



What are coronaviruses?

Coronaviruses are a large family of viruses that can infect humans or animals. Sometimes an animal coronavirus can change so that it can infect people and become a human coronavirus. There are seven known types of human coronaviruses. Four types (229E, NL63, OC43, and KHU1) are common and cause mild to moderate respiratory infections, like the common cold. Two types, Severe Acute Respiratory Syndrome coronavirus (SARS-CoV) and Middle East Respiratory Syndrome coronavirus (MERS-CoV), can cause severe respiratory infections. The seventh type (2019-nCoV) is a new coronavirus recently discovered in China. Public health officials are trying to learn more about this new virus and the infection it causes.

What is a novel coronavirus?

A novel coronavirus is a new coronavirus strain that has not been previously found in people.

Who gets coronavirus infections?

Most people become infected with coronaviruses that cause the common cold at some point during their lives. These infections often occur in the fall or winter.

Severe Acute Respiratory Syndrome (SARS) is a type of coronavirus infection discovered in China in 2002. The virus that causes SARS quickly spread to more than two dozen countries in North America, South America, Europe and Asia before it was controlled. During the 2002-2003 outbreak, nearly 8,100 people became infected. In the United States, eight people with laboratory-confirmed SARS infection were identified and they had traveled to areas where the virus was spreading. Since 2004, no cases of SARS have been reported in the world.

Another type of coronavirus infection is Middle East respiratory syndrome (MERS). Since it was discovered in 2012, nearly 2,500 people with MERS have been identified. All these cases have been linked to travel to or residence in and near the Arabian Peninsula. Countries in or near the Arabian Peninsula include Bahrain, Iraq, Iran, Israel, the West Bank and Gaza, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, the United Arab Emirates, and Yemen. Two people in the United States have had MERS and both traveled to Saudi Arabia where they likely became infected.

How do coronaviruses spread?

Human coronaviruses most commonly spread from an infected person to others through respiratory droplets produced when an infected person coughs or sneezes, close personal contact (such as caring for or living with an infected person), or touching an object or surface with the virus on it and then touching your mouth or eyes before washing your hands. Three human coronaviruses (SARS-CoV, MERS-CoV, and 2019-nCoV) are also thought to spread from infected animals to people through contact.



What are the symptoms of coronavirus infections?

Coronaviruses typically cause respiratory symptoms, such as runny nose, headache, cough, sore throat, and fever. Sometimes, coronaviruses can cause more severe infections, such as pneumonia (infection of the lungs), kidney failure, or even death.

How soon after exposure do symptoms occur?

It depends on the type of coronavirus. In general, symptoms usually appear 2-14 days after exposure.

How are coronavirus infections diagnosed?

Special laboratory tests for respiratory or blood samples are needed to diagnose coronavirus infection. This testing is more likely to be used if you have severe symptoms or if your infection might be caused by an uncommon strain of coronavirus like MERS-CoV.

What is the treatment for coronaviruses?

There is no specific treatment for coronavirus infections. Treatment consists of supportive care and relief of symptoms.

How can coronavirus infection be prevented?

A vaccine to prevent coronavirus infection is not currently available. People should follow these tips to help prevent respiratory illnesses of any kind:

- Wash your hands often with soap and water for at least 20 seconds, and help young children do the same. If soap and water are not available, use an alcohol-based hand sanitizer. Wash your hands especially after coughing and sneezing, before and after caring for an ill person, and before preparing foods and before eating.
- Cover your nose and mouth with a tissue when you cough or sneeze and then throw the tissue in the trash.
- Avoid touching your eyes, nose, or mouth with unwashed hands.
- Avoid close contact (such as kissing, sharing cups, or sharing eating utensils) with people who are sick.
- Clean and disinfect frequently touched surfaces and objects, such as toys and doorknobs, especially if someone is sick.
- Stay home when you are sick, except when you need to get medical care.
- Wash hands after animal contact and after visiting farms, markets, barns, petting zoos, and agricultural fairs.
- Avoid contact with animals who are sick.

How can I learn more about coronaviruses?

- If you have concerns about coronaviruses, contact your healthcare provider.



- Call your local health department. A directory of local health departments is located at <https://www.vdh.virginia.gov/local-health-districts/>.
- Visit the Centers for Disease Control and Prevention website at <https://www.cdc.gov/coronavirus/index.html>.

January 2020