

# Memorandum

**Date:** 19 July 2024

**To:** Calgary Zone EMS Staff

**From:** Calgary Zone Clinical EMS Directors

**RE:** Shigella Outbreak

A Shigella outbreak has been declared among unhoused and unstably housed residents of Calgary.

A number of cases of Shigella sonnei have been detected in this population. Shigellosis is a disease that is commonly associated with diarrhea, as well as fever, nausea and stomach cramps. It can cause severe illness resulting in hospitalization. Transmission occurs when an individual comes into contact with fecal matter from an infected person, and also by eating food contaminated with the bacteria.

## Background

- Shigellosis is the most communicable of the bacterial diarrheas and a low dose produces disease in humans.
- The primary mode of transmission is fecal-oral.
- Secondary attack rates within households can be as high as 40 per cent.
- Shigellosis involves the large and distal small intestine. Disease is typically characterized by diarrhea (may contain blood and mucous or be watery) accompanied by fever, nausea, and tenesmus.
- Disease may be biphasic with an initial period of watery diarrhea and cramps, followed by the development of dysentery (blood and mucous). The illness is usually self-limited, lasting between one day and one month, with an average of 7 days.
- The incubation period between exposure and symptoms is typically 1-3 days. Cases can be communicable for up to 4 weeks.

- Mild and asymptomatic infections can occur, bacteremia and pneumonia are uncommon.
- Infection with *S. sonnei* often results in a short clinical course.

Perform hand hygiene with soap and water when hands are visibly soiled, after using the bathroom, before preparing food or eating, after handling diarrheal patients.

For cleaning/disinfecting equipment, accelerated hydrogen peroxide wipes (Eg., Accel Prevention) are appropriate. Bleach wipes are not necessary if there is a strong suspicion of *Shigella* but should be used if *Clostridium difficile* infection is suspected.

Two step cleaning should be used. First step is wiping down equipment to remove gross soiling (cleaning). Once the item is clean, the second step is wiping down equipment again (disinfection). It is important to follow the contact time on the label to ensure the item is disinfected.

If supply bag is grossly soiled with blood and body fluid, remove gross soilage and send it to VESST department for laundering and restocking.