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Infection Prevention and Standard Precautions



1. Define *infection prevention* and explain the chain of infection

Define the following terms:

infection prevention

the set of methods used to prevent and control the spread of disease.

microorganism

a tiny living thing that is not visible to the eye without a microscope.

pathogens

microorganisms that are capable of causing infection and disease.

chain of infection

a way of describing how disease is transmitted from one being to another.

1. Define *infection prevention* and explain the chain of infection

Define the following terms:

causative agent

a pathogenic microorganism that causes disease.

reservoir

a place where a pathogen lives and multiplies.

portal of exit

any body opening on an infected person that allows pathogens to leave.

mode of transmission

the method of describing how a pathogen travels.

1. Define *infection prevention* and explain the chain of infection

Define the following terms:

direct contact

a way of transmitting pathogens through touching the infected person or his secretions.

indirect contact

a way of transmitting pathogens from touching something contaminated by the infected person.

portal of entry

any body opening on an uninfected person that allows pathogens to enter.

mucous membranes

membranes that line body cavities that open to the outside of the body, such as the linings of the mouth, nose, eyes, rectum, and genitals.

1. Define *infection prevention* and explain the chain of infection

Define the following terms:

susceptible host

an uninfected person who could become ill.

infectious

contagious.

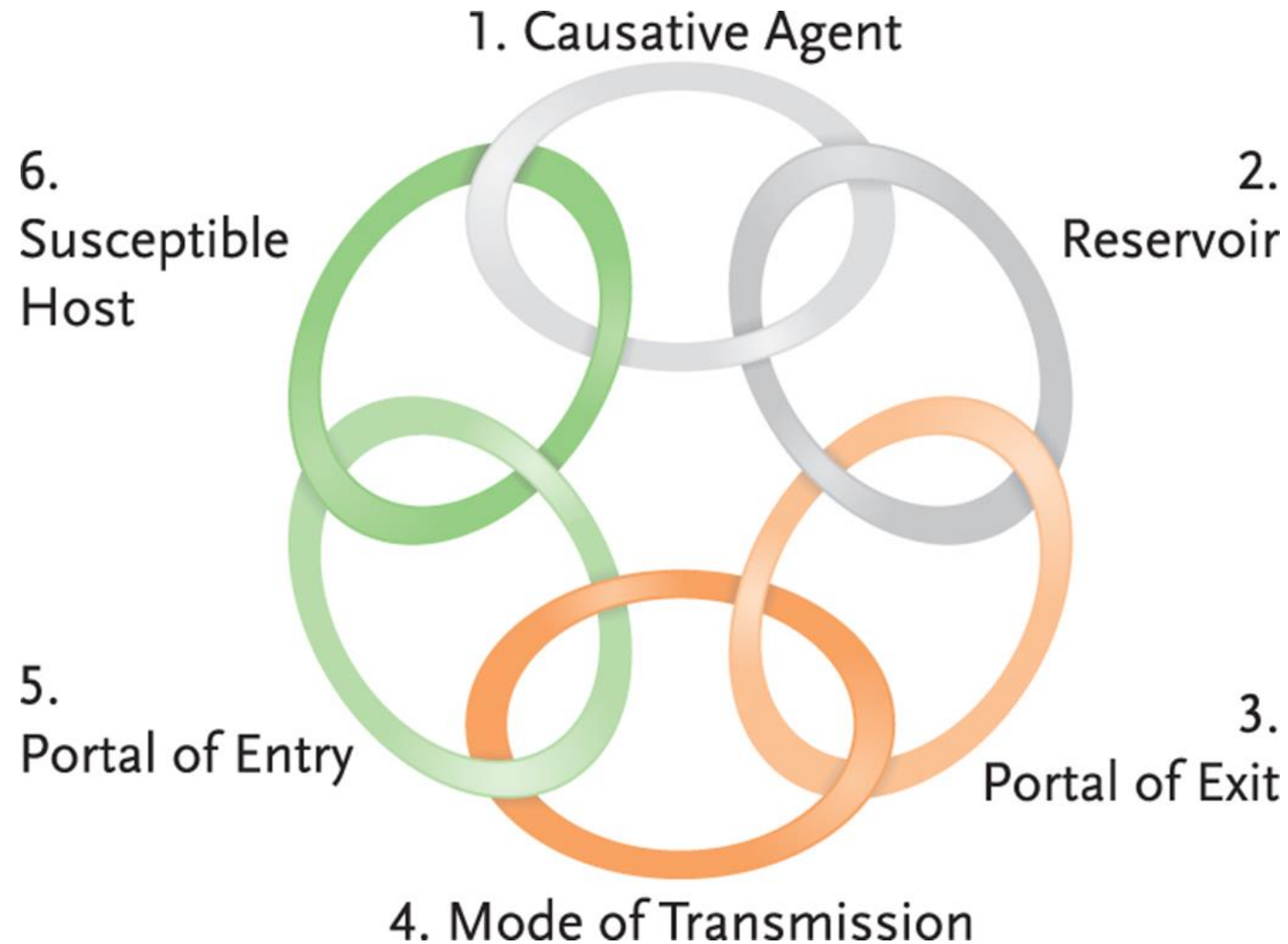
medical asepsis

measures used to reduce and prevent the spread of pathogens.

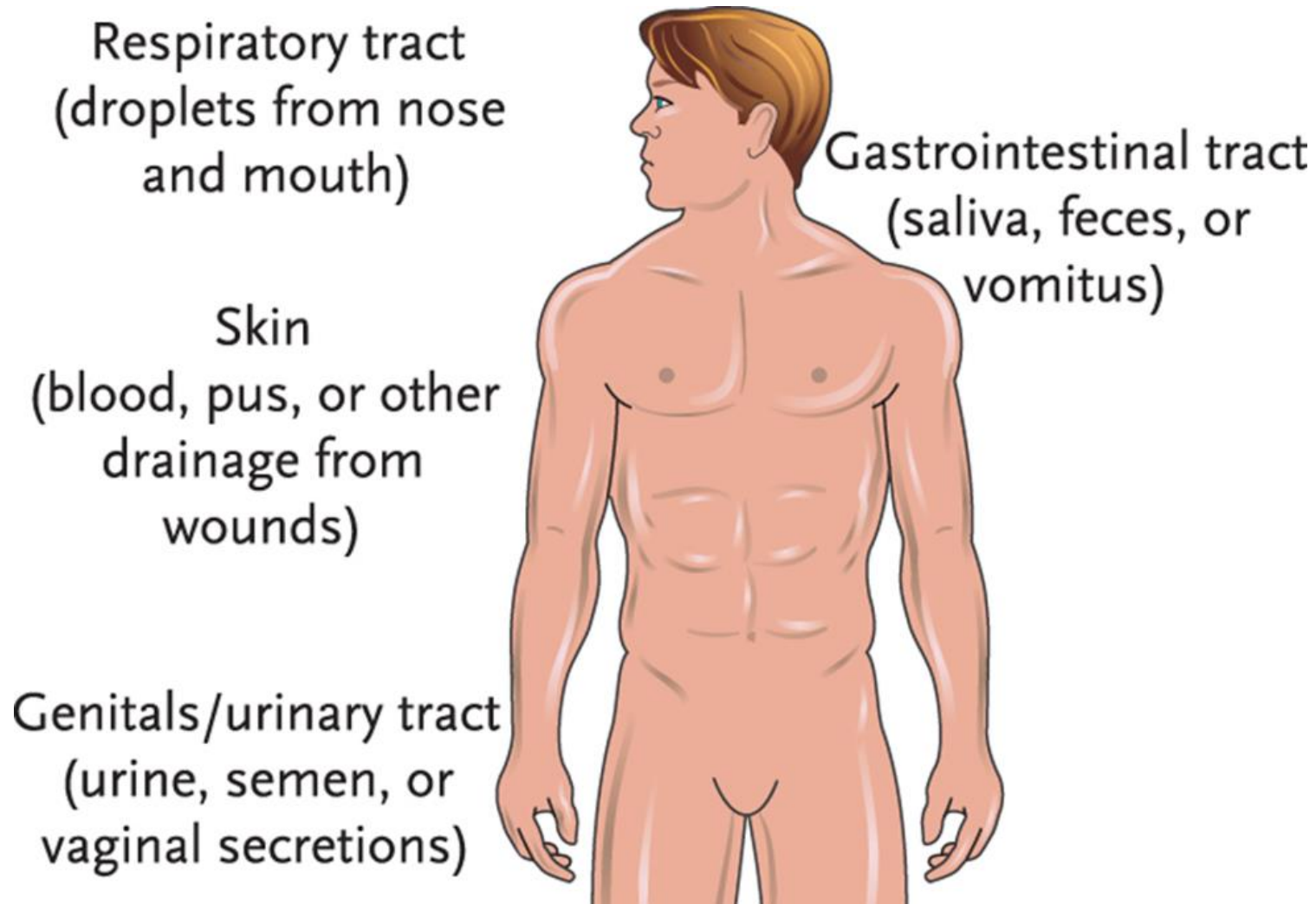
surgical asepsis

the state of being completely free of all microorganisms; also called *sterile technique*.

Key Material 5-1: The Chain of Infection



Key Material 5-2: Portals of Exit



Key Material 5-3: Portals of Entry

Respiratory tract
(nose or mouth)

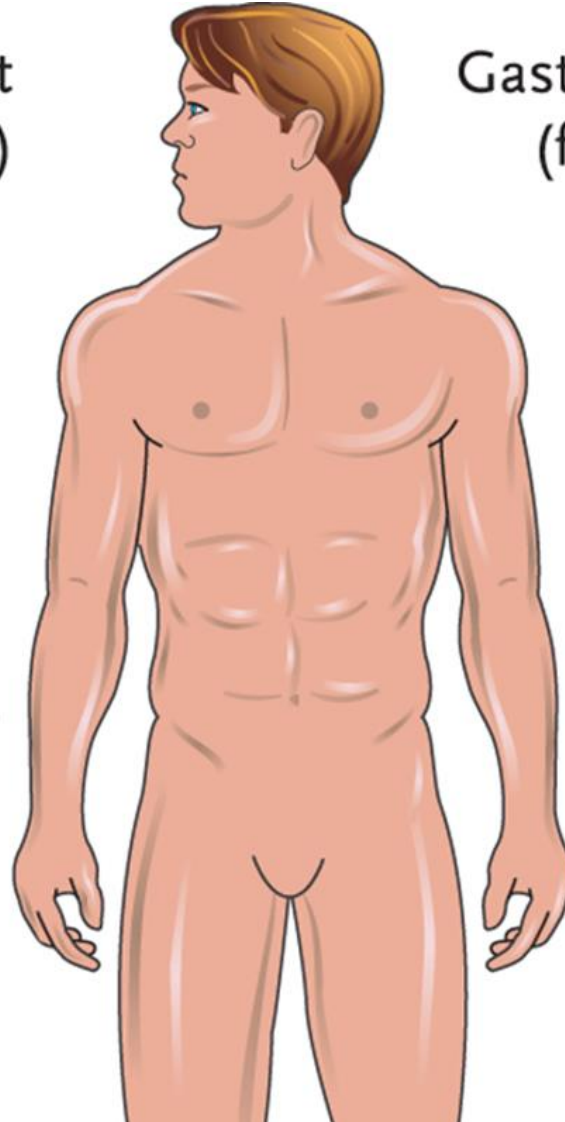
Gastrointestinal tract
(food or fluids)

Breaks in skin
(a bite, wound,
acne, or any
non-intact skin)

Genitals
(penis, vagina)

Urinary tract

The placenta
(from mother to
baby)



1. Define *infection prevention* and explain the chain of infection

Think about this question:

Can you think of an example of each link in the chain of infection?

1. Define *infection prevention* and explain the chain of infection

Remember:

If even one of the links in the chain of infection is broken, then the spread of infection is stopped.

Handout 5-1: Infection Prevention Definitions

Microorganism: Microorganisms are single-celled organisms that can be only be viewed with the aid of a microscope. Microorganisms can be divided into five basic categories—bacteria, viruses, fungi, protozoa, and helminthes. Most microorganisms are harmless—some are even beneficial. Others are capable of causing infection or disease. Microorganisms are often classified as either pathogenic or nonpathogenic.

Nonpathogenic microorganism: A nonpathogenic microorganism is a type of microorganism that does not (is unable to) cause infection or disease.

Pathogenic microorganism: A pathogenic microorganism is a type of microorganism that is capable of causing infection or disease; it is also called a pathogen.

Bacteria: Bacteria are single-celled microorganisms that lack a nuclei and organized cell structures. Bacteria can exist independently (on their own) or as parasites, dependent upon a host for life. Bacteria can be found in three basic shapes—round, rod, or spiral. While some bacteria are capable of causing disease, most are non-infectious and many have critical roles in decay, fermentation, and nutrient recycling.

Bacteria help people digest food. Some bacteria destroy disease-causing cells, and some produce important vitamins in the gastrointestinal tract. Bacteria also play a role in food processing, such as in the production of yogurt and cheeses.

Pathogenic bacteria can cause cell damage or death by producing substances known as toxins. Other cell damage can occur when the host's immune system produces substances to eliminate bacteria and these substances damage the infected cells and adjacent cells.

Handout 5-1: Infection Prevention Definitions (cont'd)

Virus: Viruses are small packages of DNA or RNA encased in protein shells that invade a cell (host cell) and incorporate themselves into the host cell's DNA. When the infected host cell begins to produce (replicate) new viral particles, the infected cell dies.

Fungi: Fungi are multi-celled or single-celled organisms that can be pathogenic, and cause infections in healthy persons, or opportunistic, and cause infections in people with weakened immune systems. Fungi can be nonpathogenic as well, and some types of fungi are even beneficial, such as those used to make antibiotics. A few types of fungi are considered delicacies, such as truffles and edible mushrooms.

Yeasts and molds are examples of fungi. Fungi are the most common cause of disease in crops and plants. Fungi receive their nourishment by secreting enzymes that break down surrounding cells. When this happens on living tissue, it is irritating and uncomfortable.

Parasite: A parasite is an organism that lives on or in an organism of a different species.

Infection: An infection occurs when microorganisms enter and multiply within the tissue of a host, causing damage to that tissue. Symptoms may be apparent, or the host may display no symptoms.

Disease: A disease occurs when tissue is damaged due to the entry and multiplication of microorganisms resulting in clinical signs and symptoms of a recognizable process.

Host: A host is an organism or cell on or in which a microorganism lives or feeds.

2. Explain Standard Precautions

Define the following terms:

Occupational Safety and Health Administration (OSHA)

a federal government agency that makes rules to protect workers from hazards on the job.

Centers for Disease Control and Prevention (CDC)

a federal government agency that issues information to protect and improve the health and safety of individuals and communities.

2. Explain Standard Precautions

Define the following terms:

Standard Precautions

a method of infection prevention in which all blood, body fluids, nonintact skin, and mucous membranes are treated as if they were infected with an infectious disease.

sharps

needles or other sharp objects.

2. Explain Standard Precautions

Remember:

The term body fluids refers to tears, saliva, sputum (mucus coughed up), urine, feces, semen, vaginal secretions, pus or other wound drainage, and vomit. It does not include sweat.

2. Explain Standard Precautions

Think about this question:

Why should Standard Precautions be followed on every single client in your care?

2. Explain Standard Precautions

HHAs should know the following guidelines for practicing Standard Precautions:

- Wash hands
- Wear gloves
- Remove gloves immediately when finished with a procedure
- Immediately wash skin surfaces
- Wear a disposable gown
- Wear a mask and goggles/face shield when contact with blood or body fluids or spraying/splashing of blood or body fluids is possible

2. Explain Standard Precautions

Guidelines for practicing Standard Precautions (cont'd):

- Wear gloves when handling sharp objects
- Never attempt to recap needles or sharps
- Bag all contaminated supplies
- Clearly label body fluids being saved for specimen
- Dispose of contaminated waste properly

3. Define *hand hygiene* and identify when to wash hands

Define the following term:

hand hygiene

washing hands with soap and water or using alcohol-based hand rubs.

3. Define *hand hygiene* and identify when to wash hands

Think about this question:

Why should hand rubs not be a substitute for washing hands with soap and water?

3. Define *hand hygiene* and identify when to wash hands

HHAs should wash their hands in these situations:

- When first arriving at client's home
- Whenever hands are visibly soiled
- Before and after touching client
- Before putting on gloves and after removing
- After contact with body fluids, mucous membranes, nonintact skin, or wound dressings
- After handling contaminated items
- Before and after making meals or working in kitchen

3. Define *hand hygiene* and identify when to wash hands

Situations when HHAs should wash their hands (cont'd):

- Before and after feeding clients
- Before getting clean linen
- Before reaching into clean area of supply bag
- After touching garbage or trash
- After picking up anything from the floor
- Before and after eating
- Before and after using toilet

3. Define *hand hygiene* and identify when to wash hands

Situations when HHAs should wash their hands (cont'd):

- After blowing nose, coughing, or sneezing into your hands
- After smoking
- After touching areas on body
- Before and after applying makeup
- After any contact with pets and pet care items
- Before leaving client's home

3. Define *hand hygiene* and identify when to wash hands

Remember:

Handwashing is the single most important thing you can do to prevent the spread of disease.

Washing hands (hand hygiene)

Equipment: soap, paper towels

1. Turn on water at sink. Keep your clothes dry, because moisture breeds bacteria. Do not let your clothing touch the outside portion of the sink or counter.
2. Wet hands and wrists thoroughly.
3. Apply soap to your hands.



Washing hands (hand hygiene)

4. Keep your hands lower than your elbows and your fingertips down. Rub your hands together and fingers between each other to create a lather. Lather all surfaces of wrists, fingers, and hands, using friction for at least 20 seconds. Friction helps clean.
5. Clean your nails by rubbing them in the palm of your other hand.



Washing hands (hand hygiene)

6. Keep your hands lower than your elbows and your fingertips down. Being careful not to touch the sink, rinse thoroughly under running water. Rinse all surfaces of your hands and wrists. Run water down from wrists to fingertips. Do not run water over unwashed arms down to clean hands.



Washing hands (hand hygiene)

7. Use a clean, dry paper towel to dry all surfaces of your fingers, hands, and wrists starting at the fingertips. Do not wipe towel on unwashed forearms and then wipe clean hands. Discard the towel into waste container without touching the container. If your hands touch the sink or wastebasket, start over.

Washing hands (hand hygiene)

8. Use a clean, dry paper towel to turn off the faucet. Dispose of paper towel into waste container. Do not contaminate your hands by touching the surface of the sink or faucet.



4. Identify when to use personal protective equipment (PPE)

Define the following terms:

personal protective equipment (PPE)

equipment that helps protect employees from serious injuries or illnesses that may result from contact with workplace hazards.

don

to put on.

doff

to remove.

4. Identify when to use personal protective equipment (PPE)

HHAs should know these points about gowns:

- Protect exposed skin
- Prevent soiling of clothing
- Should fully cover the torso and the sleeves should fit snugly

Putting on (donning) and removing (doffing) a gown

1. Wash your hands.
2. Open gown. Hold it out in front of you and allow it to touch the floor. Facing the back opening of sleeve.



wn or
h

Putting on (donning) and removing (doffing) a gown

3. Fasten the neck opening.
4. Reaching behind you, pull the gown until it covers your waist.

the gown



Putting on (donning) and removing (doffing) a gown

5. Put on your gloves after putting on gown. The cuffs of gloves should overlap the cuffs of the gown.
6. When removing a gown, first remove and discard gloves properly. Then unfasten the gown at the neck and waist. Remove the gown without touching the outside of gown. Roll the dirty side in, while holding gown away from your body. Discard the gown properly and wash your hands.



4. Identify when to use personal protective equipment (PPE)

HHAs should know these points about masks and goggles:

- Masks are worn when the client has a respiratory illness
- Masks should fully cover your nose and mouth
- Masks should fit snugly over nose and mouth
- It is important to change masks between clients
- Goggles should fit snugly over eyes or eyeglasses

Putting on (donning) a mask and goggles

1. Wash your hands.
2. Pick up the mask by the top strings or the elastic strap. Do not touch the mask where it touches your face.
3. Pull the elastic strap over your head, or if mask has strings, tie top strings first, then bottom strings. Do not wear a mask hanging from only the bottom ties or straps.



Putting on (donning) a mask and goggles

4. Pinch the metal strip at the top of the mask (if part of the mask) tightly around your nose so that it feels snug. Fit mask snugly around face and below the chin.
5. Put the goggles on over your eyes or eyeglasses. Use the headband or earpieces to secure them to your head. Make sure they fit snugly.
6. Put on gloves after putting on the mask and goggles.



4. Identify when to use personal protective equipment (PPE)

HHAs should now these points about face shields:

- Can be worn as a substitute for mask and goggles or can be worn with a mask
- Should cover forehead, go below the chin, and wrap around the sides of the face

4. Identify when to use personal protective equipment (PPE)

Define the following terms:

perineal care

care of the genital and anal area.

biodegradable

capable of breaking down or being decomposed by bacterial or other living organisms.

4. Identify when to use personal protective equipment (PPE)

Gloves should be worn for the following tasks:

- If you might touch blood or any body fluid
- During mouth care or care of any mucous membrane
- During perineal care
- Providing personal care on nonintact skin
- Providing personal care if aide has cuts on hands
- Shaving client
- Disposing of soiled linens, gowns, dressings, and pads
- When touching contaminated surfaces or equipment

4. Identify when to use personal protective equipment (PPE)

Gloves should always be changed

- Immediately before contact with mucous membranes or broken skin
- If gloves become wet, worn, soiled, or torn

4. Identify when to use personal protective equipment (PPE)

Remember:

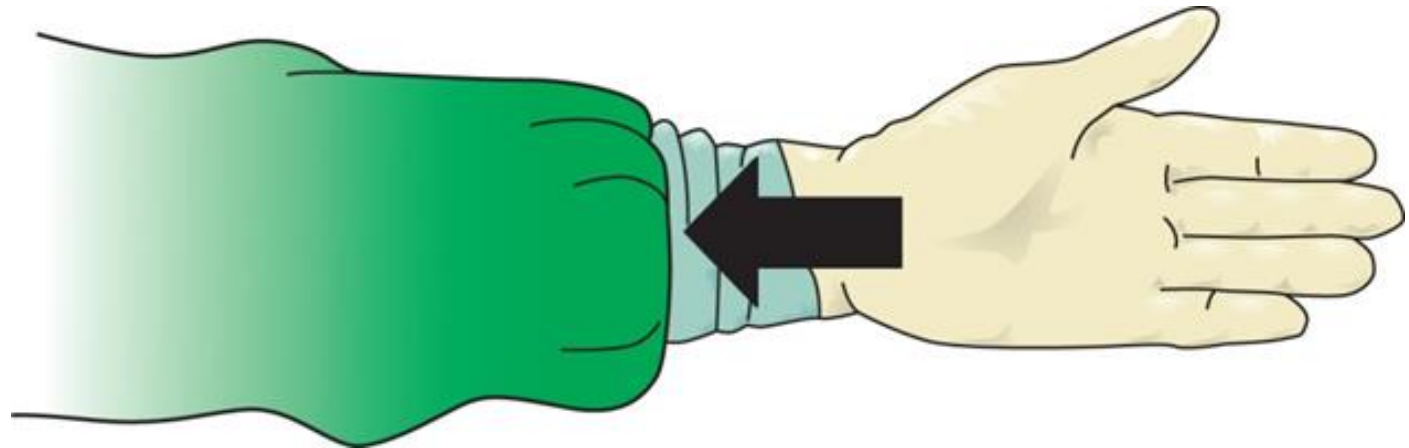
Do not contaminate room around you by touching objects with dirty/contaminated gloves.

Putting on (donning) gloves

1. Wash your hands.
2. If you are right-handed, slide one glove on your left hand (reverse if left-handed).
3. Using your gloved hand, slide the other hand into the second glove.
4. Interlace fingers to smooth out folds and create a comfortable fit.
5. Carefully check for tears, holes, cracks, or discolored spots. Replace the glove if needed.

Putting on (donning) gloves

6. Adjust gloves until they are pulled up over your wrist and fit correctly. If wearing a gown, pull the cuff of the gloves over the sleeves of the gown.



Removing (doffing) gloves

1. Touch only the outside of one glove. With one gloved hand, grasp the other glove at the palm and pull the glove off.
2. With the fingertips of your gloved hand, hold the glove you just removed. With your ungloved hand, slip two fingers underneath the cuff of the remaining glove at the wrist. Do not touch any part of the outside of the glove.



Removing (doffing) gloves

3. Pull down, turning this glove inside out and over the first glove as you remove it.
4. You should now be holding one glove from its clean inner side and the other glove should be inside it.
5. Drop both gloves into the proper container without contaminating yourself.
6. Wash your hands.

Key Material 5-4: CDC Sequence for Donning and Doffing PPE

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**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



(image reprinted from the cdc's website, www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf)

Key Material 5-4: CDC Sequence for Donning and Doffing PPE (cont'd)

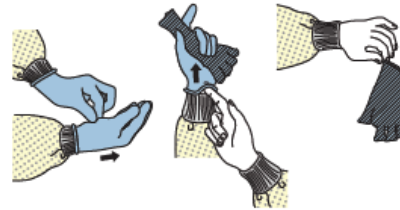
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HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 1

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room except a respirator, if worn. Remove the respirator after leaving the patient room and closing the door.** Remove PPE in the following sequence:

1. GLOVES

- Outside of gloves are contaminated!
- If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove
- Discard gloves in a waste container



2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band or ear pieces
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container



3. GOWN

- Gown front and sleeves are contaminated!
- If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
- Pull gown away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard in a waste container

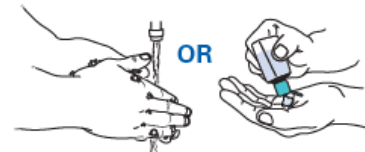


4. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated — DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container



5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS
BECOME CONTAMINATED AND IMMEDIATELY AFTER
REMOVING ALL PPE



(image reprinted from the CDC's website, www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf)

4. Identify when to use personal protective equipment (PPE)

Order for donning PPE:

1. Wash your hands.
2. Put on gown.
3. Put on mask.
4. Put on goggles or face shield.
5. Put on gloves.

4. Identify when to use personal protective equipment (PPE)

Order for doffing PPE:

1. Remove and discard gloves.
2. Remove goggles or face shield.
3. Remove and discard gown.
4. Remove and discard mask.
5. Wash your hands. Performing hand hygiene is always the final step after removing and discarding PPE. Hand hygiene should also be performed between steps if hands become contaminated at any time.

5. Explain how to handle spills

The following are guidelines for cleaning spills involving blood, body fluids, or glass:

- Put on gloves (industrial strength)
- Use 1:9 bleach to water solution or approved product
- For fabrics, use disinfectants or soap and water (wear gloves)
- Use tools - never hands - to pick up glass
- Properly bag waste
- Use a biohazard waste bag
- Dispose of biohazardous waste separately

6. Explain Transmission-Based Precautions

Define the following terms:

Transmission-Based Precautions

a method of infection prevention used when caring for people who are infected or may be infected with certain infectious diseases.

Airborne Precautions

special measures used to prevent the spread of pathogens that can be transmitted through the air after being expelled.

Droplet Precautions

special measures to prevent the spread of pathogens that are spread by droplets in the air.

6. Explain Transmission-Based Precautions

Define the following terms:

Contact Precautions

special measures used to prevent the spread of pathogens that can be transmitted by direct contact with a person or an object.

isolate

to keep something separate, or by itself.

6. Explain Transmission-Based Precautions

Remember:

Transmission-Based Precautions are used ***in addition*** to Standard Precautions.

6. Explain Transmission-Based Precautions

Airborne Precautions are used for diseases that can be transmitted, or spread, through the air after being expelled.

- Airborne pathogens are so small that they can attach to moisture in the air and remain floating for some time.
- Example: tuberculosis (TB), COVID-19
- Precautions: face mask, gown; washing hands; proper ventilation

6. Explain Transmission-Based Precautions

Droplet Precautions are used for diseases that are spread by droplets in the air. Droplets normally do not travel more than six feet.

- Droplets are spread by coughing, sneezing, laughing, singing, or talking
- Droplets do not normally travel more than six feet.
- Examples: influenza, COVID-19
- Precautions: face mask; covering nose and mouth when sneezing or coughing; washing hands

6. Explain Transmission-Based Precautions

Contact Precautions are used when the client is at risk of spreading or contracting a microorganism from touching an infected object or person

- Contact diseases can occur with touching skin, wound, or infection.
- Examples: conjunctivitis (pink eye), C. difficile, lice, scabies
- Precautions: PPE; client isolation; washing hands with soap; avoid touching infected surfaces without gloves; avoid touching uninfected surfaces with contaminated gloves; avoid sharing towels/linens/clothing; using disposable equipment when possible.

6. Explain Transmission-Based Precautions

Guidelines for isolation procedures are as follows:

- Wash dishes and utensils in hot water with antibacterial soap
- Wear disposable gloves for soiled laundry and wash separately in hot water
- Limit amount of nondisposable equipment; clean and disinfect items before taking them from the home
- Bleach and water (1:9) for spills and contaminated surfaces
- Clean and disinfect surfaces often. Use a separate bathroom

7. Explain sterilization and disinfection

Define the following terms:

clean

in health care, a condition in which an object has not been contaminated with pathogens.

dirty

in health care, a condition in which an object has been contaminated with pathogens.

disinfection

process that destroys most, but not all, pathogens; it reduces the pathogen count to a level that is considered not infectious.

sterilization

a cleaning measure used to decrease the spread of pathogens and disease by destroying all microorganisms, including those that form spores.

7. Explain sterilization and disinfection

Remember:

In home care, you may disinfect items used by the client. You will also disinfect some areas while doing housekeeping tasks. The care plan and your assignments will specify what disinfection you need to do.

General methods of disinfection are by wet and dry heat and by chemicals.

Wet heat disinfection uses boiling water to disinfect. Dry heat disinfection means baking in the oven.

Disinfecting using wet heat

Equipment: items to be disinfected, clean pot with enough room to hold items, clean lid for pot, cold water, timer or clock, stove, potholders

1. Wash your hands.
2. Place items in the pot and fill it with water. Make sure water covers all items, leaving enough room at the top for steam to escape.
3. Place lid on the pot and place the covered pot on the burner on the stove.
4. Turn on heat and bring the water to a boil. Do not open the lid at any time during the boiling process.
5. Set the timer and boil for 20 minutes. You should see steam escaping from the sides of the pot.
6. Turn off the heat. Allow the items and water to cool.
7. After items have cooled, remove the cover with the potholders.

Disinfecting using wet heat

8. Remove the items. Place on a rack or a clean towel to air dry.
9. Wash and dry the disinfecting equipment. Return to proper storage.
10. Wash your hands.
11. Document the procedure.

Disinfecting using dry heat

Equipment: items to be disinfected, clean metal pan (cookie sheet, cake pan, etc.), timer or clock, oven, potholders

1. Wash your hands.
2. Place the items in the pan.
3. Place sheet or cake pan in the oven.
4. Turn on oven to 350°F. Set timer and bake for one hour. Keep oven door closed while items are baking.
5. Turn off heat. Allow the items to cool.
6. After items have cooled, remove with the potholders.
7. Store the items.
8. Wash and dry the disinfecting equipment. Return to proper storage.
9. Wash your hands.
10. Document the procedure.

7. Explain sterilization and disinfection

Think about this question:

Are there items an HHA could carry in his supply bag to assist with infection prevention?

8. Explain how bloodborne diseases are transmitted

Define the following term:

bloodborne pathogens

microorganisms found in human blood that can cause infection and disease in humans.

8. Explain how bloodborne diseases are transmitted

HHAs should understand how bloodborne diseases are transmitted:

- Infected blood
- Infected semen or vaginal secretions
- Sexual contact
- Needle sharing
- Infected mothers
- Contact in healthcare setting

8. Explain how bloodborne diseases are transmitted

Remember:

You can safely touch and spend time with clients who have a bloodborne disease. These clients need the same thoughtful, personal attention you give to all your clients.

Follow Standard Precautions but never isolate a client emotionally because he or she has a bloodborne disease.

8. Explain how bloodborne diseases are transmitted

OSHA's Bloodborne Pathogens Standard:

The Bloodborne Pathogens Standard is a law that requires healthcare facilities to protect employees from bloodborne health hazards. By law, employers must follow these rules to reduce or eliminate the risk of exposure to infectious diseases. The standard also guides employers and employees through the steps to follow if exposed to infectious material.

9. Explain the basic facts regarding HIV and hepatitis infection

Define the following terms:

HIV (human immunodeficiency virus)

a virus that attacks the body's immune system and gradually disables it; eventually can cause AIDS.

AIDS (acquired immunodeficiency syndrome)

the final stage of HIV infection, in which infections, tumors, and central nervous system symptoms appear due to a weakened immune system that is unable to fight infection.

hepatitis

an inflammation of the liver caused by certain viruses and other factors, such as alcohol abuse, some medications, and trauma.

jaundice

a condition in which the skin, whites of the eyes, and mucous membranes appear yellow.

9. Explain the basic facts regarding HIV and hepatitis infection

The three most common types of hepatitis are

- Hepatitis A - results from fecal-oral contamination.
- Hepatitis B - transmitted through contaminated blood or needles, or by sexual contact with an infected person. Discuss the vaccine.
- Hepatitis C - transmitted through blood and body fluids.

9. Explain the basic facts regarding HIV and hepatitis infection

Remember:

The hepatitis B vaccine is usually given as a series of three shots. Prevention is the best option for dealing with this disease. Take the vaccine when it is offered.

10. Identify high-risk behaviors that allow the spread of HIV

These behaviors are high-risk:

- Having unprotected or poorly-protected anal sex with an infected person
- Having unprotected or poorly-protected vaginal sex with an infected person
- Having sexual contact with many partners
- Sharing drug needles or syringes

10. Identify high-risk behaviors that allow the spread of HIV

Remember:

In a healthcare setting, infections can be spread through accidental contact with contaminated blood or body fluids, needles or other sharp objects, or contaminated supplies or equipment.

10. Identify high-risk behaviors that allow the spread of HIV

HHAs should remember these precautions against HIV/ AIDS:

- Follow Standard Precautions
- Never share needle
- Practice safer sex
- Stay in a monogamous relationship with uninfected partner
- Practice abstinence
- Get tested
- Follow the pre-exposure prophylaxis approach (PrEP)

11. Demonstrate knowledge of the legal aspects of HIV, including testing

Remember:

The right to confidentiality is especially important to people with HIV/AIDS. Others may pass judgment on people with this disease. A person with HIV/AIDS cannot be fired from a job because of the disease. However, a healthcare worker with HIV/AIDS may be reassigned to job duties with a lower risk of transmitting the disease.

11. Demonstrate knowledge of the legal aspects of HIV, including testing

Remember:

HIV testing requires consent. HIV test results are confidential and cannot be shared with a person's family, friends, or employer without his or her consent.

12. Identify community resources and services available to clients with HIV or AIDS

Depending on the community, many resources and services may be available for people with HIV or AIDS, including the following:

- Counseling
- Meal service
- Access to experimental drugs

13. Explain tuberculosis and list infection prevention guidelines

Define the following terms:

tuberculosis (TB)

a highly contagious lung disease caused by a bacterium, *Mycobacterium tuberculosis*, that is carried on mucous droplets suspended in the air.

latent TB infection (LTBI)

a type of tuberculosis in which the person carries the disease but does not show symptoms and cannot infect others.

TB disease

a type of tuberculosis in which the person shows symptoms of the disease and can spread TB to others.

13. Explain tuberculosis and list infection prevention guidelines

Define the following terms:

multidrug-resistant TB (MDR-TB)

a form of tuberculosis that is caused by an organism that is resistant to medication that is used to treat TB.

resistant

a state in which drugs no longer work to kill specific bacteria.

phlegm

thick mucus from the respiratory passage.

13. Explain tuberculosis and list infection prevention guidelines

Signs and symptoms of TB are as follows:

- Fatigue
- Loss of appetite
- Weight loss
- Slight fever and chills
- Night sweats

13. Explain tuberculosis and list infection prevention guidelines

Signs and symptoms of TB (cont'd):

- Prolonged coughing
- Coughing up blood
- Chest pain
- Shortness of breath
- Difficulty breathing

13. Explain tuberculosis and list infection prevention guidelines

HHAs should understand the following guidelines for tuberculosis:

- Follow Standard Precautions and Airborne Precautions
- Wear PPE as instructed
- Handle sputum or phlegm carefully
- Ensure proper ventilation
- Follow isolation procedures if ordered
- Assist with medications

14. Explain the importance of reporting a possible exposure to an airborne or bloodborne disease

Remember:

If you think you may have been exposed to TB, HIV/AIDS, or hepatitis at work, report this to your supervisor immediately. Fill out an incident report or a special exposure report form. Your employer will help you find out if you have been infected and take steps to prevent you from becoming sick.

14. Explain the importance of reporting a possible exposure to an airborne or bloodborne disease

Think about this question:

Why is reporting a possible exposure to an airborne or bloodborne disease so important?

15. Discuss COVID-19 and identify care guidelines

Remember:

COVID-19 is a new disease and facts about treatment and transmission may change.

15. Discuss COVID-19 and identify care guidelines

Discuss the following regarding COVID-19:

- COVID-19 (or coronavirus disease) is caused by the severe acute respiratory syndrome coronavirus 2 virus (SARS-CoV-2)
- COVID-19 is classified as both a droplet and airborne disease
- The highest risk situation for exposure is being in close contact with an infected person and being in a poorly ventilated space.

15. Discuss COVID-19 and identify care guidelines

Discuss the following regarding COVID-19 (cont'd):

- Early signs and symptoms of infection:
 - fever
 - cough
 - fatigue
 - shortness of breath
 - chills
 - muscle pain, headache, or sore throat
 - no symptoms

15. Discuss COVID-19 and identify care guidelines

Discuss the following regarding COVID-19 (cont'd):

- Symptoms may be mild or severe and the disease may cause death
- Certain underlying conditions can put the client at higher risk of serious complications

15. Discuss COVID-19 and identify care guidelines

Review the following care guidelines for COVID-19:

- Follow Standard Precautions and Transmission-Based Precautions
- Instruct the client to stay in one room away from others, including yourself
- When in the same room, maintain a distance of at least six feet
- Increase air circulation by keeping windows open if possible
- Do not share personal or household items
- Wash hands frequently or use a hand sanitizer (minimum of 60% alcohol)
- Wear a mask that covers mouth and nose while giving care
- Instruct client to wear a mask around others
- Wear eye protection such as a face shield or goggles, and wear a gown as instructed
- Avoid touching eyes, nose, and mouth
- Clean frequently touched surfaces with proper household cleaning spray/wipes

15. Discuss COVID-19 and identify care guidelines

Review the following care guidelines for COVID-19 (cont'd):

- Use gloves when handling laundry, keep soiled laundry away from body
- Discard gloves properly after use and wash hands immediately
- Encourage bed rest and fluids, maintain hydration
- Follow agency instructions regarding visitors
- Do not go to work if you feel sick or have a fever

15. Discuss COVID-19 and identify care guidelines

Review the following care guidelines for COVID-19 (cont'd):

- Report the following signs and symptoms that may indicate the illness is getting worse
 - Difficulty breathing
 - Persistent pain or pressure in the chest
 - Confusion
 - Difficulty waking or remaining awake
 - Prolonged elevated temperature
 - Cyanotic (bluish) lips or face

16. Discuss MRSA, VRE, and *C. difficile*

Define the following terms:

multidrug-resistant organisms (MDROs)

microorganisms, mostly bacteria, that are resistant to one or more antimicrobial agents that are commonly used for treatment.

(MRSA) methicillin-resistant *Staphylococcus aureus*

bacteria (*Staphylococcus aureus*) that have developed resistance to the antibiotic methicillin.

(VRE) vancomycin-resistant enterococcus

bacteria (*enterococci*) that have developed resistance to the antibiotic vancomycin.

16. Discuss MRSA, VRE, and *C. difficile*

There are two types of MRSA:

- Hospital-associated MRSA (HA-MRSA)
- Community-associated MRSA (CA-MRSA)

16. Discuss MRSA, VRE, and *C. difficile*

MRSA is spread in two ways:

- Direct contact
- Indirect contact

16. Discuss MRSA, VRE, and *C. difficile*

Remember:

Handwashing is the single most important measure to control the spread of MRSA.

16. Discuss MRSA, VRE, and *C. difficile*

VRE is spread in two ways:

- Direct contact
- Indirect contact

16. Discuss MRSA, VRE, and *C. difficile*

Remember:

Prevention of VRE is very important. Proper handwashing is an essential part of prevention.

16. Discuss MRSA, VRE, and *C. difficile*

Define the following terms:

***Clostridioides difficile* (*C. diff*, *C. difficile*)**

bacterium that is spread by spores in feces that are difficult to kill; it causes symptoms such as diarrhea and nausea and can lead to serious inflammation of the colon (colitis).

16. Discuss MRSA, VRE, and *C. difficile*

C. difficile is spread in these ways:

- Spread by spores via direct contact
- Intestinal flora altered due to enemas, nasogastric tube, GI tract surgery, and overuse of antibiotics

16. Discuss MRSA, VRE, and *C. difficile*

Remember:

Proper handwashing and handling of wastes can help prevent *C. difficile*. Hand sanitizers are not effective in this case. Soap and water must be used each time hand hygiene is performed.

Disinfecting surfaces and limiting antibiotics can also help.

17. List employer and employee responsibilities for infection prevention

An employer's responsibilities for infection prevention include

- Establish procedures and exposure control plan
- Provide in-service education
- Have written procedures to follow if exposure occurs
- Provide proper PPE
- Provide HBV vaccination

17. List employer and employee responsibilities for infection prevention

Employee's responsibilities for infection prevention include the following:

- Follow Standard Precautions
- Follow policies and procedures
- Follow care plans and assignments
- Use PPE as indicated
- Take advantage of HBV vaccine
- Report any exposure immediately
- Participate in in-service education

