

Health Advisory – Suspected Local Transmission of Extensively Drug-Resistant (XDR) Shigellosis in King County – April 5, 2024

Actions requested

- Be aware of four cases of extensively drug-resistant (XDR) shigellosis detected in King County during 2023–2024 with suspected local transmission.
- Consider *Shigella* infection in patients with acute diarrhea, especially among people with higher risk for *Shigella* infection, including:
 - People experiencing homelessness or unstable housing;
 - International travelers;
 - Immunocompromised persons;
 - People living with HIV;
 - Men who have sex with men (MSM);
 - Young children
- Although antibiotic therapy is not routinely recommended for mild infections, it should be prescribed for patients with more severe illnesses, patients who are immunocompromised, patients in settings where there is elevated concern about transmission to others (e.g., in congregate living situations) and in outbreak settings (consult with Public Health).
- Healthcare providers should consult with a specialist knowledgeable in the treatment of antibiotic-resistant bacteria to determine the best treatment option if there are concerns for XDR *Shigella* infections or in cases of treatment failure without AST results.
- Order stool culture and antimicrobial susceptibility testing (AST) for patients suspected of having *Shigella*. Culture-independent diagnostic testing on its own (e.g., PCR) cannot be used to assess susceptibility.
 - Consider adding azithromycin to AST for *Shigella* specimens using [recently established clinical breakpoints](#) for azithromycin for *Shigella*.
- **Notify Public Health of patients with suspected or confirmed XDR shigellosis at (206) 296-4774.**
- **[March 9, 2023 XDR shigellosis Health Advisory](#) for more information on XDR shigellosis laboratory testing, risk factors, and clinical management.**

Background

Public Health – Seattle & King County (Public Health) has identified five cases of XDR *Shigella* in King County since 2020. Four cases of XDR *Shigella* in King County residents were reported during November 2023 and March 2024. Three of four cases were HIV+ and two of four endorsed sexual activity during their incubation periods. All four cases denied travel out of King County during their incubation periods, suggesting that these cases were acquired in King County and that there may be ongoing, undetected local transmission of XDR *Shigella* strains. A fifth XDR *Shigella* infection was in a King County resident who became infected during international travel through sexual exposure in 2020.

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[Shigellosis](#) is a highly contagious bacteria illness that causes acute onset of watery, bloody, or prolonged diarrhea, abdominal pain, tenesmus, fever, and malaise. *Shigella* easily spread person-to-person through the fecal-oral route and through sexual contact, especially in situations with limited access to hygiene facilities. Persons at higher risk of *Shigella* infection include men who have sex with men, people whose immune systems are weakened due to illness such as HIV or medical treatment such as chemotherapy, young children, and travelers to countries with poor sanitation. People with weakened immune systems are also more likely to develop serious illness, including bacteremia.

The Centers for Disease Control and Prevention (CDC) [National Antimicrobial Resistance Monitoring System \(NARMS\)](#) has been monitoring an increase of extensively drug-resistant (XDR) *Shigella* infections (shigellosis) in the United States. In 2022, about 5% of *Shigella* infections reported to CDC were caused by XDR strains compared to 0% in 2015.

The CDC defines XDR *Shigella* bacteria as strains that are resistant to all commonly recommended empiric and alternative antibiotics – azithromycin, ciprofloxacin, ceftriaxone, trimethoprim-sulfamethoxazole (TMP-SMX), and ampicillin. Because there are no data from clinical studies of treatment of XDR *Shigella* infections, CDC does not have recommendations for optimal antimicrobial treatment. Healthcare providers should consult with a specialist knowledgeable in the treatment of antibiotic-resistant bacteria to determine the best treatment option if there are concerns for XDR *Shigella* infections or in cases of treatment failure without antimicrobial sensitivity testing (AST) results.

Resources

- **For Healthcare Providers**
 - [Shigella – Shigellosis Information for Healthcare Professionals](#) – CDC
 - [Increase in Extensively Drug-Resistant \(XDR\) Shigellosis in the United States](#) – CDC HAN
- **For Laboratories**
 - [Microbiology Lab Requisition Form](#) – WA DOH
 - [Clinical & Laboratory Standards Institute announces clinical breakpoints for azithromycin for Shigella](#) – CDC
- **For General Public and International Travelers**
 - [Shigella – Shigellosis Information for Specific Groups](#) – CDC

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