



Diseases Fact Sheet - Middle Eastern Respiratory Syndrome (MERS)

South Dakota Department of Health

Office of Disease Prevention Services - 605-773-3737 -(1-800-592-1861 in South Dakota only)

This material is provided for informational purposes only and is not a substitute for medical care. We are not able to answer personal medical questions. Please see your health care provider concerning appropriate care, treatment or other medical advice.

What is it?

Middle Eastern Respiratory Syndrome (MERS) is an illness caused by a coronavirus called [Middle East Respiratory Syndrome Coronavirus \(MERS-CoV\)](#). MERS affects the lungs and breathing tubes. Most MERS patients develop a severe acute respiratory illness with symptoms of fever, cough and shortness of breath. About 30% of them die. It was first reported in Saudi Arabia in 2012.

How do people get infected with MERS?

MERS-CoV, like other coronaviruses, likely spreads from an infected person's respiratory secretions, such as through coughing. However, we don't fully understand the precise ways that it spreads.

MERS-CoV has spread from ill people to others through close-contact, such as caring for or living with an infected person. Infected people have spread MERS-CoV to others in healthcare settings, such as hospitals. Researchers studying MERS have not seen any ongoing spreading of MERS-CoV in the community.

All reported cases have been linked to countries in and near the Arabian Peninsula. Most infected people either lived in the Arabian Peninsula or recently traveled from the Arabian Peninsula before they became ill. A few people have gotten MERS after having close contact with an infected person who had recently traveled from the Arabian Peninsula. The largest known outbreak of MERS outside the Arabian Peninsula occurred in the Republic of Korea in 2015 and was associated with a traveler returning from the Arabian Peninsula.

Public health agencies continue to investigate clusters of cases in several countries to better understand how MERS-CoV spreads from person to person.

What are the symptoms of MERS?

Most people confirmed to have MERS-CoV infection have had severe respiratory illness with symptoms of:



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- Fever
- Cough
- Shortness of breath

Some people also had diarrhea and nausea/vomiting. For many people with MERS, more severe complications followed, such as pneumonia and kidney failure. About 3 or 4 out of every 10 people reported with MERS have died. Most of the people who died had a pre-existing medical condition that weakened their immune system, or an underlying medical condition that hadn't yet been discovered. Medical conditions sometimes weaken people's immune systems and make them more likely to get sick or have severe illness.

Pre-existing conditions among people who got MERS have included

- Diabetes
- Cancer
- Chronic lung disease
- Chronic heart disease
- Chronic kidney disease

Some infected people had mild symptoms (such as cold-like symptoms) or no symptoms at all.

The symptoms of MERS start to appear about 5 or 6 days after a person is exposed but can range from 2 to 14 days.

How do I prevent MERS?

There is currently no vaccine to protect people against MERS. But scientists are working to develop one.

You can help reduce your risk of getting respiratory illnesses:

- [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.
- Cover your nose and mouth with a tissue when you cough or sneeze, then throw the tissue in the trash.
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Avoid personal contact, such as kissing, or sharing cups or eating utensils, with sick people.
- Clean and disinfect frequently touched surfaces and objects, such as doorknobs.



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If you are caring for or living with a person confirmed to have, or being evaluated for, MERS-CoV infection, see [Interim Guidance for Preventing MERS-CoV from Spreading in Homes and Communities](#).

How do I treat MERS?

There is no specific antiviral treatment recommended for MERS-CoV infection. Individuals with MERS often receive medical care to help relieve symptoms. For severe cases, current treatment includes care to support vital organ functions.

If you think you may have been exposed MERS-CoV, see [People at Increased Risk for MERS](#).

Related Sites:

- [Centers for Disease Control and Prevention](#)
 - [Interim Guidance for Health Professionals](#)
 - [Interim Infection Prevention and Control Recommendations for Hospitalized Patients with Middle East Respiratory Syndrome Coronavirus \(MERS-CoV\)](#)
 - [Healthcare Facility Preparedness Checklist](#)
 - [Healthcare Provider Preparedness Checklist for MERS-CoV](#)