Biweekly respiratory surveillance report for week ending April 1, 2023

- For respiratory surveillance in Canada, visit: <u>Respiratory Virus Detection</u> <u>Surveillance System</u> and <u>COVID-19 Data Trends</u>
- For surveillance of COVID-19 variants of concern, visit World Health Organization: <u>Tracking SARS-CoV-2 Variants</u>
- For COVID-19 vaccination coverage in Canada, visit: <u>COVID-19 vaccination in</u> Canada

Overall Summary

Respiratory virus activity has decreased in recent weeks in the Yukon. The table below describes the intensity, geographical spread, and local trends.

	Level	Rationale
Intensity	Medium	Indicators largely at expected or historical levels of activity
Geographical spread	Widespread	Some indication of activity in all regions
Trend	Decreasing	Several indicators decreasing or stable at low to no levels of activity

The intensity is based on the overall level of clinical activity in the Yukon, measured through syndromic, sentinel, active and lab surveillance indicators. Low means no activity or activity below baseline, medium means expected or average levels of activity, high means levels of activity that are higher than historical baseline, and very high means exceptionally high levels of activity*.

*Baseline is the level at which activity remains throughout summer and most of the winter, or based on historical data for the same time period in previous years, where available.

The geographical spread is rated as either no activity (no evidence of increased or unusual respiratory disease activity), regional (activity occurring in some but not all regions of Yukon), or widespread (activity generally occurring across all of the Yukon).

The trend is a comparison of surveillance indicators to the previous two weeks. Increasing means there is evidence that the level of respiratory disease activity is increasing, stable means respiratory disease activity is relatively unchanged, and decreasing means there is evidence that the level of respiratory disease activity is decreasing.

Disease summaries

The table below provides general trends from the different surveillance indicators for each disease that is included in this report.

		-	-		
	COVID-19	Influenza	RSV		
Case rates	Decreasing	Stable	Stable		
Percent positivity	Decreasing	Decreasing	Decreasing		
Syndromic indicators	Stable				
Severity	Decreasing	Stable	Stable		
Wastewater	Stable	N/A	N/A		
Vaccination uptake	Decreasing	Stable	N/A		

Laboratory indicators

- COVID-19 test positivity decreased compared to the previous two weeks, and was the same in rural Yukon and the Whitehorse area
- Influenza A test positivity remained the same compared to the previous two weeks, and was the same in rural Yukon and the Whitehorse area

- Influenza B test positivity decreased compared to the previous two weeks, and was highest in the Whitehorse area
- RSV test positivity decreased compared to the previous two weeks, and was highest in the Whitehorse area
- RSV was the organism with the highest rolling average test positivity over the last two weeks
- Testing volume was highest among Whitehorse residents over the last two weeks
- The predominant COVID-19 variant of concern in Yukon is Omicron and the predominant lineage is BQ.1
- COVID-19 wastewater viral load in Haines Junction is stable

Figure 1: Percent positivity by respiratory virus

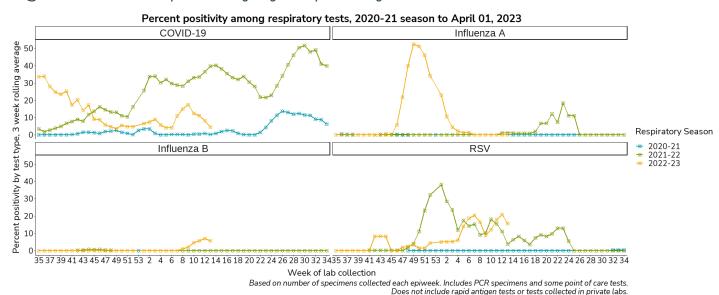


Figure 2: Number of COVID-19 tests and percent positivity by pathogen and region

Figure 3: Number of Influenza A tests and percent positivity by region

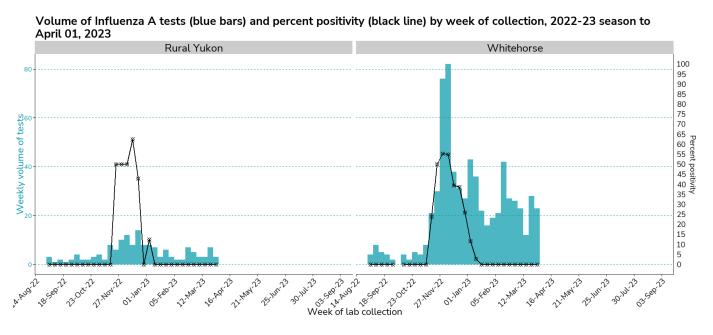




Figure 4: Number of Influenza B tests and percent positivity by region

Volume of Influenza B tests (blue bars) and percent positivity (black line) by week of collection, 2022-23 season to April 01, 2023

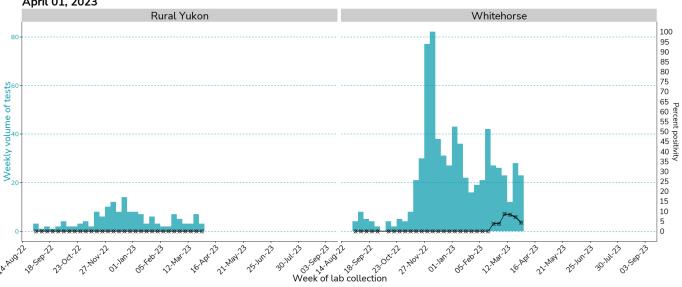


Figure 5: Number of RSV tests and percent positivity by region

Volume of RSV tests (blue bars) and percent positivity (black line) by week of collection, 2022-23 season to April 01, 2023

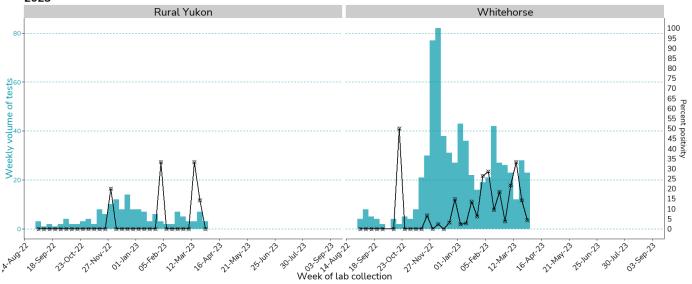




Figure 6: COVID-19 whole genome sequencing lineage results by week of collection

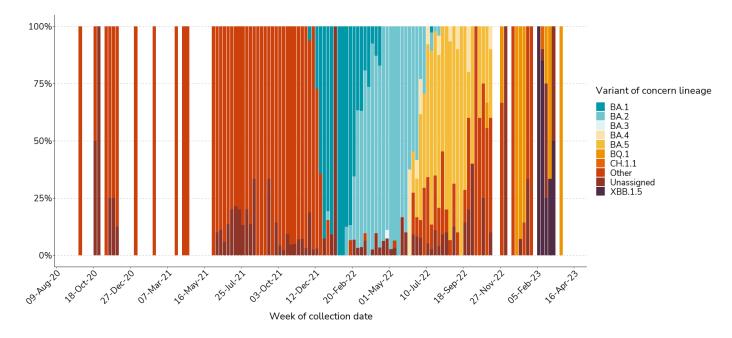


Figure 7: COVID-19 whole genome sequencing variant of concern type results by week of collection

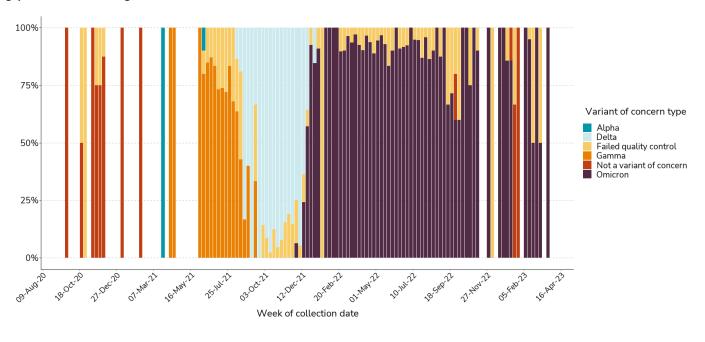
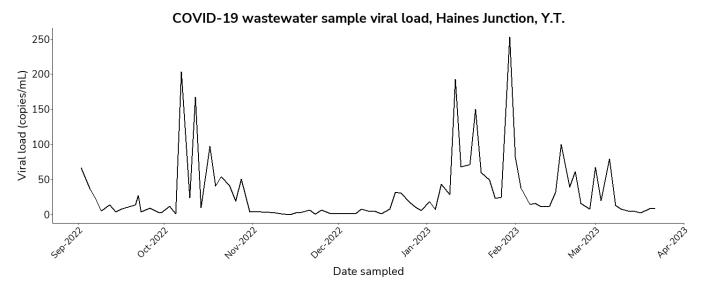




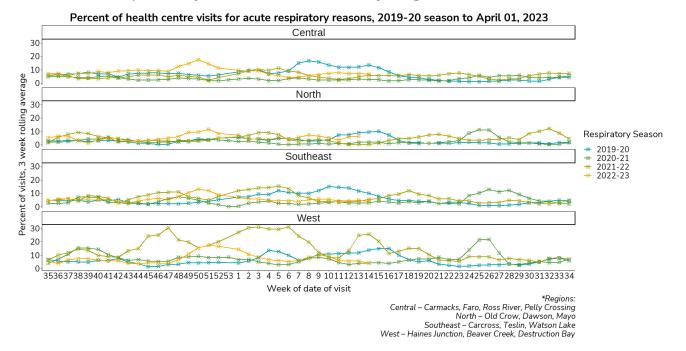
Figure 8: COVID-19 wastewater surveillance – Haines Junction



Syndromic surveillance indicators

- Visits to community health centres for respiratory-related symptoms were similar compared to previous years. Respiratory visits were highest in the central region.
- Visits to community health centres for respiratory-related symptoms are increasing in north region, decreasing in west region, and stable in central and southeast regions.

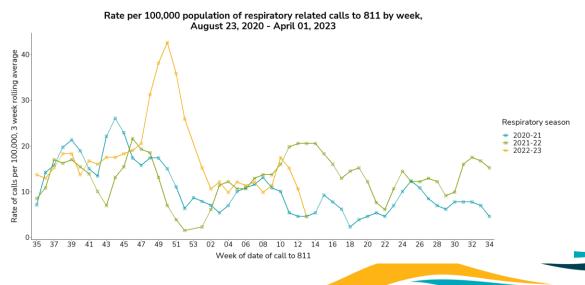
Figure 9: Percentage of weekly Community Health Centre* visits for acute respiratory-related reasons, by region



Sentinel surveillance indicators

 The rate of calls for respiratory-related reasons to 811 decreased compared to the previous two weeks

Figure 10: Rate of 811 calls that are respiratory-related



Active surveillance indicators

- The rate of confirmed cases of COVID-19 in the Yukon is decreasing, and lower than previous years. Hospitalization rates are decreasing, and similar to previous years.
- The rate of confirmed cases of Influenza A in the Yukon is stable, and similar to previous years. Hospitalization rates are stable, and similar to previous years.
- The rate of confirmed cases of Influenza B in the Yukon is stable, and similar to previous years. Hospitalization rates are stable, and similar to previous years.
- The rate of confirmed cases of RSV in Yukon is stable, and similar to previous years. Hospitalization rates are stable, and higher than previous years.
- For COVID-19, influenza and RSV combined, case rates in rural Yukon are stable, and lower than previous years. Hospitalization rates are increasing, and higher than previous years.
- For COVID-19, influenza and RSV combined, case rates in the Whitehorse area are decreasing, and lower than previous years. Hospitalization rates are decreasing and higher than previous years.

Figure 11: Case rates per 100,000 by respiratory virus

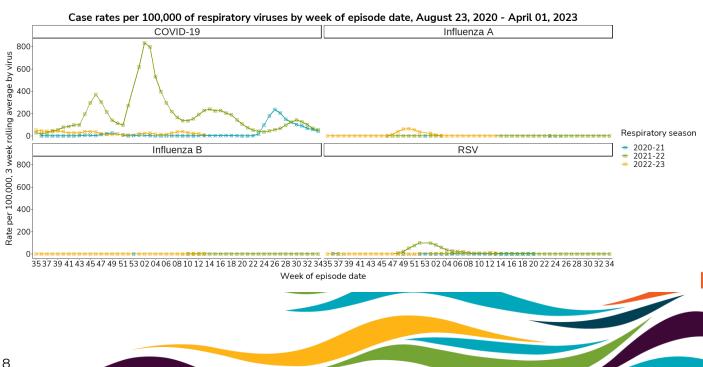


Figure 12: Hospitalization rates per 100,000 by respiratory virus

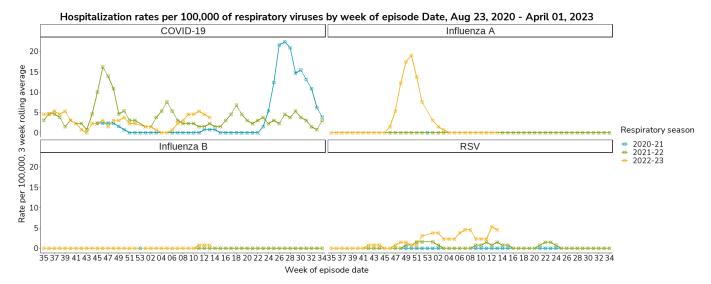


Table 1: Respiratory illness death rates per 100,000 by virus

Respiratory season	COVID-19 rate	Influenza A rate	Influenza B rate	RSV rate
2020-21	19.0	0	0	0.0
2021-22	51.0	0	0	0.0
2022-23	11.4	0	0	2.3

Figure 13: Respiratory illness case rates per 100,000 by residence

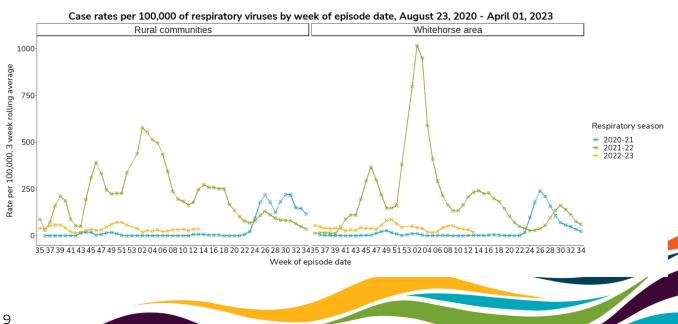


Figure 14: Respiratory illness hospitalization rates per 100,000 by residence

 $Hospitalization\ rates\ per\ 100,000\ of\ respiratory\ viruses\ by\ week\ of\ episode\ date,\ August\ 23,\ 2020\ -\ April\ 01,\ 2023$

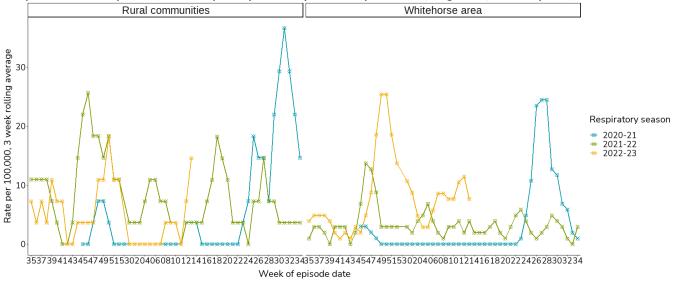
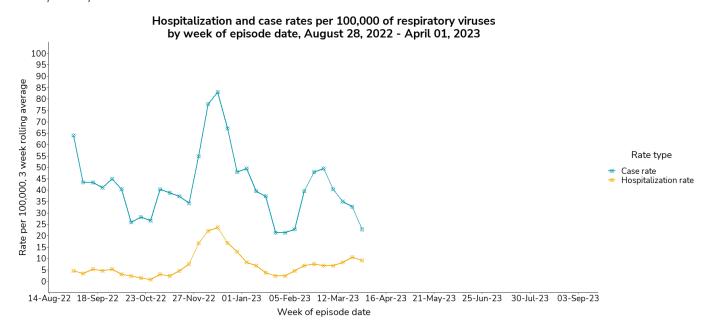


Figure 15: Respiratory virus case and hospitalization rates per 100,000, current season





Immunization Indicators

Book your COVID-19 and flu vaccine appointment here

Immunization indicators are updated monthly in the first full week of the month.

- Influenza vaccination coverage is at 29% for the Yukon population this season. The highest coverage rate is in the 70+ age group and among residents of Old Crow.
- Overall, 20% of the Yukon population is up to date with their COVID-19 vaccinations. The highest up-to-date coverage is in the 70+ age group.
- Influenza vaccination uptake is plateauing, and COVID-19 vaccination uptake is plateauing for dose 4 and dose 5.

Figure 16: Influenza vaccine uptake (%), by year

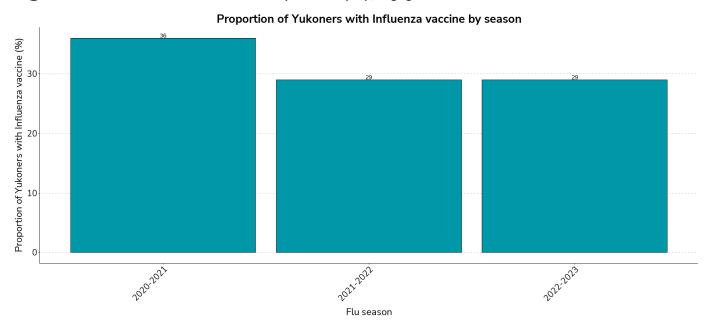


Figure 17: Influenza vaccine uptake (%), current season, by age group

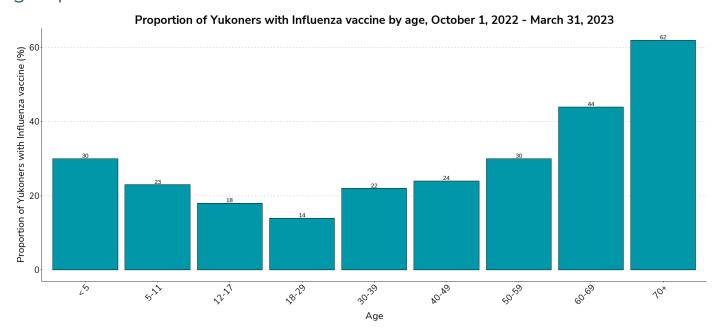


Figure 18: Influenza vaccine uptake (%), current season, by client health region

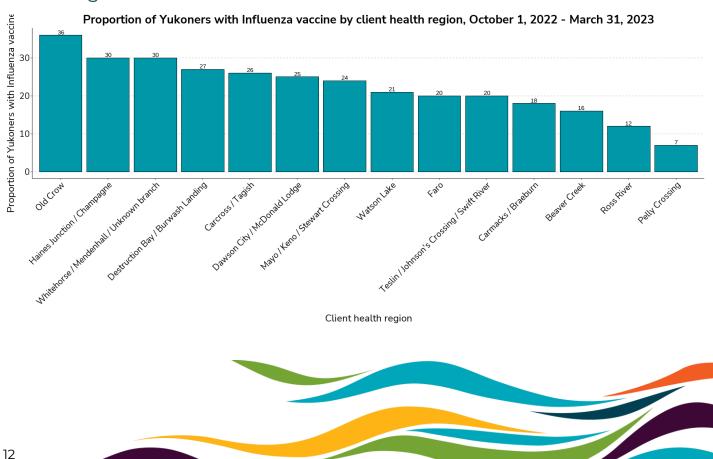


Figure 19: Percent of population up to date on COVID-19 vaccination, by age group

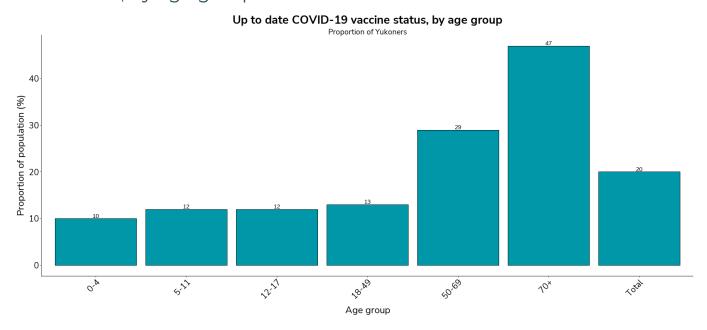


Figure 20: Percent of population up to date on COVID-19 vaccination, by client health region and age group

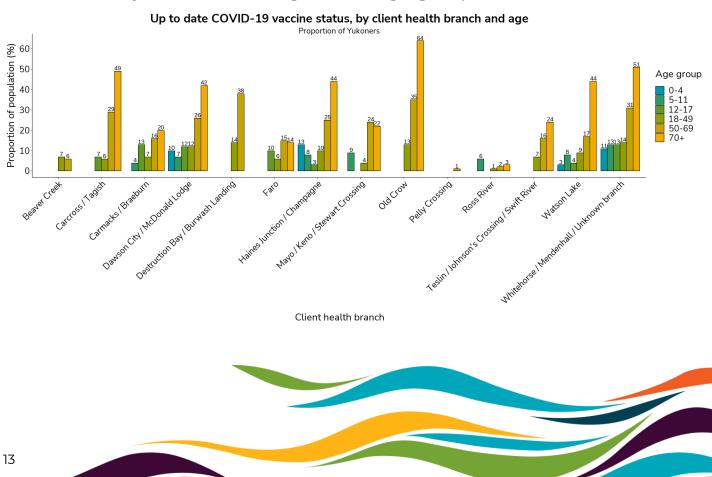


Figure 21: Cumulative uptake of influenza vaccine, by season

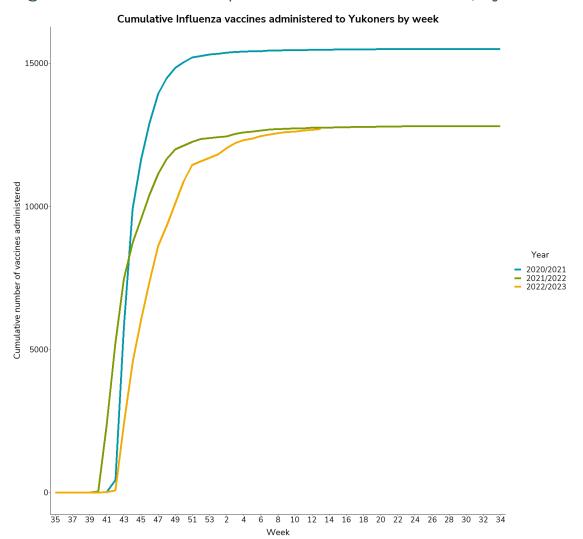
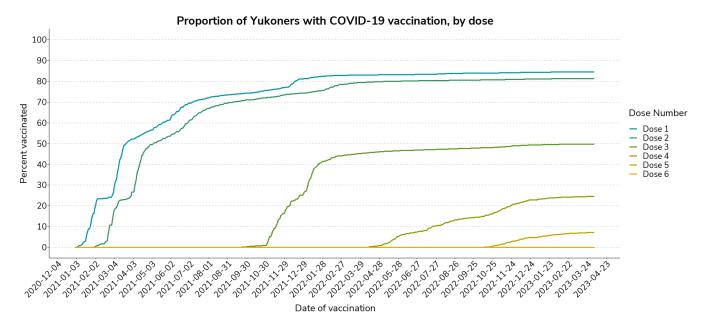


Figure 22: Cumulative uptake of COVID-19 vaccine, by dose number



Data Notes

All information is subject to change as reconciliation occurs and data becomes more complete.

Epidemiological weeks are standardized ways to count events on weekly basis year after year. The epidemiological weeks used in this report run from Sunday to Saturday. A full calendar can be found on the Public Health Agency of Canada FluWatch website

This report is updated at the following frequency during respiratory season (late August to early June): laboratory, syndromic, sentinel, and active surveillance indicators updated bi-weekly; immunization indicators updated monthly.

This report is updated at the following frequency outside of respiratory season (early June to late August): laboratory, syndromic, sentinel, and active surveillance indicators updated monthly; immunization indicators not updated.

Lab Indicators

 Based on lab-based PCR tests and rapid point-of-care tests from Whitehorse General Hospital. This does not include at-home rapid tests or tests completed in private labs.

- Percent positivity is based on the volume of specimens. As such, one individual can appear in the data more than once.
- Data will be impacted by clinical testing criteria, availability of testing, and healthcare seeking behaviour.
- Indicators stratified by rural and Whitehorse area residence reflect the information on where the person who was tested resides, and does not necessarily indicate where that person was tested or was located at the time of infection.
- Wastewater surveillance data is extracted from the Public Health Agency of Canada COVID-19 wastewater surveillance dashboard

Syndromic Surveillance Indicators

- Visits are classified by syndromes, which include clinician assessment and groupings of clinical signs and symptoms. As such, these are not considered diagnoses of communicable disease, and visits that are not related to respiratory viral illness may be included.
- Data is presented at the visit level, as such one individual can appear in the data more than once if they have several visits.
- Data may be impacted by factors such as healthcare seeking behaviour, and availability of health services.
- Community health centre visits reflect the regional location of the health centre, and not necessarily the residence of people visiting the health centre.

Sentinel Surveillance Indicators

- Includes calls to 811 from Yukon residents for respiratory-related reasons.
- Data may be impacted by factors such as the public's relative concern for symptoms or illness, and availability of health services.

Active Surveillance Indicators

- Includes all Yukon resident cases reported to Yukon Communicable Disease
 Control. Does not include non-resident cases that were diagnosed in the Yukon.
- Data will be impacted by clinical testing criteria and availability of testing.
- Episode dates are based on either date of symptom onset, laboratory collection date, or date of report to public health, depending on availability of data.
- Geographical region (rural, Whitehorse, etc.) is based on patient residence, not service delivery location.
- Death rates are estimated from Yukon Communicable Disease Control investigations, and do not reflect finalized Vital Statistics Database data. As such, these rates may be subject to some variation.

Immunization Indicators

- Up-to-date for eligible COVID-19 doses: People are classified as up-to-date for eligible COVID-19 doses based on age group:
 - 0-4 primary series received
 - 5-11 primary series + one booster vaccine, or primary series and not yet eligible for booster vaccine (i.e. less than 183 days since primary series)
 - 12+ primary series + all eligible booster vaccines and not greater than
 183 days since last booster dose, or primary series and not yet eligible for booster vaccine (i.e. less than 183 days since primary series)
- Client health region/branch indicates the most recently available information on where a person resides and does not necessarily indicate where that person received the vaccine