THE IMMUNIZATION STATUS OF SCHOOL-AGE CHILDREN IN ILLINOIS FOR THE 2005-2006 SCHOOL YEAR

ILLINOIS STATE BOARD OF EDUCATION Data Analysis and Progress Reporting Division September 2006

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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 2005-2006 and was prepared by Md. Shafiqul Azam, Data Analysis and Progress Reporting Division. The interpretations and conclusions expressed herein were based on the available data and do not necessarily reflect the official position or policy of the Illinois State Board of Education.

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

MAJOR FINDINGS

The 2005-2006 immunization status of school-age children as reported by Illinois schools unveil the following facts and figures:

- The compliance level of all students in all reported schools is 98.08%.
- The compliance level of public school students in all reported schools is 98.00%.
- The compliance level of nonpublic school students in all reported schools is 98.65%.
- The data by specific disease category based on the percent of total reported students reveal that no more than 1.44% of reported Illinois students are unprotected and in noncompliance 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, 0.95% of the required Pre-K through Grade 3 students are unprotected and in noncompliance. For Hepatitis B, 0.70% of the required Pre-K, 5th, 6th, 7th, 8th, 9th, 10th, 11th, and 12th grade children are unprotected and in noncompliance. For Hib, 1.47% of the required preschool children are unprotected and in noncompliance.]
- A statewide total of 45,615 reported students (1.92% of the total reported student enrollment of 2,371,963) are in noncompliance with immunization and/or health examination mandates on October 15, 2006, or on an earlier exclusion date established by the public district or nonpublic school. Of this number, 34,134 children are in noncompliance with immunization requirements in at least one disease category, while 11,481 are in noncompliance with the health examination requirement only.
- Only 145 of the 4,044 reported public schools (3.59%) have compliance levels of less than 90%.
- Only 33 of 1,206 reported nonpublic schools (2.74%) have compliance levels of less than 90%.
- Only one public school district has compliance level below 90%.

PROCEDURE

Data collection instruments and procedures used to collect immunization and health examination data are developed by staff of the Illinois State Board of Education in consultation with staff from the Illinois Department of Public Health. However, from 2005-2006 school year, the paper-based instrument was replaced with a web-based online survey. The formerly paper based data collection of the Immunization School Survey Form (ISBE 70-11) will now be completed and reviewed online via a secure connection over the Internet known as ISBE Web Application Security (IWAS).

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 in noncompliance for each of the eight disease categories. The online immunization survey must be completed on or before November 15 of each year.

RESULTS

Compliance Data

Compliance and protection levels for students are 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 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 if they are on an approved schedule for completion of immunizations in a series.

Statewide Compliance. Table 1 (page 7) contains the 2005-2006 compliance levels for all reported school-age children in Illinois. The compliance level for the total 2,371,963 reported public and nonpublic children in Illinois is 98.08%. The data shows 45,615 children (1.92% of the total student enrollment) are in noncompliance with immunization and/or health examination mandates. Of this number, 34,134 (1.44%) children are in noncompliance with immunization requirements in at least one disease category, while 11,481 (0.48%) are in noncompliance with the health examination requirement only. As of October 15, 2005, or an earlier exclusion date established by the public district or nonpublic school, 16,944 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 may 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.

<u>Public District Compliance</u>. For Illinois public school districts, the compliance level for the total 2,099,672 reported children is 98% (Table 1). Of the 41,948 public school children in noncompliance, 31,378 public school children were in noncompliance in one or more disease categories, while 10,570 are 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 was 15,107.

Of the 872 eligible public school districts, 871 reported compliance levels of 90% or greater. Only one district failed to comply. Illinois law does not specify compliance levels for individual schools within public school districts. Of the 4,044 schools, 145 schools (3.59%) reported compliance levels of less than 90%. All 129 out of these 145 schools were from Chicago Public School District 299.

Nonpublic School Compliance. Of the 1,206 nonpublic schools that submitted immunization data, 33 (2.74%) failed to meet 90% compliance level.

Of the 3,667 nonpublic children reported to be in noncompliance, 2,756 are in noncompliance with immunization requirements in at least one disease category, while 911 are 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 nonpublic school was 1,837.

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.

<u>Statewide Protection</u>. Table 2 (page 8) displays 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 upon 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 5th grade in 1997-98 (all Pre-K, 5th, 6th, 7th, 8th, 9th, 10th, 11th, and 12th grade children in 2005-2006). Hib is only required for children under 59 months of age entering in a school program below the kindergarten level (all Pre-K). Varicella/chickenpox is required for all students entering pre-kindergarten through 3rd grade for the year 2005-2006.

The 2005-2006 protection level percentages of all reported students are 98.88% for polio, 98.48% for DTP/DTaP/Td, 98.95% for measles, 99.14% for rubella, and 99.14% for mumps. The reported levels of protection for Varicella/chickenpox, Hepatitis B, and Hib, based upon the actual number of children *required to be immunized*, are 98.29%, 98.35%, and 97.84% respectively.

The percentage of all reported students who are unprotected and in noncompliance with immunization requirements is 1.47% or less across all eight disease categories. The reported percentages of students unprotected and in noncompliance, based upon the actual number of children required to be immunized, are 0.95% for Varicella/chickenpox, 0.70% for Hepatitis B, and 1.47% for Hib.

<u>Public School Protection</u>. As reported in Table 3 (page 9), the levels of protection for public school students by disease category are 98.93% for polio, 98.49% for DTP/DTaP/Td, 99.01% for measles, 99.23% for rubella, and 99.23% for mumps. The reported levels of protection for Varicella/chickenpox, Hepatitis B, and Hib based upon the actual number of children *required to be immunized*, are 98.44%, 98.41, and 98.00% respectively.

The percentage of all reported public school students who are unprotected and in noncompliance with immunization requirements is 1.54% or less across all eight disease categories. The reported percentages of students unprotected and in noncompliance, based upon the actual number of children *required to be immunized*, are 0.92% for Varicella/chickenpox, 0.69% for Hepatitis B, and 1.54% for Hib.

Nonpublic School Protection. The levels of protection for nonpublic school students by disease category, as reported in Table 4 (see Appendix), are 98.50% for polio, 98.40% for DTP/DTaP/Td, 98.42% for measles, and 98.48% for both rubella and mumps. The reported levels of protection for Varicella/chickenpox, Hepatitis B, and Hib, based upon the actual number of children *required to be immunized*, are 97.49%, 97.86%, and 97.51% respectively.

The percentage of nonpublic school students who are unprotected and in noncompliance with immunization requirements is 1.34% or less across all eight disease categories. The reported percentages of students unprotected and in noncompliance, based upon the actual number of children *required to be immunized*, are 1.11% for Varicella/chickenpox, 0.81% for Hepatitis B, and 1.34% for Hib.

Table 1. 2005-2006 Student Enrollment and Compliance Summary of Reported Educational Facilities

| Compliance Status | Public Sch | ools | Nonpublic | Schools | All Schools | | |
|--|--------------------|---------|--------------------|---------|--------------------|---------|--|
| | Number of Students | Percent | Number of Students | Percent | Number of Students | Percent | |
| Students in Compliance as of October 15, 2005 | 2,057,724 | 98.00 | 268,624 | 98.70 | 2,326,348 | 98.08 | |
| Students not in compliance with: | | | | | | | |
| Immunization requirements | 31,378 | 1.50 | 2,756 | 1.00 | 34,134 | 1.44 | |
| Health examination only | 10,570 | 0.50 | 911 | 0.30 | 11,481 | 0.48 | |
| All Students | 2,099,672 | 100.00 | 272,291 | 100.00 | 2,371,963 | 100.00 | |
| Students excluded from school as of October 15, 2005 or an earlier exclusion date established by the district or nonpublic school. | 15,107 | | 1,837 | | 16,944 | | |

| Table 2. 2005-2006 Immunization Status for All Reported Illinois <u>Public and Nonpublic School Students by Disease Category</u> | | | | | | | | | | | | | | | | | | |
|--|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|----------------------------|--|---|--|---|--|---|------------------|--|
| Immunization Status | Polio | | Polio | | DTP/DT | aP/Td* | Measles | | Rubella | | Mumps | | Varicella/ ChickenPox | | Hepatitis B | | Hib (Pre-K only) | |
| | | | | | | | | | | | (Pre-kindergarten through grade) | | . , | through 12 th rade) | | | | |
| | Number of Students | % of Total Enrollment S | Number of Students need to be immunized | % Protected of those required to be immunized | Number of Students need to be immunized | % Protected of those required to S be immunized | Number of students need to be immunized | % Protected of those required to be immunized | | |
| Protected and in compliance | 2,345,489 | 98.88 | 2,335,963 | 98.48 | 2,346,984 | 98.95 | 2,351,643 | 99.14 | 2,351,662 | 99.14 | 681,097 | 98.29 | 1,456,530 | 98.35 | 125,095 | 97.84 | | |
| Religious objection | 5,797 | 0.24 | 6,232 | 0.26 | 6,001 | 0.25 | 5,582 | 0.24 | 5,578 | 0.24 | 2,418 | 0.35 | 4,384 | 0.30 | 377 | 0.29 | | |
| Medical reasons | 2,671 | 0.11 | 3,002 | 0.13 | 2,607 | 0.11 | 1,872 | 0.08 | 1,866 | 0.08 | 1,369 | 0.20 | 2,962 | 0.20 | 133 | 0.10 | | |
| Approved schedule | 4,330 | 0.18 | 6,155 | 0.26 | 3,469 | 0.15 | 2,460 | 0.10 | 2,467 | 0.10 | 1,446 | 0.21 | 6,691 | 0.45 | 365 | 0.29 | | |
| Unprotected and in noncompliance | 13,676 | 0.58 | 20,611 | 0.87 | 12,902 | 0.54 | 10,406 | 0.44 | 10,390 | 0.44 | 6,605 | 0.95 | 10,411 | 0.70 | 1,884 | 1.47 | | |
| Total Enrollment | 2,371,963 | 100.00 | 2,371,963 | 100.00 | 2,371,963 | 100.00 | 2,371,963 | 100.00 | 2,371,963 | 100.00 | 692,935 | 100.00 | 1,480,978 | 100.00 | 127,854 | 100.00 | | |

| Table 3. 2005-2006 Immunization Status for All Reported Illinois <u>Public</u> School Students by Disease Category | | | | | | | | | | | | | | | | | | | | |
|--|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|--|---|--|---|--|---|---|--|--|--|
| Immunization Status | Polio | | DTP/DTa | aP/Td* | Meas | Measles | | Rubella | | Mumps | | Varicella/ ChickenPox | | atitis B | Hib (Pre-K only) | | | | | |
| | | | | | | | | | | | | | | | (Pre-kindergarten through 3 rd grade) | | (Pre-K, 5 th through 12 th grade) | | | |
| | Number of Students | % of Total Enrollment | Number of Students need to be immunized | % Protected of those required to be immunized | Number of Students need to be immunized | % Protected of those required to S be immunized | Number of tudents need to be immunized | % Protected of those required to be immunized | | | | |
| Protected and in compliance | 2,077,269 | 98.93 | 2,068,040 | 98.49 | 2,078,984 | 99.01 | 2,083,495 | 99.23 | 2,083,515 | 99.23 | 573,240 | 98.44 | 1,290,625 | 98.41 | 85,572 | 98.00 | | | | |
| Religious objection | 4,500 | 0.21 | 4,901 | 0.23 | 4,631 | 0.22 | 4,241 | 0.20 | 4,235 | 0.20 | 1,642 | 0.28 | 3,321 | 0.25 | 152 | 0.17 | | | | |
| Medical reasons | 2,425 | 0.12 | 2,727 | 0.13 | 2,258 | 0.11 | 1,497 | 0.07 | 1,495 | 0.07 | 1,050 | 0.18 | 2,589 | 0.20 | 87 | 0.10 | | | | |
| Approved schedule | 3,476 | 0.17 | 5,205 | 0.25 | 2,609 | 0.12 | 1,645 | 0.08 | 1,650 | 0.08 | 983 | 0.17 | 5,867 | 0.45 | 168 | 0.19 | | | | |
| Unprotected and in noncompliance | 12,002 | 0.57 | 18,799 | 0.90 | 11,190 | 0.53 | 8,794 | 0.42 | 8,777 | 0.42 | 5,381 | 0.92 | 9,042 | 0.69 | 1,341 | 1.54 | | | | |
| Total Enrollment | 2,099,672 | 100.00 | 2,099,672 | 100.00 | 2,099,672 | 100.00 | 2,099,672 | 100.00 | 2,099,672 | 100.00 | 582,296 | 100.00 | 1,311,444 | 100.00 | 87,320 | 100.00 | | | | |

| Table 4. 2005-2006 Immunization Status for All Reported Illinois Nonpublic School Students by Disease Category | | | | | | | | | | | | | | | | | | |
|--|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|-----------------------|--------------------------|---|---|---|---|---|--|--|--|
| Immunization Status | Polio | | DTP/DTa | DTP/DTaP/Td* | | Measles | | Rubella | | ıps | Varicella/ ChickenPox | | Hepatitis B | | Hib (Pre-K only) | | | |
| | | | | | | | | | | | | | (Pre-kindergart grae | | (Pre-K, 5 th t | _ | | |
| | Number of Students | % of Total Enrollment | Number of Students need to be immunized | % Protected of those required to be immunized | Number of Students need to be immunized | % Protected of those required to be immunized | Number of Students need to t be immunized | % Protected of hose required to be immunized | | |
| Protected and in compliance | 268,220 | 98.50 | 267,923 | 98.40 | 268,000 | 98.42 | 268,148 | 98.48 | 268,147 | 98.48 | 107,857 | 97.49 | 165,905 | 97.86 | 39,523 | 97.51 | | |
| Religious objection | 1,297 | 0.48 | 1,331 | 0.49 | 1,370 | 0.50 | 1,341 | 0.49 | 1,343 | 0.49 | 776 | 0.70 | 1,063 | 0.63 | 225 | 0.56 | | |
| Medical reasons | 246 | 0.09 | 275 | 0.10 | 349 | 0.13 | 375 | 0.14 | 371 | 0.14 | 319 | 0.29 | 373 | 0.22 | 46 | 0.11 | | |
| Approved schedule | 854 | 0.31 | 950 | 0.35 | 860 | 0.32 | 815 | 0.30 | 817 | 0.30 | 463 | 0.42 | 824 | 0.49 | 197 | 0.49 | | |
| Unprotected and in noncompliance | 1,674 | 0.61 | 1,812 | 0.67 | 1,712 | 0.63 | 1,612 | 0.59 | 1,613 | 0.59 | 1,224 | 1.11 | 1,369 | 0.81 | 543 | 1.34 | | |
| Total Enrollment | 272,291 | 100.00 | 272,291 | 100.00 | 272,291 | 100.00 | 272,291 | 100.00 | 272,291 | 100.00 | 110,639 | 100.00 | 169,534 | 100.00 | 40,534 | 100.00 | | |