Introduction

Hand hygiene and respiratory hygiene (also known as respiratory etiquette) are two ways to prevent spreading an infection you might have or to protect yourself from infections others might have.

Germs (infectious organisms) are mostly spread with our hands. Routinely using hand and respiratory hygiene will decrease your risk of becoming ill from common diseases such as a cold, seasonal flu, and stomach and intestinal system (gastrointestinal) infections such as norovirus. Hand and respiratory hygiene also protect your family, coworkers and residents.

This training module will discuss:

- How germs (infectious organisms) are transmitted (spread);
- What is hand and respiratory hygiene;
- How to properly wash your hands;
- How to properly use hand sanitizers;
- Techniques to cover your cough and/or sneeze to prevent spreading potential germs to others.

Routinely washing your hands can make it possible to have a healthy winter with no colds or flu or reduce the severity! Flu vaccines can also prevent or reduce the risk of getting ill.

Infection controls

Infection controls are measures that should always be used to prevent or reduce the spread of germs (infectious organisms).

There are many infection controls already in place such as clean water through water treatment plants, food processing, public swimming pool water treatment and restaurant requirements just to name a few.
Standard precautions are part of infection controls and specifically address ways to reduce the risk of transmitting infections to yourself or others when you are performing care tasks.

The first line of defense in preventing the spread of disease is hand and respiratory hygiene. These are considered critical tools when using standard precautions.

How disease is spread

Infectious organisms, bacteria and virus do not discriminate. No matter who you are, disease is spread by:

- Air
- Animals
- Body fluids
- Food
- Soil
- Surfaces

Primary ways disease is spread:

**Person to person:** Human hands are the main mode of transmission.

**Person to surface:** Germs can spread from infected persons to the surfaces of objects.

**Surface to person:** Spreads from contaminated surfaces to persons who touch them.

**Droplet/airborne:** Spreads through the air and is inhaled and/or contaminates surfaces.

**Body fluids:** Contact with blood, wound drainage, secretions (not sweat) stool or urine, etc.
Hand hygiene

Hand hygiene is the number one tool to prevent the transmission of germs (infectious organisms). Hand hygiene is the use of soap and water and/or hand sanitizer to reduce the number of potential infectious organisms on your hands and nails.

When you reduce the number of germs (infectious organisms) on your hands, you reduce the ability of those organisms to spread and potentially cause illness for you or others.

There are specific ways to wash your hands or use hand sanitizers to be sure you successfully reduce the number of organisms on your hands.

Hand hygiene must be done a minimum of six times a day. You must also wash your hands in these situations:

- Immediately after using the bathroom;
- Before and immediately after you provide care for someone;
- Before and after setting up medications;
- Immediately after coughing, sneezing or blowing your nose;
- Before and after preparing food;
- Immediately after handling raw meat, poultry or fish; and;
- Any time your hands are visibly dirty or greasy.

In most cases, hand sanitizers are just as effective and can replace the use of soap and warm water except in the following situations:

- After using the bathroom;
- When your hands are visibly dirty or greasy; and
- If you or someone you are working with is suspected of being ill with severe vomiting and/or diarrhea or norovirus.

You should wash your hands AND use hand sanitizer when working with someone ill with norovirus. Not sure if they have norovirus? Use soap and warm water first and then use hand sanitizers.

If you suspect you have norovirus or other gastrointestinal illness, you should not provide care for others and should stay home until the symptoms have gone away. Norovirus is a highly contagious infection that can be easily spread to others.
How to wash your hands

Wash your hands with soap and warm water for a minimum of 20 seconds. Most people are familiar with singing the birthday song twice. However, the 20 seconds does not include the time to:

- Turn on the water;
- Get the soap;
- Rinse after washing your hands;
- Turn off the water; or
- Dry your hands.

*After you turn on the water and get the soap you need to wash:*

**Lather all surfaces**

**Between all fingers**

**Thumbs**

**Wrists**

**Backs of hands**

**Finger tips**

Thoroughly rinse your hands. Then dry them and use the paper towel to turn off the faucet if it is not an auto shut off.

Drying has an infection control purpose besides not having wet hands. Rubbing also helps reduce the number of infectious organisms on your hands.

To avoid contaminating your hands after washing be sure to use a paper towel to open the door, or if there is an automatic door opener, trigger it with your elbow.
Hand sanitizers

Hand sanitizers are convenient and just as effective as soap and water in most situations. You must use hand sanitizer after washing your hands with soap and water whenever you suspect norovirus.

Read the instructions on the back of the hand sanitizers. Use only hand sanitizers that have at least 60 percent alcohol. Not all hand sanitizers are the same formula and some require more time or more product. Not sure how much? If your hands are dry before 20 seconds, you didn’t use enough hand sanitizer.

After applying the proper amount of hand sanitizer you need to:

Cover all surfaces

Between fingers

Thumbs

Wrists

Backs of hands

Finger Tips

You must continuing rubbing the hand sanitizer on all surfaces of your hands until they are dry. Do not rinse or dry your hands with a towel.
Respiratory hygiene (also known as respiratory etiquette)

Respiratory hygiene (covering your cough or sneeze) is another important tool to prevent the spread of potentially infectious organisms (germs) through the air.

The best way is to cover a cough or sneeze using your upper sleeve or elbow. This has been termed “vampire style”. This technique reduces the ability of the spray from a cough or sneeze to be transmitted through the air and on surfaces. It also prevents contaminating your hands and gives you time to either wash with soap and water or use hand sanitizer.

You can also cover your mouth and nose with a tissue; however, you must properly dispose of the tissue immediately. That does not mean you can put the used tissue in your pocket or purse or you will contaminate objects such as your phone, keys or other personal items. You will also contaminate surfaces others may touch.

Other infection control measures

Surfaces contaminated after someone sneezes or coughs on them must be cleaned and disinfected immediately. During cold and flu season, you should clean and disinfect surfaces immediately after contamination and more often than your normal cleaning schedule to reduce the chance of spreading infectious organisms.

Not all cleaners and disinfectants work the same. Read the label and follow the instructions. The label will tell you what germs it works for and how much and/or how long surfaces need to be “wet” to be effective.

Keep residents who are coughing or sneezing at least three to six feet from others to reduce the spread of infectious organisms. If sharing a room, place the beds at least six feet apart, if possible. Beds that cannot be placed at least six feet apart should have some type of portable screen between them.
A resident may be required to wear a mask to go to a medical appointment, the ER or other medical settings when they are visibly ill, coughing or sneezing.

If you are actively coughing and sneezing but do not have a fever, consider wearing a mask while providing care. If you have a fever you should stay home and should not provide care for others. You may return to work after you have been free of a fever for 24 hours and are not taking medications such as Tylenol to reduce fever.

Use posters to remind staff and residents about hand washing and covering their cough. Change the posters frequently otherwise it loses its effect.

Summary

You can reduce or prevent illness caused by infectious organisms in most situations by routinely practicing hand and respiratory hygiene. This is true whether you are at work, at home or in public places.

Hand sanitizers are effective, convenient and inexpensive. Carry a small bottle with you and keep a larger bottle in the car. Have it available no matter where you are to improve your hand hygiene habits.

Just for fun check out three videos produced by Florida Department of Health campaign on reducing transmission of infectious organisms: www.5thguy.com. There are three videos, all less than a minute and a half, which address three key infection control measures: hand washing, covering coughs and staying home when sick.
Resources

Oregon county health departments:
https://public.health.oregon.gov/ProviderPartnerResources/
LocalHealthDepartmentResources/Pages/lhd.aspx

Hand washing, covering your cough and keeping sick at home:
www.5thguy.com/handwashing.htm

Six Tips to Help Prevent the Spread of Norovirus (4:09 minutes, podcast)
www2c.cdc.gov/podcasts/player.asp?f=8629629

Safe Injection Practice: www.oneandonlycampaign.org

Infection control posters:

  Free professionally designed infection control posters
  http://webbertraining.com/freeposterdownloadsc97.php

  Got Bacteria
  www.cdc.gov/handhygiene/training/interactiveEducation/pdf/
  Posters/Poster01_GotBacteria_w.pdf

  Practice Hand Hygiene
  www.cdc.gov/handhygiene/training/interactiveEducation/pdf/
  Posters/Poster04_Gloves_w.pdf

Training credit

You will need to take and pass a test to receive training credit
(a certificate) for this course. You can find the link to the test here:
http://www.oregon.gov/DHS/SENIORS-DISABILITIES/PROVIDERS-
PARTNERS/Pages/afh-training.aspx.

You will be able to print your certificate once you successfully complete
the test.
Sources for this module’s information


Centers for Disease Control (CDC). Respiratory Hygiene/Cough Etiquette in Healthcare Settings. Available at [www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm](http://www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm)

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