Master Curriculum Elements

Advanced by the Infection Control Consortium to Provide a Framework for Infection Control Education of Oral Healthcare Professionals Responsible for Performing and/or Overseeing Infection Control Procedures in Oral Healthcare Settings

In late 2013 through July 2016, several national organizations convened in response to a number of serious breaches in infection control protocol in recent years. While the level of non-compliance with federal guidelines and regulations likely occurs in a small percentage of oral healthcare settings, these events stimulated interest in a broader national discussion around this issue.

To this end, in August 2014, the Centers for Disease Control and Prevention (CDC) cdc.gov/oral health/ and seven national dental organizations established an Infection Control Consortium (IC Consortium). The IC Consortium's work was guided by this charge, to "provide a framework for infection control education of oral healthcare professionals responsible for performing and/or overseeing infection control procedures in oral healthcare settings."

The IC Consortium agreed on the importance of patient and provider safety, that all dental health care personnel should obtain education in infection prevention and control that is based on federal standards, regulations, and evidence-based guidelines and lastly on defined educational components related to infection control in oral healthcare settings, including overarching core competencies, broad learning objectives and a suggested list of essential elements for an infection control curriculum.

Core Competencies

The IC Consortium identified the following overarching core competencies: Knowledge-based competence in the infection control curriculum will be measured by the ability to demonstrate:

- Knowledge of disease transmission and principles of infection prevention and control in oral healthcare settings
- Application of relevant infection control laws, regulations, guidelines, standards and best practices
- Use of quality assurance measures (e.g., direct observation and feedback) to ensure accurate implementation of recommended infection control practices

Learning Objectives

The IC Consortium outlined the following learning objectives:

Upon successful completion of the course, participants would be able to describe:

- The chain of infection
- Differences between standard and transmission-based precautions
- Infection control practices and precautions that prevent transmission of infectious agents
- Identification of and response to breaches in infection control
- Relevant infection control laws, regulations, guidelines and standards and their integration into best practices

Master Curriculum Elements

The following Master Curriculum Elements provide a framework for the infection control education of professionals responsible for infection control procedures in oral healthcare settings and those who supervise them:

Transmission and Prevention of Infectious Diseases

- Patient safety overview
- Principles of infection control
- Microbiology:
 - Types of pathogens
 - o Modes of transmission
- Chain of infection
- Standard precautions
- Antibiotic resistance

Overview of Laws and Guidelines Applicable to Oral Healthcare Settings

- Federal
- State/regional
- Local
- Manufacturers' Instructions for Use (IFUs)

Personnel Health Elements of an Infection Control Program

- Education and training
- Immunization programs
- Exposure prevention and post-exposure management
- Medical conditions, work-related illness and work restrictions
- Maintenance of records, data management and confidentiality

Preventing Transmission of Bloodborne Pathogens

- Hepatitis (A-E)
- HIV
- Preventing exposures to blood and other potentially infectious materials
- Post-exposure management and prophylaxis

Hand Hygiene

- Methods and indications
- Selection of antiseptic agents
- Storage and dispensing of hand care products
- Special considerations (e.g., lotions, fingernails, jewelry)

Personal Protective Equipment

- Types (e.g., masks, protective eyewear, face shields, protective clothing, gloves)
- Appropriate use for adherence to Standard Precautions

Respiratory Hygiene/Cough Etiquette

 Measures to limit the transmission of respiratory pathogens spread by droplet or airborne routes

Contact Dermatitis and Latex Hypersensitivity

Sharps Safety and the Needlestick Prevention Act

- Engineering and work practice controls

Safe Injection Practices

- Key CDC recommendations

Sterilization and Disinfection of Patient-care Items

- Spaulding classification
- Transporting and processing contaminated critical, semi-critical and non-critical patient-care items
- Manufacturer's Instructions for Use
- Instrument processing area
 - Receiving, cleaning and decontamination
 - Preparation and packaging
 - Sterilization
 - Procedures
 - o Types
 - Sterilization of unwrapped instruments
 - o Sterilization monitoring
 - Storage of sterilized items and clean dental supplies
- Administrative measures in instrument processing

Environmental Infection Control

- Clinical contact surfaces
- Housekeeping surfaces
- Cleaning and disinfection strategies for blood spills
- Carpeting and cloth furnishings
- Non-regulated and regulated medical waste
- Discharging blood or other body fluids to sanitary sewers or septic tanks

Dental Unit Waterlines, Biofilm and Water Quality

- Strategies to improve dental unit water quality
- Maintenance and monitoring of dental unit water
- Delivery of sterile surgical irrigation
- Boil-water advisories

Special considerations

- Dental handpieces and other devices attached to air and waterlines
- Saliva ejectors
- Dental radiology
- Aseptic technique for parenteral medications
- Single-use of disposable devices
- Preprocedural mouth rinses
- Oral surgical procedures
- Handling of biopsy specimens
- Handling of extracted teeth
- Dental laboratory
- Laser/Electrosurgery plumes or surgical smoke
- M. tuberculosis
- Creutzfeldt-Jakob Disease and other prion diseases
- Program evaluation

Written Procedures – Policies, Procedures and Recordkeeping

- Exposure control plan
- Employee health records
- Training documentation
- Chemical safety records
- Workplace emergency procedures
- Work-related injury and illness record keeping
- Dental waste record keeping
- Housekeeping records
- Evaluation of safer sharps documentation

Hazard Communication

- Major changes in new standard
- Chemical hazard communications program Hazard assessment
- Safety data sheets
- Hazard abatement and containment

NOTE: This information (Core Competencies, Learning Objectives and Master Curriculum Elements) is extracted from the *Proceedings of the Infection Control Consortium* (the "*Proceedings*"). The *Proceedings* and the recommendations contained therein will be available to individuals, educators, employers, organizations and agencies to reference indeveloping education in infection control in oral healthcare settings in summer 2018. Additional resources that may be available through the individual participating organizations may be obtained from the Centers for Disease Control and Prevention (CDC) at cdc.gov or by contacting the executive director of any participating organization or visiting these organizations' websites (below).

- Academy of General Dentistry (AGD; agd.org)
- American Association of Dental Boards (AADB; dentalboards.org)
- American Dental Assistants Association (ADAA; adaausa.org)
- American Dental Association (ADA; ada.org)
- American Dental Education Association (ADEA; adea.org)
- Dental Assisting National Board (DANB; danb.org)
- Organization for Safety, Asepsis and Prevention (OSAP; osap.org)