# HAND HYGIENE

Our business is to care for individuals which will involve close contact and touching persons who may be ill, have a weakened immune system, or who can just simply not afford to become sick. You must recognize that you are a common factor between all of your patients and those in your work environment.

Hand hygiene is the most effective way to prevent the spread of infection. One key element to protecting yourself and protecting others is proper hand hygiene. Even if your hands appear clean, the process of removing and handling soiled equipment could result in unseen hand contamination. Consider all of the people and things you touch in a single day. The obvious would be using the bathroom or caring for a patient, but we do not always think of the money we touch, doorknobs, touching your own skin, or the food you eat or prepare. Practicing good hand hygiene is critical to protecting yourself, your patients, your coworkers, family and so many others. You will have busy demanding days that make you feel like you can't do one more thing but if you skip hand hygiene you will be causing more harm than good. This in-service is intended to give you general and practical advice to help stop the spread of infection.

# **Definitions**

**Hand hygiene**- cleaning your hands by using either handwashing (washing hands with soap and water), antiseptic hand wash, antiseptic hand rub (i.e. alcohol-based hand sanitizer), or surgical hand antisepsis.

**Hand sanitizer**- a liquid or gel, typically one containing alcohol, which is used to clean the hands and kill infection-causing microorganisms.

**Contagious**- spread from one person or organism to another by direct or indirect contact.

**Antimicrobial**- destructive to or inhibiting the growth of microorganisms such as bacteria, viruses, and fungi.

Aseptic- free from the living germs of disease.

# WHEN SHOULD YOU WASH YOUR HANDS

Multiple opportunities for hand hygiene occur during a single care episode and throughout your day. You should perform hand hygiene when:

- 1. Before and after caring for a patient
- 2. After you use the toilet, blow your nose, covering your sneeze.
- 3. Before eating or handling food.

- 4. After handling any soiled linens, clothing, bedpan, urinal, or garbage
- 5. Before and after wearing gloves.

You **MUST** perform hand hygiene:

- 1. Before and after caring for a patient
- 2. Before performing a task that involves aseptic technique such preparing an injectable medication, wound care, changing a foley catheter.
- 3. After any contact with a patient or objects in the immediate vicinity of the patient
- 4. After any contact with blood, body fluid, or contaminated surface.
- 5. When moving from a contaminated body area to a clean body site during patient care.
- 6. After removal of PPE (personal protective equipment)

### HOW TO PERFORM HAND HYGIENE

According to the CDC:

- Alcohol-based hand sanitizers are the most effective products for reducing the number of germs on the hands of healthcare providers.
- Alcohol-based hand sanitizers are the preferred method for cleaning your hands in most clinical situations.
- Wash your hands with soap and water whenever they are visibly dirty, before eating, and after using the restroom

# The guidelines for washing your hands with SOAP AND WATER are as follows:

- 1. Wet your hands with water.
- 2. Apply the amount of product recommended by the manufacturer to your hands.
- 3. Rub your hands together vigorously for at least 20 seconds, covering all surfaces of the hands and fingers by interlocking your fingers both palms facing down and then palms together.
- 4. With fingers together, cup your hand and rub the tips of the fingers in the palm of the opposite hand and repeat with the opposite set of fingers.
- 5. Rinse your hands with water. Avoid using hot water to prevent drying out your skin.
- 6. Use disposable towels to dry your hands thoroughly.
- 7. Use a towel to turn off the faucet.

# The guidelines for using HAND SANITIZER as follows:

Use an alcohol-based product that contains 60%-95% alcohol. Higher concentrations of alcohol are more potent because they contain less water than lower concentrations. Avoid sanitizers with the active ingredient is triclosan. Hand sanitizers with lower than 60% alcohol will cause some of the germ-killing properties to be diminished or lost all together.

- 1. Apply the sanitizer to the palm of your hand.
- 2. Rub your hands together vigorously for at least 20 seconds, covering all surfaces of your hands and fingers by interlocking your fingers both palms face down and then palms together.
- 3. With your fingers together, cup your hand and rub the tips of the fingers in the palm of the opposite hand and repeat with the opposite set of fingers.
- 4. Rub until your hands are dry otherwise the sanitizer will not be effective.

Remember to clean your personal equipment such as stethoscope, bandage scissors, stylus, tablet screen (rubbing alcohol with equal parts distilled water), and thermometer with alcohol after each use. Other items such as your blood pressure cuff or items that are not washable need to be cleaned using disinfectant wipes.

# WHAT ABOUT HAND LOTIONS?

Hand lotions are important to prevent skin dryness and irritation. You should use only hospitalapproved hand lotions. Other lotions may:

- make hand hygiene less effective
- cause breakdown of latex gloves
- become contaminated with bacteria if dispensers are refilled

### WHEN SHOULD I USE GLOVES?

Clean gloves, not sterile, are generally used during patient care in the home. Gloves can be made of nitrile, latex, vinyl, or other products. You will need to notify your employer if you have a latex allergy so they can provide you with gloves made from a different product.

Gloves are worn to avoid getting a pathogen from a patient or giving a patient a pathogen that is on your hands.

When choosing gloves make sure they fit correctly because if they are too large or small, they will not protect you. You should also make sure the gloves are intact (without any holes or tears). Gloves cannot be re-used or washed. Gloves do not replace hand hygiene so you must wash your hands after removing your gloves. Your patients need to be touched but it is not necessary to wear gloves 100% of the time unless you need to apply the principles of standard precautions.

#### You should use gloves when:

- Your hands may become contaminated with blood, body fluids, excretions/secretions, or secretions such as mucous membranes, non-intact skin, or blood/body fluid spills.
- 2. When touching mucous membranes or non-intact skin.
- 3. When touching contaminated surfaces or objects.

#### You should change gloves:

- 1. When you are going between tasks with the same patient if there is any contact with potentially infectious materials or substances.
- 2. Before you touch noncontaminated items or surfaces.
- 3. After caring for a patient.
- 4. When you are caring for multiple wounds on the same patient.
- 5. If your gloves become soiled for any reason.

Common problems with glove use are failure to:

- Wear gloves when touching open wounds or mucous membranes, such as the mouth and respiratory tract.
- Wear gloves when touching items that are likely to be contaminated, such as urinary catheters and endotracheal tubes.
- Change gloves between patients.
- Wear gloves when you have cuts, scratches, chapped skin, or a rash.
- Remove gloves after patient care.

# **General Infection Control Practices**

Always wipe down and clean high traffic or hazardous areas such as bathroom or kitchen surfaces.

Clean items that are used for eating such as trays or tables.

Wipe down commonly touched items or surfaces such as counters, doorknobs, drawer handles, appliance handles, light switches, computer mouse/keyboard and faucet or toilet handles.

Cough or sneeze into your elbow if you do not have a tissue. The elbow is an unlikely area to touch others and provides a shield. Remember to clean your hands or elbow and dispose of your tissue correctly.

Try not to touch your face. Germs on your hands can enter your eyes, mouth, or nose through contact.

Do not share food or drinks.

Use gloves when cleaning to prevent contact with germs that may be on the surface of items.

# **Patient Teaching**

Teach your patients to use good hand hygiene and what you have learned from this in-service. Advise your patients to tell you when they feel sick. Stopping the spread of illness is everyone's job.

#### **CMS EXPECTATIONS**

As a result of the OASIS (Outcome and Assessment Information Set), CMS (the Centers for Medicare and Medicaid Services), reviews quality outcomes and processes regarding care that the agency provides. CMS also reviews potentially avoidable events. CMS expects that the agency's quality improvement take a multidisciplinary approach in meeting and improving the care needs of its patients.

#### **CASE STUDY**

Jennifer is a 76-year-old that is being cared for at home after being in the hospital for pneumonia. Jennifer was treated in the hospital with antibiotics and discharged to home although still weak and having a productive cough. She was given a referral to home health to continue to monitor her recovery. The home health nurse went to Jennifer's home the next day to admit her service. The nurse was greeted at the door by Jennifer's son who directed her to Jennifer's beside. The nurse put down her bag and cleansed her hands with hand sanitizer for 20 seconds. After the nurses hands were dry, she sat down in a chair next to Jennifer's bed and began her assessment. Jennifer explained that she still felt very weak and has had some diarrhea since returning home. Jennifer stated she was still coughing and had a slight temperature that morning. As the assessment proceeded Jennifer complained of stomach discomfort and needed to use the bathroom. The nurse assisted Jennifer to the bathroom and Jennifer proceeded to have an episode of explosive diarrhea. The nurse removed her gloves and cleansed her hands with hand sanitizer while Jennifer made her way back to her bed. The nurse proceeded to get Jennifer a cool glass of water and some crackers to help settle her stomach. The nurse completed the visit and used hand sanitizer before she left.

#### Some questions to think about:

- 1. Should the nurse have ever cleansed her hands with soap and water instead of using hand sanitizer during this interaction?
- 2. Since the nurse did not know the cause of Jennifer's diarrhea should she assume it could be from bacteria until otherwise proven?
- 3. Identify at least two times during the visit that the nurse made the correct decision to perform hand hygiene.
- 4. How should the nurse make the decision whether to use hand sanitizer or soap and water?

# HAND HYGIENE TEST

NAME

SCORE	
DATE	

Directions: Read each question and then determine the best answer. You need to score at least 7 out of 10 to pass.

- 1. Why is it important to practice hand hygiene?
  - a. As a healthcare worker you could carry germs from one patient to another.
  - b. Many of the people you care for are susceptible to illness.
  - c. Doorknobs, counters, and equipment are common surfaces for bacteria.
  - d. All of the above.
- 2. If your hands are visibly soiled, you should:
  - a. Use hand sanitizer.
  - b. Wash your hands with soap and water.
  - c. Use hand sanitizer then with soap and water.
  - d. Wipe your hands on a towel.
- 3. How much time should you take to wash your hands:
  - a. 10 seconds.
  - b. 20 seconds.
  - c. 2 minutes.
  - d. Until your hands look clean.
- 4. You should perform hand hygiene:
  - a. If you feel like it.
  - b. As soon as you get home from work.
  - c. After using gloves to care for a patient.
  - d. B and C
- 5. True or False. All hand sanitizer is the same, so it doesn't matter the contents or percentage of alcohol with which it is made.
  - a. True
  - b. False

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- 6. When washing your hands with soap and water, you should:
  - a. Use the patients bar of soap from the shower.
  - b. Use scalding hot water.
  - c. Only worry about washing the palm side of your hands.
  - d. Put hands on top of each other while interlacing your fingers and rub, and then put your palms together and rub, and then with your fingers together cup your hand and rub the fingertips in your palm and then repeat with the other hand.
- 7. If you have to sneeze or cough you should:
  - a. Turn your head.
  - b. Use your hands to cover your mouth and nose and then wipe them on your clothing.
  - c. Cough or sneeze into your elbow if you don't have a tissue.
  - d. Put your head into the nearest trash can.
- 8. True or False. You cannot spread COVID-19 or the flu if you are not symptomatic.
  - a. True
  - b. False
- 9. Germs can enter someone's body through:
  - a. The mouth.
  - b. A cut, scratch, or wound.
  - c. The eyes.
  - d. All of the above.

10. To prevent the spread of infection it is important to:

- a. Follow good hand hygiene.
- b. Teach your patients what you have learned about hand hygiene.
- c. Wipe contaminated surfaces down.
- d. All of the above.