

Dental Department

- Ref:(a) BUMEDINST 6600.3
(b) NMCP Infection Control Manual
(c) CDC, MMWR, Recommended Infection Control Practices for Dentistry, December 19, 2003
(d) BUMEDINST 6600.10A, Change 2, January 3, 1996

(e)Dental Evaluation & Consultation Service Comments on Digital Dental Sensors, Oct 2010

The Dental Department consists of a complex infrastructure – Prosthodontics, Orthodontics, Endodontics, Peridontics, and Oral and Maxillofacial Surgical Specialties and is a subset that otherwise adheres to NMCP policy and reports to NMCP infection control.

It is neither the intent nor the scope of the chapter to address, in detail, all aspects of infection control in the Dental Department. For a complete discussion, refer to the Dental Infection Control Manual: BUMEDINST 6600.3 and the NMCP Infection Control Manual.

Dental patients and dental healthcare workers may be exposed to a variety of microorganisms via blood, oral, or respiratory secretions. These microorganisms may include cytomegalovirus, hepatitis B virus, hepatitis C virus, herpes simplex virus types 1 and 2, HIV, Mycobacterium tuberculosis, staphylococci, streptococci and other viruses and bacteria, specifically those that infect the upper respiratory tract. Infections may be transmitted in the dental operatory through several routes, including direct contact with blood, oral fluids, or other secretions. Indirect contact can occur through contaminated instruments, operatory equipment, laundry, trash, infectious waste, or contact with airborne contaminants present in droplet, splatter, or aerosols of oral and respiratory fluids.

Responsibilities.

- Department Head: Ultimate responsibility of ensuring that the Dental Department is adhering to established Infection Control policy. Appoints the Dental Department Infection Control Officer.
- Infection Control Officer: Acts as resource person to other departmental staff. Arranges for quarterly Infection Control in-service. Performs review and update of Infection Control Manual as needed or when requested.
- Staff: Have working knowledge of Infection Control Manual and Bloodborne Pathogen Exposure Control Plan. Adhere to established Infection Control policy and procedures. Dental Corps officers will report, treat, refer, and monitor all odontogenic infections which have extended beyond the alveolar process and vestibular region and, all post-surgical infections.
- Dental Technicians: All personnel assigned duties in sterilization areas or function as surgical assistants will receive additional training in aseptic and sterilization techniques. All central sterilization technicians will attend the Basics for sterilization course and must obtain sterilization certification within two years of hiring.

Handwashing.

- Hands are to be washed before and after patient contact and after attending to personal needs.
- Personnel who may come in contact with blood and body fluids, non-intact skin, mucous membranes or items or surfaces contaminated with blood or body fluids will wear disposable gloves. Gloves torn or punctured are to be removed immediately. Hands are then washed and a clean, intact pair of gloves donned before any further contact. Do not reuse gloves or wash disposable gloves.

Employee Health.

- Employees with signs/symptoms of infection (i.e., skin lesions, URI) must report to their supervisor. The supervisor will refer them to Occupational Health where appropriate action will be determined.
- Dental healthcare providers with exudative lesions, weeping dermatitis, or other open lesions on their hands, face, or upper extremities should refrain from direct patient care until the condition resolves or cover with an occlusive dressing or long sleeve protective attire if the lesions are on the arms. Use a face shield if lesions are on the face.
- Ensure that pregnant dental healthcare workers are aware of the precautions for blood borne pathogens, and adhere to Navy policies.
- In event of occupational injury or infections exposure (i.e., needlestick, sharps injury), the employee will report this immediately to their supervisor and will be referred to the closest designated emergency department for treatment and follow-up.

Isolation.

- “Universal/Standard Precautions” will be followed by all healthcare workers for their protection against blood borne pathogens. Refer to NAVMEDCENINST 6260.5F, Bloodborne Pathogen Exposure Control Plan, for further specifications.
- Protective Attire:
 - Gloves: For protection of staff and patients, staff will wear gloves when one anticipates contact with blood, saliva, mucous membranes, and with intra-oral appliances. Hands will also be washed after gloves are removed.
 - Face shields or surgical masks: Should be worn during any patient treatment. When a mask is used, it should be changed between patients or during treatment if it becomes wet or moist.
 - Eye protection: All personnel will wear protective eye wear with side shields when splashing or spattering of blood or other body fluids is likely.
 - Protective clothing (i.e., disposable gowns, laboratory coats, or uniforms): Should be worn when clothing is likely to be soiled with blood or other body fluids.
 - Protective head gear will be worn during surgical procedures in the minor operating rooms, CSR, and the main operating room.

General Policies.

- Sharp items (i.e., needles, scalpel blades, wires) contaminated with patient’s blood and saliva should be considered as potentially infectious and handled with care to prevent injuries. Needles, syringes, and sharps are to be disposed of uncut and uncapped, into puncture resistant sharps containers. Follow the algorithm found in the Infection Control Manual if a needlestick or sharps injury occurs. All sharps containers must be stowed at or above counter height in order to keep children from reaching into the containers.
- Infectious waste will be disposed of in accordance with hospital policy. Follow guidelines found in the Infection Control Manual. Space under sinks can be utilized for properly labeled cleaning products and plastic materials such as garbage bags or unused sharp’s containers.

Patient Care Equipment.

Dental instruments are classified into three categories: critical, semi-critical, or non-critical – depending on their risk of transmitting infection and the need to sterilize them between uses. All instruments should be classified as follows:

- **Critical:** Surgical and other instruments used to penetrate soft tissue or bones are classified as critical and should be decontaminated and sterilized after each use.
- **Semi-critical:** Instruments such as mirrors and amalgam condensers that do not penetrate soft tissues or bone but contact oral tissues are classified as semi-critical. In addition, digital radiography sensors are included in this category (see page 4 regarding the care of these items). These devices should be sterilized after each use. However, if sterilization is not feasible because the heat will damage the instrument, the instrument should receive at a minimum, high-level disinfection.
- **Non-critical:** Instruments or medical devices such as external components of X-ray heads that come into contact only with intact skin are classified as non-critical. Because these non-critical surfaces have a relatively low risk of transmitting infection, they may be reprocessed between patients with an intermediate-level or low-level disinfection or detergent and water washing, depending on the nature of the surface and the degree and nature of contamination.
- All sterile gear will be tagged and have sterilization date. Sterile gear is checked daily and at the time of use for the integrity of the wrap or package.
- Clean/sterile gear is stored in a dry, clean area away from contaminated areas or supplies. Sterile supplies are preferably stored in closed cabinets or shelves that are elevated at least 8 inches off the floor, with a protective splash cover for open bottom shelving units and 18-20 inches from the ceiling. Supplies should not be stored on the floor.
- No hand scrubbing or unnecessary handling of contaminated instruments or materials must take place in the DTR’s or other patient treatment areas. Chair-side technicians are required to decontaminate packs and hand pieces using the spray wipe technique or CaviWipes® prior to these items being received in CSR.
- Cleaning of instruments may be accomplished by 10 minutes of ultrasonication in a disinfecting solution followed by thorough scrubbing and rinsing. Personnel involved in the cleaning and decontamination of instruments will wear rubber puncture resistant gloves. Instruments are then wrapped and sterilized in accordance with hospital policy.
- Impressions and intra-oral appliances will be disinfected with approved solution(s) and before being handled, adjusted or sent to the dental laboratory.

Minor Procedure Rooms.

- “Universal/Standard Precautions” will be observed in the procedure rooms in order to prevent contact with blood, blood contaminated items, or infectious materials.
- No sharps will be passed or received on the operative field. All sharps will be secured by the dental provider using an instrument and, upon completion, will be disposed of properly. All rooms will have sharps containers and properly disposed of when $\frac{3}{4}$ full.
- Masks will be worn by all personnel entering a minor procedure when sterile packs are open. Scrubs, gloves, masks, hats, goggles and protective shoe covers unless staff have secured a designated pair of approved footwear that are strictly worn only for patient care and never taken outside of the clinic, will be worn while the surgical procedure is in progress.
- The humidity in the rooms will remain at 30-60% and the temperature at 68-73° F, as per the standards of the Association of Practitioners in Infection Control. The measures are achieved through the use of a de-humidifier.
- When the de-humidifier is in use, the room will remain unlocked. Also, the water reservoir must be emptied frequently, including nights. The reservoir will be cleaned weekly with an approved germicidal/fungicidal agent potent enough to kill water borne pathogens. The removable filters will also be cleaned weekly with soap and water.
- Specimens will be placed in a leak-proof container that is clean and free of contamination. Specimens preserved in Formalin, will bear the appropriate Formalin label.

Housekeeping.

- Staff will ensure that all patient treatment areas are maintained in a clean and neat manner.
- Horizontal surfaces will be cleaned daily with an EPA approved cleaner/disinfectant. Floors can be moped using the Swiffer® Wet Jet® system. The wet jet must be hung up off the floor when not in use (note: remove the bottle of solution before hanging so wet jet is not too heavy. Solution bottle has a seal to prevent contamination and can be stored under sink as long as label is intact, lid is on, and solution is not outdated). Cleaning pads are used one time then discarded in the regular trash. Hang the wet jet without a cleaning pad inserted. Use only the approved antibacterial Swiffer® Wet Jet® solution designed to be used with the system.
- All blood or body fluid spills will be cleaned promptly with a bleach solution (1:10) or an EPA approved disinfectant.
- At the completion of work activities, counter tops and other areas that may have become contaminated with blood or saliva will be wiped with an approved disinfecting solution.
- The areas maintained by the Environmental Services contract will be monitored for cleanliness and the appropriate supervisor notified for any discrepancies.
- Any surfaces that are covered by plastic film will be cleaned daily. Plastic barrier film is replaced between each patient.
- Air and water syringes in the operatories will be wiped down after use and at the end of the day. All water lines and hoses will be flushed for 1 minute at the beginning of the day, for 30 seconds between patients and at the end of the day.
- Vacuum lines will be flushed with one (1) quart of water at the end of the day. The system will be cleaned with the HVE system cleaner at least once week.
- All amalgam traps are cleaned at the end of the day.

- Walls and blinds are cleaned as needed.

Digital Radiography Sensor Disinfection:

Dental digital radiography presents infection control challenges primarily because the image receptor (i.e., sensor or plate) is reused multiple times compared to a one time use with a film-based system. Currently, sensors and plates cannot withstand heat sterilization or complete immersion in a high level disinfectant (HDL). Until technology allows this, The CDC recommends at a minimum using barrier protection to reduce gross contamination during use. Because using a barrier does not always protect the instrument from contamination, after removing the barrier, the device should be thoroughly cleaned and disinfected using an EPA-registered HDL between each patient.

Specific guidelines include:

- Always use a protective barrier sleeve on the device.
- Always wipe the device with a FDA approved intermediate level (tuberculocidal) disinfectant (ILD). The ILD should be alcohol-based. At NMCP, either Sani-Cloths® or CaviWipes® can be utilized for this purpose.
- Contact time for the ILD is two (2) minutes.
- Thoroughly rinse the sensor with water after chemical disinfection.
- Dry the sensor before placing it into a new protective barrier.

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