

**THE IMMUNIZATION STATUS OF SCHOOL-AGE  
CHILDREN IN ILLINOIS  
FOR THE 1998-99 SCHOOL YEAR**

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## **FOREWORD**

Immunization data are collected annually from Illinois public and nonpublic schools. This report is a compilation of the data on the immunization status of school-age children in Illinois for school year 1998-99 and was prepared by Diane Baker, Research and Policy Division. The interpretations and conclusions expressed herein have been prepared by staff and do not necessarily reflect the position or policy of the Illinois State Board of Education.

## MAJOR FINDINGS

The 1998-99 immunization status of school-age children in Illinois resulted in a number of positive findings:

- The compliance level for all Illinois students is 97.25%.
- The compliance level for public school students is 97.16%.
- The compliance level for nonpublic school students is 97.83%.
- The data by specific disease category based on the percent of total student enrollment reveal that no more than 1.17% of Illinois students were unprotected and in noncompliance in any of the seven disease categories. [However, hepatitis B and haemophilus influenzae type b (Hib) percentages are also calculated based on the number of children *required to be immunized*. For hepatitis B, 5.47% of the required Pre-K, 5<sup>th</sup> and 6<sup>th</sup> graders are unprotected and in noncompliance. For Hib, 4.84% of the required preschool children are unprotected and in noncompliance.]
- A statewide total of 63,610 students (2.75% of the total student enrollment of 2,316,609) were in noncompliance with immunization and/or health examination mandates on October 15, 1998, or on an earlier exclusion date established by the district or nonpublic school. Of this number, 53,977 children were in noncompliance with immunization requirements in at least one disease category, while 9,633 were in noncompliance with the health examination requirement only.
- With 100% of Illinois public schools submitting immunization data, only 267 of the 4,130 schools (6.46%) reported compliance levels of less than 90%.
- Over 99% of the nonpublic schools reported immunization data. Only 132 of 1,376 nonpublic schools (9.59%) reported compliance levels of less than 90%.

## THE IMMUNIZATION STATUS OF SCHOOL-AGE

## **CHILDREN IN ILLINOIS FOR THE 1998-99 SCHOOL YEAR**

### **BACKGROUND**

As mandated by Section 27-8.1 (105 ILCS 5/27-8.1) of the School Code, all children must comply with immunization and health examination requirements established by the Illinois Department of Public Health (IDPH). In addition, the School Code requires all public school districts and nonpublic schools to submit completed surveys to the Illinois State Board of Education summarizing compliance status of all children as of October 15, or an earlier exclusion date established by the district or nonpublic school. This report summarizes the statewide immunization and health examination compliance data.

Every child must provide evidence to school administrators of receiving a health examination within one year prior to: (a) entering school for the first time (this includes nursery or preschool, special education, headstart programs, and students transferring into Illinois from out-of-state or out-of-country); (b) entering kindergarten; (c) entering the fifth-grade; and (d) entering ninth-grade. For every child attending schools where grade levels are not assigned, health examinations must be completed prior to the date of entering and within one year prior to the school year in which the child reaches the ages of 5, 10 and 15.

In August 1996, IDPH amended the Health Examination and Immunizations Act to include the hepatitis B and the haemophilus influenzae type b (Hib) vaccinations for the 1997-98 school year. *[It should be noted that in August 1997, IDPH announced a delay in the enforcement of the law for the hepatitis B requirement until the 1998-99 school year.]* Therefore, for the current school year (1998-99), proof of immunity must be provided to school officials against polio, DTP/DTaP, measles, rubella, mumps, hepatitis B, and Hib. Verification of having had measles or rubella constitutes proof of immunity to those diseases.

Exceptions to the immunization requirements are permitted for either religious or medical reasons. In order for an exception to be considered, parents or legal guardians, who object to vaccinations and/or a medical examination for their child, must submit a signed statement of objection to the appropriate local school authority detailing the religious grounds for such objection. A medical exception is permitted when the child's physician reports on the health examination form that administration of certain immunizing agents is medically contraindicated.

Unless a religious or medical exception is on file with the school, Illinois law requires that every child shall present proof of having had the required health examination and immunizations or of having begun an approved schedule of immunizations by October 15, or an earlier exclusion date established by the district or nonpublic school. Any child failing to meet these requirements must be excluded from school until the requirements are met. A child deficient in any one category is classified as being in noncompliance.

Each public school district must have at least 90% of its students in compliance with the law. For any district having less than a 90% compliance level, 10% of each state aid payment made pursuant to Section 18-8 (105 ILCS 5/18-8) of the School Code must be withheld by the regional superintendent until the required compliance level is reached. No compliance level has been established for nonpublic schools, nor have any sanctions been specified in statute. Nonpublic schools are, nonetheless, required by law to comply with the reporting regulations.

All of the data are provided to IDPH staff who can then identify those areas where services and resources can most effectively be allocated to prevent disease outbreaks. Along with data concerning compliance levels and protection levels within disease categories, IDPH receives the names of all schools reporting less than a 90% compliance level and the names of all schools from which no data were received.

## **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. In August of 1998 a district summary (ISBE 70-16A) was sent to each public school district superintendent along with an immunization survey (ISBE 70-11) for each public school or attendance center in that district. Immunization survey forms were also sent to regional superintendents operating regional programs, i.e., Safe Schools/Alternative Schools. In addition, an immunization survey (ISBE 70-11) was also sent to the administrator of each Illinois nonpublic school.

School administrators were required to provide information on the total number of children enrolled, the total number of children in noncompliance, and the number of children in compliance for each of the seven disease categories. These survey instruments were to be returned by the district superintendent, regional superintendent, or nonpublic school administrator to the Illinois State Board of Education on or before November 15, 1998.

## **RESULTS**

### Compliance Data

Compliance and protection levels for students were calculated based upon 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 in noncompliance 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 were identified as being in compliance with state law if they had received the required immunizations and health examinations, had exemptions for religious or medical reasons, or if they were scheduled to complete immunizations that require a series of inoculations.

### Statewide Compliance

Table 1 in the Appendix contains the 1998-99 compliance levels for all reported school-age children in Illinois. The compliance level for the total 2,316,609 public and nonpublic children in Illinois is 97.25%, a decrease from 97.66% in 1997-98. The data show 63,610 children (2.75% of the total student enrollment) were in noncompliance with immunization and/or health examination mandates. Of this number, 53,977 children were in noncompliance with immunization requirements in at least one disease category, while 9,633 were in noncompliance with the health examination requirement only. As of October 15, 1998, or an earlier exclusion date established by the district or nonpublic school, 16,962 children were excluded from Illinois schools. The number of exclusions continues to be significantly lower than the actual number of children in noncompliance. Part of this can be attributed to transfer students without records. Transfer students cannot be excluded from school, but they must be reported in noncompliance because records are not available to document immunization status.

### Public District Compliance

With 100% of the Illinois public school districts reporting immunization data, the compliance level for the total 1,999,671 children was 97.16% (Table 1), slightly lower than the 1997-98 compliance level of 97.55%. Of the 56,723 public school children in noncompliance, 48,143 were in noncompliance with immunization requirements in at least one disease category, while 8,580 were in noncompliance with the health examination requirement only. The number of students excluded from school on October 15, or an earlier exclusion date established by the district, increased from 13,100 in 1997-98 to 15,624 in 1998-99.

As Illinois law stipulates, all 899 public school districts reported compliance levels of 90% or greater. However, Illinois law does not specify compliance levels for individual schools within public school districts. There were 4,130 public schools in operation and serving students on October 15, 1998: 3,452 from downstate public schools; 639 from Chicago Public School District 299; and 39 regionally-operated programs, i.e., Safe Schools/Alternative Schools, reporting immunization data to us for the first time. Of that statewide number, 267 schools (6.46%) reported compliance levels of less than 90%: 58 from downstate public schools, and 209 from Chicago Public School District 299.

### Nonpublic School Compliance

There were 1,381 nonpublic schools in operation and serving students on October 15, 1998. Of that number, 1,376 nonpublic schools reported immunization data to the Illinois State Board of Education by March 24, 1999. This is a response rate of 99.64%.



The compliance level for the total 316,938 children attending nonpublic schools was 97.83% (Table 1), a decrease from 98.33% in 1997-98. Of the 6,887 children reported to be in noncompliance, 5,834 were in noncompliance with immunization requirements in at least one disease category, while 1,053 were in noncompliance with the health examination requirement only. Of those nonpublic schools reporting, 132 schools (9.59%) had compliance levels of less than 90%. The number of students excluded from school on October 15, or an earlier exclusion date established by the nonpublic school, increased from 809 in 1997-98 to 1,338 in 1998-99.

### 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% protection level against each disease is recommended in order to prevent epidemics.

### Statewide Protection

Table 2 in the Appendix displays the numbers and protection level percentages of all reported students who are fully protected against the diseases of polio, DTP/DTaP, measles, rubella, mumps, hepatitis B, and Hib.

Hepatitis B and Hib protection level percentages are determined based upon all reported students, and also by the actual number of children *required to be immunized*. Hepatitis B is a requirement for children entering in a program below the kindergarten level and all children entering 5<sup>th</sup> grade in 1997-98 (5<sup>th</sup> and 6<sup>th</sup> grades in 1998-99). Hib is only required for children under 59 months of age entering in a school program below the kindergarten level (all Pre-K).

The protection level percentages of all reported students who are fully protected against disease are 98.57% for polio, 98.24% for DTP/DTaP, 98.67% for measles, 99.04% for rubella, and 99.03% for mumps. The reported levels of protection for hepatitis B and Hib based upon the actual number of children required to be immunized are 82.01% for hepatitis B and 94.26% for Hib. Compared to last year, statewide protection levels increased slightly in all disease categories, except hepatitis B, which has no data available for comparisons since this is the first year data were required to be collected.

The percentage of all reported students who are unprotected and in noncompliance with immunization requirements is 1.17% or less across all seven disease categories. The reported percentages of students unprotected and in noncompliance based upon the actual number of children required to be immunized are 5.47% for hepatitis B and 4.84% for Hib.

### Public School Protection

As reported in Table 3 (see Appendix), the levels of protection for public school students by disease category are 98.58% for polio, 98.23% for DTP/DTaP, 98.72% for measles, 99.12% for rubella, and 99.10% for mumps. The reported levels of protection for hepatitis B and Hib based

upon the actual number of children required to be immunized are 80.24% for hepatitis B and 92.92% for Hib. Compared to last year, public school protection levels increased slightly in all disease categories, except hepatitis B, which has no data available for comparisons since this is the first year data were required to be collected.

The percentage of public school students who are unprotected and in noncompliance with immunization requirements is 1.18% or less across all seven disease categories. The reported percentages of students unprotected and in noncompliance based upon the actual number of children required to be immunized are 6.06% for hepatitis B and 6.38% for Hib.

### Nonpublic School Protection

The levels of protection for nonpublic school students by disease category, as reported in Table 4 (see Appendix), are 98.51% for polio, 98.35% for DTP/DTaP, 98.32% for measles, 98.55% for both rubella and mumps. The reported levels of protection for hepatitis B and Hib based upon the actual number of children required to be immunized are 90.05% for hepatitis B and 96.50% for Hib. Compared to last year, nonpublic school protection levels decreased slightly in all disease categories, except hepatitis B, which has no data available for comparisons since this is the first year data were required to be collected.

The percentage of nonpublic school students who are unprotected and in noncompliance with immunization requirements is 1.15% or less across all seven disease categories. The reported percentages of students unprotected and in noncompliance based upon the actual number of children required to be immunized are 2.83% for hepatitis B and 2.26% for Hib.

## SUMMARY

Findings of a positive nature include:

- The 1998-99 compliance level for all public and nonpublic children in Illinois was 97.25%.
- Immunization data were received from 100% of the public school districts (899) in operation and serving students on October 15, 1998. All districts reported compliance levels of 90% and over.
- Immunization data were received from 1,376 of the 1,381 nonpublic schools (99.64%) as of March 24, 1999.

The following findings may require further investigation or corrective action:

- The number of students reported to be in noncompliance with immunization requirements increased by 9,940 students (from 53,670 in 1997-98 to 63,610 in 1998-99).
- The number of students excluded from Illinois schools on October 15, 1998, or an earlier exclusion date established by the district or nonpublic school, increased by 3,053 students (from 13,909 in 1997-98 to 16,962 in 1998-99).
- The number of schools reporting compliance levels of less than 90% increased by 88 schools (from 311 in 1997-98 to 399 in 1998-99).

## **APPENDIX**

**Table 1. 1998-99 - Student Enrollment and Compliance Summary**

State Totals	Public Schools			Nonpublic Schools			All Schools		
	1998 Number of Students	1998 Percent	1997 Percent	1998 Number of Students	1998 Percent	1997 Percent	1998 Number of Students	1998 Percent	1997 Percent
Compliance Status									
Students in compliance as of October 15, 1998	1,942,948	97.16	97.55	310,051	97.83	98.33	2,252,999	97.25	97.66
Students not in compliance:									
with immunization	48,143	2.41	1.74	5,834	1.84	1.34	53,977	2.33	1.68
with health exam only	<u>8,580</u>	<u>0.43</u>	<u>0.71</u>	<u>1,053</u>	<u>0.33</u>	<u>0.33</u>	<u>9,633</u>	<u>0.42</u>	<u>0.66</u>
Student Enrollment as of October 15, 1998	1,999,671	100.00	100.00	316,938	100.00	100.00	2,316,609	100.00	100.00
Students excluded from school as of October 15, 1998	15,624			1,338			16,962		

**Table 2. 1998-99 - Immunization Status for All Reported Illinois Students (both Public and Nonpublic) by Disease Category**

(Revised 4-28-99)

Immunization Status	Polio		DTP/DTaP*		Measles		Rubella		Mumps		Hepatitis B (below K, 5th and 6th grade)			Hib (under 59 months of age in a program below the Kindergarten level)		
	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	% Protected of those required to be immunized	Number of Students	% of Total Enrollment	% Protected of those required to be immunized
Protected and in compliance	2,283,420	98.57%	2,275,875	98.24%	2,285,737	98.67%	2,294,413	99.04%	2,294,096	99.03%	376,493	16.25%	82.01%	89,438	3.86%	94.26%
Unprotected and in compliance:																
Religious Objection	2,890	0.12%	3,029	0.13%	3,007	0.13%	2,711	0.12%	2,711	0.12%	1,321	0.06%	0.29%	233	0.01%	0.25%
Medical reasons	2,954	0.13%	3,676	0.16%	2,581	0.11%	1,472	0.06%	1,516	0.07%	2,057	0.09%	0.45%	125	0.01%	0.13%
Approved schedule of completion	5,783	0.25%	6,854	0.30%	4,430	0.19%	2,032	0.09%	2,297	0.10%	54,073	2.33%	11.78%	499	0.02%	0.53%
Not required to show proof of immunization											1,857,532	80.18%	459,077**	2,221,723	95.90%	94,886***
Unprotected and in noncompliance	<u>21,562</u>	<u>0.93%</u>	<u>27,175</u>	<u>1.17%</u>	<u>20,854</u>	<u>0.90%</u>	<u>15,981</u>	<u>0.69%</u>	<u>15,989</u>	<u>0.69%</u>	<u>25,133</u>	<u>1.08%</u>	<u>5.47%</u>	<u>4,591</u>	<u>0.20%</u>	<u>4.84%</u>
Total Enrollment	2,316,609	100.00%	2,316,609	100.00%	2,316,609	100.00%	2,316,609	100.00%	2,316,609	100.00%	2,316,609	100.00%	100.00%	2,316,609	100.00%	100.00%

\*Diphtheria/tetanus/pertussis or tetanus/diphtheria

\*\*Number of children required to be immunized (below K, 5th and 6th graders) Hep B (Line E minus Line C)

\*\*\*Number of children required to be immunized (children 59 months of age and under entering a school program below the kindergarten level) Hib (Line E minus Line C)

**Table 3. 1998-99 - Immunization Status for All Reported Illinois Public School Students by Disease Category**

(Revised 4-28-99)

Immunization Status	Polio		DTP/DTaP*		Measles		Rubella		Mumps		Hepatitis B (below K, 5th and 6th grade)			Hib (under 59 months of age in a program below the Kindergarten level)		
	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	% Protected of those required to be immunized	Number of Students	% of Total Enrollment	% Protected of those required to be immunized
Protected and in compliance	1,971,214	98.58%	1,964,182	98.23%	1,974,132	98.72%	1,982,067	99.12%	1,981,765	99.10%	301,949	15.10%	80.24%	55,177	2.76%	92.92%
Unprotected and in compliance:																
Religious Objection	2,209	0.11%	2,337	0.12%	2,275	0.11%	2,000	0.10%	2,006	0.10%	931	0.05%	0.25%	47	0.00%	0.08%
Medical reasons	2,705	0.14%	3,278	0.16%	2,200	0.11%	1,136	0.06%	1,153	0.06%	1,786	0.09%	0.47%	64	0.00%	0.11%
Approved schedule of completion	5,264	0.26%	6,242	0.31%	3,860	0.19%	1,554	0.08%	1,843	0.09%	48,837	2.44%	12.98%	307	0.02%	0.52%
Not required to show proof of immunization											1,623,376	81.18%	376,295**	1,940,288	97.03%	59,383***
Unprotected and in noncompliance	<u>18,279</u>	<u>0.91%</u>	<u>23,632</u>	<u>1.18%</u>	<u>17,204</u>	<u>0.86%</u>	<u>12,914</u>	<u>0.65%</u>	<u>12,904</u>	<u>0.65%</u>	<u>22,792</u>	<u>1.14%</u>	<u>6.06%</u>	<u>3,788</u>	<u>0.19%</u>	<u>6.38%</u>
Total Enrollment	1,999,671	100.00%	1,999,671	100.00%	1,999,671	100.00%	1,999,671	100.00%	1,999,671	100.00%	1,999,671	100.00%	100.00%	1,999,671	100.00%	100.00%

\*Diphtheria/tetanus/pertussis or tetanus/diphtheria

\*\*Number of children required to be immunized (below K, 5th and 6th graders) Hep B (Line E minus Line C)

\*\*\*Number of children required to be immunized (children 59 months of age and under entering a school program below the kindergarten level) Hib (Line E minus Line C)

**Table 4. 1998-99 - Immunization Status for All Reported Illinois Nonpublic School Students by Disease Category**

Immunization Status	Polio		DTP/DTaP*		Measles		Rubella		Mumps		Hepatitis B (below K, 5th and 6th grade)			Hib (under 59 months of age in a program below the Kindergarten level)		
	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	Number of Students	% of Total Enrollment	% Protected of those required to be immunized	Number of Students	% of Total Enrollment	% Protected of those required to be immunized
Protected and in compliance	312,206	98.51%	311,693	98.35%	311,605	98.32%	312,346	98.55%	312,331	98.55%	74,544	23.52%	90.05%	34,261	10.81%	96.50%
Unprotected and in compliance:																
Religious Objection	681	0.21%	692	0.22%	732	0.23%	711	0.22%	705	0.22%	390	0.12%	0.47%	186	0.06%	0.52%
Medical reasons	249	0.08%	398	0.13%	381	0.12%	336	0.11%	363	0.11%	271	0.09%	0.33%	61	0.02%	0.17%
Approved schedule of completion	519	0.16%	612	0.19%	570	0.18%	478	0.15%	454	0.14%	5,236	1.65%	6.33%	192	0.06%	0.54%
Not required to show proof of immunization											234,156	73.88%	82,782**	281,435	88.80%	35,503***
Unprotected and in noncompliance	<u>3,283</u>	<u>1.04%</u>	<u>3,543</u>	<u>1.12%</u>	<u>3,650</u>	<u>1.15%</u>	<u>3,067</u>	<u>0.97%</u>	<u>3,085</u>	<u>0.97%</u>	<u>2,341</u>	<u>0.74%</u>	<u>2.83%</u>	<u>803</u>	<u>0.25%</u>	<u>2.26%</u>
Total Enrollment	316,938	100.00%	316,938	100.00%	316,938	100.00%	316,938	100.00%	316,938	100.00%	316,938	100.00%	100.00%	316,938	100.00%	100.00%

\*Diphtheria/tetanus/pertussis or tetanus/diphtheria

\*\*Number of children required to be immunized (below K, 5th and 6th graders) Hep B (Line E minus Line C)

\*\*\*Number of children required to be immunized (children 59 months of age and under entering a school program below the kindergarten level) Hib (Line E minus Line C)