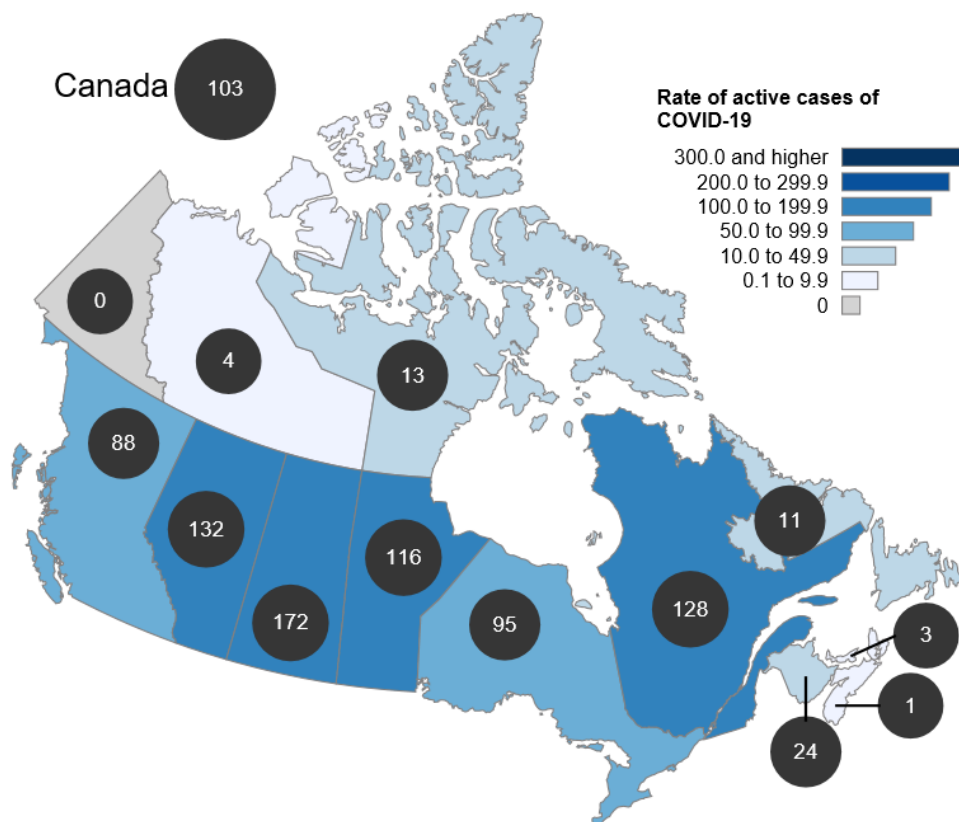


# COVID-19 Epi Update

February 11, 2021

# COVID-19 Active Cases per 100,000



The rate of active cases of COVID-19 in **Saskatchewan** was **172 per 100,000 population** as of February 9, 2021.



To date:

**25,843 total cases**

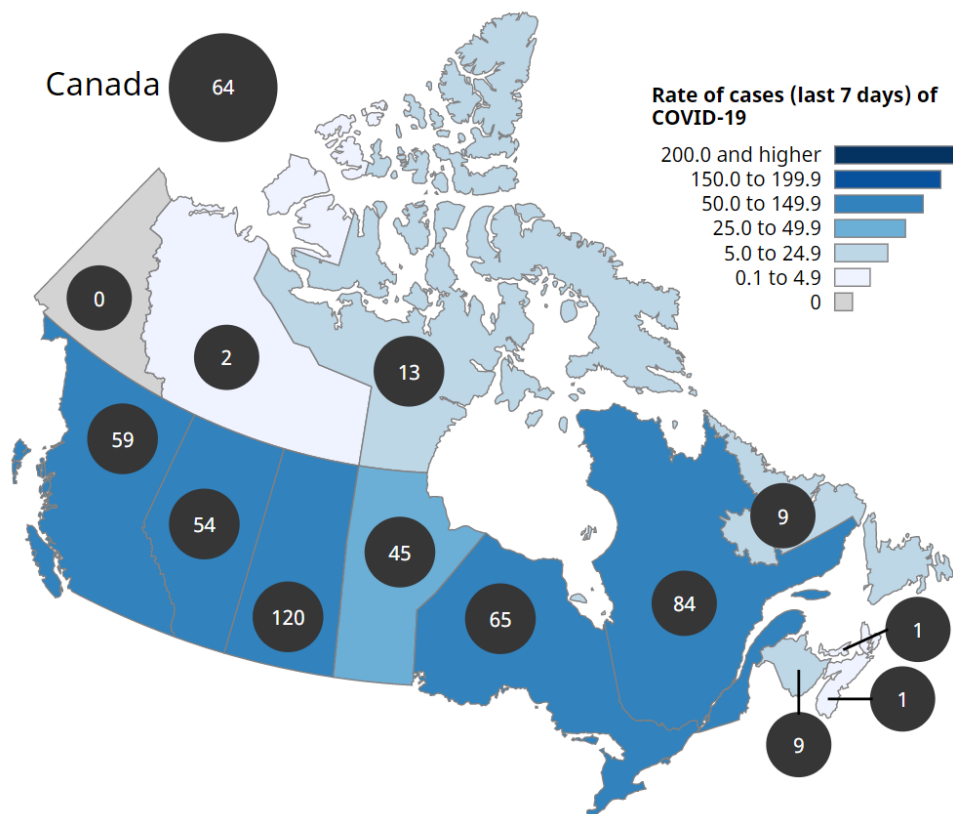
**1,968 active cases**

**1,116 hospitalized  
(228 in ICU)**

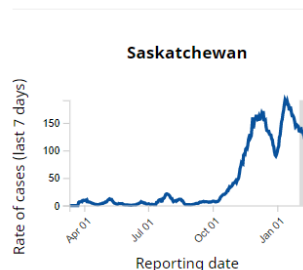
**348 deaths (1.3%  
fatality rate)**

Source: Public Health Agency of Canada, Feb 9, 2021  
<https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html?stat=rate&measure=active#a2>

# COVID-19 Rate per 100,000, Last 7 Days (Feb 3-9, 2021)



The rate of cases (last 7 days) of COVID-19 in **Saskatchewan** was **120** as of February 9, 2021.



**In the last seven days:**

**1,404 cases**

**16.4/100,000 seven day avg new case rate**

**39 new hospitalizations, four new ICUs**

**26 reported deaths**

Source: Public Health Agency of Canada, Feb 9, 2021  
[https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html?stat=rate&measure=total\\_last7#a2](https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html?stat=rate&measure=total_last7#a2)

# Indicator Summary (Feb 3-9, 2021)

Data as of Feb 10, 2021

	7 day average (Feb 3-9, 2021)					
Zone	Daily new cases	Daily new case rate per 100,000	Daily active cases	Daily active case rate per 100,000	Daily test positivity (%)	Daily testing rate per 100,000
Far North West	13.7	45.5	157.0	520.8	24.1	223.2
Far North Central	3.6	133.5	37.7	1,409.4	24.4	432.4
Far North East	14.3	58.3	146.9	599.6	17.9	321.9
North West	22.3	26.4	264.6	313.1	16.9	177.9
North Central	17.1	19.0	189.1	209.5	10.5	176.0
North East	8.3	19.7	101.6	241.1	11.2	165.5
Saskatoon	47.0	13.7	509.0	148.9	6.6	208.6
Central West	4.7	12.5	47.9	126.9	7.7	154.9
Central East	10.6	10.6	102.7	102.7	6.4	154.4
Regina	42.6	15.3	472.6	170.0	8.7	166.6
South West	0.1	0.4	7.9	19.8	0.4	88.9
South Central	3.9	6.2	45.4	73.0	5.2	126.3
South East	10.0	11.0	116.0	127.1	6.0	172.0
SK	200.6	16.4	2,221.3	181.3	7.7	208.6

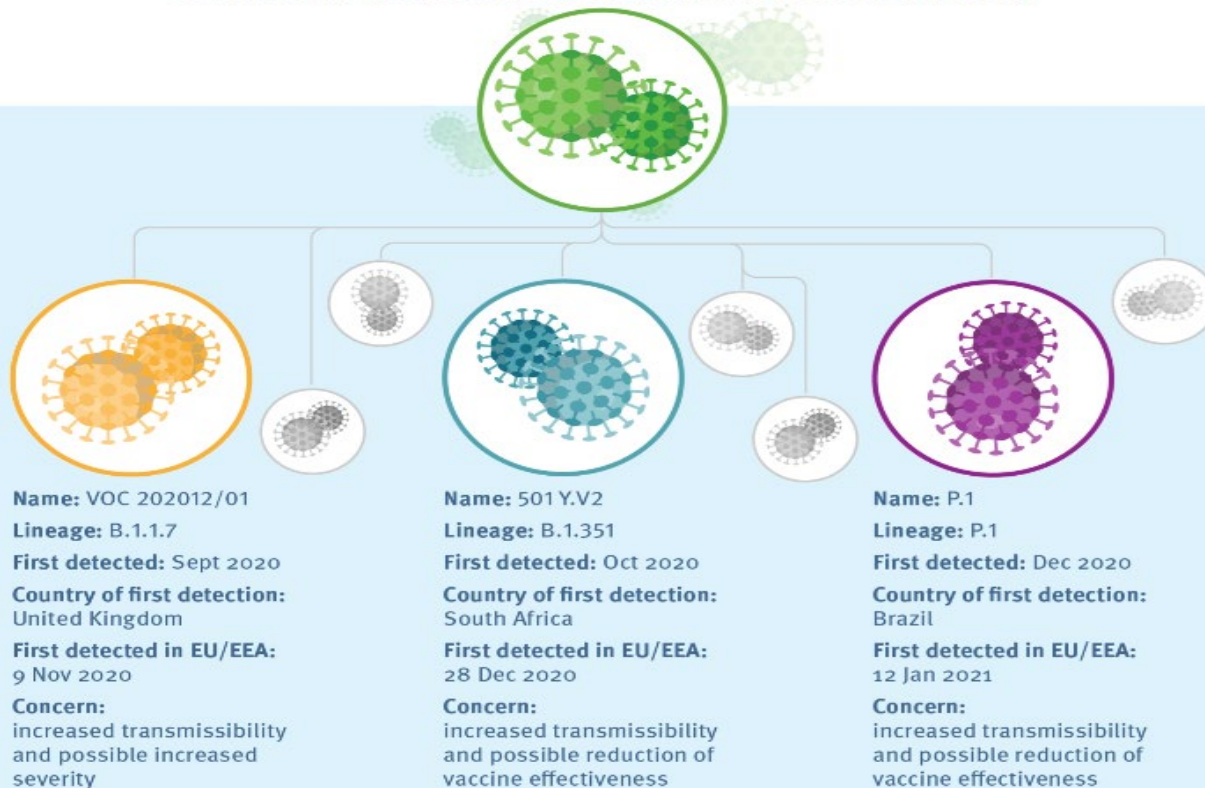
# SARS-CoV-2 Variants of Concern

## Mutation of SARS-CoV-2: current variants of concern

8 February 2021

Mutations of SARS-CoV-2 that cause COVID-19 have been observed globally. Viruses, in particular RNA viruses such as coronaviruses, constantly evolve through mutations, and while most will not have a significant impact, some mutations may provide the virus with a selective advantage such as increased transmissibility.

Such mutations are cause for concern and need to be monitored closely.



#COVID19

Learn more in the latest risk assessment by ECDC on SARS-CoV-2 variants of concern <http://bit.ly/RRAVariants1>



# SARS-CoV-2 Variants of Concern

As of February 9, 2021\*:

- Countries with confirmed B.1.1.7 variant (UK) - 81
- Countries with confirmed 501Y.V2 variant (SA) - 42
- Countries with confirmed P1 variant (BRA) – 16

Currently three cases of B.1.1.7 (UK) variant identified in SK.

- Travel-related
- Self-isolation requirements after confirmed test results limited transmission

No other variants of concern identified in SK to date.

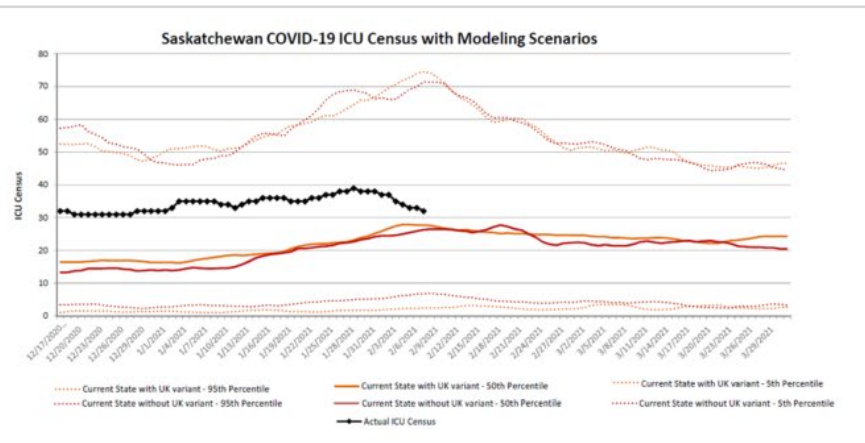
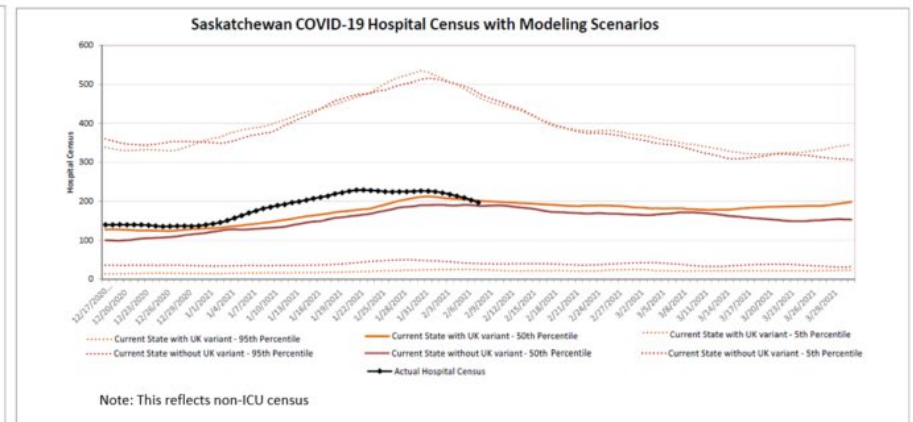
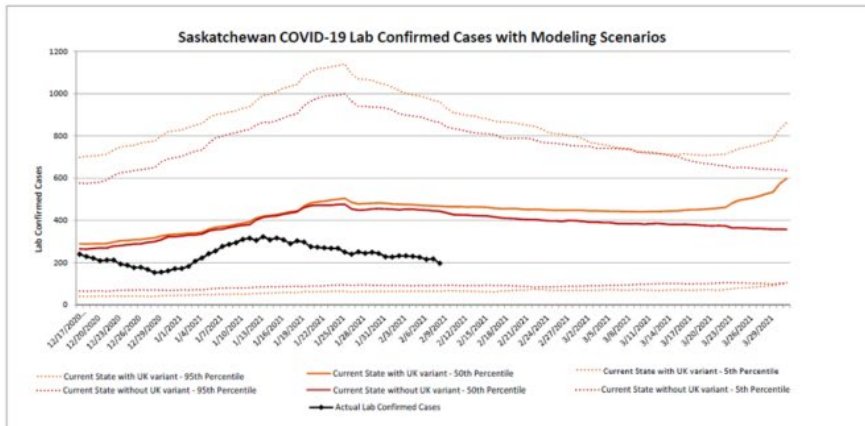
\*Source: WHO

# Variants of Concern – Potential Impact

- As observed in other countries, B.1.1.7 9 (UK) variant can have significant impact due to being ~ 50% more infectious than SARS-CoV-2
  - More transmissible therefore becomes the dominant strain with sudden growth in cases
  - As with COVID-19, the higher case trend results in higher hospitalizations and deaths
  - Impacts to acute care systems



# COVID-19 Modeling Results



Without a variant of concern and with current public health measures, gradual decline through the end of March.

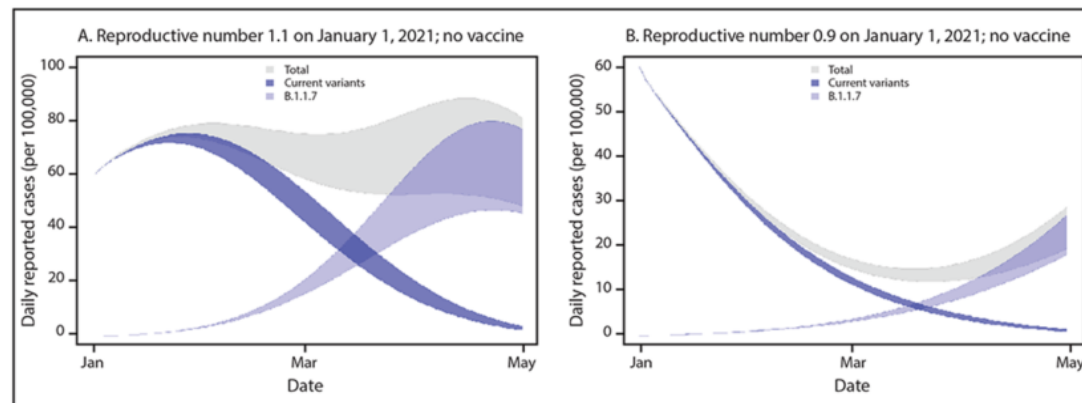
Improved adherence to public health measures required to accelerate decline.



# US CDC Modeling of B.1.1.7 Variant – without Vaccination

## Two scenarios: $R_t = 1.1$ vs $R_t = 0.9$

FIGURE 1. Simulated case incidence trajectories\* of current SARS-CoV-2 variants and the B.1.1.7 variant,<sup>†</sup> assuming no community vaccination and either initial  $R_t = 1.1$  (A) or initial  $R_t = 0.9$  (B) for current variants — United States, January–April 2021



Note: Grey shaded area – total cases show slight decline / plateau – as current variant decreases and B.1.1.7 increase.

“False sense of security”

Abbreviation:  $R_t$  = time-varying reproductive number.

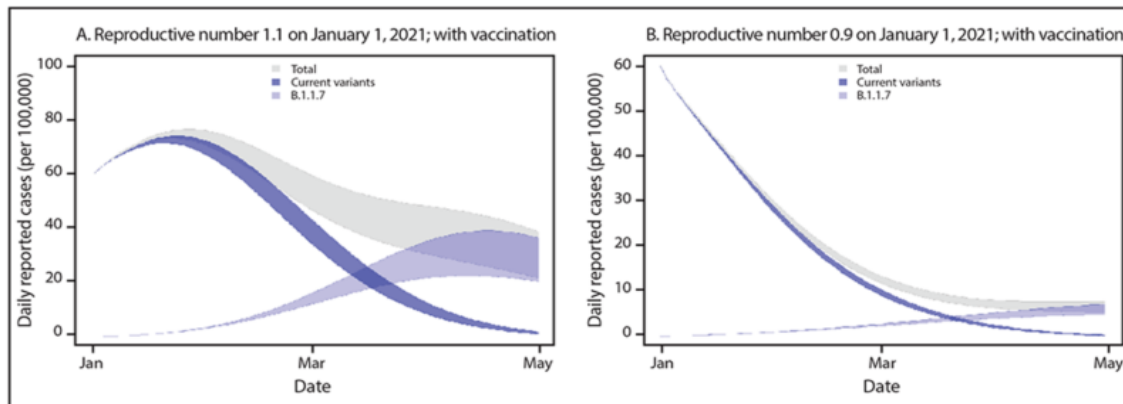
\* For all simulations, it was assumed that the reporting rate was 25% and that persons who were seropositive or infected within the simulation became immune. The simulation was initialized with 60 reported cases of SARS-CoV-2 infection per 100,000 persons (approximately 200,000 cases per day in the U.S. population) on January 1, 2021. Bands represent simulations with 10%–30% population-level immunity as of January 1, 2021.

<sup>†</sup> Initial B.1.1.7 prevalence is assumed to be 0.5% among all infections and B.1.1.7 is assumed to be 50% more transmissible than current variants.

# US CDC Modeling of B.1.1.7 Variant – w/ Vaccination

## Two scenarios: $R_t = 1.1$ vs $R_t = 0.9$

FIGURE 2. Simulated case incidence trajectories\* of current SARS-CoV-2 variants and the B.1.1.7 variant,<sup>†</sup> assuming community vaccination<sup>‡</sup> and initial  $R_t = 1.1$  (A) or initial  $R_t = 0.9$  (B) for current variants — United States, January–April 2021



Abbreviation:  $R_t$  = time-varying reproductive number.

\* For all simulations, it was assumed that the reporting rate was 25% and that persons who were seropositive or infected within the simulation became immune. The simulation was initialized with 60 reported cases of SARS-CoV-2 infection per 100,000 persons (approximately 200,000 cases per day in the U.S. population) on January 1, 2021. Bands represent simulations with 10%–30% population-level immunity as of January 1, 2021.

<sup>†</sup> Initial B.1.1.7 prevalence is assumed to be 0.5% among all infections and B.1.1.7 is assumed to be 50% more transmissible than current variants.

<sup>‡</sup> For vaccination, it was assumed that 300 doses were administered per 100,000 persons per day (approximately 1 million doses per day in the U.S. population) beginning January 1, 2021, that 2 doses achieved 95% immunity against infection, and that there was a 14-day delay between vaccination and protection.

Vaccination assumption:

- 300 doses/100,000 per day
- Starting Jan 1
- 2<sup>nd</sup> dose after 14 days and achieves 95% immunity

# Variants of Concern - Prevention

**COVID-19 variants are transmitted the in the manner; therefore, the best methods of prevention remain the same.**

- Follow public health orders and guidance at all times (masking, physical distancing, stay home and limit gatherings, etc.).
  - Get tested.
  - When available, get vaccinated.
- 
- Future model scenarios will include variant and vaccination impact.
  - Public Health Orders will take variants into concern into consideration.

# Mean, Median, Range of Contacts per Case (Jan 25 – Feb 7, 2021)

Mean, median, range contacts per case past 2 weeks Jan 25 - Feb 7, 2021		
Measure	CLOSE contacts per case past 2 weeks	ALL contacts per case past 2 weeks
Mean	5.1	6.5
Median	3.0	4.0
Range	1-70	1-241

*\*Includes contacts of cases reported in the last 2 weeks, Jan 25 to Feb 7, 2021*

*\*Summarized by source (case) Zone - cases out of province or country are excluded.*

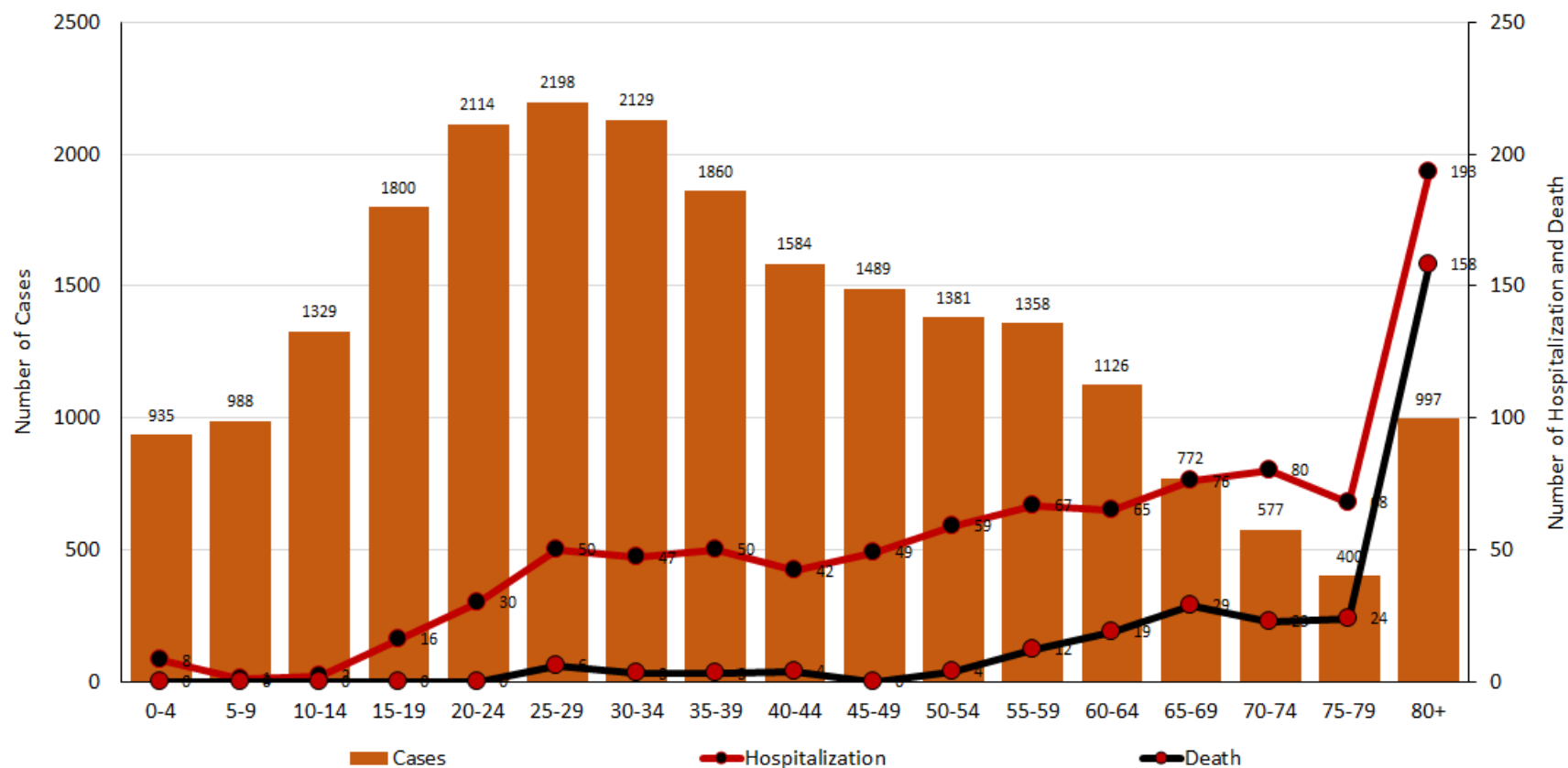
*\*Includes cases who named at least one contact*

*\*ALL contact types include close, non-close, not a contact, and missing exposure types.*

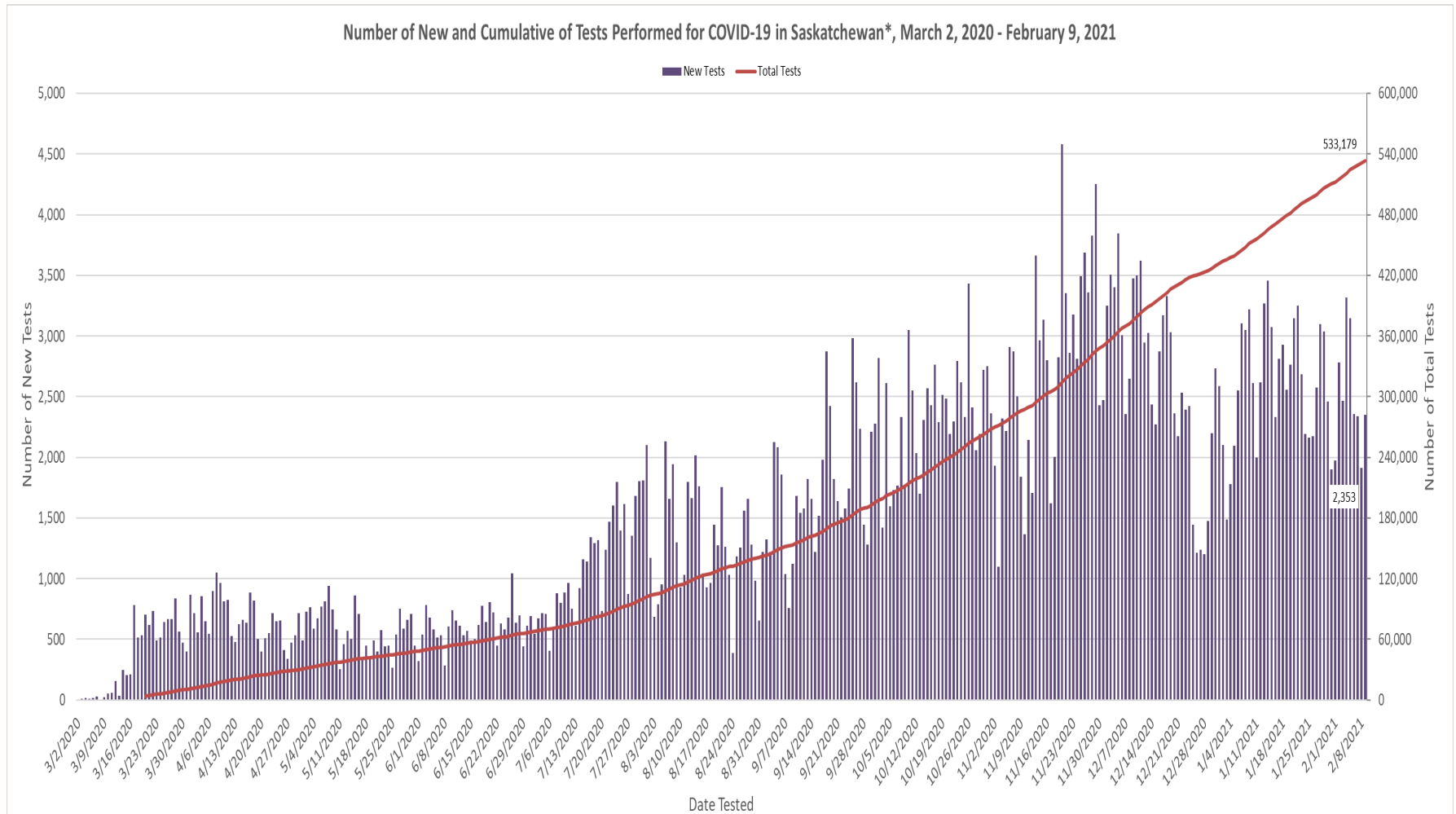
# COVID-19 Hospital and ICU by Age (Feb 9, 2021)

Number of current hospitalization and ICU, Feb 9, 2021		
Age group	Number of cases hospitalized	Number of cases in ICU
19 and under	4	0
20 to 39	21	2
40 to 59	46	11
60 to 79	76	13
80+	49	2
<b>Total</b>	<b>196</b>	<b>28</b>

# Hospitalization and Death by Age Group (Mar 11, 2020 to Feb 1, 2021)



# Provincial COVID-19 Testing - Mar 2, 2020 to Feb 9, 2021



Available with daily dashboard posting at [Saskatchewan.ca/covid19](https://saskatchewan.ca/covid19)



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

**Simple measures reduce the risk of infection:**

- **Mask whenever you are away from your home**
- **Physically distance**
- **Reduce close contacts and non-essential travel**
- **Outdoors is better than indoors**
- **Washing hand/sanitizing often**
- **Stay home with even the mildest symptoms and get tested**
- **Abide by the public health guidelines in every public space**

**Public Health Order is available at [saskatchewan.ca/COVID19](https://saskatchewan.ca/COVID19)**