

# Communicable Disease Control Directorate Guidelines

# Guidance for the management of Shigella infections ('Shigellosis') in remote populations of Western Australia

Guideline 0025/October 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 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.

Guideline: Management of shigellosis in remote regions of Western Australia

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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 shigellosis in remote populations in Western Australia (WA).
- For management of multi-drug resistant shigellosis cases in WA, refer to the <u>Guidance</u> for the management of multi-drug resistant (MDR) <u>Shigella</u> infections ('Shigellosis') in <u>Western Australia</u>. For non-MDR shigellosis cases in metropolitan and regional areas of WA (i.e. non-remote areas), refer to the Therapeutic Guidelines: Antibiotic.

#### 3. Introduction/Background

- Shigella is a highly infectious cause of bacterial gastroenteritis with ongoing transmission of Shigella infections (shigellosis) in <u>remote areas of WA</u>: Goldfields, Pilbara, Kimberley and remote areas of the Midwest.
- The highest rates of shigellosis in WA also occur in remote areas and Aboriginal people have the highest rates in these regions. It is likely that many cases are not diagnosed.
- Symptoms of shigellosis include diarrhoea (with or without blood or mucous), fever, vomiting and abdominal cramps.
- After symptoms resolve, Shigella bacteria can be shed in the stools for up to 4 weeks. This poses a high risk for ongoing person-to-person transmission, particularly where there is crowding, hygiene concerns and poor sanitation.
- Most Shigella strains infecting people living in remote communities are non-multi-drug resistant (non-MDR) and can be treated with oral antibiotics.

# 4. Requirements (of the Guideline)

#### 4.1 Clinical management

- If bacterial gastroenteritis is suspected, request stool microscopy, culture and full sensitivities.
- Antibiotic resistance cannot be determined on faecal polymerase chain reaction (PCR) testing alone. Stool culture is required.
- Rectal swabs are suboptimal specimens for isolating gastrointestinal pathogens and should not be ordered for this purpose.
- To prevent ongoing transmission and reduce the risk of severe infection, antibiotic treatment is recommended for confirmed shigellosis in patients living in remote areas of WA.
- Household contacts of confirmed cases from remote Aboriginal communities who
  present with diarrhoea should be tested and treated with empirical antibiotics as below.

- While waiting results of susceptibility testing, empiric treatment options for mild to moderate shigellosis disease in confirmed cases and symptomatic household contacts include:
  - First line of treatment: Ciprofloxacin 500mg (child: 12.5mg/kg/dose up to 500mg) orally, 12-hourly for 5 days.
- Second line of treatment: Trimethoprim/sulfamethoxazole 160/800mg (child 1 month or older 4/20mg/kg up to 160/800mg) orally, 12-hourly for 5 days.
- Modify therapy based on results of susceptibility testing.
- For severe shigellosis requiring intravenous antibiotics, commence ceftriaxone 2g (child 1 month or older: 50mg/kg up to 2g) intravenously, daily. Switch to oral antibiotics with clinical improvement, as per the culture sensitivity report, to complete five days of total therapy.
- Following treatment, clearance with repeat specimens is not routinely required for non-MDR shigellosis. See "Exclusion of people with enteric infections and their contacts".
- Discuss transmission prevention with patient and/or carer.
- Clinicians may seek advice from an infectious diseases physician or clinical microbiologist, if required.

### 4.2 Advice for patients on preventing transmission

- Wash hands often and thoroughly, especially after using the bathroom, changing nappies and before eating.
- Don't prepare food or drink for others until 48 hours after diarrhoea has stopped.
- 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 stopped.
- Do not go to work or school for at least 24 hours after the diarrhoea has stopped, or 48 hours for those who work in or attend healthcare, residential care or childcare settings, or who prepare or handle food.
- Sexually active people should not have sex until they are no longer infectious (usually 7 days after symptoms resolve).

#### 4.3 More information

- For further information or to report a possible shigellosis outbreak, contact the local public health unit.
- Consumer fact sheet for Shigella infection and dysentery
   <a href="https://www.healthywa.wa.gov.au/Articles/S">https://www.healthywa.wa.gov.au/Articles/S</a> T/Shigella-infection-and-dysentery

#### 5. Relevant Legislation

• Public Health Act 2016

#### 6. Additional Resources

- WA public health unit contact details: <a href="https://healthywa.wa.gov.au/Articles/A\_E/Contact-details-for-population-public-health-units">https://healthywa.wa.gov.au/Articles/A\_E/Contact-details-for-population-public-health-units</a>
- WA notification of infectious diseases and related conditions.
   <a href="https://ww2.health.wa.gov.au/Articles/N\_R/Notification-of-infectious-diseases-and-related-conditions">https://ww2.health.wa.gov.au/Articles/N\_R/Notification-of-infectious-diseases-and-related-conditions</a>
- 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: <a href="mailto:cdcd.directorate@health.wa.gov.au">cdcd.directorate@health.wa.gov.au</a>

#### 8. Document Control

Guideline Number	Version	Published	Review Date	Amendments
0025	V.1.	25/10/2024	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	24/10/2024			

#### 10. References / Bibliography

- Shigella flexneri 2b in the Northern Territory in 2017. <u>The Northern Territory Disease</u> Control Bulletin
- Victoria: Shigellosis-management recommendations updated 2024. <u>Shigellosis</u> (health.vic.gov.au)
- National Health and Medical Research Council publication: infectious diseases in early childhood and education and care services, 5th edition.
  - <a href="https://www.nhmrc.gov.au/about-us/publications/staying-healthy-preventing-infectious-diseases-early-childhood-education-and-care-services">https://www.nhmrc.gov.au/about-us/publications/staying-healthy-preventing-infectious-diseases-early-childhood-education-and-care-services</a>
- Therapeutic Guidelines: https://www.tg.org.au/
- World Health Organization shigellosis treatment guidelines: <u>Guidelines for the control</u> of shigellosis, including epidemics due to <u>Shigella dysenteriae</u> 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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