



Justice Centre for Constitutional Freedoms

The Unjustified Persistence of Lockdowns

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

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Introduction

The problems and challenges of COVID-19 cannot be reduced to their medical aspects only. Bound up with the goals of reducing transmission and preserving healthcare system capacity are the equally important questions of *Charter* rights violations, economic sustainability, and the well-being of Saskatchewanians more generally. A parallel question concerns the ability of the Saskatchewan Government to maintain a tax-base sufficient to sustain its healthcare system, given the recent and severe economic contraction. These questions merit answers, and the government must now consider the negative impacts of lockdown measures on the lives, health, economy, and well-being of Saskatchewanians.

In the following pages, we describe the Saskatchewan Government's response to COVID-19 in the form of lockdown measures that have impacted all facets of society. We describe the impacts of these measures on various economic indicators and on healthcare accessibility. We then analyze the Saskatchewan Health Authority's COVID-19 modelling documents, which were released to the public on April 8 and 28. We consider all these as they pertain to the *Canadian Charter of Rights and Freedoms*.¹

There is little doubt that government restrictions on citizens' freedom to move, travel, associate, assemble and worship are violations of the rights and freedoms protected by the *Charter*. The Saskatchewan Government's lockdown measures of enforced social distancing and isolation violate our *Charter* freedoms of association,² peaceful assembly,³ mobility and travel,⁴ liberty,⁵ security of the person,⁶ and conscience and religion.⁷ Even in September of 2020, these measures continue to have a severe and negative impact on Saskatchewanians' access to healthcare, which violates the *Charter* section 7 rights to life and security of the person.⁸ Finally, these measures have had, and will continue to have, a severe impact on Saskatchewan's economy, with a predictable negative impact on the Province's ability to pay for healthcare.

¹ Part 1 of the *Constitution Act, 1982*, being Schedule B to the *Canada Act 1982* (UK), 1982, c 11 ("*Charter*").

² *Charter*, s 2(d).

³ *Charter*, s 2(c).

⁴ *Charter*, s 6.

⁵ *Charter*, s 7.

⁶ *Charter*, s 7.

⁷ *Charter*, s 2(a).

⁸ *Chaoulli v Quebec*, 2005 SCC 35.

The Saskatchewan Government’s lockdown measures

In this section, we present a timeline of lockdown measures implemented by the Saskatchewan Government, which started in March and which still remain in effect—in full or in part—without a clear deadline as to when they will be lifted entirely. We describe the closure of schools 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 *Charter*.

March 12

Health officials confirmed the first presumptive case of COVID-19 in the province.⁹

March 13

Effective March 16, and pursuant to Section 45 of *The Public Health Act*, a new order

- restricted public gathering to no more than 250 persons in any one room, and
- restricted events with speakers or attendees who had travelled internationally in the previous 14 days to no more than 50 persons.¹⁰

March 16

- Effective immediately, the Chief Medical Officer of Saskatchewan extended application of the 250-person limit per room for public gatherings to faith-based organizations, and excluded all but essential visitors—"immediate family visiting for compassionate reasons"—from long-term care homes, personal care homes, group homes, and hospitals. restricted public gatherings to no more than 250 persons and restricted visitors from visiting long-term care facilities.¹¹
- The same day, the Saskatchewan Government announced that—effective March 20—all classes in Saskatchewan pre K-12 schools

⁹ "Saskatchewan Confirms Presumptive Case of COVID-19." Saskatchewan Government. March 12, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/march/12/confirmed-case-covid-19>.

¹⁰ "Province Enhances COVID-19 Prevention Measures." Saskatchewan Government. March 13, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/march/13/further-measures-for-covid-19>.

¹¹ "Province Further Enhances COVID-19 Prevention Measures." Saskatchewan Government. March 16, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/march/16/further-measures-for-covid-19-march-16>.

would be suspended indefinitely.¹² The province's Chief Medical Officer had previously announced that school closures would be based on a number of factors, including (1) evidence of sustained transmission within the community, (2) rapid increase of local cases, and (3) transmission without a known link to travel or confirmed cases.¹³

Problematically, it was noted that there was no evidence that *any* of these three criteria had actually been met: the Government asserted that it was acting proactively in order to reduce the risk of COVID-19 transmission.¹⁴ Further, Chief Medical Officer Dr. Saqib Shahab had defended the government's decision to keep schools open just the day before, when he stated on March 15 that

[a]t this point, with the number of cases we have and the fact that they're all travel-related, we really don't think that there's any reason to close schools anywhere in the province at this time.¹⁵

Later, on May 7, it was announced that Saskatchewan schools would be closed until at least September.¹⁶

March 18

The Saskatchewan Government announced a provincial state of emergency¹⁷ under the *Emergency Planning Act*.¹⁸ The following measures were then taken, effective immediately:

- prohibition of public gatherings to no more than 50 persons;
- limitation of the seating of all restaurants, bars and event venues to the lesser of 50 people or 50% of capacity, and requiring of one to two metres of social distance between customers with such establishments;
- requiring of one to two metres social distance between customers in retail spaces, including grocery stores, pharmacies and gas stations; and

¹² "Province Announces Class Suspensions Effective March 20, Wind Down Period Until Thursday." Saskatchewan Government. March 16, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/march/16/class-suspensions>.

¹³ *Ibid.*

¹⁴ *Ibid.*

¹⁵ Guy Quenneville. "COVID-19 in Sask: 7th case reported, schools to be closed." CBC News. March 16, 2020. <https://www.cbc.ca/news/canada/saskatoon/covid-19-saskatchewan-ban-crowds-1.5498898>.

¹⁶ "In-Class Learning Suspended In Saskatchewan Until At Least September." Saskatchewan Government. May 7, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/may/07/in-class-learning-suspended>.

¹⁷ "COVID-19: Saskatchewan Declares State of Emergency, Imposes Additional Measures to Protect Saskatchewan Residents." Saskatchewan Government. March 16, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/march/18/covid-19-state-of-emergency>.

¹⁸ SS 1989-90, c E-8.1.

- closure of all gyms, fitness centres, casinos and bingo halls immediately closed all bingo and gaming events.¹⁹

That same day, the Saskatchewan Health Authority (“SHA”) ordered all non-urgent/elective surgeries, procedures, and diagnostics to be discontinued—effective March 23—in order to redirect medical personnel, supplies, and personal protective equipment to the COVID-19 effort and to reduce the risks of further exposure to care providers and patients.²⁰ All cancer, urgent, and emergent surgeries would continue as scheduled.²¹

March 20

The Chief Medical Officer updated the public health order issued under the *Public Health Act*²² “to further reduce the risk of potential COVID-19 transmission in the province.”²³

Moreover, Premier Scott Moe signed an order pursuant to the provincial State of Emergency directing that all orders of the government and Chief Medical Health Officer must be followed, and that law enforcement agencies in Saskatchewan would have the full authority to enforce those orders.²⁴ The following measures were to take effect immediately:

- prohibiting public gatherings of more than 25 people in one room, except where two metre distancing between people can be maintained;
- closing all nightclubs, bars, lounges and similar facilities with exceptions for “take out” of alcohol and food products, while maintaining social distancing and the delivery of such products;
- immediately suspending all in-person classes in all primary and secondary educational institutions both public and private;
- excluding all visitors from long-term care homes, hospitals, personal care homes, and group homes, with the sole exception of family members visiting for compassionate reasons;
- mandating international travelers into self-isolation for 14 days from their date of arrival back into Canada, with exceptions for certain essential workers;
- mandating all persons who had been identified by a Medical Health Officer as a close contact of a person or persons with COVID-19 to go

¹⁹“COVID-19: Saskatchewan Declares State of Emergency, Imposes Additional Measures to Protect Saskatchewan Residents.” Saskatchewan Government. March 16, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/march/18/covid-19-state-of-emergency>.

²⁰ *Ibid.*

²¹ *Ibid.*

²² RSS 1978, c P-37.

²³ “COVID-19: Additional Measures to Protect Saskatchewan Residents.” Saskatchewan Government. March 20, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/march/20/covid-19-update-march-20>.

²⁴ *Ibid.*

into self-isolation for 14 days from the date of last having been exposed to COVID-19; and

- mandating all persons who are household members of a person having laboratory-confirmed COVID-19 into self-isolation and follow certain health directives.²⁵

The measures listed below were also announced, taking effect on March 23:

- closure of all restaurants, food courts, cafeterias, cafes, bistros and similar facilities excepting the following: where customers are able to “take out” with two metre distancing between customers during pick up, drive-through food services, delivery of food products, soup kitchens, not-for-profit community and religious kitchens with two metre distancing between tables;
- closure of all recreational and entertainment facilities including fitness centres, casinos, bingo halls, arenas, curling rinks, swimming pools, galleries, theatres, museums and similar facilities;
- closure of all personal service facilities including tattooists, hairdressers, barbers, acupuncturists, acupressurists, cosmetologists, electrologists, estheticians, manicurists, pedicurists, suntanning parlours, relaxation masseuses, and facilities in which body piercing, bone grafting or scarification services are performed;
- closure of all dental, optometrist, chiropractic, registered massage therapy and podiatry clinics except for non-elective procedures; and
- limiting all daycare facilities to a maximum of eight children except where such facilities can be configured such that a maximum of eight children are kept in one room and still be in accordance with the Saskatchewan child care guidelines for care.²⁶

March 24

The SHA announced its intention to expand hospital capacity in order to meet “demand for future phases of the COVID-19 pandemic” and to “contain, delay and mitigate COVID-19”.²⁷

SHA CEO Scott Livingstone asserted that “[d]emand will exceed capacity,” adding that

[m]odelling from other jurisdictions suggests that this virus may affect 30 per cent of the population and result in thousands needing hospitalization. This modelling is being updated to ensure it is more specific to the situation in Saskatchewan.²⁸

²⁵ *Ibid.*

²⁶ *Ibid.*

²⁷ “Saskatchewan Health Authority Expanding Capacity For COVID-19.” Saskatchewan Government. March 24, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/march/24/sha-expanding-capacity-for-covid-19>.

²⁸ *Ibid.*

March 25

The Saskatchewan Government announced that—effective March 26—certain “non-allowable” businesses would be prohibited “public facing services”. This included

clothing stores; shoe stores; flower shops; sporting good and adventure stores; vaping supply shops; boats, ATV, or snowmobile retailers; gift, book, or stationary stores; jewelry and accessory stores; toy stores; music, electronic and entertainment stores; pawn shops; and travel agencies.²⁹

March 27

Saskatchewan Parks announced that all parks facilities were closed to the public:

Saskatchewan Parks is following the advice of public health experts and implementing measures to support the Government of Canada’s efforts to reduce the spread of COVID-19. As of Monday, March 23, 2020, park facilities [are] closed, meaning there is no access to washrooms, visitor centres, picnic areas, as well as campgrounds and campsites. People should not gather in the parks at all. Some trails are very narrow and do not provide the necessary space to maintain a healthy distance when passing people.³⁰

April 8

Saskatchewan Health Authorities released [COVID-19 modelling](#) to the public, noting that

the key variable for saving lives and protecting healthcare workers during the COVID-19 pandemic is public compliance with prescribed isolation measures, physical distancing, effective hand washing and staying home, whenever and wherever possible.³¹

April 23

The Saskatchewan Government announced its “Re-Open Saskatchewan” relaunch plan:

Re-Open Saskatchewan is a plan built on a methodical and phased approach to slowly lifting restrictions so that more businesses can open and more employees can go back to work. The plan introduces five phases to methodically, gradually and cautiously re-open businesses and services across Saskatchewan, beginning May 4, 2020. The plan also details

²⁹ “Government Clarifies Allowable Business Services, Limits gatherings To 10 Persons Maximum.” Saskatchewan Government. March 25, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/march/25/allowable-business-services>.

³⁰ “Saskatchewan Provincial Parks – Support The National Effort and Stay Home.” Saskatchewan Government. March 27, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/march/27/provincial-parks-closed>.

³¹ “SHA Releases Next Phase of COVID-19 Response Plan.” Saskatchewan Government. April 8, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/april/08/health-system-readiness>.

physical distancing measures and restrictions that will remain in place throughout the five phases and provides a number of factors to inform decisions regarding the lifting of long-term restrictions.³²

These factors would include daily case numbers, controlling transmission, healthcare capacity, minimizing outbreak risks in specialized settings such as health facilities and nursing homes scenarios, putting preventative measures in place in schools and workplaces, managing importation risks, and educating communities on COVID-19. Dates for phases three, four, and five had not yet been determined.³³

April 24

It was announced that Chief Medical Health Officer Dr. Shahab has signed a Public Health Order restricting all non-essential travel into northern Saskatchewan. Dr. Shahab also strongly advised against all non-essential travel between communities in northern Saskatchewan.³⁴

April 28

SHA released the [COVID-19 Modelling and Health System Readiness Update](#) document, which was said to show that:

Saskatchewan is in a significantly better position to manage COVID-19 as a result of the interventions taken to date to slow the spread of the virus.³⁵

³² “Province Announces Re-Open Saskatchewan Plan.” Saskatchewan Government. April 23, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/april/23/reopen-saskatchewan-plan>.

³³ *Ibid.*

³⁴ “Province Takes Action To Control the Spread of COVID-19 in the North.” Saskatchewan Government. April 24, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/april/24/covid-19-cases-in-the-north>.

³⁵ “New Pandemic Modelling Shows Improved Outlook for Saskatchewan.” Saskatchewan Government. April 28, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/april/28/updated-pandemic-modelling>.

May 7

As referred to above, the Saskatchewan Government announced on May 7 that in-class learning would not resume for Saskatchewan's 180,000 students until at least September. As explained by Deputy Premier and Education Minister Gordon Wyant, the decision to close Saskatchewan schools was taken on the basis of a stated need "to move quickly and decisively in order to protect our students, staff and families".³⁶

Analysis of lockdown measures

The above were the most significant social and economic lockdown measures imposed by the Saskatchewan Government throughout March and April of 2020. While these measures were presumably well-intentioned, there is no question that they violated *Charter*-protected freedoms to move, travel, associate, assemble and worship, and these measures obviously inflicted many different kinds of harms on Saskatchewanians, even if the full extent of these harms remains unknown at this time. We conclude this section by arguing that the government enforced these measures without adequately or coherently defining their purpose or necessity.

(1) Saskatchewan politicians and health officials continued to call for "flattening the curve," even well after COVID-19 infections and hospitalizations in the province had peaked

Government and health officials repeatedly referred to the goal of "flattening the curve" for the purpose of preserving capacity in hospitals for COVID-19 patients.³⁷ To "flatten the curve" is to distribute the same number of cases across a greater unit of time in order that there might be fewer cases—and therefore, hospitalizations—at the peak of infections. This is a distinct and very different goal from trying to stop the spread of the virus entirely, as this latter goal requires lockdown measures to remain in force for months on end, if not permanently.

However, as of July 30, SHA never reported more than 60 new cases in one day,³⁸ and "cases" consist overwhelmingly of infected people who experience no harm from the virus. It

³⁶ "In-Class Learning Suspended In Saskatchewan Until At Least September." Saskatchewan Government. May 7, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/may/07/in-class-learning-suspended>.

³⁷ Thomas Piller. "Two new coronavirus cases reported in Saskatchewan, 16 new recoveries." Global News. August 28, 2020. <https://globalnews.ca/news/7304236/coronavirus-covid-19-saskatchewan-update-aug-28/>.

³⁸ "Saskatchewan's Dashboard", New COVID-19 Cases. Saskatchewan Government. Accessed July 30, 2020. <https://dashboard.saskatchewan.ca/health-wellness/covid-19/cases#new-cases-tab>.

became very clear, early on, that the healthcare system would not be overwhelmed by COVID-19 patients. Nonetheless, politicians and health officials continued to call for “flattening the curve” and continued to endorse stringent lockdown measures into April and May, in order to preserve healthcare capacity.

Were there other goals, not articulated by the Saskatchewan Government, beyond preserving capacity in the healthcare system?

(2) Given data from other jurisdictions, the Saskatchewan Government should have known that the province’s healthcare system would likely not be overwhelmed by COVID-19

Given the experience of other Canadian provinces and jurisdictions around the world, the Saskatchewan Government should have anticipated that, had a major outbreak occurred in the province, the majority of severe outcomes would occur in long-term care facilities and not in general hospitals. The Government should have realized that COVID-19 poses insignificant risk to the vast majority of its citizens and thus that the province’s healthcare system was unlikely to be overwhelmed. By May it was already clear that the healthcare system had not been, and would not be, overwhelmed with COVID-19 patients.

As of May 25, in provinces reporting more COVID-19 cases **and** deaths than Saskatchewan, between 64.6% and 96.6% of deaths attributed to COVID-19 had occurred in long-term care facilities.³⁹ According to a report by the Canadian Institute for Health Information in June of 2020, 81% of COVID-19 deaths in Canada had occurred in long-term care facilities as of May 25.⁴⁰ Nonetheless, the Saskatchewan Government continued to lock down society and the economy in order to “flatten the curve,” in order to preserve capacity within the general healthcare system.

In another section, we show that these measures have resulted in under-utilized healthcare resources, of which thousands of cancelled surgeries are but one example.

⁴⁰ “Pandemic Experience in the Long-Term Care Sector: How Does Canada Compare With Other Countries?” at page 2. Canadian Institute for Health Information. June, 2020.

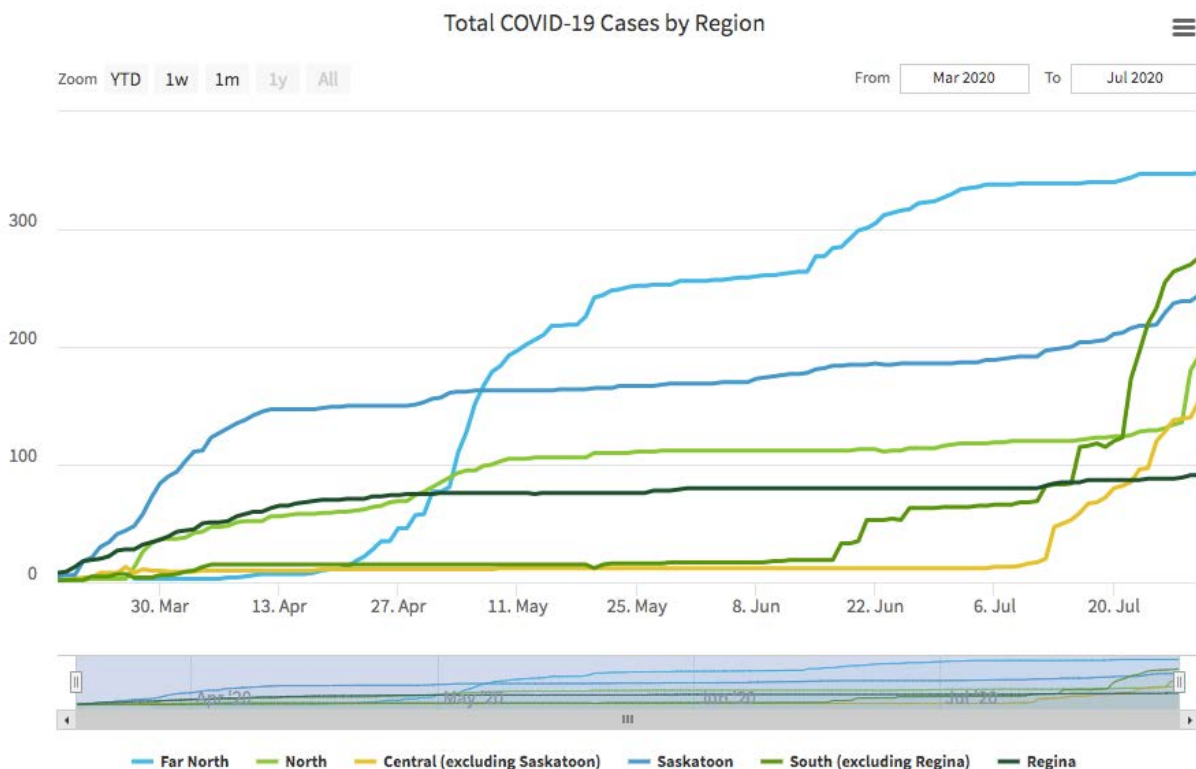
<https://www.cihi.ca/sites/default/files/document/covid-19-rapid-response-long-term-care-snapshot-en.pdf>.

⁴⁰ “Pandemic Experience in the Long-Term Care Sector: How Does Canada Compare With Other Countries?” at page 2. Canadian Institute for Health Information. June, 2020.

<https://www.cihi.ca/sites/default/files/document/covid-19-rapid-response-long-term-care-snapshot-en.pdf>.

(3) The Saskatchewan Government’s province-wide approach to lockdown measures fail to account for the stark differences in local conditions

It is unclear why the Saskatchewan Government implemented a province-wide response to COVID-19 and did not account for local conditions. The following table represents the number of cases per region:⁴¹



In March and April, while COVID-19 had not impacted the Central and South regions significantly, COVID-19 lockdown measures were still applied province-wide. Even as the Saskatchewan Government restricted public gatherings, closed schools, cancelled non-emergency (“elective”) but medically necessary surgeries, and installed other such emergency orders province-wide, the Central and South regions continued to report few cases. To date, the

⁴¹ “Saskatchewan’s Dashboard”: Total COVID-19 Cases by Region. Accessed July 30, 2020. <https://dashboard.saskatchewan.ca/health-wellness/covid-19/cases#total-by-region-tab>.

government has failed to account for local conditions or to limit government intervention within less severely-impacted regions. The province-wide response was unwarranted.

(4) The imposition of compulsory lockdown measures has demonstrated a lack of confidence in Saskatchewanians

It is unclear why the Saskatchewan Government enforced measures that might have been self-enforced by Saskatchewanians. It appears that the government lacked—and still lacks—confidence in the conscientiousness and compassion of its citizens to interact socially and economically in ways that protect themselves and others.

If it had shown that reducing transmission in a particular city or region (a) was necessary and (b) could not have been accomplished without government lockdowns enforced by penalties, then these lockdown measures might have been justified. To date, this has not been shown.

(5) The Saskatchewan Government has failed to account for the predictable negative consequences of its lockdown measures.

The Saskatchewan Government has thus far failed to account for the predictable negative consequences of these radical social and economic measures. Having surveyed the statements of Premier Scott Moe, Chief Public Health Officer Dr. Saqib Shahab, and other officials, it is not apparent that social, health, or economic risks factored into the Saskatchewan Government's decisions to lock down the economy and society. Nor has the government submitted any detailed, comprehensive risk assessment to the public, suggesting that the government has not yet conducted such an analysis. Without this, it appears that the government has simply assumed, without evidence or analysis, that lockdown measures would do more good than harm.

We argue that these measures have likely done more harm than good, given the devastating negative impacts of government decisions on the livelihoods and lives of so many citizens who have been denied access to healthcare and employment, with resulting harm to the social, educational, recreational, psychological and spiritual dimensions of the lives of people.

In the following section, we analyze the *Charter* implications of these measures and argue that, where these measures have violated and continue to violate *Charter*-protected freedoms, the Saskatchewan Government is obliged to provide the evidence necessary to justify

them. These freedoms are *constitutionally guaranteed*, “subject only to such reasonable limits [...] as can be demonstrably justified in a free and democratic society.”⁴²

Lockdown measures violate Canadians’ *Charter* freedoms

The *Charter* protects the rights of all Canadians to the freedoms of association,⁴³ peaceful assembly,⁴⁴ mobility and travel,⁴⁵ liberty,⁴⁶ security of the person,⁴⁷ and conscience and religion.⁴⁸ The Saskatchewan Government’s lockdown measures restrict Saskatchewanians’ freedoms to move, travel, associate, assemble, and practice their faith, all while causing significant harm to their lives and livelihoods.

The constitutional question is whether the Saskatchewan Government’s violations of *Charter* freedoms are reasonable and “demonstrably justified in a free and democratic society,” as required by section 1 of the *Charter*.⁴⁹ This requires serious analysis not only of the purported *benefits* of the lockdown to Saskatchewan’s society, but also of its *harmful consequences*, including adverse effects on human health and overall wellbeing.

Under section 1 of the *Charter*, when governments violate *Charter* rights and freedoms, the onus is on government— not the citizen—to justify these measures. Such measures 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, and such evidence must prove that the restrictions do more good than harm. In this context, “harm” refers both to violations themselves and to the practical, negative impacts on Saskatchewanians’ daily lives.

Bearing in mind that assertions do not qualify as evidence, the Saskatchewan Government has thus far failed to present persuasive proof to the public showing specifically how and why the lockdowns have brought about more good than harm. Nor has the government

⁴² *Charter*, s 1.

⁴³ *Charter*, s2(d).

⁴⁴ *Charter*, s 2(c).

⁴⁵ *Charter*, s 6.

⁴⁶ *Charter*, s 7.

⁴⁷ *Charter*, s 7.

⁴⁸ *Charter*, s 2(a).

⁴⁹ *Charter*, s 1.

been clear and consistent as to the specific goals of the lockdown, or the conditions under which it would be lifted.

Government 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 and well-defined 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 Saskatchewan Government should demonstrate that (a) COVID-19 presents a significant, generalized risk to all persons, such that broad lockdown measures are reasonably required because specific and targeted measures to protect the vulnerable are insufficient, and (b) lockdown measures would be effective in mitigating that risk. Neither has been demonstrated.

As will be outlined in greater detail further below, the data on COVID-19 deaths provided by governments and by health authorities in Saskatchewan and in other jurisdictions shows that COVID-19 is a threat only to those 60 and over, and a very small percentage of people under 60 who suffer from certain pre-existing health conditions. Yet the Saskatchewan Government closed schools on the assumption that students, faculty, and their families would be otherwise unsafe. It similarly ordered centres for religious and recreational activities to close, thereby limiting the rights of Saskatchewanians to worship, assemble and associate. The Saskatchewan Government has shut down many sectors of the economy, thereby limiting the rights of Saskatchewanians to security of the person protected by section 7 of the *Charter*.⁵⁰ The citizens of Saskatchewan 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 Saskatchewan's lockdown measures, sent to Premier Scott Moe and Dr. Saqib Shahab in mid-April. As of September 12, these questions remain unanswered:

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?

⁵⁰ *Chaoulli v Quebec*, 2005 SCC 35.

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?
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 the Saskatchewan Government are required to answer by its obligations under the *Charter* range far beyond this initial set above. 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. It has an obligation to determine how many additional instances of stress, anxiety, and depression will result from ruined financial prospects, and the full medical and health impacts of these increases in stress, anxiety and depression. It has an obligation to investigate fully how the increasing prevalence of stress, anxiety, and depression will result in more alcoholism, drug abuse, drug overdoses, suicides, spousal abuse and child abuse.

Unfortunately, it appears that the Saskatchewan Government has not given serious or thoughtful consideration to these consequences, nor to the effects of cancelling surgeries and other denials of access to needed healthcare.

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. Harm to physical and mental health resulting from the destruction of one's livelihood must be considered as part of the *Charter*'s "demonstrably justified" analysis.

Further, 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 support structures.

To date, it does not appear that the Saskatchewan Government has paid serious consideration to the harmful effects of lockdowns. It certainly has sufficient resources to monitor and track the positive and negative impacts of its policies on Saskatchewanians, and thus to meet its *Charter* obligation to fully weigh the benefits and harms likely to be caused by its actions.

By every metric, the goal of preserving capacity for COVID-19 patients in Saskatchewan hospitals was not only achieved, but over-achieved. It is long past time that the Saskatchewan

Government prioritize the task of determining the full costs and harms of the lockdown, the negative effects of which have been borne by Saskatchewanians.

Inaccurate claims about the risks associated with COVID-19

In this section, we assess the risks posed by COVID-19 to the general population and argue that extreme old age and comorbid conditions are indicators for increased risk from COVID-19. We then argue that COVID-19 does not pose significant *additional* risk to the general population. This information, which should have factored into the Saskatchewan Government's response to COVID-19, was available to the government at the time the above-mentioned lockdown measures were implemented.

Age and severe outcomes

Unfortunately, Saskatchewan does not report the age or the presenting comorbid conditions of those who experience a severe outcome from COVID-19. It is nonetheless reasonable to assume that the epidemiological characteristics of the severe outcomes which have occurred in Saskatchewan are similar to those of other jurisdictions:

- In Manitoba, which had reported 15 COVID-19 deaths as of August 29,⁵¹ the majority of deaths occurred amongst those 65 or over;⁵²
- In Ontario, which had reported 2,813 deaths as of September 11, only 12 deaths had been reported in ages 0-39 and 121 deaths in ages 40-59;⁵³
- In British Columbia, which had reported 210 deaths as of September 3, no deaths had been reported in ages 0-39 and only eight deaths in ages 40-59;⁵⁴
- In Alberta, which had reported 253 deaths as of September 12, only two deaths had been reported in ages 0-39 and only six deaths in ages 40-59;⁵⁵
- Across Canada, which had reported 9,163 deaths as of September 11, only 26 death had been reported in ages 0-39 and only 265 deaths had been

⁵¹ "Provincial COVID-19 surveillance" Manitoba Government. August 29, 2020.

https://www.gov.mb.ca/health/publichealth/surveillance/covid-19/week_35/index.html#hosp_icu.

⁵² *Ibid* at "Age Distribution of Severe COVID-19 Cases Compared to All Cases. Manitoba, 2020".

⁵³ "Daily epidemiological summary". Public Health Ontario. Accessed September 11, 2020.

<https://Bulletin.publichealthontario.ca/-/media/documents/ncov/epi/2020/covid-19-daily-epi-summary-report.pdf?la=en>.

⁵⁴ "British Columbia Weekly COVID-19 Surveillance Report" at page 7. BC Centre for Disease Control. September 3, 2020. http://www.bccdc.ca/Health-Info-Site/Documents/BC_Surveillance_Summary_Sept_3_2020.pdf.

⁵⁵ "COVID-19 Alberta statistics." Alberta Government. Accessed September 12, 2020.

<https://Bulletin.alberta.ca/stats/covid-19-alberta-statistics.htm>.

reported in ages 40-59, with the highest numbers of deaths amongst this age range (n=214) occurring in ages 50-59:⁵⁶

Even the Chinese Centre for Disease Control and Prevention, as early as February 17, had published a report on the epidemiological characteristics of COVID-19 in China and had found that, of the 4,584 confirmed cases in ages 0-29, only 8 cases had resulted in death.⁵⁷ Thus, even in provinces and jurisdictions reporting significantly higher case rates, the relative risk posed by COVID-19 to anyone younger than 60 is insignificant.

Comorbid conditions and severe outcomes

Having considered the minimal or nearly non-existent risks posed by COVID-19 to anyone younger than 60, we now consider the risks posed to those with pre-existing medical conditions. Again, while the Saskatchewan Government does not record age or comorbid conditions in its statistics on COVID-19 deaths, we surmise that these statistics are consistent with those reported in other provinces and across the country:

- In Manitoba, as of August 29, more than 90% of all those hospitalized for COVID-19 were suffering from at least one underlying chronic condition.⁵⁸
- In Ontario, as of May 14, “[c]ases reporting at least one comorbidity accounted for approximately half of all hospitalizations (48.4%), 55.5% of ICU admissions and 36.8% of deaths. The most commonly reported comorbidities among all cases were cardiovascular conditions (7.7%), followed by asthma and/or COPD (4.7%) and diabetes (4.4%).”⁵⁹
- Moreover, Public Health Ontario, in a report dated April 24 summarizing evidence for clinical severity in COVID-19 patients and the risk factors associated with severe disease in relation to COVID-19, noted that,
[o]f 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;

⁵⁶ “Coronavirus disease 2019 (COVID-19): Epidemiology update”. Government of Canada. Accessed August 15, 2020. <https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html#a5>.

⁵⁷ “The Epidemiological Characteristics of an Outbreak of 2019 Novel Coronavirus Diseases (COVID-19) — China, 2020”. China CCDC Weekly, 2020. February 17. 2020.

<http://weekly.chinacdc.cn/en/article/doi/10.46234/ccdcw2020.032>

⁵⁸ “Provincial COVID-19 surveillance” at “Percentage of COVID-19 Cases with Underlying Illnesses”. Manitoba Government. Accessed August 13, 2020. https://www.gov.mb.ca/health/publichealth/surveillance/covid-19/week_35/index.html#underlying_illness.

⁵⁹ “Enhanced epidemiological summary”: COVID-19 and Severe Outcomes in Ontario at page 6. Public Health Ontario. May 14, 2020. <https://www.publichealthontario.ca/-/media/documents/ncov/epi/covid-19-severe-outcomes-ontario-epi-summary.pdf?la=en>.

cardiovascular disease in 4/7; chronic obstructive pulmonary disease in 1/4; and smoking in 0/2 studies.⁶⁰

- In Alberta, as of September 11, Alberta Health Services found that 72.8% of COVID-19 deaths reported three comorbidities and that only 3.3% reported no comorbidities, with a median age at death of 83 years.⁶¹
- In British Columbia, as of May 4, the British Columbia Centre for Disease Control stated that 83.6% of COVID-19 deaths reported at least one chronic health condition.⁶² As of September 3, BC reported a median age of 85 years for COVID-19 deaths.⁶³
- The Government of Canada indicates that heart disease, hypertension, lung disease, diabetes, cancer, as well as weakened immune systems from medical conditions or treatment are all additional factors which consistently point to higher risk for severe outcomes.⁶⁴

These statistics show that old age and underlying health problems are a significant indicator for severe and fatal outcomes from COVID-19. Indeed, Professor Neil Ferguson of the Imperial College—in his statement to the UK Parliament on March 25—conceded 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 anyway.⁶⁵ It is clear that COVID-19 does not pose significant additional risk to the general population.

Having considered the risks posed by COVID-19 to Saskatchewanians and Canadians generally, we now address broader claims about the lethality of COVID-19.

Inaccurate claims about COVID-19 lethality

⁶⁰ “COVID-19 – What We Know So Far About...Clinical Severity” at pages 4-5. Public Health Ontario. April 24, 2020. <https://Bulletin.publichealthontario.ca/-/media/documents/ncov/covid-wwksf/what-we-know-clinical-severity.pdf?la=en>.

⁶¹ “COVID-19 Alberta statistics”. Alberta Government. Accessed September 12, 2020. <https://Bulletin.alberta.ca/stats/covid-19-alberta-statistics.htm>.

⁶² “COVID-19: going forward” at page 7. BC Centre for Disease Control. May 4, 2020. https://news.gov.bc.ca/files/Covid-19_May4_PPP.pdf

⁶³ “British Columbia weekly COVID-19 surveillance report” at page 2. BC Centre for Disease Control. September 3, 2020. http://www.bccdc.ca/Health-Info-Site/Documents/BC_Surveillance_Summary_Sept_3_2020.pdf.

⁶⁴ “People who are at high risk for severe illness from COVID-19”. Government of Canada. Accessed August 13, 2020. <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/people-high-risk-for-severe-illness-covid-19.html>.

⁶⁵ Sarah Knapton. “Two thirds of coronavirus victims may have died this year anyway, government adviser says”. The Telegraph. March 25, 2020. <https://Bulletin.telegraph.co.uk/news/2020/03/25/two-thirds-patients-die-coronavirus-would-have-died-year-anyway/>

As of September 12, there have been a reported 920,145 deaths from COVID-19 worldwide,⁶⁶ but there is reason to think that this number is inaccurate. It is important to recognize that the way in which medical practitioners in many jurisdictions have classified COVID-19 deaths is subject to some controversy. 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. Consider the following statements from scientific advisors and public health officials from Italy, the UK, and the U.S.:

- 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 coronavirus.”⁶⁷ This is confirmed in the report of the Istituto Superiore di Sanita.⁶⁸ 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.”⁶⁹
- Dr. John Lee, a professor emeritus 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.”⁷⁰
- 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

⁶⁶ “COVID-19 Coronavirus Pandemic.” Worldometer. Accessed September 12, 2020.

<https://www.worldometers.info/coronavirus/>.

⁶⁷ Sarah Newey. “Coronavirus: Is Covid-19 really the cause of all the fatalities in Italy?” Stuff. March 20, 2020. <https://Bulletin.stuff.co.nz/national/health/coronavirus/120443722/coronavirus-is-covid19-really-the-cause-of-all-the-fatalities-in-italy>.

⁶⁸ “Characteristics of COVID-19 patients dying in Italy.” Epicentro. April 29, 2020, https://Bulletin.epicentro.iss.it/en/coronavirus/Bulletin/Report-COVID-2019_29_april_2020.pdf.

⁶⁹ Sarah Newey. “Why have so many coronavirus patients died in Italy?” The Telegraph. March 23, 2020, <https://Bulletin.telegraph.co.uk/global-health/science-and-disease/have-many-coronavirus-patients-died-italy/>.

⁷⁰ John Lee. “How deadly is the coronavirus? It’s still far from clear.” The Spectator. March 28, 2020, <https://Bulletin.spectator.co.uk/article/The-evidence-on-Covid-19-is-not-as-clear-as-we-think>.

COVID death.”⁷¹ 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.”⁷²

In short, in some jurisdictions the number of patients killed *by* COVID-19 is certainly less than the number who died *with* it.

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 Saskatchewan and across Canada. In its Labour Force Survey for April 2020, Statistics Canada noted that

[t]he 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.⁷³

When compared to the most significant recession since the 1930s, Canada lost nearly 300% more jobs in approximately one-sixth the time.⁷⁴ Of full- and part-time jobs, Statistics Canada noted that

[i]n 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.⁷⁵

As a result of the government-imposed lockdowns, 5.5 million Canadians were either not working or were working substantially reduced hours by April of 2020.⁷⁶ Even among those who

⁷¹ Lauren Melendez. “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/>.

⁷² “Remarks by President Trump, Vice President Pence, and Members of the Coronavirus Task Force in Press Briefing.” Whitehouse.gov. April 7, 2020. <https://Bulletin.whitehouse.gov/briefings-statements/remarks-president-trump-vice-president-pence-members-coronavirus-task-force-press-briefing-april-7-2020/>.

⁷³ “Labour Force Survey, April 2020.” Statistics Canada. April 8, 2020. <https://www150.statcan.gc.ca/n1/daily-quotidien/200508/dq200508a-eng.htm?HPA=1>.

⁷⁴ *Ibid.*

⁷⁵ *Ibid.*

⁷⁶ *Ibid.*

had not lost their jobs outright, many experienced significantly reduced hours. Regarding solo self-employed workers, Statistics Canada found that

[t]he 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.⁷⁷

It is important to note that the economic decline caused by lockdown measures has not affected Canadians equally. Whereas employment for men had recovered by 92.3% of its February levels, employment for women had only recovered by 89.2%.⁷⁸ By June, employment levels for women in low-wage jobs (less than \$16.03 per hour) was 74.8% of pre-COVID levels compared to 84.7% for men in low-wage jobs.⁷⁹ Finally, Statistics Canada found that fathers with children aged 6-17 were approaching pre-COVID levels of employment, whereas mothers with children aged 6-17 were still approximately five percentage points away from pre-COVID levels in June.⁸⁰

Women were not the only disproportionately impacted group; 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 earlier noted that:

[i]n 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%).

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

⁷⁷ *Ibid.*

⁷⁸ “Labour Force Survey, June 2020.” Statistics Canada. July 10, 2020. <https://www150.statcan.gc.ca/n1/daily-quotidien/200710/dq200710a-eng.htm>.

⁷⁹ *Ibid.*

⁸⁰ *Ibid.*

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.⁸¹

Further, Statistics Canada found that workers and students aged 15-24 were disproportionately impacted by lockdown measures, triggering the federal government to implement a 9 billion dollar student aid program.⁸² According to Statistics Canada,

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).⁸³

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

[e]mployment 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

⁸¹ “Labour Force Survey, April 2020.” Statistics Canada. April 8, 2020. <https://www150.statcan.gc.ca/n1/daily-quotidien/200508/dq200508a-eng.htm?HPA=1>.

⁸² Rachel Aiello. “PM Trudeau announces \$9B in new COVID-19 funding for students.” CTV News. April 22, 2020. <https://www.ctvnews.ca/canada/pm-trudeau-announces-9b-in-new-covid-19-funding-for-students-1.4906564>.

⁸³ “Labour Force Survey, April 2020.” Statistics Canada. April 8, 2020. <https://www150.statcan.gc.ca/n1/daily-quotidien/200508/dq200508a-eng.htm?HPA=1>.

5 but less than 10 years) (-17.4%) fared better than their very recently-arrived counterparts.⁸⁴

These statistics show the degree to which the Canadian economy, and the most vulnerable participants therein, experienced unprecedented economic harm because of provincial and federal government lockdowns of society and the economy from March to April. Although the economy has rebounded as lockdown measures have recently been lifted throughout most of the country, Statistics Canada still found that “employment in June was 1.8 million (-9.2%) lower than in February” and that “significant labour market challenges remain for youth, students, and low-wage workers.”⁸⁵

It is likely that other groups have faced similar or more severe market challenges; and, as a result, Statistics Canada has indicated that it will survey the economic experiences of various ethno-cultural groups in subsequent labour surveys.⁸⁶

The Saskatchewan Government should have considered the unprecedented and disproportionate impacts that lockdown measures would have on the economic well-being of Saskatchewanians.

The economy vs 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 healthcare requires money, and first-rate healthcare 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 healthcare, resulting in Canadians dying prematurely because of inadequate or inferior healthcare. Further, the accumulation of hundreds of billions of dollars in new debt, necessitating interest payments, will also reduce the ability to fund medical care and long-term care facilities. A strong and prosperous economy is the only way to generate sufficient wealth to pay for needed medical services.

⁸⁴ *Ibid.*

⁸⁵ “Labour Force Survey, June 2020.” Statistics Canada. July 10, 2020. <https://www150.statcan.gc.ca/n1/daily-quotidien/200710/dq200710a-eng.htm>.

⁸⁶ *Ibid.*

The problem of lockdown measures should not, therefore, be framed in terms of economic profitability versus saving lives. Apart from the realms of conjecture, assertion and speculation, our elected leaders have not yet provided actual evidence to demonstrate that closing down society and the economy has saved lives, nor that continued lockdown measures will save lives.

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 Saskatchewanians. According to the Financial Consumer Agency of Canada, those dealing with financial stresses are “[t]wice as likely to report poor overall health”, “[f]our times as likely to suffer from sleep problems, headaches and other illnesses”, and are also “more likely to experience strain in [...] personal relationships.”⁸⁷ Such stresses may even lead to “more serious health problems,” including heart disease, high blood pressure, and mental health conditions.⁸⁸

Negative impacts on healthcare

In March, provincial and territorial governments across Canada imposed social and economic lockdown measures while simultaneously cancelling non-emergency medical appointments and surgeries, for the stated purpose of preserving capacity in healthcare systems for anticipated surges in COVID-19 patients. It was feared that, without lockdown measures, case rates would exponentially increase. It was also feared that, without cancelling non-emergency procedures, hospitals would be overwhelmed and thousands would die. In this section, we analyze the actions of the Saskatchewan Government regarding the Saskatchewan healthcare system, its capacity, and cancelled procedures. We then consider the impacts of these measures, especially on those whose non-emergency surgeries were cancelled.

Recall that, on March 18, SHA directed hospitals to postpone surgeries in order to ensure hospital capacity for the anticipated surge of COVID-19 hospitalizations.⁸⁹ At the time, a mere

⁸⁷ “Financial Stress and Its Impacts.” Financial Consumer Agency of Canada.. <https://Bulletin.canada.ca/en/financial-consumer-agency/services/financial-wellness-work/stress-impacts.html>

⁸⁸ *Ibid.*

⁸⁹ “COVID-19: Saskatchewan Declares State of Emergency, Imposes Additional Measures to Protect Saskatchewan Residents.” Saskatchewan Government. March 16, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/march/18/covid-19-state-of-emergency>.

16 total cases had been reported in the province.⁹⁰ On March 26—the earliest date for which hospitalization data is recorded—there were a mere seven hospitalizations in the province.⁹¹ At no time have there been more than 19 persons admitted to hospital or ICU for COVID-19 in Saskatchewan.⁹² Clearly, no surge of COVID-19 patients ever materialized.

Meanwhile, Saskatchewan hospitals have been significantly underutilized while thousands of Saskatchewanians have experienced unaddressed and worsening health conditions. According to SHA’s COVID-19 modelling from April 8, 43% (1,037 of 2,433) of acute care beds and 42% (41 of 98) of ICU beds were vacant.⁹³ While medical resources went unused, SHA had postponed 3,800 surgeries—the most common of which were cataract, joint, and gynecological procedures—by late April.⁹⁴

Certain questions are provoked by (a) the number and seriousness of cancelled surgeries for Saskatchewanians, and (b) the less-than-anticipated number of severe outcomes in Saskatchewan. Regarding cancelled surgeries, one might wonder if the harms produced by cancelled surgeries might outweigh the benefits of increasing capacity for COVID-19 cases that have not materialized in Saskatchewan. It is important to recognize that it was not the demands placed by COVID-19 that caused decreased productivity in Saskatchewan’s healthcare system, but rather the government’s lockdown measures. At no point were there more cases than the province’s healthcare system could handle, even under normal protocols. Rather, it was the way the Saskatchewan Government responded to COVID-19 that caused this decline in productivity and an inability to service the 3,800 Saskatchewan citizens in need of surgeries and referrals. Did this re-allocation of medical resources cause more harm than good?

⁹⁰ “Saskatchewan’s Dashboard”: COVID-19 Cases.” Saskatchewan Government. Accessed July 30, 2020. <https://dashboard.saskatchewan.ca/health-wellness/covid-19/cases#cumulative-cases-tab>.

⁹¹ “Saskatchewan’s Dashboard”: COVID-19 Hospitalizations. Saskatchewan Government. Accessed July 30, 2020. <https://dashboard.saskatchewan.ca/health-wellness/covid-19-cases/hospitalized>.

⁹² *Ibid.*

⁹³ “Health system readiness for COVID-19” at Slide 28. Saskatchewan Health Authority. April 8, 2020. See Appendix.

⁹⁴ Arthur White-Crummey. “Sask. Health Authority has postponed 3,800 surgeries so far due to COVID-19.” Regina Leader-Post. April 22, 2020. <https://leaderpost.com/news/saskatchewan/sha-has-postponed-3800-surgeries-so-far-due-to-covid-19>.

This is a problem that has impacted every province in Canada. In its study from May 14, the British Journal of Surgery estimates that 400,000 surgeries would be cancelled or postponed by mid-June throughout Canada.⁹⁵ Of these, an estimated 27,000 would be cancer surgeries.

According to the same study,

[d]elaying time-sensitive elective operations, such as cancer or transplant surgery, may lead to deteriorating health, worsening quality of life, and unnecessary deaths.⁹⁶

Also,

[w]hen 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.⁹⁷

Indeed, one report from the University Health Network in Ontario estimates that 35 people died in that province after their cardiac surgeries had been cancelled for the purpose of increasing COVID-19 capacity within the healthcare system.⁹⁸ 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 in any province whose health officials ordered surgeries to be postponed.

The tragic case of Aaron Ogden

The unintended consequences of cancelling medical procedures—including diagnostic tests—due to COVID-19 are tragically apparent in the recent death of nineteen-year old Aaron Ogden of Yorkton, Saskatchewan.

In December 2019, Aaron had survived a severe car accident. The force of the collision had weakened the walls of Aaron's aorta—the artery that carries blood from the heart, thereby requiring the surgical insertion of a stent into the artery. The surgery was successful, and Aaron was expected to recover fully. Aaron was also to have continual checkups and was scheduled to

⁹⁵ Matthew Trevithick. "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/>

⁹⁶ *Ibid.*

⁹⁷ *Ibid.*

⁹⁸ *Ibid.*

have a CT scan in June. Nonetheless, SHA informed Aaron that his CT scan had been cancelled and that it would be rescheduled. Throughout July and into August, however, Aaron received no word of a new date for the scan from SHA.⁹⁹

While jogging in mid-August, Aaron collapsed and was rushed to the hospital. The doctors discovered that his organs had filled with blood as a result of an undiscovered blood clot that had formed around the stent in his aorta. He died 45 hours later.¹⁰⁰

As his father Mark observed:

[t]here's a good chance that something would have been showing back in June and if they had even seen a little dot they would have gone in and done some simple procedure [...] He would have been in and out and carried on and he'd be walking with us today. But because of COVID rules, they decided to shut this down they didn't check him out and now he's dead.¹⁰¹

Aaron's family are now calling upon SHA to save others in the same situation. In the words of his uncle, Nick Ogden:

If we could point out that maybe there's appointments that aren't being made, or perhaps there's a backlog due to earlier closures - this needs to be dealt with and my heart would break to hear this story happen to someone else[.]¹⁰²

Considering the actual impact of COVID-19 on Saskatchewan's healthcare system, was it truly necessary to cancel Aaron's CT scan in June?

Under Phase 1 of SHA's service resumption plan—released on May 5 and implemented on May 19, CT scans were to increase from 55% of normal capacity to 75% of normal capacity.¹⁰³ The decision to operate at less-than-full capacity was likely informed by SHA's April 28 updated modelling document—intended to prepare Saskatchewan's healthcare system for a peak of 190 new COVID-19 hospitalizations admissions *per day*, and a peak “hospital census” of 1,736 COVID-19 patients.¹⁰⁴

⁹⁹ Mark Ogden. “DID COVID-19 RULES KILL MY SON?” Aaron Ogden Memorial Fund. August 16, 2020. <https://www.gofundme.com/f/aaron-ogden-memorial-fund>.

¹⁰⁰ Alison MacKinnon. “Man's death after delayed CT scan appointment prompts questions about SHA restrictions during COVID-19.” CTV News. August 19, 2020. <https://regina.ctvnews.ca/man-s-death-after-delayed-ct-scan-appointment-prompts-questions-about-sha-restrictions-during-covid-19-1.5071436>.

¹⁰¹ *Ibid.*

¹⁰² *Ibid.*

¹⁰³ “Saskatchewan Health Authority Service Resumption Plan Released.” Saskatchewan Government. May 5, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/may/05/shas-service-resumption-plan>.

¹⁰⁴ “COVID-19 Modelling and Health System Readiness Update,” at Slide 22. Saskatchewan Health Authority. April 28, 2020. See Appendix.

Yet there were only 13 COVID-19 hospitalizations in Saskatchewan on May 5, and—as mentioned above—there have never been more than 19 such hospitalizations in the province at any one time.¹⁰⁵ From June 5 and June 12, there was only *one* such hospitalization in the entire province.¹⁰⁶ In other words, at no point during the time in question was Saskatchewan’s healthcare system ever remotely under threat of being overwhelmed by COVID-19 patients. Why then would a potentially life-saving CT scan be cancelled?

In spite of the aforementioned resumption of some procedures as of May 19,¹⁰⁷ Saskatchewanians have and will continue to experience the negative impacts of prior cancellations, especially in relation to cancelled surgeries. According to the British Journal of Surgery, it will take countries a median of 90 weeks to clear 12 week backlogs surgeries if post-pandemic surgery volumes are increased by 10%.¹⁰⁸

Given various restrictions and social distancing orders, Saskatchewan hospitals will not be able even to maintain their pre-pandemic levels of productivity, thereby further extending the time-frame for clearing backlogged procedures. According to the Saskatchewan Surgical Initiative, “[a]s part of Phase 2 of the Health Service Resumption Plan, announced on June 10, surgical services will be increasing to 65-70% of pre-COVID-19 levels.”¹⁰⁹ As with CT scans, above, MRIs would also only be performed at 75% of normal capacity under Phase 1 of SHA’s resumption plan.¹¹⁰

It is worth questioning the validity of any public health measure—however altruistic in its design—that causes more harm than good. And, in cases where a government measure violates a *Charter* freedom, this questioning is required by the *Charter*. Since March, it is apparent that these healthcare measures have had—and will continue to have—a severe and

¹⁰⁵ “Saskatchewan’s Dashboard” at “COVID-19 Cases”. Accessed August 24, 2020. <https://dashboard.saskatchewan.ca/health-wellness/covid-19/cases>.

¹⁰⁶ *Ibid.*

¹⁰⁷ “Saskatchewan Health Authority Service Resumption Plan Released.” Saskatchewan Government. May 5, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/may/05/shas-service-resumption-plan>.

¹⁰⁸ Matthew Trevithick. “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/>.

¹⁰⁹ “Improved Access to Surgical Care - Progress Update.” Saskatchewan Government. Accessed August 1, 2020. <http://www.sasksurgery.ca/sksi/progressupdate.html>.

¹¹⁰ “Saskatchewan Health Authority Service Resumption Plan Released.” Saskatchewan Government. May 5, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/may/05/shas-service-resumption-plan>.

negative impact on Saskatchewanians' access to healthcare. This violates their *Charter* section 7 rights to life and security of the person.¹¹¹

Regarding the significantly lower-than-projected number of severe Covid-19 cases in Saskatchewan, one might wonder if the assumptions and models supporting the Saskatchewan Government's decision to cancel surgeries were evidence-based. In the next section, we analyze the COVID-19 modelling documents released by the Saskatchewan Government on April 8 and 28 in detail, and show that these should not have been cited as demonstrable justification for lockdown measures under the *Charter*.

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.¹¹² Throughout 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 documents prepared by the Saskatchewan Government. We argue that there are problems with how infection numbers are projected, with how local conditions are ignored, and with how underlying scientific evidence, data points, and assumptions are uncited. Where these models have been cited as justification for *Charter*, we argue that these should have been evidence-based, accurate, and transparent.

The Saskatchewan Health Authorities submitted its "[Dynamic Modelling Results for COVID-19](#)" to the public on April 8.¹¹³ This section describes three infection scenarios for

¹¹¹ *Chaoulli v Quebec*, 2005 SCC 35.

¹¹² "Report 9: Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand," at page 7. Imperial College COVID-19 Response Team. March 16, 2020. <https://Bulletin.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-NPI-modelling-16-03-2020.pdf>.

¹¹³ Health System Readiness for COVID 19": Dynamic Modelling Results for COVID 19. Saskatchewan Health Authority. April 8, 2020. <http://s3.documentcloud.org/documents/6827803/Saskatchewan-health-system-readiness-for-COVID-19.pdf>.

Saskatchewan based on varying base reproductive constants R_0 , i.e., “the average number of people one person with COVID-19 would infect.”¹¹⁴ According to the modelling:

Under Scenario 1 (high range based on “early Canadian estimates”) - $R_0 = 4.0$

Under Scenario 2 (mid range based on a “low Italy” range) - $R_0 = 2.76$

Under Scenario 3 (based on “Wuhan and the Imperial Model”) - $R_0 = 2.4$.¹¹⁵

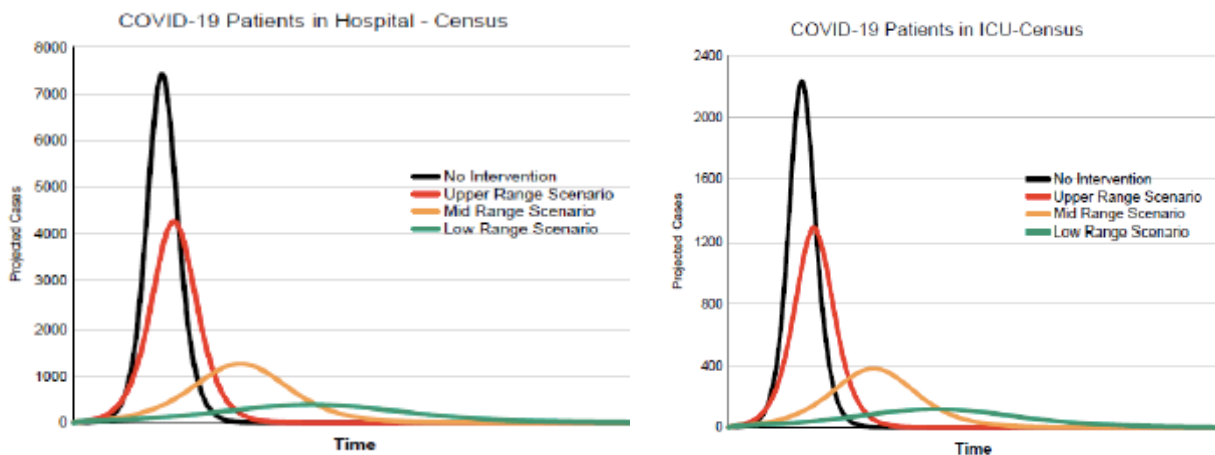
Importantly, each of these R_0 values were modelled on the assumption that “Saskatchewan continues with current levels of COVID-19 measures including testing, tracing and physical distancing.”¹¹⁶ In other words, the government’s modelling was not a projection as to what might happen without lockdown measures, but rather was predicated on lockdown measures being in place. Given these R_0 values, SHA modelled for

408,000 cases, 4,265 hospitalizations and 1,280 ICU under Scenario 1,

262,000 cases, 1,265 hospitalizations and 380 ICU under Scenario 2, and

153,000 cases, 390 hospitalizations and 120 ICU under Scenario 3.¹¹⁷

These numbers are plotted in the following graphs:¹¹⁸



¹¹⁴ *Ibid* at Slide 6.

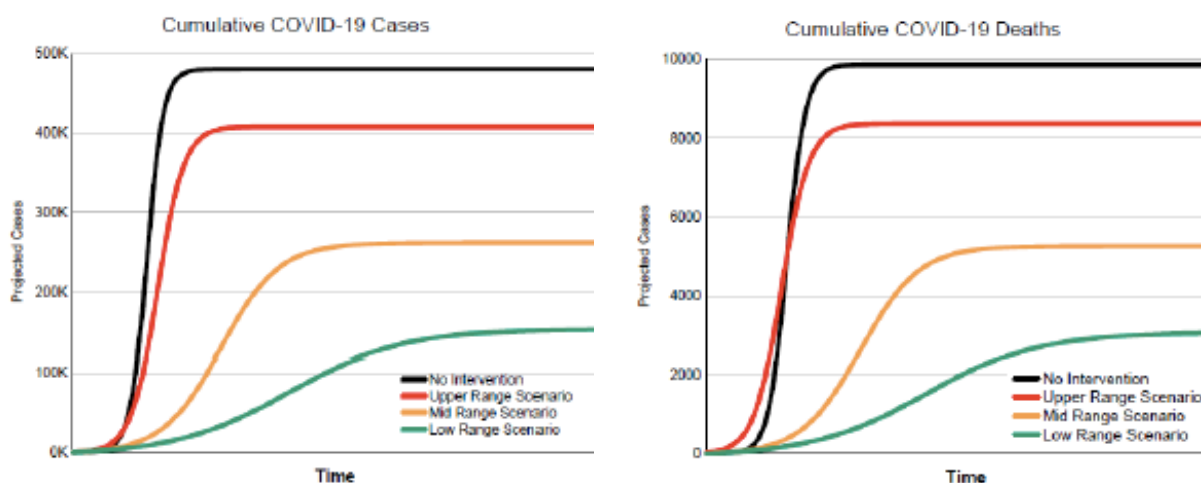
¹¹⁵ *Ibid*, at Slides 6 and 9-11.

¹¹⁶ *Ibid*, at Slides 9-11.

¹¹⁷ *Ibid* at Slide 12.

¹¹⁸ *Ibid*, at Slide 14.

Despite intervention measures, this model predicts for a range of 3,075 to 8,370 deaths under the three scenarios.¹¹⁹ Without intervention measures, SHA predicted for nearly 500,000 cases and approximately 10,000 deaths over the course of the pandemic:¹²⁰



As with other models, this model uses R_0 values to measure current and potential hospital capacity and medical resources against predicted demand from COVID-19 hospitalizations and ICU. In the remaining pages of this model, SHA described and planned for additional acute, ICU, and ventilator capacity. It is likely that early, unpublished iterations of this model guided the decisions of public health officials to implement lockdown measures such as cancelling all non-emergency medical procedures in March and April.

Considering the epidemiological importance of this model, and the implications of its predictions for the economy, society, and healthcare system in Saskatchewan, this model should have been less inaccurate, and its assumptions should have been more transparent to the public. Regarding inaccuracy, this model—even under the most optimistic scenario—predicts 153,000

¹¹⁹ *Ibid* at Slide 12.

¹²⁰ *Ibid*, at Slides 13-14.

cases and more than 3,000 deaths across the pandemic even with intervention measures.¹²¹ whereas there had been a mere 1,334 cases and 18 deaths as of August 1.¹²²

As we discuss in a [previous section](#), these errors caused problems of access to healthcare for thousands of Saskatchewanians. In an attempt to explain these inaccuracies, SHA released an updated model in which it tried to claim that the April 8 *scenarios* were based on a reproductive number *uninfluenced by public health and intervention measures*.¹²³ SHA tried to say that the updated modelling—with its more optimistic projections and less severe policy recommendations—was now based on an *effective reproductive number* (R_t), which denotes the average number of people any infected person will infect *given intervention measures*.¹²⁴ This is a *deliberate and unabashed falsification* of the previous model, which clearly states at slides 9-11 that each scenario was modelled on the assumption that current intervention measures would obtain.¹²⁵

In addition to inaccuracy and dishonesty, SHA can add opacity to the list of problematic features of its COVID-19 modelling. Implicit in the April 8 model is the assumption that the R_0 or R_t values from districts like Wuhan ($R_t = 2.76$) and Italy ($R_t = 2.4$) could be properly compared—in terms of the epidemiological factors which influence transmission—to the Saskatchewan context. But, as one biomathematician, Constantine Siettos, at the University of Naples, states, “it is unlikely that the R_0 that has been calculated in China will be the same in the US or in Europe”¹²⁶ or in Canada, by implication. In light of the inaccurate predictions of the April 8 model, it is likely that SHA failed to account for differences in the conditions that influence R_0 between Saskatchewan and Wuhan and Italy. Similarly, it is worth questioning whether the SHA had made any effort to calculate—using data from Saskatchewan contact tracing—the R_t number in Saskatchewan at any time prior to the release of this first model. In its statement from April 29, SHA admitted that “[a]nalysis going back to early March indicates

¹²¹ [Ibid](#) at Slide 12.

¹²² “Saskatchewan’s Dashboard”: COVID-19 Hospitalizations. .” Saskatchewan Government. Accessed August 1, 2020. <https://dashboard.saskatchewan.ca/health-wellness/covid-19-cases/hospitalized>.

¹²³ “COVID-19 Modelling and Health System Readiness Update”: Saskatchewan COVID-19 Modelling Update at Slide 5. Saskatchewan Health Authority. April 28, 2020. See [Appendix](#).

¹²⁴ [Ibid](#), at slide 5.

¹²⁵ “Health System Readiness for COVID-19”: Dynamic Modelling Results for COVID-19 at Slides 9-11. Saskatchewan Health Authority. April 8, 2020. <http://s3.documentcloud.org/documents/6827803/Saskatchewan-health-system-readiness-for-COVID-19.pdf>.

¹²⁶ Katerina Zimmer. “Why R_0 Is Problematic for Predicting COVID-19 Spread.” The Scientist. July 13, 2020. <https://www.the-scientist.com/features/why-r0-is-problematic-for-predicting-covid-19-spread-67690>.

that the value of this number [R_t] has been under one since early April.”¹²⁷ This statement would suggest that SHA’s predictions for Saskatchewan were not based, in any way, on local data or factors. Finally, SHA failed to cite any sources linked to these three *scenarios*, and it failed to cite which computational model (SIR, Agent-Based, or others) informed its modelling of case rates in Saskatchewan.

Without transparency, it was impossible for the public to scrutinize the modelling which, according to SHA, “underscores the importance of aggressive and sustained public health measures and population health approaches to ‘flatten the curve’.”¹²⁸ Because these aggressive and prolonged measures violated the *Charter*-protected freedoms of Saskatchewanians, the modelling on which these were based ought to have been accurate, honest, and transparent to the public. As it is, it is difficult to see how this model could have functioned as justification for government interventions of the type seen in Saskatchewan throughout March and April.

Looking forward

In March of 2020, the Saskatchewan Government’s lockdown measures began to violate the *Charter* freedoms of citizens to move, travel, assemble, associate, and worship, as well as their ability to work and to pursue employment. 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 Saskatchewanians, including 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. Finally, thousands of Saskatchewanians were affected when most hospital resources were re-allocated for COVID-19 patients only. It will be months (perhaps years) before we know the full death toll of the decision to cancel thousands of medically necessary surgeries, after counting all the cardiac patients who died while waiting for heart surgery, and after counting additional cancer deaths

¹²⁷ “New Pandemic Modelling Shows Improved Outlook for Saskatchewan.” Saskatchewan Government. April 28, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/april/28/updated-pandemic-modelling>.

¹²⁸ “Health System Readiness for COVID-19”: The Big Picture, at slide 17. Saskatchewan Health Authority. April 8, 2020. <http://s3.documentcloud.org/documents/6827803/Saskatchewan-health-system-readiness-for-COVID-19.pdf>.

caused by lack of timely diagnosis and treatment. Meanwhile, hospitals have not been operating at anything approaching full capacity.

On April 23, the Saskatchewan Government revealed its phased [Re-open Saskatchewan Plan](#) for the province.¹²⁹ Since then, many features of the economy and society have been permitted to resume operations in part, under strict and often costly conditions. Further, the government has not informed the public when long-term restrictions—such as those on mass public gatherings—will be repealed.¹³⁰

In September of 2020, the Saskatchewan Government must answer some crucial questions. Can the Saskatchewan Government demonstrably justify any ongoing conditions, restrictions and partial closures in light of the relatively low risks from COVID-19 in the province? Are these continued restrictions based on facts and evidence, or on unfounded fear caused by speculation? When will the government stop violating *Charter* freedoms by imposing and enforcing lockdown measures that appear to have caused more harm than good?

The *Charter* requires the Saskatchewan 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 its citizens. The *Charter* requires actual evidence—not mere speculation, theorizing or assertions—to prove that lockdown measures achieved results that would not have been achieved by measures that do not violate the *Charter*.

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 Saskatchewan 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 government must now consider—carefully and comprehensively—how many lives have been lost and how many people have been impacted negatively by the lockdown measures, and in what ways. The Saskatchewan Government certainly has sufficient resources to monitor and track the positive and negative impacts of government policies on its citizen base. If the Saskatchewan Government undertakes this task, it

¹²⁹ “Province Announces Re-Open Saskatchewan Plan.” Saskatchewan Government. April 23, 2020. <https://www.saskatchewan.ca/government/news-and-media/2020/april/23/reopen-saskatchewan-plan>.

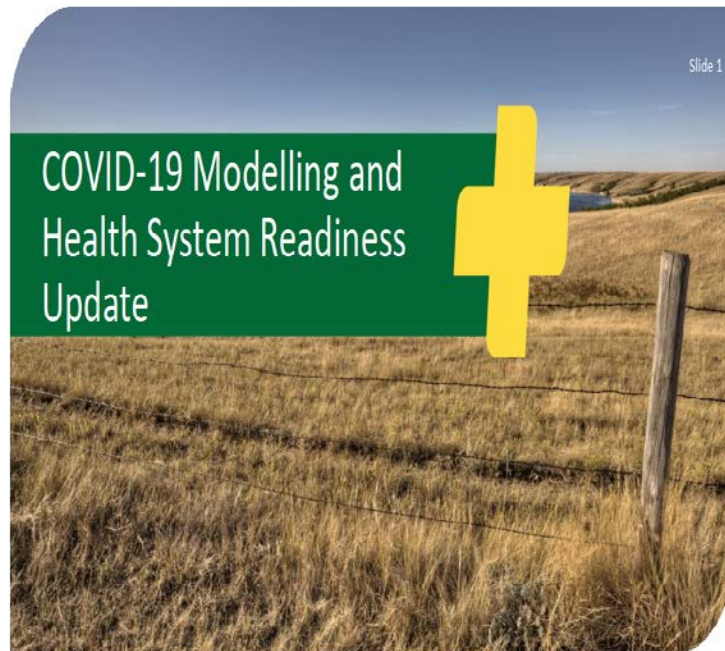
¹³⁰ [*Ibid.*](#)

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: April 28 COVID-19 Modelling



April 28, 2020



www.saskatchewan.ca/COVID19



***This presentation is
EMBARGOED until
2:30 p.m. on Tuesday,
April 28, 2020***



saskatchewan.ca/COVID19

PURPOSE

Slide 3

SHA services will adapt and expand to meet the projected COVID-19 patient demand, while continuing to deliver essential services to non-COVID-19 patients throughout the duration of the event.



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OUTLINE

Slide 4

- Introduction
- Saskatchewan COVID-19 Modelling Update
- Offensive Strategy Update
- Defensive Strategy Update
- Resumption of Health Services
- Questions



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Saskatchewan COVID-19 Modelling Update

Update: COVID-19 Modelling
and Health System Readiness



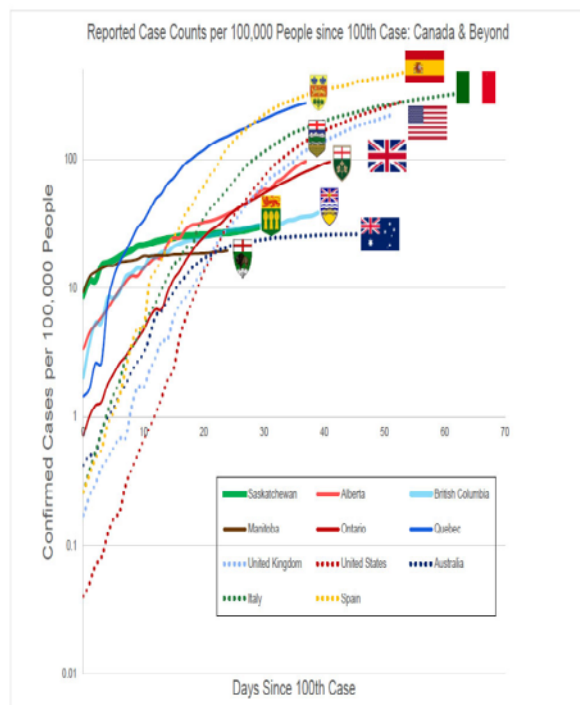
KEY DEFINITIONS

BASIC REPRODUCTIVE NUMBER (R_0)	EFFECTIVE REPRODUCTIVE NUMBER (R_t)
Average number of people one person with the virus could infect where the entire population is susceptible and no interventions have been undertaken.	Average number of people one person with the virus infects at the current time after the effects of interventions.
Purpose: support planning for health system readiness.	Purpose: guide decisions about public health measures.

Note: April 8 modelling presentation was based on Basic Reproductive Number (R_0)

HOW IS SK DOING WITH CURRENT INTERVENTIONS

Slide 7



Case count per 100,000 people similar to BC

“Flattening the curve” with a hammer



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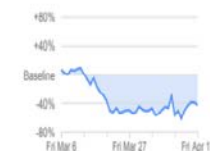
COVID-19 GOOGLE COMMUNITY MOBILITY REPORTS

Slide 8

Saskatchewan

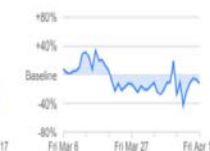
Retail & recreation

-43% compared to baseline



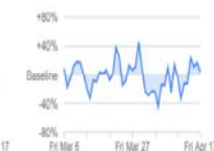
Grocery & pharmacy

-12% compared to baseline



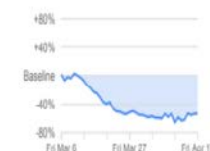
Parks

+4% compared to baseline



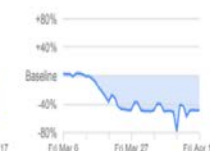
Transit stations

-53% compared to baseline



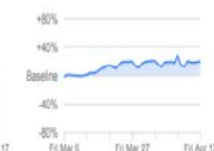
Workplace

-48% compared to baseline



Residential

+20% compared to baseline



<https://www.google.com/covid19/mobility/>

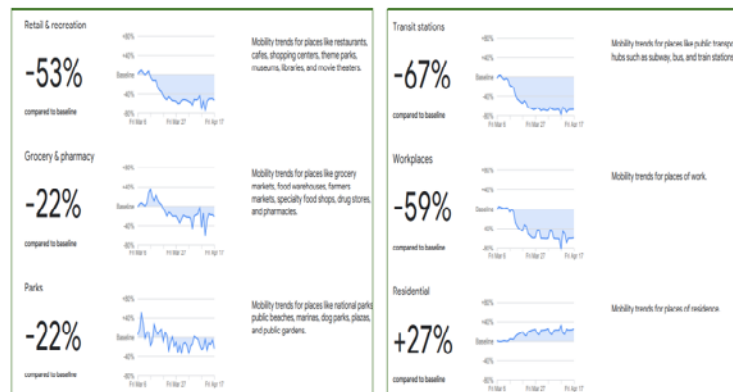


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COVID-19 GOOGLE COMMUNITY MOBILITY REPORTS

Slide 9

CANADA



<https://www.google.com/covid19/mobility/>



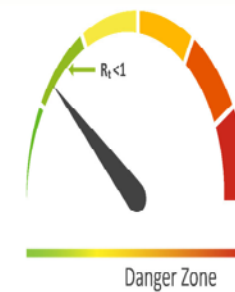
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EFFECTIVE REPRODUCTIVE NUMBER (R_t)

Slide 10

- Describes how well the various interventions are decreasing the spread of COVID-19 at the current time
- Also reflects fluctuating public compliance
- Once $R_t < 1$, virus is at the tipping point
- R_t consistently < 1 is a major consideration in determining public health measures
- 'The Hammer and the Dance'

Effective Reproductive Number



Effective Reproductive Number in SK
April 25 $R_t = 0.7$ (lagging indicator by 7-14 days)
This reflects strong SK compliance with public health measures

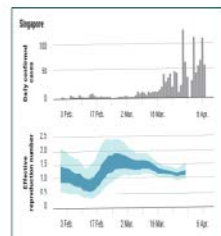
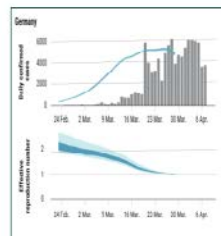
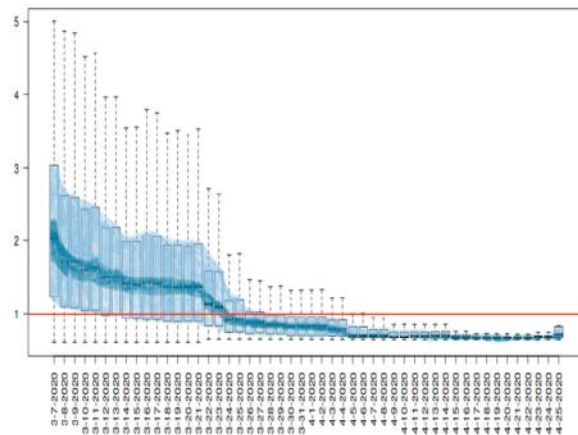


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SK'S EFFECTIVE REPRODUCTIVE NUMBER (R_t)

Slide 11

Estimate of Effective Reproductive Number over Time (Assuming that Persistent Asymptomatics Constitute 40% of Infections)



BASIC REPRODUCTIVE NUMBER (R_0) IN SK

Slide 12

R_0 = Average number of people one person with the virus could infect where the entire population is susceptible and no interventions have been undertaken.

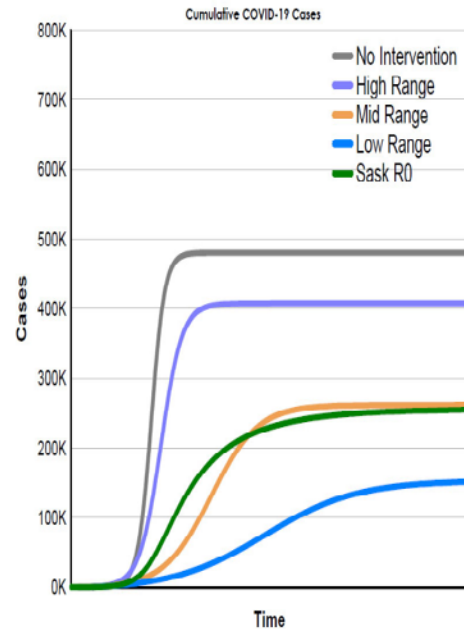
- Previously, no history of how it spreads in Saskatchewan, so needed to use what we knew from other areas that had experience
- SK case data has been used to estimate a SK R_0 of 3.12, to guide planning activities for a worst case scenario



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BASIC REPRODUCTIVE NUMBER (R_0) IN SK

Slide
13



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KEY MESSAGES

Slide 14

- Dynamic modelling is not a prediction, it provides a range of “what if” scenarios to guide planning and will evolve over time.
- The R_t value is helpful in determining effectiveness of current interventions right now, and can be a guidepost to use when choosing to implement new measures, or loosen existing ones.
- Early warning system shared with the public is key during the ‘dance.’

Effective Reproductive Number



Effective Reproductive Number in SK
April 25 $R_t = 0.7$
(lagging indicator by 7-14 days)

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Slide 15

Offensive Strategy Update

Update: COVID-19 Modelling
and Health System Readiness



COMMUNITY SURGE PLAN

Slide
16

- Our offensive strategy continues to progress and is rooted in the SHA's service delivery model: Connected Care for the People of Saskatchewan
- As the province begins to re-open, care in the community remains the foundation of our health care system
- The SHA has already implemented a number of initiatives to support care in community to reduce the burden on the acute care system



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COMMUNITY SURGE PLAN

Slide
17

Testing strategy supports contain and delay approach

- Broad availability of testing based on guidelines that support testing for virtually anyone with even a single symptom
- Work to further scale up testing is in progress including:
 - Testing asymptomatic contacts identified through public health contact and outbreak investigations
 - Outreach to populations less likely to seek testing
 - Sending consistent messages to the public and health care providers regarding testing
- Over 50 testing sites are located across the province, including 18 on First Nations
- Lab capacity is available to support more than 1,500 tests per day
 - Ongoing expansion of access to rapid testing capability with GeneExpert equipment across 8 sites to date with 11 more sites in coming weeks (inclusive of SHA supporting 4 First Nations sites)



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COMMUNITY SURGE PLAN

Slide
18

Contact tracing surge plan

- Adoption of SHA Contact Tracing Application to streamline the process and enhance reporting and monitoring
 - Saskatchewan is a leader in adoption of this common application
- Load leveling of resources across the province to support outbreaks
- Surge capacity available to stay ahead of demand and respond to outbreaks
 - Current capacity available for more than 300 new cases per day
 - Modelled potential new cases per day of 618 was used to inform planned capacity of 460 full time equivalent staff



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COMMUNITY SURGE PLAN

Slide
19

Assessment and treatment sites

- 16 sites available across Saskatchewan and more opening soon

Virtual Care

- Total clinician users: 2,000
- Total sessions: 35,000

Protecting our most vulnerable

- Early implementation of screening of staff and visitors in long-term care facilities
- Cohorting strategy to restrict staff to work in a single facility

Continuation of home care services, maintaining Seniors House Calls and Community Paramedicine programs

Meeting the needs of our vulnerable populations and supporting the homeless

Contingency plans to use hotels to cohort COVID-19 positive patients who require intermediate care



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Defensive Strategy Update

Update: COVID-19 Modelling
and Health System Readiness



Slide 20



ACUTE SURGE PLANNING

Slide
21

- Opportunity to adjust planning scenario based on updated modelling information
- Sustain conservative capacity estimates and contingency to be prepared for a worst case surge
- Retain staged response to patient demand



ORIGINAL PLANNING SCENARIO

Planning
Scenario
mid point
between

Slide 22

COVID-19 patients only	Upper Range Scenario 1 ($R_0 = 4.0$)	Original Planning Scenario	Mid Range Scenario 2 ($R_0 = 2.76$)	Low Range Scenario 3 ($R_0 = 2.4$)
Peak values, except where cumulative				
Cumulative total cases	408,000	335,000	262,000	153,000
Hospital admissions/ day	710	458	205	60
Hospital census	4,265	2,765	1,265	390
ICU admissions /day	215	138	60	20
ICU census	1,280	830	380	120
Patients requiring ventilation	1,230	800	370	120
Cumulative total deaths	8,370	6,815	5,260	3,075

PLANNING SCENARIO

Revised
Planning
Scenario

Slide 23

COVID-19 patients only	Upper Range Scenario 1 ($R_0 = 4.0$)	Original Planning Scenario	Sask Age Stratified Scenario ($R_0 = 3.12$)
Peak values, except where cumulative			
Cumulative total cases	408,000	335,000	254,756
Hospital admissions/ day	710	458	190
Hospital census	4,265	2,765	1,736
ICU admissions /day	215	138	60
ICU census	1,280	830	412
Patients requiring ventilation	1,230	800	403
Cumulative total deaths	8,370	6,815	3,050

Revised Planning
Scenario:

- Ensures SK remains prepared for a major surge
- Informed SK R_0 in new modelling
- Max capacity can be reduced by 1,000 hospital beds, 400 ICU beds, 400 ventilators (total ventilators in planned scenario of 403 are within current ventilator capacity of 486 ventilators)

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PLANNING UPDATE

Slide
24

- SHA is currently adjusting local surge plans based on the updated planning scenario
- Cohorting of COVID-19 patients forms the foundation of a staged response
- Staged activation of COVID-19, non-COVID-19 and mixed hospitals remains part of the response plan
- Timing and trigger points for deployment of the plan may be adjusted



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FIELD HOSPITALS

Slide
25

Prepare field hospitals with two stages of activation:

- Stage one: Required base infrastructure preparation complete and equipment available for activation within a predetermined amount of time
- Stage two: Capacity available for expansion of services as needed

	Stage 1 Beds	Stage 2 Additional Beds	Total beds
Saskatoon (Merlis Belsher)	125	125	250
Regina (Evraz Place)	184	216	400
Total	309	341	650

Health System Service Resumption

Slide 26

Update: COVID-19 Modelling
and Health System Readiness



HEALTH SYSTEM SERVICE RESUMPTION

Slide
27

- SHA and Ministry of Health are developing a plan to resume, in a staged approach, community services, elective surgeries and diagnostics that were impacted by the service slowdown
- The plan will include a methodical and cautious reintroduction of services
- Identification of which services to resume will consider factors such as highest priority patient needs, risk of transmission of the virus, impact on COVID-19 surge capacity, impact on personal protective equipment inventory, and other considerations
- The system must remain able to respond to potential COVID-19 surge in demand



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SUMMARY

Slide
28

- Updated modelling information provides insight into Saskatchewan situation and potential scenarios
- Offensive strategy aims to sustain low rates of transmission

Continued vigilance by the public has the most impact

- Defensive strategy provides surge capacity for potential future demand
- Resumption of Health Services plan will be phased to support non-COVID-19 patient care while ensuring ability to respond to potential COVID-19 surge in demand



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Slide 29

QUESTIONS



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Healthy People, Healthy Saskatchewan

The Saskatchewan Health Authority works in the spirit of truth and reconciliation, acknowledging Saskatchewan as the traditional territory of First Nations and Métis People.

Slide 30