



# Pertussis

## Guidance for Health Care Professionals

*CDC recommends whooping cough vaccination for all babies, children, preteens, and adults — and during every pregnancy.*



### Report Suspect Cases

Pertussis is a mandatory reportable disease. Within 24 hours, health care providers must report a suspect or a confirmed case via one of the following ways:

1. Electronic reporting portal using the HL7 feed.
2. Fax a disease report to 1-501-661-2428. The form is available online and can be accessed at the link below.
3. If a consultation is needed, health care providers can contact [adh.opr@arkansas.gov](mailto:adh.opr@arkansas.gov). For unusual cases or cluster information, call 1-501-661-2381 during normal business hours of 8:00 a.m. to 4:30 p.m. CST Monday through Friday. Call 1-800-554-5738 outside of normal business hours.



### Clinical Presentation

- Incubation period: 5 to 10 days, maximum 21 days.
- Catarrhal symptoms (1-2 weeks): often resemble a common cold, with a mild cough and possibly a low-grade fever (<100.4°F), though fever may be absent.
- Paroxysmal Stage (2-6 weeks): numerous, rapid coughs with inspiratory “whoop” and posttussive vomiting.
- Convalescent Stage (>2 weeks): gradual recovery with less persistent coughs that resolve in 2 to 3 weeks.
- Infants: Might not have cough. Can have apnea and respiratory distress.
- Adults, teenagers and previously vaccinated persons can have less severe illness and are less likely to have typical “whoop.”



### Laboratory Testing for Suspect Cases

- PCR testing (preferred method): Obtain nasopharyngeal swab within 21 days of cough onset and before starting antibiotics. This test is offered by AR Public Health Lab.
- Culture and Serology: Not preferred and not offered by AR Public Health Lab.



### Communicability of Pertussis

- Highly contagious with secondary attack rates exceeding 80% in susceptible household contacts.
- Infectious period is from the start of the catarrhal stage (cough onset) through the third week (21 days) or until 5 days after starting effective antimicrobial treatment. ADH uses date of symptom onset as the start of the infectious period.
- Early treatment can decrease illness severity and decrease transmission risk of pertussis.





## Treatment

Recommended Antimicrobial Treatment and Postexposure Prophylaxis for Pertussis (PEP), by age group<sup>1,2</sup>

Age Group	Azithromycin <sup>3</sup>	Erythromycin	Clarithromycin	TMP-SMX (Alternative) <sup>5</sup>
< 1 month	10mg/kg/day in a single dose for 5 days. <sup>4</sup> Preferred	40-50mg/kg/day in 4 divided doses for 14 days.	Not recommended	Contraindicated for infants <2 months
1-5 months	10mg/kg/day in a single dose for 5 days	40-50mg/kg/day in 4 divided doses for 14 days	15mg/kg/day in 2 divided doses for 7 days	Contraindicated at age <2 months. For infants 2 months or older, TMP 8mg/kg/day, SMX 40mg/kg/day in 2 divided doses for 14 days
6 months and older and children	10mg/kg in a single dose on day 1 then 5mg/kg/day (maximum: 500mg) on days 2-5	40-50mg/kg/day (maximum: 2g per day) in 4 divided doses for 14 days	15mg/kg/day in 2 divided doses (maximum: 1g per day) for 7 days	TMP 8mg/kg/day, SMX 40mg/kg/day in 2 divided doses for 14 days
Adults	500mg as a single dose on day 1 then 250mg daily on days 2 to 5	2g per day in 4 divided doses for 14 days	1g per day in 2 divided doses for 7 days	TMP 320 per day, SMX 1600mg per day in 2 divided doses for 14 days



## Control Measures

Both the CDC and *Red Book* recommend that active cases of pertussis should be excluded from activities until 5 days after the start of effective antimicrobial therapy. Both the CDC and *Red Book* also recommend that untreated individuals should be excluded until 21 days after cough onset.

Post-exposure Antimicrobial Prophylaxis (PEP) is recommended for all household contacts and other close contacts that are personally at high risk or will have contact with high-risk individuals. People at high risk include infants under 12 months of age and those with pre-existing health conditions that may be exacerbated by a pertussis infection. Those who will have contact with people at high risk of developing severe pertussis include pregnant women in their third trimester and all people in high-risk settings (neonatal intensive care unit, childcare settings, maternity wards).

ADH collaborates with school nurses to identify close contacts of active pertussis cases. These individuals are considered to have either simulated household exposure or could develop severe medical consequences from pertussis. These individuals receive a letter detailing next steps, including a recommendation to contact their health care provider for a medical evaluation where discussion of the risk versus benefit of post exposure prophylaxis for pertussis can occur.

Close contacts who are not immunized or under immunized should have pertussis immunization started or continued as soon as possible using age-appropriate products according to the recommended schedule.

## References & Resources

1 [Recommended Antimicrobial Agents for the Treatment and Postexposure Prophylaxis of pertussis: 2005 CDC Guidelines](#) MMWR 2005

2 American Academy of Pediatrics. pertussis (Whooping Cough) In: Kimberlin DW, Banerjee R, Barnett ED, Lynfield R, Sawyer MH, eds. *Red Book: 2024 Report of the Committee on Infectious Diseases*. American Academy of Pediatrics; 2024: 656-667

3 Use Azithromycin with caution in people with prolonged QT interval and certain proarrhythmic conditions.

4 Preferred macrolide in this age group due to risk of idiopathic hypertrophic pyloric stenosis associated with erythromycin

5 TMP-SMX can be used as an alternative agent to macrolides in patients 2 months of age or older who are allergic to macrolides, who cannot tolerate macrolides or who are infected with a rare macrolide-resistant strain of *Bordetella pertussis*.

6 [Clinical Overview of pertussis | Whooping Cough | CDC](#)

7 [pertussis \(Whooping Cough\) - Arkansas Department of Health](#)

