

What is MERS?

Middle East Respiratory Syndrome (MERS) is a respiratory disease caused by a coronavirus called Middle East Respiratory Syndrome Coronavirus (MERS-CoV). MERS was first discovered in 2012 in Saudi Arabia. MERS-CoV is not the same as the SARS-associated coronavirus (SARS-CoV) that caused severe acute respiratory syndrome (SARS) in 2003. Both viruses are similar types of viruses (coronaviruses) and both can cause severe respiratory disease. MERS-CoV, however, does not spread in communities as easily as SARS-CoV.

Who gets MERS?

People with MERS have traveled to or lived in the Arabian Peninsula, or had close contact with an ill person who recently traveled to the Arabian Peninsula. The Arabian Peninsula includes Bahrain, Iraq, Iran, Israel, the West Bank and Gaza, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, the United Arab Emirates, and Yemen. Only two people with MERS have been identified in the United States. Both lived and worked in Saudi Arabia where they likely became infected.

Some people with MERS might become infected after having contact with infected camels. People providing care to a person with MERS can also become infected if they do not follow infection control recommendations. Certain people appear to be at higher risk for developing severe disease, including those with weakened immune systems, older people, and people with chronic diseases, such as kidney disease, diabetes, cancer, and lung disease.

How is MERS spread?

MERS-CoV can spread from an animal to a person. Evidence suggests that people can become infected through contact with infected camels. Other animals might also be able to spread the virus to people. MERS-CoV can spread from person to person, but it does not spread easily unless there is close contact, such as family members or healthcare workers providing care to an infected patient. MERS-CoV is thought to spread from person to person by respiratory droplets that are produced when an infected person coughs or sneezes.

What are the symptoms of MERS?

Some people with MERS have mild, cold-like symptoms or no symptoms at all. Most people with MERS have severe respiratory illness with fever, cough and shortness of breath. Pneumonia (infection of the lungs) is common. Gastrointestinal symptoms, like diarrhea, nausea, or vomiting, might be present.

How soon after exposure do symptoms occur?

Symptoms usually appear 5 or 6 days after exposure, with a range of 2-14 days.

How is MERS diagnosed?

Special laboratory tests (polymerase chain reaction or PCR) for respiratory and blood samples are needed to diagnose MERS. These tests are available at state public health laboratories and CDC.

CDC can also test blood samples to determine if a person has been previously infected.

What is the treatment for MERS?

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

How can MERS be prevented?

A vaccine to prevent MERS 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 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.
- Wash hands after animal contact and after visiting farms, markets, barns, petting zoos, and agricultural fairs.
- Avoid contact with animals who are sick.
- When caring for a person with MERS, wear protective clothing and follow infection control recommendations.

How can I learn more about MERS?

- If you have concerns about MERS, 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/mers/>.

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