

**Alabama Department of Public Health (ADPH)  
Alabama Emergency Response Technology (ALERT)  
Health Alert Network (HAN) 08/02/18**

**Multiple County Pertussis Outbreak**

**Current Situation**

- The Alabama Department of Public Health (ADPH), Immunization Division (IMM) has identified an outbreak of pertussis spanning at least two counties (Jefferson and Shelby). The first cases were identified in children that attended a vacation bible school (VBS) mid-June. At least one case attended VBS at multiple churches while symptomatic.
- IMM is in the process of interviewing all attendees of the various VBS locations and churches to identify additional potential cases that need treatment. So far, three churches and two YMCAs have been identified.
- An additional complication is that 30% of the children exposed were not up-to-date on their pertussis vaccinations.

**Reporting**

Pertussis is a Standard Notification Notifiable Disease, and therefore must be reported to the Immunization division within 5 days of suspected diagnosis. To report a suspected vaccine preventable disease (VPD) case, please go to <https://www.adph.org/Extranet/Forms/Form.asp?ss=s&formID=5468>.

**Treatment**

The medical management of pertussis cases is primarily supportive, although antibiotics are of some value. This therapy eradicates the organism from secretions, thereby decreasing communicability and, if initiated early, may modify the course of the illness. Recommended antibiotics are azithromycin, clarithromycin, and erythromycin. Trimethoprim-sulfamethoxazole can also be used. Children who receive anti-biotic for pertussis disease should not be allowed to attend any congregated setting for 5 day after treatment is initiated.

An antibiotic effective against pertussis should be administered to all close contacts of persons with pertussis, regardless of age and vaccination status. Revised treatment and postexposure prophylaxis recommendations were published in December. All close contacts younger than 7 years of age who have not completed the four-dose primary series 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 Tdap to persons who have been exposed to a person with pertussis is not contraindicated, but the efficacy of postexposure use of Tdap is unknown.

## Testing

The diagnosis of pertussis is based on a characteristic clinical history (cough for more than 2 weeks with whoop, paroxysms, or posttussive vomiting) as well as a variety of laboratory tests (culture, polymerase chain reaction [PCR], and serology).

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.

## Specimen Collection and Shipping

If you would like for 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. CDC has a two videos to demonstrate how to take the proper nasopharyngeal swab or aspirate specimen, <https://www.cdc.gov/pertussis/clinical/diagnostic-testing/specimen-collection.html>

- Complete a BCL Requisition Form for each specimen and test ordered, [http://www.adph.org/bcl/assets/BCL\\_Requisition\\_Form.pdf](http://www.adph.org/bcl/assets/BCL_Requisition_Form.pdf). Include specimen collection date, date of symptom onset, as well as dates, locations of recent travel, and relevant vaccine history.
- Specimens may be dropped off at your local county health department to be couriered to the BCL overnight, or can be shipped directly to the BCL at 8140 AUM Drive, Montgomery, AL 36117 (at your expense).