

Case Definition

Confirmed Case¹:

Laboratory confirmation of infection with or without clinical illness, through isolation of cholera toxin producing *Vibrio cholerae* serotype O1, O139, or other toxigenic serogroups from an appropriate clinical specimen (e.g., stool, rectal swab, vomit, blood).

Probable Case^{2,3}:

Clinical illness in a person who is epidemiologically linked to a confirmed case;

OR

Detection of *Vibrio cholerae* nucleic acid by the *ctx* or *toxR* gene with or without clinical illness, in an appropriate clinical specimen (dependent on the test used), using a nucleic acid test (NAT), such as a polymerase chain reaction (PCR).

Clinical Evidence

Clinical illness is typically characterized by the following signs or symptoms: Acute and/or profuse watery diarrhea (sometimes described as “rice-water stools”), nausea, leg cramps, myalgias, and/or vomiting. The severity of illness may vary. While not considered clinical illness, asymptomatic infections may also occur.

Reporting Requirements

- Report confirmed or probable cases **immediately** to DHW Surveillance Team.

Additional Forms

None.

Data Entry

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

Additional Comments

- NAT-positive (NAT+) and culture-negative (culture-) result would still be considered a probable case.

¹ Illnesses caused by strains of *V. cholerae* other than toxigenic *V. cholerae* should not be reported as cases of cholera. Note that cholera refers to toxigenic *V. cholerae* while vibriosis refers to both non-toxigenic *V. cholerae* and other *Vibrio* spp.

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 may also be required for antimicrobial susceptibility testing (AST) and/or antimicrobial resistance (AMR) predictions to guide clinical treatment and/or for AMR surveillance.

³ NAT positive specimens should be submitted for culture of *V. cholerae* and confirmatory testing of the cholera toxin. Also, NAT-positive (NAT+) and culture-negative (culture-) results would still be considered a probable case.

- Illness caused by strains of *V.cholerae* other than toxigenic *V.cholerae* should not be reported as cases of cholera. Note that cholera refers to toxigenic *V.cholerae* while vibriosis refers to both non-toxigenic *V.cholerae* and other *Vibrio spp.*
- 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 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);
- NAT positive specimens should be submitted for culture of *V.cholerae* and confirmatory testing of the cholera toxin.
 - Although the *toxR* gene is specific for *V. cholerae*, it can be present in both toxigenic (*ctx+*) and non-toxigenic (*ctx-*) strains. Thus, a proportion of specimens positive for the *toxR* gene may not cause Cholera.