

# Coronavirus Disease 2019 (COVID-19)

## DAILY EPIDEMIOLOGY UPDATE

Updated: April 7, 2020, 11:00 AM EST

### Highlights

#### Canada

- **17,046 cases including 344 deaths** have been reported in Canada (overall case fatality rate of 2.0%).
- **346,507** people have been tested for COVID-19 in Canada which corresponds to a test rate of 9,218 per million population. The percent positivity is 5.1%.
- Data reported in the coming days and weeks will continue to be critical in determining the trajectory of Canada's epidemic.
- Further information on real-time distribution of cases and deaths can be found in the [interactive map of COVID-19 in Canada](#).
- The epidemiological summary is based on case report forms received for **55% of reported cases (n= 9,343)\***
  - **Age and gender:**
    - The highest proportion of cases are being reported among people 40-59 years of age (35%), followed by those 20-39 years of age (28%) and 60-79 years of age (24%).
    - A small proportion of cases (4%) have been reported among people ≤ 19 years of age.
    - 52% of cases were reported among females.
  - **Hospitalizations:**
    - Hospitalization data are available for 4,710 cases with completed case report forms.
      - among these, 744 have been hospitalized, including 219 in ICU.
    - While 32% of the cases are 60 years of age and older, this age group represents the highest proportion of hospitalizations (62%) and ICU admissions (62%).
    - Nine hospitalizations and one admission to ICU were reported in individuals ≤ 19 years of age.

#### International

- 206 countries/jurisdictions have reported cases of COVID-19.
- The United States is now reporting the highest number of cases, followed by Spain, Italy, Germany, and France.

#### \*Data Notes

As of April 7, 2020 11:00 AM ET, detailed data on cases have been received for **9,343 cases** (55% of reported cases). Data on these cases are preliminary and may have missing values.

Provinces and territories may not routinely update detailed data. Data on hospitalization status is unknown for 50% of all cases. PHAC does not receive routine updates on patient status.

Testing practices vary by province/territory and have changed over time which can affect case counts. Laboratory testing numbers may be an underestimate due to reporting delays and may not include additional sentinel surveillance or other testing performed.

## Canadian epidemiology

**Table 1:** Summary of COVID-19 cases reported in Canada by location, April 7, 2020, 11:00 AM EST.

Location	Total Cases	Total Confirmed	Total Probable	Total Deaths	New cases	% change	Recovered	% Recovered	People tested per 1,000,000	People Tested
BC	1,266	1,266	0	39	63	5%	783	62%	8,530	43,257
AB	1,348	1,348	0	24	98	8%	361	27%	14,683	64,183
SK	253	253	0	3	4	2%	81	32%	12,093	14,203
MB	204	190	14	2	1	0%	17	8%	10,068	13,788
ON	4,726	4,726	0	153	379	9%	1,802	38%	5,633	82,055
QC	8,580	8,580	0	121	636	8%	611	7%	12,319	104,526
NL	226	226	0	2	9	4%	32	14%	11,338	5,913
NB	103	103	0	0	2	2%	30	29%	5,095	3,958
NS	293	293	0	0	31	12%	64	22%	11,899	11,559
PE	22	22	0	0	0	0%	8	36%	5,346	839
YK	7	7	0	0	1	0%	4	57%	18,970	775
NT	5	5	0	0	1	25%	1	20%	27,149	1,217
NU	0	0	0	0	0	0%	0		6,034	234
Repatriated travellers	13	13	0	0	0	0%	0	0%		
<b>Total</b>	<b>17,046</b>	<b>17,032</b>	<b>14</b>	<b>344</b>	<b>1,225</b>	<b>8%</b>	<b>3,794</b>	<b>22.3%</b>	<b>9,218</b>	<b>346,507</b>

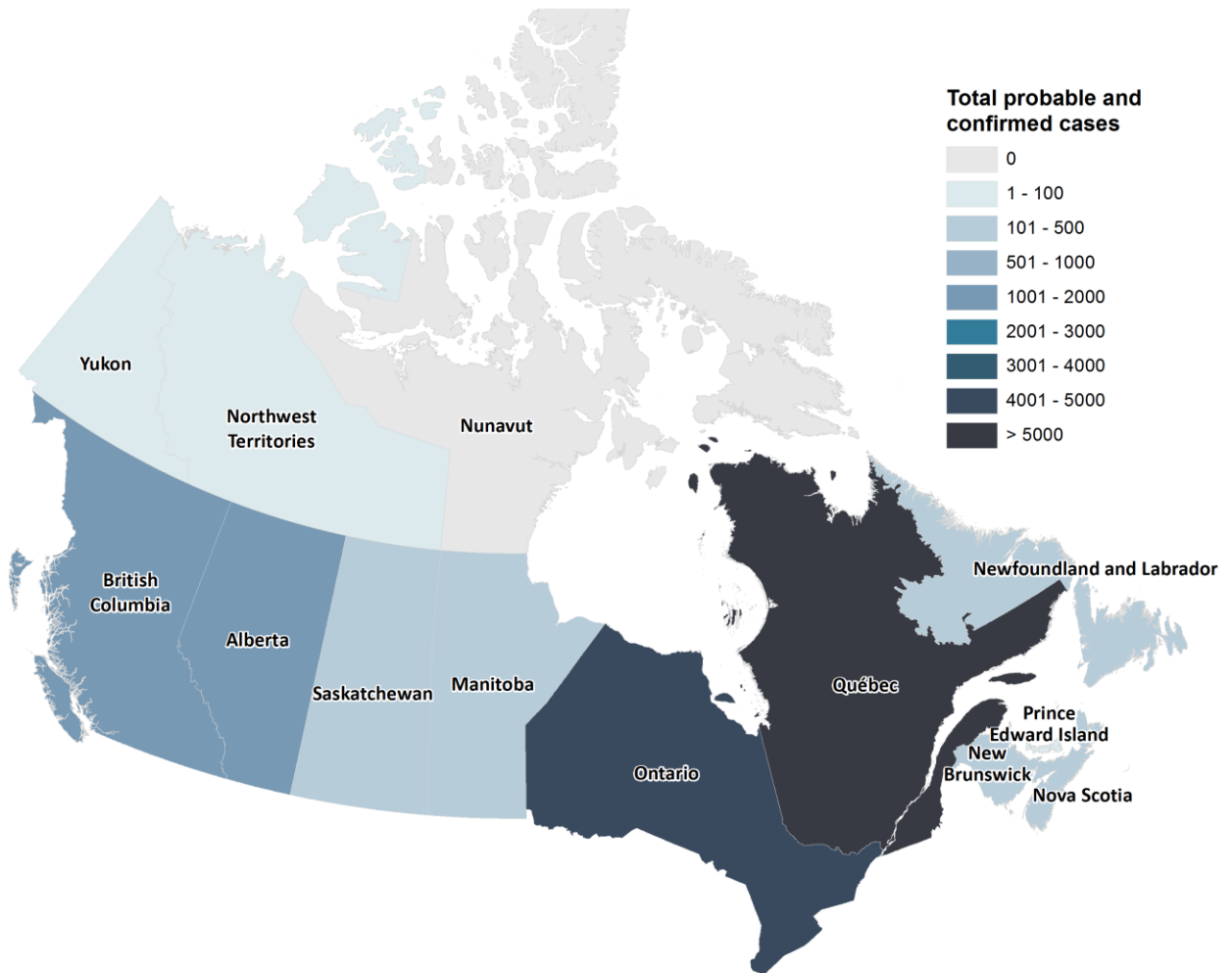
*Notes: New cases are those reported since the previous report. Probable cases have tested positive at a provincial laboratory and are awaiting confirmatory testing results from the National Microbiology Laboratory. Laboratory testing numbers may represent an underestimation due to reporting delays and may not include additional sentinel surveillance or other testing conducted in the P/T. For QC, the significant increase in confirmed cases is explained by the fact that since March 22, 2020, cases tested positive by hospital laboratories are now considered confirmed. They no longer need validation by the Laboratoire de santé publique du Québec (LSPQ).*

A total of 346,507 people have been tested for COVID-19 in Canada. This corresponds to a test rate of 9,218 per million population.

- Testing volumes vary across the country.
- Percent positivity is 5.1%.

Real-time data on the distribution of cases and deaths in Canada can be found in the [interactive map of COVID-19](#).

**Figure 1.** Map of COVID-19 cases reported in Canada by province/territory, April 7, 2020, 8:00 AM EST (n=16,667)

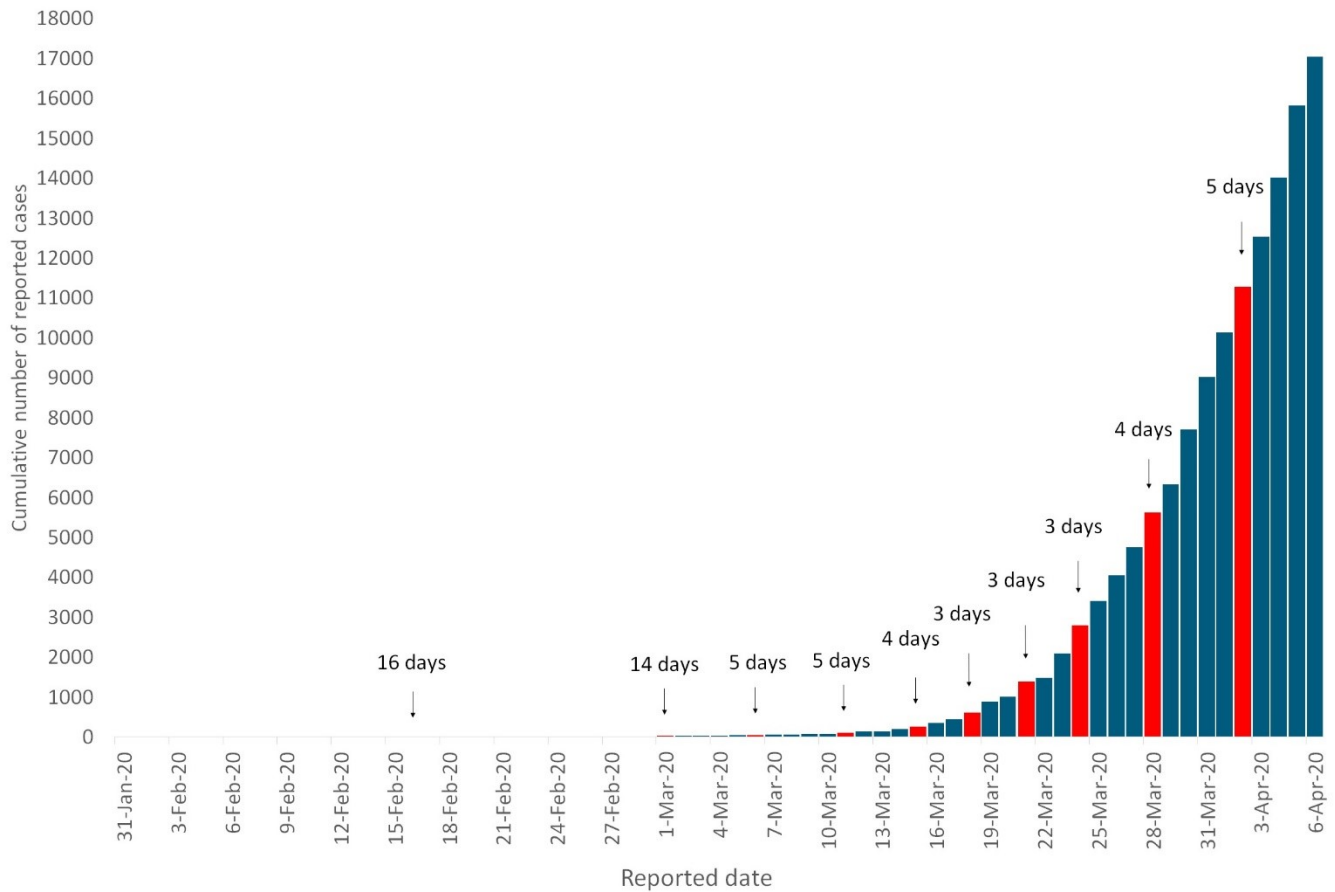


Data source: Surveillance and Risk Assessment, Epidemiology Update. Map Created by NML, Geomatics

The distribution of cumulative number of cases by report date (using publicly available PT data) can be seen in **Figure 2**.

- The epidemic doubling period of COVID-19 cases in Canada, defined as the number of days between doubling of cumulative case counts is marked with red bars.
  - Reported cases double at a rate of every three to five days since March 1.

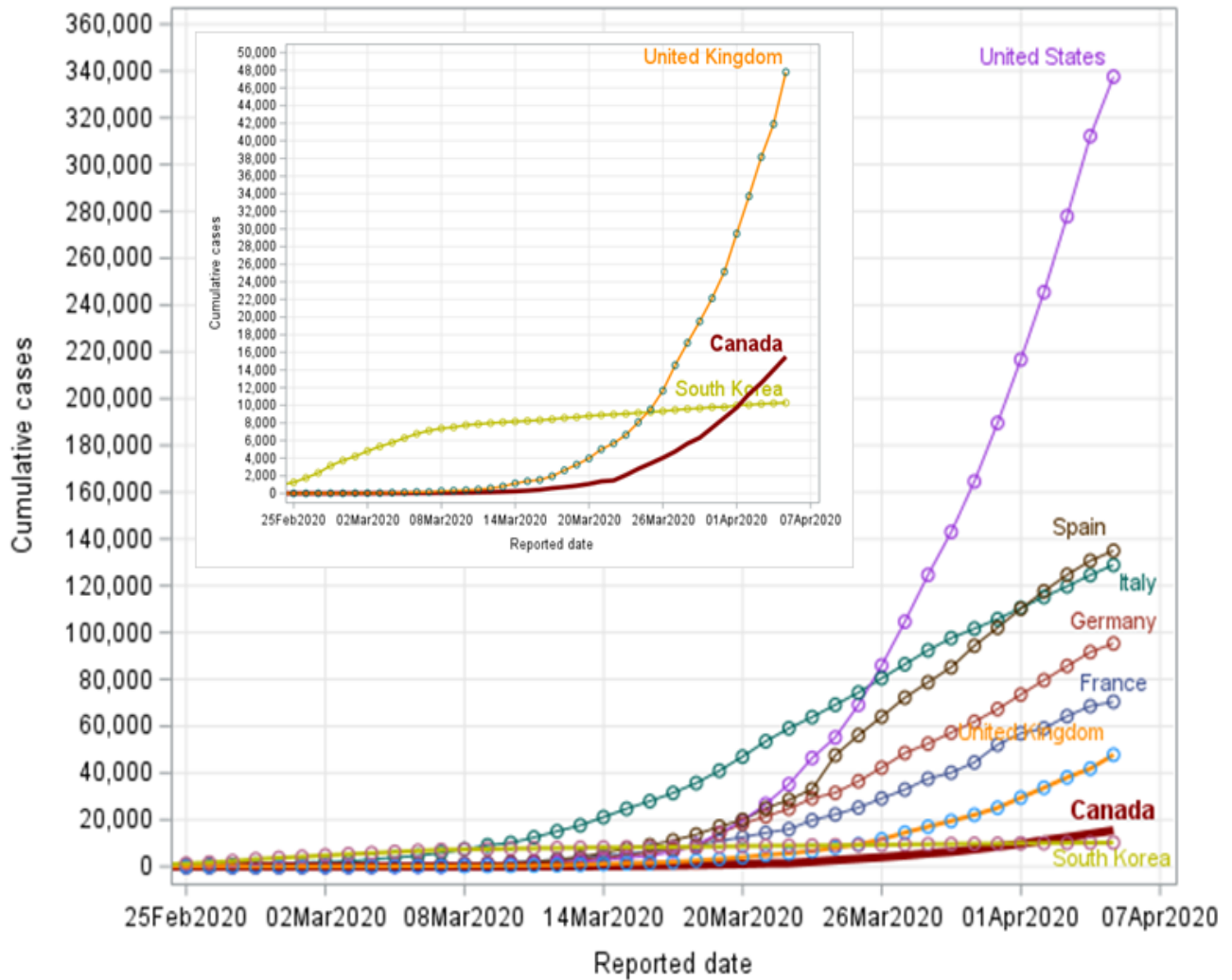
**Figure 2.** Doubling time of cumulative number of reported COVID-19 cases in Canada by date of report, April 7, 2020, 11:00 AM EST (n=17,046)



A summary of the cumulative cases of COVID-19 in Canada compared to other countries by date of report can be seen in **Figure 3**.

- Data reported in the coming days and weeks will continue to be critical in determining the trajectory of Canada's epidemic.

**Figure 3.** Cumulative cases of COVID-19 in Canada compared to other countries by date of report, April 7, 2020, 11:00 AM EST.



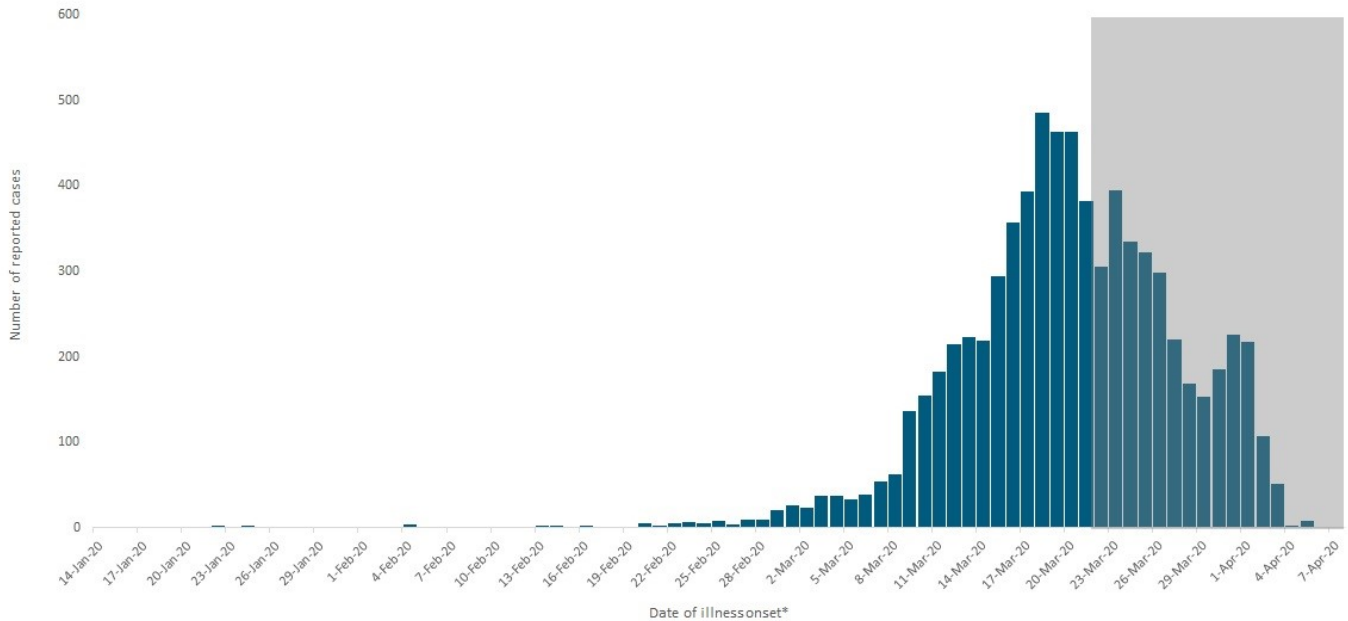
**Note:** At this time, results from international comparisons should be interpreted with caution. The number of tests conducted and indications for testing by country all have a large influence on total reported case counts. Therefore, the data displayed does not necessarily represent the true size of outbreak within each country.

Please note that this section onwards of the epidemiology update is based on limited data from provincial/territorial case report forms (n=9,343).

### Temporal Distribution

A summary of the distribution of cases by week of illness onset can be found in **Figure 4**.

**Figure 4.** New COVID-19 cases in Canada by date of illness onset, April 7, 2020, 11:00 AM EST (n=7,387)



\*If date of illness onset was not available, the earliest of the following dates was used as an estimate in the following order: Specimen Collection Date, and Laboratory Testing Date.

**Note:** The shaded area represents a period of time (lag time) where it is expected that cases have occurred but have not yet been reported nationally.

### Demographic Distribution

A summary of the demographics of reported cases can be found in **Table 2** and **Figure 5**.

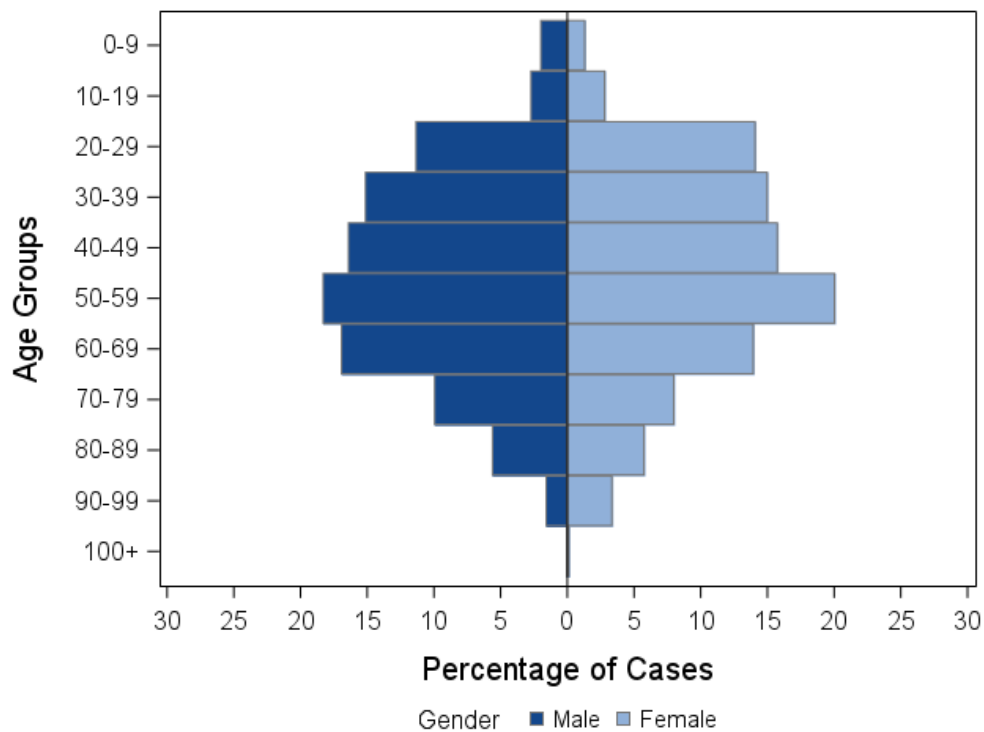
- The highest proportion of cases occurred in individuals 40-59 years of age (35%), followed by those 20-39 years of age (28%) and 60-79 years of age (24%).
- Only 4% of cases have occurred in individuals ≤ 19 years of age.
- 52% of cases were reported among females.

**Table 2.** Demographic characteristics of COVID-19 cases reported in Canada, April 7, 2020, 11:00 AM EST

Characteristics	
<b>Demographics</b> n=9,343	
<b>Age (in years)</b>	
Median	50
Range	0-105
<b>Age groups</b> n=8,880	
≤ 19*	391 (4%)
20-39	2,471 (28%)
40-59	3,128 (35%)
60-79	2,154 (24%)
80+	736 (8%)
<b>Gender</b> N=9,283	
Female	4,836 (52%)
Male	4,446 (48%)

\*Number has decreased from previous reports due to data cleaning processes.

**Figure 5.** Age and sex distribution of COVID-19 cases reported in Canada, April 7, 2020, 11:00 AM EST (n=8,838)



### Clinical Presentations and outcome

A summary of the clinical presentations of cases can be found in **Table 3**. The date of symptom onset for cases ranged from January 15, 2020 to April 5, 2020.

- Cough, headache and general weakness are the most common symptoms reported.
- 248 cases have been clinically or radiologically diagnosed with pneumonia. Of those who reported age, 57% are individuals 60 years of age and over, with individuals 60-79 representing 46%.
- The most commonly reported pre-existing health conditions amongst cases were respiratory disease, cardiac disease, and diabetes.
- Thirty-nine cases have occurred in pregnant women.

**Table 3.** Clinical presentation summary of COVID-19 cases reported in Canada, April 7, 2020, 11:00 AM EST

Clinical Presentations	
<b>Symptoms</b>	n=3,939
Cough	3,015 (77%)
Headache	2,189 (56%)
General weakness	2,150 (55%)
<b>Pre-Existing Conditions</b>	n=3,826
Respiratory disease	462 (12%)
Cardiac	403 (11%)
Diabetes	318 (8%)
Other	766 (20%)
<b>Complications</b>	n=2,214
Pneumonia	248 (11%)
Dyspnea	147 (7%)
Abnormal lung auscultation	154 (7%)
Other	302 (14%)

### Case severity (based on data available for 4,710 (50%) of all cases)

A total of 744 cases have been hospitalized including 219 in ICU (**Table 4, Figure 6, and Figure 7**).

- 62% of all reported hospitalizations, 62% of all reported ICU admissions, and 92% of deaths occurred among individuals  $\geq 60$  years of age.
  - The highest proportion of hospitalizations (42%) and ICU admissions (52%) are reported among individuals 60-79 years of age.
- Nine hospitalizations and one ICU admission were reported in individuals  $\leq 19$  years of age.
- Males represented a higher proportion of hospitalizations (56%) and ICU admissions (64%) than females.
- 73% of hospitalized cases reported having one or more pre-existing conditions.



**Table 4.** Summary of severe cases of COVID-19 reported in Canada with a submitted case report form, April 7, 2020, 11:00 AM EST.

Severe Cases							
Overall Summary Hospitalizations				n=4,710			
Hospitalizations*				744 (16%)			
Hospitalizations in ICU				219/744 (29%)			
Hospitalizations requiring mechanical ventilation*				86/744 (12%)			
Breakdown by:		Hospitalizations		Admitted to ICU		Deceased**	
Age groups							
	≤ 19	9	(1%)	1	(0%)	0	(0%)
	20-39	62	(9%)	13	(6%)	3	(2%)
	40-59	203	(29%)	65	(31%)	11	(6%)
	60-79	295	(42%)	107	(52%)	59	(35%)
	80+	138	(20%)	21	(10%)	98	(57%)
	<b>Total</b>	<b>707</b>	<b>(100%)</b>	<b>207</b>	<b>(100%)</b>	<b>171</b>	<b>(100%)</b>
Gender							
	Female	322	(44%)	79	(36%)	74	(44%)
	Male	418	(56%)	140	(64%)	96	(56%)
	<b>Total</b>	<b>740</b>	<b>(100%)</b>	<b>219</b>	<b>(100%)</b>	<b>170</b>	<b>(100%)</b>

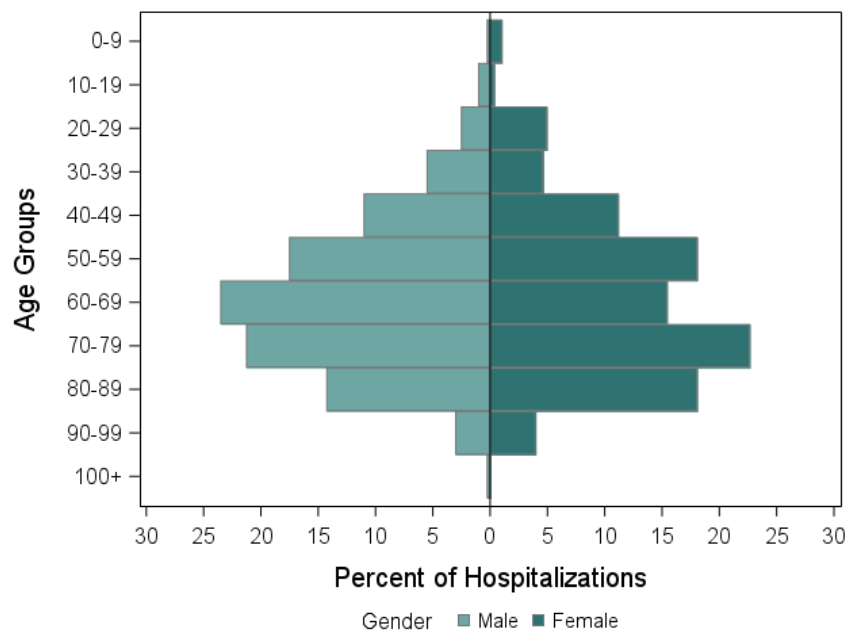
\*Hospitalizations include admission to hospital and emergency room

\*Patients requiring mechanical ventilation are classified as hospitalized, although ventilation may occur in other settings.

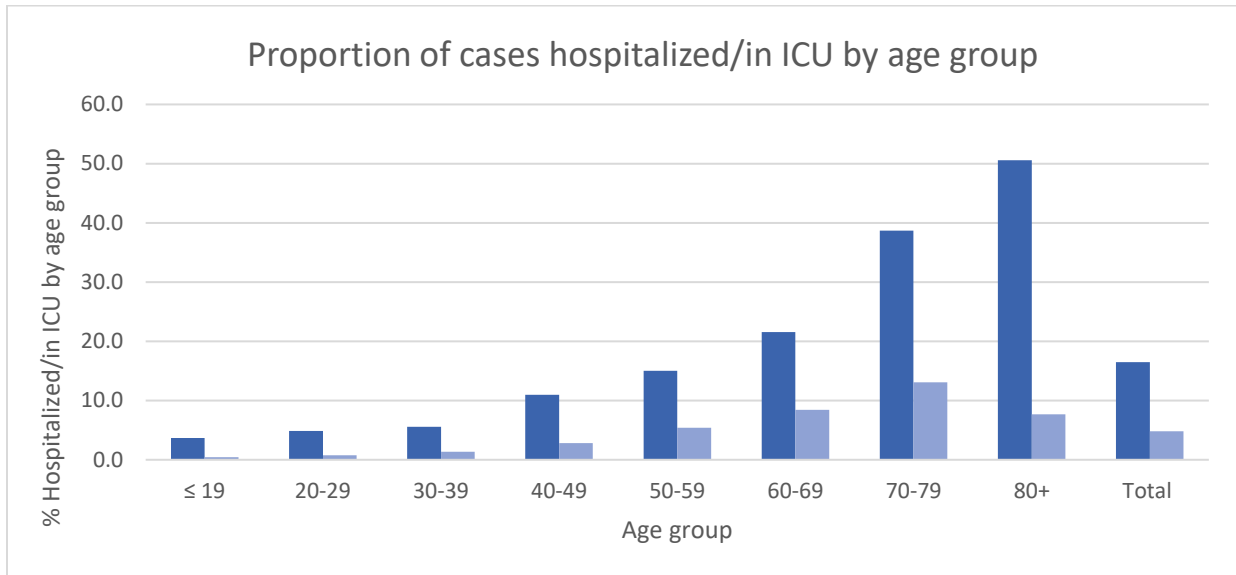
\*\*An update to the disposition of cases was reported, resulting in an increase in the number of reported deaths.

**Note:** ICU refers to Intensive Care Unit. PHAC does not receive routine updates on patient status.

**Figure 6.** Age and sex distribution of hospitalized COVID-19 cases reported in Canada, April 7, 2020, 11:00 AM EST (n=705)



**Figure 6:** Percentage of COVID-19 cases reported by age that are hospitalized or in ICU in Canada, April 7, 2020, 11:00AM (n=4,290).



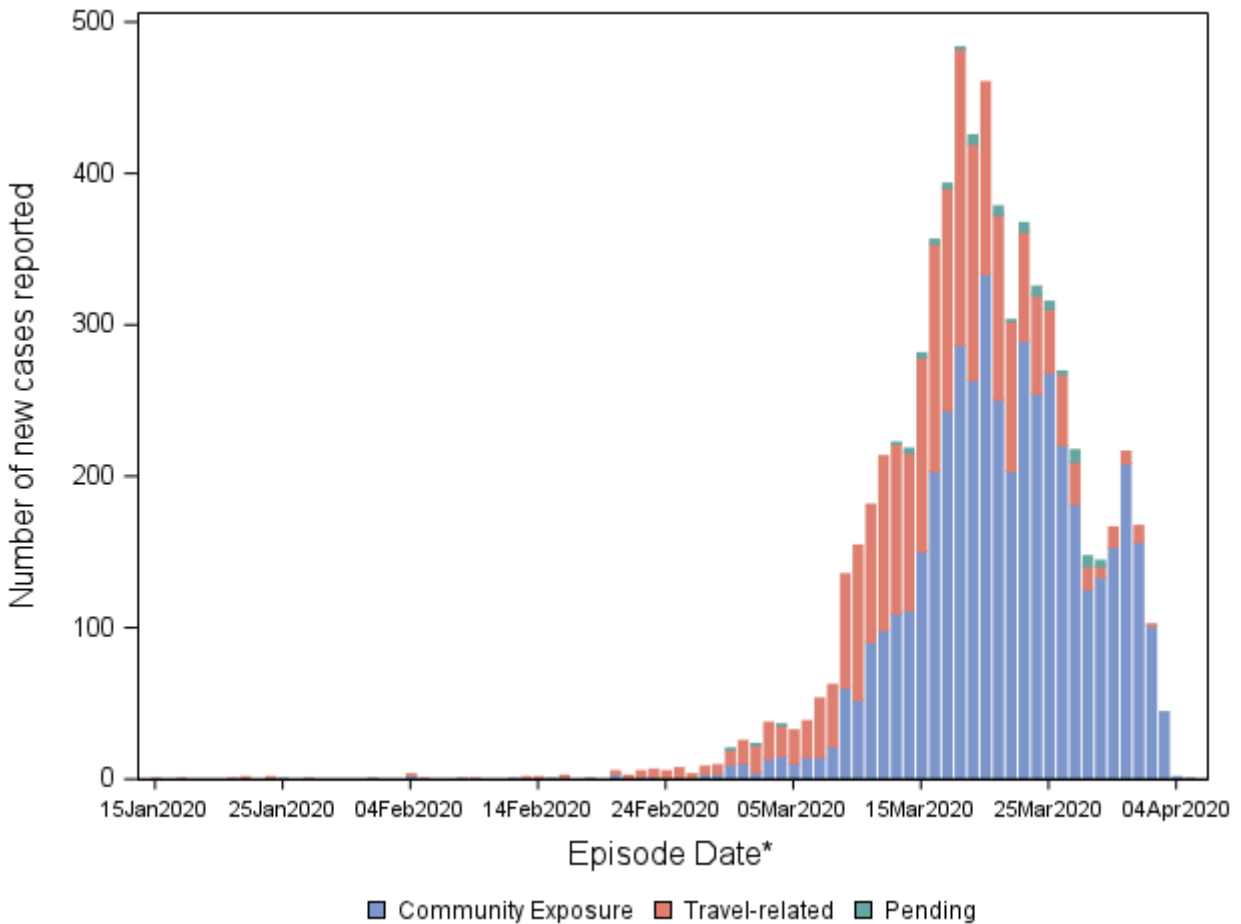
- Of individuals  $\geq 60$  years of age, 33% have required hospitalization and 10% have been admitted to the ICU.
  - Individuals  $\geq 80$  years of age have been hospitalized at the highest rate (52%) and individuals 70-79 years of age have been admitted to the ICU at the highest rate (13%).

## Exposure History

A summary of the exposure history of cases can be found in **Figure 8** and **Table 5**.

- The number of cases related to community transmission overtook travel-related cases on March 15, 2020.

**Figure 8.** Number of newly reported COVID-19 cases in Canada by possible exposure category, April 7, 2020, 11:00 AM EST (n=9,343)



\*Episode date corresponds to the earliest date reported according to the following order: Symptom Onset Date, Specimen Collection Date, Laboratory Testing Date, Date reported to the province/territory or Date reported to PHAC. Cases that do not include any of these date types have been excluded from the curve.

**Table 5.** Possible exposure setting of COVID-19 cases reported in Canada, April 7, 2020, 11:00 AM EST.

Possible Exposure Setting		n=9,343	
<b>Travel-Related</b>		n=2,502	27%
History of international travel		2,180	87%
Close contact of an international traveller		322	13%
<b>Community</b>		n=6,754	72%
Case exposed in a healthcare facility*		1,055	16%
Close contact with case in a household		336	5%
Case lives in a long-term care facility		103	2%
Close contact with case in a workplace‡		74	1%
Case attends/works at a school or daycare		78	1%
Case has no known exposures†		5,108	79%
<b>Pending</b>		n=87	1%

\*Includes healthcare workers and exposure in health care setting

‡ Excludes healthcare settings

† Includes community transmission where specific setting was not reported, as well as cases where no clear exposure setting was reported

### United States

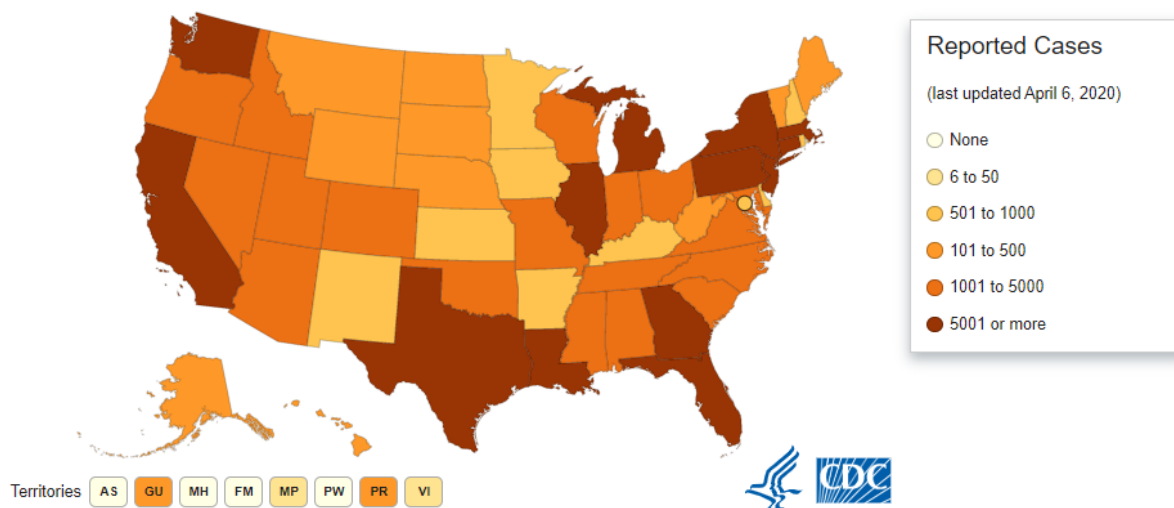
There are 368,449 cases and 10,993 deaths (overall case fatality rate of 3.0%) reported in the United States as of April 7, 2020 at 8:00 AM\*.

\*Information source: Numbers retrieved from Johns Hopkins Coronavirus Resource Center.

The [US CDC](#) has information on 330,891 cases (8,910 deaths) reported from 55 jurisdictions (50 states, District of Columbia, Puerto Rico, Guam, Northern Marianas, and US Virgin Islands).

- Exposure details are known for 7,923 cases :
  - Travel-related: 1,600
  - Close contact: 6,332
- [New York State](#) accounts for 36% and [New Jersey](#) accounts for 11% of cases in the US .
- 89% of jurisdictions reporting cases are reporting community transmission.
- As of April 6, 2020, the [US CDC and US public health labs](#) have reported testing 212,350 specimens.

**Figure 9.** States reporting cases of COVID-19, retrieved April 7, 2020, 11:00 AM EST



Source: [US CDC website](#)

## International

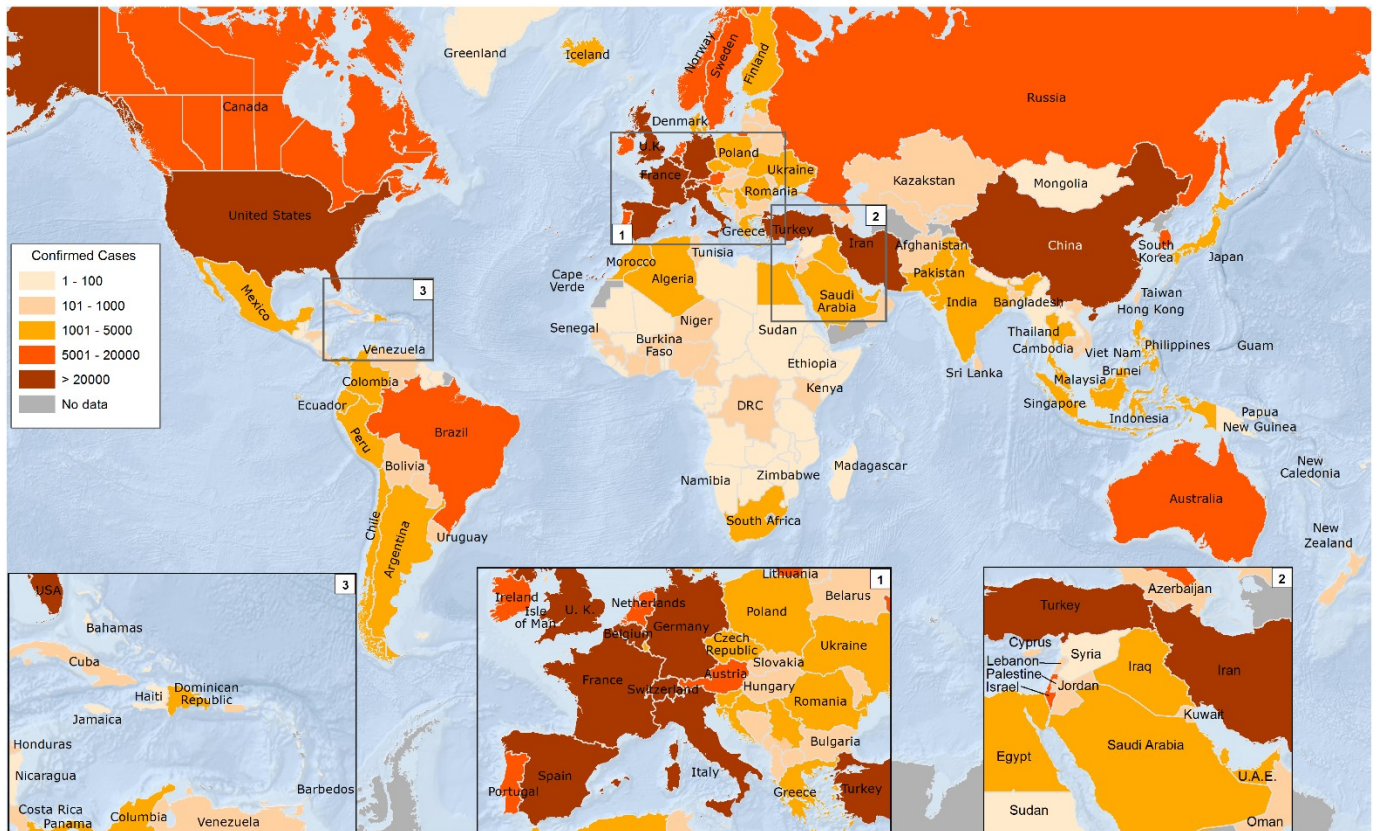
- The United States is now the epicentre of the global pandemic (**Table 6**).
- 206 countries/jurisdictions outside mainland China have reported cases of COVID-19 (**Figure 10**).
  - Five countries (United States, Spain, Italy, Germany, and France) make up the majority of international cases outside of mainland China.

**Table 6.** Global number\* of reported COVID-19 cases, April 7, 2020, 11:00 AM EST.

Location	Total cases	New cases	Total deaths	New deaths
Globally	1,324,586	73,591	74,942	5,193
USA	368,196	30,561	10,989	1,342
China	81,740	32	3,331	0

\***Information Sources:** ECDC Situation update, Hong Kong Centre for Health Protection, Chinese Center for Disease Control and Prevention, Health Commission of Hubei Province, Iran MOH, Spain MOH, Germany MOH, France MOH, Norway MOH, Netherland MOH, Italy MOH, and US CDC.

**Figure 10.** Global distribution\* of confirmed cases of COVID-19, April 7, 2020, 8:00 AM EST.



\***Information Sources:** ECDC Situation updated, Hong Kong Centre for Health Protection, Chinese Center for Disease Control and Prevention, Health Commission of Hubei Province, Iran MOH, Spain MOH, Germany MOH, France MOH, Norway MOH, Netherland MOH, Italy MOH, and US CDC.

Up-to-date country-specific risk levels may be found on [travel health notices](#).