COVID-19 and Influenza: Integration Plan

March 17, 2023

Overview

- As we continue to live with COVID-19, we continue to update reporting and surveillance practices based on research and evidence
- The systems in place for influenza have been leveraged since the beginning of the COVID-19 pandemic and there continues to be parallels between both respiratory illnesses
- The next step includes the integration of COVID-19 and influenza surveillance, analysis, and reporting

Jurisdictional scan

Respiratory Diseases

The BCCDC conducts ongoing surveillance of respiratory diseases to inform appropriate prevention and control measures.

Key messages

- Key messages (updated March 9, 2023)
- About Respiratory Diseases page
- COVID-19 Data page

Epidemiology and trends

- COVID-19 Dashboard
- COVID-19 Situation report
- COVID-19 Weekly report
- COVID-19 Epidemiology app
- Mortality context app

Facility-based surveillance

- Acute care and long-term care outbreaks
- Community visits for respiratory illness

COVID-19 Situation Reports (CRISP)

As of October 13, the Ministry of Health launched the community respiratory illness surveillance program (CRISP) report to integrate COVID-19 surveillance and reporting with provincial respiratory illness and surveillance reporting, including influenza. This report standardizes the epidemiological information required for respiratory illness surveillance and risk management and will be issued bi-weekly during respiratory illness season.

CRISP Report - Reporting Period of February 12-25, 2023 ▶

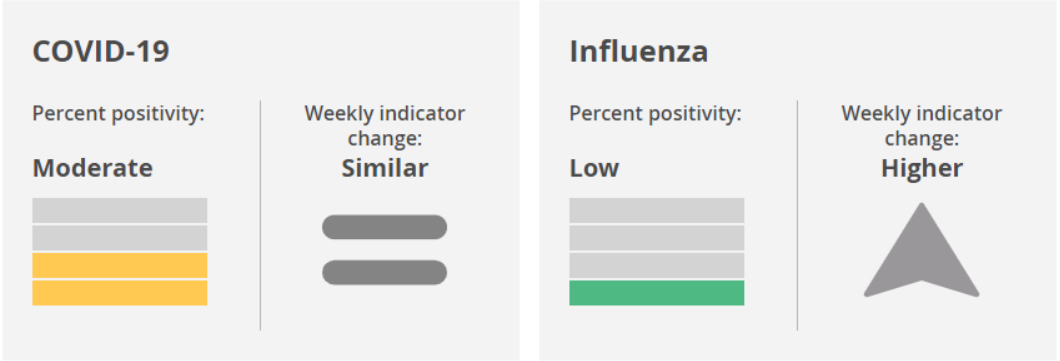
COVID-19 and Influenza Activity

February 26, 2023 to March 4, 2023

These images provide a high-level assessment of respiratory virus activity in Ontario. Provincial percent positivity can be used to provide an estimate of the intensity of circulating viruses in the province. Percent positivity for the most recent week is used to assign influenza and COVID-19 to either a low, moderate, high or very high category. Weekly indicator change was determined by considering a combination of indicators (see **Technical Notes**). For further details, please refer to the **Respiratory Virus Overview in Ontario** report.

The weekly number of COVID-19 cases and percent positivity can be found on the **Summary page.** The number of outbreaks reported by week can be found in **Outbreaks.**

The weekly number of influenza cases, percent positivity and outbreaks can be found in the **Ontario Respiratory Pathogen Bulletin.**



Provincial Respiratory Surveillance Report

COVID-19 and Seasonal Influenza

2022-2023

This weekly report provides a current epidemiological update on the intensity and severity of respiratory activity in Manitoba including laboratory confirmed activity of both COVID-19 and seasonal influenza. Surveillance data include syndromic indicators, laboratory testing, associated hospitalization and mortality, and outbreaks. Updates around immunization coverage in COVID-19 and seasonal influenza are also included.

Data are reported with a one-week delay for increased data accuracy, completeness and reliability. More analyses continue to be conducted and will be added to this report as available. It is published online at approximately 10:00am every Friday.

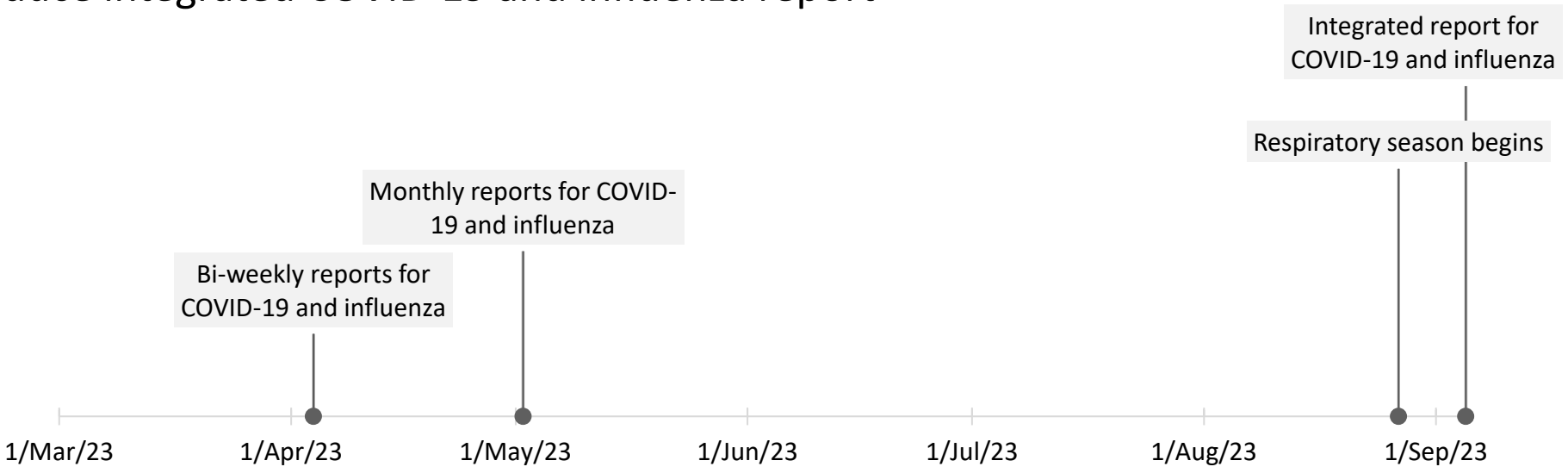
Week 9 (February 26 – March 4, 2023)

About epidemiological week

Data extracted up to 1:00 am on March 9, 2023
Next reporting date: March 17, 2023

Tasks

- Review current indicators, data sources, and reporting processes for COVID-19 and influenza
- Standardize indicators, data sources, and reporting processes, where possible
- Enhancement of sentinel surveillance program
- Consultations with stakeholders (RHAs, regional public health, MOH, comms, lab, vulnerable settings, etc.)
- Produce integrated COVID-19 and influenza report



Summary of Case Definitions

Items for discussion

Indicator	Current COVID-19	Current Influenza	Proposed Standardization
Confirmed case	*See NDEG*	*See NDEG*	No change to either definition
Outbreak	[redacted] 21(1) confirmed cases that are epi-linked…	[redacted] 21(1) symptomatic cases within a setting with two confirmed tests…	**TBD**
Hospitalization	Admissions **for** COVID-19 as per the reason for admission	Hospitalizations with a laboratory confirmation of influenza	Hospitalizations with a laboratory confirmation of influenza or COVID-19
Death	COVID-19 as primary or contributing factor to cause of death	Death of an individual that meets the influenza associated hospitalization definition	**TBD**

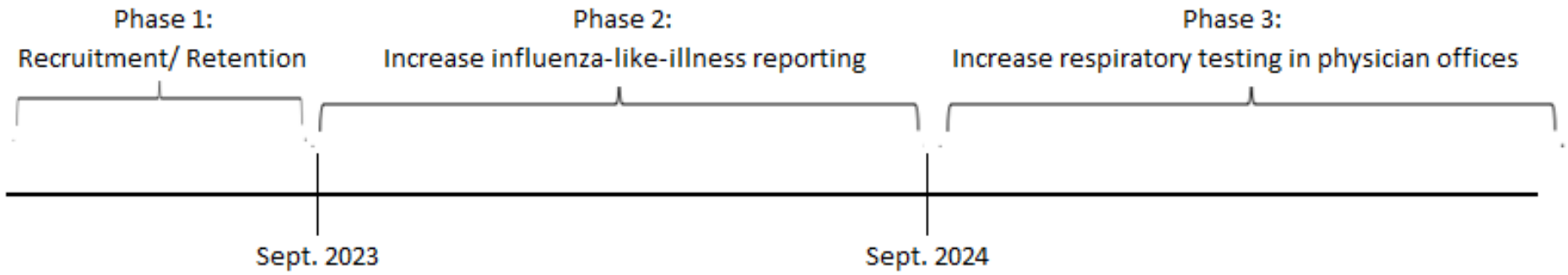
Summary of Data Sources

Items for discussion

Indicator	Current COVID-19	Current Influenza	Proposed Standardization	Action Items
Confirmed case	LIS	GDL	No change	- Examine the use of DSP for influenza - **Evaluate current surveillance system (Go.Data)**
Outbreak	Go.Data	CNPHI	CNPHI	- **Confirm outbreak definition** - Add COVID-19 module to existing influenza platform (SOLAR) - Add COVID-19 to Outbreak Investigation Final Report
Hospitalization	ADT	RHA	RHA	- **Confirm hospitalization definition for COVID-19** - Modify hospitalization form to include COVID-19 - Engage RHAs
Death	Vital statistics	RHA	Regional public health (from RHA, vulnerable settings, community)	- **Confirm death definition for COVID-19** - Determine reporting mechanism (Go.Data, Access, RDSS)

Sentinel Surveillance

- As part of a three phased approach to reestablishing sentinel surveillance, the goal is to better monitor influenza and COVID-19 using ILI and laboratory testing results:
  - Phase 1 targets increased participation from the previously established SPIN program and to consult with RHAs to inform them of the process to collect ILI data from ERs using administrative data
  - Phase 2 aims to initiate the submission of aggregate data from participating facilities and begin collecting data from ERs
  - Phase 3 includes increasing respiratory testing in the community



Discussion

- Currently, COVID-19 outbreaks are reported via Go.Data. If COVID-19 outbreak reporting moves to CNPHI, we will no longer receive patient-level data. Additionally, regional PH will be required to input into CNPHI and send an Outbreak Investigation Final Report at the completion of the outbreak. **What is the vision for Go.Data and COVID-19 outbreak reporting?**
- **Provide feedback and input for the standardization of definitions for**

  Hospitalizations
  - **Key points:**
    - COVID-associated hospitalizations instead of for COVID hospitalizations
    - Data received from RHAs instead of ADT Reason for Admission

  Outbreaks
  - **Key points:**
    - Two test-confirmed (include POCT)

  Deaths
  - **Key points:**
    - COVID-associated deaths instead of primary or contributing cause of death
    - Data received from surveillance system instead of Vital Statistics
    - Include influenza deaths from community

COVID-19 Deaths

From June 6, 2020, to February 27, 2023, there were 2987 deaths among reported COVID-19 cases as per the Client Registry:

- 824 were reported as COVID-19 deaths (as per current case definition)
- 1841 deaths occurred within 90 days of confirmed COVID-19 result
    - of which 1137 (62%) occurred in hospital
- 1630 deaths occurred within 60 days of confirmed COVID-19 result
    - of which 1023 (63%) occurred in hospital
- 1284 deaths occurred within 30 days of confirmed COVID-19 result
    - Of which 800 (62%) occurred in hospital

Of the 824 reported COVID-19 deaths, 462 occurred in hospital and within 30 days of COVID-19 infection. There were 338 additional deaths that occurred in hospital and within 30 days of COVID-19 infection that were not reported under the current case definition. Therefore, if we were to change our definition to include ***all*** *deaths that occur in hospital within 30 days of COVID-19 infection*, our total count would be 800 (-24 compared to previous total).

For 2022, there is a progressive increase in the count per month when using the definition *all deaths that occur in hospital within 30, 60, or 90 days of COVID-19 infection.*

When comparing age, the median age decreased slightly when compared the current definition to the proposed time-based definition.

Figure 1: Seven-day moving averages of COVID-19 deaths based on the different case definitions of: a COVID-19 death (as per current case definition) and deaths within 30, 60, and 90 days of COVID-19 infection, December 2021 to February 2023.

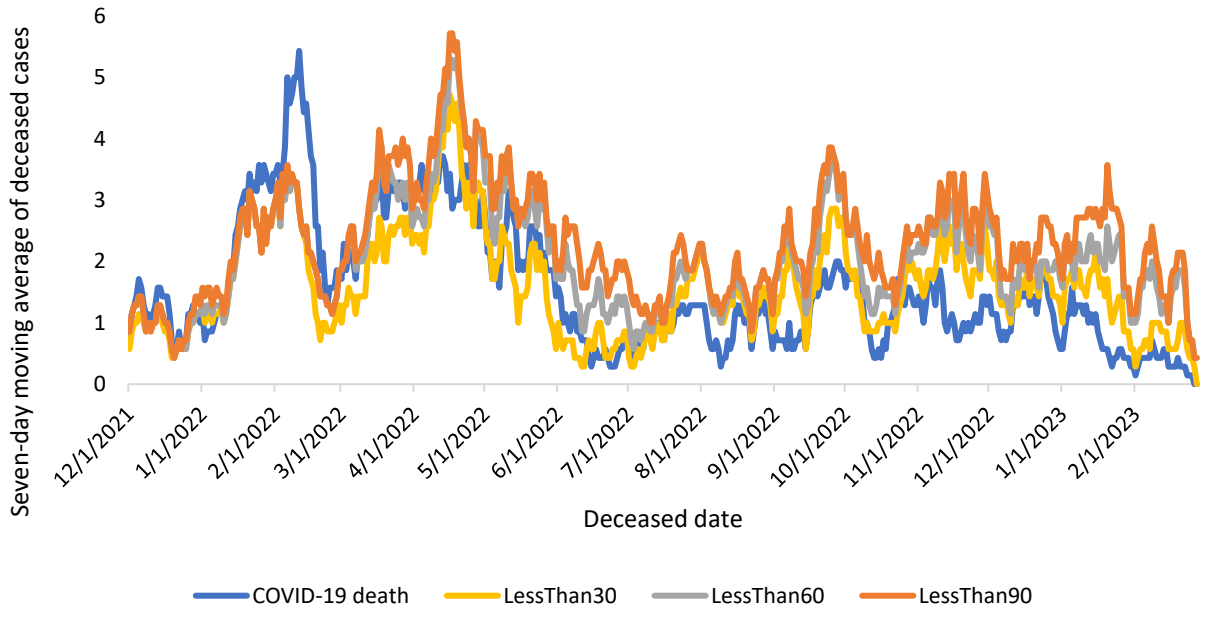


Table 1: Comparing median age and age range of different definitions for a COVID-19 case, June 2020 to February 2023.

Definition	Median Age	Age Range
Current COVID-19 death	82	28-103
Death in hospital within 30 days of positive result	79	13-103
Death in hospital within 60 days of positive result	79	13-103
Death in hospital within 90 days of positive result	79	13-103

COVID-19 Hospitalizations

We will continue to monitor trend for a few weeks (following the change in RHA testing strategy) prior to providing a recommendation.

Between January 28, 2023, and March 25, 2023, there were 359 admissions to hospital that were admitted to hospital within 30 days of a confirmed COVID-19 result:

1) detected on admission n=187

2) infected after admission n= 118

3) detected before admission (admitted within 14 days of positive result) n=39

4) considered recovered (admitted between 15 and 30 days after positive result) n=15

If we compare to the current definition for a COVID-19 hospitalization, there were 106 hospitalizations during the same timeframe.

With Key Messages

1. With the stabilization of COVID-19 and the ongoing seasonal activity of influenza, there is a need to examine respiratory diseases together and increase the capacity for surveillance systems to monitor multiple diseases.
2. As we continue our path towards living with COVID-19 the department of health continues to;
    a. update our reporting to reflect evolving evidence and practices, and
    b. strengthen our existing surveillance systems to identify respiratory pathogens with the epidemic or pandemic potential.
3. Although many surveillance activities catalysed by the pandemic provided novel epidemiological insights, continuing these activities is no longer feasible now that the state of emergency has ended.
4. For the upcoming respiratory season (commencing August 2023), COVID-19 surveillance will be integrated into our existing influenza surveillance activities to attain a more comprehensive method for monitoring respiratory pathogens in NB.
5. Where possible, the indicators, data sources, definitions, and analysis components have been aligned.
6. The alignment of COVID-19 and influenza will allow for better comparison among the two respiratory pathogens.
7. This integration is comparable to reports seen and/or projected in other jurisdictions.
8. The COVID-19 death definition has been aligned to match the existing influenza death definition.
9. The COVID-19 hospitalization definition has also been aligned to match the existing influenza hospitalization definition.
10. Respiratory Watch will be published weekly (every Tuesday), with a one-week reporting lag.

Question & Answer

What is the new death definition?

The new death definition is: *a confirmed case who was admitted to hospital and whose death occurred during their stay. A death due to COVID-19 or influenza does not mean that it was necessarily the primary or contributing factor to the cause of death.* Therefore, only deaths that occur in hospital will be reported.

Why the change in source for COVID-19 deaths?

The source is changing to provide alignment with influenza reporting, a process that has been well established.

Why are only deaths in hospital being reported?

Deaths that occur outside of hospital are subject to a three-month reporting lag, while hospitalized death reporting is a more timely indicator for disease severity.

What is the new hospitalization definition?

The new hospitalization definition is: a*dmission to hospital with a laboratory confirmation of a respiratory disease within 14 days prior to or upon admission OR a laboratory confirmation of a respiratory disease during their stay.*

Why not report only 'FOR' hospitalizations?

Including people that were hospitalized 'FOR' and 'WITH' COVID-19 provides alignment with the current reporting standard for influenza and will provide a better understanding of the burden on the health care system.

Why is sequencing removed from the report?

Sequencing is no longer available in the Respiratory Watch report due to the vast number of lineages that are circulating for COVID-19. As it becomes more difficult to fit lineages into specific categories, this section has been removed. The public can be reassured that is there is a lineage that emerges that poses an increased threat, it will be communicated appropriately.

Why is POCT no longer available?

Traditionally, respiratory illness reports, such as Fluwatch, focus on those cases that have been confirmed through testing. Through the COVID-19 pandemic, we have integrated COVID-19 positive self-reports as the situation at the time warranted it. Now that we continue our path towards living with COVID-19, we are refocusing the report to look solely at those confirmed cases.

Why is there no vaccine information available?

With the change in vaccination guidance, and who is eligible for COVID-19 vaccination, we will no longer be reporting on the number of COVID-19 vaccinations administered on a regular basis.

Why are COVID-19 outbreaks now available?

The new outbreak section is meant to inform New Brunswickers of ongoing activity in some of our vulnerable sectors. This information does provide an overview of disease activity amongst those vulnerable individuals and is another indication of overall disease activity in the province. While aggregate level outbreak information is provided, we will not release the location of these outbreaks on an ongoing basis. Individuals concerned by those outbreaks will be informed during local management.

Why are only COVID-19 and influenza included in Respiratory Watch?

Both COVID-19 and influenza are reportable diseases that are constantly changing and pose the threat for pandemic potential, therefore, require constant monitoring. Surveillance activities also help to inform vaccination initiatives and treatment options.

RESPIRATORY SURVEILLANCE PLANNING – 2023/24 SEASON

Department of Health

July 24, 2023

Agenda

- Summary of changes
- RESPWatch plan
- Proposed key messages

Summary of changes

- Where possible, many aspects of surveillance have been integrated for COVID-19 and influenza:
  - Case definitions
  - Data sources
  - Data of cases with severe outcomes
  - Burden of illness
  - Health care capacity
  - Outbreaks in vulnerable settings
- Important changes include:
  - Death definition for COVID-19 (hospitalized deaths only)
  - Hospitalization definition for COVID-19 (For and With)
  - Removal of sequencing information for COVID-19
  - Removal of vaccine information for COVID-19
  - Addition of COVID-19 outbreaks
  - Data sources and processes for influenza

RESPWatch plan

- RESPWatch integrates COVID-19 and influenza into one report, replacing COVIDWatch and the Influenza report
- RESPWatch will be available on the GNB website on a new Respiratory Watch page
- There will be a one-week reporting lag, similar to influenza reporting in previous years
- Distribution schedule:
  - August 29, 2023 – Final COVIDWatch and Influenza reports
  - September 12, 2023 – RESPWatch launch (week 35)
  - September 26, 2023 – RESPWatch (week 36, 37 and 38)
  - Weekly reports starting with October 3, 2022 (week 39 on)

Key Messages

- Integrated surveillance for respiratory viruses, including public facing reporting, is ongoing for other PTs/PHAC
- RESPWatch incorporates evolving evidence and practices into a format that is aimed toward public consumption
  - Maintains transparency and the ability to inform the public of their personal risk as it pertains to respiratory disease
- Aligning the COVID-19 hospitalization definition with influenza will provide insight to respiratory virus activity within the community and will offer an indicator for hospital capacity
- Changing the COVID-19 death definition will allow for more timely reporting of COVID-19 deaths
  - As we integrate COVID-19 into respiratory surveillance, we continue to seek alignment with processes that are used for other diseases

From: Galvin, Carolin (DH/MS)
To: Chalifoux, Mathieu (DH/MS)
Cc: LeBlanc, Shannon (DH/MS); Paulsen, Paige (DH/MS)
Subject: RE: AGNB Request
Date: Thursday, March 16, 2023 1:26:44 PM

Thank you all. Much appreciated.

Carolin Galvin
Cell.: (506) 461-2880
E-mail / Courriel: carolin.galvin@gnb.ca

From: Chalifoux, Mathieu (DH/MS) <Mathieu.Chalifoux@gnb.ca>
Sent: March 16, 2023 1:25 PM
To: Galvin, Carolin (DH/MS) <Carolin.Galvin@gnb.ca>
Cc: LeBlanc, Shannon (DH/MS) <Shannon.LeBlanc@gnb.ca>; Paulsen, Paige (DH/MS) <Paige.Paulsen@gnb.ca>
Subject: FW: AGNB Request

Good afternoon Carolin,

Regarding our recent request from the AG, please find attached our answers to Request #3.

Please note the following:

- We took “COVID-19” to mean a COVID-19 *Case*
- We provide “Non-resolved case of COVID-19” rather than “Active case of COVID-19”. With it, we provide our definition of “Resolved” for context.

Should you have any additional questions, please let me know.

Thanks,

Matt

From: Paulsen, Paige (DH/MS) <Paige.Paulsen@gnb.ca>
Sent: March 16, 2023 1:18 PM
To: Chalifoux, Mathieu (DH/MS) <Mathieu.Chalifoux@gnb.ca>; LeBlanc, Shannon (DH/MS) <Shannon.LeBlanc@gnb.ca>
Subject: AGNB Request

Hi Matt and Shannon,

Please see attached for AGNB Request.

Please review and make edits as you see appropriate.

Thank you!

Paige Paulsen, BSc, MPH
Research Officer/ Recherchiste
NB Department of Health / Ministère de la santé du NB

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AGNB Request
March 16, 2023

Request #3:

Please provide a) GNB definitions for the following terms, b) dates during which these definitions applied, c) any supporting documentation utilized to formalize the definition:

- COVID-19
- COVID-19 Death
- Active case of COVID-19
- Hospitalization with COVID-19
- Hospitalization for COVID-19

Term	Definition	Dates Used	Documentation
COVID-19 Case	Confirmed: • The detection of at least one specific gene target by a validated laboratory based NAAT assay performed at a recognized laboratory, OR • A validated point-of-care NAAT that has been deemed acceptable to provide a final result by the Government of New Brunswick, OR • A four-fold or greater seroconversion/diagnostic rise in viral specific antibody titre in serum or plasma using a validated laboratory-based serological-based serological assay for SARS-CoV-2. Probable: A person who has symptoms compatible with COVID-19 AND • Had a high-risk exposure to a confirmed case of COVID-19, OR • Was exposed to a known cluster or outbreak of COVID-19, AND • Has not had a laboratory based NAAT assay for SARS-CoV-2, OR • Has had SARS-CoV-2 antibodies detected in a single serum, plasma, or whole blood sample using a validated laboratory based serological assay within four weeks of symptom onset, OR • A person who had a positive or presumptive positive POCT NAAT or POC antigen test for SARS-CoV-2.	March 2020 – Current	National case definition: Coronavirus disease (COVID-19) - Canada.ca
Non-resolved case of COVID-19	A case can be identified as resolved if fever has resolved without the use of medication, other symptoms have improved, AND • At least ten days* have passed since symptom onset/reported date for immunocompetent cases without severe illness, OR • At least 20 days have passed for immunocompromised cases or cases with severe illness.	January 2022 – Current *From March 2020 – January 2022, 14 days was used	National case definition: Coronavirus disease (COVID-19) - Canada.ca
COVID-19 Death	A probable or confirmed COVID-19 case whose death resulted from a clinically compatible illness, unless there is a clear alternative cause of death (e.g., trauma, poisoning, drug overdose).	March 2020 – March 2022	National case definition: Coronavirus disease (COVID-19) - Canada.ca

	A death is determined to be COVID-19 related if the attending physician has identified that COVID-19 was a primary or contributing factor to the cause of death. If the cause of death is unclear, Public Health may request additional clarification from a Medical Officer of Health.	March 2022 – Current	Deceased-Reconciliation.pdf (gnb.ca)
COVID-19 Hospitalization	All hospitalizations with laboratory confirmation of COVID-19.	March 2020 – January 2022	
Hospitalization with COVID-19	All hospitalizations with laboratory confirmation of COVID-19 that were not admitted for reasons related to COVID-19.	January 2022 – April 2022	
Hospitalization for COVID-19	All hospitalizations with laboratory confirmation of COVID-19 that were admitted for reasons related to COVID-19.	January 2022 – December 2022	
	A PCR confirmed case admitted to hospital within 21 days of episode date with COVID listed in the reason for admission.	December 2022 – Current	