Nova Scotia Monthly COVID-19 Epidemiologic Summary:
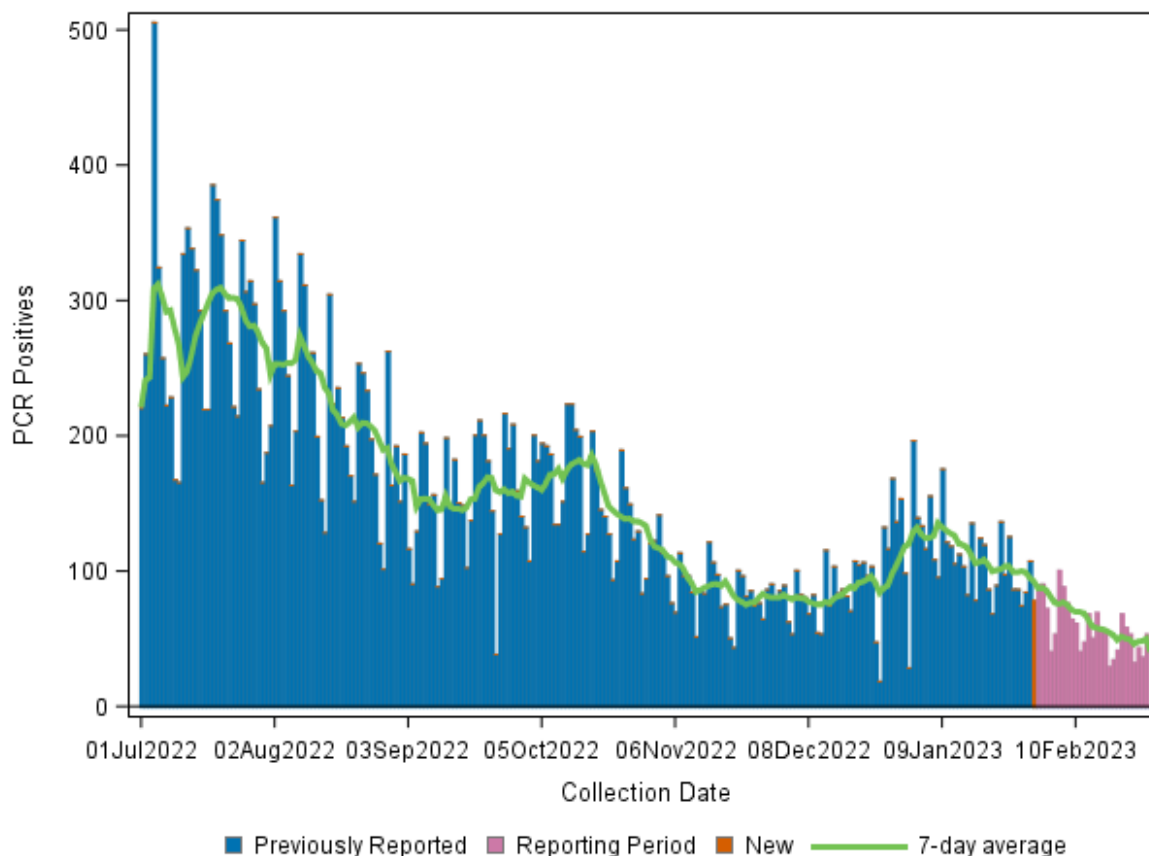### March 07, 2023

Public Health Branch
Nova Scotia Department of Health and Wellness

Highlights:

- A total of 1,595 PCR positive results, 119 hospitalizations and 15 deaths from COVID-19 were observed during the month of February 2023.

- The number of PCR positive results, hospitalizations and deaths decreased in February 2023 compared to January 2023.

- Of the 15 deaths that occurred in February, 87% (13) were in people aged 70 years and older and 33% (5) were in people residing in a long-term care facility.

- Age and under-vaccination continue to be associated with severe outcomes:

    - Nova Scotians aged 70+ are 29 times more likely to have been hospitalized compared to 18-49 years of age and are 28 times more likely to die compared to 50-69 years of age.

    - Nova Scotians who were unvaccinated or had not completed their primary series were hospitalized and died at two times the rate as those who received a booster within 168 days.

COVID-19 Cases

Figure 1: Number and seven-day moving average of PCR positive results by collection date, 1 July 2022 to 28 February 2023 (N=35,439)
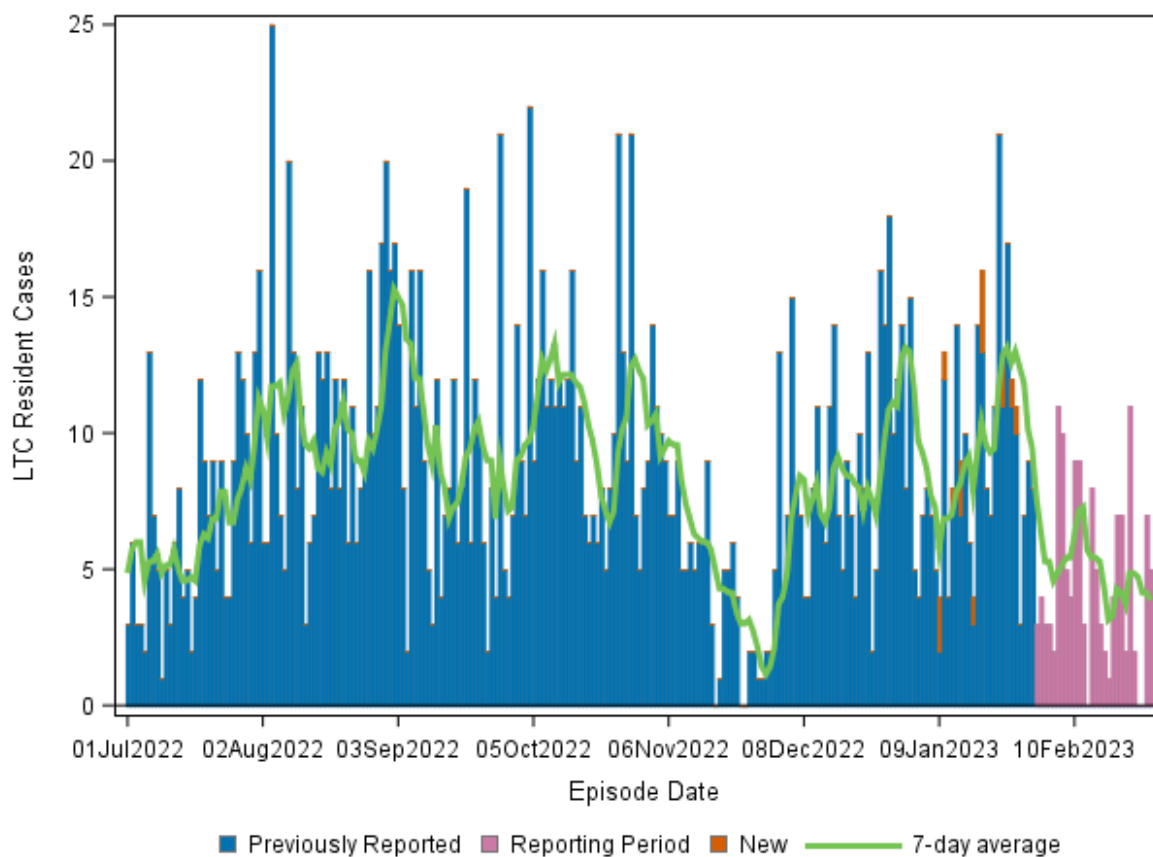

Data source: PPHLN
Notes:
- Laboratory tests are also referred to as PCR (polymerase chain reaction) tests.
- Access to PCR tests are restricted to eligible populations as outlined in the following link: https://www.nshealth.ca/coronavirustesting.
- Only the first instance of a PCR positive test within a 90-day period is counted for each individual. Multiple positive tests within the 90-day period are considered the same infection. A PCR positive test 90-days or more from the date of the initial positive test are be counted as a new infection.
- **Previous Reported** refers to PCR positives that were included in previous COVID-19 monthly reports.
- **Reporting Period** refers to new PCR positives that occurred within the current monthly reporting period.
- **New** refers to PCR positives that occurred prior to the current monthly reporting period but were not included in prior reports due to lags in notification.

Figure 2: Number and seven-day moving average of COVID-19 cases among long-term care residents by episode date, 1 July 2022 to 28 February 2023 (N= 1997)
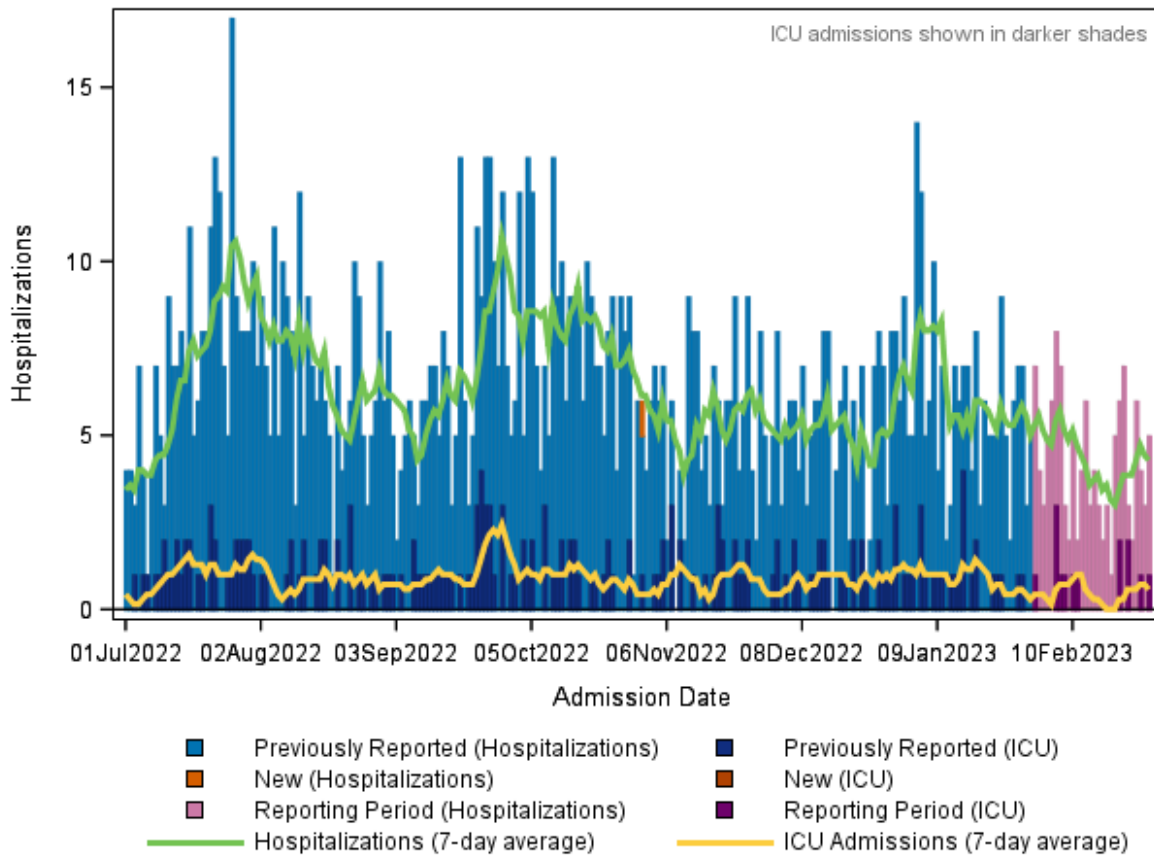

Data source: Panorama
Notes:
- LTC cases reflect positive PCR tests for COVID-19 among long-term care facility residents.
- **Previously Reported** refers to PCR positives that were included in previous COVID-19 monthly reports.
- **Reporting Period** refers to new PCR positives that occurred within the current monthly reporting period.
- **New** refers to PCR positives that occurred prior to the current monthly reporting period but were not included in prior reports due to lags in notification.

COVID-19 Serious Outcomes

Figure 3: Daily COVID-19 hospital and ICU admissions, 1 July 2022 to 28 February 2023 (N=1513)
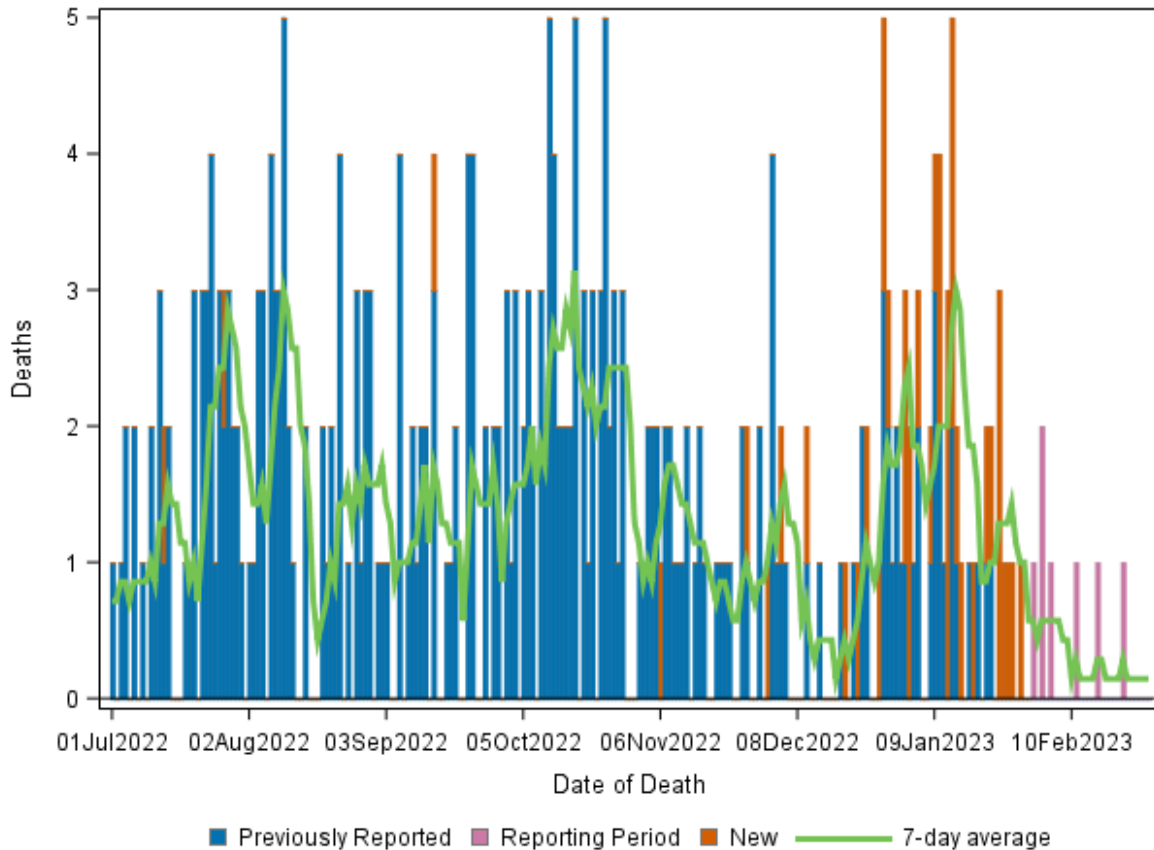

Data source: PPHLN, Meditech and STAR
Notes:
- **Previously Reported** refers to hospitalizations that were included in previous COVID-19 monthly reports.
- **Reporting Period** refers to new hospitalizations that occurred within the current monthly reporting period.
- **New** refers to hospitalizations that occurred prior to the current monthly reporting period but were not included in prior reports due to lags in notification.

Figure 4: Number and seven-day moving average of COVID-19 deaths, 1 July 2022 to 28 February 2023 (N=315)

Data source: Panorama

Notes:
- **Previous Reported** refers to deaths that were included in previous COVID-19 monthly reports.
- **Reporting Period** refers to new deaths that occurred within the current monthly reporting period.
- **New** refers to deaths that occurred prior to the current monthly reporting period but were not included in prior reports due to lags in notification.

Table 1: PCR positive results, hospitalizations and deaths

	Number in reporting month	Number in previous month	Change from last month	Totals since 1 July 2022	Age range (years)	Median age (years)	Median LoS (days)
PCR Positives	1595	3389	-1794	35439	0 - 110	57	n/a
Hospitalizations	119	189	-70	1513	0 - 102	75	7.0
Deaths	15	53	-38	315	14 - 107	84	n/a

Data Sources: PCR positive results – Provincial Public Health Lab Network; Hospitalizations – PPHLN, Meditech, STAR; Deaths – Panorama
*Notes:
- Laboratory tests used to confirm the diagnosis of COVID-19 are PCR (polymerase chain reaction) tests.

Table 2: Hospitalization* and death rates by age group, 1 July 2022 to 28 February 2023

	Number	Crude rate per 100K	Relative Risk
Hospitalizations			
<18 years	27	16.2	0.7
18-49 years**	87	22.7	1.0
50-69 years	388	133.3	5.9
70+ years	1011	650.2	28.6
Deaths			
<50 years	1	0.2	0.0
50-69 years**	20	6.9	1.0
70+ years	294	189.1	27.5

Data sources: Hospitalizations - PPHLN, Meditech and STAR; Deaths – Panorama; Denominator - Statistics Canada
Notes:
- * Hospitalizations for individuals missing age are excluded from analyses (counts, crude rates, relative risk)
- ** Denotes reference category. All risks are presented in comparison to the reference category. Comparisons are made by dividing the age-specific rates in the age category of interest to the age-specific rates in the reference category.

Table 3: Age-adjusted hospitalization[*] and death rates by vaccine status, 1 July 2022 to 28 February 2023

Vaccination Status	Number	Crude Rate per 100k Person-Years	Age-Adjusted Rate per 100k Person-Years
Hospitalizations			
Primary Series Incomplete	209	168.2	455.1
Primary Series Complete (not boosted)	228	120.9	312.9
Boosted (last dose >168 days prior)	523	248.0	236.3
Boosted (<168 days prior)	553	412.1	235.2
Deaths			
Primary Series Incomplete	34	27.4	92.4
Primary Series Complete (not boosted)	30	15.9	58.8
Boosted (last dose >168 days prior)	106	50.3	50.8
Boosted (<168 days prior)	145	104.6	40.6

Data sources: Hospitalizations - PPHLN, Meditech and STAR; Deaths – Panorama; Denominator - Statistics Canada
Notes:
- * Hospitalizations for individuals missing age are excluded from the analysis (counts, crude rates, age-adjusted rates,)
- **primary series incomplete** refers to those who have one or fewer doses of any COVID-19 vaccine (save for Johnson & Johnson, wherein the initial dose counts as a complete series)
- **primary series complete** refers to those who have received two doses of any COVID-19 vaccine (or a single dose of Johnson & Johnson) but no subsequent dose
- Boosted refers to those who have completed their primary series and received at least one additional dose of any COVID-19 vaccine.
- The 168 day window is based on the current provincial immunization recommendations: https://novascotia.ca/news/release/?id=20220826001

Table 4: Summary of confirmed and probable COVID-19 cases and outcomes, 1 July 2022 to 28 February 2023

	Province-Wide
Number of cases	35,439
Hospitalized (%)	4.3%
ICU (%)	0.6%
Deceased (%)	0.9%

Data sources: PCR positives PPHLN; Hospitalizations Meditech and STAR; Deaths Panorama

Notes:
- PCR testing criteria have changed at various points in the pandemic. Comparisons with historical data should be made with caution.
- Access to PCR tests is restricted to eligible populations as outlined in the following link: https://www.nshealth.ca/coronavirustesting.

Data Sources and Notes:

Panorama

- Data are valid to the day of the report at 04:00.
- Data presented in this report contain the information available at the time of data extraction. It may be incomplete pending follow-up. As more information becomes available, it will be included in subsequent reports.

Provincial Public Health Laboratory Network

- Data are valid to the day of the report at 05:30.
- Data presented in this report contain the information available at the time of data extraction. It may be incomplete pending follow-up. As more information becomes available, it will be included in subsequent reports.

Meditech and STAR (Nova Scotia Health)

- Data are valid to the day of the report at 04:00.
- Data are based on positive lab results and reflect patients with a valid health card number at the time of testing or admission.
- Data presented in this report contain the information available at the time of data extraction. It may be incomplete pending follow-up. As more information becomes available, it will be included in subsequent reports.

COVID-19 Case Definitions

https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/national-case-definition.html

COVID-19 Hospitalization Definitions

Hospitalization: A person admitted to hospital with a positive PCR for SARS-CoV-2 within 14 days of admission, or up to 3 days post-admission and with no epidemiologic link to the hospital (i.e., excluding nosocomial infection), and excluding specialized service unrelated to COVID-19 (e.g., surgery, obstetrics, etc).

ICU: A person admitted for at least 24 hours to the ICU and with a positive PCR for SARS-CoV-2 within 14 days prior to ISU admission or anytime after hospital admission.