Novel coronavirus (2019-nCoV)

Information for Emergency Departments

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

Primary and community health workers are advised to take the following actions when caring for patients:

- Investigate and manage patients for respiratory illness using standard practices.
- For severe respiratory illness, transfer patients to public hospital emergency departments.
- Contact your state/territory public health unit or communicable disease branch for advice on suspected cases, including diagnostic testing and specimen collection.

Current Situation

People are considered to be most infectious while symptomatic, however there is limited evidence that asymptomatic and pre-symptomatic people are also able to transmit the virus.

People who have recently returned from mainland China or who have had close contact with a confirmed case are being advised to self-isolate for 14 days and advised to call ahead to medical clinics if they require medical attention.

Identifying symptoms and exposure history

As the full clinical spectrum of illness is not known, **clinical and public health judgment** should also be used to determine the need for testing in patients who **do not** meet the epidemiological or clinical criteria below.

If the patient satisfies the epidemiological AND clinical criteria (listed below), they are classified as a **suspected case**:

Epidemiological criteria

Travel to (including transit through) mainland China in the 14 days before onset of illness.

OR

Close* or casual** contact in 14 days before illness onset with a confirmed case of 2019-nCoV.

Clinical criteria

Fever

OR

Acute respiratory infection (e.g. shortness of breath or cough) with or without fever.

- *A close contact is defined as requiring:
 - Greater than 15 minutes face-to-face contact in any setting with a confirmed case in the period extending from 24 hours before onset of symptoms in the confirmed case, or
 - Sharing of a closed space with a confirmed case for a prolonged period (e.g. more than two hours) in the period extending from 24 hours before onset of symptoms in the confirmed case.

- **A casual contact is defined as:
 - Any person having less than 15 minutes face-to-face contact with a symptomatic confirmed case in any setting, or
 - Sharing a closed space with a symptomatic confirmed case for less than two hours.

These criteria will be revised by public health authorities over time as more precise information emerges on the outbreak, including characteristics of transmission, incubation and infectivity period and geographical spread.

Action for Patients who meet criteria

Initial Actions

- On presentation, place a surgical mask on the patient and immediately direct them to a single room, with negative pressure air-handling if available (whether or not respiratory symptoms are present).
- General practitioners referring suspected cases should have already contacted your state/territory public health unit or communicable disease branch. Your emergency department should have been notified if a suspected case is being transferred to your hospital.
- If a suspected case self presents to your emergency department, immediately contact your state/territory public health unit or communicable disease branch.

Early Supportive Therapy and Monitoring

- If a patient is in respiratory distress, hypoxaemia or shock, immediately give supplemental oxygen and empirical antibiotics.
- For patients who are not in distress, provide supportive therapy as needed.

Personal Protection Equipment (PPE) during care of patients with suspected or confirmed nCoV infection:

No Respiratory Symptoms or mild Respiratory Symptoms Present:

- For most patients collection of specimens (with the exception of bronchoalveolar lavage) is a low risk procedure and can be performed using **contact and droplet precautions**.
- Note that, for droplet precautions, the room does not need to be left empty after sample collection.
- Perform hand hygiene before donning gown, gloves, eye protection and a surgical mask.
- To collect throat or nasopharyngeal swab, stand slightly to the side of the patient to avoid exposure to respiratory secretions, should the patient cough or sneeze.
- At completion of the consultation, remove PPE, place in a biohazard container and perform hand hygiene, wipe any contacted/contaminated surfaces with detergent/disinfectant.

Severe Respiratory Symptoms Present (suggestive of Pneumonia):

- If the patient has severe respiratory symptoms or frequent, severe productive coughing episodes, contact and airborne precautions should be observed for all specimen collections.
- If a negative pressure room is not available, the room door should be closed during specimen collection, and be left vacant for 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.
- At completion of the consultation, remove gown and gloves, perform hand hygiene, remove
 eye protection and P2/N95 respirator. Do not touch the front of any item of PPE during
 removal. Place used PPE in a biohazard container. Perform hand hygiene.
- Room surfaces should be wiped clean with disinfectant wipes by a person wearing gloves, gown and surgical mask. Hand hygiene should be performed after cleaning.

Investigations

 The local public health unit will provide advice on the exact specimens required for specialised testing to identify whether the patient has novel coronavirus (2019-nCoV), the approved collection methods and equipment for collecting specimens and the protocols for handling, storage and transport to correct laboratory.

- Collect all three specimen types (not just one or two of the three), i.e., lower respiratory (sputum); upper respiratory (nasopharyngeal and oropharyngeal swabs): and serum specimens for testing is recommended for specialised testing
- Undertake investigations for alternative causes including blood for culture, multiplex PCR for respiratory pathogens, and serum for serology **.

Should sample collection be managed as an Aerosol-Generating Procedure?

| Specimen type | Patients with no fever, no difficulty breathing and no severe cough | Patients with fever and difficulty breathing or severe cough |
|------------------------|--|--|
| Nasopharyngeal swab | No | Yes |
| Oropharyngeal swab | No | Yes |
| Sputum | No | Yes |
| Nasal wash/aspirate | No | Yes |
| Bronchoalveolar Lavage | Yes | Yes |

Aerosol-Generating Procedures

- **Airborne precautions** should be used routinely for high-risk aerosol-generating procedures in hospital settings, such as bronchoscopy, intubation and suctioning.
- Nebuliser use should be discouraged and alternative administrative devices (e.g. spacers) should be used.

For patients with confirmed 2019-nCoV infection

- Hospitalised patients should have repeated URT and LRT samples collected to demonstrate viral clearance. The frequency of collection will depend on local circumstances under the advice of your public health unit.
- A week or two after confirming the diagnosis, convalescent serum should be collected for serology.

Additional information

The Department of Health will provide regular updates as more information on this situation becomes available: www.health.gov.au

The Communicable Diseases Network Australia has developed interim recommendations for surveillance, infection control, laboratory testing and contact management for 2019-nCoV: https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdna-song-novel-coronavirus.htm

The Department of Health has produced a series of factsheets on 2019-nCov that you can share with your patients: https://www.health.gov.au/resources/collections/novel-coronavirus-2019-ncov-resources

For additional information on 2019-nCoV, visit the World Health Organization website: https://www.who.int/emergencies/diseases/novel-coronavirus-2019

Contact your state or territory Public Health Authority for advice on possible cases:

- ACT call 02 5124 9213 during business hours or 02 9962 4155 after hours
- NSW call 1300 066 055
- NT call 08 8922 8044.
- Qld call 13HEALTH (13 43 25 84)
- SA call 1300 232 272
- Tas call 1800 671 738
- Vic call 1800 6750398
- WA call 08 9328 0553 or call your local public health unit

^{**} Please refer to the Public Health Laboratory Network (PHLN) website https://www1.health.gov.au/internet/main/publishing.nsf/content/Publications-13 for further information on routine tests to rule in or out possible alternative causes for the patient's illness.