Cholera

REPORTABLE DISEASES TOOLKIT

Information for Health Care Professionals

Reporting Obligations

Cholera is designated as a disease of public health significance and is reportable under the *Ontario Health Protection and Promotion Act*. Report all suspect and confirmed cases **within one business day** to the health unit.

REPORTING FORM

Epidemiology

Aetiologic Agent:

Cholera is caused by toxigenic strains of *Vibrio cholerae*, which is a gram-negative, curved rod that is motile and has many serogroups. Only the toxin producing serogroups O1, O139 cause epidemics. However, non-toxigenic serotypes such as O141 can cause sporadic illness.

Clinical Presentation:

Most persons infected with cholera do not become ill, although the bacterium is present in their feces for 7-14 days. When illness does occur, infection causes only mild or moderate diarrhea in roughly 90% of individuals. In 5-10% of cases, infected individuals develop severe, watery diarrhea and vomiting. Stools are typically colorless with flecks of mucous referred to as "rice water" diarrhea. The resulting loss of fluids in an infected individual can rapidly lead to severe dehydration. If not treated, death can occur within hours.

Modes of transmission:

Ingestion of food or water contaminated with feces or vomitus of cases and occasionally feces of carriers; consumption of raw or improperly cooked seafood, and other foods harvested from estuarine water or seawater. Direct person-to-person transmission has not been documented.

Incubation Period:

From a few hours to 5 days, usually 2-3 days

Period of Communicability:

For the duration of the stool-positive stage, usually until 2-3 days after recovery, however, carrier state may persist for months. Appropriate antibiotics can shorten the period of communicability but are not recommended for treatment.

Risk Factors/Susceptibility

Susceptibility is variable; gastric achlorhydria and the lack of immunity seen in small children may increase the risk of illness. Breastfed infants are at a reduced risk of cholera. Cholera occurs more often in persons with blood type O.

In endemic areas, most people acquire antibodies by early adulthood. Infection with O1 serogroup affords no protection against O139 infection and vice versa.

Diagnosis & Laboratory Testing

Diagnosis is confirmed by laboratory isolation of cholera toxin producing *Vibrio cholerae* serovar O1 or O139 from an appropriate specimen (e.g., stool) OR by detection of V. cholerae by nucleic acid amplification testing (NAAT) from an appropriate clinical specimen (stool).

TESTING INFORMATION & REQUISITION

Treatment & Case Management

Treatment is under the direction of the attending health care provider.

Exclude infected persons from high-risk settings (food preparation, daycare, and health care) until 24 hours after cessation of symptoms, and 48 hours after antibiotic therapy or anti-diarrheal medications.

Meal companions in the 5 days before onset should be assessed for symptoms and advised to seek medical care if indicated. Chemoprophylaxis is indicated if the likelihood of secondary transmission among household contacts is high.

Patient Information

PATIENT FACT SHEET

References

1. Ministry of Health, Infectious Diseases Protocol - Ontario Public Health Standards, 2022.

Additional Resources

1. PHAC. "Cholera, travel health fact sheet."
2. WHO. "Cholera fact sheet."
3. Heymann, D.L. Control of Communicable Disease Manual (21st Ed.). Washington, American Public Health Association, 2022.
4. PHO. "Cholera: Information for Clinicians", Dec 2010.
5. PHO. "Cholera", December 2022.