PERTUSSIS CASE AND OUTBREAK 'QUICKSHEET'

California Department of Health Services—February 2004

Infectious agent: *Bordetella pertussis* (a bacterium)
Mode of transmission: Transmission most commonly occurs by contact with respiratory secretions or large droplets from the respiratory tracts of infected persons.
Incubation period: The incubation period is commonly 7-10 days (range 4-21 days), rarely up to 42 days.
Period of communicability: Persons with pertussis are most infectious during the catarrhal stage when they have cold-like symptoms and up to 2-3 weeks after onset of paroxysmal cough. With antibiotics, communicability ends after 5 days of treatment.

CDC CASE DEFINITION AND CLASSIFICATION (*for purposes of public health reporting*)

Clinical case definition: A cough illness lasting at least 2 weeks with one or more of the following: paroxysms of coughing, inspiratory "whoop", post-tussive vomiting, AND without other apparent cause.
Laboratory Criteria for Diagnosis: Isolation of *B. pertussis* from clinical specimen or positive polymerase chain reaction (PCR) test for *B. pertussis*.

Case Classification (both probable and confirmed cases should be reported)
Probable: A case that meets the clinical case definition, is not laboratory confirmed, and is not epidemiologically linked to a laboratory confirmed case.
Confirmed: A case that is culture positive and in which an acute cough illness of any duration is present; OR a case that meets the clinical case definition and is confirmed by positive PCR; OR a case that meets the clinical case definition and is epidemiologically linked directly to a case confirmed by either culture or PCR.

CLINICAL FEATURES

The illness usually has three stages: catarrhal, paroxysmal, and convalescent.
Catarrhal stage: Onset of cold-like symptoms (coryza, sneezing, mild fever, occasional cough). Fever is absent or minimal. Lasts approximately 1-2 weeks with cough gradually becoming more severe.
Paroxysmal stage: Spasms of severe coughing are followed by a sudden massive inspiratory effort. A characteristic whoop may occur as air is inhaled forcefully through a narrowed glottis. Post-tussive vomiting is common. In infants < 6 mos, whoop is rare and other respiratory manifestations are commonly confused with those due to respiratory viruses. Adolescents/adults are likely to have milder illness and whoop is uncommon.
Convalescent stage: The convalescent stage is characterized by a decreasing frequency and severity of coughing episodes, whooping and vomiting. Some cases have temporary recurrence of paroxysms with respiratory infections.

RECOMMENDED TREATMENT AND CHEMOPROPHYLAXIS*

Drug	Infants and Children	Adults
Erythromycin	40-50 mg/kg/day- div.q6h po or iv (max 2 g/d) x 14 days	1-2 g/day – div.q6h po or iv (max 2 g/d) x 14 days
If person can not tolerate erythromycin or compliance is questionable:		
Trimethoprim/ Sulfamethoxazole (TMP-SMX)	trimethoprim 8 mg/kg/day, sulfamethoxazole 40 mg/kg/day - div.q12h po x 14 days	trimethoprim 320 mg, sulfamethoxazole 1600 mg – div.q12h po x 14 days
Clarithromycin	15-20 mg/kg/day - div.q12h po (max 1 g/d) x 7days	15-20 mg/kg/day - div.q12h po (max 1 g/d) x 7 days
Azithromycin	10-12 mg/kg/day po (max 500 mg/d) x 5 days	500 mg/day day 1 250 mg/day days 2-5

*Initiating treatment ≥ 3 weeks after cough onset has limited benefit to patient or contacts and initiating chemoprophylaxis ≥ 3 weeks after exposure has limited benefit for the contact.