Response to COVID-19: Persevering through Resurgence

Presentation to the Board of Health
Toronto Public Health
November 16, 2020
## SUMMARY OF COVID-19 CASES IN TORONTO

### Cases in the Community

<table>
<thead>
<tr>
<th>Category</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovered Cases</td>
<td>22,220</td>
</tr>
<tr>
<td>Median Age At Time of Illness</td>
<td>42</td>
</tr>
<tr>
<td>Percent Female</td>
<td>48%</td>
</tr>
<tr>
<td>Percent Male</td>
<td>51%</td>
</tr>
<tr>
<td>Fatal Cases</td>
<td>322</td>
</tr>
<tr>
<td>Median Age of Deaths</td>
<td>74</td>
</tr>
</tbody>
</table>

### OB Associated Cases

<table>
<thead>
<tr>
<th>Category</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovered Cases</td>
<td>6,859</td>
</tr>
<tr>
<td>Median Age At Time of Illness</td>
<td>60</td>
</tr>
<tr>
<td>Percent Female</td>
<td>62%</td>
</tr>
<tr>
<td>Percent Male</td>
<td>36%</td>
</tr>
<tr>
<td>Fatal Cases</td>
<td>1,142</td>
</tr>
<tr>
<td>Median Age of Deaths</td>
<td>88</td>
</tr>
</tbody>
</table>

---

*Includes confirmed and probable cases

**Outbreak associated cases include persons with COVID-19 within a defined group or setting. These are generally in healthcare (e.g., long-term care homes, hospitals) and residential or congregate settings (e.g., homeless shelters, group homes), but can also be in workplaces and other settings

Gender was unknown or other for some cases

As of November 15, 2020
Epidemic curve of COVID-19 cases and changes of public health measures, Toronto

- **Sporadic**
- **Outbreak Related**

- **Jun 24, 2020**
  - Toronto enters Stage 3

- **Jul 31, 2020**
  - Toronto enters Stage 2

- **Oct 10, 2020**
  - Toronto enters modified Stage 2

**Case Count**

- **Nov 1 infections**
  - $R_t = 1.0$ (1.0-1.1)

- **November 14, 2020**
  - RED/Control level with additional measures

*Interpret case reports for the recent 2 weeks with caution due to reporting delays.

**Data sources:** Ontario Ministry of Health, Integrated Public Health Information System (iPHIS), Toronto Public Health, Coronavirus Rapid Entry System (CORES), extracted November 15 (2PM).
COVID-19 Public Health measures and contact rates, Toronto

Estimated average number of contacts per person per day, in Toronto

Model by Wu et al, Laboratory for Industrial and Applied Mathematics, York University
COVID-19 percent positivity by Toronto neighbourhoods: Week of October 25, 2020

Map of COVID-19 Percent Positivity by Neighbourhood - Week of October 25, 2020

**Black Creek**
Percent positivity: 14.0%
Case rate: 281 per 100,000
Testing rate: 13.7 per 1,000

**Rustic**
Percent positivity: 12.4%
Case rate: 141 per 100,000
Testing rate: 13.6 per 1,000

**Thorncliffe Park**
Percent positivity: 11.8%
Case rate: 203 per 100,000
Testing Rate: 10.8 per 1,000

### COVID-19 Percent Positivity by Age Group and Testing Week, Toronto

<table>
<thead>
<tr>
<th>Age Group</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 4</td>
<td>0.44%</td>
<td>0.36%</td>
<td>0.46%</td>
<td>0.85%</td>
</tr>
<tr>
<td>4-13</td>
<td>1.27%</td>
<td>1.18%</td>
<td>1.42%</td>
<td>1.06%</td>
</tr>
<tr>
<td>14-17</td>
<td>1.96%</td>
<td>2.32%</td>
<td>3.11%</td>
<td>3.60%</td>
</tr>
<tr>
<td>18-23</td>
<td>1.31%</td>
<td>2.35%</td>
<td>3.77%</td>
<td>5.02%</td>
</tr>
<tr>
<td>24-39</td>
<td>0.97%</td>
<td>1.65%</td>
<td>2.43%</td>
<td>3.74%</td>
</tr>
<tr>
<td>40-69</td>
<td>0.69%</td>
<td>0.98%</td>
<td>1.64%</td>
<td>2.65%</td>
</tr>
<tr>
<td>70+</td>
<td>0.27%</td>
<td>0.40%</td>
<td>0.79%</td>
<td>2.18%</td>
</tr>
</tbody>
</table>

**Percent Positivity**

| Percent Positivity | 0.27% | 7.83% |
COVID-19 case rates by age groups

*Interpret case reports for the recent 2 weeks with caution due to reporting delays.

**Data sources:** Ontario Ministry of Health, Integrated Public Health Information System (iPHIS), Toronto Public Health, Coronavirus Rapid Entry System (CORES), extracted November 15 (2PM).
COVID-19 confirmed outbreak associated cases by outbreak type, episode week, Toronto

*Interpret case reports for the recent 2 weeks with caution due to reporting delays.

**Data sources:** Ontario Ministry of Health, Integrated Public Health Information System (iPHIS), Toronto Public Health, Coronavirus Rapid Entry System (CORES), extracted November 15 (2PM).
Share of COVID-19 cases among ethno-racial groups compared to the share of people living in Toronto, with valid data up to September 30, 2020 (N=7,487)
Share of COVID-19 cases by household income compared to the share of people living in Toronto by income group, with valid data up to September 30, 2020 (N=4,241)
Equity indicators for monitoring

**Goal:** to monitor disparities in COVID-19 infections and guide actions needed to bring all parts of the city to a minimum threshold level

- TPH to identify metrics that are clear, serve the communities most impacted, linked to action, and sensitive to trends over time

- Plan to engage with community partners on value, appropriateness, and to prevent further stigma
Other health Impacts - Mental health and COVID-19

- Evidence is emerging on the mental health impacts resulting from population level actions and restrictions to mitigate COVID-19 spread

In Toronto:
- Mental health and addictions-related help-seeking in the emergency department decreased during the first wave of COVID-19
- Help-seeking from virtual and telephone supports, including crisis lines, increased
- Increase in concerns related to depression and anxiety, in particular around isolation and loneliness, physical health, and availability of services
COVID-19 and mental health – preliminary survey data

**COMPARSED TO MID-MARCH**

- Much better: 7%
- Slightly better: 7%
- About the same: 15%
- Slightly worse: 26%
- Much worse: 45%

**CHANGE IN MENTAL HEALTH BY SELF-RATED MENTAL HEALTH**

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Very good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much + Slightly better</td>
<td>36%</td>
<td>29%</td>
<td>19%</td>
<td>13%</td>
<td>6%</td>
</tr>
<tr>
<td>About the same</td>
<td>61%</td>
<td>56%</td>
<td>47%</td>
<td>26%</td>
<td>13%</td>
</tr>
<tr>
<td>Slightly + Much worse</td>
<td>3%</td>
<td>15%</td>
<td>34%</td>
<td>61%</td>
<td>81%</td>
</tr>
</tbody>
</table>

Base: All respondents [n=1201]
Q3. How would you rate your overall mental health and well-being now, compared to mid-March when non-essential business and schools closed?

Data sources: Toronto Public Health COVID-19 Survey, October, 2020
COVID-19 and mental health – preliminary survey data

FEEL STRESSED WHEN THINKING ABOUT IMPACT ON CHILDREN’S EDUCATION

- Strongly agree: 77%
- Somewhat agree: 22%
- Somewhat disagree: 15%
- Strongly disagree: 7%

Base: Parents of children under 14 in the household (n=246).
Q11. Do you agree or disagree with the following? [I feel stressed when thinking about the impact of COVID on my children’s education.]

Data sources: Toronto Public Health COVID-19 Survey, October, 2020
We need to take whatever measures are necessary to control the spread of COVID-19 and reduce the number of deaths

**Agree**

- Strongly agree: 60%
- Somewhat agree: 30%
- Somewhat disagree: 6%
- Strongly disagree: 4%

90%

**Data sources:** Toronto Public Health COVID-19 Survey, October, 2020
# Ministry of Health COVID-19 Response Framework

<table>
<thead>
<tr>
<th>PREVENT</th>
<th>PROTECT</th>
<th>RESTRICT</th>
<th>CONTROL</th>
<th>LOCKDOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Epidemiology</strong></td>
<td><strong>Epidemiology</strong></td>
<td><strong>Epidemiology</strong></td>
<td><strong>Epidemiology</strong></td>
<td><strong>Epidemiology</strong></td>
</tr>
<tr>
<td>- Weekly incidence rate is &lt; 10 per 100,000</td>
<td>- Weekly incidence rate is 10 to 24.9 per 100,000</td>
<td>- Weekly incidence rate is 25 to 39.9 per 100,000</td>
<td>- Weekly incidence rate ≥ 40 per 100,000</td>
<td>Trends continue to worsen after measures from Control level are implemented.</td>
</tr>
<tr>
<td>- % positivity is &lt; 0.5</td>
<td>- % positivity is 0.5-1.2%</td>
<td>- % positivity is 1.3-2.4%</td>
<td>- % positivity ≥ 2.5%</td>
<td></td>
</tr>
<tr>
<td>- Rt &lt; 1</td>
<td>- Rt is approximately 1</td>
<td>- Rt is approximately 1 to 1.1</td>
<td>- Rt ≥ 1.2</td>
<td></td>
</tr>
<tr>
<td>- Outbreak trends/ observations</td>
<td>- Repeated outbreaks in multiple sectors/settings OR increasing/# of large outbreaks</td>
<td>- Repeated outbreaks in multiple sectors/settings, increasing/# of large outbreaks</td>
<td>- Repeated outbreaks in multiple sectors/settings, increasing/# of large outbreaks</td>
<td></td>
</tr>
<tr>
<td>- Level of community transmission/non-epi linked cases stable</td>
<td>- Level of community transmission/non-epi linked cases stable or increasing</td>
<td>- Level of community transmission/non-epi linked cases stable or increasing</td>
<td>- Level of community transmission/non-epi linked cases increasing</td>
<td></td>
</tr>
<tr>
<td><strong>Health System Capacity</strong></td>
<td><strong>Public Health Unit Capacity for case and contact management at risk or overwhelmed</strong></td>
<td><strong>Health System Capacity</strong></td>
<td><strong>Health System Capacity</strong></td>
<td><strong>Health System Capacity</strong></td>
</tr>
<tr>
<td>- Hospital and ICU capacity adequate</td>
<td></td>
<td>- Hospital and ICU capacity adequate or occupancy increasing</td>
<td>- Hospital and ICU capacity at risk of being overwhelmed</td>
<td></td>
</tr>
<tr>
<td><strong>PH System Capacity</strong></td>
<td><strong>PH System Capacity</strong></td>
<td><strong>PH System Capacity</strong></td>
<td><strong>PH System Capacity</strong></td>
<td></td>
</tr>
<tr>
<td>- Case and contact follow up within 24 hours adequate</td>
<td>- Case and contact follow up within 24 hours adequate</td>
<td>- Case and contact follow up within 24 hours adequate or at risk of becoming overwhelmed</td>
<td>- Case and contact follow up within 24 hours adequate or at risk of becoming overwhelmed</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**
- Indicators will generally be assessed based on the previous two weeks of information. However, movement to apply measures will be considered sooner than two weeks if there is a rapidly worsening trend.
- Local context and conditions will inform movement, including potential regional application of measures.
- Thresholds within a region may not all be met at the same time; decisions about moving to new measures will require overall risk assessment by government.
• November 14, 2020, the Province moved Toronto into the Red-Control level
• Additional public health measures are needed to protect the people of Toronto.

The Medical Officer of Health made the following strong recommendations:
• Social gatherings be restricted to household members only and/or 1 or 2 essential supports
• Limiting activities outside the household to essential activities only
• Workplaces/businesses:
  • Implement work from home wherever possible
  • Review HVAC systems
  • Appoint compliance officer for occupational health & safety and infection prevention & control measures
The Health Protection and Promotion Act provides authority to the Medical Officer of Health under Section 22 of the Act to issue orders.

On November 14, the Medical Officer of Health issued a Section 22 Order including:

- Indoor dining will remain prohibited at restaurants, bars and food or drink establishments.
- Meeting and event spaces will remain closed, as will casinos, bingo halls and other gaming establishments.
- Prohibition on indoor group fitness and exercise classes will continue.
- Prohibiting hookah lounges from operating.
Province launched a commission to investigate the spread of COVID-19 within Long-term Care Homes (LTCHs)

Seeks to understand how residents, staff and families were impacted and the adequacy of measures taken by the province and other parties to prevent, isolate and contain the spread.

The Medical Officer of Health and other TPH staff have provided information and recommendations to the Commission about experiences responding to outbreaks and cases in LTCHs in Toronto

Final report expected by April 30, 2021
City has established its COVID-19 Immunization Task Force – led by TPH, Toronto Fire Services, Toronto Paramedic Services, Emergency Operations Centre

All three orders of government have key roles to play:

- Federal government – procurement and regulatory approval
- Provincial government – provincial campaign, priority groups, vaccine distribution, guidance
- City – approval of vaccine distribution, vaccinate particular sub-populations, work with vaccine delivery agents (i.e. MDs, pharmacies), mobilize population to receive vaccine
Preparing for COVID-19 Vaccine

• Over 200 vaccines in development worldwide.

• First doses of vaccine could be delivered in first quarter of 2021.

• Early delivery of vaccine to be administered to specific sub-populations identified by province - Likely spring for wider population access.

• November 10th - Pfizer/BioNTech reported preliminary results - their vaccine is 90% effective after 7 days, after the second dose of vaccine.

• A hopeful sign of a safe/effective COVID-19 vaccine that could be available early next year.
Report Recommendations
1. City Council and the Board of Health urge the Ontario Ministry of Health to undertake a comprehensive assessment of the impact of the pandemic on mental health and well-being to inform the need for additional supports or programs required to mitigate the associated harms.

2. City Council and the Board of Health urge the Ontario Ministry of Health to ensure flu vaccine promotion and distribution is targeted across Toronto, with a particular focus on those at higher risk such as racialized and low-income populations.

3. The Board of Health request the Medical Officer of Health to continue to widely promote the availability of flu vaccines in partnership with City divisions and community partners.
4. City Council and the Board of Health urge the Federal and Provincial Governments and the National Advisory Committee on Immunization to consider the following when promoting and distributing future approved COVID-19 vaccines:
   a) prioritizing populations so that vaccination has the greatest impact on disease burden and transmission at the time of the availability of the vaccine;
   b) this prioritization should include patient care staff to ensure that the health system remains available to respond to the needs of the population and those at highest risk of more serious complications of COVID-19 once infected; and
   c) early distribution based on the geographic burden of disease, including disadvantaged populations.

5. The Board of Health request the Medical Officer of Health to continue to prepare as quickly as possible, in partnership with other City divisions and provincial partners, Toronto Public Health's mass immunization plan for the distribution of potential future COVID-19 vaccines to promote wide scale access and protection through immunization.
6. The Board of Health request the Medical Officer of Health to support Toronto hospitals, with community partners, to explore and pilot rapid testing options, including point-of-care tests, especially for those populations who are at higher risk.

7. The Board of Health request the Medical Officer of Health to include the use of equity indicators incorporated into routine reporting to monitor any disproportionate impacts of COVID-19 across the City and guide action.

8. The Board of Health request the Medical Officer of Health to report to an upcoming Board of Health meeting regarding the general population survey on the impacts of the COVID-19 pandemic on the residents of Toronto.