

## Personal Protective Equipment

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### Head and Shoe Cover PPE (12/11)

**Question:** Can you review when we should be wearing head and shoe covers? Also, do head and shoe covers need to be removed when we leave the dental operator?

**Answer:** Head and shoe covers are considered to be personal protective equipment (PPE) by the Occupational Safety and Health Administration (OSHA). Primary PPE used in oral health-care settings include gloves, surgical masks, protective eyewear, face shields, and protective clothing. Head and shoe covers are less frequently used types of PPE (see box below), but need to be available to all personnel. According to OSHA, all PPE must be removed before leaving the work area. The definition of "work area" is determined on a case-by-case basis. Since many USAF dental clinics are designed with a suite concept, the work area is sometimes extended beyond the operator to include the hallway between operatories and a supply room in the suite area. With that being said, PPE should never be worn in offices, in break rooms, at the front desk or in patient waiting areas.



### USAF Guidelines for Infection Control in Dentistry Head and Shoe Covers

- The use of head covers is optional, but should be considered when exposure to blood and other potentially infectious materials in the form of droplet, spray, and spatter are anticipated. Situations that meet these criteria include, but are not limited to, the following: sonic or ultrasonic scaling; surgical procedures using rotary or ultrasonic instrumentation; and manual decontamination of dental instruments where spray and spatter may be generated.
- The use of shoe covers is optional, but should be considered when contamination of footwear is anticipated (e.g., surgical procedures where unusually heavy bleeding may be anticipated [e.g., maxillofacial reconstructive surgery, trauma surgery]).

#### References

- USAF Guidelines for Infection Control in Dentistry.
- US Department of Labor, Occupational Safety and Health Administration. 29 CFR Part 1910.1030. Occupational exposure to bloodborne pathogens; needlesticks and other sharps injuries; final rule. Federal Register 2001;66:5317–25. As amended from and includes 29 CFR Part 1910.1030. Occupational exposure to bloodborne pathogens; final rule. Federal Register 1991;56:64174–82.
- US Department of Labor, Occupational Safety and Health Administration. OSHA instruction: enforcement procedures for the occupational exposure to bloodborne pathogens. Washington, DC: US Department of Labor, Occupational Safety and Health Administration, 2001; directive no. CPL 2-2.69.

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### Donning & Removing Disposable Respirators (6/10)

**How to Properly Put on and Take off a Disposable Respirator**

WASH YOUR HANDS THOROUGHLY BEFORE PUTTING ON AND TAKING OFF THE RESPIRATOR.

If you have used a respirator before that fits you, use the same make, model and size.

Inspect the respirator for damage. If your respirator appears damaged, DO NOT USE it. Replace with a new one.

Do not allow facial hair, hair, jewelry, glasses, shading, or anything else to prevent proper placement or seal between your face and the respirator.

Follow the instructions that come with your respirator.\*

**Putting On the Respirator**

**Checking Your Seal**

**Removing the Respirator**

**Footnotes:**

\*Employees must comply with the OSHA Respiratory Protection Standard, 29 CFR 1910.134 if respirators are used by employees performing occupational duties.

1. Make sure you have the most recent NIOSH approved disposable respirator you have based on www.osha-slc.gov/hygiene/using/respirators/faq\_page1

2. According to the manufacturer's instructions and use.

**Question:** Recently several new staff members were fit-tested for respirators in the event that we treat a patient with H1N1 influenza or tuberculosis. Since we don't use the respirators very often, do you have or know of anything that provides a quick review about disposable respirators?

**Answer:** The National Institute for Occupational Safety and Health (NIOSH), a part of the Centers for Disease Control and Prevention (CDC), recently published information about donning and removing disposable respirators. NIOSH Publication No. 2010-131: "How to Properly Put on and Take off a Disposable Respirator" is available at no charge by visiting: <http://www.cdc.gov/niosh/docs/2010-131/>.

Several general reminders about disposable respirators include:

- Wash your hands thoroughly before putting on and taking off the respirator.
- If you have used a respirator before that fits you, use the same make, model and size.
- Inspect the respirator for damage. If your respirator appears damaged; DO NOT USE IT. Replace it with a new one.
- Do not allow facial hair, hair, jewelry, glasses, clothing, or anything else to prevent proper placement or come between your face and the respirator.
- Follow the instructions that come with your respirator. (Note: Manufacturer instructions for many NIOSH-approved disposable respirators can be found at [www.cdc.gov/niosh/npptl/topics/respirators/disp\\_part/](http://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/).)

Respirators should only be used in the context of a complete respiratory protection program\* which includes training and fit-testing of individuals to ensure an adequate seal between the face and the edges of the mask. The NIOSH brochure does not replace this.

\* USAF facilities should contact Bioenvironmental Engineering.

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## Masks and Face Shields (9/07)

**Question:** If I wear a face shield, do I need to wear a mask too?

**Answer:** Yes, a mask must be worn when wearing a face shield. A face shield is a form of protective eyewear and can provide protection to other facial areas in addition to the eyes. A face shield is often worn when additional protection is desired from spatter and splashes during dental procedures such as surgical or periodontal procedures. Wearing a mask reduces the inhalation of fluid aerosols and dust particles. To obtain maximum protection, a face shield should be chin length and wrap or curve around the face to offer side protection. The thickness of face shields may vary and therefore they may not offer protection from high-speed projectiles, so depending on the procedure being performed, you may also want to wear protective eyewear under the face shield.



## Selected References and Additional Resources

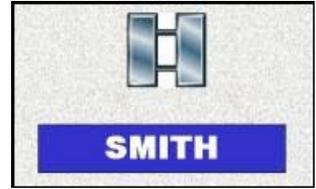
- CDC. Guidelines for infection control in dental health-care settings - 2003. MMWR 2003; 52(No. RR-17):1-66.
- Miller CH, Palenik CJ. Protective Barriers. In: Miller CH, Palenik DJ, eds. Infection Control and Management of Hazardous Materials for the Dental Team, 3rd ed St. Louis: Mosby: 2005:159-190.
- Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee. Guideline for isolation precautions: preventing transmission of infectious agents in healthcare settings 2007:1-219.
- USAF Guidelines for Infection Control in Dentistry.

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## Nametags and Infection Control (11/06)

**Question:** I have a question for you regarding the new AFI 36-2309 (Dress and Appearance of Air Force Personnel) that was published in August 2006. When wearing scrubs, it requires us to place the blue nametag and metal rank insignia on the right hand side of our scrub shirts and the hospital ID badge on the left breast scrub pocket. Doesn't this interfere with infection control?

**Answer:** The USAF Guidelines for Infection Control in Dentistry require that individuals wear scrub suits during patient-care and instrument processing activities and supplement scrub suits with personal protective equipment (PPE) when exposure to blood or saliva is reasonably anticipated. Wearing a nametag on the scrub shirt doesn't interfere with infection control because during the majority of dental procedures individuals are required to wear long-sleeved personal protective equipment (e.g., long sleeved jackets or gowns). Therefore the nametag, rank, and hospital ID badge will not become contaminated because they are covered during splash- or spatter-generating procedures. For detailed information on wearing scrubs and PPE you can review Chapter 5 in the USAF Guidelines for Infection Control in Dentistry. Air Force personnel should refer to AFI 36-2903 for additional requirements that apply when wearing scrubs.



### Reference

Air Force Instruction 36-2309: Dress and Appearance of Air Force Personnel. Available at [www.e-publishing.af.mil](http://www.e-publishing.af.mil). Accessed December 2011.

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### Rubber Dams and Long-Sleeved Protective Clothing (10/04)

**Question:** Is it acceptable to wear short-sleeved clothing when doing operative dentistry with a rubber dam in place?

**Answer:** No. The Occupational Safety and Health Administration (OSHA) requires the use of long-sleeved protective clothing for procedures in which exposure of the forearms to blood or other potentially infectious materials (OPIM), is reasonably anticipated to occur. Although OSHA standards are performance based, handpieces and air/water syringes are used during operative procedures, and both of these devices create a visible spray that contains primarily large particle droplets of water, saliva, blood, microorganisms, and other debris. A rubber dam, under ideal conditions (e.g., tightly adapted to all teeth, no holes or tears present), can be considered an engineering control that minimizes the generation of spray and spatter of blood and OPIM, which includes saliva. However, the rubber dam is not in place during local anesthetic procedures, and is usually removed when finishing and/or polishing restorations. After administering local anesthesia frequently an air/water syringe is used to rinse the patient and after removing the rubber dam, it is common to use an air/water syringe to rinse the teeth and/or use a handpiece. During both these procedures, the potential exists for contamination with blood or OPIM. In a 1992 publication, OSHA did mention that a rubber dam was an example of an engineering control, however it did not state that using a rubber dam eliminated the need for personal protective equipment. Furthermore, OSHA publication 3129 has been replaced by OSHA publications 3186-06R 2003 and 3187-09R 2003 which do not mention the rubber dam. Finally, there are no published infection-control related articles, textbooks, or guidelines that support the use of short-sleeved clothing when using a rubber dam.



### Selected References

- OSHA. Controlling Occupational Exposure to Bloodborne Pathogens in Dentistry. OSHA 3129 1992.
- OSHA. Medical and Dental Offices: A Guide to Compliance with OSHA Standards. OSHA 3187-09R 2003. Available at: [www.osha.gov/Publications/osha3187.pdf](http://www.osha.gov/Publications/osha3187.pdf). Accessed December 2011.
- OSHA. Model Plans and Programs for the OSHA Bloodborne Pathogens and Hazard Communications Standards. OSHA 3186-06R 2003. Available at: [www.osha.gov/Publications/osha3186.pdf](http://www.osha.gov/Publications/osha3186.pdf). Accessed December 2011.

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### Wearing Scrubs over the Military Uniform (Updated October 2007)

**Question:** Can we wear scrubs over our military uniform?

**Answer:** Yes, wearing scrub suits over the uniform is acceptable, as long as the uniform is covered. As a reminder, scrub suits must be supplemented with long-sleeved personal



protective equipment (PPE) when exposure to blood or saliva is anticipated. A recent change to AFI 36-2903 states that the scrub shirt will match the color of the scrub pants and must be worn together. In other words, the scrub shirt or pants will not be worn in combination with any military clothing item (e.g., wearing a scrub shirt while wearing uniform pants).

**References**

- Air Force Instruction 36-2309: Dress and Appearance of Air Force Personnel. Available at [www.e-publishing.af.mil](http://www.e-publishing.af.mil). Accessed December 2011.
- USAF Guidelines for Infection Control in Dentistry.

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