

2011-2012 Report on the Immunization Status of Students Enrolled in Maryland Schools: A Summary of Annual and Validation School Immunization Surveys

Center for Immunization
Office of Infectious Disease Epidemiology and Outbreak Response
Maryland Department of Health and Mental Hygiene
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Introduction

The Annual and Validation School Immunization Surveys are administered annually to gather information on the vaccination status of children enrolled in Maryland schools from Kindergarten through Grade 12. The data collected are used to assess compliance with Maryland school immunization requirements as required by Department of Health and Mental Hygiene (DHMH) Code of Maryland Regulations (COMAR) 10.06.04.03, ensure high immunization coverage in school-aged children, and to identify geographic areas/populations in need of improved immunization coverage. This summary report describes the results of the Maryland Annual and Validation School Immunization Surveys administered for the 2011-2012 school year.

Survey Descriptions

The Annual and Validation School Immunization Surveys assess immunization coverage for vaccines which are required for school entry: Diphtheria, Tetanus, Pertussis (DTaP/DTP/Tdap/DT/Td), Polio, Measles, Rubella, Mumps, Hepatitis B, and Varicella. Students must be vaccinated with the following antigens: 4 doses of diphtheria, tetanus and pertussis; 3 doses of polio and hepatitis B; 2 doses of measles; 1 dose each of mumps, rubella and varicella.

The surveys also collect information on the percentage of students with immunization records and the percentage of students reporting medical or religious exemptions from vaccination.

Survey respondents are asked to obtain information from the immunization records of: (1) *all* kindergarten students and (2) *newly* enrolled students in grades 1-12. The immunization status of students enrolled in non-graded programs is also assessed and included in the survey.

The Annual School Immunization Survey collects information for students enrolled in Maryland public *and* private schools. The survey collects cross-sectional data, at a single point in time. Changes in vaccination coverage, due to shifting student enrollment after initial submission of the survey, are not captured. Vaccinations that are completed after the day of assessment are not included in the survey. Survey respondents are typically school nurses and/or other school administrators who have access to student immunization records.

According to COMAR 10.06.04.09, all Maryland schools are required to report the immunization status of students who are new to the school. Reports are submitted to the Department of Health and Mental Hygiene (DHMH) on an annual basis by November 15.

The Validation School Immunization Survey collects information from a sample of students enrolled in private schools in Maryland. The Validation School Immunization Survey does not collect information from public schools. The survey is distributed to local health departments (LHDs) that are then responsible for assessing the immunization

status in a sample of students from at least 20% of the private schools in their jurisdiction. LHDs may select the schools to include in the survey, but are asked to select schools on a rotating schedule to avoid biases. From a selected sample of students, the survey respondent conducts an initial immunization status assessment. Students not in compliance with immunization requirements are given a 20 day grace period to obtain the required immunizations and/or documentation of status. A second and final assessment is completed 30 days after the initial assessment. Both the initial and final assessments collect cross-sectional data, at a single point in time. Vaccinations that are completed after the final assessment are not included in the survey. Survey respondents are typically LHD infection control nurses and administrators. LHDs are required to submit survey results to the Department of Health and Mental Hygiene (DHMH) on an annual basis by April 1.

Annual and Validation School Immunization Survey results are compared in efforts to validate and identify any significant variability and/or discrepancies in the immunization data collected. Survey results are submitted annually to the Centers for Disease Control and Prevention (CDC) per federal grant requirements.

Methods

The Annual School Immunization Surveys were distributed on August 5, 2011 and were due on November 11, 2011. Annual School Immunization Surveys were mailed directly to all public and private schools registered with the Maryland Department of Education. The Validation School Immunization Survey was distributed on November 30, 2011 and was due on April 1, 2012. As survey respondents are the LHDs, each jurisdiction was notified of the survey and provided survey materials by Health Officer Memo. LHD staff selected at least 20% of their jurisdiction's private schools for the survey. Surveys were submitted to the Maryland Department of Health and Mental Hygiene Center for Immunization. Annual and validation survey respondents submitted their responses online at <http://ideha.dhmh.maryland.gov>, by fax or by mail. Results were compiled and reviewed for completeness; individual respondents were contacted regarding inconsistent data or information requiring clarification.

See Appendices for survey materials.

Results

The following describes results obtained from the 2011-2012 Annual and Validation School Immunization Surveys. The results are summarized in Table 1.

Table 1: Summary of Estimated Immunization Coverage for Maryland Children Enrolled in Kindergarten through Grade 12 in the 2011-2012 school year

		Kindergarteners		Students in Grades 1-12	
		Annual Survey	Validation Survey	Annual Survey	Validation Survey
Students Completely Immunized by Vaccine (%)*	DTaP	99.5	99.4	99.9	99.3
	Polio	99.6	99.5	99.9	99.4
	Measles	98.7	92.2	99.9	97.7
	Rubella	99.3	97.3	99.9	98.5
	Mumps	99.3	97.3	99.9	98.4
	Hepatitis B	99.5	98.7	99.9	98.3
	Varicella	99.7	98.9	99.9	98.1
Students Reporting Exemptions (%)**	Medical	0.3	0.4	0.1	0.3
	Religious	0.6	1.0	0.1	1.4
Total Students Surveyed (n)		49,024	3,032	576,800	4,636
Students with Records (%)		98.9	97.0	99.6	97.4

*Percentages were calculated based on number of students who were non-exempt from vaccination and for whom immunization records were available.

** Percentages were calculated based on total number of students enrolled according to school reports.

Students Enrolled in Kindergarten

Immunization Coverage

During the 2011-2012 school year, Annual School Immunization Survey data were collected on 49,024 kindergarten students in Maryland. Of these students, 48,485 students (98.9%) were considered non-exempt from vaccination and had immunization records on file with the school. Maryland's immunization coverage among kindergarten students exceeded 99% for all vaccines required for school entry except measles (98.7%) (Table 1). Immunization coverage did not vary among the 24 jurisdictions in the State.

All counties achieved greater than 98% immunization coverage for all of the required antigens with the exception of Baltimore County (range from 95.4% - 97.9% for all required antigens), Prince George's County (range from 95.2% - 97.8% for all required antigens), Washington County (96.7% for measles only), and Wicomico County (93.8% for measles only). Garrett and Dorchester Counties achieved 100% immunization coverage for all of the required antigens.

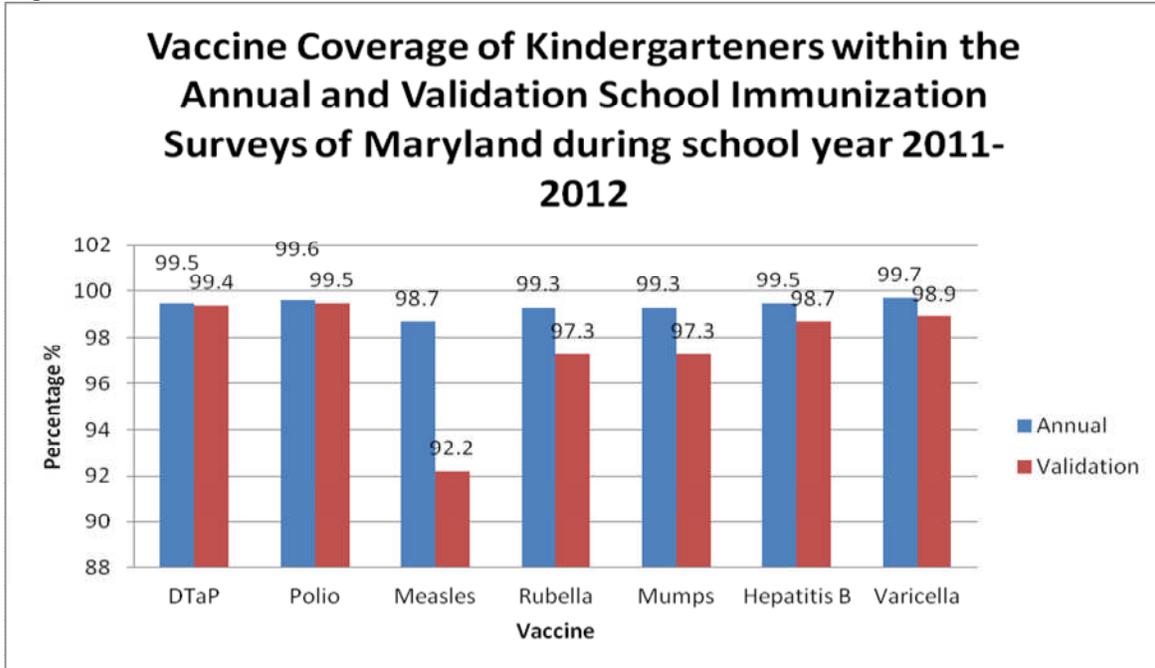
Frederick county reported 93.3% of Kindergarten students with immunization records. Baltimore county reported 97.9%. Prince George's, Montgomery, Washington, and Baltimore City reported between 98.3 % – 98.9%. Anne Arundel, Carroll, Cecil, Harford, Howard, St. Mary's, Talbot, and Wicomico reported between 99.4% - 99.9% of Kindergarten students with immunization records. The following counties reported 100% of Kindergarten students with immunization records: Calvert, Allegany, Caroline, Charles, Dorchester, Garrett, Kent, Queen Anne's, and Worcester. Somerset county did not include information about their kindergarten population. The data is self-reported by schools of all kindergarten enrollees. All numbers reflect immunization status of surveyed students, not all students in the jurisdiction.

The immunization coverage for the 2011-2012 school year did not differ notably from the immunization coverage reported during the 2010-2011 school year. Immunization coverage for DTaP, polio, measles, rubella, mumps hepatitis B, and varicella vaccines was 0.1 to 0.4 percentage points higher in the 2011-2012 school year, as compared to the 2010-2011 school year (see table 1 and Appendix 1).

The Validation School Immunization Survey results for kindergarten students were similar to the results of the Annual School Immunization Survey. The Validation School Immunization Survey was administered for 239 private schools and data were collected on 3,032 kindergarten students. Although a majority of the immunization rates reported in the Validation School Immunization Survey were lower than the immunization rates reported in the Annual School Immunization Survey, the results confirmed that greater than 90% of kindergarteners in Maryland have received the vaccinations required for school entry.

All of the immunization rates reported in the Validation School Immunization Survey, with the exception of measles immunizations, are within 1 percentage point of the rates reported in the Annual School Immunization Survey. The immunization rate for measles is 98.7% according to the Annual School Immunization Survey and 92.2% according to the Validation School Immunization Survey (Figure 2). Validation survey data were not available for Garrett County because there were no kindergarteners enrolled in the schools included in their sample.

Figure 1:

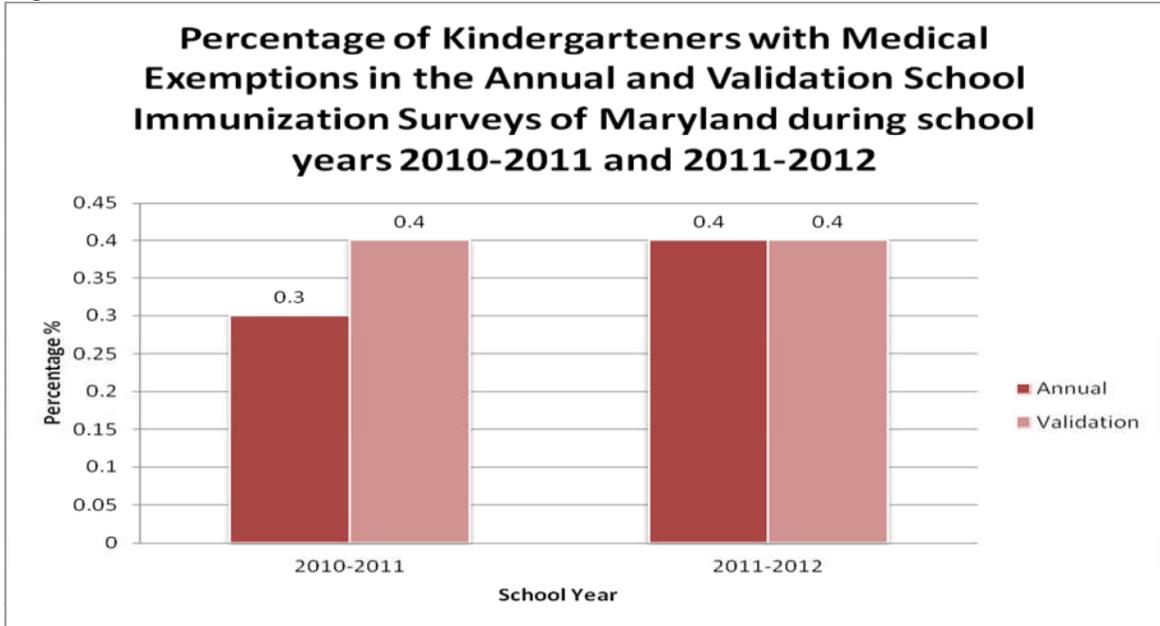


Of note, the immunization coverage for measles vaccination is lower than the coverage for mumps and rubella vaccination, despite the fact that the vaccines are typically administered in a combination shot, MMR. This trend is consistent in the 2011-2012 school year surveys as well as in previous school surveys. This can be possibly explained by the fact that 2 doses of measles antigen is required for school entry, whereas only 1 dose of mumps and 1 dose of rubella antigen are required. As a result, a lower measles immunization rate, as compared to mumps or rubella immunization rate, likely reflects a lack of compliance with obtaining the second required dose of MMR vaccine since obtaining only one MMR satisfies the requirements for mumps and rubella vaccination but not the requirement for measles vaccination. Therefore, this lack of compliance with obtaining the second MMR dose has a greater effect on the measles immunization coverage that is calculated.

Immunization Exemptions

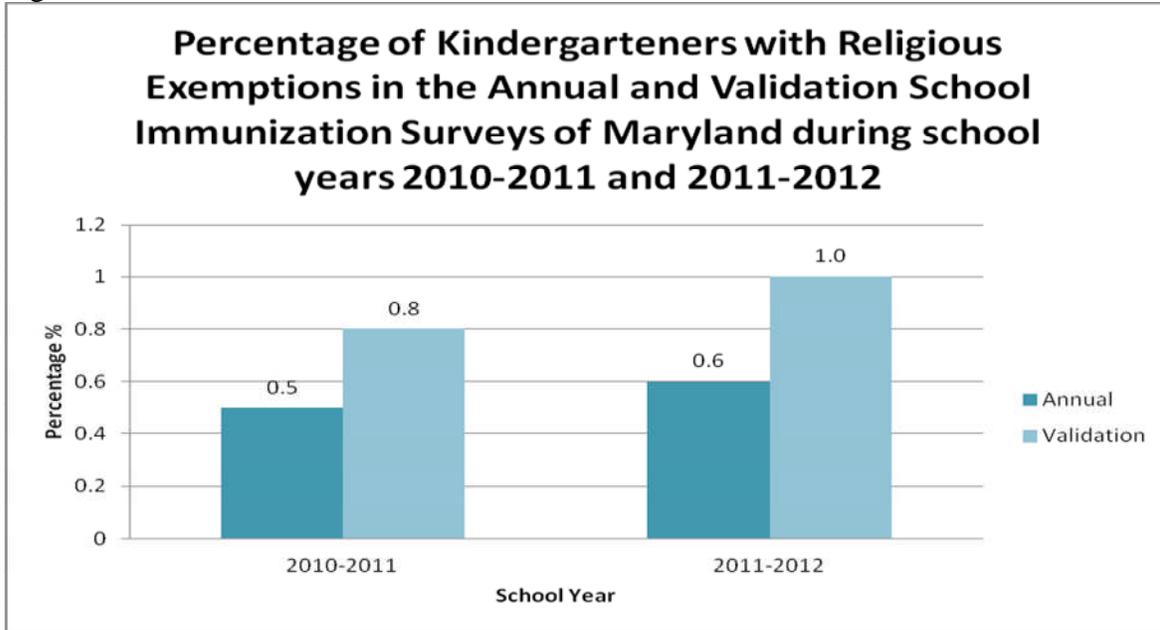
In the 2011-2012 school year, medical exemption rates were reported as 0.3% in the Annual School Immunization Survey and 0.4% in the Validation School Immunization Survey. These percentages are similar to those reported for the 2010-2011 school year in which 0.4% of kindergarteners were medically exempt according to the Annual School Immunization Survey and 0.4% of students were medically exempt according to the Validation School Immunization Survey (Figure 2).

Figure 2:



According to the Annual School Immunization Survey, 0.6% of Maryland kindergarteners claimed a religious exemption from vaccination; 1.0% of the students captured in the Validation School Immunization Survey reported a religious exemption. (Figure 4) These results are comparable to the exemption percentages reported for kindergarteners in the 2010-2011 school year: 0.5% religious exemption (Annual School Immunization Survey) and 0.8% religious exemption (Validation School Immunization Survey).

Figure 3:



Students Enrolled in Grades 1-12

Immunization Coverage

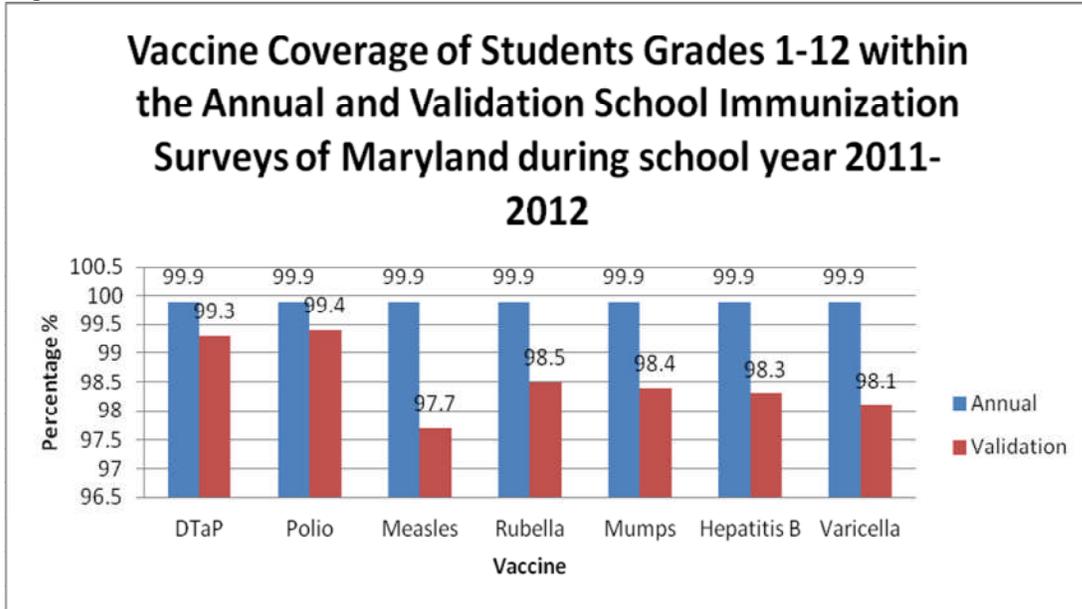
The 2011-2012 Annual School Immunization Survey collected data on 576,800 students enrolled in grades 1-12 in Maryland. Immunization records were available for 574,493 (99.6%) students who were considered non-exempt from immunization. A high level of vaccination was achieved for all of the required school-entry vaccinations (Table 1). Vaccination rates were 99.9% for all vaccines required for school entry. Immunization coverage did not vary significantly among the 24 jurisdictions in the State, with all counties achieving greater than 98% immunization coverage. Calvert, Caroline, Cecil, and Somerset Counties obtained 100% coverage for all required vaccinations.

Charles county reported 93.7% of students grades 1-12 with immunization records. Allegany, Baltimore County, Baltimore City, Frederick, Kent, Montgomery, Prince George's, Queen Anne's, Talbot, Washington and Wicomico reported between 98.9 % – 99.9%. The following counties reported 100% of students grades 1-12 with immunization records: Anne Arundel, Calvert, Caroline, Carroll, Cecil, Dorchester, Garrett, Harford, Howard, Somerset, St. Mary's and Worcester. (Figure 5). The data is self-reported by schools of all enrollees grades 1-12. All numbers reflect immunization status of surveyed students, not all students in the jurisdiction.

Immunization coverage in the 2011-2012 school year did not differ significantly from coverage in the previous school year (see Appendix 1). Immunization coverage for DTaP, polio, measles, rubella, mumps, hepatitis B, and varicella was 0.3 to 0.7 percentage points higher in the 2011-2012 school year, as compared to the 2010-2011 school year. Maryland achieved 99.9% immunization coverage for students enrolled in grades 1-12 for all antigens in the 2011-2012 school year.

For the Validation School Immunization Survey, 239 private schools were surveyed and data were obtained from a sample of 4,636 students enrolled in grades 1-12. The results obtained from the Validation School Immunization Survey were consistent with the immunization rates reported in the Annual School Immunization Survey; the immunization rates reported for both surveys were within approximately 2.0 percentage point of each other and confirm a high rate of immunization in grade 1-12 students (Figure 4).

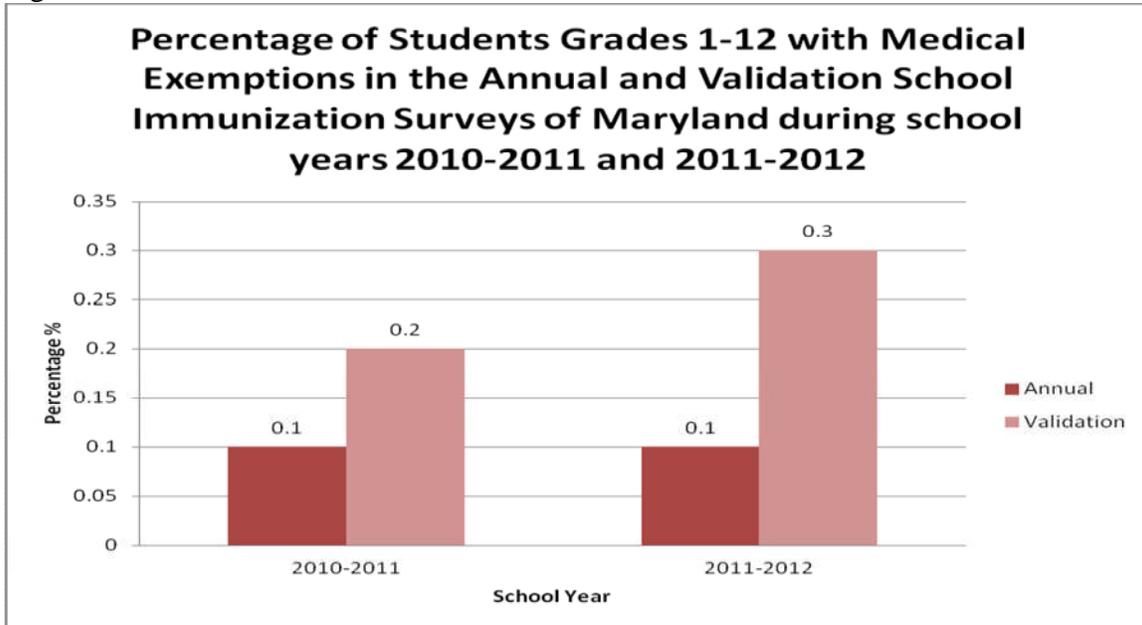
Figure 4:



Immunization Exemptions

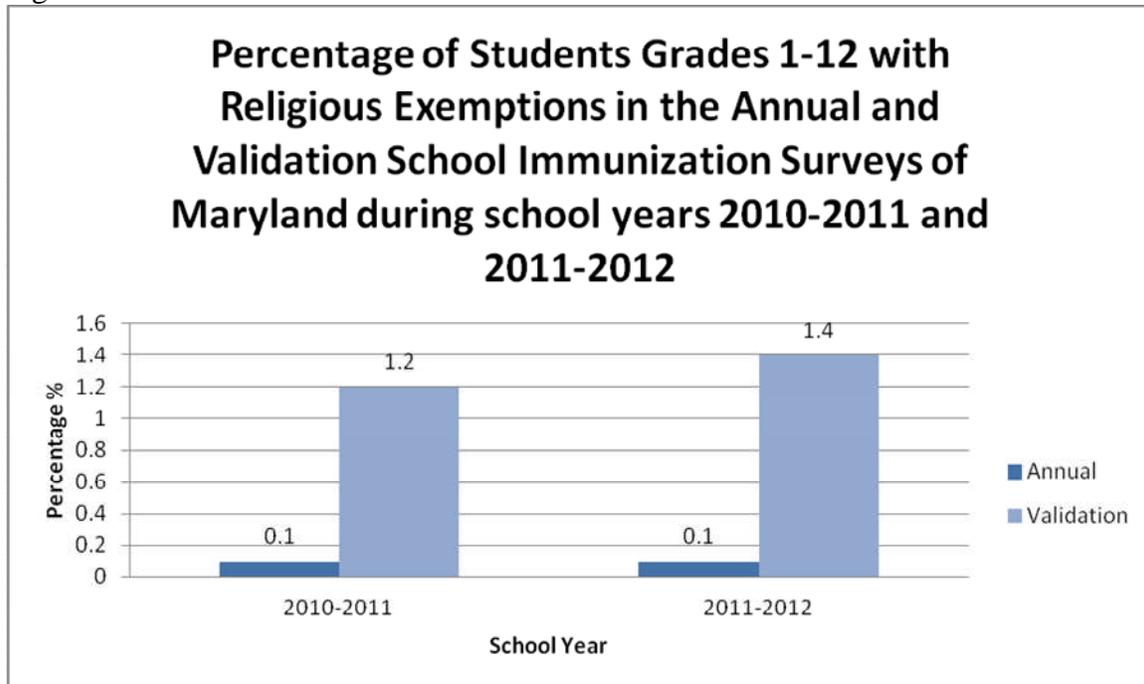
According to the Annual School Immunization Survey, 0.1% of Maryland school children enrolled in grades 1-12 were medically exempt from immunization. According to the Validation School Immunization Survey, 0.3% of children enrolled in grades 1-12 were medically exempt. In the school year 2010-2011, medical exemptions were reported by 0.1% of students in the Annual School Immunization Survey and by 0.2% of students in the Validation School Immunization Survey (Figure 5).

Figure 5:



According to the Annual School Immunization Survey, 0.1% of Maryland students in grades 1-12 claimed a religious exemption from vaccination; 1.4% of students claimed a religious exemption in the Validation School Immunization Survey. The reason for the 1 percentage point different in medical exemption rates reported in the Annual and Validation Immunization Surveys is unclear. In the 2010-2011 school year, 0.1% of students reported a religious exemption in the Annual School Immunization Survey and 1.2% reported a religious exemption in the Validation School Immunization Survey (Figure 6).

Figure 6:



Limitations

The data obtained are *estimates* of the immunization coverage of school children in Maryland. Maryland does not mandate routine reporting of immunizations to a centralized registry. As a result, data gathered through these surveys were obtained through self-report by nurses, volunteers, infectious disease control officers and other health personnel at schools and at the local health department. Reporting discrepancies and human error in reporting may lead to slight differences in immunization coverage between jurisdictions, as well as in data reported from year-to-year.

The data in the report reflect the immunization status of *surveyed* students, not all students in the jurisdiction. Also, a small proportion of students did not have immunization records and their immunization statuses were unknown.

Conclusion

The surveys estimate that more than 97% of children enrolled in Maryland schools have received all required vaccinations for school-entry, with fewer than 2% of children requesting medical or religious exemptions from vaccination.

The DHMH Center for Immunization will continue to monitor immunization coverage in all jurisdictions to ensure that Maryland residents remain protected from vaccine-preventable diseases.

Appendix 1: Summary of 2010-2011 Annual and Validation School Immunization Surveys

Table 2: Summary of Estimated Immunization Coverage for Maryland Children Enrolled in Kindergarten through Grade 12 in the 2010-2011 school year

		Kindergarteners		Students in Grades 1-12	
		Annual Survey	Validation Survey	Annual Survey	Validation Survey
Students Completely Immunized by Vaccine (%)*	DTaP	99.3	99.4	99.2	98.9
	Polio	99.5	99.6	99.4	98.9
	Measles	98.6	93.3	99.5	97.8
	Rubella	99.0	98.4	99.6	99.1
	Mumps	98.9	98.4	99.6	99.1
	Hepatitis B	99.4	99.1	99.2	98.6
	Varicella	99.5	99.6	99.3	97.3
Students Reporting Exemptions (%)**	Medical	0.4	0.4	0.1	0.2
	Religious	0.5	0.8	0.1	1.2
Total Students Surveyed (n)		62,538	2,972	737,991	4,650
Students with Records (%)		99.0	97.9	99.3	97.2

*Percentages were calculated based on number of students who were non-exempt from vaccination and for whom immunization records were available.

** Percentages were calculated based on total number of students enrolled according to school reports.

Appendix 2: 2011-2012 Annual School Immunization Survey



Annual School Immunization Survey 2011

Created: July 15 2011, 7:02 AM
Last Modified: January 20 2012, 11:04 AM
Design Theme: Basic Blue
Language: English
Button Options: Labels
Disable Browser "Back" Button: False

Department of Health & Mental Hygiene 2011 Annual School Immunization Survey



Page 1 - Question 1 - Open Ended - One or More Lines with Prompt

Contact Information:

- Name
- Phone number
- E-mail address
- County/Jurisdiction

Page 1 - Question 2 - Date and Time

Date the report was completed:

	Month	Day	Year	Time
Date/Time				

Page 2 - Question 3 - Open Ended - One or More Lines with Prompt

School Information:

- Name of school
- Phone number
- Street address
- City
- State
- Zip code
- Grade levels
- Type of school (public/private)

Please select the county/jurisdiction in which your school is located (distinguish between Baltimore City and Baltimore County):

- Allegany
- Anne Arundel
- Baltimore City
- Baltimore County
- Calvert
- Caroline
- Carroll
- Cecil
- Charles
- Dorchester
- Frederick
- Garrett
- Harford
- Howard
- Kent
- Montgomery
- Prince George's
- Queen Anne's
- St. Mary's
- Somerset
- Talbot
- Washington
- Wicomico
- Worcester

What is the total number of the students enrolled in your school in each of the following grades? This count should be based on all students, regardless of whether they are newly enrolled or not.

- Kindergarten _____
- Grade 1-5 _____
- Grade 6 _____
- Grade 7 _____
- Grade 8 _____
- Grade 9-12 _____

What is the number of students with immunization records in each of the following grades? This count should be based on all kindergarten students and only newly enrolled students in grades 1-12 (not including students with exemptions).

- Kindergarten (all) _____
- Grade 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____

- Grade 8 (new) _____
- Grade 9-12 (new) _____

Page 2 - Question 7 - Open Ended - One or More Lines with Prompt

What is the number of students without immunization records in each of the following grades? This count should be based on all kindergarten students and only newly enrolled students in grades 1-12 (not including students with exemptions).

- Kindergarten (all) _____
- Grade 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grade 9-12 (new) _____

Page 2 - Question 8 - Open Ended - One or More Lines with Prompt

What is the total number of student records being reviewed? This number should equal the sum of questions 6 and 7.

- Kindergarten (all) _____
- Grade 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grade 9-12 (new) _____

Page 3 - Question 9 - Open Ended - One or More Lines with Prompt

What is the number of students with medical exemptions in each of the following grades? This count should be based on all kindergarten students and only newly enrolled students in grades 1-12.

- Kindergarten (all) _____
- Grade 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grade 9-12 (new) _____

Page 3 - Question 10 - Open Ended - One or More Lines with Prompt

What is the number of students with religious exemptions in each of the following grades? This count should be based on all kindergarten students and only newly enrolled students in grades 1-12.

- Kindergarten (all) _____
- Grade 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grade 9-12 (new) _____

Page 3 - Question 11 - Open Ended - One or More Lines with Prompt

What is the number of students who need 1 or more doses of DTaP/Td/DT vaccine in each of the following grades? This count should be based on all kindergarten students and only newly enrolled students in grades 1-12 (not including students with exemptions).

- Kindergarten (all) _____
- Grade 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grade 9-12 (new) _____

Page 3 - Question 12 - Open Ended - One or More Lines with Prompt

What is the number of students records who need 1 or more doses of Polio vaccine in each of the following grades? This count should be based on all kindergarten students and only newly enrolled students in grades 1-12 (not including students with exemptions).

- Kindergarten (all) _____
- Grade 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7(new) _____
- Grade 8 (new) _____
- Grade 9-12 (new) _____

Page 3 - Question 13 - Open Ended - One or More Lines with Prompt

What is the number of students who need 1 or more doses of Measles vaccine in the following grades? This count should be based on all kindergarten students and only newly enrolled students in grades 1-12 (not including students with exemptions).

- Kindergarten (all) _____
- Grade 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grade 9-12 (new) _____

Page 4 - Question 14 - Open Ended - One or More Lines with Prompt

What is the number of students who need 1 dose of Rubella vaccine in the following grades? This count should be based on all kindergarten students and only newly enrolled students in grades 1-12 (not including students with exemptions).

- Kindergarten (all) _____
- Grade 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grade 9-12 (new) _____

Page 4 - Question 15 - Open Ended - One or More Lines with Prompt

What is the number of students who need 1 dose of Mumps vaccine in the following grades? This count should be based on all kindergarten students and only newly enrolled students in grades 1-12 (not including students with exemptions).

- Kindergarten (all) _____
- Grade 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grade 9-12 (new) _____

Page 4 - Question 16 - Open Ended - One or More Lines with Prompt

What is the number of students who need 1 or more doses of Hepatitis B vaccine in the following grades? This count should be based on all kindergarten students and only newly enrolled students in grades 1-12 (not including students with exemptions).

- Kindergarten (all) _____
- Grade 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grade 9-12 (new) _____

Page 5 - Question 17 - Open Ended - One or More Lines with Prompt

What is the number of students (with no history of chickenpox disease), who need 1 or more doses of Varicella vaccine in the following grades? This count should be based on all kindergarten students and only newly enrolled students in grades 1-12 (not including students with exemptions).

- Kindergarten (all) _____
- Grade 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grade 9-12 (new) _____

Page 5 - Question 18 - Choice - Multiple Answers (Bullets)

What method is your school using to document student immunization information? (Check all that apply):

- DHMH 896 (Immunization Certificate)
- Other, please specify:

Appendix 3: Instructions for 2011-2012 Annual School Immunization Survey

I. Introduction

Thank you for completing the *2009 Annual School Immunization Survey*. Please review the following instructions before you complete the online survey. You should also note the following:

For all questions only include **all current students enrolled in Kindergarten** and only **newly enrolled students in grades 1-12.**

Grade	Review <i>new</i> or <i>all</i> student records?	Targeted population for survey
Kindergarten (K)	All	All kindergarten students in your school.
Grades 1-12	New only	Newly enrolled students (grades 1-12) in your school.
Non-graded (Age 5 years)	All	All students (non-graded - age 5 years) in your school.
Non-graded (Ages 6 to 18+ years)	New only	Newly enrolled students (non-graded - age 6 to 18+ years) in your school.

- You should try to obtain immunization information on students whose records were not available on the day of your initial assessment;
- Do not include information on pre-school or pre-k students in your responses;
- Do not use abbreviations when filling out the survey;
- Please review the information on a page before proceeding to the next page (by clicking the “Submit” arrow). Once you click “Submit”, you are unable to change information on the previous page;
- You should print each page before you submit it, if you would like a copy for your records; and
- Do not leave any questions blank. Please fill in **0 (zero)** if a question does not pertain to your school.

II. Minimum Vaccine Requirements

Please refer to the “*Vaccine Requirements for Children Enrolled in Pre-School Programs and in Schools, Maryland School Year 2011-2012*” to determine age-appropriate immunity for preschool through grade 12 enrollees. The minimum vaccine requirements and DHMH COMAR 10.06.04.03 are available at www.edcp.org (click “Immunization”).

III. Non-graded students

These are students who are assigned to programs or classes without standard grade designation. These students should be recorded in the grade category that best corresponds with the students’ age. Please refer to the table below for additional guidance.

Student’s Age	Record in Grade Category	Review new or all student records
Age 5	Kindergarten (K)	All
Age 6 to 11	Grade 1 – 5	New only
Age 11 to 12	Grade 6	New only
Age 12 to 13	Grade 7	New only
Age 13 to 14	Grade 8	New only
Age 14 to 18+	Grade 9 – 12	New only

IV. Procedures

A. Instructions to Access the Online Survey

In order to access the survey, you need to:

- 1) Visit www.EDCP.org and click on the **2009 Annual School Immunization Survey** link.
- 2) Once the survey website appears on your screen, click 

B. Survey Questions – General Information

Question 1: Complete all contact information (name of person completing the report/primary contact person, phone number, and e-mail address) as indicated.

Question 2: Enter the date the report was completed. (It is not necessary to enter the time.)

Question 3: Complete all school information (school name, phone number, mailing address, county/jurisdiction, and type of school) as indicated. Please be sure to make the distinction between Baltimore County and Baltimore

City. Record the grade levels for your school (e.g., grades 1 – 5). Non-graded schools should be noted here as well.

- Question 4:** Record the “*Total number of students currently enrolled in the entire school*” by grade level. This count should be based on all students, regardless of whether (1) they are newly enrolled (or not) or (2) have medical/religious exemptions.
- Question 5:** The “*Number of students with immunization records*” is a count of **all current students enrolled in Kindergarten** and only **newly enrolled students in grades 1-12**. Do not include students with exemptions in this count.
- Question 6:** The “*Number of students without immunization records*” is a count of **all current students enrolled in Kindergarten and only newly enrolled students in grades 1-12**. Do not include students with exemptions in this count.
- Question 7:** The “*Total number of student records being reviewed*” is a count of the total number of student immunization records. Do not include students with exemptions in this count.
Note: this number should equal the sum of the responses in questions #5 and #6.
- Question 8:** The “*Number of students who have a **medical exemption***” is a count of **all** current students enrolled in Kindergarten and only **new** student enrollees in grades 1-12 with a documented (by a health care provider) medical exemption or contraindication on file.
Note: Students with medical exemptions should not be included in your record review and in the number of students with or without immunization records.
- Question 9:** The “*Number of students who have a **religious exemption***” is a count of **all** current students in Kindergarten and only **new** student enrollees in grades 1-12 whose parents have signed the religious exemption portion of the official Maryland Immunization Certificate (DHMH 896).
Note: Students with religious exemptions should not be included in your record review and in the number of students with or without immunization records.

C. Survey Questions - Immunization Status

The questions in this section (questions 10-16) are designed to assess the number of students with immunization records who NEED (i.e.; ARE MISSING) one or more of the following vaccine doses listed. Please refer to the “*Vaccine Requirements for Children Enrolled in Pre-School Programs and in Schools, Maryland School Year 2011-2012*” to determine age-appropriate immunity for Kindergarten through grade 12 enrollees.

REMEMBER: For all questions only include all current students enrolled in Kindergarten and only newly enrolled students in grades 1-12. Students with exemptions are not counted as students needing a dose of vaccine.

EXAMPLE: If one newly enrolled student in 3rd grade needs one dose of Polio vaccine; **AND** one newly enrolled student in 4th grade needs two doses of Polio vaccine; **THEN** the TOTAL number of students needing one or more doses of Polio vaccines is **TWO**.

Question 10: Provide a count of all students enrolled in Kindergarten and only newly enrolled students in grades 1-12, by grade, who have less than the required number of DTaP/Td/DT vaccinations, depending on age and grade (see minimum vaccine requirements). Do not include exemptions.

Question 11: Provide a count of all students enrolled in Kindergarten and only newly enrolled students in grades 1-12, by grade, who have less than the required **3** doses of Polio vaccine. Do not include exemptions.

Question 12: Provide a count of all students enrolled in Kindergarten and only newly enrolled students in grades 1-12, by grade, who have less than the required **2** doses of Measles vaccine. Do not include exemptions.

Question 13: Provide a count of all students enrolled in Kindergarten and only newly enrolled students in grades 1-12, by grade, who have **0** doses of Rubella vaccine. Do not include exemptions.

Question 14: Provide a count of all current students enrolled in Kindergarten and only newly enrolled students in grades 1-12, by grade, who have **0** doses of Mumps vaccine. Do not include exemptions.

Question 15: Provide a count of all current students enrolled in Kindergarten and only newly enrolled students in grades **1-11** who have less than the required **3** doses of Hepatitis B vaccine. Do not include exemptions.

Question 16: Provide a count of all current students enrolled in Kindergarten and only newly enrolled students in grades **1-11** who have less than the required doses of Varicella vaccine, depending on age and grade (see minimum vaccine requirements) and no history of chickenpox disease. Do not include exemptions.

Question 17: Provide the method (DHMH Form 896 or another method) your school uses to document student immunization information.

IV. Submitting the Survey

When you have finished answering the survey questions please click the  button at the bottom of the survey screen.

V. Frequently Asked Questions

1. Should I review the records of all students in grades K-12?

- ✓ For kindergarten students: Yes. All kindergarten records should be reviewed, including records of students who were enrolled in your pre-school program the prior year.
- ✓ For students in grades 1-12: No. You should only review the records of students who are newly enrolled for this academic year.

2. For questions 4-7, how do I calculate the *total number of students enrolled* if I am only reviewing students who are newly enrolled in grades 1-12?

- ✓ Question 4 refers to all students in your school (grades K-12), regardless of whether they are newly enrolled or not.
- ✓ Questions 5-6 refer to all kindergarten students and only newly enrolled students in grades 1-12. Do not include children with medical exemptions in this count.
- ✓ Question 7 refers to the number of records you are reviewing for this survey. When responding to question 7, the total number of student records being reviewed should ALWAYS equal:

- Question 5: the number of children with records (among kindergarten students and only newly enrolled students in grades 1-12, excluding exemptions);
+ PLUS
- Question 6: the number of children without records (among kindergarten students and only newly enrolled students in grades 1-12, excluding exemptions);

You should attempt to collect immunization information on students whose records were missing on the day of your initial assessment.

3. Do I have to complete the survey if my school only includes pre-school or pre-kindergarten?

- ✓ No. Preschool and pre-kindergarten are not included in this year's survey. Only grades K-12 are included.

4. Can I include information for several schools on one form?

- ✓ No. You will need to create a separate form for each school. Each school must be a unique entry in the database.

5. Can I print a copy of my online survey for my records?

- ✓ Yes, however in order to do this you will have to print each page before you proceed to the next page (before you hit the submit arrow at the bottom of the page).
- ✓ If you have already completed the survey without printing it and would like a copy, please call the Center for Immunization at (410) 767-6679 and we will mail or fax you a copy.

6. What should I record if I do not have information for one of the items?

- ✓ Please complete all fields. If a question does not pertain to your school, please fill in 0 (zero).

7. Can I go back on the survey pages?

- ✓ No. Once each page has been submitted, you can not make corrections to that page. If you need to make corrections, please contact the Center for Immunization.

8. If I sent in the paper form do I need to complete the online survey?

✓ No.

9. Do I count students with exemptions as students who are in need of vaccines?

✓ No.

10. Do I have to print and mail in a hard copy of the online survey?

✓ No. You should, however, print a copy of each page before you move on to the next page for your records.

11. Is this survey required for home schooled children?

✓ No.

12. Do I have the option of previewing the questions and exploring the on-line survey tool before I am ready to complete my on-line submission?

✓ The on-line survey does not include a test option. In order to view the survey questions and explore the tool, you must **SUBMIT** each page before advancing to the next page of questions.

✓ Please note that all of the questions are defined in the instructions.

Appendix 4: 2011-2012 Validation School Immunization Survey



Validation School Immunization Survey 2011-2012

Created: October 19 2011, 12:54 PM
Last Modified: May 23 2012, 6:31 AM
Design Theme: Blue Horizon
Language: English
Button Options: Custom: Start Survey: "Start Survey!" Submit: "Submit"
Disable Browser "Back" Button: False



Maryland Department of Health & Mental
Hygiene Center for Immunization Validation Survey for Students Attending Private
Schools (School Year 2011-2012)

Page 1 - Question 1 - Open Ended - One or More Lines with Prompt

County contact information:

- Name of County
- Phone Number
- Street Address
- City
- County
- State
- Zip Code
- E-mail Address
- Name of Person
Completing Report

Page 1 - Question 2 - Date and Time

Please enter the date the survey is completed:

Date

Page 1 - Question 3 - Open Ended - One Line

How many private schools are in your jurisdiction?

Page 2 - Question 4 - Open Ended - One Line

How many private schools did you include in this survey? Note: The conditions of grant award for the Maryland Immunization Grant require a review of student immunization records in a minimum of 20% of private schools.

Page 2 - Question 5 - Open Ended - One or More Lines with Prompt

Of the private schools included in this survey, what is the total number of kindergartners (all) and students in grades 1-12 (new) enrolled in each of the following grades?

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 2 - Question 6 - Open Ended - One or More Lines with Prompt

Of the number of students listed in question #5, how many students/records did you select for your sample to review in each of the following grades?

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 2 - Heading

Note: The remaining questions (#7 - #20) only refer to those students selected for your record review, not the entire student population.

Please refer to page 4 (Section C) of the instructions for guidance on selecting your sample.

Page 2 - Question 7 - Open Ended - One or More Lines with Prompt

What is the number of students WITH immunization records in each of the following grades? Do not include students with exemptions in your response. They should be recorded in questions #9 and #10.

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 2 - Question 8 - Open Ended - One or More Lines with Prompt

What is the number of students WITHOUT immunization records in each of the following grades? Do not include students with exemptions in your response. They should be recorded in questions #9 and #10.

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 3 - Question 9 - Open Ended - One or More Lines with Prompt

What is the number of students with a medical exemption in each of the following grades?

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 3 - Question 10 - Open Ended - One or More Lines with Prompt

What is the number of students with a religious exemption in each of the following grades?

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 3 - Question 11 - Open Ended - One or More Lines with Prompt

What is the number of students (with immunization records) who need 1 or more doses of DTaP/Td/DT vaccine in each of the following grades?

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____

- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 3 - Question 12 - Open Ended - One or More Lines with Prompt

What is the number of students (with immunization) records who need 1 or more doses of Polio vaccine in each of the following grades?

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 3 - Question 13 - Open Ended - One or More Lines with Prompt

What is the number of students (with immunization records) who need 1 or more doses of Measles vaccine in the following grades?

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 3 - Question 14 - Open Ended - One or More Lines with Prompt

What is the number of students (with immunization records) who need 1 dose of Rubella vaccine in the following grades?

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 4 - Question 15 - Open Ended - One or More Lines with Prompt

What is the number of students (with immunization records) who need 1 dose of Mumps vaccine in the following grades?

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 4 - Question 16 - Open Ended - One or More Lines with Prompt

What is the number of students (with immunization records) who need 1 or more doses of Hepatitis B vaccine in the following grades?

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 4 - Question 17 - Open Ended - One or More Lines with Prompt

What is the number of students (with immunization records, and no history of chickenpox disease), who need 1 or more doses of Varicella vaccine in the following grades?

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 5 - Question 18 - Open Ended - One or More Lines with Prompt

Of the students selected for your sample, what is the total number of students in compliance on the day of this assessment, by grade?

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 5 - Question 19 - Open Ended - One or More Lines with Prompt

Of the students selected for your sample, what is the total number of students in compliance 30 days after this assessment, by grade? Note: The conditions of grant award for the Maryland Immunization Grant requires 98% of private school new students be in compliance 30 days after the initial assessment.

- Kindergarten (all) _____
- Grades 1-5 (new) _____
- Grade 6 (new) _____
- Grade 7 (new) _____
- Grade 8 (new) _____
- Grades 9-12 (new) _____

Page 5 - Question 20 - Open Ended - One Line

What is the number of schools in your school sample currently using DHMH Form 896 to document student immunization history?

.....

What is the number of schools in your school sample who do not use DHMH Form 896 but other methods to document student immunization history?

.....

Appendix 5: Instructions for 2011-2012 Validation School Immunization Survey

I. Introduction

Thank you for completing the *2009 Validation Survey for Students Attending Private Schools, for the 2011-2012 school year*. Please review the following instructions before you complete the online survey. You should also note the following:

The on-line survey should not be completed until after the 30-day follow-up period has passed. You may not access the survey once it has been completed.

- Do not include information on pre-school or pre-k students in your responses;
- Do not use abbreviations when filling out the survey;
- You will need to have your completed summary worksheet (Attachment A) and your non-compliance worksheet (Attachment B) available to complete this survey;
- The word **STUDENTS** in the survey refers to students in the sample of schools selected for this survey only and not the entire student population (in all the schools) in your county;
- For all questions **NEW students** refer to students in that grade who were **not enrolled** in the school the previous year. **ALL** students refer to the total number of students enrolled in that grade;
- Please review the information on a page before proceeding to the next page (by clicking the “Submit” arrow). Once you click “Submit”, you are unable to change information on the proceeding page;
- You should print each page before you submit it, if you would like a copy for your records; and
- Do not leave any questions blank. Please fill in **N/A** if a question does not pertain to the school.

If you need assistance or need to make corrections after your submission, please contact Kimberly Sharpe at 410-767-6679.

II. Procedures

A. Online Survey Access

In order to access the survey, you need to:

- 3) Click on the **Validation School Immunization Survey** link at www.EDCP.org.
- 4) Once the survey website appears on your screen, click



B. Sampling Guidance

You should choose the schools that you will be auditing from a sample of the total number of private schools in your jurisdiction. The immunization status of at least 20% of the private schools in your jurisdiction must be assessed, as per the FY 2009 Unified Grant Award conditions of award. Additional schools may be visited based on local needs.

Please call the Center for Immunization if you need assistance in choosing your sample.

**Please note that we are not requesting information for Pre-schools or Pre-Kindergarten.

C. Students to be Reviewed

Once you have selected the schools please review the following students in each of the following grades:

Grade	Review New or All Students?	Sample Definition
Kindergarten (K)	All	All kindergarten students in your selected sample of schools.
Grades 1-5	New only	New 1 st , 2 nd , 3 rd , 4 th , and 5 th grade students in your selected sample of schools.
Grade 6	New only	New 6 th grade students in your selected sample of schools.
Grade 7	New only	New 7 th grade students in your selected sample of schools.
Grade 8	New only	New 8 th grade students in your selected sample of schools.
Grades 9-12	New only	New 9 th , 10 th , 11 th , and 12 th grade students in your selected sample of schools.

Non-graded students: *These are students who are assigned to programs or classes without standard grade designation. These students should be recorded in the grade category that best corresponds with the student’s age. Please refer to the table below for additional guidance.*

Student’s Age	Review New or All Students?	Record in Grade Category
Age 5	All	Kindergarten (K)

Age 6 to 11	New only	Grade 1 – 5
Age 11 to 12	New only	Grade 6
Age 12 to 13	New only	Grade 7
Age 13 to 14	New only	Grade 8
Age 14 to 18+	New only	Grade 9 – 12

Remember: For all questions NEW students refers to students in that grade who were not enrolled in that particular school the previous year. ALL students refer to the total number of students enrolled in that grade.

A minimum of **ten (10)** student records from each group in the school (K, G1-5, G6, G7, G8, and G9-12) should be reviewed. Please use the following selection method.

Minimum Student Record Review Requirements		
If the number of student records from each group is:		Then:
0-10	→	Select all records
11-20		Select every other record
21-30		Select every third record
31-40		Select every fourth record
41-50		Select every fifth record
51-60		Select every sixth record
61-70		Select every seventh record
71-80		Select every eighth record
81-90		Select every ninth record
91-100		Select every tenth record
And so on ...		

III. Data Definitions

A. School Information

Question 1: Complete all county contact information (name, phone, mailing address, e-mail address and person completing report) as indicated.

Question 2: Enter the date the report was completed. (It is not necessary to enter the time.)

Question 3: Provide the total number of private schools, grades K-12 only, in your jurisdiction. A school that teaches nursery, Pre-k, and Kindergarten should be included in your sample because Kindergarten is included in our target population.

Question 4: Provide the total number of private schools, grades K-12 only, audited. This number should be at least 20% of the number recorded in Question 3.

Question 5: The “*Total number of students enrolled*” is a count of **all** current students enrolled in Kindergarten and only **new** student enrollees in grades 1-12.

Question 6: Provide the “*Total number of records reviewed*” by grade.

Note: Questions #7 – 20 only refer to those students selected for your record review, not the entire student population of the school, unless you have included all students in your sample.

Question 7: The “*Number of students with immunization records*” is a count of **all** current students enrolled in Kindergarten and only **new** student enrollees in grades 1-12, among the students selected for your sample.

Question 8: The “*Number of students without immunization records*” is a count of **all** current students enrolled in Kindergarten and only **new** student enrollees in grades 1-12, among the students selected for your sample.

Question 9: The “*Number of students who have a medical exemption*” is a count of **all** current students enrolled in Kindergarten and only **new** student enrollees in grades 1-12 with a documented medical exemption (or contraindication) on file.

Question 10: The “*Number of students who have a religious exemption*” is a count of **all** current students in Kindergarten and only **new** student enrollees in grades 1-12 with a religious exemption on file.

B. Immunization Status

The questions in this section (questions 10-16) are designed to assess the number of students with immunization records who NEED (i.e. ARE MISSING) one or more of the following vaccine doses listed.

Example: If one new enrollee in 3rd grade needs one dose of Polio and one

new enrollee in 4th grade needs two doses of Polio, then the total number of students needing one or more doses of polio vaccines is **two**. Students with exemptions are not counted as students needing a dose of vaccine.

Minimum Vaccine Requirements

Please refer to the “*Minimum Vaccine Requirements for Children Enrolled in Pre-School Programs and in Schools*” to determine age-appropriate immunity for preschool through grade 12 enrollees. The minimum vaccine requirements and DHMH COMAR 10.06.04.03 are available at www.edcp.org (click “Immunization”).

The requirements for hepatitis B and varicella vaccine include all students from preschool to 9th grade effective September 2006. There is then a “progressive” implementation in which each new school year adds another successive grade that is covered by the regulation (e.g., 10th grade in September 2007, 11th grade in September 2008, etc.).

- Question 11:** Provide a count of all students, by grade, who have less than the required number of DTaP/Td/DT vaccinations, depending on age and grade (see minimum vaccine requirements).
- Question 12:** Provide a count of all students, by grade, who have less than the required **3** doses of Polio vaccine.
- Question 13:** Provide a count of all students, by grade, who have less than the required **2** doses of Measles vaccine.
- Question 14:** Provide a count of students, by grade, who have **0** doses of Rubella vaccine.
- Question 15:** Provide a count of students, by grade, who have **0** doses of Mumps vaccine.
- Question 16:** Provide a count of students in **K-11th** grades who have **less than** the required **3** doses of Hepatitis B vaccine.
- Question 17:** Provide a count of students in **K-11th** grade who have **less than** the required doses of Varicella vaccine, depending on age and grade (see minimum vaccine requirements) and no history of chickenpox disease.
- Question 18:** Provide a count of students in **K-11th** grade who **have** a history of chickenpox disease.
- Question 19:** Indicate the total number of students (among those surveyed) who were in compliance on the day of this audit.

Question 20: Indicate the total number of students (among those surveyed) who were in compliance 30 days after the date of the first audit.

Question 21: Indicate the number of schools in your sample that currently use DHMH Form 896 to document student immunization information.

Question 22: Indicate the number of schools in your sample that currently do not use DHMH Form 896 but use other methods to document student immunization information.

IV. Submitting the Survey

When you have finished answering the survey questions please click the  button at the bottom of the survey screen.