

2009-2010 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 8,213 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 the 2009-2010 fall kindergarten immunization assessment. This year 91.1% of the 507,191 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 998 (0.20%) students with permanent medical exemptions and 10,280 (2.03%) students with personal belief exemptions. Immunization coverage was above 93% for each vaccine.

Table 1: Kindergarten Immunization Assessment, 2009-2010*

Number of Schools	8,213
Number of Students	507,191
All Required Immunizations	91.1%
Conditional Entrants	6.7%
Permanent Medical Exemptions	0.20%
Personal Belief Exemptions	2.03%
4+ DTP	93.1%
3+ Polio	93.6%
2+ MMR	93.6%
3+ Hep B	96.1%
1+ Var (or physician-documented disease)	96.6%

*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).

For further information, please contact Teresa Lee at (510) 620-3746 or Teresa.Lee2@cdph.ca.gov at the California Department of Health Services, Immunization Branch.

KINDERGARTEN IMMUNIZATION ASSESSMENT - CALIFORNIA, 2009-2010

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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	507,191	461,976	91.09%	33,937	6.69%	998	0.20%	10,280	2.03%
COUNTY									
ALAMEDA	18,286	16,659	91.10%	1,343	7.34%	35	0.19%	249	1.36%
ALPINE	14	13	92.86%	1	7.14%	0	0.00%	0	0.00%
AMADOR	336	313	93.15%	11	3.27%	2	0.60%	10	2.98%
BUTTE	2,563	2,289	89.31%	158	6.16%	7	0.27%	109	4.25%
CALAVERAS	394	297	75.38%	73	18.53%	0	0.00%	24	6.09%
COLUSA	373	369	98.93%	2	0.54%	0	0.00%	2	0.54%
CONTRA COSTA	14,101	13,113	92.99%	681	4.83%	31	0.22%	276	1.96%
DEL NORTE	313	279	89.14%	10	3.19%	6	1.92%	18	5.75%
EL DORADO	2,210	1,973	89.28%	88	3.98%	20	0.90%	129	5.84%
FRESNO	16,066	15,102	94.00%	795	4.95%	11	0.07%	158	0.98%
GLENN	408	393	96.32%	9	2.21%	0	0.00%	6	1.47%
HUMBOLDT	1,444	1,116	77.29%	175	12.12%	5	0.35%	148	10.25%
IMPERIAL	2,691	2,473	91.90%	207	7.69%	3	0.11%	8	0.30%
INYO	224	217	96.88%	4	1.79%	0	0.00%	3	1.34%
KERN	14,231	13,004	91.38%	970	6.82%	43	0.30%	214	1.50%
KINGS	2,427	2,341	96.46%	51	2.10%	0	0.00%	35	1.44%
LAKE	761	650	85.41%	82	10.78%	1	0.13%	28	3.68%
LASSEN	328	268	81.71%	47	14.33%	3	0.91%	10	3.05%
LOS ANGELES	126,340	112,872	89.34%	11,507	9.11%	163	0.13%	1,798	1.42%
MADERA	2,458	2,332	94.87%	98	3.99%	2	0.08%	26	1.06%
MARIN	3,253	2,704	83.12%	314	9.65%	3	0.09%	232	7.13%
MARIPOSA	150	124	82.67%	20	13.33%	0	0.00%	6	4.00%
MENDOCINO	1,027	850	82.77%	102	9.93%	2	0.19%	73	7.11%
MERCED	4,058	3,897	96.03%	134	3.30%	4	0.10%	23	0.57%
MODOC	136	124	91.18%	7	5.15%	0	0.00%	5	3.68%
MONO	151	146	96.69%	1	0.66%	0	0.00%	4	2.65%
MONTEREY	6,270	5,867	93.57%	309	4.93%	6	0.10%	88	1.40%
NAPA	1,757	1,684	95.85%	36	2.05%	3	0.17%	34	1.94%
NEVADA	761	559	73.46%	58	7.62%	0	0.00%	144	18.92%

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	507,191	461,976	91.09%	33,937	6.69%	998	0.20%	10,280	2.03%
COUNTY									
ORANGE	41,149	36,862	89.58%	2,969	7.22%	187	0.45%	1,131	2.75%
PLACER	5,224	4,615	88.34%	339	6.49%	9	0.17%	261	5.00%
PLUMAS	188	154	81.91%	5	2.66%	0	0.00%	29	15.43%
RIVERSIDE	32,121	30,159	93.89%	1,411	4.39%	61	0.19%	490	1.53%
SACRAMENTO	19,501	16,648	85.37%	2,328	11.94%	24	0.12%	501	2.57%
SAN BENITO	849	815	96.00%	25	2.94%	0	0.00%	9	1.06%
SAN BERNARDINO	31,286	29,541	94.42%	1,329	4.25%	45	0.14%	371	1.19%
SAN DIEGO	41,003	37,955	92.57%	1,876	4.58%	90	0.22%	1,082	2.64%
SAN FRANCISCO	6,667	6,063	90.94%	491	7.36%	6	0.09%	107	1.60%
SAN JOAQUIN	11,095	10,539	94.99%	430	3.88%	18	0.16%	108	0.97%
SAN LUIS OBISPO	2,807	2,493	88.81%	191	6.80%	13	0.46%	110	3.92%
SAN MATEO	9,226	8,194	88.81%	841	9.12%	20	0.22%	171	1.85%
SANTA BARBARA	5,788	5,367	92.73%	236	4.08%	11	0.19%	174	3.01%
SANTA CLARA	24,945	23,349	93.60%	1,173	4.70%	51	0.20%	372	1.49%
SANTA CRUZ	3,371	2,800	83.06%	342	10.15%	10	0.30%	219	6.50%
SHASTA	2,170	1,826	84.15%	200	9.22%	10	0.46%	134	6.18%
SIERRA	29	19	65.52%	9	31.03%	0	0.00%	1	3.45%
SISKIYOU	471	384	81.53%	19	4.03%	4	0.85%	64	13.59%
SOLANO	5,237	4,952	94.56%	235	4.49%	7	0.13%	43	0.82%
SONOMA	6,109	5,362	87.77%	414	6.78%	9	0.15%	324	5.30%
STANISLAUS	8,124	7,669	94.40%	276	3.40%	15	0.18%	164	2.02%
SUTTER	1,512	1,436	94.97%	45	2.98%	2	0.13%	29	1.92%
TEHAMA	856	810	94.63%	18	2.10%	0	0.00%	28	3.27%
TRINITY	92	81	88.04%	4	4.35%	0	0.00%	7	7.61%
TULARE	7,934	7,611	95.93%	228	2.87%	10	0.13%	85	1.07%
TUOLUMNE	490	355	72.45%	71	14.49%	0	0.00%	64	13.06%
VENTURA	11,833	10,570	89.33%	963	8.14%	39	0.33%	261	2.21%
YOLO	2,395	2,250	93.95%	70	2.92%	4	0.17%	71	2.96%
YUBA	1,188	1,069	89.98%	106	8.92%	3	0.25%	10	0.84%

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	507,191	472,153	93.09%	474,811	93.62%	490,572	96.72%	474,682	93.59%	487,552	96.13%	489,723	96.56%
COUNTY													
ALAMEDA	18,286	17,067	93.33%	17,196	94.04%	17,782	97.24%	17,220	94.17%	17,680	96.69%	17,739	97.01%
ALPINE	14	13	92.86%	14	100.00%	14	100.00%	14	100.00%	14	100.00%	14	100.00%
AMADOR	336	316	94.05%	319	94.94%	323	96.13%	318	94.64%	322	95.83%	323	96.13%
BUTTE	2,563	2,323	90.64%	2,328	90.83%	2,403	93.76%	2,335	91.10%	2,401	93.68%	2,402	93.72%
CALAVERAS	394	321	81.47%	323	81.98%	363	92.13%	323	81.98%	351	89.09%	359	91.12%
COLUSA	373	369	98.93%	369	98.93%	370	99.20%	370	99.20%	369	98.93%	370	99.20%
CONTRA COSTA	14,101	13,298	94.31%	13,339	94.60%	13,722	97.31%	13,343	94.62%	13,631	96.67%	13,683	97.04%
DEL NORTE	313	283	90.42%	283	90.42%	286	91.37%	280	89.46%	286	91.37%	285	91.05%
EL DORADO	2,210	1,986	89.86%	1,990	90.05%	2,038	92.22%	1,995	90.27%	2,032	91.95%	2,037	92.17%
FRESNO	16,066	15,306	95.27%	15,391	95.80%	15,771	98.16%	15,530	96.66%	15,702	97.73%	15,757	98.08%
GLENN	408	396	97.06%	399	97.79%	401	98.28%	397	97.30%	399	97.79%	402	98.53%
HUMBOLDT	1,444	1,157	80.12%	1,157	80.12%	1,236	85.60%	1,175	81.37%	1,221	84.56%	1,223	84.70%
IMPERIAL	2,691	2,569	95.47%	2,575	95.69%	2,645	98.29%	2,554	94.91%	2,640	98.10%	2,640	98.10%
INYO	224	221	98.66%	219	97.77%	221	98.66%	219	97.77%	221	98.66%	221	98.66%
KERN	14,231	13,292	93.40%	13,390	94.09%	13,621	95.71%	13,253	93.13%	13,514	94.96%	13,571	95.36%
KINGS	2,427	2,352	96.91%	2,371	97.69%	2,390	98.48%	2,370	97.65%	2,382	98.15%	2,390	98.48%
LAKE	761	670	88.04%	668	87.78%	718	94.35%	679	89.22%	709	93.17%	715	93.96%
LASSEN	328	275	83.84%	281	85.67%	303	92.38%	278	84.76%	303	92.38%	299	91.16%
LOS ANGELES	126,340	116,749	92.41%	117,760	93.21%	122,225	96.74%	117,512	93.01%	121,309	96.02%	122,106	96.65%
MADERA	2,458	2,370	96.42%	2,376	96.66%	2,416	98.29%	2,366	96.26%	2,401	97.68%	2,405	97.84%
MARIN	3,253	2,816	86.57%	2,824	86.81%	2,980	91.61%	2,779	85.43%	2,939	90.35%	2,968	91.24%
MARIPOSA	150	140	93.33%	131	87.33%	142	94.67%	128	85.33%	140	93.33%	140	93.33%
MENDOCINO	1,027	878	85.49%	876	85.30%	940	91.53%	872	84.91%	935	91.04%	931	90.65%
MERCED	4,058	3,928	96.80%	3,952	97.39%	4,022	99.11%	3,936	96.99%	3,998	98.52%	4,007	98.74%
MODOC	136	126	92.65%	129	94.85%	130	95.59%	128	94.12%	131	96.32%	131	96.32%
MONO	151	146	96.69%	147	97.35%	147	97.35%	146	96.69%	147	97.35%	147	97.35%
MONTEREY	6,270	5,938	94.70%	5,952	94.93%	6,149	98.07%	5,964	95.12%	6,127	97.72%	6,100	97.29%
NAPA	1,757	1,693	96.36%	1,697	96.59%	1,709	97.27%	1,696	96.53%	1,711	97.38%	1,710	97.32%
NEVADA	761	579	76.08%	580	76.22%	611	80.29%	574	75.43%	604	79.37%	606	79.63%

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	507,191	472,153	93.09%	474,811	93.62%	490,572	96.72%	474,682	93.59%	487,552	96.13%	489,723	96.56%
COUNTY													
ORANGE	41,149	37,792	91.84%	37,891	92.08%	39,589	96.21%	37,839	91.96%	39,315	95.54%	39,501	96.00%
PLACER	5,224	4,742	90.77%	4,734	90.62%	4,924	94.26%	4,709	90.14%	4,874	93.30%	4,896	93.72%
PLUMAS	188	155	82.45%	156	82.98%	159	84.57%	158	84.04%	159	84.57%	159	84.57%
RIVERSIDE	32,121	30,582	95.21%	30,697	95.57%	31,466	97.96%	30,716	95.63%	31,262	97.33%	31,428	97.84%
SACRAMENTO	19,501	17,158	87.99%	17,301	88.72%	18,633	95.55%	17,413	89.29%	18,416	94.44%	18,507	94.90%
SAN BENITO	849	822	96.82%	826	97.29%	838	98.70%	821	96.70%	836	98.47%	839	98.82%
SAN BERNARDINO	31,286	29,939	95.69%	30,104	96.22%	30,683	98.07%	30,118	96.27%	30,496	97.47%	30,668	98.02%
SAN DIEGO	41,003	38,354	93.54%	38,510	93.92%	39,500	96.33%	38,532	93.97%	39,332	95.92%	39,503	96.34%
SAN FRANCISCO	6,667	6,224	93.36%	6,227	93.40%	6,402	96.03%	6,252	93.78%	6,347	95.20%	6,383	95.74%
SAN JOAQUIN	11,095	10,627	95.78%	10,649	95.98%	10,911	98.34%	10,678	96.24%	10,885	98.11%	10,906	98.30%
SAN LUIS OBISPO	2,807	2,535	90.31%	2,562	91.27%	2,667	95.01%	2,568	91.49%	2,654	94.55%	2,664	94.91%
SAN MATEO	9,226	8,431	91.38%	8,485	91.97%	8,943	96.93%	8,535	92.51%	8,921	96.69%	8,935	96.85%
SANTA BARBARA	5,788	5,437	93.94%	5,461	94.35%	5,576	96.34%	5,445	94.07%	5,550	95.89%	5,558	96.03%
SANTA CLARA	24,945	23,837	95.56%	23,903	95.82%	24,445	98.00%	23,890	95.77%	24,342	97.58%	24,415	97.88%
SANTA CRUZ	3,371	2,899	86.00%	2,900	86.03%	3,091	91.69%	2,878	85.38%	3,060	90.77%	3,077	91.28%
SHASTA	2,170	1,873	86.31%	1,877	86.50%	1,993	91.84%	1,884	86.82%	1,989	91.66%	1,981	91.29%
SIERRA	29	19	65.52%	19	65.52%	28	96.55%	19	65.52%	28	96.55%	28	96.55%
SISKIYOU	471	391	83.01%	390	82.80%	402	85.35%	392	83.23%	401	85.14%	397	84.29%
SOLANO	5,237	5,011	95.68%	5,047	96.37%	5,157	98.47%	5,042	96.28%	5,123	97.82%	5,147	98.28%
SONOMA	6,109	5,446	89.15%	5,500	90.03%	5,685	93.06%	5,496	89.97%	5,647	92.44%	5,661	92.67%
STANISLAUS	8,124	7,731	95.16%	7,774	95.69%	7,932	97.64%	7,768	95.62%	7,908	97.34%	7,929	97.60%
SUTTER	1,512	1,443	95.44%	1,454	96.16%	1,470	97.22%	1,456	96.30%	1,467	97.02%	1,470	97.22%
TEHAMA	856	817	95.44%	819	95.68%	828	96.73%	820	95.79%	827	96.61%	827	96.61%
TRINITY	92	81	88.04%	81	88.04%	83	90.22%	81	88.04%	83	90.22%	82	89.13%
TULARE	7,934	7,670	96.67%	7,726	97.38%	7,833	98.73%	7,704	97.10%	7,795	98.25%	7,817	98.53%
TUOLUMNE	490	373	76.12%	380	77.55%	418	85.31%	370	75.51%	420	85.71%	415	84.69%
VENTURA	11,833	10,816	91.41%	10,927	92.34%	11,370	96.09%	10,964	92.66%	11,343	95.86%	11,380	96.17%
YOLO	2,395	2,269	94.74%	2,274	94.95%	2,311	96.49%	2,270	94.78%	2,298	95.95%	2,314	96.62%
YUBA	1,188	1,102	92.76%	1,101	92.68%	1,157	97.39%	1,110	93.43%	1,155	97.22%	1,155	97.22%

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	8,213	5,766	70.21%	2,447	29.79%
COUNTY					
ALAMEDA	334	215	64.37%	119	35.63%
ALPINE	2	2	100.00%	0	0.00%
AMADOR	8	6	75.00%	2	25.00%
BUTTE	60	47	78.33%	13	21.67%
CALAVERAS	12	11	91.67%	1	8.33%
COLUSA	7	6	85.71%	1	14.29%
CONTRA COSTA	237	158	66.67%	79	33.33%
DEL NORTE	11	9	81.82%	2	18.18%
EL DORADO	43	35	81.40%	8	18.60%
FRESNO	228	191	83.77%	37	16.23%
GLENN	11	9	81.82%	2	18.18%
HUMBOLDT	55	46	83.64%	9	16.36%
IMPERIAL	46	38	82.61%	8	17.39%
INYO	8	7	87.50%	1	12.50%
KERN	180	152	84.44%	28	15.56%
KINGS	39	31	79.49%	8	20.51%
LAKE	18	13	72.22%	5	27.78%
LASSEN	14	13	92.86%	1	7.14%
LOS ANGELES	1,935	1,244	64.29%	691	35.71%
MADERA	38	35	92.11%	3	7.89%
MARIN	74	44	59.46%	30	40.54%
MARIPOSA	9	9	100.00%	0	0.00%
MENDOCINO	33	28	84.85%	5	15.15%
MERCED	61	50	81.97%	11	18.03%
MODOC	8	6	75.00%	2	25.00%
MONO	6	5	83.33%	1	16.67%
MONTEREY	90	75	83.33%	15	16.67%
NAPA	45	29	64.44%	16	35.56%
NEVADA	28	23	82.14%	5	17.86%

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	8,213	5,766	70.21%	2,447	29.79%
COUNTY					
ORANGE	661	399	60.36%	262	39.64%
PLACER	92	69	75.00%	23	25.00%
PLUMAS	8	5	62.50%	3	37.50%
RIVERSIDE	401	287	71.57%	114	28.43%
SACRAMENTO	325	239	73.54%	86	26.46%
SAN BENITO	19	16	84.21%	3	15.79%
SAN BERNARDINO	439	336	76.54%	103	23.46%
SAN DIEGO	639	442	69.17%	197	30.83%
SAN FRANCISCO	141	71	50.35%	70	49.65%
SAN JOAQUIN	176	142	80.68%	34	19.32%
SAN LUIS OBISPO	62	47	75.81%	15	24.19%
SAN MATEO	173	107	61.85%	66	38.15%
SANTA BARBARA	103	79	76.70%	24	23.30%
SANTA CLARA	378	239	63.23%	139	36.77%
SANTA CRUZ	63	44	69.84%	19	30.16%
SHASTA	60	47	78.33%	13	21.67%
SIERRA	2	2	100.00%	0	0.00%
SISKIYOU	28	26	92.86%	2	7.14%
SOLANO	79	57	72.15%	22	27.85%
SONOMA	132	101	76.52%	31	23.48%
STANISLAUS	128	110	85.94%	18	14.06%
SUTTER	34	29	85.29%	5	14.71%
TEHAMA	24	22	91.67%	2	8.33%
TRINITY	12	12	100.00%	0	0.00%
TULARE	107	94	87.85%	13	12.15%
TUOLUMNE	17	13	76.47%	4	23.53%
VENTURA	203	139	68.47%	64	31.53%
YOLO	41	30	73.17%	11	26.83%
YUBA	26	25	96.15%	1	3.85%