

## **Public Health Advisory – Pertussis**

### **May 1, 2014**

#### **Situation Update**

This health advisory informs the local medical community of recent increases in pertussis cases in Riverside County, provides links to treatment and prevention references, and reminds providers about important management issues.

The County of Riverside Department of Public Health has confirmed fifty-three pertussis cases in Riverside County through April 28, 2014. The majority of the cases are eighteen years of age or younger. This compares to only twelve cases<sup>i</sup> reported at this time last year and reflects increasing cases noted throughout California.

The first death from pertussis in California since 2010 was reported in February 2014: A Riverside County infant died after several weeks of illness. Infants too young to be vaccinated can be protected by immunizing<sup>ii</sup> pregnant women from 27 to 36 weeks of gestation during every pregnancy, irrespective of the patient's prior history of receiving Tdap. As part of the "cocooning" strategy, all close contacts of infants (e.g., parents, siblings, grandparents, child care providers) should also be immunized against pertussis.

#### **Recommendations for clinicians:**

- Inquire about recent possible pertussis exposures in schools or community settings and consider pertussis despite vaccination status when evaluating patients with respiratory symptoms.
- Consider pertussis regardless of age in the differential diagnosis of patient with unexplained, persistent cough illness. Symptoms of infection are generally milder in teens and adults, especially in those who have been vaccinated.
- Be aware that the<sup>iii</sup> diagnosis of pertussis can be a challenge in young infants given that the cough may be undetectable or mild and fever is usually not present. Mild illness may quickly transform into respiratory distress and include apnea, hypoxia or seizures. Delays in treatment may increase the risk of fatal illness in young infants, especially those under 3 months of age. A white blood cell count of  $\geq 20,000$  cells/mm<sup>3</sup> with  $\geq 50\%$  lymphocytes is a strong indication of pertussis.
- Obtain a nasal aspirate (preferable) or nasopharyngeal swab for PCR testing and/or culture (available at reference laboratories) when pertussis is in the differential diagnosis. Serologic tests are not recommended.
- Initiate antibiotic<sup>iv</sup> treatment prior to test results in patients with a clinical history suggestive of pertussis or with risk factors for severe complications. Azithromycin is the preferred antibiotic because of efficacy and compliance with treatment.
- Instruct all patients/parents diagnosed with pertussis to stay home from school, daycare, or work until they have completed their full course of antibiotics and to avoid contact with infants and others susceptible to the disease.

- Provide <sup>v</sup> post-exposure prophylaxis (PEP) to all household contacts, caregivers, and other persons who have had direct contact with respiratory, oral, or nasal secretions from a symptomatic case. PEP antibiotic treatment is the same as treatment for disease and should not be shortened.
- Encourage all individuals to be up-to-date with <sup>vi</sup> current pertussis vaccination recommendations. All <sup>vii</sup> health care workers should be immunized against pertussis with Tdap.

All suspected or confirmed cases should be promptly reported to Disease Control via <sup>viii</sup> Confidential Morbidity Report (CMR) by fax to (951) 358-5102 or by calling (951) 358-5107. Questions about pertussis diagnosis, management, or prevention may also be directed to Disease Control.

Useful resources for clinicians include the California Department of Public Health <sup>ix</sup> pertussis website and Centers for Disease Control and Prevention <sup>x</sup> pertussis webpage for clinicians.

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<sup>i</sup> <http://www.cdph.ca.gov/programs/immunize/Pages/PertussisSummaryReports.aspx>

<sup>ii</sup> <http://www.cdc.gov/vaccines/vpd-vac/pertussis/tdap-pregnancy-hcp.htm>

<sup>iii</sup> <http://www.cdc.gov/pertussis/clinical/features.html>

<sup>iv</sup> <http://www.cdc.gov/pertussis/clinical/treatment.html>

<sup>v</sup> <http://www.cdc.gov/pertussis/outbreaks/PEP.html>

<sup>vi</sup> <http://www.cdc.gov/vaccines/vpd-vac/pertussis/recs-summary.htm>

<sup>vii</sup> <http://www.cdc.gov/mmwr/pdf/rr/rr6007.pdf>

<sup>viii</sup> <http://www.rivco-diseasecontrol.org/>

<sup>ix</sup> <http://www.cdph.ca.gov/HealthInfo/discond/Pages/Pertussis.aspx>

<sup>x</sup> <http://www.cdc.gov/pertussis/clinical/index.html>