

Objectives

At the completion of this module, UAP should be able to:

1. practice correct hand hygiene.
2. practice principles of infection control and standard precautions while preparing and administering medications.
3. practice sterile technique while preparing and administering medications.

NOTE:

1) The RN or LPN is permitted to delegate **ONLY** after application of all components of the NCBON Decision Tree for Delegation to UAP and **after careful consideration that delegation is appropriate:**

- a) for **this** client,
- b) with **this** acuity level,
- c) with **this** individual UAP's knowledge and experience, and
- d) **now** (or in the time period being planned).

2) Successful completion of the "Infection Control" module by the UAP should be documented prior to instruction in medication administration by ANY route.

Principles of Infection Control

Medical Asepsis

Medical asepsis decreases the number of germs in and around a client or healthcare area such as the medication cart. This is done to keep from spreading germs from one client to another. Medical asepsis includes but is not limited to hand hygiene and the use of clean gloves.

Hand Hygiene



Look at your hands. Your hands are so very important to almost everything you do. They certainly are important to giving medications. The first and most important action to take to protect clients from germs is for you to clean your hands. Often people ignore this simple task of washing hands because they do not think it is important.

Hand washing is to be done when you first arrive at your workplace; prior to beginning any personal care task, including medication administration; before and after **every** client contact; after removing gloves; before and after eating; after using the toilet, and before leaving the workplace.

Your nails should be kept clean and short, about a quarter-inch in length. Long and/or ragged nails increase the chances of tearing gloves. The long nails increase the pressure per square inch at the tip of the glove where 90 percent of breaks occur in vinyl gloves (Pyrek, 2004). Do not wear artificial nails, because they have been found to hide bacteria and other bad germs, such as staphylococci and pseudomonas. The Center for Disease Control (CDC) in Atlanta, Georgia recommends that healthcare workers, who provide care for clients who are at high risk, should not wear artificial nails (CDC, 2003). Do not wear fingernail polish. The nail polish creates places on and around your nails that harbor germs.

Keep the amount of jewelry you wear to a minimum. In order to reduce the places germs can hide, do not wear bracelets and bangles. Limit the number of rings you wear to a simple wedding band. Jewelry can hold germs that you can take from client to client possibly causing them to be sick. Sharp edges on jewelry can cause small tears in gloves that will decrease the protection provided by the gloves (Pyrek, 2004).

Clean hands are very important for the health of the clients you are caring for, as well as, you and your family's health. Hand washing and use of alcohol-based hand rubs is referred to as "hand hygiene". To keep clients safe and to protect yourself and your

family, do not ever skip hand hygiene. Hand hygiene techniques will be discussed and you will be expected to do a return demonstration using both methods.

Hand washing is the single most effective way of not spreading germs from one client to another. The CDC estimates that each year nearly 2 million patients in the United States get an infection in hospitals, and about 90,000 of these patients die as a result of their infection. As a person delegated to administer medication, you will come in contact with many different clients that you do not want to make sick or sicker, including yourself. In order to do this, you must be especially good about keeping your hands clean.

People who work in health care settings give the following reasons for not washing their hands (as reported to the CDC) saying that:

- hand washing makes their hands dry or irritated.
- sinks are not easy to get to or are not stocked with paper towels and soap.
- there is not enough time (CDC, 2003).

However, clean hands are one of the most important things you can do to protect the clients you are caring for and yourself. So it is very important that you figure out a way to wash your hands or disinfect them prior to contact with clients, and make that a part of your medication administration routine.

The CDC defines the different ways to clean your hands as:

- **hand washing** refers to washing hands with plain soap and water.
- **antiseptic hand wash** refers to washing hands with water and soap (or other detergents) containing an antiseptic agent.
- **alcohol-based hand rub** refers to the alcohol-containing preparation applied to the hands to reduce the number of viable microorganisms (CDC, 2003).

Hand washing with soap and water is the best way to clean hands for people who are working in healthcare settings. The CDC (2003) recommends healthcare workers wash their hands with soap and water when their hands are visibly dirty, contaminated or soiled, and to use an alcohol-based hand rub when their hands are not visibly soiled to reduce the number of germs on the hands. The CDC (2003) reports that although plain soap is good at decreasing germs, antimicrobial soap or antibacterial soap (soap that reduces the number of bacteria on the hands) is better and the alcohol-based hand rubs are the best. Research has found that alcohol-based hand rubs were less drying to the skin and also took less time (Boyce, 2000; Voss & Widmer, 1997).

HAND HYGIENE

PROCEDURES

CLEAN YOUR HANDS

- **When you arrive at your workplace.**
- **Prior to beginning any task, including medication administration**
- **Before and after every client contact**
- **After removing gloves**
- **Before and after eating**
- **After using the toilet**
- **Before leaving the workplace**

Wash your hands with soap and water, prior to administering a medication. You may find it easier to clean your hands with an alcohol-based solution, *between* clients to whom you are giving medications. To make it easier to clean your hands you may place an alcohol-based hand rub solution on your medication cart or at the site where medications are administered. Note some agencies do not allow alcohol-based solutions due to fire codes. Some of these agencies use hand wipes between clients instead. It is important to be conscientious about hand hygiene. It is always important to follow your agency's policies regarding all aspects of medication administration.

K KEY POINT

You should wash your hands with soap and water any time your hands are visibly dirty, contaminated, or soiled.

ROUTINE HAND WASHING

- Before washing, remove jewelry from your fingers and wrists and place them in a safe place (preferably leave them at home).
- Watches can be removed, or if wearing a watch with an elastic band, it can be temporarily slid up the arm.

- Turn the water to warm and set the flow so that it does not splash clothing. Warm water is preferred because it leaves some of the natural protective oils on the hands and is less drying than hot water.
- Wet the hands and leave the water running. Apply a large drop of liquid antibacterial soap. It is recommended to use liquid soap versus bar soap. Bar soap can hold germs that can get onto the hands next time they are washed. Keep the hands lower than the elbows to allow germs to run off the fingertips rather than up the arms.
- Scrub all areas of the hands including the back of the hands and around the wrists. Wash between the fingers, including the thumbs. Clean well around and under the fingernails
- Rub the hands rapidly together, working the soap into a lather.
- Continue to rub the hands rapidly, washing the hands for at least 10-30 seconds, about the amount of time it takes to hum a short song such as *Twinkle Twinkle Little Star*
- Avoid touching clothing to the sink and splashing water onto the clothes.
- Rinse the hands well, again holding them so that the water runs off the fingertips.
- When finished, **leave** the water running while drying the hands thoroughly with paper towels. Avoid cloth towels since they can hold germs and put germs back onto clean hands.
- Throw away the paper towels without touching the trashcan lid.
- When finished drying hands, use a **dry** paper towel to turn off the water. Wet paper towels allow the germs to travel from the faucet handle to the hands. The use of a dry paper towel protects the hands from coming in contact with germs on the faucet handle.
- Throw away the paper towels without touching the trashcan lid.
- Use a mild lotion after washing if the hands feel dry or irritated.

ALCOHOL-BASED HAND RUB

When hands are not visibly dirty, contaminated or soiled, an alcohol-based hand rub can be used instead of hand washing to reduce the number of germs on the hands.

- Remove jewelry from fingers and wrist and place in a safe place (preferably leave them at home).
- Apply the amount of solution recommended on the alcohol-based hand rub container to the palm of one hand. The recommended amount to be used changes with each product, so check the product information.

- Rub the alcohol-based product into the hands, covering all surfaces, including around the nails and between the fingers.
- Rub the hands together until all the alcohol has dried and evaporated. It is important to let the hands dry prior to moving to the next task.
- If the alcohol is not allowed to dry completely, the germs are not being killed.
- If putting gloves on while the hands are still wet with alcohol, the material of the gloves will break down and the gloves will not be as protective (Pyrek, 2004).
- Periodically wash your hands with soap and water even when using the alcohol-based hand rub as directed. When removing the gloves, there are chemicals from the gloves left on the hands. These chemicals are not cleansed from the hands by the alcohol, which allows the chemicals from building up on the hands. This increased exposure to the chemicals from the gloves can increase the risk for an allergic reaction to gloves (Pyrek, 2004).

HAND WIPES

When hands are not visibly dirty, contaminated or soiled hand wipes are used instead of alcohol-based hand rubs.

- Remove jewelry from fingers and wrist and place in a safe place (preferably leave them at home).
- Rub all surfaces of the hands and wrists, including around the nails and between the fingers.
- Use the wipe once and throw it away, avoiding touching the trashcan lid.
- Let the hands dry prior to moving on to the next task.
- Rub the hands together until all the alcohol has dried and evaporated. It is important to let the hands dry prior to moving to the next task.

Clean Gloves

WEARING GLOVES

Wearing clean gloves as a protective barrier for the person administering a medication is required as part of Standard Precautions every time there is contact with blood or body secretions including saliva.

Clean gloves are also used when administering a medication to protect the client and UAP when applying eye ointment or drops, applying medication to the skin, or coming in contact with broken skin or the genitalia (area around penis, vagina or rectum). For example applying creams, ointments, or a suppository to the vagina or rectum, or when in contact with blood or other potentially infectious secretions.

Gloves should be removed immediately after finishing a task and hands should once again be washed. Anytime gloves are visibly dirty, contaminated or soiled, they should be removed as soon as possible. The hands should be washed immediately to protect self and clients from harmful germs. New gloves can be applied anytime they are needed to complete a task.

Busy UAP may feel that wearing gloves takes care of hand hygiene but that is not true. Gloves are not 100% effective at protecting you or your client. The use of gloves does not decrease the need for good hand hygiene. Neither does good hand hygiene decrease the need for gloves. One does not substitute for the other. It is very important to wash the hands or use alcohol-based hand rubs each time gloves are removed since gloves only reduce hand contamination by 70%-80% (CDC, 2003).

DISPOSAL OF GLOVES

Gloves need to be removed in a manner that does not contaminate the person using them. (See clean glove procedure.)

Disposal of used gloves varies between agencies. Some agencies do not want staff to throw the gloves away in the trashcan inside the client's living space such as their room. In these cases, the gloves must be thrown away either in a trash container on the medication cart or in an appropriate trash disposal as established by agency policies and procedures. Check the agency's policy regarding the proper way to dispose of gloves.

CLEAN GLOVING PROCEDURE

- Clean hands before putting on gloves.
- Select proper size of gloves (Small, Medium, Large, or Extra Large).
- Put on gloves.
- Perform task.
- Remove gloves immediately after administering the medication or performing a task.

- Remove gloves inside out without contaminating self by grabbing the glove on the non-dominant hand at the palm with the other gloved hand. Pull off the glove and crumble it up into the other gloved hand. Using skin against skin, run finger inside other glove at wrist and slide off hand, trapping the first glove removed inside of the second glove.
- Throw away gloves according to your agency's policy being careful not to touch the trashcan lid.
- Wash hands.

** ANYTIME GLOVES ARE DIRTY, CONTAMINATED, OR SOILED
THEY SHOULD BE CHANGED AND HANDS SHOULD BE WASHED**

DO NOT:

- Wear the same pair of gloves from client to client.
- Wash your hands with gloves on. Gloves do not hold up to washing and no longer protect you or the client to whom you are giving care.
- Roam halls with gloves on. People do not know if they are clean or dirty.

CARE FOR YOUR HANDS

Give the hands a chance to be out of gloves. Hands sweat when inside gloves and need a chance to be exposed to the air to dry out.

Because the hands are washed often, pamper the hands with lotions and creams between washings and also when sleeping to keep the hands and nails healthy.

Use lotions that are squeezed from a tube rather than those that require the fingers to be dipped into to get the lotion. Dipping the fingers into a container introduces germs and contaminates the lotion.

During work time, it is important to use water-based lotions versus oil-based lotions if the agency uses latex gloves. The oil-based lotions will break down the gloves and they will not be as protective (Pyrek, 2004).

Standard Precautions for Medication Administration

GUIDELINES

Standard precautions are guidelines designed to prevent the transmission of infection. Standard precautions include use of:

- Handwashing
- Gloves
- Other infection control guidelines.

Standard precaution guidelines for medication administration include:

- Use appropriate puncture resistant receptacles for disposal of needles, syringes, and sharp items.
- Never recap used needles.
- Never bend or break needles before disposal.
- Do not reuse syringes or needles.
- Do not use a needle or syringe for more than one client.

Sterile Technique

Sterile technique is the practice that keeps an area or object free from all microorganisms.

Sterile techniques to be used during medication administration include:

- Do not allow any unsterile object to touch the:
 - tip of the syringe,
 - inside of the barrel,
 - shaft of the plunger, or
 - tip of the needle.
- If the needle or syringe becomes contaminated, replace it with a new one.
- Wipe the medication vial top with an alcohol swab prior to using.

**Delegation of Medication
Administration to
Unlicensed Assistive Personnel (UAP)**

**Infection Control
Module/Skill Checklist**



SKILL CHECKLIST: HAND HYGIENE

UAP Name (print)

ID Number

SKILL PERFORMANCE OBJECTIVES	✓ Pass x Not Yet	COMMENTS
<u>Hand Washing</u>		
1. Remove jewelry from fingers and wrist.		
2. Lather with warm water for 10-30 seconds, applying friction to palms, backs of hands and wrists.		
3. Pay special attention to area between fingers, creases, & breaks in the skin, nail beds and under nails.		
4. Avoid splashing and touching clothes to sink.		
5. Rinse hands with hands lower than elbows.		
6. Dry hands thoroughly with paper towels.		
7. Turn off faucet with <u>dry</u> paper towel.		
8. Place paper towel into trashcan without touching lid.		
<u>Clean Gloves</u>		
1. Having just washed hands, select proper size of gloves and put them on.		
2. After task completed, remove gloves inside out, without contaminating self. Grab glove on non-dominant hand at the palm with the other gloved hand. Pull off the glove and crumble up into gloved hand. Using skin against skin, run finger inside other glove at wrist and slide off hand, trapping the first glove removed inside of the second glove.		
3. Throw away gloves in trashcan without touching the lid.		
<u>Alcohol-Based Hand rub</u>		
1. Apply correct amount of alcohol-based solution as recommended for product to the palm of one hand.		
2. Rub alcohol-based product into hands, covering all surfaces of hand, including around nails, and between fingers.		
3. Rub hands together until all the alcohol has dried and evaporated.		

a. Pass

b. Redo

Evaluator Name

Date