CANADA’S DEADLY RESPONSE TO COVID-19

BY DAVID REDMAN
DAVID REDMAN

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EXECUTIVE SUMMARY

This Position Paper on “Canada’s Deadly Response to COVID-19” presents, with a full description of responsibilities, actions, and process, what should have happened, starting in January/February 2020, to respond to the COVID-19 Pandemic in Canada.

The Position Paper was written in the hope that it may help someone stop Canada’s Prime Minister, Premiers, and Medical Officers of Health from continuing and repeating the deadly Canadian response to COVID-19 and to ensure they never follow this type of response in future pandemics.

Previous attempts, trying to help/advise the Premiers, to stop this deadly response to COVID-19 have been to no avail.

It is recognized that this Position Paper is lengthy. The length is required to fully describe the completely avoidable continuing tragedy that has occurred in this Pandemic.

The foundation for government led response to emergencies in Canada is the system of emergency management. Federal and provincial/territorial governments have emergency management agencies which are charged with the mitigation, preparedness, response, and recovery to all hazards. These agencies work routinely with other orders of government, internal government Ministries, jurisdictional private sector entities, and non-government organizations. These routine inter-relationships are required to ensure timely, efficient, and effective action in times of emergency.

These emergency management agencies have methodically prepared general and hazard-specific plans to ensure both rapid and coordinated response in times of emergency. These EM agencies have established, practiced, and exercised process and operating systems necessary for complete action for the resolution of emergencies.

In every Province/Territory in Canada as well as the federal government, these emergency management agencies had coordinated detailed Pandemic Response plans, written and updated based on hard lessons learned from previous pandemics.

All of this was ignored.

Instead, Canada immediately adopted the emerging “lockdown” methodology, which included the use of not recommended Non-Pharmaceutical Interventions (NPIs).

It was known by mid-March 2020 who was most at risk from COVID-19, seniors. By then, this “lockdown” approach had allowed the deaths of thousands of seniors in other countries. By using the “lockdown” methodology the same thing happened to our seniors.

Lockdowns went against all previous knowledge, published studies and Canadian Pandemic Plans. Through each wave of the Pandemic, our Canadian response remained fixated on this failed methodology, with all other ideas or science ignored and censored.
The Canadian “lockdown” response will kill at least 10 times more than it might have saved from the actual virus, COVID-19. The unconscionable use of fear during an emergency, to ensure compliance, has caused a breach in confidence in government that will last a decade or more. The damage to our democracy will last at least a generation.

Canada's Prime Minister, Premiers and Medical Officers of Health are responsible for this deadly Canadian response.

When areas of responsibility are not met, either by lack of Due Diligence or knowingly disregarding requirements, accountability must be enforced. Otherwise, elected, and non-elected officials can continue to act in manners to erode/destroy our democracy and/or do unnecessary harm.

The Canadian deadly response to the COVID-19 Pandemic must never be repeated. The people responsible need to be held accountable. Lessons learned from this pandemic must show that criminal negligence by our elected leaders and MOHs can and will be held to account in our courts.
BACKGROUND

The foundation for a government-led response to emergencies in Canada is the system of emergency management (EM). Federal and provincial/territorial governments have EM agencies charged with the mitigation, preparedness, response, and recovery to all hazards. These EM agencies work routinely with other orders of government, internal government Ministries, jurisdictional private sector entities, and non-government organizations (NGOs). These routine inter-relationships are required to ensure timely, efficient, and effective action in times of emergency. These EM agencies also have methodically-prepared general and hazard-specific plans to ensure both rapid and coordinated response in times of emergency. These EM agencies have established, practiced, and exercised process and operating systems necessary for complete action for the resolution of emergencies.

During the COVID-19 Pandemic in Canada, the emergency management system has been sidelined. The Medical Officers of Health (MOHs) have been placed in charge both federally and in the provinces/territories (P/T). This has resulted in a deadly and massively damaging response. It has caused unnecessary death in our seniors and massive collateral damage to the mental health, societal health, education/development of our children, and to our citizens with other severe illnesses, to our national economy, our civil rights, and to our trust in our democracy.

This policy paper describes the EM process that should have been followed, contrasting it with what took place in actuality. Each step is shown in order; some steps may have occurred simultaneously. By the end of this position paper, the breadth and depth of what has been overlooked in the Canadian response to COVID-19 becomes enormously evident.

The responsibility at each step is discussed. While initially some actions may appear to be negligent, the concept of “Due Diligence” must be understood and applied. The actions, or lack of actions, became grossly negligent (conscious and voluntary disregard of the need to use reasonable care, which is likely to cause foreseeable grave injury or harm to persons, property, or both). Actions of gross negligence, continually repeated in later phases of the COVID-19 Pandemic, maybe became criminal negligence.

The responsibility for this negligent, deadly, and damaging reaction to the COVID-19 Pandemic rests predominantly with the premiers of each P/T and their MOH, as healthcare is predominately a P/T jurisdiction. In addition, the massive collateral damage caused through federal negligence rests with the Prime Minister of Canada (PM) and the Canadian MOH.

The responsibility of the PM is not only to lead the national coordination of the pandemic response to minimize the effect of COVID-19 on Canada, but is also to ensure that confidence in our democracy is maintained and, preferably, strengthened. The PM is charged with defence of the institutions of the Canadian parliament and of the Charter of Rights and Freedoms. The devastating failure in both these areas is blatantly obvious.

In an emergency, premiers are responsible to ensure confidence in government, the diminishment of fear wherever possible, the stability of their P/Ts, and the efficient and effective minimization of the hazard on their P/T. Failure in these areas is blatantly obvious.
MOHs are responsible to manage the medical system in their P/T and to coordinate medical capabilities with other partners both internally and externally to their P/T, for the new disease and for all other health areas. The MOHs are responsible to ensure the minimum impact of health hazards on their P/T.

The MOHs focus on COVID-19, to the exclusion of all other health matters, resulted in massive collateral damage both to health outcomes and societal outcomes. The MOHs broke their two overarching oaths, “To do no/minimum harm” and “To ensure informed consent by providing complete and accurate information on treatment and risks, before action”.

When areas of responsibility are not met, either by lack of Due Diligence or knowingly disregarding requirements, accountability should be enforced. Otherwise, elected and non-elected officials can continue to act in manners to erode/destroy our democracy and/or do unnecessary other harms.

The Canadian deadly response to the COVID-19 Pandemic should never be repeated. Those responsible need to be held accountable. Lessons learned from this pandemic must show that negligence by our elected leaders and MOHs can and will be held to account in our courts.

Abbreviations

<table>
<thead>
<tr>
<th>Business Continuity Plans</th>
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<td>Charter</td>
<td>Canadian Charter of Rights and Freedoms</td>
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<td>EM</td>
<td>Emergency Management</td>
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<td>EMO</td>
<td>Emergency Management Organization</td>
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<td>Information Communications Technology</td>
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<td>Infection Fatality Rate</td>
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<td>Family Practitioners</td>
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<td>Non-Government Organization</td>
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<td>Non-Pharmaceutical Interventions</td>
<td>NPI(s)</td>
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<td>Operational Planning Process</td>
<td>OPP</td>
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<td>Prime Minister</td>
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<td>Province/Territory</td>
<td>P/T</td>
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<td>WHO</td>
<td>World Health Organization</td>
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BACKGROUND ABOUT IMPORTANT TERMS

COVID-19

For this paper, the term COVID-19 will be used to mean the Coronavirus 2, SARS CoV-2, and COVID-19, and its so-called variants (Reference 1).

Emergency Management

Emergency Management (EM) is defined as (Reference 2):

   emergency management means the prevention and mitigation of, preparedness for, response to and recovery from emergencies. (gestion)

The aim of emergency management is to continuously protect people, property, resources and the environment from evolving natural and human induced hazards (Reference 3).

Emergency management is made up of five dimensions. Each of these dimensions represent a critical aspect of an entire process and each are linked. Many people try to represent this discipline in two or three dimensions, and in so doing either confuse the process or worse miss aspects. In simplest terms, the five dimensions are (Reference 3):

   · Hazards/Risks (Natural, Human Induced),
   · Groupings/Organizations (Citizens, Public Sector, Private Sector, Non-Government Organizations [NGOs]),
   · Functions (Mitigation, Preparedness, Response, Recovery),
   · Activities (Governance, Operations, Planning, Intelligence, Logistics, Public/Private Sector Coordination, Communications, Financial Management, Administration, Education/Training),
   · Resources (Personnel, Infrastructure, Equipment, Supplies, Information/Communications Technology [ICT], Finances, Publications/Records/Documents).

The discipline of emergency management is the central process to the response to all emergencies, regardless of the hazard/risk. Each order of government in Canada, municipal, provincial/territorial (P/T) and federal, has established organizations for emergency management (EMOs) in their jurisdiction (Reference 4).

Integral to EM are processes that are taught and exercised regularly. These processes have learned knowledge and practiced skills that are essential to ensure that:

   · all partners are involved,
   · that all areas are included, and,
   · that the outcomes can be fully coordinated in a seamless manner.
Emergency Management Steps and Processes Required to Resolve a Major Emergency or Disaster

EM is a comprehensive system, based on steps, with each step having an internal process. A breakdown of the major components of the EM system is shown in Figure 1.

In a major emergency or disaster (e.g., a pandemic), the EM functions of Response and Recovery will require separate teams. Figure 1 shows the two functions (i.e., response and recovery) follow the same EM steps/processes. Figure 1 shows that the two functions are normally conducted concurrently in a fully linked and coordinated manner.

EM is done in support of the elected officials responsible for the jurisdiction; in a municipality for the mayor, P/T for the premier, and federally for the prime minister. After each election, the elected official is briefed on this EM system, either in writing or in person, by the head of the EMO.

**Due Diligence**

Leaders are responsible to ensure they carry out “due diligence” in the performance of their leadership roles. A definition of “due diligence” is (Reference 5):

1. **law:** the care that a reasonable person exercises to avoid harm to other persons or their property,
2. **business:** research and analysis of a company or organization done in preparation for a business transaction (such as a corporate merger or purchase of securities),
Due diligence has been used since at least the mid-fifteenth century in the literal sense “requisite effort.” Centuries later, the phrase developed a legal meaning, namely, “the care that a reasonable person takes to avoid harm to other persons or their property”.

The Government of Canada states (Reference 27):

Due diligence is the level of judgement, care, prudence, determination, and activity that a person would reasonably be expected to do under particular circumstances.

The provincial definitions are similar, with further clarification (Reference 28):

Due diligence is the ability to demonstrate that a person did what could reasonably be expected under their circumstances, in order to satisfy a legal requirement.

To prove that everything reasonable has been done and due diligence has been applied, it is necessary to consider the following items:

1) Foreseeability — could a reasonable person foresee that something could go wrong?

2) Preventability — is there an opportunity to prevent an injury or incident?

3) Control — who has the ability or responsibility to prevent an injury or incident from occurring?

The definition implies leaders are accountable to know their responsibilities and have the knowledge and skill required performing these duties. A further requirement is often stated that:

· they had or should have had the knowledge, and,
· had or should have had the skill.

There can be few more responsible positions during a pandemic than the Premier of a P/T, the Medical Officer of Health of a P/T, the Deputy Minister of Health of a Province/Territory, and the Head of the Health Agency for a P/T. The same is true for the federal equivalents.

Negligence, Gross Negligence, Criminal Negligence

Where a party has not completely fulfilled due diligence, they must be held accountable. The degree of negligence in the performance of their accountable responsibilities determines the possible severity of penalties. Lack of due diligence causing thousands of deaths is criminal negligence.

Negligence (Reference 29):

Negligence

An area of tort law that deals with the breach of duty to take care and involves harm caused by carelessness, not intentional harm.
Five elements are required to establish a prima facie case of negligence:

1. the existence of a legal duty to exercise reasonable care,
2. a failure to exercise reasonable care,
3. cause in fact of physical harm by the negligent conduct,
4. physical harm in the form of actual damages; and,
5. proximate cause, a showing that the harm is within the scope of liability.

**Gross Negligence (Reference 30):**

Means any act or failure to act (whether sole, joint or concurrent) by a person or entity which was intended to cause, or which was in reckless disregard of or wanton indifference to, avoidable and harmful consequences such person or entity knew, or should have known, would result from such act or failure to act.

**Gross Negligence (Medical Definition) (Reference 31):**

Any voluntary, intentional, and conscious act or omission committed by an individual, with reckless disregard for the consequences, esp. how they may affect another person’s life or property.

**Criminal Negligence (Reference 54):**

**Criminal Negligence**

219 (1) Everyone is criminally negligent who:

(a) in doing anything, or,

(b) in omitting to do anything that it is his duty to do, shows wanton or reckless disregard for the lives or safety of other persons.

Definition of **duty:**

(2) For the purposes of this section, duty means a duty imposed by law.

R.S., c. C-34, s. 202

**The Canadian Charter of Rights and Freedoms**

The *Canadian Charter of Rights and Freedoms* (hereinafter called “The Charter”) is a cornerstone of our Canadian democracy (Reference 6). It defines Canadians’ Rights in broad categories with four overarching Fundamental Freedoms. In an emergency *The Canadian Charter of Rights and Freedoms* is equally, if not more, important. It does state that the Rights and Freedoms are not unlimited, and states that limits must be demonstrably justified as prescribed by law. The Charter (Reference 6) states:

It is recognized that the constitutional rights of Canadians are not “unlimited” –
that the *Charter of Rights and Freedoms* guarantees the rights and freedoms set out in it “**subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society**”.

The requirement to demonstrably justify any reasonable limits is subject to the Oakes Test *(Reference 34)* in Canada. The Oakes Test is presented in Appendix E to this Position Paper. Failure to meet the Oakes Test means the denial of the *Charter Rights and Freedoms* is unlawful.

**Medical Code of Ethics**

Doctors in Canada ascribe to a Canadian Medical Association Code of Ethics. They are licenced in their P/T by their College of Physicians. Their College of Physicians are tasked to ensure the Doctors adhere to this Code of Ethics. Fundamental Commitments of the Medical Profession are stated below *(Reference 32)*:

- Commitment to the well-being of the patient.
- Consider first the well-being of the patient; always act to benefit the patient and promote the good of the patient.
- Provide appropriate care and management across the care continuum.
- Take all reasonable steps to prevent or minimize harm to the patient; disclose to the patient if there is a risk of harm or if harm has occurred.
- Recognize the balance of potential benefits and harms associated with any medical act; act to bring about a positive balance of benefits over harms.

Two fundamental commitments in the Code of Ethics are:

- Take all reasonable steps to prevent or minimize harm to the patient; disclose to the patient if there is a risk of harm or if harm has occurred.
- Recognize the balance of potential benefits and harms associated with any medical act; act to bring about a positive balance of benefits over harms.

In a pandemic, for a P/T MOH, the patient is the residents of the P/T. For Canada, the patient is the residents of Canada.

In addition, again considering the patient is the residents of the jurisdiction a fundamental requirement of a physician (the MOH) is to ensure informed consent *(Reference 33)*.

**Informed consent**

**Disclosure of information**

For consent to treatment to be considered valid, it must be an “informed” consent. The patient must have been given an adequate explanation about the nature of the proposed investigation or treatment and its anticipated outcome as well as the significant risks involved and alternatives available. The information must be such as will allow the patient to reach an informed decision. In situations where the patient is not mentally capable, the discussion must take place with the substitute decision maker.
The obligation to obtain informed consent must always rest with the physician who is to carry out the treatment or investigative procedure. This obligation may be delegated in appropriate circumstances (to a PGY trainee for example) but before assigning this duty to another, the treating physician should be confident the delegate has the knowledge and experience to provide adequate explanations to the patient.

In special circumstances, an obligation of pre-treatment disclosure may fall to more than one physician involved in the care. For example, a radiologist carrying out an invasive diagnostic procedure would likely be seen as responsible for explaining how the test will be done and the risks attendant upon it. The physician who ordered the test might also be expected to tell the patient, in general terms, about the nature and purpose of the test and alternatives which might be employed.

The bottom line:

· The patient must have been given an adequate explanation about the nature of the proposed investigation or treatment and its anticipated outcome as well as the significant risks involved and alternatives available.
· The obligation to obtain informed consent must always rest with the physician who is to carry out the treatment or investigative procedure.

These Code of Ethics commitments and fundamental obligations are paramount in a pandemic.

Science and Beliefs

A statement frequently used during this pandemic is that the response was “science-led”, or that this is a “science-based response”. There is a complete difference between science and beliefs. Definitions for each are below.

**Oxford Dictionary**

**Science** – the intellectual and practical activity encompassing the systematic study of the structure and behaviour of the physical and natural world through observation and experiment.

**Science Council Definition** (Reference 37)

**Science** is the pursuit and application of knowledge and understanding of the natural and social world following a systematic methodology based on evidence.

Scientific methodology includes the following:

· Objective observation: Measurement and data (possibly although not necessarily using mathematics as a tool)
· Evidence
· Experiment and/or observation as benchmarks for testing hypotheses
· Induction: reasoning to establish general rules or conclusions drawn from facts or examples
· Repetition
Critical analysis

Verification and testing: critical exposure to scrutiny, peer review and assessment

**Belief (Reference 38)**

*noun*

something believed;

- an opinion or conviction: *a belief that the earth is flat*.
- confidence in the truth or existence of something not immediately susceptible to rigorous proof: *a statement unworthy of belief*.
- confidence; faith; trust: *a child’s belief in his parents*.
- a religious tenet or tenets; religious creed or faith: *the Christian belief*.

Beginning with the authoritarian dictatorship led lockdown in Wuhan at the outbreak of the COVID-19 Pandemic, there has been a **belief** that “lockdowns” are effective in stopping the spread of COVID-19 and that they are an effective tool in reducing deaths.

For this belief to become science-based, the "theory" that lockdowns are effective needed to be subjected to objective observation, review of actual evidence, reasoning to draw conclusions from facts, critical analysis, and verification to peer review and assessment.

This type of “belief” could equally apply to the flawed modeling results, used to create fear to justify lockdowns.

This will be discussed in detail when reviewing the emergency management process, Courses Open – Advantages/Disadvantages (Cost Benefit Analysis).
EMERGENCY MANAGEMENT ACTIONS COVID-19

Selection and Maintenance of the Aim

The first step in emergency management is the identification of a hazard. In the case of COVID-19, the virus was the hazard. In January and February of 2020, Canada was afforded the benefit of being able to see the hazard as it evolved in other areas of the world. The reaction of the Canadian government was one of casual observation and for most P/T government’s life continued almost normally. Ministers of Health and their MOH, both federally and provincially, began regular appearance on the news. Noticeably absent was the heads of the federal and P/T emergency management organizations.

Pandemics happen continuously. Since 1955, this is the world’s fifth pandemic (Asian Influenza H2N2 1957-1959, Hong Kong Influenza H3N2 1968, SARS 2002, Swine Flu 2009, now COVID-19). In the next 65 years there will likely be five more. We have never responded to a pandemic like we responded to COVID-19.

It must be clear that a pandemic is not a Public Health Emergency, it is a Public Emergency because all areas of society are affected: public sector, private sector, not-for-profit sector, and all citizens. This will be discussed in detail later in this position paper.

What should have been happening in January and February 2020, was that the PM and the premiers should have consulted with their EMOs to discuss potential and probable actions. It is important to note that the EMOs would have immediately involved the MOH in the discussion with the premiers, as that is part of the EM system (covered in detail in the section on Governance).

With advice from the EMO, the PM and premiers should have selected a clear Aim (see below) for their jurisdictions. Selection and Maintenance of the Aim is considered to be the first and most important principle in any large-scale operation, such as war or major emergency (Reference 7):

A single, unambiguous aim is the keystone of successful military operations. Selection and maintenance of the aim is regarded as the master principle of war.

The British perhaps define it best in a description of the application of the 10 Principles with respect to government and business (Reference 8):

Selection and Maintenance of the Aim

Unity of effort and unity of purpose are provided when all understand what they are to achieve and why they are directed to achieve it. Deciding what to do, why to do it and keeping it in view as events unfold is the so called ‘Master Principle of War’. It is a process, an output and an outcome: clarity delivers effectiveness and efficiency.

The Aim (some would call it the Mission) should have been discussed both horizontally and vertically as it was developed. By that, it is meant that the federal and P/T elected leaders with their EMOs would have developed a common Aim:

· linked vertically
- Federally to:
  - the World Health Organization (WHO),
  - the P/Ts,
- P/Ts to their municipalities (who in most cases also have EMOs), and,
- Municipalities to their first responders.

linked horizontally
- Federally to our continental neighbours if possible,
- P/Ts between:
  · neighbouring P/Ts, and,
  · to neighbouring American states.
- Municipalities
  · internal to the P/T,
  · externally to:
    · municipalities on or in close proximity to neighbour P/Ts, and,
    · municipalities on, or in close proximity to, international border neighbours.

The development of a clear and concise Aim may sound difficult, but it is routinely achieved in response to all hazards in each P/T, coordinated by the EMOs. An emergency meeting of “The Council of the Federation” (Reference 9) with the PM in attendance should have been used. The EMOs should have coordinated the discussion.

Not only should the Aim be selected to guide the actions at the start of the COVID-19 Pandemic, but the correct Aim should also be such that it can lead all actions for the duration of the pandemic (i.e., Maintenance of the Aim).

An Aim, as envisioned in the federal and provincial Pandemic Plans published before the arrival of COVID-19 (Reference 10), should have been:

**AIM:** To minimize the impact of COVID-19 on <Insert Name of Jurisdiction> (i.e., Canada or P/T).

The P/T premiers and Canada’s PM have never publicly defined a stated Aim.

Instead, both federally and provincially/territorially, the MOHs were placed in charge and allowed to develop their own Aims. They did so independently (both within their P/T and nationally). Further, the MOHs did not understand the need to select an Aim that could/should be “maintained”.

In a pandemic, for the MOH, the “patient” is all the residents of the P/T. For Canada, the patient is the residents of Canada.

Therefore, any Aim developed by a MOH obligated them to: (References 32 & 33)

- Take all reasonable steps to prevent or minimize harm to the patient; disclose to the patient if there is a risk of harm or if harm has occurred,
· Recognize the balance of potential benefits and harms associated with any medical act; act to bring about a positive balance of benefits over harms,

· Ensure the patient has been given an adequate explanation about the nature of the proposed investigation or treatment and its anticipated outcome as well as the significant risks involved and alternatives available, and

· Meet the obligation to obtain informed consent which must always rest with the physician who is to carry out the treatment or investigative procedure.

At first it appeared the MOH(s)’ evolving Aim was to “slow the spread of the virus” (i.e., flatten the curve and then plank the curve). Then it became “to protect the medical system”. By the third wave the Aim became “to ensure everyone is vaccinated”.

These Aims clearly considered health outcomes and health services with respect to COVID-19 with little or no regard for other outcomes or even to all medical outcomes for the management of COVID-19 itself. While all these ideas should be incorporated into Objectives under the Aim, they completely miss the need to address the impact of COVID-19 on all our society, with deadly consequences.

Failure to define an Aim that met all these requirements meant that the MOHs were in violation of their Code of Conduct.

The premiers, who are responsible for the health care systems of their P/Ts, never took their responsible actions to correct these incorrect Aims. In fact, they compounded these incorrect Aims.

Deduction 1. By failing to establish and lead the EM process to establish the Aim, the premiers and the PM were criminally negligent as:

· This is their first primary duty in a pandemic.

· Selection of the incorrect Aim had the effect of overlooking complete areas of response to the pandemic.

· The placing of the MOH in charge was a direct result of this mistaken Aim, making individuals and staff who were not trained in EM responsible for an unfamiliar process they did not comprehend.

· The MOHs defined aims that were in clear violation of their Code of Conduct.
GOVERNANCE

In February/March 2020, the premiers and the PM needed to establish a comprehensive Governance structure to lead response and recovery for the Aim. This is the first of the ten EM activities (Reference 3). The Governance team, reporting to the premier/PM can be designated as a Governance Task Force. The Governance Task Force is essential to provide the leadership for all policy, programs, and actions taken to mitigate, prepare, respond, and recover (the four EM functions) from the pandemic.

To develop a proper comprehensive governance organization in an emergency is one of the most essential obligations of a premier and prime minister.

The premier(s)/PM needed to respond to the pandemic, not just COVID-19 (the virus).

Figure 2, next page, is a representation of some of the sectors of economy in a P/T, made up of the citizens, all of whom are affected in a pandemic. Each sector is made up of a mix of public and private sector organizations. Regulatory functions are routinely public sector and can be from the federal, provincial, or municipal order of government. The regulators, the owners, the employees, the volunteers, and their customers are all targets of the hazard in a pandemic.
To remove any doubt, a pandemic is a Public Emergency not a Public Health Emergency. The Governance Task Force must represent this fact.

The Governance Task Force must be able to coordinate across all orders of government and must include private sector collaboration. Health should not be in charge. This is not their role or their responsibility.

In order to govern the response to the pandemic at the provincial/territorial order of government a “Task Force on the COVID-19 Pandemic” should have been formed in late February/early March. This Task Force would be the single decision-making body for policy, programs, and actions with respect to the pandemic. It should have been led by the premier and included as a minimum:

- the ministers and the deputy ministers of the most impacted ministries,
- representatives of the urban and rural municipalities,
- representatives of the private sector critical infrastructure (CI),
- a representative for NGOs, and,
- perhaps representatives of opposition parties.

This Task Force would have been *coordinated and supported daily* by the P/T EMO, as is done routinely for all emergencies. The P/T should have been linked by the EMOs to their federal and municipal partners. See Figure 3, next page.
The premiers and PM have never established a comprehensive Governance Task Force for the pandemic.

Instead, both federally and provincially/territorially, the MOH(s) were placed in charge and allowed to develop their own Task Force(s), Special Advisory Council(s), Scientific Advisory group(s), and/or Advisory body(ies) in Medical Staff Association(s). These groups were almost always completely made up of medical “experts”. If a P/T group was actually formed by the premier, the group again was almost exclusively made up of medical personnel.

These organizations focused on the medical sector, to the exclusion of all other sectors. Frequently, even portions of the medical sectors were not fully considered, as will be discussed later with respect to long-term care (LTC) homes.

Rather than coordinate across the other sectors, decisions made in these advisory groups often came as a complete surprise to the other sectors which were fully impacted by the pandemic. One example was the closure of schools, routinely done with little to no consultation. Equivalent surprises were routinely experienced in the private sectors.

Protection of the medical system became the mantra to the exclusion of minimizing the impact of the pandemic on the P/T.

The decision not to establish a comprehensive governance model permitted actions to be taken without:

- a comprehensive risk/hazard assessment of COVID-19 (not just suspect modelling),
- analysis of the Objectives for the COVID-19 Pandemic,
· cross sector consultation, input, and continuing feedback,
· alternative pandemic response methodologies development,
· cost-benefit analysis,
· the development of officially released written pandemic plans to the public,
· a review of all science and emerging pandemic impacts, not just medical case counts.

The premiers, who are responsible for the health care systems of their P/Ts, never took their responsible actions to correct these incorrect Governance failures. In fact, they have at times interfered with efforts by other sectors to be heard. Further, they have actively supported only the messaging from the medical advisory groups and MOH to the detriment of the missing, full, required governance team.

**Deduction 2.** By failing to establish and lead a comprehensive pandemic governance organization, the Premiers and the PM were grossly negligent, this being a responsibility for which they were solely accountable.
In February/March 2020, a detailed assessment of the risk posed by COVID-19 needed to be completed. The assessment needed to be virus specific with all data and evidence available at the time.

The risk assessment needed to be a living document, updated regularly with actual evidence, not modeling. Modeling may be useful to ensure that surge capacity can be developed but does not replace actual evidence and never should.

COVID-19 was known to be a coronavirus. Hence, its designation as SARS CoV-2, Severe Acute Respiratory Syndrome Coronavirus 2. Much is known about Coronaviruses, including the fact that they are extremely likely to mutate and thus have what we now call variants (Reference 11). By February much was being learned about this new virus. It presented as extremely age-correlated for mortality.

In February Statista.com started recording COVID-19 information daily from around the world. Everyone with a computer or smart phone could see the data. The World Health Organization (WHO) started reporting an even larger cross section of data weekly. This data should have been used to conduct a full Risk/Hazard assessment (See Appendix A).

COVID-19 presented as a seasonal virus right from the start. It developed far more slowly in countries that were in summer when it first appeared, than in countries in winter. As the year progressed, the countries moving into spring and then summer saw the COVID-19 virus diminish like a seasonal virus, as those moving into fall and then their winter saw COVID-19 increase (Appendix A).
Yet, in MOH analysis in Canada, the lockdowns were given full credit for the seasonal decrease in the virus. The second wave appeared to come as a surprise to the MOH, and they mistakenly believed that lockdowns would “again” (in their opinion) stop the virus. The exponential growth in the period October to December 2020 was blamed on the public not following lockdown health rules, when in fact it was simply normal seasonal growth of a highly contagious virus.

Further, the COVID-19 Pandemic presented a hazard to more than just the physical health of the population. Fear of a new disease, even if placed in context, could result in:

- Personal mental health issues,
- Societal health issues,
- Lack of confidence in government, and
- Lack of confidence in medical systems.

Results from a complete Risk/Hazard Assessment would have resulted in essential deductions for the response.

- A targeted response, age dependent, was required.
- Comorbidities were important, especially in the elderly.
- The seasonal nature of the virus may/would require new surge capacity in the medical system.
- The collateral fear-based impacts of the new virus (COVID-19) needed to be addressed coherently and comprehensively.
- The zoonotic behaviour of COVID-19 needed a continuous intelligence system.
- Health issues/deaths caused by COVID-19 needed a continuous intelligence system for impacts on the operation of critical infrastructure.
- Mortuary services may need additional capability.
- EM is the coordinating agency trained, staffed and equipped to do a full Risk/Hazard Assessment in a pandemic. The MOH is not.

**Deduction 3.** By failing to ensure that a comprehensive Risk/Hazard Assessment was established during the first wave, Premiers and the PM were grossly negligent. The lack of this process resulted in a grossly negligent response:

- in identification and protection of those most at risk,
- in identification of those at extremely low risk,
- in management of the fear associated with a new disease in the population.
- in the incorrect use of non-pharmaceutical interventions,
- in the incomplete assessment of response for care of critical infrastructure,
- in the incorrect establishment of new surge capacity, for all critical infrastructure, and
- in the identification of the types, quality, and quantity of human, animal, and material resources required to logistically support, combat, and mitigate the Risk/Hazard.
Deduction 4. By failing to ensure that a comprehensive Risk/Hazard Assessment was established immediately after the first wave, Premiers and the PM were criminally negligent. This compounded the impact of the grossly negligent response from the first wave, causing continued massive collateral damage that convey/confer joint and severe liability to the provincial and territorial Premiers and PM for Canada.
In all government planning, the leadership of the government needs to specify the objectives of Policy and Programs. The Governance Task Force on the COVID-19 Pandemic therefore needed to clearly establish the objectives for the government’s actions before, during, and after the pandemic.

These objectives are defined in a process which EMOs routinely coordinate with the Task Force during emergencies. This process is normally called Mission Analysis. (Reference 20)

The objectives are laid out as a list of “what” needs to be done. The “how” is defined later in a planning process. The lists of “what” are grouped into areas that can be assigned to teams for the development of courses open or options for completion. There is always more than one way to achieve each task or objective. The process to identify advantages/disadvantages of courses open (sometimes called a cost benefit analysis) will be discussed in later sections.

In the pre-written P/T pandemic plans and the federal pandemic plan (Reference 10), high level Objectives were defined. Using the Alberta pandemic plan (Reference 14) as an example, four objectives were stated:

- Controlling the spread of influenza disease and reducing illness (morbidity) and death (mortality) by providing access to appropriate prevention measures, care, and treatment.
- Mitigating societal disruption in Alberta through ensuring the continuity and recovery of critical services.
- Minimizing adverse economic impact.
- Supporting an efficient and effective use of resources during response and recovery.
The review of the pre-written plans by the Task Force should have been the starting point for the Mission Analysis, to define both Tasks Given (the Pre-Written Objectives) and Tasks Implied, for the EM coordinator to define with the Governance Task Force.

This process is designed to break out a full list of what will be required to meet the Aim, that being "To minimize the impact of COVID-19 on <Name of Jurisdiction>". A partial example of what should have broken out is contained in Appendix B.

Regardless of the specifics of the Tasks Given and Implied, a common task in all emergencies is the minimization and control of fear.

**This point cannot be overstated.** Confidence in government is essential in any emergency. The use of fear as a tool in an emergency always results in far worse unintended consequences that are long lasting.

The use of fear is normally associated with authoritarian and dictator forms of government. Democracies should never use fear. It is inherently against the concepts of self-determination of risk and citizen-based decisions based on logic from the clear and coherent presentation of fact-based information.

For clarity, Appendix B is a partial list of the Tasks for resolution of the COVID-19 Pandemic. That said, it is evident that most of the items on this partial list were never considered in the P/T and federal response to COVID-19.

**Deduction 5.** By not having a correct Aim, by not having a correct Governance Organization, and by not conducting a coordinated Mission Analysis with a correctly established Governance Task Force, the complete list of actions required to respond to the COVID-19 Pandemic were never understood, developed, or implemented.

**Deduction 6.** The Premiers are responsible for EM in their P/T, as is the PM for Canada. The P/T Premiers and PM for Canada failed to conduct a process that fully identified what needed to be done in this pandemic and are jointly and severely liable for this criminal negligence.

**Deduction 7.** The MOH, both in the P/Ts and federally, did not conduct a process to correctly identify their own tasks, let alone the full jurisdictional tasks once established as the full P/T or federal lead agency. The P/T and federal MOH are jointly liable for this criminal negligence.

**Deduction 8.** The use of ‘Fear’ as a methodology to enforce compliance to health rules, either intentionally or unintentionally and to continue using Fear once recognized, is dangerous and deadly. The incessant use of Fear to enforce a criminally negligent response to COVID-19 is a criminally negligent action which will have long-term deleterious consequences:

- on our democracy,
- on our citizens’ mental health,
- on our country’s societal health.
DEFINING COURSES OPEN/OPTIONS

With the Tasks, both Given and Implied, fully defined the next EM step is to group the tasks and build the possible methods to achieve the Tasks. This defines a series of “Courses Open” for each grouping of tasks.

The development of courses open process should be conducted with the full expertise of senior leadership, normally direct subordinates to the members of the Governance Task Force, with specific additional experts added for specific tasks/groups of tasks.

The Courses Open process is coordinated in every emergency by the EMO. The EMO staff understands how to lead the process, how to draw observations of the factors affecting each task (or group of tasks), and then how to draw deductions from those observations. Each task or group of tasks is reviewed considering defined factors:

- Hazard(s) – COVID-19 and other hazards that can occur during the pandemic,
- Partners and stakeholders – all those directly available to assist in response to the pandemic and to the other hazards that may occur during the pandemic,
- Ground/Jurisdiction – Urban vs rural breakdown, population density, transportation networks, communication networks, etc.,
- Environment – current weather, seasonal weather, climate of jurisdiction, etc.,
- Time – expected duration of the pandemic, expected duration of waves of the pandemic, normal time to achieve normal herd immunity (if possible), normal time to achieve a fully tested vaccine (if possible), cycle of other normal hazards, etc., and,
- Space – size of the jurisdiction, distances (internal and external), etc.
Other factors may be considered if applicable.

The process is followed for each task or group of tasks until options are defined with:

- **clear measurable outcomes**
- assigned agencies;
- specific actions to be taken;
- coordination required, internal to actions defined;
- a definition of resources required (see seven resources in Reference 3);
- definition of assumptions for the course, and,
- definition of phasing or limitations on the course.

This step in OPP is the meat of the process. It is difficult and needs focus and leadership of the process.

In many cases, people wish to jump to obvious or seemingly logical assumptions of how to resolve tasks. Competent EM coordinators can help avoid this mistake.

A clear example of this in this pandemic was the assumption that the only way to deal with COVID-19 was to enact severe authoritarian lockdowns as witnessed in China.

There were many other methods of handing a pandemic as we followed in the past but they were seemingly ignored.

Once the Courses Open are defined, for each Course Open a full assessment of advantages and disadvantages of each course is developed. By ignoring other Courses Open, the comparison of advantages/disadvantages was also ignored. In some disciplines the advantages/disadvantages process is called a cost benefit analysis. This step is presented in the next section.

The final purpose of this EM step is to present to the Governance Task Force the different methodologies that are available for each task or group of tasks. This allows the Governance team to further refine the possible Courses Open or to request different Course Open to be considered/developed.

This step in the EM process is complex and needs the input of many experts across many disciplines. For each task or group of tasks the team composition to develop the Course Open will be quite different. All the Task teams can work simultaneously, with an EM staff member leading the process.

An additional EM staff member will coordinate the linking of all the teams, so that:

- the Courses Open do not conflict;
- any shortage of resources can be identified when required by multiple groups;
- a sequencing of tasks can be developed;
- potential concepts for phasing of tasks can be considered;
- possible areas of concern can be brought to the Task Force for clarification or initial decisions, and,
a presentation of final findings can be presented to the Pandemic Governance Task Force.

Examples of tasks/groups of tasks that should have been fully developed in a Course Open process are attached as Appendix C.

Deduction 9. With no Mission Analysis completed, the development of alternative strategies to respond to COVID-19 was wholly incomplete before and during the first wave of COVID-19. Entire areas were overlooked or ignored. In particular, the absence of tactical options to protect our seniors over the age of 60, even though it was clearly known they were most at risk from COVID-19, was gross negligence.

Deduction 10. In subsequent waves, the development of alternative strategies never occurred for all pandemic tasks in a complete and coherent manner by all necessary experts. The result was continued avoidable deaths of seniors and ongoing deaths from massive collateral damage. This is criminal negligence.

Deduction 11. The protection of Canadian Seniors did not consider multiple and varied methodologies, deduced with options, for:

- protection of seniors in LTC homes,
- protection of seniors living alone,
- protection of seniors living in multi-generational homes,
- the ability for choice between quarantine and non-quarantine based on respect for the Charter rights and freedoms of the seniors.
- Canada would not have placed last in the OECD for protection of our seniors in LTC homes, repeatedly in each wave.
- This is criminal negligence causing death by the Premiers and the MOH.

Deduction 12. There should have been detailed options for the protection of critical infrastructure (CI) and other essential services. If they were developed the public was never made aware.

Deduction 13. There should have been serious options developed for new medical surge capacity.

- It does not appear that new surge capacity was understood or developed.
- Surge capacity should never be envisioned by the closure of other medical procedures, except as a last recourse after all other methods have been exhausted.
- Closure of access for other illnesses, i.e., using existing capacity not new capacity, was the only option ever publicly discussed and implemented. This created fear and massive backlogs for the future.
- Mutual aid (not the emergency use of the military) should have been a full option if P/Ts were not isolating their response from each other.

Deduction 14. There should have been options for continued and enhanced care for other severe illnesses.
· People with these illnesses need extra support when a pandemic is happening.
· Instead access for individuals needing diagnosis, treatment, and care was restricted both physically and mentally by the response to COVID-19.
· It appeared to the public that only COVID-19 patients counted.
· Fear, increased backlogs, and future negative health impacts for the lack of diagnosis and treatment will result from this lack of options development.

**Deduction 15.** There should have been options for the full continued education of our youth not involving unachievable social distancing and fear. The impact on Canadian youth, who were at incredibly small risk from COVID-19, will last for this generation.

**Deduction 16.** Options to enhance Confidence in Government were clearly not considered, such as by:
· placing COVID-19 into perspective with other diseases,
· placing COVID-19 into perspective to other daily risks,
· developing confidence in the ability of the medical system to respond,
· discussing treatment options for COVID-19, and,
· not discussing fear of daily collapse of the medical system.

**Deduction 17.** Options to ensure the **continuity** of business and the economy needed to be fully developed. Support options should have been developed for industry where the business was impacted by lack of customers, staff who were ill, or influenced from outside the jurisdiction.
CONDUCTING AN ADVANTAGES/DISADVANTAGES (COST BENEFIT) ANALYSIS

Once the Courses Open are defined, for each Course Open a full assessment of advantages and disadvantages must be done.

The listing of advantages/disadvantages (cost benefit analysis) is a critical and essential requirement in the development of how to respond to the pandemic. It stops the implementation of potential dangerous group think single courses of action. It forces the teams to fully investigate new ideas or methodologies. It permits established ideas to be evaluated against new ideas.

Before discussing the advantages/disadvantages (cost benefit) analysis process, an understanding of non-pharmaceutical interventions (NPIs) is required.

Non-Pharmaceutical Interventions (NPI)

Prior to the arrival of COVID-19, the World Health Organization (WHO) had rewritten and republished a guidance document, “Non-pharmaceutical public health measures for mitigating the risk and impact of epidemic and pandemic influenza”, dated September 2019 (Reference 24).

This document had been preceded by a WHO NPI publication that stated on page 9, section 1.1.3. (Reference 24):

“WHO published guidance on NPIs in 2009 in response to the emergence of influenza A(H1N1) pdm09 (32-35). That guidance provided recommendations on the measures that can be used to reduce influenza transmission and mitigate the impact of epidemics and pandemics.”
These documents included the world’s best studies, information, and deductions on the use of separate non-pharmaceutical interventions (See Appendix D). The NPIs, scientifically reviewed included:

- Hand hygiene,
- Respiratory etiquette,
- Face masks,
- Surface and object cleaning,
- Other environmental measures:
  - UV light,
  - Modifying humidity,
  - Increased ventilation;
- Contact tracing,
- Isolation of sick individuals,
- Quarantine of exposed individuals,
- School measures and closures,
- Workplace measures and closures,
- Avoiding crowding,
- Travel advice,
- Entry and exit screening,
- Internal travel restrictions,
- Border closure.

The use of these NPIs was discussed in the development of the existing P/T and federal pandemic plans, prior to the COVID-19 Pandemic. Their advantages and disadvantages were known and taken into account in these pre-written pandemic plans.

**Due Diligence demanded that the WHO NPI 2019 document was known, or should have been known, by all Medical Officers of Health (MOHs) in Canada.**

The MOH(s) needed to consider the following facts from the WHO NPI document:

- The use of each of the NPIs was dependent on the severity of the pandemic. (Appendix D),
- Even in a high or extraordinary pandemic (References 24 & 25 and Appendix D) the use of all or a majority of these NPIs at the same time was not envisioned or recommended.
- Some of the NPIs were **not recommended for use in any pandemic** (See Appendix D).
  - Contact tracing (not recommended after first two weeks),
  - Quarantine of exposed individuals,
  - Entry and exit screening,
  - Border closures.
Some of the NPIs were recommended for use only as a last resort. Despite this, they were used as a first resort (See Appendix D).

- Workplace measures and closures.

Some NPIs were not recommended for a pandemic with the severity of COVID-19 (See Appendix D). These recommendations were ignored.

- Workplace measures and closures,
- School measures and closures,
- Face masks for public.

Prior to making the recommendations above, the WHO NPI document presented a detailed review of each NPI, with sections on:

- Quality of evidence,
- Values and preferences,
- Balance of benefits and harms,
- Resource implications,
- Ethical implications,
- Acceptability,
- Feasibility.

Therefore, this NPI document represents science. It was based on scientific methodology including the following (Reference 37):

- Objective observation: measurement and data (possibly although not necessarily using mathematics as a tool),
- Evidence,
- Experiment and/or observation as benchmarks for testing hypotheses,
- Induction: reasoning to establish general rules or conclusions drawn from facts or examples,
- Repetition,
- Critical analysis,
- Verification and testing: critical exposure to scrutiny, peer review and assessment.

Concerns over mental health, societal health, and restrictions to access for other severe illnesses, dangerous impacts on children’s education and likely economic impacts were presented. These concerns formed the basis of the recommendations stated above, clearly shown in Appendix D.

Restated, this WHO NPI document, its information, and recommendations written by the best infectious disease authorities in the world, incorporated into the pre-existing P/T and federal pandemic plans, updated in an extremely timely manner in September 2019, and essential to the discussion and decisions surrounding the use of what we now call lockdowns, was ignored in March 2020. It continues to be ignored to this day.
This shows a complete disregard of:
- the world’s best practices in the use of NPIs in the preparation of Courses Open,
- any form of advantages/disadvantages (cost benefit) analysis, and,
- the Oakes Test required by law in Canada before the denial of Charter Rights and Freedoms (Appendix E).

In fact, all attempts to question this belief in the effectiveness of the use of non-recommended NPIs, lockdowns, has been met with intentionally developed attacks from:
- the MOH(s),
- the teams of medical (science) advisors,
- the premiers,
- the PM, and,
- the media.

Once into the COVID-19 Pandemic, the theory of the effectiveness in lockdowns in reducing spread and in reducing loss of life has been scientifically reviewed. The detailed and extensive science review has concluded that lockdowns do not significantly reduce the spread of COVID-19, nor do lockdowns decrease deaths from COVID-19.

One study, “Assessing mandatory stay at home and business closure effects on the spread of COVID-19”, by Eran Bendavid, Christopher Oh, Jay Bhattacharya, and John P. A. Ioannidis dated January 5, 2021 (Reference 66) states:

**Conclusions.** While small benefits cannot be excluded, we do not find significant benefits on case growth of more restrictive NPIs. Similar reductions in case growth may be achieved with less restrictive interventions.

The authors of this study represent the best infectious disease experts in the world. The study reviewed many countries, compared similar climates, compared similar geography, in same seasons, and with similar urban/rural composition. They described their scientific methodology below:

**Methodology.** We first estimate COVID-19 case growth in relation to any NPI implementation in subnational regions of 10 countries: England, France, Germany, Iran, Italy, Netherlands, Spain, South Korea, Sweden and the United States. Using first-difference models with fixed effects, we isolate the effects of mrNPIs by subtracting the combined effects of lrNPIs and epidemic dynamics from all NPIs. We use case growth in Sweden and South Korea, 2 countries that did not implement mandatory stay-at-home and business closures, as comparison countries for the other 8 countries (16 total comparisons).

Over 30 additional scientific studies, with similar or even harsher findings on the effectiveness of lockdowns on controlling spread and/or deaths from COVID-19 can be found in “The American Institute for Economic Research – Lockdowns do not control the Coronavirus – the Evidence” (Reference 39).
This science on the effectiveness of lockdowns has not been allowed to affect the “belief” in lockdowns by our MOH(s).

In summary, the use of each NPI and the collateral damage from the use of each NPI needed to be justified in a cost benefit analysis, showing not just what life saving could be expected, but what the short term and long-term life costs would be. Further, it needed to be demonstrably shown why the WHO recommendations were being ignored.
CONDUCTING AN ADVANTAGES/DISADVANTAGES (COST BENEFIT) ANALYSIS, CONTINUED

Again, with the Courses Open defined, the Advantages/Disadvantages process becomes the critical and essential next step. This permits each option to be weighted, in a logical and intensive manner, looking for collateral damage that may occur for each course. Positive outcomes are measured in balance with negative outcomes, for each Course Open.

Then the different courses open for each part of the problem can be measured more objectively against each other, as a sum of positive and negative outcomes.

In the extremely rare case where it appears that there is only one single way to solve a portion of the response, that course must still be subject to this process. It is essential to identify the difficulties or severe outcomes that may be produced by every action. That way, solutions to the collateral damage can be planned and resources allocated in advance.

Further, during this investigation of advantages/disadvantages, a new possible Courses Open may appear, previously unrecognized. This normally occurs when it becomes obvious that this single course of action has collateral damage that will vastly outweigh the positive results.

If this OPP step is not completed it is likely that the response will have unexpected, unplanned, and dangerously severe, collateral damage. **This creates a decrease in confidence in government and fear.**
OVERARCHING EMERGENCY MANAGEMENT PRINCIPLES

Confidence in Government

Confidence in government is an overarching paramount objective in every Course Open in an emergency. This cannot be overstated. Confidence in government (i.e. the diminishment of fear) is measured in the advantages/disadvantages to each course and in comparison of each course.

Fear will always occur in an emergency. It will occur in the leaders, the responders, the partners, the stakeholders, and the public.

- It must be planned for and managed in a coherent and responsive manner, like every other task in the pandemic.
- It must never be ignored.
- It must be placed into context, so that the public, who deal with risks every day in their lives, can establish perspective (see Appendix F, Part 3)
- In and of itself, fear must NEVER be used as a tool in response. If it is, it will have uncontrollable, long term, severe, unpredictable collateral damage.

Mutual Assistance

Partnerships, mutual assistance agreements, memorandums of understanding (MOU) for emergencies, pre-existing cooperative plans, cross-border MOUs (P/T, P/T to American States, Canada/USA, Canada to other nations) and public/private sector plans/MOUs.

All these emergency management policies and plans have been developed for decades, based on one simple concept. In times of emergencies we work together. An advantage in every Course Open is when the course emphasizes mutual assistance where:

- We share resources.
- We act in a coherent and fair manner.
- We build partnerships, we do not ignore or dissolve them.
- We share ideas and best practices based on trust and confidence in government.
- It is not one system at the expense of all other systems (i.e. the medical system first, every other system a distant second).
- It is not just when convenient.
- It is not every P/T alone or for themselves.
- It is not closing areas in fear. It is assisting others with confidence.

If this principle is followed, people continue to support each other, and after the emergency they share the victory.
If this principle is not followed, an “us versus them” attitude permeates all actions, and after the emergency lingering distrust and anger will prevail.

Communication

Perhaps a cornerstone of the first principle of Confidence in Government is the principle of communication.

- In each Course Open, communication of intentions, actions and follow up become essential advantages (benefits).
- The course needs constant push and pull communications (i.e. appropriate confidence-based information about the course routinely and systematically sent to everyone, with additional methodologies to ensure everyone can pull the information when they need it).
- Feedback systems need to be in place as part of the course open to allow all citizens/partners to feel they have a way to present information, ideas, and concerns.
- Isolation must be minimized, for individuals, groups, sectors, and systems.
- In an emergency the Leader of the jurisdiction is THE SPOKESPERSON. Experts can be called to add necessary detail, but the message starts and finishes with the leader.
OVERARCHING DANGEROUS PRACTICES IN EMERGENCY MANAGEMENT

Fear

It cannot be overstated that the use of fear in any emergency should never be part of a Course Open. Fear should never be used to:

- encourage personal compliance with an aspect of the course open,
- cause citizens to report on each other,
- justify not helping others (deny mutual assistance),
- cause systems to be closed or isolated,
- cause the belittling or dismissal of ideas/opinions other than the mainstream ideas,
- control the media.

Abandonment of Science

Courses Open are developed based on the data originally available, the Aim from the Governance Task force, Hazard Assessment, the Mission Analysis, and the Assessment of Factors at a given moment in time. Data/evidence will develop and change as the pandemic evolves. This requires that Course Open in the original Operational Planning Process (OPP) be made with:

- flexibility in their design,
- an ability to transition between Courses Open if required, and,
- a clearly stated, evidence based, rational.

Science, as described in Reference 37, is used throughout the pandemic to confirm or modify Courses Open, based on the evolving evidence and critical analysis of that evidence.

Courses Open and their Advantages/Disadvantages are not selected and evaluated by:

- willful disregard of previous science (i.e., science-based existing policy and plans),
- the idea that everyone else is doing it so it must be right,
- a selection of a “belief” (i.e., lockdowns work),
- limiting the input from a correctly established full task force of partners,
- wilful ignorance of conflicting evidence,
- media pressure,
- social media pressure, and,
- personal fear.
A Lockdown Approach verses a Targeted Response

Briefly stated, it appears in Canada, that only two overarching Courses Open to the top-down response to COVID-19 were ever considered:

1. Use of Lockdowns – The use of lockdowns on the entire population to control the spread and deaths from COVID-19 until a vaccine can be developed to save everyone.

2. Targeted Approach – The use of a targeted response protecting the most at risk while maintaining life as much as normal for everyone else. A vaccine may be developed later, but it is not essential to the response.

The EM process **does not define a Courses Open in this giant concept fashion.** The EM process defines the Courses Open in smaller sub-sets, for what should be obvious reasons by now in this paper. In the EM process the definition of each Course Open should be based on:

- pieces of the response that can be built and integrated by their subject matter experts,
- pieces that when assembled make a comprehensive plan, built by all partners,
- pieces that can be evaluated for advantages/disadvantages one action at a time,
- pieces that can be verified based on science, previous and evolving, and,
- pieces that can be switched, modified, and confirmed as evidence as the pandemic evolves.

The two overarching Courses Open defined above have been forced to play against each other, to the detriment of our nation, for the entire pandemic. The media have picked sides.

Appendix F breaks out the Advantages/Disadvantages emergency management process. In Appendix F, a comparison between the two most prevalent response methodologies is shown.

The massive cost benefit evidence against the use of lockdowns has been collated for our MOH, premiers, and PM for their ease of investigation and ignored to this day (*References 78, 79 & 80*).

In a correct full EM process, which obviously has not happened in Canada, once the Governance Task Force is confident the EM process has considered all areas and that the Courses Open are well defined with a clear explanation of Advantages/Disadvantages (Cost Benefit Analysis), the Task Force will present the findings with their recommendations to the premier/PM for:

- the Premier/PM to request additional information,
- the Premier/PM to direct areas where additional Courses Open are required,
- a selection of which Courses Open will be followed for each group of tasks, and,
- the Premier/PM to direct that a written pandemic plan be developed.

**Deduction 18.** The EM process of developing Courses Open for the response to COVID-19, prior to and during the first wave, was not completed. Therefore, the ability to construct a table of Advantages/Disadvantages (i.e., conduct a Cost Benefit Analysis) to compare the individual groups of tasks, was impossible.
**Deduction 19.** In subsequent waves, the ability to construct a table of Advantages/Disadvantages (i.e., conduct a Cost Benefit Analysis) to compare the individual groups of tasks continued to be impossible. Experts were never consulted, outside of a group of MOH special advisory groups, all of whom had a collective belief and commitment to lockdowns. This resulted in continued avoidable deaths of seniors (which were being reported daily) and massive collateral damage and deaths (which were also being reported daily). This is criminal negligence.

**Deduction 20.** Even if an Advantages/Disadvantages (Cost Benefit Analysis) had been conducted on the inappropriate (and deadly) overarching Courses Open of lockdowns verses Targeted Response (Appendix F) before and during the first wave, it would have been obvious that:

- the lockdown approach would cause far more death and damage than a targeted response,
- lack of identification of this fact was caused either by a complete lack of due diligence by the MOH or willful disregard of the fact,
- the MOH was bound by their medical oath (do no [minimum] harm) to advise the Premier/PM of this fact,
- the MOH was bound by their medical oath (informed consent) to fully advise the public of the dangers of the lockdown approach (and the fact that it would cause more harm than a targeted approach),
- failure to do both actions meant the MOH should be subject to immediate disciplinary action by their College of Physicians,
- the College(s) of Physicians is in breach of their responsibility to oversee the MOH in the performance of their duties causing breach of their oath.

**Deduction 21.** In subsequent waves, an Advantages/Disadvantages (Cost Benefit Analysis) was demanded with the mass of evidence that lockdowns had no significant impact on the spread of COVID-19. The fact that this evidence was ignored is again either through a lack of due diligence or willful disregard. This is criminal negligence causing death and damage.

**Deduction 22.** Regardless of options, the protection of seniors in Canada ranked last in the OECD. This is due to the ‘belief’ in lockdowns and the willful disregard for a Cost Benefit Analysis to determine how to best protect our seniors. This is criminal negligence.

**Deduction 23.** The Advantage for developing new surge capacity as opposed to reliance on lockdowns and closure of capacity in support of other health illness is obvious. The deaths caused by these decisions are due to criminal negligence.

**Deduction 24.** The use of lockdowns led to a decision to demand waiving safety protocols in the development of vaccines, in a rush to end lockdowns. Any increased deaths and complications from vaccines now and in the future will be collateral criminal negligence.

**Deduction 25.** The danger to children and their teachers from COVID-19 was less than annual influenzas. The massive impact on Canadian youth from school closures will last at least a generation. The failure to determine this through an Advantages/Disadvantages (Cost
Benefit Analysis) process is criminal negligence.

**Deduction 26.** The use of lockdowns on the mental health and societal health of all residents of the jurisdiction caused collateral damage to both. The lack or disregard of the Advantages/Disadvantages (Cost Benefit Analysis) process in the blind application of lockdowns verses alternate Courses Open caused these increased effects. These collateral damages and deaths, now and in the future, are attributable to criminal negligence of the leaders of the pandemic response.

**Deduction 27.** The use of lockdowns on the private sector was massively disproportionally applied. Regardless, lockdowns have caused bankruptcy, mental health impacts, and debt for workers and owners. Options to ensure the continuity of business and the economy were completely ignored because of a lack of the Advantages/Disadvantages (Cost Benefit Analysis) process. These collateral damages and deaths, now and in the future, are attributable to criminal negligence of the leaders of the pandemic response.

**Deduction 28.** When the public demands to be locked down, willingly giving up their Charter rights and freedoms with no proof of the need by evidence meeting the Oakes Test, the public knowingly or unknowingly is demonstrating a complete lack of confidence in their democratic government. The Premiers/PM and the MOH using lockdowns in spite of the knowledge that they knew or should have known that lockdowns do not significantly reduce the spread of COVID-19, denied Charter Rights and Freedoms without cause or proof of cause. This is at best gross negligence.

**Deduction 29.** Massive borrowing by federal and provincial governments directly supported the use of lockdowns. It was known before the pandemic that the use of NPIs would have little beneficial effect on the spread of most viruses. Scientists repeatedly documented this fact during the COVID-19 Pandemic. The lack or disregard of the Advantages/Disadvantages (Cost Benefit Analysis) process in the blind application of lockdowns verses alternate Courses Open caused a massive near doubling of Canada’s national debt. The deaths and collateral damages, both now and into the future, caused by servicing this enormous debt obligation are attributable to criminal negligence of the leaders of the COVID-19 pandemic response.

**Deduction 30.** The PM and Premier have never publicly presented the Cost Benefit Analysis. There has been no written Cost Benefit Analysis to justify health orders, to justify denial of Charter Rights and Freedoms, or to justify States of Emergency. The only justification presented is fear of COVID-19. This is criminal negligence in the time of an emergency.
ISSUING A WRITTEN PANDEMIC RESPONSE PLAN

Background

To ensure a coordinated and comprehensive response to a pandemic, a written plan is essential. It represents the culmination of the entire emergency management process to this point.

It is the signed, written direction from the premier or PM. It forms the basis of confidence in government. It forms the basis of a statement of due diligence in the building of the response. It establishes that the government has a plan, that they are ready to respond, and that they are open to suggestions to improve the plan.

A written plan provides each partner and stakeholder in the pandemic with:

- a defined, comprehensive, and consistent statement of the Aim of the Response,
- a complete picture of the hazard as known (i.e., the virus),
- a statement of who all the partners in the response will be, their tasks, and important coordination procedure for their roles,
- a definition of the role of all residents of the jurisdiction in the response, and,
- a methodology for feedback on the plan, on the effects of the plan, and ideas for improving the plan.

A template for an emergency management plan is attached as Appendix G (Reference 70). This template represents the minimum required information to be included in a written plan. Other formats can be used, but this format has been used routinely in the issuance of written plans by military and emergency management agencies.
A COVID-19 WRITTEN PANDEMIC PLAN

Prior to the COVID-19 Pandemic, every P/T in Canada, and the federal government, had written a generic pandemic response plan. Links to all 14 plans can be found at Reference 10.

These pandemic response plans were written by full emergency management partnership teams. They were not written just by medical personal. Recognizing the fact that a pandemic is not a Public Health Emergency, it is a Public Emergency (i.e., a pandemic will affect everyone). These plans used experts from every sector of the country and every order of government.

All past lessons learned were included in these plans. Of particular note is that the lessons learned with respect to the use of non-pharmaceutical interventions (NPIs) were included in these plans. The advantages and disadvantages of the use of each of the individual NPI were noted. As these pandemic plans were generic plans for an unknown virus, all possible NPIs were discussed, knowing that at the time of an actual pandemic, these plans would be refined.

The lessons learned that were included did not just relate to the medical lessons learned from previous pandemics. The lessons learned also related to non-medical lessons from large impact emergencies. As a result, the best emergency management policy, plans, and practices were included.

These pre-written P/T and federal pandemic plans should have formed the basis of the Canadian response, starting in January 2020, while COVID-19 specific written plans were being prepared and issued.

The purpose of these pre-written plans should be obvious. For clarity, the major reasons for writing these plans were:

· to be a starting point for rapid response,
· to provide initial guidance to the premiers/PM,
· to provide initial concepts for establishment of Governance Task Forces,
· to provide initial statements of Tasks Given and Implied for the Mission Analysis, and,
· to be a starting point for the drafting of a hazard/virus specific pandemic response plan.

It appears from the response across Canada that these detailed pre-pandemic plans, written by teams of experts, with best lessons learned and constant updating and review with the aim of minimizing the impact of a future pandemic on our P/Ts and country, were completely ignored.

It appears that no written pandemic response plan has been issued to the public in any P/T or federally.

The lack of an emergency management pandemic response plan is confirmed by:
· the constantly changing Aim as the pandemic evolved,
· the routinely changing objectives, normally announced by a MOH or their special advisory groups,
· the routine “surprise” to partners in the pandemic when new or changed health rules/orders were issued without coordination of affected partners,
· the complete absence of written plans for the care of the most vulnerable, our seniors, and,
· the absence of a comprehensive pandemic response plan to the public.

A companion to the pandemic response plan is the pandemic recovery plan. It should have been drafted at the very start of the pandemic, updated as required, and issued publicly to ensure confidence in government. This too is obviously absent in the process being run by the Canadian premiers and the PM.

Deduction 31. Confidence in government is essential in a pandemic. This confidence is assisted by the leaders issuing a comprehensive, coordinated, evidence-based, demonstrably justified, publicly issued, transparent, written Pandemic Response Plan. Neither the Premiers nor the PM have taken this action. This is at best gross negligence.

Deduction 32. A written Pandemic Response Plan is the minimum action required to justify the use of special emergency powers each time they are imposed. Lack of this demonstrable justification makes the use of these special powers illegal.
CANADIAN ELECTED LEADERS IN AN EMERGENCY

Background

Legislation for emergencies exists federally and provincially/territorially. Federally there is an Emergencies Act and an Emergency Management Act, as well as Regulations. P/Ts have both Acts and Regulations (References 2, 67, 68 & 69).

Federally, these laws define that the Governor in Council is responsible for emergencies. That is the Prime Minister (PM).

For the P/Ts, these laws define that the Lieutenant Governor in Council is responsible in emergencies. That is the Premier.

Duties can be delegated to ministers and this delegation varies federally as well as in the P/Ts.

This delegation does not remove the responsibility from the PM and the premiers. Neither does it remove from them the accountability for negligence, gross negligence, nor criminal negligence for actions taken by their governments in time of emergency.

Federally, the types of emergencies are broken into four types (Reference 67):

- Public Welfare Emergencies,
- Public Order Emergencies,
- International Emergencies, and,
- War Emergencies.

Federally, a pandemic, if a declaration of a state of national emergency is required, would be defined in most cases as a Public Welfare Emergency.

For the P/Ts, emergencies are normally stated by the hazard involved (e.g., wildfire emergency, flood emergency, transportation of dangerous goods emergency, pandemic). There is normally a single type of declaration, that being a State of Emergency.

A declaration that a state of emergency exists should only be made when all normal methods of response are, or will be, overwhelmed. If a declaration of a state of emergency is made it is required that (Reference 67):

- the state of affairs that has caused the declaration be described,
- the special temporary measures that will be required, and,
- a definition of the area impacted by the declaration.

Further, legislation defines:

- the period that a declaration is in effect for unless revoked or continued,
- the exact period, by type of declaration, that is the maximum for the declaration, and,
- that a motion for confirmation must be laid before the appropriate House.
Additionally, the legislation(s) encourage that:

- as short a duration of time as is necessary be declared, until normal response can re-established,
- minimum special powers should be used for as short a duration as required, and,
- not all powers are needed to be declared for the entire duration of the declaration.

Finally, before a State of Emergency can be continued, upon reaching its maximum declared duration, all current special orders and special regulations made under the declaration are reviewed and justified. The PM or the Premier must determine if this justification exists. This must be done each time a declaration is continued for the emergency.

The exact wording for this requirement from the Federal Emergencies Act, for a Public Welfare Emergency (i.e., a pandemic) is below (Reference 67):

**Review of orders and regulations**

**(2)** Before issuing a proclamation continuing a declaration of a public welfare emergency, the Governor in Council shall review all current orders and regulations made under section 8 to determine if the Governor in Council believes, on reasonable grounds, that they continue to be necessary for dealing with the emergency and shall revoke or amend them to the extent that they do not so continue.
PRIME MINISTER’S AND PREMIER’S RESPONSIBILITIES IN PANDEMICS

There is no greater responsibility for the PM of Canada and any premier of a P/T, than their role when their jurisdiction is experiencing an emergency. In particular, a pandemic is an emergency of greater responsibility due to the fact that it can affect the entirety of a jurisdiction at the same time.

Premiers have the main responsibility in a pandemic as health is predominately a P/T area of jurisdiction. That said, the PM has areas of responsibility under the *Canada Health Act*, is responsible to assist in mutual aid between P/T, augment support as requested by P/T, and to coordinate international areas of response/aid to Canada. In addition, the PM has the responsibility to ensure that the laws of Canada are observed and to ensure that special measures, when used, are fully justified. This is particularly true for the *Charter of Rights and Freedoms*, as the federal government is the guardian of this legislation.

It must be clear that in an emergency a state of emergency does not have to be declared. A state of emergency is only declared if special measures must be used. If special measures are required, (as must be obvious by now in this pandemic) these special measures come with severe impacts, damage, and even collateral death. Each use of each special measure must be evaluated by a cost verses benefit process. The results of this process must be presented to the PM or premier, who then personally decides on the use of those individual special measures. The responsibility and accountability starts and ends with the PM and premiers.

It is for this reason that at every phase of a pandemic and at every step in the management of the pandemic, the PM and premiers must be personally involved and be seen to be involved in the response to the pandemic.

Further, it is the obligation of the PM and the premiers to use the best expertise in the prosecution of the response. For all emergencies this means using the Emergency Management Organizations (EMO) in their jurisdictions who have the specialty training in emergency management (EM). Further, they are obligated to fully engage their subject matter experts for the hazard involved. In the case of a pandemic, this is their ministries of health and MOH. Finally, in an emergency, the PM and premiers are obligated to ensure an all partners methodology that engage supporting ministries and agencies (public and private sector). This is depicted in Figure 3, repeated next page.
The PM and premiers must personally and visibly lead the response in a pandemic. They do not have to be involved in each step of the emergency management process. Rather they must be briefed of the results of each step and give guidance and direction as and when required.
There are, however, steps that require the PM or premier to personally do/be involved/make decisions. The PM and premiers:

- decide or personally confirm the AIM (with advice from the EMO and hazard expert),
- decide or personally confirm the Governance Organization composition (normally with assistance from the EMO and hazard expert),
- give personal direction to the Governance Organization to start the emergency management process,
- **make decisions on each of the Courses Open, based on the Advantages/ Disadvantages (Cost Benefit Analysis) as presented by the Governance Organization (with advice from the EMO and hazard expert if required),**
- personally sign a written, comprehensive Pandemic Response Plan for the specific disease causing the emergency to be released publicly to everyone in the jurisdiction,
- receive daily information from the EMO on the effectiveness of the response based on coordinated input from all partners in the response,
- receive specialist briefings, as and if required, for emergencies within the emergency,
- direct adjustments, normally through the Governance Organization, to the pandemic response, and,
- commence the exact same process for the **recovery** from the pandemic as soon as possible.

**Deduction 33.** The PM and Premiers have not displayed due diligence in the performance of their responsibilities as leaders of the pandemic response.

**Deduction 34.** The PM has ignored his duties for the defence of the *Charter of Rights and Freedoms*. In fact, he has encouraged and at times threatened the withholding of funding to cause contravention of the *Charter*, with no Oakes Test justification. This is criminal negligence.

**Deduction 35.** The unjustified and continuing use of States of Emergency is a contravention of both provincial and territorial laws. The Premiers are in contravention of law. This is criminal negligence.
THE CAMPAIGN OF FEAR

Background

Fear is a natural result of a hazard impacting a population: when a wildfire is headed for a community, when flood waters are building and flowing down a river, when tornados start to form, when a train derails and product pours out, when terrorists are known to be planning action in a city. All these hazards, both natural and human induced, create fear. They create fear even before they happen, and sometimes long after they have been dealt with.

Fear can cause people to act in unexpected manners. The three most common reactions are flee, fight, and freeze. These are the immediate reactions. The long-term reactions can be even more deadly, long after the actual hazard is over.

Studies of standard workplaces where leadership uses fear to achieve an aim concluded that (Reference 71):

- fear stops teamwork,
- fear creates workplace gangs,
- fear stops people speaking up, and,
- fear kills confidence in team members.

All of these outcomes are magnified, compounded, and added to in time of an emergency response on those responding to the emergency and the public (Reference 76).

The role of government in times of emergency is to simultaneously deal with the emergency while minimizing the fear.

One of the most fundamental principles, taught to all emergency management members, is to minimize fear.

The corollary of this principle is to never USE fear as a method to respond to an emergency.

If fear is used intentionally or allowed unintentionally, it is normally to control individual or public behaviour. This type of use of fear will have uncontrollable, long term, severe, unpredictable collateral damage.

Throughout this position paper this principle has been repeatedly stated.
THE CANADIAN PANDEMIC RESPONSE USE OF FEAR

In Canada, we have first responders who react immediately to hazards in our communities. These teams are trained to react positively to the actual immediate hazard and to protect and serve the communities. Behind these first responders are municipal emergency management teams, who coordinate the support to the first responders and who deal with the broader impact of the hazard on the community. When an emergency is larger than that which can be handled by a single municipality, P/Ts each have an Emergency Management Organization (EMO). This organization is staffed, trained and equipped to, as the name implies, manage the operations, planning, intelligence, logistics, communications, finances, public/private sector collaboration, and training to respond to the emergency (Reference 3). If the emergency is too great for a single P/T to handle, the federal government has Public Safety Canada, the EMO for national coordination of response to national emergencies.

Everyone trained for roles in this team of emergency responders and emergency managers knows that fear must be monitored, diminished, and directly addressed by the leaders of the response.

Rather than diminishing the fear of COVID-19, the Prime Minister (PM), the premiers, and the MOH(s) have repeatedly stoked fear of COVID-19 through daily briefings. Key messaging has always presented:

- fear, based on the number of cases (case counts) here and abroad,
- fear, based on modelling (system that never should have been used in this manner) to show how terrible the case counts can become,
- fear, based on worst case examples of how terrible the illness can be,
- fear that our children can kill their grandparents by bringing COVID-19 home from school,
- fear, that meeting anyone outside your household can kill you and fear that meeting anyone outside your household can kill them,
- fear, based on the assumption that our current hospital system capacity (acute care beds and intensive care unit (ICU) beds will be overwhelmed,
- fear, that COVID-19 can be deadly to everyone, regardless of age,
- fear, that we will have to stop care for other severe illnesses because of COVID-19 case counts,
- fear, that our doctors are overwhelmed and are unable to deal with the stress,
- fear, that variants spread faster than the original form of COVID-19,
- fear, that variants may be more deadly than the original form of COVID-19,
- fear, that variants may spread faster and be more deadly than the previous variant,
- fear, that when we build surge capacity for our acute care beds they may actually be used,
- fear, that not getting vaccinated means you will die,
· fear, that not getting vaccinated means that you can cause others to die,
· fear, that even if you are fully vaccinated, you may still catch COVID-19,
· fear, that there are long-term effects to COVID-19 that can affect everyone,
· fear, that the vaccines may not be effective against the new variants,
· fear, that if we do not do exactly what the MOH(s) say with each and every new health rule that constantly change, that we will be fined or go to jail, and,
· fear, that we will never have our life back and this is the new normal.

The list of fear key messaging is not a side product of the pandemic response. **It is a tool which has been used continuously to demand and support the use of lockdowns by the very leadership that responsible to reduce fear and assure confidence in government.** It was started and used continuously, proudly, self-righteously, and intentionally. It was used in place of evidence and science based on evidence. It is a product/methodology that was:

· started immediately with the declaration of the pandemic,
· reinforced and recalibrated to increase fear during the first wave,
· increased by each P/T as they announced lockdowns,
· used by the PM to support his massive borrowing to encourage and virtue signal the public to use lockdowns willingly,
· escalated in a one-upmanship fashion,
· developed with the cooperation and direct assistance of special advisory groups,
· supported and in fact branded by some individual doctors who became media fear go-to experts,
· designed to stop any discussion of any response other than lockdowns,
· focused on the job security of any member of the medical profession who questioned lockdowns (Reference 102),
· focused on the job security of any emergency management professional who questioned the use of lockdowns,
· focused on the job security of any member of government (elected and civil service) who questioned the use of lockdowns,
· designed to belittle, demean, personally attack, and cancel any expert who challenged the use of lockdowns,
· fully endorsed and assisted by the media,
· enhanced by the media’s fear-based reporting throughout the pandemic,
· used within the media to censor any dissenting non-lockdown response,
· used to question the ethics and nationalism of anyone who questioned the use of lockdowns, so others would keep quiet,
· encouraged to be used by the public themselves, through the use of ‘snitch lines’ and social media shaming to force fellow members of the public, business, government and leaders to be in support of lockdowns, and,
used to hide all discussion about the collateral deaths that were increasing, caused by lockdowns.

When the Great Barrington Declaration was announced by some of the best infectious disease experts in the world, fear was the immediate and relentless tool used to destroy the experts. No science was presented. The dangers of using lockdowns presented in the Declaration were silenced by the MOH and special advisory boards using fear. They simply stated that more people would die if time was spent discussing this position (Reference 72). The media took up the torch, demeaned the authors (best experts in the field) and then silenced further reporting about the Declaration.

The same is true about non-lockdown Sweden. The western and Canadian media first tried to destroy Dr. Tegnell, the head of the Swedish response. They called what Dr. Tegnell was doing a dangerous and deadly experiment (Reference 73).

In fact, what Dr. Tegnell was doing was what Canada’s pre-written pandemic plans said we were to do. When he would not resign or change his approach (and the people of Sweden supported him), the western media launched a fear campaign for their own countries, stating that Sweden had massively more deaths than its European neighbours, Finland and Norway. This was yellow journalism at best, as while true that Finland and Norway (who protected their seniors better) had much lower deaths per capita, Sweden had (and still has) a much lower death per capita to COVID-19 than the full lockdown adherents of Belgium, Italy, Spain, France, UK, and Portugal, also their European neighbours. When observers pointed this fact out, the western media ceased reporting on Sweden, so much so it has become a political cartoon.

What the western and Canadian media also does not report is that Sweden has a dramatically lower rate of collateral death and damage. The rate of mental health issues, societal health issues, excess deaths from other severe illness, increase in national debt, and impact on the economy are all not reported in comparison to Sweden, as these facts would destroy the fear-based use of the lockdown Canadian pandemic response (Reference 99 & 100).

The latest leadership fear campaign is on the Delta variant from India. Once again, the message is the variant is more transmissible, may be more deadly, the vaccines may be less effective, and look at how deadly it is in India. It is important to note, that India has resisted the lockdown methodology and this is being used in the messaging to show that lockdowns must be used and that the number of deaths in India is huge.
Rather than fear, it could be noted that India has a population of 1.366 Billion which is 36 times larger than Canada, so numbers need to be put into perspective. It could be noted that the geographic size of India is 1/3 that of Canada, so the population density is higher which may lead to spread. It could be noted that to date (June 17, 2021) India has a death rate from COVID-19 of 273.9 per million population, while Canada has a much higher death rate of 689.9 per million (Reference 101).

Considering all of this information, our elected officials, MOHs, and special advisory groups could have said that India has done well so far, recognizing the current deaths and challenges that India is undergoing, and that we are ready to provide mutual aid if requested. Here in Canada, it appears that the Delta variant can be managed (if it were far more deadly, we would know by now). One must wonder why they did not choose to discuss the Delta variant and India in this manner.

It is obvious that the advice from professional emergency management staff not to use fear was ignored.

Confidence in government during an emergency, in a democracy, is destroyed using fear.

Confidence in government is maintained and supported by having a plan and by describing the plan.

Appendix H gives examples of confidence in government messaging.

**Deduction 36.** The use of FEAR as a tool/methodology to encourage compliance to a response to a pandemic is unconscionable in a democracy. To see it used daily by our elected officials and our MOH is criminal.

**Deduction 37.** The use of fear and modelling, as opposed to evidence and science, and calling the fear and modelling science will destroy the trust in evidence-based science.

**Deduction 38.** The role of an independent media in a democracy is to hold elected officials responsible and accountable.

- The mainstream media has never acted in a manner to challenge the decisions of the Prime Minister, Premiers, and MOH in the use of lockdowns and the relentless campaign of fear and censorship to support their use.

- Rather they have immediately supported the daily news releases from the MOH and their special advisory councils.

- The mainstream media has become the ministry of propaganda for the MOH, their special advisory councils, and chosen media ‘medical experts’.

- The mainstream media has acted as an accomplice rather than a challenger and therefore shares responsibility in the collateral death and damage.

- Their role in actively promoting lockdowns and the use of fear, while never acting as a check on elected government, is criminal negligence.
CONCLUSIONS

Emergency Management in an Emergency

Emergencies happen routinely. Natural hazards and human induced hazards are part of life. Risk is evaluated and responded to by Canadians each and every day. Every order of government in Canada has a role to play in helping to manage risk on behalf of their electorate.

The Prime Minister, the Premiers, and the Mayors of our country when elected have one overarching responsibility. This is to manage emergencies that impact their electorate. Specific legislation at each order of government details their responsibilities.

The aim of this responsibility must be to minimize the impact of the risk from the hazard causing the emergency. This is done through the four functions of emergency management: mitigation, preparedness, response, and recovery.

Each order of government has emergency management organizations (EMOs). These agencies are established, trained, and equipped to coordinate all partners and stakeholders, to manage all hazards with the subject matter experts, to coordinate all functions, to coordinate all activities, and to ensure confidence in government.

Conclusion 1

In the first wave of the COVID-19 Pandemic, due diligence was not performed by the PM and premiers in understanding and meeting their responsibilities in an emergency. This was at best gross negligence. In subsequent waves, this lack of due diligence was criminal negligence.

Conclusion 2

In the COVID-19 Pandemic in Canada, the EMOs established for the very purpose of full coordination in an emergency like a pandemic, were not used for the role they were established. Lack of due diligence in understanding the role and abilities of their EMOs, by the PM and premiers caused massive long lasting damage and death. In the first wave, this is at best gross negligence. In subsequent waves this is criminal negligence.

Conclusion 3

The Medical Officers of Health, while responsible for the direct action against the hazard, COVID-19, were never established, trained, or equipped to lead the response to a pandemic across all partners, all sectors of the jurisdiction, and the public. The designation of the MOH, federally and provincially/territorially by the PM and the premiers, was a deadly decision caused by criminal negligence in the performance of their duty.
DEADLY AND DANGEROUS OUTCOMES
- THE CANADIAN PANDEMIC RESPONSE

There were three overarching unnecessary outcomes from the Canadian pandemic response to COVID-19.

1. Deaths in our Most-At-Risk Population
   
   a. In February 2020 we knew that people over the age of 60 with severe comorbidities were most at risk.
   
   b. We had time to develop options for care of our most at risk, but chose to follow the failed lockdowns of China, Italy, and Spain in the first wave.
   
   c. In subsequent waves, ignoring all evidence and science, we continued to follow the failed use of lockdowns, killing tens of thousands more of our most-at-risk.
   
   d. Only 1.5 percent of the deaths in Canada were in residents under the age of 50. Many of these had comorbidities, this fact also ignored in a lockdown response.
   
   e. By not following a targeted approach, we abandoned our seniors both in long term care homes and in the community at large (Reference 42).
   
   f. Canada did worse than other OECD countries in all waves for the protection of these citizens.

Conclusion 4

This failure to order targeted protection for our most-at-risk population resulted in tens of thousands of needless deaths.

Deductions:
   
   · This is criminal negligence by our PM and premiers.
   · This is criminal negligence by the MOH and their medical/LTC home systems.

2. Non-Pharmaceutical Interventions (NPIs) or Lockdowns
   
   a. Prior to the COVID-19 Pandemic and during the COVID-19 Pandemic the use of Non-Pharmaceutical Interventions (NPIs), what we now call lockdowns, had/has been studied comprehensively.
   
   b. The most recent publication by the World Health Organization (WHO) was issued in September 2019.
   
   c. This document and its previous versions had been written by the best infectious disease authorities in the world.
d. Each of the NPIs had been studied in detail, based on lessons learned in previous pandemics.

e. The concerns about the dangers of the use of each NPI were comprehensively detailed in observations and recommendations.

f. The observations included medical material concerns, societal concerns, and even political concerns.

g. Our Canadian federal and provincial/territorial pandemic response plans had been based on this information.

h. It was known that:

i. Most NPIs did not significantly decrease the spread of a virus,

ii. Most NPIs did not significantly decrease the deaths from a virus,

iii. Most NPIs had serious collateral impacts that could lead to death or damage,

iv. Specific recommendations for when and if each NPI should be used was presented,

v. The use of many of the NPIs followed in lockdowns were NOT RECOMMENDED for a COVID-19 pandemic.

i. The Canadian pandemic response leaders disregarded the previous studies on the use of NPIs.

j. The Canadian Pandemic Response leaders continued to disregard all evidence and science during the waves of the pandemic which confirmed that NPIs did not have significant effect on the spread of COVID-19 (Reference 39) but were having massive collateral damage.

k. Lockdowns were pursued, almost exclusively, as the sole response to COVID-19 in Canada.

Conclusion 5

The leaders in the Canadian Response to COVID-19 failed to perform due diligence before using a known pandemic response methodology that was, in most cases, not recommended, had little effect, and had major potential dangers. As a minimum, a cost benefit analysis should have been done on alternate courses of action open, and the results presented to the public. Modeling is not a cost benefit analysis.

· This is criminal negligence by our PM and premiers.

· This is criminal negligence and breaks the Medical Oath by our MOH(s).

· This is a failure of our College(s) of Physicians’ to hold MOH(s) accountable.

· This is criminal negligence by the MOH(s).
3. Collateral Deaths and Damage caused by Lockdowns (Use of NPIs)

a. The PM, premiers and MOH did not do the mandatory due diligence of a Cost Benefit Analysis before using the lockdown response to COVID-19 in the first wave.

b. The PM, premiers, and MOH did not do the mandatory due diligence of a Cost Benefit Analysis before using the lockdown response to COVID-19 in all subsequent waves of COVID-19.

c. The deadly and damaging results of the inappropriate use of NPIs came as no surprise to experts worldwide, yet Canadian leadership and medical experts seemingly ignored the evidence of these effects in Canada.

d. Canadian studies have shown the use of lockdowns have done, at a minimum, 10 times more harm than good (Reference 61).

e. Further studies have stated that the use of lockdowns will go down as one of the greatest peacetime policy failures in Canada’s history (Reference 62).

f. Lockdowns have caused massive collateral damage that while terrible already, will last for at least a generation.

g. The use of lockdowns has caused massive collateral damage to:
   i. mental health,
   ii. societal health,
   iii. education of children,
   iv. socialization of children.
   
v. individuals with other severe illnesses including but not limited to:
      1. Heart disease,
      2. Cancer,
      3. Diabetes,
      4. Dementia, and,
      5. Obesity.
   
   vi. the national economy reflected by:
      1. bankruptcies (worst in G7),
      2. federal debt (highest spending per capita in OECD),
      3. provincial/territorial debt,
      4. unemployment (highest in G7),
      5. confidence in Canada as a place to invest
         a. Internally, and,
         b. External.
Conclusion 6

The leaders in the Canadian response to COVID-19 used a known potentially deadly and dangerous lockdown response methodology. They did so, repeatedly, wave after wave, failing to perform due diligence in the form of a Cost Benefit Analysis. This has caused massive lockdown collateral death and continuing damage to Canadians, far outweighing any benefits.

- This is criminal negligence by our PM and premiers.
- This is criminal negligence is a break of the Medical Oath by the MOH(s).
- This is a failure of our College(s) of Physicians’ to hold MOH(s) accountable.
- This is criminal negligence by the MOH(s).

CONTROL OF THE PUBLIC

Denial of Charter Rights and Freedoms

- Lockdowns (the inappropriate use of NPIs) could only be achieved through the methodical control of the public, in a manner normally only used in dictatorships and ultra-authoritarian governments.
- In Canada, the denial of Charter rights and freedoms requires that the government implementing these denials must first demonstrably justify why the denial is necessary.
- The minimum standard of the Oakes Test must be met. Modelling is not demonstrable justification that would ever come close to satisfying the Oakes Test.
- No provincial or territorial government has ever demonstrably justified the use of lockdowns.
- The daily, extended, unjustified, cavalier, approach to denying Charter rights and freedoms caused the public to believe that this is acceptable as a routine response to an emergency.
- It leaves this abuse of Charter rights and freedoms open to future misuse and intentional use as a manner of enforcing actions, even not in emergencies.
- The damage to our democracy will be long lasting.

Use of Fear

- In a democracy, in an emergency, the intentional use of fear as a methodology for control of the public is unconscionable.
- The repeated use of the phrase, “We must protect our medical system,” was designed for only one purpose, to create fear in the public.
- The ‘possibility’ of our medical system failing was due to the fact that our MOH were incorrectly using the NPI of quarantining exposed individuals (NOT RECOMMENDED, Reference 15) and were incapable of establishing real medical surge capacity.
This is but one example of the continued use of fear during the COVID-19 Pandemic in Canada.

The intentional use of modelling (never considered for use in this manner) to create fear, the use of daily case counts to create fear, the use of specific cases to manipulate the public into belief that COVID-19 was equally deadly to all age groups, the use of the term “variants of concern” with misleading percentages given for spread and terms like “may be more deadly”, never attempting to place COVID-19 into perspective of other daily risks, acting as if lockdowns were the only way to save lives. These are all tools of fear to control the public.

The use of fear in this manner by MOH and medical officials in special advisory groups is a contravention of their Medical Oath.

The use of fear in this manner by the Prime Minister and Premiers is in denial of their requirement to protect democracy.

The effects of this fear will last at least a generation, with as of yet unknown new collateral damage.

MAINSTREAM MEDIA AS CHAMPIONS OF FEAR AND LOCKDOWNS

The mainstream media, by not questioning the use of lockdowns and in fact acting as the champion of lockdowns for the MOH and special advisory councils, further destroyed the concept of an independent mainstream media in Canada.

Mainstream media has ensured that opposition to the use of lockdowns was not given coverage.

When non-lockdown methods are given coverage, the media used tones of belittlement, disbelief, and out right attack on the credibility of the authors or organizations of alternate methods.

Any politician who has not fully endorsed lockdowns, deep enough, early enough, or long enough is attacked by the mainstream media.

The mainstream media has selected their medical champions of lockdowns and presented them daily or routinely to support lockdowns and the MOH.

Mainstream media in Canada copied the politics of the USA for the first two waves of COVID-19, helping to discredit some of the best infectious disease doctors in the world, who spoke out against lockdowns.

Investigative media has been censored, discouraged, or ignored.

Public belief in mainstream media as champions of democracy and free speech has been considerably damaged if not destroyed.

Conclusion 7

Fundamental principles, laws, regulations, policies, practices, and organizations which support democracy in Canada have been eroded and in some cases drastically damaged. The
public has come to accept these terrible impacts on our democracy, never demanding proof that these actions were required. Democracy and the rights and freedoms of Canadians in Canada will continue to be eroded unless the public demands that those responsible be held accountable.

- This is criminal negligence by our PM in the responsibility of his Office for the defence of the Charter of Rights and Freedoms.
- Our PM and premiers eroding/denying democracy and its institutions for over a year using dangerous methods with no demonstrable justification, is criminal negligence.
- The use of these non-democratic principles and actions break the Medical Oath by our MOH(s).
- The use of these non-democratic principles and actions also constitute criminal negligence by our MOH.

RESPONSIBILITY AND ACCOUNTABILITY

In the private sector, when areas of responsibility are not met, either by lack of due diligence or knowingly disregarding requirements, there are consequences. Government regulators in some cases and civil courts in other cases apply penalties. When areas of responsibility are not met and result in deaths, leadership in a private sector organization may be subject to criminal prosecution. There must be accountability when responsibilities are not met. When responsibilities are not met in a clearly criminally negligent manner, the public expects private sector leadership to be held criminally accountable.

The same must be true for our government leadership.

Our Prime Minister and our premiers are responsible for response to major emergencies in Canada. Legislation defines this responsibility clearly. When they have not completed their responsibility for due diligence, when they have so blatantly ignored evidence and science, when they have not followed even the most basic principles of emergency management, and when they have knowingly contravened the essential steps in protection of our democracy, they must be held accountable.

Our Medical Officers of Health (MOH) are equally charged with the responsibility to respond to the actual disease during a pandemic. Legislation likewise defines this responsibility. When they have not completed their responsibility for due diligence, when they have blatantly ignored evidence with respect to the disease, when they have intentionally tried to control areas far outside their responsibility and expertise, when they have not followed even the most basic principles of emergency management, when they have repeatedly broken their Medical Oath, and when they have knowingly contravened the essential steps in protection of our democracy, they must be held accountable.

Our Colleges’ of Physicians, established to administer and hold doctors accountable to both the practice of medicine and to the Medical Oath, have failed Canada.
Conclusion 8

Canada is a democracy and a nation based on law. Both must be defended or they will be lost.

· Canada’s elected and non-elected officials must not be allowed to continue to act in manners to erode/destroy our democracy and/or do unnecessary harm.

· The Canadian deadly response to the COVID-19 Pandemic must never be repeated. The people responsible need to be held accountable.

· Lessons learned from this pandemic must show that criminal negligence by our elected leaders and MOH(s) can and will be held accountable in our courts.
APPENDIX A

RISK/HAZARD ASSESSMENT

Background

In February/March 2020, a detailed assessment of the risk posed by COVID-19 was needed to be completed. The assessment needed to be virus specific, with all data and evidence available at the time. The risk assessment then needed to be a ‘living’ document, updated regularly with actual evidence, not modelling.

Modelling may be useful to ensure that surge capacity can be developed. It should not be either used in place of actual evidence or used as a tool for ‘manipulation’ of the public.

COVID-19 was known to be a coronavirus. Hence, its designation as SARS CoV-2, Severe Acute Respiratory Syndrome Coronavirus 2. Much is known about Coronaviruses, including the fact that they are extremely likely to mutate and thus have variants (Reference 11).

COVID-19 was presented as a seasonal virus right from the start. It developed far more slowly in countries that were in summer when it first appeared, than in countries in winter. As the year progressed, the countries moving into spring and then summer saw the COVID-19 virus diminish like a seasonal virus, as those moving into fall and then their winter saw COVID-19 increase. In Canada, the COVID-19 infection rate mirrored the annual influenza curve (Reference 63), with a minor variation only late into the third wave. See Figure 1, Appendix A.

![Chart: Canada's Influenza Seasonal Curve 2018-2019](Reference 63)
Yet, in MOH analysis in Canada, the lockdowns were given full credit for the seasonal decrease in the virus in all waves. Conversely, the public was blamed for not following public health rules for the naturally occurring increases.

The second wave appeared to come as a surprise to the MOH, they mistakenly had believed that lockdowns would stop the virus. The exponential growth in the period October to December 2020 was blamed on the public not following lockdown health rules, when in fact it was simply normal seasonal growth of a highly contagious virus.
DEFINING RISK

A full Hazard/Risk assessment for COVID-19 was required. The risk from this virus is not just to human health. COVID-19 could have a severe effect on many systems. The risk posed by the virus should have been evaluated to: (Reference 3)

- People,
- Animals,
- Critical Infrastructure Systems,
- Financial Systems,
- Equipment Systems,
- Supply systems,
- Communications Systems,
- Information Management Systems.

The risk to this full list of people, animals, and resources was needed to be done across all sectors that make up the jurisdiction. (Figure 2 is a representation of some, not all, sectors that should have been evaluated.)
The need to define comprehensive risk may not have been evident immediately outside of EM circles. That is why this process should have been coordinated by EM staff. The risk to humans and to the medical system became the entire focus of the MOH. The impact of sick humans on all the systems, let alone the risk to other resources on all of the systems, was negligently ignored.

EM staff considered these resource implications in the pandemic plans written before 2020. Using the Alberta Plan (Reference 14) as an example, the assumptions stated in that plan make it clear these are important aspects of the risk assessment.

**General Assumptions**

- The effects of, and response to, a pandemic influenza are not limited to the health sector. A whole of society approach will be used in mitigating the effects of a pandemic influenza including public and private sectors, communities, families and individuals.
- Pandemic planning is aligned with an all-hazards approach to emergency management.
- Alberta Health, AHS and AEMA as well as other stakeholders will use existing pandemic and emergency response plans during a pandemic influenza.
- Increased absenteeism is expected. Schools, workplaces and the healthcare system will likely experience workforce shortages.
- Antivirals will be effective against the pandemic virus.

The fact that the impact of increased absenteeism is stated is because these systems may fail if either critical expertise is not available or if enough workers are not available due to illness. It was never envisioned that any healthy staff would be ordered not to work if exposed.

As in all pandemic guidance the “quarantine of exposed individuals” was NOT recommended in any pandemic regardless of severity (Reference 15; Page 3 Summary of Recommendations).
RISK TO PEOPLE

Prior to February 2020, Statista.com started recording COVID-19 information daily, from around the world. Everyone with a computer or smart phone could see the data. All that was required was to type <Name of Country>, COVID, Death by Age into a browser. WHO started reporting an even larger cross section of data weekly, including information about comorbidities.

Figure 5

Statista Report - Study: Elderly Most At Risk, Feb 18, 2020 (Reference 12)

Figure 6a

Percentage of COVID-19 Cases (N=1310) and Deaths (N=65)
WHO Report March 2-8, 2020 (Reference 13)

Figure 6b

Characteristics of COVID-19 Cases and Deaths
WHO Report March 2-8, 2020 (Reference 13)
A clear inflection point for deaths occurred in early data, starting at the age of 50. For people under the age of 50, the new virus was not deadly in most cases, appearing to be less serious than annual seasonal influenza. From age 50 the data showed an increasing mortality. For people over the age of 70 and for those over the age of 60 with other severe comorbidities, COVID-19 virus was recognized as a serious concern. Week by week the age death relationship was reproved, with the relationship to comorbidities also redemonstrated.

The age relationship and the risk from comorbidities was confirmed in all countries, daily.
Nearing the end of the first wave, repeated articles and data reconfirmed the risk assessment for humans.

![Figure 9](image)

**Data for Deaths, by Age, May 12, 2020** *(Reference 17)*

Regardless of country, the risk to people over 60 was found to be exponentially higher than to those under 60. In addition, a list of comorbidities was available to help further target who was more at risk.

As the pandemic evolved, this age variance of Infection Fatality Rate (IFR) became undeniable.

In court testimony *(Reference 60)*, Dr. Jay Bhattacharya, a world-renowned epidemiologist, medical doctor, PhD in economics, and a full professor at Stanford University, identified in his January 5, 2021, expert report, “For the majority of the population including a vast majority of children and young adults, COVID-19 possesses less of a mortality risk than seasonal influenza”.

According to a meta-analysis by Doctor John Ioannidis, one of the most cited scientists in the world, the median infection survival rate for COVID-19 is 99.77 percent. For COVID-19 patients under 70, the meta-analysis finds an infection survival rate of 99.95 percent.
Figure 10

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Population</th>
<th>Seroconverted Population as of May 6 (95% CrI)</th>
<th>Deaths as of June 1</th>
<th>IFR (95% CrI), %</th>
</tr>
</thead>
<tbody>
<tr>
<td>5–9 yrs</td>
<td>26466</td>
<td>1200 (400–2400)</td>
<td>0</td>
<td>0.0016 (0 to 0.019)</td>
</tr>
<tr>
<td>10–19 yrs</td>
<td>53180</td>
<td>6100 (3900–8800)</td>
<td>0</td>
<td>0.00032 (0 to 0.0033)</td>
</tr>
<tr>
<td>20–49 yrs</td>
<td>219440</td>
<td>28800 (21400–37300)</td>
<td>2</td>
<td>0.0092 (0.0042 to 0.016)</td>
</tr>
<tr>
<td>50–64 yrs</td>
<td>98528</td>
<td>10300 (7200–13900)</td>
<td>16</td>
<td>0.14 (0.096 to 0.19)</td>
</tr>
<tr>
<td>≥65 yrs</td>
<td>83574*</td>
<td>5700 (3200–8800)</td>
<td>268</td>
<td>5.6 (4.3 to 7.4)</td>
</tr>
<tr>
<td>All</td>
<td>506765</td>
<td>54800 (41300–70700)</td>
<td>286</td>
<td>0.64 (0.38 to 0.98)</td>
</tr>
</tbody>
</table>

Crl=credible interval. IFR=infection fatality risk. SARS-CoV-2=severe acute respiratory syndrome coronavirus 2.

*The Lancet: Serology Based Estimates of SARS CoV-2 Infection Fatality Rate, Geneva Study (Reference 64)*

The information on Infection Fatality Rate from the Geneva Study after the first wave is shown above in Figure 10.

For people under 50, COVID-19 is less deadly than the annual seasonal flu. For people 50 to 60 years old it, COVID-19 is like the seasonal flu. For people over 60, targeted protections should be discussed by increasing age groups.

Even if prior to the first wave the evidence was ignored, it should have been impossible to ignore after the first wave, yet the age differential evidence and studies were ignored in Canada.

Several deductions for the human population should have been made:

- A targeted response, age dependent, was required.
- Comorbidities were important, especially in the elderly.
RISK TO ANIMALS

A risk assessment was needed to be done for animals. Three concerns should have been considered:

- the increased death of animals,
- cross-continued infections between “humans to animals” and “animals to humans”, and,
- the growth of variants in the animal populations.

This assessment should have included:

- Pets,
- Livestock,
- Nature Based animals,

The impacts of these areas of risk could have serious impacts to both human health and to livestock industry. The spread of COVID-19 through animals to both humans and livestock should be monitored.

The transfer to animals should have been expected and included in pandemic plans rather than reacted to when outbreaks occurred (Reference 65).

A deduction for animals should have, as a minimum, considered that the zoonotic behaviour of COVID-19 needs a continuous intelligence system.
RISK TO CRITICAL INFRASTRUCTURE

Critical infrastructure (Reference 19) is identified in an emergency management process that considers the impact of loss of a facility based on factors such as:

- Health, Safety and the Environment
- Interdependencies
- Economic impact
- Strategic Scope
- Availability of Substitutes
- Restoration Time/Cost
- Impact on Public Morale
- Political Impact

To be clear, most infrastructure is not critical. That said, 85 percent of critical infrastructure exists in the private sector. Therefore, the owner/operators of this infrastructure are essential in the development, implementation and operation of a pandemic response. They should be included in the Governance process and the Risk Assessment process from the very beginning.

The risk assessment across all sectors of the jurisdiction as shown in Figure 1 above must be done for the critical infrastructure in each sector.

The loss of an essential piece of critical infrastructure can cause massive damage and death. For example, if the power grid fails due to lack of a particular expertise of sufficient personnel in the winter during a season wave of COVID-19, thousands may die. These are not COVID-19 deaths, they are deaths due to incorrect COVID-19 pandemic response plans.

The sole focus of the risk assessment of critical infrastructure in the current response appears to have been on the medical system. While important, this ignores critical infrastructure like the power grid, the natural gas system (heating), the water supply system, the food supply system, and the banking/monetary system.

A deduction for critical infrastructure should have, as a minimum, considered that the health issues/deaths caused of COVID-19 needed a continuous intelligence system for impacts on the operation of critical infrastructure.
RISK TO REMAINING SECTORS AND RESOURCES

The Risk/Hazard Assessment needed to be completed for all other sectors and resources defined above. An EM coordinated response would work across all the sectors to achieve this. The MOH is not trained, staffed, or equipped to carry out this function.

A deduction for remaining sectors and resources should have, as a minimum, noted that EMO’s are the coordinating agency which is trained, staffed, and equipped to do a full Risk/Hazard Assessment in a pandemic. The MOH is not.
APPENDIX B

Background

In the Operational Planning Process (Reference 20), the first step is Mission Analysis, normally coordinated in every emergency by the EMO. This step is essential as it identifies, through a defined process, all the tasks to overcome the emergency, both Given and Implied.

The Mission Analysis process should be conducted with the highest level of leadership in the Governance Task Force possible, to gain their knowledge and expertise. In addition, it helps the Task Force understand the full complexity of the emergency and the types of information they will be presented in the future for their decisions.

In the provincial order of government, the EMO should coordinate the Mission Analysis with the deputy ministers of the ministries in the Task Force, director level representatives from the private sector associations or companies as required, heads of rural and urban municipal associations, and other specialists as may be required.

The Mission Analysis Process

The Governance Task Force on the COVID-19 Pandemic needed to clearly establish the objectives for the government’s actions before, during, and after the pandemic.

The objectives are laid out as a list of “what” needs to be done. The “how” is defined later in a planning process. The lists of “what” are grouped into areas that can be assigned to teams, for the development of courses open or options for completion. There is always more than one way to achieve each task or objective. The process to identify advantages/disadvantages of courses open (sometimes called a cost benefit analysis) will be discussed later.
In the pre-written P/T pandemic plans and the federal pandemic plan, overarching Objectives were defined. Using the Alberta pandemic plan (Reference 14) as an example, four objectives were stated:

- Controlling the spread of influenza disease and reducing illness (morbidity) and death (mortality) by providing access to appropriate prevention measures, care, and treatment.
- Mitigating societal disruption through ensuring the continuity and recovery of critical services.
- Minimizing adverse economic impact.
- Supporting an efficient and effective use of resources during response and recovery.

The review of the pre-written plans should have been the starting point for the Mission Analysis, to define both Tasks Given (these Objectives) and Tasks Implied (for the EM coordinator define with the Governance Task Force).

This process is designed to break out a full list of what will be required to meet the Aim – to minimize the impact of COVID-19 on <Name of Jurisdiction>. A partial example is given in the pages that follow.

**Task Given 1.** Controlling the spread of influenza disease and reducing illness (morbidity) and death (mortality) by providing access to appropriate prevention measures, care, and treatment.

Implied tasks:

- Care of those most at risk (those over 60 with multiple comorbidities):
  - Living in LTC homes,
  - Living alone,
  - Living in multi-generation homes,
  - Living in other situations.
- Assurance of medical capacity including:
  - Infrastructure,
  - Staff,
  - Equipment,
  - Supplies.
- Assurance of continuing care for other high-risk diseases.
- Monitoring of COVID-19:
  - Shifts,
  - Patterns,
  - Zoonotic behavior.
· Research of treatments for Covid and implementation as found.
· Testing for COVID-19 is:
  - rapid,
  - in depth,
  - cross population to determine actual Infection Fatality Rate (IFR).
· Produce risk analysis for population for family practitioner advice to population (like the cancer risk analysis provided to new cancer patients, e.g., age vs operation vs chemo vs radiation vs drug therapy):
  - by age,
  - by comorbidity,
  - by other health conditions (including obesity).
· Provision of confidence-based medical advice to:
  - Government,
  - Private sector,
  - Not for profit organizations,
  - General public.
· Develop medical examiner and mortuary services to ensure capacity and caring response if/when required.
· Etc.

**Task Given 2.** Mitigating societal disruption through ensuring the *continuity* and recovery of critical services (Note the word *continuity*).

**Implied Tasks:**
· Confirmation of critical infrastructure by sector:
  - Energy,
    - Electricity,
    - Oil,
    - Gas.
  - Water supply,
  - Food supply,
  - Agriculture,
    - Livestock (zoonotic transfer concern),
    - Farming.
  - Transportation,
  - Etc.
· Confirmation of critical services in:
  - Education:
    · Schools:
      - Public schools,
      - Separate schools,
      - Charter schools,
      - Private schools,
      - Home schooling,
      - Other.
    · Undergraduate:
      - Pandemic related specialties,
      - Other.
    · Postgraduate:
      - Pandemic related specialties,
      - Other.
  - Mental Health:
    · Existing services,
    · Additional services needed during pandemic.
  - Societal Health:
    · Existing services,
    · Additional services needed during pandemic.
  - Financial Services:
    · Etc.
  - Etc.

**Task Given 3.** Minimizing adverse economic impact.

Implied tasks:
· Ensure maximum continuity of the economy (Critical aspects covered in Task 2, this is all other aspects of the economy):
  - Manufacturing,
  - Resource sector:
    · Forestry,
    · Fishing,
    · Farming,
    · Livestock,
· Energy,
· Etc.
- Financial Institutions,
- Construction,
- Wholesale,
- Retail,
- Small Business,
- Tourism,
- Etc.
· When continuity is not possible due to COVID-19:
  - Replacement of business,
  - Assurance of return,
  - Support mechanisms for impacted systems and personnel,
· Etc.

**Task Given 4.** Supporting an efficient and effective use of resources during response and recovery.

Implied tasks:
· Identification of:
  - Critical Resources:
    · Government,
    · Private sector,
    · NGOs,
    · Citizens.
  - Necessary Resources:
    · Government,
    · Private Sector,
    · NGOs,
    · Citizens.
  - Morale resources:
    · Same as above.
· Management of Resources by Criticality:
  - Procurement,
  - Transportation,
  - Warehousing,
Other Implied tasks. Implied tasks not linked to a Given Task are then fully identified, again in the process coordinated by the EMO with the Governance Task Force. Where the existing Pandemic Plan was short on “Given” Tasks, the sheets above would need to be done during this phase of the process. Some examples are listed below.

Implied tasks:

- **Support of Confidence in Government** (Note 1):
  - Establishment of push information systems involving the premier,
  - Establishment of pull information systems for public,
  - Protection of *Charter* Rights and Freedoms,
  - Management of dis-information,
  - Management of FEAR.

- Support of the Governance Task Force:
  - When impacted by the pandemic,
  - Routine support,
  - Scheduled and emergency briefings,
  - Information and messaging support,
  - Etc.

- Operations:
  - Operation of the cross-Government Operations Center (GEOC),
  - Operation of sector specific operations centers linked to the GEOC,

- **Operation of EM in support of other hazards and emergencies (COVID-19 will not be the only emergency during the pandemic),**
  - Etc.

- Plans:
  - Pandemic related,
  - Non-pandemic related.

- Intelligence:
  - COVID-19 related:
    - Identification of sources of information,
    - Gathering,
    - Assessment of information,
· Collation of information,
· Distribution of information.
- COVID-19 Impacts related:
  · Same as above.
  · Etc.
· Communications:
  - Support of government:
    · Identification spokesperson,
    · Methodologies,
    · Systems,
    · Materials,
    · Personnel.
  - Support of private sector.
  - Support of NGOs.
  - Support of public.
· Financial Management:
  - Pandemic COVID-19 related,
  - Pandemic collateral effects,
  - Routine but potential impacted personnel continuity plans:
  · Etc.

**Note 1.** In every emergency confidence in government is paramount. When citizens lose faith in government(s), they frequently resort to taking actions which may exacerbate the emergency. In so doing they may make the emergency much harder to resolve, causing long term impacts. The premier of a P/T should be the first and last person seen by the public on all media information sessions. Frequently they should be the sole person seen.
In the Operational Planning Process (OPP) (Reference 20), after a detailed assessment of the factors, the next step is to develop the “how”. The “how” is almost never defined in a single step methodology. For each task or group of tasks, there are many ways to overcome the challenge.

The development of Courses Open process should be conducted with the full expertise of senior leadership, those normally direct subordinates to the members of the Governance Task Force, and specific additional experts added for specific tasks/groups.

This step in the OPP is the ‘meat’ of the process. It is difficult, needing focus and the leadership of the process.

In too many cases, people wish to jump to obvious or seemingly logical assumptions of how to resolve tasks. Competent EM coordinators can help avoid this mistake. A clear example of this in this pandemic was the assumption that the only way to deal with COVID-19 was to enact severe authoritarian lockdowns as witnessed in China.

There are many methods of handing a pandemic followed in the past, but they were seemingly ignored. By ignoring other Courses Open, the comparison of advantages/disadvantages (cost benefit analysis) was also ignored.
Assignment and Composition of Teams for Courses Open Development

From the Mission Analysis, logical areas of Tasks appear. Teams are needed to be assigned to develop Options for these tasks. Any team that returned with a single option for their task would be directed to continue working. Possible groupings and teams for development of options are shown below. Each possible team has a note within appropriate expertise described.

Each Team would have an EM member to run the process. While each team is assigned to a departmental lead, membership on the team would include members from other public sector departments, private sector expertise as required, and NGOs if applicable. In certain teams, federal representatives and municipal representatives would also be included.

Written instructions with the directions from the Task Force on the pandemic would be issued by the coordinating agency (EMO). The instructions would also include the format for the Courses Open documentation, as well as set the tabular format for the advantages/disadvantages (cost benefit analysis) for each Course Open.

**Task Given 1.** Controlling the spread of influenza disease, reducing illness (morbidity) and death (mortality) by providing access to appropriate prevention measures, care, and treatment.

Implied tasks:

- Care of those most at risk (those over 60 with multiple co-morbidities)
  First Priority in Feb/March 2020:
  - Living in LTC homes / HEALTH TEAM 1 (Note1),
  - Living alone / HEALTH TEAM 2 (Note 2),
  - Living in multi-generation homes / HEALTH TEAM 2 (Note 3),
  - Living in other situations / HEALTH TEAM 2.
- Assurance of Medical Capacity including / HEALTH TEAM 3 (Note 4):
  - Infrastructure,
  - Staff,
  - Equipment,
  - Supplies.
- Assurance of continuing care for other high-risk diseases / HEALTH TEAM 3.
- Monitoring of COVID-19 / PART OF EM INTELLIGENCE TEAM (Note 3):
  - Shifts,
  - Patterns,
  - Zoonotic behavior.
- Research of Treatments for Covid and implementation as found / HEALTH TEAM 4 (Note 5).
· Testing for COVID-19 / HEALTH TEAM 4:
  - Rapid,
  - In depth,
  - cross population to determine actual Infection Fatality Rate.
· Produce risk analysis for population for FP advice to population (similar to the cancer risk analysis provided to new cancer patients age vs operation vs chemo vs radiation vs drug therapy) / HEALTH TEAM 5 (Note 6):
  - by age,
  - by comorbidity,
  - by other health conditions (including obesity).
· Provision of Confidence-based Medical Advice to / PART OF PUBLIC AFFAIRS TEAM 1 (Note 7):
  - Government,
  - Private sector,
  - Not for profit organizations,
  - General public.
· Develop medical examiner and mortuary services to ensure capacity and caring response if/when required.

**Task Given 2.** Mitigating societal disruption in Alberta through ensuring the continuity and recovery of critical services. (Note the word *continuity*)

**Implied Tasks:**

· Confirmation of Critical Infrastructure by Sector / EM TEAM 2 (Note 8):
  - Energy:
    · Electricity,
    · Oil,
    · Gas.
  - Water Supply,
  - Food Supply,
  - Agriculture:
    · Livestock (zoonotic transfer concern),
    · Farming.
  - Transportation,
  - Etc.
· Confirmation of Critical Services:
  - Education / EDUCATION TEAM 1 (Note 9):
    · Schools:
      - Public schools,
      - Separate schools,
      - Charter schools,
      - Private schools,
      - Home schooling,
      - Other.
    · Undergraduate / EDUCATION TEAM 2:
      - Pandemic related specialties,
      - Other.
    · Postgraduate / EDUCATION TEAM 2:
      - Pandemic related specialties,
      - Other.
  - Mental Health / HEALTH TEAM 6:
    · Existing services,
    · Additional services needed during pandemic.
  - Societal Health / HEALTH TEAM 6:
    · Existing services,
    · Additional services needed during pandemic.
  - Financial Services / FINANCE TEAM 1 (Note 10):
    · Etc.
    · Etc.

**Task Given 3.** Minimizing adverse economic impact.

Implied tasks:

· Ensure maximum Continuity of the Economy (Critical aspects covered in Task 2, this is all other aspects of the economy) / EM TEAM 2 (Note 8):
  - Manufacturing,
  - Resource Sector:
    · Forestry,
    · Fishing,
    · Farming,
· Livestock,
· Energy,
· Etc.
- Financial Institutions,
- Construction,
- Wholesale,
- Retail,
- Small Business,
- Tourism,
- Etc.
· When Continuity is not possible due to COVID-19 / EM TEAM 2 (Note 8):
  - Replacement of business,
  - Assurance of return,
  - Support mechanisms for impacted systems and personnel,
  - Etc.
· Etc.

**Task Given 4.** Supporting an efficient and effective use of resources during response and recovery.

**Implied tasks:**

· Identification of / EM TEAM 2 (Note 8):
  - Critical Resources:
    · Government,
    · Private sector,
    · NGOs,
    · Citizens.
  - Necessary Resources / EM TEAM 2 (Note 8):
    · Government,
    · Private Sector,
    · NGOs,
    · Citizens.
  - Morale resources:
    · Same as above.
Management of Resources by Criticality / EM TEAM 2 (Note 8):
- Procurement,
- Transportation,
- Warehousing,
- Distribution,
- Accounting and Control Systems,
- Etc.
- Etc.

Implied tasks not linked to a Given Task. These tasks are then fully identified, again in the process coordinated by the EMO, with the Governance Task force. Where the existing pandemic plan was short on Given Tasks, the sheets above would need to be done during this phase of the process.

Some examples are below.

Implied tasks:

- Support of Confidence in Government / PUBLIC AFFAIRS/EM TEAMS 1 (Note 7):
  - Establishment of push information systems involving the premier,
  - Establishment of pull Information systems for public,
  - Protection of Charter Rights and Freedoms,
  - Management of dis-information,
  - Management of FEAR (not the use of Fear).

- Support of the Governance Task Force / EM TEAM 1 (Note 11):
  - When impacted by the pandemic,
  - Routine support,
  - Scheduled and emergency briefings,
  - Information and messaging support,
  - Etc.

- Operations / EM OPERATIONS TEAM (Note 12):
  - Operation of the cross-Government Operations Center (GEOC),
  - Operation of sector specific operations centers linked to the GEOC,
  - Operation of EM in Support of other hazards and emergencies (COVID-19 will not be the only emergency during the pandemic),
  - Etc.
· Plans / EM PLANS TEAM (Note 12):
  - Pandemic related,
  - Non-pandemic related,
  - Conduct of the OPP for all teams.
· Intelligence / EM INTELLIGENCE TEAM (Note 12):
  - COVID-19 related:
    · Identification of sources of information,
    · Gathering,
    · Assessment of information,
    · Collation of information,
    · Distribution of information,
    - COVID-19 Impacts related.
    · Same as above,
    - Etc.
· Communications / PUBLIC AFFAIRS TEAM 1 (Note 7):
  - Support of government:
    · Identification spokesperson,
    · Methodologies,
    · Systems,
    · Materials,
    · Personnel.
  - Support of private sector,
  - Support of NGOs,
  - Support of public.
· Financial management / FINANCE TEAM 1 (Note 10):
  - Pandemic COVID-19 related,
  - Pandemic collateral effects,
  - Routine but potential impacted personnel continuity plans.
· Etc.
Notes:

The following 12 Notes are examples of the composition of the Teams to do the development of Courses Open corresponding to their assigned task(s). The actual composition of the teams would be assigned at the end of the Mission Analysis step, by the members of the Mission Analysis process. Notes are not provided for all areas.

1. Includes LTC home specialists (private sector, public sector, management, and workers), seniors’ health care specialists, experts in quarantine systems, mental health issues advisors, infrastructure advisors, etc.

2. Includes seniors’ health care specialists/nurses, family practitioners/nurses with large numbers of senior patients, experts in quarantine systems, mental health issues, transportation systems advisors, infrastructure advisors for alternate housing options, etc.

3. Includes seniors’ health care specialists/nurses, family practitioners/nurses with large numbers of senior patients in multi-generational homes, experts in quarantine systems, mental health issues, transportation systems advisors, infrastructure advisors for alternate housing options, etc.

4. Includes administrators of small, medium, and large hospitals (management and staff), administrators of labs, private sector partners, administrators of specialist facilities (heart, cancer, diabetes, dementia, etc.), EMS, experts in surge capacity development, university/college systems in health training and education, etc.

5. Cross section of public and private sector involved in these areas, international and national expertise if required, etc.

6. Includes family practitioners/nurses, specialist medical personnel in severe illness (heart disease, dementia, cancer, etc.), public affairs experts for development of materials, media advisors for form and fit of materials for different mediums, etc.

7. Top experts in development of messaging using diverse methodologies and mediums, experts in areas like health, EM, critical infrastructure, etc. for content, premier’s office advisor to ensure leadership input and comfort with materials, etc. This is one of the fundamental concepts in any emergency and will be the daily focus of both the public affairs personnel and the leadership in the EMO.

8. EM TEAM 2 includes the EMO staff responsible for annual identification of critical infrastructure (CI) and for business continuity planning (BCP) across the government departments (security clearances required for portions of this work). In addition, experts in the regulation and operation of all sectors of critical infrastructure will be part of the Courses Open process, for their areas of responsibility. A health expert will be part of the team to participate in sectoral discussion on potential COVID-19 impacts and duration. Other government departments and agencies will be part of the team to bring expertise in support functions as and if required.

9. Experts in children’s education (management [education department, school boards, principals], specialists [special needs] and teachers [unions]), children’s mental health experts, experts in short-term and long-term impacts of early education learning on life,
parents groups representatives, day care specialists, family welfare experts, etc.

10. Finance experts for development of programs, experts in banking, markets, short-term and long-term budget management, for financial interrelationship between orders of government, advisors in support to specific critical and non-critical infrastructure and services, etc.

11. EM TEAM 1 includes the leadership team of the EMO with all EMO resources available as and when required.

12. In an EMO there are sections of personnel, specifically trained and working in areas called Operations, Planning, Intelligence, and Recovery. They will be part of this team, defined with these activities. In addition, cross government and private sector there are personnel designated and pre-trained to work in the Government Operations Centers in time of emergency. They will be so employed for development of Courses Open for this task.
# APPENDIX D

## Non-pharmaceutical public health measures for mitigating the risk and impact of epidemic and pandemic influenza (2019)

World Health Organization (WHO) (Reference 24)
[https://apps.who.int/iris/bitstream/handle/10665/329438/9789241516839-eng.pdf](https://apps.who.int/iris/bitstream/handle/10665/329438/9789241516839-eng.pdf)

### Table 1. Recommendations on the use of NPIs by severity level

<table>
<thead>
<tr>
<th>SEVERITY</th>
<th>PANDEMIC&lt;sup&gt;a&lt;/sup&gt;</th>
<th>EPIDEMIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any</td>
<td>Hand hygiene&lt;br&gt;Respiratory etiquette&lt;br&gt;Face masks for symptomatic individuals&lt;br&gt;Surface and object cleaning&lt;br&gt;Increased ventilation&lt;br&gt;Isolation of sick individuals&lt;br&gt;Travel advice</td>
<td>Hand hygiene&lt;br&gt;Respiratory etiquette&lt;br&gt;Face masks for symptomatic individuals&lt;br&gt;Surface and object cleaning&lt;br&gt;Increased ventilation&lt;br&gt;Isolation of sick individuals&lt;br&gt;Travel advice</td>
</tr>
<tr>
<td>Moderate</td>
<td>As above, plus&lt;br&gt;Avoiding crowding</td>
<td>As above, plus&lt;br&gt;Avoiding crowding</td>
</tr>
<tr>
<td>High</td>
<td>As above, plus&lt;br&gt;Face masks for public&lt;br&gt;School measures and closures</td>
<td>As above, plus&lt;br&gt;Face masks for public&lt;br&gt;School measures and closures</td>
</tr>
<tr>
<td>Extraordinary</td>
<td>As above, plus&lt;br&gt;Workplace measures and closures&lt;br&gt;Internal travel restrictions</td>
<td>As above, plus&lt;br&gt;Workplace measures and closures</td>
</tr>
</tbody>
</table>

Not recommended in any circumstances:
- UV light
- Modifying humidity
- Contact tracing
- Quarantine of exposed individuals
- Entry and exit screening
- Border closure

NPI: non-pharmaceutical intervention; UV: ultraviolet.
## 2. SUMMARY OF RECOMMENDATIONS

The eighteen recommendations, which fall under 15 measures, are summarized in Table 4. The recommendations are based on the quality of evidence, which is indicated within the table, and on the other indicators (i.e. values and preferences, balance of benefits and harms, resource implications, acceptability, feasibility and ethical considerations).

<table>
<thead>
<tr>
<th>MEASURES</th>
<th>RECOMMENDATIONS</th>
<th>QUALITY OF EVIDENCE</th>
<th>STRENGTH OF RECOMMENDATION</th>
<th>WHEN TO APPLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand hygiene</td>
<td>Hand hygiene is recommended as part of general hygiene and infection prevention, including during periods of seasonal or pandemic influenza. Although RCTs have not found that hand hygiene is effective in reducing transmission of laboratory-confirmed influenza specifically, mechanistic studies have shown that hand hygiene can remove influenza virus from the hands, and hand hygiene has been shown to reduce the risk of respiratory infections in general.</td>
<td>Moderate (lack of effectiveness in reducing influenza transmission)</td>
<td>Recommended</td>
<td>At all times</td>
</tr>
<tr>
<td>Respiratory etiquette</td>
<td>Respiratory etiquette is recommended at all times during influenza epidemics and pandemics. Although there is no evidence that this is effective in reducing influenza transmission, there is mechanistic plausibility for the potential effectiveness of this measure.</td>
<td>None</td>
<td>Recommended</td>
<td>At all times</td>
</tr>
<tr>
<td>Face masks</td>
<td>Face masks worn by asymptomatic people are conditionally recommended in severe epidemics or pandemics, to reduce transmission in the community. Although there is no evidence that this is effective in reducing transmission, there is mechanistic plausibility for the potential effectiveness of this measure. A disposable surgical mask is recommended to be worn at all times by symptomatic individuals when in contact with other individuals. Although there is no evidence that this is effective in reducing transmission, there is mechanistic plausibility for the potential effectiveness of this measure.</td>
<td>Moderate (lack of effectiveness in reducing influenza transmission)</td>
<td>Conditionally recommended</td>
<td>In severe epidemics or pandemics</td>
</tr>
<tr>
<td>Surface and object cleaning</td>
<td>Surface and object cleaning measures with safe cleaning products are recommended as a public health intervention in all settings in order to reduce influenza transmission. Although there is no evidence that this is effective in reducing transmission, there is mechanistic plausibility for the potential effectiveness of this measure.</td>
<td>Low (lack of effectiveness in reducing influenza transmission)</td>
<td>Recommended</td>
<td>At all times</td>
</tr>
<tr>
<td>MEASURES</td>
<td>RECOMMENDATIONS</td>
<td>QUALITY OF EVIDENCE</td>
<td>STRENGTH OF RECOMMENDATION</td>
<td>WHEN TO APPLY</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>----------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Other environmental measures</td>
<td>Installing UV light in enclosed and crowded places (e.g. educational institutions and workplaces) is not recommended for reasons of feasibility and safety. Increasing ventilation is recommended in all settings to reduce the transmission of influenza virus. Although there is no evidence that this is effective in reducing transmission, there is mechanistic plausibility for the potential effectiveness of this measure. There is no evidence that modifying humidity (either increasing humidity in dry climates, or reducing humidity in hot and humid climates) is an effective intervention, and this is not recommended because of concerns about cost, feasibility and safety.</td>
<td>None</td>
<td>Not recommended</td>
<td>N/A</td>
</tr>
<tr>
<td>Contact tracing</td>
<td>Active contact tracing is not recommended in general because there is no obvious rationale for it in most Member States. This intervention could be considered in some locations and circumstances to collect information on the characteristics of the disease and to identify cases, or to delay widespread transmission in the very early stages of a pandemic in isolated communities.</td>
<td>Very low (unknown)</td>
<td>Not recommended</td>
<td>N/A</td>
</tr>
<tr>
<td>Isolation of sick individuals</td>
<td>Voluntary isolation at home of sick individuals with uncomplicated illness is recommended during all influenza epidemics and pandemics, with the exception of the individuals who need to seek medical attention. The duration of isolation depends on the severity of illness (usually 5-7 days) until major symptoms disappear.</td>
<td>Very low (effective)</td>
<td>Recommended</td>
<td>At all times</td>
</tr>
<tr>
<td>Quarantine of exposed individuals</td>
<td>Home quarantine of exposed individuals to reduce transmission is not recommended because there is no obvious rationale for this measure, and there would be considerable difficulties in implementing it.</td>
<td>Very low (variable effectiveness)</td>
<td>Not recommended</td>
<td>N/A</td>
</tr>
<tr>
<td>School measures and closures</td>
<td>School measures (e.g. stricter exclusion policies for ill children, increasing desk spacing, reducing mixing between classes, and staggering recesses and lunchbreaks) are conditionally recommended, with gradation of interventions based on severity. Coordinated proactive school closures or class dismissals are suggested during a severe epidemic or pandemic. In such cases, the adverse effects on the community should be fully considered (e.g. family burden and economic considerations), and the timing and duration should be limited to a period that is judged to be optimal.</td>
<td>Very low (variable effectiveness)</td>
<td>Conditionally recommended</td>
<td>Gradation of interventions based on severity; school closure can be considered in severe epidemics and pandemics</td>
</tr>
<tr>
<td>MEASURES</td>
<td>RECOMMENDATIONS</td>
<td>QUALITY OF EVIDENCE</td>
<td>STRENGTH OF RECOMMENDATION</td>
<td>WHEN TO APPLY</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------</td>
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</tr>
<tr>
<td>Workplace measures and closures</td>
<td>Workplace measures (e.g., encouraging teleworking from home, staggering shifts, and loosening policies for sick leave and paid leave) are conditionally recommended, with gradation of interventions based on severity. Extreme measures such as workplace closures can be considered in extraordinarily severe pandemics in order to reduce transmission.</td>
<td>Very low (effective)</td>
<td>Conditionally recommended</td>
<td>Gradation of interventions based on severity; workplace closure should be a last step only considered in extraordinarily severe epidemics and pandemics</td>
</tr>
<tr>
<td>Avoiding crowding</td>
<td>Avoiding crowding during moderate and severe epidemics and pandemics is conditionally recommended, with gradation of strategies linked with severity in order to increase the distance and reduce the density among populations.</td>
<td>Very low (unknown)</td>
<td>Conditionally recommended</td>
<td>Moderate and severe epidemics and pandemics</td>
</tr>
<tr>
<td>Travel advice</td>
<td>Travel advice is recommended for citizens before their travel as a public health intervention in order to avoid potential exposure to influenza and to reduce the spread of influenza.</td>
<td>None</td>
<td>Recommended</td>
<td>Early phase of pandemics</td>
</tr>
<tr>
<td>Entry and exit screening</td>
<td>Entry and exit screening for infection in travellers is not recommended, because of the lack of sensitivity of these measures in identifying infected but asymptomatic (i.e., pre-symptomatic) travellers.</td>
<td>Very low (lack of effectiveness in reducing influenza transmission)</td>
<td>Not Recommended</td>
<td>N/A</td>
</tr>
<tr>
<td>Internal travel restrictions</td>
<td>Internal travel restrictions are conditionally recommended during an early stage of a localized and extraordinarily severe pandemic for a limited period of time. Before implementation, it is important to consider cost-effectiveness, acceptability and feasibility, as well as ethical and legal considerations in relation to this measure.</td>
<td>Very low (effective)</td>
<td>Conditionally recommended</td>
<td>Early phase of extraordinarily severe pandemics</td>
</tr>
<tr>
<td>Border closure</td>
<td>Border closure is generally not recommended unless required by national law in extraordinary circumstances during a severe pandemic, and countries implementing this measure should notify WHO as required by the IHR (2005).</td>
<td>Very low (variable effectiveness)</td>
<td>Not recommended</td>
<td>N/A</td>
</tr>
</tbody>
</table>

IHR: International Health Regulations; N/A: not applicable; NP: non-pharmaceutical intervention; RCT: randomized controlled trial; UV: ultraviolet; WHO: World Health Organization.
Definition of Severity of a Pandemic Virus

The Centers for Disease Control
Pandemic Severity Assessment Framework

1. COVID-19 is a high-transmissibility virus.

2. COVID-19, in spite of popular belief, is a low to moderate clinical severity virus, [except to seniors over the age of 60 with multiple severe comorbidities]. (See paragraph 4 and 5 below)

3. This was known in February and March of 2020. (Reference 13)

4. Current peer reviewed research has confirmed that the Infection Fatality Rate (IFR) of COVID-19 is extremely age dependant (Reference 26 - excerpt below). For people under the age of 50, this IFR is like the seasonal flu.

5. “A serology-informed estimate of the IFR in Geneva, Switzerland put the IFR at:
   age 5–9 years 0.0016% (95% Credible Interval, CrI 0, 0.019),
   10–19 years 0.00032% (95% CrI 0, 0.0033),
   20–49 years 0.0092% (95% CrI 0.0042, 0.016),
   50–64 years 0.14% (95% CrI 0.096, 0.19), and,
   age 65+ outside of assisted care facilities 2.7% (95% CrI 1.6, 4.6),
   for an overall population IFR 0.32% (95% CrI 0.17, 0.56) (41).
   Similarly, a large study from France found an inflection point in IFR around the age of 70 years (See their Figure 2D) (42)“.

6. In comparison, the Spanish Flu 1918 Influenza Pandemic, would have ranked as an “Extraordinary” pandemic in the Non-pharmaceutical Measures document (Reference 24 & 25).
   a) The Spanish Flu had a high measure of transmissibility and a high clinical severity. (See Figure 3, next page, from Reference 25)
   b) It is estimated to have killed 50,000 Canadians when the population of Canada was approximately 8.5 million.
   c) In today’s terms that would mean approximately 225,000 deaths based on Canada’s current population.
d) COVID-19 has thus far killed approximately 26,000 Canadians (June 1, 2021) or over 8.5 times less than the Spanish Flu in population adjusted terms.

e) Worldwide, the Spanish Flu is estimated to have killed at least 50 Million people, recall that the world’s population was much lower (Reference 55). The population of the world was 1.8 Billion in 1918-19 and today it is 7.8 Billion. Therefore, it is likely in today’s terms the Spanish Flu would have killed 216 Million.

f) Worldwide COVID-19 has killed 3.7 Million. It will likely go on to kill as many as 6 Million.

g) Therefore, worldwide the Spanish Flu was 36 times more deadly than COVID-19.

7. In comparison, the Asian Flu Pandemic of 1957-58 killed approximately 2 Million people worldwide.

   a) The world’s population was 2.71 times lower.
   b) Based on this fact it is likely the Asian Flu would have killed over 5 Million.
   c) This pandemic had similar characteristics to COVID-19, particularly deadly to the elderly (Reference 56).

   d) Worldwide COVID-19 has killed approximately 3.4 Million. It may kill 6 Million.
   e) Therefore, worst case worldwide COVID-19 may be 1.2 more deadly than the Asian Flu.

8. In summary, worldwide COVID-19 has shown itself to be 36 times less deadly than the Spanish Flu and 1.2 times more deadly than the Asian Flu.

9. COVID-19 ranks as a **Moderate Pandemic**.

Centres for Disease Control Pandemic Assessment Severity Framework (PASF) 
(Reference 25)
APPENDIX E

DEMOCRACY – CHARTER RIGHTS AND FREEDOMS

Background

In a case before the courts in Manitoba, over the use of health orders/rules to deny Charter Rights and Freedoms in that province, the Justice Centre for Constitutional Freedoms (JCCF) lawyers for the plaintiff provided the following statement, a quote from Lord Jonathan Sumption (Retired Justice of the Supreme Court, UK) (Reference 35):

The biggest casualty of the lockdown will not be the closed pubs, restaurants and shops and the crippled airlines. It will not be our once-thriving musical, theatrical and sporting culture. It will not even be the wreckage of our economy. These are terrible things to behold. But the biggest casualty of all will be liberal democracy.

Liberal democracy breaks down when frightened majorities demand mass coercion of their fellow citizens and call for our personal spaces to be invaded. These demands are invariably based on what people conceive to be the public good. They all assert that despotism is in the public interest.

A society in which oppressive control of every detail of our lives is unthinkable except when it is thought to be a good idea, is not free. It is not free while the controls are in place. And it is not free after they are lifted, because the new attitude will allow the same thing to happen again whenever there is enough public support.

Liberty is not an absolute value, but it is a critically important, foundational one. Of all freedoms, the freedom to interact with other human beings is perhaps the most valuable. It is a basic human need, the essential condition of human happiness and creativity.

This quote underscores the attack on our Canadian democracy that our PM, premiers, and MOH have demanded, to an ever increasingly compliant public. The abandonment of the Canadian Charter of Rights and Freedoms by our political leaders has shown that a democracy can be damaged or even destroyed. This is not a new concern. A Greek philosopher, Thucydides (455-405 BC) stated:

“Democracy satisfies best the human thirst for freedom; yet being undisciplined, turbulent, and luxury-seeking, it falls time and again to austere single-minded despotism.”

Democracy, as retired Justice Sumption stated, does not just “bounce back”. The public attitude can be used to repeatedly enforce authoritarian rule until the very foundation of the democracy crumbles.

Our rights and freedoms did not ‘just occur’. They were fought for by people who did not have them. In our country, the roots go back to Magna Carta, and more recently from workers’ demands during the industrial revolution, suffragette movements, civil rights movements, Indigenous rights movements, sexual orientation rights movements. Each of these groups battled to achieve what is established in our Canadian Charter of Rights and Freedoms. The sacrifice of these groups and of our veterans defending these rights has been made irrelevant.
The public, after a relentless campaign of fear of COVID-19 by their leaders, MOH, and the Special Advisory Groups, now demand lockdown.

It is true the *Charter* Rights and Freedoms are not unlimited. The *Charter* states:

> It is recognized that the constitutional rights of Canadians are not “unlimited” – that the *Charter of Rights and Freedoms* guarantees the rights and freedoms set out in it “subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society”.

### The Oakes Test

To establish “reasonable limits” of a law that “contravenes” a *Charter* right; Canadian courts use the Oakes test to qualify the “reasonable limits” of the law.

“The *Oakes* test was created by the Supreme Court of Canada in the 1986 case of *R v Oakes* [1]. The test interprets section 1 of the *Charter of Rights and Freedoms*, which states that rights are guaranteed, subject only to such reasonable limits ... as can be demonstrably justified in a free and democratic society.” [2] This means that the government must establish that the benefits of a law outweigh its negative impact—that is, its violation of a *Charter* right” (Reference 34).

### “The Test”

The Court in *R v Oakes* created a two-step balancing test to determine whether a government can justify a law which limits a *Charter* right.

1. “The government must establish that the law under review has a goal that is both “pressing and substantial.” The law must be both important and necessary. Governments are usually successful in this first step.”
2. “The court then conducts a proportionality analysis using three sub-tests.”
   a. “The government must first establish that the provision of the law which limits a *Charter* right is rationally connected to the law’s purpose. If it is arbitrary or serves no logical purpose, then it will not meet this standard.”
   b. “Secondly, a provision must minimally impair the violated *Charter* right. A provision that limits a *Charter* right will be constitutional only if it impairs the *Charter* right as little as possible or is “within a range of reasonably supportable alternatives.”[4]”
   c. “Finally, the court examines the law’s proportionate effects.

Even if the government can satisfy the above steps, the effect of the provision on *Charter* rights may be too high a price to pay for the advantage the provision would provide in advancing the law’s purpose.”

Demonstrable Justification

Our leaders have never produced evidence that they have even tried to meet the Oakes Test. The “reasonable limits” to Charter Rights and Freedoms, caused by “lockdowns” have been draconian, authoritarian, damaging, and deadly. **Never reasonable. Never demonstrably justified.**

**Therefore, the denials have been illegal.**

The PM of Canada has the highest legal responsibility to defend the Charter of Rights and Freedoms, enshrined in Canadian law. Throughout the pandemic he has not just been silent on Charter rights denials, he has actively encouraged and even demanded that premiers “do the right thing” and enforce lockdowns (Reference 36). The PM has gone to the point of threatening to withhold federal funding for the pandemic unless lockdowns are used.

Premiers/MOH(s) have issued public health orders and rules, without demonstrable justification for the denial of Charter Rights and Freedoms. They have, wave after wave, acted as if the requirements to meet the Oakes Test simply did not exist.
APPENDIX F
ADVANTAGES/DISADVANTAGES (COST BENEFIT ANALYSIS)
PROCESS

Background

There appears to be have only two overarching Courses Open considered in the top-down federal and P/T response to COVID-19. In evidence, it appears that only lockdowns were truly ever considered.

1. Use of Lockdowns - The use of lockdowns on the entire population to control the spread and deaths from COVID-19 until a vaccine can be developed to save everyone.

2. Targeted Approach - The use of a targeted response, protecting the most at risk, while maintaining life as much as normal for everyone else. A vaccine may be developed later, but it is not essential to the response.

The EM process does not define a Course Open in a ‘giant’ concept fashion. The EM process defines the Courses Open in smaller sub-sets, for what should be obvious reasons by now in this paper. In the EM process, the definition of each Course Open should be based on:

· pieces of the response that can be built and integrated by their subject matter experts
· pieces that when assembled make a comprehensive plan, built by all partners
· pieces that can be evaluated for advantages/disadvantages one action at a time
· pieces that can be verified based on science, previous and evolving, and
· pieces that can be switched, modified, and confirmed as evidence as the pandemic evolves.

The two overarching Courses Open defined above were forced to play against each other, to the detriment of our nation and for the entire pandemic. (The media have picked sides.)

In the interest of brevity, the two overarching concepts will be used to form the basis of comparison, while describing the actions involved in the emergency management process for Advantages/Disadvantages (Cost Benefit Analysis). (Part 1 and 2 to Appendix F)

The two advantage/disadvantage lists that follow are very brief, but give a clear representation of what went wrong in Canada's pandemic response.

Even though it would be grossly negligent to do an advantages/disadvantages process at this level, it must be noted that it is unlikely that even this limited process was followed in the P/Ts and federally.

The EM process of Advantages/Disadvantages (Cost Benefit Analysis) was either ignored or performed in a negligent manner before the first wave, and is still ignored by the PM, premiers and MOH to this day – some might displaying ‘criminal’ negligence.
It is noteworthy that after the first wave, evidence and academic review of the use of lockdowns were available, specifically for the Canadian pandemic response. Two of the overarching Cost Benefit Analysis of Canada’s response are found in References 61 and 62.

In the paper by Dr. Ari Joffe, the abstract reads:

The Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) has caused the Coronavirus Disease 2019 (COVID-19) worldwide pandemic in 2020. In response, most countries in the world implemented lockdowns, restricting their population’s movements, work, education, gatherings, and general activities in attempt to ‘flatten the curve’ of COVID-19 cases. The public health goal of lockdowns was to save the population from COVID-19 cases and deaths, and to prevent overwhelming health care systems with COVID-19 patients. In this narrative review I explain why I changed my mind about supporting lockdowns. First, I explain how the initial modeling predictions induced fear and crowd-effects [i.e., groupthink]. Second, I summarize important information that has emerged relevant to the modeling, including about infection fatality rate, high-risk groups, herd immunity thresholds, and exit strategies. Third, I describe how reality started sinking in, with information on significant collateral damage due to the response to the pandemic, and information placing the number of deaths in context and perspective. Fourth, I present a cost-benefit analysis of the response to COVID-19 that finds lockdowns are far more harmful to public health than COVID-19 can be. Controversies and objections about the main points made are considered and addressed. I close with some suggestions for moving forward.

In the paper by Professor Douglas Allen, the abstract reads:

An examination of over 80 Covid-19 studies reveals that many relied on assumptions that were false, and which tended to over-estimate the benefits and underestimate the costs of lockdown. As a result, most of the early cost/benefit studies arrived at conclusions that were refuted later by data, and which rendered their cost/benefit findings incorrect. Research done over the past six months has shown that lockdowns have had, at best, a marginal effect on the number of Covid-19 deaths. Generally speaking, the ineffectiveness of lockdown stems from voluntary changes in behavior. Lockdown jurisdictions were not able to prevent noncompliance, and non-lockdown jurisdictions benefited from voluntary changes in behavior that mimicked lockdowns. The limited effectiveness of lockdowns explains why, after one year, the unconditional cumulative deaths per million, and the pattern of daily deaths per million, is not negatively correlated with the stringency of lockdown across countries. Using a cost/benefit method proposed by Professor Bryan Caplan, and using two extreme assumptions of lockdown effectiveness, the cost/benefit ratio of lockdowns in Canada, in terms of life-years saved, is between 3.6–282. That is, it is possible that lockdown will go down as one of the greatest peacetime policy failures in Canada’s history.

It is recognized that these were done after the first wave and the second wave, but their findings should come as no surprise. The expected collateral damage and deaths resulting from the use of NPIs in the form of the Canadian lockdowns was known long before COVID-19.
Evidence and scientific research, like these two Canadian scholars cost benefit analysis, were ignored. The “Belief in lockdowns is untouchable”, both in the media and in the minds and actions of Canada’s PM, premiers, and MOH(s).
COURSE OPEN 1 – USE OF LOCKDOWNS

Advantages

1. Appears Effective (Wave 1 only):
   a. China did it, and it appeared to work,
   b. Italy and Spain have waited too long to lockdown, to a poor outcome,
   c. Some countries (Taiwan, S. Korea, New Zealand) sought going for “COVID Zero” and it appears their population largely avoid COVID.

2. Government Appears Strong – Confidence in government:
   a. Seems like everyone is doing it, our public expects us to do it,
   b. People are afraid and want action.

3. Seems Medically Science-based:
   a. It appears logical that if everyone stays at home no one will get COVID-19,
   b. If no one catches COVID-19, then our seniors should be safe,
   c. Everyone can catch COVID-19, catching any disease is bad and have long term effects,
   d. Maybe we can save our medical system from being overwhelmed, without developing surge capacity,
   e. A vaccine may be developed faster than normal and can end the process quickly.

4. Morale and Ethics – We are all in this together:
   a. A one-size fits all approach is easier to explain to the public,
   b. The public feels it has a role.

Disadvantages

1. We Have Not Used Lockdowns Before:
   a. Start of Wave 1. There is a reason why we do not use NPIs like this. They have little to no effect on the spread of a highly infectious virus after the first three weeks in a pandemic. The 2019 WHO document (Reference 15 and Appendix D) clearly state the NPI limitations.

   b. After Wave 1. Peer reviewed detailed studies of lockdown vs non-lockdown countries and USA states (in direct comparison with similar climate, demographics, political systems, and medical systems) have reconfirmed that the use of NPIs in this manner do not have significant effect on either the spread or deaths from COVID-19 (Reference 75). The effectiveness of lockdowns becomes a “belief system”, one not based on evidence (Reference 39).
2. Collateral Damage of Lockdowns:
   a. Start of Wave 1 - The 2019 WHO document (Reference 24 and Appendix D) clearly states the potential collateral damage of some NPIs use.
   b. There will need to be dedicated measures and funding to counter the potential collateral damages. These damages are dangerous and will be long-lasting (Reference 47, 51 & 76).
   c. After Wave 1 – The evidence of collateral damage caused by lockdowns reconfirmed the danger of the use of the NPIs that were of concern. Increased damage and/or deaths were reported in increasing numbers the longer the lockdowns continued in areas of:
      i. Mental health (References 45, 78, 79, 80, & 81),
      ii. Societal health (References 46, 78, & 80),
      iii. Education of youth (References 48, 49, 50, 77),
      iv. Other severe illnesses (References 51, 82, 83, 84, 85, 88, & 96),
      v. Economic damage and debt load (private sector, federal, provincial, municipal, non-for-profit) (References 87, 88, 89 & 90).

3. Medical Partners May Resist the Use of Lockdowns:
   a. Family practitioners will be severely restricted in the timely and comprehensive care of their patients. This is of particular concern for youth and elderly (Reference 48, 91, & 92).
   b. Specialists in other severe illnesses (e.g. heart disease, diabetes, cancer, and dementia) will be restricted in diagnosis, treatment, and care for their patients (References 51, 82, 83, 84, 85, 86, 91, 92 & 96).
   c. Specialist in mental illness will be forced to deal with an increase in cases due to fear caused by lockdowns, as well as fear of COVID-19 (References 45, 46, 91, & 92).
   d. Specialists in social health issues (e.g., spousal abuse, child abuse, joint custody, workplace and unemployment stress) will be restricted in timely diagnosis, treatment, and care of their current and new patients (References 46, 77, 84, 91, & 92).
   e. Specialists in social services will be restricted in ability to diagnose, treat, and care for existing and new issues and will cause these issues to grow/escalate. Homelessness will be an important issue, exacerbated by lockdowns (References 91 & 92).

4. Protection of the Most at Risk. The use of lockdowns does not address this imperative.
   a. Start of Wave 1 – The Hazard Assessment (Appendix A) clearly indicated that targeted medical diagnosis, treatment, and care for those over 60 with severe comorbidities must be the first priority for the medical system. Lockdowns in and of themselves ignore this requirement.
   b. After Wave 1 – Canada has placed last in the care of seniors in LTC homes in the OECD because we did not follow a targeted approach for their care. 95 percent of all deaths in Canada have been in our seniors over the age of 60. 81 percent of the
deaths in Canada in the first wave were in LTC homes. 73 percent of all deaths as of June 2021 continue to be in LTC homes. Lockdowns did not save them. A targeted approach would have saved far more (References 42, 43, 44, & 52).

5. There Will Be Massive Impact on the Education of our Youth (Reference 48, 49, 50, 77, 93, 94, 95):
   a. Staff of school boards and schools will have to deal with loss of education across all age groups,
   b. Primary school students will be severely disadvantaged as early education is critical in development,
   c. Schools are also centres for the delivery of social assistance programs for those with social disabilities, learning disabilities, and economic challenges (References 46),
   d. Parents with children out of school will be challenged to find care for their children while they work.

6. There will be Incredibly Significant Impact on Canadian Workers and the Economy. The lockdown of business will result in:
   a. Massive unemployment – at peak 8.8 Million were on Canada Employment Replacement Benefit (CERB) out of approximately 20.2 Million in Canada’s workforce (Reference 53),
   b. Business failure resulting in further unemployment, mental health issues, family health issues, and economic impact (Reference 89),
   c. Loss of personal income tax to fund the response to the pandemic (Reference 90),
   d. The need for massive Government spending to save workers and business impacting Canada’s ability in the future (References 87, 88, & 90):
      i. to fund health care,
      ii. to fund social programs,
      iii. to encourage economic Initiatives,
      iv. to encourage investment in Canada.

7. Denial of Charter rights and freedoms will be devastating to our democracy:
   a. This use of NPIs require the denial of Charter rights and freedoms. Legally, before these measures can be used, the Oakes Test must be met (Reference 34 and Appendix E). It is not possible to meet this requirement.
   b. Since the Oakes Test cannot be met with evidence, FEAR will likely have to ensure that the public willingly complies with public health orders. FEAR should never be intentionally used in an emergency.
   c. People becoming used to the denial of Charter rights and freedoms has long-term effects on democracy that are not visible until too late (Appendix E).

8. COVID- Zero. This is not an option for Canada, but with lockdowns people may assume it is achievable. It will need constant public communications to explain this point.
a. We share the longest undefended border in the world with the USA.

b. We have interdependent towns and cities all along that border and different health rules will be applied in American States all along that border.

c. Over 20,000 trucks a day cross the Canada/USA border and bring essential goods to Canada (mostly food). These drivers cannot follow lockdown rules or the population will starve (Reference 40 & 41).

9. This approach will rapidly erode the concept of Mutual Aid (References 97 & 98). Each P/T will move to protect its medical system and residents first to the exclusion of other P/Ts. This will have collateral impacts on transportation systems, food supply systems, and other critical infrastructure and services. A long-term impact will be felt in many ways, as P/Ts struggle to recover. Recovery will likely be internally focused rather than in a constructive and cohesive manner.

10. In order to overcome resistance to lockdowns, it is likely that fear of COVID-19 will have to be increased. FEAR should NEVER be used in an emergency. It has deep and long-lasting consequences, many which may be unintended, but still will be very real.
Advantages

1. The Hazard (COVID-19) is Clearly an Age-focused Disease:
   a. Data from China, Italy, and Spain in the hazard assessment showed that those over 60 represented 95 percent of their deaths,
   b. We can develop targeted protection options for our seniors to likely save thousands of lives,
   c. For the rest of the population this may be like a severe flu season. This can be proved to the public with real evidence,
   d. This is a coronavirus:
      i. Coronaviruses tend to be seasonal so this will likely be seasonal, there will be time to adjust between spring, fall, and winter if required,
      ii. Coronaviruses mutate constantly so there may be difficulty creating a vaccine to cover all strains,
      iii. This plan is not dependant on a vaccine.

2. Confidence in Government:
   a. We can COVID-19 in perspective by age to minimize fear (to other diseases, to other daily risks),
   b. Show how surge capacity is being prepared, in particular for our seniors, to give confidence they will be protected,
   c. We can support our P/T partners (mutual aid), encourage mutual support for seniors’ facilities, and be an example,
   d. Minimize the fear of this pandemic disease and the response to it for a majority of the population.

3. Science-based:
   a. This is in accordance with our existing plans which were developed on the best science before the pandemic,
   b. Evidence out of Sweden shows that for people under 60 the lack of lockdowns had little to no negative effect (Sweden needs to target support to their seniors),
   c. COVID-Zero is simply not possible in Canada (20,000 trucks a day cross the Canada/USA border, and this must continue, or we ‘starve’),
   d. The use of experiment lockdowns does not appear to have slowed the spread or saved people in Italy and Spain. We can watch the evidence,
   e. We can develop strong messaging to demonstrate science and publish new information constantly from all sources.
4. Economic Impact is Manageable:
   a. Business will largely remain fully open,
   b. Budget options for funding of special programs can be developed with minimal, government borrowing.

5. Morale and Ethics:
   a. There is no need to deny Charter rights and freedoms for most citizens,
   b. Quarantine options for seniors should be voluntary and cover all living arrangements.

Disadvantages

1. The Public wants a Strong Government Response like China:
   a. Public believes lockdowns work, in spite of the mass deaths in lockdown countries (China, Italy, Spain, Belgium),
   b. Public believes COVID-Zero may be possible in Canada (Taiwan, South Korea, New Zealand),
   c. We will need an extensive science-based information system to overcome media fear-based reporting and the media support of lockdowns.

2. The Public may Fear that our Medical Health System will be Overwhelmed:
   a. Regardless of cost, information programs must be developed and transparently presented on the existing capacity of our medical systems,
   b. Regardless of cost, information programs must be developed and transparently presented on the surge capacity of our medical systems. See Part 4 to Appendix F,
   c. Regardless of cost, information programs must be developed and transparently presented on the Mutual Aid available between P/Ts and our federal partners with respect to any emerging specific capacity issues of our medical systems.

3. There will be a Negative Impact on the Economy:
   a. In spite of the fact that business is left open, people may chose to stay home more,
   b. Support for workers and industry will be required, but much less than in a lockdown-based response,
   c. Options for support of the most effected industry need to be developed rapidly and transparently or fear will emerge in these industries.

4. Parents and Teachers may become Afraid to Operate Schools:
   a. Evidence of the risk posed by COVID-19 in children will need to be shared constantly,
   b. Evidence for the risk posed by COVID-19 to teachers by age group needs to be shared constantly,
   c. Teachers at high risk because of age or severe comorbidities will need programs for alternate employment, like done for industry.
5. Regardless of Response Type, there will be other Collateral Damage. Programs and spending need to be rapidly and transparently developed, with experts, partners and the public for other areas as they appear (e.g. mental health, societal health, drug overdose).

6. Fear occurs in every emergency. Regardless of cost, information programs must be developed to constantly place COVID-19 in perspective (See Part 3 to Appendix F).
PLACING COVID-19 INTO PERSPECTIVE AFTER ONE FULL YEAR

COVID-19 Deaths verses Other Causes of Death

**Fig. 11 - Traffic Fatalities (2018)**

<table>
<thead>
<tr>
<th>Age Group (yrs)</th>
<th>Fatalities</th>
<th>Serious Injuries</th>
<th>Injuries (Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 4</td>
<td>19</td>
<td>141</td>
<td>2,975</td>
</tr>
<tr>
<td>5 - 14</td>
<td>36</td>
<td>277</td>
<td>5,952</td>
</tr>
<tr>
<td>15 - 19</td>
<td>124</td>
<td>752</td>
<td>12,700</td>
</tr>
<tr>
<td>20 - 24</td>
<td>204</td>
<td>1,022</td>
<td>17,064</td>
</tr>
<tr>
<td>25 - 34</td>
<td>303</td>
<td>1,667</td>
<td>28,819</td>
</tr>
<tr>
<td>35 - 44</td>
<td>250</td>
<td>1,273</td>
<td>23,269</td>
</tr>
<tr>
<td>45 - 54</td>
<td>255</td>
<td>1,303</td>
<td>22,159</td>
</tr>
<tr>
<td>55 - 64</td>
<td>287</td>
<td>1,184</td>
<td>18,808</td>
</tr>
<tr>
<td>65 +</td>
<td>430</td>
<td>1,306</td>
<td>17,378</td>
</tr>
<tr>
<td>Not stated</td>
<td>14</td>
<td>101</td>
<td>3,723</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,922</strong></td>
<td><strong>9,026</strong></td>
<td><strong>152,847</strong></td>
</tr>
</tbody>
</table>


Other Diseases – Heart Disease (2019)

https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310039401&pickMembers%5B0%5D=2.13&pickMembers%5B1%5D=3.1&cubeTimeFrame.startYear=2017&cubeTimeFrame.endYear=2019&referencePeriods=20170101%2C20190101
COVID-19 – One Year – March 5, 2021

Fig. 12 - COVID 19 (March 5, 2021)


Examples

Canada Age 0-60 years:

1. Traffic Collision Fatalities:
   a. COVID-19 = 879,
   b. Car Accident = 1331,
   c. “Over 50% more likely to die as a traffic collision fatality than to die from COVID-19”.

Canada Age 20-40 years:

2. Traffic Collision Fatalities:
   a. COVID-19 = 111,
   b. Car Accident = 630,
   c. “Well over five times more likely to die as a traffic collision fatality than to die from COVID-19”.

3. Heart disease:
   a. Heart disease 33+126+156 = 315,
   b. COVID-19 = 111,
   c. “Over two and a half times more likely to die of heart disease than to die from COVID-19”.
Canada Age 40-60 years:

1. Heart Disease:
   a. Heart Disease $283 + 515 + 1037 + 1866 = 3701$,
   b. COVID-19 = 764,
   c. "Nearly five times more likely to die of heart disease than to die from COVID-19”.

Canada Age 60-70 years:

1. Heart disease:
   a. Heart Disease $2887+3755 = 6642$,
   b. COVID-19 = 1700,
   c. "Nearly 4 times more likely to die of heart disease than to die of COVID-19”.

Canada Age 70 years and up:

1. Heart Disease:
   a. Heart Disease $4946+12947+23951 = 41,844$,
   b. COVID-19 = 19,493,
   c. "Well over twice more likely to die of heart disease than to die of COVID-19”.

Data From (Links provided):

2. Transport Canada – 2018 – Motor Vehicle Traffic Collision deaths (Reference 57),
**Medical Surge Capacity**

Surge capacity in an emergency needs to be developed for all critical infrastructure (CI) and staff. The Operational Planning Process (OPP) is used to coordinate the development of surge capacity options with experts from all potentially effect CI, not just medical.

In a pandemic, one principle that needs to be fully understood is that you never send healthy staff home to quarantine. Every pandemic plan and NPI guidance document says not to do this *(Reference 15)*.

The development of rapid testing may assist in maintaining existing staff capacity in CI.

In the OPP for CI, team partners will develop a plan for
- Surge staff of all types,
- Surge infrastructure,
- Surge equipment,
- Surge supplies,
- Surge information communication technology (ICT).

Surge staff options can be developed with a full team of experts and partners considering:
- Recall of willing retirees,
- Requests to other jurisdiction by individual specialty if abundance in one area or P/T can be made available (mutual aid),
- Rapid training programs for less skilled positions,
- Evaluation of minimum requirements for each task, use of volunteers with basic skills,
- Use of medical students,
- Using infected but asymptomatic staff in areas where possible.

A provincial/territorial declaration of a State of Emergency allows contracts, union requirements, financial requirements, etc. to be modified, but only for a specific period and specific needs.

Due diligence must be shown (i.e., a written plan, written with the partners who are the experts in a specific need).
APPENDIX G

WRITTEN EMERGENCY RESPONSE PLANS

A Recommended Template

An Emergency Management Plan (EMP), as a minimum, should contain:

1. An Outline of the Situation Requiring the EMP, including:
   a. Definitions for this EMP,
   b. Threats/Hazards covered by the EMP:
      i. Natural,
      ii. Human induced.
   c. Partners participating to resolve the threats/hazards, but whom are not under the control of the organization who owns the plan. Normally, memorandums of understanding (MOUs) for each list partner should be referenced or attached.
      i. International,
      ii. Federal Government,
      iii. Provincial/Territorial Government,
      iv. Municipal Government,
      v. Private Sector,
      vi. Academic,
      vii. NGO.
   d. Observers, liaison groups, attachments, and detachments to/from the organization writing the plan, solely for the purpose of the plan.
   e. Governance for the life of the EMP (i.e., of this plan, not actions taken under the plan [as included in the final section of the EMP below]).

2. The Aim of the EMP:
   - To minimize the impact of <Hazard> on <Insert Name of Jurisdiction> (i.e., Canada or P/T):
     - Limitations (internal) on the EMP Aim,
     - Restrictions (external) on the EMP Aim,
     - References for appropriate legislation/regulation/policy.
3. Action Plan for EMP:
   a. General Concept:
      i. Phases:
         1. Before (Mitigation/Preparedness),
         2. Response (monitoring, assistance, intervention, complete control),
         3. Recovery (May require a separate plan for a major emergency – i.e., a pandemic).
      ii. Triggers to move between the phases and/or levels of response.
   b. Specific Internal Groupings for EMP by phase:
      i. Governance,
      ii. Emergency Operations:
         1. Emergency Operations Center,
         2. Situational Awareness.
      iii. Planning – internal/external; tactical, operational, strategic,
      iv. Training,
      v. Administration/Logistics Support,
      vi. Financial Management.
   c. Specific responsibilities and accountabilities, by internal grouping:
      i. Before:
         1. Governance,
         2. Situational Awareness,
         3. Operations,
         4. Planning,
         5. Administration/Logistics,
         6. Education,
         7. Training.
      ii. During Emergency Response:
         1. Governance,
         2. Situational Awareness,
         3. Operations (by level):
            a. EOC,
            b. Monitoring,
            c. Assistance,
            d. Intervention,
            e. Complete Control.
4. Plans:
   a. Tactical,
   b. Preparing for transition between levels of response,
   c. Preparing for transition between phases.
5. Training,
6. Administration/Logistics Support,

iii. Recovery:
   1. Governance,
   2. Situational awareness,
   3. Operational step down,
   4. Long term plans,
   5. Lessons learned.

d. Coordination of activities:
   i. Priorities for action - internal,
   ii. Internal timelines,
   iii. Between internal groupings,
   iv. Between private sector and public sector partners,
   v. Between regulatory agencies,
   vi. Between orders of government,
   vii. Between academia and other partners.

4. Support of EMP:
   a. Internal:
      i. Logistics support,
      ii. Administration support,
      iii. Financial support.
   b. External:
      i. Logistics support - internal,
      ii. Administration support,
      iii. Financial support.
5. Command, Control, and Communications:
   a. Identification of Leadership:
      i. by phase,
      ii. level of response.
   b. Definition of Forums, Requirements and Process for:
      i. Decision making.
   c. Information Sharing:
      i. Communications,
      ii. Internal:
         1. External,
         2. With partners,
         3. With stakeholders.
            iii. With public at large:
            iv. Identification of requirements,
            v. Identification of systems.
   d. Identification of Process,
   e. Continuous Improvement Process,
   f. Audit Process for the EMP.
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Biography David Redman

David Redman has worked with all orders of government, and extensively with the private sector, to develop emergency management in Alberta, Canada, and North America.

Prior to working in EMA, he had a 27 year career as an officer in the Canadian Armed Forces. His military experience was predominately in command appointments in operational field positions, including three tours as a Commanding Officer responsible for massive strategic, operational, and tactical international logistical operations. These operations included but not limited to the withdraw of all Canadian personnel and resources from Canadian Forces Europe in Lahr following the end of the Cold War; the withdraw of all Canadian United Nations personnel and resources from the Former Republic of Yugoslavia during the 1995 War; and the deployment of Canadian NATO Forces into Bosnia. During his military career he served in nineteen geographic locations, including three NATO postings to Germany, a posting to California, and postings or employment in most provinces and territories in Canada. He was also deployed on operational tours in support of the United Nations and NATO; in Egypt in 1978, Croatia in 1995, and Bosnia in 1996.

David Redman joined the Government of Alberta in 2000. His first appointment was in Emergency Management Alberta in November 2000, serving a year as the Director of Community Programs. In that capacity he was responsible for support to municipal government’s preparation, response, and recovery to major emergencies and disasters throughout the province.

Following September 11, 2001, he was appointed as Director of Crisis Management Programs. In this capacity he was responsible for leading the development of the Alberta Counter-Terrorism Crisis Management Plan (ACTCMP). Once developed, he was appointed to lead the plan’s implementation and daily coordination across all orders of government and the private sector in Alberta. The plan fully integrated both the public sector and the private sector response to threats.

In January 2004 he became the Executive Director of EMA, responsible for leading all emergency management activities for the Government of Alberta, in response to Natural and Human Induced Hazards. In this capacity he has worked and briefed extensively to federal, provincial, and municipal agencies and widely across all industry sectors. He has worked in depth with the federal and state government of the USA in the areas of Critical Infrastructure Protection and Emergency Management. He was responsible for the direction of Provincial Emergency Management of the devastating floods that hit Alberta in June 2005. In 2005, at the request of the Deputy Minister of Health, he led the update of the Alberta Pandemic influenza Plan. He held the Executive Director appointment until he retired from Public Service in December 2005.
For the next eight years he worked as a respected consultant in emergency management, working with both the public sector and the private sector. During this period he was frequently called upon by the Auditor General of Canada as an Emergency Management Expert in the drafting of, conduct of, and final report drafting of detailed federal audits. He retired fully in December 2013.

He has a Bachelor’s Degree in Electrical Engineering from the Royal Military College of Canada and a Master’s Degree in Electrical Engineering from the United States Naval Postgraduate School. He is a graduate of both the Canadian Land Forces Command and Staff College in Kingston, Ontario and the Canadian Forces Command and Staff College in Toronto, Ontario.