



Pertussis Testing, Treatment and Chemoprophylaxis in an Outbreak Setting

Antimicrobial treatment should be initiated as soon as pertussis is suspected in a patient.

Treatment of contacts is the same as for cases.

Treatment of cases is initiated even if asymptomatic. If contact is symptomatic and meets clinical case definition then they become a case and contact tracing is required for them as well.

Azithromycin, Standard 5 Day Regimen is an acceptable treatment option.

CASE DEFINITION

Clinical: Cough lasting at least 2 weeks associated with at least one of the following: paroxysms of cough, inspiratory whoop or post-tussive vomiting. Confirmed case is a clinical case with laboratory confirmation OR appropriate symptoms but of a shorter duration if known contact with a confirmed case.

LABORATORY CONFIRMATION

Preferred method is by culture or PCR of a nasopharyngeal aspirate or swab. There is limited utility in conducting lab confirmation in cases that present greater than 3-4 weeks after symptoms.

TREATMENT

Initiating treatment greater than 3 weeks after cough onset has limited benefit to the patients or contacts. However, treatment is recommended up to six weeks after cough onset in late pregnancy. The recommended dose of erythromycin for use against pertussis in children is 40 to 50 mg/kg per day and in adults 1 to 2 g/day orally in 4 divided doses for 14 days (maximum 2 g/day). Alternative treatment includes a 14 day course of TMP/SMX or a 5 day course of azithromycin.

CONTACTS

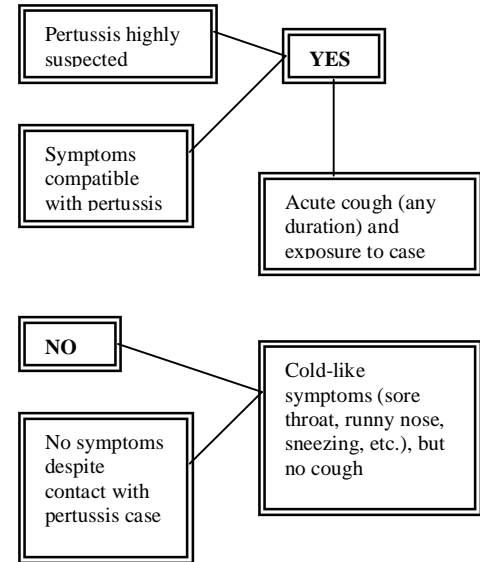
Contacts are generally limited to individuals with close household contact. This may be expanded based on Public Health assessment of risk. Treatment is generally not indicated greater than 3 weeks after exposure except in high risk contacts. Treatment of high risk contacts (infants less than one year of age) should be considered up to 6 weeks after exposure.

RETURN TO SCHOOL

If individual meets the case definition for probable pertussis and symptoms have been present for less than 3 weeks then they should not return to school until 5 days of antibiotic treatment. If individual's symptoms have been for 4 weeks or more then they may return to school without any treatment. Data from microbiologic studies have shown that 80-90% of untreated cases will clear *B. pertussis* from the respiratory tract within 3-4 weeks of cough onset.

FLOW CHART

TEST PERSON? (NOTE: confirm outbreak by ≥ 1 culture confirmed case) Nasal aspirate or swab should be taken within 3 weeks of cough onset; inoculate on Regan Lowe or Bordet-Gengon plate or half-strength Regan Lowe for transport



WHO GETS TREATED?

Erythromycin or TMP/SMX for 14 days and first five days off work or school

Persons with any of the following: Symptoms compatible with pertussis; Acute cough AND exposure to case; Acute cough AND PCR-positive; Positive culture result
Persons aged > 1 year: treat within 3 weeks cough onset

NOTE: A PCR positive result in a person without a cough is NOT a case.

WHO GETS PROPHYLAXIS?

Erythromycin or TMP/SMX for 14 days

All close contacts to a case (especially in high risk settings such as hospitals, households with infants, etc); prophylaxis of additional contacts may be warranted in some settings; persons age >1 year: prophylaxis within 3 weeks of exposure to infectious case

FOR MORE INFORMATION:

1. Centers for Disease Control and Prevention, www.cdc.gov/nip/diseases/pertussis.