



ONTARIO'S SHOT AT HEALTH AND PROSPERITY

Life Sciences Ontario's Vision for a Modern
Provincial Immunization System





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Foreward

Ontario has an opportunity to lead in how it values prevention. Vaccines are one of the most effective tools available to protect people, reduce pressure on the healthcare system, and support a healthier, more productive province. Yet, too often, immunization is treated as a program cost rather than as long-term prevention infrastructure.

At a time of increasing pressure on healthcare capacity, workforce productivity and participation, public finances, and global economic uncertainty, Ontario cannot afford to undervalue prevention. Improving vaccine access, strengthening immunization data, and creating clearer accountability are practical steps that would help the province prevent many illnesses before they reach hospitals, workplaces, families, and communities.

Life Sciences Ontario believes a modern immunization system should be easier for Ontarians to access, simpler for patients and healthcare

providers to navigate, capable of maintaining comprehensive lifelong immunization records, and better equipped to measure the full value of vaccination while identifying the gaps that limit this value. This vision paper offers a practical roadmap for moving from fragmentation to a more coordinated system built around access, accountability, and prevention.

By modernizing its approach to immunization now, Ontario can better protect its population, strengthen health system sustainability, and reinforce the role of life sciences innovation in building a more resilient province.



Dr. Jason Field
President and CEO, Life Sciences Ontario

Executive Summary

Vaccines are among the most effective and cost-effective health interventions available. They prevent illness, reduce pressure on healthcare systems, and support workforce participation and economic productivity. Yet Ontario's immunization system has long been difficult to navigate and many Ontarians face barriers accessing recommended immunizations. Against this backdrop, vaccine-preventable diseases such as measles have re-emerged¹ and vaccination rates for many vaccines remain below the public health targets required for population protection.

These challenges reflect deeper structural issues. Access to vaccination remains uneven across the province, particularly for individuals without a primary care provider, northern and rural residents, newcomers to Ontario, and uninsured or underinsured populations.² At the same time, patients and providers must navigate a complex system of eligibility requirements, funding rules, prescribing requirements, and legislation and policy that can create unnecessary barriers to care. Ontario also lacks the comprehensive data infrastructure needed to accurately measure population vaccine coverage, identify gaps in protection, and support effective public health planning.³

The need for modernization is not only a public health priority but also an economic one. Recent analysis commissioned by the Adult Vaccine Alliance estimated that six adult vaccine programs – herpes zoster (commonly known as shingles); respiratory syncytial virus (RSV); pneumococcal disease; human papillomavirus (HPV); COVID-19; and influenza – generate approximately \$2.5 billion in annual value in Canada, including \$514 million in healthcare system savings and \$1.9 billion in broader economic benefits. The same analysis found that every dollar invested in adult vaccination generates approximately \$3.41 in value through avoided healthcare costs and productivity gains.⁴

Ontario has an opportunity to build a more accessible, accountable, and prevention-focused immunization system. This paper proposes four priority areas for action:

- **Simplify vaccine access.** Ontario should reduce unnecessary barriers to vaccination by modernizing outdated regulatory requirements, better leveraging community pharmacies, and ensuring patients can access all recommended vaccines through convenient and trusted points of care.
- **Strengthen governance and accountability.** Clear leadership, defined responsibilities, and transparent reporting are needed to improve system performance and ensure accountability for immunization outcomes.



- **Accelerate implementation of a modern provincial immunization registry.** Ontario should continue to build on a comprehensive lifelong immunization registry that captures vaccinations across all care settings (including doses administered outside of the province) and provides patients, providers, and public health officials with the information needed to support better care and decision-making.
- **Treat immunization as prevention infrastructure.** Vaccination should be recognized as an investment in population health, healthcare system sustainability, and economic resilience, with its broader value reflected in planning, policy, and decision-making.

Taken together, these reforms would help Ontario move from a fragmented approach to a more coordinated immunization system that is easier to access, easier to navigate, and better equipped to protect communities from vaccine-preventable disease. By strengthening access, data, and accountability, Ontario can better realize the full health and economic value that vaccination delivers.



INTRODUCTION

Vaccines are among the most protective and cost-effective public health interventions available, preventing illness, reducing healthcare utilization, and improving population health outcomes. Yet their value extends beyond health benefits alone. Vaccination helps reduce pressure on healthcare systems, supports workforce participation, and contributes to a more productive and resilient economy.⁵

In Ontario, however, the immunization system is becoming increasingly difficult to navigate and many Ontarians continue to face barriers accessing recommended vaccines.³ As a result, vaccine-preventable diseases such as measles have re-emerged¹ and vaccination coverage rates for many vaccines remain below the public health targets required to protect the population. At the same time, healthcare providers must navigate a complex framework of eligibility requirements, funding mechanisms, prescribing rules, and data gaps, that can create unnecessary friction within the system.

These challenges reflect deeper structural issues. Immunization services are delivered across physician offices, pharmacies, public health units, hospitals, schools, workplaces, and community clinics, yet Ontario lacks the infrastructure, governance, and accountability mechanisms needed to support a coordinated approach. Existing immunization records remain fragmented across care settings,

limiting the province’s ability to identify coverage gaps, manage vaccine supply, monitor outcomes, and respond effectively to emerging public health threats.

The need for modernization is not only a health system priority but also an economic one. Recent analysis commissioned by the Adult Vaccine Alliance estimated that six adult vaccine programs – herpes zoster (shingles), RSV, pneumococcal disease, HPV, COVID-19, and influenza – generate approximately \$2.5 billion in annual value in Canada, including \$514 million in healthcare system savings and \$1.9 billion in economic benefits through increased productivity and healthcare system capacity. The study further found that every dollar invested in adult vaccination generates an estimated return of \$3.41 through avoided healthcare costs and productivity gains.⁴

Ontario has an opportunity to build a more accessible, accountable, and data-driven immunization system. This vision paper outlines a practical roadmap to simplify vaccine access, strengthen governance and accountability, modernize immunization data infrastructure, and position immunization as a critical investment in the province’s health, healthcare system, and economic future.

THE CURRENT LANDSCAPE

Access Barriers

Ontario’s immunization system is intended to protect individuals and communities from vaccine-preventable disease, yet many Ontarians continue to face barriers accessing recommended vaccines. While vaccines are available through a range of delivery settings, including physician offices, pharmacies, public health units, hospitals, schools, workplaces, and community clinics, access can vary significantly depending on where a person lives, their connection to the healthcare system, and the vaccines they require.

Individuals without a regular primary care provider often face challenges identifying which vaccines they need and where to receive recommended vaccines, while northern and rural residents may encounter geographic barriers that limit access to healthcare services more broadly. Newcomers to Ontario and uninsured or underinsured individuals can face additional obstacles navigating vaccine eligibility, funding criteria, and available points of care. These challenges can contribute to delays in vaccination, lower uptake, and missed opportunities for prevention.²

Patients seeking vaccination may also face practical barriers when the pathway to care is not straightforward. In some cases, obtaining a vaccine may require multiple appointments across different care settings, creating unnecessary inconvenience and discouraging timely vaccination. Families attempting to vaccinate children of different ages may also face inconsistent access depending on where services are offered and which providers are authorized to administer specific vaccines.

Community pharmacies have become increasingly important access points for preventive healthcare services,⁶ yet Ontario’s current framework limits their ability to contribute fully to immunization efforts. Under the current system, pharmacy professionals face a patchwork of rules in which injection authority, eligible vaccine lists, and minimum patient age thresholds vary across products, creating unnecessary confusion for patients and providers. In addition, pharmacists lack the ability to prescribe vaccines that require a prescription, meaning patients may still need to seek care from another provider before receiving a recommended vaccine. Other Canadian jurisdictions have adopted broader pharmacy-based immunization models. Alberta, for example, has expanded pharmacist scope of practice to include prescribing authorization and broad vaccine administration authorities, demonstrating how community-based delivery can improve convenience, streamline patient access, and strengthen uptake through trusted local providers.⁷

The path to vaccination must also address trust and confidence. Even when vaccines are available, growing hesitancy and misinformation can discourage people from receiving recommended immunizations. Ontarians need clear, credible, and accessible information from trusted sources to address concerns, support informed decision-making, and help ensure that recommended vaccines are actually used.

As vaccine-preventable diseases continue to pose public health risks, ensuring convenient, equitable, and trusted access to both immunization services and information will be essential.



System Complexity

Beyond access challenges, Ontario’s immunization system has become increasingly difficult for both patients and healthcare providers to navigate. The system operates across multiple care settings and is governed by a complex web of eligibility criteria, funding rules, prescribing requirements, and legislation and policy that can create confusion and inefficiency.

Patients are often required to determine whether a vaccine is publicly funded, whether they are clinically eligible to receive it, whether a prescription is required, and which provider can administer it before receiving care. While each requirement may have been developed for a legitimate policy or clinical reason, the cumulative effect is a system that frequently creates friction.

Healthcare providers face many of the same challenges. Determining vaccine eligibility, prescribing requirements, funding status, and provider responsibilities and scope often requires consultation of multiple guidance documents and information sources.

Moreover, publicly available vaccine information can be difficult to navigate and may not always reflect recent program changes. For example, Ontario’s publicly funded immunization schedule has not consistently reflected recent changes to the pneumococcal vaccination program and the introduction of RSV vaccination programs. Similarly, determining which vaccines require prescriptions in order for the patient to navigate private coverage may require navigating multiple professional resources rather than consulting a single, user-friendly source.

This complexity can create administrative burden for providers while increasing the likelihood that eligible individuals miss recommended vaccinations. It can also contribute to public confusion, particularly as immunization programs continue to evolve and expand.

The consequences extend beyond individual patient experiences. Delayed or missed vaccinations can result in preventable illness, increased healthcare utilization, caregiving pressures, missed work and school, and avoidable strain on healthcare resources.

Data and Information Gaps

A modern immunization system depends on accurate, accessible, interoperable, and comprehensive information. Yet Ontario continues to rely on fragmented data systems that provide only a partial picture of vaccination activity across the province.⁸ Good immunization data infrastructure should be digital-first, built to support seamless information sharing, and capable of enabling timely action to improve vaccine uptake.

Vaccines are administered in a variety of settings, including physician offices, pharmacies, public health units, hospitals, schools, workplaces, travel clinics, and community-based clinics. Because immunization information is not automatically or consistently reported to public health across all vaccination settings, records are often incomplete and difficult for patients, providers, and public health officials to access. Importantly, Ontario does not currently maintain a comprehensive provincial immunization registry capable of capturing vaccines administered across all care settings and throughout an individual’s lifetime.⁹

These data limitations also affect Ontario’s ability to manage publicly funded vaccine inventory effectively. Vaccine ordering, distribution, cold chain management, and wastage monitoring all depend on reliable information about vaccine use. In the absence of comprehensive administration data, public health officials may need to rely on vaccine distribution data as a proxy for actual uptake. However, distribution data cannot show whether doses were administered, wasted, expired, or remained unused, making it an imperfect and sometimes unreliable measure of coverage.

These gaps create challenges for individuals, healthcare providers, and the system as a whole. Patients may be unsure whether they are protected against a specific disease, while healthcare providers often lack the complete immunization history needed to guide clinical advice and recommend appropriate vaccines. At the same time, incomplete and disconnected data limits Ontario’s ability to identify coverage gaps, target outreach, monitor equity, manage vaccine supply, evaluate program performance, and respond quickly and efficiently during outbreaks or public health emergencies.

Data gaps are further compounded by governance and accountability challenges. Responsibility for Ontario’s immunization system is distributed across multiple organizations, yet no single entity is clearly accountable for overall system performance. While collaboration among healthcare partners is essential, this fragmented approach can make it difficult to establish common standards, monitor progress, and drive continuous improvement.

In addition to the public health and system benefits, with government focused on fiscal responsibility and the prudent management of public finances, modernized, interoperable immunization data infrastructure would support improved stewardship of public health dollars, allowing more strategic allocation, better procurement and inventory planning, more accurate budget forecasting, and reduced wastage.

As Ontario continues to pursue digital health modernization, particularly in primary care, strengthening immunization data infrastructure should be viewed as a strategic priority. A modern system should be digital-first and interoperable by design, enabling immunization information to flow securely across care settings, public health, and patient-facing tools. Better information would support more coordinated care, stronger public health planning, improved vaccine inventory management, and a more resilient immunization system.



The Untapped Value of Prevention

Vaccination is often viewed primarily through the lens of program costs and estimated uptake rates. While those measures are important, they do not capture the broader value that immunization generates for patients, the healthcare system, and the economy. As Ontario considers how to measure, evaluate and communicate the full value of immunization, evidence demonstrating protection against serious downstream complications should be included to inform how immunization programs are evaluated and funded.

Six adult vaccine programs generate approximately \$2.5 billion in annual value in Canada⁴

Approximately \$514 million in healthcare system savings⁴

\$1.9 billion in broader economic value through productivity gains and increased healthcare system capacity⁴

These benefits are generated through avoided hospitalizations, reduced outpatient visits, lower long-term healthcare utilization, decreased caregiver burden, and improved workforce productivity. Vaccination is estimated to prevent thousands of hospitalizations and millions of lost work hours each year while creating capacity elsewhere within the healthcare system.

Despite these benefits, immunization programs are frequently assessed as expenditures rather than investments. This approach fails to account for the significant downstream savings generated when illness is prevented before it requires medical intervention or incurs potentially long-term consequences. At a time when Ontario is seeking to improve healthcare system sustainability, reduce pressure on providers, and make better use of limited public resources, prevention should occupy a more central place in decision-making.

The Adult Vaccine Alliance analysis estimated that every dollar invested in the six adult vaccinations studied generates approximately \$3.41 in value through avoided healthcare costs and productivity gains.⁴ Importantly, the value of vaccination could grow substantially through improved uptake. Higher vaccination rates would not only prevent additional illness, but also generate further healthcare savings, increase workforce participation, and strengthen economic productivity.

Ontario’s current approach does not consistently measure, communicate, or leverage these broader benefits. Recognizing and capturing these benefits will be critical to building a modern immunization system that reflects the full value of prevention.

RECOMMENDATIONS FOR A MODERN IMMUNIZATION SYSTEM

Ontario's immunization system requires more than a single policy change or technology investment. Strengthening vaccine uptake, improving health outcomes, and maximizing the value of prevention will require coordinated action to address barriers to access, reduce complexity, modernize data infrastructure, and strengthen accountability.

The following recommendations provide a practical roadmap to support a more accessible, integrated, and sustainable immunization system for Ontario. They are intended to improve patient experience and access, enhance public health preparedness, strengthen health system performance, and ensure that the province is better positioned to realize the full health and economic benefits of vaccination.



a) Simplify vaccine access

Ontario can improve vaccine uptake by making the path to vaccination simpler and more consistent. Access reforms should reduce unnecessary steps, better leverage trusted community-based providers, and ensure patients can receive all recommended vaccines through convenient points of care. The following recommendations would help simplify vaccine access across Ontario.

- **Expand pharmacist administration authority:** Move from a narrow, antigen-specific approach to a route-of-administration model that authorizes qualified pharmacy professionals to administer vaccines based on their competency to provide injections rather than a prescribed list of vaccine products. Under the current system, patients may be able to receive some vaccines through a pharmacy but not others, creating confusion and uneven access. Alberta's broader approach, which is route-based rather than vaccine-based, demonstrates how expanded pharmacist authority can support convenient community-based vaccination while maintaining appropriate safety standards.¹⁰ It would also prevent access delays when new vaccines are approved for use in Canada by removing the need to amend legislation product by product, as occurred when COVID-19 and RSV vaccines were first introduced.
- **Standardize age thresholds:** Align minimum age thresholds for pharmacy-administered vaccines across products where clinically appropriate to reduce confusion for patients and providers and improve convenience for families. A more consistent approach would eliminate arbitrary distinctions between vaccines and make it easier for Ontarians of different ages to receive recommended vaccines through the same trusted point of care, including co-administration of multiple vaccines at the same visit.
- **Remove unnecessary prescribing barriers:** Modernize vaccine prescribing requirements by authorizing pharmacists to prescribe vaccines without restrictive vaccine-specific lists. Requiring patients to obtain a prescription solely to receive a recommended vaccine can create avoidable delays and additional burden on primary care. Granting pharmacists appropriate prescribing authority would support a more seamless, one-stop vaccination experience, reducing the need for additional visits to obtain a prescription. This approach will also reduce administrative complexity associated with accessing vaccines through reimbursement mechanisms.

- **Expand access to publicly funded vaccines:** Increase the number of publicly funded vaccines available through community pharmacies and pursue more consistent province-wide delivery models. Eligible Ontarians should be able to receive publicly funded vaccines through the most convenient and accessible provider for them, whether that is a physician, public health nurse, or pharmacy professional. Expanding pharmacy access to publicly funded vaccines would help ensure that funding status does not limit where patients can receive care. Ontario should also review gaps between National Advisory Committee on Immunization (NACI) recommendations and provincial funding criteria, such as herpes zoster vaccination, where NACI recommends Shingrix for adults 50 and older while Ontario's publicly funded program is limited to adults aged 65.
- **Modernize public-facing vaccine guidance:** Create clearer, centralized, tailored, and regularly updated guidance so Ontarians can understand which vaccines are recommended for them, whether they are publicly funded, and where they can receive them. Clearer and tailored information would reduce confusion for patients and providers, support timely vaccination decisions, and make the system easier to navigate.

b) Strengthen governance and accountability

Modernization will require clear leadership across the immunization system. Without defined responsibility for performance, reporting, and continuous improvement, Ontario will continue to rely on a fragmented approach where accountability is difficult to establish. The following recommendations would help strengthen governance and accountability across the system.

- **Establish a provincial steward for immunization:** Designate clear provincial responsibility for immunization data, program implementation, reporting, and system oversight. Consideration should be given to assigning stewardship to Ontario's Chief Medical Officer of Health, Ontario Health, Public Health Ontario, or another clearly identified provincial authority to ensure accountability and provide system-wide leadership for immunization modernization.
- **Clarify roles and responsibilities:** Define accountability across government, public health units, healthcare providers, pharmacies, parents/guardians, and other immunization partners to ensure consistent oversight, reduce duplication, and improve system coordination. Shared responsibility is essential, but it should not result in unclear leadership or fragmented decision-making.
- **Improve transparency and public reporting:** Establish regular public reporting mechanisms, including provincial dashboards and performance reporting, to track vaccine coverage, equity

gaps, uptake trends, and system outcomes. Public reporting can strengthen accountability, inform policy decisions, support public confidence, and help identify regions or populations requiring targeted intervention.

- **Enable comprehensive immunization data sharing:** Create legislative and policy frameworks that support secure, mandatory, and real-time sharing of immunization information across all settings where vaccinations occur, including pharmacies, hospitals, schools, workplaces, physician offices, and public health units. The framework should also enable individuals to update their own immunization records, including doses received outside Ontario or paid for privately, with appropriate verification processes to maintain data quality. Improved interoperability is critical to supporting coordinated care, outbreak response, and effective population health planning.



c) Accelerate implementation of a modern provincial immunization registry

A modern registry is foundational to a stronger immunization system. Complete, accessible, and secure records would support better patient care, public health planning, outbreak response, and system accountability. To be effective, a registry should function as part of a broader digital-first immunization data ecosystem, not as a passive repository. The following recommendations would help establish the core features of a modern provincial immunization registry.

- **Enable and accelerate a lifelong provincial immunization registry:** Build on the immunization registry modernization work already underway and accelerate the transition to a fully integrated, province-wide system linked to the Ontario health card number to capture vaccinations across all stages of life. While current efforts represent important progress, the current phased antigen-specific approach combined with voluntary

or inconsistent participation may delay the availability of complete and reliable immunization data. Dedicated funding, clear accountability, and strong political support would help accelerate adoption of a comprehensive lifelong registry capable of supporting patient care, public health decision-making, and system planning. The registry should support two-way information flow: receiving standardized data from all immunizers while making consolidated immunization histories available back to providers through their existing clinical workflows. Similar approaches in jurisdictions such as Australia¹¹ and Denmark¹² demonstrate how comprehensive registries can support stronger public health planning, better patient care, and improved accountability.

- **Mandate reporting by all immunizers:** Require standardized, timely reporting by all healthcare providers and organizations administering vaccines in Ontario. Reporting requirements should include adherence to common terminology and messaging standards so immunization data are captured consistently at the point of care and can be meaningfully exchanged across systems. Comprehensive reporting is essential to ensure that immunization records are complete, accurate, and useful for individual care and population health decision-making.
- **Enable patient and provider access:** Provide patients and healthcare providers with secure access to complete immunization records while maintaining strong privacy protections. Accessible records can improve continuity of care, reduce unnecessary duplication, support clinical decision-making, and empower individuals to better manage their own health.
- **Integrate with digital health infrastructure:** Align the registry and connected systems with the domain-specific standards required for interoperability with electronic medical records and other digital health platforms. This should include two-way integration that minimizes duplicate data entry, reduces administrative burden, improves data quality, and pushes consolidated immunization histories back into provider workflows. Integration should support seamless information sharing while strengthening the overall efficiency of the healthcare system.

This vision is strongly supported by the Ontario Immunization Advisory Committee's recent position statement, which provides the expert technical blueprint for the provincial immunization registry that is foundational to this work.



d) Position Immunization as Prevention Infrastructure

Immunization should be understood as a core prevention asset, not simply a program cost. Measuring and using the broader value of vaccination can help Ontario make better decisions about health system sustainability, productivity, procurement, and long-term resilience. The following recommendations would help position immunization as prevention infrastructure.

- **Measure the full value of vaccination:** Expand the way Ontario evaluates immunization programs by capturing and reporting their broader health and economic benefits, including avoided illness, reduced healthcare utilization, caregiver burden, productivity gains, and improved health system capacity. This would provide decision-makers with a more complete picture of vaccination's value and help ensure program decisions reflect outcomes beyond uptake and direct costs.
- **Use immunization data to drive prevention:** Leverage immunization data to support targeted outreach, population health planning, health equity initiatives, vaccine supply management, and program evaluation. Better data will enable policymakers to identify gaps in protection, direct resources more effectively, and maximize the impact of immunization programs.
- **Recognize vaccination as an investment:** Embed immunization into Ontario's broader health system sustainability and economic planning rather than treating it as a standalone program expense. This means considering vaccination in budget decisions, system capacity planning, workforce productivity, and emergency preparedness so that prevention is valued as core infrastructure for a healthier and more resilient province.



CONCLUSION

Ontario’s immunization system was not designed for the realities of today. Vaccines are delivered through more settings than ever before, new immunization programs continue to emerge, and vaccine-preventable diseases remain a persistent threat. Yet Ontarians continue to navigate a system that can be difficult to access, difficult to understand, and difficult to measure.

This does not need to be the case. The solutions outlined in this paper are practical, achievable, and largely within Ontario’s control. A simpler path to vaccination, stronger stewardship, and a modern immunization registry would make it easier for people to get protected and easier for the province to understand where action is needed most.

At its core, this is a question of whether Ontario views vaccination as a service to be managed or an asset to be strengthened. Immunization protects individuals, supports families, reduces demand on the healthcare system, and helps communities thrive. The benefits reach far beyond the point of care.

Ontario has the opportunity to move from a fragmented approach to a modern immunization system built around prevention. The longer the province waits, the greater the risk that existing gaps widen and preventable outbreaks become harder to contain.

The time to act is now.

REFERENCES

1

Rifai, Ainrisq A., et al. “[Epidemiological Review on the Resurgence of Measles Outbreaks in Canada During the Post-Elimination Era: A Scoping Review](#).” PLOS Global Public Health, vol. 6, 2026, p. e0006295, doi.org.

2

Stratoberdha, Doris, et al. “[Barriers to Adult Vaccination in Canada: A Qualitative Systematic Review](#).” CPJ/RPC: Canadian Pharmacists Journal / Revue des Pharmaciens du Canada, vol. 155, no. 4, 2022, pp. 207–216, doi.org.

3

Alberga, Hannah. “[Ontario’s Top Doctor Says Province Needs to Modernize Vaccine Registry, Calls for National Schedule](#).” CBC News, 4 Sept. 2025.

4

IQVIA Canada. (2024, October 8). [The unmet value of vaccines in Canada: Final report](#) (OPP ID: 3080506). Prepared for the Adult Vaccine Alliance.

5

Government of Canada, [Benefits of immunization: Canadian Immunization Guide](#), July 2025

6

Ontario, Ministry of Health. “[Ontario Expanding Scope of Practice for Pharmacists and Other Health Professionals](#).” Ontario Newsroom, Government of Ontario, 11 May 2026.

7

Canadian Pharmacists Association. [Scope of Practice: Immunization in Pharmacies Across Canada](#), Feb. 2025.

8

Ontario Ministry of Health. [Protecting Tomorrow: The Future of Immunization in Ontario](#). 2024 Annual Report of the Chief Medical Officer of Health of Ontario to the Legislative Assembly of Ontario. Government of Ontario, 2025

9

Office of the Auditor General of Ontario. [Lack of Vaccination Appointment and Immunization Record Systems Negatively Impacted Response to Disease Outbreak](#). News Release, November 30, 2022.

10

Ontario Pharmacists Association. (2026). Prescriptive authority for pharmacists in Ontario to prescribe vaccines: OPA proposal. https://www.opatoday.com/wp-content/uploads/2026/05/2026-03-31-RPh-Prescribing-Authority-for-Vaccines_Final.pdf

11

Australian Government Department of Health, Disability and Ageing. (2025, October 13). Using the Australian Immunisation Register. <https://www.health.gov.au/topics/immunisation/immunisation-information-for-health-professionals/using-the-australian-immunisation-register>

12

Denmark Ministry of Health and Prevention. (2014, May 8). Executive order on access to and registration, etc. of medicinal product and vaccination information (Executive Order No. 460). Retsinformation. <https://www.retsinformation.dk/eli/lt/2014/460>



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