

**MERS** 

(Middle East Respiratory Syndrome)

What is MERS?

Middle East Respiratory Syndrome (MERS) is viral a respiratory illness that was first identified in 2012 in Saudi Arabia. It is caused by a type of virus called a coronavirus. The virus that causes MERS is referred to as MERS-CoV. The first case of MERS in the United States was identified in April 2014.

Who is at risk for MERS?

At present time, most MERS cases have originated in the Arabian Peninsula. The country with the most cases is Saudi Arabia, but cases have also been identified in the United Arab Emirates (UAE), Qatar, Oman, Jordan, Kuwait, Lebanon, Iran and Yemen. MERS-CoV transmission had also been documented in the Republic of Korea, where a local outbreak occurred after a travel-associated case was treated at a local hospital. Travel-associated cases have been reported in countries in Europe, Asia and Africa and in the United States (U.S.). Cases in these countries either traveled to the Arabian Peninsula or had contact with a travel-associated case. Limited spread among healthcare workers treating patients with MERS has been documented. In the U.S. you are not considered to be at risk for contracting MERS if you have not recently traveled to the Arabian Peninsula, if you have not had close contact with someone who is being evaluated for infection with MERS-CoV or if you have not recently been in a health care facility where a MERS CoV patient was being treated.

What are the symptoms of MERS?

Many people with MERS develop severe acute respiratory illness, such as pneumonia. Common symptoms include fever, cough and shortness of breath. Some people have experienced diarrhea or kidney failure. Cases with mild respiratory symptoms or no symptoms have also been identified. About 30 percent of those with severe infection have died. People with pre-existing health conditions or weakened immune systems (such as diabetes, cancer, heart disease, chronic lung disease or kidney disease) are more likely to develop a severe case of MERS.

How soon do symptoms appear?

Symptoms usually begin within 14 days of exposure.

How is MERS spread?

We don't know for certain where the virus came from. However, it likely came from an animal source. In addition to humans, MERS-CoV has been found in camels in several countries. It is possible that some people became infected after contact with camels, although more information is needed to figure out the possible role that camels and other animals may play in the transmission of MERS-CoV.

Limited person-to-person spread has been documented in people that have had close contact to MERS cases, such as family caregivers and health care workers. However, most people who had close contact to people with MERS have not become infected or ill. There is currently no evidence of sustained spread of MERS from person to person within a community.

When and for how long is a person able to spread the disease?

The time frame in which MERS can spread is unknown.

How is a person diagnosed?

Laboratory testing to confirm infection with MERS is available through most state health departments, including the North Dakota Department of Health and the Centers for Disease Control and Prevention (CDC). If a patient is suspected of having MERS, their health care provider will work with their state or local public health agency to complete this confirmatory testing.

What is the treatment?

There are currently no specific treatments recommended for people with MERS. Medical care is provided primarily to help relieve symptoms and to support the functioning of vital organs in severe cases.

Does past infection make a person immune?

It is currently unknown if those infected with MERS will gain long-lasting immunity to MERS.

Should children or others be excluded from child care, school, work or other activities if they have MERS?

Yes, as soon as the person is suspected to have the illness they should be isolated from contact with others.

What can be done to prevent the spread of MERS?

- In order to avoid respiratory illnesses, members of the public should take every day preventative actions, such as:
 - Washing hands often and covering coughs and sneezes
 - Avoiding close contact with people who appear sick
 - Avoiding touching the eyes, nose and mouth with unwashed hands
 - Disinfecting frequently-touched surfaces
- At this time, changing travel plans because of MERS has not been recommended. People who develop a fever and cough or shortness of breath within 14 days after traveling from countries in or near the Arabian Peninsula should call a healthcare provider and mention their recent travel. While sick, people should stay home from work or school and delay future travel to reduce the possibility of spreading illness to others.
- People should monitor their health if they have had close contact with someone who recently traveled to a county in or near the Arabian Peninsula who subsequently developed fever and symptoms of respiratory illness, such as cough or shortness of breath.
- If you are suspected of having or are diagnosed with MERS, you should work closely with public health officials on taking measures to reduce the chance of spreading your illness to others.
- Healthcare providers should follow recommended infection-control measures, including standard contact and airborne precautions, while managing symptomatic contacts and patients who are suspected of having MERS.

Additional Information:

This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health.

Resources:

1. Centers for Disease Control and Prevention (www.cdc.gov/coronavirus/MERS/index.html).
2. World Health Organization (www.who.int/csr/disease/coronavirus_infections/en/).