
Communicable Disease in New Brunswick

2020 – ANNUAL SURVEILLANCE REPORT

February 2023
Epidemiology and Surveillance



Contents

Introduction	1
Data Sources	2
Limitations	3
2020 Highlights	4
Main disease trends	4
Vaccine Preventable Diseases	4
Enteric, Food and Waterborne Diseases.....	4
Sexually Transmitted and Bloodborne Infections.....	4
Vectorborne and Zoonotic Diseases.....	4
Diseases Transmitted via the Respiratory Route and Direct Contact.....	4
Provincial Outbreaks	4
Vaccine Preventable Diseases	5
Haemophilus Influenza Type B and Non-B.....	6
Influenza and COVID-19	8
Measles	8
Invasive Meningococcal Disease	10
Mumps	12
Pertussis (Whooping Cough)	14
Invasive Pneumococcal Disease.....	16
Rubella.....	19
Varicella.....	19
Other Vaccine Preventable Diseases.....	21
Enteric, Food and Water Borne Diseases	22
Campylobacteriosis	23
Clostridium difficile Infection.....	25
Cryptosporidiosis	27
E. coli O157	29
Giardiasis	30
Salmonellosis.....	32
Vibrio	35
Other Enteric, Food and Water Borne Diseases.....	36

Summary of Enteric Outbreaks	36
Sexually Transmitted and Blood Borne Infections	37
Chlamydia (Genital).....	38
Gonorrhea	41
Hepatitis B (Acute and Chronic)	44
Hepatitis B (Acute)	44
Hepatitis B (Chronic).....	45
Hepatitis C.....	47
Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS).....	50
Human Immunodeficiency Virus (HIV)	50
Acquired Immunodeficiency Syndrome (AIDS)	51
Syphilis (Infectious).....	51
Other Sexually Transmitted and Blood Borne Infections	54
Vectorborne and Zoonotic Diseases	55
Lyme Disease.....	56
Other Vectorborne and Zoonotic Diseases	57
Diseases Transmitted via the Respiratory Route and Direct Contact	59
Legionellosis	60
Streptococcus Group B Beta-hemolytic (Neonatal).....	62
Invasive Group A Streptococcal Disease	63
Tuberculosis	65
Other Diseases Transmitted via the Respiratory Route and Direct Contact	66
Appendix A List of Notifiable Diseases and Events	67
Appendix B Tables of Provincial Counts and Rates	68
Tables Related to Vaccine Preventable Diseases	68
Tables Related to Enteric, Food and Water Borne Diseases.....	73
Tables Related to Sexually Transmitted and Blood Borne Infections	82
Tables Related to Vectorborne and Zoonotic Diseases.....	87
Tables Related to Diseases Transmitted via the Respiratory Route and Direct Contact.....	93
Appendix C Figures	97
Appendix D Tables	101

Introduction

The reporting of notifiable diseases and events in New Brunswick (NB) is governed by the New Brunswick *Public Health Act*¹ (PHA). The PHA stipulates the duties and requirements of health professionals, laboratories, and institution operators with respect to the reporting of notifiable diseases and events, as well as the reporting requirements within specified timeframes.

Surveillance programs, both passive and enhanced, are in place to capture information on notifiable communicable diseases and events to facilitate monitoring of trends, detect aberrations and outbreaks, ensure reporting requirements are met. This in turn guides both response strategies and evaluation of their impact to inform policies and programs.

As per the PHA, NB public health statistics are provided for seven geographical areas called *Health Regions*². These areas correspond to Regional Health Authorities (RHA) as follows: Horizon Health Network (HHN) – Health Regions 1, 2, 3, and 7; Vitalité Health Network (VHN) – Health Regions 1, 4, 5, and 6. See Figure 1 for an overview of the Health Regions.

The purpose of this report is to provide a summary of notifiable diseases and events that were reported in New Brunswick during 2020 and to compare trends over the previous five years, 2015-2019.

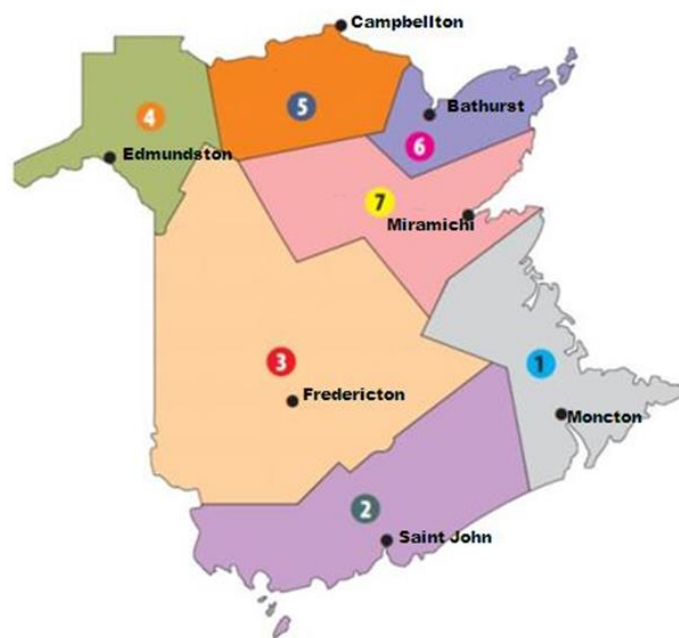


Figure 1: Map of Health Regions in New Brunswick

¹ Public Health Act (S.N.B. 1998, c. P-22.4). <http://laws.gnb.ca/en/showfulldoc/cs/P-22.4//20181113>

² Health Regions Regulation – Public Health Act. <http://laws.gnb.ca/en/showdoc/cr/2009-141>

Data Sources

Confirmed cases reports were obtained from the seven New Brunswick Public Health regional offices through the *Reportable Disease Surveillance System* (RDSS). All cases were classified according to the date they were first reported to the Health Region.

Data for enteric diseases were obtained through the enteric database maintained within Public Health New Brunswick (PHNB). Outbreak summaries of enteric diseases are also notifiable since January 2017 as part of the Outbreak Summaries module within the *Canadian Network for Public Health Intelligence* (CNPHI).

Data for invasive meningococcal disease (IMD), invasive pneumococcal disease (IPD), invasive group A streptococcal disease (iGAS), measles, mumps, legionellosis, tuberculosis (TB), sexually transmitted and bloodborne infections (except Chlamydia) and Lyme disease were obtained through enhanced surveillance systems maintained by Public Health New Brunswick. The data are derived from forms specifically designed to each disease and completed by Public Health regional staff. Since 2017, data for the Human Immunodeficiency Virus (HIV) infections and Acquired Immunodeficiency Syndrome (AIDS) are obtained from the HIV/AIDS enhanced database; data for prior years are from the *HIV/AIDS Case Report Surveillance System* database.

The denominators used to calculate provincial rates are population estimates from Statistics Canada, Demography Division, released March 2021. National disease rates for 2015 to 2019 were retrieved online from the *Notifiable Diseases Online*³ page on the Public Health Agency of Canada's (PHAC) website. National disease rates for 2020 were not available at the time of writing of this report.

³ Notifiable Diseases Online, PHAC: <https://diseases.canada.ca/notifiable/>

Limitations

The numbers cited in this report reflect only confirmed cases that met the *National Case Definitions*⁴ and were reported to Public Health New Brunswick. As a result, the data may under-estimate the true number of infected individuals in the population. This is particularly relevant for diseases where many infected individuals remain asymptomatic, and diseases that have a wide clinical spectrum. It should be noted that persons experiencing severe illness are more likely to present to a healthcare provider.

Also, number and rates presented in this report are based on 2020 notifications received as of April 2021. Some of these figures may change somewhat in future reports due to delays in reporting. The national data provided by PHAC and used in this report may also be subject to minor changes in future reports for similar reasons.

Please use caution when interpreting age, sex, and region-specific annual incidence rates for some diseases, as the relatively small number of cases can lead to major fluctuations in rates from year-to-year.

The decrease in reported disease counts observed among several diseases from 2019-2020 may be related to the change in human behaviors due to the COVID-19 pandemic such as reduced or restricted travels. In addition, access to health services may have been affected and there may have been reduced access to public health services as well as health promotion, community development and collaboration as these resources were redirected towards COVID -19 pandemic response efforts.

⁴ Case definitions: Nationally Notifiable Diseases, PHAC: <https://diseases.canada.ca/notifiable/diseases-list>

2020 Highlights

MAIN DISEASE TRENDS

VACCINE PREVENTABLE DISEASES

In comparison to the previous 5-year average, lower rates were observed for IPD, IMD, mumps and varicella. Incidence rates were higher for Haemophilus influenza and pertussis. No measles, rubella, diphtheria, tetanus, or poliomyelitis cases were reported.

ENTERIC, FOOD AND WATERBORNE DISEASES

The incidence rates for campylobacteriosis, cryptosporidiosis, cyclosporiasis, hepatitis A, listeriosis and vibrio species were higher than the previous 5-year averages, while the incidence rates for *Clostridium difficile* infections, *E. coli* O157:H7, giardiasis, salmonellosis, and yersiniosis were lower. No cases of other enteric diseases were reported.

SEXUALLY TRANSMITTED AND BLOODBORNE INFECTIONS

The incidence rates were lower than the previous 5-year averages for chlamydia, acute and chronic hepatitis B, hepatitis C, and infectious syphilis, while the incidence rate for HIV infections was equal to the rate of the previous 5-years. For gonorrhoea, the incidence rate was lower than the average rate of the five previous years, however as indicated below, high gonorrhoea incidence rates were reported in 2018 and 2019 and a provincial outbreak was declared in 2019. The decrease in the global annual incidence rate in 2020 may reflect changes in behaviors during the beginning of the covid pandemic. Indeed, gonorrhoea rates initially declined from the first to the second quarter of 2020, however, the rates then increased continually through the third and the fourth quarters of the year.

VECTORBORNE AND ZOO NOTIC DISEASES

Lower incidence rates were reported for Lyme disease and malaria compared to average rates of the previous 5-years. Four cases of Q-fever were reported. No cases of other vectorborne and zoonotic diseases were reported.

DISEASES TRANSMITTED VIA THE RESPIRATORY ROUTE AND DIRECT CONTACT

In comparison to the previous 5-year averages, incidence rates for legionellosis, iGAS, and tuberculosis were higher. In addition, one case of group B streptococcal infection of the newborn was reported in 2020.

PROVINCIAL OUTBREAKS

Cases of Gonorrhoea have been increasing in New Brunswick since 2016 and a provincial outbreak has been declared since April 2019 based on the fact that gonorrhoea activity had remained at sustained high levels in different Health Regions in 2018 and 2019.

The outbreak is still ongoing as of the time of writing this report.

Vaccine Preventable Diseases

Vaccine preventable diseases are infectious diseases for which effective preventive vaccines exist. Early immunization of infants and completion of the full schedule of vaccinations up to and through adulthood contribute to reducing the incidence and burden of these diseases.

For information on the New Brunswick Routine Immunization Schedule, please refer to the [New Brunswick Immunization Guide](#).

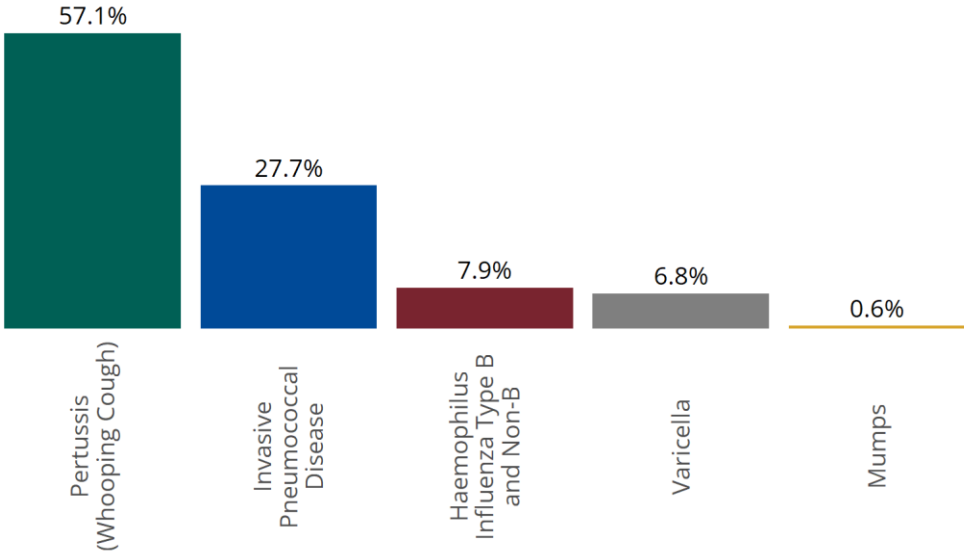


Figure 2: Percent Distribution of the most prevalent Vaccine Preventable Diseases in New Brunswick, 2020

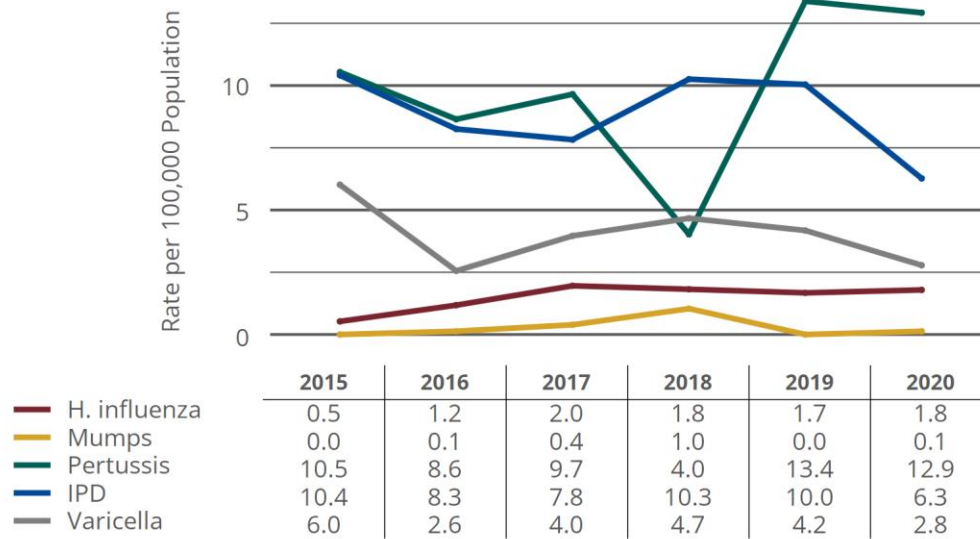


Figure 3: Incidence Rates of the most prevalent Vaccine Preventable Diseases in New Brunswick per 100,000 population, 2015-2020

HAEMOPHILUS INFLUENZA TYPE B AND NON-B

Only Haemophilus influenzae type b (Hib) is preventable by vaccine.

In New Brunswick, subtype reporting is not consistently available for Haemophilus influenzae. As a result, this report describes all invasive Haemophilus influenzae cases, whether type b or non-b, including untypable strains.

In 2020, a total of 14 cases (9 females and 5 males) of Haemophilus influenzae were reported to Public Health, with an incidence rate of 1.8 cases per 100,000 population. During the previous five years, an average of 11 cases were reported each year, with an average annual incidence rate of 1.4 cases per 100,000 population.

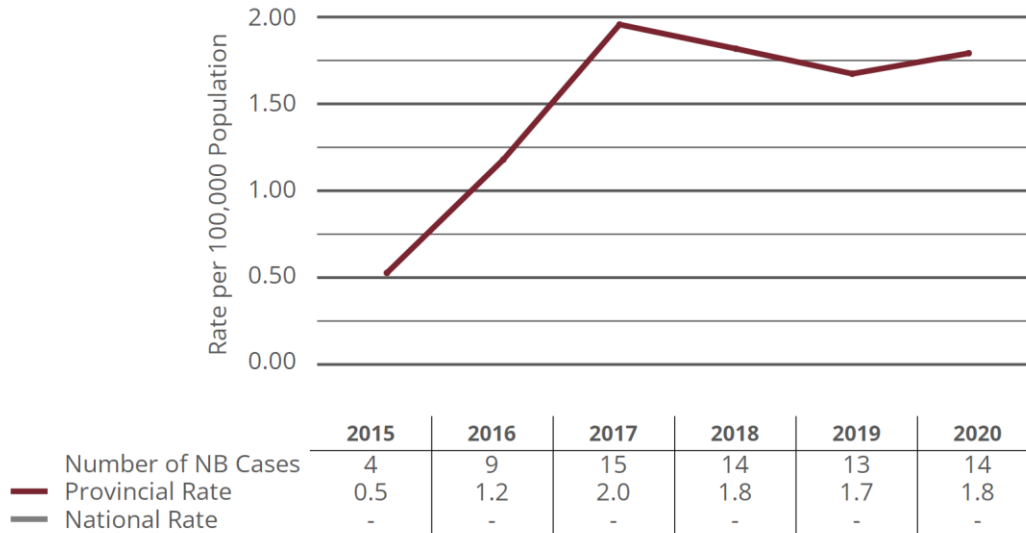


Figure 4: Number of Reported Cases of Haemophilus Influenza Type B and Non-B and Incidence Rates per 100,000 population, New Brunswick⁵, 2015-2020

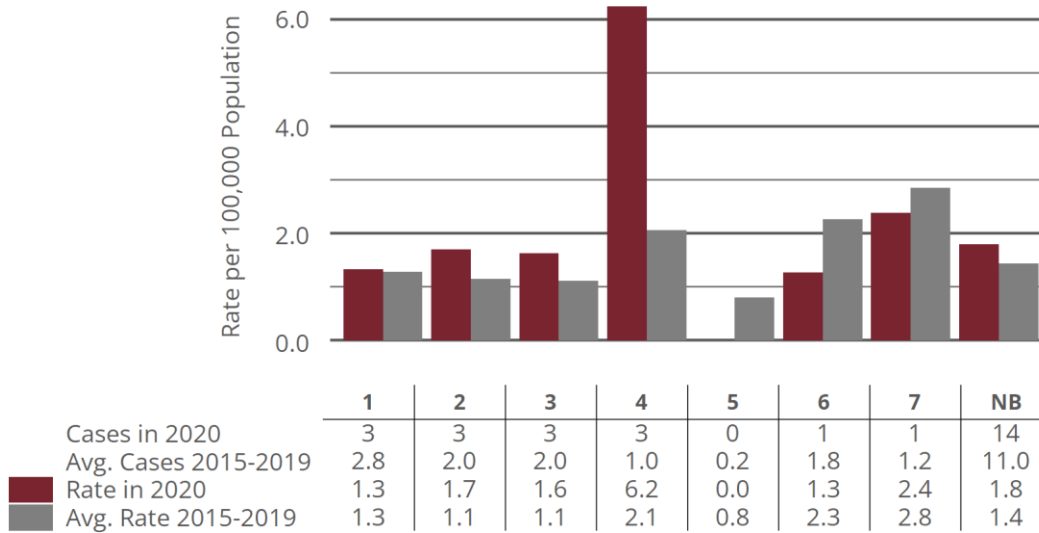


Figure 5: Number of Reported Cases of Haemophilus Influenza Type B and Non-B and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

⁵ The national rates for Haemophilus influenzae are not presented in the figure since the rates for type B and non-B are reported separately at the national level.

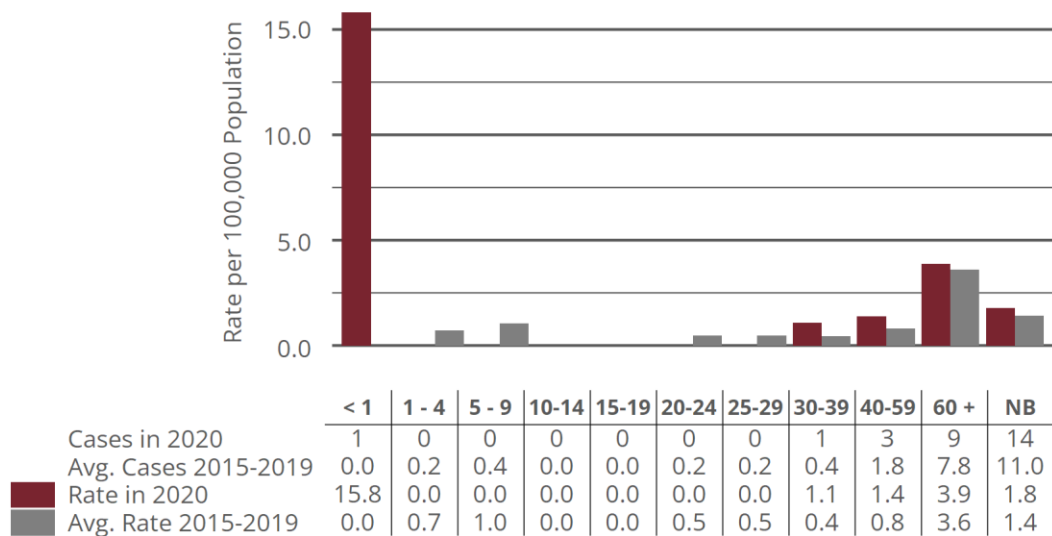


Figure 6: Number of Reported Cases of Haemophilus Influenza Type B and Non-B and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

In 2020, Haemophilus influenzae cases were reported in the <1, 30-39, 40-59 and 60+ age groups. The majority (9 cases or 64%) of cases were among the 60+ years age group, which is consistent with the previous five years. Cases were reported in every Health Region, except for Region 5. Information on strain type indicates that 7 cases had a non b strain, 5 cases had an untypeable strain and information was unknown for 2 cases. The increased number of reported cases of Haemophilus influenzae since 2017 is likely due to an increase in reporting of non-typable strains (invasive).

The annual differences in Haemophilus influenzae incidence rate should be interpreted with caution because of the small number of cases involved that can lead to major fluctuations in the rate from year to year.

Publicly funded Haemophilus influenzae type b immunization (DTaP-IPV-Hib) is offered at ages 2, 4, 6, and 18 months.

INFLUENZA AND COVID-19

Influenza activity in New Brunswick is being monitored throughout the year. However, the influenza activity period usually begins later in the fall and ends in late spring. The 2019-2020 Summary Report of influenza activity in New Brunswick can be found on the Public Health New Brunswick's [Influenza Surveillance Reports](#) webpage.

COVID activity in NB is being monitored throughout the year. COVID-19 data for the 2020-2021 season can be found on the provincial [COVID dashboard](#).

MEASLES

No cases of measles were reported to Public Health in 2020. Sustained measles transmission in Canada has been eliminated due to current immunization schedules and high coverage rates throughout the country; however, some outbreaks are still being reported. For instance, during the previous five years, an outbreak of

measles was reported in 2019, (from April 25 to July 28) in Region 2. The outbreak was the result of an imported case from a traveler. A total of 12 confirmed cases were reported. Seventy-five percent of the cases (75%) were male. The average age of cases was 20.3 years. Seventy-five percent of the cases (75%) had received two doses of Measles Containing Vaccine. Apart from this outbreak, in the past five years, only one case was reported in 2017.

Publicly funded measles immunization (MMRV) is offered during childhood at 12 and 18 months of age.

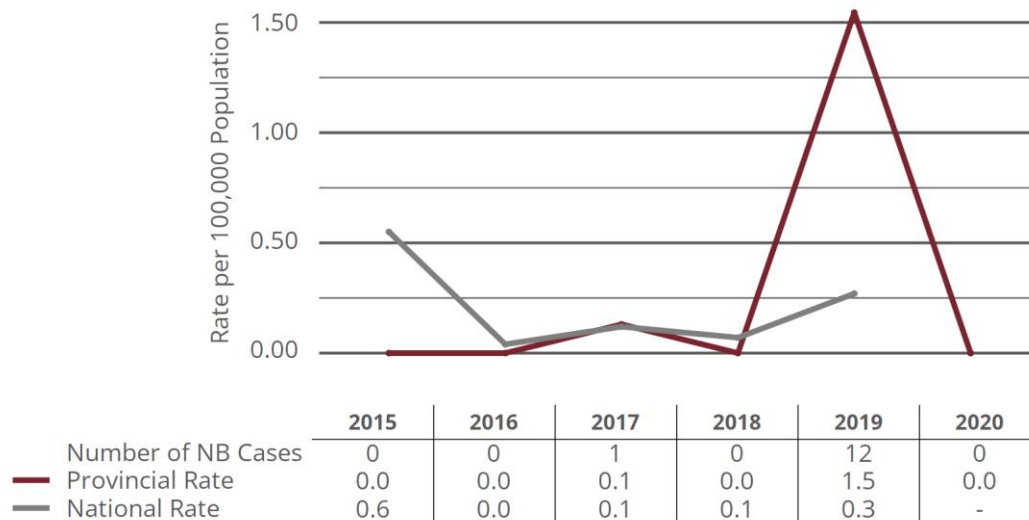


Figure 7: Number of Reported Cases of Measles and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

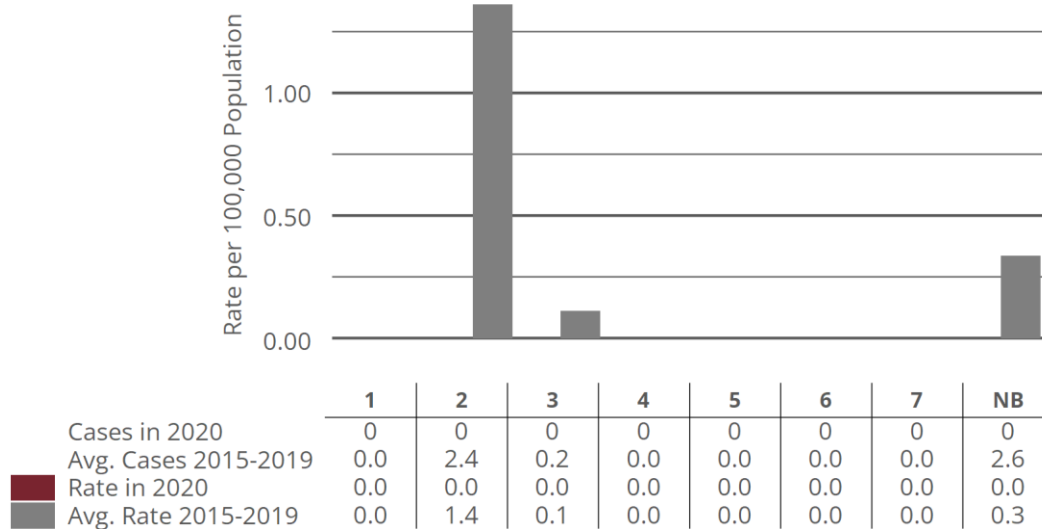


Figure 8: Number of Reported Cases of Measles and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

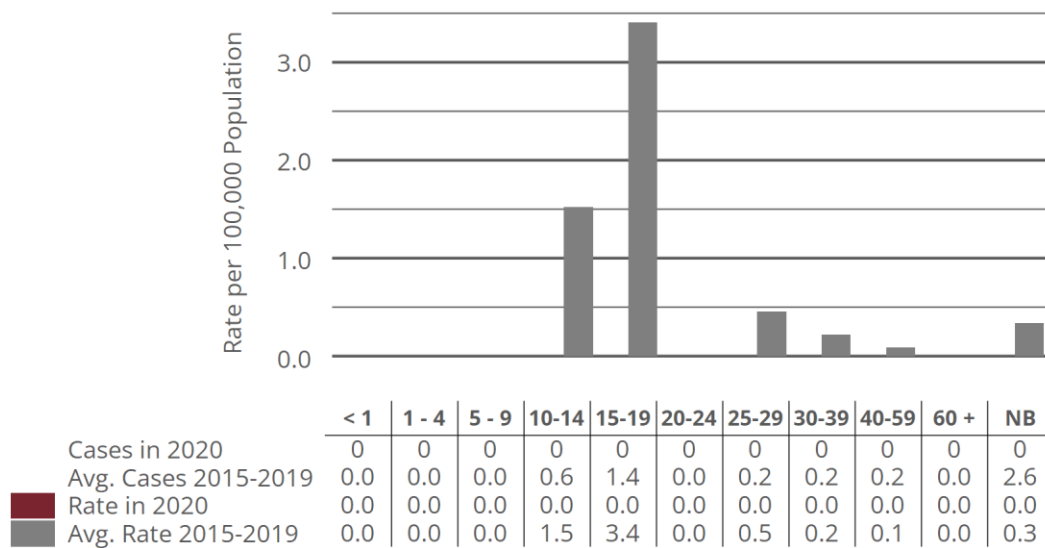


Figure 9: Number of Reported Cases of Measles and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

INVASIVE MENINGOCOCCAL DISEASE

No cases of IMD were reported to Public Health in 2020. During the previous five years, an average of 3 cases were reported each year, which amounts to an average annual incidence rate of 0.4 case per 100,000 population.

Overall, the incidence rate for New Brunswick was lower than or equal to the national rate based on the five years of available national data, except for 2015, 2018, and 2019 when the New Brunswick rate was higher than that for Canada.

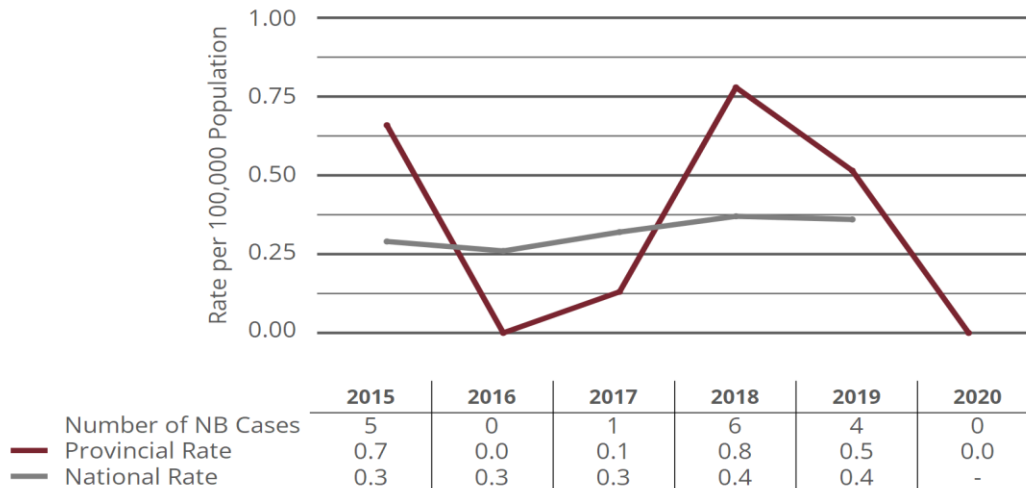


Figure 10: Number of Reported Cases of Invasive Meningococcal Disease and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

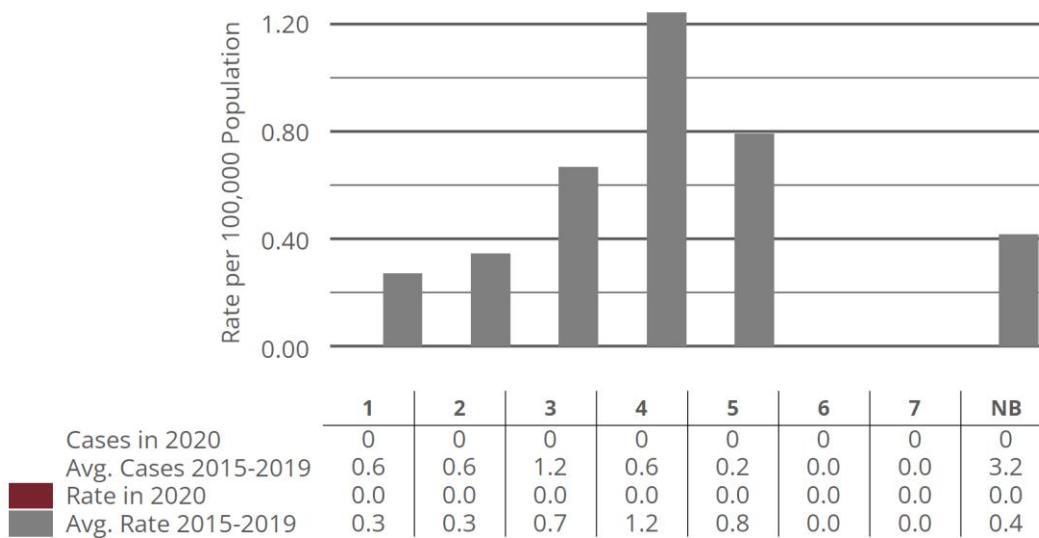


Figure 11: Number of Reported Cases of Invasive Meningococcal Disease and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

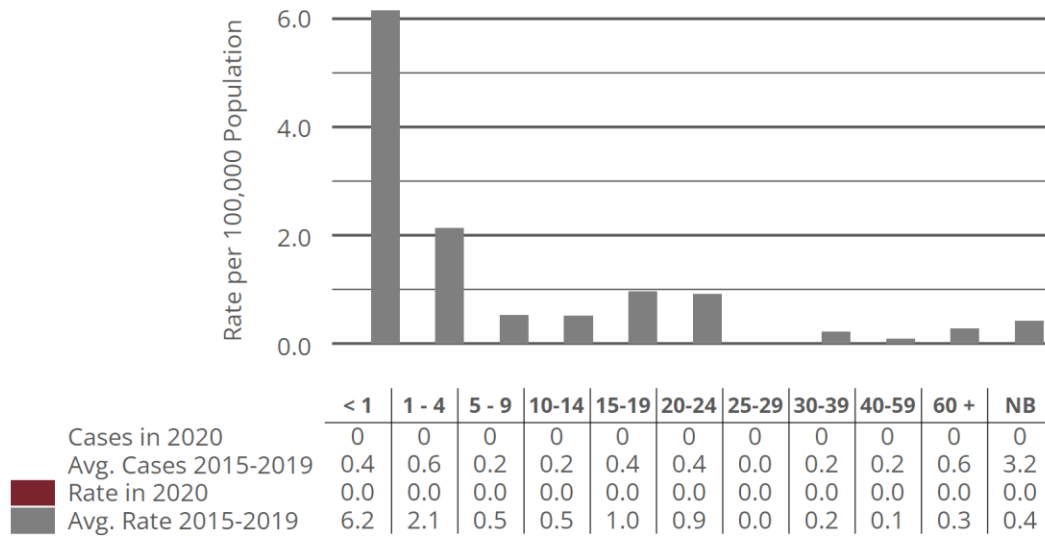


Figure 12: Number of Reported Cases of Invasive Meningococcal Disease and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

Annual differences in the IMD incidence rate should be interpreted with caution because of the small number of cases involved, which can lead to major rate fluctuations from year to year.

The majority of reported IMD cases from 2015 to 2020 were serogroup B (13 cases, 81%), except for one case with serogroup Y, one with serotype W, and one with serogroup other. A vaccine against meningococcal serogroup B disease was first introduced in Canada in 2014. In New Brunswick, the meningococcal serogroup B vaccine is available to those who are identified as having close contact with a case or are at higher risk of invasive meningococcal disease (for details on eligibility criteria, see: <https://www2.gnb.ca/content/dam/gnb/Departments/h-s/pdf/en/CDC/HealthProfessionals/NBIPG-standard3-3-e.pdf>)

Since the introduction of the meningococcal C vaccine into the routine schedule at one year of age and the adolescent catch-up program in 2005, the incidence of serogroup C IMD has steadily decreased, with the last reported case to Public Health going back to 2008.

Publicly funded immunization against meningococcal disease is offered at 12 months (Meningococcal conjugate C) and in grade 9 (Meningococcal conjugate ACYW-135).

MUMPS

In 2020, one case of mumps was reported to Public Health. During the previous five years, there were 12 confirmed cases reported in New Brunswick: one case in 2016, 3 cases in 2017, and 8 cases in 2018 (of which 4 cases were linked to a mumps outbreak in Region 1 in a post-secondary institution during the month of April).

Publicly funded mumps immunization (MMRV) is offered at 12 and 18 months of age.

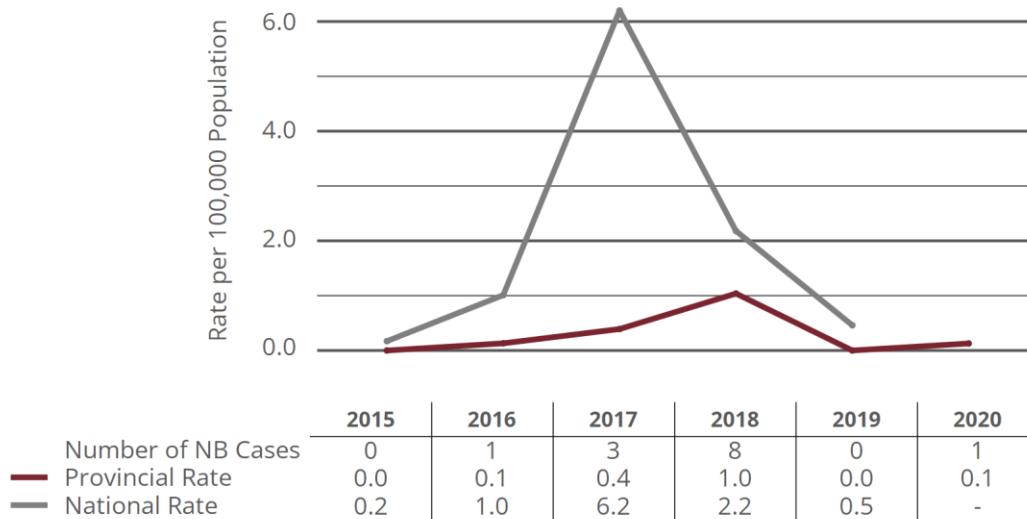


Figure 13: Number of Reported Cases of Mumps and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

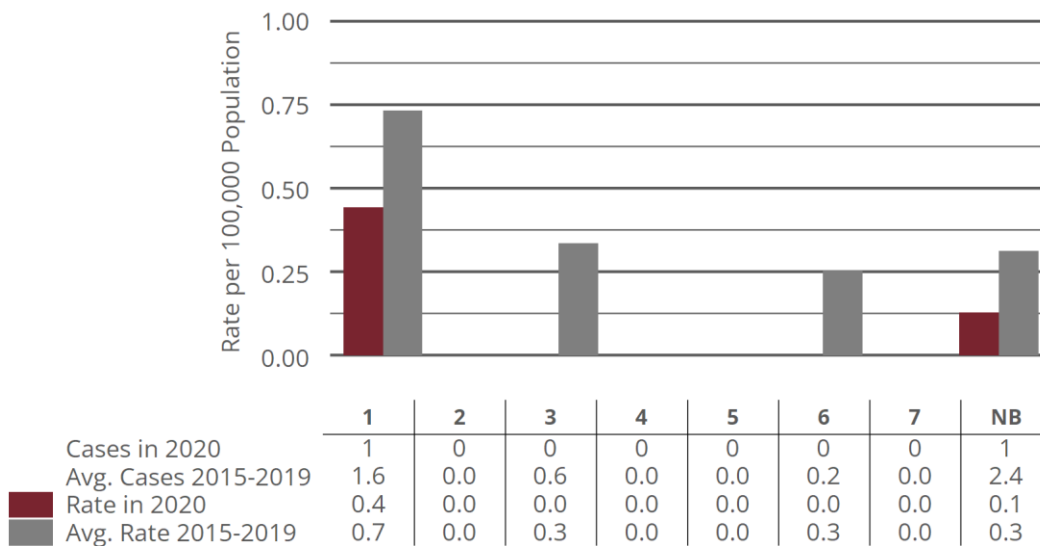


Figure 14: Number of Reported Cases of Mumps and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

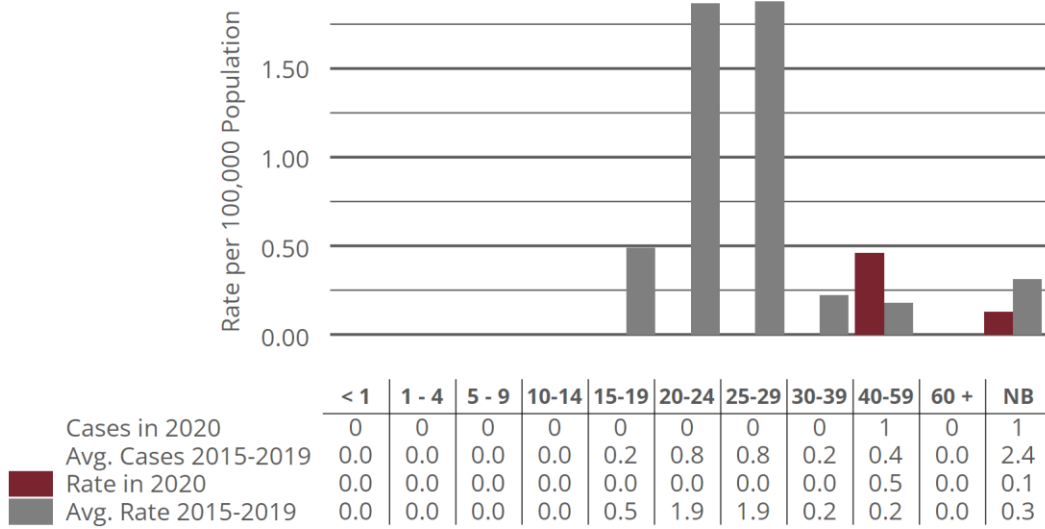


Figure 15: Number of Reported Cases of Mumps and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

PERTUSSIS (WHOOPING COUGH)

In 2020, a total of 101 cases (53 females and 48 males) of pertussis were reported to Public Health, with an incidence rate of 12.9 cases per 100,000 population. During the previous five years, an average of 71 cases were reported each year, with an average annual incidence rate of 9.3 cases per 100,000 population. The increase of cases in 2019 and 2020 was driven by the pertussis outbreak in Region 1 (declared on December 20, 2019, and declared over on August 2020) and Region 7 (declared on December 13, 2019, and declared over on May 15, 2020).

In 2020, the majority of reported cases (76 cases or 75%) and the highest incidence rate (33.6 cases per 100,000 population) were both in Region 1. The highest age-specific incidence rate was in the 15-19 age group (86.1 cases per 100,000 population; 35 cases), followed by the 10-14 age group (54.5 cases per 100,000 population; 22 cases).

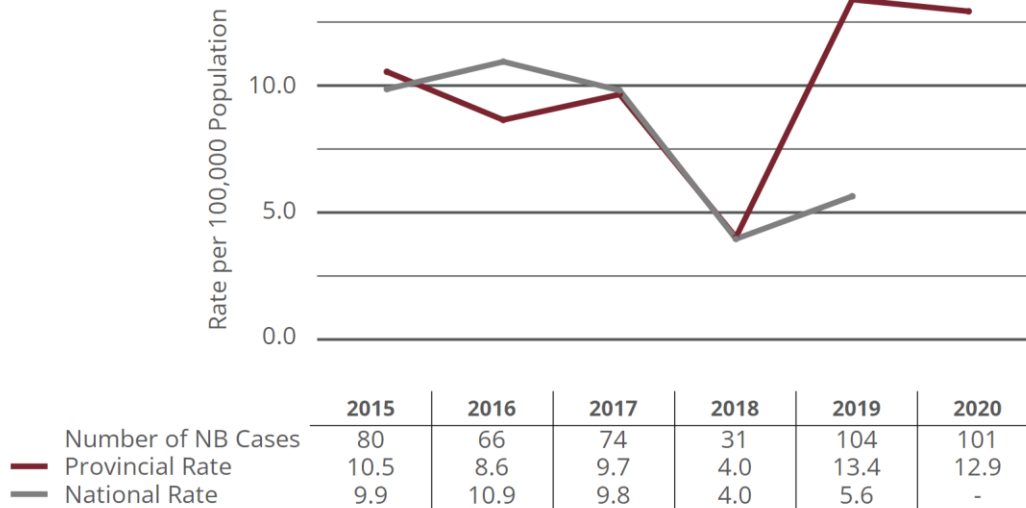


Figure 16: Number of Reported Cases of Pertussis (Whooping Cough) and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

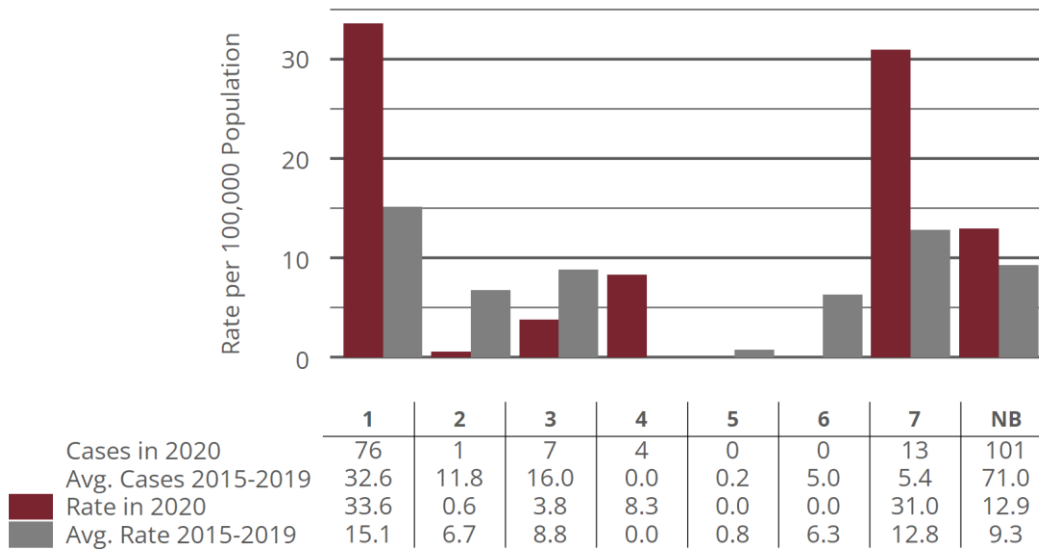


Figure 17: Number of Reported Cases of Pertussis (Whooping Cough) and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

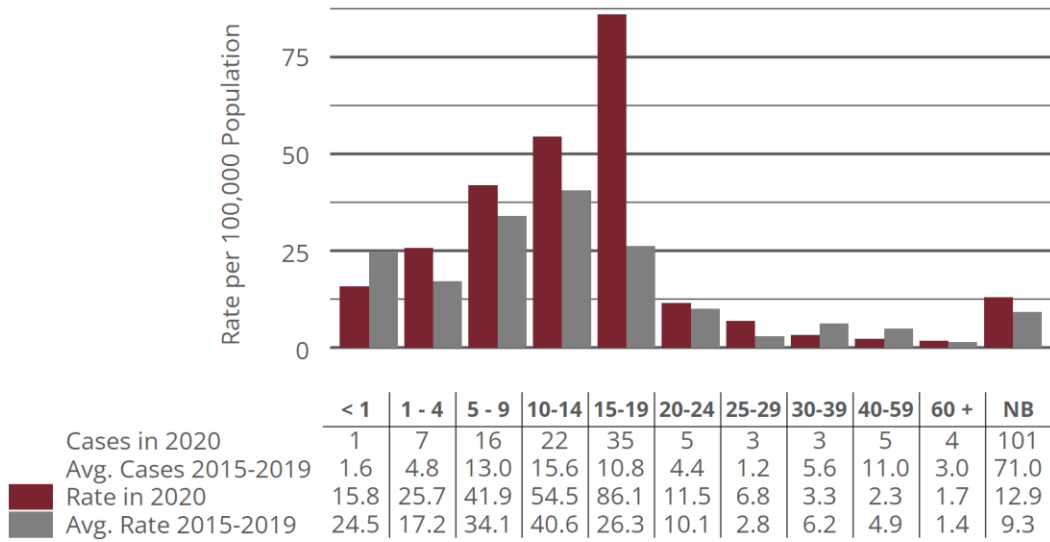


Figure 18: Number of Reported Cases of Pertussis (Whooping Cough) and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

Publicly funded pertussis immunization is offered at 2, 4, 6, and 18 months (DTaP-IPV-Hib), 4 years (Tdap-IPV), grade 7 (Tdap), and once in adulthood (Tdap). One dose is also offered to pregnant women during each pregnancy.

INVASIVE PNEUMOCOCCAL DISEASE

In 2020, a total of 49 cases (22 females and 27 males) of IPD were reported to Public Health, with an incidence rate of 6.3 cases per 100,000 population. During the previous five years, an average of 72 cases were reported each year for an average annual incidence rate of 9.4 cases per 100,000 population. From 2016 onwards, the average annual incidence rate was lower than or equal to the national rate.

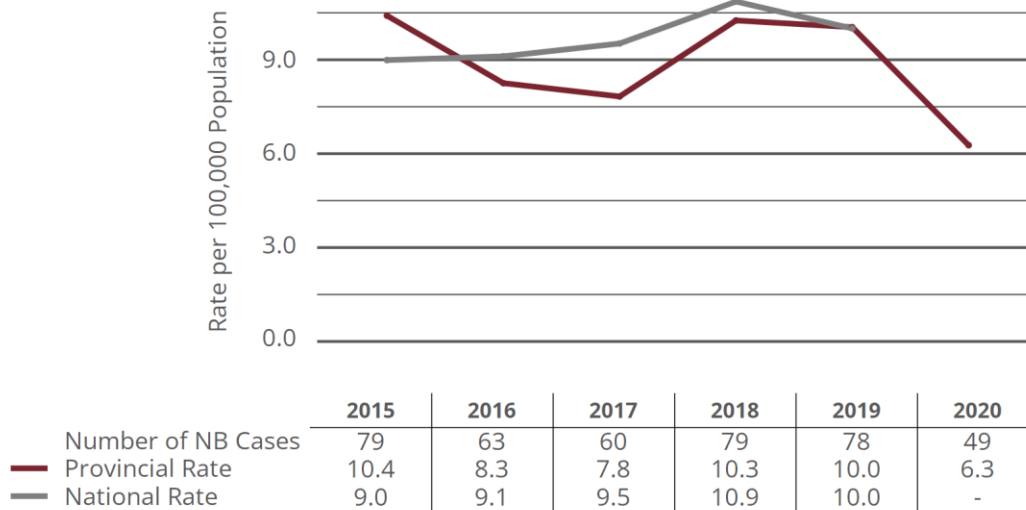


Figure 19: Number of Reported Cases of Invasive Pneumococcal Disease and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

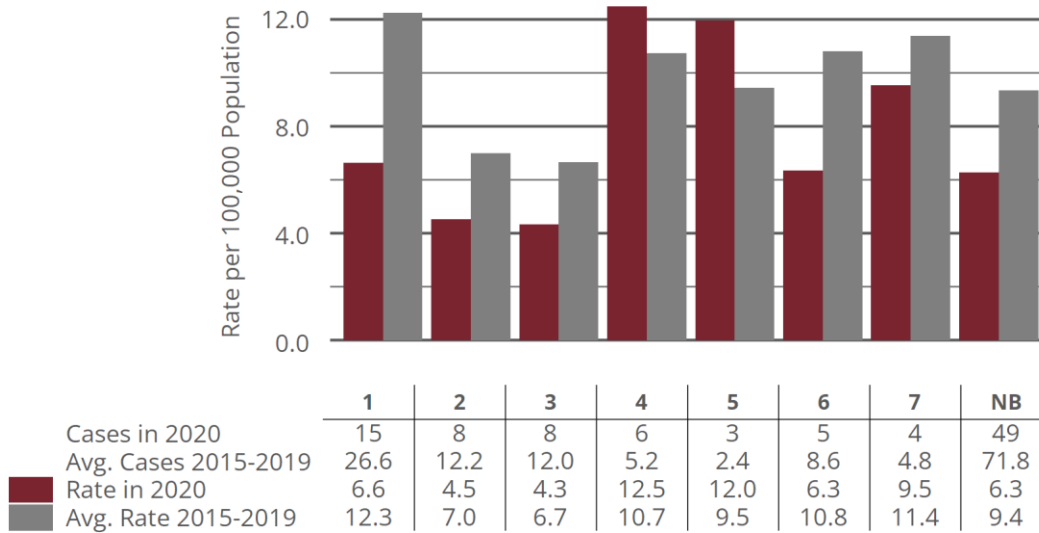


Figure 20: Number of Reported Cases of Invasive Pneumococcal Disease and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

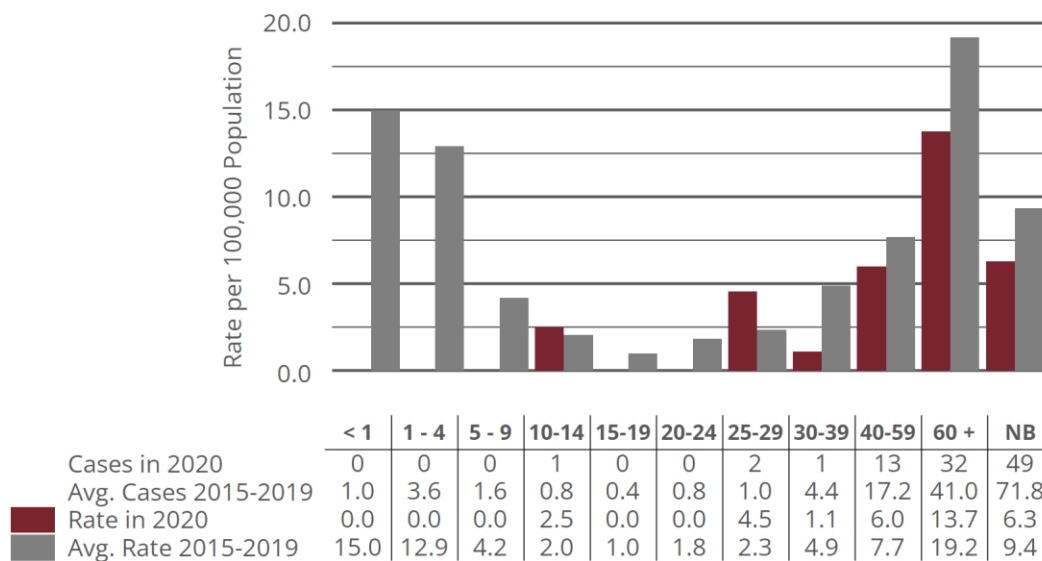


Figure 21: Number of Reported Cases of Invasive Pneumococcal Disease and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

During the previous five years, the highest age-specific incidence rate was observed in the 60+ years age group (19.2 cases per 100,000 population; 41 cases), followed by the less than one year age group (15 cases per 100,000 population; 1 case), and the 1-4 years age group (12.9 cases per 100,000 population; 4 cases).

In 2020, New Brunswickers aged 65 years and older represented more than half (n=27) of all reported IPD cases.

Among these cases, the most prevalent serotypes were: 9N (19%) and 22F (19%). Only 44% (n=12) of the cases aged 65 years and older had information on their vaccine status available. Of these, 5 cases were vaccinated (4 with the 23-valent pneumococcal vaccine and 1 with vaccine type received unknown) and were all caused by vaccine preventable serotypes. In comparison, in the five previous years, among vaccinated cases of 65 years and older, 52% of the cases, on average, were caused by a vaccine preventable serotype. Among non-vaccinated cases of 65 years and older in 2020 (n=7), 42.9% of the cases were caused by vaccine-preventable serotypes compared to an average of 65% in the 5 previous years. The proportions of cases caused by vaccine preventable serotypes should be interpreted with caution because of the small number of cases involved.

In 2020, IPD incidence rates were lower in all Health Regions compared to the previous five years, except for Regions 4 and 5. However, region-specific rates should be interpreted with caution because of the small numbers involved, which can lead to major fluctuations in rates from year to year.

- Publicly funded IPD immunization is offered at 2, 4, and 12 months of age (Pneumococcal conjugate-Prevnar-13) and also for other individuals who presents high-risk factors of IPD
- Publicly funded IPD immunization for pneumococcal polysaccharide (Pneumo-P-23) is offered for persons 65 years of age and older, individuals newly admitted to a long-term care facility and all individuals ≥ 2 years of age, not previously immunized and with health conditions that place them at greater risk of IPD. For details on eligibility criteria, see: <https://www2.gnb.ca/content/dam/gnb/Departments/h-s/pdf/en/CDC/HealthProfessionals/NBIPG-standard3-3-e.pdf>

RUBELLA

No rubella cases were reported in 2020 and the previous five years (2015-2019).

Publicly funded rubella immunization (MMRV) is offered during childhood (12 and 18 months).

VARICELLA

Varicella is under-reported to Public Health, mostly clinically diagnosed with no laboratory confirmation. Due to the fact that most cases in adults 50 years and older present with shingles (herpes zoster), this report focuses only on reported cases in those aged 0 to 49 years.

In 2020, a total of 12 laboratory-confirmed cases (5 females and 7 males) of varicella were reported to Public Health, with an incidence rate of 2.8 cases per 100,000 population. During the previous five years, an average of 18 cases were reported each year, with an average annual incidence rate of 4.3 cases per 100,000 population. The incidence rate was slightly high in 2015 due to several elementary school outbreaks reported in Region 3, followed by a sharp decrease in 2016. However, these rates started to increase again, beginning in 2017, and showed a stable pattern until 2019, followed by a sharp reduction in 2020.

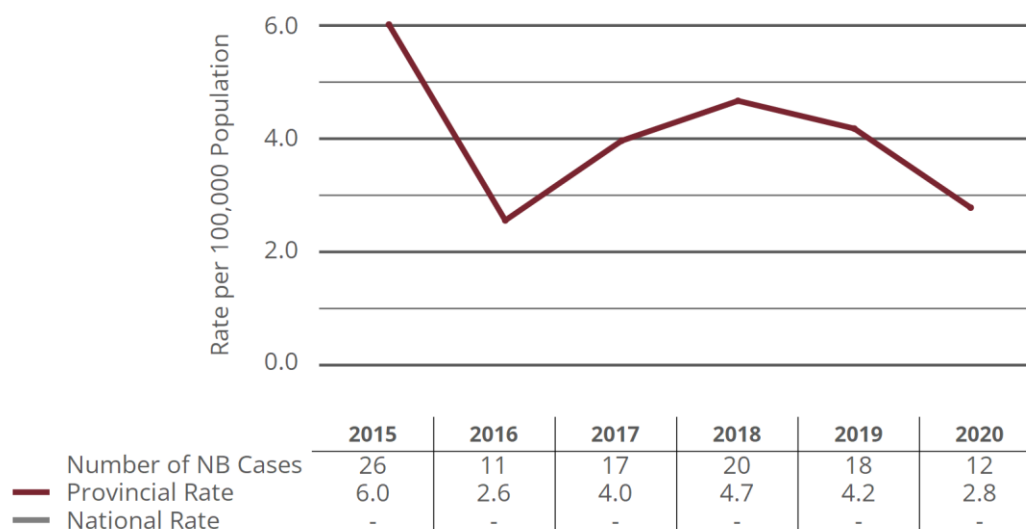


Figure 22: Number of Reported Cases of Varicella and Incidence Rates per 100,000 population, New Brunswick⁶ 2015-2020.

⁶ No national comparisons available as not all provinces report varicella cases in any given year, which leads to high fluctuation in rates from year to year.

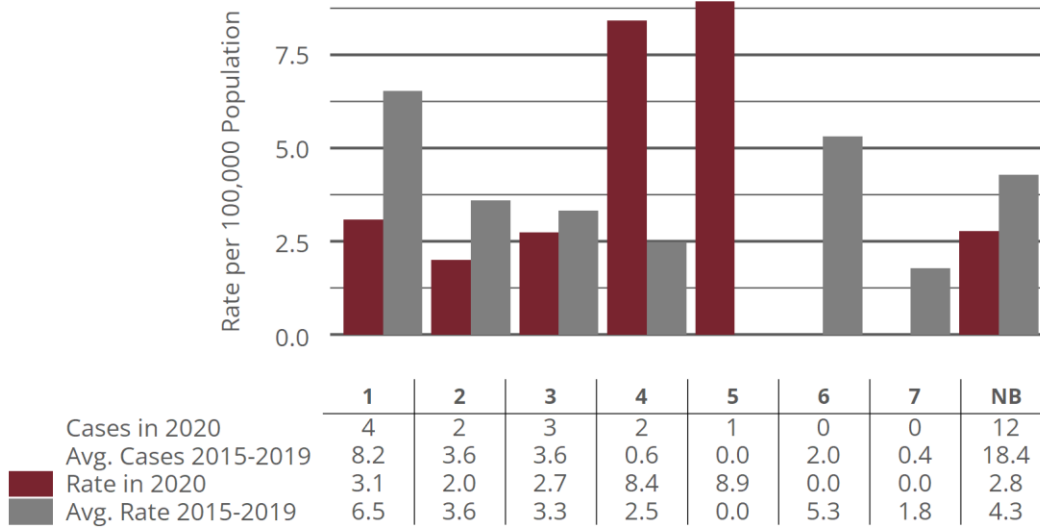


Figure 23: Number of Reported Cases of Varicella and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

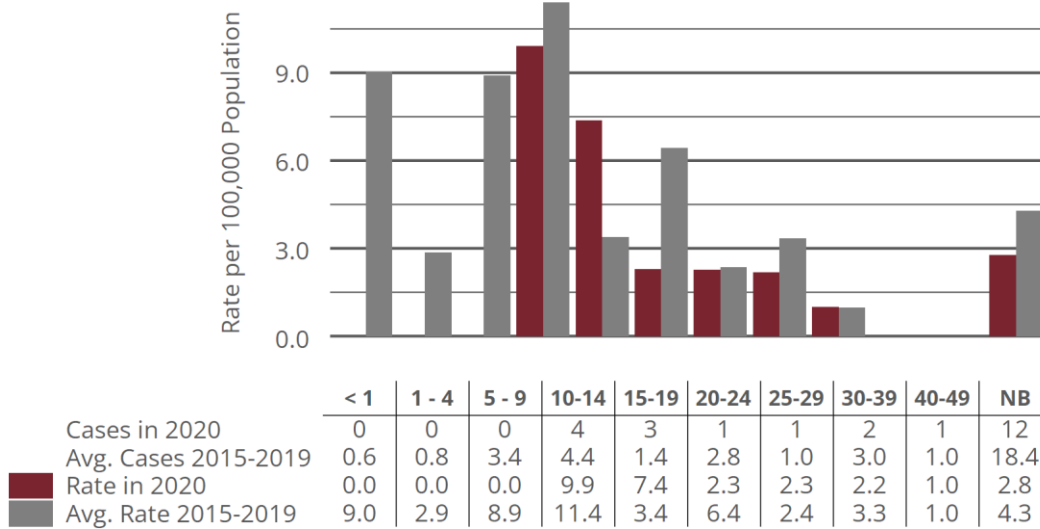


Figure 24: Number of Reported Cases of Varicella and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

Publicly funded varicella immunization (MMRV) is offered during childhood at 12 and 18 months of age. The two-dose varicella vaccine schedule started in 2011 for the 2009 birth cohort onwards. In response to the school outbreaks in 2015, a catch-up program for the second dose was introduced in the 2015/16 school year for grade 9 and 10 students. The vaccine will continue to be offered to grade 9 students through the 2022/23 school year.

OTHER VACCINE PREVENTABLE DISEASES

No cases of diphtheria, tetanus, or poliomyelitis were reported between 2015 and 2020. Publicly funded immunizations are provided during childhood (DTaP-IPV-Hib, Tdap-IPV, Tdap), adolescence (Tdap), and adulthood (Tdap, Td).

For further details on case counts and rates of different vaccine-preventable diseases, please refer to Appendix B.

Enteric, Food and Water Borne Diseases

Enteric diseases are, for the most part, associated with food. However, cases are sometimes linked to contaminated water, secondary transmission from humans, and direct contact with animals, including exotic pets.

In 2020, *Clostridium difficile* infections (CDI) accounted for the largest percentage of enteric, food and waterborne diseases reported in New Brunswick, followed by campylobacteriosis, salmonellosis and giardiasis.

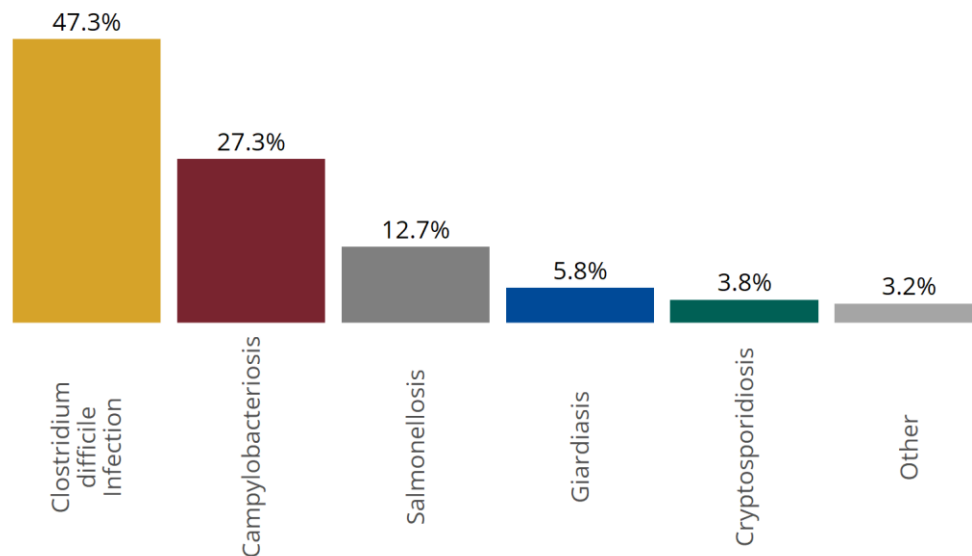


Figure 25: Percent Distribution of the most prevalent Enteric, Food and Water Borne Diseases in New Brunswick, 2020

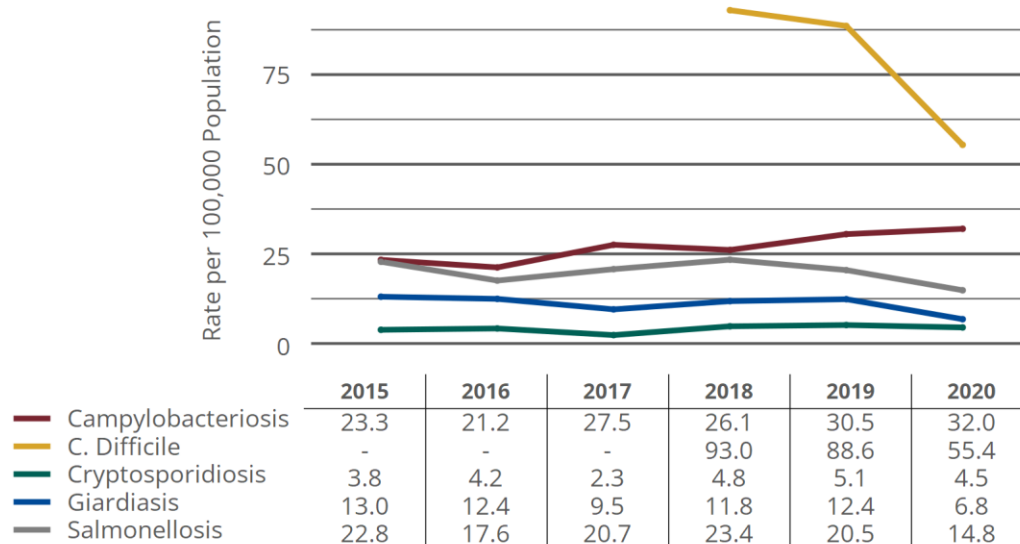


Figure 26: Incidence Rates of the most prevalent Enteric, Food and Water Borne Diseases in New Brunswick per 100,000 population, 2015-2020

CAMPYLOBACTERIOSIS

In 2020, a total of 250 cases (112 females and 138 males) of campylobacteriosis were reported to Public Health, with an incidence rate of 32.0 cases per 100,000 population. During the previous five years, an average of 197.6 cases were reported each year, with an average annual incidence rate of 25.7 cases per 100,000 population. In the past five years, the annual incidence rate has been lower than the national rate except in 2019, when it was higher than the national rate.

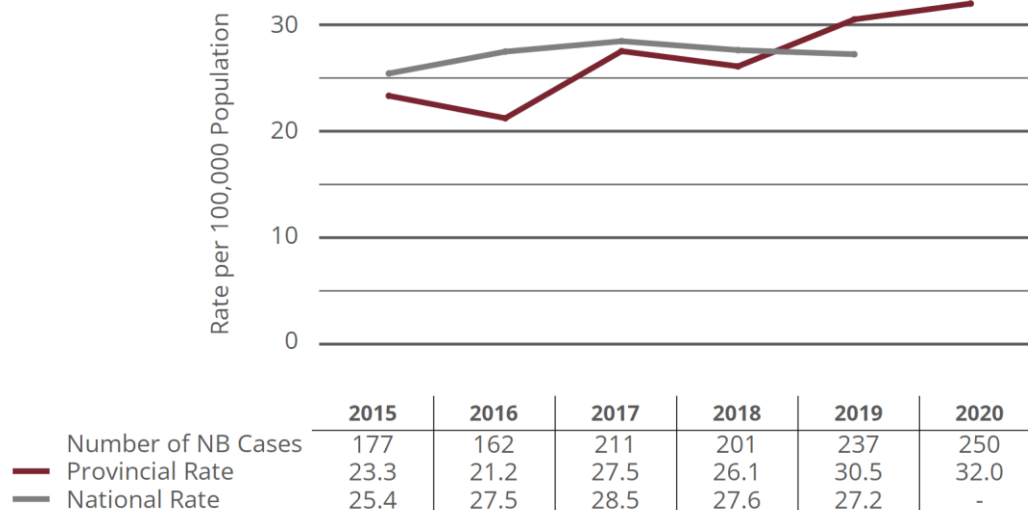


Figure 27: Number of Reported Cases of Campylobacteriosis and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

The highest incidence rate of campylobacteriosis in 2020 was in Region 4 (68.7 cases per 100,000 population), followed by Region 5 (63.8 cases per 100,000 population) and Region 6 (50.8 cases per 100,000 population). During the previous five years, the highest average incidence rate was also observed in Region 4, followed by Region 5 and Region 6, with 69.0, 43.1 and 32.4 cases per 100,000 population, respectively.

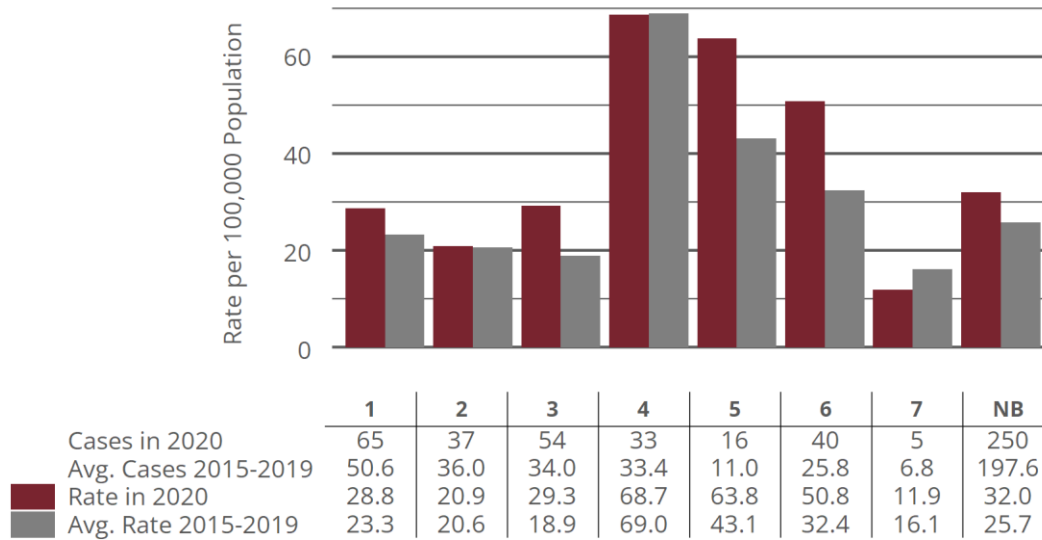


Figure 28: Number of Reported Cases of Campylobacteriosis and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

In 2020, the majority of reported cases of campylobacteriosis were in the age group 60 years and older (83 cases or 33%), followed by the 40-59 (65 cases or 26%), with incidence rates of 35.7 and 29.9 cases per 100,000 population, respectively. During the previous five years, the highest average annual incidence rate was in the 25-29 age group, followed by the 60 and older age group, with 32.7 and 30.5 cases per 100,000 population, respectively.

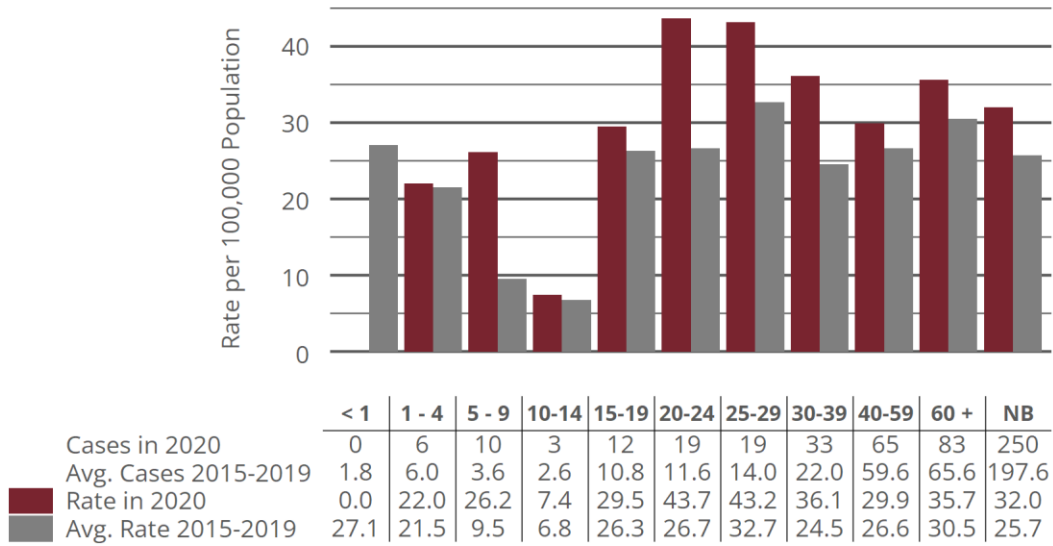


Figure 29: Number of Reported Cases of Campylobacteriosis and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

CLOSTRIDIUM DIFFICILE INFECTION

In 2020, 433 cases (251 females and 182 males) of Clostridium Difficile Infections (CDI) were reported to Public Health, with an incidence rate of 55.4 cases per 100,000 population. During the previous two years, an average of 702.0 cases were reported in New Brunswick each year for an average annual incidence rate of 90.8 cases per 100,000 population.

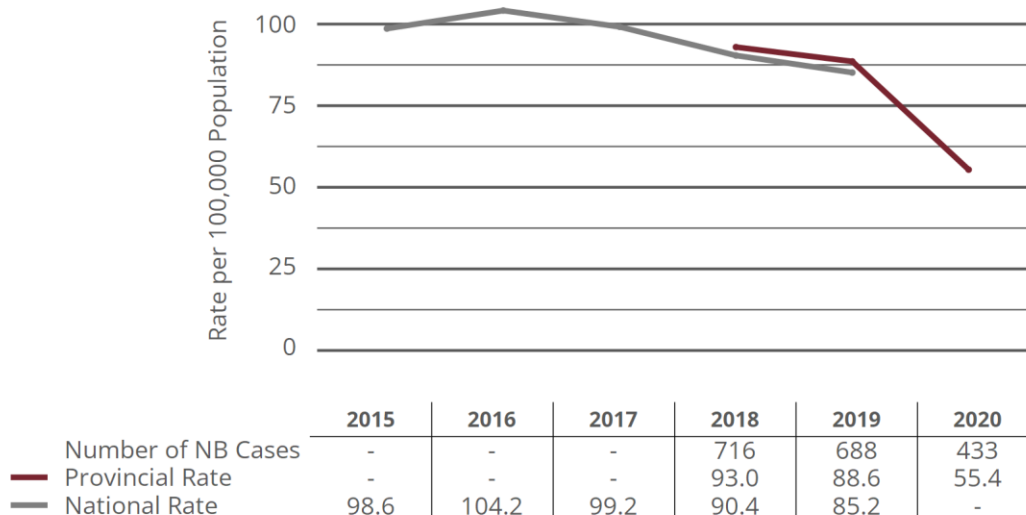


Figure 30: Number of Reported Cases of Clostridium difficile Infection and Incidence Rates per 100,000 population, New Brunswick⁷ and Canada, 2015-2020

The largest number of reported cases was in Region 2 (120 cases or 28%), followed by Region 3 (115 cases or 27%) and Region 1 (84 cases or 19%). However, the highest incidence rate of CDI was observed in Region 5, with 91.7 cases per 100,000 population, followed by Regions 6 and 2, with 72.3 and 67.8 cases per 100,000 population, respectively.

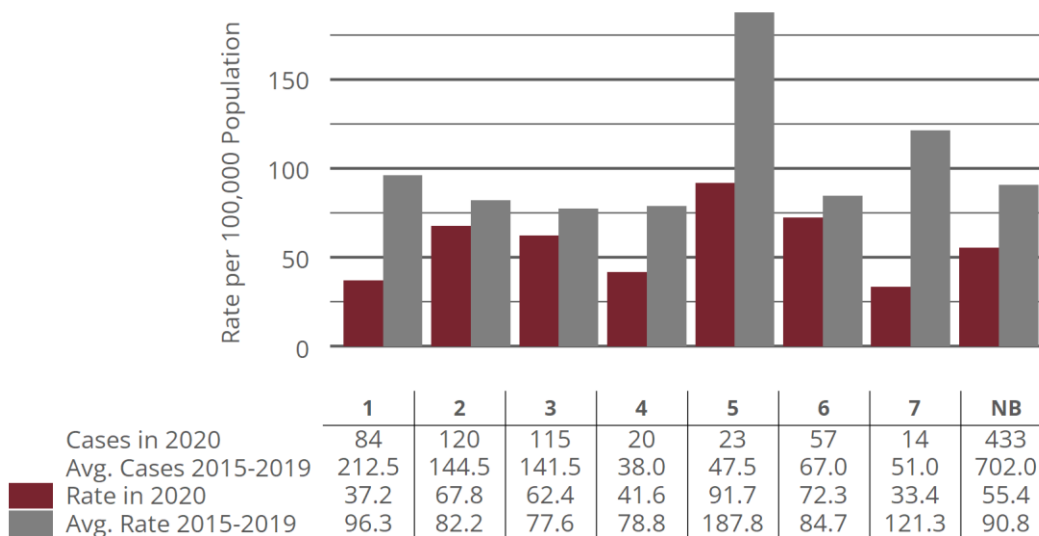


Figure 31: Number of Reported Cases of Clostridium difficile Infection and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

⁷ CDI have become reportable to Public Health New Brunswick as part of the Enteric database in 2018

The majority of CDI cases reported were in the 60+ years age group (292 cases or 67%), followed by the 40-59 (97 cases or 22%). However, the incidence rate was highest in the 60+ years age group (125.4 cases per 100,000 population), followed by the <1 and the 40-59 years age groups (47.5 and 44.7 cases per 100,000 population, respectively).

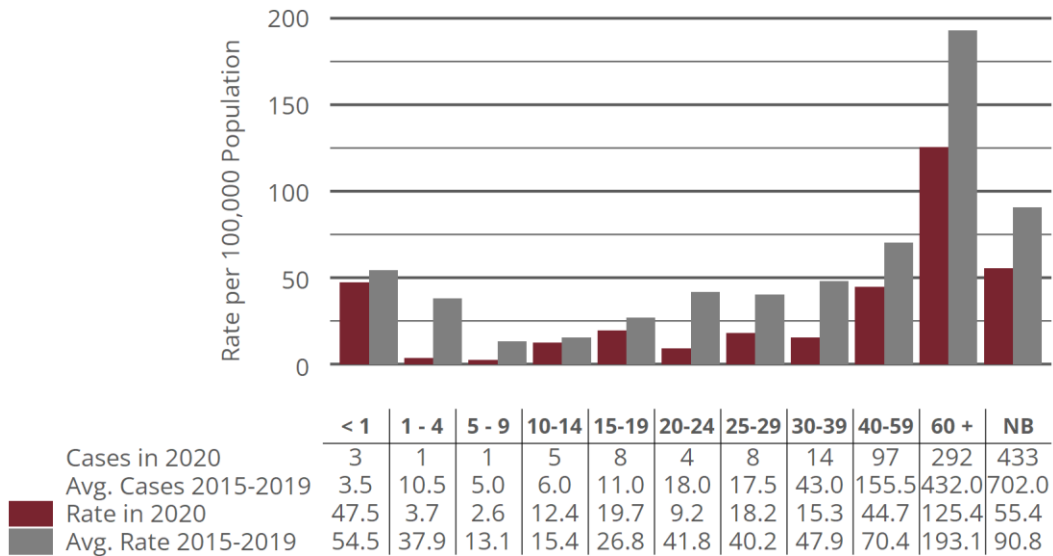


Figure 32: Number of Reported Cases of Clostridium difficile Infection and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

CRYPTOSPORIDIOSIS

In 2020, a total of 35 cases (24 females and 11 males) of cryptosporidiosis were reported to Public Health, with an incidence rate of 4.5 cases per 100,000 population. During the previous five years, an average of 31.2 cases were reported each year, with an average annual incidence rate of 4.1 cases per 100,000 population. Overall, the Incidence rates for New Brunswick fluctuated over time and were higher than the national rates based on the five years of available national data.

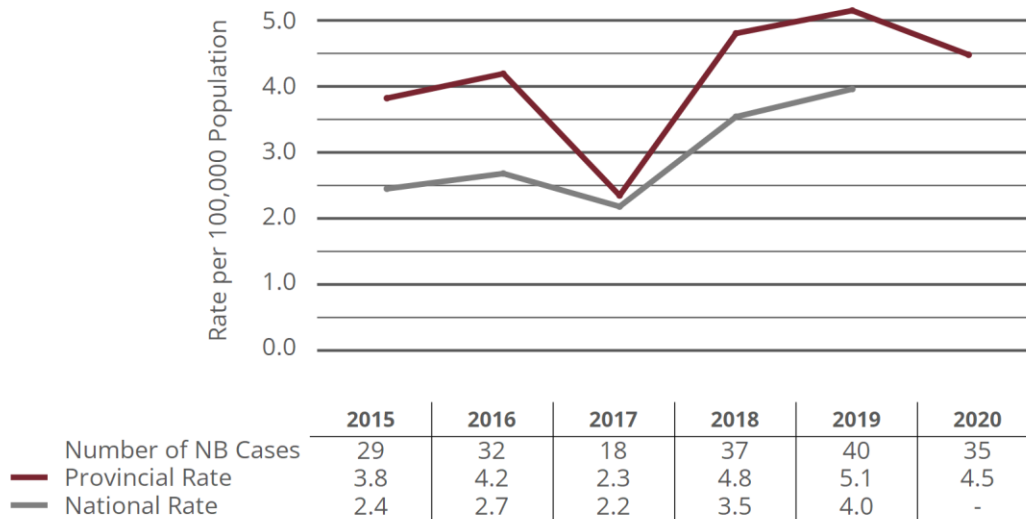


Figure 33: Number of Reported Cases of Cryptosporidiosis and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

In 2020, the largest number of reported cases of cryptosporidiosis was in Region 2 (13 cases or 37%), followed by Region 1 (10 cases or 29%). The incidence rate, however, was highest in Region 7 (11.9 cases per 100,000 population), followed by Region 2 (7.3 cases per 100,000 population).

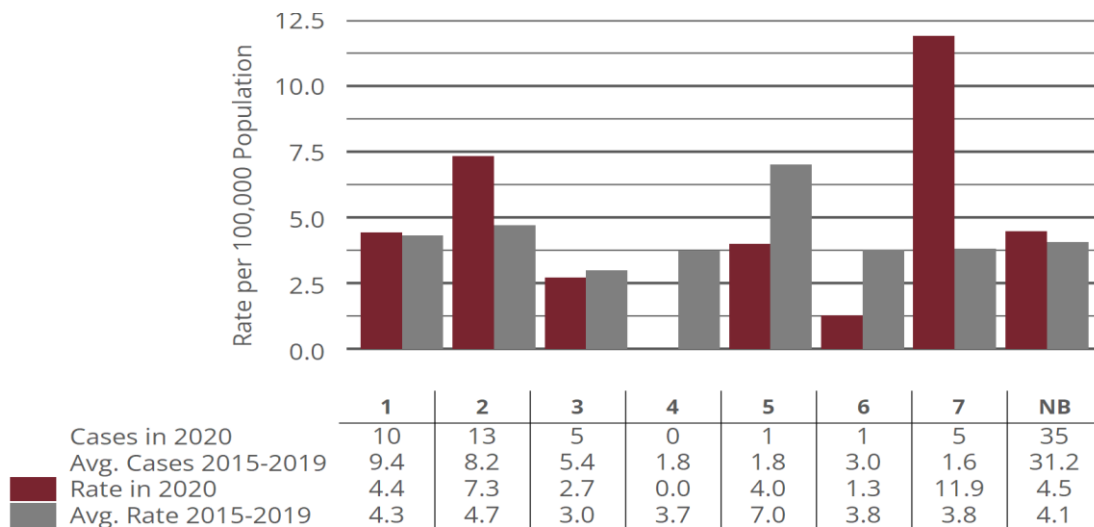


Figure 34: Number of Reported Cases of Cryptosporidiosis and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

The largest number of cases was in the 40-59 years age group (10 cases or 29%), followed by the 30-39 years (7 cases or 20%). The incidence rate was highest in the <1 year age group (15.8 cases per 100,000 population), followed by the 15-19 years age group (9.8 cases per 100,000 population).

The annual differences in incidence rates by Health Region and by age group should be interpreted with caution because of the small numbers involved that can lead to major fluctuation in rates from year to year.

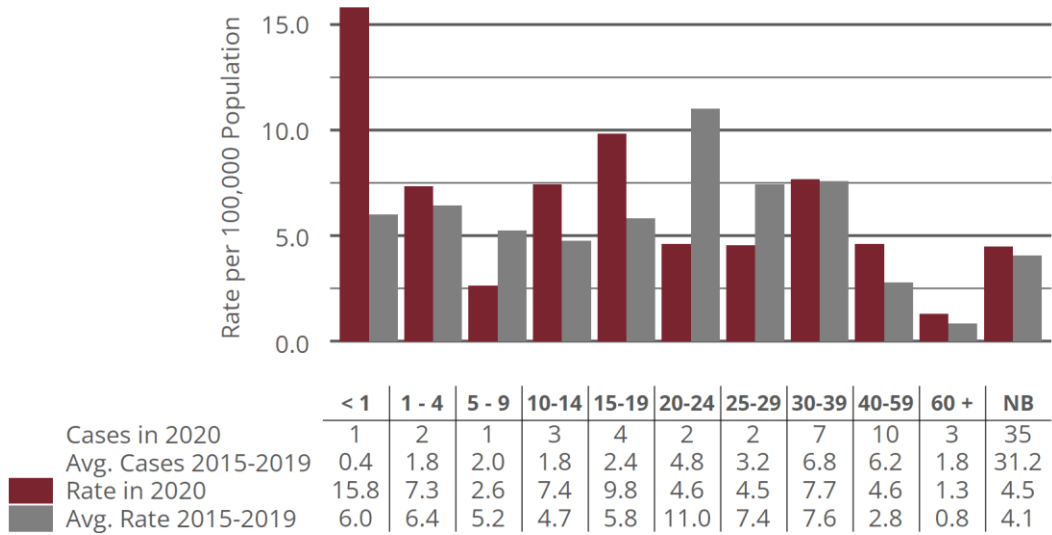


Figure 35: Number of Reported Cases of Cryptosporidiosis and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

E. COLI O157

In 2020, one case of E.coli O157:H7 infection was reported to Public Health. The incidence rate was 0.1 cases per 100,000 population. These figures are lower than the previous five years, with an average of 6 cases reported yearly and an average incidence rate of 0.8 cases per 100,000 population. During the same period, New Brunswick rates were consistently lower than the national rates.

Annual differences in incidence rates should be interpreted with caution because of the small number of reported cases, which can lead to major fluctuation in rates yearly.

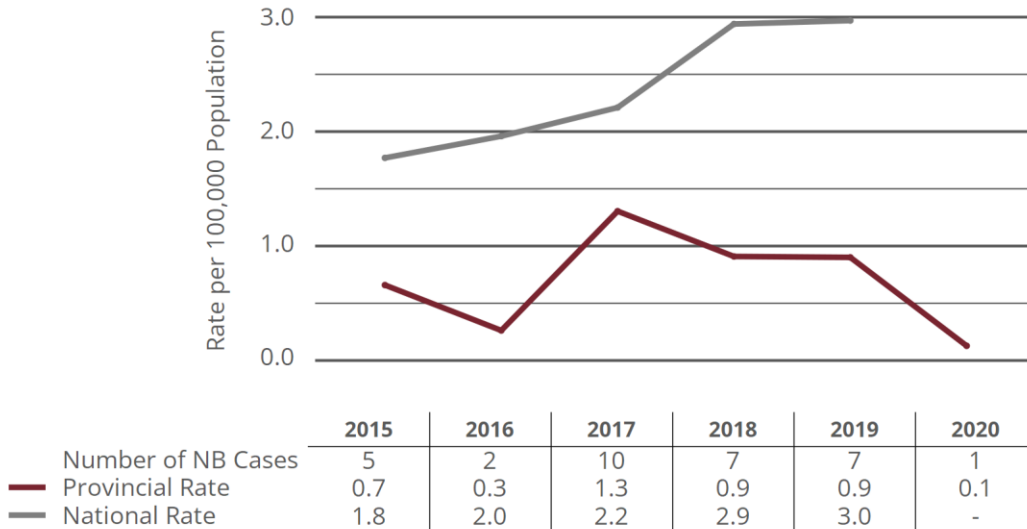


Figure 36: Number of Reported Cases of *E. coli* O157 and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

GIARDIASIS

In 2020, a total of 53 cases (27 females and 26 males) of giardiasis were reported to Public Health, with an incidence rate of 6.8 cases per 100,000 population. During the previous five years, an average of 90.8 cases were reported each year, with a 5-year average incidence rate of 11.8 cases per 100,000 population. From 2015 to 2019, the incidence rates of giardiasis were relatively stable at the national level. During the same period, New Brunswick rates were consistently higher than the national rates, except in 2017, when it was slightly lower than the national rate.

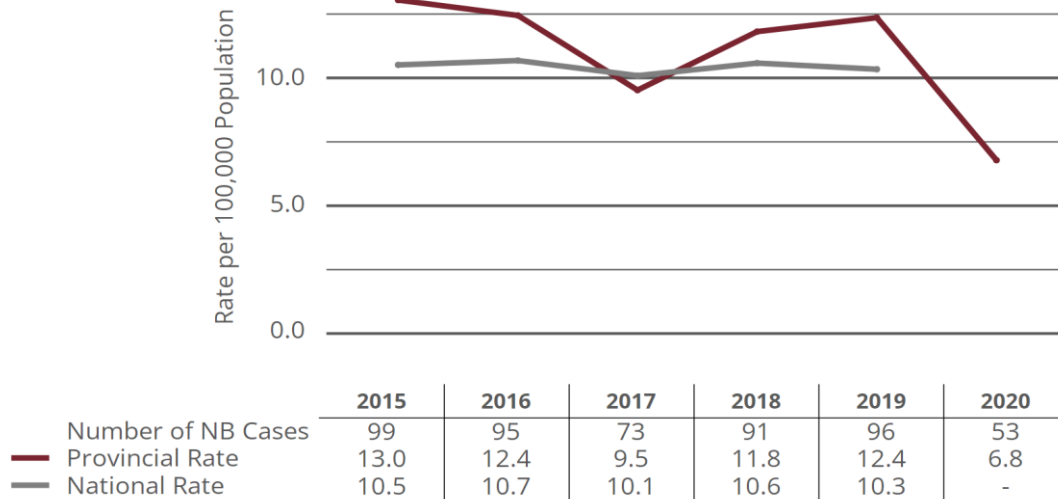


Figure 37: Number of Reported Cases of Giardiasis and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

In 2020, the majority of reported cases were in Regions 1, 2, and 3 (16 cases or 30%, 13 cases or 25% and 11 cases or 21%, respectively). This is consistent with the regional distribution of cases during the previous five years. The highest incidence rate, however, was observed in Region 5 (12.0 cases per 100,000 population), followed by Region 4 (10.4 cases per 100,000 population). Overall, the incidence rate was lower than the previous 5-year average in all regions except for Region 4.

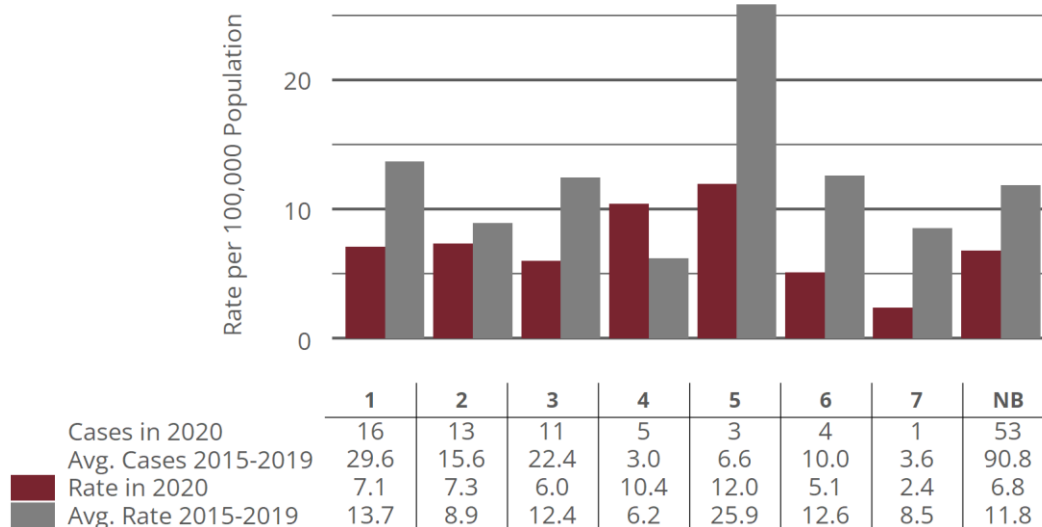


Figure 38: Number of Reported Cases of Giardiasis and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

The largest number of reported cases of giardiasis was in the 60+ years age group (20 cases or 38%), followed by the 40-59 and the 30-39 years age groups (8 cases or 15%, and 7 cases or 13%, respectively). The incidence

rates were highest in the <1 year and in the 5-9 years age groups (15.8 and 15.7 cases per 100,000 population, respectively), followed by the 20-24 age group (9.2 cases per 100,000 population). Overall, the incidence rate was lower than the previous 5-year average in all age groups except for the <1 year, the 5-9, and 20-24-years age groups.

The annual changes in the giardiasis incidence rate by age group should be interpreted with caution; the relatively low number of cases can result in major fluctuations in the rate from year to year.

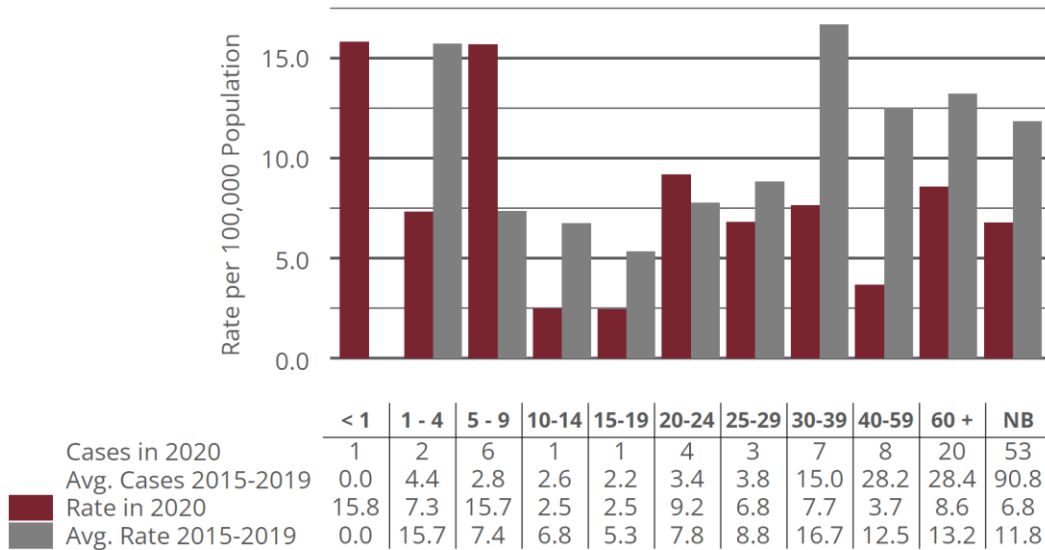


Figure 39: Number of Reported Cases of Giardiasis and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

SALMONELLOSIS

In 2020, there were 116 cases (59 females and 57 males) of salmonellosis reported to Public Health, with an incidence rate of 14.8 cases per 100,000 population. These figures are lower than the annual average for the previous five years (161.0 cases and 21.0 cases per 100,000 population). Incidence rates were higher than the national rates during the previous five years, except for 2016, when the rate was lower.

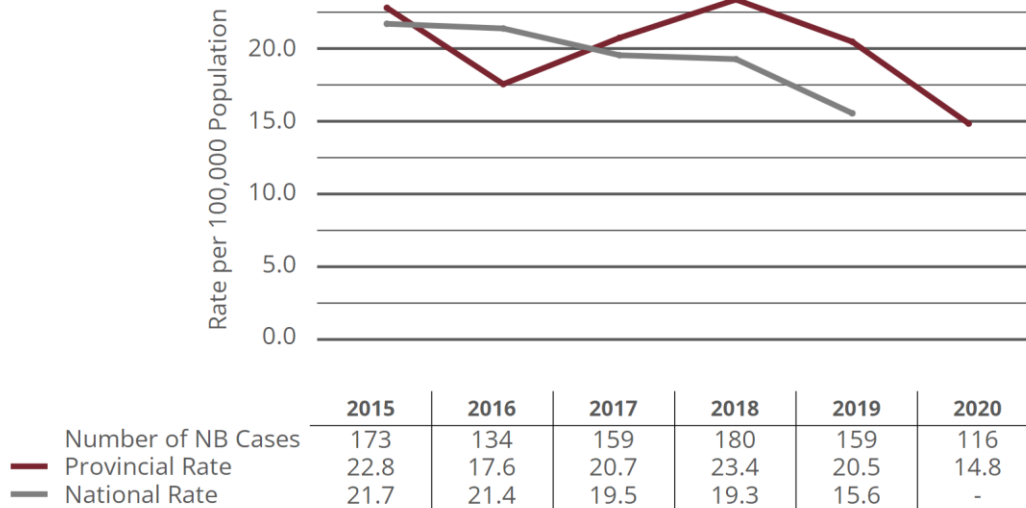


Figure 40: Number of Reported Cases of Salmonellosis and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

In 2020, the largest number of reported cases was in Region 1 (31 cases or 27%), followed by Regions 3 and 2 (28 cases or 24%, and 22 cases or 19%, respectively). However, Region 7 had the highest incidence rate with 33.4 cases per 100,000 population, followed by Region 5 with 19.9 cases per 100,000 population. During the previous five years, the highest average incidence rate was observed in Region 5 (36.8 cases per 100,000 population), followed by Regions 6 and 7 (27.2 and 24.2 cases per 100,000 population, respectively).

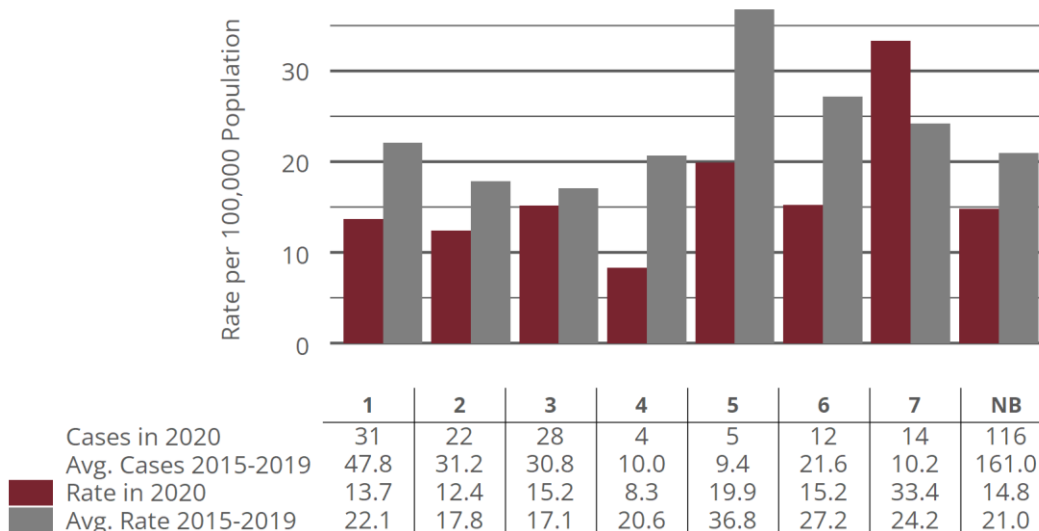


Figure 41: Number of Reported Cases of Salmonellosis and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

Most reported salmonellosis cases were in the 60+ years age group (47 cases or 41%), followed by the 40-59 years age group (32 cases or 28%). However, the incidence rate was highest in the <1 year age group (47.5 cases per 100,000 population), followed by the 25-29 and the 60+ years age groups (25.0 and 20.2 cases per 100,000 population, respectively). During the previous five years, the highest average annual incidence rate was in the 1-4 years age group (28.6 cases per 100,000 population), followed by the 20-24 and the 60+ years age groups (23.4 and 22.9 cases per 100,000 population, respectively).

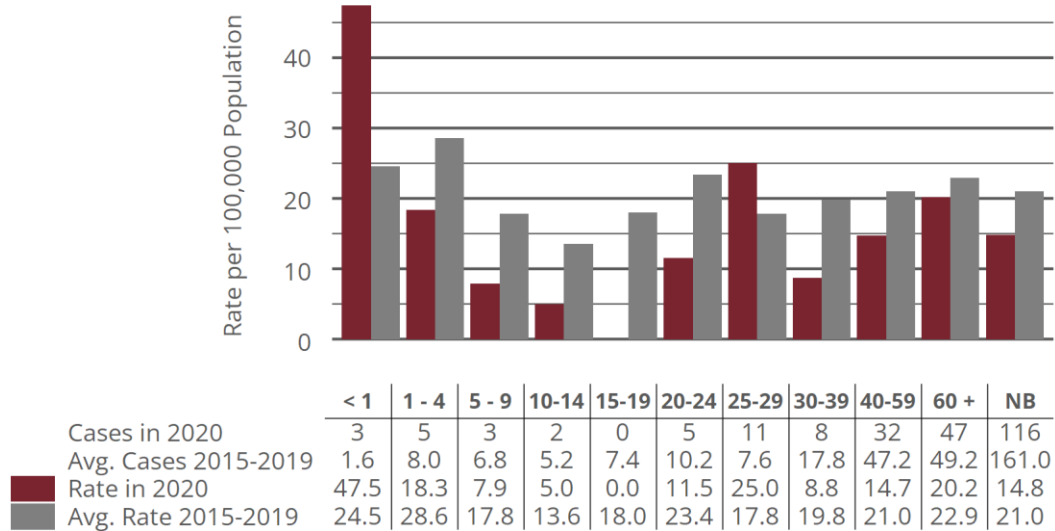


Figure 42: Number of Reported Cases of Salmonellosis and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

The most prevalent *Salmonella* serotype in 2020 was *S. enteritidis* (66 cases or 56.9%), followed by *S. heidelberg* and *S. infantis* (5 cases each or 4.3%). Twenty-six (26) cases of other or undetermined serotypes accounted for 22.4% of reported cases.

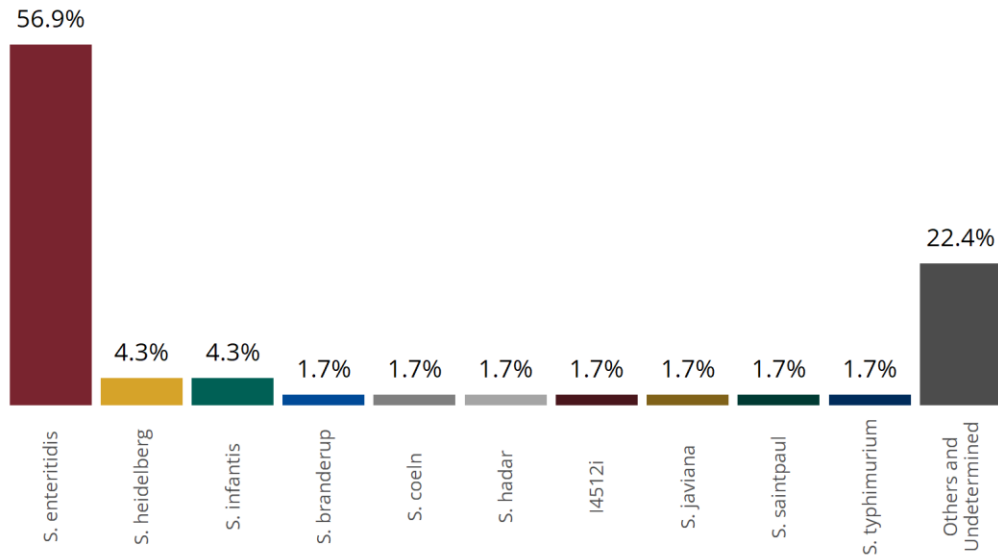


Figure 43: Percent Distribution of Salmonellosis by Serotype in New Brunswick, 2020

VIBRIO

In 2020, there were 16 cases (7 females and 9 males) of *Vibrio* species infections reported to Public Health, with an incidence rate of 2.0 cases per 100,000 population. These figures are higher than the annual average for the previous five years (5.8 cases and 0.8 cases per 100,000 population). Incidence rates at the national level are not available. Out of the sixteen cases of *Vibrio* species reported in 2020, nine (56.3%) were cases of *Vibrio parahaemolyticus* that were part of a multi-provincial outbreak related to shellfish consumption.

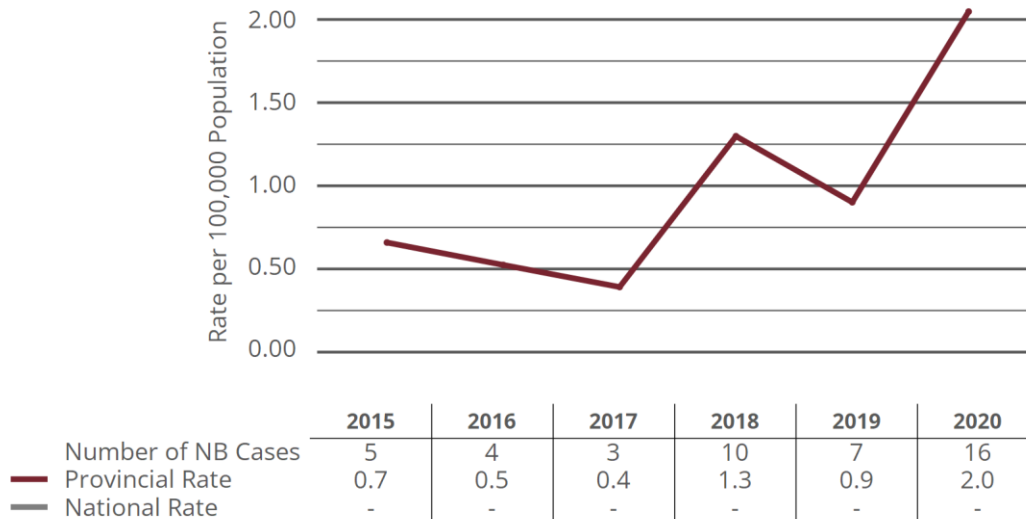


Figure 44: Number of Reported Cases of *Vibrio* and Incidence Rates per 100,000 population, New Brunswick, 2015-2020

OTHER ENTERIC, FOOD AND WATER BORNE DISEASES

Other enteric, food and waterborne diseases notifiable in New Brunswick include botulism, cholera, cyclosporiasis, hepatitis A and E, listeriosis, paralytic shellfish poisoning, shigellosis, *Staphylococcus Aureus* intoxications, typhoid fever, and yersiniosis.

In 2020, the number of reported cases and incidence rates of cyclosporiasis, hepatitis A, and listeriosis (cyclosporiasis: 2 cases; 0.3 cases per 100,000 population, hepatitis A: 3 cases; 0.4 cases per 100,000 population and listeriosis: 6 cases, 0.8 cases per 100,000 population) were higher than the previous five years' average. The number of reported cases and the incidence rate for yersiniosis (1 case; 0.1 cases per 100,000 population) were lower than the previous five years' average. For the other Enteric diseases listed above, there were no cases reported in 2020.

For further details on case counts and rates for other enteric, food and waterborne diseases, please refer to Appendix B.

SUMMARY OF ENTERIC OUTBREAKS

In 2020, 26 regional enteric, food and waterborne disease outbreaks were reported in New Brunswick. Sixteen (64%) of these occurred in institutional non-residential settings (all were in daycares), nine (35%) in institutional residential settings (all were in long-term care facilities), and one outbreak was travel related. The largest number of outbreaks occurred in Region 1 (12 outbreaks), followed by Regions 3 (7 outbreaks), Region 2 (4 outbreaks), and Region 6 (3 outbreaks). No outbreaks were reported in Regions 4, 5, and 7.

The pathogenic microorganism was identified in 6 outbreaks (23%). Of those outbreaks with an identified organism, norovirus was the most common pathogen (5 outbreaks), followed by *S. enteritidis* (1 outbreak).

For further details on settings and microorganisms' distribution, please refer to Appendix B.

New Brunswick was involved in 5 national outbreaks (1 implicated *Salmonella Typhimurium*, and pet hedgehogs were the suspected source; 1 implicated Cyclospora and was linked to prepackaged or bagged salad; 1 involved *Vibrio parahaemolyticus* and raw shellfish harvested from Canadian Atlantic waters was reported as the likely source of the outbreak; 1 outbreak implicated Hepatitis A and the source was not identified, and 1 outbreak implicated *Salmonella Oranienburg*, and fresh produce was potentially the source of infection, specifically cucumbers and radishes).

Sexually Transmitted and Blood Borne Infections

Sexually transmitted and bloodborne infections (STBBI) and their serious consequences can be prevented and mitigated through sexual health promotion, harm reduction strategies, early detection and treatment, and notification of sexual and drug use partners. Incidence rates for most STBBI in 2020 were lower than or equal to the annual average for the previous five years, which could be due to a change in behavior during the COVID-19 pandemic.

In 2020, the most commonly reported STBBI was chlamydia, followed by hepatitis C, gonorrhea, and chronic hepatitis B.

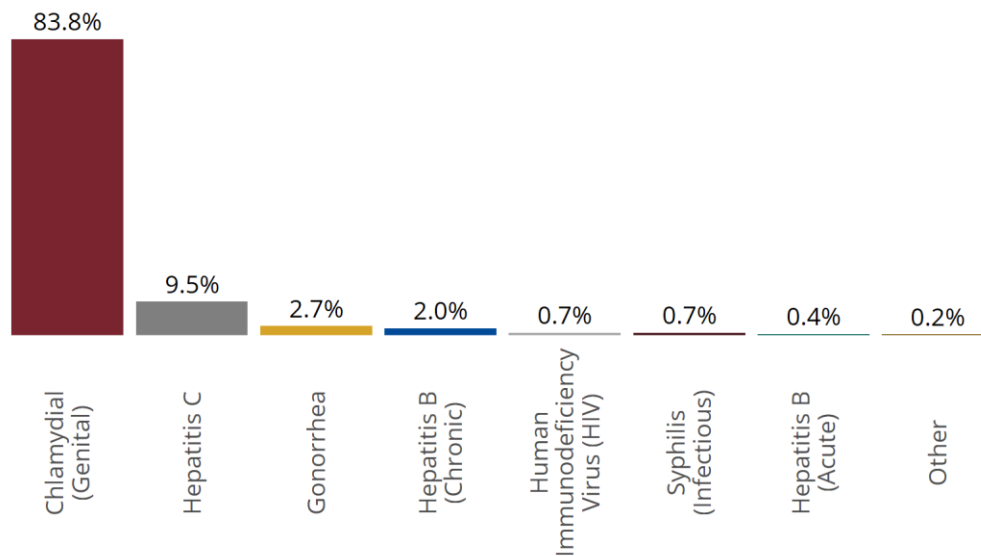


Figure 45: Percent Distribution of the most prevalent Sexually Transmitted and Blood Borne Infections in New Brunswick, 2020

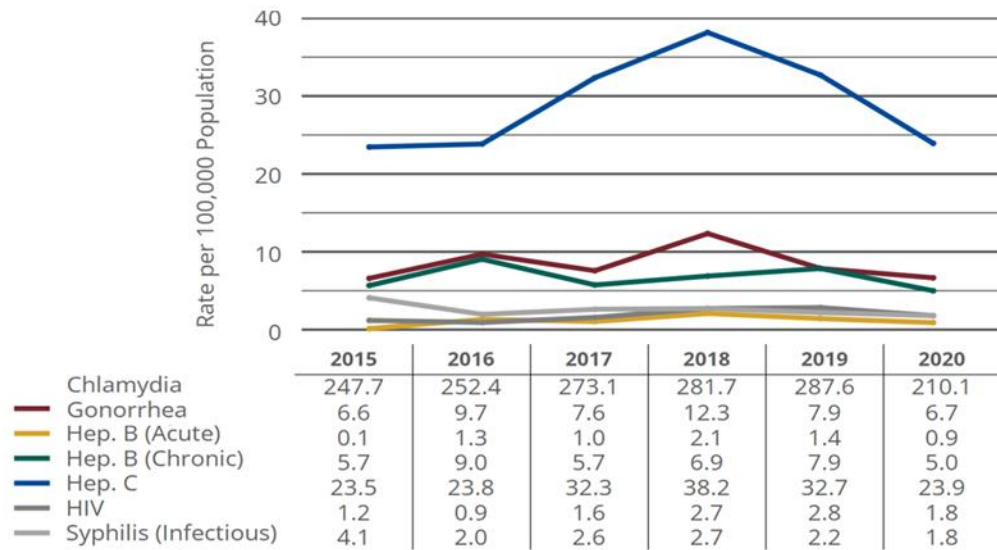


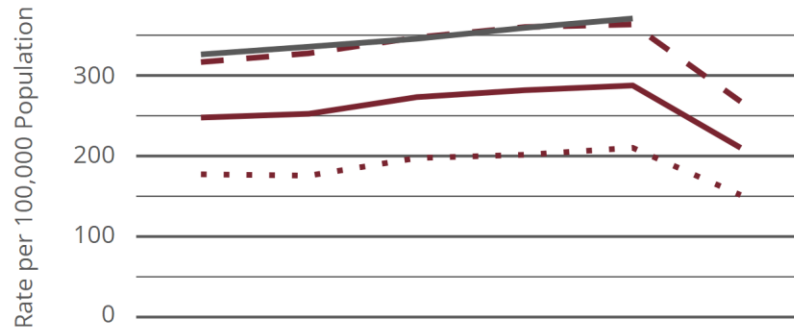
Figure 46: Incidence Rates of the most prevalent Sexually Transmitted and Blood Borne Infection⁸s in New Brunswick per 100,000 population, 2015-2020

CHLAMYDIA (GENITAL)

Chlamydia is the most commonly reported sexually transmitted infection in New Brunswick. In 2020, a total of 1,642 cases (1056 females and 586 males) were reported to Public Health, with an incidence rate of 210.1 cases per 100,000 population. These figures are lower than the annual average for the previous five years (2,061.0 cases and 270.0 cases per 100,000 population, respectively).

There was an upward trend in the number of chlamydia cases reported between 2015 and 2019, followed by a decrease in the number of reported cases in 2020. Overall, incidence rates for New Brunswick were lower than that for Canada during the previous five years.

⁸ Incidence rates for Chlamydia are included in the Table section of the Figure but are not represented on the graph section to allow for visualisation of STBBIs with lower rates.



	2015	2016	2017	2018	2019	2020
No. of Cases (Males)	665	663	749	768	808	586
No. of Cases (Females)	1,215	1,264	1,345	1,402	1,426	1,056
No. of Cases	1,880	1,927	2,094	2,170	2,234	1,642
• • • NB Rate (Males)	177.3	175.6	197.5	201.6	210.2	151.5
- - - NB Rate (Females)	316.6	327.6	347.3	360.2	363.4	267.6
— NB Rate	247.7	252.4	273.1	281.7	287.6	210.1
— National Rate	326.1	335.7	345.6	359.2	370.8	-

Figure 47: Number of Reported Cases of Chlamydia (Genital) and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

The highest incidence rate of chlamydia in 2020 was in Region 3 (264.1 cases per 100,000 population), followed by Region 1 (244.6 cases per 100,000 population) and Region 2 (210.6 cases per 100,000 population). During the previous five years, the highest average incidence rate was in Region 3, followed by Regions 1 and 2 (346.9, 337.7 and 211.6 cases per 100,000 population, respectively).

The majority of reported cases of chlamydia were in the 20-24 years age group (705 cases or 43%), followed by the 15-19 and the 25-29 years age groups (351 cases or 21% and 321 cases or 20%, respectively), with incidence rates of 1621.1, 863.2, and 729.9 cases per 100,000 population, respectively. Among females, the incidence rates were lower in all age groups compared to the 5-year averages. Among males, the rates were higher in those <15 and 60+ age groups compared to the 5-year averages.

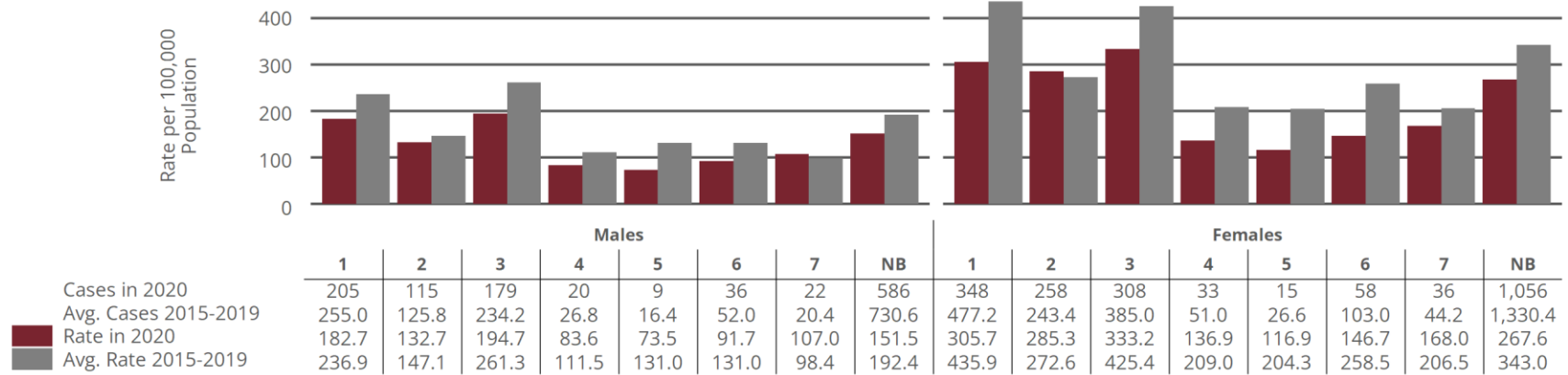


Figure 48: Number of Reported Cases of Chlamydia (Genital) and Incidence Rates per 100,000 population, by Health Region and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

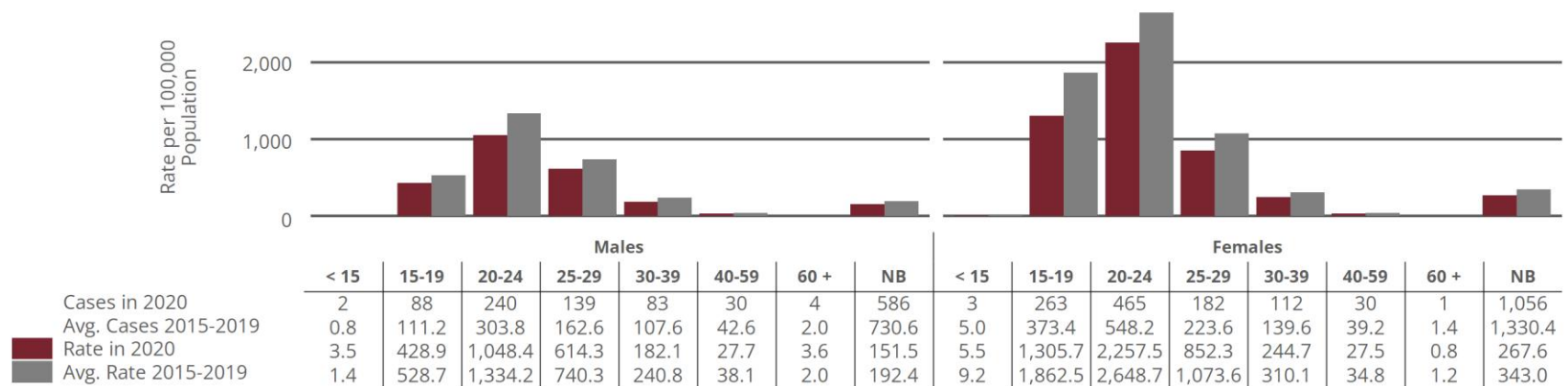


Figure 49: Number of Reported Cases of Chlamydia (Genital) and Incidence Rates per 100,000 population, by Age Group and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

GONORRHEA

In 2020, a total of 52 cases (18 females and 34 males) of gonorrhoea were reported to Public Health, with an incidence rate of 6.7 cases per 100,000 population. These figures are lower than the annual average for the previous five years (67.6 cases and 8.8 cases per 100,000 population, respectively). However, cases of Gonorrhoea have been increasing in New Brunswick since 2016 and a provincial outbreak has been declared since April 2019 due to sustained high levels of gonorrhoea activity in different Health Regions through 2018 and 2019. The decrease in cases since 2019 may be due to change in human behavior during the COVID-19 pandemic. It was noted specifically for reported cases of Gonorrhoea, that a brief initial decline was observed during the early stages of the COVID-19 pandemic in 2020. Following the second quarter of 2020, the provincial rates, as well as rates by gender, started to continually increase throughout the remainder of the year. From 2015 to 2019, New Brunswick incidence rates have been much lower than national rates.

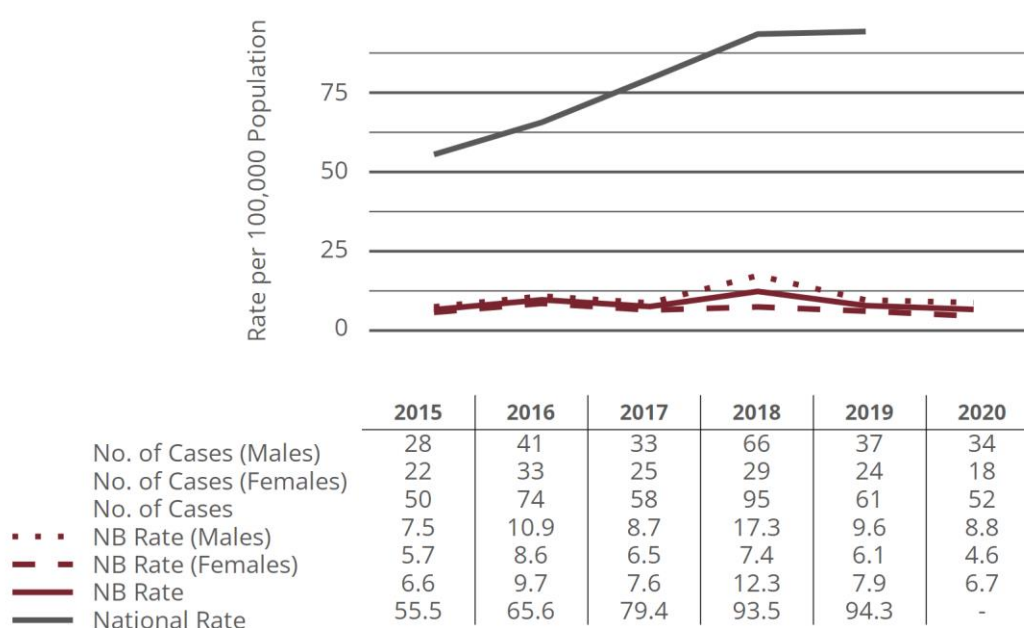


Figure 50: Number of Reported Cases of Gonorrhoea and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

The largest number of cases reported in 2020 were in Region 1 (31 cases), followed by Region 2 (7 cases) and Region 6 (5 cases). Together, these three Health Regions accounted for 83% of cases. The total number of cases was lower than the previous 5-year annual average in all Health Regions, except Region 1 (higher for males), Region 4 (equal for males and females), Region 5 (equal for males), Region 6 (equal for males and higher for females), and Region 7 (higher for males and equal for females).

The male to female case ratio (M:F) was 1.9:1 which was slightly higher than the average ratio of the 5 previous years (1.5:1).

The highest incidence rate was in the 25-29 years age group for males and the 20-24 years age group for females.

Annual variations in age and region-specific rates for gonorrhea should be interpreted with caution because of the small numbers involved that can lead to large fluctuations in rates.

Cases who identified themselves as straight or heterosexual accounted for 44% of all the cases. Cases identifying as gay or bisexual men accounted for 50% of the male cases. Among male and female cases with available risk factor information, 68% of the cases reported high risk sexual behaviors such as not using condoms while having sex (whether vaginal, anal, or oral), 42% reported having multiple partners, and 63 % reported having casual or anonymous partners in the 60 days before infection.

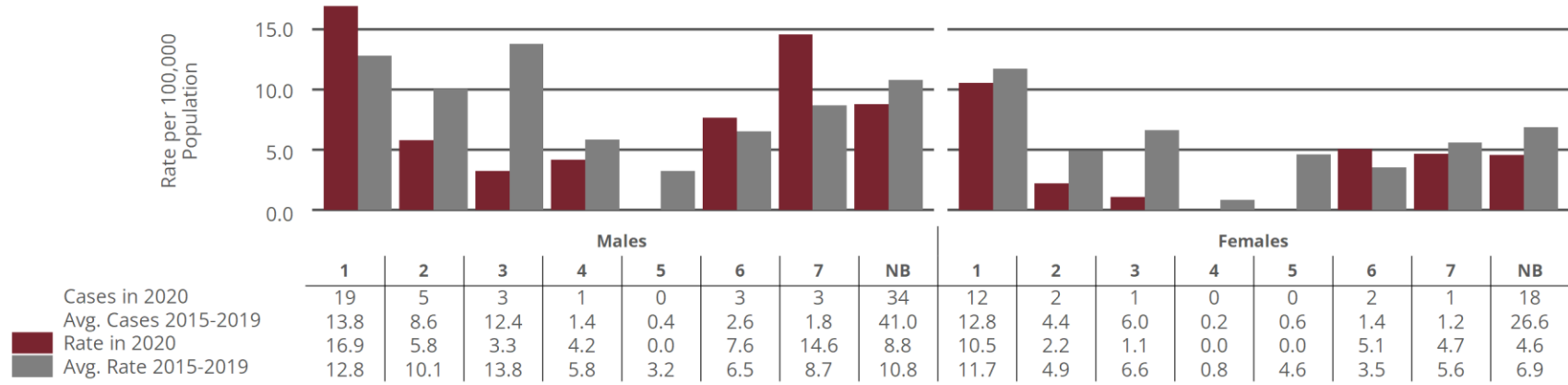


Figure 51: Number of Reported Cases of Gonorrhea and Incidence Rates per 100,000 population, by Health Region and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

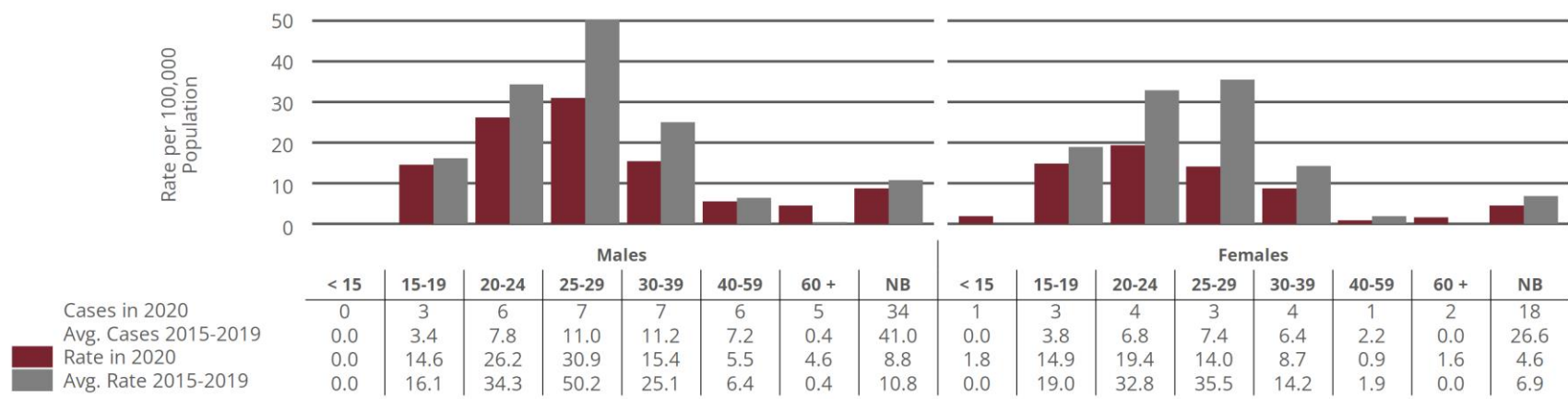


Figure 52: Number of Reported Cases of Gonorrhea and Incidence Rates per 100,000 population, by Age Group and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

HEPATITIS B (ACUTE AND CHRONIC)

HEPATITIS B (ACUTE)

In 2020, a total of 7 cases (3 females and 4 males) of acute hepatitis B were reported to Public Health, with an incidence rate of 0.9 cases per 100,000 population. These figures are lower than the annual average for the previous five years (9.2 cases and 1.2 cases per 100,000 population, respectively).

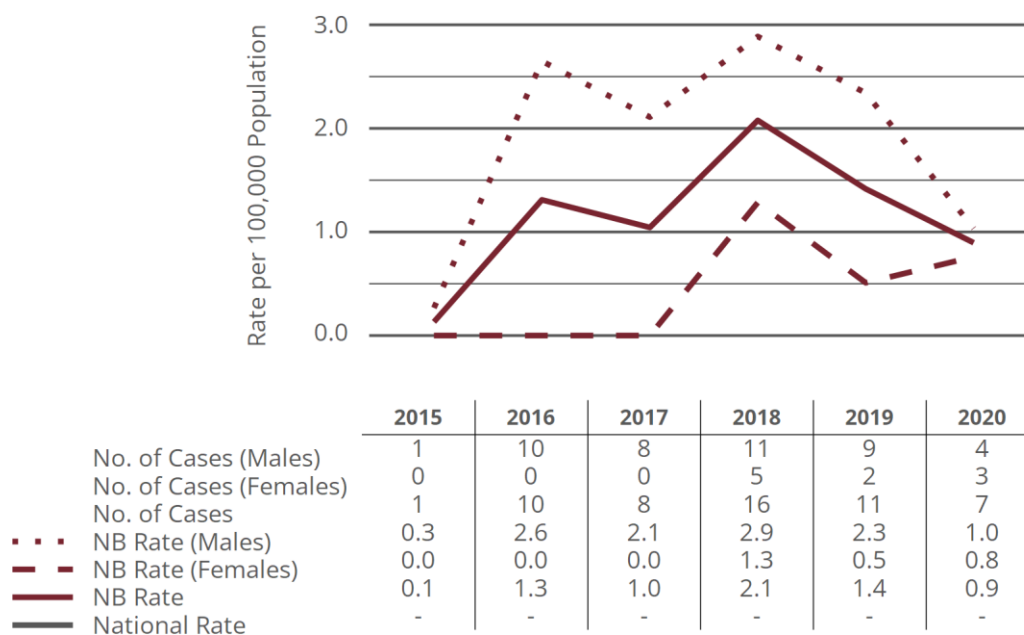


Figure 53: Number of Reported Cases of Hepatitis B (Acute) and Incidence Rates per 100,000 population, New Brunswick⁹, 2015-2020

The largest number of reported cases in 2020 were in Region 1 (5 cases or 71%), followed by Regions 2 and 3 (1 case each). The majority of reported cases were in the 40-59 years age group (4 cases or 57%), followed by the 60+ (2 cases or 29%).

Most cases (86%) reported being heterosexual and 43% of the cases reported having casual or anonymous partners. Other risk behaviours included body piercing (29%), tattooing (14%), use of street drugs (43%), use of intravenous drugs (14%), and sharing needles or other equipment (14%). One case had previously received the hepatitis B vaccine.

⁹ The national rates are not presented in the figure as they are reported for all Hepatitis B cases (chronic and acute) and are not available specifically for cases of acute Hepatitis B.

HEPATITIS B (CHRONIC)

In 2020, a total of 39 new cases (12 females and 27 males) of diagnosed chronic hepatitis B were reported to Public Health, with an incidence rate of 5.0 cases per 100,000 population. These figures are lower than the annual average for the previous five years (54.0 cases and 7.1 cases per 100,000 population, respectively).

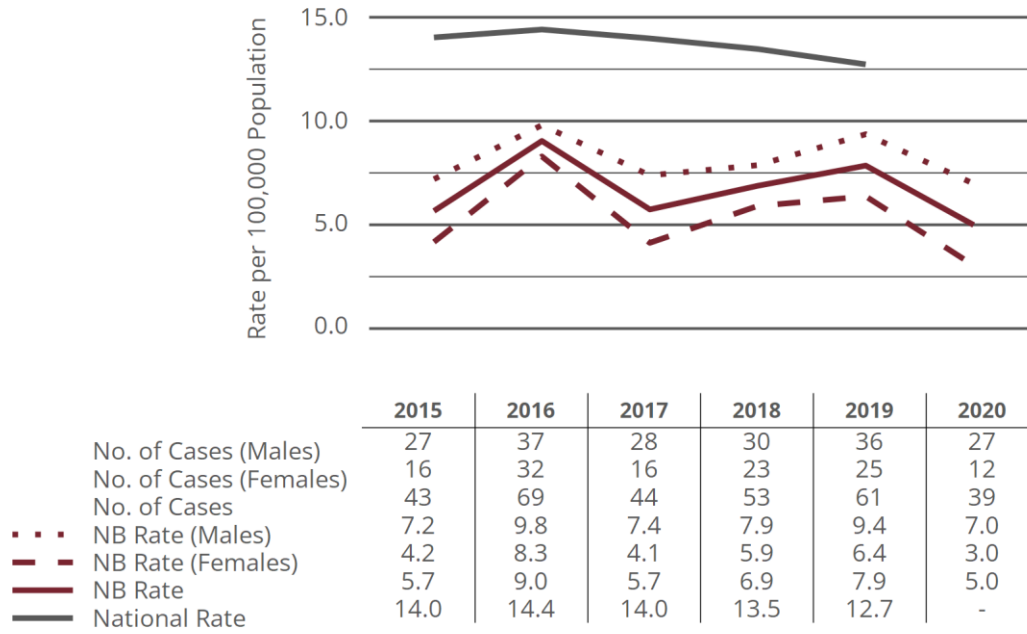


Figure 54: Number of Reported Cases of Hepatitis B (Chronic) and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020. National rates include both acute and chronic.

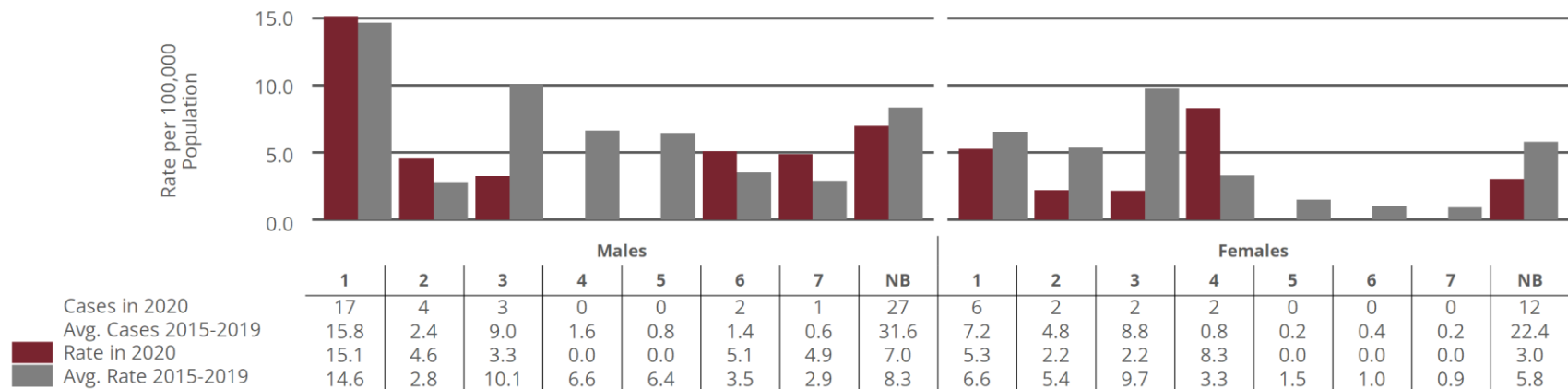


Figure 55: Number of Reported Cases of Hepatitis B (Chronic) and Incidence Rates per 100,000 population, by Health Region and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

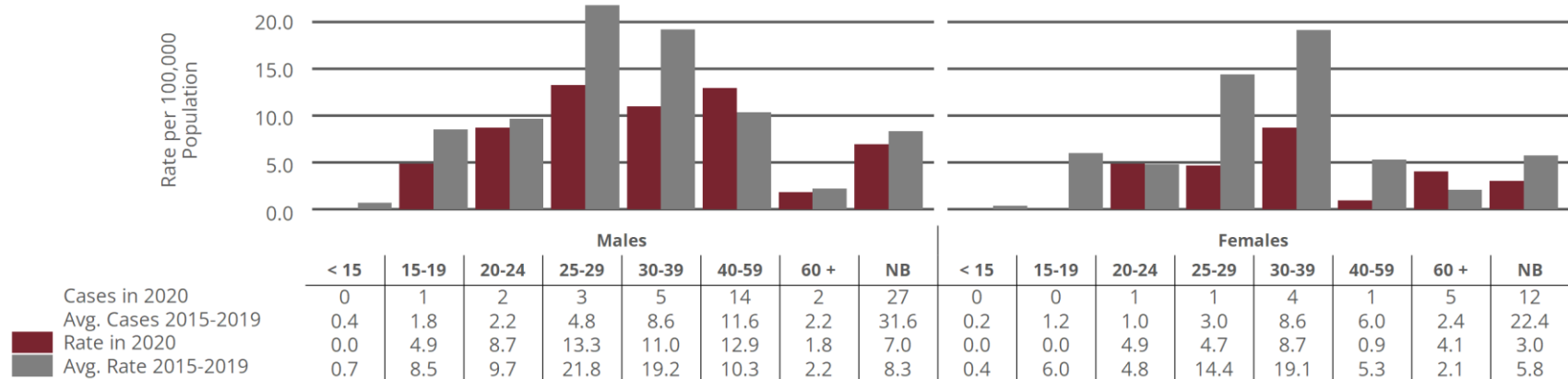


Figure 56: Number of Reported Cases of Hepatitis B (Chronic) and Incidence Rates per 100,000 population, by Age Group and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

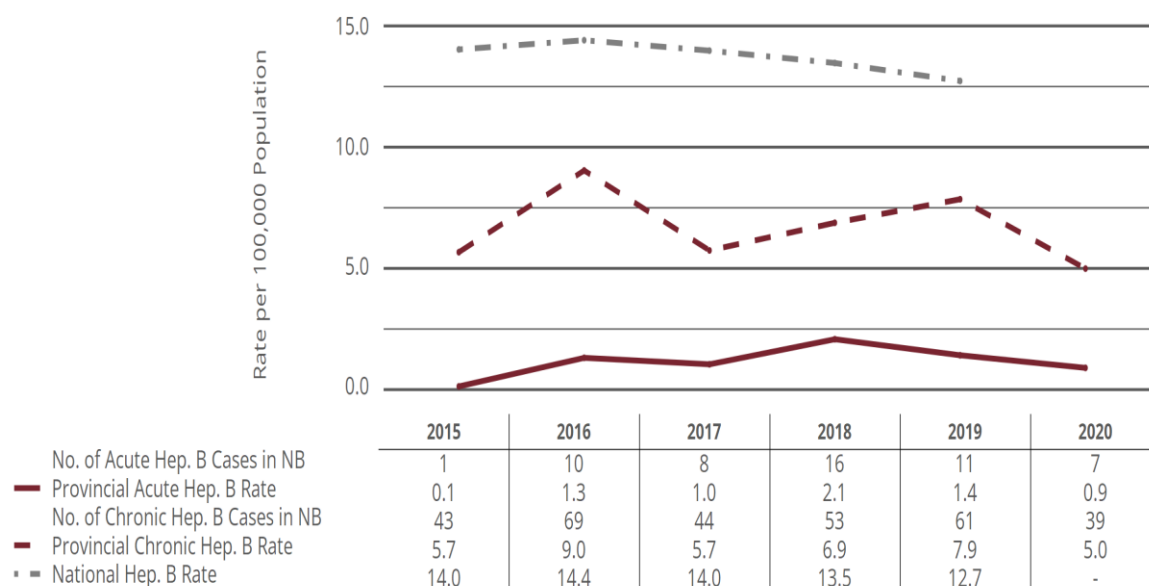


Figure 57: Number of Reported Cases of Hepatitis B (Chronic and Acute) and Incidence Rates per 100,000 population, New Brunswick and Canada¹⁰, 2020 and 2015 to 2019 Five-year Averages

The largest number of reported cases of diagnosed chronic hepatitis B in 2020 were in Region 1 (23 cases or 59%), followed by Region 2 (6 cases or 15%) and Region 3 (5 cases or 13%). Together, these three Regions accounted for 87% of cases. The incidence rate was highest in Region 1 (10.2 cases per 100,000 population), followed by Region 4 (4.2 cases per 100,000 population).

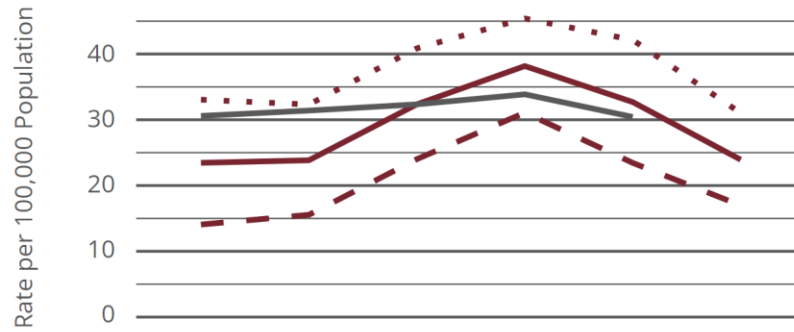
The majority (15 cases, 39%) of reported cases were in the 40-59 years age group, followed by the 30-39 years age group (9 cases, 23%) while the highest incidence rates were reported in the 30-39 years age group followed by the 25-29 years age group (9.9 cases and 9.1 cases per 100,000 population, respectively). In males, the largest proportion of cases (52%) was in the 40-59 years age group, followed by the 30-39 years age group (19%), whereas in females it was the 60+ years age group (42%), followed by the 30-39 years age groups (33%). The highest incidence rate was in the 25-29 years age group for males and in the 20-24 years age group for females (13.3 cases and 8.7 cases per 100,000, respectively).

Consistent with previous years, new residents arriving from endemic areas of the world accounted for a high proportion of the reported cases (49%).

HEPATITIS C

In 2020, a total of 187 cases (67 females and 120 males) of diagnosed hepatitis C were reported to Public Health, with an incidence rate of 23.9 cases per 100,000 population. Nineteen (19 or 10%) of these cases were confirmed as new infections (i.e., documented HCV antibody seroconversion within the last 12 months in a previously seronegative person). The 2020 figures are lower than the annual average for the previous five years (231.2 cases per year and an average incidence rate of 30.3 cases per 100,000 population). Overall, New Brunswick rates were lower than the national rates during the 5-year period, except for 2018 and 2019, when the rates were higher.

¹⁰ The national rates include all Hepatitis B cases (chronic and acute).



	2015	2016	2017	2018	2019	2020
No. of Cases (Males)	124	122	155	173	162	120
No. of Cases (Females)	54	60	93	121	92	67
No. of Cases	178	182	248	294	254	187
••• NB Rate (Males)	33.1	32.3	40.9	45.4	42.1	31.0
- - - NB Rate (Females)	14.1	15.5	24.0	31.1	23.4	17.0
— NB Rate	23.5	23.8	32.3	38.2	32.7	23.9
— National Rate	30.6	31.4	32.4	33.9	30.4	-

Figure 58: Number of Reported Cases of Hepatitis C and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

The largest number of cases were in Region 1 (89 cases or 48%), followed by Region 2 (48 cases or 26%) and Region 7 (22 cases or 12%). Together, these three Regions accounted for 85% of reported cases in 2020.

The majority of reported cases (33%, 62 cases) were in the 30-39 years age group, followed by the 40-59 years age group (31%, 57 cases). In males, the largest percentage (35%) was in the 30-39 years age group, followed by the 40-59 years age group (29%); whereas in females, it was the 40-59 years age group (33%), followed by the 30-39 years age group (30%). The highest incidence rate was in the 30-39 for males and the 25-29 years age group for females (92.1 cases and 65.6 cases per 100,000, respectively).

Among the cases that provided information on drug use (73%, 137 cases), 127 cases (92%) answered that they were using drugs with the majority (86 %) using both injection and non-injection drugs. Among the intravenous drug users, 53% admitted sharing needles, and 71% indicated sharing other snorting, sniffing, or smoking equipment.

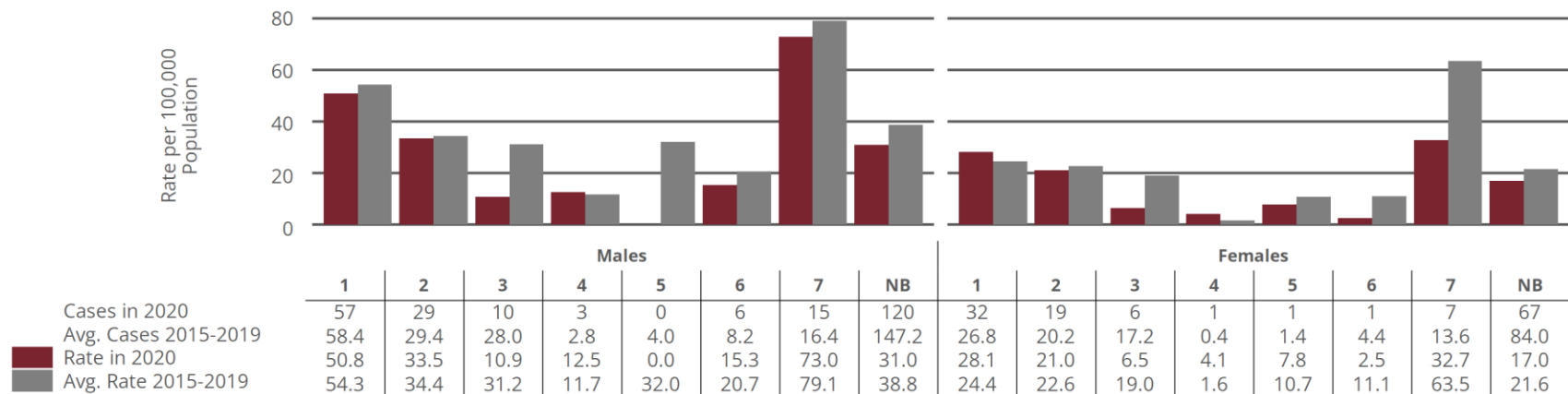


Figure 59: Number of Reported Cases of Hepatitis C and Incidence Rates per 100,000 population, by Health Region and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

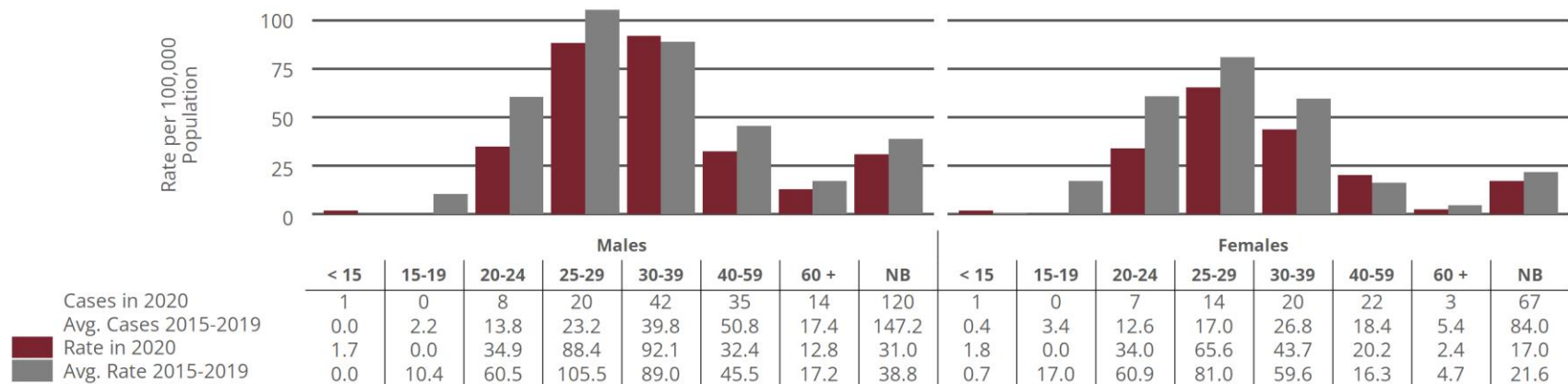


Figure 60: Number of Reported Cases of Hepatitis C and Incidence Rates per 100,000 population, by Age Group and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

HUMAN IMMUNODEFICIENCY VIRUS (HIV) AND ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)

HUMAN IMMUNODEFICIENCY VIRUS (HIV)

In 2020, a total of 14 new cases (3 females and 11 males) of diagnosed HIV infection were reported to Public Health, with an incidence rate of 1.8 cases per 100,000 population. These figures are comparable to the annual average number of cases and average rate for the previous five years (14.2 cases and 1.8 cases per 100,000 population, respectively). HIV incidence rates in New Brunswick fall below national rates.

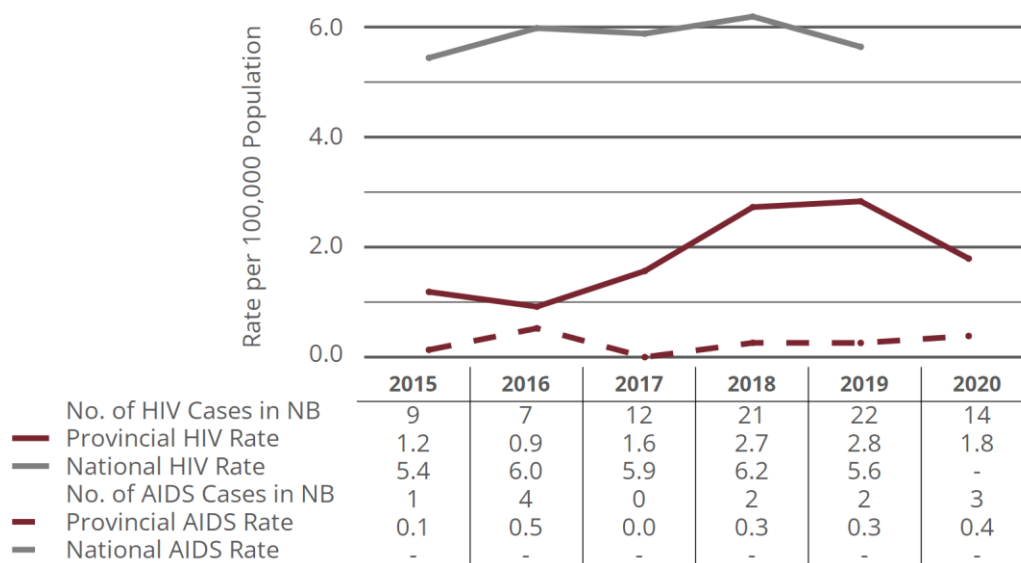


Figure 61: Number of Reported Cases of HIV and AIDS and Incidence Rates per 100,000 population, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

The majority of newly diagnosed HIV cases (57%) in 2020 were in the 40-59 years age group, followed by the 20-24, 25-29, and 30-39-years age group (14% each).

Among the newly reported cases, 8 acquired the infection in Canada and 6 would have acquired the infection prior to their arrival in Canada.

In 2020, most HIV cases (73%) in males implicated men having sex with men (MSM), whereas in females, the most common risk factor reported for HIV infection was coming from an endemic country (67%). Similarly, in the past 5 years (2015-2019), the most common risk factor reported in males was again MSM (64%), whereas, in females, it was coming from an endemic country (67%).

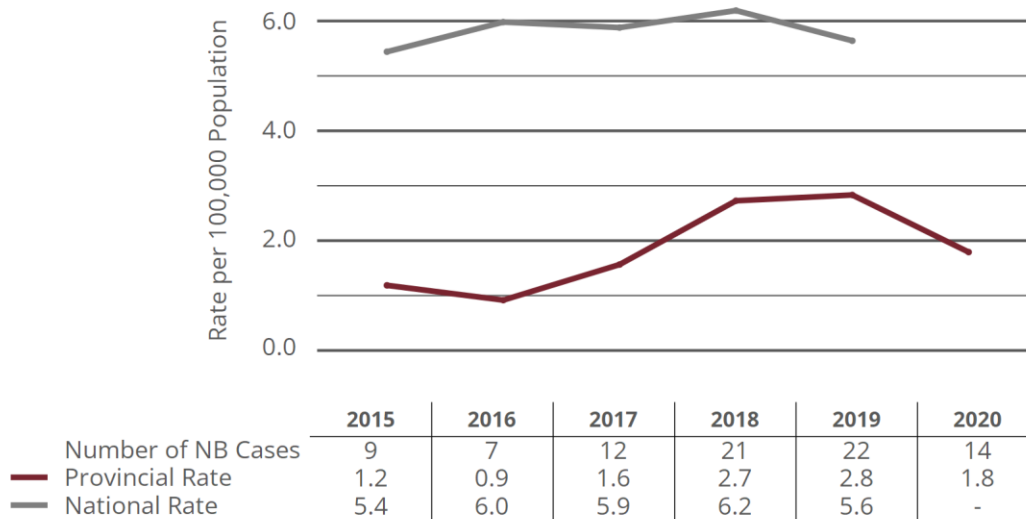


Figure 62: Number of Reported Cases of Human Immunodeficiency Virus (HIV) and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

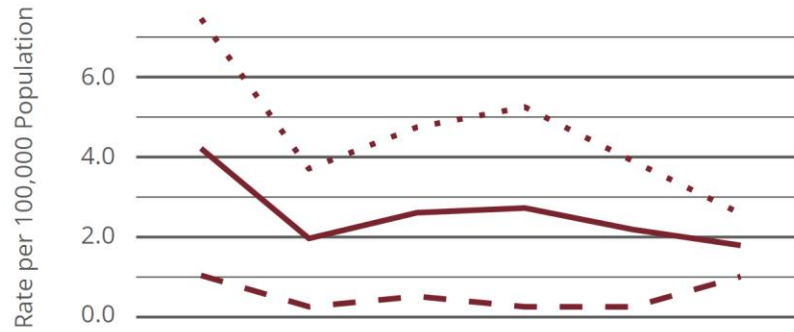
ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)

In 2020, there were three new cases of AIDS (1 female and 2 males) reported to Public Health, with an incidence rate of 0.4 cases per 100,000 population. These figures are higher than the 5-year annual averages for the previous five years (1.8 cases and 0.2 cases per 100,000 population).

Annual variations in HIV and AIDS incidence rates should be interpreted with caution because of the small numbers involved that can lead to major fluctuations in rates from year to year.

SYPHILIS (INFECTIOUS)

In 2020, there were 14 cases (4 females and 10 males) of infectious syphilis reported to Public Health, with an incidence rate of 1.8 cases per 100,000 population. During the previous five years, an average of 20.8 cases were reported each year, with a 5-year average incidence rate of 2.8 cases per 100,000 population.



	2015	2016	2017	2018	2019	2020
No. of Cases (Males)	28	14	18	20	15	10
No. of Cases (Females)	4	1	2	1	1	4
No. of Cases	32	15	20	21	17	14
• • • NB Rate (Males)	7.5	3.7	4.7	5.2	3.9	2.6
- - - NB Rate (Females)	1.0	0.3	0.5	0.3	0.3	1.0
— NB Rate	4.2	2.0	2.6	2.7	2.2	1.8
— National Rate	-	-	-	-	-	-

Figure 63: Number of Reported Cases of Syphilis (Infectious) and Incidence Rates per 100,000 population, New Brunswick¹¹, 2015-2020

In 2020, cases were reported in all Health Regions except Regions 4, 5 and 7. Region 1 and Region 2 accounted for most of the cases (11 cases or 79%).

The largest number of cases were in the 40-59 years age group (4 cases or 29%), followed by the 20-24 years age group (3 cases or 21%). However, the highest incidence rates were observed in the 20-24 and 15-19-years age groups (6.9 cases and 4.9 cases per 100,000, respectively).

Annual variations in incidence rates of infectious syphilis should be interpreted with caution because of the small numbers involved, which can lead to large fluctuations in rates from year to year.

Seven cases were diagnosed as primary or secondary syphilis and seven were early latent syphilis. In addition, 70% of the male cases that provided information on their sexual orientation identified themselves as men having sex with men.

¹¹ National rates were not included as they are reported for all syphilis stages and are not available specifically for infectious syphilis.

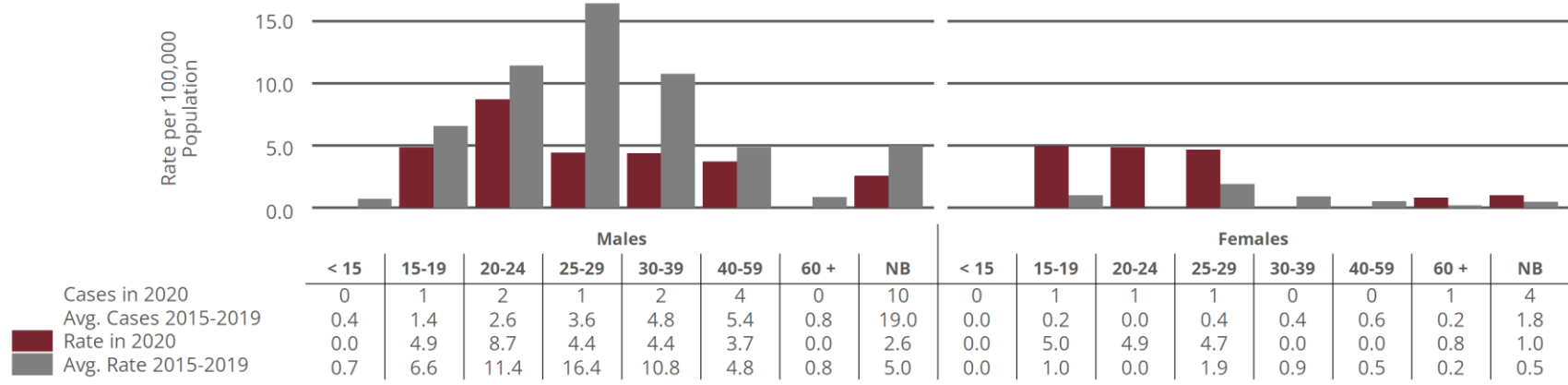


Figure 64: Number of Reported Cases of Syphilis (Infectious) and Incidence Rates per 100,000 population, by Age Group and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

OTHER SEXUALLY TRANSMITTED AND BLOOD BORNE INFECTIONS

Other sexually transmitted and blood-borne infections reported in 2020 included one case of Cytomegalovirus (Congenital/ Neonatal) with an incidence rate of 0.1 cases per 100,000 population. No cases of Herpes (Congenital/ Neonatal) have been reported in 2020.

Please refer to Appendix B for further details on counts and incidence rates of notifiable STBBIs in New Brunswick.

Vectorborne and Zoonotic Diseases

Vectorborne diseases are transmitted by insects (vectors) like mosquitoes, ticks and fleas to humans while zoonotic diseases are transmitted from vertebrate animals to humans. New Brunswick continues to generally have sporadic cases and low incidence rates of vectorborne and zoonotic diseases, with the exception of Lyme disease which has shown an overall increase from 2015 onwards though remains below the national average.

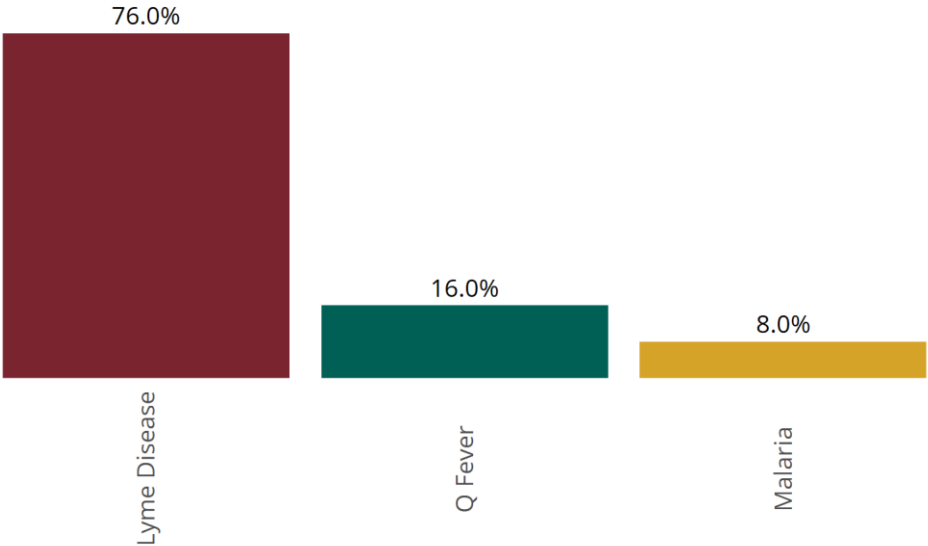


Figure 65: Percent Distribution of the most prevalent Vectorborne and Zoonotic Diseases in New Brunswick, 2020

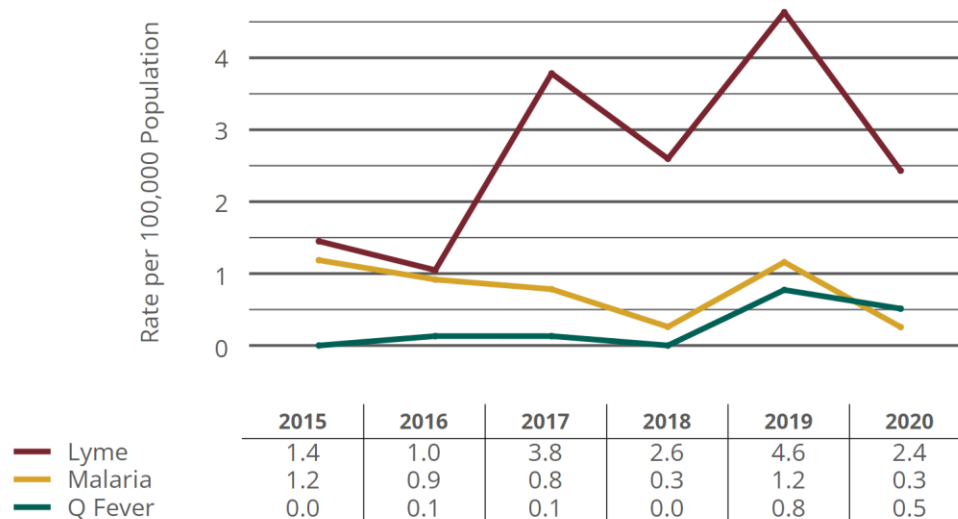


Figure 66: Incidence Rates of the most prevalent Vectorborne and Zoonotic Diseases in New Brunswick per 100,000 population, 2015-2020

LYME DISEASE

National Lyme disease surveillance began in 2009 and has evolved to enhanced Lyme disease surveillance since 2011. The disease is transmitted by the bite of an infected black-legged tick, commonly known as the deer tick. It is treatable with antibiotics, but treatment is more effective if begun early during the course of the disease. However, delayed treatment may lead to disseminated illness with more serious symptoms and complications.

Although it is possible to be bitten by an infected deer tick anywhere in New Brunswick, the risk is much greater in areas where tick populations are established or appear to be established. Based on provincial tick surveillance and reports of human disease, tick populations were established or emerging in the following counties in 2020: Saint John, Kings, Queens, Charlotte (including Grand Manan Island), Westmorland, Albert, York, Sunbury, and Kent.

A total of 19 confirmed cases (7 females and 12 males) of Lyme disease were reported to Public Health in 2020, with an incidence rate of 2.4 cases per 100,000 population. During the previous five years, an average of 20.8 cases were reported each year, with a 5-year average incidence rate of 2.7 cases per 100,000 population. Since 2015, the incidence rate of Lyme disease has consistently been lower than the national rate; however, it has shown an overall upward trend within New Brunswick.

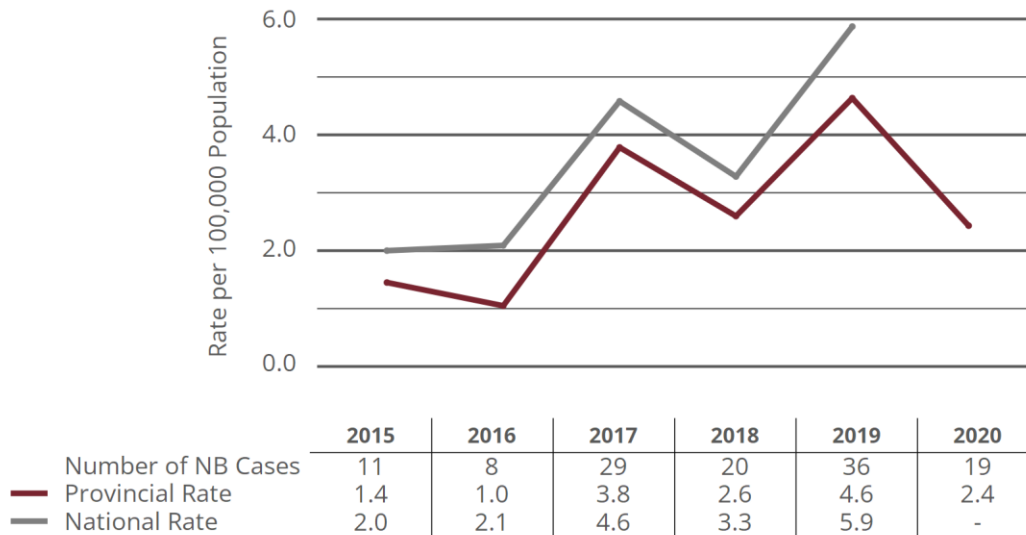


Figure 67: Number of Reported Cases of Lyme Disease and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

Annual variations in Lyme disease incidence rates should be interpreted with caution because of the small numbers involved that can lead to major fluctuations in rates from year to year.

All the reported cases in 2020 were locally acquired and were from Region 2 (Saint John County: 7, Charlotte County: 6, Kings County: 6).

Of the 19 reported cases of Lyme disease, 5 were in the 60+ years age group. The remaining 14 cases were in: the 5-9 (3 cases), the 10-14 (3 cases), 15-19 (3 cases), 30-39 (3 cases) and 40-59 (2 cases) years age groups.

OTHER VECTORBORNE AND ZONOTIC DISEASES

In 2020, two malaria cases were reported to Public Health. One case was confirmed to be related to travel and no information was available for the other case. The incidence rate in 2020 was 0.3 cases per 100,000 population, which is a decrease compared to the average counts and rates reported in the previous five years (6.6 cases, and 0.9 per 100,000 population, respectively). Overall, incidence rates in New Brunswick during the previous five years were consistently lower than the national rates.

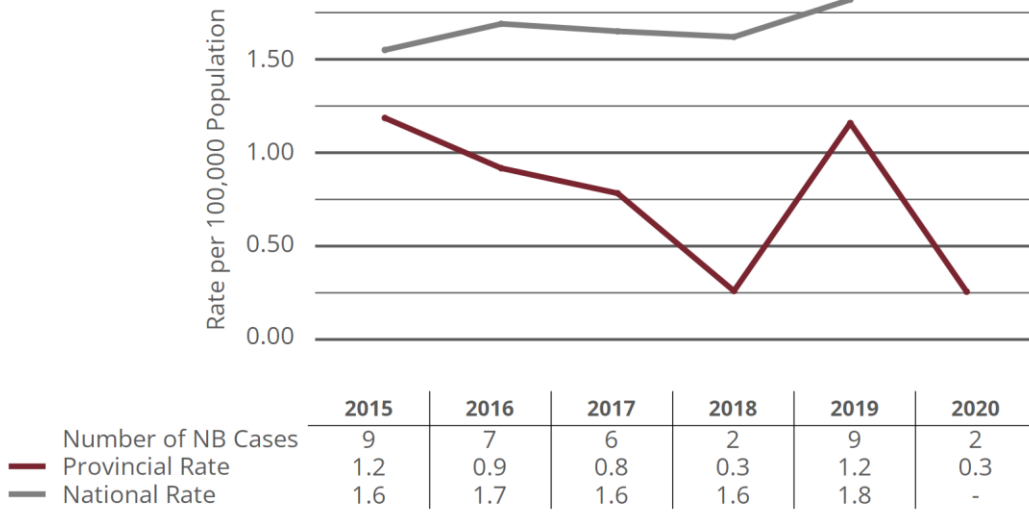


Figure 68: Number of Reported Cases of Malaria and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

Other vectorborne and zoonotic diseases reported in 2020 included 4 cases of Q-fever.

For further details on counts and rates of different vectorborne and zoonotic diseases, please refer to Appendix B.

Diseases Transmitted via the Respiratory Route and Direct Contact

Respiratory infections are spread by direct or indirect transmission or airborne routes. Pathogens may also be transmitted through aerosolization of the microbe (e.g., cooling towers).

Diseases that can be transmitted by direct contact are considered contagious. These diseases can also be transmitted by sharing a towel or items of clothing in close contact with the body (e.g., socks) if they are not washed thoroughly between uses.

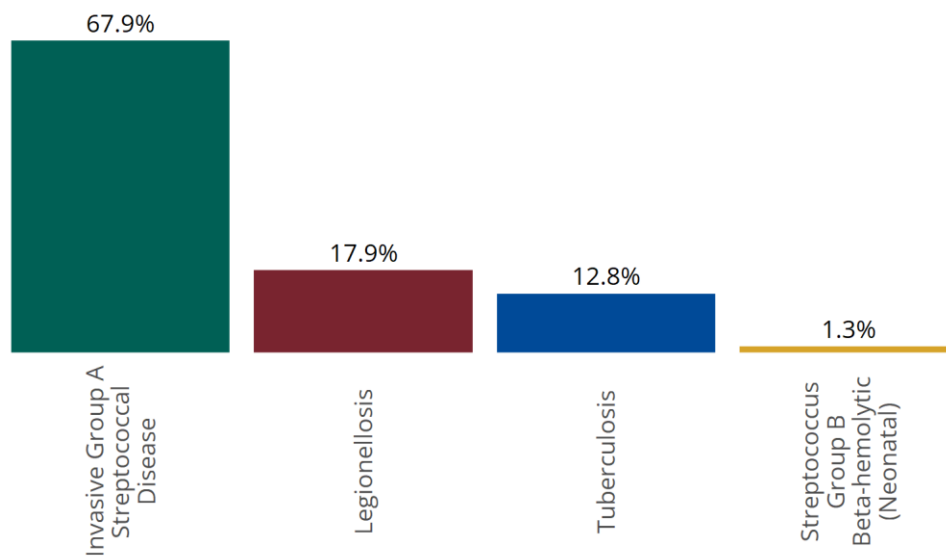


Figure 69: Percent Distribution of the most prevalent Diseases Transmitted via the Respiratory Route and Direct Contact in New Brunswick, 2020

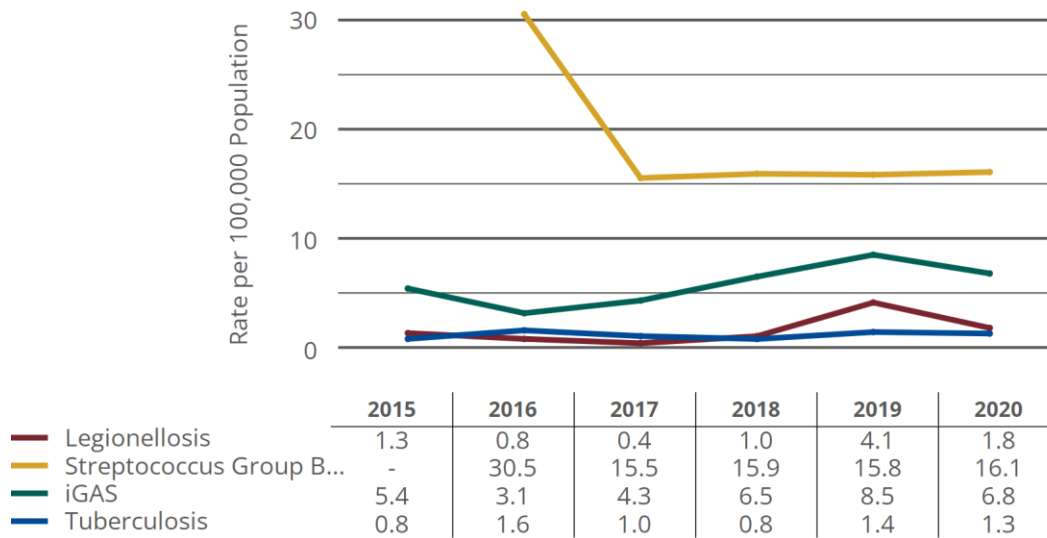


Figure 70: Incidence Rates of the most prevalent Diseases Transmitted via the Respiratory Route and Direct Contact in New Brunswick per 100,000 population, 2015-2020

LEGIONELLOSIS

In 2020, a total of 14 cases (3 females and 11 males) of legionellosis were reported to Public Health, with an incidence rate of 1.8 cases per 100,000 population. During the previous five years, an average of 12 cases were reported each year, with an average annual incidence rate of 1.5 cases per 100,000 population. Overall, the incidence rate for New Brunswick was lower than the national rate, except for 2015 and 2019, when it was higher.

In the summer of 2019, an outbreak of Legionellosis was declared in Region 1 which resulted in 15 cases identified. Fourteen cases required hospitalization, and no deaths were reported. The source of the outbreak was identified as a cooling tower in the city's west side with very high levels of legionella bacteria.

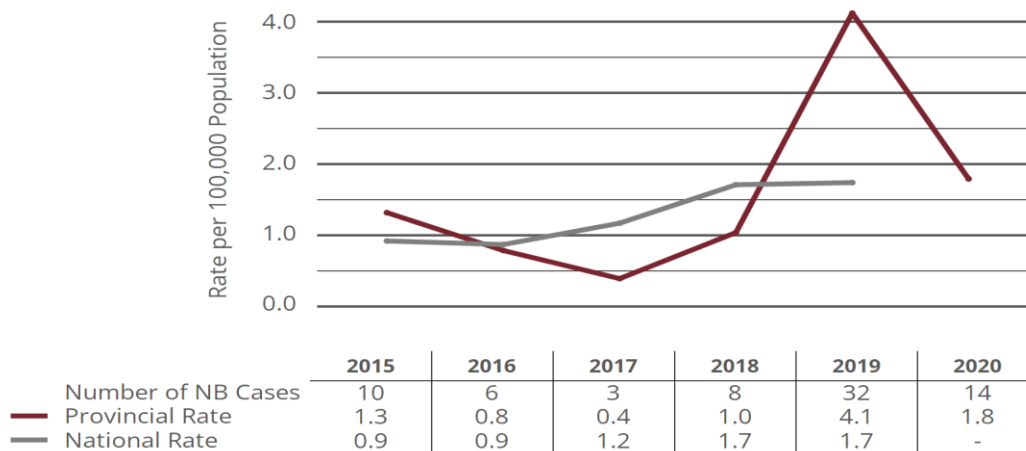


Figure 71: Number of Reported Cases of Legionellosis and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

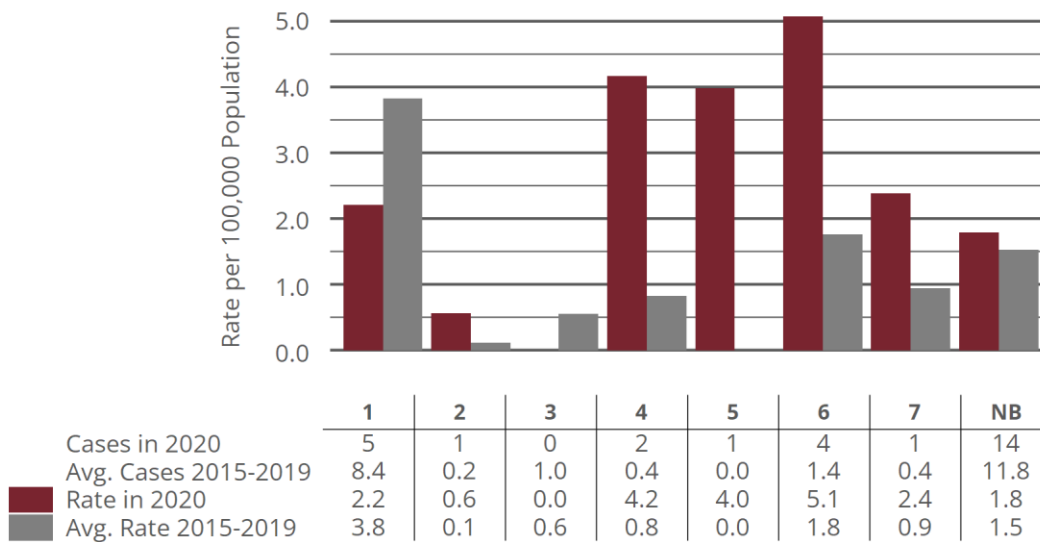


Figure 72: Number of Reported Cases of Legionellosis and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

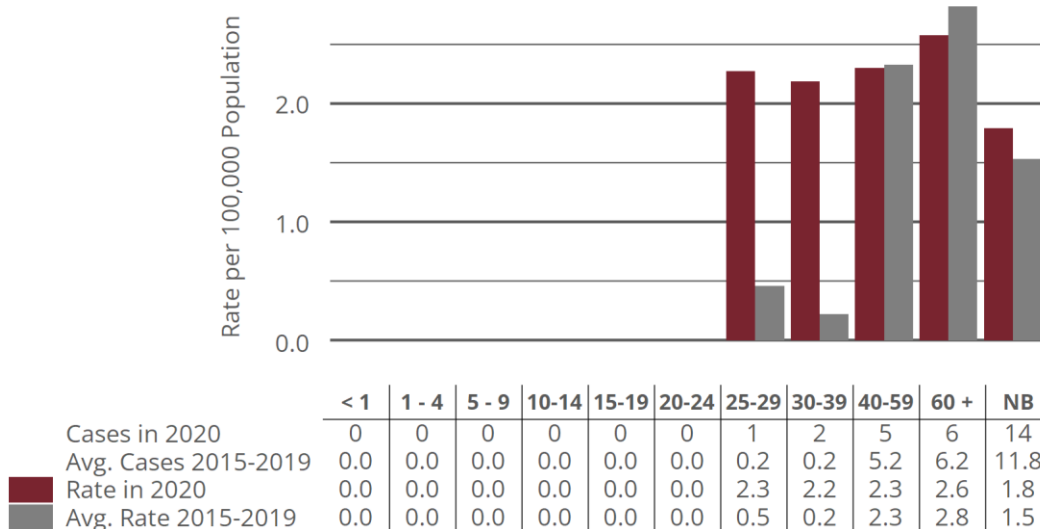


Figure 73: Number of Reported Cases of Legionellosis and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

In 2020, the largest number of reported cases of legionellosis was in Region 1 (5 cases or 36%), followed by Regions 6 (4 cases or 29%), Region 4 (2 cases or 14%), and Regions 2, 5, and 7 (1 case each or 7% each). Most cases were 40 years of age or older (11 cases or 78.5%).

STREPTOCOCCUS GROUP B BETA-HEMOLYTIC (NEONATAL)

In 2020, a single case of group B streptococcal infection of the newborn was reported to Public Health from Region 3, with an incidence rate of 16.1 cases per 100,000 population. During the period 2015-2019, an average of one case was reported each year (range: 1 to 2), with an average annual incidence rate of 19.5 cases per 100,000 population.

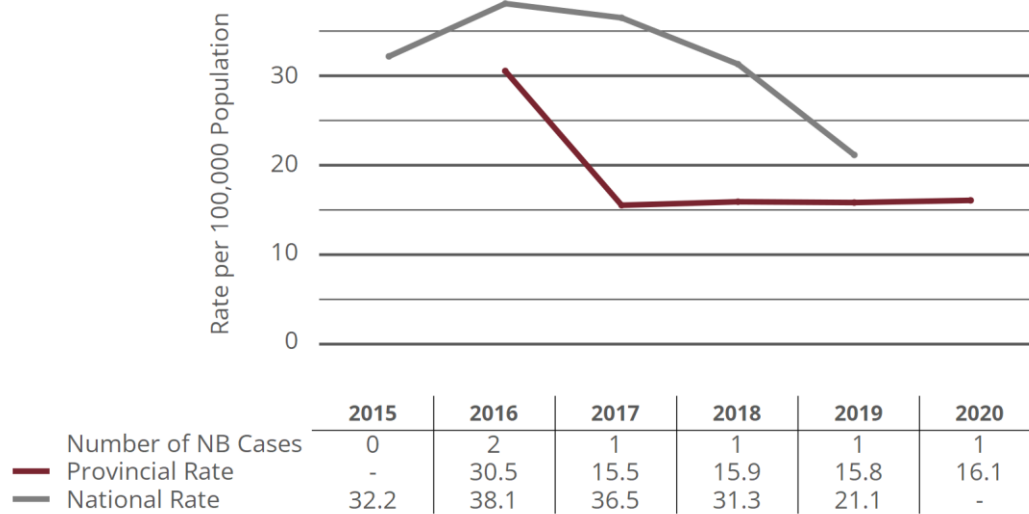


Figure 74: Number of Reported Cases of Streptococcus Group B Beta-hemolytic (Neonatal) and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

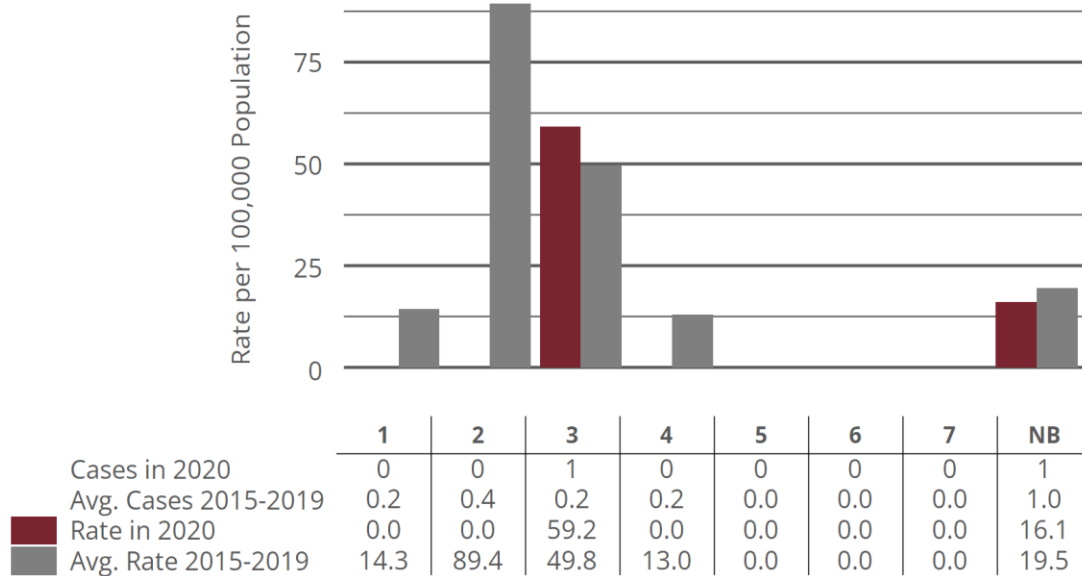


Figure 75: Number of Reported Cases of Streptococcus Group B Beta-hemolytic (Neonatal) and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

INVASIVE GROUP A STREPTOCOCCAL DISEASE

In 2020, a total of 53 confirmed cases (18 females and 35 males) of invasive group A streptococcal disease (iGAS) were reported to Public Health, with an incidence rate of 6.8 cases per 100,000 population. During the previous five years, an average of 43 cases were reported each year, with an average annual incidence rate of 5.6 cases per 100,000 population. Incidence rates of iGAS were consistently lower than national rates during the 5-year period, except for 2015 and 2019 when the rates were slightly higher.

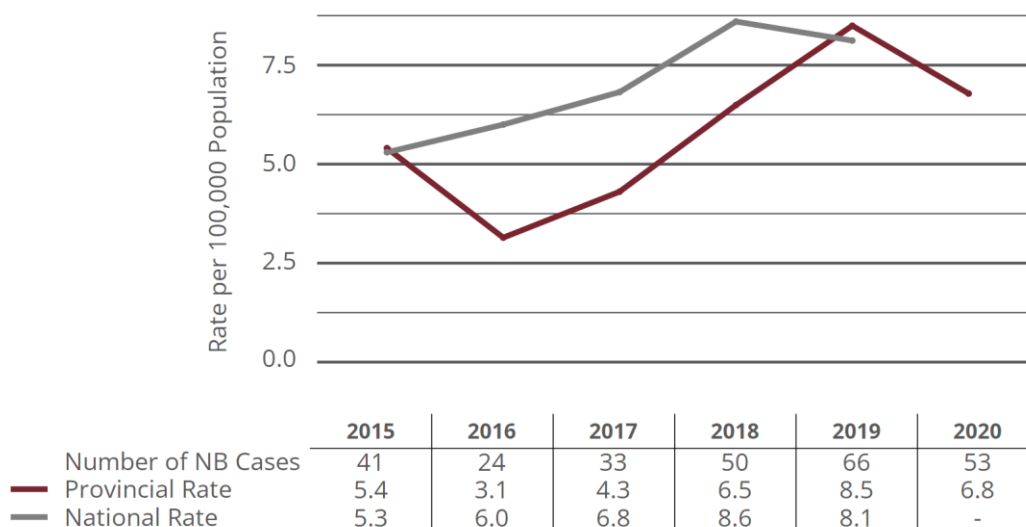


Figure 76: Number of Reported Cases of Invasive Group A Streptococcal Disease and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

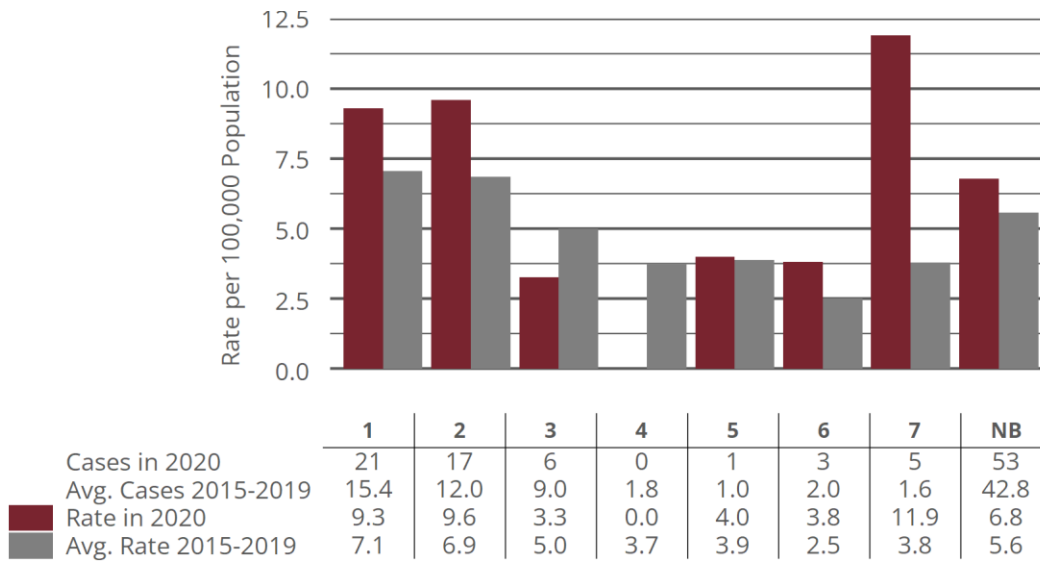


Figure 77: Number of Reported Cases of Invasive Group A Streptococcal Disease and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

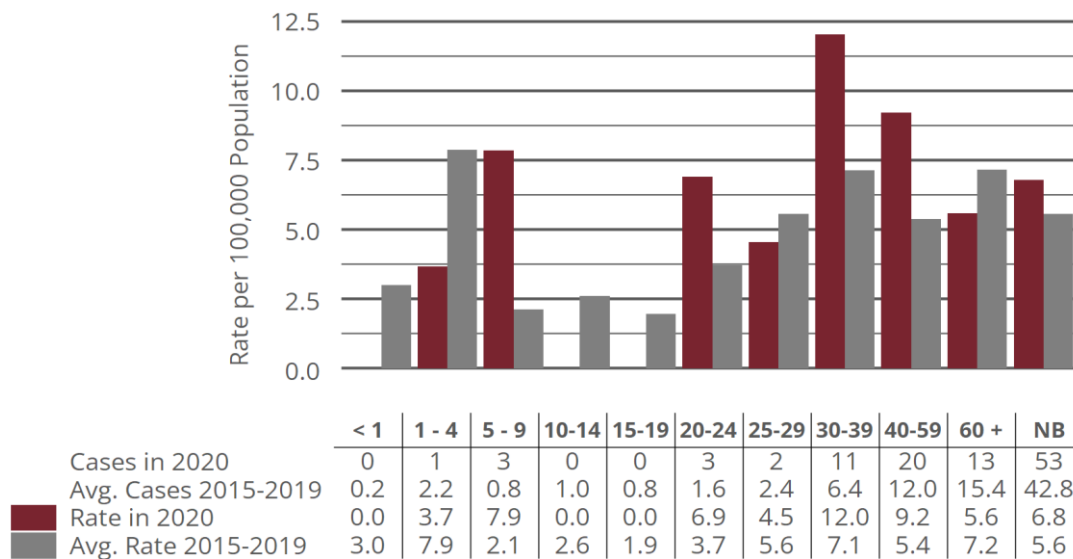


Figure 78: Number of Reported Cases of Invasive Group A Streptococcal Disease and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

In 2020, Region 1 accounted for the majority of cases (21 cases or 40%), followed by Region 2 (17 cases or 32%), Region 3 (6 cases or 11%), Region 7 (5 cases or 9%), Region 6 (3 cases or 6%) and Region 5 (1 case or 2%).

The majority of cases were in the 40-59 years age group (38%), followed by the 60+ (25%) and the 30-39 years age groups (21%).

The most frequently reported serotype was serotype M49 (22 cases), followed by serotypes M1 and M75 (7 cases each). These three serotypes accounted for 68% of all reported cases.

TUBERCULOSIS

In 2020, there were 10 confirmed cases (6 females and 4 males) of active tuberculosis (TB) reported to Public Health, with an incidence rate of 1.3 cases per 100,000 population. During the previous five years, an average of 9 cases were reported yearly, with an average annual incidence rate of 1.1 cases per 100,000 population. New Brunswick incidence rates were consistently lower than the national rates over the previous five years.

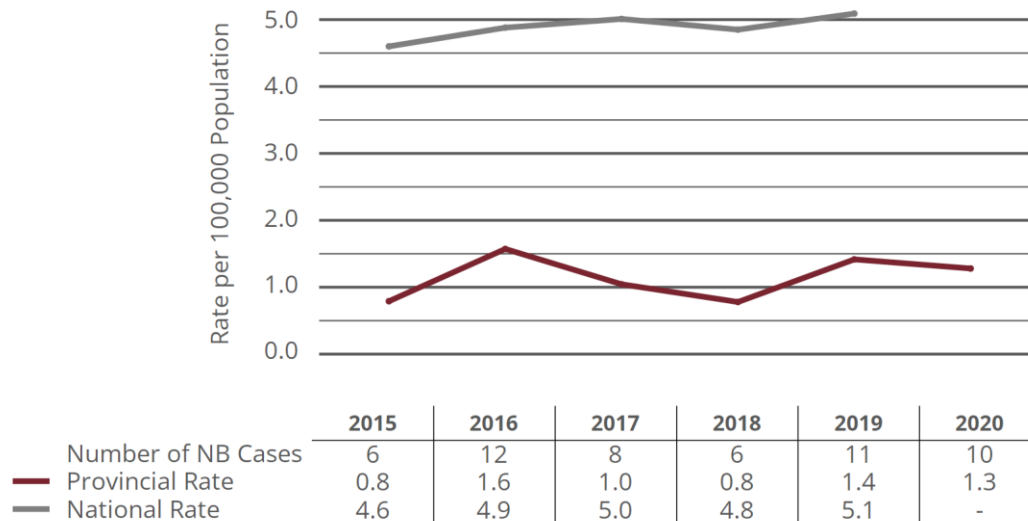


Figure 79: Number of Reported Cases of Tuberculosis and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020

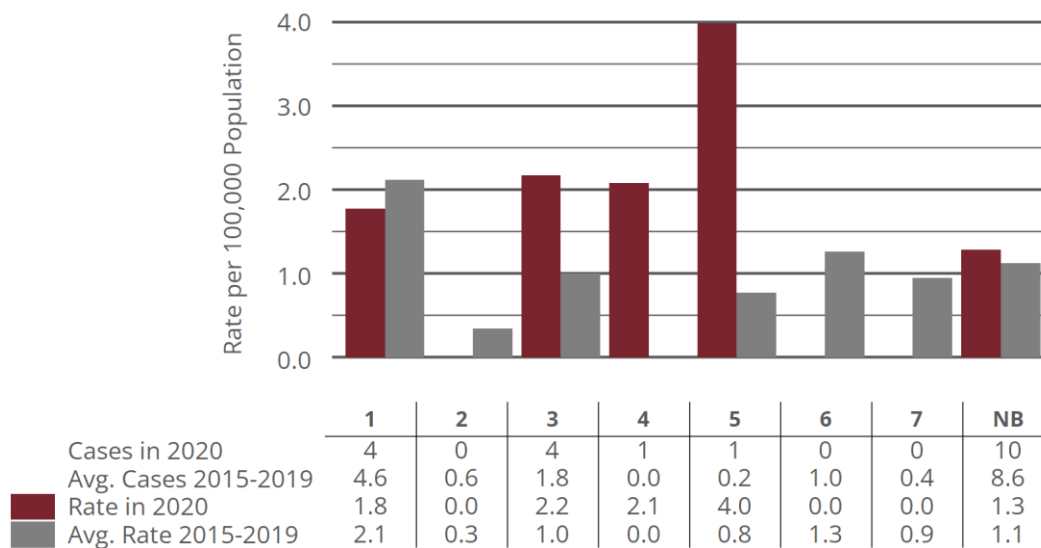


Figure 80: Number of Reported Cases of Tuberculosis and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

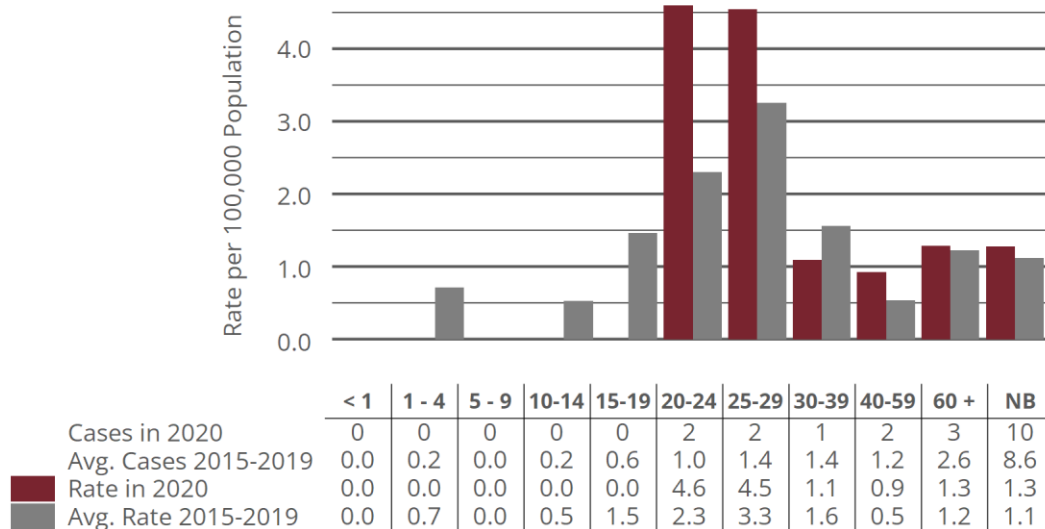


Figure 81: Number of Reported Cases of Tuberculosis and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages

Annual variations in TB incidence rates should be interpreted with caution because of the small numbers involved that can lead to major fluctuations in rates from year to year.

The majority of cases (80%) were in Regions 1 and 3 (4 cases each). The largest number of cases were in the 60+ years age group (3 cases or 30%), followed by the 20-24, 25-29, and 40-59 years age groups (2 cases or 20% each).

Pulmonary TB accounted for the majority of cases (7 cases or 70%), followed by TB in “peripheral lymph nodes” (3 cases or 30%). The majority of TB cases (8 cases or 80%) were foreign-born. The two Canadian-born cases were not of aboriginal origin.

Looking at the 2019 treatment outcomes for the eleven reported cases that year, four were cured (negative culture at the end of treatment), and seven had completed their treatment, but no culture was done at the end of treatment.

OTHER DISEASES TRANSMITTED VIA THE RESPIRATORY ROUTE AND DIRECT CONTACT

No cases of Leprosy or Acute Respiratory Syndrome (SARS) were reported between 2015 and 2020.

For further details on case counts and rates of different diseases transmitted via the respiratory route or direct contact, please refer to Appendix B.

Appendix A List of Notifiable Diseases and Events

Notifiable Disease and Reportable Events Public Health New Brunswick



Timeline	Notifiable diseases and events	To be reported by	
		Laboratory	Clinicians (clinical illness)
<p>Verbally within one hour</p> <p>Please attach a label for your region that specifies the telephone number to be used during and after business hours</p> <p>AND</p> <p>In writing by the end of the next working day</p> <p>Please attach a label for your region that specifies mailing address and fax number</p>	Anthrax	✓	✓
	Botulism	✓	✓
	Cholera	✓	✓
	Clusters of illness thought to be food, water-borne or enteric	✓	✓
	Clusters of severe or atypical illness thought to be respiratory borne	✓	✓
	COVID-19	✓	✓
	Diphtheria	✓	✓
	Hemorrhagic fever (viral)	✓	✓
	Influenza caused by a new subtype	✓	✓
	Measles	✓	✓
	Meningococcal disease (invasive)	✓	✓
	Multisystem inflammatory syndrome in children (MIS-C)	✓	✓
	Plague	✓	✓
	Poliomyelitis due to wild type poliovirus	✓	✓
	Severe acute respiratory syndrome	✓	✓
Smallpox	✓	✓	
Unusual clusters of suspect notifiable disease cases	✓	✓	
Yellow fever	✓	✓	
<p>Verbally within 24 hours</p> <p>Please attach a label for your region that specifies the telephone number to be used during and after business hours</p> <p>AND</p> <p>In writing within seven days</p> <p>Please attach a label for your region that specifies mailing address and fax number</p>	Brucellosis	✓	✓
	Campylobacteriosis	✓	✓
	Cryptosporidiosis	✓	✓
	Cyclosporiasis	✓	✓
	Escherichia coli infection (Verotoxigenic)	✓	✓
	Exposure to a suspected rabid animal	✓	✓
	Giardiasis	✓	✓
	Guillain-Barré syndrome	✓	✓
	Hantavirus pulmonary syndrome	✓	✓
	Haemophilus influenzae infection— all serotypes (invasive)	✓	✓
	Hepatitis A	✓	✓
	Hepatitis B	✓	✓
	Hepatitis E	✓	✓
	Legionellosis	✓	✓
	Listeriosis (invasive)	✓	✓
	Mumps	✓	✓
	Paralytic shellfish poisoning	✓	✓
	Pertussis	✓	✓
	Q fever	✓	✓
	Rabies	✓	✓
	Rubella (including congenital)	✓	✓
	Salmonellosis	✓	✓
	Shigellosis	✓	✓
	Staphylococcus aureus foodborne intoxications	✓	✓
	Streptococcus group A infection (invasive)	✓	✓
	Tularemia	✓	✓
	Tuberculosis (active)	✓	✓
	Typhoid	✓	✓
Unusual illness as per one of the following criteria: - presence of symptoms that do not fit any recognizable clinical picture - known aetiology but not expected to occur in New Brunswick - known aetiology that does not behave as expected - clusters presenting with unknown aetiology	✓	✓	
Varicella	✓	✓	
Vibrio species pathogenic to humans (other than Cholera)	✓	✓	
West Nile Virus infection	✓	✓	
Yersiniosis	✓	✓	
<p>In writing within seven days</p> <p>Please attach a label for your region that specifies mailing address and fax number</p>	Adverse reaction to a vaccine or other immunizing agent	✓	✓
	Chlamydial infection (genital)	✓	✓
	Clostridium difficile associated diarrhea	✓	✓
	Creutzfeld-Jacob disease (Classic and New Variant)	✓	✓
	Cytomegalovirus (congenital/neonatal)	✓	✓
	Gonococcal infection	✓	✓
	Hepatitis C and G	✓	✓
	Hepatitis (other viral)	✓	✓
	Herpes (congenital/neonatal)	✓	✓
	Human Immunodeficiency Virus infection/Acquired Immunodeficiency Syndrome	✓	✓
	Influenza (laboratory confirmed)	✓	✓
	Leprosy	✓	✓
	Leptospirosis	✓	✓
	Lyme borreliosis	✓	✓
	Malaria	✓	✓
	Methicillin-resistant Staphylococcus aureus	✓	✓
	Pneumococcal infection (invasive)	✓	✓
	Psittacosis	✓	✓
Rickettsial infection	✓	✓	
Streptococcus group B infection (neonatal)	✓	✓	
Syphilis (including congenital)	✓	✓	
Tetanus	✓	✓	
Toxoplasmosis	✓	✓	
Vancomycin-resistant Enterococci	✓	✓	

Appendix B Tables of Provincial Counts and Rates

TABLES RELATED TO VACCINE PREVENTABLE DISEASES

Table 1: Number of Cases of Vaccine Preventable Diseases reported in New Brunswick and Incidence Rates per 100,000 population, 2015-2020

Vaccine Preventable Diseases	2015		2016		2017		2018		2019		2020	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Diphtheria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Haemophilus Influenza Type B and Non-B	4	0.5	9	1.2	15	2.0	14	1.8	13	1.7	14	1.8
Measles*	0	0.0	0	0.0	1	0.1	0	0.0	12	1.5	0	0.0
Invasive Meningococcal Disease†	5	0.7	0	0.0	1	0.1	6	0.8	4	0.5	0	0.0
Mumps‡	0	0.0	1	0.1	3	0.4	8	1.0	0	0.0	1	0.1
Pertussis (Whooping Cough)	80	10.5	66	8.6	74	9.7	31	4.0	104	13.4	101	12.9
Invasive Pneumococcal Disease§	79	10.4	63	8.3	60	7.8	79	10.3	78	10.0	49	6.3
Poliomyelitis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rubella¶	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	26	6.0	11	2.6	17	4.0	20	4.7	18	4.2	12	2.8
Smallpox	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Data sources: Reportable Disease Surveillance System (RDSS) database

*Measles enhanced surveillance database. PHNB, Epidemiology and Surveillance

†Invasive Meningococcal Disease enhanced surveillance database. PHNB, Epidemiology and Surveillance

‡Mumps enhanced surveillance database. PHNB, Epidemiology and Surveillance

§Invasive Pneumococcal Disease enhanced surveillance database. PHNB, Epidemiology and Surveillance

¶Includes congenital rubella

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

Table 2: Number of Cases of Vaccine Preventable Diseases reported in New Brunswick and Incidence Rates per 100,000 population, by Health Region, 2020

Vaccine Preventable Diseases	Region 1		Region 2		Region 3		Region 4		Region 5		Region 6		Region 7		NB	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Diphtheria	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Haemophilus Influenza Type B and Non-B	3	1.3	3	1.7	3	1.6	3	6.2	0	0.0	1	1.3	1	2.4	14	1.8
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
Invasive Meningococcal Disease†	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mumps‡	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Pertussis (Whooping Cough)	76	33.6	1	0.6	7	3.8	4	8.3	0	0.0	0	0.0	13	31.0	101	12.9
Invasive Pneumococcal Disease§	15	6.6	8	4.5	8	4.3	6	12.5	3	12.0	5	6.3	4	9.5	49	6.3
Poliomyelitis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rubella	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tetanus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Varicella	4	3.1	2	2.0	3	2.7	2	8.4	1	8.9	0	0.0	0	0.0	12	2.8
Smallpox	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Data sources: Reportable Disease Surveillance System (RDSS) database

*Measles enhanced surveillance database. PHNB, Epidemiology and Surveillance

†Invasive Meningococcal Disease enhanced surveillance database. PHNB, Epidemiology and Surveillance

‡Mumps enhanced surveillance database. PHNB, Epidemiology and Surveillance

§Invasive Pneumococcal Disease enhanced surveillance database. PHNB, Epidemiology and Surveillance

|Includes congenital rubella

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

Table 3: Number of Cases of Vaccine Preventable Diseases reported in New Brunswick and Incidence Rates per 100,000 population, by Age and Sex, 2020

Vaccine Preventable Diseases		Age Groups																		Total			
		< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59		60 +		N	Rate
		N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate				
Diphtheria	M	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
	F	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
	T	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
Haemophilus influenzae Type B and Non-B	M	1	31.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.9	3	2.7	5	1.3
	F	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.2	2	1.8	6	4.9	9	2.3
	T	1	15.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.1	3	1.4	9	3.9	14	1.8
Measles*	M	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
	F	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
	T	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
Invasive Meningococcal Disease†	M	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
	F	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
	T	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
Mumps‡	M	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
	F	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	0.9	0	0.0	1	0.3
	T	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	0.5	0	0.0	1	0.1
Pertussis (Whooping Cough)	M	1	31.0	4	28.8	7	35.8	9	43.6	23	112.1	0	0.0	0	0.0	1	2.2	2	1.8	1	0.9	48	12.4

Vaccine Preventable Diseases		Age Groups																		Total			
		< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59		60 +		N	Rate
		N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate				
	F	0	0.0	3	22.5	9	48.2	13	65.9	12	59.6	5	24.3	3	14.0	2	4.4	3	2.8	3	2.4	53	13.4
	T	1	15.8	7	25.7	16	41.9	22	54.5	35	86.1	5	11.5	3	6.8	3	3.3	5	2.3	4	1.7	101	12.9
Invasive Pneumococcal Disease ⁸	M	0	0.0	0	0.0	0	0.0	1	4.8	0	0.0	0	0.0	0	0.0	0	0.0	8	7.4	18	16.4	27	7.0
	F	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	9.4	1	2.2	5	4.6	14	11.4	22	5.6
	T	0	0.0	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	2	4.5	1	1.1	13	6.0	32	13.7	49	6.3
Poliovirus	M	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
	F	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
	T	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
Rubella ¹	M	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
	F	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
	T	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
Tetanus	M	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
	F	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
	T	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
Varicella	M	0	0.0	0	0.0	0	0.0	3	14.5	1	4.9	1	4.4	0	0.0	2	4.4	0	0.0	0	0.0	7	1.8
	F	0	0.0	0	0.0	0	0.0	1	5.1	2	9.9	0	0.0	1	4.7	0	0.0	1	0.9	0	0.0	5	1.3

Vaccine Preventable Diseases	Age Groups																			Total			
	< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59		60 +		N	Rate	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate					
T	0	0.0	0	0.0	0	0.0	4	9.9	3	7.4	1	2.3	1	2.3	2	2.2	1	0.5	0	0.0	12	2.8	
Smallpox	M	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
	F	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
	T	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

Data sources: Reportable Disease Surveillance System (RDSS) database

*Measles enhanced surveillance database. PHNB, Epidemiology and Surveillance

†Invasive Meningococcal Disease enhanced surveillance database. PHNB, Epidemiology and Surveillance

‡Mumps enhanced surveillance database. PHNB, Epidemiology and Surveillance

§Invasive Pneumococcal Disease enhanced surveillance database. PHNB, Epidemiology and Surveillance

| Includes congenital rubella

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

TABLES RELATED TO ENTERIC, FOOD AND WATER BORNE DISEASES

Table 4: Number of Cases of Enteric, Food and Water Borne Diseases reported in New Brunswick and Incidence Rates per 100,000 population, 2015-2020

Enteric, Food and Water Borne Diseases	2015		2016		2017		2018		2019		2020	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	177	23.3	162	21.2	211	27.5	201	26.1	237	30.5	250	32.0
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Clostridium difficile Infection	-	-	-	-	-	-	716	93.0	688	88.6	433	55.4
Cryptosporidiosis	29	3.8	32	4.2	18	2.3	37	4.8	40	5.1	35	4.5
Cyclosporiasis	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	2	0.3
E. coli O157	5	0.7	2	0.3	10	1.3	7	0.9	7	0.9	1	0.1
Giardiasis	99	13.0	95	12.4	73	9.5	91	11.8	96	12.4	53	6.8
Hepatitis A	1	0.1	1	0.1	1	0.1	2	0.3	4	0.5	3	0.4
Hepatitis E	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0
Listeriosis (Invasive)	4	0.5	5	0.7	4	0.5	5	0.6	5	0.6	6	0.8
Paralytic Shellfish Poisoning	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	173	22.8	134	17.6	159	20.7	180	23.4	159	20.5	116	14.8
Shigellosis	5	0.7	6	0.8	3	0.4	9	1.2	5	0.6	0	0.0
Staphylococcus Aureus Intoxications	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio	5	0.7	4	0.5	3	0.4	10	1.3	7	0.9	16	2.0
Yersiniosis	2	0.3	0	0.0	1	0.1	1	0.1	5	0.6	1	0.1

Data sources: Enterics database. PHNB, Epidemiology and Surveillance.

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

Table 5: Number of Cases of Enteric, Food and Water Borne Diseases reported in New Brunswick and Incidence Rates per 100,000 population, by Health Region, 2020

Enteric, Food and Water Borne Diseases	Region 1		Region 2		Region 3		Region 4		Region 5		Region 6		Region 7		NB	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Botulism	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Campylobacteriosis	65	28.8	37	20.9	54	29.3	33	68.7	16	63.8	40	50.8	5	11.9	250	32.0
Cholera	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Clostridium difficile Infection	84	37.2	120	67.8	115	62.4	20	41.6	23	91.7	57	72.3	14	33.4	433	55.4
Cryptosporidiosis	10	4.4	13	7.3	5	2.7	0	0.0	1	4.0	1	1.3	5	11.9	35	4.5
Cyclosporiasis	0	0.0	0	0.0	2	1.1	0	0.0	0	0.0	0	0.0	0	0.0	2	0.3
E. coli O157	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Giardiasis	16	7.1	13	7.3	11	6.0	5	10.4	3	12.0	4	5.1	1	2.4	53	6.8
Hepatitis A	0	0.0	2	1.1	0	0.0	0	0.0	1	4.0	0	0.0	0	0.0	3	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
Listeriosis (Invasive)	4	1.8	0	0.0	1	0.5	1	2.1	0	0.0	0	0.0	0	0.0	6	0.8
Paralytic Shellfish Poisoning	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salmonellosis	31	13.7	22	12.4	28	15.2	4	8.3	5	19.9	12	15.2	14	33.4	116	14.8
Shigellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Staphylococcus Aureus Intoxications	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Typhoid	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vibrio	6	2.7	0	0.0	0	0.0	1	2.1	0	0.0	7	8.9	2	4.8	16	2.0
Yersiniosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.3	0	0.0	1	0.1

Data sources: Enterics database. PHNB, Epidemiology and Surveillance.

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

Table 6: Number of Cases of Enteric, Food and Water Borne Diseases reported in New Brunswick and Incidence Rates per 100,000 population, by Age and Sex, 2020

Enteric, Food and Water Borne Diseases		Age Groups																		Total			
		< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59		60 +		N	Rate
		N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate				
Botulism	M	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
	F	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
	T	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
Campylobacteriosis	M	0	0.0	4	28.8	8	41.0	2	9.7	8	39.0	12	52.4	11	48.6	10	21.9	33	30.5	50	45.5	138	35.7
	F	0	0.0	2	15.0	2	10.7	1	5.1	4	19.9	7	34.0	8	37.5	23	50.2	32	29.4	33	26.8	112	28.4
	T	0	0.0	6	22.0	10	26.2	3	7.4	12	29.5	19	43.7	19	43.2	33	36.1	65	29.9	83	35.7	250	32.0
Cholera	M	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
	F	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
	T	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
Clostridium difficile Infection	M	2	62.1	0	0.0	1	5.1	1	4.8	2	9.7	0	0.0	2	8.8	6	13.2	46	42.5	122	111.1	182	47.0
	F	1	32.3	1	7.5	0	0.0	4	20.3	6	29.8	4	19.4	6	28.1	8	17.5	51	46.8	170	138.2	251	63.6
	T	3	47.5	1	3.7	1	2.6	5	12.4	8	19.7	4	9.2	8	18.2	14	15.3	97	44.7	292	125.4	433	55.4
Cryptosporidiosis	M	1	31.0	0	0.0	0	0.0	1	4.8	2	9.7	0	0.0	0	0.0	1	2.2	4	3.7	2	1.8	11	2.8
	F	0	0.0	2	15.0	1	5.4	2	10.1	2	9.9	2	9.7	2	9.4	6	13.1	6	5.5	1	0.8	24	6.1
	T	1	15.8	2	7.3	1	2.6	3	7.4	4	9.8	2	4.6	2	4.5	7	7.7	10	4.6	3	1.3	35	4.5

Enteric, Food and Water Borne Diseases			Age Groups																		Total			
			< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59				60 +	
			N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate			N	Rate
Cyclosporiasis	M	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	0.9	0	0.0	1	0.3	
	F	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	0.9	0	0.0	1	0.3	
	T	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.9	0	0.0	2	0.3	
E. coli O157	M	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.2	0	0.0	0	0.0	1	0.3	
	F	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	
	T	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.1	0	0.0	0	0.0	1	0.1	
Giardiasis	M	1	31.0	0	0.0	3	15.4	1	4.8	1	4.9	2	8.7	2	8.8	1	2.2	7	6.5	10	9.1	28	7.2	
	F	0	0.0	2	15.0	3	16.1	0	0.0	0	0.0	2	9.7	1	4.7	6	13.1	1	0.9	10	8.1	25	6.3	
	T	1	15.8	2	7.3	6	15.7	1	2.5	1	2.5	4	9.2	3	6.8	7	7.7	8	3.7	20	8.6	53	6.8	
Hepatitis A	M	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	
	F	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.8	1	0.8	3	0.8	
	T	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.9	1	0.4	3	0.4	
Hepatitis E	M	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	
	F	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	
	T	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)	M	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	2	1.8	2	0.5	

Enteric, Food and Water Borne Diseases		Age Groups																		Total			
		< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59				60 +	
		N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
	F	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	4	3.3	4	1.0
	T	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	6	2.6	6	0.8
Paralytic Shellfish Poisoning	M	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
	F	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
	T	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
Salmonellosis	M	2	62.1	2	14.4	2	10.2	1	4.8	0	0.0	0	0.0	4	17.7	5	11.0	16	14.8	25	22.8	57	14.7
	F	1	32.3	3	22.5	1	5.4	1	5.1	0	0.0	5	24.3	7	32.8	3	6.6	16	14.7	22	17.9	59	15.0
	T	3	47.5	5	18.3	3	7.9	2	5.0	0	0.0	5	11.5	11	25.0	8	8.8	32	14.7	47	20.2	116	14.8
Shigellosis	M	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
	F	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
	T	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
Staphylococcus Aureus Intoxications	M	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
	F	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
	T	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
Typhoid	M	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
	F	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
	T	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

Enteric, Food and Water Borne Diseases		Age Groups																		Total			
		< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59		60 +		N	Rate
		N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate				
Vibrio	M	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	4.4	0	0.0	1	2.2	2	1.8	5	4.6	9	2.3
	F	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	2.8	4	3.3	7	1.8
	T	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.3	0	0.0	1	1.1	5	2.3	9	3.9	16	2.0
Yersiniosis	M	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
	F	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	0.9	0	0.0	1	0.3
	T	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	0.5	0	0.0	1	0.1

Data sources: Enterics database. PHNB, Epidemiology and Surveillance.

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

Table 7: Number of Regional Enteric Clusters or Outbreaks Reported in New Brunswick, by Type of Setting and Health Region, 2020

Type of Setting	Clusters / Outbreaks							
	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	NB
Institutional – Non Residential	5	2	6	0	0	3	0	16
Institutional – Residential	7	1	1	0	0	0	0	9
Community	0	0	0	0	0	0	0	0
Food Service Establishment	0	0	0	0	0	0	0	0
Private function	0	0	0	0	0	0	0	0
Facility, various	0	0	0	0	0	0	0	0
Other settings	0	0	0	0	0	0	0	0
More than one setting	0	0	0	0	0	0	0	0
Travel Related	0	1	0	0	0	0	0	1
Unknown	0	0	0	0	0	0	0	0
Total	12	4	7	0	0	3	0	26

Data source: Outbreak Summaries database within the Canadian Network for Public Health Intelligence (CNPHI)

Table 8: Number of Regional Enteric Clusters or Outbreaks Reported in New Brunswick, by Causative Agent and Health Region, 2020

Causative Agent	Clusters / Outbreaks							NB
	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	
Norovirus	4	1	0	0	0	0	0	5
<i>Salmonella enteritidis</i>	0	1	0	0	0	0	0	1
No organisms identified	8	2	7	0	0	3	0	20
Total	12	4	7	0	0	3	0	26

Data source: Outbreak Summaries database within the Canadian Network for Public Health Intelligence (CNPHI)

TABLES RELATED TO SEXUALLY TRANSMITTED AND BLOOD BORNE INFECTIONS

Table 9: Number of Cases of Sexually Transmitted and Blood Borne Infections reported in New Brunswick and Incidence Rates per 100,000 population, 2015-2020

Sexually Transmitted and Blood Borne Infections	2015		2016		2017		2018		2019		2020	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Chlamydial (Genital)	1880	247.7	1927	252.4	2094	273.1	2170	281.7	2234	287.6	1642	210.1
Cytomegalovirus (Congenital and Neonatal)	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	1	0.1
Gonorrhoea*	50	6.6	74	9.7	58	7.6	95	12.3	61	7.9	52	6.7
Hepatitis B (Acute)†	1	0.1	10	1.3	8	1.0	16	2.1	11	1.4	7	0.9
Hepatitis B (Chronic)†	43	5.7	69	9.0	44	5.7	53	6.9	61	7.9	39	5.0
Hepatitis C‡	178	23.5	182	23.8	248	32.3	294	38.2	254	32.7	187	23.9
Herpes (Congenital and Neonatal)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Human Immunodeficiency Virus (HIV)§	9	1.2	7	0.9	12	1.6	21	2.7	22	2.8	14	1.8
Acquired Immunodeficiency Syndrome (AIDS)§	1	0.1	4	0.5	0	0.0	2	0.3	2	0.3	3	0.4
Syphilis (All)¶	45	5.9	32	4.2	33	4.3	56	7.3	40	5.1	32	4.1
Syphilis (Infectious)¶	32	4.2	15	2.0	20	2.6	21	2.7	17	2.2	14	1.8

Data sources: Reportable Disease Surveillance System (RDSS) database

*Gonorrhoea enhanced surveillance database. PHNB, Epidemiology and Surveillance.

†Hepatitis B enhanced surveillance database. PHNB, Epidemiology and Surveillance.

‡Hepatitis C enhanced surveillance database. PHNB, Epidemiology and Surveillance.

§HIV/AIDS Case Report Surveillance System database.

¶Syphilis enhanced surveillance database. PHNB, Epidemiology and Surveillance.

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

Table 10: Number of Cases of Sexually Transmitted and Blood Borne Infections reported in New Brunswick and Incidence Rates per 100,000 population, by Health Region, 2020

Sexually Transmitted and Blood Borne Infections	Region 1		Region 2		Region 3		Region 4		Region 5		Region 6		Region 7		NB	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Chlamydial (Genital)	553	244.6	373	210.6	487	264.1	53	110.4	24	95.7	94	119.3	58	138.2	1642	210.1
Cytomegalovirus (Congenital and Neonatal)	0	0.0	0	0.0	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Gonorrhea*	31	13.7	7	4.0	4	2.2	1	2.1	0	0.0	5	6.3	4	9.5	52	6.7
Hepatitis B (Acute)†	5	2.2	1	0.6	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	7	0.9
Hepatitis B (Chronic)†	23	10.2	6	3.4	5	2.7	2	4.2	0	0.0	2	2.5	1	2.4	39	5.0
Hepatitis C‡	89	39.4	48	27.1	16	8.7	4	8.3	1	4.0	7	8.9	22	52.4	187	23.9
Herpes (Congenital and Neonatal)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Human Immunodeficiency Virus (HIV)§	5	2.2	2	1.1	7	3.8	0	0.0	0	0.0	0	0.0	0	0.0	14	1.8
Acquired Immunodeficiency Syndrome (AIDS)§	0	0.0	1	0.6	2	1.1	0	0.0	0	0.0	0	0.0	0	0.0	3	0.4
Syphilis (All)¶	14	6.2	9	5.1	6	3.3	1	2.1	1	4.0	1	1.3	0	0.0	32	4.1
Syphilis (Infectious)¶	6	2.7	5	2.8	2	1.1	0	0.0	0	0.0	1	1.3	0	0.0	14	1.8

Data sources: Reportable Disease Surveillance System (RDSS) database

*Gonorrhea enhanced surveillance database. PHNB, Epidemiology and Surveillance.

†Hepatitis B enhanced surveillance database. PHNB, Epidemiology and Surveillance.

‡Hepatitis C enhanced surveillance database. PHNB, Epidemiology and Surveillance.

§HIV/AIDS Case Report Surveillance System database.

¶Syphilis enhanced surveillance database. PHNB, Epidemiology and Surveillance.

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

Table 11: Number of Cases of Sexually Transmitted and Blood Borne Infections reported in New Brunswick and Incidence Rates per 100,000 population, by Age and Sex, 2020

Sexually Transmitted and Blood Borne Infections		Age Groups																		Total			
		< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59		60 +		N	Rate
		N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate				
Chlamydia (Genital)	M	0	0.0	0	0.0	0	0.0	2	9.7	88	428.9	240	1048.4	139	614.3	83	182.1	30	27.7	4	3.6	586	151.5
	F	0	0.0	0	0.0	0	0.0	3	15.2	263	1305.7	465	2257.5	182	852.3	112	244.7	30	27.5	1	0.8	1056	267.6
	T	0	0.0	0	0.0	0	0.0	5	12.4	351	863.2	705	1621.1	321	729.9	195	213.4	60	27.6	5	2.1	1642	210.1
Cytomegalovirus (Congenital and Neonatal)	M	1	31.0	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	0.3
	F	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
	T	1	15.8	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
Gonorrhoea*	M	0	0.0	0	0.0	0	0.0	0	0.0	3	14.6	6	26.2	7	30.9	7	15.4	6	5.5	5	4.6	34	8.8
	F	0	0.0	0	0.0	0	0.0	1	5.1	3	14.9	4	19.4	3	14.0	4	8.7	1	0.9	2	1.6	18	4.6
	T	0	0.0	0	0.0	0	0.0	1	2.5	6	14.8	10	23.0	10	22.7	11	12.0	7	3.2	7	3.0	52	6.7
Hepatitis B (Acute)†	M	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.2	2	1.8	1	0.9	4	1.0
	F	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.8	1	0.8	3	0.8
	T	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.1	4	1.8	2	0.9	7	0.9
Hepatitis B (Chronic)†	M	0	0.0	0	0.0	0	0.0	0	0.0	1	4.9	2	8.7	3	13.3	5	11.0	14	12.9	2	1.8	27	7.0
	F	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	4.9	1	4.7	4	8.7	1	0.9	5	4.1	12	3.0
	T	0	0.0	0	0.0	0	0.0	0	0.0	1	2.5	3	6.9	4	9.1	9	9.9	15	6.9	7	3.0	39	5.0

Sexually Transmitted and Blood Borne Infections		Age Groups																				Total	
		< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59		60 +		N	Rate
		N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate				
Hepatitis C ¹	M	1	31.0	0	0.0	0	0.0	0	0.0	0	0.0	8	34.9	20	88.4	42	92.1	35	32.4	14	12.8	120	31.0
	F	0	0.0	0	0.0	1	5.4	0	0.0	0	0.0	7	34.0	14	65.6	20	43.7	22	20.2	3	2.4	67	17.0
	T	1	15.8	0	0.0	1	2.6	0	0.0	0	0.0	15	34.5	34	77.3	62	67.9	57	26.3	17	7.3	187	23.9
Herpes (Congenital and Neonatal)	M	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
	F	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
	T	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
Human Immunodeficiency Virus (HIV) ²	M	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	8.7	2	8.8	1	2.2	6	5.5	0	0.0	11	2.8
	F	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.2	2	1.8	0	0.0	3	0.8
	T	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	4.6	2	4.5	2	2.2	8	3.7	0	0.0	14	1.8
Acquired Immunodeficiency Syndrome (AIDS) ³	M	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.2	1	0.9	0	0.0	2	0.5
	F	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	0.9	0	0.0	1	0.3
	T	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.1	2	0.9	0	0.0	3	0.4
Syphilis (All) ⁴	M	0	0.0	0	0.0	0	0.0	0	0.0	1	4.9	4	17.5	1	4.4	6	13.2	6	5.5	1	0.9	19	4.9
	F	0	0.0	0	0.0	0	0.0	0	0.0	2	9.9	1	4.9	3	14.0	3	6.6	3	2.8	1	0.8	13	3.3
	T	0	0.0	0	0.0	0	0.0	0	0.0	3	7.4	5	11.5	4	9.1	9	9.9	9	4.1	2	0.9	32	4.1
Syphilis (Infectious) ⁵	M	0	0.0	0	0.0	0	0.0	0	0.0	1	4.9	2	8.7	1	4.4	2	4.4	4	3.7	0	0.0	10	2.6

Sexually Transmitted and Blood Borne Infections	Age Groups																		Total			
	< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59		60 +		N	Rate
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate				
F	0	0.0	0	0.0	0	0.0	0	0.0	1	5.0	1	4.9	1	4.7	0	0.0	0	0.0	1	0.8	4	1.0
T	0	0.0	0	0.0	0	0.0	0	0.0	2	4.9	3	6.9	2	4.5	2	2.2	4	1.8	1	0.4	14	1.8

Data sources: Reportable Disease Surveillance System (RDSS) database

*Gonorrhoea enhanced surveillance database. PHNB, Epidemiology and Surveillance.

†Hepatitis B enhanced surveillance database. PHNB, Epidemiology and Surveillance.

‡Hepatitis C enhanced surveillance database. PHNB, Epidemiology and Surveillance.

§HIV/AIDS Case Report Surveillance System database.

¶Syphilis enhanced surveillance database. PHNB, Epidemiology and Surveillance.

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

TABLES RELATED TO VECTORBORNE AND ZOOBOTIC DISEASES

Table 12: Number of Cases of Vectorborne and Zoonotic Diseases reported in New Brunswick and Incidence Rates per 100,000 population, 2015-2020

Vectorborne and Zoonotic Diseases	2015		2016		2017		2018		2019		2020	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Leptospirosis	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
Anthrax	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Brucellosis	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Hantavirus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Heamorrhagic Fevers	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease*	11	1.4	8	1.0	29	3.8	20	2.6	36	4.6	19	2.4
Malaria	9	1.2	7	0.9	6	0.8	2	0.3	9	1.2	2	0.3
Plague (Pneumonic and Bubonic)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	1	0.1	1	0.1	0	0.0	6	0.8	4	0.5
Rabies	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rickettsiosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
West Nile Virus	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Yellow Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Zika	0	0.0	2	0.3	2	0.3	1	0.1	0	0.0	0	0.0

Data sources: Reportable Disease Surveillance System (RDSS) database

*Lyme Disease enhanced surveillance database. PHNB, Epidemiology and Surveillance.

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

Table 13: Number of Cases of Vectorborne and Zoonotic Diseases reported in New Brunswick and Incidence Rates per 100,000 population, by Health Region, 2020

Vectorborne and Zoonotic Diseases	Region 1		Region 2		Region 3		Region 4		Region 5		Region 6		Region 7		NB	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Leptospirosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anthrax	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Brucellosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hantavirus	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Heamorrhagic Fevers	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lyme Disease*	0	0.0	19	10.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	19	2.4
Malaria	2	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.3
Plague (Pneumonic and Bubonic)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Psittacosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Q Fever	0	0.0	3	1.7	0	0.0	0	0.0	1	4.0	0	0.0	0	0.0	4	0.5
Rabies	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rickettsiosis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tularemia	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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
Yellow Fever	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Zika	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Data sources: Reportable Disease Surveillance System (RDSS) database

*Lyme Disease enhanced surveillance database. PHNB, Epidemiology and Surveillance.

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

Table 14: Number of Cases of Vectorborne and Zoonotic Diseases reported in New Brunswick and Incidence Rates per 100,000 population, by Age and Sex, 2020

Vectorborne and Zoonotic Diseases		Age Groups																				Total	
		< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59		60 +		N	Rate
		N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate				
Leptospirosis	M	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
	F	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
	T	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
Anthrax	M	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
	F	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
	T	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
Brucellosis	M	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
	F	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
	T	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
Hantavirus	M	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
	F	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
	T	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
Haemorrhagic Fevers	M	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
	F	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
	T	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

Vectorborne and Zoonotic Diseases		Age Groups																		Total			
		< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59		60 +		N	Rate
		N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate				
Lyme Disease*	M	0	0.0	0	0.0	1	5.1	2	9.7	3	14.6	0	0.0	0	0.0	1	2.2	1	0.9	4	3.6	12	3.1
	F	0	0.0	0	0.0	2	10.7	1	5.1	0	0.0	0	0.0	0	0.0	2	4.4	1	0.9	1	0.8	7	1.8
	T	0	0.0	0	0.0	3	7.9	3	7.4	3	7.4	0	0.0	0	0.0	3	3.3	2	0.9	5	2.1	19	2.4
Malaria	M	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	4.4	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
	F	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	4.7	0	0.0	0	0.0	0	0.0	1	0.3
	T	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.3	1	2.3	0	0.0	0	0.0	0	0.0	2	0.3
Plague (Pneumonic and Bubonic)	M	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
	F	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
	T	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
Psittacosis	M	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
	F	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
	T	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
Q Fever	M	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	4.4	0	0.0	0	0.0	2	1.8	3	0.8
	F	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	0.8	1	0.3
	T	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.3	0	0.0	0	0.0	3	1.3	4	0.5
Rabies	M	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
	F	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

Vectorborne and Zoonotic Diseases		Age Groups																		Total			
		< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59		60 +		N	Rate
		N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate				
	T	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
Rickettsiosis	M	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
	F	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
	T	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
Tularemia	M	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
	F	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
	T	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
West Nile Virus	M	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
	F	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
	T	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
Yellow Fever	M	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
	F	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
	T	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
Zika	M	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
	F	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
	T	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

Vectorborne and Zoonotic Diseases	Age Groups																		Total			
	< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59		60 +		N	Rate
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate				

Data sources: Reportable Disease Surveillance System (RDSS) database

*Lyme Disease enhanced surveillance database. PHNB, Epidemiology and Surveillance.

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

TABLES RELATED TO DISEASES TRANSMITTED VIA THE RESPIRATORY ROUTE AND DIRECT CONTACT

Table 15: Number of Cases of Diseases Transmitted via the Respiratory Route and Direct Contact reported in New Brunswick and Incidence Rates per 100,000 population, 2015-2020

Diseases Transmitted via the Respiratory Route and Direct Contact	2015		2016		2017		2018		2019		2020	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Legionellosis	10	1.3	6	0.8	3	0.4	8	1.0	32	4.1	14	1.8
Leprosy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Severe Acute Respiratory Syndrome (SARS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus Group B Beta-hemolytic (Neonatal)	0	0.0	2	30.5	1	15.5	1	15.9	1	15.8	1	16.1
Invasive Group A Streptococcal Disease*	41	5.4	24	3.1	33	4.3	50	6.5	66	8.5	53	6.8
Tuberculosis†	6	0.8	12	1.6	8	1.0	6	0.8	11	1.4	10	1.3

Data sources: Reportable Disease Surveillance System (RDSS) database

*iGAS enhanced database. PHNB, Epidemiology and Surveillance.

†Active TB enhanced database. PHNB, Epidemiology and Surveillance.

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

Table 16: Number of Cases of Diseases Transmitted via the Respiratory Route and Direct Contact reported in New Brunswick and Incidence Rates per 100,000 population, by Health Region, 2020

Diseases Transmitted via the Respiratory Route and Direct Contact	Region 1		Region 2		Region 3		Region 4		Region 5		Region 6		Region 7		NB	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Legionellosis	5	2.2	1	0.6	0	0.0	2	4.2	1	4.0	4	5.1	1	2.4	14	1.8
Leprosy	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Severe Acute Respiratory Syndrome (SARS)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Streptococcus Group B Beta-hemolytic (Neonatal)	0	0.0	0	0.0	1	59.2	0	0.0	0	0.0	0	0.0	0	0.0	1	16.1
Invasive Group A Streptococcal Disease*	21	9.3	17	9.6	6	3.3	0	0.0	1	4.0	3	3.8	5	11.9	53	6.8
Tuberculosis†	4	1.8	0	0.0	4	2.2	1	2.1	1	4.0	0	0.0	0	0.0	10	1.3

Data sources: Reportable Disease Surveillance System (RDSS) database

*iGAS enhanced database. PHNB, Epidemiology and Surveillance.

†Active TB enhanced database. PHNB, Epidemiology and Surveillance.

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

Table 17: Number of Cases of Diseases Transmitted via the Respiratory Route and Direct Contact reported in New Brunswick and Incidence Rates per 100,000 population, by Age and Sex, 2020

Diseases Transmitted via the Respiratory Route and Direct Contact		Age Groups																		Total			
		< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59		60 +		N	Rate
		N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate				
Legionellosis	M	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	4.4	2	4.4	4	3.7	4	3.6	11	2.8
	F	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	0.9	2	1.6	3	0.8
	T	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.3	2	2.2	5	2.3	6	2.6	14	1.8
Leprosy	M	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
	F	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
	T	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
Severe Acute Respiratory Syndrome (SARS)	M	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
	F	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
	T	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
Streptococcus Group B Beta-hemolytic (Neonatal)	M	1	16.1	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
	F	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
	T	1	16.1	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	16.1
Invasive Group A	M	0	0.0	0	0.0	2	10.2	0	0.0	0	0.0	2	8.7	1	4.4	6	13.2	15	13.9	9	8.2	35	9.0

Diseases Transmitted via the Respiratory Route and Direct Contact	Age Groups																		Total				
	< 1		1 - 4		5 - 9		10-14		15-19		20-24		25-29		30-39		40-59		60 +		N	Rate	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate					
Tuberculosis	F	0	0.0	1	7.5	1	5.4	0	0.0	0	0.0	1	4.9	1	4.7	5	10.9	5	4.6	4	3.3	18	4.6
	T	0	0.0	1	3.7	3	7.9	0	0.0	0	0.0	3	6.9	2	4.5	11	12.0	20	9.2	13	5.6	53	6.8
Tuberculosis†	M	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	4.4	0	0.0	0	0.0	1	0.9	2	1.8	4	1.0
	F	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	4.9	2	9.4	1	2.2	1	0.9	1	0.8	6	1.5
	T	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	4.6	2	4.5	1	1.1	2	0.9	3	1.3	10	1.3

Data sources: Reportable Disease Surveillance System (RDSS) database

*iGAS enhanced database. PHNB, Epidemiology and Surveillance.

†Active TB enhanced database. PHNB, Epidemiology and Surveillance.

Note: Rates are based on population estimates from Statistics Canada, Demography Division, released March 2021.

Appendix C Figures

Figure 1: Map of Health Regions in New Brunswick	1
Figure 2: Percent Distribution of the most prevalent Vaccine Preventable Diseases in New Brunswick, 2020	5
Figure 3: Incidence Rates of the most prevalent Vaccine Preventable Diseases in New Brunswick per 100,000 population, 2015-2020	6
Figure 4: Number of Reported Cases of Haemophilus Influenza Type B and Non-B and Incidence Rates per 100,000 population, New Brunswick, 2015-2020	7
Figure 5: Number of Reported Cases of Haemophilus Influenza Type B and Non-B and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	7
Figure 6: Number of Reported Cases of Haemophilus Influenza Type B and Non-B and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	8
Figure 7: Number of Reported Cases of Measles and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020	9
Figure 8: Number of Reported Cases of Measles and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	9
Figure 9: Number of Reported Cases of Measles and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	10
Figure 10: Number of Reported Cases of Invasive Meningococcal Disease and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020.....	11
Figure 11: Number of Reported Cases of Invasive Meningococcal Disease and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	11
Figure 12: Number of Reported Cases of Invasive Meningococcal Disease and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	12
Figure 13: Number of Reported Cases of Mumps and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020	13
Figure 14: Number of Reported Cases of Mumps and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	13
Figure 15: Number of Reported Cases of Mumps and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	14
Figure 16: Number of Reported Cases of Pertussis (Whooping Cough) and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020.....	15
Figure 17: Number of Reported Cases of Pertussis (Whooping Cough) and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	15
Figure 18: Number of Reported Cases of Pertussis (Whooping Cough) and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	16
Figure 19: Number of Reported Cases of Invasive Pneumococcal Disease and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020.....	17
Figure 20: Number of Reported Cases of Invasive Pneumococcal Disease and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	17

Figure 21: Number of Reported Cases of Invasive Pneumococcal Disease and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	18
Figure 22: Number of Reported Cases of Varicella and Incidence Rates per 100,000 population, New Brunswick 2015-2020.	19
Figure 23: Number of Reported Cases of Varicella and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	20
Figure 24: Number of Reported Cases of Varicella and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	20
Figure 25: Percent Distribution of the most prevalent Enteric, Food and Water Borne Diseases in New Brunswick, 2020	22
Figure 26: Incidence Rates of the most prevalent Enteric, Food and Water Borne Diseases in New Brunswick per 100,000 population, 2015-2020	23
Figure 27: Number of Reported Cases of Campylobacteriosis and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020.....	23
Figure 28: Number of Reported Cases of Campylobacteriosis and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	24
Figure 29: Number of Reported Cases of Campylobacteriosis and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	25
Figure 30: Number of Reported Cases of Clostridium difficile Infection and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020.....	26
Figure 31: Number of Reported Cases of Clostridium difficile Infection and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	26
Figure 32: Number of Reported Cases of Clostridium difficile Infection and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	27
Figure 33: Number of Reported Cases of Cryptosporidiosis and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020	28
Figure 34: Number of Reported Cases of Cryptosporidiosis and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	28
Figure 35: Number of Reported Cases of Cryptosporidiosis and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	29
Figure 36: Number of Reported Cases of E. coli O157 and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020	30
Figure 37: Number of Reported Cases of Giardiasis and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020	31
Figure 38: Number of Reported Cases of Giardiasis and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	31
Figure 39: Number of Reported Cases of Giardiasis and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	32
Figure 40: Number of Reported Cases of Salmonellosis and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020	33
Figure 41: Number of Reported Cases of Salmonellosis and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	33

Figure 42: Number of Reported Cases of Salmonellosis and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	34
Figure 43: Percent Distribution of Salmonellosis by Serotype in New Brunswick, 2020.....	35
Figure 44: Number of Reported Cases of Vibrio and Incidence Rates per 100,000 population, New Brunswick, 2015-2020	35
Figure 45: Percent Distribution of the most prevalent Sexually Transmitted and Blood Borne Infections in New Brunswick, 2020	37
Figure 46: Incidence Rates of the most prevalent Sexually Transmitted and Blood Borne Infections in New Brunswick per 100,000 population, 2015-2020	38
Figure 47: Number of Reported Cases of Chlamydial (Genital) and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020	39
Figure 48: Number of Reported Cases of Chlamydial (Genital) and Incidence Rates per 100,000 population, by Health Region and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	40
Figure 49: Number of Reported Cases of Chlamydial (Genital) and Incidence Rates per 100,000 population, by Age Group and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	40
Figure 50: Number of Reported Cases of Gonorrhea and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020	41
Figure 51: Number of Reported Cases of Gonorrhea and Incidence Rates per 100,000 population, by Health Region and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	43
Figure 52: Number of Reported Cases of Gonorrhea and Incidence Rates per 100,000 population, by Age Group and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	43
Figure 53: Number of Reported Cases of Hepatitis B (Acute) and Incidence Rates per 100,000 population, New Brunswick, 2015-2020	44
Figure 54: Number of Reported Cases of Hepatitis B (Chronic) and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020. National rates include both acute and chronic.....	45
Figure 55: Number of Reported Cases of Hepatitis B (Chronic) and Incidence Rates per 100,000 population, by Health Region and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	46
Figure 56: Number of Reported Cases of Hepatitis B (Chronic) and Incidence Rates per 100,000 population, by Age Group and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	46
Figure 57: Number of Reported Cases of Hepatitis B (Chronic and Acute) and Incidence Rates per 100,000 population, New Brunswick and Canada, 2020 and 2015 to 2019 Five-year Averages.....	47
Figure 58: Number of Reported Cases of Hepatitis C and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020	48
Figure 59: Number of Reported Cases of Hepatitis C and Incidence Rates per 100,000 population, by Health Region and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	49
Figure 60: Number of Reported Cases of Hepatitis C and Incidence Rates per 100,000 population, by Age Group and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	49
Figure 61: Number of Reported Cases of HIV and AIDS and Incidence Rates per 100,000 population, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	50
Figure 62: Number of Reported Cases of Human Immunodeficiency Virus (HIV) and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020.....	51

Figure 63: Number of Reported Cases of Syphilis (Infectious) and Incidence Rates per 100,000 population, New Brunswick, 2015-2020	52
Figure 64: Number of Reported Cases of Syphilis (Infectious) and Incidence Rates per 100,000 population, by Age Group and Sex, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	53
Figure 65: Percent Distribution of the most prevalent Vectorborne and Zoonotic Diseases in New Brunswick, 2020	55
Figure 66: Incidence Rates of the most prevalent Vectorborne and Zoonotic Diseases in New Brunswick per 100,000 population, 2015-2020	56
Figure 67: Number of Reported Cases of Lyme Disease and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020	57
Figure 68: Number of Reported Cases of Malaria and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020	58
Figure 69: Percent Distribution of the most prevalent Diseases Transmitted via the Respiratory Route and Direct Contact in New Brunswick, 2020	59
Figure 70: Incidence Rates of the most prevalent Diseases Transmitted via the Respiratory Route and Direct Contact in New Brunswick per 100,000 population, 2015-2020	60
Figure 71: Number of Reported Cases of Legionellosis and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020	60
Figure 72: Number of Reported Cases of Legionellosis and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	61
Figure 73: Number of Reported Cases of Legionellosis and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	61
Figure 74: Number of Reported Cases of Streptococcus Group B Beta-hemolytic (Neonatal) and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020	62
Figure 75: Number of Reported Cases of Streptococcus Group B Beta-hemolytic (Neonatal) and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	62
Figure 76: Number of Reported Cases of Invasive Group A Streptococcal Disease and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020.....	63
Figure 77: Number of Reported Cases of Invasive Group A Streptococcal Disease and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	64
Figure 78: Number of Reported Cases of Invasive Group A Streptococcal Disease and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages.....	64
Figure 79: Number of Reported Cases of Tuberculosis and Incidence Rates per 100,000 population, New Brunswick and Canada, 2015-2020	65
Figure 80: Number of Reported Cases of Tuberculosis and Incidence Rates per 100,000 population, by Health Region, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	65
Figure 81: Number of Reported Cases of Tuberculosis and Incidence Rates per 100,000 population, by Age Group, New Brunswick, 2020 and 2015 to 2019 Five-year Averages	66

Appendix D Tables

Table 1: Number of Cases of Vaccine Preventable Diseases reported in New Brunswick and Incidence Rates per 100,000 population, 2015-2020	68
Table 2: Number of Cases of Vaccine Preventable Diseases reported in New Brunswick and Incidence Rates per 100,000 population, by Health Region, 2020.....	69
Table 3: Number of Cases of Vaccine Preventable Diseases reported in New Brunswick and Incidence Rates per 100,000 population, by Age and Sex, 2020.....	70
Table 4: Number of Cases of Enteric, Food and Water Borne Diseases reported in New Brunswick and Incidence Rates per 100,000 population, 2015-2020.....	73
Table 5: Number of Cases of Enteric, Food and Water Borne Diseases reported in New Brunswick and Incidence Rates per 100,000 population, by Health Region, 2020.....	75
Table 6: Number of Cases of Enteric, Food and Water Borne Diseases reported in New Brunswick and Incidence Rates per 100,000 population, by Age and Sex, 2020.....	76
Table 7: Number of Regional Enteric Clusters or Outbreaks Reported in New Brunswick, by Type of Setting and Health Region, 2020.....	80
Table 8: Number of Regional Enteric Clusters or Outbreaks Reported in New Brunswick, by Causative Agent and Health Region, 2020.....	81
Table 9: Number of Cases of Sexually Transmitted and Blood Borne Infections reported in New Brunswick and Incidence Rates per 100,000 population, 2015-2020.....	82
Table 10: Number of Cases of Sexually Transmitted and Blood Borne Infections reported in New Brunswick and Incidence Rates per 100,000 population, by Health Region, 2020.....	83
Table 11: Number of Cases of Sexually Transmitted and Blood Borne Infections reported in New Brunswick and Incidence Rates per 100,000 population, by Age and Sex, 2020.....	84
Table 12: Number of Cases of Vectorborne and Zoonotic Diseases reported in New Brunswick and Incidence Rates per 100,000 population, 2015-2020.....	87
Table 13: Number of Cases of Vectorborne and Zoonotic Diseases reported in New Brunswick and Incidence Rates per 100,000 population, by Health Region, 2020.....	88
Table 14: Number of Cases of Vectorborne and Zoonotic Diseases reported in New Brunswick and Incidence Rates per 100,000 population, by Age and Sex, 2020.....	89
Table 15: Number of Cases of Diseases Transmitted via the Respiratory Route and Direct Contact reported in New Brunswick and Incidence Rates per 100,000 population, 2015-2020.....	93
Table 16: Number of Cases of Diseases Transmitted via the Respiratory Route and Direct Contact reported in New Brunswick and Incidence Rates per 100,000 population, by Health Region, 2020.....	94
Table 17: Number of Cases of Diseases Transmitted via the Respiratory Route and Direct Contact reported in New Brunswick and Incidence Rates per 100,000 population, by Age and Sex, 2020.....	95