### Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

**PRIMARY CARE ALGORITHM**

**February 2019**  
Algorithm for the assessment and initial management in primary care of travellers presenting with febrile respiratory illness returning from an area where infection with MERS-CoV could have been acquired in the 14 days before symptom onset.

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#### For a POSSIBLE CASE, patients must fulfil the conditions 1, 2 OR 3.

1. **Any person with severe acute respiratory infection requiring admission to hospital with symptoms of fever (≥ 38°C) or history of fever, and cough plus evidence of pulmonary parenchymal disease (e.g. clinical or radiological evidence of pneumonia or Acute Respiratory Distress Syndrome (ARDS))**¹ 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 onset²
   - close contact³ during the 14 days before onset of illness with a symptomatic confirmed case of MERS-CoV infection
   - person is a healthcare worker based in ICU caring for patients with severe acute respiratory infection, regardless of history of travel or use of PPE⁴
   - associated with a cluster of two or more epidemiologically linked cases requiring ICU admission within a two week period, regardless of history of travel

2. **Acute influenza-like illness (ILI), plus contact with camels, camel environments or consumption of camel products (e.g. raw camel milk, camel urine) OR contact with a hospital, in an affected country⁵ in the 14 days prior to onset.**

   *ILI is defined as sudden onset of respiratory infection with measured fever of ≥38°C and cough*

3. **Acute respiratory illness (ARI) plus contact with a confirmed case of MERS-CoV in the 14 days prior to onset.**

   *ARI is defined as sudden onset of respiratory infection with at least one of: shortness of breath, cough or sore throat.*

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**If tolerated, ask patient to wear a fluid resistant surgical face mask and place patient in a room/area away from other people. Staff attending to the patient should wear appropriate PPE⁶.**

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**Does patient fulfil case definitions?**

- **Yes**
  - **Does clinical severity warrant hospitalisation?**
    - **Yes**
      - Treat, investigate and review as clinically indicated.
      - Suggest non-urgent molecular testing for influenza/MERS-CoV.
      - MERS-CoV is unlikely if clinical severity does not require hospitalisation.
      - Follow up by GP/HPT (check local arrangements) preferably by phone, to confirm recovery/improvement.
      - The patient should be asked to consider voluntary isolation at home while symptomatic, self-monitor and report any change in symptoms to the GP/HPT (check local arrangements).
      - Isolation for contacts is not recommended.
    - **No**
      - If patient deteriorates and needs hospitalisation

- **No**
  - Unlikely to be MERS-CoV, treat, investigate and review as clinically indicated.

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1. **MERS-CoV area:** Bahrain, Jordan, Iraq, Iran, Kingdom of Saudi Arabia, Kuwait, Oman, Qatar, United Arab Emirates and Yemen – see map and UK Risk Assessment

2. **Clinicians** should additionally be alert to the possibility of atypical presentations in patients who are immunocompromised, atypical presentations may include absence of fever.

3. **Please consider testing for Legionnaires’ disease if indicated**

4. **Contact definitions** (from date of illness onset in index case and throughout their symptomatic period): A) Health and social care workers: workers who provided direct clinical or personal care or examination of a symptomatic confirmed case or was within 2m of a symptomatic case or had direct contact with body fluids from a symptomatic case, for any length of time. B) Household or close contact: any person who has had prolonged face-to-face contact (>15 minutes) with a symptomatic confirmed case any time during the illness after onset in a household or other closed setting.

5. **PPE:** fluid resistant (type IIR) surgical face mask, disposable plastic apron and gloves (and eye protection if there is likelihood of splash or spray from patient care intervention. A correctly fitted filtering face piece respirator (FFP3) should be worn when performing any aerosol generating procedures. For further guidance, please refer to the National Infection Prevention and Control Manual

6. **For more information on MERS-CoV see:** HPS algorithms for MERS-CoV