Queensland Health

Health Facilities Communicable Disease Outbreak Preparedness, Readiness, Response and Recovery

Department of Health Guideline - November 2022

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An electronic version of this document is available at Guidelines for infection control in health care facilities | Queensland Health

1 Scope

The Health Facilities Communicable disease outbreak preparedness, readiness, response and recovery (the Guideline) provides an evidenced-based best practice action plan in a preparedness, readiness, response and recovery framework (1) (2) (PRRR) for communicable diseases (whether notifiable or not) in Queensland Health facilities. It is targeted at Queensland Health Hospital and Health Service (HHS) employees (permanent, temporary, and casual) and all organisations and individuals acting as its agents (including visiting medical officers and other partners, contractors, consultants, and volunteers) and may also be adapted for use in Queensland licensed private health facilities.

2 Governance

The Guideline is to be used in conjunction with:

- Queensland Health Disaster and Emergency Incident Plan
- Queensland Health | Public Health Sub-plan | February 2018
- Queensland Whole-of-Government Pandemic Plan.
- Queensland Health | Health service directive | Disasters and emergency incidents
- Queensland Health | Health service directive | Declaration and management of a public health event of state significance
- Existing HHS and/or facility disaster and incident management plans

These documents detail:

- Legislation that informs outbreak management
- Classification of public health incidents
- Activation, notification, and assistance request processes
- Incident management functions, structures and roles
- Emergency management framework
- Triggers for activation of Outbreak Control Team (OCT)

3 Other Related Documents

This Guideline should be read in conjunction with the following:

PUBLIC HEALTH

[Communicable disease control guidance | Disease control guidance](#) (health.qld.gov.au)

[Communicable Disease Network Australia Series of National Guidelines](#) (SoNGs)

INFECTION, PREVENTION AND CONTROL and PERSONAL PROTECTIVE EQUIPMENT

[Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019) | NHMRC.](#)

[COVID-19 Infection prevention and control manual for acute and non-acute healthcare settings.](#)

4. Guiding Principles

4.1 Background

Outbreaks of any communicable disease may occur in healthcare facilities, affecting patients/residents/clients, staff, visitors, contractors and students.

The elderly and immuno-compromised are particularly vulnerable and in general, are more likely to suffer severe outcomes and longer durations of illness.

Common causes of outbreaks in healthcare facilities include, although are not limited to:

- COVID-19
- gastrointestinal illnesses e.g., norovirus, rotavirus
- acute respiratory illnesses e.g., influenza, respiratory syncytial virus (RSV)
- multidrug-resistant organisms (MROs) e.g., methicillin-resistant *Staphylococcus aureus* (MRSA), *Candida auris*, and Carbapenem resistant organisms
- *Clostridioides difficile* (C. diff).

4.2 Hierarchy of Controls

Outbreak management in healthcare settings is associated with communicable disease transmission risk among staff, patients and visitors. The hierarchy of controls is aligned with infection prevention and control and public health principles and aims to mitigate this risk (3). The [hierarchy of controls](#) employs the following control measures, listed from most to least effective:

- eliminate risks
- substitute hazards, isolate the hazard, and reduce risks through engineering controls
- reduce exposure to the hazard through administrative controls
- employ personal protective equipment (PPE).
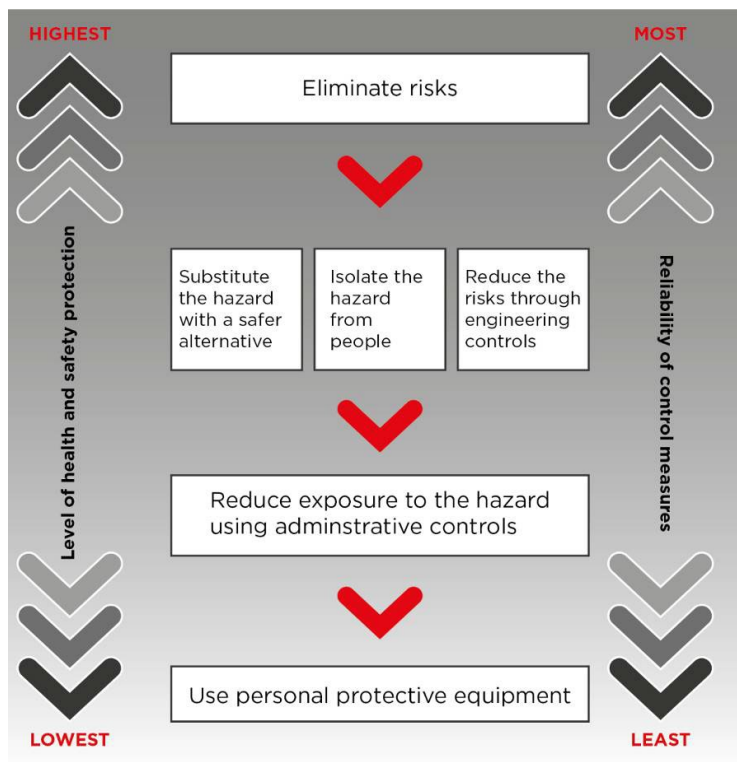
Source: Safe Work Australia

4.3 Infection Prevention and Control Principles

Infection prevention and control (IPAC) outbreak management principles are articulated in the Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019) | NHMRC and are summarised here:

- close and regular engagement of IPAC team with healthcare teams to identify possible outbreak early
- reinforce standard precautions:
    o adherence to the 5 moments of Hand Hygiene
    o increase frequency and efficiency of environmental cleaning, targeted cleaning regime may be considered, depending on type and duration of outbreak
    o appropriate use of PPE
- implement transmission-based precautions:
    o patient isolation in single or cohorted rooms, with appropriate signage
    o if the organism is spread by aerosols, consider isolation requirements including the use of Type N room, single rooms with air cleaning devices including air scrubbers, purifiers, and filters
    o enhance cleaning and disinfecting of the patient environment
    o educate staff to self-monitor and exclude if unwell
    o limit visitors for the duration of the outbreak.

4.4 Public Health Principles

Outbreak management should aim to be:

- scalable: arrangements can be applied to any size or type of outbreak
- interoperable: arrangements promote partnerships between systems, programs and people
- adaptable: arrangements can adapt to changing requirements of the system and remain flexible to the needs of staff and patients.

Outbreak control plans (OCPs) can be equally effective when employed to manage a small gastrointestinal illness on a single ward or a statewide public health response to a novel respiratory illness. Scalable, interoperable, and adaptable OCPs utilise the public health incident management principles of:

- PREPAREDNESS.
- READINESS.
- RESPONSE.
- RECOVERY. (2)

5 Outbreak Preparedness

It is recommended that each health facility develop and maintain a facility specific OCP that has been created in consultation with key stakeholders and aligns with the HHS incident management framework.

The OCP should be reviewed periodically but at least every 2 years and/or if an outbreak evaluation determines the need.

The OCP may include and identify the following:

Human resources

- IPAC and contact tracing workforce planning and contingency
- description of the roles and extent of the responsibilities and accountabilities of each of the key stakeholders and individuals
- regularly updated contact list of stakeholders
- business support arrangements (e.g., pay arrangements for staff to work outside normal working hours)
- business continuity arrangements.

Communications

- communication pathways and templates, including data logging
- arrangements for informing and consulting those who need to be aware of an outbreak situation, especially out of hours

- media plan if required
- formalised mechanisms for identifying challenges, barriers and lessons learnt
- requirement to prepare a final report and disseminate to all involved stakeholders
- incorporate lessons learned to evaluate response and revise outbreak management plan.

Definitions and triggers

- outbreak identification including guidance on the definition of an outbreak and prescribed triggers for OCP activation
- process for arranging an outbreak control team (OCT), including required membership to investigate and control the outbreak
- prescribed criteria for determining when an outbreak has concluded.

Material resources

- OCT accommodation e.g., incident room
- task cards to define roles and duties, as required
- stockpile of PPE and other supplies.

Education

- ongoing IPAC training for all staff
- training for all staff on outbreak management.

6 Outbreak Response

Outbreak management falls into four phases described as:

- Identifying the outbreak
- Investigating and responding to the outbreak
- Managing the outbreak
- Evaluating the outbreak.

In practice there is considerable overlap between the phases.

6.1 Identifying the outbreak

Outbreak management begins with the early and timely identification of an outbreak.

The following basic steps are recommended:

- Use a Generic Outbreak Trigger Tool and action plan to identify if the situation could constitute an outbreak (Refer to Tool 1: Sample_ Generic Outbreak Response Trigger Tool and Action Plan for reference)
- Refer to your OCP
- Assess the clinical situation by determining:
  - symptoms observed or pathology results
  - timeline since symptoms first observed or results notified
  - geographical area affected (e.g., confined to single ward or patient/staff cohort)
  - characteristics of individuals affected (e.g., age, sex, health status)
  - likely transmission routes (e.g., human, animal, vector, environmental, food or other factors)
  - number of suspected and confirmed cases
  - if case numbers exceed expected background rate of this disease (if applicable)
- Consider convening an outbreak control team (OCT)

Refer to *Tool 1: Outbreak Risk Assessment Tool* for further detail.

6.1.1 Convene outbreak control team

An OCT is a multi-disciplinary group which will work together to investigate an outbreak. The core team is responsible for planning and coordinating the investigation (4).

The decision to convene an OCT will be made by relevant personnel, such as the chairperson of the infection control committee or the HHS Chief Executive (CE) or their delegate. The following triggers should be considered in the decision to convene an OCT:

- the organism/agent, its clinical severity, likely mode of transmission and communicability/transmissibility
- the extent of the outbreak, taking into consideration:
  - the number of confirmed or suspected cases (outbreak definition)
  - whether there are two or more cases of a notifiable/communicable condition in the same ward/area, within the incubation period
  - whether the communicable disease is contained to one ward or is across multiple wards
  - the likely source
- the demographics of the population at risk
- the potential impact on service delivery considering:
  - involvement of management/executive to implement measures to control disease spread (e.g., additional staffing/cleaning and closure of wards or beds)
  - involvement of more than one ward, department or facility.

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6.2 Investigating the outbreak

Investigation of a disease outbreak involves a combination of epidemiological, laboratory and environmental components (4).

A case definition should be established by the OCT during the initial meeting and is formed using standard criteria to determine whether an individual should be classified as a case (4). A case definition usually includes clinical and epidemiological components:

- clinical and pathological information about the condition
- characteristics of the people who are affected
- information regarding the location and timing of the outbreak.

6.2.1 Case finding

Once a case definition has been established, attempts should be made to identify additional persons who meet the case definition. This enables a more accurate estimate of the size of the outbreak and reduces the risk of only focusing on cases detected early in the investigation and increases the likelihood of timely control.

A structured data collection tool should be used when collecting detailed information regarding cases (4). Case report forms are available for notifiable conditions at communicable disease control guidance. The following information should be collected from each case:

- identifying information
- demographic information
- clinical information (date/time of onset, signs and symptoms, death, hospitalisation, hospital bed number, treatment, etc.)
- laboratory information
- potential risk factors (contact with known case, immunosuppression, environmental exposure, other co-morbidities. etc.)
- contact with individuals with similar symptoms.

6.2.2 Contact tracing

The need for and extent of contact tracing will be determined by the OCT and organism involved. In general, contact tracing of staff, patients and visitors exposed within a healthcare facility should be coordinated by the appropriately trained contact tracing officers within that facility. In the case of a notifiable condition, contact tracing must be conducted by an appointed contact tracing officer (CTO) as described in contact tracing procedure and *Public Health Act 2005* (Qld). Close contact identification and follow up for other conditions (those not listed in the *Public Health Regulation 2018* (Qld), can be done by staff competent in these activities.

In general, close contact identification and follow up or contact tracing for those exposed within a healthcare facility should be coordinated by staff within that facility. Contact tracing of a notifiable condition in a healthcare facility must be conducted by an appointed CTO as described in the contact tracing procedure.

Contact tracing of individuals exposed in the community, should be coordinated by the local Public Health Unit (PHU).

Identifying the source of the outbreak enables effective outbreak response. Information that can assist in identifying the source includes:

- gathering information from questionnaires (e.g., patient health records, case report forms, food histories)
- environmental assessment (e.g., identification of contaminated food or food handling equipment, infection control breaches, cleaning, environmental sampling, adequate/correct equipment)
- analysis of epidemiological data (e.g., movement and contacts of cases)
- identifying and investigating contacts considering the disease's communicability and incubation period
- collecting demographic, movement and clinical information data of cases and contacts.

6.2.3   HHS Health Emergency Operation Centre

HHS Health Emergency Operation Centres (HEOC) are stood up to provide incident management, and support structures and functions, especially when there is the likelihood the response is/could become large, prolonged, and protracted. HEOCs are responsible for implementing planned and emerging strategies to manage health incidents.

Functions of the HEOC include:

- coordination of activities and support for the local incident response
- management of resources, including accessing CTOs
- development and maintenance of situational awareness and reporting upwards to State Health Emergency Coordination Centre (SHECC), if stood up
- liaison with other agencies as required.

6.2.4   Outbreak Management

Outbreak management is characterised by the implementation of relevant control measures.

The primary goal of outbreak management is to control and prevent further transmission. Control measures should be considered at all stages of the investigation and implemented as soon as possible (5). Control measures may include:

- eliminating source of infection, for example:
- identifying and eliminating contaminated foods
- increased/modified cleaning measures
- cleaning of a contaminated air conditioning system
- preventing further transmission, for example:
- isolating or cohorting cases or contacts
- screening and monitoring contacts
- protection of contacts by immunisation or chemoprophylaxis as appropriate

- closure of beds or wards
- education of staff, patients, relatives and the public
- communication with other units within the facility/organisation of symptoms to be alert to
- reinforcing standard precautions and appropriate use of transmission-based precautions
- enhanced environmental cleaning.

6.3 Communication

Cooperation and prompt exchange of information is essential to the successful management of communicable disease outbreaks. Effective communication should occur on a number of levels. This may include between the following key stakeholders (not an exhaustive list):

- Health and non-health professionals within the facility e.g., cleaning, porterage, waste, executives, staffing
- local government, and
- other key stakeholders and where appropriate, with the wider community.

Enact relevant communication pathways developed during the Outbreak Preparedness phase.

7 Outbreak Recovery

7.1 Evaluating the management of the outbreak

A thorough evaluation of the outbreak response helps bring about continuous improvements in practice. The aim of the evaluation is to determine if the incident objectives were met, identify positive outcomes and to document areas for improvement (4).

Aspects of the outbreak response for evaluation may include:

- preparedness for this type of investigation (includes resources, guidelines, checklists, questionnaires, databases, etc.)
- coordination of outbreak meetings, communication with stakeholders (including media management)
- data management e.g., administration and record keeping tasks (responsibility)
- timeliness of outbreak detection, identification of source and implementation of control measures
- effectiveness of investigation process and control initiatives implemented
- the evaluation process and findings should be prepared as part of the final report.

Refer to *Appendix 1: Outbreak control team (OCT) Guidance* for further detail.

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7.1.1   Final outbreak report

At the conclusion of the outbreak, a final report should be prepared. It is recommended the final report should be considered a public document. Therefore, due regard should be given to confidential aspects of the outbreak investigation. The final report will highlight:

- the results of the outbreak investigation and control interventions
- interventions and actions required to minimize and prevent recurrence
- challenges, barriers and remedies required to prevent recurrence of outbreak
- recommended revisions to the facility-specific outbreak control plan.

Circulation of the final report may include the following recipients:

- within the health facility:
  - all OCT members
  - HHS Executive
  - infection prevention and control service team
  - Infectious diseases physician
  - relevant patient safety and quality committee members
  - other facility-based managers and clinicians.
- Chief Operating Officer, Chief Health Officer, Communicable Diseases Branch, OzFoodNetQLD and PHU where these stakeholders have been involved.

8 Aboriginal and Torres Strait Islander considerations

There are special considerations for contact tracing in Aboriginal and Torres Strait Islander peoples and communities. Information can be found here.

9 Legislation

- *Hospital and Health Boards Act 2011 (legislation.qld.gov.au)*
- *Public Health Act 2005 (legislation.qld.gov.au)*
- *Public Health Regulation 2018 - Queensland Legislation - Queensland Government*

10 Definitions

Term	Definition
Case definition	A case definition is a set of standard criteria for classifying whether a person has a particular disease, syndrome, or other health condition in an outbreak. A case definition should include well-defined clinical symptoms (+/- laboratory criteria) and restrictions by time, place and person.
CDB	Communicable Diseases Branch
CDIM	Communicable Diseases Infection Management
CE	Chief Executive
CHO	Chief Health Officer
DG	Director General
HHS	Hospital and Health Service
MRO	Multi–resistant organism
OCP	Outbreak Control Plan
OCT	Outbreak Control Team
Outbreak	Is generally defined as occurring when disease levels exceed that expected in each community/population over a specific timeframe.
PHU	Public Health Unit
Standard precautions	They are the minimum infection prevention and control work practices which are required to achieve a basic level of infection prevention and control and must be always used for all patients in all situations.
Transmission based precautions	Transmission-based precautions are applied in addition to standard precautions. Transmission-based precautions are applied to patients suspected or confirmed to be infected with agents transmitted by the contact, droplet, or airborne routes.

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11 Version Control

Version	Date	Comments
2.0	19 March 2012	
3.0	March 2016	
4.0	15 September 2017	Fixed links, updated resources, added to new template, changes relating to Health Service Directives, overall review, and update to guideline
5.0	31 October 2022	Comprehensive review of existing guideline. Current evidence based best practices are incorporated.

References

1. World Health Organization. *Framework and toolkit for infection prevention and control in outbreak preparedness, readiness and response at the national level.* World health Organization. [Online] 2021. [Cited: 20 February 2022.] https://apps.who.int/iris/handle/10665/345251. 9789240032729 (electronic version) 9789240032736 (print version).

2. World Health Organization. *Framework and toolkit for infection prevention and control in outbreak preparedness, readiness and response at the health care facility level.* World Health Organization. [Online] 6 September 2022. [Cited: 29 September 2022.] https://www.who.int/publications/i/item/framework-and-toolkit-for-infection-prevention-and-control-in-outbreak-preparedness--readiness-and-response-at-the-health-care-facility-level. 9789240051027.

3. Australian Commission on Safety and Quality in Health Care. *Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019).* Australian Commission on Safety and Quality in Health Care. [Online] National Health and Medical Research Council, May 2019. [Cited: 20 September 2022.] https://www.safetyandquality.gov.au/sites/default/files/2022-09/australian_guidelines_for_the_prevention_and_control_of_infection_in_health_care_-_current_version_-_v11.13_19_september_2022.pdf. 978-1-86496-028-0.

4. US Centers for Disease Control and Prevention. *Outbreak Investigations in Healthcare Settings. Centers for Disease Control and Prevention.* [Online] US Centers for Disease Control and Prevention, 14 June 2021. [Cited: 20 February 2022.] https://www.cdc.gov/hai/outbreaks/index.html.

5. US Centers for Disease Control and Prevention. *Containment Strategy Guideline* [Online] US Centers for Disease Control and Prevention, 10 July 2019. [Cited: 20 February 2022.] https://www.cdc.gov/hai/containment/guidelines.html.

7. *Back to basics: the outbreak response pillars.* Carson, Dale A Fisher and Gail. 10251, Michigan, USA : The Lancet, 2020, Vols. 396 Pages 598-598. 2020-08-29.

8. *Use of portable air cleaners to reduce aerosol transmission on a hospital coronavirus disease 2019 (COVID-19) ward.* Kristy L. Buising MD1, Robyn Schofield PhD2, Louis Irving MBBS3, Melita Keywood PhD4, Ashley Stevens5,. 8 pp 987-992, Cambridge, UK : Cambridge University Press, 2021, Vol. 43.

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9. Public Health Agency. *Outbreak Management*. Regional Infection Prevention and Control Manual for Northern Ireland. [Online] Public Health Agency, 2015. [Cited: 23 September 2022.] https://www.niinfectioncontrolmanual.net/outbreak-management.

10. World Health Organization. *Roadmap to improve and ensure good indoor ventilation in the context of COVID-19.* World Health Organization. [Online] March 2021. [Cited: 20 February 2022.] https://www.who.int/publications/i/item/9789240021280. 9789240021280 (electronic version); 9789240021297 (print version).

11. Clinical Excellence Commission. *Infection prevention and control practice handbook.* [Electronic] Sydney NSW : National Library of Australia Cataloguing-in Publication entry, 2020. 978-1-76000-381-4.

12. Communicable Disease Network Australia. *CDNA Series of National Guidelines (SoNGs)*. Australian Government Department of Health and Aged Care. [Online] Australian Government. [Cited: 20 February 2022.] https://www.health.gov.au/resources/collections/cdna-series-of-national-guidelines-songs.

Tool 1: Sample - Generic Outbreak Response Trigger Tool and Action Plan

This is a SAMPLE ONLY. Triggers and management during an outbreak are prescribed by the local HHS/ facility. It is recommended to use local HHS /facility trigger tool and action plan templates during the incident when available.

Use this tool in addition to the Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019) | NHMRC

A trigger is not synonymous with the term outbreak. Some triggers may be outbreaks, but some will be natural variation in the incidence of Communicable Disease (CD) of interest.

A trigger is a more sensitive point at which the Infection Prevention and Control (IPAC) team becomes concerned that there may be the possibility of disruption in systems causing an increase in cases and a decision is made that intervention is necessary to ensure patient and staff safety.

The trigger response strategies are recommended to be implemented if a facility detects an increase in CD of interest or if transmission has occurred between patients and or staff.

Smaller healthcare facilities that do not normally have any CDs of interest, may consider one case significant.

A trigger phase requires a heightened awareness of IPAC strategies and increased communication between departments and individuals within the healthcare facility. Prior to implementing a trigger response, healthcare facilities need to establish a thorough investigation of all cases if there is evidence of transmission or if the variance is due to natural variation.

It is recommended healthcare facilities consider use of *Tool 2: Rapid Risk assessment tool* provided in this guideline if a trigger point is reached.

Roles and Responsibilities

Organism	
Ward / Clinical Area	
Date Trigger Tool Started	
Staff member starting the trigger	
Date Trigger Tool Completed	
Staff member closing the trigger	

This generic outbreak response trigger tool is designed for use in any health care facility where a CD of interest has been identified and a suspected or confirmed person-to person transmission has occurred or a person-to-person transmission poses an ongoing risk to staff and other patients in the facility.

This tool contains the following:

- roles and responsibilities of healthcare facility staff
- initial and ongoing assessment to check if the trigger poses a risk
- detailed information sheet for each type of outbreak
- day zero initial assessment and what needs to be done (when trigger is identified)
- daily outbreak checklist until the outbreak ceases to pose a risk to staff and patients.

Roles and responsibilities	
Staff nurse / Team leader / Nurse Unit Manager	• Implement and ensure compliance with Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019) • Recognise and report to infection, prevention and control (IPAC) Service any incidence where clinical presentation (e.g., signs and symptoms) represent a risk of spread to staff or other patients (e.g., 1-2 patients with symptoms of diarrhoea, skin infection etc.) • Commence an initial assessment in collaboration with IPAC service • Report using local risk register • Ensure staff allocation meets appropriate patient care needs
Other Clinicians	• Recognise and report to IPAC Service any incidence where clinical presentation (e.g., signs and symptoms) represent a risk of spread to staff or other patients (e.g., 1-2 patients with symptoms of diarrhoea, skin infection and etc.) • Ensure compliance with Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019) • Report to IPAC service any concerns regarding IPAC
Infection, Prevention and Control Team	• Have a surveillance system in place to facilitate early detection and investigation of outbreaks • Conduct initial risk assessment • Initiate outbreak response trigger tool when there is suspicion of an outbreak • Ensure additional IPAC strategies to control transmission are in place • Monitor strategies for the duration of the outbreak
Pharmacist (if required)	• When required, ensure review of antimicrobial regimens in the clinical area are aligned with local policy • Provide antimicrobial prescribing regimens to reduce further risks to patients • Initiate a report to antimicrobial specialist
Service line manager	• Ensure there is adequate and appropriate resources for the provision of a safe environment and safe care for patients
Communication officer	• Ensure timely development and dissemination of information and statements of the outbreak to all key stakeholders • Act as secretariat for the Outbreak Control team

Initial Assessment Form

Initial Assessment	Date: _____/ ____/ _____ (Date trigger is identified)
Assessment to determine Outbreak trigger tool requirement (To be completed by IPAC Service team)	
Location: Hospital / Clinical Area	
What is the outbreak trigger for this area? (e.g., 1-2 new cases of organism of alert in 3 days – dependent on QH trigger for notification for notifiable conditions and no-notifiable conditions)	
Case numbers in the last 24-72 hours that pose a risk for this trigger (this will be determined by the CD of concern).	
Trigger assessment confirmation: (Assess data to confirm trigger) • Laboratory confirmed result? • Total case numbers? • Healthcare associated or acquired in the community? • Are there modifiable risk factors in the patient population that could account for this trigger? • Can the clinical presentations be explained by other diagnosis?	
Situation Assessment (To be completed by IPAC Service team)	
As of today, how many patients/ staff on this ward are suspected or confirmed to have the CD of interest and / or symptoms?	
As of today, how many patients/ staff do not have symptoms but confirmed or suspected to the CD of interest?	
As of today, how many staff are showing symptoms and/ or known to be infected with the CD of interest?	
In the last 30 days, has the alert organism been recorded in any patient's/ staff death record?	
Please indicate health care facility risk assessment for this incident. (Refer to Appendix XX for the rapid risk assessment tool)	Red / High Amber / Moderate Green / Low
Lead IPAC team member for this trigger	
Ward team leader/ Nurse Unit Manager	
Does the trigger pose a moderate to high risk to others?	Yes No
If the trigger is low, **STOP** here, and confirm that trigger poses a low risk. (Keep this from as a record of decision making)	Name and signature:

Action Plan

If the trigger poses a moderate to high risk, complete: *Day 0 action plan checklist*: *Key Information Sheet* below.

Day 0 Action plan   **KEY INFORMATION SHEET**

The IPAC service will use this sheet to provide key information when an outbreak is identified.

Complete a *Daily action plan checklist* everyday thereafter until the trigger is considered resolved or an actual outbreak response is in place.

Case definitions:

Confirmed case	As per CDNA SoNG / *Queensland Health Communicable Disease Control Guidance* / any person (HCW of patient) with a clinical signs and symptoms and confirmed microbiological test result.
Suspected case	As per CDNA SoNG / *Queensland Health Communicable Disease Control Guidance* / any person (HCW of patient) with a clinical signs and symptoms and with pending microbiological testing waiting for result.

Signs and symptoms that confirmed case or suspected cases may present in this trigger are (IPAC service may remove or add relevant clinical signs and symptoms specific to the type of trigger:

Vomiting		Fever		Cough (Productive or unproductive)	
Diarrhoea		Sore throat		Skin rash	
Other		Describe:			

Case confirmation: To confirm a suspected case with relevant signs and symptoms, list specimen required: (Collect specimens patients / staff that develop symptoms)

Date/ time	Specimen	Symptoms	Contact exposure
10/10/22	*Rectal swab*	*none*	*Pt in bed 12*

Mode of Transmission and Environmental survival:

Mode of transmission	Droplet	Airborne	Contact (Direct /indirect)
Known organism survival in the environment, on horizontal surfaces or fabric			

High Contamination Activities:

List any procedures or activities that potentially increase environmental or personal contamination from confirmed or suspected cases of CD of interest, e.g., bed making (scabies), wound dressings (multiresistant Organism), aerosol generating procedures or aerosol generating behaviours (COVID-19).

High contamination activities	Modifications to reduce risk
Bed making	*Highlight refraining from shaking linen during removal and ensure staff appropriate PPE in linen handling*

Admission Restrictions (Patient):

No ward admission		No admission to bay xxx (bed 1-4)		No restrictions	
Visitor restrictions					

De-isolation criteria:

Confirmed case	*Negative test result for xxxx weeks or no symptoms for xxx incubation period*
Suspected case	*Negative test result for xxxx days or no symptoms for xxx days*

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Day 0 Action plan	Initial IPAC Measures

Patient placement

- **Isolate / cohort** patient (s)
- **Close doors** to isolation cohort areas if required (is it safe to close doors?)
- **Place signage on entry** to isolation / cohort areas indicating recommended measures
- Where recommended – **Ensure appropriate placement of readmitted patients who are contacts**

Admission restriction (where indicated)

- **Close the ward or bay** as instructed by IPAC service
- **Limit non-essential visitors** (where indicated and in consultation with IPAC service)

Discharge and Transfer recommendations

- **Discharge patients to their own home if safe to do so** (ensure discharge summary and patient/carer are alert for any relevant signs and symptoms, actions to take and any ongoing recommended control measures)
- **Avoid transfer to other healthcare facilities**, unless advised and agreed by IPAC service
- **Avoid patient transfer from affected ward/ bay to unaffected another ward/ bay,** if necessary, confirm with receiving area that they are ready to continue IPAC measures until the patient is cleared

Healthcare Worker

- **Refer to** the *Australian Guidelines for the Prevention of Infection in healthcare* (2019, p199 – 202) *4.2.2 Exclusion periods for healthcare workers with acute infections* and your local health facility staff exclusion guidance for specific guidance on the management for symptomatic staff
- Where indicated by IPAC service, **dedicate staff** to the care of cases for the duration of the incident
- **Consider strategies for staff working across multiple clinical areas** e.g. phlebotomists, physiotherapists (reinforce appropriate IPAC measures as per Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019) | NHMRC
- Ensure patients are receiving appropriate **medications** e.g. antimicrobials
- Where appropriate ensure adherence to antimicrobial therapy local procedure
- **Identify modifiable risk factors during high contamination procedures** to reduce healthcare worker, equipment and environmental contamination

Hand Hygiene and Personal Protective Equipment

- **Alcohol Based Hand Rub is available at point of care**
  - **Use liquid soap and water for gastrointestinal outbreaks**
- Ensure sufficient, appropriate PPE is available and staff are donning PPE before entering the area, and doffing PPE and performing hand hygiene appropriately

	Safe Environment
	• Assess for possible aerosol transmission of organism. Reduce and or remove equipment that may contribute to aerosol environmental contamination
	• **Clean and declutter** the ward and clinical space
	• **Increase frequency of cleaning**
	• **Ensure adherence to cleaning and disinfection of patient shared equipment**
	• **Allocate dedicated patient care equipment for isolation and cohort areas**
	• **Where allocation of equipment is not possible**, ensure strict adherence to cleaning and disinfection of equipment before and after each use
	Communication
	• **Disseminate outbreak situation communication** to all ward staff including support teams
	• **Educate all staff on symptoms to be alert to and actions to take**
	• **Inform patients/family** of situation, precautions, and restrictions
	Case finding
	• **Consider screening all patients in the ward in consultation with IPAC**
	• **For environmentally hardy organisms,** consult with laboratory staff and consider environmental sampling

Adapted from ECDC *Generic Outbreak Control Measure Trigger Tool*

Tool 2: Risk Assessment Tool

Rationale

A rapid risk assessment soon after identifying an outbreak will help identify risks to patients, workers, and the community.

This rapid risk assessment should not replace a thorough risk assessment at a later stage, nor should it be a static assessment. As information about an organism or outbreak emerges the risk assessment should be revisited.

The rapid risk assessment is used to determine what the probability of ongoing transmission may be and possible impact of the disease. The impact might be increased morbidity and/or mortality but should also consider the impacts on the entire facility including financial impacts.

There are other methods for risk assessment that can be used. The _Australian guidelines for the prevention and control of infection in healthcare_ discuss a risk management approach to infection prevention and control. It is suggested that this approach is used for settings other than outbreaks.

Define the population to be risk-assessed

Risk may be different across different populations within the facility. If the outbreak involves a communicable disease that will affect some patient types more than others, the risk assessment should be repeated for the different patient populations. This helps determine the risk to the facility should the outbreak become more widespread and to ensure prevention activities are appropriate for that population.

Depending on the disease, the populations might be based on age groups or on disease type. These should be defined before conducting the risk assessment.

Validate the known information

It is important to revisit the known information about the outbreak to ensure it is valid. Additional information may change the scope and severity of an outbreak or invalidate an outbreak.

Determine appropriate questions to answer considering the outbreak and type of organism. For example:

- What is known about this organism?
- Mode of transmission?
- Has the diagnosis been confirmed?
- How many cases are known?
- Is the source known?
- Is there a treatment/vaccination?

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- Who are the known vulnerable populations?
- Who are the close contacts?
- What specimens have been collected?
- What is the known infection, prevention and control strategies?
- What are the possible health outcomes for the different populations in your facility?

Consult the evidence-base

Identify if there are existing resources and information available for this disease to support appropriate management. For example, the *Queensland Health Communicable Disease Control Guidance* has information about notifiable and other communicable diseases.

It is important that information about a disease is well understood prior to commencing the risk assessment but the focus should be on reviewing the available information critically, not on a full literature review.

This review of information will assist to provide the evidence base for the risk assessment and any actions taken as a result of the risk assessment.

Assessment

Once the review of information has taken place the assessment on the probability of transmission and the impact of transmission can take place.

As a guide the more infectious an organism or disease the higher the risk rating and the higher the impact, the higher the risk rating. For example, a highly infectious pathogen that has a high case fatality ratio is risk rated as a high risk.

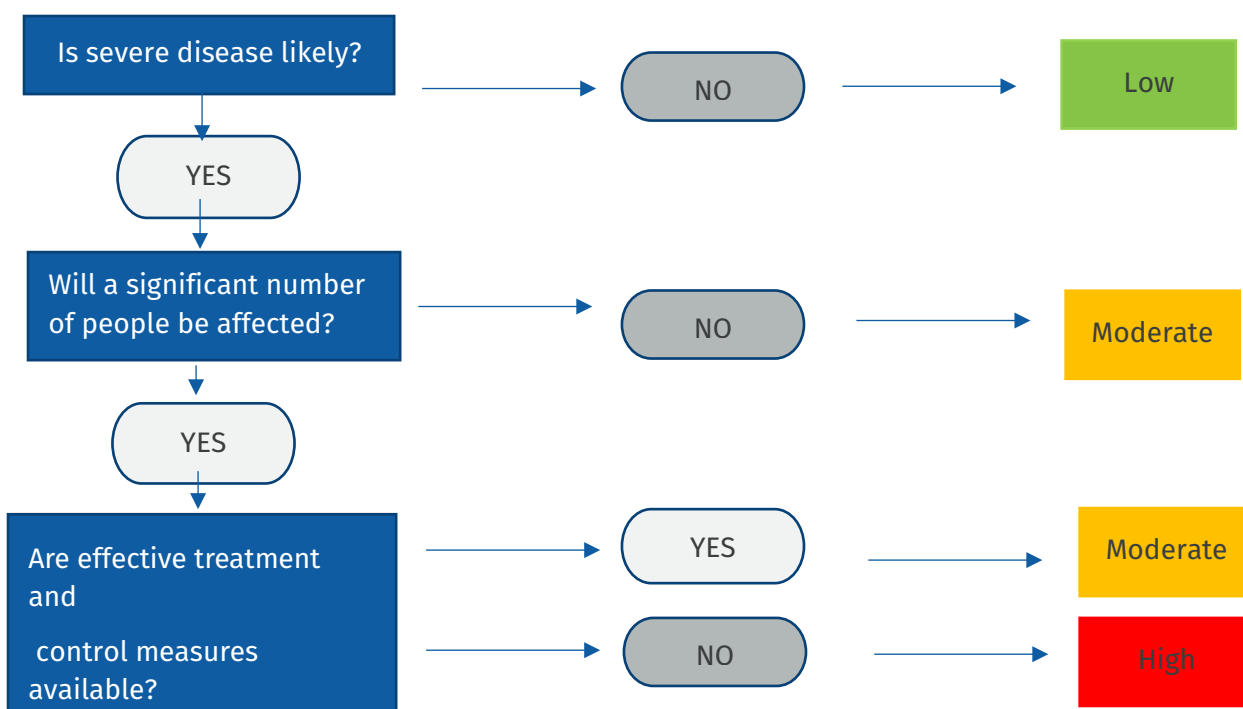## Probability of transmission or infection

To assess probability of transmission or infection in the health environment use the below algorithm. Please note this algorithm is provided without organism specific detail that is being assessed. It assumes that standard precautions are in use.

If it is not known how the disease is spread, it should be assumed that the risk is considered high until the route of transmission is characterised.

Transmission routes	Risk Rating
No human-to-human transmission	No risk
Close contact/contact with body fluids ONLY	Low risk
Body fluid/close contact and environmentally persistent organism	Moderate risk
Respiratory secretions only or in combination with close contact and/or environmentally persistent	High risk

Impact

The impact assessment should be done with consideration of one population within the facility at a time if the information about the disease/organism indicates a significant outcome in different patient cohorts.

Is severe disease likely? → NO → Low

YES ↓

Will a significant number of people be affected? → NO → Moderate

YES ↓

Are effective treatment and control measures available? → YES → Moderate

Are effective treatment and control measures available? → NO → High

Impact / Probability	None	Low	Moderate	High
Low	None	Low	Low	Moderate
Moderate	None	Low	Moderate	High
High	None	Moderate	High	High

Source: Adapted from *European Centre for Disease Prevention and Control. Operational tool on rapid risk assessment methodology* and *Queensland Health. Managing risks, incidents and injuries.* (only available on the QLD Health intranet)

Actions from Risk Assessment

The response to different risk ratings will depend on local procedures and conditions but should be proportionate.

Please refer to the trigger tool for immediate actions. The below actions are examples that could be considered. Consider consultation with hospital executive for moderate or high-risk ratings until the Outbreak Management Team is operational.

Low: standard and transmission-based precautions should continue but the importance of these precautions should be reinforced. Check that precautions and cleaning are being carried out appropriately. Follow any relevant care guideline.

Moderate: In addition to standard and transmission-based precautions, additional cleaning or organism specific cleaning requirements should be considered.

High: Consideration for ward, bay or room closures and suspending admissions and transfers should be considered in addition to the increased focus on infection prevention and control measures.

Tool 3: Sample – Outbreak Management Checklist

Type of Outbreak: _____ (e.g., COVID-19, MRO, gastroenteritis, acute respiratory illness)

Date Outbreak was reported to Infection Control: __/__/__

Reported to:

Reported by:

Outbreak Location/Facility: Ward(s) affected:

Likely Mode of Transmission:

❑ Contact ❑ Airborne ❑Droplet ❑ Food-borne ❑ Unknown   Other mode:_____

The Outbreak Control or Incident Management Team ensures that the following steps are initiated as soon as possible and if initiated, completed. The order in which the tasks are undertaken may vary.

Action commence	Action	Action completed
❑ Date/ Time:	**Outbreak declared** i.e., trigger number of cases of infection with the same causative micro-organism (if known in the early stages of the outbreak)	❑ Date/ Time:
❑ Date/ Time:	**Source identified**	❑ Date/ Time:

❑
Date/ Time:
	Convene the Outbreak Control Team (OCT)
	
	• Refer to *Appendix 1: Outbreak Control (OCT) Guidance*
	
	Factors to be considered prior to convening an OCT include:
	(a) known/likely infectious disease/agent involved
	   - A critical incident team should be established in case of possible healthcare associated transmission of blood borne virus
	(b) the number of confirmed or suspected cases
	   - large numbers of cases
	   - two or more cases of a notifiable condition in the same ward/area, within an incubation period
	(c) the size and nature of the population at risk
	(d) the likely source
	(e) potential impact on service delivery
	   - involvement of management/executive is required to implement measures to control disease spread e.g., closure of wards/beds
	   - involvement of more than one ward or department.
		❑
		Date/ Time:

❑ Date/ Time:	**Staff information** ▪ Inform relevant staff of possible/actual outbreak including advice regarding infection control measures e.g., pharmacy, operational staff, volunteers, etc. · consider the need to inform visitors and patients	❑ Date/ Time

Action commence	Action	Action completed
❑ Date/ Time: ❑ Date/ Time: ❑ Date/ Time:	▪ Notify Senior Nursing Staff on duty ▪ Flag with Pathology Queensland any additional specimen requirements ▪ Staff close contact management	❑ Date/ Time ❑ Date/ Time ❑ Date/ Time
	Patient and staff management	
	▪ Ensure appropriate patient isolation measures are implemented ▪ Confirm management of staff who are identified as close contacts	

Action commence	Action	Action completed
❑ ❑ ❑ ❑ Date/ Time	**Infection control measures implemented** ▪ Ensure sufficient supplies of appropriate personnel protective equipment (PPE) is available in the affected areas e.g., masks, gloves, gowns, aprons, protective eyewear, as indicated by mode of transmission ▪ Isolate affected patients ▪ Display signage regarding necessary precautions ▪ Reinforce 5 moments for hand hygiene · Alcohol-based hand hygiene products may not be suitable for certain outbreaks e.g., *Clostridioides difficile*	❑ ❑ ❑ ❑ Date/ Time
❑ ❑ ❑ ❑ ❑ ❑ Date/ Time	**Environment measures** ▪ Consider the need to dedicate staff to affected patients e.g. in gastroenteritis outbreaks ▪ Consider the need to cohort patients with the same infection ▪ Increase cleaning frequency in affected areas ▪ Limit transport of affected patients to essential purposes only ▪ Restrict visitors where necessary, particularly young children and people with suppressed immune systems ▪ Reinforce hand hygiene with visitors	❑ ❑ ❑ ❑ ❑ ❑ Date/ Time

❑
❑
❑
Date/ Time
	Outbreak documentation
	▪ List all known cases and update information daily (line listing)
	  o details of affected patients and staff
	  o details of onset date of symptoms/diagnosis for each case
		❑
		❑
		❑
		Date/ Time

❑	**Notifiable conditions reporting** ▪ Ensure local PHU has been notified for outbreaks involving notifiable conditions	❑
❑	**Specimen collection**	

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Action commence	Action	Action completed
❑ ❑ Date/ Time	▪ Observe standard and appropriate transmission-based precautions when collecting relevant specimens e.g., use of PPE ▪ Collect appropriate specimens - liaise with infection prevention and control or microbiology to determine collection method and specimen types ▪ Ensure laboratory is aware of outbreak situation and any additional collections	❑ ❑ ❑ Date/ Time
❑ ❑ Date/ Time	**Review and update outbreak management plan** ▪ Regularly during the outbreak ▪ Following resolution of outbreak	❑ ❑ Date/ Time
❑ Date/ Time	**Outbreak management report** ▪ Complete outbreak management report highlighting recommendations for executive and mechanisms to prevent future occurrences	❑ Date/ Time

Tool 4: Sample – SBAR Cluster Communication

Date	10 October		
	XX Ward	*XX Ward*	*XX Ward*
Situation **Total case numbers as at 10 October [DATE]** SAMPLE Tool: Outbreak SBAR Communication This is a SAMPLE ONLY: it is recommended that you use your HHS /facility template and processes during incident when available	*Patients:* *Staff:*	*Patients: 8* *Staff: 1*	*Patients:18* *Staff: 3*

Within the Situation section, spanning the three ward columns:

Inpatient cases:
Patients: 38
Staff: 8
Positive cases room occupancy rate: $\underline{\text{total number of cases (e.g., 38)}} \times 100\%$
$\underline{\hphantom{xxxxxx}}\text{funded bed stock (e.g., 250)}$
= 38/250 x 100%
= 15.2% of 250 bed stock in a facility is occupied by positive cases

Note:
Calculate room occupancy rate to understand disease impact on hospital bed stock, understand and plan patient placement during bed surge capacity.

Outline current outbreak situation e.g., ward/bed line listing, staff numbers and patient numbers

Background

Outline relevant background e.g.,

- Causative organism
- Mode of transmission
- Evidence source and expert opinion
- Incubation and infectious period

Assessment

Outline assessment of current outbreak e.g.,

- Date outbreak declared
- Ward/HHS/facility response
- IPC measures implemented

Recommendations

Outline recommended infection prevention and control actions and strategies for patients

Staff

Outline the actions and strategies agreed to be implemented for staff

Tool 5: Sample- Outbreak Communication Log and Actions Register (Patients and staff)

(This is a sample only, use local HHS/Facility template and procedures when available)

Outbreak:

Ward/Clinical Area:

OCT Members:

Date	Role	Name	Contact details	Clinical Service line
04/05/78	IPAC lead	Ivy Oblenda	xxxxx	IPAC

Date	Communication log (Outline OCT meeting discussion points)	Action (Outline OCT actions to implement and or deliver)	Responsible Officer	Status (Outline the status of action delivery)
04/05/92	Commence OCT Outline OCT meeting discussion and agreements	• Risk assessment of outbreak • Increase cleaning frequency at frequently touch point	• IPAC • Patient support services • Clinical consumables	• Completed on 1600 -02/05/92 by IG • To commence on xxxx by IG

Tool 6: Sample – Risks, Decisions and Actions Register

To ensure decisions, actions and risk are identified during an outbreak. The sample below can be transcribe using an expel spreadsheet for ease of use.

This is a SAMPLE ONLY. It is recommended to use local HHS /facility risk, decision and actions register tool templates during the incident when available.

Risks											
Risk Number	Date Identified	Description	Probability	Impact	Preventive Actions	Contingent Actions	Owner	Actions by	Target Date	Status	Notes
	Specify the date risk is identified	*Describe the risk identified*	*Outline the risk probability high*	*Outline the possible impact of the risk identified*	*Outline the actions undertaken that prevents the risk from occurring*	*Outline the alternative actions to prevent the risk from occurring*	*Identify the lead / team*	*Enlist the officer who will action*	*Outline the date of completion*	*Outline the status of the action*	*Additional update and status of action*

Actions								
Action Number	Date raised	Area	Priority	Description	Action by	Deadline	Progress	Status
	Date that actions is raised	*Area were actions are identified*	*Outline the prioritization level of action*	*Describe the actions to be undertaken*	*Enlist the lead officer who will action*	*Outline the date of completion/ delivery*	*Outline the progress of the action*	*Additional update and status of action*

Decisions					
Decision Number	Date made	Description	Impact	Approver/Decision Maker	Evidence e.g., Email date and title
	Date that decision is made	*Describe the risk identified*	*Outline the possible impact of the decision identified*	*Enlist the lead officer who will action*	*Outline correspondence or evidence of the decision*

Additional IPAC tools for outbreak response:

- o Implementation manual to prevent and control the spread of carbapenem-resistant organisms at the national and health care facility level. Geneva: World Health Organization; 2019 (https://apps.who.int/iris/bitstream/handle/10665/312226/WHO-UHC-SDS-2019.6-eng.pdf?sequence=1&isAllowed=y, accessed 29 September 2022)
- o Guidelines for the prevention and control of carbapenem-resistant Enterobacteriaceae, *Acinetobacter baumannii* and *Pseudomonas aeruginosa* in health care facilities. Geneva: World Health Organization; 2017 (https://www.who.int/publications/i/item/9789241550178, accessed 29 September 2022)
- o Line list template. Atlanta, GA: Centers for Disease Control and Prevention (https://www.cdc.gov/urdo/downloads/linelisttemplate.pdf, accessed 29 September 2022)

Appendix 1
Outbreak Control Team (OCT) Guidance

Outbreak control team – membership

The chairperson of the OCT will usually be the infection control committee chairperson or HHS CE (or delegate).

The composition of the OCT should, where possible, include the following professionals as determined by the type of outbreak:

- HHS executive member or delegate
- chairperson infection control committee
- infection control practitioner
- manager/clinician representatives from the relevant area
- infectious diseases physician
- microbiologist
- public health physician
- epidemiologist / infection control scientist
- media liaison officer
- other relevant stakeholders such as:
  - environmental health officers
  - workplace health and safety
  - support services
  - food services
  - sterilizing services
  - pharmacy
  - patient safety and quality officer
- other individuals representing other agencies involved in the outbreak
- an appropriate person should be appointed as secretariat for the OCT
- advice can be sought from the Communicable Diseases Branch (CDB) in identifying appropriately experienced or qualified individuals if required

Outbreak control team – terms of reference

Terms of reference for the OCT may include the following:

- review all the evidence available regarding the outbreak:
  - confirm the status of the outbreak
  - determine further investigation required
- develop a case definition to verify known cases and to assist in case finding, taking into consideration clinical, epidemiological and laboratory information available
- develop a plan to investigate and control the outbreak

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- investigate the outbreak and identify the source
- allocate tasks to outbreak team members
- implement control measures and monitor their effectiveness in preventing further spread
- develop and maintain communication processes with key stakeholders including CDB or PHU, if appropriate
- to prevent wider spread to other facilities, conduct formal outbreak control meetings on a regular basis
- document and disseminate minutes for each OCT meeting including allocated tasks and any actions taken or completed
- ensure adequate staff and resources are available for the management of the outbreak
- consider the potential for staff training opportunities generated by the outbreak
- identify and utilise any opportunities for the acquisition of new knowledge about disease control
- provide advice and guidance to all individuals and organisations directly involved in dealing with the outbreak which may include:
  - the general community
  - hospital patients, staff, visitors and relatives
- keep relevant outside agencies, the general public and media appropriately informed
- declare the conclusion of the outbreak, as per identified criteria and prepare and disseminate a final report
- evaluate the response to the outbreak and implement changes in OCT procedures based upon lessons learnt
- review causative data and review procedures accordingly.

A central outbreak log should be kept of all activities associated with the outbreak investigation, including minutes of meetings, delegated tasks and actions taken by team members, laboratory results and other relevant information. (Refer to Tool 5: Sample – Outbreak Communication Log and Actions Register (Patient and Staff) for reference)

Communication within Queensland Health

Communication with relevant stakeholders is a key element of outbreak management. It is the responsibility of the chairperson of the OCT to determine when to communicate with the local PHU, CDB, CHO or DG.

Under the *Public Health Act 2005* and *Public Health Regulation 2005 (Qld)*, laboratories notify the chief executive or delegate (public health physicians may be delegated for this purpose) of all laboratory-confirmed notifiable conditions. Similarly the *Public Health Act 2005 (Qld)* requires medical officers and directors of hospitals to notify the chief executive or delegate of clinical diagnosis and provisional diagnoses of notifiable conditions (refer to the website List of notifiable conditions for the list of notifiable conditions and report forms).

Health service directives and protocols, such as Declaration and management of a public health event of state significance, also outline additional requirements for notifying necessary parties.

The CDB and the CHO or DG should be notified if:

- the incident is considered to be of state significance
- the incident is considered a major health event or disaster.

CDB can be contacted on (07) 3328 9728, or CDBadministration@health.qld.gov.au and CDIMMManagers@health.qld.gov.au

Outside of office hours, CDB can be contacted via the on-call public health physician via the local PHU.

Communication with public and media

The OCT should endeavour to keep the public and media as fully informed as possible without compromising any statutory responsibilities and legal requirements. Media statements and enquires should be dealt with in accordance with the principles outlined in *Department of Health Policy: Media Relations (QH-POL-423:2015)*, and your local HHS media policy.

Appendix 2
COVID-19 Considerations

Identifying an outbreak of COVID-19

The trigger for declaring an outbreak of COVID-19 will be determined by the local HHS. It should consider the number of cases (and likely place of acquisition), facility size, case-mix, current risk at the state and local level as well as the location of transmission.

It is important that cases of COVID-19 are reported to the facility Infection control team, as per Hospital and Health Services (HHS) protocols, so that an outbreak might be identified in its early stages or ruled out.

Personal protective equipment and infection prevention and control

For standard and transmission based precautions, please refer to the _Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019)_

Please refer to the Queensland Health _Infection prevention and control guidelines for the management of COVID-19 in healthcare settings_ and COVID-19 Infection prevention and control manual for acute and non-acute healthcare settings for PPE guidance and other infection and prevention guidance for caring for those who have COVID-19.

Additionally, you can refer to the _National Guidelines for the Prevention, Control and Public Health Management of Outbreaks of Acute Respiratory Infection (including COVID-19 and Influenza) in Residential Care Facilities_ for more guidance information.

Contact management

Healthcare worker

The assessment of close contact exposures in the hospital setting should occur using the _COVID-19 Infection Prevention and Control Manual for acute and non-acute healthcare settings_ guidance.

The OCT will ensure HCWs are managed in accordance with the recommendations contained in the current _Coronavirus (COVID-19) - Communicable Diseases Network Australia (CDNA) National Guidelines for Public Health Units_ and the _Managing healthcare workers exposed to or with COVID-19._

Vaccination is considered an important prevention strategy for COVID-19. For the most recent advice about vaccination for COVID-19 please refer to the following for guidance:

- Australian Immunisation Handbook,
- COVID-19 vaccination for Queensland Health workers
- Queensland Health care worker vaccinations

Inpatient, outpatients and visitors

The healthcare facility should determine which of these cohorts meet the current definition for a close contact of a COVID-19 case by referring to the current version of *the Coronavirus (COVID-19) - Communicable Diseases Network Australia (CDNA) National Guidelines for Public Health Units*

Patient placement and cohorting

The healthcare facility will review and determine safe isolation/ cohorting of cases and close contacts and safe management of the environment. Please refer to the following guidance:

- *Appendix 1: Patient placement (cohorting) advice* and *Management of environment* of the Infection prevention and control guidelines for the management of COVID-19 in healthcare settings for guidance
- Local outbreak management plan, patient placement plan and escalation plan (if available)

De-isolation

Guidance on de-isolation of cases and close contacts are outlined in the *Coronavirus (COVID-19) - Communicable Diseases Network Australia (CDNA) National Guidelines for Public Health Units*

Variation of de-isolation of cases from the CDNA guideline needs to be determined by the local HHS led by the infection, prevention and control lead, infectious diseases physicians, and treating medical officers. Major considerations in variation of de-isolation should consider facility case mix, facility bed surge, current bed capacity and current risk at the state and local level as well as the location of transmission.

Appendix 3
Acute respiratory illness outbreaks, including influenza

Identifying an outbreak of acute respiratory illness

Acute respiratory illness (ARI) includes the following organisms that may present as ARI. The ARI listed below are not an exhaustive list.

- influenza (A or B)
- respiratory syncytial virus (RSV)
- adenovirus
- human Metapneumovirus (HMPV)
- rhinovirus
- parainfluenza.

The trigger for declaring an outbreak of an ARI will be determined by the local HHS. The following should be considered: facility size, case-mix, current risk at a local and state level as well as the location of transmission.

For more information, please refer to the following:

- *Queensland Health Communicable Diseases Control Guidance for Influenza*
- National Guidelines for the Prevention, Control and Public Health Management of Outbreaks of Acute Respiratory Infection (including COVID-19 and Influenza) in Residential Care Facilities | Australian Government Department of Health and Aged Care
- *Other respiratory viruses in residential care facilities management*

It is important that cases of ARI are reported to the facility Infection control team, as per Hospital and Health Services (HHS) / facility protocols, so that an outbreak is identified in its early stages or ruled out.

Personal protective equipment and infection prevention and control

Please refer to the following guidance for infection, prevention, and control guidance when providing care to those who have an ARI in any healthcare facility.

- *Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019)*
- *Queensland Health Communicable disease control guidance*
- National Guidelines for the Prevention, Control and Public Health Management of Outbreaks of Acute Respiratory Infection (including COVID-19 and Influenza) in Residential Care Facilities | Australian Government Department of Health and Aged Care

Annual seasonal influenza vaccination is an important prevention strategy for everyone over six months of age. Please refer to the following for up-to-date information regarding flu vaccination:

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- *Australian Immunisation Handbook*
- *Queensland Health care worker vaccinations webpage*

During an outbreak of ARI, health facility may consider initiating universal mask for the following as a source control to protect patients and staff in the facility and to prevent further transmission:

- All staff, visitors and family who are entering the facility
- Patients who can tolerate wearing mask when they are in common areas and shared areas in the facility

Healthcare Workers

Healthcare workers should not come to work if they have signs and symptoms of ARI.

The *Australian Guidelines for the Prevention of Infection in healthcare* (2019, p199 – 202) *4.2.2 Exclusion periods for healthcare workers with acute infections* provides specific guidance on the management of staff infected with a range of diseases.

The Communicable Diseases Network Australia (CDNA) provides specific guidance on the management of staff infected with a range of diseases. For more information, see *CDNA's Series of National Guidelines*

Outpatients and visitors

Limit non-essential visitors during outbreaks. Exceptions may be considered on a case-by-case basis. Visitors with any ARI signs or symptoms should not visit or be requested not to visit the facility.

In special circumstances e.g., end of life visits, a local risk assessment should be conducted, and appropriate precautions put in place to prevent spread of the condition.

Patient placement and cohorting

The healthcare facility will review and determine safe isolation/ cohorting of cases and safe management of the environment. Please refer to the following guidance for more information:

- Australian Commission on Safety and Quality in Health Care *Patient Placement Guide – Infection Prevention and Control*
- Local outbreak management plan, patient placement plan and escalation plan (if available)

De-isolation of cases

Guidance on de-isolation of cases is outlined in the *CDNA's Series of National Guidelines*

Variation of de-isolation of cases from the CDNA guideline should be led by infectious diseases physicians, treating medical officers and infection, prevention and control lead.

Appendix 4
Gastrointestinal illness outbreaks

Identifying an outbreak of gastrointestinal illness

Gastrointestinal illnesses that may trigger an outbreak includes the following (this list is not exhaustive):

- norovirus

- water-borne or food-borne illness

- rotavirus

The trigger for declaring an outbreak will be decided by the local facility. It should consider facility size, case-mix, current risk at a local and state level as well as the location of transmission.

It is important that cases of gastrointestinal illness are reported to the facility Infection control team, as per Hospital and Health Services (HHS) / facility protocols, so that an outbreak might be identified in its early stages or ruled out.

For food borne and other enteric illness, please refer to the following Queensland Health guidance:

- Foodborne disease outbreaks

- Outbreak management

Personal protective equipment and infection prevention and control

Please refer to the following guidance for infection, prevention and control guidance for caring for those who have acute gastrointestinal illness in any healthcare facility.

- *Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019)*

- *Queensland Health Communicable disease control guidance*

- *Gastroenteritis outbreak prevention poster*

Additional infection prevention and control measures may include:

- increased frequency of cleaning and disinfection in areas involved in the outbreak

- dedicated patient equipment or appropriate cleaning and disinfection where dedicated equipment cannot be used

- review of the appropriateness of the cleaning and disinfection chemicals.

Healthcare Workers

Healthcare workers should not come to work if they have signs and symptoms of gastrointestinal illness. Healthcare workers should not attend work from symptom onset until 48 hours following resolution of symptoms.

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The *Australian Guidelines for the Prevention of Infection in healthcare* (2019, p199 – 202) *4.2.2 Exclusion periods for healthcare workers with acute infections* provides specific guidance on the management of staff infected with a range of diseases.

The Communicable Diseases Network Australia (CDNA) provides specific guidance on the management of staff infected with a range of diseases. For more information, see *CDNA's Series of National Guidelines*

Inpatient, outpatients, and visitors

Limit non-essential visitors during outbreaks. Exceptions may be considered on a case-by-case basis. Visitors with any gastrointestinal illness should not attend the facility until 48 hours after symptom resolution.

Patient placement and cohorting

The healthcare facility will review and determine safe isolation/ cohorting of cases and safe management of environment. Please refer to the following guidance for more information:

- Australian Commission on Safety and Quality in Health Care *Patient Placement Guide – Infection Prevention and Control*

- Local outbreak management plan, patient placement plan and escalation (if available)

Appendix 5
Multi-resistant organism outbreaks

Multi-resistant organisms (MROs) are micro-organisms that are not susceptible to multiple classes of antimicrobial agents. MROs result in increased morbidity and mortality and prolonged hospital stays, and many are readily transmitted in the healthcare environment.

This Appendix does not include the core strategies that form the basis for the prevention of transmission of MROs in the healthcare environment. It assumes that these are already in place. For more information about prevention and control of MROS outside of an outbreak setting, please see the *Management of multi-resistant organisms guideline*, *Recommendations for the control of carbapenemase-producing Enterobacteriaceae (CPE)* and the *Australian Guidelines for the prevention and control of infection in healthcare*.

This Appendix assumes that the outbreak management strategies recommended in the main guideline are already in place.

Identifying an outbreak

The facility should decide what constitutes an outbreak of a given MRO for their facility. This trigger should be based on a risk assessment and documented. The *Tool 1: Sample -Generic Outbreak Response Trigger Tool and Action Plan* can be used to assist in determining the trigger points for each organism.

Whole genome sequencing surveillance of MROs can provide information on the early emergence and spread of MROs within facilities and inform timely infection prevention and control measures. Whole genome sequencing surveillance can identify linkages that may be separated by significant time periods and constitute part of an outbreak. Facilities should develop processes to monitor for related infections or colonisation.

Personal protective equipment (PPE) and infection prevention and control

MROs are usually spread through contact with contaminated surfaces or objects in the healthcare environment. This includes contaminated healthcare equipment or staff.

Contact transmission-based precautions are generally recommended during MRO outbreaks. PPE recommendations include the use of a disposable single use gown or apron and disposable gloves.

Additional infection prevention and control measures may include:

- increased frequency of cleaning in areas involved in the outbreak
- novel cleaning strategies
- dedicated patient equipment or appropriate cleaning and disinfection where dedicated equipment cannot be used
- review of the appropriateness of the used cleaning and disinfection chemicals
- contact screening

- collection of environmental samples for environmental surveillance may be considered for MROs that are hardy in the environment e.g., *Candida auris* and Vancomycin resistant *enterococcus*

Patient placement

Ensure appropriate patient location within the facility. Where practicable, a single room with an unshared ensuite or cohorting of patients with the same MRO is preferred patient placement. Please refer to local policies and the Australian Commission on Safety and Quality in Health Care *Patient Placement Guide – Infection Prevention and Control* for detailed information regarding patient placement when a patient is colonised or has an infection caused by a MRO.

Outbreak Management Team

The outbreak management team should consider:

1. best placement and screening management strategy for contacts, including possible closures of rooms, bays or wards and the suspension of transfers
2. review audit data for environmental cleaning and disinfection, hand hygiene and standard and transmission-based precautions
3. ensure appropriate education is provided to staff and patients, including contacts

Clearance

Please refer to the *Management of multi-resistant organisms guideline* for recommendations on the clearance. Clearance criteria for contacts can also be found in the *Management of multi-resistant organisms guideline*. Please note that it is not recommended to try to clear colonised or infected persons during an outbreak.