



LETTERS

MERS-COV AND THE HAJJ

Middle East respiratory syndrome coronavirus (MERS-CoV) in pilgrims returning from the Hajj

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Last month around two million international pilgrims travelled to Mecca in Saudi Arabia to join in the annual Islamic Hajj pilgrimage before returning home to their countries of origin. Crowded close human and animal contact has caused previous communicable disease outbreaks.¹ Coronaviruses² such as Middle East respiratory syndrome coronavirus (MERS-CoV), which causes Middle East respiratory syndrome (MERS), have resulted in nosocomial outbreaks characterised by early nosocomial super-spreading events and transmission patterns involving healthcare workers. This poses great clinical concern as a potential cause of epidemics and threat to global health.

In Saudi Arabia, 1231 MERS-CoV infections have resulted in 521 deaths and onward transmission to 21 countries.³⁻⁶ The initial infection causes an upper respiratory tract illness with an incubation period of 14 days and an average case fatality around 35%. Delayed diagnosis in a South Korean traveller infected with MERS-CoV in Saudi Arabia recently caused the largest outbreak of MERS outside Saudi Arabia, with onward transmission of 186 infections, resulting in 36 deaths and an estimated socioeconomic impact of up to \$10bn (£6.6bn; €8.94bn).⁷⁻⁹

Awareness of MERS in healthcare workers remains low. Yet the risk of returning Hajj pilgrims contracting and spreading MERS-CoV from Saudi Arabia is high.¹⁰ To help to identify cases and stop similar preventable tragic outbreaks, Public Health England has issued a warning to be aware of MERS in Hajj travellers, as well as full guidance on the samples required, diagnostics, management, and reporting of suspected and confirmed cases.^{11 12}

MERS-CoV should be considered in any patient presenting to frontline medical services with a flu-like illness or pneumonia who has travelled within 14 days before symptom onset to any

high risk countries, including in the Arabian peninsula; a risk assessment is required using the PHE case definition for possible MERS-CoV (box). There is no specific treatment or vaccine against MERS-CoV but patients can recover with early supportive care.¹³

Competing interests: None declared.

Full response at: www.bmj.com/content/346/bmj.f1301/rr.

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PHE case definition—possible case of Middle East respiratory syndrome coronavirus (MERS-CoV)*

Any person with severe acute respiratory infection needing admission to hospital with symptoms of fever ($\geq 38^{\circ}\text{C}$), or history of fever, and cough

AND

With evidence of pulmonary parenchymal disease (such as clinical or radiological evidence of pneumonia or acute respiratory distress syndrome (ARDS))

AND

Not explained by any other infection or cause

AND at least one of

History of travel to, or residence in an area where infection with MERS-CoV could have been acquired in the 14 days before symptom onset†

OR

Close contact during the 14 days before onset of illness with a confirmed case of MERS-CoV infection while the patient was symptomatic

OR

Healthcare worker based in intensive care unit (ICU) caring for patients with severe acute respiratory infection, regardless of history of travel or use of personal protective equipment

OR

Part of a cluster of two or more epidemiologically linked cases within a two week period requiring ICU admission, regardless of history of travel

*www.gov.uk/government/uploads/system/uploads/attachment_data/file/461192/MERS-COV_RA_sep_2015_final.pdf

†This definition includes all countries within the geographical Arabian Peninsula, plus countries with cases that cannot be conclusively linked to travel; as of 16 September 2015: Bahrain, Jordan, Iraq, Iran, Kingdom of Saudi Arabia, Kuwait, Oman, Qatar, United Arab Emirates, Yemen, and South Korea.