



# Pertussis Report

March 9, 2011

- **New in this report:** The number of cases in 2010 now represents the most cases reported in 65 years since there were 13,492 cases reported in 1945. Disease activity is still at relatively increased levels throughout the state and the number of cases observed in January 2011 is equivalent to the number of cases reported during the peak months of 2005.
- **9,477** confirmed, probable and suspect cases of pertussis with onset from January 1 through December 31, 2010 have been reported to CDPH for a state rate of **24.2 cases/100,000**.
  - Case Classification:
    - Confirmed: ~60%
    - Probable: ~19%
    - Suspect: ~21%
- **514** cases with onset in 2011 have been reported.
  - Disease activity levels remain high; the number of cases occurring in January 2011 is the same as the number reported during the peak months of 2005 (Figure 1).
- This is the most cases reported in 65 years when 13,492 cases were reported in 1947, a peak year, and the highest incidence in 52 years when a rate of 26.0 cases/100,000 was reported in 1958. Previously, the peak was in 2005 when there were 3,182 cases reported (Figure 2).
- Of the 81% of cases with known hospitalization information, 663 (9%) cases have been hospitalized
  - 415 (63%) of hospitalized cases were infants <3 months of age and 475 (72%) were infants <6 months of age.
  - 364 (76%) of the hospitalized infants <6 months of age with known race and ethnicity were Hispanic.
- Ten deaths have been reported; 9 (90%) were Hispanic infants. Nine fatalities were infants <2 months of age at time of disease onset and had not received any doses of pertussis-containing vaccine and the remainder was an ex-28 week preemie that was 2 months of age and had received the first dose of DTaP only 15 days prior to disease onset. The majority of infant cases in 2010 have occurred in infants <3 months of age (Figure 3).
- The case-fatality rate among infants <3 months of age is 1.4%.
- Rates are highest in infants <6 months of age (451.2 cases/100,000), in children aged 6 months to 6 years (64.2 cases/100,000), 7-9 years (69.9 cases/100,000) and adolescents aged 10-18 years (50.0 cases/100,000) (Figure 4). The majority of adolescent cases are in 10-11 year-olds (Figure 5).

- Overall rates by race/ethnicity are highest in Hispanics (26.8/100,000) and whites (21.2/100,000), however age-specific rates indicate that the highest rates are seen in Hispanic infants <6 months of age (581.0/100,000) (Figures 3 and 4).
- The median case rate by county is 18.9 cases per 100,000 (range 0-140) (Table 1).

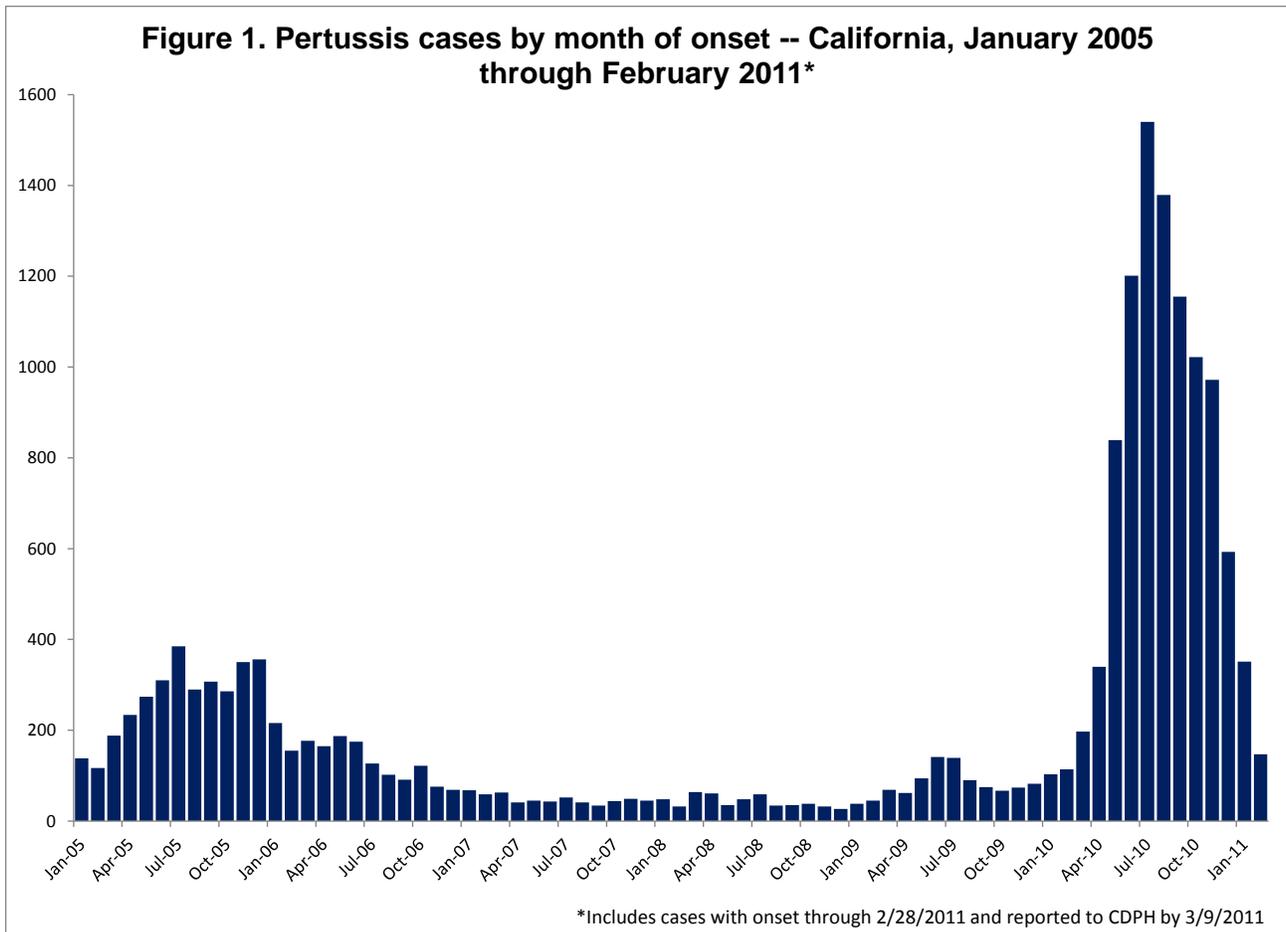


Figure 2. Number of reported pertussis cases by year of onset -- California 1947-2010\*

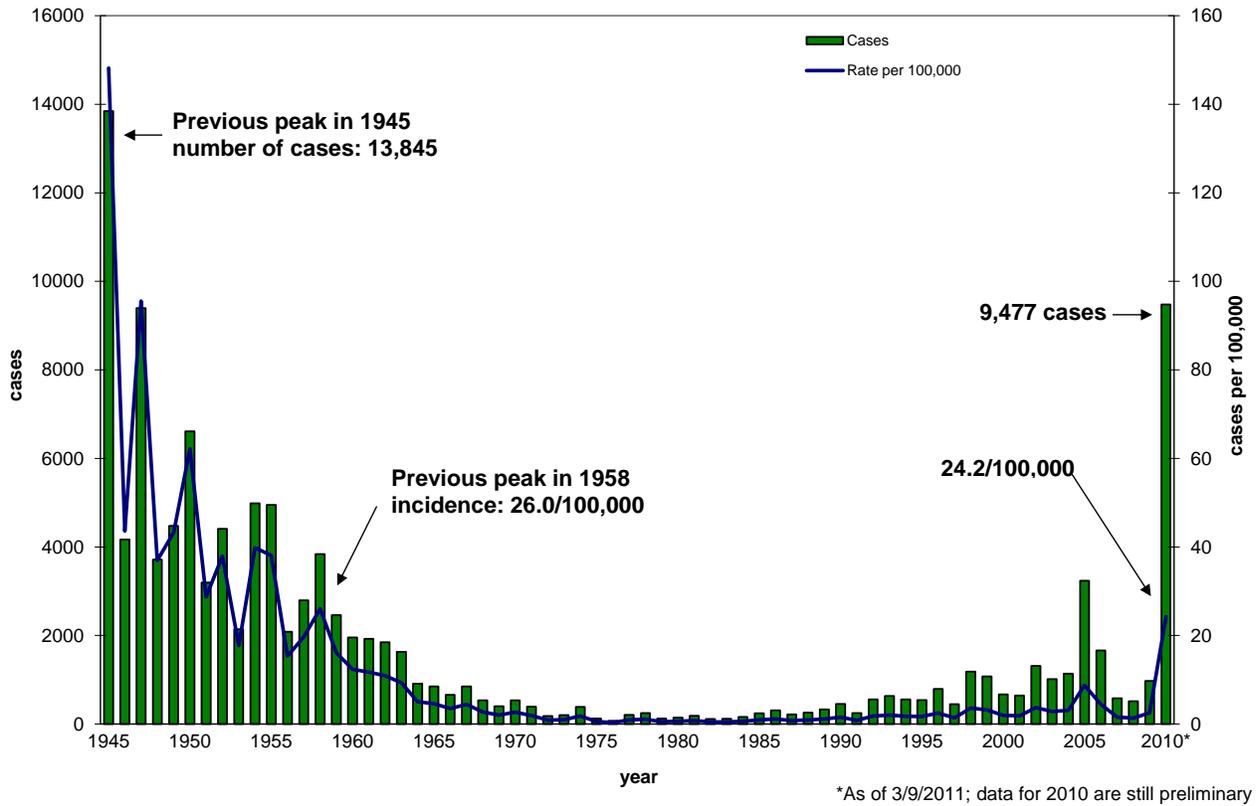


Figure 3. Infant pertussis cases by age in months -- California, 2010\*

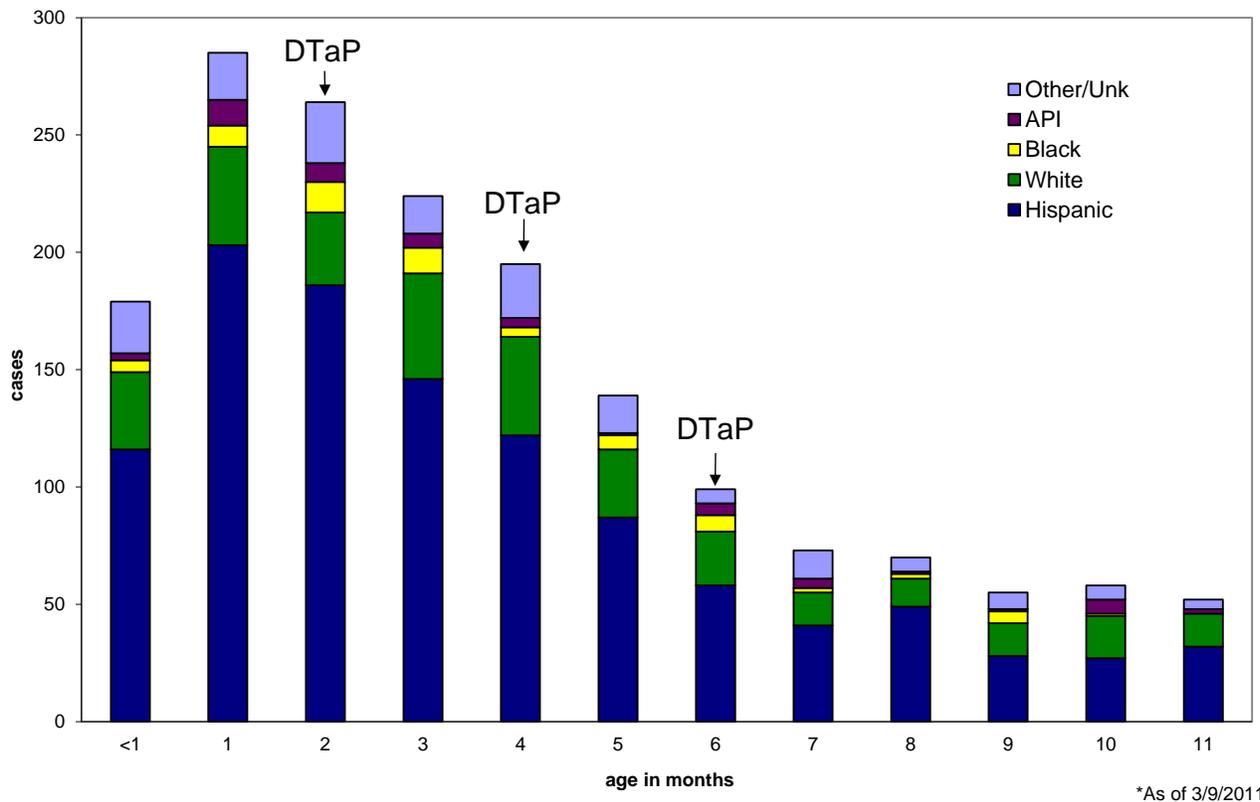
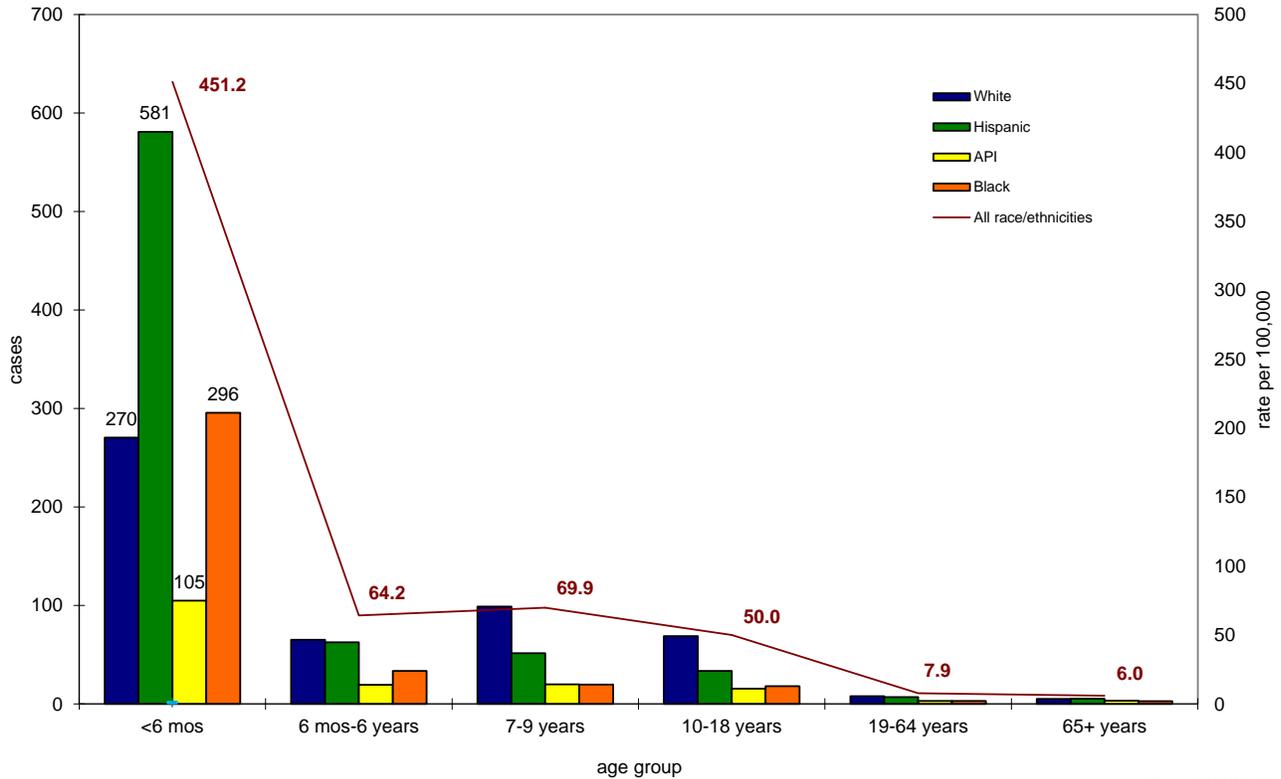
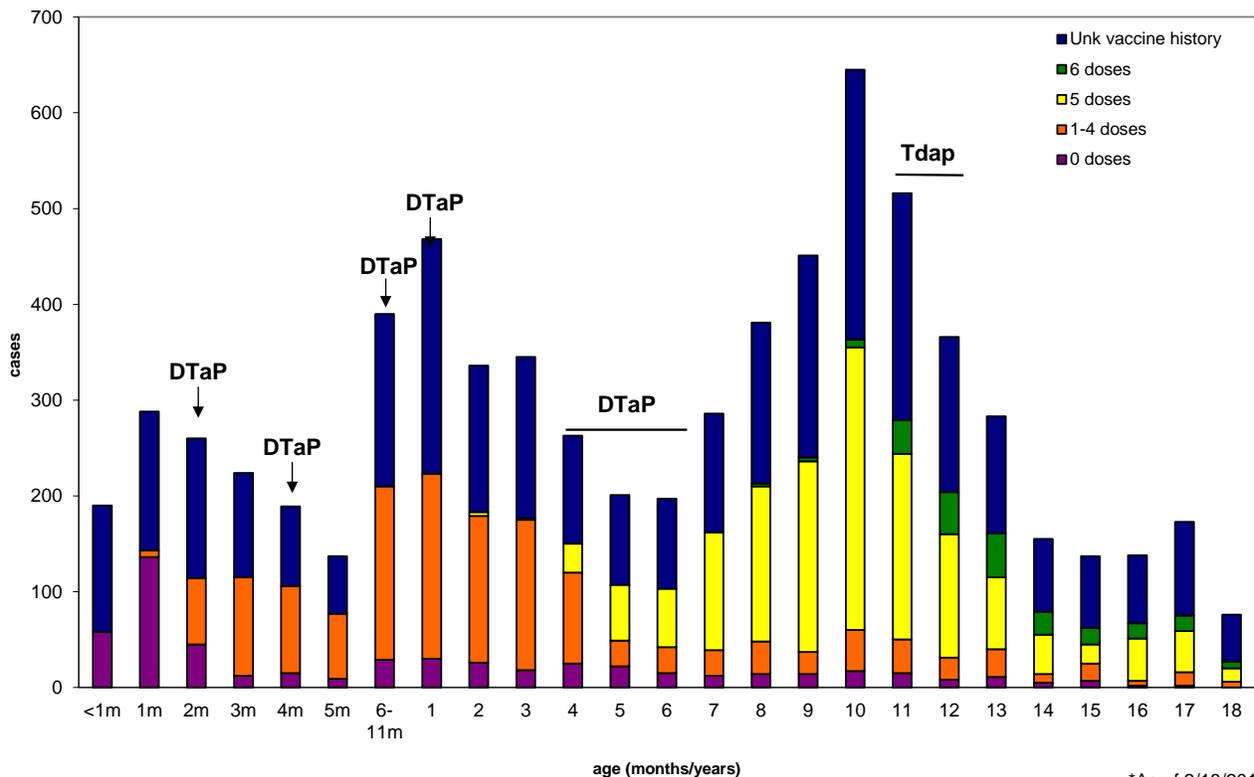


Figure 4. Pertussis cases by age and race/ethnicity -- California, 2010\*



\*As of 3/9/2011

Figure 5. Pertussis cases in children and adolescents aged 0-18 years, by vaccine history -- California, 2010\*



\*As of 2/18/2011

**Table 1. Pertussis cases with onset from January 1 through December 31, 2010 reported to CDPH by local health jurisdiction -- California, 2010**

	2010	
	Cases	Rate
<b>CALIFORNIA</b>	<b>9477</b>	<b>24.22</b>
ALAMEDA	446	30.91
City of Berkeley*	19	17.73
ALPINE	0	0.00
AMADOR	3	7.44
BUTTE	33	14.34
CALAVERAS	9	18.85
COLUSA	11	46.24
CONTRA COSTA	219	20.35
DEL NORTE	16	51.64
EL DORADO	55	29.05
FRESNO	563	57.25
GLENN	1	3.24
HUMBOLDT	65	48.22
IMPERIAL	10	5.27
INYO	8	41.70
KERN	373	42.79
KINGS	28	17.02
LAKE	5	7.40
LASSEN	0	0.00
LOS ANGELES**	1361	13.79
City of Long Beach*	74	15.02
City of Pasadena*	18	11.99
MADERA	125	77.11
MARIN	360	141.91
MARIPOSA	10	52.33
MENDOCINO	34	36.49
MERCED	135	49.28
MODOC	0	0.00
MONO	18	121.35
MONTEREY	119	27.46
NAPA	24	16.81
NEVADA	29	28.25
ORANGE	526	16.30
PLACER	51	14.67
PLUMAS	2	9.16
RIVERSIDE	486	21.71
SACRAMENTO	209	14.40
SAN BENITO	8	12.46
SAN BERNARDINO	179	8.22
SAN DIEGO	1194	37.32
SAN FRANCISCO	167	20.41
SAN JOAQUIN	86	11.60
SAN LUIS OBISPO	377	139.77
SAN MATEO	188	25.52
SANTA BARBARA	66	15.19
SANTA CLARA	500	27.21
SANTA CRUZ	87	32.46
SHASTA	31	16.17
SIERRA	0	0.00
SISKIYOU	11	23.35
SOLANO	39	8.84
SONOMA	248	50.06
STANISLAUS	168	30.02
SUTTER	6	5.86
TEHAMA	12	18.29
TRINITY	0	0.00
TULARE	233	49.90
TUOLUMNE	32	54.49
VENTURA	371	43.35
YOLO	24	11.64
YUBA	5	6.22

\*City health jurisdictions not included in county total

5

\*\*Data are preliminary and include cases reported to CDPH as of 3/9/2011