

Universal Precautions and Infection Control¹

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Infections and Germs

It's important to understand infections and how they spread. Here's what you need to know.

What are infections?

Infections are problems or diseases that happen when germs get into the body and grow.

What are germs?

Germs are tiny living things. They live almost everywhere, inside and outside our bodies. Some germs help people. Others cause problems or diseases.

Types of germs include:

- Bacteria
- Fungi
- Parasites
- Viruses

How Germs Spread

Infection is spread in 3 stages:

Stage 1

Germs live in a **host**. The host may be a person or an animal.

Stage 2

The germs **move out** of the first host.

Stage 3

The germs **move into** a new host.

Coronavirus 19 spreads the same way as other infections and can be defined as a respiratory illness caused by a new strain of coronavirus. It is important to get tested for COVID-19 for the safety of yourself and others.

Testing

There are two kinds of tests available: [viral tests](#) and [antibody tests](#).

- A viral test tells you if you have a current infection. This test uses a long swab to collect material from the back of the nose where it meets the throat.
- An antibody test, which is a blood test, might tell you if you had a past infection. An antibody test might not show if you have a current infection because it can take 1–3 weeks after the infection for your body to make antibodies. Having antibodies to the virus that causes COVID-19 might provide protection from getting infected with the virus again.

The CDC guidance for what to do if you are sick is:

If you have a fever, cough or other symptoms, you might have COVID-19. Most people have mild illness and are able to recover at home. If you think you might have been exposed to COVID-19, contact your healthcare provider.

The best way to prevent illness is to avoid being exposed or exposing others to a virus or other germs.

You can protect yourself by:

- Washing your hands often with soap and water for at least 20 seconds especially after you have been in a public place, or after blowing your nose, coughing, or sneezing
 - If soap and water are not readily available, **use a hand sanitizer that contains at least 60% alcohol**. Cover all surfaces of your hands and rub them together until they feel dry.
- Avoiding contact with people who are sick. Stay 6 feet (about 2 arms' length) from other people.
- Covering your mouth and nose with a mask when around others. Everyone should wear a mask in public settings and when around people who don't live in their household.
- **Always covering your mouth and nose** with a tissue when you cough or sneeze or use the inside of your elbow and do not spit. Throw used tissues in the trash and wash your hands immediately.
- Cleaning **AND** disinfecting frequently touched surfaces daily. This includes tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, and sinks.
- Being alert for symptoms. Watch for fever, cough, shortness of breath, or other symptoms of COVID-19. It is especially important if you are running essential errands, going into the office or workplace, and in settings where it may be difficult to keep a physical distance of 6 feet. Take your temperature if symptoms develop.

How Germs Spread

Germs use many routes to get from one host to another. Here are six ways that germs spread:

1. Through the air

The first host coughs, sneezes or exhales droplets. The new host breathes in the germs.

2. Through animal bites

3. Through insect bites

4. Through eating or drinking infected food or water

How Germs Spread

5. Through touching

The first host and the new host touch each other. Germs move from one open sore to another. Scabies and lice spread from one body to another.

6. Through body fluids

Germs get out of the first host in:

- Blood
- Fluid from a cut
- Fluid from a penis or vagina
- Mucus
- Pus
- Saliva
- Stools
- Urine
- Vomit

Germs get into the new host when infected body fluids:

- Are on a needle or other sharp thing that goes into the skin of the new host
- Get into a cut or scratch
- Touch mucus membranes, like those inside your mouth

The CDC offers additional guidance for people who care for a person with a disability at the following website.

<https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-disabilities.html>

Some people are more likely than others to get sick from germs. They are **susceptible** to germs.

Susceptible people may be:

- Already sick
- Under stress
- Very old
- Very tired
- Very young

Susceptible people may be people who:

- Don't eat a healthy diet
- Don't wash their hands well
- Have a weak immune system. That means their body is not good at fighting off things from outside.

Signs of Infection

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It's important to know the signs of infection. Here's what to look for.

If a cut is infected:

- Fluid comes out of the cut.
- The cut hurts.
- The skin around the cut is red and puffy. It feels warm.

If a body part or body system is infected, a consumer may feel:

- Pain in the infected area
- Sick to their stomach, or throw up
- Very hot or cold
- Very tired

What To Do If You Are Sick

Stay at home except to get medical care. Isolate if you are sick. **Isolation** is used to separate people infected with the virus from people who are not infected. In the home, anyone sick should separate themselves from others by staying in a specific “sick room” or area and using a separate bathroom if available. People who are in isolation should stay home until it is safe for them to be around others. You can be with others after:

- At least 14 days since symptoms first appeared **and**
- At least 24 hours with no fever without fever-reducing medication **and**
- Symptoms have improved

Quarantine is used to keep someone *who might have been exposed to COVID-19* away from others. Those who have been exposed to COVID-19 include encountering someone who has been diagnosed with COVID-19 or if you've been in a setting where you were not able to social distance. Quarantine helps prevent spread of disease that can occur **before** a person knows they are sick or if they are infected with the virus without feeling symptoms. People in quarantine should stay home, separate themselves from others, monitor their health, and follow directions from their state or

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local health department.

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If you are sick you should also:

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- Avoid public transportation, ride sharing, taxis, or any situation where you would be in an enclosed space with someone
- Monitor yourself of COVID-19 symptoms including fever, cough, and shortness of breath
- Wear face masks over your nose and mouth if you must be around other people or animals
- Cover your mouth and nose with a tissue when you cough or sneeze and throw away the used tissues. Immediately wash your hands with soap and water for at least 20 seconds or use a hand sanitizer that contains at least 60 % of alcohol
- Clean and disinfect high-touch surfaces in your home including the “sick room” and bathrooms. Wear a face mask and disposable gloves.

What is infection control?

Infection control is anything you do to prevent or stop germs from spreading.

Take these steps to control infections:

- Wash your hands.
- Do not touch consumers' body fluids.
- Wear gloves, an apron, and a mask, as needed.
- Get rid of germs on things and in work areas.
- Put waste in the right place.

What are universal precautions?

You cannot always tell if someone is infected just by looking at them. So you need to follow these rules **every time** you work with a consumer. This is called **universal precautions**.

Strategies for Controlling Infections

It's important to understand how to control infections.

- **Follow these *general* rules.**

To keep germs from spreading:

- Cover your mouth when you cough or sneeze.
- Frequently wash your hands.
- Don't touch your face or eyes.
- Do **not** come to work when you're sick.
- Eat a healthy diet.
- Keep your nails short.
- Wash your hands.
- Wear a mask and gloves, as needed.
- Wear simple jewelry.

Daily Life and Going Out

As communities and businesses are opening, you may be looking for ways to resume some daily activities as safely as possible. If you decide to engage in public activities, continue to protect yourself by practicing everyday preventive actions.

Use online services when available. Order food and other items online for home delivery or curbside pickup. If shopping in store, disinfect the shopping cart with disinfectant wipes and/or use hand sanitizer often. For food deliveries and takeout, pay online or over the phone when you can and opt for contact-less deliveries when food is delivered to your home.

When attending an event or gathering, prioritize attending outdoor activities over indoor activities where there is more ventilation or arrive during off-peak times to avoid crowding and congested areas. Elect for virtual classes/training sessions where possible to substitute in-person activities.

- Follow these *specific* rules.

When you cook:

- Clean cooking areas before and after cooking meat, fish, and poultry.
- Put away food carefully.
- Rinse can tops before opening them.
- Wash fruits and vegetables before eating or cooking them.
- Wash meat, fish, and poultry before cooking them.

When you clean:

- Wear gloves
- Keep your work area clean and free of insects.
- Put dirty linens in a laundry bag.
- Put out clean towels often.
- Throw away waste and used needles in the right place.

If you are concerned about potential contamination on your groceries, you can take additional steps to protect yourself such as:

- Wiping or washing cans and boxes of food with a disinfectant before storing them to reduce possible virus content.
- Discard packaging and transfer food to a clean bag or container.
- For fruits and vegetables, rinse completely with clean water before storing.
- Wash any tables, countertops, or other surfaces that were touched by your groceries or grocery bags.
- If you're using cloth bags, wash them with laundry soap in a washing machine and dry them thoroughly before reusing them.

Reduce the Spread of Infection

Face masks are recommended as a simple barrier to help prevent respiratory droplets from traveling into the air and onto other people. Wearing a face mask reduces droplets from coughs, sneezes, talking, or raising your voice. This is called **source control**.

The risk of infection is *very high* when no one wears a mask. If you are sick you should wear a mask to significantly reduce the risk of infection to others. When everyone wears a mask the risk of spreading infection is at its *lowest*.

Social distancing of at least 6 feet and routine hand washing should still be followed in addition to face masks to further reduce the risk of infection.

Washing Your Hands

Why should you wash your hands?

Washing your hands is the best way to control infections!

When should you wash your hands?

General Rules:

Wash your hands:

- Before you touch a consumer. This protects the consumer from *your* germs.
- After you touch a consumer and before touching other people or things. This prevents you from spreading the *consumer's* germs.
- After you touch any thing or surface that could have germs on it.

Specific Rules:

Wash your hands before you:

- Leave a consumer's home

Wash your hands after you:

- Cough, sneeze, or blow your nose
- Get to a consumer's home
- Tear your glove
- Use the toilet

Washing Your Hands

Wash your hands before and after you:

- Eat, drink, or touch food
- Put on your makeup or lip balm
- Smoke
- Do a task that involves touching a consumer
- Touch items used in personal care, like a toothbrush
- Touch your contact lenses
- Wear gloves

Questions and Answers

- **Question: The consumer's saliva is on my elbow. What should I do?**

Answer: Sometimes a part of your body touches things that may have germs on them. If this happens, wash the part with soap and water right away. If germs get in your eyes, nose, or mouth, rinse them well with plenty of water.

- **Question: I know that germs live on faucets and inside sinks. How should I wash my hands?**

Answer: Have a clean paper towel ready. Use it to turn the faucet on and off. If you touch the inside of the sink, wash your hands again.

Wearing Gloves

It's important to understand how to wear gloves. Here's what you need to know.

Why should you wear gloves?

Wearing gloves keeps you from touching body fluids. Body fluids have germs in them.

When should you wear gloves?

In general, wear gloves any time you might touch body fluids.

Follow these specific rules for when to wear gloves.

Wear gloves when you:

- Change bandages or dressings
- Clean areas where body fluids have spilled
- Collect or touch urine or stool samples
- Press down to stop bleeding
- Touch dirty items used in personal care
- Touch dirty or bloody linens, towels, or clothes

Wear gloves when you assist consumers to:

- Bathe
- Take care of their mouth
- Clean between their legs
- Use a toilet, bedpan, or urinal
- Change their pad or brief
- Take care of their catheter

Wearing Gloves

How often should you wear gloves?

Use gloves only once. Never use them again, even if you wash them.

If a glove tears:

- Take off both gloves right away.
- Wash your hands well.
- Put on another pair of gloves.

Questions and Answers

- **Question: One of the people I help is coughing and sneezing a lot. Other than gloves, what can I wear to protect myself from germs?**

Answer: You can wear a mask.

- **Question: Sometimes the bed linens are very dirty. What can I wear to protect my clothes when I change the sheets?**

Answer: You can wear an apron. You can also wear an apron when you assist a consumer to bathe.

Cleaning Up Germs

Why should you clean up germs?

Cleaning up germs keeps the consumer, family members, visitors, and you from getting sick.

How should you clean up germs?

To clean dishes:

- Wash the consumer's dishes with warm water and dish soap.
- Rinse and air-dry the dishes. If you dry dishes with a towel, use a clean towel each time.

To clean items used in personal care:

- Handle razors with care. Throw them away the same way you throw away needles.
- Wash thermometers in cool water and soap. Wipe them with alcohol before and after use.
- Make sure the consumer does not share personal care items with other family members.

To clean spilled body fluids:

- Put on gloves.
- Wipe up the spill with paper towels.
- Throw away the paper towels in the garbage. Use 2 bags.
- Take off and throw away your gloves. Wash your hands.
- Use bleach and water solution to get rid of germs.

Wear special gloves.

Wear rubber utility gloves. They will protect your hands from cleaning products. Do not wear latex gloves.

According to the CDC, wearing gloves outside of these instances (for example, when using a shopping cart or using an ATM) will not necessarily protect you from getting COVID-19 and may still lead to the spread of germs. The best way to protect yourself from germs when running errands and after going out is to regularly wash your hands with soap and water for 20 seconds or use hand sanitizer with at least 60% alcohol.

- Wear reusable or disposable gloves for routine cleaning and disinfection.
- Clean surfaces using soap and water, then use disinfectant.
- Cleaning with soap and water **reduces number of germs, dirt and impurities** on the surface.
- **Disinfecting kills germs** on surfaces.
- Practice routine cleaning of frequently touched surfaces. High touch surfaces include:
 - Tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, sinks, etc.

Use different cleaning products for different jobs.

Use detergent and hot water to clean:

- Clothes
- Dishes
- Sheets and towels

Use bleach and water to clean:

- Bathroom and kitchen surfaces
- Spilled body fluids
- Toilets

Use vinegar and water to clean and prevent odors on:

- Surfaces in the bathtub, shower, and kitchen
- Urinals, bedpans, commodes, and toilets

Making Cleaning Products

Here's how to make bleach and water solution, or "universal solution."

You will need:

- 1-cup measuring cup
- Empty plastic bottle with a cap. Make sure it can hold more than 11 cups of fluid.
- Label and marker, or permanent marker
- Liquid bleach
- Rubber utility gloves
- Water

Take these steps:

1. Wash your hands.
2. Put on gloves.
3. Measure 10 cups of water. Pour them into the bottle.
4. Measure 1 cup of bleach. Pour it into the bottle.
5. Put the cap on the bottle. Shake the bottle.
6. Write "Bleach solution 1:10" and the date on the label or bottle.
7. Put away the solution and the things you used. Keep the solution and the bleach out of reach of children.
8. Take off and rinse the gloves. Hang them up to dry.
9. Wash your hands.

Making Cleaning Products

Here's how to make vinegar and water solution.

You will need:

- 1-cup measuring cup
- Empty plastic bottle with a cap. Make sure it can hold more than 4 cups of fluid.
- Label and marker, or permanent marker
- Water
- White vinegar

Take these steps:

1. Wash your hands.
2. Measure 3 cups of water. Pour them into bottle.
3. Measure 1 cup of vinegar. Pour it into the bottle.
4. Put the cap on the bottle. Shake the bottle.
5. Write "Vinegar solution 1:3" and the date on the label or bottle.
6. Put away the solution and the things you used. Keep the solution out of reach of children.
7. Wash your hands.

Build Your Skills: Washing Your Hands

Get ready to wash your hands.
1. Get soap and paper towels before beginning; roll up sleeves.
2. Stand back from the sink. Your clothes and hands must not touch the sink.
3. Turn on the water with a dry paper towel. Make it warm and comfortable.
Wash your hands.
4. Get your hands wet. Point your fingertips down.
5. Put liquid soap on your hands and wrists.
6. Rub your hands, fingers, and wrists. Clean between your fingers. Rub your hands with soap for 30 seconds. (That’s about how long it takes to sing “Happy Birthday” two times.)
7. Rinse your hands. Rub them under the water for at least 30 seconds.
Dry your hands.
8. Dry your hands with a clean paper towel. Do not shake water off your hands.
9. Turn off the water with a clean paper towel.
10. Throw the paper towel in the garbage.

**Build Your Skills: Putting On and Taking Off
Gloves**

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Put on gloves.
1. Wash your hands.
2. Dry your hands well with a paper towel.
3. Check the gloves for tears or holes. Do not use the gloves if you find any.
4. Put the gloves on when you are ready to work with a consumer.
Take off gloves.
5. Use your gloved right hand to hold the left glove, near the wrist. Do not touch bare skin.
6. Peel the left glove off from the wrist. It should now be inside out.
7. Ball up the left glove in your right hand. Leave it inside out.
8. Put two fingers of your left hand inside the right glove. Do not touch the outside of the glove with your bare hand.
9. Peel the right glove off from the wrist. It should now be inside out, over the left glove.
10. Throw away the gloves in the right place.
11. Wash your hands.

Touching and Washing Dirty Laundry Safely

Why should you handle dirty laundry with care?

Dirty laundry may have body fluids on it. Body fluids have germs in them. Germs can make people sick.

How should you *handle* dirty laundry?

Take these steps:

1. Put on gloves and an apron.
2. Put a laundry bag where you can reach it.
3. Roll items away from your body. Wrap the dirty areas inside the clean areas.
4. **Never** shake out dirty laundry. This can put germs into the air.
5. Put dirty laundry right into the laundry bag. Do **not** put dirty laundry on the floor, on a chair, or on a counter.
6. Take off your gloves. Wash your hands.

How should you *wash* dirty laundry?

To wash dirty *white* laundry:

1. Soak very dirty items in a bleach solution for at least 10 minutes.
2. Wash the laundry in the washing machine with 1 cup of bleach.
3. Wash the laundry with regular laundry soap.
4. Dry the laundry in the dryer.

To wash dirty *colored* laundry:

1. Wash the laundry in the washing machine with 1 cup of household disinfectant, such as Lysol®.
2. Wash the laundry with regular laundry soap.
3. Dry the laundry in the drier.

To wash laundry *by hand*:

1. Use a basin, bathroom sink, or bathtub. **Never** use the kitchen sink.
2. Put on gloves.
3. Wash the laundry in 1 ounce of disinfectant per gallon of water, plus detergent.
4. Rinse the laundry well at least 3 times.
5. Clean the basin, sink, or tub with universal solution.

Getting Rid of Wastes Safely

Why should you handle wastes with care?

- Body fluids and things that touch body fluids have germs in them. Germs can make people sick.

How should you get rid of body fluids?

- Flush them down the toilet.

Body fluids include:

- Stools
- Urine
- Vomit

Things that touch body fluids are called waste materials.

Waste materials include:

- Used briefs and pads
- Used catheters
- Used dressings and bandages
- Used paper towels
- Used tissues

Getting Rid of Wastes Safely

How should you get rid of waste materials?

Always double-bag waste materials.

Take these steps:

1. Keep a garbage can for waste materials in the consumer's room. Line it with 2 plastic bags. The inner bag is "dirty." The outer bag is "clean."
2. Put on gloves. Put on an apron if your clothes may get dirty. Put on glasses and a mask if fluids may splash your face.
3. Put the waste materials in the inner bag.
4. Close the inner bag tightly.
5. Take off your gloves, apron, glasses, and mask. Put them in the clean bag.
6. Wash your hands (so that you don't make the outside of the clean bag "dirty").
7. Close the clean bag. Take it out of the consumer's room.
8. Throw the double-bagged waste materials away with other garbage—but only if you are sure it will stay out of reach of animals and children.

Getting Rid of Sharps Safely

What are sharps?

- Used needles and razors

Why should you handle sharps with care?

- Used needles and razors have body fluids on them. Body fluids have germs in them. So if you get stuck with a needle or cut with a razor, you can get sick.
- Needles and razors can tear through garbage bags. So they need to go in a sharps box.

How should you get rid of sharps?

You will need:

- Gloves
- Label or permanent marker
- Plastic bags
- Sharps box made of tough plastic with a cap

Getting Rid of Sharps Safely

Take these steps:

1. Write “needles, sharps” on the label or box. Keep the box out of reach of children.
2. Put on gloves.
3. Put the box where the consumer can reach it **before** they use any sharps.
4. Assist the consumer to take the cap off the box.
5. Make sure the consumer puts used sharps in the box **right away**.
6. Make sure all the sharps are in the box.
7. Assist the consumer to put the cap on the box.
8. When the box is full, make sure the cap is on tightly. Put tape on the cap if you think it could come off.
9. Put the sharps box in 2 garbage bags. Throw it away with other garbage.

What should you not do?

Follow these safety rules for all sharps:

- **Never** put sharps anywhere except the sharps box.
- **Never** put sharps in a garbage bag.
- **Never** try to put a sharp in the box after the box is full.

Follow these safety rules for needles:

- **Never** bend or break a needle.
- **Never** recap used needles.
- **Never** take used needles out of syringes.
- **Never** use a needle again.