TEXAS Health and Human Services

Texas Department of State Health Services

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Commissioner

Health Alert: Increase in Pertussis Cases

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Summary

The Texas Department of State Health Services (DSHS) is reporting an increase in pertussis cases in 2024 with about triple the number of cases reported so far this year compared with the same period in 2023. This follows a national trend, which has seen a more than fivefold increase in 2024 cases based on preliminary data.

DSHS advises clinicians to follow the recommendations below and report any cases to your local health department within one workday.

Background

Pertussis is highly contagious illness caused by the bacteria *Bordetella pertussis*. Early symptoms are very similar to the common cold. One to two weeks after the first symptoms start, people may develop paroxysms (coughing fits). The cough generally gets worse and becomes more common as the illness continues and can cause people to vomit or make a "whoop" sound when breathing in.

Coughing fits may continue for several weeks or even months. Many infants with pertussis may not have coughing fits; instead, they may gag, gasp, vomit, stop breathing, or turn blue. The best way to prevent pertussis is to get vaccinated. The specifics of the vaccine recommendations can be found here. However, immunized children and adults can still get pertussis, so a history of immunization should not preclude a pertussis diagnosis. Immunized children, adolescents and adults may not present with the classic "whoop" symptom.

Pertussis can cause serious and potentially life-threatening complications in infants and young children who are not fully immunized. Infants under one year old are at greatest risk for serious disease and death because their immune systems are still developing. **About a third of babies younger than 12 months old with pertussis need treatment in a hospital.** Early recognition of cases, effective treatment and prophylaxis, and appropriate vaccination are vital to limiting the spread of pertussis.

Recent Pertussis Data Trends

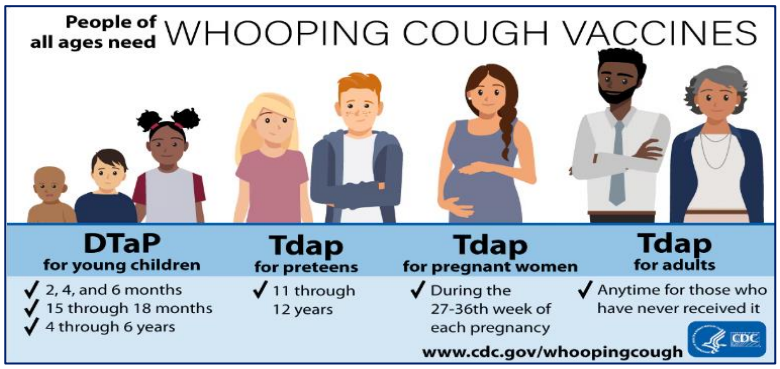
Reports of pertussis cases in Texas and nationally were lower than usual over the past few years, during and following the COVID-19 pandemic. However, nationally and in Texas, pertussis cases are beginning to return to pre-pandemic patterns when, on average, more than 1,400 cases were reported in Texas each year. In 2024, reported cases of pertussis increased across the United Sates and in Texas.

Preliminary data show more than three times as many cases reported this year in Texas as compared to the same time in 2023.

Recommendations for Clinicians:

Vaccination

- The best way to protect against pertussis is vaccination. Centers for Disease Control and Prevention recommends pertussis vaccines for people of all ages.
- Pertussis infection may occur in vaccinated people since protection from vaccination fades over time. Thus, all individuals should be kept current with pertussis vaccination. Check the vaccination history of all individuals and offer vaccine to anyone that is not up to date.
- Ensure infants get the DTaP series on time and that pregnant women are vaccinated every pregnancy with Tdap to help prevent infant hospitalization and death.



Testing Symptomatic Patients

- Collect the test specimen prior to the patient starting any treatment. Test patients via culture and/or PCR assay, which are the preferred methods of pertussis testing. PCR assays are quick and widely available at hospital and commercial laboratories.
- **Consider beginning treatment prior to receiving test results, especially if clinical history is strongly suggestive of pertussis** (such as a long cough illness), the patient is at risk for severe or complicated disease (e.g., infants), or the patient has a known pertussis exposure and has not received prophylaxis.

Treatment for Cases

- Early treatment is critical to reduce illness severity and decrease risk of spread to others. Treat patients within three weeks after cough onset, except for infants aged <1 year and pregnant women (especially near term) who should be treated within six weeks after cough onset.
- Consider prescribing antibiotics effective for pertussis treatment and prevention, which include azithromycin, erythromycin, clarithromycin, or

trimethoprim sulfamethoxazole (TMP-SMX).
- Treat patients regardless of vaccination history. According to provisional Texas Department of State Health Services data, more than half of 2024 cases (53%) have occurred in persons with one or more doses of pertussis vaccine and 33% have had five or more doses.
- Note: The Texas Medical Board changed its rules (Texas Administrative Code, Title 22, Part 9, Chapter 190, Subchapter B, §190.8) regarding the prescribing of prophylaxis for close contacts to infectious disease. Physicians may now prescribe pertussis antibiotics to contacts of pertussis cases without first medically evaluating the contact.

Infection Control Precautions in Healthcare Settings

- Droplet precautions should be used for any suspected or confirmed pertussis cases until the patient has received at least five full days of an appropriate antibiotic.
- Healthcare workers should wear a mask and face protection, including, but not limited to, performing a physical examination on, feeding, or bathing a patient; bronchoscopy; intubation; or administration of bronchodilators.

Exclusion Guidelines

- People suspected of having pertussis should be told to stay home from work, school, daycare, and any public outings (e.g., church, grocery store) until they have completed five days of appropriate antibiotic therapy. School and childcare exclusion are mandated by the Texas Administrative Code, Title 25, Chapter 97, Subchapter A, Rule §97.7.

Post Exposure Prophylaxis (PEP) Recommendations for Contacts

Contact Group*	Description	PEP Recommended?**	PEP Administration Timeframe
Household contacts	Persons who spend many hours together or sleep under the same roof	Yes	within 21 days of onset of cough in the index patient
Infants	Aged <12 months	Yes; high-risk for developing severe illness	within 21 days of the last exposure to an infectious pertussis case
All persons with pre-existing health conditions that may be exacerbated by a pertussis infection	EX: immunocompromised persons or those with a chronic lung disease	Yes; high-risk for developing severe illness	

Contact Group*	Description	PEP Recommended?**	PEP Administration Timeframe
People in contact with people at high risk of severe illness	▪ Women in their third trimester of pregnancy ▪ All people in high-risk settings+	Yes	
Other relatives, coworkers, classmates, acquaintances, etc.	Persons who do not fit into any of the above descriptions	No; recommend evaluation for symptoms and educated about pertussis	-

*Some contacts may fall into more than one group. Base PEP recommendations on the group with the longest timeframe for administering PEP.
**Provide PEP regardless of vaccination history
^ Infectious period: from the beginning of symptom onset through the third week after the onset of paroxysms, or until 5 days after the start of effective antimicrobial treatment
+High-risk setting: settings that infants aged <12 months or women in their third trimester of pregnancy. These include, but are not limited to neonatal intensive care units, childcare settings, and maternity wards.

Disease Reporting Requirements/Statute

- Several Texas laws (Health & Safety Code Chapters 81 and 84) require specific information regarding notifiable conditions be provided to DSHS. Health care providers, hospitals, laboratories, schools, childcare facilities and others are required to report patients who are suspected of having pertussis within one work day (Texas Administrative Code, Title 25, Chapter 97, Subchapter A).
- Pertussis reports should be made to your local health department (contacts by county at www.dshs.texas.gov/idcu/investigation/conditions/contacts).

Recommendations for Public Health:

Lab Confirmation Tests

- Culture and PCR assay are the preferred methods of pertussis testing. PCR assays are quick and widely available at hospital and commercial laboratories.
- For PCR assays, a nasopharyngeal swab should be done using a synthetic swab. Check with the testing laboratory to determine what transport media, if any, is needed.
- Direct Fluorescent Antibody (DFA) and serological assays are not considered confirmatory tests for pertussis.
- More information on PCR testing is available at Best Practices for Use of Polymerase Chain Reaction for Diagnosing Pertussis.

Controlling Outbreaks in Group Settings

- Even in an outbreak, antibiotic prophylaxis is only recommended for household and high-risk contacts.
- Active screening for symptomatic patients with suspected pertussis can be considered during outbreaks in settings such as schools, daycare centers, and hospitals.
    - The asymptomatic contacts may remain in group settings if they comply with prophylaxis and lack respiratory symptoms.
    - They should be monitored for 21 days past their last known exposure.
- A broader use of PEP may be appropriate in limited closed settings when the number of identified cases is small and when a community-wide outbreak is not ongoing. However, when continued transmission of pertussis is evident, multiple rounds of antibiotics would not be recommended. Rather than repeating a course of antibiotics, public health should monitor people exposed to pertussis for onset of pertussis signs and symptoms for 21 days.
- During an outbreak, people without documented immunity from vaccination or previous pertussis infection should be isolated from anyone with pertussis to protect those without immunity and control the outbreak. Additional information on school exclusion and readmission can be found at dshs.texas.gov/idps-home/school-communicable-disease-chart.

Recommendations for the Public:

If you think you have pertussis, isolate yourself from others and call your healthcare provider before arriving so they can prepare for your arrival without exposing other people.

Routine prevention steps including hand washing and covering your mouth and nose while sneezing or coughing are essential to prevent the spread of bacteria. Avoid close contact with people who are sick, and don't share food, utensils, toothbrushes, cigarettes, or similar personal items.

Review your and your child's immunization history to see if you are up to date on your pertussis containing vaccines. Additionally, discuss with your provider your immunization history and any questions about these vaccines.

If you think you've been exposed to someone with pertussis, contact your healthcare provider about medication that can keep you from getting sick.

For More Information

DSHS - Pertussis (Whooping Cough)
CDC - Whooping Cough (Pertussis)
CDC - Symptoms of Whooping Cough
CDC - Laboratory Testing for Pertussis
CDC - About Whooping Cough Outbreaks

DSHS - School and Childcare Vaccine Requirements
CDC - Pertussis Vaccination Recommendations
CDC - Pertussis Infection Control in Healthcare Personnel

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