



## **ACFAS Advisory**

### **Hand Hygiene Practices for the General Public**

#### **Overall Recommendation:**

Hand hygiene guidelines have been available for health care workers for many years. The American Red Cross Advisory Committee for First Aid and Safety is recommending improved hand hygiene practices, for three population groups. These three groups are: first aid providers (professional and lay), home care givers and the general public. Improved hand hygiene, including handwashing following contact with contaminated individuals is recommended in order to reduce the transmission of pathogenic microorganisms. Additional recommendations for handwashing technique, skin care and gloves are also provided.

#### **Standards:**

- When hands are visibly dirty or contaminated with biological material or are visibly soiled with blood or other body fluids, wash hands with either a non-antimicrobial soap and water or an antimicrobial soap or water.
- If hands are not visibly soiled, use an alcohol based hand rub for decontaminating hands, or alternatively wash hands with an antimicrobial soap and water.
- Decontaminate hands after contact with any body fluids or excretions, mucous membranes, non-intact skin or wound dressings, or intact skin.
- Decontaminate hands after contact with inanimate objects in the vicinity of a contaminated person.
- Before eating and after using a restroom, wash hands with a non-antimicrobial soap and water or with a antimicrobial soap and water.
- Wear gloves when in contact with blood or other potentially infectious materials, mucous membranes and non-intact skin occur.

#### **Guidelines:**

- When decontaminating hands with an alcohol-based hand rub, apply product to the palm of one hand and rub hands together, covering all surfaces of hands and fingers until hands are dry. Follow manufacturer's recommendations regarding volume of product to use.
- When washing hands with soap and water, wet hands first with water, apply an amount of product recommended by the manufacturer to hands and rub hands together vigorously for at least 15 seconds, covering all surfaces of the hands and fingers. Rinse hands with water and dry thoroughly with a disposable towel. Use towel to turn off the faucet.
- Multiple-use cloth towels of the hanging or roll type as well as air dryers are not recommended for drying. Rather use disposable paper towels.

#### **Options:**

- Liquid, bar, leaflet or powdered forms of plain soap are acceptable when washing hands with a non-antimicrobial soap and water.

- Hand lotions or creams can be used to minimize the occurrence of irritant contact dermatitis associated with repeated hand sanitizing or hand washing.
- Remove jewelry on hands if possible and sanitize separately
- If artificial fingernails, extenders or natural fingernails beyond ¼ inch are worn, give extra care to washing beneath the nail.

#### Indications for hand washing and hand sanitizing

1. When hands are visibly dirty or contaminated with biological material or are visibly soiled with blood or other body fluids, wash hands with either a non-antimicrobial soap and water or an antimicrobial soap or water.
2. If hands are not visibly soiled, use an alcohol based hand rub for decontaminating hands or alternatively wash hands with an antimicrobial soap and water.
3. Decontaminate hands after contact with any body fluids or excretions, mucous membranes, non-intact skin or wound dressings or intact skin.
4. Decontaminate hands after contact with inanimate objects in the vicinity of a contaminated person.
5. Before eating and after using a restroom, wash hands with a non-antimicrobial soap and water or with a antimicrobial soap and water.

#### Hand hygiene technique

1. When decontaminating hands with an alcohol-based hand rub, apply product to the palm of one hand and rub hands together, covering all surfaces of hands and fingers until hands are dry. Follow manufacturer's recommendations regarding volume of product to use.
2. When washing hands with soap and water, wet hands first with water, apply an amount of product recommended by the manufacturer to hands and rub hands together vigorously for at least 15 seconds, covering all surfaces of the hands and fingers. Rinse hands with water and dry thoroughly with a disposable towel. Use towel to turn off the faucet.
3. Liquid, bar, leaflet or powdered forms of plain soap are acceptable when washing hands with a non-antimicrobial soap and water.
4. Multiple-use cloth towels of the hanging or roll type as well as air dryers are not recommended for drying. Rather use disposable paper towels.

#### Skin care

1. Hand lotions or creams can be used to minimize the occurrence of irritant contact dermatitis associated with repeated hand sanitizing or hand washing. This recommendation may not be necessary for lay rescuer guidance where repeated hand washing is unlikely.

#### Other aspects of hand hygiene

1. Wear gloves when contact with blood or other potentially infectious materials, mucous membranes and non-intact skin occur.
2. Remove gloves after caring for a sick person. Do not wear the same pair of gloves for the care of more than one person and do not wash gloves between uses with different people.
3. Remove all jewelry and sanitize separately.
4. If artificial fingernails, extenders or natural fingernails beyond ¼ inch are worn, additional care must be given to washing beneath the nail.

### **Question to be addressed:**

What are the general guidelines for hand hygiene for the general public to limit disease transmission?

### **Introduction:**

It is generally recognized that good hand hygiene is effective in reducing the spread of infection, however there is a lack of scientific evidence which definitively demonstrates this. A number of options are available to lay rescuers and the general public for hand hygiene. No universal consensus exists on the types of hygiene agents, quantity of use, time required or application/washing technique. Each of these factors is thought to have an impact on adherence. The Centers for Disease Control (CDC) have provided Guidelines for Hand Hygiene in Health Care Settings (2002) which is based on a thorough review of the literature since publication of the last guidelines in 1985.

### **Summary of Scientific Foundation:**

In 2005 two literature searches were conducted. First an on-line search of “Evidence Based Medicine” EMB reviews from 1966 to October 2005 was performed in the following databases: EBM Reviews; Cochrane Database of Systematic Reviews; ACP Journal Club; Database of Abstracts of Reviews of Effects; Cochrane Central Register of Controlled trials and Ovid Healthstar. Search terms included: hand sanitizers, hand hygiene, handwashing, antibacterial, soap and gel. The second literature search was conducted in the following databases: CAB Abstracts 1972-present, Biosis 1969-present, Current Contents 1995-present, Derwent Drug File 1983-present, Embase 1974-present, Medline 1951-present, Pascal 1973-present, SciSearch 1974-present, ToxFile 1965-present Chemical Abstracts 1967-present, Japanese Science and Technology 1985-present and Dissertation Abstracts 1861-present. Search terms for this literature search included: resistance, tolerance, antiinfectives, antibacterial, antiviral, disinfective, effectiveness, susceptibility. The Center for Disease Control’s (CDC) 2002 report “Guideline for Hand Hygiene in Health Care Settings” provided additional sources for the development of this statement.

The recommendations are based on the CDC’s work, as no contrary literature was noted after 2002. Since 2002, the SARS and pandemic flu possibilities have heightened the role of good hygiene in thwarting the spread of disease.

When no advanced professional care will be rendered in first aid scenarios, for example minor injuries or delayed help situations (i.e., wilderness, disaster) proper hand hygiene elevates in priority. Having access to large amounts of clean water and soap is often difficult in disaster or wilderness settings. Having resources to filter/ disinfect water or having waterless hand sanitizers is important in disaster kits and first aid kits.