

INVESTIGATION AND PUBLIC HEALTH MANAGEMENT OF POSSIBLE CASES OF SEVERE ACUTE RESPIRATORY ILLNESS ASSOCIATED WITH MIDDLE EAST RESPIRATORY SYNDROME CORONAVIRUS (MERS-CoV)

POSSIBLE CASE

Any person with severe acute respiratory infection requiring 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 (eg. clinical or radiological evidence of pneumonia or Acute Respiratory Distress Syndrome (ARDS)¹)

AND

- Not explained by any other infection or aetiology²

AND AT LEAST ONE OF

- History of travel to, or residence in an area where infection with MERS-CoV could have been acquired³ in the 14 days before symptom onset
- OR
- Close contact⁴ during the **14 days** before onset of illness with a confirmed case of MERS-CoV infection while the case was symptomatic
- OR
- Healthcare worker based in ICU caring for patients with severe acute respiratory infection, regardless of history of travel or use of PPE
- 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

¹ Clinicians should additionally be alert to the possibility of atypical presentations in patients who are immunocompromised

² If the patient has an alternative aetiology, but this does not fully explain the presentation and/or clinical course, then the patient should be considered a possible case and tested for MERS-CoV

³As of 04/04/2014: Bahrain, Iraq, Israel, Jordan, Kingdom of Saudi Arabia, Kuwait, Lebanon, Occupied Palestinian territories, Oman, Qatar, Syria, UAE and Yemen – see [map](#)

⁴Close contact is defined as:

- prolonged face-to-face contact (>15 minutes) with a **symptomatic confirmed** case in a household or other closed setting OR
- healthcare or social care worker 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 full PPE* at the time

MEETS POSSIBLE CASE DEFINITION

- **Clinician/Microbiologist** -ensure full PPE* is worn (infection control advice [here](#))
-notify local PHE Health Protection Team and local PHE Laboratory – contact details available [here](#)
-ensure appropriate samples are collected and sent to both the designated PHE MERS-CoV testing lab and local PHE Lab – see lab guidance [here](#)
- **PHE Health Protection Team** -if a cluster is suspected, establish if there is an epidemiological link between cases
-inform CIDSC Colindale by **email** (respiratory.lead@phe.gov.uk, or contact the duty doctor if out of hours) & enter case details on HPZone (Infection and specific context: MERS-CoV)
-collect possible case data set ([Form 1](#)) – **email** to CIDSC Colindale

PHE TESTING LAB RESULT
**NEGATIVE FOR
MERS-CoV**

DISCARD

PHE TESTING LAB RESULT POSITIVE FOR MERS-CoV (PRESUMPTIVE POSITIVE)

- **Clinician/Microbiologist** -ensure full PPE* is worn (infection control advice [here](#))
- **PHE MERS-CoV testing Laboratory** -inform clinician, PHE Reference lab (RVU), local PHE Laboratory and local PHE Health Protection Team
-send residual material **urgently** to PHE Reference lab (RVU) for confirmatory testing– see lab guidance [here](#)
- **PHE Health Protection Team** -inform CIDSC Colindale by **email** or contact the duty doctor if out of hours
-identify and collate [list of close contacts](#)⁴ – **email** to CIDSC Colindale

REFERENCE LAB RESULT
**NEGATIVE FOR
MERS-CoV**

DISCARD

REFERENCE LAB RESULT POSITIVE FOR MERS-CoV = CONFIRMED CASE

BASELINE

- **Clinician/Microbiologist** -collect appropriate baseline samples and send to PHE Reference lab (RVU) – see lab guidance [here](#)
- **PHE Health Protection Team** -complete confirmed case initial form ([Form 1a](#)) – **email** to CIDSC Colindale

ADDITIONALLY FOLLOW [“PHE MERS-CoV CLOSE CONTACT ALGORITHM”](#)

FOLLOW UP

- **Clinician/Microbiologist** -ensure appropriate sequential follow up samples are taken after discussion with the CIDSC Colindale incident control team, and sent to PHE Reference lab (RVU)
-see lab guidance [here](#).
- **PHE Health Protection Team** -complete confirmed case follow-up form ([Form 1b](#) 14-21 days since [Form 1a](#) completed) – **email** to CIDSC Colindale

*Full PPE (Personal Protective Equipment): correctly fitted high filtration respirator (FFP3), gown, gloves and eye protection