

ALERT: Pertussis (Whooping Cough)

June 8, 2012

Pertussis is circulating in our community. The Peterborough County-City Health Unit has investigated three confirmed and two probable cases of pertussis recently. The onset date of symptoms ranged from March to May, 2012. All the cases are children ranging in age from < 1 year to 18 years old. Some of the cases are epidemiologically linked. **Over the past few months, there has been an outbreak of pertussis reported across six southwestern Ontario Health Units.**

What physicians/nurse practitioners need to do:

1. Report all suspected or confirmed cases of pertussis to the Health Unit at 705-743-1000.
2. Obtain a nasopharyngeal swab using a *Bordetella pertussis* (bp) kit. Check expiry date of kit. These kits can be ordered from the Peterborough Public Health Laboratory 705-743-6811.
3. Check that pertussis immunization is current. Refer to the [Publicly Funded Immunization Schedule for Ontario](#) for details. (NOTE: A single lifetime booster dose of Tdap is recommended for adults (19 to 64 years of age) who have not previously received a dose of acellular pertussis vaccine during adolescence.)

Pertussis is an acute bacterial infection that attacks the tracheobronchial tree and is divided into three stages:

- 1) Catarrhal Stage is characterized by mild upper respiratory tract symptoms with a mild occasional cough that lasts approximately 1-2 weeks and then progresses to the next stage;
- 2) Paroxysmal Stage presents with an increase in the severity and frequency of the cough; paroxysms are characterized by repeated violent coughs and this is where the high pitched inspiratory whoop may occur commonly followed by vomiting and can last 1 to 2 months; fever is absent or minimal, and
- 3) Convalescent Stage is the gradual recovery period where the cough becomes less paroxysmal and disappears. This may take weeks to months. Complications among adolescents and adults include syncope, sleep disturbance, incontinence, rib fractures and pneumonia. Pertussis is most severe when it occurs in infants under 6 months.

Transmission occurs by direct contact with discharges from respiratory secretions of infected persons via droplets. The incubation period is usually 7 to 10 days (range 5 to 21 days). Pertussis is highly communicable in the early catarrhal stage and beginning of the paroxysmal stage (first two weeks) and then communicability gradually decreases and becomes negligible in about three weeks. Individuals are no longer communicable after five days of effective treatment.

Non-immunized or partially immunized individuals are susceptible to pertussis. Previously immunized adolescents and adults (due to waning immunity) may also be susceptible. These individuals often are a source of infection for young children. Infection does not induce long term immunity. Secondary attack rates can occur, of up to 90% in non-immune household contacts.

Treat with antibiotics. Antibiotics should be administered as soon as possible after onset of illness; all symptomatic cases of pertussis whose culture or PCR results are positive **SHOULD BE TREATED REGARDLESS OF TIME BETWEEN SYMPTOM ONSET AND DIAGNOSIS.** Advise cases to avoid contact with young children, infants, and women in their third trimester of pregnancy, especially those who have not been immunized, until the completion of five days of appropriate antibiotic therapy or 21 days post cough onset. Advise symptomatic individuals to remain at home until after five complete days of appropriate antibiotic therapy.

Source: [Infectious Disease Protocol, 2009](#)

For more information, contact Vaccine Preventable Disease Nurses at 705-743-1000.

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