



Durham Region Health Department FAX about...

For Health Care Professionals



Pertussis (Whooping Cough)

The number of Pertussis cases in Ontario is increasing (see the [PHO Surveillance Report: Diseases of Public Health Significance Cases](#) published June 19, 2024). A similar trend is observed in Durham with a total of nine cases reported to date compared to zero cases in 2023.

Clinical Presentation

Pertussis is highly communicable, and infectivity is greatest during the catarrhal stage and during the first 2 weeks after cough onset.

The clinical course of pertussis progresses through three stages:

1. **Catarrhal Stage** - mild upper respiratory tract symptoms, including an occasional cough, that lasts approximately 1-2 weeks and then progresses to the next stage
2. **Paroxysmal Stage** - increase in the severity and frequency of the cough lasting 1 to 2 months or longer; paroxysms are characterized by repeated violent coughs (where the high-pitched inspiratory whoop may occur), commonly followed by vomiting; fever is absent or minimal
3. **Convalescent Stage** - gradual recovery period where the cough becomes less paroxysmal and disappears. This may take weeks to months.

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

Testing

If your patient presents with compatible signs and symptoms, order the following test (or search for "Pertussis" on the main PHOL website):

Test	Specimen type/volume	Collection Kit	Timing of collection
<i>Bordetella pertussis</i> detection (PCR)	Nasopharyngeal (NP) swab or NP aspirate, preferred Sputum (including induced) or tracheal aspirates are acceptable	<i>Bordetella pertussis</i> BP collection kit (order #390052)	Within the first 3 weeks of cough onset when bacterial DNA is present in the nasopharynx

Note: PCR testing is not recommended for asymptomatic patients because false-positive results are more likely in these individuals. Additionally, PCR testing following appropriate antibiotic therapy is not recommended as the exact duration of positivity is not well understood.

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Treatment

Treatment should be based on clinically compatible signs and symptoms of pertussis. Macrolide antibiotics such as azithromycin and erythromycin may prevent or moderate clinical pertussis when given during the incubation period or in the early catarrhal stage. During the paroxysmal phase of the disease, antibiotics may not shorten the clinical course but may reduce the possibility of complications.

In general, an individual should be considered infectious from the beginning of infection to 3 weeks after onset of coughing, if not treated with antibiotics. Patients are no longer considered contagious after 5 days of appropriate antibiotic treatment.

Vaccination

- Vaccinate patients who are not up-to-date with pertussis containing vaccine including:
 - Booster dose after completion of primary series for children between the ages of 4 and 6 years (as Tdap-IPV)
 - Booster dose to adolescents between the ages of 14 and 16 years (as Tdap)
 - One dose to adults ten years following adolescent booster dose (as Tdap and then moving to Td every ten years)
 - One dose of Tdap vaccine during pregnancy, ideally between 27 and 32 weeks of gestation

Reporting

Pertussis is a **reportable** disease in Ontario. Please continue to report any cases of pertussis to Durham Region Health Department.

- Phone: 905-668-2020 or 1-800-841-2729 ext. 2996
- Confidential Fax: 905-666-6215
- Access the Notification Form for Diseases of Public Health Significance at www.durham.ca/hcp (under Forms, Reporting) and fax the completed form.

June 24, 2024