

## Epidemiologic Summary

# COVID-19 in Ontario: January 15, 2020 to April 16, 2020

This report includes the most current information available from the integrated Public Health Information System (iPHIS) as of **4 p.m. April 16, 2020**.

## Purpose

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

## Highlights

- There are 9,525 confirmed cases of COVID-19 in Ontario reported to date in iPHIS. This represents an increase of 564 confirmed cases from the previous report.
  - 42.8% of cases are male, 56.5% are female.
  - 42.8% of cases are 60 years of age and older.
  - Greater Toronto Area public health units account for 55.6% of cases.
  - 12.5% of cases were hospitalized.
- 478 deaths have been reported (please note there may be a reporting delay for deaths in iPHIS). This is an increase of 55 deaths from the previous report.
- One hundred six outbreaks have been reported in long-term care homes.

## Case Characteristics

**Table 1. Summary of cases of COVID-19: Ontario, January 15, 2020 to April 16, 2020**

	Number	Percentage
Number of cases*	9,525	N/A
Change from previous report	564	6.3% increase
Gender: Male	4,074	42.8
Gender: Female	5,380	56.5
Ages: 19 and under	210	2.2
Ages: 20-39	2,164	22.7
Ages: 40-59	3,067	32.2
Ages: 60-79	2,214	23.2
Ages: 80 and over	1,864	19.6
Number of cases in health care workers	1,068	11.2

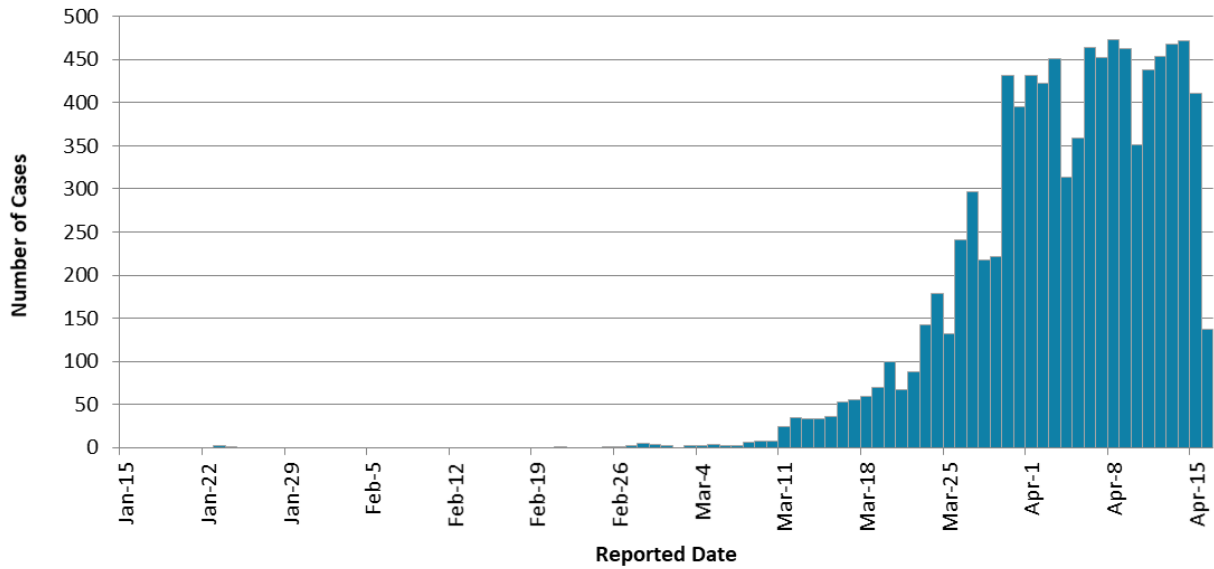
\* Cases and rates by public health unit is provided in [Appendix A](#).

**Note:** 71 cases did not specify male or female. Six cases had an unknown age.

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

# Time

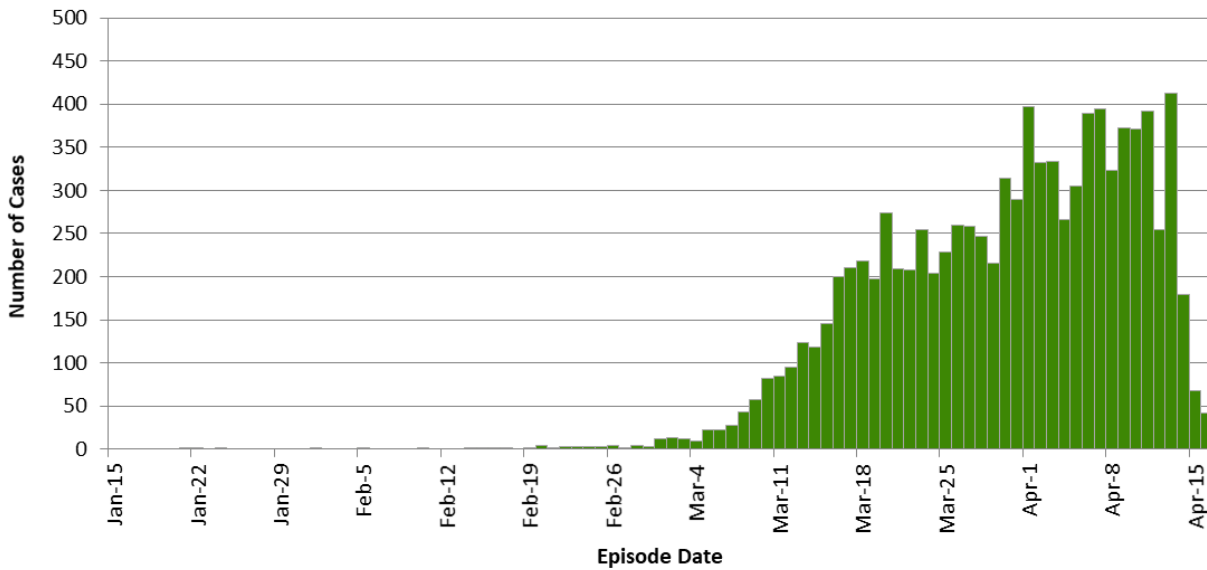
**Figure 1. Confirmed cases (n=9,525) of COVID-19 by reported date: Ontario, January 15, 2020 to April 16, 2020\***



\*Interpret case counts for the most recent days with caution due to reporting lags.

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

**Figure 2. Confirmed cases (n=9,525) of COVID-19 by an approximation of symptom onset date\*: Ontario, January 15, 2020 to April 16, 2020\*\***



\*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.

\*\*Interpret case counts for the most recent days with caution due to reporting lags.

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

## Exposure

**Table 2. Confirmed cases (n=9,525) of COVID-19 by exposure type: Ontario, January 15, 2020 to April 16, 2020**

	Number	Percentage
Travel*	1,201	12.6
Close contact of a confirmed case	1,677	17.6
Community transmission	2,524	26.5
Information pending	4,123	43.3

\*Travel within the 14 days prior to becoming ill; travel locations are provided in [Appendix A](#).

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

## Severity

**Table 3. Confirmed cases (n=9,525) of COVID-19 by severity: Ontario, January 15, 2020 to April 16, 2020**

	Number	Percentage
Cumulative deaths reported (please note there may be a reporting delay for deaths in iPHIS)	478	5.0
Change from previous report	55	13.0% increase
Deaths reported in ages: 19 and under	0	0.0
Deaths reported in ages: 20-39	1	0.0
Deaths reported in ages: 40-59	29	0.9
Deaths reported in ages: 60-79	141	6.4
Deaths reported in ages: 80 and over	307	16.5
Cumulative intensive care*	327	3.4
Cumulative hospitalized*	1,190	12.5
Number of resolved** cases	4,556	47.8

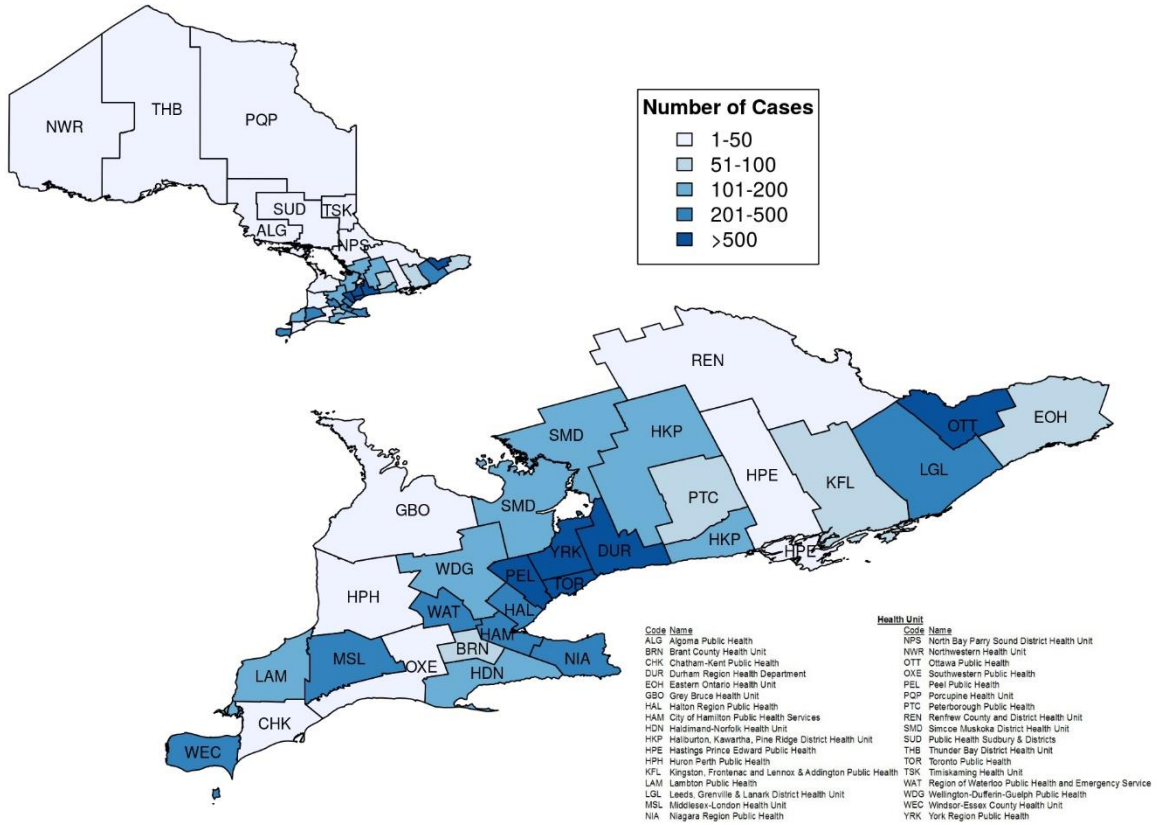
**Data Source:** integrated Public Health Information System (iPHIS) database

\* These refer to all hospitalized or ICU admitted cases, not cases that are currently hospitalized or in ICU.

\*\* Cases that are 14 days past symptom onset (if available) or 14 days past the episode date (for cases for whom the public health unit investigation is complete) 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.

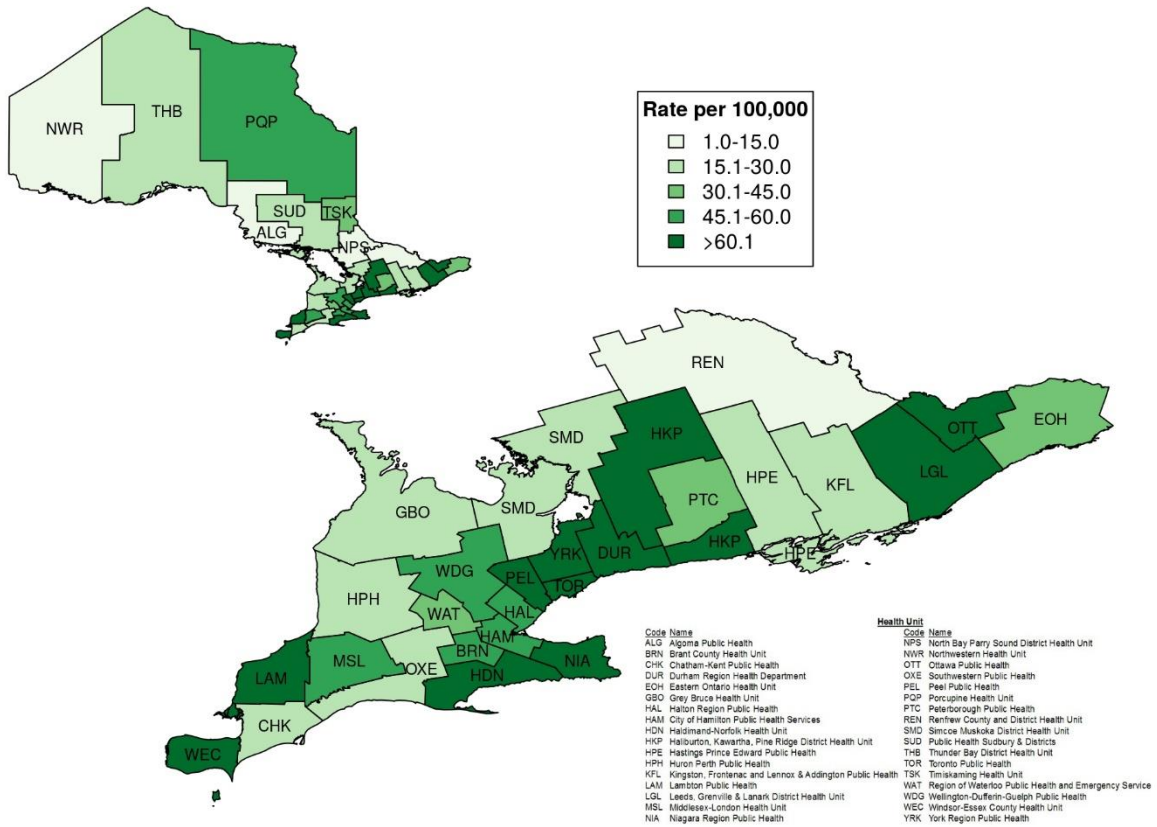
# Geography

**Figure 3. Confirmed cases (n=9,525) of COVID-19 by public health unit: Ontario, January 15, 2020 to April 16, 2020**



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

**Figure 4. Rate of confirmed cases of COVID-19 by public health unit: Ontario, January 15, 2020 to April 16, 2020**



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



## Outbreaks in Institutions and Public Hospitals

**Table 4. Confirmed COVID-19 outbreaks reported in long-term care homes and hospitals and total number of associated cases: Ontario, January 15, 2020 to April 16, 2020**

Indicator	Long-Term Care Homes	Hospitals
Number of confirmed COVID-19 outbreaks	106	30
Total number of cases*,** reported as part of the confirmed COVID-19 outbreaks	1,854	194
Cases reported among residents/patients	1,229	117
Cases reported among staff	621	76
Total number of deaths*,** reported as part of the confirmed COVID-19 outbreaks	217	10
Deaths reported among residents/patients	216	10
Deaths reported among staff	0	0

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

\*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).

\*\*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.

# Technical Notes

## Data Sources (Case Data)

- 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 **April 16, 2020 at 4 p.m.**
- iPHIS is a dynamic disease reporting system, which allows ongoing updates to data previously entered. As a result, data extracted from iPHIS 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.

## iPHIS Data Caveats:

- The data only represent cases reported to public health and recorded in iPHIS. 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 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.
- 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.
- Deaths are determined by using the outcome field in iPHIS. 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.

- 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=9,525) of COVID-19 by public health unit: Ontario, January 15, 2020 to April 16, 2020**

Public Health Unit Name	Cases	Rate per 100,000 population
Northwestern Health Unit	10	11.4
Thunder Bay District Health Unit	36	24.0
<b>TOTAL NORTH WEST</b>	46	19.4
Algoma Public Health	11	9.6
North Bay Parry Sound District Health Unit	12	9.2
Porcupine Health Unit	46	55.1
Public Health Sudbury & Districts	41	20.6
Timiskaming Health Unit	10	30.6
<b>TOTAL NORTH EAST</b>	120	21.5
Ottawa Public Health	702	66.6
Eastern Ontario Health Unit	65	31.1
Hastings Prince Edward Public Health	28	16.6
Kingston, Frontenac and Lennox & Addington Public Health	54	25.4
Leeds, Grenville & Lanark District Health Unit	253	146.1
Renfrew County and District Health Unit	14	12.9
<b>TOTAL EASTERN</b>	1,116	57.9
Durham Region Health Department	506	71.0
Haliburton, Kawartha, Pine Ridge District Health Unit	129	68.3
Peel Public Health	1,261	78.5

Public Health Unit Name	Cases	Rate per 100,000 population
Peterborough Public Health	52	35.1
Simcoe Muskoka District Health Unit	180	30.0
York Region Public Health	875	71.4
<b>TOTAL CENTRAL EAST</b>	<b>3,003</b>	<b>67.0</b>
Toronto Public Health	2,656	85.1
<b>TOTAL TORONTO</b>	<b>2,656</b>	<b>85.1</b>
Chatham-Kent Public Health	25	23.5
Grey Bruce Health Unit	42	24.7
Huron Perth Public Health	34	24.3
Lambton Public Health	126	96.2
Middlesex-London Health Unit	273	53.8
Southwestern Public Health	38	18.0
Windsor-Essex County Health Unit	415	97.7
<b>TOTAL SOUTH WEST</b>	<b>953</b>	<b>56.4</b>
Brant County Health Unit	72	46.4
City of Hamilton Public Health Services	301	50.8
Haldimand-Norfolk Health Unit	150	131.5
Halton Region Public Health	355	57.3
Niagara Region Public Health	343	72.6
Region of Waterloo Public Health and Emergency Services	237	40.6
Wellington-Dufferin-Guelph Public Health	173	55.5
<b>TOTAL CENTRAL WEST</b>	<b>1,631</b>	<b>57.2</b>
<b>TOTAL ONTARIO</b>	<b>9,525</b>	<b>64.1</b>

**Table 2. Confirmed cases (n=1,201) of COVID-19 with travel history\* by location: Ontario, January 15, 2020 to April 16, 2020**

Location travelled to**	Cases
United States	404
United Kingdom	126
Cruise	74
Mexico	68
Spain	49
France	42
Quebec	42
Germany	37
Portugal	30
Austria	22
Philippines	21
Switzerland	20
Iran	19
Egypt	18
India	16
British Columbia	14
Cuba	14
Ireland	13
Netherlands	12
Dominican Republic	11

Location travelled to**	Cases
Peru	11
Colombia	10
United Arab Emirates	9
Italy	7
Australia	6
Bahamas	6
Brazil	6
Ecuador	6
Morocco	6
Pakistan	6
China	5
Costa Rica	5
Jamaica	5
Turkey	5
Argentina	4
Alberta	3
Aruba	3
Barbados	3
Bolivia	3
Denmark	3
Israel	3
Jordan	3

Location travelled to**	Cases
New Zealand	3
Nova Scotia	3
Panama	3
Saint Martin	3
Singapore	3
Cayman Islands	2
Haiti	2
Manitoba	2
Russian Federation	2
South Africa	2
Trinidad And Tobago	2
Viet Nam	2
Antigua And Barbuda	1
Bangladesh	1
Belgium	1
Botswana	1
Bulgaria	1
Burkina Faso	1
Cambodia	1
Central African Republic	1
Chile	1
Côte D'Ivoire	1



Location travelled to**	Cases
Grenada	1
Hong Kong	1
Iceland	1
Japan	1
Lebanon	1
Malta	1
Qatar	1
Saskatchewan	1
South Korea	1
Sri Lanka	1
State of Palestine	1
Sweden	1
Tahiti	1
Uganda	1
Yukon	1

\*Travel within the 14 days prior to symptom onset.

\*\* Cases may report travel exposures for more than one country, or may report travel as a risk factor without specifying the location. Because of this, the sum of the counts in this table may not add to the number of cases with travel exposure.

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## For Further Information

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