



Postexposure Antimicrobial Prophylaxis

The primary objective of postexposure antimicrobial prophylaxis (PEP) should be to prevent death and serious complications from pertussis in individuals at increased risk of severe disease.

With increasing incidence and widespread community transmission of pertussis, extensive contact tracing and broad scale use of PEP among contacts may not be an effective use of limited public health resources. While antibiotics may prevent pertussis disease if given prior to symptom onset, there are no data to indicate that widespread use of PEP among contacts effectively controls or limits the scope of pertussis outbreaks.

Another important consideration is the overuse of antibiotics; CDC is engaged in actively promoting the judicious use of antibiotics among healthcare providers and parents. Given these considerations, CDC supports **targeting postexposure antibiotic use to persons at high risk of developing severe pertussis and to persons who will have close contact with those at high risk of developing severe pertussis**. In response to the growing number of pertussis cases, many state health departments have already implemented similar approaches.

Accordingly, CDC supports the following:

- **Providing PEP to all household contacts of a pertussis case.** Within families, secondary attack rates have been demonstrated to be high, even when household contacts are current with immunizations. Administration of antimicrobial prophylaxis to asymptomatic household contacts within 21 days of onset of cough in the index patient can prevent symptomatic infection.
- **Providing PEP to persons exposed to pertussis who are at high risk of severe illness or who will have close contact with a person at high risk of severe illness.** These include,
 - **Infants and women in their third trimester of pregnancy** -- severe and sometimes fatal pertussis-related complications occur in infants aged <12 months, especially among infants aged <4 months. Women in their third trimester of pregnancy may be a source of pertussis to their newborn infant.
 - **All persons with pre-existing health conditions that may be exacerbated by a pertussis infection (for example, but not limited to immunocompromised persons and patients with moderate to severe medically treated asthma).**
 - **Contacts who themselves have close contact with either infants under 12 months, pregnant women or individuals with pre-existing health conditions at risk of severe illness or complications.**
 - **All contacts in high risk settings that include infants aged <12 months or women in the third trimester of pregnancy.** These include, but are not limited to neonatal intensive care units, childcare settings, and maternity wards.
- A broader use of PEP in limited closed settings when the number of identified cases is small and when a community-wide outbreak is not ongoing; however, when continued transmission of pertussis is evident, multiple rounds of antibiotics would not be recommended. Rather than repeating a course of antibiotics, contacts should be monitored for onset of signs and symptoms of pertussis for 21 days.

Resources

1. [Letter of Guidance for Parents and Clinicians during Outbreaks](/pertussis/outbreaks/guidance-letter.html) (</pertussis/outbreaks/guidance-letter.html>).
2. [Get Smart: Know When Antibiotics Work](http://www.cdc.gov/GETSMART/) website (<http://www.cdc.gov/GETSMART/>)
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