

FoodNet Canada 2019 Integrated Findings Report



The Public Health Agency of
Canada's FoodNet Canada
Surveillance System

The integrated sentinel site
surveillance network for enteric
disease in Canada

Key findings

in enteric disease rates, trends, and
potential disease sources from farm-to-fork.

Most commonly reported enteric diseases in 2019:

- 1** **Campylobacteriosis**
(endemic incidence rate: 20 cases per 100,000 population)
- 2** **Salmonellosis**
(endemic incidence rate: 9 cases per 100,000 population)

Poultry contact and meat products are key sources of infection for *Campylobacter* and *Salmonella*.

Salmonella

Salmonella Enteritidis (SE):

- Most common serovar causing **endemic human infection** in 2019.
- **Significant decrease** in:



- Annual endemic incidence rate since 2017.
- Prevalence among frozen breaded chicken products (FBCP) and broiler chicken manure samples since 2018.



The **significant decrease** on FBCP is associated with the Canadian Food Inspection Agency directive to industry to reduce *Salmonella* to below detectable limits in FBCP that are packaged for retail sale by April 1, 2019.¹

Salmonella Reading:

- Top serovar among **outbreak-related** cases in 2019.
- One of the top serovars identified in **turkey manure** samples.

Shigatoxigenic Escherichia coli (STEC)



The incidence rate of non-O157 STEC increased in 2018 and 2019, reflecting an increase in testing of non-O157.



Increased non-O157 STEC testing allows for the identification of common serogroups across FoodNet Canada components which helps identify exposure sources.

International Travel

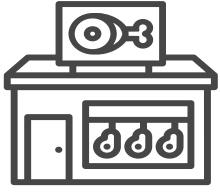


of reported cases of enteric disease between 2015-2019 were classified as international travel-related. The majority were infected with **Campylobacter, Salmonella, or Giardia**.



Listeria monocytogenes (includes QC site data)

Small stores had a **higher prevalence** of *Listeria* on ground beef sampled versus large grocery store chains in 2019.



35%

Small stores
(e.g., butcher shops)

vs

22%

Large stores



The overall **prevalence** of *Listeria* on ground beef was 25% in 2019. Raw or undercooked ground beef is a **potential source** for *Listeria* infection.

Targeted Sampling Activities

Farmers' Markets

In 2019, a **higher prevalence** of **Campylobacter, Listeria, and STEC** was found among certain retail meats collected from farmer's markets, compared with those collected from grocery stores, representing a potential emerging source of foodborne illness.

Seafood

In 2018 and 2019, the bacteria most frequently found in these samples was **Vibrio**.

53%



Mussels

75%



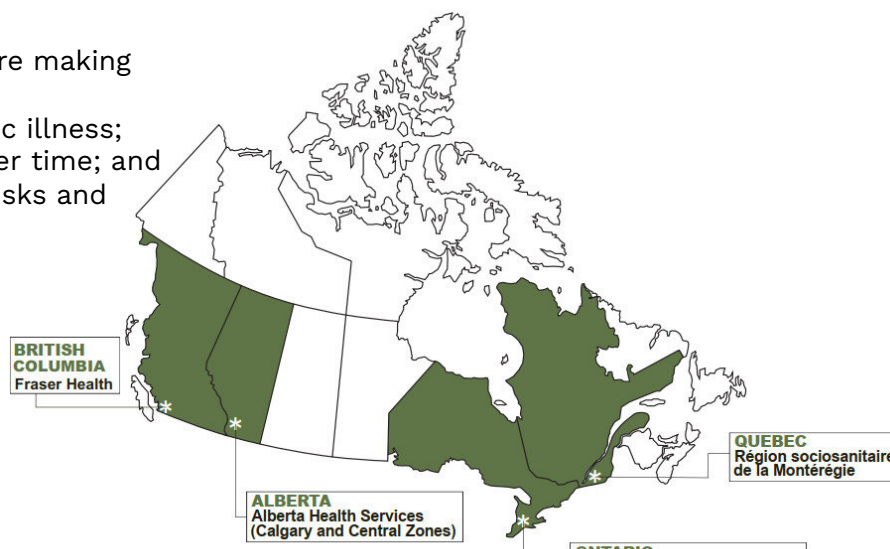
Oysters

Prevalence

About FoodNet Canada

- Determines what foods and other sources are making Canadians ill;
- Determines significant risk factors for enteric illness;
- Accurately tracks disease rates and risks over time; and
- Assesses the effectiveness of interventions to prioritize risks and assess the effectiveness of interventions.

The Quebec sentinel site was established in July 2019. For this report, Quebec site data were **excluded** from most analyses.



Foodborne illnesses can be prevented by following safe food handling practices. Learn more about food safety by visiting www.canada.ca/foodsafety
fnc-rac@phac-aspc.gc.ca



1. Government of Canada. Questions and answers: New measures to reduce salmonella in frozen raw breaded chicken products. Available at: <https://inspection.canada.ca/preventive-controls/meat/salmonella-in-frozen-raw-breaded-chicken/faq/eng/1554140834819/1554140994648>. Accessed April 2024.