



Hamilton

INFORMATION REPORT

TO:	Mayor and Members Board of Health
COMMITTEE DATE:	September 17, 2018
SUBJECT/REPORT NO:	Vaccine Program Review (BOH18022) (City Wide)
WARD(S) AFFECTED:	City Wide
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SIGNATURE:	

Council Direction:

Not Applicable

Information:

Purpose

The purpose of this report is to inform the Board of Health (BOH) of key findings from the vaccine program review and provide an update on actions to date in bringing the vaccine program closer to full compliance with the Ontario Public Health Standards (OPHS).

Executive Summary

The Vaccine Program provides services under the Ontario Public Health Standards (2018) and associated protocols of Immunization for Children in Schools and Licensed Child Care Settings (2018) and Vaccine Storage and Handling (2018). These standards and protocols outline the requirements that the BOH must meet under the Public Health Funding and Accountability Agreement (PHFAA), as well as accountability indicators for compliance with legislation, immunization coverage and vaccine wastage. The goal of the Immunization Program Standard is “to reduce or eliminate the burden of vaccine preventable diseases through immunization” (MOHLTC, 2018, p.39).

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As outlined in report (BOH16053), over the past several years, the Vaccine Program has increasing pressure as the Province has clarified and expanded its expectations for Public Health immunization programs. As a result, the program has not been in full compliance with the OPHS or the associated protocols. Reallocation of resources to the program in late 2016 provided for improved, but not complete compliance. A further program review was conducted to gain a more thorough understanding of the areas of continued non-compliance.

The findings from the review identified that there were two main areas of non-compliance with the OPHS. First, the Vaccine Program was not meeting one of the requirements outlined in the Immunization for Children in Schools and Licensed Child Care Settings Protocol. This requirement establishes the BOHs' responsibility to assess, maintain and report on the immunization status of children enrolled in licensed child care settings, as defined in the Child Care and Early Years Act, 2014; and those attending schools in accordance with the Immunization of School Pupils Act (ISPA). Secondly, the review identified that the Vaccine Program needed to improve vaccine inventory management through the use of monitoring strategies in order to reach full compliance with the Storage and Handling Protocol.

Identifying the main areas of non-compliance allowed for targeted actions to move the vaccine program closer to full compliance. With continued efforts, the Vaccine Program will be in full compliance by the end of 2019.

1) Immunization for Children in Schools and Licensed Child Care Settings Protocol

a) School Age Children (ISPA):

Ontario's Immunization of School Pupils Act (ISPA) requires that children and adolescents attending primary or secondary school be appropriately immunized against designated diseases, unless they have a valid exemption. All immunization requirements for school attendance align with Ontario's publicly funded immunization schedule.

There are approximately 83,000 students enrolled in Hamilton's 228 schools. Currently, all student immunization records reported to Public Health are entered into Panorama, a provincial immunization database. However, the program is not fully compliant with the requirement to screen all students to ensure they meet ISPA requirements. The Vaccine Program has been incrementally increasing the number of birth years included in the annual screening and suspension process from two in 2015/16 to seven in 2017/18. The program is working towards full compliance for the 2018/19 school year.

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In order to achieve full compliance, the Vaccine Program has implemented several process changes including:

- i) Engaging in preparatory screening efforts prior to the school year (during the summer months).

By identifying and notifying students with incomplete immunization records prior to the school year, the program has been able to lessen some of the workload associated with the process during the school year. Frontloading these efforts prior to the start of the school year helps to shift some of the workload from a season in which the program resources are most in demand to a time when there are more available resources.

- ii) Providing Public Health run immunization clinics in secondary schools to address the high volume of students who do not have up-to-date immunizations.

These efforts resulted in approximately 2000 secondary students receiving vaccines and, subsequently, the avoidance of suspension. In addition to students receiving vaccines, nurses were also able to update vaccine records for students who had received vaccines via a healthcare provider. Because of the overwhelming positive response to these clinics, the number of students requiring this service in 2018/19 will have decreased by approximately fifty percent.

- iii) Providing Public Health run immunization clinics the day before, day of, and day after suspension day.

These clinics are walk-in based for any student who requires vaccines to either prevent or rescind a suspension. For the 2017/18 school year, approximately 1050 students were seen at these clinics. The Vaccine Program will continue to provide this service in efforts to provide easy access to publicly funded vaccines and decrease the length of suspension.

- b) Child Care Settings:

The vaccine program collects enrollment information from approximately 127 licensed child care centres and provides immunization information to all families enrolled. The Vaccine Program also provides operators with annual recommendations regarding immunization requirements for children, establishing the responsibility for centers to report the immunization status of all children to Public Health, including monthly attendance updates.

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Historically there has been a three year backlog of entering and assessing child care centre records. In 2016/17, to ensure the backlog did not negatively impact children entering the elementary school system, the Vaccine Program prioritized records for those children who were entering the screening and suspension process associated with ISPA. This assisted the program in meeting the ISPA requirements, but resulted in delays for real time entry and assessment of records received and follow-up on incomplete immunization records for children remaining in day care.

In efforts to increase compliance, the Vaccine Program has implemented several process changes and realigned resources to allow for all childcare centre records to be entered into Panorama in real time and for records of children born in 2015 - 2018 to be assessed for non-compliance (missing vaccines or vaccines given outside of the publicly funded schedule). Nursing staff provide health teaching to parents regarding the publicly funded schedule and how to access vaccine from a health care provider (walk-in/community clinics, family doctors).

2) Vaccine Storage and Handling Protocol:

There are ten Vaccine Storage and Handling Protocol (2018) requirements that the Board of Health must meet. These apply to vaccine stored and handled on site at Public Health Services as well as vaccine stored and maintained with approximately 430 pharmacy and physician sites that provide publicly funded vaccines in the City of Hamilton.

At the time of review, the Vaccine Program was non-compliant with the requirement to ensure only a two month supply of vaccines is stored in the Vaccine Program's vaccine fridges. The purpose of this requirement is to prevent storage of too large of an inventory which increases the risk of wastage as a result of vaccine expiring prior to being ordered by health care providers. A performance monitoring process has been implemented to allow for compliance with this requirement. Vaccine use reports have been introduced, providing monthly vaccine expiry dates as well as physician ordering trends. This has allowed for increased inventory monitoring and informed vaccine ordering decisions. To further assist with more accurately predicting vaccine supply needs, a review of historical order forms from physicians was also conducted.

As a result of these increased monitoring efforts, the Vaccine Program is now compliant with the requirement to maintain no more than a two month supply of vaccine. This has subsequently resulted in a significant decrease in the total percentage of vaccine wastage (not including flu vaccine) reported to the Ministry from 8.8% in 2016 to 6.7% in 2017 with a further anticipated decrease in 2018. This

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will bring the program closer to meeting the Ministry expectation of no more than 5% vaccine wastage annually.

A continuous quality improvement evaluation initiative was conducted with an objective of identifying means to better control publicly funded vaccine provided to health care provider facilities. The results of this evaluation led to a solution where Vaccine Program will have better control of the amount of publicly funded vaccine held in health care provider facilities through the use of Hedgehog, an inspection and facility management software with full reporting capabilities. This software will allow for more site-specific monitoring and evaluation, and further strategy development to decrease vaccine wastage at other health care facilities. This will be piloted for the remainder of 2018 with full implementation in 2019.

Other Findings

Immunization 2020:

In December 2015, the MOHLTC released Immunization 2020: Modernizing Ontario's Publicly Funded Immunization Program (MOHLTC, 2015a). This is a five year road map to a high performing, integrated immunization system in addition to ministry standards and protocols. Immunization 2020 includes 20 priorities that require collective action and commitment by all Public Health Units. A review of these priority areas indicates that the operationalization of this road map will require significant program resources to meet Immunization 2020's vision. As further information is provided on specific to Immunization 2020, staff will provide updates to the Board of Health.

ISPA Amendments:

As of September 2017, the MOHLTC requires health units to provide mandatory education for parents requesting non-medical immunization exemptions under ISPA. Currently, the program has a Public Health Nurse (PHN) and a Data Support Clerk dedicated to running these sessions one day every two weeks. Several ad-hoc sessions were also conducted over the last year to ensure parents were able to complete all legislated non-medical exemption requirements to prevent the suspension of their child. In the fall of 2018, weekly sessions will be provided as a result of informal feedback from parents identifying the need for more frequent sessions.

Staffing Issues:

There are numerous challenges to program staffing, more specifically nursing, which impact the program's ability to meet Ministry requirements. These challenges include:

- Difficulty recruiting and retaining Registered Nurse (RN) positions. As of January 2005, the entry-level requirement for new RNs became a baccalaureate degree in nursing from a university. Therefore nurses currently hired into the RN position often seek PHN positions to align with their current education and a higher rate of

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pay. This result in time and resource implications related to staff turnover, including filling vacant positions.

- Fluctuating and uneven workloads throughout the year due to the annual cycle of school clinics and suspensions.

The program review included analysis of the current program staffing model. The results of this analysis will be used to develop a staffing model that will address the challenges noted above as well as continue moving the program towards full compliance with OPHS.

The Vaccine Program provides a wide range of services to achieve the overarching goal of “reducing or eliminating the burden of vaccine preventable diseases through immunization” (MOHLTC, 2018, p.39). The OPHS and associated protocols provide requirements for public health units to ensure this goal is met. The program review was a helpful tool in systematically reviewing the Vaccine Program and identifying the main areas of non-compliance with OPHS. With the efforts reported above and ongoing continuous quality improvement, the Vaccine Program is on target to meet the requirements outlined in the standards and associated protocols by the end of 2019.

References

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Appendices and Schedules Attached

Not Applicable.