

# COVID-19 Integrated Epidemiology Situation Report

July 21, 2022 (Reporting period June 26 to July 16, 2022)

## Summary:

- COVID-19 activity is increasing in the province of Saskatchewan. Compared to the previous reporting period ([June 19-25](#)), test positivity increased from 3.8 to 4.0 per cent. Regina, Saskatoon, South West, Central West and North West zones all have test positivity above five per cent with the largest increases occurring in South West and Central West zones.
- Calls to 811 for respiratory-like illness (RLI) and RLI visits to emergency departments have increased.
- Both COVID-19 hospital admissions and ICU admissions have increased with admissions from 67 to 76, and ICU from four to five.
- Of the 22 deaths reported, 14 had a death date within the June 26-July 16 period. Eight occurred between September 5, 2021 to June 25, 2022 but have not been previously reported.
- The Omicron sublineages BA.4/BA.5 are now the dominant sublineages detected in Saskatchewan. BA.4 and BA.5 have increased from 1.4 per cent (June 5-11) to 3.6 per cent (June 19-25) to 65.6 per cent (June 26-July 16).
- As of July 16, 633 courses of Paxlovid have been dispensed and 54 Remdesivir prescriptions filled with 137 infusions completed.
- As of July 16, more than 21.6 million rapid antigen test kits that have been distributed in the province.
- While more than 90 per cent of residents 50 years and older and more than 80 per cent of residents 12 to 49 years have received two doses of COVID-19 vaccine, all residents 12 years and older are eligible for third doses and residents 50 years and older are eligible for fourth doses.

**Table 1: Detailed data table – COVID-19 indicators, Saskatchewan, by surveillance period**

Reporting Period	June 19-25**	June 26-July 16
Number of new confirmed cases <sup>1</sup>	208	628
Test positivity (%) <sup>2</sup>	3.8	4.0
BA.4 (%) <sup>3</sup>	0	13.1*
BA.5 (%) <sup>3</sup>	3.6	52.5*
RLI ED visits/1,000 <sup>4</sup>	18.8	27.5
CLI 811 calls/1,000 <sup>5</sup>	76.5	83.4
Number of confirmed outbreaks <sup>6</sup>	3	17
Number of COVID-19 hospital admissions <sup>7</sup>	67	229 (76.3 per week)
Number of COVID-19 ICU admissions <sup>7</sup>	4	15 (5 per week)
Number of reported COVID-19 deaths <sup>1</sup>	3	22
Total eligible population with at least 3 doses (%) <sup>8</sup>	42.3	44.6

**Source:**

\*\* June 19 to 25 was the reporting period for the last weekly report released on June 30, 2022

<sup>1</sup> Roy Romanow Provincial Laboratory and Panorama IOM, extracted July 18, 2022. 14 have death date June 26-July 16; 8 occurred in prior period but not previously reported

<sup>2</sup> Roy Romanow Provincial Laboratory

<sup>3</sup> Roy Romanow Provincial Laboratory, with data extracted from the Saskatchewan COVID-19 Provincial Database on July 18, 2022.

<sup>4</sup> Emergency department (ED) surveillance data

<sup>5</sup> HealthLine Database, June 27 to July 17, 2022

<sup>6</sup> Outbreak line list, Ministry of Health, extracted July 18, 2022

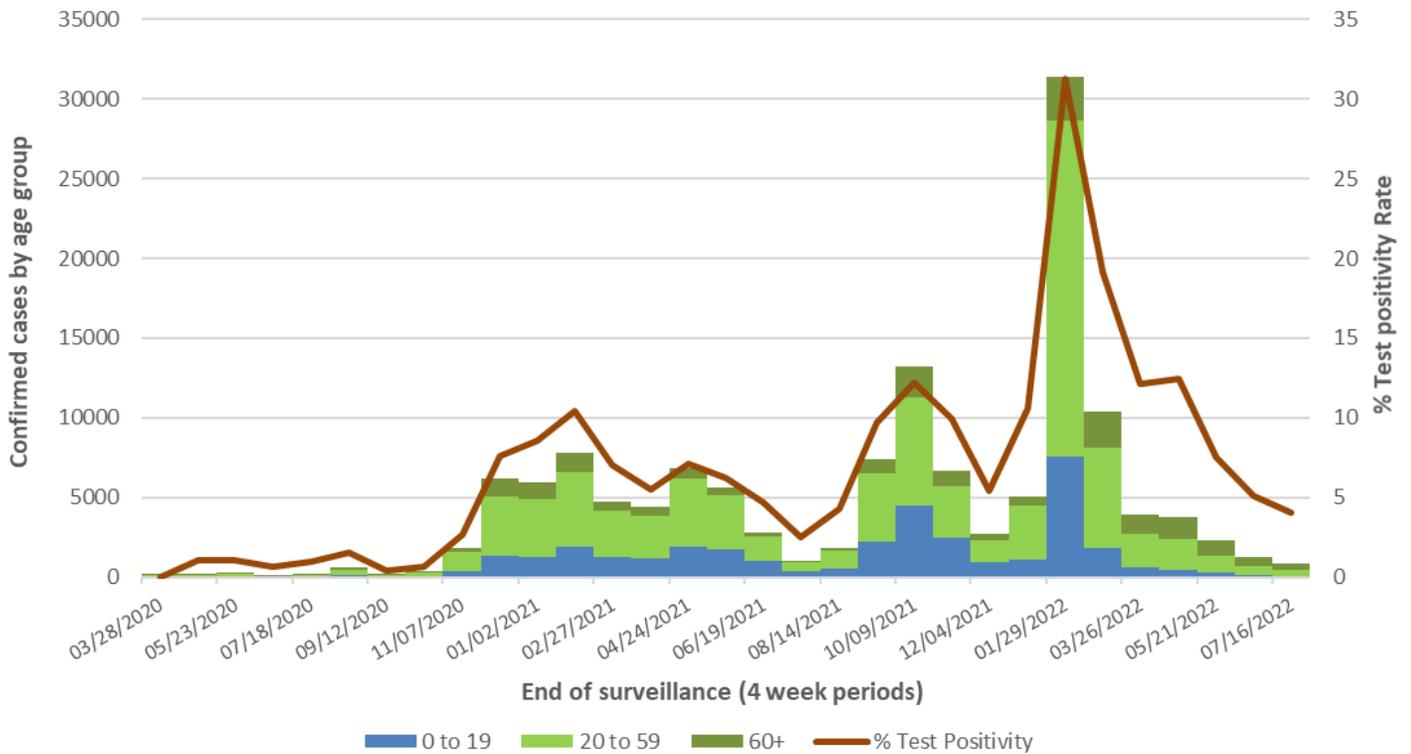
<sup>7</sup> Episode of Care (ADT, RPPL, Panorama), extracted July 18, 2022

<sup>8</sup> Panorama, extracted July 18, 2022

\* Most recent VOC data available from the Provincial database as of July 9, 2022. The data for Jun 26 to Jul 16 includes data from June 26 to July 9, 2022.

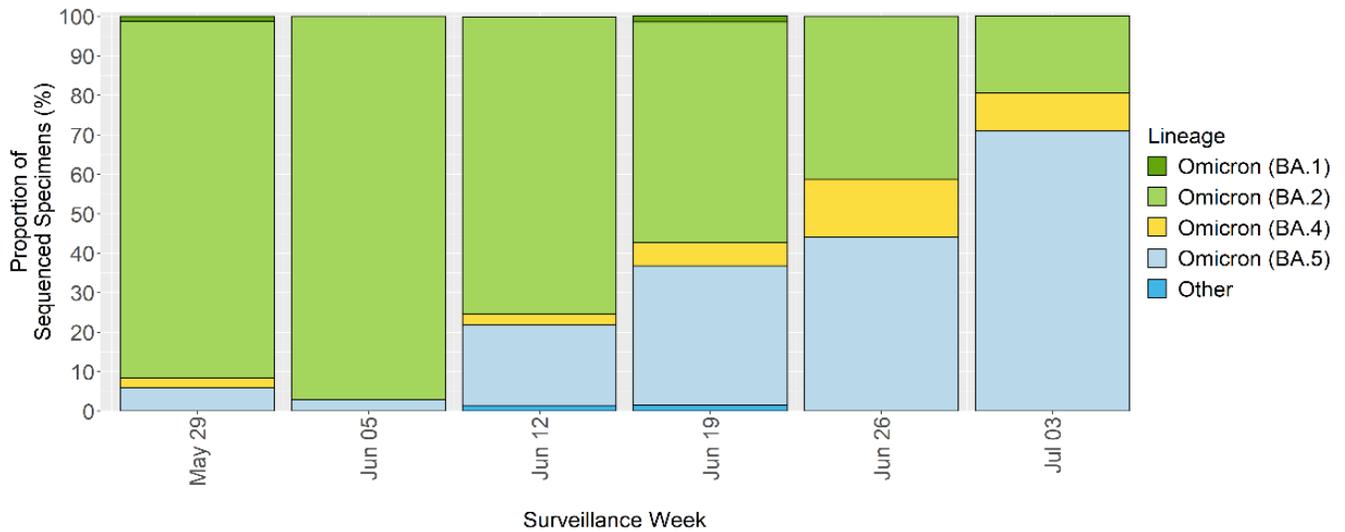
# RLI visits to EDs contains data as of July 10-16, 2022

**Figure 1: COVID-19 cases (n = 140,291) and % test positivity rate in Saskatchewan from March 2020 to July 16, 2022**



Sources: RRPL Daily Summary Report extracted on July 18, 2022 (test positivity) and Panorama IOM extracted on July 18, 2022 (cases)

**Figure 2: Percentage of SARS-CoV-2 Variants by Surveillance Week\*, May 29 to July 9, 2022**



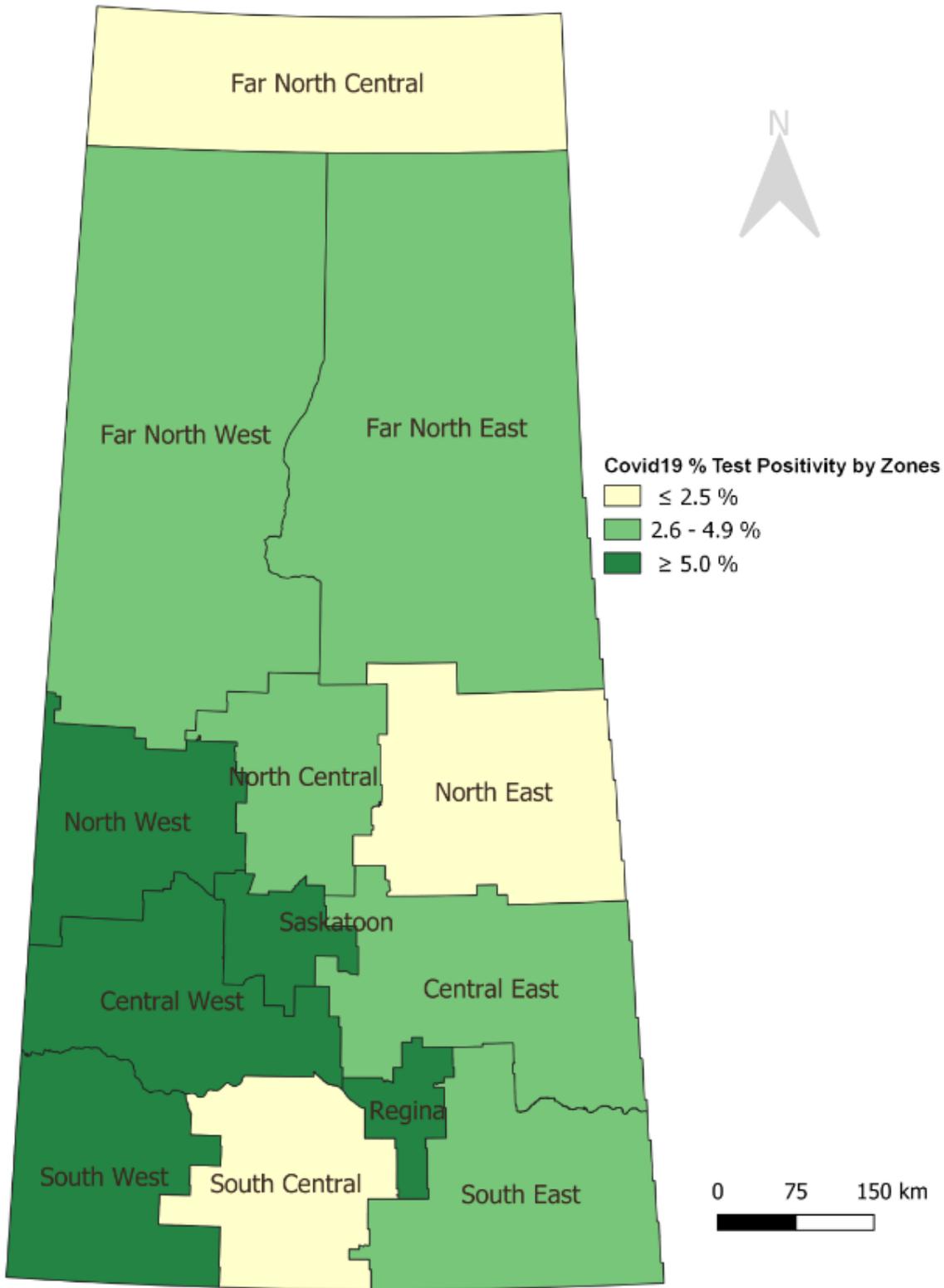
Lineage	May 29	Jun 05	Jun 12	Jun 19	Jun 26	Jul 03
Omicron (BA.1)	1	0	0	1	0	0
Omicron (BA.2)	75	68	55	38	28	6
Omicron (BA.4)	2	0	2	4	10	3
Omicron (BA.5)	5	2	15	24	30	22
Other	0	0	1	1	0	0
Total	83	70	73	68	68	31

Source: Roy Romanow Provincial Laboratory, July 18 2022

The most recent VOC data available from the Provincial database is as of surveillance week ending July 3 - 9, 2022

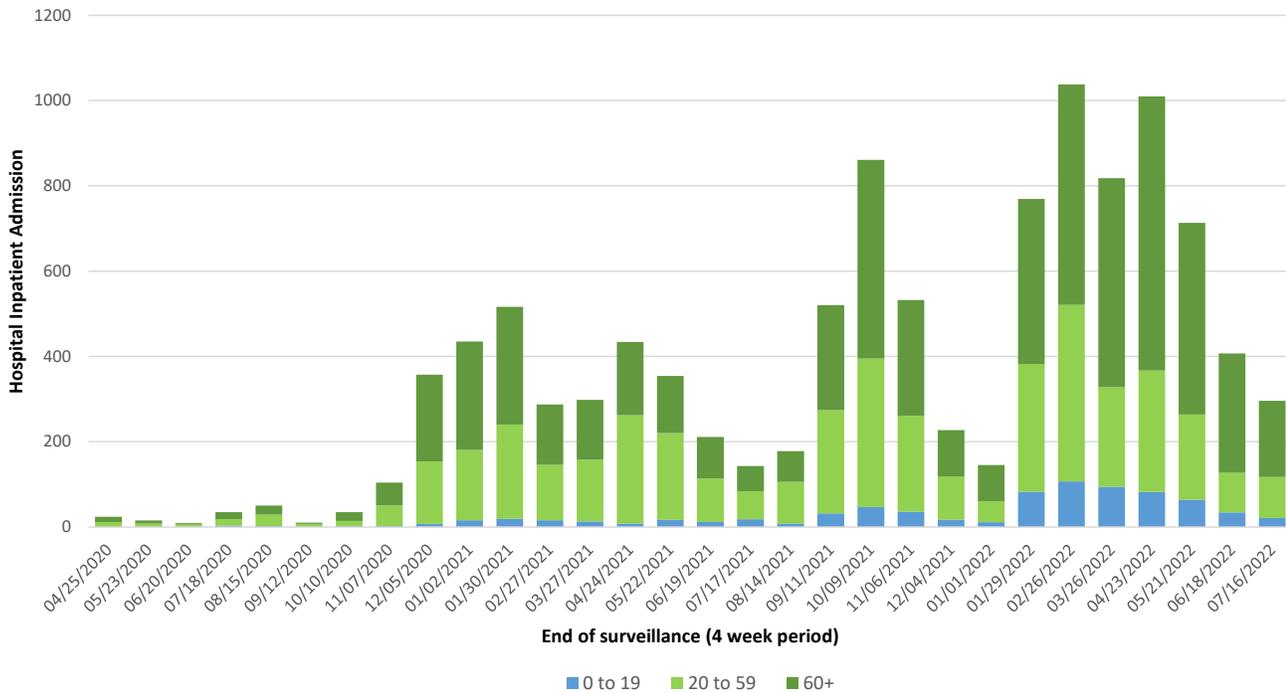
\* Surveillance week correspond to specimen collection date.

Figure 3: Map of COVID test positivity by zone from June 26 to July 16, 2022



Source: RRPL Daily Test Count by new zones extracted July 18, 2022

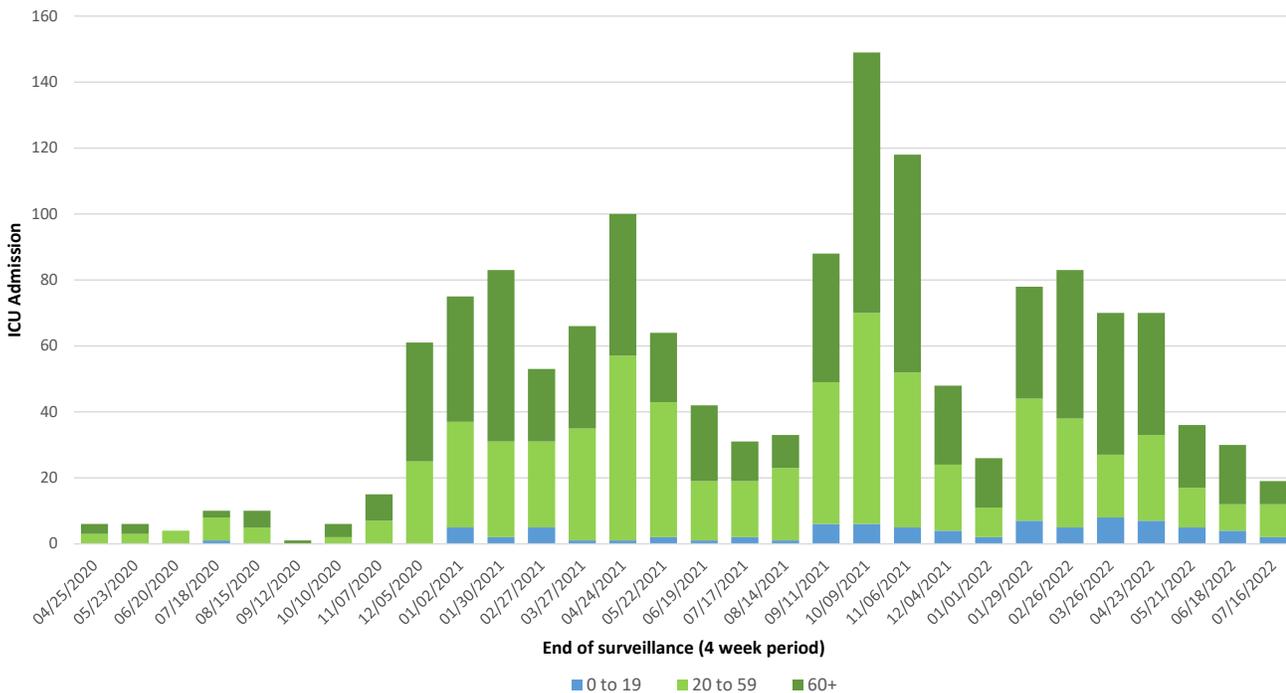
**Figure 4a: COVID-19 hospital admissions (n = 10,686) by age group and 4-week period March 29, 2020 to July 16, 2022**



**Source:** Episode of Care (ADT ,RPPL, Panorama), July 18, 2022

**Note:** 4-week surveillance period ending on July 16 includes this report’s 3-week period and the previous reporting week. Because of the delay in date tested result, it affects the total number of COVID-19 admissions for a particular day. This date lag largely impacts the data for the few days at the end of the reporting period.

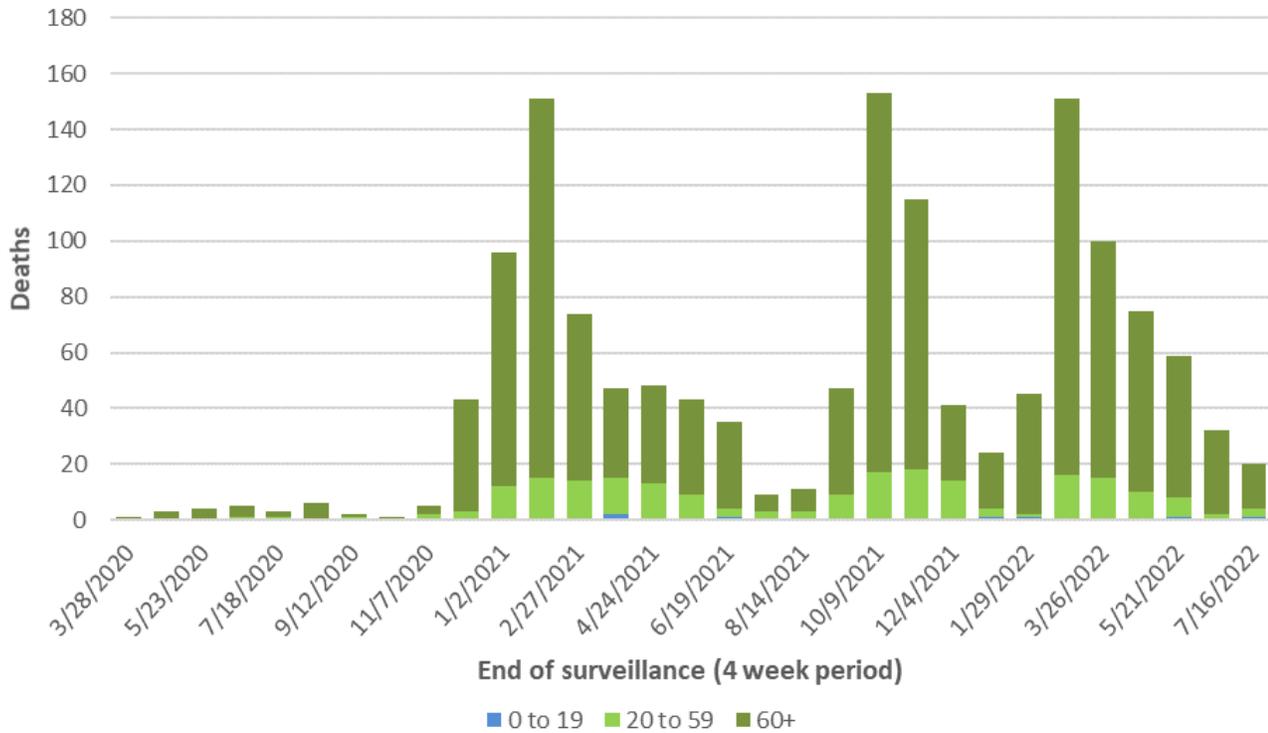
**Figure 4b: COVID-19 ICU admissions (n = 1,481) by age group and 4-week period March 29, 2020 to July 16, 2022**



**Source:** Episode of Care (ADT ,RPPL, Panorama), July 18, 2022

**Note:** 4-week surveillance period ending on July 16 includes this report’s 3-week period and the previous reporting week. Because of the delay in date tested result, it affects the total number of COVID-19 admissions for a particular day. This date lag largely impacts the data for the few days at the end of the reporting period.

**Figure 5: Deaths<sup>1</sup> (n = 1,438) in COVID-19 cases by age group and 4-week period March 8, 2020 to July 16, 2022**

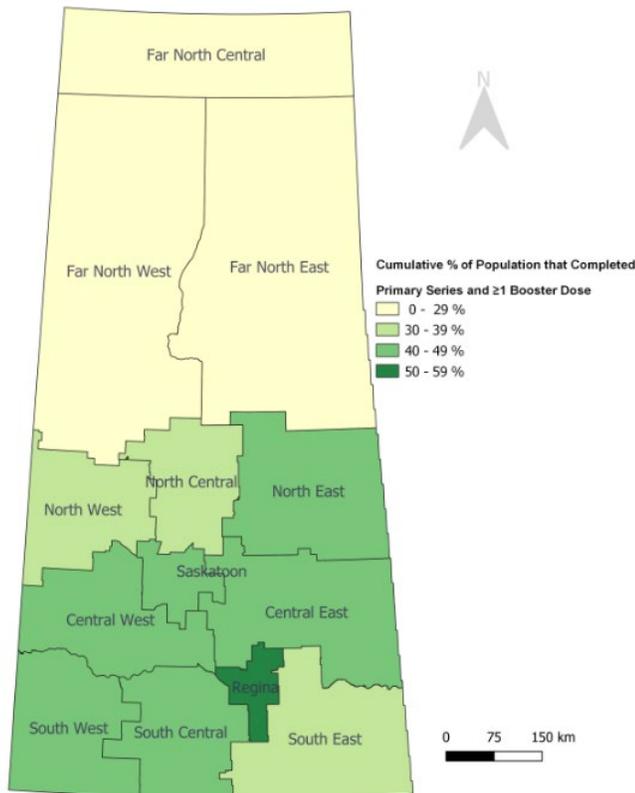


Source: Panorama IOM July 18, 2022

<sup>1</sup>Death means the Panorama IOM record reported outcome-fatal.

<sup>2</sup>Due to data entry lag, deaths for the latest period may be under-reported and not captured in this figure.

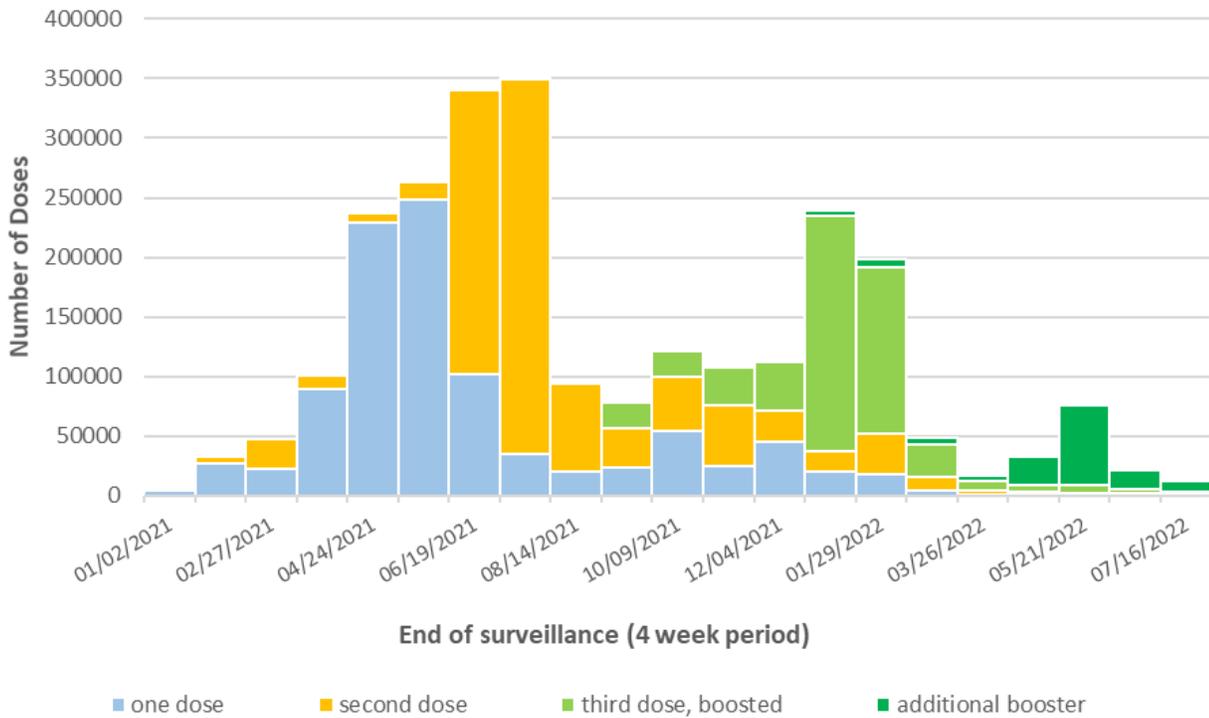
**Figure 6a: Proportion of Saskatchewan residents by up-to-date<sup>1</sup> vaccination status by zone to July 16, 2022**



<sup>1</sup>Up-to-date represents those with a completed primary series, plus at least one additional dose.

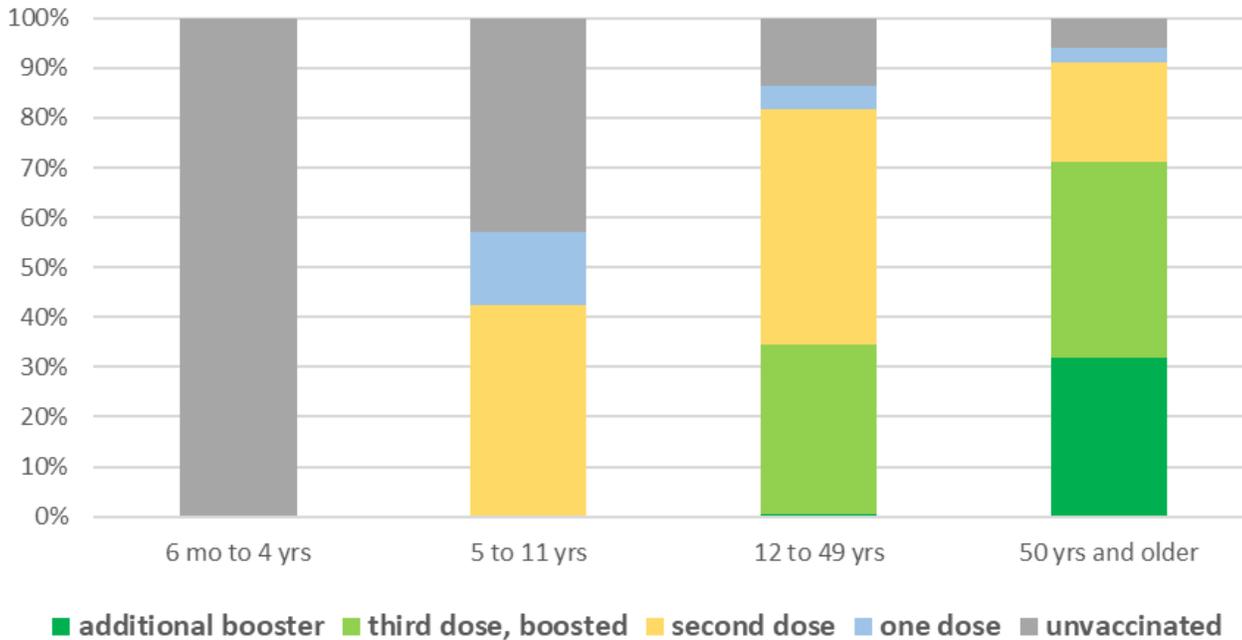
Source: Panorama July 18, 2022

**Figure 6b: Number of COVID-19 vaccine doses (N=2,526,279) by dose number and 4-week period December 2020 to July 16, 2022**



Source: Panorama July 18, 2022

**Figure 6c: Proportion of Saskatchewan residents by age group and vaccination status to July 16, 2022**



Source: Panorama July 18, 2022

## Data tables by small area geography:

**Table2: Abbreviated data table by zones**

Far North West		
Reporting period	Test positivity (%)	RLI visits to EDs/1,000
Jun 19 – 25	2.3	0.0
Jun 26 – Jul 16	3.3	3.8
Far North Central		
Reporting period	Test positivity (%)	RLI visits to EDs/1,000
Jun 19 – 25	0.0	No report
Jun 26 – Jul 16	0.0	No report
Far North East		
Reporting period	Test positivity (%)	RLI visits to EDs/1,000
Jun 19 – 25	0.0	
Jun 26 – Jul 16	2.8	
North West		
Reporting period	Test positivity (%)	RLI visits to EDs/1,000
Jun 19 – 25	5.2	6.2
Jun 26 – Jul 16	6.3	8.8
North Central		
Reporting period	Test positivity (%)	RLI visits to EDs/1,000
Jun 19 – 25	2.9	No report
Jun 26 – Jul 16	3.9	No report
North East		
Reporting period	Test positivity (%)	RLI visits to EDs/1,000
Jun 19 – 25	4.9	201.8
Jun 26 – Jul 16	1.9	64.1
Saskatoon		
Reporting period	Test positivity (%)	RLI visits to EDs/1,000
Jun 19 – 25	7.2	3.4
Jun 26 – Jul 16	5.6	5.1
Central West		
Reporting period	Test positivity (%)	RLI visits to EDs/1,000
Jun 19 – 25	0.0	125.0
Jun 26 – Jul 16	9.5	No report
Central East		
Reporting period	Test positivity (%)	RLI visits to EDs/1,000
Jun 19 – 25	2.9	No report
Jun 26 – Jul 16	4.5	No report
Regina		
Reporting period	Test positivity (%)	RLI visits to EDs/1,000
Jun 19 – 25	7.0	22.5
Jun 26 – Jul 16	7.7	No report

South West		
Reporting period	Test positivity (%)	RLI visits to EDs/1,000
Jun 19 – 25	2.3	100.0
Jun 26 – Jul 16	6.9	8.4
South Central		
Reporting period	Test positivity (%)	RLI visits to EDs/1,000
Jun 19 – 25	4.3	0.0
Jun 26 – Jul 16	2.1	0.0
South East		
Reporting period	Test positivity (%)	RLI visits to EDs/1,000
Jun 19 – 25	9.6	323.1
Jun 26 – Jul 16	3.8	116.3

The most recent VOC data available from the Provincial database as of July 9, 2022. The data for Jun 26 to Jul 16 includes data from Jun 26 to Jul 9, 2022. RLI visits to EDs contains data as of July 10-16, 2022. No report: no report was submitted by the zone. No data: no data reported by ED

**Table 3: Callers to Health line with COVID like illness from June 26 to July 17, 2022**

Integrated Service Area	Number of callers with symptoms per 1,000 calls	
	June 20-26	Jun 27-Jul 17
North East	73.8	72.0
North West	41.2	64.6
Regina	83.1	79.0
Saskatoon	80.4	97.8
South East	95.9	53.5
South West	57.0	113.2

Source: HealthLine Database, June 27 to July 17, 2022

# Technical Notes

## Case Definition and Methods Overview

Confirmed cases are people with laboratory confirmation of infection with the virus that causes COVID-19 using a Health Canada approved test or confirmed at a reference laboratory (NML or RRPL). It requires detection of at least one specific gene target by nucleic acid amplification tests (i.e., real-time PCR or nucleic acid sequencing).

Laboratory testing is reserved for priority populations at elevated risk for severe outcomes. More information on the priority populations may be found [here](#).

Statistics presented in this report represent counts and crude incidence rates for zones and aggregated to the provincial level.

Data sources are the provincially mandated Panorama database, the Roy Romanow Provincial Laboratory LabWare database, as well as local public health. Confirmed cases must meet the provincial case definition. Surveillance case definitions ensure uniform reporting to allow comparability of surveillance data. The definitions are not intended to be used for clinical or laboratory diagnosis or management of cases. Proportions are calculated using the 2021 SK covered population as the denominator.

The counts and rates presented in this summary report are dependent on the timely reporting by physicians and laboratories to the local Medical Health Officer and timely entry of notifiable disease information into Panorama IOM.

As the counts are constantly being updated, the numbers and rates calculated may differ from previous summary reports. This is a result of a combination of factors including late reporting, data cleaning and verification.

Data on COVID-19 cases use Panorama IOM as the primary source. However, in some instances when the case has not yet been entered into Panorama, the RRPL data becomes the source for the time being (e.g., age, sex, geography) until the case is eventually entered. Additionally, if certain data elements in Panorama are missing or unknown, RRPL also becomes the source to fill in the gaps where the information is available in the RRPL data.

The geographical assignment of cases follows the Panorama IOM rules for documenting geography, as opposed to the assignment of zones by RRPL. As a result, some RRPL location/geography of cases and testing information may not match Panorama IOM (testing information cannot be reconciled because negative tests are not entered into IOM). Panorama IOM geography guidelines take into consideration the client's residence in a certain period, the residence upon diagnosis, and other factors. First Nations individuals under the jurisdiction of the First Nations and Inuit Health Branch (FNIHB) or the Northern Inter-Tribal Health Authority (NITHA) are included in the geographic areas.

Notifiable diseases are generally under-detected and underreported due to a number of factors including client's lack of contact with health care, inability to isolate organism, etc.

Rates based on small numbers may fluctuate dramatically over time and may not have public health significance.

## Fatal Cases (Deaths) Table

- Includes deaths entered into Panorama IOM among laboratory confirmed cases.
- For those reported in the specified month, the deaths that were not previously reported are counted, regardless of when the death occurred.

## Variants of Concern

Variant of concern (VOC) cases:

- VOCs are SARS-CoV-2 viruses that have undergone genetic modification or mutation causing altered virus infectivity, replication and pathogenicity. As a result it can alter host immune response. The Roy Romanow Provincial Laboratory (RRPL) tests for and monitors COVID-19 variants of concern (VOCs) in Saskatchewan. Confirmation of VOC lineages is done by conducting whole genome sequencing (WGS) at RRPL or the National Microbiology Laboratory. It takes one to two weeks to complete WGS.
- Data sources for VOCs analysis include testing data from the RRPL, and epidemiological information from Panorama. Where geographical zone is missing in RRPL or Panorama data, the Saskatchewan postal code

file is used to identify cases' geographical information.

### Emergency Department Visits

- Data collection from EDs: Monitoring will be done for a twenty-four hour period on at least one week day (the exact time period will vary with the ED schedule). The ED should report to local public health services in their area on Wednesday afternoon and public health will report to the Ministry of Health on Thursday each week. This may increase to include one weekend day in certain areas if CLI activity is increasing and laboratory-confirmations support the need to do so.
- Reporting ED surveillance information: Because there is no centralized data capture source for ED admissions in the province each health area sets up a mechanism for EDs to report to public health services.
- Public health aggregates raw data from their EDs on the prescribed data collection form and sends it to the Ministry of Health for overall provincial monitoring.
- FNIHB and NITHA will report to the local zone in which the ED or health centre is located. This does not preclude monitoring in First Nations health care facilities.

### HealthLine callers with Respiratory Symptoms

- A count of protocols specific to callers with viral respiratory-like illness symptoms is completed by HealthLine nurses.
- The respiratory-like illness protocol count is tallied for a designated period each week and transformed into the rate of callers with respiratory symptoms from each zone per 1000 calls from that zone from callers with any type of symptom

### Outbreaks

- A confirmed outbreak is defined as two or more COVID-19 cases in settings outside a household where transmission is evident or there is a high level of suspicion of transmission.
- Outbreaks are reported by the week they were reported to the local public health office and not necessarily in the week that the outbreak began. Total number of confirmed outbreaks reported include outbreaks reported in high risk settings such as Long Term Care (LTC) homes and care homes
  - # COVID-19 Outbreaks in LTC: number of COVID 19 outbreaks reported that occurred in a designated special care facility (LTC) (cumulative or in current reporting week).
  - # COVID-19 Outbreaks in care homes: number of COVID 19 outbreaks reported that occurred in semi-closed settings where personal care is provided. This includes designated homes where the elderly reside or homes for the developmentally challenged (cumulative or in current reporting week). It also includes homes where residents are under the care of social services and in shelters.