

Middle East respiratory syndrome

Middle East respiratory syndrome (MERS) is a viral respiratory illness caused by a coronavirus (Middle East respiratory syndrome coronavirus, or MERS-CoV) that was first identified in Saudi Arabia in 2012

Symptoms

- A typical case of MERS includes fever, cough, and/or shortness of breath. Pneumonia is common, however some people infected with the MERS virus have been reported to be asymptomatic. Gastrointestinal symptoms, including diarrhoea, have also been reported.
- Severe cases of MERS can include respiratory failure that requires mechanical ventilation and support in an intensive-care unit.
- Some patients have had organ failure, especially of the kidneys, or septic shock. The virus appears to cause more severe disease in people with weakened immune systems, older people, and people with chronic diseases as diabetes, cancer, and chronic lung disease.
- The mortality rate for people with the MERS virus is approximately 35% – this may be an overestimate however, as mild cases may be missed by existing surveillance systems.

Transmission

The MERS virus is transmitted primarily from infected dromedary camels to people, but transmission from people to people is also possible.

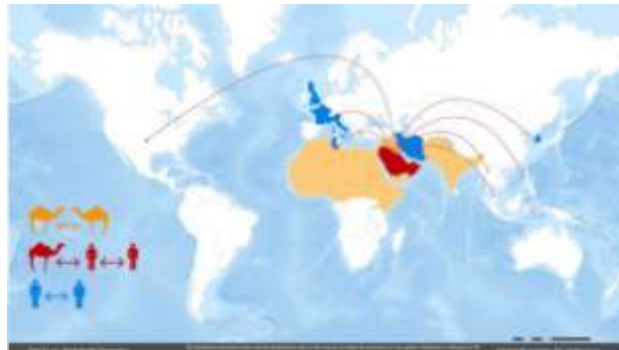


Image credit WHO

From animals to people

MERS-CoV is a zoonotic virus, meaning it is transmitted between animals and people. Scientific evidence suggests that people are infected through unprotected direct or indirect contact with infected dromedary camels.

The MERS virus has been identified in dromedary camels in several countries, including Burkina Faso, Egypt, Ethiopia, Iran, Jordan, Kenya, Kingdom of Saudi Arabia, Kuwait, Mali, Morocco, Netherlands, Nigeria, Oman, Pakistan, Qatar, Spain (Canary Islands), Somalia, Sudan, Tunisia, and the United Arab Emirates.. There is further evidence suggesting the MERS-CoV is widespread in dromedary camels in the Middle East, Africa and South Asia. It is possible that other animal reservoirs exist, however animals including goats, cows, sheep, water buffalo, swine, and wild birds have been tested for MERS-CoV and the virus has not been found.

Between people

The MERS virus does not pass easily between people unless there is close unprotected contact, such as the provision of clinical care to an infected patient without strict hygiene measures.

Transmission between people has been limited to-date, and has been identified among family members, patients, and health care workers. The majority of reported MERS cases to date have occurred in health care settings.

Treatment

No vaccine or specific treatment for MERS is currently available, however there are several vaccines for MERS in development. Treatment is supportive and based on a person's clinical condition.