**Pertussis (Whooping Cough)**

**Why is Pertussis Important?**

Pertussis is a highly contagious respiratory disease that affects people of all ages, but it can be very serious, even deadly, for infants less than 12 months old. About half of infants with pertussis are hospitalized. The best way to prevent pertussis and protect the entire community from getting pertussis and transmitting to infants is timely clinical care, including timely vaccinations, early testing and treatment of pertussis, and quickly reporting to Public Health.

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<tr>
<th>Communicability</th>
<th>Testing</th>
<th>Clinical Presentation</th>
<th>Prevention</th>
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<tbody>
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<td><strong>Untreated:</strong> 21 days after cough onset.</td>
<td><strong>PCR</strong> is the best test for timely diagnosis. Test for pertussis even if other URIs suspected, including non-specific bronchitis, RSV and croup. <em>See specimen collection.</em></td>
<td><strong>Varies by age and immunization status.</strong></td>
<td><strong>Best prevention is timely vaccination.</strong></td>
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<td><strong>Treated:</strong> 5 days after start of appropriate antibiotics.</td>
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<td><strong>See vaccine schedule.</strong></td>
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<td><strong>Secondary attack rate:</strong> 70–100% for susceptible household contacts – provide antibiotic prophylaxis.</td>
<td><strong>Treatment</strong></td>
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<td><em>See appropriate antibiotic guidelines.</em></td>
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**Clinical Stages**

**Catarrhal Stage:** 1-2 weeks
- Symptoms like the common cold – coryza, sneezing, and a mild, occasional cough. Most infectious stage – test and treat early!

**Paroxysmal Stage:** 1-6 weeks
- Paroxysms: Repeated coughing episodes without inhalation
- High-pitched inspiratory whoop
- Post-tussive vomiting or gagging

**Convalescent Stage:** May last weeks/months
- Gradual recovery

**Atypical Symptoms That May Occur:**
- Dry cough, coughs more at night, clear sputum

**Symptoms by Age**

**Infants under 6 Months of Age:**
May not have noticeable cough or “whoop”.
Signs may be present as:
- Apnea
- Absence of whoop
- Cyanosis

**Adolescents, Adults, and Vaccinated Children:**
- Prolonged hacking/persistent cough and occasional paroxysms
- May present with milder/atypical symptoms if immunized
- Can mimic bronchitis

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**Report Cases Promptly**

Under the California Code of Regulations, medical providers are mandated to report all patients suspected of having pertussis to the local health department within 1 business day.

**Do not wait for lab confirmation to report.**
Call 888-397-3993 or Fax a Confidential Morbidity Report to 888-397-3778
**Guidance for Clinicians: Pertussis**

**Laboratory Testing**

Perform lab tests for all patients with pertussis-like symptoms, especially if in close contact with a patient with pertussis and regardless of immunization history.

Direct Fluorescent Antibody (DFA) and Serological tests may be used but are not reliable to confirm pertussis. Do not test asymptomatic patients.

- **Specimen Source:** Nasopharyngeal (NP) aspirate or swab from posterior nasopharynx
- **Interpretation:** A negative lab result does not rule out pertussis.

For more details: [https://www.cdc.gov/pertussis/clinical/diagnostic-testing/specimen-collection.html](https://www.cdc.gov/pertussis/clinical/diagnostic-testing/specimen-collection.html)

<table>
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<th>Table 1: Laboratory Tests for Pertussis Diagnosis</th>
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<td><strong>Test</strong></td>
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<td>PCR</td>
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The best test is a PCR of nasopharyngeal (NP) aspirate or swab of from posterior nasopharynx.

**Treatment**

**Patient with Pertussis-like Symptoms:**

- Provide antibiotics preemptively before lab results are available or immediately stop school/work attendance of patient and wait to treat when lab results are available.
- Once antibiotics are provided, instruct the patient to not attend work or school activities until 5 days of antibiotics are completed.
- Ensure patient is up-to-date with vaccines.

**Asymptomatic Patient Exposed to Pertussis:**

- All asymptomatic close contacts of a person confirmed to have pertussis should receive treatment/post-exposure prophylaxis (PEP).
- Prioritize PEP for those who are at high risk for developing severe pertussis disease or those who are at high risk for transmitting pertussis to high risk persons (e.g., infants, pregnant women, healthcare workers, etc.).
- Recommend vaccination to contacts if not up-to-date with pertussis vaccines.

**Resources**

- Call the Los Angeles County Department of Public Health Vaccine Preventable Disease Control Program at (213) 351-7800 M-F 8:30am-5:00pm and ask to speak to the Epidemiology Unit or (213) 974-1234 after business hours or on the weekend.
- [http://publichealth.lacounty.gov/ip/VPD_pertussis.htm](http://publichealth.lacounty.gov/ip/VPD_pertussis.htm)
- See Check List for Clinicians: Managing Patients Suspected of Having Pertussis.