

Health Advisory: Pertussis in Georgia, December 2024

ACTION STEPS:

Local health departments: *Please forward to hospitals and clinics in your jurisdiction.*

Hospitals and clinics: *Please distribute to infectious disease physicians, infection preventionists, emergency department physicians, intensive care physicians, neurologists, radiologists, primary care providers, and pediatricians.*

SUMMARY

The Georgia Department of Public Health (DPH) has been investigating an increase in *Bordetella pertussis* (whooping cough) cases. This year (through November), we have seen six times as many pertussis cases than during 2023. Pertussis is reportable in Georgia, and both suspect and confirmed cases should be reported to DPH.

Given the increase in pertussis cases in Georgia, **laboratory confirmation of pertussis is increasingly necessary to understand the true burden of disease and to implement prevention measures to limit spread.**

BACKGROUND

Whooping cough, also known as pertussis, is a highly contagious respiratory illness caused by infection with the bacterium *Bordetella pertussis* and is transmitted by droplets produced from a cough, sneeze or by direct contact with secretions from the respiratory tract. Pertussis is most common in children and can be especially severe in infants less than 6 months of age. Pertussis exhibits cyclical patterns with periodic increases in incidence every 3 to 5 years, often leading to outbreaks despite widespread vaccination efforts.

CLINICAL PRESENTATION

Pertussis begins with **catarrhal symptoms** that are similar to minor respiratory infections, then progresses to the **paroxysmal stage** with frequent, rapid coughing fits. The final stage is the **convalescent stage**, which can take from weeks to months to resolve. In infants, apnea may be the only symptom, and the cough may be minimal or absent. Pertussis can also be more severe for infants under 2 months of age if their mother didn't receive Tdap during pregnancy. In those that are vaccinated, the illness can be milder and the characteristic paroxysmal cough and "whoop" may be absent.

CASE DEFINITION

Confirmed:

- A person with an acute cough illness of any duration who is culture-positive for *Bordetella pertussis*

OR

- A person with an acute cough illness of any duration who has a positive polymerase chain reaction (PCR)

Probable:

- Meets clinical evidence¹

OR

- Illness with cough of any duration, with at least one of the listed symptoms within clinical evidence **AND:** Is epidemiologically linked to a laboratory-confirmed² case

LABORATORY TESTING

Preferred specimens are nasopharyngeal swabs and culture isolates

Preferred diagnostic testing method for pertussis is polymerase chain reaction testing (PCR) and virus isolation (culture)

Ensure that the laboratory testing selected can differentiate between *Bordetella* species

Serologic testing is not recommended for pertussis confirmation:

Commercially, there are several different serologic tests used with unproven or unknown clinical accuracy.

Serology is not used as confirmatory or supportive laboratory evidence and should be used along with clinical signs and symptoms for investigative purposes.

Pertussis testing is available at commercial laboratories. If available, it is recommended to seek laboratory testing that can differentiate between *Bordetella* species. If testing cannot be done at a commercial laboratory, pertussis testing can be completed through DPH at the Georgia Public Health Laboratory.

Detailed specimen collection and shipping guidelines are available at the [DPH pertussis website](#), and DPH epidemiologists will facilitate testing at the time of notification.

To coordinate specimen collection and laboratory submission, call your [District Health Office](#) or the DPH Acute Disease Epidemiology Section at 404-657-2588 during business

¹ In the absence of a more likely alternative diagnosis, a cough illness lasting ≥ 2 weeks (14 days) with at least one of the following:

- Paroxysms of coughing
- Inspiratory “whoop”
- Post-tussive vomiting
- Apnea (with or without cyanosis)

² Laboratory Criteria for Reporting

- Positive polymerase chain reaction (PCR) for *Bordetella pertussis*, **OR**
- Isolation of *Bordetella pertussis* from a clinical specimen

hours Monday through Friday, or 1-866-PUB-HLTH (1-866-782-4584) afterhours on evenings and weekends. **Please do not send specimens directly to the Georgia Public Health Laboratory (GPHL).**

DPH RECOMMENDATIONS

- **Suspect Pertussis:** Clinicians should suspect pertussis in patients presenting with clinical characteristics or meet clinical evidence especially in children and young infants.
- **Collect Specimens for Laboratory Confirmation:** Laboratory testing for pertussis is recommended for confirmation. Clinicians should collect specimens from patients suspected of having pertussis as early as possible (preferably in the first 3 weeks following cough onset). Ensure laboratory testing can differentiate between Bordetella species.
- **Treat accordingly:** Treatment within the first 1-2 weeks is most effective for reducing symptom severity. Healthcare providers should consider treating while awaiting test results if certain circumstances are present.
 - The recommended antibiotics for treatment or postexposure prophylaxis (PEP) of pertussis are Azithromycin, Clarithromycin, Erythromycin.
 - DPH recommends providing PEP to all asymptomatic household contacts of a pertussis case within 21 days of onset of cough in the index patient.
 - Patients who have received antimicrobial treatment should be excluded and isolated from group activity settings (e.g. school, camp, church) until they have received at least 5 days of an appropriate course of antibiotics for pertussis.
- **Vaccinate:** Ensure patients are up to date on their vaccinations according to CDC's recommended schedule for children and adults.
- **Report Cases:** Pertussis is a notifiable disease, and suspect cases should be reported to DPH (O.C.G.A. §31-12-2) within 24 hours.
 - **How to Report:**
 - Report cases through the State Electronic Notifiable Disease Surveillance System (SendSS) <https://sendss.state.ga.us/ords/sendss/login.screen> OR complete and submit pertussis case report form <https://dph.georgia.gov/document/document/pertussis-case-report-form/download> to your District Public Health Department
 - Call your local [District Health Office](#) or the DPH Acute Disease Epidemiology Section at 404-657-2588 during business hours Monday through Friday, or 1-866-PUB-HLTH (1-866-782-4584) after-hours on evenings and weekends.

ADDITIONAL INFORMATION

- Pertussis in Georgia: [Pertussis | Georgia Department of Public Health](#)
- Pertussis in the United States: [Pertussis Surveillance and Trends | Whooping Cough | CDC](#)
- Pertussis Overview: [Clinical Overview of Pertussis | Whooping Cough | CDC](#)
- Pertussis treatment: [Treatment of Pertussis | Pertussis \(Whooping Cough\) | CDC](#)
- Pertussis PEP guidance: [Postexposure Antimicrobial Prophylaxis | Pertussis \(Whooping Cough\) | CDC](#)
- Pertussis vaccination: [Types of Whooping Cough Vaccines | Whooping Cough | CDC](#)
- Pertussis testing: [Laboratory Testing for Pertussis | Pertussis \(Whooping Cough\) | CDC](#)

CONTACT INFORMATION

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