

## **Pertussis Alert**

Disease patterns continue to show an increase in pertussis cases in younger, high risk age groups (age range from 2 weeks through 4 years). In November and December 2009, the Austin/Travis County Health and Human Services Department (ATCHHSD) identified 168 probable and confirmed pertussis cases and we are currently investigating an additional 94 suspect pertussis cases.

The ATCHHSD would like you to increase your clinical suspicion for pertussis in the differential diagnosis when appropriate – including in evaluation of immunized patients with mild illness. If you clinically suspect pertussis, especially if epidemiologically linked to a confirmed case, please consider appropriate pertussis treatment during that initial visit even before obtaining the lab results. Also, please make extra effort to ensure that all patients are up-to-date on their immunizations.

The Texas Department of State Health Services advises that pertussis should be considered when evaluating any patient with an acute cough illness characterized by one or more of the following symptoms: prolonged cough, cough with paroxysms, whoop, or post-tussive gagging/vomiting. Infants may present with apnea and/or cyanosis. An increased white blood cell count with lymphocytosis is a characteristic but nonspecific finding. Adults, teens, and vaccinated children often have mild symptoms that mimic bronchitis or asthma.

Laboratory tests should be used in conjunction with clinical symptoms for diagnosis and can be used to confirm but not rule out pertussis. The organism is more likely to be found early in the coughing phase. After three to four weeks in the disease process the organism may have cleared the nasopharyngeal area.

If you clinically suspect pertussis:

- Report immediately to your local health authority
- Submit specimens for laboratory confirmation. The preferred laboratory test for confirmation of pertussis is isolation of *Bordetella pertussis* by culture. Polymerase chain reaction (PCR) testing is also available in some labs, and is considered confirmatory when consistent with a clinical diagnosis.
- Begin chemoprophylaxis of patient and all household and close contacts *regardless of age or vaccination status*.
- Review immunization records for children less than 7 years of age. Children in this age group who have not completed the DTaP four dose primary series should complete the series with minimal intervals. Those who have completed the primary series should be given a booster dose if their last dose of DTaP was given more than three years ago.

Treatment of suspects and contacts may include either erythromycin or trimethoprim/sulfamethoxazole administered for 14 days. If these drugs are not tolerated, clarithromycin or azithromycin can be substituted. Symptomatic children and/or adults may return to school or work after completing the first 5 days of medication.

Pertussis immunity is not absolute (100%) and may not prevent infection. Older children and adults with mild illness can transmit the infection and are often the source of illness in infants. Therefore, early recognition and treatment of pertussis in contacts of young infants and prophylaxis of their household members is especially important.

For further questions please contact the Epidemiology and Disease Surveillance Unit at 512-972-5555 or contact the Texas Department of State Health Services at 800-705-8868 or 800-252-9152 with questions or to report a known or suspected pertussis case.