



## TEXAS DEPARTMENT OF STATE HEALTH SERVICES

DAVID L. LAKEY, M.D.  
COMMISSIONER

P.O. Box 149347  
Austin, Texas 78714-9347  
1-888-963-7111  
TTY: 1-800-735-2989  
[www.dshs.state.tx.us](http://www.dshs.state.tx.us)

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Dear Colleague:

Pertussis is a serious disease. The Texas Department of State Health Services (DSHS) has received a significant increase in reported cases of pertussis in 2012. The increased pertussis morbidity as well as the increase in mortality in Texas is a compelling health issue for both the public and private healthcare systems. DSHS urges clinicians to offer pertussis vaccine to all their patients, especially pregnant women. Clinicians should also consider a pertussis diagnosis in any coughing patient. Pertussis should be diagnosed using polymerase chain reaction (PCR). Preventing pertussis in all patients can help to save the lives of the most vulnerable, infants who are too young to be vaccinated.

Prompt reporting by clinicians, schools, hospitals, laboratories, and childcare facilities allows health departments ample time to identify cases and contacts and prevent further transmission.

We appreciate the dedicated efforts of clinicians to help reduce or eliminate vaccine-preventable diseases. Attached is an information sheet with additional details.

Sincerely,

A handwritten signature in black ink that reads "David Lakey MD".

David L. Lakey, M.D.  
Commissioner

## Pertussis in Texas

### Epidemiology

As of August 23, 2012 there have been 1,099 cases this year of pertussis reported to the Centers for Disease Control and Prevention (CDC) for Texas. This surpasses the 2011 case count of 961. It is important to note that pertussis is not evenly distributed within the state. Of the 254 counties in Texas, pertussis has been reported in 87 (34 percent) counties. The most notable increases have been seen in Hidalgo, Bell, McLennan, El Paso, Cameron, Midland, Wichita, Winkler, Jim Wells, San Patricio, Coryell, Falls, and Palo Pinto Counties. These counties have all reported more cases than would be expected for an entire year.

There have also been five deaths in the state so far in 2012, which is higher than expected for the number of cases reported. Four of these deaths occurred in infants under two months of age, which is when the first dose of vaccine is recommended. The fifth death occurred in an unvaccinated child with extensive pre-existing conditions. Approximately 12 percent of cases have required hospitalization and over 80 percent of the hospitalizations were in children under one year of age.

While children under one year of age continue to make up the largest percentage of pertussis cases (25 percent in 2012), the percentage of cases in the 10-14 year age group has doubled from nine percent in 2011 to 18 percent so far in 2012. This trend is also being seen nationally. Five to nine year olds are also an important age group as they comprise 20 percent of cases this year.

### Diagnosis

The preferred method of diagnosing pertussis is by polymerase chain reaction (PCR) from a nasopharyngeal swab. All patients (children and adults) suspected of having pertussis should be tested using PCR. Patients with no symptoms of pertussis, even if they have been exposed to pertussis, should not be tested. PCR testing is widely available at many hospitals, private labs and at the DSHS laboratory. More information on pertussis PCR testing can be found at:

<http://www.cdc.gov/pertussis/clinical/downloads/diagnosis-pcr-bestpractices.pdf>

There is no consensus on how to interpret serological results for pertussis, so PCR testing is preferred.

Because of the increase of pertussis in 10-14 year olds, children in this age group that present with coughing or cold-like symptoms should be evaluated for pertussis. Remember, older children, adolescents and adults may not present with classic symptoms, such as the “whooping” sound after bouts of coughing.

### Reporting

Any patient that is suspected of having pertussis, regardless of lab result, should be reported to the local health department. Patients should be reported to the health department as soon as they are suspected of having pertussis. Waiting for a confirmatory lab result can lead to delays in identifying contacts and arresting transmission.

Patients that have confirmed or suspected pertussis should be advised not to return to work or school until five days of appropriate antibiotic therapy have been completed. The State of Texas mandates that children not return to school until five days of antibiotic therapy have been completed. According to the American Pediatric Society, macrolides are the drugs of choice for treating pertussis patients and prophylaxing their contacts.

### **Preventing Infant Death**

Because infants are the most vulnerable to pertussis, every effort must be undertaken to protect them from exposure. To that end, following the Advisory Committee for Immunization Practices (ACIP), **CDC recommends vaccinating all pregnant women with Tdap (Tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine) in the third trimester (any time after 20 weeks)**. Mothers are the most common source of pertussis infection for infants. Ensuring all women are immune to pertussis at the time of delivery will help to ensure their infants are protected from pertussis while they are most vulnerable.

In addition to vaccinating pregnant woman, **any adult that might have contact with an infant, including healthcare workers, should be vaccinated with Tdap**. For children and adolescents, staying current with the pertussis vaccination schedule can help prevent transmission to infants.

### **Immunization**

Vaccination is the best method to protect people from getting pertussis. The current pertussis vaccine recommendations for children are a dose of DTaP (diphtheria-tetanus-acellular pertussis) at two, four and six months of age and then a fourth dose at 15-18 months. A booster dose of DTaP is recommended at four to six years of age. DTaP is licensed for use in persons six weeks to six years of age.

ACIP recommends a single Tdap dose for adolescents 11-18 years (preferably given at 11-12 years) who have completed the recommended childhood diphtheria, tetanus and pertussis vaccine series. Tdap should also be given to seven to ten year olds who are not fully immunized against pertussis. Tdap can be given no matter when Td (tetanus-diphtheria) was last received.

ACIP recommends that adults 19-64 years of age, especially those who are close contacts to infants, receive a one-time dose of the Tdap vaccine. After the initial dose of Tdap, a Td booster every 10 years is needed. For adults 65 and older who have close contact with an infant and have not previously received Tdap, one dose should be received.

These vaccines are required for childcare and school attendance. The complete schedule of vaccines needed for school and childcare can be found at:

[http://www.dshs.state.tx.us/immunize/docs/school/6-14\\_2012-2013\\_bilingual.pdf](http://www.dshs.state.tx.us/immunize/docs/school/6-14_2012-2013_bilingual.pdf)(school) and [http://www.dshs.state.tx.us/immunize/docs/school/6-15\\_2012-2013\\_bilingual.pdf](http://www.dshs.state.tx.us/immunize/docs/school/6-15_2012-2013_bilingual.pdf)(childcare).

Other information on immunizations, including catch up schedules for children that have missed doses, can be found at <http://www.dshs.state.tx.us/immunize/default.shtm>.

For additional information, please contact the DSHS Immunization Branch at 1-800-252-9152 or visit the Branch's website at [www.immunizetexas.com](http://www.immunizetexas.com).