INFECTION CONTROL SNAPSHOT

Dental Laboratory Infection Control

June 2011

Protection of dental laboratory staff as well as dental office employees from bloodborne pathogens is mandated by OSHA regulations. Infection control protocols must be applied in the dental laboratory in the same manner as in the dental office.

Overall, there are very few pieces of equipment that are unique to the dental laboratory environment; most items requiring infection control in the dental laboratory originate in the dental operatory or are returned to the operatory from the laboratory. For example, dental impressions are contaminated with saliva and also frequently with blood. Prostheses and appliances are often "tried in" in the process of their construction and thus go from laboratory to operatory and back again. Patient prostheses and appliances requiring laboratory repair are often grossly contaminated. Infection-control procedures help reduce the spread of pathogenic microorganisms by breaking the chain of infection during vital periods in the fabrication, repair, and delivery of prostheses. In summary, cleaning, disinfection, and sterilization results in a product that can safely be handled by lab personnel.

★★★ All USAF dental laboratories operate as clean laboratories and only accept items which have been appropriately decontaminated. In other words, all items must be cleaned and disinfected in the dental operatory or a professional work area before being brought to the dental laboratory. This early disinfection makes handling the items safer and greatly reduces the chances of transferring contamination to lab equipment which is difficult to clean and disinfect. ★★★

Procedures for Handling Incoming Items to the Lab

- Clean and disinfect all items (e.g., impressions, bite registrations, wax occlusal rims) BEFORE entering the lab.
- Rinse under running tap water to remove blood/saliva.
- Disinfect* using an EPA-registered intermediate-level (i.e., tuberculocidal claim) disinfectant according to manufacturer instructions (e.g., contact time).
- Rinse thoroughly with tap water to remove residual disinfectant.
- No single disinfectant is ideal or compatible with all items. (Consult with manufacturers regarding the stability of specific materials [e.g., impression materials].)
- Include specific information on the DD Form 2322 or other mechanism, such as an impression tag, regarding disinfection techniques (i.e., solution used and duration). For example: “Disinfected with ________ for ____ minutes.”

*To accomplish sub-surface disinfection of acrylic items, place the item in a resealable plastic bag containing an intermediate-level disinfectant and place in an ultrasonic bath for the recommended contact time.

Procedures for Handling Outgoing Items from the Lab

- Clean and disinfect before delivery to patient.
- After disinfection, rinse and place in plastic bag with diluted mouthwash until insertion.
- Do not store in disinfectant before insertion.
- Annotate the DD Form 2322 with the disinfection technique used.
- For example: “Disinfected with ________ for ____ minutes.”

A Few Reminders..........

✓ Return items used in the mouth (e.g., metal impression trays, face-bow forks) to the provider/clinical dental assistant for cleaning and heat sterilization.
✓ Prior to reuse, clean and disinfect items (e.g., rag wheels, polishing point, burs, lathes) used on appliances previously worn by the patient, even if the appliance was cleaned and disinfected before the adjustment/repair.
✓ If laboratory items (e.g., burs, polishing points, rag wheels, laboratory knives) are used on contaminated or potentially contaminated appliances, prostheses, or other materials, they should be cleaned and heat-sterilized between cases.
✓ Mix pumice with clean water and diluted 1:10 bleach or other appropriate disinfectant; change daily at a minimum.
✓ At a minimum, clean and disinfect rag wheels daily. Heat sterilization is preferable.
✓ At a minimum, clean and surface disinfect lathes daily.
✓ Clean and disinfect case pans and articulators when visibly soiled and after each case is completed.
✓ Clean and disinfect countertops and lab benches when visibly soiled and at the end of daily work activities.
✓ Consumption of food and/or drinks in the dental laboratory is prohibited. These items should be consumed outside the dental laboratory, preferably in a designated break room.

??????? Just a few things to think about ?????

- Do you always clean and disinfect items before bringing them into your dental lab?
- Describe the steps for disinfecting an impression.

If you want more info ?????

- CDC Guidelines for Infection Control in Dental Health-Care Settings, 2003 (www.cdc.gov/oralhealth).

Infection Control SNAPSHOTs provide a brief overview of infection control topics and highlight several important issues; they are not intended to be a comprehensive review of the subject matter. Possible uses may include, but are not limited to presentations at staff meetings or sending out e-mail reminders to the dental staff.

USAF Dental Evaluation & Consultation Service/Dental Infection Control http://airforcemedicine.afms.mil/decs

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