Advice on the use of Personal Protective Equipment (PPE) during clinical care of people with suspected or confirmed novel coronavirus (2019-nCoV) infection

There is an outbreak of novel coronavirus (2019-nCoV) in mainland China.

General Guidance

The Australian Health Protection Principal Committee (AHPPC) has endorsed the following interim recommendations for the use of PPE during clinical care of people with possible 2019-nCoV infection. Note that these interim recommendations are based on current evidence and may be subject to change as more information becomes available.

Based on current AHPPC recommendations, people in the following circumstances are at-home quarantined in Australia (voluntarily or under supervision):

- People who have travelled from Hubei Province within the past 14 days are being asked to isolate (quarantine) themselves until 14 days after leaving Hubei Province
- People who have left, or transited through, mainland China on or after 1 February 2020 are being asked to isolate themselves until 14 days after leaving mainland China
- People who have been in close contact with a confirmed case of novel coronavirus are being asked to isolate themselves until 14 days after last contact with the confirmed case

If a quarantined person needs to see a doctor for any reason (e.g. fever and respiratory symptoms or other illness/injury):

- They have been advised to telephone their doctor or hospital Emergency Department (ED) before presenting
- Patients have been advised to call 000 if they experience severe symptoms and advise officers that they are in self-isolation because of 2019-nCoV.

Upon presentation of the patient to a healthcare setting (GP, hospital ED, or pathology collection centre):

- Immediately give the patient a surgical mask and ensure they put it on correctly; and
- Direct them to a single room, whether or not respiratory symptoms are present (a negative pressure room is preferred if available).

Clinical Examination of a Quarantinable Patient

For clinical examination of a quarantinable patient (as described above), transmission-based precautions should be observed, whether or not respiratory symptoms are present.
General guidance:

- **Contact and droplet precautions** are recommended for routine care of patients in quarantine or with suspected or confirmed nCoV infection.
- **Contact and airborne precautions** are recommended when performing aerosol generating procedures, including intubation and bronchoscopy.

**Precautions for patients with mild or no respiratory symptoms**

The following transmission-based precautions are advised when collecting respiratory specimens (i.e. nasopharyngeal or oropharyngeal swabs) from quarantinable patients, regardless of whether or not they have respiratory symptoms. For most patients with mild illness in the community, collection of respiratory specimens is a low risk procedure and can be performed using **contact and droplet precautions**:

- Perform hand hygiene before donning gown, gloves, and surgical mask;
- To collect throat or nasopharyngeal swabs, stand slightly to the side of the patient to avoid exposure to respiratory secretions, should the patient cough or sneeze;
- After the consultation, remove PPE and perform hand hygiene, and wipe any contacted/contaminated surfaces with detergent/disinfectant; and
- Note that, for droplet precautions, the room does not need to be left empty after sample collection.

**Precautions for patients with severe symptoms suggestive of pneumonia**

Patients with symptoms suggestive of pneumonia should be managed in hospital. The following transmission-based precautions are advised when collecting respiratory symptoms from quarantinable patients who have severe symptoms suggestive of pneumonia (e.g. fever and difficulty breathing, or frequent, severe, or productive coughing episodes). For patients meeting this criteria, the collection of respiratory specimens can be performed using **contact and airborne precautions**:

- If possible, specimens should be collected in a negative pressure room. If this is not possible, collect the specimens in a room with the door closed. The room should be left vacant with the door closed for at least 30 minutes after specimen collection (cleaning can be performed during this time by a person wearing PPE);
- Perform hand hygiene before donning gown, gloves, eye protection (goggles or face shield) and a **P2/N95 respirator, which should be fit checked**;
- After the consultation, remove gown and gloves, perform hand hygiene, and remove eye protection and P2/N95 respirator. Do not touch the front of any item of PPE during removal, perform hand hygiene; and
- The room surfaces should be wiped clean with disinfectant wipes by a person wearing gloves, gown and surgical mask.

**Aerosol-Generating Procedures**

Aerosol-Generating Procedures (AGPs) include tracheal intubation, non-invasive ventilation, tracheotomy, cardiopulmonary resuscitation, manual ventilation before intubation, and bronchoscopy.
The potential for airborne spread of nCoV is still unknown, however appropriate care should be taken when performing AGPs.

Nebuliser use should be discouraged and alternative administration devices (e.g. spacers) should be used.

Airborne precautions should be used routinely for high-risk AGPs in a hospital setting, as outlined in the below table.

**Should sample collection be managed as an AGP?**

<table>
<thead>
<tr>
<th>Specimen type</th>
<th>Patients with <strong>no</strong> fever, <strong>no</strong> difficulty breathing and <strong>no</strong> severe cough</th>
<th>Patients with <strong>fever and</strong> difficulty breathing or severe cough</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nasopharyngeal swab</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Oropharyngeal swab</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Sputum</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Nasal wash/aspirate</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Bronchoalveolar lavage</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Where can I get more information?


For the latest advice, information and resources, go to the Australian Government Department of Health website at [www.health.gov.au](http://www.health.gov.au). You will find information on novel coronavirus symptoms and preventing the spread.

Call the National Coronavirus Health Information Line on 1800 020 080. The line operates 24 hours a day, seven days a week. If you require translating or interpreting services, call 131 450.