

TRANSMISSION

COVID-19 is a respiratory virus that can be transmitted by three modes:

- **Contact transmission** is infection spread through direct contact with an infectious person (e.g., touching during a handshake) or with an article or surface that has become contaminated. The latter is sometimes referred to as “fomite transmission.”
- **Droplet transmission** is infection spread through exposure to virus-containing respiratory droplets (i.e., larger and smaller droplets and particles) exhaled by an infectious person. Transmission is most likely to occur when someone is close to the infectious person, generally within about six feet.
- **Airborne transmission** is infection spread through exposure to those virus-containing respiratory droplets comprised of smaller droplets and particles that can remain suspended in the air over long distances (usually greater than six feet) and time (typically hours).

EXPOSURE

These modes of transmission are not mutually exclusive. For instance, “close contact” refers to transmission that can happen by either contact or droplet transmission while a person is within about six feet of an infected person.

SYMPTOMS

Approximately 2-14 days after exposure to the virus, symptoms of COVID-19 may begin to appear. While we know that 40-45% of individuals typically remain asymptomatic, others may experience any of the following symptoms: **fever, cough, shortness of breath, chills, headache, muscle pain, sore throat, fatigue, congestion, or loss of taste or smell.** Other less common symptoms include **gastrointestinal symptoms like nausea, vomiting, or diarrhea.**

It is important to note that even if someone is **asymptomatic they are still contagious** during an active COVID infection. Moreover, people are thought to be most contagious early in the course of their illness when they may not have any symptoms.

Both symptomatic and asymptomatic people remain **contagious for 10 days** from the time of symptoms beginning or after testing positive. It should also be noted that many asymptomatic individuals may also experience mild or undetected long-term health effects such as vascular, cardiac or pulmonary damage. Long-haulers are individuals who experience post-viral syndromes that include a constellation of symptoms.



TESTING

There are a variety of COVID-19 tests available today. These tests can broadly be categorized as tests that look for a part of the virus or for our body's reaction to the virus.

Tests that look for the presence of the virus may look for the DNA of the virus and are often called **molecular tests**. Other tests may look for the presence of a particular protein found on the virus and may be called **antigen tests**. Both molecular tests and antigen tests are used to diagnose an active COVID-19 infection. These tests can be done via a nasal swab or a saliva sample.

An **antibody test** looks for the presence of antibodies that your body creates in response to an infection. It may take days or weeks for antibodies to be detected in your blood and therefore these tests should not be used to diagnose a COVID infection. A positive antibody test can suggest that a person has previously been exposed to the COVID virus, but the amount of antibodies decreases over time and we do not yet know if this makes a person immune to the coronavirus.

	Molecular Test	Antigen Test	Antibody Test
Also known as...	Viral test, PCR test, NAAT, LAMP test	Rapid test (some molecular tests are also rapid)	Serologic test, blood test
How is the sample taken....	Nasal/ throat swab Saliva	Nasal/ throat	Finger stick, blood draw
How long do results take.....	1 day-1 week depending on your location	1 hour or less	1-3 days depending on your location
Shows.....	Current infection	Current infection	Past infection
Is another test needed?	Highly accurate	Positives are highly accurate, but negatives may need confirmation with a molecular test	A second test may be needed to confirm past infection

Chart amended from www.fda.gov

ISOLATION/QUARANTINE

We hear about isolation and quarantine now more than we ever have in our lives. **Self-isolation** is when individuals who have COVID-19 remain at home. The Minnesota Department of Health currently recommends that anyone who is waiting for test results, who tests positive or who has one or more common (or 2 less common) symptoms of COVID **isolate for 10 days**.

Quarantine is when someone who has a significant exposure to the coronavirus remains home. Many states require a quarantine period after having traveled out of state or country. The Minnesota Department of Health also recommends that siblings or household members of an infected individual **quarantine at home for 14 days**. This helps prevent the spread from a possible asymptomatic or presymptomatic infection.



GLOSSARY OF TERMS

- **Asymptomatic:** Not showing any symptoms of disease or illness. People may be asymptomatic but remain contagious.
- **Communicable:** Similar meaning to contagious.
- **Congregate settings:** Public places that can get crowded and where contact with infected people can happen.
- **Contact tracing:** An attempt to identify situations in which an infected person is transmitting the coronavirus and then warn others who may have been exposed through that person.
- **Coronavirus:** A family of related viruses that often cause respiratory illness. Coronaviruses cause COVID-19, SARS, MERS and some strains of the flu.
- **COVID-19:** The name of the illness caused by the coronavirus SARS-CoV-2. COVID-19 stands for 'coronavirus disease 2019.'
- **Hand hygiene:** Washing hands with soap and water for at least 20 seconds is a key strategy in slowing the spread of COVID-19.
- **Incubation period:** The time it takes for someone with an infection to start showing symptoms (2-14 days after infection for COVID-19).
- **Isolation:** Separating yourself when you're sick from healthy individuals to prevent spreading illness. Sometimes termed self-isolation.
- **Quarantine:** Designed to keep people away from each other to prevent the spread disease. Stay-at-home orders are a type of quarantine.
- **Screening:** This is not the same as a coronavirus test. This step helps healthcare workers to decide if you actually need a coronavirus test. It's a series of basic questions about your health condition and recent history. Screening may also include other common healthcare procedures, like taking your temperature.
- **Social distancing:** Also called physical or spatial distancing. It means putting space between yourself and other people at all times. The goal is to slow down how fast an infection spreads.
- **Virus:** An infectious agent that replicates only within the cells of living hosts

REFERENCES

- [MDH COVID-19 Decision Tree for People in Schools, Youth and Child Care Programs](#)
- [MDH COVID-19 Response](#)
- [MDH Face Covering Requirements](#)
- [FDA Coronavirus testing Basics](#)
- [CDC Coronavirus disease 2019](#)
- [Harvard Medical School Exposure to the coronavirus](#)
- [Yale Medicine COVID-19 Vocabulary](#)
- [UVA Health Glossary of Terms](#)