# **Infection Prevention and Control**

Isolation Precautions





#### **FACILITATOR GUIDE**

Developed by: University of Wisconsin Oshkosh Center for Community Development, Engagement and Training (CCDET)

#### **Wisconsin Department of Health Services**

**Division of Quality Assurance** 

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NOTE: This is NOT the department-approved training on Standard Precautions required under DHS 83.20 for CBRFs.

### Introduction

Isolation Precautions is a broad term that refers to the steps needed to be taken by healthcare workers to prevent the spread or transmission of infections.

Standard precautions are a set of infection control practices used to prevent transmission of diseases that can be acquired by contact with blood, body fluids, non-intact skin (including rashes), and mucous membranes. These are basic practices designed to be used on all residents, clients, or patients.

Transmission based precautions are a set of infection control practices used that are specific to the mode or transmission of a disease.

[This training recognizes that facilitators and attendees may represent any DQA-regulated healthcare, homecare or residential care provider and may use different terms to refer to their provider type; to the individuals receiving care, treatment, or services; and to the individuals providing care, treatment, or services.

For this training, the term "provider" or "provider type" is used to refer to any DQA-regulated provider, entity, or facility.

The terms "client" or "resident" are used to represent any person receiving care, treatment and/or services from any provider in a facility or in their own home.

The terms "caregiver" or "staff" are used to represent any individual employed by or under contract with the provider.

Facilitators may wish to change the language to be appropriate to the setting in which they are presenting this information.]

### **Learning Points**

After completing this training, learners will be able to:

- Review standard and transmission-based precautions, their differences and why they are important in your work
- Learn more about common communicable diseases in healthcare facilities
- Practice/review hand hygiene techniques and personal protective equipment (PPE)

#### What Are Standard Precautions?



Standard precautions are ways of doing your work to lower the chance of spreading disease. They consist of hand hygiene, protective equipment, care of the environment and safe injection practices. They are based on the principle that all blood, body fluids, secretions, excretions except sweat, non-intact skin and mucous membranes may be capable of transmitting infection.

You must follow standard precautions whenever you care for a client, even if the person doesn't seem to have an infection or a disease that can spread to another person. Standard precautions can prevent you from becoming infected. They can also protect clients by ensuring that you don't carry infectious agents on your hands, clothing or equipment.

[If your audience is from a provider that is required to have written policies re: standard precautions or infection control, bring a copy of the document to the training. (E.g., CBRFs are required to have written infection control programs.) Review it briefly, ask if people understand its purpose, know where to access it, etc. Focus specifically on any written hand hygiene policy. Although standard precautions include several topics, this training focuses on hand hygiene and its role in preventing the spread of communicable disease.]

It is estimated that failure to practice proper hand hygiene is the #1 cause of the spread of disease in healthcare facilities.

#### What Are Transmission-Based Precautions?

Several classes of pathogens can cause infection, including bacteria, viruses, fungi, parasites, and prions. The modes of transmission vary by type of organism and some infectious agents may be transmitted by more than one route: some are transmitted primarily by direct or indirect contact, others by the droplet, (e.g., influenza virus, B. pertussis) or airborne routes (e.g., M. tuberculosis). The three principal routes of transmission are contact, droplet and airborne.

Transmission-Based Precautions (TBP) refers to the measures caregivers must put into place to prevent the spread of infection, specifically related to how the infection is spread.



#### **Contact Precautions**

Contact Precautions are one type of TBP that are put in place when the use of standard precautions is not sufficient to interrupt the spread of infectious agents alone. Some organisms are spread by direct or indirect contact with the resident or the resident environment.

Contact Precautions require the use of gown and gloves on every entry into a resident room. The resident is provided with dedicated equipment (e.g., stethoscope and blood pressure cuff) and is placed in a private room.

#### **Droplet Precautions**

Droplet Precautions and Airborne Precautions are two other TBP that are utilized in the long-term care environment.

Droplet Precautions are intended to prevent transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions with infections transmitted by the droplet route. Healthcare personnel wear a mask for close contact with infectious patient; the mask is donned upon room entry. Patients on Droplet Precautions who must be transported outside of the room should wear a mask if tolerated and follow Respiratory Hygiene/Cough Etiquette.

#### **Airborne Precautions**

Airborne Precautions prevent transmission of infectious agents that remain infectious over long distances when suspended in the air (e.g., rubeola virus [measles], varicella virus [chickenpox], M. tuberculosis, and COVID-19.) Healthcare personnel caring for

patients on Airborne Precautions wear a mask or respirator, depending on the diseasespecific recommendations.



## **Respiratory Hygiene/Cough Etiquette**

The elements of Respiratory Hygiene/Cough Etiquette include:

- 1. education of healthcare facility staff, patients, and visitors
- 2. posted signs, in language(s) appropriate to the population served, with instructions to patients and visitors
- 3. source control measures (e.g., covering the mouth/nose with a tissue when coughing and prompt disposal of used tissues, using surgical masks on the coughing person when tolerated and appropriate)
- 4. if you don't have a tissue, cough or sneeze into your elbow
- 5. hand hygiene after contact with respiratory secretions; and
- 6. spatial separation, ideally >3 feet, of persons with respiratory infections in common waiting areas when possible

Covering sneezes and coughs and placing masks on coughing patients are proven means of source containment that prevent infected persons from dispersing respiratory secretions into the air.

Healthcare personnel are advised to observe Droplet Precautions (i.e., wear a mask) and hand hygiene when examining and caring for patients with signs and symptoms of a respiratory infection. Healthcare personnel who have a respiratory infection are advised to avoid direct patient contact, especially with high-risk patients. If this is not possible, then a mask should be worn while providing patient care.

#### **Communicable Diseases**

Some communicable diseases are bloodborne and others spread through contact between people. Can you think of some examples of common communicable diseases?

[Ask people to name some examples. List them on a flip chart. Examples may include COVID, Respiratory Syncytial Virus (RSV), common colds, the flu, pneumonia, tuberculosis, measles, athlete's foot, whooping cough, ringworm, HIV, Hepatitis B, Hepatitis C, etc.]

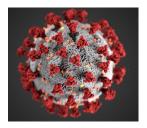
Most healthcare workers must be screened for clinically apparent communicable diseases, including tuberculosis. The purpose of this is to prevent the spread of communicable diseases to clients and other staff.

Employees who exhibit signs and symptoms of a communicable disease may not be permitted to work. Employees should seek the advice of a medical professional.

New clients must also have a health exam to check for health problems and screen for clinically apparent communicable diseases, including tuberculosis. This helps to make sure that clients get proper treatment so that illnesses are not passed on to other clients or staff.

Let's focus on some of the more common communicable diseases that occur in longterm and other provider settings.

#### **COVID-19 (Corona Virus Disease 2019)**



COVID-19 is a disease caused by a virus named SARS-CoV-2. It can be very contagious and spreads quickly. Viruses are constantly changing, including the virus that causes COVID-19. These changes occur over time and can lead to new strains of the virus or variants of COVID-19. Some people including those with minor or no symptoms will develop post-COVID conditions – also called "Long COVID."

People with COVID-19 have had a wide range of symptoms reported – ranging from mild symptoms to severe illness. Symptoms may appear 2-14 days after exposure to the virus. Anyone can have mild to severe symptoms. Symptoms include:

- Fever or chills
- Cough
- Shortness of breath or difficulty breathing
- Fatigue
- Muscle or body aches
- Headache
- New loss of taste or smell
- Sore throat
- Congestion or runny nose
- Nausea or vomiting
- Diarrhea

This list does not include all symptoms. Symptoms may change with new COVID-19 variants and can vary depending on vaccination status.

COVID-19 spreads when an infected person breathes out droplets and small particles that contain the virus. Other people can breathe in these droplets and particles, or these droplets and particles can land on their eyes, nose, or mouth. In some circumstances, these droplets may contaminate surfaces they touch.

Anyone infected with COVID 19 can spread it, even if they do not have symptoms.

#### **COVID-19 Vaccines**

- Older adults in your care are at highest risk of getting extremely sick from COVID-19
- More than 81% of COVID-19 deaths occur in people over age 65
- The number of deaths among people over age 65 is 97 times higher than the number of deaths among people ages 18-29 years
- COVID-19 vaccines help people develop protection from the virus that causes COVID-19



Although vaccinated people sometimes get infected with the virus, that significantly lowers the risk of getting extremely sick, being hospitalized, or dying from COVID-19. CDC recommends that everyone stay up to date on their COVID-19 vaccines, especially people with weakened immune systems.

#### **Testing for COVID-19**

PCR tests are more likely to detect the virus, but take much longer to process than antigen tests.

Caregivers must be very alert to signs and symptoms of COVID-19, not just for themselves, but for those in their care. Get tested if you have symptoms. A viral test tells you if you are infected with the virus that causes COVID-19. If you have symptoms, you should get tested immediately. If you have been exposed to COVID-19 and do not have symptoms, you should test five full days after your exposure. If you do not test at the right time, you are more likely to get an inaccurate test result.

You may get a Polymerase chain reaction (PCR) test at a testing site or healthcare facility. PCR tests are more likely to detect the virus compared to antigen tests, but typically take hours to perform.

Rapid antigen tests provide results quickly and are available at testing sites or for use at home. The Federal Drug Administration (FDA) recommends two negative antigen tests (if you have symptoms) or three negative antigen tests (if you do not have symptoms), performed two days (48 hours) apart to be confident that you do not have COVID-19.

Even when you don't have symptoms or a recent exposure to COVID-19, testing may help you make informed decisions about your health and your risk of spreading COVID-19 to others, especially those who are at higher risk of severe illness.

#### **Isolation Precautions to Help Control the Spread of COVID-19**

### Wearing a Mask or Respirator

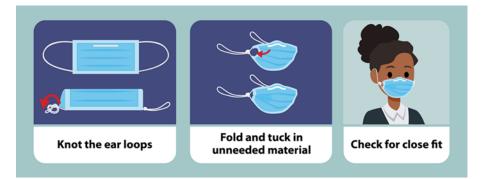
Masks and respirators (i.e., specialized filtering masks such as "N95s") can provide various levels of protection depending on the type of mask and how they are used.

- Loosely woven cloth products provide the least protection
- Layered finely woven products offer more protection
- Well-fitting disposable surgical masks and KN95s offer even more protection
- Well-fitting NIOSH-approved respirators (including N95s) offer the highest level of protection.

Whatever product you choose, it should provide a good fit (i.e., fitting closely on the face without any gaps along the edges or around the nose) and be comfortable enough when worn properly (covering your nose and mouth) so that you can keep it on when you need to.

# Better fit and extra protection with cloth and disposable masks

- Wear two masks (disposable mask underneath AND cloth mask on top)
- Combine either a cloth mask or disposable mask with a fitter or brace
- Knot and tuck ear loops of a 3-ply mask where they join the edge of the mask
- For disposable procedure masks, fold and tuck the unneeded material under the edges



### **NIOSH Approved Respirators**



The National Institute for Occupational Safety and Health (NIOSH) approves many types of filtering facepiece respirators. The most widely available are **N95 respirators**, but other types (N99, N100, P95, P99, P100, R95, R99, and R100) offer the same or better protection as an N95 respirator. Lists of respirators that are NIOSH-approved can be found on the NIOSH-Approved Particulate Filtering Facepiece Respirators webpage.

CDC recommends that specially labeled "surgical" N95 respirators — a special subtype of N95 respirators that provide additional protection against hazards present during medical procedures, such as blood splatter — should be prioritized for use by healthcare personnel.

Employers who want to distribute N95 respirators to employees must follow an Occupational Safety and Health (OSHA) respiratory protection program.

[Best to search NIOSH or OSHA websites for references above. Website links are often moved or broken and may not be reliable.]

#### **Respiratory Syncytial Virus (RSV)**



RSV is a common respiratory virus that often causes mild, cold-like symptoms. RSV is usually spread through direct contact with the virus, such as droplets from another person's cough or sneeze contacting your eyes, nose, or mouth. It can also be spread by touching a surface that has the virus on it, like a doorknob, and then touching your face before washing your hands.

RSV can cause illness in people of all ages but may be especially serious for infants and older adults. Infants and older adults with chronic medical conditions like heart or lung disease, weakened immune systems, or who live in healthcare facilities, are at highest risk of serious illness and complications from RSV.

Symptoms of RSV infection may include runny nose, decrease in appetite, coughing, sneezing, fever, or wheezing. Most people recover in a week or two, but RSV can be serious, resulting in shortness of breath and low oxygen levels. RSV can also sometimes lead to worsening of other medical conditions such as asthma, chronic obstructive pulmonary disease (a chronic disease of the lungs that makes it hard to breathe), or congestive heart failure (when the heart can't pump enough blood and oxygen through the body). Older adults and infants who get sick from RSV may need to be hospitalized. Some may even die.

#### **RSV Vaccine**

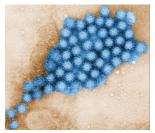
RSV vaccine can prevent lower respiratory tract disease caused by the respiratory syncytial virus. CDC recommends adults 60 years and older may receive a single dose of RSV vaccine, based on discussions between the patient and health care provider.

#### **Isolation Precautions to Help Control the Spread of RSV**

Use Standard Precautions *and* Contact Precautions when in contact with residents infected with RSV.

### Norovirus

Most norovirus is caused by people who didn't wash their hands after going to the bathroom.



In recent years, almost two-thirds of the confirmed outbreaks of norovirus in the U.S. occurred in healthcare care facilities.

You may hear norovirus illness called "food poisoning" or "stomach flu." Food poisoning can be caused by noroviruses, but other germs and chemicals can also cause food poisoning. Norovirus illness is not related to the flu (influenza), which is a

respiratory illness caused by influenza virus.

The norovirus can cause severe and sudden gastroenteritis (i.e., inflammation of the lining of the stomach and intestines). Both healthy and compromised people can be affected. Symptoms include nausea, vomiting, diarrhea, and some stomach cramping. The virus is very contagious and easily transmitted through contaminated hands, equipment/surfaces, or food/water.

The virus can be introduced into healthcare facilities by clients—who may or may not be showing symptoms—or by staff, visitors, or contaminated foods. Outbreaks in these settings can be quite long, sometimes lasting months. Illness can be more severe, occasionally even fatal, in hospitalized patients or long-term care clients compared with otherwise healthy people.

#### **Isolation Precautions to Help Control the Spread of Norovirus**

#### **Practice proper hand hygiene**



Use standard and contact precautions. Wash your hands carefully with soap and water, especially after using the toilet, toileting clients, changing incontinence products, and always before eating or preparing food. If soap and water aren't available, use an alcohol-based hand sanitizer. These alcohol-based products can quickly reduce the number of germs on hands in some situations, but they are not a substitute for washing with soap and water to kill norovirus. Alcohol-based hand sanitizers should not be used as a substitute for washing with soap and water in the case of norovirus outbreak.

#### Take care in the kitchen

Carefully wash fruits and vegetables and cook oysters and other shellfish thoroughly before eating them.

#### Do not prepare food while infected

People with norovirus illness should not prepare food for others while they have symptoms and for 3 days after they recover from their illness.

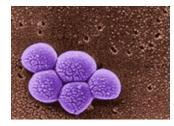
# Clean and disinfect contaminated surfaces

After throwing up or having diarrhea, immediately clean and disinfect contaminated surfaces by using a bleach-based household cleaner as directed on the product label. If no such cleaning product is available, you can use a solution made with 5 tablespoons to 1.5 cups of household bleach per 1 gallon of water.

# Wash laundry thoroughly

Immediately remove and wash clothing or linens that may be contaminated with vomit or stool. Handle soiled items carefully—without agitating them—to avoid spreading virus. If available, wear rubber or disposable gloves while handling soiled clothing or linens and wash your hands after handling. The items should be washed with detergent at the maximum available cycle length and then machine dried.

#### MRSA (Methicillin-resistant Staphylococcus aureus)



MRSA is a type of staphylococcus bacteria. "Staph" is a common germ that about one out of every three people has on their skin or in their nose. This germ does not cause any problems for most people who have it on their skin. Sometimes it can cause serious infections such as skin or wound infections, pneumonia, or infections of the blood. MRSA is resistant to certain antibiotics such as those including methicillin and other more common antibiotics such as oxacillin, penicillin, and amoxicillin. However, there *are* antibiotics that can kill MRSA bacteria.

In the community, most MRSA infections are skin infections that may appear as a bump or infected area on the skin that may be:

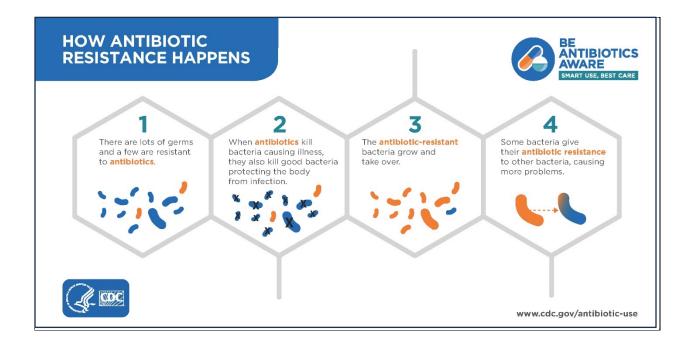
- Red
- Swollen
- Painful
- Warm to the touch
- Full of pus or other drainage
- Accompanied by a fever

More severe or potentially life-threatening MRSA infections occur most frequently among clients in healthcare settings. Common infections include:

- Surgical wound infections
- Urinary tract infections
- Bloodstream infections
- Pneumonia

These residents can remain colonized for prolonged periods of time, (remain in the body without causing an immune response) and can spread the bacteria to others.

The CDC identified 18 other Multi Drug Resistant Organisms (MDRO)s that pose an "urgent", "serious", or "concerning" threat to public health.



#### **Isolation Precautions to Help Control the Spread of MRSA and other MDROs**

The #1 precaution that caregivers can take against the spread of MRSA and MDROs is performing hand hygiene.

- Enhanced Barrier Precautions may be used to prevent the spread of MRSA and other MDROs.
- Perform hand hygiene after touching blood, body fluids, secretions, excretions, and contaminated items, whether gloves are worn.
- Perform hand hygiene immediately after gloves are removed, between patient contacts, and when otherwise indicated to avoid transfer of microorganisms to other patients or environments.
- When hands are visibly soiled with blood or other body fluids, wash hands with soap and water.
- It is necessary to perform hand hygiene between tasks and procedures on the same patient to prevent cross-contamination of different body sites.
- Perform routine and targeted cleaning of environmental surfaces near the resident and frequently touched surfaces in the resident environment.
- Promptly clean and disinfect spills of blood or other bodily fluids.
- Select EPA-registered disinfectants and follow manufacturers instructions for proper use.
- Educate residents on the importance of hand hygiene, physical hygiene, environmental cleaning, and wound care.

#### **Enhanced Barrier Precautions**

Enhanced Barrier Precautions expand the use of PPE and refer to the use of gown and gloves during high-contact resident care activities that provide opportunities for transfer of MDROs to staff hands and clothing MDROs may be indirectly transferred from resident-to-resident during these high-contact care activities. Long-term care residents with wounds and indwelling medical devices are at especially considerable risk of infection and colonization. The use of gown and gloves for high-contact resident care activities is indicated. Precautions include: • Dressing • Bathing/showering • Transferring • Providing hygiene • Changing linens • Changing briefs or assisting with toileting • Device care or use: urinary catheter, feeding tube, tracheostomy/ventilator • Wound care: any skin opening requiring a dressing.

## Flu (Influenza)



Although there are several types of influenza, the most common is the seasonal flu. In the U.S., winter is the time for flu, but the exact timing and duration of flu seasons vary. The flu is a contagious respiratory illness caused by influenza viruses that infect the nose, throat, and lungs. It can cause mild to severe illness, and at times can lead to death.

The best way to prevent the spread of influenza is to obtain an annual influenza vaccine

People who have the flu often feel some or all these signs and symptoms:

- Fever\* or feeling feverish/chills
- Cough
- Sore throat
- Runny or stuffy nose
- Muscle or body aches
- Headaches
- Fatigue (very tired)
- Some people may have vomiting and diarrhea, though this is more common in children than adults.

\*It's important to note that not everyone with flu will have a fever.

People over 65 and those with medical conditions may suffer complications from the flu. Complications of flu can include bacterial pneumonia, ear infections, sinus infections, dehydration, and worsening of chronic medical conditions, such as congestive heart failure, asthma, or diabetes.

Most experts believe that flu viruses spread by droplets made when people with flu cough, sneeze or talk. These droplets can land in the mouths or noses of people who are nearby. Less often, people might also get flu by touching a surface or object that has flu virus on it and then touching their own mouth, eyes, or their nose.

#### **Isolation Precautions to Help Control the Spread of Flu**

The single best way to prevent flu is to get a flu vaccine. However, once flu has spread in a facility, caregivers must focus on maintaining standard *and* droplet precautions including:

- Perform hand hygiene before and after touching the client, after touching the client's environment, or after touching the client's respiratory secretions, whether gloves are worn. Gloves do not replace the need for performing hand hygiene.
- Wear gloves if hand contact with respiratory secretions or potentially contaminated surfaces is anticipated.
- Wear a gown if soiling of clothes with a client's respiratory secretions is anticipated.
- Change gloves and gowns after each client encounter and performing hand hygiene.

#### **Other Communicable Diseases**

### Escherichia Coli (E. Coli)

Escherichia coli bacteria normally live in the intestines of people and animals. Most E. coli are harmless and are an important part of a healthy human intestinal tract. However, some E. coli are pathogenic, meaning they can cause illness, either diarrhea or illness outside of the intestinal tract. The types of E. coli that can cause diarrhea can be transmitted through contaminated water or food, or through contact with animals or persons.

Use Standard Precautions when caring for residents with E. Coli infections and Contact Precautions if the resident is incontinent or wearing an incontinence product.

# **Clostridium Difficile (C. diff)**

Clostridium difficile is a toxin-producing bacillus that causes diarrhea. Any surface, device, or material (e.g., toilets, bathing tubs, and electronic rectal thermometers) that becomes contaminated with feces may serve as a reservoir for the spores. C. diff spores are transferred to patients via the hands of healthcare personnel who have touched a contaminated surface or item.

Use Standard Precautions *and* Contact Precautions when caring for residents with C. diff.

Gloves are important because hand sanitizer doesn't kill C. diff, and handwashing might not be sufficient alone to eliminate all C. diff spores.

#### Hand Hygiene Plays a Strong Role



As we can see from our review of common contagious diseases, hand hygiene is a crucial factor in preventing the spread of infection. Keeping your body clean, including your hands, helps keep diseases from spreading from person to person. Hand hygiene includes both washing with soap and water or using alcohol gel. Always use soap and water if your hands are visibly dirty, before preparing food and after using the restroom.

Although many of us learned about hand hygiene in the past, it continues to be the cause of many deficiencies cited in healthcare facilities. In other words, caregivers are either failing to practice hand hygiene properly or skipping it all together in some circumstances.

Let's spend some time refreshing our knowledge of the principles of proper hand hygiene. These are the recommendations of the U.S. Centers for Disease Control and Prevention (CDC):

#### When Must I Perform Hand Hygiene?

[Using a flip chart or white board, write the words Before and After. Give people a moment or two to write responses in their guides. Ask for voluntary responses and record them on the flipchart. Include responses listed below if people don't mention them.]

Before:

[Having contact with clients, putting on gloves, caring for any invasive device (such as a catheter), handling food, administering medication. Include additional circumstances as needed.]

Right after:

[Having contact with a client's skin; having contact with body fluids (even when gloves are worn); having contact with client items such as dressings, dirty laundry, dishes or trash; taking off gloves; moving from parts of the client's body that could be contaminated to clean parts of

the client's body, using the restroom, coughing or sneezing, smoking. Include additional circumstances as needed.]

### Activity: Practice Hand Hygiene Techniques

Handwashing is like a "do-it-yourself" vaccine—it involves five simple and effective steps (Wet, Lather, Scrub, Rinse, Dry) you can take to reduce the spread of diarrheal and respiratory illness so you can stay healthy. Regular handwashing, particularly before and after certain activities, is one of the best ways to remove germs, avoid getting sick, and prevent the spread of germs to others. It's quick, it's simple, and it can keep us all from getting sick. Handwashing is a win for everyone, except the germs.

## Hand Hygiene Steps

Washing hands with soap and water is the best way to reduce the number of germs on them in most situations. If soap and water are not available, use an alcohol-based hand sanitizer that contains at least 60% alcohol. Alcohol-based hand sanitizers can quickly reduce the number of germs on hands in some situations, but sanitizers do not eliminate all types of germs and might not remove harmful chemicals.

Hand sanitizers are not as effective when hands are visibly dirty or greasy.

[It is strongly suggested that, in this activity, people have an opportunity to practice both techniques, even those with lifelong experience. NOTE: While some people learn skills well from lecture or watching a demonstration, most learn best by practice and repetition.]

#### Washing with Soap and Water



- 1. **Wet** your hands with clean, running water (warm or cold), turn off the tap, and apply soap.
- 2. Lather your hands by rubbing them together with the soap. Lather the backs of your hands, between your fingers, and under your nails.
- 3. **Scrub** your hands **for at least 20 seconds**. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.
- 4. Rinse your hands well under clean, running water.
- 5. **Dry** your hands using a clean towel or an air dryer.

Washing hands with soap and water is the best way to get rid of germs in most situations.

#### **Using Hand Sanitizer**



- 1. **Apply** the gel product to the palm of one hand (read the label to learn the correct amount).
- 2. Cover all surfaces of hands.
- 3. **Rub** your hands and fingers together until they are dry. This should take around 20 seconds.

If soap and water are not readily available, you can use an alcohol-based hand sanitizer that contains at least 60% alcohol. You can tell if the sanitizer contains at least 60% alcohol by looking at the product label. Sanitizers can quickly reduce the number of germs on hands in many situations.

**Caution!** Swallowing alcohol-based hand sanitizer can cause alcohol poisoning if more than a couple of mouthfuls are swallowed. Keep it out of reach of young children and supervise their use.

#### Soap vs. Hand Sanitizer?

Alcohol-based hand sanitizers can quickly reduce the number of microbes on hands in some situations, but sanitizers do not eliminate all types of germs. Why? People may not use a large enough volume of the sanitizer or may wipe it off before it has dried.

Soap and water are more effective than hand sanitizer at removing or inactivating certain kinds of germs, like cryptosporidium and norovirus.

Alcohol-based hand rubs are less drying to hands than using soap and water. Hand rubs can be placed in locations where sinks aren't available, so they are more convenient to use.

#### When to Use Hand Hygiene

Whenever hands are visibly dirty or contaminated

#### Before:

Having contact with clients Putting on gloves Inserting any invasive device Manipulating an invasive device

#### After:

Having contact with a client's skin Having contact with bodily fluids or excretions, non-intact skin, or wound dressings Having contact with inanimate objects belonging to a client Removing gloves

#### **Use of Hand Lotions**

Caregivers may experience dryness from frequent hand cleansing. Lotions are important to prevent dryness and irritation.

You should only use hand lotions approved by your employer. Other lotions can:

- Make hand hygiene less effective
- Cause a breakdown of disposable gloves
- Become contaminated with bacteria if dispensers are refilled

#### **Fingernail Care and Jewelry**



Germs can live under artificial fingernails both before and after using an alcohol-based hand sanitizer and handwashing. It is recommended that healthcare providers do not wear artificial fingernails or extensions when having direct contact with patients at substantial risk (e.g., those in intensive-care units or operating rooms). In addition:

- Keep natural nail tips less than 1/4 inch long
- Some studies have shown that skin underneath rings contains more germs than comparable areas of skin on fingers without rings
- Further studies are needed to determine if wearing rings results in an increased spread of potentially deadly germs

#### **Personal Protective Equipment**



Personal protective equipment is specialized clothing or equipment. Wear it to protect your skin and to prevent soiling or contamination of your clothing from contact with bloodborne pathogens.

You must wear *gloves* whenever there is a chance that your hands could have contact with blood or other body fluids

- You must wear a *gown* whenever there is a chance that other parts of your body may be exposed to blood or other body fluids
- You must wear a *mask or eye protection* whenever there is a chance that your eyes, nose, or mouth could come in contact with blood or other body fluids

Your employer must provide personal protective equipment at no cost to you. It must be available to you whenever you need it.

If you believe you need personal protective equipment to complete a task safely and the equipment is not available, do not proceed with the task. Report the lack of equipment to your supervisor.

When you remove personal protective equipment, put it in an appropriately designated area or container for storage, washing or disposal.

### Gloves

Gloves are a particularly important part of keeping both you and clients safe from communicable diseases. Gloves can only do their job if you put them on *before* you are exposed to blood or body fluids. Medical gloves are disposable, not reusable. Hypoallergenic (not likely to cause allergic reaction) gloves must be available for people who have reactions; latex gloves are an example of gloves that may cause allergic reactions in some people.

#### **Rules for Wearing Gloves**

#### Wear clean gloves when:

- Touching blood or any other body fluid
- Caring for any invasive device, such as a catheter
- Having contact with items that could contain body fluids such as dressings, dirty laundry, dishes, or trash
- Moving from parts of the client's body that could be contaminated to clean parts of the client's body
- Your facility's policy requires the use of gloves

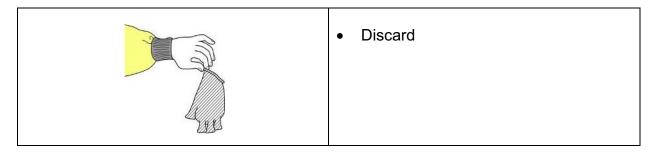
#### Always follow these rules:

- Carefully remove used gloves so that the outer surface never touches your skin
- Wear gloves that fit gloves that are too small or too big can tear
- Wash your hands after glove removal
- Never wear the same gloves for the care of more than one client!
- Never reuse gloves

### **Activity: Removing Gloves**

What is the correct way to remove gloves? The CDC offers these instructions and drawings:

<ul> <li>Grasp outside edge near wrist</li> <li>Peel away from hand, turning glove inside-out</li> </ul>
<ul> <li>Hold in opposite gloved hand</li> <li>Slide ungloved finger under the wrist of the remaining glove</li> <li>Peel off from inside, creating a bag for both gloves</li> </ul>



[Provide each participant with a pair of gloves. Before training the class, review the removal steps above. Demonstrate the proper method of glove removal and give people a chance to practice.]

### Wrap-Up

Be a role model. Show co-workers, supervisors, and clients that you are serious about everyone's health and safety by practicing standard precautions at all times. A good slogan to remember is:

Practice Standard Precautions. It's Contagious!

#### **Learning Points Review**

After completing this training, learners will be able to:

- Review standard and transmission-based precautions, their differences and why they are important in your work
- Learn more about common communicable diseases in healthcare facilities
- Practice/review hand hygiene techniques and personal protective equipment (PPE)

[Point out how each part of the training covered the learning points. For example, we learned more about common communicable diseases. Thank people for attending. Ask if there are any questions.]

### **Facilitator Preparation**

For this training, facilitators will need:

- Hand washing sink, soap, hand rub (foam or gel), paper towels (recommended)
- Disposable gloves for each participant
- MS PowerPoint (PPT Viewer can be downloaded for free at www.microsoft.com)
- *LCD projector (recommended)*
- Screen for viewing the PPT (recommended)
- Flip chart/whiteboard and markers
- Printed Participant Guides (one for each student recommended)
- Pens or pencils
- Evaluation for people (optional)
- Attendance certificate (recommended)

Note: It is strongly recommended that the PPT be viewed using an LCD projector. If that option is not available, the PPT may be downloaded and printed as a handout.

#### Resources

The following are resources used for this curriculum. These resources may also provide valuable information about current standards and practices. Instructors and students are encouraged to explore the resources to increase program knowledge.

#### **U.S. Centers for Disease Control and Prevention**

#### http://www.cdc.gov/

A US government agency whose mission is to create the expertise, information, and tools that people and communities need to protect their health – through health promotion, prevention of disease, injury and disability, and preparedness for new health threats.

https://www.cdc.gov/coronavirus/2019-ncov/index.html COVID-19

http://www.cdc.gov/mrsa/index.html MRSA Infections

http://www.cdc.gov/norovirus/index.html Norovirus

https://www.cdc.gov/niosh/npptl/hospresptoolkit/training.html Guidance for the Selection and Use of Personal Protective Equipment (PPE) in Health Care Settings

https://www.cdc.gov/handhygiene/index.html Hand Hygiene in Healthcare Settings

#### Wisconsin Administrative Rules

http://docs.legis.wisconsin.gov/frame/code/admin\_code/dhs Administrative rules governing all DHS-regulated facilities

#### Wisconsin State Statutes

<u>https://docs.legis.wisconsin.gov/statutes/prefaces/toc</u> A list of all statutes in Wisconsin. Chapter 50 covers Uniform Licensure of DQAregulated facilities.

#### **Wisconsin Department of Health Services**

https://www.dhs.wisconsin.gov/dqa/memos/index.htm

The Division of Quality Assurance (DQA) Numbered Memos deal with policies, information, and interpretation of federal as well as state regulations and guidelines of the programs under DQA's authority.

https://www.dhs.wisconsin.gov/ppe/index.htm

Personal Protective Equipment

https://www.dhs.wisconsin.gov/ic/precautions.htm Infection Control and Prevention: Standard Precautions