

About the Disease

Coronaviruses are characteristically named for the crown or "corona"-like spikes on the microscopic surface of the virus. This large family of viruses causes respiratory illnesses ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS), each of which killed approximately 800 people in 2012 and 2002-2003, So far, COVID-19 has infected almost 10 times the number of people who contracted SARS and approximately three times as many people have died of COVID-19 than either SARS or MERS. The fatality rate is estimated to be 2%, but this is an early estimate.

Symptoms

Common human coronaviruses typically cause mild to moderate upper-respiratory tract illnesses with symptoms that resemble the flu or a bad cold, such as a runny nose, headache, cough, sore throat, and a general feeling of being unwell. Approximately 70% of cases report an initial fever presentation that comes on slowly and a dry, barking cough after the first day. More severe symptoms may include difficulty breathing, pneumonia, bronchitis and lung lesions.

Incubation

The time from exposure to the onset of symptoms is thought to be about two to 14 days. Approximately 90% of the cases present clinical symptoms by nine days post-infection. Researchers observe that approximately 37% of cases had evidence of the virus in their sputum samples in the 24 hours prior to exhibiting observable symptoms like fever. The quantifiable amount of the virus is low, but there is a chance that asymptomatic patients may be infectious in the 24 hours before they have symptoms.

Transmission

Initially, the source of outbreak was linked to animal sources. Person-to-person transmission is now occurring, with an estimated two — three people becoming infected from one already infected person. The exact mode of transmission of this new strain of coronavirus is not completely understood, but prior strains of human coronavirus are most commonly spread from an infected person to others via:

- Air droplets by coughing and sneezing (-60%)

- Touching an infected object or surface (-20%)
- Touching contaminated surfaces then touching your mouth, nose, or eyes (-20%)

Those with the greatest risk of infection are older than 55 years old, men, smokers, people with diabetes, people with kidney disease, and immunocompromised patients.

Prevention

There are currently no vaccines available to protect against human coronavirus infection. In order to reduce the risk of infection, consider the following tips:

- Try to avoid contact with people who are sick. Maintain an eight foot distance if you are near someone with symptoms to avoid air droplets from coughing and sneezing.
- Wash your hands frequently with liquid soap and water for at least- 20 seconds, especially after touching public installations such as handrails or doorknobs and before touching the mouth, nose, or eyes.
- When your hands are not visibly soiled and soap and water are not available, clean your hands with sanitizer containing at least 60% alcohol, such as Purely Advanced Hand Sanitizer.
- Get the flu vaccine — the flu is co-circulating and several flu patients have caught the coronavirus in the hospital because of the compromised immune system.
- Try to stay generally healthy as being run down puts your body at greater risk.
- High risk individuals may consider putting on surgical masks while in public and not adequately ventilated places. WHO provides detailed guidance on proper technique.
- Thoroughly cook meat and eggs.
- Avoid animal markets in Asia.

Recommendations

Authoritative guidance for individuals has not changed greatly. We continue to support the following recommendations, and encourage rigorous adherence to them, especially for international travelers and in all situations that involve large numbers of people, some of whom have traveled internationally:

- Avoid close contact with people suffering from respiratory infections and keep your distance in large group settings
- Wash hands frequently with soap and water or use hand sanitizer with at least 60% alcohol
- Get a flu shot if you have not already done so
- Avoid touching shared surfaces (handrails, doorknobs)
- If you do become symptomatic (fever, cough, headache), especially if you have any reason to suspect interaction with someone who may have been exposed, we suggest that you immediately contact your primary care physician, use a mask and stay out of social and work settings

Treatment

There is no specific treatment available. If you believe that you have been exposed to someone with coronavirus or you might have coronavirus, we recommend that you **contact your primary care physician immediately.**

Your physician may prescribe medication to address pain and/or fever. CDC suggests taking a hot shower or using a humidifier to alleviate a sore throat or cough. Drinking lots of fluids and getting as much rest as possible are also advised.