

Public health and COVID-19

Board of Health, April 16, 2020

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Medical Officer of Health and Chief Executive Officer

Public Health Sudbury & Districts



Public Health
Santé publique
SUDBURY & DISTRICTS

Public health and COVID-19

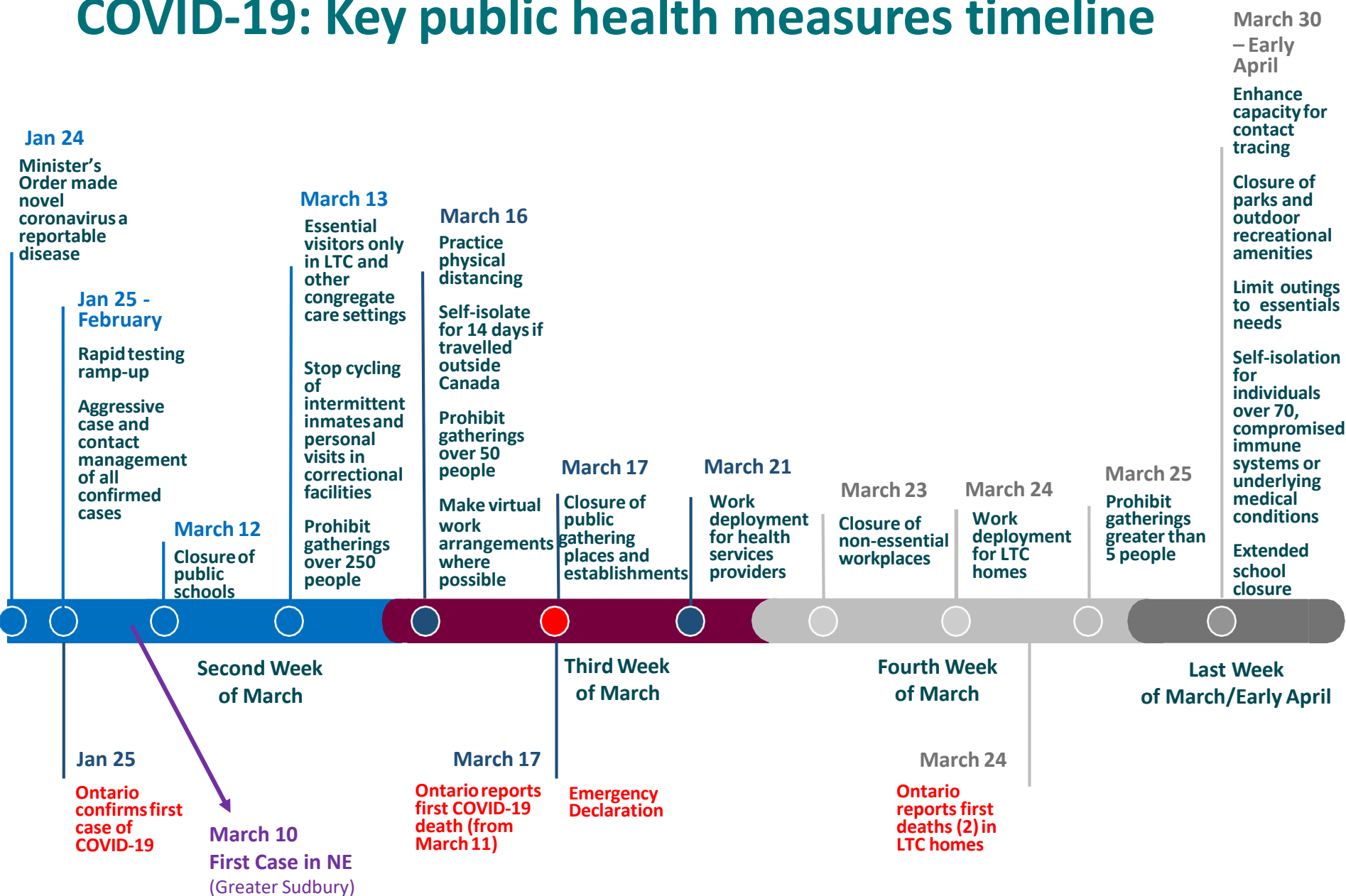
No

- Not COVID-19 *101*

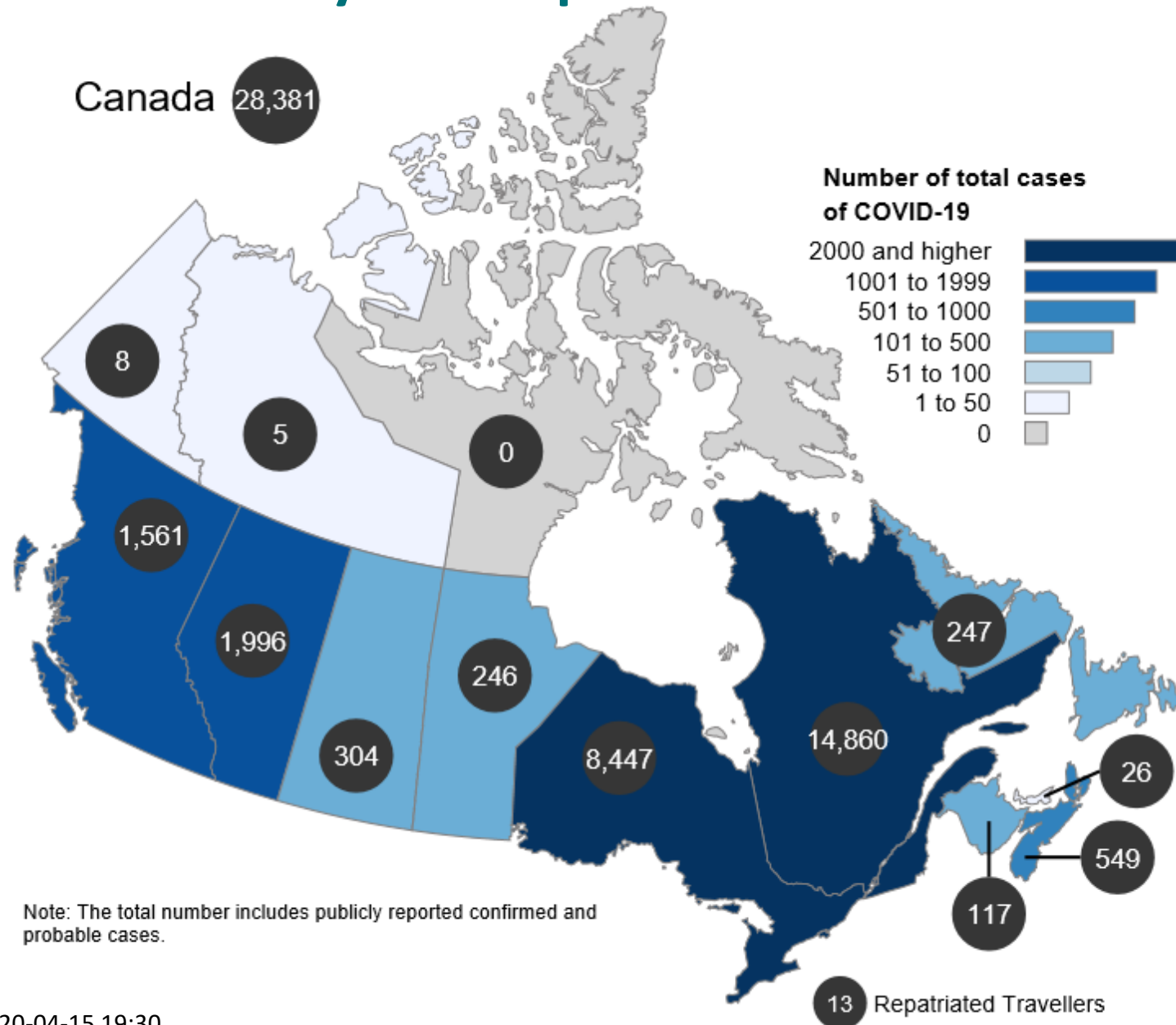
Yes

- Brief history
- Local epidemiology
- Public health measures

COVID-19: Key public health measures timeline



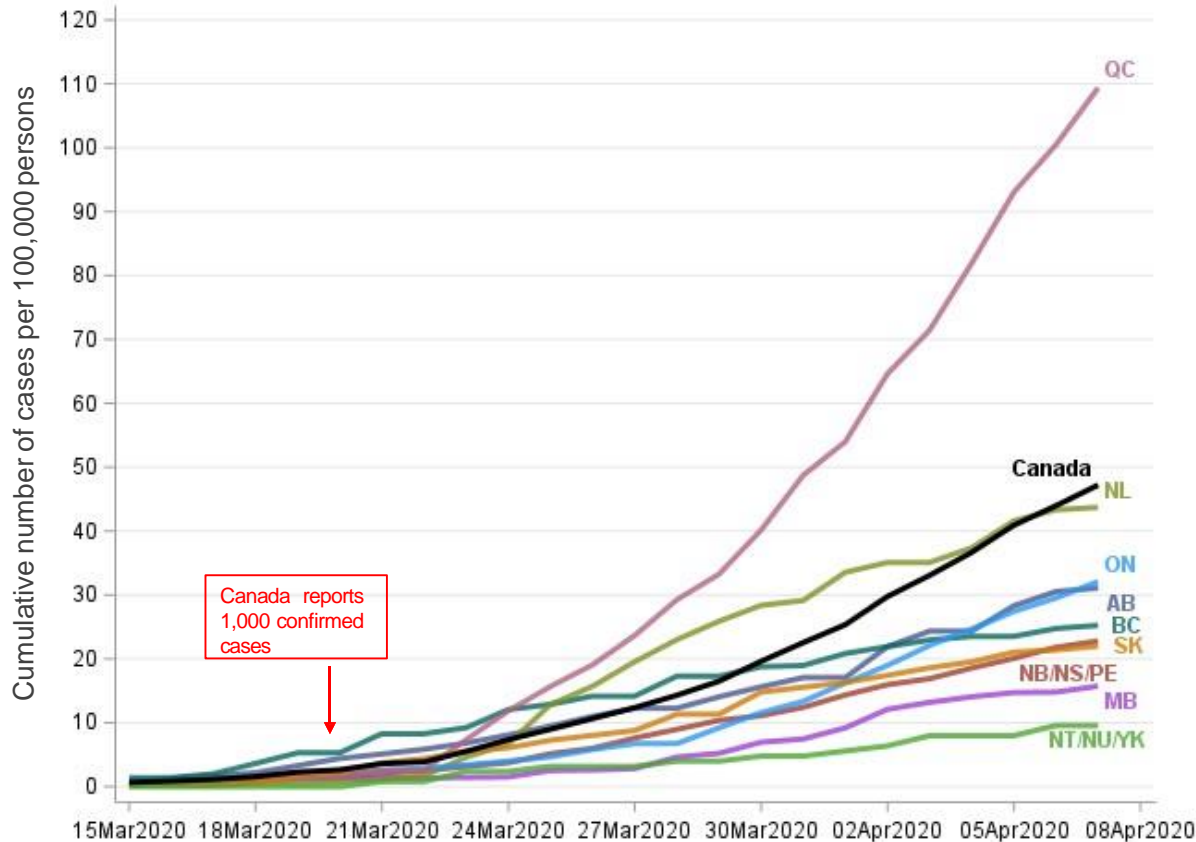
The situation today – a snapshot



Data as of 2020-04-15 19:30

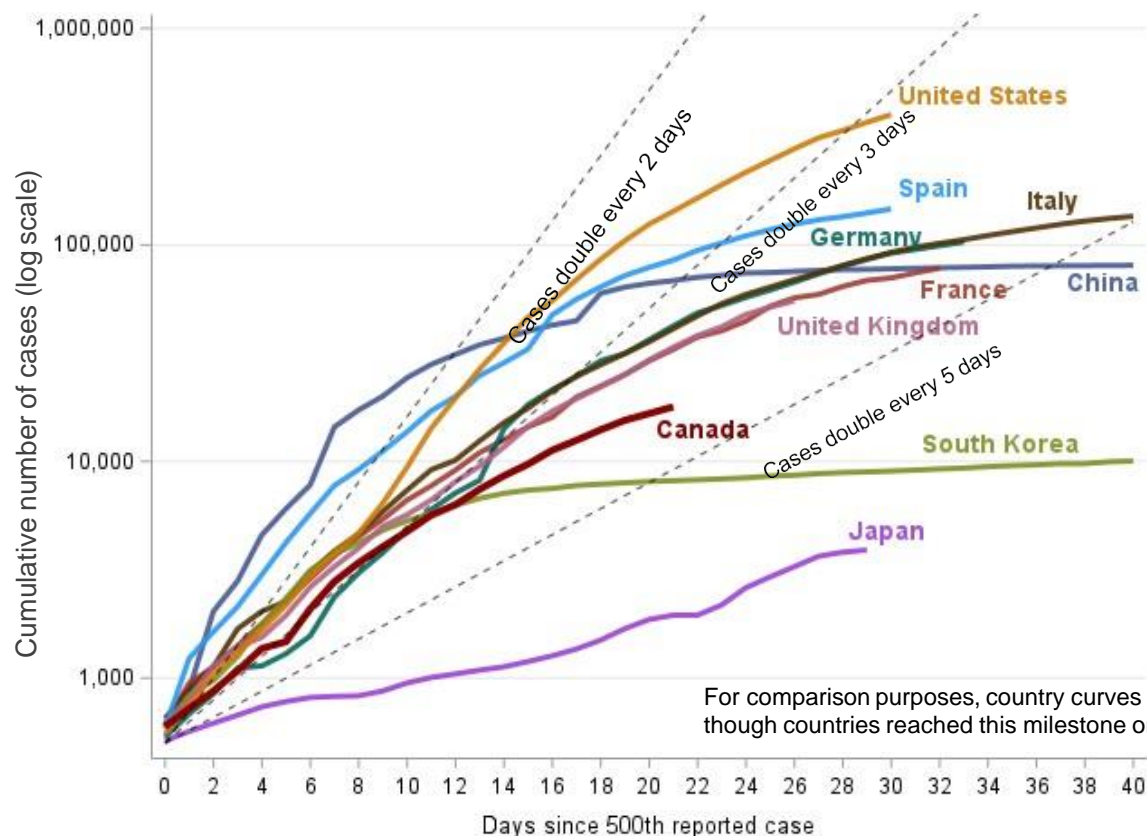
<https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html>

Canada has a series of regional epidemics



- Differences in laboratory testing and confirmation strategies explain some variation by province/territory
- Territories have very low rates of transmission so far

Community transmission started later in Canada allowing us to act early



- Canada's epidemic is in earlier stages
- Canada has a slower increase in total number of cases
- Canada's per capita testing rate is higher than most countries
- Many countries reached their first 500 cases before community transmission started in Canada
- This allowed Canada to learn from other countries' experiences and approaches and to act earlier in the epidemic's progression

Ontario Health North Regional Table

COVID-19 Cases in the North

Cumulative Cases

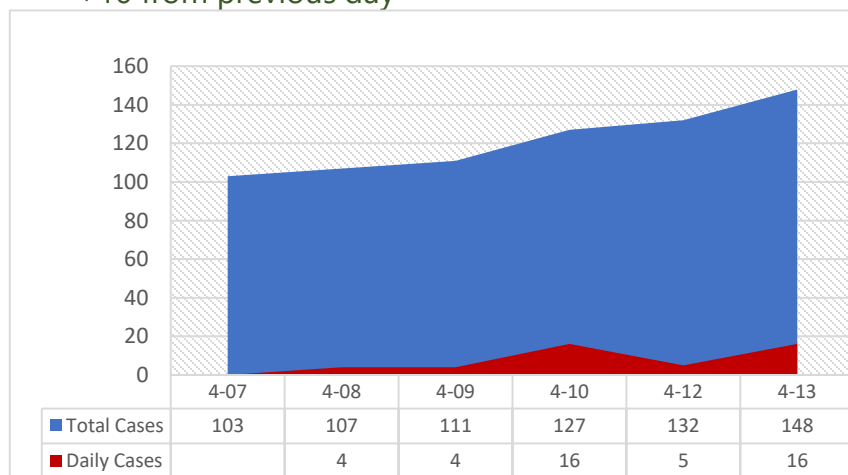
Total Confirmed Cases

148

+16 from previous day

Total Deceased

3



■ Total Cases ■ Daily Cases

Data as of April 13, 2020 unless specified otherwise

Active Cases in Hospital and LTC

In ICU Apr 12

4 confirmed

13 suspected

Hospitalized (incl. ICU) Apr 12

12 confirmed

95 Suspected

LTC homes with confirmed cases Apr 12

1 +0 from previous day

LTC homes with outbreaks

1 +0 from previous day

LTC HOMES with +ve

Extendicare
Timmins

Ontario Health North Regional Table

COVID-19 Assessment Centre Testing

30 of 31 Assessment Centres reporting

	12-Apr	Cumulative
Assessments	241	3,857
Tests completed	119	2,030

Testing results by Public Health Unit (PHU) district

PHU Districts	Positives	Negatives	Pending
Algoma (SAH, NSHN, LDHC, SJGH)	10	741	144
NBPS (MGH, WNGH, NBRHC, WPSHC)	11	n/a	n/a
Northwestern (AGH, DRHC, LWDH, RLMCMH, RHC, SLMHC)	10	384	222
Porcupine* (LMH, AGH, BMH, NDH, SH, SMRF, TDH, WAHA, HCH)	39	494	149
Sudbury & District (HSN, SSCHS, MHC, EGH)	36	999	485
TBDHU (GDH, NDMH, NOSH, MGH, SJCG, TBRHC)	33	671	53
Timiskaming* (KDH, TH, EDH)	9	188	46
Total (Daily)	148	3,477	1,099

PHU report as of April 13, 2020 at 12:18 pm (from web sites)

Cumulative North Results From PHU data

People Tested	4,724 (+411 from April 9th)
Negative	3,477**
Pending	1,099** (+99 from April 9th)
Resolved	54 (+8 from April 9th)
Deaths	3

**NBPS data missing

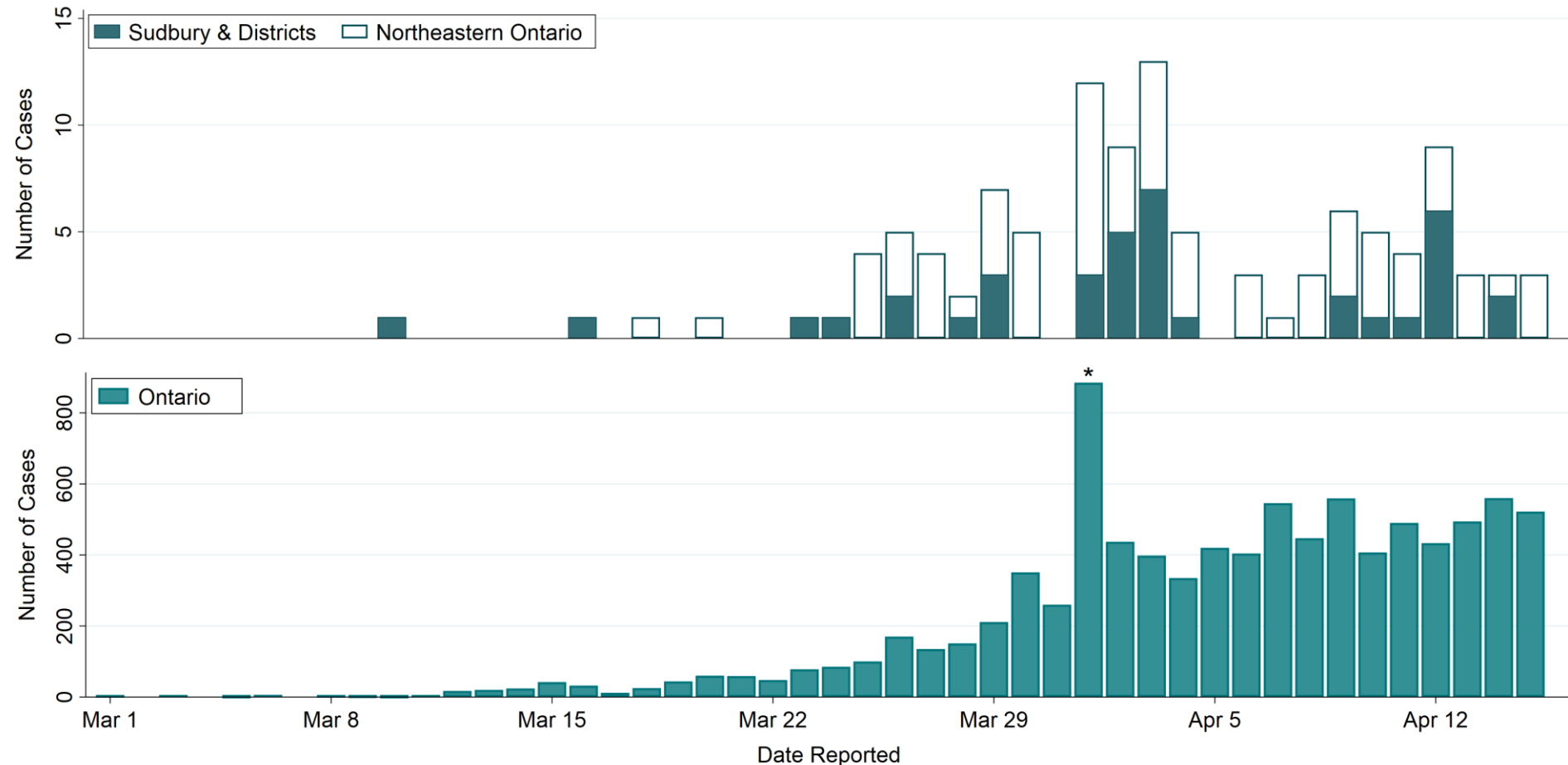
Northern health unit COVID-19 reporting current as of April 15, 2020

Location	Total Confirmed Cases	Difference from Previous Report	Negative	Resolved	Deceased	Pending	Total Tested	% of Positive Tests	Population	Case Fatality Rate	Number of Tests per 100,000 Pop'n
Canada	27,557	1,394		8,553	954		462,353	6.0%	37,590,000	3.5%	1,230.0
Ontario	8,447	494		3,902	385	4,429	119,092	7.4%	14,570,000	4.6%	817.4
Southern Ontario	8,286	NA		3,809	382		112,706	7.4%	13,766,200	4.6%	818.7
Northern Ontario	161	21	3,975	93	3	1,470	6,386	3.3%	803,800	1.9%	794.5
Algoma	10	0	802	4	0	165	977	1.2%	113,084	0.0%	864.0
NBPS	14	0		6	0		794	1.8%	127,875	0.0%	620.9
Northwestern	11	0	500	10	0	143	654	2.2%	82,231	0.0%	795.3
Porcupine	42	3	593	21	2	176	811	6.6%	82,165	4.8%	987.0
PH Sud. & Dists.	38	0	1,142	28	1	635	1,815	3.2%	198,852	2.6%	912.7
TBDHU	36	0	720	20	0	296	1,052	4.8%	151,884	0.0%	692.6
Timiskaming	10	0	218	4	0	55	283	4.4%	33,049	0.0%	856.3

*Data Sources Include: Statistics Canada, Government of Canada COVID-19 Update, Ontario MOH COVID-19 Update, integrated Public Health Information System (iPHIS) database, Northern Health Unit, Thunder Bay District Health Unit, Algoma Public Health, North Bay Parry Sound District Health Unit, Public Health Sudbury & Districts, Porcupine Health Unit, Timiskaming Health Unit

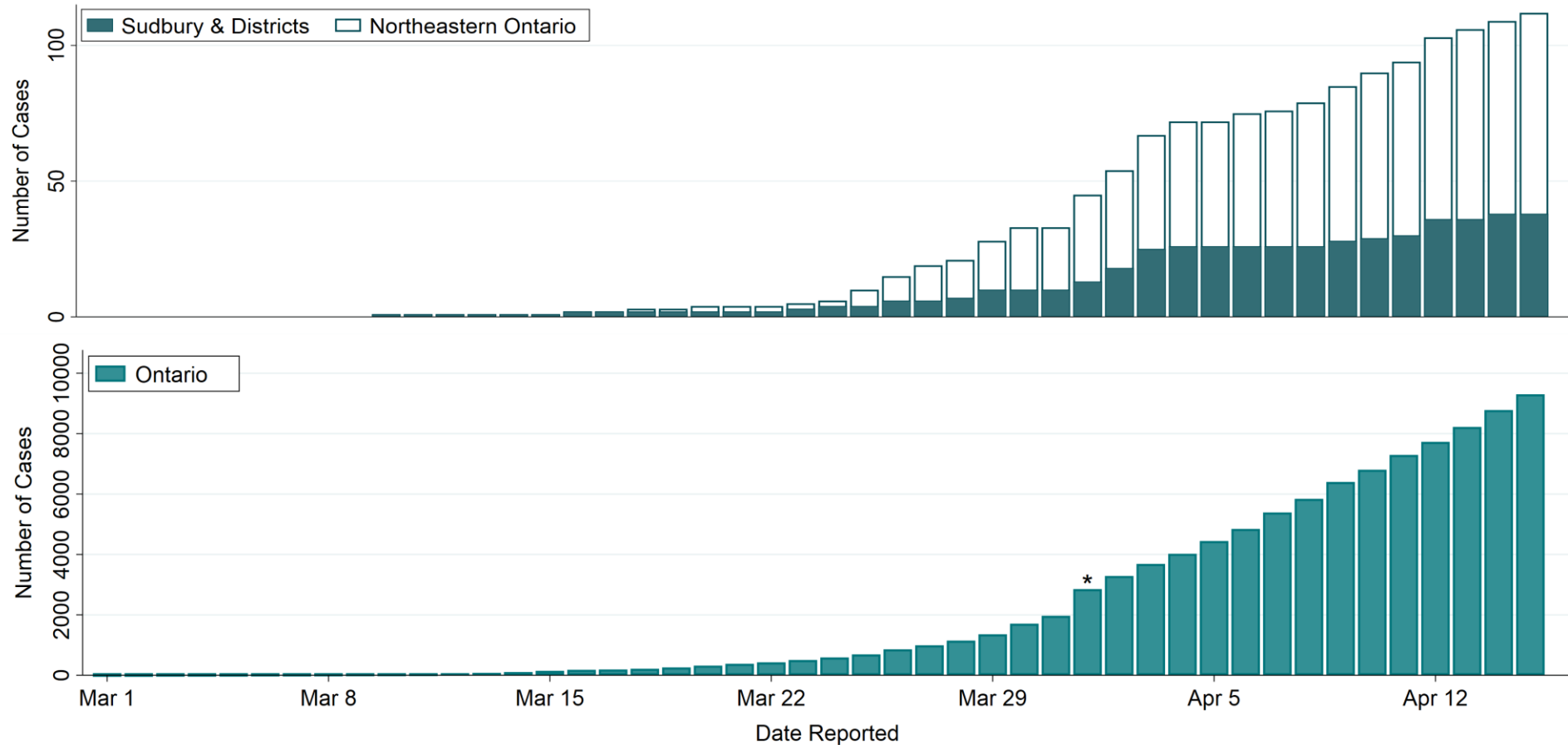
Regional data – Sudbury and districts, north east and Ontario – as of April 15, 2020

New Reported Confirmed COVID-19 Cases



Regional data – Sudbury and districts, north east and Ontario – as of April 15, 2020

Cumulative Reported Confirmed COVID-19 Cases



* Methodology change at data source
Data Source: COVID-19 Canada Open Data Working Group. <https://github.com/ishaberry/Covid19Canada>. (Access Date: April 16, 2020).

Public Health Sudbury & Districts confirmed cases

Total Number of tests Conducted	1948
Results Pending	640
Negative	1267
Confirmed positive (includes resolved and deceased)	41
Resolved	29
Deceased	1
<i>By Geographic Area</i>	
Greater Sudbury	37
Sudbury District	2
Manitoulin District	2

Age Group	Count (n)	Percentage (%)
0 to19	3	7.3
20 to 39	11	26.8
40 to 59	14	34.1
60 to 79	13	31.7
80+	0	0

Sex	Count (n)	Percentage (%)
Females	20	48.8
Males	18	43.9
Not Specified	3	7.3

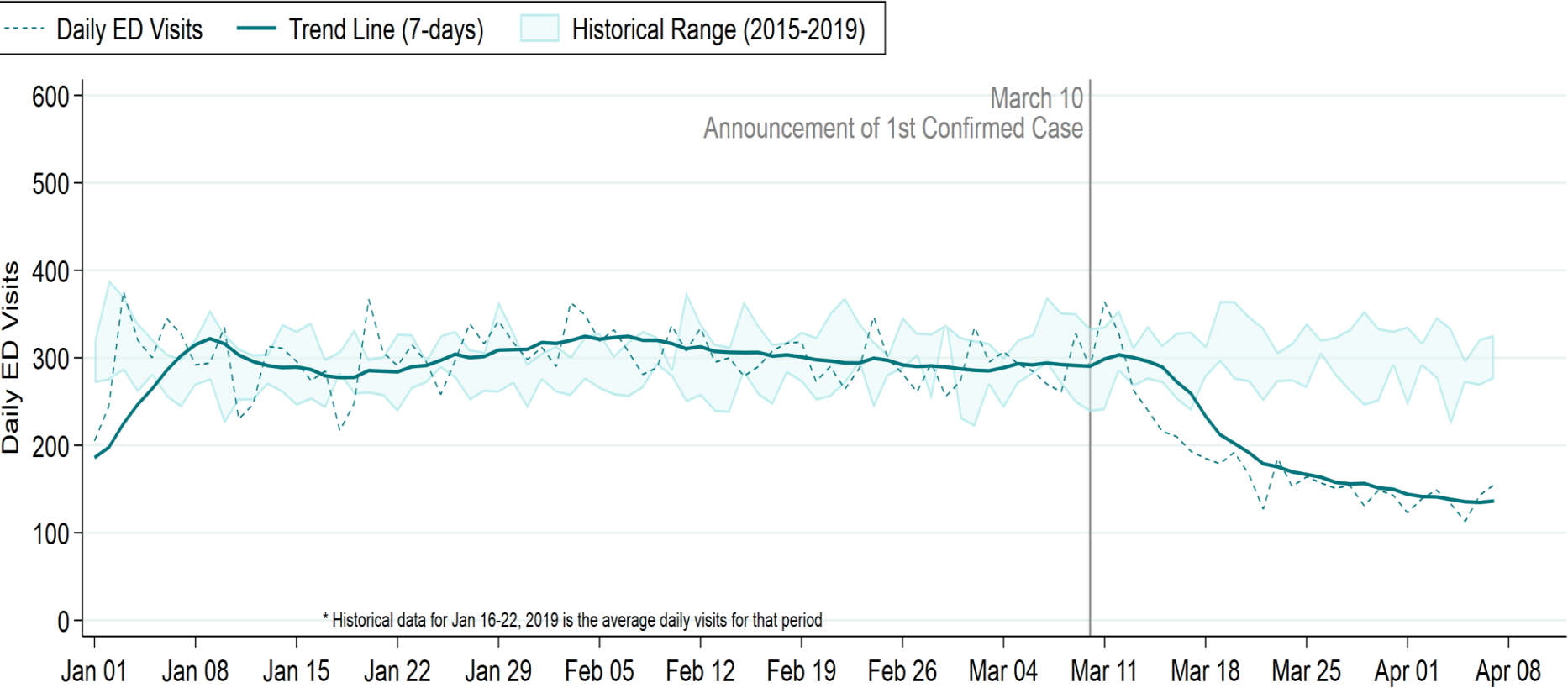
* Data current as of noon April 16, 2020

Confirmed cases by exposure type and status

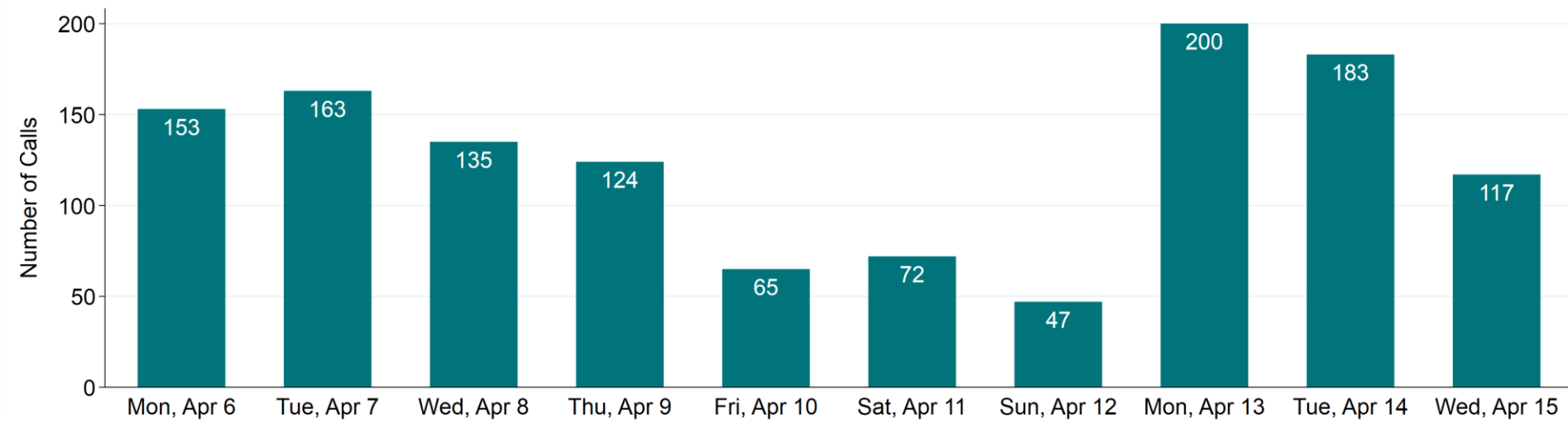
	Count (n)	Percentage (%)
Exposure type		
Travel	15	36.6
Contact with a case	15	36.6
Travel and contact with a case	6	14.6
No travel and no contact with a known case	5	12.2
Pending/undetermined	0	0.0
Status (at date of reporting)		
Self-isolating	37	90.2
Hospitalized	3	7.3
Deceased	1	2.4

* Data current as of noon April 16, 2020

FIGURE 3: ED visits for all syndromes with historical range, by day, Sudbury and Manitoulin Districts



Incoming COVID-19 calls to Public Health Sudbury & Districts Call Centre



* Data current as of 6:00 pm April 15, 2020

Public Health Services

- Limited office hours
- Essential work
 - Virtual where possible
 - Precautions if face-to-face required (pre-screening, PPE, distance)
- Otherwise redeployment to COVID-19 response
- Cross-training
- Default to remote work (March 13)
- Most provincial reporting deferred

<https://www.phsd.ca/health-topics-programs/diseases-infections/coronavirus/public-health-services>

Estimated additional costs to March 31, 2020

Item	Total
Additional hours	4387*
Financial impact	\$165,000
Non-salaried	\$53,700
Total	\$218,700

*Under-estimate as management under-reported to date

Public health measures

In absence of...

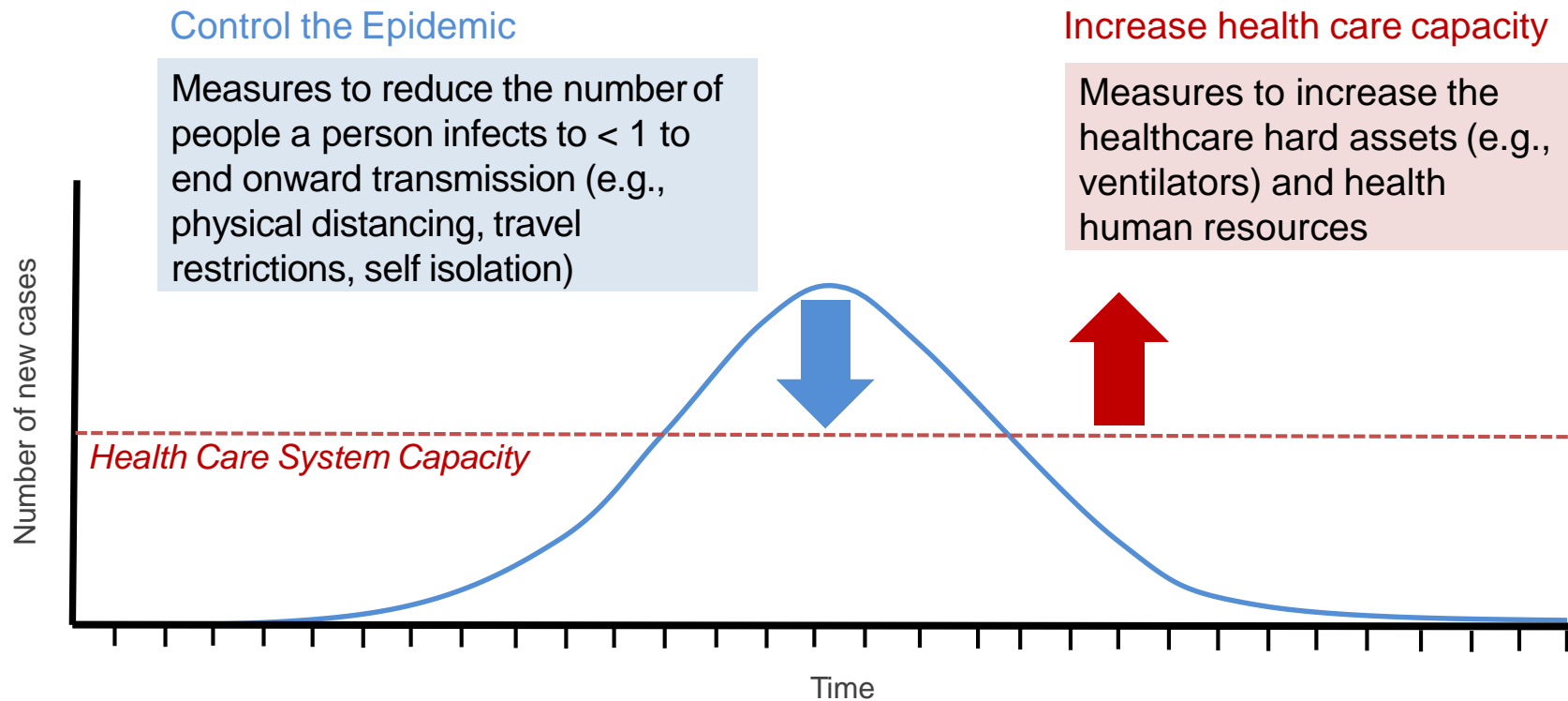
- Vaccine
- Specific treatment

**Go home.
Stay home.**

We have...

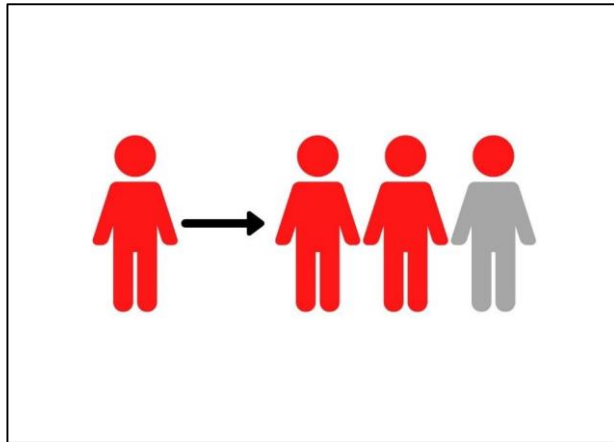
- Distance (masks when can't)
- Hand/respiratory hygiene
- Travel restrictions
- Case detection and isolation
- Quarantine of contacts and travellers

Our strategy: Control epidemic, increase health care system capacity



If each person infects fewer than one person on average, the epidemic dies out

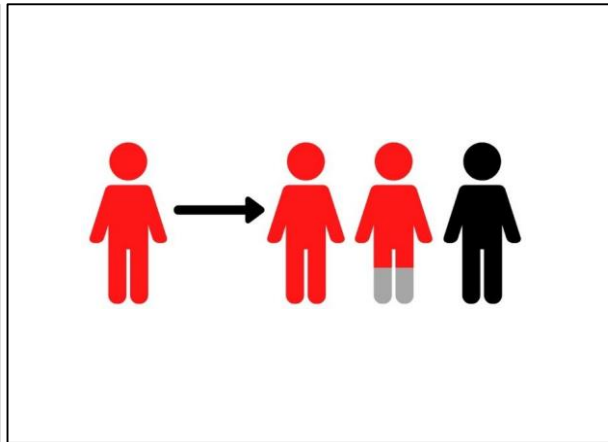
Where we've been



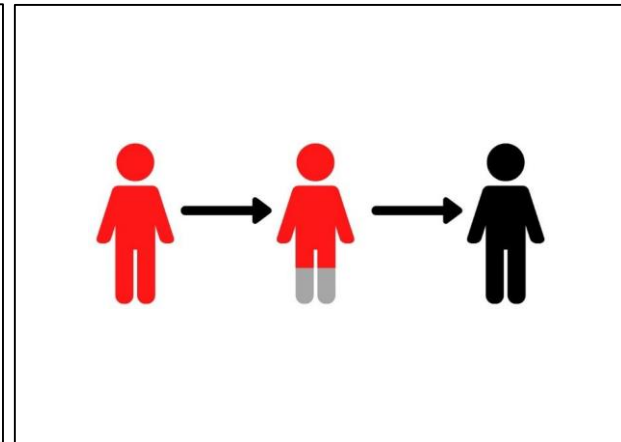
Prior to stronger public health measures, each infected person (case) in Canada infected 2.19 other people on average



Where we want to be

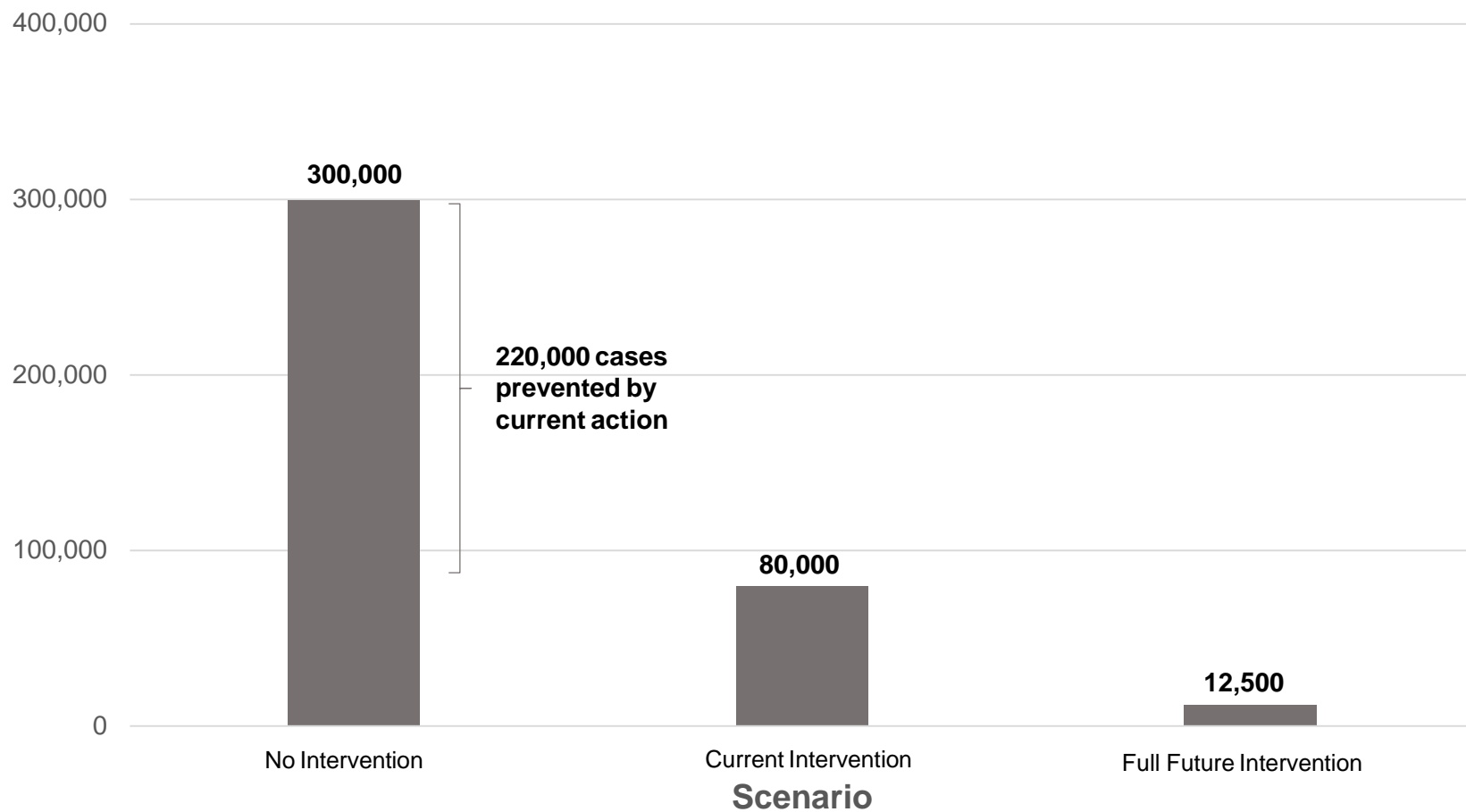


Today, stronger physical distancing and self-isolation are helping to reduce the average number of people each case infects

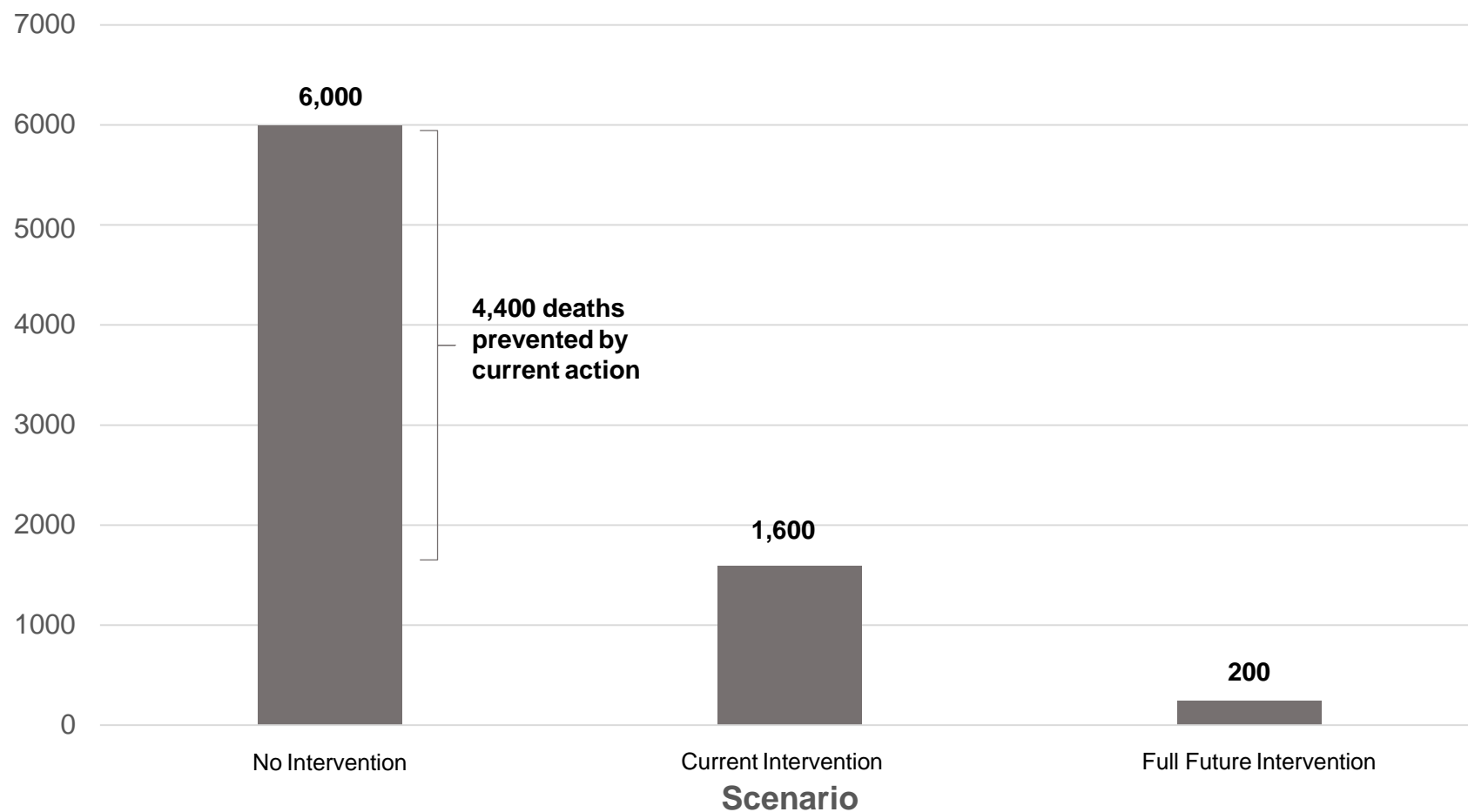


Goal: Each person infects fewer than one person on average; epidemic dies out

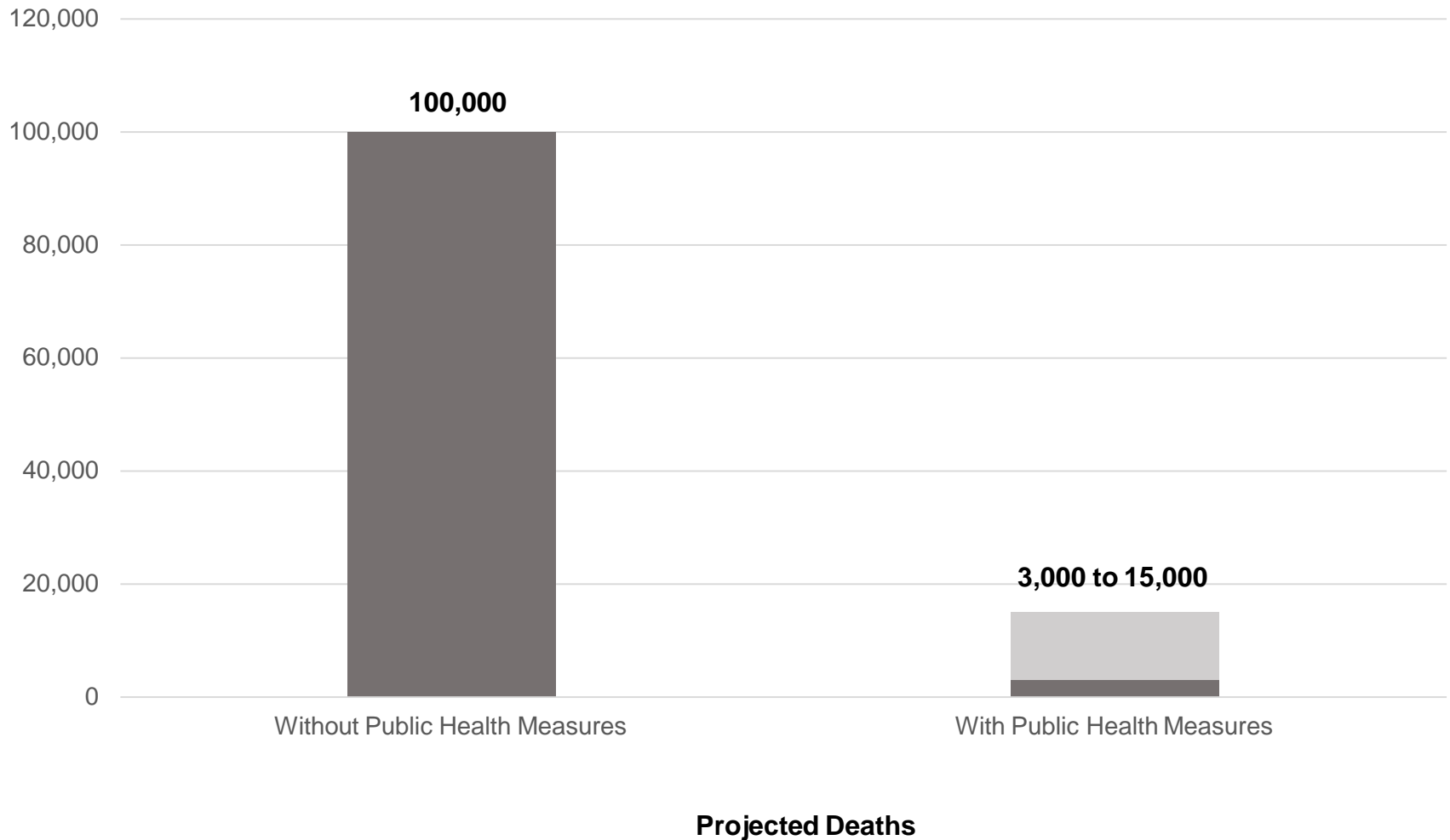
Projected Ontario Cases by April 30, 2020



Projected Ontario Deaths by April 30, 2020

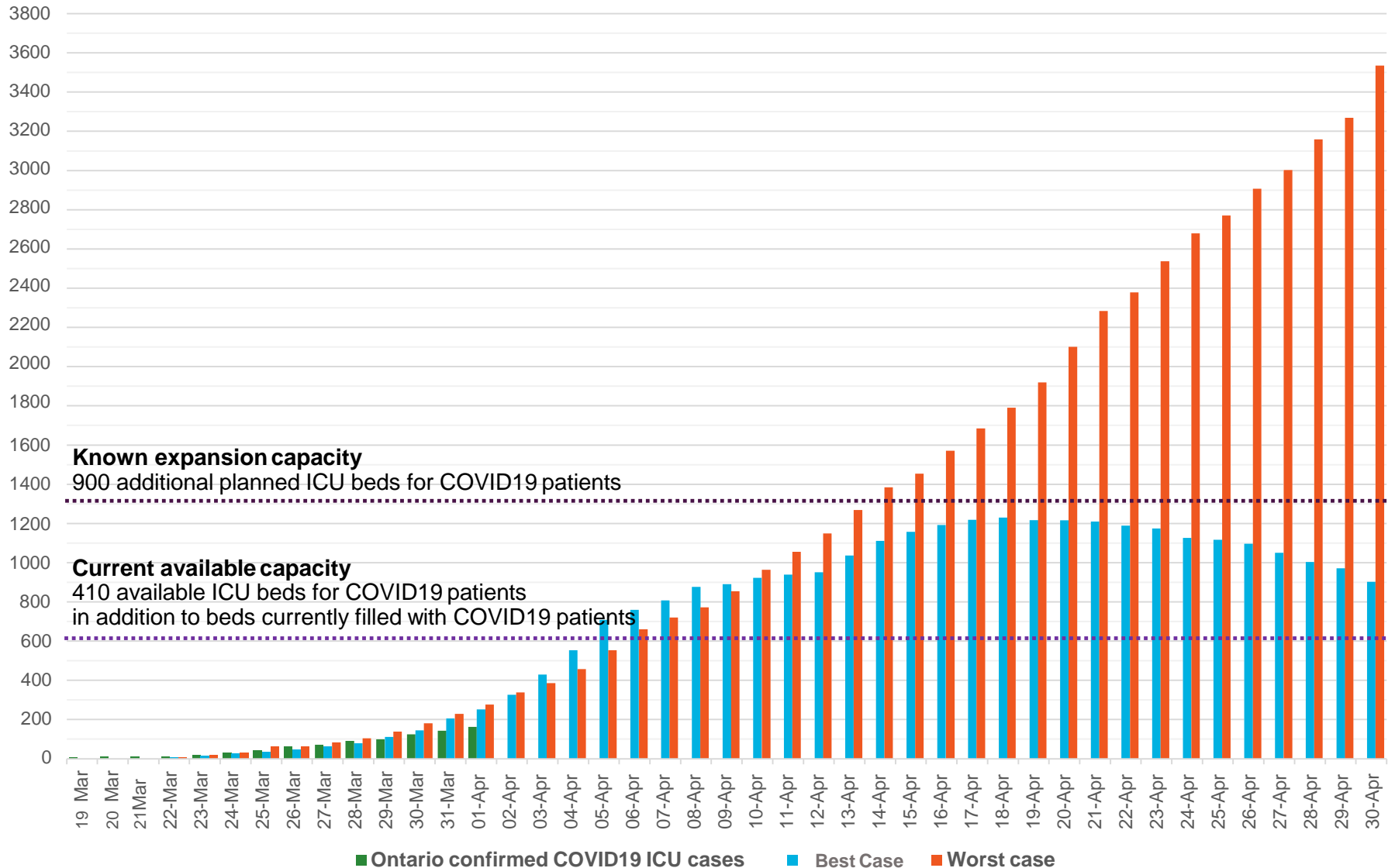


Projected Ontario Deaths over Course of Pandemic

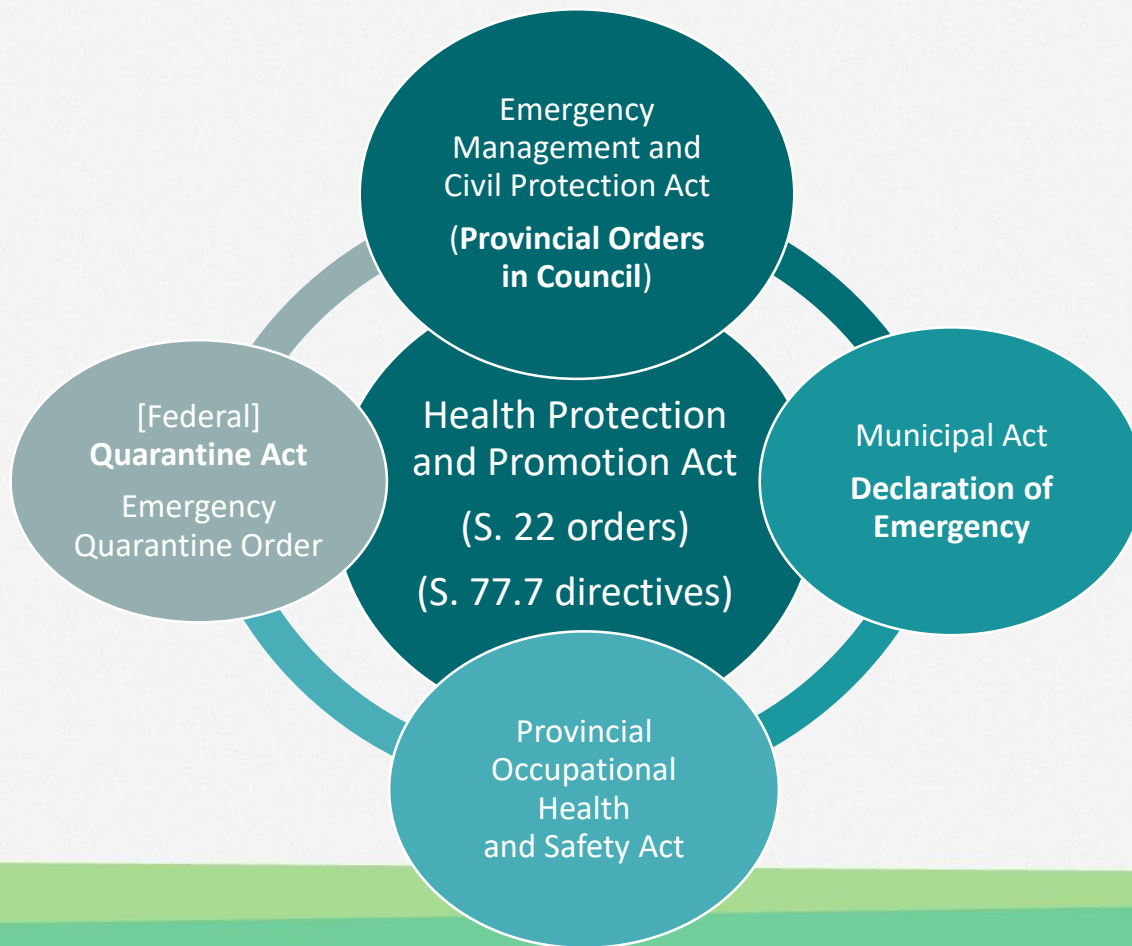


Note: Range depends on implementation of maximum public health measures

Ontario ICU capacity for COVID-19



The intersection of immediate legal jurisdiction exposed during a pandemic



Provincial emergency orders

Emergency status on COVID-19

- **Update on April 14** – In an effort to stop the spread of COVID-19 and keep people at home, the Government of Ontario has extended the Declaration of Emergency and emergency orders to May 12. These orders include the closure of non-essential workplaces and restrictions on social gatherings and events, among others.
 - No gatherings with more than 5 persons
 - Essential businesses
 - Redeployment of staff
 - Disclosures of COVID-19 cases
 - Limiting work to one LTCH
 - Etc.

<https://www.ontario.ca/page/emergency-information#emergencyorders>

Guidance for the health sector

http://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/2019_guidance.aspx

Health Sector Resources


- [Guidance for Primary Care Providers in a Community Setting](#)
- [Guidance for Acute Care](#)
- [Guidance for Home and Community Care Providers](#)
- [Outbreak Guidance for Long-Term Care Homes \(LTCH\)](#)
- [Guidance for Long-Term Care Homes](#)
 - [Long-Term Care Homes COVID-19 Screening Checklist](#)
- [Guidance for Paramedic Services](#)
- [Guidance for Independent Health Facilities](#)
- [Community Labs and Specimen Collection Centres](#)
- [Guidance for Community Pharmacies](#)
- [Guidance for Occupational Health and Safety](#)
- [Guidance for Consumption and Treatment Services](#)
- [Quick Reference Public Health Guidance on Testing and Clearance](#)


Health Protection and Promotion Act: Section 77.7 directives

Chief Medical Officer of Health – opinion there exists/may exist a immediate risk to health...

- [Directive #5 for Hospitals within the meaning of the Public Hospitals Act](#) March 31, 2020
- [Directive #4 for Ambulance Services and Paramedics under the Ambulance Act](#) March 30, 2020
- [Directive #3 for Long-Term Care Homes under the Long-Term Care Homes Act, 2007](#) March 30, 2020
- [Directive #2 for Health Care Providers \(Regulated Health Professionals or Persons who operate a Group Practice of Regulated Health Professionals\)](#) March 19, 2020
- [Directive #1 for Health Care Providers and Health Care Entities](#) March 30, 2020

Health Protection and Promotion Act: Section 22 orders (individuals and class)

 **TORONTO** Public Health

 **COVID-19 FACT SHEET**

COVID-19 Class Order: April 1, 2020

Under what authority did Toronto Public Health issue a class order related to the COVID-19 outbreak to require persons to self-isolate?

The *Health Protection and Promotion Act* authorizes the Medical Officer of Health to make a class order to address the risks presented by the potential spread of COVID-19 to residents of Toronto.

Why did the Medical Officer of Health issue this class order?

Based on the continuing increase in the number of people contracting COVID-19 in Toronto, and experiences in similar cities around the world, this is a targeted mandatory measure that will strengthen our ability to reduce the loss of life from COVID-19, and preserve and protect the capacity of our health care system to respond and to provide care for those who need it.

While most people who have or may have COVID-19, as well as their close contacts, have been compliant with instructions from public health authorities to self-isolate, there are individuals who do not take these measures seriously enough. This class order is a legal tool to help us ensure that everyone who needs to complies with the direction to self-isolate.

Issues

- Testing - Yes
 - April 15, 2020 testing guidance update
 1. Hospital inpatients
 2. Residents living in long-term care homes and retirement homes
 3. Residents in other congregate settings
 4. Persons working in congregate settings
 5. HCW/caregivers/first responders
 6. Persons living with #5
 7. Remote/isolated/rural/Indigenous
 8. Specific priority populations
 9. Essential workers
 10. Cross-border workers
- Masks - Maybe
- Travel - No
- How long - Who knows...

- www.phsd.ca
- <https://www.phsd.ca/health-topics-programs/diseases-infections/coronavirus>



The screenshot shows the Public Health Sudbury & Districts website. At the top, there is a logo with a stylized 'V' shape and the text 'Public Health Santé publique SUDBURY & DISTRICTS'. To the right of the logo are four navigation links: 'Clinics, Classes & Events', 'Features & Services', 'Health Topics & Programs', and 'Health Topics & Programs'. Below the logo, there is a breadcrumb trail: 'Home » Health Topics & Programs » Diseases & Infections » Coronavirus'. The main heading is 'Coronavirus' in a large, bold, dark blue font. Below the heading is the subtitle 'Novel coronavirus, COVID-19' in a smaller, dark blue font. On the left side of the page, there is a sidebar with a dark blue header '« Diseases & Infections'. Below the header, there are three links: 'COVID-19 information request', 'Current status (COVID-19)', and 'Guidance for parents and'.

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