

Public Health Measures
for Scaling up National Preparedness

Middle East Respiratory Syndrome (MERS)

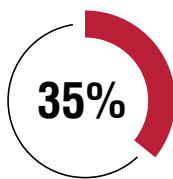


**World Health
Organization**

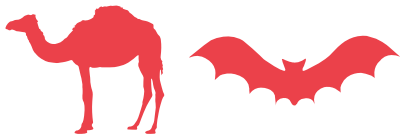
Regional Office for the Eastern Mediterranean

Background

Middle East Respiratory Syndrome (MERS) is an acute respiratory illness caused by the novel coronavirus called MERS coronavirus (MERS-CoV). MERS was first reported on 22 September 2012 in Saudi Arabia. Most of the reported cases worldwide remained associated with the Arabian Peninsula.



Approximately 35% of reported patients with MERS have died.



Humans have been infected with MERS coronavirus through contact with infected dromedary camels.



Fever



Cough



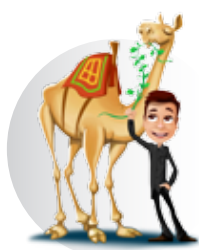
Shortness of breath

MERS symptoms include fever, cough, and shortness of breath.

People at risk



Healthcare provider



People with exposure to dromedary camels



Close contact with a MERS patient

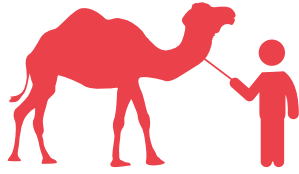


Travelers



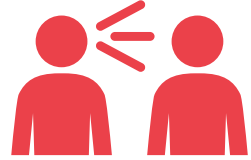
Hajj or Umrah pilgrims

Modes of transmission



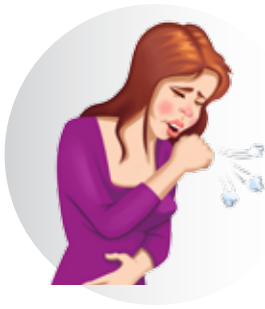
Zoonosis

Humans can be infected through direct or indirect contact with infected dromedary camels in particular, which are the major reservoir host for MERS-CoV.



Human-to-human

Human-to-human transmission is known to occur during unprotected contact with MERS patients, such as in homes or care facilities. Under other circumstances, MERS does not easily transmit between humans.



Direct transmission

Droplets produced during coughing or sneezing



Indirect transmission

Touching surfaces contaminated with MERS-CoV, and then touching the mouth, nose or eyes



Close contact

Unprotected caring of infected patients

National response plan

Public health preparedness for early detection and prevention of MERS should include a national response plan specific to MERS, and the following measures:

1. Enhance surveillance and contact management
2. Strengthen laboratory capacity
3. Reinforce infection control precautions in health care settings
4. Improve risk communications and community engagement

Public Health Measures for Early detection and prevention of transmission

1

Enhance surveillance and contact management



Enhance surveillance for acute respiratory infections where there has been exposure to dromedaries



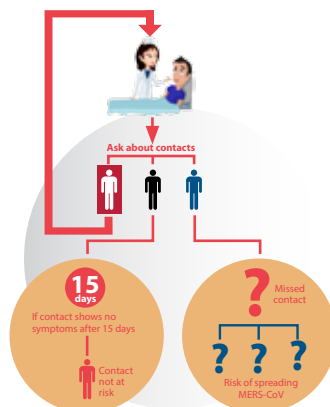
Monitor and follow-up people returning from MERS-affected areas



Report any suspected MERS case to local health authorities immediately



Send clinical specimens from suspect cases to the reference laboratory for analysis



Establish a system to trace all contacts of suspected/confirmed MERS patients using WHO protocol



Educate health care providers on MERS, associated risks and infection prevention control



Carry out assessment of risk of transmission in affected health facilities/communities



Prepare to mobilize rapid response teams and multi-sectoral expert response teams



Strengthen capacity to carry out epidemiological investigations

2

Strengthen laboratory capacity



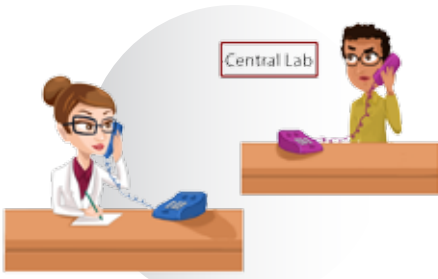
Collect upper and lower respiratory samples for patients with respiratory symptoms suspected of MERS



Perform laboratory testing for MERS-CoV using molecular testing (PCR)



Conduct virus characterization for any positive cases



Report any confirmed cases promptly to the appropriate authorities



Train staff on collection, storage and transportation of clinical samples from suspected cases



Train staff on deactivation of specimens through appropriate bio-security measures



Maintain stockpile of reagents and consumables needed for laboratory diagnostic services



Disseminate laboratory protocols, standard operating procedures, etc. for MERS diagnosis

3

Reinforce infection prevention and control precautions in health care settings



Establish appropriate isolation for patients with confirmed or suspected MERS



Prevent overcrowding in waiting areas



Limit the number of health care workers/ family members/ visitors in contact with a MERS patient



Protect yourself from MERS infections; use personal protective equipment (PPE) when in close contact with a MERS patient



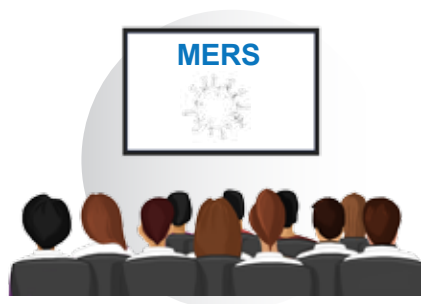
Practice hand hygiene – clean hands with soap and water or alcohol-based hand rub



Ensure health facility has adequate environmental cleaning, disinfection and ventilation



Clean and disinfect medical care equipment after each patient use



Ensure health care workers are aware of MERS case definition and case management



Educate health care workers to report and seek prompt medical care for respiratory illnesses

4

Improve risk communications and community engagement



Educate community health workers, community leaders and health partners on MERS and associated risks



Conduct intensive awareness-raising campaigns on MERS among the general public



Raise awareness of the risk of MERS for Hajj pilgrims through embassies and at borders



Develop and distribute information products on MERS, with special regard for vulnerable populations- people having direct contact with dromedaries, the elderly and those with chronic illnesses



Inform family members on how to maintain safe contact with MERS patients in the home



Address stigmatization of MERS patients and how to maintain safe contact



Use all available communications channels including TV, radio, web, print, community leaders, elders, etc



Develop standard operation procedures for external communications on MERS for health authorities and health facilities



Establish networks of community leaders and health partners for detection, reporting and community engagement activities

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World Health Organization
Regional Office for the Eastern Mediterranean
P.O. Box 7608, Cairo 11371, EGYPT

 www.emro.who.int/index.html

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