LOUISIANA DEPARTMENT OF HEALTH Public Health	**Louisiana Health Alert Message 25-2: Statewide Increase in Pertussis Cases**
Origination Date: May 1, 2025	**Revision Dates (List All Revision Dates):**

Louisiana Health Alert Message 25-2

Statewide Increase in Pertussis Cases

The Louisiana Department of Health (LDH) is issuing this health advisory to alert providers of an **increase in pertussis (whooping cough) cases**. In Louisiana, an increase in pertussis cases began in September 2024 and is ongoing**.**

Pertussis is endemic in the United States and Louisiana. It is a cyclical disease with peaks in reported cases occurring every few years. However, the increasing number of pertussis case reports that began in September 2024 could result in a record high number of cases during 2025—more than has been seen annually in the state for at least 35 years.

Because of the high level of pertussis transmission that is occurring, an **increased number of hospitalizations and deaths are also being reported**. Between September 1, 2024 and April 1, 2025, **251 pertussis cases and 40 pertussis-related hospitalizations were reported in Louisiana.** During the same timeframe the previous year (September 1, 2023-April 1, 2024), eight pertussis cases and no pertussis related hospitalizations were reported.

Infants under one year old have the highest reported rate of pertussis, and the risk of severe complications and death resulting from pertussis is highest among infants. To date in 2025, **the pertussis case rate for infants in Louisiana is at least 7 times higher** than all other age groups. Since September 2024, **70% of the pertussis-related hospitalizations in Louisiana have occurred among patients younger than one year of age**. **Two pertussis-related deaths occurred among young infants** hospitalized during that timeframe. These are the first pertussis deaths reported in Louisiana since 2018.

Considerations for Providers

- **Consider pertussis** in the differential diagnosis of patients with compatible symptoms and **order diagnostic testing**.
- **Treat pertussis early** with a macrolide antibiotic, or, for macrolide allergic patients, trimethoprim-sulfamethoxazole, to reduce symptom severity and transmission.
- **Provide antibiotics as post-exposure prophylaxis to all household members and high-risk, close contacts** (e.g., immunocompromised persons, pregnant women, infants); prophylactic antibiotics are the same as used for treatment.

- Ensure that pediatric and adult patients are **up-to-date with pertussis-containing vaccine**, especially Tdap for pregnant women during each pregnancy.

Guidance for Providers

Prevention, consultation, testing, and treatment

Clinical Overview

- Pertussis is a highly contagious respiratory illness caused by the bacterium *Bordetella pertussis.*
- Symptoms typically develop within 5-10 days, but up to 21 days, after exposure.
- **Babies younger than 1 year old are at greatest risk for getting pertussis and having severe complications.**
- Pertussis typically progresses through **three stages**.
    - First is the **catarrhal** stage (1-2 weeks), with cold-like symptoms (mild cough, runny nose, sneezing, low-grade fever).
    - Next is the **paroxysmal** stage (2-6 weeks) characterized by intense coughing fits (paroxysms) followed by an inspiratory "whooping" sound, post-tussive vomiting, and cyanosis. Infants may present with apnea, with minimal or no cough.
    - Finally, the **convalescent** stage with residual cough can take weeks to months to resolve.
- Persons with pertussis are **considered infectious** from the onset of cold-like symptoms until 3 weeks after the start of the paroxysmal stage, or until completion of 5 days of appropriate antibiotics.

Testing

- If pertussis is suspected, collect a nasopharyngeal swab for pertussis polymerase chain reaction (PCR) testing at a commercial laboratory.
    - *If using a respiratory virus panel to test for multiple pathogens, confirm that it includes pertussis PCR.*
    - *Serology is not recommended to diagnose an acute pertussis infection.*
- Specimens are most likely to be positive if collected within 3 weeks of cough onset and before completion of antibiotics.
- **If suspicion of pertussis is high, test but do not wait for results to treat.**

Treatment

- **Antibiotics can reduce symptom severity and transmission if given early**.
- Treat people ages >1 year within 3 weeks of cough onset and infants <1 year and pregnant women within 6 weeks of cough onset.
- After the paroxysmal cough is established, antibiotics may not affect the course of symptoms but are recommended to limit transmission.
- Macrolides (e.g., azithromycin, clarithromycin, erythromycin) are first-line treatments.
- For patients 2 months of age and older, an alternative is trimethoprim-sulfamethoxazole. For antibiotic details, see the CDC's Recommended Antimicrobial Agents, Table 4.

Post-Exposure Prophylaxis

- **Provide antibiotics as post-exposure prophylaxis to all household members and high-risk, close contacts** of confirmed pertussis cases including infants < 1 year old, pregnant women, people with immunocompromising conditions or moderate to severe asthma, and healthcare workers, regardless of vaccination status, to prevent illness and transmission if within 21 days of exposure to an infectious pertussis case. Antibiotics and dosing for treatment and prophylaxis are the same.

Vaccination

- **Vaccination is the most important way to prevent serious complications of pertussis.**
    - Pregnant women should be vaccinated with Tdap during every pregnancy, ideally between 27-36 weeks gestation.
    - Evidence shows that infants are less likely to develop pertussis early in life if their mother got Tdap during pregnancy.
    - Children should complete the routine five-dose DTaP vaccine series along with an adolescent Tdap booster.
    - Adults who have never received Tdap should get one dose of Tdap, followed thereafter by a Td or Tdap booster shot every 10 years.
    - Recall and catch-up incompletely vaccinated persons including teens and adults who may not have received Tdap, especially those who care or live with infants.

Infection Control

Patients with known or suspected pertussis should be placed on Droplet Precautions, in addition to Standard Precautions. Healthcare workers treating patients with any cough illness should consider the use of facemasks to reduce the risk of transmission and prevent unprotected exposure to patients with pertussis, which could otherwise require post-exposure prophylaxis.

Reporting

Positive laboratory tests for pertussis that are not sent through an automated feed should be reported to the respective LDH regional surveillance epidemiologist. To reach LDH's on-call Epidemiologist, call 800-256-2748.

For More Information

- CDC Recommended antimicrobial agents for the treatment and postexposure prophylaxis of pertussis: 2005 CDC guidelines. MMWR Recomm Rep. 2005;54(RR-14):1–16
- CDC Pertussis Vaccination Recommendations
- CDC Vaccinating Pregnant Patients [Against Pertussis]
- The American College of Obstetricians and Gynecologists (ACOG) Tetanus, Diptheria, and Pertussis FAQs for Providers