Campylobacter

REPORTABLE DISEASES TOOLKIT

Information for Health Care Professionals

Reporting Obligations

Campylobacter enteritis 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:

The bacterium *Campylobacter jejuni (C. jejuni)* and less commonly *Campylobacter coli (C. coli)* are the usual causes of campylobacteriosis.

Campylobacter species are motile, comma-shaped, microaerophilic Gram-negative bacilli that cause gastroenteritis.

Clinical Presentation:

Symptoms usually occur 2-5 days after exposure and may persist for one to two weeks. Illness is characterized by diarrhea, abdominal pain, malaise, fever, nausea, and vomiting. The symptoms can vary from mild to severe, can mimic appendicitis and can also be asymptomatic. Relapses can occur. Blood and mucus may be present in liquid stools. The illness can also mimic acute appendicitis. Less common presentations include typhoid-like syndrome, febrile convulsions, or meningitis (the bacteria infects the membrane which lines the surface of the brain); post-infectious complications include reactive arthritis, febrile convulsions or Guillain-Barre syndrome.

Modes of transmission:

Ingestion of the organisms in undercooked meat and poultry, contaminated food and water, or raw milk and other dairy products; contact with infected pets (especially puppies and kittens), farm animals or infected infants. The infective dose is often low. Person to person transmission appears uncommon.

Incubation Period:

Usually 2-5 days, with a range of 1-10 days, depending on dose ingested.

Period of Communicability:

Several days to several weeks, individuals without antibiotic treatment may shed Campylobacter bacteria in the feces for 2-7 weeks.

Risk Factors/Susceptibility

Lasting immunity to serologically related strains follows infection. In developing countries, most people develop immunity in the first 2 years of life. Behavioral risk factors include:

- Anal-oral contact (sexual)
- Animal contact
- · Poor hand hygiene practices
- Consumption of raw/undercooked meat/poultry
- Consumption of unpasteurized milk/milk products
- Travel outside province/country within last 10 days

Diagnosis & Laboratory Testing

Confirmation of infection by positive culture of *Campylobacter* species or detection of *Campylobacter* species by nucleic acid amplification testing (NAAT) from an appropriate clinical specimen (e.g., stool, urine, body fluids).

TESTING INFORMATION & REQUISITION

Treatment & Case Management

Treatment recommendations are under the direction of the attending health care provider.

Inform patients that symptomatic cases will be excluded from conducting activities in high-risk settings such as the food industry, healthcare, or daycare until symptom free for 24 hours, or 48 hours after completion of antibiotic or anti-diarrheal medications. Public health will follow up as needed.

Patient Information

PATIENT FACT SHEET

References

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

Additional Resources

- Heymann, D.L. Control of Communicable Disease Manual (21st Ed.). Washington, American Public Health Association, 2022.
- 2. <u>Simcoe Muskoka HealthSTATS: Campylobacter Enteritis</u>
- 3. Public Health Ontario. "Campylobacteriosis", December 2022.