

COVID-19 Vaccinations and Breakthrough Infections

Analysis based on new COVID-19 cases reported October 1-31, 2021

COVID-19 Vaccinations Work

- Measured at 21 day mark to allow for necessary immune response to first dose
- Two doses recommended for all vaccines currently offered in Saskatchewan
- It is anticipated that serious illness rates will decrease as residents receive second doses
- Two weeks after second dose is when optimum protection begins

Reported Lab Confirmed Cases

Total	Unvaccinated or First dose <3 weeks	Vaccinated, First dose => 3 weeks	Vaccinated, Second dose => 2 weeks
10,018	6,790	580	2,648
% of cases	67.8%	5.8%	26.4%
Estimated SK case rate per 100,000 - denominator based on receipt of one dose or completed series			
Estimated cases/100,000	1819	642	357

- There were 10,018 cases reported in October 2021. Of these, 25.1% (2,518) were aged 11 years or younger.
- Of the 580 cases with the first dose, 14.8% (86) had comorbid conditions, and 8.6% (50) cases were 65 years and older.
- Of the 2,648 cases with the second dose, 22.8% (604) had comorbid conditions, and 22.5% (595) cases were 65 years and older.
- **Estimated case rates were 1,819/100,000 for the unvaccinated, 642/100,000 for those with a first dose and 357/100,000 for those with a second dose.**

COVID-19 Hospitalizations – Oct 2021

Total	Unvaccinated or First dose <3 weeks	Vaccinated, First dose => 3 weeks	Vaccinated, Second dose => 2 weeks
461	319	33	109
% of hospitalization cases	69.2%	7.2%	23.6%
Estimated SK hospitalization rate/100,000 - denominator based on receipt of one dose or completed series			
Estimated hospitalizations/100,000	85	37	15

- Of the 10,018 cases, 461 were hospitalized in October, of whom 69.2% were unvaccinated.
- Of the 461 hospitalized cases, 3.7% (17) were aged 11 years or younger, and 1.3% (6) were 12-19 years of age.
- Of the 33 hospitalized cases with the first dose, 45.5% (15) had comorbid conditions, and 36.4% (12) cases were 65 years and older.
- Of the 109 hospitalized cases with the second dose, 67.0% (73) had comorbid conditions and 74.3% (81) cases were 65 years and older.
- **Estimated hospitalization rates 85/100,000 for the unvaccinated, 37/100,000 for those with a first dose and 15/100,000 for those with a second dose.**

COVID-19 ICU Admissions – Oct 2021

Total	Unvaccinated or First dose <3 weeks	Vaccinated, First dose => 3 weeks	Vaccinated, Second dose => 2 weeks
98	79	6	13
% of ICU cases	80.6%	6.1%	13.3%
Estimated SK ICU rate/100,000 - denominator based on receipt of one dose or completed series			
Estimated ICU cases/100,000	21	7	2

- Of the 10,018 October cases, 98 were admitted to ICU of which 80.6% (79) were unvaccinated.
- Of the total ICU cases, 3.1% (3) were aged 12 to 19 years, and 4.1% (4) were 11 years and younger.
- Of the six (6) ICU cases with the first dose, 66.7% (4) had comorbid conditions, and 33.3% (2) cases were 65 years and older.
- Of the 13 ICU cases with the second dose, 69.2% (9) had comorbid conditions, and 53.8% (7) cases were 65 years and older.
- **Estimated ICU rates were 21/100,000 for the unvaccinated, 7/100,000 for those with a first dose and 2/100,000 for those with a second dose.**

COVID-19 Hospitalizations – November 5, 2021

	Acute Care		ICU	
Age Group	COVID infectious	COVID Non-infectious	COVID infectious	COVID Non-infectious
11 and under	5	1		
12 to 19	1	1		
20 to 29	5	1	2	2
30 to 39	9	4	5	2
40 to 49	10	5	2	2
50 to 59	8	11	5	2
60 to 69	19	20	8	8
70 to 79	18	13	8	2
80+	11	22	1	
total	86	78	31	18

As of 10:05 AM on November 5, 2021

- Twenty (23.1%) of the 86 infectious COVID-19 patients in acute care are less than 40 years old.
- Seven (22.6%) of the 31 infectious COVID-19 patients in ICU are less than 40 years old.
- In addition to SK ICUs, there were 23 residents in out-of-province ICUs (data not shown).

Data source: SHA dashboard, hospital census data

Relative Risk with Vaccination

August 24 – October 24

Cases

Cases among unvaccinated/unprotected are

6 x

than a fully vaccinated

Hospitalization

Hospitalization among unvaccinated/unprotected are

12 x

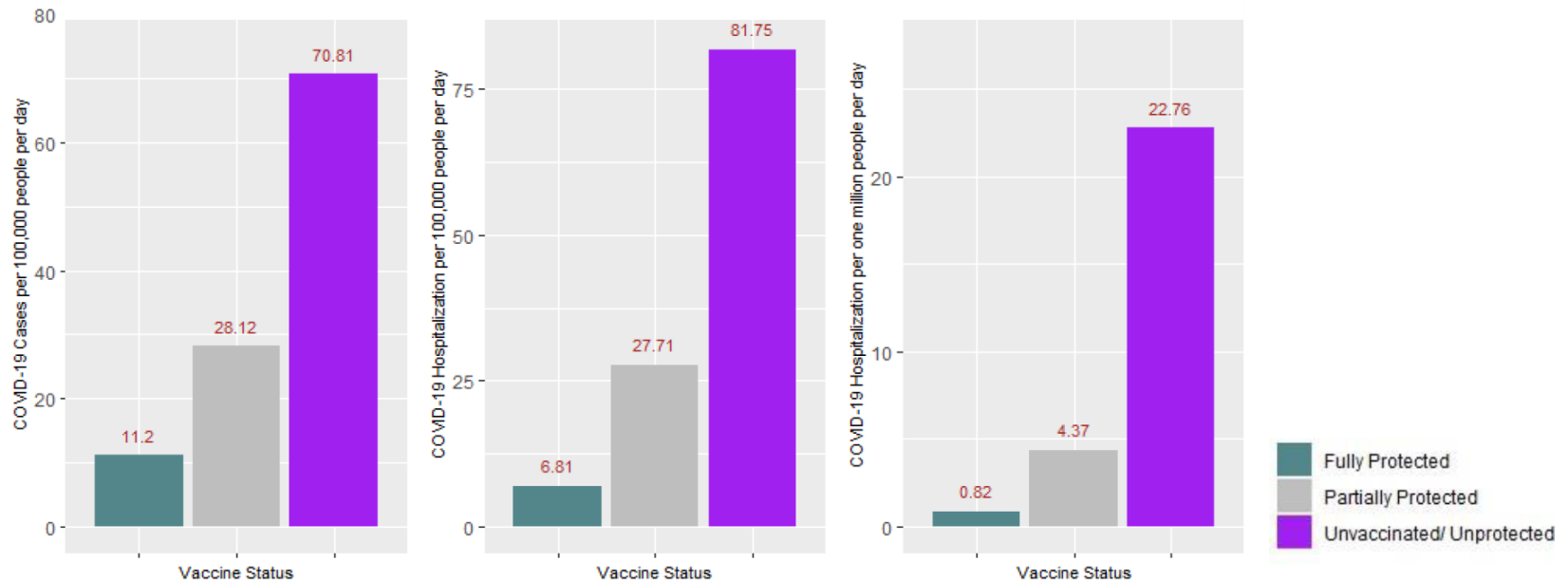
than a fully vaccinated

ICU

ICU admission among unvaccinated/unprotected are

28 x

than a fully vaccinated

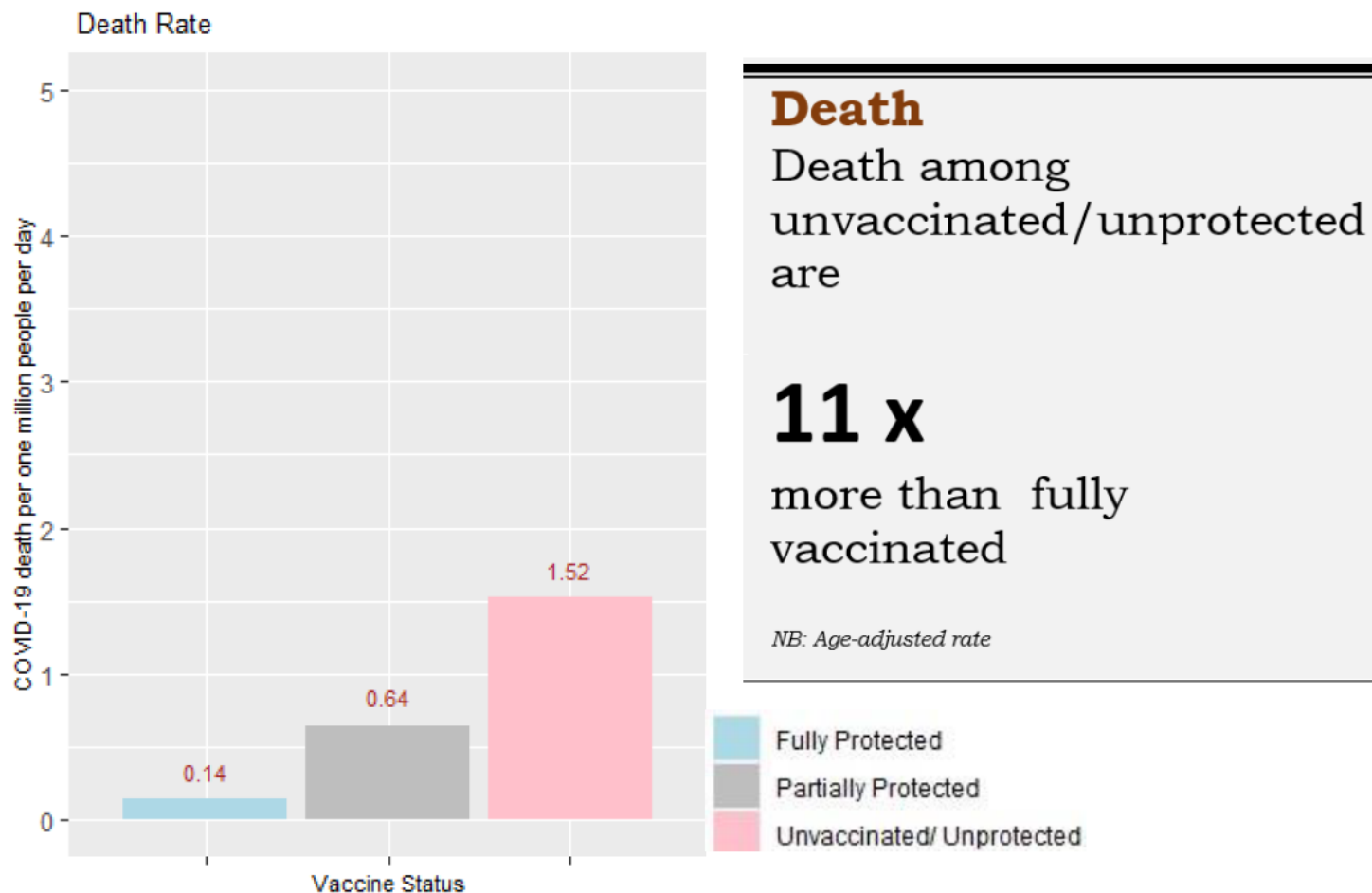


COVID-19 Deaths – Oct 2021

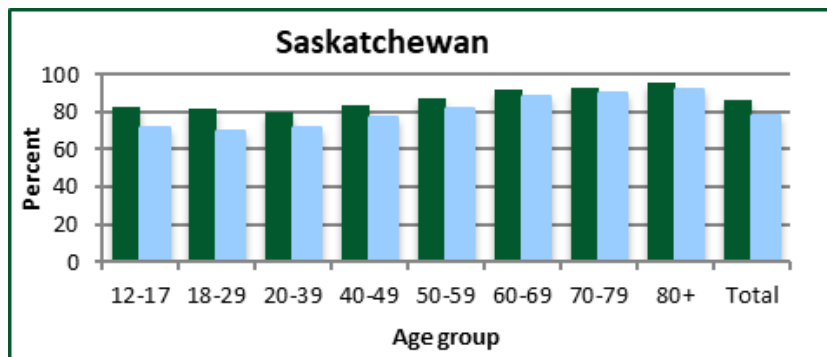
Total	Unvaccinated or First dose <3 weeks	Vaccinated, First dose => 3 weeks	Vaccinated, Second dose => 2 weeks
78	48	5	25
% of Death cases	61.5%	6.4%	32.1%
Estimated SK death rate/100,000 - denominator based on receipt of one dose or completed series			
Estimated deaths/100,000	13	6	3

- Of the 10,018 cases reported in October, 78 new deaths reported. Of these deaths, 61.5% (48) were unvaccinated, and 47.4% (37) were 65 years and older. No deaths were under 20 years of age.
- Of the five (5) deaths with the first dose, 60.0% (3) had comorbid conditions, and 60.0% (3) deaths were aged 65 years and older.
- Of the 25 deaths with the second dose, 68.0% (17) had comorbid conditions, and 72.0% (18) cases were 65 years and older.
- **Estimated death rates 13/100,000 with the unvaccinated, 6/100,000 for those with a first dose and 3/100,000 for those with a second dose.**

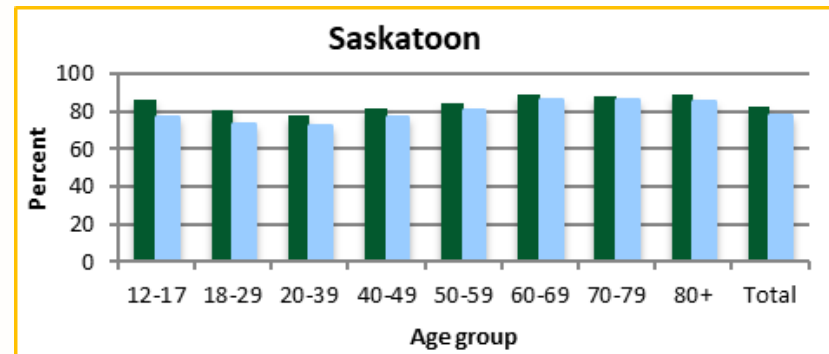
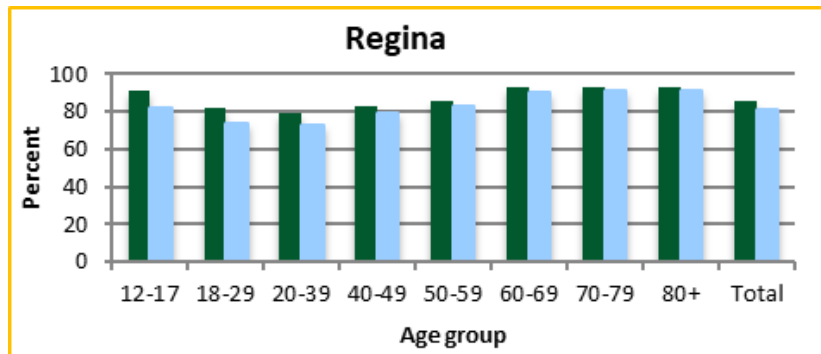
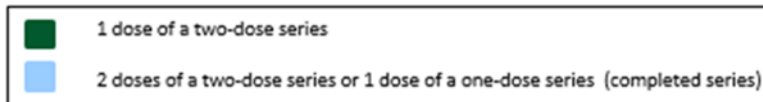
Rate of Reported COVID-19 Deaths July 1- October 24



COVID-19 Vaccinations

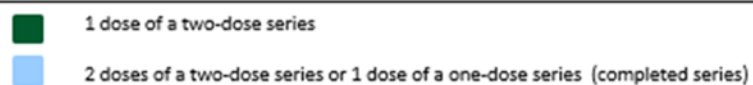
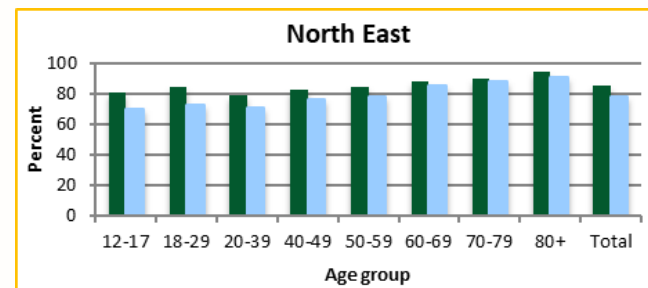
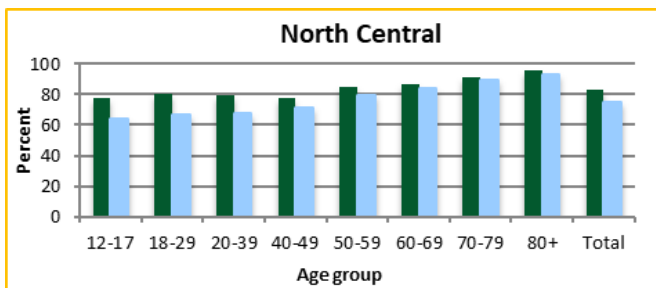
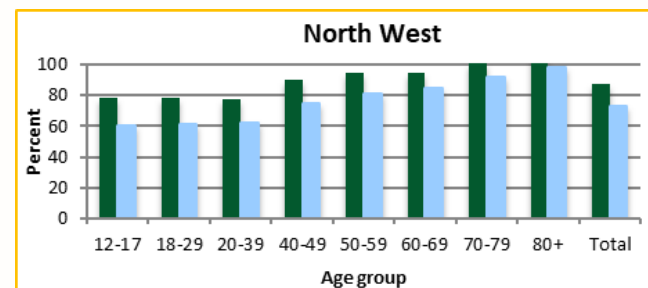
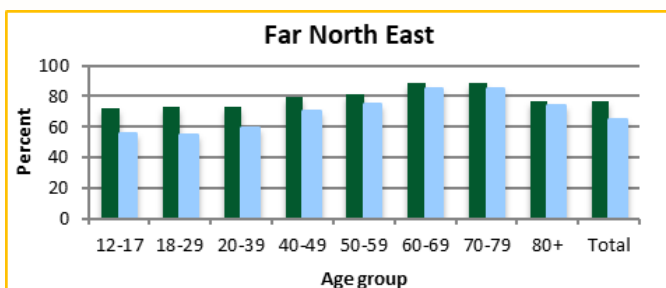
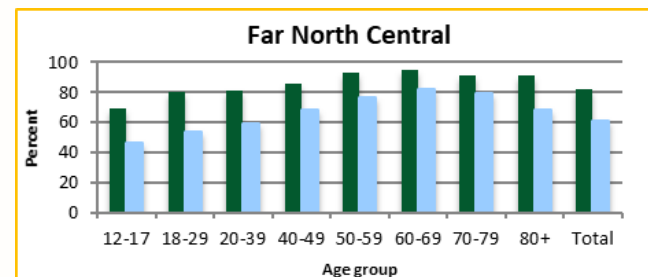
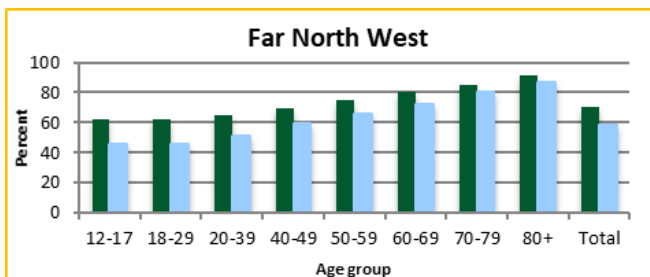


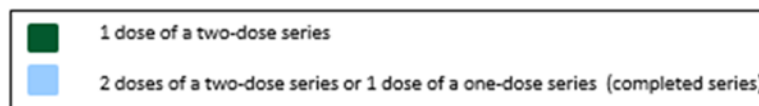
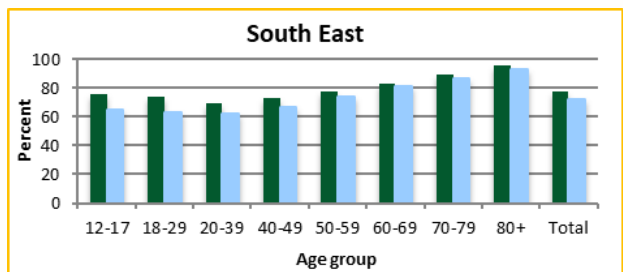
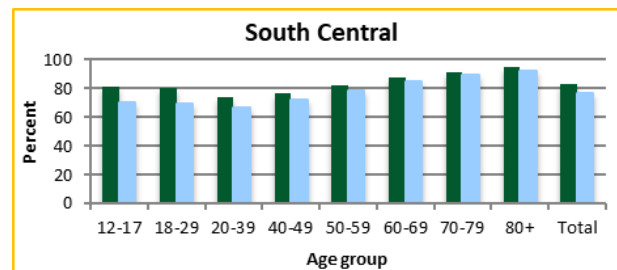
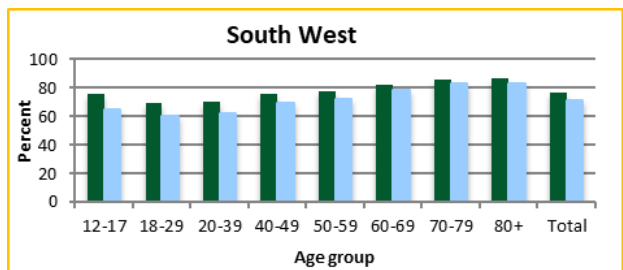
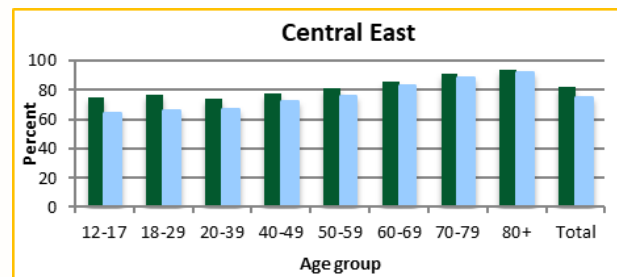
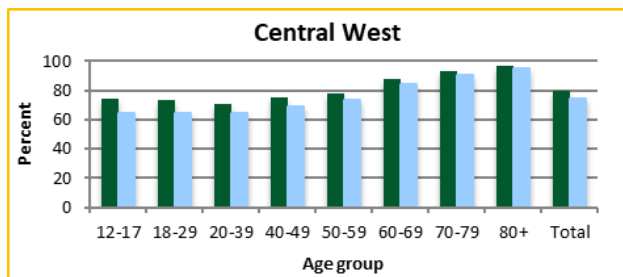
First and second dose uptake by population, provincially and by zone



As of October 31, 2021 - last week's integrated report date.

Data source: Panorama November 2, 2021.





The actions taken by the people of Saskatchewan collectively will determine the outcome.

Simple measures reduce the risk of infection:

- Get the vaccine as soon as you are eligible to receive it
- Mask whenever you are away from your home
- Physically distance
- Stay home with even the mildest symptoms and get tested
- Reduce close contacts and non-essential travel
- Outdoors is better than indoors
- Wash hands/sanitize often

COVID-19 information is available at saskatchewan.ca/COVID19