

Management of outbreaks of communicable diseases in healthcare facilities

Guideline

1. Statement

This Guideline provides recommendations regarding best practice for managing outbreaks of communicable diseases (whether notifiable or not) in Queensland Health facilities.

2. Scope

This Guideline provides information for all 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).

3. Requirements

3.1 Summary

Determine if there is an outbreak

- refer to your facility's outbreak control plan
- if required, convene an outbreak control team

Investigate and respond

- identify and investigate contacts with reference to the diseases communicability and incubation period
- collect data about the demographics, movement and clinical information of cases and contacts
- isolate, screen and manage cases and contacts as required
- communicate with other units, health professionals and facilities
- eliminate the source of infection
- prevent further transmission and recurrence
- check notification requirements

Communication and reporting

- identify problems encountered
- identify lessons learned
- prepare a final report
- disseminate this report to all involved stake holders
- use lessons learned to revise outbreak management plan

Please refer to Appendix 3 and Appendix 6 for a more comprehensive checklist and task list should you require further quick reference material.

3.2 Objective of outbreak management

The objective of outbreak management of communicable diseases is to interrupt transmission as quickly as possible and thus prevent further cases. To accomplish this, it is necessary to:

- recognise when a potential or actual outbreak has occurred
- eliminate the source
- stop further spread
- prevent recurrence
- effectively communicate with all concerned
- disseminate lessons learnt

3.3 Outbreak control plan

It is recommended that each health facility should have in place a facility-specific outbreak control plan (OCP) that has been developed in consultation with key stakeholders and aligns with the HHS incident management framework.

The OCP should be reviewed periodically but at least every two years and after an outbreak. The OCP may include and identify the following:

- outbreak identification including guidance on the definition of an outbreak
- a description of the roles and extent of the responsibilities and accountabilities of each of the organisations and individuals
- an up-to-date list of stakeholder contact details
- arrangements for informing and consulting those who need to be aware of an outbreak situation
- arrangements for creating an outbreak control team (OCT) to investigate and control a major disease outbreak
- the support which will be available to the OCT and what the support duties are
- business continuity arrangements
- the resources required to manage an outbreak
- human resources arrangements (for example, support and pay arrangements for staff to work outside normal working hours)
- training for all staff involved in investigating communicable disease outbreaks
- clear guidance to staff for outbreaks that are identified out of hours
- criteria for when an outbreak is considered over
- the requirement to complete and disseminate the final outbreak report (refer to section 3.4.5 *Outbreak control team – communication and reports* for suggested inclusions for the final report)

3.4 Outbreak control team

3.4.1 Factors to consider in convening an 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.

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 factors should be considered in the decision to convene an OCT:

- the number of cases and the demographics of the population at risk

- 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 is 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 potential impact on service delivery considering:
 - involvement of management/executive to implement measures to control disease spread (e.g. additional staffing and closure of wards or beds)
 - involvement of more than one ward, department or facility
- the extent to which this event might be or become a public health event of state significance, determined by the Health Service Directive: *Management of a public health event of state significance* (https://www.health.qld.gov.au/__data/assets/pdf_file/0019/150760/qh-hsd-046.pdf) which includes definitions for:
 - the potential public health risk
 - public concern
 - media interest.

3.4.2 Outbreak control team – membership

The chairperson of the OCT will usually be the infection control committee chairperson or HHS CE (or delegate). Refer to Appendix 1 *Duties of the chairperson – outbreak control team* for the roles and responsibilities of the OCT chairperson.

The composition of the OCT should, if available, 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 relations officer
- other relevant stake holders such as:
 - environmental health officers
 - occupational 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

3.4.3 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
 - decide what further investigation is 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
- 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 support, 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 (refer to Appendix 2 *Outbreak log* for an example) 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.

3.4.4 Outbreak control team – procedure

The decision to convene an OCT rests with the HHS CE or delegate. The practical responsibility for outbreak management usually rests with the infection control team or practitioner; therefore it is critical that the infection control team promptly communicates information about outbreaks to the HHS executive team.

The following steps outline the general procedure for an OCT:

- the chairperson is to convene the OCT
- elect the secretariat
 - minutes are to be taken of all OCT meetings
 - minutes need to be subsequently disseminated and approved.
- at the first OCT meeting:
 - agree on the OCT composition and terms of reference
 - review the checklist of tasks for the OCT and confirm individual responsibilities (refer to Appendix 3 *Checklist for outbreak control team tasks*).
- at each subsequent OCT meeting:
 - the situation should be systematically reviewed
 - consider whether there is a requirement to notify the local PHU, CDB, the Chief Health Officer (CHO) or Director General (DG)
 - the need for additional human or other resources to be arranged within the HHS for outbreak management or business continuity should be formally considered.
- at or after the final OCT meeting (determined by the chairperson) a debrief shall occur which should consider the following:
 - review the experiences of all involved in the management of the outbreak
 - identify any problems encountered
 - participate, where required, in a state led review of the outbreak
 - prepare the final report (refer to section 3.3.5 *Outbreak control team – communication and reports* for suggested inclusions for the final report)
 - recommend any necessary revisions to the facility-specific outbreak management plan.

3.4.5 Outbreak control team – communication and reports

During the outbreak, key individuals should be kept informed in accordance with the responsibilities outlined in Appendix 3 Checklist for outbreak control team tasks.

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 are required to notify the chief executive or delegate of clinical diagnosis and provisional diagnoses of notifiable conditions (refer to Appendix 5 for link to the list of notifiable conditions and report forms).

Health service directives and protocols, such as *Management of a public health event of state significance* and *Tuberculosis control*, 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.

This is determined by referencing the Health Service *Directive: Management of a Public Health Event of State Significance* (# QH-HSD-046:2014).

CDB can be contacted on (07) 3328 9728, (07) 3328 9755 or CDBadministration@health.qld.gov.au.

Outside of office hours, CDB can be contacted via the on-call public health physician from your 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), your local HHS media policy and Appendix 4 *Communication with the media*.

Final outbreak report

At the conclusion of the outbreak, a final report should be prepared. 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
- any difficulties or problems encountered
- any action required to prevent recurrence
- any recommended revisions to the facility-specific outbreak management plan.

The final report should be circulated as follows:

- within the health facility:
 - all OCT members
 - HHS Executive
 - relevant patient safety and quality committee membersother facility-based managers and clinicians.
- DG, CHO, CDB, OzFoodNet and PHU where these stakeholders have been involved

3.5 The investigation and control of an outbreak

Outbreak management falls into four phases. In practice there is considerable overlap between the phases especially between the detection, investigative and response phases. The four phases are described as:

- outbreak detection
- outbreak investigation
- outbreak response
- evaluation of response.

An outbreak is generally defined as occurring whenever disease levels exceed that expected in a given community or population over a specific timeframe. An example is two or more cases of gastroenteritis which share a plausible epidemiological link in time and place.

Appendix 5 *Resources* contains information regarding notifiable and communicable diseases which may cause outbreaks.

An *Outbreak Management Checklist* (Appendix 6) may be utilised to guide facilities in the management of outbreaks.

3.5.1 Outbreak detection

Outbreak management begins with the timely identification of an outbreak.

Basic steps to help identify if an outbreak exists includes:

- assess the situation e.g. symptoms observed or pathology results
- determine the timeline since symptoms first observed or results notified
- define the area where it is happening (e.g. confined to single ward or patient/staff cohort)
- determine characteristics of individuals affected (e.g. age, sex, health status)
- determine the likely transmission routes (e.g. human, animal, vector, environmental, food or other factors)
- determine likely numbers affected
- determine whether the numbers exceed what is the expected background rate of this disease (if applicable)

If an outbreak is confirmed, an initial assessment of the extent and significance of the outbreak will be made and a decision taken on whether to institute the facility-specific outbreak plan and convene the OCT.

3.5.2 Outbreak investigation

Investigation of disease outbreaks involves a combination of epidemiological, laboratory and environmental components. A case definition should be established by the OCT during the initial meeting and is formed using standard criteria to decide whether, in this investigation, an individual should be classified as a case for the outbreak under investigation. 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

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 it increases the likelihood of timely control.

This process might identify contacts of those identified as possibly diagnosed with a communicable disease. Contact tracing of staff and other individuals that are identified as having been exposed within a healthcare facility should be carried out by the facility. If exposure occurred in the community, contact should be made with the HHS PHU to conduct contact tracing. Some strategies for the management of these contacts are discussed in section 3.4.3 *Outbreak response*. Please refer to the Department of Health *Procedure: Contact Tracing – Public Health Act* for more information.

A structured data collection tool should be used when collecting detailed information regarding cases. Case report forms are available for notifiable conditions on the Queensland Health web site (see Appendix 5 for the link to notifiable conditions and report forms). Information to be collected from each case includes:

- 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.

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

- information gathered from the 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. movements and contacts of cases).

3.5.3 Outbreak response

An outbreak response is characterised by hypothesis-forming and the implementation of relevant control measures. It is important that an OCT is established before this phase. Please refer to Section 3.3 *Outbreak control team* and Appendix 3 *Checklist for outbreak control team tasks* for information regarding this important process.

The primary goal of outbreak response is control and prevention. Control measures should be considered at all stages of the investigation and implemented as soon as possible. Control measures may be directed at:

- eliminating source of infection e.g.:
 - identification and elimination of source of contaminated foods
 - increased/modified cleaning measures
 - cleaning of a contaminated air conditioning systems.
- preventing further transmission e.g.:
 - isolation or cohorting of cases or contacts

- screening and monitoring of contacts
- protection of contacts by immunisation or chemo-prophylaxis as appropriate
- closure of beds or wards
- education of staff, patients, relatives and the public
- advising other units within the hospital or facility of the symptoms to be vigilant for
- reinforcing standard precautions and appropriate use of transmission-based precautions.

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 health professionals, local government and other key stakeholders as well as with the wider community. For more information, guidelines and procedures for infection prevention see Appendix 5. Please refer to Section 3.3.4 *Outbreak control team – communication and reports* for further communication strategies.

3.5.4 Evaluation of outbreak response

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.

Aspects of the outbreak response for evaluation may include:

- preparedness for this type of investigation (includes resources, guidelines, questionnaires, databases, etc.)
- coordination of outbreak meetings, communication with stakeholders (including media management)
- administration and record keeping (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 (see section 3.3.5 *Outbreak control team – communication and reports*).

4. Legislation

- *Hospital and Health Boards Act 2011*
- *Public Health Act 2005*
- *Public Health Regulation 2005*

5. Supporting and related documents

- Health Service Directive: Public Health Event of State significance – Management of (qh-hsd-046:2014)
- Health Service Directive: Tuberculosis Control (qh-hsd-047)
- Health Service Protocol: Tuberculosis Control (qh-hsdptl-047-1)
- Department of Health Policy: Media Relations (qh-pol-423:2015)
- Health Service Directive: Patient Safety (qh-hsd-032:2014)
- Health Service Directive Patient Safety: Guideline for Clinical Incident Management (qh-hsdgdl-032-2)
- Guideline: Management of occupational exposure to blood and body fluids (qh-gdl-321-8:2014)
- [Procedure: Contact Tracing – Public Health Act](#)
- [Post-exposure prophylaxis after non-occupational and occupational exposure to HIV: National guidelines](#)
- [Queensland Health Foodborne illness outbreak management guidelines](#)

APPENDIX 1

Duties of chairperson – outbreak control team

- to declare an outbreak and convene the outbreak control team (OCT)
- to act as Chairperson of the OCT by leading and coordinating the response to the outbreak
- to endorse the outbreak management objectives and response strategy
- if required
 - organise an outbreak control centre and appropriate support resources
 - arrange for medical examination of cases and contacts and the taking of clinical specimens
 - arrange immunisation and/or chemo-prophylaxis for cases, contacts and others at risk
 - notify the local Public Health Unit, Communicable Diseases Branch, CHO and DG of the existence of an outbreak as appropriate
- to ensure communication strategies are developed and implemented (see Section 3.3.4 *Outbreak Control Team – Communication and Reports*)
- prepare and circulate a final report on the outbreak

APPENDIX 2
Sample outbreak log

Insert day and date						
ITEM NO:	DATE:	TIME:	TASK:	MESSAGE:	ACTION:	FILE LOCATION:
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

APPENDIX 3

Checklist for outbreak control team tasks

The principal aim of the outbreak control team (OCT) is to investigate the cause of the outbreak and to implement action to identify and remove the source, prevent further transmission of the communicable disease. The following tasks should be undertaken to deal effectively with an outbreak. The step-by-step approach does not imply that each action must follow the one preceding it. In practice, some steps must be carried out simultaneously and not all steps will be required on every occasion.

Outbreak detection

- consider whether or not cases have the same illness and establish a tentative diagnosis
- determine if there is a real outbreak
- establish a single comprehensive case list
- collect relevant clinical or environmental specimens for laboratory analysis
- conduct unstructured, in-depth interviews of index cases

Outbreak investigation

- identify population at risk
- identify persons posing a risk of further spread
- initiate immediate control measures
- assess the availability of adequate resources to deal with the outbreak
- notify the local Public Health Unit, Chief Health Officer (CHO) or Director General (DG) via the Executive Director of Communicable Diseases Branch (CDB) where the outbreak involves a notifiable disease or gives rise to broader public interest or is of state significance.
- establish a case definition (clinical and/or microbiological)
- search for other cases
- collect and collate data from affected and unaffected persons using a standardised questionnaire
- conduct appropriate environmental investigation including inspection of involved or implicated premises
- describe cases by time, place and person
- form preliminary hypotheses on the cause of the outbreak
- make decision about whether to undertake detailed analytical studies
- calculate attack rates
- confirm factors common to all or most cases
- where available, use whole genome sequencing (WGS) to confirm links and source of outbreak
- test and review hypotheses of the cause
- collect further clinical or environmental specimens for laboratory analysis
- ascertain source and mode of spread.

Outbreak response

- control the source: animal, human or environmental
- control the spread by:
 - a) isolation or exclusion of cases and contacts

- b) treatment of cases to reduce infectious period, where possible (e.g. antivirals)
- c) screening and monitoring of contacts
- d) protection of contacts by immunisation or chemo-prophylaxis
- e) enhanced infection control practices by staff and visitors including environmental cleaning, equipment decontamination procedures and hand hygiene
- f) closure of premises/wards/beds

monitor control measures by continued surveillance for disease

declare the outbreak over.

Communication

daily situation updates to the HHS CE or delegate

consider the best means of communication with colleagues, patients and the public, including the need for an incident room and/or help-lines

notify the local public health unit for communication to the CDB, CHO or DG where the outbreak involves a notifiable disease or gives rise to broader public interest or is of state significance

consider communication through 13HEALTH (13432584)

ensure appropriate information is given to the public, especially those at high risk

ensure accuracy and timeliness

include all those who need to know

engage with the media constructively (refer to Department of Health policy: *Media relations* (qh-pol-423:2015), your local HHS media policy and Appendix 4 *Communication with the Media*)

prepare written final report (refer Section 3.4.5 *Outbreak Control Team – communication and reports* for items to include in the report)

disseminate information on any lessons learnt from managing the outbreak and modify the procedure or standard operating procedures as required.

Evaluation of response

evaluate the management of the outbreak and make recommendations for the future (refer Section 3.5.3 *Evaluation of Outbreak Response* for possible criteria).

APPENDIX 4

Communication with the media

Refer to local or HHS policy about communication with the media. If possible utilise local resources such as guides for liaising with media or contact the HHS local media and communications office. These contacts and policies can usually be found on your HHS intranet page.

- The Chief Executive (CE) of the facility/HHS should endeavour to keep the public and media as fully informed as possible without prejudicing the investigation and without compromising any statutory responsibilities or legal requirements.
- At the first meeting of the OCT arrangements for communicating with the media should be discussed and agreed.
- Media statements should be prepared on behalf of the OCT by a small key group.
- Media statements applicable to community associated outbreaks will normally only be released by the media officer, following approval by the CE. The OCT should nominate a spokesperson if required.
- No member of the OCT will release information to the press without the agreement of the CE.

APPENDIX 5

Resources

Communicable diseases control guidance

<http://disease-control.health.qld.gov.au/>

This page provides a complete list of notifiable conditions accompanied by fact sheets, clinical guidelines, notification/surveillance forms and epidemiological data (where available) for each condition as well as links to more detailed information

List of all Notifiable Conditions and Notifiable Conditions Report Form

<https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/diseases-infection/notifiable-conditions/list>

A list of conditions, notification requirements, notifiable conditions report forms for clinicians and laboratories.

Infection prevention

<https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/diseases-infection/infection-prevention>

Information, guidance and policy and procedure for infection control.

Queensland Health Public Health Unit – Contact details

<https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units>

Centers for Disease Control and Prevention. *Updated Norovirus Outbreak Management and Disease Prevention Guidelines*. 2011.

<https://www.cdc.gov/mmwr/pdf/rr/rr6003.pdf>

NHMRC *Australian Guidelines for the Prevention and Control of Infection in Healthcare*. 2010.

<https://www.nhmrc.gov.au/guidelines-publications/cd33>

Principles of Epidemiology in Public Health Practice, Third Edition: An Introduction to Applied Epidemiology and Biostatistics: Lesson 6, Section 2. 2016.

www.cdc.gov/ophss/csels/dsepd/ss1978/lesson6/section2.html

Queensland Health *Foodborne Illness Outbreak Management Guidelines*. 2006.

<http://disease-control.health.qld.gov.au/Condition/704/gastroenteritis>

iLearn contact tracing learning package

<https://ilearncatalogue.health.qld.gov.au/course/442/cdb-c-contact-tracing-2016>

Guidelines for the Prevention, Control and Public Health Management of Influenza Outbreaks in Residential Care Facilities in Australia

<http://www.health.gov.au/internet/main/publishing.nsf/Content/cdna-flu-guidelines.htm>

Guidelines for the public health management of gastroenteritis outbreaks due to norovirus or suspected viral agents in Australia

<http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-cdna-norovirus.htm>

Management of outbreaks of communicable diseases in healthcare facilities

Prevention Division

CDIM

1 October 2017

APPENDIX 5 Continued

Resources

Guidelines on specific organisms

Queensland Health Guideline: Management of patients with *Clostridium difficile* infection (CDI)
https://www.health.qld.gov.au/_data/assets/pdf_file/0028/147583/gh-gdl-408.pdf

Queensland Health Guideline: Management of multi-resistant organisms
https://www.health.qld.gov.au/_data/assets/pdf_file/0026/444626/multi-resistant-organisms.pdf

Australian Commission on Safety and Quality in Healthcare Recommendations for the control of carbapenemase-producing Enterobacteriaceae (CPE): A guide for acute care health facilities
<https://www.safetyandquality.gov.au/our-work/healthcare-associated-infection/cpe-guide/>

National Tuberculosis Advisory Committee guidelines, publications and position statements
<http://www.health.gov.au/internet/main/publishing.nsf/Content/cdna-ntac-pubs.htm>

APPENDIX 6

Outbreak management checklist

Type of outbreak e.g. MRO, gastroenteritis, respiratory illness:

Date outbreak was reported to infection control: __/__/__ Reported by:

Outbreak location/facility:

Ward(s) affected:

Likely mode of transmission: Contact Airborne Droplet Food-borne

Water-borne Unknown

The outbreak control team (OCT) should ensure the following steps are initiated as soon as possible and if initiated, completed. The order in which the tasks are undertaken may vary.

Action	√ if action indicated	√ if action completed
Do you have an outbreak? i.e. a higher than expected number of cases of infection with the same causative micro-organism (if known in the early stages of the outbreak)	<input type="checkbox"/>	<input type="checkbox"/>
Has the source of the outbreak been identified?	<input type="checkbox"/>	<input type="checkbox"/>
Do you need to convene the outbreak control team? <ul style="list-style-type: none"> refer to section 3.3 of the Guideline <i>Management of outbreaks of communicable diseases in healthcare facilities</i> Factors to be considered in the decision to convene an OCT include: <ul style="list-style-type: none"> the type of communicable disease involved <ul style="list-style-type: none"> In the case of possible healthcare associated transmission of a blood borne virus an incident management team should be set up. the number of confirmed or suspected cases <ul style="list-style-type: none"> large numbers of cases two or more cases of a notifiable condition in the same ward/area, within an incubation period the size and nature of the population at risk the likely source potential impact on service delivery <ul style="list-style-type: none"> 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, department, facility or HHS 	<input type="checkbox"/>	<input type="checkbox"/>

Action	√ if action indicated	√ if action completed
Inform staff <ul style="list-style-type: none"> inform all staff that a possible outbreak is occurring including advice regarding infection control <ul style="list-style-type: none"> include supply staff and operational staff in correspondence consider the need to inform visitors and patients inform senior nursing and medical staff on duty inform Pathology Queensland of any additional specimen requirements 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Implement infection control measures <ul style="list-style-type: none"> ensure sufficient supplies of appropriate personnel protective equipment (PPE) is available in the affected areas e.g. mask, gloves, gowns, aprons, eyewear, as indicated by mode of transmission isolate affected patients in single rooms or cohort display signage regarding necessary additional precautions reinforce hand hygiene practices as appropriate <ul style="list-style-type: none"> alcohol-based hand hygiene products may not be suitable for certain micro-organisms e.g. <i>Clostridium difficile</i> 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Stop or limit further spread <ul style="list-style-type: none"> 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 frequencies 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 patients, visitors and staff 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Document the outbreak <ul style="list-style-type: none"> list all know cases and update information daily include details of affected patients and staff include details of onset date of symptoms/diagnosis for each case 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Notify authorities (as per OCT) if applicable <ul style="list-style-type: none"> public health notified: date: __/__/__ Communicable Disease Branch notified: date: __/__/__ Chief Health Officer notified: date: __/__/__ Director General notified: date: __/__/__ 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Collect specimens <ul style="list-style-type: none"> observe standard and transmission based precautions when collecting relevant specimens collect appropriate specimens - liaise with infectious diseases physician or microbiology to determine collection method and specimen types ensure specimens are labelled appropriately 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Review and up-date outbreak management plan <ul style="list-style-type: none"> regularly during the outbreak following resolution of outbreak 	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Outbreak management report <ul style="list-style-type: none"> complete outbreak management report highlighting recommendations for preventing future occurrences 	<input type="checkbox"/>	<input type="checkbox"/>

Definitions

	Definition
Case definition	Is a standard set of criteria to be used in outbreak investigation to decide who is a case and who is not. 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 and Deputy Director General
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 whenever disease levels exceed that expected in a given community/population over a specific timeframe.
PHU	Public Health Unit
Standard precautions	They are the basic level of infection control precautions which are to be used, as a minimum, in the care of all patients.
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.

Version Control

Version	Date	Comments
2	19 th March 2012	
3	March 2016	
4	15 September 2017	Fixed links, updated resources, added to new template, changes relating to Health Service Directives, overall review and update to guideline