

COVID-19 Personal Protective Equipment Supply

Standing Committee on Public Accounts Follow-Up on Value-for-Money Audit, 2021 Annual Report

On March 30, 2022, the Standing Committee on Public Accounts (Committee) held a public hearing on our 2021 audit of COVID-19 Personal Protective Equipment Supply. The Committee tabled a report on this hearing in the Legislature in February 2023. A link to the full report can be found at www.auditor.on.ca/en/content/standingcommittee/standingcommittee.html.

The Committee made seven recommendations and asked the Ministry of Health and the Ministry of Public and Business Service Delivery (MPBSD) to report back by June 2023. The Ministries formally responded to the

Committee on June 21, 2023. A number of the issues raised by the Committee were similar to the audit observations of our 2021 audit, which we also followed up on in 2023. The status of each of the Committee's recommended actions is shown in **Figure 1.**

We conducted assurance work between June 2023 and August 2023, and obtained written representation from the Ministry of Health and the Ministry of Public and Business Service Delivery that effective November 17, 2023, they have provided us with a complete update of the status of the recommendations made by the Committee.

Figure 1: Summary Status of Actions Recommended in February 2023 Committee Report

Prepared by the Office of the Auditor General of Ontario

RECOMMENDATION STATUS OVERVIEW							
		Status of Actions Recommended					
	# of Actions Recommended	Fully Implemented	In the Process of Being Implemented	Little or No Progress	Will Not Be Implemented	No Longer Applicable	
Recommendation 1	1				1		
Recommendation 2	1	1					
Recommendation 3	1		1				
Recommendation 4	4	4					
Recommendation 5	3	2	1				
Recommendation 6	3	3					
Recommendation 7	2	1	1				
Total	15	11	3	0	1	0	
%	100	73	20	0	7	0	

Overall Conclusion

As of November 17, 2023, 73% of the Committee's recommended actions had been fully implemented, and 20% of the recommended actions were in the process of being implemented. The Ministry of Health will not be implementing one (7%) recommendation to change the stockpiling practice in the Ontario Health Plan for an Influenza Pandemic (Health Pandemic Plan) to require that health-care employers maintain a four-week, eight-week or 32-week supply of personal

protective equipment (PPE) as appropriate to their health-care setting requirements, and report regularly to the Ministry of Health on their supply levels.

Detailed Status of Recommendations

Figure 2 shows the recommendations and status details that are based on responses from the Ministry of Health and the Ministry of Public and Business Service Delivery, and our review of the information provided.

Figure 2: Committee Recommendations and Detailed Status of Actions Taken

Prepared by the Office of the Auditor General of Ontario

Committee Recommendation

Recommendation 1

The Ministry of Health include a requirement in the Health Pandemic Plan that health-care employers must maintain a four-week, eight-week or 32-week supply of PPE as appropriate to their health-care setting requirements, and report regularly to the Ministry of Health on their supply levels.

Status: Will not be implemented.

Status Details

The Ministry of Health will not be changing the Health Pandemic Plan stockpiling practice to require that health-care employers maintain a four-week, eight-week or 32-week supply of PPE as appropriate to their health-care setting requirements and report regularly to the Ministry of Health on their supply levels. The Ministry of Health worked closely with the Ministry of Public and Business Service Delivery (MPBSD) to finalize the transfer of the health-care stockpile of PPE to Supply Ontario, which was completed as of July 31, 2023. PPE and critical supply equipment in the provincial stockpile will be available through the Supply Ontario PPE Supply Portal to health-care workers and their employers. Health-care providers are expected to be able to leverage the provincial stockpile to meet their stockpile requirements. The provincial stockpile is to be maintained to the levels identified through demand planning, surge planning for emergencies and to meet supply chain risk.

Recommendation 2

The Ministry of Public and Business Service Delivery update the framework of PPE distribution to schools to include distribution to students, and make the framework public.

Status: Fully implemented.

MPBSD consulted with the Ministry of Education and the Office of the Chief Medical Officer of Health to determine the requirements for PPE distribution to schools. Schools are included in the distribution framework of PPE since schools reopened during the pandemic. This was stated on May 4, 2021, when the Ministry of Education publicly announced the Ontario government provided up to \$450 million in PPE and critical supplies and equipment to protect schools.

Recommendation 3

The Ministry of Public and Business Service Delivery work with Supply Ontario to put in place the systems that will enable Supply Ontario to collect the information it needs about Ontario's PPE supply and regularly report this information to the Ministry.

Status: In the process of being implemented by April 2024.

Status Details

On July 31, 2023, the transition of staff and business operations from the Supply Chain Ontario (SCO) division in the Ministry of Public and Business Service Delivery (MPBSD) to Supply Ontario took place, including the transfer of responsibilities for the management, oversight and operations of the provincial stockpile of PPE and critical supplies and equipment (CSE). Also, effective July 31, 2023, Supply Ontario continued to utilize the government's Integrated Financial Information System (IFIS). IFIS is the Ontario government's financial system used in every ministry for financial management, transactions and reporting purposes; and SCO allocation will continue to be captured under MPBSD. Using IFIS will help to address the limitations of Supply Ontario's existing financial recordkeeping solution, with Supply Ontario temporarily leveraging IFIS as a tool to record operational spending until Supply Ontario has an adequate Enterprise Resource Planning (ERP) system in place that will manage day-to-day business activities such as financial, human resources and procurement. The Treasury Board Secretariat, MPBSD and the Ministry of Health will report on the progress of the transition of the PPE/CSE program and inventory as part of their 2024-25 Strategic Planning Process and further report on the progress of Supply Ontario toward implementation of Supply Ontario's ERP system will be provided. SCO currently manages and provides oversight and tracking of all purchases/procurement, storage/warehousing, disposal, and shipment of PPE/CSE. This includes the management of all related contracts, including funding, which currently resides with SCO within MPBSD.

Presently, SCO tracks and monitors provincial stockpile inventory from several different third-party logistics providers, systems, and combines those reports using Microsoft Excel. Also, inventory is accounted for by two different ministries, requiring further manual effort to track transfers, receipts from the federal government and other data required for inventory accounting using manual manipulation. Effective July 31, 2023, inventory ownership will continue to be recorded on the Ministry of Health and MPBSD books, but Supply Ontario now manages the entire program. It is acknowledged that a more sophisticated software will be required that is more efficient and provides real-time reporting. This is being considered by Supply Ontario as part of Supply Ontario's procurement of an ERP system. Transfer of ownership of inventory is expected to occur on April 1, 2024, as part of Supply Ontario's Strategic Planning Process or when Supply Ontario has acquired and implemented its ERP system.

Recommendation 4

The Ministry of Health and the Ministry of Public and Business Service Delivery:

 continue to collect information on inventory and consumption (or "burn") rates of PPE for both the health-care sector and non-health-care sector during the COVID-19 pandemic and after it has ended;

Status: Fully implemented.

 obtain pre-pandemic burn rates for both sectors to help inform Supply Ontario on its post-pandemic procurement needs;

Status: Fully implemented.

 reassess the 2006/07 recommended quantities of PPE that should be kept in the provincial emergency stockpile;
 Status: Fully implemented.

Status Details

MPBSD has implemented a virtual inventory tool survey for data collection to capture information about consumption, inventory and deliveries and help to accurately assess and address the province's inventory needs and inform future demand. This survey was used to identify the current status and anticipated demand for PPE and critical supplies equipment across multiple sectors within the province, such as the health-care and non-health-care sectors. Although there was a previous Minister's Order that directed health-care entities to complete and submit the survey, it has elapsed. There is no current policy document that directs participants to complete and submit the survey because Supply Ontario uses multiple inputs for demand modelling, including:

- input from ministries and the sectors they support;
- input from the Office of the Chief Medical Officer of Health and the Ministry of Labour;
- Immigration, Training and Skills Development;
- · input directly from customers; and
- · input from order history and trends.

MPBSD uses submission statistics included in the dashboard view of the survey to keep track of the health-care and non-health-care sectors that have filled in the survey. For 2023 to date, only 10.42% of the health-care sector regularly reports its PPE inventory levels to MPBSD, while the rate of survey completion is even lower for non-health-care sectors, at 9.17%. Supply Ontario is in the process of changing the rate of reporting to encourage completion, but on a less frequent basis in order to reduce reporting burden.

MPBSD had determined that there were no material pre-pandemic burn rates for PPE for the non-health-care sectors. In addition, the Ministry of Health stated that the prepandemic burn-rate data was no longer relevant because COVID-19 was expected to continue for the long-term and that Ontario's PPE health-care sector stockpile strategy must continue to prepare for COVID-19 surges and increased demand beyond prepandemic rates. Alternatively, MPBSD established the Integrated Demand and Supply Planning (IDSP) tool, which is a detailed forecasting model to project PPE consumption. This model can be adjusted based on the conditions of a particular scenario, such as the number of workers, or the consumption rate. For example, demand and historical shipments are reviewed by sector to monitor trends, and a supply plan (based on contracts or other procurements) is calendarized to forecast incoming supply to the stockpile and to determine when staffing levels will impact demand (such as in schools over the summer) when supply-level adjustments will need to be made to reflect demand. This tool can be used to identify when PPE supplies will drop into unsafe stock levels or will be completely depleted, allowing the supply team time to plan purchases or deliveries from contracts to meet demand. The team met on a regular basis to review the tool and make supply plans, as well as to review the forecast for 18 months to determine whether additional procurement approvals or contracts were required.

MPBSD established the Integrated Demand and Supply Planning (IDSP) tool used to maintain the recommended quantities of PPE to be kept in the stockpile. This amount is generally three months of forward coverage and is not a static quantity because the stockpile is continuously reassessed through the ongoing IDSP process. The IDSP tool estimates remaining inventory over time, so that when a product inventory level is forecasted to be lower than three months of forward coverage, the planning team is alerted that action is required. This allows the supply team to plan for competitive procurement, if required, and ensures that safety stock levels are adjusted with demand.

 develop clear guidelines on how health-care and non-health-care providers can request needed PPE and distribute these guidelines to all health-care and non-health-care providers who may request PPE from the provincial emergency stockpile in the future.

Status: Fully implemented.

Status Details

On August 4, 2022, MPBSD implemented the PPE Supply Portal for all orders from the emergency stockpile, from where all in-scope organizations (vetted by Supply Ontario) will order PPE from the government's stockpile through an integrated order management system. This new model will streamline the PPE request process and capitalize on the stabilization of the supply chain to co-ordinate distribution of PPE. On August 24, 2022, the Ministry of Health released Addendum: Guidelines for Pandemic Stockpile Use, which includes the Ethical Allocation Framework, identifying criteria to help determine priority for available PPE supply in the event of scarcity during a COVID-19 response. The guidance also includes information and guidelines for health-care providers on stockpiling, inventory management practices and accessing needed PPE from the emergency stockpile. These guidelines were distributed through regular communication channels, such as emails, public posts on the Ministry's website, memos to the sector, and notifications on organization websites.

Recommendation 5

The Ministry of Health and the Ministry of Public and Business Service Delivery:

- collaborate to develop lessons learned in the creation of new procurement processes and warehouse and distribution centres;
- help transfer this knowledge and incorporate lessons learned and best practices into Supply Ontario's operations;

Status: Fully implemented.

 revise the Ontario Health Plan for an Influenza Pandemic to incorporate lessons learned.

Status: In the process of being implemented by September 2024.

The government approved the transfer of the functions and staff from MPBSD to Supply Ontario (see **Recommendation 3**). With that decision in place, the collaboration to develop lessons learned and the transfer of knowledge and best practices was complete. Memos were distributed to all ministers and deputy ministers announcing the transfer, including the management, oversight, and operations of the provincial stockpile of PPE and CSE currently managed by the Supply Chain Ontario division as of July 31, 2023. In addition, early lessons learned from COVID-19 include the need to improve on the management of future pandemics by using a flexible seasonal plan that will be kept current and relevant. Going forward, the flexible seasonal plan will undergo an annual planning cycle.

At the time of the Committee's follow-up, the Ministry of Health has held debriefs and interviews to gather COVID-19 lessons learned to inform future pandemic planning. For example, at the time of our follow-up, the Ministry of Health had conducted a debrief with the co-chairs of the Respiratory Season Touchpoint and the associated Pediatric Surge Table. These two tables were key COVID-19 response structures for the Ministry of Health, Ontario Health and Public Health Ontario leadership. This debrief resulted in the development of the Seasonal Respiratory Pathogens Readiness and Response Planning Guide (Planning Guide), which was publicly released in July 2023 to help the provincial health-care system prepare for and respond to seasonal respiratory pathogens. In addition, the Ministry told us that an early lesson from the debriefs was that it was preferable to manage pandemics by using a flexible seasonal plan that is kept current and relevant, and that will undergo an annual planning cycle. The Ontario Health Plan for an Influenza Pandemic will therefore be replaced by a flexible seasonal plan that will include inventory management and control guidelines in September 2024. The Planning Guide can be escalated to respond to public health emergencies or pandemics and is intended for regular use by health-system agencies, organizations, employers and health-care service providers.

Recommendation 6

The Ministry of Health, the Ministry of Public and Business Service Delivery, and Supply Ontario:

- analyze both qualitatively and quantitatively what the optimal balance is between manufacturing PPE domestically and procuring PPE internationally, and use this information in future decision-making;
- put in place long-term formal agreements with domestic companies that can be triggered when emergencies arise, where these companies can scale up the production of PPE to meet peak demand brought on by health events such as pandemics;

Status: Fully implemented.

 ensure appropriate levels of PPE in the emergency stockpile, as well as the efficient rotation of PPE in warehouses to avoid expiration.

Status: Fully implemented.

Status Details

MPBSD has implemented a category management approach that prioritized domestically produced PPE where possible and where security of the supply chain was a key consideration. Category management considered and analyzed the data to determine the optimal procurement strategy by using marketplace research to determine what products were available domestically or internationally, along with the supply chain risks and other factors considered in procurement strategies for decisionmakers. In addition, the government introduced the Building Ontario Businesses Initiative (BOBI) that requires action (expanding on the typical technical requirements to incorporate the evaluation of criteria such as social and economic considerations in procurement) to level the playing field for Ontario businesses. This initiative was piloted in the PPE/CSE program and resulted in changes in the factors used in decision-making for procurement approvals by the Treasury Board/Management Board of Cabinet. As a result, the OPS Procurement Directive that ensures that goods and services are acquired through a process that is fair, open, transparent, geographically neutral and accessible to qualified vendors was updated, effective September 1, 2023, to include the BOBI that applies to all ministries, all provincial agencies and other organizations. In addition, MPBSD has put in place long-term agreements for critical PPE, including domestic arrangements for surgical masks, N95 respirators, nitrile gloves, hand sanitizers and disinfectant cleaners. These agreements have the ability to scale up the production of PPE to meet demands brought on by an extraordinary event. As well, all contracts are transferrable to Supply Ontario when required.

MPBSD established the Integrated Demand and Supply Planning (IDSP) tool used to maintain the recommended quantities of PPE to be kept in the stockpile. This amount is generally three months of forward coverage, but was not a static quantity because the stockpile is now continuously reassessed through the ongoing IDSP process. The IDSP tool estimates remaining inventory over time, so that when a product inventory level is forecasted to be lower than three months of forward coverage, the planning team is alerted that action is required. This allows the supply team to plan for competitive procurement, if required, and ensures that safety stock levels are adjusted with demand. In addition, in January 2022, the Ministry of Health developed and distributed an expiration guidance document that provides instructions to its warehouse on when to ship PPE and other supplies to health-care providers so that they were shipped before they expired. This was being accomplished using an inventory control method called First Expiring, First Out (FEFO), such that items that expired first were the first items to be shipped out. This attempts to prevent obsolescence or expiry at the source of picking. As part of the October 1, 2022, contractual agreement with its warehouse vendor, Metro Supply Chain Inc. (Metro), orders with products that are closest to their expiry are shipped out first. The Ministry of Health informed us that it meets weekly with Metro and Supply Chain Ontario (formerly MPBSD) to reinforce the FEFO guidelines. Since the October 1, 2022, contractual agreement with Metro was signed, by June 2023, about \$53 million of PPE had expired. The majority of the expired stock is due to the high volume of new products acquired early in the pandemic when there was a shortage of respirators, masks and sanitizer to meet demand. Once the supply chain stabilized, some products became more appropriate than others and demand for other products declined resulting in additional inventory of expired and obsolete products.

Recommendation 7

The Ministry of Health and the Ministry of Public and Business Service Delivery:

- publicly communicate the Ethical Allocation Framework for PPE and post it on their websites;
 - Status: Fully implemented.
- incorporate the Ethical Allocation
 Framework for PPE into the updated
 Ontario Health Plan for an Influenza
 Pandemic.

Status: In the process of being implemented by September 2024.

Status Details

On August 24, 2022, the Ministry of Health publicly released Addendum: Guidelines for Pandemic Stockpile Use, that includes the Ethical Allocation Framework. These guidelines were distributed through regular communication channels, such as emails, public posts on the Ministry's website, memos to the sector and notifications on organization websites.

The Ministry of Health has held debriefs and interviews to gather COVID-19 lessons learned to inform future pandemic planning. For example, at the time of the follow-up, the Ministry had conducted a debrief with the co-chairs of the Respiratory Season Touchpoint and associated Pediatric Surge Table. This debrief resulted in the development of the Seasonal Respiratory Pathogens Readiness and Response Planning Guide (Planning Guide) which was publicly released in July 2023 to help the provincial health-care system prepare for and respond to seasonal respiratory pathogens. The Planning Guide can be escalated to respond to public health emergencies or pandemics and is intended for regular use by health-system agencies, organizations, employers and health-care service providers. The Ontario Health Plan for an Influenza Pandemic will therefore be replaced with a flexible seasonal plan that will include the Ethical Allocation Framework for PPE in September 2024.