

Measles Outbreak 2015 and Ontario's Immunization System

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Presentation to Board of Health

June 29, 2015

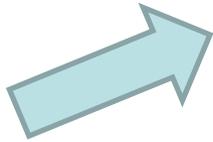
- 2015 Measles Outbreak
- Toronto Public Health's (TPH) Vaccine Preventable Diseases Program
- Legislative Requirements
- Challenges to Ontario's Immunization System

- Ontario measles outbreak began end of January 2015:
 - 19 confirmed cases
 - 10 in Toronto
- All 10 cases acquired the infection in Ontario and did not travel
- TPH investigated:
 - 10 confirmed cases
 - 140 suspect cases
 - 1548 contacts
- TPH held 10 post-exposure vaccination clinics
- Outbreak declared over on March 23, 2015

2015 Measles Outbreak – Example of Contact Follow Up



Adult with measles reported to TPH Jan 30, 2015



138 people exposed
135 high risk contacts



414 people exposed 119 high risk



Referred to another Public Health Unit

- Total cost of measles outbreak investigation and management to TPH: \$500,000
- This does not include indirect costs
- This outbreak illustrates challenges with Ontario's Immunization System despite provincial legislation and TPH's Vaccine Preventable Diseases Program

Ontario's Immunization of School Pupils Act:

- Immunizations are required for school-aged children to attend school in Ontario
 - Tetanus, diphtheria, polio, pertussis
 - Meningococcal disease
 - Measles, mumps and rubella
 - Varicella (for those born after 2010)
- Or have a valid exemption form

Child Care and Early Years Act (replaces Day Nurseries Act)

- Children attending day nurseries require proof of immunization as recommended by the local Medical Officer of Health

Toronto Public Health's Vaccine Preventable Diseases Program

1. Vaccination Monitoring

- a. School Immunization Assessment Program
- b. Day Nursery Program

2. Vaccine Administration

- a. School-based vaccination programs and catch-up clinics (hepatitis B, meningococcal, human papillomavirus)
- b. Community influenza clinics
- c. Outbreak response clinics

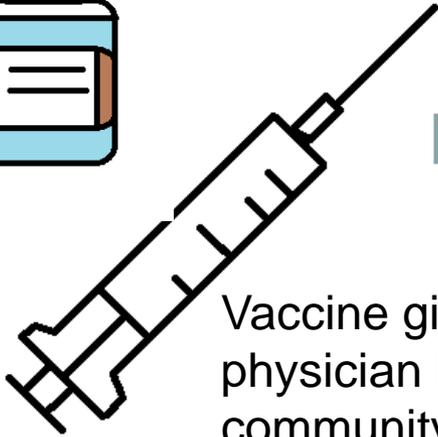
3. Vaccine Safety and Effectiveness

- a. Vaccine storage and handling
- b. Monitoring and follow-up of adverse events

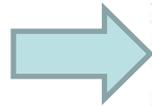
December 2014 :

1. Annual Report of the Office of the Auditor General of Ontario – Report on Value-for-Money Audit on Immunizations
2. Report of the Advisory Committee for Ontario's Immunization System Review

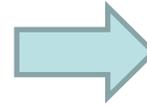
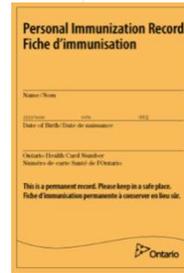
Current process for updating immunization records



Vaccine given by physician in community



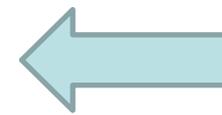
Parent given yellow card with vaccination record



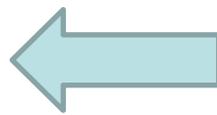
1st notice from TPH



2nd notice from TPH



3rd notice and Suspension order



Manual Data Entry by Public Health

No database for adult immunizations

Vaccine Hesitancy

- Concerns and misconceptions of vaccines which cause parents to delay immunization, question the vaccine, or refuse immunization for their children
- Mainstreet Technologies survey of 1,013 Canadian parents who did not vaccinate children with MMR vaccine:
 - 65% cited health reasons, 19% cited religious reasons
 - 79% still not likely to vaccinate child despite knowledge of recent measles outbreaks

Physician Consultation for a Philosophical Exemption

- Parents only need to complete a notarized form to get a philosophical/religious exemption for their child
- TPH recommends parents also have a form completed by a physician stating they are aware of the risks of not vaccinating their child

Travel Medicine Consultations and Vaccinations

- The 2015 measles outbreak likely resulted from an unidentified person importing the disease from abroad
- Travel medicine consultations and most travel vaccines are not publicly funded in Ontario
- Toronto Public Health (TPH) recommends the Ministry of Health and Long-Term Care fund medical consultations and vaccines required for international travel, to prevent the local spread of imported infections from returning travellers

Harmonize immunization requirements for school and daycare attendees

- Child Care and Early Years Act 2014 replaces the Day Nurseries Act
- TPH recommends that new regulations require children who attend day nursery to be fully immunized according to Ontario's publicly funded immunization schedule

- Outbreaks of vaccine preventable diseases are costly
- Illustrates inefficiencies in the provincial immunization system
- TPH's experience validates findings of recent provincial reports
- Imperative for Province to strengthen immunization system