



STOP THE SPREAD: INFECTION CONTROL

Beacon Health: Home Health Aide On-the-Go In-Service,
Volume XIV, Issue 11 - Barbara Acello, RN

Objectives

Upon completion of this program, the home health aide (HHA) will be able to:

- ☐ Recognized why, as an HHA, its important to practice infection control
- ☐ Demonstrate how to properly wash hands or use hand rub
- ☐ Identify when and how to use standard precautions
- ☐ Recognize general methods to prevent the spread of infection

Overview

As an HHA, you are for people in ways they need care- bathing, grooming, feeding, and attending to all sorts of needs. This care involves close contact and touching, often with individuals who are ill, who have weak immune systems, or who simply cannot afford to get sick.

You must recognized that you are a common factor between all your patients; this means that you can carry germs from one patient to another, even if you do not feel ill. Many illness such as the flu can be transmitted before symptoms develop. This means you must be on guard and use methods to prevent the spread of infection at all times. Once someone is sick, its to late.

You don't have to use a hazmat suit all day long, but you should take simple yet effective measures everyday. This in-services gives general and practical advice for stopping the spread of infection and explains effective measures to take and why they are so important.

Key Terms to Aid Your Understanding

❑ Hand Hygiene

- ❑ A general term referring to any action of hand cleansing.

❑ Immune System

- ❑ A system of biological structures and processes within the body that protects against disease. A weakened immune system leaves the body susceptible to disease.

❑ Contagious

- ❑ Able to be passed from one person or animal to another by touching.

Facts

Many people have weakened immune systems for a lot of different reasons, including cancer, HIV, and transplant recipients. People who have undergone an operation have a higher chance of developing an infection. People with diabetes have a difficult time healing from skin infections and often suffer from unusually high blood sugar during illness. Older adults often cannot recover quickly from illness. Older people who come down with the flu or a chest infection might have a harder time staying hydrated and breathing. People who are susceptible to the flu can die from it. These are just a few examples of why it's critical you protect your patient population and yourself from getting ill.

Keeping a distance from those who are sick is a good prevention method but one that is difficult for healthcare workers to implement. Some illnesses, such as the flu, are spread through droplets in the air. Other illnesses are contracted only through bodily fluids. Many are spread by hands. Knowing and diligently applying the principles of hand hygiene and standard precautions is the best way of protecting your patients and yourself.

Hand Hygiene

Hand hygiene is the most effective way of preventing the spread of infection. Germs can stay on your hands and be transferred. Think of all the things and people you touch in a day. You use the bathroom, are in public spaces, handle money, care for patients, touch your face, touch doorknobs and food- the list is endless. Practicing good hand hygiene helps protect your patients, yourself, your family, and others. You might think you don't always have time to clean your hands, but in all the things you're rushing around to do- caring for your patient- you might be causing more harm than good if you don't take a moment for hand hygiene

You should wash your hands:

- Before and after caring for patient
- After caring for personal needs, such as using the toilet, blowing your nose, covering a sneeze, combing hair, etc.
- Before consuming, handling, or serving food or drink
- Upon return from public places
- Before and after each shift
- After any contamination or after handling waste materials, secretions, drainage, or blood
- After handling soiled items, including linens, clothing, bedpans, urinals, or garbage
- Before and after wearing gloves
- Before and after touching wounds

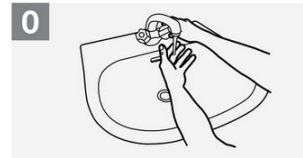
You should wash your hands:

- Before and after caring for patient
- After caring for personal needs, such as using the toilet, blowing your nose, covering a sneeze, combing hair, etc.
- Before consuming, handling, or serving food or drink
- Upon return from public places
- Before and after each shift
- After any contamination or after handling waste materials, secretions, drainage, or blood
- After handling soiled items, including linens, clothing, bedpans, urinals, or garbage
- Before and after wearing gloves
- Before and after touching wounds

How to Handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

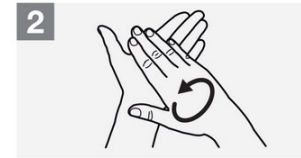
 Duration of the entire procedure: 40-60 seconds



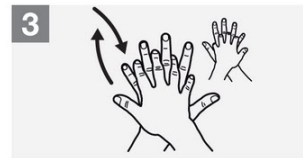
Wet hands with water;



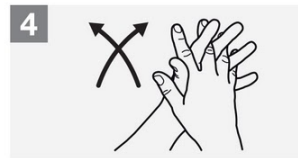
Apply enough soap to cover all hand surfaces;



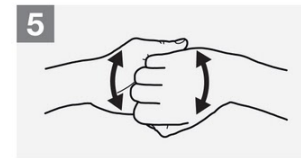
Rub hands palm to palm;



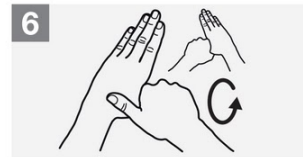
Right palm over left dorsum with interlaced fingers and vice versa;



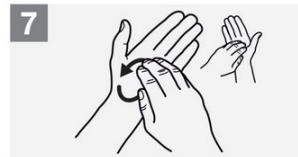
Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



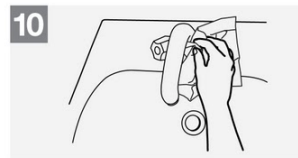
Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



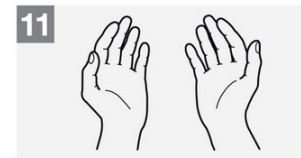
Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.



World Health Organization

Patient Safety

A World Alliance for Safer Health Care

SAVE LIVES
Clean **Your** Hands

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this document. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. WHO acknowledges the Hôpitaux Universitaires de Genève (HUG), in particular the members of the Infection Control Programme, for their active participation in developing this material.

May 2009

Figure 11.1

Alcohol Hand Rubbing

Alcohol hand rub products are more effective than hand washing with soap unless the:

- ❑ Hands are visibly soiled; or
- ❑ Person has a condition that is known or potentially spread by spores, such as norovirus or *Clostridium difficile* diarrhea

Please note that the effectiveness applies only to alcohol-based products. Avoid sanitizers in which the active ingredient is triclosan or others that do not contain 60%-95% alcohol. Higher concentrations are less potent because they contain less water than lower concentrations. The reduction in water causes some of the original germ-killing properties to be lost or diminished.

How to Handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

 Duration of the entire procedure: 20-30 seconds



Apply a palmful of the product in a cupped hand, covering all surfaces;



Rub hands palm to palm;



Right palm over left dorsum with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



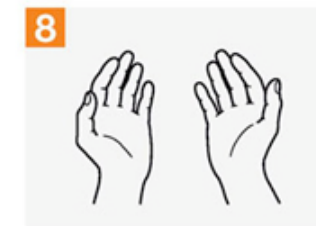
Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



Once dry, your hands are safe.



World Health
Organization

Patient Safety
A World Alliance for Safer Health Care

SAVE LIVES
Clean Your Hands

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this document. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. WHO acknowledges the Hôpital Universitaire de Genève (HUG), in particular the members of the Infection Control Programme, for their active participation in developing this material.

May 2008

Figure 11.2



Standard Precautions

Be familiar with the principles of standard precautions and select the correct PPE (personal protective equipment) for the task.

Guidelines for standard precautions

1. Routinely cleanse hands.
2. Wear gloves for any contact with blood, body fluid, secretions, excretions (except sweat), mucous membranes, or nonintact skin. Also:
 - Any time your hands are cut, scratched, chapped, or have a rash
 - When cleaning up blood or body fluid spills
 - When cleaning potentially contaminated equipment
3. Make sure your gloves are intact and fit properly. Gloves that are torn or too large or small will not protect you.
4. Change gloves:
 - After caring for each patient
 - Before touching non-contaminated articles or environmental surfaces
 - Between tasks with the same patient if there is contact with infectious materials
 - When caring for multiple wounds on the same patient
 - Anytime your gloves become solid for any reason
5. Dispose of gloves properly, according to agency policy.
6. Wear a waterproof apron or gown for procedures that are likely to produce splashes of blood or other body fluids:
 - Remove a soiled apron or gown as soon as possible and dispose of it properly
 - Wash our hands

Guidelines for standard precautions (continued...)

7. Wear a mask and protective eyewear or a face shield for procedures that are likely to produce splashes of blood and other body fluids. The surgical mask covers both the nose and the mouth. The mask is used once and discarded. If it becomes damp during use, change it. Masks lose their effectiveness when moist.

8. Goggles or a face shield help protect the mucous membranes of the eyes from splashes or sprays of blood and other body fluid. Wear a surgical mask with goggles or a face shield to protect the nose and mouth. Your eyeglasses will need to protect you.

- A good rule to follow is that a surgical mask may be worn without protective eyewear, but protective eyewear is never worn without a surgical mask.
- Apply the mask first, followed by the protective eyewear.
- Some one-piece, disposable masks have protective eye shield attached to them.

9. You should:

- Know where to obtain PPE.
- Correctly apply PPE.
- Be familiar with the principles of standard precautions and select the correct PPE for the task.
- Do not contaminate environmental surfaces with used PPE.
- Correctly remove and discard the PPE before leaving the work area.
- Place used PPE in the proper container for laundering, decontamination, or disposal. A plastic bag is usually the best option.

Figure 11.3 PPE guidelines

SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



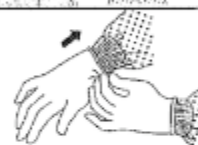
3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



4. GLOVES

- Extend to cover wrist of isolation gown



USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene



- ❖ Remember that humans need to be touched. It is not necessary to wear gloves 100% of the time unless needed to apply the principles of standard precautions.

Ebola raises PPE removal questions

In 2014, an epidemic of the deadly virus Ebola in Liberia resulted in the evacuation of patients to other countries. At the time of this writing, this includes patients in Spain (two), Germany (two), France (one), the UK (one), Norway (one), and the United States (four).

A visitor from Liberia became the first person in the United States to be diagnosed with the disease. After his death, two nurses who cared for him were diagnosed with Ebola, though luckily both survived. CDC dignitaries were quick to note that a breach in protocol must have been responsible for transmission of the virus in both instances. “It’s important to wear it, but it’s important also that when you take it off, you take it off properly,” CDC insists. “It is conceivable that you could be protected while you’re doing everything you need to do with the patient, and then as you remove the protective material that could be a point of vulnerability.” Since the technique used for removal of PPE was implicated by the CDC in the contamination, a federal inquiry is underway in the United States.

Wear Gloves

Gloves are an important part of patient care. They are worn to avoid:

- Picking up a pathogen from a patient
- Giving a patient a pathogen that is on your hands
- Picking up a pathogen and contaminating environmental surfaces and personal property in the hands
- Passing a pathogen to a coworker, visitor, family member(or other person) from you hands

Clean exam gloves are generally used in the home. Most of the gloves used today are made of nitrile, vinyl, and other synthetic products. Inform your employer if you are allergic to latex. They will provide another type of glove. Disposable gloves are to be used only once and may not be washed for reuse. Even though properly gloved, an HHA who has broken skin should be sure to inform care team members. Gloves do not take place of proper hygiene. You must clean your hands before and after touching a patient, even if you wear gloves.

Gloves will become contaminated while providing care to a patient, so it's important to remove gloves immediately after providing that care. Gloves must be changed if they become damaged or soiled in any way. It's easy to contaminate the patient's room with gloved hands, so HHAs must remove gloves, wash hands, and replace gloves in the presence of open sores and cuts, before touching bodily fluids, and before and after:

- Assisting with or performing mouth care
- Assisting with or performing perineal care
- Performing any other personal care
- Shaving a patient
- Disposing of soiled linens, dressing, or pads

Wear Gloves (continued...)

Gloves will become contaminated while providing care to a patient, so it's important to remove gloves immediately after providing that care. Gloves must be changed if they become damaged or soiled in any way. It's easy to contaminate the patient's room with gloved hands, so HHAs must remove gloves, wash hands, and replace gloves in the presence of open sores and cuts, before touching bodily fluids, and before and after:

- Assisting with or performing mouth care
- Assisting with or performing perineal care
- Performing any other personal care
- Shaving a patient
- Disposing of soiled linens, dressing, or pads

Figure 11.4 Glove guidelines

BEACON 1156-88-0100/0101 LEAF 1/11

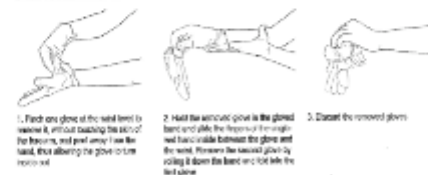
Technique for donning and removing
non-sterile examination gloves

When the hand hygiene indicator is out before a contact requiring glove use, perform hand hygiene by rubbing with an alcohol-based hand rub or by washing with soap and water.

HOW TO DON GLOVES:



HOW TO REMOVE GLOVES:



4. Then, perform hand hygiene by rubbing with an alcohol-based hand rub or by washing with soap and water.

11-116

When the hand hygiene indicator is out before a contact requiring glove use, perform hand hygiene by rubbing with an alcohol-based hand rub or by washing with soap and water.

Putting on Gloves

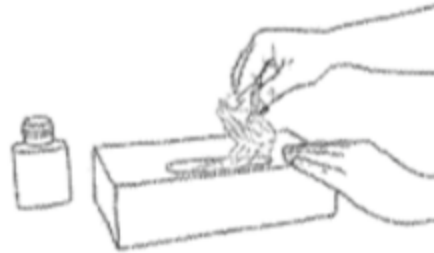
1. Wash hands
2. Places glove on one hand
3. With your gloved hand, out the other glove on
4. Look for tears and holes and immediately replace gloves that are damaged

Taking off gloves

1. Tougging the outside of one glove with the gloved fingers of the other hand, pull the glove down from the wrist.
2. As the gloves come off, roll or inside out.
3. Hold the removed glove in your opposite gloved hand.
4. With bare fingers, grasp the inside of your glove and roll it down from the wrist, turning it inside out. You will now have one glove in your hand, clean side out, with the other glove inside it.
5. Dispose of used gloves properly.
6. Wash hands again.

When the hand hygiene indication occurs before a contact requiring glove use, perform hand hygiene by rubbing with an alcohol-based handrub or by washing with soap and water.

I. HOW TO DON GLOVES:



1. Take out a glove from its original box

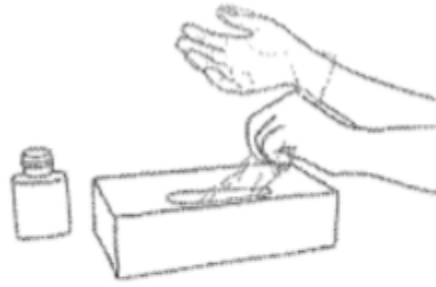


2. Touch only a restricted surface of the glove corresponding to the wrist (at the top edge of the cuff)



3. Don the first glove

How to Don Gloves



4. Take the second glove with the bare hand and touch only a restricted surface of glove corresponding to the wrist



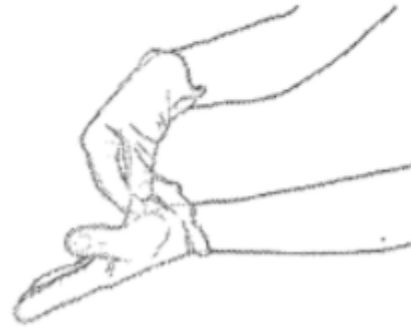
5. To avoid touching the skin of the forearm with the gloved hand, turn the external surface of the glove to be donned on the folded fingers of the gloved hand, thus permitting to glove the second hand



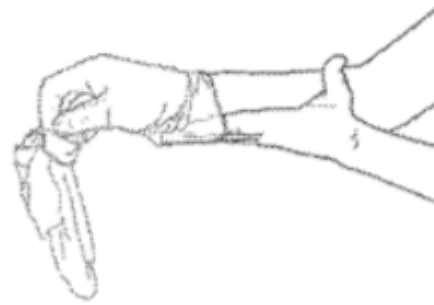
6. Once gloved, hands should not touch anything else that is not defined by indications and conditions for glove use

How to Don Gloves (continued...)

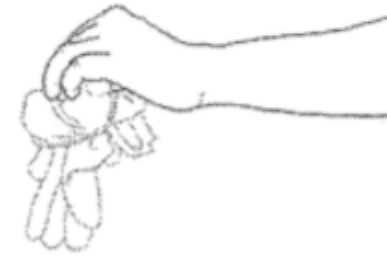
II. HOW TO REMOVE GLOVES:



1. Pinch one glove at the wrist level to remove it, without touching the skin of the forearm, and peel away from the hand, thus allowing the glove to turn inside out



2. Hold the removed glove in the gloved hand and slide the fingers of the ungloved hand inside between the glove and the wrist. Remove the second glove by rolling it down the hand and fold into the first glove



3. Discard the removed gloves

How to Don Gloves (continued...)



Sick Days

If you feel sick, you might think that your patients still need you and the gallant thing to do is to work anyway. However, you should assess how sick you are and take the necessary precautions. Discuss with your supervisor whether you should work at all that day.



Vaccination

Healthcare workers should be vaccinated against many diseases, including the flu. Because you provide care in close quarters with many patients, you having the flu created danger to a wider net of people who are more vulnerable to illness. Every healthcare worker who doesn't come down with the flu could stop countless others from catching it.



Sanitation

Always wipe down and clean high-traffic areas or hazardous areas, such as surfaces in bathrooms and kitchens. Wipe items that are used for meals or snacks, such as tray tables or trays attached to wheelchairs, with soap and water after each use. Keep kitchen eating and food-preparation surfaces clean. Wiping down doorknobs, cabinet knobs, counters, remote controls, phone receivers, cell phones, toilet flush handles, faucets, keyboard, mouse, light switches, and handles to appliances such as the microwave, oven, or toaster often is always a good idea. Linens, eating utensils, and dishes belonging to those who are sick should not be shared without washing thoroughly first.

Sneezing and Coughing

Never sneeze or cough into your hands. If you do accidentally, be sure to immediately sanitize or wash them. Using a tissue is best, but if you can't use a tissue, use the crook of your arm. This is an area unlikely to touch others and it provides a better shield to prevent contact with others. Either way, clean the hands or elbow with alcohol. Discard tissue correctly. Try to cough and sneeze away from others. Even if the cause is allergies, you can still transmit microbes you might be carrying.

General Infection Control Practices

To limit the spread of infection, follow your agency infection control procedures. Some tips to remember include:

- Basic handwashing: wash your hands before patient care and after patient care. Use an alcohol-based hand sanitizer if your hands are not visibly dirty.
- Use warm water and soap when washing hands. Hot water from the tap is not enough to kill germs and can cause skin problems.
- Cough or sneeze into a tissue and then discard the tissue. Clean your hands with alcohol. If you do not have a tissue, cough into your elbow or upper sleeve.
- Wash your hands with soap and water after coming in contact with any body fluids from your patient or yourself. This includes an unprotected sneeze or cough.
- Wear gloves for patient care that may include body fluids.
- Wear surgical mask for care of patients with flu.
- Try not to touch your face. Germs from your hands can enter the mouth, nose, or eyes, through contact.
- Do not share drinks or food.
- Use gloves when cleaning the patient's home to avoid contact with germs on the surface of chairs, tables, toilets, wheelchairs, and other items. Remember that germs can travel many feet from a sneeze.



Patient Education

Stopping the spread of illness is everyone's job. Teach your patient to use alcohol hand cleaner or wash hands often and to keep a clean home. Make sure the patients tell you when they're not feeling well. Teach them this content. Be sure they keep surfaces clean and keep liquid soap in the bathroom.



Outcome and the HHA

Infection control prevents harm to the patient and others. The last thing a patient needs is to develop an infection. Viruses like the flu can make recuperation difficult and take longer. A recently discharged patient may have to return to the hospital. Old, young, chronically ill, and healthy persons die of the flu each year. Your role in preventing these outcomes is critical. As a constant observer, you can also alert the healthcare team if a patient has signs of infection so treatment can begin as soon as possible.

CMS' Expectations

As a result of the Outcome and Assessment Information Set, the Centers for Medicare & Medicaid Services (CMS) reviews the quality outcomes and processes regarding the care an HHA provides. It also reviews potentially avoidable events. It expects that HHAs use the information available for their quality improvement programs. CMS expects an agency's quality improvement efforts to take a multidisciplinary approach in meeting and improving the care needs of its patients.

Supplemental Learning Activities

- Practices sneezing and coughing into elbow and washing your hands correctly
- Visit the Centers for Disease Control and Prevention (CDC) website at www.cdc.gov/hai to review standard procedures and the basics of infection control.
- Review your agency's infection control policies and procedures.
- Review the ACIP Vaccine Recommendations for Health-Care Personnel and Influenza Vaccination of Health-Care Personnel at www.cdc.gov/vaccines/bdp/acip-recs/index.html. Make sure your immunizations are up to date.
- Review the CDC hand washing guidelines at www.cdc.gov/handhygiene.
- Review standard precautions in detail. Summary of CDC guidelines can be found at www.cdc.gov/HAI/prevent/ppe.html.