



**NOTIFIABLE DISEASES IN NOVA SCOTIA
2018 SURVEILLANCE REPORT**

ACKNOWLEDGEMENTS

Provincial notifiable disease surveillance would not be possible without the timely and complete case reporting by health care providers, public health professionals, and laboratories within the province. The Nova Scotia Department of Health and Wellness extends its thanks to all those whose contributions have helped make this report possible.

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2018 HIGHLIGHTS

On December 3, 2018, Nova Scotia launched Panorama, a communicable disease case management and surveillance system for public health professionals. Panorama provides integrated tools to assist in monitoring, managing and reporting on public health. Because Panorama was implemented towards the end of the year, the 2018 year of public health data for this report was captured from a variety of different sources and migrated into Panorama.

A total of 7732 cases of notifiable diseases (including influenza) were reported in Nova Scotia in 2018. Figure 1 represents the frequency of diseases reported by disease category. A summary of the diseases included in each disease category can be found in the Nova Scotia Surveillance Guidelines for Notifiable Diseases and Conditions (<http://novascotia.ca/dhw/populationhealth/surveillanceguidelines/>).

Chlamydia, a sexually transmitted infection (STI), was the most frequently reported disease (42.4%), followed by Clostridium difficile (12.7%) and MRSA (8.3%) (Figure 2).

The number of cases of mumps increased in 2018 due to two clusters in the Eastern and Central Zones of the province (Eastern: n=42, 26.1/100,000 population; Central: n=32, 7.1/100,000 population).

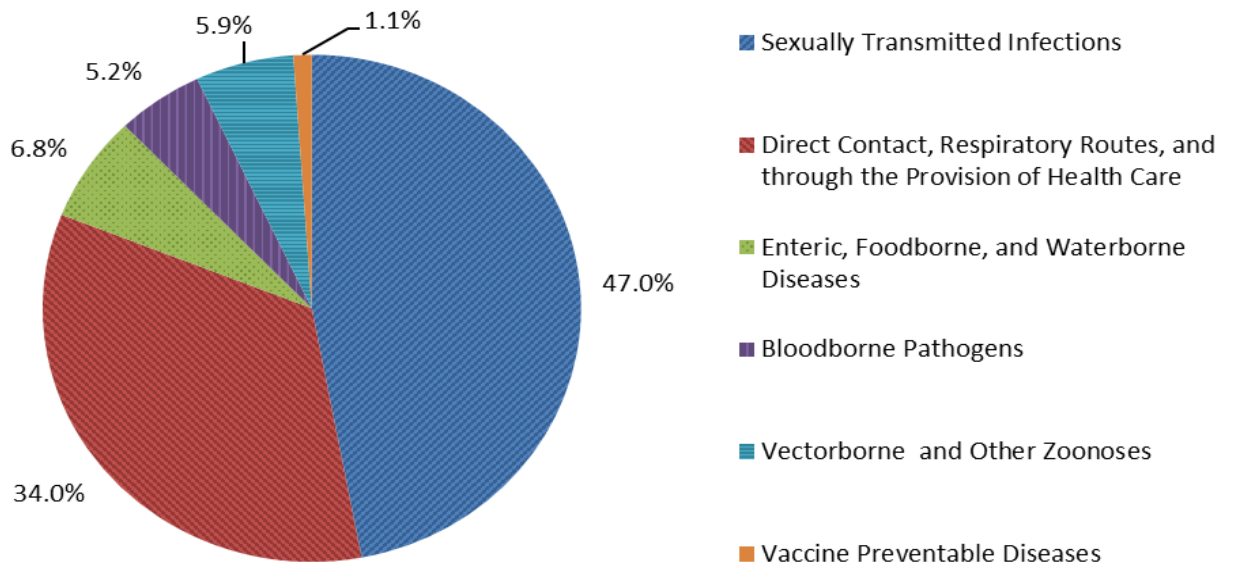
An HIV outbreak was declared in Central Zone in June 2018. There were 31 cases of newly diagnosed HIV reported in 2018, corresponding to a rate of 3.2/100,000 population. This was a 100% increase from the 2017 rate of 1.6/100,000 population.

The rate of Invasive Group A Streptococcal Disease (severe and non-severe) has increased considerably over the last several years to a high of 57 cases (rate: 5.9/100,000 population) in 2018. Invasive Group A Streptococcal Disease (iGAS) rates have demonstrated similar increases across Canada, and several national working groups have been convened related to iGAS surveillance and epidemiology.

Rates of all STIs increased in 2018; this is also consistent with national trends of increasing STI rates in Canada. The highest STI rate increase in Nova Scotia in 2018 was the gonorrhoea rate, which increased 32% from 24.4/100,000 population in 2017 to 32.2/100,000 population in 2018.

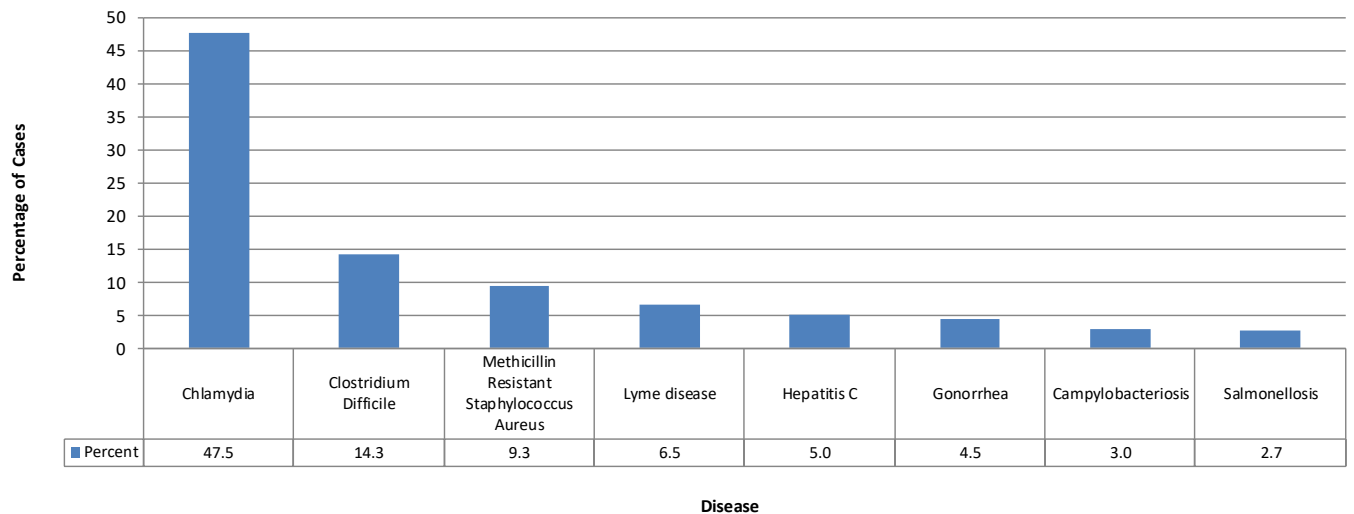
Influenza cases are not described any further in this report. Information on influenza can be obtained from the Annual Influenza Surveillance Report, which can be found on the Department of Health and Wellness website: (<http://novascotia.ca/dhw/populationhealth/>).

Figure 1: Distribution of notifiable diseases reported in Nova Scotia by disease category, 2018



Note: The “Direct Contact, Respiratory Routes, and through the Provision of Health Care” category in this figure includes influenza cases (n=833). Influenza cases are not described further in this report.

Figure 2: Summary of most frequently reported notifiable diseases in Nova Scotia, 2018



METHODS

In Nova Scotia, reporting of notifiable disease cases is mandated by the *Health Protection Act* (2). As part of public health case management, public health staff document information about notifiable disease cases that can include demographic, clinical, exposure, treatment, and laboratory information.

Cases are classified based on standardized case definitions and are reported to DHW, for provincial surveillance purposes, through a combination of applications: the Application for Notifiable Disease Surveillance (ANDS), the Application for Notifiable Disease Surveillance and Immunization (ANDI), case report forms and Panorama. Further information on the case definitions, reporting procedures, and forms can be found in the Nova Scotia Surveillance Guidelines for Notifiable Diseases and Conditions (3). Information on public health case management and control measures in Nova Scotia can be found in the Nova Scotia Communicable Disease Control Manual (4).

Cases of notifiable diseases are generally reported and counted based on their place of residence at the time of their diagnosis, with some exceptions. For more information on the guidelines for reporting and counting cases, please see the Nova Scotia Surveillance Guidelines for Notifiable Diseases and Conditions (3). For chronic conditions (e.g. hepatitis C, HIV), only residents with a first-time diagnosis in Nova Scotia are included in this report. If information on previous diagnoses for a case is not available (e.g. when a case is lost to follow up), these cases are counted as Nova Scotia cases.

Dates presented in this report are based on the episode date assigned to the case. The episode date is the earliest known date, reflecting symptom onset or the closest available date (specimen collection date, clinical diagnosis date, or test result date).

Only cases meeting a confirmed case definition are included in this report, with the exception of Lyme disease, where probable cases are also included.

Data for Meningitis-Viral, Amebiasis, Hepatitis E, Yersiniosis, Lymphogranuloma Venereum, Q-Fever and Toxoplasmosis are reported in Appendix B, Table 1 because these diseases were reportable until 2015.

Positive cases reported to public health who tested anonymously (e.g. from anonymous HIV testing programs, special research studies) are not included in this report. Anonymous positive test results are not routinely reported to public health. For HIV, cases must be tested nominally before receiving treatment for their infection, so it is assumed that most HIV cases who first test anonymously are reported nominally to public health and in turn are included in the provincial surveillance data.

Rates were calculated using Statistics Canada population counts based on the 2016 Census (accessed July 2020). All Canadian notifiable disease data were obtained from the Public Health Agency of Canada (PHAC) and are cited where used. Most comparisons in this report between Nova Scotia and Canada are based on the 2017 Notifiable Disease Report produced by PHAC. A few notifiable diseases, including HIV and syphilis had 2018 national data available at the time of this report, and these rates are used for comparison (6,8).

This report does not contain any influenza surveillance data as there is a separate annual report on this topic, which can be found on the DHW website (<http://novascotia.ca/dhw/populationhealth/>).

All case data are current as of December 31, 2019.

LIMITATIONS

The numbers cited in this report reflect only those cases that are reported to Public Health within the Nova Scotia Health Authority (NSHA) and may under-represent the true number of cases in the population. This is particularly relevant for diseases that may remain asymptomatic (i.e. chlamydia) and those that have a wide clinical spectrum (i.e. Lyme disease). For certain diseases, cases experience severe illness and are more likely to present for medical care and be diagnosed and reported to public health (e.g. invasive meningococcal disease). As a result, these diseases are likely well-captured in the surveillance information presented in this report. Additional limitations in surveillance data may also be present for specific diseases (e.g. misclassification of hepatitis B cases as acute or chronic).

Changes in case finding procedures (e.g. changes to laboratory testing methods) may result in an increase or decrease in the number of reported cases that may not be reflective of true changes in disease occurrence within the province. Any changes are noted within the report.

In December 2018, Nova Scotia implemented a new public health surveillance system (Panorama). Since the implementation of Panorama, Nova Scotia has almost entirely shifted away from paper case report forms, and now relies on electronic capture of most public health information. Because Panorama was implemented towards the end of the year, the 2018 year of public health data was captured from a variety of different sources and migrated into Panorama. After the implementation of Panorama, some data quality issues have been identified with migrated historical data and the public health system adapting to a new notifiable disease system. Historical data was extracted from ANDS and ANDI, and only 2018 data was extracted from Panorama.

Numbers and rates presented in this report are based on information in Panorama as of December 31, 2019. As Panorama is a real-time surveillance system, numbers and rates reported here are expected to change slightly as new information is added to Panorama. National notifiable disease data from PHAC that are used in this report are also subject to change.

DISEASE REPORTS IN NOVA SCOTIA BY DISEASE GROUP

The purpose of this section is to present more detailed information on reported cases within each category of notifiable diseases in Nova Scotia. Overall case counts and rates by disease, as well as counts and rates by age, sex, and Zone can be found in Appendix B.

Bloodborne Pathogens

HIV & AIDS

There were 31 newly diagnosed cases of HIV in Nova Scotia in 2018 (rate of 3.2/100,000 population) which is an increase from 2017 (rate: 1.6/100,000 population). In July 2018, a HIV outbreak was declared in Nova Scotia; overall Central Zone represented 84% (n=26) of total cases in 2018. The cumulative number of new diagnoses since 1985 (when the first case was reported) is 894. The Canadian rate of reported HIV cases in 2018 was 6.9/100,000 population (6). For 2018, the reported rate of HIV in Nova Scotia was below the national rate.

In 2018, 71.0% of HIV cases were male, which was a decrease from 86.7% of HIV cases that were male in 2017. The average age of newly diagnosed HIV cases in 2018 was 32.1 years of age. The frequency of reporting the following exposures were: men who have sex with men (MSM, 48.0%), men who have sex with men AND report injection drug use (MSM/PWID, 13.0%), persons who use injection drugs (PWID, 35%), and high risk heterosexual contact (HET-HR, 3.0%).

There were no new case of AIDS reported in Nova Scotia in 2018, which was a decrease from 2017 (2017 rate: 0.1/100,000 population).

Hepatitis B (Acute and Chronic)

The number of reported cases of acute hepatitis B in 2018 was 6 (rate: 0.6/100,000 population). There were 20 cases of chronic hepatitis B reported in 2018 (rate: 2.1/100,000 population), and 1 case of hepatitis B type unknown (rate: 0.1/100,000 population). The overall rate for hepatitis B (acute and chronic) in 2018 was 2.8/100,000 population which is an increase from the 2017 rate of 2.5/100,000 population.

The majority of cases were age 30 and older (96.2%) and 77.8% were male.

Nationally, the rates of hepatitis B are reported for acute and chronic cases combined. The 2017 Canadian rate of hepatitis B was 13.4/100,000 population which was higher than the 2018 Nova Scotia rate of 2.8/100,000 population (5).

Hepatitis C

In 2018, 345 cases of hepatitis C were reported in Nova Scotia (rate of 35.9/100,000 population). This rate is higher compared to the 2017 and 2016 rates (Figure 4). Nova Scotia's 2018 rate of 35.9/100,000 population was slightly higher than the 2017 Canadian national rate of hepatitis C, which was 31.7/100,000 population (5).

Northern Zone had the highest rate of hepatitis C compared to the other zones with a rate of 63.0/100,000 population (Figure 5). Eastern Zone had the second highest rate of hepatitis C in 2018 (55.4/100,000 population).

Figure 4: Reported rates of hepatitis C in Nova Scotia, 2009-2018

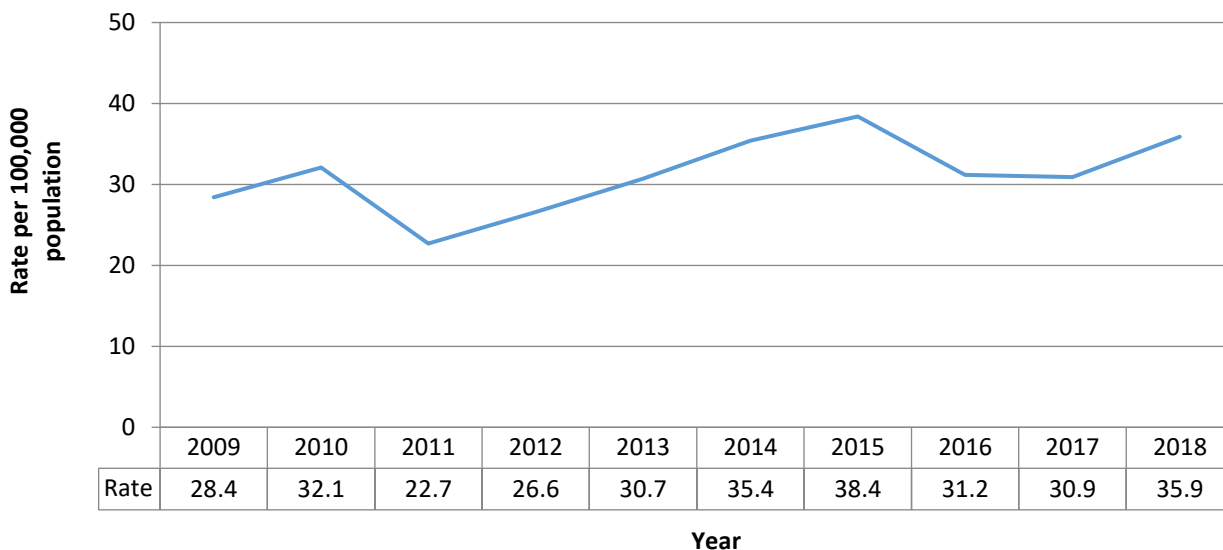
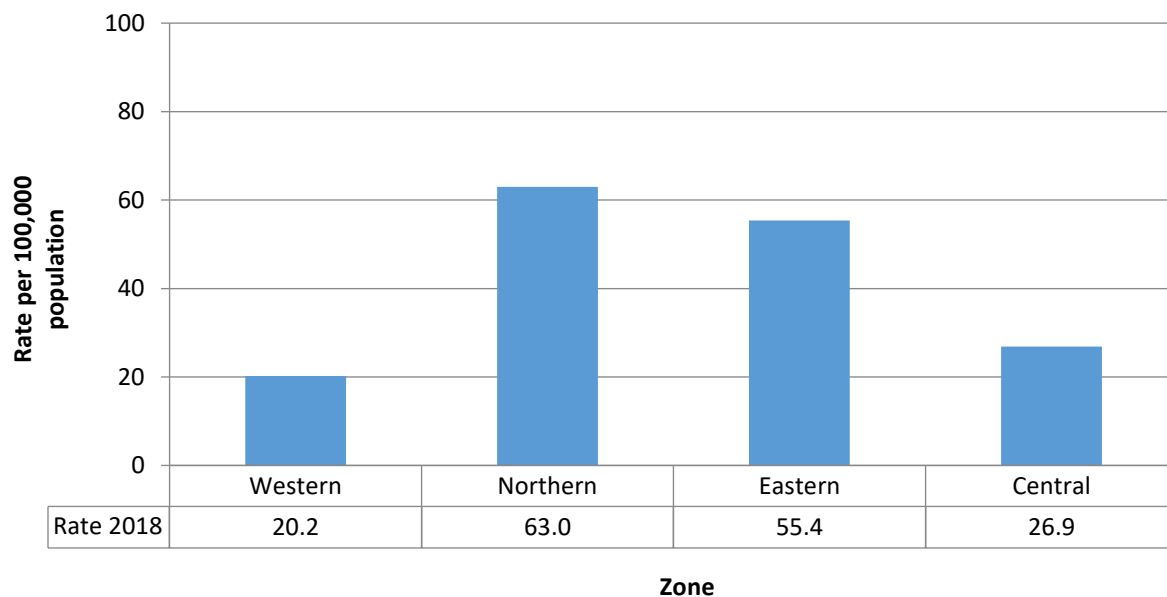


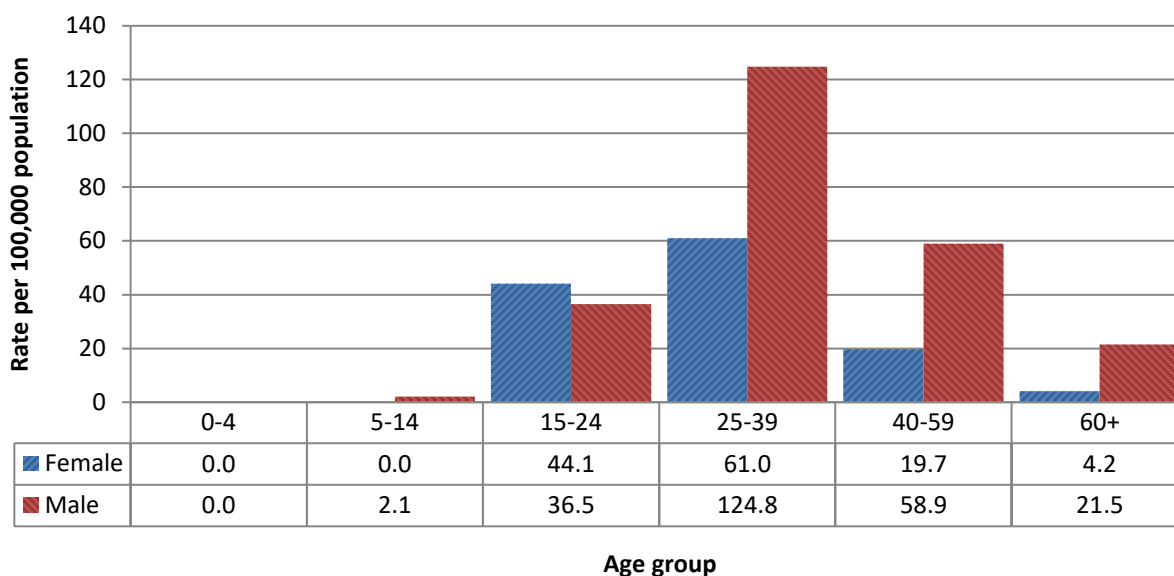
Figure 5: Reported rates of hepatitis C in Nova Scotia by Zone, 2018



Notes: Western = Zone 1, Northern = Zone 2, Eastern = Zone 3, Central = Zone 4

The majority of reported hepatitis C cases (47.0%) were between the ages of 25-39 years and 67.8% of the cases were male. The rate was highest among males aged 25-39 at 124.8/100,000 population (Figure 6). The Canadian hepatitis C rate for 2017 was also highest among males in the 25-29 age group at 66.29/100,000 population (5).

Figure 6: Reported rates of hepatitis C in Nova Scotia by age group and sex, 2018



Direct Contact, Respiratory Routes, and Through the Provision of Health Care

There were a total of 1794 cases of respiratory, direct contact, and health care-associated infections reported in 2018 (excluding influenza, n=833).

Rates of all other direct contact/respiratory route reports are presented in Figure 7 and Appendix B, Table 1.

Health Care Associated Infections

The data presented in this report reflects the total number of provincially notifiable health care-associated infections in the province (both health care and community acquired). Not all health care associated infections are included on the notifiable disease list. The current process for reporting these infections to Public Health does not allow cases to be classified as health care or community acquired.

DHW also reports surveillance data of health care-associated *Clostridium difficile* and Methicillin Resistant Staphylococcus Aureus (MRSA) in acute care hospitals within the province. These data can be found at <https://novascotia.ca/dhw/hsg/public-reporting/>.

Clostridium difficile

Clostridium difficile became a reportable disease on April 1st, 2012. The number of cases reported in 2018 was 984 (rate of 102.5/100,000 population). This is an increase from 2017 (n=927; 97.2/100,000 population). The 2018 Nova Scotia rate was lower compared to the 2017 national rate of 99.0/100,000 population (5). The majority of the cases were female (58.8%) and 57.5% were aged 60 years and older.

Four outbreaks of *Clostridium difficile* were reported in 2018.

Methicillin Resistant Staphylococcus Aureus (MRSA)

There were 642 reported cases of MRSA in Nova Scotia in 2018. The rate was 66.9/100,000 population which is lower compared to the rate in 2017 (54.7/100,000 population). Canadian rates are not available because MRSA is not nationally reportable. The highest rate in the province in 2018 was reported in the Western Zone (104.5/100,000 population).

The majority of cases occurred in those aged 60 years and older (54.7%, n=351). This was a rate of 130.3/100,000 population. The rate among males was higher compared to females (68.3/100,000 for males vs. 65.4/100,000 population for females).

There were seven outbreaks of MRSA reported in 2017.

Vancomycin-Resistant Enterococcus (VRE)

In 2018, 31 cases of VRE were reported in Nova Scotia (rate of 3.2/100,000 population). This is much lower compared to the 2017 rate of 12.7/100,000. The majority of cases (74.2%) were age 60 years or older and 58.1% were male.

One outbreak of VRE was reported in 2018.

Direct Contact and Respiratory Routes

Invasive Meningococcal Disease

Four cases of invasive meningococcal disease were reported in 2018 (rate of 0.4/100,000 population). This was a decrease from 2017 (n=6; 0.6/100,000 population). The 2018 Nova Scotia rate was higher compared to the 2017 national rate of 0.3/100,000 population (5). In 2018, three of the cases were serogroup B and one was serogroup W.

Legionellosis

There were five cases of legionellosis reported in 2018 (rate of 0.5/100,000 population). This was a decrease from the rate reported in 2017 (n=9, 0.9/100,000 population).

Invasive Pneumococcal Disease

In 2018, there were 61 cases of invasive pneumococcal disease reported (rate of 6.4/100,000 population). This was higher compared to the rate in 2017 (5.1/100,000). The majority of cases reported in 2018 were over the age of 60 (59.0%) and 54.2% were male. The 2018 Nova Scotia rate was lower compared to the 2017 national rate of 9.5/100,000 population (5).

Invasive Group A Streptococcal Disease (iGAS)

The overall rate of iGAS disease for 2018 was 5.9/100,000 (n=57). The number of severe cases reported in 2018 was 20 (rate of 2.1/100,000 population). The number of non-severe cases reported in 2018 was 33 (rate of 3.4/100,000 population). The overall (severe and non-severe) 2018 rate for Nova Scotia (5.9/100,000) was lower compared to the 2017 national rate (6.8/100,000) (5).

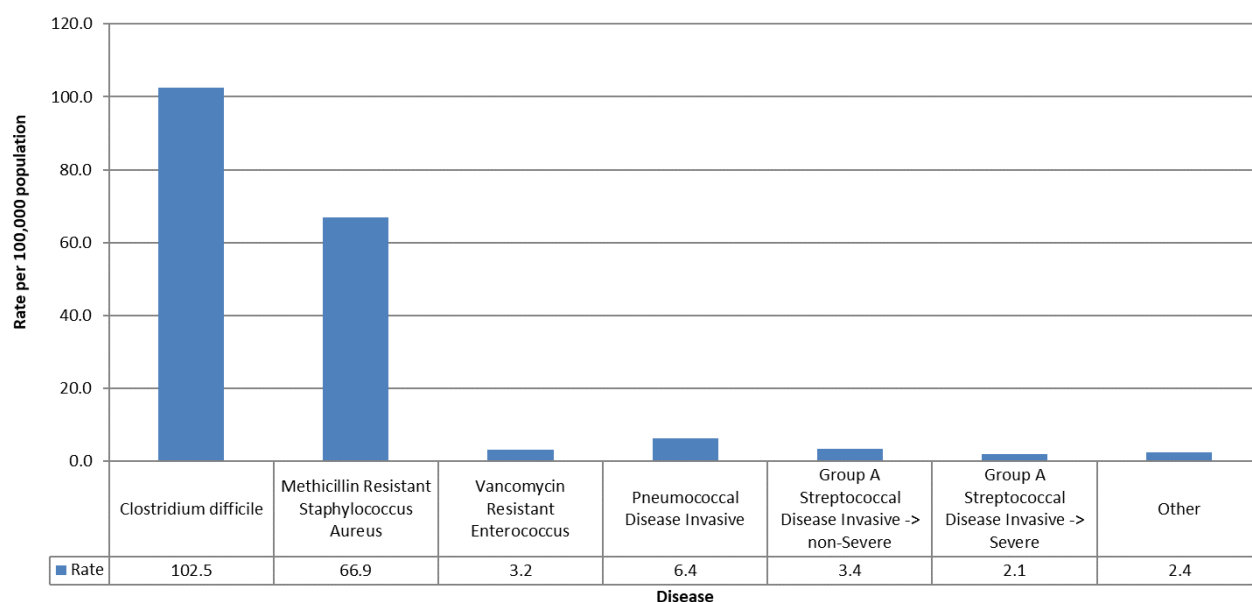
Tuberculosis

Nine cases of laboratory confirmed tuberculosis were reported in 2018 (4 pulmonary, 5 extra pulmonary). This represented a rate of 0.9/100,000 population. The cases were distributed between the 15-24, 25-39 and 60+ age groups. The majority of the cases were male (66.7%). The 2018 provincial rate was lower than the 2017 Canadian rate (0.9/100,000 vs. 4.9/100,000 population) (5).

Other Direct Contact and Respiratory Route Pathogens

One case of group B streptococcal of a newborn and no cases of Creutzfeldt-Jakob Disease-Classic were reported in 2018.

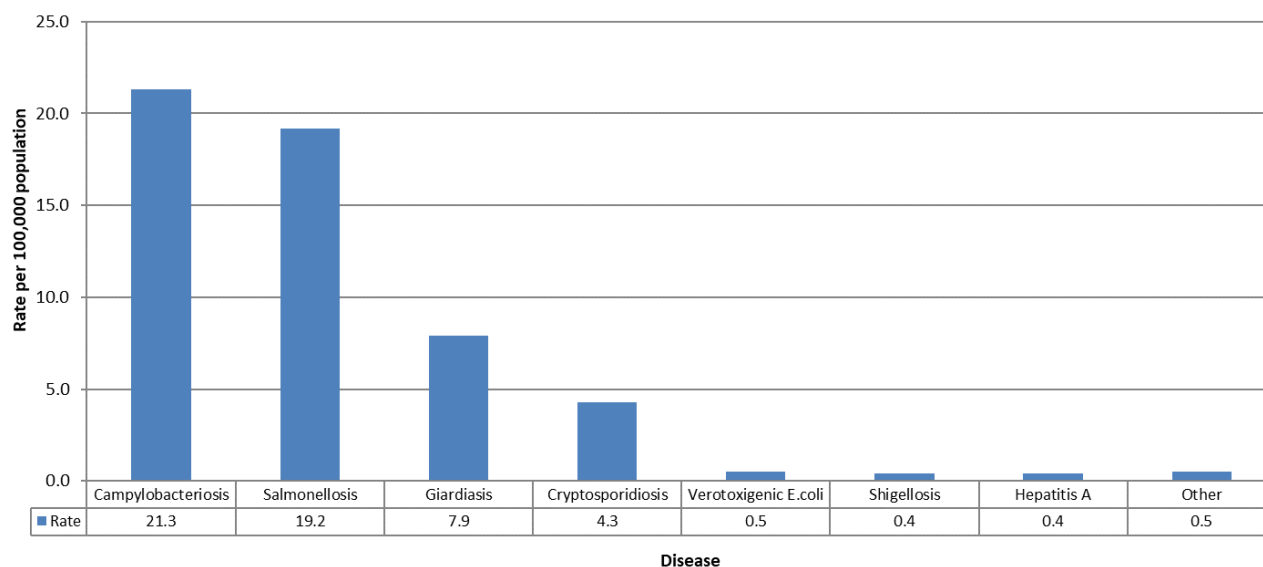
Figure 7: Reported rates of diseases transmitted by direct contact, respiratory routes, and through the provision of health care in Nova Scotia, 2018



Enteric, Foodborne, and Waterborne Diseases

There were 528 cases of enteric disease reported in Nova Scotia in 2018. Figure 8 presents the enteric disease rates for 2018.

Figure 8: Reported rates of enteric, foodborne, and waterborne diseases in Nova Scotia, 2018



Campylobacteriosis

In 2018, campylobacteriosis was the most frequently reported enteric infection (204 cases; rate of 21.3/100,000 population). The Western Zone had the highest rate among zones with a rate of 38.9/100,000 population. The majority of cases were aged 40 years or older (n=133, 65.2%). The rate for campylobacteriosis continues to be higher among males than females (23.9/100,000 for males vs. 18.8/100,000 for females). The 2018 provincial rate was lower compared to the 2017 national rate (21.3/100,000 vs. 28.4/100,000) (5).

Salmonellosis

Salmonellosis was the second most frequently reported enteric infection in Nova Scotia in 2018 (184 cases; 19.2/100,000 population). Thirty-two of the reported cases were associated with travel (18.7%). The Central Zone had the highest rate among zones with a rate of 21.5/100,000 population. Sixty-three percent of cases reported in 2018 were 40 years of age and older and 52.2% were female. The rate of salmonellosis infections in Nova Scotia in 2018 (19.0/100,000 population) was lower than the 2017 Canadian rate of 19.5/100,000 population (5).

Giardiasis

A total of 76 cases of giardiasis were reported in Nova Scotia in 2018, representing a rate of 7.9/100,000 population. The rate of illness was higher among males compared to females (9.6/100,000 for males vs. 8.2/100,000 population for females). The 2018 rate of giardiasis infections reported in Nova Scotia (7.9/100,000 population) was lower than the 2017 Canadian rate (10/100,000 population) (5).

Cryptosporidiosis

A total of 41 cases of cryptosporidiosis were reported in Nova Scotia in 2018, representing a rate of 4.3/100,000 population. Northern Zone had the highest rate among the zones (9.9/100,000 population). The majority of cases were between the ages of 15-39 (61.0%). The rate of illness was higher among females compared to males (5.1/100,000 for females vs. 3.4/100,000 population for males). The 2017 rate of cryptosporidiosis infections reported in Nova Scotia (4.3/100,000 population) was higher compared to the 2017 Canadian rate of 2.2/100,000 population (5).

Hepatitis A

A total of 4 cases of hepatitis A were reported in Nova Scotia in 2018, representing a rate of 0.4/100,000 population. This was slightly higher than the 2017 Nova Scotia rate of 0.2/100,000 population. The 2018 rate of hepatitis A infections reported in Nova Scotia (0.4/100,000 population) was lower compared to the 2017 Canadian rate of 0.7/100,000 population (5).

Verotoxigenic E.coli

A total of five cases of Verotoxigenic E.coli were reported in 2018 (0.5/100,000 population). The rate among females was higher than males (0.6/100,000 for females vs. 0.4/100,000 population for males). The 2018 Verotoxigenic E.coli rate in Nova Scotia was lower than the 2017 national rate (0.6/100,000 population vs. 2.2/100,000 population)(5).

Other Reportable Enteric Diseases

The rate of other reportable enteric diseases in Nova Scotia in 2017 remained low (See Appendix B, Table 1 for details).

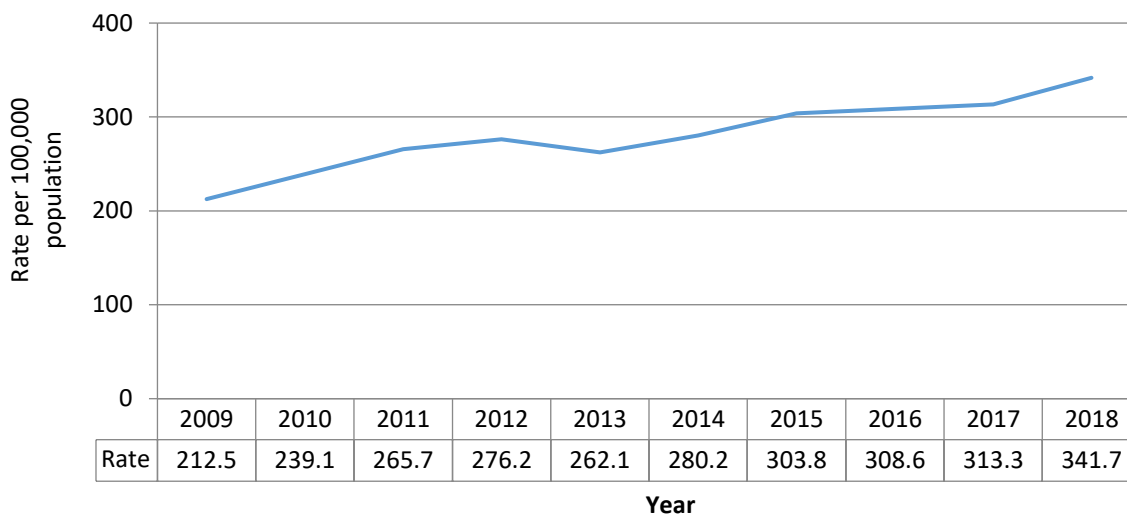
Sexually Transmitted Infections

There were 3,637 notifications of bacterial sexually transmitted infections (STI) in Nova Scotia in 2018. The rates of chlamydia, gonorrhoea and infectious syphilis increased in 2018.

Chlamydia

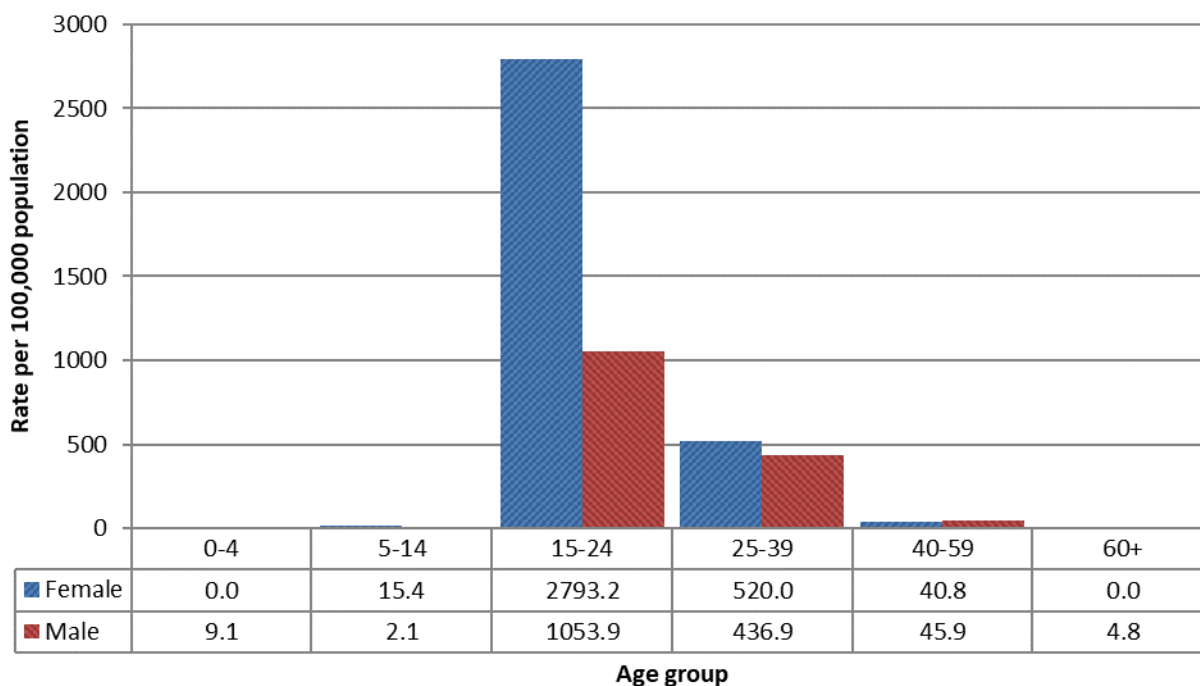
Chlamydia was the most frequently reported notifiable disease in Nova Scotia in 2018 (n=3,280, rate=341.7/100,000 population). The number of reported cases and the associated rate of chlamydia has shown an increasing trend from 2009 to 2018 (Figure 9). The 2018 Nova Scotia chlamydia rate was comparable to the 2017 national rate (341.7/100,000 vs. 345.7/100,000 population, respectively) (5).

Figure 9: Reported rates of chlamydia in Nova Scotia, 2009-2018



Similar to the overall rate, the rates of chlamydia among females and males also increased in 2018. The 2018 rate for females is 443.3/100,000 compared to 235.3/100,000 for males. The highest rate of chlamydia in Nova Scotia for 2018 was reported among females aged 15 to 24 years (2,793.2/100,000 population) (Figure 10). Similarly, 2017 national data show the highest rates of chlamydia among females aged 15 to 19 years (1,891.6/100,000 population) and 20 to 24 years (2499.4/100,000 population) (5).

Figure 10: Reported rates of chlamydia in Nova Scotia by age group* (in years) and sex, 2018



*Note: 131 female cases and 51 male cases had unknown age

Gonorrhoea

For 2018, 309 cases of gonorrhoea were reported in Nova Scotia (rate of 32.2/100,000 population. This is an increase from the rate of 24.4/100,000 population in 2017 but is still lower than the 2017 Canadian rate of 79.5/100,000 population (5).

The reported rates of gonorrhoea for 2018 continued to increase among females and males compared to 2017 (females: 18.1/100,000 population in 2017 vs. 23.5/100,000 population in 2018; males: 31.0/100,000 population 2017 vs. 41.3/100,000 population in 2018).

In 2018, the highest rates of gonorrhoea in Nova Scotia were reported among males and females aged 15 to 24 years (male rate: 111.1/100,000 population; female rate: 110.3/100,000 population)(Figure 12). The female rate in the 15-24 age group increased between 2017 and 2018 (females: 76.2/100,000 in 2017 vs. 110.3/100,000 in 2018), while the male rate in the 15-24 age group decreased between 2017 and 2018 (males: 134.9/100,000 population in 2017 vs 111.1/100,000 population in 2018). The rate for females and males in the 25-39 age group also both increased between 2017 and 2018 (females: 47.2/100,000 population in 2017 vs. 53.1/100,000 population in 2018; males: 87.4/100,000 in 2017 vs. 123.7/100,000 population in 2018).

Central Zone reported the highest rate of gonorrhoea for 2018 compared to the other zones (54.6/100,000 population).

Figure 11: Reported rates of gonorrhoea in Nova Scotia, 2009-2018

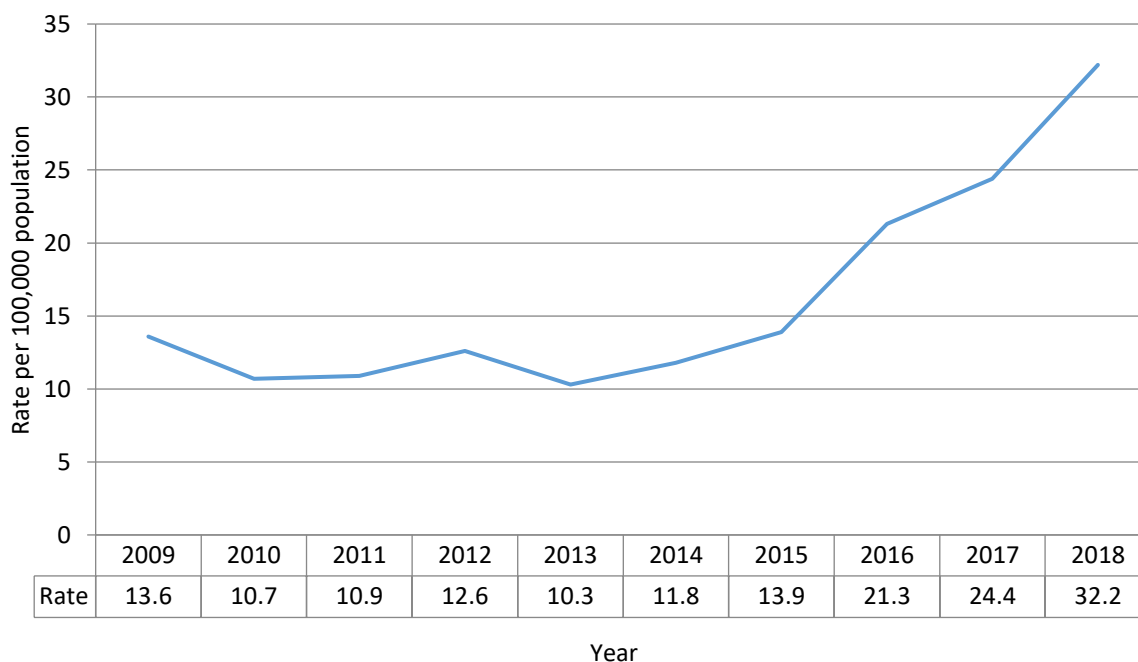
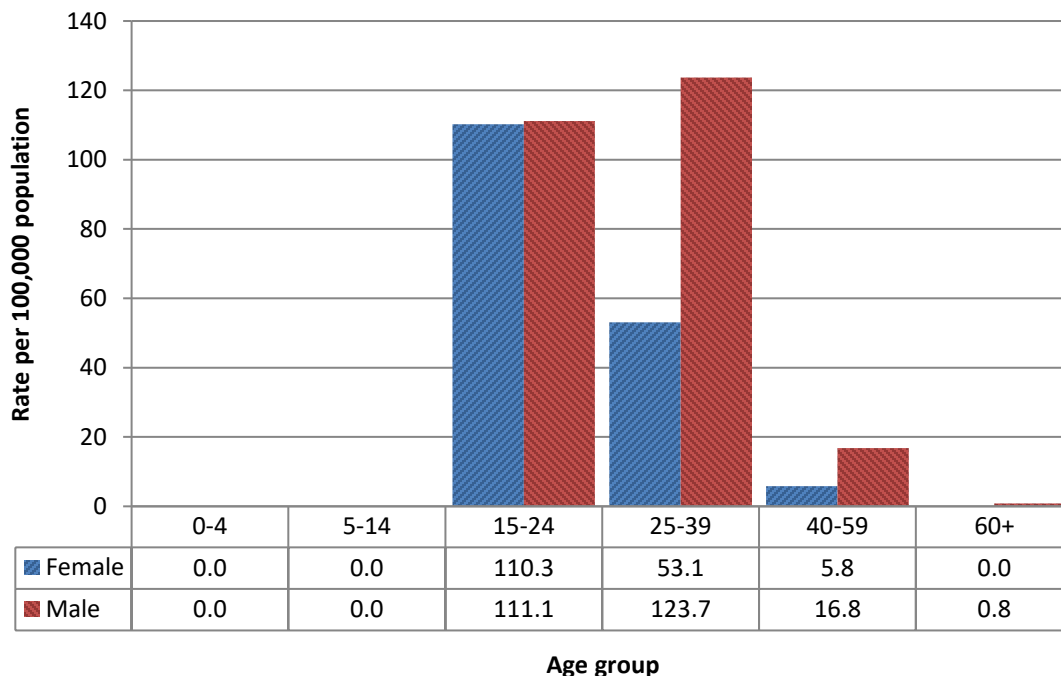


Figure 12: Reported rates of gonorrhoea in Nova Scotia by age group (in years) and sex, 2018



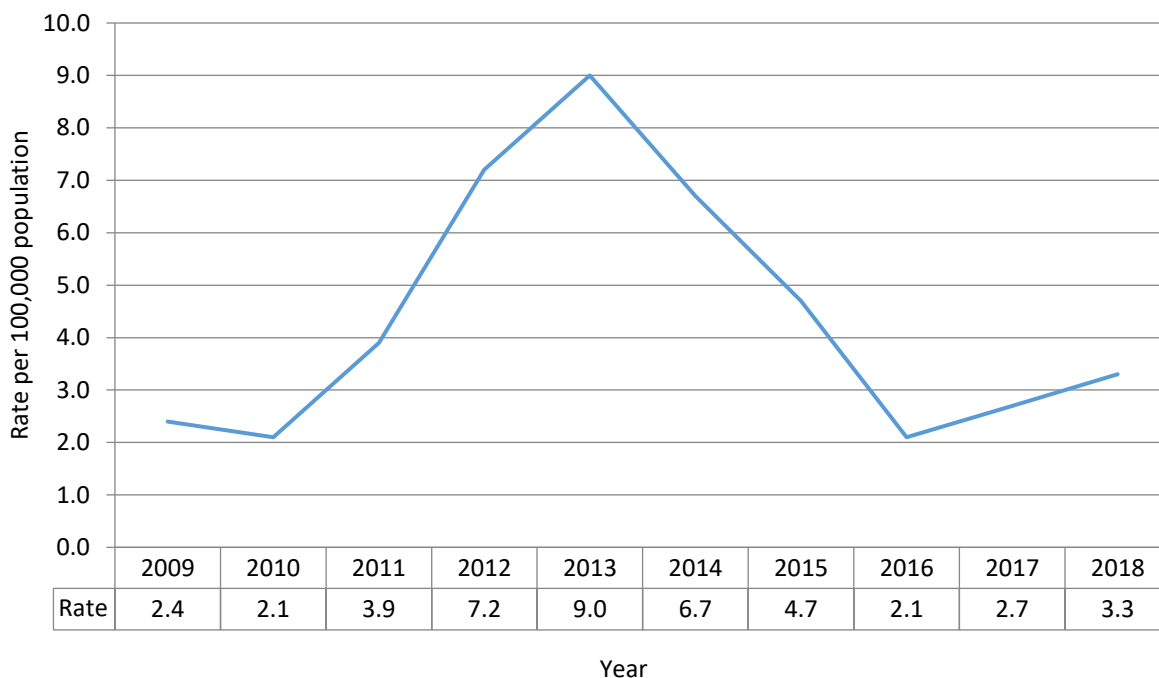
Syphilis

Syphilis cases are categorized as infectious or non-infectious syphilis. The primary, secondary, and early-latent stages of disease are considered infectious. The late latent and tertiary stages of disease are considered non-infectious (7). Infectious syphilis cases comprise those of public health significance and will be described in more detail below.

In 2018 there were 32 cases of infectious syphilis and 16 cases of non-infectious syphilis reported in Nova Scotia. The reported rate of infectious syphilis cases in Nova Scotia was 3.3/100,000 population for 2018. This is an increase from the rate in 2017 (2.7/100,000 population), but well below the highest recent rate of 9.0/100,000 population observed in 2013 (Figure 13).

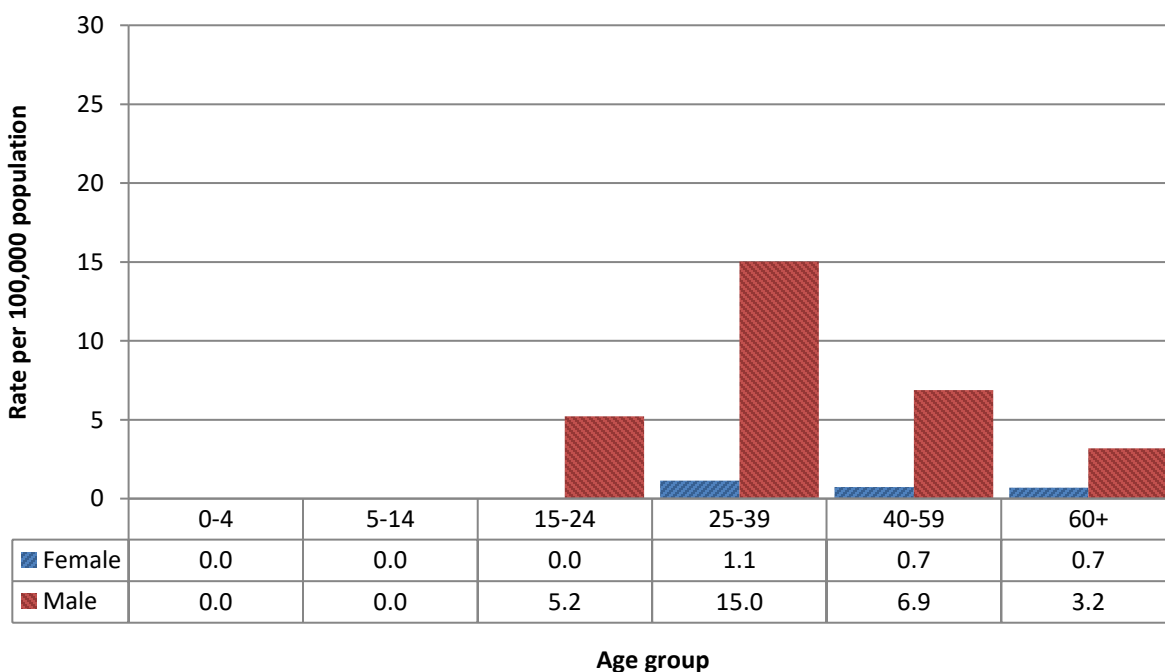
The Canadian rates for syphilis include both infectious and non-infectious cases. The 2018 Nova Scotia rate for infectious syphilis and non-infectious syphilis combined (5.0/100,000 population) was lower compared to the 2018 Canadian rate (17.0/100,000 population) (8).

Figure 13: Reported rates of infectious syphilis in Nova Scotia, 2009-2018



Since 2008, 96.0% (403/ 420) infectious syphilis cases in Nova Scotia have been male. Also during that time period, 82.1% (345/420) of infectious syphilis were associated with Central Zone. All cases of infectious syphilis reported in 2018 were over the age of 15. The highest rate was reported for males in the 25-39 year age group (rate: 15.0/100,000 population) which was an increase from 2017 (rate: 13.5/100,000 population) (Figure 14).

Figure 14: Reported rates of infectious syphilis in Nova Scotia by age group (in years) and sex, 2018



Vaccine Preventable Diseases

There were 85 cases of vaccine preventable diseases reported in Nova Scotia in 2018. This is a decrease from 96 cases in 2017.

The vaccine preventable diseases reported in 2018 included 77 cases of mumps and 3 cases of pertussis.

Measles

There were 0 cases of measles reported in 2018. In the previous year, 2017, there were 29 cases of measles reported, which were the only measles cases reported in the last ten years. The 2017 cases were associated with two outbreaks that occurred in the province: one in Central Zone, and one in Western Zone.

Mumps

Two clusters of mumps occurred in Nova Scotia in 2018, contributing to a total 77 cases (rate: 8.0/100,000 population), mostly in Eastern Zone (n=42, rate: 26.1/100,000 population) and Central Zone (n=32, rate: 7.1/100,000 population). The 2018 mumps rate increased from the 2017 rate of 2.2/100,000 population. The highest rate was reported in the 15-24 age group (n=72, 64.3/100,000 population) and 52.0% of the cases were male. The 2018 Nova Scotia rate (8.0/100,000 population) was slightly above the national 2017 (6.2/100,000 population) (5).

Pertussis

The rate of pertussis reported in 2018 was 0.3/100,000 population. The cases occurred in Central Zone (n=3). All cases occurred in the 0-4 (n=2, 4.7/100,000 population) and 5-14 (n=1, 1.1/100,000 population) age groups. There was a higher percentage of male cases reported compared to females (66.7% vs. 33.3%). The 2018 Nova Scotia rate was less than the 2017 national rate (0.3/100,000 population vs. 9.81/100,000 population)(5).

Vectorborne and Other Zoonoses

There were 457 cases of vectorborne and other zoonotic diseases reported in Nova Scotia in 2018:

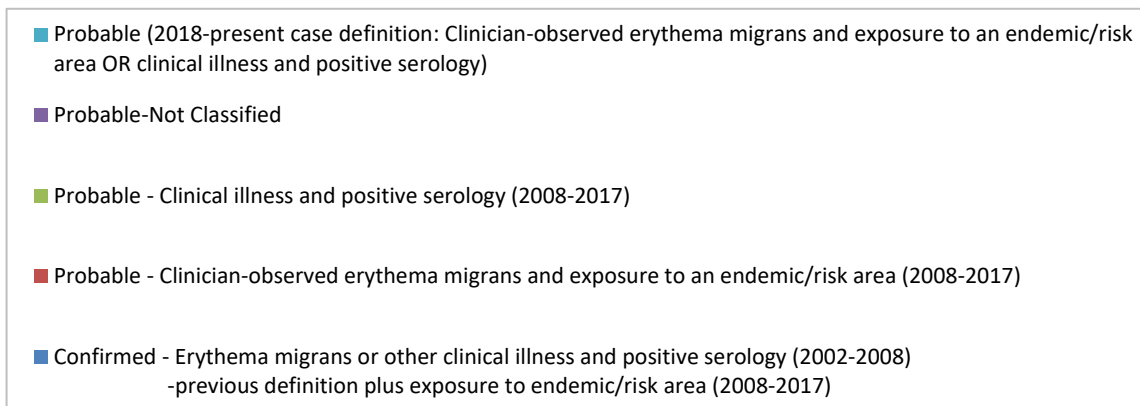
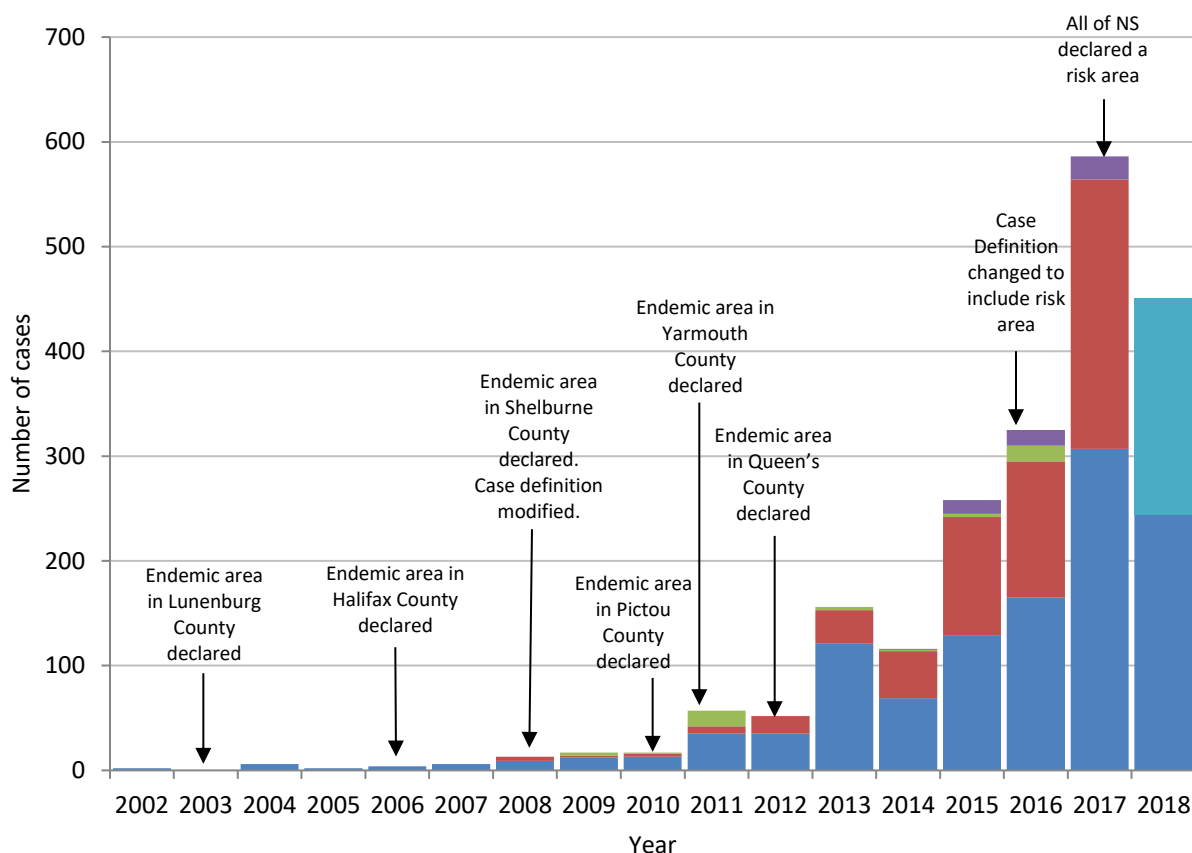
- There were 451 cases of Lyme disease reported.
- There were six cases of malaria reported. None of these cases were acquired in Nova Scotia.

See Appendix B for tables containing numbers and rates of reported cases of vectorborne and other zoonotic diseases from 2009 to 2018.

Lyme Disease

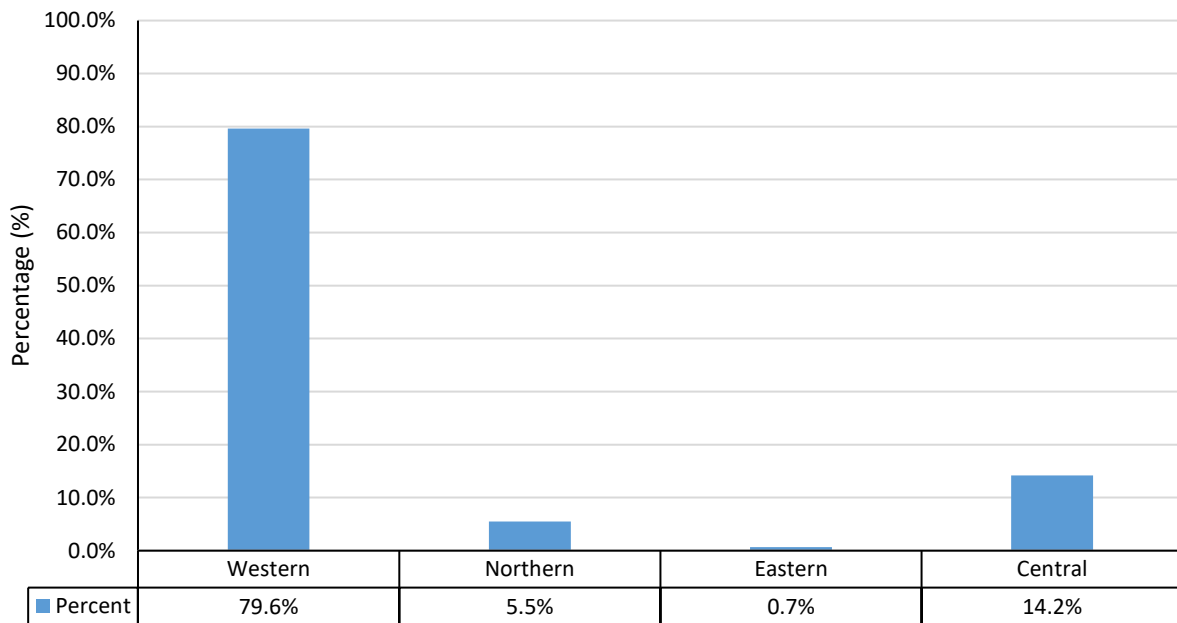
There were 451 cases of confirmed and probable Lyme disease reported in 2018, which is a decrease from 2017 (n=586). Figure 15 presents the number of reported cases by year, and also indicates the years in which new areas were added to the list of known Lyme disease endemic or risk areas, and when the surveillance case definition was modified.

Figure 15: Number of reported cases of Lyme disease by case classification and year, Nova Scotia, 2002-2018



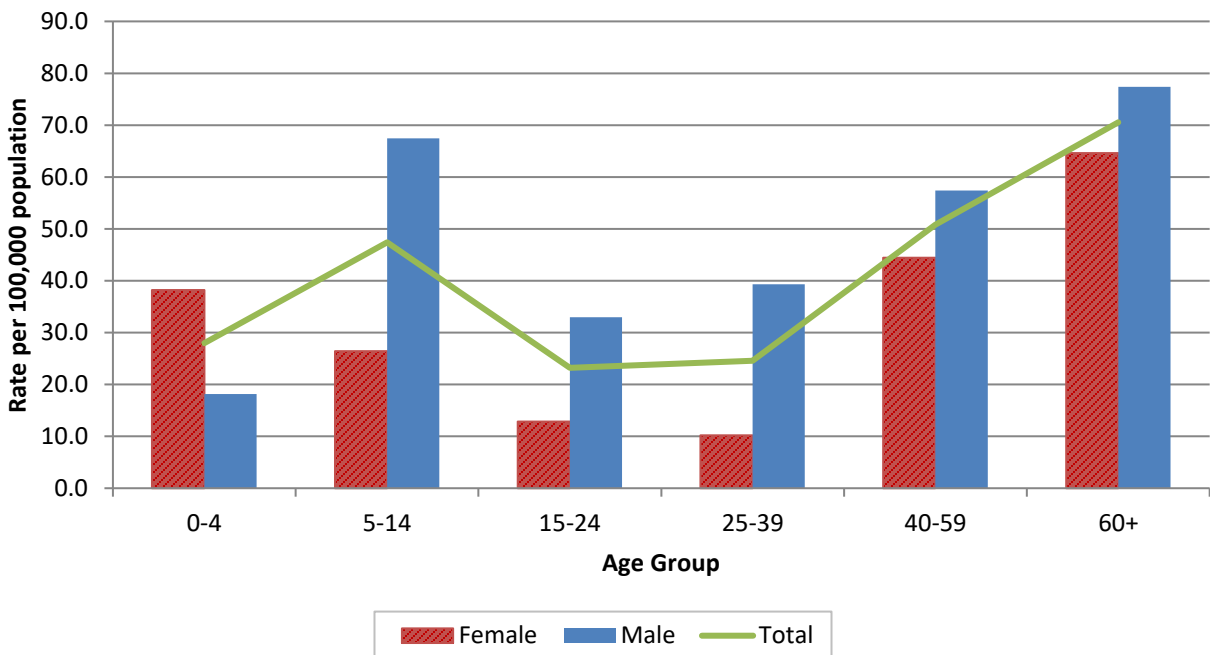
In 2018, Western zone had the highest rate among the zones (n=359; 181.3/100,000 population). The percentage of total cases reported by Zone is presented in Figure 16. The majority of cases in Nova Scotia were reported in the 40-59 (n=136; 50.8/100,000 population) and 60+ (n=190; 70.5/100,000 population) age groups and 57.9% were male (Figure 17).

Figure 16: Percentage of cases reported by Zone, 2018



Notes: Western = Zone 1, Northern = Zone 2, Eastern = Zone 3, Central = Zone 4

Figure 17: Rates of reported cases of Lyme disease per 100,000 population, by sex and age group, (in years), Nova Scotia, 2018



For a current map of known risk areas in the province, please see the map online:

<http://novascotia.ca/hpp/cdpc/lyme-map.asp>.

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APPENDIX A – Notifiable Diseases in Nova Scotia

Acquired Immunodeficiency Syndrome (AIDS)	Measles
Acute Flaccid Paralysis (AFP)	Meningitis (bacterial)
Anthrax	Meningococcal Disease Invasive (IMD)
Botulism (Foodborne, Wound, Infant, & Colonization Botulism)	Methicillin-resistant Staphylococcus aureus (MRSA)
Brucellosis	Mumps
Campylobacteriosis	Pertussis
Chlamydia (genital, extra-genital, and perinatally acquired)	Plague
Cholera	Pneumococcal Disease, Invasive
Clostridium difficile	Poliomyelitis
Creutzfeldt-Jakob Disease – Classic (sporadic, iatrogenic, Genetic Prion Disease) and Variant	Rabies
Cryptosporidiosis	Rubella (Non-Congenital, Congenital Rubella Syndrome)
Cyclosporiasis	Salmonellosis (includes Paratyphoid)
Diphtheria	Severe Acute Respiratory Infection (SARI)
Ebola Virus Disease	Severe Acute Respiratory Syndrome (SARS)
Giardiasis	Shellfish Poisoning (Paralytic & Amnesic)
Gonorrhea (genital, extra-genital, and perinatally acquired)	Shigellosis
Group A Streptococcal Disease, Invasive	Smallpox
Group B Streptococcal Disease of Newborn	Syphilis (primary, secondary, early latent, late latent, infectious neurosyphilis, non-infectious neurosyphilis, tertiary other than neurosyphilis, and early congenital)
Haemophilus Influenzae type b (Hib) Invasive Disease	Tetanus
Hantavirus Pulmonary Syndrome (HPS)	Tuberculosis
Hepatitis A	Tularemia
Hepatitis B (Acute Case and Chronic Carrier)	Typhoid
Hepatitis C	Vancomycin Resistant Enterococcus (VRE)
Human Immunodeficiency Virus (HIV)	Verotoxigenic Escherichia coli
Influenza (laboratory confirmed)	Viral Hemorrhagic Fevers (Lassa, Marburg, Crimean-Congo, Other)
Invasive Listeriosis	West Nile Virus (WNV) (West Nile Asymptomatic Infection, West Nile Neurological Syndrome, West Nile Non-Neurological Syndrome)
Legionellosis	Yellow Fever
Leprosy (Hansen’s Disease)	
Lyme Disease	
Malaria (Plasmodium falciparum, Plasmodium malariae, Plasmodium ovale, Plasmodium vivax)	

APPENDIX B – List of Tables

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TABLE 1: Notifiable diseases reported in Nova Scotia from 2009-2018: Number of reports and crude rates per 100,000 population

Condition	Year																				All Years		
	2009		2010		2011		2012		2013		2014		2015		2016		2017		2018		n	Average Rate	
	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate			
Bloodborne Pathogens																							
Acquired Immune Deficiency Syndrome (AIDS)	2	0.2	5	0.5	4	0.4	2	0.2	0	0.0	4	0.4	3	0.3	2	0.2	1	0.1	0	0.0	23	0.2	
Hepatitis B - Acute	5	0.5	3	0.3	4	0.4	1	0.1	2	0.2	3	0.3	9	1.0	9	0.9	6	0.6	6	0.6	48	0.5	
Hepatitis B-Chronic*	16	1.7	15	1.6	11	1.2	9	1	13	1.4	21	2.2	10	1.1	12	1.3	18	1.9	20	2.1	81	1.3	
Hepatitis B-Chronic or Unspecified*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	1	0.1	0	0.0
Hepatitis C	265	28.4	299	32.1	212	22.7	252	26.6	289	30.7	332	35.4	362	38.4	296	31.2	295	30.9	345	35.9	2947	31.2	
Human Immunodeficiency Virus (HIV)	13	1.4	15	1.6	15	1.6	17	1.8	16	1.7	10	1.1	17	1.8	21	2.2	15	1.6	31	3.2	170	1.8	
Direct Contact, Respiratory Routes, and Through the Provision of Health Care																							
Clostridium difficile	0	0.0	1	0.1	0	0.0	500	52.8	676	71.9	610	65.0	812	86.1	879	92.6	927	97.2	984	102.5	5389	81.2	
Creutzfeldt-Jakob Disease - Classic	1	0.1	0	0.0	2	0.2	3	0.3	1	0.1	2	0.2	0	0.0	1	0.1	1	0.1	0	0.0	11	0.1	
Encephalitis - Viral	2	0.2	1	0.1	2	0.2	1	0.1	0	0.0	1	0.1	2	0.2	0	0.0	0	0.0	0	0.0	9	0.1	
Group A Streptococcal Disease Invasive*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Group A Streptococcal Disease Invasive-Severe*	9	1.0	3	0.3	13	1.4	11	1.2	6	0.6	8	0.9	10	1.1	6	0.6	16	1.7	21	2.2	103	1.1	
Group A Streptococcal Disease Invasive-non-Severe*	7	0.8	12	1.3	11	1.2	13	1.4	15	1.6	14	1.5	15	1.6	12	1.3	30	3.1	36	3.7	165	1.8	
Group B Streptococcal Disease of the Newborn	2	0.2	6	0.6	3	0.3	1	0.1	3	0.3	1	0.1	3	0.3	3	0.3	3	0.3	5	0.5	30	0.3	
Legionellosis	2	0.2	1	0.1	0	0.0	0	0.0	2	0.2	3	0.3	7	0.7	1	0.1	9	0.9	5	0.5	30	0.3	
Meningitis - Bacterial	2	0.2	2	0.2	2	0.2	0	0.0	0	0.0	2	0.2	0	0.0	0	0.0	1	0.1	0	0.0	9	0.1	
Meningitis - Viral	6	0.6	2	0.2	11	1.2	39	4.1	20	2.1	15	1.6	17	1.8	2	0.2	0	0.0	0	0.0	112	1.2	
Meningococcal Disease Invasive	3	0.3	3	0.3	3	0.3	2	0.2	0	0.0	3	0.3	7	0.7	4	0.4	6	0.6	4	0.4	35	0.4	
Methicillin Resistant Staphylococcus Aureus (MRSA)	887	95.1	912	97.8	838	89.9	835	88.2	787	83.7	644	68.6	623	66.1	569	59.9	522	54.7	642	66.9	7259	77.1	
Pneumococcal Disease Invasive	20	2.1	35	3.8	51	5.5	51	5.4	65	6.9	66	7.0	52	5.5	66	7.0	49	5.1	61	6.4	516	5.5	
Tuberculosis	7	0.8	10	1.1	9	1.0	8	0.8	8	0.9	7	0.7	6	0.6	3	0.3	9	0.9	9	0.9	76	0.8	
Vancomycin resistant Enterococcus (VRE)	10	1.1	8	0.9	18	1.9	49	5.2	43	4.6	17	1.8	4	0.4	13	1.4	121	12.7	31	3.2	314	3.3	
Enteric, Foodborne, and Waterborne Diseases																							
Amebiasis	1	0.1	7	0.8	8	0.9	4	0.4	3	0.3	3	0.3	6	0.6	0	0.0	0	0.0	0	0.0	32	0.3	
Botulism	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	
Campylobacteriosis	123	13.2	151	16.2	185	19.8	188	19.9	172	18.3	181	19.3	155	16.4	170	17.9	185	19.4	204	21.3	1714	18.2	
Cryptosporidiosis	10	1.1	21	2.3	12	1.3	18	1.9	22	2.3	32	3.4	17	1.8	27	2.8	41	4.3	41	4.3	241	2.6	
Cyclosporiasis	1	0.1	2	0.2	0	0.0	0	0.0	3	0.3	1	0.1	3	0.3	2	0.2	2	0.2	2	0.2	16	0.2	
Giardiasis	76	8.1	68	7.3	66	7.1	96	10.1	96	10.2	91	9.7	87	9.2	100	10.5	93	9.7	76	7.9	849	9.0	
Hepatitis A	2	0.2	3	0.3	4	0.4	2	0.2	2	0.2	3	0.3	1	0.1	11	1.2	2	0.2	4	0.4	34	0.4	
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Listeriosis - Invasive	3	0.3	9	1.0	6	0.6	4	0.4	8	0.9	5	0.5	8	0.8	4	0.4	4	0.4	3	0.3	54	0.6	
Salmonellosis	94	10.1	145	15.5	170	18.2	150	15.8	169	18.0	204	21.7	169	17.9	138	14.5	171	17.9	184	19.2	1594	16.9	
Shigellosis	11	1.2	11	1.2	13	1.4	11	1.2	1	0.1	9	1.0	5	0.5	10	1.1	10	1.0	4	0.4	85	0.9	
Typhoid	0	0.0	3	0.3	1	0.1	0	0.0	1	0.1	2	0.2	0	0.0	1	0.1	2	0.2	0	0.0	10	0.1	
Verotoxigenic E. coli	5	0.5	14	1.5	18	1.9	18	1.9	11	1.2	10	1.1	5	0.5	5	0.5	21	2.2	5	0.5	112	1.2	
Yersiniosis	2	0.2	3	0.3	1	0.1	3	0.3	3	0.3	2	0.2	2	0.2	1	0.1	0	0.0	0	0.0	17	0.2	
Sexually Transmitted Infections																							
Chlamydia	1982	212.5	2230	239.1	2478	265.7	2614	276.2	2466	262.1	2631	280.2	2865	303.8	2930	308.6	2988	313.3	3280	341.7	26464	280.3	
Gonorrhoea	127	13.6	100	10.7	102	10.9	119	12.6	97	10.3	111	11.8	131	13.9	202	21.3	233	24.4	309	32.2	1531	16.2	
Lymphogranuloma Venereum	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	1	0.0	
Syphilis - Infectious	22	2.4	20	2.1	36	3.9	68	7.2	85	9.0	63	6.7	44	4.7	20	2.1	26	2.7	32	3.3	416	4.4	
Syphilis - Non-Infectious or Stage Pending	2	0.2	8	0.9	13	1.4	10	1.1	23	2.4	37	3.9	27	2.9	17	1.8	12	1.3	16	1.7	165	1.8	
Vaccine Preventable Diseases																							
Acute Flaccid Paralysis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	
Haemophilus influenzae Type b Invasive Disease	0	0.0	1	0.1	1	0.1	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	5	0.1	
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	29	3.0	0	0.0	29	0.3	
Mumps	1	0.1	1	0.1	0	0.0	0	0.0	2	0.2	1	0.1	6	0.6	1	0.1	21	2.2	77	8.0	110	1.1	
Pertussis	18	1.9	6	0.6	3	0.3	22	2.3	4	0.4	11	1.2	110	11.7	63	6.6	45	4.7	3	0.3	285	3.0	
Tetanus	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	
Vectorborne and Other Zoonoses																							
Lyme Disease - Confirmed	12	1.3	13	1.4	35	3.8	35	3.7	121	12.9	69	7.3	129	13.7	165	17.4	307	32.2	244	25.4	1130	11.9	
Lyme Disease - Probable	5	0.5	4	0.4	22	2.4	17	1.8	35	3.7	47	5.0	129	13.7	160	16.9	279	29.2	207	21.6	905	9.5	
Malaria	2	0.2	5	0.5	0	0.0	3	0.3	3	0.3	3	0.3	4	0.4	6	0.6	3	0.3	6	0.6	35	0.4	
Q-Fever	2	0.2	3	0.3	2	0.2	0	0.0	0	0.0	0	0.0	3	0.3	0	0.0	0	0.0	0	0.0	10	0.1	
Toxoplasmosis	3	0.3	1	0.1	2	0.2	0	0.0	1	0.1	3	0.3	1	0.1	1	0.1	0	0.0	0	0.0	12	0.1	
West Nile Virus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Total Number	3763		4162		4388		5178		5275		5283		5867		5933		6504		6898		53186		

Notes: *From 2009-2017, hepatitis B cases are reported as either Chronic or Acute. In 2008, unspecified hepatitis B cases were also reported. Severe and non-Severe cases of Group A Streptococcal Disease Invasive are reported together for 2008. Notifiable diseases with no reported cases in the last 10 years and influenza cases are not included in this table.

TABLE 2: Notifiable diseases reported in Nova Scotia in 2018 by Health Management Zone: Number of reports and crude rates per 100,000 population

Condition	Zone 1		Zone 2		Zone 3		Zone 4		Nova Scotia	
	Western		Northern		Eastern		Central		n	Rate
	n	Rate	n	Rate	n	Rate	n	Rate		
Bloodborne Pathogens										
Acquired Immune Deficiency Syndrome (AIDS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B - Acute	0	0.0	4	2.6	0	0	2	0.5	6	0.6
Hepatitis B - Chronic	1	0.5	3	2.0	1	0.6	16	3.5	21	2.2
Hepatitis C	40	20.2	95	63.0	89	55.4	121	26.9	345	35.9
Human Immunodeficiency Virus (HIV)	2	1	2	1.3	1	0.6	26	5.8	31	3.2
Direct Contact, Respiratory Routes, and Through the Provision of Health Care										
Clostridium difficile	137	69.2	107	70.9	277	172.3	463	102.8	984	102.5
Creutzfeldt-Jakob Disease - Classic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Group A Streptococcal Disease Invasive-Severe	7	3.5	2	1.3	3	1.9	9	2	21	2.2
Group A Streptococcal Disease Invasive-Non-Severe	12	6.1	7	4.7	6	3.7	11	2.4	36	3.7
Group B Streptococcal Disease of the Newborn	0	0.0	2	1.3	0	0.0	3	0.7	5	0.5
Legionellosis	0	0.0	1	0.7	0	0.0	4	0.9	5	0.5
Meningitis - Bacterial	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease Invasive	0	0.0	1	0.7	2	1.2	1	0.2	4	0.4
Methicillin Resistant Staphylococcus Aureus (MRSA)	207	104.5	118	78.2	96	59.7	221	49.1	642	66.9
Pneumococcal Disease Invasive	13	6.6	5	3.3	17	10.6	26	5.8	61	6.4
Tuberculosis	2	1.0	0	0.0	0	0.0	7	1.6	9	0.9
Vancomycin resistant Enterococcus (VRE)	3	1.5	8	5.3	6	3.7	14	3.1	31	3.2
Enteric, Foodborne, and Waterborne Diseases										
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	77	38.9	29	19.2	16	10	82	18.2	204	21.3
Cryptosporidiosis	3	1.5	15	9.9	9	5.6	14	3.1	41	4.3
Cyclosporiasis	0	0.0	0	0.0	0	0.0	2	0.4	2	0.2
Giardiasis	21	10.6	13	8.6	5	3.1	37	8.2	76	7.9
Hepatitis A	0	0.0	0	0.0	0	0.0	4	0.9	4	0.4
Listeriosis - Invasive	0	0.0	0	0.0	0	0.0	3	0.7	3	0.3
Salmonellosis	38	19.2	22	14.6	27	16.8	97	21.5	184	19.2
Shigellosis	0	0	1	0.7	0	0.0	3	0.7	4	0.4
Typhoid	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Verotoxigenic E. coli	2	1	0	0.0	0	0.0	3	0.7	5	0.5
Sexually Transmitted Infections										
Chlamydia	522	263.6	380	251.8	460	286.1	1918	426	3280	341.7
Gonorrhoea	27	13.6	15	9.9	21	13.1	246	54.6	309	32.2
Syphilis - Infectious	4	2.1	1	0.7	4	2.5	23	5.1	32	3.3
Syphilis - Non-Infectious or Stage Pending	1	0.5	1	0.7	1	0.6	13	2.9	16	1.7
Vaccine Preventable Diseases										
Acute Flaccid Paralysis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Haemophilus influenzae Type b Invasive Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	3	2	42	26.1	32	7.1	77	8.0
Pertussis	0	0.0	0	0.0	0	0	3	0.7	3	0.3
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vectorborne and Other Zoonoses										
Lyme Disease - Confirmed	173	114.5	20	13.3	2	1.3	49	10.9	244	25.4
Lyme Disease - Probable	186	127.3	5	3.3	1	0.6	15	3.3	207	21.6
Malaria	1	0.5	1	0.7	1	0.6	3	0.7	6	0.6
West Nile Virus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

TABLE 3: Notifiable diseases reported in Nova Scotia in 2018 by age group: Number of reports and age specific rates per 100,000 population

Condition	Age Group (Years)												Total NS	
	0-4		5-14		15-24		25-39		40-59		60+			
	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate
Bloodborne Pathogens														
Acquired Immune Deficiency Syndrome (AIDS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hepatitis B - Acute	0	0.0	0	0.0	0	0.0	1	0.8	5	1.9	0	0.0	6	0.6
Hepatitis B - Chronic	0	0.0	0	0.0	0	0.0	11	6.3	7	2.6	3	1.1	21	2.2
Hepatitis C	0	0.0	1	1.1	45	40.2	162	92.6	104	38.8	33	12.3	345	35.9
Human Immunodeficiency Virus (HIV)	0	0.0	0	0.0	4	3.6	22	12.6	5	1.9	0	0.0	31	3.2
Direct Contact, Respiratory Routes, and Through the Provision of Health Care														
Clostridium difficile	19	44.2	12	12.9	43	38.4	75	42.9	174	65	566	210.1	984	102.5
Creutzfeldt-Jakob Disease - Classic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Group A Streptococcal Disease Invasive-Severe	1	2.3	0	0.0	2	1.8	1	0.6	10	3.7	7	2.6	21	2.2
Group A Streptococcal Disease Invasive-Non-Severe	0	0.0	6	6.5	2	1.8	3	1.7	9	3.4	16	5.9	36	3.7
Group B Streptococcal Disease of the Newborn	5	11.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	0.5
Legionellosis	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4	4	1.5	5	0.5
Meningitis - Bacterial	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Meningococcal Disease Invasive	1	2.3	0	0.0	2	1.8	1	0.6	0	0.0	0	0.0	4	0.4
Methicillin Resistant Staphylococcus Aureus (MRSA)	15	34.9	8	8.6	24	21.7	53	30.3	101	37.7	351	130.3	642	66.9
Pneumococcal Disease Invasive	2	4.7	1	1.1	0	0.0	3	1.7	8	3	36	13.4	61	6.4
Tuberculosis	0	0.0	0	0.0	3	2.7	4	2.3	0	0.0	2	0.7	9	0.9
Vancomycin resistant Enterococcus (VRE)	0	0.0	0	0.0	0	0.0	1	0.6	4	1.5	23	8.5	31	3.2
Enteric, Foodborne, and Waterborne Diseases														
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	4	9.3	10	10.8	19	17.0	38	21.7	58	21.7	75	27.8	204	21.3
Cryptosporidiosis	1	2.3	3	3.2	13	11.6	12	6.9	8	3	4	1.5	41	4.3
Cyclosporiasis	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	1	0.4	2	0.2
Giardiasis	4	9.3	5	5.4	5	4.5	20	11.4	23	8.6	19	7.1	76	7.9
Hepatitis A	0	0.0	1	1.1	0	0.0	3	1.7	0	0.0	0	0.0	4	0.4
Listeriosis - Invasive	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	2	0.7	3	0.3
Salmonellosis	10	23.3	13	14	18	16.1	27	15.4	52	19.4	64	23.8	184	19.2
Shigellosis	0	0.0	0	0.0	0	0.0	1	0.6	2	0.7	1	0.4	4	0.4
Typhoid*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Verotoxigenic E. coli	0	0.0	4	4.3	1	0.1	0	0.0	0	0.0	0	0.0	5	0.5
Sexually Transmitted Infections														
Chlamydia	2	4.7	8	8.6	2128	1899.7	838	478.9	116	43.3	6	2.2	3280	341.7
Gonorrhoea	0	0.0	0	0.0	124	110.7	154	88.0	30	11.2	1	0.4	309	32.2
Syphilis - Infectious	0	0.0	0	0.0	3	2.7	14	8.0	10	3.7	5	1.8	32	3.3
Syphilis - Non-Infectious or Stage Pending	0	0.0	0	0.0	2	1.8	6	3.4	3	1.2	5	1.8	16	1.7
Vaccine Preventable Diseases														
Acute Flaccid Paralysis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Haemophilus influenzae Type b Invasive Disease	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps	0	0.0	0	0.0	72	64.3	2	1.1	2	0.7	1	0.4	77	8.0
Pertussis	2	4.7	1	1.1	0	0.0	0	0.0	0	0.0	0	0.0	3	0.3
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vectorborne and Other Zoonoses														
Lyme Disease - Confirmed	7	16.3	25	26.9	17	15.2	23	13.1	84	31.4	88	32.7	244	25.4
Lyme Disease - Probable	5	11.6	19	20.5	9	8	20	11.5	52	19.4	102	37.8	207	21.6
Malaria	1	2.3	0	0.0	2	1.8	1	0.6	2	0.7	0	0.0	6	0.6
West Nile Virus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL	79		117		2538		1498		870		1415		6898	

Notes: Excludes 90 cases of MRSA, 11 cases of pneumococcal disease, 3 cases of VRE, and 182 cases of chlamydia with no reported age.

TABLE 4: Notifiable diseases reported in Nova Scotia in 2018: Number of reports and sex-specific rates per 100,000 population

Condition	Sex				Total NS	
	Female		Male		n	Rate
	n	Rate	n	Rate		
Bloodborne Pathogens						
Acquired Immune Deficiency Syndrome (AIDS)	0	0	0	0.0	0	0.0
Hepatitis B - Acute	0	0	6	1.3	6	0.6
Hepatitis B - Chronic	6	1.2	15	3.2	21	2.2
Hepatitis C	111	22.6	234	49.8	345	35.9
Human Immunodeficiency Virus (HIV)	9	1.8	22	4.7	31	3.2
Direct Contact, Respiratory Routes, and Through the Provision of Health Care						
Clostridium difficile	579	118.1	405	86.3	984	102.5
Creutzfeldt-Jakob Disease - Classic	0	0.0	0	0.0	0	0.0
Group A Streptococcal Disease Invasive-Severe	13	2.7	8	1.7	21	2.2
Group A Streptococcal Disease Invasive-Non-Severe	17	3.4	19	4.1	36	3.7
Group B Streptococcal Disease of the Newborn	4	0.8	1	0.2	5	0.5
Legionellosis	2	0.4	3	0.6	5	0.5
Meningitis - Bacterial	0	0.0	0	0.0	0	0.0
Meningococcal Disease Invasive	2	0.4	2	0.4	4	0.4
Methicillin Resistant Staphylococcus Aureus (MRSA)	335	68.3	307	65.4	642	66.9
Pneumococcal Disease Invasive	28	5.7	33	7	61	6.4
Tuberculosis	3	0.6	6	1.3	9	0.9
Vancomycin resistant Enterococcus (VRE)	13	2.7	18	3.8	31	3.2
Enteric, Foodborne, and Waterborne Diseases						
Botulism	0	0.0	0	0.0	0	0.0
Campylobacteriosis	92	18.8	112	23.9	204	21.3
Cryptosporidiosis	25	5.1	16	3.4	41	4.3
Cyclosporiasis	2	0.4	0	0.0	2	0.2
Giardiasis	31	6.3	45	9.6	76	7.9
Hepatitis A	2	0.4	2	0.4	4	0.4
Listeriosis - Invasive	3	0.6	0	0	3	0.3
Salmonellosis	96	19.6	88	18.7	184	19.2
Shigellosis	3	0.6	1	0.2	4	0.4
Typhoid*	0	0.0	0	0.0	0	0.0
Verotoxigenic E. coli	3	0.6	2	0.4	5	0.5
Sexually Transmitted Infections						
Chlamydia	2174	443.3	1105	235.3	3280	341.7
Gonorrhea	115	23.5	194	41.3	309	32.2
Syphilis - Infectious	3	0.6	29	6.2	32	3.3
Syphilis - Non-Infectious or Stage Pending	2	0.4	14	3	16	1.7
Vaccine Preventable Diseases						
Acute Flaccid Paralysis	0	0.0	0	0.0	0	0.0
Haemophilus influenzae Type b Invasive Disease	0	0.0	0	0.0	0	0.0
Measles	0	0.0	0	0.0	0	0.0
Mumps	37	7.5	40	8.5	77	8.0
Pertussis	1	0.2	2	0.4	3	0.3
Tetanus	0	0.0	0	0.0	0	0.0
Vectorborne and Other Zoonoses						
Lyme Disease - Confirmed	93	19	151	32.2	244	25.4
Lyme Disease - Probable	97	19.7	110	23.4	207	21.6
Malaria	2	0.4	4	0.9	6	0.6
West Nile Virus	0	0.0	0	0.0	0	0.0
TOTAL	3903		2994		6898	

Notes: Excludes 1 chlamydia case with no reported sex.