



NEW YORK CITY DEPARTMENT OF  
HEALTH AND MENTAL HYGIENE  
Ashwin Vasan, MD, PhD  
*Commissioner*

## 2024 Health Advisory #5: Increase in Pertussis Cases in New York City

- There has been an increase in pertussis cases in New York City.
- Pertussis and other respiratory pathogens can be difficult to distinguish based on clinical symptoms alone, highlighting the importance of 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 other high-risk, close contacts (e.g., immunocompromised persons, pregnant persons, infants); prophylactic antibiotics are the same as used for treatment.
- Ensure that pediatric and adult patients are up to date with pertussis-containing vaccine, including Tdap for pregnant people during each pregnancy. A strong provider recommendation is one of the most important determinants of a patient getting vaccinated.

February 15, 2024

Dear Colleague:

There has been a citywide increase in pertussis cases in 2023-2024, with approximately 244 reported cases from October 1, 2023, through January 31, 2024, representing a nearly 200% increase relative to the corresponding period in 2022-2023. The median age of all cases October 2023 to January 2024 is 5 years old (range 8 weeks to 93 years). Cases have included a mix of unvaccinated individuals (mostly infants), vaccinated individuals (primarily school-aged children), and individuals with unknown vaccination history (mostly adults). Nine cases have been hospitalized during this period.

Pertussis may present similarly to circulating respiratory viruses, like influenza, RSV, and COVID-19. During respiratory virus season when these are prevalent, remember to consider pertussis as a possible diagnosis. Clinical presentation along with indications for testing, treatment, and post-exposure prophylaxis are described below.

**Clinical presentation:** Pertussis typically begins with nonspecific upper respiratory symptoms lasting 7-10 days, followed by cough. The cough may include persistent paroxysms (coughing fits), an inspiratory “whoop,” apnea, and post-tussive vomiting. Older children and adults and people who are vaccinated may have milder symptoms. Complications include rib fracture, pneumonia, encephalitis, and death. A history of vaccination does not rule out a diagnosis.

**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. **If suspicion of pertussis is high, test but do not wait for results to treat.** Specimens are most likely to be positive if collected within 2-3 weeks of cough onset and before completion of antibiotics. The NYC Department of Health and Mental Hygiene (Health Department) does not recommend serologic testing for pertussis.

**Treatment:** Antibiotics can reduce symptom severity and transmission if given early; treat people ages  $\geq 1$  year within 3 weeks of cough onset and infants  $< 1$  year and pregnant people within 6 weeks of cough onset. Treatment beyond this period is not recommended. Treat with a macrolide or, for macrolide allergic patients, trimethoprim-sulfamethoxazole. **Strongly consider treating prior to test results if there is a high suspicion of pertussis or if the person or their household members are at risk for severe disease (e.g., infants, pregnant people, or immunocompromised people).** People receiving treatment should stay home from childcare, school, and work until completion of appropriate antibiotics. For antibiotic details, see [the CDC's MMWR, Table 4](#).

**Post-exposure prophylaxis:** Provide antibiotics as post-exposure prophylaxis to all household members and other high-risk, close contacts of confirmed pertussis cases including infants, pregnant people, or immunocompromised people, regardless of vaccination status, to prevent illness and transmission if within 21 days of cough onset in the case. Antibiotics and dosing for treatment and prophylaxis are the same.

**Vaccination:** Vaccination is the most important way to prevent serious complications of pertussis. Children should complete the routine five-dose DTaP vaccine series along with an adolescent Tdap booster. Adults who have not received Tdap should get one dose of Tdap, followed thereafter by a Td or Tdap booster shot every 10 years. Pregnant people should receive Tdap during every pregnancy, ideally between 27-36 weeks gestation to maximize passive antibody transfer from mother to infant to provide protection during the infant's first two months of life. A strong recommendation from a medical provider is one of the most important determinants of a patient getting vaccinated.

**Reporting:** Report persons with pertussis to the NYC Health Department online through [Reporting Central](#) or by calling 866-692-3641

We greatly appreciate your partnership.

Sincerely,



Celia Quinn, MD, MPH

Deputy Commissioner

Division of Disease Control