Pertussis: Testing and treatment

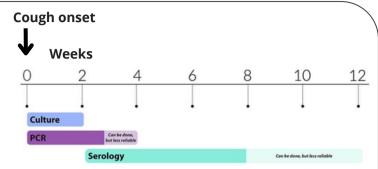


NOTE: An acute cough illness of any duration with inspiratory whoop or paroxysmal cough or post-tussive vomiting or apnea is **reportable** to public health, **regardless** of testing.

01.

Testing

- **Preferred:** PCR for individuals **with** symptoms that developed within the last 21 days. PCR are rapid and sensitive.
 - Nasopharyngeal swab is preferred.
- **Gold standard:** Cultures are the most specific, but take up to 7 days for results.
- Can be done, but less reliable: Serological testing is not considered confirmatory and should generally not be used for testing in the early phase of pertussis infection.



Note: Link to image



- For optimal results, serologic testing can be done 2 to 8 weeks following cough onset but can be used up to 12 weeks after the cough onset.
- Additional diagnostic testing guidance can be found here.

02.

Who should be treated

CDC supports post exposure prophylaxis (PEP) use for people at high risk of developing severe pertussis, as well as people who will have close contact with others at high risk of developing severe pertussis, **regardless of vaccination status**. This includes:

- Household contacts
- High risk contacts
 - Infants and individuals in their 3rd trimester of pregnancy
 - All individuals with pre-existing health conditions
 - People who themselves have close contact with either infants
 12 months of age, pregnant individuals, or individuals with pre-existing health conditions at risk for severe illness or complications
 - All individuals in high risk settings that include infants <12 months of age or individuals in their 3rd trimester of pregnancy

03.

Treatment prior to results

- Antimicrobial therapy is recommended before test results are received in the following situations, regardless of immunization status:
 - The patient's clinical history strongly suggests pertussis.
 - The patient is an infant or has risk factors for severe or complicated disease.
 - The patient has contact or anticipated contact with infants, pregnant individuals, and others at high risk of serious disease.

04.

Treatment

- A 5-day course of azithromycin is the appropriate first-line choice for treatment and for PEP. Individuals should isolate during this time until completion.
- After the paroxysmal cough is established, antimicrobial agents have no real effect on the course of illness but are recommended to limit spread to others.
- Symptoms of pertussis often continue after treatment due to pertussis-toxin-mediated tissue damage to respiratory epithelial cells.
- Unvaccinated contacts should be vaccinated according to recommendations, see <u>here</u>, but this is not a substitute for antimicrobial treatment.
- Treatment recommendations can be found here.

