MERS aide-memoir for GP Out of Hours and minor injuries units

Middle East Respiratory Syndrome – Coronavirus (MERS-CoV) is a severe respiratory illness, generally associated with travel to certain countries in the middle-east.

It is important to take a clear travel history from any patient presenting with a febrile illness to ensure prompt isolation and infection control procedures are put in place. It is important to note that in the current literature once appropriate PPE was used no onward transmission to healthcare workers has occurred.

History of travel should be asked at reception, and if a patient with fever, or history of fever has visited an at-risk country (see poster), they should not be placed in the general waiting area, but directly into a clinic room if possible.

Diagnosis

For a POSSIBLE CASE, patients must fulfil one of the following three case definitions:

1 Any person with severe acute respiratory infection requiring admission to hospital **AND** 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)) **AND AT LEAST ONE OF**:

- History of travel to, or residence in an area1 where infection with MERS-CoV could have been acquired in the 14 days before symptom onset
- Close contact during the 14 days before onset of illness with a symptomatic confirmed case of MERS-CoV infection
- Healthcare worker based in ICU caring for patients with severe acute respiratory infection, regardless of history of travel or use of PPE
- 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 symptoms (ILI), plus contact with camels or consumption of camel products OR contact with a hospital, in an affected country2 in the 14 days prior to onset.
ILI is defined as sudden onset of respiratory infection with measured fever of ≥38oC 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 of one of : shortness of breath, cough or sore throat.

If one of these definitions is met, then consider as POSSIBLE MERS and take action depending on severity of illness. If one of the case definitions is not met,

then unlikely to be MERS, and patient should be investigated, treated and followed up as clinically indicated

Does not requires hospitalisation

MERS is unlikely if the clinical severity does not warrant hospitalisation. The patient should be investigated and treated as clinically indicated**.** They should be encouraged to self-isolate and monitor at home whilst symptomatic, and followed up, by phone, should be arranged to check patient is improving/recovered

Non-urgent testing for influenza and MERS should be discussed with Infectious Diseases/Virology

Clinical severity warrants hospitalisation

- If tolerated, ask patient to wear fluid-resistant surgical mask
- Place patient in room away from other patients/staff. Movement of patient should be minimised, and if possible keep them in the clinic room they are currently in.
- Staff should wear appropriate PPE (fluid resistant surgical mask, disposable plastic apron, and gloves. Eye protection and FFP3 mask should be worn if splash or aerosol risk from interventions. See algorithm and infection control guidance for further detail)
- Inform senior clinical and management staff member for the service
- Start a list of staff who have been in contact with the patient
- Ask reception/administrative staff to compile list of other patients in waiting area at same time as case.

The patient should be discussed urgently with the on-call Infectious Disease (ID) Consultant (via switchboard) who will advise on further management and admission. The ID consultant will also inform the on-call Public Health (PH) and Infectious Disease/Microbiology (IPC) consultants.

Patient transfer will require liaison with ID, PH, IPC, ambulance service. Usually this is via a Problem Assessment Group (PAG), which will be arranged by PH.

Further information

The HPS MERS primary care algorithm is reproduced on the next page.
Links to MERS documentation, including the algorithms and infection control guidance can be found at

http://www.nhsggc.org.uk/your-health/infection-prevention-and-control/mers-cov-information-hub/

Health Protection Scotland

Middle East Respiratory Syndrome Coronavirus (MERS-CoV) PRIMARY CARE ALGORITHM

NHS National Services Scotland

August 2018 **Version: 4**

Algorithm for the assessment and initial management in **primary care of travellers** presenting with **febrile respiratory illness returning from an area**[1] where infection with **MERS-CoV** could have been acquired in the **14 days before symptom onset**.

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** AND 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))[2]

AND AT LEAST ONE OF:

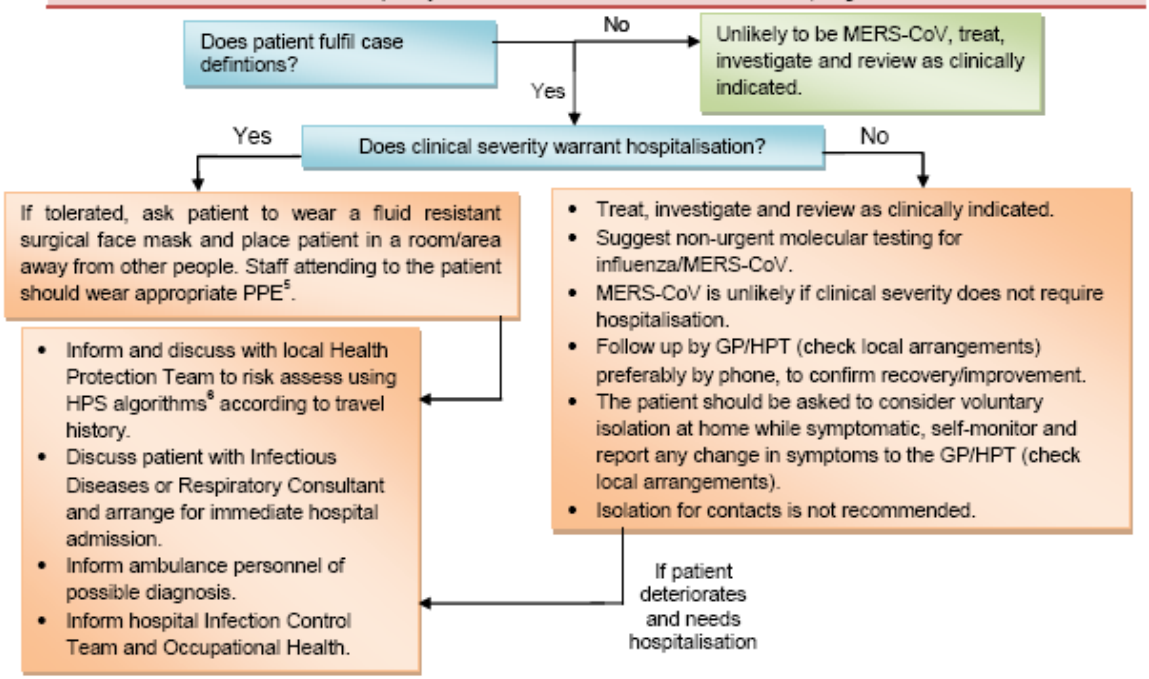
- **History of travel to**, or residence in an area[1] where infection with MERS-CoV could have been acquired in the **14 days before symptom onset**[3]
- Close contact[4] during the **14 days** before onset of illness with a symptomatic confirmed case of MERS-CoV infection
- Healthcare worker based in ICU caring for patients with severe acute respiratory infection, regardless of history of travel or use of PPE[5]
- 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 symptoms (ILI), plus contact with camels or consumption of camel products OR contact with a hospital, in an affected country[2] 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 of one of : shortness of breath, cough or sore throat.



1 - MERS-CoV area, as of 24/08/2018: 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.

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 within close vicinity of an aerosol generating procedure AND who was not wearing appropriate/recommended PPE at the 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