

**2009 SELECTIVE REVIEW RESULTS**  
**CALIFORNIA DEPARTMENT OF HEALTH SERVICES, IMMUNIZATION BRANCH**

Introduction

The annual selective review conducted each spring provides information on compliance with the California School Immunization Law. The purpose of this review is to evaluate the enforcement of the immunization requirements and the follow-up of students who have not received all required immunizations. This report presents results from this year's selective review and the attached tables present comparisons of immunization coverage among the selected schools.

Methods and Participants

This year's selective review was conducted in a sample of approximately 3.0% of kindergartens. Local health department staff visited 256 schools with kindergartens. During the site visits a short interview was conducted with school administrators. In addition, a complete review of student immunization records was performed. Data were analyzed by comparing immunization coverage rates reported by schools during the fall and those reported by local health departments during the spring.

Results and Discussion

Overall, results of the 2009 selective review indicate that schools are in compliance with the California School Immunization Law. Coverage for each required vaccine was above 95% for public schools and 87% for private schools.

Over 88% of schools surveyed had a workable system for immediate identification of children who have a permanent medical exemption (PME) or a personal beliefs exemption (PBE) in the event. 7.4% of schools surveyed had no system in place but were advised that a system to quickly identify students with PMEs and PBEs in case of an infectious disease outbreak is required. 4% of schools surveyed did not have children with exemptions and therefore such a system was not applicable to their school. As indicated below, the two most commonly used method for follow-up were keeping a computerized or handwritten list of students with exemptions and flagging records. .

Methods used to keep track of students who have permanent medical exemption (PMEs) or personal beliefs exemption (PBE) for immediate identification in the event there's an infectious disease outbreak

	n=256	
	Number	Percent
Keep computerized/handwritten list	99	38.7%
Separate file of California State Immunization Records	21	8.2%
Flags the record	54	21.1%
Look at records during outbreak	8	3.1%
No system to identify unvaccinated students	19	7.4%
More than one of the choices given	36	14.1%
Other	19	7.4%

Kindergarten (Table 1)

The percentage of kindergarten students with all required immunizations measured during the spring selective review (94.8±1.1%) was similar to that measured during the fall assessment (92.3±1.4%). As in previous years, estimates of immunization coverage in the

selected kindergartens varied by the type of school (public or private). In the spring, the percentage of students with all required immunizations was higher in public schools (95.7±1.1%) than in private schools (86.9±4.9%).

#### Kindergarten Personal Beliefs Exemptions (PBE) Special Study

It has been observed that personal beliefs exemption rates increase each year. This year, a special study of PBE immunization records was conducted to characterize PBEs. Results of this special study will be available later this year.

#### Conclusion

Maintaining compliance with the California School Immunization Law is labor intensive and requires child care providers and school administrators to have a thorough understanding of the immunization requirements. Selective review provides an opportunity to emphasize the importance of following up on students who are missing required immunizations. Higher coverage levels measured in the spring could be an indication that follow-up of conditional entrants is occurring. Similar or lower estimates of coverage measured in the spring could be an indication that follow-up is not occurring or that there may be a great deal of student movement with continuing enrollment of students with conditional entry throughout the school year. Overall, the results indicate that schools are in compliance with the California School Immunization Law.

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Table 2: Kindergarten Immunization Coverage\*, Comparison of Fall 2008 Assessment and Spring 2009 Selective Review

	All Schools n = 256		Public Schools n = 184		Private Schools n = 72	
	Fall 2008 Assessment	Spring 2009 Selective Review	Fall 2008 Assessment	Spring 2009 Selective Review	Fall 2008 Assessment	Spring 2009 Selective Review
Total Enrollment	15,429	15,471	13,813	13,896	1,616	1,575
All Required Immunizations	92.3% ± 1.4%	94.8% ± 1.1%	92.7% ± 1.5%	95.7% ± 1.1%	88.7% ± 4.0%	86.9% ± 4.9%
Conditional Entrants	6.13% ± 1.40%	3.15% ± 1.01%	5.84% ± 1.49%	2.41% ± 0.99%	8.60% ± 3.82%	9.71% ± 4.58%
Permanent Medical Exemptions	0.11% ± 0.07%	0.11% ± 0.06%	0.10% ± 0.07%	0.10% ± 0.06%	0.25% ± 0.29%	0.19% ± 0.21%
Personal Belief Exemptions	1.48% ± 0.39%	1.98% ± 0.46%	1.37% ± 0.39%	1.84% ± 0.48%	2.41% ± 1.62%	3.24% ± 1.61%
DTaP (4+) <sup>1</sup>	94.3% ± 1.0%	95.9% ± 0.9%	94.7% ± 1.0%	96.6% ± 0.8%	91.0% ± 3.9%	89.1% ± 4.4%
Polio (3+) <sup>2</sup>	94.6% ± 1.0%	96.4% ± 0.8%	95.0% ± 1.0%	97.2% ± 0.7%	91.2% ± 3.8%	89.4% ± 4.3%
MMR (2+) <sup>3</sup>	94.7% ± 1.0%	96.4% ± 0.8%	95.2% ± 1.1%	97.1% ± 0.8%	90.5% ± 3.9%	90.6% ± 4.0%
Hep B (3+) <sup>4</sup>	97.1% ± 0.6%	97.1% ± 0.6%	97.3% ± 0.6%	97.3% ± 0.7%	95.0% ± 3.0%	95.6% ± 1.8%
Var (1+) <sup>5</sup>	97.4% ± 0.6%	97.4% ± 0.6%	97.7% ± 0.5%	97.6% ± 0.6%	94.5% ± 3.0%	96.0% ± 1.7%

\* Immunization coverage for individual antigens is unavailable for students with Personal Beliefs Exemptions and therefore may be underestimated;  
Anecdotal evidence suggests a small percentage of students may have some but not all required immunizations.

1. Four or more doses of any diphtheria and tetanus toxoids and pertussis vaccines including diphtheria and tetanus toxoids, and any acellular pertussis vaccine
2. Three or more doses of any poliovirus vaccine
3. Two or more doses of measles, mumps, and rubella vaccines, separately or combined on or after the 1st birthday
4. Three or more doses of hepatitis B vaccine
5. One or more doses of varicella vaccine, adjusted for history of varicella disease