Increase in Pertussis Cases Circulating in York Region

Update as of June 25, 2024

Multiple jurisdictions in Canada are currently seeing pertussis outbreaks. In particular, Quebec, Alberta and Ontario have all reported a rise in cases. In York Region (YR), there have been 16 pertussis cases to date in 2024, and four of these cases were in children under the age of one. The rate of pertussis in YR has been steadily increasing since late 2023 and has rebounded to levels seen prior to the pandemic (2019).

Pertussis, commonly known as whooping cough, is a highly contagious, vaccine-preventable disease (VPD) that infects the lungs and airways. Anyone can become ill with pertussis, but morbidity and mortality rates are highest in infants during their first two months of life with a case fatality rate of approximately 2%. Serious complications of pertussis include pneumonia, atelectasis, seizures, encephalopathy and death.

Pertussis Clinical Features

Consider pertussis infection in the differential diagnosis for patients presenting with an acute cough lasting for 14 days or more plus one or more of:

- Paroxysmal cough; (attacks occur frequently at night and increase in frequency during the first 1-2 weeks).
- Post-tussive vomiting;
- Inspiratory whoop;
- Note in young infants, a characteristic whoop is often absent, and may instead present with periodic apnea.

OR someone with signs or symptoms consistent with pertussis who has been in contact with an individual diagnosed with pertussis in the last 21 days. Initial signs and symptoms are typically characterized by mild upper respiratory tract symptoms (mild cough, coryza, low-grade fever), which typically lasts for a week or two.

Early treatment of pertussis with a macrolide can reduce severity and prevent transmission.

Pertussis Testing

Please consider pertussis in any differential diagnosis of patients presenting with a persistent cough lasting more than two weeks. <u>Test</u> any patients with signs and symptoms of pertussis within three weeks of symptom onset by polymerase chain reaction (PCR) to confirm the diagnosis. Specimens should be collected via NP swab, using the <u>BP collection kit</u>. Be sure to report all probable and confirmed cases to <u>York Region Public Health</u>.

Tetanus, Diphtheria, Pertussis (Tdap) Vaccination

With increasing rates of pertussis circulating, routine Tdap vaccination of your patients is very important. Vaccination will provide protection for about five to six years, after which immunity begins to wane. Please ensure all patients stay up-to-date on their Tdap vaccinations. See Ontario's Immunization Schedule for more details.



Ontario Tetanus, Diptheria, Pertussis (Tdap) Immunization Schedule

Age Vaccine	2 Months	4 Months	6 Months	1 Year Φ	15 Months	18 Months	4 Years	Grade 7	14 Years	24 Years	≥34 Years Y	65 Years	
DTaP-IPV-Hib Diphtheria, Tetanus, Pertussis, Polio, Haemophilus influenzae type b	•	•	•			•							
Tdap-IPV Tetanus, diphtheria, pertussis, Polio							•						
Tdap Tetanus, diphtheria, pertussis									•	•			
Tdap Tetanus, diphtheria, pertussis								 One dose in every pregnancy, ideally between 27-32 weeks of gestation 					

Additional Resources:

- Public Health Management Considerations for Pertussis (publichealthontario.ca)
- Pertussis (whooping cough) vaccines: Canadian Immunization Guide Canada.ca
- Improving Vaccination uptake in pregnant Canadians: A toolkit for Heatlh PRofessionals (immunize.ca)

Thank you for keeping our families and communities safe and protected.