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Chair: Mr. Ron McKinnon



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• (1305)

[English]

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

Welcome, everyone, to meeting number 21 of the House of Commons Standing Committee on Health. We're meeting today to study the emergency situation facing Canadians in light of the second wave of the COVID-19 pandemic.

I would like to remind everyone that you have the right to participate in these proceedings in the official language of your choice. In the event of difficulty hearing the translation, please bring it to our attention as soon as possible so that the matter can be resolved.

I'd now like to welcome the witnesses.

Appearing as an individual is Dr. Joanne Langley, professor of pediatrics and community health and epidemiology. Appearing with Dr. Langley is Mr. Roger Scott-Douglas, secretary of the COVID-19 Vaccine Task Force. He will not make a presentation but will assist Dr. Langley in answering questions. Also appearing, in this case as an individual, is Dr. Andrew Morris, professor of infectious diseases. From the Canadian Nurses Association, we have Michael Villeneuve, chief executive officer; and Aden Hamza, policy lead. From Doctors Without Borders, we have Dr. Jason Nicker-son, humanitarian affairs adviser.

Before we go to the statements, I will advise everyone that I will be using a yellow card to indicate when there's approximately one minute left and a red card to indicate when your time is up. At that point, please try to wrap up.

We'll start with Dr. Langley.

Dr. Langley, please go ahead for five minutes.

Dr. Joanne Langley (Professor of Pediatrics and Community Health and Epidemiology, As an Individual): Thank you.

Good afternoon.

My name is Joanne Langley, and I am speaking to you today from Nova Scotia. I'd like to start by acknowledging that my workplace here at Dalhousie University and the IWK Health Centre sit on the ancestral and unceded territory of the Mi'kmaq.

Thank you for the invitation to the House of Commons Standing Committee on Health.

Thank you, members of Parliament, for your services to the country.

I'm a pediatrician specializing in infectious diseases. I'm also a vaccine researcher and clinical epidemiologist. I've been honoured to work over several decades with public health colleagues on communicable disease control and vaccines to prevent and limit the spread of infectious diseases. These challenges that we have worked on together include the 2003 SARS outbreak, various local and regional epidemics and the last pandemic in 2009 due to influenza. The current pandemic, which has affected the physical, mental, social and economic well-being of humanity across our globe, has been unprecedented.

All of us have been heartened by the speed at which science and dedicated hard-working humans have delivered safe and highly effective COVID-19 vaccines. These advances in vaccine development are also unprecedented, but the work is not over. There are important tasks ahead for this year and, in my view, likely for a few years.

We must not become accustomed to this suffering, which has affected all people, including children. Now is the time for lofty goals and for solidarity. Words and deeds matter. We must support our health care professionals as they take care of the sick. We must support our public health workers as they implement what is the largest vaccine rollout in our country's history. We must continue public health measures and support for them until we understand the natural history of this virus.

There is much remaining basic and clinical science research to be done, and we must continue to strive to collaborate across all the man-made divisions that exist now to work together. While we protect people within our own borders, we must continue to lift our gaze to the protection of the peoples of the world, to the low- and middle-income countries, and how we can serve them.

I'd like to make a few closing comments about the role of vaccines in ensuring a healthy society. Immunization has been cited as one of the top 10 public health achievements of the last century. When there isn't a pandemic, I would argue that vaccines do not always get the attention they deserve. At this time, Canadian children are protected against 16 different infections. Vaccination can prevent whooping cough, death, disability and serious illness. Adults, too, have a schedule of vaccines that can prevent influenza, shingles, pneumonia and other life-altering infections. Immunization is a strong and dynamic system, but somewhat fragile.

The Chair: Pardon me, Dr. Langley, your mike is just a bit too close.

Dr. Joanne Langley: Thank you.

I use the word “fragile” because a robust immunization program requires public confidence, high vaccine uptake, funding and surveillance to measure the impact of vaccine programs, and ongoing research.

I hope that this pandemic has sharpened our focus on the detection and prevention of infectious diseases, broadly speaking.

Thank you for your attention. I look forward to our discussion.

The Chair: Thank you, Doctor.

We go now to Dr. Andrew Morris. Please go ahead, sir. You have six minutes.

Dr. Andrew Morris (Professor of Infectious Diseases, As an Individual): Thank you, Mr. Chair, and honourable committee members. It's an honour to be able to address this committee.

Before I begin, I'd like to acknowledge that I'm currently speaking from what I believe to be the unceded ancestral territory of the Haudenosaunee, which is where my family home currently rests.

I'm a professor of medicine at the University of Toronto and a consultant in infectious diseases at Sinai Health and the University Health Network. Prior to this pandemic, most of my academic work was really focused around antimicrobial resistance—drug-resistant infections. I've been doing work on behalf of the Public Health Agency of Canada, along with Gerry Wright, to develop a pan-Canadian network to tackle antimicrobial-resistant infections.

This is my third such appearance before the Standing Committee on Health in relation to infectious diseases in the past four years. I'm really privileged to be invited again. As I will remind this committee—in fact, the only familiar face I see here is Mr. Davies', so there are many new faces—much of the action that I've urged this committee to act on previously has not occurred.

Although it was self-evident at the beginning of the pandemic when the virus was first isolated, it's worth reminding everyone that COVID-19 is just one of a host of drug-resistant infections. There are many drug-resistant infections that affect Canadians annually. Sadly, we estimate that we've lost around 22,000 people to COVID-19 over the past 12 months, and many more have become sick. We lose about one quarter of that figure annually due to drug-resistant infections at a cost to the Canadian health care system of \$1.4 billion, with a reduction in GDP of about \$2 billion. We expect that those numbers are going to rise to about \$7.6 billion in health care costs and \$21 billion in GDP by 2050.

We're now roughly a year into this pandemic, and it would be sufficient to say that the lives that we're going to continue to see lost around the world, including in Canada, will be due to a combination of two things. One is insufficient vaccination, primarily limited by supply, and the other one will be ineffective antimicrobial therapy. I do want to point out, as Dr. Langley also pointed out, that as citizens of the world, both of these issues affect people throughout the globe.

We need to invest in infectious diseases prevention, surveillance, diagnostics and therapeutics. I think I'm going to attenuate what I was going to say for reasons of time, but I will point out that our surveillance systems in particular remain so poor that at present we've had to put together a hodgepodge of genomic sequencing resources to try to give us the surveillance information that countries like Denmark, which has one tenth of Canada's population, and the U.K., which has roughly double our population, can provide to their own citizens. We also lack the capacity to develop antimicrobials, and we're unable to produce vaccines to serve our citizens.

We have not been able to mount a coordinated response to infectious diseases, and I really want to focus for the next while on drug therapy. I will start by pointing out that there are two evidence-based therapeutic treatments for COVID-19 that unequivocally save lives in hospitalized patients: dexamethasone, which is a cortisone-like medication, and tocilizumab, which is a monoclonal antibody that blocks a component of the immune system. Both of these agents are life-saving with comparable and additive effects.

At present, we have sufficient supply of dexamethasone across the country. It's a cheap, generic drug. On the other hand, we have insufficient supply of tocilizumab for the needs of Canadians. Whereas I do understand that the federal government along with the provincial governments have been making efforts to procure sufficient supply, provinces have been sheepish to provide tocilizumab to patients whose conditions merit its use because of uncertain drug supply. This is an unquestionably life-saving drug.

The last point I want to make is to contrast these stories with the stories of remdesivir and bamlanivimab. Yes, if you're wondering, as an infectious disease physician I'm used to pronouncing organism and drug names that the rest of humanity struggles to pronounce.

● (1310)

Remdesivir is an antiviral drug whose effectiveness remains uncertain to me and many others, including the WHO. Bamlanivimab is a monoclonal antibody that targets the virus itself. It's a drug that the Canadian Agency for Drugs and Technologies in Health evaluated as neither practically implementable nor of clinical value.

The federal government, through Health Canada, purchased remdesivir at a cost that is not publicly known, but that I would estimate to be \$75 million. On the other hand, the government also purchased what I believe to be \$32 million worth of bamlanivimab. This expenditure of approximately \$100 million on effectively useless drugs contrasts with the shortage of the two life-saving treatments that currently exist.

What is urgently needed is a pan-Canadian committee of national experts with experience in clinical practice guidelines and expertise relevant to COVID-19, comparable to NACI, the National Advisory Committee on Immunization, who can share knowledge and data and come up with sensible recommendations.

I'm sensitive to the challenges faced by our federal government in nudging provinces and territories to row in the same direction. Clearly, this is an area in which the government has not been successful. Accordingly, I, along with several of my colleagues from around the country who have been involved in the development of provincial guidance, have decided to mobilize, mainly because of the urgency of the need and the importance of this to Canadians. These challenges are too great to defer any longer to the various levels of government.

In the meantime, it would be wise for this committee and the federal government to figure out how our group of national experts can either be supported immediately or catapulted to a future state where such a committee exists for all infectious diseases. As I said at the beginning, drug-resistant infections are not going away, and we need to approach their treatment with a pan-Canadian, evidence-based lens that brings together the interests and expertise of all people from coast to coast to coast.

Thank you.

• (1315)

The Chair: Thank you, Doctor.

We now go to the Canadian Nurses Association, with either Mr. Villeneuve or Mr. Hamza. Please go ahead for six minutes.

Mr. Michael Villeneuve (Chief Executive Officer, Canadian Nurses Association): Thanks, Mr. Chair, and I apologize for disappearing. We had a technical emergency at this end and I wasn't able to hear the first two witnesses.

I want to thank you, Mr. Chair, and members of the committee for inviting the Canadian Nurses Association to appear today. My name is Mike Villeneuve, and I'm the CEO at the Canadian Nurses Association. I'm delighted to have my colleague, Aden Hamza, who is our policy lead, here with me.

In December 2020, Canada reached a much-anticipated milestone, as you will know, as the first doses of the COVID-19 vaccine arrived and immunization programs began across the country. This gave nurses and people living in Canada the hope that the unprecedented global crisis may be brought under control. Never in history has the world of science come together at the same time to solve a common threat to humanity and, globally, scientists have deployed new techniques, shared their findings openly, and worked around the clock with governments and regulators while preserving safety.

Two weeks from yesterday, we will mark the one-year anniversary since the WHO declared COVID-19 a global pandemic. Day after day since then, health care workers and vulnerable populations have been suffering the most due to the pandemic. As a key step in eliminating this crippling virus from our society, the Canadian Nurses Association is strongly recommending that everyone living in Canada take the vaccine as it becomes available to them. In addition, clear guidelines and a strong nursing and health care workforce will be critical to successfully deploying a mass COVID-19 immunization program.

Nurses will be central to the delivery of the COVID-19 vaccines across Canada. In fact, it was a nurse in the U.K. who gave the world's first COVID-19 vaccine to a patient. As nurses, we historically have been at the forefront of immunization programs. A vast amount of vaccine delivery into the arms of human beings was carried out by nurses globally, and we have always been strong supporters of science. This was demonstrated in Canada as we saw many nurses be the first to roll up their sleeves to be vaccinated in December.

As the largest group of health care professionals in Canada, nurses are playing a critical role not only in administering vaccines but in educating the public and encouraging vaccine confidence. In carrying out their roles, nurses are ethically bound to give evidence-based, accurate, timely and non-judgmental information to patients. CNA has been committed throughout this process and is playing a key role in promoting vaccine acceptance and supporting nurses through clear, consistent messaging and evidence-informed resources.

I will conclude, Mr. Chair, by saying that CNA continues to be extremely concerned with the critical problems we've witnessed during the pandemic. The long-term care sector continues to suffer the most, and even with lessons learned from the first wave of the pandemic, the second wave has rehashed vulnerabilities in these homes and settings, leading to new outbreaks and many deaths of older adults.

We are also extremely concerned with the mental health and burnout of nurses and all health care workers in Canada. The worsening mental health of nurses could lead to long-term effects for those nurses as individuals but also for the health care system, including amplifying nursing shortages, which seems to be a concern in some parts of Canada. Last year, we asked nurses and found that their mental health had deteriorated significantly throughout the year with over half stating that their mental health was only fair or worse than fair.

Urgent action from all of us, certainly from governments, is needed to address these challenges. Federal, provincial and territorial governments need to remain vigilant and continue to hear the expert voices of nurses and other health care professionals.

Thank you, Mr. Chair, and Aden and I will do our best to answer any questions.

• (1320)

The Chair: Thank you.

We'll go now to Doctors Without Borders.

Dr. Nickerson, please go ahead for six minutes.

Dr. Jason Nickerson (Humanitarian Affairs Advisor, Doctors Without Borders): Good afternoon, and thank you to the committee for having me back today.

It has been said many times that this is a global pandemic that requires global solidarity and global actions. In addition to protecting Canadians, it is essential that our government unite behind a truly global response. Doctors Without Borders, or Médecins Sans Frontières, MSF, teams have witnessed a severe second wave of the COVID pandemic in many of the places where we work. In places such as Mozambique, Malawi and Zimbabwe, health systems have struggled to cope with the sudden onslaught of patients. Several African countries have recorded more COVID-19 cases in the month of January 2021 than in all of 2020 combined, and in many countries, the indirect impacts of the pandemic, in particular the disruption of essential health services, have been even more deadly than COVID itself.

My key message today is that our immediate global priority needs to be ensuring that health care workers and other people most at risk in low- and middle-income countries have equitable access to the most effective and contextually appropriate COVID-19 vaccines urgently. Unless we scale up access to vaccines in all places, the world risks generating new pandemics of vaccine-resistant COVID-19 variants. If we fail at equitable distribution of COVID-19 vaccines, we fail at global public health. It's that simple. This would be morally catastrophic and a significant risk to the public health of all people, including Canadians.

There are billions of people in the world who are almost exclusively dependent on the Covax facility as the source of their vaccines, yet it wasn't until Wednesday of this week that the first doses from Covax arrived in the first recipient country. That's because Covax itself is struggling to access doses in a timely way, in large part because the existing supply has so far been monopolized by high-income countries.

I want to emphasize that the only reason for Covax's existence in the first place is because the way that the world currently develops, manufactures and delivers new medicines and vaccines is broken. It is set up to maximize profits. The pharmaceutical industry is not set up to rapidly respond to emerging pathogens with pandemic potential. It is not designed to scale up manufacturing of new health technologies to meet global demand, and as we are seeing today and have seen for decades, it is not set up to ensure equitable access to new medicines and vaccines, particularly for people in economically poor countries.

We need to change the way the world develops medicines and vaccines, to prioritize developing the tools needed to respond to public health threats and making them readily available and accessible. There are vast areas of medicine that cannot and simply do not respond to the market. They're market failures. COVID-19 clearly falls into that category. A year and a half ago, there was no commercial interest in coronavirus vaccines. The same is true of Ebola and drug-resistant infections. As Canada moves toward a conversation of biomanufacturing of medicines and vaccines, it's essential that this not just be a conversation about how to incentivize private companies to build factories here. It needs to be a conversation that transforms our relationship with the way that medicines and vaccines are discovered, developed, manufactured and delivered.

This committee actually studied this issue during its study on federally funded health research in 2018. None of the recommendations made by the committee in that report have been implemented, though they could have helped avert parts of this crisis by demanding fair pricing, greater transparency and sharing of technologies, and global access to drugs and vaccines developed with Canadian public funding.

It is common sense that when the federal government invests in vaccine or drug development it would ensure that the final product is available at a fair price around the world, including in Canada, but that's not what happens. We know that Canadians are concerned by this, because more than 90,000 people signed MSF's petition calling on the federal government to attach conditions to federal funding to ensure that the medicines and vaccines we pay to develop are affordable and accessible to people who need them.

We have three recommendations today for this committee. One, Canada needs a timeline for making a percentage of its doses of COVID-19 vaccines available for use in low- and middle-income countries to vaccinate health care workers and other high-risk people. Canada has publicly released timelines for when we anticipate having a surplus of doses, so Canada should release a timeline for the sharing of vaccines. This committee should ask for it.

Two, push for the implementation of the recommendations in the 2018 study on federally funded health research and open science, which recommended that Canada make the funding provided to develop new medicines and vaccines conditional on recipients ensuring that they would be available to people around the world at affordable, fair prices.

• (1325)

Three, we request that the Parliamentary Budget Officer review any drugs and vaccines that have been discovered and developed with Canadian public funding to understand whether, under a different model of production, we might have more affordable and accessible options for things like the rVSV-ZEBOV Ebola vaccine. This vaccine was first developed with Canadian public funding and to date costs \$98.60 per dose, unquestionably the most expensive vaccine in use in global health.

As always, I'm happy to discuss any of this in greater detail. Thank you again for having me back.

The Chair: Thank you, doctor.

[*Translation*]

We now move to questions.

Mr. Paul-Hus, you have the floor for six minutes.

Mr. Pierre Paul-Hus (Charlesbourg—Haute-Saint-Charles, CPC): Thank you, Mr. Chair.

Thank you to the witnesses for being with us today.

Ms. Langley, at the moment, there are serious delays with regard to vaccines. Contract management has been somewhat disastrous. Now our committee needs more information. You are part of the COVID-19 Vaccine Task Force, so I would like to know the following:

Do you agree that the minutes of the task force meetings should be published on the government's website and that the committee should be able to receive a copy?

[*English*]

Dr. Joanne Langley: Thank you, Mr. Chair, for the question about the minutes of the COVID-19 Vaccine Task Force.

To date, the limits on the minutes of the task force are related to the confidential business information the task force considers. We've tried to overcome this by holding a number of media interviews, offering to meet with the leaders of the political parties, and holding multiple seminars and sharing as soon as possible information that doesn't contain this confidential business information. We have all signed CDAs with the companies that presented to us.

[*Translation*]

Mr. Pierre Paul-Hus: Thank you.

We understand that, but there is still a way to have minutes. Everyone is trying to understand what happened.

At the onset of the crisis, in 2020, the Government of Canada signed an agreement with CanSino Biologics. You're at Dalhousie University, so I believe you already have a relationship with CanSino. We're trying to understand what happened at that time.

Did you recommend that the Government of Canada do business with CanSino?

[*English*]

Dr. Joanne Langley: With regard to that particular vaccine, there are two separate processes.

The first was a research agreement with Dalhousie University and CanSino, which was a result of the scientific collaboration between CanSino and the NRC. That happened before the task force.

Second, CanSino, along with all the other international vaccines, was considered a potential candidate.

Roger, would you have anything to add to that in terms of detail?

Mr. Roger Scott-Douglas (Secretary of the COVID-19 Vaccine Task Force, As an Individual): No, I think that puts it very well, Joanne. You have drawn a pretty clear distinction between the work that the Canadian Centre for Vaccinology did early in May with CanSino, and then the subsequent work—

[*Translation*]

Mr. Pierre Paul-Hus: Thank you, Mr. Scott-Douglas.

Ms. Langley, how is it that Canadian intellectual property was transferred to the Chinese at CanSino and that the Chinese subsequently cancelled the agreement? Do you know why?

[*English*]

Dr. Joanne Langley: I think the assumption there is not quite correct. I don't believe—and Roger can explain this—that there was not actually intellectual property transferred.

Mr. Roger Scott-Douglas: That's right, Joanne. The IP was owned by CanSino. It was not NRC IP that was involved in the vaccine. CanSino did have access to the HEK-293 cell line, which is very advanced and used by many vaccine companies in the development of the product. However, all of the IP related to this particular vaccine was actually CanSino's, not the NRC's, and no money was paid to CanSino.

• (1330)

[*Translation*]

Mr. Pierre Paul-Hus: All right, thank you.

I will ask my next question.

Currently, approximately 3 million Canadians are expected to be vaccinated by the end of March. However, by that time, 130 million Americans will have been vaccinated. According to Pfizer's press releases, Americans are vaccinating their population very quickly and there will be a surplus at Pfizer.

Is that why we will be getting more vaccines in April and May, because the Americans will be ahead of us and Pfizer will be able to supply us with vaccines through the United States as well?

[*English*]

Dr. Joanne Langley: I think your question is whether the relationship between the company and the U.S. is affecting Canada. I believe they're independent contracts. I'm not sure that they're procured from the same factories.

Roger, can you fill in the details there?

Mr. Roger Scott-Douglas: The Pfizer doses received by Canada, which are being referred to here, come from European manufacturing centres, not the U.S.

[Translation]

Mr. Pierre Paul-Hus: Yes, I know that the vaccines come from Belgium.

It is currently known that 130 million Americans will be vaccinated and that there will be a surplus of doses, since the United States plans to produce 2 billion doses.

Will Canada receive the surplus doses from the United States instead of just Belgium? Is this already planned?

[English]

Mr. Roger Scott-Douglas: I know that every effort is being made by government ministers to get safe and effective vaccines such as the Pfizer vaccine, and the Moderna and now AstraZeneca ones as quickly as possible to Canadians. They're looking at all destinations where that is possible. The current arrangements for Pfizer, though, are from the Belgian plant that you referred to.

[Translation]

Mr. Pierre Paul-Hus: Mr. Chair, I think my time is up.

The Chair: You still have 30 seconds.

Mr. Pierre Paul-Hus: Ms. Langley, if you had to do it all over again, what would you do better in terms of vaccine contract management?

[English]

Dr. Joanne Langley: Mr. Chair, the vaccine task force is not responsible for the rollout.

As an individual, I think it's a huge endeavour that we don't have regular practice with. I think we will learn from this in terms of pandemic planning and how to better deliver mass vaccination rollout programs in the future.

[Translation]

The Chair: Thank you, Mr. Paul-Hus.

[English]

We go now to Dr. Powlowski.

Dr. Powlowski, please go ahead. You have six minutes.

Mr. Marcus Powlowski (Thunder Bay—Rainy River, Lib.): I think the big news for all Canadians today on the vaccine front is that the AstraZeneca vaccine was approved. We apparently have 20 million doses ordered.

Looking at the numbers, I'm not sure what to think of it. I would note that Health Canada has pointed out that some places have not allowed its use in those over 65. Health Canada regulators have said that the results are too limited to allow an estimated efficiency in those over 65. There seems to be a note of caution about its use for those over 65.

Now its efficacy seems to be a matter of question. The initial trials, I think, showed 62% generally, but when you used half the first

dose, it was up to 90%. I see Health Canada is suggesting right now that it's 62% and WHO says 63% after eight to twelve weeks. However, there have been a number of studies reporting that after eight to twelve weeks with one dose, efficacy is 76% to 82%. This is perhaps somewhat confusing.

Here's the biggest number and the most interesting study, which doesn't seem to be that well reported. I think maybe the most significant evidence, apparently, is coming out of Scotland where they have over a million people vaccinated and over 400,000 people have received the AstraZeneca vaccine. They're reporting 94% reduction in hospitalization of those having had the AstraZeneca vaccine. That's surprisingly lower than those who had the Pfizer one. Moreover, those numbers for AstraZeneca's preventing hospitalization were of those aged over 80 years old, primarily.

Maybe we can start with Dr. Langley and Dr. Scott-Douglas from the task force, on Pfizer or on AstraZeneca and specifically its use in the elderly. Where is this going to slot in if we're not going to use it in the elderly?

• (1335)

Dr. Joanne Langley: I can start, Mr. Chair.

Thank you very much for the question and the wonderful summary of the evidence so far.

I think your summary has highlighted a couple of points, and I'll just deal with them briefly. One is that each trial has a slightly different efficacy outcome. When you compare a trial where the outcome is a positive PCR test plus one symptom with a trial like the AstraZeneca one, where the outcome is severe illness or some kind of really significantly important clinical illness, they're apples and oranges, and you can't compare them, so across these trials we have to be very cognizant of what we're comparing. Also, none of them have been compared head to head.

The second thing is that what we're seeing now is evidence from the fourth phase of clinical research, which is post-market authorization. This is a very important part of learning about vaccines where we see what the efficacy and effectiveness is in true rollout programs, so we have to continue observing that. I think we have complete confidence in Health Canada's review of the file and that it is a safe and effective vaccine and an important part of the armamentarium to wrestle this pandemic to the ground.

Mr. Marcus Powlowski: Dr. Morris, do you want to comment on AstraZeneca and/or its use in the over 65 age group?

Dr. Andrew Morris: There is really not much more to add to what Dr. Langley said. The real challenge is that most of our research experience is in adults younger than age 65, but the growing real-world experience is that it is effective, but it's going to be a matter of time in the post-marketing data for us to collect and really get more information on it.

Mr. Marcus Powlowski: Dr. Morris, while I have you, you seem to feel that bamlanivimab was totally useless. Maybe you could comment on the Chen et al. study in *The New England Journal of Medicine*. Their numbers were such that when it's used early, I think it decreased emergency room and hospitalization rates from 6.3% to 1.6%, and, in those who are either obese or over 65, from 14% to 4.6%.

Then, there's the BLAZE-2 trial. Dr. Silverman at Western, the head of infectious disease, said about bamlanivimab that apparently there have been six different groups of infectious disease people in Ontario trying to use it and, according to Dr. Silverman, there are no trials suggesting that it doesn't work whereas there are several suggesting that early on in the disease it is effective, so....

Dr. Andrew Morris: I'm not exactly sure what the question is, but I can comment on it.

I will say that the data that we have from the trials so far is markedly limited. The number of end points is quite small.

There are two real challenges with bamlanivimab. One is identifying the people who will benefit, which is difficult to do early on. The number of people who would need to be administered the drug in order to prevent just hospitalization is in the order of about 100 people just to prevent one hospitalization.

More importantly, because it's a drug that needs to be administered intravenously, the course of therapy is really two hours: one hour for it to be administered and then another hour of observation. We would have to do that for the people who are most infectious early on in their course when they would be most infectious. On top of that, in order to identify them, first you need to get a positive test. What would normally happen in most centres around the country is that someone would be tested, and then they would get their information two or three days later. Then they would have to be brought back when a lot of that early benefit would be lost. For all of these reasons, the implementation challenges as well as the lack of information, it is a drug that, at the moment as far as we know, doesn't hold tremendous promise.

I will also point out one other thing that has been observed in the BLAZE trials. When bamlanivimab is used as monotherapy—it's used alone—we see these escape mutants, which are variants that are resistant to some degree to the immune system, escaping. What we would rather have and what the evidence suggests is combination therapy. We don't have a second drug, and obviously that adds to more complexity and cost.

• (1340)

[*Translation*]

The Chair: Thank you, Dr. Morris.

We go now to Mr. Thériault.

Mr. Thériault, you have the floor for six minutes.

Mr. Luc Thériault (Montcalm, BQ): Thank you, Mr. Chair.

I thank all the witnesses for their important testimony.

Mr. Nickerson, I remember a brilliant presentation that was made at the beginning of the pandemic. I was impressed and thought it was an interesting and relevant perspective. Indeed, the global pan-

demic has confounded all the experts who, for too long, thought that the virus would remain in mainland China. We now know that the virus is not staying in mainland China and that we are facing a global problem. Vaccine protectionism has been chosen as the solution. How do you explain this?

As my colleague Mr. Powlowski said, the vaccines will be delivered. So shouldn't Canada drop the idea of tapping into the COVAX bank?

[*English*]

Dr. Jason Nickerson: I think the point you're getting at is that this is a global public health emergency and what happens in one country affects all of us everywhere. Disease control and public health interventions that are applied inequitably or only in one country will simply not be effective at ending the pandemic. We live in an interconnected world, where disease knows no borders.

To the question of vaccines and vaccine access, I think it's very clear that what we have seen over the past three months, as vaccines have started to roll out, is that the vast majority, almost exclusively all, of the vaccine doses that have been administered have been administered in high-income countries. As I said, there are only this week shipments of COVID-19 vaccine doses arriving in countries through the Covax mechanism. A large reason for that is that the available vaccine supply has largely been monopolized by high-income countries up to this point. We face a fundamental problem of high need, high demand, and extremely limited supply up to this point.

On the issue of Covax specifically, I want to be very clear that I actually think that Canada's participating in Covax as a purchasing country was appropriate at the outset. This mechanism was intended to be a global procurement mechanism that would be guided by principles of equitable access to prioritize high-risk health care workers and other vulnerable people as a global priority. That was the deal. We vaccinate the people who are at highest risk in every country everywhere as a matter of urgency. Having purchasing countries participate in that to demonstrate that we're not just invested in this as a charitable function but also as a mechanism for changing the way we procure and distribute vaccines I think was appropriate.

To then also sign bilateral agreements for a large number of vaccine doses, which is the situation Canada and other high-income countries are in today, and to then go and draw on the Covax mechanism at the same time as effectively monopolizing the global supply—I think that's not appropriate. The solution here is that Canada should sit this first round out, because we need those Covax doses to be going to countries that are entirely dependent on Covax as their procurement mechanism and who don't have the same kind of bilateral deals that Canada and other countries have.

[*Translation*]

Mr. Luc Thériault: Dr. Morris, I am going to take advantage of our meeting to create a dynamic.

Do you agree with Mr. Nickerson?

• (1345)

[English]

Dr. Andrew Morris: I do, as a matter of fact.

[Translation]

Mr. Luc Thériault: Dr. Morris, I wanted to ask you about Remdesivir and bamlanivimab, and my colleague did.

You are advocating a tightening of sanitary measures. What more needs to be done to achieve the zero COVID target that you advocate?

Are we on the right track, or are there measures that we should tighten up further? In which settings does this apply?

[English]

Dr. Andrew Morris: That's probably a 10-hour conversation. I will try to narrow it as much as possible and focus first on the public health measures you have suggested.

I think one thing we haven't done well in Canada in particular is to take on a national or pan-Canadian strategy. Instead, we have a mixture of strategies. The territories and the Atlantic provinces have taken a maximum suppression approach. That has unquestionably saved lives, and it doesn't appear to have substantially harmed their economy, whereas all of the other provinces have taken a pure mitigation approach. How do you get there? I don't think there's any question of how you get to a maximum suppression strategy. The Atlantic provinces and the territories have demonstrated how to do that. That includes tight controls on the movement of people and travel, aggressive testing, contact tracing, isolating and supporting those who need help in all those aspects.

It's a very data-driven approach that targets zero, even though you may not actually achieve zero. I think as a national strategy, if there were to be a national strategy, then all the things that would be included in those would be necessary.

It looks like I don't have time to answer on the drugs.

[Translation]

The Chair: Thank you, Mr. Thériault.

[English]

Mr. Davies, please go ahead for six minutes.

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

Thank you to the witnesses for being here.

Mr. Scott-Douglas, last week you appeared at the industry committee, where you said the following:

We looked at all the other task forces, including Warp Speed. What Canada is doing is largely equivalent to what everybody else is doing. There's a great deal of confidential business information, and that necessitates that meetings be held in confidence, the same as almost every other task force.

Of course, the difference is that the U.S. vaccines and related biological products advisory committee does publish its agenda and its conclusions. Its entire meetings are webcast on YouTube for anyone to see. Why can the U.S. be transparent and Canada can't?

Mr. Roger Scott-Douglas: I think that's an excellent question. Transparency, to the degree possible, is obviously the goal we should all be seeking to achieve, though the work of the vaccine task force is not equivalent to the group you've identified in the United States. That is more equivalent to the regulator in Canada, Health Canada.

The work of Warp Speed, where they were dealing with sensitive and confidential business information and making decisions at an early stage that were then subsequently authorized through the FDA, etc., was done in confidence because of the confidential business information we've talked about. That same practice was generally followed by all of the leading vaccine task forces. The work of the regulator is a little different.

Mr. Don Davies: Okay. Got it.

The federal vaccine task force has a declaration of interest protocol, which requires all members to give a full disclosure of activities and interests that could place them in a potential conflict of interest to the federal government. Is there a reason why those members' disclosures have not been made public?

Mr. Roger Scott-Douglas: It is extremely important that the decision-making around advice given by the task force is made fully aware of potential conflicts of interest and interests generally. The ministers of ISED, health, and procurement are made fully aware of all of the interests relevant to advice given in that context. In any case where the government has acted on that advice and has announced the funding of projects, or commended it, the interests of the task force members relevant to those decisions have also been made fully public.

• (1350)

Mr. Don Davies: Okay.

Dr. Langley, drawing on the advice of the vaccine task force last September, the federal government pre-ordered 72 million doses of the vaccine candidate developed jointly by GlaxoSmithKline and Sanofi. It's Canada's second-largest vaccine supply agreement.

I think you currently hold the \$700,000 CIHR-GlaxoSmithKline chair in pediatric vaccinology at Dalhousie University. I believe you have worked with Sanofi on research and as a consultant in the past. By standard conflict measures, was it appropriate for you to not recuse yourself from discussions relating to the GSK-Sanofi vaccine candidate?

Dr. Joanne Langley: Thank you for the question.

To clarify, the research chair that I hold was an endowment that started to be developed between 2000...and was ultimately posted as an application on the Canadian Institutes of Health Research website. The endowment funds came from the Canadian Institutes of Health Research, the Dalhousie Medical Research Foundation, the department of pediatrics, several other smaller charitable agencies, as well as GlaxoSmithKline.

With an endowed chair, the money goes to the holder of the chair, which is Dalhousie University. The funds that arise from the endowment are then used to support research.

Mr. Don Davies: With respect, Dr. Langley, I don't need to understand how it works. I do understand. I'm asking if you think it was appropriate not to recuse yourself given the clear link, financially, between GlaxoSmithKline and the position that you hold.

Dr. Joanne Langley: Thank you.

I think it's important to understand if there is a conflict of interest. In this case, I have no material benefit to gain from an endowment that's held at Dalhousie University.

I'll turn to Roger Scott-Douglas to explain the process for the management of conflicts of interest.

Mr. Don Davies: That's fine. I'll control the questioning here, if I can.

Dr. Nickerson, South Africa and India have put forward a proposal at the WTO to exempt member countries from enforcing patents, trade secrets and pharmaceutical monopolies under the organization's agreement on trade-related intellectual property rights, know as TRIPS. Of course, the aim of that is to ensure that vaccines and other technologies needed to control COVID-19 are available universally across the globe.

What position is the Government of Canada taking on that position? In your view, what should Canada's position be?

Dr. Jason Nickerson: Thank you for the question.

I believe Canada's official position on this is that it does not yet have an official position, which is to say that Canada is sort of officially saying that it's not rejecting the proposal.

To cut right to the chase, countries should be supporting this proposal. Patents and other intellectual property rights have historically been barriers to access to medicines, particularly for people in low and middle-income countries. The TRIPS waiver proposal that's in front of the WTO at the moment is a needed and important mechanism for removing intellectual property rights as being a barrier to accessing COVID-19 technologies. Canada should support it.

The Chair: Thank you, Mr. Davies.

Mr. Don Davies: Thank you.

The Chair: We're going to try to squeeze in a quick round of one minute per party. If questioners could try to keep their questions to 30 seconds or less to allow 30 seconds or so for the answer, that would be great.

We'll go now to Monsieur d'Entremont. Please go ahead for one minute.

Mr. Chris d'Entremont (West Nova, CPC): I have a couple of quick points for Dr. Langley and maybe Mr. Scott-Douglas on getting the minutes of the task force. There are other ways for political parties to get information from different committees. The information might end up being a little blacked out, making it hard to understand what happened at the task force and how decisions were made. Knowing that, I'm wondering if you could provide us a copy of the minutes of the task force meetings.

Mr. Roger Scott-Douglas: Thank you very much, Mr. Chair, for the question.

I think that active efforts are being looked at now on how we can realize as much transparency as possible while protecting the confidential business information that legal agreements have been entered into to protect. That's under active consideration.

• (1355)

Mr. Chris d'Entremont: Can we make sure that they are provided to this committee as soon as they are available? I don't want to do a motion. I'd like to do a motion just to make sure they come here, but I'm going to use your best judgment to actually have that provided to us.

Mr. Roger Scott-Douglas: Mr. Chair, every effort will be made to get information to the committee in a timely fashion, recognizing that we'll need to redact the confidential information, of course.

The Chair: Thank you, Monsieur d'Entremont.

We go now to Mr. Van Bynen. Please go ahead for one minute.

Mr. Tony Van Bynen (Newmarket—Aurora, Lib.): Thank you, Mr. Chair.

We've heard a lot about the need for pan-Canadian initiatives, firstly for data sharing and now Dr. Morris has suggested that we have a national committee of experts on infectious diseases.

How would Dr. Morris propose that we implement this? You had mentioned earlier that there was an Atlantic example. Perhaps there are some lessons that we could learn from that. How should we go about implementing this pan-Canada presence?

Dr. Andrew Morris: I think there are a few options available. Some of those would require legislation. The Public Health Agency of Canada was born out of the SARS Commission and a recognition that we did need a strong federal response to infectious diseases and pandemics. Over time, PHAC has seen its budget and its overall strength diminished by effective reductions in budgets, etc. I think that's one aspect of it.

The second thing I would say is that NACI has proved itself to be an efficient structure and organization for immunization practices. It has effectively advised provinces that have then contextualized the advice from NACI. I don't see why a similar approach—whether it's therapy for infectious diseases or overall strategies to tackle infectious diseases—can't be structured in a similar manner.

The Chair: Thank you, Mr. Van Bynen.

[Translation]

We go now to Mr. Thériault.

Please go ahead for one minute.

Mr. Luc Thériault: Dr. Morris, on the subject of immunity, Dr. Bernstein told us at the last meeting that mixing vaccines—giving the Pfizer or BioNTech vaccine in the first dose and the AstraZeneca vaccine in the second dose—could boost immunity.

What do you think?

[English]

Dr. Andrew Morris: Although I have a personal view on it, I think that Dr. Langley has more expertise than I do to answer that.

Dr. Joanne Langley: Thank you, Dr. Morris, and thank you, Mr. Chair.

These questions are very important to answer. I don't think we have the answer to those right now, and they should be studied. It is very important to know the effect of the second dose on maturing the immune response in a safe and effective way. That, overall, has been the concern about changing whether there is, or when you give, a second dose.

These are important public health questions the member has raised, and I think we should address them.

[Translation]

The Chair: Thank you, Mr. Thériault.

[English]

We go now to Mr. Davies.

Mr. Davies, go ahead for one minute.

Mr. Don Davies: Thank you.

Dr. Langley, you and your colleagues got help and are registered as principal investigators on the phase three trial of the COVID-19 vaccine developed by CanSino Biologics. We know that's the partnership with the NRC that collapsed this summer.

Did you recuse yourself from the vaccine task force's deliberations on the CanSino vaccine?

Dr. Joanne Langley: I would have declared my interest, and I don't remember.

Roger.

Mr. Roger Scott-Douglas: The CanSino—

Mr. Don Davies: I'm just asking if you recused yourself. That's all.

Mr. Roger Scott-Douglas: The very first time CanSino was discussed, it was reviewed in a list of the international candidates, and then Dr. Langley indicated that she had—

Mr. Don Davies: I'm sorry, I have limited time. I'm asking about your recusing yourself. Excuse me, sir, but you're not answering the question.

Mr. Roger Scott-Douglas: —and she indicated she would recuse herself from any discussion.

Mr. Don Davies: The reason I ask is that Dr. Kobinger said he voiced very strong concerns despite the fact that this was officially the first recommendation of the committee, but they had never really discussed the CanSino recommendations. We didn't know how it was made is the first recommendation.

Can you explain why a recommendation of CanSino was the vaccine task force's first priority?

Mr. Roger Scott-Douglas: It wasn't the first priority, and Dr. Kobinger only came to very few meetings—two and a half meet-

ings. Most of the discussion occurred after he stopped appearing at the task force.

• (1400)

The Chair: Thank you, Mr. Davies.

Mr. Don Davies: Thank you.

Mr. Chris d'Entremont: On a point of order, Mr. Chair, just before we get onto the next panel, I'd like to ask a question.

The Chair: Mr. d'Entremont has a point of order.

Mr. Chris d'Entremont: Thank you.

At the meeting last week there were a number of undertakings made by PHAC to provide us with some information. Have we received any follow-up information from PHAC on the questions we had asked?

The Chair: We've received a number of submissions from various people. I don't know exactly if they've been resolved. That's a question we can ask the clerk.

The clerk is shaking his head no, so not at this time.

The Clerk of the Committee (Mr. Jean-François Pagé): No, I haven't received anything.

Mr. Chris d'Entremont: Okay.

Thank you, Mr. Chair.

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

I'd like to thank all of the witnesses for appearing today and giving their time, expertise and great answers.

We will now suspend and bring in the next panel.

Thank you all.

• (1400)

(Pause)

• (1405)

The Chair: The meeting is resumed.

Welcome back, everyone.

We are resuming meeting number 21 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 second wave of the COVID-19 pandemic.

I would like to welcome the witnesses.

As an individual, we have Dr. Cécile Tremblay, full professor, Université de Montréal. From the Canadian Association of Emergency Physicians, we have Dr. Alan Drummond, co-chair, public affairs committee; and Dr. Atul Kapur, co-chair, public affairs committee. From the Public Health Agency of Canada, we have Mr. Iain Stewart, president, who will be making a presentation. And we have Major-General Dany Fortin, vice-president of the vaccine roll-out task force, logistics and operations, who will also be making a presentation.

We will start now with witness statements. I would remind everyone that I will be using a yellow card to indicate when there's about a minute left, if I don't forget, and a red card when your time is up. When you see the red card, please try to wrap up.

We will start with Dr. Tremblay.

• (1405)

[Translation]

Dr. Tremblay, you have the floor for six minutes.

[English]

Dr. Cécile Tremblay (Infectious Disease Specialist and Medical Microbiologist, Centre hospitalier de l'Université de Montréal, As an Individual): Thank you.

My name is Cécile Tremblay, I am an infectious disease specialist and medical microbiologist at the Centre hospitalier de l'Université de Montréal. I hold the Pfizer University of Montreal chair on HIV translational research.

I have been working for decades on correlates of protection that could be used for vaccine development in HIV. This goal has long eluded us for HIV, so we've been thrilled to see the rapid development of viral-effective vaccines against COVID-19 in such a short period of time.

Several challenges persist. Vaccines do not stop pandemics; vaccinations do. Three factors will determine if herd immunity can be achieved in Canada through vaccination.

First is the availability of vaccine supply. Canadian researchers have been working hard on developing new vaccines. This work has been supported by the Canadian government through CIHR and other funding mechanisms. However, the time frame for the development of a new vaccine amenable to clinical trial in Canada is unlikely to yield products available for us in 2021.

I'm talking about the homegrown vaccines in Canada. These research efforts, though, should continue to be supported, as they may become useful if the pandemic persists, or if variants render our present vaccines obsolete.

At the moment, we have to rely on existing vaccines, which are in short supply not only in Canada, but throughout the world. Because of our deficient Canadian vaccine manufacturing infrastructure, we have had to rely on the importation of vaccines produced elsewhere with all of the delays that creates.

The lessons learned from previous pandemics had identified the need to produce vaccines in Canada as a priority, as part of a pandemic preparedness plan. Unfortunately, little was done and although we have had some companies manufacturing vaccines in Canada such as Sanofi Pasteur in Toronto and GSK in Quebec City, the capacity for large-scale production is limited.

The recent initiative of the federal government to develop a vaccine manufacturing facility in the Royalmount district in Montreal is commendable. Other facilities associated with research centres are also being created, such as the one in Saskatoon.

However, if we want to develop sustainable infrastructure for vaccine development and production in Canada, we must also sup-

port the presence of a variety of pharmaceutical industries, from homegrown biotechs such as Medicago in Quebec City, to big pharma. This will maintain the scientific expertise in Canada and avoid the brain drain of our young researchers to the U.S.

This means reversing an unfortunate trend over the last decade. In 2007, AstraZeneca and Bristol Myers Squibb shut down their manufacturing operations. In 2010 Johnson & Johnson and Merck's research centre in Montreal closed. Several other companies such as Pfizer, Abbott, and other research facilities that were based in Quebec were also relocated abroad.

If we want to make sure that we have sufficient vaccine supplies for the next pandemic, then we need to have an infrastructure that includes both a government-administered manufacturing capacity and a strong pharmaceutical industry presence.

The second factor in achieving herd immunity is the ability to establish mass vaccination programs that are accessible to the entire population. From what we can observe in Quebec, this seems to be quite well organized.

The third factor is vaccine hesitancy. This is not specific to COVID-19. Misinformation on vaccines has been circulating for decades, and has accelerated in recent years on social media. COVID-19 has intensified conspiracy theories, which have instilled fear in a significant proportion of the population.

To achieve herd immunity it is believed that 75% to 85% of the population needs to be vaccinated. At the moment a good percentage of the population is eagerly awaiting their vaccine. These are the low-hanging fruit. The challenge will be to reach out to those who are hesitant and not necessarily against vaccination, but who need to have their questions answered.

So far it is not clear to me what the communication plan is. People who are hesitant about getting vaccines are spread throughout society across all ages and socioeconomic strata. Specific communication strategies must be developed to address their various concerns.

Finally, phase three vaccine clinical trials usually exclude certain populations, such as immune-compromised and HIV-positive people, transplant patients, cancer patients receiving immunosuppressive therapies, and pregnant or breastfeeding women. However, we know that these populations could benefit from vaccines, but we are always in the grey zone, because data has not been collected. It could be, because of their immunosuppression, that their antibody response may not be as high or effective. We might need to use a different strategy, such as adding booster doses.

- (1410)

Usually researchers initiate research projects, like I do, to test vaccines in these populations. They apply for grants and, if they are lucky, they get funded. There's always a problem in accessing the product that we want to test to conduct these clinical trials.

With phase 4, this is particularly true when the supply is limited, such as the case right now, so testing new vaccines in these various populations should not be left to individual initiatives. It should be mandated by the government, and resources as well as vaccines should be available automatically to conduct these phase 4 trials once the vaccines are approved.

In the midst of this devastating pandemic, vaccines are the shining light on the horizon. Let us learn from previous pandemics and build a durable infrastructure encompassing research and development and manufacturing and distribution so that we are ready for the next time.

[*Translation*]

The Chair: Thank you, Dr. Tremblay.

[*English*]

We will go now to the Canadian Association of Emergency Physicians.

Dr. Drummond or Dr. Kapur, please.

Dr. Alan Drummond (Co-Chair, Public Affairs Committee, Canadian Association of Emergency Physicians): I believe that's Dr. Kapur.

The Chair: Go ahead, Dr. Kapur.

Dr. Atul Kapur (Co-Chair, Public Affairs Committee, Canadian Association of Emergency Physicians): I apologize. I thought Dr. Drummond was going to lead us off.

Thank you for the opportunity to appear. We plan to utilize our time by focusing on the immediate situation of vaccination and the vital need to engage with frontline workers and their associations. There are other points that we will be mentioning later on.

Our first priority has to be to repeat our call for increased transparency around the prioritization and administration of the COVID-19 vaccines and the plans for the vaccinations going forward. Unfortunately, there remains confusion, lack of transparency and mixed messaging around prioritization. We urge there to be central, federal coordination of efforts with clear, consistent and transparent messaging.

Why are we calling for this? It's because we see the stark example of this problem in the fact that there are still people working in Canadian emergency departments who have not been vaccinated or not completely vaccinated. Of particular concern for us are those working in smaller, isolated and rural communities. We are highlighting health care workers because of the precarious state of the health care system and its dependence on workers who are already overstretched. Plainly said, if our health care workers are incapacitated due to COVID-19, the system won't be able to take care of the population at large. As I said, but it needs reinforcing, most troubling is the fact that vaccination has been delayed for emergency personnel in rural and isolated communities. The risk there is that

because they don't have as many people and as many backup personnel, the smaller population of providers means that there are not others who can step up and fill in for colleagues who fall ill. The risk of system collapse in rural communities is much higher. That also has caused frustration for health care personnel and added to the burden of working in a system that was already overloaded even prior to the pandemic.

We as health care workers have been repeatedly thanked. We've been hailed as heroes. The reality is that we are workers, no less than any others, who deserve a safe work environment. Instead, all too often the assumption has been that we will simply accept increased risks without consistent, evidence-based assessment and mitigation of those risks. In fact, we even saw last week one provincial government fail to recognize that emergency department nurses are a higher-risk group that treats COVID-19 patients often before they have been identified as cases.

Our members and our colleagues on the front lines have continued to step up and care for the sickest patients in our communities. Transparency, communication and adherence to an ethical framework in vaccine prioritization and administration are the minimum they should receive in return. We have seen many missteps up until now. We are looking forward to the ramp-up, but we want assurance that those missteps won't be enlarged and expanded as we ramp up.

We also want to talk about the conditions that hindered the response to the COVID-19 pandemic and that need to be addressed now in order to prevent a third wave that's even worse than the second and to support the health care system's ability to respond and to resolve vulnerabilities prior to the next health care crisis. Think about the idea of a system that's resilient and able to respond. It needs surge capacity, which is eliminated when there's pre-existing crowding. It needs adequate staff, which requires HHR planning. It requires adequate supplies, which requires stockpiles, domestic production capacity, and a strategy to prevent shortages of medications and supplies. It needs an appropriate working environment, which requires hospital design. It requires adequate leadership and decision-making, such as an incident management system and clear communications.

At the beginning, we emphasized the point of keeping the system resilient, which requires vaccinating staff so that the capacity is there. I'll touch on a couple of these points specifically.

- (1415)

When we talk about surge capacity, we saw that hospitals completely shut down in wave one in order to create capacity to handle anticipated COVID-19 patients. Hospitals function most adequately and appropriately at 85% capacity. Even before COVID, most hospitals in this country were operating at or above 100%. That is not suitable; it is not appropriate. It wasn't then. It isn't now, and it won't be in the future.

We cannot go back to the old normal. That has added to the strain on emergency department workers. We have been and are continuing to see emergency department staff leave the emergency department to work elsewhere or leave the profession. Unfortunately, we have also seen at least one colleague who has been lost to suicide in the last year.

I see that my time is coming to an end. We have submitted a written brief with more details and we will be happy to answer questions from the committee.

Thank you.

The Chair: Thank you.

We'll now go to Mr. Iain Stewart, president, Public Health Agency of Canada.

Please go ahead for six minutes.

Mr. Iain Stewart (President, Public Health Agency of Canada): Thank you, Mr. Chair and members of the Standing Committee on Health for inviting Major General Fortin and me to return today to inform and discuss with you our work on vaccines.

The Government of Canada has taken a whole-of-government approach to much of the work we have been undertaking in response to the pandemic. We've been relying on accumulating scientific data and emerging evidence and we've been pulling on expert guidance to inform our decisions, strategies and recommendations. We're also participating in international communities of practice in order to benefit from the experiences and developments in other countries.

As you know, we've begun our phased approach to vaccinating Canadians. I'm pleased to say that we are on track to complete phase one by the end of March. As expected, we're ready to move on for phase two in April. Major General Fortin will be speaking more about the upcoming "big lift" we require to get ready for the influx of additional vaccine doses.

Last fall, the vaccine rollout task force was established inside the Public Health Agency of Canada in order to provide public health and strategic policy advice to decision-makers and also to oversee the management of the delivery of the vaccine portfolio. That included logistical planning and tracking of data on a secure platform as vaccines are deployed and distributed across Canada and to provide leadership and support to the various fora of the immunization experts like the National Advisory Committee on Immunization or the special advisory committee. It is also managing vaccine surveillance programs for issues such as vaccine safety, effectiveness of the vaccines and the coverage of the vaccines as we deliver them.

In order to fulfill its mandate, this internal task force is working closely with provinces, territories, indigenous leaders and communities across the country to support a consistent approach to COVID-19 immunization. The task force's expert advice and leadership have been invaluable over the past quarter and will be invaluable going forward as we move into the second phase.

Throughout the pandemic, public health practices and efforts of all Canadians have proven to be effective in containing the spread of the virus. Our efforts have brought us this far, but we have to continue wearing our masks, washing our hands and physical dis-

tancing as we move forward, until the immunization campaign is well advanced.

We also need to rely on effective border measures to mitigate the further introduction and spread of the virus and the virus' variants into Canada. That is why as of this month, travellers arriving in Canada have to produce at the border a molecular test done before arrival in Canada. They are tested again on the day of arrival and on day 10 of their quarantine. They have to continue to present quarantine plans that are appropriate and contact information for us for following up with them.

COVID-19 virus variants of concern have emerged in countries around the world. There is evidence that these variants are more easily transmitted. There is the risk that they cause more severe illness. These variants require our attention and we need to track them. We need to learn more about them and we need to use science to guide us.

In this regard, the Government of Canada recently allocated \$53 million in funding for an integrated variants of concern strategy that builds on sequencing, research and surveillance capacity for detecting the variants and informing public health measures. This vital work has provided decision-makers with the latest science on controlling for variants of concern and will continue to respond accordingly and explore options for variants, such as vaccine boosters to control against their spread.

Canada has successfully secured a diverse portfolio of vaccines to vaccinate everyone in Canada who wants to be vaccinated, by the end of September. To this end, Canada has negotiated advance purchase agreements with seven pharmaceutical companies. This includes a diversity of vaccine technologies, including two mRNA vaccines, which are Pfizer and Moderna. As of this morning, as you'll know from the announcements, AstraZeneca has been authorized by Health Canada as well.

Several other vaccines are currently under review using the rolling review process Health Canada has developed. AstraZeneca will help with the immunization campaign starting relatively soon. I believe today, as well, an announcement was made about initial early doses, which will help us begin to take on board these new viral vector vaccines as part of our immunization campaign.

• (1420)

Last fall, NACI, the National Advisory Committee on Immunization, identified priority populations that would be vaccinated first. In anticipation of increased supply, they will be updating their advice on who should be the priority populations. We will continue to be guided by their evidence and their advice in the work that we do.

Thank you very much, Mr. Chair.

The Chair: Thank you, Mr. Stewart.

We go now to Major General Dany Fortin, vice-president of the Vaccine Roll-Out Task Force, logistics and operations.

Please go ahead, General, for six minutes.

Major-General Dany Fortin (Vice-President, Vaccine Roll-Out Task Force, Logistics and Operations, Public Health Agency of Canada): Thank you very much, Mr. Chair and members of the standing committee. I'm pleased to provide the committee with an update on the progress we've made so far and our plans for moving forward to provide all Canadians with vaccines by the fall.

So far, the national operations centre here at the agency has distributed nearly two and a half million doses of both approved vaccines—Pfizer-BioNTech and Moderna—with approximately three and a half million coming next month to round out our six million announced commitment from both manufacturers.

Since last December, we have been working on a plan that will allow us to deliver authorized vaccines safely, efficiently and as quickly as possible to provinces and territories. We deliberately implemented a phased approach so we could establish our capacity to distribute vaccines and support the provinces and territories to administer the vaccines. We completed a series of tabletop exercises and various discussions and rehearsals with the provinces and territories to ensure that all critical capability gaps were filled, risks were identified and mitigated, that the plan was resilient and contingencies were in place to secure the vaccine supply chain. That continues today.

As part of our soft launch approach last December, we started with early deliveries of authorized vaccines to 14 designated points of use on the 14th of December across Canada. As we moved forward, we expanded the number of distribution sites. Last week alone, 107 vaccination sites were used for Pfizer and 83 for Moderna.

Also, I personally conducted multiple bilateral meetings with counterparts from provincial and territorial vaccine rollout leads as well as federal stakeholders to ensure that we're all on the same page. We continue to have those moving forward.

• (1425)

[Translation]

Over the last two months, Canada was significantly affected by COVID-19 vaccine shortages and delays as Pfizer-BioNTech and Moderna reduced production rates at their respective European facilities. This created a temporary delay for deliveries to Canada, but the improvements in manufacturing are now allowing for greater productivity. We are now coming out of this trough.

From the beginning, we have been open with our partners and stakeholders about fluctuations in supply and the need for contingency plans.

I want to emphasize that we are expecting 444,000 doses each week in March from Pfizer-BioNTech and that Moderna will send the full 2 million missing doses. We are on a very good track from our perspective.

From April onwards, we expect a sharp increase in the availability of licensed vaccines against COVID-19. As we announced this morning, we will receive two new vaccines from AstraZeneca, and these quantities will be added to the totals for these two productions.

More than 23 million doses are therefore expected to arrive between April and June. This includes the advance delivery of an additional 2.8 million doses of Pfizer-BioNTech, which was planned for this summer, but will now occur in the spring.

The National Operations Centre at the Public Health Agency of Canada continues to lead the planning effort to ensure that the provinces and territories keep pace with the increased deliveries of licensed vaccines. In addition, the National Operations Centre continues to ship different types of freezers to ensure ultra-cold and cold chain storage for different products, further building capacity in the provinces and territories.

Our collective efforts over the past months and weeks, the initial testing of our distribution and logistics systems, and the launch of the Pfizer-BioNTech and Moderna vaccines have all served to set the stage for rapid scale-up in anticipation of the increased availability of vaccines in the coming weeks and months. The same approach will be taken in the coming weeks for the additional vaccines, in close collaboration with the provinces and territories.

Coordination and collaboration with our federal, provincial and territorial partners is key to the success of this operation. We regularly give them updates or inform them of changes to the distribution plan and ensure that we give them as much visibility as possible on future quantities as soon as we can.

[English]

Mr. Chair, in conclusion, our work to enable our provincial and territorial counterparts continues to be done proactively and transparently. This is a co-operative effort that touches on everything from vaccine availability to enabling equipment, to considerations by health care practitioners. We're in close coordination, and we will continue to be so over the next several months. Every step of the way, to ensure that vaccines continue to be delivered efficiently and safely across regions in Canada, we've been working collaboratively with all stakeholders, and we'll certainly endeavour to do so moving forward.

With that, subject to your questions, this concludes my introductory remarks.

Thank you, Mr. Chair.

• (1430)

[Translation]

The Chair: Thank you, Major General Fortin.

We will now move to questions.

Mr. Paul-Hus, you have the floor for six minutes, please.

Mr. Pierre Paul-Hus: Thank you, Mr. Chair.

Hello everyone.

I thank the witnesses for being here.

I will address you first, Major General Fortin. It is a pleasure to see you again.

In your speech, you talked briefly about coordinating with provinces. First of all, I want to clarify one thing for everyone: you are responsible for the logistics of vaccine distribution in the country, but you are not the one who signed the contracts in advance or negotiated them. You are in charge of distributing the vaccines that are delivered.

At first, the quantity of doses to be distributed was very small, but now, we are going to receive a lot of vaccines at the same time.

Have the provinces raised an objection saying they can't handle it, or is everything okay?

If there are problems, which provinces are concerned?

MGen Dany Fortin: I thank the member for his question.

This is an ongoing effort that will continue over the next few weeks. However, over the past few weeks, we have been working with the provinces and territories to determine their needs and capacity to deliver vaccines.

I'm pleased to say today that some provinces are well advanced in establishing vaccination mega-sites, mobile clinics and drive-through sites. There are also plans at all levels, including plans to use pharmacy distribution systems, which also involve pharmacists. There are also plans to hire retired people or people who do not usually administer vaccines to contribute to this effort.

Since provinces and territories are responsible for their own immunization programs, they are learning from each other.

Mr. Pierre Paul-Hus: Major-General Fortin, let me give you an example.

You say that we will receive 23 million doses between April and June. With this information, you are well positioned to make a plan. Each province is able to know how many doses will arrive, but are there any logistical problems right now?

For example, even if it is offered 5 million doses, Quebec may not have the capacity to receive them. Is that being taken into account?

Are there provincial concerns?

MGen Dany Fortin: Indeed, if provinces are not given a good idea of the number of doses they will receive and the delivery schedule, it will become difficult for them to manage.

The provinces all indicate that they have the capacity to deliver the expected number of doses. At this point, the best way to help them is to give them the best possible estimates of how many doses they will receive so that they can coordinate all their resources. These are the indications we are receiving at the moment, yes.

Mr. Pierre Paul-Hus: On the opposition side, we have made small, easy calculations, which are not scientific. We estimate that 300,000 Canadians would need to be vaccinated every day to ensure that all Canadians are vaccinated by September, which is the deadline announced by the Prime Minister.

Do you think this is feasible and possible?

MGen Dany Fortin: These are also projections that we use and share with the provinces.

I certainly have the impression that we are heading in the right direction. What we can do to continue helping provinces is to identify risks and sticking points and make sure that we're using our logistical support to the maximum extent possible. We also need to put the freezers in the right places and prioritize distribution to ensure that we are able to make this significant increase.

These are projections that were shared with provinces. They tell us whether they are able to do so over time. We will continue to work with them to make sure we don't run into any administrative difficulties.

Mr. Pierre Paul-Hus: Thank you, Mr. Fortin. I would like to ask you one last question.

As far as planning is concerned, the 6 million planned doses have taken a long time to arrive and they will all arrive at the same time. We had known since November that this was the deal. As of April 1, for the second quarter, there will be 26 million doses.

Do you have information for the months of June, July and August?

Have companies already announced figures?

• (1435)

MGen Dany Fortin: Yes, of course.

We previously announced that we will have 23 million doses from Pfizer and Moderna during the second quarter. In the third quarter, we will be receiving more than 55 million doses. That will give us a total of 84 million doses from those two manufacturers alone.

Today, we added AstraZeneca to our portfolio of vaccines. The exact quantities we will receive during the second and third quarters still have to be confirmed. However, we can easily see that about 25 million doses will be added to our portfolio of vaccines starting in March, according to the announcement by the Serum Institute.

Those are some of the projections we have communicated to the provinces. Of course, we have to turn to the provinces quickly to tell them about the quantities we will be receiving shortly and to inform them about the distribution process. We want to avoid situations in which quantities arrive unannounced on a clinic's doorstep.

We will clearly have to plan quickly for the first deliveries of the doses from AstraZeneca.

Mr. Pierre Paul-Hus: You are convinced that all Canadians will be vaccinated by the end of September?

MGen Dany Fortin: That is what the numbers tell us. The quantities will be sufficient to vaccinate all Canadians before the end of September.

Mr. Pierre Paul-Hus: Thank you, Mr. Fortin.

I have no further questions, Mr. Chair.

The Chair: Thank you, Mr. Paul-Hus.

[*English*]

Ms. Sidhu, please go ahead for six minutes.

Ms. Sonia Sidhu (Brampton South, Lib.): Thank you to all of the witnesses for joining us today—the same day we received the news of the approval of the AstraZeneca vaccine by Health Canada.

Mr. Chair, I want to begin my round of questioning with a few brief questions for our witnesses to set the record straight for Canadians watching.

Mr. Stewart, most of the GTA is presently under a stay-at-home order. Is it correct to say that the Province of Ontario, not the federal government, imposed it based on consultations with regional and provincial public health experts?

Mr. Iain Stewart: Yes. It would be the Province of Ontario that would be establishing public health measures of that nature.

Ms. Sonia Sidhu: Thank you.

General Fortin, is it correct to say that the federal government distributes vaccines to provinces per capita and that the provinces are responsible for local vaccine distribution, including through on-line booking portals?

MGen Dany Fortin: Yes. While we've focused in the last few months, or up until now, on establishing distribution networks, we're really focusing on supporting provinces to administer and execute their immunization plans. It's very much their responsibility.

Ms. Sonia Sidhu: Thank you.

General Fortin, how many vaccine doses have been distributed to the Province of Ontario? How many have been administered by the province? How many are presently in the fridges?

MGen Dany Fortin: Mr. Chair, I'll need 10 seconds to find my data.

The Chair: Please go ahead.

MGen Dany Fortin: Mr. Chair, I think I'll have to get back to you in a few seconds, if I may.

Ms. Sonia Sidhu: Thank you, General Fortin.

Can I ask my other questions? He can come back to that question.

General Fortin, the AstraZeneca vaccine was approved this morning. This week, Canada received the largest number of doses of the Moderna and the Pfizer vaccines so far.

Are you confident that provinces will be able to increase their delivery capacity to keep up to the supply coming in? Do you have any concerns? How are you preparing for the influx of vaccines?

MGen Dany Fortin: Mr. Chair, we're focusing on helping provinces identify the risks and the additional requirements they may have in order to help them immunize at scale. The AstraZeneca and other non-mRNA vaccines have less stringent, less demanding cold chain requirements. They can be stored in the pharmaceutical fridges that you would find in pharmacies. That gives us more options. They are much easier to handle and dis-

tribute in the provinces and territories. It's good news for provinces and territories.

• (1440)

Ms. Sonia Sidhu: Would you be able to comment on the vaccination work in remote northern and indigenous communities in Canada?

MGen Dany Fortin: Mr. Chair, we are in close coordination with Indigenous Services Canada and, of course, with the provincial and territorial authorities as well. They are the colleagues that distribute vaccines. The input of the different jurisdictions is also factored in, or discussed at, numerous tables. There is plenty of opportunity to take their considerations into account. As I said, we work closely with Indigenous Services Canada in addressing the particular requirements of indigenous communities in remote locations. Personally, I have taken part in numerous discussions with my colleagues at Indigenous Services Canada and the leaders of national indigenous organizations.

It's an all-aware network that continues to develop, and we continue to address the particular concerns and requirement of all Canadians through those tables.

Ms. Sonia Sidhu: Thank you.

The next question is for Mr. Stewart.

You said that NACI is giving recommendations about vaccine prioritization. How will we see if there is a difference among provinces? How can you explain the difference among provinces? At the end of the day, the province has to decide which demographic will be vaccinated first. Can you explain that?

Mr. Iain Stewart: Yes, that's an excellent point.

Mr. Chair, the National Advisory Committee on Immunization provides advice on priority populations, as has been mentioned. That advice suggests who to target for vaccination and who has first priority. It is shared with the provinces and territories in an ongoing collaborative dialogue, but as was pointed out, at the end of the day each province and territory has to make choices about who they will immunize first within their jurisdiction, because they are delivering health care in that community.

Ms. Sonia Sidhu: Thank you.

Mr. Chair, I would still like General Fortin to submit an answer to the question I previously asked about the numbers.

Do I have time for another question?

The Chair: No. Thank you, Ms. Sidhu.

General Fortin, if you have those numbers, you can give them now. Otherwise, I'll ask you to submit them to the clerk in due course.

MGen Dany Fortin: Thank you, Mr. Chair.

For the province of Ontario at the end of March—my apologies, I have to do some math in public—as of today, it has been 1.57 million Pfizer doses, and for Moderna, 703,000 up to now.... In addition, there is a newly approved table of data that is in circulation. Forgive me, I am trying to get my hands on that.

I'll submit this to the committee in writing, if I may.

[*Translation*]

The Chair: Thank you.

We now move to Mr. Thériault.

Mr. Thériault, the floor is yours for six minutes.

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

My first question is for you, Dr. Tremblay.

Welcome, and thank you again for joining us.

People are concerned about the arrival of the variants. Modelling by the Public Health Agency of Canada showed that, if the public health measures were relaxed too quickly, we could have up to 20,000 new cases per day. The Institut national de santé publique du Québec, INSPQ, was talking about 2,000 new cases per day in Quebec alone.

Do you believe that those measures must be relaxed, or tightened even more? Some claim that we need to tighten them even more until we have a critical mass of people who have been vaccinated.

Dr. Cécile Tremblay: Thank you for your question, Mr. Thériault.

It is important to be concerned about the variants, because they could completely change the dynamics of the epidemic. Currently, the number of cases and hospitalizations is going down, but everything could change if the variants become dominant.

That being the case, I do not feel that this is the time to relax the precautionary measures we have taken up to now. In Quebec, some loosening during the school break week was allowed, but we are all a little frightened that it may subsequently cause a new spike in cases.

In my opinion, we should not continue in that direction. Instead, we should continue to restrict gatherings as much as possible until we have a critical mass of people who have been vaccinated.

• (1445)

Mr. Luc Thériault: From what we know about the effectiveness of vaccines against the first strain of the COVID-19 virus, could herd immunity be threatened by the emergence of variants, even though we are happy with the availability of vaccines?

Dr. Cécile Tremblay: The predominant variants are the one from South Africa and the B117 from England. For those two variants, the vaccine response seems adequate with both vaccines, from Pfizer and from Moderna. The South African strain shows some resistance to the antibodies that the vaccines generate and we know that the AstraZeneca vaccine is less effective for that variant. However, it is not sufficient to impair the effectiveness of vaccination. All the vaccines are effective in protecting people against the severe infections that require hospitalization or cause death.

That is encouraging for now, but it does not mean that other variants will not emerge and possibly turn out to be completely resistant to current vaccines. That should encourage us, therefore, to be even more careful and to take advantage of local and national opportunities to quickly begin producing new vaccines or boosters, because we may well be needing them next year.

Mr. Luc Thériault: Some are talking about combining vaccines from different sources in order to increase immunity. The first dose could come from Pfizer and the second from AstraZeneca, for example. Do you have a view on that?

Dr. Cécile Tremblay: No evidence suggests that we should move in that direction. No study on combining vaccines has been conducted. With vaccines available to such an extent, as everyone is telling us, we have no reason to want to combine vaccines.

Mr. Luc Thériault: With the appearance of the variants and because extremely few doses of vaccine have currently been given, should we not turn more to rapid testing for certain population groups? If so, which ones? It might mean that we do not have actually have to tighten the rules everywhere.

Dr. Cécile Tremblay: That is an important and interesting question. Until now, we have used rapid tests in a limited way because some, like antigenic tests, are less sensitive than traditional tests. However, there are several types of rapid tests and we must not confuse them.

Rapid tests can still be used, because, if they are administered regularly, they at least allow us to detect the most contagious cases. Additionally, if they are repeated, we will end up detecting all cases. So I am in favour of a strategy that combines rapid testing with comprehensive or random vaccination in the settings where outbreaks are likely.

Mr. Luc Thériault: Some are starting to talk about vaccination passports. What is your view on them, in light of the management of the pandemic, the number of infections and the variants?

Dr. Cécile Tremblay: We need to be extremely careful about vaccination passports. I find the idea a little premature. If we give out vaccination passports, what do they show?

We are still not sure about the duration of the immunity that vaccines provide. Some people may have had one dose and others two. Will the immunity last six months, eight months? If you want to use a vaccination passport in order to travel, but you were vaccinated a year ago and you no longer have any antibodies, what significance does it have?

Before we talk about a vaccination passport, I would like to have data about the duration of the immunity that the vaccines provide and about the extent of their effectiveness. That would reassure me that the passport actually means that the person is immunized and protected and will not therefore be spreading the virus in other countries.

• (1450)

Mr. Luc Thériault: Thank you.

I think that's all the time I had, Mr. Chair.

The Chair: Thank you, Mr. Thériault.

Mr. Luc Thériault: I made it for once.

The Chair: Well done.

[*English*]

We'll go now to Mr. Davies.

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

Mr. Don Davies: The Prime Minister has repeatedly and publicly said that all Canadians who want a vaccine will get one by September. I noticed that you, today, said by late September. Why the shift in dates?

MGen Dany Fortin: Mr. Chair, there is no shift in date. If I said that, it's by mistake. It's by September, and with the numbers that we're seeing with the approval of the AstraZeneca vaccine, you'll see even more vaccines arrive sooner, and so that date might be revisited at a future point in time.

Mr. Don Davies: Okay. Thank you.

The U.S. is currently administering 1.45 million doses per day on average, and they plan to ramp up to a capacity of three million per day by April—

The Chair: Pardon me, Mr. Davies, but your mike needs to be adjusted I think.

Mr. Don Davies: Sorry.

The U.S. is currently administering 1.45 million doses per day on average, and they plan to ramp up to a capacity of three million per day by April. In contrast, Canada has only administered a total of approximately 1.7 million doses to date.

General Fortin, what is the maximum number of doses per day that Canada is currently capable of administering?

MGen Dany Fortin: Mr. Chair, I think this is a question that is best answered by integrating the inputs from the different provinces, but what provinces are telling us is that they can scale up significantly. They see no major obstacles to scaling up with the projections that we issued them. I think that with the efforts over the last few weeks and the culminating point that is the rehearsal on March 9, it's not an end date, but it is a good, important, way point to come together and confirm that we have a good line of sight in our plans and that additional risks are identified. We might be in a better position to answer that in the fullness of time.

Mr. Don Davies: So as a—

The Chair: Mr. Davies, the clerk advises me that you need to unplug and plug in again. I'll stop your time.

Mr. Don Davies: How is that?

The Chair: Try it again.

Mr. Don Davies: Is that better, Mr. Chair?

The Chair: I believe so.

We'll carry on from here.

Mr. Don Davies: Sorry, General Fortin.

To clarify, are you saying that, as of today, we don't have a national number on how many vaccines we can deliver on a national basis? We don't know that number right now.

MGen Dany Fortin: Mr. Chair, what I'm saying is that it depends on the provinces' ability to scale up. The number of 300,000 a day that was mentioned earlier makes perfect sense. It's part of the projections that we shared with provinces, and they intend to scale up different types of vaccination clinics to meet that goal.

Mr. Don Davies: Okay.

U.S. President Biden has committed 10,000 federal troops and the National Guard to participate in vaccinating American citizens. Has the government asked you or has the Canadian Armed Forces been asked to participate in vaccinations? Have you been asked about that?

MGen Dany Fortin: Mr. Chair, there are ongoing discussions with the Canadian Armed Forces and the Department of National Defence. In close coordination with Indigenous Services Canada, plans exist to support provinces that require it for some of their remote and indigenous communities. We're actually seeing that now in northern Manitoba as well as northern Ontario and it's appeared in Newfoundland and Labrador, and so it will likely continue as required.

Mr. Don Davies: Thank you.

Mr. Stewart, if I can turn to you, you were president of the NRC until September 2020. The day before, on August 31, 2020, the Prime Minister issued a press release that said that Canada would begin producing 250,000 doses per month by November 2020 at the NRC's Royalmount facility in Montreal and up to two million doses per month by the end of 2020.

On August 31, 2020, when the Prime Minister said that, was that your understanding, Mr. Stewart? Was the Prime Minister accurate?

• (1455)

Mr. Iain Stewart: I just want to jump in and say that Canada is delivering 637,000 doses this week, just to answer your previous question. That is our current throughput for how many doses we're able to deliver.

With respect to your question about projections and announcements made at that time, I believe that was tied to a thing that subsequently was set aside. It had arisen from the work that you'd previously been talking about around the CanSino project.

Mr. Don Davies: On August 31 the Prime Minister was telling Canadians that the NRC facility that you were head of was going to be producing 250,000 doses in November. On that date, was he telling the truth to Canadians, as far as you were concerned?

Mr. Iain Stewart: The NRC facility that you are referring to is the Royalmount facility in Montreal, and that is on track to produce two million doses a month—

Mr. Don Davies: But not by November 2020, Mr. Stewart. That's the question.

Mr. Iain Stewart: Actually, as I just said, that was related to a project that didn't go ahead.

Mr. Don Davies: Did you know on August 31, 2020 that the project was not going ahead?

Mr. Iain Stewart: I did not know on August 31 that the project was not going to go ahead, but I think that's something you should be discussing with the people who were running the NRC after I left.

Mr. Don Davies: That's the problem. You went until September 1. You don't know the answer, and when I put that very question to the NRC chief after September, he said to ask you, so it seems that there's a gap here.

Mr. Stewart, when you were president of the NRC, in the spring of 2020, when the federal government announced an investment of \$44 million, it was specifically to “ensure that the facility complies with good manufacturing practices related to the development, testing, and scale-up and production of promising vaccine candidates.”

My understanding is that the reason we've been given for not producing those doses in November that were promised by the Prime Minister was that the facility never achieved its good manufacturing practices, so if you were given \$44 million in the spring to achieve good manufacturing practice status, why didn't that happen?

The Chair: Go ahead with your response quickly, please.

Mr. Iain Stewart: There were actually a series of funding announcements, and those were to take a clinical facility and have that clinical facility achieve GMP. Over the course of the summer, the project evolved to become the creation of a large-scale manufacturing facility, and that large-scale manufacturing facility is on track, and it will be GMP.

The Chair: Thank you, Mr. Davies.

Committee, that wraps up our round of questions. I think, because we started a little later, we'll try to squeeze in another, lighting round, so let's propose one minute per party. Again, I encourage members to keep their questions short to allow time within that minute for a response.

On my list is Ms. Michelle Rempel Garner, or it will be Mr. d'Entremont again.

Go ahead.

Hon. Michelle Rempel Garner (Calgary Nose Hill, CPC): It's all right. Mr. d'Entremont is going to quarterback today.

Mr. Chris d'Entremont: Okay. We're all fighting about who goes first. I thought it was Larry anyway.

This is for Mr. Stewart since it is for PHAC. Last week we had a number of your vice-presidents or vice-chairs—whatever the positions are within your department—who committed to getting some information back to us, especially on the data that PHAC would have used to tell the government how or why they would use the quarantine hotels. Do you have that information available today, or can you commit to making sure we have it by March 5?

Mr. Iain Stewart: Mr. Chair, if I understand, from the discussion that occurred last week, I think the question was what the relationship was between the Alberta pilots and the current structure being

used at the border with respect to the three-day PHAC hotels, as they're being called.

First of all, I need to point out that the public health agency is actually part of the Alberta pilots. We provided \$23 million in funding to enable the Alberta pilots, and we're partners with Alberta on those pilots.

From that work, which we hope will ultimately involve 52,000 people by the end of the life of the project, we're learning about what is the right sequencing and timing of tests. That knowledge that we've gathered through joining that project is in fact what we used to design the approach we're using at the border now. It's a continuation of learning from being part of that pilot.

I'm sorry. Did I miss something?

• (1500)

Mr. Chris d'Entremont: I'm out of time, so....

Mr. Iain Stewart: Oh, okay.

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

We go now to Dr. Powlowski for one minute, please.

Mr. Marcus Powlowski: Dr. Drummond, Dr. Kapur is a fellow long-time emerg doctor who has moved on. I need to ask if you can answer this question in about your particular hospital, your particular ER. Was your emergency room, your hospital, prepared in the early months of the pandemic to be able to start looking after COVID patients, making all the changes you needed in order to do so?

As you know, the hospitals are under provincial jurisdiction. Health care is primarily a provincial jurisdiction. Did you get any assistance from the hospitals in coordinating a response and knowing where to go?

Dr. Alan Drummond: The short answer to that question is no. In the first wave, we were governed by media appearances on what was happening in northern Italy and New York City. Thankfully, we had a few weeks' time to prepare for this potential onslaught of the novel coronavirus.

We felt very much left to our own devices, I think, in terms of inadequate protective equipment; mixed messaging, which led to confusion amongst clinical staff; an insufficient number of negative-pressure rooms, which was mandated after the SARS pandemic and I guess we didn't learn; and our concern for ventilator and ICU capacity. Our association actually had to fill in the clinical gaps left by the educational void.

Thank God, I guess, emergency physicians, emergency nurses and paramedics on a good day are a very innovative bunch. I think they responded in an exceptional manner to the challenges that lay ahead.

The Chair: Thank you, Dr. Powlowski.

[Translation]

Mr. Thériault, the floor is yours for one minute.

Mr. Luc Thériault: Okay.

Dr. Tremblay, managing a pandemic in a public health context is practising medicine en masse. We have to make sure that the public sticks to the message and does not quit. Some advocate a uniform, centralized approach. Currently, the coordination is decentralized; it is different and varies from one coast to the other.

Which model do you prefer?

Dr. Cécile Tremblay: Yes, managing a pandemic requires a structure in which everyone speaks with the same voice. It takes a degree of centralization, but that does not exclude adapting to local realities. In fact, the marching orders cannot apply in the same way in a province with no cases of the virus as in another with a crisis.

So I believe we need a mixed model, but one with good central and coordinated management. Public health messages must be consistent. We must say generally the same thing, but then tailor the message to local realities.

Mr. Luc Thériault: Thank you.

The Chair: Thank you, Mr. Thériault.

[English]

Mr. Davies, go ahead, please, for one minute.

Mr. Don Davies: Mr. Stewart, a recent study from a British university found that in light of the emergence of the B.1.1.7 variant, the only way for the U.K. to reach herd immunity would be to vaccinate almost everyone, including children, with the more effective Pfizer vaccine. They found that vaccinating the entire population with the AstraZeneca vaccine would only reduce the R0. Meanwhile, the Pfizer vaccine would require 82% of the population to be vaccinated to control the spread of the new variant.

Has the Public Health Agency of Canada conducted similar modelling for Canada?

Mr. Iain Stewart: First of all, I'm not aware of that study. We'll look for that with great interest. Thank you for that.

Secondly, we have 70 million doses of Pfizer and Moderna, which are sufficient for the needs of Canadians. It will become a question of vaccine hesitancy, at a certain point, as to whether we can vaccinate the number of people we need with those two products.

Mr. Don Davies: Do we need to access the Covax fund if we have 70 million Pfizer and Moderna vaccines?

Mr. Iain Stewart: The decision about whether or not to access the Covax fund is not in my remit, so I might not be the best person to speak to it.

Our overall strategy has been to have multiple vaccine candidates in order to try to bring forward vaccines earlier so that we can complete the immunization program in a timely manner. AstraZeneca, whether through Covax or through our direct APA, is in fact a way to get more doses earlier, which I think Canadians are very anxious to have.

• (1505)

Mr. Don Davies: This study was from the University of East Anglia, Mr. Stewart, if that helps.

Mr. Iain Stewart: It does. Thank you, sir.

The Chair: Thank you, Mr. Davies.

To all our witnesses today, thank you for sharing your time, expertise and knowledge with us today.

Thank you to all of the members for a great meeting. I look forward to seeing you all next week.

With that, we are adjourned.

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