Chapter 9

Selected Communicable Diseases other than COVID-19

(Reported September 2022)

Key Findings:

- Response measures introduced to reduce transmission of COVID-19 and changes in individuals' behaviour may have also led to the decline in cases of several reportable communicable diseases compared to previous years.
- Decreases in communicable diseases during 2020 may be due to reduced social contacts, travel restrictions, more frequent cleaning (i.e., surfaces and hands), and increased use of personal protective equipment. Decreases in testing may have also contributed to the decline in cases identified.

Vaccines are available for some of the communicable diseases discussed in this report. For information on BC's Immunization Schedules, please see details from HealthLinkBC (https://www.healthlinkbc.ca/bc-immunization-schedules) for:

- Infants and Children (https://www.healthlinkbc.ca/bc-immunization-schedules#child)
- School Age Children (https://www.healthlinkbc.ca/bc-immunization-schedules#school)
- Adults, Seniors, and Individuals at High Risk (https://www.healthlinkbc.ca/bc-immunization-schedules#adult)

Situation

Response measures to the COVID-19 pandemic included temporary restrictions on traveling; visiting long-term care or seniors' assisted living facilities; indoor dining at restaurants, pubs, and bars; and gatherings and events.[1,2] People were encouraged to physically distance themselves from others, sanitize frequently touched surfaces and objects more often than usual, wear masks, wash hands, and self-isolate if exposed to anyone infected with COVID-19.[2] Many workplaces also implemented remote working policies, and enhanced infection control practices with guidance from WorkSafeBC.[3,4] In addition to reducing the transmission of COVID-19, these measures may have decreased the number of new cases for several other communicable diseases in 2020, compared to previous years.

Background

Communicable diseases are infectious diseases that are contagious. They can be spread from person to person, through a vector (e.g., insects), through contaminated foods, water, or surfaces, or from the environment.[5] Infectious agents include bacteria, viruses, or parasites.[6] Some communicable diseases are reportable in British Columbia under the Reporting Information Affecting Public Health Regulation (B.C. Reg. 167/2018), under the *Public Health Act*.[7] The BC Centre for Disease Control (BCCDC) monitors, evaluates, and reports on more than 80 reportable

For more information about public health measures during COVID-19, see:

https://www2.gov.bc.ca/gov/content/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/current-health-issues/covid-19-novel-coronavirus

Truth and Reconciliation: Communicable Disease and Decolonizing Care

As the original Peoples of what is now known as Canada, First Nations, Métis, and Inuit Peoples have pre-existing rights (commonly referred to as Indigenous or Aboriginal rights) that are recognized and affirmed by Section 35 of the *Constitution Act*, 1982. First Nations, Métis, and Inuit Peoples are distinct Indigenous groups in Canada that each have their own customs, practices, and traditions.

Prior to contact, communicable diseases amongst First Nations and Inuit were limited and did not pose an existential threat. The arrival of Europeans introduced new communicable diseases that caused devastating illness and death. First Nations, Métis, and Inuit Peoples continue to face many historical and ongoing structural inequities that make them more susceptible to many kinds of communicable diseases. In addition, the BC health-care system continues to discriminate against Indigenous Peoples (First Nations, Métis, and Inuit) as documented in the *In Plain Sight* report (https://engage.gov.bc.ca/addressingracism/). As a result, many Indigenous individuals face challenges in accessing culturally safe health services. Indigenous Peoples have remained strong and resilient through the COVID-19 pandemic. Indigenous leaders and communities have prioritized public health supports to manage both COVID-19 and other communicable diseases, while ensuring community wellness and cultural priorities continued to be met through these challenging times.

communicable diseases in the province, including respiratory (droplet and airborne infections), enteric or water/foodborne, sexually transmitted and bloodborne, vector-borne, and zoonotic diseases.[a,7,8]

Some public health measures put in place to limit the spread of COVID-19 may have impacted the incidence of other reportable communicable diseases. As COVID-19 is a respiratory infection, public health measures to slow the spread of COVID-19 may have slowed and prevented the spread of other respiratory infections (e.g., influenza, pertussis). Restrictions or limitations on the size of gatherings, as well as physical distancing measures, can also limit the spread of respiratory infections. Additionally, restrictions on travel, particularly to tropical destinations where certain infections are more common than in BC (e.g., malaria, *Shigella* infections, typhoid fever, hepatitis A), have likely led to fewer reports of these infections in BC in returning travellers. Environmental measures may have similarly reduced the potential for infections to be transmitted through contaminated surfaces (e.g., through more frequent cleaning). Lastly, decreased testing may have resulted in fewer diagnoses of reportable communicable diseases. This is more likely for reportable communicable diseases that are mildly symptomatic and those that may be present without symptoms (e.g., sexually transmitted infections).

The diseases included in this report were chosen because they are examples of respiratory, foodborne, or travel-related diseases, and therefore likely to have been affected by COVID-19 response measures. Sexually transmitted and bloodborne infections are not included here because they are being considered for separate reporting. For further information on reportable diseases in BC, including surveillance reports, please visit the BCCDC webpage on communicable diseases (http://www.bccdc.ca/health-professionals/data-reports/communicable-diseases).

[a] This report provides an overview of recent trends in selected respiratory and foodborne diseases only.

Equity Considerations

Due to structural inequities in our society, some groups of people are more likely to contract communicable diseases, get sicker, and take longer to recover.[9] Specifically, the social determinants of health (e.g., income, housing, food security) affect the distribution of infectious diseases by influencing exposure to diseases, impacting access to health services, and rendering some people more likely to experience adverse effects.[10] For example, poverty can be associated with reduced access to material and social resources that can lead to unsafe habitation (e.g., crowded living conditions), food insecurity and malnutrition (including maternal-fetal malnutrition), poor water quality, and increased exposure to infectious agents, as well as environmental toxins.[11] These circumstances can contribute in turn to the spread of many pathogens, including acute and chronic infectious diseases.[11,12] An overview of inequities between groups of people for each of the eight diseases examined in the findings section is out of scope for this report; however, please see the following for more information about communicable diseases and the social determinants of health:

- Canada communicable disease report: Social determinants of health (https://nccdh.ca/resources/entry/canada-communicable-disease-report-social-determinants-of-health)
- Infectious disease, social determinants and the need for intersectoral action (https://doi.org/10.14745/ccdr.v42is1a04)

Findings

This section describes case counts for selected communicable diseases in BC, before and after March 2020 (see Appendix 9-A for information about data sources and methodology). Of note, case counts reflect diagnoses for these communicable diseases. The number of diagnoses may be impacted by delays or avoidance in seeking medical care (e.g., difficulty accessing medical care or avoidance due to concern regarding COVID-19 infection).[13,14,15] In addition, health provider and testing resources may have been less available due to re-deployment to respond to COVID-19.[16]

Table 9.1 provides an overview of trends in the moving averages of cases of selected respiratory and foodborne diseases in 2020, compared to previous years (see Appendix 9-A for a definition of the moving average). Three out of eight communicable diseases analyzed in this report showed sustained decreases in the moving averages in 2020, following the implementation of public health measures, compared to the moving averages in previous years. Temporary declines in moving averages were observed for the other five diseases in 2020, compared to the moving averages in previous years.

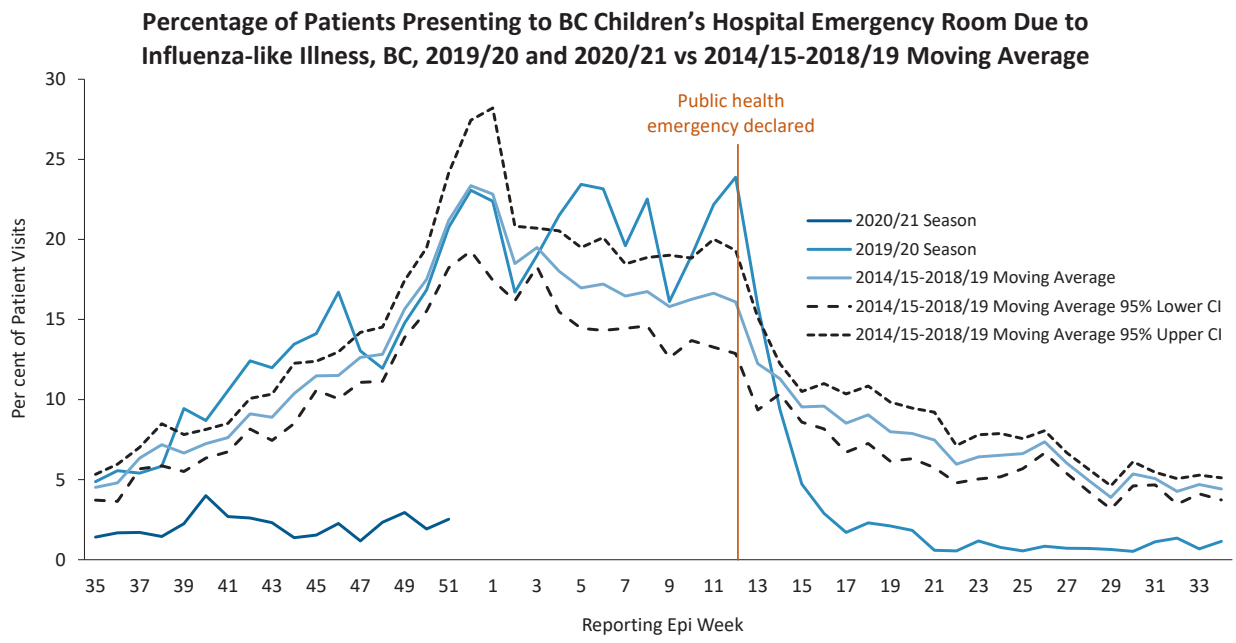
Table 9.1 Overall Trend in Select Communicable Diseases in BC in 2020, Compared to Previous Years

Primary Transmission Route	Diseases with Sustained Decrease in 2020	Diseases with Temporary Decrease in 2020
Respiratory	• Mumps*† • Pertussis*†	• Invasive pneumococcal disease (IPD)** • Invasive group A streptococcal disease (iGAS)
Foodborne	• *Shigella*^	• *Campylobacter* • Shiga-toxigenic *Escherichia coli (E. coli)* • *Giardia*

Legend: *vaccines are available; **vaccines are available for many but not all pneumococcal serotypes; †impacting mainly children, with severe outcomes primarily impacting infants; ^commonly travel-associated.

Respiratory Diseases: Influenza-like Illness, Mumps, Pertussis, Invasive Pneumococcal Disease, and Invasive Group A Streptococcal Disease

FIGURE 9.1

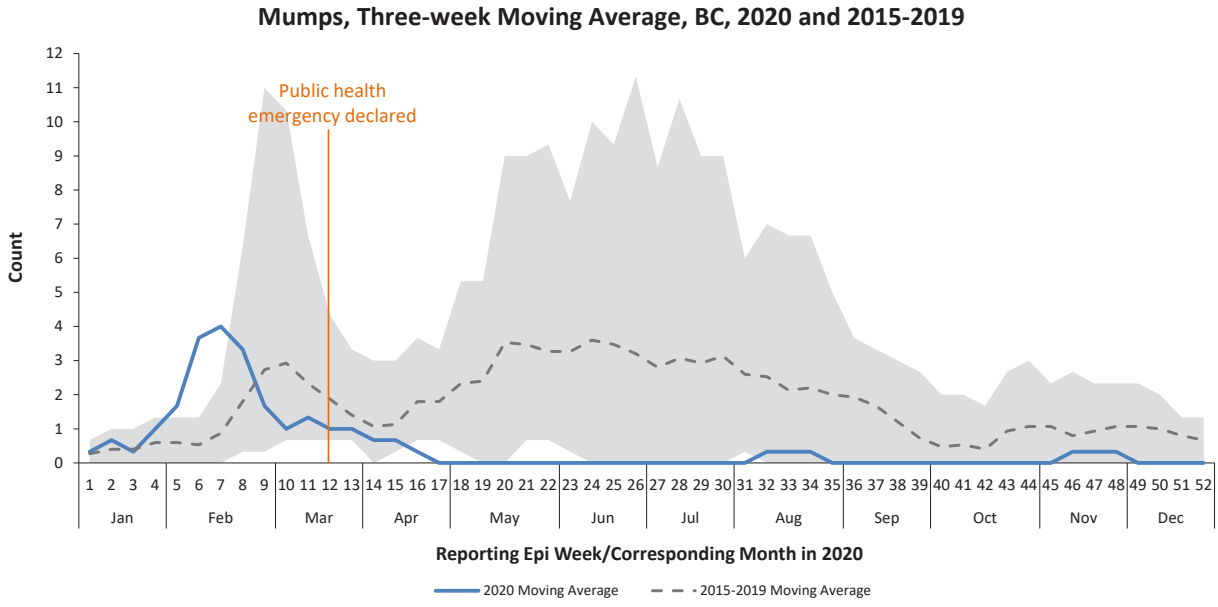


Notes: Data include records with a triage chief complaint of "flu" or "influenza" or "fever/cough." The five-year historical average is based on 2014/15 to 2018/19 seasons.
Source: BC Children's Hospital (BCCH) Admitting, Discharge, Transfer database (ADT). Prepared by BC Centre for Disease Control (BCCDC) Influenza and Emerging Respiratory Pathogens Team; and Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, September 2020.

Figure 9.1 shows the percentage of patients who presented to the BC Children's Hospital Emergency Room due to influenza-like illness between August 25, 2019 (epi week 35) and December 19, 2020 (epi week 51), compared to previous years (see Appendix 9-A for details about epidemiological [epi] weeks). A public health emergency was declared in response to COVID-19 on March 17, 2020. This date is marked on the chart for reference. A substantial reduction in the percentage of patients who visited the emergency department due to influenza-like illnesses occurred from the end of April to December 2020. While a decrease in April 2020 would generally be expected since it was the end of the flu season, a sustained decrease through the fall and into December 2020 was not expected—this shows that the percentage of visits was far below the historical average. In fact, as of May 1, 2021, there was no sign of influenza virus circulation throughout the 2020/21 fall-winter season when respiratory viruses usually circulate.[b,17]

[b] For more information about influenza in BC, see: http://www.bccdc.ca/health-professionals/data-reports/communicable-diseases/influenza-surveillance-reports.

FIGURE 9.2

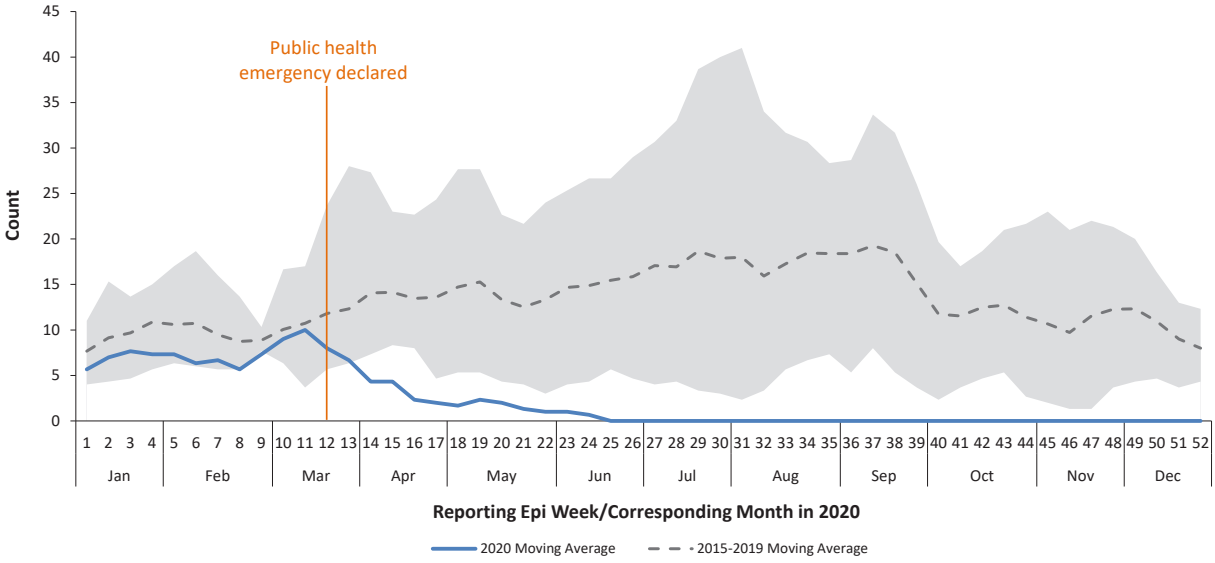


Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. A three-week moving average was calculated for 2020. The 2015-2019 three-week moving averages were calculated for each year (dating five years back from the current year). The shaded region reflects the entire range of three-week moving averages in the 2015-2019 period.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figures 9.2 to 9.9 show the three-week moving average of selected respiratory communicable diseases in 2020, compared to the moving average in previous years. A public health emergency was declared in response to COVID-19 on March 17, 2020. This date is marked on all of the charts for reference.

Figure 9.2 shows the three-week moving average of mumps infections in BC in 2020 compared to the 2015–2019 moving average in the corresponding epi weeks. Mumps is a disease caused by the mumps virus.[18] Mumps is characterized by the acute onset of unilateral or bilateral, tender, self-limited swelling of the salivary glands. Mumps can sometimes cause complications, such as orchitis (inflammation of one or both testicles), encephalitis or meningitis (inflammation of the brain or infection of the lining of the brain), and temporary or permanent deafness.[18] The figure shows that the moving average of the number of reported mumps cases fell to zero beginning in April 2020 (epi week 17), and remained close to zero until the end of 2020. Of note, mumps is an uncommon infection in BC because of a highly effective vaccine and high rates of immunization.[18]

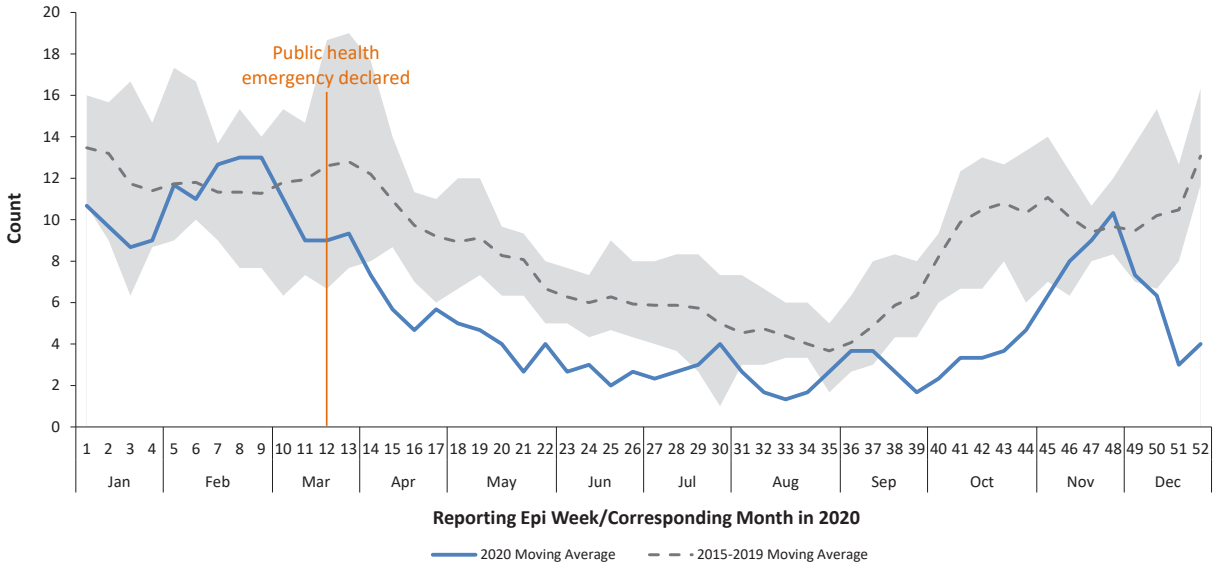
FIGURE 9.3



Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. A three-week moving average was calculated for 2020. The 2015-2019 three-week moving averages were calculated for each year (dating five years back from the current year). The shaded region reflects the entire range of three-week moving averages in the 2015-2019 period.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figure 9.3 shows the three-week moving average of pertussis infections in BC in 2020 compared to the 2015–2019 moving average in the corresponding epi weeks. Pertussis is caused by a bacterium, *Bordetella pertussis*, found in the mouth, nose, and throat of a person who is infected.[19] Pertussis, also called whooping cough, can cause pneumonia, seizures, brain damage, and death.[19] Approximately one in 170 infants with pertussis will die from it.[19] In BC, pertussis is rare, as the vaccine for pertussis is part of BC's childhood immunization schedule. The figure shows that, beginning in March–April 2020 (epi week 14), the three-week moving average for the number of reported pertussis cases fell far below the three-week moving average of the previous five years. The three-week moving average declined to zero beginning in June (epi week 25), and stayed at zero until the end of 2020.

FIGURE 9.4

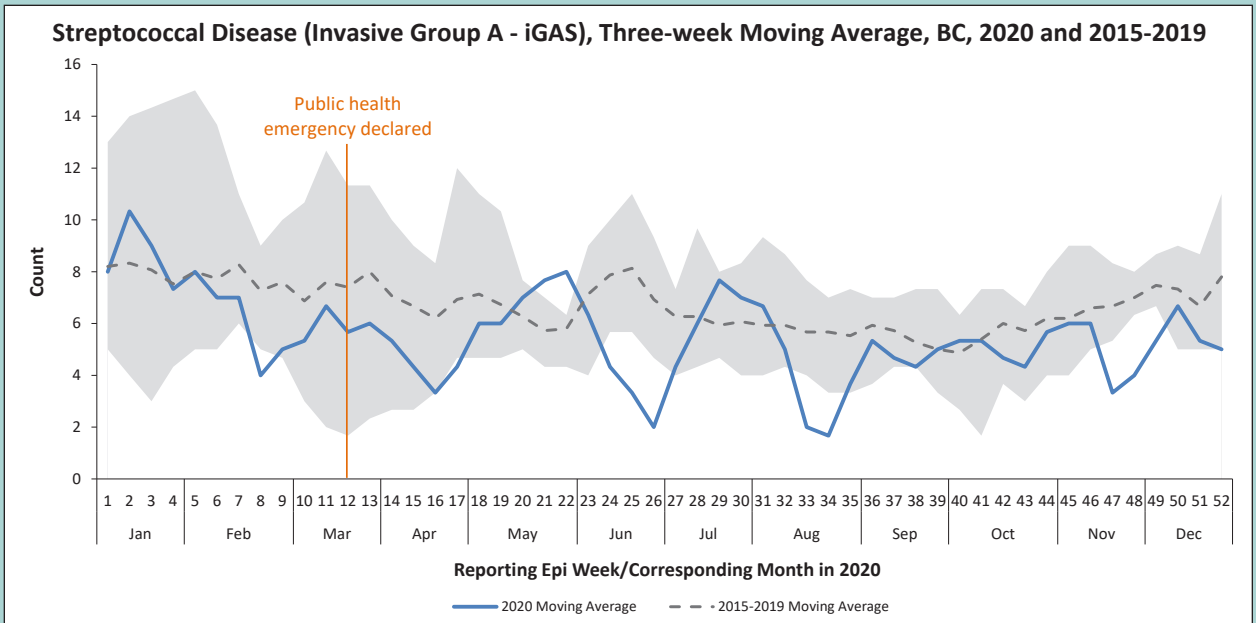


Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. A three-week moving average was calculated for 2020. The 2015-2019 three-week moving averages were calculated for each year (dating five years back from the current year). The shaded region reflects the entire range of three-week moving averages in the 2015-2019 period.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figure 9.4 shows the three-week moving average of invasive pneumococcal infections[20] in BC residents over 16 years of age[c] in 2020, compared to the 2015–2019 moving average in the corresponding epi weeks. Invasive pneumococcal disease occurs when the bacterium *Streptococcus pneumoniae* infects a part of the body that is normally free of germs, such as blood (also known as bacteremia), bone, or joint fluid. It is a serious disease and typically requires care in a hospital. Non-invasive pneumococcal infections are more frequent but not reportable. Immunization against pneumococcal infections is part of BC's childhood immunization schedule. A pneumococcal vaccine is also available for free to seniors age 65 years and older.[21] The three-week moving average for the number of cases reported of invasive pneumococcal infections in adults over 16 years of age fell below the three-week moving average of the previous five years beginning in March 2020 (epi week 10). With the exception of November 22–28 (epi week 48), the three-week moving average remained below the three-week moving average of the previous five years until the end of 2020.[d]

[c] Case counts for people under 16 years of age are low. BC Centre for Disease Control provides information for all age groups in its Reportable Diseases Data Dashboard: http://www.bccdc.ca/health-professionals/data-reports/reportable-diseases-data-dashboard.
[d] The three-week moving average for weeks 47 and 49 in 2020 may appear to be higher than the three-week moving average for the same weeks in the previous five years. This is due to spatial constraints with visualizing this data. Values for weeks 47 and 49 in 2020 are not higher than the three-week moving average in the previous five years.

FIGURE 9.5

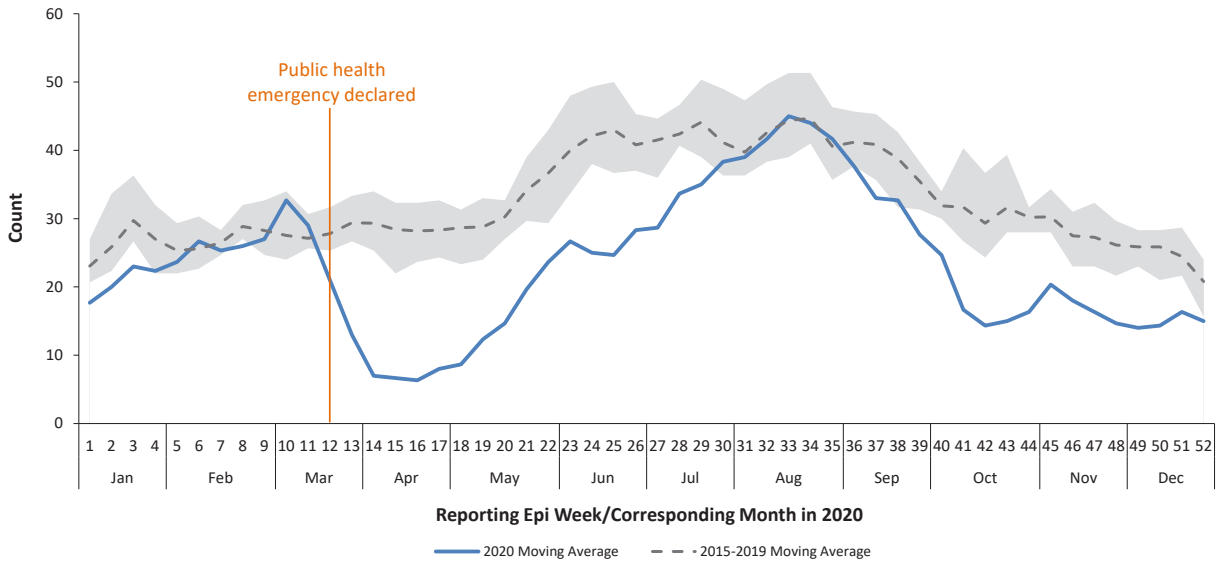


Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. A three-week moving average was calculated for 2020. The 2015-2019 three-week moving averages were calculated for each year (dating five years back from the current year). The shaded region reflects the entire range of three-week moving averages in the 2015-2019 period.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figure 9.5 shows the three-week moving average of invasive group A streptococcal (iGAS) infections in BC in 2020 compared to the 2015–2019 moving average in the corresponding epi weeks. Like invasive pneumococcal disease, iGAS infection occurs when the bacterium, group A *Streptococcus,* infects a part of the body that is normally free of germs. It is a serious disease and typically requires care in a hospital. Non-invasive group A streptococcal infections (e.g., strep throat) are more frequent and are not reportable. The three-week moving average number of iGAS infections reported in 2020 was generally similar to the three-week moving average of the previous five-years, despite occasional fluctuations.

Foodborne Diseases: Campylobacter *Infection,* E-coli *Infection,* Giardia, *and* Shigella

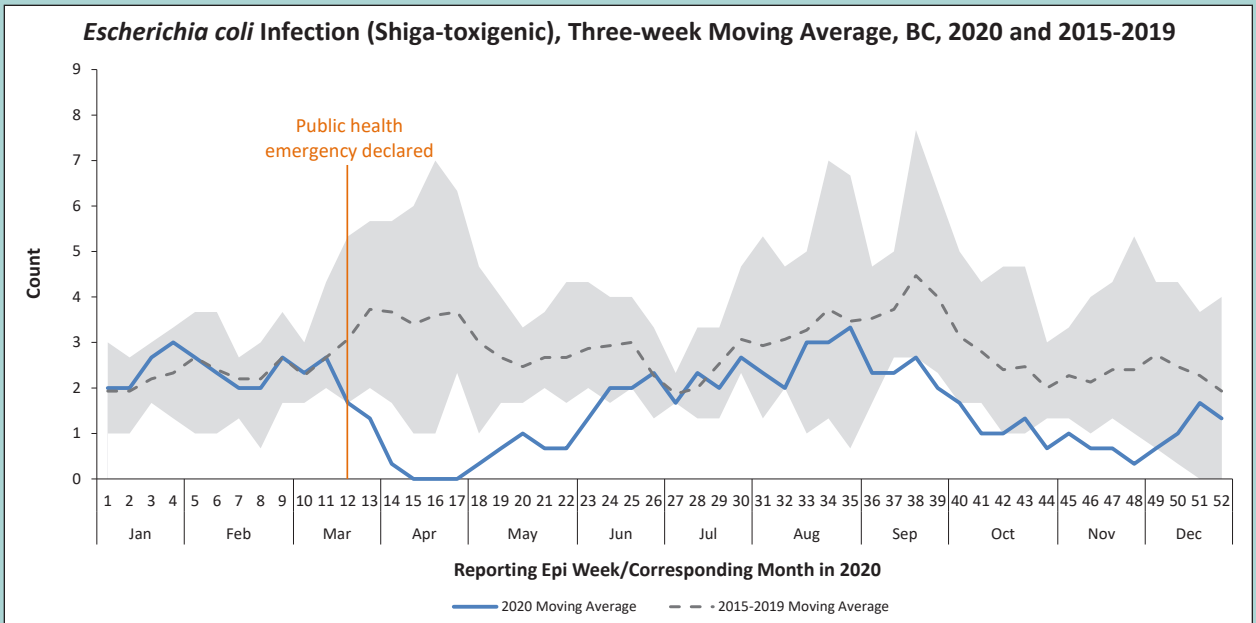
FIGURE 9.6



Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. A three-week moving average was calculated for 2020. The 2015-2019 three-week moving averages were calculated for each year (dating five years back from the current year). The shaded region reflects the entire range of three-week moving averages in the 2015-2019 period.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figure 9.6 shows the three-week moving average of *Campylobacter* infections in BC in 2020 compared to the 2015–2019 moving average in the corresponding epi weeks. *Campylobacter* infection refers to an infection caused by bacteria in the *Campylobacter* genus.[22] When a person gets sick from this infection, it is called campylobacteriosis. Campylobacteriosis is a common cause of diarrhea in BC and in other parts of the world. In rare instances, arthritis and Guillain-Barré Syndrome (a neurological condition) can occur after campylobacteriosis.[22] The three-week moving average number of *Campylobacter* infections fell below the three-week moving average of the previous five years in March 2020 (epi week 12). The three-week moving average began to rise again beginning in epi week 17 (April 19–25). In August (epi weeks 31–35), the moving average of *Campylobacter* infections was the same as the three-week moving average observed in the 2015–2019 period.

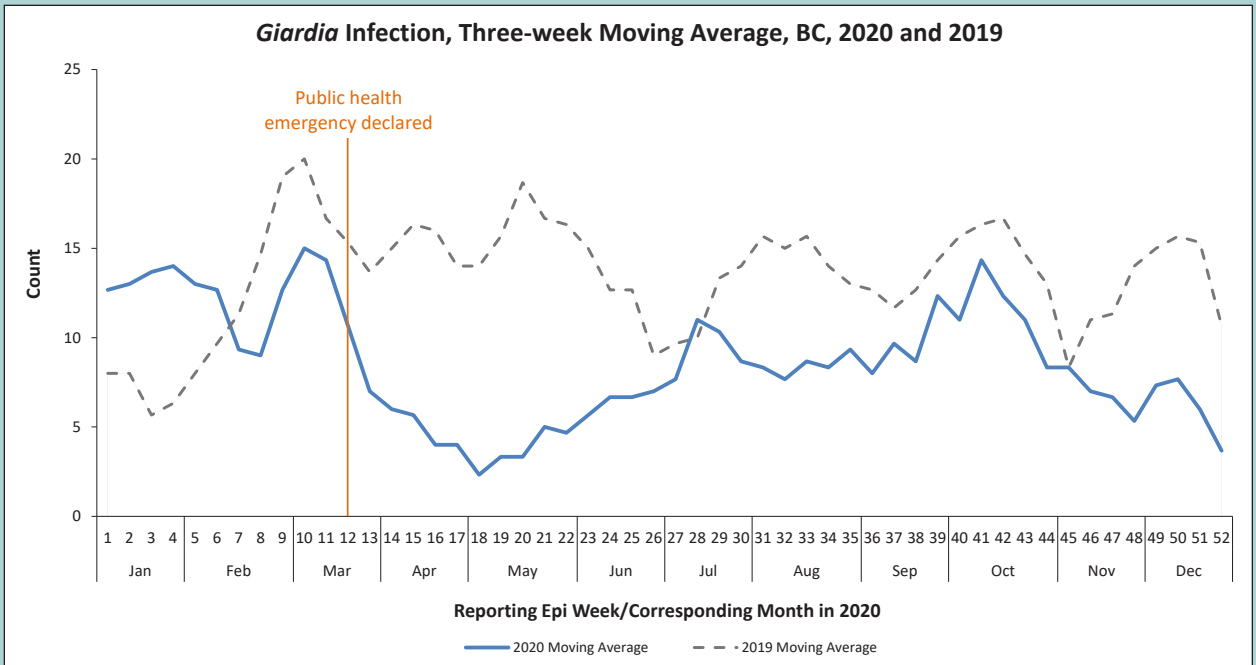
FIGURE 9.7



Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. A three-week moving average was calculated for 2020. The 2015-2019 three-week moving averages were calculated for each year (dating five years back from the current year). The shaded region reflects the entire range of three-week moving averages in the 2015-2019 period.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figure 9.7 shows the three-week moving average of shiga-toxigenic *Escherichia coli (E. coli)* infections in BC in 2020 compared to the 2015-2019 moving average in the corresponding epi weeks. Shiga-toxigenic *E. coli* infection refers to an infection caused by *E. coli* bacteria that produces the shiga toxin (also known as enterohemorrhagic *E. coli* [EHEC] and verotoxigenic *E. coli* [VTEC]).[23] Shiga-toxigenic *E. coli* can cause much more severe disease than non-shiga-toxigenic *E. coli*, and symptoms can include severe diarrhea, serious complications, and death.[23] The 2020 three-week moving average number of shiga-toxigenic *E. coli* infections fell far below the 2015–2019 moving averages beginning in late March 2020 (epi week 12) and down to zero by mid-April (epi week 15). The moving average began to rise beginning in late April (epi week 17) until the end of August (epi week 35), after which the three-week moving average of shiga-toxigenic *E. coli* infections remained below the three-week moving average of the previous five years for the rest of 2020.

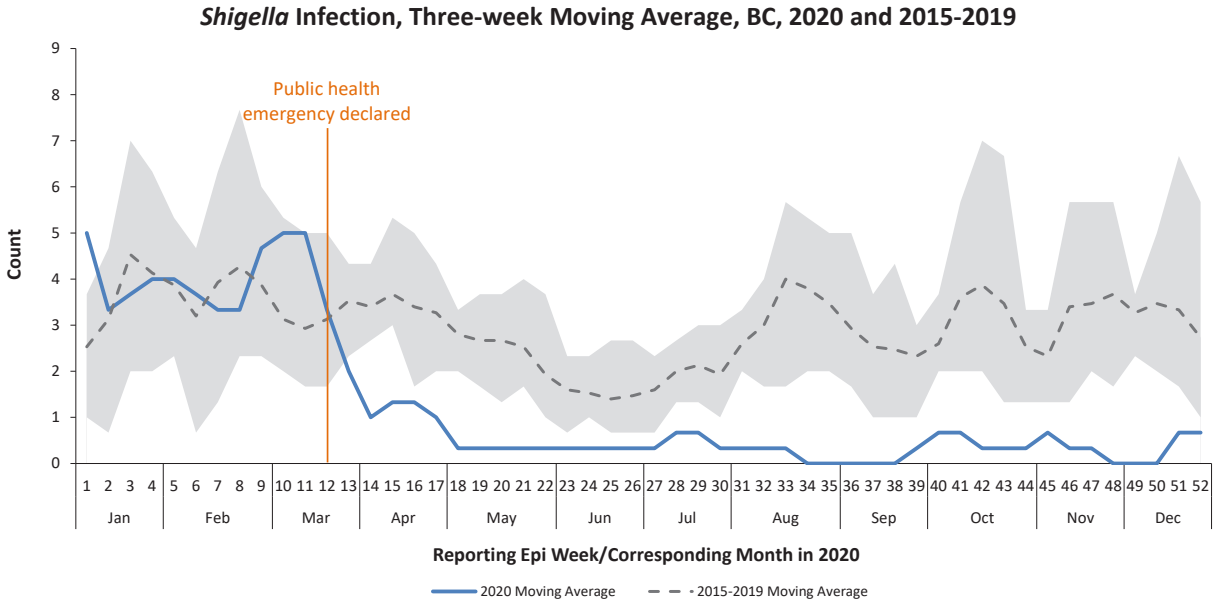
FIGURE 9.8



Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. Three-week moving averages were calculated for 2020 and 2019.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figure 9.8 shows the three-week moving average of *Giardia* infections in BC in 2020 compared to the 2019 moving average in the corresponding epi weeks. *Giardia* infections are caused by an enteric parasite, *Giardia lamblia,* and the corresponding clinical illness is characterized by diarrhea, abdominal cramps, bloating, weight loss, or malabsorption.[24] Unlike gastrointestinal infections caused by *Campylobacter*, and shigatoxin-producing *E. coli,* both of which are usually short-lasting, *Giardia* infections can last for months. For this reason, the diagnosis date for *Giardia* infections can be days or months after exposure. The moving average for the number of *Giardia* infections fell below the 2019 moving average beginning in March 2020 (epi week 13). The three-week moving average began to rise beginning in May (epi week 19) up until July (epi week 28), when it again fell below the 2019 three-week moving average and generally stayed below it for the rest of the year.

FIGURE 9.9



Notes: The month labels correspond to the month of the final day of each epi week in the year 2020. A three-week moving average was calculated for 2020. The 2015-2019 three-week moving averages were calculated for each year (dating five years back from the current year). The shaded region reflects the entire range of three-week moving averages in the 2015-2019 period.
Source: BC Centre for Disease Control. Prepared by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer, BC Ministry of Health, August 2021.

Figure 9.9 shows the three-week moving average of *Shigella* infections in BC in 2020 compared to the 2015–2019 moving average in the corresponding epi weeks. *Shigella* infections are caused by four species of *Shigella* bacteria: *Shigella sonnei, Shigella flexneri, Shigella boydii,* and *Shigella dysenteriae.*[25] People with a *Shigella* infection may experience diarrhea, fever, and stomach pain.[25] The figure shows that the three-week moving average for the number of *Shigella* infections fell far below the range of the moving average of the previous five years beginning in mid-March 2020 (epi week 12). The moving average remained below the moving average of the previous five years, and close to zero, from May (epi week 18) until the end of 2020.

Considerations for Further Action

This section provides considerations for action based on the findings of this report. These are not formal recommendations, but rather ideas to consider when shaping recommendations and actions related to this topic.

The findings of this report suggest that COVID-19 public health measures may have decreased cases of other communicable diseases, though further analysis would be needed to explore other potential contributing factors before drawing conclusions about the role of COVID-19 public health measures in the observed decreases. The following are ideas to consider for the future:

1. Continued attentiveness to routine infection control practices (such as hand washing), and continued supports for staying home from work and school when ill, including public messaging encouraging these practices.
2. Continued monitoring of disease trends, and further examination of data to investigate the reasons for the case count declines, including changes in transmission dynamics as well as potential artefactual reasons (e.g., decreased or delayed testing and reporting).
3. Continued immunizations for vaccine preventable diseases. While not directly evaluated in this report, immunizations have played a valuable role in reducing the burden of many communicable diseases.
4. Expanded support for community-led infection control practices among populations that experience a higher communicable disease burden (e.g., isolation supports and accommodations), and attention to the socioeconomic factors driving higher disease burden in certain populations.

Appendix 9-A: Data Methodology Notes

1. Charts provided by Population Health Surveillance and Epidemiology, Office of the Provincial Health Officer.

For questions contact: HLTH.PHSE@gov.bc.ca.

2. Methodology

The analysis in Figure 9.1 was provided by the Influenza and Emerging Respiratory Pathogens Team at the BC Centre for Disease Control (BCCDC), based upon the BC Children's Hospital (BCCH) Admitting, Discharge, Transfer database (ADT). Data include records with a triage chief complaint of "flu," "influenza," or "fever/cough." The five-year historical average is based on the 2014-15 to 2018-19 seasons. The data table for this figure is downloadable from the main project website (http://www.bccdc.ca/health-professionals/data-reports/societal-consequences-covid-19) as an Excel workbook.

The data and analyses for Figures 9.2–9.9 were provided by Communicable Diseases and Immunization Service at the BCCDC. The data tables for these figures are downloadable from the main project website (see link above) as an Excel workbook.

Moving average: In Figures 9.2–9.9, the three-week moving average of new cases is reported for each week. A moving average smooths out short-term (weekly, in this case) fluctuations by reporting the average over a longer period of time (three weeks in this case). It is referred to as a "moving" average because the three-week window moves along with the reporting week. That is, the value reported for epi week 9 is the average of epi weeks 8, 9, and 10, while the value reported for epi week 10 is the average of epi weeks 9, 10, and 11.

Epidemiological week (epi week): Many disease measures in this report use the epi week as the unit of time. Using epi weeks allows for a standardized way to number weeks in a year and for comparison of weekly measures across years. An epi week begins on Sunday and ends on Saturday. The first epi week of each year ends on the first Saturday of January, as long as that week has at least four days. This means that the first epi week of some years begins in the previous year. For instance, epi week 1 of 2019 is December 30, 2018 to January 5, 2019. Most years have 52 epi weeks, but some years, such as 2020, have 53 epi weeks.

The following table shows the final day of each epi week for the years 2015 through 2020.

Epi Week Number	2015	2016	2017	2018	2019	2020
1	Jan 10	Jan 09	Jan 07	Jan 06	Jan 05	Jan 04
2	Jan 17	Jan 16	Jan 14	Jan 13	Jan 12	Jan 11
3	Jan 24	Jan 23	Jan 21	Jan 20	Jan 19	Jan 18
4	Jan 31	Jan 30	Jan 28	Jan 27	Jan 26	Jan 25
5	Feb 07	Feb 06	Feb 04	Feb 03	Feb 02	Feb 01
6	Feb 14	Feb 13	Feb 11	Feb 10	Feb 09	Feb 08
7	Feb 21	Feb 20	Feb 18	Feb 17	Feb 16	Feb 15
8	Feb 28	Feb 27	Feb 25	Feb 24	Feb 23	Feb 22
9	Mar 07	Mar 05	Mar 04	Mar 03	Mar 02	Feb 29

Epi Week Number	2015	2016	2017	2018	2019	2020
10	Mar 14	Mar 12	Mar 11	Mar 10	Mar 09	Mar 07
11	Mar 21	Mar 19	Mar 18	Mar 17	Mar 16	Mar 14
12	Mar 28	Mar 26	Mar 25	Mar 24	Mar 23	Mar 21
13	Apr 04	Apr 02	Apr 01	Mar 31	Mar 30	Mar 28
14	Apr 11	Apr 09	Apr 08	Apr 07	Apr 06	Apr 04
15	Apr 18	Apr 16	Apr 15	Apr 14	Apr 13	Apr 11
16	Apr 25	Apr 23	Apr 22	Apr 21	Apr 20	Apr 18
17	May 02	Apr 30	Apr 29	Apr 28	Apr 27	Apr 25
18	May 09	May 07	May 06	May 05	May 04	May 02
19	May 16	May 14	May 13	May 12	May 11	May 09
20	May 23	May 21	May 20	May 19	May 18	May 16
21	May 30	May 28	May 27	May 26	May 25	May 23
22	Jun 06	Jun 04	Jun 03	Jun 02	Jun 01	May 30
23	Jun 13	Jun 11	Jun 10	Jun 09	Jun 08	Jun 06
24	Jun 20	Jun 18	Jun 17	Jun 16	Jun 15	Jun 13
25	Jun 27	Jun 25	Jun 24	Jun 23	Jun 22	Jun 20
26	Jul 04	Jul 02	Jul 01	Jun 30	Jun 29	Jun 27
27	Jul 11	Jul 09	Jul 08	Jul 07	Jul 06	Jul 04
28	Jul 18	Jul 16	Jul 15	Jul 14	Jul 13	Jul 11
29	Jul 25	Jul 23	Jul 22	Jul 21	Jul 20	Jul 18
30	Aug 01	Jul 30	Jul 29	Jul 28	Jul 27	Jul 25
31	Aug 08	Aug 06	Aug 05	Aug 04	Aug 03	Aug 01
32	Aug 15	Aug 13	Aug 12	Aug 11	Aug 10	Aug 08
33	Aug 22	Aug 20	Aug 19	Aug 18	Aug 17	Aug 15
34	Aug 29	Aug 27	Aug 26	Aug 25	Aug 24	Aug 22
35	Sep 05	Sep 03	Sep 02	Sep 01	Aug 31	Aug 29
36	Sep 12	Sep 10	Sep 09	Sep 08	Sep 07	Sep 05
37	Sep 19	Sep 17	Sep 16	Sep 15	Sep 14	Sep 12
38	Sep 26	Sep 24	Sep 23	Sep 22	Sep 21	Sep 19
39	Oct 03	Oct 01	Sep 30	Sep 29	Sep 28	Sep 26
40	Oct 10	Oct 08	Oct 07	Oct 06	Oct 05	Oct 03
41	Oct 17	Oct 15	Oct 14	Oct 13	Oct 12	Oct 10
42	Oct 24	Oct 22	Oct 21	Oct 20	Oct 19	Oct 17
43	Oct 31	Oct 29	Oct 28	Oct 27	Oct 26	Oct 24

Epi Week Number	2015	2016	2017	2018	2019	2020
44	Nov 07	Nov 05	Nov 04	Nov 03	Nov 02	Oct 31
45	Nov 14	Nov 12	Nov 11	Nov 10	Nov 09	Nov 07
46	Nov 21	Nov 19	Nov 18	Nov 17	Nov 16	Nov 14
47	Nov 28	Nov 26	Nov 25	Nov 24	Nov 23	Nov 21
48	Dec 05	Dec 03	Dec 02	Dec 01	Nov 30	Nov 28
49	Dec 12	Dec 10	Dec 09	Dec 08	Dec 07	Dec 05
50	Dec 19	Dec 17	Dec 16	Dec 15	Dec 14	Dec 12
51	Dec 26	Dec 24	Dec 23	Dec 22	Dec 21	Dec 19
52	Jan 02, 2016	Dec 31	Dec 30	Dec 29	Dec 28	Dec 26
53	--	--	--	--	--	Jan 02, 2021

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