

Addressing routine immunization rates among school-aged children and youth

Date: November 1, 2024

To: Board of Health

From: Medical Officer of Health

Wards: All

SUMMARY

Toronto Public Health (TPH) works to facilitate high vaccination rates among elementary and secondary school-aged students and prevent vaccine-preventable disease outbreaks in schools and communities. Vaccinating children and youth protect them against vaccine-preventable diseases and some cancers and can prevent children and youth from passing on an infection to other people in their family or school.

Ontario's Immunization of School Pupils Act (ISPA) requires students who attend elementary and secondary school to be vaccinated against nine designated diseases or to have a valid exemption. It is the responsibility of parents and caregivers of students to report their immunizations to TPH. Under the requirements of the ISPA, students who do not submit the required vaccination records or a valid exemption form to TPH may be suspended from school.

Following a pause in student suspensions during the pandemic, TPH resumed the full ISPA assessment and enforcement process for the 2023-2024 school year. This included suspensions from school for students who did not provide TPH with complete ISPA vaccine records or a valid exemption. TPH reminds and assists families and schools to promote ISPA compliance through informational and vaccination initiatives so that students can avoid suspension or return to school as quickly as possible. TPH includes equity-focused initiatives in their student immunization programs, including working with other health and community partners to share messages about vaccines and assigning Public Health Nurses to schools with lower rates of coverage and Aanse-focused schools that have the highest numbers of self-identified Indigenous students.

Through the School Immunization Program (SIP), TPH offers three vaccines to grade seven and eight students at clinics in schools. These vaccines are meningococcal, Human Papillomavirus (HPV), and the hepatitis B vaccines. Vaccine clinics in schools were paused during the pandemic response. The resumption of school-based clinics for adolescents promotes vaccine uptake.

RECOMMENDATIONS

The Medical Officer of Health recommends that:

1. The Board of Health recommend the Ministry of Health implement the recommendation from the Ontario Immunization Advisory Committee to create a provincial immunization registry that provides real-time information access to individuals and their health care providers and includes sociodemographic data linkage capabilities to support interventions to address inequities in vaccine access.
2. The Board of Health request the Minister of Health to:
 - a. Increase eligibility for publicly funded vaccine and access to Human Papillomavirus (HPV) vaccination for all people under 26 years of age; and as part of expanded public funding for HPV vaccination to all people under 26 years of age, the Ministry of Health request the Ontario Ministry of Colleges and Universities to promote HPV vaccination access with postsecondary institutions.
 - b. Develop a comprehensive campaign to increase the uptake of Human Papillomavirus (HPV), hepatitis B, and meningococcal vaccinations, especially among communities with lower coverage of these vaccines.

FINANCIAL IMPACT

There are no financial impacts associated with this initiative in current and future years. The Chief Financial Officer and Treasurer has reviewed this report and agrees with the information as presented in the Financial Impact Section.

DECISION HISTORY

On October 21, 2024, the Board of Health received item HL17.1, "Toronto Public Health Initiatives to Prevent Cancer" and requested the Ministry of Health work across the health care system to expand hepatitis B vaccination coverage.

<https://secure.toronto.ca/council/agenda-item.do?item=2024.HL17.1>

On November 27, 2023, the Board of Health received item HL8.2, "Enhancing Immunization Coverage for Toronto's School-Aged Population" and requested funding from the province for vaccine catch up efforts following the COVID-19 pandemic impact on vaccine rates. <https://secure.toronto.ca/council/agenda-item.do?item=2023.HL8.2>

On September 11, 2023, the Board of Health received item HL6.1 regarding the impact of the COVID-19 pandemic on school-aged children and requested that the Medical Officer of Health consider strategies and partnerships to increase ISPA-required vaccination rates and to include these efforts in the 2024 operational budget.

<https://secure.toronto.ca/council/agenda-item.do?item=2023.HL6.1>

COMMENTS

As contagious and severe diseases like polio and measles have become rare in highly vaccinated populations such as Toronto, the public can become less familiar and less fearful of their associated health risks. When vaccination rates decrease in local populations, preventable and serious diseases can return, spread, and cause health harms.

High vaccination rates protect Toronto residents from vaccine preventable diseases and vaccine preventable disease outbreaks. Toronto Public Health (TPH) assesses and addresses immunization gaps in the school-aged Toronto population. TPH also promotes catch-up opportunities for routine child and youth vaccines to increase population-level protection. This includes through the enforcement of the Immunization of School Pupils Act (ISPA) and the delivery of the School Immunization Program (SIP).

Toronto Public Health's Immunization of School Pupils Act Assessment and Enforcement Program

Ontario's ISPA requires students who attend school between the ages of four and 17 to report their diphtheria, tetanus, polio, measles, mumps, rubella, meningococcal disease, pertussis (whooping cough) and varicella (chickenpox) immunizations to their local public health unit, such as TPH, or to have a valid exemption which includes medical, religious and conscience exemptions. Elementary and secondary students who do not have a valid exemption or a complete vaccine record with their local public health unit can be suspended from school.

Due to the pandemic response, TPH last assessed all school cohorts' vaccine records in the 2018-2019 school year. At that time, more than 90 per cent of students were up to date with their ISPA vaccinations. Since then, due to reduced access to vaccines and health system services during the pandemic, the ISPA compliance rate among Toronto's students decreased.

Beginning in the 2023-2024 school year, TPH resumed the school suspension process for students born in 2016. TPH also sent assessment letters to grade 12 students to encourage them to complete recommended routine vaccinations before high school graduation.

Before a suspension order is ordered by TPH, parents and caregivers receive advance notice of students' outstanding vaccinations along with informational resources to assist the student in achieving ISPA compliance. If a student is not compliant with ISPA after three mailed notices, then the child can be suspended from school. The suspension can end once a student becomes compliant with the ISPA. TPH supports schools and families so that students can return to school as quickly as possible.

Toronto Public Health's School Immunization Program

Meningococcal, Human Papillomavirus (HPV), and hepatitis B vaccines are offered as part of the SIP to grade seven students. Meningococcal vaccination status reporting is

required under the ISPA. The HPV and hepatitis B vaccines are not required in the ISPA but are highly recommended for youth by the National Advisory Committee for Immunization.

In the 2023-24 school year, the SIP program held 900 clinics at 439 schools across all four Toronto school boards and some independent schools. TPH vaccinated 15,013 students and administered 25,654 vaccines. In addition, TPH hosted 33 high school vaccine clinics providing 582 students with vaccines as an extraordinary pandemic catchup measure. Students could also catchup SIP and ISPA vaccines at 85 TPH catch up clinics which provided extra vaccination opportunities for school-aged children.

This report recommends that the Ministry of Health fund the HPV vaccine for residents aged 26 and under, as some students exit the secondary school system without receiving all their vaccinations. Expanding the age eligibility for publicly funded access to the HPV vaccine will reduce the number of individuals' risk of HPV infection and developing high-risk precancerous cervical lesions and certain cancers.

Additionally, the development of a comprehensive campaign by the Ministry of Health to increase the uptake of HPV, hepatitis B, and meningococcal vaccinations - especially in communities with lower coverage rates - could yield multiple significant benefits for population-level health outcomes.

TPH collaborations with school communities to prevent ISPA suspensions

With the resumption of student immunization assessment activities during the 2023-2024 school year, TPH's School Health Team provided enhanced communications and liaison support to school communities to increase vaccine coverage and prevent student suspensions. TPH sends information to the school boards' administrations, school principals, and parents to help them understand how to meet ISPA requirements. These resources also provide evidence-based information about routine immunization and promote vaccination opportunities available for students. Additionally, Public Health Nurses work with principals to determine their school's needs based on their vaccine compliance data and implement activities to promote ISPA compliance. To reach families directly, Public Health Nurses deliver presentations, conduct informational phone calls to parents and guardians of non-compliant students, and offer resources on reporting student vaccine records to TPH.

Vaccination coverage rates among Toronto students and schools

In November 2023, the Board of Health requested the Medical Officer of Health to post online students' immunization rates in local public schools for hepatitis B, HPV and meningococcal vaccines. TPH [posted immunization rates online](#) for the 2023-2024 school year for these SIP vaccines, as well as for vaccines named in the ISPA.

Immunization of School Pupils Act vaccination coverage rates

Data from ISPA assessments shows that students born in the 2016 cohort are approaching vaccination rates that are similar to grade two cohorts assessed before the pandemic. This is due in part to efforts by TPH and schools to assess and enforce the

ISPA and promote vaccine catchup for students. ISPA data for grade 12 students indicate that approximately half of this 2006 cohort is not up to date with their adolescent booster of Tdap (tetanus, diphtheria and pertussis). This may be because they did not get the booster, or they did not report it to TPH. Measles, mumps, and rubella vaccination rates are high for grade 12 students (88 per cent) as many of them would have been up to date before the pandemic started (the second MMR dose is given to children at four to six years of age).

Student Immunization Program vaccination coverage rates

This past 2023-2024 school year, vaccination rates for SIP vaccines observed at the end of grade eight are lower than pre-pandemic rates. The 2007 and 2008 cohorts that did not have school clinics due to pandemic disruptions have the lowest coverage rates. Vaccinations that require only one dose (meningococcal) have higher coverage rates compared to vaccines with more doses, namely hepatitis B (two or three doses) and HPV (two or three doses). Compared to high school grade students, middle school grade students have higher SIP immunization rates in 2023-2024, demonstrating the positive impact of school-based SIP clinics to increase vaccine uptake.

If students received their SIP vaccine(s) from their primary health care providers but did not report it to TPH, then TPH's data may underestimate vaccination rates. Without a provincial vaccine registry, TPH does not have a systematic and automated way to verify if students received a vaccine.

TPH's initiatives to increase routine child and youth vaccination rates

TPH's efforts to increase routine child and youth vaccination rates before ISPA assessment periods, including public information and outreach initiatives, and promotion of vaccination opportunities, include the following:

- TPH delivers a city-wide public education and outreach campaign to inform parents and caregivers about routine immunization and how to report vaccinations in the Immunize Connect Ontario (ICON) system. This includes targeted print and digital communication activities, and a direct letter campaign to parents and caregivers.
- TPH School Liaison Public Health Nurses provide education, resources and direct outreach to school communities as described earlier in the report.
- TPH hosts community vaccination clinics to help school-aged children catch up on their SIP and ISPA vaccinations.
- TPH delivers the SIP program in schools including school-based SIP catch-up clinics.
- TPH partners with Ontario Health, Ontario Health Teams and Community Health Centres to coordinate vaccinations clinics and promotion, especially for children and youth who do not have a primary care provider or health insurance.

Equity-Focused Initiatives

TPH's SIP and ISPA communications includes equity-focused vaccine information for Toronto communities that face barriers to vaccination. Communication materials are available in multiple languages. Clear health information is offered in both digital and

physical formats to reach families with limited internet access.

When possible, TPH leverages trusted community spaces such as schools, libraries, and community centres for community vaccine clinics and vaccine promotion. TPH partners with organizations serving people of African descent, Indigenous, and newcomer populations to facilitate outreach to equity-deserving populations, especially children without access to primary care. TPH collaborates with community ambassadors of other agencies like school boards, community health centres, and Ontario Health teams to help build trust and broaden the reach of vaccination messages. Additionally, TPH clinic offerings include some weekend, evening, and school professional day holiday availability to increase vaccine access.

TPH's School Liaison Public Health Nurses offer augmented services to schools with a higher concentration of students not in compliance with the ISPA. School Liaison Public Health Nurses are each assigned a group of prioritized schools with lower coverage rates, working closely with the administrators, staff, and parents at these schools to identify and address barriers to ISPA compliance.

A designated School Liaison Public Health Nurse works closely with Aanse¹-focused schools that have the highest numbers of self-identified Indigenous students. The School Liaison Public Health nurse uses culturally safe approaches with parents, caregivers, and students to participate in school community events, respond to questions, and to confirm and update students' immunization status and records. TPH is also liaising with the school board Indigenous community liaison staff. TPH engages with Indigenous-serving primary care providers to facilitate and promote immunization opportunities for Indigenous students.

Potential Gains from a Vaccine Registry

Using real-time data in an electronic immunization registry in Ontario would increase the efficiency of ISPA compliance documentation and assessment. For example, most Ontario residents still have a paper-based 'yellow immunization card' to document their vaccination history. If there was a digital provincial immunization registry, public health resources could be re-allocated from the manual collection, input, and assessment of immunization records. An electronic immunization registry would also allow parents and families to easily access and track their children's vaccination records, reducing the need to keep and update paper-based records. This could prevent students from missing school and ensure timely reminders for upcoming vaccinations, supporting family health and reducing the risk of vaccine-preventable diseases. In September 2024, Public Health Ontario's Immunization Advisory Committee [strongly urged](#) the Ontario Ministry of Health to develop and implement a provincial immunization registry that provides real-time access to vaccination records for individuals and their health care providers. This report recommends that the Board of Health recommend the Ministry of Health implement that recommendation, which would support access to a

¹ The Anishinaabemowin word, Aanse, translates in English to transforming. This word has inspired the multi-faceted professional learning that has made of the Indigenous Student Well-Being and Achievement Strategy. This is the definition used by the Toronto District School Board.

reliable, complete and timely system to record vaccinations for all people in the province.

Toronto Public Health Strategic Impact

The SIP and ISPA compliance efforts align with TPH's Strategic Plan 2024-2028, specifically;

Priority 1: Strengthen health protection, disease prevention, and emergency preparedness", and some corresponding objectives:

- a. Prepare for and respond to outbreaks and public health emergencies informed by best evidence and lessons learned from previous responses.
- c. Effectively communicate with the public about how they can protect their health.

Priority 4: Advocate to advance health equity:

- a. Assess and report on health inequities and population health needs.
- b. Collaborate with partners across multiple sectors to address local health needs.
- c. Share evidence, advocate, and collaborate to influence actions that impact population health.

Next Steps

Toronto Public Health continues to work with school boards, families, and students to increase SIP vaccination rates and ISPA compliance. In the 2024-25 school year, TPH is activating full ISPA assessment and enforcement to increase vaccine preventable disease protection in Toronto schools and communities.

CONTACT

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SIGNATURE

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Medical Officer of Health

ATTACHMENTS

Appendix 1 - Summary ISPA Vaccination Coverage Rates Pre- and Post- Pandemic, Toronto Students

Appendix 2 - Summary SIP Vaccination Coverage Rates Pre- and Post- Pandemic, Toronto Students

Appendix 1 - Summary ISPA Vaccination Coverage Rates Pre- and Post-Pandemic, Toronto Students

Cohort	DPTaP	MMR
Pre-Pandemic: 2017/18 Grade 2s*	DPT: 75.0% Pertussis: 75.4%	78.5%
Post-Pandemic: 2023/24 Grade 2s (2016 birth cohort)**	67.8%	71.9%
Pre-Pandemic: 2017/18 Grade 12s*	DPT: 81.9% Pertussis: 81.0%	93.6%
Post-Pandemic: 2023/24 Grade 12s (2006 birth cohort)**	46.5%	87.4%

(DPTaP: Diphtheria, Pertussis, Tetanus, and Polio vaccines; MMR: Measles, Mumps, Rubella vaccines)

*ISPA compliance rate, August 2018; **As of September 12, 2024

Appendix 2 - Summary SIP Vaccination Coverage Rates Pre- and Post-Pandemic, Toronto Students

Cohort	Hepatitis B	HPV	Meningococcal Disease
Pre-Pandemic: 2017/18 Grade 7s*	77.2%	65.8%	85.5%
Post-Pandemic: 2023/24 Grade 8s (2010 birth cohort)**	66.7%	61.6%	73.1%
Post-Pandemic: 2023/24 Grade 9-12s (2006-2009 birth cohort)**	55.2%	50.6%	73.0%

*Compliance rate, as of August 2018; **As of June 27, 2024