

Interim infection prevention and control advice for acute care hospitals relating to suspected Middle Eastern respiratory syndrome coronavirus (MERS-CoV) infections

For links to further information on MERS, see below

Method of transmission of MERS-CoV:

The method of transmission of MERS-CoV, particularly in health care setting, is still incompletely understood; respiratory (mainly), trans ocular and enteric spread all probably occur in some circumstances. Therefore standard, droplet, contact and airborne precautions should be implemented.

The incubation period is 2–14 days, most commonly 5 days.

Identify:

Patients presenting with acute respiratory symptoms should be triaged as a high priority and asked about recent overseas travel from the Middle East or any other region where MERS is occurring.

Isolate:

If history and/or symptoms are consistent with MERS, the patient, whilst awaiting medical assessment and results of diagnostic tests, should be placed (in order of preference) either:

- a) in a negative pressure room, if available;
- b) in a single well ventilated room in an area away from other patients. The patient should be asked to wear a mask, if practicable, and observe cough etiquette and hand hygiene; or
- c) spatial separation from other patients, with respiratory precautions as above.

The room should have its own toilet and bathroom facilities (if en suite facilities are not available in a suitable location, a commode can be used for short term patient care)

An adjacent clean area for storage of, and putting on, clean PPE and a separate area of adequate size for the safe removal of PPE and the disposal of clinical waste are required.

Movement within a healthcare facility of a suspected/confirmed case of MERS should be kept to a minimum and aerosol generating procedures avoided where possible. The patient should wear a surgical mask during any movement from isolation to any other area of the facility.

Inform:

Contact local state/territory communicable disease branch/centre to discuss further management and testing. For contact details refer to [Information for GPs on MERS coronavirus](http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-mers-cov-info-gp.htm) (www.health.gov.au/internet/main/publishing.nsf/Content/ohp-mers-cov-info-gp.htm)

Infection prevention: standard, contact and airborne precautions

These include:

- **Hand hygiene** according to “5 Moments of Hand Hygiene”.
- Use of appropriate PPE to be put on when entering patient room:
 - **Gloves** (nonsterile, disposable)
 - **Gown** (fluid resistant, disposable)
 - **Mucous membrane (respiratory/ eye) protection:** fit-checked P2/N95 respirator/mask and goggles/face shield should be worn; staff performing aerosol-generating procedures, such as suctioning or endotracheal intubation, should wear a **fit-tested** P2/N95 respirator or equivalent protection, such as a powered air purifying respirator (PAPR).
- **PPE should be removed in the following order:** gloves, gown (before leaving room); mask/goggles (after leaving room; avoid touching front surfaces); perform hand hygiene before and after mask removal.
- **Safe handling and disposal of waste (as infectious waste) and sharps**
- **Environmental controls:** routine care, cleaning, and disinfection of environmental surfaces, especially frequently touched surfaces in patient-care areas.

Where possible all equipment required for patient care should be dedicated for the use of an individual patient.

Patient care zone:

The strict procedures required for putting on and taking off PPE mean that patient care location and environment need careful consideration. Identification of separate zones, based on environmental contamination risk, is useful to minimise risks to HCWs and others.

Staff vulnerabilities:

- Rosters should be appropriate to avoid staff fatigue. Wearing a P2/N95 respirator or PAPR can be tolerated for only limited periods; regular refreshment breaks are needed.
- Appropriate training in the use of PPE, environmental cleaning, and disinfection of equipment. This training should include the relevant categories of HCWs (including supervisors) as well as managing the different levels of risk.

Health conditions that preclude HCWs from providing direct care for MERS include:

- medical conditions that could affect their ability to exit the room quickly and safely, or may require another HCW to enter the room to provide urgent medical assistance (e.g. seizure disorder, hypoglycaemia);
- inability to safely put on, use, or remove recommended PPE (e.g. claustrophobia, significant anxiety, body morphology, mobility issues);
- diabetes, chronic lung, liver or heart disease, renal impairment, lowered immune competence, including cancer; and
- pregnancy is a relative contraindication for working in high risk clinical areas.

For further information on situation updates, infection control, laboratory diagnosis and public health management refer to: [Middle Eastern Respiratory Syndrome \(MERS\)](http://www.health.gov.au/mers-coronavirus) (www.health.gov.au/mers-coronavirus) and [the Centre for Disease Control](http://www.cdc.gov/coronavirus/mers/infection-prevention-control.html) (www.cdc.gov/coronavirus/mers/infection-prevention-control.html)