# **Cholera**

# REPORTABLE DISEASES TOOLKIT

Information for Health Care Professionals

## **Reporting Obligations**

Confirmed and suspected cases shall be reported immediately to the local 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 colourless with flecks of mucous referred to as "rice water" diarrhoea. 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 achlorydia 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** 

#### **Additional Resources**

- 1. PHAC. "Cholera, travel health fact sheet".
- 2. WHO. "Cholera fact sheet".
- Heymann, D.L. Control of Communicable Disease Manual (20th Ed.). Washington, American Public Health Association. 2015.

#### References

1. Ministry of Health and Long Term Care, Infectious Diseases Protocol, 2014.