Hand Hygiene

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FDA Final Rule for the Safety and Effectiveness of Consumer Antiseptics (1/18)

**Question:** Does the 2017 FDA Final Rule for antiseptic products apply to our clinic healthcare antiseptic hand wash products?

No, the FDA rule, effective September 2017 does not apply to healthcare antiseptics, consumer antiseptic rubs or first aid antiseptics.

FDA has determined that 19 active ingredients in over-the-counter consumer hand and body washes (including triclosan and triclocarban) are misbranded. Companies will no longer be able to market antibacterial washes with these active ingredients because manufacturers did not demonstrate that the ingredients are both safe for long-term daily use and more effective than plain soap and water in preventing illness and the spread of certain infections.

The final rule applies to consumer antiseptic wash products containing one or more of 19 specific active ingredients, including the most commonly used ingredients – triclosan and triclocarban. Click here for the FDA Final Rule

**Alcohol-Based Hand Rubs Before Surgery** (5/09) Updated (1/18)

**Question:** Can we use alcohol-based hand rubs before surgical procedures?

**Answer:** Yes. If you want to use an alcohol-based product before surgery, it must be labeled as a surgical hand-scrub product with persistent activity. Be sure to follow the manufacturer's instructions for use (IFU) for all hand hygiene products. The actual technique involves two steps:

1. Prewash your hands and forearms with a plain or non-antimicrobial soap, rinse, and dry your hands and forearms completely.
2. After application of the alcohol-based product as recommended by the IFU, allow hands and forearms to dry thoroughly before donning sterile gloves.
Selected References:


Long Fingernails on Healthcare Personnel (7/06) UPDATED (1/18)

Question: Why are long fingernails on healthcare personnel contraindicated during patient treatment?

Answer: The relationship between fingernail length and wound infection is unknown, however keeping nails short is considered essential because the majority of flora on the hands are found under and around the fingernails. Fingernails should be short enough to allow dental personnel to thoroughly clean underneath them and prevent glove tears. Also, sharp nail edges or broken nails are also likely to increase glove failure. Long artificial or natural nails may make glove placement more difficult and can result in glove perforation. Hand carriage of gram-negative organisms has been determined to be greater among wearers of artificial nails than among nonwearers, both before and after handwashing. In addition, artificial fingernails or extenders have been epidemiologically implicated in multiple outbreaks involving fungal and bacterial infections in hospital intensive-care units and operating rooms. Check with your local policy to see if long fingernails are permitted.

USAF Guidelines for Infection Control in Dentistry

Keep fingernails short with smooth, filed edges to allow thorough cleaning and prevent glove tears. Long nails make glove placement more difficult and may result in glove perforation. Use of artificial fingernails is prohibited.

Chipped nail polish can harbor bacteria. Unchipped nail polish on short natural nails is acceptable.

Do not wear hand or nail jewelry if it makes donning gloves more difficult or compromises the fit and integrity of the glove.
Artificial Fingernails (7/06) Reviewed (1/18)

**Question:** We do not allow artificial nails to be worn in our dental clinic. An assistant recently had an “acrylic” substance added to her natural nails, is this considered to be an artificial fingernail or is it “ok” to wear?

**Answer:** No, According to the USAF Guidelines for Infection Prevention and Control in Dentistry artificial nails are defined as substances or devices applied or added to the natural nails to augment or enhance the wearer's own nails including but not limited to, bondings, tips, wrappings, and tapes. After about a week the acrylic substance can lift, crack, or peel up allowing debris to enter into the space between the acrylic and the natural nail. This can result in bacteria and moisture accumulating under and in the acrylic compound. Therefore, adding an acrylic substance or devices applied or added to the natural nails to augment or enhance the wearer's artificial fingernails is not allowed.
own nails to the natural fingernail is considered to be an artificial product, and therefore would not be acceptable.

**Selected References:**

- USAF Guidelines for Infection Prevention & Control in Dentistry

**Fire Safety and Alcohol-Based Hand Rubs** (7/04) Updated (1/18)

**Question:** I've read that it is unsafe to use alcohol-based hand rubs in healthcare settings because of the fire risk. Is there any information about safety precautions that we should take to minimize the risk of fire if using alcohol-based hand rubs?

**Answer:** According to the World Health Organization (WHO), all alcohol-based hand rubs are potentially flammable and should be stored away from high temperatures or flames. The WHO also suggest that all healthcare organizations should perform local risk assessments. The benefits of alcohol regarding infection prevention and control far outweigh the risks of a fire related incident involving alcohol-based hand rubs.

According to a 2007 study in Infection Control and Hospital Epidemiology (Kramer et al 2007) found that alcohol-based hand rubs have been used for several decades in many hospitals. The median consumption for hospitals ranged from 3L (small clinics) and 450L (largest hospitals) with a combine total of over 35 million L of consumption. Furthermore, only 7 non-severe fire incidents were reported. Of those reported, none were related to storage areas.

**Additional safety precautions & storage recommendations for alcohol-based hand rubs.**

1. Local and central (bulk) storage must comply with fire regulations regarding the type of cabinet and store, respectively.
2. Containers / dispensers should be stored in a cool place, and care should be taken regarding the securing of tops / lids. Dispensers should not be placed in any corridor that forms part of a means of escape. Fire advisors may need to be consulted.
3. If dispensers are placed in a circulation area within a ward (e.g. outside bedded areas) it is recommended that they are at least 1.2 meters apart, the circulation area is at least 2 meters wide and the maximum container size is 1L.
4. The maximum individual dispenser fluid capacity is 1.2L for dispensers in rooms, corridors, and areas open to corridors and 2L for dispensers in suites of rooms.
5. If using wall-mounted dispensers, do not install over or directly adjacent to electrical outlets and switches or any other potential source of ignition.
6. In locations with carpeted floor coverings, dispensers installed directly over carpeted surfaces are permitted only in areas with sprinklers.
7. Each smoke compartment may contain a maximum aggregate of 10 gallons of alcohol-based hand rub solution in dispensers and a maximum of 5 gallons in storage.
   
   This advice is based on a Fire Modelling Analysis Report prepared for the American Society for Healthcare Engineering (ASHE) in the US in 2003.

Alcohol-based hand rubs have been proven effective and they may help improve adherence to hand hygiene protocols in many healthcare settings. Although alcohol-based hand rubs have the potential to increase hand hygiene compliance, sinks and other hand hygiene supplies are readily available in dental operatories, making the use of these waterless hand hygiene agents optional. In dental settings, alcohol-based hand rubs may be useful in exam rooms or radiology work areas where multiple patients are seen...
in a short period of time and frequent handwashing is indicated. Another indication may be in dental residencies where staff members perform frequent patient checks. Because dispensers should not be installed near electrical outlets and the restrictions on the amount of product in operatories, dental clinics may want to consider using smaller pump dispensers instead of purchasing wall-mounted dispensing systems. In summary, careful evaluation and ongoing educational and motivational programs to maintain awareness of the importance of hand hygiene are indicated before deciding to introduce alcohol-based hand rubs into a dental practice.

**Selected References:**

- Fire Modeling Analysis Report prepared the American Society for Healthcare Engineering (ASHE) in the U.S. 2003

**OSHA and Alcohol-Based Hand Rubs (1/04) UPDATED (1/18)**

**Question:** Is the use of alcohol-based hand rubs consistent with the requirements for handwashing established in OSHA’s Bloodborne Pathogen Standard?

**Answer:** OSHA states that when an employee is removing gloves and has had contact (occupational exposure) with blood or other potentially infectious materials (OPIM), hands must be washed with an appropriate soap and running water. If there has been no exposure to blood or OPIM, alcohol-based hand rubs may be used. If gloves are intact upon removal hands have not been exposed to blood or OPIM, the use of an alcohol-based hand rub product for hand hygiene is acceptable. If your gloves become torn during the procedure, washing your hands with soap and water after removing the torn gloves and before donning new gloves is indicated. Additionally, if you notice a hole in your gloves upon removal, washing your hands with soap and water is indicated.

For more information see the 03/31/2003 OSHA interpretation letter—Acceptable use of antiseptic-hand cleansers for bloodborne pathogen decontamination and as an appropriate handwashing practice—can be found by visiting [www.osha.gov](http://www.osha.gov).

**The Importance of Hand Hygiene to Infection Control (2004) UPDATED (1/18)**

**Question:** I always wear gloves during patient treatment. Is hand hygiene still really that important?

**Answer:** Yes, **hand hygiene is most important measure to prevent the spread of infections among patients and DHCP**. Hands of dental healthcare personnel can carry bacteria, viruses, and fungi that are potentially infectious to them and their patients. Hand hygiene is recommended before and after situations in which hands are likely to become contaminated with blood, body fluids/secretions, or saliva. Know if your facility follows Centers for Disease Control and Prevention (CDC) or World Health Organization (WHO) hand hygiene guidelines and follow those guidelines. Also they should be washed when contacting contaminated items, instruments, or equipment. Always wash your hands before and after wearing gloves. **Gloves are not a substitute for handwashing.**

**Specific hand hygiene indications from CDC**

- Before and after treating each patient (e.g., before glove placement and after glove removal)
- After barehanded touching of inanimate objects likely to be contaminated by blood or saliva
Before re-gloving after removing gloves that are torn, cut, or punctured
Before leaving the dental operatory

Specific hand hygiene indications from WHO
Before patient care
Before an aseptic procedure
After any contact with blood or other body fluids - even if gloves are worn
After patient care
After contact with patients environment


Question: Is it acceptable to use my personal hand lotion when my hands become dry?

Answer: USAF Dental Healthcare Personnel (DHCP) should only use Medical Treatment Facility (MTF)-approved and supplied lotions. Lotions are recommended to ease hand dryness. Some lotions may make medicated soaps less effective. If a lotion’s base is one of the following; lanolin, mineral oil, palm oil or coconut oil, that lotion can affect the integrity of latex gloves. Lotions containing these ingredients as their base can weaken latex gloves and increase glove permeability. These lotions are suitable for the end of the duty day.

Petroleum-based lotion formulations, however, can weaken latex gloves and cause increased permeability. For that reason, lotions containing petroleum or other oil emollients may affect the integrity of gloves and should not be used.

Before selecting a hand lotion to be considered on the MTF approved list, obtain information from the manufacturer regarding interaction between gloves and lotions.

DHCP with open sores or weeping dermatitis must refrain from direct patient contact and handling of patient care equipment until the condition has resolved. Evaluation by a qualified health-care professional is necessary if DHCP experience repeated or unresolved hand irritation.

Measures to prevent dry hands include:
- Washing with cool or tepid water
- Wetting hands thoroughly before applying the handwashing agent
- Thoroughly rinsing off all handwashing agents with cool water
- Gently drying hands (vs. rubbing) with disposable soft materials
- Drying hands completely before donning gloves
- Wearing puncture/chemical resistant gloves when cleaning or handling chemicals
- Using water-based skin care products

Measures to prevent contamination of lotion dispensers:
- Do not add soap or lotion to a partially empty dispenser (i.e., top off)
- Use disposable closed containers or closed containers that can be washed & dried before refilling

Selected References and Additional Resources:


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