

Pertussis

Whooping Cough



Clinical Description:

Pertussis is a respiratory infection caused by *Bordetella pertussis* bacteria. The disease typically begins with mild upper respiratory tract symptoms similar to the common cold. This stage lasts 1 - 2 weeks. In the next stage, the cough comes in multiple exhausting bursts (paroxysmal cough). Some people may experience vomiting following paroxysms. In young children, each cough may be followed by a "whooping" sound as the child inhales. "Whooping" does not occur in all children and adults. This stage lasts 2 - 4 weeks, followed by a recovery phase of gradually diminishing coughing for 2 - 3 weeks, but may last for several months.

Incubation Period:

The incubation period is from 4 - 21 days, but typically within 7 - 10 days.

Mode of Transmission:

Transmission occurs primarily through contact with infectious respiratory secretions. Droplet contact and close person-to-person contact are the modes of transmission.

Period of Communicability:

Pertussis is mostly communicable in the early stage of the illness. After three weeks, an individual is considered unable to spread the illness to others. When treated with an appropriate antibiotic, the period of communicability ends after five days of appropriate therapy; however, symptoms may remain even after the antibiotic regimen has been completed.

Exclusion/Reporting:

Whenever pertussis is strongly suspected or confirmed, notify the local health department immediately. Infected persons are excluded from school and contact with persons outside the household until they have completed at least five days of effective treatment (azithromycin, erythromycin, clarithromycin, or trimethoprim/sulfamethoxazole). Infected persons not receiving prophylaxis are excluded from schools, day care centers, and public gatherings for 21 days after cough onset. Inadequately immunized household contacts less than seven years of age are excluded from schools, day care centers, and public gatherings for 14 days after the last exposure or until they have received five days of appropriate antibiotic therapy. For information on laws and rules regarding pertussis see the ISDH Communicable Disease Reporting Rule (410 IAC 1-2.3-88) at [http://www.in.gov/isdh/files/comm_dis_rule\(1\).pdf](http://www.in.gov/isdh/files/comm_dis_rule(1).pdf).

Prevention/Care:

- Safe and effective vaccines are available to prevent pertussis. Children and staff should receive the recommended doses of DTaP or Tdap vaccines in order to build and boost immunity against pertussis infections. School immunization requirements can be found at <http://bit.ly/1rFzDxD>.
- Appropriate antibiotics can reduce the communicability of disease among individuals with pertussis and close contacts.
- Inform high risk students and staff within the school when a case of pertussis has been identified.

Outbreaks:

According to the ISDH Communicable Disease Reporting Rule (410 IAC 1-2.3), an outbreak is defined as the number of cases of disease occurring in a community, region, or particular population that exceeds what is normally expected. If an outbreak is suspected, contact your local health department. According to the CDC, a school outbreak is defined as two or more cases clustered in time in a school. However, no additional exclusions are recommended once the outbreak threshold is reached. Any case or suspected case must be immediately reported to the local health department and/or the ISDH. For additional information and recommendations regarding the preparation for, and the management of an outbreak situation in a school setting, see Appendix A, "Managing an Infectious Disease Outbreak In a School Setting."

Other Resources:

Centers for Disease Control and Prevention (CDC):

<http://www.cdc.gov/pertussis/>

<http://www.cdc.gov/pertussis/outbreaks/PEP.html> (postexposure prophylaxis guidelines)

<http://www.cdc.gov/vaccines/pubs/pinkbook/pert.html>

<http://www.cdc.gov/vaccines/vpd-vac/pertussis/default.htm>

Indiana State Department of Health Quick Facts Page (found on disease/condition page):

<http://bit.ly/12IJLfD>