

COURT FILE NUMBER	2001-14300
COURT	COURT OF QUEEN'S BENCH OF ALBERTA
JUDICIAL CENTRE	CALGARY
APPLICANTS	REBECCA MARIE INGRAM, HEIGHTS BAPTIST CHURCH, NORTHSIDE BAPTIST CHURCH, ERIN BLACKLAWS and TORRY TANNER
RESPONDENTS	HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF ALBERTA and THE CHIEF MEDICAL OFFICER OF HEALTH
DOCUMENT	<b>EXPERT REPORT OF SCOTT LONG</b>
ADDRESS FOR SERVICE AND CONTACT INFORMATION OF PARTY FILING THIS DOCUMENT	Alberta Justice, Constitutional and Aboriginal Law 10 <sup>th</sup> Floor, 102A Tower 10025 -102A Avenue Edmonton, Alberta T5J 2Z2

Clerk's Stamp

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1. My name is Scott Long. I am the Acting Managing Director of the Alberta Emergency Management Agency (AEMA or the Agency). I was been the Acting Managing Director of AEMA from October 2020 to May 2021. I have been with AEMA in various managerial roles since 2014.
2. My qualifications are set out in Schedule A.
3. A summary of my report can be found in Schedule B.
4. My report, along with the information and assumptions that have informed my report, is found at Schedule C.

## **SCHEDULE A – SUMMARY OF QUALIFICATIONS**

### **History with AEMA**

5. I possess a Master's Degree in Defence Studies from the Royal Military College of Canada (2007) and graduated from the Canadian Forces Command and Staff College (2007) and I hold a Bachelor's Degree in Military Arts from the Royal Military College (2005). My emergency management training includes Incident Command System courses (Level 100 to 400 inclusive) and Business Continuity Planner courses.

6. I joined the AEMA in 2014 in the aftermath of the 2013 Southern Alberta floods, as the Executive Director of Provincial Operations. In October 2020, I became the Acting Managing Director of AEMA, which continued until May 2021.

7. In my role as the Executive Director of Provincial Operations, I led the operations team through 2016 Regional Municipality of Wood Buffalo (RMWB) wildfires, 2019 northern Alberta wildfires, and the 2020 pandemic and northern Alberta spring flooding as well as many other disaster events.

8. As the Executive Director of Provincial Operations, I was responsible for:

a. The routine and emergency operation of the Provincial Operations Centre, regional Field Officers, Incident Command System training and governance. The mission of AEMA is to provide strategic leadership in the area of emergency management and Government of Alberta business continuity. We collaborate with key stakeholders in order to build a safer, more disaster-resilient Alberta. Our focus is in community preparedness, response, and setting the conditions for the transition to recovery from a disaster event.

b. The Field Operations Community Liaison Team, the Central Operations Team (Provincial Operations Centre), the Alberta Emergency Alerts Program, the Government of Alberta Business Continuity Program, and the Alberta First Nations Emergency Management Program. I co-chair the Public Alerting Federal/Provincial/Territorial Working Group. I have also provided input into policy development within AEMA and the Ministry of Municipal Affairs on emergency management topics.

c. Supporting preparedness and enhancing the resiliency of community organizations, along with key emergency management professionals through training, mentoring, exercises, and relationship building. The Provincial Operations branch provides response expertise through a properly trained, equipped, collaborative, and highly functioning Provincial Operations Centre capable of cross government coordination and information passage during events. Recovery through cooperation with other branches and ministries to ensure unity of understanding through policy and regulations, criteria for transition to recovery from response to set the conditions for success, and support to the Disaster Recovery Program and recovery task forces as required.

d. Supporting the operations mandate by building, managing and leading a highly trained, equipped and motivated team of emergency management professionals. I have been the lead executive for the design and the delivery of the Government of Alberta annual readiness exercise: Emergency Management Exercise since 2015, mentoring and coaching the team to continually enhance the exercise and improve the relevance, realism, and inclusivity of the training.

9. In my role as Executive Director of Operations, I led the organizational re-design of the AEMA operations team in order to best manage the operational challenges and requirements of the increasingly complex emergency management environment. This includes assisting in the development of the AEMA Strategic Plan and accompanying Business Planning Cycle.

10. In my role as Acting Managing Director, I am also responsible for the exercise of informed judgement for legislated authorities under the Disaster Recovery Regulation for Disaster Recovery Program creation and appeals.

### **Military Background**

#### ***Service with the Regular Canadian Armed Forces***

11. Prior to joining AEMA, I was a member of the Regular component of the Canadian Armed Forces. I held the rank of Lieutenant-Colonel upon my retirement from the Regular component of the Canadian Armed Forces in 2014. Throughout my career, I held commands at every rank level.

12. I was the Chief of Operations for the 3<sup>rd</sup> Canadian Division Support Group (CDSG) in Edmonton, Alberta from 2013 to 2014. In this role:

- a. I was a key member of the Leadership Team in a newly created operational headquarters. The Leadership Team had a mandate to provide infrastructure support, engineering support, environmental advice and compliance, training area management and development, and specialist logistical support (heavy transport, bridging, air movement) to from Thunder Bay, Ontario to mainland British Columbia. The 3<sup>rd</sup> Division is responsible for land (Canadian Army) infrastructure, logistics and resource support from Thunder Bay to the west coast Canada and includes the NWT. This role did not include responsibility for Royal Canadian Air Force or Royal Canadian Navy bases.
- b. I was responsible for designing, equipping, and building the operations team. This included designing the operations centre, developing and implementing new operations processes, and implementing internal and external lines of communication to facilitate integration across four functional branches (Corporate Services, Technical Services, Environmental Services, and Engineer Services).
- c. I directed the 3<sup>rd</sup> CDSG Operations Centre during the Calgary floods in June 2013. This operations centre coordinated the provision of strategic military assets such as bridging, water purification systems, flood mitigation equipment, and heavy equipment to the flood relief efforts. In my role, I was a key planning, liaison, and coordination node for the flood relief efforts.

13. I was Chief of Staff with the 41 Canadian Brigade Group in Calgary, Alberta from July 2012 to June 2013. As the Chief of Staff:

- a. I led a team of 50 military professionals (experienced in logistics, administration, planning, recruiting, operations, comptroller, training, and public affairs) responsible for the development and integration of processes essential to recruit, train, conduct operations and complete the administration for approximately 2,000 Primary Reserve (part-time) soldiers throughout Alberta and as far north as Yellowknife, NWT.



b. I designed, coordinated, and provided oversight on the execution of the training scenario and exercise to prepare the leadership to plan, manage, and coordinate military support to domestic operations in Alberta. This included providing military personnel with Incident Command System training, which utilizes a different methodology than used in the Regular component of Canadian Armed Forces. This organization played a key role in flood relief efforts in Calgary, June 2013.

14. I was Deputy Commander of the Canadian Manoeuvre Training Centre (CMTC) in Wainwright, Alberta from July 2011 to July 2012. The CMTC, as the Canadian Forces Advanced Collective Training Facility, prepares both military and civilian organizations for operational deployments outside of Canada. This innovative learning organization consists of over 400 military and civilian trainers all committed to providing the best training possible to prepare people to operate in dangerous environments. In this role:

a. I integrated and managed all aspects of exercise design, infrastructure, technology enhancements, and learning strategies to ensure CMTC maintained its international reputation as an innovative, professional learning organization in the post-Afghanistan conflict environment.

b. I was responsible for management functions, including business planning, human resource management, training systems design, mentoring senior civilian and military leaders, and capability development, infrastructure and technology to ensure the delivery of world class training was achieved.

15. I was Chief of Current Operations with the Combined Joint Operations Centre, NATO Divisional Headquarters, Regional Command (South) in Kandahar, Afghanistan from October 2009 to November 2010. In this capacity I was responsible for:

a. The coordination and integration of operational effects and the allocation of strategic resources in accordance with Command priorities across the south of Afghanistan. This area is the size of the United Kingdom with 70,000 NATO soldiers, 20,000 civilian partners, and numerous humanitarian aid organizations. My team also coordinated all planning aspects for the security of the 2010 Afghanistan Elections in the southern portion of the country in conjunction with NATO partners, international non-governmental organizations, and the Afghan security forces.

b. All aspects of the design, layout, and staffing of a newly constructed (December 2009) Combined Joint Operations Centre (CJOC). This strategic operations centre was managed by an international team of 100 military and civilian personnel. This team's primary purpose was continuous, 24 hour monitoring, management, coordination, and conduct of whole of government operations in southern Afghanistan. The CJOC coordinated and managed a myriad of critical functions such as aviation resources, airspace control, medical evacuation, and information management. The CJOC also worked with the Government of Afghanistan, the United Nations, and other non-governmental liaisons in providing logistical support for southern Afghanistan.

c. Providing daily briefings and chairing meetings with representatives from NATO and the international organizations that operated in southern Afghanistan. These organizations included the United Nations High Commissioner for Refugees, Canadian International Development Agency, US Department of State, the World Health Organization, Doctors Without Borders. I also provided updates and situational briefings to various high profile individuals, such as the Canadian Ambassador to Afghanistan and the Prime Minister of the United Kingdom.

16. I was the Chief Trainer of the CMTC in Wainwright, Alberta from June 2007 to June 2009. In this role, I was responsible for:

a. The development and integration of learning strategies into large-scale training events (3,000 soldiers) to enhance learning and the retention of key training objectives through a rigorous lessons learned process.

b. An organization within the CMTC that consisted of over 200 military and civilian personnel, which facilitated and enabled the lessons learned process. The team consisted of experienced individuals from various military and government agencies, including the military, Royal Canadian Mounted Police, Corrections Canada, Canada International Development Agency, Department of Foreign Affairs and International Trade, with previous operational experience outside of Canada.

17. I was the Commanding Officer for the Lord Strathcona's Horse (Royal Canadians) along with being the Second in Command from August 2004 to July 2006. In this role, I was responsible for leading, training, and managing the personnel of a military unit with 650 officers

and soldiers and over 300 military vehicles. The unit was trained, equipped, and prepared to execute operations abroad or domestically in the provision of military aid to the civil authorities which includes emergency and disaster response.

***Service with the Canadian Armed Forces Primary Reserve***

18. While I am retired from the Regular component of the Canadian Armed Forces, I still serve as a member of the Canadian Armed Forces Primary Reserve.

19. I am currently the Deputy Commanding Officer for 41 Canadian Brigade Group, Alberta, a role that I have occupied since 2020. As the Deputy Commanding Officer, I support the Brigade Commander in his efforts to lead, train, mentor, acquire resources, and ensure the personnel administration of 10 various Alberta-based army reserve units, with over 2,000 serving members.

20. I was the Commanding Officer of 41 Combat Engineer Regiment from 2017 until 2020. In this role, I was responsible for:

- a. Leading, training, mentoring, and managing the personnel in a unit of 200 part-time, dedicated officers and soldiers. I also oversaw compliance with safety regulations for all personnel. This reserve unit focuses on bridge building, road construction, heavy equipment, and demolitions. It is composed of students, trades and professionals of all stripes, and includes a focus on military aid to civil authorities in times of disaster.
- b. Setting the training year focus and leading the development of the annual training plan for the unit including setting clear performance measures.
- c. The resourcing and financial management of the annual training plan. The goal of the annual training plan is to develop and lead a highly capable, trained, and motivated unit capable of accomplishing their mission(s) and assisting Canadians in times of emergency.

## **SCHEDULE B – SUMMARY OF OPINION**

1. It is factually inaccurate to categorize the COVID-19 pandemic as simply a “public emergency”. A decision was made to use the *Public Health Act*, rather than the *Emergency Powers Act*, so that the response could be led and informed by medical professionals, which is contemplated in the Alberta Pandemic Influenza Plan (APIP).
2. The process of developing a plan is more valuable than the actual plan itself. It is the “process” that affords participants the deeper understanding of the problem the plan is intended to address, which in turn affords them the ability to adapt to changing circumstances as an incident unfolds. It is unwise to rigidly adhere to a plan.
3. Alberta’s response to COVID-19 has been constantly changing, not because there has been no plan, as asserted in the Expert Report of David Redman, filed January 22, 2021 (the Redman Report), but because of the rapidly changing landscape of the pandemic. In my opinion, Alberta’s COVID-19 response has been reasonable given the circumstances and the uncertainty. The response has not been perfect, but the standard for emergency management is not perfection.
4. Alberta’s COVID-19 response has favoured moderate restrictions to minimize disruptions to individuals, while also taking steps to ensure the health care system can continue to function and provide services. This was to ensure that the system would be able to both treat those suffering from significant COVID-19 infections and ensure that the system remained able to treat those with other urgent or life threatening illnesses or injuries.

## **SCHEDULE C – REPORT**

### **Overview**

1. The COVID-19 pandemic has been a highly dynamic, worldwide event. At the outset, the global environment and the health impacts were extremely uncertain. There were a number of factors that needed to be considered in responding to the virus, including but not limited to: transmissibility of the virus, level of protective measures required, availability of PPE, secondary impacts on the health care system, societal impacts, and potential effects on critical infrastructure operations.
2. Initially, the timeline and potential availability of a vaccine along with its effectiveness was also uncertain. Even with the continued expansion of the amount and different manufacturers for the vaccine, availability remains a closely monitored and reported issue. Vaccines, with varying levels of effectiveness, have formed a significant part of society's overall response to this pandemic.
3. As the response has evolved, our understanding of the risks to the health care system and to society as a whole have evolved. There are lessons to be identified and implemented as a result of this pandemic. As with other disaster events, these will be identified and implemented.
4. Having reviewed the Redman Report, I disagree with its "black and white" approach. The Redman Report is flawed in a number of ways, including:
  - a. The assertion that COVID-19 is not a public health emergency;
  - b. The suggestion that quarantining long term care facilities was a viable and effective solution;
  - c. It does not account for the potential variant spread; and
  - d. The suggestion that the Swedish approach should have been adopted in Alberta.
5. My opinion, which is informed by my personal knowledge<sup>1</sup> and the other sources identified within this report, is that Alberta's response to the COVID-19 pandemic has been reasonable in the circumstances.

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<sup>1</sup> See the Affidavit of Scott Long sworn July 16, 2021.

6. Alberta's approach favoured moderate restrictions to individuals, while instituting a number of supports to minimize economic disruptions and ensuring the health care system could continue to operate. More stringent public health measures, such as those adopted in Taiwan, while more effective at controlling the spread of COVID-19, would not have been feasible in Alberta.

### **Flaws in the Redman Report**

7. Generally, the Redman Report suffers from a "black and white" approach to emergency response. The Redman Report also has the benefit of significant hindsight.

8. Additionally, the Redman Report does not acknowledge the short time frame within which COVID-19 arose and its spread to Canada. There was approximately 8 to 9 weeks of advance notice.

### ***COVID-19 is a Public Health Emergency***

9. The Redman Report alleges COVID-19 should have been treated as a public emergency, not a public health emergency because "all areas of society are affected."<sup>2</sup> The Redman Report suggests it was an error to declare a state of public health emergency instead of a state of public emergency.

10. Although the *Public Health Act* contains many of the same emergency management authorities as the *Emergency Management Act*, it also includes specific authorities applicable to a public health emergency such as the ability to make public health orders, which is an authority not found under the *Emergency Management Act*. The tools available under the *Emergency Management Act* would not have allowed the Chief Medical Officer of Health to make some of the recommended public health provisions. For instance, the Chief Medical Officer of Health has used the authority granted to her under the *Public Health Act* to make numerous orders specific to the medical aspects of the COVID-19 response.

11. The decision to utilize the *Public Health Act* to declare a state of public health emergency was both logical and sensible, given that this was an emergency brought on by a novel coronavirus. Utilizing the *Public Health Act's* emergency provisions was also a reasonable

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<sup>2</sup> Redman Report at para 3.

decision because, in cases of pandemic illnesses, the APIP contemplates the response being led and informed by health professionals, with a focus on science-based advice.

***“Hardening” Facilities is not a Viable Solution***

12. The Redman Report identifies the concept of “hardening”<sup>3</sup> long-term care facilities and reinforcing Alberta Health Services, but is silent on some practical aspects of this concept. While some functions, such as contact tracing, have been able to scale up rapidly, other areas of the health care system are not as amenable to rapid scale up due to the specialized knowledge required, level of training required, the cross globe demand for health care workers and other medium to long-term considerations.

13. As part of the “hardening” of long-term care facilities, Redman Report suggests isolating staff and residents to reduce the risk of COVID-19. For this approach to be successful, staff and residents would need to remain wholly isolated. The family members of those staff members would also need to remain isolated to ensure that COVID-19 was not contracted by a family member, spread to a staff member of a long-term care facility, and then spread within the long-term care facility. This approach would mean that neither staff (including their families) nor residents would have any freedoms for the duration of the COVID-19 pandemic. These individuals and their families would essentially need to be entirely prohibited from grocery shopping, spending time with others outside of their household, going to school or church – virtually all activities outside of work to ensure COVID-19 was not contracted and spread throughout the long-term care facilities.

14. It is inaccurate to suggest a decision was made to “sacrifice” senior citizens.

***Variant Spread was not Accounted for in the Redman Report***

15. The Redman Report is silent regarding the impact or consequences of COVID-19 variants that have gained worldwide attention. As the United Kingdom variant became the predominant form of the virus in that country, the British government was forced to adopt severe restrictions to avoid the National Health System being overwhelmed.<sup>4</sup>

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<sup>3</sup> Redman Report at para 12.

<sup>4</sup> <https://www.nytimes.com/2020/12/19/world/europe/coronavirus-uk-new-variant.html>.

16. Both Canada and Alberta have reported variant strains of the COVID-19 virus. The variants initially identified in the United Kingdom (B.1.1.7 variant) and Brazil (P.1 variant) have become dominant strains of the COVID-19 virus present in the province. Another variant, known as the Delta variant (B.1.617.2 variant) is becoming increasingly prevalent.<sup>5</sup>

17. The Redman Report ignores the potential for variant spread and ignores the reality that COVID-19 variants, some of which are more transmissible, can (and should) impact public health response measures.

### ***The Swedish Model is not an Effective Model***

18. The Redman Report endorses the response model used in Sweden, which focused on protection of the senior citizen population and resulted in minimal restrictions placed on the majority of the population. Sweden suffered far worse mortality rates than any of its Nordic neighbors where more restrictive measures were adopted.<sup>6</sup> As of July 5, 2021, Sweden ranks 11<sup>th</sup> overall for the number of COVID-19 cases per million. Canada is 87<sup>th</sup>.<sup>7</sup>

19. Brazil took a similar approach with minimal restrictions, allowing the virus to run unchecked in the hopes of establishing herd immunity. Brazil has reported over 500,000 COVID-19 deaths during this pandemic.<sup>8</sup> A variant strain of COVID-19 was also identified in Brazil.

20. Conversely, jurisdictions that have taken firm public health driven response actions, such as Taiwan, South Korea, Australia, and New Zealand, have fared better and enjoyed more rapid return to economic and social well-being.

### **Alberta's COVID-19 Response**

21. Alberta's emergency response to the COVID-19 pandemic was more moderate, when compared with Taiwan and New Zealand, with restrictions on individual freedoms being balanced against health, social, and economic concerns.

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<sup>5</sup> <https://www.alberta.ca/covid-19-variants.aspx>.

<sup>6</sup> <https://www.medpagetoday.com/infectiousdisease/covid19/89017>;  
<https://www.nytimes.com/2020/07/07/business/sweden-economy-coronavirus.html>.

<sup>7</sup> <https://www.worldometers.info/coronavirus/>.

<sup>8</sup> <https://www.nytimes.com/2021/06/20/health/brazil-deaths-covid.html>.



22. Due to Alberta's geographic location, more firm public health responses, such as those in Taiwan and New Zealand (both being island nations), were likely not possible. As a result of Canada's close economic relationship with the United States, Canada and Alberta's responses to the COVID-19 pandemic could not exist in isolation. The border needed to remain open in some capacity.

23. One of the primary considerations at the outset of the COVID-19 pandemic was preserving the integrity of the health care system and aligns with the goals set out in the APIP. This was to ensure that the health care system would continue to be available - both to treat those suffering from significant COVID-19 infections but also to ensure that it remained able to respond and treat those with other urgent or life threatening illnesses or injuries. The APIP recognizes the potential that, if health care services are overwhelmed, critical health services will be prioritized and that some health services may be suspended or deferred to support the health care system's operational requirements.

24. Another aspect that was closely examined was critical infrastructure required to support the ongoing functioning of society as a whole. This included determination of key staff involved in such areas as water treatment, power generation, telecommunications, food distribution networks, community governance, emergency management and health related sectors such as pharmacies, dentists and other health related service providers. This required a detailed examination of the impacts of these critical staff not being available to maintain or operate equipment fulfilling these functions as the identified individuals were typically not in the senior executive positions.

25. The Redman Report also does not consider the effect of COVID-19 on other areas where there have been significant COVID-19 impacts on the community and to the economy. For example:

- a. The meat packing industry in Alberta was significantly impacted early in the pandemic and again in the second wave. This was likely due to close proximity in working conditions and due to some staff living in high density residential settings, such as in dormitory-style housing with co-workers or in extended family living arrangements.
- b. Individuals experiencing homelessness were also affected. In many instances, these individuals would not have a place to self-isolate if experiencing COVID-19

symptoms or if they tested positive. Additional efforts were made to support these vulnerable populations and to reduce the risk of community transmission.

c. Individuals being detained, both in remand centres and within provincial prisons. Again, due to the living situation of these individuals and the staff that operates these institutions, a policy of complete isolation would not be feasible.

26. Overall, I believe Alberta's response, from an emergency management perspective, to the COVID-19 pandemic has been reasonable. The response has been flexible and changing to meet the circumstances as they arise.

27. It is not a "failing" of Alberta's COVID-19 response that the response has not adhered to the letter of the APIP. Disaster plans must be treated as a "starting point" when responding to emergency events. Rigid adherence to a pre-existing plan is not well-accepted by emergency management professionals and would ignore lessons being learned as an event unfolds along with nuances that the plan may not have foreseen.

28. Alberta Health and AEMA have consulted with other Canadian provinces and internationally to identify response options. Alberta's response to COVID-19 could not have existed in isolation. In my opinion, Alberta Health and Alberta Health Services have demonstrated deep capabilities and competencies in leading the public health response efforts through their extant structures, organizations, processes, and procedures.

29. The response has not been perfect. When the COVID-19 pandemic comes to a close, like with other disaster and emergency events, the response will be studied and potential improvements will be identified and implemented.



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Scott Long

**Foot Note # 4**

**U.K. Imposes Harsher Lockdown on London, Citing New Version of  
Virus - The New York Times**

## Boris Johnson Tightens U.K. Lockdown, Citing Fast-Spreading Version of Virus

The variant is up to 70 percent more transmissible than earlier versions, officials said. People in southeast England, including London, were told to stay at home.



By Mark Landler and Stephen Castle

Published Dec. 19, 2020 Updated June 1, 2021

LONDON — Alarmed by a fast-spreading variant of the coronavirus, Prime Minister Boris Johnson abruptly reversed course on Saturday and imposed a wholesale lockdown on London and most of England's southeast, banning Christmas-season gatherings beyond individual households.

The decision, which Mr. Johnson announced after an emergency meeting of his cabinet, came after the government got new evidence of a variant first detected several weeks ago in southeast England, which the prime minister asserted was as much as 70 percent more transmissible than previous versions.

The new measures, which take effect on Sunday, are designed, in effect, to cut off the capital and its surrounding counties from the rest of England. They are the most severe measures the British government has taken since it imposed a lockdown on the country back in March, and reflect a fear that the new variant could supercharge the transmission of the virus as winter takes hold.

"When the virus changes its method of attack, we must change our method of defense," a somber Mr. Johnson said on Saturday. "We have to act on information as we have it, because this is now spreading very fast."

Viral mutations are not uncommon, and British officials said this variant had been detected in a handful of other countries, without naming them. But the government's medical experts expressed alarm about its apparent infectiousness, noting that it now accounts for more than 60 percent of the new infections reported in London.

Other scientists cautioned that only laboratory experiments and other kinds of analysis will determine with certainty whether the variant is more transmissible, or if its prevalence is due to other factors.

But some said there was good reason for concern that this variant is more infectious. Preliminary findings suggest that it is spreading so fast in Britain that it is quickly displacing dozens of competing versions of the coronavirus that have been circulating for longer.

"This spread is happening at a moment in time when there are already many lineages circulating, and despite that it is displacing them all," said Kristian Andersen, a geneticist at the Scripps Research in La Jolla, Calif. "We can't say for sure, but to me it looks like this very explosive growth is primarily because" of its new mutations.

The new variant in Britain shares a crucial mutation with a lineage that is growing just as explosively in South Africa. At a World Health Organization meeting early this month, scientists reported that the South African variant accounted for 80 to 90 percent of newly identified infections, driving an explosive second wave.

"We normally see 20 to 30 lineages in our samples at a given time," said Tulio de Oliveira, a professor at the University of KwaZulu-Natal's Nelson R. Mandela School of Medicine, in Durban, who first flagged the variant. "Now, we see only one."

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Whatever the characteristics of the mutation, it is clear that Britain faces an escalating crisis, even as it rolls out a mass vaccination program. Nationwide, the pace of new infections has nearly doubled in less than two weeks, leaping past most of Western Europe, though it remains well below the per capita rate in the United States.



“When the virus changes its method of attack, we must change our method of defense,” a somber Mr. Johnson said at a Saturday afternoon news conference. Pool photo by Toby Melville

Public health experts said the new variant reinforced the urgency to tighten restrictions to try to eliminate the virus altogether, since new mutations are a recurring phenomenon.

“Elimination is more and more optimal,” said Devi Sridhar, head of the global public health program at the University of Edinburgh. “More virus circulating means more variants and mutations.”

Mr. Johnson’s abrupt reversal came after a cabinet subcommittee meeting on Friday, in which members of the government’s scientific advisory panel presented evidence that new infections had nearly doubled in London in the last week, and that the new variant accounted for a majority of those cases.

The government’s chief scientific adviser, Patrick Vallance, said there was no evidence that this version of the virus was more lethal or more resistant to vaccines than others. But Dr. Vallance, a physician and medical researcher, said scientists had identified 23 changes in the new variant, an unusually large number, including several in the “spike protein” that the virus uses to attach itself to host cells, which could increase its transmissibility.

Scientists outside the British government confirmed that the variant has potentially significant changes in the spike protein.

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Faster transmission would mean more cases, which would lead to more hospitalizations and fatalities. The government said it had notified the World Health Organization about the prevalence of the new variant.



"This virus spreads more easily," Dr. Vallance said, as he flanked Mr. Johnson, "and therefore more measures are needed to keep it under control."

The new lockdown zone includes all of Greater London and much of the surrounding southeast of the country, a densely populated area encompassing nearly 20 million people, a third of England's population. The restrictions will remain in place for at least two weeks, and will be reviewed on Dec. 30.



Shopping in Oxford Circus in London last week. The new lockdown will apply to nearly 20 million people, a third of England's population. Andrew Testa for The New York Times

The government told people to stay at home except for urgent travel, medical appointments and outdoor exercise. Those outside the zone were advised not to travel into it, and those inside will not be permitted to travel outside overnight. Foreign travel is strongly discouraged. Nonessential shops will close, as will gyms, movie theaters, hairdressers and nail salons.

Though Mr. Johnson said only a few days ago that it would be "inhuman" to cancel Christmas, that will be the practical effect for much of the country. A plan to allow up to three households to meet together over the holiday will be scrapped in London and the southeast, with no mixing permitted at all.

Elsewhere, three households will be allowed to gather, but only on Christmas Day, and not for the extended five-day period once promised.

Mr. Johnson's announcement was an admission that England's existing system of restrictions, under which the country was divided into three "tiers" with different rules, had not been sufficient to control the spread of the virus. The newly announced lockdown will constitute a new, and tougher, fourth tier.

Mr. Johnson has the legal authority to tighten rules on his own, and there is no plan to recall Parliament. But the announcement provoked an immediate backlash from opposition leaders, and even members of his own Conservative Party.

"Millions of families across the country are going to be heartbroken by this news, having their Christmas plans ripped up," Keir Starmer, the leader of the Labour Party, told the BBC. "I'm really frustrated because I raised this with the prime minister on Wednesday and he dismissed that and went on to tell people to have a 'merry little Christmas' only three days later to rip up their plans."



Mark Harper, who chairs a group of Conservative lawmakers who have been critical of lockdown measures, said, “These changes must also be put to a vote in the Commons at the earliest opportunity, even if that means a recall of the House.”



A closed cafe in central London last week, after the city entered Tier 3 restrictions. Andrew Testa for The New York Times

The coronavirus has mutated many times since it first emerged in China in 2019, according to epidemiologists. On Friday, South Africa reported it had identified a variant that it said was driving a new wave of infections there. Scientists said it was different from the one identified in Britain.

Most of these variants are not significant or widespread. But as the number of people who have been infected — and, presumably, have developed some immunity — increases, the pressure on the pathogen to mutate also increases. Some of the new variants can be more transmissible or lead to more severe illness than earlier versions of the virus.

For months, Mr. Johnson has struggled to balance his response to the virus with pressure not to further damage the economy. At times, he has lagged behind other European leaders in imposing restrictions. At other moments, he has appeared to resist the advice of his own government’s scientific advisers.

Britain reported 27,052 new cases and 534 deaths on Saturday. The country’s death toll from the pandemic is the second-highest in Europe after Italy, according to a New York Times database. Mr. Johnson pointed to the rollout of a vaccine, which Britain approved and began administering ahead of other Western countries, as a ray of hope. He said 350,000 people in the country had received a first dose of the Pfizer-BioNTech vaccine, which is a two-shot regimen.

But as the economy has languished, lockdowns have become politically fraught. When the government placed Manchester, Liverpool and other northern cities, where the infection rates were higher, in a more restrictive tier, local officials complained that they were being unfairly targeted. Life in London, they noted, remained mostly unchanged.

Last week, amid signs that London had become a new hot spot, Mr. Johnson placed the capital and most of the southeast in Tier 3, the highest level of restrictions. But he clung to his promise of a Christmas reprieve from Dec. 23 to Dec. 27, even as he implored people to keep family gatherings brief and small.

“Have yourself a merry little Christmas,” Mr. Johnson said last week, announcing the half measures, “but this year alas, preferably a very little Christmas.”

With the draconian restrictions announced on Saturday, Christmas gatherings in England will become smaller still.

*Benedict Carey and Matt Apuzzo contributed reporting.*



**Foot Note # 6**

**Sweden Has Become the World's Cautionary Tale - The New York Times**

## Sweden Has Become the World's Cautionary Tale

Its decision to carry on in the face of the pandemic has yielded a surge of deaths without sparing its economy from damage — a red flag as the United States and Britain move to lift lockdowns.



By Peter S. Goodman

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LONDON — Ever since the coronavirus emerged in Europe, Sweden has captured international attention by conducting an unorthodox, open-air experiment. It has allowed the world to examine what happens in a pandemic when a government allows life to carry on largely unhindered.

This is what has happened: Not only have thousands more people died than in neighboring countries that imposed lockdowns, but Sweden's economy has fared little better.

"They literally gained nothing," said Jacob F. Kirkegaard, a senior fellow at the Peterson Institute for International Economics in Washington. "It's a self-inflicted wound, and they have no economic gains."

The results of Sweden's experience are relevant well beyond Scandinavian shores. In the United States, where the virus is spreading with alarming speed, many states have — at President Trump's urging — avoided lockdowns or lifted them prematurely on the assumption that this would foster economic revival, allowing people to return to workplaces, shops and restaurants.

In Britain, Prime Minister Boris Johnson — previously hospitalized with Covid-19 — reopened pubs and restaurants last weekend in a bid to restore normal economic life.

Implicit in these approaches is the assumption that governments must balance saving lives against the imperative to spare jobs, with the extra health risks of rolling back social distancing potentially justified by a resulting boost to prosperity. But Sweden's grim result — more death, and nearly equal economic damage — suggests that the supposed choice between lives and paychecks is a false one: A failure to impose social distancing can cost lives and jobs at the same time.

Sweden put stock in the sensibility of its people as it largely avoided imposing government prohibitions. The government allowed restaurants, gyms, shops, playgrounds and most schools to remain open. By contrast, Denmark and Norway opted for strict quarantines, banning large groups and locking down shops and restaurants.

More than three months later, the coronavirus is blamed for 5,420 deaths in Sweden, according to the World Health Organization. That might not sound especially horrendous compared with the more than 129,000 Americans who have died. But Sweden is a country of only 10 million people. Per million people, Sweden has suffered 40 percent more deaths than the United States, 12 times more than Norway, seven times more than Finland and six times more than Denmark.



Per million people, Sweden has suffered 40 percent more coronavirus-related deaths than the United States. Jonathan Nackstrand/Agence France-Presse — Getty Images

The elevated death toll resulting from Sweden's approach has been clear for many weeks. What is only now emerging is how Sweden, despite letting its economy run unimpeded, has still suffered business-destroying, prosperity-diminishing damage, and at nearly the same magnitude of its neighbors.

Sweden's central bank expects its economy to contract by 4.5 percent this year, a revision from a previously expected gain of 1.3 percent. The unemployment rate jumped to 9 percent in May from 7.1 percent in March. "The overall damage to the economy means the recovery will be protracted, with unemployment remaining elevated," Oxford Economics concluded in a recent research note.

This is more or less how damage caused by the pandemic has played out in Denmark, where the central bank expects that the economy will shrink 4.1 percent this year, and where joblessness has edged up to 5.6 percent in May from 4.1 percent in March.

In short, Sweden suffered a vastly higher death rate while failing to collect on the expected economic gains.

The coronavirus does not stop at national borders. Despite the government's decision to allow the domestic economy to roll on, Swedish businesses are stuck with the same conditions that produced recession everywhere else. And Swedish people responded to the fear of the virus by limiting their shopping — not enough to prevent elevated deaths, but enough to produce a decline in business activity.

Here is one takeaway with potentially universal import: It is simplistic to portray government actions such as quarantines as the cause of economic damage. The real culprit is the virus itself. From Asia to Europe to the Americas, the risks of the pandemic have disrupted businesses while prompting people to avoid shopping malls and restaurants, regardless of official policy.



Sweden's central bank expects its economy to contract by 4.5 percent this year, a revision from a previously expected gain of 1.3 percent. Jonathan Nackstrand/Agence France-Presse — Getty Images

Sweden is exposed to the vagaries of global trade. Once the pandemic was unleashed, it was certain to suffer the economic consequences, said Mr. Kirkegaard, the economist.

"The Swedish manufacturing sector shut down when everyone else shut down because of the supply chain situation," he said. "This was entirely predictable."

What remained in the government's sphere of influence was how many people would die.

"There is just no questioning and no willingness from the Swedish government to really change tack, until it's too late," Mr. Kirkegaard said. "Which is astonishing, given that it's been clear for quite some time that the economic gains that they claim to have gotten from this are just nonexistent."

Norway, on the other hand, was not only quick to impose an aggressive lockdown, but early to relax it as the virus slowed, and as the government ramped up testing. It is now expected to see a more rapid economic turnaround. Norway's central bank predicts that its mainland economy — excluding the turbulent oil and gas sector — will contract by 3.9 percent this year. That amounts to a marked improvement over the 5.5 percent decline expected in the midst of the lockdown.

Sweden's laissez faire approach does appear to have minimized the economic damage compared with its neighbors in the first three months of the year, according to an assessment by the International Monetary Fund. But that effect has worn off as the force of the pandemic has swept through the global economy, and as Swedish consumers have voluntarily curbed their shopping anyway.

Researchers at the University of Copenhagen gained access to credit data from Danske Bank, one of the largest in Scandinavia. They studied spending patterns from mid-March, when Denmark put the clamps on the economy, to early April. The pandemic prompted Danes to reduce their spending 29 percent in that period, the study concluded. During the same weeks, consumers in Sweden — where freedom reigned — reduced their spending 25 percent.

Strikingly, older people — those over 70 — reduced their spending more in Sweden than in Denmark, perhaps concerned that the business-as-usual circumstances made going out especially risky.

Collectively, Scandinavian consumers are expected to continue spending far more robustly than in the United States, said Thomas Harr, global head of research at Danske Bank, emphasizing those nations' generous social safety nets, including national health care systems. Americans, by contrast, tend to rely on their jobs for health care, making them more cautious about their health and their spending during the pandemic, knowing that hospitalization can be a gateway to financial calamity.

"It's very much about the welfare state," Mr. Harr said of Scandinavian countries. "You're not as concerned about catching the virus, because you know that, if you do, the state is paying for health care."

**Foot Note # 8**

**Brazil Reported One of the Highest Covid-19 Death Tolls in the  
World – The New York Times**

## Brazil reported one of the highest Covid death tolls in the world.



By Reed Abelson

June 20, 2021

The Covid-19 death toll in Brazil has now surpassed 500,000, behind only the United States, which marked 600,000 deaths last week, and India, where deaths may range from 600,000 to as high as 4.2 million.

Nearly 18 million Brazilians have been infected so far, and the country is averaging almost 73,000 new cases and some 2,000 deaths a day, according to official data. But many experts believe the numbers understate the true scope of the country's epidemic, as they do in India.

Brazil's president, Jair Bolsonaro, has been heavily criticized for dismissing the threat posed by the virus, despite contracting it himself last year. On Saturday, thousands of people protested his response to the pandemic, including his resistance to mask-wearing edicts and the slow rollout of vaccines, according to Reuters. Only 11 percent of residents are believed to be fully vaccinated.

A severe drought has also gripped the country, the worst in at least 91 years, and experts say a terrible fire season may further complicate the country's struggle to manage the virus. The smoke could even aggravate cases of Covid-19, by increasing the inflammation in the lungs.

"It's a situation that's dangerous," said Dr. Aljerry Rêgo, a professor and director of a Covid facility in the Amazon state of Amapá. "And the biggest risk, of course, is overwhelming the public health system even further, which is already precarious in the Amazon."

In recent testimony before a legislative committee, Brazil's former health ministers described Mr. Bolsonaro's befuddling belief that an anti-malaria drug was effective against Covid-19, and an executive at Pfizer said that the company offered millions of doses of its Covid-19 vaccine to Brazil last year — but received no response from the government for months.

Mr. Bolsonaro shrugged off the revelations. Last month, his government announced that Brazil would host the Copa America soccer tournament later this year, after Argentina decided it would be irresponsible to do so while the virus continued to spread.

On Friday, officials reported that 82 people connected with the tournament had contracted Covid-19, according to The Associated Press. Brazil's health ministry said in a statement that 37 players and staffers of the 10 tournament teams infected, along with 45 workers.