



KENTUCKY HEALTH ALERT

Increase in Pertussis in Kentucky Recommendations for Identification and Prevention

November 21, 2025

Kentucky health officials are alerting providers that cases of pertussis (“whooping cough”) have increased steadily across the Commonwealth in recent weeks. To date, 566 cases of pertussis have been reported in Kentucky in 2025, the highest number of cases in the Commonwealth since 2012. This follows a trend that was first [announced](#) in July 2024 when pertussis cases began increasing in Kentucky to levels not seen in over a decade. Health officials anticipate that pertussis will continue to increase during the winter months based on historic trends. Many U.S. states and other countries are also experiencing elevated levels of pertussis.

Many of the recent cases have occurred in young infants, and health officials also recently confirmed the third pertussis-related death in a Kentucky infant within the last year. This follows [two other infant deaths](#) that were announced in June. These are Kentucky’s first pertussis deaths since 2018. None of the infants nor their mothers received the recommended pertussis vaccinations during pregnancy or early infancy. Health officials urge all Kentuckians to remain up to date on recommended pertussis immunizations and emphasize the importance of maternal immunization during pregnancy, and for all infants beginning promptly at two months of age. Health officials also encourage providers to consider pertussis as a diagnosis in addition to circulating seasonal respiratory viruses such as influenza, RSV and COVID-19.

A significant number of cases have also occurred in school-aged children, many of whom were up to date on pertussis vaccination. Immunity from vaccination or natural infection wanes over time so infections can occur in people who are fully vaccinated. However, the vaccine is known to reduce disease severity, and hospitalization among vaccinated individuals is rare.

The Kentucky Department for Public Health encourages health care providers to:

- **Consider pertussis in children with respiratory infections and adults with persistent or violent coughs, in addition to circulating seasonal respiratory viruses.** Collect nasopharyngeal (NP) swab or nasal wash for pertussis testing via PCR or culture.
- **Report suspected or confirmed pertussis cases** within one (1) business day to the [local health department](#) of the county in which the patient resides.
- **Ensure patients are up-to-date with [routine pertussis vaccinations](#)**, particularly [pregnant women](#) and infants starting at two (2) months of age, as well as individuals with pre-existing health conditions that may be worsened by pertussis infection.

About Pertussis:

Pertussis is a highly contagious respiratory illness caused by the bacterium *Bordetella pertussis*. While people of any age can get pertussis, those who have not received all vaccinations, including children who are too young to be vaccinated, are at highest risk for severe illness and death. Sporadic pertussis cases occur

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regularly in Kentucky, however an increase beyond the expected background rate has been reported in recent weeks. Though pertussis vaccination (DTaP or Tdap) is available and widely implemented, *B. pertussis* continues to spread in the U.S. due to lack of vaccination or timely boosters, the lack of lifelong immunity from vaccination or natural infection and the long duration of infectiousness in untreated cases.

Symptoms of pertussis usually begin with a runny or congested nose, a low-grade fever, and mild coughing; apnea/stopping breathing can also occur in infants. After one to two weeks, the cough can progress to rapid, violent (paroxysmal) coughing fits that can cause the “whooping” sound, vomiting or labored breathing. Young children are the most severely affected; most teens and adults will have mild symptoms. People with pre-existing health conditions that may be worsened by whooping cough are at high risk for developing a severe infection.

Testing for Pertussis:

The preferred methods for pertussis testing include nasal pharyngeal (NP) swab or nasal wash via PCR testing or culture. PCR has optimal sensitivity during the first three weeks of cough, is widely available at commercial laboratories and has a fast turnaround time. Culture is considered the gold standard due to excellent specificity but may take longer to complete. Serology for antibodies to *B. pertussis* is available at many commercial laboratories, however, serologic assays are not generally recommended for primary diagnosis of pertussis due to variability and unknown clinical accuracy. The most promising serologic assays are those that measure IgG antibodies against pertussis toxin only and are collected two to eight weeks following cough onset.

Prevention of Pertussis:

Prevention of pertussis is primarily achieved through [routine vaccination](#) with DTaP (ages two months to six years) and Tdap (ages seven years and older), followed by appropriate booster doses. Vaccination of pregnant women between 27-36 weeks gestation, as well as prompt initiation of the three-dose primary vaccine series starting at two months of age, is most critical for preventing severe pertussis in infants.

There is little evidence demonstrating the effectiveness of contact tracing and post-exposure prophylaxis of all close contacts with antibiotics. However, antimicrobial prophylaxis is recommended for:

- 1) All household contacts of a known case, regardless of vaccination status, within 21 days of onset of coughing in the index case, and
- 2) Contacts of any case who are at high risk of developing severe pertussis, and those who will have close contact with others at high risk of developing severe pertussis, including infants less than one year of age, pregnant women and caregivers or household contacts of infants.

Other contacts of known cases not described above should monitor for symptoms during the 21 days after exposure. If symptoms develop, they should isolate and inquire with their provider about testing.

Treatment of Patients with Pertussis:

Health care providers should strongly consider initiating antimicrobial treatment prior to receipt of test results if any of the following are present:

- A clinical history strongly suggestive of pertussis and patient is within three weeks of cough onset (or within six weeks of cough onset if an infant is less than one year of age or a pregnant woman).
- Patient is at risk for severe or complicated disease (e.g., infants).
- Patient has routine contact with people considered at high risk of serious disease (e.g., pregnant woman in third trimester or caregiver of infants).

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Bordetella parapertussis

B. parapertussis is a bacterium that is similar to *B. pertussis* and can cause pertussis-like illness but does not produce pertussis toxin. Symptoms of parapertussis are typically milder and infection may be asymptomatic. There is no vaccine for *B. parapertussis* and post-exposure prophylaxis is not recommended, however treatment recommendations for symptomatic patients are the same as those for *B. pertussis*. *B. parapertussis* is not reportable in Kentucky.

Thank you for your attention to this alert and guidance. The KDPH [pertussis website](#) includes supplemental resources, including a [pertussis quicksheet](#) with additional information that providers may find useful. If you have questions regarding reporting, testing, or prevention of pertussis or other infectious diseases, please contact the Kentucky Immunization Branch at (502) 564-4478 or after hours by calling the KDPH Epidemiology on-call line at 888-9-REPORT (888-973-7678).

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