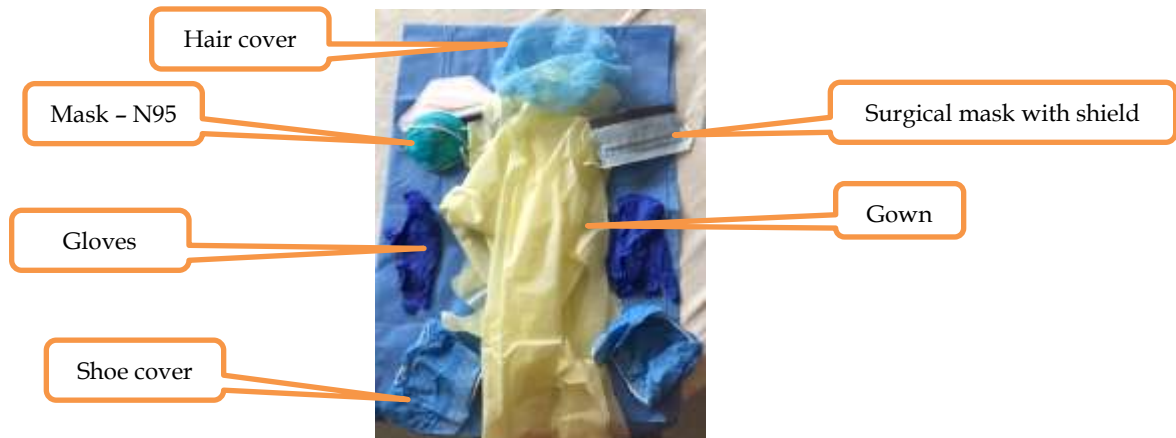


## PPE

Personal Protection Equipment – hair cover, mask (surgical mask, N95, respirator), face shield, gown, gloves and shoe covers.



To protect patients and everyone in the hospitals, healthcare personnel are required to wear appropriate attire when contacting with patients, especially with airborne diseases. Doctors and nurses have to be vigilant and work diligently to care and protect patients and themselves/their families. At times, they have to wear limited PPE (one mask/day...) throughout their long hour shifts.

Understanding of how the disease is spread is very crucial. As COVID-19 continues to spread across the country and the world, CDC recommended that we all must remain vigilant. The changes we have had to make to routines and daily life are extremely hard, but these changes are even more important now and in the future. We must stop the spread of this new and dangerous virus. The more steps you and your family can take to prevent the spread of COVID-19, the safer you will be.

According to CDC, an infection occurs when germs enter the body, increase in number, and cause a reaction of the body.

Three things are necessary for an infection to occur:

- **Source:** Places where infectious agents (germs) live (e.g., sinks, surfaces, human skin)

A Source is an infectious agent or germ and refers to a virus, bacteria, or other microbe.

In healthcare settings, germs are found in many places. People are one source of germs including:

- ✚ Patients
- ✚ Healthcare workers
- ✚ Visitors and household members

People can be sick with symptoms of an infection or colonized with germs (not have symptoms of an infection but able to pass the germs to others).

Germs are also found in the healthcare environment. Examples of environmental sources of germs include:

- ✚ Dry surfaces in patient care areas (e.g., bed rails, medical equipment, countertops, and tables)
- ✚ Wet surfaces, moist environments, and [biofilms](#) (e.g., cooling towers, faucets and sinks, and equipment such as ventilators)
- ✚ Indwelling medical devices (e.g., catheters and IV lines)
- ✚ Dust or decaying debris (e.g., construction dust or wet materials from water leaks)

- **Susceptible Person** with a way for germs to enter the body

A susceptible person is someone who is not vaccinated or otherwise immune, or a person with a weakened immune system who has a way for the germs to enter the body. For an infection to occur, germs must enter a susceptible person's body and invade tissues, multiply, and cause a reaction.

Devices like IV catheters and surgical incisions can provide an entryway, whereas a healthy immune system helps fight infection.

When patients are sick and receive medical treatment in healthcare facilities, the following factors can increase their susceptibility to infection.

- ✚ Patients in healthcare who have underlying medical conditions such as diabetes, cancer, and organ transplantation are at increased risk for infection because often these illnesses decrease the immune system's ability to fight infection.
- ✚ Certain medications used to treat medical conditions, such as antibiotics, steroids, and certain cancer fighting medications increase the risk of some types of infections.
- ✚ Lifesaving medical treatments and procedures used in healthcare such as urinary catheters, tubes, and surgery increase the risk of infection by providing additional ways that germs can enter the body.

Recognizing the factors that increase patients' susceptibility to infection allows providers to recognize risks and perform basic infection prevention measures to prevent infection from occurring.

- **Transmission:** Is a way germs are moved to the susceptible person.

Transmission refers to the way germs are moved to the susceptible person. Germs don't move themselves. Germs depend on people, the environment, and/or medical equipment to move in healthcare settings.

There are a few general ways that germs travel in healthcare settings – through contact (i.e., touching), sprays and splashes, inhalation, and sharps injuries (i.e., when someone is accidentally stuck with a used needle or sharp instrument).

- ✚ Contact: Contact moves germs by touch (example: MRSA or VRE). For example, healthcare provider hands become contaminated by touching germs present on medical equipment or high touch surfaces and then carry the germs on their hands and spread to a susceptible person when proper hand hygiene is not performed before touching the susceptible person.
- ✚ Droplet: Sprays and splashes occur when an infected person coughs or sneezes, creating droplets which carry germs short distances (within approximately 6 feet). These germs can land on a susceptible person's eyes, nose, or mouth and can cause infection (example: pertussis or meningitis).
  - Close range inhalation occurs when a droplet containing germs is small enough to breathe in but not durable over distance.
- ✚ Airborne: Inhalation occurs when germs are aerosolized in tiny particles that **survive on air currents over great distances** and time and reach a susceptible person. Airborne transmission can occur when infected patients cough, talk, or sneeze germs into the air (example: CoVID-19, TB, chicken pox, measles), or when germs are aerosolized by medical equipment or by dust from a construction zone (example: Nontuberculous mycobacteria or aspergillus).
- ✚ Sharps injuries can lead to infections (example: HIV, HBV, HCV) when blood borne pathogens enter a person through a skin puncture by a used needle or sharp instrument.

### Three Important Ways to Slow the Spread

- Wear a [mask](#) to help stop the spread of COVID-19 to others.
- [Stay at least 6 feet \(about two arm lengths\)](#) from others who don't live with you, particularly in crowded areas.
- [Wash your hands](#) with soap and water for 20 seconds or use hand sanitizer with at least 60% alcohol.

## How to Protect Yourself When Going Out

- Wear [a mask that covers your nose and mouth](#) to help protect others.
  - [Choose a mask](#) with two or more layers of washable, breathable fabric that fits snugly against the sides of your face.
- Stay 6 feet apart and avoid crowds.
  - The more people you are in contact with, the more likely you are to be exposed to COVID-19.
- Avoid indoor spaces as much as possible, particularly ones that aren't well ventilated.
  - You may find it harder to stay 6 feet apart in indoor spaces.
- [Wash your hands often](#).
  - Use soap and water for 20 seconds, especially after you have been in a public place or hand sanitizer if soap and water aren't available.

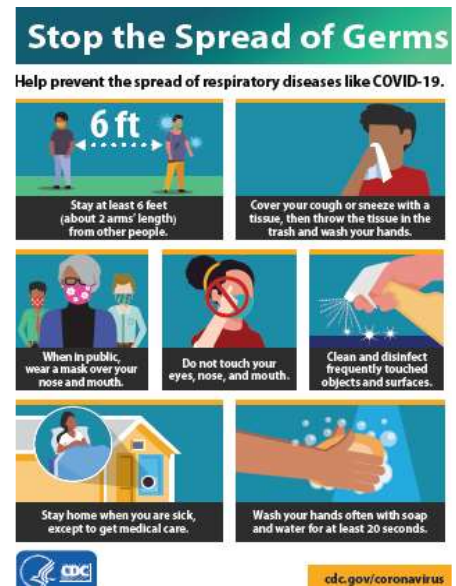


## What Symptoms to Watch For – Stay home

The [most common symptoms](#) of COVID-19 are

- Fever
- Cough
- Headaches
- Fatigue
- Muscle or body aches
- Loss of taste or smell
- Sore throat
- Nausea
- Diarrhea

Other symptoms are [signs of serious illness](#). If someone has trouble breathing, chest pain or pressure, or difficulty staying awake, get medical care immediately.



Source: <https://www.cdc.gov/coronavirus>