

# 2007-2008 KINDERGARTEN IMMUNIZATION ASSESSMENT RESULTS

## CALIFORNIA DEPARTMENT OF HEALTH SERVICES, IMMUNIZATION BRANCH

### Introduction

The annual kindergarten immunization assessment is conducted each fall to monitor compliance with the California School Immunization Law. Results from this assessment are used to measure immunization coverage among students entering kindergarten. This report presents results from this year's kindergarten immunization assessment and the attached tables present comparisons of immunization coverage in kindergarten schools by county.

### Methods and Participants

This year's kindergarten immunization assessment was conducted in 8,481 of California's schools with kindergartens. School staff complete assessment reports and return them to local health departments and the Immunization Branch.

### Results and Discussion

Table 1 shows the results from this fall's kindergarten immunization assessment. This year 92.1% of the 499,301 students enrolled in reporting kindergartens received all required immunizations (4+ DTP, 3+ Polio, 2+ MMR, 3+ Hep B, and 1+ Var or physician-documented varicella disease). There were 889 (0.18%) students with permanent medical exemptions and 7,811 (1.56%) students with personal belief exemptions. Immunization coverage was above 94% for each vaccine.

**Table 1: Kindergarten Immunization Assessment, 2007-2008\***

Number of Schools	8,481
Number of Students	499,301
All Required Immunizations	92.1%
Conditional Entrants	6.14%
Permanent Medical Exemptions	0.18%
Personal Belief Exemptions	1.56%
4+ DTP	94.1%
3+ Polio	94.5%
1+ MMR	94.6%
3+ Hep B	96.7%
1+ Var (or physician-documented disease)	97.1%

\*Individual antigen status is unavailable for students with Personal Beliefs Exemptions. Therefore, individual antigen immunization coverage may be underestimated; anecdotal evidence suggests a small percentage of students may have some but not all required immunizations.

### Description of Attached Tables

Enclosed is a full set of tables showing this year's results. Table 2 shows total enrollment and admission status by county. Table 3 shows students adequately immunized for each vaccine by county. Table 4 shows the number of schools reporting by county and type (public or private).

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KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2007-2008

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TABLE 2: TOTAL ENROLLMENT AND ADMISSION STATUS  
BY COUNTY

	TOTAL STUDENTS	ENTRANTS WITH ALL REQ. IMMUN.		CONDITIONAL ENTRANTS		ENTRANTS WITH PME		ENTRANTS WITH PBE	
	NUMBER	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STATE TOTAL	499,301	459,920	92.11%	30,681	6.14%	889	0.18%	7,811	1.56%
COUNTY									
ALAMEDA	18,352	16,795	91.52%	1,320	7.19%	39	0.21%	198	1.08%
ALPINE	19	19	100.00%	0	0.00%	0	0.00%	0	0.00%
AMADOR	331	311	93.96%	10	3.02%	0	0.00%	10	3.02%
BUTTE	2,426	2,217	91.38%	92	3.79%	6	0.25%	111	4.58%
CALAVERAS	468	382	81.62%	58	12.39%	0	0.00%	28	5.98%
COLUSA	373	353	94.64%	11	2.95%	0	0.00%	9	2.41%
CONTRA COSTA	14,150	13,276	93.82%	597	4.22%	37	0.26%	240	1.70%
DEL NORTE	336	325	96.73%	10	2.98%	1	0.30%	0	0.00%
EL DORADO	2,214	1,975	89.21%	113	5.10%	6	0.27%	120	5.42%
FRESNO	14,669	13,954	95.13%	613	4.18%	26	0.18%	76	0.52%
GLENN	460	453	98.48%	5	1.09%	0	0.00%	2	0.43%
HUMBOLDT	1,350	1,100	81.48%	121	8.96%	1	0.07%	128	9.48%
IMPERIAL	2,668	2,525	94.64%	131	4.91%	3	0.11%	9	0.34%
INYO	184	178	96.74%	3	1.63%	0	0.00%	3	1.63%
KERN	13,811	12,763	92.41%	830	6.01%	30	0.22%	188	1.36%
KINGS	2,350	2,278	96.94%	59	2.51%	0	0.00%	13	0.55%
LAKE	712	611	85.81%	76	10.67%	0	0.00%	25	3.51%
LASSEN	337	290	86.05%	37	10.98%	1	0.30%	9	2.67%
LOS ANGELES	129,655	117,095	90.31%	11,121	8.58%	191	0.15%	1,248	0.96%
MADERA	2,347	2,199	93.69%	120	5.11%	0	0.00%	28	1.19%
MARIN	3,159	2,675	84.68%	292	9.24%	9	0.28%	183	5.79%
MARIPOSA	144	115	79.86%	23	15.97%	6	4.17%	0	0.00%
MENDOCINO	1,054	890	84.44%	71	6.74%	1	0.09%	92	8.73%
MERCED	4,406	4,168	94.60%	222	5.04%	3	0.07%	13	0.30%
MODOC	143	128	89.51%	6	4.20%	1	0.70%	8	5.59%
MONO	140	132	94.29%	5	3.57%	0	0.00%	3	2.14%
MONTEREY	6,141	5,861	95.44%	226	3.68%	6	0.10%	48	0.78%
NAPA	1,702	1,630	95.77%	42	2.47%	2	0.12%	28	1.65%
NEVADA	791	597	75.47%	88	11.13%	2	0.25%	104	13.15%

TABLE 2: TOTAL ENROLLMENT AND ADMISSION STATUS  
BY COUNTY

	TOTAL STUDENTS	ENTRANTS WITH ALL REQ. IMMUN.		CONDITIONAL ENTRANTS		ENTRANTS WITH PME		ENTRANTS WITH PBE	
	NUMBER	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STATE TOTAL	499,301	459,920	92.11%	30,681	6.14%	889	0.18%	7,811	1.56%
COUNTY									
ORANGE	40,402	36,673	90.77%	2,845	7.04%	127	0.31%	757	1.87%
PLACER	4,948	4,410	89.13%	334	6.75%	15	0.30%	189	3.82%
PLUMAS	176	160	90.91%	8	4.55%	0	0.00%	8	4.55%
RIVERSIDE	31,466	30,114	95.70%	1,043	3.31%	47	0.15%	262	0.83%
SACRAMENTO	16,244	14,482	89.15%	1,368	8.42%	19	0.12%	375	2.31%
SAN BENITO	817	782	95.72%	28	3.43%	1	0.12%	6	0.73%
SAN BERNARDINO	31,405	29,859	95.08%	1,202	3.83%	45	0.14%	299	0.95%
SAN DIEGO	39,629	36,967	93.28%	1,605	4.05%	58	0.15%	999	2.52%
SAN FRANCISCO	6,113	5,569	91.10%	481	7.87%	4	0.07%	59	0.97%
SAN JOAQUIN	10,722	10,234	95.45%	405	3.78%	7	0.07%	76	0.71%
SAN LUIS OBISPO	2,579	2,310	89.57%	162	6.28%	8	0.31%	99	3.84%
SAN MATEO	8,751	7,873	89.97%	749	8.56%	22	0.25%	107	1.22%
SANTA BARBARA	5,305	4,916	92.67%	240	4.52%	8	0.15%	141	2.66%
SANTA CLARA	24,490	23,102	94.33%	1,070	4.37%	47	0.19%	271	1.11%
SANTA CRUZ	3,281	2,757	84.03%	292	8.90%	24	0.73%	208	6.34%
SHASTA	2,201	1,855	84.28%	243	11.04%	4	0.18%	99	4.50%
SIERRA	42	41	97.62%	1	2.38%	0	0.00%	0	0.00%
SISKIYOU	412	336	81.55%	35	8.50%	0	0.00%	41	9.95%
SOLANO	5,409	5,147	95.16%	205	3.79%	7	0.13%	50	0.92%
SONOMA	5,906	5,229	88.54%	424	7.18%	10	0.17%	243	4.11%
STANISLAUS	8,314	7,878	94.76%	236	2.84%	14	0.17%	186	2.24%
SUTTER	1,499	1,401	93.46%	66	4.40%	3	0.20%	29	1.93%
TEHAMA	865	804	92.95%	38	4.39%	2	0.23%	21	2.43%
TRINITY	126	103	81.75%	7	5.56%	3	2.38%	13	10.32%
TULARE	8,082	7,788	96.36%	231	2.86%	10	0.12%	53	0.66%
TUOLUMNE	463	345	74.51%	70	15.12%	2	0.43%	46	9.94%
VENTURA	11,177	10,205	91.30%	762	6.82%	29	0.26%	181	1.62%
YOLO	2,420	2,253	93.10%	120	4.96%	0	0.00%	47	1.94%
YUBA	1,165	1,032	88.58%	109	9.36%	2	0.17%	22	1.89%

TABLE 3: STUDENTS ADEQUATELY IMMUNIZED  
BY COUNTY

	TOTAL STUDENTS	DTP 4+		POLIO 3+		MMR 1		MMR 2		HEP B 3+		VAR 1+	
	NUMBER	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STATE TOTAL	499,301	469,915	94.11%	471,699	94.47%	486,082	97.35%	472,326	94.60%	482,806	96.70%	484,885	97.11%
COUNTY													
ALAMEDA	18,352	17,181	93.62%	17,280	94.16%	17,870	97.37%	17,352	94.55%	17,746	96.70%	17,862	97.33%
ALPINE	19	19	100.00%	19	100.00%	19	100.00%	19	100.00%	19	100.00%	19	100.00%
AMADOR	331	314	94.86%	318	96.07%	321	96.98%	317	95.77%	316	95.47%	320	96.68%
BUTTE	2,426	2,255	92.95%	2,261	93.20%	2,303	94.93%	2,252	92.83%	2,291	94.44%	2,292	94.48%
CALAVERAS	468	402	85.90%	404	86.32%	438	93.59%	400	85.47%	424	90.60%	424	90.60%
COLUSA	373	357	95.71%	359	96.25%	364	97.59%	358	95.98%	361	96.78%	361	96.78%
CONTRA COSTA	14,150	13,458	95.11%	13,510	95.48%	13,782	97.40%	13,523	95.57%	13,726	97.00%	13,790	97.46%
DEL NORTE	336	325	96.73%	331	98.51%	334	99.40%	332	98.81%	334	99.40%	334	99.40%
EL DORADO	2,214	1,997	90.20%	2,002	90.42%	2,070	93.50%	2,009	90.74%	2,067	93.36%	2,072	93.59%
FRESNO	14,669	14,143	96.41%	14,177	96.65%	14,432	98.38%	14,277	97.33%	14,385	98.06%	14,437	98.42%
GLENN	460	454	98.70%	456	99.13%	458	99.57%	455	98.91%	458	99.57%	458	99.57%
HUMBOLDT	1,350	1,137	84.22%	1,139	84.37%	1,185	87.78%	1,130	83.70%	1,169	86.59%	1,164	86.22%
IMPERIAL	2,668	2,586	96.93%	2,591	97.11%	2,650	99.33%	2,580	96.70%	2,643	99.06%	2,639	98.91%
INYO	184	178	96.74%	181	98.37%	181	98.37%	181	98.37%	181	98.37%	181	98.37%
KERN	13,811	13,027	94.32%	13,137	95.12%	13,410	97.10%	13,170	95.36%	13,348	96.65%	13,363	96.76%
KINGS	2,350	2,301	97.91%	2,313	98.43%	2,328	99.06%	2,308	98.21%	2,322	98.81%	2,324	98.89%
LAKE	712	628	88.20%	637	89.47%	668	93.82%	638	89.61%	668	93.82%	655	91.99%
LASSEN	337	296	87.83%	299	88.72%	325	96.44%	301	89.32%	323	95.85%	319	94.66%
LOS ANGELES	129,655	121,124	93.42%	121,773	93.92%	126,159	97.30%	122,333	94.35%	125,138	96.52%	125,863	97.08%
MADERA	2,347	2,235	95.23%	2,246	95.70%	2,290	97.57%	2,245	95.65%	2,283	97.27%	2,289	97.53%
MARIN	3,159	2,786	88.19%	2,779	87.97%	2,911	92.15%	2,763	87.46%	2,903	91.90%	2,913	92.21%
MARIPOSA	144	126	87.50%	122	84.72%	132	91.67%	129	89.58%	129	89.58%	131	90.97%
MENDOCINO	1,054	902	85.58%	902	85.58%	952	90.32%	908	86.15%	948	89.94%	953	90.42%
MERCED	4,406	4,210	95.55%	4,232	96.05%	4,375	99.30%	4,232	96.05%	4,345	98.62%	4,353	98.80%
MODOC	143	129	90.21%	130	90.91%	133	93.01%	130	90.91%	134	93.71%	133	93.01%
MONO	140	134	95.71%	135	96.43%	137	97.86%	133	95.00%	136	97.14%	137	97.86%
MONTEREY	6,141	5,936	96.66%	5,950	96.89%	6,065	98.76%	5,951	96.91%	6,026	98.13%	6,046	98.45%
NAPA	1,702	1,648	96.83%	1,647	96.77%	1,663	97.71%	1,653	97.12%	1,654	97.18%	1,662	97.65%
NEVADA	791	622	78.63%	623	78.76%	663	83.82%	621	78.51%	669	84.58%	659	83.31%

TABLE 3: STUDENTS ADEQUATELY IMMUNIZED  
BY COUNTY

	TOTAL STUDENTS	DTP 4+		POLIO 3+		MMR 1		MMR 2		HEP B 3+		VAR 1+	
	NUMBER	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
STATE TOTAL	499,301	469,915	94.11%	471,699	94.47%	486,082	97.35%	472,326	94.60%	482,806	96.70%	484,885	97.11%
COUNTY													
ORANGE	40,402	37,559	92.96%	37,649	93.19%	39,277	97.22%	37,526	92.88%	39,014	96.56%	39,160	96.93%
PLACER	4,948	4,491	90.76%	4,513	91.21%	4,696	94.91%	4,518	91.31%	4,652	94.02%	4,671	94.40%
PLUMAS	176	164	93.18%	165	93.75%	167	94.89%	163	92.61%	166	94.32%	165	93.75%
RIVERSIDE	31,466	30,516	96.98%	30,605	97.26%	31,079	98.77%	30,576	97.17%	30,887	98.16%	31,067	98.73%
SACRAMENTO	16,244	14,718	90.61%	14,804	91.14%	15,710	96.71%	14,839	91.35%	15,476	95.27%	15,569	95.84%
SAN BENITO	817	792	96.94%	797	97.55%	809	99.02%	788	96.45%	805	98.53%	808	98.90%
SAN BERNARDINO	31,405	30,216	96.21%	30,335	96.59%	30,926	98.47%	30,360	96.67%	30,768	97.97%	30,901	98.40%
SAN DIEGO	39,629	37,409	94.40%	37,508	94.65%	38,467	97.07%	37,496	94.62%	38,240	96.49%	38,355	96.79%
SAN FRANCISCO	6,113	5,721	93.59%	5,708	93.37%	5,912	96.71%	5,723	93.62%	5,836	95.47%	5,862	95.89%
SAN JOAQUIN	10,722	10,373	96.75%	10,409	97.08%	10,596	98.82%	10,402	97.02%	10,530	98.21%	10,588	98.75%
SAN LUIS OBISPO	2,579	2,350	91.12%	2,362	91.59%	2,460	95.39%	2,353	91.24%	2,433	94.34%	2,447	94.88%
SAN MATEO	8,751	8,148	93.11%	8,160	93.25%	8,560	97.82%	8,143	93.05%	8,487	96.98%	8,523	97.39%
SANTA BARBARA	5,305	4,978	93.84%	5,013	94.50%	5,118	96.48%	4,990	94.06%	5,098	96.10%	5,110	96.32%
SANTA CLARA	24,490	23,503	95.97%	23,517	96.03%	24,052	98.21%	23,544	96.14%	23,921	97.68%	24,011	98.04%
SANTA CRUZ	3,281	2,858	87.11%	2,845	86.71%	3,015	91.89%	2,869	87.44%	2,979	90.80%	2,990	91.13%
SHASTA	2,201	1,910	86.78%	1,921	87.28%	2,020	91.78%	1,933	87.82%	2,017	91.64%	2,015	91.55%
SIERRA	42	41	97.62%	41	97.62%	42	100.00%	41	97.62%	42	100.00%	42	100.00%
SISKIYOU	412	340	82.52%	344	83.50%	364	88.35%	347	84.22%	360	87.38%	358	86.89%
SOLANO	5,409	5,205	96.23%	5,222	96.54%	5,324	98.43%	5,232	96.73%	5,274	97.50%	5,318	98.32%
SONOMA	5,906	5,365	90.84%	5,383	91.14%	5,573	94.36%	5,402	91.47%	5,532	93.67%	5,570	94.31%
STANISLAUS	8,314	7,951	95.63%	7,953	95.66%	8,106	97.50%	7,956	95.69%	8,080	97.19%	8,097	97.39%
SUTTER	1,499	1,423	94.93%	1,424	95.00%	1,464	97.67%	1,416	94.46%	1,453	96.93%	1,462	97.53%
TEHAMA	865	814	94.10%	819	94.68%	840	97.11%	810	93.64%	838	96.88%	838	96.88%
TRINITY	126	105	83.33%	105	83.33%	109	86.51%	106	84.13%	109	86.51%	109	86.51%
TULARE	8,082	7,866	97.33%	7,910	97.87%	8,011	99.12%	7,883	97.54%	7,967	98.58%	7,993	98.90%
TUOLUMNE	463	358	77.32%	359	77.54%	407	87.90%	360	77.75%	404	87.26%	395	85.31%
VENTURA	11,177	10,479	93.76%	10,521	94.13%	10,868	97.24%	10,492	93.87%	10,827	96.87%	10,831	96.90%
YOLO	2,420	2,292	94.71%	2,290	94.63%	2,358	97.44%	2,294	94.79%	2,346	96.94%	2,352	97.19%
YUBA	1,165	1,060	90.99%	1,064	91.33%	1,134	97.34%	1,064	91.33%	1,119	96.05%	1,125	96.57%

TABLE 4: NUMBER OF SCHOOLS REPORTING  
BY COUNTY AND TYPE

	TOTAL NUMBER OF SCHOOLS	SCHOOL TYPE			
		PUBLIC		PRIVATE	
		NUMBER OF SCHOOLS	PERCENT OF TOTAL	NUMBER OF SCHOOLS	PERCENT OF TOTAL
STATE TOTAL	8,481	5,713	67.36%	2,768	32.64%
COUNTY					
ALAMEDA	339	215	63.42%	124	36.58%
ALPINE	2	2	100.00%	0	0.00%
AMADOR	9	7	77.78%	2	22.22%
BUTTE	62	48	77.42%	14	22.58%
CALAVERAS	13	12	92.31%	1	7.69%
COLUSA	6	5	83.33%	1	16.67%
CONTRA COSTA	237	156	65.82%	81	34.18%
DEL NORTE	11	9	81.82%	2	18.18%
EL DORADO	46	35	76.09%	11	23.91%
FRESNO	217	183	84.33%	34	15.67%
GLENN	12	10	83.33%	2	16.67%
HUMBOLDT	58	48	82.76%	10	17.24%
IMPERIAL	44	36	81.82%	8	18.18%
INYO	9	7	77.78%	2	22.22%
KERN	185	150	81.08%	35	18.92%
KINGS	38	30	78.95%	8	21.05%
LAKE	19	13	68.42%	6	31.58%
LASSEN	12	11	91.67%	1	8.33%
LOS ANGELES	2,141	1,247	58.24%	894	41.76%
MADERA	40	36	90.00%	4	10.00%
MARIN	74	43	58.11%	31	41.89%
MARIPOSA	8	8	100.00%	0	0.00%
MENDOCINO	32	28	87.50%	4	12.50%
MERCED	65	52	80.00%	13	20.00%
MODOC	9	7	77.78%	2	22.22%
MONO	6	5	83.33%	1	16.67%
MONTEREY	92	75	81.52%	17	18.48%
NAPA	47	31	65.96%	16	34.04%
NEVADA	28	21	75.00%	7	25.00%

TABLE 4: NUMBER OF SCHOOLS REPORTING  
BY COUNTY AND TYPE

	TOTAL NUMBER OF SCHOOLS	SCHOOL TYPE			
		PUBLIC		PRIVATE	
		NUMBER OF SCHOOLS	PERCENT OF TOTAL	NUMBER OF SCHOOLS	PERCENT OF TOTAL
STATE TOTAL	8,481	5,713	67.36%	2,768	32.64%
COUNTY					
ORANGE	687	397	57.79%	290	42.21%
PLACER	90	66	73.33%	24	26.67%
PLUMAS	6	5	83.33%	1	16.67%
RIVERSIDE	403	285	70.72%	118	29.28%
SACRAMENTO	280	203	72.50%	77	27.50%
SAN BENITO	19	15	78.95%	4	21.05%
SAN BERNARDINO	456	329	72.15%	127	27.85%
SAN DIEGO	647	438	67.70%	209	32.30%
SAN FRANCISCO	144	71	49.31%	73	50.69%
SAN JOAQUIN	178	141	79.21%	37	20.79%
SAN LUIS OBISPO	64	47	73.44%	17	26.56%
SAN MATEO	180	107	59.44%	73	40.56%
SANTA BARBARA	100	76	76.00%	24	24.00%
SANTA CLARA	382	240	62.83%	142	37.17%
SANTA CRUZ	66	45	68.18%	21	31.82%
SHASTA	60	48	80.00%	12	20.00%
SIERRA	2	2	100.00%	0	0.00%
SISKIYOU	24	23	95.83%	1	4.17%
SOLANO	84	61	72.62%	23	27.38%
SONOMA	136	105	77.21%	31	22.79%
STANISLAUS	136	109	80.15%	27	19.85%
SUTTER	34	28	82.35%	6	17.65%
TEHAMA	25	23	92.00%	2	8.00%
TRINITY	11	11	100.00%	0	0.00%
TULARE	111	98	88.29%	13	11.71%
TUOLUMNE	18	14	77.78%	4	22.22%
VENTURA	204	139	68.14%	65	31.86%
YOLO	47	35	74.47%	12	25.53%
YUBA	26	22	84.62%	4	15.38%