

Rhode Island Department of Health Three Capitol Hill Providence, RI 02908-5094 401-222-2577 www.health.ri.gov

Pertussis: Provider Guidelines for Management and Reporting

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To: Primary Care Physicians

From: Division of Infectious Disease & Epidemiology

Please be advised and share with your colleagues this important information:

Clinical providers should remain vigilant in identifying new cases, and follow guidelines for testing, treatment, prophylaxis, and reporting. Immunity typically wanes and cases may be seen five years after the last booster. The Tdap vaccine is a requirement for all children entering Grade 7 in Rhode Island.

Pertussis Case Definition: A cough illness lasting at least two weeks with one of the following: paroxysms of coughing, inspiratory "whoop" or post-tussive vomiting.

Infectious Period: People are infectious from the beginning of the catarrhal period and up to 21 days after onset of cough, or five days after starting antibiotics.

Incubation Period: 7-10 days (range 4-21 days)

## Diagnostic Tests/Specimens:

Laboratory testing for pertussis at the State Health Laboratory consists of both PCR and culture. The correct specimen consists of two calcium alginate nasopharyngeal swabs (one for each nostril). To help concentrate low levels of bacteria, place both swabs in one tube of Regan Lowe transport media.

Specimens need to be properly labeled and accompanied by a completed Specimen Test Requisition Form. Improperly labeled specimens will be rejected. Do not use Regan Lowe transport media past its expiration date.

Additional guidance is available on the <u>HEALTH website</u>, by selecting Bordetella pertussis. Pertussis Collection Kits can be obtained from the State Health Laboratory for provider use and returned to the laboratory for analysis. Pertussis Collection Kits also are available for pick-up from the following hospital laboratories:

- Women & Infants, 401-274-1122 ext. 1191
- Kent County, 401-737-7010 ext. 1383
- Landmark, 401-769-4100
- Westerly, 401-596-6000
- Newport, 401-845-1260
- South County, 401-788-1437

Management of Index Case and Symptomatic Contacts Pending Confirmation: Isolate patients at home and exclude them from school or work for the five (5) days after antibiotics are started. If hospitalized, enforce standard and droplet precautions for the first five (5) days of antibiotic treatment.

The Centers for Disease Control and Prevention (CDC) recommends the following macrolides for treatment or prophylaxis of pertussis:

## Azithromycin

- Infants aged <6 months: 10 mg/kg per day for 5 days.
- Infants and children aged >6 months: 10 mg/kg (maximum: 500 mg) on day 1, followed by 5 mg/kg per day (maximum: 250 mg) on days 2—5.
- Adults: 500 mg on day 1, followed by 250 mg per day on days 2—5.

## Erythromycin Estolate

• Infants aged <1 month: not preferred because of risk for infantile hypertrophic pyloric stenosis (IHPS).

Azithromycin is the recommended antimicrobial agent. If azithromycin is unavailable and erythromycin is used, the dose is 40—50 mg/kg per day in 4 divided doses. These infants should be monitored for IHPS.

• Infants aged >1 month and older children: 40—50 mg/kg per day (maximum: 2 g per day) in 4 divided

doses for 14 days.

• Adults: 2 g per day in 4 divided doses for 14 days

## Clarithromycin

- Infants aged <1 month: not recommended.
- Infants and children aged >1 month: 15 mg/kg per day (maximum: 1 g per day) in 2 divided doses each day for 7 days.
- Adults: 1 g per day in two divided doses for 7 days.

# Trimethoprim-sulfamethoxazole can be used as an alternate antimicrobial agent:

- Infants aged <2 months: contraindicated.
- Infants aged >2 months and children: Trimethoprim 8 mg/kg per day, sulfamethoxazole 40 mg/kg per day in 2 divided doses for 14 days.
- Adults: Trimethoprim 320 mg per day, sulfamethoxazole 1,600 mg per day in 2 divided doses for 14 days.

## High Risk Groups:

Persons who have pertussis, are suspected to have pertussis, or are contacts of a pertussis case patient, and who may be at risk for developing severe disease and adverse outcomes include: persons with an immunodeficiency condition; persons who have other underlying severe disease such as chronic lung disease; pregnant women in the third trimester; and infants <1 year of age. Disease in infants younger than 6 months of age can be atypical with a short catarrhal stage, gagging, gasping, or apnea as prominent early manifestations, and often with an absence of whoop.

#### Management of Contacts:

1. Identify exposed close contacts (household/childcare, other) of index cases and place on prophylactic antibiotic (regimen is identical to treatment) regardless of age or vaccination status.

Definition of close contact will vary depending on the situation:

- Direct face-to-face contact for a period (not defined) with a case-patient who is symptomatic (e.g., in the catarrhal or paroxysmal period of illness);
- Shared confined space in close proximity for a prolonged period of time, such as >1 hour, with a symptomatic case patient; or
- Direct contact with respiratory, oral, or nasal secretions from a symptomatic case-patient.
- 2. Assess immunization status of contacts and immunize with age appropriate pertussis-containing vaccine (Dtap/Tdap). Consult with HEALTH's Immunization Program for additional guidance, if needed.

## Reporting to the Rhode Island Department of Health:

Please report pertussis within four days of diagnosis or strong clinical suspicion to the Rhode Island Department of Health by phone. Laboratory confirmation is not necessary prior to reporting suspected cases. Monday through Friday from 8:30 a.m. to 4:30 p.m., call the Division of Infectious Disease and Epidemiology at (401) 222-2577.

For more information or technical assistance, call (401) 222-2577 or visit:

- State Laboratory Clinical Guidance and Submission: http://www.health.ri.gov/programs/laboratory/biological/about/specimensubmission/
- Pertussis Treatment, Management and Reporting Guidance:
  <a href="http://health.ri.gov/publications/guidelines/treatmentmanagementandreporting/Pertussis.pdf">http://health.ri.gov/publications/guidelines/treatmentmanagementandreporting/Pertussis.pdf</a>
- Pertussis topic on the HEALTH website: http://www.health.ri.gov/diseases/pertussis/