# Coronavirus Disease 2019 (COVID-19)

## DAILY EPIDEMIOLOGY UPDATE

Updated: April 26, 2020, 11:00 AM ET

#### **Highlights**

#### Canada

- 45 791 (+1 427) cases, including 2 489 (+139) deaths, have been reported in Canada (overall case fatality rate of 5.4%).
- At least 691 663 people have been tested to date for COVID-19 in Canada, which corresponds to a test rate
  of 18 401 per million population.
  - The cumulative percent positivity is 6.8%.
  - The weekly percent positivity from April 13 to April 19 is 9.1%.
- Data reported in the coming days and weeks will continue to be critical in determining the trajectory of Canada's epidemic.
- The epidemiological summary is based on detailed case information received for 58% of reported COVID-19 cases in Canada (N=26 360)\*.
  - Age and gender:
    - The highest proportion of cases occurred among individuals 40-59 years of age (33%) followed by those 20-39 years of age (26%).
    - Only 5% of cases are individuals ≤ 19 years of age.
    - 55% of cases are female.

#### Hospitalizations:

- Hospitalization data are available for 16 090 cases with detailed case information.
  - Among these, 2 748 have been hospitalized, including 684 in the ICU.
- While 37% of the cases were 60 years of age and older, this age group represents the highest proportion of hospitalizations (66%) and ICU admissions (64%).
- o 17 hospitalizations and two admissions to ICU were reported in individuals ≤ 19 years of age.
- Male cases appear to have a somewhat higher risk of hospitalization, and ICU admission compared to female cases.

#### International

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

#### \*Data Notes

As of April 26, 2020, 11:00 AM ET, detailed data on cases have been received for **26 360 cases** (58% of reported cases). Data on these cases are preliminary and may have missing values for characteristics of interest.

Provinces and territories may not routinely update detailed data. Data on hospitalization status is known for 61% of cases with detailed case information. 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

	Total	Total	Total	Total	New	%		%	People tested per	Poonlo
Location	Cases	Confirmed	Probable	Deaths	cases	change	Recovered	Recovered	1 000 000	People Tested
BC	1 948	1 948	0	100	95	5%	1 137	58%	12 758	64 700
AB	4 233	4 233	0	73	216	5%	1 471	35%	27 736	121 244
SK	349	347	2	4	8	2%	288	83%	21 880	25 697
MB	267	256	11	6	4	2%	199	75%	15 860	21 720
ON	14 432	14 432	0	835	437	3%	8 000	55%	14 451	210 502
QC	23 267	23 267	0	1 446	651	3%	5 057	22%	23 050	195 577
NL	257	257	0	3	1	0%	208	81%	14 265	7 440
NB	118	118	0	0	0	0%	107	91%	15 973	12 408
NS	865	865	0	22	15	2%	412	48%	27 662	26 871
PE	26	26	0	0	0	0%	24	92%	17 127	2 688
YK	11	11	0	0	0	0%	8	73%	21 883	894
NT	5	5	0	0	0	0%	5	100%	34 667	1 554
NU	0	0	0	0	0	0%	0	0%	9 489	368
Repatriated travellers*	13	13	0	0	0	0%	Unknown	Unknown	0	0
Total	45 791	45 778	13	2 489	1 427	3%	16 916	37%	18 401	691 663

<sup>\*</sup> Repatriated travellers refer to the Grand Princess cruise ship travellers who were under quarantine in Trenton. Update on their status is not available.

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.

At least **691 663** people have been tested for COVID-19 in Canada. This corresponds to a test rate of **18 401** per million population.

- The cumulative percent positivity is 6.8%.
- The weekly percent positivity from April 13 to April 19 is 9.1%.\*

<sup>\*</sup>The weekly percent positivity will be updated in reports published on Mondays for the previous 7 days.

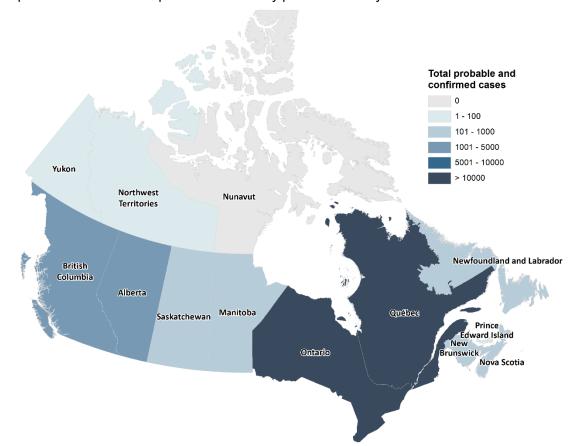


Figure 1. Map of COVID-19 cases reported in Canada by province/territory

 ${\sf Data\ source: Surveillance\ and\ Risk\ Assessment\ Epidemiology\ Update.\ Map\ Created\ by\ NML\ Geomatics}$ 

The distribution of cumulative number of cases by report date (using publicly available P/T 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.

- The rate of doubling of reported cases in Canada has changed from doubling about every 3-4 days in the period March 12 to 28 to doubling approximately every 5-8 days during the period March 29 to April 10.
- More recently, Canada's rate of growth of COVID-19 cases has decreased and the current rate of doubling is 15 days.

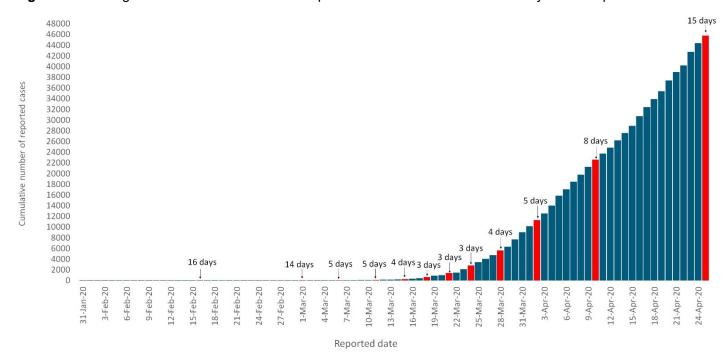


Figure 2. Doubling time of cumulative number of reported COVID-19 cases in Canada by date of report

#### **FluWatchers**

FluWatchers is an online health surveillance system that helps track the spread of flu-like illness across Canada.

FluWatchers normally track the flu, but with the COVID-19 pandemic, we are shifting our focus to tracking COVID-19 over the spring and summer months. The FluWatchers program relies on Canadian volunteers to report each week.

In the week of April 12, 2020, 9 484 participants reported into the FluWatchers program. A total of 24 participants (0.3%) reported cough and fever.

Among the 24 participants reporting cough and fever:

- 10 (42%) sought medical attention
- 5 (20%) were tested
  - 1 test was positive for COVID-19 and 4 test results were negative

5 Percentage of Participants Reporting Cough and Second influenza First peak (based influenza peak (based 4 3 First reported case of COVID-19 Fever (%) in Canada 2 Physical distancing mesures begin to Influenza Season 1 0 19 -Dec-19 23-Feb-20 19 1-Dec-19 29-Dec-19 13-Oct-19 20-Oct-19 27-Oct-19 24-Nov-19 15-Dec-19 12-Jan-20 19-Jan-20 26-Jan-20 9-Feb-20 16-Feb-20 2-Feb-2 3-Nov-10-Nov-8-Dec-5-Jan-8-Mar-15-Mar-2 1-Mar-

22-

Week Beginning

Participants Reporting Cough and Fever

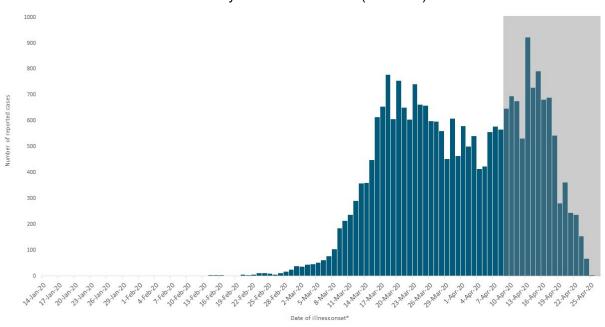
Figure 3: Percentage of FluWatchers Participants Reporting Cough and Fever (N=9 484 the week of April 12, 2020)

This section of the epidemiology update is based on more detailed case information provided by provinces/territories (N=26 360). The number of cases for which we have information varies by characteristic of interest.

#### **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 (n=25 100)



<sup>\*</sup>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

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.

- The highest proportion of cases are among those aged 40-59 years (33%), followed by those aged 20-39 years (26%)
- 5% of cases have occurred in individuals ≤ 19 years of age
- 55% of cases were reported among females

Table 2. Demographic characteristics of COVID-19 cases reported in Canada

Characteristics							
Age (in years)							
Median	52						
Range	0-111						
Age groups	n=25	n=25 824					
≤ 19	1 240	(5%)					
20-39	6 588	(26%)					
40-59	8 396	(33%)					
60-79	5 466	(21%)					
80+	4 134	(16%)					
Gender	n=26 137						
Female	14 468	(55%)					
Male	11 658	(45%)					
Other	11	(<1%)					

#### **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 25, 2020.
- Cough, headache, and general weakness are the most common symptoms reported.
- 510 cases have been clinically or radiologically diagnosed with pneumonia. Of those who reported age, 56% are cases 60 years of age and over with individuals 60-79 representing 41%.
- The most commonly reported pre-existing health conditions were cardiac disease, respiratory disease, and diabetes.

Table 3. Clinical presentation summary of COVID-19 cases reported in Canada

Clinical Presentations						
Pre-Existing Conditions	n=7	875				
Cardiac	980	(12%)				
Respiratory disease	966	(12%)				
Diabetes	731	(9%)				
Other	1 509	(19%)				
Symptoms	n=7	866				
Cough	5 860	(74%)				
Headache	4 462	(57%)				
Weakness	4 369	(56%)				
Complications	n=3	889				
Pneumonia	510	(13%)				
Dyspnea	304	(8%)				
Abnormal lung auscultation	265	(7%)				
Other	270	(7%)				

#### Case severity

A total of 2 748 cases (n=16 090) have been hospitalized, including 684 in ICU (Table 4).

- 66% of all reported hospitalizations, 64% of all reported ICU admissions, and 94% of deaths occurred among those aged ≥ 60 years.
- 17 hospitalizations and two ICU admissions were reported in individuals ≤ 19 years of age.
- 74% of hospitalized cases reported having one or more pre-existing conditions.

Table 4. Summary of severe cases of COVID-19 reported in Canada with detailed case information

Severe Cases						
Overall Summary Hospit	n=16 090					
Hospitalizations				2 748 (17%)		
Hospitalizations in ICU			684/ 2 748 (25%)			5%)
Hospitalizations requiring	mechanic	al ventilation	153/ 2 748 (6%)			5%)
Breakdown by:	All Hos	pitalizations	Admitted to ICU		Deceased	
Age groups						
≤ 19	17	(1%)	2	(<1%)	0	(0%)
20-39	206	(8%)	37	(6%)	8	(1%)
40-59	702	(26%)	207	(31%)	44	(4%)
60-79	1 101	(41%)	353	(53%)	287	(28%)
80+	674	(25%)	72	(11%)	672	(66%)
Total	2 700	(100%)	671	(100%)	1 011	(100%)
Gender						
Female	1 205	(44%)	238	(35%)	500	(50%)
Male	1 532	(56%)	444	(65%)	506	(50%)
Other	1	(<1%)				
Total	2 738	(100%)	682	(100%)	1 006	(100%)

Note: Hospitalizations may include admission to hospital and emergency room. Patients requiring mechanical ventilation are classified as hospitalized although ventilation may occur in other settings. ICU refers to Intensive Care Unit. PHAC does not receive routine updates on patient status.

Case severity by age group and by gender is presented in Figure 5 and Figure 6, respectively.

- Of cases ≥ 60 years of age, 35% have required hospitalization and 8% have been admitted to the ICU.
  - Cases 70 to 79 year olds have been hospitalized at the highest percentage (43%) and admitted to the ICU at the highest percentage (12%).
- Male cases appear to have a somewhat higher risk of hospitalization (1.4 times), and ICU admission (2.1 times) compared to female cases.

Please note that this information has not been tested for statistical significance and is only based on a portion of all cases.

Figure 5. Percent of COVID-19 cases hospitalized and admitted to ICU by age group in Canada (n=15 613)

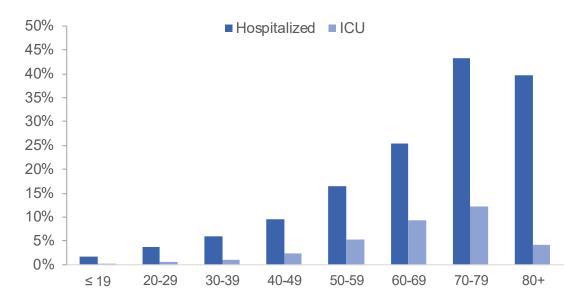
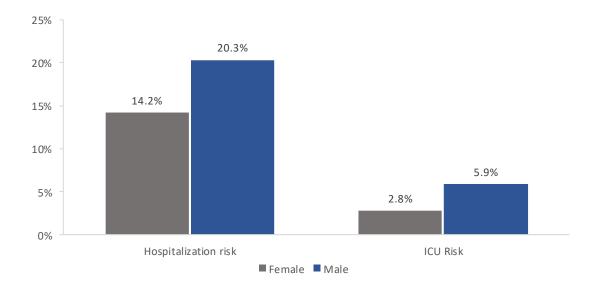


Figure 6. Percent of COVID-19 cases hospitalized and admitted to ICU by gender in Canada (n=16 027)

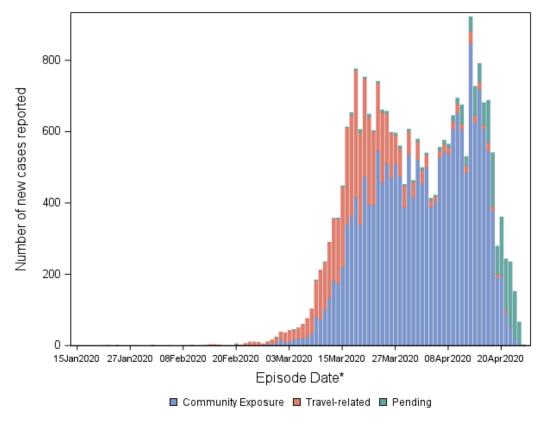


#### **Exposure History**

A summary of the exposure history of cases can be found in Figure 7 and Table 5.

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

Figure 7. Number of newly reported COVID-19 cases in Canada by possible exposure category (n=25 100)



<sup>\*</sup>Episode date corresponds to the earliest date reported according to the following order: Symptom Onset Date, Specimen Collection Date, Laboratory Testing Date. 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

N=26 360		
n=4 954	19%	
3 987	80%	
967	20%	
n=19 812	75%	
3 350	17%	
466	2%	
835	4%	
208	1%	
136	1%	
14 817	75%	
n=1 594	6%	
	n=4 954 3 987 967 n=19 812 3 350 466 835 208 136 14 817	

<sup>\*</sup>Includes healthcare workers and exposure in health care setting

<sup>¥</sup> Excludes healthcare settings

<sup>†</sup> Includes community transmission where specific setting was not reported as well as cases where no clear exposure setting was reported

#### International

- The United States is the epicentre of the global pandemic (Table 6).
  - There are 939 249 cases and 53 934 deaths (CFR of 5.7%) reported in the United States as of April 26, 2020, at 8:00 AM\*.
  - Further information on the situation in the US can be found on <u>US CDC website</u> and in their weekly <u>COVID-19 surveillance report</u>.
- 209 countries/jurisdictions outside mainland China have reported cases of COVID-19.
- The United States is reporting the highest number of cases, followed by Spain, Italy, Germany, the United Kingdom, and France.
- Up-to-date country-specific risk levels may be found on travel health notices.

Table 6. Global number\* of reported COVID-19 cases, April 26, 2020, 8:00 AM ET

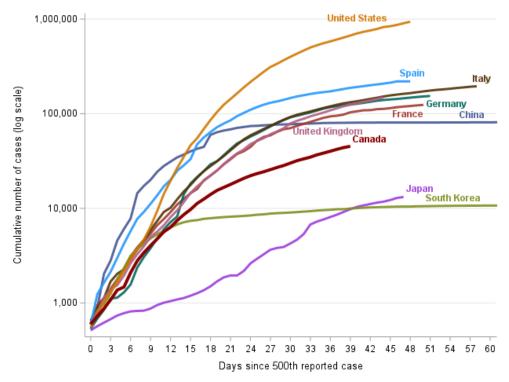
Location	Total cases	New cases	Total deaths	New deaths
Globally	2 846 085	86 513	202 120	5 481
USA	939 249	33 916	53 934	1 985
Mainland China	82 827	11	4 632	0

<sup>\*</sup>Information Sources: ECDC Situation update, Hong Kong Centre for Health Protection, Chinese Center for Disease Control and Prevention, Spain MOH, Germany MOH, France MOH, Italy MOH, and Johns Hopkins Resource Center.

A summary of the cumulative cases of COVID-19 in Canada compared to other countries by date of report can be seen in **Figure 8**.

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

Figure 8. Cumulative cases of COVID-19 in Canada compared to other countries by date of report



**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.