



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

Communicable Disease Control Directorate Guidelines

Guidance for the management of multi-drug resistant (MDR) *Shigella* infections ('Shigellosis') in Western Australia

Guideline 0026/October 2024

health.wa.gov.au

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 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.

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1. Definitions / Acronyms

Term	Definition
Diarrhoea	Is the onset of three or more loose or watery bowel movements in a 24 hour period (or more frequent than usual).
Shigellosis	An infection of the digestive tract caused by <i>Shigella</i> bacteria, which are highly infectious and transmitted mainly via the faecal-oral route.

2. Purpose

- These guidelines outline management recommendations for multi-drug resistant (MDR) shigellosis in Western Australia (WA).
- For non-MDR shigellosis cases in metropolitan and regional areas of WA (i.e. non-remote areas), refer to the Therapeutic Guidelines: Antibiotic.
- For non-MDR shigellosis cases in remote WA¹, refer to [Guidance for the management of shigellosis in remote populations of Western Australia](#).

3. Introduction/Background

- *Shigellosis* is most commonly acquired overseas in countries where *Shigella* is prevalent, however local acquisition can also occur.
- In Australia, there has been an increase in multi-drug resistant (MDR) *Shigella* strains, particularly among men who have sex with men (MSM).
- In WA, MDR *Shigella* strains have been increasing since 2018 in metropolitan and regional areas, with extensively-drug resistant (XDR) *Shigella* strains emerging from 2023.
- MDR *Shigella* strains are defined as those that are resistant to three or more antibiotic classes.
- XDR strains are resistant to all antibiotics usually recommended for the treatment of *Shigella*, including penicillins, fluoroquinolones, cotrimoxazole, macrolides and 3rd generation cephalosporins (e.g. ceftriaxone). However, they are usually susceptible to carbapenems (e.g. meropenem, ertapenem).
- *Shigella sonnei* biotype g is the most common emerging XDR strain, with most cases occurring in MSM. There are genomic similarities among *Shigella sonnei* biotype g strains detected in WA and other States/Territories, suggesting local transmission in Australia.

4. Requirements (of the Guideline)

4.1 Clinical management

- In patients with diarrhoea and a MSM exposure where *Shigella* is suspected:
 - Request stool culture and full antibiotic susceptibility testing (including azithromycin and ceftriaxone sensitivities). Include the symptoms, MSM exposure and likely place of acquisition on the request form.
 - Stool culture is required as PCR testing cannot detect antibiotic resistance.
 - Rectal swabs are suboptimal for isolating gastrointestinal pathogens and should not be ordered for this purpose.

¹ Remote areas include the Goldfields, Pilbara, Kimberley and remote areas of the Midwest. See [map](#).

- Most people with a diarrheal illness require only supportive care and fluid replacement. Antimicrobials are not always recommended for mild shigellosis in the absence of risk factors.
- Where the MDR/XDR status of the *Shigella* is unknown in a patient who reports MSM exposure and has ongoing diarrhoea that may require treatment, then discuss treatment options with an infectious diseases physician or clinical microbiologist.
- If MDR or XDR *Shigella* is confirmed, to reduce risk of ongoing transmission and severe infection, it is recommended that clinicians:
 - recall the patient immediately to assess ongoing symptoms, role of treatment, and ensure clinical recovery
 - seek advice on treatment options if the patient is still symptomatic by contacting an infectious diseases physician or clinical microbiologist from the diagnosing laboratory or PathWest
 - provide advice on preventing transmission (see below), including recommending that sexual and household contacts be informed of their possible exposure to *Shigella*. Symptomatic contacts should have a stool sample collected for testing.
- Following clinical recovery, evidence of clearance is not routinely required, but there could be circumstances when the treating clinician or public health officer may ask for clearance specimens. See [Exclusion of people with enteric infections and their contacts](#).

4.2 Advice for patients on preventing transmission

- **Wash hands often** and thoroughly, especially after toileting and before eating.
- **Don't have sex while symptomatic** and for **7 days after** diarrhoea has resolved.
- **Don't prepare food or drink for others** until **48 hours** after diarrhoea has resolved.
- **Don't share** eating utensils, linen or towels and take extra precautions when providing personal care for others.
- **Don't swim** in a pool until **48 hours** after diarrhoea has resolved.
- **Don't attend work or school** for at least 24 hours after diarrhoea has resolved, or for 48 hours for those who work in or attend healthcare, residential care or childcare settings, or who prepare or handle food.

4.3 Public health management

- Patients diagnosed with MDR or XDR shigellosis are routinely followed up by public health officers to determine risk factors for illness and to reiterate advice on preventing transmission to others.
- For assistance with public health case management, contact your local [public health unit](#).

- Consumer fact sheet for *Shigella* infection and dysentery
https://www.healthywa.wa.gov.au/Articles/S_T/Shigella-infection-and-dysentery

5. Relevant Legislation

- [Public Health Act 2016](#)

6. Additional Resources

- WA public health unit contact details:
https://healthywa.wa.gov.au/Articles/A_E/Contact-details-for-population-public-health-units
- WA notification of infectious diseases and related conditions.
https://ww2.health.wa.gov.au/Articles/N_R/Notification-of-infectious-diseases-and-related-conditions
- For fact sheets about various communicable diseases visit the Healthy WA website at: <https://healthywa.wa.gov.au/Health-conditions/Health-conditions-A-to-Z>

7. Guideline Contact

Enquiries relating to this guideline may be directed to:

Directorate: Communicable Disease Control Directorate

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

8. Document Control

Guideline number	Version	Published	Review Date	Amendments
0026	V.1.	22/10/2024	01/01/2027	Original version

9. Approval

These guidelines were endorsed by the Western Australian Multi-Resistant Organism Expert Advisory Group (WAMRO).

Approved by	Dr Jelena Maticevic, A/Director, Communicable Disease Control Directorate, Department of Health	
Approval date	22/10/2024	

10. References / Bibliography

- *Shigella flexneri* 2b in the Northern Territory in 2017. [The Northern Territory Disease Control Bulletin](#)
- New South Wales: MDR shigellosis update 2023. [GP-MDR-Shigella-update-20230331.pdf \(nsw.gov.au\)](#)
- Victoria: Shigellosis-management recommendations updated 2024. [Shigellosis \(health.vic.gov.au\)](#)
- National Health and Medical Research Council publication: infectious diseases in early childhood and education and care services, 5th edition.
 - <https://www.nhmrc.gov.au/about-us/publications/staying-healthy-preventing-infectious-diseases-early-childhood-education-and-care-services>
- Therapeutic Guidelines: <https://www.tg.org.au/>
- World Health Organization shigellosis treatment guidelines: [Guidelines for the control of shigellosis, including epidemics due to *Shigella dysenteriae* type 1 \(who.int\)](#)
- Western Australian Department of Health [Enteric Infection Reports](#).

Produced by the Department of Health with representatives from WA Public Health Units and WAMRO clinicians, 2024

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