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<th><strong>TO:</strong></th>
<th>Mayor and Members Board of Health</th>
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<td><strong>COMMITTEE DATE:</strong></td>
<td>September 16, 2019</td>
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<td><strong>SUBJECT/REPORT NO:</strong></td>
<td>Immunization of School Pupils Act Overview (BOH19029) (City Wide)</td>
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<td><strong>WARD(S) AFFECTED:</strong></td>
<td>City Wide</td>
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<td><strong>PREPARED BY:</strong></td>
<td>Julie Prieto (905) 546-2424 Ext. 3528</td>
</tr>
<tr>
<td><strong>SUBMITTED BY:</strong></td>
<td>Kevin McDonald on behalf of Michelle Baird Director, Epidemiology, Wellness and Communicable Disease Control Division Public Health Services</td>
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**RECOMMENDATION(S)**

(a) That the Board of Health endorse the position of the Council of Ontario Medical Officers of Health in support of a seamless immunization registry, whereby health care providers directly input immunization information at the time of vaccine administration;

(b) That the Board of Health circulate Report BOH19029 to the Minister of Health, the Chief Medical Officer of Health, City of Hamilton Members of Provincial Parliament, the Association of Local Public Health Agencies, the Council of Ontario Medical Officers of Health and the other 34 Ontario Boards of Health.

**EXECUTIVE SUMMARY**

This report provides information on how Public Health Services, Vaccine Program meets the requirement to enforce the *Immunization of School Pupils Act* (ISPA) - an Ontario law that requires children under the age of 18 years attending school to have an up-to-date
immunization record, or valid exemption, on file with their local public health unit for designated publicly funded childhood immunizations.

Key Points:
- Enforcement of the *Immunization of School Pupils Act* is a tool that is used to improve vaccine coverage rates amongst school-aged children, monitor trends and patterns in vaccine coverage, and support public health response to vaccine-preventable disease cases or outbreaks; and,
- Administration of the *Immunization of School Pupils Act* in the City of Hamilton would be enhanced if the provincial government were to create a provincial Electronic Medical Record and merge this record with the existing Digital Health Immunization Repository. This would ensure that any time a vaccine was administered by a health care provider, it was automatically captured in the central provincial vaccine registry.

**Alternatives for Consideration – Not Applicable**

**FINANCIAL – STAFFING – LEGAL IMPLICATIONS**

There are none currently. Greater efficiencies could be gained with the creation of a seamless immunization registry. If the Province were to implement such a registry, impacts would be reported back to the Board of Health at that time.

Financial: Not Applicable.

Staffing: Not Applicable.

Legal: Not Applicable.

**HISTORICAL BACKGROUND**

Immunizations are one of the most successful and cost-effective public health interventions, as they protect individuals from the harmful effects of vaccine-preventable diseases. In addition, they provide community-level protection known as herd immunity, which reduces the risk of disease for those who cannot receive a vaccine because of their age or a medical condition.

The Vaccine Program is responsible for implementing the *Immunization of School Pupils Act* (ISPA), and has done so since 1990.
POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

The Board of Health is mandated to enforce the *Immunization of School Pupils Act 1990*, for school-aged children and the *Child Care and Early Years Act 2014*, for children attending licensed child care centres. Program specific requirements are outlined in the Ontario Public Health Standards and associated protocols, and include the requirement to assess vaccine records, maintain vaccine records, and report on the immunization status of children enrolled in schools and licensed child care centres.

ISPA requires each public health unit to have a record that students attending school have been immunized according to the Ontario immunization schedule. Under ISPA, students under the age of 18 years must provide proof of up-to-date immunizations against the following designated diseases:

- Diphtheria;
- Tetanus;
- Polio;
- Measles;
- Mumps;
- Rubella;
- Pertussis (whooping cough);
- Varicella (chicken pox); and,
- Meningococcal disease.

For students who are unable to receive vaccines for medical reasons (e.g. allergies, immunocompromised, etc.), a health care provider must complete a medical exemption form and provide it to public health. Parents/guardians may also choose to exempt their child from receiving vaccines for religious or conscientious reasons. As per ISPA, to obtain a non-medical exemption, parents/guardians must attend an education session provided by public health as well as complete a “statement of conscience or religious belief” form and have it notarized by an authorized notary public. Completion of either exemption places a student in compliance with ISPA.

RELEVANT CONSULTATION

Not Applicable.

ANALYSIS AND RATIONALE FOR RECOMMENDATION(S)

Rationale

Children receive most childhood immunizations through their primary health care provider. Following immunization, health care providers typically provide a paper
immunization record to the parent and/or guardian (the “yellow card”) and the child’s medical record is also updated. Parents/guardians are then responsible for reporting their child’s immunization record to public health. Parents can report by phone, fax, drop-in or online. To date, most records are reported either by phone or fax. Public Health enters this information into the provincial Digital Health Immunization Repository.

The Digital Health Immunization Repository is the provincial electronic immunization database that stores all student immunization information. Immunization records can only be entered by Public Health and the information within the database is only accessible to Public Health. Health care providers who administer vaccines to children do not have access to this system.

Previous attempts were made to create online portals where patients and health care providers could securely submit immunization information to the Digital Health Immunization Repository. For example, Immunization Connect Ontario (ICON) developed a platform for both the public as well as primary health care providers to enter vaccine information. Although the Vaccine Program adopted ICON for public use in 2016, there are barriers to universal adoption of ICON by primary health care providers and public health units across Ontario, such as additional time to log into a parallel system and double document the immunization.

The provincial government recently announced plans to create a provincial Electronic Medical Record and merge it with the Digital Health Immunization Repository. Moving forward with this plan would allow for the seamless reporting of immunization information by health care providers at the time of administration thereby removing the onus from parents/guardians to report vaccine records to Public Health.

Analysis
To orient and support parents and guardians to have their children immunized and protected against vaccine preventable diseases, the Vaccine Program regularly promotes immunizations and vaccine reporting. This includes answering calls from parents, guardians and health care providers, having a dedicated web page, doing community presentations, as well as providing educational resources at kindergarten registration events. The Vaccine Program also engages in a screening only process in the summer months for parents and guardians of Kindergarten 1 (formerly JK) children to familiarize them with the annual process starting in the following school year.

Annually, the Vaccine Program engages in a screening and suspension process which ensures parents and guardians are adequately notified of ISPA requirements. The program is responsible for assessing and maintaining vaccine records of over 70,000 students enrolled in Hamilton elementary and secondary schools. Between the age of two months and 16 years, children may receive up to 18 different vaccines. Because the vast majority of vaccine record reporting is done by phone or fax, Vaccine Program staff
are responsible for manually entering most vaccine records into the provincial database. The program currently has five data clerks who are primarily responsible for accurate transcription and entering of all vaccine records.

Details of the screening and suspension process as well as supportive processes can be found in Appendix “A” to BOH19029.

In 2018-2019, after the assessment of vaccine records of over 70,000 students, approximately 16,000 students were notified that they did not have an up-to-date record on file with public health. This was either because a student had not received all required vaccines or the student’s vaccine record was not reported to public health by the parent and/or guardian. Of these students, approximately 3400 were suspended from school as records had not been received despite reminders; most orders of suspension were rescinded within the first week.

For the 2018-2019 school year, at the completion of the screening and suspension process, the compliance rate ranged between 94.3% to 98.5% for 7 to 8 year old school students and 93.1% to 99.8% for 17 to 18 year old school students. Further details of compliance for each type of vaccine can be found in Appendix “B” to BOH19029.

These compliance values are used as an approximate indication of immunization coverage; however, these estimates include a small proportion of non-immunized exempt students (2.6% to 3.4% varying by immunization and age). If an outbreak of one of these vaccine-preventable diseases were to occur in a school, those who are not up to date on their immunizations may be excluded during the outbreak in order to protect both them and others.

This data provides evidence of the effectiveness of the process in reaching over a 90% vaccine coverage rate for all designated vaccines. Although ISPA is an effective tool to ensure individual and community level immunity, the process is resource intensive both from a staff and time perspective. This is a result of most vaccine records requiring manual input into the provincial database by program staff, and follow-up required on records received that are missing information such as date of administration of vaccine, required demographics or a fax error.

**Immunization Support**

The goal of the Vaccine Program is to improve vaccine coverage, not suspend children from school. Enforcement of the ISPA is a last resort when information is not provided as required under the Act. To support parents and ensure timely access to vaccines, the program runs several different clinics. Throughout the year three community clinics per month (in the east end, mountain and downtown) are held for children unable to access vaccines through a health care provider or who were unable to receive the vaccines administered at Grade 7 school-based immunization clinics (Hepatitis B, Menactra and
Human Papillomavirus). As well, based on the observation that high school students tended to be missing vaccines rather than not reporting them, two years ago high school clinics were initiated as a means of decreasing barriers for students and parents. This effort has been highly successful with over 2800 students receiving vaccines in the last two years. Finally, vaccine clinics are held the day before, day of, and day after suspension day. The clinics are open to students who require vaccines to either prevent or rescind a suspension order.

**Improving ISPA with a Seamless Immunization Registry**

A major challenge to the administration of ISPA is the lack of a provincial immunization registry to seamlessly transfer immunization information from primary and community health care providers at the time a vaccine is given to the Digital Health Immunization Repository. Furthermore, public health units across Ontario do not have a process to verify the vaccine information received from parents/guardians with their health care provider as this would be both labour intensive and costly.

The introduction of a seamless immunization registry whereby health care providers directly input immunization information at the time of vaccine administration would:

- Eliminate the burden on parents/guardians to report vaccines to public health;
- Reduce the risk of inaccurate information being reported by parents;
- Reduce staff time and resources needed to manually input vaccine records; and,
- Reduce the number of suspensions due to the lack of reporting by parents.

In March 2019, the Council of Ontario Medical Officers of Health, a subgroup of the Association of Local Public Health Agencies representing Associate Medical Officers of Health and Medical Officers of Health across the province, wrote to the Minister of Health supporting the Ministry’s proposed plan to develop a provincial Electronic Medical Record and merge it with the Digital Health Immunization Repository. This Electronic Medical Record-Digital Health Immunization Repository integration project would allow for the seamless reporting of immunizations from primary health care providers at the time of vaccine administration directly to local public health.

Public Health Services is very supportive of the recommendation made by the Council of Ontario Medical Officers of Health that the Ministry assume the role of health information custodian for the Digital Health Immunization Repository. The Ministry has previously assumed this role with the Ontario Laboratory Information System and the Digital Health Repository. The Ministry taking on the role of health information custodian, instead of 35 Medical Officers of Health doing so would ensure a more consistent approach in obtaining consent for the collection of vaccine information not covered under ISPA.

**Conclusion**

Hamilton Public Health is committed to protecting the health of the community by preventing vaccine-preventable diseases. To achieve this goal, Public Health Services
will continue to collaborate and support parents and local school boards to ensure compliance with *Immunization of School Pupils Act*. Moving toward a seamless immunization registry would increase efficiencies in the screening and suspension process while reducing the parental burden to report vaccines to public health.

**ALTERNATIVES FOR CONSIDERATION** – Not Applicable

**ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN**

**Healthy and Safe Communities**
Hamilton is a safe and supportive City where people are active, healthy, and have a high quality of life.

The Immunization of Student Pupils Act aligns with the strategic plans and the City of Hamilton’s vision to be the best place to raise a child and age successfully. Enforcement of the act ensures both individual and community level protection against vaccine-preventable diseases.

**APPENDICES AND SCHEDULES ATTACHED**

Appendix “A” to BOH19029: Details of Screening and Suspension Process
Appendix “B” to BOH19029: Immunization of School Pupils Act Overview