



Pertussis Report

May 16, 2011

- **New in this report:** Disease activity in 2011 is still at relatively increased levels throughout the state.
- **2011: 1,102 cases with onset in 2011** have been reported to CDPH. The state rate per observed person-days is **7.5 cases/100,000**.
 - Disease activity levels remain high; the number of cases occurring in January 2011 was the same as the number reported during the peak months of 2005 (Figure 1).
 - 66 cases have been hospitalized (of 77% with complete data).
 - No deaths have been reported.
 - Cases have been reported from 42 (69%) of 61 local health jurisdictions.
- **2010: 9,120 cases with onset in 2010** have been reported to CDPH for a state rate of **23.3 cases/100,000**.
 - 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).
 - 804 (9%) cases were hospitalized
 - 442 (55%) of hospitalized cases were infants <3 months of age and 581 (72%) were infants <6 months of age.
 - 414 (76%) of the hospitalized infants <6 months of age with known race and ethnicity were Hispanic.
 - Ten deaths were 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 1.3%.
 - Case Classification:
 - Confirmed: 59%
 - Probable: 19%
 - Suspect: 22%
 - The median case rate by county is 17.5 cases per 100,000 (range 0-139) (Table 1).
 - Rates are highest in infants <6 months of age (435.0 cases/100,000), in children aged 6 months to 6 years (61.8 cases/100,000), 7-9 years (67.3 cases/100,000) and adolescents aged 10-18 years (49.0 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 (26.5/100,000) and whites (20.9/100,000), however age-specific rates indicate that the highest rates are seen in Hispanic infants <6 months of age (574.9/100,000) (Figures 3 and 4).

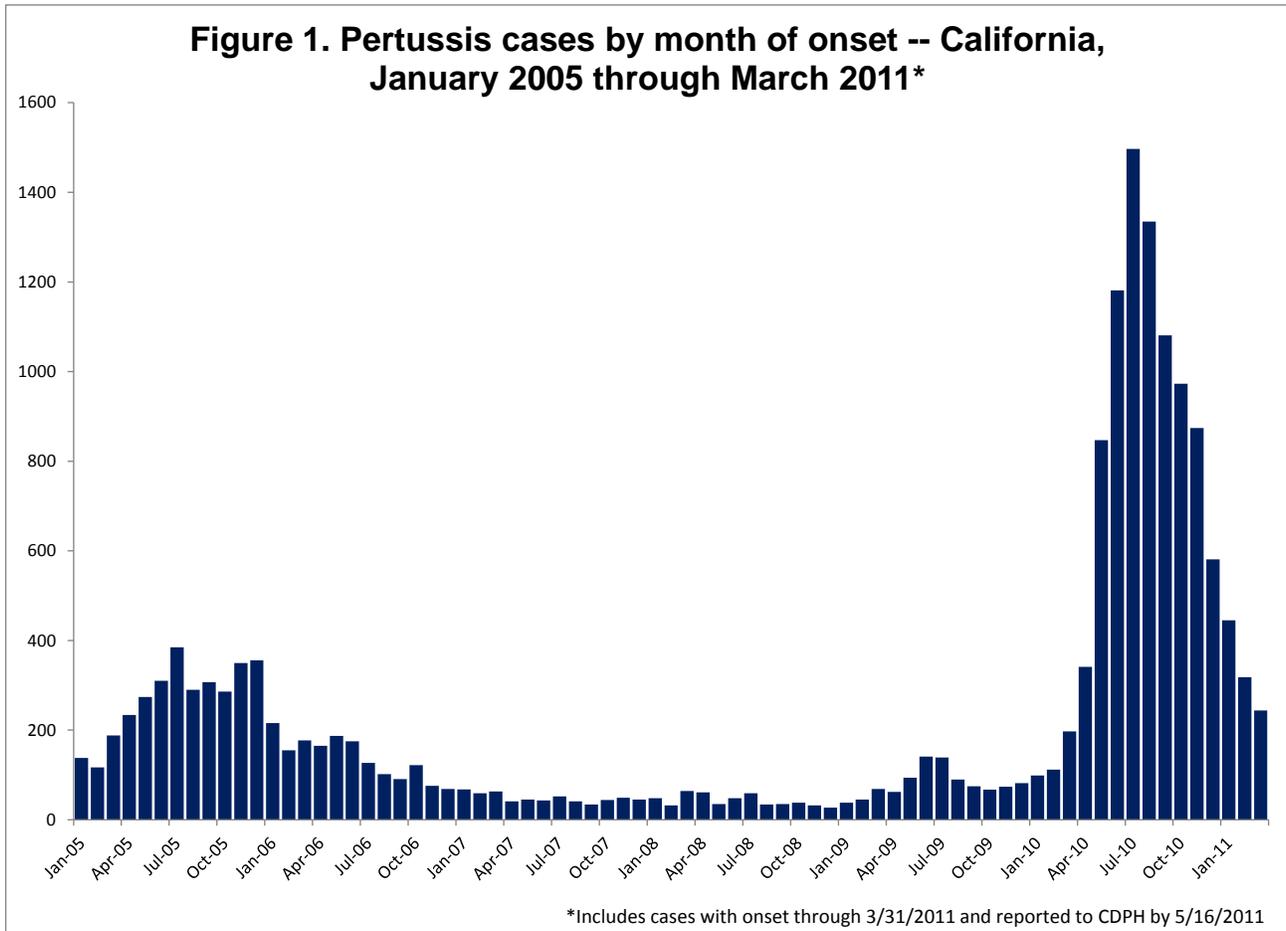


Figure 2. Number of reported pertussis cases by year of onset -- California 1947-2010

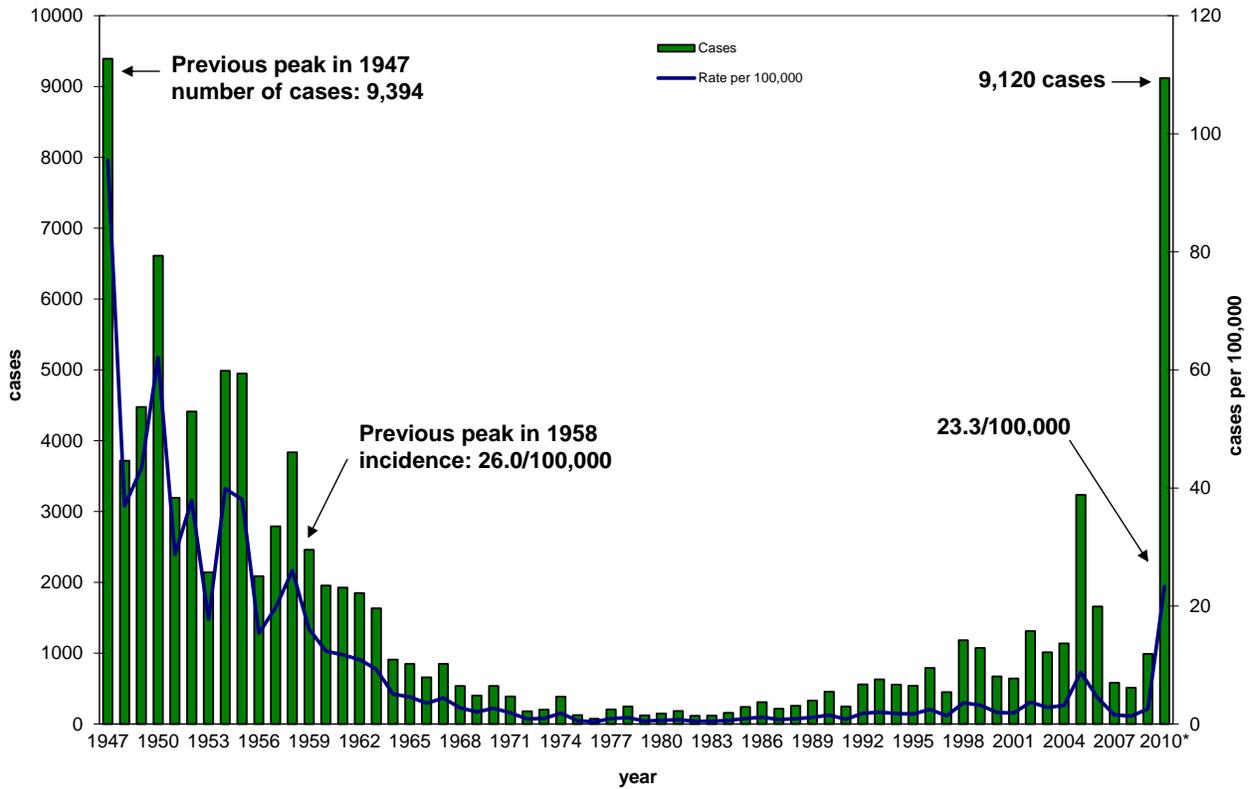


Figure 3. Infant pertussis cases by age in months -- California, 2010

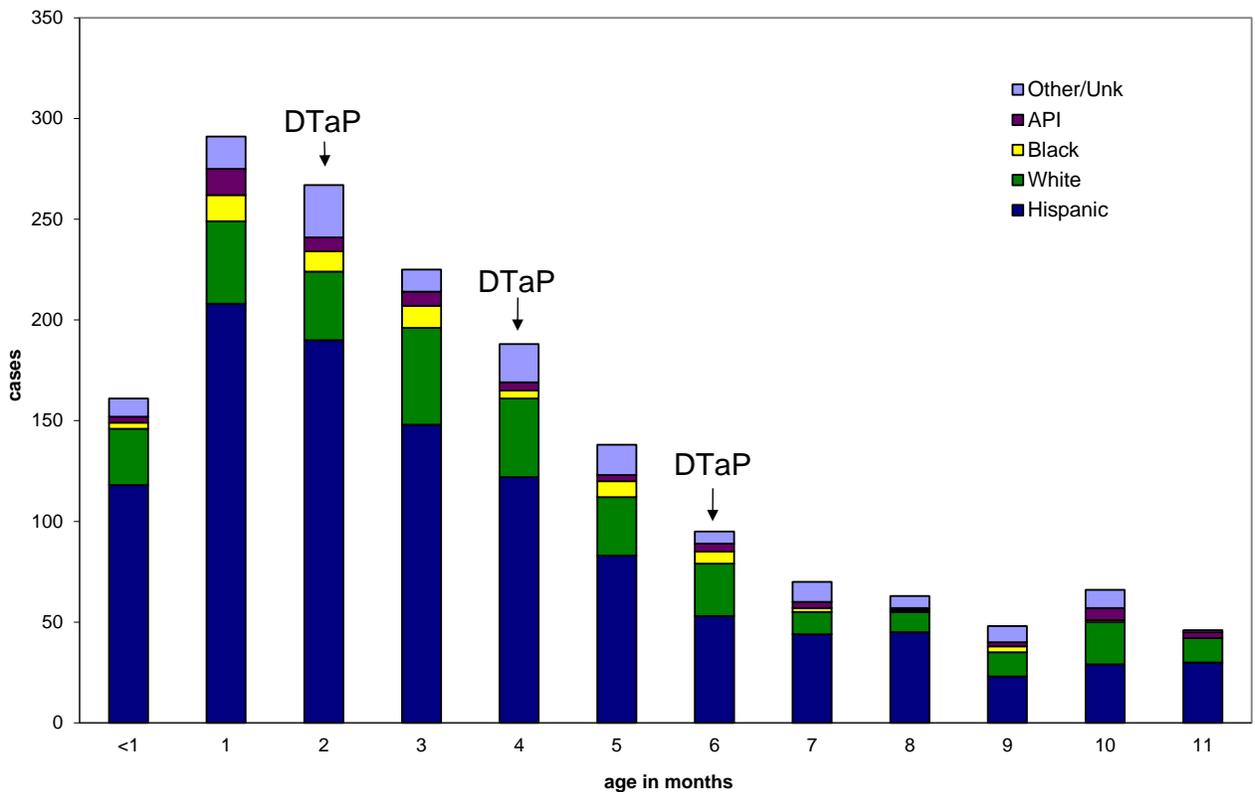


Figure 4. Pertussis cases by age and race/ethnicity -- California, 2010

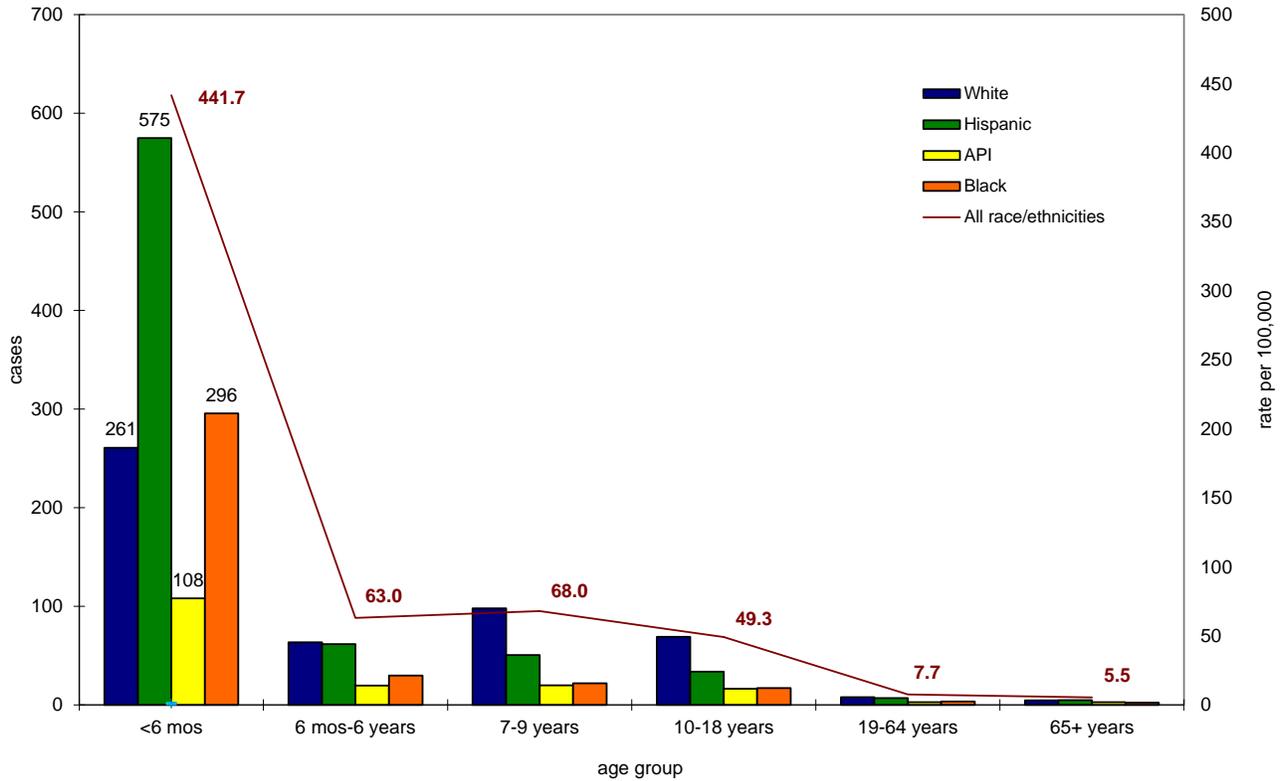
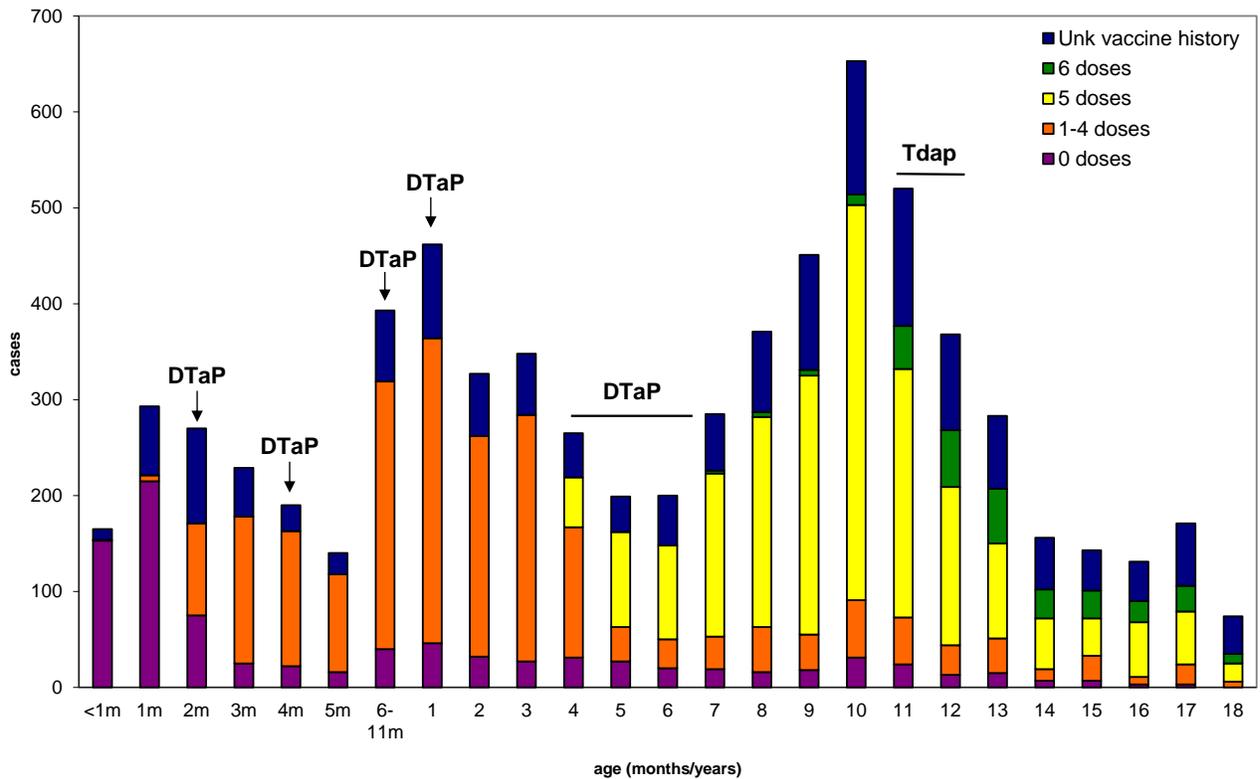


Figure 5. Pertussis cases in children and adolescents aged 0-18 years, by vaccine history -- California, 2010



**Figure 6. Pertussis rates by county – California, January 1, 2010 – December 31, 2010
(updated 05/16/2011)**

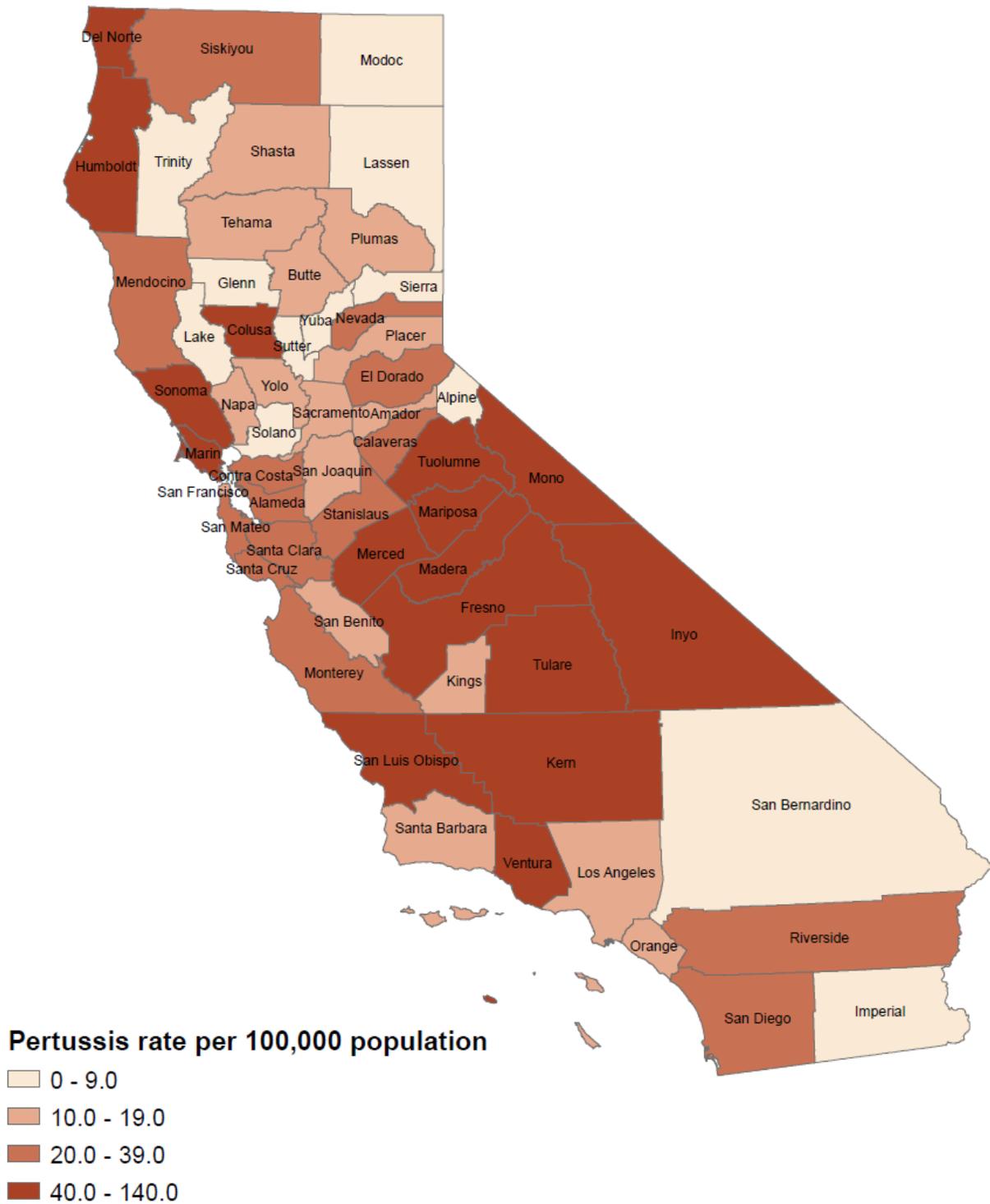


Figure 7. Pertussis rates (person days) by county – California, January 1, 2011 – May 16, 20

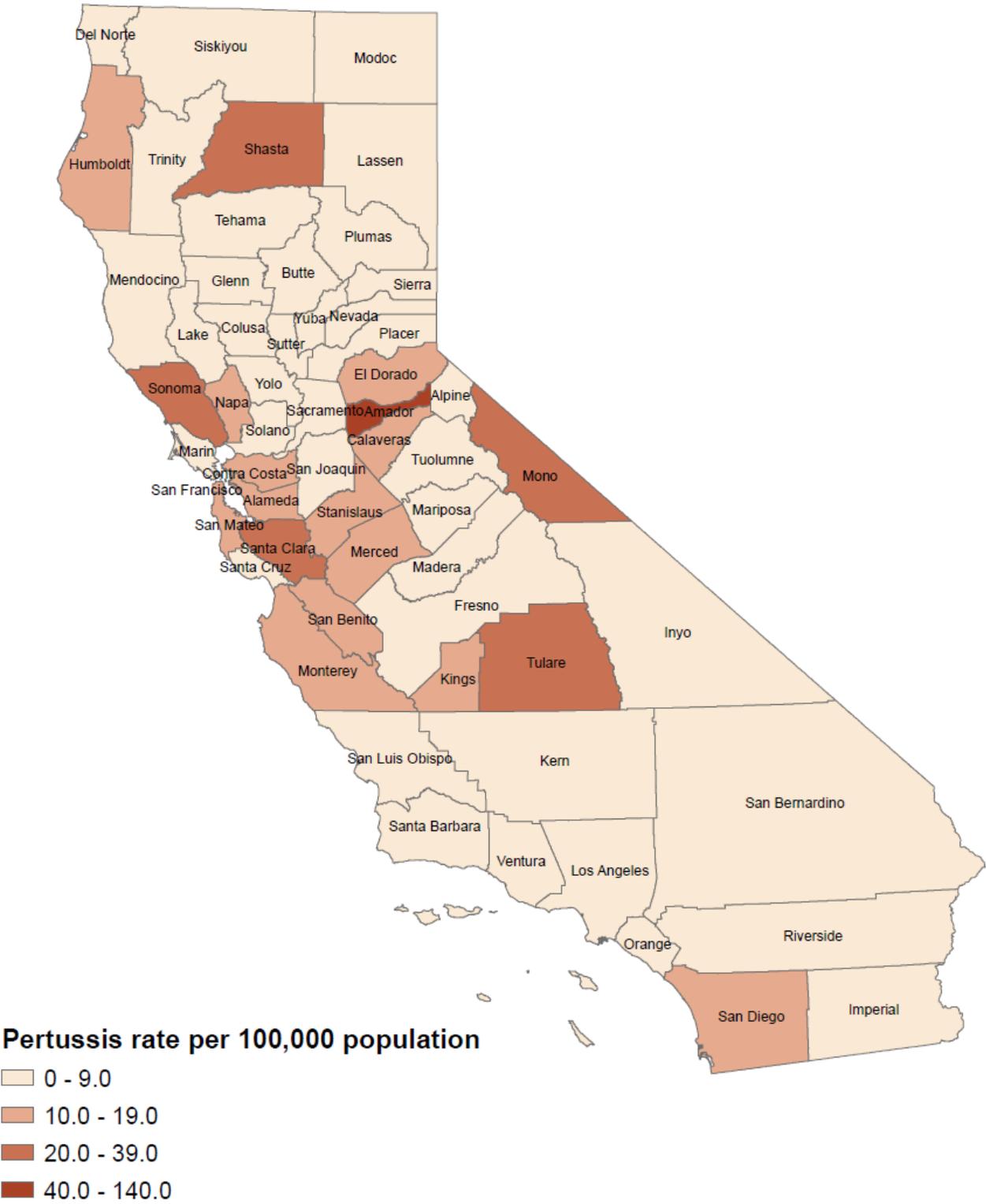


Table 1. Pertussis cases reported to CDPH by local health jurisdiction -- California, 2010-2011

	2010		2011*	
	Cases	Rate	Cases	Rate**
CALIFORNIA	9120	23.30	1102	7.45
ALAMEDA	422	29.25	64	11.78
City of Berkeley†	12	11.20	3	7.49
ALPINE	0	0.00	0	0.00
AMADOR	4	9.92	9	58.66
BUTTE	32	13.91	4	4.55
CALAVERAS	9	18.85	3	16.51
COLUSA	11	46.24	0	0.00
CONTRA COSTA	206	19.15	72	17.66
DEL NORTE	16	51.64	0	0.00
EL DORADO	55	29.05	7	9.74
FRESNO	555	56.43	27	7.20
GLENN	1	3.24	0	0.00
HUMBOLDT	59	43.77	6	11.84
IMPERIAL	9	4.74	0	0.00
INYO	8	41.70	0	0.00
KERN	375	43.02	18	5.40
KINGS	26	15.80	7	11.12
LAKE	5	7.40	0	0.00
LASSEN	1	2.64	0	0.00
LOS ANGELES	1302	13.19	93	2.51
City of Long Beach†	69	14.00	3	1.63
City of Pasadena†	21	13.98	0	0.00
MADERA	120	74.02	4	6.40
MARIN	348	137.18	6	6.32
MARIPOSA	10	52.33	0	0.00
MENDOCINO	27	28.98	0	0.00
MERCED	132	48.19	14	13.33
MODOC	0	0.00	0	0.00
MONO	19	128.09	2	35.38
MONTEREY	118	27.23	20	12.24
NAPA	25	17.51	7	12.94
NEVADA	23	22.41	3	7.73
ORANGE	501	15.52	44	3.62
PLACER	50	14.39	11	8.29
PLUMAS	2	9.16	0	0.00
RIVERSIDE	469	20.95	77	8.95
SACRAMENTO	188	12.95	32	5.83
SAN BENITO	7	10.90	3	12.16
SAN BERNARDINO	181	8.31	31	3.74
SAN DIEGO	1146	35.82	153	12.66
SAN FRANCISCO	143	17.48	32	10.42
SAN JOAQUIN	85	11.46	7	2.46
SAN LUIS OBISPO	375	139.03	9	8.85
SAN MATEO	189	25.66	27	9.77
SANTA BARBARA	64	14.73	11	6.74
SANTA CLARA	473	25.74	136	19.65
SANTA CRUZ	87	32.46	6	5.95
SHASTA	32	16.69	16	21.97
SIERRA	0	0.00	0	0.00
SISKIYOU	10	21.23	0	0.00
SOLANO	37	8.39	1	0.60
SONOMA	246	49.66	62	33.20
STANISLAUS	164	29.30	21	9.82
SUTTER	5	4.89	1	2.53
TEHAMA	10	15.25	2	8.00
TRINITY	0	0.00	0	0.00
TULARE	233	49.90	44	24.57
TUOLUMNE	32	54.49	0	0.00
VENTURA	346	40.43	0	0.00
YOLO	20	9.70	4	5.10
YUBA	5	6.22	0	0.00

*Data are preliminary and include cases reported to CDPH as of 5/16/2011

**Rate calculated using observed person-days

†City health jurisdictions not included in county total