

## Epidemiologic Summary

# COVID-19 in Ontario: January 15, 2020 to May 4, 2020

This report includes the most current information available from the integrated Public Health Information System (iPHIS) as of **4 p.m. May 4, 2020**, from the Toronto Public Health Coronavirus Rapid Entry System (CORES) and the Ottawa Public Health COVID-19 Ottawa Database (The COD) as of **2 p.m. May 4, 2020**.

## Purpose

- This daily report provides an epidemiologic summary of COVID-19 activity in Ontario to date.

## Highlights

- There are 18,310 confirmed cases of COVID-19 in Ontario reported to date. This represents an increase of 387 confirmed cases from the previous report.
  - 41.7% of cases are male, 57.5% are female.
  - 44.0% of cases are 60 years of age and older.
  - Greater Toronto Area public health units account for 60.4% of cases.
  - 12.2% of cases were hospitalized.
- 1,361 deaths have been reported (please note there may be a reporting delay for deaths). This is an increase of 61 deaths from the previous report.
- 218 outbreaks have been reported in long-term care homes. This is an increase of 6 outbreaks from the previous report.
- 697 deaths have been reported among residents/patients in long-term care homes. This is an increase of 71 deaths from the previous report.

## Case Characteristics

**Table 1. Summary of cases of COVID-19: Ontario, January 15, 2020 to May 4, 2020**

	Number	Percentage
Number of cases <sup>1</sup>	18,310	N/A
Change from previous report	387	2.2% increase
Gender: Male	7,629	41.7
Gender: Female	10,521	57.5
Ages: 19 and under	451	2.5
Ages: 20-39	4,257	23.2
Ages: 40-59	5,528	30.2
Ages: 60-79	4,012	21.9
Ages: 80 and over	4,051	22.1
Number of cases in health care workers	2,892	15.8

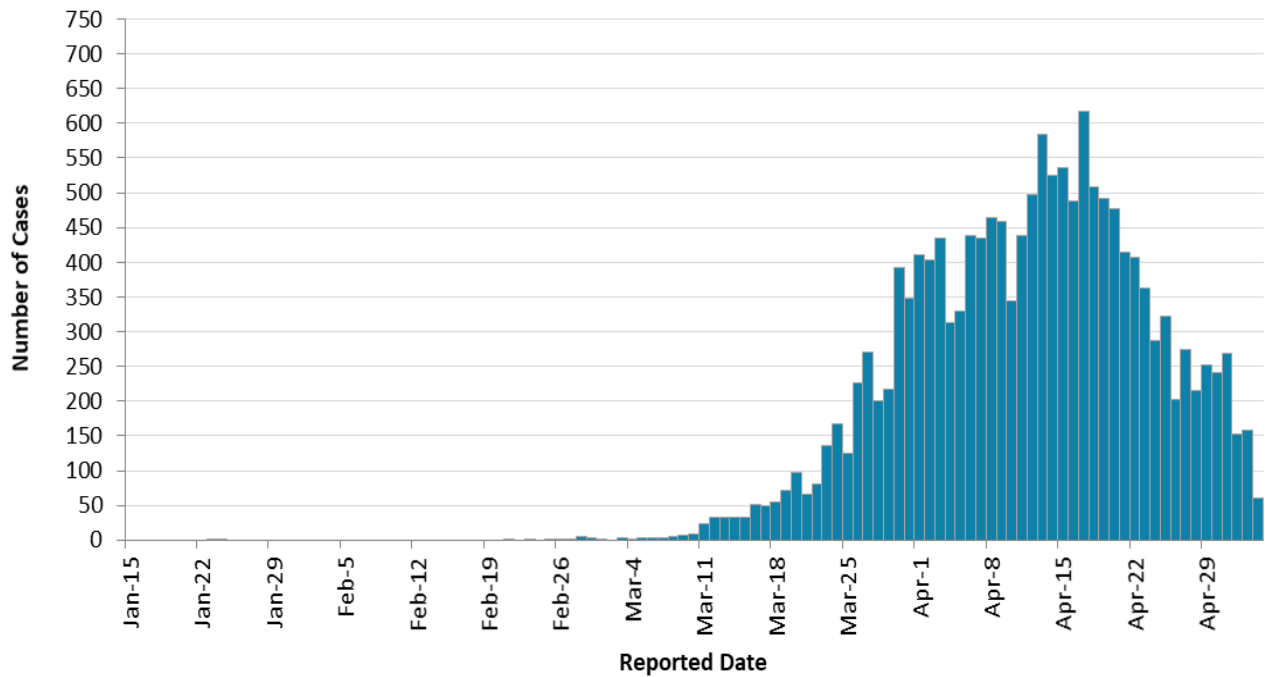
<sup>1</sup> Cases and rates by public health units are provided in [Appendix A](#).

**Note:** 160 cases did not specify male or female. 11 cases had an unknown age.

**Data Source:** integrated Public Health Information System (iPHIS) database, Coronavirus Rapid Entry System (CORES) database, The COVID-19 Ottawa Database (The COD).

# Time

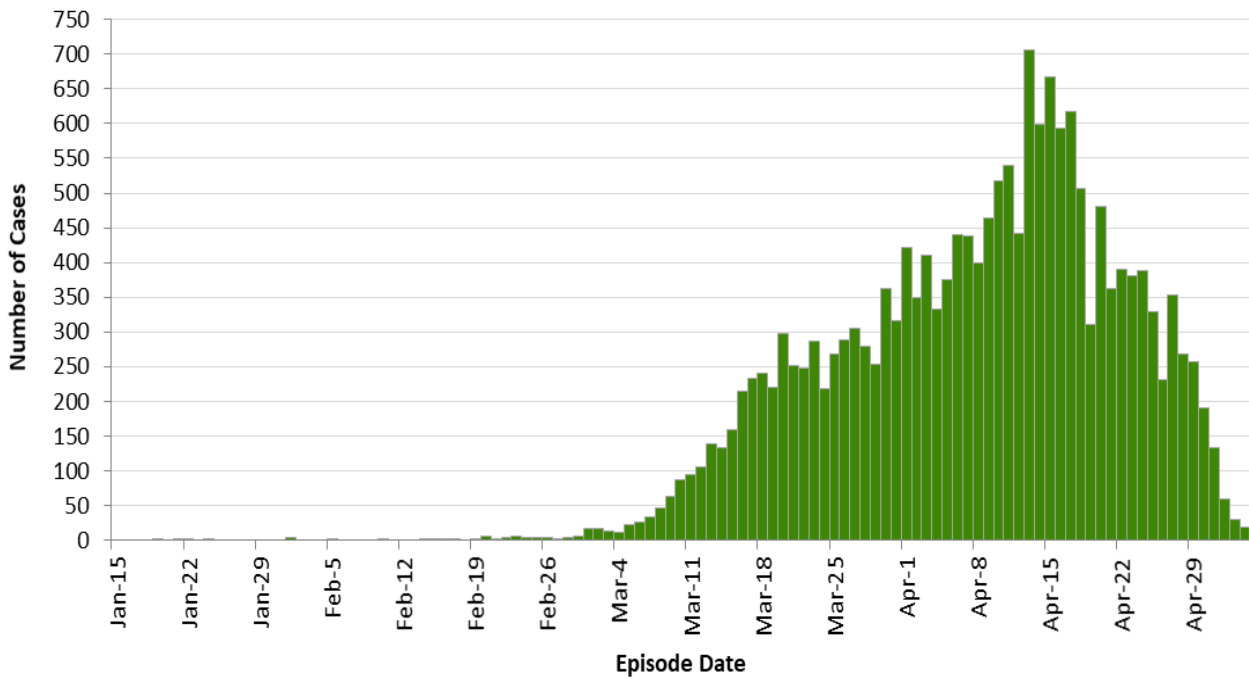
**Figure 1. Confirmed cases (n=18,310) of COVID-19 by reported date: Ontario, January 15, 2020 to May 4, 2020<sup>1</sup>**



<sup>1</sup> Interpret case counts for the most recent days (approximately 3 days) with caution due to reporting lags.

**Data Source:** integrated Public Health Information System (iPHIS) database, Coronavirus Rapid Entry System (CORES) database, The COVID-19 Ottawa Database (The COD).

**Figure 2. Confirmed cases (n=18,310) of COVID-19 by an approximation of symptom onset date<sup>1</sup>: Ontario, January 15, 2020 to May 4, 2020<sup>2</sup>**

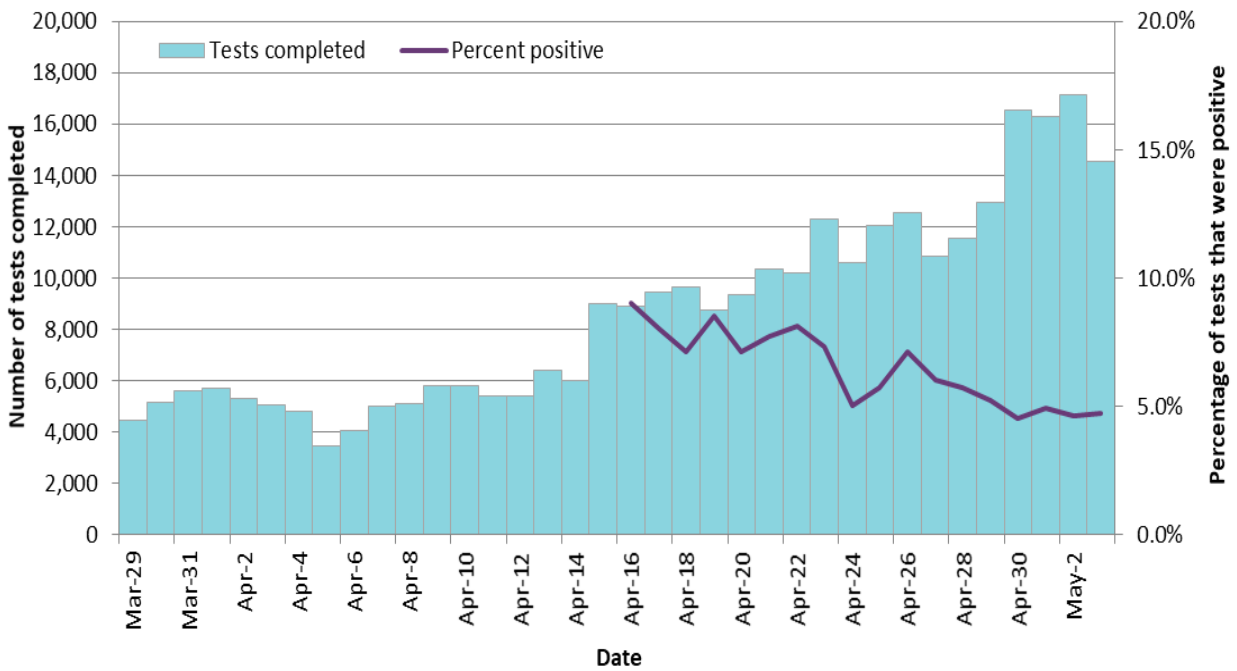


<sup>1</sup> This date, referred to as episode date, is intended to approximate symptom onset date. It is calculated based on either the date of symptom onset, specimen collection/test date, or the date reported to public health.

<sup>2</sup> Interpret case counts for the most recent days (approximately 14 days) with caution due to reporting lags.

**Data Source:** integrated Public Health Information System (iPHIS) database, Coronavirus Rapid Entry System (CORES) database, The COVID-19 Ottawa Database (The COD).

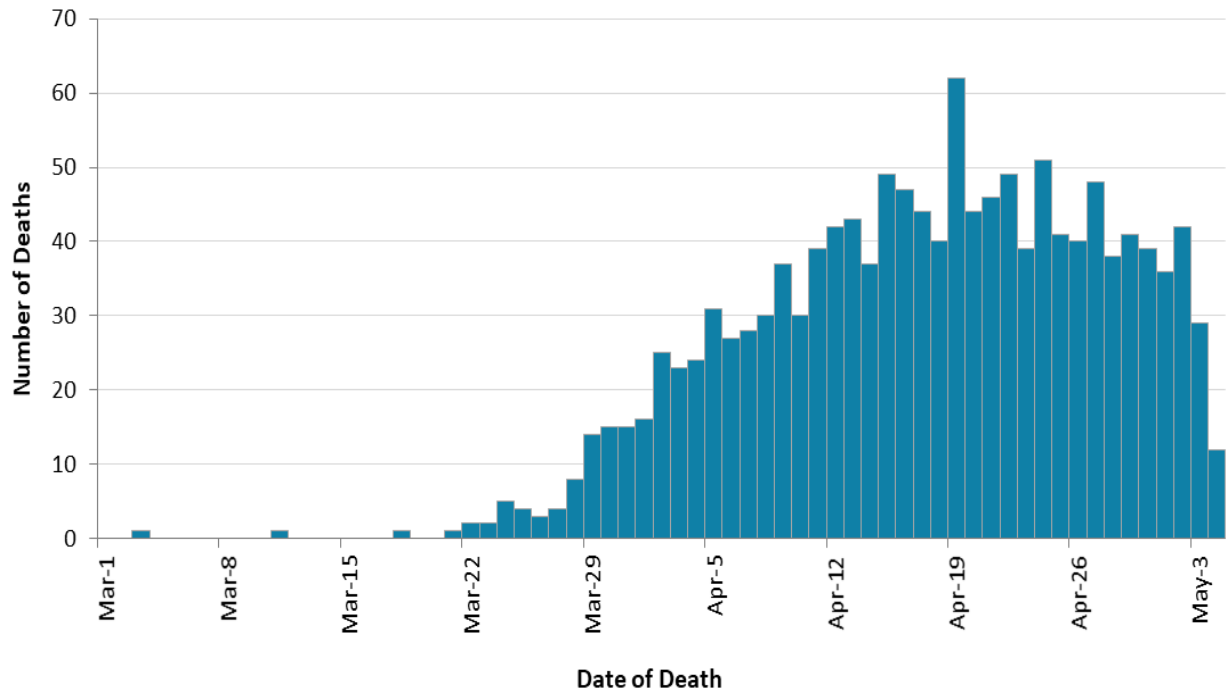
**Figure 3. Number of COVID-19 tests completed<sup>1</sup> and percent positivity: Ontario, March 29, 2020 to May 3, 2020**



<sup>1</sup>The number of tests performed does not reflect the number of specimens or persons tested. More than one test may be performed per specimen or per person. As such, the percentage of tests that were positive does not necessarily translate to the number of specimens or persons testing positive.

**Data Source:** The Provincial COVID-19 Diagnostics Network, data reported by member microbiology laboratories.

**Figure 4. Confirmed deaths (n=1,345<sup>1</sup>) among COVID-19 cases by date of death: Ontario, March 1, 2020 to May 4, 2020<sup>2</sup>**



<sup>1</sup>This count excludes 16 cases that did not have a date of death reported.

<sup>2</sup>Interpret case counts for the most recent days with caution due to reporting lags.

**Data Source:** integrated Public Health Information System (iPHIS) database, Coronavirus Rapid Entry System (CORES) database, The COVID-19 Ottawa Database (The COD).

## Exposure

**Table 2. Confirmed cases (n=18,310) of COVID-19 by exposure type: Ontario, January 15, 2020 to May 4, 2020**

	Number	Percentage
Travel <sup>1</sup>	1,402	7.7
Close contact of a confirmed case	3,853	21.0
Community transmission	6,617	36.1
Information pending	6,438	35.2

<sup>1</sup>Travel within the 14 days prior to becoming ill.

**Data Source:** integrated Public Health Information System (iPHIS) database, Coronavirus Rapid Entry System (CORES) database, The COVID-19 Ottawa Database (The COD).

## Severity

**Table 3. Confirmed cases (n=18,310) of COVID-19 by severity: Ontario, January 15, 2020 to May 4, 2020**

	Number	Percentage
Cumulative deaths reported (please note there may be a reporting delay for deaths in iPHIS)	1,361	7.4
Change from previous report	61	4.7% increase
Deaths reported in ages: 19 and under	0	0
Deaths reported in ages: 20-39	7	0.2
Deaths reported in ages: 40-59	59	1.1
Deaths reported in ages: 60-79	338	8.4
Deaths reported in ages: 80 and over	957	23.6
Cumulative intensive care <sup>1</sup>	524	2.9
Cumulative hospitalized <sup>1</sup>	2,225	12.2
Number of resolved <sup>2</sup> cases	12,779	69.8

<sup>1</sup> These refer to all hospitalized or ICU admitted cases, not cases that are currently hospitalized or in ICU.

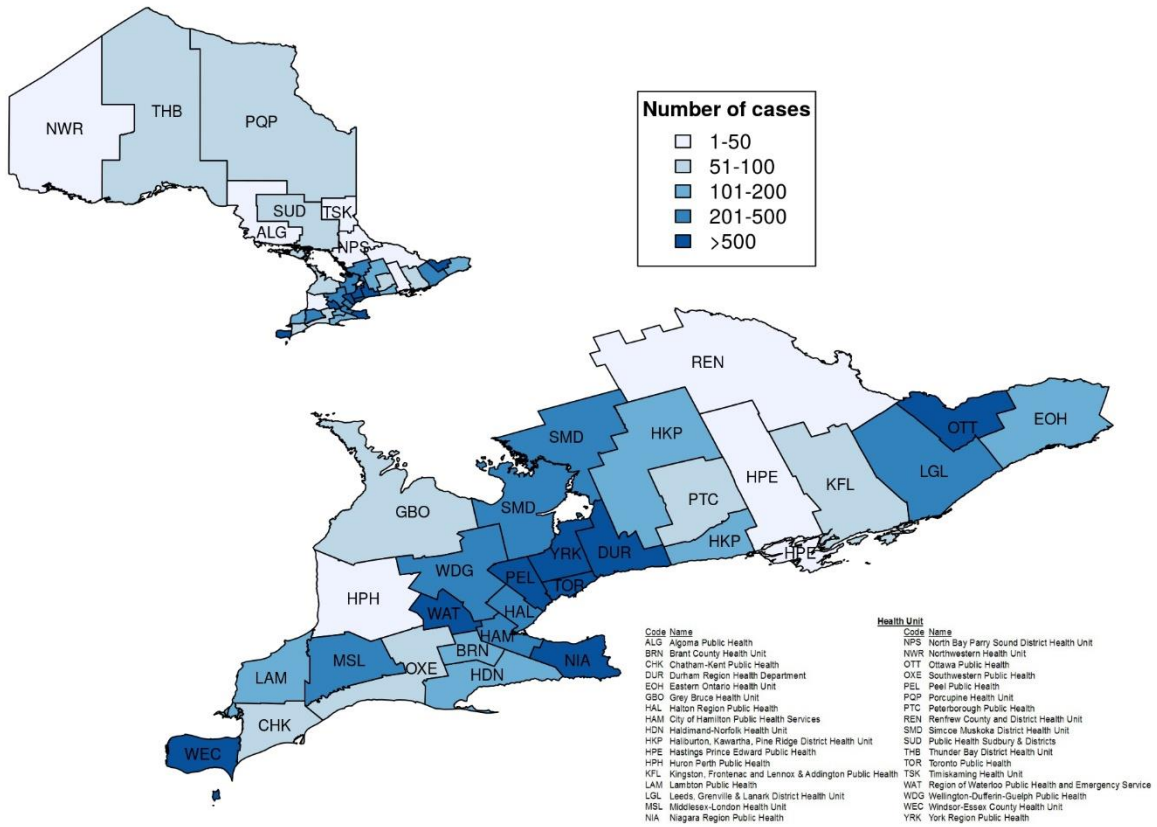
<sup>2</sup> Cases that are 14 days past symptom onset (if available) or 14 days past the episode date are classified as resolved for non-fatal cases that are not currently listed as hospitalized. Cases are also classified as resolved if the case is reported as “recovered” in iPHIS.

**Data Source:** integrated Public Health Information System (iPHIS) database, Coronavirus Rapid Entry System (CORES) database, The COVID-19 Ottawa Database (The COD).



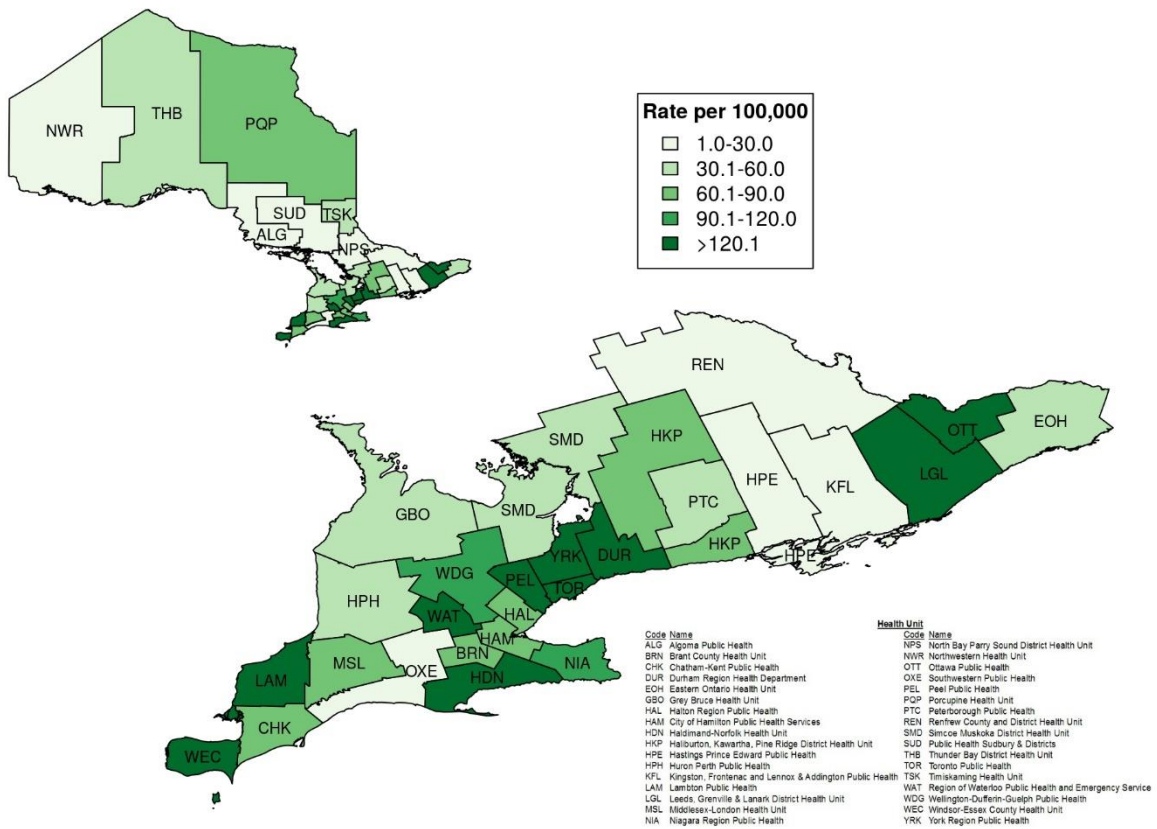
# Geography

**Figure 5. Confirmed cases (n=18,310) of COVID-19 by public health unit: Ontario, January 15, 2020 to May 4, 2020**



**Data Source:** integrated Public Health Information System (iPHIS) database, Coronavirus Rapid Entry System (CORES) database, The COVID-19 Ottawa Database (The COD).

**Figure 6. Rate of confirmed cases of COVID-19 by public health unit: Ontario, January 15, 2020 to May 4, 2020**



**Data Source:** integrated Public Health Information System (iPHIS) database, Coronavirus Rapid Entry System (CORES) database, The COVID-19 Ottawa Database (The COD).

## Outbreaks in Institutions and Public Hospitals

**Table 4. Confirmed COVID-19 outbreaks reported in long-term care homes, retirement homes and hospitals and total number of associated cases: Ontario, January 15, 2020 to May 4, 2020**

Indicator	Long-Term Care Homes	Retirement Homes	Hospitals
Cumulative number of confirmed COVID-19 outbreaks	218	78	66
Total number of cases <sup>1,2,3</sup> reported as part of the confirmed COVID-19 outbreaks	4,052	836	520
Cases reported among residents/patients	2,707	549	245
Cases reported among staff	1,340	287	268
Total number of deaths <sup>1,2,3</sup> reported as part of the confirmed COVID-19 outbreaks	698	108	38
Deaths reported among residents/patients	697	108	38
Deaths reported among staff	1	0	0

<sup>1</sup> Includes all outbreak-related cases and deaths reported in aggregate outbreak summary counts, regardless of whether the case was laboratory confirmed (deaths among non-laboratory confirmed cases reported here are not included in Table 3).

<sup>2</sup> May include cases and deaths other than residents/patients or staff, such as volunteers. As a result, the total number of cases and deaths may be greater than the number of cases and deaths reported in residents or staff.

<sup>3</sup> Counts may fluctuate from previous reports due to updates made by health units as additional information about the outbreak is reported.

**Data Source:** integrated Public Health Information System (iPHIS) database.

# Technical Notes

## Data Sources

- The data for this report were based on:
  - Information extracted from the Ontario Ministry of Health (MOH) integrated Public Health Information System (iPHIS) database, as of **May 4, 2020 at 4 p.m.**
  - Information successfully uploaded to the Ministry from Local Systems: the Toronto Public Health (Coronavirus Rapid Entry System) CORES and the Ottawa Public Health COVID-19 Ottawa Database (The COD), as of **May 4, 2020 at 2 p.m.**
- iPHIS, CORES and COD are dynamic disease reporting systems, which allows ongoing updates to data previously entered. As a result, data extracted from iPHIS and the Local Systems represent a snapshot at the time of extraction and may differ from previous or subsequent reports.
- Ontario population projection data for 2020 were sourced from Ontario Ministry of Health, IntelliHEALTH Ontario. Data were extracted on November 26, 2019.
- COVID-19 test data were based on information from The Provincial COVID-19 Diagnostics Network, reported by member microbiology laboratories.

## Data Caveats:

- The data only represent cases reported to public health and recorded in iPHIS and the Local Systems (e.g., CORES, COD). As a result, all counts will be subject to varying degrees of underreporting due to a variety of factors, such as disease awareness and medical care seeking behaviours, which may depend on severity of illness, clinical practice, changes in laboratory testing, and reporting behaviours.
- Lags in iPHIS and Local Systems data entry due to reduced holiday and weekend staffing may result in lower case counts than would otherwise be recorded.
- Only cases meeting the confirmed case classification as listed in the MOH [COVID-19 case definition](#) are included in the report counts from iPHIS the Local Systems.
- Case episode date is based on an estimate of the best date of disease onset. This date is calculated based on either the date of symptom onset, specimen collection/test date, or the date reported to public health.
- Orientation of case counts by geography is based on the diagnosing health unit (DHU). DHU refers to the case's public health unit of residence at the time of illness onset and not necessarily the location of exposure. Cases for which the DHU was reported as MOH (to signify a case that is not a resident of Ontario) have been excluded from the analyses.
  - GTA health units include: Durham Region Health Department, Peel Public Health, Toronto Public Health and York Region Public Health
- Exposure type is determined by examining the exposure and risk factor fields from iPHIS to determine whether a case travelled, was a contact of a case or neither. A hierarchy has been

applied as follows: Travel-related > Close contact of a confirmed case > Community transmission > Information pending.

- Exposure type is determined from Local Systems by examining the risk factor fields from Local Systems to determine whether a case travelled, was a contact of a case or neither. A hierarchy has been applied as follows: Travel-related > Close contact of a confirmed case > Community transmission > Information pending
- Deaths are determined by using the outcome field in iPHIS or Local Systems. Any case marked 'Fatal' is included in the deaths data. Deaths are included whether or not COVID-19 was determined to be a contributing or underlying cause of death as indicated in the iPHIS field Type of Death.
  - The date of death is determined using the outcome date field for cases marked as 'Fatal' in the outcome field.
- iPHIS cases for which the Disposition Status was reported as ENTERED IN ERROR, DOES NOT MEET DEFINITION, DUPLICATE-DO NOT USE, or any variation on these values have been excluded.
- To provide a measure of the impact of COVID-19 on long-term care homes and hospitals, the number of outbreaks and the associated cases are reported. To obtain the case and deaths data for these outbreaks, the aggregate counts recorded by public health units in the outbreak's summary counts section of iPHIS is used. This information is presented in table 4.
  - Previously only a select number of persons in institutional outbreaks would be tested for COVID-19, and there could still be circumstances where not all individuals end up being tested (e.g., the person dies before they can be tested).
  - These counts may not be updated as frequently as the information for laboratory-confirmed cases.
  - The information in the aggregate counts can not necessarily be reconciled with the laboratory-confirmed case data.

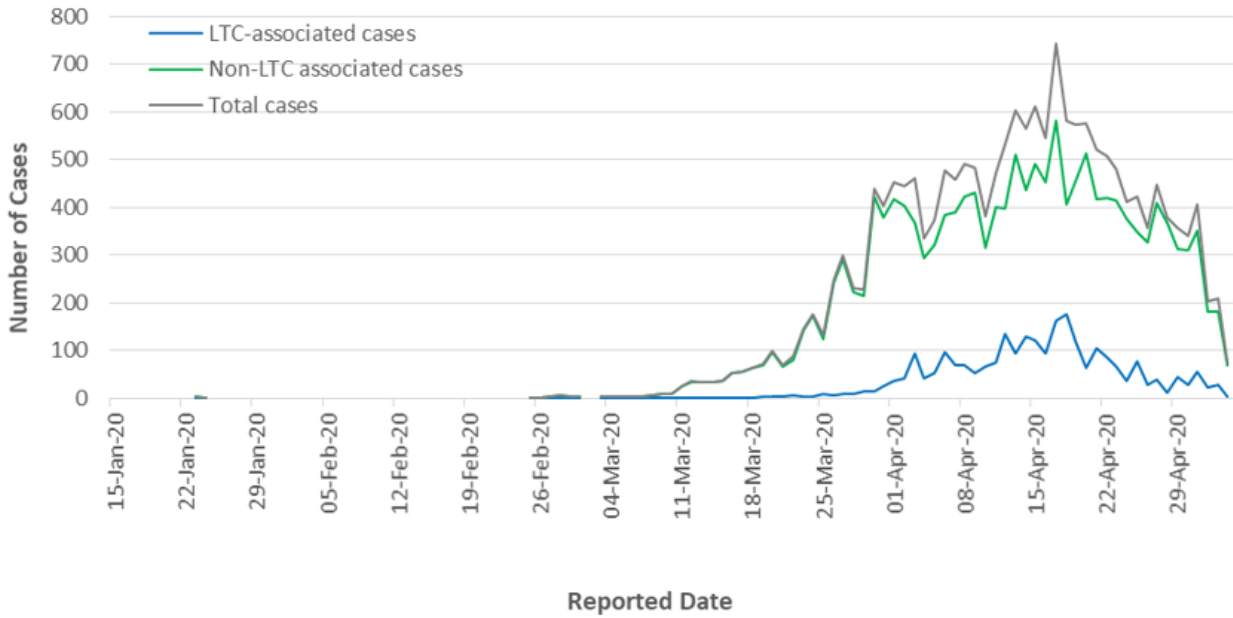
## Appendix A

**Table 1. Confirmed cases (n=18,310) of COVID-19 by public health unit: Ontario, January 15, 2020 to May 4, 2020**

Public Health Unit Name	Cases	Rate per 100,000 population
Northwestern Health Unit	15	17.1
Thunder Bay District Health Unit	77	51.3
<b>TOTAL NORTH WEST</b>	92	38.7
Algoma Public Health	13	11.4
North Bay Parry Sound District Health Unit	17	13.1
Porcupine Health Unit	61	73.1
Public Health Sudbury & Districts	57	28.6
Timiskaming Health Unit	18	55.1
<b>TOTAL NORTH EAST</b>	166	29.7
Ottawa Public Health	1,531	145.2
Eastern Ontario Health Unit	103	49.4
Hastings Prince Edward Public Health	44	26.1
Kingston, Frontenac and Lennox & Addington Public Health	60	28.2
Leeds, Grenville & Lanark District Health Unit	323	186.5
Renfrew County and District Health Unit	16	14.7
<b>TOTAL EASTERN</b>	2,077	107.8
Durham Region Health Department	1,070	150.2
Haliburton, Kawartha, Pine Ridge District Health Unit	158	83.6
Peel Public Health	2,590	161.3

Public Health Unit Name	Cases	Rate per 100,000 population
Peterborough Public Health	84	56.8
Simcoe Muskoka District Health Unit	318	53.0
York Region Public Health	1,657	135.2
<b>TOTAL CENTRAL EAST</b>	<b>5,877</b>	<b>131.2</b>
Toronto Public Health	5,737	183.9
<b>TOTAL TORONTO</b>	<b>5,737</b>	<b>183.9</b>
Chatham-Kent Public Health	89	83.7
Grey Bruce Health Unit	82	48.3
Huron Perth Public Health	50	35.8
Lambton Public Health	189	144.3
Middlesex-London Health Unit	432	85.1
Southwestern Public Health	59	27.9
Windsor-Essex County Health Unit	636	149.7
<b>TOTAL SOUTH WEST</b>	<b>1,537</b>	<b>90.9</b>
Brant County Health Unit	105	67.7
City of Hamilton Public Health Services	450	76.0
Haldimand-Norfolk Health Unit	193	169.2
Halton Region Public Health	481	77.7
Niagara Region Public Health	527	111.5
Region of Waterloo Public Health and Emergency Services	761	130.2
Wellington-Dufferin-Guelph Public Health	307	98.4
<b>TOTAL CENTRAL WEST</b>	<b>2,824</b>	<b>99.1</b>
<b>TOTAL ONTARIO</b>	<b>18,310</b>	<b>123.2</b>

**Figure 1. Confirmed cases (n=18,310) of COVID-19 by reported date and association with long-term care homes (LTC)<sup>1</sup>: Ontario, January 15, 2020 to Month day, 2020<sup>2</sup>**



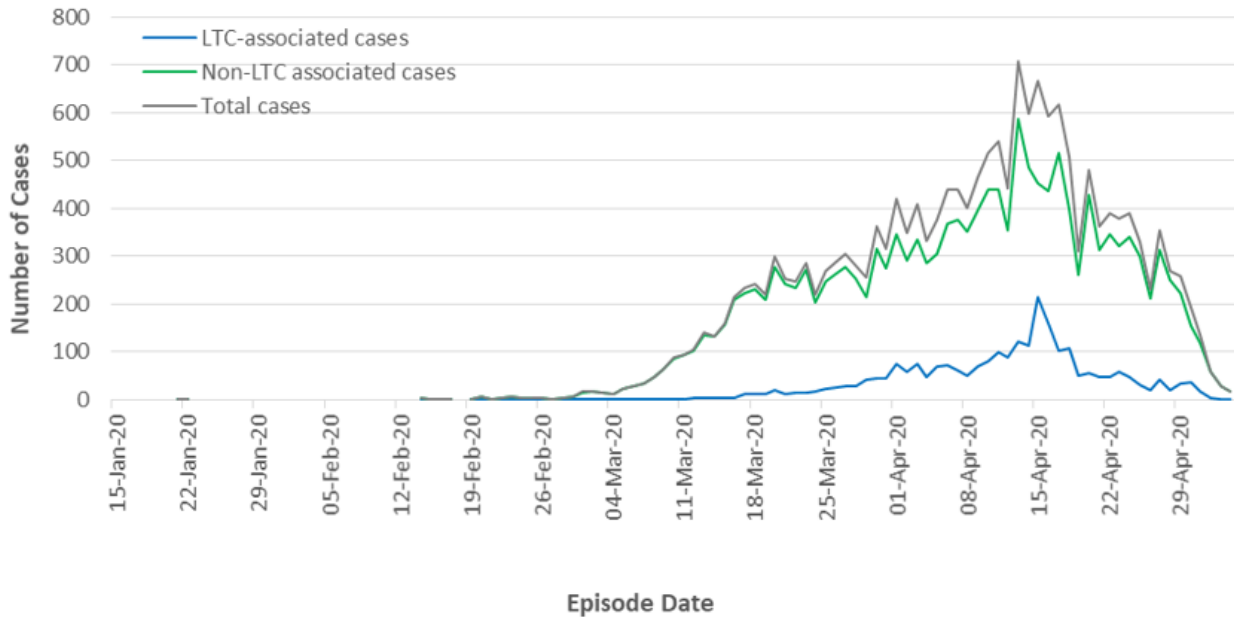
<sup>1</sup> LTC associated cases includes those that reported ‘yes’ to the risk factor ‘Resident of nursing home or other chronic care facility’ and non-LTC associated cases includes those who did not report ‘yes’ to the above risk factor.

<sup>2</sup> Interpret case counts for the most recent days (approximately 3 days) with caution due to reporting lags.

**Data Source:** integrated Public Health Information System (iPHIS) database, Coronavirus Rapid Entry System (CORES) database, The COVID-19 Ottawa Database (The COD).



**Figure 2. Confirmed cases (n=18,310) of COVID-19 by an approximation of symptom onset date<sup>1</sup> and association with long-term care homes (LTC)<sup>2</sup>: Ontario, January 15, 2020 to Month day, 2020<sup>3</sup>**



<sup>1</sup> This date, referred to as episode date, is intended to approximate symptom onset date. It is calculated based on either the date of symptom onset, specimen collection/test date, or the date reported to public health.

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## For Further Information

For more information, email [cd@oahpp.ca](mailto:cd@oahpp.ca).

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