



Community Medicine Newsletter

Pertussis Outbreak Alert:

There is an outbreak of pertussis (whooping cough) in communities in the vicinity of Hope and Chilliwack. Over 100 cases ranging in age from 2 months to 72 years have been reported since December 2011. Over one third of these cases are among Aboriginal individuals. Most cases have been fully immunized, but received their last pertussis booster more than five years ago. The outbreak has not spread to the Vancouver Coastal Health region, but one to three sporadic cases per month have been reported here. However, not all cases of pertussis are reported, so community activity may be higher. **Please be alert for patients with symptoms of pertussis.**

Clinical Presentation: Pertussis is a bacterial infection causing prolonged (up to three months) cough and can be fatal in infants under one year of age. Suspect pertussis in a patient who has a paroxysmal cough of any duration, a cough with an inspiratory whoop, or cough ending in vomiting or gagging or associated with apnea. Pertussis should also be suspected in patients with prolonged cough with no other known cause.

Lab Diagnosis: If you suspect pertussis, **please test the patient using a nasopharyngeal swab.** A throat swab cannot be used to diagnose pertussis. To collect a nasopharyngeal swab, you need a **Pertussis Collection Kit.** If you do not have these in your office, you can order them (for free) the Provincial Laboratory by faxing (604-707-2606) the order form found at:

<http://www.phsa.ca/NR/rdonlyres/357FE8D0-2020-4A34-9416-8C3B12C4F2C3/0/SampleContainerOrderForm.pdf>

Detailed instructions for collecting a nasopharyngeal swab can be found at:

http://www.phsa.ca/NR/rdonlyres/5E73E66A-EBA4-4575-A8EF-BE8FA920C677/0/PertussisCollectionInstructions_Mar2003.pdf

Treatment: All individuals with pertussis should be treated with antibiotics. Please see table on the following page for treatment recommendations. While antibiotics do not decrease the duration of illness, they will reduce the infectious period from 3 weeks to five days. Cases of pertussis should stay home for 5 days after antibiotic treatment has started.

We do not recommend antibiotics for most **contacts** of pertussis. However, **those exposed to pertussis who are at highest risk of complications should receive preventive antibiotic treatment. These are:**

1. **infants less than one year of age and their household and childcare contacts and,**
2. **All pregnant women in the last 3 months of pregnancy and their household or childcare contacts.**

Immunization: This is a good opportunity to ensure your patients' pertussis immunizations are up-to-date. Acellular pertussis vaccine is part of the routine immunization schedule in BC and is given at 2, 4, 6, 18 months of age, at 4-6 years of age and in grade 9. **It is particularly important at this time that infants' immunization against pertussis is not delayed so vulnerable infants can be protected at the earliest opportunity.**

The National Advisory Committee recommends a single adult dose of acellular pertussis vaccine (Adacel). Since this is not a publicly funded program in BC, most adults have not had this dose. However, the vaccine is recommended, is available for purchase, and is of **particular importance for those in contact with infants under 18 months of age and pregnant women. (Don't forget yourself and your staff, if not already vaccinated with Adacel.)**

Aboriginal communities in the VCHA region: Since over one third of cases in the Fraser Valley are among Aboriginal people, and at this time of year, there are a large number of traditional gatherings taking place, there may be an increased risk of pertussis among local Aboriginal communities. To prevent outbreaks, **a pertussis booster (Adacel) is now recommended and provided for free for all Aboriginal children and adults who have not received a pertussis containing vaccine in the past five years. Practically, this applies to students in grades 6, 7, and 8 and adults 20 years and older.** Publicly funded vaccine from your health unit can be used for these patients.

If you require further information, please contact the nurse on call at 604-983-6700.

11.1 Pertussis Treatment and Chemoprophylactic Agents – Dosage Summary

For detailed information, refer to individual information pages for each antibiotic.

AGE	AZITHROMYCIN	ERYTHROMYCIN	CLARITHROMYCIN	TRIMETHOPRIM - SULFAMETHOXAZOLE (alternative agent)
< 1 month	Recommended agent. 10 mg/kg per day in a single dose for 5 days	Not preferred. Erythromycin is associated with infantile hypertrophic pyloric stenosis. Use if azithromycin is unavailable: 40 mg/kg/day po (maximum 1 gm/day) divided in 3 doses for 7 days	Not recommended (safety data unavailable).	Contraindicated for infants aged < 2 months (risk for kernicterus).
1 – 5 months	10 mg/kg per day in a single dose for 5 days	40 mg/kg/day po (maximum 1 gm/day) divided in 3 doses for 7 days	15 mg/kg/day po (maximum 1 gm/day) divided in 2 doses for 7 days	Contraindicated for infants aged < 2 months (risk for kernicterus) Children 2 months to ≤ 12 years of age: Trimethoprim 4 mg/kg and Sulfamethoxazole 20 mg/kg po twice a day for 14 days (maximum Trimethoprim 160mg and Sulfamethoxazole 800mg twice daily)
≥ 6 months to ≤ 12 years	10 mg/kg/day po (maximum 500 mg) once for 1 day, then 5 mg/kg/day po (maximum 250 mg/day) once daily for 4 days	40 mg/kg/day po (maximum 1 gm/day) divided in 3 doses for 7 days	15 mg/kg/day po (maximum 1 gm/day) divided in 2 doses for 7 days	Children 2 months to ≤ 12 years of age: Trimethoprim 4 mg/kg and Sulfamethoxazole 20 mg/kg po twice a day for 14 days (maximum Trimethoprim 160mg and Sulfamethoxazole 800mg twice daily)
> 12 years	500mg po once for one day then 250mg po once daily for 4 days	40 mg/kg/day po (maximum 1 gm/day) divided in 3 doses for 7 days	1 gm/day divided in 2 doses for 7 days Not recommended in pregnancy	Adults and children over 12 years of age: Trimethoprim 160 mg and Sulfamethoxazole 800 mg po twice a day for 14 days Not recommended in pregnancy

Sincerely,



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