AMENDED ARTICLE XV
INFECTION CONTROL

Arkansas Code §17-82-316(a)-(c) and Arkansas Code §17-82-406 provide that the Arkansas State Board of Dental Examiners is vested with the power to revoke or suspend for any period of time, the privilege of practicing under any license issued in the State of Arkansas to any dentist, dental hygienist or dental assistant if the licensee fails to maintain proper standards of sanitation or fails to otherwise maintain adequate safeguards for the health and safety of patients.

Public Law 102-141 passed in the First Session of the 102nd Congress of the United States of America approved October 28, 1991 provides that the states will establish guidelines to apply to health professionals and will determine appropriate disciplinary and other actions to ensure compliance with those guidelines in order to prevent the transmission of human immunodeficiency virus and hepatitis B virus during exposure-prone invasive procedures except for an emergency situation where the patient's life or limb is in danger.

A. Definitions as used in this Rule:

1. Dental Health Care Personnel (DHCP)

   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 includes 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).

2. HIV

   The human immunodeficiency virus, whether HIV-1 or HIV-2.

3. HBV

   The Hepatitis B virus.

4. HCV

   The Hepatitis C virus.

5. OPIM

   Other potentially infectious materials. OPIM is a term that refers to

   1) bodily fluids including semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, 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; and 2) any unfixed tissue or organ (other than intact skin) from a human (living or dead).

6. Exposure-prone invasive procedure
Any surgical, diagnostic or therapeutic procedure involving manual or instrumental contact with or entry into any blood, body fluids, cavity, internal organ, subcutaneous tissue, mucous membrane or percutaneous would of the human body in which there is a risk of contact between the blood or OPIM of the DHCP and the blood or OPIM of the patient.

7. Standard precautions
The concept that all blood and OPIM should be treated as infectious because patients with bloodborne infections can be asymptomatic or unaware they are infected. 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 personal protective barriers (e.g., gloves, masks, protective eyewear, and gowns).
Standard precautions integrate and expand the elements of universal precautions (the term used by the CDC prior to 1996) into a standard of care designed to protect DHCP and patients from pathogens that can be spread by blood or any other body fluid, excretion, or secretion. 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.

8. 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.

9. 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.

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

11. Critical instruments
Penetrates soft tissue, contacts bone, enters into or contacts the bloodstream or other normally sterile tissue; includes surgical instruments, periodontal scalers, scalpel blades, surgical dental burs.

12. Semicritical instruments
Contacts mucous membranes or nonintact skin; will not penetrate soft tissue, contact

bone, enter into or contact the bloodstream or other normally sterile tissue; includes dental mouth mirror, amalgam condenser, reusable dental impression trays.

13. Noncritical instruments
Contacts intact skin; includes radiograph head/cone, blood pressure cuff, facebow, pulse oximeter.

B. Education and Training

1. Training in standard precautions and other infection control standards required by OSHA and as recommended by the CDC and set forth in this rule shall be provided to all DHCP by the employer upon initial employment prior to direct patient care, whenever new tasks are assigned which effects the level of occupational exposure, and at least annually.

2. At least two (2) continuing education hours on infection control must be reported with biennial license renewals for all dentists, dental hygienists and registered dental assistants.

C. Preventing Transmission of Bloodborne Pathogens

1. All DHCPs who are at risk for occupational exposure to blood or OPIM shall at all times use and practice standard precautions for all patient encounters.

2. Engineering and work-practice controls

a. Consider sharp items (needles, scalers, burs, lab knives, and wires) that are contaminated as infective.

b. Place used disposable syringes and needles, scalpel blades, and other sharp items in appropriate puncture-resistant containers.

a. Do not recap used needles by using both hands or any other technique that involves directing the point of the needle toward any part of the body. Use either a one-handed scoop technique or a mechanical device designed for holding the needle cap when recapping needles.

b. Do not bend or break needles prior to disposal.

3. Follow CDC guidelines after percutaneous, mucous membrane, or nonintact skin exposure to blood or OPIM. Guidelines are found in the CDC publication MMWR, Dec. 19, 2003, Volume 52, No. RR-17, pg. 13-14, "Post Exposure Management and Prophylaxis."

D. Personal Protective Equipment (PPE)

1. Masks, protective eyewear, and face shields

a. A surgical mask and eye protection with solid side shields or a surgical mask and a face shield must be worn during procedures likely to generate splashing or spattering of blood or OPIM.

b. Change masks between patients. Also change masks during patient treatment if mask becomes wet.

a. Clean with soap and water, or if visibly soiled, clean and disinfect reusable

facial protective equipment.

2. Protective clothing
    a. Wear reusable or disposable gowns, lab coats, or uniforms that cover personal clothing and skin (forearms) likely to be soiled with blood or OPIM.
    b. Change protective clothing if visibly soiled.
    c. Remove gloves, mask, non-prescription protective eyewear or shields before departing clinic area.
3. Gloves
    a. Wear medical gloves when a potential exists for contacting blood, saliva, OPIM, or mucous membranes.
    b. Wash hands before donning gloves. Wear a new pair of gloves for each patient, remove them promptly after use, and wash hands immediately.
    c. Remove gloves that are torn, cut, or punctured and wash hands before regloving.
    d. Do not wash or disinfect gloves before use.
    e. Ensure that appropriate gloves in the correct size are readily accessible.
    f. Use puncture and chemical resistant utility gloves when cleaning instruments and performing housekeeping tasks involving contact with chemicals and/or contaminated surfaces.
    g. Ensure that non-latex gloves are available for those patients and DHCP's with latex allergies.

E. Sterilization and disinfection of patient-care items
1. Instrument cleaning and sterilization
    a. Clean and heat-sterilize critical and semicritical instruments and items before each use using only FDA-cleared medical devices for sterilization and follow the manufacturer's instructions for correct use.
    b. Clean all visible debris from instruments and items before sterilization or disinfection using an automated cleaning process such as an ultrasonic cleaner or washer-disinfector.
    c. Wear puncture- and chemical-resistant/heavy duty utility gloves for instrument cleaning and decontamination procedures.
    d. Wear appropriate PPE when splashing or spraying is anticipated during cleaning (i.e., mask, eye protection or face shield).
    e. Single-use disposable instruments are acceptable alternatives if they are used only once and disposed of correctly.
    f. Ensure that noncritical patient-care items are barrier protected or cleaned and disinfected after each use with an EPA-registered hospital disinfectant.

2. Packaging of Instruments
    a. Instruments should be sterilized inside packages with color change markings or chemical indicator tape attached which verify that the package has been exposed to the sterilization process and required parameters of time, temperature, and the presence of steam has been achieved.
    b. Critical and Semicritical instruments intended for immediate reuse can be heat-sterilized unwrapped if a chemical indicator such as autoclave tape is used for each cycle and the instruments are transported immediately and aseptically to the point of use.
    c. Do not sterilize implantable devices unwrapped.
3. Sterilization monitoring
    a. Monitor each load with mechanical (e.g., time, temperature, and pressure) and chemical indicators. Color change markings on bags or autoclave tape are acceptable indicators.
    b. Do not use instrument packs if mechanical or chemical indicators indicate inadequate processing.
    c. Monitor sterilizers at least monthly by using a biological indicator (spore test) with a matching control).
    d. In case of a positive spore test, remove the sterilizer from service and retest. If the repeat spore test is negative put the sterilizer back in service.
    e. If the repeated spore test is positive, remove the sterilizer from use until it has been inspected or repaired, recall and reprocess all items processed since the last negative test.
    f. Maintain sterilization records or biological spore testing for three years.
4. Storing sterile items
    a. Place the date or sterilization and if multiple sterilizers are used in the facility, the sterilizer used on the outside of the packaging material. This will be critical in case of a failed spore test.
    b. Reclean, repack, and resterilize any instrument package that has been compromised (torn, punctured, etc.)
    c. Do not store sterile instruments where the packages might be contaminated by contact with non-sterile instruments or packages.
    d. Do not store critical or semicritical instruments unwrapped.

F. Environmental Infection Control
1. Clinical contact surfaces
    a. Examples of clinical contact surfaces are light handles, switches, radiograph equipment, chairside computers, drawer handles, faucet handles, countertops, pens, doorknobs, etc.

b. Use barriers such as clear plastic wrap, bags, sheets, tubing, and plastic-backed paper or other materials impervious to moisture, to protect clinical contact surfaces. Barriers must be changed between patients.

c. Clean and disinfect clinical contact surfaces that are not barrier-protected, by using an EPA-registered hospital disinfectant after each patient following manufacturer's directions.

d. Use PPE when cleaning and disinfecting environmental surfaces.

2. Regulated medical waste

a. Dispose of regulated medical waste in accordance with federal, state, and local regulations.

b. Use color-coded or labeled containers that prevent leakage for nonsharp regulated medical waste.

c. Place sharp items (needles, glass anesthetic carpules, scalpel blades, ortho bands/wires, broken metal instruments, and burs) in an appropriate sharps container. Do not overfill.

G. Dental Unit Water Lines and Water Quality

1. Use water that meets EPA regulatory standards for drinking water.

2. 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 that patient's mouth.

3. During a boil-water advisory, 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 until the boil order is lifted by the local water utility.

H. Special Considerations

1. Clean and heat-sterilize handpieces and other intraoral instruments that can be removed from the air and waterlines of dental units between patients.

2. Use heat-tolerant or disposable intraoral devices for dental radiography which are sterilized before each use.

3. For digital radiography sensors, use barriers (covers). If the items cannot tolerate heat sterilization.

4. Handling of extracted teeth

a. Dispose of extracted teeth as regulated medical waste unless returned to the patient.

b. Clean and place extracted teeth in a leak proof container, labeled with a biohazard symbol, and maintain hydration for transport to education institutions or a dental laboratory.

5. Dental laboratory

a. Use PPE when handling items received in the lab until they have been decontaminated.

b. Before they are handled in the lab, clean disinfect, and rinse all dental prostheses and prosthodontic materials (impressions, bite registrations, occlusal rims, and extracted teeth) by using an EPA registered hospital disinfectant.

c. Clean and heat-sterilize heat tolerant items used in the mouth such as metal impression trays.

I. Medical conditions, work-related illness, and work restrictions

1. A DHCP who is positive for HIV, Hepatitis B or Hepatitis C shall disclose this fact to the board. If the DHCP is not a licensee or permit holder, the supervising licensed dentist will report the DHCP's health status to the board. The DHCP shall thereafter refrain from participating in any procedure which has a potential for occupational exposure.

   Said refraining will continue until such time as the board enters an Order delineating the scope of practice permitted for the DHCP.

2. The Board will then establish and appoint members to serve on a Review Panel to review, counsel, monitor and recommend restrictions, when appropriate, for the practices of HIV, Hepatitis B or Hepatitis C positive DHCPs.

3. The Review Panel shall be appointed by the Board with its members being chosen on a case-by-case basis.

4. The Review Panel will conduct its review considering that exposure-prone invasive procedures are best determined on a case-by-case basis by taking into consideration the degree of infectivity, the specific procedure(s) as well as the skill, technique, and possible mental and/or physical impairment of the infected DHCP. Following its review, the Panel Chairperson will submit a report of recommendations or restrictions of practice to the Board.

5. The Board will consider the Review Panel's recommendations, will make the final determination of practice and/or procedure restrictions, will develop procedures in order to monitor the compliance of the DHCP with restrictions, and will communicate said information of any restrictions and the monitoring of the restrictions to the DHCP or the supervising licensed dentist by written Order.

6. Information as to the Panel's recommendations, the Board's monitoring of restrictions and its disciplining of the DHCP or the supervising license dentist, if necessary, will be reported in a timely manner to the Director of the Arkansas Department of Health who will continue to ensure the confidentiality of the infected DHCP.

7. Reports and information furnished to and by the Board relative to the HIV, HBV or HCV infectivity of a DHCP shall not be deemed to constituted public record but shall be deemed and maintained by the Board as confidential and privileged as medical records.

8. At such time as there is an alleged violation of this Rule and Regulation, the Board will proceed with its procedures set forth in the Dental Practice Act and Rules and Regulations by bringing a licensee before it for alleged violations of the Practice Act. At that time, the knowledge and information pertaining to the medical condition of the DHCP may become public knowledge.

9. The failure of a dentist, dental hygienist, or registered dental assistant to comply with the terms of this Rule and Regulation or the Order of the Board concerning the scope of practice as referred to in Section I, Paragraph 1 will be considered a failure to maintain adequate safeguards for the health and safety of the patient and the public, as referred to in the Dental Practice Act.

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