HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

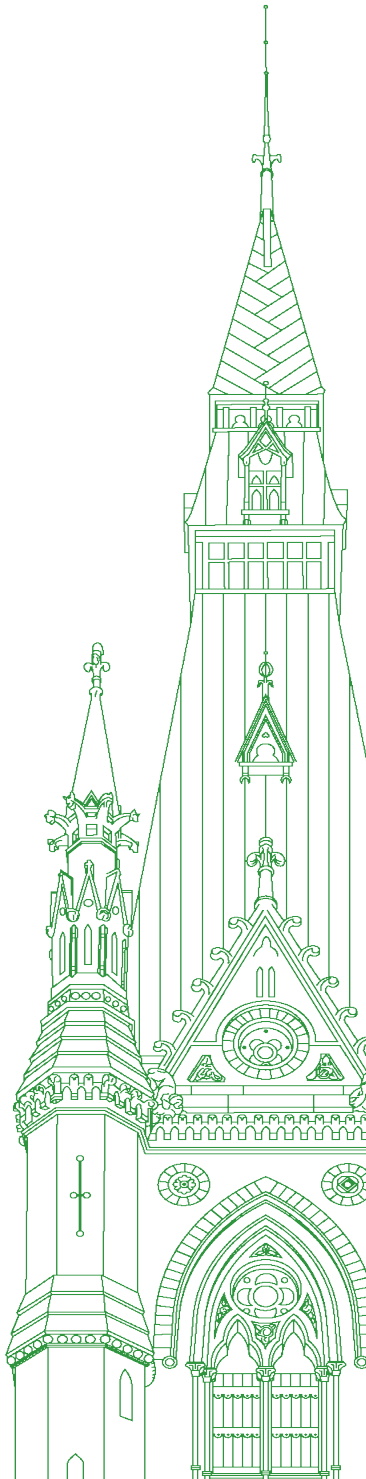
43rd PARLIAMENT, 2nd SESSION

Standing Committee on Health

EVIDENCE

NUMBER 034

Monday, May 3, 2021



Chair: Mr. Ron McKinnon

Standing Committee on Health

Monday, May 3, 2021

● (1100)

[*English*]

The Chair (Mr. Ron McKinnon (Coquitlam—Port Coquitlam, Lib.)): I call this meeting to order.

Welcome to meeting number 34 of the House of Commons Standing Committee on Health. The committee is meeting to study the emergency situation facing Canadians in light of the COVID-19 pandemic. Specifically, today we are examining Canada's national emergency response landscape.

I would like to welcome the witnesses.

As an individual, we have Dr. Amir Attaran, professor in the Faculty of Law and the School of Epidemiology and Public Health at the University of Ottawa. From the Canadian Cardiovascular Society we have Dr. Marc Ruel, president. With the Nunavut Department of Health we have Dr. Michael Patterson, chief public health officer.

Thank you for joining us today.

I will invite the witnesses to make up to a six-minute presentation. When your time is nearly up I will give you a yellow card, and when your time is up I will show you the red card. When you see the red card, please do try to wrap up.

With that, we will start with Dr. Attaran.

Doctor, would you present your statement for six minutes, please?

Dr. Amir Attaran (Professor, Faculty of Law and School of Epidemiology and Public Health, University of Ottawa, As an Individual): Good morning, Chair.

I'm Amir Attaran, a lawyer, a scientist and a professor of both. Thank you for inviting me again.

This morning I've been asked to discuss federal emergency powers and COVID.

Let's start with the obvious: This country has learned nothing. We are in a third wave larger than the first two. How did Ontario, Saskatchewan, Quebec and other large provinces get a year and two practice runs into this pandemic, only to fail worse the third time? It's humiliating.

Look at Alberta. Yesterday, it became the most dangerous place in North America, literally. Alberta's incidence of COVID cases is higher than those of all nine provinces and of 50 American states, higher even than India's. Jason Kenney's inability to lead brought us this, and now, unfortunately, Alberta has become a threat to the rest of Canada.

Take the work camps in the oil sands. Many are fly-in, fly-out. The camps have about 700 active cases currently, including the most dangerous variants. What is going to happen if you take all those workers and fly them all over, including to Atlantic Canada, which has licked COVID? If you were a mad scientist, it would be the perfect plan: contrive camps with abundant disease and deliver the victims to an airport to seed death widely.

Now if we had a serious federal government in Canada, that simply would not be allowed. Rather than using its spending power liberally to cure the damage of COVID, which is a salve costing hundreds of billions of dollars, Ottawa would be more concerned to use its constitutional power over emergencies to prevent the damage in the first place. Ottawa would use the Emergencies Act, or even better, the Department of Health Act, to make emergency rules that both crush the cases and restrict travel out of hot spots. You'd make emergency rules to contain fires such as the kind burning in Alberta right now.

However, as we speak today, Ottawa still has no emergency rules. An emergency has never been declared federally. Frankly, it's because the Prime Minister is too scared to lead.

Pierre Trudeau, I often remember, used the Constitution's emergency power to combat inflation and rising prices, but his son is callow and won't do likewise, a year into a pandemic that is Canada's worst catastrophe in a century. He does not consider COVID-19 an emergency and has never declared so. That abdication is bottomless.

I believe it is time for the Prime Minister to pull up his photogenic socks and use his emergency powers. Since I think he won't, my next comments really can't be addressed to him. They have to be addressed to tomorrow's historians instead, who one day will wonder about this.

At the moment, there are three legal options. Number one, Canada can trigger a public health emergency under the Emergencies Act, but that, I feel, is a poor option because the Emergencies Act does not let Ottawa order shutdowns of non-essential activities in the provinces. It is, to be frank, an inferior and nearly useless law that Parliament simply has to get rid of and start over. That is how useless the Emergencies Act is.

The better option for now is, number two, for Parliament to pass bespoke COVID emergency legislation under the general residual power of section 91 of the Constitution. That law could set minimum national standards of disease control as Parliament considers necessary.

● (1105)

However, there's a third option, and it's my favourite. Number three: Patty Hajdu can unilaterally issue an interim order under section 11.1 of the Department of Health Act.

You may not have heard of that act, but it gives Ottawa the power to impose “immediate action...required to deal with a significant risk, direct or indirect, to health or safety.”

That fits COVID perfectly. We need immediate action to deal with a threat to health, and an interim order can happen instantly. I even published a draft of one in Maclean's last year, which you might find interesting to read.

We need that as a country—and we need it now—to set minimum national standards of disease control so that places, one province after the next, do not spin out of control and endanger the whole federation. If we're a serious country, we will not allow that to happen.

Thank you very much.

The Chair: Thank you, Doctor.

We go now to the Canadian Cardiovascular Society and Dr. Marc Ruel.

Go ahead please, Doctor, for six minutes.

[*Translation*]

Dr. Marc Ruel (President, Canadian Cardiovascular Society): Thank you very much, Mr. Chair.

Good morning, everyone.

I would like to begin by thanking all the members of the committee for giving me the opportunity to represent the Canadian Cardiovascular Society.

[*English*]

My name is Marc Ruel. I'm the chief of cardiac surgery and a cardiac surgeon at the Heart Institute in Ottawa. I'm also, incidentally, the president of the Canadian Cardiovascular Society, which is the national professional association that represents 2,500 cardiologists, cardiac surgeons and scientists across Canada.

● (1110)

I'm pleased today to have this opportunity to describe to you the realities that my colleagues and I are facing as we treat heart patients throughout the COVID-19 pandemic. As you know, this is a time that is very challenging for our resourcefulness. Among our concerns have been the priority sequencing for COVID-19 immunization and our country's ability to deliver essential cardiac care as the pandemic continues.

My colleagues and I oversee medical and procedural aspects of hospital cardiac care across the country. We have direct contact with COVID patients and their contacts every day as we serve as Canada's front line of defence in the pandemic. Our patients are the most severely ill: some who have pre-existing heart disease and then contract COVID-19, and some who develop cardiac complications as a result of COVID infection.

Along with the physicians and the health care and support workers who have direct contact with COVID patients are also the nurses, technologists, care aides and cleaners, and they need full protection from the virus. This has been recognized by the National Advisory Committee on Immunization, which identified health care workers as a priority population for immunization, given their essential role and their high potential for transition to those at high risk of severe COVID illness.

We applaud the recent acceleration of vaccination of vulnerable populations and the continued emphasis on preventive public health measures to reduce the spread of COVID-19. However, we have expressed our strong and persistent concern about the policy shift to a four-month delay in providing the second dose of vaccines—which is off-label for the Pfizer and Moderna messenger RNA vaccines—for frontline health care workers.

Incomplete vaccination of health care workers has translated into vaccination rates of essential health care workers of as low as 50%, depending on the region, as of today. There's recent data from The New England Journal of Medicine that demonstrates the profound effect of the timely administration of the second dose of the vaccine. One dose dropped rates of infection by about 30%, whereas the second dose dropped COVID infection rates by 98%. Let's remember that frontline health care workers do not have the option of not providing direct care in close contact with COVID-19 patients.

Other emerging data suggest that the delays for off-label use of mRNA vaccines lead to inadequate immunization and a paradoxical increase in the risk of variant spread. They also may exacerbate vaccine hesitancy due to infections after one dose, leading to lack of confidence in effectiveness among the population.

Outbreaks have already occurred in hospitals across Canada in this third wave. Most patient-facing health care workers and key support staff in many provinces are not fully vaccinated, and some of those with incomplete vaccination have become infected with the virus. We have seen examples of these in every centre. These outbreak situations and the general intensity of COVID-19 in hospitals not only puts patients and health care workers at risk for COVID, but also puts patients at risk from cardiac and other non-COVID disease conditions—indeed a dual threat. This has placed extreme strains on hospitals that were already heavily strained to deliver care prior to the pandemic.

Therefore, we fear that our public health organizations and governments have underestimated the negative impact of incomplete vaccination on health care workers and on the workforce as a whole, which has a direct negative effect on the health of Canadians from both COVID and non-COVID-related illnesses.

A related concern is an increase in vaccine hesitancy when infection occurs as a result of delayed dosing. Strict measures are needed to ensure the highest possible adherence to the vaccine with limited medically documented exemptions.

We all agree that vulnerable populations should be vaccinated as soon as possible, and that public health preventive measures are key even with vaccination, but again, protecting health care workers has the compounded benefit of protecting the public from both COVID and non-COVID illnesses and keeping hospitals less vulnerable to outbreaks. In a reality where we're now overwhelmed with COVID patients and what feels like an insurmountable backlog of critical non-COVID cardiac patients, every policy and practice improvement matters.

Based on the vaccine efficacy and increased risk, the Canadian Cardiovascular Society strongly recommends prioritizing the timely vaccination of our vulnerable populations and, by the same token, reclassifying high-volume patient-facing health care workers and key hospital support staff among those who should receive a second dose no more than two months after the first, also to ensure strict adherence to vaccination. These measures would enable the highest level of protection, so that health care workers can serve the public good to treat COVID and non-COVID-related illnesses, including cardiac disease.

● (1115)

[*Translation*]

Thank you for your attention.

[*English*]

I look forward to your questions.

The Chair: Thank you, Doctor.

We will go now to the Nunavut Department of Health and Dr. Michael Patterson, chief public health officer.

Please go ahead, Doctor. You have six minutes.

Dr. Michael Patterson (Chief Public Health Officer, Nunavut Department of Health): Thank you for the opportunity to speak to this committee. I welcome the chance to share Nunavut's experience during the COVID-19 pandemic.

In comparison with the rest of Canada, Nunavut's size, isolation and social determinants of health leave the territory at significantly higher risk of severe impact from infectious disease outbreaks. This is as true for COVID-19 infections as it is for tuberculosis and was for H1N1 influenza. I would like to take this opportunity to illustrate how some of these factors can magnify the impact of outbreaks in Nunavut.

At the onset of the pandemic, testing capacity in Nunavut was identified as a significant challenge, as this territory was entirely reliant on southern public health labs. Combined with decreased airline service, this meant that the turnaround time—the time from collection of a sample to getting results back—could be as long as 17 days. As you can imagine, that lag was not only unacceptable but also dangerous. It put us at risk of having weeks of undetected transmission before a response even started.

Today we can do confirmatory testing in both Iqaluit and Rankin Inlet, and our turnaround time is almost always less than four days. While this is good news, it is not sustainable. We rely on having chartered aircraft on standby, ready to collect swabs from remote communities and transport them to Rankin Inlet or Iqaluit. As of March, the charter aircraft system has cost $2.8 million and is vulnerable to mechanical and weather delays. However, without this charter system, there are limited options for reliable community-level testing that will give Nunavummiut the same kind of surveillance protection as most of the rest of this country.

Isolation was our second major obstacle and one of the areas where we felt the housing burden the most. Nunavut suffers from a shortage of housing, and overcrowding is common in every community. We estimate that less than half of Nunavummiut would have the minimum resources to safely self-isolate at home. We have seen from other jurisdictions and our own experience prior to vaccination that, when COVID-19 arrives in a household, it is common for everyone in the house to become infected.

By the middle of March 2020, it was clear that unchecked spread of COVID-19 infections could easily overwhelm our health care resources. As a result, the decision was made to mandate isolation outside of the territory for most individuals flying to Nunavut. With the exception of exempted workers, most travellers have spent 14 days in an isolation hotel in the south prior to coming here. While this form of isolation is not perfect, experience in Nunavut and around the world shows that it can be part of a successful risk reduction strategy that ensures that the frequency of introduction events is kept to a manageable level.

Out-of-territory isolation is not perfect. While it has been mostly effective, many have struggled with the extra time away from their home and family. For many Nunavummiut, this travel is the only way to meet certain medical needs, even though in doing so they increase their risk of contracting COVID-19 and face two weeks of isolation. This has caused some to delay treatment, and it has increased stress for those who do travel south.

Despite the mandatory isolation system, Nunavut has experienced a few separate introduction events. In November, the community of Arviat, with a population of about 2,700, was one of four communities in the Kivalliq region to have cases of COVID-19. For approximately three months, there were active cases in the community despite aggressive contact tracing supported by public health measures to reduce the spread. This required extra staff and near-daily charter flights to transport samples for testing.

At this time, Iqaluit is also experiencing an outbreak of COVID-19. The first case was identified April 14, with contact tracing showing that there was likely transmission occurring in the city as early as one week prior.

● (1120)

Despite earlier vaccination efforts, there has been a rapid rise in cases. Spread of infection has been driven by household contacts and contact between essential workers, who often work two or more jobs to make ends meet, which is that much harder in a remote northern community.

I hope this short review gives you an idea of some of the unique challenges that Nunavummiut face in their response to this pandemic. I also hope it has reinforced the idea that solutions designed in and for southern Canadian cities may not be appropriate for or applicable to remote northern communities. What is needed is support to develop solutions to local problems, as well as investments to reduce the risk of current health problems and future outbreaks.

Thank you.

The Chair: Thank you, Doctor.

We will start our questioning at this point with Ms. Rempel Garner.

Ms. Rempel Garner, please go ahead for six minutes.

Hon. Michelle Rempel Garner (Calgary Nose Hill, CPC): Thank you, Chair. My questions will be for Dr. Ruel.

The letter that the Canadian Cardiovascular Society wrote to some parliamentarians was, I think, a significant warning. I just wanted to expand upon some of the points you made in that letter, as well as in your remarks today, particularly around the dosing intervals that have been approved by [*Technical difficulty—Editor*].

[*Translation*]

Mr. Luc Thériault (Montcalm, BQ): There's no interpretation. Addressing this issue this morning would be important because the questions are relevant.

The Chair: Thank you, Mr. Thériault.

[*English*]

Mr. Clerk, I wonder if you could check with interpretation to see that we are getting—

[*Translation*]

The Clerk of the Committee (Mr. Jean-François Pagé): Mr. Thériault, I think Ms. Garner's screen froze, so the problem isn't with the interpretation.

The technicians are in the processing of verifying that.

● (1125)

Dr. Marc Ruel: Mr. Thériault, I can answer in both languages. It will take a little more time, but I'll keep it very brief.

[*English*]

The Chair: Thanks. I think we'll just suspend for a few minutes, until we get this sorted out.

● (1125)

_____(Pause)_____

● (1125)

The Chair: Thank you all.

We are now resumed. I am told that the interpretation should be good. There was an Internet communications problem.

Ms. Rempel Garner, if you please, you can start over again.

Hon. Michelle Rempel Garner: Thanks, Chair.

Again, to Dr. Ruel, your letter talked about the delayed dosing interval paradoxically increasing the risk of vaccine-resistant variants, I believe.

I was hoping you could expand upon your concern and perhaps give a recommendation to the committee.

Dr. Marc Ruel: Thank you, Madam Rempel Garner.

With regard to vaccine resistance, the data is still unclear. What is important to note is that health care workers do not have the option of staying away and not providing direct care to COVID-19-positive patients. There's no doubt—and the data are clear—that delaying the second dose provides a vulnerability window, if you will, even after the two-week period following the first dose.

Health care workers are at risk. They are providing care. With the high incidence levels we are seeing in most Canadian provinces, we think this is really about vaccinations, focus and money well spent to provide care to Canadians, both with COVID and non-COVID-related illnesses.

Hon. Michelle Rempel Garner: There was a Canadian Press article this morning that talked about the percentage of infections found in persons who have had one dose in Canada. Based on your letter, are you concerned that this percentage could increase as the time between that first dose and the second dose extends across the country?

Dr. Marc Ruel: Thanks for mentioning that. Indeed, the Public Health Agency of Canada report that was published in *The Globe and Mail* this morning is interesting. It notes that 53 infections caused death after receipt of only the first dose, so definitely it's not an impossible occurrence. We have seen at all major institutions patients and health care workers becoming sick after having received only one dose of vaccination.

I can tell you one example specific to the Ottawa Heart Institute. We had an outbreak of COVID-19 about three weeks ago. Very unfortunately, we had more health care workers who were at home with COVID positivity than we had patients themselves who were COVID-positive.

It seems, then, to really be affecting our health care workers primarily, because of the amount of traffic and care provided by health care workers; hence the need for a second dose.

Hon. Michelle Rempel Garner: Thank you.

Are you tracking data around how many health care workers in Canada have contracted COVID-19 after receiving only one dose?

Dr. Marc Ruel: I think those data are not current at the present time.

Hon. Michelle Rempel Garner: Okay. Would you be willing to share whatever data you have with the committee?

● (1130)

Dr. Marc Ruel: I would not at this point, because the data are currently not updated, and it's hard to really have a good sense.

I think we have age-specific data. Most of the reinfections after one dose, especially those causing significant morbidity, occur in older people, but it can still happen among health care workers.

Hon. Michelle Rempel Garner: I guess what I'm concerned about is that no other country has extended the dosing interval to four months. What would you advise the committee in terms of direction to the government on how to be monitoring or tracking COVID infections that are happening at different milestones as the delay between doses increases?

It's just that when we have Health Canada in front of us, it's very nebulous, and I'm really concerned about this. What sort of recommendation could you give to committee on how the government could be improving this and sharing data with the provinces?

Dr. Marc Ruel: Our recommendation goes along the lines of the message I was providing earlier. We understand that the Canadian population needs to be vaccinated as soon as possible. That may imply a “one vaccine as soon as possible” strategy for the most possible people, and Canada is not the only country to have adopted this path. There are other countries that have done it.

Hon. Michelle Rempel Garner: No other country has extended it for four months, though. Isn't that so?

Dr. Marc Ruel: I think there should be an exception made for health care workers, for the reasons we highlighted. Health care workers should receive their second dose within the usual therapeutic window that has been mandated by Moderna, Pfizer, you name them.

Hon. Michelle Rempel Garner: Are you aware of any other country that has extended the dosing intervals to four months?

Dr. Marc Ruel: I'm not aware of another country, because I focus on Canadian data. That being said, there could very well be some.

Hon. Michelle Rempel Garner: Okay. I haven't seen any.

In terms of the potential impact, are there any studies that you could point the committee to, or research that's being undertaken, into how immunity is waning beyond the manufacturer's window? Is there any research that we should be looking at or examining?

Dr. Marc Ruel: That's an excellent question. So far the data appear to be encouraging. There doesn't seem to be an indication that if the second dose is delayed you will be more likely to need a third dose. It may very well be that we'll all need a third dose in the future.

That being said, really the point here that is most urgent is that health care workers need to be fully protected as soon as possible, because the incidence rates are high; they are providing frontline care to patients with COVID-19, and they do not have the option to refrain from direct contact with those patients.

Hon. Michelle Rempel Garner: Thank you, Chair.

The Chair: Thank you, Ms. Rempel Garner.

We'll go now to Mr. Kelloway.

Mr. Kelloway, go ahead, please, for six minutes.

Mr. Mike Kelloway (Cape Breton—Canso, Lib.): Thank you, Chair, and hello to my colleagues. To the witnesses, thank you so much.

My questions are going to be for Dr. Patterson.

I spent some time in Nunavut when I was with the Nova Scotia Community College and working with the Nunavut Arctic College. I often felt very much at home, given that there were quite a few Cape Bretoners and Newfoundlanders there, so it's great to connect with you.

Dr. Patterson, early on in the pandemic there was great cause for concern about how the territories would fare with limited health resources. The federal government, in partnership with the Government of Nunavut, took quick, early action to focus on outbreak prevention, ensuring that the territories had the resources they needed.

From your perspective as a chief public health officer of Nunavut, why do all levels of government need to work together to combat COVID-19?

I have a secondary question. It's based on your testimony. You talked about Nunavut having a unique set of challenges in talking about being involved in decision-making processes and informing policy on health.

I'm wondering how we can we do this better between the government you represent in your area and those provincially and federally.

Dr. Michael Patterson: Having a structure in place that supports preparations and the ability to respond to the next outbreak in a more efficient manner would be extremely helpful; one that provides, for example, remote communities with greater access to public health labs and other diagnostic supports. That work is extremely specialized and is typically located only in larger centres.

Nunavut is not alone in not having access to trained medical microbiologists and certified public health labs that can roll out and ramp up diagnostic capacity in a hurry. An organized approach to supporting remote and isolated jurisdictions or areas that lack those services is needed for the next pandemic.

I'm sorry, Mr. Kelloway, can you restate the second part of the question?

● (1135)

Mr. Mike Kelloway: Sure. It actually emanates from your testimony when you talked about the unique challenges you just spoke to.

This may be something you do a deeper dive on from your previous question, but I'm curious as to how we create better relationships, better systems between unique communities such as Nunavut and the south, as you described, in terms of playing a much deeper role in informing policy up front—community intelligence, health care intelligence on the ground—and translating it into collaboration with provincial or federal counterparts.

Dr. Michael Patterson: I would say it's by providing support and expertise in terms of surveillance and diagnostic capacity and physical resources, but being careful not to mandate activities in a very strict way and automatically tie them to funding.

There have been examples in research in the U.S. In 2001-02, there were mandates to prepare for anthrax or white powder events. U.S. federal funding was tied to those preparations, and it led to declines in preparation for other emergencies that would be much more common than bioterrorism, such as hurricanes and other events.

Hospitals in New Orleans, for example, were more prepared for bioterrorism than they were for Hurricane Katrina, with disastrous results.

Mr. Mike Kelloway: Thank you, Doctor. I want to pivot to focusing on vaccines.

Dr. Patterson, as soon as vaccines were available in Canada, those living in the territories were prioritized. Since then, there has been a considerable uptake, with thousands of those living in Nunavut vaccinated earlier in the year.

Can you tell us and Canadians why it was important for those living in Nunavut and the territories to be prioritized? Can you tell us the impacts of vaccination in your community so far?

Dr. Michael Patterson: It was recognized early on that there was a much higher burden of risk in Nunavut and in other remote indigenous communities. With the absence of other supports or reduced supports and services in other areas, increased access to vaccination is one way to offset that increased burden of risk. It appears to have helped.

By this time in the Arviat outbreak, three weeks into it, almost 5% of the community had been diagnosed with COVID-19. We're two and a half weeks into the outbreak in Iqaluit, and the numbers are still rising, but not as fast, so it has made a difference already when we compare the two communities.

Thank you.

The Chair: Thank you, Mr. Kelloway.

We'll go now to Mr. Thériault.

[*Translation*]

Mr. Thériault, you have six minutes.

Mr. Luc Thériault: Thank you very much, Mr. Chair.

My questions are for Dr. Ruel, and I hope my colleagues will be able to benefit from the English interpretation.

Dr. Ruel, how many hospitals in Quebec do you think are currently dealing with an outbreak?

Dr. Marc Ruel: Mr. Thériault, thank you for your question.

I don't necessarily have that information on hand.

Mr. Luc Thériault: If you have it, perhaps you could send it to the committee later.

In the first wave, hot and cold zones had to be organized, and there was no vaccination. We're now in the third wave, and I imagine the outbreak rate in hospitals must have gone down a lot. Is that the case?

● (1140)

Dr. Marc Ruel: That's not necessarily the case. As you know, with the new variants, the mutations, the transmissibility of infections is significantly enhanced and not at all favourable. So there is much more potential for transmission from person to person.

Mr. Luc Thériault: There's a difference between the potential for transmission and a definite outbreak, isn't there?

Dr. Marc Ruel: There isn't a huge difference because an outbreak usually occurs on most floors between two patients where transmission has occurred in a hospital setting.

The definition is still quite strict.

Mr. Luc Thériault: In your testimony, you said that at least 25% of health care workers were reluctant to get vaccinated.

How do you explain that?

Dr. Marc Ruel: The data changes every week. I can tell you that, in my speciality, it isn't 25%. All health care workers want to get their vaccine, and the second dose, as soon as possible. Later, it may be the third dose.

There may be regional variations, but that's not what we're seeing here.

Mr. Luc Thériault: When you mention variations, are you talking about areas of specialty? You said that the percentage is different in cardiology.

Dr. Marc Ruel: Actually, I think it's really not that percentage.

We have the pandemic in our face every day. We have patients on artificial hearts and lungs because of COVID-19. Right now, there are a lot of patients who are between life and death, and the situation tips more often in the wrong direction.

Mr. Luc Thériault: You talked about patients who don't have COVID-19 earlier. On April 26, we heard from Dr. Perrault, president of the Association des chirurgiens cardiovasculaires et thoraciques du Québec. He told us that before the pandemic, despite chronic underfunding in the health care system, these surgeons were trying to keep the percentage of patients on a waiting list at less than 10% above acceptable wait times for the situation to be manageable. We know that cardiac procedures have to be early, just as they have to be in cancer.

Very quickly, in the first wave, this percentage on the waiting list rose to 20%. It's now reported to be between 40% and 45%. Dr. Perrault said something quite powerful. He said that at these rates, we're playing Russian roulette, because the important thing is to be able to counteract sudden death. If patients end up getting care, they're obviously going to experience much greater consequences.

Do you agree with those comments?

Dr. Marc Ruel: I couldn't agree more. In fact, that's the big problem with COVID-19, that excess deaths aren't just from COVID-19, but are caused, in large part, by other diseases, such as cardiovascular disease. This is a problem that we have to deal with, and it's called the “double threat”. Since the beginning of the pandemic, there has been an increase in deaths, mostly related to cardiovascular disease. This has been observed in Europe, and very early data were published in *The Economist*. Other data have recently been published in the United States in the *Journal of the American Medical Association*.

We're also seeing the same thing. It must be the same for Dr. Perrault, who I know very well, at the Montreal Heart Institute. We're seeing the same thing in Ottawa and in all the centres in Canada because, unfortunately, diagnoses are delayed. Because of COVID-19, we need to protect the nurses and staff who care for patients. All of the impacts on the health care system often slow us down and prevent us from doing surgeries or other cardiovascular procedures at the same rate as before.

Mr. Luc Thériault: According to Dr. Perrault, a patient who hasn't had access to the diagnostic process will show up at a later stage of the disease, which will have worsened, and their chances of recuperation will become more difficult. Their chances of returning to work quickly will also be lessened. A mild heart attack can become much more severe. The patient will lose function, which will affect their quality of life. Sometimes, the patient will suffer from having heart failure and will become a subscriber to the health care system because of the chronic nature of the disease. For this reason, not treating it quickly will lead to an explosion in costs. Is that right?

● (1145)

Dr. Marc Ruel: You're right, Mr. Thériault, it's a problem. We must continue to provide cardiac care. The Canadian Cardiology Association and the Ottawa Heart Institute have been repeating this message since the pandemic began, and it's important to keep repeating it.

Mr. Luc Thériault: Dr. Perrault said that recurring investments in health care are absolutely necessary. Do you agree with that?

Dr. Marc Ruel: We must continue to address both threats simultaneously, the threat of COVID-19 and the threat of other diseases, including cardiovascular disease, which unfortunately cannot be treated in a timely manner because of COVID-19.

Mr. Luc Thériault: Thank you.

The Chair: Thank you, Mr. Thériault.

[*English*]

We will go now to Mr. Davies.

Mr. Davies, please go ahead, for six minutes.

Mr. Don Davies (Vancouver Kingsway, NDP): Thank you, Mr. Chair.

Dr. Attaran, I would like to explore the federal government's powers a bit more, specifically the Emergencies Act.

Section 3 of the Emergencies Act defines a national emergency as “an urgent and critical situation of a temporary nature that...seriously endangers the lives, health or safety of Canadians and is of such proportions or nature as to exceed the capacity or authority of a province to deal with it” and one that “cannot be effectively dealt with under any other law of Canada.”

Given what you have said about Alberta, and I think some of those comments may apply equally to Ontario, would you say that this definition of national emergency is triggered by the current COVID crisis?

Dr. Amir Attaran: Absolutely I would, and to the extent that you can use the Emergencies Act, now is the time to do it. Well, the time to do it was months ago, but it should be used.

Mr. Don Davies: Thanks. I'm going to carry on.

Section 5 of that act has a more specific definition. It says:

> Public welfare emergency means an emergency that is caused by a real or imminent...disease in human beings, animals or plants...and that results or may result in a danger to life or property, social disruption or a breakdown in the flow of essential goods, services or resources, so serious as to be a national emergency.

In your view, Dr. Attaran, does the present COVID crisis fit the definition of a public welfare emergency?

Dr. Amir Attaran: It fits absolutely all of the branches you mentioned, so again, clearly yes.

Mr. Don Davies: Section 8 of the Emergencies Act specifies a range of the numerated powers. One of them—in fact, the first one.... I will just read a bit of the preamble: “While a declaration of a public welfare emergency is in effect, the Governor in Council may make such orders or regulations with respect to the following matters”. It goes on to list, among others, “the regulation or prohibition of travel to, from or within any specified area, where necessary for the protection of the health or safety of individuals”.

I listened carefully to your comments about, as an example, the work camps in Alberta and their potential for being vectors of transmission. Is that a power under this act that could be used by the federal government in order to control interprovincial travel for quarantining and to control the spread of disease?

Dr. Amir Attaran: It is, and let me give you some historical context. You can go back centuries to medieval Italy. At that time, the very best public health measure was the cordon sanitaire, the looping off of an area—the cordoning off of an area and not allowing people in or out. It is the surest, safest, best thing when you're dealing with a hot zone, and it's been part of public health practice forever. That is allowed under the Emergencies Act and should be done with hot zones for exactly the reasons you mention, Mr. Davies. That is about as far as the Emergencies Act will carry you, I think, but that's very far, so this part of it should be a no-brainer.

Mr. Don Davies: Well, there are other powers there. I'd be interested in your views on this one. Paragraph 8(g) would give the Governor in Council the power to establish emergency shelters and hospitals.

We know that hospitals generally fall under provincial jurisdiction. I'm thinking of the overwhelming of the ICUs, say, in Ontario. Would that paragraph (g) not give the federal government the power to move into a province and set up, for instance, mobile ICUs under the power to set up hospitals?

● (1150)

Dr. Amir Attaran: In a physical sense, yes, but this is where the law clashes a bit with practical reality. You can set up the hospitals federally using paragraph (g), but how are you going to staff them and integrate them into the health system so that, for instance, you have somewhere to discharge those patients as they get better? This is not a power that could be exercised without some co-operation from the province.

On the other hand, Mr. Davies, you mentioned the cordon sanitaire. That's something that can be done by the federal government instantly, and ought to be.

For some of these other powers in the Emergencies Act, yes, you could use them, but they will take greater integration with the province.

Mr. Don Davies: Well, I want to go to that too, because the act is very clear on when provincial agreement is needed, and my reading of the act is that if an emergency is restricted to one province, then you must have the consent of the province. However, where the emergency is in multiple provinces, then consultation is required, but the agreement of the provinces is not required. Is that a correct understanding of the Emergencies Act?

Dr. Amir Attaran: Definitely.

Mr. Don Davies: Finally, I'm going to read to you from the working paper for Bill C-77, as it was called, from 1987, which I dug up. It is the document that surrounded the act that became the Emergencies Act in 1988. It starts off by saying this:

> The constitutional responsibility for dealing with emergencies is divided between the federal government and the provinces. The Constitution Act, 1867 does not delineate in specific terms the authority of each level of government over emergencies, but...the federal government has primary and ultimate responsibility to provide for the safety and security of Canadians during national emergencies. Its constitutional jurisdiction over such national emergencies stems from the power of Parliament to legislate for the "Peace, Order and Good Government of Canada" and the emergency doctrine which has evolved from it.
>
> That doctrine invests the Parliament of Canada, during times of national crisis, with temporary plenary jurisdiction to legislate on all matters, including those normally reserved exclusively to the provinces. It operates, as Mr. Justice Beetz of the Supreme Court of Canada stated in the Anti-Inflation Reference, as a "partial and temporary alteration of the division of powers between Parliament and the provincial legislatures"...which gives to the Parliament of Canada in times of national crisis, "concurrent and paramount jurisdiction over matters which would normally fall within exclusive provincial jurisdiction". And, as he also observed, "the power of Parliament to make laws in a great crisis knows no limits other than those which are dictated by the nature of the crisis".

Those are the opening words of the instruction of parliamentarians prior to the introduction of the Emergencies Act. Does that jibe with your constitutional understanding of the way the Emergencies Act flows?

Dr. Amir Attaran: Yes, it's all correct. Interestingly, a case around the peace, order and good government power comes to the Supreme Court about once every 30 years, and we just had one decided a few weeks ago. The carbon tax case was a peace, order and good government case. I litigated it—full disclosure—and the Supreme Court just weeks ago reaffirmed that the federal government can do precisely what you've read out, so yes, whatever needs to be undertaken in an emergency, should Parliament choose to take it up, it can do. Essentially, it is unlimited power, as long as it's time-limited in nature. That was true in the summary you read, and it was true according to the Supreme Court just weeks ago. That this has not been used so far in the pandemic is Canada's cardinal blind spot, marked only by thousands of dead. It's tragic.

The Chair: Thank you, Mr. Davies.

We will have a very short time for a quick snapper round. I propose 30 seconds per party, and I hope we're agreed on that.

With that, we will go to Mr. d'Entremont, please, for 30 seconds.

Mr. Chris d'Entremont (West Nova, CPC): I have a quick question for Dr. Patterson in Nunavut.

Did you roll out rapid testing, to try to get into some of those really remote communities without having to get the test back to labs and do all that? I see you've already done 12,500 tests. How many of those might have been rapid testing?

● (1155)

Dr. Michael Patterson: We have rapid testing in a number of communities and plan to roll it out to all of our communities, but it is still required to get confirmatory testing, which is available only in Iqaluit and Rankin Inlet.

The Chair: Thank you, Mr. d'Entremont.

We go now to Ms. O'Connell. Please go ahead for 30 seconds.

Ms. Jennifer O'Connell (Pickering—Uxbridge, Lib.): Thank you, Mr. Chair.

Dr. Ruel, I just wanted to follow up on your suggestion, and I support [*Technical difficulty—Editor*] frontline health care workers right away. I guess my question is around the fact that the decision about dosing intervals is actually made provincially, as is the decision about prioritization of vaccines.

I am thinking that there are some provinces that provide those intervals sooner for health care workers. Do you have any statistics on which provinces and territories those might be?

I'm sorry, Mr. Chair. That took a little longer.

Dr. Marc Ruel: I don't want to get into province specifics. This is obviously a national panel. I hear your thoughts around the greater good, but we think that not delaying the second dose for health care workers brings greater good and allows for health care workers to take care of people with COVID and non-COVID-related illnesses.

The Chair: Thank you, Ms. O'Connell.

[*Translation*]

Mr. Thériault, you have 30 seconds.

Mr. Luc Thériault: Dr. Ruel, you agree that in the context of a vaccine shortage, it's still more beneficial to vaccinate as many people as possible than to follow the manufacturer's recommendation to administer the second dose of the vaccine 21 days after the first dose.

That's what you're saying about this, noting that an exception should be made for frontline health care workers, however. Is that correct?

Dr. Marc Ruel: That's essentially what I'm saying.

Mr. Luc Thériault: Thank you.

[*English*]

The Chair: We go now to Mr. Davies.

Mr. Davies, finish this up, please, for 30 seconds.

Mr. Don Davies: Thanks.

Dr. Attaran, you've written that the federal government can make national rules—specifically, minimum national standards—for COVID-19 control that the provinces must play by. They can put a standard, legally binding floor under the provinces—a backstop of disease control that kicks in only when they fail.

Can you explain that a bit, Dr. Attaran?

Dr. Amir Attaran: You need a safety net. There has to be a safety net. You cannot have a free-for-all of a country, where some provinces don't do the right thing—whether it's on vaccination, on shutdowns or on the size of public gatherings—and expect good outcomes.

If every province is making it up on their own, you're never going to get 10 out of 10 doing it right—never. You need minimum national standards, including for vaccination, as Ms. O'Connell averred briefly. That is something the federal government can do with its emergency powers constitutionally. There is precedent.

I'll give you the names of some federal acts that set minimum legal standards across the board. For the environment, it's the Canadian Environmental Protection Act; for medical care, it's the Canada Health Act; and for privacy, it's the Personal Information Protection and Electronic Documents Act. They're all federal legislation and they all set minimum standards.

Why can't we have minimum standards for disease control in the biggest crisis this country has faced in a century?

The Chair: Thank you, Mr. Davies.

That brings our panel to a close. I would like to thank the witnesses for sharing with us their time, their expertise and their knowledge. Thank you all for being here.

With that we will suspend to bring in the next panel.

● (1155)

_____(Pause)_____

● (1200)

The Chair: We are resuming meeting number 34 of the House of Commons Standing Committee on Health. The committee is meeting to study the emergency situation facing Canadians in light of the COVID-19 pandemic; specifically today we are examining Canada's national emergency response landscape.

I'd like to welcome the witnesses. We have, appearing today as an individual, Dr. Gregory Marchildon. I apologize for my mispronunciation of your name. He is a professor and Ontario research chair in health policy and system design at the Dalla Lana School of Public Health at the University of Toronto. With the Canadian Public Health Association, we have Mr. Ian Culbert, executive director. With the COVID-19 Immunity Task Force, we have Dr. Timothy Evans, executive director.

With that, I will invite the witnesses to give their statements. For your information, I will display a yellow card when you're getting near the end of your time, and a red card when your time is up. When you see the red card, try to wrap up. Thank you all.

We will start with Dr. Marchildon. Please go ahead, sir, for six minutes.

Dr. Gregory Marchildon (Professor and Ontario Research Chair in Health Policy and System Design, Dalla Lana School of Public Health, University of Toronto, As an Individual): Thank you very much.

In addition to my academic appointment, I'm also director of the North American Observatory on Health Systems and Policies, which has a mandate for Canada, the United States and Mexico but is based out of Toronto. In the 1990s, I served as deputy minister of intergovernmental affairs, and later as deputy minister to the premier, and cabinet secretary, in the Government of Saskatchewan. After that I was executive director of the Commission on the Future of Health Care in Canada, commonly known as the Romanow commission.

I'd like to start by saying that we live in one of the most decentralized federations in the OECD. This means that our first stop in any national public health crisis will naturally lie with the provincial and territorial governments. From the beginning, provincial and territorial governments have assumed this responsibility in various ways, and they've used their emergency acts and their public health acts to declare states of emergency or of public health emergency in order to close businesses and schools, to prohibit or restrict gatherings, to restrict the movement of populations and, in Quebec, to impose a curfew.

Of course, infectious diseases like the coronavirus are something that crosses borders, and governments need to act in a coordinated way if they're to be effective. This puts a very heavy onus both on federal-provincial-territorial collaboration and on regional collaboration among the provinces and territories, such as we've seen in the creation and maintenance of the Atlantic bubble.

This means intergovernmental agreement and action are essential to make this decentralized federation effective in a time of crisis. There has been some discussion already this morning about the federal Emergencies Act, and some believe that the federal cabinet can bypass this kind of intergovernmental agreement in action by invoking a public welfare emergency under section 5 of the Emergencies Act. However, I think we need to recognize that there are serious limitations to this approach, in part, as already mentioned by Dr. Attaran, with the limitations and protections that are built in to the current act.

In particular, section 5 can be invoked only if the emergency is “of such proportions or nature as to exceed the capacity or authority of a province to deal with it”—in other words, if the spread of COVID-19 or the administration of vaccines has exceeded the response capacities of the provinces.

The second limitation is that there needs to be proof that the emergency cannot be dealt with in any other way, through any other law in Canada. We've seen how the Quarantine Act has already allowed the federal government to quarantine and isolate individuals at national borders, and we've seen the use of the Emergency Management Act, which is the framework for helping provinces in an emergency. We heard from Dr. Attaran earlier about the Department of Health Act and about how it could potentially be used rather than the Emergencies Act.

These existing laws allow the federal government to do what is necessary, at least so far, in terms of the supports it's provided to individuals and businesses during the pandemic, as well as directly controlling our national border, including quarantine measures for those entering the country.

Now, even if you think—and Dr. Attaran again has referred to this—that things are bad in terms of contagion in some provinces, or you feel that the vaccination rollout is extremely poor, there's no reason to believe that the federal government could do better by acting unilaterally, in practical terms. In fact, recognizing that the administration of public health care, work sites, long-term care homes, etc., is actually in the hands of provincial and territorial governments, it would be almost impossible for the federal government to implement unilateral solutions to this crisis.

● (1205)

However, the question of emergency powers is a different question from the one of whether the federal government could do more. As a national government, it can and should do more.

We've talked briefly about the setting of national standards, perhaps through existing federal legislation other than the Emergency Act. I am going to focus, however, on the one task that remains, and that's achieving immunity through vaccination.

For the first time that I know of, the government of Canada has assumed the full responsibility and cost of securing vaccines. It should have used this leverage to require provinces and territories to provide additional information and data to track vaccinated Canadians and help determine the efficacy of vaccination. It should provide each fully vaccinated Canadian with an official Public Health Agency of Canada vaccination passport.

In general, it should have been involved and can still be more involved with provincial and territorial governments in the co-crafting and co-implementation of a national vaccination campaign.

We've learned that we can't depend on supply contracts with pharmaceutical companies whose own source of production and supply is outside Canada. We need a domestic production capacity and domestic vaccine research and development capable of anticipating and responding to epidemics and pandemics in the future. We had Connaught Laboratories at the University of Toronto until it was privatized and sold in the 1970s and 1980s. We need the federal government to work with our university-based scientists and academic hospitals to build this capacity for the next pandemic, to ensure this capacity is sustainable for decades to come.

Thank you.

● (1210)

The Chair: Thank you, doctor.

We'll go now to the Canadian Public Health Association and Mr. Culbert, executive director.

Please go ahead, Mr. Culbert. You have six minutes, please.

Mr. Ian Culbert (Executive Director, Canadian Public Health Association): Thank you.

Good afternoon, honourable members, and thank you for the invitation to appear before you today.

The COVID-19 pandemic has highlighted the limits of our health care and public health systems and resulted in governments considering the implementation of the Emergencies Act. We agree that the conditions to implement the Emergencies Act have not been met, for the reasons your previous witness has indicated.

From a public health perspective, the use of the Emergencies Act should be considered only as a last resort. Its use in response to an infectious disease outbreak can be forestalled by the appropriate funding and governance of Canada's public health systems.

The fact that the federal government has discussed with the provinces and territories the use of the Emergencies Act underscores the need to modernize the funding and governance of these systems. While the delivery of health services is the responsibility of the provinces and territories, the federal government has a responsibility for leadership, collaboration and international relations. The challenge is that the federal responsibilities are not well defined.

A further challenge is that the key components of a public health response, such as data sharing, are based on voluntary agreements that are not legally enforceable and do not result in the timely collection of the information necessary for an informed response. This situation must change if our country is to respond efficiently and effectively to future outbreaks.

In May 2019, CPHA published a background document and position statement on “Public Health in the Context of Health System Renewal in Canada”. That report includes a series of legislative, regulatory and policy-related recommendations to strengthen the capacity of Canada's public health systems to protect and promote the health of Canadians.

In February of this year, we published our “Review of Canada's Initial Response to the COVID-19 Pandemic”. In this review, we noted that the health portfolio operations centre was activated, and a special advisory committee was implemented as a means for developing guidance, facilitating communication, providing governance and coordinating FPT public health activities and responses. However, the challenge with implementing the work of these groups is the current delegation of authority for managing health services. This division results in barriers to achieving an effective, consistent national public health response.

While we need to respect provincial and territorial authorities, the varying approaches among neighbouring provinces demonstrate that steps are required to improve the consistency of the national response.

CPHA recommends the development of a more unified structure that provides a national approach to public health while respecting provincial and territorial responsibilities. This goal could be achieved through the development of federal legislation for public health, a Canada public health act with clear roles and responsibilities defined for all governments and stakeholders. Such legislation would require a national funding accord that incorporates performance measures for the delivery of public health services according to national standards.

The COVID-19 pandemic has demonstrated the strengths, resilience and weaknesses that exist within governments' collective abilities to protect those who live in Canada from a global pandemic, and the vital role of public health organizations in achieving that goal.

These organizations have a history of responding to infectious disease outbreaks with the skills, competencies and professionalism that are the hallmarks of public health. Following every outbreak response, efforts are made to look back at their actions and to learn from them so that the response can be improved for the next event.

In the time between outbreaks, however, political commitment to implementing the recommended changes and to funding public health systems appropriately wanes. The defunding of public health systems is an easy target, because they operate in the background, protecting and improving the health of Canadians and reducing health inequities. Unlike wait-lists for surgical procedures or MRIs, there isn't a public backlash when public health services are cut.

Emergency preparedness is only one of six core functions of public health, so the necessary investments in public health governance, infrastructure and human resources will be fully utilized across the remaining functions in between infectious disease outbreaks.

The COVID-19 pandemic has clearly demonstrated that we cannot afford to allow the status quo to continue with respect to the governance and funding of public health systems in this country. If a jurisdiction spends only 5% of its overall health budget on protecting and promoting the health of its citizens, it can come as no surprise that we have unsustainable growth in our acute care systems during normal times and they teeter on the brink of being overwhelmed during this third wave of this pandemic.

We did not learn the lessons from SARS. We failed to properly and fully implement the recommendations of the Naylor and Campbell reports.

● (1215)

Our proverbial chickens have come home to roost with COVID-19. The political will at all levels of government must be marshalled to reform public health governance and to ensure its appropriate funding if we are to be better prepared to address the next outbreak, and there most definitely will be a next outbreak.

Thank you.

The Chair: Thank you, Mr. Culbert.

We'll now go to the COVID-19 Immunity Task Force, with Dr. Evans, executive director.

Please go ahead, Dr. Evans, for six minutes.

Dr. Timothy Evans (Executive Director, COVID-19 Immunity Task Force): Good afternoon, honourable members, and thank you for the opportunity to address this standing committee.

The COVID-19 Immunity Task Force was established by the Government of Canada in April 2020 with a two-year mandate. We work virtually and have a leadership group that's co-chaired by Dr. Catherine Hankins and Dr. David Naylor. The leadership group is a set of volunteer experts from across the country who work closely with governments, public health agencies, health organizations, research teams, other task forces, communities and stakeholders.

The task force is focused on understanding the nature of immunity arising from the novel coronavirus that causes COVID-19, and establishing the prevalence of that infection in the general population and in specific communities with priority populations. In January 2021 the task force was asked to take a major role in supporting vaccine surveillance, to monitor both effectiveness and safety.

There are approximately five areas of focus for the task force, and we've supported to date about 80 to 85 studies. The primary focus is to undertake zero-prevalence studies. Those test for the presence of antibodies arising in individuals from either previous infection or vaccination with a COVID vaccine. These studies shed light on the level of immunity in the general population and in priority populations such as long-term care residents. They were initiated in May 2020, shortly after we were established, and are ongoing as we navigate the third wave.

Initial studies from the blood banks across Canada revealed that at the tail of the first wave in May and June 2020, the level of population immunity in Canada was extremely low, at less than 1%. While this was a strong indicator of the success of public efforts to limit the spread of infection, these low levels of immunity made it abundantly clear that across the country we remained extremely vulnerable to a second wave.

Updated results in January 2021, in the midst of the second wave, suggest that levels of immunity are higher in all regions beyond the Atlantic provinces, yet remain extremely low. Of particular concern in the latest results is the growth in inequalities in infection among people living in poor neighbourhoods and among racialized groups. In neighbourhoods with the greatest material deprivation, risk of infection is five times greater than in the least materially deprived neighbourhoods, and that risk of infection is growing nearly three times as fast in neighbourhoods of greatest material deprivation. Among racialized groups, infection risk is more than three times greater compared with the white population and is growing at about twice the speed.

The abundantly clear messages that are emerging from our CR prevalence data are that, one, we're a long way from herd immunity; two, vaccines are the only route to herd immunity; three, vaccine rollout must be directed as a priority to materially deprived neighbourhoods and racialized communities; and four, adherence to recommended public health behaviours remains critical until vaccine coverage reaches thresholds for herd immunity.

The task force is also working to advance our understanding of immunity against SARS-CoV-2 infection, and some of the results we have to date give us an indication, for example, that immunity following infection remains strong and protective for at least eight months, and also that older populations living in long-term care may have a less robust immune response following a first dose vaccine. As we follow cohorts of infected persons and now vaccinated persons, we're going to gain more insights into how long immunity from infection and/or vaccination lasts in different age and sex groups, and when booster doses of vaccines may be needed.

● (1220)

The task force is also supporting immune testing work across Canada to validate and improve access to immune tests. We've validated a dried blood spot specimen, which is a made-in-Canada antibody test that helps distinguish vaccine-induced immunity from postinfection immunity. This is permitting home-based testing, and it is being deployed in studies across the country to gather information about how population immunity is evolving as vaccines are rolled out.

In terms of vaccine surveillance, we're working with a consortium of Canadian organizations: the Public Health Agency of Canada, the Canadian Immunization Research Network and the National Advisory Committee on Immunization. Together, through something called the vaccine surveillance reference group, we've identified studies that monitor the safety and effectiveness of COVID-19 vaccines across Canada. Some of the topics we're monitoring include the effectiveness of alternative dosing schedules, the safety and effectiveness of vaccines in children, the safety and effectiveness of people with chronic illness, and a trial that's looking at mix-and-match vaccines. For example, if you get a Moderna vaccine as your first dose, how effective will it be if you get a Pfizer vaccine as your second dose?

Finally, we're also modelling herd immunity. With the rollout of vaccines, the task force is looking at the trajectories to herd immunity across Canada as a whole and in each of the provinces and territories, drawing on national and international sources of data.

Thank you very much.

The Chair: Thank you, Doctor.

We'll start our rounds of questions at this point, with Ms. Rempel Garner.

Please go ahead, Ms. Rempel Garner, for six minutes.

Hon. Michelle Rempel Garner: Thank you, Chair.

My questions will be for Dr. Evans. Thank you so much for being here today.

It's really serendipitous that you are here today. There's a story in The New York Times, which I'm sure you read this morning, that is getting a lot of attention. The headline reads, “Reaching ‘Herd Immunity’ Is Unlikely in the U.S., Experts Now Believe”. In it, there's a quote from an evolutionary biologist at Emory University in Atlanta. He said, “The virus is unlikely to go away...but we want to do all we can to check that it’s likely to become a mild infection.”

Based on your work to date, would this statement be accurate in the Canadian context?

Dr. Timothy Evans: I think it's a function of assumptions related to the evolution of the virus and the extent to which new variants affect vaccine effectiveness or escape the immune protection that's generated by the existing vaccines. This is definitely something we have to look at and follow very closely. I think it's too early to state definitively that indeed this will be the case. However, I think there's enough evidence that we need to continue to follow it very closely into the future.

Hon. Michelle Rempel Garner: Do you believe that COVID-zero is possible in Canada?

Dr. Timothy Evans: I think that depends on what you mean by COVID-zero. If it means—

● (1225)

Hon. Michelle Rempel Garner: I guess what I'm trying to ask is, are we likely to be moving into an endemic situation, and should we be looking at responses to manage this accordingly?

Dr. Timothy Evans: I think we're moving to a situation where, as with a lot of coronaviruses, we could manage this through vaccinations such that it affects people at worst like a cold, and limits severe illness, hospitalization and death to a very large degree.

Hon. Michelle Rempel Garner: What work is being done by your group to translate some of this research and knowledge into policy on public health restrictions or benchmarks for lifting public health restrictions?

Dr. Timothy Evans: We have a number of studies that are looking at what the duration of protection is, not only from natural infection, as I stated earlier, but also from vaccines, and in different types of populations. We just supported a number of studies that are looking at, for example, immunocompromised populations and populations with chronic illnesses. We're looking to see the extent to which vaccine protection differs in those at-risk communities.

Hon. Michelle Rempel Garner: Do you have any sense of a timeline on when that research would be translated into public health advice for guidelines or lifting restrictions?

Dr. Timothy Evans: These studies are now enrolling patients as the vaccines roll out, and I think the important issue is the extent to which you can generate valid findings over time. When duration is one of the variables, then it's hard to accelerate or diminish that time interval.

To give you an example—

Hon. Michelle Rempel Garner: I'd love to get more information, but I only have a couple of minutes left. My apologies for cutting you off. I wish I had more time.

I'm wondering if, within your group or with any people you're working with in the government, you are looking at economic impact, mental health, other issues that may be arising as part of the restrictions, etc., and sort of marrying those together to come up with public health advice that looks at all aspects of what the country is going through right now.

Dr. Timothy Evans: The closest we would come to informing discussions on that is our work on modelling trajectories toward herd immunity, because that's really going to be the evidence that allows us to understand just how long we're going to be in this crisis.

Hon. Michelle Rempel Garner: Do you have any data on the causality of inequalities in COVID-19 immunity, which you mentioned, that you could table with the committee?

Dr. Timothy Evans: I have data on the seroprevalence surveys. We do not have data on the causality at the moment, no.

Hon. Michelle Rempel Garner: Is anybody working on causality?

Dr. Timothy Evans: I think many investigators will be looking at this, and I've seen various studies, but I don't have a definitive list for you at this time.

Hon. Michelle Rempel Garner: As well, with regard to the dosing interval, are there any studies in Canada right now on waning or potential waning immunity at different data points over a four-month dosing interval for all the vaccines that have been approved for use in Canada?

Dr. Timothy Evans: There are a number of provinces that have provincial surveillance systems. In particular, British Columbia and Quebec have very good surveillance systems looking at the trends in immunity over time with a single dose, or the “first dose fast” strategy.

The task force has supported studies that are looking at measures of immune function over time and how they differ. I mentioned one of the studies in my remarks related to long-term care residents.

Hon. Michelle Rempel Garner: In closing, my understanding is that there isn't any data that you or anybody could point this committee to on immunity levels after one dose at a four-month interval for, let's say, the Pfizer vaccine. If there is, I'd love to know what that is.

Dr. Timothy Evans: The country that's furthest ahead in this is the U.K. They published data last week that gives us an indication of the effectiveness of a single dose in that population as much as 12 weeks out. I don't think they have the 16-week data at this time, so we'll have to wait a little longer for that.

● (1230)

The Chair: Thank you, Ms. Rempel Garner.

We'll go now to Ms. O'Connell.

Ms. O'Connell, please go ahead, for six minutes.

Ms. Jennifer O'Connell: Thank you, Chair.

Dr. Evans, my questions are for you as well.

I'm picking up on that international piece that you were just speaking of. Obviously there's lots of data, but some of the helpful data that I think a lot of us are looking to is from the U.K. and Israel.

You mentioned that the only way to get to herd immunity is through vaccination. One of the things we've noticed is this idea of loosening public health measures too soon, and Israel and the U.K. had instances of this.

I'm curious whether you're looking at this. How much do you factor in that international kind of experience in your work? I would assume, given the topic, that any data is helpful, but in terms of spikes until vaccinations can do their work, do you have any models or indicators that would be helpful in determining some of that balance between public health measures and vaccinations, moving out?

Dr. Timothy Evans: I have a couple of quick things to say.

The first is that, yes, the international experience is extremely important and in part because the U.K. and Israel, as you mentioned, were well ahead of Canada in the rollout of their vaccines. They have a time advantage on us. In addition—and I'd like to mention this very clearly—there are much more unified data systems across their countries. This is a barrier in Canada that we need to address. The fact that they have this data now, with vaccine coverage rates that are over 50%, is very helpful in understanding and informing our models related to herd immunity.

The U.K. is particularly relevant because they have adopted this "first dose fast" strategy. What we can see from the data at the moment is that this strategy has been very successful in curbing the third wave. That, to me, suggests that the approach Canada has adopted, similar to the U.K.'s, holds promise for getting us through this third wave and stresses the importance of accelerating the vaccine rollout as fast as possible.

Ms. Jennifer O'Connell: To follow up on this international theme, obviously everybody wants to be done with COVID and wants to understand what they can start to do if they're fully vaccinated. We are starting to see bits and pieces of this in different countries around the world. I know it's something you're looking at too, in the immunity data. However, the challenge I have is that sometimes this can be a bit unhelpful in the sense that if we don't have a recognized sense of immunity understanding, some jurisdictions can say you can do x or y, and can then pull that back.

Do you see that as a challenge, this constant struggle? Everybody obviously wants to travel or do things again. Where do you see us, in understanding the immunity data, with vaccines, taking into account the variants? Maybe that's an unfair question, but it's about a balance between moving ahead and having some kind of unified understanding of what immunity means when you're fully vaccinated.

Dr. Timothy Evans: That's an excellent question, and there are three dimensions of it that I'd like to address.

First, I think we're much closer today to having immune measures that are what we call correlates of protection. Not to go into detail, but anybody who has gone into the depths of immunology will know that there's nothing simple here: It's a very complex immune system we all have. Therefore, generalizing with unified measures across immune systems has taken a lot of work. However, there's been tremendous progress over the last year, and I believe we're much closer to having accepted measures of correlates of protection. These are biological measures of immunity that will allow us to understand how protected we are after vaccines or natural infection. That's inclusive of variants.

The second part of this is the variants of concern that have recently emerged. We're actively working with the variants network that Canada has set up to understand the interfaces between vaccines and immunity. We're getting data on that, and at the moment the initial evidence suggests that the vaccines are perhaps more robust than we would have expected in the context of the variants.

The last point is about public health vigilance and behaviours. I think we may see an opportunity to dial those back when we get 50% to 60% of Canadians vaccinated. However, before that time, we really have to continue to promote adherence to public health measures, which we know make a difference.

● (1235)

Ms. Jennifer O'Connell: Thank you very much.

I'm sorry to the other witnesses. I didn't have time to get to you, but hopefully my colleagues will.

Thank you, Chair.

The Chair: Thank you, Ms. O'Connell.

[*Translation*]

Mr. Thériault, you now have six minutes.

Mr. Luc Thériault: Thank you, Mr. Chair.

I'll begin with Dr. Evans, and I would like to come back to the previous questions.

Dr. Evans, you just said that it might be possible to relax the health measures once 50% to 60% of people are vaccinated. Are you talking about a first dose or full vaccination?

Also, you were saying earlier that we aren't close to herd immunity. I'd like to know roughly when we will be. If we're not close to herd immunity and the health measures are relaxed, aren't we running the risk of going back to square one?

You also mentioned that immunity following infection lasts for eight months. Could you tell me how that was determined? Are we talking about full immunity? What about immunity from the first dose?

I'll stop there for now and let you answer my questions.

Dr. Timothy Evans: Thank you for these questions.

I'll begin by saying that the vaccination rate of 50% to 60% is a minimum. In the UK, 50% to 53% of the population has received a first dose of the vaccine, and we're seeing that the infection rate continues to drop there.

I believe that a similar situation could exist in Canada. The big difference is that our immunity rate is much lower because fewer people have been infected with the virus. So it's possible that we'll need to reach a 60% or 65% vaccination rate before health measures are relaxed, but we'll see.

As for herd immunity, I think we'll have to continue following all public health measures until there's a significant drop in the infection rate. We can all agree that we haven't yet reached that point, so it's absolutely necessary to continue to follow all public health measures.

● (1240)

Mr. Luc Thériault: You say that we could start to relax health measures a bit once 55% to 60% of the population has received a first dose.

Does that mean that you agree with the strategy of giving a first dose of the vaccine to as many people as possible, regardless of the time frame for the second dose?

That's what's happening now, and you're saying that we could start to relax health measures.

Dr. Timothy Evans: All the data I've seen to date support this strategy. I think there are certain groups in the population that need to be considered, especially the elderly and those with immune deficiencies. They may need to have a second dose sooner, or as soon as possible.

Regarding the other question about the immunity obtained after infection, this is a natural infection. There was a study done at the University of Montreal by Professor Andrés Finzi, who followed up on a population of patients who had been infected. I think they have more details now, but a few weeks ago it was concluded with certainty that for the first eight months there was strong immunity related to long-term immunological memory. That doesn't mean it's complete immunity, but it's very strong.

The study hasn't yet determined the rate of infection among these people, but from the immune tests, we have important data showing that the immune system is still very effective against new infections.

Mr. Luc Thériault: Is this always the case, regardless of the initial viral load? These are people who are still alive and who haven't had serious enough after-effects to prevent them from participating in a study. Is that right?

Dr. Timothy Evans: I believe that most of the people who took part in the study had been hospitalized following infection.

Mr. Luc Thériault: Thank you.

The Chair: Thank you, Mr. Thériault.

[*English*]

We will now go to Mr. Davies.

You have six minutes, Mr. Davies.

Mr. Don Davies: Thank you, Mr. Chair.

Dr. Marchildon, I'm sure you're aware that the War Measures Act was enacted in 1914 and that up until the 1980s Canada had no comprehensive peacetime emergencies legislation. I'm going to read a bit to you from the working paper that surrounded the introduction of the Emergencies Act in 1988, which was was given to parliamentarians.

It says:

> Emergencies legislation is an attribute of statehood. Canada is unique among industrially developed nations in not having comprehensive emergency legislation on the books. As well, all of our provinces and territories have legislation in place to deal with their responsibilities for emergencies.
>
> The Emergencies Act meets the shortcomings of the existing regime.... It will enable the federal government to discharge its constitutional responsibility to provide for the safety and security of Canadians during “national” emergencies which are defined in the Preamble.

The paper continues:

> The Act will provide the government with an appropriately safeguarded statute to deal with a full range of possible emergencies, not only enabling it to act quickly to minimize injury and suffering, but also ensuring that exceptional powers granted are no greater than those necessary to cope with the situation.

Over the past year, the Canadian Armed Forces have had to be called in three times to the provinces: twice in Ontario—one recently—and once in Quebec. We are in the third wave of a pandemic. Several provinces today are in, I would say, grave situations. We heard a previous witness describe Alberta as having the worst record of any jurisdiction in Canada or the United States.

My question to you is this. If we don't or can't invoke the Emergencies Act today in these circumstances, is that a problem with the legislation or is there a problem with the political decision-making to do so?

● (1245)

Dr. Gregory Marchildon: I would say that it can be invoked, but the question then becomes one of how effective that would be.

If you look at existing legislation like the Canada Health Act, which was referred to earlier, that would be a way of setting national standards, and if that wasn't powerful enough, you could resort to the Emergencies Act to set some basic national standards, including the requirements on dosing, and that's been subject to a great deal of scientific discussion.

Our state of knowledge, of course, is imperfect, but assuming a situation where our state of knowledge would have been better, then it would have been possible to set some standards. However, to take direct action would be extremely difficult because of the need to basically work through the provinces and territories.

You can invoke police powers but then you would rely upon provincial and municipal police to enforce those powers; you could not do it solely through the RCMP. All I said was, yes, it can be done, and I think the power is there to do it, but would it be effective? As the earlier speaker, Dr. Attaran, said, I would say it's maybe one of the less effective ways to approach this.

Mr. Don Davies: I guess that's my question. If Canada's flagship and, frankly, only legislation to deal with national emergencies is not invoked in what I think we all regard as about the worst emergency one can think of—certainly it's been described as once in a century—then to me there's either a problem with the legislation—it's either got too high a barrier to be invoked or it doesn't have sufficient powers or the right kinds of powers—or there is a political issue with it not being invoked.

What we do know is that it has not been invoked. What I'm trying to get at is where the problem is, because if we have a national government that can't invoke its full powers to deal with the issues that are national in scope.... I'm going to pause here and give you one example, and then I'll let you answer.

We know that a group of leading Canadian physicians and scientists have recently signed a letter calling for a nationwide circuit-breaker shutdown, and of course they point to the strategy of Australia, Taiwan, and the Atlantic bubble. They say if we had had one, we might have saved thousands of lives.

How do we adopt a nationwide circuit-breaker shutdown if we don't have the national government that can actually bring that in, and by what legislation would they do so if not the Emergencies Act?

Dr. Gregory Marchildon: Well, we already talked about the Canada Health Act. That's one possibility, so there are alternatives. However, even if the Emergencies Act is a viable alternative from a legal perspective, I pointed out what are more than political difficulties. These are administrative and financial difficulties, and I think those are greater impediments than are the legal impediments in the Emergencies Act.

The Emergencies Act could do some of these things. It could create a kind of a safety net. It could create a threshold, and the federal government could quite possibly have already acted on that, or it could have used other federal legislation to create that, so clearly the problem lies elsewhere.

The fact that Canada has not invoked the Emergencies Act though, I want to emphasize, is not necessarily a failure of the federal government in this federation. It also reflects the fact that in a decentralized federation, the provinces and the provincial governments bear much more weight.

One of the advantages of this is that they saw their responsibilities immediately and acted on them, whereas in the United States there were many states that were waiting for the U.S. federal government to move and to act. It did not do so, and as the weeks went on, some of these governments, like the State of New York, finally realized they had to act. We wouldn't want that kind of situation in Canada. Given what we have, it's far better that the provinces feel that the weight to act is predominantly on their shoulders.

Many other things need to be done to ensure that we have pan-Canadian actions and, second of all, that we have national standards that could be set by the federal government in a number of different ways. It should have used, for example, the leverage that it had in paying for the vaccines to set some of those national standards through an agreement, and, if that federal-provincial-territorial agreement had failed, then to act unilaterally and set those standards.

● (1250)

The Chair: Thank you, Mr. Davies.

Committee, it looks like we have a few minutes left. I propose a snapper round of two minutes per party.

If that's acceptable, we will start with Mr. Barlow, I believe, for two minutes.

Please go ahead, Mr. Barlow.

Mr. John Barlow (Foothills, CPC): Thank you very much, Mr. Chair.

My question is for Dr. Evans.

You were talking about doing a study on how long the immunization would last or how long the effectiveness of the vaccinations would last. That would determine when a booster was needed. Has the task force come to the result or to the acceptance that a booster will be needed? What is the metric that is being looked at to make that decision on when and if a booster will be needed?

Dr. Timothy Evans: A number of metrics would be used. First is looking at what we call “escape infection” and the rates of escape infection: people who have been vaccinated and the rate at which you get new infections. If that rate goes above what is the expected efficacy of the vaccine, then it may be a strong signal that immune levels are waning.

The second, as I mentioned earlier, is to identify immune measures, which, if they go below certain thresholds, would suggest that you don't have adequate immune protection. Those are called “correlates of protection”.

On both fronts, it's too early to tell. We'll need a significant amount more time, I think, before we have evidence that suggests definitively what the appropriate time for a booster is.

Mr. John Barlow: You've also mentioned mixing vaccines and some study that is going to be done on that. I know that many constituents in my riding in Alberta have had the AstraZeneca vaccine for their first dose, but now we have no idea when more deliveries of AstraZeneca are going to arrive in Canada.

I'm wondering what the timeline will be for any studies on the ability to mix vaccines. Or are many of these Canadians who have the AstraZeneca first dose having to now look at two doses of another vaccine?

Dr. Timothy Evans: It will depend on the supply dynamics. As you've identified, there are factors that come into this which are very difficult to predict, but there's a strong likelihood that people may be faced with receiving a second vaccine that is not the same as the first. That's why we've set up a study to look at every combination possible and understand what the risks and benefits of that might be. This study has been designed, but it will be a function of what comes through on supply and what that mix-and-match looks like.

However, we are in a position to study it and understand benefits and risks.

Mr. John Barlow: Thank you very much, Mr. Chair.

The Chair: Thank you, Mr. Barlow.

We'll go to Dr. Powlowski, please, for two minutes.

Mr. Marcus Powlowski (Thunder Bay—Rainy River, Lib.): My question is for Mr. Culbert and Dr. Marchildon.

One thing I've found kind of perplexing in terms of the public health response to the pandemic has been the reluctance of health officers to use their powers under provincial health legislation, which gives public health officers the powers to protect the public and, in doing so, to issue various kinds of orders—for example, requiring people to self-isolate.

I think all provinces have that kind of legislation. I know that in Ontario it's the Health Protection and Promotion Act. Sections 22 and 35 are the two sections that give them the powers.

Why have public health officers in Canada been so reluctant to use this legislation, which would seem to me to have been placed for this very purpose?

● (1255)

Mr. Ian Culbert: If I may, I'll answer first.

I think it leads to the common misconception that medical officers of health and chief medical officers of health in the provinces and territories are independent. They're not. They are employees of the provincial government and therefore put under the restraints of the political leadership—the elected leadership—limits on how they actually use their legislation. There are political limits placed on them.

Mr. Marcus Powlowski: That was a very interesting response. Does that suggest you're in favour of giving more independence to the individual health officers so they can make those determinations, rather than it being a decision made by the political leaders in a province?

Mr. Ian Culbert: It's difficult, insomuch as medical officers of health are not elected. The electorate chooses people to make these very difficult decisions on their behalf. I think that as a result of the pandemic, people will perhaps think about these decisions differently in the future.

Dr. Gregory Marchildon: I think this is the same situation in the vast majority of countries; these are major decisions that are made by democratically elected bodies. The question becomes one of how much latitude you could create for public health officers, and I think there would probably be consensus that it should be limited, even if more extensive than currently.

The Chair: Thank you, Dr. Powlowski.

We'll go now to Monsieur Thériault.

[*Translation*]

Mr. Thériault, you have two minutes.

Mr. Luc Thériault: Thank you, Mr. Chair.

Mr. Marchildon, you said that when it comes to immunization, the federal government could have used that fact that it was paying for the vaccines as leverage and put standards in place.

What should it have done differently, given that there's a shortage of vaccines? Do they still need to be delivered?

However, studies on the time between doses were much less clear at first, and there is growing consensus now.

What more could the federal government have known about vaccination than Quebec, for example?

[*English*]

Dr. Gregory Marchildon: I think it's not so much about the knowledge of vaccination and the vaccination protocol as the data flowing, in terms of surveillance of individuals post vaccination.

There needs to be a pan-Canadian repository for this. The data needs to be collected on a consistent basis, provided by provincial governments to the federal government, so that you can do surveillance at a pan-Canadian level. This could have been part of the arrangement made with the provinces as part of the deal in which the federal government paid in full for the vaccine. In the past, it has paid part of the cost but not the full cost. This would have allowed for surveillance across provincial boundaries. This disease is not limited to one provincial jurisdiction.

[*Translation*]

The Chair: You have 15 seconds left, Mr. Thériault.

Mr. Luc Thériault: Thank you.

The Chair: Thank you, Mr. Thériault.

[*English*]

We'll go now to Mr. Davies.

You have two minutes, please.

Mr. Don Davies: Thank you.

Dr. Marchildon, on August 4 you wrote the following in Policy Options: “If federalism is going to be mobilized to achieve urgent policy solutions, we need to challenge three incorrect assertions about our federation that get wheeled out, time and again, to obstruct needed progress.”

I'm wondering if you could tell us what those incorrect assertions are and what advice you might give us to challenge them.

Dr. Gregory Marchildon: Well, the first and most important is that health care is provincial jurisdiction. There's no such thing in the Constitution. It depends on the health care sector. Hospitals are provincial jurisdiction; public health is shared jurisdiction. The federal government actually has, based upon various provisions of the Constitution, more jurisdiction than the provinces when it comes to prescription drugs.

It is true that the provinces have tended to occupy most of these fields, but that does not mean that health is a provincial jurisdiction. This is an area that the provinces and the federal government need to work very closely on. There are some areas in which the federal government can act unilaterally in a national emergency, if absolutely necessary to preserve peace, order and good government in Canada, for example. There are also important roles to be played by Health Canada and the Public Health Agency of Canada in a crisis like this.

In my view, there are other problems.

The second area that I would briefly mention is that the federal government can't manage anything, or that the provinces are much more capable of managing everything on the ground. I would say that the federal government has built up expertise in managing large tax expenditure programs that involve transfers to individuals, and the provinces have clearly demonstrated administrative capacity in terms of delivering certain services. When you're dealing with a pandemic like this, it involves a mixture of both. We have seen the federal government tending to do the things it's better at, and the provinces do the things they're better at. At the same time, there were more proactive actions that could have been taken by the Government of Canada that would have allowed Canada to be in a much better position than it is today, and there are still things that can be done as vaccination proceeds.

● (1300)

The Chair: Thank you, Mr. Davies.

Thank you, committee members.

That wraps up our time for today.

I would like to thank the witnesses for sharing with us their time, their knowledge and their expertise.

I would also like to recognize in particular today the interpreters, who operate day after day in an extremely challenging environment. Today it's been somewhat of a chaotic Internet environment, so thank you all for all your dedication and conscientious effort.

Thank you, everyone, once again.

With that, we are adjourned.