



To: CAHAN San Diego Participants  
Date: April 29, 2014

### **Pertussis Cases Increase in San Diego County**

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

The County of San Diego Health and Human Services Agency (HHS) has confirmed 298 pertussis cases in San Diego so far in 2014. This compares to only 53 cases reported at this time last year and reflects increasing cases [noted throughout California](#). Local case reports began to increase last September, with 275 of the 430 reported cases for 2013 having onset in the last four months of the year.

Of the 573 pertussis cases reported between 9/1/13 and 4/22/14, 12% were less than one year of age and 46% were 13 through 18 years of age. Patients ranged in age from 1 month to 74 years, with a median age of 8 years. Eighteen cases (3%) required hospitalization. Eighty percent of the cases in this period were up-to-date on pertussis vaccinations, with 12% not up-to-date, 1.5% too young for immunization, and 6.5% immunization status unknown.

Clusters of cases have been noted in middle and high school settings throughout the county. When cases occur in schools or daycares, staff and families are directly notified and urged to seek care promptly for early symptoms or for contact prophylaxis. The community is notified of public exposures in [County news releases](#).

The first death from pertussis in California since 2010 was reported in February 2014: a two-month-old Riverside resident who died in a San Diego hospital after several weeks of illness. Infants too young to be vaccinated can be protected by immunizing [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 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 [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 [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.

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- Instruct all patients diagnosed with pertussis to stay home from school or daycare until they have completed their full course of antibiotics and to avoid contact with infants and others susceptible to the disease.
- Provide [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 [current pertussis vaccination recommendations](#). All [health care workers](#) should be immunized against pertussis with Tdap.

Useful resources for clinicians include the California Department of Public Health [pertussis website](#) and Centers for Disease Control and Prevention [pertussis webpage for clinicians](#).

All suspected or confirmed cases should be promptly reported to the HHS Immunization Program via [Confidential Morbidity Report \(CMR\)](#) by FAX to 619-692-5677 or by calling at 866-358-2966 (select option #5). Questions about pertussis diagnosis, management, or prevention may also be directed to the [Immunization Program](#).

Thank you for your continued participation.

**CAHAN San Diego**

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