

**Alabama Department of Public Health
Alabama Emergency Response Technology (ALERT)
Health Alert Network (HAN)
November 5, 2024
Pertussis update for Alabama**

Current Situation: The number of pertussis cases in Alabama has already increased 300% from 41 cases in 2023 to 123 cases in 2024 as of October 17. Children diagnosed with pertussis should stay at home for 5 days during treatment. It is important to keep pertussis vaccines up to date according to current guidance.

<https://www.cdc.gov/pertussis/hcp/vaccine-recommendations/index.html>

Reporting: Pertussis is a reportable disease in Alabama. See below for reporting pertussis:
https://www.alabamapublichealth.gov/bcd/assets/adph_han_notifiablediseaserulesupdated_20240425.pdf
<https://epiweb.adph.state.al.us/redcap/surveys/?s=H37ENP8ADD>

Treatment

The medical management of pertussis cases is primarily supportive, although antibiotics are of some value. If initiated early (in the first 1-2 weeks of illness), antibiotics may modify the course of the illness. Antibiotic therapy is still recommended even after the coughing spells have started as it eradicates the organism from secretions thereby decreasing communicability. However, the course of the illness is not affected.

Children who receive antibiotic for pertussis disease should not be allowed to attend any congregate setting for 5 days after treatment is initiated. Postexposure prophylaxis with an appropriate antibiotic may be considered in certain circumstances. These include household contacts and other close contacts, including children in childcare, regardless of immunization status. Prophylaxis for other close contacts outside the household may also be considered if the contact is at high risk of severe pertussis disease or will be in contact with those who could develop severe disease (young infants).

All close contacts younger than 7 years of age who have not completed the four-dose primary series of DTaP should complete the series with the minimal intervals. Close contacts who are 4 to 6 years of age and who have not yet received the second booster dose (usually the fifth dose of DTaP) should be vaccinated. The administration of DTaP or Tdap to persons who have been exposed to a case of pertussis is not contraindicated, but the efficacy of postexposure vaccine use is unknown.

<https://www.cdc.gov/pertussis/php/postexposure-prophylaxis/index.html>

[https://www.cdc.gov/pertussis/hcp/clinical-care/index.html#:~:text=Macrolides%20\(erythromycin%2C%20clarithromycin%2C%20and,for%20the%20treatment%20of%20pertussis.](https://www.cdc.gov/pertussis/hcp/clinical-care/index.html#:~:text=Macrolides%20(erythromycin%2C%20clarithromycin%2C%20and,for%20the%20treatment%20of%20pertussis.)

Testing

Diagnosis of pertussis is based on a characteristic clinical history (cough for more than 2 weeks with whoop, paroxysms, or post-tussive vomiting) as well as a variety of laboratory tests (culture, polymerase chain reaction [PCR]). PCR is the recommended test for pertussis diagnosis up to the fourth week of cough. Serology is not a useful test until much later in disease and is not a recommended primary test.

Polymerase chain reaction (PCR) is a rapid test and has excellent sensitivity. PCR should be tested from nasopharyngeal specimens taken at 0-3 weeks following cough onset but may provide accurate results for up to 4 weeks of cough in infants or unvaccinated persons. ADPH recommends testing after a 1 week of cough. After the fourth week of cough, the amount of bacterial DNA rapidly diminishes, which increases the risk of obtaining falsely negative results.

<https://www.cdc.gov/pertussis/php/pcr-bestpractices/index.html>

Specimen Collection and Shipping

If you would like specimens to be tested for pertussis at the Bureau of Clinical Laboratories (BCL), follow the instructions below to properly collect and send to BCL for testing.

- Collect a nasopharyngeal aspirate or swab. For PCR-only testing, place the specimen in a sterile container. For PCR and culture testing, the specimen must be placed into Regan-Lowe medium. A video concerning pertussis testing can be found at the link below.
<https://www.alabamapublichealth.gov/immunization/cases.html>
- Complete a BCL Requisition Form for each specimen. Please include the date of symptom onset, recent travel, and relevant vaccine history.
http://www.adph.org/bcl/assets/BCL_Requisition_Form.pdf
- Store and ship specimens at 2-8°C using frozen cold packs.
- Specimens may be dropped off at your local county health department to be couriered to the BCL overnight or shipped directly to the Bureau of Clinical Laboratories, 204 Legends Court, Prattville, Alabama 36066.

For more information, please visit:

<https://www.alabamapublichealth.gov/immunization/pertussis.html>