

How COVID-19 Spreads

Person-to-person spread

The virus is thought to spread mainly from person-to-person.

- Between people who are in close contact with one another (within about 6 feet).
- Through respiratory droplets produced when an infected person coughs or sneezes.

These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.

Can someone spread the virus without being sick?

- People are thought to be most contagious when they are most symptomatic (the sickest).
- Some spread might be possible before people show symptoms; there have been reports of this occurring with this new coronavirus, but this is not thought to be the main way the virus spreads.

Spread from contact with contaminated surfaces or objects

It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads.

How easily the virus spreads

How easily a virus spreads from person-to-person can vary. Some viruses are highly contagious (spread easily), like measles, while other viruses do not spread as easily. Another factor is whether the spread is sustained, spreading continually without stopping.

The virus that causes COVID-19 seems to be spreading easily and sustainably in the community ("community spread") in some affected geographic areas.

Symptoms

Watch for symptoms

Reported illnesses have ranged from mild symptoms to severe illness and death for confirmed coronavirus disease 2019 (COVID-19) cases.

The following symptoms may appear **2-14 days after exposure**.*

- Fever
- Cough
- Shortness of breath

Prevention & Treatment

Prevention

There is currently no vaccine to prevent coronavirus disease 2019 (COVID-19). The best way to prevent illness is to avoid being exposed to this virus. However, as a reminder, CDC always recommends everyday preventive actions to help prevent the spread of respiratory diseases, including:

- Avoid close contact with people who are sick.
- Avoid touching your eyes, nose, and mouth.
- Stay home when you are sick.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
- Clean and disinfect frequently touched objects and surfaces using a regular household cleaning spray or wipe.
- Follow CDC's recommendations for using a facemask.
 - CDC does not recommend that people who are well wear a facemask to protect themselves from respiratory diseases, including COVID-19.
 - Facemasks should be used by people who show symptoms of COVID-19 to help prevent the spread of the disease to others. The use of facemasks is also crucial for health

workers and people who are taking care of someone in close settings (at home or in a health care facility).

- Wash your hands often with soap and water for at least 20 seconds, especially after going to the bathroom; before eating; and after blowing your nose, coughing, or sneezing.
 - If soap and water are not readily available, use an alcohol-based hand sanitizer with at least 60% alcohol. Always wash hands with soap and water if hands are visibly dirty.

For information about handwashing, see CDC's Handwashing website

For information specific to healthcare, see CDC's Hand Hygiene in Healthcare Settings

These are everyday habits that can help prevent the spread of several viruses. CDC does have specific guidance for travelers.

Treatment

There is no specific antiviral treatment recommended for COVID-19. People with COVID-19 should receive supportive care to help relieve symptoms. For severe cases, treatment should include care to support vital organ functions.

People who think they may have been exposed to COVID-19 should contact their healthcare provider immediately.

Steps to help prevent the spread of COVID-19 if you are sick

Follow the steps below: If you are sick with COVID-19 or suspect you are infected with the virus that causes COVID-19, follow the steps below to help prevent the disease from spreading to people in your home and community.

Stay home except to get medical care

- **Stay home:** People who are mildly ill with COVID-19 are able to isolate at home during their illness. You should restrict activities outside your home, except for getting medical care.
- **Avoid public areas:** Do not go to work, school, or public areas.
- **Avoid public transportation:** Avoid using public transportation, ride-sharing, or taxis.

Separate yourself from other people and animals in your home

- **Stay away from others:** As much as possible, you should stay in a specific room and away from other people in your home. Also, you should use a separate bathroom, if available.
- **Limit contact with pets & animals:** You should restrict contact with pets and other animals while you are sick with COVID-19, just like you would around other people. Although there have not been reports of pets or other animals becoming sick with COVID-19, it is still recommended that people sick with COVID-19 limit contact with animals until more information is known about the virus.
- When possible, have another member of your household care for your animals while you are sick. If you are sick with COVID-19, avoid contact with your pet, including petting, snuggling, being kissed or licked, and sharing food. If you must care for your pet or be around animals while you are sick, wash your hands before and after you interact with pets and wear a facemask. See COVID-19 and Animals for more information.

Call ahead before visiting your doctor

- **Call ahead:** If you have a medical appointment, call the healthcare provider and tell them that you have or may have COVID-19. This will help the healthcare provider's office take steps to keep other people from getting infected or exposed.

Wear a facemask if you are sick

- **If you are sick:** You should wear a facemask when you are around other people (e.g., sharing a room or vehicle) or pets and before you enter a healthcare provider's office.
- **If you are caring for others:** If the person who is sick is not able to wear a facemask (for example, because it causes trouble breathing), then people who live with the person who is sick should not stay in the same room with them, or they should wear a facemask if they enter a room with the person who is sick.

Cover your coughs and sneezes

- **Cover:** Cover your mouth and nose with a tissue when you cough or sneeze.
- **Dispose:** Throw used tissues in a lined trash can.
- **Wash hands:** Immediately wash your hands with soap and water for at least 20 seconds or, if soap and water are not available, clean your hands with an alcohol-based hand sanitizer that contains at least 60% alcohol.

Clean your hands often

- **Wash hands:** Wash your hands often with soap and water for at least 20 seconds, especially after blowing your nose, coughing, or sneezing; going to the bathroom; and before eating or preparing food.
- **Hand sanitizer:** If soap and water are not readily available, use an alcohol-based hand sanitizer with at least 60% alcohol, covering all surfaces of your hands and rubbing them together until they feel dry.
- **Soap and water:** Soap and water are the best option if hands are visibly dirty.
- **Avoid touching:** Avoid touching your eyes, nose, and mouth with unwashed hands.

Avoid sharing personal household items

- **Do not share:** You should not share dishes, drinking glasses, cups, eating utensils, towels, or bedding with other people or pets in your home.
- **Wash thoroughly after use:** After using these items, they should be washed thoroughly with soap and water.

Clean all “high-touch” surfaces everyday

- **Clean and disinfect:** Practice routine cleaning of high touch surfaces.

High touch surfaces include counters, tabletops, doorknobs, bathroom fixtures, toilets, phones, keyboards, tablets, and bedside tables.

- **Disinfect areas with bodily fluids:** Also, clean any surfaces that may have blood, stool, or body fluids on them.
- **Household cleaners:** Use a household cleaning spray or wipe, according to the label instructions. Labels contain instructions for safe and effective use of the cleaning product including precautions you should take when applying the product, such as wearing gloves and making sure you have good ventilation during use of the product.

Monitor your symptoms

- **Seek medical attention:** Seek prompt medical attention if your illness is worsening (e.g., difficulty breathing).
- **Call your doctor:** Before seeking care, call your healthcare provider and tell them that you have, or are being evaluated for, COVID-19.
- **Wear a facemask when sick:** Put on a facemask before you enter the facility. These steps will help the healthcare provider’s office to keep other people in the office or waiting room from getting infected or exposed.
- **Alert health department:** Ask your healthcare provider to call the local or state health department. Persons who are placed under active monitoring or facilitated self-monitoring should follow instructions provided by their local health department or occupational health professionals, as appropriate.

alert icon

Call 911 if you have a medical emergency: If you have a medical emergency and need to call 911, notify the dispatch personnel that you have, or are being evaluated for COVID-19. If possible, put on a facemask before emergency medical services arrive.

Discontinuing home isolation

- **Stay at home until instructed to leave:** Patients with confirmed COVID-19 should remain under home isolation precautions until the risk of secondary transmission to others is thought to be low.
- **Talk to your healthcare provider:** The decision to discontinue home isolation precautions should be made on a case-by-case basis, in consultation with healthcare providers and state and local health departments.

Footnote

¹Fever may be subjective or confirmed

²Close contact is defined as—

1. a) being within approximately 6 feet (2 meters) of a COVID-19 case for a prolonged period of time; close contact can occur while caring for, living with, visiting, or sharing a health care waiting area or room with a COVID-19 case

– or –

1. b) having direct contact with infectious secretions of a COVID-19 case (e.g., being coughed on)

If such contact occurs while not wearing recommended personal protective equipment or PPE (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection), criteria for PUI consideration are met.

See CDC's updated Interim Healthcare Infection Prevention and Control Recommendations for Persons Under Investigation for 2019 Novel Coronavirus.

Data to inform the definition of close contact are limited. Considerations when assessing close contact include the duration of exposure (e.g., longer exposure time likely increases exposure risk) and the clinical symptoms of the person with COVID-19 (e.g., coughing likely increases exposure risk as does exposure to a severely ill patient). Special consideration should be given to those exposed in health care settings.

Stigma and Resilience

Knowing and sharing Facts can help stop stigma

- Share facts about COVID-19
- COVID-19 FAQs

Public health emergencies, such as the outbreak of coronavirus disease 2019 (COVID-19), are stressful times for people and communities. Fear and anxiety about a disease can lead to social stigma toward people, places, or things. For example, stigma and discrimination can occur when people associate a disease, such as COVID-19, with a population or nationality, even though not everyone in that population or from that region is specifically at risk for the disease. Stigma can also occur after a person has been released from COVID-19 quarantine even though they are not considered a risk for spreading the virus to others.

It is important to remember that people – including those of Asian descent – who do not live in or have not recently been in an area of ongoing spread of the virus that causes COVID-19, or have not been in contact with a person who is a confirmed or suspected case of COVID-19 are not at greater risk of spreading COVID-19 than other Americans.

Some groups of people who may be experiencing stigma because of COVID-19 include:

- Persons of Asian descent
- People who have traveled
- Emergency responders or healthcare professionals

Stigma hurts everyone by creating fear or anger towards other people.

Stigmatized groups may be subjected to:

- Social avoidance or rejection
- Denials of healthcare, education, housing or employment
- Physical violence.

Stigma affects the emotional or mental health of stigmatized groups and the communities they live in. Stopping stigma is important to making communities and community members resilient. See resources on mental health and coping during COVID-19.

Everyone can help stop stigma related to COVID-19 by knowing the facts and sharing them with others in your community.

Communicators and public health officials can help counter stigma during the COVID-19 response.

- Maintain privacy and confidentiality of those seeking healthcare and those who may be part of any contact investigation.
- Quickly communicate the risk or lack of risk from associations with products, people, and places.
- Raise awareness about COVID-19 without increasing fear.
- Share accurate information about how the virus spreads.
- Speak out against negative behaviors, including negative statements on social media about groups of people, or exclusion of people who pose no risk from regular activities.
- Be cautious about the images that are shared. Make sure they do not reinforce stereotypes.

- Engage with stigmatized groups in person and through media channels including news media and social media.
- Thank healthcare workers and responders. People who have traveled to areas where the COVID-19 outbreak is happening to help have performed a valuable service to everyone by helping make sure this disease does not spread further.
- Share the need for social support for people who have returned from China or are worried about friends or relatives in the affected region.