IC5.1.04 - Hand hygiene

ADMINISTRATION 018610, approved by VP Quality & Patient Safety on 9/2007

Scope

Scope Of Services: Hospital/Medical Center

Policy Statement

The purpose of this policy is to promote improved hand hygiene practices and thereby reduce the transmission of pathogenic microorganisms to patients and personnel in healthcare settings. It is the policy of Anne Arundel Medical Center to comply with the recommended CDC hand hygiene guidelines (CDC 2002). The Infection Control Committee will have responsibility and oversight for this policy.

The use of alcohol-based handrubs is the preferred method of hand hygiene in most circumstances, as alcohol is more effective than soap and water for reducing bacteria on hands. However, handwashing MUST be performed when hands are visibly soiled (dirty), when hands are visibly contaminated with blood or other body fluids, before eating, and after using the restroom. Handwashing is also the preferred method of hand hygiene after care of patients with Clostridium difficile and other spore-forming bacteria (such as Bacillus anthracis), as alcohol will not effectively kill spores.

Exceptions: None. The scope of this policy is directed to all hospital employees including members of the medical staff and allied health professionals.

Definitions

Hand hygiene is a general term that applies to handwashing, use of alcohol-based handrub, or surgical hand antisepsis.

Alcohol-based handrub is an alcohol-containing product that is formulated with moisturizers for use on hands to reduce viable microorganisms. In the United States, these preparations usually contain 60-95% ethanol or isopropanol, and are also called hand sanitizers, hand rinses, alcohol foams or gels.

Handwashing is the process of washing hands with soap and water while using mechanical friction.

Decontaminate hands refers to reducing the bacterial count on hands by using antiseptic handrub or performing antiseptic handwashing or both. Guidelines for use of alcohol-based handrubs versus handwashing are listed below.

Surgical hand antisepsis involves an antiseptic handwash or antiseptic handrub performed preoperatively by surgical personnel to eliminate transient and reduce resident hand flora. Antiseptic detergent preparations should be broad spectrum, fast acting, and if possible have persistent antimicrobial activity.

Artificial nails are defined as any material applied to the fingernail for the purpose of strengthening or lengthening nails, including but not limited to:

a) artificial fingernails

b) silk wraps

c) acrylic overlays

d) tips

e) extenders

f) gels

g) tapes

h) any appliqués other than nail polish

i) nail piercing jewelry of any kind

Procedures

Hand Hygiene

Decontaminate hands:

-before having direct contact with patients

-before donning sterile gloves when inserting a central intravascular catheter

-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 (i.e., when taking a pulse or blood pressure, and lifting a patient)

-after contact with body fluids or excretions, mucous membranes, nonintact skin, and wound dressings

-if moving from a contaminated body site to a clean body site during patient care

-after contact with patient environment (linens, privacy curtain, bed, bedside table, food tray, IV pumps and other medical equipment, etc.)

-after handling contaminated linens and waste

-after removing gloves

-between contacts with different patients

-before eating

-after using a restroom

-after sneezing, coughing, blowing your nose, or combing your hair

-before commencing work and after leaving a work area

Use of alcohol-based handrub is the hand hygiene method/product of choice, except in the following circumstances when HANDWASHING must be performed:

-when hands are visibly dirty or contaminated with proteinaceous material, blood, or other body fluids

-before eating

-after using the restroom

-following contact with patients with Clostridium difficile or other spore-forming bacteria and/or this patient care environment; you may follow handwashing with use of the alcohol-based handrub

Use Alcohol-based HANDRUB (e.g. Avagard D) as follows:

1. Apply 1.5 to 3 ml of alcohol-based product (enough to wet and cover hands thoroughly) to palm of one hand.

2. Rub hands together, covering all surfaces of hands and fingers, including areas around and under fingernails. A sufficient amount of the product is applied if hands are wet and covered thoroughly.

3. Continue rubbing all surfaces of hands and fingers at least 10-15 seconds until dry.

If the conditions indicate HANDWASHING as the method of hand hygiene:

1. Stand near the sink, but avoid touching it with your hands.

2. Wet hands first with warm water. Avoid using hot water, as repeated exposure to hot water may increase the risk of dermatitis.

3. Apply amount of plain or antimicrobial soap recommended by the manufacturer (usually 3-5 ml) to hands.

4. Rub hands together vigorously for at least 15 seconds covering all surfaces of the hands and fingers, including areas around and under fingernails.

5. Rinse hands, letting the water run towards the fingertips.

6. Thoroughly dry hands with a disposable towel.

7. Use the paper towel to turn off the faucet. The paper towel is used as a barrier since the faucet controls are always considered to be contaminated.

Personnel with non-intact skin on their hands (e.g., dermatitis or eczema) are at increased risk of infection to themselves and others. All such conditions must be reported to Employee Health for evaluation.

Surgical Hand Antisepsis:

1. Remove rings, watches and bracelets before beginning the surgical hand scrub.

2. Remove debris from underneath fingernails using a nail cleaner under running water.

3. Surgical hand antisepsis using either an antimicrobial soap or an alcohol-based hand rub with persistent activity is recommended before donning sterile gloves when performing surgical procedures.

4. Refer to procedure for surgical hand scrubs in surgical services.

Selection of Hand Hygiene Agents:

It is the responsibility of the Infection Control Committee to:

1. Provide personnel with efficacious hand-hygiene products that have low potential for skin irritation, particularly when these products are used multiple times per shift.

2. Maximize acceptance of hand-hygiene products by soliciting input employees regarding the feel, fragrance, and skin tolerance of any products under consideration.

3. Ensure that information from manufacturers regarding any known interactions between other products (gloves, etc.) have been considered when selecting non-antimicrobial soaps, antimicrobial soaps, or alcohol-based hand rubs.

Other Aspects of Hand Hygiene

Fingernails and Artificial Nails:

1. Fingernails are to be clean, neatly groomed, and of reasonable length. Nails should no longer than ¼ inch in length.

2. Polished nails are acceptable if nails are intact (no chips), but nail polish should be clear.

3. Artificial nails or extenders are NOT PERMITTED to be worn by healthcare providers who provide direct patient care, directly supervise care, or have contact with patient care supplies, medications, equipment or food. See “artificial fingernails” definition for detailed description of restrictions.

Rings:

Rings should be kept to a minimum, since the skin underneath rings can harbor bacteria.

Gloving:

1. The use of gloves does not eliminate the need for hand hygiene. Likewise, the use of hand hygiene does not eliminate the need for gloves. Gloves reduce hand contamination by 70-80%, prevent cross contamination, and protect patients and healthcare personnel from infection.

2. Wear gloves when contact with blood or other potentially infectious materials, mucous membranes and non-intact skin could occur.

3. Remove gloves after caring for a patient. Do not wear the same pair of gloves for the care of more than one patient, and do not wash gloves.

4. Change gloves during patient care when moving from a contaminated body site to a clean body site.

5. Hand hygiene must be performed before and after each patient, just as gloves are changed before and after each patient.

6. Gloves are not to be worn in hallways or in between patient rooms.

Exceptions:

-ACTIVELY caring for the patient (e.g., use of resuscitation equipment on patient during emergent event occurring in the hallway)

-removal of potentially contaminated items (food trays, linen)

-environmental cleaning in hallways.

For the above exceptions, gloves need to be removed following their specific use and hand hygiene performed.

Staff Education:

1. As part of an overall program to improve hand-hygiene practices, staff will be educated regarding the types of patient-care activities that can result in hand contamination and the advantages and disadvantages of various methods used to decontaminate their hands.

2. Education will be provided during initial orientation/competency and periodically thereafter.

3. Monthly Hand Hygiene monitoring will be performed in patient care areas with findings reported quarterly at Executive Quality Council and Patient Care Services Quality Council. Feedback will be provided to staff on the compliance with selected measure(s).

4. The adequacy of healthcare workers' hand hygiene practices may be assessed through random or targeted (e.g., during outbreak or cluster) surveillance, by culturing healthcare workers' hands and/or assessing hand hygiene technique.

References:

APIC Text of Infection Control and Epidemiology, 2nd ed. Washington, D.C.; Association for Professionals in Infection Control and Epidemiology, Inc.; January 2005.

Centers for Disease Control and Prevention. Guideline for Hand Hygiene in Health-Care Settings: Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. MMWR 2002; 51 (No. RR-16): 1-45.(Landmark Reference)

Kampf, G. and Kramer, A. Epidemiological Background of Hand Hygiene and Evaluation of the Most Important Agents for Scrubs and Rubs. Clinical Microbiology Reviews. October 2004:863-893.

World Health Organization. WHO Guidelines on Hand Hygiene in Health Care (Advanced Draft). 2006.

Cross References:

HR8.3.04 - "**Dress code"** – “Dress Code”

SNP15.4.03 - "**Aseptic practices"** – “Aseptic Practices”

IC5.1.03 - "**Isolation precautions, transmission-based"** – “Isolation Precautions”