

DAI Policy 500.40.16 Dental Radiation Procedure and Safety
Attachment C – Infection Control for Digital Radiography
Effective Date: 12/05/12

I. General Considerations

- A. Digital radiography sensors come into contact with mucous membranes and are considered semicritical devices. Ideally, they should be cleaned and heat-sterilized or high-level disinfected between patients.
- B. At this time, however, **the sensors cannot withstand heat sterilization or complete immersion in a high-level disinfectant.** Therefore, these devices should, at a minimum, be barrier protected by using a Food and Drug Administration (FDA)-cleared barrier to reduce gross contamination during use. However, **use of a barrier does not always protect from contamination.** To minimize the potential for patient cross-contamination, the Centers for Disease Control and Prevention recommends cleaning and disinfecting the sensor with an Environmental Protection Agency (EPA)-registered intermediate-level (i.e., tuberculocidal) disinfectant after removing the barrier and before use on another patient.

II. Infection Control for Sensors

- A. Cover the sensor and any cords that may contact intraoral surfaces or contaminated hands with an FDA-cleared plastic sensor sleeve, and over that, a medium-sized finger cot.
- B. After the procedure remove both barriers and discard appropriately.
- C. Between patients, clean and disinfect (spray-wipe-spray) the sensor with an EPA-registered disinfectant with intermediate-level (i.e., tuberculocidal) activity. Using disinfecting cloths/wipes with intermediate-level activity may be easier than spraying the sensor and then wiping it.
 - 1. Note: for best results use an ethanol (80%) based product.
 - 2. Note: chlorine-based (e.g., bleach) products may be too corrosive to use on the sensors and should be avoided.
- D. Consult with the equipment manufacturer if you have any additional questions or concerns about specific disinfection procedures or product compatibility.

III. Infection Control for Radiographic Positioning Devices

- A. Most positioning devices are heat tolerant. Before re-use on a patient: clean, package, and heat sterilize.
- B. If disposable positioning devices are used, use once and dispose of appropriately. Do not attempt to re-use.

IV. Infection Control for Computer Equipment in the Dental Operatory

- A. General Considerations
 - 1. Many items cannot be properly cleaned and disinfected or sterilized so avoiding contamination is important. Good hand-hygiene is important. Before touching any office equipment, ensure your hands are clean, and if wearing gloves select a powder-free brand.
 - 2. Place computer equipment which is unlikely to be touched during treatment (e.g., CPU, monitor) in a location where it won't be contaminated with direct spray or spatter. Consider installing a clear barrier shield, which can be disinfected, and place the equipment behind

**DAI Policy 500.40.16 Dental Radiation Procedure and Safety
Attachment C – Infection Control for Digital Radiography**

2

Effective Date: 12/05/12

it. This would allow visualization of the equipment during patient treatment and minimize or prevent contamination.

3. Cover all surfaces that will be contacted with gloved or contaminated hands or that may be contaminated by spatter/spray with plastic barriers.

B. Infection control for keyboard

1. Single use plastic disposable cover (e.g., plastic sheets, self-adhesive plastic, headrest cover): change between patients.
2. Reusable preformed plastic keyboard covers that fit over the keyboard: clean and disinfect between patients.

C. Infection control for mouse

1. Single use plastic disposable cover (e.g., plastic sheets, self-adhesive plastic): change between patients.
2. Use a headrest cover and place your gloved hand into the headrest cover, then use the mouse normally. The mouse is outside the headrest cover and is not covered. After removing your hand from the headrest cover, attempt to keep it propped open so you can place your hand back into it if necessary. Discard the headrest cover after each patient.

Selected References

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