Communicable Disease Surveillance Report

Fiscal Quarter 2
July 1 – September 30, 2021

Date: December 8, 2021

Labrador-Grenfell Health

Communicable Disease Surveillance Report

Disclaimer

The purpose of this report is to provide an overview of reportable communicable disease activity within the Labrador-Grenfell Health (LGH) Regional Health Authority. This activity is represented by case counts. The text of any disease that has exceeded the upper threshold during this quarter (calculated based on the previous 5 years) is coloured red.

Please note that although all efforts are made to ensure accuracy of data, due to continuous reporting, as well as potential delays in reporting, data is subject to change.

Diseases that Exceeded Threshold

LGH flags diseases that exceed an upper threshold. This is calculated using the 3rd quartile + 1.5 * interquartile range for each quarter, over the previous 5 calendar years. This may mean increased activity of this disease during the period covered by this report.

During this quarter, the following diseases exceeded the upper threshold: Giardiasis, Invasive Haemophilus Inflluenza non-type B, Invasive Pneumococcal Disease (IPD), Gonorrhea

Disease Counts

Table 1. Enteric, Food, and Waterborne Diseases

	Current Quarter	YTD	YTD 2020	5-Year Historical Median	Upper Threshold
Amoebiasis	0	0	0	0.0	0.0
Botulism	0	0	0	0.0	0.0
Campylobacteriosis	1	2	2	0.8	4.8
Cryptosporidiosis	1	1	1	0.3	1.1
Cyclosporiasis	0	0	2	0.0	0.6
Cytomegalovirus	1	5	4	0.8	3.2
Giardiasis	2	3	3	0.8	1.9
Hepatitis A	0	1	1	0.0	0.9
Listeriosis	0	0	0	0.0	0.0
Salmonellosis	1	3	9	2.5	8.8
Shigellosis	0	0	0	0.0	0.0
Typhoid/Paratyphoid Fever	0	0	0	0.0	0.0
Verotoxigenic Escherichia coli	0	0	0	0.5	1.4
Yersiniosis	0	0	0	0.0	0.0

Table 2. Diseases Transmitted by Direct Contact and Respiratory Route

	Current Quarter	YTD	YTD 2020	5-Year Historical Median	Upper Threshold
COVID-19	26	34	7		
Creutzfeldt-Jakob Disease (CJD)	0	0	0	0.0	0.0
Group B Streptococcal Disease, Neonatal	0	0	1	0.0	0.3
Influenza Virus of a Novel Strain	0	0	0	0.0	0.0
Invasive Group A Streptococcal Disease	1	2	3	0.5	2.6
Invasive Haemophilus Influenza non-type B	2	3	0	0.5	1.4
Invasive Meningococcal Disease (IMD)	0	0	0	0.3	0.6
Invasive Pneumococcal Disease (IPD)	4	6	1	0.8	2.8
Legionelloisis	0	0	0	0.0	0.0
Meningitis, Bacterial (excl Hib, IMD, IPD)	0	0	0	0.0	0.0
Meningitis, Viral	0	0	0	0.0	0.0
Nontuberculosis Mycobacterial Disease	0	0	0	0.0	0.0
Severe Respiratory Illness, Unknown Origin	0	0	0	0.0	0.0
Tuberculosis, Non-respiratory	0	0	0	0.3	1.6
Tuberculosis, Respiratory	0	4	5	2.5	8.4
Tuberculosis (all)	0	4	5	2.5	9.4

Table 3. Sexually Transmitted and Blood Borne Infections (STBBIs)

	Current Quarter	YTD	YTD 2020	5-Year Historical Median	Upper Threshold
Chlamydia	56	167	158	42.8	63.8
Gonorrhea	13	14	0	0.5	5.1
Hepatitis C	1	3	8	2.5	7.6
HIV Infection	0	0	0	0.0	0.6
Syphilis, Infectious	0	0	2	0.0	0.6
Syphilis, Noninfectious	0	1	0	0.0	0.3

Table 4. Vectorborne and Other Zoonotic Diseases

	Current Quarter	YTD	YTD 2020	5-Year Historical Median	Upper Threshold
Lyme Disease	0	0	0	0.0	0.0
Malaria	0	0	0	0.0	0.0
Q Fever	0	0	0	0.0	0.0
Rabies	0	0	0	0.0	0.0
Toxoplasmosis	0	0	0	0.0	0.0
Trichinellosis	0	0	0	0.0	0.0
West Nile Virus	0	0	0	0.0	0.0

Table 5. Vaccine Preventable Diseases

	Current Quarter	YTD	YTD 2020	5-Year Historical Median	Upper Threshold
Congenital Rubella Syndrome	0	0	0	0.0	0.0
Hepatitis B	0	0	0	0.3	0.4
Invasive Haemophilus Influenza type B (Hib)	0	0	2	0.0	0.6
Measles	0	0	0	0.0	0.0
Mumps	0	0	0	0.0	0.0
Pertussis	0	0	0	0.0	0.0
Rubella	0	0	0	0.0	0.0
Tetanus	0	0	0	0.0	0.0
Varicella/Chickenpox	5	6	9	3.0	16.4

In Focus: Coronavirus Disease 2019 (COVID-19)

The first known cases of COVID-19 were reported in Wuhan, Hubei Province, China on December 31, 2019, from an outbreak of pneumonia of unknown origin. [1, 2] COVID-19 spread rapidly worldwide, despite measures to contain it, and the World Health Organization (WHO) declared COVID-19 a global pandemic on March 11, 2020. [1]

COVID-19 is caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), which belongs to a family of viruses known as Coronaviridae. [3] Capable of infecting mammalian and bird species, coronaviruses are enveloped, single-stranded RNA viruses with glycoprotein spikes on the surface. [2, 3] Coronaviruses that have been previously known to infect humans include Human Coronavirus (HCoV)-229E and HCoV-OC43, which both cause non-severe illness, as well as Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV) and Middle East Respiratory Syndrome Coronavirus (MERS-CoV), which both cause severe, life-threatening illness. [3] Genome sequencing of SARS-CoV-2 shows the closest match (96%) to a strain of coronavirus that infects bats, which suggests that SARS-CoV-2 may have originated in bats and the infection was transmitted either directly or indirectly (through an intermediate host) from bats to humans. [2, 3]

Transmission of SARS-CoV-2 from human-to-human is predominantly via respiratory droplets and contact with contaminated surfaces; however, other routes of transmission may be involved, including airborne aerosols produced during aerosol-generating procedures. [4] SARS-CoV-2 RNA has been detected in blood, urine, stool, and breast milk, but there is currently little to no evidence that the virus is transmitted vertically, during breastfeeding, or through contact with any of these bodily fluids. [4] The average incubation period of SARS-CoV-2 is 5 to 6 days, although it can be up to 14 days. [4] Current evidence suggests that individuals infected with SARS-CoV-2 can spread the virus to others, regardless of whether they are symptomatic, pre-symptomatic, or asymptomatic. [4] Those who have symptomatic infections are likely capable of transmitting the virus anywhere from three days before symptom onset (pre-symptomatic) up to several weeks after symptom onset. [4] Those who are asymptomatic throughout the course of the infection appear to be less likely to infect others. [4]

The most common symptoms of COVID-19 infection include new or worsening cough, dyspnea, fever, chills, fatigue, muscle or body pain, loss of smell or taste, headache, abdominal pain, diarrhea, and vomiting. [5] The severity of disease varies between individuals and can range from asymptomatic and mild symptomatic infections to critical illness and death, although most infections are mild and do not require inpatient hospital treatment. [6, 7] Figures from the United

States and China from early in the pandemic, suggested case fatality rates of 5% and 2.3%, respectively, although it should be noted that case fatality rates only consider confirmed COVID-19 infections. [6, 7] Infection fatality rates are estimated to be much lower, ranging between 0.15% to 1% overall and rising with increasing age. [6]

One method to curtail transmission of SARS-CoV-2 is to restrict contact between infected individuals and others. This can be achieved through rapid identification, testing, and isolation of suspect cases, as well as quarantine of close contacts of cases. [4] The recommended length of quarantine is 14 days, accounting for the known maximum incubation period of the virus. [4] Other measures, including physical distancing, frequent hand washing, use of fabric face masks, environmental cleaning and disinfection, respiratory etiquette, avoiding crowded gatherings, and adequate indoor ventilation, are also recommended to limit transmission, particularly when there is community transmission. [4]

Vaccines are also an important tool to curtail transmission of SARS-CoV-2. None of the COVID-19 vaccines that are currently available are100% effective; however, among the vaccinated, there are significant reductions in the likelihood of infection, symptomatic infection, and severe outcomes such as hospitalization or death. [8, 9, 10] Currently (as of October 28, 2021), four COVID-19 vaccines have been approved by Health Canada for use in Canada: AstraZeneca Vaxzevria (ages 18+), Moderna Spikevax (ages 12+), Pfizer-BioNTech Comirnaty (ages 12+), and Janssen/Johnson & Johnson (age 18+). [10, 11] Moderna Spikevax and Pfizer-BioNTech Comirnaty are mRNA-based vaccines, while AstraZeneca Vaxzevria and Janssen are recombinant viral vector vaccines. [11] The AstraZeneca, Moderna, and Pfizer-BioNTech vaccines are given in two doses at prescribed intervals while the Janssen vaccine is given in a single dose. [10, 12] Individuals are considered fully vaccinated 2 weeks after they have received either one dose of a single-dose vaccine (e.g., Janssen) or the second dose of a two-dose vaccine. [13]

The necessity and timing of COVID-19 vaccine booster doses in Canada are currently under review by Health Canada and the National Advisory Committee on Immunization (NACI). [10,14] As of October 22, 2021, NACI recommends that moderately to severely immunocompromised individuals (age 12 and up) who have not yet been vaccinated receive a 3-dose primary series with an authorized mRNA COVID-19 vaccine or an additional dose of an authorized mRNA COVID-19 vaccine if they have already completed a primary vaccine series. [10] NACI also recommends that adult residents of long-term care facilities and seniors living in other congregate living settings who completed a primary vaccine series more than 6 months ago should receive a booster dose of an authorized mRNA COVID-19 vaccine. [10] For the most up-to-date NACI COVID-19 vaccine guidelines and recommendations, please go to National Advisory Committee on Immunization (NACI): Statements and publications - Canada.ca. Information about COVID-19 vaccine eligibility and clinics in the LGH region can be found at the LGH Vaccine Portal (www.lghealth.ca/vaccine).

As SARS-CoV-2 continues to circulate, gene mutations develop which can affect transmissibility of the virus, severity of disease, vaccine effectiveness, drug treatments, and diagnostic testing. [13, 15] Variants of SARS-CoV-2 that have major mutations in the virus structure are referred to as Variants of Concern (VOC). [15] Current VOCs in Canada include Alpha (B.1.1.7), Beta (B.1.351), Gamma (P.1), and Delta (B.1.617.2). [15] At least two of these variants, namely Alpha and Delta, may spread more easily and there are additional concerns that vaccines may not be as efficacious against Beta, Delta, and Gamma. [15]

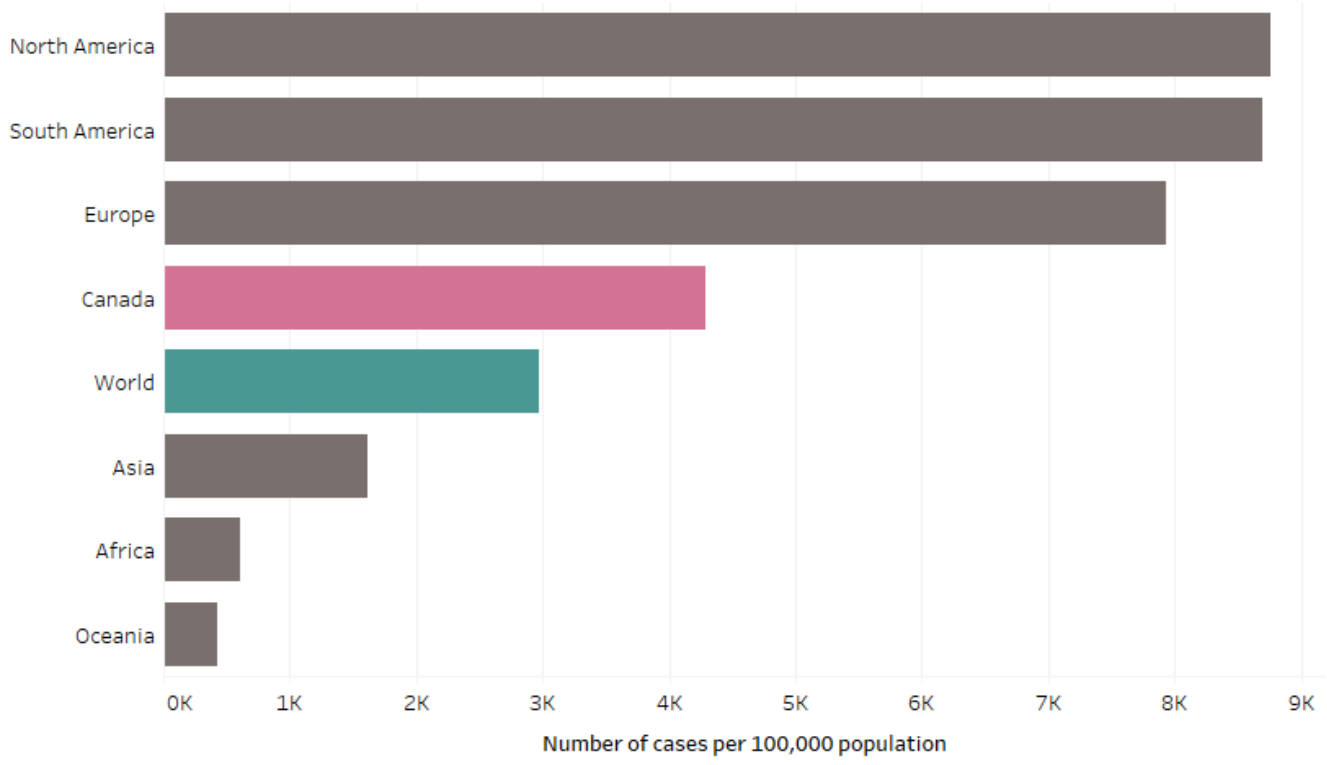
Epidemiology of COVID-19

As of October 13, 2021, the World Health Organization (WHO) reported over 238.2 million confirmed cases of COVID-19 and 4.8 million deaths from COVID-19 worldwide. [16] The Region of the Americas recorded the highest number of confirmed COVID-19 cases at more than 91.5 million, as well as the highest number of deaths at more than 2.2 million. [16]

As shown in Figure 1, the highest regional cumulative rate of reported COVID-19 infection is in North America (8.761.9 cases per 100,000), while the lowest is in Oceania (422.9 cases per 100,000). [17] The highest cumulative case rate is in the country of Seychelles (21,709.4 per 100,000), located in the Africa region. [17]

As of September 30, 2021, there has been a cumulative total of 1,624,732 cases of COVID-19 with 1,551,619 recoveries and 27,871 deaths in Canada. [18] The cumulative rate of COVID-19 infection in Canada of 4,275.0 per 100,000 [18] is higher than the global rate (2,968.5 per 100,000) [17].

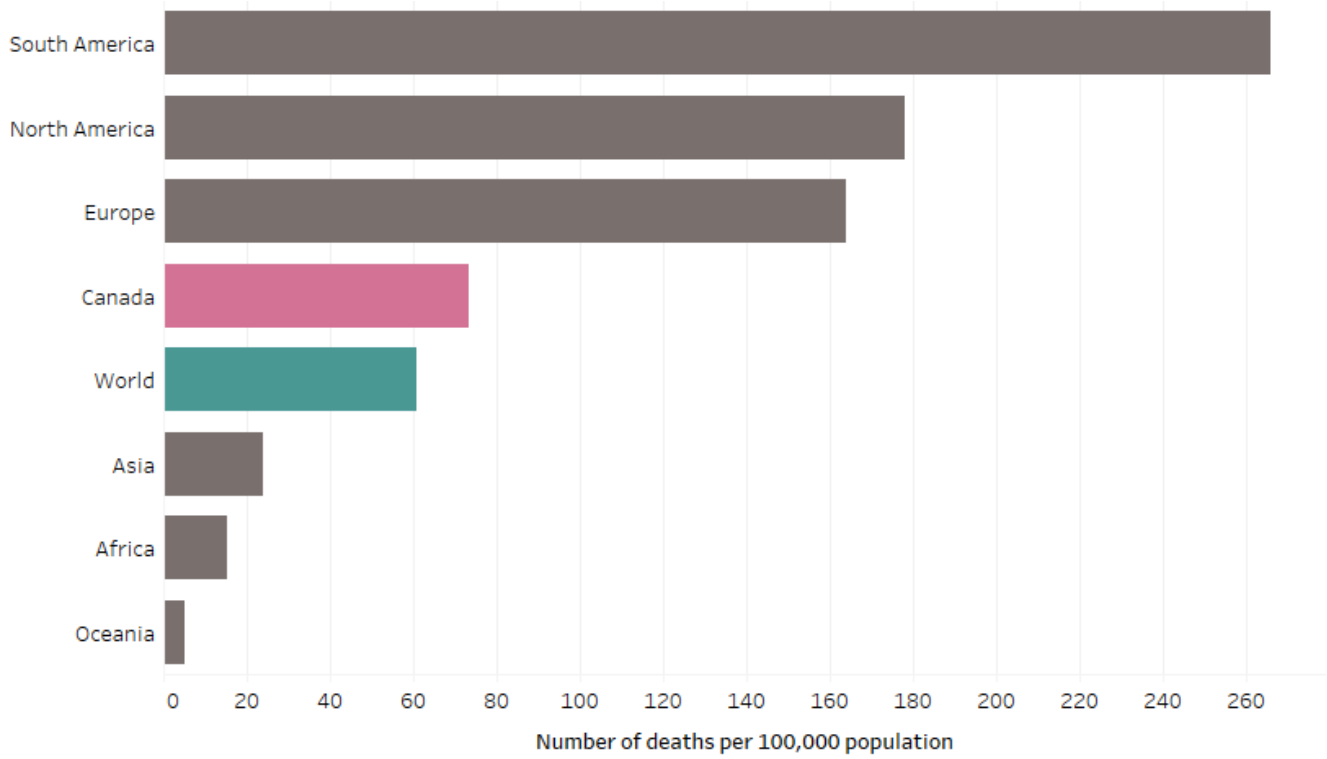
Figure 1. Comparison of Cumulative Reported Case Rate of COVID-19 in the World, Global Regions, and Canada, as of September 30, 2021.



Note: Figure constructed from analysis performed on dataset downloaded from Our World in Data, Global Change Data Lab, University of Oxford; 2021 Oct 14 [cited 2021 Oct 15]. Available from: https://ourworldindata.org/explorers/coronavirus-data-explorer.

The region with the highest cumulative death rate from COVID-19 infection is South America (266.0 per 100,000). [17] The highest cumulative death rate in the world is in the country of Peru (597.6 per 100,000), which is in South America. [17] Canada's COVID-19 death rate of 73.3 per 100,000 is higher than the overall global death rate (60.7 per 100,000). [17, 18] Please see Figure 2 for a comparison between global, global regional, and Canadian death rates.

Figure 2. Comparison of Cumulative Reported Death Rate Due to COVID-19 in the World, Global Regions, and Canada, as of September 30, 2021.



Note: Figure constructed from analysis performed on dataset downloaded from Our World in Data, Global Change Data Lab, University of Oxford; 2021 Oct 14 [cited 2021 Oct 15]. Available from: https://ourworldindata.org/explorers/coronavirus-data-explorer.

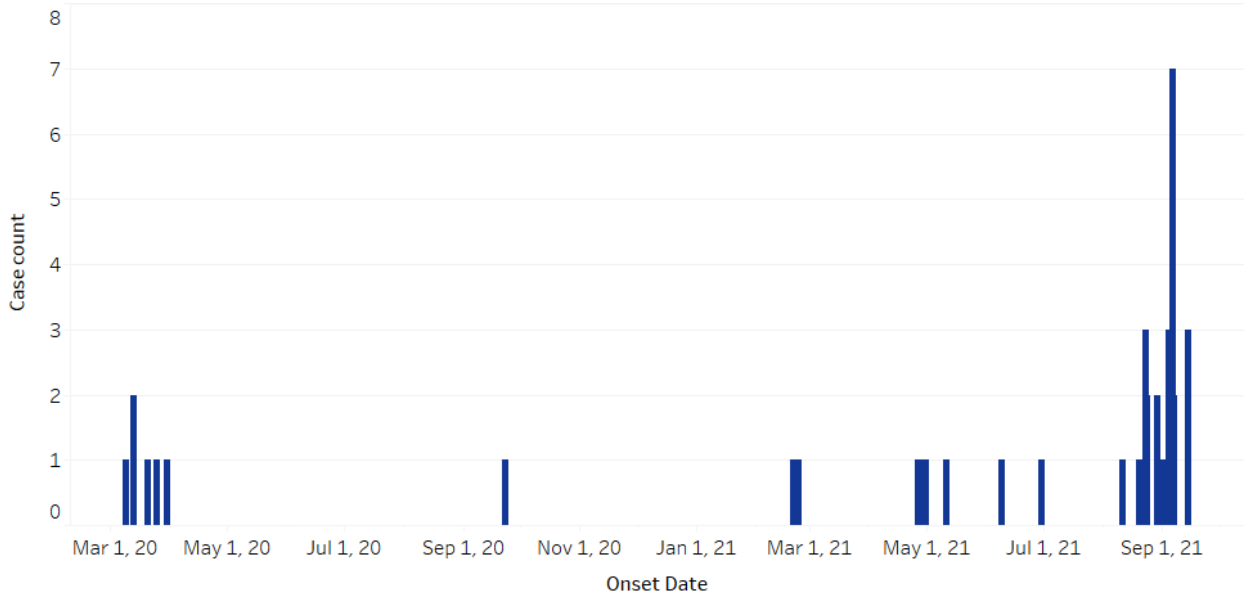
Over recent months, the Delta variant has accounted for an increasing proportion of samples sequenced via whole genome sequencing, such that by the week of September 5, 2021, 99.3% of all samples sequenced in Canada were Delta variant, while Alpha and other variants were present in less than 1% of sequenced samples. [19]

Epidemiology of COVID-19 in the LGH Region

There has been a total of 41 confirmed cases and an overall cumulative case rate of 113.5 cases per 100,000 population in the LGH region since the first known case of COVID-19 in the region was identified on March 13, 2020. [20]

As shown in the epidemic curve in Figure 3, six cases were identified in the LGH Region in March 2020 and, for the remainder of 2020, only one other COVID-19 case was identified. [20] During 2021, disease activity was sporadic until the current quarter, when 63.4% (n=26) of all COVID-19 cases identified in the LGH region were diagnosed. [20] Most of these cases were associated with a cluster of cases that emerged in the Roddickton-Bide Arm area of the Northern Peninsula on September 3, 2021, comprising 51.2% (n=21) of all known cases in the LGH region during the entire pandemic. [20] After the last active case from this cluster recovered on September 25, 2021, there was no additional disease activity up to the end of September 2021. [20]

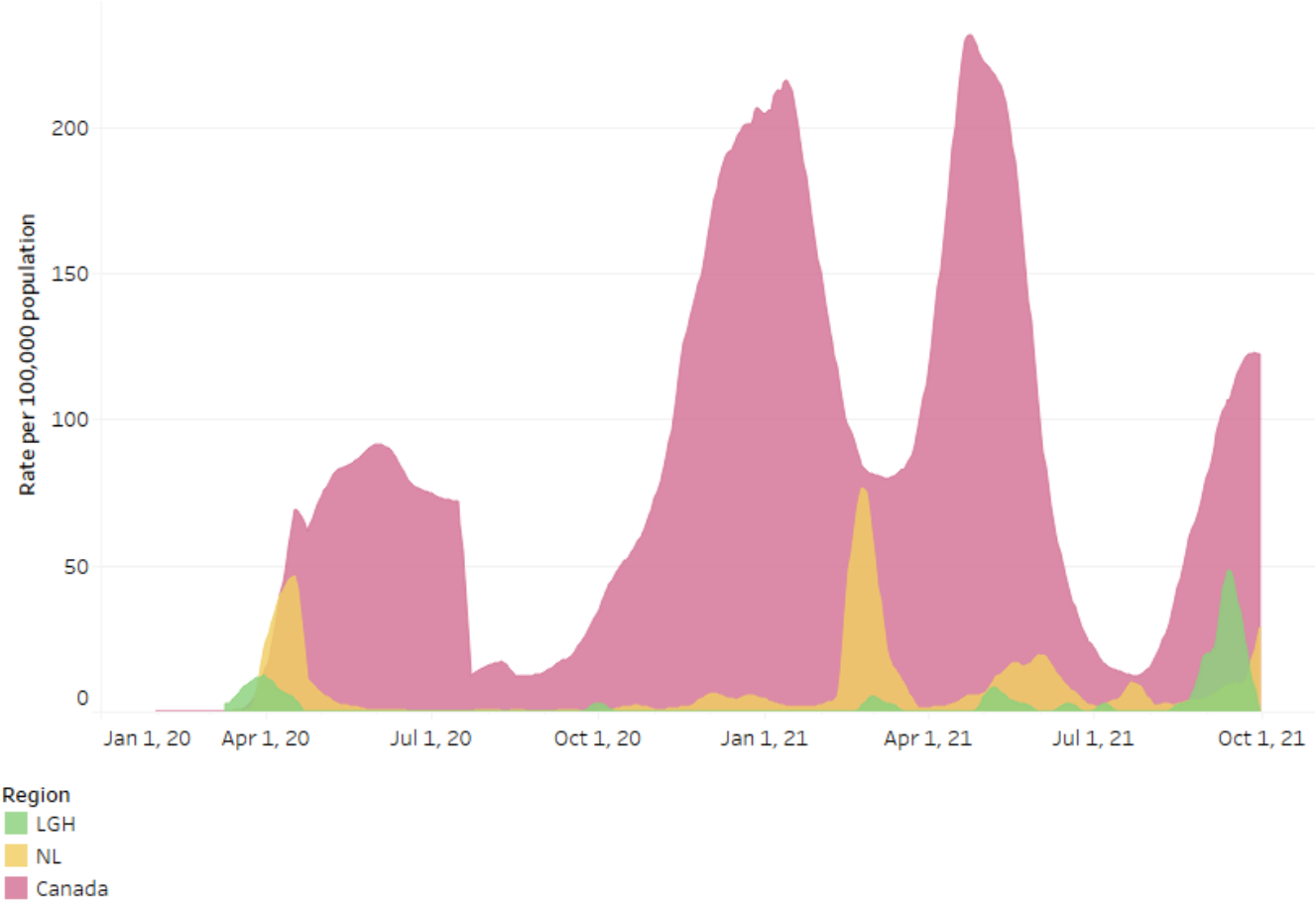
Figure 3. Epidemic Curve of Confirmed COVID-19 Cases in the LGH Region (up to September 30, 2021).



Note: 1. The onset date is the earliest of either the symptom onset date or specimen collection date of the first positive PCR test.
2. Data sourced from COVID-19 Tracker. St. John's: Government of Newfoundland and Labrador; 2021 Oct 1 [cited 2021 Oct 1].

As shown in Figure 4, there have been distinct waves of increased COVID-19 activity with notable differences in timing and duration. The highest daily active case rate in the LGH region was from September 9 to September 11, 2021, when the 7-day moving average peaked at 49.9 cases per 100,000. [20] Meanwhile, at the national level, the highest daily active case rate occurred on April 18, 2021, when the 7-day moving average case rate peaked at 236.5 per 100,000. [17] The highest daily active case rate in NL occurred on February 20, 2021, with a peak 7-day moving average active case rate of 83.7 per 100,000. [17]

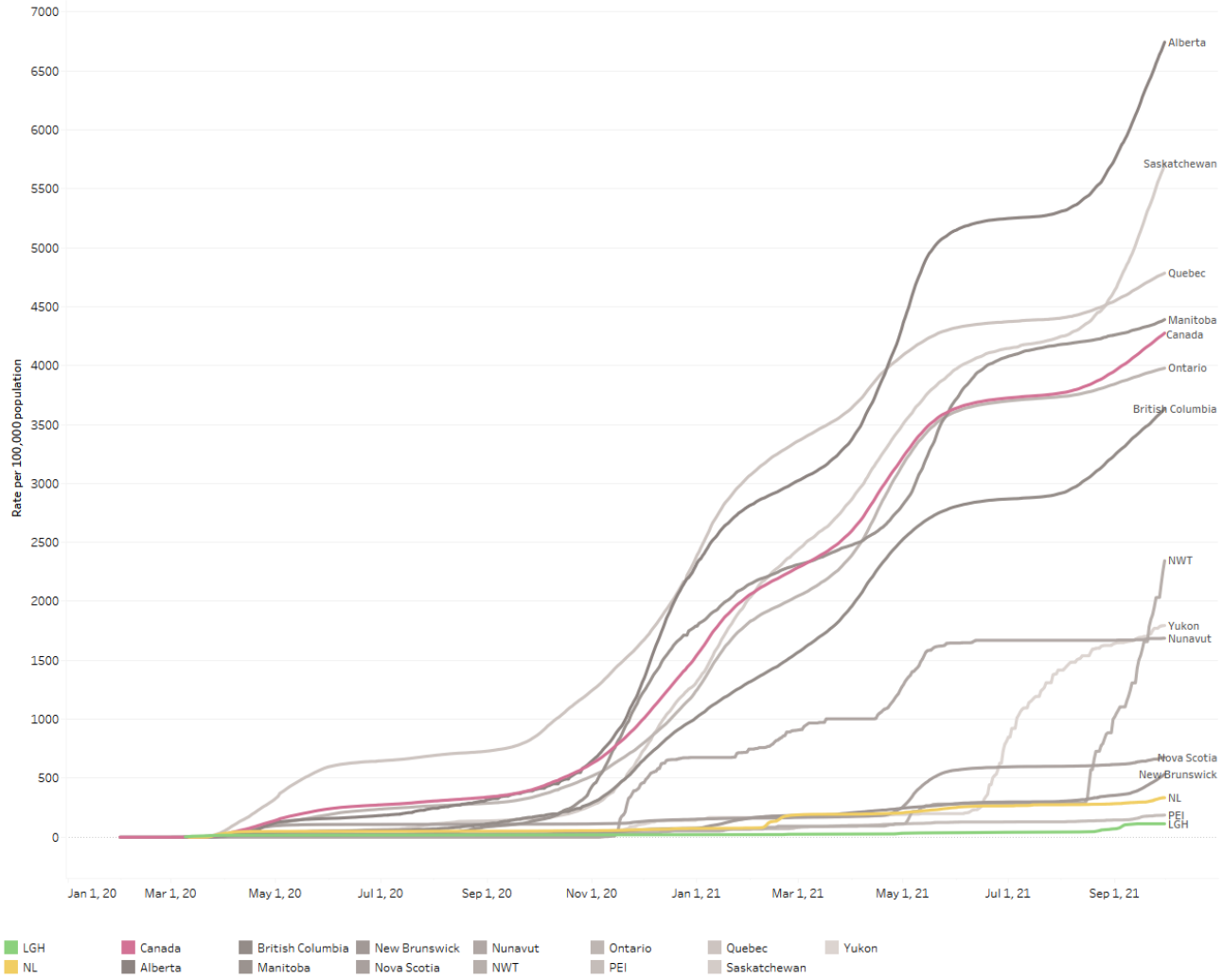
Figure 4. Comparison of 7-Day Moving Average Rate of Active COVID-19 Cases in Canada, NL, and LGH, Over Time (up to September 30, 2021).



Note: 1. Data for Canada and NL sourced from COVID-19 dataset download [Internet]. Ottawa: Public Health Agency of Canada; 2021 Oct 13 [cited 2021 Oct 13]. Available from: https://health-infobase.canada.ca/src/data/covidLive/covid19-download.csv.
2. Numerator data for LGH region sourced from COVID-19 Tracker. St. John's: Government of Newfoundland and Labrador; 2021 Oct 1 [cited 2021 Oct 1].
3. Denominators used for LGH rate calculations were sourced from Table 17-10-0134-01 Estimates of population (2016 Census and administrative data), by age group and sex for July 1st, Canada, provinces, territories, health regions (2018 boundaries) and peer groups. Ottawa: Statistics Canada; 2021 Aug 19 [cited 2021 Aug 30]. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1710013401

The overall cumulative case rate in the LGH region for the duration of the pandemic up to September 30, 2021 was 113.5 cases per 100,000. [20] Comparatively, the cumulative case rates in NL and Canada over the same period were both higher, at 334.6 cases per 100,000 and 4,275.0 cases per 100,000, respectively. [18] As of September 30, the highest cumulative case rate in Canada is in Alberta (6,743.1 per 100,000) while the lowest is in Prince Edward Island (187.3 per 100,000). [18] Newfoundland and Labrador's cumulative case rate is the second lowest in Canada and well below the national cumulative rate. [18] See Figure 5 for a provincial and territorial comparison of the COVID-19 cumulative case rate over time.

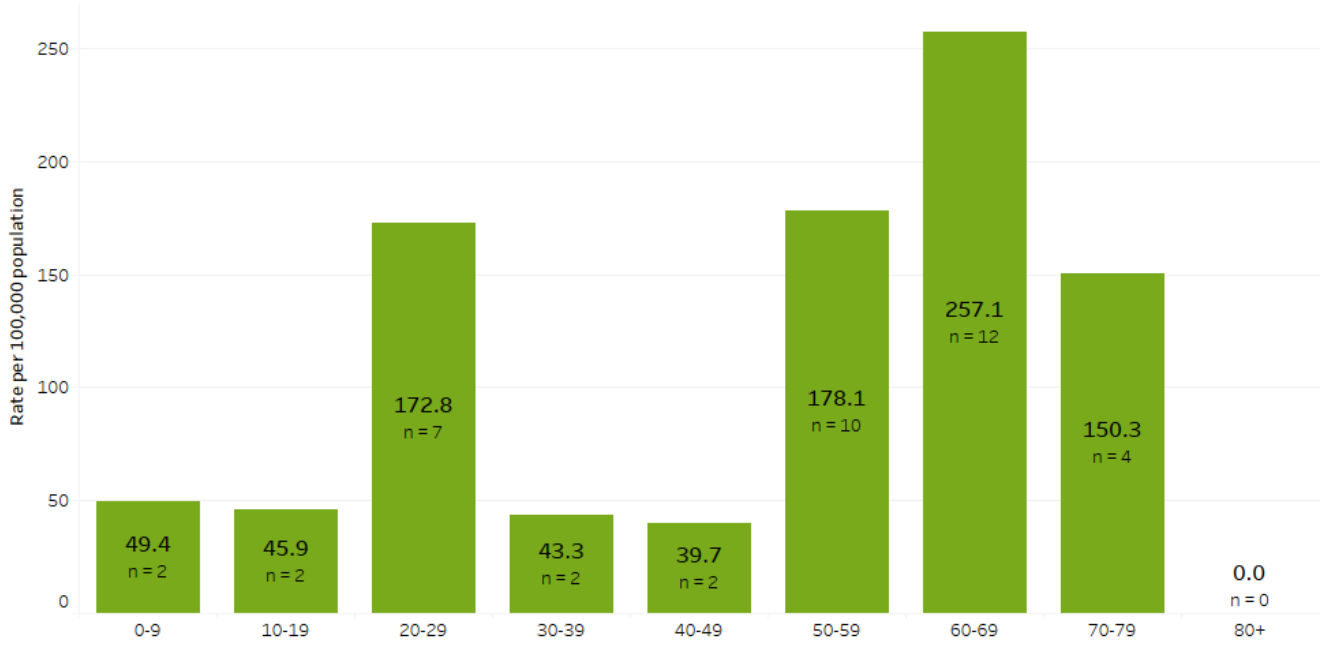
Figure 5. Comparison of the Cumulative Rate of Confirmed COVID-19 Cases in Canada, Provinces & Territories, and LGH Region Over Time (up to September 30, 2021).



Note: 1. National and provincial data sourced from COVID-19 dataset download [Internet]. Ottawa: Public Health Agency of Canada; 2021 Oct 13 [cited 2021 Oct 13]. Available from: https://health-infobase.canada.ca/src/data/covidLive/covid19-download.csv and COVID-19 Tracker.
2. LGH numerator data sourced from COVID-19 Tracker. St. John's: Government of Newfoundland and Labrador; 2021 Oct 1 [cited 2021 Oct 1]. *3. Denominators used for LGH rate calculations were sourced from Table 17-10-0134-01 Estimates of population (2016 Census and administrative data), by age group and sex for July 1st, Canada, provinces, territories, health regions (2018 boundaries) and peer groups. Ottawa: Statistics Canada; 2021 Aug 19 [cited 2021 Aug 30]. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1710013401.*

The median age of a COVID-19 case in the LGH region was 54.0 years old. [20] The median age of females was slightly higher than males, at 54.0 years old and 52.5 years old, respectively. [20] As shown in Figure 6, the highest number and rate of cases occurred among those age 60 to 69 years. [20] The second highest case numbers and rates occurred in the 50 to 59- year-old age group, followed by the 20 to 29-year-old age group. [20] There were no cases in those over the age of 80 years old. [20]

Figure 6. Cumulative COVID-19 Case Rates in the LGH Region, by Age Group.



Note: 1. LGH numerator data sourced from COVID-19 Tracker. St. John's: Government of Newfoundland and Labrador; 2021 Oct 1 [cited 2021 Oct 1].
2. Denominators used for LGH rate calculations were sourced from Table 17-10-0134-01 Estimates of population (2016 Census and administrative data), by age group and sex for July 1st, Canada, provinces, territories, health regions (2018 boundaries) and peer groups. Ottawa: Statistics Canada; 2021 Aug 19 [cited 2021 Aug 30]. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1710013401.

Overall, in the LGH region, 56.1% (n=23) of cases were female and 43.9% (n=18) were male. [20] The overall case rates were also higher amongst females at 129.2 cases per 100,000, as opposed to 98.3 cases per 100,000 for males. [20] The breakdown of cases by gender and age group in the LGH region is presented in Table 6, which shows that the highest case rate was in females between age 60 and 69 years old. [20]

Table 6. Cumulative COVID-19 Case Rates (per 100,000 Population) in the LGH Region, by Gender and Age Group.

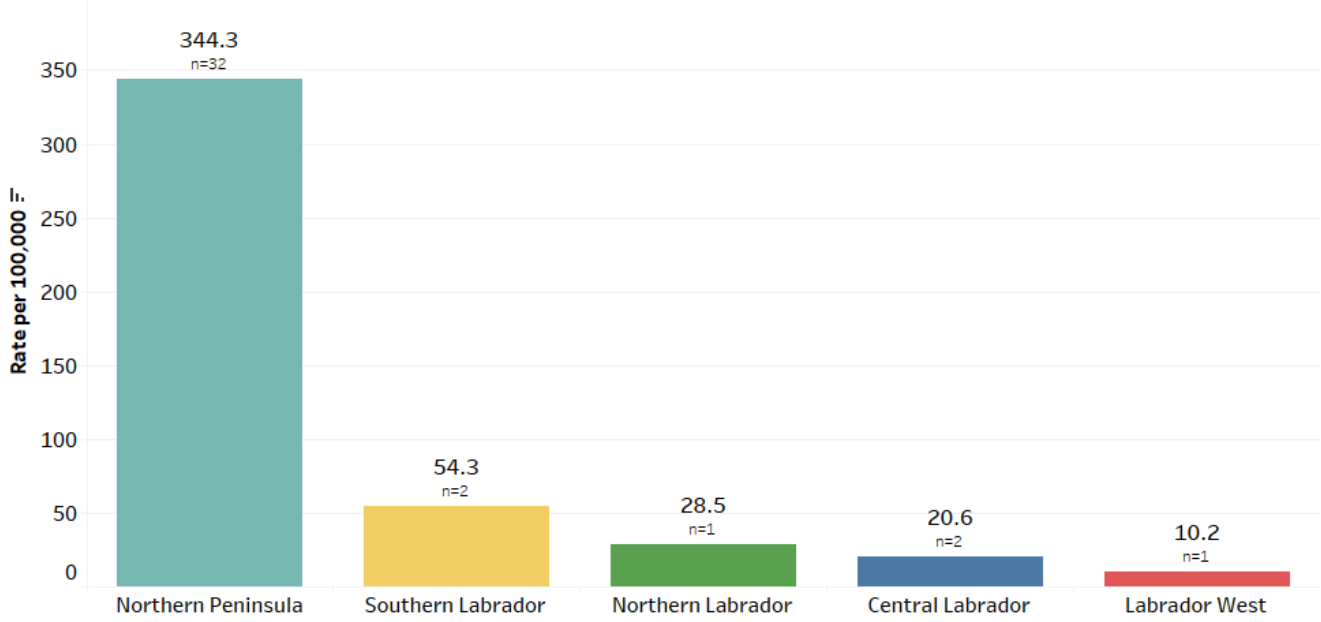
	Female	Male
0-9	102.2	0.0
10-19	0.0	86.9
20-29	200.7	145.8
30-39	83.3	0.0
40-49	40.1	39.3
50-59	146.9	207.4
60-69	349.8	168.1
70-79	150.2	150.5
80+	0.0	0.0

0.0 349.8

Note: 1. LGH numerator data sourced from COVID-19 Tracker. St. John's: Government of Newfoundland and Labrador; 2021 Oct 1 [cited 2021 Oct 1].
2. Denominators used for LGH rate calculations were sourced from Table 17-10-0134-01 Estimates of population (2016 Census and administrative data), by age group and sex for July 1st, Canada, provinces, territories, health regions (2018 boundaries) and peer groups. Ottawa: Statistics Canada; 2021 Aug 19 [cited 2021 Aug 30]. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1710013401.

Seventy-eight percent (n=32) of all COVID-19 cases in the LGH region occurred among residents of the Northern Peninsula primary healthcare zone. [20] As shown in Figure 7, the Northern Peninsula also had the highest case rate in the region (344.3 cases per 100,000), while Labrador West had the lowest case rate (10.2 cases per 100,000). [20] Three (7.3%) of the cases that were diagnosed and followed in the LGH region were non-LGH residents. [20]

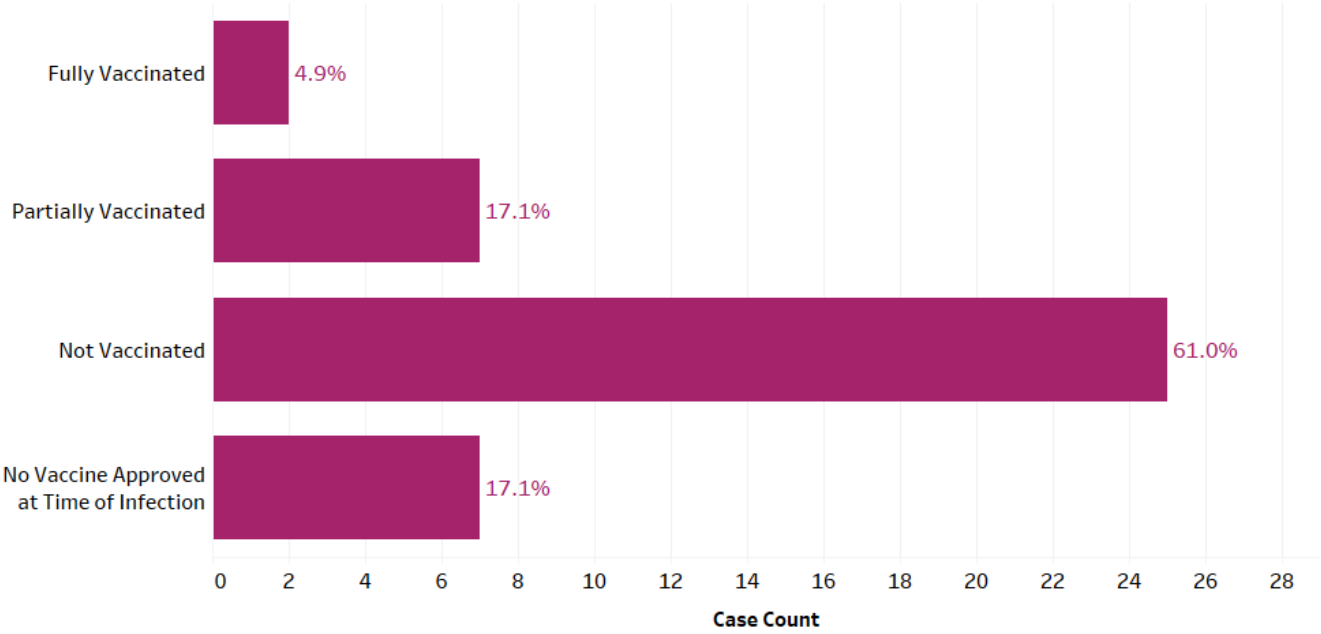
Figure 7. Cumulative Rate of Confirmed COVID-19 Cases in the LGH Region, by Primary Healthcare Zone of Residence.



Note: 1. LGH numerator data sourced from COVID-19 Tracker. St. John's: Government of Newfoundland and Labrador; 2021 Oct 1 [cited 2021 Oct 1].
2. Denominator data for the LGH Primary Healthcare zones was sourced from Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X201600 [Internet]. Ottawa: Statistics Canada; 2017 Nov [cited 2019 Dec 10]. Available from: www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E

As shown in Figure 8, only 4.9% of confirmed cases in the LGH region were fully vaccinated (received two doses of an approved vaccine and 14 days elapsed since second dose) at the time of infection, while 17.1% were partially vaccinated (received either only one dose of an approved vaccine or less than14 days had elapsed between the vaccination date with a second dose and illness onset date). [20] The vast majority of cases, a total of 78.1%, were unvaccinated at the time of infection; however, it should be noted that for 17.1% of cases, no COVID-19 vaccines were approved in Canada at the time of infection. [20]

Figure 8. Vaccination Status of Confirmed COVID-19 Cases in the LGH Region.



Note: Data sourced from COVID-19 Tracker. St. John's: Government of Newfoundland and Labrador; 2021 Oct 1 [cited 2021 Oct 1].

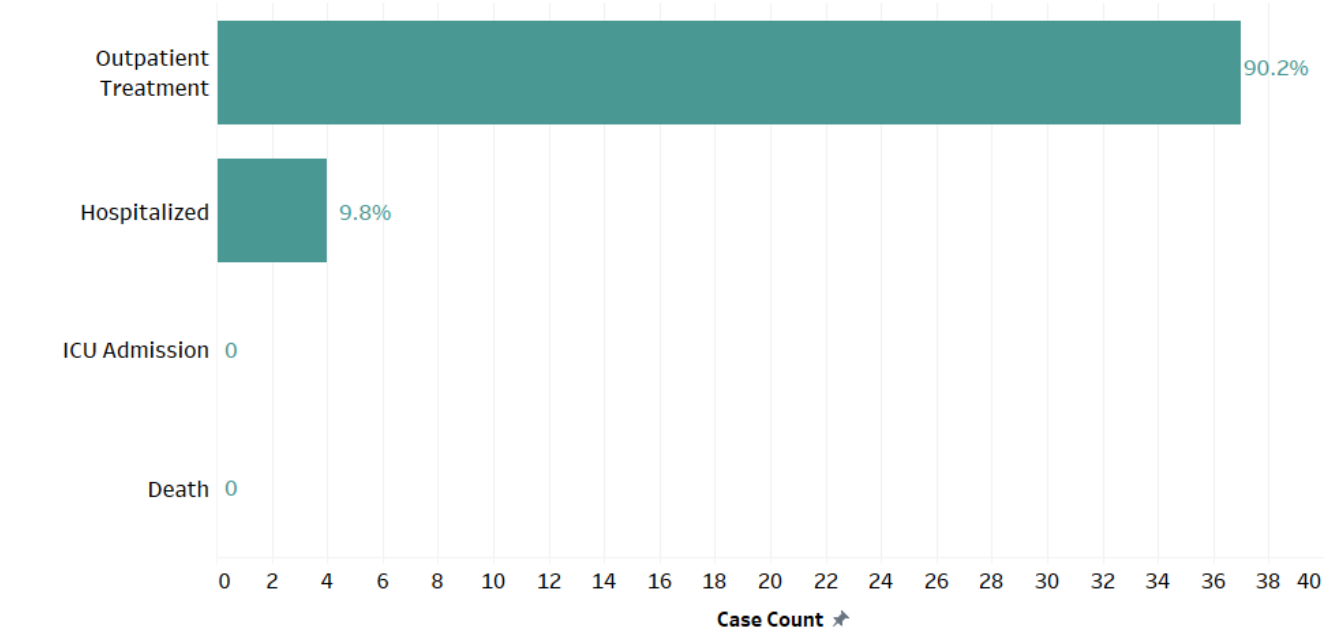
In the LGH region, 68.3% of confirmed cases reported having at least one symptom during the course of the illness, while the remaining 31.7% were asymptomatic throughout. [20] All cases who were fully vaccinated at the time of their illness were asymptomatic (n=2), while all cases who were partially vaccinated reported at least one symptom during the course of the illness (n=7). [20] Among the unvaccinated, 34.3% of cases were asymptomatic, while the remaining 65.6% reported at least one symptom. [20]

In LGH, the median number of contacts identified per case is 7 and the median number of contacts per case who were confirmed COVID-19 cases was 2. [20] For 92.7% of confirmed cases in the LGH region, at least one potential exposure could account for the transmission of the virus. [20] 75.6% of all cases had a history of contact with a known COVID-19 case, 43.9% had a personal history of travel within the 14 days prior to onset (including travel to another region within the province), and 14.6% had a history of contact with an individual who had recently travelled. [20] However, for the remaining 7.3% of cases, no other confirmed cases were linked to the case, nor was another potential source of exposure to SARS-CoV-2, such as a recent history of travel, identified. [20]

For the 43.9% of confirmed cases with a history of travel in the 14 days prior to onset, the travel was primarily domestic, either to another region in the province or within Canada. Only 7.3% of cases had a history of international travel within the previous 14 days, while 29.3% had a history of travel out of the province but within Canada. [20] A small proportion of cases, 9.8%, had a history of travel to another region within the province (i.e., to another regional health authority). [20] The remaining 56.1% had no history of travel within the 14 days prior to onset. [20]

As shown in Figure 9, in terms of treatment and case outcomes, the LGH region fared well. Only 9.8% (n=4) were hospitalized during their illness, while the remaining 90.2% (n=37) were monitored as outpatients. [20] There were no ICU admissions or deaths. [20] The median length of hospital admission for the cases who were hospitalized was 6.5 days. [20] All of the hospitalized cases were unvaccinated. [20] The median time from illness onset (earliest of either symptom onset date or specimen collection date) to recovery was 13.0 days. [20]

Figure 9. Treatments and Case Outcomes for Confirmed COVID-19 Cases in the LGH Region.



Note: Data sourced from COVID-19 Tracker. St. John's: Government of Newfoundland and Labrador; 2021 Oct 1 [cited 2021 Oct 1].

Summary

Prior to the current quarter, COVID-19 disease activity in the LGH region was sporadic and limited. However, there has been an increase in COVID-19 activity in the LGH region during the current quarter, such that 63.4% of all known COVID-19 cases in the region were diagnosed during this 3-month period. Rates of COVID-19 infection have been highest among females, 60- to 69-year-olds, and in the Northern Peninsula PHC zone. Only a small portion of cases (4.9%) have been fully vaccinated, but all of these cases were asymptomatic during the course of their illness and none were hospitalized. Although 9.8% of confirmed cases were hospitalized, there were no deaths and 100% of confirmed COVID-19 cases in the LGH region recovered from the infection.

Conclusion

The ongoing COVID-19 pandemic continues to be a significant public health concern in the LGH region. Although the cumulative rate of COVID-19 infection in the LGH region has been relatively low compared to provincial and Canadian rates and disease activity has tended to be sporadic, a recent cluster of cases during August-September 2021 resulted in the highest rate of active cases in the LGH region during the pandemic. This underlines the importance of continued disease surveillance to detect increased disease activity and to institute appropriate public health measures which curtail the spread of disease and limit adverse outcomes. Vaccines are an important tool to protect public health and all efforts should be made to encourage COVID-19 vaccination among eligible residents of the LGH region. In addition, public health measures, such as physical distancing, gathering limits, and masking, play an important role in limiting the spread of COVID-19, and should be observed as per current local public health guidelines.

Technical Notes

Data Sources

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Definitions

5-Year Historical Median: Middle value of quarterly counts over the previous 5 calendar years.

YTD: Year-to-Date

Upper threshold: Calculated using the 3rd quartile + 1.5 * interquartile range for each quarter, over the previous 5 calendar years.

Central Labrador: Region located in the Lake Melville area, which includes the communities of Happy Valley-Goose Bay, North West River, Sheshatshiu, and Mud Lake.

Labrador West: Region located in the western region of Labrador, which includes the communities of Labrador City, Wabush, and Churchill Falls.

Northern Labrador: Region located in northern Labrador, which includes the communities of Rigolet, Postville, Makkovik, Hopedale, Nain, and Natuashish.

Northern Peninsula: Region stretching north from Bartlett's Harbour on the western side and Englee on the eastern side, up to the northernmost reaches of the Northern Peninsula of Newfoundland, which includes communities such as St. Anthony, Roddickton, and Flower's Cove.

Southern Labrador: Region spanning the southern coast and straits of Labrador, which includes all communities from Cartwright to L'Anse au Clair.

Note

This report was prepared by Krista Baker, Public Health Information Management Analyst, Labrador-Grenfell Health.

Data analysis was performed with Microsoft Excel and Tableau computer software.

Any questions about this report should be directed to CDCintake@lghealth.ca

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