COVID-19 Integrated Epidemiology Situation Report

Week of March 20 - 26, 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

- 7,449 laboratory tests were performed in Saskatchewan reflecting 6.2 tests performed per 1,000 population.
- The number of tests was similar to the number of tests in the previous week (7,488).
- Almost one in eight laboratory tests were positive (weekly test positivity of 12.3%), slightly higher than the previous week.
- 1,196 new cases were confirmed reflecting about 1.0 laboratory-confirmed cases per 1,000 population.
- The number of new laboratory-confirmed cases was about 34% higher than the number of new cases in the previous week (894).
- There were 400 new lineage results reported this week.
 Of the 400 variants of concern identified by whole genome sequencing, all were Omicron.
- The Omicron BA.2 sublineage accounted for 15.5% of the VOCs reported this week, a decrease from 25.9% the previous week.

- There were 20 newly-reported COVID-19 deaths, about 39% lower than in the previous week (33).
- There were 25.7 COVID-like illness patients per 1,000 emergency department visits which is lower than the average weekly rate in the previous six weeks (35.2 per week/1,000 visits).
- Ten (10) confirmed COVID-19 outbreaks in long-term care and care home settings were reported this week.
- As of March 26, of the population five years and older, 85.7% received at least one dose of a two-dose COVID-19 vaccine and 80.6% completed a series.
- Among the population 18 years and older, 51.3% had received at least one booster vaccination.

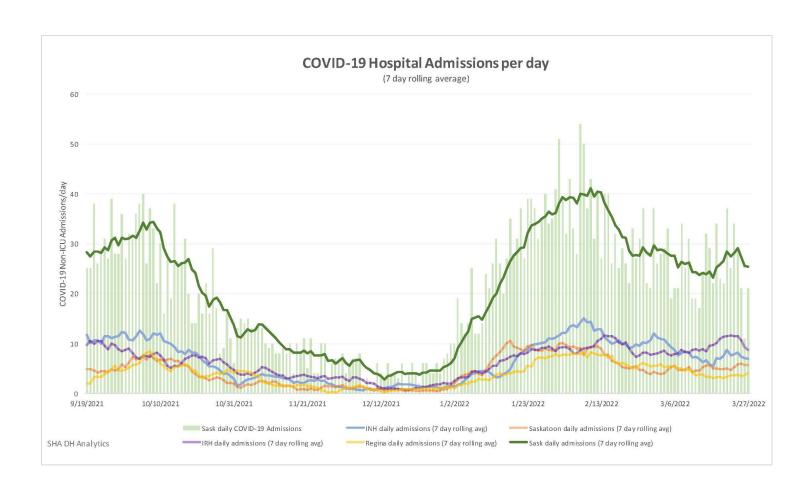


Weekly COVID-19 Hospitalization Indicators: March 23, 2022 as compared to March 30, 2022

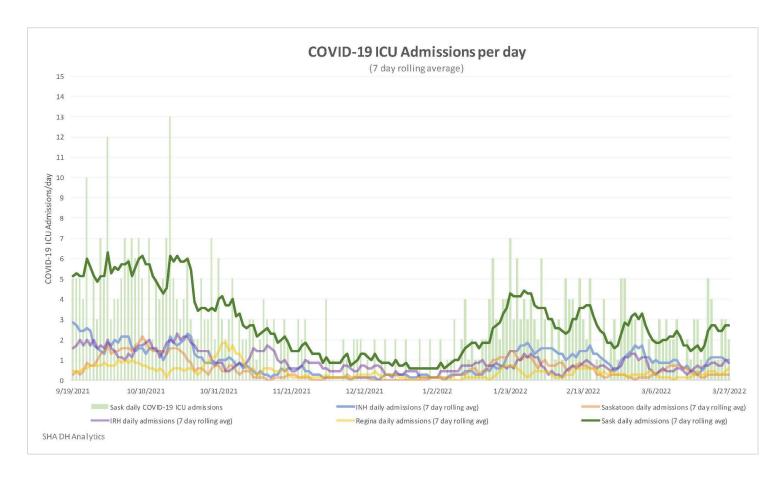
	23-Mar	30-Mar	Change from last reporting period
Total Covid Hospitalized	305	324	+19
Total Covid Adult ICU/ICU Surge	19	21	+2
Average Daily Admissions over past 7 days	27.4	23	-4.4
Total Covid Related Illness	128	120	-8
Total Incidental Covid Infection	158	184	+26
Total Patient Under Investigation	19	20	+1

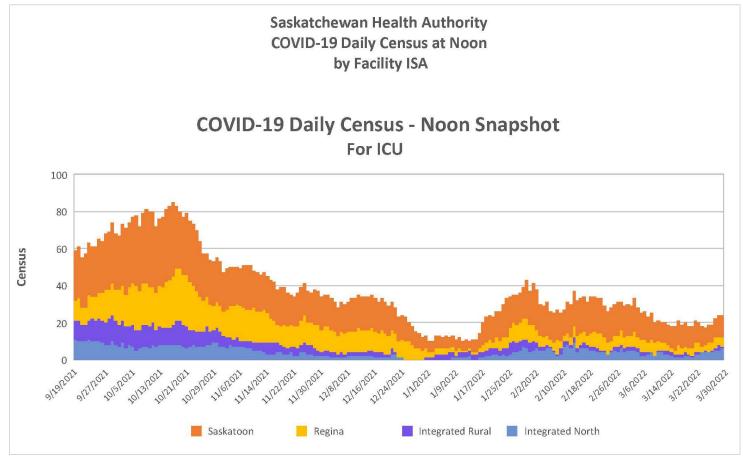
All data is reflective of the 12:00pm (noon) snapshot with the exception of the average daily admissions over past 7 days, which is reflective of the previous Wednesday to Tuesday reporting cycle.

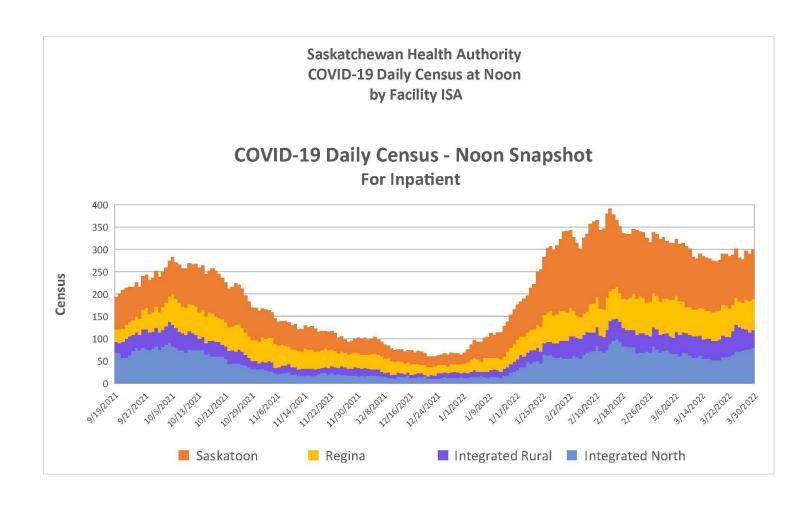
Note: Because of the delay in date tested result, it affects the total number of COVID-19 admissions for a particular day. This lag in data impacts mostly the last couple of days from the day the report is updated.











Rapid Antigen Test Distribution as of March 21, 2022

Sector	SPSA	SHA	Sector Totals
SHA Internal	0	4,281,947	4,281,947
NITHA/ISC	2,305,310	433,720	2,739,030
Schools	1,078,415	1,390,000	2,468,415
Congregate Living	214,290	418,867	633,157
Law Enforcement & Fire Depts.	154,160	37,440	191,600
EMS	0	15,615	15,615
Test to Protect & Unclassified	0	299,990	299,990
Public Distribution Centres	7,307,615	1,372,660	8,680,275
Total Tests:	11,059,790	8,250,239	19,310,029

[•] There are currently 655 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 March 20 to 26, 2022, by zone

	Current Week			Previous Week			Change from			
	(March 20 to 26, 2022)			(Marc	(March 13 to 19, 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	113	8.0%	3.8	106	12.3%	3.6	-4.3	1 0.2		
FNC	13	7.7%	4.9	7		2.6	1.7	1 2.3		
FNE	81	4.9%	3.3	59	10.2%	2.4	-5.3	1 0.9		
NW	396	17.9%	4.8	420	13.8%	5.1	4.1	-0.3		
NC	251	9.6%	2.8	312	7.1%	3.5	1 2.5	-0.7		
NE	273	12.1%	6.6	253	17.0%	6.1	-4.9	1 0.5		
ST	1,372	13.0%	4.1	1,432	10.7%	4.2	1 2.3	-0.1		
CW	139	12.9%	3.8	109	17.4%	2.9	-4.5	1 0.9		
CE	511	13.5%	5.2	518	10.8%	5.3	1 2.7	-0.1		
RE	500	18.2%	1.8	565	18.6%	2.1	-0.4	-0.3		
SW	131	13.7%	3.4	196	19.4%	5.1	-5.7	-1.7		
SC	274	16.8%	4.5	351	15.1%	5.8	1 .7	-1.3		
SE	309	16.2%	3.5	275	20.7%	3.1	-4.5	1 0.4		
Unknown	3,086	9.8%		2,885	8.8%		1.0			
SK	7,449	12.3%	6.2	7,488	11.7%	6.2	1 0.6	→ 0.0		

Source: RRPL Daily Test Count Table by new zones, extracted March 28, 2022; Covered Population, 08-Jul-2021 Ministry of Health version (2021 Version 1). As of February 7, 2022 RRPL PCR testing was reserved for populations deemed to be at an elevated risk for severe outcomes (see details in Technical Notes) *Test positivity is based on the number of tests that were positive and does not necessarily equal the number of cases in Table 2.

For the week of March 20 to 26, 2022:

- 7,449 laboratory tests were performed in Saskatchewan.
- The number of tests per 1,000 population was 6.2. This was equal to the previous week (March 13 to 19, 2022) and the average for the previous four weeks (February 20 to March 19, 2022).
- The North East zone had the highest testing rate (6.6 tests per 1,000 population). The Regina zone had the lowest testing rate (1.8 tests per 1,000 population).
- 12.3% of tests in the province were positive. This was 0.6 percentage points higher than in the previous week
 (March 13 to 19, 2022) but similar to the average for the previous four weeks (February 20 to March 19, 2022) where the average was 12.5%.
- The Regina zone (18.2%) had the highest test positivity. The Far North East zone had the lowest test positivity (4.9%).

Overview of COVID-19 Laboratory-Confirmed Cases

Table 2: Summary of new laboratory-confirmed COVID-19 cases for the week of March 20 to 26, by zone

	New	cases	Previou	ıs Week	Change in Cases per		Weekly Rate Four V	e in Previous Weeks	Char	nge from
Zone	Confirmed cases	Cases ¹ per	Confirmed cases	Cases ¹ per 1000	1,0 Pr	00 from evious Week	Confirmed cases	Cases ¹ per 1000	Previous 4- week Rate	
FNW	34	1.1	14	0.5	1	0.6	19	0.6	1	0.5
FNC										
FNE	31	1.3	8	0.3		1.0	9	0.4	1	0.9
NW	198	2.4	95	1.2		1.2	73	0.9	1	1.5
NC	56	0.6	37	0.4	1	0.2	59	0.7	•	-0.1
NE	45	1.1	47	1.1			46	1.1	1	0.0
ST	249	0.7	200	0.6	1	0.1	218	0.6	1	0.1
CW	36	1.0	26	0.7	1	0.3	32	0.9	1	0.1
CE	103	1.0	93	0.9		0.1	93	0.9	1	0.1
RE	229	0.8	171	0.6		0.2	221	0.8	1	0.0
SW	28	0.7	37	1.0	4	-0.3	38	1.0	•	-0.3
SC	56	0.9	59	1.0	-	-0.1	70	1.2	•	-0.3
SE	93	1.0	82	0.9	1	0.1	81	0.9	1	0.1
Pending	38		25			·	39			
SK	1,196	1.0	894	0.7	1	0.3	995	0.8	•	0.2

Source: RRPL line list March 28, 2022.

For a given week, the number of cases in Table 2 can be slightly different from the number of tests used to calculate test positivity in Table 1, because the RRPL test dates may be in a different week than case dates used in Panorama.

For the week of March 20 to 26, 2022

- 1,196 new cases were confirmed by a positive laboratory test.
- The proportion of new laboratory-confirmed cases was 1.0 per 1,000 population, 0.3 per 1,000 population higher than last week. It was higher than the weekly rate in the previous four weeks (February 20 to March 19, 2022) by 0.2 cases per 1,000 population, consistent with higher test positivity (see Table 1).
- The highest proportion of new cases for the week was in the North West zone (2.4 per 1,000 population). Of the zones with confirmed cases, the lowest was in the North Central zone (0.6 per 1,000 population).

- Numbers and proportions of new cases were higher compared to last week in all zones with the exception of FNC, NE, SW, and SC, which were unchanged or lower.
- Rates should be interpreted with caution because they do not include cases detected by home rapid-antigen 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 March 20 to 26, 2022

For the week of March 20 to 26, 2022:

- 65 new cases in the Far North (FNW, 34 cases; FNE, 31 cases);
- 299 new cases in the North (NW, 198 cases; NC, 56 cases; NE, 45 cases);
- 249 new cases in the Saskatoon area;
- 139 new cases in the Central area (CW, 36 cases; CE, 103 cases);
- 229 new cases in the Regina area; and
- 177 new cases in the South (SW, 28 cases; SC, 56 cases; SE, 93 cases).
- 38 new cases still have pending residence information.

Source: RRPL line list March 28, 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.

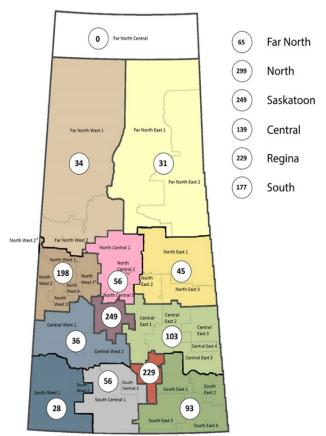
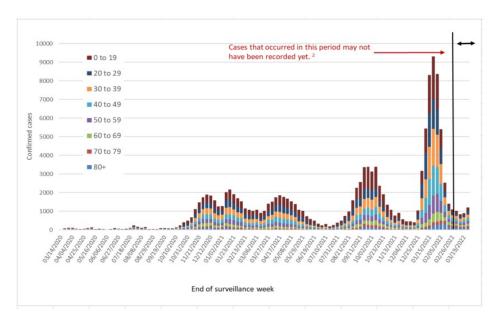


Figure 2: Laboratory-confirmed cases¹, by age group and week, March 8, 2020 to March 26, 2022

- From March 8, 2020 to March 26, 2022, there were 132,172 laboratoryconfirmed cases.
- Half of the cases were between 20 and 49 years of age and over onequarter were younger than 20 years of age.
- There were 302 more laboratory confirmed cases this week compared with last week.



Source: Panorama IOM March 28, 2022.

¹ Panorama IOM record.

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

Variants of Concern

Table 3: Distribution of Variants of Concern (VOCs) among sequenced COVID-19 cases for the week March 20 to 26, 2022, by zone

	Current week (March 20 - March 26)			Previous week (March 13 – March 19)				
MoH Zone	Omicro	on VOC	Delta VOC	Total	Omicron VOC		Delta VOC	Total
	BA.2 sublineage	Other sublineage			BA.2 sublineage	Other sublineage		
Far North West	12.5%	87.5%		16				0
Far North Central				0				0
Far North East		100%		3		100%		1
North West	4.8%	95.2%		21	12.5%	87.5%		8
North Central		100%		26		100%		10
North East	16.7%	83%		6		100%		5
Saskatoon	5.8%	94.2%		52	26.7%	73%		30
Central West	18.2%	82%		11		100%		2
Central East	8.8%	91%		34		100%		7
Regina	24.6%	75.4%		118	36.0%	64%		50
South West	22.7%	77.3%		22	60.0%	40.0%		5
South Central	26.8%	73.2%		41	28.6%	71.4%		14
South East	13.3%	86.7%		30	28.6%	71.4%		14
Pending	5.0%	95%		20		1		1
Total	15.5%	84.5%	0	400	25.9%	74.1%	0	147

Source: Panorama March 28, 2022.

Notes

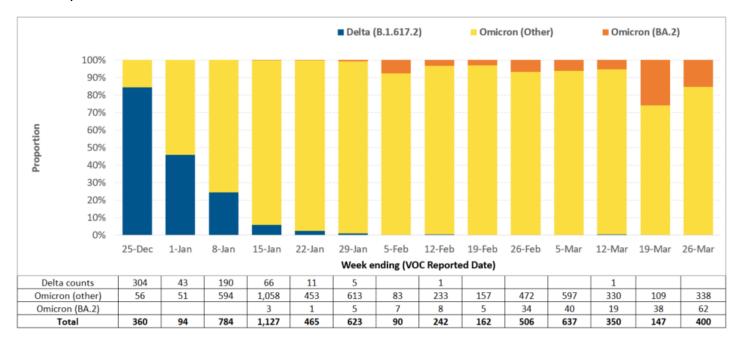
Results are based on the date Variants of Concern (VOC) were reported by the provincial laboratory (RRPL).

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 400 VOCs reported during the current week (March 20 26) compared to 147 in the previous week (March 13 19).
- Of the total VOCs reported in the past two weeks, 100% were the Omicron VOCs.
- 15.5% of Omicron VOC were of sublineage BA.2 which was less compared to last week.

Figure 3: Distribution of VOCs among sequenced COVID-19 cases (N=5,987), weeks ending December 25, 2021 to March 26, 2022



Data source: Panorama IOM; data extraction: March 28, 2022 VOC reported date are based on date VOC reported by the provincial lab (RRPL) Results are based on the number of samples sequenced and the date VOCs were reported by RRPL.

- 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 5,987 positive samples sequenced between December 19, 2021 and March 26, 2022, 10.4% (621) were Delta VOC and 89.6% (5,366) were Omicron VOC.
- The proportion of Delta VOC declined rapidly, and only one (1) has been reported in the past six weeks.
- 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 newly reported during the week of March 20 to 26, 2022

- For the week of March 20 to 26, 2022, there were 20 newly reported COVID-19 deaths.
- Over one-third, seven (7), of the newly reported deaths were in the Saskatoon zone.
- Of this week's newly reported deaths, 16 occurred within the week. The
 other four (4) deaths occurred in previous weeks (February 21 to March
 19, 2022), but were reported this week.
- Death rates should be interpreted with caution because of small numbers.

Source: Panorama IOM March 28, 2022.

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

	Deaths					
Zone	Number	¹ Deaths per 100,000 population				
FNW	1	3.4				
FNC						
FNE						
NW	1	1.2				
NC						
NE	2	4.8				
ST	7	2.1				
CW	1	2.7				
CE	3	3.0				
RE	1	0.4				
SW	1	2.6				
SC	2	3.3				
SE	1	1.1				
Pending						
SK	20	1.7				

Table 5: Age and sex distribution of deaths with COVID-19, newly reported the week of March 20 to 26, 2022

- For the week of March 20 to 26, 2022, there were 20 newly reported COVID-19 deaths.
- There were four (4) newly reported deaths among those younger than 70 years of age.
- Close to one-half of the deaths, nine (9), were among those 80 years of age or older.
- Almost two-thirds, 65%, of the deaths were among males.
- Of this week's newly reported deaths, 16 occurred within the week. The other four (4) deaths occurred in previous weeks (February 21 to March 19, 2022), but were reported this week.

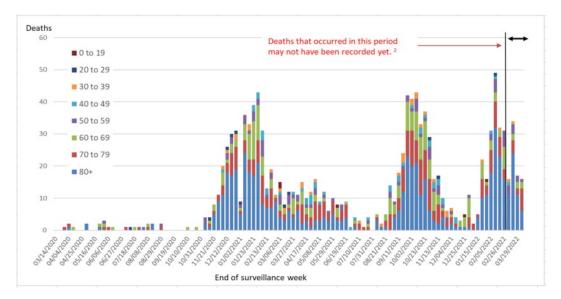
Ago and say distribution		Deaths			
Age and	Age and sex distribution		%		
	19 and younger				
	20 to 39				
A	40 to 59	1	5		
Age	60 to 69	3	15		
	70 to 79	7	35		
	80 or older	9	45		
	TOTAL	20	100		
Cov	Female	7	35		
Sex	Male	13	65		
	TOTAL	20	100		

Source: Panorama IOM March 28, 2022

¹Proportion 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 of death, March 8, 2020 to March 26, 2022

- From March 8, 2020 to March 26, 2022, there were 1,232 cases with a fatal outcome.
- Over one in five deaths (270 or 21.9%) were in the 70 to 79 year age group and close to half (569 or 46.2%) were in the 80 years and older group.
- Five (5) or 0.4%, of the total deaths were reported in the age group 19 years and younger.



Source: Panorama IOM March 28, 2022

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

Table 6: Most common pre-existing conditions among severe** COVID-19 cases in Saskatchewan, as of March 26, 2022

- There were 2,801 severe cases who reported having one or more underlying pre-existing conditions
- Of the cases with pre-existing underlying conditions, the most common were hypertension (54.1%), diabetes (45.4%), heart disease (36.3%), lung disease (27.5 %), obesity (8.1%) and pregnancy (2.1%).

Co-morbidity	Number of cases (N=2,801*)	Percent
Hypertension	1,514	54.1%
Diabetes	1,271	45.4%
Heart Disease	1,016	36.3%
Lung Disease	771	27.5%
Obesity	228	8.1%
Pregnancy	60	2.1%

Source: Panorama IOM March 28, 2022

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

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

^{*}Number of cases represents unique clients.

^{**} Severe cases indicate those cases where case investigation showed admitted to hospital and/or ICU, and death.

C. Sentinel Surveillance

Emergency Department (ED) visits related to 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, February 19 to March 26, 2022

COVID-like patients per 1000 ED visits	Feb 19	Feb 26	Mar 5	Mar 12	Mar 19	Mar 26
Provincial Rate	38.8	37.6	38.1	27.1	30.0	25.7
FNW	49.8	72.7	80.4	24.9	15.6	11.9
FNC	No report					
FNE	No report					
NW	46.8	46.2	32.8	23.5	27.2	29.7
NC	No report					
NE	51.3	155.2	200.0	239.1	328.1	148.1
ST	24.3	12.8	29.5	8.9	9.7	15.0
cw	24.8	89.5	6.7	15.6	50.0	No report
CE	No report					
RE	41.5	26.6	36.0	44.6	23.2	39.0
SW	No report	127.7	No report	No report	136.4	No report
SC	0.0	0.0	No report	0.0	0.0	0.0
SE	183.9	72.3	74.5	105.3	162.2	No report
Preschool						
age 1-4 years	110.2	64.9	67.9	72.6	68.4	52.0
School age 5 -19	9.0	33.1	12.7	30.7	28.9	31.4
Working age 20-64	34.8	35.9	36.4	21.4	24.1	19.0
Seniors 65 +	42.6	34.8	43.7	18.3	27.1	25.6

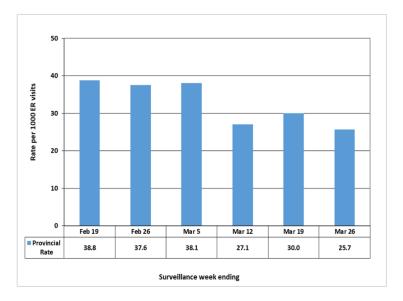
Source: Emergency department surveillance data, March 28, 2022. No report: no report was submitted by the zone. No data: no data reported by ED.

- Six of 13 zones submitted data this week.
- This week's provincial rate of 25.7 CLI patients per 1,000 visits was notably lower than the six-week average of 35.2/1,000 visits. Respiratory syncytial virus (RSV) had a 14% lab test positivity rate compared to entero and rhino viruses (17.0%) and influenza (1.0%).
- This week's preschool age rate of 52.0/1,000 visits is a
 decrease over last week (68.4/1,000) and below the
 average weekly rate of 79.6/1,000 over the previous six
 weeks.
- The school age rate at 31.4/1,000 is higher than last week (28.9/1,000) and also higher than the previous sixweek average rate of 23.0/1,000.
- The working age group rate at 19.0/1,000 visits was lower than last week at 24.1/1,000 and the average rate in previous six weeks (31.8/1,000).
- The seniors' age group rate at 25.6/1,000 was lower than last week (27.1/1,000) and lower than the previous sixweek average rate of 33.4/1,000 visits.

Figure 5: COVID-19-like illness surveillance in emergency departments, February 19 to March 26, 2022

The provincial emergency department rate of visitors with CLI, representing six of 13 areas of the province, was 25.7 patients/1,000 visitors in the reporting week ending March 26, notably lower than the average rate over the previous six weeks (35.2/1,000 visits). This week's rate represents 94 CLI patients among 3,661 visitors to the EDs.

Source: Emergency department surveillance data, March 28, 2022. Note: 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.



HealthLine Callers with COVID-19-like Illness (CLI)

Table 8a: Rate of callers to HealthLine with respiratory-like symptoms per 1,000 calls by integrated service area (ISA), week ending March 27, 2022

 In the week ending March 27, of the 1,763 calls to HealthLine (811), 223 (12.6%) callers reported respiratory symptoms similar to COVID-19 and other common respiratory viral infections. The provincial rate was 126.5 callers per 1,000 calls, higher than 103.5/1,000 calls last week and in the three weeks prior to last.

Source: HealthLine Database March 28, 2022.

Integrated Service Area	Number of callers with symptoms	Rate per 1,000 calls
North East	18	90.9
North West	16	133.3
Regina	65	121.5
Saskatoon	76	143.4
South East	30	141.5
South West	18	107.1
Saskatchewan	223	126.5

Table 8b: Weekly rate trend of callers to HealthLine with respiratory-like symptoms per 1,000 calls by integrated service area

- The increase is most evident in the Saskatoon and South East areas.
 Influenza is circulating at moderate levels in the Saskatoon ISA.
- HealthLine caller rates can fluctuate week over week.

Source: HealthLine Database March 28, 2022.

Integrated Service					
Area	27-Feb	06-Mar	13-Mar	20-Mar	27-Mar
North East	107.3	86.1	126.3	68.8	90.9
North West	110.4	90.2	98.4	116.8	133.3
Regina	106.7	106.9	101.3	92.6	121.5
Saskatoon	86.1	89.4	79.1	116.6	143.4
South East	106.7	65.5	79.5	117.0	141.5
South West	77.3	48.5	94.7	120.3	107.1
Province	98.2	87.2	94.6	103.5	126.5

D. Outbreak Surveillance

Table 9: New confirmed COVID-19 outbreaks in long-term care and other care home settings reported for the week of March 20 to March 26, 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		1
North West	1	
North Central	1	1
North East		
Saskatoon		1
Central West	2	
Central East	1	
Regina		
South West		
South Central		1
South East		1
Total	5	5

Source: Outbreak line list, PHB, extracted March 28, 2022.

- Ten (10) confirmed new COVID-19 outbreaks in high risk settings were reported this week.
- Five (5) outbreaks were reported in long term care facilities. Outbreaks occurred in four (4) personal care homes and one (1) in a group home.

Table 10: COVID-19 outbreaks in high risk settings, weeks ending February 19 to March 26, 2022

High risk setting	19-Feb	26-Feb	5-Mar	12-Mar	19-Mar	26-Mar	6-week total by setting
# COVID-19 Outbreaks in LTC	6	8	12	6	7	5	44
# COVID-19 Outbreaks in personal care homes, group homes, shelters	11	4	6	4	3	5	33
Total by week	17	12	18	10	10	10	77

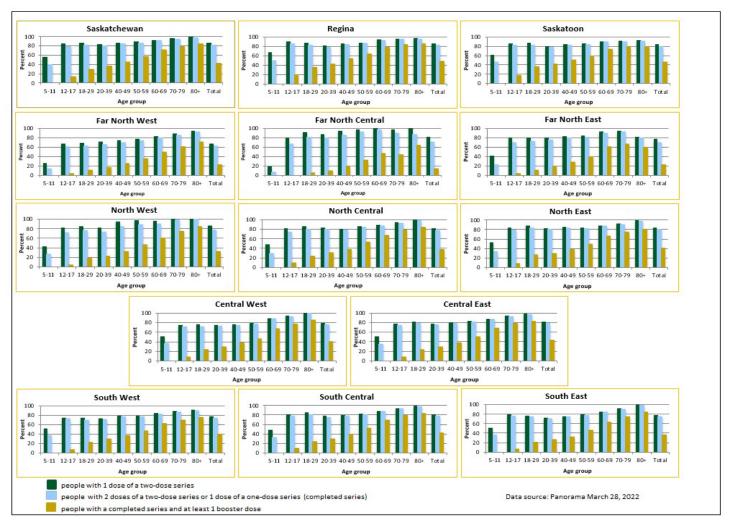
Source: Outbreak line list, PHB, extracted March 28, 2022

- Over the past six weeks, forty-four (44) outbreaks occurred in long term care facilities, twenty-two (22) in personal care homes and eleven (11) in group homes. Thirty (30, 39.0%) are in the Regina and Saskatoon areas. Fifty-four (70.1%) of the 77 outbreaks are ongoing.
- Figures from previous weeks may change as outbreaks reported earlier as suspect have since been confirmed or outbreaks are entered to the Ministry's database.

^{*}By date of first notification.

E. Immunization

Figure 6: COVID-19 immunization coverage (% population 5 years and older) by age group and zone, up to and including March 26, 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, with the first additional dose administered 28 days or longer after primary series completion. 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 March 26, 2022:

- Of the population five years and older:
 - 85.7% received at least one dose of a two-dose COVID-19 vaccine, unchanged from the week earlier ending March 19, 2022, and
 - 80.6% completed a series, compared with 80.5% the week earlier.
- Among the population 12 years and older, 47.8% had received at least one booster, compared with 47.7% in the previous week.
- Among the population 18 years and older, 51.3% had received at least one booster, compared with 51.2% in the previous week.
- Among the youngest age group, five to 11 years of age:
 - 56.2% received one dose and 39.7% completed their series, compared with 56.1% and 39.2%, respectively from the week earlier.
- The Regina zone at 82.5% is the only zone reporting over 80.0% of the eligible population with a completed series. All others are below 80.0%.

Table 11a: Vaccine doses administered March 20 to 26, 2022

 During the week of March 20 to 26, 2022, 3,634 doses of COVID-19 vaccine were administered, of which 665 (18.3%) were pediatric primary series doses and 2,625 (72.2%) were booster doses.

Number
263
738
8
2,625
3,634
665

^{*} 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 minimum interval criteria. The minimum interval allowed between the primary series and the first booster is 28 days. Starting last week, a minimum interval of 91 days is used between the first and second booster (a change from 28 days).

Source: Panorama immunization registry March 28, 2022

Table 11b: Cumulative vaccines doses administered from start of the immunization campaign (December 15, 2020) to March 26, 2022

- Since the start of the immunization campaign to March 26, 2022, about 2.4 million doses of COVID-19 vaccine were administered.
- Of these, about 1.9 million (78.8%) were administered for a primary series, of which 105,359 were pediatric doses.

Source: Panorama immunization registry March 28, 202

	1		
Type of dose	Number		
Pediatric primary series doses	105,359		
Primary series doses including pediatric doses	1,881,589		
Total Doses including Booster Doses	2.388.610		

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

ISA - Integrated Service Area

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

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.

As of February 7, 2022 RRPL PCR testing was reserved for populations deemed to be at an elevated risk for severe outcomes:

- Hospitalized patients, those admitted or transferred between acute, long-term care or personal care homes
- High-risk populations as ordered by the medical health officer: residents in long-term care, personal care homes and congregate living facilities; and international or travellers from areas of concern
- Priority symptomatic persons: health-care workers or essential workers who have a negative rapid antigen test but remain symptomatic; those with chronic illness (diabetes, history of cancer, cardiac failure, etc.)
- Symptomatic people living or working in First Nation and Métis communities
- Surgical patients with symptoms or a positive rapid antigen test if scheduled or expecting to receive surgery within the next 90 days
- Pregnant patients who are symptomatic and more than 30 weeks gestation
- Symptomatic immunocompromised individuals including all transplant donors and recipients prior to and posttransplant; all oncology patients prior to, receiving or post chemotherapy
- Newborns born to COVID-19-positive parents, prior to discharge.
- Health-care workers and workers deemed essential under the current public health order with negative rapid antigen results who remain symptomatic will be eligible for PCR tests.

In 2019/20 about one-third of the SK population aged one year and older had at least one of eight priority chronic conditions (asthma, COPD, diabetes, hypertension, heart failure, ischemic heart disease, stroke, and dementia), making about half of the population eligible for PCR testing.

Fatal Cases (Deaths) Table

- Includes 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.
- There can be significant lags in reporting on death data.
 Data entry into Panorama IOM may be delayed due to staffing shortages or work load issues. Deaths may be delayed getting reported to public health for a variety of reasons including staffing, work load, and deaths requiring further investigation.

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.

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.

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
 Integrated Service Area per 1000 calls from that
 geographical area 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.
- # 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.

H. Map of Saskatchewan by Zone and Sub-Zone

