

# Pertussis Report

January 23, 2018

Young infants are at greatest risk of hospitalization and death from pertussis. Therefore, pregnant women are encouraged to receive pertussis vaccine (Tdap) at the earliest opportunity between 27 and 36 weeks gestation of every pregnancy. Pertussis antibodies transferred from vaccinated mothers to their infants help protect babies until they are old enough to be vaccinated. The primary DTaP vaccine series is essential for reducing severe disease in young infants and should not be delayed. DTaP can be given to infants at an accelerated schedule with the first dose given as early as 6 weeks of age. Even one dose of DTaP may offer some protection against severe pertussis disease and death in infants.

- **2925 cases with onset in 2017** have been reported to CDPH as of January 23, 2018, for a state rate of 7.4 cases per 100,000 population (Figure 1-2, Table 1). This represents a 51% increase in overall pertussis cases reported in 2017 compared to 2016, a low incidence year (data are provisional).
  - 111 cases have been hospitalized; 32 (29%) of these required intensive care.
    - 52 (47%) of hospitalized patients and 24 (75%) of intensive care patients were infants <4 months of age.
  - One death was reported in a 7 year-old child that had multiple severe underlying medical complications as well as co-infection with another respiratory pathogen.
  - Overall pertussis rates were highest for infants <1 year of age and teens 14-17 years of age (Figures 3-5).
    - There was no increase in incidence among infants <4 months of age from 2016 to 2017, remaining stable at 1.0 per 1,000 population.
    - Incidence among teenagers 14-17 years of age doubled (105%) from 23.9 in 2016 to 49.1 in 2017, per 100,000 population.
  - Rates by race/ethnicity are highest for White, non-Hispanic and Hispanic infants <4 months of age and White, non-Hispanic adolescents and teens aged 10-17 years of age (Figure 5).

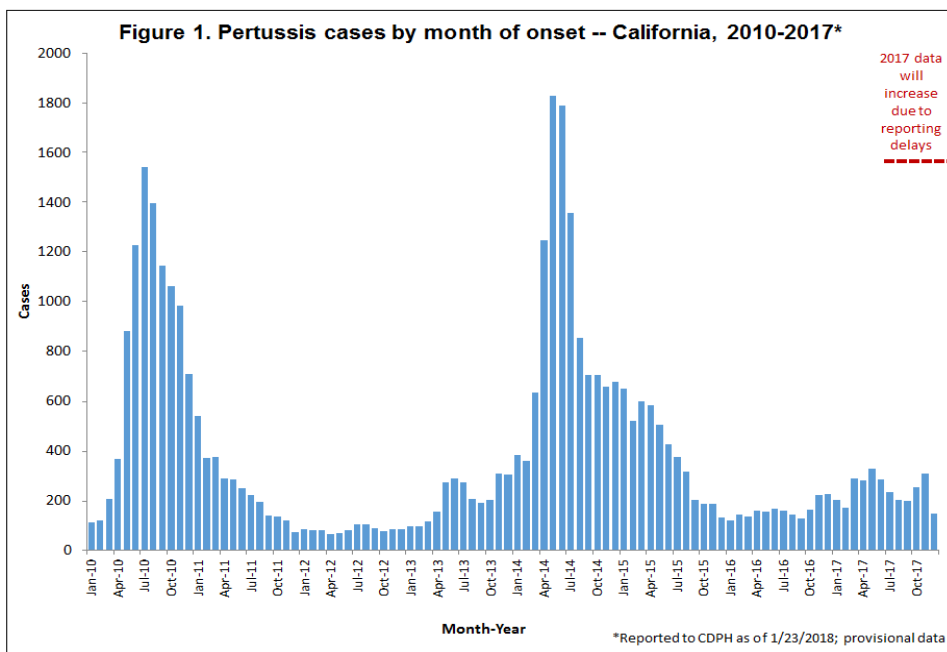


Figure 2. Pertussis incidence per 100,000 population, by county - California 2017\*

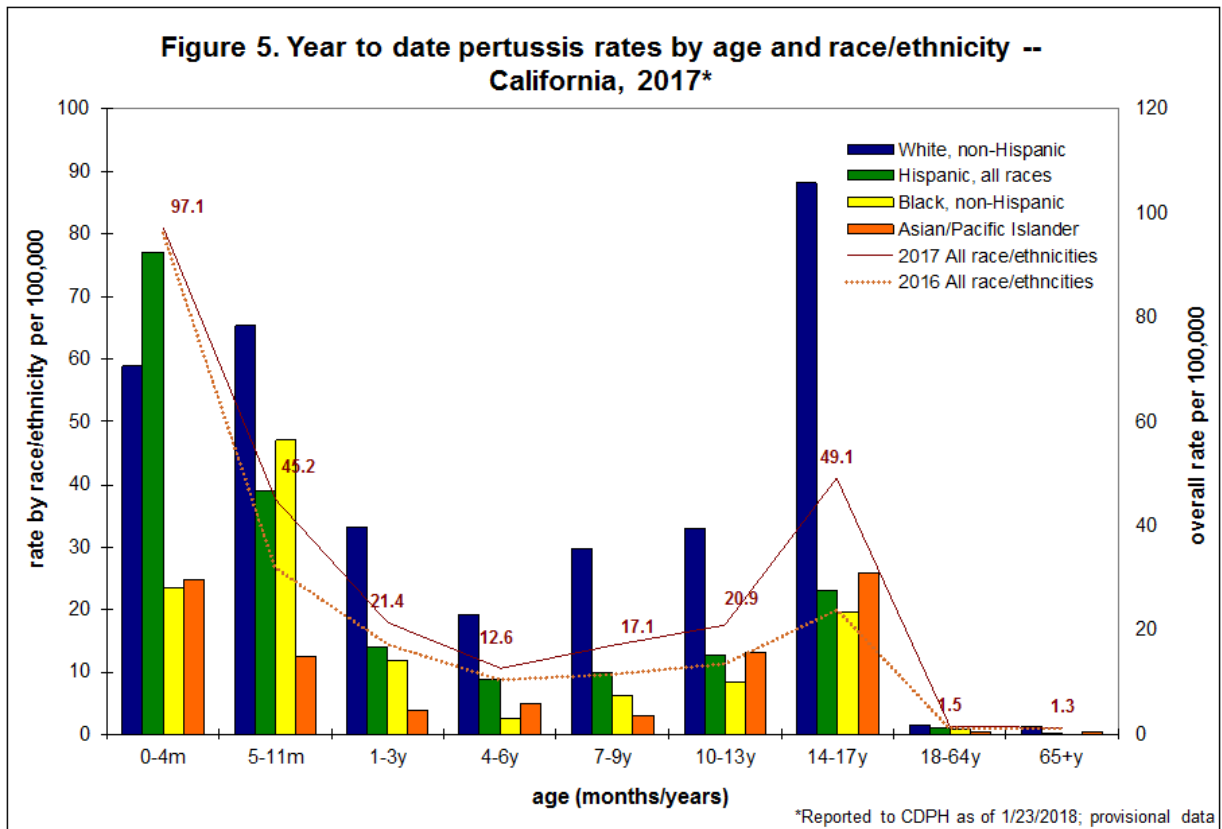
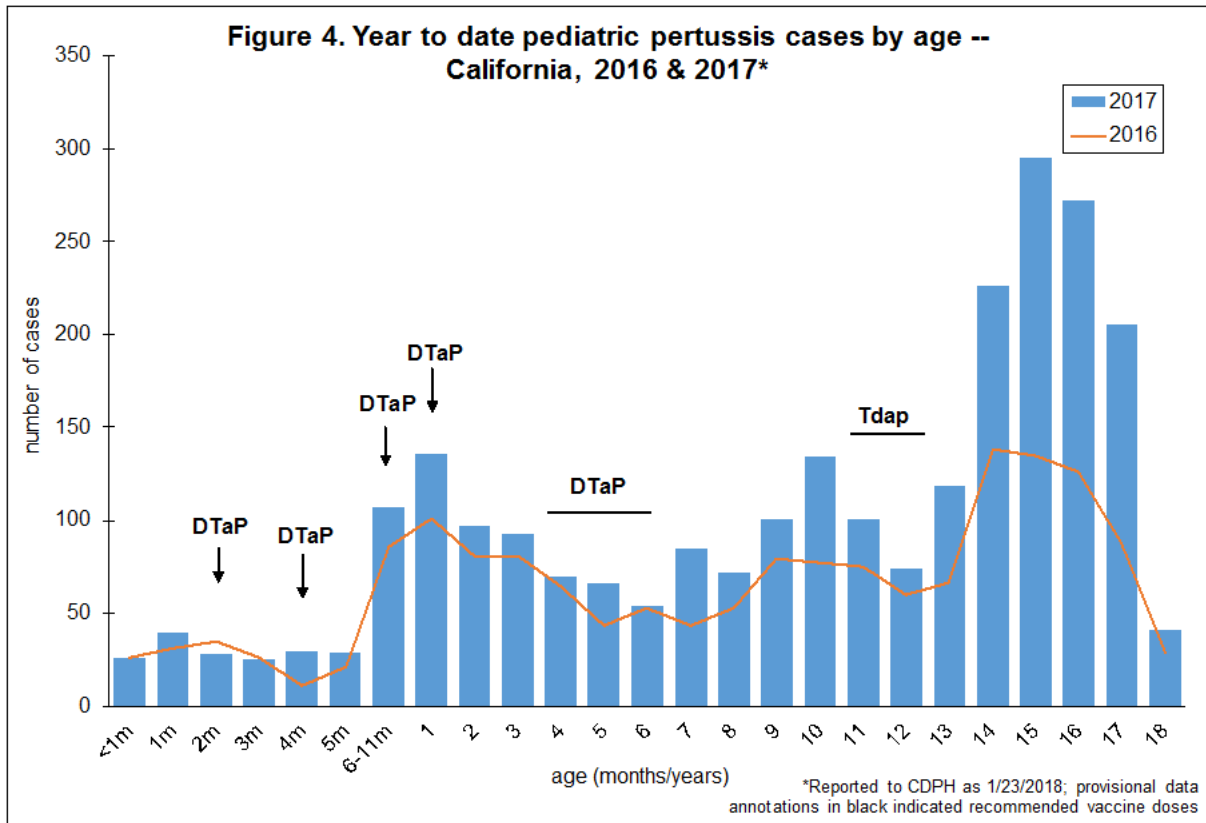


\*Reported to CDPH as of 1/23/2018; data still provisional.

Figure 3. Pertussis incidence among infants <4 months of age per 1,000 population, by county - California 2017\*



\*Reported to CDPH as of 1/23/2018; data still provisional.



**Table 1. Year to date pertussis cases and rate by year of onset and local health jurisdiction  
-- California 2016 & 2017\***

	All ages				Infants <4 months of age (per			
	2016		2017		2016		2017	
	Cases	Rate <sup>†</sup>	Cases	Rate <sup>†</sup>	Cases	Rate <sup>§</sup>	Cases	Rate <sup>§</sup>
<b>CALIFORNIA</b>	<b>1938</b>	<b>4.9</b>	<b>2925</b>	<b>7.4</b>	<b>118</b>	<b>1.0</b>	<b>119</b>	<b>1.0</b>
ALAMEDA	78	5.1	112	7.4	3	0.7	1	0.2
City of Berkeley‡	4	3.3	7	5.8	0	-	0	-
ALPINE	0	-	0	-	0	-	0	-
AMADOR	2	5.4	0	-	0	-	0	-
BUTTE	2	0.9	6	2.7	0	-	0	-
CALAVERAS	2	4.5	1	2.2	0	-	0	-
COLUSA	0	-	1	4.5	0	-	0	-
CONTRA COSTA	49	4.3	50	4.4	3	1.0	0	-
DEL NORTE	0	-	0	-	0	-	0	-
EL DORADO	9	4.9	7	3.8	1	-	0	-
FRESNO	16	1.6	36	3.6	1	0.2	0	-
GLENN	1	3.4	0	-	0	-	0	-
HUMBOLDT	1	0.7	0	-	0	-	0	-
IMPERIAL	4	2.1	1	0.5	0	-	0	-
INYO	0	-	3	16.1	0	-	0	-
KERN	27	3.0	17	1.9	2	0.6	1	0.3
KINGS	7	4.7	0	-	1	-	0	-
LAKE	1	1.5	11	16.9	0	-	1	-
LASSEN	0	-	0	-	0	-	0	-
LOS ANGELES	310	3.2	452	4.7	19	0.6	21	0.7
City of Long Beach‡	13	2.7	20	4.1	3	2.0	3	2.0
City of Pasadena‡	4	2.8	5	3.5	1	-	1	-
MADERA	3	1.9	7	4.5	0	-	1	-
MARIN	30	11.4	44	16.7	0	-	0	-
MARIPOSA	1	5.5	0	-	1	-	0	-
MENDOCINO	8	9.0	3	3.4	0	-	0	-
MERCED	1	0.4	2	0.7	0	-	2	-
MODOC	0	-	0	-	0	-	0	-
MONO	0	-	0	-	0	-	0	-
MONTEREY	16	3.6	27	6.1	2	1.4	2	1.4
NAPA	5	3.5	13	9.1	0	-	1	-
NEVADA	42	42.6	2	2.0	3	-	0	-
ORANGE	69	2.2	195	6.1	12	1.2	10	1.0
PLACER	17	4.5	82	21.8	0	-	1	0.5
PLUMAS	0	-	0	-	0	-	0	-
RIVERSIDE	82	3.5	147	6.2	13	2.1	12	2.0
SACRAMENTO	71	4.7	73	4.8	3	0.7	4	0.9
SAN BENITO	9	15.5	3	5.2	1	-	0	-
SAN BERNARDINO	32	1.5	45	2.1	2	0.3	7	1.0
SAN DIEGO	390	11.8	1011	30.6	27	2.4	35	3.1
SAN FRANCISCO	9	1.0	38	4.4	2	0.6	0	-
SAN JOAQUIN	4	0.5	8	1.1	1	0.5	0	-
SAN LUIS OBISPO	29	10.4	15	5.4	0	-	1	-
SAN MATEO	109	14.2	65	8.5	2	1.5	0	-
SANTA BARBARA	10	2.2	9	2.0	2	1.4	1	0.7
SANTA CLARA	233	12.1	188	9.7	4	0.6	1	0.1
SANTA CRUZ	46	16.7	43	15.6	0	-	3	-
SHASTA	25	14.0	2	1.1	1	-	1	-
SIERRA	0	-	0	-	0	-	0	-
SISKIYOU	0	-	3	6.8	0	-	0	-
SOLANO	14	3.2	15	3.5	0	-	0	-
SONOMA	42	8.3	20	4.0	0	-	0	-
STANISLAUS	13	2.4	6	1.1	2	0.8	3	1.1
SUTTER	1	1.0	4	4.1	0	-	0	-
TEHAMA	4	6.2	2	3.1	1	-	0	-
TRINITY	1	7.4	0	-	0	-	0	-
TULARE	13	2.8	13	2.8	1	0.6	0	-
TUOLUMNE	0	-	5	9.2	0	-	0	-
VENTURA	35	4.1	70	8.2	0	-	1	0.4
YOLO	43	19.8	5	2.3	4	-	1	-
YUBA	1	1.3	31	40.7	0	-	4	-

\* Includes cases reported to CDPH as of 1/23/2018; provisional data

† Incident case rate per 100,000 persons

§ Incident case rate per 1,000 births; suppress for jurisdictions with <1,000 births

‡City health jurisdictions not included in county total