

Canada's COVID-19 Immunization Plan: Saving Lives and Livelihoods

Executive Summary

Canada is preparing to roll out an immunization response, which will provide Canadians with access to safe and effective vaccines to protect against COVID-19. This ambitious plan will be delivered through a principled and evidence-informed approach that puts protecting the health and safety of Canadians first.

Governments recognize that Canadians have made great sacrifices to minimize the harmful effects of COVID-19 on our communities and that many Canadians are anxious to know where, when and how they can receive a vaccine. Extensive work has been done over the last several months to secure strong vaccine options and to have the measures necessary to deliver vaccinations to everyone in Canada. Immunizations will be free to everyone in Canada and available over the course of 2021.

Until extensive immunization is achieved, public health measures will continue to be essential to minimize the spread of COVID-19 in Canada and save lives.

Canada's immunization response involves collaboration between the Government of Canada, provinces, territories, First Nations, Inuit and Métis leaders, municipal governments, public health and logistical experts, manufacturers, and all Canadians. The plan is rooted in **core principles** of:

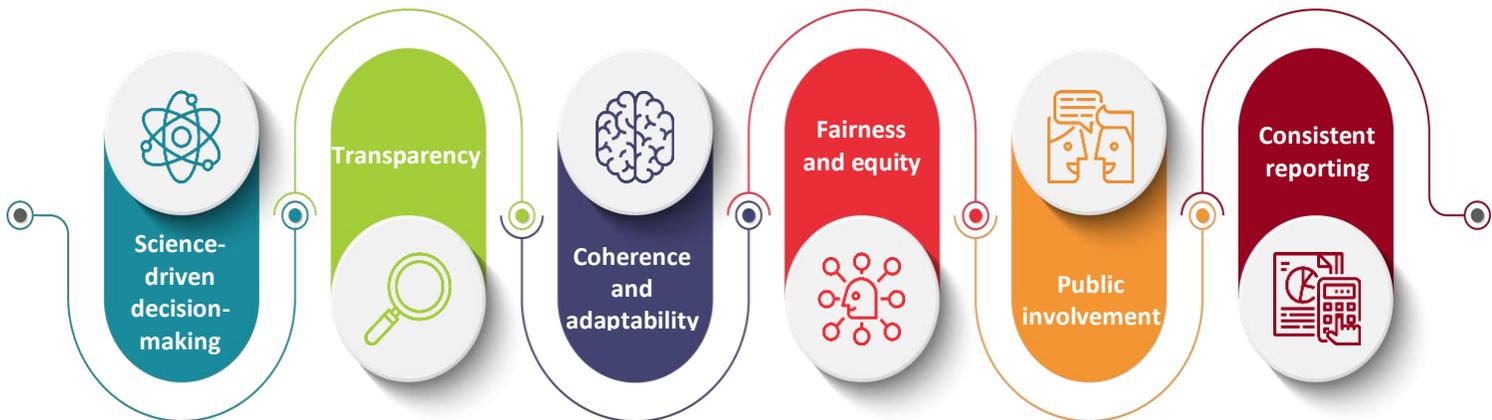


Figure: Principles in Action to Delivering a COVID-19 vaccination in Canada

The goal of Canada's COVID-19 immunization response is to **enable as many Canadians as possible to be immunized as quickly as possible against COVID-19, while ensuring that high risk populations are prioritized.** While the immunization response is large and multifaceted, Canada is in a strong position to take on this challenge. This plan outlines Canada's approach to widespread immunization against COVID-19, with the first immunizations beginning as soon as possible to priority populations.

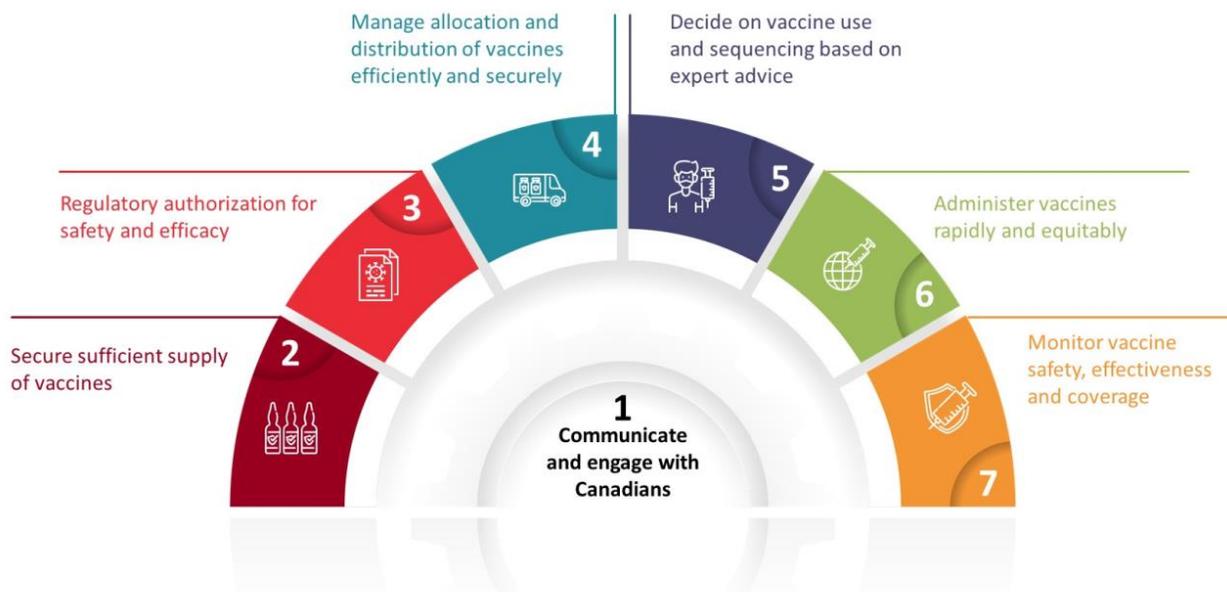


Figure: Canada's Immunization Plan is comprised of Seven Key Elements

Canada's COVID-19 immunization requires close collaboration between all governments, Indigenous peoples, experts and partners in Canada and abroad. Roles include:



1. Provinces / Territories; 2. Federal / Provincial / Territorial

Figure: Key players

- Federal Government:** Procure vaccinations on behalf of all jurisdictions; authorize vaccines for use; support efforts in partnership with all jurisdictions via new National Operating Centre; provide scientific guidance on vaccine use; coordinate pan Canadian surveillance and reporting; and liaise with international partners.

- **Provincial and Territorial (P/T) Governments:** Decide the policy and process for vaccination distribution. Plan, store, administer and deliver vaccination programs to the populations they serve, including deciding on how to sequence the initial and subsequent doses; manage, track and share data on coverage and adverse events.
- **All governments together with respective Indigenous leaders and key partners:** Provide reliable information to the public and promote vaccine confidence; coordinate delivery systems to First Nations, Inuit and Métis populations; monitor and respond to safety signals; monitor coverage; and assess vaccine effectiveness.
- **Expert Advisors across many fields:** Advise on vaccine candidates and prioritization of early doses; ensure evidence-based approach; and support technical logistics planning and delivery.
- **International collaborators:** Share information and collaborate across health, scientific and regulatory communities.

Canada’s Vaccine Rollout: Through advance purchasing agreements, enough vaccines have been secured to provide all Canadians with access to vaccinations. Immunization will begin with the arrival of limited doses, which will be prioritized to high-risk populations, such as the elderly, residents and staff of congregate living arrangements such as long term care facilities, front-line health care workers, and those in living or working conditions with elevated risk for infection or disproportionate consequences, including Indigenous communities. (see National Advisory Committee on Immunization December 4, 2020 advice to the Public Health Agency on Canada, <https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/guidance-prioritization-initial-doses-covid-19-vaccines.html>).

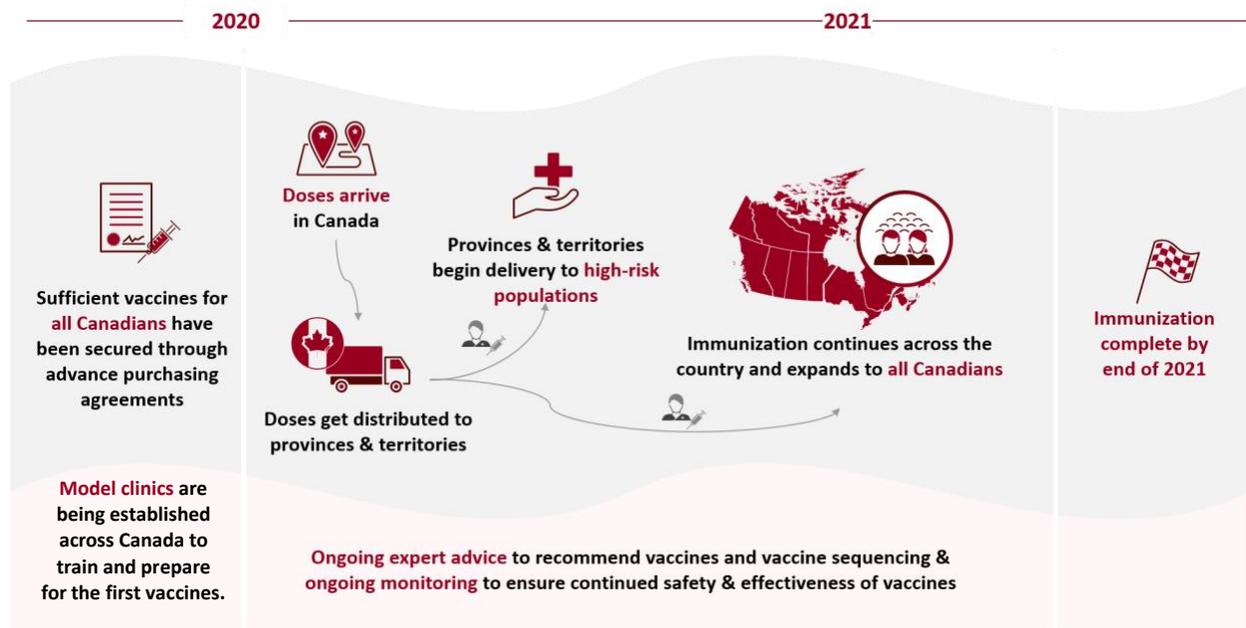


Figure: Canada’s Vaccine Rollout

A comprehensive COVID-19 immunization response in Canada is under way. Through close coordination across all governments, with First Nations, Inuit and Métis leaders, and public health officials, this strategy will ensure that Canada is prepared for the safe, secure, and rapid distribution of COVID-19 vaccines.

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Protecting Canada from COVID-19

COVID-19 has presented unprecedented challenges that have impacted the health, social and economic well-being of Canadians and the global community. By the end of November 2020, over 389,000 people in Canada had contracted COVID-19 and more than 12,300 of those lost their lives.

In the face of a common threat, Canadians have joined together and have made sacrifices to keep each other safe. These efforts have been, and continue to be essential to help control the spread and diminish the severe impacts of COVID-19. An immunization plan is critical in Canada's COVID-19 response.

Widespread immunization presents the best option to protect people from COVID-19 and, over time, to lift the restrictions placed on our society to keep people safe and healthy. Until extensive immunization is achieved, public health measures will continue to be essential to minimize the spread of COVID-19 in Canada and save lives.

Immunizing Canadians: Canada's Plan

Throughout 2021, Canada will provide access to safe and effective COVID-19 vaccines for all Canadians, leveraging established vaccination programs that are in place across the country for a wide range of illnesses.

The Goal

Since the beginning of the pandemic, Canada's response has aimed to minimize serious illness and overall deaths while minimizing societal disruption as a result of COVID-19. In line with these overarching objectives, the goal of Canada's COVID-19 immunization response is:

To enable as many Canadians as possible to be immunized as quickly as possible against COVID-19, while ensuring that high risk populations are prioritized.

The federal government, provinces and territories are working together with First Nations, Inuit and Métis leaders, experts, advisors, manufacturers and other Canadians to:

- Allocate, distribute and administer vaccines as efficiently, equitably and effectively as possible;
- Provide safe and effective vaccines as quickly as possible for all who want them; and,
- Monitor the safety, coverage and effectiveness of COVID-19 vaccines.

Principles in Action

To bring the benefits of COVID-19 immunization to Canada, Federal, Provincial and Territorial (F/P/T) health ministers agreed to the following common principles:

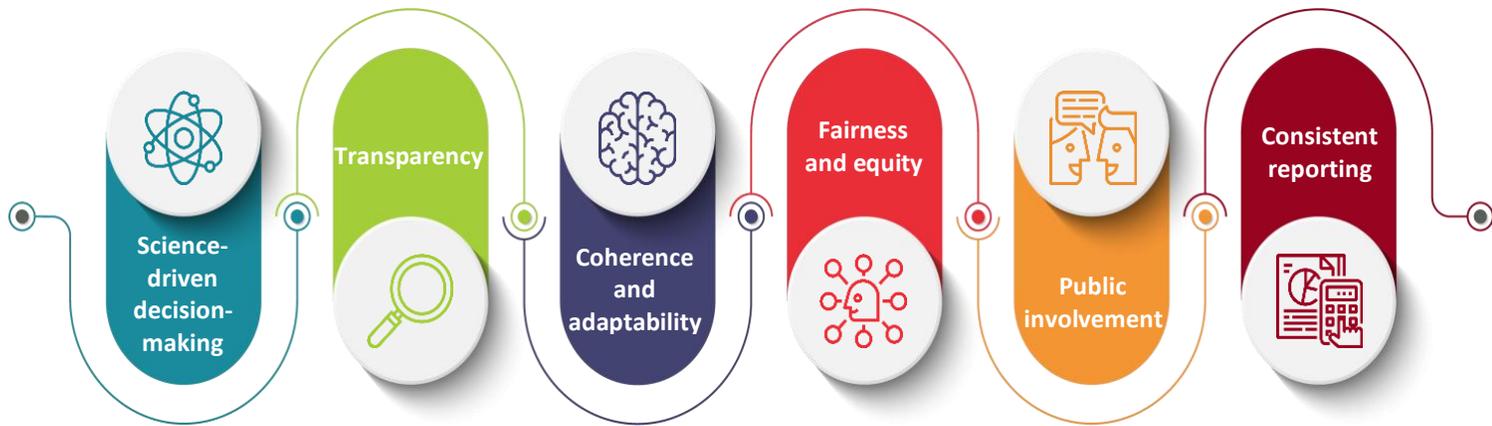


Figure: Principles in Action to Delivering a COVID-19 vaccination in Canada

Science-Driven Decision-making

Government' decision-making on COVID-19 vaccine use in Canada will be based on science, independent regulatory review and the advice of medical and other experts, including the National Advisory Committee on Immunization (NACI), to establish and maintain public confidence in the processes to authorize, procure, administer and monitor vaccines. This principle reflects the fundamental value that F/P/T governments place on public health expertise and the independence of scientific enquiry.

Transparency

Reliable, comprehensive, and transparent information about all aspects of the development, evaluation, recommended use, and the surveillance and monitoring of vaccines is fundamental in order to support public trust. Misinformation threatens the health and safety of Canadians by undermining confidence in science, vaccines and in public health authorities.

F/P/T governments will provide appropriate information to their respective populations on COVID-19 vaccines and on what governments are doing to plan COVID-19 immunization programs through their own accountability processes. Messaging and engagement with the public should be informative and designed to support public confidence, with consideration given to using accessible language and culturally safe approaches to vaccine delivery as would most benefit their populations.

Coherence and adaptability

F/P/T governments recognize the need for overall coherence in approaches to and communication regarding immunization based on scientific and epidemiological evidence, while allowing for adaptability and flexibility in immunization planning and implementation. Canada's approach respects jurisdictional roles and responsibilities and is commensurate with the epidemiology of COVID-19 and realities on the ground.

Limited vaccine supply will be available initially. Therefore, F/P/T governments will work together to develop a clear and transparent process for the allocation of vaccines across jurisdictions, with F/P/T governments being responsible for vaccine allocation to their respective populations.

Expert advice from public health, scientific and medical experts, including the NACI and provincial immunization committees, will be the basis for F/P/T government decisions on priority groups for immunization for the populations under their respective responsibilities while vaccine supplies are limited and for recommended use of authorized vaccines in Canada.

Fairness and Equity

Fair and equitable access to vaccines underpins F/P/T governments' overall approach to immunization. These principles will be elaborated in an allocation framework for COVID-19 vaccines. Governments recognize the unique needs of rural, remote, and isolated communities, Indigenous Peoples, as well as smaller jurisdictions. Provincial and territorial governments are committed to ensuring fairness and equity in access to vaccines in their own jurisdictions.

Public Involvement

People are at the centre of effective immunization programs. This means that engaging respective communities, non-governmental organizations, and Indigenous organizations in dialogue and understanding their needs is essential to how governments plan immunization strategies. F/P/T governments will work with their respective populations on what is important to them as planning proceeds. Governments agree to consider those disproportionately affected by the pandemic.

Consistent Reporting

F/P/T governments recognize that timely access to data is essential to an effective pandemic vaccine response. Public health systems need timely and accurate information to monitor program implementation and inform decision-making. F/P/T governments are committed to report to their own populations on core elements of vaccine distribution, administration, safety and effectiveness, in a manner that could benefit all jurisdictions. Accurate and timely data will enable effective delivery and use of these novel vaccines across all jurisdictions. The Government of Canada can provide supporting resources to implement consistent reporting, where requested by provinces and territories.

Key Elements of Canada's Immunization Response

Canada's COVID-19 pandemic immunization response will include a number of key elements, which represent distinct, complementary and, in some instances, interdependent areas of activity. Canada is making rapid progress within each of these elements, as we work towards our shared goal of ensuring full operational readiness to begin administering safe and effective COVID-19 vaccines across Canada as soon as possible.

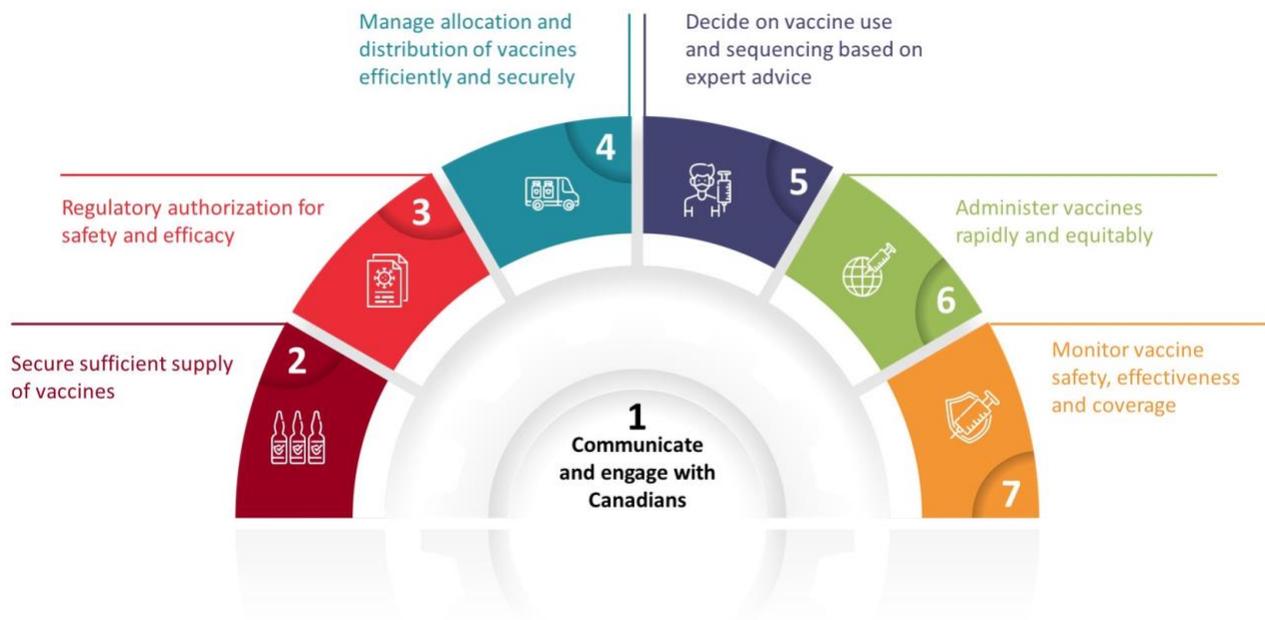


Figure: Canada's Immunization Plan is comprised of Seven Key Elements

1: Communicate and engage with Canadians

In order for immunization to protect individuals and potentially have an impact on stopping the spread of COVID-19, enough Canadians need to choose to take the vaccine. Individual Canadians must be confident in the safety and efficacy of the vaccines and understand government decisions on priority populations and sequencing. Canadians need to feel empowered to make informed choices about immunization. To support this, F/P/T governments will provide ongoing access to comprehensive, accurate and clear information about the available vaccines and immunization plans (for example via the [Canada.ca](https://www.canada.ca) website) and in partnership with First Nations, Inuit and Métis leaders, health professionals, and other stakeholders or sectors.



Canadians will be **informed and engaged**...



...with **clear, consistent, and relevant** information...



...so they can make **informed choices** about COVID-19 vaccination

Figure: How Canadians will be engaged and informed

2: Secure sufficient supply of vaccines

Through advance purchasing agreements with seven companies developing COVID-19 vaccines, Canada has secured enough doses to provide access to vaccines to all Canadians. Canada secured these doses based on the advice of the COVID-19 Vaccine Task Force, a multidisciplinary group of experts and industry leaders in the field of vaccines. Vaccines will be rolled out in phases as they arrive from manufacturers. The earliest vaccines are expected to arrive between late December 2020 and March 2021 (an estimated 6M doses), and will be delivered to high-risk populations first, with more vaccines arriving over the course of 2021.

Pending regulatory authorization, Canada is well-positioned to immunize 100% of the population in 2021. The vaccine supply strategy also includes options for purchasing additional vaccines which ensures more than the sufficient amount of doses for everyone in Canada.

Canada has secured vaccine access from 7 leading candidates	6 of 7 candidates require 2 doses, at different intervals	Health Canada has received submissions for authorization from 4 vaccine candidates
	2 doses:  → 21 days apart → 	
	2 doses:  → 28 days apart → 	
	1 dose: 	
	2 doses:  → 21 days apart → 	
	2 doses:  → 21 days apart → 	
	2 doses:  → 21 days apart → 	
	2 doses:  → 28 days apart → 	

Figure: Government of Canada has secured access for seven leading vaccine candidates

3. Regulatory authorization for safety and efficacy

While timeliness of vaccine delivery is essential, immunizations must also be safe, efficacious and meet the highest quality standards. Health Canada has a robust, proven, world-class regulatory system, employing tested safety protocols, to determine which vaccines are safe and efficacious in preventing the diseases they target. Under usual circumstances, it can take about ten months to review vaccine submissions. However, recognizing the urgent need for COVID-19 treatments, the federal Minister of Health signed an [Interim Order Respecting the Importation, Sale and Advertising of Drugs for Use in Relation to COVID-19](#). The Interim Order introduces more flexibility to speed up the review and authorization of drugs and vaccines for COVID-19 without compromising safety and quality. It allows Health Canada to accept rolling submissions for drugs and vaccines that have promising evidence and clinical trials underway. This means that Health Canada will receive and review the information as it becomes available from the manufacturer. While this new process will shorten overall review times,

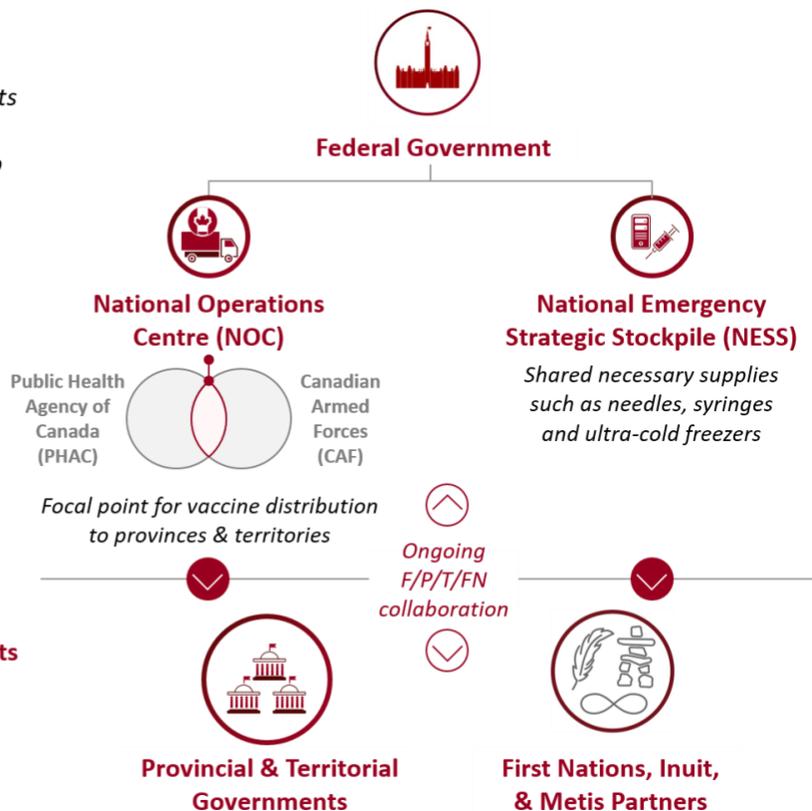
Health Canada still reviews all the data that is necessary to decide if a vaccine is safe and effective and of high manufacturing quality. Sharing information with Canadians will be a priority, and Health Canada will provide details about the review and ongoing monitoring of vaccine safety and effectiveness after authorization.

4: Manage the allocation and distribution of vaccines efficiently and securely

Successfully importing, shipping and distributing novel COVID-19 vaccines requires several unique considerations. To ensure safe handling requirements are met with respect to temperature control and security, the federal government is ramping up capacity to meet the logistical challenges of getting vaccines to Canada and distributing them across the country. An Immunization National Operations Centre (NOC) for COVID-19 has been established as the federal logistical coordination entity and focal point for managing vaccine delivery and collaboration with provinces and territories for distribution. Supported by a multidisciplinary team of experts, including the Canadian Armed Forces, the Centre has been designed to support partners involved in Canada’s immunization rollout and lead the tracking of vaccine delivery and distribution. The NOC is working closely with provinces and territories to have 14 sites across Canada to be ready to receive COVID-19 vaccines by December 14, 2020. FedEx Express Canada and Innomar Strategies will support the NOC with logistics and vaccine distribution.

Federal Government

Working closely with PT governments and First Nations, Inuit, and Metis partners to ensure they are ready to administer vaccines



Provincial & Territorial Governments

Responsible for deciding how to deploy COVID-19 vaccines within their jurisdiction (including vaccine prioritization)

Figure: Working closely with provincial and territorial governments and First Nations, Inuit and Métis partners

5: Decide on vaccine use and sequencing based on expert advice

A limited vaccine supply will be available at the beginning of the immunization response. Provinces and territories are drawing on the independent expertise of public health, scientific and medical experts (including the National Advisory Committee on Immunization) to work out the specific order and priority of who gets vaccinated in their jurisdiction. F/P/T governments will work together to develop a clear and transparent process for the allocation of vaccines across jurisdictions. Vaccine sequencing will consider high-risk populations first, before expanding vaccination access to the entire population as vaccine supply increases. Immunization will begin with the arrival of limited doses, prioritized to high-risk populations, such as the elderly, residents and staff of congregate living arrangements such as long term care facilities, front-line health care workers, and indigenous people in remote and isolated communities (see recommendations of the National Advisory Committee on Immunization December 4, 2020 advice to the Public Health Agency on Canada, <https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/guidance-prioritization-initial-doses-covid-19-vaccines.html>). F/P/T governments will work with First Nations, Inuit and Métis leaders on vaccination distribution and communication.

6: Administer vaccines rapidly and equitably

Provinces and territories are responsible for, and have processes in place to, prepare their health systems and health care providers to allocate, deliver, store, distribute, and administer vaccines within their jurisdictions. F/P/T governments have been working closely with First Nations, Inuit and Métis leadership to support readiness to receive and administer the vaccines, including procuring necessary supplies and equipment. Regional vaccine oversight bodies coordinating the administration activity, progress, challenges and solutions must be inclusive of First Nations, Inuit and Métis representatives for both rural and urban populations.

7: Monitor vaccine safety, effectiveness and coverage

Strong immunization surveillance systems are essential to monitor the safety and effectiveness of COVID-19 vaccines, make adjustments as necessary, and to achieve a level of vaccine coverage that will slow disease transmission and ultimately decrease rates of illness, hospitalizations and deaths. Existing vaccine surveillance structures will enable vaccine monitoring, assess vaccine effectiveness, and understand and address adverse events. Adverse events are to be expected, and will not necessarily change the risk/benefit profile of the vaccine. If any new safety issues are confirmed, Health Canada and provincial/territorial governments will take appropriate action, which could include communicating the new risk to Canadians and healthcare providers or changing the recommended use of the product.

Data comes from the frontlines, vaccine suppliers, and regulators in Canada and abroad, which enables the identification of issues, assessment of any events, and timely and appropriate action. Data on COVID-19 vaccine safety, coverage, effectiveness and use will be invaluable for informed decision-making by governments and First Nations, Inuit and Métis communities.

Measuring success of a COVID-19 vaccination approach:

- ✓ All Canadians have access to a safe and effective COVID-19 vaccine
- ✓ Canadians are immunized against COVID-19
- ✓ Morbidity and mortality caused by COVID-19 are significantly reduced
- ✓ Canada's immunization system is strengthened to better address future public health crises

Key Players

F/P/T governments share responsibility for ensuring that all Canadians have access to safe and effective COVID-19 vaccines. This is based on the established principle that universal access to vaccination safeguards lives and is a public good. F/P/T governments continue to work collaboratively with First Nations, Inuit and Métis partners and other key players to ensure that Canada's vaccination response is comprehensive, inclusive and culturally safe.

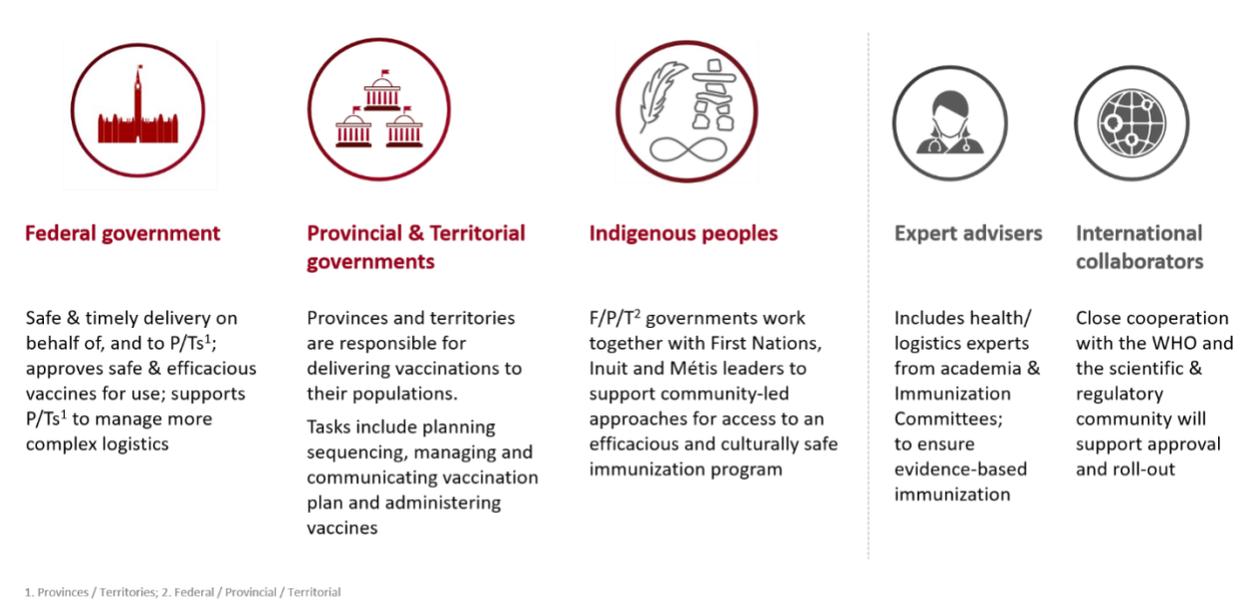


Figure: Key players in Canada's immunization plan

Federal Government:

Multiple government departments are involved in approving a safe and efficacious COVID-19 vaccine, and ensuring safe and timely delivery of the vaccine to provinces and territories for distribution to their communities. Departments engaged on this task include, but are not limited to, the Public Health Agency of Canada, Health Canada, Indigenous Services Canada, Public Services and Procurement Canada, Global Affairs Canada, and the Department of National Defense and the Canadian Armed Forces. The Immunization National Operation Centre (NOC) for COVID-19 will act as the federal logistical

authority and coordinating centre for managing, in collaboration with provinces and territories, vaccine distribution across Canada.

While delivery of health care is under provincial and territorial jurisdiction, the Government of Canada is responsible for ensuring health care access to members of the Canadian Armed Forces, and populations incarcerated in federal correctional facilities. The Federal government, along with provinces and territories, is also responsible for ensuring health care and vaccine access to First Nations, Inuit and Métis populations. The Public Health Agency of Canada is working collaboratively with Indigenous Services Canada, the Department of National Defence and the Correctional Service of Canada to ensure access to the vaccine for populations served by these departments.

While F/P/T governments are responsible for administering vaccines in their jurisdictions, the NOC is working in collaboration with provinces and territories to manage the logistics associated with some of the more complex COVID-19 vaccines and to support data sharing regarding COVID-19 vaccine management, especially in rural, remote or isolated locations, through enhanced Information Technology platforms.

Provincial and Territorial Governments:

Provincial and territorial governments have the jurisdictional responsibility for delivering vaccinations to the populations they serve. Working closely with PHAC and the NOC, provinces and territories will:

- Receive and document vaccine shipments;
- Securely store vaccines at required conditions and temperatures;
- Plan and establish clinics for provision and delivery of immunizations, including providing the required training to healthcare workers and support staff, including culturally sensitive, trauma-informed care approaches
- Make decisions about how to sequence vaccines doses within the populations they serve;
- Administer vaccines to individuals, monitor and report on any adverse effects;
- Manage and track vaccine shipments within their jurisdiction's immunization delivery system, including tracking doses provided to individuals; and,
- Work through the NOC to order vaccines when needed. Given that most of the vaccine candidates require two doses, this includes ensuring that the second dose is available for administration in the appropriate time frame after receipt of the first dose.

Provinces and territories will provide clear information on COVID-19 and related public health measures and immunization efforts tailored to their populations. These communication efforts will also be supported more broadly by the federal government and will be essential to implementing a successful COVID-19 Immunization Plan. Building vaccine confidence broadly and among groups anticipated to receive early vaccination, as well as dispelling vaccine misinformation, are critical to ensure vaccine uptake.

Indigenous Peoples

Engagement with First Nations, Inuit and Métis leaders and partners is vital to ensuring timely and efficacious delivery of vaccine while encouraging high vaccine uptake in Indigenous communities. It is important to acknowledge the historical legacy of racism and trauma and support community-led approaches so that First Nations, Inuit and Métis have access to an efficacious and culturally safe immunization program. F/P/T governments are working together with respective First Nations, Inuit and Métis leaders to meet this challenge using a culturally safe approach to inform actions and decisions. It will be important to have regional plans developed by working groups inclusive of Indigenous (First Nations, Inuit and/or Métis where appropriate), federal, provincial, territorial and local bodies.

It will be important to recognize that some First Nations, Inuit and Métis peoples live in communities that are disproportionately impacted by infectious diseases. Reduced access to stable housing, income, clean water and/or health and social services place many Indigenous peoples at higher risk of COVID-19. Additionally, because of the historical experiences of previous pandemics, tailored information and informed consent during vaccination administration is critical.

The federal government is responsible for ensuring access to health care services for the Indigenous population, and Indigenous Services Canada (ISC) is the department responsible for this service. Provinces and territories are responsible for immunization programs for some Indigenous peoples in their jurisdictions. ISC and provinces and territories are working with Indigenous leaders on vaccination distribution and communication. ISC, along with PHAC, will continue this engagement through forthcoming workshops and discussions with Indigenous groups and organizations, especially representatives from First Nations, Inuit and Métis partners. Provinces and territories will also continue to engage with Indigenous groups in their respective jurisdictions.

Expert Advisors

A range of experts from the Canadian Immunization Committee, provincial/territorial immunization committees, researchers, and academia are working together to ensure an evidence-based COVID-19 immunization response for Canada.

The National Advisory Committee on Immunization (NACI) draws on the best available research, science, and independent expertise to provide vaccination recommendations. As outlined above, a critical role for NACI is making recommendations on how key populations should be sequenced for early COVID-19 immunization. NACI will refine its guidance on high-priority groups and as more clinical data becomes available, as well as providing specific advice on the use of each vaccine.

Federal, provincial, and territorial public health governance tables will engage Indigenous leaders to ensure inclusion of First Nations, Inuit and Métis expertise and input.

International Collaborators

Close cooperation between the World Health Organization, and the international scientific and regulatory community will support the approval and roll-out of a COVID-19 vaccine in Canada. Health Canada will continue to work closely with its international counterparts to monitor and ensure the safety and efficacy of a COVID-19 vaccine. While all decisions about the approval and use of COVID-19 vaccines will be determined by Health Canada based on Canada's high standards for vaccine safety and efficacy, information sharing between international counterparts will help expedite approvals in Canada.

The Overall Rollout Approach

The federal government has completed Advanced Purchasing Agreements for vaccines sufficient to immunize all Canadians, operationalized the National Operations Centre (NOC), secured FedEx Express Canada and Innomar Strategies as the national logistics service provider, and purchased and commenced to distribute vaccine refrigeration and clinical supplies. Provincial and territorial governments are in turn organizing and launching their immunization teams and plans to enable delivery in their jurisdictions, and are working with PHAC on their planned points of delivery for the first available vaccines and logistics plans.

Planning work with the provinces and territories has included a review of the capacity and capability of the existing vaccine supply chain, including the network and product flow, distribution nodes, warehouse capabilities, equipment, cold chain, current service providers, information technology platforms and data interchange. Any capacity gaps will be addressed to ensure the safe and timely delivery of vaccines. Also, in December, model points of administration and clinics for vaccine use were established in locations across Canada allowing jurisdictions to walk through the receipt, preparation, and use of the first vaccines for training and planning purposes.

Prioritizing the first available vaccines

Although Canada has secured a sufficient vaccine supply, doses for the whole population will not arrive at the same time. A phased approach is being prepared for vaccine delivery that prioritizes Canadians who need early access to the vaccine. High-risk groups will receive the vaccine first starting in late 2020. Vaccination will be expanded to the entire population throughout 2021 as vaccine supply increases.

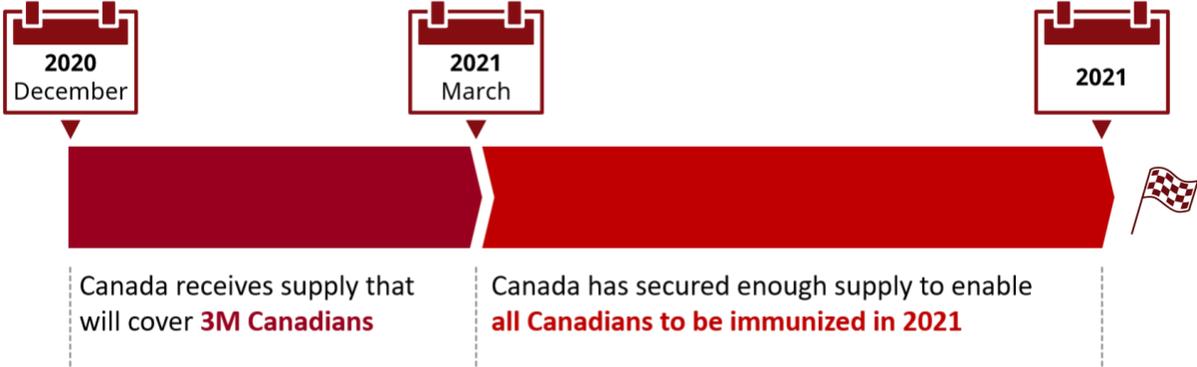


Figure: When Canadians Will have Access to a safe and effective vaccine

NACI has provided independent expert advice regarding priority populations for the early vaccinations and based on this advice, two main priority groups have been identified for the first vaccinations:

- *Health vulnerable*: Those at high risk of severe illness and death from COVID-19
- *Exposure vulnerable*: Those most likely to be exposed to the virus

Federal, provincial and territorial governments will take NACI’s recommendations into consideration as they work to finalize allocation and priority groups within their respective jurisdictions. Ultimately, it is important to maximize equitable, individual health outcomes and to limit the transmission of the virus as quickly as possible.

Delivery and Distribution of COVID-19 vaccines

Normally vaccines are distributed to central depots within the provinces and territories for onward distribution by that jurisdiction. However, the first COVID-19 vaccines to arrive in Canada will have unique requirements for storage and transport at ultra-frozen (-80°C) or frozen (-20°C) temperatures. As the usual vaccine distribution systems in Canada are generally not equipped to manage vaccines held at these temperatures, the federal government and/or the manufacturer will support, when required, the transportation of these vaccines, including delivery to the destination where they will be administered within provinces and territories, including Indigenous communities. Vaccines that will be available later in the immunization program will have more standard storage and handling requirements and will be distributed using existing distribution mechanisms across Canada.



Figure: Delivery and distribution of COVID-19 vaccines

COVID-19 Vaccine Provider Preparation

In conjunction with the COVID-19 immunization plan, guidance documents have been developed for governments and public health authorities to support implementation rollout and administration of vaccines. This guidance can be used in conjunction with existing immunization guidance used by First Nations, Inuit and Métis communities, and regional and local health authorities.

Health care provider training webinars are being developed by the Public Health Agency of Canada in collaboration with the Association of Medical Microbiology and Infectious Disease Canada (AMMI). Topics include:

- ✓ The role of Health Canada in authorizing vaccines and NACI in providing advice on the use of available vaccines for Canadians;
- ✓ The different technologies used to develop the vaccines that may be available in Canada (e.g., viral vector, mRNA, protein subunit);
- ✓ How to administer COVID-19 vaccines, including during mass immunization clinics, with emphasis placed on attention to infection prevention and control and cold chain requirements; and,
- ✓ The administration of COVID-19 vaccines in a culturally safe manner.

Also, the Government of Canada continues to support a range of vaccine capacity building initiatives for healthcare providers. This includes support for the Canadian Paediatric Society's Education Program for Immunization Competencies, online tools and resources curated by CANVax, and a wide range of tailored interventions funded under the Immunization Partnership Fund.

Preparing for Challenges

Canada's COVID-19 immunization plan is the largest and most complex ever developed in Canada. A COVID-19 vaccine presents novel challenges, including requirements for ultra-cold or frozen storage, and delivering rapid vaccination quickly on a large scale. While Canada's COVID-19 immunization plan has been developed to support the delivery of sufficient numbers of safe and efficacious vaccines to all Canadians, governments across Canada are also committed to anticipating potential challenges and mitigating potential disruptions. Core considerations include:



Safety and efficacy



Manufacturing and availability



Transport and storage



Managing misinformation



Building trust and confidence

Figure: Preparing for challenges

- **Safety and efficacy:** Every vaccine must successfully complete clinical trials and demonstrate to the regulator that they are safe, of high and consistent quality, and efficacious. The federal government, which is responsible for monitoring and tracking adverse effects, will communicate transparently as adverse effects are identified or the distribution plan needs any modifications.
- **Manufacturing and availability:** PHAC and Health Canada have established regular communication with manufacturers to get updates on the manufacturing process and any

potential shortfalls. The NOC will communicate and potential issues to provinces and territories, enabling them to quickly communicate with their populations.

- **Transport and storage:** Because of the unique storage and handling requirements of new COVID-19 vaccines, federal, provincial, territorial and local governments have made a number of investments to support the storage and handling needs for these products, including sourcing -80°C freezers and dry ice, and preparing transportation options for delivery and storage to remote communities. Governments are also procuring materials and supplies needed to support vaccination programs such as syringes, needles and alcohol swabs. Consideration is also being made into transporting first and second doses together into remote and isolated locations.
- **Managing misinformation:** Alongside the challenge of responding to the pandemic is the impact of misinformation about COVID-19 and vaccines, which can impede the success of vaccination efforts. The Government of Canada is implementing strategies to provide Canadians access to clear, transparent and reliable information about COVID-19 vaccines.
- **Building public trust and confidence in vaccines:** It is important for the public to have access to information about vaccine efficacy and safety including details about how the vaccines will be administered, such as the need for two doses in some cases. Governments are working with experts in vaccine hesitancy and behavioural science to develop public education campaigns that take the needs and input of diverse segments of the population, including First Nations, Inuit and Métis communities into account while making vaccination decisions.

Measuring Effectiveness

Vaccine Monitoring and Reporting

Effective surveillance of real-world vaccine use is necessary to ensure ongoing safety and effectiveness as well as sufficient coverage within the population. Canada has a vaccine surveillance system in place, comprised of three main streams: safety, coverage and effectiveness. Canada's vaccine surveillance involves healthcare professionals, vaccine manufacturers, the provinces and territories, the Public Health Agency of Canada, and Health Canada, to alert public health authorities of changing trends or unusual adverse events that were not previously reported.

As COVID-19 vaccination is novel with unique challenges, measures are planned for Canada's vaccine surveillance program to improve monitoring and reporting which include:

- Expanded vaccine monitoring that includes collaboration and information sharing with Canadian partners and international regulators;
- An interactive, public-facing dashboard on government websites for improved transparency and timeliness of reporting; and
- Data on populations more severely impacted by COVID-19 including racialized populations, health care workers and long-term care residents.

Ongoing assessments and communication of adverse effects

Adverse reactions could be as mild as soreness or a fever, or more serious in nature. If safety issues are confirmed, the Federal Government and other levels of government will take appropriate action. Together, these activities will enable Canada to monitor vaccine coverage, assess vaccine effectiveness, and respond quickly to any potential safety signals associated with a specific vaccine. To ensure system readiness, an approach has been developed to:

- Work with Federal/Provincial/Territorial governments and First Nations, Inuit and Métis partners to enhance immunization registry and safety reporting systems;
- Test systems in advance of vaccine deployment, in order to identify and resolve any issues;
- Make effective use of existing hospital and community-based vaccine surveillance networks to ensure readiness for the COVID-19 vaccine roll-out.

Conclusion

A comprehensive COVID-19 immunization response in Canada is under way. Vaccinations will be available in 2021 at no cost to everyone in Canada who wants one. Governments across Canada are committed to working together and to keeping Canadians informed throughout Canada's COVID-19 immunization response.

Addressing the threat of COVID-19 is a shared responsibility. Ultimately, we each have an essential part to play in saving lives and protecting Canadian livelihoods. Governments recognize and understand the toll that the COVID-19 response has taken on our communities and are proud of the continued strength of commitment from Canadians to protect each other. The partnerships we are forging today to support our COVID-19 pandemic immunization response will also enable Canada's public health system and Canadians to emerge from this pandemic stronger and more resilient.

Timeline:

- ✓ December: launch of the National Operations Centre, national logistics service provider, and establishment of model points of vaccine administration across Canada for training purposes.
- ✓ December: commencement of immunization of priority populations.
- ✓ April: commencement of general immunization for all Canadians.
- ✓ End of 2021: completion of COVID-19 immunization campaign.

