



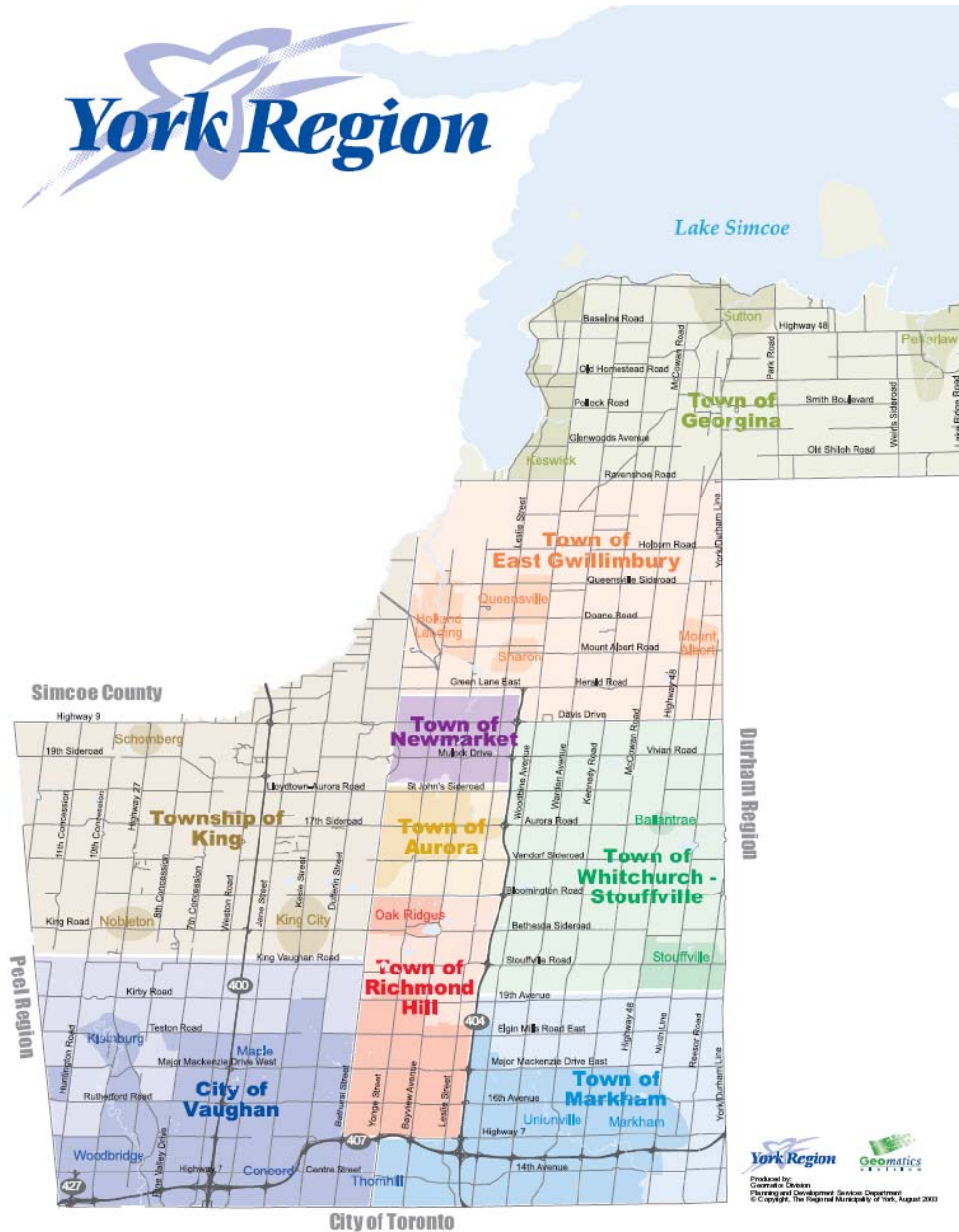
School Absenteeism Surveillance in York Region

Last revised – June 2010



Sentinel School Surveillance

- To monitor and collect data on student absenteeism rates due to illness in order to identify trends or clusters of illness within that school community
- This initiative is a joint collaboration between
 - York Region District School Board;
 - York Catholic District School Board; and
 - York Region Public Health Surveillance Unit
- It is estimated that for every 10 children who miss school for an influenza-related illness, 8 household members will subsequently become ill.



York Region

- Population = 1,016,379 (Population estimate 2009)
- 49 high schools*
- 250 elementary schools*
- Approximately 169,304 school age children enrolled*
- *combined data for 2009/10 school year Public and Catholic schools





School Absenteeism Surveillance

A brief York Region history

2005-06	<ul style="list-style-type: none">■ Pilot project begins – 8 participating schools■ Data collection includes respiratory and enteric syndromes■ Form faxed/emailed to Public Health on a daily/weekly basis
2007-08	<ul style="list-style-type: none">■ Introduction of daily electronic data reporting for all YRDSB elementary schools (1-day lag in data reporting)■ 9 participating schools continue to submit syndromic data by fax/email (1-2 day lag in data reporting)
2008-09	<ul style="list-style-type: none">■ Electronic data collection expanded to all York Region elementary schools (Public and Catholic) and all York Region Public secondary schools■ Sentinel syndromic data collection discontinued
2009-10	<ul style="list-style-type: none">■ Electronic data collection expanded to all York Region Public and Catholic schools



Syndromic Definitions

- **Breathing-related illness**

- Persistent cough, either dry or productive;
- Either a runny nose or nasal congestion; and/or
- Sore throat or hoarseness

- **Stomach-related illness**

- Diarrhea;
- Vomiting; and/or
- Stomach cramps

- **Other**

- Fever;
- Malaise;
- Lethargy; and/or
- Anything that does not fit into above categories



Data Analysis

Involves daily review of school-level data

Short-Term Outcomes

- Increased availability of relevant, timely, high quality, and representative data on student absences due to all illness
- Increased information and knowledge about geographical distribution of schools with higher reported student absenteeism
- Increased use of data in decision-making

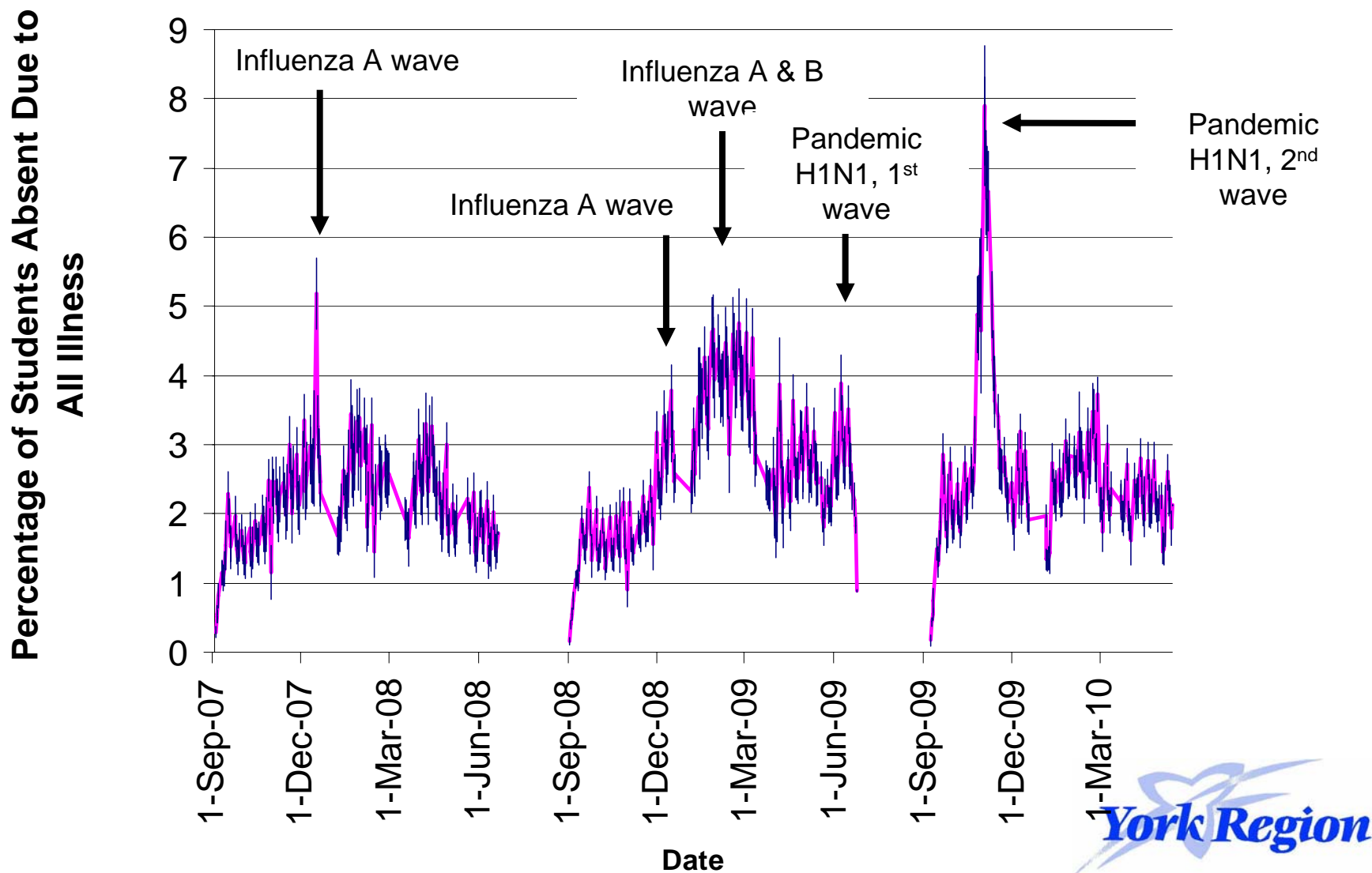
Intermediate Outcomes

- Increased policies, programs, and services supporting health enhancing behaviour; increase in synergy among programs and services

Long-Term Outcomes

- Decreased student absenteeism due to all illness
- Increased health promoting behaviours
- Increased supportive environments

Percentage of Student Absent Due to All Illness and corresponding laboratory confirmed waves of influenza cases in the community York Region (2007-08 to 2009-10)





School Absenteeism Surveillance - *Response (1)*

- Daily monitoring of absenteeism from all schools is maintained from downloads retrieved from the school boards.
- Epidemiologist reviews all absenteeism flags and investigates the possible cause for the higher level of absenteeism
- Should higher incidents of illness be confirmed, a request is sent to the Board requesting more specific absentee information
- Flagged school's absenteeism information is summarized and provided to Public Health management for review.
- If a child is identified as a positive high-risk case of disease, Public Health initiates case investigation and reviews school absenteeism data.



School Absenteeism Surveillance - *Response* (2)

- Further Public Health involvement is considered should one or more of the following triggers be met:
 - Abnormally high illness rate;
 - Known disease-related hospitalizations and/or death in a school;
 - Demonstration of fast, uncontrolled dissemination of disease in school; or
 - Demonstration of disease clustering in a specific classroom
- A Public Health investigator may visit the school to monitor the infection prevention and control practices in the affected area.
- Purpose is to assist the facility in breaking the chain of infection and preventing any further spread within the school community.
- Need for enhanced communications with a school community is jointly evaluated by the School Board, Public Health and York Region Communications.
- Requests for Public Health dispatch to a specific school are handled and evaluated on a case-by-case basis.



Summary

- School absenteeism rates have the potential of providing insight into patterns of less severe illness occurring among children, who do not seek medical attention, in close to a real-time setting.
- Introduction of automatic data extractions for all York Region District School Board and York Region Catholic School Board schools has greatly enhanced the scope of this initiative.
- Data from this initiative continues to allow York Region Public Health to detect moderate increases in school absenteeism during the school year that coincide with peak influenza activity in the community.
- School absenteeism data was particularly informative during Public Health's enhanced response to the 2009 pandemic influenza A (H1N1).