



## PERTUSSIS FACT SHEET For Medical Providers

Pertussis (whooping cough) can occur at any age. Severe illness is more common in infants who have not been fully immunized. A history of immunization **does not** preclude the diagnosis.

**Incubation period:** 6 to 20 days (usually 7-10 days).

### Symptoms

Early: nasal congestion, tearing, mild conjunctival injection, malaise, followed by development of an initially mild cough. The cough becomes severe; **may** see inspiratory whoop, cyanosis, and/or posttussive gag/vomiting. These symptoms are most severe in children <1 year. Residual coughing may last 2 months or longer.

### Diagnosis

Culture of nasopharyngeal secretions is the “gold standard” for the diagnosis of pertussis. A dacron swab should be used and throat swabs are not acceptable specimens for culture. Direct fluorescent antibody (DFA) stains can provide rapid, presumptive diagnosis, but false positives and false negatives can occur. Polymerase chain reaction (PCR) performed at a reliable lab is rapidly becoming the diagnostic method of choice. The Nevada State Public Health Laboratory is the only lab in Nevada capable of PCR testing for *B. pertussis*. For more information on PCR testing, please call the Nevada State Public Health Laboratory at (775) 688-1335. For the best diagnostic yield, the specimens should be obtained within the first two weeks of infection and before the patient receives antibiotics. A negative DFA and/or a negative culture does not rule out pertussis.

### Treatment

**Erythromycin** is the drug of choice: 40-50 mg/kg per day orally in four divided doses (max 2g/day) for 14 days.

Newer macrolides, azithromycin and clarithromycin are highly active against *B. pertussis* in vitro. The American Academy of Pediatrics Committee on Infectious listed the following alternatives in the 2000 Red Book as alternatives for patients who cannot tolerate erythromycin:

### Azithromycin

- Children- 10 mg/kg (max 500mg/d) orally on day 1 followed by 5 mg/kg per day (max 250mg/d) once daily for days 2-5 (The Red Book does not specify a loading dose nor length of course; however this is the standard pediatric dose)
- Adults- 500 mg oral loading dose on day 1 followed by 250 mg orally once daily for days 2-5

**Clarithromycin** is a possible alternative. Consult the AAP 2000 Redbook and the Physicians Desk Reference.

In addition, **trimethoprim-sulfamethoxazole** is a possible alternative. Consult the AAP 2000 Redbook and the Physicians Desk Reference.

**Antibiotic prophylaxis should be administered to all household and other close contacts of persons with pertussis, regardless of age and vaccination status.**

### Additional prevention measures:

All close contacts <7 years of age who have not completed the 4-dose primary series of pertussis vaccine (DTP or DTaP) should complete the series with the minimum intervals. Close contacts <7 years of age who have completed a primary series but have not received a dose of vaccine within 3 years of exposure should be given a booster dose.

Symptomatic persons should be considered contagious until 3 weeks after the onset of cough and should be excluded from school, daycare, or employment until after receiving antimicrobial therapy for 5 days. Healthcare workers with pertussis, or health-care workers who are symptomatic after exposure to a case, should be relieved from direct patient contact from the beginning of the symptoms through the third week after onset of paroxysms or until 5 days after the start of effective antibiotic therapy.

### Further questions?

For questions or to report a confirmed or suspected case of pertussis, please contact the Washoe County District Health Department Communicable Disease Program at **328-2447**.