

Middle East Respiratory Syndrome



Centre for Health Protection



Department of Health

Causative agent

Middle East respiratory syndrome (MERS) is a viral respiratory disease caused by a novel coronavirus that was first identified in Saudi Arabia in 2012. There are 3 main subgroups of coronaviruses: alpha (α), beta (β) and gamma (γ). Middle East Respiratory Syndrome Coronavirus (MERS-CoV) is a beta coronavirus.

Clinical features

Infected persons may present with acute serious respiratory illness with symptoms including fever, cough, shortness of breath and breathing difficulties. Patients with MERS may develop severe complications such as pneumonia and kidney failure. Some also have gastrointestinal symptoms including diarrhoea and nausea/ vomiting. In people with immune deficiencies, the disease may have atypical presentation. Some laboratory-confirmed cases of MERS-CoV infection are reported as asymptomatic.

Mode of transmission

People may be infected upon exposure to animals (especially camel), environment or other confirmed patients (such as in a hospital setting). Based on the current information, MERS-CoV could be spread from person-to-person through close contact. Besides, scientific studies support that dromedary camels served as a major reservoir host for MERS-CoV and an animal source of infection in humans.

Incubation period

2 - 14 days

Management

Treatment is supportive.

Prevention

No vaccine is currently available to protect against MERS. The best preventive measure is to maintain good personal and environmental hygiene.

Personal hygiene

- Keep hands clean
- Cover nose and mouth with tissue paper when sneezing or coughing
- When having respiratory symptoms, wear a surgical mask, refrain from work or school, avoid going to crowded places and seek medical advice promptly
- Build up good body immunity by having a balanced diet, regular exercise and adequate rest, do not smoke and avoid alcohol consumption



Environmental hygiene

Though coronaviruses may survive for some time in the environment, they are easily destroyed by most detergents and cleaning agents. It is important to:

- Regularly clean and disinfect frequently touched surfaces with 1:99 diluted household bleach
- Use absorbent disposable towels to wipe away obvious contaminants such as respiratory secretions, and then disinfect the surface and neighbouring areas with 1:49 diluted household bleach
- Maintain good indoor ventilation. Avoid going to crowded or poor ventilated public places; high-risk individuals may consider putting on surgical masks while in such places

Travel health advice



- Consult a health care provider at least 6 weeks before travelling to review the risk
- Avoid going to farms, barns and markets with camels
- Avoid contact with animals, especially camels including riding camels or participating in any activity involving contact with camels
- Wash hands before and after touching animals in case of visits to farms, barns or markets with camels
- Avoid close contact with sick people, especially with those suffering from acute respiratory infections, and avoid visit to healthcare settings with MERS patients
- Adhere to food safety and hygiene rules such as avoiding consuming raw or undercooked animal products, including milk and meat, or foods which may be contaminated by animal secretions, excretions (such as urine) or products, unless they have been properly cooked, washed or peeled
- If feeling unwell, put on a surgical mask, seek medical attention immediately and inform doctor of recent travel history



Centre for Health Protection Website www.chp.gov.hk
Health Education Infoline of the Department of Health
2833 0111

Revised in October 2019