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# Standing Committee on Public Accounts

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Chair: Mr. John Williamson





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• (1100)

[*Translation*]

**The Chair (Mr. John Williamson (New Brunswick South-west, CPC)):** I call the meeting to order.

Welcome to meeting No. 48 of the House of Commons Standing Committee on Public Accounts.

Pursuant to Standing Order 108(3g), the committee is meeting today as part of its study, called “Report 9, COVID-19 Vaccines, of the 2022 Reports 9 and 10 of the Auditor General of Canada”.

[*English*]

I would like to welcome our witnesses. We have a long list, so please bear with me.

From the Office of the Auditor General, we have Karen Hogan, Auditor General of Canada; Susan Gomez, principal, and Nadine Cormier, director. Welcome.

From the Public Health Agency of Canada, we have Luc Gagnon, assistant deputy minister and chief digital transformation officer, digital transformation branch, by video conference; Dr. Harpreet Kochhar, president; and Stephen Bent, vice-president, COVID-19 vaccine rollout task force.

From the Department of Health, we have Stephen Lucas, deputy minister; Celia Lourenco, acting associate assistant deputy minister, health products and food branch; and Supriya Sharma, chief medical adviser and senior medical adviser, health products and food branch.

Finally, from the Department of Public Works and Government Services, we have Arianne Reza, associate deputy minister; and Michael Mills, assistant deputy minister, procurement branch.

Welcome, everyone.

All four departments will have five minutes each.

I'm going to begin with Ms. Hogan. You have the floor for five minutes, please.

[*Translation*]

**Ms. Karen Hogan (Auditor General, Office of the Auditor General):** Mr. Chair, thank you for this opportunity to discuss our report on COVID-19 vaccines, which was tabled in the House of Commons on December 6, 2022.

I would like to acknowledge that this hearing is taking place on the traditional unceded territory of the Algonquin Anishinaabe people.

Joining me today are Susan Gomez, the principal who was responsible for the audit, and Nadine Cormier, the director who led the audit team.

This audit examined how the federal government procured, authorized, and distributed vaccines to the provinces and territories to immunize Canadians against COVID-19.

Overall, we found that the Public Health Agency of Canada, Health Canada, and Public Services and Procurement Canada worked together to respond to the urgent nature of the pandemic and secured enough COVID-19 vaccine doses to vaccinate everyone living in Canada.

Health Canada helped get vaccines to Canadians by adjusting its usual authorization process. The department did this by reviewing information from the vaccine companies as it became available, rather than waiting to receive a complete application package before starting its review. We found that Health Canada followed a systematic process to authorize the COVID-19 vaccines.

In 2020, Public Services and Procurement Canada established advance purchase agreements with seven companies that showed the potential to develop viable vaccines. Between December 2020 and May 2022, the federal government paid for 169 million vaccine doses. Over 84 million were administered to eligible people across the country. On average, the Public Health Agency of Canada delivered vaccines within two days of receiving a province's or a territory's request. This is successful, considering the logistics of transporting temperature-sensitive materials to sometimes remote locations.

[*English*]

We found that the Public Health Agency of Canada and Health Canada collaborated and analyzed COVID-19 vaccine surveillance data to monitor the safety, coverage and effectiveness of the vaccines. However, a lack of finalized data-sharing agreements with the provinces and territories meant that the agency struggled to effectively share detailed case-level safety surveillance data with Health Canada, the World Health Organization and vaccine companies.

We raised concerns about the sharing of health data between federal and provincial or territorial health authorities in 1999, 2002, 2008 and again in 2021. These long-standing issues, including implementing a pan-Canadian framework for sharing information, must be urgently addressed, because the sharing of health data is a cornerstone of effective surveillance to keep Canadians safe.

We also found that problems with information sharing affected the Public Health Agency of Canada's ability to gather wastage and expiry information. Delays in implementing important functionalities of VaccineConnect also reduced the agency's ability to track wastage.

By the end of May 2022, Canada had 32.5 million doses of COVID-19 vaccines, estimated to be worth about \$1 billion, in federal, provincial and territorial inventories. Another 50.6 million doses were deemed surplus and offered for donation.

Between December 2020 and May 31, 2022, which marked the end of the period covered by our audit, 15.1 million doses were wasted. The Public Health Agency of Canada told us that from June to December 2022, another 11 million doses expired before they could be used or donated.

Wastage can happen for many reasons, and given the evolving nature of the pandemic, some wastage was to be expected.

Mr. Chair, this concludes my opening remarks. We'd be pleased to answer any questions the committee may have. Thank you.

• (1105)

**The Chair:** Thank you very much, Ms. Hogan.

I'll turn now to Dr. Kochhar from the Public Health Agency of Canada.

You have the floor for five minutes, please.

**Dr. Harpreet S. Kochhar (President, Public Health Agency of Canada):** Good morning, and thank you, Chair.

Thank you for the opportunity to appear before this—

**The Chair:** Could I ask you to remove your mask while you're speaking, please? It helps with translation and enables all the members to hear clearly.

Thank you very much.

**Dr. Harpreet S. Kochhar:** Again, good morning. Thank you for the opportunity to appear before this committee to talk about the Public Health Agency of Canada's role in access to COVID-19 vaccines.

Joining me today are Stephen Bent, vice-president of the vaccine rollout task force, and Luc Gagnon, the chief digital transformation officer for Health Canada and the Public Health Agency of Canada.

I'd like to start by acknowledging the findings and recommendations from the OAG audit on COVID-19 vaccination.

You'll recall that this period of time covered by the audit, January 1, 2020 to May 31, 2022, was a time of unprecedented mobilization to procure, allocate, distribute and track the administration of COVID-19 vaccines.

Since May 31, 2022, another 13 million doses of vaccine have been administered in Canada. Additionally, 13.5 million more doses were donated, and 11.4 million doses, both mRNA and non-mRNA, had their shelf life extended.

[Translation]

Early in the pandemic, the government needed to make decisions on COVID-19 vaccine procurement. This was at a time when global demand was high and there was uncertainty about which, if any, vaccine candidates would be approved for use.

To help the government make the necessary evidence-based decisions in this uncertain environment, the COVID-19 Vaccine Task Force was established in April 2020.

[English]

Guided by the advice of this task force, Canada adopted a diversified vaccine strategy and built its vaccine portfolio with seven suppliers through advance purchase agreements. Our strategy was successful, and Canada was among the first in the world to secure early supply and administer COVID-19 vaccine doses in December 2020.

The Public Health Agency of Canada is proud of its role and the success of the largest vaccination campaign in our country's history, a campaign that was central to the COVID-19 response and recovery.

We are also pleased that the OAG audit on COVID-19 vaccines noted that the Public Health Agency of Canada allocated and distributed COVID-19 vaccines to provinces and territories equitably and in a timely manner.

The Government of Canada will continue to ensure the sufficient supply of COVID-19 vaccines for anticipated demand and population protection. This includes recommended booster doses and new bivalent formulations for people in Canada.

At the same time, we're taking steps to manage our COVID-19 vaccine surplus. This includes making surplus doses available for donation to other countries to help address global vaccine inequity. However, this has become increasingly difficult due to global over-supply and diminishing demand.

• (1110)

[Translation]

The Agency is also working closely with Public Services and Procurement Canada and vaccine manufacturers to adjust contractual commitments and delivery schedules, where possible.

Furthermore, we continue to work with provinces, territories, and Indigenous and federal partners on demand planning and forecasting to determine supply requirements for COVID-19 vaccination programs.

[English]

Concerning the safety of COVID-19 vaccines, PHAC is committed to continued transparency. This includes improving information sharing among partners, including Health Canada, WHO and vaccine companies.

We understand that this information sharing is an important part of our public health and regulatory system, and Canada's vaccine safety surveillance system continues to effectively monitor, detect, share and act on vaccine safety signals. The agency will continue to lead the consultations with provinces and territories to address information-sharing issues identified by the audit. The Public Health Agency of Canada will continue to share data from this system in aggregate form on a regular schedule with the World Health Organization and on an as-needed basis with vaccine manufacturers.

The agency is actively working to fully implement VaccineConnect, an IT system to manage a nationwide vaccination program. As of November 2022, the system has a newer module for tracking orders and inventory at the central level to support supply chain management.

The agency will continue to work closely with provinces and territories to identify data quality gaps, and will continue engaging with jurisdictional partners to identify service gaps.

In conclusion, the Public Health Agency of Canada will review lessons learned and collaborate with implicated departments and stakeholders to optimize COVID-19 vaccine supply management and reduce COVID-19 vaccine surpluses.

Thank you. I would be happy to respond to any questions.

**The Chair:** Thank you very much, Dr. Kochhar. I appreciate it.

We'll hear for five minutes from Dr. Lucas from the Department of Health.

It's over to you, please.

**Dr. Stephen Lucas (Deputy Minister, Department of Health):** Thank you, Mr. Chair.

I would like to thank the committee members for the opportunity to appear before you today. Joining me is Health Canada's chief medical advisor, Dr. Supriya Sharma, and the acting associate assistant deputy minister of the health products and food branch, Dr. Celia Lourenco.

Health Canada is responsible for regulating health products in Canada, including vaccines. The department evaluates data in support of the safety, quality and efficacy of health products before authorizing them for sale in Canada. We also monitor the safety of health products while they are on the market and take prompt action should safety concerns emerge.

[Translation]

Health Canada acknowledges the extensive effort of the Office of the Auditor General, in collaboration with relevant partners across

government, in developing the COVID-19 vaccines report assessing the procurement, authorization, allocation, distribution and surveillance of COVID-19 vaccines.

In fulfilling its mandate, Health Canada relies on information sharing with the Canada Public Health Agency in collaboration with the provinces and territories to continuously monitor vaccine safety.

I will focus on the areas of the audit relating to Health Canada's responsibilities. Specifically, the authorization of COVID-19 vaccines, surveillance, and data sharing.

[English]

The COVID-19 pandemic presented a global threat and public health emergency that required the federal government to act quickly regarding vaccine approval, procurement, distribution and surveillance.

One of Health Canada's top priorities in light of the pandemic was to exercise regulatory agility to support access to vaccines while maintaining rigorous evidence standards that were aligned with those of international regulatory partners.

Health Canada welcomes the results of the audit that found that Health Canada expedited the regulatory review and authorization of the vaccines used to combat COVID-19 while upholding the rigorous standards required for our approval. The expedited authorization process was developed and implemented for COVID-19 vaccines through an interim order and modified the department's usual process in a few key ways.

• (1115)

[Translation]

First, the department created dedicated teams that focused on the review of COVID-19 vaccines by mobilizing existing internal resources with expertise in vaccines.

Second, Health Canada authorized vaccine manufacturers to submit data on a rolling basis, which allowed us to review data from early in the development of the vaccine while later-stage clinical trials were taking place. The vaccines were only authorized once all the necessary data were reviewed and considered acceptable.

Third, we applied terms and conditions on each vaccine authorization to more closely monitor vaccine safety, quality and effectiveness as they are administered in Canada and globally.

Finally, Health Canada cooperated extensively with our international partners to share information during the review process and reduce duplication.

The audit concluded that the Public Health Agency and Health Canada efficiently provided access to COVID-19 vaccines, with Health Canada's expedited authorization process playing a critical role in ensuring that vaccine doses were available to Canadians in a timely manner.

[English]

The audit also found that the Public Health Agency and Health Canada shared relevant surveillance data, such as cases of adverse events following immunization, to effectively monitor the safety and effectiveness of COVID-19 vaccines. This allowed both organizations to take immediate action in response to vaccine safety signals resulting from reported adverse events and subsequently communicate them to the Canadian public and to the vaccine manufacturers. In doing so, Health Canada was able to act appropriately and in a timely manner to respond to confirmed vaccine safety signals based on reported adverse events.

However, the audit also highlighted long-standing issues related to data sharing, which affected the Public Health Agency's ability to share detailed case-level safety surveillance data with Health Canada. For example, the audit recommended that more should be done to facilitate the sharing of surveillance data with Health Canada by allowing the department access to the Canadian adverse events following immunization surveillance system, CAEFISS, and by expediting the implementation of the pan-Canadian health data strategy.

Health Canada agrees with the audit's findings. Its recommendations validate the department's efforts to advance a more robust and consistent method of sharing health data.

Health Canada will continue to collaborate with the Public Health Agency and provinces and territories on the pan-Canadian health data strategy, and we support ongoing work with provinces and territories to provide greater access to CAEFISS.

[Translation]

In closing, Health Canada welcomes the Auditor General's recommendations and is committed to continuous improvement in the timely access to accurate health data to achieve better health outcomes for Canadians.

Thank you again to the committee for inviting me. I will be pleased to answer any questions you may have.

**The Chair:** Thank you, Dr. Lucas.

[English]

Ms. Reza, you have the floor for five minutes, please.

**Ms. Arianne Reza (Associate Deputy Minister, Department of Public Works and Government Services):** Thank you, Mr. Chair. Good morning.

I am pleased to appear before the committee to discuss the Auditor General's report on securing vaccines during the COVID-19

pandemic. Here with me today is Michael Mills, assistant deputy minister of procurement.

The Government of Canada worked diligently to secure access to safe and effective COVID-19 vaccines.

[Translation]

On behalf of the Public Health Agency of Canada, and based on advice from the COVID-19 Vaccine Task Force, Public Services and Procurement Canada led negotiations and finalized agreements with vaccine suppliers.

The report by the Auditor General focused on whether Public Services and Procurement Canada provided adequate procurement support to secure COVID-19 vaccines. It concluded that the department provided efficient procurement support to the Public Health Agency of Canada as part of a whole-of-government response to a rapidly evolving coronavirus pandemic.

Working with the Public health agency of Canada, Health Canada and Innovation, Science and Economic Development Canada, and guided by the Task Force, we successfully secured enough COVID-19 vaccine doses to vaccinate everyone living in Canada.

At the end of May 2022, the Public Health Agency reported that about 82% of eligible people at that time had received at least two doses.

This was the largest mass vaccination program in Canadian history, carried out under the most extraordinary of circumstances.

• (1120)

[English]

In the midst of the COVID-19 pandemic and in a hyper-competitive global market, Public Services and Procurement Canada was tasked with procuring the vaccines to reduce Canadians' risk of serious illness, hospitalization and death. At the time, there was great uncertainty about which vaccines would be developed and authorized, and when the vaccines would be available for distribution. Canada also had very limited domestic capacity to produce vaccines and relied on international products.

In those early days, procuring the required vaccine doses was an around-the-clock effort that was undertaken by PSPC immediately after the vaccine task force made its recommendations regarding potential vaccines.

As the department worked to secure a sufficient supply of vaccine doses, we were always mindful of the urgency, as well as the need for due diligence. As the Auditor General noted, Public Services and Procurement Canada modified its procurement processes early in the pandemic to allow use of its emergency contracting authority, enabling the department to procure vaccines using a non-competitive approach.

[*Translation*]

Based on expert advice, Canada adopted a sweeping strategy to supply everyone in Canada with the most promising COVID-19 vaccines. It was a strategy to cover all bases, securing agreements with several companies in case Health Canada authorized only one or a few vaccines.

By January 2021, Public Services and Procurement Canada had signed seven advance purchase agreements for up to 414 million potential doses. These agreements included advance payments required to support vaccine development, testing, and at-risk manufacturing.

The Auditor General found that the department exercised due diligence on the seven companies by conducting assessments to examine their financial capability to meet requirements and by conducting integrity checks to mitigate the risk of unethical business practices.

Ultimately, our approach was successful. In July 2021, the government announced that Canada had received more than 66 million doses of COVID-19 vaccines, enough to fully vaccinate every eligible person in Canada and meeting the government's target to provide vaccines to those who wanted them by fall 2021.

In closing, Public Services and Procurement Canada employed a procurement strategy that covered all the bases to secure vaccines to protect Canadians, and it has proven effective.

[*English*]

Of course, we continue to evolve our vaccine procurement strategy based on the best scientific advice available, including securing new formulations for variants, boosters and pediatrics as they become available and approved by Health Canada.

Thank you. I'm happy to take your questions.

**The Chair:** Thank you all very much.

We'll now turn to our members. In the first round, each member will have six minutes.

Dr. Ellis, you have the floor for six minutes, please.

**Mr. Stephen Ellis (Cumberland—Colchester, CPC):** Thank you very much, Chair, and thank you to the witnesses for being here.

Certainly, having been a physician in charge of a regional COVID unit, this has very personal meaning for me with respect to now looking at lessons learned.

I take umbrage at the AG report in terms of its saying that a billion dollars' worth of wasted vaccines is acceptable, expected, reasonable or perhaps successful—that's the word that was used. On behalf of Canadians, I think that's a bit appalling.

That is, of course, directly related to VaccineConnect, with a total cost of \$59.1 million, of which \$37.4 million was paid. We know that this was a failing system. That people were using spreadsheets in this day and age is absolutely shocking.

As a simple question, did we pay the remaining \$21.7 million, and why did we?

• (1125)

**The Chair:** Maybe indicate who the question is for, Dr. Ellis.

**Mr. Stephen Ellis:** Sure, I'll ask Dr. Lucas.

**Dr. Stephen Lucas:** I'll defer to Dr. Kochhar on that question.

**Dr. Harpreet S. Kochhar:** The contract was with a contracting firm that was providing those services to us. The rest of the money was actually spent on making sure we had the infrastructure available for it to work.

Luc Gagnon is online, in case you need a bit more on that.

**Mr. Stephen Ellis:** No, that's fine. Thank you.

Much like "ArriveSCAM", we continue to pay for an app that didn't work. It's not surprising.

Again, it's hard, with so many of you there, to know who to direct this to. That being said, we've lost probably a billion dollars' worth of vaccines. How many contracts are there now outstanding, and how much more vaccine are we going to lose?

**Dr. Harpreet S. Kochhar:** Mr. Chair, many contracts we have currently are based on the advance purchase agreement. They are with different vaccine manufacturers. The details are with our colleagues in PSPC, but just as a reminder, these are evolving scenarios, with bivalent vaccines coming on board too. We continue to move to obtain those specific vaccines, which are current and which we can use on the Canadian population.

**Mr. Stephen Ellis:** That's fine. Thank you for that response. The question, though, is this: How many more vaccines are we on the hook for? What are we going to do with them? Are we going to lose them because we can't track expiry dates, and will it cost us multiple more billions of dollars?

Perhaps Ms. Reza could answer that.

**Ms. Arianne Reza:** As Harpreet alluded to, we have seven APAs. I think six of them have received regulatory approval. We had an opportunity to purchase up to 412 million doses. Some of those are firm, and some of those are options that are triggered at the request of Canada. We continue to work with all of the suppliers to adjust the supply based on demand.

**Mr. Stephen Ellis:** How many of those are firm contracts? I guess that's my question. How much money are we on the hook for?

**Ms. Arianne Reza:** Each of the APAs has a firm portion to it, usually reflective of the type of—

**Mr. Stephen Ellis:** I get that part. How much is it?

**Ms. Arianne Reza:** We do not have the number of firm contracts or firm doses on hand. We'll have to come back to you with details.

If I could add a footnote on this, it is a constantly evolving field. For example, there are usually a minimum of 20 million firm doses per APA. There are additional doses related to boosters and various elements, and when there's a decision based on a public health need to trigger options of certain types of platform.

**The Chair:** Doctor, just let me interrupt.

You can request that the documents be sent to the committee. I think the offer was made, but if you would like to make that request, we will follow up on that. You can do that, please.

**Mr. Stephen Ellis:** Thank you, Chair. I'd like to make that request, please.

If you look at it, you see there are seven APAs, with 20 million doses per agreement, so that's \$30 a dose on average. Wow. That's a lot of money we're going to be out, given the uptake for this thing.

I'll probably come back to this in my next round of questioning, but CanSino obviously is a significant failure of this Liberal government. How much was paid to CanSino in the contracts?

**Ms. Arianne Reza:** PSPC cannot speak to CanSino. It was not part of the seven APAs we negotiated. It would have to be redirected, I believe, to ISED.

**Mr. Stephen Ellis:** Mr. Chair, what you're telling me here is we're doing a review on vaccines. We have a Liberal government that failed to procure vaccines early for Canadians, because it put all its proverbial eggs in one basket with respect to CanSino, which delayed getting vaccines to Canadians by at least three months and probably cost the economy \$80 billion. Nobody knows the answer here, at this very esteemed panel, as to how much we paid CanSino.

Perhaps, Dr. Lucas, you could answer that.

• (1130)

**Dr. Stephen Lucas:** Mr. Chair, what I would indicate is that the advance purchase agreements with the seven manufacturers were concluded between the summer and fall of 2020. The first vaccine authorized, the Pfizer vaccine, in early December 2020, was within days of the initial authorization. In the United Kingdom, when vaccine doses were delivered in December 2020—

**Mr. Stephen Ellis:** Sorry, just to interrupt, I asked about CanSino.

**Dr. Stephen Lucas:** In regard to early access to vaccines by Canadians, there was not an advance purchase agreement with CanSino, and further questions, as Ms. Reza from PSPC indicated, could be directed to officials from Innovation, Science and Economic Development pertaining to that.

**The Chair:** Thank you very much. That is time.

We're turning now to Ms. Bradford for six minutes.

**Ms. Valerie Bradford (Kitchener South—Hespeler, Lib.):** Thank you, Mr. Chair, and thank you to our many witnesses today.

This committee has looked at a number of issues revolving around COVID and the government response to it at the time. This far away from the initial crisis, we tend to forget what an uncertain

time that was, how little we understood what we were dealing with, what the disease was, and how to effectively treat and conquer it. I think it's important to go back to that.

It's good that without knowing who the winners would be—because nobody knew what the effective vaccines were—you did not put all our eggs in one basket. We had seven different vaccines that we were investigating.

By the end of May 2022, the Public Health Agency reported that 82% of eligible people had received at least two doses. I think that's quite remarkable under the circumstances, but it's always good to compare.

Is there any one of you who could address—I don't know if it's Mr. Lucas—how that uptake compares with the uptake in similar countries, like the U.S., the U.K. or Germany?

**Dr. Harpreet S. Kochhar:** Mr. Chair, I'll probably try to answer that question.

Canada, among the G7 countries, had the highest rate of the primary vaccination, and that continues to be the case. As of today, we have 80.7% of primary series coverage as of January 29. Again, I'll just remind you that we moved from 12 years old to five to 12 years and then pediatrics, and the uptake has been calculated.

We are also among the top two who have delivered booster vaccinations—44% for Japan and 26% for Canada—so we are amongst the leaders in terms of early vaccination and completion of the primary doses, as well as boosters that were administered to the Canadian population.

**Ms. Valerie Bradford:** Thank you for that. I think Canadians should be congratulated for taking care of themselves and their neighbours and protecting each other, because that's what you have to do with a global pandemic.

I want to turn my questions now to looking at the lack of sharing of data, how that's being addressed and how critical that is. As we see in the report, the pandemic highlighted issues that made it a challenge to collect, share and use health data. We know that good health data is crucial in public health emergencies. It leads to improvement in health outcomes for Canadians in the long term.

I'm not sure who would know this, probably Health Canada or maybe PHAC. What's the status of the development of a pan-Canadian health data strategy? It's referred to several times in the report. What's the Government of Canada doing to expedite its work with the provinces and territories to complete the pan-Canadian health data strategy?



**Dr. Stephen Lucas:** As was noted, the critical importance of health data in informing both public health and health care responses was highlighted in the pandemic, as well as in the report of the Auditor General.

During the course of the pandemic, the Public Health Agency and Health Canada worked extensively with provinces and territories to support and facilitate data information sharing, including working with them towards common interoperability standards so that data systems can communicate with each other in the country.

We have been working with provinces, territories and other stakeholders, informed by advice from an expert advisory group chaired by Dr. Vivek Goel, on developing a pan-Canadian health data strategy to facilitate the collection, sharing, use and public reporting of health data.

This work has continued with health officials, and elements of the strategy will be discussed tomorrow at the working meeting of the Prime Minister with premiers.

• (1135)

**Ms. Valerie Bradford:** That's great.

What are some of the key barriers to information sharing between the jurisdictions, and how important is federal-provincial-territorial collaboration to overcoming these barriers?

I'm glad it is going to be on the table for discussion tomorrow.

What seems to be the problem with getting all the players to share the data?

**Dr. Stephen Lucas:** Mr. Chair, as I noted, there are technical barriers in terms of systems being able to connect, but work is advancing on that, looking to align with international standards, working with Canada Health Infoway, provinces, territories and other key stakeholders.

It's important, of course, to protect the privacy of Canadians in terms of health data, and work is under way to ensure that while enabling the safe stewardship of that information to support public health response or health care response, such as sharing health information between GPs and specialists to support the care of patients.

In addition, we see the importance of enabling common definitions of the data through data content standards, and the Canadian Institute for Health Information has been supporting work on this.

In specific areas such as vaccination data, extensive work was done, as was highlighted by Dr. Kochhar, to enable further steps that are required, again looking to support aligning standards, policies and commitments to share that data to support the health of Canadians.

**Ms. Valerie Bradford:** That's great.

Ms. Reza, can you maybe explain how you were able to meet the moment in the face of the tremendous urgency, while still ensuring that the proper due diligence was in place so that these things were going to be safe and effective?

**The Chair:** Ms. Reza, you just have time for a brief answer, but I will allow you to answer.

**Ms. Arianne Reza:** We took the lessons that we learned from the pandemic PPE buy. We really focused on due diligence, understanding and being informed buyers, spending as much time as we could in the planning phases, working with the provinces and territories to look at their ancillary vaccine needs, building a logistics supply chain, being resilient and bringing the whole of government, interdepartmentally, ready to make sure that we could access those supplies or those vaccines as early as possible.

**The Chair:** Thank you very much.

[*Translation*]

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

**Mr. Yves Perron (Berthier—Maskinongé, BQ):** Thank you, Mr. Chair.

I thank the committee members for welcoming me. I also thank the witnesses for making themselves available to answer our questions today.

Ms. Hogan, in your report, you noted persistent problems with data sharing. That was the issue raised with Ms. Bradford a few minutes ago.

To what extent do you think that these data sharing problems, IT problems, caused \$1 billion worth of vaccine doses to be wasted? That's not acceptable. We have to find a solution.

I'd like your opinion on that.

**Ms. Karen Hogan:** It is difficult to assess to what extent the lack of a system caused vaccines to go unused and then expire, but it certainly did not improve the process.

Some of the VaccineConnect functionalities weren't implemented and we used files, which led to human error, but also a lack of information. Information was also lost once the vaccines were delivered to the provinces and territories. A system really would have helped reduce waste.

**Mr. Yves Perron:** We can't establish a direct link, but we can agree that, if we don't know the expiry date, it's hard to manage them properly.

What is upsetting is that Canada also committed to providing vaccine doses to other countries, and these doses were simply thrown out. In a context where new variants were appearing all the time, participating in worldwide vaccination was a way to limit consequences. I say this because it's important for it to be included in the official record. That type of thing must never happen again. I find it inconceivable that, in a G-7 country, we are unable to share information effectively.

I would now like to address the representatives of the Public Health Agency of Canada.

Regarding waste and the IT system, what is being done now? A few minutes ago, you said you had an action plan, but has there been any progress with it?

If a new event like this were to happen in six months, a year or two years, would we be better prepared to face it?

• (1140)

[*English*]

**Dr. Harpreet S. Kochhar:** Thank you, Mr. Chair.

I will pass it on to Luc, but I will just mention that VaccineConnect was launched in 2021. It is an agile modular digital platform that was developed to address these urgent data needs.

Luc, if I could, I'll pass it on to you, please.

[*Translation*]

**Mr. Luc Gagnon (Assistant Deputy Minister and Chief Digital Transformation Officer, Digital Transformation Branch, Public Health Agency of Canada):** I thank the member for his question.

Indeed, the platform is evolving. The choices made to develop its functionality at the beginning of the pandemic were based on the need to deliver vaccines as quickly as possible, from coast to coast, and that's what we did.

One of the big reasons we didn't have the expiration dates is that the provinces and territories were busy delivering vaccines. There were deploying new and innovative techniques to administer vaccines to Canadians. That meant they didn't always have the computer systems or the staff to enter data into the VaccineConnect platform.

To improve the situation, we've developed a new deliverable, and work should be done by the end of March. In fact, there was another deliverable in November. It was made possible because we are using agile methodology. The program will facilitate information sharing. That's what we're doing on the level of information technology.

**Mr. Yves Perron:** Thank you, Mr. Gagnon.

I understand that progress is happening. However, reports from the Office of the Auditor General often raised problems in the area of data sharing. Reports mentioned it in 1999, in 2002, in 2008 and in 2021. You told me about a program you're working on, and that's perfect. But why did it have to be created after such a massive loss, rather than in response to recommendations by the Office of the Auditor General? The OAG's mandate is to find problems. I don't understand why the department did not act faster.

Do you have any comments on that?

**Mr. Luc Gagnon:** I thank the member for his question.

Again, information technology can be useful. Automating the process of data sharing leads to faster data management. We also were in a situation where vaccines had to be delivered, in a context where they had been developed with new technology. That included a lot of new data, and everything had to be created at the same time. That's why we experienced certain difficulties at the outset.

The issue of interoperability is important. I think I heard earlier that people are working on it. Work is ongoing and we will finish in March, as I said. We will then have a more integrated system to manage vaccine data.

**Mr. Yves Perron:** Thank you.

Mr. Gagnon, I also see that you retained the services of Deloitte to solve IT issues. I'd like to ask you two brief questions on that.

First, don't you have the internal resources needed to manage IT problems?

Second, can we get an idea of the costs associated this agreement?

**Mr. Luc Gagnon:** I thank the member for his question.

In the end, Deloitte provided the platform. We were in the context of a worldwide pandemic, and resources were extremely scarce. I'm talking about IT experts who manage functionalities and provide platforms.

Our teams worked 24/7 for 16 hours and even 18 hours a day to set up a platform in time for Canadians to get vaccines. We needed outside help. Deloitte won the bid and provided platforms, an evolving platform, as well as developers to help us develop functionalities very quickly.

**The Chair:** Thank you very much, Mr. Gagnon. Your time is up.

[*English*]

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

**Mr. Blake Desjarlais (Edmonton Griesbach, NDP):** Thank you very much, Mr. Chair.

I want to thank the witnesses for being present, and of course thank the Auditor General for this report.

I want to bring the committee's attention to exhibit 9.3, which of course has been touched on today, in relation to the amount of dosage waiting for donation. It shows that 50.6 million doses waited for donation. Of those, 13.6 million had already expired by May 2022. These life-saving doses were largely wasted.

We can see that Canada managed to donate 15.3 million doses by May 2022. I believe due credit should be given to the public service for their good work in being able to assist people not just here but around the world in combatting this deadly disease. However, this does leave another 21.7 million doses that were offered by the federal government but were still waiting for donation as of May last year.

This is the part where I believe Canadians deserve a really credible and really sound answer. I think it was touched on and alluded to by some of my colleagues here. The issue here is trying to understand how this number is so high. If it were a small number, I think Canadians would be relatively fine with it, but it's the sheer size of it: 21.7 million doses were offered by the federal government but were still waiting for donation as of May last year.

I also want to remind my colleagues and of course our witnesses here that most of these doses had already expired by the end of 2022. There are some issues here.

I guess I will direct my question to you, Dr. Kochhar. How many of the 21.7 million doses were successfully donated to countries in need of vaccines?

• (1145)

**Dr. Harpreet S. Kochhar:** Mr. Chair, I'll start by mentioning that we have been very diligent in working with COVAX, an international way of making sure that donations are equitably distributed. We have been able to donate. We offered almost 41.5 million doses as the doses became available. We also did it bilaterally with 37 countries. We were able to move 3.76 million doses through direct bilateral agreements with them—

**Mr. Blake Desjarlais:** I'm sorry. Very specifically, Dr. Kochhar, just because time is limited, of the 21.7 million, how many were successfully delivered?

**Dr. Harpreet S. Kochhar:** Can I pass it to you...? [*Inaudible—Editor*] numbers are probably different.

**Mr. Stephen Bent (Vice-President, COVID-19 Vaccine Roll-out Task Force, Public Health Agency of Canada):** Thank you very much.

In the context of vaccine donations, I think the number you're referring to is in the context of some AstraZeneca doses that we had. I think you referred to 13 million doses that expired. Those were put on offer in 2021, as soon as we were able to make them available. Unfortunately, COVAX was unable to place those doses in countries, because there wasn't sufficient demand.

**Mr. Blake Desjarlais:** Of the 21.7 million, how many would you say were wasted?

You just said that they were unable to deliver them to those countries. Would that mean all the 21.7 million? Does that mean 10 million?

What is the estimate here?

**Mr. Stephen Bent:** The 13-million dose number that you cited for AstraZeneca were the doses that were lost because they were not able to be placed. The remainder were donated to countries.

To bring precision to what Dr. Kochhar mentioned in terms of the countries we were able to support both through COVAX and through bilateral donations, we've been able to provide doses to 37 countries around the world.

**Mr. Blake Desjarlais:** It was 13.6 million wasted vaccines. Is that correct?

**Mr. Stephen Bent:** AstraZeneca vaccines. Yes.

**Mr. Blake Desjarlais:** I think that's my answer. Thank you very much.

To the Auditor General, in paragraph 9.55 of your report you state:

The agency was not able to properly track vaccine surplus and wastage once vaccines were delivered to the provinces and territories. A lack of data-sharing agreements with provinces and territories...affected the agency's capacity to gather information on the inventory, wastage, and expiry of COVID-19 vaccine doses.

I recognize the tremendous difficulty this would place on the public service's ability to monitor and track that, considering that you rely on the partners—at least we hope so—in the context of them reporting their need.

The lack of data-sharing agreements with provinces and territories is something that is important for Canadians to understand. In light of that finding and of the 13.6 million that were wasted that we just heard about, is it likely that there's a greater percentage of wastage, considering we weren't able to actually know how the provinces handled their vaccine dosage?

**Ms. Karen Hogan:** That's one issue we were trying to raise. It's that the federal government actually loses some visibility in what happens to the doses once they've been delivered to the provinces and territories.

VaccineConnect was suppose to help with creating some awareness of where those doses were used, administered or expired. The long-standing issue of not having data-sharing agreements is that it just doesn't allow the provinces and territories to let the federal government know where the information is, who has it and how to share it.

Those have been long-standing, where an agreement needs to be in place, back to 1999.

I'll just highlight this. You asked about the 21.7 million doses that were waiting to be donated back in early December when these reports were released. At the time, the department had confirmed to me that eight million had been donated and that a million of those 21.7 million had expired. That was in early December.

I can offer up that additional information following your exchange earlier with the other witness.

• (1150)

**Mr. Blake Desjarlais:** What's my time, Chair? Do I have enough for another question?

**The Chair:** You have about 15 seconds.

**Mr. Blake Desjarlais:** I don't have time for my next question, but I want to thank you all for your information today.

On behalf of Canadians, this is an important piece to realize: Data sharing is an incredibly important piece for understanding our visibility in the provinces and territories and, of course, nationally.

I'll follow up in my next round.

Thank you.

**The Chair:** Thank you very much.

Turning to the next round, Mr. Kram, you have the floor for five minutes, please.

**Mr. Michael Kram (Regina—Wascana, CPC):** Thank you, Mr. Chair, and thank you to all the witnesses for being here today.

I guess I will start with the Auditor General.

In October 2021, Bob McKeown from the CBC's *The Fifth Estate* ran an investigative report about CanSino. I would like to read a couple of quotes from a couple of articles.

The subheading of one article reads, “Federal officials wasted months, spent millions on a lab that never produced a single shot”.

Another article reads, “The National Research Council of Canada...signed an agreement with Tianjin-based CanSino Biologics in early May 2020 to 'fast-track the availability of a COVID-19 vaccine in Canada for emergency pandemic use.’”

Ms. Hogan, are you familiar with the CBC's *The Fifth Estate* and this investigative report?

**Ms. Karen Hogan:** I believe I saw it at the time, but that company was not one of the seven companies that an advance purchase agreement had been signed with. Hence, it was not scoped into our audit, which was looking at how the government responded to the need for vaccines and procured them for the country.

**Mr. Michael Kram:** Why would this agreement, signed in May 2020 with the National Research Council, not be relevant in terms of vaccine procurement for Canada?

**Ms. Karen Hogan:** As I mentioned, Mr. Chair, it wasn't one of the seven advance purchase agreements. We were focused on how the government ensured there were sufficient doses for all Canadians in the country who wanted to be vaccinated.

**Mr. Michael Kram:** Okay. I couldn't help noticing that at the beginning of the report there was no mention of the National Research Council at all.

Given that the National Research Council was involved in these negotiations with CanSino and did sign at least one agreement, can you just elaborate on your thought process as to why...? Did you reach out to the National Research Council in doing this audit? Why was it not included at all?

**Ms. Karen Hogan:** We did speak to it at the beginning of the audit, when we were scoping, but as I mentioned, it wasn't a contract that resulted in an advance purchase agreement for vaccines for the country, so it wasn't included in the scope of our audit.

**Mr. Michael Kram:** Can you inform the committee as to what it had to say on lessons learned from dealing with CanSino, in establishing the vaccine task force, and what the vaccine task force learned from this experience with CanSino?

**Ms. Karen Hogan:** Unfortunately, because it wasn't scoped in, I don't have any information to share with the committee about CanSino.

**Mr. Michael Kram:** Okay. When was the national vaccine task force established?

**Ms. Karen Hogan:** I don't know who you would like to answer that. I know that the vaccine task force made a recommendation in

late June about companies that would be viable to have vaccines, but I would hand it over, perhaps, to Mr. Lucas to expand.

**Dr. Stephen Lucas:** Mr. Chair, the vaccine task force was established in May 2020 and provided advice to the government—through the then ministers of health and of innovation, science and economic development—in terms of its assessment of all vaccines being developed globally. That led to the recommendations for the seven candidates, across a range of vaccine platforms, that then led to decisions on the advance purchase agreements with those seven companies.

• (1155)

**Mr. Michael Kram:** Page 6 of the report spells out the dates on which these advance purchase agreements were signed between Canada and the various companies.

I've gone to Google and looked up when the American government signed the same advance purchase agreements. The Americans signed their first contract on March 27, 2020, and then another on May 21. The Americans were finishing all of their advance purchase agreements at the end of July, just as we were getting started.

Can anyone explain why we were so many months behind the Americans in signing these advance purchase agreements?

**Dr. Stephen Lucas:** Mr. Chair, I'll respond and then turn to Arienne Reza.

The United States government, through its Operation Warp Speed, was focused on supporting the research and development of the vaccines, working with those companies. Elements of those included purchase commitments.

The Government of Canada launched the vaccine task force in May 2020, and it provided outstanding recommendations to us, which allowed for the initial agreement with Moderna to be signed in July 2020—one of the first in world with Moderna.

I would note that we received submissions from the companies for regulatory approval in the fall of 2020, at the same time or shortly linked to the time—

**The Chair:** Thank you. I'm afraid that is the time. I try to allow witnesses to answer, and I allow a little overtime, but I have to stay within some semblance of the time.

I'm turning now to Mr. Fragiskatos.

You have the floor for five minutes.

**Mr. Peter Fragiskatos (London North Centre, Lib.):** Thank you, Mr. Chair, and thank you to the officials for being here.

Thank you, particularly, to all of you in the public service who contributed so much during the pandemic. I know you made enormous sacrifices, being away from friends and family, and that's something that is not lost on any of us, regardless of the fact that we have to ask hard questions sometimes. I think that point needs recognition.

Ms. Hogan, I will go to you first.

It's imperfect, naturally. Something like this is not going to...and I don't think Canadians are expecting a perfect approach to have been taken by the government, by the public service, because we're talking about such a rare event, a one in a hundred years pandemic. It's important to highlight lessons learned and areas to improve on, certainly, but your report uses the word "efficient" 14 times, so clearly you think there is something to be said—a great deal to be said—about the efficiency of the overall process.

Can you speak to that?

**Ms. Karen Hogan:** I'd like to try to take everybody back to March 2020. I think many of us want to forget that time, but it was a time of great uncertainty and a time when there was a global race to determine who would be able to manufacture vaccines. Add on to that the layer of, "Will they be approved for use in Canada?"

Our view was that the approach taken by the government to sign so many advance purchase agreements was a prudent one in the circumstances, to ensure that every Canadian who wanted to be vaccinated could be vaccinated. We found that Public Services and Procurement Canada expedited its procurement process and still followed some elements that we had highlighted earlier on in the personal protective equipment audit, which they then addressed. They looked at the financial capabilities of the companies. They did integrity checks to ensure that organizations would minimize the risk of unethical business practices.

We felt there was a good adjustment, and that's why we highlighted that this was an efficient procurement process.

The last thing I would highlight is that the provinces and territories received doses, on average, within two days of putting a request in to the federal government. When you think about how vast our country is and the need to control the temperature of a lot of the vaccines going to remote areas, it was an efficient delivery process as well.

Public servants should be commended for what they did to help the country respond to the pandemic.

**Mr. Peter Fragiskatos:** Thank you very much, Auditor General.

If I can, I'll go to the deputy minister, Mr. Lucas. We heard the United States being mentioned. It was just brought up in previous questioning by my colleague. This is a different line of questioning, but I think it's still relevant to look at Canada and the United States.

Do we have data, Deputy Minister, on the number of lives saved in per capita terms if we compare Canada to the United States in the vaccine approaches taken in the two countries?

• (1200)

**Dr. Stephen Lucas:** Mr. Chair, I don't have the comparative numbers offhand. I know, however, that the Public Health Agency has done modelling, which has been published, on the counterfactual of what would have happened had there not been access to vaccines.

I'll turn to Dr. Kochhar to provide that information from a Canadian perspective.

**Dr. Harpreet S. Kochhar:** As Dr. Lucas said, we have done a study in which we did modelling. According to that, almost

800,000 lives were saved, 1.9 million hospitalizations avoided and 34 million COVID cases prevented by making sure there was early access to vaccines and we had public health measures in place.

An independent study by C.D. Howe also said there were around \$2.1 billion in savings associated with missed work and treatment. A six-month delay in vaccination, Mr. Chair, would have led to a loss of \$156 billion in economic activities in 2021. This is from a C.D. Howe report that has been published already.

**Mr. Peter Fragiskatos:** Thank you very much. That's an important point.

I have another question, but my timer says I have about 20 seconds left, unless you want to give me an extra couple of minutes, Mr. Chair.

**The Chair:** No, I think we're done. Thank you very much.

[Translation]

Mr. Perron, you now have the floor for two and half minutes.

**Mr. Yves Perron:** Thank you, Mr. Chair.

I admit that it was not just black and white with the delivery of vaccines and so forth.

The committee's role, however, is to examine the factors that led to the loss of a billion vaccine doses. That is a lot of money for the average person. We have to think of the future.

It is clear that, in March 2020, everyone had to improvise. On the other hand, we have an obligation to be better prepared for the next time. That is why it is important to have local vaccine production. I have concerns about this, though.

You are probably aware of the closure of Medicigo in the Quebec City area. I would like to know why that is happening.

What can we do to preserve that company's knowledge, expertise and manpower?

Mr. Lucas, can you answer please?

**Dr. Stephen Lucas:** As the parent company, the Mitsubishi Chemical Group made the business decision to cease support for the operations of its partner, Medicigo. We will of course be closely following the next steps in this process in order to preserve Medicigo's talent, research laboratories and production facilities as much as possible.

[English]

I'll also note more broadly that the government has invested over \$2.1 billion in a biomanufacturing life science strategy to support numerous businesses across Canada in all stages of vaccine and therapy production, including an agreement with Moderna to establish a manufacturing facility in Quebec.

[Translation]

**Mr. Yves Perron:** Mr. Lucas, sorry to interrupt, but our time is very limited, especially for this second round of questions.

In Medicago's case, didn't it take a long time for the vaccine to be approved?

The Pfizer vaccine was approved in December 2020, while the decision on the Medicago vaccine was not made until February 2022.

Can any aspects of this situation be analyzed to improve things for the next time?

[English]

**The Chair:** Dr. Lucas, you have time for a brief response.

[Translation]

**Dr. Stephen Lucas:** The time required to approve a vaccine depends on the date that Health Canada starts processing the file and the date the company provides the data. I can provide further details on this.

**The Chair:** I'm sorry, but your time is up.

[English]

Mr. Desjarlais, you have the floor for two and a half minutes.

**Mr. Blake Desjarlais:** Thank you very much, Mr. Chair.

I want to continue in the same vein as my colleague from the Bloc in relation to domestic vaccine production. I think many Canadians, when the pandemic hit, were asking the question, where were Canada's vaccines? It's a question we haven't returned to in many ways, in light of the traumatic experience that many Canadians had.

We were able to sustain ourselves with the kinds of purchasing agreements we had from the private sector. However, I want to mention the risks of that and the issues some Canadians may have with them, particularly in light of the wasted vaccines. I think there's evidence to suggest that wasted vaccines are a waste of taxpayer dollars. When considering these agreements that Canadians have been in many ways forced into, not by any kind of prejudice of public service, of course, but because of our needs as a country, I believe it has allowed for a disservice in Canada.

Each authorized vaccine came with an obligation to purchase a specific quantity of doses, and for all but one agreement, options to purchase additional doses. That's what I understand from procurement's point of view.

The problem is that we are reliant on Pfizer's or Moderna's purchasing agreements, rather than Canada's public health needs. This, I think, is a really important part to note. When it comes to the needs of Canadians and the needs of these companies, they are different. This leads to sending billions of taxpayer dollars in some ways—whether by wasted vaccines or not—to big pharmaceutical companies, which we're now bound to having minimum purchase agreements with. That is a tough pill to swallow for many Canadians.

My question would be—procurement could maybe start and then the Public Health Agency—whether they have any other comments in relation to whether or not a Crown corporation that would produce domestically produced vaccines would be better able to deliv-

er on actual public health needs, rather than a private company that would require a minimum purchase.

• (1205)

**Dr. Stephen Lucas:** Mr. Chair, I will respond.

As I noted to the previous honourable member, the government has invested in a biomanufacturing life science strategy. That is invested in further establishing all aspects...from vaccine therapeutic production to the fill and finish of the final bottles. That includes an agreement with Moderna to establish a facility in Quebec—

**Mr. Blake Desjarlais:** Would it do a better job?

**Dr. Stephen Lucas:** In addition to that, the National Research Council has established a biologics manufacturing centre. We are diversifying our ability to respond quickly, and here in Canada, to the threat of a new—

**Mr. Blake Desjarlais:** Do you recognize the waste there?

**The Chair:** That is the time. Thank you very much.

You will have another opportunity, Mr. Desjarlais.

We'll turn again now to Dr. Ellis.

You have the floor for five minutes.

**Mr. Stephen Ellis:** Thank you very much, Chair.

I have so many things to say and so little time. It's important to point out some comments with respect to the Auditor General's report that this was a successful program. Not only did we lose a billion dollars, but realistically what we were asking people to do here was keep track of things and distribute a product at a cold temperature. That happens all the time in this world, and I find it very difficult for anyone to say that this was a successful program.

We also had a deal with CanSino. We put all of our eggs in one basket, which everybody here refuses to talk about, but that resulted in a three-month delay in getting vaccines into the arms of Canadians.

It also led to, and I'm not sure why.... Dr. Kochhar, you said this. You were talking about the diligent nature in which we used the COVAX program. Is taking two million doses from a program that was supposed to be able to distribute, first and foremost, vaccines in an equitable fashion to the entire world but then focusing on the developing nations...? We're the only G7 country that took vaccines from the COVAX program. Shame, shame, shame.

I have to say shame on you, Auditor General, for saying that keeping track of things and maintaining temperature is a.... It's not a new science. We didn't do this well, and if we did it the same way again and we lost another billion dollars, and now we're on the hook for at least \$4.2 billion of contracts.... We don't even know what we're going to do with this vaccine.

Is this a good use of Canadians' money, a loss of \$5 billion? That may even have been able to fund the terrible health care system we now have after eight years of these Liberals.

I'd like to return to Medicago. Very simply, in these Government of Canada documents, the government has poured in probably more than half a billion dollars into Medicago. I have two very simple questions. Number one is, who owns the intellectual property that was developed with Medicago? Secondly, are we also on the hook for 20 million doses that we purchased from Medicago, which again would be just a shoddy \$600 million?

Does anybody know the answer to that question, here on this esteemed panel?

• (1210)

**Ms. Arianne Reza:** I'll start with your question about Medicago and APA, the 20 million firm doses. This is under active negotiation as we speak, given the news from Medicago and the need for the public health sector to reduce that delivery.

**Mr. Stephen Ellis:** I'm not clear, Mr. Chair. Are you telling me that we're trying to negotiate our way out of a \$600-million contract?

**Ms. Arianne Reza:** Mr. Chair, I'm saying that with the recent news from Mitsubishi and Medicago, coupled with the demand and our constant review of contracts, there are active negotiations going on right now looking at the 20 million doses and what can be done to adjust it.

**Mr. Stephen Ellis:** Okay. Thank you, I think.

Mr. Chair, does anybody want to answer the IP question? Who owns the IP now? Is it Mitsubishi Tanabe that now owns it? The Government of Canada, as I said, pumped almost a billion dollars into this company. Who owns the IP?

**Dr. Harpreet S. Kochhar:** Mr. Chair, this is something that is in active conversation between the company and ISED, who are the key interlocutors between the Government of Canada and the industry. That conversation is going on as such in terms of those details.

**The Chair:** You had an open question.

Dr. Lucas, did you have something to add there as well? I know you went to your mike. You can say no, and that's no problem, but I wanted to give you the opportunity.

**Dr. Stephen Lucas:** No, on the specific one, but I think it's important to note for the record that based on the world-leading experts on the vaccine task force, purchase agreements were put in place, vaccines were authorized, and doses delivered to Canadians within days of any other country in the world, and we had the single highest level of primary dose vaccination in the G7, saving hundreds of thousands of—

**The Chair:** Thank you.

It's back to you, Doctor.

**Mr. Stephen Ellis:** I would point out to you a BBC article in February 2021 that said we were the worst in the world. That was in the early days. We had the delta variant then, when many of us on the front line thought we were going to die, and guess what happened? Our country teamed up with a Chinese company to put all of our eggs in one basket in a company called CanSino, which now we don't even want to talk about. It's shameful.

Finally, the Medicago fiasco needs to be solved, and I'll leave it at that, Mr. Chair. Thank you.

**The Chair:** Thank you very much. That was spot-on for time. I thought I would have to rein you in.

Mrs. Shanahan, you have the floor for five minutes.

**Mrs. Brenda Shanahan (Châteauguay—Lacolle, Lib.):** Thank you, Mr. Chair.

First, I'd like to express my extreme disappointment in some of the words used by the member who just spoke. This is a committee that prides itself...

Mr. Chair, I would like you to speak up the next time a member disparages the witnesses who appear in front of us, especially the Auditor General. The integrity of the Auditor General is something we all hold—

**An hon. member:** [*Inaudible—Editor*]

**The Chair:** I call for order.

I try not to interrupt members.

Mrs. Shanahan has the floor. The government's been respectful of opposition members. I'd ask that the same be true now.

It's back to you, Mrs. Shanahan.

**Mrs. Brenda Shanahan:** Thank you, Mr. Chair.

This is the work we are here to do: to look at what happened, learn lessons and understand how we can do better, next time. Quite frankly, the hundreds of thousands of lives that were saved are, to me, successes.

I'd like to turn the microphone over to the Auditor General. Please tell us more about your investigation and what you found for this report.

**Ms. Karen Hogan:** Thank you, Mr. Chair.

My comments, earlier on, were about the efficiency of procurement and ensuring that every Canadian who wanted to be vaccinated could be. There are always two sides to every coin and, obviously, things that needed to be done better.

The lack of data-sharing agreements with the provinces and territories—which have existed since 1999—is a concern this country needs to address. It requires all levels of government to come together, in order to ensure we know what health data information should be shared, when it should be shared and how it should be shared, and also have the IT infrastructure behind it. There are absolutely a lot of good lessons to be learned, and also a lot of important successes that should be recognized, which is what our report did. It was very balanced in looking at both angles.

Thank you, Mr. Chair, for this time to address our report.

• (1215)

**Mrs. Brenda Shanahan:** Thank you.

Some things that have come up here a number of times—it's part of the public accounts committee's job to look at these, certainly—are value for money, wastage and so on.

Auditor General, you said some wastage was to be expected. We're looking at an emergency situation. What kinds of information, basis or guidelines do we have? What percentage of wastage can be expected? If we're in a war and win that war, are we then looking at the number of bullets we used and saying, "Well, maybe we used too many bullets"? What is the context in this emergency situation?

**Ms. Karen Hogan:** Unfortunately, I don't have that. Perhaps one of the other witnesses from the health industry can add to that. What I can offer up is this: Vaccines can be wasted for many reasons. They could expire on a shelf. Once a vial is opened, it might not all be used. There is wastage in transportation. There are lots of reasons.

With that, I'll see whether someone from one of the departments can provide a more specific answer to that.

**Dr. Harpreet S. Kochhar:** Mr. Chair, I'll attempt to clarify that wastage is inevitable in any immunization program. When we initially started the vaccination campaign, the unavoidable wastage was around 3%. Basically, when you open the vial, you have to use it within a 24-hour time period, or it cannot be stored, etc.

As we moved further into our vaccination campaign, demand decreased. There were some other factors that meant that, from a wastage perspective, there was increased waste. In reality, what happened was that there were times when we had vaccines that were very complex, early in the rollout. As I said, you have to thaw them and you have a limited time period in which to use them. Also, as we moved on to other vaccines, stability data became more...such that we were able to say, "This vaccine could be used in nine months." For example, Health Canada authorized an increase in the shelf life based on what was presented to them, so we continued to plan according to the nine-month....

There were multiple factors that happened: cold chain excursions, puncturing of the vial, or inability to store at a particular temperature. Those were multiple factors that contributed to wastage, which is unavoidable.

**The Chair:** Thank you. That is the time.

I did pause the clock when I spoke as well, Ms. Shanahan.

Turning now to Mr. McCauley, you have the floor for five minutes.

**Mr. Kelly McCauley (Edmonton West, CPC):** Thank you, Mr. Chair.

Witnesses, thank you for being here today.

It's nice to see my Liberal colleagues stand up for the AG after refusing to stand up when the Minister of National Revenue attacked her repeatedly publicly in the House of Commons.

Dr. Kochhar, I have a couple of quick questions for you. You mentioned the shelf life was extended on some of these drugs. How are we extending them? Is it just science saying, "Oh, wait a moment; this is just a best before date"?

**Dr. Harpreet S. Kochhar:** I'll pass—

**Dr. Stephen Lucas:** I think Dr. Lourenco can speak to it.

**Dr. Celia Lourenco (Acting Associate Assistant Deputy Minister, Health Products and Food Branch, Department of Health):** The vaccines are initially authorized with a certain shelf life, and the manufacturer provides additional data for us to be able to extend the shelf life.

**Mr. Kelly McCauley:** She mentioned as well about Canada's being an early leader in acquiring vaccine. I'm looking at data from February 21, when 3% of Canadians had the vaccine compared with 21% in the U.K. and 14% in the U.S. In what way were we an early leader?

We've seen reports. It was during the worst of times that daily in the National Post they were publishing where we were on the list of vaccines. Yes, we preacquired tons, enough for everyone, but in what way were we an early acquirer when we did not catch up to the U.S., the U.K., Israel and Japan until months later?

• (1220)

**Dr. Harpreet S. Kochhar:** Mr. Chair, when we signed the seven APAs, that was the component where we actually locked in most of the vaccine manufacturers who could really produce a safe and effective vaccine.

**Mr. Kelly McCauley:** Right, but that's signing. That's not acquiring. I think, again, that it almost feels like we're pushing a false narrative with the study of how successful the government was, ignoring the fact that we were late to the game in acquiring.

In this country we like to put up our noses at how the Americans do, but they had almost five times the number vaccinated compared to us in February. The Brits had seven times more, yet we're claiming that because we signed something—even though we didn't actually have vaccines in the arms of Canadians—the intent was there. I don't think it's an adequate description to say we were an advanced leader. I'll leave it at that.

Auditor General, you talked about the data sharing. It goes back to 1999. Thinking about 1999, we were singing the Prince song, yet here we are 24 years later and we still do not have that.

What's lacking? Is it the provinces just saying they're not interested? Is it a lack of will of the federal government? You've brought it up four times. Surely you'd think the government would have reacted by now.

**Ms. Karen Hogan:** I don't know if I can speak to the reasons. If I had identified them, I would have put them in the report.

I guess I offer up that I'm not sure how many more health crises we need to live through before we realize the importance of needing to share this information across the country. Some of these are H1N1, SARS and now COVID, and this has always been the same issue.

**Mr. Kelly McCauley:** Do you get a sense of déjà vu all over again with your reports?



**Ms. Karen Hogan:** I do on this issue, for sure. It would be great for the country to resolve the pan-Canadian health data sharing agreement and to have a system in place to help support the country to better respond to a health crisis in the future.

**Mr. Kelly McCauley:** Could I ask why you didn't address the CanSino delay in your report? Who decided that we were only going to study the acquisition of these seven chosen ones?

**Ms. Karen Hogan:** As I mentioned earlier on, it was a decision we made in the scoping in order to keep our audit focused on the advance purchase agreements that were actually going to bring vaccines that would be able to vaccinate Canadians.

**Mr. Kelly McCauley:** Okay. I have about 45 seconds. I'm going to ask kind of an open question.

On the advance purchase, can someone provide to this committee how much we've spent so far, what we've purchased physically, what we have in inventory, what we've thrown out and also what we are on the hook for going forward?

One of the witnesses was talking about the new bivalent. Are we on the hook for these booster shots, or are they covered if we pre-agree on 50 million from Pfizer? Are the new booster shots on top of those 50 million for our obligation?

**The Chair:** Mr. McCauley, instead of making it open, could I ask you to direct it to someone, please? Unless someone has an answer, I think that would be helpful.

**Mr. Kelly McCauley:** Whoever would have that information, raise your hand and consider it directed.

Perfect. We'll go to you....

We're out of time. Can you get back to us with all that, please?

**The Chair:** I will allow a brief answer.

**Mr. Kelly McCauley:** We're 0.5 seconds over, sir.

**The Chair:** Well, I stop the time when I talk. I will allow a brief answer.

Go ahead, please.

**Ms. Arianne Reza:** Very briefly, we have received 164 million doses in Canada. Our agreements do give us access to the latest and greatest formulations in pediatrics—

**Mr. Kelly McCauley:** What are we obligated to buy, though? How many shots do we—

**The Chair:** Now I have to cut it off.

**Mr. Kelly McCauley:** Perhaps they could get back to us, please.

**The Chair:** You'll have to ask for that information, I think.

Mr. Dong, you have the floor for five minutes, please.

**Mr. Han Dong (Don Valley North, Lib.):** Thank you very much, Chair.

I would like to thank the AG for doing the report. I would also like to thank all the public service. I can only imagine how difficult it was at those times, when every country was fighting to access even APAs and to access those vaccines.

First of all, I find it a little hilarious, listening to the questions today. First, it sounds like we bought too many vaccines and we were

wasting the vaccines. Then we're hearing that we didn't secure enough early on. Usually we get that from two different parties. Usually the Conservatives talk about how the Liberal government hasn't done enough, and the NDP...or vice versa, but today we're hearing it from the same source. I find it a little hilarious.

I can't help but think that perhaps we as Canadians, in terms of the way we think, are a bit spoiled. We take it for granted. On a regular basis, we as Canadians can access pretty much everything—all the technologies available to humankind. In the situation of a world pandemic, this time we did struggle a little, knowing that we didn't have the capacity to produce the vaccines and knowing that every country around the world was competing to access those vaccines early on.

Under those circumstances, I'm very thankful, actually, to go through the report and to read the details about how those vaccines were acquired and what could be done better to prepare us in the future.

Perhaps I can ask the staff to explain the logistics behind how the vaccines that were obtained by the federal government were distributed to the provinces and communities. We also saw the provincial AG's report, at least in Ontario, talking about how some of those vaccines were not distributed fast enough, which contributed to the fact that many of those vaccines expired.

What was the thinking behind that? What was the logistical arrangement on that? What happened at the time? What was the decision or what happened when vaccines were close to expiry and there was no way for municipalities or provinces to distribute them fast enough? What was the plan at the time?

● (1225)

**Mr. Stephen Bent:** Mr. Chair, perhaps I'll take a moment to explain how we worked throughout the pandemic with provinces and territories on vaccine distribution.

We work as an intermediary between, obviously, the provinces and territories and then down to the local level and the vaccine companies. Some provinces and territories have fairly robust logistics systems and capacity. They have warehousing capacity that they use, and in some cases can take delivery directly to other jurisdictions. In other cases, we hold it centrally and then distribute it to the provinces and territories as they require it.

We've put a lot of effort, over the last two-plus years, into having very strong relationships with the logistics teams in each of the jurisdictions, to have a good line of sight on exactly what their needs are. It has evolved over time, and I think the audit has highlighted that in the early days a lot of effort had to go into building the systems. My colleague Luc Gagnon has explained that we are now working on the technological platforms and evolving them so that we can do that more efficiently.

I think, in the context of the ability to use doses, one of the things we are very keen to work on with the provinces and territories is real-time data sharing, so that we can reallocate doses quickly if there are jurisdictions that cannot use them. We have done that on many occasions. When we've polled and canvassed jurisdictions to ask them if they have additional need, we've reallocated between jurisdictions, working collaboratively with provinces and territories.

One point I would make is that when you think about the full vaccine rollout, thousands of points of distribution and administration occurred across Canada. That was one of the challenges we faced. We're continuing to learn from the lessons on how we can be better prepared for the next pandemic in terms of being able to have data right down to the local level.

Thank you.

**Mr. Han Dong:** I want to ask a question of Health Canada.

Health Canada decided to grant an expedited approval process. First of all, can you explain to the committee the difference between a regular process and an expedited process? Also, at any point was the safety of the public or safety of these vaccines compromised due to the expedited process?

**The Chair:** Give a brief response, please.

**Dr. Stephen Lucas:** We'll turn to Dr. Sharma.

**Dr. Supriya Sharma (Chief Medical Advisor and Senior Medical Advisor, Health Products and Food Branch, Department of Health):** Thank you, Mr. Chair.

When we were preparing for the receipt of the submissions, there were a lot of discussions that happened before we received them in terms of the requirements. For the safety, efficacy and quality of the vaccines, it was decided very early that we were not going to make any changes to those requirements, maintaining the same rigorous standards that we would for all vaccines.

What we did was find efficiencies in terms of the review processes. It still took the same number of hours to do the reviews, but there was less downtime and there were flexibilities on the administrative side provided to the company so they could provide, for example, what we call a rolling submission. As data became available, they could provide that data to us. We compressed the normal time for the review into a very short period of time.

● (1230)

**The Chair:** Thank you. I know there's more to that question. I hope you'll have an opportunity to come back to it.

[*Translation*]

Mr. Perron, you have the floor for two and a half minutes.

**Mr. Yves Perron:** Thank you very much, Mr. Chair.

I will pick up where we left off earlier, Mr. Lucas.

You said the vaccine approval date depends on when the authorization period for the vaccine began. You then handed it over to Ms. Lourenco. I am not sure which of you can answer my question.

Can we get information about how long it took to approve each of the vaccines so we can draw a comparison?

It seems like it took longer to approve the Medicago vaccine, but that might not be the case.

Do you have that information? If so, can you send it to the committee?

**Dr. Celia Lourenco:** Yes, I can talk about that a bit. If necessary, we can provide further information later on.

For the Pfizer and Moderna vaccines, it took three months for us to evaluate all the data and approve the vaccines.

It took much longer for the Medicago vaccine because the company was very late in providing all the data. The evaluation began in April 2021. We did not receive the data for phase 3 until December 2021, and we approved the Medicago vaccine in February 2022.

**Mr. Yves Perron:** Thank you very much.

We would be very grateful if you could provide all the details you have on this, Ms. Lourenco.

Ms. Hogan, there is something I have a lot of trouble with: the confidentiality of vaccine supply agreements.

First, I would like to know if you obtained information during your evaluation to which we do not have access.

**Ms. Karen Hogan:** If I may, I would even add some information. Item 9.1 of our report provides the initial application date of each company and the subsequent approval date. That will probably be helpful for you.

Yes, we had access to all the contracts, all the information, all the corrections and all the amendments.

**Mr. Yves Perron:** So that was not a problem in your audit work.

**Ms. Karen Hogan:** No, not at all.

**Mr. Yves Perron:** As I understand it, you cannot provide that information to the committee. If the committee were to meet in camera—and I am asking the chair at the same time—, would you be able to provide that information to us then?

**Ms. Karen Hogan:** I have to maintain the confidentiality that the government assigns to a document. The information is confidential for reasons of competition. I would have to consult a lawyer. I can say though that I don't think I can provide that information to you.

**Mr. Yves Perron:** If that possibility could be explored, I would perhaps...

**The Chair:** Sorry to interrupt you again. Your speaking time is up.

[English]

Mr. Desjarlais, you have the floor for two and a half minutes.

**Mr. Blake Desjarlais:** Thank you, Mr. Chair. I'd like to begin with Dr. Kochhar.

As part of the effort to draw lessons learned from managing the COVID-19 vaccine stockpile, has the Public Health Agency of Canada measured how our efforts in vaccine donation compare to peer countries like the United States or the EU?

**Dr. Harpreet S. Kochhar:** Mr. Chair, we constantly work with the international donation organism, COVAX. We also have a good line of sight internationally in terms of the donations. The donation market is saturated, Mr. Chair, given that there are many countries that are trying to donate and also that the receptivity to those vaccines is limited to a certain extent. We have a comparison, but that is an open-source comparison as such.

**Mr. Blake Desjarlais:** In relation to some of those, when you do that analysis, when you're looking at where Canada is in relation to our peers, are we ahead, are we behind, or are we in the average in terms of donations?

**Dr. Harpreet S. Kochhar:** Mr. Chair, the donation aspect is based on the availability of the doses each country puts forward.

Canada mentioned very early that we would be donating 200 million doses to COVAX.

There are other countries that have greater access. For example, the U.S. went out and said they would deliver one billion doses of Pfizer. It is not a comparison among the different countries. It is the availability of the doses that are surplus and that we can donate.

We also made efforts in the very beginning to donate those vaccines very early that we deemed we would not be using at all. Those did go to COVAX. We also made bilateral arrangements on that.

• (1235)

**Mr. Blake Desjarlais:** In terms of finding ways to accelerate Canada's ability to donate, while also coming up against timelines.... There are real timelines to the expiry of these vaccines. We can make it any number. We can say we'll donate all of the vaccines, but the reality is there's a real time limit and viability to that.

How many has Canada donated in a timely fashion, of the 200 million that have been committed?

**The Chair:** I need a very tight answer here, please.

Mr. Desjarlais, you will have one more round.

Perhaps you could just keep it very focused, please.

**Dr. Harpreet S. Kochhar:** We have actually achieved close to 200 million doses. This is in terms of what we offered, which my notes say is around 196 million.

**The Chair:** Thank you very much. We turn now to Mr. Genuis.

You have the floor for five minutes, sir.

**Mr. Garnett Genuis (Sherwood Park—Fort Saskatchewan, CPC):** Thank you, Chair, and thank you to the witnesses.

This is International Development Week. I want to recognize all the development organizations that are doing great work around the world seeking justice and fighting poverty.

It's topical that we look at this report, which includes some discussion of Canada's failure, I think, to do what was required to assist developing partners around the world when it came to getting vaccines to people.

I had always thought that the intention was to overbuy and to distribute vaccines to other countries to help make up the shortfall.

Throughout the course of the pandemic there were very low vaccination rates in certain countries, yet we are disposing of and destroying massive amounts of vaccines that could be given to countries that are struggling. Some of those donations that happened were when there was very little shelf life left on the vaccines—they were virtually unusable.

Madam Auditor General, I wonder if you could just share your thoughts specifically on the question of vaccine donation, and what you found in terms of why the government has thrown vaccines in the garbage that could have been given to other countries.

**Ms. Karen Hogan:** It was actually an area that was a little difficult for us to look at.

Global Affairs Canada plays a role. When donations were needed, the government explained to us the difficulty—how the market was saturated and how long it took, at times, to agree with foreign countries about how many doses would be sent and when they would be sent.

I'm sure the government would probably be able to provide you with more information, but that's the extent of where we stopped during our audit.

**Mr. Garnett Genuis:** In terms of what was difficult, I don't think we have any officials here from Global Affairs Canada. Are you implying they weren't forthcoming with information that you needed? I don't want to put words in your mouth, but was that the difficulty, or something else?

**Ms. Karen Hogan:** No, I'm sorry, not at all. Please don't read that into my comments.

They just said it was a difficult process, because there were so many other countries trying to donate at the same time.

**Mr. Garnett Genuis:** In a context where many African countries have relatively extremely low vaccination rates...I wonder if one contributing factor was the fact that we were telling Canadians not to opt for AstraZeneca, while we were trying to give it away.

Does one of the officials from the health department want to weigh in on this point?

**Dr. Stephen Lucas:** Mr. Chair, what I would say just at the outset is that Canada is one of the top donors to COVAX, financially. We—

**Mr. Garnett Genuis:** That's not what I'm talking about, sir. I'm talking about wasted doses that could have been donated.

**Dr. Stephen Lucas:** Mr. Chair, I think it's an important point.

**Mr. Garnett Genuis:** That's not my question.

**Dr. Stephen Lucas:** The contribution to supporting vaccine access in low- and middle-income countries was through financial donations, not only for vaccine purchase—

**Mr. Garnett Genuis:** I'm sorry, sir, but I have limited time. Can you answer my question?

**The Chair:** Dr. Lucas, the member has asked a question. You might have an interesting point, but either move on or the member can interrupt you.

We'll go back to you.

**Dr. Stephen Lucas:** The additional point is that in addition to offering vaccines, we offered financial support to countries that—

**Mr. Garnett Genuis:** I'll just stop you, Dr. Lucas, because you're not answering the question.

We're not getting an answer about the core issue here, which is the large volume of vaccine doses that were thrown in the garbage when there are a substantial number of countries around the world that have vaccination rates of less than 15%.

Ms. Hogan, I want to just briefly ask you about another subject.

We've had two committees adopt motions that have asked your office to look into the government's dealings with McKinsey. I wonder if you can just give us a sense of how you would respond to those kinds of recommendations and what the timelines would be on a possible look into that important issue.

• (1240)

**Ms. Karen Hogan:** As you know, we receive many requests from many committees and from the House. We are in the process of doing the ArriveCAN audit, which was requested of us. We recognize that this committee has passed a unanimous motion for us to look at contracting with McKinsey.

As an executive team, we're figuring out the best way to audit, if it's something we can slot in. We will respond to the committee very soon.

**Mr. Garnett Genuis:** Thank you. There may be a concurrence of that happening in the House shortly.

I'm almost out of time.

Ms. Reza, I want to follow up and ask if you could submit in writing the information about what we're obligated to buy, how many doses and how much money. Could you provide that to the committee?

**Ms. Arianne Reza:** Certainly.

**Mr. Garnett Genuis:** Thank you very much.

**The Chair:** Thank you very much.

Ms. Yip, you have the floor for five minutes, please.

**Ms. Jean Yip (Scarborough—Agincourt, Lib.):** Thank you.

I'd like to return to the topic of today, which is vaccines.

Dr. Lucas, you tried to tell us earlier about the financial contribution that Canada made to COVAX.

Would you like to elaborate on that, since you were cut off?

**Dr. Stephen Lucas:** Thank you, Mr. Chair.

The point I was making is that Canada worked in multiple regards to support access to vaccines and their distribution and use in low- and middle-income countries, first through being a leading donor to COVAX, right from the very beginning in 2020. Additionally, Canada provided funds through COVAX and bilaterally with countries to support their vaccine programs—information, distribution and uptake in clinics. Thirdly, as we've been discussing, Canada provided doses through to COVAX and bilaterally with countries. Those elements have supported and helped low- and middle-income countries.

The investments we have made through Global Affairs to support information and support trusted people in communities on vaccine uptake have been important, recognizing some of the challenges in uptake in those countries, as has been noted.

**Ms. Jean Yip:** I'd like to ask Dr. Lucas another question, on the COVID-19 vaccination coverage surveillance system.

A review of the data shows that some population characteristics, such as ethnicity or indigenous status, were not included. I think it is really important to have this type of disaggregated data, as information would help target programs or communications to groups that may be at higher risk.

Can you provide an update on this?

**Dr. Stephen Lucas:** I'll respond initially and then turn to Stephen Bent from the Public Health Agency.

As I noted, the government is very focused on working with provinces, territories and other partners on significantly improving the sharing of health data across the country. As I noted, that will be discussed with the Prime Minister and premiers tomorrow.

Extensive work has been done to address a number of the barriers, as I noted in a previous discussion. This includes, as we've been working with provinces and territories, obtaining disaggregated data, which is specific to your question.

I'll turn to Stephen Bent on the surveillance system.

**Mr. Stephen Bent:** In terms of our collaboration with the provinces and territories, we've been working since early 2022 to look at the CAEFISS system and at VaccineConnect as it evolves into the new version of that system, to ensure that we have all of the relevant fields incorporated.

Another aspect of this, obviously, is working with provinces and territories and local vaccine administrators to ensure that they submit the data that is required to be able to have that disaggregated information, as you've noted. We're working very hard at it.

• (1245)

**Ms. Jean Yip:** Thank you.

This is a question for Ms. Reza.

In terms of moving forward, which, if any, lessons have been learned and have you been able to incorporate in terms of procuring vaccines for variants?

**Ms. Arianne Reza:** In general what we strive for is to get early access and early delivery, and we also strive to get access to the latest and greatest in terms of formulations that have been approved by Health Canada.

In terms of some of the contracting best practices that we've brought in, I'm going to turn to my colleague, Mr. Mills.

**Mr. Michael Mills (Assistant Deputy Minister, Procurement Branch, Department of Public Works and Government Services):** Thank you, Mr. Chair.

In terms of procurement best practices, some of them were mentioned in the report, in terms of looking at the integrity of companies and doing financial checks, but also what is important for us is to focus on determining your requirements and your needs.

One of the things we did early on in this, in terms of setting our strategy, was to develop a playbook for the acquisition of vaccines. Going forward, we will continue to work with the Public Health Agency and Health Canada to ensure that we understand the needs and the timeliness; that we have the requirements of Canadians well defined upfront; that, as we're conducting our procurements, we'll continue to look at how we ensure that we are integral partners; and that our contracts reflect the needs of Canadians and give us the flexibility to manage those supplies as we go forward.

**The Chair:** Ms. Yip, I'm sorry. That is the time.

I'm going to get in one more round, but because of the clock I'm going to limit the government and official opposition to three minutes each.

[*Translation*]

The two other parties, the Bloc Québécois and the NDP, have a minute and a half each.

[*English*]

Mr. Kram, you have the floor for three minutes, please.

I'll be very tight with the time.

Thank you.

**Mr. Michael Kram:** Thank you, Mr. Chair.

Thank you, again, to all the witnesses for being here today. This has been a very interesting meeting.

I would like to just wrap up as many loose ends as I can in the time I have left.

If I look at the advance purchase agreements listed on page six and the ones that were actually approved on page nine, would it be correct to conclude that all the companies delivered a vaccine except Sanofi?

Is that correct?

**Dr. Stephen Lucas:** The six vaccines except Sanofi were approved. All except Medicago delivered doses.

**Mr. Michael Kram:** Okay.

What went wrong with Sanofi and Medicago?

**Dr. Stephen Lucas:** Sanofi has not completed the package of information and has modified its vaccine strategy through its work.

Medicago had challenges in terms of the manufacturing of the vaccine and did not enable us to approve its quality and therefore delivery to Canadians.

**Mr. Michael Kram:** I'll request a written submission.

On page 15, exhibit 9.3 gives a nice breakdown of what happened to all the vaccines.

Could we get a similar breakdown by advance purchase agreement or by company, so we can see which advance purchase agreements bore more fruit than others, so to speak?

**Ms. Arianne Reza:** Certainly.

I think we can do it as part of the follow-up [*Inaudible—Editor*].

**Mr. Michael Kram:** Thank you.

One question that I've had brought to my attention a number of times is whether there was any difference with these vaccines with respect to protection from liability compared to any other vaccine or medication on the market.

**Ms. Arianne Reza:** As part of the APA, we negotiated different clauses of liability. They were done in consultation with Public Health.

In terms of comparing it with other types of vaccine, I'm afraid I can't answer that question.

**Mr. Michael Kram:** Okay. Also, on page 13 it says, "The agency contracted logistics providers FedEx Express Canada...and Innomar Strategies Inc. for vaccine delivery and storage."

Why not go with Canada Post?

**Ms. Arianne Reza:** We had an open competition for that, and I think we received several bidders. They were the ones that had the best-value bids.

**The Chair:** You have 10 seconds.

**Mr. Michael Kram:** I have 10 seconds. Okay.

I don't think I have time to get it off my chest, so thank you, Mr. Chair.

• (1250)

**The Chair:** Ms. Bradford, you have the floor for three minutes, please.

**Ms. Valerie Bradford:** Thank you, Mr. Chair.

I think all of us agree that none of us like wastage, especially of valuable vaccines, but I think it's far better that we err on the side of purchasing too many than not having enough. It's the unnecessary wastage that we want to look at, because I believe Dr. Kochhar indicated that with any vaccination program, because of the process, there is always wastage of vaccines.

We've heard from procurement services what they would do differently and the lessons learned. In all of these report processes, that's always the most important thing: What have we learned going forward?

I'd be interested in hearing from both Dr. Lucas and Dr. Kochhar what their departments have learned from this process and how they'd handle things differently going forward to avoid some of the pitfalls we experienced.

**Dr. Stephen Lucas:** Mr. Chair, I'll highlight two points.

One, with regard to the regulatory efficiencies we put in place and the dedicated teams that allowed for the expedited approval while maintaining safety standards, we have put forward for consultation now an agile regulation package that takes the best of the lessons from that experience and proposes to adopt those in our food and drug regulations.

The second point, as we've discussed, is securing the commitment to collect, share and use, with the appropriate privacy protections, health data to support the needs of Canadians, both in public health emergencies and in the health care system. We are resolute on advancing on that point.

**Dr. Harpreet S. Kochhar:** Mr. Chair, I'll add, just in terms of our own management of the supply, that we are very committed to doing work with PTs on the forward supply planning, informed by science and expert advice.

We are also looking, as our colleagues from PSPC said, to adjust the delivery schedules and also collaborate with Gavi and COVAX for any donations we can make.

Again, we also encourage the boosters when the NACI recommends or when the advisory committee recommends.

We also believe in a couple of other things, like domestic capacity to produce these vaccines, making sure we have the involvement of all PT and I partners—provincial, territorial and indigenous—just to make sure we have the right kind of formulation that we can provide to the Canadian population.

Those are the things that we've learned over time and that we will try to introduce into our planning further.

**The Chair:** You, too, have 10 seconds for a comment.

**Ms. Valerie Bradford:** Oh, that's fine. Thank you.

**The Chair:** Thank you. I'm trying to keep us on the clock.

[*Translation*]

Mr. Perron you have just a minute and a half.

**Mr. Yves Perron:** Thank you very much, Mr. Chair.

I will try to be brief.

Ms. Hogan, I would like to pick up on what we were talking about earlier.

I was asking if we could have access to secret contracts, even if it means discussing them in a sub-committee meeting in camera. I would like you to explore that request with your lawyers, as you said, so you can tell the committee whether that is possible.

Next, I want to get back to the computer-related problems. Perhaps the officials from the Public Health Agency of Canada can answer this.

A private company was hired to fix a computer-related problem that apparently dates back twenty years. I do not want to sensationalize this, but this is rather surprising all the same.

Are you sure that this problem can be fixed? We need to know.

Were other private companies consulted during the pandemic?

We mentioned McKinsey earlier.

Are there any other companies or individuals to whom sub-contracts were awarded without calling on the expertise of our public servants?

[*English*]

**Dr. Harpreet S. Kochhar:** Mr. Chair, I'll start and then pass to Luc.

**The Chair:** You have 30 seconds.

**Dr. Harpreet S. Kochhar:** One of the things to start is that Deloitte was contracted specifically for VaccineConnect and not in general for the health data component, which was a part of our strategy in the pan-Canadian health data strategy.

Luc, if you can elaborate a little on that...

[*Translation*]

**The Chair:** Please answer briefly, Mr. Gagnon.

**Mr. Luc Gagnon:** Thank you, Mr. Chair.

I thank the member for his question. I will be brief.

I would like to add that Deloitte was responsible for developing the platform. The products and specifications were managed by a team at the Public Health Agency of Canada, using all the internal expertise available.

• (1255)

**The Chair:** Thank you very much, Mr. Gagnon.

[English]

Mr. Desjarlais, you have the floor for 90 seconds, please.

**Mr. Blake Desjarlais:** Thank you very much, Mr. Chair.

I'd now like to turn to my original question in relation to exhibit 9.3, about how most unused doses in Canada will expire by the end of 2022.

There were 21.7 million doses offered by Canada that were awaiting donation. The AG, in that questioning, offered that by December, only one million of those doses had been successfully donated and eight million had expired.

Can Dr. Kochhar confirm that the Public Health Agency of Canada was able to successfully donate the remainder, or were they all expired?

**Ms. Karen Hogan:** If I may, Mr. Chair, it was the opposite: Eight million doses were donated, and one million expired by early December.

**Mr. Blake Desjarlais:** Oh, I see. Of the one million then, what happened to that one million?

**Mr. Stephen Bent:** Perhaps I'll take the question. Thank you, Mr. Chair.

Overall, in terms of our vaccine wastage, by the end of the calendar year we had 12 million doses of vaccine in federal inventory that had expired. Some of those would have included the residual...in terms of the donation.

I would offer, though—it's fundamentally important to note—that these doses were put on offer. There were countries that were not interested in taking them. It's not the fact that they were not accessible to the countries, it was the fact that COVAX could not find suitable homes for them. That was a difference from the early part of the pandemic, when there was a lot of demand and a scarcity of supply.

**Mr. Blake Desjarlais:** Is part of the contributing problem the requirement by these companies to have minimum amounts...as we heard from procurement, 20 million?

**Mr. Stephen Bent:** No. We've moved—

**The Chair:** I heard the no.

Thank you very much. I appreciate it. I'm sorry. I have to keep things tight. I apologize. However, we did get an answer.

Mr. McCauley, you have the floor for three minutes, please.

**Mr. Kelly McCauley:** Thanks, Mr. Chair.

In listening to all of this today, it seems very much the issue—despite what looks like is being spun—that we had far too few vaccines at the beginning and now we have far too many at the end.

I'd like to get an idea, please, I guess from PSPC. What have we signed for obligations going forward for purchasing more vaccine—in terms of dollar value and shots?

Who is providing the demand to you—the numbers that we are expecting to purchase? Is that coming from Health? Where's that coming from?

Also, with regard to the existing contracts we have, for example, Pfizer, are we obligated to buy from the original APA, or is it being revised as we have the booster shots come up?

**Ms. Arianne Reza:** As it relates to our current negotiation stance, we work very closely with the Public Health Agency, and behind them, the provinces and territories, to predict demand and the need for supply. We constantly renegotiate our existing agreements: whether or not to trigger options and whether or not to adjust downward based on volume.

These are constantly moving parts. They're not static. That is why it will be helpful for me to come back with the various data points. They're constantly being readjusted. Whether or not options are being triggered is a consideration that's done at the request of the Public Health Agency.

**Mr. Kelly McCauley:** Is the government still claiming national security as the reason not to release vaccine pricing to Canadians?

**Ms. Arianne Reza:** Vaccine pricing is one of the commercially sensitive data elements in our contracts. Under our contractual obligations with the suppliers, we do not release that information.

**Mr. Kelly McCauley:** It's been released in other countries. The Americans and Europeans release their pricing, but for some reason Canada will not. Is it because we're special? Why is that? Is this coming from the manufacturers, or is this coming from the government?

**Ms. Arianne Reza:** I cannot comment in detail on what other countries do.

I can advise, of course, that in some of the countries you noted—in some of those markets—they are the countries producing the vaccines. Through their initial investments, they have perhaps a different pricing regime than we see in straight APAs with other countries. This is in terms of guarding that commercially sensitive information, which is done in discussions with the vaccine suppliers.

**The Chair:** You have 13 seconds for a question and an answer, Mr. McCauley.

**Mr. Kelly McCauley:** I will just say thank you for your report, AG Hogan, and others from the office.

**The Chair:** Thank you.

Mr. Fragiskatos, you have the floor for three minutes, please.

**Mr. Peter Fragiskatos:** Thank you, Chair.

I'm going to follow up on a point that I raised when I was asking questions earlier. This is for the deputy minister, Mr. Lucas.

In fact, in 2022, John Hopkins University put out a study on Canada and the United States, looking at rates of death through the COVID experience on a per capita basis. I'm quoting from a report from the BBC that 279 U.S. residents have died of COVID-19 per 100,000 people compared to about 94 in Canada.

This saves you, if you wish, sir. You don't have to come back to the committee now with that data.

I wish we had longer, but could you make a quick comment on the extent to which Canada's vaccine strategy and how the approach taken here may have contributed to that outcome?

• (1300)

**Dr. Stephen Lucas:** Certainly, I think there was broad engagement across the country with provinces, territories, communities, faith leaders and sports heroes. Everyone in Canada joined in to push the primary series of vaccinations, reaching leading levels in the G7 and the world. I think that contributed significantly to that increase, as well as other public health measures in Canada. That created the differential between Canada and the United States.

**Mr. Peter Fragiskatos:** Chair, if colleagues have another question, then I...

**The Chair:** You have 90 seconds.

**Mr. Peter Fragiskatos:** Well, okay.

**The Chair:** You can stop at any time.

**Mr. Peter Fragiskatos:** I also see that it's one o'clock.

**The Chair:** I try to finish the rounds, and no one's pressing to end, so you still have 90 seconds.

**Mr. Peter Fragiskatos:** That's fine. I'm glad to keep the time, if that's what we're going to do.

I'll go back to this whole issue of international development, since it is International Development Week.

This is again for the deputy minister, Mr. Lucas.

Regarding the 37 bilateral agreements that have been signed between the government and the various countries, how does that

come about, exactly? How do we form those deals? Which countries are chosen? How does that process unfold, exactly?

Whoever wishes to can take it.

**Dr. Stephen Lucas:** I'll start and then turn to my public health colleagues.

Through Global Affairs there has been very significant and sustained engagement throughout the pandemic, certainly in the context of donating with COVAX. As well, it's based on our bilateral engagement priorities. This includes, for example, in the Americas and the Caribbean. We reached out to those countries and others.

I'll turn to colleagues on the specifics.

**Dr. Harpreet S. Kochhar:** Mr. Chair, we actually reached out to multiple countries and offered those surplus vaccines. There were situations where, in addition to Latin America and Caribbean countries, there were African countries that also opted for that. We were diligent enough to send them not only the vaccines but also the supplies needed for the vaccination, to make it possible.

**The Chair:** Thank you very much.

I want to thank all our witnesses. I appreciate your indulgence with the few minutes with Mr. Fragiskatos. I can only imagine the reaction if I was to cut off a government member at the end. Better safe and to run it long to make sure I would have you both. I would have Mr. Fragiskatos and Mr. McCauley coming down on me; instead, we like to hear from everyone, including our witnesses. Thank you again for appearing.

The meeting is adjourned.









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