



HASTINGS PRINCE EDWARD  
**Public Health**

**Hastings and Prince Edward Counties  
Immunization Coverage Report  
2015-2016**

July 2016

## Introduction

This report summarizes the immunization coverage of 7-year olds and 17-year olds estimated at one point in time (July 2016) in Hastings and Prince Edward Counties (HPEC) for the 2015-2016 school year.

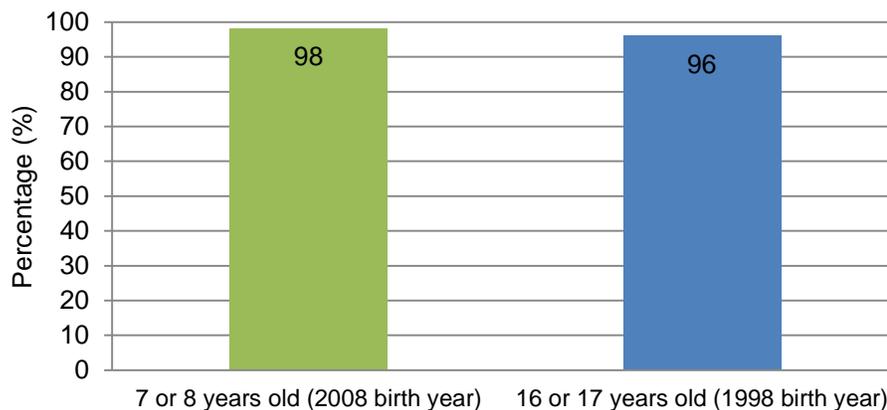
**Immunization coverage** refers to the proportion of a specific population that is appropriately immunized for a specific vaccine-preventable disease.

**Ontario's Immunization of School Pupils Act (ISPA)**<sup>1</sup> requires that the parents of children attending primary or secondary school (public or private) provide public health with proof of their child's immunization against designated diseases, unless they have a valid exemption. These designated diseases include diphtheria, tetanus, polio, measles, mumps, rubella, meningococcal disease, pertussis and varicella. Pertussis and varicella were not included in this report, as they were not listed under the Accountability Agreement indicators requested by Minister of Health and Long Term Care for ISPA this year.

**Ontario school-based immunization programs: Hepatitis B, human papillomavirus (HPV) and meningococcal disease.** Public health plans and delivers school-based immunization clinics for these vaccine-preventable diseases. This indicator reflects the appropriate planning and delivery of these programs as well as the public health unit efforts to educate parents and children and promote uptake of these immunizations.

## Summary of Statistics

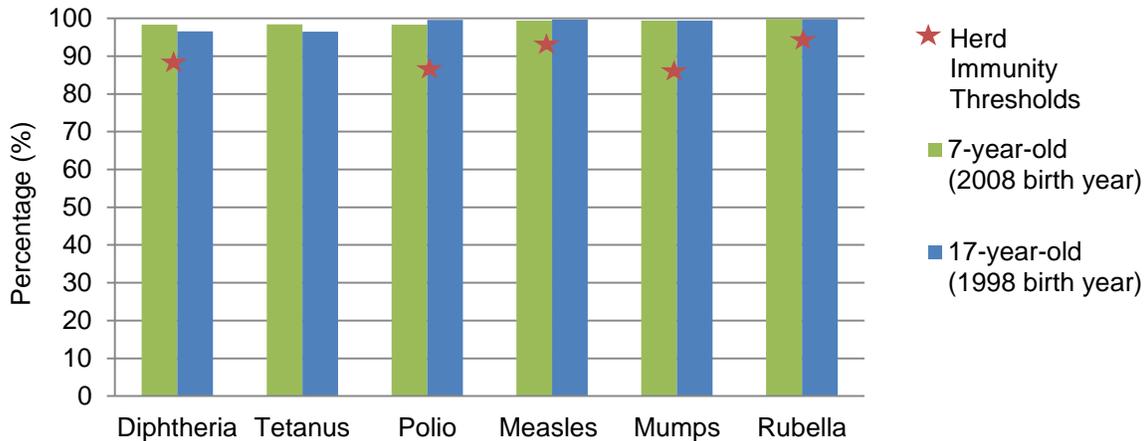
### Overall Student Compliance with ISPA



## Key Findings

- The overall percentage of students in compliance with ISPA is slightly greater among 7 or 8 years old (2008 birth year) as compared to 16 or 17 years old (1998 birth year).

### Student Compliance with ISPA by Disease



### Key Findings

- All ISPA designated diseases saw their immunization rates required for herd immunity achieved in HPEC during 2015-2016 school year. Please note that tetanus does not have a herd immunity threshold (refer to notes in herd immunity for more details).
- When looking at the types of vaccines with more detail, the compliance is higher among 17-year-olds for polio and MMR (measles, mumps and rubella), but lower in diphtheria and tetanus than among 7-year-olds.

### Percent of Students with Completed Immunizations for Hepatitis B, Meningococcal Disease (MCV4) and HPV in HPEC

Program	Target Grade	2015-2016 School Year	Target Coverage <sup>4</sup>
Hepatitis B	Grade 7	64	95
MCV4	Grade 7	79	90
HPV	Grade 8	52	90

### Key Findings

- The school-based program with the lowest coverage was HPV vaccine at 52%. The highest school-based coverage estimate was noted for meningococcal disease (79%), followed by Hepatitis B (64%). National vaccine coverage targets were not met for these school-based programs vaccines.
- Public health will prioritize and work with identified low compliance schools for the next school year to improve upon these findings.

## Notes

### **Herd Immunity** <sup>2</sup>

*Herd immunity* (or community immunity) occurs when a high percentage of the population is immune to a disease (through vaccination and/or prior illness), making the spread of this disease from person to person unlikely. This gives protection to vulnerable people such as newborns, elderly and those immune-compromised.

However, herd immunity does not protect against all vaccine-preventable diseases such as tetanus, which is infectious but not contagious. It is caught from bacteria in the environment, not from others who have the disease.

### **Data Sources**

*Panorama* is a provincial web-based information system to more efficiently manage immunization coverage, vaccine inventory, and cases and outbreaks of communicable diseases.<sup>3</sup>

*Panorama Enhanced Analytical Reporting (PEAR)* is an extension of Panorama that uses software to extract data and generate reports from Panorama.

## Reference:

1. Immunization of School Pupils Act, R.S.O.1990, c.I.1. Available from: <https://www.ontario.ca/laws/statute/90i01>
2. Association for Professionals in Infection Control and Epidemiology. 2015. Infection Prevention and You. Available from: [http://www.apic.org/Resource/TinyMceFileManager/for\\_consumers/IPandYou\\_Bulletin\\_Herd\\_immunity.pdf](http://www.apic.org/Resource/TinyMceFileManager/for_consumers/IPandYou_Bulletin_Herd_immunity.pdf)
3. Ministry of Health and Long-Term Care Population and Public Health Division. June 2016. Technical Document: Health Protection Indicators.
4. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Immunization Coverage Report for School Pupils: 2012-13 School Year. Toronto, ON: Queen's Printer for Ontario; 2014.