

# Newfoundland and Labrador Communicable Disease Surveillance

2024 Annual Report

Department of Health and Community Services

## A Message from the Chief Medical Officer of Health

I am pleased to publish the 2024 Newfoundland and Labrador Communicable Disease Surveillance report in accordance with paragraph 9(3)(j) of the **Public Health Protection and Promotion Act**.

Health surveillance is an essential function of the public health system. The assessment of epidemiology is essential to gain an understanding of the determinants of health and communicable disease transmission.

Newfoundland and Labrador public health teams continue to strengthen our communicable disease surveillance system. A resilient communicable disease surveillance system is necessary for the routine monitoring of infectious diseases, responding to outbreaks, and identifying disparities in the distribution of communicable diseases within our population.

Most notable this past year were outbreaks of whooping cough (pertussis) and syphilis. Both impacted several communities in 2024 and both have resurged in numbers not seen in decades, underscoring the importance of vaccination against pertussis and prevention and early detection of sexually transmitted infections. Assessment of the epidemiology of these outbreaks was essential to understanding transmission dynamics and supported the outbreak response by public health teams in Newfoundland and Labrador Health Services.

The following report will provide insight into communicable disease trends seen throughout 2024. Having a thorough understanding of the epidemiology is essential – both during times of low disease activity and amid outbreaks – to prevent disease transmission, reduce severe outcomes, and protect the health and well-being of the population. A strong public health surveillance system will help ensure our communities are healthy, vibrant, and resilient – today and for the years to come.



Dr. Janice Fitzgerald, Chief Medical Officer of Health



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# Section 1: Introduction

## Introduction to Provincial Communicable Disease Surveillance

Health surveillance is an essential function of public health. The collection and analysis of surveillance data allows for the assessment of trends in communicable disease epidemiology and for appropriate resource allocation.

### Authority

The **Public Health Protection and Promotion Act (PHPPA)** constitutes the statutory basis for the surveillance of communicable diseases in Newfoundland and Labrador.

The Minister of Health and Community Services has overall responsibility for the PHPPA and has several duties and powers under the Act. The Chief Medical Officer of Health (CMOH) and Regional Medical Officers of Health (RMOH) within Newfoundland and Labrador Health Services (NLHS) are also responsible for exercising certain powers and discharging duties under the **PHPPA**.

### Purpose

Under the **PHPPA**, all notifiable diseases are required to be reported to the CMOH or an RMOH. The CMOH must prepare and publish an annual report within six months of the end of the year with respect to the reportable events, outbreaks, public health emergencies, and number and results of inspections conducted under the PHPPA during the year (paragraph 9(3)(j)). The purpose of this report is to fulfill this statutory duty for 2024.

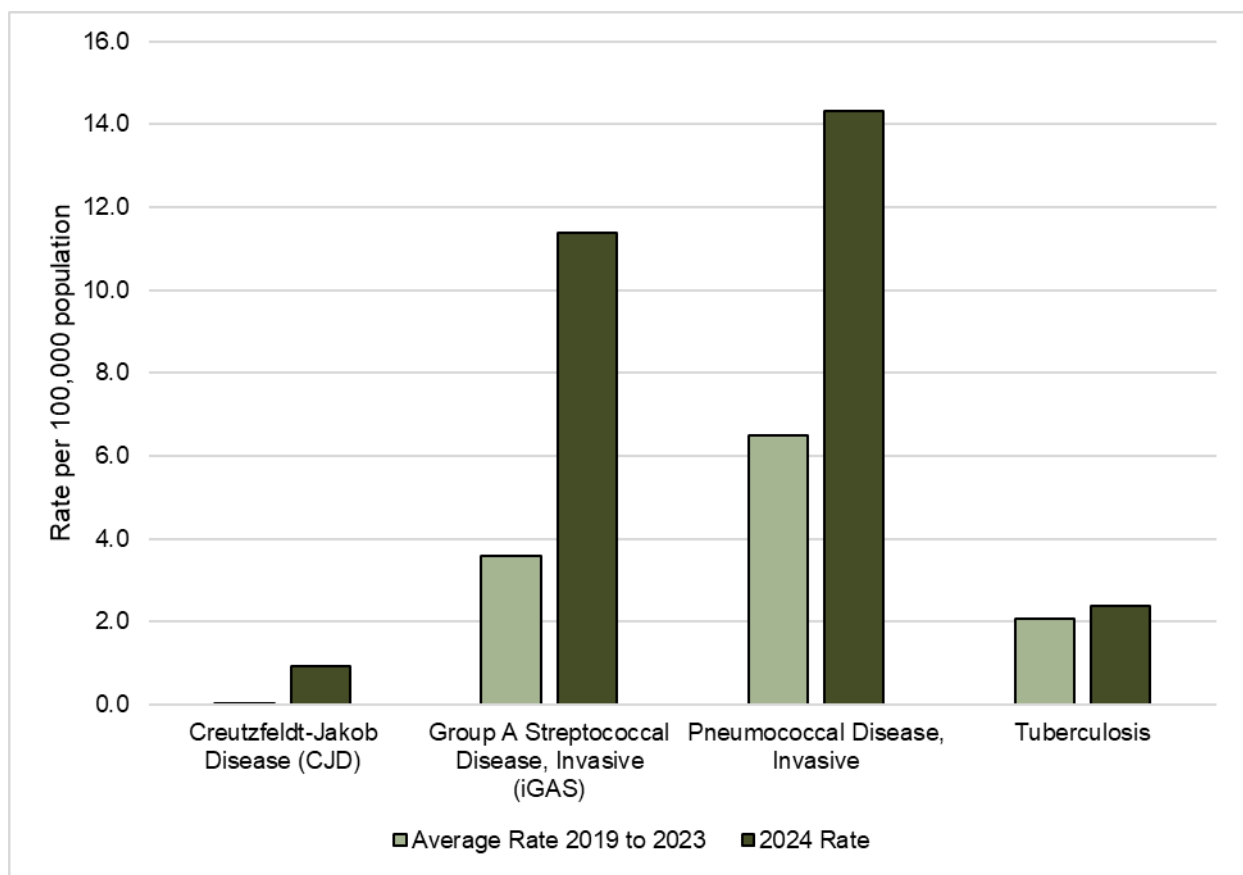
## Section 2: Highlights

The following section outlines notable communicable disease trends for 2024, categorized by disease type.

### 2.1 Diseases Transmitted via Direct Contact and the Respiratory Route

In 2024, incidence rates of invasive group A streptococcal disease (iGAS), invasive pneumococcal disease (IPD), and Creutzfeldt-Jacob Disease (CJD) were higher compared to the five-year average rate. Incidence rates of tuberculosis in 2024 were similar to the five-year average rate.

Figure 1. Average Rate<sup>1</sup> Compared with 2024 Rate, Diseases Transmitted via Direct Contact and the Respiratory Route

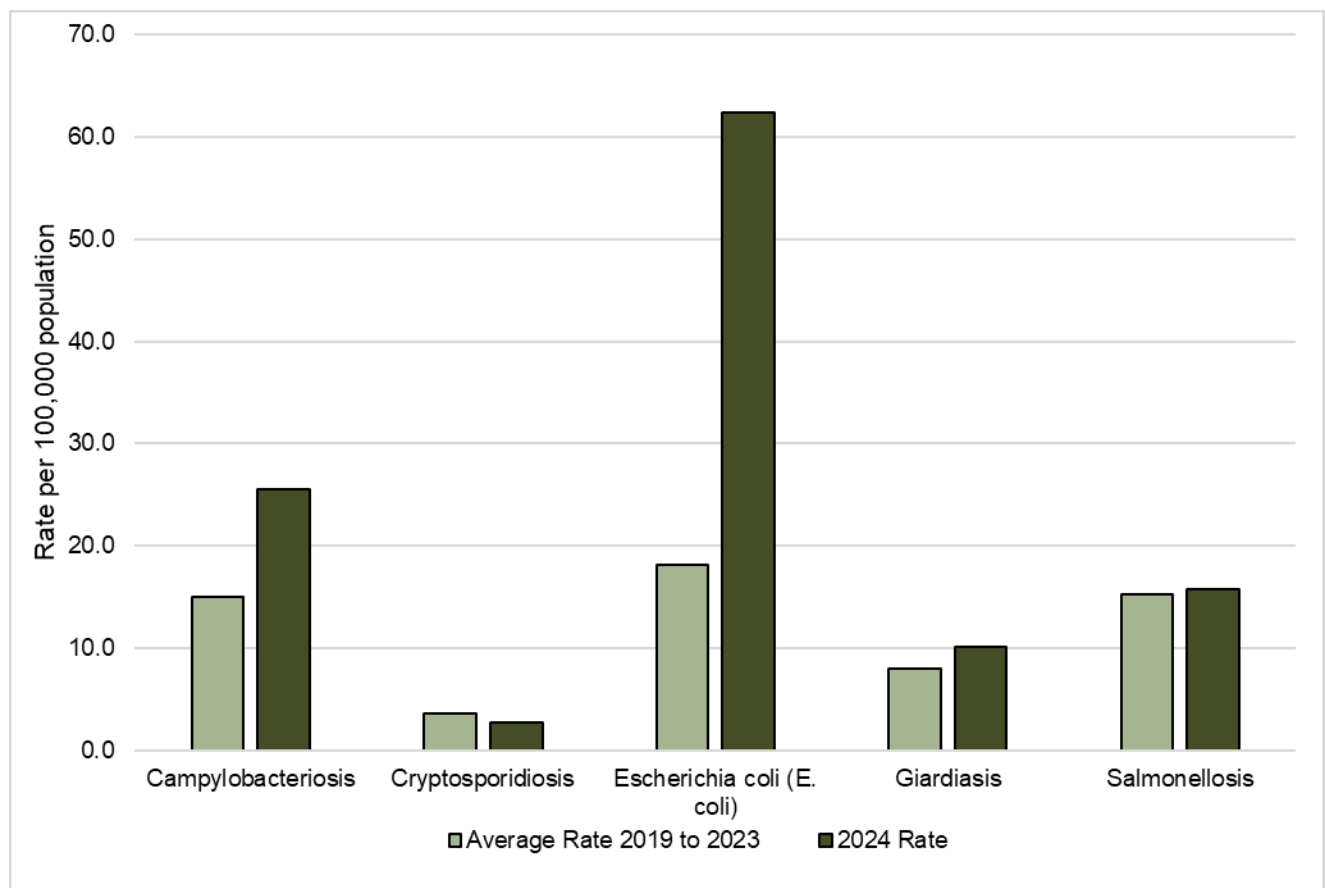


For information on influenza and COVID-19 activity, please visit the [provincial respiratory dashboard](#).

## 2.2 Enteric, Food and Waterborne Diseases

In 2024, incidence rates of campylobacteriosis and *Escherichia coli* (*E. coli*) were higher compared to the average rate. *E. coli* includes *Enteroaggregative Escherichia coli* (EAEC), *Enteropathogenic Escherichia coli* (EPEC), and *Enterotoxigenic Escherichia coli* (ETEC). These strains are separate from the more severe *Verotoxigenic Escherichia coli* (VTEC).

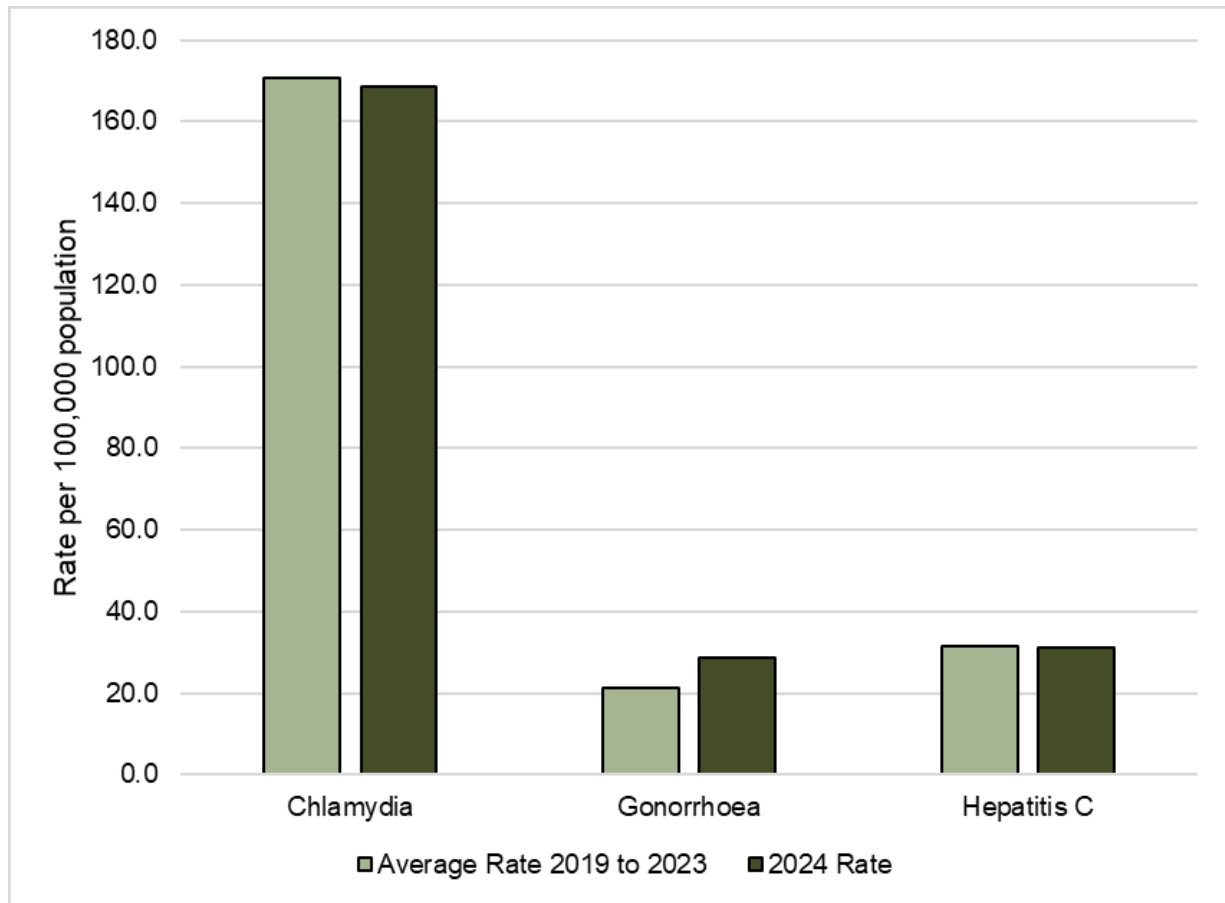
Figure 2. Average Rate<sup>1</sup> Compared with 2024 Rate, Enteric, Food and Waterborne Diseases



## 2.3 Sexually Transmitted and Bloodborne Infections

In 2024, the provincial incidence rate of chlamydia and hepatitis C virus (HCV) was on par with the five-year average rate. The provincial incidence rate of gonorrhea was slightly higher compared to the five-year average rate.

Figure 3. Average Rate Compared with 2024 Rate, Sexually Transmitted and Bloodborne Infections



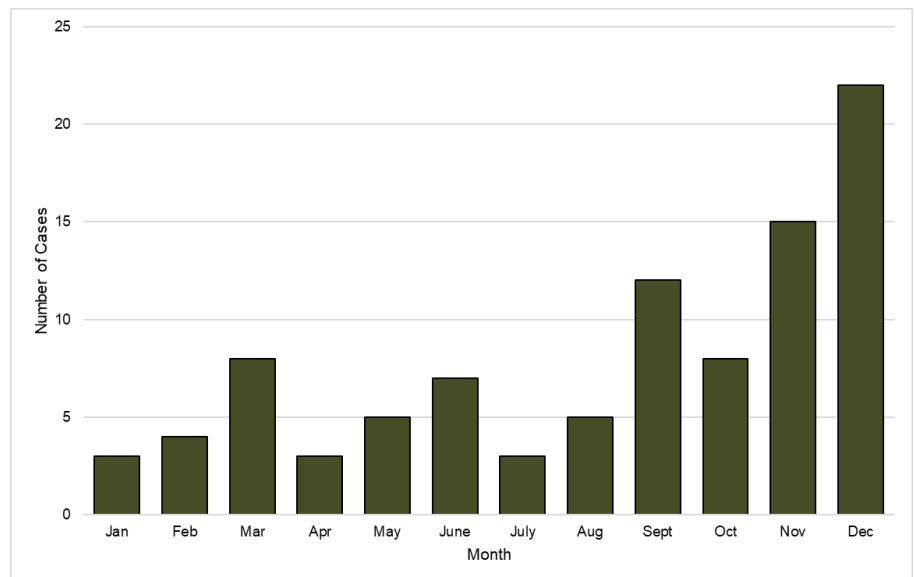
### 2.3.1 Syphilis Outbreak

In September 2024, NLHS advised of an outbreak of syphilis in the Labrador-Grenfell zone. Syphilis is a bacterial sexually transmitted infection (STI) with symptoms that may go unnoticed in both early and late stages of infection. If untreated, syphilis infection can result in long-term health effects and spread to the developing fetus if infection occurs during pregnancy. Early detection and treatment are essential to reduce the spread of syphilis.

In 2024, 95 cases of syphilis were reported provincially. Typically, NL reports 37 cases on average per year (10-year average). In keeping with the epidemiology of syphilis seen in Newfoundland and Labrador, the 20- to 39-year-old age group are most impacted by the syphilis outbreak. Incidence of syphilis has been increasing in Canada and other areas of the world over the last ten years.

According to the Public Health Agency of Canada, risk factors associated with syphilis infection include sexual activity without the use of barrier protection, multiple sexual partners, and substance use - particularly sexual activity while under the influence of drugs. Limited access to healthcare, poor awareness of syphilis and stigma can also deter individuals from seeking health care and may be driving the global increase of syphilis according to the World Health Organization.

Figure 4. Number of Syphilis Cases Reported in Newfoundland and Labrador by Month, 2024





## 2.4 Vector-borne and Other Zoonotic Diseases

In NL, rates of vector-borne and other zoonotic diseases are low as cases are sporadic and related to travel.

## 2.5 Vaccine Preventable Diseases

In NL, rates of vaccine preventable disease (VPD) are generally low. Chickenpox and hepatitis B virus (HBV) are usually the two most reported VPDs. In 2024, rates of most diseases in this disease class ranged from 0 to 4.2 cases per 100,000 population.

Incidence of pertussis was much higher in 2024 compared to previous years due to a provincial outbreak.

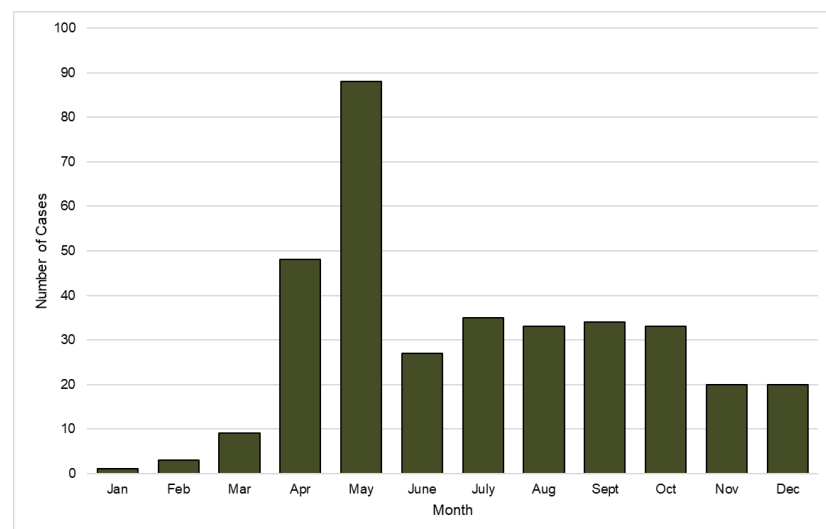
### 2.5.1 Pertussis Outbreak

In May 2024, NLHS advised of an outbreak of pertussis (whooping cough). Pertussis is a vaccine-preventable disease and infants are at the greatest risk for severe outcomes.

From May 2024 to December 2024, a total of 351 cases of pertussis were reported across all zones of NLHS (Figure 5). By comparison, from 2014 to 2023 the expected range of pertussis cases in Newfoundland and Labrador (NL) was zero to 10 cases per year. Infants and school-aged children were most impacted by the outbreak.

An increase in pertussis incidence throughout 2024 was noted across Canada, South America, the United States, and Europe. The increased global and domestic incidence of pertussis highlights the importance of vaccination.

Figure 5. Number of Pertussis Cases Reported in NL by Month, 2024



## Section 3: Reportable Events

### 3.1 Reportable Disease Events in Humans

Under the [PHPPA](#), all [notifiable diseases](#) must be reported to Newfoundland and Labrador Communicable Disease Control. For Canadian rates of nationally notifiable diseases, please see [Notifiable Diseases Online \(NDO\)](#).

Table 1: Number and Rate of Reportable Diseases Identified in Newfoundland and Labrador, 2024

Disease Name	Newfoundland and Labrador Total	
	# of Cases	# of Cases per 100,000 Population
Acute Flaccid Paralysis	0	0
Amoebiasis	2	0.4
Anthrax	0	0
Antimicrobial Resistant Organisms <sup>2</sup>	-	-
Arbovirus	0	0
Botulism	1	0.2
Brucellosis	0	0
Campylobacteriosis	139	25.5
Chancroid	0	0
Chlamydia	919	168.5
<i>Clostridium difficile</i> <sup>2</sup>	-	-
COVID-19 (laboratory-confirmed only)	3057	560.8
Creutzfeldt-Jakob Disease (CJD)	5	0.9
Cryptosporidiosis	15	2.8
Cyclosporiasis	7	1.3
Diphtheria	0	0
<i>Escherichia coli</i>	340	62.4
Giardiasis	55	10.1
Gonorrhea	157	28.8
Group A Streptococcal Disease, Invasive (iGAS)	62	11.4
Group B Streptococcal Disease of the Newborn	2	0.4
Haemophilus Influenza Non-B Disease, Invasive	19	3.5
Haemophilus Influenza type B Disease, Invasive (HIB)	2	0.4
Hantavirus Pulmonary Syndrome	0	0
Hepatitis A	0	0
Hepatitis B	24	4.4

Disease Name	Newfoundland and Labrador Total	
	# of Cases	# of Cases per 100,000 Population
Hepatitis C	169	31.0
Human Immunodeficiency Virus (HIV)	11	2.0
Influenza (laboratory-confirmed only)	1029	188.7
Legionellosis	0	0
Leprosy	0	0
Listeria	3	0.6
Louse or Tick-borne Diseases	3	0.6
Malaria	1	0.2
Measles	0	0
Meningococcal Disease, Invasive	1	0.2
Multisystem Inflammatory Syndrome in Children	0	0
Mumps	0	0
Nontuberculosis Mycobacterial Disease	0	0
Pertussis	351	64.4
Plague	0	0
Pneumococcal Disease, Invasive	78	14.3
Poliomyelitis	0	0
Q fever	2	0.4
Rabies	0	0
Rubella	0	0
Salmonellosis	86	15.8
Severe Acute Respiratory Illness (SARI)	0	0
Shigellosis	15	2.8
Smallpox	0	0
Syphilis <sup>3</sup>	95	17.4
Tetanus	0	0
Tuberculosis	13	2.4
Tularemia	2	0.4
Typhoid Fever	0	0
Unspecified Hepatitis	0	0
Varicella (Chickenpox)	17	3.1
<i>Verotoxigenic Escherichia coli</i> (VTEC)	19	3.5
Viral Hemorrhagic Fevers	0	0
Yersiniosis	2	0.4

### 3.2 Reportable Disease Events in Animals

Pursuant to section 8 of the **Public Health Protection and Promotion Regulations**, the Chief Veterinary Officer reported the below zoonotic diseases to Public Health.

Table 2. Reportable Disease Events in Animals Identified in Newfoundland and Labrador, 2024

Zoonotic Disease	# of Affected Animals
Arbovirus	0
Bovine Spongiform Encephalopathy (BSE)	0
Brucellosis	0
Chlamydiosis or Psittacosis in birds	0
Cystic Echinococcosis	0
Influenza A in swine	0
Influenza H5 and H7 (Avian Influenza)	15 (14 H5N5 and 1 H5N1)
Louse or Tick-borne diseases	0
Plague	0
Q Fever	0
Rabies	0
Trichinosis or Trichinellosis	0
Tuberculosis due to <i>Mycobacterium bovis</i>	0
Tularaemia	1

## Section 4: Outbreaks

### 4.1 Facility Outbreaks

In Newfoundland and Labrador, both single cases of disease and outbreaks are investigated. Health professionals within NLHS, under the direction of the MOH, conduct outbreak investigations. The causative agent(s) for respiratory outbreaks in 2024 included COVID-19, influenza, adenovirus, RSV, seasonal coronavirus, human metapneumovirus (hMPV), parainfluenza virus, and entero/rhinovirus. The causative agent(s) for enteric outbreaks in 2024 were norovirus, sapovirus, and *C. difficile*. The outbreaks reported in Table 3 occurred in either long-term care (LTC), personal care homes (PCH), assisted living facilities, or acute care.

Table 3. Confirmed Outbreaks (LTC, PCH, assisted living, acute care), Newfoundland and Labrador, 2024

Type of Outbreak	# of Confirmed Outbreaks
Respiratory	321
Enteric	22

### 4.2 Zoonotic Disease Outbreaks

Pursuant to section 8 of the **Public Health Protection and Promotion Regulations**, the Chief Veterinary Officer reported the below zoonotic disease outbreaks to Public Health.

Table 4. Zoonotic Disease Outbreaks in 2024, by Disease Type

Zoonotic Disease	# Outbreaks
Arbovirus	0
Bovine Spongiform Encephalopathy (BSE)	0
Brucellosis	0
Chlamydiosis or Psittacosis in birds	0
Cystic Echinococcosis	0
Influenza A in swine	0
Influenza H5 and H7 (Avian Influenza)	1
Louse or Tick-borne diseases	0
Plague	0
Q Fever	0
Rabies	0
Trichinosis or Trichinellosis	0
Tuberculosis due to <i>Mycobacterium bovis</i>	0
Tularemia	1

## Section 5: Public Health Emergencies

No public health emergencies were declared in 2024.

## Technical Notes

Data are subject to fluctuation and revision.

Data is verified as of July 10, 2025.

### Data Sources

**Reportable Human Disease Events:** Communicable Disease Control System, Department of Health and Community Services, Government of Newfoundland and Labrador.

**Respiratory and Enteric Outbreaks:** CNPHI Outbreak Summaries, COVID-19 Surveillance System (Department of Health and Community Services, Government of Newfoundland and Labrador).

**Reportable Zoonotic Disease Events and Outbreaks:** Office of the Chief Veterinary Officer, Department of Fisheries, Forestry and Agriculture, Government of Newfoundland and Labrador

**Population statistics:** Statistics Canada Annual Population Estimates.

### Endnotes

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<sup>1</sup> The average rate is calculated from 2019 to 2023.

<sup>2</sup> Data pending for 2024.

<sup>3</sup> Cases of syphilis include infectious syphilis, non-infectious syphilis, and congenital syphilis.