

IN THIS ISSUE: SHIGELLOSIS OUTBREAK

Initial Look: Shigellosis Outbreak in Washoe County and Recommendations for Prevention and Control

Introduction

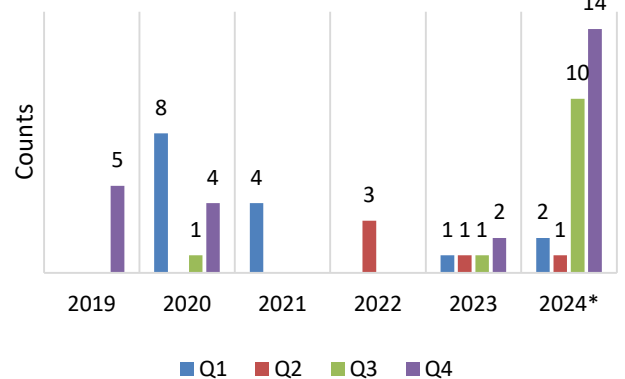
Northern Nevada Public Health (NNPH) declared a shigellosis outbreak associated with those experiencing homelessness. Shigellosis is caused by the bacterium *Shigella*. There are four species of *Shigella*, with *sonnei* and *flexneri* being the most common in the United States to cause gastrointestinal illness.^{1,2} The primary mode of transmission is the fecal-oral route and typically occurs with the ingestion of contaminated food or water, contact with infected fecal matter, or sexual contact with a person who has shigellosis.¹ Risk of transmission can be increased for young children, international travelers, gay and bisexual men and other men who have sex with men (MSM), people with weakened immune systems, and people experiencing homelessness.² For those experiencing homelessness, risk is increased due to overcrowded living spaces, exposure to contaminated food and water, and limited or no access to hygiene or sanitization services.³

The incubation period ranges from 1 to 7 days. Symptoms can include loose, watery stools, hematochezia (bloody stool), fever, lethargy, tenesmus (urge to pass stool when bowels are empty), and abdominal cramping. Others may experience minimal to no clinical symptoms.¹

Epidemiology

In the United States, there are an estimated 450,000 cases of shigellosis each year.⁴ In 2024 (to date), Nevada has had a total of 153 cases.⁵ Of those cases, Washoe County (WC) has 27 cases reported to NNPH. Compared to previous years, 2024 has shown a surge in cases (see figure 1). Due to the increase in reported cases with laboratory and epidemiological linkage, NNPH declared an outbreak of Shigellosis on December 19, 2024.⁶

Figure 1: Number of Shigellosis Cases Reported by Quarter, Washoe County, 2019-2024



*2024 Q3 includes a family cluster of shigellosis that is not part of the current outbreak.

Source: Northern Nevada Public Health

Initial demographic analysis of reported cases has identified the outbreak is mainly affecting WC residents experiencing homelessness (71.4%). Of those diagnosed with shigellosis, 64.3% are male and 35.7% are female. The median age is 49 years old. The epidemiology curve (figure 2) shows that cases have been consistently reported to NNPH since October 27, 2024.⁶

Because persons experiencing symptoms must seek medical care to receive laboratory testing for diagnostic purposes, the number of cases in the community is expected to be higher than reported. The symptoms associated with Shigellosis are also associated with other infectious agents, so medical providers are encouraged to order laboratory testing to distinguish cause and provide appropriate treatment. Although most of the WC cases are associated with homelessness, it is important to note that not all cases are among this group.

Figure 2: Epidemiology Curve of Shigellosis Cases Reported by Housing Status, Washoe County, 10/27/24-12/18/24



Source: Northern Nevada Public Health

Prevention⁷

- Hand Hygiene:** wash hands frequently with soap and water for at least 20 seconds after using the toilet, changing diapers, before preparing food, and after caring for a sick person.
- Avoid food preparation and recreational water-** Do not prepare or share food with others and avoid swimming in pools, lakes, or other recreational water sources while symptomatic and for at least two weeks after recovery.
- Safe sexual practices-** refrain from sexual activity (vaginal, anal, oral) during illness and for two weeks following recovery. Safe sexual practices include using barriers like condoms or dental dams and washing hands after touching used barriers. Sex toys should be washed before and after use with soap and water.
- Stay home from work and school-** avoid work (especially in the food service, healthcare, or childcare), school, or daycare until cleared by public health authorities.

Recommendations for Providers

- Suspect Shigellosis in Unhoused Populations:** If patients who are experiencing homelessness present with acute gastrointestinal symptoms like diarrhea, abdominal cramps, and fever, consider shigellosis as a potential cause.
- Test for Common Pathogens:** For individuals showing symptoms of gastrointestinal illness,

test for common pathogens, including Shigella, Salmonella, and E. coli. If Shigella is identified, particularly through culture independent methods, request further culture and susceptibility testing through the Nevada State Public Health Laboratory (NSPHL).

For patients diagnosed with shigella, send the bacterial isolated to NSPHL for further testing to support the outbreak investigation.

- Recommend Testing for Other Bloodborne Pathogens:** Due to common transmission mode being associated with high-risk activities (i.e., MSM, Intravenous Drug Use), it is recommended to test for other diseases such as hepatitis C, syphilis, HIV, and other sexually transmitted diseases.
- Provide Appropriate Treatment:** Administer the recommended treatment based on the patient's clinical condition. Keep in mind that data on antimicrobial resistance is limited during the current outbreak, so please follow up on susceptibility testing to confirm that the treatment remains effective.
- Report Cases to Public Health Authorities:** Nevada Revised statutes require providers to report cases of Shigella to the Northern Nevada Public Health Communicable Disease Program. This can be done via secure fax to 775-328-3764 or calling 775-328-6052. Please send any questions to epicenter@nnph.org.
- Educate Patients on Preventing the Spread of Infection⁷:** Individuals with suspected or confirmed shigellosis should be aware of how to prevent transmission of the infection, particularly during the contagious period (while experiencing diarrhea and up to two weeks after symptoms subside). **See Recommendations for Prevention for additional information.**

Reporting

The list of reportable communicable diseases and reporting forms can be found at:

<http://tinyurl.com/WashoeDiseaseReporting>

Report communicable diseases to Northern Nevada Public Health. To report a communicable disease, please call 775-328-2447 or fax your report to the NNPH at 775-328-3764.

Acknowledgement

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References

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Edited by: David W. Kimberlin, MD, FAAP, Ritu Banerjee, MD, PhD, FAAP, Elizabeth D. Barnett, MD, FAAP, Ruth Lynfield, MD, FAAP, Mark H. Sawyer, MD, FAAP. <https://doi.org/10.1542/9781610027373>
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