## IMMUNIZATION STATUS OF SCHOOL-AGE CHILDREN IN ILLINOIS FOR SCHOOL YEAR 2009-2010

# **ILLINOIS STATE BOARD OF EDUCATION Data Analysis and Progress Reporting Division**

February 2010

Jesse H. Ruiz, Chairman State Board of Education Christopher A. Koch, Ed.D. State Superintendent of Education

### TABLE OF CONTENTS

	l	
Backgrou	ınd	ii
Major Fi	ndings	1
Procedur	e	2
Results .		3
Stat Pub Non Protect Stat Pub	iance Data ewide Compliance	3 4 4 4
	2009-2010 Student Enrollment and Compliance Summary of Reported Educational Facilities	
Table 2.	2009-2010 Immunization Status for All Reported Illinois Public and Nonpublic School Students, by Disease Category	7
Table 3.	2009-2010 Immunization Status for All Reported Illinois Public School Students, by Disease Category	8
Table 4.	2009-2010 Immunization Status for All Reported Illinois Nonpublic School Students, by Disease Category	9

#### **FOREWORD**

Immunization data are collected annually from Illinois public and nonpublic schools. This report is a compilation of data on the immunization status of school-age children in Illinois for school year 2009-2010. The interpretations and conclusions expressed herein are based on the available data and do not necessarily reflect the official position or policy of the Illinois State Board of Education. Direct inquiries regarding this report to Mr. Md. Shafiqul Azam in the Illinois State Board of Education, Division of Data Analysis and Progress Reporting, at 217/782-3950.

#### **BACKGROUND**

As mandated by Section 27-8.1 of the Illinois School Code, all Illinois children must comply with immunization and health examination requirements established by the Illinois Department of Public Health. In addition, the Illinois School Code requires all public and nonpublic schools to submit to the Illinois State Board of Education completed surveys summarizing the compliance status of all children as of October 15, or an earlier exclusion date established by the public school district or nonpublic school. This report summarizes the statewide immunization and health examination compliance data.

#### **MAJOR FINDINGS**

The 2009-2010 immunization status of school-age children, as reported by Illinois schools, reveals the following facts and figures:

- The compliance level of all students in all reported schools is 96.56 percent.
- The compliance level of public school students in all reported schools is 96.35 percent.
- The compliance level of nonpublic school students in all reported schools is 98.57 percent.
- The data by specific disease category, based on the percentage of total reported students, reveal that no more than 2.76 percent of reported Illinois students are unprotected and not in compliance in any of the eight disease categories (polio, DTP/DTaP/Td, measles, rubella, mumps, varicella/chickenpox, hepatitis B, and Haemophilus influenza type b—Hib). However, varicella/chickenpox, hepatitis B, and Hib percentages are calculated based on the number of children *required to be immunized*. For varicella/chickenpox, 1.20 percent of the required preK through Grade 7 students are unprotected and not in compliance. For hepatitis B, 0.84 percent of the required preK and Grades 5-12 children are unprotected and not in compliance. For Hib, 2.76 percent of the required preschool children are unprotected and not in compliance.
- Statewide, a total of 79,367 students (3.44 percent of the total reported student enrollment of 2,310,406) were not in compliance with immunization and/or health examination mandates as of October 15, 2009, or as of an earlier exclusion date established by a public district or nonpublic school. Of this number, 49,300 children were not in compliance with immunization requirements in at least one disease category, while 30,067 were not in compliance with the health examination requirement only.
- Of the submitted public school districts, two have compliance levels of less than 90 percent.
- None of the schools from 21 public school districts submitted data. These are mainly small school districts.
- Not all schools from 33 public school districts submitted data. Most of these fall into the category of small school districts.
- Of the 1,003 reported nonpublic schools, 26 (2.59 percent) have compliance levels of less than 90 percent.

#### **PROCEDURE**

Data collection instruments and procedures used to collect immunization and health examination data were developed by staff of the Illinois State Board of Education in consultation with staff from the Illinois Department of Public Health. Data collection of the Immunization School Survey was conducted using an online system.

School administrators are required to provide information on the total number of children enrolled, the total number of children in compliance, and the total number of children not in compliance for each of the eight disease categories, by grade level. The online immunization survey must be completed annually by November 15.

#### RESULTS

#### **Compliance Data**

Compliance and protection levels for students are calculated based on the information provided by Illinois school officials. Data reported by school officials show overall compliance with the requirements of the student health mandates for both immunizations and health examinations. Students not in compliance are required to be excluded from school until their health examination and immunization records are in compliance with state law. Protection levels refer only to immunizations and denote the reported immunity against specific communicable diseases.

Students are identified as being in compliance with state law if they present proof of immunizations and/or health examinations, have exemptions for religious or medical reasons on file with the local school authority, or are on an approved schedule for completion of immunizations in a series.

#### Statewide Compliance

Table 1 (page 6) presents the 2009-2010 compliance levels for all reported school-age children in Illinois. The compliance level for the total 2,310,406 reported public and nonpublic school children in Illinois is 96.56 percent. The data show 79,367 children (3.44 percent of the total student enrollment) are not in compliance with immunization and/or health examination mandates. Of this number, 49,300 (2.13 percent of the total student enrollment) children are not in compliance with immunization requirements in at least one disease category, while 30,067 (1.30 percent of the total student enrollment) were not in compliance with the health examination requirement only. As of October 15, 2009, or as of an earlier exclusion date established by a public school district or nonpublic school, 11,844 children were excluded from Illinois schools. The number of exclusions continues to be significantly lower than the actual number of children not in compliance. This may be attributed partly to transfer students without records. Transfer students cannot be excluded from school, but they must be reported as not being in compliance because records are not available to document immunization status.

#### Public School District Compliance

For Illinois public school districts, the compliance level for the total 2,082,851 reported children is 96.35 percent. (See Table 1, page 6). Of the 76,115 public school children not in compliance, 47,198 are not compliant in one or more disease categories, while 28,917 are not in compliance with the health examination requirement only. The number of students excluded from school as of October 15, 2009, or as of an earlier exclusion date established by a school district, was 11,328.

Two public school districts failed to meet 90 percent compliance. However, 21 public school districts did not submit any data and 33 public school districts submitted partial data (i.e., not all schools in the district submitted data). Illinois law does not specify a compliance level for individual schools within public school districts.

#### Nonpublic School Compliance

Of the 1,003 nonpublic schools that submitted immunization data, 26 (2.59 percent) failed to meet the 90 percent compliance level.

Of the 3,252 nonpublic children reported to be not in compliance, 2,102 were not in compliance with immunization requirements in at least one disease category, while 1,150 were not in compliance with the health examination requirement only. The number of students excluded from school as of October 15, 2009, or as of an earlier exclusion date established by a nonpublic school, was 516.

#### **Protection Levels**

In order to be counted as fully protected, a student must present proof that the immunization series has been completed and/or present verification of immunity. The Illinois Department of Public Health has determined that a 90 percent protection level against each disease is recommended in order to prevent epidemics.

#### Statewide Protection

Table 2 (page 7) presents the numbers and protection-level percentages of all reported students who are fully protected against the diseases of polio, DTP/DTaP/Td, measles, rubella, mumps, varicella/chickenpox, hepatitis B, and Hib. Varicella/chickenpox, hepatitis B, and Hib protection-level percentages are determined based on the actual number of children *required to be immunized*. Hepatitis B is required for children in preK and grades 5-12. Hib is required only for children under 59 months of age entering a school program below the kindergarten level (all preK students). Varicella/chickenpox is required for all students entering preK through grade 7 for the 2009-2010 school year.

The 2009-2010 protection-level percentages of all reported students are 98.52 percent for polio, 97.71 percent for DTP/DTaP/Td, 98.29 percent for measles, 98.65 percent for rubella, and 98.65 percent for mumps. The reported levels of protection for varicella/chickenpox, hepatitis B, and Hib, based on the actual number of children *required to be immunized*, are 98.10 percent, 98.52 percent, and 96.07 percent, respectively.

The percentage of all reported students who are unprotected and not in compliance with immunization requirements is 2.76 percent or less across all eight disease categories. The reported percentages of students unprotected and not in compliance, based on the actual number of children *required to be immunized*, are 1.20 percent for varicella/chickenpox, 0.84 percent for hepatitis B, and 2.76 percent for Hib.

#### Public School District Protection

As reported in Table 3 (page 8), the levels of protection for public school students, by disease category, are 98.58 percent for polio, 97.69 percent for DTP/DTaP/Td, 98.34 percent for measles, 98.73 percent for rubella, and 98.73 percent for mumps. The reported levels of protection for varicella/chickenpox, hepatitis B, and Hib, based on the actual number of children *required to be immunized*, are 98.18 percent, 98.59 percent, and 95.84 percent, respectively.

The percentage of all reported public school students who were unprotected and not in compliance with immunization requirements is 3.31 percent or less across all eight disease categories. The reported percentages of students unprotected and not in compliance, based on the actual number of children *required to be immunized*, are 1.25 percent for varicella/ chickenpox, 0.85 percent for hepatitis B, and 3.31 percent for Hib.

#### Nonpublic School Protection

The levels of protection for nonpublic school students, by disease category, as reported in Table 4 (page 9), are 97.94 percent for polio, 97.91 percent for DTP/DTaP/Td, 97.83 percent for measles, 97.92 percent for rubella, and 97.92 percent for mumps. The reported levels of protection for varicella/chickenpox, hepatitis B, and Hib, based on the actual number of children *required to be immunized*, are 97.39 percent, 97.81 percent, and 96.75 percent, respectively.

The percentage of nonpublic school students who were unprotected and not in compliance with immunization requirements is 1.13 percent or less across all eight disease categories. The reported percentages of students unprotected and not in compliance, based on the actual number of children *required to be immunized*, are 0.75 percent for varicella/chickenpox, 0.71 percent for hepatitis B, and 1.13 percent for Hib.

Table 1. 2009-2010 Student Enrollment and Compliance Summary of Reported Educational Facilities

	Public S	Schools	Nonpublic S	chools	All Schools		
Compliance Status	Number of		Number of		Number of		
	Students	Percent	Students	Percent	Students	Percent	
Students in compliance as of October 15, 2009	2,006,736	96.35	224,303	98.57	2,231,039	96.56	
Students not in compliance with:							
Immunization requirements	47,198	2.27	2,102	0.92	49,300	2.13	
Health examination only	28,917	1.39	1,150	0.51	30,067	1.30	
All Students	2,082,851	100.00	227,555	100.00	2,310,406	100.00	
Students excluded from school as of October 15, 2009, or as of an earlier exclusion date established by the							
district or nonpublic school.	11,328		516		11,844		

Table 2. 2009-2010 Immunization Status for All Reported Illinois <u>Public and Nonpublic</u> School Students, by Disease Category

Immunization Status	Polio		Polio		Polio		Polio DTP/DTaP/Td		Measles		Rubella		Mumps		Varicella/ChickenPox PreK-Grade 7		Hepatitis B PreK & Grades 5-12		Hib PreK	
	Number of	% of	Number of	% of	Number of	% of	Number of	% of	Number of	% of	Number of	% of	Number of	% of	Number of	% of				
	Students	Total	Students	Total	Students	Total	Students	Total	Students	Total	Students	Total	Students	Total	Students	Total				
Protected and in																				
compliance	2,276,155	98.52	2,257,522	97.71	2,270,872	98.29	2,279,139	98.65	2,279,134	98.65	1,430,014	98.10	1,450,540	98.52	111,837	96.07				
Religious objection	7,933	0.34	8,320	0.36	8,248	0.36	7,686	0.33	7,671	0.33	5,696	0.39	4,452	0.30	497	0.43				
Medical reasons	1,704	0.07	2,417	0.10	2,616	0.11	2,038	0.09	2,027	0.09	1,848	0.13	2,031	0.14	149	0.13				
Approved schedule	4,539	0.20	5,873	0.25	4,532	0.20	3,588	0.16	3,583	0.16	2,746	0.19	2,995	0.20	718	0.62				
Unprotected and in noncompliance	20,075	0.87	36,274	1.57	24,138	1.04	17,955	0.78	17,991	0.78	17,469	1.20	12,378	0.84	3,214	2.76				
Total	2,310,406	100.00	2,310,406	100.00	2,310,406	100.00	2,310,406	100.00	2,310,406	100.00	1,457,773	100.00	1,472,396	100.00	116,415	100.00				

Table 3. 2009-2010 Immunization Status for All Reported Illinois Public School Students, by Disease Category

Immunization Status	Polio		DTP/DTaP/Td		Measles		Rubella		Mumps		Varicella/ChickenPox PreK-Grade 7		Hepatitis B PreK & Grades 5-12		Hib PreK	
	Number of	% of	Number of	% of	Number of	% of	Number of	% of	Number of	% of	Number of	% of	Number of	% of	Number of	% of
	Students	Total	Students	Total	Students	Total	Students	Total	Students	Total	Students	Total	Students	Total	Students	Total
Protected and in compliance	2,053,294	98.58	2,034,722	97.69	2,048,249	98.34	2,056,311	98.73	2,056,311	98.73	1,275,189	98.18	1,308,751	98.59	83,444	95.84
Religious objection	6,251	0.30	6,649	0.32	6,486	0.31	5,962	0.29	5,955	0.29	4,262	0.33	3,424	0.26	259	0.30
Medical reasons	1,371	0.07	2,074	0.10	2,179	0.10	1,614	0.08	1,603	0.08	1,318	0.10	1,747	0.13	71	0.08
Approved schedule Unprotected and in	3,279	0.16	4,541	0.22	3,234	0.16	2,340	0.11	2,333	0.11	1,753	0.13	2,168	0.16	412	0.47
noncompliance	18,656	0.90	34,865	1.67	22,703	1.09	16,624	0.80	16,649	0.80	16,275	1.25	11,345	0.85	2,882	3.31
Total	2,082,851	100.00	2,082,851	100.00	2,082,851	100.00	2,082,851	100.00	2,082,851	100.00	1,298,797	100.00	1,327,435	100.00	87,068	100.00

Table 4. 2009-2010 Immunization Status for All Reported Illinois Nonpublic School Students, by Disease Category

Immunization Status	Polio		DTP/DTaP/Td		Measles		Rubella		Mumps		Varicella/ChickenPox PreK-Grade 7		Hepatitis B PreK & Grade 5-12		Hib PreK	
	Number of	% of	Number of	% of	Number of	% of	Number of	% of	Number of	% of	Number of	% of	Number of	% of	Number of	% of
	Students	Total	Students	Total	Students	Total	Students	Total	Students	Total	Students	Total	Students	Total	Students	Total
Protected and in																
compliance	222,861	97.94	222,800	97.91	222,623	97.83	222,828	97.92	222,823	97.92	154,825	97.39	141,789	97.81	28,393	96.75
Religious objection	1,682	0.74	1,671	0.73	1,762	0.77	1,724	0.76	1,716	0.75	1,434	0.90	1,028	0.71	238	0.81
Medical reasons	333	0.15	343	0.15	437	0.19	424	0.19	424	0.19	530	0.33	284	0.20	78	0.27
Approved schedule	1,260	0.55	1,332	0.59	1,298	0.57	1,248	0.55	1,250	0.55	993	0.62	827	0.57	306	1.04
Unprotected and in																
noncompliance	1,419	0.62	1,409	0.62	1,435	0.63	1,331	0.58	1,342	0.59	1,194	0.75	1,033	0.71	332	1.13
Total	227,555	100.00	227,555	100.00	227,555	100.00	227,555	100.00	227,555	100.00	158,976	100.00	144,961	100.00	29,347	100.00