



# Pertussis Report\*

January 7, 2011

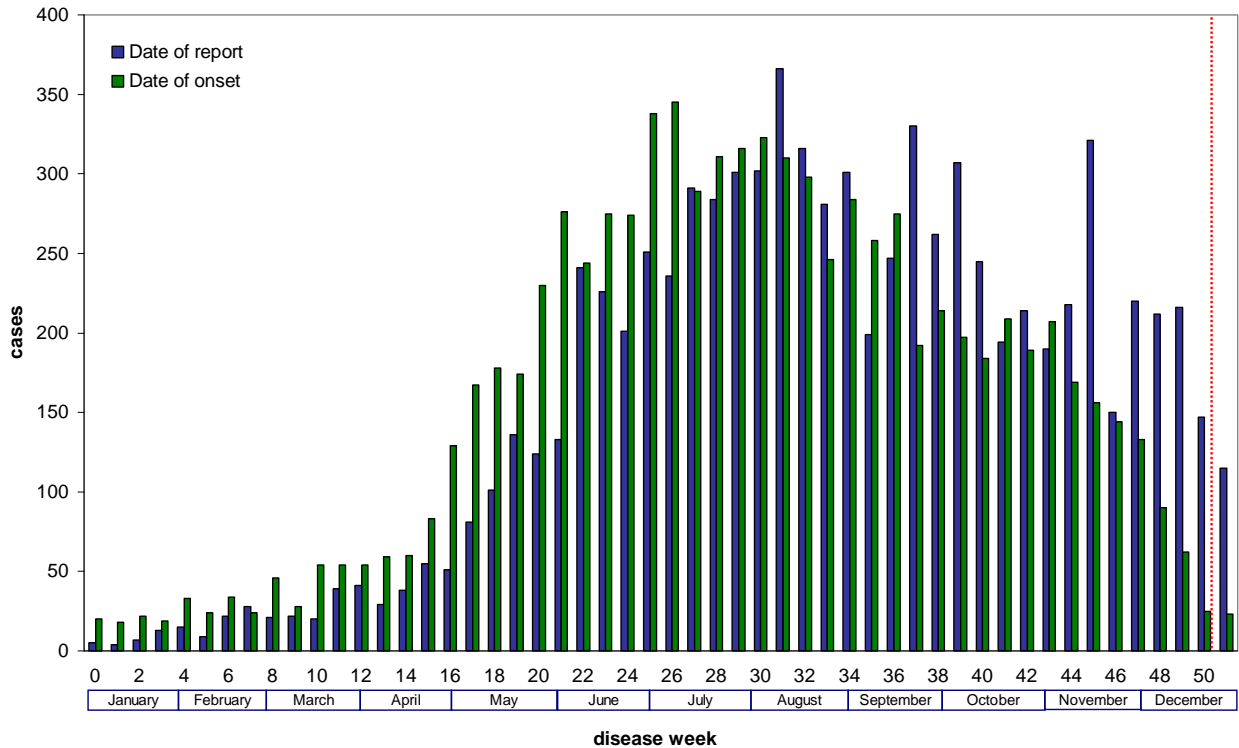
- **New in this report:** Disease activity is slowing statewide, however relatively high numbers of cases continue to be reported each week. Data for 2010 is still preliminary and final case counts are not expected until Spring 2011.
- **8,383** confirmed, probable and suspect cases of pertussis with onset from January 1 through December 31, 2010 have been reported to CDPH for a state rate of **21.4 cases/100,000**. 2 cases with onset in 2011 have been reported.
  - 559 new cases have been reported to CDPH since December 15, 2010 (Figure 1).
  - Case Classification:
    - Confirmed: ~63%
    - Probable: ~18%
    - Suspect: ~19%
- This is the most cases reported in 63 years when 9,394 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 43% of cases with known hospitalization information, 361 (10%) cases have been hospitalized
  - 198 (55%) of hospitalized cases were infants <3 months of age and 253 (70%) were infants <6 months of age.
  - 190 (75%) 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 (417.8 cases/100,000), in children aged 6 months to 6 years (54.5 cases/100,000), 7-9 years (62.0 cases/100,000) and adolescents aged 10-18 years (44.8 cases/100,000) (Figure 4). The majority of adolescent cases are in 10-11 year-olds.
- Overall rates by race/ethnicity are highest in Hispanics (22.5/100,000) and whites (18.0/100,000), however age-specific rates indicate that the highest rates are seen in Hispanic infants <6 months of age (521.3/100,000) (Figures 3 and 4).
- The median case rate by county is 18.6 cases per 100,000 (range 0-141) (Figure 5 and Table 1).

\*This report has been corrected

Prepared by the California Department of Public Health, Immunization Branch

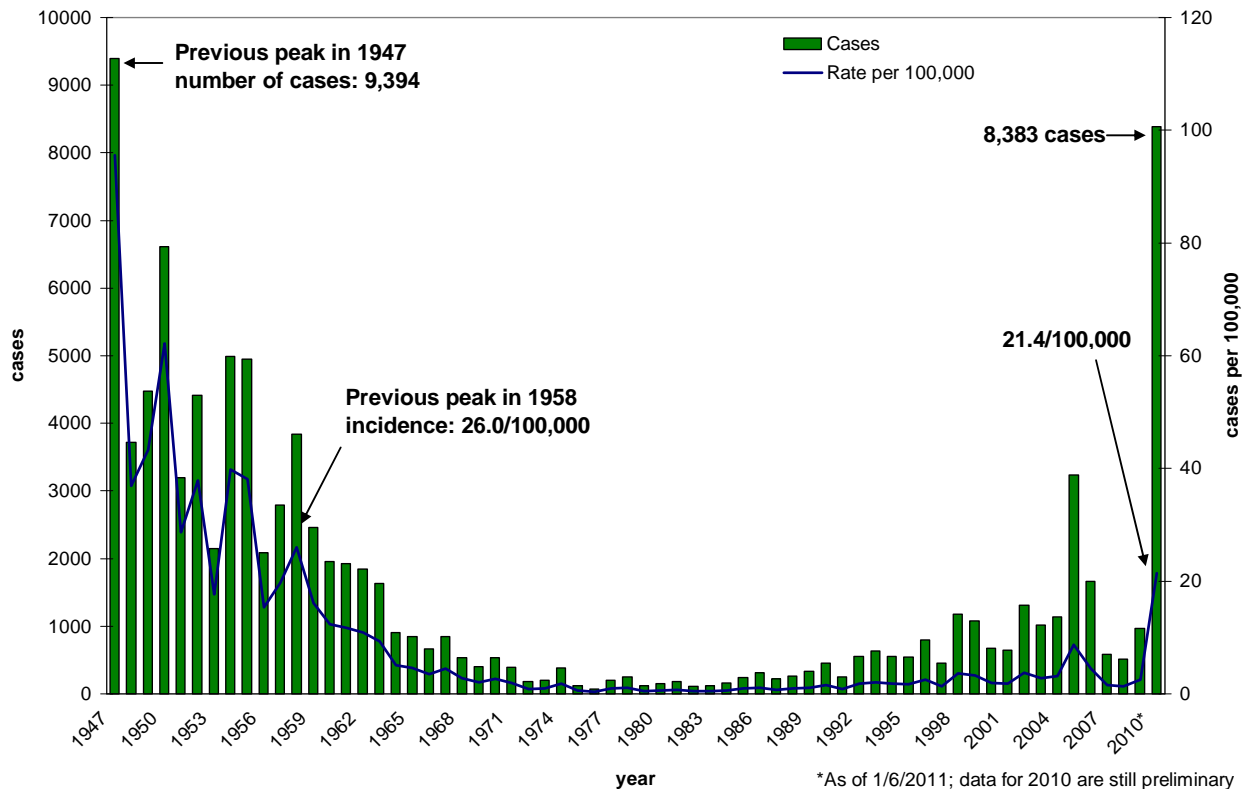
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**Figure 1. Epidemic curve of pertussis cases\* by weeks of report and onset -- California, January 1 through December 31, 2010**



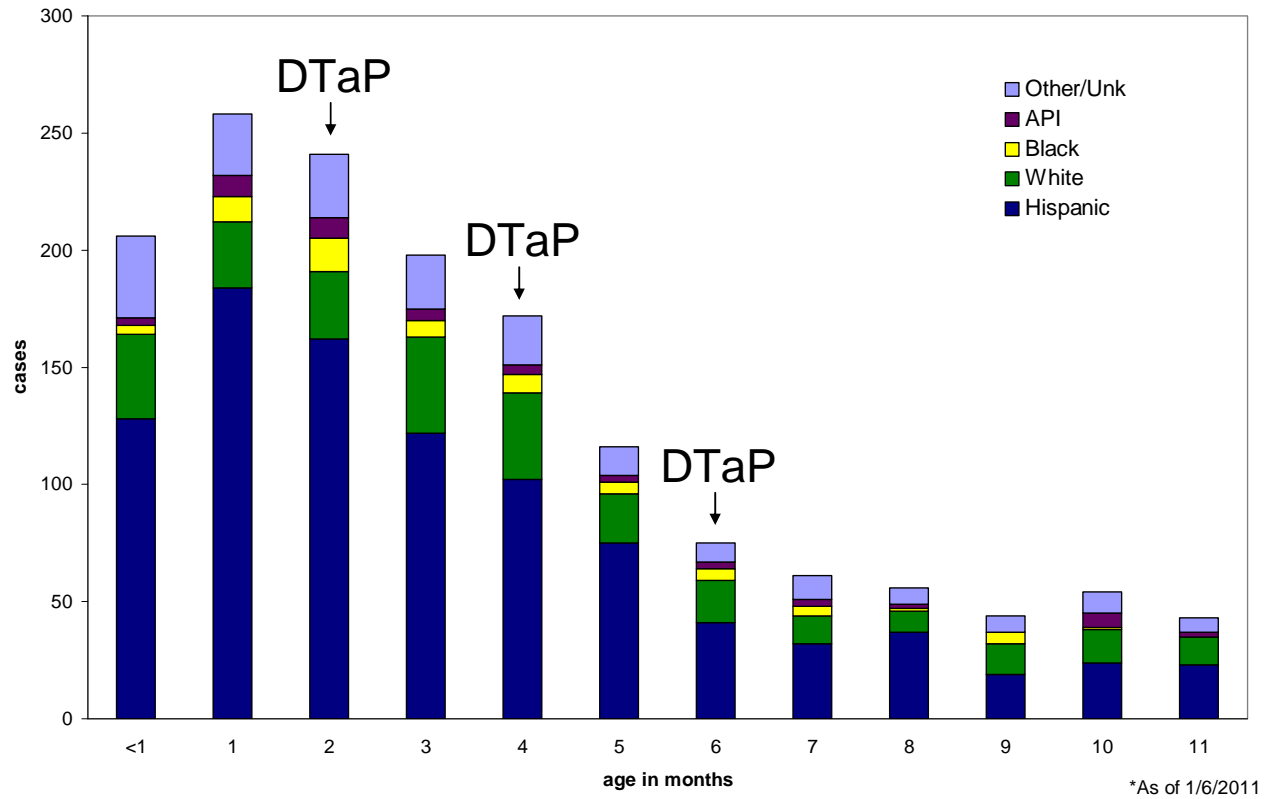
\*Includes cases reported to CDPH as of 1/6/2011

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

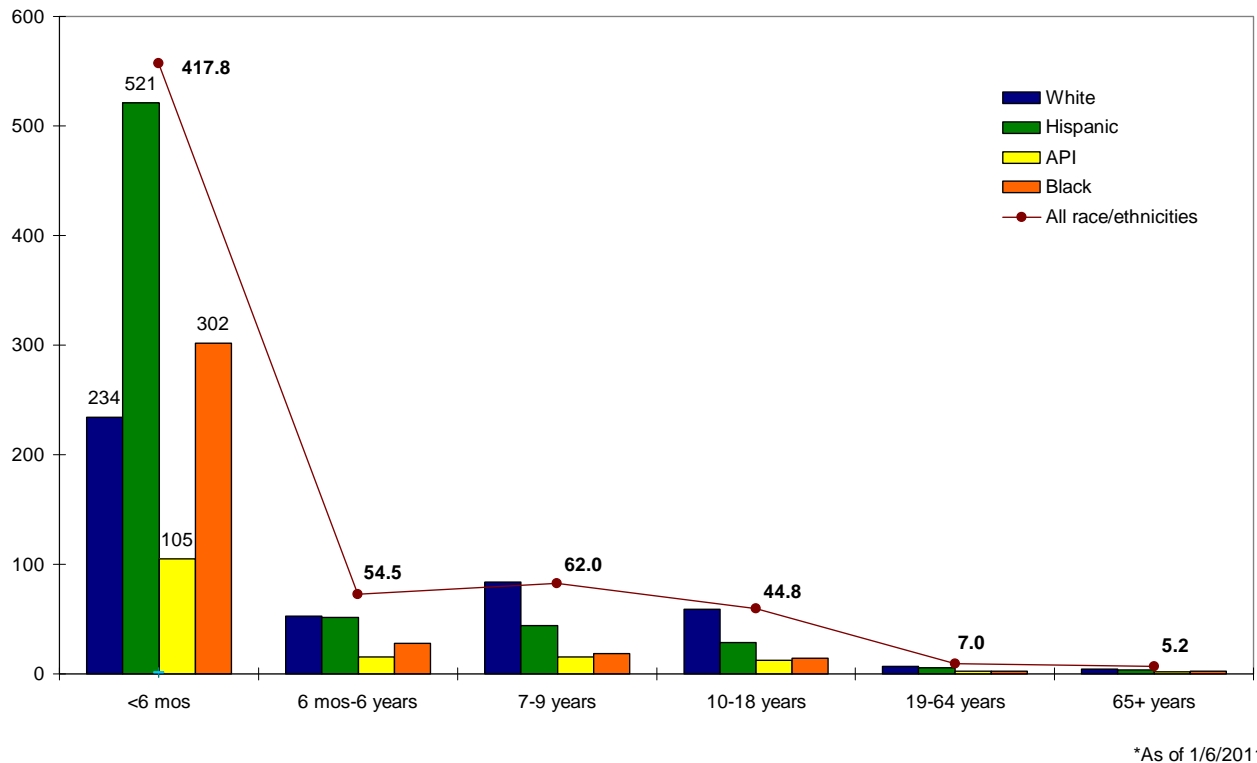


\*As of 1/6/2011; data for 2010 are still preliminary

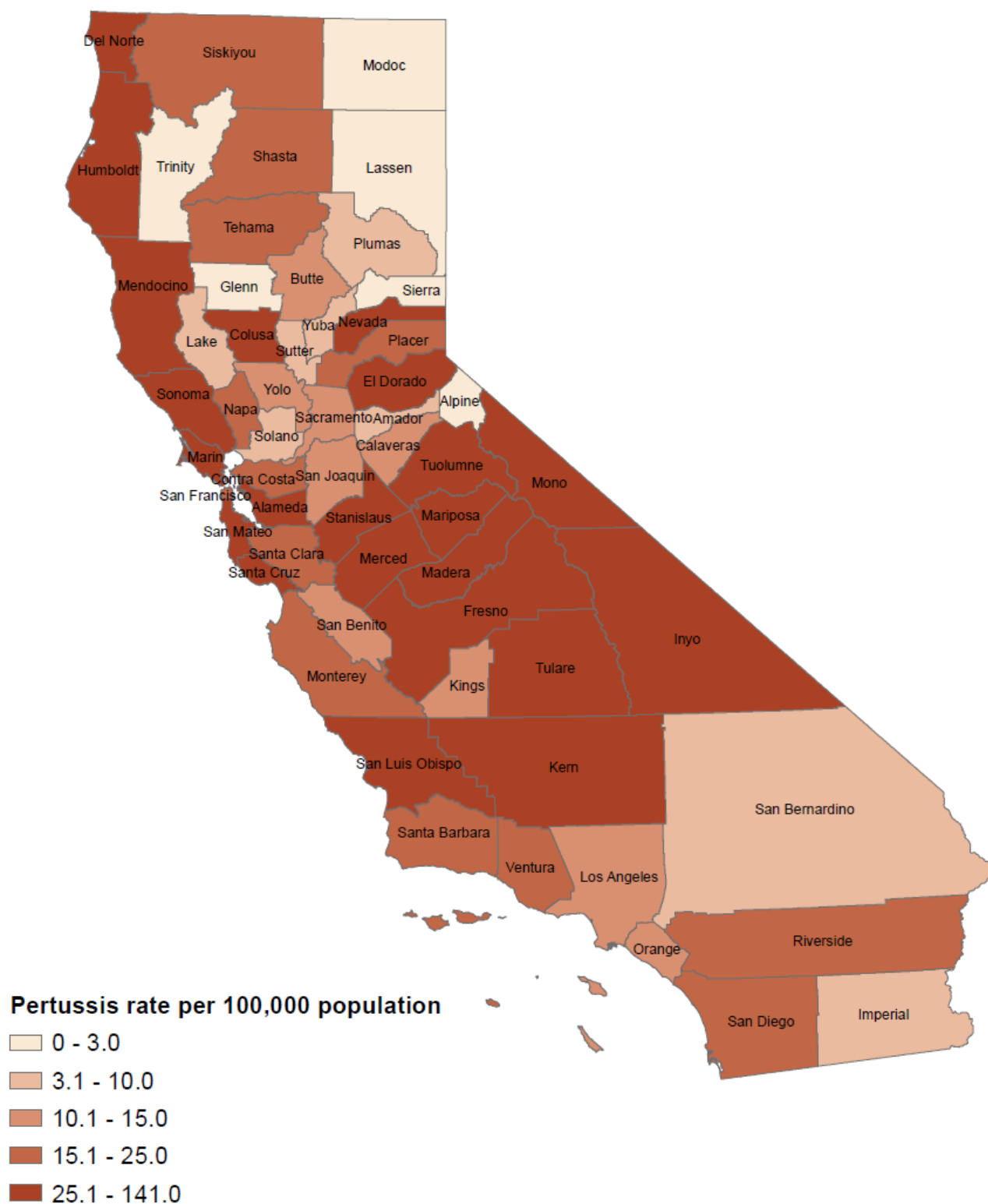
**Figure 3. Infant pertussis cases by age in months -- California, 2010\***



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



**Figure 5. Pertussis rates by county – California, January 1 – December 31, 2010**



**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>8383</b>	<b>21.42</b>
ALAMEDA	420	29.30
City of Berkeley*	17	15.86
ALPINE	0	0.00
AMADOR	3	7.53
BUTTE	32	14.11
CALAVERAS	7	14.83
COLUSA	11	47.20
CONTRA COSTA	211	19.82
DEL NORTE	16	52.23
EL DORADO	53	28.44
FRESNO	549	56.91
GLENN	0	0.00
HUMBOLDT	62	46.26
IMPERIAL	10	5.41
INYO	6	31.43
KERN	353	41.37
KINGS	24	14.90
LAKE	5	7.49
LASSEN	0	0.00
LOS ANGELES**	1352	13.79
City of Long Beach*	73	14.82
City of Pasadena*	17	11.32
MADERA	122	77.09
MARIN	349	137.66
MARIPOSA	10	52.81
MENDOCINO	32	34.61
MERCED	129	48.19
MODOC	0	0.00
MONO	10	68.54
MONTEREY	96	22.30
NAPA	22	15.62
NEVADA	28	27.50
ORANGE	476	14.92
PLACER	58	17.02
PLUMAS	2	9.20
RIVERSIDE	456	20.93
SACRAMENTO	186	12.94
SAN BENITO	8	12.81
SAN BERNARDINO	124	5.80
SAN DIEGO	771	24.33
SAN FRANCISCO	145	17.81
SAN JOAQUIN	79	10.91
SAN LUIS OBISPO	377	140.69
SAN MATEO	185	25.20
SANTA BARBARA	65	15.09
SANTA CLARA	450	24.67
SANTA CRUZ	84	31.49
SHASTA	29	14.81
SIERRA	0	0.00
SISKIYOU	11	23.48
SOLANO	24	5.50
SONOMA	236	48.02
STANISLAUS	159	28.94
SUTTER	6	6.00
TEHAMA	12	18.57
TRINITY	0	0.00
TULARE	194	42.49
TUOLUMNE	22	37.65
VENTURA	179	21.14
YOLO	21	10.36
YUBA	5	6.37

\*City health jurisdictions not included in county total

\*\*Data are preliminary and include cases reported to CDPH as of 1/6/2011

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