Government of **Western Australia**
Department of **Health**
Public and Aboriginal Health Division

Communicable Disease Control Directorate guideline

Public health management of notifiable enteric diseases

Guideline 0020/March 2024

These guidelines have been released by the Communicable Disease Control Directorate, Public and Aboriginal Health Division, Western Australian Department of Health, to provide consistent and evidence informed advice to agencies involved in the prevention of infections and management of communicable diseases in Western Australia.

ACKNOWLEDGEMENT OF COUNTRY AND PEOPLE

The Communicable Disease Control Directorate (CDCD) at the Department of Health acknowledges the Aboriginal people of the many traditional lands and language groups of Western Australia. We acknowledge the wisdom of Aboriginal Elders both past and present and pay respect to Aboriginal communities of today.

Contents

1. Definitions / acronyms

Term	Definition
Case	A person diagnosed with an infectious disease.
Contact	A person who has been exposed to a case and is at risk of acquiring the infection from that case. They are generally asymptomatic.
Diarrhoea	Is the onset of three or more loose or watery bowel movements in a 24-hour period (or more frequent than usual).
Facility	Includes residential or aged care facilities, boarding schools and childcare centres.
High-risk person	A person who if infected, is at higher risk of transmitting a pathogen, including: • Someone not able to maintain good toilet hygiene e.g. children <5 years of age who attend childcare, kindergarten and pre-school **OR** people who are faecally incontinent. • Someone who works in a high risk setting e.g. food handlers, health care workers with direct patient care, carers for the elderly or children <5 years of age.
High-risk case	A high-risk person who has an infectious gastroenteritis illness that is potentially transmissible, that may or may not be diagnosed.
High-risk contact (Typhoid/ Paratyphoid fever only)	A contact who is also a high-risk person and has a similar exposure history to the case including: • travelled overseas with the case in the month prior to onset of illness in the case OR

	• if the case acquired the infection in Australia, contacts include household members or others who may have consumed an implicated food.
Low-risk case or contact	A person who does not fulfil the 'high-risk' definition.

[1] Children in other settings may be considered a high-risk case or contact if they are not toilet trained.

2. Purpose

The purpose of this document is to describe the roles, responsibilities and recommended actions to be undertaken for the public health management of notifiable enteric diseases by Public Health Units (PHU) and the OzFoodNet (OFN) team, Communicable Disease Control Directorate (CDCD). The OFN team conducts surveillance and investigation of enteric diseases in WA.

This guideline supersedes the "Operational Directive 0490/14: Guidelines for Public health follow-up of sporadic enteric disease notifications".

3. Introduction / background

Gastroenteritis, also known as **infectious diarrhea** or simply as **gastro**, is an inflammation of the gastrointestinal tract including the stomach and intestine. Symptoms may include diarrhea, vomiting, fever and abdominal pain. Enteric diseases are a group of diseases associated with ingestion of food/water contaminated by microorganisms or toxins that cause gastroenteritis. Microorganisms include bacteria (e.g. *Salmonella*, *Campylobacter*, *Shigella*), viruses (e.g. norovirus, rotavirus, hepatitis A) and parasites (e.g. *Giardia*, *Cryptosporidium*). Some enteric diseases can cause more severe illness resulting in hospitalisations, and susceptible (e.g. elderly, immunocompromised) individuals have higher levels of associated morbidity and mortality.

The follow up of infectious diseases is important to identify the source of illness, and interrupt transmission to prevent further cases.

Enteric infections in the community appear to be mostly sporadic cases, but can occur as small clusters of cases, or as point source outbreaks that may vary in size and last from hours to weeks, or even months. For most sporadic cases, the vehicle of infection remains unknown even if they are investigated.

The need to follow up an enteric infection depends on a number of factors including:

- infectiousness of the pathogen;
- how long a person can remain infectious;
- the potential severity of the infection;
- the mode of transmission of the pathogen;
- ability of the infected person to undertake appropriate hygiene precautions; and
- whether the infected person or contact works or attends a workplace/facility which can facilitate transmission such as a food handler, healthcare worker or childcare.

The investigation of sporadic cases allows for:

- determination of the potential source of infection to prevent further cases;
- prevention of the spread of illness to others;

- identification of other cases amongst household and other close contacts of the index case;
- identification of disease amongst high-risk occupations, for example, food handlers, health care workers and childcare workers and possible exclusion from work;
- provision of education for the case, doctor, other contacts and staff at the affected premises; and
- identification of broader health promotion opportunities to inform and educate the community about preventing the spread of infectious diseases.

Not all cases of enteric disease require follow up. For instance, most cases of salmonellosis and campylobacteriosis are considered sporadic infections and surveillance is conducted to identify outbreaks. Single cases of important diseases that can cause serious illness are routinely followed up, which includes Typhoid fever and listeriosis.

Cases of enteric disease linked to clusters and outbreaks often reside in multiple health regions and/or jurisdictions and multiple agencies can be involved in the investigation.

4. Roles and responsibilities

Table 1 summarises the required public health management for sporadic cases of notifiable enteric diseases and their contacts, including the responsible entity and the response timeframe.

Table 1: Public Health management of notifiable sporadic enteric diseases

Disease[1] *(incubation period)*	**Public health follow-up for cases**	**Public health follow-up for contacts**	**Responsible entity[2,3]**	**Response time**
Botulism[1] *(Dependent on form of botulism)*	Identify possible source.	Identify people who have eaten source food & are at risk of developing disease.	OFN	On day of notification
Campylobacter infection *(1-10 days)*	PHU follow up not usually required. Generally only clusters or outbreaks investigated, by OFN with assistance from PHU as required.			
Cholera[1] (*Vibrio cholerae O1/O139)* presumptive toxin positive *(Hours to 5 days)*	Determine place of acquisition. If Australian-acquired, refer to OFN to identify risk factors. Ensure enteric precautions, exclusions and clearance specimens for high risk cases[4].	Provide advice/ information as required.	PHU[3]	On day of notification
Cryptosporidium infection *(1-12 days)*	PHU follow up not usually required. Generally only clusters or outbreaks investigated by OFN with assistance from PHU as required.			
Haemolytic uraemic syndrome[1] caused by enteric infections *(N/A)*	Identify possible source.	Provide advice/ information as required.	OFN	≤ 1 working day of notification
Hepatitis A[1] *(15-50 days)*	See Hepatitis A Series of National Guidelines (SoNG). . If Australian-acquired, refer to OFN to identify risk factors.		PHU[3]	≤ 1 working day of notification
Hepatitis E[1] *(15-64 days)*	Determine place of acquisition. If Australian-acquired, refer to OFN to identify risk factors. Ensure enteric precautions and exclusions for high risk cases[3].	Provide advice/ information as required.	PHU[3]	≤ 2 working days of notification
Listeria infection[1] *(3-70 days)*	Identify possible source.	Provide advice/ information as required.	OFN	≤ 1 working day of notification

Disease[1] (*incubation period*)	Public health follow-up for cases	Public health follow-up for contacts	Responsible entity[2,3]	Response time
Multi-drug resistant *Shigella*[1] & *Salmonella* species	Determine place of acquisition. If Australian-acquired, identify risk factors. Ensure enteric precautions and exclusions[2].	Provide advice/ information as required.	OFN	≤ 2 working days of notification
Paratyphoid fever[1] (*Salmonella* Paratyphi) *(1-10 days)*	Determine place of acquisition. If Australian-acquired, refer to OFN to identify risk factors. Ensure enteric precautions, exclusions and clearance specimens for high risk cases[4].	Ensure enteric precautions, exclusions and screening specimens for high risk contacts[4] For low risk contacts provide information only.	PHU[3]	On day of notification
Rotavirus infection *(1-3 days)*	Determine the vaccination status of the case as per Australian Immunisation Handbook. Generally only clusters or outbreaks are investigated by PHU with assistance from OFN as required.			
Salmonella Enteritidis infection *(1-7 days)*	Determine place of acquisition. If Australian-acquired, identify risk factors. Ensure enteric precautions and exclusions[4].	Provide advice/ information as required.	OFN	≤ 7 working days of notification
Salmonella species, not listed above *(1-7 days)*	Generally only clusters or outbreaks are investigated, by OFN with assistance from PHU as required.			
Shiga toxin *E. coli* (STEC) infection *(2-10 days)*	Generally only clusters or outbreaks are investigated, by OFN with assistance from PHU as required.			
Shigella dysenteriae infection[1] *(1-4 days)*	Determine place of acquisition. If Australian-acquired, refer to OFN to identify risk factors. Ensure enteric precautions, exclusions and clearance specimens for high risk cases[4].	Provide advice/ information as required.	PHU[3]	≤ 1 working day of notification
Shigella species, not listed above *(1-4 days)*	Generally only clusters or outbreaks are investigated and these are normally due to person-to-person transmission. OFN will refer these to PHU for follow-up and response.			
Typhoid fever[1] (*Salmonella* Typhi) *(3-60 days)*	Determine place of acquisition. If Australian-acquired, refer to OFN to identify risk factors. Ensure enteric precautions, exclusions and clearance specimens for high risk cases[4].	Ensure enteric precautions, exclusions and screening specimens for high risk contacts[3] For low risk contacts provide information only.	PHU[3]	≤ 1 working day of notification
Vibrio parahaemolyticus infection *(4-96 hours)*	Determine place of acquisition. If Australian-acquired, identify risk factors. Ensure enteric precautions and exclusions[3].	Provide advice/ information as required.	OFN	≤ 7 working days of notification
Yersinia infection *(1-10 days)*	Generally only clusters or outbreaks are investigated, by OFN with assistance from PHU as required.			

Notes:

[1] Each case requires a completed case investigation form. Cases of other diseases generally only require a case investigation form if a cluster or outbreak is being investigated.

[2]The responsible agency is required to confirm that the case meets the case definition for notification, in accordance with the Case definitions of notifiable infectious diseases and related conditions.

[3]If case is locally acquired refer to OFN by email (OzFoodNetWA@health.wa.gov.au) for further investigation.

[4]refer to *Exclusion guidelines for people with enteric infections and their contacts*. See definitions for high risk cases and contacts.

4.1 Public health units and OzFoodNet team

The following points provide general guidance regarding roles and responsibilities for the public health management of enteric diseases:

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- PHUs monitor the Western Australian Notifiable Infectious Disease Database (WANIDD) to identify infectious diseases within their region and respond accordingly including notifying OFN as required.
- The PHU covering the health region in which the case resides undertakes case follow-up according to Table 1. For non-WA residents diagnosed in Western Australia, the public health region where the requesting clinician is based, undertakes follow-up.
- The responsible agency (PHU or OFN, as indicated in Table 1) confirms that the case meets the case definition for notification.
- For important diseases such as Typhoid fever, Paratyphoid fever, Cholera, hepatitis A and E, PHUs conduct the initial follow up including determining place of acquisition. If evidence suggests these infections were locally acquired, then PHUs should report these cases to OFN by email (OzfoodnetWA@health.wa.gov.au) or phone. OFN and/or PHU staff will investigate, as appropriate.
- The responsible agency implements appropriate public health actions for case and contacts, in collaboration with the notifying clinician/initial diagnosing doctor, and local government officers via OFN, as appropriate.

4.2 After hours

- CDCD is responsible for after-hours follow up should an urgent response be required.

4.3 Contacting cases, case investigation forms, and fact sheets

- Prior to proceeding with case follow-up, the responsible agency should advise the notifying practitioner of their intention to contact the case. This is necessary as electronic laboratory notification to WANIDD often occurs before the notifying practitioner becomes aware of the positive result. Hence, the patient may not have been informed of their diagnosis. If the notifying practitioner or appropriate delegate (e.g. practice nurse) is unavailable, the responsible agency should continue with the follow-up investigation in the interest of minimising disease transmission.
- Case investigation forms used to interview enteric disease cases as part of the follow up (see Table 1) can be provided by OFN (see list in section 7).
- Infection-specific information can be provided to cases and contacts including the generic ‘Gastroenteritis’/disease-specific fact sheet. Fact sheets are available from the Healthy WA website, in the section Health conditions A to Z.

4.4 WANIDD documentation

- The responsible agency undertaking the public health follow-up, updates WANIDD with information collected, including case details, date of onset, hospitalisation, travel history, clinical history, risk factors, whether cases or contacts are high risk and when follow-up is complete. It is important that agencies share information as required via usual communication channels.

4.5 Outbreaks

- OFN conducts surveillance of enteric diseases and refers possible clusters/outbreaks to the responsible agency for follow-up.
- Person-to-person enteric disease outbreaks are usually associated with facilities and generally followed-up by PHUs with support from OFN as required.

- Possible food-borne, water-borne and animal-to-person outbreaks are usually investigated by OFN with support from PHUs as required.

5. Additional follow-up for important enteric diseases

5.1 Cholera, *Shigella dysenteriae*, Typhoid and Paratyphoid fever

Cholera definition

The *Vibrio cholerae* isolate must be either serogroup O1 or O139 and toxin positive to meet the case definition. Toxin test results can be delayed so case follow-up should begin when the serogrouping results are available. PHUs conduct the follow up (e.g. exclusion advice, clearance) and determine the place of acquisition. For locally acquired infections, OFN will assisting in identifying risk factors for transmission. Information should be provided to the infected person regarding general exclusions and precautions to undertake following notification of a *Vibrio cholerae* and while waiting for serogroup results.

Case follow-up

- Interview the case, carer or initial diagnosing doctor using the “Typhoid / Paratyphoid / Cholera / *Shigella dysenteriae* case investigation” forms.
- High-risk cases of Cholera, *S. dysenteriae*, Typhoid and Paratyphoid Fever require clearance specimens. To assist with collection of clearance specimens, use the “Typhoid / Paratyphoid specimen collection for clearance” letter or the “Cholera /*Shigella dysenteriae* specimen collection for clearance” letter.
- Refer to the Guidelines Exclusion of People with Enteric Diseases and their Contacts.

Contact follow-up

- High risk contacts of Typhoid and Paratyphoid cases require screening specimens to ensure they are not infected. For these high-risk contacts, use the “Typhoid/Paratyphoid high risk contact letter” to assist with collection of screening specimens.
- To assist with public health management of low-risk contacts of Typhoid and Paratyphoid and any contacts of cholera and *Shigella dysenteriae* infection, use the “Typhoid / Paratyphoid / Cholera / *Shigella dysenteriae* letter (high/low-risk contacts)”.

5.2 Haemolytic Uraemic Syndrome (HUS)

- Haemolytic Uraemic Syndrome (HUS) can only be clinician-notified as the case definition is based solely on clinical evidence. OFN will contact the doctor to obtain clinical history of the case, including onset date and symptoms and confirm that the case meets the case definition. Follow-up is performed according to standard operating procedures.

5.3 Hepatitis A and Hepatitis E

- PHUs follow up all cases which includes interviewing the case with the case investigation form and determine place of acquisition. For hepatitis A cases, follow up should be guided by the Series of National Guidelines.
- If the infection is locally-acquired or is part of an outbreak, the PHU will first follow-up to prevent ongoing transmission. OFN will also assist to identify possible risk factors for illness.

5.4 Multi-drug resistant (MDR) *Salmonella* & *Shigella* species

- MDR *Salmonella* and *Shigella* are generally notified by the laboratory directly to OFN, who will conduct follow up.
- OFN informs the case's initial diagnosing doctor of the MDR result and determines place of acquisition.
- If the case has not travelled during the incubation period, the case is interviewed using the appropriate *Salmonella* or *Shigella* case investigation form.

6. Relevant Legislation

- *Public Health Act 2016*

7. Additional lesources

The following questionnaires associated with this guideline are available to PHUs on request from OFN.

- *Campylobacter* questionnaire
- Cholera /*Shigella dysenteriae* specimen collection for clearance letter (high-risk cases)
- *Cryptosporidium* questionnaire
- Hepatitis A questionnaire
- Hepatitis E questionnaire
- Rotavirus questionnaire
- *Salmonella Enteritidis* questionnaire
- *Salmonella* questionnaire
- Shiga toxin-producing *Escherichia coli* / Haemolytic uraemic syndrome questionnaire
- *Shigella* questionnaire
- Typhoid / Paratyphoid /Cholera / *Shigella dysenteriae* questionnaire
- Typhoid / Paratyphoid specimen collection for clearance letter (high-risk cases)
- Typhoid / Paratyphoid / Cholera / *Shigella dysenteriae* letter (high/low-risk contacts)
- *Vibrio parahaemolyticus* questionnaire
- *Yersinia* questionnaire

8. Guideline contact

Enquiries relating to this Guideline may be directed to:

Directorate: Communicable Disease Control Directorate

Email: cdcd.directorate@health.wa.gov.au

9. Document Control

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0020	V.1.	22/03/2024	March 2026	Original version

10. Approval

Approved by	Dr Paul Armstrong, Director Communicable Disease Control Directorate, Department of Health
Approval date	22/03/2024

11. References / bibliography

12. Western Australian case definitions of notifiable infectious diseases and related conditions
13. Australian Series of National Guidelines for notifiable infectious diseases
14. Guidelines Exclusion of People with Enteric Diseases and their Contacts.

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