HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

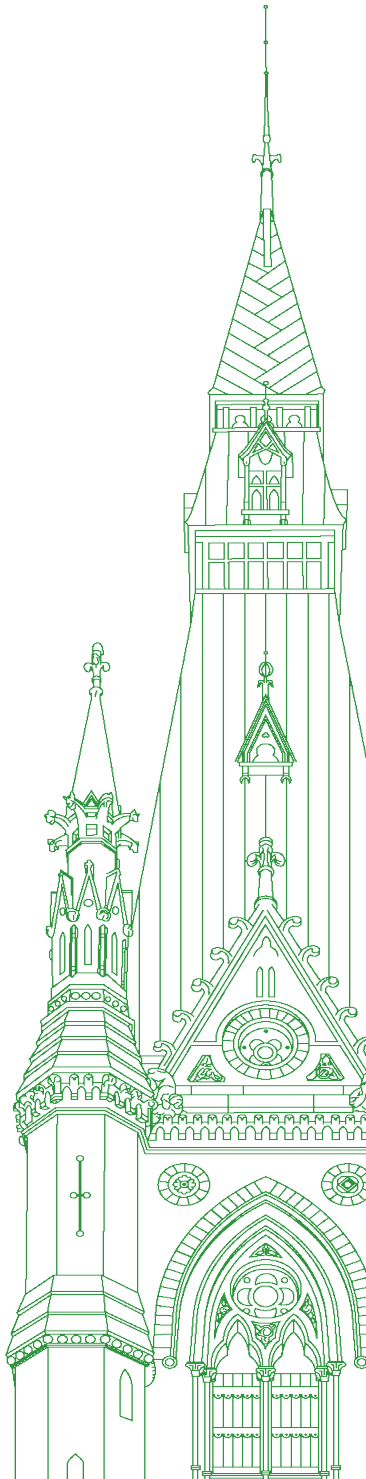
43rd PARLIAMENT, 2nd SESSION

Standing Committee on Health

EVIDENCE

NUMBER 044

Monday, June 14, 2021



Chair: Mr. Ron McKinnon

Standing Committee on Health

Monday, June 14, 2021

● (1100)

[*English*]

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

Welcome to meeting number 44 of the House of Commons Standing Committee on Health.

The committee is meeting today to study the emergency situation facing Canadians in light of the COVID-19 pandemic. I'd like to start by welcoming the witnesses.

Appearing as an individual is Dr. Steven Hoffman, professor of global health, law and political science at York University. Also appearing as an individual is Dr. Shirin Kalyan, adjunct professor of medicine, University of British Columbia, and vice-president, scientific innovation, Qu Biologics.

From the Canadian Association for Neuroscience, we have Dr. Shernaz Bamji, professor, and from the COVID-19 testing and screening expert advisory panel, we have Ms. Sue Paish, panel co-chair, and chief executive officer of the digital supercluster.

Thank you, all, for being here.

I will invite you to make a brief statement.

Just as an FYI, I have magic cards. I will display the yellow one, if I don't get too engrossed in your testimony, shortly before the end of your time. I will display the red card when your time is up. Do try to wrap up when you see that. You don't have to stop instantly, but do try to wrap up.

Thank you very much. We will start with Dr. Hoffman.

Dr. Hoffman, please go ahead. You have five minutes.

Dr. Steven Hoffman (Professor of Global Health, Law and Political Science, York University, As an Individual): Thank you, Mr. Chair, and thank you for the opportunity to appear before this committee as a private individual.

My name is Steven Hoffman, and I'm a professor of global health, law and political science at York University, where I direct the global strategy lab.

Today I'll speak about a collateral impact of the pandemic that I think this committee has likely heard less about, namely the significant damage this pandemic has caused for our global governance systems. That's bad for Canadians' health because there are increasing numbers of health threats that defy national boundaries and depend on international co-operation to be addressed: antimicrobial resistance, air pollution, climate change, microplastics, radiation, the list goes on.

Since Canada cannot tackle these transnational health threats alone, we are especially vulnerable to them as one of the most globalized countries in the world. That means that we have a special vulnerability to any weakening of our global governance systems and, as I'd argue, a special obligation to help strengthen them. Canadians' health depends on it.

To draw this conclusion, I will first point to the fact that our existing global governance systems are predicated on a model of independent sovereign nation states that dates back to the 1648 Treaty of Westphalia. This means we are literally using 17th-century social technology to address 21st-century threats.

This way of organizing ourselves might have worked when pathogens would cross continents over the course of decades, but today pathogens travel across the world in a matter of hours. It takes just 18 hours for a virus to fly from China to Toronto, where I'm based, and that includes a nice stop in Vancouver along the way.

Even more important than understanding what COVID-19 has revealed about our weak global governance systems is how COVID-19 is further breaking them. The reality is that trust is fundamental, yet today we are witnessing the greatest erosion of that trust that I've seen in my lifetime. I am speaking about the horribly inequitable global distribution of COVID-19 vaccines. Rich countries are getting vaccinated, while poorer countries have mostly been shut out. Of course, this is not new. Certainly for me, it brings back some bad memories of the HIV crisis 20 years ago when richer countries had access to antiretrovirals, while poorer countries went without. A whole lot of people needlessly died, and those who didn't became angry, distrusting and resentful.

I make these pointed remarks not as a critique of a particular government or even of a particular country. Rather, fundamentally, I blame our global governance systems, which are in desperate need of strengthening. Our current systems make it very difficult for elected governments not to prioritize the short-term needs of their citizens above others, yet considering this virus will continue to evolve and new variants of concern will continue to emerge, global vaccine inequity will lead to suboptimal health outcomes for Canadians, in addition to humanity more broadly.

Of course, there is some good news. Canada is not only leading the world in first-dose vaccinations, but we are also one of the most generous countries in pledging 100 million vaccine doses to COVAX as of yesterday. That's great, but I think it's also a sad reflection on our global governance systems when actions taken by Canada and its G7 peers can simultaneously be both generous and woefully inadequate at the same time. Even one billion vaccine doses from G7 countries means that just 5% to 6% of people in low-income countries will get vaccinated this calendar year. That means that as we prepare to go back to normal, nearly everyone in poorer countries knows that won't be their reality in 2021, and probably not in 2022 either.

Mr. Chair, we are witnessing and are active beneficiaries of one of the starkest injustices of our lives. Like with HIV, this injustice is breeding anger, distrust and resentment, both towards the global governance systems that enable it, as well as towards the people, like us, who benefit from it.

The consequences of this injustice and our broken global governance systems will be with us, Canadians, for decades to come. We will all be less healthy in the long term because of it.

Thank you again for the opportunity to appear before this committee.

I look forward to your questions.

● (1105)

The Chair: Thank you, Dr. Hoffman.

We go now to Dr. Shirin Kalyan.

Go ahead, Dr. Kalyan, for five minutes please.

Dr. Shirin Kalyan (Adjunct Professor of Medicine, University of British Columbia and Vice-President, Scientific Innovation, Qu Biologics, As an Individual): Thank you, Chair, and thank you to the honourable members of the committee for the opportunity to speak this morning.

I'd like to start off by just saying that the thoughts I'm presenting are really my own as a translational immunologist, and not necessarily those that are shared by my affiliated organizations.

My focus today is really on two issues.

The first is the apparent lack of strategy we had of ensuring that Canadians have a diverse portfolio of the types of vaccines we have in our tool box at this time. We have definitely procured a good number of vaccines and this is fantastic, but they're all of the new gene delivery platform variety, and I'll be elaborating a little bit on that subsequently.

Second is our apparent neglect to consider sex differences in immune response to infections and vaccinations in our strategy for immune protection.

To understand the first issue, I will provide a brief overview of the three broad categories of vaccines.

The first is whole vaccines and these come in two flavours. First is the live-attenuated vaccine, which provides a really fulsome training for the immune system. The one infectious disease that we have successfully eradicated through vaccination, smallpox, was done using a live-attenuated vaccine. These provide longer lasting immunity and they typically don't require multiple booster shots. I would say these are the best options for young, healthy kids. However, they take quite a while to produce.

The second type of whole vaccine is the whole inactivated vaccines. These are fairly straightforward to make. They don't take very long at all. It's essentially the whole microbe that's killed in some way. We already have one that has been approved for emergency use for COVID-19 by the World Health Organization. These whole vaccines, because of their multiple epitopes, are theoretically really less susceptible to result in a loss of efficacy with variants or aid in variants selection.

The second category of vaccines is what we call component, or subunit, vaccines. They're made by selecting immunogenic parts of a microbe and formulating these with an adjuvant. You can consider them to be highly processed versions of a double inactivated vaccine.

We have a lot of experience using the above types of vaccines for generating immune protection. In fact, the first category we've used for centuries, which really makes it easier to make educated guesses about their effects and also anticipating any safety concerns we may have.

The third category is these new cool nucleic acid delivery platforms that we have rolled out, which deliver genetic material either in the form of DNA or RNA into our cells to make or express viral proteins. We have very little, to no, knowledge on the long-term safety and efficacy of many aspects of this particular technology, especially when these vaccines are given in multiple doses. Given this lack of experience, it is very difficult to make well-informed decisions regarding their use. We've seen this play out in real time during the pandemic.

Given the above, why are all the options Canadians currently have in our tool box for immune protection in the midst of a pandemic all based on a technology in which we have the least experience and which have never been approved outside of emergency use authorization? I think we need to understand that issue a little bit more.

That leads me to the second issue. Not only do we need access to a diverse portfolio of vaccines to de-risk our response to the pandemic, but we should really strive to understand which vaccines would best serve different populations with different risk profiles.

To this point, I'd like to bring attention to sex differences that have been largely ignored, despite a very long history of sex-discrepant outcomes to infections and vaccine-associated adverse effects. This would be a prime example in which the implementation of GBA+, for example, would be highly relevant.

We know cis men are known to be, on average, more susceptible to severe infections, and we've seen that in the COVID-19 mortality data. Cis women, on the other hand, have a much stronger immune response, and this more vigorous immunity is a double-edged sword. Being female is also the greatest predictive risk factor for many autoimmune diseases. Women also bear the brunt of experiencing more serious adverse events related to vaccination, and we've also seen that with the COVID-19 vaccines.

Of note, a study has shown that women receiving half the flu dose generate a higher level of immune response compared to men who receive a typical or standard dose of the vaccine.

Given this body of knowledge, we should, at minium I think, be requesting that sex-based dosing studies for these new gene delivery platforms be performed for both safety and efficacy.

● (1110)

Thank you again for your time and considering these issues.

The Chair: Thank you.

We go now to the Canadian Association for Neuroscience, with Dr. Bamji.

Go ahead, Professor, for five minutes please.

Dr. Shernaz Bamji (Professor, Canadian Association for Neuroscience): Good morning, and thank you so much for providing me with this opportunity to speak to you on behalf of biomedical researchers in Canada.

My name is Shernaz Bamji and I'm a neuroscientist and a professor at the University of British Columbia. I'm also the president of the Canadian Association for Neuroscience, but I'm here today to not only speak on behalf of my members, who are over 1,000 scientists doing brain research in Canada, but for all Canadian scientists doing biomedical research.

I'm here to request an increase in our investment of fundamental research in Canada. We all know that investing in research will diversify and strengthen Canada's economy and will create quality jobs, but really, over the past 18 months, after we've seen the world ravaged by the COVID-19 virus, it's clear that investing in biomedical research is of utmost importance for the health of Canadians and people around the world.

As you know, in Canada, discovery science is funded by three main granting councils, collectively called the “tri-councils”. We are requesting a one-time 25% increase in tri-council funding and a 10% budget increase every year until funding levels are commensurate with other G7 countries.

Since COVID-19 is front and centre on everyone's mind, I'll share with you a Canadian success story. It's a story of my colleague at the University of British Columbia, Dr. Pieter Cullis, who has had a long-standing career studying lipid nanoparticles, which is a technology that wraps DNA and mRNA in a type of bubble so that we can safely inject them into animals and humans.

He started working on this back in 1995, but he firmly believed that one day this technology could be important for delivering therapies to patients. Along the way, he established collaborations with companies around the world, including BioNtech, which you guys probably know is a company in Germany that worked with Pfizer to generate one of the COVID-19 vaccines. If you received the Pfizer vaccine, you received a vaccine that uses lipid nanoparticle technology that was developed right here in Canada. I hope you are proud, because I certainly am.

This is just one success story out of hundreds, because of the investment that Canada has made in fundamental, non-targeted research. I say “non-targeted” because we don't know what the next needs of tomorrow will be.

The fact is that Pieter was doing his research back when the success rate for funding projects was higher. In 2005, more than 30% of grant applications were funded. Today, fewer than 14% of grant applications are funded, and I can tell you, as the chair of a research panel at CIHR just last week, there are many outstanding research projects, projects just like Pieter's, that will not get funded and, therefore, not get done.

Much of the data is pointing the same way. Canada is the only G7 country whose investments in research and development as a percentage of our GDP have actually been going down steadily in the last 15 years. Canada is now second to last in the G7 with respect to research funding. Not surprisingly, given this fact, the number of academic researchers, like me, per 1,000 people in Canada has been going down since 2011.

To show you what we are up against, in 2017 the budget for the National Institutes of Health in the United States was $30 billion U.S., while the CIHR budget was $1 billion Canadian. They spend more than 30 times the amount we do on research, but our population is only nine times less.

While the 2018 federal budget announced a historic addition of $689 million to tri-council funding, for which we are incredibly grateful, it is little more than just half of what was recommended by the fundamental science review report, which was commissioned by the government in 2017. Without this critical increase in funding, we will not be able to compete on the world stage. We will not be able to contribute to the next global health crisis, like we did with SARS and COVID—and there will be a next time.

Canadian researchers are ready to put in the hard work and we now look to you to help fund this work.

Thank you so much for listening.

● (1115)

The Chair: Thank you, Dr. Bamji.

We go now to the COVID-19 testing and screening expert advisory panel.

Ms. Paish, go ahead, please, for five minutes.

Ms. Sue Paish (Panel Co-Chair and Chief Executive Officer of the Digital Supercluster, COVID-19 Testing and Screening Expert Advisory Panel): Thank you, Mr. Chair and honourable members, for this opportunity to speak about the testing and screening expert advisory panel's fourth report, "Priority strategies to optimize testing and quarantine at Canada's borders", which was published on May 27.

As vaccination increases and as we see the number of cases in the third wave subsiding, it appears many regions are now stabilizing. It's an opportune time to start to consider the appropriate balance of measures to protect public health while also reopening our borders. Supporting economic recovery depends on enabling the movement of people and goods across the border, while at the same time being vigilant in protecting the health and safety of Canadians and limiting the risk of importing variants and viruses.

Managing borders is complex. Measures must be easy to understand, equitable, feasible and consider both the benefits and the risks of harm. The panel took all these matters into consideration in preparing the recommendations that I'm going to summarize for you today.

The panel reviewed the various scientific evidence and presented to the Minister of Health recommendations for border measures relative to five different groups of travellers: unvaccinated, vaccinated, partially vaccinated, previously infected and exempt travellers.

For unvaccinated travellers, we recommend a testing approach similar to what is currently in place, including a predeparture test—either a PCR test within 72 hours of departure or a rapid antigen test within 24 hours of departure—an on-arrival test and quarantine. In respect of the quarantine periods, the panel found sufficient evidence to conclude that a negative test seven days after a traveller has arrived in Canada provides the same level of protection as a negative test on day 10.

Given the high efficacy of the vaccines authorized by Health Canada, the panel recommended that fully vaccinated travellers need only to complete an arrival test for surveillance purposes but no quarantine requirements, with a proof of vaccination. This approach also provides an incentive to encourage Canadians to get vaccinated.

For the partially vaccinated traveller, the panel found emerging evidence that a single dose of vaccine provides effective protection against severe disease, but it does not guarantee against infection. Therefore, we recommend that the measures for this population include a predeparture test, an on-arrival test and quarantine until a negative test result arrives after departure.

For a previously infected traveller, the panel recommends an on-arrival test and quarantine until a negative test result after arrival is confirmed.

For exempt travellers, based on the data the panel reviewed, we recommend voluntary testing at both land and air borders, primarily for surveillance purposes.

The panel also made a number of additional recommendations to improve the simplicity and adherence to border measures, including aligning travellers who are arriving by air and land borders so that they are consistent, and discontinuing the requirement for non-exempt travellers to stay in a government-authorized accommodation while awaiting their on-arrival test result.

Similarly, the panel concluded that testing requirements that vary by country of origin should not generally be implemented for travellers entering Canada except under unique circumstances, because once a variant is detected, it is likely already present in many countries, including Canada.

The panel also noted the critical importance of quarantine adherence and recommends increased monitoring of quarantine and adherence to requirements for testing, as well as the prompt reporting of a positive test result to local public health authorities where individuals reside to allow an immediate follow-up from that local health authority.

In conclusion, I noted carefully the announcement recently that the government will be easing travel measures in a phased approach, including by reducing potentially the testing and quarantine requirements for vaccinated travellers. Taking a phased approach to implementation aligns with the panel's view that changes to border measures need to be incremental. They need to be carefully evaluated in the context of increasing experience and data, the global situation regarding variants of concern and new evidence that might emerge as vaccination continues to increase.

Thank you for your interest in this work. I'd be pleased to take any questions from the committee.

● (1120)

The Chair: Thank you, Ms. Paish.

We will now start our questions.

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

Hon. Michelle Rempel Garner (Calgary Nose Hill, CPC): Thank you, Chair. I'll be directing my questions to Ms. Paish.

First of all, thank you so much for the work the panel did. It was very important in moving the country forward. I have a few questions for you with regard to the report itself.

On what date did the panel complete the report, “Priority strategies to optimize testing and quarantine at Canada's borders”, and on what date was it submitted to the government?

Ms. Sue Paish: Thank you for the question.

This is our fourth report. We initiated our work on the report in late February, and we consulted very broadly, listening to industry groups and medical experts, as well as a variety of experts in other fields. We delivered our report to Health Canada on May 2. They serve as our secretariat for the panel. That's when we, as a panel, concluded.

After that, there was a period in which officials went through processes to evaluate and get the report ready to publish, including things like—you know this more than I do—translation, and things like that.

Hon. Michelle Rempel Garner: Thank you. I have limited time.

Ms. Sue Paish: I'm sorry.

Hon. Michelle Rempel Garner: It was submitted to the government on May 2. That would mean that the quarantine hotel provision was extended on May 21, after the government had received the report advice. Would that be correct?

Ms. Sue Paish: We met with the FPT—the federal-provincial-territorial—health ministers on May 10, which is part of our normal process to receive their input. We were still getting that final input on May 10, and then the report was published on May 27.

Hon. Michelle Rempel Garner: I notice that the government has chosen not to enact the recommendations of the panel in the first instance. Are you aware of any other data that the government would have received to inform their current approach to, for example, the quarantine hotels?

Ms. Sue Paish: We don't know what sources the government has beyond our panel that it takes into consideration, but we do know that there is a lot of information and a lot of data and evidence in areas that impact borders that are not within the purview of our panel. Our panel is just focused on testing and screening.

Hon. Michelle Rempel Garner: Sure. Are you aware of any other data that the government would be looking at on testing and screening that would be informing its decision to keep the status quo?

Ms. Sue Paish: We're not advised of the other sources that the government considers. We look at a very broad base of evidence, but there are other things that have to come into consideration in opening the borders.

Hon. Michelle Rempel Garner: Have you gotten any input from the officials as to why they haven't chosen to enact your recommendations?

Ms. Sue Paish: Once we file our report, the report stays with government. We've not had further engagement at this point in terms of their considerations. We did note in our report very clearly that the evidence and data is evolving rapidly. We were starting this report while the third wave was on its increase, if you will, and we all know that things have changed a lot since mid-February. We know that there's a lot there, but we haven't heard.

Hon. Michelle Rempel Garner: Is there any reason that you would speculate on as to why the government has not chosen to enact your recommendations?

Ms. Sue Paish: I'm not good at speculating, so I think I'll pass on that.

Hon. Michelle Rempel Garner: Is there any data that you could cite that would support the government's decision not to enact your recommendation?

● (1125)

Ms. Sue Paish: As we understand it, the government is certainly exploring elements of our report for implementation. I'm not aware that they are not implementing the report. I think one of the critical elements of our mandate is that borders be done in a measured, a very cautious and a phased way because there are multiple elements that need to be considered. The information that we have, which is what we have in the public domain in terms of the reopening—

Hon. Michelle Rempel Garner: I'm specifically referring to the five classes of travellers that you outlined in your remarks, not necessarily anything else. That hasn't been implemented yet. Is that right?

Ms. Sue Paish: That's correct. I understand that, from what we've heard—

Hon. Michelle Rempel Garner: Thank you. I just have limited time.

On page 9 of the report, you note that the “hotel quarantine of up to 3 days is inconsistent with the incubation period of SARS-CoV-2.” Can you expand on what you mean here?

Ms. Sue Paish: Absolutely. The evidence, as we know, is that the incubation period for SARS-CoV-2 is approximately seven days, so being in a quarantine accommodation for three days does not necessarily provide the protection the population and public health officials would want.

Hon. Michelle Rempel Garner: Do you think that the hotel quarantine was perhaps just a deterrent to travel?

Ms. Sue Paish: I don't know why it was implemented. The other reason that we suggested changing it and eliminating these provisions is that it's being applied differently to land and air travellers. Therefore, it was really not fulfilling the purpose for which it might have been implemented because you're not catching travellers who come across the border—

Hon. Michelle Rempel Garner: Do you think the hotel quarantine requirement should stay in place for any traveller?

Ms. Sue Paish: We've recommended, as you know, that the mandatory requirement for the hotels, the government-authorized hotels, be replaced and not be continued, that it be replaced with a more comprehensive and close monitoring of at-home quarantines.

There would need to be—and I think we note this as you'll see in the report as well—

Hon. Michelle Rempel Garner: I have one more question I want to get—

The Chair: Actually, Ms. Rempel Garner, your time is up.

Hon. Michelle Rempel Garner: Okay, thank you.

The Chair: Thank you, Ms. Paish and Ms. Rempel Garner.

We go now to Dr. Powlowski.

Dr. Powlowski, you have six minutes, although I understand that you wish to pass four minutes over to Ms. O'Connell.

Go ahead, please.

Mr. Marcus Powlowski (Thunder Bay—Rainy River, Lib.): Yes, and please hold up your red card when we're on to four minutes so that I know that.

My questions are for Dr. Hoffman. Certainly the question of when and how we reopen the border is absolutely important, but I would suggest that an even more important issue is the global governance structures with respect to health and particularly the spread of infectious disease. As much as vaccines have been the answer with respect to managing this pandemic, this is certainly how we can do better in the future.

With that in mind, I want to ask you, Dr. Hoffman, a question about the international health regulations that were passed by the World Health Organization in 2005 in response to the SARS pandemic, though I'm not sure if it was ever actually categorized as a pandemic. This was supposedly establishing a mechanism for WHO to deal with an outbreak of an infectious disease like this. A committee determines what is classified as a public health emergency of international concern, and WHO then has the power to deal with it.

Dr. Hoffman, are the international health regulations a sufficiently robust document? Can and should they be reformed, or should we have an international treaty?

I expect you can speak for the rest of the four minutes on that, so go ahead, Dr. Hoffman.

Dr. Steven Hoffman: Great. Thanks so much for the question.

I would succinctly say that our global governance systems are not up to 21st-century threats, as we're seeing with COVID-19. There's a full range of different threats for which they are not up to standard.

When we look to the World Health Organization, we see that it is the leading [*Technical difficulty—Editor*] authority on public health, but for at least a couple of decades, it has been chronically denied the resources that it needs to actually carry out its job effectively. We're at a point now where only 20% of WHO's budget is funded by core contributions. Eighty per cent is conditional. It's voluntary. The organization can't count on it, such that when bad things happen, like COVID-19, the organization is left to scramble.

Now there are the international health regulations, which are the legally binding instrument that govern how 195 countries around the world are supposed to respond to outbreaks, but it is itself a rather weak instrument. It was revised most recently in 2005, as was mentioned.

Its origin, though, is actually 1892. It used to be called the international sanitary convention. Again, we are using mechanisms that don't have compliance mechanisms and don't have sanctions if countries don't follow through. As a result, most countries in the world are currently violating that binding international legal agreement.

Consequently, there is a proposal on the table for a global pandemics treaty. Every global health law professor in the world, myself included, would be supportive of that. The reason I can say that so clearly is that I currently chair the Global Health Law Consortium, which is a network of all the world's global health law professors.

If you bring different law professors into the same room, we all disagree on basically everything, yet the one thing we agreed on is that the international health regulations need to be reformed. They need to be strengthened, and there is also consensus that there's a big opportunity with the potential global pandemics treaty.

● (1130)

Mr. Marcus Powlowski: Thank you. I think I will give it to Ms. O'Connell.

The Chair: Thank you.

Ms. O'Connell, please go ahead. You have two and a half minutes.

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

Ms. Paish, I just wanted to follow up on the questions around quarantining. I won't have enough time to get into all of the details, so forgive me if I'm speaking a little fast. I understand the phased approach, and I think that makes a lot of sense for those five categories. You can't just open it up immediately. There would be an influx in terms of having to deal with that, so with that phased approach, I think the government has already committed to some of those elements moving forward. However, you also talked about the land versus air border.

I think there is a conversation that I may not have time for here in terms of the risk profile of being on an airplane and in an airport, versus in your own personal vehicle going to your own personal residence, but you said something there. You said that it's about catching travellers. Is there not some acknowledgement that when dealing with the quarantine hotels, it's not about the incubation period. It's about the testing and ensuring that those test results come back negative before someone would move on to their community. It's about catching those positive cases so that they aren't spread into the community first. This is something that provinces and territories spoke a lot about.

Did you hear that from provinces and territories in your work, in terms of ensuring that enforcement of quarantine after travel and before the negative test result is in place?

Ms. Sue Paish: Let me just summarize very quickly again what the provisions around those hotels are.

Right now, it's not being applied equally to land and air travellers. We saw a lot of evidence at our panel that travellers were choosing to fly from an international destination into a United States airport and then drive across the border to avoid those quarantine hotels, so it's not working in that context and it's very expensive for taxpayers to administer these hotels.

We also received evidence that arriving at a land border, a traveller could [*Technical difficulty—Editor*] hotel by paying a fine, which completely undermines the purpose of the hotel. As I mentioned, it doesn't comply with the incubation period for SARS-CoV-2. When we presented to the FPT health officers, as well as the ministers, we did not get any specific comments or questions that disagreed with the approaches we were taking. We were all, I would say, ad idem that we are trying to reduce the importation at the borders and that the current approach could be improved.

The Chair: Thank you.

Thank you, Ms. O'Connell.

[*Translation*]

We'll now go to Mr. Lemire.

Mr. Lemire, you have six minutes.

● (1135)

Mr. Sébastien Lemire (Abitibi—Témiscamingue, BQ): Thank you, Mr. Chair.

My question is for Dr. Bamji.

First of all, I'd like to thank you for being with us.

The pandemic has highlighted the fact that investments in basic research are paramount, as they have an impact on people's daily lives; they help prevent diseases, cure people and deal with the climate crisis, just for starters.

We need to stop compartmentalizing everything and seeing increased funding for basic research as simply an expense. Instead, we need to see it as a societal investment, one that allows society to better develop over the long term.

Do you agree with that and, more importantly, can you explain your point of view?

[*English*]

Dr. Shernaz Bamji: Thank you.

I absolutely agree with you. This is why we believe that funding fundamental science—and by fundamental science I just need to kind of explain that it is non-targeted. You don't say, here's $2 billion towards COVID or whatever, because we don't know where the next big important crisis is going to be coming up. Canada has always been able to compete on the world stage and also been able to provide help whenever we have needed to, for example, in the SARS situation, as well as in the COVID situation.

We used to be funding science very similarly to the other G7 countries, and now it is going down. The actual research funding is going down. Our ability to compete is going down, and we're in a very dire situation. When you're funding 14% of the project grants that are coming in, you're not funding the majority of the really excellent applications that are coming in.

Thank you.

[*Translation*]

Mr. Sébastien Lemire: Dr. Bamji, the COVID-19 vaccine race made us realize that basic research is essential to enable innovation and that the exploratory part of the research feeds into the applied research, as it is the tip of the iceberg that we see more of. In short, messenger RNA vaccines are, after all, the result of basic work that began in the late 1970s and has never stopped since.

Given the importance of basic research, do you consider the latest investments proposed by the government to be sufficient, given that they have been greatly reduced over the past 10 years?

[*English*]

Dr. Shernaz Bamji: Once again, absolutely, I totally agree that we're reaping the fruits of what we sowed a long time ago with respect to mRNA vaccines. That was started, again, back.... A Canadian researcher at Harvard contributed to this as well.

Right now we are unfortunately not funding at the proper level that we would need. I would say that we would need to fund about 25% of the grants that are coming in to appropriately fund the great grants that are coming in at the moment, especially when it comes to mental health.

Because I am a neuroscientist and president of the Canadian Association for Neuroscience, we are really quite worried about the mental health situation. The mental health work that people have been doing is going to help us to deal with these kinds of things, but it is coming from fundamental science, which we are not actually funding at the appropriate level.

[*Translation*]

Mr. Sébastien Lemire: Effectively, as a society, we must learn to prioritize investments and build our future on a solid foundation. Obviously, we need to stimulate the modern economy based on innovation and highly skilled scientific knowledge.

In short, underinvestment in basic research has unfortunately led to a brain drain, a phenomenon that has been ongoing for many years. What do you think we can do to stop this exodus and make Canada an attractive place for scientists again?

[*English*]

Dr. Shernaz Bamji: Canada is a really attractive location for scientists. Whenever I go to a conference, people are always quite impressed by Canada as a country. We have so much to offer as far as our society goes.

However, when we are sending out applications or when we are actually trying to find people to come to our university, we're finding that people are balking at the investments we are making. They are very interested in coming to Vancouver, for example, to the University of British Columbia. They apply for the actual job advertisement, and then they start digging a little bit further and looking to see how much we are willing to invest—the amount of the average CIHR grant, the ability to get the CIHR grant, the success rate—and that is causing a lot of the brain drain, I would believe.

The other issue is that we are also losing our own Canadian students. The students are looking at us frustrated, writing grant after grant and not getting funded. The students are saying to themselves, "I don't want this lifestyle."

I have only one student who has gone on to continue in an academic setting. Many of them decide to leave academia. They go into industry, etc., and that is because they are horrified by what they're seeing. We cannot disillusion our own trainees like this.

● (1140)

[*Translation*]

Mr. Sébastien Lemire: I will end with this question. Are you afraid of the danger of the "covidization" of scientific research? By this I mean that all investments are devoted to the same issue, to the detriment of funding in other areas.

[*English*]

Dr. Shernaz Bamji: Absolutely. COVID is not a thing of the past. It is still here, and it's going to be here with us for many years. However, we do not know what the next thing is going to be, what the next crisis is going to be. It might be a virus. It might not be a virus. We have no idea where it's going to come from.

The fact is that every single thing that we have been able to do—we've been able to catch the viruses, etc., all the different global issues—is because of fundamental research. We have no idea where breakthroughs are going to come from.

The biggest breakthrough, I believe, is CRISPR technology, which started off studying bacteria. With CRISPR technology, we now possibly have the ability to treat many genetic diseases, and it will be coming up fairly soon, I hope.

[*Translation*]

The Chair: Thank you, Mr. Lemire.

Mr. Sébastien Lemire: Thank you.

[*English*]

The Chair: We go now to Mr. Davies.

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

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

Dr. Kalyan, having watched the last year and a half, Canada rolling out our vaccine production and procurement and delivery strategy, what are your main take-aways for us?

Dr. Shirin Kalyan: The COVID-19 pandemic has provided an important opportunity to identify and rectify our deficiencies in having a cogent plan to deal with emerging infectious threats that takes into account not only the short immunological health of Canadians but also the long-term health. This is a nice segue from what Dr. Shernaz Bamji was speaking about.

My first wish for the immediate response would be to immediately diversify our portfolio of the types of vaccines we have in Canada, specifically procuring or acquiring in some way whole inactivated vaccines. As I mentioned, one was just authorized by the World Health Organization for emergency use.

Another, which I particularly favour due to its formulation, is in development by Valneva and the U.K. National Institute for Health, for example. They're in phase three development. They've been looking at Canada for a potential phase three trial site, and I'm hoping we would take advantage of that. [*Technical difficulty—Editor*] inactivated vaccines would be better booster shots for people who have already had COVID-19 and recovered, because they would be able to retain that more fulsome memory.

Secondly, we need to ensure we have capabilities to develop a vaccine of our own preferred design in Canada. We have no GMP facility here at this moment, and this is not new. We've heard a lot about this. India, China and Kazakhstan have their own facilities, and they've all developed inactivated vaccines for their populations. Not having this capacity and expertise has left us vulnerable and potentially at the whim of external interests, which are I think what we're beholden to at this time.

Thirdly, we need to ensure we have a more diverse expertise to advise on vaccine development and/or procurement, which includes a deeper understanding of the immune system and what constitutes immune competency to a given pathogen.

Lastly, I would say we need to make it a policy for drugs, particularly vaccines and immunotherapy that are approved in Canada, to include sex-based dosing analysis for both safety and efficacy.

Mr. Don Davies: What specifically are these unknown concerns with the new gene delivery platform vaccines that we are using?

Dr. Shirin Kalyan: What we don't know is what we don't know. For me, one of the biggest black holes is that we have no clear biodistribution or in-situ expression data for these gene delivery vectors, meaning we don't know where these go and where they're being expressed.

As an immunologist, it's still unclear to me how these expressed proteins are presented to the immune system. Typically our immune system relies on a danger signal, or what we call pathogen-associated molecular patterns or PAMPs. This helps us to differentiate cell from non-cell and what's dangerous from not dangerous, to launch an appropriate type of immune response. Antiviral immunity is different from antifungal immunity, which is different from antiparasitic. These strategies are different.

In respect, for example, to the lead mRNA vaccine candidates we have, I don't see where that instructive information is contained for the immune system to know what exactly it's supposed to be fighting. It's like eliciting an answer without knowing what the question is. The long-term consequences of this immune ambivalence I think are yet to be determined.

Lastly, in terms of the DNA vector vaccines, we have not evaluated and we should—so I would add that to my wish list—the antibody and the immune response to the adenovirus vector itself, the thing carrying the message. Presumably we'd be generating a pretty strong response to the vector, which theoretically means that each subsequent booster shot would elicit a lower immune response to the message, because the messenger is being wiped before it delivers it.

We have not asked for any of this more detailed nuance. We could be giving booster shots eventually, by the third time, and they're just blanks for our immune system. We're not launching sufficient immune response to the spike protein that is being encoded in the message there.

● (1145)

Mr. Don Davies: I'm going to throw two questions in here.

First, why do you prefer the live attenuated vaccines for children, and second, I mentioned women.

I think women are generally not considered in our male-dominated health care system. We know that women bear the brunt of experiencing more severe adverse events related to vaccination. You commented on that. We know that women have twice as many antibodies as men and we know that they have increased susceptibility to autoimmune diseases, yet we're giving the exact same medication, the exact same dose, to children and women.

What's your position on that?

Dr. Shirin Kalyan: I'll take the easier question first.

For the live attenuated vaccines, they engage and train all parts of the immune system so it acts as one. That includes training the innate immune system, which also has that type of memory that's contained at the epigenetic level, and mobilizing the awareness of the adaptive immune system to respond appropriately to a given type of pathogen. Multiple studies have shown that this type of training provided by live attenuated vaccines protects kids not only against specific pathogens that are a target of the vaccine, but they also provide a more broad range of protection against immune pathologies.

For example, the BCG vaccine, which is a really old-school live attenuated vaccine, is now being tested for the treatment of type 1 diabetes. Young immune systems require this education and exercise, if you will, to function properly, just like other complex systems such as muscles, bones and language acquisition.

In respect to women, this is not new. It has been forever. I think a large part is that drug development doesn't want to make anything more complicated than necessary, and looking at sex-based differences has been ignored across the board. However, I think when it comes to the immune system, given the profound difference, it is unfortunate that we continue to just have a regression to the mean, essentially. That is what we do, and women tend to bear the brunt for things like vaccination. We really should be looking for more sex-based analysis in terms of dosing and safety.

Mr. Don Davies: Thank you.

The Chair: Thank you, Dr. Kalyan.

Thank you, Mr. Davies.

That wraps up our round of questions. I think we can try to squeeze in another quick round with maybe two minutes per party, if we're all very disciplined.

We'll go, I believe, to Ms. Rempel Garner or Mr. Barlow.

Hon. Michelle Rempel Garner: It's Mr. Barlow.

The Chair: Go ahead, Mr. Barlow.

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

Quickly, this question is to Ms. Paish.

You were talking about inconsistency between land and air borders.

Did the panel take a look at the Alberta pilot project, which was on initially during COVID, where they were using rapid testing at the airports and the land border? There were very strong results from that, very positive results. Did the panel look at that as an option, comparing that to the hotel quarantine?

Ms. Sue Paish: Thank you, Mr. Barlow.

Yes, we did. We looked at a number of the pilots. We looked at the Alberta pilot, and Verna Yiu actually sits on our panel. We also looked at the pilots that had taken place in other provinces as well. Those were all incorporated into our recommendation.

● (1150)

Mr. John Barlow: Ms. Paish, was there any evidence in terms of the effectiveness of a hotel quarantine over quarantining at home?

You talked about a comprehensive at-home quarantine program. Through the panel's review, was there any evidence that showed that the hotel quarantine was more effective than a comprehensive at-home quarantine program?

Ms. Sue Paish: No. We didn't have any evidence that established the efficacy of that three-day quarantine hotel program.

In fact, as you know, our recommendation includes more stringent observation and support of people in their place of quarantine at home. That, combined with a seven-day PCR test, was seen as being the most effective way of both supporting the quarantine and making sure that if the virus had in fact developed during that period of time it would be caught.

Mr. John Barlow: Thank you.

I have one last question to Dr. Kalyan.

Can you say if an attenuated vaccine is more effective? Some of your testimony was quite interesting there.

Dr. Shirin Kalyan: Historically, given that it's the only one that has succeeded in wiping out infectious diseases, I would say yes, but it takes longer to develop these live attenuated vaccines.

I was looking at the types of vaccines being developed on the spreadsheet of the World Health Organization. There are a couple that are in development. That kind of training that engages the entire immune system and puts everything on the same page, as opposed to giving a piece of information to only one arm, is going to be by far, in my opinion, more effective. Also, it provides the right exercise for your immune system to operate more functionally overall.

For children, definitely there has been quite a large body of evidence showing that live attenuated vaccines are better.

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

The Chair: Thank you, Mr. Barlow.

We will go now to Ms. O'Connell.

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

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

Ms. Paish, following up from where we left off, at that meeting on May 10, I believe I wrote down that you were consulting with provinces and territories on the findings and on the panel's recommendations. If I heard correctly, you didn't get much push-back in that there was agreement around the table for that.

At that time, in my home province, for example, there were ads being run showing “blood maps” of closing the border and how the third wave was completely to blame on the border. At the time of these blood maps, of the virus spreading, in the political realm you're saying that provinces and territories were actually supportive of lifting restrictions. This would be in your conversations. I'm not asking you to comment on the political side of things, but in those conversations, they were supportive of lifting border measures.

Ms. Sue Paish: In the discussions we had both with the medical health officers and with the federal, provincial and territorial ministers—so at two different meetings—the health officers had suggestions and comments, but I'd say those were supportive and things like the Alberta pilot were discussed. With the ministers, there was no criticism or concern raised about elements of the report.

Ms. Jennifer O'Connell: That's really interesting. Thank you.

In terms of the phased approach, again, the announcement made was that the first phase would allow fully vaccinated individuals to have that testing, but to be able to avoid the hotel quarantine as well as a home quarantine once a negative test result came back. Is that pretty consistent with your recommendations?

Ms. Sue Paish: Our recommendation is that nobody avoids a quarantine. Our recommendation is framed around the nature of the quarantine. You have your predeparture test. If that's negative, you come into the country. You then must have an approved quarantine plan in place. There may be a need for those who don't have a quarantine plan to have special consideration.

Once you have completed seven days of quarantine and have a negative PCR test, then the quarantine is ended.

The third element of that recommendation is that the quarantine period of seven days needs to be very carefully monitored and supported for Canadians, but there's no suggestion of avoiding a quarantine.

● (1155)

Ms. Jennifer O'Connell: Perfect. Thank you so much.

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

[*Translation*]

We're back to Mr. Lemire.

Mr. Lemire, you have two minutes.

Mr. Sébastien Lemire: Thank you, Mr. Chair.

I'll continue with Dr. Bamji.

In 2019, you asked political parties some questions that we found very relevant.

I have a question for you, because I am sincerely curious to know your opinion on this subject.

My question is this. How do you see the role of government in research, given that government agencies should perhaps themselves play an active role in targeting scientific research priorities?

[*English*]

Dr. Shernaz Bamji: Thank you for the question.

I think the government people are there to govern, and the scientists are there to actually do the science. The scientists definitely have the ability to target their research to what they think is the most important thing. We would once again prefer not to have the government come in and ask us to do any sort of targeted research as they have in the past.

Even with COVID-19, again, we're very happy with the influx of funding into the COVID-19 research because we absolutely have to do that. That is going to be a very big thing for the next even 10 years down the line. However, we are not totally sure where the next crisis is going to come from—I keep saying that—and that is why we need to have completely unfettered funding, which is open funding for the tri-councils—CIHR, NSERC and SSHRC.

[*Translation*]

Mr. Sébastien Lemire: Funding for basic research depends on the mesh between the pharmaceutical industry and governments. Therefore, do you think there should be better collaboration between these stakeholders?

Should the government substitute more for industry?

[*English*]

Dr. Shernaz Bamji: Should the government take the place of industry more? I'm sorry but I'm not really qualified to answer something like that.

[*Translation*]

The Chair: Thank you, Mr. Lemire.

Mr. Sébastien Lemire: Thank you.

[*English*]

The Chair: We'll go now to Mr. Davies.

Mr. Davies, wrap this up in two minutes please.

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

Dr. Kalyan, I'm wondering if there's a financial aspect to this in terms of why we're not proceeding with whole vaccines. Is there any financial aspect to that, specifically with respect to the ability to patent or profit off of whole vaccines versus, say, mRNA vaccines?

Dr. Shirin Kalyan: I am speculating. It's really hard to convince large.... Pharmaceutical companies, on average, would have the greatest capacity and resources to roll out anything super fast. They have their feet on the ground. They can do clinical trials. They have manufacturing capacity, etc. However, with the vaccine world, pandemics come and go, as we saw previously with the SARS issue. It came about and then it sort of dissipated.

With regard to putting in a lot of resources, there's not a lot of enticement for pharmaceutical companies to do that unless they get some useful information out of it. Through this pandemic, they have gotten a lot of data on the safety and efficacy of these viral vectors. I think that was the big draw, and why we didn't....

There are those inactivated vaccines, as I mentioned. If you have the capacity to make your own type of vaccine, you wouldn't be beholden to these other potential interests.

Mr. Don Davies: Thanks. I'll try to squeeze in my second question.

A group of clinician scientists and patient advocates recently asked the FDA in the United States not to prematurely grant licensure to COVID-19 vaccines that have emergency use authorization right now until they have fulfilled all regulatory requirements, which include biodistribution studies and a minimum two-year follow-up of participants of pivotal trials.

Is that something, in your view, that Health Canada should follow?

Dr. Shirin Kalyan: Yes, it is—100%.

There is a desire to push this through now to regulations. What we'll also see is a push to regulate the use of these platforms for other drugs, because once you have a [*Technical difficulty—Editor*] for one, then it's easier to enter any other type of indication.

I definitely think that we need to wait and understand how these work—at a minimum the biodistribution and expression data, for sure.

Mr. Don Davies: Thank you.

The Chair: Thank you, Mr. Davies.

Thank you to all of the witnesses. I thank you for your time today and for sharing your expertise with us. Thank you for your considerable ongoing work in your respective fields.

With that, we will suspend and bring in the next panel.

Thank you, all. We are suspended.

● (1155)

(Pause)

● (1200)

The Chair: I call the meeting back to order.

Welcome to meeting number 44 of the House of Commons Standing Committee on Health. The committee is meeting today to study the emergency situation facing Canadians in light of the COVID-19 pandemic.

I'd like to welcome back the witnesses.

We have, from the Department of Health, Dr. Stephen Lucas, deputy minister. From the Department of Public Safety and Emergency Preparedness, we have Mr. Rob Stewart, deputy minister. From the Department of Public Works and Government Services, we have Mr. Bill Matthews, deputy minister. From the National Advisory Committee on Immunization, we have Dr. Matthew Tunis, executive secretary. From the Public Health Agency of Canada, we have Dr. Theresa Tam, chief public health officer; Brigadier-General Krista Brodie, vice-president, logistics and operations; and Mr. Iain Stewart, president.

I will notify the committee that Mr. Stewart, Dr. Tam and Brigadier-General Brodie have a hard stop at one o'clock. They have other engagements.

With that, we will go straight into the questions.

I believe it's Ms. Rempel Garner who will start.

● (1205)

Hon. Michelle Rempel Garner: Yes, Chair, it's me.

I was having a small technical issue, but I am now good to go.

The Chair: Go ahead.

I'll start your time as of now, for six minutes, please.

Hon. Michelle Rempel Garner: Thank you, Chair.

I'll start with a question for Dr. Lucas regarding the announcement that the Johnson & Johnson vaccines the government had been holding were going to be destroyed. Have they been destroyed?

Dr. Stephen Lucas (Deputy Minister, Department of Health): I don't have that particular information.

On Friday, Health Canada did determine that the batch would not be accepted and the—

Hon. Michelle Rempel Garner: Thank you.

On the doses that will be subject to this non-use or discarding order, did we pay for them?

Dr. Stephen Lucas: Yes, the doses were paid for.

In terms of how that is being managed, I would turn to my colleague Bill Matthews to respond.

Hon. Michelle Rempel Garner: Briefly, will we be getting reimbursed for those doses?

Mr. Bill Matthews (Deputy Minister, Department of Public Works and Government Services): I'll answer the question in a different way.

Those doses will not count against the deliveries under the contract with J&J or Janssen.

Hon. Michelle Rempel Garner: When is the next set of Johnson & Johnson doses scheduled to arrive in Canada?

Mr. Bill Matthews: We're working with Johnson & Johnson to line up deliveries potentially for sometime this month, so in the next couple of weeks.

Hon. Michelle Rempel Garner: Mr. Matthews, while I have you here, on the contracts for vaccines that were delivered to the health committee on Friday, did your department provide those to the law clerk in redacted or unredacted format?

Mr. Bill Matthews: Those documents were redacted by the department before they were furnished to the law clerk.

Hon. Michelle Rempel Garner: Just to be clear, the law clerk received them in redacted format.

Mr. Bill Matthews: Those documents were redacted by the department before they were sent on.

Hon. Michelle Rempel Garner: Thank you.

For CBSA, has the Privacy Commissioner been consulted on the [*Technical difficulty—Editor*] for biometrics that was discussed in a CTV article last week?

Mr. Rob Stewart (Deputy Minister, Department of Public Safety and Emergency Preparedness): There's nobody here from CBSA, although they are in the portfolio of Public Safety. I can undertake to get back to you on that question.

Hon. Michelle Rempel Garner: Can you please table that response with the committee?

Mr. Rob Stewart: Yes.

Hon. Michelle Rempel Garner: Similarly, since it falls under the portfolio, will Canadians be required to submit biometrics like retinal scans and fingerprints when getting a new passport in the future?

Mr. Rob Stewart: That question would need to be directed to Immigration, Refugees and Citizenship Canada.

Hon. Michelle Rempel Garner: Thank you.

It's my understanding that some 9,000 CBSA workers are preparing for strike votes. Is this going to pose a challenge for any potential reopening measures of the U.S.-Canada border?

Mr. Rob Stewart: There is a risk that labour action by the CBSA could produce a [*Technical difficulty—Editor*] labour shortages so that is a concern that CBSA has, yes.

Hon. Michelle Rempel Garner: Has your department or CBSA provided advice to the government to delay the reopening of the Canada-U.S. border due to potential strike action by the CBSA agents?

Mr. Rob Stewart: No.

Hon. Michelle Rempel Garner: Thank you.

Again, we've heard that the American government may consider unilaterally reopening the U.S.-Canada border. Has there been any analysis done for what testing capacity would be needed in that eventuality, given that there may be a significant number of Canadians going to the U.S. through the land border at that time?

Mr. Rob Stewart: I believe the testing capacity question is best directed to my colleague Iain Stewart.

● (1210)

Mr. Iain Stewart (President, Public Health Agency of Canada): Thank you for the question.

Modelling is being done under various scenarios for the testing capacity required for different opening strategies.

The Chair: Mr. Stewart, could you make sure your video is on to help the interpreters? Thanks.

Mr. Iain Stewart: Thanks, Mr. Chair. I'm sorry.

Hon. Michelle Rempel Garner: Thank you.

As well, Mr. Stewart, it's been reported that the federal government is not currently tracking the vaccination status of returning Canadians who got their COVID-19 vaccine abroad. Is this correct?

Mr. Iain Stewart: Are you asking if we track the vaccination status of people currently arriving at this moment? That's right. We do not.

Hon. Michelle Rempel Garner: Okay.

Do you know what the estimated number of people is who have been vaccinated abroad?

Mr. Iain Stewart: I don't have an estimate, and I'm not aware that we've done one.

Hon. Michelle Rempel Garner: Is this going to be completed, given that it may affect reopening targets?

Mr. Iain Stewart: We do have estimates of the volume of Canadians abroad and the likely patterns of their returning based on annual movements. Those are underpinning our volume determinations.

Hon. Michelle Rempel Garner: Could you table that with committee, please?

Mr. Iain Stewart: I will see what is available that is appropriate to be tabled in this way.

Hon. Michelle Rempel Garner: Thank you.

With respect to the June 9 announcement to allow those who are currently allowed to travel to Canada with two doses to return to Canada without the 14-day quarantine requirement, has there been a date set yet by the federal government on which that provision would be implemented?

Mr. Iain Stewart: Is that a question for me?

Hon. Michelle Rempel Garner: Yes.

Mr. Iain Stewart: Thank you.

We are looking at different operational scenarios. The timeline that was indicated by the minister was the first week of July. The specific date is based on rollout planning.

Hon. Michelle Rempel Garner: When would that specific date be?

Mr. Iain Stewart: That has not yet been made public.

The Chair: Thank you, Ms. Rempel Garner.

We go now to Ms. Sidhu.

Ms. Sidhu, go ahead, please, for six minutes.

Ms. Sonia Sidhu (Brampton South, Lib.): Thank you, Mr. Chair.

Thank you to our witnesses for joining us today.

My question is for Dr. Tunis.

As of this morning, most Peel residents and residents across Ontario hot spots can book their second dose of vaccine, thanks to the increased supply. At our last meeting, Dr. Loh was here and told us about the importance of getting second doses to protect us from variants.

What can you tell us about the effectiveness against the delta variant of any of the vaccines authorized in Canada?

Dr. Matthew Tunis (Executive Secretary, National Advisory Committee on Immunization): Thank you for the question.

NACI has been monitoring global vaccine effectiveness against a number of variants of concern. We have seen recent evidence from the United Kingdom looking at the delta variant or B1.617.2. That variant does seem to respond very well to two doses of either Pfizer or AstraZeneca vaccine. In both cases when the second dose is provided, then you see a really strong improvement in protection. There is also some protection offered by the first dose of vaccine, as has been studied in the U.K.

This hasn't made its way into any advice from the NACI to the agency yet, but the committee has been monitoring that evidence closely. Obviously, it is a point of concern as that variant is emerging in Canada. The committee continues to study it. I believe it was somewhere in the 60% range for AstraZeneca. It is somewhere in the 80% range for the Pfizer vaccine.

I will note that's against symptomatic infection. We have not yet seen the evidence regarding how well those vaccines protect against severe outcomes like hospitalization and death. They are expected in general to give higher protection than what we get against symptomatic infection, as we've seen across a number of other vaccine-effectiveness studies. It's quite encouraging that these vaccines that we have access to and are using in Canada, once provided with that complete series, are expected to provide protection against the delta variant.

Thank you.

Ms. Sonia Sidhu: Thank you.

As a follow-up question to that, Dr. Tam, although the vaccine rollout is going very well, as Dr. Tunis said, the delta variant is present in Canada.

What should residents in the community know about how this variant differs from the other ones?

Dr. Theresa Tam (Chief Public Health Officer, Public Health Agency of Canada): Thank for that question, Mr. Chair.

I think we've been communicating that this particular variant, the delta variant, is more transmissible. It spreads more easily. Doubling down on making sure that they are observing their personal protective measures and observing public health advice are very important for the individual.

The data is not as robust about the impact of this variant on the severity of outcomes. There are some early indications that there may be increased hospitalizations as well with this variant.

My message has been that you have to be very vigilant between your first dose and second dose. Please roll up your sleeves and get two doses for a two-dose vaccine schedule. The provinces right now are accelerating their second doses. We see that in the data that we have on what's being provided right now.

● (1215)

Ms. Sonia Sidhu: Thank you, Dr. Tam.

The next question Dr. Lucas or Mr. Stewart can answer.

Public health officials, doctors and scientists have said that vaccines are the best way to protect people from severe COVID-19 outcomes and death from illness, a key part of the post-pandemic return to normal.

For anyone listening who might still be hesitant to get their first dose, what would you say to them directly?

Dr. Stephen Lucas: I would certainly say that it is critical both to protect yourself and to protect others in your family and your community. It is essential to get your first dose and then complete the series with your second dose.

Ms. Sonia Sidhu: Thank you.

General Brodie, I believe that, as of today, roughly 73.6% of eligible Canadians have received at least a first dose, which means, based on anticipated vaccine deliveries, what is the latest that every Canadian who wants to be could be vaccinated?

Brigadier-General Krista Brodie (Vice-President, Logistics and Operations, Public Health Agency of Canada): Mr. Chair, honourable members, we're working very closely with the provinces and territories to determine their needs and how much they can absorb and with our modellers to define what that sweet spot is with respect to having enough vaccines available from a supply perspective in order to support the vaccination campaigns.

Certainly, with the current numbers that we're tracking, if the supply stays steady, then we have every confidence that we'll have enough vaccines to meet that requirement by the end of the summer. Certainly, as we refine those numbers and the ability of the provinces to absorb vaccines, we'll further refine those numbers. We're tracking very closely on a week-by-week basis, particularly as we get into the middle of July and beyond to refine those numbers.

Ms. Sonia Sidhu: Thank you, General Brodie.

The next question is for the deputy minister of Public Safety.

Throughout the pandemic, Public Safety has approved 85 requests for assistance from the provinces and territories. Can you speak to the process and collaboration that exists between your portfolio and those of your counterparts'?

Mr. Rob Stewart: We work in close collaboration with public health, and also with the Canadian Armed Forces and the Red Cross, to respond to requests for assistance from provinces and territories. There is an extensive coordination process that goes into the formulation of the formal request, wherein there's a lot of discussion and a refinement of what we can do to meet the request. Then there's a formal request made of the Minister of Public Safety. The response is usually, by that point in time, already in train.

The Chair: Thank you, Ms. Sidhu.

[*Translation*]

It's Mr. Lemire's turn now.

Mr. Lemire, you have six minutes.

Mr. Sébastien Lemire: Thank you, Mr. Chair.

I received the testimony of a couple who documented their entire journey with Switch Health to get their results.

Let me give you some context. The group arrived on June 2, but they have yet to receive the results of their second test, even though their quarantine ends tomorrow. The man is scheduled to return to work on Wednesday. In her testimony, the woman mentions that she has waited more than two hours on the phone to get the results of her test. In many cases, Switch Health has been contacted ten times.

However, Switch Health officials assured this committee on May 28 that the wait time on the phone had been reduced to 15 minutes, quite a contrast from two hours. They also claimed that people were receiving their results by the 14th day, which clearly will not be the case in this situation.

As a member of Parliament in a riding with many farmers, I don't need to draw you a picture of the failures Switch Health has experienced in the past.

My question is for Mr. Lucas. Has the Department of Health followed up with Switch Health to make sure that these timelines are being met?

What steps has his department taken to ensure that Switch Health responds in a timely manner?

● (1220)

Dr. Stephen Lucas: I'll turn it over to Iain Stewart.

[*English*]

Mr. Iain Stewart: Thank you very much for the question.

We've had a number of areas where performance has not been what we were hoping for with respect to call waiting times, with respect to test kit delivery times and with respect to test kit turnaround times. In each of those areas, we've worked with Switch Health, which has been a constructive and engaged partner, and have found solutions. In addition, we've also been working to expand the service providers in this space, where capacity issues are driving the problem.

I would say, Mr. Chair and honourable member, that if you provide the details, I will make sure that's resolved as well. You have my email, of course, or you can get it through the chair. I don't want to see any such situation of that nature, of course, and we'd be very happy to follow up with your constituent to address that right away.

[*Translation*]

Mr. Sébastien Lemire: Thank you, Mr. Stewart, for your honest answer.

Let me continue.

Does Switch Health provide reports and data to the department on its activities and timelines for providing test results, as well as telephone wait times?

Can we get data on this?

[*English*]

Mr. Iain Stewart: We do get performance data indicators, and we do track as well. I will look at what is not company confidential and what is generated by us that can be shared. I am happy to do that, honourable member.

[*Translation*]

Mr. Sébastien Lemire: Thank you very much. We would appreciate it.

To your knowledge or that of the deputy ministers, roughly how many people haven't received their test results by the 14th day?

[*English*]

Mr. Iain Stewart: Mr. Chair and honourable member, I don't have that statistic off the top of my head, but we'll make sure that's part of the material we provide in response to this question.

[*Translation*]

Mr. Sébastien Lemire: Thank you.

Has the Department of Health issued a directive for people who are due to return to work but, like the man and woman we're talking about who have completed their quarantine, have not received their test results from Switch Health?

Is there a specific guideline for this type of case?

[*English*]

Mr. Iain Stewart: Mr. Chair and honourable member, we actually did create, with Switch Health, a pathway of this nature. What is supposed to happen is that Switch Health is supposed to inform them that, where they're facing a pressure of this nature, they go and just get tested at a local service provider. From what you're saying here, I don't hear that this has happened, which is why I want to follow up on it.

[*Translation*]

Mr. Sébastien Lemire: On August 31, 2020, the government announced a $126 million investment to renovate the National Research Council, or NRC, facilities in Montreal. In February, NRC announced that construction of its new biologics facility on Royalmount Avenue in Montreal was expected to be completed by July. A few months of work would then be required to complete the facility, with the first engineering tests scheduled for December 2021. After that, production of Novavax's vaccine in Canada could begin.

Can you give us an update on this?

[*English*]

Dr. Stephen Lucas: I think that question would be best directed to the president of the National Research Council and the deputy minister of innovation, science and economic development.

[*Translation*]

Mr. Sébastien Lemire: Do you have any information to give us in this regard?

Can we expect to meet the timelines and begin vaccine production?

[*English*]

Dr. Stephen Lucas: As I said, to ensure that the committee is properly informed, I think those individuals would be best placed to provide that response.

[*Translation*]

Mr. Sébastien Lemire: Okay.

At the G7 over the weekend, when asked about the lifting of patents on COVID-19 vaccines, Prime Minister Justin Trudeau said that he was looking at all the ways to ensure everyone is vaccinated, but did not say whether his government had changed its approach on the issue.

Can you tell us today what the government's view is on lifting the patents on COVID-19 vaccines?

● (1225)

[*English*]

Dr. Stephen Lucas: Canada is engaged in the process at the World Trade Organization based on motions brought forward by a number of countries and engagement over recent months, in addition to working in a number of fora, including the G7, to support broader global access to vaccines throughout the world.

The Chair: Thank you.

[*Translation*]

Mr. Sébastien Lemire: Thank you.

The Chair: Thank you, Mr. Lemire.

[*English*]

We'll move on to Mr. Davies for six minutes.

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

I think this question is properly directed to Mr. Matthews. If not, maybe you can direct me.

The delivery of the vaccine contracts late last Friday was done pursuant to the order of the House dated October 26, 2020. Is that correct?

Mr. Bill Matthews: I believe so. I believe the correspondence went directly to the clerk of this committee, if I recall correctly, on Friday.

Mr. Don Davies: You've anticipated where I'm going, but I want to make it clear. The vaccine contracts weren't delivered gratuitously, I presume. They were delivered pursuant to that order.

Mr. Bill Matthews: In response to it, yes.

Mr. Don Davies: Thank you.

Now, reading from that order, it says:

> (aa) all documents issued pursuant to this order (i) be organized by department and be provided to the Office of the Law Clerk and Parliamentary Counsel....

Can you tell us why the government did not send those documents to the law clerk and parliamentary counsel, but instead violated that and sent them to the health committee clerk?

Mr. Bill Matthews: I will have to get back and check where else it went. I know it went to this committee. It may have gone to other places as well.

We wanted to have the documentation ready in time for the committee meetings this week, so I will get back to you and see if it was sent to other locations as well. It was about getting the documents out before this meeting, frankly.

Mr. Don Davies: I can assure you that it was not sent to the law clerk or the parliamentary counsel, Mr. Matthews.

That leads me to my next question, which is carrying on with that order of the House of October 26. It says:

> ...provided to the Office of the Law Clerk and Parliamentary Counsel within 15 days of the adoption of this order, (ii) be vetted for matters of personal privacy information, and national security, and, with respect to paragraph (y) only, be additionally vetted for information the disclosure of which could reasonably be expected to interfere with contractual or other negotiations [to the jeopardy of Canada]—

Ms. Sonia Sidhu: I have a point of order, Mr. Chair.

Did someone else say it was sent to the committee not to the law clerk?

Mr. Don Davies: That's not a point of order, Mr. Chair.

Ms. Sonia Sidhu: These contracts were not requested to the October order.

The Chair: I'm sorry, but I wonder if you could clarify your point, Ms. Sidhu.

Ms. Sonia Sidhu: I just want to clarify....

Mr. Don Davies: That's not a point of order, Mr. Chair. That's a matter of debate.

Ms. Sidhu can pursue this line of questioning, if she wishes, later on.

The Chair: Thank you.

Go ahead, Mr. Davies.

I have stopped your time. I will resume it now.

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

Carrying on, it says that the vetting will be done “by the Law Clerk and Parliamentary Counsel within seven days of receipt”.

I think you have already confirmed, Mr. Matthews, that the vetting was done by the department, not by obviously the law clerk and parliamentary counsel. Is that correct?

Mr. Bill Matthews: That's correct, Mr. Chair. The vetting was done by the department.

Mr. Don Davies: Can you tell me why the department chose to violate the order of the House by vetting the documents, when the order clearly said that the vetting would be done by the law clerk and parliamentary counsel?

Ms. Jennifer O'Connell: I have a point of order.

I'm sorry, Mr. Davies.

I believe Mr. Davies is reading the wrong motion. It wasn't in relation to the House order. It was in relation to Mr. Barlow's motion. Before he reads into the record the wrong motion, I just want to make that clear.

Hon. Michelle Rempel Garner: Is that a point of order, Chair?

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

Mr. Davies, go ahead.

I shall resume your time.

Mr. Don Davies: Thank you.

Once again, the witness has already confirmed that they provided the vaccine contracts, pursuant to the order of the House in October, so....

Can you tell me again why that was done? Why were the documents not sent in unredacted form to the law clerk for vetting, as the order of the House required?

Mr. Bill Matthews: I think there are two things, Mr. Chair.

In relation to which motion, I believe there was a motion at this committee that said if we couldn't get the documents to the law clerk in time to send them to committee. If I erred in sending them here, I apologize.

In terms of the redaction, it's the Department of PSPC, as the contracting arm of government, that knows what's sensitive and what's not. We have an obligation to consult with our vaccine suppliers in making those determinations. It was felt that the department was best placed to make those judgments to protect the integrity of the contracts.

● (1230)

Mr. Don Davies: Mr. Matthews, were the criteria that the department used the exact same criteria listed in the order of the House of October 26?

Mr. Bill Matthews: The criteria used by the department in making the redaction determinations were around privacy, commercially sensitive, as well as [*Technical difficulty—Editor*] deliveries under the current contracts and Canada's negotiating position going forward.

Mr. Don Davies: Okay. I'm going to switch here.

The federal government previously claimed that it would donate up to 100 million vaccine doses to low-income countries. However, yesterday, the Prime Minister confirmed that Canada will donate only 13 million of Canada's surplus doses. The other 87 million are accounted for through money.

Given that it's virtually impossible for low-income countries to buy doses, given the severe global supply shortage, why isn't the Government of Canada willing to make a larger donation of surplus doses?

Mr. Matthews, this is not necessarily to you, but whomever would be best placed to answer that.

Dr. Stephen Lucas: The government did make the commitment, through the Prime Minister at the G-7, to donate both the actual doses, as the honourable member indicated, but also through its significant financial commitment to COVAX, which has as its core intention and commitment to further the COVAX process to purchase doses from suppliers to distribute to low-income and middle-income countries.

Mr. Don Davies: Are you confident, Dr. Lucas, that those countries will be able to purchase those doses? From where would they purchase those doses with the money that Canada's given them?

Dr. Stephen Lucas: The money is provided to COVAX. COVAX purchases the doses and distributes them.

Mr. Don Davies: Okay.

I want to break down those 13 million doses. More than seven million of the doses are being donated from Novavax, whose vaccine is currently in clinical trials and has not even been approved in Canada. The remaining six million doses are the AstraZeneca and Johnson & Johnson that Canada bought from COVAX. It seems to me that of the hundred million doses promised, what Canada's really going to do is deliver seven million doses that have not even been approved yet and may never be approved, and six million doses that we already were going to take from COVAX, which I would argue we never should have taken from COVAX.

Do I have that correct? That sort of seems, in terms of actual doses going to—

Mr. Iain Stewart: What's the breakout on the 13 million?

Mr. Don Davies: I think I know the breakout. I guess what I'm asking for is your comment on the breakout. It looks like it's less than six million of doses that we never had but were going to take from COVAX. That seems to be the net sum of it.

Mr. Iain Stewart: I'm sorry, Mr. Chair and honourable member. I had my mike on. I apologize for bursting out with that question.

Mr. Don Davies: Okay.

Mr. Iain Stewart: I was trying to remind myself out loud.

On the breakout that you mentioned for Novavax, Novavax is, as you say, a forward-leaning product, but it is a product that is in the process of being lined up for manufacturing. Its clinical trial results are beginning to come out, and it's looking like an extremely promising vaccine. With respect to AstraZeneca, as you know, these doses are in fact in production. Those kinds of doses are therefore available doses.

Over time, we're going to need to get everybody in the world vaccinated. We're going to [*Technical difficulty—Editor*], so yes, some right away, as you're pointing out, and others over the coming months will be actually extremely valuable as well.

Mr. Don Davies: Thank you.

The Chair: Thank you, Mr. Davies.

That wraps up our first round.

We'll start our second round with Ms. Rempel Garner.

Go ahead for five minutes, please.

Hon. Michelle Rempel Garner: Thank you very much, Chair.

I'd like to put the following motion on notice. It is that the analyst and clerk be directed to prepare a brief report to the House outlining the material facts of the possible contempt, discussed with Bill Matthews, deputy minister of Public Services and Procurement, on June 14, 2021, concerning the documents ordered by the House on October 26, 2020, and further requested by this Committee on February 19, 2021; and that report be tabled as soon as it is ready.

I'll cede the floor to my colleague Mr. d'Entremont.

The Chair: Thank you, Ms. Rempel Garner.

Go ahead, Mr. d'Entremont.

Mr. Chris d'Entremont (West Nova, CPC): Thank you very much. It's a pleasure to join you from a committee room, for a change.

I want to go back to you, Mr. Matthews, on the issue of the Janssen vaccine and the destruction of the 300,000 vaccines. Can you explain it to us just quickly?

Within the contract, these will not be counted against the total number purchased from Janssen. Can you maybe give us an idea of how many doses were supposed to have been ordered from Janssen?

● (1235)

Mr. Bill Matthews: In order for the doses to count as delivered, they have to meet the regulatory requirements put in place by Health Canada, as Dr. Lucas has already shared. These doses did not meet those requirements, so they will effectively be destroyed at some point. The contract with Janssen is for 10 million doses.

Mr. Chris d'Entremont: We hear from government that we have a robust portfolio of vaccines. We had some pretty compelling testimony from Dr. Kalyan. When we talk about the other kinds, we have two mRNA and one viral vector, and Janssen's not available to us yet. What other contracts are we looking at right now with other manufacturers?

Mr. Bill Matthews: There are seven that are commonly referred to. There are the two mRNA—Pfizer and Moderna. You have the two viral vector—AstraZeneca and Johnson & Johnson. Then you have the three subunit protein—Novavax, Sanofi and Medicago. Medicago is a bit of a special category, but I'll put it in that bucket as well.

If you're looking for more information on the differences between those technologies, I suspect that my health colleagues are better able to help.

Mr. Chris d'Entremont: I probably will ask them the question, but before we go there, the doctor we had or the testimony we had prior to this did talk about some older forms of vaccines, questioning maybe some of the challenges we have with the mRNA vaccines and that the technology, while interesting and helpful, may not be quite as effective as maybe some old types of vaccines.

Are there other older versions of vaccines on our list of seven?

Mr. Bill Matthews: I think—and I will kick this to health colleagues—the Novavax, Sanofi and Medicago are a little different, probably closer to more traditional types of vaccines. I'll pause there and let my health colleagues elaborate.

Mr. Iain Stewart: If I may, Mr. Chair....

Theresa, you might want to speak to the efficacy of the messenger RNA vaccines. Apparently, a previous witness suggested that they are not effective or not as good as some of the other technology platforms.

Dr. Theresa Tam: Mr. Chair, thank you for that question. I hope I'll give the answer you are looking for.

The mRNA vaccines have been extremely effective in terms of the clinical trials and the real-life data, including against variants, which I think some of the previous answers covered—and also the viral vector vaccines. We have data from clinical trials and live data as well.

The question is this: What about the other vaccines? You do need to have the clinical trial data coming out of the other vaccines to know how effective they are. Novavax is coming out with some very promising data, which has to be reviewed by the regulator.

Protein subunit vaccines are technologies that have been used for other vaccines for human use, so we know that kind of technology. Some of these vaccines have an adjuvant as an immune-boosting aspect to the vaccine as well. These are vaccines that we have used in the past.

Some of the previous questions pertained to concerns about the repeat use of vaccines and whether they will become effective as boosters, for example. That is something that we will have to examine through data. Whether the whole virus or live attenuated virus vaccines will come to fruition and be an option in the future remains to be seen. It is possible that we will be using boosters that are different from what we used for the initial vaccine programs. Again, we will have to look at the evidence.

Mr. Chris d'Entremont: Thank you for that.

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

We go now to Mr. Kelloway.

Please go ahead for five minutes.

Mr. Mike Kelloway (Cape Breton—Canso, Lib.): Thank you, Mr. Chair. MP O'Connell will be taking my time.

The Chair: Go ahead, Ms. O'Connell.

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

Thank you, Mr. Kelloway.

Mr. Matthews, I want to clarify because I think you misspoke.

The motion you were referring to.... The House motion doesn't actually exclusively refer to contracts. It's Mr. Barlow's motion. I'll read a section of it into the record:

> If the law clerk does not have such documents, that the committee request from the government the contracts for Canada's seven vaccine agreements with suppliers be tabled with the committee....

Would you like to clarify which motion in particular you were speaking to? I think the—

● (1240)

Mr. Don Davies: I have a point of order, Mr. Chair.

If Ms. O'Connell is going to read from the motion, then she has an obligation to read the entire motion. If you continue with that motion, it says:

> ...be tabled with the committee in both official languages, that the documents be vetted in accordance with the parameters set out in the House motion, and that the members of the Standing Committee on Health review these documents in camera.

In fairness, you can't just give a partial quote. Of course, the rest of Mr. Barlow's motion makes clear that it is vetted in accordance with the House motion.

The Chair: Thank you, Mr. Davies.

I believe that gets into debate.

Ms. O'Connell, please go ahead.

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

The point was in relation to these documents. The House motion doesn't refer to the contracts. If the members want to debate how the motion should be applied, that's their prerogative.

However, Mr. Matthews, can you please speak about how your department dealt with the information and why it was sent here? Which motion were you referring to?

Mr. Bill Matthews: I may be guilty of oversimplifying things, but I view the motions as being related. As was said, Mr. Barlow's motion did say that, if the law clerk didn't have the documents, please prioritize that the contract documents are forwarded to this committee, which is what we did. I have done some homework while we were talking, and that, indeed, is why these documents were sent directly to this committee and not to the law clerk.

Regardless, in terms of the redaction, it was the Department of PSPC that did the redaction. We are the contracting agent of the government, and we have a sense with our vaccine providers as to what is commercially sensitive and what is not. I do apologize, Mr. Chair, for being a little general in my language earlier. The documents were sent in response to the Barlow motion, but I do appreciate that the two are related.

I'll leave it there.

The Chair: I must interject here at this point. The bells are ringing in the House, so we are required to have unanimous consent to continue. I propose that we finish Ms. O'Connell's time, then jump straight to the Bloc and the NDP portion, and then adjourn if that's okay.

Ms. Jennifer O'Connell: No, Mr. Chair, we don't have unanimous consent to continue.

The Chair: Therefore, I have to suspend. Is it okay to suspend or shall we adjourn? If we suspend, we have to resume on Friday and that will interfere with the scheduling for Friday's meeting.

Do I have consensus to adjourn at this time?

Seeing no dissent, I declare this meeting adjourned

Published under the authority of the Speaker of the House of Commons

SPEAKER'S PERMISSION

The proceedings of the House of Commons and its committees are hereby made available to provide greater public access. The parliamentary privilege of the House of Commons to control the publication and broadcast of the proceedings of the House of Commons and its committees is nonetheless reserved. All copyrights therein are also reserved.

Reproduction of the proceedings of the House of Commons and its committees, in whole or in part and in any medium, is hereby permitted provided that the reproduction is accurate and is not presented as official. This permission does not extend to reproduction, distribution or use for commercial purpose of financial gain. Reproduction or use outside this permission or without authorization may be treated as copyright infringement in accordance with the Copyright Act. Authorization may be obtained on written application to the Office of the Speaker of the House of Commons.

Reproduction in accordance with this permission does not constitute publication under the authority of the House of Commons. The absolute privilege that applies to the proceedings of the House of Commons does not extend to these permitted reproductions. Where a reproduction includes briefs to a committee of the House of Commons, authorization for reproduction may be required from the authors in accordance with the Copyright Act.

Nothing in this permission abrogates or derogates from the privileges, powers, immunities and rights of the House of Commons and its committees. For greater certainty, this permission does not affect the prohibition against impeaching or questioning the proceedings of the House of Commons in courts or otherwise. The House of Commons retains the right and privilege to find users in contempt of Parliament if a reproduction or use is not in accordance with this permission.

Also available on the House of Commons website at the following address: https://www.ourcommons.ca

Publié en conformité de l'autorité du Président de la Chambre des communes

PERMISSION DU PRÉSIDENT

Les délibérations de la Chambre des communes et de ses comités sont mises à la disposition du public pour mieux le renseigner. La Chambre conserve néanmoins son privilège parlementaire de contrôler la publication et la diffusion des délibérations et elle possède tous les droits d'auteur sur celles-ci.

Il est permis de reproduire les délibérations de la Chambre et de ses comités, en tout ou en partie, sur n'importe quel support, pourvu que la reproduction soit exacte et qu'elle ne soit pas présentée comme version officielle. Il n'est toutefois pas permis de reproduire, de distribuer ou d'utiliser les délibérations à des fins commerciales visant la réalisation d'un profit financier. Toute reproduction ou utilisation non permise ou non formellement autorisée peut être considérée comme une violation du droit d'auteur aux termes de la Loi sur le droit d'auteur. Une autorisation formelle peut être obtenue sur présentation d'une demande écrite au Bureau du Président de la Chambre des communes.

La reproduction conforme à la présente permission ne constitue pas une publication sous l'autorité de la Chambre. Le privilège absolu qui s'applique aux délibérations de la Chambre ne s'étend pas aux reproductions permises. Lorsqu'une reproduction comprend des mémoires présentés à un comité de la Chambre, il peut être nécessaire d'obtenir de leurs auteurs l'autorisation de les reproduire, conformément à la Loi sur le droit d'auteur.

La présente permission ne porte pas atteinte aux privilèges, pouvoirs, immunités et droits de la Chambre et de ses comités. Il est entendu que cette permission ne touche pas l'interdiction de contester ou de mettre en cause les délibérations de la Chambre devant les tribunaux ou autrement. La Chambre conserve le droit et le privilège de déclarer l'utilisateur coupable d'outrage au Parlement lorsque la reproduction ou l'utilisation n'est pas conforme à la présente permission.

Aussi disponible sur le site Web de la Chambre des communes à l'adresse suivante : https://www.noscommunes.ca