Government of Western Australia
Department of Health

State Health Incident Coordination Centre

Guidelines for management and contact tracing of COVID-19 with exposure in the hospital setting

Version 3.0

Contents

Version control **2**
1 Summary **3**
2 Case and contact definitions **3**
2.1 Close contact definition 3
2.2 Casual contact definition 3
2.3 Healthcare worker definition 3
2.4 Definition of an outbreak in a healthcare setting 3
2.5 Public Health Operations (PHOps) 4
3 Role of Public Health Operations (PHOps) in referral of a COVID-19 case **4**
4 Role of Hospital Infection Prevention and Control (IPC) / staff health team **4**
4.1 Nominate a lead in the IPC unit / staff health 4
4.2 Establishing a hospital outbreak management committee 5
4.3 Follow up of confirmed COVID-19 case 5
4.4 Follow up of contacts 6
4.5 Workplace risk assessment 7
4.6 Escalation 7
5 Role of Public Health Operations (PHOps) in follow up **8**
5.1 Contacts 8
5.2 Confirmed cases 8
5.3 Close of outbreak 8
Appendix 1. Checklist for the management of COVID-19 cases and contact tracing with hospital exposure **9**

Version control

Version	Date	Revised by	Changes
1.0	26 May 2020	Dr Tania Wallace	First version created.
2.0	1 August 2020	Dr Tania Wallace	Updated definitions. Contact tracing form.
3.0	16 November 2021	Dr Jelena Maticevic, Senior Medical Advisor, SHICC Planning	Updates to 2 Case and contact definitions, 2.1 Close contact definition, 2.5 PHEOC and PHOps, 3 Role of PHOps in referral of COVID-19 case, 4.1 Nominate a lead in the IPC unit / staff health, 4.3 Follow up of confirmed COVID-19 case, 4.5 Follow up of close contacts, 4.7 Escalation, 5.1 Contacts, 5.2 Confirmed cases. Inclusion of 2.2 Casual contact definition. Removal of 4.3 Immediate management of health care worker as a suspect case.

1 Summary

This guideline describes the management and contact tracing for COVID-19 cases where there has been exposure in the hospital setting. This would primarily be cases in health care workers, or patients where appropriate infection prevention and control (IPC) processes were not in place during their presentation and admission to hospital. It describes the role of IPC units, staff health or delegated officers in hospitals responsible for contact tracing; and the role of public health.

2 Case and contact definitions

Case and contact definitions relevant to this document are available at the Coronavirus Disease 2019 (COVID-19) Communicable Diseases Network Australia (CDNA) National Guidelines for Public Health Units (PHUs) which is updated frequently.

2.1 Close contact definition

In the hospital setting, all persons identified as having had contact with a case during their infectious period should be assessed to see if they should be classified as a close contact.

This includes direct contact with the body fluids or laboratory specimens of a case without recommended Personal Protective Equipment (PPE) or failure of PPE.

Note that the infectious period is the period extending from 48 hours before onset of symptoms in the case until the case is classified as no longer infectious. More conservative periods (e.g. 72 hours prior to illness onset) may be considered in high risk settings such as the hospital setting, at the discretion of Public Health.

Healthcare workers (HCWs) and other contacts who have taken recommended IPC precautions, including the use of appropriate PPE, while caring for an infectious COVID-19 case are not generally considered to be close contacts, provided that appropriate PPE has been worn and there has not been a PPE breach.

Identification of secondary close contacts is an intensive exercise aimed at a second ring of containment. It may or may not be implemented depending on the circumstances of the epidemic at the time, as determined by Public Health.

2.2 Casual contact definition

Refer to the COVID-19 CDNA National Guidelines for PHUs for factors to consider regarding reclassification of contacts.

At the discretion of Public Health, some casual contacts may be reclassified as close contacts. This may be relevant in super spreading events, where there is evidence of transmission occurring to individuals who do not meet the close contact definition.

2.3 Healthcare worker definition

HCWs are people in contact with patients or the patient space. For example, doctors, nurses, patient care assistants and cleaners who enter the patient's room or cubicle and frontline administrative staff would be included as HCWs. Staff who work in non-clinical areas who do not enter patient rooms are not included as HCWs for this purpose. However, they still require follow up by the relevant hospital's IPC unit or delegate with support from Public Health.

2.4 Definition of an outbreak in a healthcare setting

An *outbreak* is defined as a single confirmed case of COVID-19 in a patient, staff member

or visitor of a hospital where there has been exposure in that setting. This applies to inpatients and outpatients, clinical and non-clinical staff and attendees of a hospital, such as visitors or external consultants. An outbreak may be confined to a ward or involve the entire hospital and the response can be scaled accordingly.

2.5 Public Health Operations (PHOps)

The Public Health Operations (PHOps) cell of the State Health Incident Coordination Centre (SHICC) is responsible for COVID-19 case follow up and contact tracing activities in Western Australia (WA). PHOps work closely with hospitals in this setting. Contact details for PHOps are: ncovcontact@health.wa.gov.au and phone 1300 316 555. WACHS hospitals can also contact their local public health units.

3 Role of Public Health Operations (PHOps) in referral of a COVID-19 case

PHOps interview all confirmed COVID-19 cases and ascertain date of onset of illness, infectious period and close contact groups. PHOps also follow up contacts in the community. However, if the case is found to be infectious whilst in the hospital setting, PHOps urgently refer this case to the IPC unit of the relevant hospital/facility or delegated officer to follow up this exposure. The IPC team should discuss a case of COVID-19 with PHOps prior to commencing a response. In this instance, PHOps will undertake the following:

- Refer the case to the hospital's IPC unit or delegated officer with their name, DOB, contact numbers, date of onset of illness, defined infectious period (from 48 hours prior to onset of illness) and a summary of dates and locations they were in the hospital setting whilst infectious.
- Ensure that the IPC unit urgently notifies their hospital Executive Director/ Manager and emergency operations officer.
- Ensure cases are aware that the hospital will be notified, and the IPC unit or delegated officer will be contacting them to elicit further information for contact tracing in the hospital setting.
- Provide the hospital with a template COVID-19 contact letter and COVID-19 isolation fact sheet.
- Provide the Guidelines for management and contact tracing of COVID-19 with exposure in the hospital setting.
- Provide the hospital with a case and contact line listing with the variables required for data entry and follow up.
- Nominate a public health nurse / surveillance officer to be the liaison person with the IPC unit or delegated officer.
- Provide ongoing support via email and phone for the IPC unit or delegated officer, which may include advice regarding contact identification, classification and management.

4 Role of Hospital Infection Prevention and Control (IPC) / staff health team

Refer to Appendix 1 for a Checklist for the management of COVID-19 cases and contact tracing with hospital exposure.

4.1 Nominate a lead in the IPC unit / staff health

Nominate a staff member from the IPC unit/ staff health or delegated officer to be the lead. They should:

- Be the point of contact between PHOps and the hospital.
- Ensure there is a designated person / point of contact for PHOps for after-hours, weekends and public holidays.
- Liaise with key stakeholders within the hospital including: Executive, infectious diseases physicians, medical and nursing leads, allied health, support services, pathology services.

- Review and enhance IPC measures.
- Interview the case to ascertain further details of exposure whilst infectious in the hospital.
- Coordinate contact tracing within the hospital.
- Keep a list of confirmed and suspect cases, contacts and deaths.
- Initiate a workplace risk assessment.
- Provide PHOps regularly with an updated case and contact spread sheet (timeframe agreed between PHOps and the IPC unit or delegated officer).
- Activate the hospitals outbreak management plan and establish an outbreak committee if required.

4.2 Establishing a hospital outbreak management committee

Hospitals may decide to activate their hospital outbreak management committee when there has been exposure from a COVID-19 case in the hospital setting. This committee will consider additional measures required to manage the ongoing risk to staff and patients in this facility.

The committee should include, but is not limited to, the following:

- IPC unit representative if available or Staff Health nurse or (if none available) delegate
- Infectious diseases physician or clinical microbiologist or Public Health Physician
- Medical lead
- Nursing lead
- PHOps representative
- Others including: Allied Health, PathWest, patient support and communication team representative

4.3 Follow up of confirmed COVID-19 case

Infectious period and close contacts

Confirmed COVID-19 cases are generally considered infectious from 48 hours prior to onset of symptoms or positive PCR result if asymptomatic until they meet the criteria for release from isolation. More conservative periods (e.g. 72 hours prior to illness onset) may be considered in high risk settings such as the hospital setting, at the discretion of Public Health. PHOps will inform IPC of an appropriate infectious period for the case.

The IPC unit or delegated contact tracing officer will also need to interview the case to ascertain exposure whilst infectious and possible source of infection within their facility.

Refer to the ‘Resources for the management and contact tracing of COVID-19 exposure in a Health Care Facility’ pack provided by PHOps for an interview script and a case and contact spreadsheet.

The following steps will be required for contact tracing:

- Ascertain the commencement of the case’s infectious period and use that as a guide to determine the exposure sites in the hospital setting where contact tracing will be required.
- Work back for 14 days prior to the onset of symptoms to identify if the source of their infection was from within the facility.
- Use the below methods to identify close and casual contacts:
  - Review medical records/charts to ascertain any relevant contacts.
  - Review any CCTV available.
  - Review SafeWA sign-in data or mandatory register for the QR codes at that location (note PHOps will access SafeWA data).
  - Review staff rosters including area allocations (e.g. ward, ED short stay unit,

Level 5, etc.)
  - Consider casual contact exposures e.g. ED waiting rooms or open spaces.
- Compile a list of all contacts including inpatients, discharged inpatients, outpatients and emergency department patients, HCWs, clinical and non-clinical staff and attendees of a hospital such as visitors or external consultants and add to the case and contact spreadsheet (line listing), including accurate contact information.
- If there are multiple confirmed cases, each confirmed case needs a separate form/tab completed, and the above process needs to be repeated for each case.

Source of infection for the confirmed case

Consider whether the confirmed case's infection may have been acquired within the health service (via a patient or staff member) or via an external exposure, within the incubation period of 14 days prior to onset of illness.
Other factors to consider are:

- contact with anyone with fever or acute respiratory symptoms,
- history of close contact with any confirmed cases, and
- breaches in IPC policies and procedures, i.e. PPE breach, which may have led to HCW or patient exposure.

4.4 Follow up of contacts

While the IPC units or delegated officers in hospitals will need to identify all close and casual contacts including patients, visitors and staff, PHOps will assist with contacting some groups of these contacts, as outlined below.

General principles for identified contacts

- Inpatients need to be followed up by IPC until discharge.
- PHOps will provide guidance regarding quarantine duration of contacts.
- Place any inpatients into quarantine and ensure that appropriate transmission-based precautions are followed when caring for these patients as outlined at COVID-19 Infection Prevention and Control in WA Healthcare Facilities.
- Provide inpatients with verbal and written information as provided by PHOps.
- HCWs and other staff need to be identified by IPC or staff health, provided with verbal and written information, and sent into quarantine.
- For contacts interviewed by the hospital IPC or staff health, provide information on the case and contact spreadsheet, for PHOps to enter onto their contact tracing database for SMS follow up.
- Visitors need to be referred to PHOps for follow up and need to remain in quarantine and not visit patients in a hospital
  - Discharged patients, outpatients and non-admitted emergency department patients and those who attended with them, need to be referred to PHOps for follow up and need to remain in quarantine
  - For those visitors and discharged patients in the community for follow up by PHOps, provide contact and exposure details to enable follow up.

Process of contact follow up

- Collect demographic and epidemiological data and contact details and enter onto the case and contact spreadsheet. This spreadsheet will need to be sent to PHOps for entering onto the contact tracing database (PHOCUS) for the follow up SMS.
- Provide a PHOps COVID-19 contact letter and a contact factsheet.
- Provide verbal advice as outlined in PHOps COVID-19 contact letter.
  - Counsel about their risk and the symptoms of COVID-19.
  - Advise on the processes for seeking medical care. Before presenting for medical attention they must phone ahead and alert that they are close contacts in

    - quarantine. This would include an ambulance, their GP, where telehealth may be an option, or a hospital COVID-19 clinic or ED.
    - Advise that if they develop fever or respiratory symptoms consistent with COVID-19 during the quarantine period, they must respond "Yes" to their daily SMS text which is sent for symptom monitoring purposes. This will generate a call from PHOps who will organise testing for COVID-19. They should also be advised to call hospital IPC or staff health (for hospital staff and inpatients) or PHOps on 1300 316 555 (for outpatients, discharged patients or visitors) to report that they have symptoms so that testing can be facilitated.
- Provide advice regarding testing and quarantine and ensure their quarantine location is appropriate. Refer to the COVID-19 CDNA National guidelines for PHUs, Appendix C for risk matrices to assess exposure events for workers in health care settings and recommended work permissions and restrictions. The approach to management of contacts should be discussed first with PHOps to ensure that it is consistent with the current statewide approach. In general contacts are managed in the following manner:
    - Close contacts are required to quarantine for 14 days following the last contact with the case.
    - Casual contacts may be required to quarantine for a short period of time, or at least until a negative test result is returned. This will be determined based on a risk assessment of exposure.
    - Low risk contacts that do not meet casual contact definition may need information, testing and quarantine until a negative test result is returned, noting staffing impact considerations.
- Provide advice regarding testing during the quarantine period, including testing frequency and where to attend for testing.
- Provide advice to symptomatic contacts who test negative by PCR; they will still need to remain in quarantine for 14 days from last contact with case and may require re-testing if their symptoms worsen or persist.
- Advise HCWs and other staff that their contact letter requiring home quarantine can be used in lieu of a sick certificate.
- Advise HCWs and other staff that the SMS they receive on their final day of quarantine will be evidence that PHOps has cleared them to be released from quarantine and return to work.

4.5 Workplace risk assessment

The aim of a workplace risk assessment is to establish the following:

- Whether the case was infectious while at the workplace.
- Whether additional cleaning and disinfection of certain areas are required.
- Whether enhanced surveillance for symptoms of COVID-19 in the workplace is required.
- Whether closure of certain areas is required to facilitate cleaning and disinfection and allow for the investigation to be completed.
- Whether there are high risk/vulnerable patients for which enhanced surveillance for symptoms and possibly enhanced use of PPE could be considered (e.g. immunocompromised patients).

4.6 Escalation

The outbreak management committee needs to consider the triggers for escalation which are:

- If there are many exposures within the hospital, for example large numbers of staff are required to quarantine.
- If there is exposure in a vulnerable cohort, for example immune-compromised patients.
- If there is ongoing transmission within the hospital, so new cases emerging.

- Identified risks with infection prevention and control processes.
- If a hospital exceeds capacity at a specialist level, for example an oncology ward if affected by the outbreak, or at a hospital wide level.

The trigger for escalation will vary depending on the size and location of a hospital. For a small hospital in a remote location in regional WA escalation may be more rapid.

The process for escalation is:

- Through the hospital's emergency response process to their Chief Executive / Hospital Manager.
  - In the Perth metropolitan area, hospitals will then escalate directly to the Incident Management Team (IMT) in the SHICC.
  - In regional areas, hospitals will escalate through their Regional Emergency Operations Centre (REOC), who will then escalate to WACHS Emergency Operations Centre (EOC). WACHS EOC may be able to activate a rapid deployment team to support the hospital on the ground. If this is beyond the capacity of WACHS the EOC will escalate to the IMT in SHICC.
  - PHOps will also alert SHICC.

5 Role of Public Health Operations (PHOps) in follow up

5.1 Contacts

- PHOps will follow up those exposed in the hospital setting who are now in the community. This includes visitors, discharged patients, outpatients and non-admitted emergency department patients and those who attended with them.
- The IPC unit or delegated officer will supply PHOps with a line listing of these contacts who need follow up, including contact details.
- If any hospital contacts in quarantine develop COVID-19, PHOps will provide this information to the IPC unit or delegated officer.

HCW contacts and other staff

- The hospital IPC unit or representative, staff health or delegate will have provided verbal and written information and send the contact into quarantine.
- Using the case and contact spreadsheet provided by the IPC unit or representative, staff health or delegate, PHOps will add HCWs onto the contact database (PHOCUS) for the 14 day follow up via SMS.
- If any HCWs or other staff in quarantine develop COVID-19, PHOps will provide this information to the IPC unit or representative, staff health or delegate.

5.2 Confirmed cases

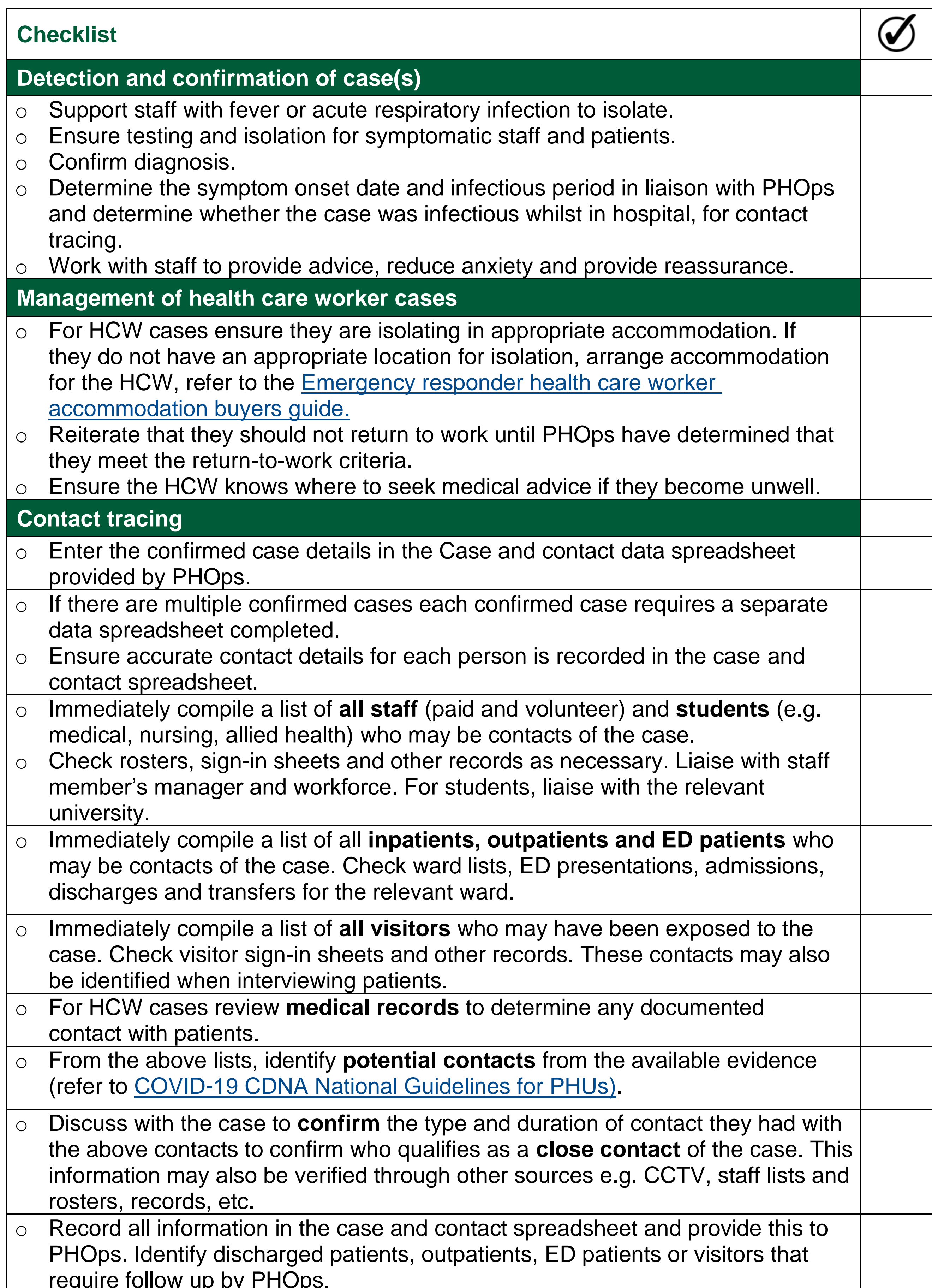
- Follow up as outlined in the COVID-19 CDNA National Guidelines for PHUs. Active COVID-19 cases are phoned daily by PHOps for monitoring.
- Provide clearance letter to patients and for HCWs, copy to hospital IPC unit or representative, staff health or delegate at their workplace for return to work.

5.3 Close of outbreak

- At close of the outbreak, send a summary to the hospital IPC unit / staff health or delegate and the hospital outbreak committee, copying in PHEOC at PHEOC@health.wa.gov.au
- Review and evaluate case and outbreak management, including consideration of a debrief, and if needed amend outbreak plan.

Appendix 1. Checklist for the management of COVID-19 cases and contact tracing with hospital exposure

This process should be managed by the hospital IPC unit or representative, staff health or delegated officer.



Checklist	✓
Detection and confirmation of case(s)	
○ Support staff with fever or acute respiratory infection to isolate. ○ Ensure testing and isolation for symptomatic staff and patients. ○ Confirm diagnosis. ○ Determine the symptom onset date and infectious period in liaison with PHOps and determine whether the case was infectious whilst in hospital, for contact tracing. ○ Work with staff to provide advice, reduce anxiety and provide reassurance.	
Management of health care worker cases	
○ For HCW cases ensure they are isolating in appropriate accommodation. If they do not have an appropriate location for isolation, arrange accommodation for the HCW, refer to the Emergency responder health care worker accommodation buyers guide. ○ Reiterate that they should not return to work until PHOps have determined that they meet the return-to-work criteria. ○ Ensure the HCW knows where to seek medical advice if they become unwell.	
Contact tracing	
○ Enter the confirmed case details in the Case and contact data spreadsheet provided by PHOps.	
○ If there are multiple confirmed cases each confirmed case requires a separate data spreadsheet completed. ○ Ensure accurate contact details for each person is recorded in the case and contact spreadsheet.	
○ Immediately compile a list of **all staff** (paid and volunteer) and **students** (e.g. medical, nursing, allied health) who may be contacts of the case. ○ Check rosters, sign-in sheets and other records as necessary. Liaise with staff member's manager and workforce. For students, liaise with the relevant university.	
○ Immediately compile a list of all **inpatients, outpatients and ED patients** who may be contacts of the case. Check ward lists, ED presentations, admissions, discharges and transfers for the relevant ward.	
○ Immediately compile a list of **all visitors** who may have been exposed to the case. Check visitor sign-in sheets and other records. These contacts may also be identified when interviewing patients.	
○ For HCW cases review **medical records** to determine any documented contact with patients.	
○ From the above lists, identify **potential contacts** from the available evidence (refer to COVID-19 CDNA National Guidelines for PHUs).	
○ Discuss with the case to **confirm** the type and duration of contact they had with the above contacts to confirm who qualifies as a **close contact** of the case. This information may also be verified through other sources e.g. CCTV, staff lists and rosters, records, etc.	
○ Record all information in the case and contact spreadsheet and provide this to PHOps. Identify discharged patients, outpatients, ED patients or visitors that require follow up by PHOps.	

Quarantine and test contacts	
For contacts identified within the hospital setting the IPC unit/IPC representative/staff health/delegate or PHOps should have; o Notified them that they have been identified as a contact of a confirmed case and inform them of the next steps required: that they are required to quarantine and/or be tested and that they will be monitored during this period (please note that an employer cannot disclose confidential information about the confirmed case and should only notify close contacts that they have been identified as a close contact with a confirmed case).	
o Distribute contact letter and quarantine fact sheet provided by PHOps.	
For inpatients, additionally: o Implement appropriate transmission-based precautions as outlined at COVID-19 Infection Prevention and Control in WA Healthcare Facilities. o Test for COVID-19 according to testing protocol for a close or casual contact. o Ensure additional testing if they develop COVID-19 symptoms.	
o Keep a record of each contact and when they were informed of their potential exposure.	
Implement infection prevention and control measures	
o Quarantine patients who are close contacts of the case. Cohorting of cases may be considered especially in those facilities where heating, ventilation and air conditioning (HVAC) systems can be isolated.	
o Consider temporary closures (e.g. rooms, wards) to facilitate investigation of the positive case and allow appropriate cleaning and disinfection. This decision can be made in consultation with PHOps, and the SHICC IPC team.	
o Non-essential personnel are not to enter rooms or designated isolation areas of cases or close contacts.	
o Clear signage indicating the appropriate transmission-based precautions and required PPE to be placed at the entrance of the patient room or in a prominent position at the entry to the designated isolated area of cases or close contacts.	
o Donning and doffing stations should be clearly identified.	
o Reinforce standard precautions (social distancing, hand hygiene, cough etiquette) throughout facility.	
o Increase frequency of cleaning and disinfection to reduce environmental contamination in high traffic areas and high touch surfaces /items.	
Monitor/update	
o Arrange for daily symptom check and observations for inpatients who are contacts. Arrange testing for those who develop symptoms of COVID-19 whilst in quarantine as a contact. o Ensure the IPC lead is informed of all positive results as soon as possible.	
o The IPC lead/delegate officer/staff health must update PHOps on an agreed basis (e.g. daily) or when there is a significant issue (e.g. a death).	
Communication	
o Contact PHOps on ncovcontact@health.wa.gov.au or phone 1300 316 555	
o Keep hospital stakeholders informed.	
o Keep patients, staff and families informed.	
Restrict	
o Restrict movement of HCWs between areas of a facility and between facilities.	
o Avoid patient transfers if possible.	
o Restrict visitors where practical and in compliance with most recent direction on	

hospital visitors.	
○ Do not allow HCWs to return to work until cleared by PHOps.	
Declare and review	
○ Declare the outbreak over when there have been no new cases for a defined period (in consultation with PHOps).	
○ Review and evaluate case and outbreak management. This may include holding a debrief. Amend outbreak plan as needed.	

Last Update: 16 November 2021 – SHICC Planning V3

This document can be made available in alternative formats on request for a person with disability.

© Department of Health 2021

Copyright to this material is vested in the State of Western Australia unless otherwise indicated. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the provisions of the *Copyright Act 1968*, no part may be reproduced or re-used for any purposes whatsoever without written permission of the State of Western Australia.