

Case Definition

Confirmed Case:

Laboratory confirmation of infection with or without clinical illness¹:

- Isolation of *Shigella* spp. from an appropriate clinical specimen (e.g., stool, blood, rectal swab, deep tissue wounds, other sterile site, vomit, urine).

Probable Case²:

- Clinical illness¹ in a person who is epidemiologically linked to a confirmed case
OR
- Detection of *Shigella* spp./Enteroinvasive *E.coli* (EIEC) nucleic acid with or without clinical illness, in an appropriate clinical specimen (dependent on test used), using a nucleic acid (NAT), such as a polymerase chain reaction (PCR)

Clinical Evidence

Clinical illness may be characterized by the following signs or symptoms: diarrhea (watery and often bloody), fever, nausea, vomiting, abdominal pain and/or tenesmus. The severity of illness may vary. While not considered clinical illness, asymptomatic infections may occur.

Reporting Requirements

Report confirmed and probable cases to DHW Surveillance via Panorama.

Additional Forms

None.

Data Entry

Complete Generic Food Questionnaire form in the User Defined Forms section in Panorama.

Additional Comments

- NAT-positive (NAT+) and culture-negative (culture-) result would still be considered a probable case.
- Further strain characterization (e.g., antimicrobial susceptibility testing, serotyping, whole genome sequencing [WGS]) is required for epidemiologic, public health, and control purposes.
- It is best practice to culture the NAT positive specimen as soon as possible, such as performing culture in the laboratory that generated the NAT positive signal. When a specimen is positive using a NAT, it is

¹ See Clinical Evidence Section.

² Culture is required for public health and clinical management. Thus, culture must be performed on NAT-positive (NAT+) specimens to enable molecular typing (e.g., whole genome sequencing) for surveillance, outbreak detection and response, as per [Canadian Public Health Laboratory Network \(CPHLN\) guidance](#). An isolate is required for antimicrobial susceptibility testing (AST) and/or antimicrobial resistance (AMR) predictions to guide clinical treatment and/or for AMR surveillance, which is increasingly important due to substantial multidrug resistance among *Shigella*.

strongly advised to collect and document information on all culture results for the specimen (i.e., NAT+/culture+ **vs** NAT+/culture– **vs** NAT+/culture not done);

- If more than one target is positive on the gastrointestinal NAT panel, it may be indicative of a cross-reaction, co-infection and/or a single organism harbouring these genes. Reflex culture should be performed to confirm all suspect bacterial NAT signals and to meet requirements for epidemiologic, public health, and clinical management of that organism.