



Justice Centre for Constitutional Freedoms

Unprecedented and Unjustified

A Charter Analysis of Ontario's Response to COVID-19

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Introduction

The problems and challenges of COVID-19 cannot be reduced only to their medical aspects. Bound up with the goal of reducing transmission and preventing health system overloads are the equally important questions of *Charter* rights violations, as well as the economic activity that is required to maintain health on an individual level and provide the tax base needed to sustain our health care system financially. The Ontario Government must consider the ways in which emergency orders and consequent lockdown measures have a negative and unprecedented impact on life, health, and economic and social well-being. In the following pages, we describe the Ontario Government's response to COVID-19 in the form of lockdown measures that impacted all facets of society—from social gatherings, to the economy, to the healthcare system. We then analyze the Command Table's COVID-19 Modelling documents, which were released to the public on April 3 and 20, 2020.

There is little doubt that restrictions on citizens' freedom to move, travel, associate, assemble and practice their faith violate the rights and freedoms protected by the *Canadian Charter of Rights and Freedoms*. This government's lockdown measures of enforced social distancing and isolation violate our *Charter* freedoms of association,¹ peaceful assembly,² mobility and travel,³ liberty,⁴ security of the person,⁵ and conscience and religion.⁶ In June of 2020, these measures continue to have a severe and negative impact on Ontarians' access to health care, which violates the *Charter* section 7 rights to life and security of the person.⁷ Finally, these measures have had, and will continue to have, a severe impact on Ontario's economy, with a predictable and negative impact on the ability to pay for health care.

¹ *Canadian Charter of Rights and Freedoms*, Part I of the *Constitution Act, 1982*, being Schedule B to the *Canada Act 1982 (UK)*, 1982, c 11, [*Charter*],) section 2(d).

² *Charter* section 2(c).

³ *Charter* section 6.

⁴ *Charter* section 7.

⁵ *Charter* section 7.

⁶ *Charter* section 2(a).

⁷ *Chaoulli v Quebec*, 2005 SCC 35.

The Ontario Government’s lockdown measures

In this section, we enumerate the lockdown measures implemented by the Ontario Government, which started in March of 2020 and are intended to remain in place (in full or in part) through to the end of June and possibly longer. We describe the closure of schools, post-secondary institutions, and recreational facilities, restrictions on travel and freedom of association, and restrictions on economic activity. In subsequent sections, we address the negative impacts of these measures, and consider whether these impacts have been properly analyzed and accounted for by way of a thorough cost-benefit analysis as required by the *Canadian Charter of Rights and Freedoms*.

On March 2, and in response to the increasing number of COVID-19 cases around the world, the Ontario Government formed various ‘tables’ with specific mandates, the most significant of which was the Command Table. This Table has been chaired by the Deputy Minister of Health, Helen Angus, and includes Ontario’s Chief Medical Officer of Health Dr. David Williams, Ontario Health’s President and Chief Executive Officer Matthew Anderson, and others from the ministries of Public Health, Long-Term Care, Labor, Training, and Skills Development. Reporting to the Minister of Health, the Command Table has been the “single point of oversight providing executive leadership and strategic direction to guide Ontario’s response to COVID-19”⁸. It was this Table that published the two COVID-19 models on April 3 and April 20, which are analyzed in another section of this paper. The Command Table issued a series of recommendations for broad and unprecedented measures to lock down Ontario’s economy and society, starting in March 2020.

On March 12, on the advice of Dr. Williams and the Command Table, Education Minister Stephen Lecce issued a Ministerial Order to close all schools in Ontario from March 14 to April 5, 2020⁹. This Order has since been extended many times, and all schools (public and private) are now to be closed for the remainder of this school year.¹⁰ The following day, on March 13, the Minister of Colleges and Universities, Ross Romano, requested that post-

⁹ “Statement from Premier Ford, Minister Elliott, and Minister Lecce on the 2019 Novel Coronavirus (COVID-19),” Ontario Newsroom, March 12, 2020, https://news.ontario.ca/opo/en/2020/03/title.html?utm_source=ondemand&utm_medium=email&utm_campaign=o.

¹⁰ “Health and Safety Top Priority as Schools Remain Closed,” Ontario Newsroom, May 19, 2020, <https://news.ontario.ca/opo/en/2020/05/health-and-safety-top-priority-as-schools-remain-closed.html>.

secondary institutions develop COVID-19 response plans for academic continuity in order that the health and personal well-being of students and faculty would not be put at risk¹¹. That same day, Dr. Williams and the Command Table recommended the immediate suspension of all events of more than 250 persons.¹²

On March 15, Ontario Parks announced the cancellation of all planned events, and the closure of all Ontario Parks buildings, including visitor centres.¹³ On March 16, the Ontario Government recommended the immediate suspension of all events of more than 50 persons¹⁴ and the immediate closure of all “recreational programs and libraries, private schools, daycares, churches and other faith settings, as well as bars and restaurants, except those that may only offer takeout.”¹⁵ It was only a few days later, on March 18, that the Ontario Government announced that all provincial park activities, including car camping, backcountry camping, roofed accommodations, day-use opportunities, and public buildings, would be closed to the public from March 19 to April 30, 2020.¹⁶ With some exceptions, these closures have been in effect throughout March, April, May, and into June. On March 30, Premier Doug Ford stated:

Based on the best medical advice available, we are taking further steps today to protect the health and safety of all Ontarians by closing outdoor recreational amenities, like sports fields and playgrounds, and extending our emergency orders to save lives.

This new order would close all communal or shared, public or private, outdoor recreational amenities everywhere in Ontario, including but not limited to playgrounds, sports fields, basketball and tennis courts, off-leash dog parks, benches, skateboard and BMX parks, picnic areas, outdoor community gardens, park shelters,

¹¹ “Statement from Minister Elliott and Minister Romano on the 2019 Novel Coronavirus (COVID-19),” Ontario Newsroom, March 13, 2020, <https://news.ontario.ca/maesd/en/2020/03/statement-from-minister-elliott-and-minister-romano-on-the-2019-novel-coronavirus-covid-19.html>.

¹² “Statement from Minister Elliott and Minister MacLeod on the 2019 Novel Coronavirus (COVID-19),” Ontario Newsroom, March 13, 2020, <https://news.ontario.ca/mtc/en/2020/03/statement-from-minister-elliott-and-minister-macleod-on-the-2019-novel-coronavirus-covid-19-1.html>.

¹³ “Statement from Minister Elliott and Minister Yurek Related to Ontario Parks Operations in Response to COVID-19,” Ontario Newsroom, March 15, 2020, <https://news.ontario.ca/ene/en/2020/03/statement-from-minister-elliott-and-minister-yurek-related-to-ontario-parks-operations-in-response-t.html>.

¹⁴ “No gatherings of over 50’ among new recommendations announced by officials to curb spread of COVID-19,” CBC, March 16, 2020, <https://www.cbc.ca/news/canada/toronto/ontario-covid-19-coronavirus-monday-1.5498849>.

¹⁵ “Ontario Takes Further Action to Contain the Spread of COVID-19,” Ontario Newsroom, March 16, 2020, <https://news.ontario.ca/opo/en/2020/03/ontario-takes-further-action-to-contain-the-spread-of-covid-19.html>.

¹⁶ “Update on Ontario Parks Operations in Response to COVID-19,” Ontario Newsroom, March 18, 2020, <https://news.ontario.ca/ene/en/2020/03/ontario-update-on-ontario-parks-operations-in-response-to-covid-19.html>.

outdoor exercise equipment, condo parks and gardens, and other outdoor recreational amenities. Green spaces in parks, trails, ravines and conservation areas that aren't otherwise closed would remain open for walkthrough access, but individuals must maintain the safe physical distance of at least two metres apart from others. Ontario's provincial parks and conservation reserves remain closed.¹⁷

From March 15 to 30, the public sphere became much smaller, and opportunities for social and recreational activities far fewer.

On March 17, the Ontario Government declared an emergency under section 7.0.1 (1) of the *Emergency Management and Civil Protection Act*, thereby allowing it increased powers “to continue to protect the health and safety of all individuals and families.”¹⁸ On the subject, Premier Doug Ford stated, “We are facing an unprecedented time in our history... This is a decision that was not made lightly. COVID-19 constitutes a danger of major proportions. We are taking this extraordinary measure because we must offer our full support and every power possible to help our health care sector fight the spread of COVID-19. The health and well-being of every Ontarian must be our number-one-priority.”¹⁹ The implications of this declaration and its associated Orders impacted many public utilities, businesses, venues, and services. The following establishments were legally obligated to close immediately:

all facilities providing indoor recreational programs; all public libraries; all private schools as defined in the *Education Act*; all licensed child-care centres; all bars and restaurants, except to the extent that such facilities provide takeout food and delivery; all theatres, including those offering live performances of music, dance, and other art forms, as well as cinemas that show movies; and concert venues.”²⁰

This declaration has since been extended²¹ to June 30, although certain of the above-mentioned establishments have been partially and conditionally allowed to resume their operations.

¹⁷ “Ontario Extends Emergency Declaration to Stop the Spread of COVID-19.” Ontario Newsroom. March 30, 2020. <https://news.ontario.ca/opo/en/2020/03/ontario-extends-emergency-declaration-to-stop-the-spread-of-covid-19.html>.

¹⁸ “Ontario Enacts Declaration of Emergency to Protect the Public.” Ontario Newsroom. March 17, 2020. <https://news.ontario.ca/opo/en/2020/03/ontario-enacts-declaration-of-emergency-to-protect-the-public.html>

¹⁹ “Ontario Enacts Declaration”

²⁰ “Ontario Enacts Declaration”

²¹ “Ontario Extends Declaration of Emergency until June 30.” Ontario Newsroom. June 2, 2020. <https://news.ontario.ca/opo/en/2020/06/ontario-extends-declaration-of-emergency-until-june-30.html>

Commenting on these emergency measures, Deputy Premier and Minister of Health Christine Elliott stated:

We are acting on the best advice of our Chief Medical Officer of Health and other leading public health officials across the province. We know these measures will affect people's everyday lives, but they are necessary to ensure that we can slow the spread of COVID-19 and protect our people. We're working with all partners across the system - from public health to hospitals and community care - to do everything we can to contain this virus and ensure that the system is prepared to respond to any scenario."²²

That same day, on March 17, the Ontario Government ordered²³ all places of worship to close, amongst the twenty-seven thousand places of worship affected across Canada.²⁴

On March 23, on the advice of Dr. Williams and public health officials, the Ontario Government ordered all organized public events, including parades, weddings, social gatherings, and communal services within places of worship to be cancelled. Previously, only public events of more than 50 persons were prohibited. That same day, Premier Ford announced that all non-essential workplaces were to close. "This was a tough decision, but the right decision, as this is no time for half measures," said Premier Doug Ford. "But I have said from day one we will, and we must, take all steps necessary to slow the spread of COVID-19. The health and safety of every Ontarian must come first. The health of you, your children, your grandparents and friends depends on all of us doing our part."²⁵

On March 28, Christine Elliott announced that, on the "best advice" of Dr. David Williams and on the basis of a new emergency order under the *Emergency Management and Civil Protection Act*, all public events and social gatherings of more than five people were to be prohibited, effective immediately.²⁶ Finally, on March 31, the Ontario Government announced penalties (fines, imprisonment, or both) for those who fail to identify themselves, if asked, to

²² "Ontario Enacts Declaration of Emergency to Protect the Public." Ontario Newsroom. March 17, 2020. <https://news.ontario.ca/opo/en/2020/03/ontario-enacts-declaration-of-emergency-to-protect-the-public.html>

²³ "Ontario Enacts Declaration of Emergency to Protect the Public." Ontario Newsroom. March 17, 2020. <https://news.ontario.ca/opo/en/2020/03/ontario-enacts-declaration-of-emergency-to-protect-the-public.html>

²⁴ "Places of Worship Need Immediate Government Support Too." National Post. March 18, 2020. <https://nationalpost.com/opinion/opinion-places-of-worship-need-immediate-government-support-too>

²⁵ "Ontario Orders the Mandatory Closure of All Non-Essential Workplaces to Fight Spread of COVID-19." Ontario Newsroom. March 23, 2020. <https://news.ontario.ca/opo/en/2020/03/ontario-orders-the-mandatory-closure-of-all-non-essential-workplaces-to-fight-spread-of-covid-19.html>

²⁶ "Ontario Prohibits Gatherings of More Than Five People with Strict Exceptions." Ontario Newsroom, March 28, 2020. <https://news.ontario.ca/opo/en/2020/03/ontario-prohibits-gatherings-of-five-people-or-more-with-strict-exceptions.html>

provincial offences officers, and for those who fail to comply with lockdown measures (i.e., closure of non-essential businesses, prohibitions on organized events of more than five persons, etcetera).²⁷

Lockdown measures violate our *Charter* Freedoms

The *Canadian Charter of Rights and Freedoms* confers on all Canadians the freedoms of association,²⁸ peaceful assembly,²⁹ mobility and travel,³⁰ liberty,³¹ security of the person,³² and conscience and religion.³³ The Ontario Government's lockdown measures restrict citizens' freedoms to move, travel, associate, assemble, and practice their faith while causing significant harm to the lives and livelihoods of Ontarians.

The constitutional question is whether the Ontario Government's violations of *Charter* freedoms are reasonable and "demonstrably justified in a free and democratic society."³⁴ This requires serious analysis not only of the purported *benefits* of the lockdown of Ontario's society and the economy but also of its *harmful consequences*, including adverse effects on human health and wellbeing. Under the *Charter*, when governments violate the freedoms of citizens to move, travel, associate, assemble, and worship, the onus is on government (not the citizen) to show that freedom-violating measures will do more good than harm. Restrictions on *Charter* freedoms are not valid merely because governments impose them with good intentions to achieve desirable outcomes. Rather, the *Charter* requires governments to "demonstrably" justify such restrictions on the basis of evidence which proves that the restrictions do more good than harm. "Harm" includes the violations of *Charter* rights themselves, and not only the practical negative impact on people's daily lives.

²⁷ "Public Required to Identify Themselves if Charged with Breaching an Emergency Order During the COVID-19 Outbreak." Ontario Newsroom. March 31, 2020. <https://news.ontario.ca/mcscs/en/2020/03/public-required-to-identify-themselves-if-charged-with-breaching-an-emergency-order-during-the-covid.html>

²⁸ *Canadian Charter of Rights and Freedoms*, Part I of the *Constitution Act, 1982*, being Schedule B to the *Canada Act 1982* (UK), 1982, c 11, [*Charter*],) section 2(d).

²⁹ *Charter* section 2(c).

³⁰ *Charter* section 6.

³¹ *Charter* section 7.

³² *Charter* section 7.

³³ *Charter* section 2(a).

³⁴ *Charter* section 1.

Thus far, the Ontario Government has failed to present such proof to the public. Furthermore, government also bears the onus of demonstrating that its laws and policies violate *Charter* freedoms as little as possible: only to the extent necessary to achieve a pressing goal. The *Charter* does not allow governments to impose broad, sweeping and far-reaching measures that go further than what is truly needed to achieve a specific objective.

What would count as demonstrable justification for the lockdown measures enumerated in this section? As a starting point, the Ontario Government should demonstrate that (a) COVID-19 presents a significant generalized risk such that broad lockdown measures are reasonably required, and (b) lockdown measures are effective in mitigating this risk. As yet, neither has been demonstrated by the Ontario Government. The Ontario Government closed publicly funded schools, private schools, and post-secondary institutions on the assumption that students, faculty, and their families would be otherwise unsafe. But these closures were imposed without reference to the type of data or evidence that would count as demonstrable justification. The Ontario Government, in addition to banning public events of more than five persons, closed recreational facilities, parks, and borders, thereby limiting the *Charter* rights and freedoms of Ontarians, without reference to the type of data or evidence that would count as demonstrable justification. The Ontario Government forced sectors of the economy to close without reference to the type of data or evidence that would count as demonstrable justification, limiting thereby the rights of Ontarians to security of the person³⁵ as per section 7 of the *Charter*. Ontarians have been asked to accept unprecedented interference with their civil, religious and economic freedom in the absence of evidence-based modelling or statistics demonstrating why these policies were necessary.

Below is a list of questions that pertain to Ontario's lockdown measures, sent to Premier Doug Ford and Dr. Williams in mid-April. As of June 22, 2020, no answers have been provided.

1. How many suicides are projected to take place as a result of the government having shut down much of our economy, forcing people into unemployment, bankruptcy, or poverty?
2. How many do you project will die because of the rise in depression, anxiety, alcoholism, other addictions and drug overdoses that the lockdown and associated unemployment and social isolation will cause, as the lockdown drags on for weeks or even months?

³⁵ *Chaoulli v Quebec*, 2005 SCC 35.

3. How many children and spouses do you project will be abused while couples and parents remain confined to their homes, in many cases unemployed, without their usual income and social connections?
4. How many children will be put in foster care because of domestic abuse, or loss of their parents' ability to provide for them, or both?
5. How many isolated seniors are projected to become sick or die because they no longer receive regular visitors, such that nobody is able to take them to their own family doctor, or take them to an emergency unit at the hospital? How many will die at home, alone?
6. How many people are projected to die or to suffer permanent damage because their non-emergency (elective) surgery, their testing and their various treatments have been cancelled due to your singular focus on fighting COVID-19?
7. How many people are projected to suffer serious harm caused by lack of access to secondary health providers they regularly rely on, such as physiotherapists, massage therapists, optometrists, chiropractors, osteopaths, podiatrists and dentists?
8. How many people are projected to die or suffer serious harm because they believe (correctly or incorrectly) that they cannot go see their doctor, or that they cannot check into emergency at the hospital?
9. How many children, confined to their homes while schools and playgrounds are closed and athletic and recreational activities are shut down, are projected to develop diabetes or other chronic health conditions?
10. How many people will develop psychiatric disorders caused by governments having eliminated social interaction at restaurants, pubs, churches, recreational facilities and community centres?
11. Have you or your staff researched any of these questions here above?
12. If yes to the foregoing question, have you created any models, estimates or projections in regard to any or all of these causes of illness, harm and death, in the same way that you have relied on models, estimates and projections in regard to COVID-19?

The questions which must be answered by the Ontario Government range far beyond this initial set. The Government has an obligation to provide the numbers (or estimates or predictions where actual numbers are not available) of bankruptcies, insolvencies, and foreclosures that have resulted, and will result in future, because of the lockdown measures. The Government has an obligation to determine how many additional instances of stress, anxiety, and depression will result from ruined financial prospects. The Government has a constitutional obligation to

investigate fully how the increasing prevalence of stress, anxiety, and depression will result in more alcoholism, drug abuse, suicides, spousal abuse and child abuse. Unfortunately, it appears that the Ontario Government has not given serious or thoughtful consideration to the lockdown's consequences of financial stress and ruin, mental illness, and physical harm resulting from cancelled surgeries and other non-availability of medical care.

While the *Charter* does not explicitly protect the economic or financial interests of citizens, it does require government officials (elected and non-elected) to broadly analyze the harms which flow from any government action which violates *Charter* freedoms. There is no rationale for excluding the destruction of livelihoods (in some cases permanently) from the *Charter*'s "demonstrably justified" analysis. In fact, it would be irrational to ignore the impact of a weaker and poorer economy on tax revenues, and the impact of reduced tax revenues on the ability to pay for necessary medical care, mental health support, and other important social benefits. The onus is on the Ontario Government to weigh the harms of additional suicides, anxiety, depression, mental illness, cancelled surgeries and other negative impacts on physical and mental health against the purported benefits of lockdown measures. These measures have negatively impacted Ontarians across many domains – social, religious, economic, and constitutional.

To date, there is no evidence available to the public that would show that the Ontario Government has paid serious consideration to the harmful effects of lockdowns. Certainly, this government has sufficient resources to monitor and track the positive and negative impacts of government policies on Ontarians, and thus to meet its *Charter* obligation to calculate, analyze, and monitor the harms that have been caused, are being caused, and will be caused by these lockdown measures. By every metric, the goal of preserving capacity for COVID-19 patients in Ontarian hospitals has been not only achieved but over-achieved. It is now time that the Ontario Government attend to the costs incurred by single-mindedly prioritizing this goal, the negative effects of which have been borne by millions of Ontarians.

Inaccurate claims about COVID-19's impact on children and youth

When schools and post-secondary institutions were asked to close in mid-March, the Office of the Premier stated that "...these measures we are putting in place will ensure that we

continue to contain the spread of COVID-19 in Ontario and thereby protect children and families across the province.”³⁶ Throughout March and into April, government and public health officials often alluded to the risks of COVID-19 to children and youth, but this was without reference to then-available statistics on the actual risks of COVID-19 to this demographic. Such statements have been made at the federal level as well. On March 31, the Chief Public Health Officer of Canada, Dr. Theresa Tam, tweeted, “The young are not spared from severe outcomes.”³⁷ Similarly, Alberta Premier Kenney stated in early April, “I’ve seen online and some of the chatter and discussions here, people saying, ‘Well why don’t you just kind of close down the seniors’ homes and quarantine the seniors and let the rest of society continue to function?’ Well...no age group is immune...We have had two deaths, I think one amongst a 20-something and one amongst a 30-something, so young people can be seriously affected by this.”³⁸ These statements, while true, fail to capture the reality of the improbability of a severe outcome in young people. This failure is even more apparent in the following statement by University of Toronto professor, Dr. Dionne Aleman, who wrote, “Younger people should not be comforted by statistics that show they are less likely to end up in hospital or die because of COVID-19. It is like rolling a die. It might be unlikely that if I roll the die that the number one pops up, but that doesn’t mean that it is never going to happen.”³⁹ If the statistical probability of a young person being hospitalized or dying were really “like rolling a one on a die”, we might expect a 1/6 probability that any young person in Ontario would die from COVID-19 or suffer serious harm from it. In fact, according to Public Health Ontario’s analysis of severe outcomes from January 15 to May 14 of 2020, and supposing that a “young person” is defined as anyone aged 0-59, there is only a 1/14 chance that any person aged 0-59 would become hospitalized with COVID-

³⁶ “Statement from Premier Ford, Minister Elliott, and Minister Lecce on the 2019 Novel Coronavirus (COVID-19).” Ontario Newsroom. March 12, 2020. <https://news.ontario.ca/opo/en/2020/03/title.html>

³⁷ Cox, Wendy and Keller, James. “Western Canada: Death of an Alberta man in his 30s underscores that young people are not immune from COVID-19.” The Globe And Mail. April 1, 2020. Accessed May 15, 2020. <https://www.theglobeandmail.com/canada/british-columbia/article-western-canada-death-of-an-alberta-man-in-his-30s-underscores-that/>.

³⁸ Heidenreich, Phil. “Reality check: Would Alberta benefit by letting COVID-19 spread among young people to build up herd immunity?” Global News. April 10, 2020. <https://globalnews.ca/news/6802755/coronavirus-covid-19-young-people-herd-immunity/>

³⁹ Tait, Carry. “COVID-19 kills Alberta man in his 30s as officials warn that young people are not immune.” The Globe And Mail. April 1, 2020. https://www.theglobeandmail.com/canada/alberta/article-covid-19-kills-alberta-man-in-his-30s-as-officials-warn-that-young/?fbclid=IwAR2R5nJOHwFUBLPb6NS0cAYOGVmSVOk8yrvQoiWVNwRrx18c0fbqJbTfg_A

19.⁴⁰ (As of May 14, there were 12,561 COVID-19 cases in persons aged 0-59, and 867 of these were hospitalized, with the majority of hospitalizations occurring in persons aged 50-59.⁴¹) Further, it is important to note that the probability that *any person aged 0-39* (diagnosed, infected but undiagnosed, or uninfected) will experience a severe outcome is *significantly less* than 1/14. As of May 14, only 9.9 persons aged 0-39 per 100,000 had been hospitalized for COVID-19.⁴² Of course, this is remarkably less than 1/6 or 16.66%. Remarks of these sort have been made frequently by elected and appointed government officials since March 2020, without subsequent correction to account for facts as they became known. Statements like these have been allowed to inform public policy decisions that continue to have severe social, economic and health impacts on Ontarians.

So, were the closures of schools and post-secondary institutions evidence-based and demonstrably justified in Ontario? No evidence has been cited in support of the claim that children and youths were or are at significant risk from COVID-19, or that school closures were necessary to mitigate this risk in Ontario. As early as March 3, the *China Centre for Disease Control* published its findings on the epidemiological characteristics of COVID-19 in China, and stated that only 0.9% of confirmed cases occurred in ages 0-9; that only 1.2% occurred in ages 10-19; and that only 8.1% occurred in ages 20-29.⁴³ Moreover, of the 4,584 confirmed cases in ages 0-29, only 8 resulted in death: a small fraction of 1%. These findings reveal that comorbid conditions – such as hypertension, diabetes, cardiovascular disease, chronic respiratory disease, and cancer – significantly impact case fatality rate, and those older than 80 experienced the highest case fatality rate⁴⁴. The epidemiological characteristics of COVID-19 have been similar in Ontario. According to Public Health Ontario’s Epidemiological Summary, no deaths have

⁴⁰ “COVID-19 and Severe Outcomes in Ontario.” Public Health Ontario. May 14, 2020. <https://www.publichealthontario.ca/-/media/documents/ncov/epi/covid-19-severe-outcomes-ontario-epi-summary.pdf?la=en>

⁴¹ “COVID-19 and Severe Outcomes in Ontario.” Public Health Ontario. May 14, 2020. <https://www.publichealthontario.ca/-/media/documents/ncov/epi/covid-19-severe-outcomes-ontario-epi-summary.pdf?la=en>

⁴² “COVID-19 and Severe Outcomes in Ontario.” Public Health Ontario. May 14, 2020. <https://www.publichealthontario.ca/-/media/documents/ncov/epi/covid-19-severe-outcomes-ontario-epi-summary.pdf?la=en>

⁴³ The Novel Coronavirus Pneumonia Emergency Response Epidemiology Team. The Epidemiological Characteristics of an Outbreak of 2019 Novel Coronavirus Diseases (COVID-19) — China, 2020[J]. *China CDC Weekly*, 2020, 2(8): 113-122. doi: 10.46234/ccdcw2020.032

⁴⁴ The Novel Coronavirus Pneumonia Emergency Response Epidemiology Team. The Epidemiological Characteristics of an Outbreak of 2019 Novel Coronavirus Diseases (COVID-19) — China, 2020[J]. *China CDC Weekly*, 2020, 2(8): 113-122. doi: 10.46234/ccdcw2020.032

occurred in ages 0-19 and only eight deaths have occurred in ages 20-39.⁴⁵ Moreover, only 12.5% of all confirmed cases across every age demographic have resulted in a severe outcome.⁴⁶ It is therefore highly unlikely that any young person will experience a severe outcome, other than a very small number of youth with serious pre-existing health conditions (in which case any number of different diseases will pose a serious threat). Any public health measures predicated on the alleged need to protect all children and students from experiencing severe outcomes are based on misinformation, or the refusal to consider information which was already available to the Ontario Government in early March.

As a result of lockdown measures, students of all ages have been unable to access the type and quality of education to which they are accustomed. In the case of post-secondary students and students attending private schools, this impact is even more severe, in light of tuition fees which they or their parents have paid. Moreover, it is not clear to what extent, if any, the Ontario Government considered the negative impacts of these closures on parents and students, including social, financial and learning consequences. Public schools provide more than education. In many cases, they provide food security for underprivileged children, and a form of affordable child care to parents who must work, or who choose to work.⁴⁷ The negative effects on Ontario parents - suddenly faced with new responsibilities to care for children during routine workday hours - are entirely predictable. Were these negative impacts or the above-mentioned statistics considered in the Ontario Government's decision to close schools and universities?

The available data shows that COVID-19 does not confer significant risk on the vast majority of Ontarians. For instance, in Canada and among those aged 0-69, there is generally a higher statistical probability of dying in a motor vehicle accident⁴⁸ than dying from COVID-19⁴⁹.

⁴⁵ "COVID-19 in Ontario: January 15, 2020 to May 26, 2020." Public Health Ontario. Accessed May 28, <https://files.ontario.ca/moh-covid-19-report-en-2020-05-27.pdf>

⁴⁶ "COVID-19 in Ontario: January 15, 2020 to May 26, 2020." Public Health Ontario. Accessed May 28, <https://files.ontario.ca/moh-covid-19-report-en-2020-05-27.pdf>

⁴⁷ Hay, Andrew and O'Brien, Brendan. "Do we really want to close schools? U.S. authorities resist coronavirus closures." March 6, 2020. <https://www.reuters.com/article/us-health-coronavirus-usa-education/do-we-really-want-to-close-schools-u-s-authorities-resist-coronavirus-closures-idUSKBN20T1DQ>

⁴⁸ "Canadian Motor Vehicle Traffic Collision Statistics: 2017." Statistics Canada. Accessed May 30, 2020. <https://www.tc.gc.ca/eng/motorvehiclesafety/canadian-motor-vehicle-traffic-collision-statistics-2017.html>

⁴⁹ "COVID-19 and Severe Outcomes in Ontario." Public Health Ontario. May 14, 2020. <https://www.publichealthontario.ca/-/media/documents/ncov/epi/covid-19-severe-outcomes-ontario-epi-summary.pdf?la=en>

(For instance, of those aged 50-59, only an approximate 3 persons per 100,000 had died of COVID-19 as of April 22, 2020, whereas 5 persons per 100,000 had died of motor vehicle accidents in Canada in 2017⁵⁰.) Approximately 69% of total fatal outcomes have occurred in persons age 80 and higher, and approximately 96% of total fatal outcomes have occurred in persons age 60 and higher.

According to Public Health Ontario's Enhanced Epidemiological Summary for May 14⁵¹, the median age for a fatal outcome in Ontario is 86. Further, as of May 14, 26.1% of all confirmed cases (5,714 of 21,922) and 36.8% of all deaths (671) had occurred in those with at least one comorbid condition. Of these deaths, it was found that 63.79% occurred in persons age 80 or higher; 31.15% occurred in persons 60-79; 4.47% occurred in persons 40-59; and 0.6% occurred in persons 0-39. It is therefore clear that those who are elderly or have comorbid conditions, or both, are the only groups likely to die from COVID-19. These findings are consistent with the data released by governments and public health authorities in other jurisdictions around the world. In a report summarizing evidence for clinical severity in COVID-19 patients and the risk factors associated with severe disease, Public Health Ontario notes,

Of the nine studies that performed direct comparisons using statistical tests and looking at variables that were not assessed in the multivariable analyses, the following were noted to be statistically significantly associated with more severe disease: age in 7/8 studies; gender in 1/8; any comorbidities in 5/6; diabetes in 5/8; hypertension in 4/7; cardiovascular disease in 4/7; chronic obstructive pulmonary disease in 1/4; and smoking in 0/2 studies.⁵²

COVID-19 does not confer any significant risk to those aged 0-69 with no pre-existing conditions. Its impact is limited to the elderly and to those with pre-existing conditions. Professor Neil Ferguson, in his statement to the UK Parliament on March 25 of 2020, conceded

⁵⁰ "Canadian Motor Vehicle Traffic Collision Statistics: 2017." Statistics Canada. Accessed May 30, 2020. <https://www.tc.gc.ca/eng/motorvehiclesafety/canadian-motor-vehicle-traffic-collision-statistics-2017.html>

⁵¹ "COVID-19 and Severe Outcomes in Ontario." Public Health Ontario. May 14, 2020. <https://www.publichealthontario.ca/-/media/documents/ncov/epi/covid-19-severe-outcomes-ontario-epi-summary.pdf?la=en>

⁵² "COVID-19 – What We Know So Far About Clinical Severity." Public Health Ontario. April 24, 2020. Accessed May 28, 2020. <https://www.publichealthontario.ca/-/media/documents/ncov/covid-wwksf/what-we-know-clinical-severity.pdf?la=en>

that two thirds of those who died with COVID-19 would likely have died of external causes within one year of their COVID-19 diagnosis.⁵³

Inaccurate claims regarding COVID-19 lethality

In mid-March, the United Kingdom and other jurisdictions around the world relied on predictions by Dr. Neil Ferguson of Imperial College. His model predicted 510,000 COVID-19 deaths in the U.K. and 2.2 million deaths in the U.S.⁵⁴ Based on the statements made by Canadian Premiers and Chief Medical Officers since March, it appears that these numbers were relied upon by the Ontario Government and other governments to embark on a novel experiment of imposing lockdowns on entire populations and economies, rather than quarantining the sick.

Today, more data is available. The Ontario Government owes Ontarians a clear and specific explanation as to what evidence and data it relied upon when crafting its lockdown measures, and what data justifies the continued lockdown today. Models that are used to formulate government policies must be accurate, if they are to serve as adequate justification for violating *Charter* freedoms.

It is helpful to consider the COVID-19 pandemic within its global and historical context, and to compare the epidemiological characteristics of COVID-19 with those of other illnesses worldwide. The 1957-58 “Asian flu” and the 1968-69 “Hong Kong flu” each claimed one million lives worldwide.⁵⁵ In more average years, the seasonal flu sadly takes between 291,000 and 646,000 lives,⁵⁶ most of them vulnerable elderly people who are already sick with one or more serious health conditions. In March of 2020, politicians and Chief Medical Officers claimed that COVID-19 threatens not just the already sick elderly, but children, youth and healthy adults as well. But these claims have proven to be false. As of June 18, 2020, COVID-

⁵³ “Two thirds of coronavirus victims may have died this year anyway, government adviser says.” The Telegraph. March 25, 2020. <https://www.telegraph.co.uk/news/2020/03/25/two-thirds-patients-die-coronavirus-would-have-died-year-anyway/>

⁵⁴ <https://www.cato.org/blog/how-one-model-simulated-22-million-us-deaths-covid-19>

⁵⁵ https://www.who.int/influenza/publications/public_health_measures/publication/en/, page 7

⁵⁶ “Seasonal flu death estimate increases worldwide,” CDC, retrieved June 2, 2020, <https://www.cdc.gov/media/releases/2017/p1213-flu-death-estimate.html>.

19 had apparently killed 456,000 people around the world,⁵⁷ although this number includes people who died of other causes while also having this virus. In every jurisdiction, COVID-19 targeted vulnerable elderly people with one or more serious comorbidities. While very tragic, the number deaths from COVID-19 is not different from what has happened in many other years, and is within the range of the annual flu.

There were 42,288 reported COVID-19 deaths in the United Kingdom as of June 18.⁵⁸ In a country of more than 66 million people, this number is not radically different from the 34,300 deaths from seasonal influenza in 2014-2015.⁵⁹ Italy is well past its COVID-19 peaks: March 21 for cases, and March 27 for deaths. As of June 2, Italy has reported 33,530 COVID-19 deaths.⁶⁰ The death toll from influenza-like illnesses in Italy was 41,066 in 2014-15, and 43,336 in 2016-17.⁶¹ Contrary to the claims of government officials in Ontario and other jurisdictions, COVID-19 is not an unusually deadly killer when viewed in its historical and global context.

Further, from the beginning of the pandemic, record-keeping has suffered from a failure to distinguish between people who had COVID-19 at time of death, and those who actually died from it. As is demonstrated further below, in some jurisdictions, any person who died *with* COVID-19 is deemed to have died *of* COVID-19, even when COVID-19 was not the primary cause of death. This issue is significant, given that COVID-19 death numbers have had an enormous influence on how governments around the world have determined their responses to COVID-19.

Prof. Walter Ricciardi, scientific advisor to the Italian minister of health, has stated publicly: “The way in which we code deaths in our country is very generous in the sense that all the people who die in hospitals with the coronavirus are deemed to be dying of the

⁵⁷ <https://www.worldometers.info/coronavirus/#countries>

⁵⁸ Worldometer, Accessed June 18, <https://www.worldometers.info/coronavirus/country/uk/>

⁵⁹ “A review of recent trends in mortality in England,” Public Health England, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/827518/Recent_trends_in_mortality_in_England.pdf.

⁶⁰ Worldometer, Accessed June 2, <https://www.worldometers.info/coronavirus/country/italy/>.

⁶¹ “Investigating the impact of influenza on excess mortality in all ages in Italy during recent seasons (2013/14 - 2016/17 seasons),” ResearchGate, [file:///Users/lukeneilson/Downloads/1-s2.0-S1201971219303285-main%20\(1\).pdf](file:///Users/lukeneilson/Downloads/1-s2.0-S1201971219303285-main%20(1).pdf).

coronavirus.”⁶² This is confirmed in the report of the Istituto Superiore di Sanita.⁶³ The discrepancy between dying “from” COVID-19 and dying “with” the disease may be very high indeed. Prof. Ricciardi went on to state: “On re-evaluation by the National Institute of Health, only 12% of death certificates have shown a direct causality from coronavirus, while 88% of patients who have died have at least one pre-morbidity – many had two or three.”⁶⁴

Dr. John Lee, an emeritus professor of pathology in the UK, explains that this same bias affects cause-of-death statistics in the UK: “There is a big difference between Covid-19 causing death, and Covid-19 being found in someone who died of other causes. ... It might appear far more of a killer than flu, simply because of the way deaths are recorded.”⁶⁵

Dr. Ngozi Ezike, director of the Illinois Department of Public Health, has gone on the record to say, “If you were in hospice and had already been given a few weeks to live, and then you also were found to have COVID, that would be counted as a COVID death. It means technically even if you died of a clear alternate cause, but you had COVID at the same time, it’s still listed as a COVID death.”⁶⁶ During the April 7 COVID-19 White House briefing, Dr. Deborah Birx stated that this is practiced across the U.S., observing, “So, I think in this country, we’ve taken a very liberal approach to mortality...If someone dies with COVID-19, we are counting that as a COVID-19 death.”⁶⁷

In short, in some jurisdictions the number of patients killed *by* COVID-19 is certainly less than the number who died *with* it. Have COVID-19 deaths been recorded accurately in Ontario?

⁶² Newy, Sarah. “Coronavirus: Is Covid-19 really the cause of all the fatalities in Italy?”, Stuff, Retrieved April 24, 2020, <https://www.stuff.co.nz/national/health/coronavirus/120443722/coronavirus-is-covid19-really-the-cause-of-all-the-fatalities-in-italy>.

⁶³ “Characteristics of SARS-CoV-2 patients dying in Italy,” Epicentro, April 29, 2020, https://www.epicentro.iss.it/en/coronavirus/bollettino/Report-COVID-2019_29_april_2020.pdf.

⁶⁴ “Why have so many coronavirus patients died in Italy?”, The Telegraph, March 23, 2020, <https://www.telegraph.co.uk/global-health/science-and-disease/have-many-coronavirus-patients-died-italy/>.

⁶⁵ Lee, John. “How deadly is the coronavirus? It’s still far from clear,” The Spectator, March 28, 2020, <https://www.spectator.co.uk/article/The-evidence-on-Covid-19-is-not-as-clear-as-we-think>.

⁶⁶ “IDPH Director explains how Covid deaths are classified,” Week.com, April 20, 2020, <https://week.com/2020/04/20/idph-director-explains-how-covid-deaths-are-classified/>.

⁶⁷ “Remarks by President Trump, Vice President Pence, and Members of the Coronavirus Task Force in Press Briefing,” Whitehouse.org, April 7, 2020, <https://www.whitehouse.gov/briefings-statements/remarks-president-trump-vice-president-pence-members-coronavirus-task-force-press-briefing-april-7-2020/>.

Unprecedented economic harm

The descriptor “unprecedented” has been inappropriately applied to many features of COVID-19, yet it certainly applies to the rapid decline in economic performance across many sectors and indicators, in Ontario and across Canada. In its Labour Force Survey for April 2020, Statistics Canada notes, “The magnitude of the decline in employment [in Canada] since February (-15.7%) far exceeds declines observed in previous labour market downturns. For example, the 1981-1982 recession resulted in a total employment decline of 612,000 (-5.4%) over approximately 17 months.”⁶⁸ That is, when compared to the most significant recession since the 1930s, Canada has lost nearly 300% more jobs in approximately one sixth of the time period. Statistics Canada further notes, “In April, both full-time (-1,472,000; -9.7%) and part-time (-522,000; -17.1%) employment fell. Cumulative losses since February totalled 1,946,000 (-12.5%) in full-time work and 1,059,000 (-29.6%) in part-time employment.”⁶⁹

Cumulatively, and as a result of the government-imposed lockdowns, by April of 2020, 5.5 million Canadians were either not working or were working substantially reduced hours.⁷⁰ Of all the provinces and territories, Ontario has experienced the most significant negative economic impacts on employment as a result of lockdown measures. In April there were 689,200 fewer jobs than in March, and 1,092,00 fewer jobs than in February.⁷¹ The rate of unemployment climbed from 5.5% in February to 11.3% in April.⁷² Of all major urban centres in Canada, Toronto reported the third-largest decline (-18%; 539,000) in employment.⁷³ Even among those who have not lost their jobs outright, many have experienced significantly reduced hours. Regarding solo self-employed workers, Statistics Canada found:

The number of solo self-employed workers (2.0 million)—that is, those with no employees—was little changed in April compared with February (not adjusted for seasonality). For this group of workers, the impact of the COVID-19 shutdown has been felt through a significant loss of hours worked. In April, 59.4% of the solo self-employed (1.2 million) worked less than half of their usual hours during the week of April 12, including 38.4% who did not work any hours.⁷⁴

⁶⁸ “Labour Force Survey, April 2020.” Statistics Canada. April 8, 2020. <https://www150.statcan.gc.ca/n1/daily-quotidien/200508/dq200508a-eng.htm?HPA=1>

⁶⁹ “Labour Force Survey”

⁷⁰ “Labour Force Survey”

⁷¹ “Labour Force Survey”

⁷² “Labour Force Survey”

⁷³ “Labour Force Survey”

⁷⁴ “Labour Force Survey”

It is important to note that the economic decline caused by lockdown measures has not affected Canadians equally. Vulnerable workers, young workers, and immigrant workers have thus far experienced the most severe economic outcomes. Of those working temporary and non-unionized jobs, Statistics Canada noted:

In the two months since February, employment (not adjusted for seasonality) declined by 17.8% among all paid employees. The pace of employment losses was above-average among employees with a temporary job (-30.2%), those with job tenure of one year or less (-29.5%) and those not covered by a union or collective agreement (-21.2%). There were also sharper declines for employees earning less than two-thirds of the 2019 median hourly wage of \$24.04 (-38.1%) and those who are paid by the hour (-25.1%).⁷⁵

This is consistent with the declines observed in accommodation and food services, and wholesale and retail trade, which generally have a higher proportion of workers with these characteristics. Despite these declines, there were approximately one million people in low-wage, non-unionized, hourly-paid jobs in April who worked at least some hours during the reference week. Of these, 89.1% worked at locations outside the home. Two-thirds of those working in locations outside the home were employed in accommodation and food services or wholesale and retail trade—both industries with relatively high proportions of workers in jobs usually requiring close physical contact.⁷⁶

Of those workers aged 15-24, Statistics Canada noted:

COVID-19 has disproportionately affected Canada's youth (aged 15 to 24). As a group, they are more likely to hold less secure jobs in hard-hit industries such as accommodation and food services. From February to April, employment among youth declined by 873,000 (-34.2%), while an additional 385,000 (or one in four) who remained employed in April lost all or the majority of their usual hours worked (not adjusted for seasonality). Employment declined faster among those aged 15 to 19 (-40.4%) than among those aged 20 to 24 (-31.1%), reflecting the less secure jobs held by those in the younger age category.

Among students aged 15 to 24 in April, the unemployment rate increased to 31.7% (not adjusted for seasonality), signaling that many could face difficulties in continuing to pay for their studies. Among non-student youth, a little more than half were employed in April, down from three-quarters in February (data not seasonally adjusted).⁷⁷

⁷⁵ “Labour Force Survey”

⁷⁶ “Labour Force Survey”

⁷⁷ “Labour Force Survey”

Finally, of those very recent immigrant workers, Statistics Canada noted:

Employment among very recent immigrants (five years or less) fell more sharply from February to April (-23.2%) than it did for those born in Canada (-14.0%). This is partly because this group is more likely than people born in Canada to work in industries which have been particularly affected by the COVID-19 economic shutdown, such as accommodation and food services, and less likely to work in less severely-impacted industries, such as public administration.

Employment among the total landed immigrant population declined by 18.0% from February to April (not adjusted for seasonality), as established immigrants (10 years or more) (-17.0%) and recent immigrants (more than 5 but less than 10 years) (-17.4%) fared better than their very recently-arrived counterparts.”⁷⁸

These statistics show the degree to which the Canadian economy, and the most vulnerable participants therein, are experiencing an unprecedented economic contraction because of provincial and federal government lockdowns of society and the economy.

The economy versus saving lives: a false dichotomy

In public and private discourse on the merits and demerits of lockdown measures, some have claimed that we must choose between economic profitability and human life. This claim ignores the simple fact that health care requires money, and first-rate health care requires a lot of it. A crippled economy that is riddled with high rates of unemployment, bankruptcies, insolvencies and other business failures will not generate enough money for good health care, resulting in Canadians dying prematurely because of inadequate or inferior health care. A strong and prosperous economy is the only way to generate sufficient wealth to pay for good health care.

The problem of lockdown measures should therefore not be framed in terms of economic profitability versus saving lives. Apart from the realms of conjecture, assertion and speculation, our elected leaders have not provided actual evidence that demonstrates scientifically that closing down society and the economy has saved lives. COVID-19 made its way into nursing homes (long-term care facilities) where this virus has claimed more than 80% of its victims, and neither elected leaders nor Chief Medical Officers have brought forward evidence to show that locking

⁷⁸ “Labour Force Survey”

down the healthy population has actually saved lives, or is actually saving lives, unless one confuses assertions with evidence.

Considerable time will pass before we can calculate the full cost – in health and in lives – of the predictable increases in anxiety, depression, mental illness, and suicide caused by government-mandated and government-enforced social isolation, and the predictable increases in unemployment, bankruptcies, insolvencies and poverty that lockdown measures have inflicted on Ontarians. According to the Financial Consumer Agency of Canada, those dealing with financial stresses are twice as likely to report poor overall health, are four times as likely to report lost sleep, and are four times as likely to report strained relationships.⁷⁹ Sustained financial stress may even lead to heart disease, high blood pressure, and mental health conditions, according to one study.⁸⁰ Only after conducting a thorough and comprehensive investigation of the number of lives lost due to lockdown measures will Ontario’s elected leaders and Chief Medical Officers be in a position to weigh this number against the number of lives that may have been saved by lockdowns.

Negative impacts on health care

In this section, we enumerate the measures implemented by the Ontario Government and Public Health Ontario to increase capacity within the health care system by decreasing the number of “elective” (non-emergency) services. We then consider the impacts of these measures, especially on those whose non-emergency surgeries have been cancelled or postponed.

According to one report from the Financial Accountability Office of Ontario, on April 28 there were 906 unoccupied acute care beds, 357 unoccupied critical care beds, and 356 unoccupied critical care beds with ventilators in the lead-up to the pandemic in Ontario.⁸¹ And this after government officials had stated on March 15 that “after consultation with the Ontario Hospital Association, and with the support of Dr. David Williams, Ontario’s Chief Medical

⁷⁹ “Financial Stress and Its Impacts.” Government of Canada. Accessed May 31, 2020.

<https://www.canada.ca/en/financial-consumer-agency/services/financial-wellness-work/stress-impacts.html>

⁸⁰ “Financial Stress and Its Impacts.”

⁸¹ “Ontario Health Sector: A Preliminary Review of the Impact of the COVID-19 Outbreak on Hospital Capacity.” Financial Accountability Office of Ontario. April 28, 2020. Accessed May 28, 2020. <https://www.fao-on.org/en/Blog/Publications/health-2020>

Officer of Health, the province is requesting that all hospitals further implement pandemic plans by carefully ramping down elective surgeries and other non-emergent activity. In doing so, hospitals can preserve capacity as cases of COVID-19 continue to grow in Ontario.”⁸² In mid-March there were a mere 145 confirmed cases in the province. Similarly, the Royal College of Dental Surgeons imposed cancellations of their own on March 15, stating that “the RCDSO strongly recommends that all non-essential and elective dental services should be suspended immediately. Emergency treatment should continue.”⁸³

On March 21, and upon hearing the “clear and urgent requests from our frontline health service providers,”⁸⁴ the Ontario government announced a new order such that hospitals “would have the ability to cancel and postpone services to free-up space and valuable staff, identify staffing priorities, and develop, modify, and implement redeployment plans.”⁸⁵ Sylvia Jones, the Solicitor General, stated, “While normal protocols are important in routine times, these extraordinary steps will ensure our health sector workers are there, where and when they are needed, to care for Ontarians and support our extensive efforts to contain this virus.”⁸⁶ At the time, there were 377 confirmed cases in the province.⁸⁷ This “freeing up” of “space and valuable staff” did not come without the high cost of medically necessary health care being denied to Ontarians who needed it, and still need it.

On April 16, the Ontario Government reported a significant expansion in health care capacity - adding 1,035 acute care beds and 1,492 critical care beds in order to prepare for a sudden surge in hospitalizations.⁸⁸ In addition to recruiting additional doctors and redeploying

⁸² “Ontario Hospitals Asked to Take a Planned Approach to Ramping Down Elective Surgeries.” Ontario Newsroom. March 15, 2020. <https://news.ontario.ca/mohltc/en/2020/03/ontario-hospitals-asked-to-take-a-planned-approach-to-ramping-down-elective-surgeries.html>

⁸³ “A message to all dentists in Ontario - COVID-19 Pandemic.” Royal College of Dental Surgeons of Ontario. March 15, 2020. <https://www.rcdso.org/en-ca/rcdso-members/dispatch-magazine/articles/5286>

⁸⁴ “Ontario Takes Extraordinary Steps to Ensure Health Care Resources are Available to Contain COVID-19.” Ontario Newsroom, March 21, 2020. <https://news.ontario.ca/mohltc/en/2020/03/ontario-takes-extraordinary-steps-to-ensure-health-care-resources-are-available-to-contain-covid-19.html>

⁸⁵ “Ontario Takes Extraordinary Steps to Ensure Health Care Resources are Available to Contain COVID-19.” Ontario Newsroom, March 21, 2020. <https://news.ontario.ca/mohltc/en/2020/03/ontario-takes-extraordinary-steps-to-ensure-health-care-resources-are-available-to-contain-covid-19.html>

⁸⁶ “Ontario Takes Extraordinary Steps to Ensure Health Care Resources are Available to Contain COVID-19.” Ontario Newsroom, March 21, 2020. <https://news.ontario.ca/mohltc/en/2020/03/ontario-takes-extraordinary-steps-to-ensure-health-care-resources-are-available-to-contain-covid-19.html>

⁸⁷ “Status of COVID-19 cases in Ontario.” Ontario Data Catalogue. Accessed June 2, 2020. <https://data.ontario.ca/dataset/status-of-covid-19-cases-in-ontario>

⁸⁸ “Ontario Significantly Expands Hospital Capacity to Prepare for Any COVID-19 Outbreak Scenario.” Ontario Newsroom. April 16, 2020. <https://news.ontario.ca/opo/en/2020/04/ontario-significantly-expands-hospital-capacity-to-prepare-for-any-covid-19-outbreak-scenario.html>

nursing staff across units, the Ontario Government purchased 10,000 additional ventilator units, millions of respirator masks, and millions of units of PPE.⁸⁹ As of April 13, however, there were more than 7,300 unoccupied acute care beds and 2,000 unoccupied critical care beds in Ontario, while a large but as-yet unknown number of Ontarians were prevented from accessing the health care they needed. The Financial Accountability Office of Ontario estimates that, as of April 23, there were 9,345 unoccupied acute care beds, 2,191 unoccupied critical care beds, and 2,238 unoccupied critical care beds with ventilators.⁹⁰ However, at no point have there been more than 1,043 hospitalizations (peak on May 5) or 264 ICU (peak on April 9) in Ontario.⁹¹ Ontario hospitals were notably underutilized through most of March, April, and May, to the detriment of patients.

While hospitals in Ontario remain largely unoccupied, thousands of Ontarians and other Canadians await much-needed elective surgeries. In Ontario, every week of the pandemic results in an additional 12,200 cancelled elective surgeries.⁹² As one recent article notes, “According to the province, 90,297 non-oncology surgeries were performed last year between March 17 and May 12, compared to 6,168 surgeries for the same time period this year. For oncology surgeries, 7,987 were performed in the same time period in 2019, compared to 5,317 in 2020 - a decrease of 33 per cent.”⁹³ Throughout Canada, the British Journal of Surgery estimates that 400,000 surgeries will have been cancelled or postponed by mid-June.⁹⁴ Of these, an estimated 27,000 will have been cancer surgeries.⁹⁵ Under the *Charter*, it is incumbent on the Ontario

⁸⁹ “Update on COVID-19 Preparations: Supplies and Equipment/” Minister of Health. March 28, 2020. http://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/memos/DM_OH_CMOH%20memo%200_COVID19_update_PPE_March_28_2020.pdf

⁹⁰ “Ontario Health Sector: A Preliminary Review of the Impact of the COVID-19 Outbreak on Hospital Capacity.” Financial Accountability Office of Ontario. April 28, 2020. Accessed May 28, 2020. <https://www.fao.on.org/en/Blog/Publications/health-2020>

⁹¹ “Status of COVID-19 cases in Ontario.” Ontario Data Catalogue. Accessed June 2, 2020. <https://data.ontario.ca/dataset/status-of-covid-19-cases-in-ontario>

⁹² “Ontario Health Sector: A Preliminary Review of the Impact of the COVID-19 Outbreak on Hospital Capacity.” Financial Accountability Office of Ontario. April 28, 2020. Accessed May 28, 2020. <https://www.fao.on.org/en/Blog/Publications/health-2020>

⁹³ Trevithick. Matthew. “COVID-19 pandemic to affect nearly 400,000 elective surgeries across Canada by mid-June: study.” Global News. May 15, 2020. <https://globalnews.ca/news/6948692/covid-19-pandemic-elective-surgeries-canada/>

⁹⁴ “Elective surgery cancellations due to the COVID -19 pandemic: global predictive modelling to inform surgical recovery plans,” BJS Society, May 12, 2020. doi: 10.1002/bjs.11746. <https://bjssjournals.onlinelibrary.wiley.com/doi/abs/10.1002/bjs.11746>

⁹⁵ Trevithick. Matthew. “COVID-19 pandemic to affect nearly 400,000 elective surgeries across Canada by mid-June: study.” Global News. May 15, 2020. <https://globalnews.ca/news/6948692/covid-19-pandemic-elective-surgeries-canada/>

Government to explain to what extent, if any, the cancellation of surgeries contributed to the goal of fewer COVID-19 deaths, especially in light of the fact that COVID-19 made its way into nursing homes in any event.

According to this study, “Delaying time-sensitive elective operations, such as cancer or transplant surgery, may lead to deteriorating health, worsening quality of life, and unnecessary deaths.” Also, “When hospitals resume elective activities, patients are likely to be prioritised by clinical urgency, resulting in lengthening delays for patients with benign but potentially disabling conditions where there may be less of a perceived time impact.” Indeed, one much-cited report by the University Health Network in Ontario estimates that 35 people died after their cardiac surgeries had been cancelled for the purpose of increasing COVID-19 capacity within the health system.⁹⁶ Considering that as many as 400,000 surgeries across Canada were cancelled or postponed, the number of preventable fatalities is likely much higher than 35.

On May 7, the Ontario Government announced that elective surgeries would once again resume, starting with cardiovascular surgeries and hip/knee replacements.⁹⁷ Performing all newly-scheduled and postponed surgeries, however, will require considerable time and resources. According to this same study by the British Journal of Surgery,⁹⁸ assuming that post-pandemic surgery capacity increased by 10%, it would take Canada 90 weeks (almost two years) to perform all cancelled and postponed surgeries.⁹⁹ Since March of 2020, these healthcare measures continue to have a severe and negative impact on Ontarians’ access to healthcare, which violates the *Charter* section 7 rights to life and security of the person.¹⁰⁰

It is likely that these healthcare measures were predicated on information from early versions of the Command Table’s COVID-19 Modelling documents, released on April 3 and April 20. In the next section, we analyze the Command Table’s COVID-19 Modelling

⁹⁶ “Delayed Cardiac Surgeries Due To Coronavirus May Have Caused 35 Deaths In Ontario: Minister,” Global News, Accessed April 30, 2020, <https://globalnews.ca/news/6879082/coronavirus-delayed-surgeries-ontario-deaths/>.

⁹⁷ Davidson, Shawn and D’Mello, Colin. “Ontario unveils plan to resume elective surgeries and procedures.” CTV News Toronto. May 7, 2020. <https://toronto.ctvnews.ca/ontario-unveils-plan-to-resume-elective-surgeries-and-procedures-1.4928705>

⁹⁸ “Elective surgery cancellations due to the COVID -19 pandemic: global predictive modelling to inform surgical recovery plans,” BJS Society, May 12, 2020. doi: 10.1002/bjs.11746. <https://bjssjournals.onlinelibrary.wiley.com/doi/abs/10.1002/bjs.11746>

⁹⁹ Trevithick, Matthew. “COVID-19 pandemic to affect nearly 400,000 elective surgeries across Canada by mid-June: study.” Global News. May 15, 2020. <https://globalnews.ca/news/6948692/covid-19-pandemic-elective-surgeries-canada/>

¹⁰⁰ *Chaoulli v Quebec*, 2005 SCC 35.

documents and show that these cannot be cited as demonstrable justification for public health or lockdown measures under any past or present emergency orders that violate *Charter* rights and freedoms to move, travel, assemble, associate and worship.

COVID-19 Modelling

Models have been produced by governments around the world to predict total cases, severe outcomes, and consequent impacts on healthcare systems. Perhaps the most famous of these was developed in mid-March by Dr. Neil Ferguson of Imperial College in the United Kingdom, predicting 510,000 COVID-19 deaths in the United Kingdom and 2.2 million deaths in the United States. In early April, provincial governments across Canada published their own models of COVID-19 and its impacts on healthcare resources. These numbers were cited by public health experts and government officials as justification for the lockdown measures that violate fundamental *Charter* freedoms.

In this section, we analyze the COVID-19 modelling documents¹⁰¹ published by the Ontario Government Command Table on April 3 and April 20. We compare the projections with the numbers to date. Where these models have been cited as justification for *Charter*-violating lockdown measures, we argue that they must be evidence-based, accurate, and transparent.

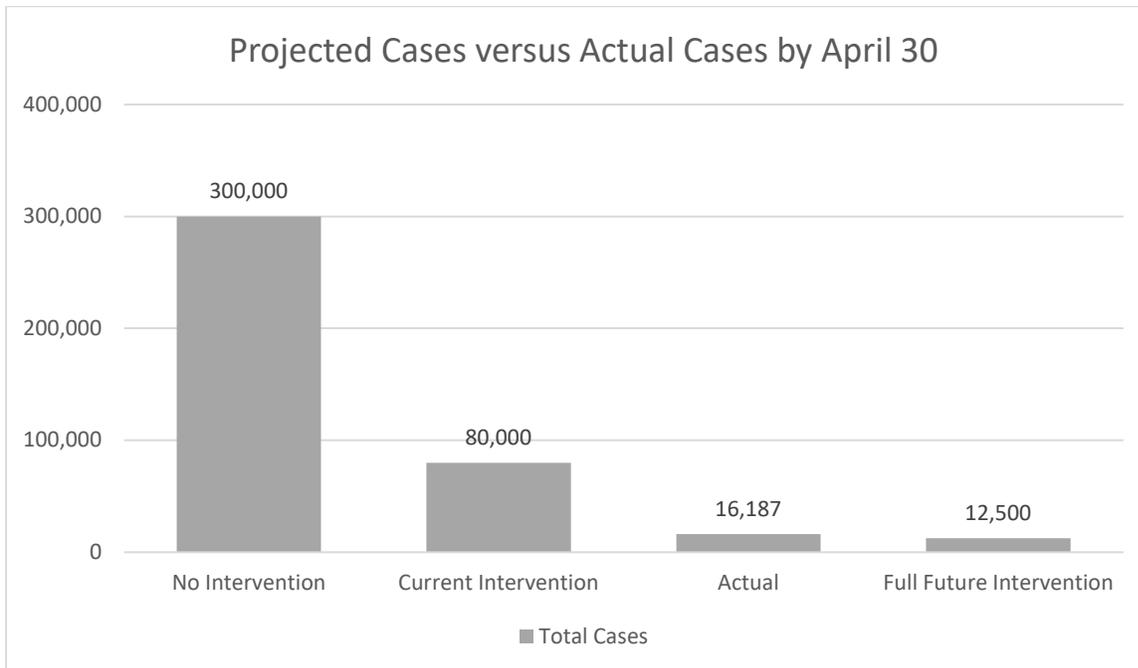
Command Table's April 3 COVID-19 Modelling

On April 3, the Command Table released its COVID-19 modelling document to the public. "In doing so," notes the Government of Ontario Newsroom, "the province is providing the public with full transparency about the consequences should everyone but essential workers fail to stay home and practice physical distancing."¹⁰² This April 3 model claims that, had no public health measures been enforced, there would have been approximately 300,000 cases and 6,000 deaths by April 30. If the Ontario Government had not intervened, according to the model, approximately 100,000 Ontarians would have died over the course of the pandemic in Ontario. Commenting on the model, Christine Elliott said, "The numbers released today are sobering.

¹⁰¹ April 3 and April 20 models provided in Appendix A

¹⁰² "Ontario Provides Full Transparency by Releasing COVID-19." Ontario Newsroom. April 3, 2020. <https://news.ontario.ca/opo/en/2020/04/ontario-provides-full-transparency-by-releasing-covid-19-modelling.html>

While they reveal a disastrous path, they also serve as a call to arms for greater action. We have for months now been preparing for this very moment, but to avoid the worst-case scenario we are relying on every Ontarian to stay home to stop the spread of this virus. Lives depend on the public heeding this advice.”¹⁰³ Timely interventions, however, are supposed to have prevented approximately 220,000 cases and 4,400 deaths to date.¹⁰⁴



While a few aspects of this April 3 model have proven accurate, this model is ambiguous and inaccurate in many respects. For instance, the way in which case fatality ratios (CFR) have been modelled across the three scenarios – *no intervention*, *current intervention*, and *full future intervention* – is unclear. The Command Table did not provide Ontarians a definition of “*full intervention scenario*” or what additional lockdown measures would be entailed by this scenario. Most of the significant lockdown measures were implemented throughout March – well before the release of this April 3 model. And so, we cannot know what measures would be necessary to reduce total cases from 80,000 to 12,500 by April 30. This is important. While the model appears to have predicted “total cases” with some accuracy for April 30 (16,187 actual vs 12,500

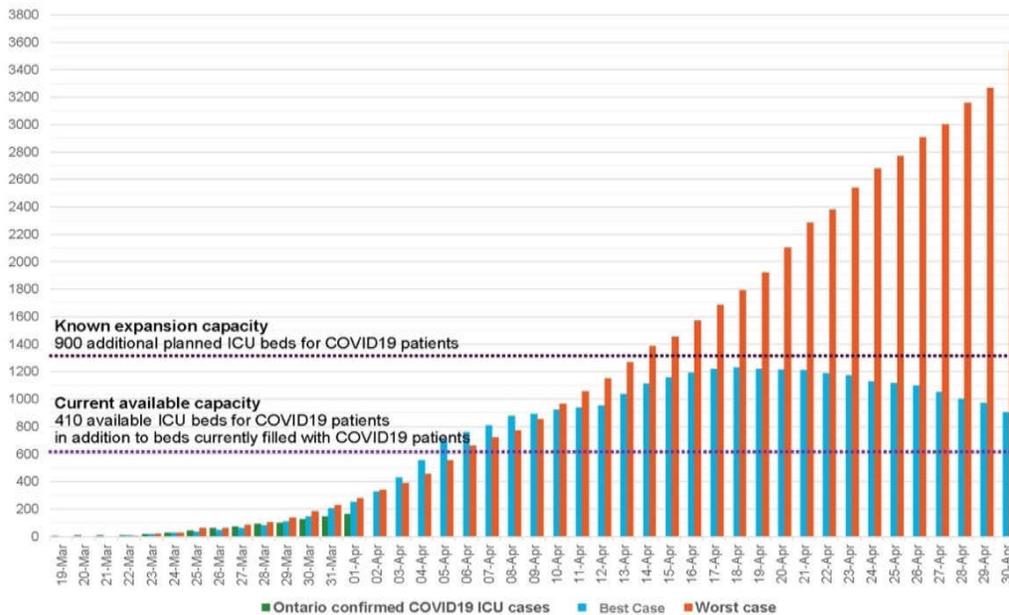
¹⁰³ “Ontario Provides Full Transparency”

¹⁰⁴ “Ontario Provides Full Transparency”

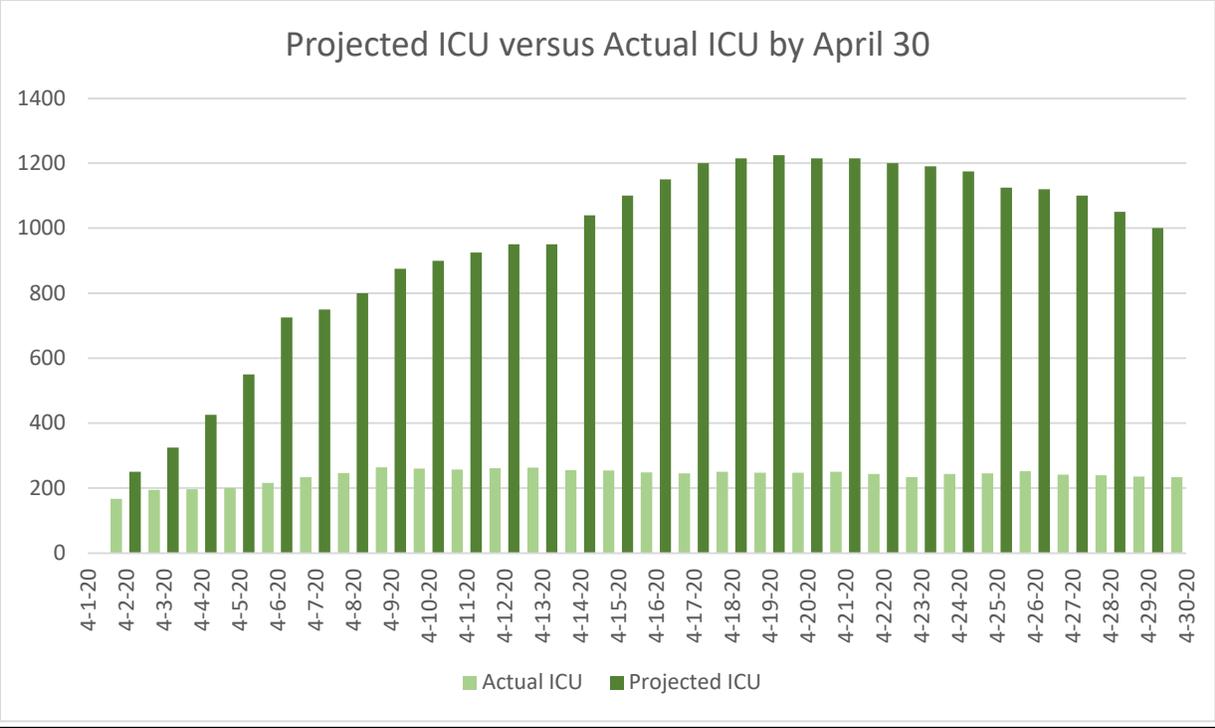
projected under *full future intervention*), it seems like Ontario did not ever implement *full future intervention*-type measures. So, it does seem like this model overpredicted total cases by approximately 500% (80,000 projected /16,187 actual).

This April 3 model also projects total required ICU beds under best-case and worst-case scenarios.¹⁰⁵ Predicting more than 1,200 ICU under the best case scenario with a peak of ICU on April 18 and more than 3,500 cases under the worst case scenario, the Ontario Government planned to have built an additional 900 ICU beds for COVID-19 patients by April 30. On April 18, however, there were only 197 persons in ICU beds, and at no time have there been more than 264 persons in ICU beds for COVID-19 infections in Ontario. This model overpredicts total ICU by approximately 500%. The graphs below depict the Command Table’s ICU projections and the actual ICU numbers for April 2 to 30.

Ontario ICU Capacity for COVID-19



¹⁰⁵ It is unclear whether the “best case” and “worst case” scenarios map onto the “full future intervention” and “no intervention” scenarios. In this paper, we assume that they do.



Command Table’s April 20 COVID-19 Modelling

On April 20, the Command Table released its updated COVID-19 modelling to the public, stating that the “total cumulative cases for span of outbreak now likely less than 20,000, substantially lower than worst case (300,000) or even expected case (80,000) projected by previous models,”¹⁰⁶ and that “projections now show Ontario’s COVID-19 outbreak behaving more like best case.”¹⁰⁷ Unfortunately, this updated model has proven to be little better than its predecessor. For instance, while this model predicts 20,000 confirmed cases, there were 28,263 cases as of June 1.¹⁰⁸ The projections regarding required ICU beds were little better.

The Command Table projected a peak of 715 required ICU beds on April 7 under the *medium scenario* and a peak of 387 required ICU beds on April 14 under the *best-case scenario*. Unfortunately, where this model describes past ICU capacity requirements, it is incorrect; where

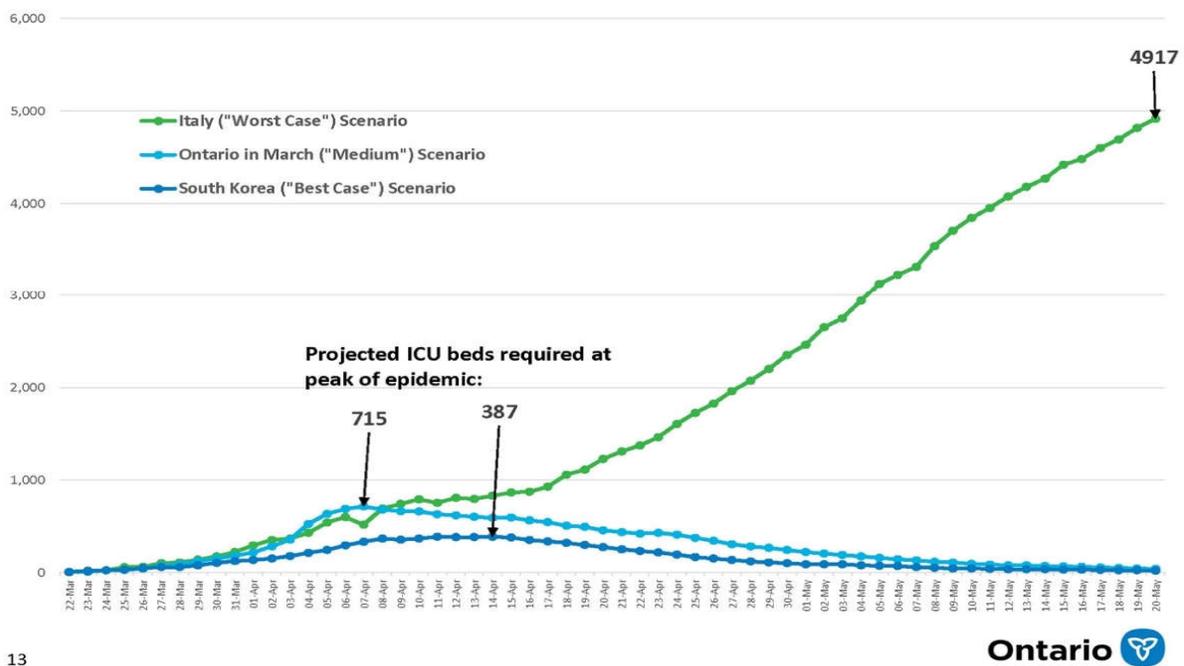
¹⁰⁶ See April 20 Model at page 5

¹⁰⁷ See April 20 Model at page 5

¹⁰⁸ “Status of COVID-19 cases in Ontario.” Ontario Data Catalogue. Accessed June 2, 2020. <https://data.ontario.ca/dataset/status-of-covid-19-cases-in-ontario>

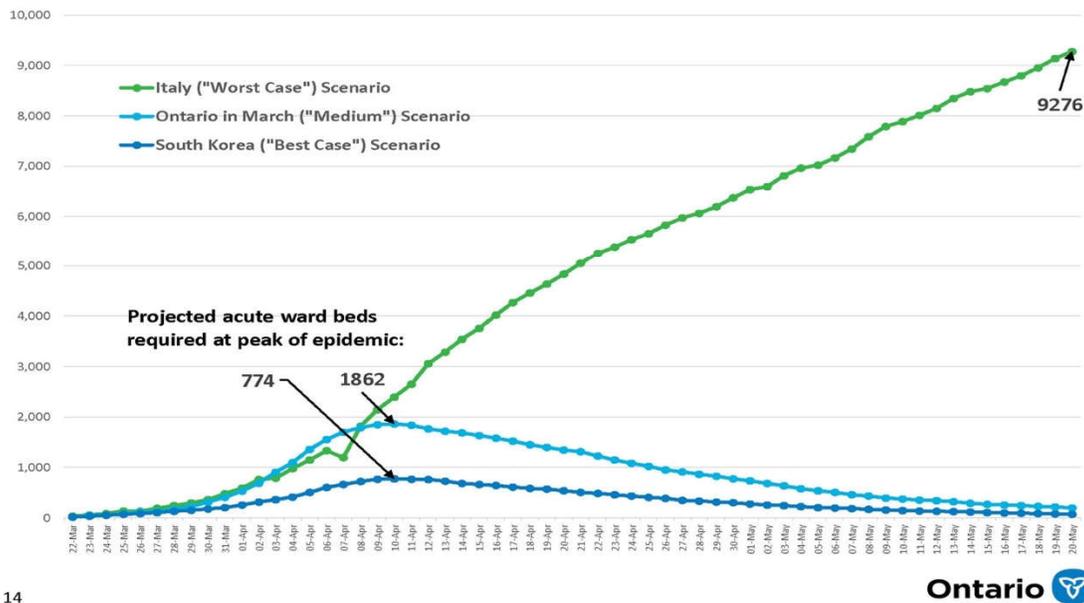
this model projects future ICU capacity requirements, it is inaccurate. At the time of writing, there were only 247 patients in ICU beds; at the peak on April 9, there were only 264 (68.2% of projected). Yet this model predicts 387 required beds on April 14. For May 20 (beyond which this model does not predict), the Command Table predicted approximately 0 required ICU beds under both *medium* and *best-case scenarios*. There were 160 persons in ICU beds with COVID-19 on May 20. Which assumptions informed this modelling?

Projecting COVID-19 Demand for Health Care Resources in Ontario: ICU Beds Required



Regarding projected required hospital beds, the Command Table projected a peak of 1,862 required acute ward beds on April 10 under the *medium scenario* and a peak of 774 required beds on April 10 under the *best-case scenario*. On April 10, there were 673 hospitalized persons. It is unclear why a model published on April 20 overstated the hospitalizations for April 10 by 101 persons. For May 20, the Command Table predicted approximately 100-250 hospitalizations, yet there were 991 hospitalized persons. Again, it is unclear which assumptions informed this modelling.

Projecting COVID-19 Demand for Health Care Resources in Ontario: Acute Ward Beds Required



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COVID-19 Modelling and demonstrable justification

In summary, these models have failed to predict the number of cases, hospitalizations, and ICU-admissions in Ontario with any accuracy. The number of total cases and required ICU beds were overpredicted by approximately 500% in the April 3 model. It is unclear how CFRs are calculated, and no appropriate definitions are attached to *current intervention* and *full future intervention scenarios*. The number of total cases, required acute ward beds, and required ICU beds were completely inaccurate in the April 20 model. Again, it is important to remember that there have been no more than 264 persons in ICU beds at any time throughout the pandemic.¹⁰⁹ Despite the Ontario Government’s claim that these models offered “full transparency”¹¹⁰ to Ontarians, they are hardly transparent or accurate.

¹⁰⁹ “Status of COVID-19 cases in Ontario.” Ontario Data Catalogue. Accessed June 2, 2020. <https://data.ontario.ca/dataset/status-of-covid-19-cases-in-ontario>

¹¹⁰ “Ontario Provides Full Transparency by Releasing COVID-19.” Ontario Newsroom. April 3, 2020. <https://news.ontario.ca/opo/en/2020/04/ontario-provides-full-transparency-by-releasing-covid-19-modelling.html>

To the extent that these models are neither transparent nor accurate, they do not function as demonstrable justification for the restrictions on *Charter* freedoms that have been imposed by the Ontario Government. It is worth noting that a considerable number of lockdown measures were implemented *weeks prior to the release of any model*, as described in a previous section of this document. It is therefore unclear what justification supported these measures, which otherwise constitute unreasonable and unacceptable limitations on Ontarians' *Charter* rights and freedoms. The citizen whose *Charter* freedoms are violated does not bear the burden of acquiring data, creating modelling scenarios, exploring and tabulating negative impacts from the lockdown, or providing a cost-benefit analysis. The *Charter* appropriately and deliberately places this responsibility instead on the entity that violates our freedoms: the government.

Furthermore, it is also worth noting that these models do not predict for total cases, hospitalizations, or ICU-admissions past May 20. In the absence of any model describing future, anticipated hospitalizations, no justification underlies any further extensions to lockdown measures in June or beyond June. If the purpose of emergency orders was to contain the virus in order that hospitals would have sufficient capacity for COVID-19 patients, and if there exists no model indicating that emergency orders continue to be necessary to preserve this capacity, then any extension to emergency orders is not demonstrably justified in a free and democratic society. Despite this, the Ontario Government has again extended emergency orders to June 30 *in the absence of any justification*.

Looking Forward

In March, the Ontario Government began to violate the *Charter* freedoms of Ontarians to move, travel, assemble, associate, and worship. We have argued that these limitations were not reasonable or “demonstrably justified” and thus not in keeping with the *Charter*. The daily routines of millions of Ontarians, in particular their ability to earn a living to support themselves and their loved ones, were affected when the most significant centres of the public sphere were ordered to close. The daily ebb and flow of economic activity was likewise devastated when many important centres of economic activity were ordered to close. And tens of thousands of Ontarians were affected when hospitals were made available to COVID-19 patients only. Regarding this last, it will be months or even years before we know the full death toll of the

decision to cancel these surgeries, after counting all the cardiac patients who died while waiting for heart surgery, and after counting additional cancer deaths caused by lack of timely diagnosis and treatment. Meanwhile, hospitals have not been operating at anything approaching full capacity. And all of this under the supposed justification of COVID-19 models that have proven ambiguous and inaccurate in their most important aspects.

The Ontario Government must now respond to a crucial question: in June of 2020, can the Ontario Government demonstrably justify that schools, universities, many businesses and recreational facilities, churches, mosques, temples, and synagogues should remain fully or even partially closed? Are strict and costly conditions for opening based on facts and evidence, or on speculation and unfounded fear? When will the Ontario Government stop violating *Charter* freedoms by imposing and enforcing lockdown measures that appear to have caused more harm than good?

In April, the Command Table “held a focused discussion to refine specific longer-term, staged targets for each stream of work so we can measure progress against defined outcomes over the course of this pandemic.”¹¹¹ It cited spread of disease and health care capacity as important indicators for whether emergency measures could be relaxed and businesses, services, and public spaces could be opened. On April 27, the Command Table stated¹¹² that if the base reproduction number (i.e., the number of additional persons infected by any infected person) became less than 1.0, then lockdown measures could be relaxed. Moreover, it stated that if 90% of new COVID-19 contacts could be reached by health officials within 24 hours, then lockdown measures could be relaxed.

There are other indicators, but these are not cited. Ontarians deserve to know when, given success across all indicators, emergency orders and lockdown measures will be lifted. But this is impossible to know if some indicators are not cited. For instance, it is possible that, while Ontarians are successful across the cited indicators (reproduction number and contact tracing), the government could still decide to enforce emergency measures *given failures across some*

¹¹¹ “Update on COVID-19 Preparations and Actions.” Ontario Minister of Health. April 10, 2020. http://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/memos/DM_OH_CMOH_memo_COVID19%20update_Apr_10_2020.pdf

¹¹² “Update on COVID-19 Preparations and Actions.” Ontario Minister of Health. April 27, 2020. http://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/memos/DM_OH_CMOH_memo_COVID19_Apr_27_2020.pdf

other, unknown indicators. Without knowledge of these indicators, Ontarians cannot keep their governments accountable for continued declarations of emergency orders.

The *Charter* requires the Ontario Government to consider carefully and thoughtfully the full impact of lockdown measures, including all the social and economic harm, and adverse impact on the physical and mental health of Ontarians. The *Charter* requires actual evidence – not mere speculation, theorizing or assertions – to prove that lockdown measures achieved results that other measures (which do not violate *Charter* freedoms) would not have achieved.

While lockdown measures were presumably imposed with the good intention of saving lives, good intentions do not meet the *Charter*'s test of demonstrable justification. The *Charter* places the onus on the Ontario Government to show that its *Charter*-violating measures *actually* preserved the most lives possible, and that lockdown measures did not inadvertently harm more lives than they saved. The Ontario Government must therefore consider – carefully and comprehensively – how many lives are being lost or negatively impacted by the lockdown measures. The Ontario Government certainly has sufficient resources to monitor and track the positive and negative impacts of government policies on Ontarians. If the Ontario Government undertakes this task, it will at least fulfil its *Charter* obligation to calculate, analyze, and monitor the harms that have been, are being, and will be caused by lockdown measures.

Authorship

This paper was researched and written by the Justice Centre's staff lawyers and paralegals, and Medical Doctors.

Appendix: Command Table COVID-19 Modelling



COVID-19 Modelling

April 3, 2020

COVID-19 Update: Today's Presentation

- The information provided in this presentation was developed by several experts at Ontario Health, Public Health Ontario and researchers at Ontario universities, led by the COVID-19 Command Table.
- The objective of today's presentation is to share the modelling and projection data that the Command Table has been using to inform our work, and advising government on their response to COVID-19.
- We feel it is important to be transparent with the public about the challenges we are facing, and the important work we all need to do to flatten the curve.
- How this outbreak unfolds is in the hands of the public, in all of your hands – we can change the outcomes by how we all stay at home and physically distance ourselves.
- Recognizing that we get new information about this outbreak on a daily basis, we will continue to refine our models.
- Our public health measures so far have made a significant difference and we need everyone to stay focused on these in the weeks ahead: stay home, stop the spread, stay safe.

Current Status

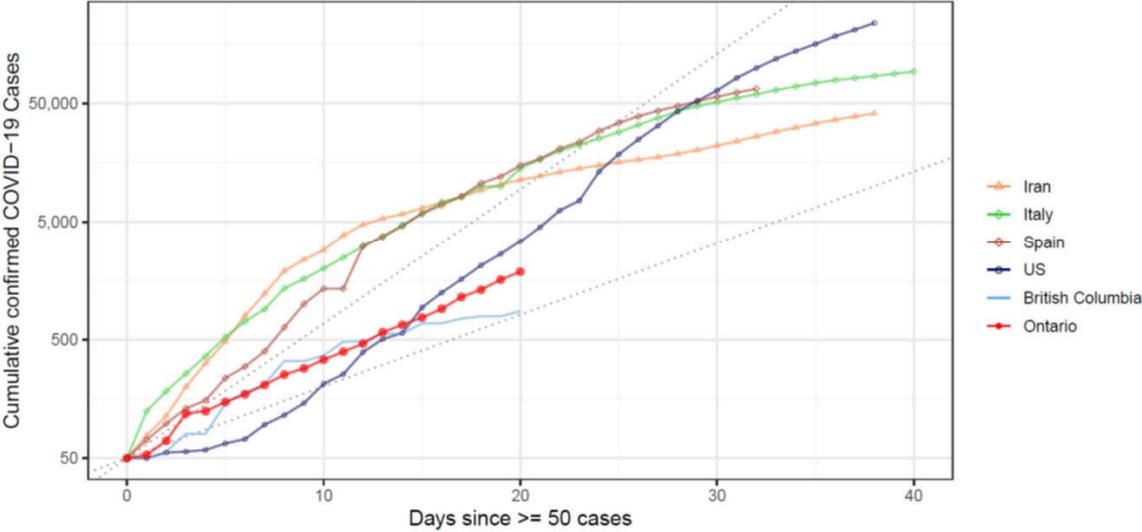
COVID-19: Cases and Deaths by Age Group (January 15 to April 2, 2020)

Age Group	Cases	Deaths	Case Fatality Ratio (%)
19 and under	82	0	0
20-39	945	0	0
40-59	1,178	7	0.6
60-79	821	24	2.9
80 and over	226	36	15.9
Unknown	3	0	0
Total	3,255	67	2.1

Data Source: integrated Public Health Information System (iPHIS). Data extracted April 2, 2020 at 4pm



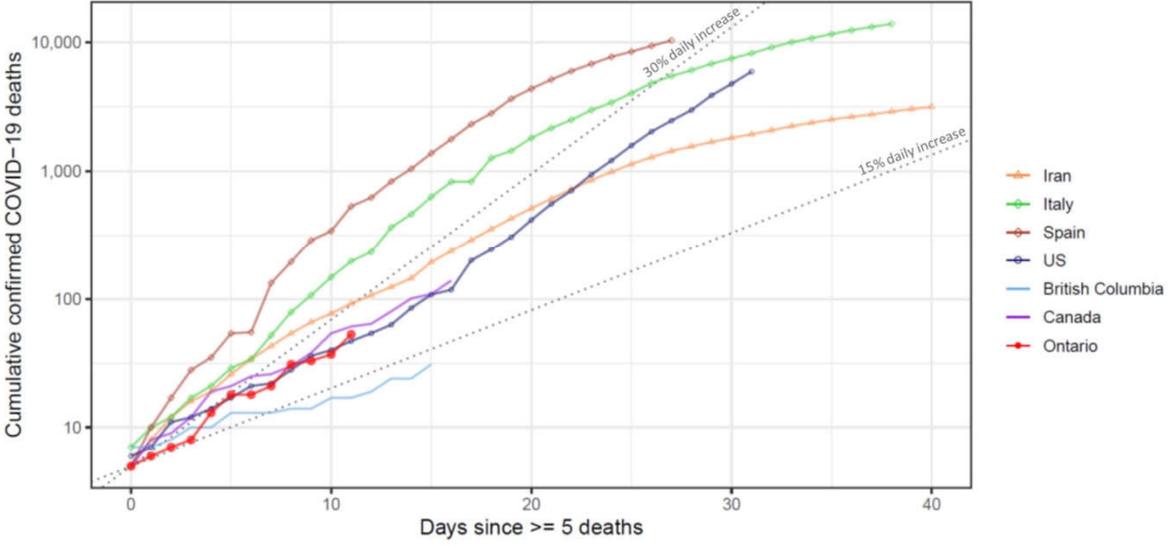
COVID-19: Cases in Ontario and Other Jurisdictions



Source: Johns Hopkins University, Centre for System Science and Engineering. Accessed April 1, 2020



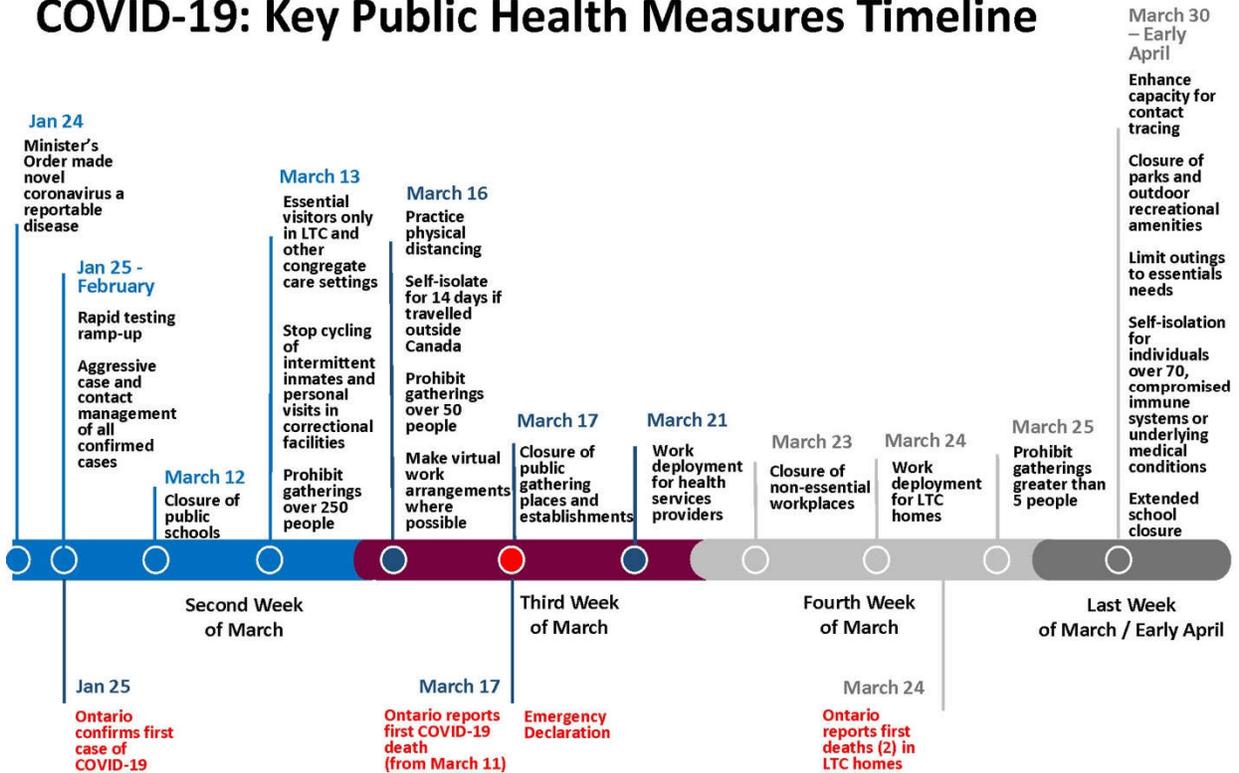
COVID-19: Deaths in Ontario and Other Jurisdictions



Source: Johns Hopkins University, Centre for System Science and Engineering. Accessed April 1, 2020



COVID-19: Key Public Health Measures Timeline

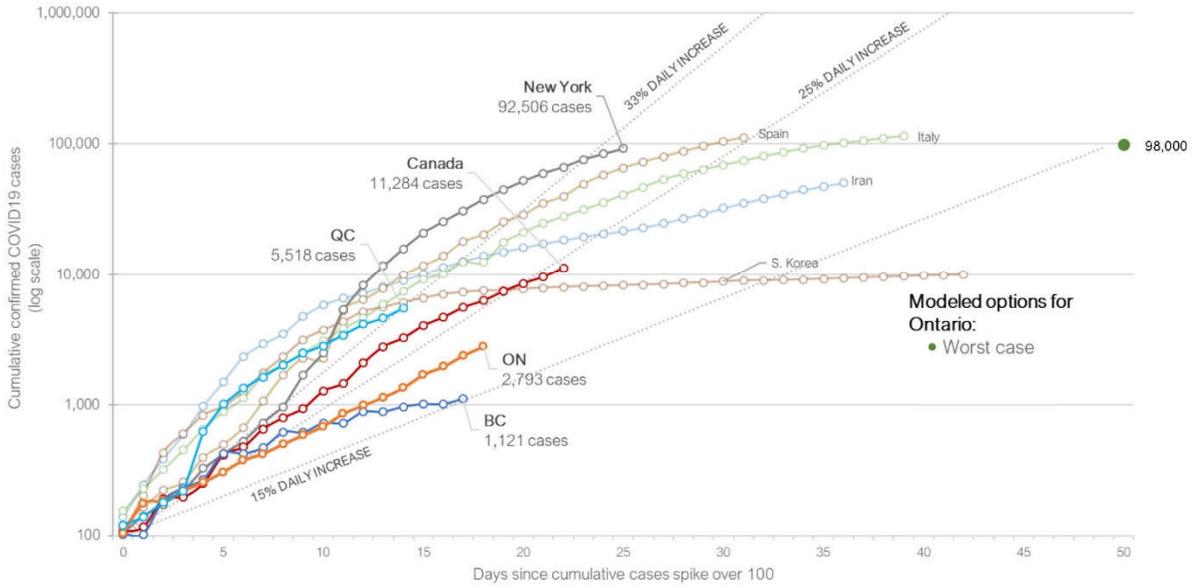


Future Outlook

COVID-19: Using Models to Inform Ontario's Planning

- Models are used to help plan for what could happen.
- As with any model, the farther out predicted, the more uncertainty there is in the predictions.
- There is more confidence in the projections for the next 30 days than in the longer term projections.
- Assumptions were used to inform the model.
- Experts modelled how the disease spreads based on observed data and what is known from other countries.
- Any benefit seen in the model from improved public health measures assumes people follow those measures.
- If there are people with COVID-19 infections moving between health care facilities, there could be larger outbreaks.

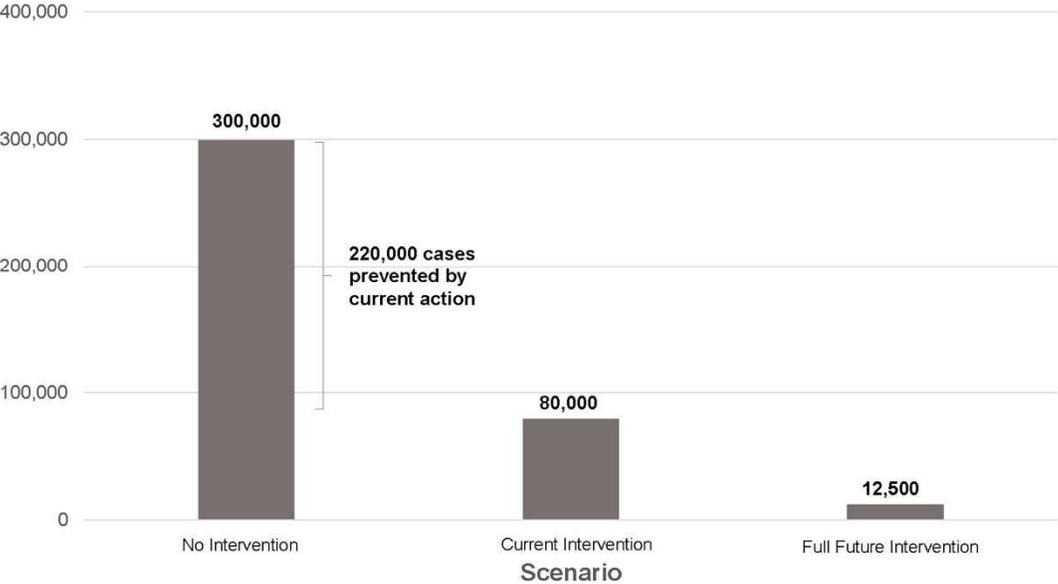
Cumulative Confirmed COVID-19 Cases, Number of Days since the 100th Case



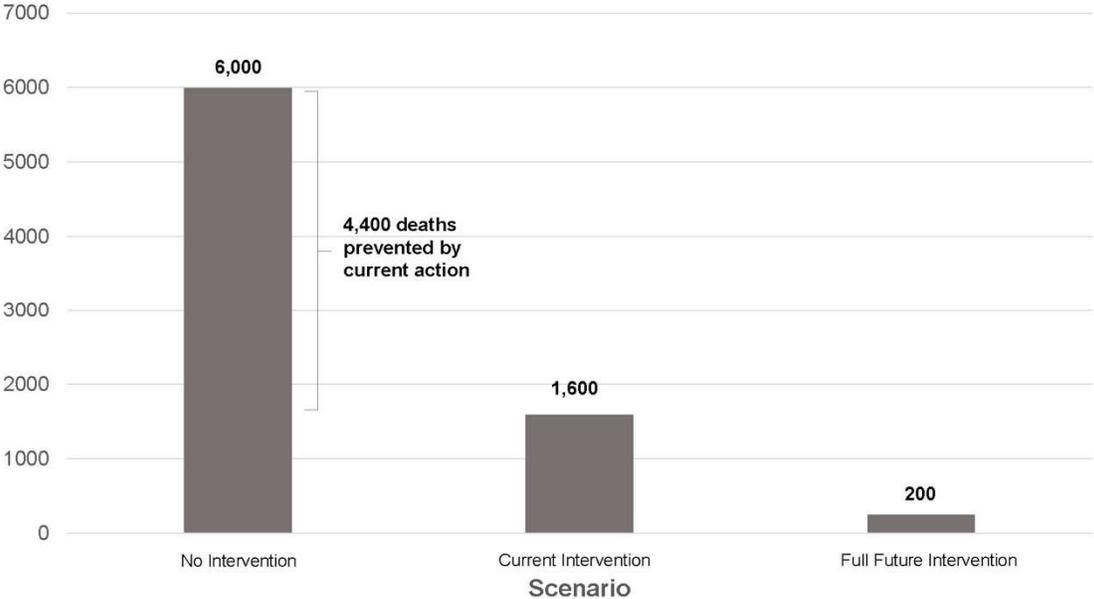
Data from: Dong, E., Du, H., & Gardner, L. (2020). An interactive web-based dashboard to track COVID-19 in real time. *The Lancet Infectious Diseases*, as of April 2, 2020. Data compiled by Johns Hopkins University from the following sources: [WHO](#), [CDC](#), [ECDC](#), [NHC](#), [DXY](#), [1point3acres](#), [Worldometers.info](#), [BNO](#), state and national government health department, and local media reports.



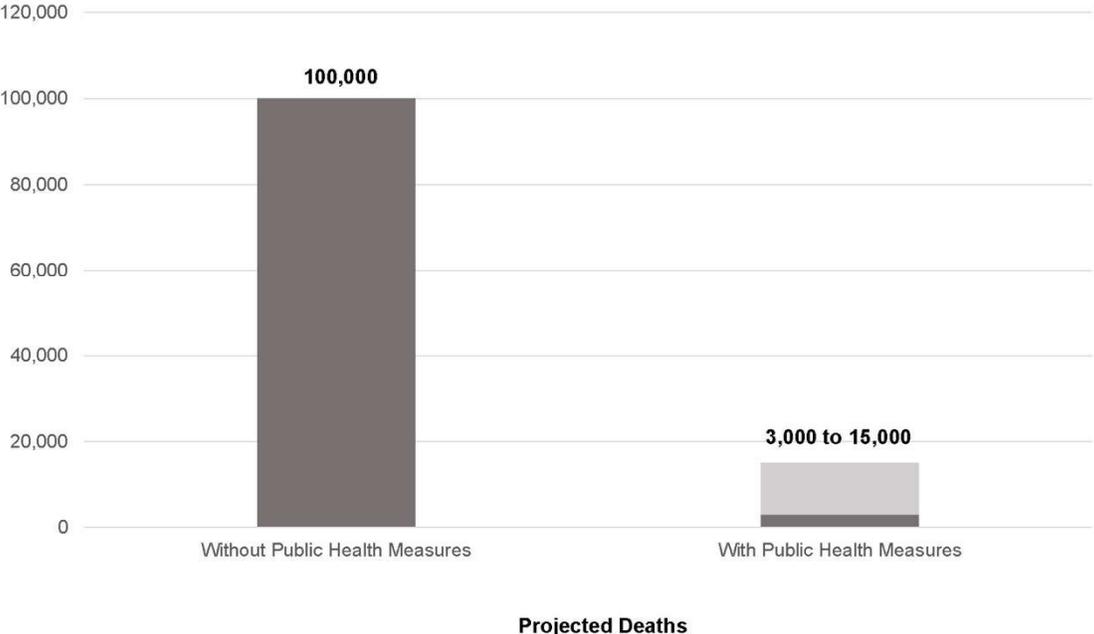
Projected Ontario Cases by April 30, 2020



Projected Ontario Deaths by April 30, 2020



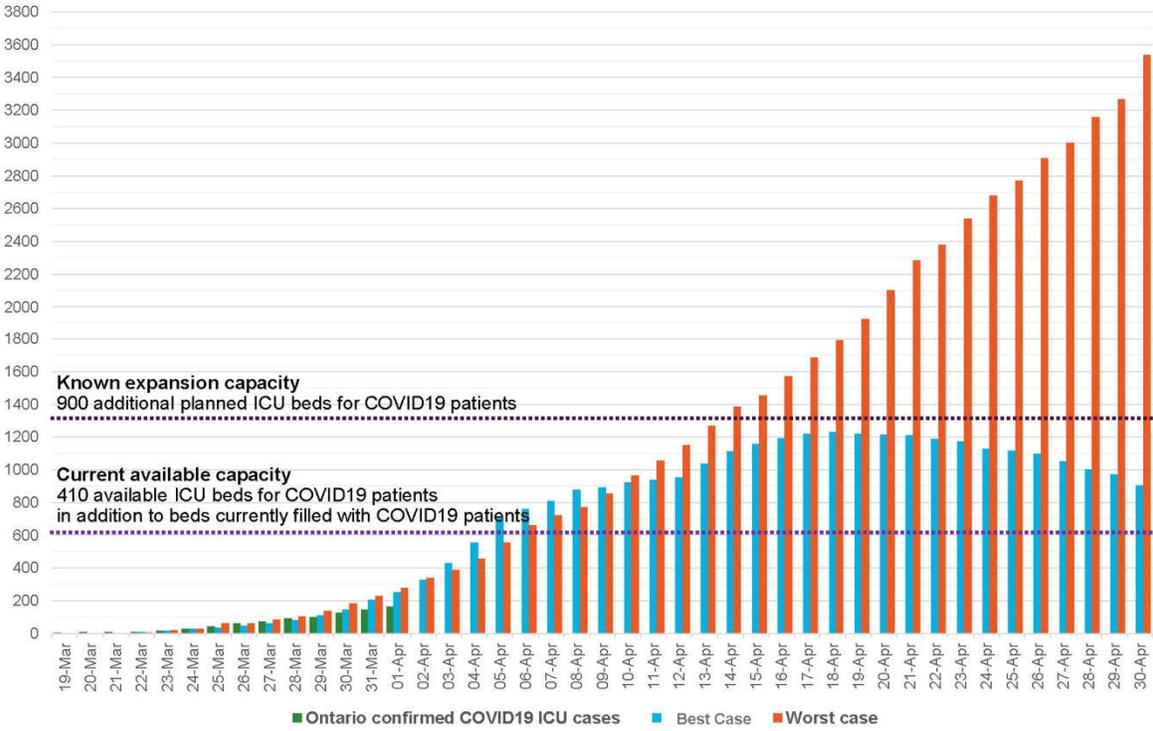
Projected Ontario Deaths over Course of Pandemic



Note: Range depends on implementation of maximum public health measures



Ontario ICU Capacity for COVID-19



Looking Ahead

COVID-19: Slowing the Spread

- We need you to help us change the outcomes for Ontarians by staying at home and physically distancing.
- Our public health measures so far have made a difference and we need everyone to stay focused on these: stay home, stop the spread, stay safe.
- We need everyone to help stop the spread so we all must continue to fully adhere to the public health measures that have been put in place. We want to avoid the health care system being overwhelmed and the consequences to Ontarians, as we have seen in other jurisdictions in Europe and in the United States.

COVID-19: Additional Public Health Measures

Immediate Focus

- Enhanced capacity for case and contact tracing is underway.
- Increased testing for COVID-19, with a focus on long-term care, retirement homes and other congregate settings.

Future Measures

- Reduce the number and types of essential workplaces.
- Enhance focus on enforcement and fines for non-compliance.
- Expand direction/guidance on physical distancing, including retail settings.
- Enhanced support for elderly, homeless and other vulnerable populations and communities.
- Consider entry restrictions in some communities including First Nations.
- Human resource management (movement of health care workers between settings).
- Use of technology to reinforce self-isolation (alerts).
- Additional public education and communication (shelter in place with limited exceptions).

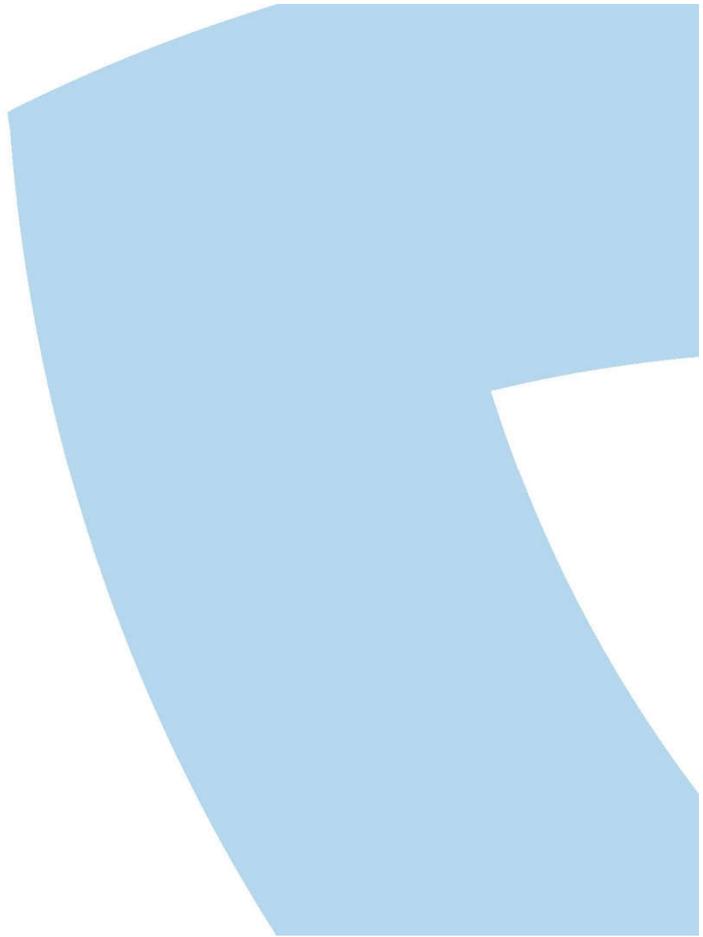
COVID-19: Modelling and Potential Scenarios

April 20, 2020

COVID-19 Update: Today's Presentation

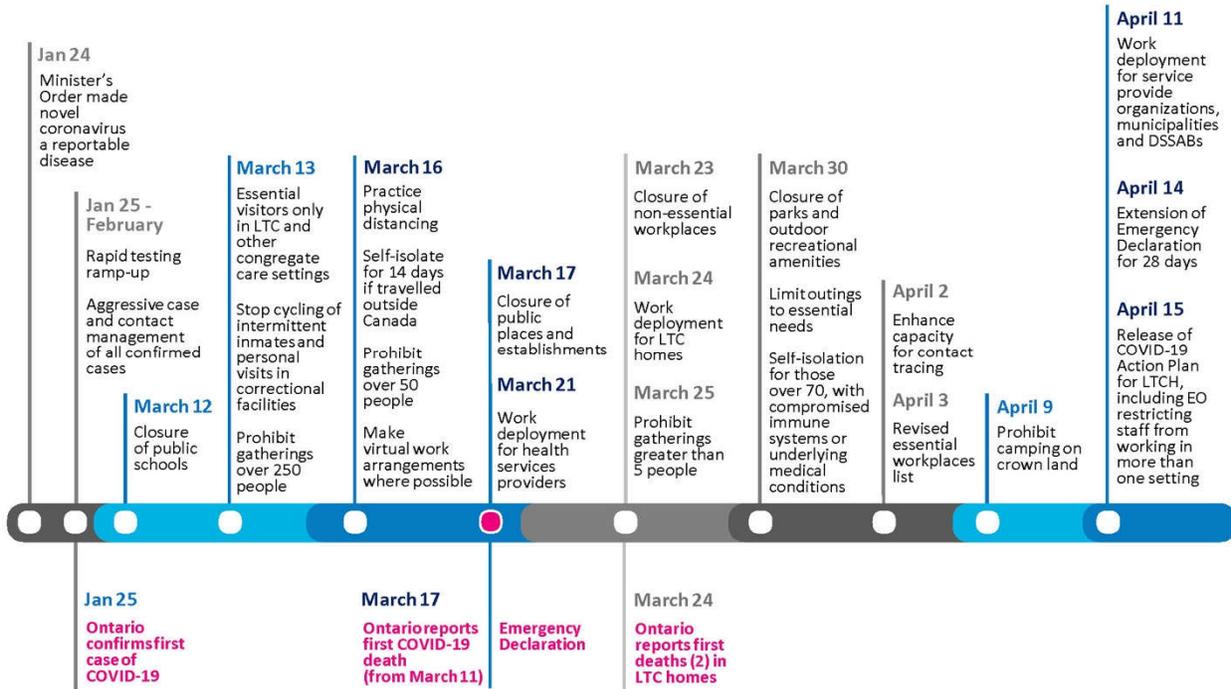
- The information and analysis provided was developed by several experts at Ontario Health, Public Health Ontario and researchers at Ontario universities, led and coordinated by the COVID-19 Command Table.
- Today's presentation will share the most up-to-date modelling and projections that Ontario's COVID-19 Command Table is using to inform the province's ongoing response.
- The government believes the public deserves to have access to the same information as it receives in regular briefings.
- Providing this information is key to ensuring continued transparency with the public about the current challenges that Ontario faces in dealing with COVID-19 and where there has been progress in flattening the curve.

Current Situation in Ontario



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COVID-19: Key Public Health Measures Timeline

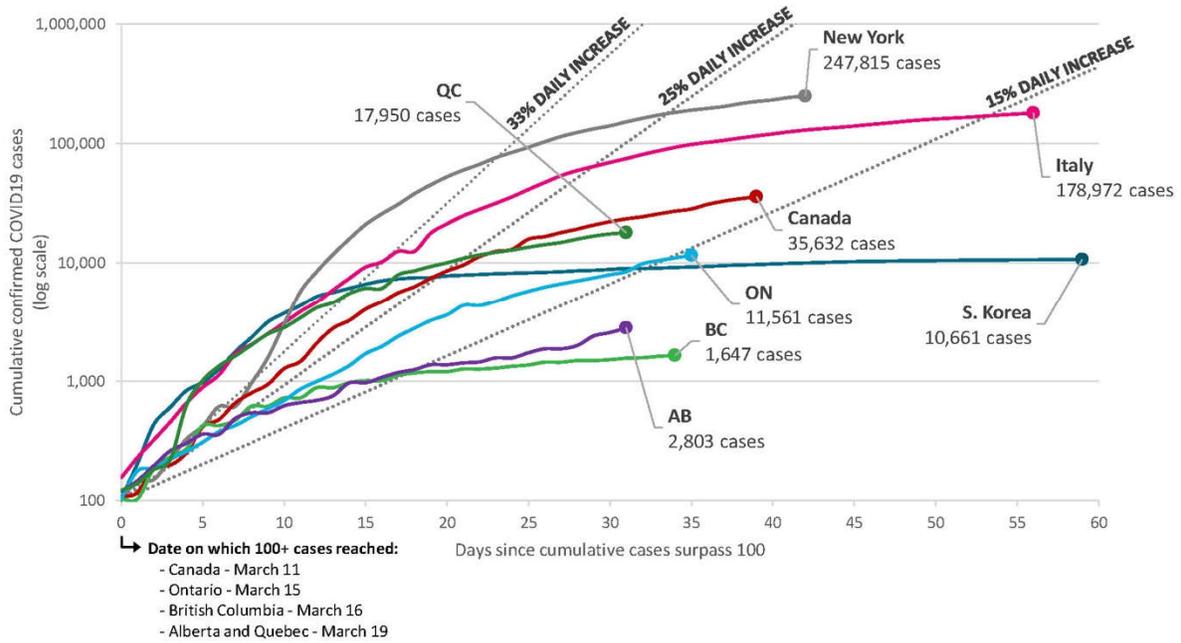


Current Status

- The wave of new community spread cases of COVID-19 in Ontario appears to have peaked.
- While earlier models predicted a peak in cases in May, public health interventions, including widespread adherence to physical distancing, have accelerated the peak to now. The sacrifices people are making to stay home and wash their hands are making a difference.
 - Peak is important because epidemics follow what is called Farr's Law, where epidemics have a symmetrical shape.
 - Total cumulative cases for span of the outbreak now likely less than 20,000, substantially lower than worst case (300,000) or even expected case (80,000) projected by previous models.
 - Projections now show Ontario's COVID-19 outbreak behaving more like best case.
- However, data shows that province is facing two different disease processes.
 - Community spread of COVID-19 seems to have peaked and is coming under control.
 - Spread in long-term care and other congregate settings seems to be growing.

Epidemic Curve: Cumulative confirmed COVID-19 cases, number of days since the 100th case

By country, including the Canadian provinces of Ontario, Alberta, British Columbia and Quebec



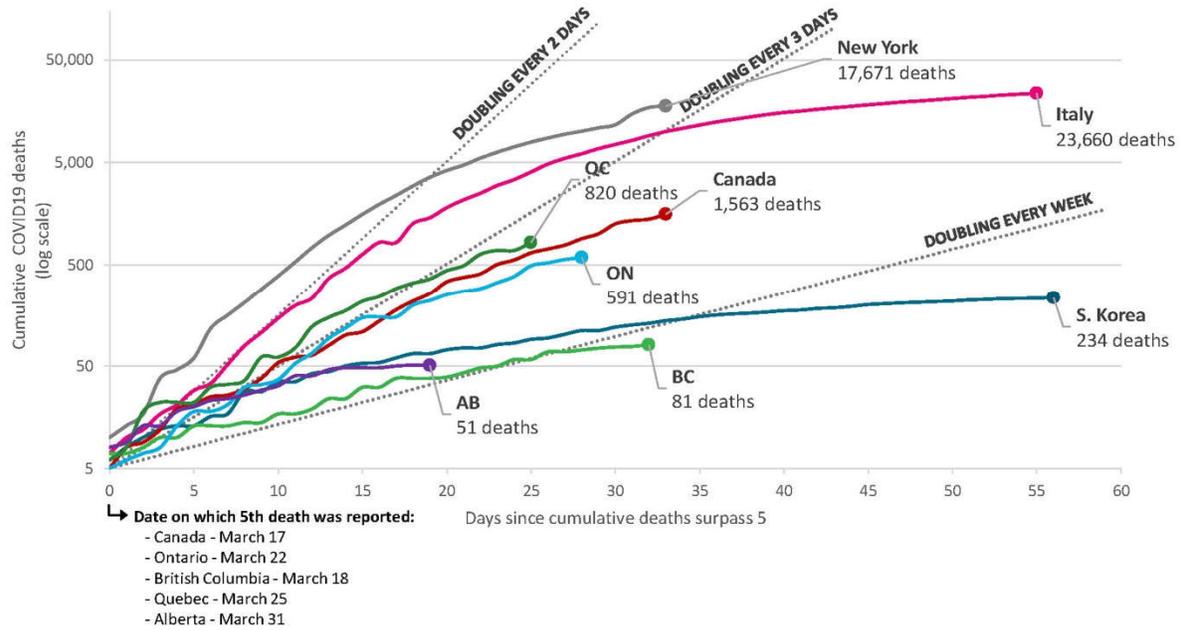
Data from: Dong, E., Du, H., & Gardner, L. (2020). An interactive web-based dashboard to track COVID-19 in real time. *The Lancet Infectious Diseases*, as of April 19, 2020.

6 Data compiled by Johns Hopkins University from the following sources: [WHO](#), [CDC](#), [ECDC](#), [NHC](#), [DXY](#), [1point3acres](#), [Worldometers.info](#), [BNO](#), state and national government health department, and local media reports.



Epidemic Curve: Cumulative COVID-19 deaths, number of days since the 5th death

By country, including the Canadian provinces of Ontario, Alberta, British Columbia and Quebec



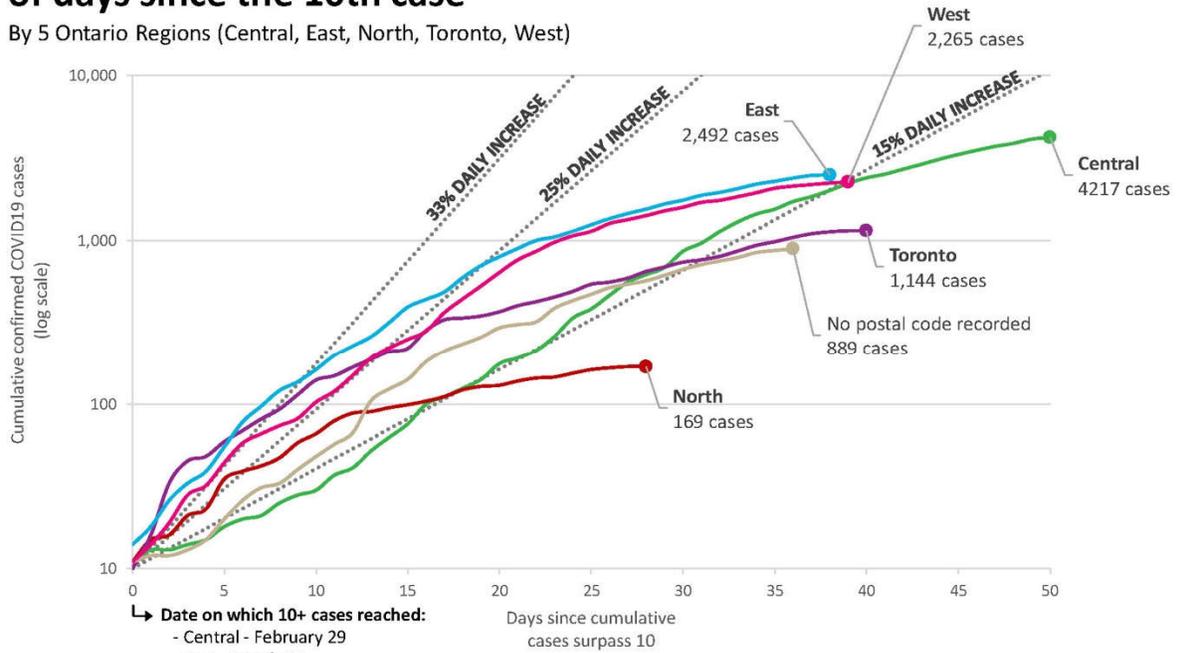
Data from: Dong, E., Du, H., & Gardner, L. (2020). An interactive web-based dashboard to track COVID-19 in real time. *The Lancet Infectious Diseases*, as of April 19, 2020.

7 Data compiled by Johns Hopkins University from the following sources: [WHO](#), [CDC](#), [ECDC](#), [NHC](#), [DXY](#), [1point3acres](#), [Worldometers.info](#), [BNO](#), state and national government health department, and local media reports.



Epidemic Curve: Cumulative confirmed cases, number of days since the 10th case

By 5 Ontario Regions (Central, East, North, Toronto, West)



↳ Date on which 10+ cases reached:

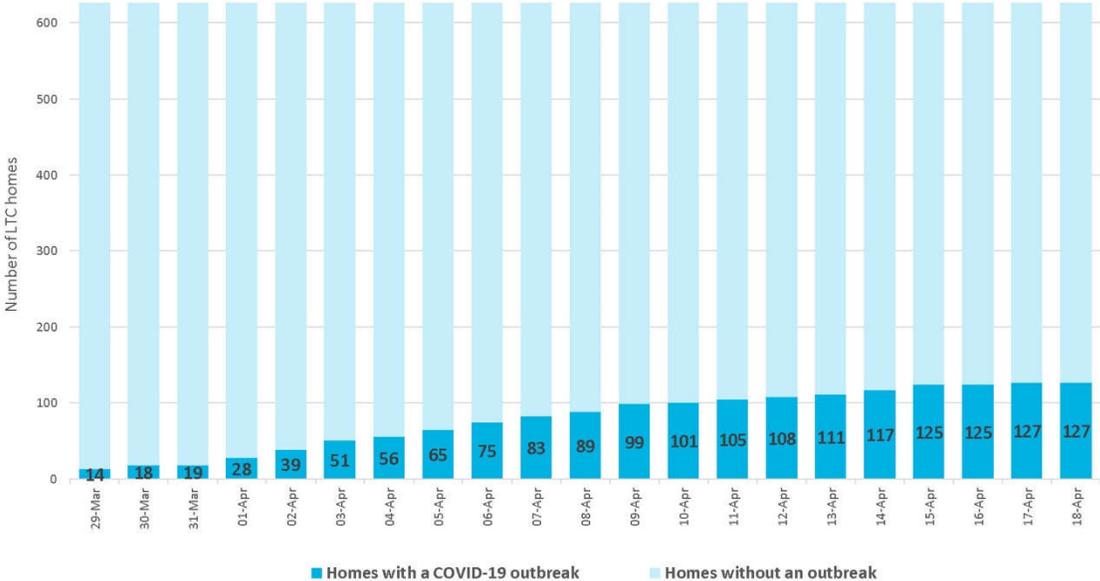
- Central - February 29
- East - March 12
- North - March 23
- Toronto - March 11
- West - March 11
- Ontario - February 28

8

Data source: Integrated Public Health Information System, as of April 19 (8pm)



LTC Snapshot: Cumulative long-term care homes with a COVID-19 outbreak



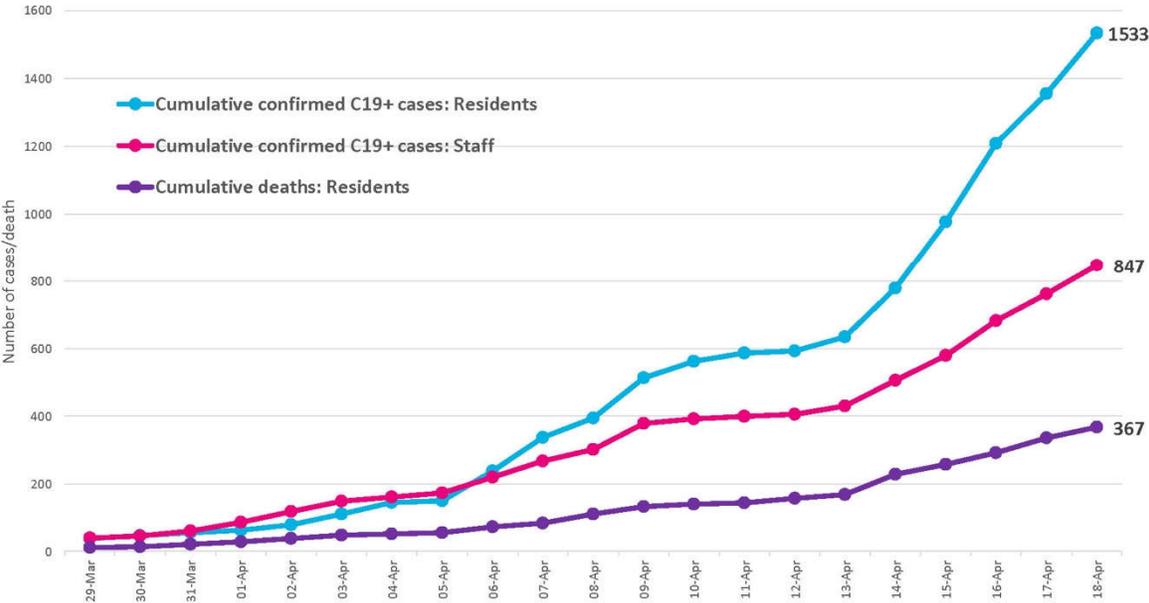
9

Data source: LTC COVID-19 daily report via COVID-19 dashboard. All data current as of April 19.



LTC Snapshot:

Cumulative resident COVID-19 cases, staff COVID-19 cases and resident deaths



10

Data source: LTC COVID-19 daily report via COVID-19 dashboard. All data current as of April 19.



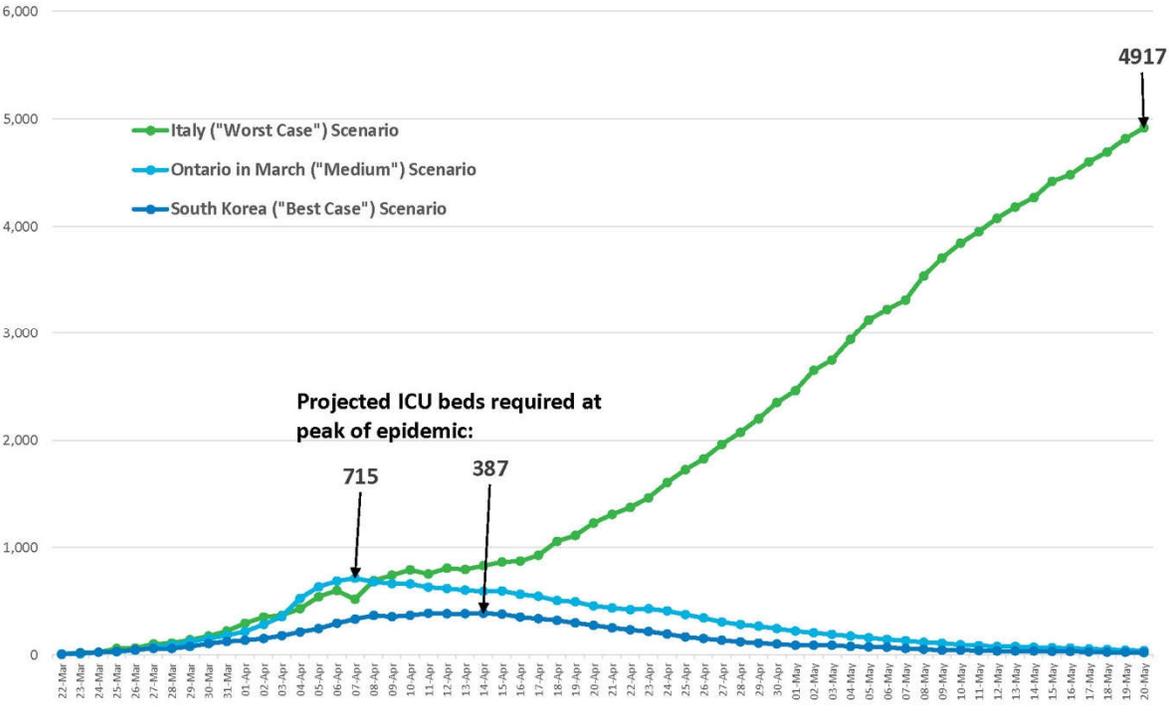


Modelling: Continuing to Inform Ontario's Planning

Hospital Demand Modeling Scenarios

- The projections presented here draw from COVID-19 health system impact models developed by a multidisciplinary collaborative of researchers and clinician scientists.
- Three scenarios were modeled:
 - **South Korea (“Best Case”)**: Restrained growth in infected cases slowed early through impact of public health measures.
 - **Ontario in March (“Medium Case”)**: Moderate growth in infected cases slowed later on through impact of public health measures.
 - **Italy (“Worst Case”)**: Moderate then rapid growth in COVID-19 cases that continue to climb at an exponential rate without public health measures.
- Based on recent data, if current measures restricting spread of the disease remain in place, **Ontario appears to be tracking toward the South Korea (“best case”) scenario.**
- The rate of growth in COVID-19 hospitalizations has slowed, while the number of COVID-19 patients in intensive care units has remained relatively constant over the past week.
- These models focus on predicting COVID-19 requirements for hospital intensive care unit and ward beds. They are not designed to predict impacts on community services such as long-term care and retirement homes.
- The recent experience in long-term care demonstrates that the disease multiplies rapidly in congregate settings, emphasizing the need for redoubled efforts to restrict spread of COVID-19.

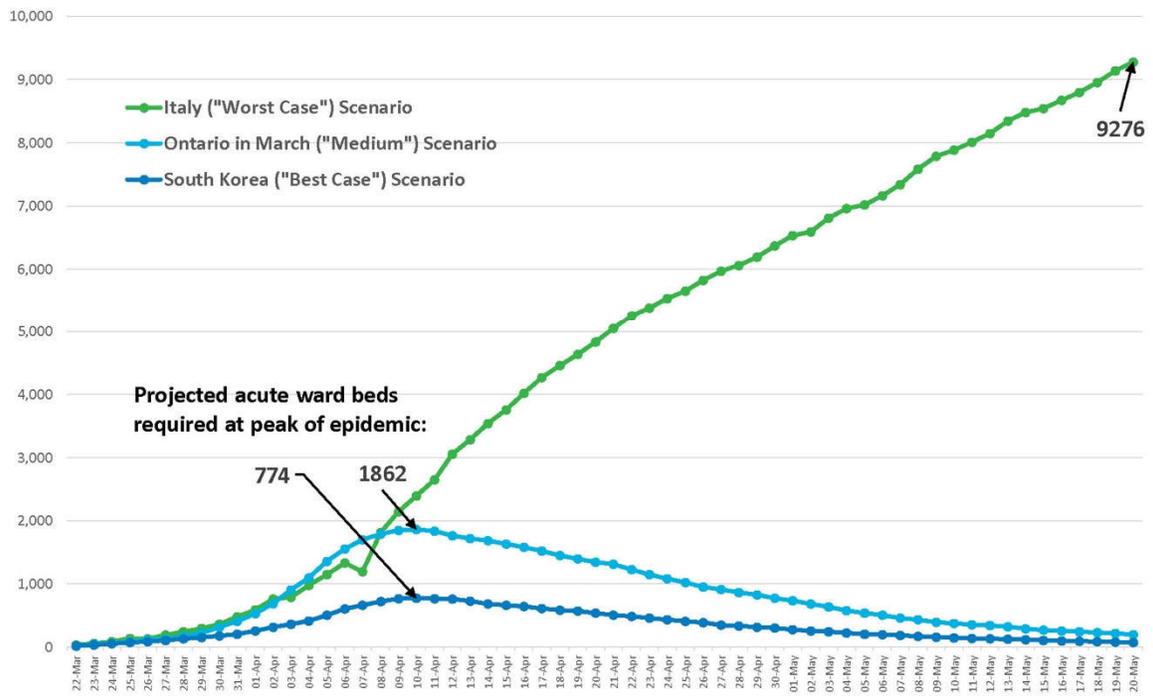
Projecting COVID-19 Demand for Health Care Resources in Ontario: ICU Beds Required



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Projecting COVID-19 Demand for Health Care Resources in Ontario: Acute Ward Beds Required

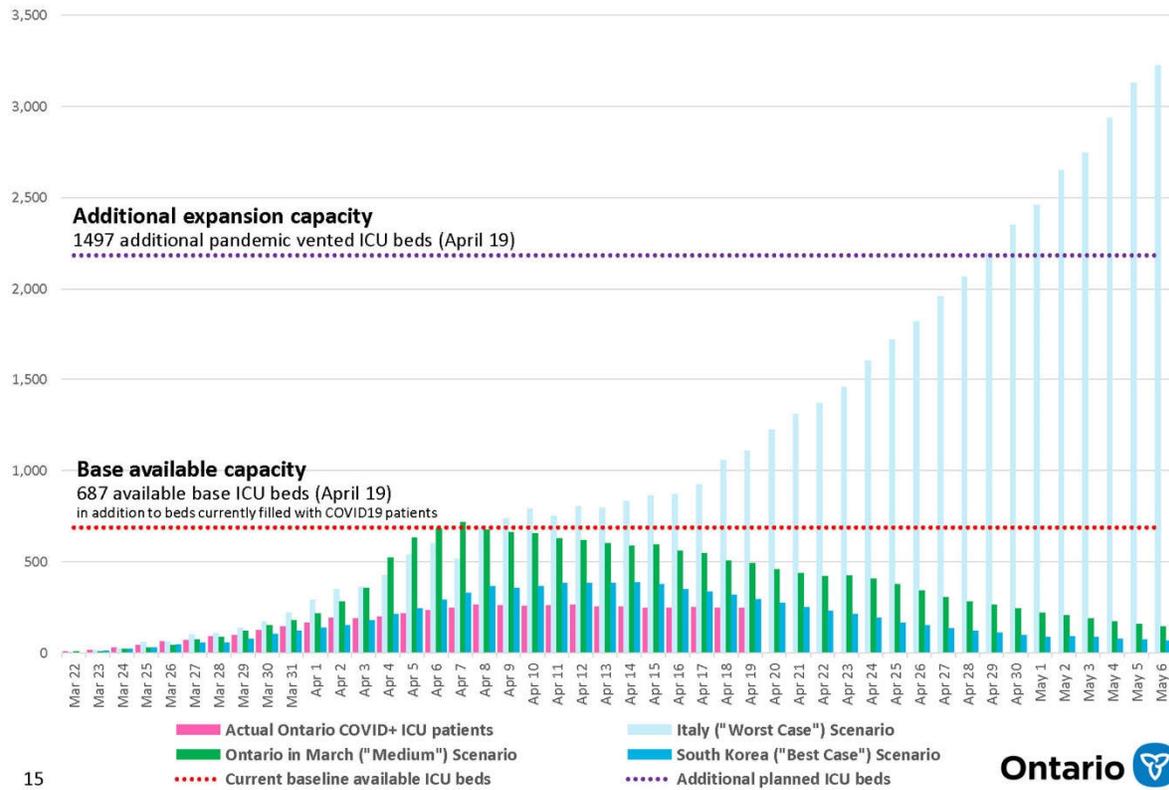


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How are we doing so far?

COVID-19 patients in Ontario ICU beds each day vs. predicted ICU bed demands in 3 model scenarios



Looking Ahead

16

Prevention and Disease Management in Long-Term Care Homes

- Ontario is urgently implementing the COVID-19 Action Plan for Protecting Long-Term Care Homes:
 - **Aggressive Testing, Screening, and Surveillance:** Enhancing testing for symptomatic residents and staff and those who have been in contact with persons confirmed to have COVID-19; expanding screening to include more asymptomatic contacts of confirmed cases; and leveraging surveillance tools to enable care providers to move proactively against the disease.
 - **Managing Outbreaks and Spread of the Disease:** Supporting long-term care homes with public health and infection control expertise to contain and prevent outbreaks; providing additional training and support for current staff working in outbreak conditions.
 - **Growing our Heroic Long-Term Care Workforce:** Redeploying staff from hospitals and home and community care to support the long-term care home workforce and respond to outbreaks, alongside intensive on-going recruitment initiatives.
- Issued an emergency order directing long-term care employers to ensure their employees, including registered nurses, registered practical nurses, personal support workers, kitchen and cleaning staff only work in one long-term care home.
- Enhanced guidance on personal protective equipment requiring staff to always wear appropriate protection, supporting by priority distribution to homes.

Continued Adherence to Public Health Measures

- Continued implementation of enhanced public health measures to stop the spread of COVID-19 and flatten the curve:
 - Extended the declaration of emergency to at least May 12 to support existing public health measures in place, including restricting social gatherings to five people and the closure of all non-essential workplaces, outdoor recreational amenities, public places and bars and restaurants, except those that provide takeout and delivery.
 - Implementing the next phase of the testing strategy to expand testing to include several priority groups to identify and contain new cases, especially among vulnerable populations.
 - Extending actions taken in long-term care homes to retirement homes and other congregate settings, including group homes and homeless shelters, to further protect vulnerable populations.
- Public should continue to stay home and maintain physical distancing to ensure the province continues to stop the spread of COVID-19 and flatten the curve. These actions are making a difference and people need to stay the course and stay strong in order to save lives.