

PERTUSSIS FACT SHEET

LOS ANGELES COUNTY IMMUNIZATION PROGRAM

Revised 8/2008, Page 1 of 3

BACKGROUND INFORMATION

- **Agent:** *Bordetella pertussis*, a gram negative pleomorphic bacillus.
- **Transmission:** Via contact with respiratory tract secretions or droplets of infected persons.
- **Incubation Period:** Commonly 7-10 days (range 5-21 days).
- **Communicability:** Greater in the catarrhal stage before paroxysms. Tapers off until 21 days after onset of paroxysms, if untreated. If treated, 5 days after start of appropriate antibiotics. Secondary attack rate of 70 – 100% among susceptible household contacts.

IMMUNITY FROM VACCINATION

- **5 doses of DTaP are recommended for children <7 years of age**
 - 3 (primary) doses at ages 2, 4, and 6 months
 - Boosters at 15-18 months AND 4-6 years of age
 - **Vaccine protection decreases over time**, with little or no protection 5-10 years following receipt of the last vaccine dose.
- **A single dose of Tdap is recommended for adolescents and adults at least 10 years of age**
 - Tdap may replace Td for a booster immunization against tetanus, diphtheria, and pertussis. Td should be used for subsequent booster doses. Contact the Immunization Program for more information regarding Tdap if necessary.
- **Adults who have close contact with children <12 months of age and health care personnel who provide direct patient care should be prioritized for receipt of Tdap and can receive it at an interval as short as 2 years since their last dose of Td.**
- Immunity following pertussis illness is not permanent.

CLINICAL FEATURES OF PERTUSSIS

- **1st Stage (Catarrhal stage):** Insidious onset of coryza (runny nose), sneezing, and a mild, occasional cough, similar to the common cold. Fever is absent or minimal.
- **2nd Stage (Paroxysmal stage):** Cough becomes more severe. Repeated violent coughing episodes without inhalation (paroxysms), ended by characteristic high-pitched inspiratory whoop. Post-tussive vomiting or gagging can occur without whoop. Can last 1-2 months.
- **3rd stage (Convalescent stage):** Gradual recovery. Cough becomes less paroxysmal.
- **Infants (under 6 months of age):** May have cough, choking, apnea, cyanosis, without “whoop” or paroxysms. Leukocytosis and lymphocytosis are common findings during the early paroxysmal stage. Complications include hospitalization, pneumonia, seizures, encephalopathy, and death.
- **Adults/adolescents/immunized children:** Have milder illness, hacking cough, usually with mucus production and occasional paroxysms. Post-tussive vomiting or gagging can occur without “whoop”. Mimics bronchitis.