



Windsor-Essex County Health Unit Board of Health

INFORMATION REPORT

Prepared By: Healthy Schools Department - Immunization

Date: September 21, 2023

Subject: Immunization Coverage in 7, 12 and 17-year-olds in Windsor-Essex County

BACKGROUND/PURPOSE

The compliance rates of students in elementary and secondary schools were assessed as part of the Immunization of School's Pupil Act (ISPA) enforcement during the 2022-2023 school year. Students born in 2008 were not included in this compliance review due to the timing of their transition from elementary to high school and the planned implementation process. This compliance data, apart from the rates of students born in 2008, was presented in the [April 2023 Board Report](#).

Local available temporal trends of immunization coverage rates among 7- and 17-year-olds is presented on the WECHU's [Healthy Schools Immunization](#) dashboard. The dashboard also provides comparisons to provincial coverage rates and national coverage goals.

This report is in follow-up to the April 2023 commitment to the Board of Health and the community to provide updated and expanded immunization coverage rate data as an outcome of the completed process in the previous school year.

Immunization Coverage Rates

Immunization coverage rate describes the proportion of a population that is appropriately immunized against a vaccine preventable disease (VPD) at a point in time. Achieving and maintaining high immunization coverage is essential for effective prevention and control of VPDs.

Vaccine coverage rates for [ISPA required vaccines](#) and strongly recommended school ages vaccines are presented below.

Of interest is the HPV vaccine coverage rate among 17 year olds, which is higher than the [provincial rate](#) of 64.1% (as of August 31, 2022). While the WEC region surpasses the provincial coverage rate for HPV, WEC is below the [national coverage goal](#) of 90% vaccination coverage by 17 years of age. Also interesting to note, is the vaccine coverage for Hepatitis B among 17 year olds, which is higher than the [provincial rate](#) of 74.9%, is also lower than the desired [national goal](#) of 90%. Both of these vaccines, in addition to Meningococcal disease vaccine, is provided to all students in grade 7 as a part of the WECHU's school-based vaccine program.

Discussion

The coverage rates for 7-year-olds reflect families who have completed the immunization record review process, including notification of immunizations missed and catch-up vaccination clinics as part of the 2022-2023 ISPA enforcement process.

During the 2016-17 school year, the Grade 7 HPV vaccination program was expanded to include provincially funded coverage for males. While these students have since graduated high school, it is likely that the HPV coverage rate among young males is impacted by societal norms, which may take some time to increase the rate of HPV coverage.

The coverage rates for diphtheria, tetanus and pertussis among 17-year-olds is lower than many immunizations listed below. This suggests many students missed receiving their adolescent tetanus-diphtheria-pertussis (Tdap) booster dose during the pandemic, typically administered between 14-16 years of age by primary care providers. The WECHU continues to work with local primary care providers to promote adherence to Ontario's Routine Immunization Schedule.

Also of note, effective September 2014, the ISPA was amended to require children born on or after 2010 to be vaccinated against Varicella-zoster – a herpes virus that causes chickenpox. The publicly funded immunization schedule outlines this dose of Varicella vaccine should be administered when the child is 15 months old. Students who are 17 years old in 2023, reflected in much lower rates upon review, were born in 2006, before the ISPA requirement was instituted.

Vaccine Coverage Rates for ISPA Required and Recommended Vaccines (HPV and Hep B) among 7, 12 and 17-year-olds in Windsor and Essex County

Vaccine-Preventable Disease	Required by ISPA in Ontario	Lead Vaccine Provider	7-year-olds as of...		12-year-olds as of...		17-year-olds as of...	
			Aug 31, 2022 (%)	2022-23 School Year (%)	Aug 31, 2022 (%)	2022-23 School Year (%)	Aug 31, 2022 (%)	2022-23 School Year (%)
Diphtheria ^{1,2}	Yes	Primary Care Provider	84.5	88.95	Data not available at this interval	95.12	32.0	82.49
Hepatitis B ²	No	WECHU/ Primary Care Provider	These vaccines are recommended and offered to 12-year-olds, during their Grade 7 year.		37.0	71.22	73.2	76.65
HPV ²	No	WECHU			26.0	61.31	60.6	68.79
Measles ¹	Yes	Primary Care Provider	85.6	89.78	Data not available at this interval	95.16	86.0	91.98
Meningococcal Disease ²	Yes	WECHU/ Primary Care Provider	94.8 ³	95.58 ³	61.6 ⁴	86.64 ⁴	85.1 ⁴	93.34 ⁴
Mumps ¹	Yes	Primary Care Provider	85.4	89.68	Data not available at this interval	95.12	85.6	91.84
Pertussis ^{1,2}	Yes	Primary Care Provider	84.5	88.92	Data not available at this interval	94.97	31.9	82.20
Polio ¹	Yes	Primary Care Provider	85.7	89.95	Data not available at this interval	95.35	79.7	91.67
Rubella ¹	Yes	Primary Care Provider	95.9	95.94	Data not available at this interval	95.95	92.1	94.75
Tetanus ^{1,2}	Yes	Primary Care Provider	84.5	89.23	Data not available at this interval	95.18	32.0	82.49
Varicella	Yes	Primary Care Provider	82.9	88.02	Data not available at this interval	93.28	Data not available at this interval	34.57

¹National goal to achieve 95% vaccination coverage by 7 years of age, highlighted in green above.

²National goal to achieve 90% vaccination coverage by 17 years of age, highlighted in green above.

³Vaccination with Meningococcal C conjugate vaccine.

⁴Vaccination with Quadrivalent meningococcal conjugate vaccine.

Note: Cells in orange above, highlight the coverage rates for vaccine-preventable diseases that are below the national goal.

Improved coverage rates can be attributed to several WECHU interventions that were implemented during the ISPA enforcement activities of the 2022-2023 school year. An improved level of human resources was dedicated to the school aged vaccine administration and the ISPA enforcement process compared to what was previously available. This enabled increased capacity to accomplish:

- comprehensive immunization records review and updating
- enhanced communication and support for families
- improved technologies to support parent/guardian consent process
- increased catch-up vaccinations administered via in-house clinics and in collaboration with health care providers.

Conclusion

There is a significant opportunity in Windsor and Essex County to improve the existing vaccine coverage rate for HPV among 12- and 17-year-olds. The HPV vaccine is safe and over 95% effective in protecting students against 9 types of HPV that can cause head and neck cancers, genital cancers, and warts. The best protection against these diseases is receiving the HPV vaccine before a person engages in sexual activity. The WECHU will be implementing future communication campaigns to raise uptake of the HPV vaccine in eligible populations (Grades 7-12 students) based on current criteria for access to free vaccine (until the end of Grade 12) and explore advocacy efforts to expand current provincially funded eligibility requirements.

The WECHU continues to focus on parent/guardian communication strategies to increase awareness of their duty to report immunizations to the health unit and to help address vaccine hesitancy concerns. These interventions will focus on reporting prior to entry to school and using an online reporting tool that parents can use to update their child's immunization from infancy. The WECHU is also planning to expand our efforts to work with families of pre-school age children, prior to their entry to school, to ensure protections are in place even sooner than the start of elementary aged attendance.

The WECHU implemented and completed ISPA assessment, enforcement (including the suspension processes) for elementary and secondary school students (except for those born in 2008) in the 2022-2023 school year. Any student who was overdue for their age-appropriate ISPA-vaccine (and did not have an exemption) by the deadline; was suspended from school for up to 20 days. Currently, any student born in 2008 (Grade 10 students for the 2023-2024 school year) has received a notification letter informing them of any vaccines they're overdue for; catch up clinics took place over the entire summer to provide students with an option to get those vaccinations prior to the new school year.

The WECHU will be implementing a robust maintenance strategy for all school aged children in the spring. Student immunization records, in all grades, will be assessed this fall and winter and the WECHU will implement the enforcement process for any student enrolled in WEC elementary and secondary schools that are overdue for required ISPA vaccines (based on age eligibility). Although highly resource intensive, this maintenance process will take place annually, and is the most effective and sustainable way to support ongoing protections and improved immunization coverage for our community.

To ensure ongoing protections for vaccine preventable illness, the WECHU remains committed to working with primary care providers helping them adhere to the publicly funded immunization schedule. Following the schedule will help ensure infants start on the right timetable for important childhood immunizations, and can help get students' vaccination back on schedule, if there are gaps in coverage. The WECHU continues its work in ensuring access to publicly funded vaccines for students who currently do not have access to primary care providers.