

2013-2014 Selective Review Results

California Department of Public Health, 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 3.5% of kindergartens. Local health department staff visited 253 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

The percentage of kindergarten students with all required immunizations measured during the spring selective review ($93.9 \pm 0.9\%$) was similar to that measured during the fall assessment ($90.9 \pm 1.5\%$). The percentage of 'Conditional' entrants decreased from $6.57 \pm 1.46\%$ in fall to $2.94 \pm 0.68\%$ in the spring while the percentage of students receiving permanent medical and personal beliefs exemptions remained the same. 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 ($94.7 \pm 0.9\%$) than in private schools ($85.7 \pm 4.0\%$). Whereas the percentage of 'Conditional' entrants decreased in public schools between fall ($6.52 \pm 1.56\%$) and spring ($2.27 \pm 0.64\%$), it remained about the same in private schools taking into account confidence intervals. The percentage of 'Conditional' entrants in private schools remained higher than in public schools from fall to spring. The percentage of students completing required vaccines was around 98% in the spring, a slight increase from the fall with the highest percentage of students meeting the 3 dose Hepatitis B and 1 dose Varicella requirement.

School surveys indicated that 70.5% of schools had a computerized information system for storing vaccinations. Also, compared to private schools, public schools were significantly more likely to inform parents that their unvaccinated PBE child may be excluded from school if there's an outbreak of a disease that the child has not been vaccinated against (96.1% vs. 76.1%). Public schools (56.7%) were also significantly more likely to be using an immunization registry to check children's records compared with private schools (2.8%).

Conclusion

Maintaining compliance with the California School Immunization Law is labor intensive and requires 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. Educational efforts targeting private schools to increase awareness among school staff to inform parents their child may be excluded in

case of a vaccine preventable disease outbreak may be warranted. Higher coverage levels measured in the spring could be an indication that follow-up of conditional entrants is occurring. Similar estimates 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. Working with schools with a fall conditional entrant rate or more of 15% to improve follow-up may be warranted.

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SELECTIVE REVIEW
CALIFORNIA, 2008

Table 2: Kindergarten Immunization Coverage*, Comparison of Fall 2013 Assessment and Spring 2014 Selective Review

	All Schools n = 253		Public Schools n = 182		Private Schools n = 71	
	Fall 2013 Assessment	Spring 2014 Selective Review	Fall 2013 Assessment	Spring 2014 Selective Review	Fall 2013 Assessment	Spring 2014 Selective Review
Total Enrollment	18,861	19,292	17,028	17,329	1,833	1,963
All Required Immunizations	90.9% ± 1.5%	93.9% ± 0.9%	91.1% ± 1.6%	94.7% ± 0.9%	88.8% ± 4.1%	85.7% ± 4.0%
Conditional Entrants	6.57% ± 1.46%	2.94% ± 0.68%	6.52% ± 1.56%	2.27% ± 0.64%	7.08% ± 3.75%	10.15% ± 3.89%
Permanent Medical Exemptions	0.17% ± 0.08%	0.13% ± 0.07%	0.12% ± 0.07%	0.13% ± 0.07%	0.67% ± 0.70%	0.15% ± 0.17%
Personal Belief Exemptions	2.34% ± 0.56%	3.02% ± 0.57%	2.24% ± 0.60%	2.93% ± 0.61%	3.48% ± 1.41%	4.01% ± 1.68%
DTaP (4+) ¹	95.3% ± 1.1%	98.3% ± 0.5%	95.2% ± 1.2%	98.7% ± 0.4%	96.0% ± 1.9%	93.5% ± 2.8%
Polio (3+) ²	95.8% ± 1.1%	98.3% ± 0.5%	95.8% ± 1.2%	98.8% ± 0.4%	96.2% ± 1.7%	93.8% ± 2.7%
MMR (2+) ³	95.3% ± 1.1%	98.0% ± 0.5%	95.4% ± 1.2%	98.4% ± 0.5%	94.4% ± 3.2%	93.3% ± 3.0%
Hep B (3+) ⁴	98.2% ± 0.5%	99.4% ± 0.2%	98.2% ± 0.5%	99.4% ± 0.2%	99.2% ± 0.4%	98.6% ± 0.7%
Var (1+) ⁵	98.7% ± 0.4%	99.7% ± 0.1%	98.6% ± 0.5%	99.7% ± 0.2%	99.3% ± 0.5%	99.3% ± 0.5%

* 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