
SUBJECT: Pertussis Circulation in the Community
Date: May 13, 2024
Pages: 2
To: Family Physicians, Nurse Practitioners, Hospitals
From: Dr. Nicola Mercer, Medical Officer of Health & CEO

Pertussis is circulating in communities within our region.

- **Please consider a low threshold for testing for pertussis in individuals seeking medical care with compatible respiratory symptoms.**
- **Ensure your medical offices have the appropriate specimen collection kits for *Bordetella pertussis* and check the expiry dates.**
- **Call WDG Public Health to report any suspect or confirmed cases of pertussis.**

Background

Wellington-Dufferin-Guelph (WDG) Public Health was recently notified of 3 lab-confirmed cases of *Bordetella pertussis* in vaccinated children within our region and an additional 3 secondary cases. At this time, we are unable to determine a common source for acquisition. Please consider a low threshold for diagnostic testing for pertussis in individuals seeking medical care for upper respiratory infections especially in:

- Children, staff, and families from St. John Catholic School in Arthur,
- John Black Public School in Fergus, and
- Individuals that participate in competitive hockey leagues.

Clinical Signs and Symptoms of Pertussis

Onset of mild upper respiratory symptoms (the catarrhal stage) usually occurs 9-10 days (range 6-20 days) after exposure. It is easy to miss the diagnosis during this stage as the symptoms are very nonspecific. Pertussis is highly infectious during this stage and is negligible after approximately 3 weeks.

This progresses to the paroxysmal stage over the next 1-2 weeks. Classic symptoms include repeated often violent coughing characterized by an inspiratory whoop and commonly followed by vomiting. Fever is **not** usually present during this stage. Symptoms in infants less than 6 months of age can be atypical and much more severe. Cough may last for 10 weeks or longer in adolescents.

Up to 80% of susceptible household contacts will develop pertussis, becoming a source of unrecognized infection for infants and young children.

Diagnosis of Pertussis

You must use a [specific nasopharyngeal swab collection kit](#) for *Bordetella pertussis* PCR specimens. These kits have a short expiration window, so please ensure that you have an unexpired supply. New kits can be [ordered directly from PHO](#). WDG Public Health does have a limited supply of kits available at our offices if you need kits urgently. The first three weeks of illness are the best time to test.

WDG Public Health Physicians Alert
Pertussis Circulation in the Community
May 13, 2024
Page 2 of 2

Refer to [PHO's Test Information Sheet for Bordetella – Respiratory](#) for additional testing information.

Treatment of Pertussis Cases

Macrolide antibiotics given early in the disease may ameliorate symptoms and will limit the spread of disease to others. Symptomatic individuals should not return to school, daycare, work or participate in group activities until the prescribed antibiotic has been taken for **5 days**. Cases are not infectious after 5 days of effective treatment.

Immunization

The current schedule for acellular pertussis vaccine is **2, 4, 6** and **18 months**, and booster doses at **4-6 years, 14-16 years** and **one adult** dose (typically given 10 years from the adolescent dose and with **every pregnancy** as per [Ontario's Publicly Funded Immunization Schedule](#)). The effectiveness of acellular pertussis vaccine wanes by 4-7 years following the most recent dose.¹

Reporting

Pertussis is a reportable disease. If you suspect a case of pertussis, please report to Wellington-Dufferin-Guelph Public Health immediately, **519-822-2715 ext. 4752**. After hours, weekends and holidays please call **1-877-884-8653**.

References:

1. Kevin L. Schwartz, Jeffrey C. Kwong, Shelley L. Deeks, Michael A. Campitelli, Frances B. Jamieson, Alex Marchand-Austin, Therese A. Stukel, Laura Rosella, Nick Daneman, Shelly Bolotin, Steven J. Drews, Heather Rilkoff and Natasha S. Crowcroft. Effectiveness of pertussis vaccination and duration of immunity. CMAJ.2016 Nov 01;188(16) E399-E406; DOI: <https://doi.org/10.1503/cmaj.160193>
2. Ontario Ministry of Health. Ontario Public Health Standards: Requirements for Programs, Services and Accountability Infectious Disease Protocol Appendix 1: Case Definitions and Disease-Specific Information Disease: Centers for Disease Control and Prevention. Pertussis (Whooping Cough)
https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/pertussis_chapter.pdf
3. Public Health Ontario. Test Information Index. Bordetella-Respiratory.
<https://www.publichealthontario.ca/en/Laboratory-Services/Test-Information-Index/Bordetella-Respiratory>

For more information, please contact:

Name/Title: Lilliana Marinko, Manager, Infectious Diseases Team
Email: lilliana.marinko@wdgpublichealth.ca
Website: www.wdgpublichealth.ca