UNIVERSITY OF SOUTH FLORIDA COLLEGE OF MEDICINE USF PHYSICIANS GROUP

Policy and Procedures: IC-005	Supersedes:		File Code Number:
Approvals: Dr. Charles Paidas, MD, MBA Dr. Ana P. Velez, MD, Infectious Disease Linda R. Lennerth, RN, MSN Quality & Safety Committee,		Sections: Infection Prevention & Control Subject: Hand Hygiene Policy and Procedure	
Reviewed/Revised: New 3/2015			

Purpose

Effective hand hygiene reduces the incidence of healthcare-associated infections.

Policy

All members of the healthcare team will comply with current Centers for Disease Control and Prevention (CDC) hand hygiene guidelines.

Procedure

Indications for Handwashing and Hand Antisepsis

Perform hand hygiene with an alcohol based hand rub (ABHR) containing a minimum of 60% alcohol or an antimicrobial or nonantimicrobial soap for the following indications.

- 1. Before direct patient contact
- 2. Prior to donning gloves or other PPE
- 3. Before preparing or handling medication in anticipation of patient care (e.g., in medication room or at medication cart before patient encounter)
- 4. Before inserting an invasive device
- 5. Before and after handling an invasive device, including before accessing intravenous devices for medication administration.
- 6. Before moving from a contaminated body site to a clean body site in the same patient.
- 7. After direct patient contact.
- 8. After removing gloves.
- 9. After contact with blood or body fluids.

A. Indications for Handwashing (with either an antimicrobial or nonantimicrobial soap)

- 1. When hands are visibly dirty or contaminated with proteinaceous material or are visibly soiled with blood or other body fluids, wash hands
- 2. Before eating and after using a restroom, wash hands
- 3. Handwashing may also be used for routinely decontaminating hands in the following clinical situations:
 - Before having direct contact with patients
 - Before inserting indwelling urinary catheters, peripheral vascular catheters, or other invasive devices that do not require a surgical procedure
 - After contact with a patient's intact skin (e.g., when taking a pulse or blood pressure, and lifting a patient)
 - After contact with body fluids or excretions, mucous membranes, non-intact skin, and wound dressings, even if hands are not visibly soiled
 - When moving from a contaminated body site to a clean body site during patient care
 - After contact with inanimate objects (including medical equipment) in the immediate vicinity of the patient
 - After known or suspected exposure to patients with infectious diarrhea during norovirus outbreaks
 - Potential exposure to spore-forming organisms alcohol hand rub is ineffective against spore-forming organisms (e.g., Clostridium Difficile and Norovirus)
 - After removing gloves

B. Indications for Hand antisepsis - Alcohol-based hand rub (ABHR) containing a minimum of 60% alcohol

If hands are *not visibly soiled*, an alcohol-based hand rub may be used for routinely decontaminating hands in the following clinical situations: (alcohol hand rub is ineffective against spore-forming organisms (e.g., Clostridium Difficile and Norovirus)

- Before having direct contact with patients
- Before inserting indwelling urinary catheters, peripheral vascular catheters, or other invasive devices that do not require a surgical procedure
- After contact with a patient's intact skin (e.g., when taking a pulse or blood pressure, and lifting a patient)
- After contact with body fluids or excretions, mucous membranes, non-intact skin, and wound dressings, only if hands are not visibly soiled
- When moving from a contaminated body site to a clean body site during patient care
- After contact with inanimate objects (including medical equipment) in the immediate vicinity of the patient
- After removing gloves

Non-Surgical Hand Hygiene Technique

A. Handwashing with soap and water (either plain lotion soap or antimicrobial soap)

1. Wet hands with running water

- 2. Apply hand washing agent to hand
- 3. Vigorously rub hands together for at least 15 seconds, covering all surfaces of hands Including area around fingernails and between the fingers.
- 4. Rinse hands thoroughly under running water to remove soap
- 5. Dry hands thoroughly with a disposable paper towel(s)
- 6. Use a paper towel to turn off the water

B. Alcohol-based hand rub

- 1. Apply product to palm of one hand so hands remain wet for 15 seconds
- 2. Rub hands together, covering all surfaces of hands and fingers
- 3. Continue to rub until hands are dry

Nails

- 1. Artificial fingernails or extenders may not be worn if duties include direct contact with patients
- 2. Natural nail tips shall be less than ¼ inch long

Gloves and Hand Hygiene

Gloves reduce hand contamination by 70 – 80 percent, prevent cross-contamination and protect patients and health care personnel from infection. Gloves are not a replacement for hand cleansing.

- 1. Wear gloves before an aseptic procedure.
- 2. Wear gloves when contact with blood or other potentially infectious materials (other body fluids, secretions and excretions), mucous membranes, non-intact skin and contaminated items will or could occur.
- 3. When in contact with a patient or patient equipment/environment during contact precautions.
- 4. Change gloves during patient care if moving from a contaminated body site to a clean body site.
- 5. Remove gloves promptly after use, before touching non-contaminated items and environmental surfaces, and before caring for another patient.
- 6. Single use (disposable) gloves will be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.
- 7. Decontaminate hands after removing gloves.

Minimize Contamination When Putting On and Taking Off Gloves

Wash or decontaminate hands prior to putting on gloves

- 1. When putting on gloves, take only 1 glove out of the box at a time, touching only the top cuff.
- 2. When taking gloves off, pinch 1 glove at wrist level without touching the forearm and peel away from the hand such that the glove turns inside out. Hold the removed glove in the gloved hand and slide the fingers of the bare hand between the glove and wrist and remove the glove by rolling it down the hand and folding it into the first glove.

Glossary of Commonly Used Hand Hygiene Terms

Alcohol-based hand rub (ABHR). An alcohol-containing preparation designed for application to the hands for reducing the number of viable microorganisms on the hands. In the United States, such preparations usually contain 60%–95% ethanol or isopropanol.

Antimicrobial soap. Soap (i.e., detergent) containing an antiseptic agent.

Antiseptic agent. Antimicrobial substances that are applied to the skin to reduce the number of microbial flora. Examples include alcohols, chlorhexidine, chlorine, hexachlorophene, iodine, chloroxylenol (PCMX), quaternary ammonium compounds, and triclosan.

Antiseptic handwash. Washing hands with water and soap or other detergents containing an antiseptic agent.

Antiseptic hand rub. Applying an antiseptic hand rub product to all surfaces of the hands to reduce the number of microorganisms present.

Cumulative effect. A progressive decrease in the numbers of microorganisms recovered after repeated applications of a test material.

Decontaminate hands. To reduce bacterial counts on hands by performing antiseptic hand rub or antiseptic handwash.

Detergent. Detergents (i.e., surfactants) are compounds that possess a cleaning action. They are composed of both hydrophilic and lipophilic parts and can be divided into four groups: anionic, cationic, amphoteric, and nonionic detergents. Although products used for handwashing or antiseptic handwash in health-care settings represent various types of detergents, the term "soap" is used to refer to such detergents in this guideline.

Hand antisepsis. Refers to either antiseptic handwash or antiseptic hand rub.

Hand hygiene. A general term that applies to either handwashing, antiseptic handwash, antiseptic hand rub, or surgical hand antisepsis.

Handwashing. Washing hands with plain (i.e., non-antimicrobial) soap and water.

Persistent activity. Persistent activity is defined as the prolonged or extended antimicrobial activity that prevents or inhibits the proliferation or survival of microorganisms after application of the product. This activity may be demonstrated by sampling a site several minutes or hours after application and demonstrating bacterial antimicrobial effectiveness when compared with a baseline level. This property also has been referred to as "residual activity." Both substantive and

nonsubstantive active ingredients can show a persistent effect if they substantially lower the number of bacteria during the wash period.

Plain soap. Plain soap refers to detergents that do not contain antimicrobial agents or contain low concentrations of antimicrobial agents that are effective solely as preservatives.

Substantivity. Substantivity is an attribute of certain active ingredients that adhere to the stratum corneum (i.e., remain on the skin after rinsing or drying) to provide an inhibitory effect on the growth of bacteria remaining on the skin.

Surgical hand antisepsis. Antiseptic handwash or antiseptic hand rub performed preoperatively by surgical personnel to eliminate transient and reduce resident hand flora. Antiseptic detergent preparations often have persistent antimicrobial activity.

Visibly soiled hands. Hands showing visible dirt or visibly contaminated with proteinaceous material, blood, or other body fluids (e.g., fecal material or urine).

Waterless antiseptic agent. An antiseptic agent that does not require use of exogenous water. After applying such an agent, the hands are rubbed together until the agent has dried.

References

To access the CDC's hand hygiene guidelines in their entirety, see the CDC website at: http://www.cdc.gov/handhygiene;

Measuring Hand Hygiene Adherence: Overcoming the Challenges, The Joint Commission monograph, 2009.

Pittet D¹, Allegranzi B, Boyce J; World Health Organization World Alliance for Patient Safety First Global Patient Safety Challenge Core Group of Experts. The World Health Organization guidelines on Hand Hygiene in Health Care and their consensus recommendations. Infect Control Hosp Epidemiol. 2009 Jul;30(7):611-22. doi: 10.1086/600379 http://www.ncbi.nlm.nih.gov/pubmed/19508124

Ellingson, K., Haas, J., et al. SHEA/ISDA Practice Recommendations: Strategies to Prevent Healthcare-Associated Infections through Hand Hygiene. *Infection Control and Hospital Epidemiology* 2014:35 S2.S155-S178.

Approvals:

Dr. Charles Paidas, Vice Dean Clinical Affairs & GME_

Dr. Ana Velez, Medical Director Health Administration

Linda Lennerth, MSN, Associate Director Medical Health Administration