COVID-19 Integrated Epidemiology Situation Report

Week of February 13-19, 2022

Purpose

This report provides COVID-19 surveillance information at the provincial and COVID-19 reporting zone levels on a weekly basis. Surveillance information is used for a variety of public health purposes including public communications and decision-making, both strategic and operational. The reporting week for most public health surveillance data runs from Sunday to Saturday and the data are analysed early the following week. The hospital census data are compiled on a Wednesday to Wednesday cycle to ensure the most up-to-date information is available.

The report provides a snapshot of key indicators for the previous week. Where appropriate, longer term comparisons are offered to provide context on the profile of COVID-19 in Saskatchewan. New information is also introduced in this report, such as sentinel surveillance. Sentinel surveillance involves the collection of information about respiratory illness from a variety of sites across the province. For example, analysis of visits to emergency departments for COVID-like illness provides information about community transmission of respiratory illnesses in the province.

Highlights for the week

- 9,142 laboratory tests were performed in Saskatchewan (SK) reflecting 7.6 tests performed per 1,000 population.
- The number of tests was just over three-quarters of the number of tests in the previous week.
- Less than one-fifth of laboratory tests were positive (weekly test positivity of 14.4%).
- Test positivity was about two-thirds of the test positivity value in the previous week.
- 1,407 new cases were confirmed reflecting about 1.2 laboratory-confirmed cases per 1,000 population.
- The number of new laboratory-confirmed cases was more than one-half of the number of new cases in the previous week.
- There were 162 new lineage results reported this week. Of the 162 variants of concern (VOCs) identified by whole genome sequencing, 100% were Omicron.

- Based on data recorded in Panorama, the public health database, there were 37 newly reported COVID-19 deaths, which is slightly lower than the number reported in the previous week (42).
- There were 38.8 COVID-like illness patients (CLI) per 1,000 emergency department (ED) visits, a decrease from 39.9 per 1,000 the previous week.
- Seven (7) confirmed new COVID-19 outbreaks in long-term care and care home settings were reported this week. This is almost one-third of the 22 outbreaks that were reported the previous week.
- As of February 19, of the population five years and older, 85.5% received at least one dose of a twodose COVID-19 vaccine and 80.1% completed a series.
- Among the population 18 years and older, 50.4% had received at least one booster vaccination.



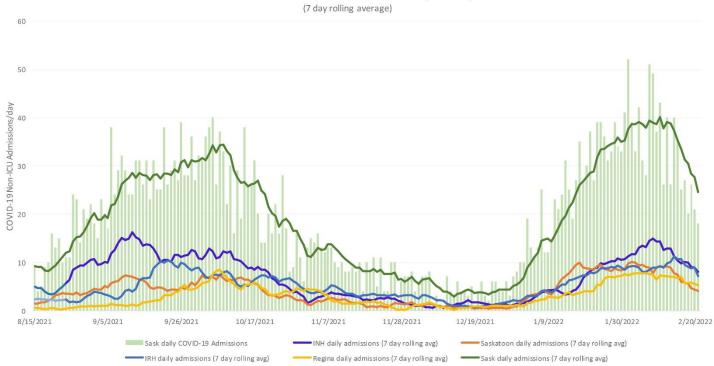
Weekly COVID-19 Hospitalization Indicators: February 16, 2022 as compared to February 23, 2022

	16-Feb	23-Feb	Change from last reporting period
Total COVID Hospitalized	410	372	-38
Total COVID Adult ICU/ICU Surge	33	27	-6
Average Daily Admissions over past 7 days	35.3	21.6	-13.7
Total COVID Related Illness	181	149	-32
Total Incidental COVID Infection	221	204	-17
Total Undetermined	8	19	+11

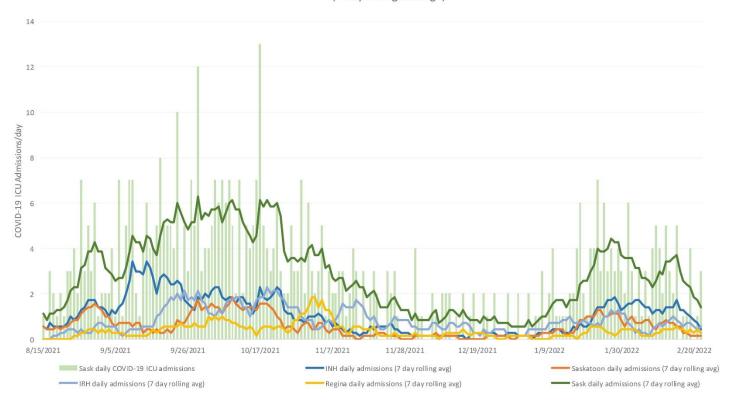
All data is reflective of the 12:00pm (noon) snapshot with the exception of the average daily admissions over past 7 days, which is reflective of the previous Wednesday to Tuesday reporting cycle.

Note: Because of the delay in date tested result, it affects the total number of COVID-19 admissions for a particular day. This lag in data impacts mostly the last couple of days from the day the report is updated.

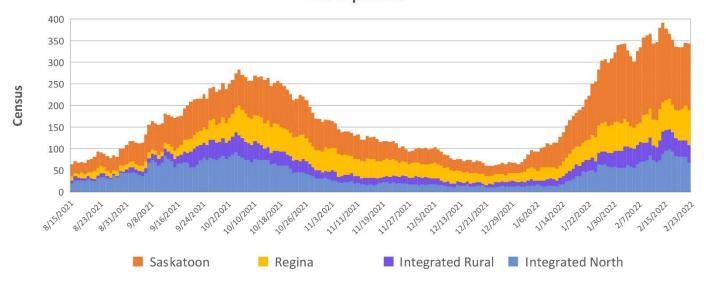
COVID-19 Hospital Admissions per day



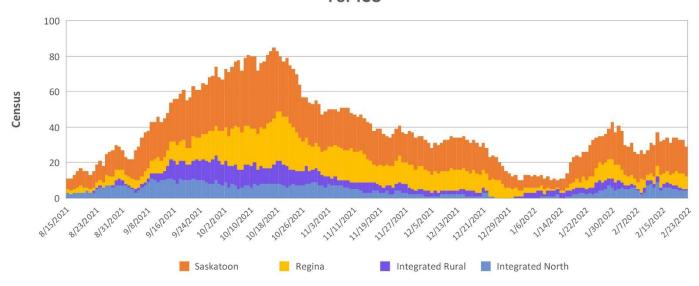
COVID-19 ICU Admissions per day (7 day rolling average)



COVID-19 Daily Census - Noon Snapshot For Inpatient



COVID-19 Daily Census - Noon Snapshot For ICU



Rapid Antigen Test Distribution as of February 22, 2022

Sector	SPSA	SHA	Sector Totals
SHA Internal		4,156,121	4,156,121
NITHA/ISC	1,753,315	433,720	2,187,035
Schools	994,175	1,390,000	2,384,175
Congregate Living	178,725	412,182	590,907
Daycare	25,145	53,460	78,605
Law Enforcement & Fire Depts.	148,500	37,440	185,940
EMS		15,615	15,615
Test to Protect & Unclassified		291,150	291,150
Public Distribution Centres	6,772,420	1,319,200	8,091,620
Total Tests:	9,872,280	8,108,888	17,981,168

[•] There are currently 647 public distribution centres in the province. The full list is available at <a href="https://www.saskatchewan.ca/government/health-care-administration-and-provider-resources/treatment-procedures-and-guidelines/emerging-public-health-issues/2019-novel-coronavirus/testing-information/rapid-testing/locations-for-rapid-antigen-self-test-kits

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A. Laboratory Surveillance

Overview of COVID-19 Laboratory Tests

Table 1: Summary of COVID-19 laboratory tests for the week of February 13 to 19, 2022, by zone

	Current Week			Pi	revious Week	Change from			
	(February 13 to 19, 2022)			(February 6 to 12, 2022)			Previous Week		
Zone	Total Number of Tests Performed	% Tested Positive	Tests performed per 1,000 population	Total Number of Tests Peformed	% Tested Positive	Tests performed per 1,000 population	Test Positivity	Tests performed per 1,000 population	
FNW	232	20.3%	7.8	210	15.2%	7.0	f 5.0	1 0.7	
FNC	3	0.0%	1.1	7	28.6%	2.6	-28.6	-1.5	
FNE	79	27.8%	3.3	136	19.1%	5.6	1 8.7	-2.4	
NW	438	11.6%	5.3	611	18.3%	7.4	-6.7	-2.1	
NC	410	19.8%	4.6	567	29.6%	6.4	-9.9	-1.8	
NE	197	15.2%	4.7	275	18.9%	6.6	-3.7	-1.9	
ST	1,525	11.3%	4.5	2,748	20.0%	8.1	-8.7	-3.6	
CW	136	19.9%	3.7	211	23.7%	5.7	-3.8	-2.0	
CE	604	17.9%	6.1	802	25.7%	8.2	-7.8	-2.0	
RE	1,170	16.2%	4.3	1,473	26.7%	5.4	-10.5	-1.1	
SW	195	18.5%	5.0	235	31.5%	6.1	-13.0	-1.0	
SC	386	16.1%	6.4	501	19.8%	8.3	-3.7	-1.9	
SE	427	22.0%	4.8	668	28.1%	7.5	-6.1	-2.7	
Unknown	3,340	12.0%		3,635	13.4%		-1.4		
SK	9,142	14.4%	7.6	12,079	20.2%	10.0	-5.8	-2.4	

Source: RRPL Daily Test Count Table by new zones, extracted February 21, 2022; Covered Population, 08-Jul-2021 Ministry of Health version (2021 Version 1).

For the week of February 13 to 19, 2022:

- 9,142 laboratory tests were performed in Saskatchewan.
- The number of tests per 1,000 population was 7.6. This was lower than the previous week (February 6 to 12, 2022) by 2.4 tests per 1,000 population. It was also lower than the weekly rate in the previous four weeks (January 16 to February 12, 2022) by 9.6 tests per 1,000 population where the weekly average was 17.2 tests per 1,000 population (data not shown).
- The Far North West zone had the highest proportion of people tested (7.8 tests per 1,000 population). The Far North Central zone had the lowest proportion of people tested (1.1 tests per 1,000 population).
- 14.4% of tests in the province were positive. This was 5.8 percentage points lower than in the previous week (February 6 to 12, 2022) and 14.6 percentage points lower than in the previous four weeks (January 16 to February 12, 2022, data not shown).
- The Far North East zone (27.8%) had the highest test positivity. Of zones with positive tests, ST zone had lowest test positivity (11.3%).

Overview of COVID-19 Laboratory-Confirmed Cases

Table 2: Summary of new laboratory-confirmed COVID-19 cases for the week of February 13 to 19, 2022, by zone

	New	New cases		Previous Week			ate in Previous Ir Weeks	Change from
Zone	Confirmed cases	Cases ¹ per 1,000	Confirmed cases	Cases ¹ per 1,000	Cases per 1,000 from Previous Week	Confirmed cases	Cases ¹ per 1,000	Previous 4-week Rate
FNW	53	1.8	45	1.5	0.3	90	3.0	-1.2
FNC	2	0.8	2	0.8	• 0.0	12	4.6	-3.9
FNE	34	1.4	30	1.2	1 0.2	99	4.1	-2.7
NW	88	1.1	176	2.1	-1.1	461	5.6	-4.5
NC	101	1.1	259	2.9	-1.8	602	6.8	-5.6
NE	41	1.0	57	1.4	-0.4	153	3.7	-2.7
ST	237	0.7	601	1.8	-1.1	1,780	5.3	-4.6
CW	34	0.9	61	1.7	-0.7	156	4.2	-3.3
CE	123	1.3	258	2.6	-1.4	471	4.8	-3.5
RE	295	1.1	507	1.9	-0.8	1,483	5.4	-4.3
SW	49	1.3	83	2.1	-0.9	189	4.9	-3.6
SC	84	1.4	127	2.1	-0.7	338	5.6	-4.2
SE	134	1.5	232	2.6	-1.1	465	5.2	-3.7
Pending	132		83			104		
SK	1,407	1.2	2,521	2.1	-0.9	6,402	5.3	-4.1

Source: RRPL line list February 21, 2022.

For the week of February 13 to 19, 2022

- 1,407 new cases were confirmed by a positive laboratory test.
- The proportion of new laboratory-confirmed cases was 1.2 per 1,000, a decrease of 0.9 per 1,000 since last week.
- It was also lower than the weekly rate in the previous four weeks (January 16-February 12, 2022) by 4.1 cases per 1,000 population.
- The highest proportion of new cases for the week was in Far North West Zone (1.8 per 1,000) and the lowest was the Saskatoon zone (0.7 per 1,000).
- Numbers and proportions of new cases were lower in all zones compared to last week except in the Far North zones.
- Rates should be interpreted with caution because they do not include cases detected by home rapidantigen test kits.

¹Proportion per 100,000 calculated using the Saskatchewan 2021 Covered Population, 08-Jul-2021 Ministry of Health SAS version (2021 Version 1) Data should be interpreted with caution because they do not include cases detected by home rapid-antigen-test kits.

Figure 1: Map of new laboratory-confirmed COVID-19 cases by zone and area for the week of February 13 to 19, 2022

For the week of February 13 to 19, 2022, there were:

- 89 new cases in the Far North (FNW, 53 cases; FNC, 2 cases; FNE, 34 cases);
- 230 new cases in the North (NW, 88 cases; NC, 101 cases; NE, 41 cases);
- 237 new cases in the Saskatoon area;
- 157 new cases in the Central area (CW, 34 cases; CE, 123 cases);
- 295 new cases in the Regina area; and
- 267 new cases in the South (SW, 49 cases; SC, 84 cases; SE, 134 cases).
- 132 new cases pending residence information.

Source: RRPL line list February 21, 2022. The zones include cases reported by First Nations (FN) jurisdictions based on the location of the FN community. Far North – Far North West, Far North Central, Far North East; North – North West, North Central, North East; Saskatoon; Central – Central West, Central East; Regina; South – South West, South Central, South East.

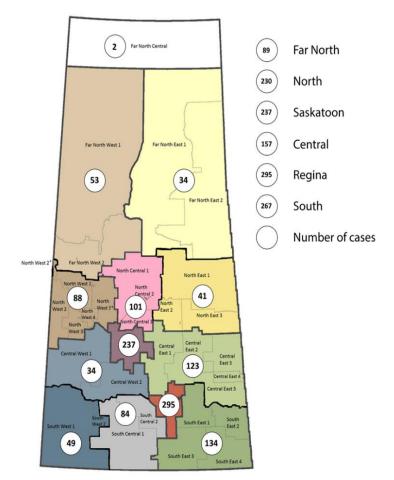


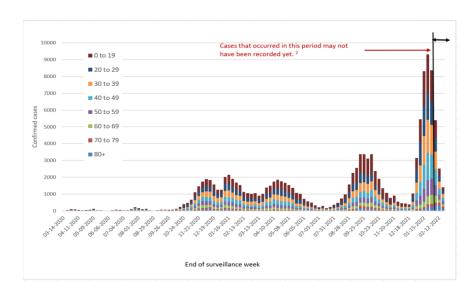
Figure 2: Laboratory-confirmed cases¹, by age group and week, March 8, 2020 to February 19, 2022

- From March 8, 2020 to February 19, 2022, there were 127,162 laboratory-confirmed cases.
- 76.8% were younger than 50 years of age and 26.7% were younger than 20 years of age.



¹ Panorama IOM record.

² Due to data entry lag, cases for this period may be underreported and not captured in this figure.



Variants of Concern

Table 3: Distribution of Variants of Concern (VOCs) among sequenced COVID-19 cases February 13 to 19, 2022, by zone

	Curren	t week (February 13-19)	Previous week (February 6-12)				
Zone	Delta (B.1.617.2)	Omicron (B.1.1.529)	Total	Delta (B.1.617.2)	Omicron (B.1.1.529)	Total	
Far North West		100%	2		100%	1	
Far North Central		100%	3				
Far North East		100%	3		100%	1	
North West		100%	20		100%	7	
North Central		100%	22	3.8%	96%	26	
North East		100%	5		100%	6	
Saskatoon		100%	72		100%	55	
Central West		100%	4		100%	8	
Central East		100%	10		100%	19	
Regina		100%	10		100%	74	
South West		100%	3		100%	6	
South Central		100%	3		100%	18	
South East		100%	4		100%	20	
Pending		100%	1		100%	1	
Total	0.0%	100%	162	0.4%	99.6%	242	

Source: Panorama February 21, 2022.

Notes

Results are based on the date variants of concern (VOC) were reported by the provincial laboratory (RRPL).

Zones are assigned based on information as available in the Panorama database.

Pending cases are those whose geograpical information is not available at the time of reporting.

- There were 162 VOCs reported during the week of February 13 to19, 2022, compared to 242 VOCs in the previous week (February 6-12, 2022).
- Of the total VOCs reported this week, 100% were Omicron VOC compared to 99.6% in the previous week.

■ Delta (B.1.617.2) Omicron (B.1.1.529) 100% 90% 80% 70% Proportion 60% 50% 40% 30% 20% 10% 0% 25-Dec 8-Jan 15-Jan 22-Jan 29-Jan 5-Feb 12-Feb 19-Feb 1-Jan VOC Reported Date Delta counts 304 43 190 66 11 5 0 1 0 Omicron counts 56 51 594 1061 454 618 90 241 162 Total 465 360 94 784 1127 623 90 242 162

Figure 3: Distribution of VOCs among sequenced COVID-19 cases (N=3,947), December 19, 2021 to February 19, 2022

Data source: Panorama IOM; data extraction: February 21, 2022

Results are based on the number of samples sequenced and the date VOCs were reported by RRPL.

The Omicron variant began increasing substantially in Saskatchewan during the week of December 19, 2021.

- The Omicron VOC was first reported in South Africa, and the World Health Organization (WHO) designated Omicron as a variant of concern on November 26, 2021.
- Of all 3,947 positive samples sequenced between December 19, 2021 and February 19, 2022, 15.8% (620) were Delta VOC and 84.3% (3,327) were Omicron VOC.
- The proportion of Delta VOC declined rapidly since the first week of January, 2022.
- The Omicron VOC rapidly increased since the first week of January and became the dominant variant in Saskatchewan.

B. Description of Severe COVID-19 Cases

Table 4: Number and proportion of COVID-19 deaths reported during the week of February 13 to 19, 2022

- In the week of February 13 to 19, 2022, there were 37 new COVID-19 deaths reported.
- Deaths per 100,000 should be interpreted with caution because of small numbers.

Source: Panorama IOM February 21, 2022.

This week's newly reported deaths did not necessarily occur in this past week. They may have occurred in previous weeks.

	Deaths				
Zone	Number	Deaths per 100,000 population			
FNW					
FNC					
FNE					
NW	1	1.2			
NC	9	10.1			
NE	2	4.8			
ST	6	1.8			
CW					
CE	4	4.1			
RE	7	2.6			
SW	1	2.6			
SC					
SE	7	7.8			
Pending					
SK	37	3.1			

Table 5: Age and sex distribution of COVID-19 deaths reported for the week of February 13 to 19, 2022

- For the week of February 13 to 19, 2022, there were 37 COVID-19 new deaths reported.
- 70% of the deaths were among those 80 years of age or older.

		Deaths			
		n	%		
	19 and younger				
	20 to 39	1	3		
	40 to 59				
Age	60 to 69	3	8		
	70 to 79	7	19		
	80 and older	26	70		
	TOTAL	37	100		
	Female	22	59		
Sex	Male	15	41		
	Total	37	100		

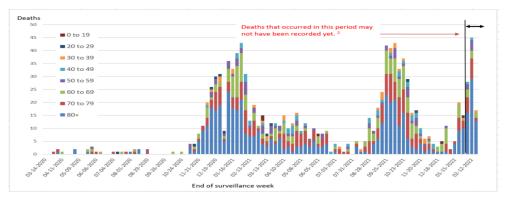
Source: Panorama IOM February 21, 2022

This week's newly reported deaths did not necessarily occur in this past week. They may have occurred in previous weeks.

¹ Proportion per 100,000 calculated using the Saskatchewan 2021 Covered Population, 08-Jul-2021 Ministry of Health SAS version (2021 Version 1)

Figure 4: Deaths¹ in COVID-19 cases, by age group and week, March 8, 2020 to February 19, 2022

- From March 8, 2020 to February 19, 2022, there were 1,093 cases with a fatal outcome reported in Panorama IOM.
- 731 (66.9%) were 70 years and older. Five (5) deaths were reported in the 0 to 19 age group.



Source: Panorama IOM February 21, 2022

¹Death means the Panorama IOM record reported outcome-fatal.

²Due to data entry lag, deaths for this period may be under-reported and not captured in this figure.

Table 6: Most common pre-existing conditions among severe** COVID-19 cases in Saskatchewan, as of February 19, 2022

- There were 2,522 discrete cases who reported having one or more underlying preexisting conditions.
- Of the cases with underlying conditions, the most common pre-existing conditions were hypertension (53.7%), diabetes (45.4%), cardiac disease (35.7%), lung disease (27.7 %), obesity (8.5%) and pregnancy (2.3%).

	T		
Co-morbidity	Number of cases (N=2,522*)	Percent	
Hypertension	1,354	53.7%	
Diabetes	1,146	45.4%	
Cardiac Disease	900	35.7%	
Lung Disease	698	27.7%	
Obesity	214	8.5%	
Pregnancy	59	2.3%	

Note - Some cases reported recently are yet to be reported in Panorama.

[•] Source: Panorama IOM February 21, 2022

^{*}Number of cases represents unique clients.

^{**} Severe cases indicate those cases who were admitted to hospital and/or ICU, and deaths

C. Emergency Department (ED) visits of COVID-19-like illness (CLI)

Emergency department (ED) visit data regarding COVID-like illness (CLI) is one component of community-based respiratory illness surveillance. Visitors with CLI in EDs reflect the level of respiratory illness activity in the community. Visitors may access EDs as their primary health care service or come when health provider offices are closed.

Table 7: COVID-19-like illness (CLI) surveillance (rate per 1,000) in emergency departments by zone and week, January 15 to February 19, 2022

COVID-like patients per 1000 ED visits	Jan 15	Jan 22	Jan 29	Feb 5	Feb 12	Feb 19
Provincial Rate	39.7	53.8	40.5	47.1	39.9	38.8
FNW	36.8	43.1	40.5	59.1	53.6	49.8
FNC	No report					
FNE	No report					
NW	24.6	61.1	69.4	63.8	60.2	46.8
NC	No report	No report	No report	62.5	No report	No report
NE	666.7	277.1	132.7	129.0	92.0	51.3
ST	8.7	23.7	12.6	31.8	18.2	24.3
CW	176.5	167.7	No report	47.4	35.6	24.8
CE	No report	183.9				
RE	36.2	37.5	40.5	24.1	40.0	41.5
SW	134.6	No report	No report	114.3	104.2	No report
SC	No data	No data	0.0	No data	0.0	0.0
SE	211.8	114.3	86.4	119.4	84.5	No report
Preschool						
age 1-4 years	68.0	137.5	62.5	90.1	93.7	110.2
School age 5 -19	38.4	71.6	31.3	17.3	23.6	9.0
Working age 20-64	37.2	37.9	36.6	44.3	38.8	34.8
Seniors 65 +	36.0	51.1	50.1	59.3	33.9	42.6

Source: Emergency department surveillance data, February 22, 2022.

No report: no report was submitted by the zone.

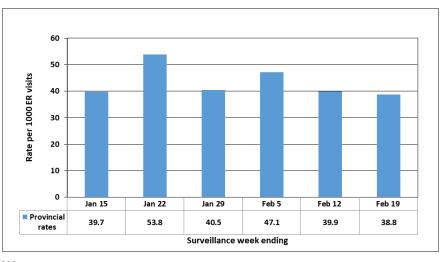
No data: no data reported by ED.

- Eight (8) of 13 zones submitted data this week.
- This week's provincial rate of 38.8 COVID-like illness patients per 1,000 visits is an indicator of respiratory viral activity in the community, still largely reflective of COVID-19.
- This week's preschool age rate of 110.2/1,000 visits is higher than the average weekly rate of 87.5/1,000 over

the previous six weeks. The school age rate at 9.0/1,000 is lower than the six-week average rate of 37.2/1,000. However, the working age group rate at 34.8/1,000 visits was comparable to the average rate in previous six weeks (37.6/1,000). The seniors age group rate at 42.6/1,000 was similar to the average six-week rate of 42.3/1,000 visits. Pediatric and school age rates can vary widely week by week.

Figure 5: COVID-19-like illness surveillance in emergency departments, as of February 19, 2022

• The provincial emergency department (ED) rate of visitors with COVID-like illness (CLI), representing eight of 13 areas of the province, was 38.8 patients/1,000 visitors in the reporting week ending February 19, comparable to the average rate over the previous six weeks (42.6/1,000 visits). This week's rate represents 129 COVID-like illness patients among 3,327 visitors to the EDs.



Source: Emergency department surveillance data, February 22, 2022.

Note: COVID-like illness (CLI) may present as the gradual onset of respiratory illness with fever and cough or one or more of the following – severe headache, chills, sore throat, arthralgia, myalgia, gastrointestinal disorder, prostration or shortness of breath which could be due to COVID-19.

D. Outbreak Surveillance

Table 8: New confirmed COVID-19 outbreaks in long-term care and other care home settings reported for the week of February 13 to 19, 2022, by zone

Surveillance Zones	# COVID-19 Outbreaks in LTC	# COVID-19 Outbreaks in care homes including personal care homes
Far North West		
Far North Central		
Far North East		
North West		
North Central		1
North East		
Saskatoon	1	
Central West		
Central East		2
Regina		1
South West	1	1
South Central		
South East		
Total	2	5

Source: Outbreak line list, PHB, extracted February 22, 2022

• Seven (7) new confirmed COVID-19 outbreaks in high risk settings were reported this week.

• Two (2) outbreaks were reported in long term care facilities. Of the five (5) outbreaks in care homes, three (3) were in personal care homes and two (2) in group homes.

Table 9: COVID-19 outbreaks in high risk settings, weeks ending January 16 to February 19, 2022

High risk setting	16-Jan	22-Jan	29-Jan	05-Feb	12-Feb	19-Feb	6-week total by setting
# COVID-19 Outbreaks in LTC	12	21	10	17	6	2	68
# COVID-19 Outbreaks in personal care homes, group homes, shelters	22	20	12	17	16	5	92
Total by week	34	41	22	34	22	7	160

Source: Outbreak line list, PHB, extracted February 22, 2022

• Over the past six weeks sixty-eight (68) outbreaks occurred in long term care facilities, fifty-one (51) in personal care homes, forty (40) in group homes, and one (1) in shelters. One hundred forty (88%) of these outbreaks are ongoing.

E. Immunization

Figure 6: COVID-19 immunization coverage (% population 5 years and older) by age group and zone, up to and including February 19, 2022



Notes: Zone is based on the client's address in Panorama. People whose addresses cannot be mapped to a zone are counted only in the Saskatchewan total.

The denominator used for coverage calculation is the Saskatchewan 2021 covered population (08-Jul-2021 Ministry of Health SAS version (2021 Version 1)).

Completed series is defined as immunized with one dose of a one-dose vaccine or two doses of a two-dose vaccine where the minimum interval criterion is met.

Booster doses are additional doses beyond the one or two-dose primary series and meeting certain minimum interval criteria.

Although certain sub-populations have been identified as requiring a three-dose primary series, they cannot be reliably identified in the Panorama immunization registry. These doses are therefore counted as booster doses.

Lloydminster is in the North West zone. Some Alberta residents living in Lloydminster, AB are included in the numerator but they are not included in the denominator. This results in an overestimation of the percentage of the population immunized in the North West zone.

Although proof of vaccination now allows for non-Health Canada approved vaccines (nonHCAVs), they are NOT included in the immunization coverage tables.

As of February 19, 2022:

- Of the population five years and older:
 - 85.5% received at least one dose of a two-dose COVID-19 vaccine, compared to 85.4% the week earlier (as of February 12, 2022), and
 - 80.1% completed a series compared to 79.9% the week earlier.
- Among the population 18 years and older, 50.4% had received at least one booster (not shown in chart) compared to 50.0% the week earlier.

- Among the youngest age group, five to 11 years of age:
 - 55.6% received at least one dose compared to
 55.3% the week earlier, and
 - 36.0% completed their series compared to 34.7% the week earlier.
- The Regina zone at 81.8% is the only zone reporting over 80% of the eligible population with a completed vaccination series. All others are below 80%.

Table 10a: Vaccine doses administered February 13 to 19, 2022

 During the week of February 13 to 19, 2022, 10,808 doses of COVID-19 vaccine were administered, of which 1,996 (18.5%) were pediatric doses and 7,662 (70.9%) were booster doses.

Type of dose	Number
First dose of two	815
Second dose of two	2,323
Janssen single dose	8
First and second boosters after complete series*	7,662
Total	10,808
Pediatric doses	1,996

Source: Panorama immunization registry February 21, 2022

Table 10b: Cumulative vaccines doses administered from start of the immunization campaign (December 15, 2020) to February 19, 2022

 Since the start of the immunization campaign to February 19, 2022, about 2.4 million doses of COVID-19 vaccine were administered.

 Of these, about 1.9 million (79.2%) were administered for a primary series, of whi

Type of dose	Number
Pediatric primary series doses	100,111
Primary series doses including pediatric doses	1,873,399
Total Doses including Booster Doses	2,365,748

administered for a primary series, of which 100,111 were pediatric doses.

Source: Panorama immunization registry February 21, 2022

F. Abbreviations

General

CLI - COVID-19-like illness

ED - emergency department

FNIHB – First Nations and Inuit Health Branch

ICU - intensive care unit

IOM – Investigations and Outbreak Module –

Panorama

LTC - long-term care

NA – not available

NITHA - Northern Inter-Tribal Health Authority

OOP – out of province

PCR - polymerase chain reaction

PHB – Population Health Branch

SHA – Saskatchewan Health Authority

SK - Saskatchewan

SNP – single nucleotide polymorphism

RRPL - Roy Romanow Provincial Laboratory

WGS - whole genome sequencing

WHO - World Health Organization

13 Zones

FNW - Far North West zone

FNC – Far North Central zone

FNE – Far North East zone

NW – North West zone

NC - North Central zone

NE - North East zone

ST – Saskatoon zone

CW - Central West zone

CE - Central East zone

RE - Regina zone

SW - South West zone

SC - South Central zone

SE - South East zone

^{*}Completed series is defined as immunized with one of a one-dose vaccine or two doses of a two-dose vaccine where the minimum interval criterion is met. Booster doses are additional doses beyond the one or two-dose completed series and meeting certain minimum interval criteria.

G. 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

- Include all deaths entered into Panorama IOM.
- For those reported in the specified week, the deaths that were not previously reported are counted, regardless of when the death occurred.

VOC Section

Variant of concern (VOC) cases:

- VOCs are SARS-CoV-2 viruses that have undergone genetic modification or mutation causing in 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 linages 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.

Sentinel Surveillance - 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.
- The count of CLI patients in each of four broad age categories, preschool (approximately 0-4 years), school age (approx. 5-19 years), working age group (approx. 20-64 years), seniors (approx. 65 years plus) as a proportion of total ED admissions in those age categories is captured. The age group in which to place a patient is determined in part by the age groups used by the ED's administrative database. The categories are approximate but provide a general profile of the broad age groups most affected by COVID-19.
- 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.

Outbreaks

A confirmed outbreak is defined as two or more lab diagnosed COVID-19 cases in settings outside a household where transmission is evident or there is a high level of suspicion of transmission.

- # COVID-19 Outbreaks in LTC: Number of COVID 19 outbreaks reported that occurred in a special care facility (LTC) (cumulative or in current reporting week).
- # COVID-19 Outbreaks in care homes including group homes: Number of COVID 19 outbreaks reported that occurred in semi-closed settings where personal care is provided. This includes 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 (mental health services).

H. Map of Saskatchewan by Zone and Sub-Zone

