
PERTUSSIS IN OREGON, 2003

INFORMATION AND GUIDELINES FOR CLINICIANS

How contagious is pertussis?

1. Pertussis cases are *contagious* for the first two weeks of illness (during the catarrrhal period when cases have cold-like symptoms), before the onset of the classic paroxysmal whooping cough. Cases are contagious, though less so, for up to three weeks after the paroxysmal cough begins.
2. Pertussis is not airborne; it is spread by respiratory droplets that tend to fall to the ground a few feet from a person coughing, laughing, talking, shouting or singing.
3. Pertussis is quite contagious among "close contacts," usually:
 - a. everyone who lives with the case;
 - b. persons who were face-to-face and within "spitting distance" of a case for more than one hour while the case was contagious (*above*);
 - c. persons who had direct contact with respiratory, oral, or nasal secretions while the case was contagious (*above*).

How good is the current pertussis vaccine?

1. The four-dose series of acellular pertussis vaccination protects about 80% of recipients from pertussis.
2. Immunity wanes after 5–10 years, so that most adolescents and adults are susceptible.
3. Vaccination does not guarantee that the recipient will not be colonized with *Bordetella pertussis*.

4. Vaccine is only recommended for children under seven years of age.

Whom should I test for pertussis?

1. Anyone with an acute cough of at least 2 weeks' duration.
2. Close contacts of a known case with an acute cough of any duration.
3. Any person in whom pertussis is highly suspected clinically — e.g., because of cough with whooping or lymphocyte count >20,000/ μ l.

Who should be isolated and how?

1. Cases should be isolated at home until the correct antibiotic (*below*) has been taken for at least 5 days.
2. Inadequately immunized household contacts <7 years of age should be excluded from school and day care for 21 days after the last exposure, or until cases and contacts have each received \geq 5 days of antibiotic therapy.

Who should get prophylaxis?

1. *Close contacts* should receive one of the following antibiotics:

Azithromycin \times 5 days

Adults, 500 mg p.o. on day 1; then 250 mg p.o. q.d. on days 2–5
Children \geq 6 months of age, 10–12 mg/kg/d in single dose on day 1, then 5 mg/kg/d p.o. q.d. on days 2–5

Erythromycin \times 14 days

Adults, 500 mg p.o. q.i.d.
Children, 40–50 mg/kg/d p.o. in 4 divided doses, maximum 2g/d.
If child is <6 weeks of age, inform parents of potential for developing infantile hypertrophic pyloric stenosis.

Trimethoprim-sulfamethoxazole (TMP-SMX) × 14 d

Adults, 1 double-strength tabs p.o. b.i.d.

Children ≥2 months of age, 8 mg/kg/d TMP component in 2 divided doses.

Clarithromycin × 10 d

Adults, 500mg p.o. b.i.d.

Children ≥6 months of age, 15–20 mg/kg/d p.o. in 2 divided doses, maximum 1g/d.

2. *Close contacts <7 years of age* who have completed the primary series but have not had a dose within 3 years should receive a dose of DTaP (see note on contraindications *below*). Close contacts <7 years old of age who have not had the 4-dose primary vaccination series should get it (with the minimal intervals between doses).

Contraindications include serious allergic reaction to a component of the vaccine, or encephalopathy occurring within 7 days after vaccination and not due to another identifiable cause.