

**IN THIS ISSUE:**

- Increase in pertussis cases in Ontario including Peel
- COVID-19 has been updated on the list of reportable diseases

**FROM:**

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**Key Messages:**

- Increase in pertussis (whooping cough) cases in Ontario including Peel.
- Keep pertussis in your differential of persistent cough and test for *Bordetella pertussis*.
- Report suspected and confirmed cases of pertussis to Peel Public Health.
- Ensure patients are up to date with pertussis immunization.
- COVID-19 remains on the list of reportable diseases but is no longer considered a novel coronavirus.

**Increase in pertussis (whooping cough) cases in Ontario including Peel**

Public Health Ontario (PHO) has described an increase in pertussis cases in Ontario as of May 2024, with case counts above the pre-pandemic monthly five-year averages. Most cases have been between the ages of 10-14 years old. 47% of cases were unimmunized.

Peel has reported 12 cases of pertussis since the start of 2024. Previously, Peel has had an average of 2 cases per year. Summer camps have been a common source of exposure. As we anticipate the start of a new school year, ensure patients are up to date with pertussis immunization.

**Pertussis clinical presentation**

Keep pertussis on the differential diagnosis for persistent cough in adolescents and adults. Pertussis typically presents as:

- Catarrhal Stage: mild upper respiratory tract symptoms with a mild occasional cough lasting approximately 1-2 weeks.
- Paroxysmal Stage: increased severity and frequency of the cough which can last 1 to 2

months and sometimes longer; paroxysms are characterized by repeated violent coughs and high-pitched inspiratory whoop may occur, commonly followed by vomiting; fever is absent or minimal.

- Convalescent Stage: Gradual recovery period where the cough becomes less paroxysmal and disappears. This may take weeks to months.

Pertussis clinical course varies with age. In young infants, who are at the highest risk of most serious complications, clinical symptoms are frequently atypical. Pertussis presentation may also be atypical in adults or among persons previously immunized.

**Risk factors**

Pertussis is of most concern for infants as they are at the highest risk of severe disease. Pregnant women who become infected with pertussis in their third trimester (particularly during the last three weeks of pregnancy) are at risk of passing the infection onto their baby post birth.

A high proportion of adolescents and adults who are hospitalized with pertussis have underlying asthma or chronic obstructive pulmonary disease.

**Laboratory diagnosis**

Patients with signs and symptoms consistent with pertussis should be tested for the *Bordetella pertussis* bacteria via nasopharyngeal PCR swab. The optimal time to collect a sample for PCR testing is in the first three weeks of illness, while bacterial DNA is still present in the nasopharynx.

For more information on testing see PHO's website: [Bordetella - Respiratory - PCR | Public Health Ontario](#)

## Treatment

Macrolide antibiotics (erythromycin, azithromycin, and clarithromycin) are preferred for the treatment of pertussis. Antibiotics should be started as soon as possible after onset of illness. When administered early in the course of illness, antibiotics may shorten the duration of symptoms and decrease transmission to susceptible contacts. Treatment is particularly important for infants as they are most at risk for severe complications of infection.

Patients are no longer considered infectious after five days of appropriate antibiotic therapy or after 21 days post cough onset.

Note: Azithromycin is the preferred antimicrobial for infants < 1 month of age. Clarithromycin is not recommended during pregnancy as it is classified as a Category C drug.

## Pertussis contact management

Public Health attempts to follow up with all susceptible pertussis contacts. Contacts who are not up to date with their pertussis vaccinations should be offered vaccine according to the routine schedule. Regardless of immunization status, contacts should be advised to monitor for signs and symptoms of pertussis. In some cases, Peel Public Health may advise high risk contacts to take prophylactic antibiotics.

## Reporting Requirements

Pertussis is a reportable disease under the Health Protection and Promotion Act. Report suspected and confirmed cases immediately to Peel Public Health at 905 799-7700. Do not wait for laboratory confirmation.

## Vaccine recommendations for pertussis

Immunization is the best defence against pertussis. Adults are a main source of infection for infants who are not fully protected and at greatest risk for serious health outcomes.

Ensure patients are up to date with pertussis vaccination, especially those who are in regular

contact with infants and children (such as parents, grandparents, and childcare workers).

## Ontario pertussis vaccine program

Children	
2, 4, 6 and 18 months of age	DTaP-IPV-Hib (Pentacel®)
4-6 years of age	Tdap-IPV (Adacel®/Polio/Boostrix®/Polio)
14-16 years of age	Tdap (Adacel®/Boostrix®)
Adults ≥ 18 years	
One dose in adulthood	Tdap (Adacel®/ Boostrix®)
Pregnant person	
One dose every pregnancy (regardless of Tdap history) *	Tdap (Adacel®/ Boostrix®)

\*Tdap in pregnancy should ideally be administered between 27 and 32 weeks of gestation, refer to NACI's [Update on immunization in pregnancy with Tdap vaccine](#) for additional considerations related to timing of pertussis vaccine.

- Monovalent pertussis is not available in Canada.

Some children and adults may be on a catch-up schedule for the pertussis vaccine. Please refer to the [Publicly Funded Immunization Schedules for Ontario](#) for additional information.

## COVID-19 has been updated on the list of reportable diseases

The list of reportable diseases has been updated. COVID-19 remains a disease of public health significance on the list of [reportable communicable diseases](#) but is no longer considered a novel coronavirus. The public health focus has shifted from individual case management to supporting outbreaks in institutional settings and reporting on deaths of confirmed cases.