Policy on Infection Control

Latest Revision

2019

Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes the importance of infection control policies, procedures, and practices in dental health care settings in order to prevent disease transmission from patient to care provider, from care provider to patient, and from patient to patient.

Methods

This policy was developed by the Infectious Disease Control Subcommittee of the Clinical Affairs Committee and adopted in 1989, and was revised by the Council of Clinical Affairs. This document is a revision of the previous version, revised in 2014. The revision of the policy is based upon a review of current dental and medical literature related to infection control, expert opinion, and best current practices. Literature searches of PubMed®/MEDLINE and Google Scholar databases were conducted using the terms: dentistry infection control AND health care, and infection control AND dental; fields: all; limits: within the last 10 years; English; humans; comparative study, meta-analysis, multicenter study, systematic reviews, and validation study. The search returned 352 articles that matched the criteria. The articles were evaluated by title and/or abstract and relevance to dental care for children and adolescents. Ten articles were chosen from this method and from references within selected articles.

Background

The application of standard precautions regarding infection control during dental treatment is paramount. The environment in which dental care is delivered impacts both patient and provider safety. Health care professionals should remain knowledgeable in ways to reduce exposure and contamination risks to infectious materials. This would include body substances, contaminated supplies, equipment, environmental surfaces, water, and air. Some infection control practices routinely used by health-care professionals cannot be rigorously evaluated by clinical trials for ethical and logistical reasons.

Many resources are available to aid dental providers in creating checklists, standard operating procedures, or other quality assurance mechanisms for use in daily practice. All patient care, laboratory procedures, and equipment management should be carried out in an environment with techniques consistent with guidelines set forth by the Centers for Disease Control and Prevention (CDC) and the Occupational Safety and Health Administration (OSHA), as well as state and local regulatory boards. Providers should consult such organizations and boards as well as regulatory agencies for current infection control recommendations. Standard precautions include hand washing and using personal protective equipment (PPE) such as gloves, gowns, eyewear with safety side shields, and masks whenever touching or exposure to patients' body fluids is likely.

The possibility of contamination within the internal components of dental handpieces has led to the recent recommendation that all dental handpieces, including low-speed motors and removable prophylaxis angles, undergo heat sterilization between patients. Providers should verify that the instructions for sterilization provided by the manufacturer of their reusable equipment comply with current standards.

Dental providers should be cognizant of potential infections associated with waterlines as cases of disease transmission from waterlines have been reported. To help prevent such infections, practitioners “should follow manufacturer guidelines to disinfect waterlines, monitor water quality to ensure recommended bacterial counts, use point-of-use water filters, and eliminate dead ends in plumbing where stagnant water can enable biofilm formation.” In 2015, an outbreak of Mycobacterium abscessus odontogenic infections in children receiving pulpotomy treatment from a pediatric dental clinic was investigated. The source of the Mycobacterium was contaminated water from dental unit waterlines. Practitioners should consider use of sterile water or saline when irrigating pulpal tissue.

Although no adverse health effects have been reported with use of saliva ejectors, the CDC cautions dental health care providers to be aware of the possibility of suctioned fluids in tubing flowing back into the patient’s mouth. This can happen when:

1. the pressure in patient’s mouth, as a result of closing their lips and forming a seal around the tip of the ejector, is lower than the pressure in saliva ejector;
2. the suction tubing attached to the ejector is positioned above patient’s mouth; or
3. the saliva ejector is used at same time with other high-volume suctions.

ABBREVIATION

AAPD: American Academy Pediatric Dentistry, CDC: Centers for Disease Control and Prevention, OSHA: Occupational Safety and Health Administration, PPE: Personal protective equipment.
Clinicians should take all necessary precautions to prevent potential backflow associated with use of saliva ejectors.

Policy statement
The AAPD:


• encourages providers to follow CDC recommendations to heat sterilize all dental handpieces, including low-speed motors and removable prophylaxis angles, between patients.

• encourages providers and their dental teams to be proactive in addressing infection control concerns. Staff may benefit from additional training to better answer questions from parents regarding the infection control practices in their treatment facility.

Reference