Daily Epidemiologic Summary

COVID-19 in Ontario: January 15, 2020 to August 28, 2020

This report includes the most current information available from CCM and other case management systems (CCM plus) as of August 28, 2020.

Please visit the interactive Ontario COVID-19 Data Tool to explore recent COVID-19 data by public health unit, age group, sex, and trends over time.

A weekly summary report is available with additional information to complement the daily report.

This daily report provides an epidemiologic summary of recent COVID-19 activity in Ontario. The change in cases is determined by taking the cumulative difference between the current day and the previous day.

Highlights

- There are a total of 42,083 confirmed cases of COVID-19 in Ontario reported to date.
- Compared to the previous day, this represents:
  - An increase of 148 confirmed cases (percent change of 21.3%)
  - An increase of 0 deaths (percent change of -100.0%)
  - An increase of 103 resolved cases (percent change of 24.1%)

In this document, the term 'change in cases' refers to cases publicly reported by the province for a given day. Data corrections or updates can result in case records being removed and or updated from past reports and may result in subset totals for updated case counts (i.e., age group, gender) differing from the overall updated case counts.

The term public health unit reported date in this document refers to the date local public health units were first notified of the case.
## Case Characteristics

### Table 1a. Summary of recent cases of COVID-19: Ontario

<table>
<thead>
<tr>
<th></th>
<th>Change in cases August 27</th>
<th>Change in cases August 28</th>
<th>Percentage change August 28 compared to August 27</th>
<th>Cumulative case count as of August 28</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of cases</td>
<td>122</td>
<td>148</td>
<td>+21.3%</td>
<td>42,083</td>
</tr>
<tr>
<td>Number of deaths</td>
<td>6</td>
<td>0</td>
<td>-100.0%</td>
<td>2,809</td>
</tr>
<tr>
<td>Number resolved</td>
<td>83</td>
<td>103</td>
<td>24.1%</td>
<td>38,126</td>
</tr>
</tbody>
</table>

**Note:** The number of cases publicly reported by the province each day may not align with case counts reported to public health on a given day; public health unit reported date refers to the date local public health was first notified of the case.

**Data Source:** CCM plus
### Table 1b. Summary of recent cases of COVID-19 by age group and gender: Ontario

<table>
<thead>
<tr>
<th></th>
<th>Change in cases August 27</th>
<th>Change in cases August 28</th>
<th>Cumulative case count as of August 28</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender: Male</td>
<td>52</td>
<td>66</td>
<td>19,698</td>
</tr>
<tr>
<td>Gender: Female</td>
<td>70</td>
<td>81</td>
<td>22,087</td>
</tr>
<tr>
<td>Ages: 19 and under</td>
<td>18</td>
<td>30</td>
<td>2,758</td>
</tr>
<tr>
<td>Ages: 20-39</td>
<td>59</td>
<td>53</td>
<td>13,175</td>
</tr>
<tr>
<td>Ages: 40-59</td>
<td>31</td>
<td>37</td>
<td>12,542</td>
</tr>
<tr>
<td>Ages: 60-79</td>
<td>15</td>
<td>22</td>
<td>7,512</td>
</tr>
<tr>
<td>Ages: 80 and over</td>
<td>-1</td>
<td>6</td>
<td>6,091</td>
</tr>
</tbody>
</table>

**Note:** Not all cases have a reported age or gender reported. Data corrections or updates can result in case records being removed and or updated from past reports and may result in subset totals (i.e., age group, gender) differing from past publicly reported case counts.

**Data Source:** CCM plus

### Table 2. Summary of recent cases of COVID-19 in long-term care homes: Ontario

<table>
<thead>
<tr>
<th>Long-term care home cases</th>
<th>Change in cases August 27</th>
<th>Change in cases August 28</th>
<th>Cumulative case count as of August 28</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents</td>
<td>2</td>
<td>3</td>
<td>5,935</td>
</tr>
<tr>
<td>Health care workers</td>
<td>-1</td>
<td>-2</td>
<td>2,637</td>
</tr>
<tr>
<td>Deaths among residents</td>
<td>7</td>
<td>0</td>
<td>1,814</td>
</tr>
<tr>
<td>Deaths among health care workers</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
</tbody>
</table>

**Note:** Information on how long-term care home residents and health care workers are identified is available in the technical notes. Also, the change in cases in these categories may represent existing case records that have been updated.

**Data Source:** CCM plus
Time

Figure 1. Confirmed cases of COVID-19 by likely acquisition and public health unit reported date: Ontario, January 15, 2020 to August 28, 2020

Data Source: CCM plus
Figure 2. Confirmed cases of COVID-19 by likely acquisition and approximation of symptom onset date: Ontario, January 15, 2020 to August 28, 2020

Note: Not all cases may have an episode date and those without one are not included in the figure. Episode date is defined and available in the technical notes.

Data Source: CCM plus
Figure 3. Number of COVID-19 tests completed and percent positivity: Ontario, March 29, 2020 to August 27, 2020

Note: 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.
Severity

Figure 4. Confirmed deaths among COVID-19 cases by date of death: Ontario, March 1, 2020 to August 28, 2020

Note: Cases without a death date are not included in the figure.

Data Source: CCM plus
Table 3. Confirmed cases of COVID-19 by severity: Ontario

<table>
<thead>
<tr>
<th></th>
<th>Cumulative case count as of August 28</th>
<th>Percentage of all cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative deaths reported</td>
<td>2,809</td>
<td>6.7%</td>
</tr>
<tr>
<td>(please note there may be a reporting delay for deaths)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deaths reported in ages: 19 and under</td>
<td>1</td>
<td>0.0%</td>
</tr>
<tr>
<td>Deaths reported in ages: 20-39</td>
<td>11</td>
<td>0.1%</td>
</tr>
<tr>
<td>Deaths reported in ages: 40-59</td>
<td>121</td>
<td>1.0%</td>
</tr>
<tr>
<td>Deaths reported in ages: 60-79</td>
<td>752</td>
<td>10.0%</td>
</tr>
<tr>
<td>Deaths reported in ages: 80 and over</td>
<td>1,923</td>
<td>31.6%</td>
</tr>
<tr>
<td>Ever in ICU</td>
<td>1,037</td>
<td>2.5%</td>
</tr>
<tr>
<td>Ever hospitalized</td>
<td>4,863</td>
<td>11.6%</td>
</tr>
</tbody>
</table>

Data Source: CCM plus
## Geography

### Table 4. Summary of recent cases of COVID-19 by public health unit and region: Ontario

<table>
<thead>
<tr>
<th>Public Health Unit Name</th>
<th>Change in cases August 27</th>
<th>Change in cases August 28</th>
<th>Cumulative case count</th>
<th>Cumulative rate per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwestern Health Unit</td>
<td>0</td>
<td>0</td>
<td>46</td>
<td>52.5</td>
</tr>
<tr>
<td>Thunder Bay District Health Unit</td>
<td>0</td>
<td>0</td>
<td>103</td>
<td>68.7</td>
</tr>
<tr>
<td><strong>TOTAL NORTH WEST</strong></td>
<td>0</td>
<td>0</td>
<td>149</td>
<td>62.7</td>
</tr>
<tr>
<td>Algoma Public Health</td>
<td>0</td>
<td>0</td>
<td>27</td>
<td>23.6</td>
</tr>
<tr>
<td>North Bay Parry Sound District Health Unit</td>
<td>0</td>
<td>0</td>
<td>35</td>
<td>27.0</td>
</tr>
<tr>
<td>Porcupine Health Unit</td>
<td>0</td>
<td>0</td>
<td>73</td>
<td>87.5</td>
</tr>
<tr>
<td>Public Health Sudbury &amp; Districts</td>
<td>0</td>
<td>0</td>
<td>94</td>
<td>47.2</td>
</tr>
<tr>
<td>Timiskaming Health Unit</td>
<td>0</td>
<td>1</td>
<td>20</td>
<td>61.2</td>
</tr>
<tr>
<td><strong>TOTAL NORTH EAST</strong></td>
<td>0</td>
<td>1</td>
<td>249</td>
<td>44.5</td>
</tr>
<tr>
<td>Ottawa Public Health</td>
<td>17</td>
<td>20</td>
<td>2,930</td>
<td>277.8</td>
</tr>
<tr>
<td>Eastern Ontario Health Unit</td>
<td>1</td>
<td>-1</td>
<td>191</td>
<td>91.5</td>
</tr>
<tr>
<td>Hastings Prince Edward Public Health</td>
<td>0</td>
<td>0</td>
<td>51</td>
<td>30.3</td>
</tr>
<tr>
<td>Kingston, Frontenac and Lennox &amp; Addington Public Health</td>
<td>0</td>
<td>0</td>
<td>112</td>
<td>52.7</td>
</tr>
<tr>
<td>Leeds, Grenville &amp; Lanark District Health Unit</td>
<td>1</td>
<td>3</td>
<td>365</td>
<td>210.8</td>
</tr>
<tr>
<td>Renfrew County and District Health Unit</td>
<td>1</td>
<td>0</td>
<td>32</td>
<td>29.5</td>
</tr>
<tr>
<td><strong>TOTAL EASTERN</strong></td>
<td>20</td>
<td>22</td>
<td>3,681</td>
<td>191.1</td>
</tr>
<tr>
<td>Public Health Unit Name</td>
<td>Change in cases August 27</td>
<td>Change in cases August 28</td>
<td>Cumulative case count</td>
<td>Cumulative rate per 100,000 population</td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
<td>---------------------------</td>
<td>---------------------------</td>
<td>-----------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Durham Region Health Department</td>
<td>4</td>
<td>7</td>
<td>1,889</td>
<td>265.2</td>
</tr>
<tr>
<td>Haliburton, Kawartha, Pine Ridge District Health Unit</td>
<td>1</td>
<td>-1</td>
<td>223</td>
<td>118.0</td>
</tr>
<tr>
<td>Peel Public Health</td>
<td>27</td>
<td>32</td>
<td>7,113</td>
<td>442.9</td>
</tr>
<tr>
<td>Peterborough Public Health</td>
<td>0</td>
<td>0</td>
<td>103</td>
<td>69.6</td>
</tr>
<tr>
<td>Simcoe Muskoka District Health Unit</td>
<td>6</td>
<td>4</td>
<td>709</td>
<td>118.2</td>
</tr>
<tr>
<td>York Region Public Health</td>
<td>15</td>
<td>7</td>
<td>3,424</td>
<td>279.3</td>
</tr>
<tr>
<td><strong>TOTAL CENTRAL EAST</strong></td>
<td><strong>53</strong></td>
<td><strong>49</strong></td>
<td><strong>13,461</strong></td>
<td><strong>300.4</strong></td>
</tr>
<tr>
<td>Toronto Public Health</td>
<td>32</td>
<td>41</td>
<td>14,696</td>
<td>471.0</td>
</tr>
<tr>
<td><strong>TOTAL TORONTO</strong></td>
<td><strong>32</strong></td>
<td><strong>41</strong></td>
<td><strong>14,696</strong></td>
<td><strong>471.0</strong></td>
</tr>
<tr>
<td>Chatham-Kent Public Health</td>
<td>2</td>
<td>0</td>
<td>362</td>
<td>340.5</td>
</tr>
<tr>
<td>Grey Bruce Health Unit</td>
<td>0</td>
<td>-1</td>
<td>118</td>
<td>69.5</td>
</tr>
<tr>
<td>Huron Perth Public Health</td>
<td>0</td>
<td>1</td>
<td>117</td>
<td>83.7</td>
</tr>
<tr>
<td>Lambton Public Health</td>
<td>0</td>
<td>0</td>
<td>338</td>
<td>258.1</td>
</tr>
<tr>
<td>Middlesex-London Health Unit</td>
<td>0</td>
<td>2</td>
<td>728</td>
<td>143.4</td>
</tr>
<tr>
<td>Southwestern Public Health</td>
<td>0</td>
<td>0</td>
<td>253</td>
<td>119.6</td>
</tr>
<tr>
<td>Windsor-Essex County Health Unit</td>
<td>4</td>
<td>19</td>
<td>2,501</td>
<td>588.7</td>
</tr>
<tr>
<td><strong>TOTAL SOUTH WEST</strong></td>
<td><strong>6</strong></td>
<td><strong>21</strong></td>
<td><strong>4,417</strong></td>
<td><strong>261.2</strong></td>
</tr>
<tr>
<td>Brant County Health Unit</td>
<td>0</td>
<td>0</td>
<td>171</td>
<td>110.2</td>
</tr>
<tr>
<td>City of Hamilton Public Health Services</td>
<td>2</td>
<td>2</td>
<td>966</td>
<td>163.1</td>
</tr>
<tr>
<td>Public Health Unit Name</td>
<td>Change in cases August 27</td>
<td>Change in cases August 28</td>
<td>Cumulative case count</td>
<td>Cumulative rate per 100,000 population</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>---------------------------</td>
<td>---------------------------</td>
<td>-----------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Haldimand-Norfolk Health Unit</td>
<td>0</td>
<td>3</td>
<td>465</td>
<td>407.6</td>
</tr>
<tr>
<td>Halton Region Public Health</td>
<td>3</td>
<td>0</td>
<td>878</td>
<td>141.8</td>
</tr>
<tr>
<td>Niagara Region Public Health</td>
<td>1</td>
<td>1</td>
<td>933</td>
<td>197.5</td>
</tr>
<tr>
<td>Region of Waterloo Public Health and Emergency Services</td>
<td>3</td>
<td>7</td>
<td>1,454</td>
<td>248.8</td>
</tr>
<tr>
<td>Wellington-Dufferin-Guelph Public Health</td>
<td>2</td>
<td>1</td>
<td>563</td>
<td>180.5</td>
</tr>
<tr>
<td><strong>TOTAL CENTRAL WEST</strong></td>
<td><strong>11</strong></td>
<td><strong>14</strong></td>
<td><strong>5,430</strong></td>
<td><strong>190.6</strong></td>
</tr>
<tr>
<td><strong>TOTAL ONTARIO</strong></td>
<td><strong>122</strong></td>
<td><strong>148</strong></td>
<td><strong>42,083</strong></td>
<td><strong>283.1</strong></td>
</tr>
</tbody>
</table>

**Note:** Health units with data corrections or updates could result in records being removed from totals resulting in negative counts.

**Data Source:** CCM plus
### Outbreaks

**Table 5. Summary of recent confirmed COVID-19 outbreaks reported in long-term care homes, retirement homes and hospitals by status: Ontario**

<table>
<thead>
<tr>
<th>Institution type</th>
<th>Change in outbreaks August 27</th>
<th>Change in outbreaks August 28</th>
<th>Number of ongoing outbreaks</th>
<th>Cumulative number of outbreaks reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term care homes</td>
<td>0</td>
<td>1</td>
<td>13</td>
<td>412</td>
</tr>
<tr>
<td>Retirement homes</td>
<td>2</td>
<td>2</td>
<td>18</td>
<td>185</td>
</tr>
<tr>
<td>Hospitals</td>
<td>0</td>
<td>-1</td>
<td>3</td>
<td>98</td>
</tr>
</tbody>
</table>

**Note:** Ongoing outbreaks includes all outbreaks that are ‘Open’ in iPHIS without a ‘Declared Over Date’ recorded.

**Data Source:** iPHIS
Technical Notes

Data Sources

- The data for this report were based on:
  - Information extracted from the Ontario Ministry of Health (Ministry) integrated Public Health Information System (iPHIS) database for Toronto Public Health as of August 28, 2020 at 3 p.m.
  - Information successfully uploaded to the Ministry from Local Systems: Toronto Public Health (Coronavirus Rapid Entry System) CORES, The Ottawa Public Health COVID-19 Ottawa Database (The COD) and Middlesex-London COVID-19 Case and Contact Management Tool (CCMtool) as of August 28, 2020 at 2 p.m.
  - Information successfully uploaded to the Ministry from the Public Health Case and Contact Management Solution (CCM) for all other PHUs as of August 28, 2020 at 1 p.m.
  - CCM and CCM plus (which includes CCM, iPHIS, CORES, The COD and COVID-19 CCMtool) are dynamic disease reporting systems, which allow ongoing updates to data previously entered. As a result, data extracted from CCM 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 Ministry, 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 units and recorded in CCM plus. 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 CCM plus data entry due to 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 CCM plus. This includes persons with a positive detection of serum/plasma immunoglobulin G (IgG) antibodies to SARS-CoV-2, which was added to the confirmed case definition on August 6, 2020.
- 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.
- Reported date is the date the case was reported to the public health unit.

- 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 the public health unit.

- Resolved cases are determined only for COVID-19 cases that have not died. Cases that have died are considered fatal and not resolved. The following cases are classified as resolved:
  - Cases that are reported as ‘recovered’ in CCM
  - Cases that are not hospitalized and are 14 days past their episode date
  - Cases that are currently hospitalized (no hospital end date entered) and have a status of ‘closed’ in CCM (indicating public health unit follow-up is complete) and are 14 days past their symptom onset date or specimen collection date

- Hospitalization includes all cases for which a hospital admission date was reported at the time of data extraction. It includes cases that have been discharged from hospital as well as cases that are currently hospitalized. Emergency room visits are not included in the number of reported hospitalizations.

- ICU admission includes all cases for which an ICU admission date was reported at the time of data extraction. It is a subset of the count of hospitalized cases. It includes cases that have been treated or that are currently being treated in an ICU.

- 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.

- Likely source of acquisition is determined by examining the exposure and risk factor fields from CCM and local systems to determine whether a case travelled, was associated with an outbreak, was a contact of a case, had no known epidemiological link (sporadic community transmission) or was reported to have an unknown source/no information was reported. Some cases may have no information reported if the case is untraceable, was lost to follow-up or referred to FNIHB. Cases with multiple exposures or risk factors were assigned to a single likely acquisition source group which was determined hierarchically in the following order:
  - For cases with an episode date on or after April 1, 2020: Outbreak-associated > close contact of a confirmed case > travel > no known epidemiological link > information missing or unknown
  - For cases with an episode date before April 1, 2020: Travel > outbreak-associated > close contact of a confirmed case > no known epidemiological link > information missing or unknown
• Deaths are determined by using the outcome field in CCM plus. 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 CCM field Type of Death.

• The date of death is determined using the outcome date field for cases marked as ‘Fatal’ in the outcome field.

• CCM/iPHIS cases for which the Disposition Status was reported as ENTERED IN ERROR, DOES NOT MEET DEFINITION, DOES NOT MEET, IGNORE, DUPLICATE-DO NOT USE, or any variation on these values have been excluded. The provincial case count for COVID-19 includes cases that are counted once across all systems from which the case data are obtained. Duplicate records may exist if these records were not identified and resolved prior to data upload to the Ministry.

• Ongoing outbreaks are those that are reported in iPHIS as ‘Open’ without a ‘Declared Over Date’ recorded.

• ‘Long-term care home residents’ includes cases that reported ‘Yes’ to the risk factor ‘Resident of a long-term care home’; or ‘Yes’ to the risk factor ‘Resident of nursing home or other chronic care facility’ and reported to be part of an outbreak assigned as a long-term care home (via the Outbreak number or case comments field); or were reported to be part of an outbreak assigned as a long-term care home (via the outbreak number or case comments field) with an age over 70 years and did not report ‘No’ to the risk factors ‘Resident of long-term care home’ or ‘Resident of nursing home or other chronic care facility’. ‘Long-term care home residents’ excludes cases that reported ‘Yes’ to any of the health care worker occupational risk factors.

• The ‘health care workers’ variable includes cases that reported ‘Yes’ to any of the occupation of health care worker, doctor, nurse, dentist, dental hygienist, midwife, other medical technicians, personal support worker, respiratory therapist, first responder.

• ‘Health care workers associated with long-term care outbreaks’ includes ‘health care workers’ reported to be part of an outbreak assigned as a long-term care home (via the outbreak number or case comments field). Excludes cases that reported ‘Yes’ to risk factors ‘Resident of long-term care home’ or ‘Resident of nursing home or other chronic care facility’ and ‘Yes’ to the calculated ‘health care workers’ variable.

• Percent change is calculated by taking the difference between the current day and previous day, divided by the previous day count.
Disclaimer
This document was developed by Public Health Ontario (PHO). PHO provides scientific and technical advice to Ontario’s government, public health organizations and health care providers. PHO’s work is guided by the current best available evidence at the time of publication.

The application and use of this document is the responsibility of the user. PHO assumes no liability resulting from any such application or use.

This document may be reproduced without permission for non-commercial purposes only and provided that appropriate credit is given to PHO. No changes and/or modifications may be made to this document without express written permission from PHO.

Citation

For Further Information
For more information, email cd@oahpp.ca.

Public Health Ontario
Public Health Ontario is an agency of the Government of Ontario dedicated to protecting and promoting the health of all Ontarians and reducing inequities in health. Public Health Ontario links public health practitioners, front-line health workers and researchers to the best scientific intelligence and knowledge from around the world.

For more information about PHO, visit publichealthontario.ca.