Dental Assistant Study Guide & Reference Materials

Infection Control & Jurisprudence

Updated: June 2024

Dear Prospective Registrant:

Congratulations on your decision to pursue a career in dental assisting! This study guide and resource manual are designed to help you prepare for your infection control and jurisprudence exams, which are required parts of the application process for becoming registered as a dental assistant in the state of Iowa.

Review these important resources thoroughly. The Guidelines for Infection Control in Dental Health-Care Settings, published by the Centers for Disease Control, contain the required protocols for infection control. As a dental assistant, one of your most important roles will be to prevent and control infectious diseases and to manage health and safety concerns in order to protect the health and well-being of Iowans. Iowa Administrative Code 650 outlines the rules and laws which govern your profession. It is your responsibility to know, understand and implement these regulations.

The enclosed study guide and resource manual is divided into two sections. PART 1 contains information regarding infection control. PART 2 contains information on the rules and laws which govern dentistry and that will help you prepare for your jurisprudence exam. The table of contents and manual overview will help you to better understand the layout of this manual as you begin to study this important information. You may attempt the examinations at your convenience at any of the Board-approved locations.

The Iowa Dental Board wishes you well as you embark upon dental assisting in the state of Iowa. If we can ever be of assistance, please let us know.

Iowa Dental Board
6200 Park Ave. #100
Des Moines, IA 50321

https://dial.iowa.gov/about/boards/dental-board

IDB@Iowa.gov

Phone: 515-381-7030

Iowa Dental Board
Dental Assistant
Infection Control Study Guide

Updated: June 2024

Overview

As a dental assistant and a member of the dental team, you are responsible for complying with all applicable requirements and recommendations of the Center for Disease Control's Morbidity and Mortality Weekly Report (MMWR) Guidelines for Infection Control in Dental Health-Care Settings – 2003. Infection control is critical in a dental setting. These guidelines consolidate recommendations for preventing and controlling infectious diseases, and managing personnel health and safety concerts as they relate to infection control in dental settings. They are designed to prevent, or reduce, the potential for disease transmission from a patient to a practitioner or another patient. They also provide guidance to dental personnel for preventing disease transmission in dental health-care settings, for promoting a safe working environment, and assisting dental practices in developing and implementing infection-control programs. Proper procedures can prevent transmission of infections among patients and dental health care personnel. The purpose of infection control is to break the chain of infection. It is your responsibility to be knowledgeable about infection control in order to create a safe environment for patients as well as the dental staff.

The attached CDC recommendations document provides the infection control principles you are required to know and implement in your office. Iowa law requires that dental offices adhere to recommendations designated as Category IA, Category IB and Category IC. To help you study we have highlighted all sections of this document that you are required under Iowa law. The best way to prepare for your infection control exam is to study this document.

The learning activities below are intended to supplement your study of these documents.

Learning Activity: Preventing the Transmission of Bloodborne Pathogens

Questions for Review

1. How can dental patients and dental health care professionals be exposed to pathogenic microorganisms?
2. How can dental patients and dental health care professionals use preventive practices to reduce blood exposures?
3. What are the modes of transmission of pathogenic microorganisms in dental settings?
4. Why is it important in dentistry to have an understanding of spores?
5. What is recommended in the case of a positive spore test?
6. What does the term standard precautions mean?
7. Standard precautions include what practices?
8. What should be done if there is exposure to a bloodborne pathogen?
9. How often should dental health-care personnel immunization records be updated?
10. What is the major source of microorganisms in the dental office?
11. What destroys or inhibits some pathogenic microorganisms?
12. How can microorganisms enter a person's body?
13. How often should the patient's medical history be updated?
14. What is the difference between disinfection and sterilization?
15. Is a TB test required for dental health-care personnel?

Mark each statement below true (T) or false (F).

1. Bloodborne pathogens are disease-causing microorganisms that can only be transmitted by direct contact with blood. _____
2. Bloodborne pathogens may be transmitted through intact as well as non-intact skin. _____

3. HBV may be transmitted by handling or touching contaminated surfaces. _____

4. Dental health care workers can prevent contracting Tuberculosis by wearing a face mask during treatment of a patient with active TB. _____

5. HIV can be transmitted through accidental needle sticks with a contaminated needle. _____

6. Standard precautions must be used in all patient care in dentistry. _____

Learning Activity: Maintaining Infection Control

Questions for Review

1. What are the modes of transmission for bloodborne pathogens?
2. How can you minimize spraying or spattering of oral fluids in a dental office?
3. What type of cross-contamination occurs when microorganisms enter into the dental office in the water that supplies the dental unit?
4. How often should dental devices that are connected to the dental water system be flushed?
5. What is personal protective equipment (PPE)?
6. How often should protective clothing be changed?
7. What are indications for hand hygiene?
8. How often should gloves be changed?
9. Does wearing gloves replace the need for handwashing?
10. What are overgloves?
11. When should overgloves be used?
12. What type of gloves are used in surgical vs. nonsurgical procedures?
13. When should sterile surgical gloves be worn?
14. What is a latex allergy and what symptoms indicate that a latex allergy has occurred?
15. What can employees with latex allergies wear for gloves?
16. Give examples of single use devices in dentistry.
17. What is the preferred method of disinfecting impressions?
18. What disinfectants can be used for spraying?
19. What is the preferred method of decontamination for countertops?
20. What chemicals can be used for sterilization?

Mark each statement below either true (T) or false (F).

1. A container holding contaminated laundry should be labeled with a biohazard label. _____
2. Protective clothing and equipment (e.g. gowns, lab coats, gloves, masks, and protective eyewear or face shield) should be worn to prevent contamination of street clothing and to protect the skin of health care personnel from exposures to blood and body substances. _____
3. Dental assistants can eat or drink in the sterilization area of the dental office only if there are no contaminated instruments on the counter. _____
4. Needles should be bent or broken before being discarded. _____
5. Overgloves are not acceptable alone as a glove during patient treatment. _____
6. Protective eyewear should have protective side shields. _____
7. If you wear contact lenses, you do not need additional eye protection. _____

Learning Activity: Complying with Safety and Health Regulations

Questions for Review

1. Does the Centers for Disease Control and Prevention (CDC) have authority to make laws?
2. What agencies have infection control regulations?
3. What does the Food and Drug Administration (FDA) regulate?
4. What does the Environmental Protection Agency (EPA) regulate?
5. What does the Occupational Safety and Health Administration (OSHA) do?
6. Can employees take contaminated laundry home to clean?
7. What should be placed in a sharps container?
8. What is an exposure incident?
9. When should an exposure be reported?
10. Why is it important to report exposures?
11. What classification must be heat-sterilized before reuse?
12. What are examples of semi-critical dental instruments?
13. What instruments are included under critical instruments?
14. How should instrument processing be handled?
15. How do you properly dispose of extracted teeth in a dental office?

Mark each statement below either true (T) or false (F).

1. Training on OSHA bloodborne pathogens regulations must be provided annually. _____
2. It is the employee's responsibility to seek appropriate training on bloodborne pathogens. _____

3. An employer may decide not to provide training if it is not cost effective. _____

4. Additional training is required if there is a change in the tasks or procedures that affect employee occupational exposure. _____

5. Training must be performed during regular work hours. _____

6. The training program must include information on what to do in the event of an occupational exposure to bloodborne pathogens. _____

7. After training, employees should be familiar with the symptoms of blood- borne disease. _____

8. If an antiseptic hand cleanser or antiseptic towelette is used for hand washing, you must wash with soap and water as soon as possible. _____

9. While cleaning a spill of blood or other potentially infectious materials, gloves are not needed because of the cleaning solution used. _____

10. Disposable sharps must be placed in some type of biohazard bag or container. The type of bag or container is unimportant as long as it says biohazard. _____

11. Persons handling regulated laundry should practice standard precautions. This would include the wearing of latex gloves. _____

Learning Activity: Disinfecting Equipment, Supplies, and Surfaces

Questions for Review

1. What is holding solution?
2. Why is hand scrubbing the least desirable method of precleaning instruments?
3. How long should instruments be in the ultrasonic cleaner?
4. What solution is used in the ultrasonic cleaner?
5. What is the difference between sterilization and disinfection?
6. How can heat-sensitive items be sterilized?
7. How often should sterilization cycles be verified?
8. What is the main advantage of chemical vapor sterilization over steam sterilization?
9. What are the advantages of autoclaving?
10. What two liquid disinfectants can be used to sterilize instruments?
11. Why should glutaraldehyde not be used for surface disinfection?
12. Why can the spray-wipe-spray method not be used for surface disinfection with chlorine dioxide?
13. Why is alcohol not recommended for use as a surface disinfectant?
14. How long should air and water lines be flushed after the patient visit?
15. How should clinical contact surfaces without barrier protection be cleaned and disinfected?

Mark each statement below either true (T) or false (F).

1. Sterilization is the process by which all life forms are destroyed. _____
2. There is only one perfect disinfectant. _____
3. Glutaraldehydes are EPA-registered chemical/sterilants. _____

4. Chlorine dioxide containing products can be used as surface disinfectants or chemical sterilants depending on the exposure time. _____

5. Sodium hypochlorite when used as a surface disinfectant should be mixed in a 1:10 dilution. _____

6. Dental hand pieces and associated attachments, including low-speed motors and reusable prophylaxis angles, should always be heat sterilized between patients and not high-level or surface disinfected. _____

7. If contaminated instruments cannot be cleaned immediately following the procedure, they should be placed in a holding solution. _____

8. Surfaces that are difficult to disinfect (e.g. chair buttons, control buttons on the air-water syringe, switches on the unit, light handles, hoses, and hand piece and air-water syringe holders) should be covered with a material impervious to water and should be replaced between each patient. _____

9. Wear a mask when cleaning and disinfecting to prevent inhalation or direct mucous-membrane contamination from spatter. _____

10. For surface disinfection, water, rather than alcohol, must be used to dilute agents that require dilution before use. _____

11. An EPA-registered hospital disinfectant should be used for both the cleaning and disinfectant step for uncovered surfaces to provide dual purposes. _____

Disinfecting Equipment, Supplies, and Surfaces

Practical Application 1

Practice cleaning and disinfecting a treatment room. Complete each step in the order listed.

- [ ] 1. Immediately following treatment, remove exam gloves, wash, rinse, and dry hands and place utility gloves.
- [ ] 2. Discard sharps into a puncture-resistant sharps container.
- [ ] 3. Flush water lines into the high volume evacuator for 30 seconds.
- [ ] 4. Discard disposable waste.
- [ ] 5. Place instruments in a cassette and take to the contaminated area of the sterilization area.
- [ ] 6. Remove protective eyewear and mask.
- [ ] 7. Wash the exterior of the utility gloves, spray disinfectant on them, remove them, and wash hands.
- [ ] 8. Return the patient's record to the business office.
- [ ] 9. Wash hands and place utility gloves.
- [ ] 10. Spray cleaner/disinfectant on contaminated surfaces.
- [ ] 11. Vigorously wipe surfaces clean.
- [ ] 12. Spray disinfectant on the clean surfaces. Allow to air dry or dry after the manufacturer's recommended exposure time.
- [ ] 13. Wash utility gloves, spray with disinfectant, remove them, and wash hands.
- [ ] 14. Place clean barriers in the operatory.
- [ ] 15. Place sterile instrument tray in the operatory.
- [ ] 16. Prepare the patient's record.
- [ ] 17. Seat and drape the patient.
- [ ] 18. Place protective eyewear and mask, then wash hands and put on clean exam gloves.
- [ ] 19. Open instrument packages without touching instruments.

Sterilizing Equipment, Supplies and Surfaces

Practical Application 2

Practice preparing instruments and materials for sterilization. Complete each step in the order listed.

- [ ] 1. Place instruments in a holding solution they can be cleaned.
- [ ] 2. Place utility gloves, mask, protective eyewear and protective gown.
- [ ] 3. Rinse instruments and place in ultrasonic cleaner until visibly clean (5-15 minutes).
    a. Keep lid on ultrasonic cleaner.
    b. Discard disposable waste.
- [ ] 4. Remove the basket and rinse under water, using PPE.
- [ ] 5. Inspect instruments and dry (instruments need not be dry for autoclaving).
- [ ] 6. Label the appropriate package.
    a. Date of sterilization.
    b. Sterilizer to be used.
    c. Type of instruments (unless see-through).
- [ ] 7. Insert process integrator into the package.
- [ ] 8. Package and seal the instruments.
- [ ] 9. Load the sterilizer following the manufacturer’s instructions.
- [ ] 10. Set the controls for the correct time, temperature, and pressure.
- [ ] 11. Wash utility gloves, remove, and wash hands.
- [ ] 12. Following sterilization, allow the contents to dry and cool before storing.

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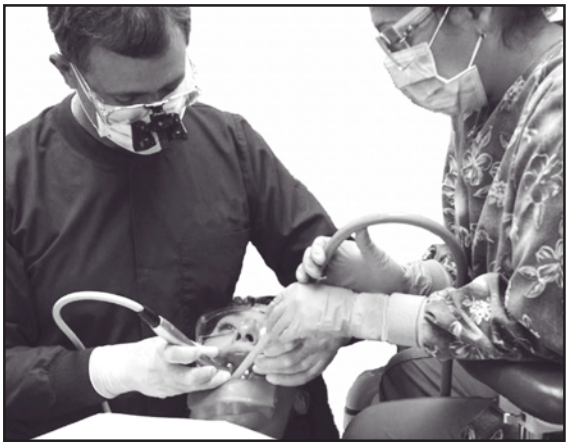
Guidelines for Infection Control in Dental Health-Care Settings — 2003



INSIDE: Continuing Education Examination

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

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Guidelines for Infection Control in Dental Health-Care Settings — 2003

Prepared by
William G. Kohn, D.D.S.[1]
Amy S. Collins, M.P.H.[1]
Jennifer L. Cleveland, D.D.S.[1]
Jennifer A. Harte, D.D.S.[2]
Kathy J. Eklund, M.H.P.[3]
Dolores M. Malvitz, Dr.P.H.[1]
[1]*Division of Oral Health*
National Center for Chronic Disease Prevention and Health Promotion, CDC
[2]*United States Air Force Dental Investigation Service*
Great Lakes, Illinois
[3]*The Forsyth Institute*
Boston, Massachusetts

Summary

This report consolidates previous recommendations and adds new ones for infection control in dental settings. Recommendations are provided regarding 1) educating and protecting dental health-care personnel; 2) preventing transmission of bloodborne pathogens; 3) hand hygiene; 4) personal protective equipment; 5) contact dermatitis and latex hypersensitivity; 6) sterilization and disinfection of patient-care items; 7) environmental infection control; 8) dental unit waterlines, biofilm, and water quality; and 9) special considerations (e.g., dental handpieces and other devices, radiology, parenteral medications, oral surgical procedures, and dental laboratories). These recommendations were developed in collaboration with and after review by authorities on infection control from CDC and other public agencies, academia, and private and professional organizations.

Introduction

This report consolidates recommendations for preventing and controlling infectious diseases and managing personnel health and safety concerns related to infection control in dental settings. This report 1) updates and revises previous CDC recommendations regarding infection control in dental settings (*1*,*2*); 2) incorporates relevant infection-control measures from other CDC guidelines; and 3) discusses concerns not addressed in previous recommendations for dentistry. These updates and additional topics include the following:

- application of standard precautions rather than universal precautions;
- work restrictions for health-care personnel (HCP) infected with or occupationally exposed to infectious diseases;
- management of occupational exposures to bloodborne pathogens, including postexposure prophylaxis (PEP) for work exposures to hepatitis B virus (HBV), hepatitis C virus (HCV); and human immunodeficiency virus (HIV);
- selection and use of devices with features designed to prevent sharps injury;
- hand-hygiene products and surgical hand antisepsis;
- contact dermatitis and latex hypersensitivity;
- sterilization of unwrapped instruments;
- dental water-quality concerns (e.g., dental unit waterline biofilms; delivery of water of acceptable biological quality for patient care; usefulness of flushing waterlines; use of sterile irrigating solutions for oral surgical procedures; handling of community boil-water advisories);
- dental radiology;
- aseptic technique for parenteral medications;
- preprocedural mouth rinsing for patients;
- oral surgical procedures;
- laser/electrosurgery plumes;
- tuberculosis (TB);
- Creutzfeldt-Jakob disease (CJD) and other prion-related diseases;
- infection-control program evaluation; and
- research considerations.

These guidelines were developed by CDC staff members in collaboration with other authorities on infection control. Draft documents were reviewed by other federal agencies and professional organizations from the fields of dental health care, public health, and hospital epidemiology and infection control. A *Federal Register* notice elicited public comments that were considered in the decision-making process. Existing guidelines and published research pertinent to dental infection-control prin-

The material in this report originated in the National Center for Chronic Disease Prevention and Health Promotion, James S. Marks, M.D., M.P.H., Director; and the Division of Oral Health, William R. Maas, D.D.S., M.P.H., Director.

ciples and practices were reviewed. Wherever possible, recommendations are based on data from well-designed scientific studies. However, only a limited number of studies have characterized risk factors and the effectiveness of prevention measures for infections associated with dental health-care practices.

Some infection-control practices routinely used by health-care practitioners cannot be rigorously examined for ethical or logistical reasons. In the absence of scientific evidence for such practices, certain recommendations are based on strong theoretical rationale, suggestive evidence, or opinions of respected authorities based on clinical experience, descriptive studies, or committee reports. In addition, some recommendations are derived from federal regulations. No recommendations are offered for practices for which insufficient scientific evidence or lack of consensus supporting their effectiveness exists.

Background

In the United States, an estimated 9 million persons work in health-care professions, including approximately 168,000 dentists, 112,000 registered dental hygienists, 218,000 dental assistants (*3*), and 53,000 dental laboratory technicians (*4*). In this report, dental health-care personnel (DHCP) refers to all paid and unpaid personnel in the dental health-care setting who might be occupationally exposed to infectious materials, including body substances and contaminated supplies, equipment, environmental surfaces, water, or air. DHCP include dentists, dental hygienists, dental assistants, dental laboratory technicians (in-office and commercial), students and trainees, contractual personnel, and other persons not directly involved in patient care but potentially exposed to infectious agents (e.g., administrative, clerical, housekeeping, maintenance, or volunteer personnel). Recommendations in this report are designed to prevent or reduce potential for disease transmission from patient to DHCP, from DHCP to patient, and from patient to patient. Although these guidelines focus mainly on outpatient, ambulatory dental health-care settings, the recommended infection-control practices are applicable to all settings in which dental treatment is provided.

Dental patients and DHCP can be exposed to pathogenic microorganisms including cytomegalovirus (CMV), HBV, HCV, herpes simplex virus types 1 and 2, HIV, *Mycobacterium tuberculosis*, staphylococci, streptococci, and other viruses and bacteria that colonize or infect the oral cavity and respiratory tract. These organisms can be transmitted in dental settings through 1) direct contact with blood, oral fluids, or other patient materials; 2) indirect contact with contaminated objects (e.g., instruments, equipment, or environmental surfaces); 3) contact of conjunctival, nasal, or oral mucosa with droplets (e.g., spatter) containing microorganisms generated from an infected person and propelled a short distance (e.g., by coughing, sneezing, or talking); and 4) inhalation of airborne microorganisms that can remain suspended in the air for long periods (*5*).

Infection through any of these routes requires that all of the following conditions be present:

- a pathogenic organism of sufficient virulence and in adequate numbers to cause disease;
- a reservoir or source that allows the pathogen to survive and multiply (e.g., blood);
- a mode of transmission from the source to the host;
- a portal of entry through which the pathogen can enter the host; and
- a susceptible host (i.e., one who is not immune).

Occurrence of these events provides the chain of infection (*6*). Effective infection-control strategies prevent disease transmission by interrupting one or more links in the chain.

Previous CDC recommendations regarding infection control for dentistry focused primarily on the risk of transmission of bloodborne pathogens among DHCP and patients and use of universal precautions to reduce that risk (*1,2,7,8*). Universal precautions were based on the concept that all blood and body fluids that might be contaminated with blood should be treated as infectious because patients with bloodborne infections can be asymptomatic or unaware they are infected (*9,10*). Preventive practices used to reduce blood exposures, particularly percutaneous exposures, include 1) careful handling of sharp instruments, 2) use of rubber dams to minimize blood spattering; 3) handwashing; and 4) use of protective barriers (e.g., gloves, masks, protective eyewear, and gowns).

The relevance of universal precautions to other aspects of disease transmission was recognized, and in 1996, CDC expanded the concept and changed the term to *standard precautions*. Standard precautions integrate and expand the elements of universal precautions into a standard of care designed to protect HCP and patients from pathogens that can be spread by blood or any other body fluid, excretion, or secretion (*11*). Standard precautions apply to contact with 1) blood; 2) all body fluids, secretions, and excretions (except sweat), regardless of whether they contain blood; 3) nonintact skin; and 4) mucous membranes. Saliva has always been considered a potentially infectious material in dental infection control; thus, no operational difference exists in clinical dental practice between universal precautions and standard precautions.

In addition to standard precautions, other measures (e.g., expanded or transmission-based precautions) might be necessary to prevent potential spread of certain diseases (e.g., TB, influenza, and varicella) that are transmitted through airborne,

droplet, or contact transmission (e.g., sneezing, coughing, and contact with skin) (*11*). When acutely ill with these diseases, patients do not usually seek routine dental outpatient care. Nonetheless, a general understanding of precautions for diseases transmitted by all routes is critical because 1) some DHCP are hospital-based or work part-time in hospital settings; 2) patients infected with these diseases might seek urgent treatment at outpatient dental offices; and 3) DHCP might become infected with these diseases. Necessary transmission-based precautions might include patient placement (e.g., isolation), adequate room ventilation, respiratory protection (e.g., N-95 masks) for DHCP, or postponement of nonemergency dental procedures.

DHCP should be familiar also with the hierarchy of controls that categorizes and prioritizes prevention strategies (*12*). For bloodborne pathogens, engineering controls that eliminate or isolate the hazard (e.g., puncture-resistant sharps containers or needle-retraction devices) are the primary strategies for protecting DHCP and patients. Where engineering controls are not available or appropriate, work-practice controls that result in safer behaviors (e.g., one-hand needle recapping or not using fingers for cheek retraction while using sharp instruments or suturing), and use of personal protective equipment (PPE) (e.g., protective eyewear, gloves, and mask) can prevent exposure (*13*). In addition, administrative controls (e.g., policies, procedures, and enforcement measures targeted at reducing the risk of exposure to infectious persons) are a priority for certain pathogens (e.g., *M. tuberculosis*), particularly those spread by airborne or droplet routes.

Dental practices should develop a written infection-control program to prevent or reduce the risk of disease transmission. Such a program should include establishment and implementation of policies, procedures, and practices (in conjunction with selection and use of technologies and products) to prevent work-related injuries and illnesses among DHCP as well as health-care–associated infections among patients. The program should embody principles of infection control and occupational health, reflect current science, and adhere to relevant federal, state, and local regulations and statutes. An infection-control coordinator (e.g., dentist or other DHCP) knowledgeable or willing to be trained should be assigned responsibility for coordinating the program. The effectiveness of the infection-control program should be evaluated on a day-to-day basis and over time to help ensure that policies, procedures, and practices are useful, efficient, and successful (see Program Evaluation).

Although the infection-control coordinator remains responsible for overall management of the program, creating and maintaining a safe work environment ultimately requires the commitment and accountability of all DHCP. This report is designed to provide guidance to DHCP for preventing disease transmission in dental health-care settings, for promoting a safe working environment, and for assisting dental practices in developing and implementing infection-control programs. These programs should be followed in addition to practices and procedures for worker protection required by the Occupational Safety and Health Administration's (OSHA) standards for occupational exposure to bloodborne pathogens (*13*), including instituting controls to protect employees from exposure to blood or other potentially infectious materials (OPIM), and requiring implementation of a written exposure-control plan, annual employee training, HBV vaccinations, and postexposure follow-up (*13*). Interpretations and enforcement procedures are available to help DHCP apply this OSHA standard in practice (*14*). Also, manufacturer's Material Safety Data Sheets (MSDS) should be consulted regarding correct procedures for handling or working with hazardous chemicals (*15*).

Previous Recommendations

This report includes relevant infection-control measures from the following previously published CDC guidelines and recommendations:

- CDC. Guideline for disinfection and sterilization in health-care facilities: recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee (HICPAC). MMWR (in press).
- CDC. Guidelines for environmental infection control in health-care facilities: recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee (HICPAC). MMWR 2003;52(No. RR-10).
- CDC. Guidelines for the prevention of intravascular catheter-related infections. MMWR 2002;51(No. RR-10).
- CDC. Guideline for hand hygiene in health-care settings: recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. MMWR 2002;51 (No. RR-16).
- CDC. Updated U.S. Public Health Service guidelines for the management of occupational exposures to HBV, HCV, and HIV and recommendations for postexposure prophylaxis. MMWR 2001;50(No. RR-11).
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Selected Definitions

Alcohol-based hand rub: An alcohol-containing preparation designed for reducing the number of viable microorganisms on the hands.

Antimicrobial soap: A detergent containing an antiseptic agent.

Antiseptic: A germicide used on skin or living tissue for the purpose of inhibiting or destroying microorganisms (e.g., alcohols, chlorhexidine, chlorine, hexachlorophene, iodine, chloroxylenol [PCMX], quaternary ammonium compounds, and triclosan).

Bead sterilizer: A device using glass beads 1.2–1.5 mm diameter and temperatures 217°C–232°C for brief exposures (e.g., 45 seconds) to inactivate microorganisms. (This term is actually a misnomer because it has not been cleared by the Food and Drug Administration [FDA] as a sterilizer).

Bioburden: Microbiological load (i.e., number of viable organisms in or on an object or surface) or organic material on a surface or object before decontamination, or sterilization. Also known as *bioload* or *microbial load*.

Colony-forming unit (*CFU*)*:* The minimum number (i.e., tens of millions) of separable cells on the surface of or in semisolid agar medium that give rise to a visible colony of progeny. CFUs can consist of pairs, chains, clusters, or as single cells and are often expressed as colony-forming units per milliliter (CFUs/mL).

Decontamination: Use of physical or chemical means to remove, inactivate, or destroy pathogens on a surface or item so that they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

Dental treatment water: Nonsterile water used during dental treatment, including irrigation of nonsurgical operative sites and cooling of high-speed rotary and ultrasonic instruments.

Disinfectant: A chemical agent used on inanimate objects (e.g., floors, walls, or sinks) to destroy virtually all recognized pathogenic microorganisms, but not necessarily all microbial forms (e.g., bacterial endospores). The U.S. Environmental Protection Agency (EPA) groups disinfectants on the basis of whether the product label claims limited, general, or hospital disinfectant capabilities.

Disinfection: Destruction of pathogenic and other kinds of microorganisms by physical or chemical means. Disinfection is less lethal than sterilization, because it destroys the majority of recognized pathogenic microorganisms, but not necessarily all microbial forms (e.g., bacterial spores). Disinfection does not ensure the degree of safety associated with sterilization processes.

Droplet nuclei: Particles ≤5 µm in diameter formed by dehydration of airborne droplets containing microorganisms that can remain suspended in the air for long periods of time.

Droplets: Small particles of moisture (e.g., spatter) generated when a person coughs or sneezes, or when water is converted to a fine mist by an aerator or shower head. These particles, intermediate in size between drops and droplet nuclei, can contain infectious microorganisms and tend to quickly settle from the air such that risk of disease transmission is usually limited to persons in close proximity to the droplet source.

Endotoxin: The lipopolysaccharide of gram-negative bacteria, the toxic character of which resides in the lipid protein. Endotoxins can produce pyrogenic reactions in persons exposed to their bacterial component.

Germicide: An agent that destroys microorganisms, especially pathogenic organisms. Terms with the same suffix (e.g., *virucide*, *fungicide*, *bactericide*, *tuberculocide*, and *sporicide*) indi-

cate agents that destroy the specific microorganism identified by the prefix. Germicides can be used to inactivate microorganisms in or on living tissue (i.e., antiseptics) or on environmental surfaces (i.e., disinfectants).

Hand hygiene: General term that applies to handwashing, antiseptic handwash, antiseptic hand rub, or surgical hand antisepsis.

Health-care–associated infection: Any infection associated with a medical or surgical intervention. The term *health-care–associated* replaces *nosocomial*, which is limited to adverse infectious outcomes occurring in hospitals.

Hepatitis B immune globulin (*HBIG*)*:* Product used for prophylaxis against HBV infection. HBIG is prepared from plasma containing high titers of hepatitis B surface antibody (anti-HBs) and provides protection for 3–6 mos.

Hepatitis B surface antigen (*HBsAg*)*:* Serologic marker on the surface of HBV detected in high levels during acute or chronic hepatitis. The body normally produces antibodies to surface antigen as a normal immune response to infection.

Hepatitis B e antigen (*HBeAg*)*:* Secreted product of the nucleocapsid gene of HBV found in serum during acute and chronic HBV infection. Its presence indicates that the virus is replicating and serves as a marker of increased infectivity.

Hepatitis B surface antibody (*anti-HBs*)*:* Protective antibody against HBsAg. Presence in the blood can indicate past infection with, and immunity to, HBV, or immune response from hepatitis B vaccine.

Heterotrophic bacteria: Those bacteria requiring an organic carbon source for growth (i.e., deriving energy and carbon from organic compounds).

High-level disinfection: Disinfection process that inactivates vegetative bacteria, mycobacteria, fungi, and viruses but not necessarily high numbers of bacterial spores. FDA further defines a high-level disinfectant as a sterilant used for a shorter contact time.

Hospital disinfectant: Germicide registered by EPA for use on inanimate objects in hospitals, clinics, dental offices, and other medical-related facilities. Efficacy is demonstrated against *Salmonella choleraesuis*, *Staphylococcus aureus*, and *Pseudomonas aeruginosa*.

Iatrogenic: Induced inadvertently by HCP, medical (including dental) treatment, or diagnostic procedures. Used particularly in reference to an infectious disease or other complication of treatment.

Immunization: Process by which a person becomes immune, or protected against a disease. Vaccination is defined as the process of administering a killed or weakened infectious organism or a toxoid; however, vaccination does not always result in immunity.

Implantable device: Device placed into a surgically or naturally formed cavity of the human body and intended to remain there for ≥30 days.

Independent water reservoir: Container used to hold water or other solutions and supply it to handpieces and air and water syringes attached to a dental unit. The independent reservoir, which isolates the unit from the public water system, can be provided as original equipment or as a retrofitted device.

Intermediate-level disinfection: Disinfection process that inactivates vegetative bacteria, the majority of fungi, mycobacteria, and the majority of viruses (particularly enveloped viruses) but not bacterial spores.

Intermediate-level disinfectant: Liquid chemical germicide registered with EPA as a hospital disinfectant and with a label claim of potency as tuberculocidal (Appendix A).

Latex: Milky white fluid extracted from the rubber tree *Hevea brasiliensis* that contains the rubber material cis-1,4 polyisoprene.

Low-level disinfection: Process that inactivates the majority of vegetative bacteria, certain fungi, and certain viruses, but cannot be relied on to inactivate resistant microorganisms (e.g., mycobacteria or bacterial spores).

Low-level disinfectant: Liquid chemical germicide registered with EPA as a hospital disinfectant. OSHA requires low-level hospital disinfectants also to have a label claim for potency against HIV and HBV if used for disinfecting clinical contact surfaces (Appendix A).

Microfilter: Membrane filter used to trap microorganisms suspended in water. Filters are usually installed on dental unit waterlines as a retrofit device. Microfiltration commonly occurs at a filter pore size of 0.03–10 µm. Sediment filters commonly found in dental unit water regulators have pore sizes of 20–90 µm and do not function as microbiological filters.

Nosocomial: Infection acquired in a hospital as a result of medical care.

Occupational exposure: Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or OPIM that can result from the performance of an employee's duties.

OPIM: Other potentially infectious materials. OPIM is an OSHA term that refers to 1) body fluids including semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures; any body fluid visibly contaminated with blood; and all body fluids in situations where differentiating between body fluids is difficult or impossible; 2) any unfixed tissue or organ (other than intact skin) from a human (living or dead); and 3) HIV-containing cell or tissue cultures, organ

cultures; HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

Parenteral: Means of piercing mucous membranes or skin barrier through such events as needlesticks, human bites, cuts, and abrasions.

Persistent activity: Prolonged or extended activity that prevents or inhibits proliferation or survival of microorganisms after application of a product. This activity can be demonstrated by sampling a site minutes or hours after application and demonstrating bacterial antimicrobial effectiveness when compared with a baseline level. Previously, this property was sometimes termed *residual activity*.

Prion: Protein particle lacking nucleic acid that has been implicated as the cause of certain neurodegenerative diseases (e.g., scrapie, CJD, and bovine spongiform encephalopathy [BSE]).

Retraction: Entry of oral fluids and microorganisms into waterlines through negative water pressure.

Seroconversion: The change of a serological test from negative to positive indicating the development of antibodies in response to infection or immunization.

Sterile: Free from all living microorganisms; usually described as a probability (e.g., the probability of a surviving microorganism being 1 in 1 million).

Sterilization: Use of a physical or chemical procedure to destroy all microorganisms including substantial numbers of resistant bacterial spores.

Surfactants: Surface-active agents that reduce surface tension and help cleaning by loosening, emulsifying, and holding soil in suspension, to be more readily rinsed away.

Ultrasonic cleaner: Device that removes debris by a process called cavitation, in which waves of acoustic energy are propagated in aqueous solutions to disrupt the bonds that hold particulate matter to surfaces.

Vaccination: See immunization.

Vaccine: Product that induces immunity, therefore protecting the body from the disease. Vaccines are administered through needle injections, by mouth, and by aerosol.

Washer-disinfector: Automatic unit that cleans and thermally disinfects instruments, by using a high-temperature cycle rather than a chemical bath.

Wicking: Absorption of a liquid by capillary action along a thread or through the material (e.g., penetration of liquids through undetected holes in a glove).

Review of Science Related to Dental Infection Control

Personnel Health Elements of an Infection-Control Program

A protective health component for DHCP is an integral part of a dental practice infection-control program. The objectives are to educate DHCP regarding the principles of infection control, identify work-related infection risks, institute preventive measures, and ensure prompt exposure management and medical follow-up. Coordination between the dental practice's infection-control coordinator and other qualified health-care professionals is necessary to provide DHCP with appropriate services. Dental programs in institutional settings, (e.g., hospitals, health centers, and educational institutions) can coordinate with departments that provide personnel health services. However, the majority of dental practices are in ambulatory, private settings that do not have licensed medical staff and facilities to provide complete on-site health service programs. In such settings, the infection-control coordinator should establish programs that arrange for site-specific infection-control services from external health-care facilities and providers before DHCP are placed at risk for exposure. Referral arrangements can be made with qualified health-care professionals in an occupational health program of a hospital, with educational institutions, or with health-care facilities that offer personnel health services.

Education and Training

Personnel are more likely to comply with an infection-control program and exposure-control plan if they understand its rationale (*5,13,16*). Clearly written policies, procedures, and guidelines can help ensure consistency, efficiency, and effective coordination of activities. Personnel subject to occupational exposure should receive infection-control training on initial assignment, when new tasks or procedures affect their occupational exposure, and at a minimum, annually (*13*). Education and training should be appropriate to the assigned duties of specific DHCP (e.g., techniques to prevent cross-contamination or instrument sterilization). For DHCP who perform tasks or procedures likely to result in occupational exposure to infectious agents, training should include 1) a description of their exposure risks; 2) review of prevention strategies and infection-control policies and procedures; 3) discussion regarding how to manage work-related illness and injuries, including PEP; and 4) review of work restrictions for the exposure or infection. Inclusion of DHCP with minimal exposure risks (e.g., administrative employees) in education and training programs might enhance facilitywide understand-

ing of infection-control principles and the importance of the program. Educational materials should be appropriate in content and vocabulary for each person's educational level, literacy, and language, as well as be consistent with existing federal, state, and local regulations (*5,13*).

Immunization Programs

DHCP are at risk for exposure to, and possible infection with, infectious organisms. Immunizations substantially reduce both the number of DHCP susceptible to these diseases and the potential for disease transmission to other DHCP and patients (*5,17*). Thus, immunizations are an essential part of prevention and infection-control programs for DHCP, and a comprehensive immunization policy should be implemented for all dental health-care facilities (*17,18*). The Advisory Committee on Immunization Practices (ACIP) provides national guidelines for immunization of HCP, which includes DHCP (*17*). Dental practice immunization policies should incorporate current state and federal regulations as well as recommendations from the U.S. Public Health Service and professional organizations (*17*) (Appendix B).

On the basis of documented health-care–associated transmission, HCP are considered to be at substantial risk for acquiring or transmitting hepatitis B, influenza, measles, mumps, rubella, and varicella. All of these diseases are vaccine-preventable. ACIP recommends that all HCP be vaccinated or have documented immunity to these diseases (*5,17*). ACIP does not recommend routine immunization of HCP against TB (i.e., inoculation with bacille Calmette-Guérin vaccine) or hepatitis A (*17*). No vaccine exists for HCV. ACIP guidelines also provide recommendations regarding immunization of HCP with special conditions (e.g., pregnancy, HIV infection, or diabetes) (*5,17*).

Immunization of DHCP before they are placed at risk for exposure remains the most efficient and effective use of vaccines in health-care settings. Some educational institutions and infection-control programs provide immunization schedules for students and DHCP. OSHA requires that employers make hepatitis B vaccination available to all employees who have potential contact with blood or OPIM. Employers are also required to follow CDC recommendations for vaccinations, evaluation, and follow-up procedures (*13*). Nonpatient-care staff (e.g., administrative or housekeeping) might be included, depending on their potential risk of coming into contact with blood or OPIM. Employers are also required to ensure that employees who decline to accept hepatitis B vaccination sign an appropriate declination statement (*13*). DHCP unable or unwilling to be vaccinated as required or recommended should be educated regarding their exposure risks, infection-control policies and procedures for the facility, and the management of work-related illness and work restrictions (if appropriate) for exposed or infected DHCP.

Exposure Prevention and Postexposure Management

Avoiding exposure to blood and OPIM, as well as protection by immunization, remain primary strategies for reducing occupationally acquired infections, but occupational exposures can still occur (*19*). A combination of standard precautions, engineering, work practice, and administrative controls is the best means to minimize occupational exposures. Written policies and procedures to facilitate prompt reporting, evaluation, counseling, treatment, and medical follow-up of all occupational exposures should be available to all DHCP. Written policies and procedures should be consistent with federal, state, and local requirements addressing education and training, postexposure management, and exposure reporting (see Preventing Transmission of Bloodborne Pathogens).

DHCP who have contact with patients can also be exposed to persons with infectious TB, and should have a baseline tuberculin skin test (TST), preferably by using a two-step test, at the beginning of employment (*20*). Thus, if an unprotected occupational exposure occurs, TST conversions can be distinguished from positive TST results caused by previous exposures (*20,21*). The facility's level of TB risk will determine the need for routine follow-up TSTs (see Special Considerations).

Medical Conditions, Work-Related Illness, and Work Restrictions

DHCP are responsible for monitoring their own health status. DHCP who have acute or chronic medical conditions that render them susceptible to opportunistic infection should discuss with their personal physicians or other qualified authority whether the condition might affect their ability to safely perform their duties. However, under certain circumstances, health-care facility managers might need to exclude DHCP from work or patient contact to prevent further transmission of infection (*22*). Decisions concerning work restrictions are based on the mode of transmission and the period of infectivity of the disease (*5*) (Table 1). Exclusion policies should 1) be written, 2) include a statement of authority that defines who can exclude DHCP (e.g., personal physicians), and 3) be clearly communicated through education and training. Policies should also encourage DHCP to report illnesses or exposures without jeopardizing wages, benefits, or job status.

With increasing concerns regarding bloodborne pathogens and introduction of universal precautions, use of latex gloves among HCP has increased markedly (*7,23*). Increased use of these gloves has been accompanied by increased reports of allergic reactions to natural rubber latex among HCP, DHCP, and patients

TABLE 1. Suggested work restrictions for health-care personnel infected with or exposed to major infectious diseases in health-care settings, in the absence of state and local regulations*

Disease/problem	Work restriction	Duration
Conjunctivitis	Restrict from patient contact and contact with patient's environment.	Until discharge ceases
Cytomegalovirus infection	No restriction	
Diarrheal disease		
Acute stage (diarrhea with other symptoms)	Restrict from patient contact, contact with patient's environment, and food-handling.	Until symptoms resolve
Convalescent stage, *Salmonella* species	Restrict from care of patients at high risk.	Until symptoms resolve; consult with local and state health authorities regarding need for negative stool cultures
Enteroviral infection	Restrict from care of infants, neonates, and immunocompromised patients and their environments.	Until symptoms resolve
Hepatitis A	Restrict from patient contact, contact with patient's environment, and food-handing.	Until 7 days after onset of jaundice
Hepatitis B		
Personnel with acute or chronic hepatitis B surface antigenemia who do not perform exposure-prone procedures	No restriction†; refer to state regulations. Standard precautions should always be followed.	
Personnel with acute or chronic hepatitis B e antigenemia who perform exposure-prone procedures	Do not perform exposure-prone invasive procedures until counsel from a review panel has been sought; panel should review and recommend procedures that personnel can perform, taking into account specific procedures as well as skill and technique. Standard precautions should always be observed. Refer to state and local regulations or recommendations.	Until hepatitis B e antigen is negative
Hepatitis C	No restrictions on professional activity.† HCV-positive health-care personnel should follow aseptic technique and standard precautions.	
Herpes simplex		
Genital	No restriction	
Hands (herpetic whitlow)	Restrict from patient contact and contact with patient's environment.	Until lesions heal
Orofacial	Evaluate need to restrict from care of patients at high risk.	
Human immunodeficiency virus; personnel who perform exposure-prone procedures	Do not perform exposure-prone invasive procedures until counsel from an expert review panel has been sought; panel should review and recommend procedures that personnel can perform, taking into account specific procedures as well as skill and technique. Standard precautions should always be observed. Refer to state and local regulations or recommendations.	
Measles		
Active	Exclude from duty	Until 7 days after the rash appears
Postexposure (susceptible personnel)	Exclude from duty	From fifth day after first exposure through twenty-first day after last exposure, or 4 days after rash appears
Meningococcal infection	Exclude from duty	Until 24 hours after start of effective therapy
Mumps		
Active	Exclude from duty	Until 9 days after onset of parotitis
Postexposure (susceptible personnel)	Exclude from duty	From twelfth day after first exposure through twenty-sixth day after last exposure, or until 9 days after onset of parotitis

Source: Adapted from Bolyard EA, Hospital Infection Control Practices Advisory Committee. Guidelines for infection control in health care personnel, 1998. Am J Infect Control 1998;26:289–354.

* Modified from recommendations of the Advisory Committee on Immunization Practices (ACIP).
† Unless epidemiologically linked to transmission of infection.
§ Those susceptible to varicella and who are at increased risk of complications of varicella (e.g., neonates and immunocompromised persons of any age).
¶ Patients at high risk as defined by ACIP for complications of influenza.

TABLE 1. (*Continued*) Suggested work restrictions for health-care personnel infected with or exposed to major infectious diseases in health-care settings, in the absence of state and local regulations*

Disease/problem	Work restriction	Duration
Pediculosis	Restrict from patient contact	Until treated and observed to be free of adult and immature lice
Pertussis		
Active	Exclude from duty	From beginning of catarrhal stage through third week after onset of paroxysms, or until 5 days after start of effective antibiotic therapy
Postexposure (asymptomatic personnel)	No restriction, prophylaxis recommended	
Postexposure (symptomatic personnel)	Exclude from duty	Until 5 days after start of effective antibiotic therapy
Rubella		
Active	Exclude from duty	Until 5 days after rash appears
Postexposure (susceptible personnel)	Exclude from duty	From seventh day after first exposure through twenty-first day after last exposure
Staphylococcus aureus infection		
Active, draining skin lesions	Restrict from contact with patients and patient's environment or food handling.	Until lesions have resolved
Carrier state	No restriction unless personnel are epidemiologically linked to transmission of the organism	
Streptococcal infection, group A	Restrict from patient care, contact with patient's environment, and food-handling.	Until 24 hours after adequate treatment started
Tuberculosis		
Active disease	Exclude from duty	Until proved noninfectious
PPD converter	No restriction	
Varicella (chicken pox)		
Active	Exclude from duty	Until all lesions dry and crust
Postexposure (susceptible personnel)	Exclude from duty	From tenth day after first exposure through twenty-first day (twenty-eighth day if varicella-zoster immune globulin [VZIG] administered) after last exposure.
Zoster (shingles)		
Localized, in healthy person	Cover lesions, restrict from care of patients§ at high risk	Until all lesions dry and crust
Generalized or localized in immunosuppressed person	Restrict from patient contact	Until all lesions dry and crust
Postexposure (susceptible personnel)	Restrict from patient contact	From tenth day after first exposure through twenty-first day (twenty-eighth day if VZIG administered) after last exposure; or, if varicella occurs, when lesions crust and dry
Viral respiratory infection, acute febrile	Consider excluding from the care of patients at high risk¶ or contact with such patients' environments during community outbreak of respiratory syncytial virus and influenza	Until acute symptoms resolve

Source: Adapted from Bolyard EA, Hospital Infection Control Practices Advisory Committee. Guidelines for infection control in health care personnel, 1998. Am J Infect Control 1998;26:289–354.

* Modified from recommendations of the Advisory Committee on Immunization Practices (ACIP).
† Unless epidemiologically linked to transmission of infection.
§ Those susceptible to varicella and who are at increased risk of complications of varicella (e.g., neonates and immunocompromised persons of any age).
¶ Patients at high risk as defined by ACIP for complications of influenza.

(*24–30*), as well as increased reports of irritant and allergic contact dermatitis from frequent and repeated use of hand-hygiene products, exposure to chemicals, and glove use.

DHCP should be familiar with the signs and symptoms of latex sensitivity (*5,31–33*). A physician should evaluate DHCP exhibiting symptoms of latex allergy, because further exposure could result in a serious allergic reaction. A diagnosis is made through medical history, physical examination, and diagnostic tests. Procedures should be in place for minimizing latex-related health problems among DHCP and patients while protecting them from infectious materials. These procedures should include 1) reducing exposures to latex-containing materials by using appropriate work practices, 2) training and educating DHCP, 3) monitoring symptoms, and 4) substituting nonlatex products where appropriate (*32*) (see Contact Dermatitis and Latex Hypersensitivity).

Maintenance of Records, Data Management, and Confidentiality

The health status of DHCP can be monitored by maintaining records of work-related medical evaluations, screening tests, immunizations, exposures, and postexposure management. Such records must be kept in accordance with all applicable state and federal laws. Examples of laws that might apply include the Privacy Rule of the Health Insurance Portability and Accountability Act (HIPAA) of 1996, 45 CFR 160 and 164, and the OSHA Occupational Exposure to Bloodborne Pathogens; Final Rule 29 CFR 1910.1030(h)(1)(i–iv) (*34,13*). The HIPAA Privacy Rule applies to covered entities, including certain defined health providers, health-care clearinghouses, and health plans. OSHA requires employers to ensure that certain information contained in employee medical records is 1) kept confidential; 2) not disclosed or reported without the employee's express written consent to any person within or outside the workplace except as required by the OSHA standard; and 3) maintained by the employer for at least the duration of employment plus 30 years. Dental practices that coordinate their infection-control program with off-site providers might consult OSHA's Bloodborne Pathogen standard and employee Access to Medical and Exposure Records standard, as well as other applicable local, state, and federal laws, to determine a location for storing health records (*13,35*).

Preventing Transmission of Bloodborne Pathogens

Although transmission of bloodborne pathogens (e.g., HBV, HCV, and HIV) in dental health-care settings can have serious consequences, such transmission is rare. Exposure to infected blood can result in transmission from patient to DHCP, from DHCP to patient, and from one patient to another. The opportunity for transmission is greatest from patient to DHCP, who frequently encounter patient blood and blood-contaminated saliva during dental procedures.

Since 1992, no HIV transmission from DHCP to patients has been reported, and the last HBV transmission from DHCP to patients was reported in 1987. HCV transmission from DHCP to patients has not been reported. The majority of DHCP infected with a bloodborne virus do not pose a risk to patients because they do not perform activities meeting the necessary conditions for transmission. For DHCP to pose a risk for bloodborne virus transmission to patients, DHCP must 1) be viremic (i.e., have infectious virus circulating in the bloodstream); 2) be injured or have a condition (e.g., weeping dermatitis) that allows direct exposure to their blood or other infectious body fluids; and 3) enable their blood or infectious body fluid to gain direct access to a patient's wound, traumatized tissue, mucous membranes, or similar portal of entry. Although an infected DHCP might be viremic, unless the second and third conditions are also met, transmission cannot occur.

The risk of occupational exposure to bloodborne viruses is largely determined by their prevalence in the patient population and the nature and frequency of contact with blood and body fluids through percutaneous or permucosal routes of exposure. The risk of infection after exposure to a bloodborne virus is influenced by inoculum size, route of exposure, and susceptibility of the exposed HCP (*12*). The majority of attention has been placed on the bloodborne pathogens HBV, HCV, and HIV, and these pathogens present different levels of risk to DHCP.

Hepatitis B Virus

HBV is a well-recognized occupational risk for HCP (*36,37*). HBV is transmitted by percutaneous or mucosal exposure to blood or body fluids of a person with either acute or chronic HBV infection. Persons infected with HBV can transmit the virus for as long as they are HBsAg-positive. The risk of HBV transmission is highly related to the HBeAg status of the source person. In studies of HCP who sustained injuries from needles contaminated with blood containing HBV, the risk of developing clinical hepatitis if the blood was positive for both HBsAg and HBeAg was 22%–31%; the risk of developing serologic evidence of HBV infection was 37%–62% (*19*). By comparison, the risk of developing clinical hepatitis from a needle contaminated with HBsAg-positive, HBeAg-negative blood was 1%–6%, and the risk of developing serologic evidence of HBV infection, 23%–37% (*38*).

Blood contains the greatest proportion of HBV infectious particle titers of all body fluids and is the most critical vehicle of transmission in the health-care setting. HBsAg is also found in multiple other body fluids, including breast milk, bile, cerebrospinal fluid, feces, nasopharyngeal washings, saliva, semen, sweat, and synovial fluid. However, the majority of body fluids are not efficient vehicles for transmission because they contain low quantities of infectious HBV, despite the presence of HBsAg (*19*). The concentration of HBsAg in body fluids can be 100–1,000-fold greater than the concentration of infectious HBV particles (*39*).

Although percutaneous injuries are among the most efficient modes of HBV transmission, these exposures probably account for only a minority of HBV infections among HCP. In multiple investigations of nosocomial hepatitis B outbreaks, the majority of infected HCP could not recall an overt percutaneous injury (*40,41*), although in certain studies, approximately one third of infected HCP recalled caring for a patient who was HBsAg-positive (*42,43*). In addition, HBV has been demonstrated to survive in dried blood at room temperature on environmental surfaces for ≤1 week (*44*). Thus, HBV infections that occur in HCP with no history of nonoccupational exposure or occupational percutaneous injury might have resulted from direct or indirect blood or body fluid exposures that inoculated HBV into cutaneous scratches, abrasions, burns, other lesions, or on mucosal surfaces (*45–47*). The potential for HBV transmission through contact with environmental surfaces has been demonstrated in investigations of HBV outbreaks among patients and HCP in hemodialysis units (*48–50*).

Since the early 1980s, occupational infections among HCP have declined because of vaccine use and adherence to universal precautions (*51*). Among U.S. dentists, >90% have been vaccinated, and serologic evidence of past HBV infection decreased from prevaccine levels of 14% in 1972 to approximately 9% in 1992 (*52*). During 1993–2001, levels remained relatively unchanged (Chakwan Siew, Ph.D., American Dental Association, Chicago, Illinois, personal communication, June 2003). Infection rates can be expected to decline further as vaccination rates remain high among young dentists and as older dentists with lower vaccination rates and higher rates of infection retire.

Although the potential for transmission of bloodborne infections from DHCP to patients is considered limited (*53–55*), precise risks have not been quantified by carefully designed epidemiologic studies (*53,56,57*). Reports published during 1970–1987 describe nine clusters in which patients were thought to be infected with HBV through treatment by an infected DHCP (*58–67*). However, transmission of HBV from dentist to patient has not been reported since 1987, possibly reflecting such factors as 1) adoption of universal precautions, 2) routine glove use, 3) increased levels of immunity as a result of hepatitis B vaccination of DHCP, 4) implementation of the 1991 OSHA bloodborne pathogen standard (*68*), and 5) incomplete ascertainment and reporting. Only one case of patient-to-patient transmission of HBV in the dental setting has been documented (CDC, unpublished data, 2003). In this case, appropriate office infection-control procedures were being followed, and the exact mechanism of transmission was undetermined.

Because of the high risk of HBV infection among HCP, DHCP who perform tasks that might involve contact with blood, blood-contaminated body substances, other body fluids, or sharps should be vaccinated (*2,13,17,19,69*). Vaccination can protect both DHCP and patients from HBV infection and, whenever possible, should be completed when dentists or other DHCP are in training and before they have contact with blood.

Prevaccination serological testing for previous infection is not indicated, although it can be cost-effective where prevalence of infection is expected to be high in a group of potential vacinees (e.g., persons who have emigrated from areas with high rates of HBV infection). DHCP should be tested for anti-HBs 1–2 months after completion of the 3-dose vaccination series (*17*). DHCP who do not develop an adequate antibody response (i.e., anti-HBs <10 mIU/mL) to the primary vaccine series should complete a second 3-dose vaccine series or be evaluated to determine if they are HBsAg-positive (*17*). Revaccinated persons should be retested for anti-HBs at the completion of the second vaccine series. Approximately half of nonresponders to the primary series will respond to a second 3-dose series. If no antibody response occurs after the second series, testing for HBsAg should be performed (*17*). Persons who prove to be HBsAg-positive should be counseled regarding how to prevent HBV transmission to others and regarding the need for medical evaluation. Nonresponders to vaccination who are HBsAg-negative should be considered susceptible to HBV infection and should be counseled regarding precautions to prevent HBV infection and the need to obtain HBIG prophylaxis for any known or probable parenteral exposure to HBsAg-positive blood.

Vaccine-induced antibodies decline gradually over time, and 60% of persons who initially respond to vaccination will lose detectable antibodies over 12 years. Even so, immunity continues to prevent clinical disease or detectable viral infection (*17*). Booster doses of vaccine and periodic serologic testing to monitor antibody concentrations after completion of the vaccine series are not necessary for vaccine responders (*17*).

Hepatitis D Virus

An estimated 4% of persons with acute HBV infection are also infected with hepatitis Delta virus (HDV). Discovered in 1977, HDV is a defective bloodborne virus requiring the presence of HBV to replicate. Patients coinfected with HBV and HDV have substantially higher mortality rates than those infected with HBV alone. Because HDV infection is dependent on HBV for replication, immunization to prevent HBV infection, through either pre- or postexposure prophylaxis, can also prevent HDV infection (*70*).

Hepatitis C Virus

Hepatitis C virus appears not to be transmitted efficiently through occupational exposures to blood. Follow-up studies of HCP exposed to HCV-infected blood through percutaneous or other sharps injuries have determined a low incidence of seroconversion (mean: 1.8%; range, 0%–7%) (*71–74*). One study determined transmission occurred from hollow-bore needles but not other sharps (*72*). Although these studies have not documented seroconversion associated with mucous membrane or nonintact skin exposure, at least two cases of HCV transmission from a blood splash to the conjunctiva (*75,76*) and one case of simultaneous transmission of HCV and HIV after nonintact skin exposure have been reported (*77*).

Data are insufficient to estimate the occupational risk of HCV infection among HCP, but the majority of studies indicate the prevalence of HCV infection among dentists, surgeons, and hospital-based HCP is similar to that among the general population, approximately 1%–2% (*78–86*). In a study that evaluated risk factors for infection, a history of unintentional needlesticks was the only occupational risk factor independently associated with HCV infection (*80*).

No studies of transmission from HCV-infected DHCP to patients have been reported, and the risk for such transmission appears limited. Multiple reports have been published describing transmission from HCV-infected surgeons, which apparently occurred during performance of invasive procedures; the overall risk for infection averaged 0.17% (*87–90*).

Human Immunodeficiency Virus

In the United States, the risk of HIV transmission in dental settings is extremely low. As of December 2001, a total of 57 cases of HIV seroconversion had been documented among HCP, but none among DHCP, after occupational exposure to a known HIV-infected source (*91*). Transmission of HIV to six patients of a single dentist with AIDS has been reported, but the mode of transmission could not be determined (*2,92,93*). As of September 30, 1993, CDC had information regarding test results of >22,000 patients of 63 HIV-infected HCP, including 33 dentists or dental students (*55,93*). No additional cases of transmission were documented.

Prospective studies worldwide indicate the average risk of HIV infection after a single percutaneous exposure to HIV-infected blood is 0.3% (range: 0.2%–0.5%) (*94*). After an exposure of mucous membranes in the eye, nose, or mouth, the risk is approximately 0.1% (*76*). The precise risk of transmission after skin exposure remains unknown but is believed to be even smaller than that for mucous membrane exposure.

Certain factors affect the risk of HIV transmission after an occupational exposure. Laboratory studies have determined if needles that pass through latex gloves are solid rather than hollow-bore, or are of small gauge (e.g., anesthetic needles commonly used in dentistry), they transfer less blood (*36*). In a retrospective case-control study of HCP, an increased risk for HIV infection was associated with exposure to a relatively large volume of blood, as indicated by a deep injury with a device that was visibly contaminated with the patient's blood, or a procedure that involved a needle placed in a vein or artery (*95*). The risk was also increased if the exposure was to blood from patients with terminal illnesses, possibly reflecting the higher titer of HIV in late-stage AIDS.

Exposure Prevention Methods

Avoiding occupational exposures to blood is the primary way to prevent transmission of HBV, HCV, and HIV, to HCP in health-care settings (*19,96,97*). Exposures occur through percutaneous injury (e.g., a needlestick or cut with a sharp object), as well as through contact between potentially infectious blood, tissues, or other body fluids and mucous membranes of the eye, nose, mouth, or nonintact skin (e.g., exposed skin that is chapped, abraded, or shows signs of dermatitis).

Observational studies and surveys indicate that percutaneous injuries among general dentists and oral surgeons occur less frequently than among general and orthopedic surgeons and have decreased in frequency since the mid-1980s (*98–102*). This decline has been attributed to safer work practices, safer instrumentation or design, and continued DHCP education (*103,104*). Percutaneous injuries among DHCP usually 1) occur outside the patient's mouth, thereby posing less risk for recontact with patient tissues; 2) involve limited amounts of blood; and 3) are caused by burs, syringe needles, laboratory knives, and other sharp instruments (*99–102,105,106*). Injuries among oral surgeons might occur more frequently during fracture reductions using wires (*104,107*). Experience, as measured by years in practice, does not appear to affect the risk of injury among general dentists or oral surgeons (*100,104,107*).

The majority of exposures in dentistry are preventable, and methods to reduce the risk of blood contacts have included use of standard precautions, use of devices with features engineered to prevent sharp injuries, and modifications of work practices. These approaches might have contributed to the decrease in percutaneous injuries among dentists during recent years (*98–100,103*). However, needlesticks and other blood contacts continue to occur, which is a concern because percutaneous injuries pose the greatest risk of transmission.

Standard precautions include use of PPE (e.g., gloves, masks, protective eyewear or face shield, and gowns) intended to prevent skin and mucous membrane exposures. Other protective equipment (e.g., finger guards while suturing) might also reduce injuries during dental procedures (*104*).

Engineering controls are the primary method to reduce exposures to blood and OPIM from sharp instruments and needles. These controls are frequently technology-based and often incorporate safer designs of instruments and devices (e.g., self-sheathing anesthetic needles and dental units designed to shield burs in handpieces) to reduce percutaneous injuries (*101,103,108*).

Work-practice controls establish practices to protect DHCP whose responsibilities include handling, using, assembling, or processing sharp devices (e.g., needles, scalers, laboratory utility knives, burs, explorers, and endodontic files) or sharps disposal containers. Work-practice controls can include removing burs before disassembling the handpiece from the dental unit, restricting use of fingers in tissue retraction or palpation during suturing and administration of anesthesia, and minimizing potentially uncontrolled movements of such instruments as scalers or laboratory knives (*101,105*).

As indicated, needles are a substantial source of percutaneous injury in dental practice, and engineering and work-practice controls for needle handling are of particular importance. In 2001, revisions to OSHA's bloodborne pathogens standard as mandated by the Needlestick Safety and Prevention Act of 2000 became effective. These revisions clarify the need for employers to consider safer needle devices as they become available and to involve employees directly responsible for patient care (e.g., dentists, hygienists, and dental assistants) in identifying and choosing such devices (*109*). Safer versions of sharp devices used in hospital settings have become available (e.g., blunt suture needles, phlebotomy devices, and butterfly needles), and their impact on reducing injuries has been documented (*110–112*). Aspirating anesthetic syringes that incorporate safety features have been developed for dental procedures, but the low injury rates in dentistry limit assessment of their effect on reducing injuries among DHCP.

Work-practice controls for needles and other sharps include placing used disposable syringes and needles, scalpel blades, and other sharp items in appropriate puncture-resistant containers located as close as feasible to where the items were used (*2,7,13,113–115*). In addition, used needles should never be recapped or otherwise manipulated by using both hands, or any other technique that involves directing the point of a needle toward any part of the body (*2,7,13,97,113,114*). A one-handed scoop technique, a mechanical device designed for holding the needle cap to facilitate one-handed recapping, or an engineered sharps injury protection device (e.g., needles with resheathing mechanisms) should be employed for recapping needles between uses and before disposal (*2,7,13,113,114*). DHCP should never bend or break needles before disposal because this practice requires unnecessary manipulation. Before attempting to remove needles from nondisposable aspirating syringes, DHCP should recap them to prevent injuries. For procedures involving multiple injections with a single needle, the practitioner should recap the needle between injections by using a one-handed technique or use a device with a needle-resheathing mechanism. Passing a syringe with an unsheathed needle should be avoided because of the potential for injury.

Additional information for developing a safety program and for identifying and evaluating safer dental devices is available at

- http://www.cdc.gov/OralHealth/infectioncontrol/forms.htm (forms for screening and evaluating safer dental devices), and
- http://www.cdc.gov/niosh/topics/bbp (state legislation on needlestick safety).

Postexposure Management and Prophylaxis

Postexposure management is an integral component of a complete program to prevent infection after an occupational exposure to blood. During dental procedures, saliva is predictably contaminated with blood (*7,114*). Even when blood is not visible, it can still be present in limited quantities and therefore is considered a potentially infectious material by OSHA (*13,19*). A qualified health-care professional should evaluate any occupational exposure incident to blood or OPIM, including saliva, regardless of whether blood is visible, in dental settings (*13*).

Dental practices and laboratories should establish written, comprehensive programs that include hepatitis B vaccination and postexposure management protocols that 1) describe the types of contact with blood or OPIM that can place DHCP at risk for infection; 2) describe procedures for promptly reporting and evaluating such exposures; and 3) identify a health-

care professional who is qualified to provide counseling and perform all medical evaluations and procedures in accordance with current recommendations of the U.S. Public Health Service (PHS), including PEP with chemotherapeutic drugs when indicated. DHCP, including students, who might reasonably be considered at risk for occupational exposure to blood or OPIM should be taught strategies to prevent contact with blood or OPIM and the principles of postexposure management, including PEP options, as part of their job orientation and training. Educational programs for DHCP and students should emphasize reporting all exposures to blood or OPIM as soon as possible, because certain interventions have to be initiated promptly to be effective. Policies should be consistent with the practices and procedures for worker protection required by OSHA and with current PHS recommendations for managing occupational exposures to blood (*13,19*).

After an occupational blood exposure, first aid should be administered as necessary. Puncture wounds and other injuries to the skin should be washed with soap and water; mucous membranes should be flushed with water. No evidence exists that using antiseptics for wound care or expressing fluid by squeezing the wound further reduces the risk of bloodborne pathogen transmission; however, use of antiseptics is not contraindicated. The application of caustic agents (e.g., bleach) or the injection of antiseptics or disinfectants into the wound is not recommended (*19*). Exposed DHCP should immediately report the exposure to the infection-control coordinator or other designated person, who should initiate referral to the qualified health-care professional and complete necessary reports. Because multiple factors contribute to the risk of infection after an occupational exposure to blood, the following information should be included in the exposure report, recorded in the exposed person's confidential medical record, and provided to the qualified health-care professional:

- Date and time of exposure.
- Details of the procedure being performed, including where and how the exposure occurred and whether the exposure involved a sharp device, the type and brand of device, and how and when during its handling the exposure occurred.
- Details of the exposure, including its severity and the type and amount of fluid or material. For a percutaneous injury, severity might be measured by the depth of the wound, gauge of the needle, and whether fluid was injected; for a skin or mucous membrane exposure, the estimated volume of material, duration of contact, and the condition of the skin (e.g., chapped, abraded, or intact) should be noted.
- Details regarding whether the source material was known to contain HIV or other bloodborne pathogens, and, if the source was infected with HIV, the stage of disease, history of antiretroviral therapy, and viral load, if known.
- Details regarding the exposed person (e.g., hepatitis B vaccination and vaccine-response status).
- Details regarding counseling, postexposure management, and follow-up.

Each occupational exposure should be evaluated individually for its potential to transmit HBV, HCV, and HIV, based on the following:

- The type and amount of body substance involved.
- The type of exposure (e.g., percutaneous injury, mucous membrane or nonintact skin exposure, or bites resulting in blood exposure to either person involved).
- The infection status of the source.
- The susceptibility of the exposed person (*19*).

All of these factors should be considered in assessing the risk for infection and the need for further follow-up (e.g., PEP).

During 1990–1998, PHS published guidelines for PEP and other management of health-care worker exposures to HBV, HCV, or HIV (*69,116–119*). In 2001, these recommendations were updated and consolidated into one set of PHS guidelines (*19*). The new guidelines reflect the availability of new antiretroviral agents, new information regarding the use and safety of HIV PEP, and considerations regarding employing HIV PEP when resistance of the source patient's virus to antiretroviral agents is known or suspected. In addition, the 2001 guidelines provide guidance to clinicians and exposed HCP regarding when to consider HIV PEP and recommendations for PEP regimens (*19*).

Hand Hygiene

Hand hygiene (e.g., handwashing, hand antisepsis, or surgical hand antisepsis) substantially reduces potential pathogens on the hands and is considered the single most critical measure for reducing the risk of transmitting organisms to patients and HCP (*120–123*). Hospital-based studies have demonstrated that noncompliance with hand hygiene practices is associated with health-care–associated infections and the spread of multiresistant organisms. Noncompliance also has been a major contributor to outbreaks (*123*). The prevalence of health-care–associated infections decreases as adherence of HCP to recommended hand hygiene measures improves (*124–126*).

The microbial flora of the skin, first described in 1938, consist of transient and resident microorganisms (*127*). Transient flora, which colonize the superficial layers of the skin, are easier to remove by routine handwashing. They are often acquired by HCP during direct contact with patients or contaminated environmental surfaces; these organisms are most frequently

associated with health-care–associated infections. Resident flora attached to deeper layers of the skin are more resistant to removal and less likely to be associated with such infections.

The preferred method for hand hygiene depends on the type of procedure, the degree of contamination, and the desired persistence of antimicrobial action on the skin (Table 2). For routine dental examinations and nonsurgical procedures, handwashing and hand antisepsis is achieved by using either a plain or antimicrobial soap and water. If the hands are not visibly soiled, an alcohol-based hand rub is adequate.

The purpose of surgical hand antisepsis is to eliminate transient flora and reduce resident flora for the duration of a procedure to prevent introduction of organisms in the operative wound, if gloves become punctured or torn. Skin bacteria can rapidly multiply under surgical gloves if hands are washed with soap that is not antimicrobial (*127,128*). Thus, an antimicrobial soap or alcohol hand rub with persistent activity should be used before surgical procedures (*129–131*).

Agents used for surgical hand antisepsis should substantially reduce microorganisms on intact skin, contain a nonirritating antimicrobial preparation, have a broad spectrum of activity, be fast-acting, and have a persistent effect (*121,132–135*). Persistence (i.e., extended antimicrobial activity that prevents or inhibits survival of microorganisms after the product is applied) is critical because microorganisms can colonize on hands in the moist environment underneath gloves (*122*).

Alcohol hand rubs are rapidly germicidal when applied to the skin but should include such antiseptics as chlorhexidine, quaternary ammonium compounds, octenidine, or triclosan to achieve persistent activity (*130*). Factors that can influence the effectiveness of the surgical hand antisepsis in addition to the choice of antiseptic agent include duration and technique of scrubbing, as well as condition of the hands, and techniques used for drying and gloving. CDC's 2002 guideline on hand hygiene in health-care settings provides more complete information (*123*).

Selection of Antiseptic Agents

Selecting the most appropriate antiseptic agent for hand hygiene requires consideration of multiple factors. Essential performance characteristics of a product (e.g., the spectrum and persistence of activity and whether or not the agent is fast-acting) should be determined before selecting a product. Delivery system, cost per use, reliable vendor support and supply are also considerations. Because HCP acceptance is a major factor regarding compliance with recommended hand hygiene protocols (*122,123,147,148*), considering DHCP needs is critical and should include possible chemical allergies,

TABLE 2. Hand-hygiene methods and indications

Method	Agent	Purpose	Duration (minimum)	Indication*
Routine handwash	Water and nonantimicrobial soap (e.g., plain soap†)	Remove soil and transient microorganisms	15 seconds§	Before and after treating each patient (e.g., before glove placement and after glove removal). After barehanded touching of inanimate objects likely to be contaminated by blood or saliva. Before leaving the dental operatory or the dental laboratory. When visibly soiled.¶ Before regloving after removing gloves that are torn, cut, or punctured.
Antiseptic handwash	Water and antimicrobial soap (e.g., chlorhexidine, iodine and iodophors, chloroxylenol [PCMX], triclosan)	Remove or destroy transient microorganisms and reduce resident flora	15 seconds§	
Antiseptic hand rub	Alcohol-based hand rub¶	Remove or destroy transient microorganisms and reduce resident flora	Rub hands until the agent is dry¶	
Surgical antisepsis	Water and antimicrobial soap (e.g., chlorhexidine, iodine and iodophors, chloroxylenol [PCMX], triclosan) Water and non-antimicrobial soap (e.g., plain soap†) followed by an alcohol-based surgical hand-scrub product with persistent activity	Remove or destroy transient microorganisms and reduce resident flora (persistent effect)	2–6 minutes Follow manufacturer instructions for surgical hand-scrub product with persistent activity¶**	Before donning sterile surgeon's gloves for surgical procedures††

* (*7,9,11,13,113,120–123,125,126,136–138*).

† Pathogenic organisms have been found on or around bar soap during and after use (*139*). Use of liquid soap with hands-free dispensing controls is preferable.

§ Time reported as effective in removing most transient flora from the skin. For most procedures, a vigorous rubbing together of all surfaces of premoistened lathered hands and fingers for ≥15 seconds, followed by rinsing under a stream of cool or tepid water is recommended (*9,120,123,140,141*). Hands should always be dried thoroughly before donning gloves.

¶ Alcohol-based hand rubs should contain 60%–95% ethanol or isopropanol and should not be used in the presence of visible soil or organic material. If using an alcohol-based hand rub, apply adequate amount to palm of one hand and rub hands together, covering all surfaces of the hands and fingers, until hands are dry. Follow manufacturer's recommendations regarding the volume of product to use. If hands feel dry after rubbing them together for 10–15 seconds, an insufficient volume of product likely was applied. The drying effect of alcohol can be reduced or eliminated by adding 1%–3% glycerol or other skin-conditioning agents (*123*).

** After application of alcohol-based surgical hand-scrub product with persistent activity as recommended, allow hands and forearms to dry thoroughly and immediately don sterile surgeon's gloves (*144,145*). Follow manufacturer instructions (*122,123,137,146*).

†† Before beginning surgical hand scrub, remove all arm jewelry and any hand jewelry that may make donning gloves more difficult, cause gloves to tear more readily (*142,143*), or interfere with glove usage (e.g., ability to wear the correct-sized glove or altered glove integrity).

skin integrity after repeated use, compatibility with lotions used, and offensive agent ingredients (e.g., scent). Discussing specific preparations or ingredients used for hand antisepsis is beyond the scope of this report. DHCP should choose from commercially available HCP handwashes when selecting agents for hand antisepsis or surgical hand antisepsis.

Storage and Dispensing of Hand Care Products

Handwashing products, including plain (i.e., nonantimicrobial) soap and antiseptic products, can become contaminated or support the growth of microorganisms (*122*). Liquid products should be stored in closed containers and dispensed from either disposable containers or containers that are washed and dried thoroughly before refilling. Soap should not be added to a partially empty dispenser, because this practice of topping off might lead to bacterial contamination (*149,150*). Store and dispense products according to manufacturers' directions.

Lotions

The primary defense against infection and transmission of pathogens is healthy, unbroken skin. Frequent handwashing with soaps and antiseptic agents can cause chronic irritant contact dermatitis among DHCP. Damage to the skin changes skin flora, resulting in more frequent colonization by staphylococci and gram-negative bacteria (*151,152*). The potential of detergents to cause skin irritation varies considerably, but can be reduced by adding emollients. Lotions are often recommended to ease the dryness resulting from frequent handwashing and to prevent dermatitis from glove use (*153,154*). However, petroleum-based lotion formulations can weaken latex gloves and increase permeability. For that reason, lotions that contain petroleum or other oil emollients should only be used at the end of the work day (*122,155*). Dental practitioners should obtain information from lotion manufacturers regarding interaction between lotions, gloves, dental materials, and antimicrobial products.

Fingernails and Artificial Nails

Although the relationship between fingernail length and wound infection is unknown, keeping nails short is considered key because the majority of flora on the hands are found under and around the fingernails (*156*). Fingernails should be short enough to allow DHCP to thoroughly clean underneath them and prevent glove tears (*122*). Sharp nail edges or broken nails are also likely to increase glove failure. Long artificial or natural nails can make donning gloves more difficult and can cause gloves to tear more readily. Hand carriage of gram-negative organisms has been determined to be greater among wearers of artificial nails than among nonwearers, both before and after handwashing (*157–160*). In addition, artificial fingernails or extenders have been epidemiologically implicated in multiple outbreaks involving fungal and bacterial infections in hospital intensive-care units and operating rooms (*161–164*). Freshly applied nail polish on natural nails does not increase the microbial load from periungual skin if fingernails are short; however, chipped nail polish can harbor added bacteria (*165,166*).

Jewelry

Studies have demonstrated that skin underneath rings is more heavily colonized than comparable areas of skin on fingers without rings (*167–170*). In a study of intensive-care nurses, multivariable analysis determined rings were the only substantial risk factor for carriage of gram-negative bacilli and *Staphylococcus aureus,* and the concentration of organisms correlated with the number of rings worn (*170*). However, two other studies demonstrated that mean bacterial colony counts on hands after handwashing were similar among persons wearing rings and those not wearing rings (*169,171*). Whether wearing rings increases the likelihood of transmitting a pathogen is unknown; further studies are needed to establish whether rings result in higher transmission of pathogens in health-care settings. However, rings and decorative nail jewelry can make donning gloves more difficult and cause gloves to tear more readily (*142,143*). Thus, jewelry should not interfere with glove use (e.g., impair ability to wear the correct-sized glove or alter glove integrity).

Personal Protective Equipment

PPE is designed to protect the skin and the mucous membranes of the eyes, nose, and mouth of DHCP from exposure to blood or OPIM. Use of rotary dental and surgical instruments (e.g., handpieces or ultrasonic scalers) and air-water syringes creates a visible spray that contains primarily large-particle droplets of water, saliva, blood, microorganisms, and other debris. This spatter travels only a short distance and settles out quickly, landing on the floor, nearby operatory surfaces, DHCP, or the patient. The spray also might contain certain aerosols (i.e., particles of respirable size, <10 µm). Aerosols can remain airborne for extended periods and can be inhaled. However, they should not be confused with the large-particle spatter that makes up the bulk of the spray from handpieces and ultrasonic scalers. Appropriate work practices, including use of dental dams (*172*) and high-velocity air evacuation, should minimize dissemination of droplets, spatter, and aerosols (*2*).

Primary PPE used in oral health-care settings includes gloves, surgical masks, protective eyewear, face shields, and protective

clothing (e.g., gowns and jackets). All PPE should be removed before DHCP leave patient-care areas (*13*). Reusable PPE (e.g., clinician or patient protective eyewear and face shields) should be cleaned with soap and water, and when visibly soiled, disinfected between patients, according to the manufacturer's directions (*2,13*). Wearing gloves, surgical masks, protective eyewear, and protective clothing in specified circumstances to reduce the risk of exposures to bloodborne pathogens is mandated by OSHA (*13*). General work clothes (e.g., uniforms, scrubs, pants, and shirts) are neither intended to protect against a hazard nor considered PPE.

Masks, Protective Eyewear, Face Shields

A surgical mask that covers both the nose and mouth and protective eyewear with solid side shields or a face shield should be worn by DHCP during procedures and patient-care activities likely to generate splashes or sprays of blood or body fluids. Protective eyewear for patients shields their eyes from spatter or debris generated during dental procedures. A surgical mask protects against microorganisms generated by the wearer, with >95% bacterial filtration efficiency, and also protects DHCP from large-particle droplet spatter that might contain bloodborne pathogens or other infectious microorganisms (*173*). The mask's outer surface can become contaminated with infectious droplets from spray of oral fluids or from touching the mask with contaminated fingers. Also, when a mask becomes wet from exhaled moist air, the resistance to airflow through the mask increases, causing more airflow to pass around edges of the mask. If the mask becomes wet, it should be changed between patients or even during patient treatment, when possible (*2,174*).

When airborne infection isolation precautions (expanded or transmission-based) are necessary (e.g., for TB patients), a National Institute for Occupational Safety and Health (NIOSH)-certified particulate-filter respirator (e.g., N95, N99, or N100) should be used (*20*). *N95* refers to the ability to filter 1-µm particles in the unloaded state with a filter efficiency of >95% (i.e., filter leakage <5%), given flow rates of ≤50 L/min (i.e., approximate maximum airflow rate of HCP during breathing). Available data indicate infectious droplet nuclei measure 1–5 µm; therefore, respirators used in healthcare settings should be able to efficiently filter the smallest particles in this range.

The majority of surgical masks are not NIOSH-certified as respirators, do not protect the user adequately from exposure to TB, and do not satisfy OSHA requirements for respiratory protection (*174,175*). However, certain surgical masks (i.e., surgical N95 respirator) do meet the requirements and are certified by NIOSH as respirators. The level of protection a respirator provides is determined by the efficiency of the filter material for incoming air and how well the face piece fits or seals to the face (e.g., qualitatively or quantitatively tested in a reliable way to obtain a face-seal leakage of <10% and to fit the different facial sizes and characteristics of HCP).

When respirators are used while treating patients with diseases requiring airborne-transmission precautions (e.g., TB), they should be used in the context of a complete respiratory protection program (*175*). This program should include training and fit testing to ensure an adequate seal between the edges of the respirator and the wearer's face. Detailed information regarding respirator programs, including fit-test procedures are available at http://www.cdc.gov/niosh/99-143.html (*174,176*).

Protective Clothing

Protective clothing and equipment (e.g., gowns, lab coats, gloves, masks, and protective eyewear or face shield) should be worn to prevent contamination of street clothing and to protect the skin of DHCP from exposures to blood and body substances (*2,7,10,11,13,137*). OSHA bloodborne pathogens standard requires sleeves to be long enough to protect the forearms when the gown is worn as PPE (i.e., when spatter and spray of blood, saliva, or OPIM to the forearms is anticipated) (*13,14*). DHCP should change protective clothing when it becomes visibly soiled and as soon as feasible if penetrated by blood or other potentially infectious fluids (*2,13,14,137*). All protective clothing should be removed before leaving the work area (*13*).

Gloves and Gloving

DHCP wear gloves to prevent contamination of their hands when touching mucous membranes, blood, saliva, or OPIM, and also to reduce the likelihood that microorganisms present on the hands of DHCP will be transmitted to patients during surgical or other patient-care procedures (*1,2,7,10*). Medical gloves, both patient examination and surgeon's gloves, are manufactured as single-use disposable items that should be used for only one patient, then discarded. Gloves should be changed between patients and when torn or punctured.

Wearing gloves does not eliminate the need for handwashing. Hand hygiene should be performed immediately before donning gloves. Gloves can have small, unapparent defects or can be torn during use, and hands can become contaminated during glove removal (*122,177–187*). These circumstances increase the risk of operative wound contamination and exposure of the DHCP's hands to microorganisms from patients. In addition, bacteria can multiply rapidly in the moist environments underneath gloves, and thus, the hands should be dried thoroughly before donning gloves and washed again immediately after glove removal.

Types of Gloves

Because gloves are task-specific, their selection should be based on the type of procedure to be performed (e.g., surgery or patient examination) (Table 3). Sterile surgeon's gloves must meet standards for sterility assurance established by FDA and are less likely than patient examination gloves to harbor pathogens that could contaminate an operative wound (*188*). Appropriate gloves in the correct size should be readily accessible (*13*).

Glove Integrity

Limited studies of the penetrability of different glove materials under conditions of use have been conducted in the dental environment. Consistent with observations in clinical medicine, leakage rates vary by glove material (e.g., latex, vinyl, and nitrile), duration of use, and type of procedure performed (*182,184,186,189–191*), as well as by manufacturer (*192–194*). The frequency of perforations in surgeon's gloves used during outpatient oral surgical procedures has been determined to range from 6% to 16% (*181,185,195,196*).

Studies have demonstrated that HCP and DHCP are frequently unaware of minute tears in gloves that occur during use (*186,190,191,197*). These studies determined that gloves developed defects in 30 minutes–3 hours, depending on type of glove and procedure. Investigators did not determine an optimal time for changing gloves during procedures.

During dental procedures, patient examination and surgeon's gloves commonly contact multiple types of chemicals and materials (e.g., disinfectants and antiseptics, composite resins, and bonding agents) that can compromise the integrity of latex as well as vinyl, nitrile, and other synthetic glove materials (*198–206*). In addition, latex gloves can interfere with the setting of vinyl polysiloxane impression materials (*207–209*), although the setting is apparently not adversely affected by synthetic vinyl gloves (*207,208*). Given the diverse selection of dental materials on the market, dental practitioners should consult glove manufacturers regarding the chemical compatibility of glove materials.

If the integrity of a glove is compromised (e.g., punctured), it should be changed as soon as possible (*13,210,211*). Washing latex gloves with plain soap, chlorhexidine, or alcohol can lead to the formation of glove micropunctures (*177,212,213*) and subsequent hand contamination (*138*). Because this condition, known as wicking, can allow penetration of liquids through undetected holes, washing gloves is not recommended. After a hand rub with alcohol, the hands should be thoroughly

TABLE 3. Glove types and indications

Glove	Indication	Comment	Commercially available glove materials*	
			Material	Attributes†
Patient examination gloves§	Patient care, examinations, other nonsurgical procedures involving contact with mucous membranes, and laboratory procedures	Medical device regulated by the Food and Drug Administration (FDA). Nonsterile and sterile single-use disposable. Use for one patient and discard appropriately.	Natural-rubber latex (NRL) Nitrile Nitrile and chloroprene (neoprene) blends Nitrile & NRL blends Butadiene methyl methacrylate Polyvinyl chloride (PVC, vinyl) Polyurethane Styrene-based copolymer	1, 2 2, 3 2, 3 1, 2, 3 2, 3 4 4 4, 5
Surgeon's gloves§	Surgical procedures	Medical device regulated by the FDA. Sterile and single-use disposable. Use for one patient and discard appropriately.	NRL Nitrile Chloroprene (neoprene) NRL and nitrile or chloroprene blends Synthetic polyisoprene Styrene-based copolymer Polyurethane	1, 2 2, 3 2, 3 2, 3 2 4, 5 4
Nonmedical gloves	Housekeeping procedures (e.g., cleaning and disinfection) Handling contaminated sharps or chemicals Not for use during patient care	Not a medical device regulated by the FDA. Commonly referred to as utility, industrial, or general purpose gloves. Should be puncture- or chemical-resistant, depending on the task. Latex gloves do not provide adequate chemical protection. Sanitize after use.	NRL and nitrile or chloroprene blends Chloroprene (neoprene) Nitrile Butyl rubber Fluoroelastomer Polyethylene and ethylene vinyl alcohol copolymer	2, 3 2, 3 2, 3 2, 3 3, 4, 6 3, 4, 6

* Physical properties can vary by material, manufacturer, and protein and chemical composition.
† 1 contains allergenic NRL proteins.
2 vulcanized rubber, contains allergenic rubber processing chemicals.
3 likely to have enhanced chemical or puncture resistance.
4 nonvulcanized and does not contain rubber processing chemicals.
5 inappropriate for use with methacrylates.
6 resistant to most methacrylates.
§ Medical or dental gloves include patient-examination gloves and surgeon's (i.e., surgical) gloves and are medical devices regulated by the FDA. Only FDA-cleared medical or dental patient-examination gloves and surgical gloves can be used for patient care.

dried before gloving, because hands still wet with an alcohol-based hand hygiene product can increase the risk of glove perforation (*192*).

FDA regulates the medical glove industry, which includes gloves marketed as sterile surgeon's and sterile or nonsterile patient examination gloves. General-purpose utility gloves are also used in dental health-care settings but are not regulated by FDA because they are not promoted for medical use. More rigorous standards are applied to surgeon's than to examination gloves. FDA has identified acceptable quality levels (e.g., maximum defects allowed) for glove manufacturers (*214*), but even intact gloves eventually fail with exposure to mechanical (e.g., sharps, fingernails, or jewelry) and chemical (e.g., dimethyacrylates) hazards and over time. These variables can be controlled, ultimately optimizing glove performance, by 1) maintaining short fingernails, 2) minimizing or eliminating hand jewelry, and 3) using engineering and work-practice controls to avoid injuries with sharps.

Sterile Surgeon's Gloves and Double-Gloving During Oral Surgical Procedures

Certain limited studies have determined no difference in postoperative infection rates after routine tooth extractions when surgeons wore either sterile or nonsterile gloves (*215,216*). However, wearing sterile surgeon's gloves during surgical procedures is supported by a strong theoretical rationale (*2,7,137*). Sterile gloves minimize transmission of microorganisms from the hands of surgical DHCP to patients and prevent contamination of the hands of surgical DHCP with the patient's blood and body fluids (*137*). In addition, sterile surgeon's gloves are more rigorously regulated by FDA and therefore might provide an increased level of protection for the provider if exposure to blood is likely.

Although the effectiveness of wearing two pairs of gloves in preventing disease transmission has not been demonstrated, the majority of studies among HCP and DHCP have demonstrated a lower frequency of inner glove perforation and visible blood on the surgeon's hands when double gloves are worn (*181,185,195,196,198,217–219*). In one study evaluating double gloves during oral surgical and dental hygiene procedures, the perforation of outer latex gloves was greater during longer procedures (i.e., >45 minutes), with the highest rate (10%) of perforation occurring during oral surgery procedures (*196*). Based on these studies, double gloving might provide additional protection from occupational blood contact (*220*). Double gloving does not appear to substantially reduce either manual dexterity or tactile sensitivity (*221–223*). Additional protection might also be provided by specialty products (e.g., orthopedic surgical gloves and glove liners) (*224*).

Contact Dermatitis and Latex Hypersensitivity

Occupationally related contact dermatitis can develop from frequent and repeated use of hand hygiene products, exposure to chemicals, and glove use. Contact dermatitis is classified as either irritant or allergic. Irritant contact dermatitis is common, nonallergic, and develops as dry, itchy, irritated areas on the skin around the area of contact. By comparison, allergic contact dermatitis (type IV hypersensitivity) can result from exposure to accelerators and other chemicals used in the manufacture of rubber gloves (e.g., natural rubber latex, nitrile, and neoprene), as well as from other chemicals found in the dental practice setting (e.g., methacrylates and glutaraldehyde). Allergic contact dermatitis often manifests as a rash beginning hours after contact and, similar to irritant dermatitis, is usually confined to the area of contact.

Latex allergy (type I hypersensitivity to latex proteins) can be a more serious systemic allergic reaction, usually beginning within minutes of exposure but sometimes occurring hours later and producing varied symptoms. More common reactions include runny nose, sneezing, itchy eyes, scratchy throat, hives, and itchy burning skin sensations. More severe symptoms include asthma marked by difficult breathing, coughing spells, and wheezing; cardiovascular and gastrointestinal ailments; and in rare cases, anaphylaxis and death (*32,225*). The American Dental Association (ADA) began investigating the prevalence of type I latex hypersensitivity among DHCP at the ADA annual meeting in 1994. In 1994 and 1995, approximately 2,000 dentists, hygienists, and assistants volunteered for skin-prick testing. Data demonstrated that 6.2% of those tested were positive for type I latex hypersensitivity (*226*). Data from the subsequent 5 years of this ongoing cross-sectional study indicated a decline in prevalence from 8.5% to 4.3% (*227*). This downward trend is similar to that reported by other studies and might be related to use of latex gloves with lower allergen content (*228–230*).

Natural rubber latex proteins responsible for latex allergy are attached to glove powder. When powdered latex gloves are worn, more latex protein reaches the skin. In addition, when powdered latex gloves are donned or removed, latex protein/powder particles become aerosolized and can be inhaled, contacting mucous membranes (*231*). As a result, allergic patients and DHCP can experience cutaneous, respiratory, and conjunctival symptoms related to latex protein exposure. DHCP can become sensitized to latex protein with repeated exposure (*232–236*). Work areas where only powder-free, low-allergen latex gloves are used demonstrate low or undetectable amounts of latex allergy-causing proteins (*237–239*) and fewer symptoms among HCP related to natural rubber latex allergy.

Because of the role of glove powder in exposure to latex protein, NIOSH recommends that if latex gloves are chosen, HCP should be provided with reduced protein, powder-free gloves (*32*). Nonlatex (e.g., nitrile or vinyl) powder-free and low-protein gloves are also available (*31,240*). Although rare, potentially life-threatening anaphylactic reactions to latex can occur; dental practices should be appropriately equipped and have procedures in place to respond to such emergencies.

DHCP and dental patients with latex allergy should not have direct contact with latex-containing materials and should be in a latex-safe environment with all latex-containing products removed from their vicinity (*31*). Dental patients with histories of latex allergy can be at risk from dental products (e.g., prophylaxis cups, rubber dams, orthodontic elastics, and medication vials) (*241*). Any latex-containing devices that cannot be removed from the treatment environment should be adequately covered or isolated. Persons might also be allergic to chemicals used in the manufacture of natural rubber latex and synthetic rubber gloves as well as metals, plastics, or other materials used in dental care. Taking thorough health histories for both patients and DHCP, followed by avoidance of contact with potential allergens can minimize the possibility of adverse reactions. Certain common predisposing conditions for latex allergy include previous history of allergies, a history of spina bifida, urogenital anomalies, or allergies to avocados, kiwis, nuts, or bananas. The following precautions should be considered to ensure safe treatment for patients who have possible or documented latex allergy:

- Be aware that latent allergens in the ambient air can cause respiratory or anaphylactic symptoms among persons with latex hypersensitivity. Patients with latex allergy can be scheduled for the first appointment of the day to minimize their inadvertent exposure to airborne latex particles.
- Communicate with other DHCP regarding patients with latex allergy (e.g., by oral instructions, written protocols, and posted signage) to prevent them from bringing latex-containing materials into the treatment area.
- Frequently clean all working areas contaminated with latex powder or dust.
- Have emergency treatment kits with latex-free products available at all times.
- If latex-related complications occur during or after a procedure, manage the reaction and seek emergency assistance as indicated. Follow current medical emergency response recommendations for management of anaphylaxis (*32*).

Sterilization and Disinfection of Patient-Care Items

Patient-care items (dental instruments, devices, and equipment) are categorized as critical, semicritical, or noncritical, depending on the potential risk for infection associated with their intended use (Table 4) (*242*). Critical items used to penetrate soft tissue or bone have the greatest risk of transmitting infection and should be sterilized by heat. Semicritical items touch mucous membranes or nonintact skin and have a lower risk of transmission; because the majority of semicritical items in dentistry are heat-tolerant, they also should be sterilized by using heat. If a semicritical item is heat-sensitive, it should, at a minimum, be processed with high-level disinfection (*2*).

Noncritical patient-care items pose the least risk of transmission of infection, contacting only intact skin, which can serve as an effective barrier to microorganisms. In the majority of cases, cleaning, or if visibly soiled, cleaning followed by disinfection with an EPA-registered hospital disinfectant is adequate. When the item is visibly contaminated with blood or OPIM, an EPA-registered hospital disinfectant with a tuberculocidal claim (i.e., intermediate-level disinfectant) should be used (*2,243,244*). Cleaning or disinfection of certain noncritical patient-care items can be difficult or damage the surfaces; therefore, use of disposable barrier protection of these surfaces might be a preferred alternative.

FDA-cleared sterilant/high-level disinfectants and EPA-registered disinfectants must have clear label claims for intended use, and manufacturer instructions for use must be followed (*245*). A more complete description of the regulatory framework in the United States by which liquid chemical germicides are evaluated and regulated is included (Appendix A).

TABLE 4. Infection-control categories of patient-care instruments

Category	Definition	Dental instrument or item
Critical	Penetrates soft tissue, contacts bone, enters into or contacts the bloodstream or other normally sterile tissue.	Surgical instruments, periodontal scalers, scalpel blades, surgical dental burs
Semicritical	Contacts mucous membranes or nonintact skin; will not penetrate soft tissue, contact bone, enter into or contact the bloodstream or other normally sterile tissue.	Dental mouth mirror, amalgam condenser, reusable dental impression trays, dental handpieces*
Noncritical	Contacts intact skin.	Radiograph head/cone, blood pressure cuff, facebow, pulse oximeter

* Although dental handpieces are considered a semicritical item, they should always be heat-sterilized between uses and not high-level disinfected (*246*). See Dental Handpieces and Other Devices Attached to Air or Waterlines for detailed information.

Three levels of disinfection, high, intermediate, and low, are used for patient-care devices that do not require sterility and two levels, intermediate and low, for environmental surfaces (*242*). The intended use of the patient-care item should determine the recommended level of disinfection. Dental practices should follow the product manufacturer's directions regarding concentrations and exposure time for disinfectant activity relative to the surface to be disinfected (*245*). A summary of sterilization and disinfection methods is included (Appendix C).

Transporting and Processing Contaminated Critical and Semicritical Patient-Care Items

DHCP can be exposed to microorganisms on contaminated instruments and devices through percutaneous injury, contact with nonintact skin on the hands, or contact with mucous membranes of the eyes, nose, or mouth. Contaminated instruments should be handled carefully to prevent exposure to sharp instruments that can cause a percutaneous injury. Instruments should be placed in an appropriate container at the point of use to prevent percutaneous injuries during transport to the instrument processing area (*13*).

Instrument processing requires multiple steps to achieve sterilization or high-level disinfection. Sterilization is a complex process requiring specialized equipment, adequate space, qualified DHCP who are provided with ongoing training, and regular monitoring for quality assurance (*247*). Correct cleaning, packaging, sterilizer loading procedures, sterilization methods, or high-level disinfection methods should be followed to ensure that an instrument is adequately processed and safe for reuse on patients.

Instrument Processing Area

DHCP should process all instruments in a designated central processing area to more easily control quality and ensure safety (*248*). The central processing area should be divided into sections for 1) receiving, cleaning, and decontamination; 2) preparation and packaging; 3) sterilization; and 4) storage. Ideally, walls or partitions should separate the sections to control traffic flow and contain contaminants generated during processing. When physical separation of these sections cannot be achieved, adequate spatial separation might be satisfactory if the DHCP who process instruments are trained in work practices to prevent contamination of clean areas (*248*). Space should be adequate for the volume of work anticipated and the items to be stored (*248*).

Receiving, Cleaning, and Decontamination

Reusable instruments, supplies, and equipment should be received, sorted, cleaned, and decontaminated in one section of the processing area. Cleaning should precede all disinfection and sterilization processes; it should involve removal of debris as well as organic and inorganic contamination. Removal of debris and contamination is achieved either by scrubbing with a surfactant, detergent, and water, or by an automated process (e.g., ultrasonic cleaner or washer-disinfector) using chemical agents. If visible debris, whether inorganic or organic matter, is not removed, it will interfere with microbial inactivation and can compromise the disinfection or sterilization process (*244,249–252*). After cleaning, instruments should be rinsed with water to remove chemical or detergent residue. Splashing should be minimized during cleaning and rinsing (*13*). Before final disinfection or sterilization, instruments should be handled as though contaminated.

Considerations in selecting cleaning methods and equipment include 1) efficacy of the method, process, and equipment; 2) compatibility with items to be cleaned; and 3) occupational health and exposure risks. Use of automated cleaning equipment (e.g., ultrasonic cleaner or washer-disinfector) does not require presoaking or scrubbing of instruments and can increase productivity, improve cleaning effectiveness, and decrease worker exposure to blood and body fluids. Thus, using automated equipment can be safer and more efficient than manually cleaning contaminated instruments (*253*).

If manual cleaning is not performed immediately, placing instruments in a puncture-resistant container and soaking them with detergent, a disinfectant/detergent, or an enzymatic cleaner will prevent drying of patient material and make cleaning easier and less time-consuming. Use of a liquid chemical sterilant/high-level disinfectant (e.g., glutaraldehyde) as a holding solution is not recommended (*244*). Using work-practice controls (e.g., long-handled brush) to keep the scrubbing hand away from sharp instruments is recommended (*14*). To avoid injury from sharp instruments, DHCP should wear puncture-resistant, heavy-duty utility gloves when handling or manually cleaning contaminated instruments and devices (*6*). Employees should not reach into trays or containers holding sharp instruments that cannot be seen (e.g., sinks filled with soapy water in which sharp instruments have been placed). Work-practice controls should include use of a strainer-type basket to hold instruments and forceps to remove the items. Because splashing is likely to occur, a mask, protective eyewear or face shield, and gown or jacket should be worn (*13*).

Preparation and Packaging

In another section of the processing area, cleaned instruments and other dental supplies should be inspected, assembled into sets or trays, and wrapped, packaged, or placed into container systems for sterilization. Hinged instruments should be processed open and unlocked. An internal chemical indicator should be placed in every package. In addition, an external

chemical indicator (e.g., chemical indicator tape) should be used when the internal indicator cannot be seen from outside the package. For unwrapped loads, at a minimum, an internal chemical indicator should be placed in the tray or cassette with items to be sterilized (*254*) (see Sterilization of Unwrapped Instruments). Dental practices should refer to the manufacturer's instructions regarding use and correct placement of chemical indicators (see Sterilization Monitoring). Critical and semicritical instruments that will be stored should be wrapped or placed in containers (e.g., cassettes or organizing trays) designed to maintain sterility during storage (*2,247,255–257*).

Packaging materials (e.g., wraps or container systems) allow penetration of the sterilization agent and maintain sterility of the processed item after sterilization. Materials for maintaining sterility of instruments during transport and storage include wrapped perforated instrument cassettes, peel pouches of plastic or paper, and sterilization wraps (i.e., woven and nonwoven). Packaging materials should be designed for the type of sterilization process being used (*256–259*).

Sterilization

The sterilization section of the processing area should include the sterilizers and related supplies, with adequate space for loading, unloading, and cool down. The area can also include incubators for analyzing spore tests and enclosed storage for sterile items and disposable (single-use) items (*260*). Manufacturer and local building code specifications will determine placement and room ventilation requirements.

Sterilization Procedures. Heat-tolerant dental instruments usually are sterilized by 1) steam under pressure (autoclaving), 2) dry heat, or 3) unsaturated chemical vapor. All sterilization should be performed by using medical sterilization equipment cleared by FDA. The sterilization times, temperatures, and other operating parameters recommended by the manufacturer of the equipment used, as well as instructions for correct use of containers, wraps, and chemical or biological indicators, should always be followed (*243,247*).

Items to be sterilized should be arranged to permit free circulation of the sterilizing agent (e.g., steam, chemical vapor, or dry heat); manufacturer's instructions for loading the sterilizer should be followed (*248,260*). Instrument packs should be allowed to dry inside the sterilizer chamber before removing and handling. Packs should not be touched until they are cool and dry because hot packs act as wicks, absorbing moisture, and hence, bacteria from hands (*247*). The ability of equipment to attain physical parameters required to achieve sterilization should be monitored by mechanical, chemical, and biological indicators. Sterilizers vary in their types of indicators and their ability to provide readings on the mechanical or physical parameters of the sterilization process (e.g., time, temperature, and pressure). Consult with the sterilizer manufacturer regarding selection and use of indicators.

Steam Sterilization. Among sterilization methods, steam sterilization, which is dependable and economical, is the most widely used for wrapped and unwrapped critical and semicritical items that are not sensitive to heat and moisture (*260*). Steam sterilization requires exposure of each item to direct steam contact at a required temperature and pressure for a specified time needed to kill microorganisms. Two basic types of steam sterilizers are the gravity displacement and the high-speed prevacuum sterilizer.

The majority of tabletop sterilizers used in a dental practice are gravity displacement sterilizers, although prevacuum sterilizers are becoming more widely available. In gravity displacement sterilizers, steam is admitted through steam lines, a steam generator, or self-generation of steam within the chamber. Unsaturated air is forced out of the chamber through a vent in the chamber wall. Trapping of air is a concern when using saturated steam under gravity displacement; errors in packaging items or overloading the sterilizer chamber can result in cool air pockets and items not being sterilized.

Prevacuum sterilizers are fitted with a pump to create a vacuum in the chamber and ensure air removal from the sterilizing chamber before the chamber is pressurized with steam. Relative to gravity displacement, this procedure allows faster and more positive steam penetration throughout the entire load. Prevacuum sterilizers should be tested periodically for adequate air removal, as recommended by the manufacturer. Air not removed from the chamber will interfere with steam contact. If a sterilizer fails the air removal test, it should not be used until inspected by sterilizer maintenance personnel and it passes the test (*243,247*). Manufacturer's instructions, with specific details regarding operation and user maintenance information, should be followed.

Unsaturated Chemical-Vapor Sterilization. Unsaturated chemical-vapor sterilization involves heating a chemical solution of primarily alcohol with 0.23% formaldehyde in a closed pressurized chamber. Unsaturated chemical vapor sterilization of carbon steel instruments (e.g., dental burs) causes less corrosion than steam sterilization because of the low level of water present during the cycle. Instruments should be dry before sterilizing. State and local authorities should be consulted for hazardous waste disposal requirements for the sterilizing solution.

Dry-Heat Sterilization. Dry heat is used to sterilize materials that might be damaged by moist heat (e.g., burs and certain orthodontic instruments). Although dry heat has the advantages of low operating cost and being noncorrosive, it is

a prolonged process and the high temperatures required are not suitable for certain patient-care items and devices (*261*).

Dry-heat sterilizers used in dentistry include static-air and forced-air types.

- The static-air type is commonly called an oven-type sterilizer. Heating coils in the bottom or sides of the unit cause hot air to rise inside the chamber through natural convection.
- The forced-air type is also known as a rapid heat-transfer sterilizer. Heated air is circulated throughout the chamber at a high velocity, permitting more rapid transfer of energy from the air to the instruments, thereby reducing the time needed for sterilization.

Sterilization of Unwrapped Instruments. An unwrapped cycle (sometimes called *flash sterilization*) is a method for sterilizing unwrapped patient-care items for immediate use. The time required for unwrapped sterilization cycles depends on the type of sterilizer and the type of item (i.e., porous or nonporous) to be sterilized (*243*). The unwrapped cycle in tabletop sterilizers is preprogrammed by the manufacturer to a specific time and temperature setting and can include a drying phase at the end to produce a dry instrument with much of the heat dissipated. If the drying phase requirements are unclear, the operation manual or manufacturer of the sterilizer should be consulted. If the unwrapped sterilization cycle in a steam sterilizer does not include a drying phase, or has only a minimal drying phase, items retrieved from the sterilizer will be hot and wet, making aseptic transport to the point of use more difficult. For dry-heat and chemical-vapor sterilizers, a drying phase is not required.

Unwrapped sterilization should be used only under certain conditions: 1) thorough cleaning and drying of instruments precedes the unwrapped sterilization cycle; 2) mechanical monitors are checked and chemical indicators used for each cycle; 3) care is taken to avoid thermal injury to DHCP or patients; and 4) items are transported aseptically to the point of use to maintain sterility (*134,258,262*). Because all implantable devices should be quarantined after sterilization until the results of biological monitoring are known, unwrapped or flash sterilization of implantable items is not recommended (*134*).

Critical instruments sterilized unwrapped should be transferred immediately by using aseptic technique, from the sterilizer to the actual point of use. Critical instruments should not be stored unwrapped (*260*). Semicritical instruments that are sterilized unwrapped on a tray or in a container system should be used immediately or within a short time. When sterile items are open to the air, they will eventually become contaminated. Storage, even temporary, of unwrapped semicritical instruments is discouraged because it permits exposure to dust, airborne organisms, and other unnecessary contamination before use on a patient (*260*). A carefully written protocol for minimizing the risk of contaminating unwrapped instruments should be prepared and followed (*260*).

Other Sterilization Methods. Heat-sensitive critical and semicritical instruments and devices can be sterilized by immersing them in liquid chemical germicides registered by FDA as sterilants. When using a liquid chemical germicide for sterilization, certain poststerilization procedures are essential. Items need to be 1) rinsed with sterile water after removal to remove toxic or irritating residues; 2) handled using sterile gloves and dried with sterile towels; and 3) delivered to the point of use in an aseptic manner. If stored before use, the instrument should not be considered sterile and should be sterilized again just before use. In addition, the sterilization process with liquid chemical sterilants cannot be verified with biological indicators (*263*).

Because of these limitations and because liquid chemical sterilants can require approximately 12 hours of complete immersion, they are almost never used to sterilize instruments. Rather, these chemicals are more often used for high-level disinfection (*249*). Shorter immersion times (12–90 minutes) are used to achieve high-level disinfection of semicritical instruments or items. These powerful, sporicidal chemicals (e.g., glutaraldehyde, peracetic acid, and hydrogen peroxide) are highly toxic (*244,264,265*). Manufacturer instructions (e.g., regarding dilution, immersion time, and temperature) and safety precautions for using chemical sterilants/high-level disinfectants must be followed precisely (*15,245*). These chemicals should not be used for applications other than those indicated in their label instructions. Misapplications include use as an environmental surface disinfectant or instrument-holding solution.

When using appropriate precautions (e.g., closed containers to limit vapor release, chemically resistant gloves and aprons, goggles, and face shields), glutaraldehyde-based products can be used without tissue irritation or adverse health effects. However, dermatologic, eye irritation, respiratory effects, and skin sensitization have been reported (*266–268*). Because of their lack of chemical resistance to glutaraldehydes, medical gloves are not an effective barrier (*200,269,270*). Other factors might apply (e.g., room exhaust ventilation or 10 air exchanges/hour) to ensure DHCP safety (*266,271*). For all of these reasons, using heat-sensitive semicritical items that must be processed with liquid chemical germicides is discouraged; heat-tolerant or disposable alternatives are available for the majority of such items.

Low-temperature sterilization with ethylene oxide gas (ETO) has been used extensively in larger health-care facilities. Its primary advantage is the ability to sterilize heat- and moisture-sensitive patient-care items with reduced deleterious effects. However, extended sterilization times of 10–48 hours

and potential hazards to patients and DHCP requiring stringent health and safety requirements (*272–274*) make this method impractical for private-practice settings. Handpieces cannot be effectively sterilized with this method because of decreased penetration of ETO gas flow through a small lumen (*250,275*). Other types of low-temperature sterilization (e.g., hydrogen peroxide gas plasma) exist but are not yet practical for dental offices.

Bead sterilizers have been used in dentistry to sterilize small metallic instruments (e.g., endodontic files). FDA has determined that a risk of infection exists with these devices because of their potential failure to sterilize dental instruments and has required their commercial distribution cease unless the manufacturer files a premarket approval application. If a bead sterilizer is employed, DHCP assume the risk of employing a dental device FDA has deemed neither safe nor effective (*276*).

Sterilization Monitoring. Monitoring of sterilization procedures should include a combination of process parameters, including mechanical, chemical, and biological (*247,248,277*). These parameters evaluate both the sterilizing conditions and the procedure's effectiveness.

Mechanical techniques for monitoring sterilization include assessing cycle time, temperature, and pressure by observing the gauges or displays on the sterilizer and noting these parameters for each load (*243,248*). Some tabletop sterilizers have recording devices that print out these parameters. Correct readings do not ensure sterilization, but incorrect readings can be the first indication of a problem with the sterilization cycle.

Chemical indicators, internal and external, use sensitive chemicals to assess physical conditions (e.g., time and temperature) during the sterilization process. Although chemical indicators do not prove sterilization has been achieved, they allow detection of certain equipment malfunctions, and they can help identify procedural errors. External indicators applied to the outside of a package (e.g., chemical indicator tape or special markings) change color rapidly when a specific parameter is reached, and they verify that the package has been exposed to the sterilization process. Internal chemical indicators should be used inside each package to ensure the sterilizing agent has penetrated the packaging material and actually reached the instruments inside. A single-parameter internal chemical indicator provides information regarding only one sterilization parameter (e.g., time or temperature). Multiparameter internal chemical indicators are designed to react to ≥2 parameters (e.g., time and temperature; or time, temperature, and the presence of steam) and can provide a more reliable indication that sterilization conditions have been met (*254*). Multiparameter internal indicators are available only for steam sterilizers (i.e., autoclaves).

Because chemical indicator test results are received when the sterilization cycle is complete, they can provide an early indication of a problem and where in the process the problem might exist. If either mechanical indicators or internal or external chemical indicators indicate inadequate processing, items in the load should not be used until reprocessed (*134*).

Biological indicators (BIs) (i.e., spore tests) are the most accepted method for monitoring the sterilization process (*278,279*) because they assess it directly by killing known highly resistant microorganisms (e.g., *Geobacillus* or *Bacillus* species), rather than merely testing the physical and chemical conditions necessary for sterilization (*243*). Because spores used in BIs are more resistant and present in greater numbers than the common microbial contaminants found on patient-care equipment, an inactivated BI indicates other potential pathogens in the load have been killed (*280*).

Correct functioning of sterilization cycles should be verified for each sterilizer by the periodic use (at least weekly) of BIs (*2,9,134,243,278,279*). Every load containing implantable devices should be monitored with such indicators (*248*), and the items quarantined until BI results are known. However, in an emergency, placing implantable items in quarantine until spore tests are known to be negative might be impossible.

Manufacturer's directions should determine the placement and location of BI in the sterilizer. A control BI, from the same lot as the test indicator and not processed through the sterilizer, should be incubated with the test BI; the control BI should yield positive results for bacterial growth.

In-office biological monitoring is available; mail-in sterilization monitoring services (e.g., from private companies or dental schools) can also be used to test both the BI and the control. Although some DHCP have expressed concern that delays caused by mailing specimens might cause false-negatives, studies have determined that mail delays have no substantial effect on final test results (*281,282*).

Procedures to follow in the event of a positive spore test have been developed (*243,247*). If the mechanical (e.g., time, temperature, and pressure) and chemical (i.e., internal or external) indicators demonstrate that the sterilizer is functioning correctly, a single positive spore test probably does not indicate sterilizer malfunction. Items other than implantable devices do not necessarily need to be recalled; however the spore test should be repeated immediately after correctly loading the sterilizer and using the same cycle that produced the failure. The sterilizer should be removed from service, and all records reviewed of chemical and mechanical monitoring since the last negative BI test. Also, sterilizer operating procedures should be reviewed, including packaging, loading, and spore testing, with all persons who work with the sterilizer to determine whether operator error could be responsible (*9,243,247*).

Overloading, failure to provide adequate package separation, and incorrect or excessive packaging material are all common reasons for a positive BI in the absence of mechanical failure of the sterilizer unit (*260*). A second monitored sterilizer in the office can be used, or a loaner from a sales or repair company obtained, to minimize office disruption while waiting for the repeat BI.

If the repeat test is negative and chemical and mechanical monitoring indicate adequate processing, the sterilizer can be put back into service. If the repeat BI test is positive, and packaging, loading, and operating procedures have been confirmed as performing correctly, the sterilizer should remain out of service until it has been inspected, repaired, and rechallenged with BI tests in three consecutive empty chamber sterilization cycles (*9,243*). When possible, items from suspect loads dating back to the last negative BI should be recalled, rewrapped, and resterilized (*9,283*).

A more conservative approach has been recommended (*247*) in which any positive spore test is assumed to represent sterilizer malfunction and requires that all materials processed in that sterilizer, dating from the sterilization cycle having the last negative biologic indicator to the next cycle indicating satisfactory biologic indicator results, should be considered nonsterile and retrieved, if possible, and reprocessed or held in quarantine until the results of the repeat BI are known. This approach is considered conservative because the margin of safety in steam sterilization is sufficient enough that infection risk, associated with items in a load indicating spore growth, is minimal, particularly if the item was properly cleaned and the temperature was achieved (e.g., as demonstrated by acceptable chemical indicator or temperature chart) (*243*). Published studies are not available that document disease transmission through a nonretrieved surgical instrument after a steam sterilization cycle with a positive biological indicator (*243*). This more conservative approach should always be used for sterilization methods other than steam (e.g., dry heat, unsaturated chemical vapor, ETO, or hydrogen peroxide gas plasma) (*243*).

Results of biological monitoring should be recorded and sterilization monitoring records (i.e., mechanical, chemical, and biological) retained long enough to comply with state and local regulations. Such records are a component of an overall dental infection-control program (see Program Evaluation).

Storage of Sterilized Items and Clean Dental Supplies

The storage area should contain enclosed storage for sterile items and disposable (single-use) items (*173*). Storage practices for wrapped sterilized instruments can be either date- or event-related. Packages containing sterile supplies should be inspected before use to verify barrier integrity and dryness. Although some health-care facilities continue to date every sterilized package and use shelf-life practices, other facilities have switched to event-related practices (*243*). This approach recognizes that the product should remain sterile indefinitely, unless an event causes it to become contaminated (e.g., torn or wet packaging) (*284*). Even for event-related packaging, minimally, the date of sterilization should be placed on the package, and if multiple sterilizers are used in the facility, the sterilizer used should be indicated on the outside of the packaging material to facilitate the retrieval of processed items in the event of a sterilization failure (*247*). If packaging is compromised, the instruments should be recleaned, packaged in new wrap, and sterilized again.

Clean supplies and instruments should be stored in closed or covered cabinets, if possible (*285*). Dental supplies and instruments should not be stored under sinks or in other locations where they might become wet.

Environmental Infection Control

In the dental operatory, environmental surfaces (i.e., a surface or equipment that does not contact patients directly) can become contaminated during patient care. Certain surfaces, especially ones touched frequently (e.g., light handles, unit switches, and drawer knobs) can serve as reservoirs of microbial contamination, although they have not been associated directly with transmission of infection to either DHCP or patients. Transfer of microorganisms from contaminated environmental surfaces to patients occurs primarily through DHCP hand contact (*286,287*). When these surfaces are touched, microbial agents can be transferred to instruments, other environmental surfaces, or to the nose, mouth, or eyes of workers or patients. Although hand hygiene is key to minimizing this transferal, barrier protection or cleaning and disinfecting of environmental surfaces also protects against health-care–associated infections.

Environmental surfaces can be divided into clinical contact surfaces and housekeeping surfaces (*249*). Because housekeeping surfaces (e.g., floors, walls, and sinks) have limited risk of disease transmission, they can be decontaminated with less rigorous methods than those used on dental patient-care items and clinical contact surfaces (*244*). Strategies for cleaning and disinfecting surfaces in patient-care areas should consider the 1) potential for direct patient contact; 2) degree and frequency of hand contact; and 3) potential contamination of the surface with body substances or environmental sources of microorganisms (e.g., soil, dust, or water).

Cleaning is the necessary first step of any disinfection process. Cleaning is a form of decontamination that renders the environmental surface safe by removing organic matter, salts,

and visible soils, all of which interfere with microbial inactivation. The physical action of scrubbing with detergents and surfactants and rinsing with water removes substantial numbers of microorganisms. If a surface is not cleaned first, the success of the disinfection process can be compromised. Removal of all visible blood and inorganic and organic matter can be as critical as the germicidal activity of the disinfecting agent (*249*). When a surface cannot be cleaned adequately, it should be protected with barriers (*2*).

Clinical Contact Surfaces

Clinical contact surfaces can be directly contaminated from patient materials either by direct spray or spatter generated during dental procedures or by contact with DHCP's gloved hands. These surfaces can subsequently contaminate other instruments, devices, hands, or gloves. Examples of such surfaces include

- light handles,
- switches,
- dental radiograph equipment,
- dental chairside computers,
- reusable containers of dental materials,
- drawer handles,
- faucet handles,
- countertops,
- pens,
- telephones, and
- doorknobs.

Barrier protection of surfaces and equipment can prevent contamination of clinical contact surfaces, but is particularly effective for those that are difficult to clean. Barriers include clear plastic wrap, bags, sheets, tubing, and plastic-backed paper or other materials impervious to moisture (*260,288*). Because such coverings can become contaminated, they should be removed and discarded between patients, while DHCP are still gloved. After removing the barrier, examine the surface to make sure it did not become soiled inadvertently. The surface needs to be cleaned and disinfected only if contamination is evident. Otherwise, after removing gloves and performing hand hygiene, DHCP should place clean barriers on these surfaces before the next patient (*1,2,288*).

If barriers are not used, surfaces should be cleaned and disinfected between patients by using an EPA-registered hospital disinfectant with an HIV, HBV claim (i.e., low-level disinfectant) or a tuberculocidal claim (i.e., intermediate-level disinfectant). Intermediate-level disinfectant should be used when the surface is visibly contaminated with blood or OPIM (*2,244*). Also, general cleaning and disinfection are recommended for clinical contact surfaces, dental unit surfaces, and countertops at the end of daily work activities and are required if surfaces have become contaminated since their last cleaning (*13*). To facilitate daily cleaning, treatment areas should be kept free of unnecessary equipment and supplies.

Manufacturers of dental devices and equipment should provide information regarding material compatibility with liquid chemical germicides, whether equipment can be safely immersed for cleaning, and how it should be decontaminated if servicing is required (*289*). Because of the risks associated with exposure to chemical disinfectants and contaminated surfaces, DHCP who perform environmental cleaning and disinfection should wear gloves and other PPE to prevent occupational exposure to infectious agents and hazardous chemicals. Chemical- and puncture-resistant utility gloves offer more protection than patient examination gloves when using hazardous chemicals.

Housekeeping Surfaces

Evidence does not support that housekeeping surfaces (e.g., floors, walls, and sinks) pose a risk for disease transmission in dental health-care settings. Actual, physical removal of microorganisms and soil by wiping or scrubbing is probably as critical, if not more so, than any antimicrobial effect provided by the agent used (*244,290*). The majority of housekeeping surfaces need to be cleaned only with a detergent and water or an EPA-registered hospital disinfectant/detergent, depending on the nature of the surface and the type and degree of contamination. Schedules and methods vary according to the area (e.g., dental operatory, laboratory, bathrooms, or reception rooms), surface, and amount and type of contamination.

Floors should be cleaned regularly, and spills should be cleaned up promptly. An EPA-registered hospital disinfectant/detergent designed for general housekeeping purposes should be used in patient-care areas if uncertainty exists regarding the nature of the soil on the surface (e.g., blood or body fluid contamination versus routine dust or dirt). Unless contamination is reasonably anticipated or apparent, cleaning or disinfecting walls, window drapes, and other vertical surfaces is unnecessary. However, when housekeeping surfaces are visibly contaminated by blood or OPIM, prompt removal and surface disinfection is appropriate infection-control practice and required by OSHA (*13*).

Part of the cleaning strategy is to minimize contamination of cleaning solutions and cleaning tools (e.g., mop heads or cleaning cloths). Mops and cloths should be cleaned after use and allowed to dry before reuse, or single-use, disposable mop heads and cloths should be used to avoid spreading contamination. Cost, safety, product-surface compatibility, and acceptability by housekeepers can be key criteria for selecting a cleaning agent or an EPA-registered hospital disinfectant/

detergent. PPE used during cleaning and housekeeping procedures followed should be appropriate to the task.

In the cleaning process, another reservoir for microorganisms can be dilute solutions of detergents or disinfectants, especially if prepared in dirty containers, stored for long periods of time, or prepared incorrectly (*244*). Manufacturers' instructions for preparation and use should be followed. Making fresh cleaning solution each day, discarding any remaining solution, and allowing the container to dry will minimize bacterial contamination. Preferred cleaning methods produce minimal mists and aerosols or dispersion of dust in patient-care areas.

Cleaning and Disinfection Strategies for Blood Spills

The majority of blood contamination events in dentistry result from spatter during dental procedures using rotary or ultrasonic instrumentation. Although no evidence supports that HBV, HCV, or HIV have been transmitted from a housekeeping surface, prompt removal and surface disinfection of an area contaminated by either blood or OPIM are appropriate infection-control practices and required by OSHA (*13,291*).

Strategies for decontaminating spills of blood and other body fluids differ by setting and volume of the spill (*113,244*). Blood spills on either clinical contact or housekeeping surfaces should be contained and managed as quickly as possible to reduce the risk of contact by patients and DHCP (*244,292*). The person assigned to clean the spill should wear gloves and other PPE as needed. Visible organic material should be removed with absorbent material (e.g., disposable paper towels discarded in a leak-proof, appropriately labeled container). Nonporous surfaces should be cleaned and then decontaminated with either an EPA-registered hospital disinfectant effective against HBV and HIV or an EPA-registered hospital disinfectant with a tuberculocidal claim (i.e., intermediate-level disinfectant). If sodium hypochlorite is chosen, an EPA-registered sodium hypochlorite product is preferred. However, if such products are unavailable, a 1:100 dilution of sodium hypochlorite (e.g., approximately ¼ cup of 5.25% household chlorine bleach to 1 gallon of water) is an inexpensive and effective disinfecting agent (*113*).

Carpeting and Cloth Furnishings

Carpeting is more difficult to clean than nonporous hard-surface flooring, and it cannot be reliably disinfected, especially after spills of blood and body substances. Studies have documented the presence of diverse microbial populations, primarily bacteria and fungi, in carpeting (*293–295*). Cloth furnishings pose similar contamination risks in areas of direct patient care and places where contaminated materials are managed (e.g., dental operatory, laboratory, or instrument processing areas). For these reasons, use of carpeted flooring and fabric-upholstered furnishings in these areas should be avoided.

Nonregulated and Regulated Medical Waste

Studies have compared microbial load and diversity of microorganisms in residential waste with waste from multiple health-care settings. General waste from hospitals or other health-care facilities (e.g., dental practices or clinical/research laboratories) is no more infective than residential waste (*296,297*). The majority of soiled items in dental offices are general medical waste and thus can be disposed of with ordinary waste. Examples include used gloves, masks, gowns, lightly soiled gauze or cotton rolls, and environmental barriers (e.g., plastic sheets or bags) used to cover equipment during treatment (*298*).

Although any item that has had contact with blood, exudates, or secretions might be infective, treating all such waste as infective is neither necessary nor practical (*244*). Infectious waste that carries a substantial risk of causing infection during handling and disposal is regulated medical waste. A complete definition of regulated waste is included in OSHA's bloodborne pathogens standard (*13*).

Regulated medical waste is only a limited subset of waste: 9%–15% of total waste in hospitals and 1%–2% of total waste in dental offices (*298,299*). Regulated medical waste requires special storage, handling, neutralization, and disposal and is covered by federal, state, and local rules and regulations (*6,297,300,301*). Examples of regulated waste found in dental-practice settings are solid waste soaked or saturated with blood or saliva (e.g., gauze saturated with blood after surgery), extracted teeth, surgically removed hard and soft tissues, and contaminated sharp items (e.g., needles, scalpel blades, and wires) (*13*).

Regulated medical waste requires careful containment for treatment or disposal. A single leak-resistant biohazard bag is usually adequate for containment of nonsharp regulated medical waste, provided the bag is sturdy and the waste can be discarded without contaminating the bag's exterior. Exterior contamination or puncturing of the bag requires placement in a second biohazard bag. All bags should be securely closed for disposal. Puncture-resistant containers with a biohazard label, located at the point of use (i.e., sharps containers), are used as containment for scalpel blades, needles, syringes, and unused sterile sharps (*13*).

Dental health-care facilities should dispose of medical waste regularly to avoid accumulation. Any facility generating regulated medical waste should have a plan for its management that complies with federal, state, and local regulations to ensure health and environmental safety.

Discharging Blood or Other Body Fluids to Sanitary Sewers or Septic Tanks

All containers with blood or saliva (e.g., suctioned fluids) can be inactivated in accordance with state-approved treatment technologies, or the contents can be carefully poured down a utility sink, drain, or toilet (*6*). Appropriate PPE (e.g., gloves, gown, mask, and protective eyewear) should be worn when performing this task (*13*). No evidence exists that bloodborne diseases have been transmitted from contact with raw or treated sewage. Multiple bloodborne pathogens, particularly viruses, are not stable in the environment for long periods (*302*), and the discharge of limited quantities of blood and other body fluids into the sanitary sewer is considered a safe method for disposing of these waste materials (*6*). State and local regulations vary and dictate whether blood or other body fluids require pretreatment or if they can be discharged into the sanitary sewer and in what volume.

Dental Unit Waterlines, Biofilm, and Water Quality

Studies have demonstrated that dental unit waterlines (i.e., narrow-bore plastic tubing that carries water to the high-speed handpiece, air/water syringe, and ultrasonic scaler) can become colonized with microorganisms, including bacteria, fungi, and protozoa (*303–309*). Protected by a polysaccharide slime layer known as a glycocalyx, these microorganisms colonize and replicate on the interior surfaces of the waterline tubing and form a biofilm, which serves as a reservoir that can amplify the number of free-floating (i.e., planktonic) microorganisms in water used for dental treatment. Although oral flora (*303,310,311*) and human pathogens (e.g., *Pseudomonas aeruginosa* [*303,305,312,313*], *Legionella* species [*303,306,313*], and nontuberculous *Mycobacterium* species [*303,304*]), have been isolated from dental water systems, the majority of organisms recovered from dental waterlines are common heterotrophic water bacteria (*305,314,315*). These exhibit limited pathogenic potential for immunocompetent persons.

Clinical Implications

Certain reports associate waterborne infections with dental water systems, and scientific evidence verifies the potential for transmission of waterborne infections and disease in hospital settings and in the community (*306,312,316*). Infection or colonization caused by *Pseudomonas* species or nontuberculous mycobacteria can occur among susceptible patients through direct contact with water (*317–320*) or after exposure to residual waterborne contamination of inadequately reprocessed medical instruments (*321–323*). Nontuberculous mycobacteria can also be transmitted to patients from tap water aerosols (*324*). Health-care–associated transmission of pathogenic agents (e.g., *Legionella* species) occurs primarily through inhalation of infectious aerosols generated from potable water sources or through use of tap water in respiratory therapy equipment (*325–327*). Disease outbreaks in the community have also been reported from diverse environmental aerosol-producing sources, including whirlpool spas (*328*), swimming pools (*329*), and a grocery store mist machine (*330*). Although the majority of these outbreaks are associated with species of *Legionella* and *Pseudomonas* (*329*), the fungus *Cladosporium* (*331*) has also been implicated.

Researchers have not demonstrated a measurable risk of adverse health effects among DHCP or patients from exposure to dental water. Certain studies determined DHCP had altered nasal flora (*332*) or substantially greater titers of *Legionella* antibodies in comparisons with control populations; however, no cases of legionellosis were identified among exposed DHCP (*333,334*). Contaminated dental water might have been the source for localized *Pseudomonas aeruginosa* infections in two immunocompromised patients (*312*). Although transient carriage of *P. aeruginosa* was observed in 78 healthy patients treated with contaminated dental treatment water, no illness was reported among the group. In this same study, a retrospective review of dental records also failed to identify infections (*312*).

Concentrations of bacterial endotoxin ≤1,000 endotoxin units/mL from gram-negative water bacteria have been detected in water from colonized dental units (*335*). No standards exist for an acceptable level of endotoxin in drinking water, but the maximum level permissible in United States Pharmacopeia (USP) sterile water for irrigation is only 0.25 endotoxin units/mL (*336*). Although the consequences of acute and chronic exposure to aerosolized endotoxin in dental health-care settings have not been investigated, endotoxin has been associated with exacerbation of asthma and onset of hypersensitivity pneumonitis in other occupational settings (*329,337*).

Dental Unit Water Quality

Research has demonstrated that microbial counts can reach ≤200,000 colony-forming units (CFU)/mL within 5 days after installation of new dental unit waterlines (*305*), and levels of microbial contamination ≤10^6 CFU/mL of dental unit water have been documented (*309,338*). These counts can occur because dental unit waterline factors (e.g., system design, flow rates, and materials) promote both bacterial growth and development of biofilm.

Although no epidemiologic evidence indicates a public health problem, the presence of substantial numbers of pathogens in dental unit waterlines generates concern. Exposing patients or DHCP to water of uncertain microbiological quality, despite

the lack of documented adverse health effects, is inconsistent with accepted infection-control principles. Thus in 1995, ADA addressed the dental water concern by asking manufacturers to provide equipment with the ability to deliver treatment water with ≤200 CFU/mL of unfiltered output from waterlines (*339*). This threshold was based on the quality assurance standard established for dialysate fluid, to ensure that fluid delivery systems in hemodialysis units have not been colonized by indigenous waterborne organisms (*340*).

Standards also exist for safe drinking water quality as established by EPA, the American Public Health Association (APHA), and the American Water Works Association (AWWA); they have set limits for heterotrophic bacteria of ≤500 CFU/mL of drinking water (*341,342*). Thus, the number of bacteria in water used as a coolant/irrigant for nonsurgical dental procedures should be as low as reasonably achievable and, at a minimum, ≤500 CFU/mL, the regulatory standard for safe drinking water established by EPA and APHA/AWWA.

Strategies To Improve Dental Unit Water Quality

In 1993, CDC recommended that dental waterlines be flushed at the beginning of the clinic day to reduce the microbial load (*2*). However, studies have demonstrated this practice does not affect biofilm in the waterlines or reliably improve the quality of water used during dental treatment (*315,338,343*). Because the recommended value of ≤500 CFU/mL cannot be achieved by using this method, other strategies should be employed. Dental unit water that remains untreated or unfiltered is unlikely to meet drinking water standards (*303–309*). Commercial devices and procedures designed to improve the quality of water used in dental treatment are available (*316*); methods demonstrated to be effective include self-contained water systems combined with chemical treatment, in-line microfilters, and combinations of these treatments. Simply using source water containing ≤500 CFU/mL of bacteria (e.g., tap, distilled, or sterile water) in a self-contained water system will not eliminate bacterial contamination in treatment water if biofilms in the water system are not controlled. Removal or inactivation of dental waterline biofilms requires use of chemical germicides.

Patient material (e.g., oral microorganisms, blood, and saliva) can enter the dental water system during patient treatment (*311,344*). Dental devices that are connected to the dental water system and that enter the patient's mouth (e.g., handpieces, ultrasonic scalers, or air/water syringes) should be operated to discharge water and air for a minimum of 20–30 seconds after each patient (*2*). This procedure is intended to physically flush out patient material that might have entered the turbine, air, or waterlines. The majority of recently manufactured dental units are engineered to prevent retraction of oral fluids, but some older dental units are equipped with antiretraction valves that require periodic maintenance. Users should consult the owner's manual or contact the manufacturer to determine whether testing or maintenance of antiretraction valves or other devices is required. Even with antiretraction valves, flushing devices for a minimum of 20–30 seconds after each patient is recommended.

Maintenance and Monitoring of Dental Unit Water

DHCP should be trained regarding water quality, biofilm formation, water treatment methods, and appropriate maintenance protocols for water delivery systems. Water treatment and monitoring products require strict adherence to maintenance protocols, and noncompliance with treatment regimens has been associated with persistence of microbial contamination in treated systems (*345*). Clinical monitoring of water quality can ensure that procedures are correctly performed and that devices are working in accordance with the manufacturer's previously validated protocol.

Dentists should consult with the manufacturer of their dental unit or water delivery system to determine the best method for maintaining acceptable water quality (i.e., ≤500 CFU/mL) and the recommended frequency of monitoring. Monitoring of dental water quality can be performed by using commercial self-contained test kits or commercial water-testing laboratories. Because methods used to treat dental water systems target the entire biofilm, no rationale exists for routine testing for such specific organisms as *Legionella* or *Pseudomonas*, except when investigating a suspected waterborne disease outbreak (*244*).

Delivery of Sterile Surgical Irrigation

Sterile solutions (e.g., sterile saline or sterile water) should be used as a coolant/irrigation in the performance of oral surgical procedures where a greater opportunity exists for entry of microorganisms, exogenous and endogenous, into the vascular system and other normally sterile areas that support the oral cavity (e.g., bone or subcutaneous tissue) and increased potential exists for localized or systemic infection (see Oral Surgical Procedures). Conventional dental units cannot reliably deliver sterile water even when equipped with independent water reservoirs because the water-bearing pathway cannot be reliably sterilized. Delivery devices (e.g., bulb syringe or sterile, single-use disposable products) should be used to deliver sterile water (*2,121*). Oral surgery and implant handpieces, as well as ultrasonic scalers, are commercially available that bypass the dental unit to deliver sterile water or other solutions by using single-use disposable or sterilizable tubing (*316*).

Boil-Water Advisories

A boil-water advisory is a public health announcement that the public should boil tap water before drinking it. When issued, the public should assume the water is unsafe to drink. Advisories can be issued after 1) failure of or substantial interruption in water treatment processes that result in increased turbidity levels or particle counts and mechanical or equipment failure; 2) positive test results for pathogens (e.g., *Cryptosporidium*, *Giardia*, or *Shigella*) in water; 3) violations of the total coliform rule or the turbidity standard of the surface water treatment rule; 4) circumstances that compromise the distribution system (e.g., watermain break) coupled with an indication of a health hazard; or 5) a natural disaster (e.g., flood, hurricane, or earthquake) (*346*). In recent years, increased numbers of boil-water advisories have resulted from contamination of public drinking water systems with waterborne pathogens. Most notable was the outbreak of cryptosporidiosis in Milwaukee, Wisconsin, where the municipal water system was contaminated with the protozoan parasite *Cryptosporidium parvum*. An estimated 403,000 persons became ill (*347,348*).

During a boil-water advisory, water should not be delivered to patients through the dental unit, ultrasonic scaler, or other dental equipment that uses the public water system. This restriction does not apply if the water source is isolated from the municipal water system (e.g., a separate water reservoir or other water treatment device cleared for marketing by FDA). Patients should rinse with bottled or distilled water until the boil-water advisory has been cancelled. During these advisory periods, tap water should not be used to dilute germicides or for hand hygiene unless the water has been brought to a rolling boil for ≥1 minute and cooled before use (*346,349–351*). For hand hygiene, antimicrobial products that do not require water (e.g., alcohol-based hand rubs) can be used until the boil-water notice is cancelled. If hands are visibly contaminated, bottled water and soap should be used for handwashing; if bottled water is not immediately available, an antiseptic towelette should be used (*13,122*).

When the advisory is cancelled, the local water utility should provide guidance for flushing of waterlines to reduce residual microbial contamination. All incoming waterlines from the public water system inside the dental office (e.g., faucets, waterlines, and dental equipment) should be flushed. No consensus exists regarding the optimal duration for flushing procedures after cancellation of the advisory; recommendations range from 1 to 5 minutes (*244,346,351,352*). The length of time needed can vary with the type and length of the plumbing system leading to the office. After the incoming public water system lines are flushed, dental unit waterlines should be disinfected according to the manufacturer's instructions (*346*).

Special Considerations

Dental Handpieces and Other Devices Attached to Air and Waterlines

Multiple semicritical dental devices that touch mucous membranes are attached to the air or waterlines of the dental unit. Among these devices are high- and low-speed handpieces, prophylaxis angles, ultrasonic and sonic scaling tips, air abrasion devices, and air and water syringe tips. Although no epidemiologic evidence implicates these instruments in disease transmission (*353*), studies of high-speed handpieces using dye expulsion have confirmed the potential for retracting oral fluids into internal compartments of the device (*354–358*). This determination indicates that retained patient material can be expelled intraorally during subsequent uses. Studies using laboratory models also indicate the possibility for retention of viral DNA and viable virus inside both high-speed handpieces and prophylaxis angles (*356,357,359*). The potential for contamination of the internal surfaces of other devices (e.g., low-speed handpieces and ultrasonic scalers), has not been studied, but restricted physical access limits their cleaning. Accordingly, any dental device connected to the dental air/water system that enters the patient's mouth should be run to discharge water, air, or a combination for a minimum of 20–30 seconds after each patient (*2*). This procedure is intended to help physically flush out patient material that might have entered the turbine and air and waterlines (*2,356,357*).

Heat methods can sterilize dental handpieces and other intraoral devices attached to air or waterlines (*246,275,356, 357,360*). For processing any dental device that can be removed from the dental unit air or waterlines, neither surface disinfection nor immersion in chemical germicides is an acceptable method. Ethylene oxide gas cannot adequately sterilize internal components of handpieces (*250,275*). In clinical evaluations of high-speed handpieces, cleaning and lubrication were the most critical factors in determining performance and durability (*361–363*). Manufacturer's instructions for cleaning, lubrication, and sterilization should be followed closely to ensure both the effectiveness of the process and the longevity of handpieces.

Some components of dental instruments are permanently attached to dental unit waterlines and although they do not enter the patient's oral cavity, they are likely to become contaminated with oral fluids during treatment procedures. Such components (e.g., handles or dental unit attachments of saliva ejectors, high-speed air evacuators, and air/water syringes) should be covered with impervious barriers that are changed after each use. If the item becomes visibly contaminated during use, DHCP should clean and disinfect with an EPA-

registered hospital disinfectant (intermediate-level) before use on the next patient.

Saliva Ejectors

Backflow from low-volume saliva ejectors occurs when the pressure in the patient's mouth is less than that in the evacuator. Studies have reported that backflow in low-volume suction lines can occur and microorganisms be present in the lines retracted into the patient's mouth when a seal around the saliva ejector is created (e.g., by a patient closing lips around the tip of the ejector, creating a partial vacuum) (*364–366*). This backflow can be a potential source of cross-contamination; occurrence is variable because the quality of the seal formed varies between patients. Furthermore, studies have demonstrated that gravity pulls fluid back toward the patient's mouth whenever a length of the suction tubing holding the tip is positioned above the patient's mouth, or during simultaneous use of other evacuation (high-volume) equipment (*364–366*). Although no adverse health effects associated with the saliva ejector have been reported, practitioners should be aware that in certain situations, backflow could occur when using a saliva ejector.

Dental Radiology

When taking radiographs, the potential to cross-contaminate equipment and environmental surfaces with blood or saliva is high if aseptic technique is not practiced. Gloves should be worn when taking radiographs and handling contaminated film packets. Other PPE (e.g., mask, protective eyewear, and gowns) should be used if spattering of blood or other body fluids is likely (*11,13,367*). Heat-tolerant versions of intraoral radiograph accessories are available and these semicritical items (e.g., film-holding and positioning devices) should be heat-sterilized before patient use.

After exposure of the radiograph and before glove removal, the film should be dried with disposable gauze or a paper towel to remove blood or excess saliva and placed in a container (e.g., disposable cup) for transport to the developing area. Alternatively, if FDA-cleared film barrier pouches are used, the film packets should be carefully removed from the pouch to avoid contamination of the outside film packet and placed in the clean container for transport to the developing area.

Various methods have been recommended for aseptic transport of exposed films to the developing area, and for removing the outer film packet before exposing and developing the film. Other information regarding dental radiography infection control is available (*260,367,368*). However, care should be taken to avoid contamination of the developing equipment. Protective barriers should be used, or any surfaces that become contaminated should be cleaned and disinfected with an EPA-registered hospital disinfectant of low- (i.e., HIV and HBV claim) to intermediate-level (i.e., tuberculocidal claim) activity. Radiography equipment (e.g., radiograph tubehead and control panel) should be protected with surface barriers that are changed after each patient. If barriers are not used, equipment that has come into contact with DHCP's gloved hands or contaminated film packets should be cleaned and then disinfected after each patient use.

Digital radiography sensors and other high-technology instruments (e.g., intraoral camera, electronic periodontal probe, occlusal analyzers, and lasers) come into contact with mucous membranes and are considered semicritical devices. They should be cleaned and ideally heat-sterilized or high-level disinfected between patients. However, these items vary by manufacturer or type of device in their ability to be sterilized or high-level disinfected. Semicritical items that cannot be reprocessed by heat sterilization or high-level disinfection should, at a minimum, be barrier protected by using an FDA-cleared barrier to reduce gross contamination during use. Use of a barrier does not always protect from contamination (*369–374*). One study determined that a brand of commercially available plastic barriers used to protect dental digital radiography sensors failed at a substantial rate (44%). This rate dropped to 6% when latex finger cots were used in conjunction with the plastic barrier (*375*). To minimize the potential for device-associated infections, after removing the barrier, the device should be cleaned and disinfected with an EPA-registered hospital disinfectant (intermediate-level) after each patient. Manufacturers should be consulted regarding appropriate barrier and disinfection/sterilization procedures for digital radiography sensors, other high-technology intraoral devices, and computer components.

Aseptic Technique for Parenteral Medications

Safe handling of parenteral medications and fluid infusion systems is required to prevent health-care–associated infections among patients undergoing conscious sedation. Parenteral medications can be packaged in single-dose ampules, vials or prefilled syringes, usually without bacteriostatic/preservative agents, and intended for use on a single patient. Multidose vials, used for more than one patient, can have a preservative, but both types of containers of medication should be handled with aseptic techniques to prevent contamination.

Single-dose vials should be used for parenteral medications whenever possible (*376,377*). Single-dose vials might pose a risk for contamination if they are punctured repeatedly. The leftover contents of a single-dose vial should be discarded and

never combined with medications for use on another patient (*376,377*). Medication from a single-dose syringe should not be administered to multiple patients, even if the needle on the syringe is changed (*378*).

The overall risk for extrinsic contamination of multidose vials is probably minimal, although the consequences of contamination might result in life-threatening infection (*379*). If necessary to use a multidose vial, its access diaphragm should be cleansed with 70% alcohol before inserting a sterile device into the vial (*380,381*). A multidose vial should be discarded if sterility is compromised (*380,381*).

Medication vials, syringes, or supplies should not be carried in uniform or clothing pockets. If trays are used to deliver medications to individual patients, they should be cleaned between patients. To further reduce the chance of contamination, all medication vials should be restricted to a centralized medication preparation area separate from the treatment area (*382*).

All fluid infusion and administration sets (e.g., IV bags, tubing, and connections) are single-patient use because sterility cannot be guaranteed when an infusion or administration set is used on multiple patients. Aseptic technique should be used when preparing IV infusion and administration sets, and entry into or breaks in the tubing should be minimized (*378*).

Single-Use or Disposable Devices

A single-use device, also called a disposable device, is designed to be used on one patient and then discarded, not reprocessed for use on another patient (e.g., cleaned, disinfected, or sterilized) (*383*). Single-use devices in dentistry are usually not heat-tolerant and cannot be reliably cleaned. Examples include syringe needles, prophylaxis cups and brushes, and plastic orthodontic brackets. Certain items (e.g., prophylaxis angles, saliva ejectors, high-volume evacuator tips, and air/water syringe tips) are commonly available in a disposable form and should be disposed of appropriately after each use. Single-use devices and items (e.g., cotton rolls, gauze, and irrigating syringes) for use during oral surgical procedures should be sterile at the time of use.

Because of the physical construction of certain devices (e.g., burs, endodontic files, and broaches) cleaning can be difficult. In addition, deterioration can occur on the cutting surfaces of some carbide/diamond burs and endodontic files during processing (*384*) and after repeated processing cycles, leading to potential breakage during patient treatment (*385–388*). These factors, coupled with the knowledge that burs and endodontic instruments exhibit signs of wear during normal use, might make it practical to consider them as single-use devices.

Preprocedural Mouth Rinses

Antimicrobial mouth rinses used by patients before a dental procedure are intended to reduce the number of microorganisms the patient might release in the form of aerosols or spatter that subsequently can contaminate DHCP and equipment operatory surfaces. In addition, preprocedural rinsing can decrease the number of microorganisms introduced in the patient's bloodstream during invasive dental procedures (*389,390*).

No scientific evidence indicates that preprocedural mouth rinsing prevents clinical infections among DHCP or patients, but studies have demonstrated that a preprocedural rinse with an antimicrobial product (e.g., chlorhexidine gluconate, essential oils, or povidone-iodine) can reduce the level of oral microorganisms in aerosols and spatter generated during routine dental procedures with rotary instruments (e.g., dental handpieces or ultrasonic scalers) (*391–399*). Preprocedural mouth rinses can be most beneficial before a procedure that requires using a prophylaxis cup or ultrasonic scaler because rubber dams cannot be used to minimize aerosol and spatter generation and, unless the provider has an assistant, high-volume evacuation is not commonly used (*173*).

The science is unclear concerning the incidence and nature of bacteremias from oral procedures, the relationship of these bacteremias to disease, and the preventive benefit of antimicrobial rinses. In limited studies, no substantial benefit has been demonstrated for mouth rinsing in terms of reducing oral microorganisms in dental-induced bacteremias (*400,401*). However, the American Heart Association's recommendations regarding preventing bacterial endocarditis during dental procedures (*402*) provide limited support concerning preprocedural mouth rinsing with an antimicrobial as an adjunct for patients at risk for bacterial endocarditis. Insufficient data exist to recommend preprocedural mouth rinses to prevent clinical infections among patients or DHCP.

Oral Surgical Procedures

The oral cavity is colonized with numerous microorganisms. Oral surgical procedures present an opportunity for entry of microorganisms (i.e., exogenous and endogenous) into the vascular system and other normally sterile areas of the oral cavity (e.g., bone or subcutaneous tissue); therefore, an increased potential exists for localized or systemic infection. Oral surgical procedures involve the incision, excision, or reflection of tissue that exposes the normally sterile areas of the oral cavity. Examples include biopsy, periodontal surgery, apical surgery, implant surgery, and surgical extractions of teeth (e.g., removal of erupted or nonerupted tooth requiring elevation of mucoperiosteal flap, removal of bone or section of tooth,

and suturing if needed) (see Hand Hygiene, PPE, Single Use or Disposable Devices, and Dental Unit Water Quality).

Handling of Biopsy Specimens

To protect persons handling and transporting biopsy specimens, each specimen must be placed in a sturdy, leakproof container with a secure lid for transportation (*13*). Care should be taken when collecting the specimen to avoid contaminating the outside of the container. If the outside of the container becomes visibly contaminated, it should be cleaned and disinfected or placed in an impervious bag (*2,13*). The container must be labeled with the biohazard symbol during storage, transport, shipment, and disposal (*13,14*).

Handling of Extracted Teeth

Disposal

Extracted teeth that are being discarded are subject to the containerization and labeling provisions outlined by OSHA's bloodborne pathogens standard (*13*). OSHA considers extracted teeth to be potentially infectious material that should be disposed in medical waste containers. Extracted teeth sent to a dental laboratory for shade or size comparisons should be cleaned, surface-disinfected with an EPA-registered hospital disinfectant with intermediate-level activity (i.e., tuberculocidal claim), and transported in a manner consistent with OSHA regulations. However, extracted teeth can be returned to patients on request, at which time provisions of the standard no longer apply (*14*). Extracted teeth containing dental amalgam should not be placed in a medical waste container that uses incineration for final disposal. Commercial metal-recycling companies also might accept extracted teeth with metal restorations, including amalgam. State and local regulations should be consulted regarding disposal of the amalgam.

Educational Settings

Extracted teeth are occasionally collected for use in preclinical educational training. These teeth should be cleaned of visible blood and gross debris and maintained in a hydrated state in a well-constructed closed container during transport. The container should be labeled with the biohazard symbol (*13,14*). Because these teeth will be autoclaved before clinical exercises or study, use of the most economical storage solution (e.g., water or saline) might be practical. Liquid chemical germicides can also be used but do not reliably disinfect both external surface and interior pulp tissue (*403,404*).

Before being used in an educational setting, the teeth should be heat-sterilized to allow safe handling. Microbial growth can be eliminated by using an autoclave cycle for 40 minutes (*405*), but because preclinical educational exercises simulate clinical experiences, students enrolled in dental programs should still follow standard precautions. Autoclaving teeth for preclinical laboratory exercises does not appear to alter their physical properties sufficiently to compromise the learning experience (*405,406*). However, whether autoclave sterilization of extracted teeth affects dentinal structure to the point that the chemical and microchemical relationship between dental materials and the dentin would be affected for research purposes on dental materials is unknown (*406*).

Use of teeth that do not contain amalgam is preferred in educational settings because they can be safely autoclaved (*403,405*). Extracted teeth containing amalgam restorations should not be heat-sterilized because of the potential health hazard from mercury vaporization and exposure. If extracted teeth containing amalgam restorations are to be used, immersion in 10% formalin solution for 2 weeks should be effective in disinfecting both the internal and external structures of the teeth (*403*). If using formalin, manufacturer MSDS should be reviewed for occupational safety and health concerns and to ensure compliance with OSHA regulations (*15*).

Dental Laboratory

Dental prostheses, appliances, and items used in their fabrication (e.g., impressions, occlusal rims, and bite registrations) are potential sources for cross-contamination and should be handled in a manner that prevents exposure of DHCP, patients, or the office environment to infectious agents. Effective communication and coordination between the laboratory and dental practice will ensure that appropriate cleaning and disinfection procedures are performed in the dental office or laboratory, materials are not damaged or distorted because of disinfectant overexposure, and effective disinfection procedures are not unnecessarily duplicated (*407,408*).

When a laboratory case is sent off-site, DHCP should provide written information regarding the methods (e.g., type of disinfectant and exposure time) used to clean and disinfect the material (e.g., impression, stone model, or appliance) (*2,407,409*). Clinical materials that are not decontaminated are subject to OSHA and U.S. Department of Transportation regulations regarding transportation and shipping of infectious materials (*13,410*).

Appliances and prostheses delivered to the patient should be free of contamination. Communication between the laboratory and the dental practice is also key at this stage to determine which one is responsible for the final disinfection process. If the dental laboratory staff provides the disinfection, an EPA-registered hospital disinfectant (low to intermediate) should be used, written documentation of the disinfection method

provided, and the item placed in a tamper-evident container before returning it to the dental office. If such documentation is not provided, the dental office is responsible for final disinfection procedures.

Dental prostheses or impressions brought into the laboratory can be contaminated with bacteria, viruses, and fungi (*411,412*). Dental prostheses, impressions, orthodontic appliances, and other prosthodontic materials (e.g., occlusal rims, temporary prostheses, bite registrations, or extracted teeth) should be thoroughly cleaned (i.e., blood and bioburden removed), disinfected with an EPA-registered hospital disinfectant with a tuberculocidal claim, and thoroughly rinsed before being handled in the in-office laboratory or sent to an off-site laboratory (*2,244,249,407*). The best time to clean and disinfect impressions, prostheses, or appliances is as soon as possible after removal from the patient's mouth before drying of blood or other bioburden can occur. Specific guidance regarding cleaning and disinfecting techniques for various materials is available (*260,413–416*). DHCP are advised to consult with manufacturers regarding the stability of specific materials during disinfection.

In the laboratory, a separate receiving and disinfecting area should be established to reduce contamination in the production area. Bringing untreated items into the laboratory increases chances for cross infection (*260*). If no communication has been received regarding prior cleaning and disinfection of a material, the dental laboratory staff should perform cleaning and disinfection procedures before handling. If during manipulation of a material or appliance a previously undetected area of blood or bioburden becomes apparent, cleaning and disinfection procedures should be repeated. Transfer of oral microorganisms into and onto impressions has been documented (*417–419*). Movement of these organisms onto dental casts has also been demonstrated (*420*). Certain microbes have been demonstrated to remain viable within gypsum cast materials for ≤7 days (*421*). Incorrect handling of contaminated impressions, prostheses, or appliances, therefore, offers an opportunity for transmission of microorganisms (*260*). Whether in the office or laboratory, PPE should be worn until disinfection is completed (*1,2,7,10,13*).

If laboratory items (e.g., burs, polishing points, rag wheels, or laboratory knives) are used on contaminated or potentially contaminated appliances, prostheses, or other material, they should be heat-sterilized, disinfected between patients, or discarded (i.e., disposable items should be used) (*260,407*). Heat-tolerant items used in the mouth (e.g., metal impression tray or face bow fork) should be heat-sterilized before being used on another patient (*2,407*). Items that do not normally contact the patient, prosthetic device, or appliance but frequently become contaminated and cannot withstand heat-sterilization (e.g., articulators, case pans, or lathes) should be cleaned and disinfected between patients and according to the manufacturer's instructions. Pressure pots and water baths are particularly susceptible to contamination with microorganisms and should be cleaned and disinfected between patients (*422*). In the majority of instances, these items can be cleaned and disinfected with an EPA-registered hospital disinfectant. Environmental surfaces should be barrier-protected or cleaned and disinfected in the same manner as in the dental treatment area.

Unless waste generated in the dental laboratory (e.g., disposable trays or impression materials) falls under the category of regulated medical waste, it can be discarded with general waste. Personnel should dispose of sharp items (e.g., burs, disposable blades, and orthodontic wires) in puncture-resistant containers.

Laser/Electrosurgery Plumes or Surgical Smoke

During surgical procedures that use a laser or electrosurgical unit, the thermal destruction of tissue creates a smoke byproduct. Laser plumes or surgical smoke represent another potential risk for DHCP (*423–425*). Lasers transfer electromagnetic energy into tissues, resulting in the release of a heated plume that includes particles, gases (e.g., hydrogen cyanide, benzene, and formaldehyde), tissue debris, viruses, and offensive odors. One concern is that aerosolized infectious material in the laser plume might reach the nasal mucosa of the laser operator and adjacent DHCP. Although certain viruses (e.g., varicella-zoster virus and herpes simplex virus) appear not to aerosolize efficiently (*426,427*), other viruses and various bacteria (e.g., human papilloma virus, HIV, coagulase-negative *Staphylococcus*, *Corynebacterium* species, and *Neisseria* species) have been detected in laser plumes (*428–434*). However, the presence of an infectious agent in a laser plume might not be sufficient to cause disease from airborne exposure, especially if the agent's normal mode of transmission is not airborne. No evidence indicates that HIV or HBV have been transmitted through aerosolization and inhalation (*435*). Although continuing studies are needed to evaluate the risk for DHCP of laser plumes and electrosurgery smoke, following NIOSH recommendations (*425*) and practices developed by the Association of periOperative Registered Nurses (AORN) might be practical (*436*). These practices include using 1) standard precautions (e.g., high-filtration surgical masks and possibly full face shields) (*437*); 2) central room suction units with in-line filters to collect particulate matter from minimal plumes; and 3) dedicated mechanical smoke exhaust systems with a high-efficiency filter to remove substantial amounts of laser plume particles. Local smoke evacuation systems have been recom-

mended by consensus organizations, and these systems can improve the quality of the operating field. Employers should be aware of this emerging problem and advise employees of the potential hazards of laser smoke (*438*). However, this concern remains unresolved in dental practice and no recommendation is provided here.

M. tuberculosis

Patients infected with *M. tuberculosis* occasionally seek urgent dental treatment at outpatient dental settings. Understanding the pathogenesis of the development of TB will help DHCP determine how to manage such patients.

M. tuberculosis is a bacterium carried in airborne infective droplet nuclei that can be generated when persons with pulmonary or laryngeal TB sneeze, cough, speak, or sing (*439*). These small particles (1–5 µm) can stay suspended in the air for hours (*440*). Infection occurs when a susceptible person inhales droplet nuclei containing *M. tuberculosis*, which then travel to the alveoli of the lungs. Usually within 2–12 weeks after initial infection with *M. tuberculosis*, immune response prevents further spread of the TB bacteria, although they can remain alive in the lungs for years, a condition termed latent TB infection. Persons with latent TB infection usually exhibit a reactive tuberculin skin test (TST), have no symptoms of active disease, and are not infectious. However, they can develop active disease later in life if they do not receive treatment for their latent infection.

Approximately 5% of persons who have been recently infected and not treated for latent TB infection will progress from infection to active disease during the first 1–2 years after infection; another 5% will develop active disease later in life. Thus, approximately 90% of U.S. persons with latent TB infection do not progress to active TB disease. Although both latent TB infection and active TB disease are described as TB, only the person with active disease is contagious and presents a risk of transmission. Symptoms of active TB disease include a productive cough, night sweats, fatigue, malaise, fever, and unexplained weight loss. Certain immunocompromising medical conditions (e.g., HIV) increase the risk that TB infection will progress to active disease at a faster rate (*441*).

Overall, the risk borne by DHCP for exposure to a patient with active TB disease is probably low (*20,21*). Only one report exists of TB transmission in a dental office (*442*), and TST conversions among DHCP are also low (*443,444*). However, in certain cases, DHCP or the community served by the dental facility might be at relatively high risk for exposure to TB.

Surgical masks do not prevent inhalation of *M. tuberculosis* droplet nuclei, and therefore, standard precautions are not sufficient to prevent transmission of this organism. Recommendations for expanded precautions to prevent transmission of *M. tuberculosis* and other organisms that can be spread by airborne, droplet, or contact routes have been detailed in other guidelines (*5,11,20*).

TB transmission is controlled through a hierarchy of measures, including administrative controls, environmental controls, and personal respiratory protection. The main administrative goals of a TB infection-control program are early detection of a person with active TB disease and prompt isolation from susceptible persons to reduce the risk of transmission. Although DHCP are not responsible for diagnosis and treatment of TB, they should be trained to recognize signs and symptoms to help with prompt detection. Because potential for transmission of *M. tuberculosis* exists in outpatient settings, dental practices should develop a TB control program appropriate for their level of risk (*20,21*).

- A community risk assessment should be conducted periodically, and TB infection-control policies for each dental setting should be based on the risk assessment. The policies should include provisions for detection and referral of patients who might have undiagnosed active TB; management of patients with active TB who require urgent dental care; and DHCP education, counseling, and TST screening.
- DHCP who have contact with patients should have a baseline TST, preferably by using a two-step test at the beginning of employment. The facility's level of TB risk will determine the need for routine follow-up TST.
- While taking patients' initial medical histories and at periodic updates, dental DHCP should routinely ask all patients whether they have a history of TB disease or symptoms indicative of TB.
- Patients with a medical history or symptoms indicative of undiagnosed active TB should be referred promptly for medical evaluation to determine possible infectiousness. Such patients should not remain in the dental-care facility any longer than required to evaluate their dental condition and arrange a referral. While in the dental health-care facility, the patient should be isolated from other patients and DHCP, wear a surgical mask when not being evaluated, or be instructed to cover their mouth and nose when coughing or sneezing.
- Elective dental treatment should be deferred until a physician confirms that a patient does not have infectious TB, or if the patient is diagnosed with active TB disease, until confirmed the patient is no longer infectious.
- If urgent dental care is provided for a patient who has, or is suspected of having active TB disease, the care should be provided in a facility (e.g., hospital) that provides airborne infection isolation (i.e., using such engineering con-

trols as TB isolation rooms, negatively pressured relative to the corridors, with air either exhausted to the outside or HEPA-filtered if recirculation is necessary). Standard surgical face masks do not protect against TB transmission; DHCP should use respiratory protection (e.g., fit-tested, disposable N-95 respirators).

- Settings that do not require use of respiratory protection because they do not treat active TB patients and do not perform cough-inducing procedures on potential active TB patients do not need to develop a written respiratory protection program.
- Any DHCP with a persistent cough (i.e., lasting >3 weeks), especially in the presence of other signs or symptoms compatible with active TB (e.g., weight loss, night sweats, fatigue, bloody sputum, anorexia, or fever), should be evaluated promptly. The DHCP should not return to the workplace until a diagnosis of TB has been excluded or the DHCP is on therapy and a physician has determined that the DHCP is noninfectious.

Creutzfeldt-Jakob Disease and Other Prion Diseases

Creutzfeldt-Jakob disease (CJD) belongs to a group of rapidly progressive, invariably fatal, degenerative neurological disorders, transmissible spongiform encephalopathies (TSEs) that affect both humans and animals and are thought to be caused by infection with an unusual pathogen called a prion. Prions are isoforms of a normal protein, capable of self-propagation although they lack nucleic acid. Prion diseases have an incubation period of years and are usually fatal within 1 year of diagnosis.

Among humans, TSEs include CJD, Gerstmann-Straussler-Scheinker syndrome, fatal familial insomnia, kuru, and variant CJD (vCJD). Occurring in sporadic, familial, and acquired (i.e., iatrogenic) forms, CJD has an annual incidence in the United States and other countries of approximately 1 case/million population (*445–448*). In approximately 85% of affected patients, CJD occurs as a sporadic disease with no recognizable pattern of transmission. A smaller proportion of patients (5%–15%) experience familial CJD because of inherited mutations of the prion protein gene (*448*).

vCJD is distinguishable clinically and neuropathologically from classic CJD, and strong epidemiologic and laboratory evidence indicates a causal relationship with bovine spongiform encephalopathy (BSE), a progressive neurological disorder of cattle commonly known as *mad cow disease* (*449–451*). vCJD, was reported first in the United Kingdom in 1996 (*449*) and subsequently in other European countries (*452*). Only one case of vCJD has been reported in the United States, in an immigrant from the United Kingdom (*453*). Compared with CJD patients, those with vCJD are younger (28 years versus 68 years median age at death), and have a longer duration of illness (13 months versus 4.5 months). Also, vCJD patients characteristically exhibit sensory and psychiatric symptoms that are uncommon with CJD. Another difference includes the ease with which the presence of prions is consistently demonstrated in lymphoreticular tissues (e.g., tonsil) in vCJD patients by immunohistochemistry (*454*).

CJD and vCJD are transmissible diseases, but not through the air or casual contact. All known cases of iatrogenic CJD have resulted from exposure to infected central nervous tissue (e.g., brain and dura mater), pituitary, or eye tissue. Studies in experimental animals have determined that other tissues have low or no detectable infectivity (*243,455,456*). Limited experimental studies have demonstrated that scrapie (a TSE in sheep) can be transmitted to healthy hamsters and mice by exposing oral tissues to infectious homogenate (*457,458*). These animal models and experimental designs might not be directly applicable to human transmission and clinical dentistry, but they indicate a theoretical risk of transmitting prion diseases through perioral exposures.

According to published reports, iatrogenic transmission of CJD has occurred in humans under three circumstances: after use of contaminated electroencephalography depth electrodes and neurosurgical equipment (*459*); after use of extracted pituitary hormones (*460,461*); and after implant of contaminated corneal (*462*) and dura mater grafts (*463,464*) from humans. The equipment-related cases occurred before the routine implementation of sterilization procedures used in healthcare facilities.

Case-control studies have found no evidence that dental procedures increase the risk of iatrogenic transmission of TSEs among humans. In these studies, CJD transmission was not associated with dental procedures (e.g., root canals or extractions), with convincing evidence of prion detection in human blood, saliva, or oral tissues, or with DHCP becoming occupationally infected with CJD (*465–467*). In 2000, prions were not found in the dental pulps of eight patients with neuropathologically confirmed sporadic CJD by using electrophoresis and a Western blot technique (*468*).

Prions exhibit unusual resistance to conventional chemical and physical decontamination procedures. Considering this resistance and the invariably fatal outcome of CJD, procedures for disinfecting and sterilizing instruments potentially contaminated with the CJD prion have been controversial for years. Scientific data indicate the risk, if any, of sporadic CJD transmission during dental and oral surgical procedures is low to nil. Until additional information exists regarding the transmissibility of CJD or vCJD, special precautions in addition to

standard precautions might be indicated when treating known CJD or vCJD patients; the following list of precautions is provided for consideration without recommendation (*243,249,277,469*):

- Use single-use disposable items and equipment whenever possible.
- Consider items difficult to clean (e.g., endodontic files, broaches, and carbide and diamond burs) as single-use disposables and discard after one use.
- To minimize drying of tissues and body fluids on a device, keep the instrument moist until cleaned and decontaminated.
- Clean instruments thoroughly and steam-autoclave at 134°C for 18 minutes. This is the least stringent of sterilization methods offered by the World Health Organization. The complete list (*469*) is available at http://www.who.int/emc-documents/tse/whocdscsraph2003c.html.
- Do not use flash sterilization for processing instruments or devices.

Potential infectivity of oral tissues in CJD or vCJD patients is an unresolved concern. CDC maintains an active surveillance program on CJD. Additional information and resources are available at http://www.cdc.gov/ncidod/diseases/cjd/cjd.htm.

Program Evaluation

The goal of a dental infection-control program is to provide a safe working environment that will reduce the risk of health-care–associated infections among patients and occupational exposures among DHCP. Medical errors are caused by faulty systems, processes, and conditions that lead persons to make mistakes or fail to prevent errors being made by others (*470*). Effective program evaluation is a systematic way to ensure procedures are useful, feasible, ethical, and accurate. Program evaluation is an essential organizational practice; however, such evaluation is not practiced consistently across program areas, nor is it sufficiently well-integrated into the day-to-day management of the majority of programs (*471*).

A successful infection-control program depends on developing standard operating procedures, evaluating practices, routinely documenting adverse outcomes (e.g., occupational exposures to blood) and work-related illnesses in DHCP, and monitoring health-care–associated infections in patients. Strategies and tools to evaluate the infection-control program can include periodic observational assessments, checklists to document procedures, and routine review of occupational exposures to bloodborne pathogens. Evaluation offers an opportunity to improve the effectiveness of both the infection-control program and dental-practice protocols. If deficiencies or problems in the implementation of infection-control procedures are identified, further evaluation is needed to eliminate the problems. Examples of infection-control program evaluation activities are provided (Table 5).

TABLE 5. Examples of methods for evaluating infection-control programs

Program element	Evaluation activity
Appropriate immunization of dental health-care personnel (DHCP).	Conduct annual review of personnel records to ensure up-to-date immunizations.
Assessment of occupational exposures to infectious agents.	Report occupational exposures to infectious agents. Document the steps that occurred around the exposure and plan how such exposure can be prevented in the future.
Comprehensive postexposure management plan and medical follow-up program after occupational exposures to infectious agents.	Ensure the postexposure management plan is clear, complete, and available at all times to all DHCP. All staff should understand the plan, which should include toll-free phone numbers for access to additional information.
Adherence to hand hygiene before and after patient care.	Observe and document circumstances of appropriate or inappropriate handwashing. Review findings in a staff meeting.
Proper use of personal protective equipment to prevent occupational exposures to infectious agents.	Observe and document the use of barrier precautions and careful handling of sharps. Review findings in a staff meeting.
Routine and appropriate sterilization of instruments using a biologic monitoring system.	Monitor paper log of steam cycle and temperature strip with each sterilization load, and examine results of weekly biologic monitoring. Take appropriate action when failure of sterilization process is noted.
Evaluation and implementation of safer medical devices.	Conduct an annual review of the exposure control plan and consider new developments in safer medical devices.
Compliance of water in routine dental procedures with current drinking U.S. Environmental Protection Agency water standards (fewer than 500 CFU of heterotrophic water bacteria).	Monitor dental water quality as recommended by the equipment manufacturer, using commercial self-contained test kits, or commercial water-testing laboratories.
Proper handling and disposal of medical waste.	Observe the safe disposal of regulated and nonregulated medical waste and take preventive measures if hazardous situations occur.
Health-care–associated infections.	Assess the unscheduled return of patients after procedures and evaluate them for an infectious process. A trend might require formal evaluation.

Infection-Control Research Considerations

Although the number of published studies concerning dental infection control has increased in recent years, questions regarding infection-control practices and their effectiveness remain unanswered. Multiple concerns were identified by the working group for this report, as well as by others during the public comment period (Box). This list is not exhaustive and does not represent a CDC research agenda, but rather is an effort to identify certain concerns, stimulate discussion, and provide direction for determining future action by clinical, basic science, and epidemiologic investigators, as well as health and professional organizations, clinicians, and policy makers.

BOX. Dental infection-control research considerations

Education and promotion

- Design strategies to communicate, to the public and providers, the risk of disease transmission in dentistry.
- Promote use of protocols for recommended postexposure management and follow-up.
- Educate and train dental health-care personnel (DHCP) to screen and evaluate safer dental devices by using tested design and performance criteria.

Laboratory-based research

- Develop animal models to determine the risk of transmitting organisms through inhalation of contaminated aerosols (e.g., influenza) produced from rotary dental instruments.
- Conduct studies to determine the effectiveness of gloves (i.e., material compatibility and duration of use).
- Develop devices with passive safety features to prevent percutaneous injuries.
- Study the effect of alcohol-based hand-hygiene products on retention of latex proteins and other dental allergens (e.g., methylmethacrylate, glutaraldehyde, thiurams) on the hands of DHCP after latex glove use.
- Investigate the applicability of other types of sterilization procedures (e.g., hydrogen peroxide gas plasma) in dentistry.
- Encourage manufacturers to determine optimal methods and frequency for testing dental-unit waterlines and maintaining dental-unit water-quality standards.
- Determine the potential for internal contamination of low-speed handpieces, including the motor, and other devices connected to dental air and water supplies, as well as more efficient ways to clean, lubricate, and sterilize handpieces and other devices attached to air or waterlines.
- Investigate the infectivity of oral tissues in Creutzfeldt-Jakob disease (CJD) or variant CJD patients.
- Determine the most effective methods to disinfect dental impression materials.
- Investigate the viability of pathogenic organisms on dental materials (e.g., impression materials, acrylic resin, or gypsum materials) and dental laboratory equipment.
- Determine the most effective methods for sterilization or disinfection of digital radiology equipment.
- Evaluate the effects of repetitive reprocessing cycles on burs and endodontic files.
- Investigate the potential infectivity of vapors generated from the various lasers used for oral procedures.

Clinical and population-based epidemiologic research and development

- Continue to characterize the epidemiology of blood contacts, particularly percutaneous injuries, and the effectiveness of prevention measures.
- Further assess the effectiveness of double gloving in preventing blood contact during routine and surgical dental procedures.
- Continue to assess the stress placed on gloves during dental procedures and the potential for developing defects during different procedures.
- Develop methods for evaluating the effectiveness and cost-effectiveness of infection-control interventions.
- Determine how infection-control guidelines affect the knowledge, attitudes, and practices of DHCP.

Recommendations

Each recommendation is categorized on the basis of existing scientific data, theoretical rationale, and applicability. Rankings are based on the system used by CDC and the Healthcare Infection Control Practices Advisory Committee (HICPAC) to categorize recommendations:

Category IA. Strongly recommended for implementation and strongly supported by well-designed experimental, clinical, or epidemiologic studies.

Category IB. Strongly recommended for implementation and supported by experimental, clinical, or epidemiologic studies and a strong theoretical rationale.

Category IC. Required for implementation as mandated by federal or state regulation or standard. When IC is used, a second rating can be included to provide the basis of existing scientific data, theoretical rationale, and applicability. Because of state differences, the reader should not assume that the absence of a IC implies the absence of state regulations.

Category II. Suggested for implementation and supported by suggestive clinical or epidemiologic studies or a theoretical rationale.

Unresolved issue. No recommendation. Insufficient evidence or no consensus regarding efficacy exists.

I. Personnel Health Elements of an Infection-Control Program

A. General Recommendations

1. Develop a written health program for DHCP that includes policies, procedures, and guidelines for education and training; immunizations; exposure prevention and postexposure management; medical conditions, work-related illness, and associated work restrictions; contact dermatitis and latex hypersensitivity; and maintenance of records, data management, and confidentiality (IB) (*5,16–18,22*).
2. Establish referral arrangements with qualified health-care professionals to ensure prompt and appropriate provision of preventive services, occupationally related medical services, and postexposure management with medical follow-up (IB, IC) (*5,13,19,22*).

B. Education and Training

1. Provide DHCP 1) on initial employment, 2) when new tasks or procedures affect the employee's occupational exposure, and 3) at a minimum, annually, with education and training regarding occupational exposure to potentially infectious agents and infection-control procedures/protocols appropriate for and specific to their assigned duties (IB, IC) (*5,11,13,14,16,19,22*).
2. Provide educational information appropriate in content and vocabulary to the educational level, literacy, and language of DHCP (IB, IC) (*5,13*).

C. Immunization Programs

1. Develop a written comprehensive policy regarding immunizing DHCP, including a list of all required and recommended immunizations (IB) (*5,17,18*).
2. Refer DHCP to a prearranged qualified health-care professional or to their own health-care professional to receive all appropriate immunizations based on the latest recommendations as well as their medical history and risk for occupational exposure (IB) (*5,17*).

D. Exposure Prevention and Postexposure Management

1. Develop a comprehensive postexposure management and medical follow-up program (IB, IC) (*5,13,14,19*).
   a. Include policies and procedures for prompt reporting, evaluation, counseling, treatment, and medical follow-up of occupational exposures.
   b. Establish mechanisms for referral to a qualified health-care professional for medical evaluation and follow-up.
   c. Conduct a baseline TST, preferably by using a two-step test, for all DHCP who might have contact with persons with suspected or confirmed infectious TB, regardless of the risk classification of the setting (IB) (*20*).

E. Medical Conditions, Work-Related Illness, and Work Restrictions

1. Develop and have readily available to all DHCP comprehensive written policies regarding work restriction and exclusion that include a statement of authority defining who can implement such policies (IB) (*5,22*).
2. Develop policies for work restriction and exclusion that encourage DHCP to seek appropriate preventive and curative care and report their illnesses, medical conditions, or treatments that can render them more susceptible to opportunistic infection or exposures; do not penalize DHCP with loss of wages, benefits, or job status (IB) (*5,22*).

3. Develop policies and procedures for evaluation, diagnosis, and management of DHCP with suspected or known occupational contact dermatitis (IB) (*32*).
4. Seek definitive diagnosis by a qualified healthcare professional for any DHCP with suspected latex allergy to carefully determine its specific etiology and appropriate treatment as well as work restrictions and accommodations (IB) (*32*).

F. Records Maintenance, Data Management, and Confidentiality

1. Establish and maintain confidential medical records (e.g., immunization records and documentation of tests received as a result of occupational exposure) for all DHCP (IB, IC) (*5,13*).
2. Ensure that the practice complies with all applicable federal, state, and local laws regarding medical recordkeeping and confidentiality (IC) (*13,34*).

II. Preventing Transmission of Bloodborne Pathogens

A. HBV Vaccination

1. Offer the HBV vaccination series to all DHCP with potential occupational exposure to blood or other potentially infectious material (IA, IC) (*2,13,14,19*).
2. Always follow U.S. Public Health Service/CDC recommendations for hepatitis B vaccination, serologic testing, follow-up, and booster dosing (IA, IC) (*13,14,19*).
3. Test DHCP for anti-HBs 1–2 months after completion of the 3-dose vaccination series (IA, IC) (*14,19*).
4. DHCP should complete a second 3-dose vaccine series or be evaluated to determine if they are HBsAg-positive if no antibody response occurs to the primary vaccine series (IA, IC) (*14,19*).
5. Retest for anti-HBs at the completion of the second vaccine series. If no response to the second 3-dose series occurs, nonresponders should be tested for HBsAg (IC) (*14,19*).
6. Counsel nonresponders to vaccination who are HBsAg-negative regarding their susceptibility to HBV infection and precautions to take (IA, IC) (*14,19*).
7. Provide employees appropriate education regarding the risks of HBV transmission and the availability of the vaccine. Employees who decline the vaccination should sign a declination form to be kept on file with the employer (IC) (*13*).

B. Preventing Exposures to Blood and OPIM

1. General recommendations
   a. Use standard precautions (OSHA's bloodborne pathogen standard retains the term universal precautions) for all patient encounters (IA, IC) (*11,13,19,53*).
   b. Consider sharp items (e.g., needles, scalers, burs, lab knives, and wires) that are contaminated with patient blood and saliva as potentially infective and establish engineering controls and work practices to prevent injuries (IB, IC) (*6,13,113*).
   c. Implement a written, comprehensive program designed to minimize and manage DHCP exposures to blood and body fluids (IB, IC). (*13,14,19,97*).
2. Engineering and work-practice controls
   a. Identify, evaluate, and select devices with engineered safety features at least annually and as they become available on the market (e.g., safer anesthetic syringes, blunt suture needle, retractable scalpel, or needleless IV systems) (IC) (*13,97,110–112*).
   b. Place used disposable syringes and needles, scalpel blades, and other sharp items in appropriate puncture-resistant containers located as close as feasible to the area in which the items are used (IA, IC) (*2,7,13,19,113, 115*).
   c. Do not recap used needles by using both hands or any other technique that involves directing the point of a needle toward any part of the body. Do not bend, break, or remove needles before disposal (IA, IC) (*2,7,8,13,97,113*).
   d. Use either a one-handed scoop technique or a mechanical device designed for holding the needle cap when recapping needles (e.g., between multiple injections and before removing from a nondisposable aspirating syringe) (IA, IC) (*2,7,8,13,14,113*).
3. Postexposure management and prophylaxis
   a. Follow CDC recommendations after percutaneous, mucous membrane, or nonintact skin exposure to blood or other potentially infectious material (IA, IC) (*13,14,19*).

III. Hand Hygiene

A. General Considerations

1. Perform hand hygiene with either a nonantimicrobial or antimicrobial soap and water when hands are visibly dirty or contaminated with blood or other potentially infectious material. If hands are not visibly soiled, an alcohol-based hand rub can also be used. Follow the manufacturer's instructions (IA) (*123*).
2. Indications for hand hygiene include
   a. when hands are visibly soiled (IA, IC);
   b. after barehanded touching of inanimate objects likely to be contaminated by blood, saliva, or respiratory secretions (IA, IC);
   c. before and after treating each patient (IB);
   d. before donning gloves (IB); and
   e. immediately after removing gloves (IB, IC) (*7–9,11,13,113,120–123,125,126,138*).
3. For oral surgical procedures, perform surgical hand antisepsis before donning sterile surgeon's gloves. Follow the manufacturer's instructions by using either an antimicrobial soap and water, or soap and water followed by drying hands and application of an alcohol-based surgical handscrub product with persistent activity (IB) (*121–123,127–133,144,145*).
4. Store liquid hand-care products in either disposable closed containers or closed containers that can be washed and dried before refilling. Do not add soap or lotion to (i.e., top off) a partially empty dispenser (IA) (*9,120,122,149,150*).

B. Special Considerations for Hand Hygiene and Glove Use

1. Use hand lotions to prevent skin dryness associated with handwashing (IA) (*153,154*).
2. Consider the compatibility of lotion and antiseptic products and the effect of petroleum or other oil emollients on the integrity of gloves during product selection and glove use (IB) (*2,14,122,155*).
3. Keep fingernails short with smooth, filed edges to allow thorough cleaning and prevent glove tears (II) (*122,123,156*).
4. Do not wear artificial fingernails or extenders when having direct contact with patients at high risk (e.g., those in intensive care units or operating rooms) (IA) (*123,157–160*).
5. Use of artificial fingernails is usually not recommended (II) (*157–160*).
6. Do not wear hand or nail jewelry if it makes donning gloves more difficult or compromises the fit and integrity of the glove (II) (*123,142,143*).

IV. PPE

A. Masks, Protective Eyewear, and Face Shields

1. Wear a surgical mask and eye protection with solid side shields or a face shield to protect mucous membranes of the eyes, nose, and mouth during procedures likely to generate splashing or spattering of blood or other body fluids (IB, IC) (*1,2,7,8,11,13,137*).
2. Change masks between patients or during patient treatment if the mask becomes wet (IB) (*2*).
3. Clean with soap and water, or if visibly soiled, clean and disinfect reusable facial protective equipment (e.g., clinician and patient protective eyewear or face shields) between patients (II) (*2*).

B. Protective Clothing

1. Wear protective clothing (e.g., reusable or disposable gown, laboratory coat, or uniform) that covers personal clothing and skin (e.g., forearms) likely to be soiled with blood, saliva, or OPIM (IB, IC) (*7,8,11,13,137*).
2. Change protective clothing if visibly soiled (*134*); change immediately or as soon as feasible if penetrated by blood or other potentially infectious fluids (IB, IC) (*13*).
3. Remove barrier protection, including gloves, mask, eyewear, and gown before departing work area (e.g., dental patient care, instrument processing, or laboratory areas) (IC) (*13*).

C. Gloves

1. Wear medical gloves when a potential exists for contacting blood, saliva, OPIM, or mucous membranes (IB, IC) (*1,2,7,8,13*).
2. Wear a new pair of medical gloves for each patient, remove them promptly after use, and wash hands immediately to avoid transfer of microorganisms to other patients or environments (IB) (*1,7,8,123*).
3. Remove gloves that are torn, cut, or punctured as soon as feasible and wash hands before regloving (IB, IC) (*13,210,211*).
4. Do not wash surgeon's or patient examination gloves before use or wash, disinfect, or sterilize gloves for reuse (IB, IC) (*13,138,177,212,213*).

5. Ensure that appropriate gloves in the correct size are readily accessible (IC) (*13*).
6. Use appropriate gloves (e.g., puncture- and chemical-resistant utility gloves) when cleaning instruments and performing housekeeping tasks involving contact with blood or OPIM (IB, IC) (*7,13,15*).
7. Consult with glove manufacturers regarding the chemical compatibility of glove material and dental materials used (II).

D. Sterile Surgeon's Gloves and Double Gloving During Oral Surgical Procedures

1. Wear sterile surgeon's gloves when performing oral surgical procedures (IB) (*2,8,137*).
2. No recommendation is offered regarding the effectiveness of wearing two pairs of gloves to prevent disease transmission during oral surgical procedures. The majority of studies among HCP and DHCP have demonstrated a lower frequency of inner glove perforation and visible blood on the surgeon's hands when double gloves are worn; however, the effectiveness of wearing two pairs of gloves in preventing disease transmission has not been demonstrated (Unresolved issue).

V. Contact Dermatitis and Latex Hypersensitivity

A. General Recommendations

1. Educate DHCP regarding the signs, symptoms, and diagnoses of skin reactions associated with frequent hand hygiene and glove use (IB) (*5,31,32*).
2. Screen all patients for latex allergy (e.g., take health history and refer for medical consultation when latex allergy is suspected) (IB) (*32*).
3. Ensure a latex-safe environment for patients and DHCP with latex allergy (IB) (*32*).
4. Have emergency treatment kits with latex-free products available at all times (II) (*32*).

VI. Sterilization and Disinfection of Patient-Care Items

A. General Recommendations

1. Use only FDA-cleared medical devices for sterilization and follow the manufacturer's instructions for correct use (IB) (*248*).
2. Clean and heat-sterilize critical dental instruments before each use (IA) (*2,137,243,244, 246,249,407*).
3. Clean and heat-sterilize semicritical items before each use (IB) (*2,249,260,407*).
4. Allow packages to dry in the sterilizer before they are handled to avoid contamination (IB) (*247*).
5. Use of heat-stable semicritical alternatives is encouraged (IB) (*2*).
6. Reprocess heat-sensitive critical and semi-critical instruments by using FDA-cleared sterilant/high-level disinfectants or an FDA-cleared low-temperature sterilization method (e.g., ethylene oxide). Follow manufacturer's instructions for use of chemical sterilants/high-level disinfectants (IB) (*243*).
7. Single-use disposable instruments are acceptable alternatives if they are used only once and disposed of correctly (IB, IC) (*243,383*).
8. Do not use liquid chemical sterilants/high-level disinfectants for environmental surface disinfection or as holding solutions (IB, IC) (*243,245*).
9. Ensure that noncritical patient-care items are barrier-protected or cleaned, or if visibly soiled, cleaned and disinfected after each use with an EPA-registered hospital disinfectant. If visibly contaminated with blood, use an EPA-registered hospital disinfectant with a tuberculocidal claim (i.e., intermediate level) (IB) (*2,243,244*).
10. Inform DHCP of all OSHA guidelines for exposure to chemical agents used for disinfection and sterilization. Using this report, identify areas and tasks that have potential for exposure (IC) (*15*).

B. Instrument Processing Area

1. Designate a central processing area. Divide the instrument processing area, physically or, at a minimum, spatially, into distinct areas for 1) receiving, cleaning, and decontamination; 2) preparation and packaging; 3) sterilization; and 4) storage. Do not store instruments in an area where contaminated instruments are held or cleaned (II) (*173,247,248*).
2. Train DHCP to employ work practices that prevent contamination of clean areas (II).

C. Receiving, Cleaning, and Decontamination Work Area

1. Minimize handling of loose contaminated instruments during transport to the instrument processing area. Use work-practice controls (e.g., carry instruments in a covered container) to minimize exposure potential (II). Clean all visible blood and other contamination from dental instruments and devices before sterilization or disinfection procedures (IA) (*243,249–252*).
2. Use automated cleaning equipment (e.g., ultrasonic cleaner or washer-disinfector) to remove

debris to improve cleaning effectiveness and decrease worker exposure to blood (IB) (*2,253*).

3. Use work-practice controls that minimize contact with sharp instruments if manual cleaning is necessary (e.g., long-handled brush) (IC) (*14*).
4. Wear puncture- and chemical-resistant/heavy-duty utility gloves for instrument cleaning and decontamination procedures (IB) (*7*).
5. Wear appropriate PPE (e.g., mask, protective eyewear, and gown) when splashing or spraying is anticipated during cleaning (IC) (*13*).

D. Preparation and Packaging

1. Use an internal chemical indicator in each package. If the internal indicator cannot be seen from outside the package, also use an external indicator (II) (*243,254,257*).
2. Use a container system or wrapping compatible with the type of sterilization process used and that has received FDA clearance (IB) (*243,247, 256*).
3. Before sterilization of critical and semicritical instruments, inspect instruments for cleanliness, then wrap or place them in containers designed to maintain sterility during storage (e.g., cassettes and organizing trays) (IA) (*2,247,255,256*).

E. Sterilization of Unwrapped Instruments

1. Clean and dry instruments before the unwrapped sterilization cycle (IB) (*248*).
2. Use mechanical and chemical indicators for each unwrapped sterilization cycle (i.e., place an internal chemical indicator among the instruments or items to be sterilized) (IB) (*243,258*).
3. Allow unwrapped instruments to dry and cool in the sterilizer before they are handled to avoid contamination and thermal injury (II) (*260*).
4. Semicritical instruments that will be used immediately or within a short time can be sterilized unwrapped on a tray or in a container system, provided that the instruments are handled aseptically during removal from the sterilizer and transport to the point of use (II).
5. Critical instruments intended for immediate reuse can be sterilized unwrapped if the instruments are maintained sterile during removal from the sterilizer and transport to the point of use (e.g., transported in a sterile covered container) (IB) (*258*).
6. Do not sterilize implantable devices unwrapped (IB) (*243,247*).
7. Do not store critical instruments unwrapped (IB) (*248*).

F. Sterilization Monitoring

1. Use mechanical, chemical, and biological monitors according to the manufacturer's instructions to ensure the effectiveness of the sterilization process (IB) (*248,278,279*).
2. Monitor each load with mechanical (e.g., time, temperature, and pressure) and chemical indicators (II) (*243,248*).
3. Place a chemical indicator on the inside of each package. If the internal indicator is not visible from the outside, also place an exterior chemical indicator on the package (II) (*243,254,257*).
4. Place items/packages correctly and loosely into the sterilizer so as not to impede penetration of the sterilant (IB) (*243*).
5. Do not use instrument packs if mechanical or chemical indicators indicate inadequate processing (IB) (*243,247,248*).
6. Monitor sterilizers at least weekly by using a biological indicator with a matching control (i.e., biological indicator and control from same lot number) (IB) (*2,9,243,247,278,279*).
7. Use a biological indicator for every sterilizer load that contains an implantable device. Verify results before using the implantable device, whenever possible (IB) (*243,248*).
8. The following are recommended in the case of a positive spore test:
   a. Remove the sterilizer from service and review sterilization procedures (e.g., work practices and use of mechanical and chemical indicators) to determine whether operator error could be responsible (II) (*8*).
   b. Retest the sterilizer by using biological, mechanical, and chemical indicators after correcting any identified procedural problems (II).
   c. If the repeat spore test is negative, and mechanical and chemical indicators are within normal limits, put the sterilizer back in service (II) (*9,243*).
9. The following are recommended if the repeat spore test is positive:
   a. Do not use the sterilizer until it has been inspected or repaired or the exact reason for the positive test has been determined (II) (*9,243*).

b. Recall, to the extent possible, and reprocess all items processed since the last negative spore test (II) (*9,243,283*).
c. Before placing the sterilizer back in service, rechallenge the sterilizer with biological indicator tests in three consecutive empty chamber sterilization cycles after the cause of the sterilizer failure has been determined and corrected (II) (*9,243,283*).

10. Maintain sterilization records (i.e., mechanical, chemical, and biological) in compliance with state and local regulations (IB) (*243*).

G. Storage Area for Sterilized Items and Clean Dental Supplies

1. Implement practices on the basis of date- or event-related shelf-life for storage of wrapped, sterilized instruments and devices (IB) (*243, 284*).
2. Even for event-related packaging, at a minimum, place the date of sterilization, and if multiple sterilizers are used in the facility, the sterilizer used, on the outside of the packaging material to facilitate the retrieval of processed items in the event of a sterilization failure (IB) (*243,247*).
3. Examine wrapped packages of sterilized instruments before opening them to ensure the barrier wrap has not been compromised during storage (II) (*243,284*).
4. Reclean, repack, and resterilize any instrument package that has been compromised (II).
5. Store sterile items and dental supplies in covered or closed cabinets, if possible (II) (*285*).

VII. Environmental Infection Control

A. General Recommendations

1. Follow the manufacturers' instructions for correct use of cleaning and EPA-registered hospital disinfecting products (IB, IC) (*243–245*).
2. Do not use liquid chemical sterilants/high-level disinfectants for disinfection of environmental surfaces (clinical contact or housekeeping) (IB, IC) (*243–245*).
3. Use PPE, as appropriate, when cleaning and disinfecting environmental surfaces. Such equipment might include gloves (e.g., puncture- and chemical-resistant utility), protective clothing (e.g., gown, jacket, or lab coat), and protective eyewear/face shield, and mask (IC) (*13,15*).

B. Clinical Contact Surfaces

1. Use surface barriers to protect clinical contact surfaces, particularly those that are difficult to clean (e.g., switches on dental chairs) and change surface barriers between patients (II) (*1,2,260, 288*).
2. Clean and disinfect clinical contact surfaces that are not barrier-protected, by using an EPA-registered hospital disinfectant with a low- (i.e., HIV and HBV label claims) to intermediate-level (i.e., tuberculocidal claim) activity after each patient. Use an intermediate-level disinfectant if visibly contaminated with blood (IB) (*2,243,244*).

C. Housekeeping Surfaces

1. Clean housekeeping surfaces (e.g., floors, walls, and sinks) with a detergent and water or an EPA-registered hospital disinfectant/detergent on a routine basis, depending on the nature of the surface and type and degree of contamination, and as appropriate, based on the location in the facility, and when visibly soiled (IB) (*243,244*).
2. Clean mops and cloths after use and allow to dry before reuse; or use single-use, disposable mop heads or cloths (II) (*243,244*).
3. Prepare fresh cleaning or EPA-registered disinfecting solutions daily and as instructed by the manufacturer. (II) (*243,244*).
4. Clean walls, blinds, and window curtains in patient-care areas when they are visibly dusty or soiled (II) (*9,244*).

D. Spills of Blood and Body Substances

1. Clean spills of blood or OPIM and decontaminate surface with an EPA-registered hospital disinfectant with low- (i.e., HBV and HIV label claims) to intermediate-level (i.e., tuberculocidal claim) activity, depending on size of spill and surface porosity (IB, IC) (*13,113*).

E. Carpet and Cloth Furnishings

1. Avoid using carpeting and cloth-upholstered furnishings in dental operatories, laboratories, and instrument processing areas (II) (*9,293–295*).

F. Regulated Medical Waste

1. General Recommendations
   a. Develop a medical waste management program. Disposal of regulated medical waste must follow federal, state, and local regulations (IC) (*13,301*).
   b. Ensure that DHCP who handle and dispose of regulated medical waste are trained in appropriate handling and disposal methods

and informed of the possible health and safety hazards (IC) (*13*).

2. Management of Regulated Medical Waste in Dental Health-Care Facilities
   a. Use a color-coded or labeled container that prevents leakage (e.g., biohazard bag) to contain nonsharp regulated medical waste (IC) (*13*).
   b. Place sharp items (e.g., needles, scalpel blades, orthodontic bands, broken metal instruments, and burs) in an appropriate sharps container (e.g., puncture resistant, color-coded, and leakproof). Close container immediately before removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping (IC) (*2,8,13,113,115*).
   c. Pour blood, suctioned fluids or other liquid waste carefully into a drain connected to a sanitary sewer system, if local sewage discharge requirements are met and the state has declared this an acceptable method of disposal. Wear appropriate PPE while performing this task (IC) (*7,9,13*).

VIII. Dental Unit Waterlines, Biofilm, and Water Quality

A. General Recommendations

1. Use water that meets EPA regulatory standards for drinking water (i.e., ≤500 CFU/mL of heterotrophic water bacteria) for routine dental treatment output water (IB, IC) (*341,342*).
2. Consult with the dental unit manufacturer for appropriate methods and equipment to maintain the recommended quality of dental water (II) (*339*).
3. Follow recommendations for monitoring water quality provided by the manufacturer of the unit or waterline treatment product (II).
4. Discharge water and air for a minimum of 20–30 seconds after each patient, from any device connected to the dental water system that enters the patient's mouth (e.g., handpieces, ultrasonic scalers, and air/water syringes) (II) (*2,311,344*).
5. Consult with the dental unit manufacturer on the need for periodic maintenance of antiretraction mechanisms (IB) (*2,311*).

B. Boil-Water Advisories

1. The following apply while a boil-water advisory is in effect:
   a. Do not deliver water from the public water system to the patient through the dental operative unit, ultrasonic scaler, or other dental equipment that uses the public water system (IB, IC) (*341,342,346,349,350*).
   b. Do not use water from the public water system for dental treatment, patient rinsing, or handwashing (IB, IC) (*341,342,346,349,350*).
   c. For handwashing, use antimicrobial-containing products that do not require water for use (e.g., alcohol-based hand rubs). If hands are visibly contaminated, use bottled water, if available, and soap for handwashing or an antiseptic towelette (IB, IC) (*13,122*).
2. The following apply when the boil-water advisory is cancelled:
   a. Follow guidance given by the local water utility regarding adequate flushing of waterlines. If no guidance is provided, flush dental waterlines and faucets for 1–5 minutes before using for patient care (IC) (*244,346,351,352*).
   b. Disinfect dental waterlines as recommended by the dental unit manufacturer (II).

IX. Special Considerations

A. Dental Handpieces and Other Devices Attached to Air and Waterlines

1. Clean and heat-sterilize handpieces and other intraoral instruments that can be removed from the air and waterlines of dental units between patients (IB, IC) (*2,246,275,356,357,360,407*).
2. Follow the manufacturer's instructions for cleaning, lubrication, and sterilization of handpieces and other intraoral instruments that can be removed from the air and waterlines of dental units (IB) (*361–363*).
3. Do not surface-disinfect, use liquid chemical sterilants, or ethylene oxide on handpieces and other intraoral instruments that can be removed from the air and waterlines of dental units (IC) (*2,246,250,275*).
4. Do not advise patients to close their lips tightly around the tip of the saliva ejector to evacuate oral fluids (II) (*364–366*).

B. Dental Radiology

1. Wear gloves when exposing radiographs and handling contaminated film packets. Use other PPE (e.g., protective eyewear, mask, and gown) as appropriate if spattering of blood or other body fluids is likely (IA, IC) (*11,13*).

2. Use heat-tolerant or disposable intraoral devices whenever possible (e.g., film-holding and positioning devices). Clean and heat-sterilize heat-tolerant devices between patients. At a minimum, high-level disinfect semicritical heat-sensitive devices, according to manufacturer's instructions (IB) (*243*).
3. Transport and handle exposed radiographs in an aseptic manner to prevent contamination of developing equipment (II).
4. The following apply for digital radiography sensors:
   a. Use FDA-cleared barriers (IB) (*243*).
   b. Clean and heat-sterilize, or high-level disinfect, between patients, barrier-protected semicritical items. If the item cannot tolerate these procedures then, at a minimum, protect with an FDA-cleared barrier and clean and disinfect with an EPA-registered hospital disinfectant with intermediate-level (i.e., tuberculocidal claim) activity, between patients. Consult with the manufacturer for methods of disinfection and sterilization of digital radiology sensors and for protection of associated computer hardware (IB) (*243*).

C. Aseptic Technique for Parenteral Medications

1. Do not administer medication from a syringe to multiple patients, even if the needle on the syringe is changed (IA) (*378*).
2. Use single-dose vials for parenteral medications when possible (II) (*376,377*).
3. Do not combine the leftover contents of single-use vials for later use (IA) (*376,377*).
4. The following apply if multidose vials are used:
   a. Cleanse the access diaphragm with 70% alcohol before inserting a device into the vial (IA) (*380,381*).
   b. Use a sterile device to access a multiple-dose vial and avoid touching the access diaphragm. Both the needle and syringe used to access the multidose vial should be sterile. Do not reuse a syringe even if the needle is changed (IA) (*380,381*).
   c. Keep multidose vials away from the immediate patient treatment area to prevent inadvertent contamination by spray or spatter (II).
   d. Discard the multidose vial if sterility is compromised (IA) (*380,381*).
5. Use fluid infusion and administration sets (i.e., IV bags, tubings and connections) for one patient only and dispose of appropriately (IB) (*378*).

D. Single-Use (Disposable) Devices

1. Use single-use devices for one patient only and dispose of them appropriately (IC) (*383*).

E. Preprocedural Mouth Rinses

1. No recommendation is offered regarding use of preprocedural antimicrobial mouth rinses to prevent clinical infections among DHCP or patients. Although studies have demonstrated that a preprocedural antimicrobial rinse (e.g., chlorhexidine gluconate, essential oils, or povidone-iodine) can reduce the level of oral microorganisms in aerosols and spatter generated during routine dental procedures and can decrease the number of microorganisms introduced in the patient's bloodstream during invasive dental procedures (*391–399*), the scientific evidence is inconclusive that using these rinses prevents clinical infections among DHCP or patients (see discussion, Preprocedural Mouth Rinses) (Unresolved issue).

F. Oral Surgical Procedures

1. The following apply when performing oral surgical procedures:
   a. Perform surgical hand antisepsis by using an antimicrobial product (e.g., antimicrobial soap and water, or soap and water followed by alcohol-based hand scrub with persistent activity) before donning sterile surgeon's gloves (IB) (*127–132,137*).
   b. Use sterile surgeon's gloves (IB) (*2,7,121, 123,137*).
   c. Use sterile saline or sterile water as a coolant/irrigatant when performing oral surgical procedures. Use devices specifically designed for delivering sterile irrigating fluids (e.g., bulb syringe, single-use disposable products, and sterilizable tubing) (IB) (*2,121*).

G. Handling of Biopsy Specimens

1. During transport, place biopsy specimens in a sturdy, leakproof container labeled with the biohazard symbol (IC) (*2,13,14*).
2. If a biopsy specimen container is visibly contaminated, clean and disinfect the outside of a

container or place it in an impervious bag labeled with the biohazard symbol, (IC) (*2,13*).

H. Handling of Extracted Teeth

1. Dispose of extracted teeth as regulated medical waste unless returned to the patient (IC) (*13,14*).
2. Do not dispose of extracted teeth containing amalgam in regulated medical waste intended for incineration (II).
3. Clean and place extracted teeth in a leakproof container, labeled with a biohazard symbol, and maintain hydration for transport to educational institutions or a dental laboratory (IC) (*13,14*).
4. Heat-sterilize teeth that do not contain amalgam before they are used for educational purposes (IB) (*403,405,406*).

I. Dental Laboratory

1. Use PPE when handling items received in the laboratory until they have been decontaminated (IA, IC) (*2,7,11,13,113*).
2. Before they are handled in the laboratory, clean, disinfect, and rinse all dental prostheses and prosthodontic materials (e.g., impressions, bite registrations, occlusal rims, and extracted teeth) by using an EPA-registered hospital disinfectant having at least an intermediate-level (i.e., tuberculocidal claim) activity (IB) (*2,249,252,407*).
3. Consult with manufacturers regarding the stability of specific materials (e.g., impression materials) relative to disinfection procedures (II).
4. Include specific information regarding disinfection techniques used (e.g., solution used and duration), when laboratory cases are sent offsite and on their return (II) (*2,407,409*).
5. Clean and heat-sterilize heat-tolerant items used in the mouth (e.g., metal impression trays and face-bow forks) (IB) (*2,407*).
6. Follow manufacturers' instructions for cleaning and sterilizing or disinfecting items that become contaminated but do not normally contact the patient (e.g., burs, polishing points, rag wheels, articulators, case pans, and lathes). If manufacturer instructions are unavailable, clean and heat-sterilize heat-tolerant items or clean and disinfect with an EPA-registered hospital disinfectant with low- (HIV, HBV effectiveness claim) to intermediate-level (tuberculocidal claim) activity, depending on the degree of contamination (II).

J. Laser/Electrosurgery Plumes/Surgical Smoke

1. No recommendation is offered regarding practices to reduce DHCP exposure to laser plumes/surgical smoke when using lasers in dental practice. Practices to reduce HCP exposure to laser plumes/surgical smoke have been suggested, including use of a) standard precautions (e.g., high-filtration surgical masks and possibly full face shields) (*437*); b) central room suction units with in-line filters to collect particulate matter from minimal plumes; and c) dedicated mechanical smoke exhaust systems with a high-efficiency filter to remove substantial amounts of laser-plume particles. The effect of the exposure (e.g., disease transmission or adverse respiratory effects) on DHCP from dental applications of lasers has not been adequately evaluated (see previous discussion, Laser/Electrosurgery Plumes or Surgical Smoke) (Unresolved issue).

K. *Mycobacterium tuberculosis*

1. General Recommendations
   a. Educate all DHCP regarding the recognition of signs, symptoms, and transmission of TB (IB) (*20,21*).
   b. Conduct a baseline TST, preferably by using a two-step test, for all DHCP who might have contact with persons with suspected or confirmed active TB, regardless of the risk classification of the setting (IB) (*20*).
   c. Assess each patient for a history of TB as well as symptoms indicative of TB and document on the medical history form (IB) (*20,21*).
   d. Follow CDC recommendations for 1) developing, maintaining, and implementing a written TB infection-control plan; 2) managing a patient with suspected or active TB; 3) completing a community risk-assessment to guide employee TSTs and follow-up; and 4) managing DHCP with TB disease (IB) (*2,21*).
2. The following apply for patients known or suspected to have active TB:
   a. Evaluate the patient away from other patients and DHCP. When not being evaluated, the patient should wear a surgical mask or be instructed to cover mouth and nose when coughing or sneezing (IB) (*20,21*).
   b. Defer elective dental treatment until the patient is noninfectious (IB) (*20,21*).

c. Refer patients requiring urgent dental treatment to a previously identified facility with TB engineering controls and a respiratory protection program (IB) (*20,21*).

L. **Creutzfeldt-Jakob Disease (CJD) and Other Prion Diseases**

1. No recommendation is offered regarding use of special precautions in addition to standard precautions when treating known CJD or vCJD patients. Potential infectivity of oral tissues in CJD or vCJD patients is an unresolved issue. Scientific data indicate the risk, if any, of sporadic CJD transmission during dental and oral surgical procedures is low to nil. Until additional information exists regarding the transmissibility of CJD or vCJD during dental procedures, special precautions in addition to standard precautions might be indicated when treating known CJD or vCJD patients; a list of such precautions is provided for consideration without recommendation (see Creutzfeldt-Jakob Disease and Other Prion Diseases) (Unresolved issue).

M. **Program Evaluation**

1. Establish routine evaluation of the infection-control program, including evaluation of performance indicators, at an established frequency (II) (*470-471*).

Infection-Control Internet Resources

Advisory Committee on Immunization Practices
http://www.cdc.gov/nip/ACIP/default.htm
American Dental Association
http://www.ada.org
American Institute of Architects Academy of Architecture for Health
http://www.aahaia.org
American Society of Heating, Refrigeration, Air-conditioning Engineers
http://www.ashrae.org
Association for Professionals in Infection Control and Epidemiology, Inc.
http://www.apic.org/resc/guidlist.cfm
CDC, Division of Healthcare Quality Promotion
http://www.cdc.gov/ncidod/hip
CDC, Division of Oral Health, Infection Control
http://www.cdc.gov/OralHealth/infectioncontrol/index.htm
CDC, *Morbidity and Mortality Weekly Report*
http://www.cdc.gov/mmwr
CDC, NIOSH
http://www.cdc.gov/niosh/homepage.html
CDC Recommends, Prevention Guidelines System
http://www.phppo.cdc.gov/cdcRecommends/AdvSearchV.asp
EPA, Antimicrobial Chemicals
http://www.epa.gov/oppad001/chemregindex.htm
FDA
http://www.fda.gov
Immunization Action Coalition
http://www.immunize.org/acip
Infectious Diseases Society of America
http://www.idsociety.org/PG/toc.htm
OSHA, Dentistry, Bloodborne Pathogens
http://www.osha.gov/SLTC/dentistry/index.html
http://www.osha.gov/SLTC/bloodbornepathogens/index.html
Organization for Safety and Asepsis Procedures
http://www.osap.org
Society for Healthcare Epidemiology of America, Inc., Position Papers
http://www.shea-online.org/PositionPapers.html

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Advisory Group

Joseph A. Bartoloni, D.M.D., United States Air Force Dental Investigation Service, Great Lakes, Illinois; Nancy Bjerke, M.A., M.Ed., M.P.H., Infection Control Associates, San Antonio, Texas; Walter W. Bond, M.S., RCSA Inc., Lawrenceville, Georgia; Eve Cuny, M.S., University of Pacific School of Dentistry, San Francisco, California; Kathy J. Eklund, M.H.P., Forsyth Institute, Boston, Massachusetts; Curt Hamann, M.D., Smart Practice, Phoenix, Arizona; Jennifer A. Harte, D.D.S., United States Air Force Dental Investigation Service, Great Lakes, Illinois; Chris Miller, Ph.D., Indiana University School of Dentistry, Bloomington, Indiana; Shannon E. Mills, D.D.S., Air Force Medical Operations Agency, Bolling AFB, Washington, District of Columbia; John Molinari, Ph.D., University of Detroit Mercy School of Dentistry, Detroit, Michigan; William A. Rutala, Ph.D., University of North Carolina School of Medicine, Chapel Hill, North Carolina; Brian Shearer, Ph.D., Bayer, Inc., Chicago, Illinois.

CDC Consultants

Matthew Arduino, Dr.P.H., Elizabeth Bolyard, M.P.H., Denise Cardo, M.D., Joe Carpenter, Linda Chiarello, M.P.H., Lynne Sehulster, Ph.D., Division of Healthcare Quality Promotion, National Center for Infectious Diseases (NCID), Atlanta, Georgia; Miriam J. Alter, Ph.D., Division of Viral Hepatitis, NCID; Larry Schonberger, Ph.D., Ermias Belay, M.D., Division of Viral and Ricketsial Diseases, NCID, Atlanta, Georgia; Susan Y. Chu, Ph.D., National Immunization Program, Atlanta, Georgia; Paul A. Jensen, National Center for HIV, STD and TB Prevention, Atlanta, Georgia; Janice Huy, National Institute of Occupational Safety and Health (NIOSH), Cincinnati, Ohio; Lee Petsonk, NIOSH, Morgantown, West Virginia; Jennifer L. Cleveland, D.D.S., Amy S. Collins, M.P.H., Barbara F. Gooch, D.M.D., William G. Kohn, D.D.S., Dolores M. Malvitz, Dr.P.H., Division of Oral Health, National Center for Chronic Disease Prevention and Health Promotion, Atlanta Georgia.

Other Federal Consultants

Susan Runner, D.D.S., Food and Drug Administration, Rockville, Maryland; Elise Handelman, Occupational Safety and Health Administration, Washington, District of Columbia; Jeffrey Kempter, M.S., David Liem, Ph.D., Michelle Wingfield, Environmental Protection Agency, Washington, District of Columbia.

Outside Consultants

Martin S. Favero, Ph.D., Advanced Sterilization Products, Johnson and Johnson, Irvine, California; Pamela Rodgers, Ph.D., SmartHealth Inc., Phoenix, Arizona; Daniel M. Meyer, D.D.S., American Dental Association, Chicago, Illinois; Deborah Greenspan, BDS, DSC University of California San Francisco School of Dentistry, San Francisco, California; Helene Bednarsh, Boston Department of Public Health, Boston, Massachusetts; Steve Peake, Barnstead-Harvey Corp, Dubuque, Iowa; Chakwan Siew, Ph.D., American Dental Association, Chicago, Illinois.

Appendix A

Regulatory Framework for Disinfectants and Sterilants

When using the guidance provided in this report regarding use of liquid chemical disinfectants and sterilants, dental health-care personnel (DHCP) should be aware of federal laws and regulations that govern the sale, distribution, and use of these products. In particular, DHCPs should know what requirements pertain to them when such products are used. Finally, DHCP should understand the relative roles of the U.S. Environmental Protection Agency (EPA), the U.S. Food and Drug Administration (FDA), the Occupational Safety and Health Administration (OSHA) and CDC.

The choice of specific cleaning or disinfecting agents is largely a matter of judgment, guided by product label claims and instructions and government regulations. A single liquid chemical germicide might not satisfy all disinfection requirements in a given dental practice or facility. Realistic use of liquid chemical germicides depends on consideration of multiple factors, including the degree of microbial killing required; the nature and composition of the surface, item, or device to be treated; and the cost, safety, and ease of use of the available agents. Selecting one appropriate product with a higher degree of potency to cover all situations might be more convenient.

In the United States, liquid chemical germicides (disinfectants) are regulated by EPA and FDA (*A-1–A-3*). In healthcare settings, EPA regulates disinfectants that are used on environmental surfaces (housekeeping and clinical contact surfaces), and FDA regulates liquid chemical sterilants/high-level disinfectants (e.g., glutaraldehyde, hydrogen peroxide, and peracetic acid) used on critical and semicritical patient-care devices. Disinfectants intended for use on clinical contact surfaces (e.g., light handles, radiographic-ray heads, or drawer knobs) or housekeeping surfaces (e.g., floors, walls, or sinks) are regulated in interstate commerce by the Antimicrobials Division, Office of Pesticide Programs, EPA, under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) of 1947, as amended in 1996 (*A-4*). Under FIFRA, any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any pest, including microorganisms but excluding those in or on living man or animals, must be registered before sale or distribution. To obtain a registration, a manufacturer must submit specific data regarding the safety and the effectiveness of each product.

EPA requires manufacturers to test formulations by using accepted methods for microbicidal activity, stability, and toxicity to animals and humans. Manufacturers submit these data to EPA with proposed labeling. If EPA concludes a product may be used without causing unreasonable adverse effects, the product and its labeling are given an EPA registration number, and the manufacturer may then sell and distribute the product in the United States. FIFRA requires users of products to follow the labeling directions on each product explicitly. The following statement appears on all EPA-registered product labels under the Directions for Use heading: "It is a violation of federal law to use this product inconsistent with its labeling." This means that DHCP must follow the safety precautions and use directions on the labeling of each registered product. Not following the specified dilution, contact time, method of application, or any other condition of use is considered misuse of the product.

FDA, under the authority of the 1976 Medical Devices Amendment to the Food, Drug, and Cosmetic Act, regulates chemical germicides if they are advertised and marketed for use on specific medical devices (e.g., dental unit waterline or flexible endoscope). A liquid chemical germicide marketed for use on a specific device is considered, for regulatory purposes, a medical device itself when used to disinfect that specific medical device. Also, this FDA regulatory authority over a particular instrument or device dictates that the manufacturer is obligated to provide the user with adequate instructions for the safe and effective use of that device. These instructions must include methods to clean and disinfect or sterilize the item if it is to be marketed as a reusable medical device.

OSHA develops workplace standards to help ensure safe and healthful working conditions in places of employment. OSHA is authorized under Pub. L. 95-251, and as amended, to enforce these workplace standards. In 1991, OSHA published Occupational Exposure to Bloodborne Pathogens; final rule [29 CFR Part 1910.1030] (*A-5*). This standard is designed to help prevent occupational exposures to blood or other potentially infectious substances. Under this standard, OSHA has interpreted that, to decontaminate contaminated work surfaces, either an EPA-registered hospital tuberculocidal disinfectant or an EPA-registered hospital disinfectant labeled as effective against human immunodeficiency virus (HIV) and hepatitis B virus (HBV) is appropriate. Hospital disinfectants with such HIV and HBV claims can be used, provided surfaces are not contaminated with agents or concentration of agents for which higher level (i.e., intermediate-level) disinfection is recommended. In addition, as with all disinfectants, effectiveness is governed by strict adherence to the label instructions for intended use of the product.

CDC is not a regulatory agency and does not test, evaluate, or otherwise recommend specific brand-name products of chemical germicides. This report is intended to provide overall guidance for providers to select general classifications of products based on certain infection-control principles. In this report, CDC provides guidance to practitioners regarding appropriate application of EPA- and FDA-registered liquid chemical disinfectants and sterilants in dental health-care settings.

CDC recommends disinfecting environmental surfaces or sterilizing or disinfecting medical equipment, and DHCP should use products approved by EPA and FDA unless no such products are available for use against certain microorganisms or sites. However, if no registered or approved products are available for a specific pathogen or use situation, DHCP are advised to follow the specific guidance regarding unregistered or unapproved (e.g., off-label) uses for various chemical germicides. For example, no antimicrobial products are registered for use specifically against certain emerging pathogens (e.g., Norwalk virus), potential terrorism agents (e.g., variola major or *Yersinia pestis*), or Creutzfeldt-Jakob disease agents.

One point of clarification is the difference in how EPA and FDA classify disinfectants. FDA adopted the same basic terminology and classification scheme as CDC to categorize medical devices (i.e., critical, semicritical, and noncritical) and to define antimicrobial potency for processing surfaces (i.e., sterilization, and high-, intermediate- and low-level disinfection) (*A-6*). EPA registers environmental surface disinfectants based on the manufacturer's microbiological activity claims when registering its disinfectant. This difference has led to confusion on the part of users because the EPA does not use the terms intermediate- and low-level disinfectants as used in CDC guidelines.

CDC designates any EPA-registered hospital disinfectant without a tuberculocidal claim as a low-level disinfectant and any EPA-registered hospital disinfectant with a tuberculocidal claim as an intermediate-level disinfectant. To understand this comparison, one needs to know how EPA registers disinfectants. First, to be labeled as an EPA hospital disinfectant, the product must pass Association of Official Analytical Chemists (AOAC) effectiveness tests against three target organisms: *Salmonella choleraesuis* for effectiveness against gram-negative bacteria; *Staphylococcus aureus* for effectiveness against gram-positive bacteria; and *Pseudomonas aeruginosa* for effectiveness against a primarily nosocomial pathogen. Substantiated label claims of effectiveness of a disinfectant against specific microorganisms other than the test microorganisms are permitted, but not required, provided that the test microorganisms are likely to be present in or on the recommended use areas and surfaces. Therefore, manufacturers might also test specifically against organisms of known concern in health-care practices (e.g., HIV, HBV, hepatitis C virus [HCV], and herpes) although it is considered likely that any product satisfying AOAC tests for hospital disinfectant designation will also be effective against these relatively fragile organisms when the product is used as directed by the manufacturer.

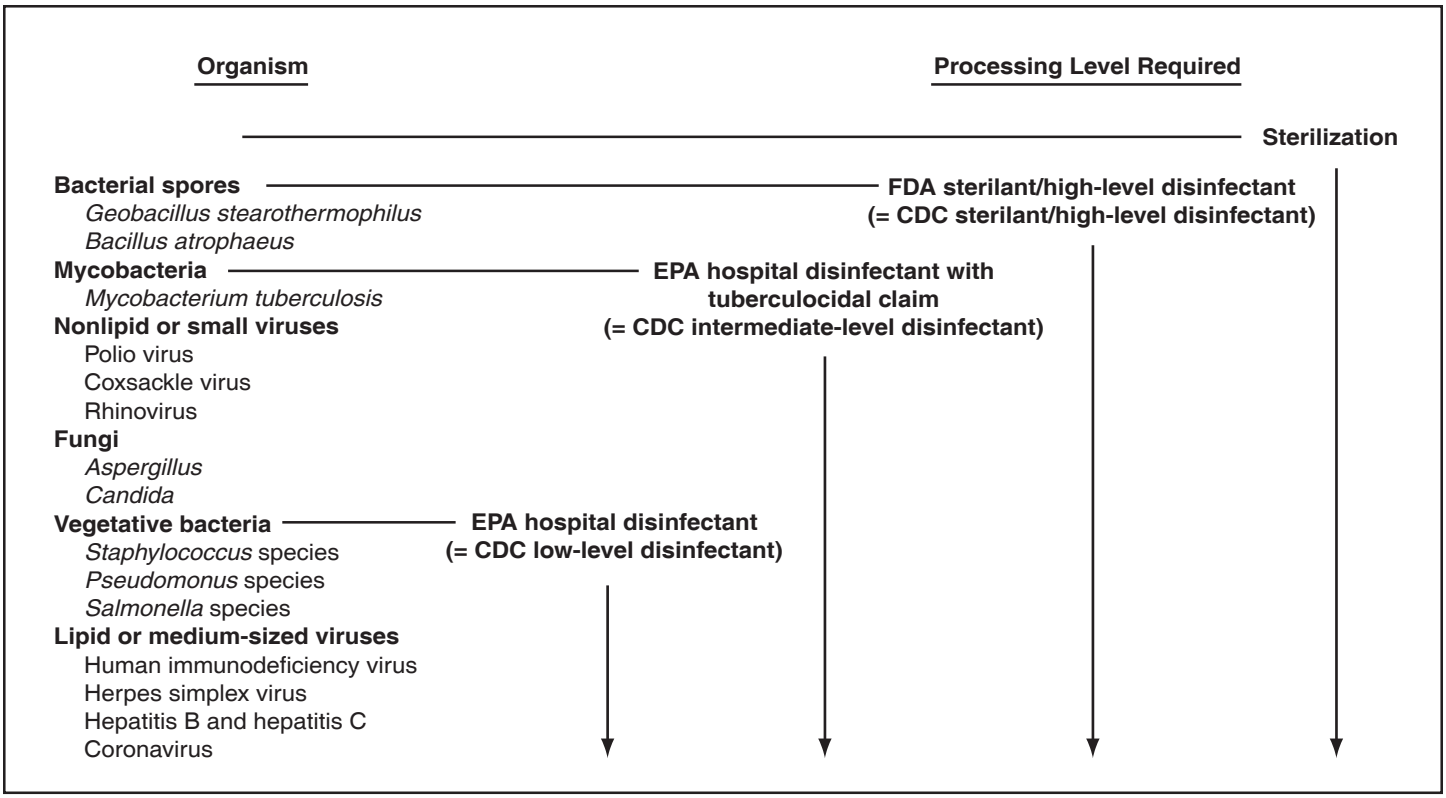
Potency against *Mycobacterium tuberculosis* has been recognized as a substantial benchmark. However, the tuberculocidal claim is used only as a benchmark to measure germicidal potency. Tuberculosis is not transmitted via environmental surfaces but rather by the airborne route. Accordingly, use of such products on environmental surfaces plays no role in preventing the spread of tuberculosis. However, because mycobacteria have among the highest intrinsic levels of resistance among the vegetative bacteria, viruses, and fungi, any germicide with a tuberculocidal claim on the label is considered capable of inactivating a broad spectrum of pathogens, including such less-resistant organisms as bloodborne pathogens (e.g., HBV, HCV, and HIV). It is this broad-spectrum capability, rather than the product's specific potency against mycobacteria, that is the basis for protocols and regulations dictating use of tuberculocidal chemicals for surface disinfection.

EPA also lists disinfectant products according to their labeled use against these organisms of interest as follows:

- **List B**. Tuberculocide products effective against *Mycobacterium* species.
- **List C**. Products effective against human HIV-1 virus.
- **List D**. Products effective against human HIV-1 virus and HBV.
- **List E**. Products effective against *Mycobacterium* species, human HIV-1 virus, and HBV.
- **List F**. Products effective against HCV.

Microorganisms vary in their resistance to disinfection and sterilization, enabling CDC's designation of disinfectants as high-, intermediate-, and low-level, when compared with EPA's designated organism spectrum (Figure). However, exceptions to this general guide exist, and manufacturer's label claims and instructions should always be followed.

FIGURE. Decreasing order of resistance of microorganisms to germicidal chemicals



Source: Adapted from Bond WW, Ott BJ, Franke K, McCracken JE. Effective use of liquid chemical germicides on medical devices; instrument design problems. In: Block SS, ed. Disinfection, sterilization and preservation. 4th ed. Philadelphia, PA: Lea & Gebiger, 1991:1100.

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A-1. Food and Drug Administration (FDA) and US Environmental Protection Agency (EPA). Memorandum of understanding between the FDA and EPA: notice regarding matters of mutual responsibility—regulation of liquid chemical germicides intended for use on medical devices. Rockville, MD: US Department of Health and Human Services, Public Health Service, Food and Drug Administration, US Environmental Protection Agency, 1993.

A-2. Food and Drug Administration (FDA). Interim measures for registration of antimicrobial products/liquid chemical germicides with medical device use claims under the memorandum of understanding between EPA and FDA. Rockville, MD: US Department of Health and Human Services, Food and Drug Administration, 1994.

A-3. Food and Drug Administration. Guidance for industry and FDA reviewers: content and format of premarket notification [510(k)] submissions for liquid chemical sterilants/high level disinfectants. Rockville, MD: US Department of Health and Human Services, Food and Drug Administration, 2000. Available at http://www.fda.gov/cdrh/ode/397.pdf.

A-4. US Environmental Protection Agency. 40 CFR Parts 152, 156, and 158. Exemption of certain pesticide substances from federal insecticide, fungicide, and rodenticide act requirements. Amended 1996. Federal Register 1996;61:8876–9.

A-5. US Department of Labor, Occupational Safety and Health Administration. 29 CFR Part 1910.1030. Occupational exposure to bloodborne pathogens; needlesticks and other sharps injuries; final rule. Federal Register 2001;66:5317–25. As amended from and includes 29 CFR Part 1910.1030. Occupational exposure to bloodborne pathogens; final rule. Federal Register 1991;56:64174–82. Available at http://www.osha.gov/SLTC/dentistry/index.html.

A-6. Spaulding EH. Role of chemical disinfection in preventing nosocomial infections. In: Proceedings of the International Conference on Nosocomial Infections, 1970. Brachman PS, Eickhoff TC, eds. Chicago, IL: American Hospital Association, 1971:247–54.

Appendix B

Immunizations Strongly Recommended for Health-Care Personnel (HCP)

Vaccine	Dose schedule	Indications	Major precautions and contraindications	Special considerations
Hepatitis B recombinant vaccine*	Three-dose schedule administered intramuscularly (IM) in the deltoid; 0,1,6 - second dose administered 1 month after first dose; third dose administered 4 months after second. Booster doses are not necessary for persons who have developed adequate antibodies to hepatitis B surface antigen (anti-HBs).	Health-care personnel (HCP) at risk for exposure to blood and body fluids.	History of anaphylactic reaction to common baker's yeast. Pregnancy is not a contraindication.	No therapeutic or adverse effects on hepatitis B virus (HBV)-infected persons; cost-effectiveness of prevaccination screening for susceptibility to HBV depends on costs of vaccination and antibody testing and prevalence of immunity in the group of potential vaccinees; health-care personnel who have ongoing contact with patients or blood should be tested 1–2 months after completing the vaccination series to determine serologic response. If vaccination does not induce adequate anti-HBs (>10 mIU/mL), a second vaccine series should be administered.
Influenza vaccine (inactivated)¶	Annual single-dose vaccination IM with current vaccine.	HCP who have contact with patients at high risk or who work in chronic-care facilities; HCP aged ≥50 years or who have high-risk medical conditions.	History of anaphylactic hypersensitivity to eggs or to other components of the vaccine.	Recommended for women who will be in the second or third trimesters of pregnancy during the influenza season and women in any stage of pregnancy who have chronic medical conditions that are associated with an increased risk of influenza.§
Measles live-virus vaccine	One dose administered subcutaneously (SC); second dose ≥4 weeks later.	HCP who were born during or after 1957 without documentation of 1) receipt of 2 doses of live vaccine on or after their first birthday, 2) physician-diagnosed measles, or 3) laboratory evidence of immunity. Vaccine should also be considered for all HCP who have no proof of immunity, including those born before 1957.	Pregnancy; immunocompromised† state (including human immunodeficiency virus [HIV]-infected persons with severe immunosuppression); history of anaphylactic reactions after gelatin ingestion or receipt of neomycin; or recent receipt of antibody-containing blood products.	Measles, mumps, rubella (MMR) is the recommended vaccine, if recipients are also likely to be susceptible to rubella or mumps; persons vaccinated during 1963–1967 with 1) measles killed-virus vaccine alone, 2) killed-virus vaccine followed by live-virus vaccine, or 3) a vaccine of unknown type, should be revaccinated with two doses of live-virus measles vaccine.
Mumps live-virus vaccine	One dose SC; no booster.	HCP believed susceptible can be vaccinated; adults born before 1957 can be considered immune.	Pregnancy; immunocompromised† state; history of anaphylactic reaction after gelatin ingestion or receipt of neomycin.	MMR is the recommended vaccine.
Rubella live-virus vaccine	One dose SC; no booster.	HCP, both male and female, who lack documentation of receipt of live vaccine on or after their first birthday, or lack of laboratory evidence of immunity can be vaccinated. Adults born before 1957 can be considered immune, except women of childbearing age.	Pregnancy; immunocompromised† state; history of anaphylactic reaction after receipt of neomycin.	Women pregnant when vaccinated or who become pregnant within 4 weeks of vaccination should be counseled regarding theoretic risks to the fetus; however, the risk of rubella vaccine-associated malformations among these women is negligible. MMR is the recommended vaccine.
Varicella-zoster live-virus vaccine	Two 0.5 mL doses SC 4–8 weeks apart if aged ≥13 years.	HCP without reliable history of varicella or laboratory evidence of varicella immunity.	Pregnancy; immunocompromised† state; history of anaphylactic reaction after receipt of neomycin or gelatin; recent receipt of antibody-containing blood products; salicylate use should be avoided for 6 weeks after vaccination.	Because 71%–93% of U.S.-born persons without a history of varicella are immune, serologic testing before vaccination might be cost-effective.

Sources: Adapted from Bolyard EA, Hospital Infection Control Practices Advisory Committee. Guidelines for infection control in health care personnel, 1998. Am J Infect Control 1998;26:289–354.
CDC. Immunization of health-care workers: recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Hospital Infection Control Practices Advisory Committee (HICPAC). MMWR 1997;46(No. RR-18).
CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2003;52:1-34.
CDC. Using live, attenuated influenza vaccine for prevention and control of influenza: supplemental recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2003;52(No. RR-13).

* A federal standard issued in December 1991 under the Occupational Safety and Health Act mandates that hepatitis B vaccine be made available at the employer's expense to all HCP occupationally exposed to blood or other potentially infectious materials. The Occupational Safety and Health Administration requires that employers make available hepatitis B vaccinations, evaluations, and follow-up procedures in accordance with current CDC recommendations.
† Persons immunocompromised because of immune deficiencies, HIV infection, leukemia, lymphoma, generalized malignancy; or persons receiving immunosuppressive therapy with corticosteroids, alkylating drugs, antimetabolites; or persons receiving radiation.
§ Vaccination of pregnant women after the first trimester might be preferred to avoid coincidental association with spontaneous abortions, which are most common during the first trimester. However, no adverse fetal effects have been associated with influenza vaccination.
¶ A live attenuated influenza vaccine (LAIV) is FDA-approved for healthy persons aged 5-49 years. Because of the possibility of transmission of vaccine viruses from recipients of LAIV to other persons and in the absence of data on the risk of illness and among immunocompromised persons infected with LAIV viruses, the inactivated influenza vaccine is preferred for HCP who have close contact with immunocompromised persons.

Appendix C

Methods for Sterilizing and Disinfecting Patient-Care Items and Environmental Surfaces*

Process	Result	Method	Examples	Health-care application: Type of patient-care item	Health-care application: Environmental surfaces
Sterilization	Destroys all microorganisms, including bacterial spores.	Heat-automated			Not applicable
		High temperature	Steam, dry heat, unsaturated chemical vapor	Heat-tolerant critical and semicritical	
		Low temperature	Ethylene oxide gas, plasma sterilization	Heat-sensitive critical and semicritical	
		Liquid immersion†	**Chemical sterilants.** Glutaraldehyde, glutaraldehydes with phenol, hydrogen peroxide, hydrogen peroxide with peracetic acid, peracetic acid	Heat-sensitive critical and semicritical	
High-level disinfection	Destroys all microorganisms, but not necessarily high numbers of bacterial spores.	Heat-automated	Washer-disinfector	Heat-sensitive semicritical	Not applicable
		Liquid immersion†	**Chemical sterilants/high-level disinfectants.** Glutaraldehyde, glutaraldehyde with phenol, hydrogen peroxide, hydrogen peroxide with peracetic acid, ortho-phthalaldehyde		
Intermediate-level disinfection	Destroys vegetative bacteria and the majority of fungi and viruses. Inactivates *Mycobacterium bovis*.§ Not necessarily capable of killing bacterial spores.	Liquid contact	U.S. Environmental Protection Agency (EPA)-registered hospital disinfectant with label claim of tuberculocidal activity (e.g., chlorine-containing products, quaternary ammonium compounds with alcohol, phenolics, iodophors, EPA-registered chlorine-based product¶)	Noncritical with visible blood	Clinical contact surfaces; blood spills on housekeeping surfaces
Low-level disinfection	Destroys the majority of vegetative bacteria, certain fungi, and viruses. Does not inactivate *Mycobacterium bovis*.§	Liquid contact	EPA-registered hospital disinfectant with no label claim regarding tuberculocidal activity.** The Occupational Safety and Health Administration also requires label claims of human immunodeficiency virus (HIV) and hepatitis B virus (HBV) potency for clinical contact surfaces (e.g., quaternary ammonium compounds, some phenolics, some iodophors)	Noncritical without visible blood	Clinical contact surfaces; housekeeping surfaces

* EPA and the Food and Drug Administration (FDA) regulate chemical germicides used in health-care settings. FDA regulates chemical sterilants used on critical and semicritical medical devices, and the EPA regulates gaseous sterilants and liquid chemical disinfectants used on noncritical surfaces. FDA also regulates medical devices, including sterilizers. More information is available at 1) http://www.epa.gov/oppad001/chemregindex.htm, 2) http://www.fda.gov/cdrh/index.html, and 3) http://www.fda.gov/cdrh/ode/germlab.html.

† Contact time is the single critical variable distinguishing the sterilization process from high-level disinfection with FDA-cleared liquid chemical sterilants. FDA defines a high-level disinfectant as a sterilant used under the same contact conditions as sterilization except for a shorter immersion time (*C-1*).

§ The tuberculocidal claim is used as a benchmark to measure germicidal potency. Tuberculosis (TB) is transmitted via the airborne route rather than by environmental surfaces and, accordingly, use of such products on environmental surfaces plays no role in preventing the spread of TB. Because mycobacteria have among the highest intrinsic levels of resistance among vegetative bacteria, viruses, and fungi, any germicide with a tuberculocidal claim on the label (i.e., an intermediate-level disinfectant) is considered capable of inactivating a broad spectrum of pathogens, including much less resistant organisms, including bloodborne pathogens (e.g., HBV, hepatitis C virus [HCV], and HIV). It is this broad-spectrum capability, rather than the product's specific potency against mycobacteria, that is the basis for protocols and regulations dictating use of tuberculocidal chemicals for surface disinfection.

¶ Chlorine-based products that are EPA-registered as intermediate-level disinfectants are available commercially. In the absence of an EPA-registered chlorine-based product, a fresh solution of sodium hypochlorite (e.g., household bleach) is an inexpensive and effective intermediate-level germicide. Concentrations ranging from 500 ppm to 800 ppm of chlorine (1:100 dilution of 5.25% bleach and tap water, or approximately ¼ cup of 5.25% bleach to 1 gallon of water) are effective on environmental surfaces that have been cleaned of visible contamination. Appropriate personal protective equipment (e.g., gloves and goggles) should be worn when preparing hypochlorite solutions (*C-2,C-3*). Caution should be exercised, because chlorine solutions are corrosive to metals, especially aluminum.

** Germicides labeled as "hospital disinfectant" without a tuberculocidal claim pass potency tests for activity against three representative microorganisms: *Pseudomonas aeruginosa, Staphylococcus aureus,* and *Salmonella choleraesuis*.

References

C-1. Food and Drug Administration. Guidance for industry and FDA reviewers: content and format of premarket notification [510(k)] submissions for liquid chemical sterilants/high level disinfectants. Rockville, MD: US Department of Health and Human Services, Food and Drug Administration, 2000. Available at http://www.fda.gov/cdrh/ode/397.pdf.

C-2. US Department of Labor, Occupational Safety and Health Administration. 29 CFR Part 1910.1030. Occupational exposure to bloodborne pathogens; needlesticks and other sharps injuries; final rule. Federal Register 2001;66:5317–25. As amended from and includes 29 CFR Part 1910.1030. Occupational exposure to bloodborne pathogens; final rule. Federal Register 1991;56:64174–82. Available at http://www.osha.gov/SLTC/dentistry/index.html.

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Morbidity and Mortality Weekly Report

Recommendations and Reports | December 19, 2003 / Vol. 52 / No. RR-17

Continuing Education Activity Sponsored by CDC
Guidelines for Infection Control in Dental Health-Care Settings — 2003

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INSTRUCTIONS

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1. Read this *MMWR* (Vol. 52, RR-17), which contains the correct answers to the questions beginning on the next page.
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Continuing Nursing Education (CNE). This activity for 2.2 contact hours is provided by CDC, which is accredited as a provider of continuing education in nursing by the American Nurses Credentialing Center's Commission on Accreditation.

Goal and Objectives

This *MMWR* provides recommendations regarding infection control practices for dentistry settings. These recommendations were prepared by CDC staff after consultation with staff from other federal agencies and specialists in dental infection control. The goal of this report is to minimize the risk of disease transmission in dental health-care settings through improved understanding and practice of evidence-based infection control strategies. Upon completion of this continuing education activity, the reader should be able to 1) list the major components of a personnel health infection-control program in the dental setting; 2) list key measures for preventing transmission of bloodborne pathogens; 3) describe key elements of instrument processing and sterilization; 4) describe dental water quality concepts; and 5) demonstrate the importance of developing an infection-control program evaluation.

To receive continuing education credit, please answer all of the following questions.

1. The components of a personnel health infection control program in a dental setting should include which of the following?

A. Infection control education and training for dental staff.
B. Appropriate immunizations against vaccine-preventable diseases.
C. Exposure prevention and postexposure management strategies.
D. Policies regarding work-related illness and work restrictions.
E. Confidentiality of work-related medical evaluations for dental staff.
F. All of the above.

2. Which of the following is true regarding standard infection-control precautions?

A. Standard precautions are strategies used to reduce the risk of transmission of pathogens in the health-care setting.
B. Standard precautions should be used in caring for all patients, regardless of their infectious status.
C. Expanded or transmission-based precautions are used beyond standard precautions to interrupt the spread of certain pathogens.
D. Standard precautions apply to exposure to blood, all body fluids and secretions (except sweat), nonintact skin, and mucous membranes.
E. All of the above.
F. None of the above.

3. Factors to consider in assessing need for follow-up after an occupational blood or body fluid exposure include . . .

A. the type of exposure.
B. the type of body fluid.
C. the bloodborne pathogen infection status of the source.
D. the susceptibility of the exposed person.
E. all of the above.
F. none of the above.

4. Which of the following is not usually worn as personal protective equipment when anticipating spatter of blood or body fluids?

A. Jacket with long sleeves.
B. Gloves.
C. Head covering.
D. Protective eyewear or face shield.
E. Face mask.

5. Which of the following is not true regarding gloves?

A. Certain hand lotions can affect the integrity of gloves.
B. Wearing gloves replaces the need for handwashing.
C. Sterile surgical gloves are recommended for oral surgical procedures.
D. The Food and Drug Administration (FDA) has identified glove failure rates for manufacturers.
E. Certain glove materials can interfere with the setting of impression materials.

6. Which of the following statements regarding processing of contaminated instruments is true?

A. Instruments should be processed in an area separate from where clean instruments are stored.
B. Personnel should wear heavy-duty utility gloves.
C. Instruments only need cleaning if they have visible contamination.
D. Instruments should be heat-sterilized unless they are heat-sensitive.
E. Cleaning an instrument precedes all sterilization and disinfection processes.
F. A, B, D, and E are correct.

7. Which of the following statements is true regarding monitoring the correct functioning of a sterilizer?

A. A chemical indicator should be placed in a visible area of the package before sterilization processing.
B. A biological indicator spore test should be processed through a sterilizer cycle at least once a week.
C. A biological indicator control test matching the same lot of the spore test should be submitted with the sterilizer spore test.
D. Mechanical assessments of sterilizer cycle time and temperature should be monitored.
E. All of the above.

8. Low- to intermediate–level disinfectants used to clean environmental surfaces . . . (*Indicate all that apply.*)

A. rapidly inactivate human immunodeficiency virus and hepatitis B virus on clinical contact and housekeeping surfaces.
B. must be FDA-registered.
C. are used after prompt removal of blood or body substance contamination on a surface.
D. are appropriate to disinfect floors, depending on type of contamination.
E. all of the above.
F. A, C, and D are correct.

9. Which of the following statements is true regarding dental unit waterlines?

A. If municipal water is the source that enters the dental unit waterline, output will always meet drinking water quality.
B. Flushing the waterlines for ≥2 minutes at the beginning of the day reduces the biofilm in the waterlines.
C. Dentists should consult with the manufacturer of the dental unit or water delivery system to determine the best method for maintaining optimal water quality.
D. Dental unit waterlines can reliably deliver optimal water quality when used for irrigation during a surgical procedure.
E. All of the above.
F. A, B, and D are correct.

10. Which of the following is true regarding a dental clinic infection control program evaluation?

A. A method to ensure a safe working environment should be in place to reduce the risk of health-care–associated infections among patients and occupational exposures among dental health-care personnel.
B. Evaluation of a program should include documenting periodic observational assessments, reviewing completed checklists, and reviewing occupational exposures.
C. An evaluation program does not improve an infection control program.
D. A and B are correct.
E. A and C are correct.
F. All of the above.

11. Indicate your work setting.

A. Private dental practice.
B. Hospital dental setting.
C. Academic institution.
D. Laboratory.
E. Other public health setting.
F. Other.

12. Which best describes your professional activities?
A. Dentist.
B. Dental hygienist.
C. Dental laboratory staff.
D. Dental office staff.
E. Other medical profession.

13. I plan to use these recommendations as the basis for . . . (*Indicate all that apply.*)
A. health education materials.
B. insurance reimbursement policies.
C. local practice guidelines.
D. public policy.
E. other.

14. Each month, approximately how many dental patients do you treat?
A. None.
B. 1–10.
C. 11–50.
D. 51–100.
E. 101–200.
F. >200.

15. How much time did you spend reading this report and completing the exam?
A. <2.0 hours.
B. >2.0 hours but <3.0 hours.
C. >3.0 hours but <4.0.
D. >4.0 hours.

16. After reading this report, I am confident I can list the major components of a personnel health infection control program in the dental setting.
A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

17. After reading this report, I am confident I can list key measures for preventing transmission of bloodborne pathogens.
A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

18. After reading this report, I am confident I can describe key elements of instrument processing and sterilization.
A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

19. After reading this report, I am confident I can describe dental water quality concepts.
A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

20. After reading this report, I am confident I can demonstrate the importance of developing an infection-control program evaluation.
A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

21. The objectives are relevant to the goal of this report.
A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

(Continued on pg CE-4)

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December 19, 2003/Vol. 52/No. RR-17
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4. sign and date this form or a photocopy;
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Fill in the appropriate blocks to indicate your answers. Remember, you must answer all of the questions to receive continuing education credit!

1.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E	[ ]F	15.	[ ]A	[ ]B	[ ]C	[ ]D			
2.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E	[ ]F	16.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		
3.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E	[ ]F	17.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		
4.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		18.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		
5.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		19.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		
6.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E	[ ]F	20.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		
7.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		21.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		
8.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E	[ ]F	22.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		
9.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E	[ ]F	23.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		
10.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E	[ ]F	24.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		
11.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E	[ ]F	25.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		
12.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		26.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		
13.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E		27.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E	[ ]F	
14.	[ ]A	[ ]B	[ ]C	[ ]D	[ ]E	[ ]F								

Signature *Date I Completed Exam*

22. The teaching strategies used in this report (text, figures, boxes, and tables) were useful.

A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

23. Overall, the presentation of the report enhanced my ability to understand the material.

A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

24. These recommendations will affect my practice.

A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

25. The content of this activity was appropriate for my educational needs.

A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

26. The availability of continuing education credit influenced my decision to read this report.

A. Strongly agree.
B. Agree.
C. Neither agree nor disagree.
D. Disagree.
E. Strongly disagree.

27. How did you learn about this continuing education activity?

A. Internet.
B. Advertisement (e.g., fact sheet, *MMWR* cover, newsletter, or journal).
C. Coworker/supervisor.
D. Conference presentation.
E. *MMWR* subscription.
F. Other.

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Iowa Dental Board
Dental Assistant
Jurisprudence Study Guide

Updated: June 2024

Overview

As a prospective registered dental assistant, it is important to know and understand the rules and regulations for the practice of dentistry in your state. This document is intended to serve as a guide to help you prepare for the jurisprudence exam.

Dental Practice Act

The Dental Practice Act was written to govern the profession of dentistry, dental hygiene and dental assisting in the state of Iowa. These laws are called statutes**.** Each state develops their own dental practice act. In Iowa, the state statute is referred to as the Iowa Code. The Dental Practice Act of Iowa is found in Iowa Code Chapter 153. Other statutes that affect dentistry in Iowa include Iowa Code Chapters 136C, 147, and 272C. Laws can only be amended or changed through legislative action.

The Iowa Dental Board is responsible for regulating the practice of dentistry by adopting rules based on the authorities granted in Iowa Code. The practice of dentistry includes dentists, dental hygienists and dental assistants. Rules passed by the Board, also known as Iowa Administrative Code (IAC), have the same force of law as statutes.

The practice of dentistry must also follow federal requirements that are implemented and interpreted by federal regulatory agencies. The Occupational Safety and Health Administration (OSHA), and the Centers for Disease Control and Prevention (CDC) are examples of state and federal agencies that write regulations, which Iowa dentists, dental hygienists and dental assistants are required to follow.

Requirements for Licensed Dentists and Auxiliaries

To practice dentistry, dental hygiene, or dental assisting in the state of Iowa, a person must obtain a **license** or a **registration**. In Iowa, dentists and hygienists are licensed, and dental assistants are registered. The effect of license and registration is the same under the Iowa law. Those practicing dentistry or dental hygiene without a license, or dental assisting without a registration or active trainee status are practicing illegally.

A registration in dental assisting authorizes an assistant to work within the dental assisting scope of practice in Iowa. Dental assistant trainees may train on the job for 12 months from the first date of employment while meeting the requirements for registration. Without a license, registration or current trainee status, persons are prohibited from engaging in a particular profession. The requirements for a license or registration vary from state to state.

Responsibilities of the Iowa Dental Board

The Iowa Dental Board is responsible for interpreting, implementing, and enforcing state laws and rules that regulate the practice of dentistry, dental hygiene, and dental assisting in the state of Iowa. The Board consists of nine members who have been appointed by the governor and confirmed by the Iowa Senate. Board members may serve a maximum of three, three-year terms.

- Five members are licensed dentists;
- Two members are licensed dental hygienists; and
- Two members represent the general public.

The Board's job is to adopt rules that define, interpret, implement and enforce the dental practice act. The Board performs the following functions:

- Sets examination standards for licensure and registration;
- Issues licenses, registrations, certificates, and permits;
- Sets standards for licensure/registration, for renewal, for continuing education, and for the practice of dentistry, dental hygiene, and dental assisting; and
- Enforces Iowa laws pertaining to dentistry by investigating complaints, conducting disciplinary hearings and taking disciplinary action, and by monitoring compliance with orders of the Board.

Board rules, found in the Iowa Administrative Code 650, include the requirements for licensure or registration, continuing education, requirements for using x-ray equipment, and qualifications for those exposing radiographs. Board rules also include grounds for suspension or revocation of a license or registration.

Prospective dental assistants should demonstrate an understanding of the following prior to taking the dental assistant jurisprudence examination:

- The scope of practice of a dental assistant.
- The eligibility requirements to practice as a dental assistant trainee.
- The requirements to take dental radiographs (i.e. x-rays)
- The requirements regarding infection control standards.
- The rules for record keeping.
- The requirements for continuing education.
- The requirements for dental assistant registration.

- The consequences of unauthorized practice.
- The rules governing expanded functions.
- The role of the Iowa Practitioner Review Committee (IPRC).

Resources about Laws and Rules

All practitioners should know where to locate the laws and rules governing dentistry. This is especially important because laws and rules change! Please be aware that the Iowa Dental Board can promulgate rulemaking at any time, so rules may change from year to year.

To access the most current laws, visit the Iowa General Assembly website at https://www.legis.iowa.gov/law/ and click on either “Iowa Code” (for state statutes) or “Iowa Administrative Code (for Board rules).

Jurisprudence Exam Study Materials

The following materials should be reviewed in advance of the exam:

Iowa Code Chapter 153

- Emphasis on 153.38 and 153.39.

This chapter of statute is the Dental Practice Act. It defines the practice of dentistry as well as the dental assistant scope of practice and registration requirements.

Iowa Code Chapter 272C.8 and 272C.9

This state statute establishes ground for immunities and duties of licensees and registrants.

Iowa Administrative Code 650--Chapter 1, “Administration”

This chapter provides key terms and their definitions. In particular, please review the definitions of the levels of supervision.

Iowa Administrative Code 650--Chapter 10, “General Requirements”

- Emphasis on 10.1, 10.2, and 10.6.

This chapter provides information such as the display of a registration certificate in each permanent practice location.

Iowa Administrative Code 650--Chapter 11, “Licensure and Registration”

This chapter establishes the requirements for licensure and registration to practice in Iowa.

Iowa Administrative Code 650--Chapter 14, “Renewal and Reinstatement”

- Emphasis on 14.2, 14.3, 14.5 and 14.6.

This chapter provides information about requirements for registration renewal and reinstatement of a lapsed registration.

Iowa Administrative Code 650--Chapter 20, “Dental Assistants”

This chapter sets the standards governing the profession of dental assisting. It outlines the scope of practice requirements, categories of dental assistants, and examination requirements.

Iowa Administrative Code 650--Chaper 22, “Dental Assistant Radiography Qualification”

This chapter outlines the requirements for dental assistants engaging in dental radiography, including examination requirements.

Iowa Administrative Code 650--Chapter 23, “Expanded Functions”

This chapter establishes the requirements for training in and engaging in expanded functions, including minimum training standards.

Iowa Administrative Code 650--Chapter 25, “Continuing Education”

This chapter outlines the requirements for continuing education and exemption**.**

Iowa Administrative Code 650-Chapter 27, “Standards of Practice and Principles of Professional Ethics”

- Emphasis on 27.9, 27.11 and 27.12.

This chapter outlines the ethics and principles that govern the profession of dentistry. It establishes record keeping requirements, and the parameters for teledentistry.

Iowa Administrative Code 650--Chapter 30, “Discipline”

This chapter outlines grounds for discipline. The rules further address requirements and prohibitions related to the practice of dentistry in Iowa.

Iowa Administrative Code 650--Chapter 35, “Iowa Practitioner Review Committee”

This chapter discusses the Iowa Practitioner Review Committee (IPRC), which was established to evaluate, assist, and, as necessary, make reports to the Board on the recovery or rehabilitation of practitioners who self-report impairments.

Resources for Dental Assisting Information

There are several professional organizations that with which dental assistant may be affiliated. It is important that dental assistant understand the function of each entity, as they all have a different purpose and mission.

The Iowa Dental Board is the primary contact for questions regarding the rules and laws affecting the practice of dentistry in Iowa.

Iowa Dental Board

6200 Park Ave. #100
Des Moines, IA 50321

https://dial.iowa.gov/about/boards/dental-board

IDB@Iowa.gov

Phone: 515-381-7030

Dental Assisting National Board, Inc. (DANB)

DANB is a national resource for dental assistants. DANB is an independent organization that administers credentialing examinations for dental assistants. If the dental assistant passes a comprehensive written examination, a national credential is awarded allowing the dental assistant to use the title certified dental assistant (CDA).

The comprehensive examination consists of three components: Infection Control Examination (ICE), Radiation Health and Safety, and General Chairside. In the state of Iowa, dental assistants are not required by law to complete these examinations. The Iowa Dental Board does, however, accept passing scores on the ICE exam or Radiation Health and Safety exam as an alternative to taking the Board tests on infection control and radiation health and safety.

https://www.danb.org/

Phone: 1-800-367-3262

Iowa Dental Assistants Association (IDAA)

The IDAA is a local resource for dental assistants. The Iowa Dental Assistant Association is an organization committed to helping dental assistants with professionalism and education.

https://idaada.org/

Jurisprudence Exam Learning Activities

Administrative (Iowa Code Chapter 153; Iowa Administrative Code 650, Chapter 1)

1. What is the difference between rules and statute?
2. Where is the Dental Practice Act of Iowa found?
3. Who is responsible for writing rules that regulate dental assisting in Iowa?
4. Do all states have the same laws, rules and regulations for dental assistants?
5. Who should be contacted for questions about dental assisting rules and laws in Iowa?

Continuing Education (Iowa Administrative Code 650, Chapters 14, 20, 25)

1. How many hours of continuing education are required for renewal?
2. What are the requirements for continuing education renewal?
3. What are some of the reasons a registrant or licensee may claim a continuing education exemption?

Dental Assistant Trainees (Iowa Administrative Code 650, Chapter 20)

1. Name some of the procedures a dental assistant trainee cannot perform.
2. For how long, following the first date of employment, may a dental assistant trainee practice while meeting the requirements for registration?
3. How soon after starting practice as a dental assistant trainee is an individual eligible for registration?
4. Under what level of supervision must a dental assistant trainee always work?

Dental Radiography (Iowa Administrative Code 650, Chapter 22)

1. Where are the requirements for dental assistants who engage in dental radiography?
2. Who governs radiation-emitting machines and radioactive materials in the state of Iowa?
3. What is the minimum age required to take radiographs in Iowa?

Discipline (Iowa Administrative Code 650, Chapter 30)

1. What are some of the things a registered dental assistant can be disciplined for by the Board?
2. What are the requirements for infection control in dental offices?
3. Can licensees and registrants be disciplined for unauthorized practice?

Expanded Functions (Iowa Administrative Code 650, Chapter 23)

1. What are the requirements for a registered dental assistant to train in expanded functions?
2. What is the primary difference between Level 1 and Level 2 expanded functions?
3. Under what level of supervision must the clinical portion of expanded function training be performed?
4. What are the requirements to train in Level 2 expanded functions?
5. Which expanded functions may be performed under general supervision? Direct supervision?

Other Requirements (Iowa Administrative Code 650, Chapters 10, 27)

1. Within how many days must a change of address be reported to the Board?
2. What contact information must be reported to the Iowa Dental Board?
3. At what location(s) must a certificate of dental assistant registration be prominently displayed?
4. What are the rules governing both the transfer of patient records and the retention of patient records?

Public Health Supervision (Iowa Administrative Code 650, Chapter 20)

1. Are registered dental assistants permitted to practice under public health supervision?
2. What are the requirements to participate in public health supervision?
3. What types of services may a public health dental assistant provide?
4. At what locations may public health services be provided?

Registration Requirements (Iowa Administrative Code 650, Chapters 11, 14, 20)

1. What are the various categories of dental assistants?
2. What education and/or experience is required in order to become a registered dental assistant?
3. When does a dental assistant registration expire?
4. Where can a prospective assistant find the law that mandates registration of dental assistants?
5. Which procedures can be performed by registered dental assistants under general supervision?

Scope of Practice (Iowa Code Chapter 153; Iowa Administrative Code 650, Chapters 1, 20)

1. Define the dental assistant scope of practice.
2. Who is responsible for determining what acts may be delegated to qualified personnel?
3. What procedures may not be delegated to a dental assistant?

Supervision (Iowa Administrative Code 650, Chapters 1, 20)

For each of the following statement, place a P for personal supervision, a D for direct supervision, or a G for general supervision.

1. The dentist does not have to be present in the treatment facility or available via live video upon request. _____
2. The type of supervision required for registered dental assistants for all intraoral services with the exceptions of dental radiography, intraoral suction, and use of a curing light or intraoral camera). _____
3. A registered dental assistant who performs extraoral duties assigned by the dentist. _____
4. A dentist, dental hygienist or registered dental assistant must be present in the treatment room. _____
5. The dentist must be present in the treatment facility, but not necessarily the treatment room. _____

Supplemental Questions (Iowa Administrative Code 650, Chapters 1, 20, 27, 30, 35)
Mark each of the following statements either true (T) or false (F).

1. Patient records for patients 18 years of age or older must be kept at least six years after the last date of examination, prescription or treatment. _____

2. Patient records for minors must be kept at least six years after the last date of examination, prescription or treatment or until they reach the age of 19, whichever is longer. _____

3. Dentists are required to furnish dental records or copies of them to a patient upon request. _____

4. Dentists are allowed to withhold patient records for a limited set of circumstances, such as non-payment of fees. _____

5. The purpose of the Iowa Practice Review Committee is to monitor impaired practitioners. _____

6. The dentist must supervise and delegate the work of all personnel (both hygienists and assistants) in a dental office. _____

7. It is unethical to report a violation of the rules by another licensee or registrant. _____

CHAPTER 153

DENTISTRY

Referred to in §10A.711, 135.24, 135B.7, 135P.1, 147.76, 147.136A, 272C.2C, 514.17, 514J.102, 714H.4

Penalty, §147.86
Licensing board and support staff; location, meetings, and powers; see §10A.503 – 10A.505, 135.12

153.1 through 153.11 Reserved.

153.12 Board defined.
As used in this chapter, *"board"* means the dental board created under chapter 147.
2007 Acts, ch 10, §132; 2007 Acts, ch 218, §204

153.13 "Practice of dentistry" defined.
For the purpose of this subtitle the following classes of persons shall be deemed to be engaged in the practice of dentistry:

1. Persons publicly professing to be dentists, dental surgeons, or skilled in the science of dentistry, or publicly professing to assume the duties incident to the practice of dentistry.

2. Persons who perform examination, diagnosis, treatment, and attempted correction by any medicine, appliance, surgery, or other appropriate method of any disease, condition, disorder, lesion, injury, deformity, or defect of the oral cavity and maxillofacial area, including teeth, gums, jaws, and associated structures and tissue, which methods by education, background experience, and expertise are common to the practice of dentistry.

3. Persons who offer to perform, perform, or assist with any phase of any operation incident to tooth whitening, including the instruction or application of tooth whitening materials or procedures at any geographic location. For purposes of this subsection, *"tooth whitening"* means any process to whiten or lighten the appearance of human teeth by the application of chemicals, whether or not in conjunction with a light source.

[S13, §2600-o; C24, 27, 31, 35, 39, §**2565;** C46, 50, 54, 58, 62, 66, §153.1; C71, 73, 75, 77, 79, 81, §153.13]
96 Acts, ch 1147, §1; 2009 Acts, ch 56, §5, 13
Referred to in §153.14

153.14 Persons not included.
Section 153.13 shall not be construed to include the following classes:

1. Students of dentistry who practice dentistry upon patients at clinics in connection with their regular course of instruction at an accredited dental college, students of dental hygiene who practice upon patients at clinics in connection with their regular course of instruction at state-approved schools, and students of dental assisting who practice upon patients at clinics

in connection with a regular course of instruction determined by the board pursuant to section 153.39.

2. Licensed physicians and surgeons or licensed osteopathic physicians and surgeons who extract teeth or treat diseases of the oral cavity, gums, teeth, or maxillary bones as an incident to the general practice of their profession.

3. Persons licensed to practice dental hygiene who are exclusively engaged in the practice of said profession.

4. Dentists and dental hygienists who are licensed in another state and who are active or reserve members of the United States military service when acting in the line of duty in this state.

5. Persons registered to practice as a dental assistant.

1, 2. [S13, §2600-l, -o; C24, 27, 31, 35, 39, §**2566;** C46, 50, 54, 58, 62, 66, §153.2; C71, 73, 75, 77, 79, 81, §153.14]

3. [C24, 27, 31, 35, 39, §**2566;** C46, 50, 54, 58, 62, 66, §153.2; C71, 73, 75, 77, 79, 81, §153.14]

89 Acts, ch 63, §1; 95 Acts, ch 16, §1; 2000 Acts, ch 1002, §3, 4; 2007 Acts, ch 10, §133; 2009 Acts, ch 133, §57; 2011 Acts, ch 129, §86, 156; 2021 Acts, ch 76, §37

153.15 Dental hygienists — scope of term.

1. A licensed dental hygienist may perform those services which are educational, therapeutic, and preventive in nature which attain or maintain optimal oral health as determined by the board. Services may include but are not necessarily limited to the following:

a. Complete oral prophylaxis.

b. Application of preventive agents to oral structures.

c. Exposure and processing of radiographs.

d. Administration of medicaments prescribed by a licensed dentist.

e. Obtaining and preparing nonsurgical, clinical and oral diagnostic tests for interpretation by the dentist.

f. Preparation of preliminary written records of oral conditions for interpretation by the dentist.

2. Such services, except educational services, shall be performed under supervision of a licensed dentist but nothing in this section shall be construed to authorize a dental hygienist to practice dentistry.

3. Educational services shall be limited to the following:

a. Assessing the need for, planning, implementing, and evaluating oral health education programs for individual patients and community groups.

b. Conducting workshops and in-service training sessions on dental health for nurses, school personnel, institutional staff, community groups, and other agencies providing consultation and technical assistance for promotional, preventive, and educational services.

[C24, 27, 31, 35, 39, §**2571;** C46, 50, 54, 58, 62, 66, §153.7; C71, 73, 75, 77, 79, 81, §153.15]

2007 Acts, ch 10, §134; 2017 Acts, ch 41, §1; 2020 Acts, ch 1018, §1; 2021 Acts, ch 80, §83

Referred to in §153.23

153.15A Dental hygienists — license requirements, renewal.

1. In addition to requirements adopted by rule by the board, in order to obtain a license as a dental hygienist, an applicant shall present evidence to the board of both of the following:

a. That the applicant possesses a degree or certificate of graduation from a college, university, or institution of higher education, accredited by a national agency recognized by the council on higher education accreditation or the United States department of education, in a program of dental hygiene with a minimum of two academic years of curriculum.

b. That the applicant possesses a valid certificate in a nationally recognized course in cardiopulmonary resuscitation.

2. In order to renew a license as a dental hygienist, a licensee shall furnish evidence of

valid annual certification for cardiopulmonary resuscitation which shall be credited toward the licensee's continuing education requirement.

92 Acts, ch 1121, §1; 2016 Acts, ch 1011, §37

153.16 Dental office where dentist is employed.

Every person who owns, operates, or controls a dental office in which anyone other than that person is practicing dentistry shall display the name of the other person in a conspicuous manner at the public entrance to said office.

[S13, §2600-o1; C24, 27, 31, 35, 39, §**2568;** C46, 50, 54, 58, 62, 66, §153.4; C71, 73, 75, 77, 79, 81, §153.16]

153.17 Unlawful practice.

Except as otherwise provided in this chapter, it shall be unlawful for any person to practice dentistry or dental surgery or dental hygiene in this state, other than:

1. Those who are now duly licensed dentists, under the laws of this state in force at the time of their licensure; and
2. Those who are now duly licensed dental hygienists under the laws of this state in force at the time of their licensure; and
3. Those who may hereafter be duly licensed as dentists or dental hygienists pursuant to the provisions of this chapter.

[C71, 73, 75, 77, 79, 81, §153.17]

2021 Acts, ch 80, §84

153.18 Employment of unlicensed dentist.

No person owning or conducting any place where dental work of any kind is done or contracted for, shall employ or permit any unlicensed dentist to practice dentistry in said place.

[S13, §2600-o2; C24, 27, 31, 35, 39, §**2569;** C46, 50, 54, 58, 62, 66, §153.5; C71, 73, 75, 77, 79, 81, §153.18]

153.19 Temporary permit — fees.

1. The board may, in its discretion, issue a temporary permit authorizing the permit holder to practice dentistry or dental hygiene in a specific location or locations and for a specified period of time if, in the opinion of the board, a need exists and the person possesses the qualifications prescribed by the board for the permit, which shall be substantially equivalent to those required for licensure under this chapter. The board shall determine in each instance those eligible for this permit, whether or not examinations shall be given, and the type of examinations. None of the requirements for regular licensure under this chapter are mandatory for a temporary permit except as specifically designated by the board. The issuance of a temporary permit shall not in any way indicate that the permit holder is necessarily eligible for regular licensure, nor is the board in any way obligated to so license the person.
2. A temporary permit shall be issued for a period determined by the board and may be renewed at the discretion of the board. The fee for a temporary permit and the fee for renewal shall be set by the board. The fees shall be based on the administrative costs of issuing and renewing the permits.

2002 Acts, ch 1108, §15; 2004 Acts, ch 1167, §7, 8

153.20 Drugs, medicine, and surgery.

A dentist shall have the right to prescribe and administer drugs or medicine, perform such surgical operations, administer general or local anesthetics and use such appliances as may be necessary to the proper practice of dentistry.

[C71, 73, 75, 77, 79, 81, §153.20]

153.21 License by credentials.

The board may issue a license under this chapter without examination to an applicant who furnishes satisfactory proof that the applicant meets all of the following requirements:

1. Holds a license from a similar dental board of another state, territory, or district of the United States under requirements equivalent or substantially equivalent to those of this state.

2. Has satisfied at least one of the following:

a. Passed an examination administered by a regional or national testing service, which examination has been approved by the dental board in accordance with section 147.34, subsection 1.

b. Has for three consecutive years immediately prior to the filing of the application in this state been in a legal practice of dentistry or dental hygiene in such other state, territory, or district of the United States.

3. Furnishes such other evidence as to the applicant's qualifications and lawful practice as the board may require.

[C71, 73, 75, 77, 79, 81, §153.21]
2002 Acts, ch 1108, §16; 2011 Acts, ch 80, §1

153.22 Resident license.

A dentist or dental hygienist who is serving only as a resident, intern, or graduate student and who is not licensed to practice in this state is required to obtain from the board a temporary or special license to practice as a resident, intern, or graduate student. The license shall be designated "Resident License" and shall authorize the licensee to serve as a resident, intern, or graduate student only, under the supervision of a licensed practitioner, in an institution approved for this purpose by the board. Such license shall be renewed at the discretion of the board. The fee for a resident license and the renewal fee shall be set by the board based upon the cost of issuance of the license. The board shall determine in each instance those eligible for a resident license, whether or not examinations shall be given, and the type of examination. None of the requirements for regular permanent licensure are mandatory for resident licensure except as specifically designated by the board. The issuance of a resident license shall not in any way indicate that the person so licensed is necessarily eligible for regular licensure or that the board is obligated to so license the person. The board may revoke a resident license at any time it shall determine either that the caliber of work done by a licensee or the type of supervision being given such licensee does not conform to reasonable standards established by the board.

[C71, 73, 75, 77, 79, 81, §153.22]
2002 Acts, ch 1108, §17; 2007 Acts, ch 10, §135

153.23 Retired volunteer license.

1. Upon application and qualification, the board may issue a retired volunteer license to a dentist or dental hygienist who has held an active license to practice dentistry or dental hygiene within the past five years, and who has retired from the practice of dentistry or dental hygiene, to enable the retired dentist or dental hygienist to provide volunteer dental or dental hygiene services. The board shall adopt rules to administer this section, including but not limited to rules providing eligibility requirements and services that may be performed pursuant to the license.

2. The board shall not charge an application or licensing fee for issuing or renewing a retired volunteer license. A retired volunteer license shall not be converted to a regular license with active or inactive status. A retired volunteer license shall not be considered to be an active license to practice dentistry or dental hygiene.

3. A person holding a retired volunteer license shall not charge a fee or receive compensation or remuneration in any form from any person or third-party payor including but not limited to an insurance company, health plan, or state or federal benefit program.

4. A person holding a retired volunteer license is subject to all rules and regulations governing the practice of dentistry or dental hygiene except those relating to the payment of fees, license renewal, and continuing education requirements.

5. A dental hygienist holding a retired volunteer license shall abide by the permitted scope

of practice of actively licensed dental hygienists described in section 153.15. However, a dental hygienist holding a retired volunteer license may perform screenings or educational programs without an actively licensed dentist present.

6. An applicant for a retired volunteer license who has surrendered, resigned, converted, or allowed a license to lapse or expire as the result of or in lieu of disciplinary action shall not be eligible for a retired volunteer license.

7. The board may waive the five-year requirement in subsection 1 if the applicant demonstrates that the applicant possesses sufficient knowledge and skills to practice safely and competently.

2015 Acts, ch 18, §1

153.24 Orthodontia-related services.

1. A licensee under the purview of the board who provides treatment for the correction of malpositions of human teeth or the initial use of orthodontic appliances shall not begin orthodontic treatment on a new patient unless one of the following conditions is met:

a. The licensee performs an initial in-person or teledentistry examination of the teeth and supporting structures of the new patient prior to beginning orthodontic treatment.

b. The new patient provides the licensee with the portion of the dental record taken within the prior six months of an in-person or teledentistry examination of the teeth and supporting structures of the new patient prior to the licensee beginning orthodontic treatment.

2. The examination required pursuant to subsection 1 shall include any appropriate conventional or digital radiographs or digital imaging that are necessary to develop a suitable orthodontic diagnosis and treatment plan.

3. For the purposes of this section, *"new patient"* means a person whom a licensee has not examined, for whom a licensee has not provided care, or for whom a licensee has not otherwise provided consultation during the two-year period immediately prior to the patient's most recent appointment.

2021 Acts, ch 127, §1

153.25 through 153.30 Reserved.

153.31 Falsification in application for renewal.

A license to practice either dentistry or dental hygiene, or registration as a dental assistant, shall be revoked or suspended in the manner and upon the grounds elsewhere provided in this chapter, and also when the certificate accompanying the application of such licensee or registrant for renewal of license or registration filed with the board is not in all material respects true.

[C35, §2573-g15; C39, §**2573.15;** C46, 50, 54, 58, 62, 66, §153.24; C71, 73, 75, 77, 79, 81, §153.31]

2002 Acts, ch 1108, §18

153.32 Unprofessional conduct.

As to dentists and dental hygienists *"unprofessional conduct"* shall consist of any of the acts denominated as such elsewhere in this chapter, and also any other of the following acts:

1. Receiving any rebate, or other thing of value, directly or indirectly from any dental laboratory or dental technician.

2. Solicitation of professional patronage by agents or persons popularly known as "cappers" or "steerers", or profiting by the acts of those representing themselves to be agents of the licensee.

3. Receipt of fees on the assurance that a manifestly incurable disease can be permanently cured.

4. Division of fees or agreeing to split or divide the fees received for professional services with any person for bringing or referring a patient or assisting in the care or treatment of a patient without the consent of said patient or the patient's legal representative.

5. Willful neglect of a patient in a critical condition.

[C35, §2573-g16; C39, §**2573.16;** C46, 50, 54, 58, 62, 66, §153.25; C71, 73, 75, 77, 79, 81, §153.32]

153.33 Powers of board.

1. Subject to the provisions of this chapter, any provision of this subtitle to the contrary notwithstanding, the board shall exercise the following powers:

a. (1) To initiate investigations of and conduct hearings on all matters or complaints relating to the practice of dentistry, dental hygiene, or dental assisting or pertaining to the enforcement of any provision of this chapter, to provide for mediation of disputes between licensees or registrants and their patients when specifically recommended by the board, to revoke or suspend licenses or registrations, or the renewal thereof, issued under this or any prior chapter, to provide for restitution to patients, and to otherwise discipline licensees and registrants.

(2) Subsequent to an investigation by the board, the board may appoint a disinterested third party to mediate disputes between licensees or registrants and patients. Referral of a matter to mediation shall not preclude the board from taking disciplinary action against the affected licensee or registrant.

b. To appoint investigators, who shall not be members of the board, to administer and aid in the enforcement of the provisions of law relating to those persons licensed to practice dentistry and dental hygiene, and persons registered as dental assistants. The amount of compensation for the investigators shall be determined pursuant to chapter 8A, subchapter IV. Investigators authorized by the board have the powers and status of peace officers when enforcing this chapter and chapters 147 and 272C.

c. To initiate in its own name or cause to be initiated in a proper court appropriate civil proceedings against any person to enforce the provisions of this chapter or this subtitle relating to the practice of dentistry, and the board may have the benefit of counsel in connection therewith. Any such judicial proceeding as may be initiated by the board shall be commenced and prosecuted in the same manner as any other civil action and injunctive relief may be granted therein without proof of actual damage sustained by any person but such injunctive relief shall not relieve the person so enjoined from criminal prosecution by the attorney general or county attorney for violation of any provision of this chapter or this subtitle relating to the practice of dentistry.

d. To adopt rules regarding infection control in dental practice which are consistent with standards of the federal Occupational Safety and Health Act of 1970, 29 U.S.C. §651 – 678, and recommendations of the centers for disease control.

e. To promulgate rules as may be necessary to implement the provisions of this chapter.

2. All employees needed to administer this chapter except the executive director shall be appointed pursuant to the merit system. The executive director shall be appointed pursuant to section 10A.504 and shall be exempt from the merit system provisions of chapter 8A, subchapter IV.

3. In any investigation made or hearing conducted by the board on its own motion, or upon written complaint filed with the board by any person, pertaining to any alleged violation of this chapter or the accusation against any licensee or registrant, the following procedure and rules so far as material to such investigation or hearing shall obtain:

a. The accusation of such person against any licensee or registrant shall be reduced to writing, verified by some person familiar with the facts therein stated, and three copies thereof filed with the board.

b. If the board finds the charges sufficient, if true, to warrant suspension or revocation of license or registration, the board shall issue an order fixing a time and place for hearing and requiring the licensee or registrant to appear and answer to the charges. The order, together with a copy of the charges, shall be served upon the accused at least twenty days before the date fixed for hearing, either personally or by certified or registered mail, sent to the licensee's or registrant's last known post office address as shown by the records of the board.

c. At the time and place fixed in said notice for said hearing, or at any time and place to which the said hearing shall be adjourned, the board shall hear the matter and may take

evidence, administer oaths, take the deposition of witnesses, including the person accused, in the manner provided by law in civil cases, compel the appearance of witnesses before it in person the same as in civil cases by subpoena issued over the signature of the chairperson of the board and in the name of the state of Iowa, require answers to interrogatories, and compel the production of books, papers, accounts, documents and testimony pertaining to the matter under investigation or relating to the hearing.

d. In all investigations and hearings pertaining to the suspension or revocation of licenses or registrations, the board and any person affected may have the benefit of counsel. Upon the request of the licensee or registrant or the licensee's or registrant's counsel, the board shall issue subpoenas for the attendance of witnesses in behalf of the licensee or registrant. The subpoenas when issued shall be delivered to the licensee or registrant or the licensee's or registrant's counsel. Such subpoenas for the attendance of witnesses shall be effective if served upon the person named in the subpoena anywhere within this state, provided that, at the time of such service, the fees provided by law for attendance of witnesses in civil cases in district court are paid or tendered to the person.

e. In case of disobedience of a subpoena lawfully served under this subsection, the board or any party to such hearing aggrieved thereby may invoke the aid of the district court in the county where the hearing is being conducted to require the attendance and testimony of such witnesses. The district court of the county within which the hearing is being conducted may, in case of contumacy or refusal to obey the subpoena, issue an order requiring the person to appear before the board, and, if so ordered, to give evidence touching the matter involved in the hearing. Any failure to obey such order of the court may be punished by the court as contempt.

f. If the licensee or registrant pleads guilty, or after hearing is found guilty by the board of any of the charges made, the board may suspend for a limited period or revoke the license or registration, and the last renewal of the license or registration, and shall enter the order on its records. The board shall notify the accused of the revocation or suspension of the person's license or registration, as the case may be, and the person shall immediately surrender that license or registration to the board. Any person whose license or registration has been revoked or suspended shall not practice dentistry, dental hygiene, or dental assisting within this state while the revocation or suspension is in force and effect.

g. The findings of fact made by the board acting within its power shall, in the absence of fraud, be conclusive, but the district court shall have power to review questions of law involved in any final decision or determination of the board if application is made by the aggrieved party within thirty days after such determination by certiorari, mandamus, or such other method of review or appeal permitted under the laws of this state, and to make such further orders in respect thereto as justice may require.

h. Pending the review and final disposition thereof by the district court, the action of the board suspending or revoking such license or registration shall not be stayed.

4. An inspector may be appointed by the dental board pursuant to the provisions of chapter 8A, subchapter IV.

5. *a.* The board may impose an administrative penalty of up to five hundred dollars on a licensee, registrant, or trainee of the board who does any of the following:

(1) Engages in a practice regulated by this chapter without a current license, registration, permit, or qualification.

(2) Employs a person without a current license, registration, permit, or qualification to engage in a practice regulated by this chapter.

(3) Fails to complete the continuing education required for renewal of a license or registration.

b. The assessment and payment of a penalty imposed pursuant to paragraph "*a*" shall not be considered a disciplinary action or reported as discipline and shall be confidential.

c. A licensee, registrant, or trainee may contest a penalty issued pursuant to paragraph "*a*" by initiating a contested case proceeding pursuant to chapter 17A.

d. This subsection shall not prohibit the board from imposing discipline on a licensee, registrant, or trainee for willful or repeated violations.

e. An administrative penalty collected pursuant to this subsection shall be deposited into the general fund of the state.

[C71, 73, 75, 77, 79, 81, §153.33]

90 Acts, ch 1112, §1; 92 Acts, ch 1121, §2; 93 Acts, ch 41, §2; 2002 Acts, ch 1108, §19, 20; 2003 Acts, ch 44, §38, 39; 2003 Acts, ch 145, §200; 2007 Acts, ch 10, §136; 2009 Acts, ch 41, §263; 2009 Acts, ch 133, §192; 2015 Acts, ch 36, §1; 2016 Acts, ch 1073, §61; 2017 Acts, ch 29, §43; 2019 Acts, ch 85, §62; 2020 Acts, ch 1018, §2; 2021 Acts, ch 80, §85, 86

Referred to in §272C.5

Section not amended; internal reference change applied

153.33A Dental hygiene committee.

1. A three-member dental hygiene committee of the board is created, consisting of the two dental hygienist members of the board and one dentist member of the board. The dentist member of the committee must have supervised and worked in collaboration with a dental hygienist for a period of at least three years immediately preceding election to the committee. The dentist member shall be elected to the committee annually by a majority vote of board members.

2. The committee shall have the authority to adopt recommendations regarding the practice, discipline, education, examination, and licensure of dental hygienists, subject to subsection 3, and shall carry out duties as assigned by the board. The committee shall have no regulatory or disciplinary authority with regard to dentists, dental assistants, dental lab technicians, or any other auxiliary dental personnel.

3. The board shall ratify recommendations of the committee at the first meeting of the board following adoption of the recommendations by the committee, or at a meeting of the board specifically called for the purpose of board review and ratification of committee recommendations. The board shall decline to ratify committee recommendations only if the board makes a specific finding that a recommendation exceeds the jurisdiction or expands the scope of the committee beyond the authority granted in subsection 2, creates an undue financial impact on the board, or is not supported by the record. The board shall pay the necessary expenses of the committee and of the board in implementing committee recommendations ratified by the board.

4. This section shall not be construed as impacting or changing the scope of practice of the profession of dental hygiene or authorizing the independent practice of dental hygiene.

98 Acts, ch 1010, §2; 2007 Acts, ch 10, §137

Referred to in §147.14

153.33B Executive director — duties.

A full-time executive director shall be appointed as provided under section 10A.504. The executive director shall not be a member of the board. The duties of the executive director shall be the following:

1. To receive all applications for the following:
a. Licensure as a dentist or dental hygienist.
b. Registration as a dental assistant.
c. Permission to administer sedation or anesthesia.
d. Any other activity for which an application to the board is required.
2. To collect and receive all fees.
3. To keep all records pertaining to licensure, registration, enforcement, and other board actions, including a record of all board proceedings.
4. To perform such other duties as may be prescribed by the board.
5. To appoint assistants to the director and other persons necessary to administer this chapter.

2015 Acts, ch 36, §2; 2020 Acts, ch 1063, §65

Section not amended; internal reference change applied

153.34 Discipline.

The board may issue an order to discipline a licensed dentist or dental hygienist, or registered dental assistant, for any of the grounds set forth in this chapter, chapter 272C,

or Title IV. Notwithstanding section 272C.3, licensee or registrant discipline may include a civil penalty not to exceed ten thousand dollars. Pursuant to this section, the board may discipline a licensee or registrant for any of the following reasons:

1. For fraud or deceit in procuring the license or registration or the renewal thereof to practice dentistry, dental hygiene, or dental assisting.
2. For being guilty of willful and gross malpractice or willful and gross neglect in the practice of dentistry, dental hygiene, or dental assisting.
3. For fraud in representation as to skill or ability.
4. For willful or repeated violations of this chapter, this subtitle, or the rules of the board.
5. For obtaining any fee by fraud or misrepresentation.
6. For having failed to pay license or registration fees as provided herein.
7. For gross immorality or dishonorable or unprofessional conduct in the practice of dentistry, dental hygiene, or dental assisting.
8. For failure to maintain a reasonably satisfactory standard of competency in the practice of dentistry, dental hygiene, or dental assisting.
9. For a violation of a law of this state, another state, or the United States, without regard to its designation as either a felony or misdemeanor, which law relates to the practice of dentistry, dental hygiene, or dental assisting. A certified copy of the final order or judgment of conviction or plea of guilty in this state or in another state constitutes conclusive evidence of the conviction.
10. The revocation or suspension of a license or registration to practice dentistry, dental hygiene, or dental assisting or other disciplinary action taken by a licensing authority of another state, territory, or country. A certified copy of the record or order of suspension, revocation, or disciplinary action is conclusive or prima facie evidence.
11. Knowingly aiding, assisting, procuring, or advising a person to unlawfully practice dentistry, dental hygiene, or dental assisting.
12. For an adjudication of mental incompetence by a court of competent jurisdiction. Such adjudication shall automatically suspend a license or registration for the duration of the license or registration unless the board orders otherwise.
13. Inability to practice dentistry, dental hygiene, or dental assisting with reasonable skill and safety by reason of illness, drunkenness, or habitual or excessive use of drugs, intoxicants, narcotics, chemicals, or other types of materials or as a result of a mental or physical condition. At reasonable intervals following suspension or revocation under this subsection, a dentist, dental hygienist, or dental assistant shall be afforded an opportunity to demonstrate that the dentist, dental hygienist, or dental assistant can resume the competent practice of dentistry, dental hygiene, or dental assisting with reasonable skill and safety to patients.
14. For being a party to or assisting in any violation of any provision of this chapter.
15. For a dental hygienist, the practice of dentistry by the dental hygienist; and for a dentist, permitting the practice of dentistry by a dental hygienist by the dentist under whose supervision the dental hygienist is operating.

[C71, 73, 75, 77, 79, 81, §153.34]

88 Acts, ch 1124, §1 – 4; 93 Acts, ch 41, §3; 2002 Acts, ch 1108, §21; 2007 Acts, ch 10, §138; 2009 Acts, ch 133, §192; 2010 Acts, ch 1069, §20; 2020 Acts, ch 1103, §18, 31

Referred to in §272C.3, 272C.4

153.35 Construction rule.

This chapter shall be deemed to be passed in the interest of the public health, safety and welfare of the people of this state, and its provisions shall be liberally construed to carry out its object and purposes.

[C71, 73, 75, 77, 79, 81, §153.35]

153.36 Exceptions to other statutes.

1. Sections 147.44, 147.48, 147.49, 147.53, and 147.55, and sections 147.87 through 147.92 shall not apply to the practice of dentistry.
2. In addition to the provisions of section 272C.2, subsection 4, a person licensed by the

board shall also be deemed to have complied with continuing education requirements of this state if, during periods that the person practiced the profession in another state or district, the person met all of the continuing education and other requirements of that state or district for the practice of the occupation or profession.

3. Notwithstanding the panel composition provisions in section 272C.6, subsection 1, the board's disciplinary hearing panels shall be comprised of three board members, at least two of which are licensed in the profession.

[C71, 73, 75, 77, 79, 81, §153.36]

97 Acts, ch 159, §23; 2007 Acts, ch 10, §139; 2009 Acts, ch 41, §56

153.37 Dental college and dental hygiene program faculty permits.

The board may issue a faculty permit entitling the holder to practice dentistry or dental hygiene within a college of dentistry or a dental hygiene program and affiliated teaching facilities as an adjunct to the faculty member's teaching position, associated responsibilities, and functions. The dean of the college of dentistry or chairperson of a dental hygiene program shall certify to the board those bona fide members of the college's or a dental hygiene program's faculty who are not licensed and registered to practice dentistry or dental hygiene in Iowa. Any faculty member so certified shall, prior to commencing the member's duties in the college of dentistry or a dental hygiene program, make written application to the board for a permit. The permit shall be for a period determined by the board and may be renewed at the discretion of the board. The fee for the faculty permit and the renewal shall be set by the board based upon the administrative cost of issuance of the permit. The fee shall be deposited in the same manner as fees provided for in section 147.82. The faculty permit shall be valid during the time the holder remains a member of the faculty and shall subject the holder to all provisions of this chapter.

[C79, 81, §153.37]

93 Acts, ch 41, §4; 2002 Acts, ch 1108, §22; 2007 Acts, ch 10, §140

153.38 Dental assistants — scope of practice.

A registered dental assistant may perform those services of assistance to a licensed dentist as determined by the board by rule. A registered dental assistant with additional education and training, as provided by the board by rule, may become certified to perform expanded functions or become qualified to participate in dental radiography. A registered dental assistant who has successfully completed expanded function training through the university of Iowa college of dentistry or a program certified by the commission on dental accreditation may place dental sealants on teeth. Services performed by a registered dental assistant shall be performed under supervision of a licensed dentist, but this section shall not be construed to authorize a dental assistant to practice dentistry or dental hygiene. The board shall not adopt rules that delegate to a dental assistant the administration of local anesthesia or the removal of plaque, stain, calculus, or hard natural material except by toothbrush, floss, or rubber cup coronal polish. Every licensed dentist who utilizes the services of a registered dental assistant for the purpose of assistance in the practice of dentistry shall be responsible for acts delegated to the registered dental assistant. A dentist shall delegate to a registered dental assistant only those acts which are authorized to be delegated to registered dental assistants by the board.

2000 Acts, ch 1002, §5; 2007 Acts, ch 10, §141; 2020 Acts, ch 1018, §3

153.39 Dental assistants — registration requirements, renewal, revocation, or suspension.

1. A person shall not practice on or after July 1, 2001, as a dental assistant unless the person has registered with the board and received a certificate of registration pursuant to this chapter.

2. Education requirements shall be determined by the board by rule, according to standards to be determined by the board. A person shall be registered upon the successful completion of either of the education and examination requirements established in paragraph *"a"* or *"b"*:

a. Successful completion of a course of study and examination approved by the board and sponsored by a board-approved postsecondary school.

b. Successful completion of on-the-job training and examination consisting of all of the following:

(1) Completion of on-the-job training as specified in rule.

(2) Successful completion of an examination process approved by the board. A written examination may be waived by the board pursuant to section 17A.9A, in practice situations where the written examination is deemed to be unnecessary or detrimental to the dentist's practice.

3. The education requirements in subsection 2, paragraphs *"a"* and *"b"* may include possession of a valid certificate in a nationally recognized course in cardiopulmonary resuscitation. Successful passage of an examination administered by the board under subsection 2, paragraph *"a"* or *"b"*, which shall include sections regarding infection control, hazardous materials, and jurisprudence, shall also be required.

4. The board shall establish continuing education requirements as a condition of renewing registration as a registered dental assistant, as well as standards for the suspension or revocation of registration.

5. A person employed as a dental assistant after July 1, 2005, shall have a twelve-month period following the person's first date of employment after July 1, 2005, to comply with the provisions of subsection 1.

2000 Acts, ch 1002, §6; 2002 Acts, ch 1108, §23; 2005 Acts, ch 28, §1, 2; 2007 Acts, ch 22, §39; 2009 Acts, ch 133, §201

Referred to in §153.14

153.40 Reserved.

For future text of this section effective upon receipt by the department of health and human services of federal funding to establish a mobile dental delivery system, see 2004 Acts, ch 1175, §227, 287; 2023 Acts, ch 19, §1358

CHAPTER 147

GENERAL PROVISIONS, HEALTH-RELATED PROFESSIONS

Referred to in §10A.503, 10A.711, 144E.6, 148.2A, 148.14, 148A.1, 148B.2, 148C.1, 148C.10, 148C.13, 148E.1, 148E.7, 148E.8, 148F.3, 148G.1, 148G.5, 148G.8, 148H.4, 148H.6, 148I.1, 148I.2, 148I.4, 149.1, 151.1A, 152.1, 152.4, 152.11, 152A.1, 152B.1, 152B.11, 152C.1, 152D.1, 152D.5, 153.12, 153.33, 154.1, 154B.1, 154B.6, 154C.1, 154C.4, 154C.7, 154D.1, 154D.3, 154D.4, 154E.1, 154E.2, 154E.3, 155.1, 155.4, 155.9, 155A.6, 155A.6A, 155A.6B, 155A.12, 155A.23, 155A.40, 235A.15, 235B.6, 257.11, 272C.1, 272C.2A, 272C.2B, 272C.6, 489.1101, 496C.2, 514C.28, 514C.34, 519A.2, 614.1, 668A.1, 707A.1

Continuing education and regulation; see chapter 272C

DEFINITIONS

147.1 Definitions.

For the purpose of this subtitle:

1. *"Board"* means one of the boards enumerated in section 147.13 or any other board established in this subtitle whose members are appointed by the governor to license applicants and impose licensee discipline as authorized by law.

2. *"Department"* means the department of inspections, appeals, and licensing.

3. *"Licensed"* or *"certified"*, when applied to a physician and surgeon, podiatric physician, osteopathic physician and surgeon, genetic counselor, physician assistant, psychologist, chiropractor, nurse, dentist, dental hygienist, dental assistant, optometrist, speech pathologist, audiologist, pharmacist, physical therapist, physical therapist assistant, occupational therapist, occupational therapy assistant, orthotist, prosthetist, pedorthist, respiratory care practitioner, practitioner of cosmetology arts and sciences, practitioner of barbering, funeral director, dietitian, behavior analyst, assistant behavior analyst, marital and family therapist, mental health counselor, midwife, respiratory care and polysomnography practitioner, polysomnographic technologist, social worker, massage therapist, athletic trainer, acupuncturist, nursing home administrator, hearing aid specialist, or sign language interpreter or transliterator means a person licensed under this subtitle.

4. *"Peer review"* means evaluation of professional services rendered by a person licensed to practice a profession.

5. *"Peer review committee"* means one or more persons acting in a peer review capacity who also serve as an officer, director, trustee, agent, or member of any of the following:

a. A state or local professional society of a profession for which there is peer review.

b. Any organization approved to conduct peer review by a society as designated in paragraph *"a"* of this subsection.

c. The medical staff of any licensed hospital.

d. A board enumerated in section 147.13 or any other board established in this subtitle which is appointed by the governor to license applicants and impose licensee discipline as authorized by law.

e. The board of trustees of a licensed hospital when performing a function relating to the reporting required by section 147.135, subsection 3.

f. A health care entity, including but not limited to a group medical practice, that provides health care services and follows a formal peer review process for the purpose of furthering quality health care.

6. *"Profession"* means medicine and surgery, podiatry, osteopathic medicine and surgery, genetic counseling, practice as a physician assistant, psychology, chiropractic, nursing, dentistry, dental hygiene, dental assisting, optometry, speech pathology, audiology, pharmacy, physical therapy, physical therapist assisting, occupational therapy, occupational therapy assisting, respiratory care, cosmetology arts and sciences, barbering, mortuary science, applied behavior analysis, marital and family therapy, mental health counseling, midwifery, polysomnography, social work, dietetics, massage therapy, athletic training, acupuncture, nursing home administration, practice as a hearing aid specialist, sign language interpreting or transliterating, orthotics, prosthetics, or pedorthics.

[C24, 27, 31, 35, 39, §**2438;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.1]

84 Acts, ch 1075, §6; 85 Acts, ch 168, §1; 86 Acts, ch 1211, §13; 87 Acts, ch 91, §6; 88 Acts, ch 1225, §2; 89 Acts, ch 89, §4, 5; 91 Acts, ch 229, §1; 92 Acts, ch 1205, §13; 94 Acts, ch 1132, §10; 95 Acts, ch 41, §8; 95 Acts, ch 108, §3; 96 Acts, ch 1036, §3, 4; 96 Acts, ch 1109, §1; 96 Acts, ch 1219, §20; 98 Acts, ch 1053, §2, 3; 2000 Acts, ch 1053, §1; 2000 Acts, ch 1148, §1; 2004 Acts, ch 1175, §419, 420, 433; 2007 Acts, ch 10, §26, 27; 2008 Acts, ch 1088, §1; 2012 Acts, ch 1101, §1; 2015 Acts, ch 30, §60; 2015 Acts, ch 57, §1; 2015 Acts, ch 70, §2; 2018 Acts, ch 1052, §1, 12; 2018 Acts, ch 1106, §2, 14; 2023 Acts, ch 19, §1623; 2023 Acts, ch 127, §1

Referred to in §148F.4

Subsections 2, 3, and 6 amended

LICENSES

147.2 License required.

1. A person shall not engage in the practice of medicine and surgery, podiatry, osteopathic medicine and surgery, genetic counseling, psychology, chiropractic, physical therapy, physical therapist assisting, nursing, dentistry, dental hygiene, dental assisting, optometry, speech pathology, audiology, occupational therapy, occupational therapy assisting, orthotics, prosthetics, pedorthics, respiratory care, pharmacy, cosmetology arts and sciences, barbering, social work, dietetics, applied behavior analysis, marital and family therapy or mental health counseling, massage therapy, mortuary science, polysomnography, athletic training, acupuncture, nursing home administration, or sign language interpreting or transliterating, or shall not practice as a physician assistant or a hearing aid specialist, unless the person has obtained a license for that purpose from the board for the profession.

2. For purposes of this section, a person who is licensed in another state and recognized for licensure in this state pursuant to the nurse licensure compact contained in section 152E.1 or pursuant to the advanced practice registered nurse compact contained in section 152E.3 shall be considered to have obtained a license to practice nursing.

[C97, §2582, 2588; S13, §2575-a28, -a31, -a36, 2582, 2583-a, -d, -r, 2600-o4; SS15, §2588; C24, 27, 31, 35, 39, §**2439;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.2]

85 Acts, ch 168, §2; 88 Acts, ch 1225, §3; 96 Acts, ch 1035, §1; 96 Acts, ch 1036, §5; 98 Acts, ch 1050, §1, 5; 2000 Acts, ch 1008, §1; 2000 Acts, ch 1053, §2; 2000 Acts, ch 1185, §1; 2004 Acts, ch 1045, §1; 2004 Acts, ch 1175, §421, 433; 2005 Acts, ch 53, §1; 2007 Acts, ch 10, §28; 2008 Acts, ch 1009, §1, 5; 2008 Acts, ch 1088, §2; 2012 Acts, ch 1101, §2; 2015 Acts, ch 57, §2; 2015 Acts, ch 70, §3, 18; 2018 Acts, ch 1052, §2, 12; 2018 Acts, ch 1106, §3, 14

Referred to in §148.6, 148G.1, 148G.6

147.3 Qualifications.

An applicant for a license to practice a profession under this subtitle is not ineligible because of age, citizenship, sex, race, religion, marital status, or national origin, although the application form may require citizenship information.

[S13, §2575-a29, -a37, 2583-a, -1, 2600-d; C24, 27, 31, 35, 39, §**2440, 2567;** C46, 50, 54, 58, 62, 66, §147.3, 153.3; C71, 73, §147.3, 153.5; C75, 77, 79, 81, §147.3]

84 Acts, ch 1075, §7; 85 Acts, ch 168, §3; 88 Acts, ch 1225, §4; 94 Acts, ch 1132, §11; 96 Acts, ch 1036, §6; 98 Acts, ch 1053, §4; 2008 Acts, ch 1088, §3; 2020 Acts, ch 1103, §11, 31

Referred to in §152.7

147.4 Grounds for refusing.

A board may refuse to grant a license to practice a profession to any person otherwise qualified upon any of the grounds for which a license may be revoked or suspended.

[C97, §2578; S13, §2575-a33, -a41, 2578, 2583-c; C24, 27, 31, 35, 39, §**2441;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.4]

90 Acts, ch 1086, §1; 2008 Acts, ch 1088, §4

Grounds for revocation, see §147.55

147.5 Certificate of license.

1. Every license to practice a profession shall be in the form of a certificate under the seal of the board. Such license shall be issued in the name of the board.

2. This section shall not apply to a person who is licensed in another state and recognized for licensure in this state pursuant to the nurse licensure compact contained in section 152E.1 or pursuant to the advanced practice registered nurse compact contained in section 152E.3.

[C97, §2576, 2577, 2591; S13, §2575-a30, -a38, 2576, 2583-k, 2600-d; C24, 27, 31, 35, 39, §**2442;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.5]

2000 Acts, ch 1008, §2; 2000 Acts, ch 1140, §30; 2005 Acts, ch 53, §2; 2007 Acts, ch 10, §29; 2008 Acts, ch 1088, §5

147.6 Certificate presumptive evidence.

Every license issued under this subtitle shall be presumptive evidence of the right of the holder to practice in this state the profession therein specified.

[C97, §2576; S13, §2575-a30, -a38, 2576, 2583-k, 2600-d; C24, 27, 31, 35, 39, §**2443;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.6]

94 Acts, ch 1132, §12; 96 Acts, ch 1036, §7; 98 Acts, ch 1053, §5

147.7 Display of license.

1. A board may require every person licensed by the board to display the license and evidence of current renewal publicly in a manner prescribed by the board.

2. This section shall not apply to a person who is licensed in another state and recognized for licensure in this state pursuant to the nurse licensure compact contained in section 152E.1 or pursuant to the advanced practice registered nurse compact contained in section 152E.3. A person licensed in another state and recognized for licensure in this state pursuant to either compact shall, however, maintain a copy of a license issued by the person's home state available for inspection when engaged in the practice of nursing in this state.

[C97, §2591; S13, §2600-o1; C24, 27, 31, 35, 39, §**2444;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.7]

90 Acts, ch 1086, §2; 94 Acts, ch 1132, §13; 96 Acts, ch 1036, §8; 98 Acts, ch 1053, §6; 2000 Acts, ch 1008, §3; 2005 Acts, ch 53, §3; 2006 Acts, ch 1010, §54; 2008 Acts, ch 1088, §6

147.8 Record of licenses.

A board shall keep the following information available for public inspection for each person licensed by the board:

1. Name.
2. Address of record.
3. The number of the license.
4. The date of issuance of the license.

[C97, §2591; S13, §2575-a40, 2583-a, -k, 2600-d; C24, 27, 31, 35, 39, §**2445;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.8]

96 Acts, ch 1128, §5; 2008 Acts, ch 1088, §7; 2009 Acts, ch 41, §50

147.9 Change of address.

Every person licensed pursuant to this chapter shall notify the board which issued the license of a change in the person's address of record within a time period established by board rule.

[C97, §2591; C24, 27, 31, 35, 39, §**2446;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.9]

90 Acts, ch 1086, §3; 94 Acts, ch 1132, §14; 96 Acts, ch 1036, §9; 98 Acts, ch 1053, §7; 2008 Acts, ch 1088, §8

147.10 Renewal.

1. Every license to practice a profession shall expire in multiyear intervals and be renewed as determined by the board upon application by the licensee. Each board shall establish rules for license renewal and concomitant fees. Application for renewal shall be made to the board accompanied by the required fee at least thirty days prior to the expiration of such license.

2. Each board may by rule establish a grace period following expiration of a license in which the license is not invalidated. Each board may assess a reasonable penalty for renewal of a license during the grace period. Failure of a licensee to renew a license within the grace period shall cause the license to become inactive or lapsed. A licensee whose license is inactive or lapsed shall not engage in the practice of the profession until the license is reactivated or reinstated.

[C97, §2590; S13, §2575-a39, 2589-d; C24, 27, 31, §2447; C35, §2447, 2573-g2 – 2573-g4; C39, §**2447, 2573.02 – 2573.04;** C46, 50, 54, 58, 62, 66, §147.10, 153.11 – 153.12; C71, 73, §147.10, 153.9, 153.10; C75, 77, 79, 81, §147.10]

2002 Acts, ch 1108, §12; 2008 Acts, ch 1088, §9

Referred to in §147.11, 148.6

147.11 Reactivation and reinstatement.

1. A licensee who allows the license to become inactive or lapsed by failing to renew the license, as provided in section 147.10, may reactivate the license upon payment of a reactivation fee and compliance with other terms established by board rule.

2. A licensee whose license has been revoked, suspended, or voluntarily surrendered must apply for and receive reinstatement of the license in accordance with board rule and must apply for and be granted reactivation of the license in accordance with board rule prior to practicing the profession.

[C24, 27, 31, 35, 39, §**2448;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.11]
2007 Acts, ch 10, §30; 2008 Acts, ch 1088, §10; 2009 Acts, ch 41, §51

HEALTH PROFESSION BOARDS

147.12 Health profession boards.

1. The governor shall appoint, subject to confirmation by the senate, a board for each of the professions. The board members shall not be required to be members of professional societies or associations composed of members of their professions.

2. If a person who has been appointed by the governor to serve on a board has ever been disciplined in a contested case by the board to which the person has been appointed, all board statements of charges, settlement agreements, findings of fact, and orders pertaining to the disciplinary action shall be made available to the senate committee to which the appointment is referred at the committee's request before the full senate votes on the person's appointment.

[C97, §2576, 2584; S13, §2575-a29, -a37, 2576, 2583-a, -h, 2600-b; SS15, §2584; C24, 27, 31, 35, 39, §**2449;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.12]
88 Acts, ch 1128, §2; 94 Acts, ch 1132, §15; 96 Acts, ch 1036, §10; 98 Acts, ch 1053, §8; 2007 Acts, ch 10, §31; 2008 Acts, ch 1088, §11
Referred to in §147.13, 148.2A, 155A.2A
Confirmation, see §2.32
Board of medicine alternate members, see §148.2A
Board of pharmacy alternate members, see §155A.2A

147.13 Designation of boards.

The boards provided in section 147.12 shall be designated as follows:

1. For medicine and surgery, osteopathic medicine and surgery, acupuncture, and genetic counseling, the board of medicine.
2. For physician assistants, the board of physician assistants.
3. For psychology, the board of psychology.
4. For podiatry, the board of podiatry.
5. For chiropractic, the board of chiropractic.
6. For physical therapy and occupational therapy, the board of physical and occupational therapy.
7. For nursing and midwifery, the board of nursing.
8. For dentistry, dental hygiene, and dental assisting, the dental board.
9. For optometry, the board of optometry.
10. For speech pathology and audiology, the board of speech pathology and audiology.
11. For cosmetology arts and sciences, the board of barbering and cosmetology arts and sciences.
12. For pharmacy, the board of pharmacy.
13. For mortuary science, the board of mortuary science.
14. For social work, the board of social work.
15. For applied behavior analysis, marital and family therapy, and mental health counseling, the board of behavioral science.
16. For dietetics, the board of dietetics.
17. For respiratory care and polysomnography, the board of respiratory care and polysomnography.
18. For massage therapy, the board of massage therapy.

19. For athletic training, the board of athletic training.
20. For interpreting, the board of sign language interpreters and transliterators.
21. For hearing aid specialists, the board of hearing aid specialists.
22. For nursing home administration, the board of nursing home administrators.
23. For orthotics, prosthetics, and pedorthics, the board of podiatry.

[C24, 27, 31, 35, 39, §**2450;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.13]

84 Acts, ch 1075, §8; 85 Acts, ch 168, §4; 88 Acts, ch 1225, §5; 91 Acts, ch 229, §2; 92 Acts, ch 1205, §14; 93 Acts, ch 86, §12; 96 Acts, ch 1036, §11; 98 Acts, ch 1053, §9; 2000 Acts, ch 1002, §1; 2004 Acts, ch 1175, §422, 433; 2006 Acts, ch 1155, §3, 15; 2007 Acts, ch 10, §32; 2007 Acts, ch 218, §197; 2008 Acts, ch 1088, §12, 141; 2009 Acts, ch 41, §52; 2012 Acts, ch 1101, §3; 2015 Acts, ch 57, §3; 2015 Acts, ch 70, §4; 2018 Acts, ch 1052, §3, 12; 2018 Acts, ch 1106, §4, 14; 2023 Acts, ch 99, §2, 3; 2023 Acts, ch 127, §2

Referred to in §147.1, 147.82, 232.69, 235B.16, 280.13C, 422.7(16)
Subsections 7 and 11 amended
Subsection 12 stricken and subsections 13 – 24 renumbered as 12 – 23

147.14 Composition of boards — quorum.

1. The board members shall consist of the following:

a. For medicine, five members licensed to practice medicine and surgery, two members licensed to practice osteopathic medicine and surgery, and three members not licensed to practice either medicine and surgery or osteopathic medicine and surgery, and who shall represent the general public.

b. For nursing, four registered nurses, two of whom shall be actively engaged in practice, two of whom shall be nurse educators from nursing education programs; of these, one in higher education and one in area community and vocational-technical registered nurse education; one licensed practical nurse actively engaged in practice; and two members not registered nurses or licensed practical nurses and who shall represent the general public. The representatives of the general public shall not be members of health care delivery systems.

c. For dentistry, five members licensed to practice dentistry, two members licensed to practice dental hygiene, and two members not licensed to practice dentistry or dental hygiene and who shall represent the general public. The two dental hygienist board members and one dentist board member shall constitute a dental hygiene committee of the board as provided in section 153.33A.

d. For pharmacy, five members licensed to practice pharmacy, one member registered as a certified pharmacy technician as defined by the board by rule, and two members who are not licensed to practice pharmacy or registered as a certified pharmacy technician and who shall represent the general public.

e. For optometry, five members licensed to practice optometry and two members who are not licensed to practice optometry and who shall represent the general public.

f. For psychology, five members who are licensed to practice psychology and two members not licensed to practice psychology and who shall represent the general public. Of the five members who are licensed to practice psychology, one member shall be primarily engaged in graduate teaching in psychology or primarily engaged in research psychology, three members shall be persons who render services in psychology, and one member shall represent areas of applied psychology and may be affiliated with training institutions and shall devote a major part of the member's time to rendering service in psychology.

g. For chiropractic, five members licensed to practice chiropractic and two members who are not licensed to practice chiropractic and who shall represent the general public.

h. For speech pathology and audiology, five members licensed to practice speech pathology or audiology at least two of whom shall be licensed to practice speech pathology and at least two of whom shall be licensed to practice audiology, and two members who are not licensed to practice speech pathology or audiology and who shall represent the general public.

i. For physical therapy and occupational therapy, three members licensed to practice physical therapy, two members licensed to practice occupational therapy, and two members who are not licensed to practice physical therapy or occupational therapy and who shall represent the general public.

j. For dietetics, one licensed dietitian representing the approved or accredited dietetic education programs, one licensed dietitian representing clinical dietetics, one licensed dietitian representing community nutrition services, and two members who are not licensed dietitians and who shall represent the general public.

k. For the board of physician assistants, five members licensed to practice as physician assistants, at least two of whom practice in counties with a population of less than fifty thousand, one member licensed to practice medicine and surgery who supervises a physician assistant engaged in independent practice or collaborates with a physician assistant, one member licensed to practice osteopathic medicine and surgery who supervises a physician assistant engaged in independent practice or collaborates with a physician assistant, and two members who are not licensed to practice either medicine and surgery or osteopathic medicine and surgery or licensed as a physician assistant and who shall represent the general public. At least one of the physician or osteopathic physician members shall be in practice in a county with a population of less than fifty thousand.

l. For behavioral science, three members licensed to practice marital and family therapy, all of whom shall be practicing marital and family therapists; three members licensed to practice mental health counseling, one of whom shall be employed in graduate teaching, training, or research in mental health counseling and two of whom shall be practicing mental health counselors; two licensed behavior analysts; one licensed assistant behavior analyst; and three members who are not licensed to practice marital and family therapy, applied behavior analysis, or mental health counseling and who shall represent the general public.

m. For respiratory care and polysomnography, one licensed physician with training in respiratory care, two respiratory care practitioners who have practiced respiratory care for a minimum of six years immediately preceding their appointment to the board and who are recommended by the society for respiratory care, one polysomnographic technologist who has practiced polysomnography for a minimum of six years immediately preceding appointment to the board and who is recommended by the Iowa sleep society, and one member not licensed to practice medicine, osteopathic medicine, polysomnography, or respiratory care who shall represent the general public.

n. For mortuary science, four members licensed to practice mortuary science, one member owning, operating, or employed by a crematory, and two members not licensed to practice mortuary science and not a crematory owner, operator, or employee who shall represent the general public.

o. For massage therapists, four members licensed to practice massage therapy and three members who are not licensed to practice massage therapy and who shall represent the general public.

p. For athletic trainers, three members licensed to practice athletic training, three members licensed to practice medicine and surgery, and one member not licensed to practice athletic training or medicine and surgery and who shall represent the general public.

q. For podiatry, five members licensed to practice podiatry, two members licensed to practice orthotics, prosthetics, or pedorthics, and two members who are not so licensed and who shall represent the general public.

r. For social work, a total of seven members, five who are licensed to practice social work, with at least one from each of three levels of licensure described in section 154C.3, subsection 1, and one employed in the area of children's social work, and two who are not licensed social workers and who shall represent the general public.

s. For sign language interpreting and transliterating, four members licensed to practice interpreting and transliterating, three of whom shall be practicing interpreters and transliterators at the time of appointment to the board and at least one of whom is employed in an educational setting; and three members who are consumers of interpreting or transliterating services as defined in section 154E.1, each of whom shall be deaf or hard of hearing.

t. For hearing aid specialists, three licensed hearing aid specialists and two members who are not licensed hearing aid specialists who shall represent the general public. No more than two members of the board shall be employees of, or specialists principally for, the same hearing aid manufacturer.

u. For nursing home administrators, a total of nine members, four who are licensed nursing home administrators, one of whom is the administrator of a nonproprietary nursing home; three licensed members of any profession concerned with the care and treatment of chronically ill or elderly patients who are not nursing home administrators or nursing home owners; and two members of the general public who are not licensed under chapter 155, have no financial interest in any nursing home, and who shall represent the general public.

v. For barbering and cosmetology arts and sciences, three members who are licensed barbers or cosmetologists; one member who is a licensed instructor of barbering and cosmetology arts and sciences; one member who is a licensed electrologist, esthetician, or nail technologist; one member who owns a school of barbering and cosmetology arts and sciences; and one member who is not licensed in the practice of barbering and cosmetology arts and sciences and who shall represent the general public.

2. A majority of the members of a board constitutes a quorum.

[C97, §2564, 2576, 2584; S13, §2564, 2575-a29, -a30, -a37, -a38, 2576, 2583-a, -h, -i, 2600-b, -c; SS15, §2584; C24, 27, 31, 35, 39, §**2451, 2452, 2475;** C46, 50, 54, 58, 62, 66, §147.14, 147.15, 147.38; C71, 73, §147.14, 147.15, 147.38, 153.1; C75, 77, 79, 81, §147.14]

84 Acts, ch 1075, §9; 85 Acts, ch 168, §5; 86 Acts, ch 1003, §1; 86 Acts, ch 1022, §1; 88 Acts, ch 1134, §29; 88 Acts, ch 1225, §6, 7; 91 Acts, ch 229, §3; 92 Acts, ch 1183, §2; 92 Acts, ch 1205, §15, 16; 96 Acts, ch 1035, §2, 3, 13; 96 Acts, ch 1036, §12; 96 Acts, ch 1148, §1, 2; 98 Acts, ch 1002, §1, 2; 98 Acts, ch 1010, §1; 98 Acts, ch 1053, §10; 99 Acts, ch 19, §1; 99 Acts, ch 96, §14; 2004 Acts, ch 1175, §423, 433; 2005 Acts, ch 3, §36; 2007 Acts, ch 10, §33; 2007 Acts, ch 218, §188; 2008 Acts, ch 1032, §26; 2008 Acts, ch 1088, §13; 2009 Acts, ch 56, §2; 2009 Acts, ch 133, §47; 2010 Acts, ch 1069, §18; 2012 Acts, ch 1101, §4; 2015 Acts, ch 57, §4; 2015 Acts, ch 70, §5; 2018 Acts, ch 1106, §5, 14; 2018 Acts, ch 1141, §1; 2020 Acts, ch 1102, §6; 2023 Acts, ch 73, §4; 2023 Acts, ch 99, §4, 5

Referred to in §148.2A, 154F.1, 155A.2A
Board of medicine alternate members, see §148.2A
Board of pharmacy alternate members, see §155A.2A
Subsection 1 amended and editorially internally redesignated

147.15 Reserved.

147.16 Board members.

1. Each licensed board member shall be actively engaged in the practice or the instruction of the board member's profession and shall have been so engaged for a period of five years just preceding the board member's appointment, the last two of which shall be in this state.

2. However, each licensed physician assistant member of the board of physician assistants shall be actively engaged in practice as a physician assistant and shall have been so engaged for a period of three years just preceding the member's appointment, the last year of which shall be in this state.

[C97, §2584; S13, §2583-a, -h, 2600-b; SS15, §2584; C24, 27, 31, 35, 39, §**2453;** C46, 50, 54, 58, 62, 66, §147.16; C71, 73, §147.16, 153.1; C75, 77, 79, 81, §147.16; 81 Acts, ch 65, §1]

88 Acts, ch 1225, §8; 2007 Acts, ch 10, §34

147.17 Reserved.

147.18 Disqualifications. Repealed by 2008 Acts, ch 1088, §79.

147.19 Terms of office.

The board members shall serve three-year terms, which shall commence and end as provided by section 69.19. Any vacancy in the membership of a board shall be filled by

appointment of the governor subject to senate confirmation. A member shall serve no more than nine years in total on the same board.

[C97, §2564, 2576, 2584; S13, §2564, 2575-a29, -a37, 2576, 2583-a, -h, 2600-b; SS15, §2584; C24, 27, 31, 35, 39, §**2456, 2458**; C46, 50, 54, 58, 62, 66, §147.19, 147.21; C71, 73, §147.19, 147.21, 153.1; C75, 77, 79, 81, §147.19]

2007 Acts, ch 10, §36; 2008 Acts, ch 1088, §14

Referred to in §148.2A, 155A.2A

Confirmation, see §2.32

Board of medicine alternate members, see §148.2A

Board of pharmacy alternate members, see §155A.2A

147.20 Nomination of board members.

The regular state association or society for each profession may recommend the names of potential board members to the governor, but the governor shall not be bound by the recommendations.

[S13, §2583-a, -h, 2600-b; C24, 27, 31, 35, 39, §**2457;** C46, 50, 54, 58, 62, 66, §147.20; C71, 73, §147.20, 153.1; C75, 77, 79, 81, §147.20]

2007 Acts, ch 10, §37

147.21 Examination information.

1. The public members of a board shall be allowed to participate in administrative, clerical, or ministerial functions incident to giving the examination, but shall not determine the content of the examination or determine the correctness of the answers.

2. A member of the board shall not disclose information relating to any of the following:

a. The contents of the examination.

b. The examination results other than final score except for information about the results of an examination which is given to the person who took the examination.

3. A member of the board who willfully communicates or seeks to communicate such information, and any person who willfully requests, obtains, or seeks to obtain such information, is guilty of a simple misdemeanor.

[C75, 77, 79, 81, §147.21]

83 Acts, ch 101, §26; 2008 Acts, ch 1088, §15

Referred to in §152.12, 157.3B

147.22 Officers.

Each board shall annually select a chairperson and a vice chairperson from its own membership.

[C97, §2576, 2585; S13, §2576, 2583-i, 2585, 2600-c; C24, 27, 31, 35, 39, §**2459;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.22]

2007 Acts, ch 10, §38; 2008 Acts, ch 1088, §16

147.23 Reserved.

147.24 Compensation.

Members of a board shall receive actual expenses for their duties as a member of the board. Each member of each board shall also be eligible to receive compensation as provided in section 7E.6, within the limits of funds available.

[C97, §2574; S13, §2574, 2575-a34, -a44, 2583-a, -p, 2600-g; C24, 27, 31, 35, 39, §**2461;** C46, 50, 54, 58, 62, 66, §147.24; C71, 73, §147.24, 153.3; C75, 77, 79, 81, §147.24]

86 Acts, ch 1245, §1141; 2007 Acts, ch 10, §39; 2008 Acts, ch 1088, §17

147.25 System of health personnel statistics — fee.

1. A board may establish a system to collect, maintain, and disseminate health personnel statistical data regarding board licensees, including but not limited to number of licensees, employment status, location of practice or place of employment, areas of professional specialization and ages of licensees, and other pertinent information bearing on the availability of trained and licensed personnel to provide services in this state.

2. In addition to any other fee provided by law, a fee may be set by the respective boards

for each license and renewal of a license to practice a profession, which fee shall be based on the annual cost of collecting information for use by the board in the administration of the system of health personnel statistics established by this section. The fee shall be retained by the respective board in the manner in which license and renewal fees are retained in section 147.82.

[C75, 77, 79, 81, §147.25]

84 Acts, ch 1075, §10; 85 Acts, ch 168, §6; 88 Acts, ch 1225, §9; 2006 Acts, ch 1155, §4, 15; 2007 Acts, ch 10, §40, 184; 2008 Acts, ch 1088, §18

147.26 Supplies and examination quarters. Repealed by 2008 Acts, ch 1088, §79.

147.27 Reserved.

147.28 National organization.

Each board may maintain a membership in the national organization of the regulatory boards of its profession to be paid from board funds.

[C27, 31, 35, §2465-b1; C39, §**2465.1;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.28]

2007 Acts, ch 10, §42; 2008 Acts, ch 1088, §19

147.28A Scope of practice review committees — future repeal. Repealed by its own terms; 2005 Acts, ch 175, §84.

EXAMINATIONS

147.29 Applications. Repealed by 2008 Acts, ch 1088, §78.

147.30 Time and place of examinations. Repealed by 2008 Acts, ch 1088, §78. See §147.34.

147.31 and 147.32 Reserved.

147.33 Professional schools.

A dean of a college or university which provides instruction or training in a profession shall supply information or data related to the college or university upon request of a board.

[C24, 27, 31, 35, 39, §**2470;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.33]

2007 Acts, ch 10, §44; 2008 Acts, ch 1088, §20

147.34 Examinations.

1. Each board shall by rule prescribe the examination or examinations required for licensure for the profession and the manner in which an applicant shall complete the examination process. A board may develop and administer the examination, may designate a national, uniform, or other examination as the prescribed examination, or may contract for such services. Dentists shall pass an examination approved by a majority of the dentist members of the dental board.

2. When a board administers an examination, the board shall provide adequate public notice of the time and place of the examination to allow candidates to comply with the provisions of this subtitle. Administration of examinations, including location, frequency, and reexamination, may be determined by the board.

3. Applicants who fail the examination once shall be allowed to take the examination at the next authorized time. Thereafter, applicants shall be allowed to take the examination at the discretion of the board. An applicant who has failed an examination may request in writing information from the board concerning the examination grade and subject areas or questions which the applicant failed to answer correctly, except that if the board prescribes a national or uniform examination, the board shall only be required to provide the examination

grade and such other information concerning the applicant's examination results which are available to the board.

[C97, §2576, 2582, 2589, 2597; S13, §2575-a29, -a37, 2576, 2582, 2583-a, -i, -k, 2589-a, 2600-c, -d; SS15, §2589-a; C24, 27, 31, 35, 39, §**2471, 2567, 2572, 2573;** C46, 50, 54, 58, 62, 66, §147.34, 153.3, 153.8, 153.9; C71, 73, §147.34, 153.2, 153.6, 153.8; C75, 77, 79, 81, §147.34]

94 Acts, ch 1132, §17; 96 Acts, ch 1036, §14; 98 Acts, ch 1053, §12; 2007 Acts, ch 10, §45; 2008 Acts, ch 1088, §21

Referred to in §153.21, 155.3, 156.4

147.35 Names of eligible candidates. Repealed by 2008 Acts, ch 1088, §79.

147.36 Rules.

Each board may establish rules for any of the following:

1. The qualifications required for applicants seeking to take examinations.
2. The denial of applicants seeking to take examinations.
3. The conducting of examinations.
4. The grading of examinations and passing upon the technical qualifications of applicants, as shown by such examinations.
5. The minimum scores required for passing standardized examinations.

[C97, §2584; S13, §2575-a38, 2583-a, -i, 2600-e; SS15, §2584; C24, 27, 31, 35, 39, §**2473;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.36]

92 Acts, ch 1183, §3; 2007 Acts, ch 10, §47; 2008 Acts, ch 1088, §22

147.37 Identity of candidate concealed.

The identity of the person taking an examination shall not be disclosed during the examination process and in practice the identity of the candidate shall be concealed to the extent possible.

[C97, §2576; S13, §2576, 2583-a; C24, 27, 31, 35, 39, §**2474;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.37]

2007 Acts, ch 10, §48; 2008 Acts, ch 1088, §23

147.38 Reserved.

147.39 through 147.42 Repealed by 2008 Acts, ch 1088, §79.

147.43 Preservation of records. Repealed by 2008 Acts, ch 1088, §78.

RECIPROCAL LICENSES

147.44 Reciprocal agreements.

A board may enter into a reciprocal agreement with a licensing authority of another state for the purpose of recognizing licenses issued by the other state, provided that such licensing authority imposes licensure requirements substantially equivalent to those imposed in this state. The board may establish by rule the conditions for the recognition of such licenses and the process for licensing such individuals to practice in this state.

[C97, §2582; S13, §2582; C24, 27, 31, 35, 39, §**2481;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.44]

94 Acts, ch 1132, §19; 96 Acts, ch 1036, §16; 98 Acts, ch 1053, §14; 2007 Acts, ch 10, §53; 2008 Acts, ch 1088, §24

Referred to in §148.3, 152.8, 153.36, 155.11, 157.3

147.45 through 147.47 Repealed by 2008 Acts, ch 1088, §79.

147.48 Termination of reciprocal agreements.

If the requirements for a license in any state with which this state has a reciprocal agreement are changed by any law or rule of the authorities in that state so that such

requirements are no longer substantially equivalent to those existing in this state, the agreement shall be deemed terminated and licenses issued in that state shall not be recognized as a basis of granting a license in this state until a new agreement has been negotiated.

[C24, 27, 31, 35, 39, §**2485;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.48]
2007 Acts, ch 10, §57; 2008 Acts, ch 1088, §25
Referred to in §152.8, 153.36, 155.11, 157.3

147.49 License of another state.

A board shall, upon presentation of a license to practice a profession issued by the duly constituted authority of another state with which this state has established reciprocal relations, and subject to the rules of the board for such profession, license the applicant to practice in this state, unless under the rules of the board a practical or jurisprudence examination is required. The board of medicine may accept in lieu of the examination prescribed in section 148.3 a license to practice medicine and surgery or osteopathic medicine and surgery, issued by the duly constituted authority of another state, territory, or foreign country. Endorsement may be accepted in lieu of further written examination without regard to the existence or nonexistence of a reciprocal agreement, but shall not be in lieu of the standards and qualifications prescribed by section 148.3.

[C97, §2582; S13, §2575-a30, -a39, 2582, 2583-l, 2589-b, 2600-m; C24, 27, 31, 35, 39, §**2486;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.49]
2007 Acts, ch 10, §58; 2008 Acts, ch 1088, §26
Referred to in §152.8, 153.36, 155.11, 157.3

147.50 Practical examinations. Repealed by 2008 Acts, ch 1088, §79.

147.51 and 147.52 Repealed by 2008 Acts, ch 1088, §78.

147.53 Power to adopt rules.

Each board entering into a reciprocal agreement shall adopt necessary rules, not inconsistent with law, for carrying out the reciprocal relations with other states which are authorized by this chapter.

[C24, 27, 31, 35, 39, §**2490;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.53]
2007 Acts, ch 10, §60; 2008 Acts, ch 1088, §27
Referred to in §152.8, 153.36, 155.11

147.54 Change of residence. Repealed by 2008 Acts, ch 1088, §78.

LICENSEE DISCIPLINE

147.55 Grounds.

A licensee's license to practice a profession shall be revoked or suspended, or the licensee otherwise disciplined by the board for that profession, when the licensee is guilty of any of the following acts or offenses:

1. Fraud in procuring a license.
2. Professional incompetence.
3. Knowingly making misleading, deceptive, untrue, or fraudulent representations in the practice of a profession or engaging in unethical conduct or practice harmful or detrimental to the public. Proof of actual injury need not be established.
4. Habitual intoxication or addiction to the use of drugs.
5. Fraud in representations as to skill or ability.
6. Use of untruthful or improbable statements in advertisements.
7. Willful or repeated violations of the provisions of this chapter, chapter 272C, or a board's enabling statute.
8. Sexual abuse in the fourth degree in violation of section 709.4A.
9. Fraud in assisted reproduction in violation of section 714I.3.

10. Other acts or offenses as specified by board rule.

1. [C97, §2578; S13, §2575-a33, -a41, 2578, 2583-c, 2600-o5; C24, 27, 31, 35, 39, §**2492;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.55(1)]

2. [C97, §2578; S13, §2578, 2583-c, -m; C24, 27, 31, 35, 39, §**2492;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.55(2)]

3. [C97, §2578; S13, §2575-a33, -a41, 2578, 2583-m, 2600-o5; C24, 27, 31, 35, 39, §**2492;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.55(3)]

4. [C97, §2578; S13, §2575-a41, 2578, 2583-c, -m, 2600-o5; C24, 27, 31, 35, 39, §**2492;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.55(4)]

5. [C97, §2578; S13, §2578, 2583-c; C24, 27, 31, 35, 39, §**2492;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.55(6)]

6. [C97, §2578; S13, §2578, 2583-c, 2600-o5; C24, 27, 31, 35, 39, §**2492;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.55(7)]

7. [C97, §2596; S13, §2575-a33, -a41; C24, 27, 31, 35, 39, §**2492;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, §147.55(9); C79, 81, §147.55(8)]

2008 Acts, ch 1088, §28; 2009 Acts, ch 133, §48; 2020 Acts, ch 1103, §12, 31; 2022 Acts, ch 1123, §5

Referred to in §148.6, 148.7, 148A.7, 148E.8, 148H.7, 152.10, 152D.6, 153.36, 155.4, 155A.12, 156.9, 272C.3, 272C.4

147.56 Lyme disease treatment — exemption from discipline.

A person licensed by a board under this subtitle shall not be subject to discipline under this chapter or the board's enabling statute based solely on the licensee's recommendation or provision of a treatment method for Lyme disease or other tick-borne disease if the recommendation or provision of such treatment meets all the following criteria:

1. The treatment is provided after an examination is performed and informed consent is received from the patient.
2. The licensee identifies a medical reason for recommending or providing the treatment.
3. The treatment is provided after the licensee informs the patient about other recognized treatment options and describes to the patient the licensee's education, experience, and credentials regarding the treatment of Lyme disease or other tick-borne disease.
4. The licensee uses the licensee's own medical judgment based on a thorough review of all available clinical information and Lyme disease or other tick-borne disease literature to determine the best course of treatment for the individual patient.
5. The treatment will not, in the opinion of the licensee, result in the direct and proximate death of or serious bodily injury to the patient.

2017 Acts, ch 16, §1, 2

147.57 Reserved.

147.58 through 147.71 Repealed by 2008 Acts, ch 1088, §78.

USE OF TITLES AND DEGREES

147.72 Professional titles and abbreviations.

Any person licensed to practice a profession under this subtitle may append to the person's name any recognized title or abbreviation, which the person is entitled to use, to designate the person's particular profession, but no other person shall assume or use such title or abbreviation, and no licensee shall advertise in such a manner as to lead the public to believe that the licensee is engaged in the practice of any other profession than the one which the licensee is licensed to practice.

[S13, §2575-a28, -a31, 2583-q; C24, 27, 31, 35, 39, §**2509;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.72]

94 Acts, ch 1132, §22; 96 Acts, ch 1036, §19; 98 Acts, ch 1053, §17

Referred to in §147.73

147.73 Titles used by holder of degree.

Nothing in section 147.72 shall be construed:

1. As authorizing any person licensed to practice a profession under this subtitle to use or assume any degree or abbreviation of the degree unless such degree has been conferred upon the person by an institution of learning accredited by the appropriate board, or by some recognized state or national accredited agency.

2. As prohibiting any holder of a degree conferred by an institution of learning accredited by the appropriate board created in this chapter, or by some recognized state or national accrediting agency, from using the title which such degree authorizes the holder to use, but the holder shall not use such degree or abbreviation in any manner which might mislead the public as to the holder's qualifications to treat human ailments.

[C24, 27, 31, 35, 39, §**2510;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.73]
94 Acts, ch 1132, §23; 96 Acts, ch 1036, §20; 98 Acts, ch 1053, §18; 2008 Acts, ch 1088, §30

147.74 Professional titles or abbreviations — false use prohibited.

1. Any person who falsely claims by the use of any professional title or abbreviation, either in writing, cards, signs, circulars, advertisements, the internet, or other written or electronic means, to be a practitioner of a profession other than the one under which the person holds a license or who fails to use the designations provided in this section shall be guilty of a simple misdemeanor.

2. A physician or surgeon may use the prefix "Dr." or "Doctor", and shall add after the person's name the letters, "M. D."

3. An osteopathic physician and surgeon may use the prefix "Dr." or "Doctor", and shall add after the person's name the letters, "D. O.", or the words "osteopathic physician and surgeon".

4. A chiropractor may use the prefix "Dr." or "Doctor", but shall add after the person's name the letters, "D. C." or the word, "chiropractor".

5. A dentist may use the prefix "Dr." or "Doctor", but shall add after the person's name the letters "D. D. S.", or "D. M. D.", or the word "dentist" or "dental surgeon". A dental hygienist may use the words "registered dental hygienist" or the letters "R. D. H." after the person's name. A dental assistant may use the words "registered dental assistant" or the letters "R. D. A." after the person's name.

6. A podiatric physician may use the prefix "Dr." or "Doctor", but shall add after the person's name the letters "D. P. M." or the words "podiatric physician".

7. A graduate of a school accredited by the board of optometry may use the prefix "Dr." or "Doctor", but shall add after the person's name the letters "O. D."

8. A physical therapist registered or licensed under chapter 148A may use the words "physical therapist" after the person's name or signify the same by the use of the letters "P. T." after the person's name. A physical therapist with an earned doctoral degree from an accredited school, college, or university may use the suffix designating the degree, or the prefix "Doctor" or "Dr." and add after the person's name the words "physical therapist". An occupational therapist registered or licensed under chapter 148B may use the words "occupational therapist" after the person's name or signify the same by the use of the letters "O. T." after the person's name. An occupational therapist with an earned doctoral degree from an accredited school, college, or university may use the suffix designating the degree, or the prefix "Doctor" or "Dr." and add after the person's name the words "occupational therapist".

9. A physical therapist assistant licensed under chapter 148A may use the words "physical therapist assistant" after the person's name or signify the same by use of the letters "P. T. A." after the person's name. An occupational therapy assistant licensed under chapter 148B may use the words "occupational therapy assistant" after the person's name or signify the same by use of the letters "O. T. A." after the person's name.

10. A psychologist who possesses a doctoral degree may use the prefix "Dr." or "Doctor" but shall add after the person's name the word "psychologist".

11. A speech pathologist with an earned doctoral degree in speech pathology obtained beyond a bachelor's degree from an accredited school, college, or university, may use the

suffix designating the degree, or the prefix "Doctor" or "Dr." and add after the person's name the words "speech pathologist". An audiologist with an earned doctoral degree in audiology obtained beyond a bachelor's degree from an accredited school, college, or university, may use the suffix designating the degree, or the prefix "Doctor" or "Dr." and add after the person's name the word "audiologist".

12. A bachelor social worker licensed under chapter 154C may use the words "licensed bachelor social worker" or the letters "L. B. S. W." after the person's name. A master social worker licensed under chapter 154C may use the words "licensed master social worker" or the letters "L. M. S. W." after the person's name. An independent social worker licensed under chapter 154C may use the words "licensed independent social worker", or the letters "L. I. S. W." after the person's name.

13. A marital and family therapist licensed under chapter 154D and this chapter may use the words "licensed marital and family therapist" after the person's name or signify the same by the use of the letters "L. M. F. T." after the person's name. A marital and family therapist licensed under chapter 154D and this chapter who possesses a doctoral degree may use the prefix "Doctor" or "Dr." in conjunction with the person's name, but shall add after the person's name the words "licensed marital and family therapist".

14. A mental health counselor licensed under chapter 154D and this chapter may use the words "licensed mental health counselor" after the person's name. A mental health counselor licensed under chapter 154D and this chapter who possesses a doctoral degree may use the prefix "Doctor" or "Dr." in conjunction with the person's name, but shall add after the person's name the words "licensed mental health counselor".

15. *a.* A behavior analyst licensed under chapter 154D may use the letters "LBA" after the person's name.

b. An assistant behavior analyst licensed under chapter 154D may use the letters "LABA" after the person's name.

16. A pharmacist who possesses a doctoral degree recognized by the accreditation council for pharmacy education from a college of pharmacy approved by the board of pharmacy or a doctor of philosophy degree in an area related to pharmacy may use the prefix "Doctor" or "Dr." but shall add after the person's name the word "pharmacist" or "Pharm. D."

17. A physician assistant licensed under chapter 148C may use the words "physician assistant" after the person's name or signify the same by the use of the letters "P. A." after the person's name.

18. A massage therapist licensed under chapter 152C may use the words "licensed massage therapist" or the initials "L. M. T." after the person's name.

19. An acupuncturist licensed under chapter 148E may use the words "licensed acupuncturist" or the abbreviation "L. Ac." after the person's name.

20. A respiratory care practitioner licensed under chapter 152B and this chapter may use the title "respiratory care practitioner" or the letters "R. C. P." after the person's name.

21. An athletic trainer licensed under chapter 152D and this chapter may use the words "licensed athletic trainer" or the letters "LAT" after the person's name.

22. A registered nurse licensed under chapter 152 may use the words "registered nurse" or the letters "R. N." after the person's name. A licensed practical nurse licensed under chapter 152 may use the words "licensed practical nurse" or the letters "L. P. N." after the person's name. An advanced registered nurse practitioner licensed under chapter 152 or 152E may use the words "advanced registered nurse practitioner" or the letters "A.R.N.P." after the person's name.

23. A sign language interpreter or transliterator licensed under chapter 154E and this chapter may use the title "licensed sign language interpreter" or the letters "L. I." after the person's name.

24. *a.* An orthotist licensed under chapter 148F may use the words "licensed orthotist" after the person's name or signify the same by the use of the letters "L.O." after the person's name.

b. A pedorthist licensed under chapter 148F may use the words "licensed pedorthist" after the person's name or signify the same by the use of the letters "L.ped." after the person's name.

c. A prosthetist licensed under chapter 148F may use the words "licensed prosthetist" after the person's name or signify the same by the use of the letters "L.P." after the person's name.

25. A genetic counselor licensed under chapter 148H may use the words "genetic counselor" or "licensed genetic counselor" or corresponding abbreviations after the person's name.

26. A person who is licensed to engage in the practice of polysomnography shall have the right to use the title "polysomnographic technologist" or the letters "P.S.G.T." after the person's name. No other person may use that title or letters or any other words or letters indicating that the person is a polysomnographic technologist.

27. No other practitioner licensed to practice a profession under any of the provisions of this subtitle shall be entitled to use the prefix "Dr." or "Doctor" unless the licensed practitioner possesses an earned doctoral degree. Such a practitioner shall reference the degree held after the person's name.

28. A midwife licensed under chapter 148I may use the words "licensed midwife" or the initials "L.M." after the person's name.

[C31, 35, §2510-d1; C39, §**2510.1;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.74; 81 Acts, ch 66, §1]

84 Acts, ch 1075, §11; 87 Acts, ch 215, §40; 88 Acts, ch 1225, §10; 90 Acts, ch 1168, §27; 91 Acts, ch 228, §1; 91 Acts, ch 229, §4; 92 Acts, ch 1137, §7; 92 Acts, ch 1183, §4; 93 Acts, ch 86, §13; 95 Acts, ch 108, §4; 96 Acts, ch 1035, §4; 96 Acts, ch 1036, §21; 98 Acts, ch 1053, §19; 99 Acts, ch 101, §1; 2000 Acts, ch 1053, §3; 2001 Acts, ch 58, §7; 2003 Acts, ch 93, §1, 14; 2004 Acts, ch 1045, §2; 2004 Acts, ch 1175, §424, 433; 2007 Acts, ch 10, §61; 2007 Acts, ch 215, §246; 2008 Acts, ch 1088, §31; 2012 Acts, ch 1101, §5; 2014 Acts, ch 1019, §1; 2015 Acts, ch 70, §6; 2018 Acts, ch 1052, §4, 12; 2018 Acts, ch 1106, §6, 14; 2023 Acts, ch 127, §3

Referred to in §148A.7
NEW subsection 28

147.75 Itinerants. Repealed by 2008 Acts, ch 1088, §78.

RULES

147.76 Rules.

The boards for the various professions shall adopt all necessary and proper rules to administer and interpret this chapter and chapters 148 through 157, except chapter 148D.

[C77, 79, 81, §147.76]

89 Acts, ch 83, §28; 92 Acts, ch 1097, §4; 2007 Acts, ch 10, §62; 2008 Acts, ch 1088, §32; 2023 Acts, ch 99, §6

Section amended

147.77 Powers, privileges, rights, or duties provided by rule — applicability to physician assistants.

1. The following agencies that adopt rules pursuant to chapter 17A providing a power, privilege, right, or duty to a physician licensed under chapter 148 or other profession licensed under this subtitle relating to the following subjects shall, consistent with the scope of practice of physician assistants licensed under chapter 148C, and unless otherwise inconsistent with state or federal law, provide the same power, privilege, right, or duty by rule to a physician assistant licensed under chapter 148C:

a. The department of administrative services, with respect to rules relating to the following:

(1) Retroactive conversion of vacation time to sick leave for vacation time spent under the care of a physician.

(2) Certification of a catastrophic illness by a physician for purposes of donation of leave and second medical opinions and updates sought from a physician relating to such certifications.

b. The department of corrections, with respect to rules relating to the following:

(1) That a parolee shall not use, purchase, possess, or transfer any drugs unless prescribed by a physician.

(2) That a serious medical need is one that has been diagnosed by a physician as requiring treatment or is one so obvious that a lay person would easily recognize the necessity for a physician's attention.

(3) That each jail shall have a designated licensed physician, licensed osteopathic physician, or medical resource designated for the medical supervision, care, and treatment of prisoners as deemed necessary and appropriate.

(4) That prescription medication, as ordered by a licensed physician, licensed osteopathic physician, or licensed dentist shall be provided in accordance with the directions of the prescribing physician or dentist. Prisoners with medication from a personal physician, osteopathic physician, or dentist may be evaluated by a physician, osteopathic physician, or dentist selected by the jail administrator to determine if the present medication is appropriate.

(5) That expired drugs or drugs not in unit dose packaging, whose administration had been discontinued by the attending physician, shall be destroyed by the jail administrator or designee in the presence of a witness.

(6) That special diets in jails prescribed by a physician shall be followed and documented, that the physician who prescribes the special diet shall specify a date on which the diet will be reviewed for renewal or discontinuation, and that unless specified by the prescribing physician, a certified dietitian shall develop the menu.

(7) That special diets prescribed by a physician for the care and treatment of juveniles in nonsecure hold shall be followed and documented.

(8) For medical services in temporary holding facilities, that a serious medical need is one that has been diagnosed by a physician as requiring treatment or one that is so obvious that a lay person would easily recognize the necessity for a physician's attention.

(9) For medical resources in temporary holding facilities, that each facility shall have a designated licensed physician, licensed osteopathic physician, or medical resource designated for the medical supervision, care, and treatment of detainees as deemed necessary and appropriate.

(10) Medication procedures in temporary holding facilities, that prescription medication, as ordered by a licensed physician, licensed osteopathic physician, or licensed dentist shall be provided in accordance with the directions of the prescribing physician or dentist. Detainees with medication from a personal physician, osteopathic physician, or dentist may be evaluated by a physician, osteopathic physician, or dentist selected by the facility administrator to determine if the present medication is appropriate.

(11) For medication storage in temporary holding facilities, that expired drugs or drugs not in unit dose packaging, whose administration had been discontinued by the attending physician, shall be destroyed by the facility administrator or designee in the presence of a witness.

(12) For medical diets in temporary holding facilities, that special diets as prescribed by a physician shall be followed and documented.

(13) For medical care and treatment for juveniles in nonsecure holds in temporary holding facilities, that special diets as prescribed by a physician shall be followed and documented.

c. The economic development authority, with respect to rules relating to the certification of a person with a disability for the purpose of the targeted small business program, that in order to be considered a person with a disability for the purpose of the targeted small business program, the person must qualify and receive certification as having a disability from a licensed medical physician or must have been found eligible for vocational rehabilitation services by the department of workforce development, division of vocational rehabilitation services, or by the department for the blind.

d. The department of education, with respect to rules relating to the following:

(1) For statements relating to medication administration policies, that a statement that persons administering medication shall include authorized practitioners, such as licensed registered nurses and physicians, and persons to whom authorized practitioners have delegated the administration of prescription and nonprescription drugs. Individuals shall self-administer asthma or other airway constricting disease medication or possess and have

use of an epinephrine auto-injector with parent and physician consent on file, without the necessity of demonstrating competency to self-administer these medications.

(2) For medication administration courses relating to medication administration policies, that a medication administration course be conducted by a registered nurse or licensed pharmacist and include an annual medication administration procedural skills check completed with a registered nurse or pharmacist.

(3) For school-based youth services programs, that preventive and primary health care services shall be delivered by specifically credentialed providers as specified.

e. The department of health and human services, with respect to rules relating to the following:

(1) That an incident for purposes of accreditation of providers of services to persons with mental illness, intellectual disabilities, or developmental disabilities includes but is not limited to an occurrence involving the individual using the service that results in a physical injury to or by the individual that requires a physician's treatment or admission to a hospital.

(2) That a mental health professional, for purposes of accreditation of providers of services to persons with mental illness, intellectual disabilities, or developmental disabilities, includes a medical professional licensed in this state, provided that the professional otherwise meets all of the conditions to qualify as a mental health professional.

(3) That home health aide services for purposes of disability services management and regional services may include medications specifically ordered by a physician.

(4) That payment relating to the state supplementary assistance program for residential care shall only be made when there is on file an order written by a physician certifying that the applicant or recipient being admitted requires residential care but does not require nursing services.

(5) That a case folder for a facility participating in the state supplementary assistance program must include a physician's statement certifying that a resident does not require nursing services.

(6) That personnel providing psychological evaluations and counseling or psychotherapy services for area education agencies under the medical assistance program include specified professions endorsed, licensed, or registered in this state, provided that the professional otherwise meets all of the conditions to qualify as a mental health professional.

(7) That personnel providing psychological evaluations and counseling or psychotherapy services for providers of infant and toddler program services under the medical assistance program include specified professions endorsed, licensed, or registered in this state, provided that the professional otherwise meets all of the conditions to qualify as a mental health professional.

(8) That personnel providing other services for providers of infant and toddler program services under the medical assistance program include specified professions recognized, endorsed, or licensed in this state, provided that the professional otherwise meets all of the conditions to qualify as a mental health professional.

(9) That personnel providing psychological evaluations and counseling or psychotherapy services for providers of local education agency services under the medical assistance program include specified professions endorsed, licensed, or registered in this state, provided that the professional otherwise meets all of the conditions to qualify as a mental health professional.

(10) That personnel providing other services for providers of local education agency services under the medical assistance program include specified professions recognized, endorsed, or licensed in this state, provided that the professional otherwise meets all of the conditions to qualify as a mental health professional.

(11) For payment for medically necessary home health agency services under the medical assistance program, that payment shall be approved for medically necessary home health agency services prescribed by a physician in a plan of home health care provided by a Medicare-certified home health agency.

(12) For authorization for medically necessary home health agency services under the medical assistance program, that services shall be authorized by a physician, evidenced by the physician's signature and date on a plan of treatment.

(13) For treatment plans of home health agencies under the medical assistance program, that a member's medical condition shall be reflected by the date last seen by a physician, if available.

(14) For items included in treatment plans of home health agencies under the medical assistance program, that a plan of care shall include a physician's signature and date and that the plan of care must be signed and dated by the physician before the claim for service is submitted for reimbursement.

(15) For skilled nursing services provided by a home health agency under the medical assistance program, that medical documentation shall be submitted justifying the need for continued visits, including the physician's estimate of the length of time that additional visits will be necessary, and that daily skilled nursing visits or multiple daily visits for wound care or insulin injections shall be covered when ordered by a physician and included in the plan of care.

(16) For physical therapy services provided by a home health agency under the medical assistance program, that payment shall be made for physical therapy services when the services follow a treatment plan established by the physician after any needed consultation with the qualified physical therapist.

(17) For occupational therapy services provided by a home health agency under the medical assistance program, that payment shall be made for occupational therapy services when the services follow a treatment plan established by the physician.

(18) For speech therapy services provided by a home health agency under the medical assistance program, that payment shall be made for speech therapy services when the services follow a treatment plan established by the physician.

(19) For home health aide services provided by a home health agency under the medical assistance program, that the service as well as the frequency and duration are stated in a written plan of treatment established by a physician.

(20) For home health aide services provided by a home health agency under the medical assistance program, that services provided for specified durations when ordered by a physician and included in a plan of care shall be allowed as intermittent services.

(21) For home health aide services provided by a home health agency under the medical assistance program, that personal care services include helping the member take medications specifically ordered by a physician.

(22) For private duty nursing or personal care services for persons aged twenty and under, under the medical assistance program, that private duty nursing services are those services which are provided by a registered nurse or a licensed practical nurse under the direction of the member's physician to a member in the member's place of residence or outside the member's residence, when normal life activities take the member outside the place of residence.

(23) For private duty nursing or personal care services for persons aged twenty and under, under the medical assistance program, that services shall be provided according to a written plan of care authorized by a licensed physician.

(24) For private duty nursing or personal care services for persons aged twenty and under, under the medical assistance program, that personal care services are those services provided by a home health aide or certified nurse's aide and which are delegated and supervised by a registered nurse under the direction of the member's physician to a member in the member's place of residence or outside the member's residence, when normal life activities take the member outside the place of residence, and that these services shall be in accordance with the member's plan of care and authorized by a physician.

(25) For requirements for private duty nursing or personal care services for persons aged twenty and under, under the medical assistance program, that private duty nursing or personal care services shall be ordered in writing by a physician as evidenced by the physician's signature on the plan of care.

(26) For obtaining prescription medications for children in juvenile detention and shelter care homes, that prescription medication provided to residents shall be dispensed only from a licensed pharmacy in this state in accordance with state law, from a licensed pharmacy in another state according to the laws of that state, or by a licensed physician.

(27) For health and dental programs provided by agencies providing foster care services, that a child's physical examination shall be performed by a licensed physician or licensed nurse practitioner.

(28) For health and dental programs provided by agencies providing foster care services, that if documentation of prior immunization is unavailable, immunizations required by the department shall begin within thirty days of placement, unless contraindicated and unless a statement from a physician to that effect is included in the child's medical record, and that a statement from a physician, referring agency, parent, or guardian indicating immunizations are current is sufficient documentation of immunizations.

(29) For the dispensing, storage, authorization, and recording of medications in child care centers, that all medications shall be stored in their original containers, with accompanying physician or pharmacist's directions and label intact and stored so they are inaccessible to children and the public.

(30) For an infants' area in a child care center, that upon the recommendation of a child's physician or the area education agency serving the child, a child who is two years of age or older with a disability that results in significant developmental delays in physical and cognitive functioning who does not pose a threat to the safety of the infants may, if appropriate and for a limited time approved by the department, remain in the infant area.

(31) For facility requirements for a child development home, that the telephone number for each child's physician shall be written on paper and readily accessible by the telephone.

(32) For medications and hazardous materials in a child development home, that medications shall be given only with the parent's or doctor's written authorization, and that each prescribed medication shall be accompanied by a physician's or pharmacist's direction.

(33) For medical reports regarding the health of a family in a family life home, that a medical report shall provide significant findings of a physician, such as the presence or absence of any communicable disease.

(34) For medical reexaminations of a family in a family life home, that medical reexaminations may be required at the discretion of a physician.

(35) For medical examinations of a client in a family life home, that a physician shall certify that the client is free from any communicable disease and does not require a higher level of care than that provided by a family life home.

(36) For the records of a client in a family life home, that the family shall have available at all times, the name, address, and telephone number of the client's physician.

(37) For the facility requirements for a child care home, that the telephone number for each child's physician shall be written on paper and readily accessible by the telephone.

(38) For the administration of medications at a child care home, that medications shall be given only with the parent's or doctor's written authorization and each prescribed medication shall be accompanied by a physician's or pharmacist's direction.

(39) For payments for foster care, that an intellectual disabilities professional includes specified professions, provided that the professional otherwise meets all of the conditions to qualify as an intellectual disabilities professional.

(40) For payments for foster care, that a mental health professional includes specified professions, provided that the professional otherwise meets all of the conditions to qualify as a mental health professional.

(41) For the subsidized adoption program, that a qualified intellectual disability professional includes specified professions, provided that the professional otherwise meets all of the conditions to qualify as a qualified intellectual disability professional.

(42) For the subsidized adoption program, that a qualified mental health professional includes specified professions, provided that the professional otherwise meets all of the conditions to qualify as a qualified mental health professional.

(43) For the information provided to a foster care provider by a department worker at the time of placement, that the information shall include the names, addresses, and telephone numbers of the child's physician and dentist.

(44) A written order from a physician for an older individual requesting a therapeutic diet, and the interpretation of such orders.

(45) That "*impaired glucose tolerance*", for purposes of outpatient diabetes education

programs, means a condition in which blood glucose levels are higher than normal, diagnosed by a physician, and treated with a food plan, exercise, or weight control.

(46) For instructors for programs not recognized by the American diabetes association or accredited by the American association of diabetes educators, that the primary instructors shall be one or more of specified health care professionals who are knowledgeable about the disease process of diabetes and the treatment of diabetes.

(47) For the written form for participation in the prescription drug donation repository program, that the form shall include the name and telephone number of the responsible pharmacist, physician, or nurse practitioner who is employed by or under contract with the pharmacy or medical facility, and shall also include a statement, signed and dated by the responsible pharmacist, physician, or nurse practitioner, indicating that the pharmacy or medical facility meets the eligibility requirements and shall comply with the requirements established by rule.

(48) For the dispensing of donated prescription drugs and supplies, that donated drugs and supplies may be dispensed only if the drugs or supplies are prescribed by a health care practitioner for use by an eligible individual and are dispensed by a licensed pharmacist, physician, or nurse practitioner.

f. The department of inspections, appeals, and licensing, with respect to rules relating to the following:

(1) For the qualifications of an attending physician at a hospice, that the person shall have an active Iowa license to practice medicine.

(2) For residential care facilities for persons with intellectual disabilities, that a qualified intellectual disability professional includes specified professions, provided that the professional otherwise meets all of the conditions to qualify as a qualified intellectual disability professional.

(3) For nursing facilities, that a qualified intellectual disabilities professional includes specified professions, provided that the professional otherwise meets all of the conditions to qualify as a qualified intellectual disabilities professional.

(4) For intermediate care facilities for persons with mental illness, that a qualified mental health professional includes specified professions, provided that the professional otherwise meets all of the conditions to qualify as a qualified mental health professional.

(5) For notifications submitted to the department from a subacute mental health care facility in the event of an accident causing a major injury, including as a major injury an injury which requires consultation with the attending physician or designee of the physician or advanced registered nurse practitioner who determines that an injury is a major injury.

(6) For applications for a license to practice asbestos removal, that except as noted in rule, only worker and contractor/supervisor license applicants must submit the respiratory protection and physician's certification forms.

(7) For documentation held by persons licensed for asbestos abatement in an area that is subject to a disaster emergency proclamation, that the director of the department of inspections, appeals, and licensing deems an individual contractor, supervisor, or worker to be licensed and authorized for asbestos abatement if the individual, in addition to other specified conditions, makes immediately available on the work site a copy of a physician's statement indicating that, consistent with federal law, a licensed physician has examined the individual within the past twelve months and approved the individual to work while wearing a respirator.

(8) That the contents of an application for an event license for a covered athletic event other than a professional wrestling event shall contain, along with other requirements, a copy of the medical license of the ringside physician and the date, time, and location of the ringside physician's examination of the contestants.

(9) For the responsibilities of the promoter of an athletic event, that the promoter submit test results to the ringside physician no later than at the time of the physical showing that each contestant scheduled for the event tested negative for the human immunodeficiency, hepatitis B, and hepatitis C viruses within the one-year period prior to the event, and that the contestant shall not participate and the physician shall notify the promoter that the contestant is prohibited from participating for medical reasons if specified circumstances occur.

(10) For injuries during a professional boxing match, that if a contestant claims to be injured during the bout, the referee shall stop the bout and request the attending physician to make an examination. If the physician decides that the contestant has been injured as the result of a foul, the physician shall advise the referee of the injury. If the physician is of the opinion that the injured contestant may be able to continue, the physician shall order an intermission, after which the physician shall make another examination and again advise the referee of the injured contestant's condition. It shall be the duty of the promoter to have an approved physician in attendance during the entire duration of all bouts.

(11) For persons allowed in a ring during a professional boxing match, that no person other than the contestants and the referee shall enter the ring during the bout, excepting the seconds between the rounds or the attending physician if asked by the referee to examine an injury to a contestant.

(12) For the weighing of contestants in a professional boxing match, that contestants shall be weighed and examined on the day of the scheduled match by the attending ring physician at a time and place to be determined by the state commissioner of athletics.

(13) For attending ring physicians during a professional boxing match, that when a boxer has been injured seriously, knocked out, or technically knocked out, the referee shall immediately summon the attending ring physician to aid the stricken boxer, and that managers, handlers, and seconds shall not attend to the stricken boxer, except at the request of the physician.

(14) For the keeping of time during a professional boxing match, that the timekeeper shall keep an exact record of time taken out at the request of a referee for an examination of a contestant by the physician.

(15) For the suspension of contestants during a professional boxing match that is an elimination tournament, that a contestant who for specified reasons is not permitted to box in the state for a period of time shall be examined by a physician approved by the state commissioner of athletics before being permitted to fight again.

(16) For the designation of officials for professional kickboxing, that the designation of physicians is subject to the approval of the state commissioner of athletics or designee.

(17) For officials for a mixed martial arts event, that officials shall include a physician.

(18) For the keeping of time for a mixed martial arts event, that the timekeeper shall keep an exact record of time taken out at the request of a referee for an examination of a contestant by the physician.

(19) For persons allowed in the cage during a mixed martial arts event, that a physician may enter the cage to examine a contestant upon the request of the referee.

(20) For the decorum of persons involved in a mixed martial arts event, that a contestant is exempt from prohibitions on specified conduct while interacting with the contestant's opponent during a round, but if the round is stopped by the physician or referee for a time out, the prohibitions shall apply to the contestant.

(21) For the examination of contestants in a mixed martial arts event, that on the day of the event, at a time and place to be approved by the state commissioner of athletics, the ringside physician shall conduct a rigorous physical examination to determine the contestant's fitness to participate in a mixed martial arts match, and that a contestant deemed not fit by the physician shall not participate in the event.

(22) For injuries during a mixed martial arts event, that if a contestant claims to be injured or when a contestant has been injured seriously or knocked out, the referee shall immediately stop the fight and summon the attending ring physician to make an examination of the stricken fighter. If the physician decides that the contestant has been injured, the physician shall advise the referee of the severity of the injury. If the physician is of the opinion the injured contestant may be able to continue, the physician shall order an intermission, after which the physician shall make another examination and again advise the referee of the injured contestant's condition. Managers, handlers, and seconds shall not attend to the stricken fighter, except at the request of the physician.

g. The racing and gaming commission, with respect to rules relating to the following:

(1) For the grounds for denial, suspension, or revocation of an occupational or vendor

license, that a license shall be denied if the applicant has a history of mental illness without demonstrating successful treatment by a licensed medical physician.

(2) For the qualifications for jockeys, that a jockey shall pass a physical examination by a licensed physician affirming fitness to participate as a jockey.

(3) For the regulation of licensees in restricted areas of a racing facility, that licensees whose duties require them to be in a restricted area of a racing facility shall not have present within their systems any controlled substance as listed in schedules I to V of section 202 of the federal Controlled Substances Act, 21 U.S.C. §812, chapter 124, or any prescription drug unless it was obtained directly or pursuant to valid prescription or order from a duly licensed physician who is acting in the course of professional practice.

h. The Iowa law enforcement academy, with respect to rules relating to the following:

(1) For the minimum standards for law enforcement officers, that an officer is examined by a licensed physician or surgeon.

(2) For hiring standards must be reverified if an individual is not hired by an Iowa law enforcement agency during a specified period of time following completion of the course of study, that the individual must be examined by a licensed physician or surgeon.

(3) For the selection or appointment of reserve peace officers, that the person shall be examined by a licensed physician or surgeon.

i. The natural resource commission, with respect to rules relating to the following:

(1) That the grounds for revoking or suspending an instructor license include participation in a course while ingesting prescription medication in a manner contrary to the dosing directions given by the prescribing physician.

(2) For applications for use of a crossbow for deer and turkey hunting by handicapped individuals, that an application must include a statement signed by the applicant's physician declaring that the individual is not physically capable of shooting a bow and arrow.

(3) For authorization for the use of a crossbow for deer and turkey hunting by handicapped individuals, that if a conservation officer has probable cause to believe the person's handicapped status has improved, making it possible for the person to shoot a bow and arrow, the department of natural resources may, upon the officer's request, require the person to obtain in writing a current physician's statement.

(4) For licenses for nonresidents to participate in a special deer hunting season for severely disabled persons, that a nonresident applying for the license must have on file with the department of natural resources either a copy of a disabilities parking permit issued by a state department of transportation or an Iowa department of natural resources form signed by a physician that verifies their disability.

j. The department of public safety, with respect to rules relating to permits to carry weapons, that a person who is an unlawful user of or addicted to any controlled substance includes any person who is a current user of a controlled substance in a manner other than as prescribed by a licensed physician.

k. The department of transportation, with respect to rules relating to exemptions from motor vehicle window transparency requirements, that a motor vehicle fitted with a front windshield, a front side window, or a front sidewing with less than seventy percent but not less than thirty-five percent light transmittance before July 4, 2012, may continue to be maintained and operated with a front windshield, a front side window, or a front sidewing with less than seventy percent but not less than thirty-five percent light transmittance on or after July 4, 2012, so long as the vehicle continues to be used for the transport of a passenger or operator who documented in the manner specified by the department a medical need for such reduced transparency, which document was signed by the person's physician before July 4, 2012.

l. The Iowa department of veterans affairs, with respect to rules relating to expenses relating to the purchase of durable equipment or services, that individuals requesting reimbursement who need durable equipment as a medical necessity should provide information from a physician.

m. The department of workforce development, with respect to rules relating to the following:

(1) That a voluntary quit shall be presumed to be without good cause attributable to the employer for purposes of unemployment compensation if a claimant left employment because

of illness or injury which was not caused or aggravated by the employment or pregnancy and failed to obtain the advice of a licensed and practicing physician, obtain certification of release for work from a licensed and practicing physician, or return to the employer and offer services upon recovery and certification for work by a licensed and practicing physician.

(2) That for purposes of unemployment compensation, it is a reason for a claimant leaving employment with good cause attributable to the employer if the claimant left employment because of illness, injury, or pregnancy upon the advice of a licensed and practicing physician, and upon recovery, when recovery was certified by a licensed and practicing physician, the claimant returned and offered to perform services to the employer, but no suitable, comparable work was available.

(3) That for purposes of unemployment compensation it is a reason for a claimant leaving employment with good cause attributable to the employer if the claimant left employment upon the advice of a licensed and practicing physician for the sole purpose of taking a family member to a place having a different climate and subsequently returned to the claimant's regular employer and offered to perform services, but the claimant's regular or comparable work was not available.

n. The labor services division of the department of inspections, appeals, and licensing, with respect to rules relating to the following:

(1) For the disclosure of a trade secret relating to a hazardous chemical during a medical emergency, that where a treating physician or nurse determines that a medical emergency exists and the specific chemical identity of a hazardous chemical is necessary for emergency or first-aid treatment, the chemical manufacturer, importer, or employer shall immediately disclose the specific chemical identity of a trade secret chemical to that treating physician or nurse, regardless of the existence of a written statement of need or a confidentiality agreement.

(2) For the disclosure of a trade secret relating to a hazardous chemical in a nonemergency situation, that in nonemergency situations, a chemical manufacturer, importer, or employer shall, upon request, disclose a specific chemical identity, otherwise permitted to be withheld by rule, to a specified health professional providing medical or other occupational health services to exposed employees or designated representatives in specified circumstances.

2. This section shall not be construed to expand, diminish, or otherwise modify the scope of practice of any profession licensed under this subtitle.

3. The rulemaking requirements provided in this section shall not be construed to prohibit the agencies listed in subsection 1 from engaging in further rulemaking not in conflict with this section or state or federal law relating to the subject matter of this section or to otherwise diminish the authority to engage in rulemaking provided to those agencies by any other statute.

2022 Acts, ch 1066, §51; 2022 Acts, ch 1153, §8, 9; 2023 Acts, ch 19, §263, 1910 – 1913; 2023 Acts, ch 64, §19

See Code editor's note on simple harmonization at the beginning of this Code volume
Section amended

147.78 and 147.79 Reserved.

FEES

147.80 Establishment of fees — administrative costs.

1. Each board may by rule establish fees for the following based on the costs of sustaining the board and the actual costs of the service:

a. Examinations.
b. Licensure, certification, or registration.
c. Renewal of licensure, certification, or registration.
d. Renewal of licensure, certification, or registration during the grace period.
e. Reinstatement or reactivation of licensure, certification, or registration.

f. Issuance of a certified statement that a person is licensed, registered, or has been issued a certificate to practice in this state.

g. Issuance of a duplicate license, registration, or certificate, which shall be so designated on its face. A board may require satisfactory proof that the original license, registration, or certificate issued by the board has been lost or destroyed.

h. Issuance of a renewal card.

i. Verification of licensure, registration, or certification.

j. Returned checks.

k. Inspections.

2. Each board shall annually prepare estimates of projected revenues to be generated by the fees received by the board as well as a projection of the fairly apportioned administrative costs and rental expenses attributable to the board. Each board shall annually review and adjust its schedule of fees to cover projected expenses.

3. The board of medicine, the board of pharmacy, the dental board, and the board of nursing shall retain individual executive officers pursuant to section 10A.504.

[C97, §2576, 2597, 2590; S13, §2575-a30, -a38, -a39, 2582, 2583-a, -l, 2589-d, 2600-d; C24, 27, 31, 35, 39, §**2516;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.80; 81 Acts, ch 2, §10(5), ch 5, §4(5)]

1. [C97, §2597; S13, §2600-d, -m; C24, 27, 31, 35, 39, §**2516;** C46, 50, 54, 58, 62, §147.80(1, 2, 7); C66, 71, 73, §147.80(1, 7); C75, 77, 79, 81, §147.80(1)]

2. [C97, §2590; S13, §2589-b, -d; C24, 27, 31, 35, 39, §**2516;** C46, 50, 54, 58, 62, §147.80(5 – 7); C66, 71, 73, §147.80(1, 7); C75, 77, 79, 81, §147.80(2)]

3. [C97, §2576; S13, §2576, 2582, 2583-a; C24, 27, 31, 35, 39, §**2516;** C46, 50, 54, 58, 62, §147.80(1 – 4); C66, 71, 73, §147.80(2, 7); C75, 77, 79, 81, §147.80(3)]

4. [C75, 77, 79, 81, §147.80(4)]

6. [C24, 27, 31, 35, 39, §**2516;** C46, 50, 54, 58, 62, 66, 71, 73, §147.80(3, 4, 7); C75, 77, 79, 81, §147.80(5)]

7. [C24, 27, 31, 35, 39, §**2516;** C46, 50, 54, 58, 62, 66, 71, 73, §147.80(3, 4, 7); C75, 77, 79, 81, §147.80(6)]

8. [C66, 71, 73, §147.80(3, 4, 7); C75, 77, 79, 81, §147.80(7)]

10. [S13, §2583-l, -n; C24, 27, 31, 35, 39, §**2516;** C46, 50, 54, 58, 62, 66, 71, 73, §147.80(3, 4, 7); C75, 77, 79, 81, §147.80(8)]

11. [C24, 27, 31, 35, 39, §**2516;** C46, 50, 54, 58, 62, 66, 71, 73, §147.80(5 – 7); C75, 77, 79, 81, §147.80(9)]

12. [S13, §2575-a38, -a39; C24, 27, 31, 35, 39, §**2516;** C46, 50, 54, 58, 62, 66, 71, 73, §147.80(5 – 7); C75, 77, 79, 81, §147.80(10)]

13. [S13, §2575-a30; C24, 27, 31, 35, 39, §**2516;** C46, 50, 54, 58, 62, §147.80(5 – 7); C66, §147.80(6, 7, 16, 17); C71, 73, §147.80(6, 7, 19, 20); C75, 77, 79, 81, §147.80(11)]

14. [C66, §147.80(19); C71, 73, §147.80(22); C75, 77, 79, 81, §147.80(12)]

15. [C27, §2516(5 – 7); C31, 35, 39, §**2516(5 – 7, 11, 13);** C46, 50, 54, 58, 62, §147.80(5 – 7, 11, 13); C66, 71, 73, §147.80(5 – 7, 10, 11); C75, 77, 79, 81, §147.80(13)]

16. [C27, 31, 35, 39, §**2516;** C46, 50, 54, §147.80(5 – 7, 12, 13); C58, 62, 66, §147.80(5 – 7, 12 – 14); C71, 73, §147.80(5 – 7, 12 – 17); C75, 77, 79, 81, §147.80(14)]

17. [C77, 79, 81, §147.80(15)]

18. [C81, §147.80(16)]

19. [C81, §147.80(17)]

24. [S13, §2600-n; C24, 27, 31, 35, 39, §**2516;** C46, 50, 54, 58, 62, 66, 71, 73, §147.80(8); C75, §147.80(15); C77, 79, §147.80(16); C81, §147.80(18)]

25. [C66, 71, 73, §147.80(18); C75, §147.80(16); C77, 79, §147.80(17); C81, §147.80(19)]

84 Acts, ch 1075, §12; 85 Acts, ch 168, §7; 85 Acts, ch 246, §1; 88 Acts, ch 1225, §11; 89 Acts, ch 240, §1; 91 Acts, ch 228, §2; 91 Acts, ch 229, §5; 92 Acts, ch 1183, §5; 92 Acts, ch 1205, §17; 93 Acts, ch 86, §14; 96 Acts, ch 1036, §22; 98 Acts, ch 1053, §20; 2000 Acts, ch 1002, §2; 2000 Acts, ch 1053, §4; 2001 Acts, ch 24, §31; 2001 Acts, ch 58, §8; 2003 Acts, ch 93, §2, 14; 2004 Acts, ch 1175, §425, 433; 2005 Acts, ch 175, §85; 2006 Acts, ch 1155, §5, 15; 2007 Acts, ch 10,

§63; 2007 Acts, ch 218, §199, 200; 2008 Acts, ch 1088, §33; 2009 Acts, ch 133, §49; 2019 Acts, ch 85, §60; 2023 Acts, ch 108, §39
Referred to in §147.82, 148F.3, 154A.13, 155A.43, 157.4, 157.8, 157.11
Subsection 3 amended

147.81 Reserved.

147.82 Disposition of fees.

All fees collected by a board listed in section 147.13 or by the department, and fees collected pursuant to sections 124.301 and 147.80 and chapter 155A by the board of pharmacy, shall be deposited in the licensing and regulation fund created in section 10A.507.

[C97, §2583; S13, §2575-a44, 2583-a, -s; C24, 27, 31, 35, 39, §**2518;** C46, 50, 54, 58, 62, 66, §147.82; C71, 73, §147.82, 153.4; C75, 77, 79, 81, §147.82]

2005 Acts, ch 175, §86; 2006 Acts, ch 1155, §6, 15; 2006 Acts, ch 1184, §86; 2007 Acts, ch 10, §184; 2008 Acts, ch 1088, §34; 2023 Acts, ch 19, §1624; 2023 Acts, ch 108, §40
Referred to in §147.25, 153.37, 155A.43
Section amended

VIOLATIONS — CRIMES — PUNISHMENT

147.83 Injunction.

Any person engaging in any business or in the practice of any profession for which a license is required by this subtitle without such license may be restrained by permanent injunction.

[C24, 27, 31, 35, 39, §**2519;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.83]

94 Acts, ch 1132, §24; 96 Acts, ch 1036, §23; 98 Acts, ch 1053, §21
Referred to in §154C.2, 156.16
Injunctions, **R.C.P. 1.1501 – 1.1511**

147.84 Forgeries.

Any person who files or attempts to file with a board any false or forged diploma, certificate or affidavit of identification or qualification, or other document shall be guilty of a fraudulent practice.

[C97, §2580, 2595; S13, §2583-d; C24, 27, 31, 35, 39, §**2520;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.84]

2008 Acts, ch 1088, §35
Referred to in §148.6
See also §714.8, chapter 715A

147.85 Fraud.

Any person who presents to a board a diploma or certificate of which the person is not the rightful owner, for the purpose of procuring a license, or who falsely impersonates anyone to whom a license has been issued by the board shall be guilty of a serious misdemeanor.

[C97, §2580, 2581, 2595; S13, §2575-a45, 2581, 2583-c, -d; C24, 27, 31, 35, 39, §**2521;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.85]

2008 Acts, ch 1088, §36; 2009 Acts, ch 133, §50
Referred to in §148.6

147.86 Penalties.

Any person violating any provision of this subtitle, except insofar as the provisions apply or relate to or affect the practice of pharmacy, or where a specific penalty is otherwise provided, shall be guilty of a serious misdemeanor.

[C97, §2580, 2581, 2588, 2590, 2591, 2595; S13, §2575-a35, -a45, 2581, 2583-d, -r, 2589-d, 2600-o4; SS15, §2588; C24, 27, 31, 35, 39, §**2522;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.86]

92 Acts, ch 1183, §6; 94 Acts, ch 1023, §12; 94 Acts, ch 1132, §25; 96 Acts, ch 1036, §24; 98 Acts, ch 1053, §22; 2015 Acts, ch 30, §61
Referred to in §147.107, 147.108, 147.109, 147.114

ENFORCEMENT PROVISIONS

147.87 Enforcement.

A board shall enforce the provisions of this chapter and the board's enabling statute and for that purpose may request the department of inspections, appeals, and licensing to make necessary investigations. Every licensee and member of a board shall furnish the board or the department of inspections, appeals, and licensing such evidence as the member or licensee may have relative to any alleged violation which is being investigated.

[C24, 27, 31, 35, 39, §**2523;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.87]

90 Acts, ch 1204, §19; 94 Acts, ch 1132, §26; 96 Acts, ch 1036, §25; 98 Acts, ch 1053, §23; 2007 Acts, ch 10, §64; 2008 Acts, ch 1088, §37; 2009 Acts, ch 41, §53; 2023 Acts, ch 19, §1914

Referred to in §152.10, 153.36, 156.9
Continuing education and regulation, chapter 272C
Section amended

147.88 Inspections and investigations.

The department of inspections, appeals, and licensing may perform inspections and investigations as required by this subtitle, except inspections and investigations for the board of medicine, board of pharmacy, board of nursing, and the dental board. The department of inspections, appeals, and licensing shall employ personnel related to the inspection and investigative functions.

[C31, 35, §2523-c1; C39, §**2523.1;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.88]

90 Acts, ch 1204, §20; 94 Acts, ch 1132, §27; 96 Acts, ch 1036, §26; 98 Acts, ch 1053, §24; 2007 Acts, ch 10, §65; 2007 Acts, ch 218, §201; 2008 Acts, ch 1088, §38; 2023 Acts, ch 19, §1915

Referred to in §152.10, 153.36
Section amended

147.89 Report of violators.

Every licensee and member of a board shall report to the board the name of any person without the required license if the licensee or member of the board has reason to believe the person is practicing the profession without a license.

[C24, 27, 31, 35, 39, §**2524;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.89]

2007 Acts, ch 10, §66; 2008 Acts, ch 1088, §39; 2009 Acts, ch 41, §54

Referred to in §152.10, 153.36

147.90 Rules and forms. Repealed by 2008 Acts, ch 1088, §78.

147.91 Publications.

Each board shall provide access to the laws and rules regulating the board to the public upon request and shall make this information available through the internet.

[C24, 27, 31, 35, 39, §**2526;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.91]

90 Acts, ch 1204, §22; 2001 Acts, ch 58, §9; 2007 Acts, ch 10, §67; 2008 Acts, ch 1088, §40

Referred to in §153.36

147.92 Attorney general.

Upon request of a board the attorney general shall institute in the name of the state the proper proceedings against any person charged by the board with violating any provision of this or the following chapters of this subtitle.

[S13, §2600-o7; C24, 27, 31, 35, 39, §**2527;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.92]

94 Acts, ch 1132, §29; 94 Acts, ch 1173, §8; 96 Acts, ch 1036, §28; 98 Acts, ch 1053, §26; 2008 Acts, ch 1088, §41

Referred to in §153.36

147.93 Prima facie evidence.

The opening of an office or place of business for the practice of any profession for which a license is required by this subtitle, the announcing to the public in any way the intention to practice any such profession, the use of any professional degree or designation, or of any sign,

card, circular, device, internet site, or advertisement, as a practitioner of any such profession, or as a person skilled in the same, shall be prima facie evidence of engaging in the practice of such profession.

[S13, §2575-a28, -a31, 2600-o; C24, 27, 31, 35, 39, §**2528;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.93]

94 Acts, ch 1132, §30; 96 Acts, ch 1036, §29; 98 Acts, ch 1053, §27; 2008 Acts, ch 1088, §42; 2013 Acts, ch 90, §257

147.94 through 147.96 Repealed by 2008 Acts, ch 1088, §79.

147.97 Reserved.

147.98 through 147.100 Repealed by 2008 Acts, ch 1088, §79.

147.101 Reserved.

147.102 through 147.103A Repealed by 2008 Acts, ch 1088, §79.

147.104 Records. Repealed by 2008 Acts, ch 1088, §78.

147.105 Reserved.

ANATOMIC PATHOLOGY
SERVICES BILLING

147.106 Anatomic pathology services — billing.

1. A physician or a clinical laboratory located in this state or in another state that provides anatomic pathology services to a patient in this state shall present or cause to be presented a claim, bill, or demand for payment for such services only to the following persons:

a. The patient who is the recipient of the services.

b. The insurer or other third-party payor responsible for payment of the services.

c. The hospital that ordered the services.

d. The public health clinic or nonprofit clinic that ordered the services.

e. The referring clinical laboratory, other than the laboratory of a physician's office or group practice, that ordered the services. A laboratory of a physician's office or group practice that ordered the services may be presented a claim, bill, or demand for payment if a physician in the physician's office or group practice is performing the professional component of the anatomic pathology services.

f. A governmental agency or a specified public or private agent, agency, or organization that is responsible for payment of the services on behalf of the recipient of the services.

2. Except as provided under subsections 5 and 6, a clinical laboratory or a physician providing anatomic pathology services to patients in this state shall not, directly or indirectly, charge, bill, or otherwise solicit payment for such services unless the services were personally rendered by the clinical laboratory or the physician or under the direct supervision of the clinical laboratory or the physician in accordance with section 353 of the federal Public Health Service Act, 42 U.S.C. §263a.

3. A person to whom a claim, bill, or demand for payment for anatomic pathology services is submitted is not required to pay the claim, bill, or demand for payment if the claim, bill, or demand for payment is submitted in violation of this section.

4. This section shall not be construed to mandate the assignment of benefits for anatomic pathology services as defined in this section.

5. This section does not prohibit claims or charges presented to a referring clinical laboratory, other than a laboratory of a physician's office or group practice unless in accordance with subsection 1, paragraph "*e*", by another clinical laboratory when samples are transferred between laboratories for the provision of anatomic pathology services.

6. This section does not prohibit claims or charges for anatomic pathology services presented on behalf of a public health clinic or nonprofit clinic that ordered the services provided that the clinic is identified on the claim or charge presented.

7. A violation of this section by a physician shall subject the physician to the disciplinary provisions of section 272C.3, subsection 2.

8. As used in this section:

a. "Anatomic pathology services" includes all of the following:

(1) Histopathology or surgical pathology, meaning the gross and microscopic examination and histologic processing of organ tissue performed by a physician or under the supervision of a physician.

(2) Cytopathology, meaning the examination of cells from fluids, aspirates, washings, brushings, or smears, including the Pap test examination, performed by a physician or under the supervision of a physician.

(3) Hematology, meaning the microscopic evaluation of bone marrow aspirates and biopsies performed by a physician or under the supervision of a physician, and the examination of peripheral blood smears performed by a physician or under the supervision of a physician upon the request of an attending or treating physician or technologist that a blood smear be reviewed by a physician.

(4) Subcellular pathology and molecular pathology services performed by a physician or under the supervision of a physician.

(5) Bloodbanking services performed by a physician or under the supervision of a physician.

b. "Physician" means any person licensed to practice medicine and surgery or osteopathic medicine and surgery in this state or in another state.

2005 Acts, ch 10, §1; 2005 Acts, ch 179, §120; 2006 Acts, ch 1185, §73, 74; 2008 Acts, ch 1088, §95

DRUG AND LENS DISPENSING, SUPPLYING, AND PRESCRIBING

147.107 Drug dispensing, supplying, and prescribing — limitations.

1. A person, other than a pharmacist, physician, dentist, podiatric physician, prescribing psychologist, or veterinarian who dispenses as an incident to the practice of the practitioner's profession, shall not dispense prescription drugs or controlled substances.

2. *a.* A prescriber who dispenses prescription drugs, including but not limited to controlled substances, for human use, may delegate nonjudgmental dispensing functions to staff assistants only when verification of the accuracy and completeness of the dispensing is determined by the practitioner in the practitioner's physical presence. However, the physical presence requirement does not apply when a practitioner is utilizing an automated dispensing system. When using an automated dispensing system, the practitioner shall utilize an internal quality control assurance plan that ensures accuracy for dispensing. Verification of automated dispensing accuracy and completeness remains the responsibility of the practitioner and shall be determined in accordance with rules adopted by the board of medicine, the dental board, the board of podiatry, and the board of psychology for their respective licensees.

b. A prescriber who dispenses prescription drugs, other than drug samples, pursuant to this subsection, shall report the fact that they dispense prescription drugs with the practitioner's respective board at least biennially.

c. A prescriber who dispenses prescription drugs, other than drug samples, pursuant to this subsection, shall provide the patient with a prescription, if requested, that may be dispensed from a pharmacy of the patient's choice or offer to transmit the prescription orally, electronically, or by facsimile in accordance with section 155A.27 to a pharmacy of the patient's choice.

d. A pharmacist who dispenses prescription drugs, including but not limited to controlled substances, for human use, may delegate nonjudgmental dispensing functions only when

verification of the accuracy and completeness of the dispensing is determined by the pharmacist in the pharmacist's physical presence. The pharmacist's verification of the accuracy of the prescription drug dispensed shall not be required when verified by a certified pharmacy technician in a technician product verification program as defined in section 155A.3. The pharmacist's physical presence shall not be required when the pharmacist is remotely supervising pharmacy personnel operating in a licensed telepharmacy site or when utilizing an automated dispensing system that utilizes an internal quality control assurance plan. When utilizing a technician product verification program, or when remotely supervising pharmacy personnel operating at a licensed telepharmacy site, the pharmacist shall utilize an internal quality control assurance plan, in accordance with rules adopted by the board of pharmacy, that ensures accuracy for dispensing. Automated dispensing verification, technician product verification, and telepharmacy practice accuracy and completeness remains the responsibility of the pharmacist and shall be determined in accordance with rules adopted by the board of pharmacy.

3. A registered nurse may supply, when pharmacist services are not reasonably available or when it is in the best interests of the patient, on the direct order of the supervising physician, a quantity of properly packaged and labeled prescription drugs, controlled substances, or contraceptive devices necessary to complete a course of therapy. However, a remote clinic, staffed by a registered nurse, where pharmacy services are not reasonably available, shall secure the regular advice and consultation of a pharmacist regarding the distribution, storage, and appropriate use of such drugs, substances, and devices.

4. Notwithstanding subsection 1 and any other provision of this section to the contrary, a physician assistant may prescribe, dispense, order, administer, or procure prescription drugs, controlled substances, or medical devices necessary to complete a course of therapy pursuant to section 148C.4. Rules relating to the authority of physician assistants to prescribe drugs, controlled substances, and medical devices pursuant to this subsection shall be adopted by the board of physician assistants after consultation with the board of medicine and board of pharmacy.

5. Notwithstanding subsection 1, a family planning clinic may dispense birth control drugs and devices upon the order of a physician. Subsections 2 and 3 do not apply to a family planning clinic under this subsection.

6. Notwithstanding subsection 1, but subject to the limitations contained in subsections 2 and 3, a registered nurse who is licensed as an advanced registered nurse practitioner may prescribe substances or devices, including controlled substances or devices, if the nurse is engaged in the practice of a nursing specialty regulated under rules adopted by the board of nursing in consultation with the board of medicine and the board of pharmacy.

7. Notwithstanding section 147.86, a person, including a pharmacist, who violates this section is guilty of a simple misdemeanor.

84 Acts, ch 1006, §1; 88 Acts, ch 1232, §1; 91 Acts, ch 238, §1; 91 Acts, ch 239, §1; 92 Acts, ch 1163, §37; 92 Acts, ch 1183, §10; 94 Acts, ch 1134, §1; 95 Acts, ch 108, §5; 2002 Acts, ch 1108, §13; 2003 Acts, ch 93, §3, 14; 2003 Acts, ch 108, §39; 2004 Acts, ch 1036, §8; 2004 Acts, ch 1101, §22; 2006 Acts, ch 1094, §1; 2007 Acts, ch 10, §78; 2007 Acts, ch 218, §202; 2008 Acts, ch 1016, §1; 2008 Acts, ch 1088, §43; 2015 Acts, ch 56, §3; 2016 Acts, ch 1093, §1; 2016 Acts, ch 1112, §3; 2018 Acts, ch 1142, §1; 2020 Acts, ch 1020, §1, 12; 2021 Acts, ch 68, §1; 2023 Acts, ch 73, §5, 6

Referred to in §148G.1, 152B.1, 154.1, 155A.2, 155A.4, 155A.47
Subsection 4 amended
Subsections 5 and 6 stricken and former subsections 7 – 9 renumbered as 5 – 7

147.108 Contact lens prescribing and dispensing.

1. A person shall not dispense or adapt contact lenses without first receiving authorization to do so by a written, electronic, or facsimile prescription, except when authorized orally under subsection 2, from a person licensed under chapter 148 or 154. The board of optometry shall adopt rules relating to electronic or facsimile transmission of a prescription under this section.

2. After contact lenses have been adequately adapted and the patient released from initial follow-up care by a person licensed under chapter 148 or 154, the patient may request a copy,

at no cost, of the contact lens prescription from that licensed person. A person licensed under chapter 148 or 154 shall not withhold a contact lens prescription after the requirements of this section have been met. The prescription, at the option of the prescriber, may be given orally only to a person who is actively practicing and licensed under chapter 148, 154, or 155A. The contact lens prescription shall contain an expiration date, at the discretion of the prescriber, but not to exceed eighteen months. The contact lens prescription shall contain the necessary requirements of the ophthalmic lens, and the prescription validation requirements as defined by rules adopted pursuant to this section. The prescription may contain adapting and material guidelines and may also contain specific instructions for use by the patient. For the purpose of this section, *"ophthalmic lens"* means one which has been fabricated to fill the requirements of a particular contact lens prescription, including pharmaceutical-delivering contact lenses as defined in section 154.1, subsection 3.

3. A person who fills a contact lens prescription shall maintain a file of a valid prescription for a period of two years.

4. Notwithstanding section 147.86, a person who violates this section is guilty of a simple misdemeanor for a first violation. Subsequent violations are governed by section 147.86.

94 Acts, ch 1098, §1; 2004 Acts, ch 1036, §9; 2007 Acts, ch 10, §79; 2008 Acts, ch 1088, §96; 2010 Acts, ch 1010, §1; 2012 Acts, ch 1004, §1

147.109 Ophthalmic spectacle lens prescribing and dispensing.

1. A person shall not dispense or adapt an ophthalmic spectacle lens or lenses without first receiving authorization to do so by a written, electronic, or facsimile prescription from a person licensed under chapter 148 or 154. For the purpose of this section, *"ophthalmic spectacle lens"* means one which has been fabricated to fill the requirements of a particular spectacle lens prescription. The board of optometry shall adopt rules relating to electronic or facsimile transmission of a prescription under this section.

2. Upon completion of an eye examination, a person licensed under chapter 148 or 154 shall furnish the patient a copy of their ophthalmic spectacle lens prescription at no cost. The ophthalmic spectacle lens prescription shall contain an expiration date. The ophthalmic spectacle lens prescription shall contain the requirements of the ophthalmic spectacle lens and the prescription validation requirements as defined by rules adopted pursuant to this section. The prescription, at the option of the prescriber, may contain adapting and material guidelines and may also contain specific instructions for use by the patient.

3. Upon request of a patient, a person licensed under chapter 148 or 154 shall provide the prescription of the patient, if the prescription has not expired, at no cost to another person licensed under chapter 148 or 154. The person licensed under chapter 148 or 154 shall accept the prescription and shall not require the patient to undergo an eye examination unless, due to observation or patient history, the licensee has reason to require an examination.

4. A dispenser shall maintain a file of a valid prescription for a period of two years.

5. Notwithstanding section 147.86, a person who violates this section is guilty of a simple misdemeanor for a first violation. Subsequent violations are governed by section 147.86.

94 Acts, ch 1098, §2; 2004 Acts, ch 1036, §10; 2007 Acts, ch 10, §80; 2008 Acts, ch 1088, §97

147.110 Reserved.

WOUNDS BY CRIMINAL VIOLENCE OR MOTOR VEHICLE

147.111 Report of treatment of wounds and other injuries.

1. A person licensed under the provisions of this subtitle who administers any treatment to any person suffering a gunshot or stab wound or other serious injury, as defined in section 702.18, which appears to have been received in connection with the commission of a criminal offense, or a motor vehicle accident or crash, or to whom an application is made for treatment of any nature because of any such gunshot or stab wound or other serious injury, as defined in section 702.18, shall at once but not later than twelve hours thereafter, report that fact to the law enforcement agency within whose jurisdiction the treatment was administered or an

application for treatment was made, or if ascertainable, to the law enforcement agency in whose jurisdiction the gunshot or stab wound or other serious injury occurred, stating the name of such person, the person's residence if ascertainable, and giving a brief description of the gunshot or stab wound or other serious injury.

2. A person certified under the provisions of chapter 147A who administers any treatment to any person suffering a gunshot or stab wound or other serious injury, as defined in section 702.18, which appears to have been received in connection with the commission of a criminal offense, or a motor vehicle accident or crash, or to whom an application is made for treatment of any nature because of any such gunshot or stab wound or other serious injury, may report that fact to the law enforcement agency within whose jurisdiction the treatment was administered or application for treatment was made, or if ascertainable, to the law enforcement agency in whose jurisdiction the gunshot or stab wound or other serious injury occurred, stating the name of the person, the person's residence if ascertainable, and giving a brief description of the gunshot or stab wound or other serious injury.

3. Any provision of law or rule of evidence relating to a confidential communication is suspended for communications under this section.

[C31, 35, §2537-d1; C39, §**2537.7;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.111]

93 Acts, ch 100, §2; 94 Acts, ch 1132, §31; 96 Acts, ch 1036, §30; 98 Acts, ch 1053, §28; 99 Acts, ch 114, §8; 2010 Acts, ch 1127, §1

Referred to in §147.112, 331.653

147.112 Investigation and report by law enforcement agency.

The law enforcement agency who has received any report required by this chapter and who has any reason to believe that the person injured was involved in the commission of any crime, either as perpetrator or victim, shall at once commence an investigation into the circumstances of the gunshot or stab wound or other serious injury and make a report of the investigation to the county attorney in whose jurisdiction the gunshot or stab wound or other serious injury occurred. Law enforcement personnel shall not divulge any information received under the provisions of this section and section 147.111 to any person other than a law enforcing officer, and then only in connection with the investigation of the alleged commission of a crime.

[C31, 35, §2537-d2; C39, §**2537.8;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.112]

93 Acts, ch 100, §3; 99 Acts, ch 114, §9

Referred to in §331.653

"Serious injury" definition, see §702.18

147.113 Violations.

Any person failing to make the report required herein shall be guilty of a simple misdemeanor.

[C31, 35, §2537-d3; C39, §**2537.9;** C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §147.113]

BURN INJURIES

147.113A Report of burn injuries.

Any person licensed under the provisions of this subtitle who administers any treatment to a person suffering a burn which appears to be of a suspicious nature on the body, a burn to the upper respiratory tract, a laryngeal edema due to the inhalation of super-heated air, or a burn injury that is likely to result in death, which appears to have been received in connection with the commission of a criminal offense, or to whom an application is made for treatment of any nature because of any such burn or burn injury shall at once but not later than twelve hours after treatment was administered or application was made report the fact to law enforcement. The report shall be made to the law enforcement agency within whose jurisdiction the treatment was administered or application was made, or if ascertainable, to the law enforcement agency in whose jurisdiction the burn or burn injury occurred, stating the name of such person, the person's residence if ascertainable, and giving a brief description

of the burn or burn injury. Any provision of law or rule of evidence relative to confidential communications is suspended insofar as the provisions of this section are concerned.

2003 Acts, ch 134, §1

PELVIC EXAMINATIONS — INFORMED CONSENT

147.114 Prior informed consent relative to pelvic examinations — patient under anesthesia or unconscious — penalties.

1. A person licensed or certified to practice a profession, or a student undertaking a course of instruction or participating in a clinical training or residency program for a profession, shall not perform a pelvic examination on an anesthetized or unconscious patient unless one of the following conditions is met:

a. The patient or the patient's authorized representative provides prior written informed consent to the pelvic examination, and the pelvic examination is necessary for preventive, diagnostic, or treatment purposes.

b. The patient or the patient's authorized representative has provided prior written informed consent to a surgical procedure or diagnostic examination to be performed on the patient, and the performance of a pelvic examination is within the scope of care ordered for that surgical procedure or diagnostic examination.

c. The patient is unconscious and incapable of providing prior informed consent, and the pelvic examination is necessary for diagnostic or treatment purposes.

d. A court has ordered the performance of the pelvic examination for the purposes of collection of evidence.

2. A person who violates this section is subject to the penalty specified under section 147.86, and any professional disciplinary provisions, as applicable.

2017 Acts, ch 174, §111

147.115 through 147.134 Reserved.

MALPRACTICE

147.135 Peer review committees — nonliability — records and reports privileged and confidential.

1. A person shall not be civilly liable as a result of acts, omissions, or decisions made in connection with the person's service on a peer review committee. However, such immunity from civil liability shall not apply if an act, omission, or decision is made with malice.

2. As used in this subsection, *"peer review records"* means all complaint files, investigation files, reports, and other investigative information relating to licensee discipline or professional competence in the possession of a peer review committee or an employee of a peer review committee. As used in this subsection, *"peer review committee"* does not include licensing boards. Peer review records are privileged and confidential, are not subject to discovery, subpoena, or other means of legal compulsion for release to a person other than an affected licensee or a peer review committee, and are not admissible in evidence in a judicial or administrative proceeding other than a proceeding involving licensee discipline or a proceeding brought by a licensee who is the subject of a peer review record and whose competence is at issue. A person shall not be liable as a result of filing a report or complaint with a peer review committee or providing information to such a committee, or for disclosure of privileged matter to a peer review committee. A person present at a meeting of a peer review committee shall not be permitted to testify as to the findings, recommendations, evaluations, or opinions of the peer review committee in any judicial or administrative proceeding other than a proceeding involving licensee discipline or a proceeding brought by a licensee who is the subject of a peer review committee meeting and whose competence is at issue. Information or documents discoverable from sources other than the peer review committee do not become nondiscoverable from the other sources merely because they

are made available to or are in the possession of a peer review committee. However, such information relating to licensee discipline may be disclosed to an appropriate licensing authority in any jurisdiction in which the licensee is licensed or has applied for a license. If such information indicates a crime has been committed, the information shall be reported to the proper law enforcement agency. This subsection shall not preclude the discovery of the identification of witnesses or documents known to a peer review committee. Any final written decision and finding of fact by a licensing board in a disciplinary proceeding is a public record. Upon appeal by a licensee of a decision of a board, the entire case record shall be submitted to the reviewing court. In all cases where privileged and confidential information under this subsection becomes discoverable, admissible, or part of a court record the identity of an individual whose privilege has been involuntarily waived shall be withheld.

3. *a.* A full and confidential report concerning any final hospital disciplinary action approved by a hospital board of trustees that results in a limitation, suspension, or revocation of a physician's privilege to practice for reasons relating to the physician's professional competence or concerning any voluntary surrender or limitation of privileges for reasons relating to professional competence shall be made to the board of medicine by the hospital administrator or chief of medical staff within ten days of such action. The board of medicine shall investigate the report and take appropriate action. These reports shall be privileged and confidential as though included in and subject to the requirements for peer review committee information in subsection 2. Persons making these reports and persons participating in resulting proceedings related to these reports shall be immune from civil liability with respect to the making of the report or participation in resulting proceedings. As used in this subsection, "*physician*" means a person licensed pursuant to chapter 148.

b. Notwithstanding subsection 2, if the board of medicine conducts an investigation based on a complaint received or upon its own motion, a hospital pursuant to subpoena shall make available information and documents requested by the board, specifically including reports or descriptions of any complaints or incidents concerning an individual who is the subject of the board's investigation, even though the information and documents are also kept for, are the subject of, or are being used in peer review by the hospital. However, the deliberations, testimony, decisions, conclusions, findings, recommendations, evaluations, work product, or opinions of a peer review committee or its members and those portions of any documents or records containing or revealing information relating thereto shall not be subject to the board's request for information, subpoena, or other legal compulsion. All information and documents received by the board from a hospital under this section shall be confidential pursuant to section 272C.6, subsection 4.

[C77, 79, 81, §147.135]

86 Acts, ch 1211, §14; 90 Acts, ch 1086, §7; 2007 Acts, ch 10, §82; 2009 Acts, ch 133, §51

Referred to in §139A.22, 147.1, 147A.24

147.136 Scope of recovery.

1. Except as otherwise provided in subsection 2, in an action for damages for personal injury against a physician and surgeon, osteopathic physician and surgeon, dentist, podiatric physician, optometrist, pharmacist, chiropractor, physician assistant, or nurse licensed to practice that profession in this state, or against a hospital licensed for operation in this state, based on the alleged negligence of the practitioner in the practice of the profession or occupation, or upon the alleged negligence of the hospital in patient care, in which liability is admitted or established, the damages awarded shall not include actual economic losses incurred or to be incurred in the future by the claimant by reason of the personal injury, including but not limited to the cost of reasonable and necessary medical care, rehabilitation services, and custodial care, and the loss of services and loss of earned income, to the extent that those losses are replaced or are indemnified by insurance, or by governmental, employment, or service benefit programs or from any other source.

2. This section shall not bar recovery of economic losses replaced or indemnified by any of the following:

a. Benefits received under the medical assistance program under chapter 249A.

b. The assets of the claimant or of the members of the claimant's immediate family.

[C77, 79, 81, §147.136]

95 Acts, ch 108, §6; 2008 Acts, ch 1088, §141; 2011 Acts, ch 129, §85, 156; 2020 Acts, ch 1020, §2, 12

Referred to in §668.14, 668.14A

147.136A Noneconomic damage awards against health care providers.

1. For purposes of this section:

a. "Health care provider" means a hospital as defined in section 135B.1, a health care facility as defined in section 135C.1, a health facility as defined in section 135P.1, a physician or an osteopathic physician licensed under chapter 148, a physician assistant licensed under chapter 148C, a podiatrist licensed under chapter 149, a chiropractor licensed under chapter 151, a licensed practical nurse, a registered nurse, or an advanced registered nurse practitioner licensed under chapter 152 or 152E, a dentist licensed under chapter 153, an optometrist licensed under chapter 154, a pharmacist licensed under chapter 155A, a professional corporation under chapter 496C that is owned by persons licensed to practice a profession listed in this paragraph, or any other person or entity who is licensed, certified, or otherwise authorized or permitted by the law of this state to administer health care in the ordinary course of business or in the practice of a profession.

b. (1) *"Noneconomic damages"* means damages arising from pain, suffering, inconvenience, physical impairment, mental anguish, emotional pain and suffering, loss of chance, loss of consortium, or any other nonpecuniary damages.

(2) *"Noneconomic damages"* does not include the loss of dependent care, including the loss of child care, due to the death of or severe injury to a spouse or parent who is the primary caregiver of a child under the age of eighteen or a disabled adult. Such damages shall be considered economic damages.

c. "Occurrence" means the event, incident, or happening, and the acts or omissions incident thereto, which proximately caused injuries or damages for which recovery is claimed by the patient or the patient's representative.

2. Subject to subsection 4, the total amount recoverable in any civil action for noneconomic damages for personal injury or death, whether in tort, contract, or otherwise, against a health care provider for any occurrence resulting in injury or death of a patient regardless of the number of plaintiffs, derivative claims, theories of liability, or defendants in the civil action, shall not exceed two hundred fifty thousand dollars unless the jury determines that there is a substantial or permanent loss or impairment of a bodily function, substantial disfigurement, loss of pregnancy, or death, which warrants a finding that imposition of such a limitation would deprive the plaintiff of just compensation for the injuries sustained, in which case the amount recoverable shall not exceed one million dollars, or two million dollars if the civil action includes a hospital as defined in section 135B.1.

3. The limitation on damages contained in this section shall not apply as to a defendant if that defendant's actions constituted actual malice.

4. The limitations on damages contained in subsection 2 shall increase by two and one-tenth percent on January 1, 2028, and each January 1 thereafter. In any civil action described in this section, such limitations on damages shall be the amount effective at the time of the occurrence. The commissioner of insurance shall publish the amount of the limitations on damages contained in this section on the insurance division's internet site and shall update the published amount annually.

2017 Acts, ch 107, §2, 5; 2018 Acts, ch 1041, §46; 2023 Acts, ch 4, §1 – 3, 5, 6; 2023 Acts, ch 73, §7

Referred to in §147.139, 147.140

Section applies to causes of action that accrue on or after July 1, 2017; 2017 Acts, ch 107, §5

2023 amendments to subsection 1, paragraph b, subsection 2, and new subsection 4, by 2023 Acts, ch 4, apply to causes of action accrued on or after February 16, 2023; 2023 Acts, ch 4, §6

Subsection 1, paragraphs a and b amended

Subsection 2 amended

NEW subsection 4

147.137 Consent in writing.

A consent in writing to any medical or surgical procedure or course of procedures in patient care which meets the requirements of this section shall create a presumption that informed consent was given. A consent in writing meets the requirements of this section if it:

1. Sets forth in general terms the nature and purpose of the procedure or procedures, together with the known risks, if any, of death, brain damage, quadriplegia, paraplegia, the loss or loss of function of any organ or limb, or disfiguring scars associated with such procedure or procedures, with the probability of each such risk if reasonably determinable.

2. Acknowledges that the disclosure of that information has been made and that all questions asked about the procedure or procedures have been answered in a satisfactory manner.

3. Is signed by the patient for whom the procedure is to be performed, or if the patient for any reason lacks legal capacity to consent, is signed by a person who has legal authority to consent on behalf of that patient in those circumstances.

[C77, 79, 81, §147.137]

147.138 Contingent fee of attorney reviewed by court.

In any action for personal injury or wrongful death against any physician and surgeon, osteopathic physician and surgeon, dentist, podiatric physician, optometrist, pharmacist, chiropractor, physician assistant, or nurse licensed under this chapter or against any hospital licensed under chapter 135B, based upon the alleged negligence of the licensee in the practice of that profession or occupation, or upon the alleged negligence of the hospital in patient care, the court shall determine the reasonableness of any contingent fee arrangement between the plaintiff and the plaintiff's attorney.

[C77, 79, 81, §147.138]

95 Acts, ch 108, §7; 2008 Acts, ch 1088, §141; 2020 Acts, ch 1020, §3, 12

147.139 Expert witness standards.

If the standard of care given by a health care provider, as defined in section 147.136A, is at issue, the court shall only allow a person the plaintiff designates as an expert witness to qualify as an expert witness and to testify on the issue of the appropriate standard of care or breach of the standard of care if all of the following are established by the evidence:

1. The person is licensed to practice in the same or a substantially similar field as the defendant, is in good standing in each state of licensure, and in the five years preceding the act or omission alleged to be negligent, has not had a license in any state revoked or suspended.

2. In the five years preceding the act or omission alleged to be negligent, the person actively practiced in the same or a substantially similar field as the defendant or was a qualified instructor at an accredited university in the same field as the defendant.

3. If the defendant is board-certified in a specialty, the person is certified in the same or a substantially similar specialty by a board recognized by the American board of medical specialties, the American osteopathic association, or the council on podiatric medical education.

4. *a.* If the defendant is a licensed physician or osteopathic physician under chapter 148, the person is a physician or osteopathic physician licensed in this state or another state.

b. If the defendant is a licensed podiatric physician under chapter 149, the person is a physician, osteopathic physician, or a podiatric physician licensed in this state or another state.

86 Acts, ch 1211, §16; 2008 Acts, ch 1088, §98; 2017 Acts, ch 107, §3, 5; 2018 Acts, ch 1172, §46

Referred to in §147.140

2017 amendment applies to causes of action that accrue on or after July 1, 2017; 2017 Acts, ch 107, §5

147.140 Expert witness — certificate of merit affidavit.

1. *a.* In any action for personal injury or wrongful death against a health care provider based upon the alleged negligence in the practice of that profession or occupation or in patient care, which includes a cause of action for which expert testimony is necessary to establish a prima facie case, the plaintiff shall, prior to the commencement of discovery in the case and

within sixty days of the defendant's answer, serve upon the defendant a certificate of merit affidavit signed by an expert witness with respect to the issue of standard of care and an alleged breach of the standard of care. The expert witness must meet the qualifying standards of section 147.139.

b. A certificate of merit affidavit must be signed by the expert witness and certify the purpose for calling the expert witness by providing under the oath of the expert witness all of the following:

(1) The expert witness's statement of familiarity with the applicable standard of care.

(2) The expert witness's statement that the standard of care was breached by the health care provider named in the petition.

c. A plaintiff shall serve a separate certificate of merit affidavit on each defendant named in the petition.

2. An expert witness's certificate of merit affidavit does not preclude additional discovery and supplementation of the expert witness's opinions in accordance with the rules of civil procedure.

3. The parties shall comply with the requirements of section 668.11 and all other applicable law governing certification and disclosure of expert witnesses.

4. The parties by agreement or the court for good cause shown and in response to a motion filed prior to the expiration of the time limits specified in subsection 1 may provide for extensions of the time limits. Good cause shall include but not be limited to the inability to timely obtain the plaintiff's medical records from health care providers when requested prior to filing the petition.

5. If the plaintiff is acting pro se, the plaintiff shall have the expert witness sign the certificate of merit affidavit or answers to interrogatories referred to in this section and the plaintiff shall be bound by those provisions as if represented by an attorney.

6. Failure to substantially comply with subsection 1 shall result, upon motion, in dismissal with prejudice of each cause of action as to which expert witness testimony is necessary to establish a prima facie case.

7. For purposes of this section, *"health care provider"* means the same as defined in section 147.136A.

2017 Acts, ch 107, §4, 5
Section applies to causes of action that accrue on or after July 1, 2017; 2017 Acts, ch 107, §5

147.141 through 147.150 Reserved.

SPEECH PATHOLOGISTS AND AUDIOLOGISTS

147.151 and 147.152 Repealed by 2008 Acts, ch 1088, §79. See §154F.1, 154F.2.

147.153 through 147.156 Repealed by 2008 Acts, ch 1088, §78. See §154F.3 through 154F.6.

147.157 through 147.160 Reserved.

MENTAL HEALTH PROFESSIONALS EMPLOYMENT AGREEMENTS

147.161 Mental health professionals — limitations on competition prohibited.

1. As used in this section:

a. *"Employer"* means a person, as defined in chapter 4, who in this state employs for wages an employee.

b. *"Mental health professional"* means the same as defined in section 228.1, and includes all of the following:

(1) Individuals who are completing their supervisory requirement under a temporary license.

(2) Licensed master social workers with a current and active supervision plan on file with the board of social work.

2. An employer shall not enter into an agreement with a licensed mental health professional that limits the location at which the licensee may practice, prohibits the licensee from contacting for professional services a person previously treated by the licensee, or imposes a time restriction on the practice of the licensee.

3. A provision of an agreement entered into between an employer and a licensed mental health professional prior to, on, or after June 1, 2023, that is contrary to this section shall be void and unenforceable.

2023 Acts, ch 120, §1, 2
NEW section

OPIOID PRESCRIPTION RULES

147.162 Rules and directives relating to opioids.

1. Any board created under this chapter that licenses a prescribing practitioner shall adopt rules under chapter 17A establishing penalties for prescribing practitioners that prescribe opioids in dosage amounts exceeding what would be prescribed by a reasonably prudent prescribing practitioner engaged in the same practice.

2. For the purposes of this section, *"prescribing practitioner"* means a licensed health care professional with the authority to prescribe prescription drugs including opioids.

2018 Acts, ch 1138, §21

AMBULATORY SURGICAL CENTERS

147.163 Provision of information — referral to ambulatory surgical center — licensee discipline.

1. A health care provider who determines that a patient is a candidate for outpatient surgery based on the patient's medical status and surgical service needs, and refers the patient to an ambulatory surgical center as an option for the surgery, shall provide the patient with a written document listing the factors the patient should consider to make a fully informed decision about the patient's recommended course of care. The considerations shall include all of the following:

a. The differences in ownership; licensure, certification, or accreditation; and payment alternatives between the ambulatory surgical center and a hospital.

b. The types of medical personnel generally involved in the patient's surgical service and the capacity of the ambulatory surgical center and a hospital to comply with the personnel requirements.

c. The capacity of the ambulatory surgical center and a hospital to respond to medical complications and emergencies that may arise from the surgical service.

d. The proximity of the ambulatory surgical center to a hospital and the protocols in place for transfer of a patient from the ambulatory surgical center to the hospital for emergency care.

e. The type of anesthesia generally used for the patient's surgical service and the capacity of the ambulatory surgical center and a hospital to comply with requirements relative to the use of anesthesia.

2. For the purposes of this section:

a. "Ambulatory surgical center" means a distinct facility that operates exclusively for the purpose of providing surgical services to patients not requiring hospitalization and in which the expected duration of services does not exceed twenty-four hours following an admission. *"Ambulatory surgical center"* includes a facility that otherwise meets the definition of ambulatory surgical center whether or not licensed, certified, or accredited as an ambulatory surgical center and which may or may not operate on a partially cash-only or completely cash-only basis. *"Ambulatory surgical center"* does not include individual

or group practice offices of private physicians or podiatrists that do not contain a distinct area used for outpatient surgical treatment on a regular basis, or that only provide surgery routinely provided in a physician's or podiatrist's office using local anesthesia or conscious sedation; individual or group practice offices of private dentists; or a portion of a licensed hospital designated for outpatient surgical treatment.

b. "Health care provider" means a person who is licensed, certified, or otherwise authorized or permitted by the laws of this state to administer health care in the ordinary course of business or in the practice of a profession.

c. "Hospital" means the same as defined in section 135B.1.

3. A health care provider who violates this section is subject to licensee discipline by the appropriate licensing or disciplinary authority.

2022 Acts, ch 1153, §48

GENDER TRANSITION PROCEDURES AND MINORS

147.164 Gender transition procedure-related activities — minors — prohibitions.

1. As used in this section:

a. "Gender" means the psychological, behavioral, social, and cultural aspects of being male or female.

b. "Health care professional" means a person who is licensed, certified, or otherwise authorized or permitted by the law of this state to administer health care in the ordinary course of business or in the practice of a profession.

c. "Minor" means an unemancipated person under eighteen years of age.

d. "Sex" means the biological indication of male and female, including sex chromosomes, naturally occurring sex hormones, gonads, and nonambiguous internal and external genitalia present at birth without regard to an individual's psychological, chosen, or subjective experience of gender.

2. *a.* Except as otherwise provided in paragraph *"c"*, a health care professional shall not knowingly engage in or cause any of the following practices to be performed on a minor if the practice is performed for the purpose of attempting to alter the appearance of, or affirm the minor's perception of, the minor's gender or sex, if that appearance or perception is inconsistent with the minor's sex:

(1) Prescribing or administering gonadotropin-releasing hormone analogues or other synthetic drugs used to stop luteinizing hormone and follicle-stimulating hormone secretion, synthetic antiandrogen drugs used to block the androgen receptor, or any drug to suppress or delay normal puberty.

(2) Prescribing or administering testosterone, estrogen, or progesterone to a minor in an amount greater than would normally be produced endogenously in a healthy individual of that individual's age and sex.

(3) Performing surgeries that sterilize, including castration, vasectomy, hysterectomy, oophorectomy, orchiectomy, and penectomy.

(4) Performing surgeries that artificially construct tissue with the appearance of genitalia that differs from the individual's sex, including metoidioplasty, phalloplasty, and vaginoplasty.

(5) Removing any healthy or nondiseased body part or tissue.

b. A health care professional shall not knowingly engage in conduct that aids or abets the practices described in paragraph *"a"*. This paragraph shall not be construed to impose liability on any speech protected by federal or state law.

c. Paragraphs *"a"* and *"b"* do not apply to any of the following:

(1) Services provided to a minor born with a medically verifiable disorder of sex development, including a minor with external biological sex characteristics that are irresolvably ambiguous, such as a minor born with forty-six XX chromosomes with virilization, forty-six XY chromosomes with undervirilization, or having both ovarian and testicular tissue.

(2) Services provided to a minor who has otherwise been diagnosed with a disorder of sexual development by a physician, when the physician has determined through genetic or

biochemical testing that the minor does not have a normal sex chromosome structure, sex steroid hormone production, or sex steroid hormone action for a biological male or biological female.

(3) The treatment of any infection, injury, disease, or disorder that has been caused or exacerbated by the performance of gender transition procedures, whether or not the procedures were performed in accordance with state and federal law.

(4) Any procedure undertaken because a minor suffers from a physical disorder, physical injury, or physical illness that is certified by a physician and that would place the minor in imminent danger of death or impairment of a major bodily function unless surgery is performed.

d. A violation of the prohibitions under paragraph "*a*" or "*b*" by a health care professional is considered unprofessional conduct and subject to licensee discipline by the appropriate licensing board or entity.

3. *a.* A person may assert an actual or threatened violation of this section as a claim or defense in a judicial or administrative proceeding and may obtain compensatory damages, injunctive relief, declaratory relief, or any other appropriate relief.

b. An action brought for a violation of this section shall be brought within two years after the cause of action accrues. However, a minor may bring an action during the minor's minority through a parent or legal guardian, and may bring an action in the minor's own name upon reaching majority and for twenty years after reaching majority.

c. Notwithstanding any other law to the contrary, an action under this section may be commenced, and relief may be granted, in a judicial proceeding without regard to whether the person commencing the action has sought or exhausted available administrative remedies. In an action or proceeding to enforce this section, a prevailing party may recover reasonable attorney fees.

d. The attorney general may bring an action to enforce this section.

e. Nothing in this section shall be construed to deny, impair, or otherwise affect any right or authority of the attorney general, the state, or any agency, officer, or employee of the state to institute or intervene in any proceeding.

f. Compliance with, or enforcement or implementation of, this section shall not constitute a violation of any provision of chapter 216.

2023 Acts, ch 9, §1 – 3; 2023 Acts, ch 119, §39, 47, 49
Referred to in §601.1
Section applies one hundred eighty days after March 22, 2023; 2023 Acts, ch 9, §3
NEW section

CHAPTER 272C

REGULATION OF LICENSED PROFESSIONS AND OCCUPATIONS

Referred to in §10A.902, 105.22, 105.23, 147.55, 147A.7, 148.6, 148.14, 148C.13, 148F.3, 148G.5, 148G.8, 148I.2, 151.9, 152.4, 152.11, 153.33, 153.34, 154C.4, 154D.3, 154E.3, 155.9, 155A.6A, 155A.6B, 203.16, 203C.24, 235B.16, 542.3, 542.17, 543D.5, 543D.12, 543D.17

Identifying and reporting of dependent adult abuse to be included in continuing education; see §235B.16

272C.1 Definitions.

1. *"Continuing education"* means that education which is obtained by a professional or occupational licensee in order to maintain, improve, or expand skills and knowledge obtained prior to initial licensure or to develop new and relevant skills and knowledge. This education may be obtained through formal or informal education practices, self-study, research, and participation in professional, technical, and occupational societies, and by other similar means as authorized by the board.

2. *"Disciplinary proceeding"* means any proceeding under the authority of a licensing board pursuant to which licensee discipline may be imposed.

3. *"Inactive licensee re-entry"* means that process a former or inactive professional or occupational licensee pursues to again be capable of actively and competently practicing as a professional or occupational licensee.

4. *"Licensee discipline"* means any sanction a licensing board may impose upon its licensees for conduct which threatens or denies citizens of this state a high standard of professional or occupational care.

5. The term *"licensing"* and its derivations include the terms *"registration"* and *"certification"* and their derivations.

6. *"Licensing board"* or *"board"* includes the following boards:

a. The state board of engineering and land surveying examiners, created pursuant to chapter 542B.

b. The board of examiners of shorthand reporters created pursuant to article 3 of chapter 602.

c. The Iowa accountancy examining board, created pursuant to chapter 542.

d. The Iowa real estate commission, created pursuant to chapter 543B.

e. The board of architectural examiners, created pursuant to chapter 544A.

f. The Iowa board of landscape architectural examiners, created pursuant to chapter 544B.

g. The board of barbering and cosmetology arts and sciences, created pursuant to chapter 147.

h. The board of chiropractic, created pursuant to chapter 147.

i. The dental board, created pursuant to chapter 147.

j. The board of mortuary science, created pursuant to chapter 147.

k. The board of medicine, created pursuant to chapter 147.

l. The board of physician assistants, created pursuant to chapter 148C.

m. The board of nursing, created pursuant to chapter 147.

n. The board of nursing home administrators, created pursuant to chapter 155.

o. The board of optometry, created pursuant to chapter 147.

p. The board of pharmacy, created pursuant to chapter 147.

q. The board of physical and occupational therapy, created pursuant to chapter 147.

r. The board of podiatry, created pursuant to chapter 147.

s. The board of psychology, created pursuant to chapter 147.

t. The board of speech pathology and audiology, created pursuant to chapter 147.

u. The board of hearing aid specialists, created pursuant to chapter 154A.

v. The board of veterinary medicine, created pursuant to chapter 169.

w. The director of the department of natural resources in certifying water treatment operators as provided in sections 455B.211 through 455B.224.

x. Any professional or occupational licensing board created after January 1, 1978.

y. The board of respiratory care and polysomnography in licensing respiratory care practitioners pursuant to chapter 152B, respiratory care and polysomnography practitioners pursuant to chapter 152B, and polysomnographic technologists pursuant to chapter 148G.

z. The board of athletic training in licensing athletic trainers pursuant to chapter 152D.

aa. The board of massage therapy in licensing massage therapists pursuant to chapter 152C.

ab. The board of sign language interpreters and transliterators, created pursuant to chapter 154E.

ac. The director of health and human services in certifying emergency medical care providers and emergency medical care services pursuant to chapter 147A.

ad. The plumbing and mechanical systems board, created pursuant to chapter 105.

ae. The department of inspections, appeals, and licensing, in licensing fire protection system installers and maintenance workers pursuant to chapter 100D.

af. The director of the department of inspections, appeals, and licensing in registering and supervising appraisal management companies pursuant to chapter 543E.

7. *"Malpractice"* means any error or omission, unreasonable lack of skill, or failure to maintain a reasonable standard of care by a licensee in the course of practice of the licensee's occupation or profession, pursuant to this chapter.

8. *"Offense directly relates"* refers to either of the following:

a. The actions taken in furtherance of an offense are actions customarily performed within the scope of practice of a licensed profession.

b. The circumstances under which an offense was committed are circumstances customary to a licensed profession.

9. *"Peer review"* means evaluation of professional services rendered by a professional practitioner.

10. *"Peer review committee"* means one or more persons acting in a peer review capacity pursuant to this chapter.

[C79, 81, §258A.1]

83 Acts, ch 186, §10063, 10201; 84 Acts, ch 1067, §26; 87 Acts, ch 165, §3; 88 Acts, ch 1134, §61; 88 Acts, ch 1225, §25; 89 Acts, ch 83, §36; 90 Acts, ch 1193, §8; 92 Acts, ch 1205, §23

C93, §272C.1

94 Acts, ch 1132, §32; 96 Acts, ch 1036, §40; 98 Acts, ch 1053, §41, 42; 2001 Acts, ch 16, §1, 37; 2001 Acts, ch 55, §25, 38; 2004 Acts, ch 1110, §1; 2004 Acts, ch 1175, §430, 433; 2005 Acts, ch 3, §57; 2006 Acts, ch 1184, §119; 2007 Acts, ch 10, §171; 2007 Acts, ch 218, §205; 2007 Acts, ch 198, §31; 2008 Acts, ch 1089, §10, 12; 2008 Acts, ch 1094, §14, 18; 2009 Acts, ch 151, §31; 2010 Acts, ch 1037, §15; 2015 Acts, ch 57, §17; 2015 Acts, ch 70, §16; 2016 Acts, ch 1124, §21, 32; 2020 Acts, ch 1103, §23, 31; 2023 Acts, ch 19, §1028, 1652; 2023 Acts, ch 99, §46, 47

Referred to in §232.69, 235B.16, 622.31

Subsection 6, paragraph g amended

Subsection 6, paragraph i stricken and paragraphs j – ac redesignated as i – ab

Subsection 6, former paragraph ad amended and redesignated as ac

Subsection 6, former paragraph ae redesignated as ad

Subsection 6, former paragraphs af and ag amended and redesignated as ae and af

272C.2 Continuing education required.

1. Each licensing board shall require and issue rules for continuing education requirements as a condition to license renewal.

2. The rules shall create continuing education requirements at a minimum level prescribed by each licensing board. These boards may also establish continuing education programs to assist a licensee in meeting such continuing education requirements. Such rules shall also:

a. Give due attention to the effect of continuing education requirements on interstate and international practice.

b. Place the responsibility for arrangement of financing of continuing education on the licensee, while allowing the board to receive any other available funds or resources that aid in supporting a continuing education program.

c. Attempt to express continuing education requirements in terms of uniform and widely recognized measurement units.

d. Establish guidelines, including guidelines in regard to the monitoring of licensee participation, for the approval of continuing education programs that qualify under the continuing education requirements prescribed.

e. Not be implemented for the purpose of limiting the size of the profession or occupation.

f. Define the status of active and inactive licensure and establish appropriate guidelines for inactive licensee reentry.

g. Be promulgated solely for the purpose of assuring a continued maintenance of skills and knowledge by a professional or occupational licensee directly related and commensurate with the current level of competency of the licensee's profession or occupation.

3. The state board of engineering and land surveyors, the board of architectural examiners, the board of landscape architectural examiners, and the economic development authority shall cooperate with each other and with persons who typically offer continuing education courses for design professionals to make available energy efficiency related continuing education courses, and to encourage interdisciplinary cooperation and education concerning available energy efficiency strategies for employment in the state's construction industry.

4. A person licensed to practice an occupation or profession in this state shall be deemed to have complied with the continuing education requirements of this state during periods that the person serves honorably on active duty in the military services, or for periods that the person is a resident of another state or district having a continuing education requirement for the occupation or profession and meets all requirements of that state or district for practice therein, or for periods that the person is a government employee working in the person's licensed specialty and assigned to duty outside of the United States, or for other periods of active practice and absence from the state approved by the appropriate licensing board.

5. A person licensed to sell real estate in this state shall be deemed to have complied with the continuing education requirements of this state during periods that the person serves honorably on active duty in the military services, or for periods that the person is a resident of another state or district having a continuing education requirement for the occupation or profession and meets all requirements of that state or district for practice therein, if the state or district accords the same privilege to Iowa residents, or for periods that the person is a government employee working in the person's licensed specialty and assigned to duty outside of the United States, or for other periods of active practice and absence from the state approved by the appropriate licensing board.

[C79, 81, §258A.2]
89 Acts, ch 292, §5; 90 Acts, ch 1252, §16
C93, §272C.2
2007 Acts, ch 10, §172; 2009 Acts, ch 108, §13, 41; 2011 Acts, ch 118, §50, 89
Referred to in §105.20, 153.36, 155A.6A, 155A.6B, 543D.16

272C.2A Continuing education minimum requirements — cosmetology arts and sciences.

The board of cosmetology arts and sciences created pursuant to chapter 147 shall require as a condition of license renewal a minimum of six hours of continuing education in the two

years immediately prior to a licensee's license renewal. The board of cosmetology arts and sciences may notify cosmetology arts and sciences licensees on a quarterly basis regarding continuing education opportunities.

88 Acts, ch 1274, §40
C89, §258A.2A
92 Acts, ch 1205, §24
C93, §272C.2A
2007 Acts, ch 10, §173; 2015 Acts, ch 63, §2

272C.2B Continuing education minimum requirements — mortuary science.

1. The board of mortuary science, created pursuant to chapter 147, shall require, as a condition of license renewal, a minimum number of hours of continuing education in the two years immediately prior to a licensee's license renewal as prescribed by rule.

2. A person licensed to practice mortuary science in this state shall be deemed to have complied with the continuing education requirements of this state during periods that the person serves honorably on active duty in the military services, or for periods that the person is a government employee working in the person's licensed specialty and assigned to duty outside of the United States, or for other periods of active practice and absence from the state approved by the board of mortuary science.

2010 Acts, ch 1067, §1

272C.2C Continuing education minimum requirements — medicine and surgery and osteopathic medicine and surgery, nursing, dentistry, podiatry, and physician assistants.

1. The board of medicine, board of dentistry, board of physician assistants, board of podiatry, and board of nursing shall establish rules requiring a person licensed pursuant to section 148.3, 148C.3, 149.3, or 152.6 or chapter 153 who has prescribed opioids to a patient during the previous licensure cycle to receive continuing education credits regarding the United States centers for disease control and prevention guideline for prescribing opioids for chronic pain, including recommendations on limitations on dosages and the length of prescriptions, risk factors for abuse, and nonopioid and nonpharmacologic therapy options, as a condition of license renewal. Each licensing board shall have the authority to determine how often a licensee must receive continuing education credits.

2. The rules established pursuant to this section shall include the option for a licensee to attest as part of the license renewal process that the licensee is not subject to the requirement to receive continuing education credits pursuant to this section, due to the fact that the licensee did not prescribe opioids to a patient during the previous licensure cycle.

2018 Acts, ch 1138, §22

272C.3 Authority of licensing boards.

1. Notwithstanding any other provision of this chapter, each licensing board shall have the powers to:

a. Administer and enforce the laws and administrative rules provided for in this chapter and any other statute to which the licensing board is subject.

b. Adopt and enforce administrative rules which provide for the partial reexamination of the professional licensing examinations given by each licensing board.

c. Review or investigate, or both, upon written complaint or upon its own motion pursuant to other evidence received by the board, alleged acts or omissions which the board reasonably believes constitute cause under applicable law or administrative rule for licensee discipline.

d. Determine in any case whether an investigation, or further investigation, or a disciplinary proceeding is warranted. Notwithstanding the provisions of chapter 17A, a determination by a licensing board that an investigation is not warranted or that an investigation should be closed without initiating a disciplinary proceeding is not subject to judicial review pursuant to section 17A.19.

e. Initiate and prosecute disciplinary proceedings.

f. Impose licensee discipline.

g. Petition the district court for enforcement of its authority with respect to licensees

or with respect to other persons violating the laws which the board is charged with administering.

h. Register or establish and register peer review committees.

i. Refer to a registered peer review committee for investigation, review, and report to the board, any complaint or other evidence of an act or omission which the board reasonably believes to constitute cause for licensee discipline. However, the referral of any matter shall not relieve the board of any of its duties and shall not divest the board of any authority or jurisdiction.

j. Determine and administer the renewal of licenses for periods not exceeding three years.

k. Establish a licensee review committee for the purpose of evaluating and monitoring licensees who are impaired as a result of substance use disorder, dependency, or addiction, or by any mental or physical disorder or disability, and who self-report the impairment to the committee, or who are referred by the board to the committee. Members of the committee shall receive actual expenses for the performance of their duties and shall be eligible to receive per diem compensation pursuant to section 7E.6. The board shall adopt rules for the establishment and administration of the committee, including but not limited to establishment of the criteria for eligibility for referral to the committee and the grounds for disciplinary action for noncompliance with committee decisions. Information in the possession of the board or the licensee review committee, under this paragraph, shall be subject to the confidentiality requirements of section 272C.6. Referral of a licensee by the board to a licensee review committee shall not relieve the board of any duties of the board and shall not divest the board of any authority or jurisdiction otherwise provided. A licensee who violates section 272C.10 or the rules of the board while under review by the licensee review committee shall be referred to the board for appropriate action.

2. Each licensing board may impose one or more of the following as licensee discipline:

a. Revoke a license, or suspend a license either until further order of the board or for a specified period, upon any of the grounds specified in section 100D.5, 105.22, 147.55, 148.6, 148B.7, 152.10, 153.34, 154A.24, 169.13, 455B.219, 542.10, 542B.21, 543B.29, 544A.13, 544B.15, or 602.3203 or chapter 151 or 155, as applicable, or upon any other grounds specifically provided for in this chapter for revocation of the license of a licensee subject to the jurisdiction of that board, or upon failure of the licensee to comply with a decision of the board imposing licensee discipline.

b. Revoke, or suspend either until further order of the board or for a specified period, the privilege of a licensee to engage in one or more specified procedures, methods, or acts incident to the practice of the profession, if pursuant to hearing or stipulated or agreed settlement the board finds that because of a lack of education or experience, or because of negligence, or careless acts or omissions, or because of one or more intentional acts or omissions, the licensee has demonstrated a lack of qualifications which are necessary to assure the residents of this state a high standard of professional and occupational care.

c. Impose a period of probation under specified conditions, whether or not in conjunction with other sanctions.

d. Require additional professional education or training, or reexamination, or any combination, as a condition precedent to the reinstatement of a license or of any privilege incident thereto, or as a condition precedent to the termination of any suspension.

e. Impose civil penalties by rule, if the rule specifies which offenses or acts are subject to civil penalties. The amount of civil penalty shall be in the discretion of the board, but shall not exceed one thousand dollars. Failure to comply with the imposition of a civil penalty may be grounds for further license discipline.

f. Issue a citation and warning respecting licensee behavior which is subject to the imposition of other sanctions by the board.

3. The powers conferred by this section upon a licensing board shall be in addition to powers specified elsewhere in the Code. The powers of any other person specified elsewhere in the Code shall not limit the powers of a licensing board conferred by this section, nor shall the powers of such other person be deemed limited by the provisions of this section.

4. *a.* Nothing contained in this section shall be construed to prohibit informal stipulation and settlement by a board and a licensee of any matter involving licensee discipline. However,

licensee discipline shall not be agreed to or imposed except pursuant to a written decision which specifies the sanction and which is entered by the board and filed.

b. All health care boards shall file written decisions which specify the sanction entered by the board with the department of inspections, appeals, and licensing which shall be available to the public upon request. All non-health care boards shall have on file the written and specified decisions and sanctions entered by the board and shall be available to the public upon request.

[C79, 81, §258A.3]

83 Acts, ch 186, §10064, 10201; 84 Acts, ch 1056, §1; 84 Acts, ch 1067, §27; 86 Acts, ch 1245, §1880; 90 Acts, ch 1086, §16

C93, §272C.3

95 Acts, ch 72, §1; 2000 Acts, ch 1008, §10; 2001 Acts, ch 16, §2, 37; 2001 Acts, ch 55, §26, 38; 2002 Acts, ch 1108, §26; 2002 Acts, ch 1119, §149; 2003 Acts, ch 78, §6; 2004 Acts, ch 1110, §2; 2004 Acts, ch 1176, §13; 2007 Acts, ch 198, §32; 2008 Acts, ch 1089, §10, 12; 2008 Acts, ch 1094, §15, 18; 2009 Acts, ch 41, §263; 2023 Acts, ch 19, §1029, 1653

Referred to in §147.106, 148.6, 153.34, 155A.18, 155A.39, 169.20, 272C.4, 272C.6, 543B.48, 543D.17
Civil penalty for real estate brokers and salespersons, see §543B.48
Subsection 1, paragraph k amended
Subsection 4, paragraph b amended

272C.4 Duties of board.

Each licensing board shall have the following duties in addition to other duties specified by this chapter or elsewhere in the Code:

1. Establish procedures by which complaints which relate to licensure or to licensee discipline shall be received and reviewed by the board.

2. Establish procedures by which disputes between licensees and clients which result in judgments or settlements in or of malpractice claims or actions shall be investigated by the board.

3. Establish procedures by which any recommendation taken by a peer review committee shall be reported to and reviewed by the board if a peer review committee is established.

4. Establish procedures for registration with the board of peer review committees if a peer review committee is established.

5. Define by rule those recommendations of peer review committees which shall constitute disciplinary recommendations which must be reported to the board if a peer review committee is established.

6. Define by rule acts or omissions that are grounds for revocation or suspension of a license under section 100D.5, 105.22, 147.55, 148.6, 148B.7, 152.10, 153.34, 154A.24, 169.13, 455B.219, 542.10, 542B.21, 543B.29, 544A.13, 544B.15, or 602.3203 or chapter 148I, 151, or 155, as applicable, and to define by rule acts or omissions that constitute negligence, careless acts, or omissions within the meaning of section 272C.3, subsection 2, paragraph *"b"*, which licensees are required to report to the board pursuant to section 272C.9, subsection 2.

7. Establish the procedures by which licensees shall report those acts or omissions specified by the board pursuant to subsection 6.

8. Give written notice to another licensing board or to a hospital licensing agency if evidence received by the board either alleges or constitutes reasonable cause to believe the existence of an act or omission which is subject to discipline by that other board or agency.

9. Require each health care licensing board to file with the department of inspections, appeals, and licensing a copy of each decision of the board imposing licensee discipline. Each non-health care board shall have on file a copy of each decision of the board imposing licensee discipline which copy shall be properly dated and shall be in simple language and in the most concise form consistent with clearness and comprehensiveness of subject matter.

10. Adopt rules under chapter 17A to prohibit the suspension or revocation of a license issued by the board to a person who is in default or is delinquent on repayment or a service obligation under federal or state postsecondary educational loans or public or private services-conditional postsecondary tuition assistance solely on the basis of such default or delinquency.

[C79, 81, §258A.4]

83 Acts, ch 186, §10065, 10201; 84 Acts, ch 1067, §28; 90 Acts, ch 1086, §17
C93, §272C.4
97 Acts, ch 203, §16; 98 Acts, ch 1119, §8; 2000 Acts, ch 1008, §11; 2001 Acts, ch 16, §3, 37; 2001 Acts, ch 55, §27, 38; 2002 Acts, ch 1057, §1; 2002 Acts, ch 1111, §1; 2002 Acts, ch 1119, §150; 2004 Acts, ch 1110, §3; 2005 Acts, ch 89, §35; 2007 Acts, ch 198, §33; 2008 Acts, ch 1089, §10, 12; 2008 Acts, ch 1094, §16, 18; 2010 Acts, ch 1069, §37; 2014 Acts, ch 1116, §34; 2019 Acts, ch 9, §4; 2019 Acts, ch 13, §2; 2020 Acts, ch 1103, §24, 31; 2022 Acts, ch 1134, §17; 2023 Acts, ch 19, §1654; 2023 Acts, ch 127, §11
Referred to in §272C.9
Subsections 6 and 9 amended

272C.5 Licensee disciplinary procedure — rulemaking delegation.

1. Each licensing board may establish by rule licensee disciplinary procedures. Each licensing board may impose licensee discipline under these procedures.

2. Rules promulgated under subsection 1 of this section:

a. Shall comply with the provisions of chapter 17A.

b. Shall designate who may or shall initiate a licensee disciplinary investigation and a licensee disciplinary proceeding, and who shall prosecute a disciplinary proceeding and under what conditions, and shall state the procedures for review by the licensing board of findings of fact if a majority of the licensing board does not hear the disciplinary proceeding.

c. Shall state whether the procedures are an alternative to or an addition to the procedures stated in sections 100D.5, 105.23, 105.24, 148.6 through 148.9, 152.10, 152.11, 153.33, 154A.23, 542.11, 542B.22, 543B.35, 543B.36, and 544B.16.

d. Shall specify methods by which the final decisions of the board relating to disciplinary proceedings shall be published.

[C79, 81, §258A.5]
87 Acts, ch 215, §45
C93, §272C.5
2000 Acts, ch 1008, §12; 2001 Acts, ch 55, §28, 38; 2002 Acts, ch 1108, §27; 2007 Acts, ch 198, §34; 2008 Acts, ch 1088, §116; 2008 Acts, ch 1089, §10, 12; 2008 Acts, ch 1094, §17, 18

272C.6 Hearings — power of subpoena — decisions.

1. Disciplinary hearings held pursuant to this chapter shall be heard by the board sitting as the hearing panel, or by a panel of not less than three board members who are licensed in the profession, or by a panel of not less than three members appointed pursuant to subsection 2. Notwithstanding chapters 17A and 21 a disciplinary hearing shall be open to the public at the discretion of the licensee.

2. When, in the opinion of a majority of the board, it is desirable to obtain specialists within an area of practice of a profession when holding disciplinary hearings, a licensing board may appoint licensees not having a conflict of interest to make findings of fact and to report to the board. Such findings shall not include any recommendation for or against licensee discipline.

3. *a.* The presiding officer of a hearing panel may issue subpoenas pursuant to rules of the board on behalf of the board or on behalf of the licensee. A licensee may have subpoenas issued on the licensee's behalf.

(1) A subpoena issued under the authority of a licensing board may compel the attendance of witnesses and the production of professional records, books, papers, correspondence and other records, whether or not privileged or confidential under law, which are deemed necessary as evidence in connection with a disciplinary proceeding.

(2) Nothing in this subsection shall be deemed to enable a licensing board to compel an attorney of the licensee, or stenographer or confidential clerk of the attorney, to disclose any information when privileged against disclosure by section 622.10.

(3) In the event of a refusal to obey a subpoena, the licensing board may petition the district court for its enforcement. Upon proper showing, the district court shall order the person to obey the subpoena, and if the person fails to obey the order of the court the person may be found guilty of contempt of court.

b. The presiding officer of a hearing panel may also administer oaths and affirmations, take or order that depositions be taken, and pursuant to rules of the board, grant immunity to a witness from disciplinary proceedings initiated either by the board or by other state agencies which might otherwise result from the testimony to be given by the witness to the panel.

4. *a.* In order to assure a free flow of information for accomplishing the purposes of this section, and notwithstanding section 622.10, all complaint files, investigation files, other investigation reports, and other investigative information in the possession of a licensing board or peer review committee acting under the authority of a licensing board or its employees or agents which relates to licensee discipline are privileged and confidential, and are not subject to discovery, subpoena, or other means of legal compulsion for their release to a person other than the licensee and the boards, their employees and agents involved in licensee discipline, and are not admissible in evidence in a judicial or administrative proceeding other than the proceeding involving licensee discipline. However, investigative information in the possession of a licensing board or its employees or agents which relates to licensee discipline may be disclosed to appropriate licensing authorities within this state, the appropriate licensing authority in another state, the coordinated licensure information system provided for in the nurse licensure compact contained in section 152E.1 or the advanced practice registered nurse compact contained in section 152E.3, the District of Columbia, or a territory or country in which the licensee is licensed or has applied for a license. If the investigative information in the possession of a licensing board or its employees or agents indicates a crime has been committed, the information shall be reported to the proper law enforcement agency. However, a final written decision and finding of fact of a licensing board in a disciplinary proceeding, including a decision referred to in section 272C.3, subsection 4, is a public record.

b. Pursuant to the provisions of section 17A.19, subsection 6, a licensing board upon an appeal by the licensee of the decision by the licensing board, shall transmit the entire record of the contested case to the reviewing court.

c. Notwithstanding the provisions of section 17A.19, subsection 6, if a waiver of privilege has been involuntary and evidence has been received at a disciplinary hearing, the court shall order withheld the identity of the individual whose privilege was waived.

5. Licensee discipline shall not be imposed except upon the affirmative vote of a majority of the licensing board.

6. *a.* A board created pursuant to chapter 147, 154A, 155, 169, 542, 542B, 543B, 543D, 544A, or 544B may charge a fee not to exceed seventy-five dollars for conducting a disciplinary hearing pursuant to this chapter which results in disciplinary action taken against the licensee by the board, and in addition to the fee, may recover from a licensee the costs for the following procedures and associated personnel:

(1) Transcript.

(2) Witness fees and expenses.

(3) Depositions.

(4) Medical examination fees incurred relating to a person licensed under chapter 147, 154A, 155, or 169.

b. The department of agriculture and land stewardship, the department of insurance and financial services, the department of inspections, appeals, and licensing, and the department of health and human services shall each adopt rules pursuant to chapter 17A which provide for the allocation of fees and costs collected pursuant to this section to the board under its jurisdiction collecting the fees and costs. The fees and costs shall be considered repayment receipts as defined in section 8.2.

[C79, 81, §258A.6; 82 Acts, ch 1005, §8]

86 Acts, ch 1211, §15; 92 Acts, ch 1125, §1

C93, §272C.6

2000 Acts, ch 1008, §13; 2001 Acts, ch 55, §29, 38; 2005 Acts, ch 53, §10; 2010 Acts, ch 1061, §94; 2023 Acts, ch 19, §1030

Referred to in §10A.506, 105.23, 139A.22, 147.135, 147A.24, 148.2A, 148.7, 153.36, 155A.2A, 155A.39, 155A.40, 155A.45, 156.16, 203.16, 203C.24, 272C.3, 272C.7, 542.11, 543D.21, 543E.18, 543E.20, 602.3205

Board of medicine, see §148.2A, 148.7

Subsection 6, paragraph b amended

272C.7 Executive secretary and personnel.

1. As an alternative to authority contained elsewhere in this chapter, a licensing board may employ within the limits of available funds an executive secretary, one or more inspectors, and such clerical personnel as may be necessary for the administration of the duties of the board. Employees of the board shall be employed subject to chapter 8A, subchapter IV. The qualifications of the executive secretary shall be determined by the board.

2. All employees of a licensing board shall be reimbursed subject to the rules of the director of the department of administrative services for their expenses incurred in the performance of official duties. All reimbursements shall constitute costs of sustaining the board.

3. Licensees appointed to serve on a hearing panel pursuant to section 272C.6, subsection 2, shall be compensated at the rate specified in section 7E.6 for each day of actual duty, and shall be reimbursed for actual expenses reasonably incurred in the performance of duties.

4. Salaries, per diem, and expenses incurred in the performance of official duties of the board or its employees shall be paid from funds appropriated by the general assembly.

[C79, 81, §258A.7]
90 Acts, ch 1256, §43
C93, §272C.7
2003 Acts, ch 145, §233, 286

272C.8 Immunities.

1. *a.* A person shall not be civilly liable as a result of the person's acts, omissions, or decisions in good faith as a member of a licensing board or as an employee or agent in connection with the person's duties.

b. A person shall not be civilly liable as a result of filing a report or complaint with a licensing board or peer review committee, or for the disclosure to a licensing board or its agents or employees, whether or not pursuant to a subpoena of records, documents, testimony, or other forms of information which constitute privileged matter concerning a recipient of health care services or some other person, in connection with proceedings of a peer review committee, or in connection with duties of a health care board. However, such immunity from civil liability shall not apply if such act is done with malice.

c. A person shall not be dismissed from employment, and shall not be discriminated against by an employer because the person filed a complaint with a licensing board or peer review committee, or because the person participated as a member, agent, or employee of a licensing board or peer review committee, or presented testimony or other evidence to a licensing board or peer review committee.

2. Any employer who violates the terms of this section shall be liable to any person aggrieved for actual and punitive damages plus reasonable attorney fees.

[C79, 81, §258A.8]
C93, §272C.8
2010 Acts, ch 1069, §74

272C.9 Duties of licensees.

1. Each licensee of a licensing board, as a condition of licensure, is under a duty to submit to a physical, mental, or clinical competency examination when directed in writing by the board for cause. All objections shall be waived as to the admissibility of the examining physician's testimony or reports on the grounds of privileged communications. The medical testimony or report shall not be used against the licensee in any proceeding other than one relating to licensee discipline by the board, or one commenced in district court for revocation of the licensee's privileges. The licensing board, upon probable cause, shall have the authority to order a physical, mental, or clinical competency examination, and upon refusal of the licensee to submit to the examination the licensing board may order that the allegations pursuant to which the order of physical, mental, or clinical competency examination was made shall be taken to be established.

2. A licensee has a continuing duty to report to the licensing board by whom the person is licensed those acts or omissions specified by rule of the board pursuant to section 272C.4,

subsection 6, when committed by another person licensed by the same licensing board. This subsection does not apply to licensees under chapter 542 when the observations are a result of participation in programs of practice review, peer review and quality review conducted by professional organizations of certified public accountants, for educational purposes and approved by the accountancy examining board.

3. A licensee shall have a continuing duty and obligation, as a condition of licensure, to report to the licensing board by which the licensee is licensed every adverse judgment in a professional or occupational malpractice action to which the licensee is a party, and every settlement of a claim against the licensee alleging malpractice.

4. A licensee who willfully fails to comply with subsection 2 or 3 of this section commits a violation of this chapter for which licensee discipline may be imposed.

[C79, 81, §258A.9; 81 Acts, ch 84, §1]
C93, §272C.9
2001 Acts, ch 55, §30, 38; 2005 Acts, ch 89, §36
Referred to in §135P.4, 272C.4, 543E.12

272C.10 Rules for revocation or suspension of license.

A licensing board established after January 1, 1978, and pursuant to the provisions of this chapter shall by rule include provisions for the revocation or suspension of a license which shall include but is not limited to the following:

1. Fraud in procuring a license.
2. Professional incompetency.
3. Knowingly making misleading, deceptive, untrue, or fraudulent representations in the practice of the licensee's profession or engaging in unethical conduct or practice harmful or detrimental to the public. Proof of actual injury need not be established.
4. Habitual intoxication or addiction to the use of drugs.
5. Conviction of a felony offense, if the offense directly relates to the profession or occupation of the licensee, in the courts of this state or another state, territory, or country. Conviction as used in this subsection includes a conviction of an offense which if committed in this state would be a felony without regard to its designation elsewhere, and includes a finding or verdict of guilt made or returned in a criminal proceeding even if the adjudication of guilt is withheld or not entered. A certified copy of the final order or judgment of conviction or plea of guilty in this state or in another state constitutes conclusive evidence of the conviction.
6. Fraud in representations as to skill or ability.
7. Use of untruthful or improbable statements in advertisements.
8. Willful or repeated violations of the provisions of this chapter.

[C79, 81, §258A.10]
C93, §272C.10
2020 Acts, ch 1103, §25, 31
Referred to in §152D.6, 156.9, 272C.3, 542.10, 543E.17

272C.11 Insurers of professional and occupational licensees — reports.

Insurance carriers which insure professional and occupational licensees for acts or omissions that constitute negligence, careless acts, or omissions in the practice of a profession or occupation shall file reports with the appropriate licensing board. The reports shall include information pertaining to any lawsuit filed against a licensee which may affect the licensee as defined by rule, involving an insured of the insurer.
2010 Acts, ch 1069, §38

272C.12 Licensure of persons licensed in other jurisdictions.

1. Notwithstanding any other provision of law, an occupational or professional license, certificate, or registration, including a license, certificate, or registration issued by the board of educational examiners, shall be issued without an examination to a person if all of the following conditions are met:

a. The person is currently licensed, certified, or registered by at least one other issuing jurisdiction in the occupation or profession applied for with a substantially similar scope

of practice and the license, certificate, or registration is in good standing in all issuing jurisdictions in which the person holds a license, certificate, or registration.

b. For a license issued pursuant to chapter 103 or 105, the person has established residency in this state or is married to an active duty member of the military forces of the United States and is accompanying the member on an official permanent change of station to a military installation located in this state.

c. When the person was licensed by the issuing jurisdiction, the issuing jurisdiction imposed minimum educational requirements and, if applicable, work experience and clinical supervision requirements, and the issuing jurisdiction verifies that the person met those requirements in order to be licensed in that issuing jurisdiction.

d. The person previously passed an examination required by the other issuing jurisdiction for licensure, certification, or registration, if applicable.

e. The person has not had a license, certificate, or registration revoked and has not voluntarily surrendered a license, certificate, or registration in any other issuing jurisdiction or country while under investigation for unprofessional conduct.

f. The person has not had discipline imposed by any other regulating entity in this state or another issuing jurisdiction or country. If another jurisdiction has taken disciplinary action against the person, the appropriate licensing board shall determine if the cause for the action was corrected and the matter resolved. If the licensing board determines that the matter has not been resolved by the jurisdiction imposing discipline, the licensing board shall not issue or deny a license, certificate, or registration to the person until the matter is resolved.

g. The person does not have a complaint, allegation, or investigation pending before any regulating entity in another issuing jurisdiction or country that relates to unprofessional conduct. If the person has any complaints, allegations, or investigations pending, the appropriate licensing board shall not issue or deny a license, certificate, or registration to the person until the complaint, allegation, or investigation is resolved.

h. The person pays all applicable fees.

i. The person does not have a criminal history that would prevent the person from holding the license, certificate, or registration applied for in this state.

2. A person licensed pursuant to this section is subject to the laws regulating the person's practice in this state and is subject to the jurisdiction of the appropriate licensing board.

3. This section does not apply to any of the following:

a. The ability of a licensing board, agency, or department to require the submission of fingerprints or completion of a criminal history check.

b. Criteria for a license, certificate, or registration that is established by an interstate compact.

c. The ability of a licensing board, agency, or department to require a person to take and pass an examination specific to the laws of this state prior to issuing a license. A licensing board, agency, or department that requires an applicant to take and pass an examination specific to the laws of this state shall issue an applicant a temporary license that is valid for a period of three months and may be renewed once for an additional period of three months.

d. A license issued by the department of transportation.

e. A person who is licensed by another issuing jurisdiction and may be granted a privilege to practice in this state by another provision of law without receiving a license in this state.

f. A person applying for a license through a national licensing organization.

4. A license, certificate, or registration issued pursuant to this section does not grant the person receiving the license, certificate, or registration eligibility to practice pursuant to an interstate compact. A licensing board shall determine eligibility for a person to hold a license, certificate, or registration pursuant to this section regardless of the person's eligibility to practice pursuant to an interstate compact.

5. For the purposes of this section, *"issuing jurisdiction"* means the duly constituted authority in another state that has issued a professional license, certificate, or registration to a person.

2020 Acts, ch 1103, §26, 31; 2022 Acts, ch 1134, §18 – 20
Referred to in §272C.12A

272C.12A Licensure of military spouses and veterans.

1. A licensing board, agency, or department shall expedite the application for an occupational or professional license, certificate, or registration, including a license, certificate, or registration issued by the board of educational examiners, by a person who is licensed in a profession or occupation with a similar scope of practice in another state and who is married to an active duty member of the military forces of the United States or is a veteran, as defined in section 35.1.

2. *a.* If the licensing board, agency, or department determines that the applicant does not qualify for licensure pursuant to section 272C.12 because the person is not licensed, certified, or registered in an occupation or profession with a substantially similar scope of practice, the licensing board, agency, or department shall issue a temporary license to the applicant for a period of time deemed necessary by the board, agency, or department for the applicant to complete education or training substantially similar to the education or training required for the issuance of the occupational or professional license, certificate, or registration required of this state.

b. The licensing board, agency, or department shall advise the applicant of the required education or training necessary to obtain a professional license, certificate, or registration in this state.

3. After an applicant submits records of completing the requirements identified in subsection 2, the licensing board, agency, or department shall issue an occupational or professional license, certificate, or registration to the applicant.

4. A licensing board, agency, or department shall adopt rules to provide credit toward qualifications for licensure to practice an occupation or profession in this state for education, training, and service obtained or completed by a person while serving honorably on federal active duty, state active duty, or national guard duty, as defined in section 29A.1, to the extent consistent with the qualifications required by the appropriate licensing board, agency, or department. The rules shall also provide credit toward qualifications for initial licensure for education, training, or service obtained or completed by a person while serving honorably in the military forces of another state or the organized reserves of the armed forces of the United States, to the extent consistent with the qualifications required by the appropriate licensing board, agency, or department.

5. A licensing board, agency, or department shall annually file a report with the governor and the general assembly providing information and statistics on licenses and temporary licenses issued under this section and information and statistics on credit received by individuals for education, training, and service pursuant to subsection 4.

2022 Acts, ch 1134, §21

272C.13 Educational requirements — work experience.

1. Except as provided in subsection 2, a person applying for a professional or occupational license, certificate, or registration in this state who relocates to this state from another state that did not require a professional or occupational license, certificate, or registration to practice the person's profession or occupation may be considered to have met any education, training, or work experience requirements imposed by a licensing board in this state if the person has three or more years of related work experience with a substantially similar scope of practice within the four years preceding the date of application as determined by the board.

2. This section does not apply to a license, certificate, or registration issued by the board of medicine, the board of nursing, the dental board, the board of pharmacy, or the board of educational examiners.

3. If this Code or administrative rules require a person applying for a professional or occupational license, certificate, or registration in this state to pass an examination to obtain the license, certificate, or registration, a person applying for licensure, certification, or registration under this section shall be required to pass the same examination.

2020 Acts, ch 1103, §27, 31

272C.14 Waiver of fees.

1. A licensing board, agency, or department shall waive any fee charged to an applicant

for a license if the applicant's household income does not exceed two hundred percent of the federal poverty income guidelines and the applicant is applying for the license for the first time in this state.

2. A licensing board, agency, or department shall waive an initial application fee and one renewal fee for an applicant that has been honorably or generally discharged from federal active duty or national guard duty, as those terms are defined in section 29A.1, that would otherwise be charged within five years of the discharge.

2020 Acts, ch 1103, §28, 31; 2022 Acts, ch 1134, §22; 2022 Acts, ch 1149, §24

272C.15 Disqualifications for criminal convictions limited.

1. Notwithstanding any other provision of law to the contrary, except for chapter 256, subchapter VII, part 3, a person's conviction of a crime may be grounds for the denial, revocation, or suspension of a license only if an unreasonable risk to public safety exists because the offense directly relates to the duties and responsibilities of the profession and the appropriate licensing board, agency, or department does not grant an exception pursuant to subsection 4.

2. A licensing board, agency, or department that may deny a license on the basis of an applicant's conviction record shall provide a list of the specific convictions that may disqualify an applicant from receiving a license. Any such offense shall be an offense that directly relates to the duties and responsibilities of the profession.

3. A licensing board, agency, or department shall not deny an application for a license on the basis of an arrest that was not followed by a conviction or based on a finding that an applicant lacks good character, suffers from moral turpitude, or on other similar basis.

4. A licensing board, agency, or department shall grant an exception to an applicant who would otherwise be denied a license due to a criminal conviction if the following factors establish by clear and convincing evidence that the applicant is rehabilitated and an appropriate candidate for licensure:

a. The nature and seriousness of the crime for which the applicant was convicted.

b. The amount of time that has passed since the commission of the crime. There is a rebuttable presumption that an applicant is rehabilitated and an appropriate candidate for licensure five years after the date of the applicant's release from incarceration, provided that the applicant was not convicted of sexual abuse in violation of section 709.4, a sexually violent offense as defined in section 229A.2, dependent adult abuse in violation of section 726.26, a forcible felony as defined in section 702.11, or domestic abuse assault in violation of section 708.2A, and the applicant has not been convicted of another crime after release from incarceration.

c. The circumstances relative to the offense, including any aggravating and mitigating circumstances or social conditions surrounding the commission of the offense.

d. The age of the applicant at the time the offense was committed.

e. Any treatment undertaken by the applicant.

f. Whether a certification of employability has been issued to the applicant pursuant to section 906.19.

g. Any letters of reference submitted on behalf of the applicant.

h. All other relevant evidence of rehabilitation and present fitness of the applicant.

5. An applicant may petition the relevant licensing board, agency, or department, in a form prescribed by the board, agency, or department, for a determination as to whether the applicant's criminal record will prevent the applicant from receiving a license. The board, agency, or department shall issue such a determination at the next regularly scheduled meeting of the board, agency, or department or within thirty days of receiving the petition, whichever is later. The board, agency, or department shall hold a closed session while determining whether an applicant's criminal record will prevent the applicant from receiving a license and while determining whether to deny an applicant's application on the basis of an applicant's criminal conviction. A board, agency, or department may charge a fee to recoup the costs of such a determination, provided that such fee shall not exceed twenty-five dollars.

6. *a.* A licensing board, agency, or department that denies an applicant a license solely

or partly because of the applicant's prior conviction of a crime shall notify the applicant in writing of all of the following:

(1) The grounds for the denial or disqualification.

(2) That the applicant has the right to a hearing to challenge the licensing authority's decision.

(3) The earliest date the applicant may submit a new application.

(4) That evidence of rehabilitation of the applicant may be considered upon reapplication.

b. A determination by a licensing board, agency, or department that an applicant's criminal conviction is specifically listed as a disqualifying conviction and the offense directly relates to the duties and responsibilities of the applicant's profession must be documented in written findings for each factor specified in subsection 4 sufficient for a review by a court.

c. In any administrative or civil hearing authorized by this section or chapter 17A, a licensing board, agency, or department shall carry the burden of proof on the question of whether the applicant's criminal offense directly relates to the duties and responsibilities of the profession for which the license is sought.

7. A board, agency, or department may require an applicant with a criminal record to submit the applicant's complete criminal record detailing an applicant's offenses with an application. A board, agency, or department may also require an applicant with a criminal record to submit a personal statement regarding whether each offense directly relates to the duties and performance of the applicant's occupation. For the purposes of this subsection, *"complete criminal record"* includes the complaint and judgment of conviction for each offense of which the applicant has been convicted.

2020 Acts, ch 1103, §29, 31; 2022 Acts, ch 1132, §11; 2023 Acts, ch 19, §2580
Subsection 1 amended

272C.16 Apprenticeships — licensure.

1. Notwithstanding any provision of law to the contrary, except as provided in chapters 100C, 100D, 103, and 105, beginning on January 1, 2022, a board shall grant a license to a person who completes an apprenticeship program in the relevant occupation or profession and submits an application pursuant to this section.

2. A board may require an applicant to pass an examination prior to licensure if the board requires an applicant who has completed an educational program to pass an examination prior to licensure. A board shall not require an applicant to receive a higher score on the examination than the score required of an applicant who completes an educational program.

3. A board may require an applicant to pay a licensing fee if the board requires an applicant who has completed an educational program to pay a licensing fee. A board shall not impose a licensing fee greater than the licensing fee imposed on an applicant who completes an educational program.

4. A board shall not require an applicant to complete an apprenticeship program of a greater duration than is required by federal law for that program.

5. For the purposes of this section, *"apprenticeship program"* means the same as defined in section 84E.2.

6. *a.* A board shall adopt rules to implement this section upon receipt of a petition for rulemaking submitted pursuant to section 17A.7.

b. A board shall not grant a license pursuant to this section prior to the effective date of rules adopted by the board to implement this section.

2021 Acts, ch 115, §1, 2
Section not amended; internal reference change applied

DENTAL BOARD[650]

[Prior to 5/18/88, Dental Examiners, Board of[320]]

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TITLE I
GENERAL PROVISIONS

CHAPTER 1
ADMINISTRATION

[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—1.1(153) Definitions. As used in these rules:

"Accredited school" means a dental, dental hygiene, or dental assisting education program accredited by the American Dental Association Commission on Dental Accreditation.

"Board" means the dental board.

"Chapter" means Iowa Code chapter 153.

"Coronal polish" means an adjunctive procedure that must also include removal of any calculus, if present, by a dentist or dental hygienist. Coronal polishing of teeth using only a rotary instrument and a rubber cup or brush for such purpose, when performed at the direction of and under the supervision of a licensed dentist, is deemed not to be the giving of prophylactic treatment.

"Dental assistant trainee" means any person who is engaging in on-the-job training to meet the requirements for registration in accordance with Iowa Code section 153.39 and who is learning the necessary skills under the personal supervision of a licensee or registrant as delegated by a licensed dentist.

"Dental hygiene committee," as defined in Iowa Code section 153.33A, means the dental hygiene committee of the dental board.

"Department" means the department of public health.

"Direct supervision" means that the dentist is present in the treatment facility, but it is not required that the dentist be physically present in the treatment room, or the dentist is not present in the treatment facility but is able to appear using live video upon request with a response time similar to what would be expected if the dentist were present in the treatment facility.

"General supervision of a dental assistant" means that a dentist has examined the patient and has delegated the services to be provided by a registered dental assistant, which are limited to all extraoral duties, dental radiography, intraoral suctioning, and use of a curing light and intraoral camera. The dentist need not be present in the facility while these services are being provided. If a dentist will not be present, the following requirements shall be met:

1. Patients or their legal guardians must be informed prior to the appointment that no dentist will be present and therefore no examination will be conducted at that appointment.
2. The dental assistant must consent to the arrangement.
3. Basic emergency procedures must be established and in place, and the dental assistant must be capable of implementing these procedures.
4. The treatment to be provided must be prior-prescribed by a licensed dentist and must be entered in writing in the patient record.

"General supervision of a dental hygienist" means that a dentist has examined the patient and has prescribed authorized services to be provided by a dental hygienist. The dentist need not be present in the facility while these services are being provided. If a dentist will not be present, the following requirements shall be met:

1. Patients or their legal guardians must be informed prior to the appointment that no dentist will be present and therefore no examination will be conducted at that appointment.
2. The hygienist must consent to the arrangement.
3. Basic emergency procedures must be established and in place and the hygienist must be capable of implementing these procedures.
4. The treatment to be provided must be prior prescribed by a licensed dentist and must be entered in writing in the patient record.

"Lapsed license," "permit," or *"registration"* means a license, permit, or registration that a person has failed to renew as required or the license, permit, or registration of a person who failed to meet stated obligations for renewal within a stated time. A person whose license, permit, or registration has lapsed

continues to hold the privilege of licensure or registration in Iowa, but may not practice dentistry, dental hygiene, or dental assisting until the license, permit, or registration is reinstated.

"License" means a certificate issued to a person to practice as a dentist or dental hygienist under the laws of this state.

"Licensee" means a person who has been issued a certificate to practice as a dentist or dental hygienist under the laws of this state.

"Overpayment" means payment in excess of the required fee. Overpayment shall result in the return of the original request and payment, prior to processing, with a clarification of the total amount due.

"Peer review" as defined in Iowa Code section 272C.1(7) means evaluation of professional services rendered by a licensee or registrant.

"Peer review committee" as defined in Iowa Code section 272C.1(8) means one or more persons acting in a peer review capacity pursuant to these rules.

"Personal supervision" means a licensee or registrant is physically present in the room to oversee and instruct all services of the dental assistant trainee as delegated by a licensed dentist.

"Practice of dentistry" as defined in Iowa Code section 153.13 includes the rendering of professional services in this state as an employee or independent contractor or the rendering of any dental decisions, including diagnosing, treatment planning, determining the appropriateness of proposed dental care, or engaging in acts that constitute the practice of dentistry.

The following classes of persons shall also be deemed to be engaged in the practice of dentistry:

1. Persons publicly professing to be dentists, dental surgeons, or skilled in the science of dentistry, or publicly professing to assume the duties incident to the practice of dentistry.

2. Persons who perform examinations, diagnosis, treatment, and attempted correction by any medicine, appliance, surgery, or other appropriate method of any disease, condition, disorder, lesion, injury, deformity, or defect of the oral cavity and maxillofacial area, including teeth, gums, jaws, and associated structures and tissue, which methods by education, background, experience, and expertise are common to the practice of dentistry.

3. Persons who offer to perform, perform, or assist with any phase of any operation incident to tooth whitening, including the instruction or application of tooth whitening materials or procedures at any geographic location. For purposes of this paragraph, "tooth whitening" means any process to whiten or lighten the appearance of human teeth by the application of chemicals, whether or not in conjunction with a light source.

"Registrant" means a person who has been issued a certificate to practice as a dental assistant under the laws of this state.

"Registration" means a certificate issued to a person to practice as a dental assistant under the laws of this state.

This rule is intended to implement Iowa Code sections 147.1(2), 147.13, 147.30, 147.76, 147.80, 153.13 and 153.15, and chapter 272C.

[**ARC 8369B**, IAB 12/16/09, effective 1/20/10; **ARC 2030C**, IAB 6/10/15, effective 7/15/15; **ARC 3963C**, IAB 8/15/18, effective 9/19/18; **ARC 6303C**, IAB 4/20/22, effective 5/25/22; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—1.2(17A,147,153,272C) Purpose of the board. The purpose of the board is to protect public health, safety, and welfare by administering, interpreting, and enforcing the provisions of law that relate to the practice of dentistry, dental hygiene, and dental assisting. In pursuit of this mission, the board performs these primary functions:

1.2(1) Administers examinations for the testing of dentists, dental hygienists, and dental assistants;

1.2(2) Issues licenses, registrations, certificates, and permits to qualified practitioners;

1.2(3) Sets standards for license, registration, and permit renewal and continuing education;

1.2(4) Enforces Iowa laws regulating the practice of dentistry, dental hygiene, and dental assisting;

1.2(5) Investigates complaints concerning violations of the dental practice Act and rules;

1.2(6) Conducts disciplinary hearings and monitors the compliance of licensees or registrants with board orders; and

1.2(7) Adopts rules and establishes standards for practitioners pursuant to its authority under the Iowa Code and administrative rules.

650—1.3(17A,147,153) Organization of the board.

1.3(1) The board shall be composed of five members licensed to practice dentistry, two members licensed to practice dental hygiene and two members not licensed to practice dentistry or dental hygiene and who shall represent the general public. All members are appointed by the governor, subject to confirmation by the senate.

1.3(2) Five members of the board shall constitute a quorum for the purpose of conducting business.

1.3(3) The dental hygiene committee of the board shall be composed of the two dental hygiene members of the board and one dentist member of the board. The dentist member will be elected annually to serve on the committee by a majority vote of the board. The dentist member of the committee must have supervised and worked in collaboration with a dental hygienist for a period of at least three years immediately preceding election to the committee.

1.3(4) Two members of the dental hygiene committee shall constitute a quorum for the purpose of conducting business.

1.3(5) Committees of the board may be appointed by the board chairperson and shall not constitute a quorum of the board. The board chairperson shall appoint committee chairpersons. Committees of the board may include the executive committee, licensure committee, grievance committee, continuing education advisory committee, and dental assistant committee.

650—1.4(153) Organization of the dental hygiene committee.

1.4(1) All matters regarding the practice, discipline, education, examination, and licensure of dental hygienists will be initially directed to the dental hygiene committee. The committee shall have the authority to adopt recommendations regarding the practice, discipline, education, examination, and licensure of dental hygienists and shall carry out duties as assigned by the board. Recommendations by the committee shall include a statement and documentation supporting its recommendation to the board. The board shall review all committee recommendations. The recommendations shall be ratified by the board unless the board makes a specific written finding that the recommendation exceeds the jurisdiction or expands the scope of the committee beyond the authority granted in subrule 1.4(2), creates an undue financial impact on the board, or is not supported by the record. The board may not amend a committee recommendation without the concurrence of the majority of the members of the dental hygiene committee.

1.4(2) This rule shall not be construed as impacting or changing the scope of practice of the profession of dental hygiene or authorizing the independent practice of dental hygiene.

1.4(3) The committee shall not have regulatory or disciplinary authority with regard to dentists, dental assistants, dental lab technicians, or other auxiliary dental personnel.

This rule is intended to implement Iowa Code section 153.33A.

650—1.5(17A,153) Information. Members of the public may obtain information from or submit requests relating to the practice of dentistry, dental hygiene, or dental assisting, continuing education, or any other matter to the Executive Director, Iowa Dental Board, 400 S.W. 8th Street, Suite D, Des Moines, Iowa 50309-4687.

[**ARC 6303C**, IAB 4/20/22, effective 5/25/22]

650—1.6(17A,147,153) Meetings.

1.6(1) The board shall hold an annual meeting each year in Des Moines to elect officers and conduct other business. Officers of the board shall consist of a chairperson, vice chairperson, and secretary. Officers shall assume their duties immediately following their election at the annual meeting.

1.6(2) The board may hold additional meetings as the chairperson, vice chairperson, or majority of the board deems necessary. Written notices stating the time and place of the meetings shall be provided consistent with the open meetings law.

1.6(3) The dental hygiene committee shall hold an annual meeting each year in Des Moines, Iowa, to elect officers and conduct other business. Officers of the committee shall consist of a chairperson, vice chairperson, and secretary. Officers shall assume their duties immediately following their election at the annual meeting.

1.6(4) The dental hygiene committee may hold additional meetings as the chairperson, vice chairperson, or majority of the committee deems necessary.

1.6(5) Dates and location of board meetings may be obtained from the board's office. Except as otherwise provided by statute, all board meetings shall be open and the public shall be permitted to attend.

These rules are intended to implement Iowa Code sections 17A.3, 147.14(4), 147.22, and 153.33A(1).

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CHAPTERS 2 to 4
Reserved

TITLE II
ADMINISTRATION

CHAPTER 5
ORGANIZATION
[Ch 5, IAC 7/1/75 renumbered as Ch 50, IAC 9/20/78]
[Prior to 5/18/88, Dental Examiners, Board of[320]]
Rescinded IAB 7/10/02, effective 8/14/02

CHAPTER 6
PUBLIC RECORDS AND FAIR INFORMATION PRACTICES

The Iowa board of dental examiners hereby adopts, with the following exceptions and amendments, rules of the Governor's Task Force on Uniform Rules of Agency Procedure relating to public records and fair information practices which are printed in the first volume of the Iowa Administrative Code.

650—6.1(153,147,22) Definitions. As used in this chapter:

"Agency." In lieu of the words "agency issuing these rules", insert "Iowa Board of Dental Examiners".

650—6.3(153,147,22) Requests for access to records.

6.3(1) *Location of record.* In lieu of the words "Insert agency name and address", insert "Iowa Board of Dental Examiners, 400 S.W. 8th Street, Suite D, Des Moines, Iowa 50309-4687".

6.3(2) *Office hours.* In lieu of the words "Insert customary office hours and, if agency does not have customary office hours of at least thirty hours per week, insert hours specified in Iowa Code section 22.4", insert "8 a.m. to 4:30 p.m. daily excluding Saturdays, Sundays, and legal holidays".

6.3(7) *Fees.*

c. *Supervisory fee.* In lieu of the words "(specify time period)", insert "one-half hour".

650—6.6(153,147,22) Procedure by which additions, dissents, or objections may be entered into certain records. In lieu of the words "designate office", insert "the executive director".

650—6.9(153,147,22) Disclosures without the consent of the subject.

6.9(1) Open records are routinely disclosed without the consent of the subject.

6.9(2) To the extent allowed by law, disclosure of confidential records may occur without the consent of the subject. Following are instances where disclosure, if lawful, will generally occur without notice to the subject:

a. For a routine use as defined in rule 650—6.10(153,147,22) or in any notice for a particular record system.

b. To a recipient who has provided the agency with advance written assurance that the record will be used solely as a statistical research or reporting record; provided, that, the record is transferred in a form that does not identify the subject.

c. To another government agency or to an instrumentality of any governmental jurisdiction within or under the control of the United States for a civil or criminal law enforcement activity if the activity is authorized by law, and if an authorized representative of such government agency or instrumentality has submitted a written request to the agency specifying the record desired and the law enforcement activity for which the record is sought.

d. To an individual pursuant to a showing of compelling circumstances affecting the health or safety of any individual if a notice of the disclosure is transmitted to the last-known address of the subject.

e. To the legislative services agency.

f. Disclosures in the course of employee disciplinary proceedings.

g. In response to a court order or subpoena.

h. Notwithstanding any statutory confidentiality provision, the board may share information with the child support recovery unit through manual or automated means for the sole purpose of identifying licensees or applicants subject to enforcement under Iowa Code chapter 252J or 598.

[**ARC 4747C**, IAB 11/6/19, effective 12/11/19]

650—6.10(153,147,22) Routine use.

6.10(1) Defined. "Routine use" means the disclosure of a record without the consent of the subject or subjects, for a purpose which is compatible with the purpose for which the record was collected. It includes disclosures required to be made by statute other than the public records law, Iowa Code chapter 22.

6.10(2) To the extent allowed by law, the following uses are considered routine uses of all agency records:

a. Disclosure to those officers, employees, investigators, members or agents of the agency who have a need for the record in the performance of their duties. The custodian of the record may upon request of any officer or employee, investigator, or member, or on the custodian's own initiative, determine what constitutes legitimate need to use confidential records.

b. Disclosure of information indicating an apparent violation of the law to appropriate law enforcement authorities for investigation and possible criminal prosecution, civil court action, or regulatory order.

c. Disclosure to the department of inspections and appeals for matters in which it is performing services or functions on behalf of the agency.

d. Transfers of information within the agency and among board members; to other state agencies, boards and departments; federal agencies; to agencies in other states; national associations; or to local units of government as appropriate to administer the agency's statutory authority.

e. Information released to staff of federal and state entities for audit purposes or for purposes of determining whether the agency is operating a program lawfully.

f. Any disclosure specifically authorized by the statute under which the record was collected or maintained.

g. Disclosure to the attorney general's office for use in performing its official functions.

h. Disclosure to the public and news media of pleadings, motions, orders, final decisions, and informal settlements filed in licensee disciplinary proceedings.

i. Transmittal to the district court of the record in a disciplinary hearing, pursuant to Iowa Code section 17A.19(6), regardless of whether the hearing was opened or closed.

650—6.11(153,147,22) Consensual disclosure of confidential records.

6.11(1) *Consent to disclosure by a subject individual.* To the extent permitted by law, the subject may consent in writing to agency disclosure of confidential records as provided in rule 650—6.7(153,147,22).

6.11(2) *Complaints to public officials.* A letter from the subject of a confidential record to a public official which seeks the official's intervention on behalf of the subject in a matter that involves the agency may to the extent permitted by law be treated as an authorization to release sufficient information about the subject to the official to resolve the matter.

6.11(3) *Obtaining information from a third party.* The agency is required to obtain information to verify and investigate applications for licensure or permit, complaints concerning licensees, and alleged violations of law and statute. Requests to third parties for this information may involve the release of records requiring special procedures.

a. Where necessary, the agency shall obtain from the subject individual an authorization for the release of specially protected information on a form that meets the requirements of the law.

b. To obtain alcohol and drug abuse patient information, the agency shall obtain special authorization from the subject individual on a "Consent to Release Alcohol and Drug Abuse Patient Information" form or other appropriate form.

c. The agency is authorized by law to subpoena books, papers, records, and any other real evidence, whether or not privileged or confidential under law, to help it determine whether it should institute an administrative hearing.

650—6.12(153,147,22) Release to subject.

6.12(1) The subject of a confidential record may file a written request to review confidential records about that person as provided in rule 650—6.6(153,147,22). However, the agency need not release the following records to the subject:

a. The identity of a person providing information to the agency need not be disclosed directly or indirectly to the subject of the information when the information is authorized to be held confidential pursuant to Iowa Code section 22.7(18) or other provisions of law.

b. Records need not be disclosed to the subject when they are the work product of an attorney or are otherwise privileged.

c. Peace officers' investigative reports may be withheld from the subject, except as required by the provisions of Iowa Code section 22.7(5).

d. All information in licensee complaint and investigation files maintained by the board for purposes of licensee discipline are required to be withheld from the subject prior to the filing of formal charges and the notice of hearing in a licensee disciplinary proceeding.

e. As otherwise authorized by state or federal law or rule.

6.12(2) Where a record has multiple subjects with interest in the confidentiality of the record, the agency may take reasonable steps to protect confidential information relating to another subject.

650—6.13(153,147,22) Availability of records.

6.13(1) *General.* Agency records are open for public inspection and copying unless otherwise provided by rule or law.

6.13(2) *Confidential records.* The following records may be withheld from public inspection. Records are listed by category, according to the legal basis for withholding them from public inspection.

a. Tax records made available to the agency. (Iowa Code sections 422.20 and 422.72)

b. Prior to initiation of a contested case, all complaint files, investigation files, other investigation reports, and other investigative information in the possession of the board or its employees or agents which relates to licensee or registrant discipline. (Iowa Code section 272C.6(4))

c. Criminal history, prior misconduct or investigative information relating to an applicant for licensure or registration. (Iowa Code section 147.21(1))

d. Information relating to results of an examination for licensure, registration, or certification other than final score except for information about results of an examination which is given to the person who took the examination. (Iowa Code section 147.21(3))

e. Information relating to the contents of an examination for licensure, registration, or certification. (Iowa Code section 147.21(2))

f. Information contained in professional substance abuse reports or other investigative reports relating to the abuse of controlled substances. (Iowa Code section 124.504)

g. Minutes of closed meetings of the board. (Iowa Code section 21.5(4))

h. Records of closed session board disciplinary hearings. (Iowa Code sections 272C.6(1) and 21.5(4))

i. Information or records received from a restricted source and any other information or records made confidential by law.

j. Identifying details in final orders, decisions, and opinions to the extent required to prevent a clearly unwarranted invasion of personal privacy or trade secrets under Iowa Code section 17A.3(1)*"d."*

k. Those portions of agency staff manuals, instructions or other statements issued which set forth criteria or guidelines to be used by agency staff in conducting audits, in making inspections, in negotiating settlements, or in the selection or handling of cases, such as operational tactics or allowable tolerances or criteria for the defense, prosecution or settlement of cases, when disclosure of these statements would:

(1) Enable law violators to avoid detection;

(2) Facilitate disregard of requirements imposed by law; or

(3) Give a clearly improper advantage to persons who are in an adverse position to the agency. (See Iowa Code sections 17A.2 and 17A.3)

l. Records which constitute attorney work product, attorney-client communications, or which are otherwise privileged. Attorney work product is confidential under Iowa Code sections 22.7(4), 622.10, and 622.11, Iowa R.C.P. 122(c), Fed. R. Civ. P. 26 (b)(3), and case law. Attorney-client communications are confidential under Iowa Code sections 622.10 and 622.11, the rules of evidence, the Code of Professional Responsibility, and case law.

m. Any other records made confidential by law.

n. Records which are exempt from disclosure under Iowa Code section 22.7.

o. Information in nonlicensee investigation files maintained by the board which are otherwise exempt from disclosure under Iowa Code section 22.7 or other provisions of law.

6.13(3) *Authority to release confidential records.* The agency may have discretion to disclose some confidential records which are exempt from disclosure under Iowa Code section 22.7 or other law. Any person may request permission to inspect records withheld from inspection under a statute which authorizes limited or discretionary disclosure as provided in rule 650—6.4(153,147,22). If the agency initially determines that it will release such records, the agency may, where appropriate, notify interested parties and withhold the records from inspections as provided in subrule 6.4(3).

650—6.14(153,147,22) Personally identifiable information. This rule describes the nature and extent of personally identifiable information which is collected, maintained, and retrieved by the agency by personal identifier in record systems as defined in rule 650—6.1(153,147,22). For each record system, this rule describes the legal authority for the collection of that information, the means of storage of that information and indicates whether a data processing system matches, collates, or permits the comparison of personally identifiable information in one record system with personally identifiable information in another record system. The record systems maintained by the agency are:

6.14(1) *Information on nonlicensee investigation files maintained by the board.* This information is collected by the board pursuant to the authority granted in Iowa Code sections 147.2, 147.83, 147.84, 147.85, and 147.93. This information is stored on paper only. This information is a public record except to the extent that certain information may be exempt from disclosure under Iowa Code section 22.7 or other provisions of law.

6.14(2) *Information in complaint, compliance, and investigative files maintained by the board for the purposes of discipline.* This information is collected pursuant to Iowa Code sections 153.33, 272C.3, and 272C.9. This information is stored electronically and on paper. This information is required to be kept confidential pursuant to Iowa Code section 272C.6(4). However, information may be released to the licensee or registrant once a disciplinary proceeding is commenced by the filing of a formal statement of charges and the notice of hearing.

6.14(3) *Records of board disciplinary hearings.* These records contain information about licensees and persons under the board's jurisdiction who are subject of a board disciplinary proceeding or other action. This information is collected by the board pursuant to the authority granted in Iowa Code sections 153.23 and 153.33, and chapter 272C. This information is stored electronically and on paper. These records may also contain the following:

a. Formal charges and notices of hearings and final written decisions imposing sanctions, including informal stipulations and settlements. This information is collected by the board pursuant to the authority granted in Iowa Code sections 153.23 and 153.33 and chapter 272C. This information is stored electronically and on paper. This information is a public record pursuant to Iowa Code sections 272C.5 and 272C.6.

b. Court reporter notes, tape recordings, exhibits, pleadings, motions, orders, and other documents that constitute the record in a disciplinary hearing. If a hearing is closed pursuant to Iowa Code section 272C.6(1), the record is confidential under Iowa Code section 21.5(4). This information is collected by the board pursuant to the authority granted in Iowa Code sections 153.23 and 153.33, and chapter 272C. This information is stored on recorder tape or paper only.

6.14(4) *Continuing education records.* These records contain educational information about persons registered or licensed by the board. This information is collected pursuant to the authority granted in Iowa Code section 272C.2. This information is stored on paper only.

6.14(5) *Sponsors of continuing education.* These records contain information concerning continuing education sponsors, annual reports, recertification forms, courses, and attendance sheets. This information is collected pursuant to Iowa Code section 272C.2. This information is stored on paper only.

6.14(6) *Application records.* These records contain information about applicants which may include name, address, telephone number, social security number, place of birth, date of birth, education, certifications, examinations with scores, character references, fingerprints, diplomas and any additional

information the board may request. This information is collected by the board pursuant to Iowa Code sections 147.2, 153.21, 153.22, and 153.37 to 153.39. This information is stored electronically and on paper. The personal information contained in these records may be confidential in whole or in part pursuant to Iowa Code sections 147.21(1) to 147.21(3), 22.7(1), and 22.7(19) or other provisions of law.

6.14(7) *Examination records.* These records contain examination information and scores for any of the following examinations: Joint Commission on National Dental Examinations; Joint Commission on National Dental Hygiene Examinations; Central Regional Dental Testing Service, Inc. examinations; Iowa jurisprudence examinations; state radiography examinations; state dental examinations; state dental hygiene examinations; and state dental assistant registration examinations. This information is collected by the board pursuant to Iowa Code sections 147.21 and 147.34. This information is stored electronically and on paper. The information contained in these records is confidential in part pursuant to Iowa Code sections 147.21(2), 147.21(3), 22.7(1), and 22.7(19).

6.14(8) *Licensure, registration, permit or certification records.* These records contain information about currently, previously, or reinstated licensed dentists, dental hygienists, and dental assistants. This information includes name of license, registration, permit or certificate holder, license, registration, permit or certificate number, date issued, current renewal status and current address. This information is collected by the board pursuant to the authority granted in Iowa Code sections 136C.2, 147.2, 147.10, 153.22, 153.23, and 153.30. This information is stored electronically and on paper.

6.14(9) *Personnel files.* The agency maintains files containing information about employees, families and dependents, and applicants for positions with the agency. The files include payroll records, biographical information, medical information relating to disability, performance reviews and evaluations, disciplinary information, information required for tax withholding, information concerning employee benefits, affirmative action reports, and other information concerning the employer-employee relationship. Some of this information is confidential under Iowa Code section 22.7(11).

6.14(10) *Compliance reports.* These records contain information about dentists and their dental facilities which are inspected to determine compliance with board regulations including the use of parenteral sedation, general anesthesia, or nitrous oxide by dentists in dental facilities. This information is collected by the board pursuant to the authority granted in Iowa Code section 153.20. The information contained in these reports is confidential in whole or in part pursuant to Iowa Code sections 22.7(5), 272C.3, and 272C.6(4). This information is stored electronically and on paper.

6.14(11) *Litigation files.* These files or records contain information regarding litigation or anticipated litigation, which includes judicial and administrative proceedings. The records include briefs, depositions, docket sheets, documents, correspondence, attorney notes, memoranda, research materials, witness information, investigation materials, information compiled under the direction of the attorney, and case management records. The files contain materials which are confidential as attorney work product and attorney-client communications. Some materials are confidential under other applicable provisions of law or because of a court order. Persons wishing copies of pleadings and other documents filed in litigation should obtain these from the clerk of the appropriate court which maintains the official copy.

650—6.15(153,147,22) Other groups of records. This rule describes groups of records maintained by the agency other than record systems as defined in rule 650—6.1(153,147,22). These records are routinely available to the public. However, the agency's files of these records may contain confidential information as discussed in rule 650—6.13(153,147,22). This information is stored electronically and on paper. The records listed may contain information about individuals.

6.15(1) Board agendas, minutes, news releases, statistical reports and compilations, newsletters, publications, correspondence, opinions, rulings, and other information intended for the public except those records concerning closed sessions which are exempt from disclosure under Iowa Code section 21.5 or which are otherwise confidential by law. These records may contain information about individuals, including board members and staff. This information is collected pursuant to Iowa Code section 21.3. This information is stored electronically and on paper.

6.15(2) Records of board rule-making proceedings. These records may contain information about individuals making written or oral comments on rules proposed by the board. This information is collected pursuant to Iowa Code section 17A.4. This information is stored electronically and on paper.

6.15(3) Board decisions, findings of fact, final orders, declaratory rulings, declaratory orders, and other statements of law or policy issued by the board in the performance of its function. This information is stored electronically or on paper.

6.15(4) Administrative records. This includes documents concerning budget, property inventory, purchasing, yearly reports, office policies for employees, time sheets, printing and supply requisitions.

6.15(5) Office manuals. Information in office manuals such as the procedures manual may be confidential under Iowa Code section 17A.2(7)*"f"* or other applicable provision of law.

650—6.16(153,147,22) Data processing system. The board does not currently have a data processing system which matches, collates, or permits the comparison of personally identifiable information in one record system with personally identifiable information on another record system.

650—6.17(153,147,22) Purpose and scope. This chapter implements Iowa Code section 22.11 by establishing board policies and procedures for the maintenance of records.

This chapter does not:

1. Require the board to index or retrieve records which contain information about individuals by that person's name or other personal identifier.
2. Make available to the general public records which would otherwise not be available under the public records law, Iowa Code chapter 22.
3. Govern the maintenance or disclosure of, notification of or access to, records in the possession of the board which are governed by rules of another board or agency.
4. Apply to grantees, including local governments or subdivisions, administering state-funded programs, unless otherwise provided by law or agreement.
5. Make available records compiled by the board in reasonable anticipation of court litigation or formal administrative proceedings. The availability of the records to the general public or to any subject individual or party to litigation or proceedings shall be governed by applicable legal and constitutional principles, statutes, rules of discovery, evidentiary privileges, and applicable rules of the board.

These rules are intended to implement Iowa Code section 22.11 and chapters 147, 153, and 272C and Iowa Code chapter 252J.

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CHAPTER 7
RULES
[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—7.1(17A,147,153) Petition for rule making.

7.1(1) An interested person may petition the board for the adoption, amendment or repeal of administrative rules.

7.1(2) The petition shall be in writing, signed by or on behalf of the petitioner, and contain the following information:

a. A general statement of the rule the petitioner is requesting the board to adopt, amend, or repeal. Where amendment or repeal of an existing rule is sought, the rule number should be included but is not required. The petitioner is not required to enclose a draft of the proposed rule or proposed amendment being requested.

b. A statement of sufficient detail setting forth reasons for adoption, amendment, or repeal.

c. A statement showing how the petitioner would be affected by the requested action.

d. Name and address of petitioner.

7.1(3) The petition is filed when it is received by the board. Within 14 days after the filing of a petition is received, the board shall submit a copy of the petition and any accompanying brief to the administrative rules coordinator and to the administrative rules review committee (ARRC).

7.1(4) Upon receipt of the petition, the board shall take the petition under advisement. The board may request additional information from the petitioner or the board office. Upon request by the petitioner, the board shall schedule a brief and informal meeting between the petitioner and the board, a member of the board, or a member of board staff to discuss the petition. The board may also solicit comments from any person on the substance of the petition. Any person may submit to the board comments on the substance of the petition.

7.1(5) If the petition raises an issue regarding the practice of dental hygiene, the petition shall be referred to the dental hygiene committee for review. The dental hygiene committee shall review the petition and timely submit its recommendations to the board. The board's review of the dental hygiene committee recommendation is subject to 650—Chapter 1.

7.1(6) The board shall deny the petition or initiate rule-making procedures within 60 days after filing of the petition. In the case of a denial, the board shall state in writing its reasons for the denial. The petitioner and the ARRC shall be notified in writing of the board action taken.

This rule is intended to implement Iowa Code sections 17A.3(1) and 17A.7.

[**ARC 5722C**, IAB 6/30/21, effective 8/4/21]

650—7.2(17A,147,153) Oral presentations for rule making.

7.2(1) Oral presentations may be made to the board when requested in writing not later than 20 days after notice of intended action is published in the Iowa Administrative Bulletin, by five interested persons, a governmental subdivision, the administrative rules review committee, an agency, or an association having not less than 25 members or upon discretion of the board.

7.2(2) The board shall give the public not less than 20 days' notice of the time and place where oral presentations may be made.

7.2(3) Persons wishing to speak shall notify the board prior to start of the oral presentations.

7.2(4) Oral presentations may be limited to ten minutes at the discretion of the board.

This rule is intended to implement Iowa Code sections 17A.3(1) and 17A.4(1).

650—7.3(153) Declaratory rulings. Rescinded IAB 5/19/99, effective 6/23/99. See 650—Chapter 9.

650—7.4(17A,147,153) Waivers.

7.4(1) *Definition.* For purposes of this rule, "a waiver" means action by the board that suspends, in whole or in part, the requirements or provisions of a rule as applied to an identified person on the basis of the particular circumstances of that person.

7.4(2) *Scope of rule.* This rule outlines generally applicable standards and a uniform process for the granting of an individual waiver from a rule adopted by the board in situations where no other more specifically applicable law provides for a waiver. To the extent another more specific provision of law governs the issuance of a waiver from a particular rule, the more specific provision shall supersede this rule with respect to any waiver from that rule.

7.4(3) *Applicability of rule.* The board may grant a waiver from a rule only if the board has jurisdiction over the rule and the requested waiver is consistent with applicable statutes, constitutional provisions, or other provisions of law. The board may not waive requirements created or duties imposed by statute.

7.4(4) *Criteria for waiver.* In response to a petition, the board may in its sole discretion issue an order waiving in whole or in part the requirements of a rule if the board finds, based on clear and convincing evidence, all of the following:

a. The application of the rule would impose an undue hardship on the person for whom the waiver is requested;

b. The waiver from the requirements of the rule in the specific case would not prejudice the substantial legal rights of any person;

c. The provisions of the rule subject to the petition for a waiver are not specifically mandated by statute or another provision of law; and

d. Substantially equal protection of public health, safety, and welfare will be afforded by a means other than that prescribed in the particular rule for which the waiver is requested.

7.4(5) *Filing of petition.* A petition for a waiver must be submitted in writing to the board as follows:

a. Application for license, registration, certification, or permit. If the petition relates to an application for license, registration, certification, or permit, the petition shall be made in accordance with the filing requirements for the application in question.

b. Contested cases. If the petition relates to a pending contested case, the petition shall be filed in the contested case proceeding, using the caption of the contested case.

c. Other. If the petition does not relate to an application or a pending contested case, the petition may be submitted to the board's executive director.

d. A petition is deemed filed when it is received at the board's office. A petition may be filed using the online form, emailed to IDB@iowa.gov, or mailed to the Iowa Dental Board, 400 S.W. 8th Street, Suite D, Des Moines, Iowa 50309-4687. The petition must include the content specified in subrule 7.4(6).

7.4(6) *Content of petition.* A petition for waiver shall include the following information where applicable and known to the requester:

a. The name, address, email address, and telephone number of the person for whom a waiver is being requested and a reference to any related contested case. Also, the name, address, email address, and telephone number of the petitioner's legal representative, if applicable, and a statement indicating the person to whom communications concerning the petition should be directed.

b. A description and citation of the specific rule from which a waiver is requested.

c. The specific waiver requested, including the precise scope and duration.

d. The relevant facts that the petitioner believes would justify a waiver under each of the four criteria described in subrule 7.4(4). The petitioner shall attest to the accuracy of the facts provided in the petition and a statement of reasons that the petitioner believes will justify a waiver.

e. The name, address, email address, and telephone number of any person with knowledge of the relevant facts relating to the proposed waiver.

7.4(7) *Additional information.* Prior to issuing an order granting or denying a waiver, the board may request additional information from the petitioner relative to the petition and surrounding circumstances.

7.4(8) *Notice.* The board shall provide public notice by including any petitions for waiver on the agenda of the board meeting during which the petition for waiver will be discussed.

7.4(9) *Ruling.* An order granting or denying a waiver shall be in writing and shall contain a reference to the particular person and rule or portion thereof to which the order pertains, a statement of the relevant

facts and reasons upon which the action is based, and a description of the precise scope and duration of the waiver if one is issued.

a. Board discretion. The final decision on whether the circumstances justify the granting of a waiver shall be made at the sole discretion of the board, upon consideration of all relevant factors. Each petition for a waiver shall be evaluated by the board based on the unique, individual circumstances set out in the petition.

b. Burden of persuasion. The burden of persuasion rests with the petitioner to demonstrate by clear and convincing evidence that the board should exercise its discretion to grant a waiver from a board rule.

c. Narrowly tailored exception. A waiver, if granted, shall provide the narrowest exception possible to the provisions of a rule.

d. Conditions. The board may place any condition on a waiver that the board finds desirable to protect the public health, safety, and welfare.

e. Time period of waiver. A waiver shall not be permanent unless the petitioner can show that a temporary waiver would be impracticable. If a temporary waiver is granted, there is no automatic right to renewal. At the sole discretion of the board, a waiver may be renewed if the board finds that grounds for a waiver continue to exist.

f. Time for ruling. The board shall grant or deny a petition for a waiver as soon as practicable but, in any event, shall do so within 120 days of its receipt, unless the petitioner agrees to a later date. However, if a petition is filed in a contested case, the board shall grant or deny the petition no later than the time at which the final decision in that contested case is issued. The board may issue a waiver in conjunction with an application that remains in place in perpetuity.

g. When deemed denied. Failure of the board to grant or deny a petition within the required time period shall be deemed a denial of that petition by the board. However, the board shall remain responsible for issuing an order denying a waiver.

h. Service of order. Within seven days of its issuance, any order issued under this rule shall be transmitted to the petitioner or the person to whom the order pertains.

i. Delegation. The board may authorize staff to administratively approve additional petitions for waiver under the same parameters as an approved petition.

7.4(10) *Public availability.* All orders granting or denying a waiver petition shall be indexed, filed, and available for public inspection as provided in Iowa Code section 17A.3. Petitions for a waiver and orders granting or denying a waiver petition are public records under Iowa Code chapter 22. Some petitions or orders may contain information the board is authorized or required to keep confidential. The board may accordingly redact confidential information from petitions or orders prior to public inspection.

7.4(11) *Submission of waiver information.* Within 60 days of granting or denying a waiver, the board shall make a submission on the Internet site established pursuant to Iowa Code section 17A.9A for the submission of waiver information. The submission shall identify the rules for which a waiver has been granted or denied, the number of times a waiver was granted or denied for each rule, and a citation to the statutory provisions implemented by these rules. The submission shall include a general summary of the reasons justifying the board's action on waiver requests. If practical, the submission shall detail the extent to which the granting of a waiver has established a precedent for additional waivers and the extent to which the granting of waiver has affected the general applicability of the rule itself.

7.4(12) *Cancellation of a waiver.* A waiver issued by the board pursuant to this rule may be withdrawn, canceled, or modified if, after appropriate notice and hearing, the board issues an order finding any of the following:

a. The petitioner or the person who was the subject of the waiver order withheld or misrepresented material facts relevant to the propriety or desirability of the waiver; or

b. The alternative means for ensuring that the public health, safety and welfare will be adequately protected after issuance of the waiver order have been insufficient; or

c. The subject of the waiver order has failed to comply with all conditions contained in the order; or

d. The rule cited in the waiver has been amended since the waiver was issued.

7.4(13) *Violations.* A violation of a condition in a waiver order shall be treated as a violation of the particular rule for which the waiver was granted. As a result, the recipient of a waiver under this rule who violates a condition of the waiver may be subject to the same remedies or penalties as a person who violates the rule at issue.

7.4(14) *Defense.* After the board issues an order granting a waiver, the order is a defense within its terms and the specific facts indicated therein only for the person to whom the order pertains in any proceeding in which the rule in question is sought to be invoked.

7.4(15) *Judicial review.* Judicial review of a board's decision to grant or deny a waiver petition may be taken in accordance with Iowa Code chapter 17A.

This rule is intended to implement Iowa Code chapters 17A, 147, and 153.

[**ARC 5722C**, IAB 6/30/21, effective 8/4/21]

650—7.5(17A,147,153) Sample petition for waiver. Rescinded **ARC 5722C**, IAB 6/30/21, effective 8/4/21.

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CHAPTER 8
SALE OF GOODS AND SERVICES

650—8.1(68B) Selling of goods or services by members of the board. The board members shall not sell, either directly or indirectly, any goods or services to individuals, associations, or corporations that are subject to the regulatory authority of the department of public health except as authorized by this chapter.

650—8.2(68B) Conditions of consent for members.

8.2(1) *Consent shall be given by a majority of the members of the board.* Consent shall not be given to an official to sell goods or services to an individual, association, or corporation regulated by the department of public health unless all of the following conditions are met:

a. The official requesting consent does not have authority to determine whether consent should be given.

b. The official's duties or functions are not related to the department's regulatory authority over the individual, association or corporation to whom the goods and services are being sold, or the selling of the good or service does not affect the official's duties or functions.

c. The selling of the good or service does not include acting as an advocate on behalf of the individual, association, or corporation to the department of public health.

d. The selling of the good or service does not result in the official selling a good or service to the department on behalf of the individual, association, or corporation.

8.2(2) *Authorized sales.*

a. A member of the board may sell goods or services to any individual, association, or corporation regulated by any division within the department of public health, other than the board on which that official serves. This consent is granted because the sale of such goods or services does not affect the board member's duties or functions on the board.

b. A member of the board may sell goods or services to any individual, association, or corporation regulated by the board if those goods or services are routinely provided to the public as part of that person's regular professional practice. This consent is granted because the sale of such goods or services does not affect the board member's duties or functions on the board. In the event an individual, association, or corporation regulated by the board, to whom a board member sells goods or services is directly involved in any matter pending before the board, including a disciplinary matter, that board member shall not participate in any deliberation or decision concerning that matter. In the event a complaint is filed with the board concerning the services provided by the board member to a member of the public, that board member is otherwise prohibited by law from participating in any discussion or decision by the licensing board in that case.

c. Individual application and approval are not required for the sales authorized by this rule unless there are unique facts surrounding a particular sale which would cause the sale to affect the seller's duties or functions, would give the buyer an advantage in dealing with the board, or would otherwise present a conflict of interest.

8.2(3) *Application for consent.* Prior to selling a good or service to an individual, association, or corporation subject to the regulatory authority of the department of public health, an official must obtain prior written consent unless the sale is specifically allowed in subrule 8.2(2). The request for consent must be in writing signed by the official requesting consent. The application must provide a clear statement of all relevant facts concerning the sale. The application should identify the parties to the sale and the amount of compensation. The application should also explain why the sale should be allowed.

8.2(4) *Limitation of consent.* Consent shall be in writing and shall be valid only for the activities and the time period specifically described in the consent. Consent can be revoked at any time by a majority vote of the members of the board upon written notice to the board. A consent provided under this chapter does not constitute authorization for any activity which is a conflict of interest under common law or which would violate any other statute or rule.

It is the responsibility of the official requesting consent to ensure compliance with all other applicable laws and rules.

These rules are intended to implement Iowa Code section 68B.4.

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[Filed 4/21/95, Notice 2/15/95—published 5/10/95, effective 6/14/95]

CHAPTER 9
DECLARATORY ORDERS

650—9.1(17A) Petition for declaratory order. Any person may file a petition with the board (which for purposes of this chapter means the board of dental examiners or as to matters exclusively involving dental hygiene or dental hygienists means the dental hygiene committee of the board of dental examiners) for a declaratory order as to the applicability to specified circumstances of a statute, rule, or order within the primary jurisdiction of the Board of Dental Examiners, 400 S.W. 8th Street, Suite D, Des Moines, Iowa 50309-4687. A petition is deemed filed when it is received by that office. The board of dental examiners shall provide the petitioner with a file-stamped copy of the petition if the petitioner provides the board an extra copy for this purpose. The petition must be typewritten or legibly handwritten in ink and must substantially conform to the following form:

BOARD OF DENTAL EXAMINERS

Petition by (Name of Petitioner) for a Declaratory Order on (Cite provisions of law involved).	PETITION FOR DECLARATORY ORDER

The petition must provide the following information:

1. A clear and concise statement of all relevant facts on which the order is requested.
2. A citation and the relevant language of the specific statutes, rules, policies, decisions, or orders, whose applicability is questioned, and any other relevant law.
3. The questions petitioner wants answered, stated clearly and concisely.
4. The answers to the questions desired by the petitioner and a summary of the reasons urged by the petitioner in support of those answers.
5. The reasons for requesting the declaratory order and disclosure of the petitioner's interest in the outcome.
6. A statement indicating whether the petitioner is currently a party to another proceeding involving the questions at issue and whether, to the petitioner's knowledge, those questions have been decided by, are pending determination by, or are under investigation by, any governmental entity.
7. The names and addresses of other persons, or a description of any class of persons, known by petitioner to be affected by, or interested in, the questions presented in the petition.
8. Any request by petitioner for a meeting provided for by 650—9.7(17A).

The petition must be dated and signed by the petitioner or the petitioner's representative. It must also include the name, mailing address, and telephone number of the petitioner and petitioner's representative, and a statement indicating the person to whom communications concerning the petition should be directed.

650—9.2(17A) Notice of petition. Within 15 days after receipt of a petition for a declaratory order, the board of dental examiners shall give notice of the petition to all persons not served by the petitioner pursuant to 650—9.6(17A) to whom notice is required by any provision of law. The board of dental examiners may also give notice to any other persons.

650—9.3(17A) Intervention.

9.3(1) Persons who qualify under any applicable provision of law as an intervenor and who file a petition for intervention within 15 days of the filing of a petition for declaratory order shall be allowed to intervene in a proceeding for a declaratory order.

9.3(2) Any person who files a petition for intervention at any time prior to the issuance of an order may be allowed to intervene in a proceeding for a declaratory order at the discretion of the board of dental examiners.

9.3(3) A petition for intervention shall be filed with the board at 400 S.W. 8th Street, Suite D, Des Moines, Iowa 50309-4687. Such a petition is deemed filed when it is received by that office. The board

of dental examiners will provide the petitioner with a file-stamped copy of the petition for intervention if the petitioner provides an extra copy for this purpose. A petition for intervention must be typewritten or legibly handwritten in ink and must substantially conform to the following form:

BOARD OF DENTAL EXAMINERS

Petition by (Name of Original Petitioner) for a Declaratory Order on (Cite provisions of law cited in original petition).	PETITION FOR INTERVENTION

The petition for intervention must provide the following information:

1. Facts supporting the intervenor's standing and qualifications for intervention.
2. The answers urged by the intervenor to the question or questions presented and a summary of the reasons urged in support of those answers.
3. Reasons for requesting intervention and disclosure of the intervenor's interest in the outcome.
4. A statement indicating whether the intervenor is currently a party to any proceeding involving the questions at issue and whether, to the intervenor's knowledge, those questions have been decided by, are pending determination by, or are under investigation by, any governmental entity.
5. The names and addresses of any additional persons, or a description of any additional class of persons, known by the intervenor to be affected by, or interested in, the questions presented.
6. Whether the intervenor consents to be bound by the determination of the matters presented in the declaratory order proceeding.

The petition must be dated and signed by the intervenor or the intervenor's representative. It must also include the name, mailing address, and telephone number of the intervenor and intervenor's representative, and a statement indicating the person to whom communications should be directed.

650—9.4(17A) Briefs. The petitioner or any intervenor may file a brief in support of the position urged. The board of dental examiners may request a brief from the petitioner, any intervenor, or any other person concerning the questions raised.

650—9.5(17A) Inquiries. Inquiries concerning the status of a declaratory order proceeding may be made to the Executive Director, Board of Dental Examiners, 400 S.W. 8th Street, Suite D, Des Moines, Iowa 50309-4687.

650—9.6(17A) Service and filing of petitions and other papers.

9.6(1) *When service required.* Except where otherwise provided by law, every petition for declaratory order, petition for intervention, brief, or other paper filed in a proceeding for a declaratory order shall be served upon each of the parties of record to the proceeding, and on all other persons identified in the petition for declaratory order or petition for intervention as affected by or interested in the questions presented, simultaneously with their filing. The party filing a document is responsible for service on all parties and other affected or interested persons.

9.6(2) *Filing—when required.* All petitions for declaratory orders, petitions for intervention, briefs, or other papers in a proceeding for a declaratory order shall be filed with the Board of Dental Examiners, 400 S.W. 8th Street, Suite D, Des Moines, Iowa 50309-4687. All petitions, briefs, or other papers that are required to be served upon a party shall be filed simultaneously with the board of dental examiners.

9.6(3) *Method of service, time of filing, and proof of mailing.* Method of service, time of filing, and proof of mailing shall be as provided by 650—Chapter 51.

650—9.7(17A) Consideration. Upon request by petitioner, the board of dental examiners must schedule a brief and informal meeting between the original petitioner, all intervenors, and the board of dental examiners, a member of the board of dental examiners, or a member of the staff of the board of dental examiners, to discuss the questions raised. The board of dental examiners may solicit comments from

any person on the questions raised. Also, comments on the questions raised may be submitted to the board of dental examiners by any person.

650—9.8(17A) Action on petition.

9.8(1) Within the time allowed by 1998 Iowa Acts, chapter 1202, section 13(5), after receipt of a petition for a declaratory order, the board of dental examiners or designee shall take action on the petition as required by 1998 Iowa Acts, chapter 1202, section 13(5).

9.8(2) The date of issuance of an order or of a refusal to issue an order is as defined in 650—Chapter 51.

650—9.9(17A) Refusal to issue order.

9.9(1) The board of dental examiners shall not issue a declaratory order where prohibited by 1998 Iowa Acts, chapter 1202, section 13(1), and may refuse to issue a declaratory order on some or all questions raised for the following reasons:

1. The petition does not substantially comply with the required form.
2. The petition does not contain facts sufficient to demonstrate that the petitioner will be aggrieved or adversely affected by the failure of the board of dental examiners to issue an order.
3. The board of dental examiners does not have jurisdiction over the questions presented in the petition.
4. The questions presented by the petition are also presented in a current rule making, contested case, or other agency or judicial proceeding, that may definitively resolve them.
5. The questions presented by the petition would more properly be resolved in a different type of proceeding or by another body with jurisdiction over the matter.
6. The facts or questions presented in the petition are unclear, overbroad, insufficient, or otherwise inappropriate as a basis upon which to issue an order.
7. There is no need to issue an order because the questions raised in the petition have been settled due to a change in circumstances.
8. The petition is not based upon facts calculated to aid in the planning of future conduct but is, instead, based solely upon prior conduct in an effort to establish the effect of that conduct or to challenge an agency decision already made.
9. The petition requests a declaratory order that would necessarily determine the legal rights, duties, or responsibilities of other persons who have not joined in the petition, intervened separately, or filed a similar petition and whose position on the questions presented may fairly be presumed to be adverse to that of petitioner.
10. The petitioner requests the board of dental examiners to determine whether a statute is unconstitutional on its face.

9.9(2) A refusal to issue a declaratory order must indicate the specific grounds for the refusal and constitutes final agency action on the petition.

9.9(3) Refusal to issue a declaratory order pursuant to this provision does not preclude the filing of a new petition that seeks to eliminate the grounds for the refusal to issue an order.

650—9.10(17A) Contents of declaratory order—effective date. In addition to the order itself, a declaratory order must contain the date of its issuance, the name of petitioner and all intervenors, the specific statutes, rules, policies, decisions, or orders involved, the particular facts upon which it is based, and the reasons for its conclusion.

A declaratory order is effective on the date of issuance.

650—9.11(17A) Copies of orders. A copy of all orders issued in response to a petition for a declaratory order shall be mailed promptly to the original petitioner and all intervenors.

650—9.12(17A) Effect of a declaratory order. A declaratory order has the same status and binding effect as a final order issued in a contested case proceeding. It is binding on the board of dental examiners, the petitioner, and any intervenors (who consent to be bound) and is applicable only in circumstances

where the relevant facts and the law involved are indistinguishable from those on which the order was based. As to all other persons, a declaratory order serves only as precedent and is not binding on the board of dental examiners. The issuance of a declaratory order constitutes final agency action on the petition.

These rules are intended to implement Iowa Code chapter 17A as amended by 1998 Iowa Acts, chapter 1202.

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[Filed emergency 1/21/00—published 2/9/00, effective 1/21/00]

TITLE III
LICENSING

CHAPTER 10
GENERAL REQUIREMENTS

[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—10.1(153) Licensed or registered personnel. Persons engaged in the practice of dentistry in Iowa must be licensed by the board as a dentist, and persons performing services under Iowa Code section 153.15 must be licensed by the board as a dental hygienist. Persons engaged in the practice of dental assisting must be registered by the board pursuant to 650—Chapter 20.

This rule is intended to implement Iowa Code sections 147.2 and 153.17.

650—10.2(147,153) Display of license, registration, permit, and renewal. The license to practice dentistry or dental hygiene or the registration as a dental assistant and the current renewal must be prominently displayed by the licensee or registrant at each permanent practice location. A dentist who holds a permit to administer deep sedation/general anesthesia or conscious sedation, or a dental hygienist who holds a permit to administer local anesthesia, shall also prominently display the permit and the current renewal at each permanent practice location.

10.2(1) Additional certificates shall be obtained from the board whenever a licensee or registrant practices at more than one address.

10.2(2) Duplicate licenses, certificates of registration, or permits shall be issued by the board upon satisfactory proof of loss or destruction of the original license, certificate of registration, or permit.

This rule is intended to implement Iowa Code sections 147.7, 147.10 and 147.80(17).

650—10.3(153) Authorized practice of a dental hygienist.

10.3(1) "Practice of dental hygiene" as defined in Iowa Code section 153.15 means the performance of the following educational, therapeutic, preventive and diagnostic dental hygiene services. Such services, except educational services, shall be delegated by and performed under the supervision of a dentist licensed pursuant to Iowa Code chapter 153.

a. Educational. Assessing the need for, planning, implementing, and evaluating oral health education programs for individual patients and community groups; conducting workshops and in-service training sessions on dental health for nurses, school personnel, institutional staff, community groups and other agencies providing consultation and technical assistance for promotional, preventive and educational services.

b. Therapeutic. Identifying and evaluating factors which indicate the need for and performing (1) oral prophylaxis, which includes supragingival and subgingival debridement of plaque, and detection and removal of calculus with instruments or any other devices; (2) periodontal scaling and root planing; (3) removing and polishing hardened excess restorative material; (4) administering local anesthesia with the proper permit; (5) administering nitrous oxide inhalation analgesia in accordance with 650—subrules 29.6(4) and 29.6(5); (6) applying or administering medicaments prescribed by a dentist, including chemotherapeutic agents and medicaments or therapies for the treatment of periodontal disease and caries; (7) removal of adhesives.

c. Preventive. Applying pit and fissure sealants and other medications or methods for caries and periodontal disease control; organizing and administering fluoride rinse or sealant programs.

d. Diagnostic. Reviewing medical and dental health histories; performing oral inspection; indexing dental and periodontal disease; preliminary charting of existing dental restorations and teeth; making occlusal registrations for mounting study casts; testing pulp vitality; testing glucose levels; analyzing dietary surveys.

e. The following services may only be delegated by a dentist to a dental hygienist: administration of local anesthesia, placement of sealants except as permitted by 650—subrule 23.6(2), and the removal of any plaque, stain, calculus, or hard natural or synthetic material except by toothbrush, floss, or rubber cup coronal polish.

f. Phlebotomy.

g. Expanded function procedures in accordance with 650—Chapter 23.

10.3(2) All authorized services provided by a dental hygienist, except educational services, shall be performed under the general, direct, or public health supervision of a dentist currently licensed in the state of Iowa in accordance with 650—1.1(153) and 650—10.5(153).

10.3(3) Under the general or public health supervision of a dentist, a dental hygienist may provide educational services, assessment, screening, or data collection for the preparation of preliminary written records for evaluation by a licensed dentist. A dentist is not required to examine a patient prior to the provision of these dental hygiene services.

10.3(4) The administration of local anesthesia or nitrous oxide inhalation analgesia shall only be provided under the direct supervision of a dentist.

10.3(5) All other authorized services provided by a dental hygienist to a new patient shall be provided under the direct or public health supervision of a dentist. An examination by the dentist must take place during an initial visit by a new patient, except when hygiene services are provided under public health supervision.

10.3(6) Subsequent examination and monitoring of the patient, including definitive diagnosis and treatment planning, is the responsibility of the dentist and shall be carried out in a reasonable period of time in accordance with the professional judgment of the dentist based upon the individual needs of the patient.

10.3(7) General supervision shall not preclude the use of direct supervision when in the professional judgment of the dentist such supervision is necessary to meet the individual needs of the patient.

This rule is intended to implement Iowa Code section 153.15.

[**ARC 2141C**, IAB 9/16/15, effective 10/21/15; **ARC 3487C**, IAB 12/6/17, effective 1/10/18; **ARC 4676C**, IAB 9/25/19, effective 10/30/19; **ARC 6733C**, IAB 12/14/22, effective 1/18/23]

650—10.4(153) Unauthorized practice of a dental hygienist. A dental hygienist who renders hygiene services, except educational services, that have not been delegated by a licensed dentist or that are not performed under the supervision of a licensed dentist as provided by rule shall be deemed to be practicing illegally.

10.4(1) The unauthorized practice of dental hygiene means allowing a person not licensed in dentistry or dental hygiene to perform dental hygiene services authorized in Iowa Code section 153.15 and rule 650—10.3(153).

10.4(2) The unauthorized practice of dental hygiene also means the performance of services by a dental hygienist that exceeds the scope of practice granted in Iowa Code section 153.15.

10.4(3) Students enrolled in dental hygiene programs. Students enrolled in an accredited dental hygiene program are not considered to be engaged in the unlawful practice of dental hygiene provided that such practice is in connection with their regular course of instruction and meets the following:

a. The practice of clinical skills on peers enrolled in the same program must be under the direct supervision of a program instructor with an active Iowa dental hygiene license, Iowa faculty permit, or Iowa dental license;

b. The practice of clinical skills on members of the public must be under the general supervision of a dentist with an active Iowa dental license;

c. The practice of clinical skills involving the administration or monitoring of nitrous oxide or the administration of local anesthesia must be under the direct supervision of a dentist with an active Iowa dental license.

This rule is intended to implement Iowa Code sections 147.10, 147.57 and 153.15.

[**ARC 2592C**, IAB 6/22/16, effective 7/27/16; **ARC 3487C**, IAB 12/6/17, effective 1/10/18; **ARC 3987C**, IAB 8/29/18, effective 10/3/18]

650—10.5(153) Public health supervision allowed. A dentist who meets the requirements of this rule may provide public health supervision to a dental hygienist if the dentist has an active Iowa license and the services are provided in public health settings.

10.5(1) *Public health settings defined.* For the purposes of this rule, public health settings are limited to schools; Head Start programs; programs affiliated with the early childhood Iowa (ECI) initiative

authorized by Iowa Code chapter 256I; child care centers (excluding home-based child care centers); federally qualified health centers; public health dental vans; free clinics; nonprofit community health centers; nursing facilities; and federal, state, or local public health programs.

10.5(2) *Public health supervision defined.* "Public health supervision" means all of the following:

a. The dentist authorizes and delegates the services provided by a dental hygienist to a patient in a public health setting, with the exception that hygiene services may be rendered without the patient's first being examined by a licensed dentist;

b. The dentist is not required to provide future dental treatment to patients served under public health supervision;

c. The dentist and the dental hygienist have entered into a written supervision agreement that details the responsibilities of each licensee, as specified in subrule 10.5(3); and

d. The dental hygienist has an active Iowa license with a minimum of one year of clinical practice experience.

10.5(3) *Licensee responsibilities.* When working together in a public health supervision relationship, a dentist and dental hygienist shall enter into a written agreement that specifies the following responsibilities.

a. The dentist providing public health supervision must:

(1) Be available to provide communication and consultation with the dental hygienist;

(2) Have age- and procedure-specific standing orders for the performance of dental hygiene services. Those standing orders must include consideration for medically compromised patients and medical conditions for which a dental evaluation must occur prior to the provision of dental hygiene services;

(3) Specify a period of time in which an examination by a dentist must occur prior to providing further hygiene services. However, this examination requirement does not apply to educational services, assessments, screenings, and fluoride if specified in the supervision agreement;

(4) Specify the location or locations where the hygiene services will be provided under public health supervision; and

(5) Complete board-approved training on silver diamine fluoride if the supervision agreement permits the use of silver diamine fluoride. The supervision agreement must specify guidelines for use of silver diamine fluoride and must follow board-approved protocols.

b. A dental hygienist providing services under public health supervision may provide assessments; screenings; data collection; and educational, therapeutic, preventive, and diagnostic services as defined in rule 650—10.3(153), except for the administration of local anesthesia or nitrous oxide inhalation analgesia, and must:

(1) Maintain contact and communication with the dentist providing public health supervision;

(2) Practice according to age- and procedure-specific standing orders as directed by the supervising dentist, unless otherwise directed by the dentist for a specific patient;

(3) Provide to the patient, parent, or guardian a written plan for referral to a dentist and assessment of further dental treatment needs;

(4) Have each patient sign a consent form that notifies the patient that the services that will be received do not take the place of regular dental checkups at a dental office and are meant for people who otherwise would not have access to services;

(5) Specify a procedure for creating and maintaining dental records for the patients that are treated by the dental hygienist, including where these records are to be located; and

(6) Complete board-approved training on silver diamine fluoride if the supervision agreement permits the use of silver diamine fluoride. The supervision agreement must specify guidelines for use of silver diamine fluoride and must follow board-approved protocols.

c. The written agreement for public health supervision must be maintained by the dentist and the dental hygienist and must be made available to the board upon request. The dentist and dental hygienist must review the agreement at least biennially.

d. A copy of the written agreement for public health supervision shall be filed with the Bureau of Oral and Health Delivery Systems, Iowa Department of Public Health, Lucas State Office Building, 321 E. 12th Street, Des Moines, Iowa 50319.

10.5(4) *Reporting requirements.* Each dental hygienist who has rendered services under public health supervision must complete a summary report at the completion of a program or, in the case of an ongoing program, at least annually. The report shall be filed with the bureau of oral and health delivery systems of the Iowa department of public health on forms provided by the department and shall include information related to the number of patients seen and services provided so that the department may assess the impact of the program. The department will provide summary reports to the board on an annual basis.

This rule is intended to implement Iowa Code section 153.15.

[**ARC 7767B**, IAB 5/20/09, effective 6/24/09; **ARC 0629C**, IAB 3/6/13, effective 4/10/13; **ARC 2141C**, IAB 9/16/15, effective 10/21/15; **ARC 3987C**, IAB 8/29/18, effective 10/3/18]

650—10.6(147,153,272C) Other requirements.

10.6(1) *Change of name.* Each person licensed or registered by the board must notify the board, by written correspondence, of a change of legal name within 60 days of such change. Proof of a legal name change, such as a copy of a notarized letter, marriage certificate, or other legal document establishing the change must accompany the request for a name change.

10.6(2) *Change of address.* Each person licensed or registered by the board must notify the board within 60 days, through the board's online system, of changes in email and mailing addresses. Address changes shall be submitted as follows:

a. Primary mailing address. Licensees or registrants shall designate a primary mailing address. The primary mailing address may be a designated work or home address.

b. Practice locations. Licensees or registrants shall report addresses for all practice locations. Practice locations include full-time and part-time practice locations.

c. Email address. Each licensee or registrant shall report, when available, an email address for the purpose of electronic communications from the board.

10.6(3) *Child and dependent adult abuse training.* Licensees or registrants who regularly examine, attend, counsel or treat children or adults in Iowa must obtain mandatory training in child and dependent adult abuse identification and reporting in accordance with 650—subrule 25.4(2).

10.6(4) *Reporting requirements.* Each licensee and registrant shall be responsible for reporting to the board, within 30 days, any of the following:

a. Every adverse judgment in a professional malpractice action to which the licensee or registrant was a party.

b. Every settlement of a claim against the licensee or registrant alleging malpractice.

c. Any license or registration revocation, suspension or other disciplinary action taken by a licensing authority of another state, territory or country within 30 days of the final action by the licensing authority.

This rule is intended to implement Iowa Code sections 147.9, 232.69, 235B.16 and 272C.9.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3987C**, IAB 8/29/18, effective 10/3/18; **ARC 4846C**, IAB 1/1/20, effective 2/5/20]

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[Filed ARC 3987C (Notice ARC 3849C, IAB 6/20/18), IAB 8/29/18, effective 10/3/18]
[Filed ARC 4676C (Notice ARC 4424C, IAB 5/8/19), IAB 9/25/19, effective 10/30/19]
[Filed ARC 4846C (Notice ARC 4661C, IAB 9/25/19), IAB 1/1/20, effective 2/5/20]
[Filed ARC 6733C (Notice ARC 6515C, IAB 9/7/22), IAB 12/14/22, effective 1/18/23]

[1] Effective date of 10.3(1) delayed until the end of the 2000 Session of the General Assembly by the Administrative Rules Review Committee at its meeting held September 15, 1999.

†See HJR 2006 of 2006 Session of the Eighty-first General Assembly regarding nullification of subrule 10.6(4).

CHAPTER 11
LICENSURE AND REGISTRATION
[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—11.1(147,153) Applicant responsibilities. An applicant for dental or dental hygiene licensure or dental assistant registration bears full responsibility for each of the following:

1. Paying all fees charged by regulatory authorities, national testing or credentialing organizations, health facilities, and educational institutions providing the information required to complete a license, registration or permit application;

2. Providing accurate, up-to-date, and truthful information on the application form including, but not limited to, prior professional experience, education, training, examination scores, and disciplinary history; and

3. Submitting complete application materials. An application for a license, permit, or registration or reinstatement of a license or registration will be considered active for 180 days from the date the application is received. For purposes of establishing timely filing, the postmark on a paper submittal will be used, and for applications submitted online, the electronic timestamp will be deemed the date of filing. If the applicant does not submit all materials, including a completed fingerprint packet, within this time period or if the applicant does not meet the requirements for the license, permit, registration or reinstatement, the application shall be considered incomplete. An applicant whose application is filed incomplete must submit a new application and application fee.

This rule is intended to implement Iowa Code sections 147.2 and 153.39.

[**ARC 9218B**, IAB 11/3/10, effective 12/8/10; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—11.2(147,153) Dental licensure by examination.

11.2(1) Applications for licensure by examination to practice dentistry in this state shall be made on the form provided by the board and must be completely answered, including required credentials and documents. An applicant who has held a dental license issued in another state for one year or longer must apply for licensure by credentials pursuant to rule 650—11.3(153).

11.2(2) Applications for licensure must be filed with the board along with:

a. Documentation of graduation from dental college. Satisfactory evidence of graduation with a DDS or DMD from an accredited dental college approved by the board or satisfactory evidence of meeting the requirements specified in rule 650—11.4(153).

b. Certification of good standing from dean or designee. Certification by the dean or other authorized representative of the dental school that the applicant has been a student in good standing while attending that dental school.

c. Documentation of passage of national dental examination. Evidence of successful passage of the examination administered by the Joint Commission on National Dental Examinations.

d. Documentation of passage of a clinical examination. Successful passage of a board-approved clinical examination within the previous five-year period.

(1) The following patient-based regional clinical examinations are approved by the board for purposes of licensure by examination: the Central Regional Dental Testing Service, Inc. examination as administered by the Central Regional Dental Testing Service, Inc. (CRDTS), the Western Regional Examining Board examination as administered by the Western Regional Examining Board (WREB), the Southern Regional Testing Agency, Inc. examination as administered by the Southern Regional Testing Agency, Inc. (SRTA), and the American Board of Dental Examiners, Inc. examination as administered by the Commission on Dental Competency Assessments (CDCA) and the Council of Interstate Testing Agencies, Inc. (CITA).

(2) The following manikin-based regional clinical examinations are approved by the board for purposes of licensure by examination: the Central Regional Dental Testing Service, Inc. examination as administered by the Central Regional Dental Testing Service, Inc. (CRDTS), and the American Board of Dental Examiners, Inc. examination as administered by the Commission on Dental Competency Assessments (CDCA).

(3) Beginning January 1, 2018, the 2014 California portfolio examination is approved by the board for the purposes of licensure by examination. To be eligible for licensure on the basis of portfolio examination, an applicant must be a student at the University of Iowa College of Dentistry or have graduated from the University of Iowa College of Dentistry within one year of the date of application.

e. Explanation of any legal or administrative actions. A statement disclosing and explaining any disciplinary actions, investigations, complaints, malpractice claims, judgments, settlements, or criminal charges.

f. Payment of application, fingerprint and background check fees. The nonrefundable application fee, plus the fee for the evaluation of the fingerprint packet and the criminal history background checks by the Iowa division of criminal investigation (DCI) and the Federal Bureau of Investigation (FBI), as specified in 650—Chapter 15.

g. Documentation of passage of jurisprudence examination. Evidence of successful completion of a board-approved jurisprudence examination with a grade of at least 75 percent.

h. Current CPR certification. A statement:

(1) Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

(2) Providing the expiration date of the CPR certificate; and

(3) Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

i. Completed fingerprint packet. A completed fingerprint packet to facilitate a criminal history background check by the DCI and FBI.

11.2(3) The board may require a personal appearance or any additional information relating to the character, education and experience of the applicant.

11.2(4) Applications must be signed and verified as to the truth of the statements contained therein.

This rule is intended to implement Iowa Code sections 147.3, 147.29, and 147.34.

[**ARC 9218B**, IAB 11/3/10, effective 12/8/10; **ARC 9510B**, IAB 5/18/11, effective 6/22/11; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 2870C**, IAB 12/21/16, effective 1/25/17; **ARC 3488C**, IAB 12/6/17, effective 1/10/18; **ARC 5366C**, IAB 12/30/20, effective 2/3/21]

650—11.3(153) Dental licensure by credentials.

11.3(1) Applications for licensure by credentials to practice dentistry in this state shall be made on the form provided by the board and must be completely answered, including required credentials and documents.

11.3(2) Applications must be filed with the board along with:

a. Satisfactory evidence of graduation with a DDS or DMD from an accredited dental college approved by the board or satisfactory evidence of meeting the requirements specified in rule 650—11.4(153).

b. Evidence of successful passage of the Joint Commission on National Dental Examinations. Any dentist who has lawfully practiced dentistry in another state or territory for five years may be exempted from presenting this evidence.

c. A statement of any dental examinations taken by the applicant, with indication of pass/fail for each examination taken. Any dentist who has lawfully practiced dentistry in another state or territory for five or more years may be exempted from presenting this evidence.

d. Evidence of a current, valid license to practice dentistry in another state, territory or district of the United States issued under requirements equivalent or substantially equivalent to those of this state.

e. Evidence that the applicant has met at least one of the following:

(1) Has less than three consecutive years of practice immediately prior to the filing of the application and evidence of successful passage of a board-approved clinical examination pursuant to subrule 11.2(2) within the previous five-year period; or

(2) Has for three consecutive years immediately prior to the filing of the application been in the lawful practice of dentistry in such other state, territory or district of the United States.

f. Evidence from the state board of dentistry, or equivalent authority, from each state in which applicant has been licensed to practice dentistry, that the applicant has not been the subject of final or pending disciplinary action.

g. A statement disclosing and explaining any disciplinary actions, investigations, malpractice claims, complaints, judgments, settlements, or criminal charges, including the results of a self-query of the National Practitioner Data Bank (NPDB).

h. The nonrefundable application fee for licensure by credentials, plus the fee for the evaluation of the fingerprint packet and the criminal history background checks by the Iowa division of criminal investigation (DCI) and the Federal Bureau of Investigation (FBI), as specified in 650—Chapter 15.

i. Current CPR certification. A statement:

(1) Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

(2) Providing the expiration date of the CPR certificate; and

(3) Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

j. Evidence of successful completion of a board-approved jurisprudence examination with a grade of at least 75 percent.

k. A completed fingerprint packet to facilitate a criminal history background check by the DCI and FBI.

11.3(3) The board may require a personal appearance or may require any additional information relating to the character, education, and experience of the applicant.

11.3(4) The board may also require such examinations as may be necessary to evaluate the applicant for licensure by credentials.

11.3(5) Applications must be signed and verified attesting to the truth of the statements contained therein.

11.3(6) A dentist who is licensed in another jurisdiction but who is unable to satisfy the requirements for licensure by credentials may apply for licensure by verification, if eligible, in accordance with rule 650—11.12(272C).

This rule is intended to implement Iowa Code chapters 147 and 153.

[**ARC 9218B**, IAB 11/3/10, effective 12/8/10; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 2870C**, IAB 12/21/16, effective 1/25/17; **ARC 3488C**, IAB 12/6/17, effective 1/10/18; **ARC 5366C**, IAB 12/30/20, effective 2/3/21; **ARC 5747C**, IAB 7/14/21, effective 8/18/21]

650—11.4(153) Graduates of foreign dental schools. In addition to meeting the other requirements for licensure specified in rule 650—11.2(147,153) or 650—11.3(153), an applicant for dental licensure who did not graduate with a DDS or DMD from an accredited dental college approved by the board must provide satisfactory evidence of meeting the following requirements.

11.4(1) The applicant must complete a full-time dental education program at an accredited dental college. The program must consist of either:

a. An undergraduate supplemental dental education program of at least two academic years. The undergraduate supplemental dental education program must provide didactic and clinical education to the level of a DDS or DMD graduate of the accredited dental college; or

b. A postgraduate general practice residency program of at least one academic year.

11.4(2) The applicant must receive a dental diploma, degree or certificate from the accredited dental college upon successful completion of the program.

11.4(3) The applicant must present to the board the following documents:

a. Satisfactory evidence of completion of board-approved dental education at an accredited dental college;

b. A final, official transcript verifying graduation from the foreign dental school at which the applicant originally obtained a dental degree. If the transcript is written in a language other than English, an original, official translation shall also be submitted; and

c. Verification from the appropriate governmental authority that the applicant was licensed or otherwise authorized by law to practice dentistry in the country in which the applicant received foreign dental school training and that no adverse action was taken against the license.

11.4(4) The applicant must demonstrate to the satisfaction of the board an ability to read, write, speak, understand, and be understood in the English language. The applicant may demonstrate English proficiency by submitting to the board evidence of achieving a score sufficient to be rated in the highest level of ability on each section of the Test of English as a Foreign Language (TOEFL) as administered by the Educational Testing Service (ETS).

11.4(5) A dentist who is licensed in another jurisdiction but who is unable to satisfy the requirements for licensure in this rule may apply for licensure by verification, if eligible, in accordance with rule 650—11.12(272C).

This rule is intended to implement Iowa Code chapters 147 and 153.

[**ARC 3961C**, IAB 8/15/18, effective 9/19/18; **ARC 5747C**, IAB 7/14/21, effective 8/18/21]

650—11.5(147,153) Dental hygiene licensure by examination.

11.5(1) Applications for licensure to practice dental hygiene in this state shall be made on the form provided by the dental hygiene committee and must be completely answered, including required credentials and documents. An applicant who has held a dental hygiene license issued in another state for one year or longer must apply for licensure by credentials pursuant to rule 650—11.6(153).

11.5(2) Applications for licensure must be filed with the dental hygiene committee along with:

a. Documentation of graduation from dental hygiene school. Satisfactory evidence of graduation from an accredited school of dental hygiene approved by the dental hygiene committee.

b. Certification of good standing from dean or designee. Certification by the dean or other authorized representative of the school of dental hygiene that the applicant has been a student in good standing while attending that dental hygiene school.

c. Documentation of passage of national dental hygiene examination. Evidence of successful passage of the examination administered by the Joint Commission on National Dental Examinations.

d. Documentation of passage of a regional clinical examination. Successful passage of a board-approved clinical examination within the previous five-year period.

(1) The following patient-based regional examinations are approved by the board for purposes of licensure by examination: the Central Regional Dental Testing Service, Inc. examination as administered by the Central Regional Dental Testing Service, Inc. (CRDTS), the Western Regional Examining Board examination as administered by the Western Regional Examining Board (WREB), the Southern Regional Testing Agency, Inc. examination as administered by the Southern Regional Testing Agency, Inc. (SRTA), and the American Board of Dental Examiners, Inc. examination as administered by the Commission on Dental Competency Assessments (CDCA) and the Council of Interstate Testing Agencies, Inc. (CITA).

(2) The following manikin-based regional clinical examinations are approved by the board for purposes of licensure by examination: the examination administered by the Central Regional Dental Testing Service, Inc. (CRDTS), the American Board of Dental Examiners, Inc. examination as administered by the Commission on Dental Competency Assessments (CDCA) and the Council of Interstate Testing Agencies (CITA), and the examination administered by the Western Regional Examining Board (WREB).

e. Payment of application, fingerprint and background check fees. The nonrefundable application fee, plus the fee for the evaluation of the fingerprint packet and the criminal history background checks by the Iowa division of criminal investigation (DCI) and the Federal Bureau of Investigation (FBI), as specified in 650—Chapter 15.

f. Documentation of passage of jurisprudence examination. Evidence of successful completion of a board-approved jurisprudence examination with a grade of at least 75 percent.

g. Current CPR certification. A statement:

(1) Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

(2) Providing the expiration date of the CPR certificate; and

(3) Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

h. Explanation of any legal or administrative actions. A statement disclosing and explaining any disciplinary actions, investigations, complaints, malpractice claims, judgments, settlements, or criminal charges.

i. Completed fingerprint packet. A completed fingerprint packet to facilitate a criminal history background check by the DCI and FBI.

11.5(3) The dental hygiene committee may require a personal appearance or any additional information relating to the character, education and experience of the applicant.

11.5(4) Applications must be signed and verified as to the truth of the statements contained therein.

11.5(5) Following review by the dental hygiene committee, the committee shall make recommendation to the board regarding the issuance or denial of any license to practice dental hygiene. The board's review of the dental hygiene committee recommendation is subject to 650—Chapter 1.

This rule is intended to implement Iowa Code chapters 147 and 153.

[**ARC 7790B**, IAB 5/20/09, effective 6/24/09; **ARC 9218B**, IAB 11/3/10, effective 12/8/10; **ARC 9510B**, IAB 5/18/11, effective 6/22/11; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 2870C**, IAB 12/21/16, effective 1/25/17; **ARC 5366C**, IAB 12/30/20, effective 2/3/21; **ARC 5539C**, IAB 4/7/21, effective 5/12/21]

650—11.6(153) Dental hygiene licensure by credentials. To be issued a license to practice dental hygiene in Iowa on the basis of credentials, an applicant shall meet the following requirements.

11.6(1) Applications for licensure by credentials to practice dental hygiene in this state shall be made on the form provided by the dental hygiene committee and must be completely answered, including required credentials and documents.

11.6(2) Applications must be filed with the dental hygiene committee along with:

a. Satisfactory evidence of graduation from an accredited school of dental hygiene approved by the dental hygiene committee.

b. Evidence of successful passage of the examination of the Joint Commission on National Dental Examinations. Any dental hygienist who has lawfully practiced dental hygiene in another state or territory for five or more years may be exempted from presenting this evidence.

c. A statement of any dental hygiene examinations taken by the applicant, with indication of pass/fail for each examination taken. Any dental hygienist who has lawfully practiced dental hygiene in another state or territory for five or more years may be exempted from presenting this evidence.

d. Evidence of a current, valid license to practice dental hygiene in another state, territory or district of the United States issued under requirements equivalent or substantially equivalent to those of this state.

e. Evidence that the applicant has met at least one of the following:

(1) Has less than three consecutive years of practice immediately prior to the filing of the application and evidence of successful passage of a regional clinical examination pursuant to subrule 11.5(2) within the previous five-year period; or

(2) Has for three consecutive years immediately prior to the filing of the application been in the lawful practice of dental hygiene in such other state, territory or district of the United States.

f. Evidence from the state board of dentistry, or equivalent authority, in each state in which applicant has been licensed to practice dental hygiene, that the applicant has not been the subject of final or pending disciplinary action.

g. A statement disclosing and explaining any disciplinary actions, investigations, complaints, malpractice claims, judgments, settlements, or criminal charges, including the results of a self-query of the National Practitioner Data Bank (NPDB).

h. The nonrefundable application fee for licensure by credentials, the initial licensure fee and the fee for the evaluation of the fingerprint packet and the criminal history background checks by the Iowa division of criminal investigation (DCI) and the Federal Bureau of Investigation (FBI), as specified in 650—Chapter 15.

i. A statement:

(1) Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

(2) Providing the expiration date of the CPR certificate; and

(3) Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

j. Successful completion of a board-approved jurisprudence examination with a grade of at least 75 percent.

k. A completed fingerprint packet to facilitate a criminal history background check by the DCI and FBI.

11.6(3) Applicant shall appear for a personal interview conducted by the dental hygiene committee or the board by request only.

11.6(4) The dental hygiene committee may also require such examinations as may be necessary to evaluate the applicant for licensure by credentials.

11.6(5) Applications must be signed and verified attesting to the truth of the statements contained therein.

11.6(6) Following review by the dental hygiene committee, the committee shall make a recommendation to the board regarding issuance or denial of a dental hygiene license. The board's review of the dental hygiene committee recommendation is subject to 650—Chapter 1.

11.6(7) A dental hygienist who is licensed in another jurisdiction but who is unable to satisfy the requirements for licensure by credentials may apply for licensure by verification, if eligible, in accordance with rule 650—11.12(272C).

This rule is intended to implement Iowa Code section 147.80 and chapter 153.

[**ARC 9218B**, IAB 11/3/10, effective 12/8/10; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 0618C**, IAB 3/6/13, effective 4/10/13; **ARC 2870C**, IAB 12/21/16, effective 1/25/17; **ARC 5366C**, IAB 12/30/20, effective 2/3/21; **ARC 5539C**, IAB 4/7/21, effective 5/12/21; **ARC 5747C**, IAB 7/14/21, effective 8/18/21]

650—11.7(147,153) Dental hygiene application for local anesthesia permit. A licensed dental hygienist may administer local anesthesia provided the following requirements are met:

1. The dental hygienist holds a current local anesthesia permit issued by the board.
2. The local anesthesia is prescribed by a licensed dentist.
3. The local anesthesia is administered under the direct supervision of a licensed dentist.

11.7(1) Application for permit. A dental hygienist shall make application for a permit to administer local anesthesia on the form approved by the dental hygiene committee and provide the following:

a. The fee for a permit to administer local anesthesia as specified in 650—Chapter 15; and

b. Evidence that formal training in the administration of local anesthesia has been completed within 12 months of the date of application. The formal training shall be approved by the dental hygiene committee and conducted by a school accredited by the American Dental Association Commission on Dental Education; or

c. Evidence of completion of formal training in the administration of local anesthesia approved by the dental hygiene committee and documented evidence of ongoing practice in the administration of local anesthesia in another state or jurisdiction that authorizes a dental hygienist to administer local anesthesia.

11.7(2) Permit renewal. The permit shall expire on August 31 of every odd-numbered year. To renew the permit, the dental hygienist must:

a. At the time of renewal, document evidence of holding an active Iowa dental hygiene license.

b. Submit the application fee for renewal of the permit as specified in 650—Chapter 15.

11.7(3) Failure to meet the requirements for renewal shall cause the permit to lapse and become invalid.

11.7(4) A permit that has been lapsed for two years or less may be reinstated upon the permit holder's application for reinstatement and payment of the reinstatement fee as specified in 650—Chapter 15. A permit that has been lapsed for more than two years may be reinstated upon application for reinstatement,

documentation of meeting the requirements of 11.7(1)*"b"* or *"c,"* and payment of the reinstatement fee as specified in 650—Chapter 15.

This rule is intended to implement Iowa Code sections 147.10 and 147.80 and chapter 153.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 5366C**, IAB 12/30/20, effective 2/3/21]

650—11.8(153) Dental assistant registration.

11.8(1) *General.* An applicant must satisfy all of the following requirements:

a. Successful completion of board-approved training or education in dental assisting in accordance with subrule 11.8(2);

b. Evidence of current certification in cardiopulmonary resuscitation that included a hands-on component; and

c. Successful completion of board-approved examination in the areas of infection control/hazardous materials and jurisprudence in accordance with subrule 11.8(3). Successful completion of board-approved examination in the area of dental radiography is also required if an applicant is applying for a radiography qualification in accordance with rule 650—22.5(136C,153).

11.8(2) *Education and training.* An applicant must meet one of the following:

a. Work in a dental office as a dental assistant trainee until competency is achieved as determined by the supervising dentist;

b. Work as a dental assistant in another state, district or territory within five years prior to the date of application; or

c. Be a graduate of an accredited dental assisting program.

11.8(3) *Examination.* An applicant for registration must successfully complete examinations as required pursuant to subrule 11.8(2). Applicants may complete a single comprehensive examination or complete separate board-approved examinations in the required areas.

a. The following examinations are approved for the purposes of this subrule:

(1) Board-approved examinations;

(2) The Dental Assisting National Board's (DANB's) Infection Control Examination (ICE);

(3) The DANB's Radiation Health and Safety (RHS) Examination;

(4) Examinations administered by accredited dental assisting programs; or

(5) Board-approved continuing education courses, which include posttest examination.

b. A score of 75 percent or better on the board-approved examinations shall be considered successful completion of the examination. The board also accepts the passing standard established by DANB for applicants who take the ICE or RHS examination.

c. An examinee must meet such other requirements as may be imposed by the board's approved dental assistant testing centers.

11.8(4) *Applications.* Applications for registration as a registered dental assistant must be filed on official board forms and include the following:

a. The fee as specified in 650—Chapter 15.

b. Evidence of meeting the education and training requirements specified in subrule 11.8(2).

c. Evidence of successful completion of a board-approved examination in the areas of infection control, hazardous materials and jurisprudence as specified in subrule 11.8(3), and dental radiography, if the applicant is also applying for a qualification in dental radiography in accordance with rule 650—22.5(136,153).

d. Evidence of meeting the qualifications of 650—Chapter 22 if the applicant is engaging in dental radiography.

e. Evidence of current certification in cardiopulmonary resuscitation that included a hands-on component.

f. Any additional information required by the board relating to the character, education and experience of the applicant as may be necessary to evaluate the applicant's qualifications.

11.8(5) *Attestation.* All applications must be signed and verified by the applicant as to the truth of the documents and statements contained therein.

11.8(6) *Alternate pathway for registration.* A dental assistant who is licensed or registered in another jurisdiction but who is unable to satisfy the requirements for registration in this rule may apply for registration by verification, if eligible, in accordance with rule 650—11.9(272C).

This rule is intended to implement Iowa Code section 153.39.

[**ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—11.9(272C) Registration by verification. Registration by verification is available in accordance with the following:

11.9(1) *Eligibility.* A dental assistant may seek registration by verification if the person is currently licensed or registered as a dental assistant in at least one other jurisdiction that has a scope of practice substantially similar to that of Iowa.

11.9(2) *Board application.* The applicant must submit the following:

a. A completed application for registration.

b. Payment of the application fee.

c. A verification form, completed by the licensing authority in the jurisdiction that issued the applicant's license or registration, verifying that the applicant's license or registration in that jurisdiction complies with the requirements of Iowa Code section 272C.12. The completed verification form must be sent directly from the licensing authority to the board.

d. Evidence of successful completion of a board-approved jurisprudence examination with a grade of at least 75 percent.

e. Copies of complete criminal record, if the applicant has a criminal history.

f. A copy of the relevant disciplinary documents, if another jurisdiction has taken disciplinary action against the applicant.

g. A written statement from the applicant detailing the scope of practice in the other state.

h. Copies of relevant laws setting forth the scope of practice in the other state.

11.9(3) *Applicants with prior discipline.* If another jurisdiction has taken disciplinary action against an applicant, the board will determine whether the cause for the disciplinary action has been corrected and the matter has been resolved. If the board determines the disciplinary matter has not been resolved, the board will neither issue a registration nor deny the application for registration until the matter is resolved. A person who has had a license or registration revoked, or who has voluntarily surrendered a license or registration, in another jurisdiction is ineligible for registration by verification.

11.9(4) *Applicants with pending complaints or investigations.* If an applicant is currently the subject of a complaint, allegation, or investigation relating to unprofessional conduct pending before any regulating entity in another jurisdiction, the board will neither issue a registration nor deny the application for registration until the complaint, allegation, or investigation is resolved.

11.9(5) *Temporary registrations.* Applicants who satisfy all requirements for a registration under this rule except for passing the jurisprudence examination may be issued a temporary registration in accordance with the following:

a. A temporary registration is valid for a period of three months.

b. A temporary registration may be renewed once for an additional period of three months if the applicant has not failed the jurisprudence examination.

c. A temporary registrant shall display the board-issued registration renewal card that indicates the registration is a temporary registration, which will satisfy the requirements in rule 650—10.2(147,153).

d. The temporary registrant must submit proof of passing the jurisprudence examination before the temporary registration expires. When the temporary registrant submits proof of passing the jurisprudence examination, the temporary registration will convert to a standard registration and be assigned an expiration date consistent with standard registrations.

e. If the temporary registrant does not submit proof of passing the jurisprudence examination prior to the expiration of the temporary registration, the temporary registrant must cease practice until a standard registration is issued.

This rule is intended to implement Iowa Code section 272C.12.

[**ARC 6673C**, IAB 11/16/22, effective 12/21/22; **ARC 6940C**, IAB 3/8/23, effective 4/12/23]

650—11.10(147,153) Review of applications. Upon receipt of a completed application, the executive director as authorized by the board has discretion to:

1. Authorize the issuance of the license, permit, or registration.

2. Refer the license, permit, or registration application to the license and registration committee for review and consideration when the executive director determines that matters including, but not limited to, prior criminal history, chemical dependence, competency, physical or psychological illness, malpractice claims or settlements, or professional disciplinary history are relevant in determining the applicants' qualifications for license, permit, or registration.

11.10(1) Following review and consideration of an application referred by the executive director, the license and registration committee may at its discretion:

a. Authorize the executive director to issue the license, permit, or registration.

b. Send the license, permit, or registration application to the board for further review and consideration.

11.10(2) Following review and consideration of a license, permit, or registration application referred by the license and registration committee, the board shall:

a. Authorize the issuance of the license, permit, or registration,

b. Deny the issuance of the license, permit, or registration, or

c. Authorize the issuance of the license, permit, or registration under certain terms and conditions or with certain restrictions.

11.10(3) The license and registration committee or board may require an applicant to appear for an interview before the committee or the full board as part of the application process.

11.10(4) The license and registration committee or board may defer final action on an application if there is an investigation or disciplinary action pending against an applicant, who may otherwise meet the requirements for license, permit, or registration, until such time as the committee or board is satisfied that licensure or registration of the applicant poses no risk to the health and safety of Iowans.

11.10(5) The dental hygiene committee shall be responsible for reviewing any applications submitted by a dental hygienist that require review in accordance with this rule. Following review by the dental hygiene committee, the committee shall make a recommendation to the board regarding issuance of the license or permit. The board's review of the dental hygiene committee's recommendation is subject to 650—Chapter 1.

11.10(6) An application for a license, permit, or reinstatement of a license will be considered complete prior to receipt of the criminal history background check on the applicant by the FBI for purposes of review and consideration by the executive director, the license and registration committee, or the board. However, an applicant is required to submit an additional completed fingerprint packet and fee within 30 days of a request by the board if an earlier fingerprint submission has been determined to be unacceptable by the DCI or FBI.

This rule is intended to implement Iowa Code section 153.33B.

[**ARC 4187C**, IAB 12/19/18, effective 1/23/19; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—11.11(147,153) Grounds for denial of application. The board may deny an application for license, registration or permit for any of the following reasons:

1. Failure to meet the requirements for license, registration or permit as specified in these rules.

2. Failure to provide accurate and truthful information, or the omission of material information.

3. Pursuant to Iowa Code section 147.4, upon any of the grounds for which licensure or registration may be revoked or suspended.

4. Pursuant to 650—Chapter 50, for having a disqualifying offense.

This rule is intended to implement Iowa Code section 147.4.

[**ARC 5747C**, IAB 7/14/21, effective 8/18/21; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—11.12(147) Denial of licensure—appeal procedure.

11.12(1) *Preliminary notice of denial.* Prior to the denial of licensure or registration to an applicant, the board shall issue a preliminary notice of denial that shall be sent to the applicant by regular, first-class mail. The preliminary notice of denial is a public record and shall cite the factual and legal basis for

denying the application, notify the applicant of the appeal process, and specify the date upon which the denial will become final if it is not appealed.

11.12(2) *Appeal procedure.* An applicant who has received a preliminary notice of denial may appeal the notice and request a hearing on the issues related to the preliminary notice of denial by serving a request for hearing upon the executive director not more than 30 calendar days following the date when the preliminary notice of denial was mailed. The request is deemed filed on the date it is received in the board office. The request shall provide the applicant's current address, specify the factual or legal errors in the preliminary notice of denial, indicate if the applicant wants an evidentiary hearing, and provide any additional written information or documents in support of licensure.

11.12(3) *Hearing.* If an applicant appeals the preliminary notice of denial and requests a hearing, the hearing shall be a contested case and subsequent proceedings shall be conducted in accordance with rule 650—51.20(17A). License or registration denial hearings are open to the public. Either party may request issuance of a protective order in the event privileged or confidential information is submitted into evidence.

a. The applicant shall have the ultimate burden of persuasion as to the applicant's qualification for licensure.

b. The board, after a hearing on license or registration denial, may grant the license or registration, grant the license or registration with restrictions, or deny the license or registration. The board shall state the reasons for its final decision, which is a public record.

c. Judicial review of a final order of the board to deny a license or registration, or to issue a license or registration with restrictions, may be sought in accordance with the provisions of Iowa Code section 17A.19.

11.12(4) *Finality.* If an applicant does not appeal a preliminary notice of denial, the preliminary notice of denial automatically becomes final and a notice of denial will be issued. The final notice of denial is a public record.

11.12(5) *Failure to pursue appeal.* If an applicant appeals a preliminary notice of denial in accordance with subrule 11.10(2), but the applicant fails to pursue that appeal to a final decision within six months from the date of the preliminary notice of denial, the board may dismiss the appeal. The appeal may be dismissed after the board sends a written notice by first-class mail to the applicant at the applicant's last-known address. The notice shall state that the appeal will be dismissed and the preliminary notice of denial will become final if the applicant does not contact the board to schedule the appeal hearing within 14 days after the written notice is sent. Upon dismissal of an appeal, the preliminary notice of denial becomes final.

11.12(6) *Disqualifying offenses.* Any denial of licensure or registration based on a disqualifying offense is governed by 650—Chapter 50 and not this rule.

This rule is intended to implement Iowa Code sections 147.3 and 147.4.

[**ARC 7789B**, IAB 5/20/09, effective 6/24/09; **ARC 5747C**, IAB 7/14/21, effective 8/18/21; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—11.13(252J) Receipt of certificate of noncompliance. The board shall consider the receipt of a certificate of noncompliance of a support order from the child support recovery unit pursuant to Iowa Code chapter 252J and 650—Chapter 33 of these rules. License denial shall follow the procedures in the statutes and board rules as set forth in this rule.

This rule is intended to implement Iowa Code chapter 252J.

[**ARC 4747C**, IAB 11/6/19, effective 12/11/19; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—11.14(272C) Licensure by verification. Licensure by verification is available in accordance with the following:

11.14(1) *Eligibility.* A dentist or dental hygienist may seek licensure by verification if the person is currently licensed as a dentist or dental hygienist in at least one other jurisdiction that has a scope of practice substantially similar to that of Iowa.

11.14(2) *Board application.* The applicant must submit the following:

a. A completed application for licensure.

b. Payment of the application fee.

c. A completed fingerprint packet to facilitate a criminal history background check by the DCI and FBI.

d. A verification form, completed by the licensing authority in the jurisdiction that issued the applicant's license, verifying that the applicant's license in that jurisdiction complies with the requirements of Iowa Code section 272C.12. The completed verification form must be sent directly from the licensing authority to the board.

e. Evidence of successful completion of a board-approved jurisprudence examination with a grade of at least 75 percent.

f. Copies of complete criminal record, if the applicant has a criminal history.

g. A copy of the relevant disciplinary documents, if another jurisdiction has taken disciplinary action against the applicant.

h. A written statement from the applicant detailing the scope of practice in the other state.

i. Copies of relevant laws setting forth the scope of practice in the other state.

11.14(3) *Applicants with prior discipline.* If another jurisdiction has taken disciplinary action against an applicant, the board will determine whether the cause for the disciplinary action has been corrected and the matter has been resolved. If the board determines the disciplinary matter has not been resolved, the board will neither issue a license nor deny the application for licensure until the matter is resolved. A person who has had a license revoked, or who has voluntarily surrendered a license, in another jurisdiction is ineligible for licensure by verification.

11.14(4) *Applicants with pending complaints or investigations.* If an applicant is currently the subject of a complaint, allegation, or investigation relating to unprofessional conduct pending before any regulating entity in another jurisdiction, the board will neither issue a license nor deny the application for licensure until the complaint, allegation, or investigation is resolved.

11.14(5) *Temporary licenses.* Applicants who satisfy all requirements for a license under this rule except for passing the jurisprudence examination may be issued a temporary license in accordance with the following:

a. A temporary license is valid for a period of three months.

b. A temporary license may be renewed once for an additional period of three months if the applicant has not failed the jurisprudence examination.

c. A temporary licensee shall display the board-issued license renewal card that indicates the license is a temporary license, which will satisfy the requirements in rule 650—10.2(147,153).

d. The temporary licensee must submit proof of passing the jurisprudence examination before the temporary license expires. When the temporary licensee submits proof of passing the jurisprudence examination, the temporary license will convert to a standard license and be assigned an expiration date consistent with standard licenses.

e. If the temporary licensee does not submit proof of passing the jurisprudence examination prior to the expiration of the temporary license, the temporary licensee must cease practice until a standard license is issued.

This rule is intended to implement Iowa Code section 272C.12.

[**ARC 5747C**, IAB 7/14/21, effective 8/18/21; **ARC 6673C**, IAB 11/16/22, effective 12/21/22; **ARC 6940C**, IAB 3/8/23, effective 4/12/23]

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CHAPTER 12
DENTAL AND DENTAL HYGIENE EXAMINATIONS
[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—12.1(147,153) Clinical examination procedure for dentistry.

12.1(1) *Compliance with regional clinical examination testing requirements and procedures.* Examinees shall meet the requirements for testing and follow procedures established by each respective testing agency. Examinees must take all parts offered by the respective testing agency, including the CDCA periodontal scaling non-patient component.

12.1(2) *Scoring requirements.* The examinee must attain a passing score on each clinical portion of the examination and on the written portion of the examination.

[**ARC 9510B**, IAB 5/18/11, effective 6/22/11; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 2871C**, IAB 12/21/16, effective 1/25/17; **ARC 5366C**, IAB 12/30/20, effective 2/3/21]

650—12.2(147,153) System of retaking dental examinations.

12.2(1) *Method of counting failures.* For the purposes of counting examination failures, the board shall utilize policies adopted by each respective testing agency.

12.2(2) *Remedial education required prior to third examination.*

a. Prior to the third examination attempt, a dental examinee must submit proof of additional formal education or clinical experience approved in advance by the board.

b. A dental examinee shall be required to retake only those parts of the examination that the examinee failed. However, a dental examinee who has not passed all parts of the examination within the time frame specified shall be required to retake the entire examination. The dental examinee shall refer to the policies of each respective testing agency to determine applicable time frames.

12.2(3) *Remedial education required prior to fourth examination.*

a. Prior to the fourth examination attempt, a dental examinee must submit proof of satisfactory completion of the equivalent of an additional senior year of an approved curriculum in dentistry at a university or school with an approved curriculum.

b. At the fourth examination, the dental examinee shall be required to retake only those parts of the examination that the examinee failed. However, a dental examinee who has not passed all parts of the examination within the time frame specified shall be required to retake the entire examination. The dental examinee shall refer to the policies of each respective testing agency to determine applicable time frames.

12.2(4) *Subsequent failures.* For the purposes of additional study prior to retakes, the fifth examination will be considered the same as the third.

12.2(5) *Failures of other examinations.* If a dental examinee applies for an examination after having failed any other state or regional examinations, the failure shall be counted for the purposes of retakes.

[**ARC 9510B**, IAB 5/18/11, effective 6/22/11; **ARC 2871C**, IAB 12/21/16, effective 1/25/17]

650—12.3(147,153) Portfolio examination procedure for dentistry.

12.3(1) *Completion of a portfolio examination.* The 2014 California portfolio examination is accepted for licensure by examination for University of Iowa graduates. To meet the requirements for dental licensure and portfolio examination, applicants shall complete the portfolio examination as administered at the University of Iowa College of Dentistry (College of Dentistry).

12.3(2) *Compliance with testing requirements and procedures.*

a. The board shall oversee all aspects of the portfolio examination process but shall not interfere with the College of Dentistry's authority to establish and deliver an accredited curriculum. The board shall determine an end-of-year deadline, in consultation with the College of Dentistry, to determine when the portfolio examinations shall be completed and submitted to the board for review by the board's examiners.

b. The portfolio examination shall be conducted while the applicant is actively enrolled as a student at the College of Dentistry. This examination shall utilize uniform standards of clinical experiences and competencies as outlined in the 2014 California portfolio examination. The applicant

shall pass a final assessment of the submitted portfolio at the end of the applicant's dental school education at the College of Dentistry.

c. Before any portfolio examination may be submitted to the board, the applicant shall remit to the board the required portfolio examination fee as specified in 650—Chapter 15 and a letter of good standing signed by the dean of the College of Dentistry stating that the applicant has graduated or will graduate with no pending ethical issues.

12.3(3) *Scoring requirements.*

a. Final clinical competencies performed by the applicant must be evaluated by two examiners who have participated in standardization, calibration and training. The examiners shall be approved by the board and may include faculty, board members or board member designees. Board members or board member designees shall have priority as examiners at all times. The College of Dentistry shall submit to the board the names of the portfolio examiners for consideration by January 1 of each calendar year.

b. The College of Dentistry shall provide a minimum of a seven-day notice for all final competencies. In the event that a seven-day notice cannot be provided, the College of Dentistry must notify the board immediately. In the event that no board members or designees are available to participate in an evaluation, the College of Dentistry may use two board-approved portfolio examiners.

c. Successful completion of each competency shall result in a score that meets minimum competence-level performance. Scoring criteria for each competency is outlined in the 2014/2015 California Examiner Training Manual.

d. The board shall monitor and audit the standardization and calibration of examiners at least biennially to ensure standardization and an acceptable level of calibration in the grading of the examination. The College of Dentistry's competency examinations with regard to the portfolio examination shall be audited annually by the board.

12.3(4) *Compliance with clinical operation requirements.*

a. The board shall require and verify the successful completion of a minimum number of clinical experiences for the portfolio examination.

b. The board shall require and verify the successful completion of a set number of competency examinations performed on a patient of record. The clinical experiences include, but are not limited to, the following:

(1) Comprehensive oral diagnosis and treatment planning;
(2) Periodontics;
(3) Direct restorations;
(4) Indirect restorations;
(5) Removable prosthodontics; and
(6) Endodontics.

[**ARC 3488C**, IAB 12/6/17, effective 1/10/18]

650—12.4(147,153) Clinical examination procedure for dental hygiene.

12.4(1) *Compliance with regional clinical examination testing requirements and procedures.* Examinees shall meet the requirements for testing and follow the procedures established by each respective testing agency. Examinees must take all parts offered by the respective testing agency.

12.4(2) *Scoring requirements.* The examinee must attain a passing score on each clinical portion of the examination and on the written portion of the examination.

[**ARC 7790B**, IAB 5/20/09, effective 6/24/09; **ARC 9510B**, IAB 5/18/11, effective 6/22/11; **ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 2871C**, IAB 12/21/16, effective 1/25/17; **ARC 3488C**, IAB 12/6/17, effective 1/10/18; **ARC 5366C**, IAB 12/30/20, effective 2/3/21]

650—12.5(147,153) System of retaking dental hygiene examinations.

12.5(1) *Method of counting failures.*

a. For the purposes of counting examination failures, the board shall utilize the policies adopted by each respective testing agency.

b. A dental hygiene examinee who has two examination failures will be required to complete the remedial education requirements set forth in subrule 12.5(2).

12.5(2) *Remedial education required prior to third examination.* Prior to the third examination attempt, a dental hygiene examinee must submit proof of a minimum of 40 hours of additional formal education or a minimum of 40 hours of clinical experience that is approved in advance by the dental hygiene committee.

12.5(3) *Remedial education required prior to fourth examination.* Prior to the fourth examination attempt, a dental hygiene examinee must submit proof of satisfactory completion of the equivalent of an additional semester of dental hygiene at a university or school approved by the dental hygiene committee.

12.5(4) *Subsequent failures.* For purposes of additional study prior to retakes, the fifth examination will be considered the same as the third.

12.5(5) *Failures of other examinations.* If a dental hygiene examinee applies for an examination after having failed any other state or regional examinations, the failure shall be counted for the purposes of retakes.

[**ARC 7790B**, IAB 5/20/09, effective 6/24/09; **ARC 9510B**, IAB 5/18/11, effective 6/22/11; **ARC 2871C**, IAB 12/21/16, effective 1/25/17; **ARC 3488C**, IAB 12/6/17, effective 1/10/18]

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CHAPTER 13
SPECIAL LICENSES
[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—13.1(153) Resident license.

13.1(1) A dentist or dental hygienist seeking permission to practice as a resident, intern or graduate student in a board-approved teaching or educational institution offering specialty oriented courses shall be required to make application to the board on official board forms and furnish to the board the following:

a. A signed written statement from the dean or designated administrative officer of the institution in which the applicant seeks to enroll.

b. A signed written statement of a dentist who holds an active Iowa license or faculty permit and who proposes to exercise supervision and direction over said applicant, specifying in general terms the time and manner thereof.

c. Satisfactory evidence of graduation from an accredited school of dentistry or other school approved by the board.

d. Such additional information as the board may deem necessary to enable it to determine the proficiency, character, education or experience of such applicant.

e. Applications must be signed and verified as to the truth of the statements contained therein, and all questions must be completely answered.

f. The appropriate fee as specified in 650—Chapter 15 of these rules.

13.1(2) If approved by the board, a resident license shall allow the licensee to serve as a resident, intern, or graduate student dentist or dental hygienist, under the supervision of a practitioner who holds an active Iowa license or faculty permit, at the University of Iowa College of Dentistry or at an institution approved by the board.

13.1(3) If a resident licensee leaves the service of such institution during the tenure of residency, internship or graduate study, the license shall be considered null and void and the authority granted by the board to the licensee shall be automatically canceled. The director of the resident training program shall notify the board within 30 days of the licensee's terminating from the program.

13.1(4) The resident license shall be valid for one year and may be renewed annually during such period of time as the dental resident is continuously enrolled in a graduate dental education program. A resident license issued or renewed on or after January 1, 2006, shall expire on the expected date of completion of the resident training program as indicated on the licensure or renewal application.

13.1(5) A resident license may be extended past the original expected completion date of the training program at the discretion of the board. A licensee who wishes to extend the expiration date of the license shall submit to the board office an extension application that includes a letter explaining the need for an extension, an extension fee in the amount specified in 650—Chapter 15, and a statement from the director of the resident training program attesting to the progress of the resident in the training program, the new expected date of completion of the program, and whether any warnings have been issued, investigations conducted or disciplinary actions taken, whether by voluntary agreement or formal action.

13.1(6) The director of the resident training program shall report annually on July 1 the progress of residents under the director's supervision and whether any warnings have been issued, investigations conducted or disciplinary actions taken, whether by voluntary agreement or formal action. The board shall notify the program directors of the reporting requirement at least 30 days prior to the deadline.

13.1(7) A resident licensee who changes resident training programs shall apply for a new resident license and also include a statement from the director of the applicant's most recent residency program documenting the applicant's progress in the program.

13.1(8) No examination or continuing education shall be required for this license.

13.1(9) The resident licensee shall be subject to all applicable provisions of the law and the rules of the board. Any violations of these laws or rules or the failure of the licensee to perform and progress

satisfactorily or receive effective supervision as determined by the board shall be grounds for revocation of the license after proper notice and hearing.

This rule is intended to implement Iowa Code section 153.22.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12]

650—13.2(153) Dental college and dental hygiene program faculty permits.

13.2(1) The board may issue a faculty permit entitling the holder to practice dentistry or dental hygiene as a faculty member within the University of Iowa College of Dentistry or a dental hygiene program and affiliated teaching facilities.

13.2(2) The dean of the college of dentistry or chairperson of a dental hygiene program shall certify to the board or the dental hygiene committee those bona fide members of the college's or a dental hygiene program's faculty who are not licensed to practice dentistry or dental hygiene in Iowa. Any faculty member so certified shall, prior to commencing duties in the college of dentistry or a dental hygiene program, make on official board forms written application to the board or the dental hygiene committee for a permit and shall provide the following:

a. The nonrefundable application fee, plus the fee for the evaluation of the fingerprint packet and the criminal history background checks by the Iowa division of criminal investigation (DCI) and the Federal Bureau of Investigation (FBI), as specified in 650—Chapter 15.

b. Information regarding the professional qualifications and background of the applicant.

c. A completed fingerprint packet to facilitate the criminal history background checks by the DCI and FBI.

d. If the applicant is licensed by another jurisdiction, the applicant shall furnish evidence from the board of dental examiners of that jurisdiction that the applicant is licensed in good standing and has not been the subject of final or pending disciplinary action.

e. A statement disclosing and explaining any disciplinary actions, investigations, complaints, malpractice claims, judgments, settlements, or criminal charges, including the results of a self-query of the National Practitioners Data Bank (NPDB) and the Healthcare Integrity and Protection Data Bank (HIPDB).

f. A statement:

(1) Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

(2) Providing the expiration date of the CPR certificate; and

(3) Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

g. Such additional information as the board may deem necessary to enable it to determine the character, education or experience of such applicant.

h. Applications must be signed and verified as to the truth of the statements contained therein and include required credentials and documents, and all questions must be completely answered.

i. Evidence of successful completion of the jurisprudence examination administered by the Iowa dental board.

13.2(3) A faculty permit shall expire on August 31 of every even-numbered year and may, at the sole discretion of the board, be renewed on a biennial basis.

13.2(4) The appropriate fee as specified in 650—Chapter 15 of these rules shall be paid for renewal of the faculty permit. A faculty permit holder who fails to renew by the expiration date of the permit shall be assessed a late fee in accordance with 650—14.4(147,153,272C).

13.2(5) The faculty permit shall be valid only so long as the holder remains a member of the faculty of the college of dentistry or member of the faculty of a dental hygiene program in Iowa and shall subject the holder to all provisions of the law regulating the practice of dentistry and dental hygiene in this state.

13.2(6) Faculty permit holders are required to obtain 30 hours of continuing education in accordance with the guidelines in 650—Chapter 25 for renewal of the faculty permit.

13.2(7) To renew the permit, faculty permit holders shall submit a statement:

a. Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

b. Providing the expiration date of the CPR certificate; and

c. Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

13.2(8) Application for issuance of a dental hygiene program faculty permit shall be made to the dental hygiene committee for consideration and recommendation to the board pursuant to 650—Chapter 1.

This rule is intended to implement Iowa Code section 153.37.

[**ARC 9218B**, IAB 11/3/10, effective 12/8/10; **ARC 0265C**, IAB 8/8/12, effective 9/12/12]

650—13.3(153) Temporary permit. The board may issue a temporary permit authorizing the permit holder to practice dentistry or dental hygiene on a short-term basis in Iowa at a specific location or locations to fulfill an urgent need, to serve an educational purpose, or to provide volunteer services. A temporary permit may be granted on a case-by-case basis.

13.3(1) General provisions.

a. The temporary permit is intended for dentists and dental hygienists with short-term assignments in Iowa that fulfill an urgent need, serve an educational purpose, or provide volunteer services, and clearly have no long-term implications for licensure. If the need changes or if the permit holder wishes to continue in short-term assignments in other Iowa locations, the permit holder is expected to seek permanent licensure. A temporary permit is not meant as a way to practice before a permanent license is granted or as a means to practice because the applicant does not fulfill the requirements for permanent licensure.

b. The board may issue a temporary permit authorizing the permit holder to practice at a specific location or locations in Iowa for a specified period up to three months.

c. Following expiration of the permit, a permit holder shall be required to obtain a new temporary permit or a permanent license in order to practice dentistry or dental hygiene in Iowa.

d. A person may be issued not more than three temporary permits to fulfill an urgent need or serve an educational purpose.

e. The board may cancel a temporary permit if the permit holder has practiced outside the scope of the permit or for any of the grounds for which licensure may be revoked or suspended as specified in Iowa Code chapters 147, 153, and 272C and 650—30.4(147,153,272C). When cancellation of a permit is proposed, the board shall promptly notify the permit holder by sending a statement of charges and notice of hearing by certified mail to the last-known address of the permit holder. The provisions of 650—Chapter 51 shall govern a contested case proceeding following notice of intent to cancel the permit.

f. A temporary permit shall be displayed in the primary location of practice.

g. A temporary permit holder shall notify the board by written correspondence or through the board's online system of any change in name or mailing address within seven days of the change. A certified copy of a marriage license or a certified copy of court documents is required for proof of a name change.

13.3(2) Eligibility for a temporary permit to fulfill an urgent need or serve an educational purpose. An application for a temporary permit shall be filed on the form provided by the board and must be completely answered, including required credentials and documents. An applicant for a temporary permit may submit an application online or on a paper form. To be eligible for a temporary permit to fulfill an urgent need or serve an educational purpose, an applicant shall provide all of the following:

a. Satisfactory evidence of graduation with a DDS or DMD degree for applicants seeking a temporary permit to practice dentistry or satisfactory evidence of graduation from a dental hygiene school for applicants seeking a temporary permit to practice dental hygiene.

b. The nonrefundable application fee for a temporary permit to fulfill an urgent need or serve an educational purpose as specified in 650—Chapter 15.

c. A statement:

(1) Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

(2) Providing the expiration date of the CPR certificate; and

(3) Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

d. A statement disclosing and explaining any disciplinary actions, investigations, complaints, malpractice claims, judgments, settlements, or criminal charges against the applicant.

e. Certification from the state board of dentistry, or equivalent authority, from a state in which the applicant has been licensed for at least three years immediately preceding the date of application and evidence of having engaged in the practice of dentistry in that state for three years immediately preceding the date of application or evidence of three years of practice satisfactory to the board. The applicant must also provide evidence that the applicant has not been the subject of final or pending disciplinary action.

f. Evidence from the appropriate examining board from each jurisdiction in which the applicant has ever held a license. At least one license must be issued on the basis of clinical examination.

g. A request for the temporary permit from those individuals or organizations seeking the applicant's services that establishes, to the board's satisfaction, the justification for the temporary permit, the dates the applicant's services are needed, and the location or locations where those services will be delivered.

13.3(3) Eligibility for a temporary permit to provide volunteer services.

a. A temporary permit to provide volunteer services is intended for dentists and dental hygienists who will provide volunteer services at a free or nonprofit dental clinic and who will not receive compensation for dental services provided. A temporary permit issued under this subrule shall be valid only at the location specified on the permit, which shall be a free clinic or a dental clinic for a nonprofit organization, as described under Section 501(c)(3) of the Internal Revenue Code.

b. An application for a temporary permit shall be filed on the paper form provided by the board. The application form will collect the name, address, and telephone number of the applicant, the location of the free clinic or dental clinic for a nonprofit organization, and the dates on which the volunteer services will be provided. The application form must be accompanied by each of the following:

(1) A verification of license (or substantially similar document) from the appropriate licensing board of the applicant's home jurisdiction.

(2) A statement:

1. Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

2. Providing the expiration date of the CPR certificate; and

3. Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

(3) A statement disclosing and explaining any pending disciplinary actions or criminal charges against the applicant.

(4) A statement from the applicant seeking the temporary permit that the applicant shall practice only in a free dental clinic or dental clinic for a nonprofit organization and that the applicant shall not receive compensation directly or indirectly for providing dental services.

13.3(4) Dental hygiene committee review. The dental hygiene committee shall make recommendations to the board regarding the issuance or denial of any temporary permit to practice dental hygiene. The board's review of the dental hygiene committee's recommendation is subject to 650—Chapter 1.

13.3(5) Denial of temporary permit. The board may deny a temporary permit in accordance with 650—11.9(147,153) or, at the sole discretion of the board, for failure to justify the need for a temporary permit. The procedure for appealing the denial of a permit is set forth in 650—11.10(147).

13.3(6) A temporary permit holder shall be subject to and follow all rules and state laws pertaining to the practice of dentistry and dental hygiene in this state.

This rule is intended to implement Iowa Code section 153.19.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 0984C**, IAB 9/4/13, effective 10/9/13]

650—13.4(153) Retired volunteer license. Upon application and qualification, the board may issue a retired volunteer license to a dentist or dental hygienist who has retired from the practice of dentistry or dental hygiene to enable the dentist or dental hygienist to provide volunteer dental or dental hygiene services without remuneration.

13.4(1) Applications for a retired volunteer license shall be made on forms provided by the board, which may include online applications, and must be complete. Incomplete applications will not be accepted.

13.4(2) Applications shall be filed with the board and must include:

a. Satisfactory evidence that the applicant has retired from practice; and

b. A statement disclosing and explaining any disciplinary actions or criminal charges, or both; and

c. Satisfactory evidence demonstrating that:

(1) The applicant has held an active dental or dental hygiene license within the previous five years; or

(2) The applicant possesses sufficient knowledge and skill to practice safely and competently if the applicant has not held an active dental or dental hygiene license within the previous five years.

13.4(3) A person holding a retired volunteer license shall not practice unless an Iowa-licensed dentist with an active license is present at the location of practice at all times. Screenings and educational programs may be performed without the presence of an Iowa-licensed dentist with an active license, provided that all other board rules governing the respective practice in regards to supervision requirements and permitted scope of practice are met.

13.4(4) A person holding a retired volunteer license shall not charge a fee or receive compensation or remuneration in any form from any person or third-party payer, including but not limited to an insurance company, health plan, or state or federal benefit program.

13.4(5) An applicant who has surrendered, resigned, converted, or allowed a license to lapse or expire as the result of or in lieu of disciplinary action shall not be eligible for a retired volunteer license.

13.4(6) A retired volunteer license shall not be considered to be an active license to practice dentistry or dental hygiene and cannot be converted to any regular license type with active or inactive status.

13.4(7) A person holding a retired volunteer license is prohibited from delegating duties to other licensees or registrants and is prohibited from providing any level of supervision to other licensees or registrants. Licensees and registrants assisting persons with a retired volunteer license do so only under the delegation and supervision of the Iowa-licensed dentist with an active license who is required to be present at all times.

13.4(8) A person holding a retired volunteer license is prohibited from prescribing, administering, or dispensing prescription drugs and all controlled substances.

13.4(9) A person holding a retired volunteer license is subject to all rules and regulations governing the practice of dentistry or dental hygiene except those related to the payment of fees, license renewal, and continuing education.

13.4(10) The board shall not charge an application or licensing fee for issuance of a retired volunteer license.

13.4(11) A retired volunteer license is valid for 12 months from the date of issuance, at which time it expires and becomes invalid. A retired volunteer license holder whose license has become invalid is prohibited from the practice of dentistry or dental hygiene until a new retired volunteer license is issued.

13.4(12) The board may cancel a retired volunteer license if the holder has practiced outside the scope of the license or for any of the grounds for which licensure may be revoked or suspended as specified in Iowa Code chapters 147, 153, and 272C and 650—30.4(147,153,272C). When cancellation of a retired volunteer license is proposed, the board shall promptly notify the license holder by sending a statement of charges and notice of hearing by certified mail to the last-known address of the license holder or by personal service. The provisions of 650—Chapter 51 shall govern a contested case proceeding following notice of intent to cancel the license.

13.4(13) A person holding a retired volunteer license shall notify the board by written correspondence or through the board's online system of any change in name or home address within

seven days of the change. A copy of a certified marriage license or copy of certified court documents is required for proof of a name change.

13.4(14) The dental hygiene committee shall make recommendations to the board regarding the issuance or denial of any retired volunteer license to practice dental hygiene. The board's review of the dental hygiene committee's recommendation is subject to 650—Chapter 1.

13.4(15) The board may deny a retired volunteer license in accordance with 650—11.9(147,153). The procedure for appealing the denial is set forth in 650—11.10(147).

13.4(16) A person holding an inactive Iowa dental or dental hygiene license may also hold a retired volunteer license.

This rule is intended to implement Iowa Code section 153.23.

[**ARC 2423C**, IAB 3/2/16, effective 4/6/16]

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CHAPTER 14
RENEWAL AND REINSTATEMENT
[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—14.1(147,153,272C) Renewal of license to practice dentistry or dental hygiene. A license to practice dentistry or a license to practice dental hygiene must be renewed prior to the expiration date of the license. Dental hygiene licenses expire on August 31 of every odd-numbered year. Dental licenses expire August 31 of every even-numbered year.

14.1(1) *Application renewal procedures.*

a. Renewal notice. The board office will send a renewal notice by email to each licensee at the licensee's last-known email address.

b. Licensee and permit holder obligation. The licensee or permit holder is responsible for renewing the license or permit prior to its expiration. Failure of the licensee or permit holder to receive the notice does not relieve the licensee or permit holder of the responsibility for renewing that license or permit in order to continue practicing in the state of Iowa.

c. Renewal application form. Application for renewal must be made on forms provided by the board office. Licensees and permit holders may renew their licenses and permits online or via paper application.

d. Complete and timely filed application. No renewal application shall be considered timely and sufficient until received by the board office and accompanied by all material required for renewal and all applicable renewal and late fees. Incomplete applications will not be accepted. For purposes of establishing timely filing, the postmark on a paper submittal will be used, and for renewals submitted online, the electronic timestamp will be deemed the date of filing.

14.1(2) *Application fee.* The appropriate fee as specified in 650—Chapter 15 of these rules must accompany the application for renewal. A penalty shall be assessed by the board for late renewal, as specified in 650—Chapter 15.

14.1(3) *Continuing education requirements.* Completion of continuing education in accordance with 650—Chapter 25 is required for renewal of an active license. However, licensees are exempt from the continuing education requirement for the current biennium in which the license is first issued.

14.1(4) *CPR certification.* In order to renew a license, an applicant must submit a statement:

a. Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

b. Providing the expiration date of the CPR certificate; and

c. Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

14.1(5) *Dental hygiene committee review.* The dental hygiene committee may, in its discretion, review any applications for renewal of a dental hygiene license and make recommendations to the board. The board's review is subject to 650—Chapter 1.

This rule is intended to implement Iowa Code section 147.10 and chapters 153 and 272C.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 6303C**, IAB 4/20/22, effective 5/25/22]

650—14.2(153) Renewal of registration as a dental assistant. A certificate of registration as a registered dental assistant must be renewed biennially. Registration certificates shall expire on August 31 of every odd-numbered year.

14.2(1) *Renewal procedures.*

a. Renewal notice. The board office will send a renewal notice by email to each registrant at the registrant's last-known email address.

b. Registrant obligation. The registrant is responsible for renewing the registration prior to its expiration. Failure of the registrant to receive the notice does not relieve the registrant of the responsibility for renewing that registration in order to continue practicing in the state of Iowa.

c. Renewal application form. Registrants may renew their registration online or via paper application. Paper application for renewal must be made in writing on forms provided by the board office before the current registration expires.

d. Complete and timely filed application. No renewal application shall be considered timely and sufficient until received by the board office and accompanied by all material required for renewal and all applicable renewal and late fees. Incomplete applications will not be accepted. For purposes of establishing timely filing, the postmark on a paper submittal will be used, and for renewals submitted online, the electronic timestamp will be deemed the date of filing.

14.2(2) *Application fee.* The appropriate fee as specified in 650—Chapter 15 must accompany the application for renewal. A penalty shall be assessed by the board for late renewal, as specified in 650—Chapter 15.

14.2(3) *Continuing education requirements.* Completion of continuing education as specified in 650—Chapter 25 is required for renewal of an active registration. Failure to meet the requirements of renewal in the time specified by rule will automatically result in a lapsed registration.

14.2(4) *CPR certification.* In order to renew a registration, an applicant must submit a statement:

a. Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

b. Providing the expiration date of the CPR certificate; and

c. Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

This rule is intended to implement Iowa Code sections 147.10 and 153.39.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 6303C**, IAB 4/20/22, effective 5/25/22]

650—14.3(136C,153) Renewal of dental assistant radiography qualification. A certificate of radiography qualification must be renewed biennially. Radiography qualification certificates shall expire on August 31 of every odd-numbered year.

14.3(1) *Renewal procedures.*

a. Renewal notice. The board office will send a renewal notice by regular mail or email to each registrant at the registrant's last-known mailing address or email address. The board will notify each registrant by mail or email of the expiration of the radiography qualification.

b. Registrant obligation. The registrant is responsible for renewing the radiography qualification prior to its expiration. Failure of the registrant to receive the notice does not relieve the registrant of the responsibility for renewing that radiography qualification if the registrant wants to continue taking dental radiographs in the state of Iowa.

c. Renewal application form. Application for renewal must be made in writing on forms provided by the board office before the current radiography qualification expires. Registrants may renew their radiography qualification online or via paper application.

d. Complete and timely filed application. No renewal application shall be considered timely and sufficient until received by the board office and accompanied by all material required for renewal and all applicable renewal and late fees. Incomplete applications will not be accepted. For purposes of establishing timely filing, the postmark on a paper submittal will be used, and for renewals submitted online, the electronic timestamp will be deemed the date of filing.

14.3(2) *Application fee.* The appropriate fee as specified in 650—Chapter 15 must accompany the application for renewal. A penalty shall be assessed by the board for late renewal, as specified in 650—Chapter 15.

14.3(3) *Continuing education requirements.* In order to renew a radiography qualification, the dental assistant shall obtain at least two hours of continuing education in the subject area of dental radiography. Proof of attendance shall be retained by the dental assistant and must be submitted to the board office upon request.

14.3(4) *CPR certification.* In order to renew a radiography qualification, an applicant must submit a statement:

a. Confirming that the applicant possesses a valid certificate from a nationally recognized course in cardiopulmonary resuscitation (CPR) that included a "hands-on" clinical component;

b. Providing the expiration date of the CPR certificate; and

c. Acknowledging that the CPR certificate will be retained and made available to board office staff as part of routine auditing and monitoring.

This rule is intended to implement Iowa Code chapters 136C and 153.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12]

650—14.4(147,153,272C) Grounds for nonrenewal. The board may refuse to renew a license, registration or radiography qualification on the following grounds:

14.4(1) After proper notice and hearing, for a violation of these rules or Iowa Code chapter 147, 153, or 272C during the term of the last license, registration or radiography qualification or renewal of license, registration or radiography qualification.

14.4(2) Failure to pay required fees.

14.4(3) Failure to obtain required continuing education.

14.4(4) Failure to provide a statement of current certification in cardiopulmonary resuscitation in a course that includes a clinical component.

14.4(5) Receipt of a certificate of noncompliance from the child support recovery unit of the department of human services in accordance with 650—Chapter 33.

This rule is intended to implement Iowa Code section 153.23 and chapters 147, 252J, and 272C.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 4747C**, IAB 11/6/19, effective 12/11/19]

650—14.5(147,153,272C) Late renewal.

14.5(1) *Failure to renew license or permit.*

a. Failure to renew a dental or dental hygiene license or permit prior to September 1 following expiration shall result in a late fee in the amount specified in 650—Chapter 15 being assessed by the board in addition to the renewal fee.

b. Failure to renew prior to October 1 following expiration shall result in assessment of a late fee in the amount specified in 650—Chapter 15.

c. Failure of a license or permit holder to renew a license or permit prior to November 1 following expiration shall cause the license or permit to lapse and become invalid. A licensee or permit holder whose license or permit has lapsed and become invalid is prohibited from the practice of dentistry or dental hygiene until the license or permit is reinstated in accordance with rule 650—14.6(147,153,272C).

14.5(2) *Failure to renew registration.*

a. Failure to renew a dental assistant registration prior to September 1 following expiration shall result in a late fee in the amount specified in 650—Chapter 15 assessed by the board in addition to the renewal fee.

b. Failure to renew prior to October 1 following expiration shall result in assessment of a late fee in the amount specified in 650—Chapter 15.

c. Failure to renew a registration prior to November 1 following expiration shall cause the registration to lapse and become invalid. A registrant whose registration has lapsed and become invalid is prohibited from practicing as a dental assistant until the registration is reinstated in accordance with rule 650—14.6(147,153,272C).

14.5(3) *Failure to renew radiography qualification.* Failure to renew a radiography qualification prior to November 1 following expiration shall cause the radiography qualification to lapse and become invalid. A dental assistant whose radiography qualification is lapsed is prohibited from engaging in dental radiography until the qualification is reinstated in accordance with rule 650—14.7(136C,153).

This rule is intended to implement Iowa Code sections 147.10, 147.11, and 272C.2.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12]

650—14.6(147,153,272C) Reinstatement of a lapsed license or registration.

14.6(1) A licensee or a registrant who allows a license or registration to lapse by failing to renew may have the license or registration reinstated at the discretion of the board by submitting the following:

a. A completed application for reinstatement of a lapsed license or registration to practice dentistry, dental hygiene or dental assisting, on forms provided by the board.

b. Dates and places of practice.

c. A list of other states in which licensed or registered and the identifying number of each license or registration.

d. Payment of a renewal fee, as specified in 650—Chapter 15, plus the reinstatement application fee as specified in 650—Chapter 15.

e. Evidence of completion of the hours of continuing education required for renewal of a license or registration in accordance with 650—Chapter 25 taken within the previous two-year period, or evidence of the full-time or part-time practice of the profession in another state of the United States or the District of Columbia, for a minimum of two years within the previous five-year period.

f. If licensed or registered in another state, the licensee or registrant shall provide certification by the state board of dentistry or equivalent authority of such state that the licensee or registrant has not been the subject of final or pending disciplinary action.

g. A statement disclosing and explaining any disciplinary actions, investigations, claims, complaints, judgments, settlements, or criminal charges.

h. Evidence that the applicant possesses a current certificate in a nationally recognized course in cardiopulmonary resuscitation. The course must include a clinical component.

i. For reinstatement of a lapsed license, a completed fingerprint packet to facilitate a criminal history background check by the Iowa division of criminal investigation (DCI) and the Federal Bureau of Investigation (FBI), including the fee for the evaluation of the fingerprint packet and the criminal history background checks by the DCI and FBI, as specified in 650—Chapter 15.

14.6(2) The board may require a licensee or registrant who is applying for reinstatement, and has not actively practiced clinically within the previous five years, to successfully complete a regional clinical examination, or other board-approved examination or assessment, for the purpose of ensuring that the applicant possesses sufficient knowledge and skill to practice safely.

14.6(3) When the board finds that a practitioner applying for reinstatement is or has been subject to disciplinary action taken against a license or registration held by the applicant in another state of the United States, District of Columbia, or territory, and the violations which resulted in such actions would also be grounds for discipline in Iowa in accordance with rule 650—30.4(153), the board may deny reinstatement of a license or registration to practice dentistry, dental hygiene, or dental assisting in Iowa or may impose any applicable disciplinary sanctions as specified in rule 650—30.2(153) as a condition of reinstatement.

14.6(4) The dental hygiene committee may, in its discretion, review any applications for reinstatement of a lapsed dental hygiene license and make recommendations to the board. The board's review of the dental hygiene committee recommendation is subject to 650—Chapter 1.

This rule is intended to implement Iowa Code sections 147.10, 147.11, and 272C.2.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 6303C**, IAB 4/20/22, effective 5/25/22]

650—14.7(136C,153) Reinstatement of lapsed radiography qualification. A dental assistant who allows a radiography qualification to lapse by failing to renew may have the radiography qualification reinstated at the discretion of the board by submitting the following:

14.7(1) A completed application for reinstatement of the dental assistant radiography qualification.

14.7(2) Payment of the radiography reinstatement application fee and the current renewal fee, both as specified in 650—Chapter 15.

14.7(3) Proof of current registration as a dental assistant or proof of an active Iowa nursing license.

14.7(4) If the radiography qualification has been lapsed for less than five years, proof of two hours of continuing education in the subject area of dental radiography, taken within the previous two-year period.

14.7(5) If the radiography qualification has been lapsed for more than five years, the dental assistant shall be required to retake and successfully complete an examination in dental radiography. A dental

assistant who presents proof of a current radiography qualification issued by another state and who has engaged in dental radiography in that state is exempt from the examination requirement.

This rule is intended to implement Iowa Code section 136C.3 and chapter 153.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 6303C**, IAB 4/20/22, effective 5/25/22]

650—14.8(153) Reactivation of an inactive license or registration. Rescinded **ARC 6303C**, IAB 4/20/22, effective 5/25/22.

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[Filed ARC 6303C (Notice ARC 6210C, IAB 2/23/22), IAB 4/20/22, effective 5/25/22]

CHAPTER 15
FEES

650—15.1(147,153) Establishment of fees. The board is self-supporting through the collection of fees and does not receive an appropriation from the general fund. Pursuant to Iowa Code section 147.80, the board is to establish fees by rule based on the costs of sustaining the board and the actual costs of the services performed by the board. Under Iowa law, the board is required to annually prepare an estimate of projected revenues generated by the fees received and review projected expenses to ensure that there are sufficient funds to cover projected expenses.
[**ARC 0164C**, IAB 6/13/12, effective 5/21/12; **ARC 0265C**, IAB 8/8/12, effective 9/12/12]

650—15.2(147,153) Definitions. The following definitions apply to this chapter:

"Fee" means the amount charged for the services described in this chapter. All fees are nonrefundable. Overpayment of the fee will result in return of the original request and payment, prior to processing, with a clarification of the total amount due.

"Service charge" means the amount charged for making a service available online and is in addition to the actual fee for a service itself. For example, a licensee who renews a license online will pay the license renewal fee and a service charge.
[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3490C**, IAB 12/6/17, effective 1/10/18]

650—15.3(153) Examination fees. All fees are nonrefundable. In addition to the fees specified in this rule, an applicant will pay a service charge for filing online.

15.3(1) *Portfolio dental examination fee.* The fee for dental examination on the basis of portfolio is $1500.

15.3(2) Reserved.
[**ARC 3488C**, IAB 12/6/17, effective 1/10/18]

650—15.4(153) Application fees. All fees are nonrefundable. In addition to the fees specified in this rule, an applicant will pay a service charge for filing online.

15.4(1) *Dental licensure on the basis of examination.* The fees for a dental license issued on the basis of examination include an application fee, a fee for evaluation of a fingerprint packet and criminal background check and, if the applicant is applying within three months or less of a biennial renewal due date, the renewal fee.

a. Application fee. The application fee for a license to practice dentistry is $200.

b. Initial licensure period and renewal period. If an applicant applies within three months or less of a biennial renewal due date, the applicant shall pay the renewal fee along with the licensure application fee. A license shall not be issued for a period less than three months or longer than two years and three months. Thereafter, a licensee shall pay the renewal fee as specified in rule 650—15.5(153).

c. Fingerprint packet and criminal history check. The fee for evaluation of a fingerprint packet and criminal background check is as specified in subrule 15.8(4).

15.4(2) *Dental hygiene licensure on the basis of examination.* The fees for a dental hygiene license issued on the basis of examination include an application fee, an initial licensure fee, and a fee for evaluation of a fingerprint packet and criminal background check.

a. Application fee. The application fee for a license to practice dental hygiene is $100.

b. Initial licensure period and renewal period. If an applicant applies within three months or less of a biennial renewal due date, the applicant shall pay the renewal fee along with the licensure application fee. A license shall not be issued for a period less than three months or longer than two years and three months. Thereafter, a licensee shall pay the renewal fee as specified in rule 650—15.5(153).

c. Fingerprint packet and criminal history check. The fee for evaluation of a fingerprint packet and criminal background check is as specified in subrule 15.8(4).

15.4(3) *Resident dental license.* The application fee for a resident dental license is $120.

15.4(4) *Faculty permit.* The application fee for a faculty permit is $200.

15.4(5) *Dental licensure on the basis of credentials.* The fees for a dental license issued on the basis of credentials include an application fee, an initial licensure fee, and a fee for evaluation of a fingerprint packet and criminal background check.

a. Application fee. The application fee for a license to practice dentistry issued on the basis of credentials is $550.

b. Initial licensure period and renewal period. If an applicant applies within three months or less of a biennial renewal due date, the applicant shall pay the renewal fee along with the licensure application fee. A license shall not be issued for a period less than three months or longer than two years and three months. Thereafter, a licensee shall pay the renewal fee as specified in rule 650—15.5(153).

c. Fingerprint packet and criminal history check. The fee for evaluation of a fingerprint packet and criminal background check is as specified in subrule 15.8(4).

15.4(6) *Dental hygiene licensure on the basis of credentials.* The fees for a dental hygiene license issued on the basis of credentials include an application fee, an initial licensure fee, and a fee for evaluation of a fingerprint packet and criminal background check.

a. Application fee. The application fee for a license to practice dental hygiene issued on the basis of credentials is $200.

b. Initial licensure period and renewal period. If an applicant applies within three months or less of a biennial renewal due date, the applicant shall pay the renewal fee along with the licensure application fee. A license shall not be issued for a period less than three months or longer than two years and three months. Thereafter, a licensee shall pay the renewal fee as specified in rule 650—15.5(153).

c. Fingerprint packet and criminal history check. The fee for evaluation of a fingerprint packet and criminal background check is as specified in subrule 15.8(4).

15.4(7) *Reinstatement of a lapsed dental assistant registration.* The fee for a reinstatement application for a lapsed dental assistant registration is $50.

15.4(8) *Reinstatement of a lapsed dental hygiene license.* The fee for a reinstatement application for a lapsed dental hygiene license is $100.

15.4(9) *Reinstatement of a lapsed dental license.* The fee for a reinstatement application for a lapsed dental license is $150.

15.4(10) *General anesthesia permit application.* The application fee for a general anesthesia permit is $500.

15.4(11) *Moderate sedation permit application.* The application fee for a moderate sedation permit is $500.

15.4(12) *Dental assistant trainee application.* The fee for an application for registration as a dental assistant trainee is $25.

15.4(13) *Dental assistant registration only application.*

a. Application fee. The application fee for dental assistant registration is $40.

b. Initial registration period and renewal period. If an applicant applies within three months or less of a biennial renewal due date, the applicant shall pay the renewal fee along with the registration application fee. A dental assistant registration shall not be issued for a period less than three months or longer than two years and three months. Thereafter, a registrant shall pay the renewal fee as specified in rule 650—15.5(153).

15.4(14) *Combined application—dental assistant registration and qualification in radiography.*

a. Application fee. The application fee for a combined application for both registration as a registered dental assistant and radiography qualification is $60.

b. Initial combined registration and radiography qualification period and renewal period. If an applicant applies within three months or less of a biennial renewal due date, the applicant shall pay the renewal fee along with the combined registration/radiography qualification application fee. A dental assistant registration and radiography qualification shall not be issued for a period less than three months or longer than two years and three months. Thereafter, the applicant shall pay the renewal fee as specified in rule 650—15.5(153).

15.4(15) *Dental assistant radiography qualification application fee.* The fee for an application for dental assistant radiography qualification is $40.

15.4(16) *Temporary permit—urgent need or educational services.* The fee for an application for a temporary permit to serve an urgent need or provide educational services is $100 if an application is submitted online or $150 if submitted via paper application.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 0618C**, IAB 3/6/13, effective 4/10/13; **ARC 0984C**, IAB 9/4/13, effective 10/9/13; **ARC 3490C**, IAB 12/6/17, effective 1/10/18; **ARC 3488C**, IAB 12/6/17, effective 1/10/18; **ARC 6303C**, IAB 4/20/22, effective 5/25/22; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—15.5(153) Renewal fees. All fees are nonrefundable. Each two-year renewal period begins on September 1 and runs through August 31. Dental licenses, moderate sedation permits, and general anesthesia permits expire in even-numbered years. Dental hygiene licenses, local anesthesia permits, dental assistant registration and qualification in dental radiography expire in odd-numbered years. To avoid late fees, paper renewal applications must be postmarked on or received in the board office by August 31. To avoid late fees, online renewal applications must be time-stamped no later than 11:59 p.m. (CST) on August 31.

15.5(1) *Dental license renewal.* The fee for renewal of a license to practice dentistry for a biennial period is $315.

15.5(2) *Dental hygiene license renewal.* The fee for renewal of a license to practice dental hygiene for a biennial period is $150.

15.5(3) *General anesthesia permit renewal.* The fee for renewal of a general anesthesia permit is $125.

15.5(4) *Moderate sedation permit renewal.* The fee for renewal of a moderate sedation permit is $125.

15.5(5) *Local anesthesia permit renewal.* The fee for renewal of a permit to authorize a dental hygienist to administer local anesthesia is $25.

15.5(6) *Dental assistant registration renewal.* The fee for renewal of registration as a registered dental assistant is $75.

15.5(7) *Combined renewal application—dental assistant registration and qualification in radiography.* The fee for a combined application to renew both a registration as a registered dental assistant and a radiography qualification is $115.

15.5(8) *Dental assistant qualification in radiography renewal.* The fee for renewal of a certificate of qualification in dental radiography is $40.

15.5(9) *Faculty permit renewal.* The fee for renewal of a faculty permit is $315.

15.5(10) *Resident license renewal.* The fee for renewal or extension of a resident license is $40.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3488C**, IAB 12/6/17, effective 1/10/18; **ARC 6303C**, IAB 4/20/22, effective 5/25/22]

650—15.6(153) Late renewal fees. All fees are nonrefundable. A licensee, registrant or permit holder who fails to renew a license, registration or permit following expiration is subject to late renewal fees as described in this rule.

15.6(1) *Failure to renew a license, registration or permit prior to September 1.* Failure by a licensee, registrant or permit holder to renew the license, registration or permit prior to September 1 following expiration shall result in the following late fees:

a. *Dental license or permit.* A late fee of $100 shall be assessed, in addition to the renewal fee.

b. *Dental hygiene license.* A late fee of $100 shall be assessed, in addition to the renewal fee.

c. *Dental assistant registration.* A late fee of $20 shall be assessed, in addition to the renewal fee.

15.6(2) *Failure to renew a license, registration or permit prior to October 1.* Failure by a licensee, registrant or permit holder to renew the license, registration or permit prior to October 1 following expiration shall result in the following late fees:

a. *Dental license or permit.* A late fee of $150 shall be assessed, in addition to the renewal fee.

b. *Dental hygiene license.* A late fee of $150 shall be assessed, in addition to the renewal fee.

c. *Dental assistant registration.* A late fee of $40 shall be assessed, in addition to the renewal fee.

15.6(3) *Failure to renew a license, registration or permit prior to November 1.* Failure by a licensee, registrant or permit holder to renew a license, registration or permit prior to November 1

following expiration shall cause the license, registration or permit to lapse and become invalid. A licensee, registrant or permit holder whose license, registration or permit has lapsed and become invalid is prohibited from the practice of dentistry, dental hygiene, or dental assisting until the license, registration or permit is reinstated.
[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3488C**, IAB 12/6/17, effective 1/10/18]

650—15.7(147,153) Reinstatement fees. If a license, registration or permit lapses, a licensee, registrant or permit holder may submit an application for reinstatement. Licensees, registrants or permit holders are subject to reinstatement fees as described in this rule.

15.7(1) *Reinstatement of a dental license.* In addition to the reinstatement application fee specified in subrule 15.4(9), the applicant must pay a renewal fee as specified in subrule 15.5(1) and the fee for evaluation of a fingerprint packet and criminal background check as specified in subrule 15.8(4).

15.7(2) *Reinstatement of a dental hygiene license.* In addition to the reinstatement application fee specified in subrule 15.4(8), the applicant must pay a renewal fee as specified in subrule 15.5(2) and the fee for evaluation of a fingerprint packet and criminal background check as specified in subrule 15.8(4).

15.7(3) *Reinstatement of a dental assistant registration.* In addition to the reinstatement application fee specified in subrule 15.4(7), the applicant must pay a renewal fee as specified in subrule 15.5(6) to reinstate a registration as a registered dental assistant.

15.7(4) *Combined reinstatement application—dental assistant registration and qualification in radiography.* In addition to the reinstatement application fee specified in subrule 15.4(7), the applicant must pay a renewal fee as specified in subrule 15.5(7) for a combined application to reinstate both a registration as a registered dental assistant and a radiography qualification.

15.7(5) *Reinstatement of qualification in radiography.* In addition to the reinstatement application fee of $40, the applicant must pay a renewal fee as specified in subrule 15.5(8) to reinstate a qualification in dental radiography without registration as a dental assistant.
[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3490C**, IAB 12/6/17, effective 1/10/18; **ARC 3488C**, IAB 12/6/17, effective 1/10/18; **ARC 6303C**, IAB 4/20/22, effective 5/25/22]

650—15.8(153) Miscellaneous fees. Payments made to the Iowa Dental Board, which shall be considered a repayment receipt as defined in Iowa Code section 8.2, shall be received in the board office prior to release of the requested document.

15.8(1) *Duplicates.* The fee for issuance of a hard-copy duplicate license, permit or registration certificate or current renewal is $25. Electronic copies are provided at no cost.

15.8(2) *Certification or verification.* The fee for a written certification or written verification of an Iowa license, permit or registration is $25.

15.8(3) *Trainee manual.* The fee for the dental assistant trainee manual is $70.

15.8(4) *Fingerprint packet and criminal history background check.* The fee for evaluation of a fingerprint packet and the criminal history background checks is $46.

15.8(5) *IPRC monitoring.* The fee for monitoring for compliance with an IPRC agreement is $100 per quarter, unless otherwise stated in the Iowa practitioner program contract entered into pursuant to 650—Chapter 35.

15.8(6) *Monitoring for compliance with settlement agreements.* The fee for monitoring a licensee's, registrant's or permit holder's compliance with a settlement agreement entered into pursuant to 650—subrule 51.19(9) is $300 per quarter, unless otherwise stated in the settlement agreement.

15.8(7) *Disciplinary hearings—fees and costs.*

a. Definitions. As used in this subrule in relation to fees related to a formal disciplinary action filed by the board against a licensee, registrant or permit holder:

"Deposition" means the testimony of a person pursuant to subpoena or at the request of the state of Iowa taken in a setting other than a hearing.

"Expenses" means costs incurred by persons appearing pursuant to subpoena or at the request of the state of Iowa for purposes of providing testimony on the part of the state of Iowa in a hearing or other official proceeding and shall include mileage reimbursement at the rate specified in Iowa Code section

70A.9 or, if commercial air or ground transportation is used, the actual cost of transportation to and from the proceeding. Also included are actual costs incurred for meals and necessary lodging.

"Medical examination fees" means actual costs incurred by the board in a physical, mental, chemical abuse, or other impairment-related examination or evaluation of a licensee when the examination or evaluation is conducted pursuant to an order of the board.

"Transcript" means a printed verbatim reproduction of everything said on the record during a hearing or other official proceeding.

"Witness fees" means compensation paid by the board to persons appearing pursuant to subpoena or at the request of the state of Iowa for purposes of providing testimony on the part of the state of Iowa. For the purposes of this rule, compensation shall be the same as outlined in Iowa Code section 622.69 or 622.72 as the case may be.

b. The board may charge a fee not to exceed $75 for conducting a disciplinary hearing which results in disciplinary action taken against the licensee by the board. In addition to the fee, the board may recover from the licensee costs for the following procedures and personnel:

(1) Court reporter and transcript.

(2) Witness fees and expenses. The parties in a contested case shall be responsible for any witness fees and expenses incurred by witnesses appearing at the contested case hearing. In addition, the board may assess a licensee the witness fees and expenses incurred by witnesses called to testify on behalf of the state of Iowa.

(3) Depositions. Deposition costs for the purposes of allocating costs against a licensee include only those deposition costs incurred by the state of Iowa. The licensee is directly responsible for the payment of deposition costs incurred by the licensee.

(4) Medical examination fees incurred relating to a person licensed under Iowa Code chapter 147. All costs of physical or mental examinations or substance abuse evaluations or drug screening or clinical competency evaluations ordered by the board pursuant to Iowa Code section 272C.9(1) as part of an investigation or pending complaint or as a sanction following a contested case shall be paid directly by the licensee.

15.8(8) *Certification of reimbursable costs.* The executive director or designee shall certify any reimbursable costs incurred by the board. The executive director shall calculate the specific costs, certify the cost calculated, and file the certification as part of the record in the contested case. A copy of the certification shall be served on the party responsible for payment of the certified costs at the time of the filing.

15.8(9) *Assessment of fees and costs.* A final decision of the board imposing disciplinary action against a licensee shall include the amount of any disciplinary hearing fee assessed, which shall not exceed $75. If the board also assesses reimbursable costs against the licensee, the board shall file a certification of reimbursable costs which includes a statement of costs delineating each category of costs and the amount assessed. Fees and costs that cannot be calculated at the time of the issuance of the board's final disciplinary order may be invoiced to the licensee at a later time, provided the board's final disciplinary order states that the fees and costs will be invoiced at a later date. The board shall specify the time period in which the fees and costs must be paid by the licensee.

15.8(10) *Board treatment of collected fees, costs.* Fees and costs collected by the board shall be considered repayment receipts as defined in Iowa Code section 8.2.

15.8(11) *Failure to pay assessed fees, costs.* Failure of a licensee to pay the fees and costs assessed herein within the time period specified in the board's final disciplinary order shall constitute a violation of an order of the board and shall be grounds for disciplinary action.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3490C**, IAB 12/6/17, effective 1/10/18; **ARC 3488C**, IAB 12/6/17, effective 1/10/18; **ARC 4676C**, IAB 9/25/19, effective 10/30/19]

650—15.9(153) Continuing education fees.

15.9(1) *Application for prior approval of activities.* The fee for an application for prior approval of a continuing education activity is $10.

15.9(2) *Application for postapproval of activities.* The fee for an application for postapproval of a continuing education activity is $10.

15.9(3) *Application for approved sponsor status.* The fee for an application to become an approved sponsor for a continuing education activity is $100. The biennial renewal fee is $100.
[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3488C**, IAB 12/6/17, effective 1/10/18]

650—15.10(153) Facility inspection fee. The actual costs for an on-site evaluation of a facility at which deep sedation/general anesthesia or moderate sedation is authorized pursuant to 650—Chapter 29 shall not exceed $500 per facility per inspection.
[**ARC 0265C**, IAB 12/6/17, effective 9/12/12; **ARC 3488C**, IAB 12/6/17, effective 1/10/18]

650—15.11(22,147,153) Public records. Public records are available according to 650—Chapter 6, "Public Records and Fair Information Practices." Payment made to the Iowa Dental Board, which shall be considered a repayment receipt as defined in Iowa Code section 8.2, shall be received in the board office prior to the release of the records.

15.11(1) Copies of public records shall be calculated at $.25 per page plus labor. A $16 per-hour fee shall be charged for labor in excess of one-half hour for searching and copying documents or retrieving and copying information stored electronically. No additional fee shall be charged for delivery of the records by mail or fax. A fax is an option if the requested records are fewer than 30 pages. The board office shall not require payment when the fees for the request would be less than $5 total.

15.11(2) Electronic copies of public records delivered by email shall be calculated at $.10 per page; the minimum charge shall be $5. A $16 per-hour fee shall be charged for labor in excess of one-half hour for searching and copying documents or retrieving and copying information stored electronically. The board office shall not require payment when the fee for the request would be less than $5 total.

15.11(3) Electronic files of statements of charges, final orders and consent agreements from each board meeting may be delivered via email, upon written request, at no cost.

15.11(4) Printed copies of statements of charges, final orders and consent agreements from each board meeting shall be available for an annual subscription fee of $120.
[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3490C**, IAB 12/6/17, effective 1/10/18; **ARC 3488C**, IAB 12/6/17, effective 1/10/18]

650—15.12(22,147,153) Purchase of a mailing list or data list. Payment made to the Iowa Dental Board, which shall be considered a repayment receipt as defined in Iowa Code section 8.2, shall be received in the board office prior to the release of a list.

15.12(1) *Mailing list for dentists, hygienists or assistants.* The standard mailing list for all active licensees and registrants includes the full name, address, city, state, ZIP code, and Iowa county. The standard mailing list of dentists or dental hygienists includes resident licensees and faculty permit holders.

a. Printed mailing list, $65 per profession requested.

b. Mailing list on disc or DVD, $45 per profession requested.

c. Mailing list in an electronic file, $35 per profession requested.

15.12(2) *Data list for dentists, hygienists, or assistants.* The standard data list for active licensees or registrants includes full name, address, Iowa county (if applicable), original issue date, expiration date, license or registration number, license or registration status, specialty (if applicable), and whether public disciplinary action has been taken. The standard data list includes resident licensees and faculty permit holders. Additional data elements, programming or sorting increases the following fees by $25.

a. Printed standard data list, $75 per profession requested.

b. Standard data list on disc or DVD, $55 per profession requested.

c. Standard data list in an electronic file, $45 per profession requested.
[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3490C**, IAB 12/6/17, effective 1/10/18; **ARC 3488C**, IAB 12/6/17, effective 1/10/18]

650—15.13(147,153) Returned checks. The board shall charge a fee of $39 for a check returned for any reason. If a license or registration had been issued by the board office based on a check that is later

returned by the bank, the board shall request payment by certified check or money order. If the fees are not paid within two weeks of notification of the returned check by certified mail, the licensee or registrant shall be subject to disciplinary action for noncompliance with board rules.
[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3488C**, IAB 12/6/17, effective 1/10/18]

650—15.14(147,153,272C) Copies of the laws and rules. Copies of laws and rules pertaining to the practice of dentistry, dental hygiene, or dental assisting are available from the board office for the following fees.

1. Iowa Code and Iowa Administrative Code access, no fee, available at dentalboard.iowa.gov.
2. Printed copies of the Iowa Code chapters that pertain to the practice of dentistry, $10.
3. Printed copies of dental board rules in the Iowa Administrative Code, $15.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3488C**, IAB 12/6/17, effective 1/10/18; **ARC 6303C**, IAB 4/20/22, effective 5/25/22]

650—15.15(17A,147,153,272C) Waiver prohibited. Rules in this chapter are not subject to waiver pursuant to 650—Chapter 7 or any other provision of law.
[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 3488C**, IAB 12/6/17, effective 1/10/18]

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◊ Two or more ARCs

CHAPTER 16
PRESCRIBING, ADMINISTERING, AND DISPENSING DRUGS
[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—16.1(124,153,155A) Definitions.

"Authorized delegate" means a licensed or registered health care professional, such as a dental hygienist, dental assistant or registered nurse, who has obtained PMP log-in credentials. A dental assistant trainee may not serve as an authorized delegate.

"Controlled substance" means a drug or other substance listed in division II of Iowa Code chapter 124.

"Opioid" means a drug that produces an agonist effect on opioid receptors and is indicated or used for the treatment of pain.

"Prescription drug" means a drug, as classified by the United States Food and Drug Administration, that is required to be prescribed or administered to a patient by a practitioner prior to dispensation.

"Prescription monitoring program" or *"PMP"* means the information program for drug prescribing and dispensing administered by the Iowa board of pharmacy.

[**ARC 4409C**, IAB 4/24/19, effective 5/29/19]

650—16.2(153) Scope of authority and prescribing requirements.

16.2(1) A license to practice dentistry issued by this board permits the licensee to prescribe, administer, or dispense prescription drugs if the use is directly related to the practice of dentistry and is within the scope of the dentist-patient relationship. Registration with the federal Drug Enforcement Administration and the Iowa board of pharmacy further extends this privilege to controlled substances.

16.2(2) Prescribing by a licensed dentist must be directly related to the practice of dentistry. A dental examination and medical history must be taken before a dentist initially prescribes, administers, or dispenses a prescription drug to a patient, except for patients who receive fluoride dispensed under protocols approved by the bureau of oral and health delivery systems of the department of public health. A prescription drug prescribed, administered, or dispensed by a licensed dentist must be for a diagnosed condition and be included in a dental treatment plan. The patient's dental record must contain written evidence of the examination and medical history.

16.2(3) On each occasion when a prescription drug is prescribed, administered, or dispensed to a patient, an entry must be made in the patient's dental record containing the following information: the name, quantity, and strength of the prescription drug; the directions for its use; the date of issuance; and the condition for which the prescription drug was used.

16.2(4) The prescribing, administering, and dispensing of prescription drugs shall be done in accordance with all applicable state and federal laws.

16.2(5) When controlled substances are purchased, administered, or dispensed, a dentist shall maintain records and accountability in accordance with 657—Chapter 10.

16.2(6) A dentist shall not self-prescribe or self-administer controlled substances.

16.2(7) Prescribing, administering, or dispensing controlled substances to members of the licensee's immediate family is prohibited, except in the case of an acute dental condition or on an emergency basis for a dental condition when the licensee conducts an examination, establishes a patient record, and maintains proper documentation.

[**ARC 3987C**, IAB 8/29/18, effective 10/3/18; **ARC 4409C**, IAB 4/24/19, effective 5/29/19]

650—16.3(153) Dispensing—requirements for containers and labeling.

16.3(1) *Containers.* A prescription drug shall be dispensed in a suitable container designed to protect its integrity in accordance with all applicable federal and state laws.

16.3(2) *Labeling.* A label shall be affixed to the container in which a prescription drug is dispensed bearing the following information:

1. Name and address of the dentist.
2. Name of the patient.
3. Date dispensed.

4. Directions for use.
5. Name, quantity, and strength of medication.
6. If it is Schedule II, III, or IV controlled substance, the federal transfer warning statement must appear on the label as follows: "Caution: Federal law prohibits the transfer of this drug to any person other than the patient for whom it was prescribed."
7. Cautionary statements, if any.

[**ARC 8369B**, IAB 12/16/09, effective 1/20/10; **ARC 4409C**, IAB 4/24/19, effective 5/29/19]

650—16.4(153) Prescription requirements.

16.4(1) Prior to January 1, 2020, a prescription drug order may be written or transmitted to a pharmacy orally, by fax, or through electronic prescribing in accordance with applicable federal and state laws. A dentist shall take adequate measures to prevent prescription forgery from occurring. Beginning January 1, 2020, all prescription drug orders, including prescriptions for controlled substances, must be electronically prescribed unless exempted. Beginning January 1, 2020, a dentist who fails to comply with the electronic prescription mandate may be subject to a nondisciplinary administrative penalty of $250 per violation, up to a maximum of $5,000 per calendar year.

16.4(2) A dentist may delegate to a licensed dental hygienist or registered dental assistant the preparation of a prescription for the review, authorization, and manual or electronic signature of the dentist, but the dentist is responsible for the accuracy, completeness, and validity of the prescription.

16.4(3) A dentist shall securely maintain the unique authentication credentials issued to the dentist for utilization of the electronic prescription application and authentication of the dentist's electronic signature. Unique authentication credentials issued to any individual shall not be shared with or disclosed to any other individual.

[**ARC 4409C**, IAB 4/24/19, effective 5/29/19]

650—16.5(153) Required use of the PMP.

16.5(1) Before a dentist issues an opioid prescription or dispenses an opioid, a dentist or authorized delegate shall query the PMP. The query shall be performed within 48 hours prior to a prescription being issued or dispensed and shall be done for each patient, each time an opioid prescription is authorized or dispensed.

16.5(2) A dentist who dispenses a controlled substance is required to report the dispensing to the PMP within one business day in accordance with 657—Chapter 37.

[**ARC 4409C**, IAB 4/24/19, effective 5/29/19]

These rules are intended to implement Iowa Code section 153.20.

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CHAPTERS 17 to 19
Reserved

TITLE IV
AUXILIARY PERSONNEL

CHAPTER 20
DENTAL ASSISTANTS

[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—20.1(153) Registration required. A person shall not practice dental assisting without a certificate of registration issued by the board pursuant to rule 650—11.8(153), unless practicing as a dental assistant trainee.

[**ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—20.2(153) Definitions. As used in this chapter:

"Dental assistant" means any person who, under the supervision of a dentist, performs any extraoral services including infection control or the use of hazardous materials or performs any intraoral services on patients. The term "dental assistant" does not include persons otherwise actively licensed in Iowa to practice dental hygiene or nursing who are engaged in the practice of said profession.

"Dental assistant trainee" means any person who is engaging in on-the-job training to meet the requirements for registration in accordance with Iowa Code section 153.39 and who is learning the necessary skills under the personal supervision of a licensee or registrant. Trainees who are 18 years of age or older may also engage in on-the-job training in dental radiography pursuant to rule 650—22.3(136C,153).

"Public health supervision" means all of the following:

1. The dentist authorizes and delegates the services provided by a registered dental assistant to a patient in a public health setting, with the exception that services may be rendered without the patient's first being examined by a licensed dentist;
2. The dentist is not required to provide future dental treatment to patients served under public health supervision;
3. The dentist and the registered dental assistant have entered into a written supervision agreement that details the responsibilities of each licensee/registrant, as specified in subrule 20.9(2); and
4. The registered dental assistant has an active Iowa registration and a minimum of one year of clinical practice experience.

"Registered dental assistant" means any person who has met the requirements for registration and has been issued a certificate of registration.

"Trainee status expiration date" means 12 months from the date of employment as a dental assistant trainee.

[**ARC 8369B**, IAB 12/16/09, effective 1/20/10; **ARC 0465C**, IAB 11/28/12, effective 1/2/13; **ARC 2028C**, IAB 6/10/15, effective 7/15/15; **ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 4948C**, IAB 2/26/20, effective 4/1/20; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—20.3(153) Dental assistants.

20.3(1) *Dental assistant trainee.*

a. Dental assistant trainees are individuals who are engaging in on-the-job training to meet the requirements for registration and who are learning the necessary skills under the personal supervision of a licensee or registrant. Trainees who are 18 years of age or older may also engage in on-the-job training in dental radiography pursuant to rule 650—22.3(136C,153).

b. The dental assistant trainee shall:

(1) Successfully complete on-the-job training and examinations in the areas of infection control, hazardous materials, and jurisprudence.

(2) If the trainee fails to become registered by the trainee status expiration date, stop work as a dental assistant trainee.

20.3(2) *Registered dental assistant.* Registered dental assistants are individuals who have met the requirements for registration and have been issued a certificate of registration. A registered dental assistant may, under direct supervision, assist a dentist in performing duties assigned by the dentist

that are consistent with these rules. The registered dental assistant may take radiographs if qualified pursuant to 650—Chapter 22.
[**ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—20.4(153) Scope of practice.

20.4(1) In all instances, a dentist assumes responsibility for determining, on the basis of diagnosis, the specific treatment patients will receive and which aspects of treatment may be delegated to qualified personnel as authorized in these rules.

20.4(2) A licensed dentist may delegate to a dental assistant those procedures for which the dental assistant has received training. This delegation shall be based on the best interests of the patient. Such services shall be delegated by and performed under the supervision of a licensed dentist and may include:

a. Placement and removal of dry socket medication;

b. Placement of periodontal dressings;

c. Testing pulp vitality;

d. Preliminary charting of existing dental restorations and teeth;

e. Glucose testing;

f. Phlebotomy; and

g. Expanded function procedures in accordance with 650—Chapter 23.

20.4(3) The dentist shall exercise supervision and shall be fully responsible for all acts performed by a dental assistant. A dentist may not delegate to a dental assistant any of the following, unless allowed pursuant to 650—Chapter 23:

a. Diagnosis, examination, treatment planning, or prescription, including prescription for drugs and medicaments or authorization for restorative, prosthodontic or orthodontic appliances.

b. Surgical procedures on hard and soft tissues within the oral cavity and any other intraoral procedure that contributes to or results in an irreversible alteration to the oral anatomy.

c. Administration of local anesthesia.

d. Placement of sealants.

e. Removal of any plaque, stain, or hard natural or synthetic material except by toothbrush, floss, or rubber cup coronal polish, or removal of any calculus.

f. Dental radiography, unless the assistant is qualified pursuant to 650—Chapter 22.

g. Those procedures that require the professional judgment and skill of a dentist.

20.4(4) A dental assistant may perform duties consistent with these rules under the supervision of a licensed dentist. The specific duties dental assistants may perform are based upon:

a. The education of the dental assistant.

b. The experience of the dental assistant.

[**ARC 2028C**, IAB 6/10/15, effective 7/15/15; **ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 4676C**, IAB 9/25/19, effective 10/30/19]

650—20.5(153) Continuing education. Each person registered as a dental assistant shall complete continuing education requirements as specified in 650—Chapter 25.
[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 2028C**, IAB 6/10/15, effective 7/15/15; **ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 4948C**, IAB 2/26/20, effective 4/1/20; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—20.6(252J) Receipt of certificate of noncompliance. The board shall consider the receipt of a certificate of noncompliance of a support order from the child support recovery unit pursuant to Iowa Code chapter 252J and 650—Chapter 33. Registration denial or denial of renewal of registration shall follow the procedures in the statutes and board rules as set forth in this rule.

This rule is intended to implement Iowa Code chapter 252J.
[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 2028C**, IAB 6/10/15, effective 7/15/15; **ARC 4747C**, IAB 11/6/19, effective 12/11/19; **ARC 4948C**, IAB 2/26/20, effective 4/1/20; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—20.7(153) Unlawful practice. A dental assistant who assists a dentist in practicing dentistry in any capacity other than as a person supervised by a dentist in a dental office, or who directly or indirectly procures a licensed dentist to act as nominal owner, proprietor or director of a dental office as a guise or

subterfuge to enable such dental assistant to engage directly or indirectly in the practice of dentistry, or who performs dental service directly or indirectly on or for members of the public other than as a person working for a dentist shall be deemed to be practicing dentistry without a license.
[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 2028C**, IAB 6/10/15, effective 7/15/15; **ARC 4948C**, IAB 2/26/20, effective 4/1/20; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—20.8(153) Advertising and soliciting of dental services prohibited. Dental assistants shall not advertise, solicit, represent or hold themselves out in any manner to the general public that they will furnish, construct, repair or alter prosthetic, orthodontic or other appliances, with or without consideration, to be used as substitutes for or as part of natural teeth or associated structures or for the correction of malocclusions or deformities, or that they will perform any other dental service.
[**ARC 0265C**, IAB 8/8/12, effective 9/12/12; **ARC 2028C**, IAB 6/10/15, effective 7/15/15; **ARC 4948C**, IAB 2/26/20, effective 4/1/20; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—20.9(153) Public health supervision allowed. A dentist may provide public health supervision to a registered dental assistant if the dentist has an active Iowa license and the services are provided in a public or private school, public health agencies, hospitals, or the armed forces.

20.9(1) *Public health agencies defined.* For the purposes of this rule, public health agencies include programs operated by federal, state, or local public health departments.

20.9(2) *Responsibilities.* When working together in a public health supervision relationship, a dentist and registered dental assistant shall enter into a written agreement that specifies the following responsibilities.

a. The dentist providing public health supervision must:

(1) Be available to provide communication and consultation with the registered dental assistant;

(2) Have age- and procedure-specific standing orders for the performance of services. Those standing orders must include consideration for medically compromised patients and medical conditions for which a dental evaluation must occur prior to the provision of services;

(3) Specify a period of time in which an examination by a dentist must occur prior to providing further services;

(4) Specify the location or locations where the services will be provided under public health supervision.

b. A registered dental assistant providing services under public health supervision may only provide services which are limited to all extraoral duties, dental radiography, intraoral suctioning, and use of a curing light and intraoral camera and must:

(1) Maintain contact and communication with the dentist providing public health supervision;

(2) Practice according to age- and procedure-specific standing orders as directed by the supervising dentist, unless otherwise directed by the dentist for a specific patient;

(3) Ensure that the patient, parent, or guardian receives a written plan for referral to a dentist;

(4) Ensure that each patient, parent, or guardian signs a consent form that notifies the patient that the services that will be received do not take the place of regular dental checkups at a dental office and are meant for people who otherwise would not have access to services; and

(5) Ensure that a procedure is in place for creating and maintaining dental records for the patients who are treated, including where these records are to be located.

c. The written agreement for public health supervision must be maintained by the dentist and the registered dental assistant and a copy filed with the board office within 30 days of the date on which the dentist and the registered dental assistant entered into the agreement. The dentist and registered dental assistant must review the agreement at least biennially.

d. The registered dental assistant shall file annually with the supervising dentist and the bureau of oral and health delivery systems a report detailing the number of patients seen, the services provided to patients and the infection control protocols followed at each practice location.

e. A copy of the written agreement for public health supervision shall be filed with the Bureau of Oral and Health Delivery Systems, Iowa Department of Public Health, Lucas State Office Building, 321 E. 12th Street, Des Moines, Iowa 50319.

20.9(3) *Reporting requirements.* Each registered dental assistant who has rendered services under public health supervision must complete a summary report at the completion of a program or, in the case of an ongoing program, at least annually. The report shall be filed with the bureau of oral and health delivery systems of the Iowa department of public health on forms provided by the department and shall include information related to the number of patients seen and services provided so that the department may assess the impact of the program. The department will provide summary reports to the board on an annual basis.

[**ARC 2028C**, IAB 6/10/15, effective 7/15/15; **ARC 4948C**, IAB 2/26/20, effective 4/1/20; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—20.10(153) Students enrolled in dental assisting programs. Students enrolled in an accredited dental assisting program are not considered to be engaged in the unlawful practice of dental assisting provided that such practice is in connection with their regular course of instruction and meets the following:

1. The practice of clinical skills on peers enrolled in the same program must be under the direct supervision of a program instructor with an active Iowa dental assistant registration, Iowa dental hygiene license, Iowa faculty permit, or Iowa dental license;
2. The practice of clinical skills on members of the public must be under the direct supervision of a dentist with an active Iowa dental license.

[**ARC 2593C**, IAB 6/22/16, effective 7/27/16; **ARC 4948C**, IAB 2/26/20, effective 4/1/20; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

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[1] The Administrative Rules Review Committee at their May 21, 1979, meeting delayed the effective date of Chapters 20 and 21 70 days.

CHAPTER 21
DENTAL LABORATORY TECHNICIAN
[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—21.1(153) Definition. "Dental laboratory technician" as used in these rules shall include a person other than a licensed dentist who fabricates, constructs, makes, or repairs oral prosthetic appliances solely and exclusively for a licensed dentist and under the dentist's supervision or direction. A dental laboratory technician who performs any of the duties of a dental assistant, as defined in 650—20.2(153), must be registered with the board as a dental assistant.

650—21.2(153) Unlawful practice by dental laboratory technician. Any dental laboratory technician who assists a dentist in practicing dentistry in any capacity other than as an employee or independent contractor, or who directly or indirectly procures a licensed dentist to act as nominal owner, proprietor or director of a dental office as a guise or subterfuge to enable such dental laboratory technician to engage directly or indirectly in the practice of dentistry, or who renders dental service directly or indirectly on or for members of the public other than as an employee or independent contractor for an employing dentist shall be deemed to be practicing dentistry without a license.

650—21.3(153) Advertising and soliciting dental services prohibited. No dental laboratory or dental laboratory technician shall advertise, solicit, represent or hold themselves, or itself out in any manner to the general public that they or it will furnish, construct, repair or alter prosthetic, orthodontic or other appliances, with or without consideration, to be used as substitutes for or as part of natural teeth or associated structures or for the correction of malocclusions or deformities, or that they or it will render any other dental service.

This chapter is intended to implement Iowa Code sections 153.17, 153.32(5) and 153.33.

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[1] At their meeting held May 21, 1979, the Administrative Rules Review Committee delayed the effective date of Chapter 21 for 70 days.

CHAPTER 22
DENTAL ASSISTANT RADIOGRAPHY QUALIFICATION
[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—22.1(136C,153) Qualification required. A person who is not otherwise actively licensed by the board shall not participate in dental radiography unless the person holds a current registration certificate or active nursing license and holds an active radiography qualification issued by the board, and a dentist provides general supervision.
[**ARC 8369B**, IAB 12/16/09, effective 1/20/10]

650—22.2(136C,153) Definitions. As used in this chapter:

"Dental radiography" means the application of X-radiation to human teeth and supporting structures for diagnostic purposes only.

"Radiography qualification" means authorization to engage in dental radiography issued by the board.

650—22.3(136C,153) Exemptions. The following individuals are exempt from the requirements of this chapter.

22.3(1) A student enrolled in an accredited dental, dental hygiene, or dental assisting program, who, as part of the student's course of study, applies ionizing radiation.

22.3(2) A dental assistant pursuant to 650—Chapter 20, or an Iowa-licensed nurse, who is engaging in on-the-job training in dental radiography.
[**ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—22.4(136C,153) Application requirements for dental radiography qualification. Applicants must apply for registration as a dental assistant or hold an active license issued by the board of nursing. Applications for dental radiography qualification must be filed on official board forms and include the following:

22.4(1) Evidence of one of the following requirements:

a. The applicant is a dental assistant trainee who has completed on-the-job training or registered dental assistant with an active registration status;

b. The applicant is a graduate of an accredited dental assisting program;

c. The applicant is a nurse who holds an active Iowa license issued by the board of nursing and has completed on-the-job training; or

d. The applicant practiced as a dental assistant in another state within the previous five years, and that practice included clinical experience taking dental radiographs.

22.4(2) The fee as specified in 650—Chapter 15.

22.4(3) Evidence of successful completion, within the previous five years, of education, clinical training and examination in the area of dental radiography. The education and clinical training may be completed on the job as a dental assistant, as part of an accredited dental assisting program, or through the Dental Assisting National Board (DANB).

22.4(4) Any additional information required by the board relating to the character, education, and experience of the applicant as may be necessary to evaluate the applicant's qualifications.
[**ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—22.5(136C,153) Examination requirements. An applicant for dental assistant radiography qualification shall successfully pass an examination in dental radiography.

22.5(1) Examination may be completed as part of one of the following:

a. The board's examination for dental assistants, which includes sections on infection control/hazardous materials, radiography, and jurisprudence;

b. A board-approved examination in the area of dental radiography;

c. The DANB's Radiation Health and Safety (RHS) Examination;

d. An examination in the area of dental radiography administered by accredited dental assisting programs; or

e. A board-approved continuing education course in the area of dental radiography, which includes a posttest examination at the conclusion of the course.

22.5(2) A score of 75 percent or better on a board-approved examination shall be considered successful completion of the examination. The board accepts the passing standard established by the DANB for applicants who take the DANB's RHS Examination.

22.5(3) A dental assistant must meet such other requirements as may be imposed by the board's approved dental assistant testing centers.

[**ARC 3143C**, IAB 6/21/17, effective 7/26/17; **ARC 4948C**, IAB 2/26/20, effective 4/1/20; **ARC 6673C**, IAB 11/16/22, effective 12/21/22]

650—22.6(136C,153) Penalties.

22.6(1) Any individual except a licensed dentist or a licensed dental hygienist who participates in dental radiography in violation of this chapter or Iowa Code chapter 136C shall be subject to the criminal and civil penalties set forth in Iowa Code sections 136C.4 and 136C.5.

22.6(2) Any licensee who permits a person to engage in dental radiography or a registrant who engages in dental radiography contrary to this chapter or Iowa Code chapter 136C shall be subject to discipline by the board pursuant to 650—Chapter 30.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12]

These rules are intended to implement Iowa Code section 136C.3 and chapter 153.

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[Filed ARC 4948C (Notice ARC 4741C, IAB 11/6/19), IAB 2/26/20, effective 4/1/20]
[Filed ARC 6673C (Notice ARC 6514C, IAB 9/7/22), IAB 11/16/22, effective 12/21/22]

CHAPTER 23
EXPANDED FUNCTIONS

650—23.1(153) Definitions. As used in this chapter:

"Accredited school" means a dental, dental hygiene, or dental assisting education program accredited by the Commission on Dental Accreditation (CODA).

"Clinical training" means training which includes patient experiences.

"Didactic training" means educational instruction.

"Fabrication" means the construction or creation of an impression, occlusal registration, provisional restoration or denture, as defined in this chapter.

"Laboratory training" means training that is hands-on, that may include simulation, and that prepares a dental hygienist or dental assistant for patient experiences. Laboratory training can be done as part of an approved course, or obtained through a supervising dentist.

"Observational supervision," for expanded functions, is for training purposes only and means the dentist is physically present in the treatment room to oversee and direct all services being provided as part of clinical training.

"Patient experiences" are procedures that are performed on a patient, during the course of clinical training, under the observational supervision of a dentist.

"Prosthetic" means any provisional or permanent restoration intended to replace a tooth or teeth.

"Provisional restoration" means a restoration or appliance, which is formed or preformed for temporary purposes, used over a limited period of time.

[**ARC 4676C**, IAB 9/25/19, effective 10/30/19; **ARC 6733C**, IAB 12/14/22, effective 1/18/23]

650—23.2(153) Expanded function requirements and eligibility.

23.2(1) Dental hygienists or dental assistants may only perform expanded function procedures upon successful completion of a board-approved course of training and certification by the board. All expanded function procedures must be delegated by and performed under the direct supervision of a dentist licensed pursuant to Iowa Code chapter 153 unless otherwise specified in this rule. A dental assistant trainee is not eligible to perform or receive training in expanded function procedures. This shall not preclude dental hygienists or dental assistants from practicing expanded function procedures for training purposes while enrolled in a board-approved course of training.

23.2(2) To be eligible to train in Level 1 expanded function procedures, dental hygienists or dental assistants must comply with one of the following:

a. Hold an active dental hygiene license in Iowa; or

b. Hold an active dental assistant registration, and comply with at least one of the following:

(1) Be a graduate of an accredited school; or

(2) Be currently certified by the Dental Assisting National Board (DANB); or

(3) Have at least three months of clinical practice as a registered dental assistant; or

(4) Have at least three months of clinical practice as a dental assistant in a state that does not require registration.

23.2(3) A dentist who delegates Level 1 or Level 2 expanded function procedures to dental hygienists or dental assistants under direct supervision must examine the patient to review the quality of work prior to the conclusion of the dental appointment. The following expanded function procedures are exempt from this requirement and may be performed under general supervision:

a. Recementation of a provisional restoration.

b. Taking occlusal registrations for purposes other than mounting study casts by dental hygienists only.

[**ARC 4676C**, IAB 9/25/19, effective 10/30/19; **ARC 6733C**, IAB 12/14/22, effective 1/18/23]

650—23.3(153) Expanded function categories. Dental hygienists and dental assistants must be issued a certificate of completion for the corresponding function in which training has been completed by a board-approved training program before performing a specific expanded function procedure. A dentist

may delegate to dental hygienists or dental assistants only those expanded function procedures in which training has been successfully completed.

23.3(1) *Level 1.* Level 1 expanded functions may be taught by board-approved training providers using curriculum prior-approved by the board.

23.3(2) *Level 2.* Training in Level 2 expanded functions must be completed at the University of Iowa College of Dentistry or another accredited school using curriculum approved by the board. Before beginning Level 2 training, dental assistants and dental hygienists must complete all prerequisites established by the accredited school for the Level 2 training to be completed.

[**ARC 4676C**, IAB 9/25/19, effective 10/30/19; **ARC 6733C**, IAB 12/14/22, effective 1/18/23]

650—23.4(153) Level 1 expanded function procedures for dental assistants. Level 1 expanded function procedures for dental assistants include:

23.4(1) Taking occlusal registrations;

23.4(2) Placement and removal of gingival retraction material;

23.4(3) Fabrication, temporary cementation, and removal of provisional restorations following review of the fit and function by the supervising dentist, and temporary recementation of provisional restorations;

23.4(4) Applying cavity liners and bases and desensitizing agents;

23.4(5) Applying bonding systems, which may include the placement of the attachments used in clear aligner systems, following review of the fit and function by the supervising dentist;

23.4(6) Placement, bonding, and removal of provisional orthodontic restorations as follows:

a. Placement or bonding of orthodontic brackets and bands or provisional orthodontic appliances following review of the fit and function by the supervising dentist; and

b. Removal of adhesive, orthodontic brackets and bands, or provisional orthodontic appliances using nonmotorized hand instrumentation;

23.4(7) Monitoring of patients receiving nitrous oxide inhalation analgesia, which may include increasing oxygen levels as needed, pursuant to the following:

a. A dentist shall induce a patient and establish the maintenance level;

b. A dental assistant may make adjustments that decrease the nitrous oxide concentration during the administration of nitrous oxide;

c. A dental assistant may turn off the oxygen delivery at the completion of the dental procedure;

23.4(8) Taking final impressions;

23.4(9) Removal of adhesives using nonmotorized hand instrumentation;

23.4(10) Placement of temporary restorative materials following preparation of the tooth by a dentist;

23.4(11) Extraoral adjustment to acrylic dentures without making any adjustments to the prosthetic teeth; and

23.4(12) Tissue conditioning (soft reline only).

[**ARC 4676C**, IAB 9/25/19, effective 10/30/19; **ARC 6733C**, IAB 12/14/22, effective 1/18/23]

650—23.5(153) Level 1 expanded function procedures for dental hygienists. Level 1 expanded function procedures for dental hygienists include:

23.5(1) Taking occlusal registrations;

23.5(2) Placement and removal of gingival retraction material;

23.5(3) Fabrication, temporary cementation, and removal of provisional restorations following review of the fit and function by the supervising dentist, and temporary recementation of provisional restorations;

23.5(4) Applying cavity liners and bases;

23.5(5) Applying bonding systems, which may include the placement of the attachments used in clear aligner systems, following review of the fit and function by the supervising dentist;

23.5(6) Taking final impressions;

23.5(7) Placement, bonding, and removal of provisional orthodontic appliances as follows:

a. Placement or bonding of orthodontic brackets and bands or provisional orthodontic appliances following review of fit and function by the supervising dentist; and

b. Removal of adhesive, orthodontic brackets and bands, or provisional orthodontic appliances;

23.5(8) Placement of temporary restorative materials following preparation of the tooth by a dentist;

23.5(9) Extraoral adjustment to acrylic dentures without making any adjustments to the prosthetic teeth; and

23.5(10) Tissue conditioning (soft reline only).

[**ARC 4676C**, IAB 9/25/19, effective 10/30/19; **ARC 6733C**, IAB 12/14/22, effective 1/18/23]

650—23.6(153) Level 2 expanded function procedures for dental hygienists and dental assistants.

23.6(1) Level 2 expanded function procedures for dental hygienists and dental assistants include:

a. Placement and shaping of amalgam following preparation of a tooth by a dentist;

b. Placement and shaping of adhesive restorative materials following preparation of a tooth by a dentist;

c. Polishing of adhesive restorative material using a slow-speed handpiece; and

d. Fitting of stainless steel crowns on primary posterior teeth, and cementation after fit verification by a dentist.

23.6(2) Level 2 expanded function procedures for dental assistants include the placement of sealants. The placement of sealants is included in the scope of practice for dental hygienists and is not considered an expanded function for dental hygienists.

23.6(3) These Level 2 expanded function procedures refer to both primary and permanent teeth except as otherwise noted. Training in Level 2 expanded functions may be separated between application of the services on primary or permanent teeth as determined by the accredited training provider.

[**ARC 4676C**, IAB 9/25/19, effective 10/30/19; **ARC 5748C**, IAB 7/14/21, effective 8/18/21; **ARC 6733C**, IAB 12/14/22, effective 1/18/23]

650—23.7(153) Expanded function training.

23.7(1) *Approved expanded function training programs.* Training programs for Level 1 and Level 2 expanded function procedures must be board-approved. Training programs for Level 2 expanded function procedures shall be eligible for board approval if the training is offered through the University of Iowa College of Dentistry or another accredited school.

23.7(2) *Certificates of completion.* All board-approved training programs are authorized and required to issue certificates to dental hygienists and dental assistants who successfully complete expanded function training. A certificate shall be issued for one or more of the listed expanded function procedures completed. Dental hygienists and dental assistants shall prominently display the expanded functions certificate in each dental facility where services are provided.

23.7(3) *Training requirements.* Training may be completed in one or more of the listed expanded function procedures. Clinical training in expanded function procedures must be completed under observational supervision. Level 1 expanded function training must consist of the following:

a. An initial assessment to determine the base entry level of all participants in the program;

b. Completion of a training program that meets the following minimum standards for each function:

(1) Taking occlusal registrations:

Goal: To reproduce the patient's jaw relationship accurately.

Standard: Demonstrate an accurate occlusal registration confirmed by a supervising dentist.

Minimum training requirement: One hour of didactic training, and clinical training that includes a minimum of five patient experiences under observational supervision.

(2) Placement and removal of gingival retraction material:

Goal: To expose the margins of a crown by displacing tissue from the tooth.

Standard: Perform the procedural steps to place and remove retraction material and recognize oral conditions and techniques that may compromise tissue displacement or patient health.

Minimum training requirement: Two hours of didactic training, the equivalent of one hour of laboratory training that includes a minimum of three experiences, and clinical training that includes a minimum of five patient experiences under observational supervision.

(3) Fabrication, temporary cementation, temporary recementation, and removal of provisional restorations:

Goal: To replicate the anatomy and function of the natural tooth, prior to the final restoration, and secure the provisional restoration to a previously prepared tooth after the provisional restoration has become loose or dislodged.

Standard: Use various methods to fabricate and temporarily cement single-unit and multiunit provisional restorations.

Minimum training requirement: Four hours of didactic training, the equivalent of four hours of laboratory training that includes a minimum of five experiences, and clinical training that includes a minimum of ten patient experiences under observational supervision.

(4) Applying cavity liners and bases and desensitizing agents:

Goal: To apply appropriate material that protects existing tooth structure and to apply appropriate medicaments to minimize sensitivity to existing tooth structure.

Standard: Manipulate and apply appropriate material and apply appropriate medicaments to meet clinical competency.

Minimum training requirement: One hour of didactic training, the equivalent of one hour of laboratory training that includes a minimum of two experiences, and clinical training that includes a minimum of five patient experiences in each one of the functions under observational supervision.

(5) Applying bonding systems, which may include the placement of the attachments used in clear aligner systems, following review of the fit and function by the supervising dentist:

Goal: To apply appropriate material and systems that adhere to the existing tooth structure.

Standard: Manipulate and apply appropriate material and systems to meet clinical competency.

Minimum training requirement: Two hours of didactic training, the equivalent of one hour of laboratory training that includes a minimum of two experiences, and clinical training that includes a minimum of five patient experiences under observational supervision.

(6) Placement, bonding, and removal of orthodontic brackets and bands or provisional orthodontic appliances pursuant to subrules 23.4(5) and 23.5(7):

Goal: To place on and remove from the existing tooth structure orthodontic brackets and bands or provisional orthodontic appliances.

Standard: Manipulate and apply appropriate material and appliances to meet clinical competency.

Minimum training requirement: For each function, two hours of didactic training, the equivalent of one hour of laboratory training that includes a minimum of two experiences, and clinical training that includes a minimum of five patient experiences under observational supervision.

(7) Monitoring of patients receiving nitrous oxide inhalation analgesia, pursuant to subrule 23.4(7):

Goal: Understand the equipment, recognize the signs of patient distress or adverse reaction, and know when to call for help.

Standard: Exercise the ability to maintain patient safety while nitrous oxide is used.

Minimum training requirement: Two hours of didactic training, one hour of laboratory training in the office where the dental hygienist or dental assistant is employed, and five patient experiences under observational supervision.

(8) Taking final impressions:

Goal: Reproduce soft and hard oral tissues, digitally or with impression materials.

Standard: Complete the procedural steps to obtain a clinically acceptable final impression.

Minimum training requirement: Three hours of didactic training, and the equivalent of clinical training that includes a minimum of six patient experiences under observational supervision.

(9) Removal of adhesives using nonmotorized hand instrumentation:

Goal: Remove excess adhesives and bonding materials to eliminate soft tissue irritation.

Standard: Identify how, when and where to remove excessive bonding or adhesive material.

Minimum training requirement: One hour of didactic training, and clinical training that includes a minimum of five patient experiences under observational supervision.

(10) Placement of temporary restorative materials following preparation of the tooth by the dentist:

Goal: Place temporary restorative materials following preparation of a tooth by a dentist.

Standard: Identify how, when and where to place temporary restorative materials.

Minimum training requirement: Two hours of didactic training, the equivalent of one hour of laboratory training that includes a minimum of two experiences, and clinical training that includes a minimum of five patient experiences under observational supervision.

(11) Extraoral adjustment to acrylic dentures without making any adjustments to the prosthetic teeth:

Goal: To make adjustments to dentures.

Standard: Identify how and where to make extraoral adjustments to dentures.

Minimum training requirement: One hour of didactic training, the equivalent of one hour of laboratory training that includes a minimum of two experiences, and clinical training that includes a minimum of five patient experiences under observational supervision.

(12) Tissue conditioning (soft reline only):

Goal: To apply appropriate material to dentures.

Standard: Identify how and where to apply appropriate material to dentures.

Minimum training requirement: One hour of didactic training, the equivalent of one hour of laboratory training that includes a minimum of two experiences, and clinical training that includes a minimum of five patient experiences under observational supervision.

c. A postcourse written examination at the conclusion of the training program, with a minimum of ten questions per function, must be administered. Participants must obtain a score of 75 percent or higher on each examination administered.

23.7(4) *Grandfathering.* Any dental hygienist or dental assistant who has completed expanded function training prior to January 1, 2020, can continue to perform expanded function procedures for which training has been completed. For any expanded function procedures that are new, in whole or in part, additional training to satisfy the standard and minimum training requirement is required of the dental hygienist or dental assistant prior to performing the new expanded function procedure.

[**ARC 4676C**, IAB 9/25/19, effective 10/30/19; **ARC 6733C**, IAB 12/14/22, effective 1/18/23]

These rules are intended to implement Iowa Code chapter 153.

[Filed ARC 4676C (Notice ARC 4424C, IAB 5/8/19), IAB 9/25/19, effective 10/30/19]

[Filed ARC 5748C (Notice ARC 5381C, IAB 1/13/21), IAB 7/14/21, effective 8/18/21]

[Filed ARC 6733C (Notice ARC 6515C, IAB 9/7/22), IAB 12/14/22, effective 1/18/23]

CHAPTER 24
Reserved

TITLE V
PROFESSIONAL STANDARDS

CHAPTER 25
CONTINUING EDUCATION

[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—25.1(153) Definitions. For the purpose of this chapter, these definitions shall apply:

"Advisory committee" means a committee on continuing education formed to review and advise the board with respect to applications for approval of sponsors or activities. The committee's members shall be appointed by the board and consist of at least one member of the board, two licensed dentists with expertise in the area of professional continuing education, two licensed dental hygienists with expertise in the area of professional continuing education, and two registered dental assistants with expertise in the area of professional continuing education. The advisory committee on continuing education may recommend approval or denial of applications or requests submitted to it pending final approval or disapproval of the board at its next meeting.

"Board" means the dental board.

"Continuing dental education" consists of education activities designed to review existing concepts and techniques and to update knowledge on advances in dental and medical sciences. The objective of continuing dental education is to improve the knowledge, skills, and ability of the individual to deliver the highest quality of service to the public and professions.

Continuing dental education should favorably enrich past dental education experiences. Programs should make it possible for practitioners to attune dental practice to new knowledge as it becomes available. All continuing dental education should strengthen the skills of critical inquiry, balanced judgment and professional technique.

"Dental public health" is the science and art of preventing and controlling dental diseases and promoting dental health through organized community efforts. It is that form of dental practice in which the community serves as the patient rather than the individual. It is concerned with the dental health education of the public, with applied dental research, with the administration of group dental care programs, and with the prevention and control of dental diseases on a community basis.

"Hour of continuing education" means one unit of credit which shall be granted for each hour of contact instruction and shall be designated as a "clock hour." This credit shall apply to either academic or clinical instruction.

"Licensee" means any person who has been issued a certificate to practice dentistry or dental hygiene in the state of Iowa.

"Opioid" means a drug that produces an agonist effect on opioid receptors and is indicated or used for the treatment of pain.

"Registrant" means any person registered to practice as a dental assistant in the state of Iowa.

"Self-study activities" means the study of something by oneself, without direct supervision or attendance in a class. "Self-study activities" may include Internet-based coursework, television viewing, video programs, correspondence work or research, or computer programs that are interactive and require branching, navigation, participation and decision making on the part of the viewer. Internet-based webinars which include the involvement of an instructor and participants in real time and which allow for communication with the instructor through messaging, telephone or other means shall not be construed to be self-study activities.

"Sponsor" means a person, educational institution, or organization sponsoring continuing education activities which has been approved by the board as a sponsor pursuant to these rules. During the time a person, educational institution, or organization is an approved sponsor, all continuing education activities of such person or organization may be deemed automatically approved provided the continuing education activities meet the continuing education guidelines of the board.

[**ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 4409C**, IAB 4/24/19, effective 5/29/19]

650—25.2(153) Continuing education administrative requirements.

25.2(1) Each person licensed to practice dentistry or dental hygiene in this state shall complete during the biennium renewal period a minimum of 30 hours of continuing education approved by the board.

25.2(2) Each person registered to practice dental assisting in this state shall complete during the biennium renewal period a minimum of 20 hours of continuing education approved by the board.

25.2(3) Each person who holds a qualification in dental radiography in this state shall complete during the biennium renewal period a minimum of two hours of continuing education in the area of dental radiography.

25.2(4) The continuing education compliance period shall be the 24-month period commencing September 1 and ending on August 31 of the renewal cycle.

25.2(5) Hours of continuing education credit may be obtained by attending and participating in a continuing education activity either previously approved by the board or which otherwise meets the requirements herein and is approved by the board pursuant to rule 650—25.5(153).

25.2(6) It is the responsibility of each licensee or registrant to finance the costs of continuing education.

[**ARC 3489C**, IAB 12/6/17, effective 1/10/18]

650—25.3(153) Documentation of continuing education hours.

25.3(1) Every licensee or registrant shall maintain a record of all courses attended by keeping the certificates of attendance for four years. The board reserves the right to require any licensee or registrant to submit the certificates of attendance for the continuing education courses attended. If selected for continuing education audit, the licensee or registrant shall file a signed continuing education form and submit certificates or other evidence of attendance.

25.3(2) Licensees and registrants are responsible for obtaining proof of attendance forms when attending courses. Clock hours must be verified by the sponsor with the issuance of proof of attendance forms to the licensee or registrant.

25.3(3) Each licensee or registrant shall report the number of continuing education credit hours completed during the current renewal cycle in compliance with this chapter. Such report shall be filed with the board at the time of application for renewal of a dental or dental hygiene license or renewal of dental assistant registration.

25.3(4) No carryover of credits from one biennial period to the next will be allowed.

[**ARC 3489C**, IAB 12/6/17, effective 1/10/18]

650—25.4(153) Required continuing education courses.

25.4(1) The following courses are required for all licensees and registrants:

a. Mandatory reporter training for child abuse and dependent adult abuse.

b. Cardiopulmonary resuscitation.

c. Infection control.

d. Jurisprudence.

25.4(2) Mandatory reporter training for child abuse and dependent adult abuse.

a. Effective July 1, 2019, a licensee who regularly examines, attends, counsels or treats adults in Iowa shall complete an initial two-hour dependent adult abuse mandatory reporter training course offered by the department of human services within six months of employment, or prior to the expiration of a current certificate. Completion of the initial training course results in two hours of continuing education credit. Thereafter, all mandatory reporters shall take a one-hour recertification training every three years, prior to the expiration of a current certificate. Completion of the recertification training results in one hour of continuing education credit.

b. Effective July 1, 2019, a licensee who regularly examines, attends, counsels or treats children in Iowa shall complete an initial two-hour child abuse mandatory reporter training course offered by the department of human services within six months of employment, or prior to the expiration of a current certificate. Completion of the initial training course results in two hours of continuing education credit. Thereafter, all mandatory reporters shall take a one-hour recertification training every three years, prior to the expiration of a current certificate. Completion of the recertification training results in one hour of continuing education credit.

25.4(3) Cardiopulmonary resuscitation (CPR). Licensees and registrants shall furnish evidence of valid certification for CPR, which shall be credited toward the continuing education requirement for renewal of the license, faculty permit or registration. Such evidence shall be filed at the time of renewal of the license, faculty permit or registration. Valid certification means certification by an organization on an annual basis or, if that certifying organization requires certification on a less frequent basis, evidence that the licensee or registrant has been properly certified for each year covered by the renewal period. In addition, the course must include a clinical component. Credit hours awarded for certification in CPR shall not exceed three hours of required continuing education hours per biennium. Credit hours awarded for certification in pediatric advanced life support (PALS) or advanced cardiac life support (ACLS) may be claimed hour for hour.

25.4(4) Infection control. Beginning September 1, 2018, licensees and registrants shall complete continuing education in the area of infection control. Licensees and registrants shall furnish evidence of continuing education completed within the previous biennium in the area of infection control standards, as required by the Centers for Disease Control and Prevention of the United States Department of Health and Human Services. Completion of continuing education in the area of infection control shall be credited toward the required continuing education requirement in the renewal period during which it was completed. A minimum of one hour shall be submitted.

25.4(5) Jurisprudence. Beginning September 1, 2018, licensees and registrants shall complete continuing education in the area of Iowa jurisprudence related to the practice of dentistry, dental hygiene and dental assisting. Licensees and registrants shall furnish evidence of continuing education completed within the previous biennium in the area of Iowa jurisprudence. Completion of continuing education in the area of Iowa jurisprudence shall be credited toward the required continuing education requirement in the renewal period during which it was completed. A minimum of one hour shall be submitted.

25.4(6) The following is required for dentists only.

a. As a condition of license renewal, a licensed dentist who has prescribed opioids to a patient during the biennium renewal period shall obtain a minimum of one hour of continuing education credit on opioids. This training shall include guidelines for prescribing opioids, including recommendations on limitations of dosages and the length of prescriptions, risk factors for abuse, and nonopioid and nonpharmacological therapy options. This hour may count toward the 30 hours of continuing education required for license renewal. The licensee shall maintain documentation of this hour, which may be subject to audit. If the continuing education did not cover the U.S. Centers for Disease Control and Prevention guideline for prescribing opioids for chronic pain, the licensee shall read the guideline prior to license renewal.

b. A licensed dentist who did not prescribe opioids during the biennium renewal period may attest that the dentist is not subject to this requirement due to the fact that the dentist did not prescribe opioids during the time period.

[**ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 4409C**, IAB 4/24/19, effective 5/29/19; **ARC 4846C**, IAB 1/1/20, effective 2/5/20]

650—25.5(153) Acceptable programs and activities.

25.5(1) A continuing education activity shall be acceptable and not require board approval if it meets the following criteria:

a. It constitutes an organized program of learning (including a workshop or symposium) which contributes directly to the professional competency of the licensee or registrant and is of value to dentistry and applicable to oral health care; and

b. It pertains to common subjects or other subject matters which relate to the practice of dentistry, dental hygiene, or dental assisting which are intended to refresh and review, or update knowledge of new or existing concepts and techniques, and enhance the dental health of the public; and

c. It is conducted by individuals who have sufficient special education, training and experience to be considered experts concerning the subject matter of the program. The program must include a written outline or manual that substantively pertains to the subject matter of the program.

25.5(2) Types of activities acceptable for continuing dental education credit may include:

a. A dental science course that includes topics which address the clinical practice of dentistry, dental hygiene, dental assisting and dental public health.

b. Courses in record keeping, medical conditions which may have an effect on oral health, ergonomics related to clinical practice, HIPAA, risk management, sexual boundaries, communication with patients, OSHA regulations, and the discontinuation of practice related to the transition of patient care and patient records.

c. Sessions attended at a multiday convention-type meeting. A multiday convention-type meeting is held at a national, state, or regional level and involves a variety of concurrent educational experiences directly related to the practice of dentistry.

d. Postgraduate study relating to health sciences.

e. Successful completion of a recognized specialty examination or the Dental Assisting National Board (DANB) examination.

f. Self-study activities.

g. Original presentation of continuing dental education courses.

h. Publication of scientific articles in professional journals related to dentistry, dental hygiene, or dental assisting.

i. Delivery of volunteer dental services without compensation through a free clinic, the purpose of which is the delivery of health care services to low-income or underserved individuals.

25.5(3) Credit may be given for other continuing education activities upon request and approval by the board.

[**ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 5318C**, IAB 12/16/20, effective 1/20/21]

650—25.6(153) Unacceptable programs and activities.

25.6(1) Unacceptable subject matter and activity types include, but are not limited to, personal development, business aspects of practice, business strategy, financial management, marketing, sales, practice growth, personnel management, insurance, and collective bargaining. While desirable, those subjects and activities are not applicable to dental skills, knowledge, and competence. Therefore, such courses will receive no credit toward renewal. The board may deny credit for any course.

25.6(2) Inquiries relating to acceptability of continuing dental education activities, approval of sponsors, or exemptions should be directed to Advisory Committee on Continuing Dental Education, Iowa Dental Board, 400 S.W. 8th Street, Suite D, Des Moines, Iowa 50309-4687.

[**ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 5318C**, IAB 12/16/20, effective 1/20/21]

650—25.7(153) Prior approval of activities. A person or organization, other than an approved sponsor, that desires prior approval for a course, program or other continuing education activity or that desires to establish approval of the activity prior to attendance may apply for approval to the board, using board-approved forms, at least 90 days in advance of the commencement of the activity. Within 90 days after receipt of such application, the board shall advise the licensee or registrant in writing whether the activity is approved and the number of hours allowed. All requests may be reviewed by the advisory committee on continuing education prior to final approval or denial by the board. An application fee as specified in 650—Chapter 15 is required. Continuing education course approval shall be valid for a period of five years following the date of board approval. Thereafter, courses may be resubmitted for approval. Courses which clearly meet the criteria listed under acceptable programs and activities are not required to be submitted for approval.

[**ARC 3489C**, IAB 12/6/17, effective 1/10/18]

650—25.8(153) Postapproval of activities. A licensee or registrant seeking credit for attendance and participation in an educational activity which was not conducted by an approved sponsor or otherwise approved and which does not clearly meet the acceptable programs and activities listed in rule 650—25.5(153) may apply for approval to the board using board-approved forms. Within 90 days after receipt of such application, the board shall advise the licensee or registrant in writing whether the activity is approved and the number of hours allowed. All requests may be reviewed by the advisory

committee on continuing education prior to final approval or denial by the board. An application fee as specified in 650—Chapter 15 is required.
[**ARC 3489C**, IAB 12/6/17, effective 1/10/18]

650—25.9(153) Designation of continuing education hours. Continuing education hours shall be determined by the length of a continuing education course in clock hours. For the purpose of calculating continuing education hours for renewal of a license or registration, the following rules shall apply:

25.9(1) Attendance at a multiday convention.

a. Attendees at a multiday convention may receive a maximum of 1.5 hours of credit per day with the maximum of six hours of credit allowed per biennium.

b. Sponsors of multiday conventions shall submit to the board for review and prior approval guidelines for awarding credit for convention attendance.

25.9(2) Presenters or attendees of table clinics at a meeting.

a. Four hours of credit shall be allowed for presentation of an original table clinic at a meeting as verified by the sponsor when the subject matter conforms with rule 650—25.5(153).

b. Attendees at the table clinic session of a dental, dental hygiene, or dental assisting meeting shall receive two hours of credit as verified by the sponsor when the subject matter conforms with rule 650—25.5(153).

25.9(3) Postgraduate study relating to health sciences shall receive 15 credits per semester.

25.9(4) Successful completion of a specialty examination or the Dental Assisting National Board (DANB) shall result in 15 hours of credit.

25.9(5) Self-study activities shall result in a maximum of 12 hours of continuing education credit per biennium.

25.9(6) An original presentation of continuing dental education shall result in credit double that which the participants receive. Additional credit will not be granted for the repeating of presentations within the biennium. Credit is not given for teaching that represents part of the licensee's or registrant's normal academic duties as a full-time or part-time faculty member or consultant.

25.9(7) Publication of scientific articles in professional journals related to dentistry, dental hygiene, or dental assisting shall result in 5 hours of credit per article with the maximum of 20 hours allowed per biennium.

25.9(8) Delivery of volunteer dental services in accordance with paragraph 25.5(2)*"i"* shall result in one hour of continuing education credit for every three hours worked. Dentists and dental hygienists can report a maximum of six hours of credit per biennium of volunteer dental services. Dental assistants can report a maximum of four hours of credit per biennium of volunteer dental services. The volunteer hours must be verified by the free clinic or the organization sponsoring the event where volunteer services are provided.
[**ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 5318C**, IAB 12/16/20, effective 1/20/21]

650—25.10(153) Extensions and exemptions.

25.10(1) *Illness or disability.* The board may, in individual cases involving physical disability or illness, grant an exemption of the continuing education requirements or an extension of time within which to fulfill the same or make the required reports. No exemption or extension of time shall be granted unless written application is made on forms provided by the board and signed by the licensee or registrant and a licensed health care professional. Extensions or exemptions of the continuing education requirements may be granted by the board for any period of time not to exceed one calendar year. In the event that the physical disability or illness upon which an exemption has been granted continues beyond the period granted, the licensee or registrant must apply for an extension of the exemption. The board may, as a condition of the exemption, require the applicant to make up a certain portion or all of the continuing education requirements.

25.10(2) *Other extensions or exemptions.* Extensions or exemptions of continuing education requirements will be considered by the board on an individual basis. Licensees or registrants will be exempt from the continuing education requirements for:

a. Periods that the person serves honorably on active duty in the military services;

b. Periods that the person practices the person's profession in another state or district having a continuing education requirement and the licensee or registrant meets all requirements of that state or district for practice therein;

c. Periods that the person is a government employee working in the person's licensed or registered specialty and assigned to duty outside the United States;

d. Other periods of active practice and absence from the state approved by the board;

e. The current biennium renewal period, or portion thereof, following original issuance of the license;

f. For dental assistants registered pursuant to rule 650—20.6(153), the current biennium renewal period, or portion thereof, following original issuance of the registration.

[**ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 4676C**, IAB 9/25/19, effective 10/30/19]

650—25.11(153) Approval of sponsors.

25.11(1) An organization or person which desires approval as a sponsor of courses, programs, or other continuing education activities shall apply for approval to the board stating its education history, including approximate dates, subjects offered, total hours of instruction presented, and names and qualifications of instructors. All applications shall be reviewed by the advisory committee on continuing education prior to final approval or denial by the board.

25.11(2) Prospective sponsors must apply to the board using approved forms in order to obtain approved sponsor status. An application fee as specified in 650—Chapter 15 is required. Sponsors must pay the biennial renewal fee as specified in 650—Chapter 15 and file a sponsor recertification record report biennially.

25.11(3) The person or organization sponsoring continuing education activities shall make a written record of the Iowa licensees or registrants in attendance, maintain the written record for a minimum of five years, and submit the record upon the request of the board. The sponsor of the continuing education activity shall also provide proof of attendance and the number of credit hours awarded to the licensee or registrant who participates in the continuing education activity.

25.11(4) Sponsors must be formally organized and adhere to board rules for planning and providing continuing dental education activities. Programs sponsored by individuals or institutions for commercial or proprietary purposes, especially programs in which the speaker advertises or urges the use of any particular dental product or appliance, may be recognized for credit on a prior-approval basis only. When courses are promoted as approved continuing education courses which do not meet the requirements as defined by the board, the sponsor will be required to refund the registration fee to the participants. Approved sponsors may offer noncredit courses provided the participants have been informed that no credit will be given. Failure to meet this requirement may result in loss of approved sponsor status.

[**ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 6303C**, IAB 4/20/22, effective 5/25/22]

650—25.12(153) Review of programs or sponsors. The board on its own motion or at the recommendation of the advisory committee on continuing education may monitor or review any continuing education program or sponsors already approved by the board. Upon evidence of a failure to meet the requirements of rule 650—25.11(153), the board may revoke the approval status of the sponsor. Upon evidence of significant variation in the program presented from the program approved, the board may deny all or any part of the approved hours granted to the program. A provider that wishes to appeal the board's decision regarding revocation of approval status or denial of continuing education credit shall file an appeal within 30 days of the board's decision. A timely appeal shall initiate a contested case proceeding. The contested case shall be conducted pursuant to Iowa Code chapter 17A and 650—Chapter 51. The written decision issued at the conclusion of a contested case hearing shall be considered final agency action.

[**ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 6303C**, IAB 4/20/22, effective 5/25/22]

650—25.13(153) Noncompliance with continuing dental education requirements. It is the licensee's or registrant's personal responsibility to comply with these rules. The license or registration of

individuals not complying with the continuing dental education rules may be subject to disciplinary action by the board or nonrenewal of the license or registration.
[**ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 6303C**, IAB 4/20/22, effective 5/25/22]

650—25.14(153) Dental hygiene continuing education. The dental hygiene committee, in its discretion, shall make recommendations to the board for approval or denial of requests pertaining to dental hygiene education. The dental hygiene committee may utilize the continuing education advisory committee as needed. The board's review of the dental hygiene committee recommendation is subject to 650—Chapter 1. The following items pertaining to dental hygiene shall be forwarded to the dental hygiene committee for review.

1. Dental hygiene continuing education requirements and requests for approval of programs, activities and sponsors.
2. Requests by dental hygienists for waivers, extensions and exemptions of the continuing education requirements.
3. Requests for reinstatement from lapsed dental hygiene practitioners.
4. Appeals of denial of dental hygiene continuing education and conduct of hearings as necessary.

[**ARC 3489C**, IAB 12/6/17, effective 1/10/18; **ARC 6303C**, IAB 4/20/22, effective 5/25/22]

These rules are intended to implement Iowa Code sections 147.10, 153.15A, and 153.39 and chapter 272C.

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CHAPTER 26
ADVERTISING
[Prior to 5/18/88, Dental Examiners, Board of [320]]

650—26.1(153) General. Communications by inclusion or omission to the public must be accurate. They must not convey false, untrue, deceptive, or misleading information through statements, testimonials, photographs, graphics or other means. Communications must not appeal to an individual's anxiety in an excessive or unfair way; and they must not create unjustified expectations of results. If communications refer to benefits or other attributes of dental procedures or products that involve significant risks, realistic assessments of the safety and efficacy of those procedures or products must also be included, as well as the availability of alternatives and, where necessary to avoid deception, descriptions or assessments of the benefits or other attributes of those alternatives. Communications must not misrepresent a dentist's credentials, training, experience or ability, and must not contain material claims of superiority that cannot be substantiated.

There are several areas that the board believes to be susceptible to deceptive or misleading statements. While the board does not intend to discourage dentists from engaging in any form of truthful, nondeceptive advertising, dentists engaging in the type of advertising listed below shall take special care to ensure that their ads are consistent with these rules.

26.1(1) Claims that the service performed or the materials used are professionally superior to that which is ordinarily performed or used or that convey the message that one licensee is better than another when superiority of service or materials cannot be substantiated.

26.1(2) The use of an unearned or nonhealth degree in general announcements to the public.

26.1(3) The use of attainment of an honorary fellowship in an advertisement. An honorary fellowship does not include an award based on merit, study or research. However, the attainment of the fellowship status may be indicated in scientific papers, curriculum vitae, third party payment forms, and letterhead and stationery which is not used for the direct solicitation of patients.

26.1(4) Promotion of a professional service which the dentist knows or should know is beyond the dentist's ability to perform.

26.1(5) Techniques of communication which intimidate, exert undue pressure or undue influence over a prospective patient.

26.1(6) The use of any personal testimonial attesting to a quality of competence of a service or treatment offered by a licensee that is not reasonably verifiable.

26.1(7) Utilizing any statistical data or other information based on past performance or predication of future success, which creates an unjustified expectation about results that the dentist can achieve.

26.1(8) The communication of personally identifiable facts, data, or information about a patient without first obtaining patient consent.

26.1(9) Any misrepresentation of a material fact.

26.1(10) The knowing suppression, omission or concealment of any material fact or law without which the communication would be deceptive.

26.1(11) Any communication which creates an unjustified expectation concerning the potential result of any dental treatment.

26.1(12) Where the circumstances indicate "bait and switch" advertising, the board may require the advertiser to furnish to the board data or other evidence pertaining to those sales at the advertised price as well as other sales. Where the circumstances indicate deceptive advertising, the board will initiate an investigation or disciplinary action as warranted.

650—26.2(153) Requirements. The board may require a dentist to substantiate the truthfulness of any assertion or representation of material fact set forth in an advertisement.

26.2(1) At the time an advertisement is placed, the dentist must possess and rely upon information which, when produced, would substantiate the truthfulness of any assertion, omission, or representation of material fact set forth in the advertisement.

26.2(2) The failure to possess and rely upon the information required in subrule 26.2(1) at the time the advertisement is placed shall be deemed professional misconduct.

26.2(3) The failure or refusal to provide the factual substantiation to support a representation or assertion when requested by the board shall be deemed professional misconduct.

650—26.3(153) Fees. Advertising that states a fee must clearly define the professional service being offered in the advertisement. Advertised offers shall be presumed to include everything ordinarily required for such a service.

650—26.4(153) Public representation. All advertisements and public representations shall contain the name and address or telephone number of the practitioner who placed the ad.

26.4(1) If one's practice is referred to in the advertisement, the ad may state either "general/family practice" or "specialist," "specializes," or "specializing." A dentist advertising or representing oneself as a specialist must comply with the other provisions of this rule.

26.4(2) A dentist may advertise as a specialist if the dentist meets the standards set forth in this rule.

a. The dentist wishing to advertise as a specialist must be a diplomate of, or board-eligible for, a national certifying board of a specialty recognized by the American Dental Association (ADA), or a diplomate of a board recognized by the American Board of Dental Specialties (ABDS); and

b. The indicated area of specialty must be board-approved. Board-approved ADA specialties are as follows: dental public health, endodontics, oral and maxillofacial pathology, oral and maxillofacial surgery, orofacial pain, orthodontics and dentofacial orthopedics, pediatric dentistry, periodontics, prosthodontics and oral and maxillofacial radiology. Board-approved ABDS specialties are as follows: oral implantology/implant dentistry, oral medicine, orofacial pain, and anesthesiology.

26.4(3) A certifying board may apply for a new area of specialty to become board-approved by submitting information regarding the area of specialty, including an explanation of how the proposed specialty is within the scope of practice of dentistry in Iowa, and proof of the following:

a. The proposed specialty is separate and distinct from any preexisting specialty recognized by the board or combination of board-recognized dental specialties;

b. The proposed specialty is a distinct and well-defined field which requires unique knowledge and skills beyond those commonly possessed by dental school graduates;

c. The certifying board is an independent entity that is comprised of licensed dentists, whose membership is reflective of the proposed specialty, and that is incorporated and governed solely by the licensed dentists/board members;

d. The certifying board has a permanent headquarters and staff;

e. The certifying board has issued diplomate certificates to licensed dentists for at least five years;

f. The certifying board requires passing an oral and written examination based on psychometric principles that tests the applicant's knowledge and skill in the proposed specialty;

g. The certifying board requires all dentists who seek certification in the proposed specialty to have successfully completed a specified, objectively verifiable amount of post-DDS or -DMD education and experience that is appropriate for the proposed specialty area, as determined by the board; and

h. The certifying board's website that includes online resources for the consumer to verify the certifying board's certification requirements and a list of the names and addresses of the dentists who have been awarded certification by the board shall be made available for public access.

26.4(4) The use of the terms "specialist," "specializes," "orthodontist," "oral and maxillofacial surgeon," "oral and maxillofacial radiologist," "periodontist," "pediatric dentist," "prosthodontist," "endodontist," "oral pathologist," "public health dentist," "dental anesthesiologist," or other similar terms which imply that the dentist is a specialist may only be used by a licensed dentist meeting the requirements of this rule. A dentist who advertises as a specialist must avoid any implication that other dentists associated with the same practice are specialists unless the dentists also meet all of the requirements of this rule.

26.4(5) The term "diplomate" or "board-certified" may only be used by a dentist who has successfully completed the qualifying examination of the appropriate certifying board of one or more of the specialties recognized by the ADA or the ABDS, or as otherwise permitted pursuant to these rules.

26.4(6) A dentist advertising as a specialist pursuant to these rules shall include the name of the national certifying board and the name of the entity which recognizes the board in the advertisement.

26.4(7) A dentist may advertise the areas in which the dentist practices, including, but not limited to, specialty services, using other descriptive terms such as "emphasis on _____" or other similar terms, as long as all other provisions of these rules regarding advertising are met.

[**ARC 4099C**, IAB 10/24/18, effective 11/28/18; **ARC 6674C**, IAB 11/16/22, effective 12/21/22]

650—26.5(153) Responsibility. Each professional who is a principal partner, officer, or licensed professional employee, acting as an agent of the firm or entity identified in the advertisement, is jointly and severally responsible for the form and content of any advertisement offering services or materials.

650—26.6(153) Advertisement records. A recording of every advertisement communicated by electronic media, and a copy of every advertisement communicated by print media indicating the date and place of the advertisement shall be retained by the dentist for a period of two years and be made available for review upon request by the board or its designee.

These rules are intended to implement Iowa Code sections 153.33 and 153.34.

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[1] Effective date of Chapter 26 delayed by the Administrative Rules Review Committee 70 days.

CHAPTER 27
STANDARDS OF PRACTICE AND PRINCIPLES OF PROFESSIONAL ETHICS

650—27.1(153) General.

27.1(1) *Dental ethics.* The following principles relating to dental ethics are compatible with the Code of Professional Ethics and advisory opinions published in August 1998 by the American Dental Association. These principles are not intended to provide a limitation on the ability of the board to address problems in the area of ethics but rather to provide a basis for board review of questions concerning professional ethics. The dentist's primary professional obligation shall be service to the public with the most important aspect of that obligation being the competent delivery of appropriate care within the bounds of the clinical circumstances presented by the patient, with due consideration being given to the needs and desires of the patient. Unprofessional conduct includes, but is not limited, to any violation of these rules.

27.1(2) *Dental hygiene ethics.* The following principles relating to dental hygiene ethics are compatible with the Code of Ethics of the American Dental Hygienists' Association published in 1995. Standards of practice for dental hygienists are compatible with the Iowa dental hygienists' association dental hygiene standards of practice adopted in May 1993. These principles and standards are not intended to provide a limitation on the ability of the dental hygiene committee to address problems in the area of ethics and professional standards for dental hygienists but rather to provide a basis for committee review of questions regarding the same. The dental hygienist's primary responsibility is to provide quality care and service to the public according to the clinical circumstances presented by the patient, with due consideration of responsibilities to the patient and the supervising dentist according to the laws and rules governing the practice of dental hygiene.

27.1(3) *Dental assistant ethics.* Dental assistants shall utilize the principles of professional dental and dental hygiene ethics for guidance, and the laws and rules governing the practice of dental assisting.

650—27.2(153,272C) Patient acceptance. Dentists, in serving the public, may exercise reasonable discretion in accepting patients in their practices; however, dentists shall not refuse to accept patients into their practice or deny dental service to patients because of the patient's race, creed, sex or national origin.

650—27.3(153) Emergency service. Emergency services in dentistry are deemed to be those services necessary for the relief of pain or to thwart infection and prevent its spread.

27.3(1) Dentists shall make reasonable arrangements for the emergency care of their patients of record.

27.3(2) Dentists shall, when consulted in an emergency by patients not of record, make reasonable arrangements for emergency care.

650—27.4(153) Consultation and referral.

27.4(1) Dentists shall seek consultation, if possible, whenever the welfare of patients will be safeguarded or advanced by utilizing those practitioners who have special skills, knowledge and experience.

27.4(2) The specialist or consulting dentist upon completion of their care shall return the patient, unless the patient expressly states a different preference, to the referring dentist or, if none, to the dentist of record for future care.

27.4(3) The specialist shall be obliged, when there is no referring dentist and upon completion of the treatment, to inform the patient when there is a need for further dental care.

27.4(4) A dentist who has a patient referred for a second opinion regarding a diagnosis or treatment plan recommended by the patient's treating dentist, should render the requested second opinion in accordance with these rules. In the interest of the patient being afforded quality care, the dentist rendering the second opinion should not have a vested interest in the ensuing recommendation.

650—27.5(153) Use of personnel. Dentists shall protect the health of their patients by assigning to qualified personnel only those duties that can be legally delegated. Dentists shall supervise the work of all personnel working under their direction and control.

650—27.6(153) Evidence of incompetent treatment.

27.6(1) Licensees or registrants shall report to the board instances of gross or continually faulty treatment by other licensees or registrants.

27.6(2) Licensees or registrants may provide expert testimony when that testimony is essential to a just and fair disposition of a judicial or administrative action.

650—27.7(153) Representation of care and fees.

27.7(1) Dentists shall not represent the care being rendered to their patients or the fees being charged for providing the care in a false or misleading manner.

27.7(2) A dentist who accepts a third-party payment under a copayment plan as payment in full without disclosing to the third-party payer that the patient's payment portion will not be collected is engaging in deception and misrepresentation by this overbilling practice.

27.7(3) A dentist shall not increase a fee to a patient solely because the patient has insurance.

27.7(4) Payments accepted by a dentist under a governmentally funded program, a component or constituent dental society sponsored access program, or a participating agreement entered into under a program of a third party shall not be considered as evidence of overbilling in determining whether a charge to a patient or to another third party on behalf of a patient not covered under any of these programs, constitutes overbilling under this rule.

27.7(5) A dentist who submits a claim form to a third party reporting incorrect treatment dates is engaged in making unethical, false or misleading representations.

27.7(6) A dentist who incorrectly describes a dental procedure on a third party claim form in order to receive a greater payment or incorrectly makes a noncovered procedure appear to be a covered procedure is engaged in making an unethical, false or misleading representation to the third party.

27.7(7) A dentist who recommends or performs unnecessary dental services or procedures is engaged in unprofessional conduct.

27.7(8) A dentist shall not bill for services not rendered. A dentist shall not be prohibited from billing for those services which have been rendered, for actual costs incurred in the treatment of the patient, or for charges for missed appointments.

27.7(9) A dentist shall not bill or draw on a patient's line of credit prior to services being rendered. A dentist may bill or draw on a patient's line of credit for those services which have been rendered or for actual costs incurred in the treatment of the patient.

27.7(10) A dentist shall not be prohibited from permitting patients to prepay for services, in whole or in part, on a voluntary basis.

[**ARC 9218B**, IAB 11/3/10, effective 12/8/10]

650—27.8(153) General practitioner announcement of services. General dentists who wish to announce the services available in their practices are permitted to announce the availability of those services so long as they avoid any communications that express or imply specialization. General dentists shall also state that the services are being provided by a general dentist.

650—27.9(153) Unethical and unprofessional conduct.

27.9(1) Licensee or registrant actions determined by the board to be abusive, coercive, intimidating, harassing, untruthful or threatening in connection with the practice of dentistry shall constitute unethical or unprofessional conduct.

27.9(2) A treatment regimen shall be fully explained and patient authorization obtained before treatment is begun.

27.9(3) A licensee or registrant determined to be infected with HIV or HBV shall not perform an exposure-prone procedure except as approved by the expert review panel as specified in Iowa Code section 139A.22, established by the Iowa department of public health, or if the licensee or registrant

works in a hospital setting, the licensee or registrant may elect either the expert review panel established by the hospital or the expert review panel established by the Iowa department of public health for the purpose of making a determination of the circumstances under which the licensee or registrant may perform exposure-prone procedures. The licensee or registrant shall comply with the recommendations of the expert review panel. Failure to do so shall constitute unethical and unprofessional conduct and is grounds for disciplinary action by the board.

27.9(4) Knowingly providing false or misleading information to the board or an agent of the board is considered unethical and unprofessional conduct.

27.9(5) Prohibiting a person from filing or interfering with a person's filing a complaint with the board is considered unethical and unprofessional conduct.

27.9(6) A licensee shall not enter into any agreement with a patient that the patient will not file a complaint with the board.

[**ARC 9218B**, IAB 11/3/10, effective 12/8/10]

650—27.10(153) Retirement or discontinuance of practice.

27.10(1) A licensee, upon retirement, or upon discontinuation of the practice of dentistry, or upon leaving or moving from a community, shall notify all active patients in writing, or by publication once a week for three consecutive weeks in a newspaper of general circulation in the community, that the licensee intends to discontinue the practice of dentistry in the community, and shall encourage patients to seek the services of another licensee. The licensee shall make reasonable arrangements with active patients for the transfer of patient records, or copies thereof, to the succeeding licensee. "Active patient" means a person whom the licensee has examined, treated, cared for, or otherwise consulted with during the two-year period prior to retirement, discontinuation of the practice of dentistry, or leaving or moving from a community.

27.10(2) Nothing herein provided shall prohibit a licensee from conveying or transferring the licensee's patient records to another licensed dentist who is assuming a practice, provided that written notice is furnished to all patients as hereinbefore specified.

650—27.11(153,272C) Record keeping. Dentists shall maintain patient records in a manner consistent with the protection of the welfare of the patient. Records shall be permanent, timely, accurate, legible, and easily understandable.

27.11(1) *Dental records.* Dentists shall maintain dental records for each patient. The records shall contain all of the following:

a. Personal data.

(1) Name, date of birth, address and, if a minor, name of parent or guardian.

(2) Name and telephone number of person to contact in case of emergency.

b. Dental and medical history. Dental records shall include information from the patient or the patient's parent or guardian regarding the patient's dental and medical history. The information shall include sufficient data to support the recommended treatment plan.

c. Patient's reason for visit. When a patient presents with a chief complaint, dental records shall include the patient's stated oral health care reasons for visiting the dentist.

d. Clinical examination progress notes. Dental records shall include chronological dates and descriptions of the following:

(1) Clinical examination findings, tests conducted, and a summary of all pertinent diagnoses;

(2) Plan of intended treatment and treatment sequence;

(3) Services rendered and any treatment complications;

(4) All radiographs, study models, and periodontal charting, if applicable;

(5) Name, quantity, and strength of all drugs dispensed, administered, or prescribed; and

(6) Name of dentist, dental hygienist, or any other auxiliary, who performs any treatment or service or who may have contact with a patient regarding the patient's dental health.

e. Informed consent. Dental records shall include, at a minimum, documentation of informed consent that includes discussion of procedure(s), treatment options, potential complications and known risks, and patient's consent to proceed with treatment.

27.11(2) *Retention of records.* A dentist shall maintain a patient's dental record for a minimum of six years after the date of last examination, prescription, or treatment. Records for minors shall be maintained for a minimum of either (a) one year after the patient reaches the age of majority (18), or (b) six years, whichever is longer. Study models and casts shall be maintained for six years after the date of completion of treatment. Alternatively, one year after completion of treatment, study models and casts may be provided to the patient for retention. Proper safeguards shall be maintained to ensure safety of records from destructive elements.

27.11(3) *Electronic record keeping.* The requirements of this rule apply to electronic records as well as to records kept by any other means. When electronic records are kept, a dentist shall keep either a duplicate hard copy record or use an unalterable electronic record.

27.11(4) *Correction of records.* Notations shall be legible, written in ink, and contain no erasures or white-outs. If incorrect information is placed in the record, it must be crossed out with a single nondeleting line and be initialed by a dental health care worker.

27.11(5) *Confidentiality and transfer of records.* Dentists shall preserve the confidentiality of patient records in a manner consistent with the protection of the welfare of the patient. Upon request of the patient or patient's legal guardian, the dentist shall furnish the dental records or copies or summaries of the records, including dental radiographs or copies of the radiographs that are of diagnostic quality, as will be beneficial for the future treatment of that patient. The dentist may charge a nominal fee for duplication of records, but may not refuse to transfer records for nonpayment of any fees.

[**ARC 8369B**, IAB 12/16/09, effective 1/20/10; **ARC 1995C**, IAB 5/27/15, effective 7/1/15]

650—27.12(153) Teledentistry. This rule establishes the standards of practice for teledentistry.

27.12(1) *Definition.*

"Teledentistry" means a dentist is providing or supervising dental services using technology when the patient is in another location.

27.12(2) *Teledentistry authorized.* A dentist may utilize teledentistry to provide dental care to patients located in Iowa. A dentist shall not provide dental care to a patient located in Iowa based solely on an Internet questionnaire consisting of a static set of questions that have been answered by the patient.

27.12(3) *License or registration required.* A dentist, dental hygienist, or dental assistant who uses teledentistry for a patient located in Iowa shall hold an active Iowa license or registration issued by the board.

27.12(4) *General requirements.* The standard of dental care is the same whether a patient is seen in person or through a teledentistry encounter. The use of teledentistry is not an expansion of the scope of practice for dental hygienists or dental assistants. A dentist who uses teledentistry shall utilize evidence-based standards of practice and practice guidelines to ensure patient safety, quality of care, and positive outcomes.

27.12(5) *Informed consent.* When teledentistry will be utilized, a dentist shall ensure informed consent covers the following additional information:

a. A description of the types of dental care services provided via teledentistry, including limitations on services;

b. The identity, contact information, practice location, licensure, credentials, and qualifications of all dentists, dental hygienists, and dental assistants involved in the patient's dental care, which must be publicly displayed on a website or provided in writing to the patient; and

c. Precautions for technological failures or emergency situations.

27.12(6) *Examination.* A dentist may use teledentistry to conduct an examination for a new patient or for a new diagnosis if the examination is conducted in accordance with evidence-based standards of practice to sufficiently establish an informed diagnosis. A dentist shall not conduct a dental examination

using teledentistry if the standard of care necessitates an in-person dental examination. Once an examination has been conducted, a dentist may delegate the services to be provided.

27.12(7) *Follow-up and emergency care.* A dentist who uses teledentistry shall have adequate knowledge of the nature and availability of local dental resources to provide appropriate follow-up care to a patient following a teledentistry encounter. A dentist shall refer a patient to an acute care facility or an emergency department when referral is necessary for the safety of the patient or in the case of emergency.

27.12(8) *Supervision.* With the exception of administering local anesthesia or nitrous oxide inhalation analgesia, or performing expanded functions, a dentist may delegate to and supervise services to be performed by a dental hygienist or dental assistant.

a. When direct supervision of a dental hygienist or dental assistant is required, a dentist may provide direct supervision using live video. A dentist is not required to directly supervise the entire delivery of dental care but must appear upon request using live video with a response time similar to what would be expected if the dentist were present in the treatment facility.

b. When general supervision of a dental hygienist or dental assistant is required, a dentist may utilize teledentistry.

c. When public health supervision is utilized, a supervising dentist may authorize use of teledentistry.

27.12(9) *Patient records.* A teledentistry encounter shall be clearly characterized as such in a patient record.

27.12(10) *Privacy and security.* All dentists, dental hygienists, and dental assistants shall ensure that the use of teledentistry complies with the privacy and security requirements of the Health Insurance Portability and Accountability Act.

[**ARC 4748C**, IAB 11/6/19, effective 12/11/19]

650—27.13(17A,147,153,272C) Waiver prohibited. Rules in this chapter are not subject to waiver pursuant to 650—Chapter 7 or any other provision of law.

[**ARC 4748C**, IAB 11/6/19, effective 12/11/19]

These rules are intended to implement Iowa Code sections 153.34(7) and 272C.4(6).

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CHAPTER 28
DESIGNATION OF SPECIALTY

[Prior to 5/18/88, Dental Examiners, Board of[320]]

Rescinded **ARC 4099C**, IAB 10/24/18, effective 11/28/18

CHAPTER 29
SEDATION AND NITROUS OXIDE
[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—29.1(153) Definitions. For the purpose of these rules, relative to the administration of deep sedation, general anesthesia, moderate sedation, minimal sedation, and nitrous oxide inhalation analgesia by licensed dentists, the following definitions shall apply:

"ACC" means the anesthesia credentials committee of the board.

"ASA" refers to the American Society of Anesthesiologists Patient Physical Status Classification System. Category I means normal healthy patients, and category II means patients with mild systemic disease. Category III means patients with severe systemic disease, and category IV means patients with severe systemic disease that is a constant threat to life.

"Board" means the Iowa dental board established in Iowa Code section 147.14(1)*"d."*

"Capnography" means the monitoring of the concentration of exhaled carbon dioxide in order to assess physiologic status or determine the adequacy of ventilation during anesthesia.

"Current ACLS or PALS certification" means current certification in advanced cardiac life support (ACLS) or pediatric advanced life support (PALS). Current certification means certification by an organization on an annual basis or, if that certifying organization requires certification on a less frequent basis, evidence that the individual has been properly certified for each year covered by the renewal period. The course for the purposes of certification must include a clinical component.

"DAANCE" means the dental anesthesia assistant national certification examination as offered by the American Association of Oral and Maxillofacial Surgeons (AAOMS).

"Deep sedation" means drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained.

"Facility" means any dental office or clinic where sedation is used in the practice of dentistry. The term "facility" does not include a hospital.

"General anesthesia" means a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.

"Licensed sedation provider" means a physician anesthesiologist currently licensed by the Iowa board of medicine or a certified registered nurse anesthetist (CRNA) currently licensed by the Iowa board of nursing.

"Minimal sedation" means a minimally depressed level of consciousness produced by a pharmacological method that retains the patient's ability to independently and continuously maintain an airway and respond normally to tactile stimulation and verbal command. Although cognitive function and coordination may be modestly impaired, ventilatory and cardiovascular functions are unaffected. A patient whose only response reflex is withdrawal from repeated painful stimuli is not considered to be in a state of minimal sedation.

"Moderate sedation" means a drug-induced depression of consciousness, either by enteral or parenteral means, during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained. A patient whose only response reflex is withdrawal from a painful stimulus is not considered to be in a state of moderate sedation.

"Monitoring nitrous oxide inhalation analgesia" means continually observing the patient receiving nitrous oxide and recognizing and notifying the dentist of any adverse reactions or complications.

"MRD" means the manufacturer's maximum recommended dose of a drug as printed in FDA-approved labeling.

"Nitrous oxide inhalation analgesia" refers to the administration by inhalation of a combination of nitrous oxide and oxygen producing an altered level of consciousness that retains the patient's ability to independently and continuously maintain an airway and respond appropriately to physical stimulation or verbal command.

"Patient monitor" means a dental assistant, dental hygienist, nurse or dentist whose primary responsibility is to continuously monitor a patient receiving moderate sedation, deep sedation or general anesthesia until the patient meets the criteria to be discharged to the recovery area.

"Pediatric" means patients aged 12 or under.

"Permit holder" means an Iowa licensed dentist who has been issued a moderate sedation or general anesthesia permit by the board.

"Time-oriented anesthesia record" means documentation at appropriate time intervals of drugs, doses and physiologic data obtained during patient monitoring.

[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

650—29.2(153) Advertising. A dentist shall ensure that any advertisements related to the availability of antianxiety premedication or minimal sedation clearly reflect the level of sedation provided and are not misleading.

[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

650—29.3(153) Nitrous oxide inhalation analgesia.

29.3(1) A dentist may use nitrous oxide inhalation analgesia sedation on an outpatient basis for dental patients provided the dentist has completed training and complies with the following:

a. Has adequate equipment with fail-safe features.

b. Has routine inspection, calibration, and maintenance on equipment performed every two years and maintains documentation of such and provides documentation to the board upon request.

c. Ensures the patient is continually monitored by a patient monitor while receiving nitrous oxide inhalation analgesia.

29.3(2) A dentist shall provide direct supervision of the administration and monitoring of nitrous oxide and establish a written office protocol for taking vital signs, adjusting anesthetic concentrations, and addressing emergency situations that may arise. The dentist shall be responsible for dismissing the patient following completion of the procedure.

29.3(3) A dental hygienist may administer and monitor nitrous oxide inhalation analgesia provided the services have been prescribed by a dentist and the hygienist has completed training while a student in an accredited school of dental hygiene or a board-approved course of training.

29.3(4) A dental assistant may monitor a patient who is under nitrous oxide after the dentist has induced a patient and established the maintenance level, provided the dental assistant has completed a board-approved expanded function course. A dental assistant may make adjustments to decrease the nitrous oxide concentration while monitoring the patient or may turn off oxygen delivery at the completion of the dental procedure.

29.3(5) Record keeping. The patient chart must include the concentration administered and duration of administration, as well as any vital signs taken.

[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

650—29.4(153) Minimal sedation standards.

29.4(1) A dentist shall evaluate a patient prior to the start of any sedative procedure. In healthy or medically stable patients (ASA I, II), the dentist should review the patient's current medical history and medication use. For a patient with significant medical considerations (ASA III, IV), a dentist may need to consult with the patient's primary care provider or consulting medical specialist. A dentist shall obtain informed consent from the patient or the patient's parent or legal guardian prior to providing minimal sedation.

29.4(2) Record keeping. A time-oriented anesthesia record must be maintained and must contain the names of all drugs administered, including local anesthetics and nitrous oxide, dosages, time administered, and monitored physiological parameters, including oxygenation, ventilation, and circulation.

29.4(3) Minimal sedation for ASA I or II nonpediatric patients.

a. A dentist may prescribe or administer a single medication for minimal sedation via the enteral route that does not exceed the MRD for unmonitored home use. A dentist may administer a supplemental dose of the same drug provided the total aggregate dose does not exceed 1.5 times the MRD on the day of treatment. The dentist shall not administer a supplemental dose until the clinical half-life of the initial dose has passed.

b. A dentist may administer a single medication for minimal sedation via the enteral route that does not exceed the MRD for monitored use on the day of treatment.

c. A dentist may utilize nitrous oxide inhalation analgesia in combination with a single enteral drug.

29.4(4) Minimal sedation for ASA III, ASA IV or pediatric patients.

a. A dentist may prescribe or administer a single medication for minimal sedation via the enteral route for ASA III or IV patients or pediatric patients that does not exceed the MRD for unmonitored home use.

b. A dentist may administer a single medication for minimal sedation via the enteral route that does not exceed the MRD for monitored use on the day of treatment.

c. A dentist may administer nitrous oxide inhalation analgesia for minimal sedation of ASA III or IV patients or pediatric patients provided the concentration does not exceed 50 percent and is not used in combination with any other drug.

[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

650—29.5(153) Shared standards for moderate sedation, deep sedation and general anesthesia.

29.5(1) Prior to administering moderate sedation, deep sedation or general anesthesia, a dentist must obtain a current moderate sedation permit or general anesthesia permit pursuant to rule 650—29.11(153).

29.5(2) A dentist administering moderate sedation, deep sedation or general anesthesia must maintain current ACLS certification. A dentist administering moderate sedation to pediatric patients may maintain current PALS certification in lieu of current ACLS certification.

29.5(3) A dentist shall evaluate a patient prior to the start of any sedative procedure. A dentist should review a patient's medical history, medication(s) and NPO (nothing by mouth) status. For a patient with significant medical considerations (ASA III, IV), a dentist may need to consult with the patient's primary care provider or consulting medical specialist. The dentist should consult the body mass index as part of the preprocedural workup.

29.5(4) A dentist who administers sedation or anesthesia shall ensure that each facility where sedation services are provided is appropriately staffed to reasonably handle emergencies incident to the administration of sedation. A patient monitor shall be present in the treatment room and continually monitor the patient until the patient returns to a level of minimal sedation.

29.5(5) The dentist must provide postoperative verbal and written instructions to the patient and caregiver prior to discharging the patient.

29.5(6) The dentist must not leave the facility until the patient meets the criteria for discharge.

29.5(7) The dentist or another designated permit holder or licensed sedation provider must be available for postoperative aftercare for a minimum of 48 hours following the administration of sedation.

29.5(8) The dentist must establish emergency protocols which comply with the following:

a. A dentist must establish a protocol for immediate access to backup emergency services;

b. A patient monitor shall employ initial life-saving measures in the event of an emergency and shall activate the EMS system for life-threatening complications;

c. A dentist who utilizes an immobilization device must avoid chest or airway obstruction when applying the device and shall allow a hand or foot to remain exposed; and

d. The recovery room for a pediatric patient must include a functioning suction apparatus as well as the ability to provide >90% oxygen and positive-pressure ventilation, along with age- and size-appropriate rescue equipment.

29.5(9) Record keeping. A time-oriented anesthesia record must include preoperative and postoperative vital signs, drugs administered, dosage administered, anesthesia time in minutes, and monitors used. Pulse oximetry, heart rate, respiratory rate, and blood pressure must be recorded continually until the patient is fully ambulatory. The chart should contain the name of the person to whom the patient was discharged.

[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

650—29.6(153) Moderate sedation standards.

29.6(1) Moderate sedation for ASA I or II nonpediatric patients.

a. A dentist may prescribe or administer a single enteral drug in excess of the MRD on the day of treatment.

b. A dentist may prescribe or administer a combination of more than one enteral drug.

c. A dentist may administer a medication for moderate sedation via the parenteral route.

d. A dentist may administer a medication for moderate sedation via the parenteral route in incremental doses.

e. A dentist shall ensure the drug(s) or techniques, or both, carry a margin of safety wide enough to render unintended loss of consciousness unlikely.

f. A dentist may administer nitrous oxide with more than one enteral drug.

29.6(2) Moderate sedation for ASA III, ASA IV or pediatric patients. A dentist who does not meet the requirements of paragraph 29.11(3)*"c"* is prohibited from administering moderate sedation to pediatric or ASA III or IV patients. The following constitutes moderate sedation:

a. The use of one or more enteral drugs in combination with nitrous oxide.

b. The administration of any intravenous drug.

29.6(3) A dentist administering moderate sedation in a facility shall have at least one patient monitor observe the patient while under moderate sedation. The patient monitor shall be capable of administering emergency support and shall complete one of the following:

a. A minimum of three hours of on-site training in airway management that provides the knowledge and skills necessary for a patient monitor to competently assist with emergencies including, but not limited to, recognizing apnea and airway obstruction;

b. Current ACLS or PALS certification; or

c. Current DAANCE certification.

29.6(4) Use of capnography or pretracheal/precordial stethoscope is required for moderate sedation providers.

a. All moderate sedation permit holders shall use capnography to monitor end-tidal carbon dioxide unless the use of capnography is precluded or invalidated by the nature of the patient, procedure or equipment.

b. In cases where the use of capnography is precluded or invalidated for the reasons listed previously, a pretracheal or precordial stethoscope must be used to continually monitor the auscultation of breath sounds at all facilities where licensed sedation providers provide sedation.

[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

650—29.7(153) Deep sedation or general anesthesia standards.

29.7(1) The administration of anesthetic sedative agents intended for deep sedation or general anesthesia, including but not limited to Propofol, Ketamine and Dilaudid, shall constitute deep sedation or general anesthesia.

29.7(2) A dentist shall have at least two patient monitors observe the patient while the patient is under deep sedation or general anesthesia. The patient monitors who observe patients under deep sedation or general anesthesia shall be capable of administering emergency support and shall have completed one of the following:

a. Current ACLS or PALS certification; or

b. Current DAANCE certification.

29.7(3) A dentist shall use capnography and a pretracheal/precordial stethoscope.

29.7(4) If the dentist has a recovery area separate from the operatory, the recovery area must have oxygen and suction equipment.

[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

650—29.8(153) Facility and equipment requirements for moderate sedation, deep sedation or general anesthesia.

29.8(1) Change of address or addition of facility location(s). A permit holder shall notify the board office in writing within 60 days of a change in location or the addition of a sedation facility.

29.8(2) Facilities shall be permanently equipped. A dentist who administers moderate sedation, deep sedation or general anesthesia in a facility is required to be trained in and maintain, at a minimum, the following equipment to be properly equipped:

a. Electrocardiogram (EKG) monitor;

b. Positive pressure oxygen;

c. Suction;

d. Laryngoscope and blades;

e. Endotracheal tubes;

f. Magill forceps;

g. Oral airways;

h. Stethoscope;

i. Blood pressure monitoring device;

j. Pulse oximeter;

k. Emergency drugs;

l. Defibrillator;

m. Capnography machine to monitor end-tidal carbon dioxide;

n. Pretracheal or precordial stethoscope; and

o. Any additional equipment necessary to establish intravascular or intraosseous access, which shall be available until the patient meets discharge criteria.

29.8(3) The board or designated agents of the board may conduct facility inspections. The actual costs associated with the on-site evaluation of the facility shall be the primary responsibility of the licensee. The cost to the licensee shall not exceed the fee specified in 650—Chapter 15.

[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

650—29.9(153) Use of another licensed sedation provider or permit holder.

29.9(1) A dentist may only use the services of a licensed sedation provider or another permit holder to administer moderate sedation, deep sedation, or general anesthesia in a dental facility if the dentist holds a current moderate sedation or general anesthesia permit. A permit holder who does not meet the training requirement in paragraph 29.11(3)*"c"* to administer moderate sedation to pediatric or ASA III or IV patients may use a licensed sedation provider or another qualified permit holder to administer moderate sedation to pediatric or ASA III or IV patients. A dentist who does not hold a sedation permit is prohibited from using a licensed sedation provider or permit holder to provide moderate sedation, deep sedation or general anesthesia.

29.9(2) The dentist must remain present in the treatment room for the duration of any dental treatment.

29.9(3) When a licensed sedation provider or another permit holder is used to administer moderate sedation, deep sedation or general anesthesia, that provider constitutes one patient monitor for the purpose of complying with subrule 29.6(3) or 29.7(2).

29.9(4) A permit holder who has a licensed sedation provider or another permit holder administer moderate sedation, deep sedation or general anesthesia services must maintain a permanently and properly equipped facility pursuant to the provisions of this chapter.

29.9(5) A permit holder shall assess the need and the patient suitability for sedation services. A permit holder shall not interfere with any independent assessment performed by a licensed sedation provider.
[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

650—29.10(153) Reporting of adverse occurrences related to sedation or nitrous oxide.

29.10(1) All licensed dentists must submit a report to the board office within a period of seven days of any mortality related to sedation or nitrous oxide or any other incident related to sedation or nitrous oxide which results in the patient receiving inpatient treatment at a hospital or clinic. The report shall include a complete copy of the patient record and include responses to the following:

a. Description of dental procedure.

b. Description of preoperative physical condition of patient.

c. List of drugs and dosage administered.

d. Description, in detail, of techniques utilized in administering the drugs utilized.

e. Description of adverse occurrence:

(1) Description, in detail, of symptoms of any complications, to include but not be limited to onset, and type of symptoms in patient.

(2) Treatment instituted on the patient.

(3) Response of the patient to the treatment.

f. Description of the patient's condition on termination of any procedures undertaken.

29.10(2) Failure to report an adverse occurrence, when the occurrence is related to the use of sedation or nitrous oxide, may result in disciplinary action.
[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

650—29.11(153) Requirements for issuance of a moderate sedation or general anesthesia permit.

29.11(1) No dentist shall administer moderate sedation, deep sedation or general anesthesia for dental patients unless the dentist possesses a current permit issued by the board.

29.11(2) A dentist who intends to obtain a sedation permit must submit a completed application and pay the fee specified in 650—Chapter 15.

29.11(3) To qualify for a moderate sedation permit, the applicant shall have successfully completed the following education and training:

a. A training program, approved by the board, that consists of a minimum of 60 hours of instruction and management of at least 20 patients, or an accredited residency program that includes formal training and clinical experience in moderate sedation.

b. Training that includes rescuing patients from a deeper level of sedation than intended, including managing the airway, intravascular or intraosseous access, and reversal medications.

c. For a dentist who intends to utilize moderate sedation on pediatric or ASA III or IV patients: an accredited residency program that includes formal training in anesthesia and clinical experience in managing pediatric or ASA III or IV patients.

29.11(4) To qualify for a general anesthesia permit, the applicant shall have successfully completed the following education and training:

a. An advanced education program accredited by the Commission on Dental Accreditation that provides training in deep sedation and general anesthesia.

b. A minimum of one year of advanced training in anesthesiology and related academic subjects beyond the undergraduate dental school level, in a training program approved by the ACC.

c. Formal training in airway management.

d. Current ACLS certification.

29.11(5) Prior to issuance of a new permit, all facilities where the applicant intends to provide sedation services must have passed inspection by the board or designated agent.

29.11(6) The applicant may be required to complete a peer review evaluation, if requested by the ACC, prior to issuance of a permit.
[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

650—29.12(153) ACC.

29.12(1) The ACC shall be chaired by a member of the board and shall include at least six additional members who are licensed to practice dentistry in Iowa. At least four members of the ACC shall hold deep sedation/general anesthesia or moderate sedation permits issued under this chapter.

29.12(2) The ACC shall perform the following duties:

a. Review all permit applications and take action as authorized.

b. Perform peer reviews as needed and report the results to the board.

c. Other duties as delegated by the board.

[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

650—29.13(153) Review of permit applications.

29.13(1) *Referral to the ACC.* All applications will be referred to the ACC for review at its next scheduled meeting.

29.13(2) *Review by the ACC.* Following review and consideration of an application, the ACC may take any of the following actions:

a. Request additional information;

b. Request that the applicant appear for an interview;

c. Approve issuance of the permit;

d. Approve issuance of the permit under certain terms and conditions or with certain restrictions;

e. Recommend denial of the permit;

f. Refer the permit application to the board for review and consideration with or without recommendation; or

g. Request a peer review evaluation.

29.13(3) *Review by board.* The board shall consider applications and recommendations referred by the ACC. The board may take any of the following actions:

a. Request additional information;

b. Request that the applicant appear for an interview;

c. Grant the permit;

d. Grant the permit under certain terms and conditions or with certain restrictions; or

e. Deny the permit.

29.13(4) *Appeal process for denials.* If a permit application is denied, an applicant may file an appeal of the final decision using the process described in rule 650—11.10(147).

[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

650—29.14(153) Renewal. A permit to administer deep sedation/general anesthesia or moderate sedation shall be renewed biennially at the time of license renewal. Permits expire August 31 of every even-numbered year.

29.14(1) To renew a permit, a licensee must submit the following:

a. Evidence of renewal of current ACLS certification or of current PALS certification if the permit holder provides sedation services for pediatric patients.

b. A minimum of six hours of continuing education in the area of sedation. These hours may also be submitted as part of license renewal requirements.

c. The appropriate fee for renewal as specified in 650—Chapter 15.

29.14(2) Failure to renew the permit prior to November 1 following its expiration shall cause the permit to lapse and become invalid for practice.

29.14(3) A permit that has been lapsed may be reinstated upon submission of a new application for a permit in compliance with the provisions of this chapter and payment of the application fee as specified in 650—Chapter 15.

[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

650—29.15(147,153,272C) Grounds for nonrenewal. A request to renew a permit may be denied on any of the following grounds:

29.15(1) After proper notice and hearing, for a violation of these rules or Iowa Code chapter 147, 153, or 272C during the term of the last permit renewal.

29.15(2) Failure to pay required fees.

29.15(3) Failure to obtain required continuing education.

29.15(4) Failure to provide documentation of current ACLS or PALS certification.

29.15(5) Failure to provide documentation of maintaining a properly equipped facility.

29.15(6) Receipt of a certificate of noncompliance from the child support recovery unit of the department of human services in accordance with 650—Chapter 33.

[**ARC 4556C**, IAB 7/17/19, effective 8/21/19; **ARC 4747C**, IAB 11/6/19, effective 12/11/19]

650—29.16(153) Noncompliance. Violations of the provisions of this chapter may result in revocation or suspension of the dentist's permit or other disciplinary measures as deemed appropriate by the board.

[**ARC 4556C**, IAB 7/17/19, effective 8/21/19]

These rules are intended to implement Iowa Code sections 153.13, 153.33, and 153.33B.

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◊ Two or more ARCs

1 Effective date of 29.6(4) to 29.6(6) delayed 70 days by the Administrative Rules Review Committee at its meeting held June 9, 1998.

2 Effective date of 29.6(4) to 29.6(6) delayed until the end of the 2000 Session of the General Assembly by the Administrative Rules Review Committee at its meeting held September 15, 1999. Subrules 29.6(4) and 29.6(5) were rescinded IAB 2/9/00, effective 3/15/00; delay on subrule 29.6(6) lifted by the Administrative Rules Review Committee at its meeting held January 4, 2000, effective January 5, 2000.

TITLE VI
PROFESSIONAL REGULATION

CHAPTER 30
DISCIPLINE

[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—30.1(153) General. The board has authority to impose discipline for any violation of Iowa Code title IV, chapter 272C, or the rules promulgated thereunder.

650—30.2(153) Methods of discipline. The board has authority to impose one or more of the following disciplinary sanctions:

1. Revocation of license or registration.
2. Suspension of license or registration until further order of the board or for a specified period.
3. Nonrenewal of license or registration.
4. Prohibit permanently, until further order of the board or for a specified period, the engaging in specified procedures, methods or acts.
5. Probation.
6. Require additional education or training.
7. Require clinical or written examination.
8. Order a physical, mental, or clinical evaluation.
9. Impose civil penalties not to exceed $10,000 where specifically provided by rules.
10. Issue citation and warning.
11. Such other sanctions allowed by law as may be appropriate.

650—30.3(153) Discretion of board. The following factors may be considered by the board in determining the nature and severity of the disciplinary sanction to be imposed:

1. The relative seriousness of the violation as it relates to assuring the citizens of this state a high standard of professional care.
2. The facts of the particular violation.
3. Any extenuating circumstances or other countervailing considerations.
4. Number of prior violations or complaints.
5. Seriousness of prior violations or complaints.
6. Whether remedial action has been taken.
7. Such other factors as may reflect upon the competency, ethical standards and professional conduct of the licensee or registrant.

650—30.4(147,153,272C) Grounds for discipline. The following shall constitute grounds for the imposition by the board of one or more of the disciplinary sanctions set forth in rule 650—30.2(153), specifically including the imposition of civil penalties not to exceed $10,000. This rule is not subject to waiver pursuant to 650—Chapter 7 or any other provision of law.

30.4(1) The board may impose discipline for the following violations related to licensure and registration:

a. Fraud or deceit in procuring or renewing any license, permit, or registration, including any false or misleading statement of a material fact or omission of information required to be disclosed;

b. Engaging in the practice of dentistry, dental hygiene, or dental assisting with a lapsed or inactive license, permit, or registration, or engaging in dental radiography with a lapsed or inactive dental radiography qualification;

c. Engaging in the practice of dentistry, dental hygiene, or dental assisting without a license, permit, or registration, or engaging in dental radiography without a dental radiography qualification;

d. Employing or permitting an unlicensed or unregistered person or a person with a lapsed or inactive license, permit, or registration to practice dentistry, dental hygiene, or dental assisting;

e. Encouraging, assisting, or enabling in any manner the unauthorized practice of dentistry, dental hygiene, or dental assisting; or

f. Failure to prominently display the names of all persons who are practicing dentistry, dental hygiene, or dental assisting within an office.

30.4(2) The board may impose discipline for the following violations related to ethics:

a. Fraud in representation as to skill or ability, whether by words or conduct or concealment of that which should have been disclosed, including but not limited to violations of 650—Chapter 26;

b. Knowingly making misleading, deceptive, untrue, or fraudulent representations in the practice of the licensee's or registrant's profession;

c. Practicing dentistry, dental hygiene, or dental assisting in a manner that is harmful or detrimental to the public. Proof of actual injury need not be established;

d. Being convicted of an offense that directly relates to the duties and responsibilities of the profession. A conviction includes a guilty plea, including Alford and nolo contendere pleas, or a finding or verdict of guilt, even if the adjudication of guilt is deferred, withheld, or not entered. A copy of the guilty plea or order of conviction constitutes conclusive evidence of conviction. An offense directly relates to the duties and responsibilities of the profession if the actions taken in furtherance of the offense are actions customarily performed within the scope of practice of the profession or the circumstances under which the offense was committed are circumstances customary to the profession;

e. Improper sexual contact with, or making suggestive, lewd, lascivious or improper remarks or advances to, a patient or a coworker;

f. Actions which are abusive, coercive, intimidating, harassing, untruthful, or threatening in the practice of dentistry;

g. Obtaining any fee by fraud or misrepresentation;

h. Giving or receiving cash or cash equivalents, or giving or receiving any gifts exceeding nominal value, for referral of patients;

i. Failure to transfer patient records to another licensee upon request; or

j. Unprofessional or unethical conduct including, but not limited to, those acts defined by Iowa Code section 153.32 or any violation of 650—Chapter 27.

30.4(3) The board may impose discipline for the following violations related to the ability to practice:

a. Habitual use of drugs or intoxicants rendering the licensee or registrant unfit for practice; or

b. Practicing dentistry, dental hygiene, or dental assisting while in a state of advanced physical or mental disability where such disability renders the licensee or registrant incapable of performing professional services or impairs functions of judgment necessary to the practice.

30.4(4) The board may impose discipline for the following violations related to patient care:

a. Willful and gross malpractice;

b. Willful and gross neglect;

c. Failure to maintain a satisfactory standard of competency;

d. Failure to preserve the confidentiality of patient information or accessing any confidential patient information without authorization;

e. Practicing beyond training; or

f. Delegating any acts to any licensee or registrant that are beyond the training or education of the licensee or registrant, or that are otherwise prohibited by rule.

30.4(5) The board may impose discipline for the following violations related to prescribing:

a. Violating the rules governing prescribing, including any violation of 650—Chapter 16;

b. Improperly delegating access to the Iowa prescription monitoring program (PMP) to an unauthorized individual;

c. Indiscriminately or promiscuously prescribing, administering, or dispensing any drug;

d. Failure to check the PMP prior to prescribing an opioid; or

e. Prescribing opioids in dosage amounts exceeding what would be prescribed by a reasonably prudent prescribing practitioner engaged in a similar practice.

30.4(6) The board may impose discipline for the following violations related to infection control:

a. Failure to maintain adequate safety and sanitary conditions for a dental office; or

b. Failure to comply with standard precautions for preventing and controlling infectious diseases and managing personnel health and safety concerns related to infection control, as "required" or

"recommended" for dentistry by the Centers for Disease Control and Prevention of the United States Department of Health and Human Services and the Iowa occupational safety and health administration.

30.4(7) The board may impose discipline for the following violations related to reporting, compliance, and other state laws:

a. Failure to notify the board of change of address within 60 days;

b. Failure to report disciplinary action taken by a licensing authority of another state, territory or country, or another licensing authority in this state, within 30 days of the final action by the licensing authority. A stay by an appellate court shall not negate this requirement; however, if the disciplinary action is overturned or reversed by a court of last resort, the report shall be expunged from the records of the board when the board is so notified;

c. Having a license or registration revoked, suspended, or otherwise disciplined by a licensing authority in any state, territory, or country;

d. Failure to report any adverse judgment in a professional malpractice action to which the licensee or registrant was a party or any settlement of a claim against the licensee or registrant alleging malpractice;

e. Failure to comply with an order of the board;

f. Violating any provision of Iowa law or rule of the board, or being a party to or assisting in any violation of any provision of Iowa law or rule of the board;

g. Failure to report any restriction of practice imposed by a hospital, clinic, or other practicing setting;

h. Failure to report any misdemeanor or felony conviction within 60 days, excluding traffic offenses;

i. Failure to comply with an Iowa practitioner review committee (IPRC) initial agreement or contract;

j. Failure to report to the board any acts or omissions made by other licensees or registrants of the board that may constitute a basis for disciplinary action under the rules of statutory provisions governing the practice of dentistry, dental hygiene, or dental assisting in Iowa; or

k. Failure to report adverse occurrences related to sedation, nitrous oxide inhalation analgesia, and antianxiety premedication pursuant to 650—Chapter 29.

30.4(8) The board may impose discipline for the following violations related to board investigations:

a. Knowingly providing false information to the board or an agent of the board during the course of an inspection or investigation or interfering with an inspection or investigation;

b. Failure to comply with a subpoena issued by the board;

c. Failure to fully and promptly comply with office inspections conducted at the request of the board to determine compliance with sanitation and infection control standards or sedation permit requirements;

d. Failure to cooperate with a board investigation; or

e. Retaliating against, threatening, or coercing any person for filing a complaint with the board or cooperating with a board inspection or investigation.

30.4(9) The board may impose discipline for the following violations related to continuing education:

a. Failure to respond to the board during a continuing education audit, or failure to submit verification of continuing education requirements within the time period provided;

b. Knowingly submitting a false report of continuing education; or

c. Failure to meet the required continuing education hours per biennium.

[**ARC 4409C**, IAB 4/24/19, effective 5/29/19; **ARC 5747C**, IAB 7/14/21, effective 8/18/21]

650—30.5(272C) Prohibited grounds for discipline. The board shall not suspend or revoke the license of a person who is in default or is delinquent on repayment or a service obligation under federal or

state postsecondary educational loans or public or private services-conditional postsecondary tuition assistance solely on the basis of such default or delinquency.
[**ARC 4747C**, IAB 11/6/19, effective 12/11/19]

These rules are intended to implement Iowa Code chapters 147; 153; 252J; 272C as amended by 2019 Iowa Acts, Senate File 304; and 598.

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1 Effective date of **ARC 3520B**, Items 17 and 20, delayed 70 days by the Administrative Rules Review Committee at its meeting held August 11, 2004.

2 See HJR 2006 of 2006 Session of the Eighty-first General Assembly.

CHAPTER 31
COMPLAINTS AND INVESTIGATIONS
[Prior to 5/18/88, Dental Examiners, Board of [320]]

650—31.1(272C) Complaint review. The board shall, upon receipt of a complaint, or may upon its own motion, pursuant to other evidence received by the board, review and investigate alleged acts or omissions which the board reasonably believes constitute cause under applicable law or administrative rule for licensee or registrant discipline. All complaints regarding the practice of dental hygiene will be initially directed to the dental hygiene committee. The committee shall review the complaint and make a recommendation to the board.

650—31.2(153) Form and content. A written complaint should include the following facts:

1. The full name, address, and telephone number of the complainant.
2. The full name, address, and telephone number of the licensee or registrant.
3. A statement of the facts concerning the alleged acts or omissions.

650—31.3(153) Address. The written complaint may be delivered personally, electronically or by mail to the executive director of the board. The current office address is 400 S.W. 8th Street, Suite D, Des Moines, Iowa 50309-4687.

650—31.4(153) Investigation. In order for the board to determine if probable cause exists for a hearing on the complaint, the executive director or authorized designee shall cause an investigation to be made into the allegations of the complaint.

650—31.5(153) Issuance of investigatory subpoenas. Pursuant to Iowa Code sections 17A.13(1) and 272C.6(3), the board has the authority to issue an investigatory subpoena to compel the production of evidence deemed necessary in connection with a licensee disciplinary investigation. A subpoena issued by the board in connection with a licensee disciplinary investigation may seek evidence whether or not it is privileged or confidential under law.

31.5(1) The executive director or designee may, upon the written request of a board investigator or on the director's own initiative, subpoena books, correspondence, papers, records, and other real evidence which is necessary for the board to decide whether to institute a contested case proceeding. In the case of a subpoena for mental health records, each of the following conditions shall be satisfied prior to the issuance of the subpoena:

a. The nature of the complaint reasonably justifies the issuance of a subpoena;

b. Adequate safeguards have been established to prevent unauthorized disclosure;

c. An express statutory mandate, articulated public policy, or other recognizable public interest favors access; and

d. An attempt was made to notify the patient and to secure an authorization from the patient for release of the records at issue.

31.5(2) A written request for a subpoena or the director's written memorandum in support of the issuance of a subpoena shall contain the following:

a. The name and address of the person to whom the subpoena will be directed;

b. A specific description of the books, papers, records or other real evidence requested;

c. An explanation of why the documents sought to be subpoenaed are necessary for the board to determine whether it should institute a contested case proceeding; and

d. In the case of a subpoena request for mental health records, confirmation that the conditions described in 31.5(1) have been satisfied.

31.5(3) Each subpoena shall contain:

a. The name and address of the person to whom the subpoena is directed;

b. A description of the books, papers, records or other real evidence requested;

c. The date, time and location for production or inspection and copying;

d. The time within which a motion to quash or modify the subpoena must be filed;

e. The signature, address and telephone number of the executive director or designee;
f. The date of issuance; and
g. A return of service attached to the subpoena.

31.5(4) Any person who is aggrieved or adversely affected by compliance with the subpoena must, within 14 days after service of the subpoena, or before the time specified for compliance if such time is less than 14 days, file with the board a motion to quash or modify the subpoena. The motion shall describe the legal reasons why the subpoena should be quashed or modified, and may be accompanied by legal briefs or factual affidavits.

31.5(5) Upon receipt of a timely motion to quash or modify a subpoena, the board may request an administrative law judge to hold a hearing and issue a decision, or the board may conduct a hearing and issue a decision. Oral argument may be scheduled at the discretion of the board or the administrative law judge. The administrative law judge or the board may quash or modify the subpoena, deny the motion, or issue an appropriate protective order.

31.5(6) A person aggrieved by a ruling of an administrative law judge who desires to challenge that ruling must appeal the ruling to the board by serving on the executive director, either in person or by certified mail, a notice of appeal within ten days after service of the decision of the administrative law judge.

31.5(7) If the person contesting the subpoena is not the person under investigation, the board's decision is final for purposes of judicial review. If the person contesting the subpoena is the person under investigation, the board's decision is not final for purposes of judicial review until either the person is notified the investigation has been concluded with no formal action, or there is a final decision in the contested case.

650—31.6(153) Board appearances. The board may request a licensee or registrant to appear before the board to discuss a pending investigation. By electing to participate in the board appearance, the licensee or registrant waives any objection to a board member's both participating in the appearance and later participating as a decision maker in a contested case proceeding on the grounds of a personal investigation and a combination of investigative and adjudicative functions. If the executive director participates in the appearance, the licensee or registrant further waives any objection to having the executive director assist the board in the contested case proceeding.

650—31.7(153) Peer review. A complaint may be assigned to a peer review committee for review, investigation and report.

31.7(1) The board shall determine which peer review committee will review a case involving a dentist or dental assistant and what complaints or other matters shall be referred to a peer review committee for investigation, review, and report to the board. The board may use the peer review committee system organized under the dental care programs council of the Iowa dental association, a peer review committee system organized by the Iowa dental assistants association, or a specifically constituted peer review committee designated by the board for matters involving dentists or dental assistants.

31.7(2) The dental hygiene committee shall determine which peer review committee will review a case involving a dental hygienist and what complaints or other matters shall be referred to a peer review committee for investigation, review, and report to the dental hygiene committee. The dental hygiene committee may use the peer review system organized under the ethics committee of the Iowa dental hygienists' association or a specifically constituted peer review committee designated by the dental hygiene committee for matters involving dental hygienists.

31.7(3) The Iowa dental association, the Iowa dental hygienists' association and the Iowa dental assistants association shall register yearly and keep current their peer review systems with the board. Peer review committee members shall be registered with the board when appointed.

31.7(4) Members of the peer review committees shall not be liable for acts, omissions or decisions made in connection with service on the peer review committee. However, immunity from civil liability shall not apply if the act is done with malice.

650—31.8(272C) Duties of peer review committees.

31.8(1) The peer review committees shall observe the requirements of confidentiality imposed by Iowa Code section 272C.6.

31.8(2) The board may provide investigative and related services to peer review committees.

31.8(3) A peer review committee shall thoroughly investigate a complaint as assigned and provide a written report to the board in accordance with the board's direction.

31.8(4) The peer review report shall contain a statement of facts and a recommendation as to whether a violation of the standard of care occurred. The peer review committee should consider relevant statutes, board rules, ethical standards and standards of care in making its recommendations.

31.8(5) The peer review report shall be signed by the members of the peer review committee concurring in the report.

31.8(6) Upon completion, the peer review report and all investigative information shall be submitted to the board.

650—31.9(272C) Board review. The board shall review all investigative reports and proceed pursuant to 650—Chapter 51.

650—31.10(272C) Confidentiality of investigative files. Complaint files, investigation files, all other investigation reports, and other investigative information in the possession of the board or peer review committee acting under the authority of the board or its employees or agents which relate to licensee or registrant discipline shall be privileged and confidential, and shall not be subject to discovery, subpoena, or other means of legal compulsion for their release to any person other than the licensee or registrant and the board, its employees and agents involved in licensee or registrant discipline, or be admissible in evidence in any judicial or administrative proceeding other than the proceeding involving licensee or registrant discipline. However, a final written decision and finding of fact of the board in a disciplinary proceeding shall be public record.

650—31.11(272C) Reporting of judgments or settlements. Each licensee or registrant shall report to the board every adverse judgment in a malpractice action to which the licensee or registrant is a party and every settlement of a claim against the licensee or registrant alleging malpractice. The report together with a copy of the judgment or settlement must be filed with the board within 30 days from the date of said judgment or settlement.

650—31.12(272C) Investigation of reports of judgments and settlements. Reports received by the board from the commissioner of insurance, insurance carriers and licensees or registrants involving adverse judgments in a professional malpractice action, and settlement of claims alleging malpractice, shall be reviewed and investigated by the board in the same manner as is prescribed in these rules for the review and investigation of complaints.

650—31.13(272C) Mandatory reporting.

31.13(1) *Definitions.* For the purposes of this rule, the following definitions apply:

"Knowledge" means any information or evidence acquired from personal observation, from a reliable or authoritative source, or under circumstances that cause the licensee or registrant to believe that there exists a substantial likelihood that an act or omission may have occurred.

"Reportable act or omission" means any conduct that may constitute a basis for disciplinary action under the rules or statutory provisions governing the practice of dentistry, dental hygiene, or dental assisting in Iowa.

31.13(2) *Reporting requirement.* A report shall be filed with the board when a licensee or registrant has knowledge that another person licensed or registered by the board may have committed a reportable act or omission.

a. The report shall be filed with the board within 30 days from the date the licensee or registrant acquires knowledge of the reportable act or omission. However, in the event such reportable act or

omission poses an immediate threat to patient safety, the report shall be filed within 24 hours from the date the licensee or registrant acquires knowledge of the reportable act or omission.

b. The report shall contain the name and the address of the licensee or registrant who may have committed the reportable act or omission, the date, time, place and circumstances in which the reportable act or omission may have occurred, and a statement indicating how the knowledge was acquired.

c. The requirement to report takes effect when a licensee or registrant has knowledge that another licensee or registrant may have committed a reportable act or omission. The final determination of whether or not such act or omission has occurred is the responsibility of the board.

31.13(3) *Failure to report.* Failure to report knowledge of a reportable act or omission within the required time period shall constitute a basis for the initiation of a board disciplinary action against the licensee or registrant who failed to report.

650—31.14(272C) Failure to report licensee or registrant. Rescinded IAB 5/11/05, effective 6/15/05.

650—31.15(272C) Immunities. A person shall not be civilly liable as a result of filing a report or complaint with the board, or for the disclosure to the board or its agents or employees, whether or not pursuant to a subpoena of records, documents, testimony or other forms of information which constitute privileged matter concerning a recipient of health care services or some other person, in connection with proceedings of a peer review committee, or in connection with duties of the board. However, immunity from civil liability shall not apply if the act is done with malice.

These rules are intended to implement Iowa Code chapter 17A as amended by 1998 Iowa Acts, chapter 1202, and Iowa Code sections 153.33, 272C.3, and 272C.4.

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[1] Effective date of **ARC 3520B**, Items 17 and 20, delayed 70 days by the Administrative Rules Review Committee at its meeting held August 11, 2004.

CHAPTER 32
MEDIATION OF DISPUTES

650—32.1(153) Definitions.

"Board" means the Iowa board of dental examiners.

"Center" or *"mediation center"* means an approved dispute resolution center that has applied for and received approval from the executive director of the prosecuting attorneys training coordination council provided for in Iowa Code section 679.3.

"Mediation" means an informal dispute resolution process by which the parties involved in a dispute voluntarily agree to enter into informal discussion and negotiation with the assistance of a mediator.

650—32.2(153) Mediation authorized. The board has the authority to provide for mediation of disputes between licensees or registrants and their patients when requested by either party or recommended by the board and agreed to by the parties.

32.2(1) The board may recommend for mediation those cases that are appropriate, which could include, but are not limited to, cases involving fee disputes.

32.2(2) The board's referral of a matter to mediation shall not preclude the board from taking disciplinary action against the affected licensee or registrant. There is no obligation that the licensee or registrant participate in mediation and the licensee or registrant shall not be subject to disciplinary action for failure to participate in a board recommended mediation.

650—32.3(153) Mediation process.

32.3(1) Subsequent to an investigation by the board, the board may recommend mediation to address a dispute between a licensee or registrant and a patient.

32.3(2) If mediation is recommended by the board, the board shall notify the licensee or registrant, the patient and a mediation center of the recommendation within 30 days.

32.3(3) Upon receipt of a mediation request from the board, the mediation center shall provide the parties with a written statement setting forth the center's established procedures and the cost, if any, prior to each mediation session.

32.3(4) If mediation is agreed upon by the parties involved, the mediation center shall schedule a mediation at a time and place convenient and neutral to the parties and the mediator.

650—32.4(153) Assignment of mediator. The assignment of a mediator shall be made by the mediation center. At the request of either party, and upon a showing of good cause, the director of the mediation center shall review the assignment of the mediator and shall, upon a showing of good cause, remove a mediator and assign another mediator to the case. Good cause includes partiality, bias, or the existence of a personal or professional relationship with any of the parties.

650—32.5(153) Cancellation. If mediation is scheduled, either party may contact the mediation center to cancel the mediation meeting or reschedule the mediation meeting.

650—32.6(153) Mediation meetings. In addition to any duties imposed by statute or rule, each mediator shall:

32.6(1) Clarify the names of all participating parties present and facilitate agreement on the attendance of assisting parties at the mediation meeting, as well as the extent to which such persons may participate in the proceedings.

32.6(2) Ensure that the parties understand that the mediator does not legally represent any of the parties and is neutral in the proceedings.

32.6(3) Help the parties review any proposed solution to determine if it can be effectively implemented and to help the parties understand the consequences of the proposed solution.

650—32.7(153) Mediation report. The mediation center shall report to the board whether or not the parties agreed to participate in mediation and whether or not the mediation was successful. The mediation

center shall not, however, disclose the terms of the mediation to the board. The mediation center shall make such report within 15 days of the conclusion of the mediation.

650—32.8(679) Mediation agreement. If the parties involved in the dispute reach agreement, the agreement may be reduced to writing setting forth the settlement of the issues and the future responsibilities of each party.

650—32.9(679) Mediation confidential. All verbal or written information relating to the subject matter of mediation or a mediation agreement transmitted between any party to a dispute and a mediator or the staff of an approved center or any other person present during any stage of mediation, whether reflected in notes, memoranda, or other work products in the case files, is confidential communications except as otherwise expressly provided for in Iowa Code chapter 679. Mediators and center staff members shall not be examined in any judicial or administrative proceeding regarding confidential communications and are not subject to judicial or administrative process requiring the disclosures of confidential communications. This rule does not apply when a mediator or center staff member has reason to believe that a party to a dispute has given perjured evidence.

650—32.10(679) Mediator immunity. No mediator, employee or agent of a center, or member of a center's board may be held liable for civil damages for any statement or decision made in the process of mediation unless the mediator, employee, agent or member acted in bad faith, with malicious purpose or in a manner exhibiting willful and wanton disregard of human rights, safety or property.

These rules are intended to implement Iowa Code section 153.33 and Iowa Code chapter 679.

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TITLES VII TO X

CHAPTER 33
CHILD SUPPORT NONCOMPLIANCE

650—33.1(252J,598) Definitions. For the purpose of this chapter the following definitions shall apply:

"Act" means Iowa Code sections 252J.1 to 252J.9.

"Board" means the Iowa board of dental examiners.

"Certificate" means a document known as a certificate of noncompliance which is provided by the child support unit certifying that the named licensee or registrant is not in compliance with a support order or with a written agreement for payment of support entered into by the child support unit and the licensee or registrant.

"Child support unit" means the child support recovery unit of the Iowa department of human services.

"Denial notice" means a board notification denying an application for the issuance or renewal of a license or registration as required by the Act.

"License" means a license to practice dentistry or dental hygiene.

"Registration" means registration to practice as a dental assistant trainee or registered dental assistant.

"Revocation or suspension notice" means a board notification suspending a license or registration for an indefinite or specified period of time or a notification revoking a license or registration as required by the Act.

"Withdrawal certificate" means a document known as a withdrawal of a certificate of noncompliance provided by the child support unit certifying that the certificate is withdrawn and that the board may proceed with issuance, reinstatement, or renewal of a license or registration.

650—33.2(252J,598) Issuance or renewal of a license or registration—denial. The board shall deny the issuance or renewal of a license or registration upon the receipt of a certificate from the child support unit. This rule shall apply in addition to the procedures set forth in the Act.

33.2(1) *Service of denial notice.* Notice shall be served upon the licensee, registrant, or applicant by certified mail, return receipt requested; by personal service; or through authorized counsel.

33.2(2) *Effective date of denial.* The effective date of the denial of issuance or renewal of a license or registration, as specified in the denial notice, shall be 60 days following service of the denial notice upon the licensee, registrant, or applicant.

33.2(3) *Preparation and service of denial notice.* The executive director of the board is authorized to prepare and serve the denial notice upon the licensee, registrant, or applicant.

33.2(4) *Licensee, registrant, or applicant responsible to inform board.* Licensees, registrants, and applicants shall keep the board informed of all court actions, and all child support unit actions taken under or in connection with the Act and shall provide the board copies, within seven days of filing or issuance, of all applications filed with the district court pursuant to the Act, all court orders entered in such actions, and any withdrawal of certificates issued by the child support unit.

33.2(5) *Reinstatement following license or registration denial.* All board fees required for application, license or registration renewal, or license or registration reinstatement shall be paid by licensees, registrants, or applicants before a license or registration will be issued, renewed, or reinstated after the board has denied the issuance or renewal of a license or registration pursuant to the Act.

33.2(6) *Effect of filing in district court.* In the event a licensee, registrant, or applicant files a timely district court action following service of a board notice, the board shall continue with the intended action described in the denial notice upon the receipt of a court order lifting the stay, dismissing the action, or otherwise directing the board to proceed. For purposes of determining the effective date of the denial of the issuance or renewal of a license or registration, the board shall count the number of days before the action was filed and the number of days after the action was disposed of by the court.

33.2(7) *Final notification.* The board shall notify the licensee, registrant, or applicant in writing through regular first-class mail, or such other means as the board determines appropriate in the

circumstances, within ten days of the effective date of the denial of the issuance or renewal of a license or registration, and shall similarly notify the licensee, registrant, or applicant if the license or registration is issued or renewed following the board's receipt of a withdrawal certificate.

650—33.3(252J,598) Suspension or revocation of a license or registration. The board shall suspend or revoke a license or registration upon the receipt of a certificate from the child support unit according to the procedures set forth in the Act. This rule shall apply in addition to the procedures set forth in the Act.

33.3(1) *Service of revocation or suspension notice.* Revocation or suspension notice shall be served upon the licensee or registrant by certified mail, return receipt requested; by personal service; or through authorized counsel.

33.3(2) *Effective date of revocation or suspension.* The effective date of the suspension or revocation of a license or registration, as specified in the revocation or suspension notice, shall be 60 days following service of the revocation or suspension notice upon the licensee or registrant.

33.3(3) *Preparation and service of revocation or suspension notice.* The executive director of the board is authorized to prepare and serve the revocation or suspension notice upon the licensee or registrant and is directed to notify the licensee or registrant that the license or registration will be suspended unless the license or registration is already suspended on other grounds. In the event that the license or registration is on suspension, the executive director shall notify the licensee or registrant of the board's intention to revoke the license or registration.

33.3(4) *Licensee or registrant responsible to inform board.* The licensee or registrant shall keep the board informed of all court actions, and all child support unit action taken under or in connection with the Act, and shall provide the board copies, within seven days of filing or issuance, of all applications filed with the district court pursuant to the Act, all court orders entered in such actions, and any withdrawal certificates issued by the child support unit.

33.3(5) *Reinstatement following license or registration suspension or revocation.* A licensee or registrant shall pay all board fees required for license or registration renewal or reinstatement before a license or registration will be reinstated after the board has suspended a license or registration pursuant to the Act.

33.3(6) *Effect of filing in district court.* In the event a licensee or registrant files a timely district court action pursuant to the Act and following service of a revocation or suspension notice, the board shall continue with the intended action described in the revocation or suspension notice upon the receipt of a court order lifting the stay, dismissing the action, or otherwise directing the board to proceed. For purposes of determining the effective date of the suspension or revocation, the board shall count the number of days before the action was filed and the number of days after the action was disposed of by the court.

33.3(7) *Final notification.* The board shall notify the licensee or registrant in writing through regular first-class mail, or such other means as the board determines appropriate in the circumstances, within ten days of the effective date of the suspension or revocation of a license or registration, and shall similarly notify the licensee or registrant if the license or registration is reinstated following the board's receipt of a withdrawal certificate.

These rules are intended to implement Iowa Code sections 252J.1 to 252J.9 and chapter 598.

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CHAPTER 34
STUDENT LOAN DEFAULT/NONCOMPLIANCE WITH AGREEMENT FOR PAYMENT OF OBLIGATION

Rescinded **ARC 4747C**, IAB 11/6/19, effective 12/11/19

CHAPTER 35
IOWA PRACTITIONER REVIEW COMMITTEE

650—35.1(153,272C) Iowa practitioner review committee. Pursuant to the authority of Iowa Code section 272C.3(1)*"k,"* the board establishes the Iowa practitioner review committee.

35.1(1) *Definitions.*

"Impairment" means an inability, or significant potential for inability, to practice dentistry, dental hygiene, or dental assisting with reasonable safety and skill as a result of alcohol or drug abuse, dependency, or addiction, or any mental or physical disorder or disability. For the purposes of this program, "impairment" does not include sexual dysfunction, sexual addiction, sexual compulsivity, paraphilia, or other sexual disorder.

"Initial agreement" means the written document establishing the initial terms for participation in the program.

"Iowa practitioner program contract" or *"contract"* means the written document executed by a practitioner and the IPRC that establishes the terms for participation in the program.

"IPP" or *"program"* means the Iowa practitioner program.

"IPRC" or *"committee"* means the Iowa practitioner review committee.

"Practitioner" means a licensed dentist or dental hygienist or a registered dental assistant or a person applying for a license or registration.

"Self-report" means the practitioner providing written or oral notification to the IPRC that the practitioner has been, is or may be diagnosed as having an impairment prior to the board's receiving a complaint or report alleging an impairment prior to the date of self-report. Information related to an impairment or a potential impairment that is provided on a license or registration application or renewal form may be considered a self-report upon the request of the practitioner, authorization from the license committee, and agreement by the IPRC.

35.1(2) *Purpose.* The IPRC evaluates, assists, and monitors the recovery, rehabilitation, or maintenance of dentists, hygienists, or assistants who self-report impairments. As necessary, the committee notifies the board in the event of noncompliance with contract provisions. The IPRC is both an advocate for the health of a practitioner and a means to protect the health and safety of the public. Reports on the activities of the IPRC shall be made to the board on a quarterly basis.

35.1(3) *Composition of the committee.* The chairperson of the board shall appoint the members of the IPRC. Committee members, except the executive director, shall be appointed for three-year terms which begin on May 1 and terminate on April 30. The committee shall elect a chairperson and vice chairperson annually at the last meeting closest to April 30. The chairperson and vice chairperson will serve one-year terms beginning on May 1. The membership of the IPRC may include, but is not limited to:

a. Executive director of the board or the director's designee from the board's staff;

b. One practitioner who has remained free of addiction for a period of no less than two years following successful completion of a board-approved recovery program, a board-ordered probation for drug or alcohol dependency, addiction, or abuse, or an IPRC contract;

c. One physician/counselor with expertise in substance abuse/addiction treatment programs;

d. One psychiatrist or one psychologist; and

e. One public member.

35.1(4) *Eligibility.* To be eligible for participation in the IPP, a practitioner must self-report an impairment or suspected impairment directly to the office of the board or be referred by the board pursuant to rule 650—35.2(272C). A practitioner is deemed ineligible to participate in the program if the license committee or IPRC finds sufficient evidence of any of the following:

a. The practitioner is engaged in the unlawful diversion or distribution of controlled substances or illegal substances to a third person or for personal profit or gain;

b. At the time of the self-report, the practitioner is already under board order for an impairment or any other violation of the laws and rules governing the practice of the profession;

c. The practitioner has caused harm or injury to a patient;

d. There is currently a board investigation of the practitioner that concerns serious matters related to the ability to practice with reasonable safety and skill or in accordance with the accepted standards of care;

e. The practitioner has been subject to a civil administrative or criminal sanction, or ordered to make reparations or remuneration by a government or regulatory authority of the United States, this or any other state or territory or a foreign nation for actions that the committee determines to be serious infractions of the laws, administrative rules, or professional ethics related to the practice of dentistry, dental hygiene, or dental assisting;

f. The practitioner provided inaccurate, misleading, or fraudulent information or failed to fully cooperate with the board or committee; or

g. There is currently a complaint before the board related to an impairment.

35.1(5) *Type of program.* The IPP is an individualized recovery, rehabilitation, or maintenance program designed to meet the specific needs of the impaired practitioner. The committee, in consultation with an IPRC-approved evaluator, shall determine the type of recovery, rehabilitation, or maintenance program required to treat the practitioner's impairment. The committee shall prepare a contract, to be signed by the practitioner, that shall provide a detailed description of the goals of the program, the requirements for successful participation, and the practitioner's obligations therein.

35.1(6) *Terms of participation.* A practitioner shall agree to comply with the terms for participation in the IPP established in the initial agreement and contract. Terms of participation specified in the contract shall include, but are not limited to:

a. Duration. The length of time a practitioner shall participate in the program shall be determined by the committee. Length of participation in the program will vary depending upon the recommendations provided by an approved evaluator and the determination of the IPRC following review of all relevant information.

b. Noncompliance. A practitioner participating in the program is responsible for notifying the committee of any instance of noncompliance including, but not limited to, a relapse. Notification of noncompliance made to the IPRC by the practitioner, any person responsible for providing or monitoring treatment, or another party shall result in full review by the board for the filing of formal charges or other action the board deems appropriate.

c. Practice restrictions. The IPRC may impose restrictions on the license to practice dentistry or dental hygiene or registration to practice dental assisting as a term of the initial agreement or contract until such time as it receives a report from an approved evaluator and the IPRC determines, based on all relevant information, that the practitioner is capable of practicing with reasonable safety and skill. As a condition of participating in the program, a practitioner is required to agree to restrict practice in accordance with the terms specified in the initial agreement or contract. In the event that the practitioner refuses to agree to or comply with the restrictions established in the initial agreement or contract, the committee shall refer the practitioner to the board for appropriate action.

d. Monitoring costs. A provision for payment of the actual costs or a $100 quarterly fee to cover the board's expenses associated with monitoring a practitioner's compliance with the terms of the IPRC initial agreement or contract may be included in the initial agreement and contract. Actual costs include mileage, meals, travel expenses, hourly investigative time, and all incidental expenses associated with monitoring compliance. Monitoring costs shall be considered repayment receipts as defined in Iowa Code section 8.2.

35.1(7) *Limitations.* The IPRC establishes the terms and monitors a participant's compliance with the program specified in the initial agreement and contract. The IPRC is not responsible for participants who fail to comply with the terms of or successfully complete the IPP. Participation in the program under the auspices of the IPRC shall not relieve the board of any duties and shall not divest the board of any authority or jurisdiction otherwise provided. Any violation of the statutes or rules governing the practice of dentistry, dental hygiene, or dental assisting by a participant shall be referred to the board for appropriate action.

35.1(8) *Confidentiality.* Information in the possession of the board or the committee shall be subject to the confidentiality requirements of Iowa Code section 272C.6. Accordingly, information in

the possession of the board or the committee about practitioners in the program shall not be disclosed to the public. Participation in the IPP under the auspices of the IPRC is not a matter of public record. Information about participants may only be shared in the following circumstances:

a. Upon authorization or prior to successful completion of a contract, the IPRC may communicate information about an IPP participant to dental regulatory authorities or the impaired practitioner program of any jurisdiction of the United States in which the participant is currently licensed to practice dentistry, dental hygiene, or dental assisting, or in which the practitioner is seeking licensure.

b. The IPRC may communicate information about an IPP participant to any person assisting in the participant's treatment, recovery, rehabilitation, monitoring, or maintenance.

c. The IPRC may communicate information about an IPP participant to the board in the event that a participant does not comply with the terms of the initial agreement or contract. The IPRC may provide the board with a participant's IPRC file in the event that the participant does not comply with the terms of the initial agreement or contract and the IPRC refers the case to the board for appropriate action.

d. The IPRC shall report to the board any knowledge of violations of administrative rules or statutes unrelated to the impairment.

e. If the board initiates disciplinary action against a practitioner for noncompliance with the terms of the contract, the board may include information about the practitioner's participation in the IPP in the statement of charges, settlement agreement and final order, or order following hearing.

[**ARC 0617C**, IAB 3/6/13, effective 4/10/13]

650—35.2(272C) Board referrals to the Iowa practitioner review committee.

35.2(1) *Eligibility for board referral to IPRC.* The board may refer a practitioner who is the subject of a board order to the IPRC for monitoring in the following circumstances:

a. The practitioner has an impairment as defined in rule 650—35.1(272C).

b. The board determines that the practitioner is an appropriate candidate for participation in the IPRC.

c. The IPRC determines that the practitioner is an appropriate candidate for participation in the IPRC.

35.2(2) *Referral process.*

a. Determination of whether a practitioner is appropriate for referral to the IPRC is in the sole discretion of the board. Upon the board's approval, a referral shall be made to the IPRC and the committee shall be provided with relevant information about the practitioner.

b. The IPRC shall make a determination whether the practitioner is an appropriate candidate for participation in the program. Upon this determination, the IPRC shall offer the referred practitioner a contract that specifies terms of participation in the program. See 650—35.1(272C).

c. If the IPRC finds that the practitioner is not an appropriate candidate for participation in the IPP or if the practitioner fails to sign the contract in the time period specified by the IPRC, the IPRC shall notify the board promptly.

d. When the practitioner signs the contract, the IPRC shall notify the board that the referral has been finalized. The practitioner's failure to sign a contract within the time period specified by the IPRC may be grounds for disciplinary action.

e. Referral of a practitioner by the board to the IPP shall not relieve the board of any duties of the board and shall not divest the board of any authority or jurisdiction otherwise provided. Upon referral, the practitioner shall be subject to the provisions of 650—Chapter 35. Specifically, the practitioner shall be subject to board review and potential formal disciplinary action for noncompliance with the provisions of the IPP contract.

These rules are intended to implement Iowa Code section 272C.3(1)*"k."*

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CHAPTER 36
NONPAYMENT OF STATE DEBT

650—36.1(272D) Definitions. For the purpose of this chapter, the following definitions shall apply.

"Act" means Iowa Code chapter 272D.

"Applicant" means an individual who is seeking the issuance of a license.

"Board" means the Iowa dental board.

"Centralized collection unit" means the centralized collection unit of the Iowa department of revenue.

"Certificate of noncompliance" means a document provided by the centralized collection unit of the department of revenue certifying that the named applicant, licensee, permit holder, or registrant has an outstanding liability placed with the unit and has not entered into an approved payment plan to pay the liability.

"Denial notice" means a board notification denying an application for the issuance or renewal of a license, permit, or registration as required by the Act.

"Revocation or suspension notice" means a board notification suspending a license, registration, or permit for an indefinite or specified period of time or a notification revoking a license, permit, or registration as required by the Act.

"Withdrawal certificate" means a document provided by the centralized collection unit certifying that the certificate of noncompliance is withdrawn and that the board may proceed with issuance, reinstatement, or renewal of a license, permit, or registration.

[**ARC 8329B**, IAB 12/2/09, effective 1/6/10]

650—36.2(272D) Issuance or renewal of a license—denial. The board shall deny the issuance or renewal of a license, permit, or registration upon the receipt of a certificate of noncompliance from the centralized collection unit. This rule shall apply in addition to the procedures set forth in the Act.

36.2(1) *Service of denial notice.* Notice shall be served upon the applicant, licensee, permit holder, or registrant by certified mail, return receipt requested; by personal service; or through authorized counsel.

36.2(2) *Effective date of denial.* The effective date of the denial of the issuance or renewal of a license, permit, or registration, as specified in the denial notice, shall be 60 days following service of the denial notice upon the applicant, licensee, permit holder, or registrant.

36.2(3) *Preparation and service of denial notice.* The executive director of the board is authorized to prepare and serve the denial notice upon the applicant, licensee, permit holder, or registrant.

36.2(4) *Licensees, permit holders, registrants, and applicants responsible to inform board.* Licensees, permit holders, registrants, and applicants shall keep the board informed of all court actions and all centralized collection unit actions taken under or in connection with the Act. Licensees, permit holders, registrants, and applicants shall also provide the board copies, within seven days of filing or issuance, of all applications filed with the district court pursuant to the Act, all court orders entered in such actions, and any withdrawals of certificates issued by the centralized collection unit.

36.2(5) *Reinstatement following denial.* All board fees required for application, renewal, or reinstatement must be paid by applicants, licensees, permit holders, or registrants before a license, permit, or registration will be issued, renewed, or reinstated after the board has denied the issuance or renewal of a license, permit, or registration pursuant to the Act.

36.2(6) *Effect of filing in district court.* In the event an applicant, licensee, permit holder, or registrant files a timely district court action following service of a board denial notice, the board shall continue with the intended action described in the denial notice upon the receipt of a court order lifting the stay, dismissing the action, or otherwise directing the board to proceed. For purposes of determining the effective date of the denial of the issuance or renewal of a license, permit, or registration, the board shall count the number of days before the action was filed and the number of days after the action was disposed of by the court.

36.2(7) *Final notification.* The board shall notify the applicant, licensee, permit holder, or registrant in writing through regular first-class mail, or such other means as the board determines appropriate in the

circumstances, within ten days of the effective date of the denial of the issuance or renewal of a license, permit, or registration and shall similarly notify the applicant, licensee, permit holder, or registrant if the license, permit, or registration is issued or renewed following the board's receipt of a withdrawal certificate.
[**ARC 8329B**, IAB 12/2/09, effective 1/6/10]

650—36.3(272D) Suspension or revocation of a license. The board shall suspend or revoke a license, permit, or registration upon the receipt of a certificate of noncompliance from the centralized collection unit according to the procedures set forth in the Act. This rule shall apply in addition to the procedures set forth in the Act.

36.3(1) *Service of revocation or suspension notice.* A revocation or suspension notice shall be served upon the licensee, permit holder, or registrant by certified mail, return receipt requested; by personal service; or through authorized counsel.

36.3(2) *Effective date of revocation or suspension.* The effective date of the suspension or revocation of a license, permit, or registration, as specified in the revocation or suspension notice, shall be 60 days following service of the notice upon the licensee, permit holder, or registrant.

36.3(3) *Preparation and service of revocation or suspension notice.* The executive director of the board is authorized to prepare and serve the revocation or suspension notice upon the licensee, permit holder, or registrant and is directed to notify the licensee, permit holder, or registrant that the license, permit, or registration will be suspended, unless the license, permit, or registration is already suspended on other grounds. In the event that the license, permit, or registration is on suspension, the executive director shall notify the licensee, permit holder, or registrant of the board's intention to revoke the license, permit, or registration.

36.3(4) *Responsibility to inform board.* The licensee, permit holder, or registrant shall keep the board informed of all court actions and all centralized collection unit actions taken under or in connection with the Act. Licensees, permit holders, or registrants shall also provide the board copies, within seven days of filing or issuance, of all applications filed with the district court pursuant to the Act, all court orders entered in such actions, and any withdrawal certificates issued by the centralized collection unit.

36.3(5) *Reinstatement following suspension or revocation.* A licensee, permit holder, or registrant shall pay all board fees required for renewal or reinstatement before a license, permit, or registration will be reinstated after the board has suspended or revoked a license, permit, or registration pursuant to the Act.

36.3(6) *Effect of filing in district court.* In the event a licensee, permit holder, or registrant files a timely district court action pursuant to the Act, and following service of a revocation or suspension notice, the board shall continue with the intended action described in the revocation or suspension notice upon the receipt of a court order lifting the stay, dismissing the action, or otherwise directing the board to proceed. For purposes of determining the effective date of the suspension or revocation, the board shall count the number of days before the action was filed and the number of days after the action was disposed of by the court.

36.3(7) *Final notification.* The board shall notify the licensee, permit holder, or registrant in writing through regular first-class mail, or by such other means as the board determines appropriate in the circumstances, within ten days of the effective date of the suspension or revocation, and shall similarly notify the licensee, permit holder, or registrant if the license, permit, or registration is reinstated following the board's receipt of a withdrawal certificate.
[**ARC 8329B**, IAB 12/2/09, effective 1/6/10]

650—36.4(272D) Sharing of information. Notwithstanding any statutory confidentiality provision, the board may share information with the centralized collection unit of the department of revenue through automated means for the sole purpose of identifying applicants, licensees, permit holders, or registrants subject to enforcement under Iowa Code chapter 272D.
[**ARC 8329B**, IAB 12/2/09, effective 1/6/10]

These rules are intended to implement Iowa Code chapter 272D.

[Filed ARC 8329B (Notice ARC 8042B, IAB 8/12/09), IAB 12/2/09, effective 1/6/10]

CHAPTERS 37 to 49
Reserved

CHAPTER 50
USE OF CRIMINAL CONVICTIONS IN ELIGIBILITY DETERMINATIONS AND INITIAL LICENSING DECISIONS

650—50.1(272C) Definitions.

"Complete criminal record" includes the complaint and judgment of conviction for each offense of which the applicant has been convicted, regardless of whether the offense is classified as a felony or a misdemeanor, and regardless of the jurisdiction in which the offense occurred.

"Conviction" means a finding, plea, or verdict of guilt made or returned in a criminal proceeding, even if the adjudication of guilt is deferred, withheld, or not entered. "Conviction" includes Alford pleas and pleas of nolo contendere.

"Disqualifying offense" means a conviction directly related to the duties and responsibilities of the profession. A conviction is directly related to the duties and responsibilities of the profession if either (1) the actions taken in furtherance of an offense are actions customarily performed within the scope of practice of a licensed profession, or (2) the circumstances under which an offense was committed are circumstances customary to a licensed profession.

"License" means any license, registration, or permit issued by the board.

[**ARC 5747C**, IAB 7/14/21, effective 8/18/21]

650—50.2(272C) License application. Unless an applicant for licensure petitions the board for an eligibility determination pursuant to rule 650—50.3(272C), the applicant's convictions will be reviewed when the board receives a completed license application.

50.2(1) An applicant must disclose all convictions on a license application. Failure to disclose all convictions is grounds for license denial or disciplinary action following license issuance.

50.2(2) An applicant with one or more convictions shall submit the complete criminal record for each conviction and a personal statement regarding whether each conviction directly relates to the practice of the profession in order for the license application to be considered complete.

50.2(3) An applicant must submit as part of the license application all evidence of rehabilitation that the applicant wishes to be considered by the board.

50.2(4) The board may deny a license if the applicant has a disqualifying offense unless the applicant demonstrates by clear and convincing evidence that the applicant is rehabilitated pursuant to Iowa Code section 272C.15.

50.2(5) An applicant with one or more disqualifying offenses who has been found rehabilitated must still satisfy all other requirements for licensure.

50.2(6) Any application fees paid will not be refunded if the license is denied.

[**ARC 5747C**, IAB 7/14/21, effective 8/18/21]

650—50.3(272C) Eligibility determination.

50.3(1) An individual who has not yet submitted a completed license application may petition the board for a determination of whether one or more of the individual's convictions are disqualifying offenses that would render the individual ineligible for licensure. An individual with a conviction is not required to petition the board for an eligibility determination prior to applying for licensure.

50.3(2) To petition the board for an eligibility determination of whether one or more of the petitioner's convictions are disqualifying offenses, a petitioner shall submit all of the following:

a. A completed petition for eligibility determination form;

b. The complete criminal record for each of the petitioner's convictions;

c. A personal statement regarding whether each conviction directly relates to the duties and responsibilities of the profession and why the board should find the petitioner rehabilitated;

d. All evidence of rehabilitation that the petitioner wishes to be considered by the board; and

e. Payment of a nonrefundable fee of $25.

[**ARC 5747C**, IAB 7/14/21, effective 8/18/21]

650—50.4(272C) Appeal. A petitioner deemed ineligible or an applicant denied a license due to a disqualifying offense may appeal the decision in the manner and timeframe set forth in the board's written decision. A timely appeal will initiate a nondisciplinary contested case proceeding. The board's rules governing contested case proceedings will apply unless otherwise specified in this rule. If the petitioner or applicant fails to timely appeal, the board's written decision will become a final order.

50.4(1) An administrative law judge will serve as the presiding officer of the nondisciplinary contested case proceeding, unless the board elects to serve as the presiding officer. When an administrative law judge serves as the presiding officer, the decision rendered shall be a proposed decision.

50.4(2) The contested case hearing shall be closed to the public, and the board's review of a proposed decision shall occur in closed session.

50.4(3) The office of the attorney general shall represent the board's initial ineligibility determination or license denial and shall have the burden of proof to establish that the petitioner's or applicant's convictions include at least one disqualifying offense. Upon satisfaction of this burden by a preponderance of the evidence by the office of the attorney general, the burden of proof shall shift to the petitioner or applicant to establish rehabilitation by clear and convincing evidence.

50.4(4) A petitioner or applicant must appeal an ineligibility determination or license denial in order to exhaust administrative remedies. A petitioner or applicant may only seek judicial review of an ineligibility determination or license denial after the issuance of a final order following a contested case proceeding. Judicial review of the final order following a contested case proceeding shall be in accordance with Iowa Code chapter 17A.

[**ARC 5747C**, IAB 7/14/21, effective 8/18/21]

650—50.5(272C) Future petitions or applications. If a final order determines a petitioner is ineligible, the petitioner may not submit a subsequent petition for eligibility determination or a license application prior to the date specified in the final order. If a final order denies a license application, the applicant may not submit a subsequent license application or a petition for eligibility determination prior to the date specified in the final order.

[**ARC 5747C**, IAB 7/14/21, effective 8/18/21]

These rules are intended to implement Iowa Code sections 272C.1(8) and 272C.15.

[Filed ARC 5747C (Notice ARC 5371C, IAB 12/30/20), IAB 7/14/21, effective 8/18/21]

CHAPTER 51
CONTESTED CASES

[Ch 6 renumbered as Ch 51, IAC 9/20/78]
[Prior to 5/18/88, Dental Examiners, Board of[320]]

650—51.1(17A) Scope and applicability. This chapter applies to contested case proceedings conducted by the board of dental examiners.

650—51.2(17A) Definitions. Except where otherwise specifically defined by law:

"Contested case" means a proceeding defined by Iowa Code section 17A.2(5) and includes any matter defined as a no factual dispute contested case under 1998 Iowa Acts, chapter 1202, section 14.

"Issuance" means the date of mailing of a decision or order or date of delivery if service is by other means unless another date is specified in the order.

"Party" means the state or the respondent.

"Presiding officer" means the board of dental examiners or a panel of the board. In a disciplinary contested case proceeding, the board may request that an administrative law judge make initial rulings on prehearing matters, and assist and advise the board in presiding at the disciplinary contested case hearing.

"Proposed decision" means the hearing panel's recommended findings of fact, conclusions of law, decision, and order in a contested case in which the full board did not preside.

650—51.3(17A) Probable cause. In the event the board finds there is probable cause for taking disciplinary action against a licensee following investigation of a complaint, the board shall order a contested case hearing be commenced by the filing of a statement of charges and notice of hearing.

650—51.4(17A) Legal review. Every statement of charges and notice of hearing prepared by the board shall be reviewed by the office of the attorney general before they are filed.

650—51.5(17A) Time requirements.

51.5(1) Time shall be computed as provided in Iowa Code subsection 4.1(34).

51.5(2) For good cause, the presiding officer may extend or shorten the time to take any action, except as precluded by statute or by rule. Except for good cause stated in the record, before extending or shortening the time to take any action, the presiding officer shall afford all parties an opportunity to be heard or to file written arguments.

650—51.6(17A) Statement of charges and notice of hearing.

51.6(1) *Delivery.* Delivery of the statement of charges and notice of hearing constitutes the commencement of the contested case proceeding. Delivery may be executed by:

a. Personal service as provided in the Iowa Rules of Civil Procedure; or

b. Restricted certified mail, return receipt requested; or

c. Publication, as provided in the Iowa Rules of Civil Procedure.

51.6(2) *Contents.* The statement of charges and notice of hearing shall contain the following information:

a. A statement of the time, place, and nature of the hearing;

b. A statement of the legal authority and jurisdiction under which the hearing is to be held;

c. A reference to the particular sections of the statutes and rules involved;

d. A short and plain statement of the matters asserted. This statement shall contain sufficient detail to give the respondent fair notice of the allegations so the respondent may adequately respond to the charges, and to give the public notice of the matters at issue;

e. Identification of all parties including the name, address and telephone number of the person who will act as advocate for the board or the state and of parties' counsel where known;

f. Reference to the procedural rules governing conduct of the contested case proceeding;

g. Reference to the procedural rules governing informal settlement;

h. Identification of the board as the presiding officer; and

i. Notification of the time period in which a party may request pursuant to 1998 Iowa Acts, chapter 1202, section 15(1), and rule 51.9(17A) that the presiding officer be an administrative law judge.

650—51.7(17A) Legal representation. Following the filing of the statement of charges and notice of hearing, the office of the attorney general shall be responsible for the legal representation of the public interest in all proceedings before the board.

650—51.8(17A) Presiding officer in a disciplinary contested case. The presiding officer in a disciplinary contested case shall be the board or a panel of the board. However, the board may request that an administrative law judge assist the board with initial rulings on prehearing matters. Decisions of the administrative law judge serving in this capacity are subject to the interlocutory appeal provisions of rule 650—51.25(17A). In addition, an administrative law judge may assist and advise the board in presiding at the contested case hearing.

650—51.9(17A) Presiding officer in a nondisciplinary contested case.

51.9(1) Any party in a nondisciplinary contested case who wishes to request that the presiding officer assigned to render a proposed decision be an administrative law judge employed by the department of inspections and appeals must file a written request within 20 days after service of a notice of hearing which identifies or describes the presiding officer as the board.

51.9(2) The board may deny the request only upon a finding that one or more of the following apply:

a. There is compelling need to expedite issuance of a final decision in order to protect the public health, safety, or welfare.

b. An administrative law judge with the qualifications identified in subrule 51.9(4) is unavailable to hear the case within a reasonable time.

c. The case involves significant policy issues of first impression that are inextricably intertwined with the factual issues presented.

d. The demeanor of the witnesses is likely to be dispositive in resolving the disputed factual issues.

e. Funds are unavailable to pay the costs of an administrative law judge and an interagency appeal.

f. The request was not timely filed.

g. The request is not consistent with a specified statute.

51.9(3) The board shall issue a written ruling specifying the grounds for its decision within 20 days after a request for an administrative law judge is filed. If the ruling is contingent upon the availability of an administrative law judge with the qualifications identified in subrule 51.9(4), the parties shall be notified at least 10 days prior to hearing if a qualified administrative law judge will not be available.

51.9(4) An administrative law judge assigned to act as presiding officer in a nondisciplinary contested case shall have a J.D. degree unless waived by the board.

51.9(5) Except as provided otherwise by another provision of law, all rulings by an administrative law judge acting as presiding officer in a nondisciplinary contested case are subject to appeal to the board. A party must seek any available intra-agency appeal in order to exhaust adequate administrative remedies. Such appeals must be filed within 10 days of the date of the issuance of the challenged ruling, but no later than the time for compliance with the order or the date of hearing, whichever is first.

650—51.10(17A) Disqualification.

51.10(1) A presiding officer or other person shall withdraw from participation in the making of any proposed or final decision in a contested case if that person:

a. Has a personal bias or prejudice concerning a party or a representative of a party;

b. Has personally investigated, prosecuted or advocated, in connection with that case, the specific controversy underlying that case, another pending factually related contested case, or a pending factually related controversy that may culminate in a contested case involving the same parties;

c. Is subject to the authority, direction or discretion of any person who has personally investigated, prosecuted or advocated in connection with that contested case, the specific controversy underlying that contested case, or a pending factually related contested case or controversy involving the same parties;

d. Has acted as counsel to any person who is a private party to that proceeding within the past two years;

e. Has a personal financial interest in the outcome of the case or any other significant personal interest that could be substantially affected by the outcome of the case;

f. Has a spouse or relative within the third degree of relationship that (1) is a party to the case, or an officer, director or trustee of a party; (2) is a lawyer in the case; (3) is known to have an interest that could be substantially affected by the outcome of the case; or (4) is likely to be a material witness in the case; or

g. Has any other legally sufficient cause to withdraw from participation in the decision making in that case.

51.10(2) The term "personally investigated" means taking affirmative steps to interview witnesses directly or to obtain documents or other information directly. The term "personally investigated" does not include:

a. General direction and supervision of assigned investigators;

b. Unsolicited receipt of information which is relayed to assigned investigators;

c. Review of another person's investigative work product in the course of determining whether there is probable cause to initiate a proceeding; or

d. Exposure to factual information while performing other board functions, including fact gathering for purposes other than investigation of the matter which culminates in a contested case.

Factual information relevant to the merits of a contested case received by a person who later serves as presiding officer in that case shall be disclosed if required by Iowa Code section 17A.17 as amended by 1998 Iowa Acts, chapter 1202, section 19, and subrules 51.10(3) and 51.23(9).

51.10(3) In a situation where a presiding officer or other person knows of information which might reasonably be deemed to be a basis for disqualification and decides voluntary withdrawal is unnecessary, that person shall submit the relevant information for the record by affidavit and shall provide for the record a statement of the reasons for the determination that withdrawal is unnecessary.

51.10(4) If a party asserts disqualification on any appropriate ground, including those listed in subrule 51.10(1), the party shall file a motion supported by an affidavit pursuant to 1998 Iowa Acts, chapter 1202, section 19(7). The motion must be filed as soon as practicable after the reason alleged in the motion becomes known to the party. The board shall determine the matter as part of the record in this case.

650—51.11(17A) Consolidation—severance.

51.11(1) *Consolidation.* The presiding officer may consolidate any or all matters at issue in two or more contested case proceedings where:

a. The matters at issue involve common parties or common questions of fact or law;

b. Consolidation would expedite and simplify consideration of the issues involved; and

c. Consolidation would not adversely affect the rights of any of the parties to those proceedings.

51.11(2) *Severance.* The presiding officer may, for good cause shown, order any contested case proceedings or portions thereof severed.

650—51.12(17A) Pleadings.

51.12(1) *Pleadings.* Pleadings may be required by rule, by the notice of hearing, or by order of the presiding officer.

51.12(2) *Answer.* An answer shall be filed within 20 days of service of the statement of charges and notice of hearing.

a. An answer shall show on whose behalf it is filed and specifically admit, deny, or otherwise answer all material allegations of the statement of charges. It shall state any facts deemed to show an affirmative defense and contain as many additional defenses as the pleader may claim.

b. An answer shall state the name, address and telephone number of the person filing the answer, the person or entity on whose behalf it is filed, and the attorney representing that person, if any.

c. Any allegation in the statement of charges not denied in the answer is considered admitted.

51.12(3) *Amendment.* Amendments to the statement of charges and to an answer may be allowed with the consent of the parties or in the discretion of the presiding officer who may impose terms or grant a continuance.

650—51.13(17A) Service and filing.

51.13(1) *Service—when required.* Except where otherwise provided by law, every document filed in a contested case proceeding shall be served upon each of the parties of record to the proceeding, including the assistant attorney general designated as prosecutor for the state or the board, simultaneously with their filing. Except for the original notice of hearing and an application for rehearing as provided in Iowa Code section 17A.16(2), the party filing a document is responsible for service on all parties.

51.13(2) *Service—how made.* Service upon a party represented by an attorney shall be made upon the attorney unless otherwise ordered. Service is made by delivery or by mailing a copy to the person's last-known address. Service by mail is complete upon mailing, except where otherwise specifically provided by statute, rule, or order.

51.13(3) *Filing—when required.* After the notice of hearing, all documents in a contested case proceeding shall be filed with the board. All documents that are required to be served upon a party shall be filed simultaneously with the board.

51.13(4) *Filing—when made.* Except where otherwise provided by law, a document is deemed filed at the time it is delivered to the Board of Dental Examiners, 400 S.W. 8th Street, Suite D, Des Moines, Iowa 50309-4687, delivered to an established courier service for immediate delivery to that office, or mailed by first-class mail or state interoffice mail to that office, so long as there is proof of mailing.

51.13(5) *Proof of mailing.* Proof of mailing includes either: a legible United States Postal Service postmark on the envelope, a certificate of service, a notarized affidavit, or a certification in substantially the following form:

> I certify under penalty of perjury and pursuant to the laws of Iowa that, on (date of mailing), I mailed copies of (describe document) addressed to the Board of Dental Examiners, 400 S.W. 8th Street, Suite D, Des Moines, Iowa 50309-4687, and to the names and addresses of the parties listed below by depositing the same in (a United States post office mailbox with correct postage properly affixed or state interoffice mail).
>
> (Date) (Signature)

650—51.14(17A) Discovery.

51.14(1) Discovery procedures applicable in civil actions are applicable in contested cases. Unless lengthened or shortened by these rules or by order of the presiding officer, time periods for compliance with discovery shall be as provided in the Iowa Rules of Civil Procedure.

51.14(2) Any motion relating to discovery shall allege that the moving party has previously made a good-faith attempt to resolve the discovery issues involved with the opposing party. Motions in regard to discovery shall be ruled upon by the presiding officer. Opposing parties shall be afforded the opportunity to respond within ten days of the filing of the motion unless the time is shortened as provided in subrule 51.14(1). The presiding officer may rule on the basis of the written motion and any response, or may order argument on the motion.

650—51.15(17A,272C) Issuance of subpoenas in a contested case. Pursuant to Iowa Code sections 17A.13(1) and 272C.6(3), the board has the authority to issue subpoenas to compel the attendance of witnesses at depositions or hearing and to compel the production of evidence deemed necessary in connection with a contested case. A subpoena issued by the board in a contested case may seek evidence whether or not it is privileged or confidential under law.

51.15(1) The executive director or designee may, upon the written request of the licensee or the state, issue a subpoena to compel the attendance of witnesses at depositions or hearing, and to compel the production of books, correspondence, papers, records, and other real evidence deemed necessary in connection with a contested case. A subpoena to produce evidence or to permit inspection may be joined with a subpoena to testify at a deposition or hearing, or may be issued separately. A request for a subpoena of mental health records must confirm that the conditions described in 650—subrule 31.5(1) have been satisfied prior to the issuance of the subpoena.

51.15(2) A request for a subpoena shall include the following information, as applicable, unless the subpoena is requested to compel testimony or documents for rebuttal or impeachment purposes:

a. The name, address and telephone number of the person requesting the subpoena;

b. The name and address of the person to whom the subpoena shall be directed;

c. The date, time, and location at which the person shall be commanded to attend and give testimony;

d. Whether the testimony is requested in connection with a deposition or hearing;

e. A description of the books, papers, records or other real evidence requested;

f. The date, time and location for production, or inspection and copying; and

g. In the case of a subpoena request for mental health records, confirmation that the conditions described in 650—subrule 31.5(1) have been satisfied.

51.15(3) Each subpoena shall contain, as applicable:

a. The caption of the case;

b. The name, address and telephone number of the person who requested the subpoena;

c. The name and address of the person to whom the subpoena is directed;

d. The date, time, and location at which the person is commanded to appear;

e. Whether the testimony is commanded in connection with a deposition or hearing;

f. A description of the books, papers, records or other real evidence the person is commanded to produce;

g. The date, time and location for production, or inspection and copying;

h. The time within which a motion to quash or modify the subpoena must be filed;

i. The signature, address and telephone number of the executive director or designee;

j. The date of issuance;

k. A return of service which shall be attached to the subpoena.

51.15(4) Unless a subpoena is requested to compel testimony or documents for rebuttal or impeachment purposes, the executive director or designee shall mail copies of all subpoenas to the parties to the contested case. The person who requested the subpoena is responsible for serving the subpoena upon the subject of the subpoena.

51.15(5) Any person who is aggrieved or adversely affected by compliance with the subpoena, or any party to the contested case who desires to challenge the subpoena must, within 14 days after service of the subpoena, or before the time specified for compliance if such time is less than 14 days, file with the board a motion to quash or modify the subpoena. The motion shall describe the legal reasons why the subpoena should be quashed or modified, and may be accompanied by legal briefs or factual affidavits.

51.15(6) Upon receipt of a timely motion to quash or modify a subpoena, the board may request an administrative law judge to hold a hearing and issue a decision, or the board may conduct the hearing and issue a decision. Oral argument may be scheduled at the discretion of the board or administrative law judge. The administrative law judge or the board may quash or modify the subpoena, deny the motion, or issue an appropriate protective order.

51.15(7) A person aggrieved by a ruling of an administrative law judge who desires to challenge that ruling must appeal the ruling to the board by serving on the board's executive director, either in person or by certified mail, a notice of appeal within ten days after service of the decision of the administrative law judge.

51.15(8) If the person contesting the subpoena is not the person under investigation, the board's decision is final for purposes of judicial review. If the person contesting the subpoena is the person

under investigation, the board's decision is not final for purposes of judicial review until there is a final decision in the contested case.

650—51.16(17A) Motions.

51.16(1) No technical form for motions is required. However, prehearing motions must be in writing, state the grounds for relief, and state the relief sought.

51.16(2) Any party may file a written response to a motion within ten days after the motion is served, unless the time period is extended or shortened by the presiding officer. The presiding officer may consider a failure to respond within the required time period in ruling on a motion.

51.16(3) The presiding officer may schedule oral argument on any motion.

51.16(4) Motions pertaining to the hearing must be filed and served at least ten days prior to the date of hearing unless there is good cause for permitting later action or the time for such action is lengthened or shortened by rule of the board or an order of the presiding officer.

650—51.17(17A) Prehearing conference.

51.17(1) Any party may request a prehearing conference. Prehearing conferences shall be conducted by the executive director, who may request the assistance of an administrative law judge. A written request for prehearing conference or an order for prehearing conference on the executive director's own motion shall be filed prior to the contested case hearing, but no later than 20 days prior to the hearing date.

51.17(2) The parties at a prehearing conference shall be prepared to discuss the following subjects, and the executive director or administrative law judge may issue appropriate orders concerning:

a. The possibility of settlement.

b. The entry of a scheduling order to include deadlines for completion of discovery.

c. Stipulations of law or fact.

d. Stipulations on the admissibility of exhibits.

e. Submission of expert and other witness lists. Witness lists may be amended subsequent to the prehearing conference within the time limits established by the executive director or administrative law judge at the hearing conference. Any such amendments must be served on all parties. Witnesses not listed on the final witness list may be excluded from testifying unless there was good cause for the failure to include their names.

f. Submission of exhibit lists. Exhibit lists may be amended subsequent to the prehearing conference within the time limits established by the executive director or administrative law judge at the prehearing conference. Exhibits, other than rebuttal exhibits, that are not listed on the final exhibit list may be excluded from admission into evidence unless there was good cause for the failure to include them.

g. Stipulations for waiver of any provision of law.

h. Identification of matters which the parties intend to request be officially noticed.

i. Consideration of any additional matters which will expedite the hearing.

51.17(3) Prehearing conferences may be conducted by telephone unless otherwise ordered.

650—51.18(17A) Continuances. Unless otherwise provided, applications for continuances shall be filed with the board. In the event the application for continuance is not contested, the executive director shall serve as presiding officer and issue the appropriate order. In the event the application for continuance is contested, the matter shall be heard by the board as presiding officer or may be delegated by the board to an administrative law judge.

51.18(1) A written application for a continuance shall:

a. Be made at the earliest possible time and no less than five working days before the hearing except in case of unanticipated emergencies;

b. State the specific reasons for the request; and

c. Be signed by the requesting party or the party's representative.

An oral application for a continuance may be made if the presiding officer waives the requirement for a written motion. However, a party making such an oral application for a continuance must confirm that request by written application within two days after the oral request unless that requirement is waived by the presiding officer. No application for continuance shall be made or granted without notice to all parties except in an emergency where notice is not feasible.

51.18(2) In determining whether to grant a continuance, the presiding officer may consider:

a. Prior continuances;
b. The interests of all parties;
c. The public interest;
d. The likelihood of informal settlement;
e. The existence of an emergency;
f. Any objection;
g. Any applicable time requirements;
h. The existence of a conflict in the schedules of counsel, parties, or witnesses;
i. The timeliness of the request; and
j. Other relevant factors.

The presiding officer may require documentation of any grounds for continuance.

650—51.19(17A) Settlements.

51.19(1) A contested case may be resolved by informal settlement. Settlement negotiations may be initiated at any stage of a contested case by the executive director, prosecuting attorney, the respondent, the board or its designee. Neither the board nor the respondent is required to participate in the informal settlement process. The executive director and chairperson of the board, or the chairperson's designee(s), shall have authority to negotiate on behalf of the board.

51.19(2) The full board shall not be involved in negotiation until a written proposed settlement is submitted to the full board for approval, unless both parties waive this prohibition.

51.19(3) Consent to negotiation by the respondent during informal settlement negotiation constitutes a waiver of notice and opportunity to be heard pursuant to Iowa Code section 17A.17. Thereafter, the prosecuting attorney is authorized to discuss informal settlement with the board chairperson or designee(s).

51.19(4) Negotiations for a proposed settlement shall be completed at least ten days prior to the hearing date set by the order for hearing. However, after consultation with the board chairperson or designee, the executive director shall have the power to grant additional time for continued negotiations in instances where additional time will likely lead to a satisfactory settlement prior to the hearing date.

51.19(5) No proposed settlement shall be presented to the board for approval until it is in final, written form signed by the respondent.

51.19(6) All proposed settlements are subject to approval of a majority of the full board. If the board fails to approve a proposed settlement, it shall be of no force or effect to either party. The proposed settlement shall be binding if approved by the board and signed by both the chairperson or the chairperson's designee and the respondent.

51.19(7) A board member who participates in the negotiation of a proposed settlement is not disqualified from participating in the adjudication of the contested case.

51.19(8) Consent to settlement negotiations by the respondent constitutes a waiver of any objection to the participation in the adjudication of the contested case of any board member who participated in the review of a settlement agreement which was not approved by the board.

51.19(9) A provision for payment of a quarterly fee as stated in 650—Chapter 15 or such other fees as specified by the board may be included in the settlement agreement.

[**ARC 8369B**, IAB 12/16/09, effective 1/20/10; **ARC 0265C**, IAB 8/8/12, effective 9/12/12]

650—51.20(17A) Hearing procedures.

51.20(1) A hearing may be conducted before the board or a panel of not less than three members of the board at least two of whom are licensed by the board.

51.20(2) Hearings by the dental hygiene committee. In the event the licensee who is the subject of the contested case is a dental hygienist, the hearing shall be held before the dental hygiene committee, which shall constitute a panel of the board. The dental hygiene committee may in its discretion recommend to the board that the hearing be held instead before a panel of the board or full board.

51.20(3) When, in the opinion of a majority of the board, it is desirable to obtain specialists within an area of practice when holding disciplinary hearings, the board may appoint a panel of three specialists who are not board members to make findings of fact and to report to the board. Such findings shall not include any recommendation for or against licensee discipline.

51.20(4) The presiding officer shall have the authority to administer oaths, to admit or exclude testimony or other evidence, and to rule on all motions and objections. The presiding officer may request that an administrative law judge perform any of these functions, and may be assisted and advised by an administrative law judge.

51.20(5) All objections shall be timely made and stated on the record.

51.20(6) Parties have the right to participate or to be represented in all hearings or prehearing conferences related to their case. Any party may be represented by an attorney at their own expense.

51.20(7) Subject to terms and conditions prescribed by the presiding officer, parties have the right to introduce evidence on issues of material fact, cross-examine witnesses present at the hearing as necessary for a full and true disclosure of the facts, present evidence in rebuttal, and submit briefs and engage in oral argument.

51.20(8) The presiding officer shall maintain the decorum of the hearing and may refuse to admit or may expel anyone whose conduct is disorderly.

51.20(9) Witnesses may be sequestered during the hearing.

51.20(10) The presiding officer shall have authority to grant immunity from disciplinary action to a witness as provided by Iowa Code section 272C.6(3).

51.20(11) The presiding officer shall conduct the hearing in the following manner:

a. The presiding officer shall give an opening statement briefly describing the nature of the proceedings;

b. The parties shall be given an opportunity to present opening statements;

c. Parties shall present their cases in the sequence determined by the presiding officer;

d. Each witness shall be sworn or affirmed by the presiding officer or the court reporter, and be subject to examination and cross-examination. The presiding officer may limit questioning in a manner consistent with law;

e. When all parties and witnesses have been heard, parties may be given the opportunity to present final arguments.

51.20(12) The board members and administrative law judge have the right to question a witness. Examination of witnesses by board members is subject to properly raised objections.

51.20(13) The hearing shall be open to the public unless the licensee requests that the hearing be closed.

650—51.21(17A) Evidence.

51.21(1) The presiding officer shall rule on admissibility of evidence and may, where appropriate, take official notice of facts in accordance with all applicable requirements of law.

51.21(2) Stipulation of facts is encouraged. The presiding officer may make a decision based on stipulated facts.

51.21(3) Evidence in the proceeding shall be confined to the issues as to which the parties received notice prior to the hearing unless the parties waive their right to such notice or the presiding officer determines that good cause justifies expansion of the issues. If the presiding officer decides to admit evidence on issues outside the scope of the notice over the objection of a party who did not have actual notice of those issues, that party, upon timely request, shall receive a continuance sufficient to amend pleadings and to prepare on the additional issue.

51.21(4) The party seeking admission of an exhibit must provide opposing parties with an opportunity to examine the exhibit prior to the ruling on its admissibility. Copies of documents should normally be provided to opposing parties.

All exhibits admitted into evidence shall be appropriately marked and be made part of the record.

51.21(5) Any party may object to specific evidence or may request limits on the scope of any examination or cross-examination. Such an objection shall be accompanied by a brief statement of the grounds upon which it is based. The objection, the ruling on the objection, and the reasons for the ruling shall be noted in the record. The presiding officer may rule on the objection at the time it is made or may reserve a ruling until the written decision.

51.21(6) Whenever evidence is ruled inadmissible, the party offering that evidence may submit an offer of proof on the record. The party making the offer of proof for excluded oral testimony shall briefly summarize the testimony or, with permission of the presiding officer, present the testimony. If the excluded evidence consists of a document or exhibit, it shall be marked as part of an offer of proof and inserted in the record.

650—51.22(17A) Default.

51.22(1) If a party fails to appear or participate in a contested case proceeding after proper service of notice, the presiding officer may, if no adjournment is granted, enter a default decision or proceed with the hearing and render a decision in the absence of the party.

51.22(2) Where appropriate and not contrary to law, any party may move for default against a party who has failed to appear after proper service.

51.22(3) Default decisions or decisions rendered on the merits after a party has failed to appear or participate in a contested case proceeding become final board action unless, within 15 days after the date of notification or mailing of the decision, a motion to vacate is filed and served on all parties or an appeal of a decision on the merits is timely initiated within the time provided by rule 650—51.26(17A). A motion to vacate must state all facts relied upon by the moving party which establish that good cause existed for that party's failure to appear or participate at the contested case proceeding. Each fact so stated must be substantiated by at least one sworn affidavit of a person with personal knowledge of each such fact, which affidavit(s) must be attached to the motion.

51.22(4) The time for further appeal of a decision for which a timely motion to vacate has been filed is stayed pending a decision on the motion to vacate.

51.22(5) Properly substantiated and timely filed motions to vacate shall be granted only for good cause shown. The burden of proof as to good cause is on the moving party. Adverse parties shall have ten days to respond to a motion to vacate. Adverse parties shall be allowed to conduct discovery as to the issue of good cause and to present evidence on the issue prior to a decision on the motion, if a request to do so is included in that party's response.

51.22(6) "Good cause" for purposes of this rule shall have the same meaning as "good cause" for setting aside a default judgment under Iowa Rule of Civil Procedure 236.

51.22(7) A decision denying a motion to vacate is subject to further appeal within the time limit allowed for further appeal of a decision on the merits in the contested case proceeding. A decision granting a motion to vacate is subject to interlocutory appeal by the adverse party pursuant to rule 650—51.25(17A).

51.22(8) If a motion to vacate is granted and no timely interlocutory appeal has been taken, the presiding officer shall issue another notice of hearing and the contested case shall proceed accordingly.

51.22(9) A default decision may provide either that the default decision is to be stayed pending a timely motion to vacate or that the default decision is to take effective immediately, subject to a request for stay under rule 650—51.28(17A).

650—51.23(17A) Ex parte communication.

51.23(1) Prohibited communications. Unless required for the disposition of ex parte matters specifically authorized by statute, following issuance of the notice of hearing there shall be no communication, directly or indirectly, between the presiding officer and any party or representative

of any party or any other person with a direct or indirect interest in such case in connection with any issue of fact or law in the case except upon notice and opportunity for all parties to participate. Nothing in this provision is intended to preclude board members from communicating with other board members or members of the board staff, other than those with a personal interest in, or those engaged in personally investigating as defined in subrule 51.10(2), prosecuting, or advocating in, either the case under consideration or a pending factually related case involving the same parties, as long as those persons do not directly or indirectly communicate to the presiding officer any ex parte communications they have received of a type that the presiding officer would be prohibited from receiving or that furnish, augment, diminish, or modify the evidence in the record.

51.23(2) Prohibitions on ex parte communications commence with the issuance of the notice of hearing in a contested case and continue for as long as the case is pending before the board.

51.23(3) Written, oral or other forms of communication are "ex parte" if made without notice and opportunity for all parties to participate.

51.23(4) To avoid prohibited ex parte communications, notice must be given in a manner reasonably calculated to give all parties a fair opportunity to participate. Notice of written communications shall be provided in compliance with rule 650—51.13(17A) and may be supplemented by telephone, facsimile, electronic mail or other means of notification. Where permitted, oral communications may be initiated through conference telephone call including all parties or their representatives.

51.23(5) Persons who jointly act as presiding officer in a pending contested case may communicate with each other without notice or opportunity for parties to participate.

51.23(6) The executive director may be present in deliberations or otherwise advise the presiding officer without notice or opportunity for parties to participate as long as they are not disqualified from participating under rule 650—51.10(17A).

51.23(7) Communications with the presiding officer involving uncontested scheduling or procedural matters do not require notice or opportunity for parties to participate. Parties should notify other parties prior to initiating such contact with the presiding officer when feasible, and shall notify other parties when seeking to continue hearings or other deadlines pursuant to rule 650—51.18(17A).

51.23(8) Disclosure of prohibited communications. A presiding officer who receives a prohibited ex parte communication during the pendency of a contested case must initially determine if the effect of the communication is so prejudicial that the presiding officer should be disqualified.

If the presiding officer determines that disqualification is warranted, a copy of any prohibited written communication, all written responses to the communication, a written summary stating the substance of any prohibited oral or other communication not available in written form for disclosure, all responses made, and the identity of each person from whom the presiding officer received a prohibited ex parte communication shall be submitted for inclusion in the record under seal by protective order.

If the presiding officer determines that disqualification is not warranted, such documents shall be submitted for inclusion in the record and served on all parties. Any party desiring to rebut the prohibited communication must be allowed the opportunity to do so upon written request filed within ten days after notice of the communication.

51.23(9) Promptly after being assigned to serve as presiding officer at any stage in a contested case proceeding, a presiding officer shall disclose to all parties material factual information received through ex parte communication prior to such assignment, unless the factual information has already been or shortly will be disclosed pursuant to Iowa Code section 17A.13(2) or through discovery. Factual information contained in an investigative report or similar document need not be separately disclosed by the presiding officer as long as such documents have been or will shortly be provided to the parties.

51.23(10) The presiding officer may render a proposed or final decision imposing appropriate sanctions for violations of this rule including default, a decision against the offending party, censure, suspension or revocation of the privilege to practice before the board. Violation of ex parte communication prohibitions by board personnel shall be reported to the board and its executive director for possible sanctions including censure, suspension, dismissal, or other disciplinary action.

650—51.24(17A) Recording costs. Upon request, the board shall provide a copy of the whole or any portion of the record at cost. The cost of preparing a copy of the record or of transcribing the hearing record shall be paid by the requesting party.

650—51.25(17A) Interlocutory appeals. Upon written request of a party or on its own motion, the board may review an interlocutory order of the executive director, administrative law judge, or hearing panel. In determining whether to do so, the board shall consider:

1. The extent to which its granting the interlocutory appeal would expedite final resolution of the case; and
2. The extent to which review of that interlocutory order by the board at the time it reviews the proposed decision of the presiding officer would provide an adequate remedy.

Any request for interlocutory review must be filed within 14 days of issuance of the challenged order, but no later than the time for compliance with the order or the date of hearing, whichever is first.

650—51.26(17A) Proposed and final decision.

51.26(1) When a quorum of the board presides over the reception of the evidence at the hearing, the decision is a final decision.

51.26(2) When a panel of three specialists presides over the hearing, the panel shall issue a proposed decision which shall include proposed findings of fact but shall not include conclusions of law. A proposed decision of a hearing panel of specialists, together with a transcript of the proceedings and exhibits presented, shall be reviewed by the board within 30 days of the date the proposed decision was issued. The parties shall have the opportunity to submit briefs and arguments to the board. The decision of the board is a final decision.

51.26(3) When a panel of three board members or the dental hygiene committee presides over the hearing, the panel shall issue a proposed decision which shall include proposed findings of fact, conclusions of law, and order. A proposed decision, together with a transcript of the proceedings and the exhibits presented, shall be reviewed by the board within 30 days of the date the proposed decision was issued. A proposed decision of a board hearing panel becomes a final decision without further proceedings unless appealed in accordance with the following provisions:

a. The board may review a proposed decision on its own motion by serving a notice of appeal on the parties within 30 days after issuance of the proposed decision.

b. A proposed decision may be appealed to the board by either party by serving on the executive director, either in person or by certified mail, a notice of appeal within 30 days after service of the proposed decision on the appealing party.

c. Following receipt of a notice of appeal, the board shall enter an order establishing a schedule for submission of briefs and oral argument. The parties shall serve their briefs on the board and shall furnish an additional copy to each party by first-class mail.

d. Oral argument shall be heard by the board unless waived by both parties. The time granted each party for oral argument shall be established by the board.

e. The record on appeal shall be the entire record made before the hearing panel or administrative law judge. Costs associated with the appeal shall be paid by the appealing party.

51.26(4) At no time prior to the release of the final decision by the board shall a proposed decision be made public or distributed to any person other than the parties.

51.26(5) Requests to present additional evidence. A party may request the taking of additional evidence only by establishing that:

a. The evidence is material; and

b. The evidence arose after completion of the original hearing; or

c. Good cause exists for failure to present the evidence at the original hearing; and

d. The party has not waived the right to present the additional evidence.

A written request to present additional evidence must be filed with the notice of appeal or, by a nonappealing party, within 14 days of service of the notice of appeal. The board may remand a case to the hearing panel for further hearing or may itself preside at the taking of additional evidence.

650—51.27(17A) Applications for rehearing.

51.27(1) *By whom filed.* Any party to a contested case proceeding may file an application for rehearing from a final order.

51.27(2) *Content of application.* The application for rehearing shall state on whose behalf it is filed, the specific grounds for rehearing, and the relief sought. In addition, the application shall state whether the applicant desires reconsideration of all or part of the board decision on the existing record and whether, on the basis of the grounds enumerated in subrule 51.27(5), the applicant requests an opportunity to submit additional evidence.

51.27(3) *Time of filing.* The application shall be filed with the board within 20 days after issuance of the final decision.

51.27(4) *Notice to other parties.* A copy of the application shall be timely mailed by the applicant to all parties of record not joining therein.

51.27(5) *Additional evidence.* A request that additional evidence be considered on rehearing shall be governed by subrule 51.26(5).

51.27(6) *Disposition.* Any application for a rehearing shall be deemed denied unless the board grants the application within 20 days after its filing.

650—51.28(17A) Stays of board actions.

51.28(1) *When available.* Any party to a contested case proceeding may petition the board for a stay of an order issued in that proceeding or for other temporary remedies, pending review by the board or pending judicial review. The petition shall state the reasons justifying a stay or other temporary remedy.

51.28(2) *When granted.* In determining whether to grant a stay, the board shall consider the factors listed in 1998 Iowa Acts, chapter 1202, section 23(5c). The board shall not grant a stay in any case in which the district court would be expressly prohibited by statute from granting a stay.

650—51.29(17A) No factual dispute contested cases. If the parties agree that no dispute of material fact exists as to a matter that would be a contested case if such a dispute of fact existed, the parties may present all relevant admissible evidence either by stipulation or otherwise as agreed by the parties, without necessity for the production of evidence at an evidentiary hearing. If such agreement is reached, a jointly submitted schedule detailing the method and timetable for submission of the record, briefs and oral argument should be submitted to the presiding officer for approval as soon as practicable.

650—51.30(17A) Emergency adjudicative proceedings.

51.30(1) To the extent necessary to prevent or avoid immediate danger to the public health, safety, or welfare, and consistent with the Constitution and other provisions of law, the board may issue a written order in compliance with 1998 Iowa Acts, chapter 1202, section 21, to suspend a license in whole or in part, order the cessation of any continuing activity, order affirmative action, or take other action within the jurisdiction of the board by emergency adjudicative order. Before issuing an emergency adjudicative order the board shall consider factors including, but not limited to, the following:

a. Whether there has been a sufficient factual investigation to ensure that the board is proceeding on the basis of reliable information;

b. Whether the specific circumstances which pose immediate danger to the public health, safety or welfare have been identified and determined to be continuing;

c. Whether the person required to comply with the emergency adjudicative order may continue to engage in other activities without posing immediate danger to the public health, safety or welfare;

d. Whether imposition of monitoring requirements or other interim safeguards would be sufficient to protect the public health, safety or welfare; and

e. Whether the specific action contemplated by the board is necessary to avoid the immediate danger.

51.30(2) Issuance of order.

a. An emergency adjudicative order shall contain findings of fact, conclusions of law, and policy reasons to justify the determination of an immediate danger in the board's decision to take immediate action. The order is a public record.

b. The written emergency adjudicative order shall be immediately delivered to the person who is required to comply with the order by utilizing one or more of the following procedures:

(1) Personal delivery;

(2) Certified mail, return receipt requested, to the last address on file with the board;

(3) Certified mail to the last address on file with the board; or

(4) Fax. Fax may be used as the sole method of delivery if the person required to comply with the order has filed a written request that board orders be sent by fax and has provided a fax number for that purpose.

c. To the degree practicable, the board shall select the procedure for providing written notice that best ensures prompt, reliable delivery.

51.30(3) Oral notice. Unless the written emergency adjudicative order is provided by personal delivery on the same day that the order issues, the board shall make reasonable immediate efforts to contact by telephone the persons who are required to comply with the order.

51.30(4) Completion of proceedings. After the issuance of an emergency adjudicative order, the board shall proceed as quickly as feasible to complete any proceedings that would be required if the matter did not involve an immediate danger.

Issuance of a written emergency adjudicative order shall include notification of the date on which board proceedings are scheduled for completion. After issuance of an emergency adjudicative order, continuance of further board proceedings to a later date will be granted only in compelling circumstances upon application in writing, unless the person who is required to comply with the order is the party requesting the continuance.

650—51.31(153) Judicial review. Judicial review of the board's decision may be sought in accordance with the terms of Iowa Code chapter 17A as amended by 1998 Iowa Acts, chapter 1202, and Iowa Code section 153.33(4)*"g"* and *"h."*

650—51.32(17A) Notification of decision. All parties to a contested case shall be promptly furnished with a copy of any decision or order either by personal delivery or by certified or first-class mailing. Delivery or first-class mailing of any decision or order to an attorney of record in a contested case hearing shall constitute notification of the respondent. Service by mail is complete upon mailing.

650—51.33(17A) Publicizing disciplinary action.

51.33(1) Final decisions of the board relating to licensee discipline shall be transmitted to the appropriate state and national professional associations and news media, which may include a newspaper(s) of general circulation, and to other news media, person or organization upon request.

51.33(2) The board shall notify other boards of dentistry in states where the respondent is also licensed of disciplinary action taken against the Iowa licensee.

51.33(3) The board shall notify the American Association of Dental Examiners of disciplinary action taken against an Iowa licensee.

51.33(4) The board shall, in accordance with federal law, notify the National Practitioners Data Bank of disciplinary action taken against an Iowa licensee.

650—51.34(153) Reinstatement.

51.34(1) Any person whose license has been revoked or suspended by the board may apply to the board for reinstatement in accordance with the terms of the order of revocation or suspension.

51.34(2) If the order of revocation or suspension did not establish terms upon which reinstatement might occur, or if the license was voluntarily surrendered pursuant to disciplinary action, an initial application for reinstatement may not be made until one year has elapsed from the date of the final order.

51.34(3) All proceedings for reinstatement shall be initiated by the respondent, who shall file with the board an application for the reinstatement of the license. All proceedings upon the petition for reinstatement shall be subject to the same rules of procedure as other disciplinary matters before the board.

51.34(4) An application for reinstatement shall allege facts which, if established, will be sufficient to enable the board to determine that the basis for the revocation or suspension no longer exists and that it will be in the public interest for the license to be reinstated. The burden of proof to establish such facts shall be on the respondent.

51.34(5) An application for reinstatement may include a request for a hearing on the issues raised on the application or any other information furnished to the board. The hearing on an application for reinstatement shall be a contested case proceeding within the meaning of Iowa Code section 17A.2(2).

51.34(6) The order to grant or deny reinstatement shall include findings of fact and conclusions of law. If reinstatement is granted, terms and conditions of licensure may be imposed. Such terms and conditions may include restrictions on the licensee's practice. This order will be published as provided for in rule 650—51.33(153).

51.34(7) A person whose license to practice dentistry or dental hygiene was revoked or suspended must successfully complete the examination required at the time of reinstatement for dental or dental hygiene licensure. The board may in its discretion require remedial training in addition to or in lieu of the examination requirements.

650—51.35(272C) Disciplinary hearings—fees and costs.

51.35(1) Fees. The fees related to a formal disciplinary action filed by the board are specified in 650—Chapter 15.

51.35(2) Failure of a licensee, registrant or permit holder to pay the fees and costs assessed in 650—Chapter 15 in the time specified in the board's final disciplinary order shall constitute a violation of a lawful order of the board.

[**ARC 0265C**, IAB 8/8/12, effective 9/12/12]

These rules are intended to implement Iowa Code chapter 17A as amended by 1998 Iowa Acts, chapter 1202, and Iowa Code sections 272C.5 and 272C.6.

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◊ Two or more ARCs

CHAPTER 52
MILITARY SERVICE AND VETERAN RECIPROCITY

650—52.1(272C) Definitions.

"License" or *"licensure"* means any license, registration, certificate or permit that may be granted by the board.

"Military service" means honorably serving on federal active duty, state active duty, or national guard duty, as defined in Iowa Code section 29A.1; in the military services of other states, as provided in 10 U.S.C. Section 101(c); or in the organized reserves of the United States, as provided in 10 U.S.C. Section 10101.

"Military service applicant" means an individual who is requesting credit toward licensure or registration for military education, training, or service obtained or completed in military service.

"Reciprocity" means the process by which an individual licensed in another jurisdiction becomes licensed in Iowa and may also be referred to in other board rules as "licensure by credentials."

"Spouse" means a spouse of an active duty member of the military forces of the United States.

"Veteran" means an individual who meets the definition of "veteran" in Iowa Code section 35.1(2).

[**ARC 1811C**, IAB 1/7/15, effective 2/11/15; **ARC 4749C**, IAB 11/6/19, effective 12/11/19; **ARC 5747C**, IAB 7/14/21, effective 8/18/21; **ARC 6940C**, IAB 3/8/23, effective 4/12/23]

650—52.2(272C) Military education, training, and service credit. A military service applicant may apply for credit for verified military education, training, or service toward any experience or educational requirement for licensure by submitting a military service application form to the board office.

52.2(1) The completed military service application may be submitted with an application for licensure or examination or prior to an applicant's applying for licensure or to take an examination. No fee is required with submission of an application for military service credit.

52.2(2) The applicant shall identify the experience or educational licensure requirement to which the credit would be applied if granted. Credit shall not be applied to an examination requirement.

52.2(3) The applicant shall provide documents, military transcripts, a certified affidavit, or forms that verify completion of the relevant military education, training, or service, which may include, when applicable, the applicant's Certificate of Release or Discharge from Active Duty (DD Form 214) or Verification of Military Experience and Training (VMET) (DD Form 2586).

52.2(4) Upon receipt of a completed military service application, the board shall promptly determine whether the verified military education, training, or service will satisfy all or any part of the identified experience or educational licensure requirement.

52.2(5) The board shall grant the application in whole or in part if the board determines that the verified military education, training, or service satisfies all or part of the experience or educational qualifications for licensure.

52.2(6) The board shall inform the military service applicant in writing of the credit, if any, given toward an experience or educational qualification for licensure or explain why no credit was granted. The applicant may request reconsideration upon submission of additional documentation or information.

52.2(7) A military service applicant who is aggrieved by the board's decision may request a contested case (administrative hearing) and may participate in a contested case by telephone. A request for a contested case shall be made within 30 days of issuance of the board's decision. No fees or costs shall be assessed against the military service applicant in connection with a contested case conducted pursuant to this subrule.

52.2(8) The board shall grant or deny the military service application prior to ruling on the application for licensure. The applicant shall not be required to submit any fees in connection with the licensure application unless the board grants the military service application. If the board does not grant the military service application, the applicant may withdraw the licensure application or request that the licensure application be placed in pending status for up to one year or as mutually agreed. The

withdrawal of a licensure application shall not preclude subsequent applications supported by additional documentation or information.

[**ARC 1811C**, IAB 1/7/15, effective 2/11/15; **ARC 4749C**, IAB 11/6/19, effective 12/11/19; **ARC 5747C**, IAB 7/14/21, effective 8/18/21]

650—52.3(272C) Veteran and spouse reciprocity.

52.3(1) A veteran or spouse with an unrestricted professional license in another jurisdiction may apply for licensure in Iowa through reciprocity. A veteran or spouse must pass any examinations required for licensure to be eligible for licensure through reciprocity. A fully completed application for licensure submitted by a veteran or spouse under this subrule shall be given priority and shall be expedited.

52.3(2) An application for licensure by reciprocity shall contain all of the information required of all applicants for licensure who hold unrestricted licenses in other jurisdictions and who are applying for licensure by reciprocity including, but not limited to, completion of all required forms, payment of applicable fees, disclosure of criminal or disciplinary history, and, if applicable, a criminal history background check. The applicant shall use the same forms as any other applicant for licensure by reciprocity and shall additionally provide such documentation as is reasonably needed to verify the applicant's status as a veteran under Iowa Code section 35.1(2) or as a spouse of an active duty member of the military forces of the United States.

52.3(3) Upon receipt of a fully completed licensure application, the board shall promptly determine if the scope of practice in the jurisdiction where the applicant is licensed is substantially equivalent to the scope of practice in Iowa. The board shall make this determination based on information supplied by the applicant and such additional information as the board may acquire from the applicable jurisdiction.

52.3(4) The board shall promptly grant a license to the applicant if the applicant is licensed in the same or similar profession in another jurisdiction whose scope of practice is substantially equivalent to the scope of practice in Iowa, unless the applicant is ineligible for licensure based on other grounds, for example, the applicant's disciplinary or criminal background.

52.3(5) If the board determines that the scope of practice in the jurisdiction in which the applicant is licensed is not substantially equivalent to the scope of practice in Iowa, the board shall promptly inform the applicant of the additional education or training required for licensure in Iowa. Unless the applicant is ineligible for licensure based on other grounds, such as disciplinary or criminal background, the following shall apply:

a. If an applicant has not passed the required examination(s) for licensure, the applicant may not be issued a temporary license but may request that the licensure application be placed in pending status for up to one year or as mutually agreed to provide the applicant with the opportunity to satisfy the examination requirements.

b. If additional education or training is required, the applicant may request that the board issue a temporary license for a specified period of time during which the applicant will successfully complete the necessary education or training. The board shall issue a temporary license for a specified period of time upon such conditions as the board deems reasonably necessary to protect the health, welfare or safety of the public unless the board determines that the deficiency is of a character that the public health, welfare or safety will be adversely affected if a temporary license is granted.

c. If a request for a temporary license is denied, the board shall issue an order fully explaining the decision and shall inform the applicant of the steps the applicant may take in order to receive a temporary license.

d. If a temporary license is issued, the application for full licensure shall be placed in pending status until the necessary education or training has been successfully completed or the temporary license expires, whichever occurs first. The board may extend a temporary license on a case-by-case basis for good cause.

52.3(6) An applicant who is aggrieved by the board's decision to deny an application for a reciprocal license or a temporary license or is aggrieved by the terms under which a temporary license will be granted may request a contested case (administrative hearing) and may participate in a contested case by telephone. A request for a contested case shall be made within 30 days of issuance of the board's

decision. No fees or costs shall be assessed against the applicant in connection with a contested case conducted pursuant to this subrule.

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