

SCHOOL-BASED IMMUNIZATION COVERAGE IN NOVA SCOTIA: 2008-09 to 2011-12

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Population Health Assessment and Surveillance

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Introduction

Delivery of vaccines via school-based immunization programs is an effective delivery model to reach the adolescent target population. A school-based delivery model provides equal access to immunization for the adolescent population (attending schools) and can reduce disparities in vaccine coverage.

In Nova Scotia, the school based immunization program is the primary method of delivery of the following four publicly funded vaccines;

- Tetanus, Diphtheria, and Acellular Pertussis (Tdap)
- Meningococcal Group C Conjugate (Men C)
- Hepatitis B
- Human Papillomavirus (HPV)

The school based immunization program is delivered by Public Health Services within public and private schools and by community health nurses within First Nations schools on-reserve. The vaccines are administered to both males and females, with the exception of the HPV vaccine, which is administered only to females.

Monitoring immunization coverage rates provides important information for Public Health planning and decision making. Immunization coverage rates are a useful indicator of vaccine uptake within populations and of a population's susceptibility to vaccine-preventable diseases. In 2010-2011 the Department of Health & Wellness set the following targets for school-based immunization coverage rates:

Tdap, Men C, Hepatitis B	≥ 90% coverage
HPV	≥ 80% coverage

This report presents immunization coverage rates for the school-based program in Nova Scotia over a four year time period that includes the school years; 2008/2009, 2009/2010, 2010/2011, and 2011/2012. Provincial and District Health Authority (DHA) coverage rates are presented for each vaccine. For vaccines requiring more than one dose, coverage rates per dose are presented.

The immunization schedule varied during the reporting period (Table 1). Prior to the reporting period, Tdap, Men C, and Hepatitis B vaccines had been administered in grades 4 and 10. With the introduction of the HPV vaccine for females in 2007, a decision was made to move towards administration of all school-based immunizations in one grade level. Grade 7 was selected because Grade 4 was considered too early for an HPV program and that Grade 10 was considered too late for an HPV program. In the 2008/2009 school year a catch-up program for Tdap and Men C vaccine was added for grade 10 students. In the following school year (2009/2010) Public Health was responding to the H1N1 flu pandemic and resources were only available to conduct immunization clinics for one grade level. Therefore, in the 2009/2010 school year grade 10 students were immunized and in 2010/2011 grades 7 & 8 were immunized. In the 2011/2012 school year administration of all school-based immunizations to grade 7 was initiated.

	Tdap	Men C	HPV	Hepatitis B
2008-2009	Grade 7, 14-16 year olds	14-16 year olds	Grade 7	N/A
2009-2010	Grade 10	Grade 10	Grade 10	N/A
2010-2011	Grades 7 & 8	Grade 7	Grades 7&8	Grade 7 (3 doses)
2011-2012	Grade 7	Grade 7	Grade 7	Grade 7 (2 doses)

Table 1: Nova Scotia school-based program immunization schedule, 2008/2009 to 2011/2012

Methodology

Data:

All school-based immunizations are entered into the Application for Notifiable Disease Surveillance (ANDS) by Public Health. Any notifications (e.g. reciprocal forms) of immunizations delivered by other health care providers are also entered into ANDS by Public Health. The immunization data used in this report was extracted from ANDS and includes any immunization events entered on or before October 25, 2012.

The data on the eligible populations for the school-based program were submitted annually by DHAs to the Department of Health and Wellness. For the 2009/2010, 2010/2011, and 2011/2012 school years the eligible population data were submitted at the DHA level. However, for the 2008/2009 school year these data were submitted at the Shared Service Area¹ (SSA) level).

Complete information on adverse event following immunization (AEFI) is available in ANDS for 2011 and beyond. Therefore, only AEFIs for the 2011/2012 school year are presented in this report.

Coverage calculations:

Immunization coverage rates are calculated by:

Coverage rate (%) = <u># immunized (numerator)</u> x 100 # eligible (denominator)

Numerator = the number of students in the specified grade/age group who received the vaccine in the specified school year. Grade level was inferred based on age at the time of immunization, using a four year age range (Table 2). School year was defined as September 1 - August 31 to allow for immunizations administered during the summer months. Students that were immunized outside of the school program should be captured in ANDS, and were therefore included.

¹ Prior to 2009, smaller DHAs were grouped into Shared Service Areas to address concerns regarding critical mass, (SSA 1 = DHA 1, 2, 3; SSA 2 = DHA 4, 5, 6; SSA 3 = DHA 7,8; SSA 4 = DHA 9).

Table 2: Ages included in inferred grade levels

Grade level	Ages included
Grade 7	11-14
Grade 7&8	11-15
Grade 10	14-17
14-16yo	14-17

The implementation of ANDS in 2008 enabled the collection of individual immunization events. In turn, for vaccines with multi-dose schedules, the calculation of multi-dose coverage is now feasible. For HPV and Hepatitis B vaccines, rates of complete coverage were calculated for each dose (Table 3).

Table 3: Description of valid doses for HPV and Hepatitis B vaccines

	HPV	Hepatitis B
Dose 1	# eligible students who received a dose of the vaccine in the specified school year.	# eligible students who received a dose of the vaccine in the specified school year.
Dose 2	# of eligible students who received another dose of the vaccine >27 days after the first dose, in the specified school year.	<pre># eligible students who received another dose of the vaccine >27 days after the first dose, in the specified school year (pediatric formulation) or # eligible students who received another dose of the vaccine >111 days after the first dose (adult formulation)</pre>
Dose 3	 # eligible students who received a third dose > 111 days after the first dose, in the specified school year. 	# eligible students who received another dose of the vaccine >27 days after the second dose, in the specified school year (pediatric formulation)

*Using valid doses excluded <10 records so is not considered a limitation causing data problems.

Denominator = the number of eligible students, based on September enrolment, in a DHA (or SSA). This included all students enrolled, and may have included individuals that did not require the immunization at the time of the program delivery (if they had already received the dose previously from a physician or outside of the province, etc.).

Limitations

The numbers of students immunized within the school based program are taken only from ANDS for this report. Any immunizations by providers other than Public Health, for which Public Health has not received notification, were not included.

As described in the previous section, denominator data on the number of eligible students was based on September enrolment. By using September enrolment, the movement of students between DHAs could potentially result in a student immunization being counted in a particular DHA, but that student being reflected in the denominator of another DHA. Provincial coverage rates would not impacted by this potential limitation.

Use of the September enrolment data also assumes that all students enrolled are eligible for immunization. However, this limitation should have minimal impact as students who were immunized by providers other than Public Health and students immunized outside of the school clinic times should be captured in ANDS and therefore counted in the calculation of vaccine coverage rates.

By estimating grade levels based on a four year age group (Table 2) the potential exists to capture immunizations for students who may not be captured in the denominator. This could potentially artificially inflate the coverage rates.

Coverage rate calculations included only immunizations given within a specified school year. Missing doses given in a previous or following school year were not captured in this report. This method is similar to past DHA coverage reporting, but future reporting will consider capturing doses administered anytime in the preceding 3 years.

Duplicate records were excluded from the data based on name (first and last), date of birth, DHA, vaccine, and date administered. However, duplicate records of immunizations recorded in two different DHAs were not excluded because it was not possible to determine which DHA to attribute the immunization. There were a small number of these duplicates, but they did not significantly impact the provincial immunization coverage rates. The potential also exists for duplicate records from different years, however if these duplicates occur in ANDS it is impossible to determine whether the record is a duplicate or whether the individual received the immunization again.

Tetanus, Diphtheria, and Acellular Pertussis (Tdap)

The Tdap vaccine protects against Tetanus (Lockjaw), Diphtheria, and Pertussis (Whooping Cough). Diphtheria and Tetanus have essentially been eradicated in Nova Scotia. There have been no cases of Diphtheria in over a decade and only one case of Tetanus in the past five years (rate of 0.1 per 100,000). The province continues to see pertussis cases each year. Over the past five years there was an average of 11.4 cases per year (rate of 1.2 per 100,000).

The Tdap vaccine is administered as a single dose and for the years covered in this report followed the schedule in Table 4.

SCHOOL YEAR	TARGET GROUP
2008/2009	Grade 7, 14-16 year olds
2009/2010	Grade 10
2010/2011	Grades 7 & 8
2011/2012	Grade 7

Table 4: Tdap immunization schedule (2008/2009 to 2011/2012)

Coverage rates for Tdap vaccine are presented in Figure 1 and Table 5. During the reporting period the provincial coverage rate was highest (93.2 %) in the 2011/2012 school year and lowest (78.9%) in the 2009/2010 school year (Figure 1). The provincial target of ninety percent coverage, set in 2010/2011, was achieved in the 2010/11 and 2011/2012 school years.

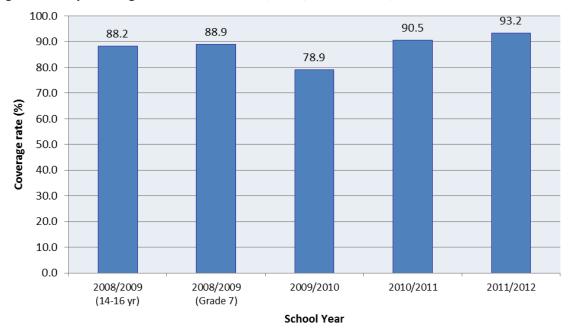


Figure 1: Tdap coverage rates in Nova Scotia, 2008/2009 to 2011/2012*

*For the 2008/2009 school year the immunization schedule varied slightly in DHAs 7 & 8; the 14-16 year old cohort were immunized in the 2007/2008 school year and therefore not captured in this analysis. The 2008/2009 NS coverage rate does not include data from these districts.

During the reporting period Tdap coverage rates ranged from 70.8 % to 97.7% across the district health authorities (Table 5). With the exception of the 2009/2010 school year all districts had coverage rates greater than eighty percent during the reporting period.

	DHA									
		Western		Northern			Eas	tern	Capital	NS
School Year	1	2	3	4	5	6	7	8	9	NS
2008/2009										
(14-16 yr)	91.9			91.9			N/A		83.2	88.2
2008/2009										
(Grade 7)		94.8			96.0			7.8	83.9	88.9
2009/2010	70.8	97.7	89.9	82.9	91.1	95.3	80.3	70.8	75.3	78.9
2010/2011	92.4	93.6	93.3	96.4	91.8	94.4	89.3	89.2	88.0	90.5
2011/2012	93.2	96.1	95.8	91.7	96.5	97.4	83.7	87.6	94.5	93.2

Table 5: Tdap coverage rates by District Health Authority, 2008/2009 to 2011/2012*

*Notes:

1- For the 2008/2009 school year the immunization schedule varied slightly in DHAs 7 & 8; the 14-16 year old cohort were immunized in the 2007/2008 school year and therefore not captured in this analysis. The 2008/2009 NS coverage rate does not include data from these districts.

2 - Documentation from DHA 1 indicates that in the 2009/2010 school year 156 of the eligible students were previously immunized and therefore were not captured in the numerator data from ANDS. This may be due to the changes to the vaccine schedule and method used to capture 14-16 year olds during the report time frame. Removal of the previously immunized students from the denominator provides a coverage rate of 92.8 %.

Meningococcal Group C Conjugate

Meningococcal Group C Conjugate (Men C Conj.) vaccine protects against illness caused by the group C strain of meningococcus. It does not protect against other strains of this bacteria, or other organisms that cause meningitis or septicaemia. Over the past five years there have been 5 cases (rate of 0.1 per 100,000) of Invasive Meningococcal Disease identified as group C in Nova Scotia. There were 4 cases of Invasive Meningococcal Disease during this same time period where serogroup information was unknown.

Men C Conj. Is administered as a single dose and for the years covered in this report followed the schedule in Table 6.

SCHOOL YEAR	TARGET GROUP
2008/2009	14-16 year olds
2009/2010	Grade 10
2010/2011	Grade 7
2011/2012	Grade 7

Table 6: Men C Conj. Immunization schedule (2008/2009 to 2011/2012)

Coverage rates for Men C Conj. vaccine are presented in Figure 2 and Table 7. During the reporting period the provincial coverage rates were highest (91.4 %) in the 2011/2012 school year and lowest (79.3%) in the 2009/2010 school year (Figure 2). The provincial target of ninety percent coverage was achieved in the 2010/11 and 2011/2012 school years.

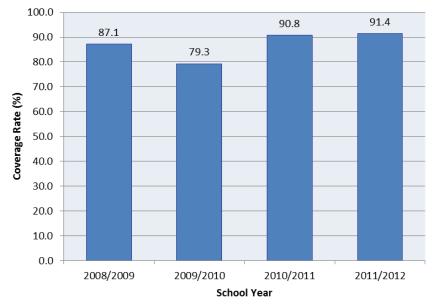


Figure 2: Men C Conj. coverage rates in Nova Scotia, 2008/2009 to 2011/2012*

*For the 2008/2009 school year the immunization schedule varied slightly in DHAs 7 & 8; the 14-16 year old cohort were immunized in the 2007/2008 school year and therefore not captured in this analysis. The 2008/2009 NS coverage rate does not include data from these districts.

Across the district health authorities coverage rates ranged from 68.8% (DHA 1) to 100% (DHA 5) during the reporting period (Table 7). With the exception of the 2009/2010 school year the majority (7 of 9) of DHA's had coverage rates close to ninety percent or above.

		DHA									
	Western				Northern		Eas	tern	Capital	NC	
School Year	1 2 3			4	5	6	7	8	9	NS	
2008/2009	90.7			009 90.7 92.2				N,	/A	83.5	87.1
2009/2010	68.8	96.1	84.4	81.8	88.6	96.4	79.7	70.7	77.8	79.3	
2010/2011	91.7	93.6	91.1	98.2	94.1	94.6	90.4	87.8	89.4	90.8	
2011/2012	91.5	93.5	92.0	90.6	100.0	94.0	84.6	85.9	92.5	91.4	

Table 7: Meningococcal group c conjugate coverage rates by District Health Authority, 2008/2009 to2011/2012*

*Notes:

1- For the 2008/2009 school year the immunization schedule varied slightly in DHAs 7 & 8; the 14-16 year old cohort were immunized in the 2007/2008 school year and therefore not captured in this analysis. The 2008/2009 NS coverage rate does not include data from these districts.

2 - Documentation from DHA 1 indicates that in the 2009/2010 school year 155 of the eligible students were previously immunized and therefore were not captured in the numerator data from ANDS. This may be due to the changes to the vaccine schedule and method used to capture 14-16 year olds during the report time frame. Removal of the previously immunized students from the denominator provides a coverage rate of 90.1%.

Human Papillomavirus (HPV)

Human Papillomavirus (HPV) vaccine protects against HPV, a common sexually transmitted infection. HPV vaccine protects against the most common types of HPV that infect the genital area, including the 2 types of HPV that cause 70% of cervical cancer. HPV infection is not a notifiable disease in Nova Scotia (or Canada), however greater than 70 percent of sexually active Canadians are estimated to have a sexually transmitted HPV infection at some point in their lives². The HPV vaccine was introduced into the school-based immunization program in the 2007/2008 school year.

HPV vaccine is administered to female students as a series of three doses and for the years covered in this report followed the schedule in Table 8.

Table 8: HPV immunization schedule (2008/2009 to 2011/2012)

SCHOOL YEAR	TARGET GROUP
2008/2009	Grade 7
2009/2010	Grade 10
2010/2011	Grades 7&8
2011/2012	Grade 7

Complete coverage rates per dose for HPV vaccine are presented in Figure 3 and Table 9. Complete coverage (all three doses) rates were highest (76.1%) in the 2011/2012 school year and lowest (59.8%) in the 2009/2010 school year (Figure 3). The target of greater than 80 percent coverage was not achieved during the reporting period.

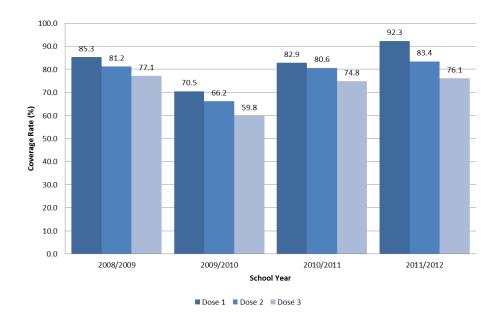


Figure 3: HPV vaccine coverage rates in Nova Scotia, 2008/2009 to 2011/2012

²<u>http://www.phac-aspc.gc.ca/std-mts/hpv-vph/fact-faits-eng.php#sm</u>

		DO:	SE 1			DO	SE 2			DO	SE 3	
DHA	08-09	09-10	10-11	11-12	08-09	09-10	10-11	11-12	08-09	09-10	10-11	11-12
1		71.5	81.7	83.6		68.4	80.5	79.3		66.1	77.5	77.7
2	84.7	79.4	86.8	79.9	79.6	76.2	86.8	78.6	75.7	74.1	80.8	76.9
3		77.0	81.5	91.3		70.4	78.8	84.2		61.1	74.3	79.5
4		62.9	80.6	83.9		58.8	78.7	79.7		54.1	75.2	74.2
5	87.5	87.2	85.3	94.6	82.8	78.2	81.4	88.4	79.4	60.9	75.6	80.3
6		84.3	85.2	92.1		79.5	84.0	88.2		72.3	80.9	84.6
7	96.6	73.4	79.2	79.7	01.2	70.5	75.6	77.5	76.0	66.4	68.9	74.8
8	86.6	77.1	83.8	92.2	81.2	70.7	81.3	85.6	76.0	63.8	75.5	78.8
9	84.1	64.3	82.8	98.0	81.4	61.2	80.3	84.2	77.5	54.7	73.4	73.7
NS	85.3	70.5	82.9	92.3	81.2	66.2	80.6	83.4	77.1	59.8	74.8	76.1

Table 9: HPV coverage rates by District Health Authority, 2008/2009 to 2011/2012

Hepatitis B

Hepatitis B vaccine protects against the Hepatitis B virus. Hepatitis B is caused by contact with the blood or body fluids of someone who is infected. The annual rate of acute Hepatitis B infection in Nova Scotia is low. Over the past 5 years there has been an average of 3 cases per year (rate of 0.3 per 100,000).

The Hepatitis B vaccine was introduced into the school program in 1995. However, during the report period it was only offered during the 2010/2011 and 2011/2012 school years. Hepatitis B vaccine is administered as multiple doses. In the 2010/2011 school year it was administered as 3 doses of pediatric formulation (due to a global shortage of adult formulate) and in the 2011/2012 school year it was administered as 2 doses of adult formulation. The immunization schedule for Hepatitis B vaccine during the years covered in this report is presented in Table 10.

Table 10: HPV immunization schedule (2010/2011 to 2011/2012)

SCHOOL YEAR	TARGET GROUP
2010/2011	Grades 7 (3 doses)
2011/2012	Grade 7 (2 doses)

Coverage rates for Hepatitis B vaccine are presented in Figure 4 and Table 11. Coverage rates were higher for first doses of the vaccine and full coverage rates (complete doses) were slightly higher in the 2011/2012 school year than the 2010/2011 school year. The provincial target of ninety percent coverage was not achieved during the reporting period.

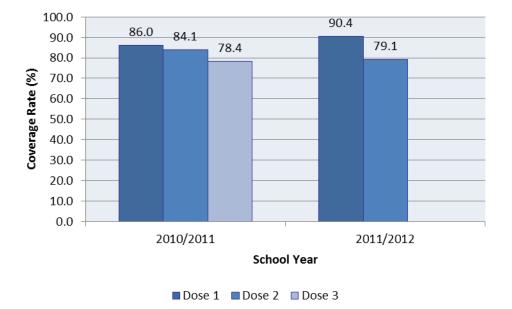


Figure 4: Hepatitis B vaccine coverage rates in Nova Scotia, 2010/2011 to 2011/2012

Hepatitis B vaccine coverage rates by DHA are presented in Table 11. Full coverage (complete doses) rates ranged from 76.0 % (DHA 7) to 88.4 % (DHA 4) across the DHAs.

	DO	DOSE 1 DOSE 2		DO	SE 3	
DHA	10-11	11-12	10-11	11-12	10-11	11-12
1	88.5	91.1	87.4	84.1	85.2	
2	91.8	91.4	90.5	88.0	86.8	
3	86.1	89.2	83.9	83.0	79.2	
4	96.1	88.4	93.1	80.3	88.4	
5	89.9	98.7	85.6	87.4	77.5	NI / A
6	90.7	89.0	89.2	83.9	87.4	N/A
7	88.9	81.4	86.5	76.0	78.8	
8	86.1	88.7	83.5	79.9	76.9	
9	82.0	91.7	79.6	75.0	73.0	
NS	86.0	90.4	83.7	79.1	78.0	

 Table 11: Hepatitis B coverage rates by District Health Authority, 2010/2011 to 2011/2012

Adverse Events Following Immunization

In the 2011/2012 school year four adverse events following immunization that were related to schoolbased immunizations were reported. All four were mild in nature.

Discussion

Overall, coverage rates were highest in the 2011/2012 school year and lowest in the 2009/2010 school year. In 2009/2010 a one-year immunization catch-up program for Grade 10 students was planned in addition to grade seven students. Due to the Public Health response to H1N1 that year, there were insufficient resources to conduct immunization clinics for two grades, resulting in only grade 10 students being immunized in 2009/2010. Lower coverage rates for that school year could be due to lower uptake among older students, although the focus on H1N1 immunization may have also played a role on uptake of school based immunizations.

Immunization targets were achieved for Tdap and Men C Conj in the 2010/11 and 2011/2012 school years. Targets were not achieved for HPV and Hepatitis B. Hepatitis B vaccine is frequently administered as part of travel related immunizations by providers other than Public Health. If Public Health was not notified of these immunizations they would not have been captured in these analyses.

The method used in this report to calculate immunization coverage is similar to how DHA's have reported immunization coverage in the past. However, coverage rates presented in this report consider only immunizations administered within a particular school year. As such they do not provide the complete picture of up to date coverage at a given time. To enhance estimates of up to date coverage to include those immunized prior to the school year of interest, future reporting will consider capturing immunizations administered within the preceding 3 years.

	2008/2009 (14-16 yr)	2008/2009 (Grade 7)	2009/2	010	2010/2	011	2011/2	012
DHA	Immunized	Eligible	Immunized	Eligible	Immunized	Eligible	Immunized	Eligible	Immunized	Eligible
1	608		553		466	658	1077	1165	504	541
2	688	2431	655	2241	430	440	1190	1272	595	619
3	939		916		739	822	1722	1846	907	947
4	795		824		794	958	1523	1580	740	807
5	265	1695	345	1787	337	370	612	667	307	318
6	497		547		506	531	979	1037	441	453
7	N/A	1535	456	2065	313	390	864	967	376	449
8	N/A	1333	1358	2005	957	1351	2439	2733	1136	1297
9	4018	4828	4092	4876	3916	5202	7866	8934	4037	4272
NS	7894	8954	9746	10969	8458	10722	18272	20201	9043	9703

Table A2: Men C Coni	immunizations & eligible stude	ents by DHA, 2008/2009 to 2011/2012

	2008/2009 (Grade 7)	2009/2	010	2010/2	011	2011/2	012
DHA	Immunized	Eligible	Immunized	Eligible	Immunized	Eligible	Immunized	Eligible
1	607		453	658	533	581	495	541
2	687	2431	423	440	581	621	579	619
3	912		690	818	837	919	871	947
4	810		799	977	751	765	731	807
5	259	1702	327	369	288	306	318	318
6	501		511	530	489	517	426	453
7	N/A		311	390	423	468	380	449
8	N/A		955	1351	1184	1349	1126	1311
9	4039	4836	4045	5202	4017	4495	3952	4272
NS	7815	8969	8514	10735	9103	10021	8878	9717

Table A3: HPV (dose 1) immunizations & eligible students by DHA, 2008/2009 to 2011/2012

	2008/2	009	2009/2	010	2010/2011		2011/2012	
DHA	Immunized	Eligible	Immunized	Eligible	Immunized	Eligible	Immunized	Eligible
1	252		226	316	464	568	214	256
2	296	1123	270	340	534	615	235	294
3	403		416	540	724	888	410	449
4	350		322	512	650	806	338	403
5	148	862	156	179	262	307	139	147
6	256		210	249	415	487	210	228
7	213	987	177	241	392	495	177	222
8	642	987	603	782	1126	1344	571	619
9	1877	2231	1608	2500	3598	4344	2103	2145
NS	4437	5203	3988	5659	8165	9854	4397	4763

	2008/2	009	2009/2	010	2010/2	011	2011/2	012
DHA	Immunized	Eligible	Immunized	Eligible	Immunized	Eligible	Immunized	Eligible
1	236		216	316	457	568	203	256
2	282	1123	259	340	534	615	231	294
3	376		380	540	700	888	378	449
4	338		301	512	634	806	321	403
5	140	862	140	179	250	307	130	147
6	236		198	249	409	487	201	228
7	200	097	170	241	374	495	172	222
8	601	987	553	782	1092	1344	530	619
9	1817	2231	1529	2500	3490	4344	1806	2145
NS	4226	5203	3746	5659	7940	9854	3972	4763

Table A4: HPV (dose 2) immunizations & eligible students by DHA, 2008/2009 to 2011/2012

Table A5: HPV (dose 3) immunizations & eligible students by DHA, 2008/2009 to 2011/2012

	2008/2	009	2009/2	010	2010/2	011	2011/	/2012
DHA	Immunized	Eligible	Immunized	Eligible	Immunized	Eligible	Immunized	Eligible
1	224		209	316	440	568	199	256
2	273	1123	252	340	497	615	226	294
3	353		330	540	660	888	357	449
4	328		277	512	606	806	299	403
5	132	862	109	179	232	307	118	147
6	224		180	249	394	487	193	228
7	188	007	160	241	341	495	166	222
8	562	987	499	782	1015	1344	488	619
9	1728	2231	1368	2500	3190	4344	1580	2145
NS	4012	5203	3384	5659	7375	9854	3626	4763

Table A6: Hep B (dose 1) immunizations & eligible students by DHA, 2010/2011 to 2011/2012

	2010/2	2011	2011/2012		
DHA	Immunized	Eligible	Immunized	Eligible	
1	514	581	493	541	
2	568	619	566	619	
3	791	919	845	947	
4	735	765	713	807	
5	275	306	314	318	
6	469	517	403	453	
7	416	468	363	446	
8	1161	1349	1131	1275	
9	3687	4495	3917	4272	
NS	8616	10019	8745	9678	

	2010/2	2011	2011/2012		
DHA	Immunized	Eligible	Immunized	Eligible	
1	508	581	455	541	
2	560	619	545	619	
3	771	919	786	947	
4	712	765	648	807	
5	262	306	278	318	
6	461	517	380	453	
7	405	468	339	446	
8	1126	1349	1019	1275	
9	3578	4495	3205	4272	
NS	8383	10019	7655	9678	

 Table A7: Hep B (dose 2) immunizations & eligible students by DHA, 2010/2011 to 2011/2012

Table A8: Hep B (dose 3) immunizations & eligible students by DHA, 2010/2011 to 2011/2012

	2010/2011		
DHA	Immunized	Eligible	
1	495	581	
2	537	619	
3	728	919	
4	676	765	
5	237	306	
6	452	517	
7	369	468	
8	1037	1349	
9	3283	4495	
NS	7814	10019	