



Hamilton

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MEDICAL ADVISORY

Continued Increase of Pertussis Activity in Hamilton

TO: Family Physicians
Emergency Departments
Infectious Disease Physicians
LTCH Administrators/Directors of Care
Medical Laboratories
Infection Control Professionals (**please inform Labs**)
St. Joseph's Centre for Ambulatory Health Services, Urgent Care

FOR YOUR INFORMATION:

Central West Medical Officers of Health
Academy of Medicine
Dr. Richard McLean, Vice-President, Medical Affairs, Hamilton Health Sciences
Dr. Peter Fitzgerald, President, McMaster Children's Hospital
Dr. David Russell, Chief of Staff, St. Joseph's Healthcare

FROM: Dr. Ninh Tran, Associate Medical Officer of Health

DATE: July 9, 2019

Hamilton Public Health Services (PHS) is notifying health care providers of continued increase of Pertussis activity in Hamilton. There have been 12 confirmed cases of Pertussis since mid-May 2019, with the majority of the cases occurring in persons aged 10-14 who were previously immunized.

PHS is recommending health care providers have heightened awareness for symptoms of pertussis in patients who are not fully immunized with pertussis containing vaccine, and additionally in those who were previously immunized if it has been 5 or more years since their previous vaccination. Due to waning immunity, previously immunized adolescents and adults may also be susceptible. Testing should be considered for those with clinically compatible signs and symptoms.

The purpose of this advisory is to review the signs and symptoms, diagnostic testing, treatment, as well as the recommended immunization schedule for Pertussis.

Pertussis Background

Symptoms include a catarrhal stage characterized by mild upper respiratory tract symptoms with a mild cough lasting 1-2 weeks. During the paroxysmal stage, cough increases in frequency and severity. Cough may be characterized as violent with or without an inspiratory whoop, commonly followed by vomiting. Fever may be absent or minimal. Young infants often have an atypical presentation and are at high-risk for serious complications.

Transmission is generally by direct contact with respiratory secretions of infected persons via droplets.

Incubation period: 9-10 days (range 6-20 days).

Period of Communicability: Highly communicable in the early catarrhal stage and beginning of the paroxysmal stage (first 2 weeks). Communicability gradually decreases and becomes negligible after about 3 weeks.

Isolation: Advise patients to self-isolate at home during the infectious period. Individuals are **no longer communicable after 5 days of effective antibiotic treatment.**

If you are seeing a patient with suspect Pertussis, **routine practices and droplet precautions** are recommended. Further information regarding infection prevention and control (IPAC) practices for clinical offices can be found at:

<https://www.publichealthontario.ca/en/health-topics/infection-prevention-control/clinical-office-practice>

Testing Recommendations

Persons under investigation for pertussis should have a nasopharyngeal (NP) swab obtained for PCR, ideally within the first 3 weeks of symptom onset. This can be performed in a physician's office using a *Bordetella pertussis* kit, obtained from the Public Health Ontario Laboratory.

The lab requisition should include symptoms, symptom onset date, exposure history and vaccination history. Indicate the tests are for Pertussis diagnosis. Further information regarding *Bordetella pertussis* "Specimen Collection and Handling" can be found at the Public Health Ontario Test Information Index

<https://www.publichealthontario.ca/en/laboratory-services/test-information-index/bordetella-respiratory>

Treatment:

Appropriate antibiotic treatment has been shown to decrease the period of time in which an infected individual is able to communicate it to others. As such, infected individuals should be prescribed appropriate antibiotics.

Immunization Recommendations (Publicly-funded):

The current schedule for acellular pertussis vaccine is 2, 4, 6, and 18 months, and booster doses at 4-6 years, and 14-16 years. All adults should also receive one dose of Tdap (Adacel[®]) vaccine if they have not previously received pertussis containing vaccines in adulthood.

Because immunity is known to wane, if it has been 5 or more years since receiving the vaccine, please consider giving the adolescent booster dose of Tdap (Adacel[®]) earlier, which should increase a person's level of protection. Administration of the 2, 4 & 6 month doses of acellular pertussis vaccine are critical in reducing infant mortality and hospitalization rates from pertussis.

Up-to-date vaccine status varies with age. Refer to the publicly funded immunization schedule for up to date information on the pertussis vaccine:

http://www.health.gov.on.ca/en/pro/programs/immunization/docs/immunization_schedule.pdf

For questions related to this medical advisory or to **report suspected or confirmed cases of Pertussis**, please contact the Infectious Disease Program at 905-546-2063, Monday through Friday, 8:30 a.m. to 4:30 p.m. After-hours, on weekends and holidays please call 905-546-2063 and ask to speak with the on-call Public Health Nurse.

Please call Public Health Services, **Vaccine Program** at **905-546-2424 ext. 7556** for questions about the Pertussis vaccine. To order Pertussis vaccine, physicians should use

their personalized Vaccine Order Form and fax it along with 4 weeks of logged (twice daily) current, minimum and maximum temperatures to **Vaccine Program Inventory** at **905-546-3472 (fax)**.