

Cette présentation a été effectuée le 28 novembre 2012, au cours de la journée « Piste d'action pour la prévention et le contrôle des maladies évitables par la vaccination : le cas de la rougeole » dans le cadre des 16es Journées annuelles de santé publique (JASP 2012). L'ensemble des présentations est disponible sur le site Web des JASP à la section Archives au : <http://jasp.inspq.qc.ca/>.

NEW YORK CITY SCHOOL IMMUNIZATION PROGRAM

**New York City Department of Health & Mental
Hygiene (NYC DOHMH)
Cheryl Lawrence, MD, FAAP
Medical Director
NYC Office of School Health**



Background



New York City (NYC) Schools

Types of Schools

•Public Schools*	1,791
•Charter Schools	161
•Private Schools	889

Total school population

•Public (includes charter schools)	1,068,733
•Private (based on self reported survey) †	260,782

*November 8, 2012 Automate the Schools (ATS) data

Includes 161 Charter Schools with 58,627 Students and 45,565 18- year old students

† Based on data from 2011-2012 school year



NYC Non-Public Schools

- Schools not affiliated with the NYC Department of Education (DOE)
- Some are Religiously affiliated
- Others are Independent (schools without a religious affiliation)



Demographics

- About 40% of students in public school live in a non-English speaking household.
- All documents are always translated into the following languages: Spanish, French, German, Chinese, Urdu, Hindi, Russian, Bengali, Haitian Creole, Korean, and Arabic



New York State (NYS) Public Health Law § 2164

- PHL § 2164 defines immunization requirements for students attending schools in New York State
- Required immunizations for children in primary and secondary schools include:
 - DTaP (3), Tdap (1), Polio (3), MMR (2), Hep B (3), and Varicella (1)
- Only exemptions allowed
 - Valid medical exemptions
 - Valid religious exemptions
- Does not allow for philosophical exemptions



Citywide Immunization Registry-CIR

- Started in 1997
- Vital records (birth certificates) loaded twice a week
 - All NYC births from 1996 forward
 - ~125,000 births annually
- Mandatory reporting of immunizations administered to individuals 0-18 years
 - City Health Code, State Law
- 1,813 pediatric provider sites
 - 85% (1,535) participate in Vaccines for Children (VFC) program
- 93% of providers report regularly
- All electronic reporting – Online Registry, batch file transfer, HL7 Web service (real-time, bidirectional)



Automate The Schools system

- School based administrative database used by the public school system to record student specific data
- Immunization records added to this system to assist with tracking each student
- CIR records are now populated into the ATS system.



SEPTEMBER 2012

IMMUNIZATION REQUIREMENTS FOR ALL STUDENTS

NYC DEPARTMENT OF HEALTH AND MENTAL HYGIENE

The following immunization requirements are mandated by law. Children must be excluded from school if they do not meet these requirements.

For all students between the ages of two months and eighteen years.

A child's immunization history must include all of the following vaccines to be considered fully immunized. Their immunization record should be evaluated according to the grade they are enrolled in this school year.

FULL COMPLIANCE

DAY CARE/PRE-KINDERGARTEN	NO. OF DOSES	GRADES 1-12	NO. OF DOSES
DTaP (diphtheria-tetanus-acellular pertussis) OR DTP (diphtheria-tetanus-pertussis)	4	DTaP, DTP, DT, Td (tetanus-diphtheria) OR Tdap (tetanus-diphtheria-acellular pertussis)	3
Fourth dose should be at least 6 months after the third dose.		Vaccine type as appropriate for age.	
IPV (inactivated poliovirus) or OPV (oral poliovirus)	3	Tdap (effective September 1, 2007)	1
MMR (measles-mumps-rubella)	1	For all children in 6th, 7th, 8th, 9th, 10th or 11th grades born on or after January 1, 1994.	
On or after the 1st birthday.		IPV or OPV	2
MMR (Measles-mumps-rubella type b)	1, 2, or 3	One dose on or after the 1st birthday, plus a second dose of a measles-containing vaccine (preferably as MMR) administered at least 28 days or more after the first dose.	
On or after the 1st birthday.		Hepatitis B	2 or 3
Hepatitis B	3	All students in all grades.	
Varicella	1	2 doses of pediatric hepatitis B vaccine OR 2 doses of the Merck Recommended HB adult vaccine, given at least 4 months apart. Documentation must clearly specify the type and dose given.	
On or after the 1st birthday.		Varicella (Grades 1-12)	1*
Pneumococcal conjugate (PCV)	1, 2, or 3	For all children born on or after January 1, 1994.	
For all children born on or after January 1, 2008, as age appropriate.			
KINDERGARTEN			
DTaP or DTP	4		
Fourth dose should be at least 6 months after the third dose.			
IPV or OPV	3		
MMR	2		
One dose on or after the 1st birthday, plus a second dose of a measles-containing vaccine (preferably as MMR) administered at least 28 days after the first dose.			
Hepatitis B	3		
Varicella	1*		
On or after the 1st birthday.			

PROVISIONAL REQUIREMENTS

New students may enter school provisionally with documentation of at least this initial series of immunizations within the previous 2 months. Once admitted provisionally, completion must be as follows: (1) no more than 2 months between the first and second dose, and no more than 6 months between the second and third dose of diphtheria, polio, and hepatitis B and (2) no more than 2 months between the first and second dose of a measles-containing vaccine, preferably MMR. Students must complete the entire series to comply with the law. Students who have not been immunized within the provisional period must be issued exclusion letters and excluded from school until they comply with the requirements.

DAY CARE/PRE-KINDERGARTEN	NO. OF DOSES	KINDERGARTEN/GRADES 1-12	NO. OF DOSES
DTaP (diphtheria-tetanus-acellular pertussis) OR DTP (diphtheria-tetanus-pertussis)	1	DTaP, DTP, DT, Td (tetanus-diphtheria) OR Tdap (tetanus-diphtheria-acellular pertussis)	1
IPV (inactivated poliovirus) or OPV (oral poliovirus)	1	Vaccine type as appropriate for age.	
MMR (measles-mumps-rubella)	1	Tdap (effective September 1, 2007)	1
On or after the 1st birthday.		For all children in 6th, 7th, 8th, 9th, 10th or 11th grades born on or after January 1, 1994.	
MMR (Measles-mumps-rubella type b)	1	IPV or OPV	1
On or after the 1st birthday.		MMR	1
Hepatitis B	1	On or after the 1st birthday.	
Varicella	1	Hepatitis B	1
On or after the 1st birthday.		For all children born on or after January 1, 1994, one dose on or after the first birthday.	
Pneumococcal conjugate (PCV)	1	Varicella (Grades K-12)	1
For all children born on or after January 1, 2008.			

For more information on immunizations or to locate a provider to vaccinate your child, call 311. For information about the current Recommended Immunization Schedules see www.cdc.gov/vaccines/recs/schedules/default.htm

SH 1-05 (Rev. 06/10)

Health

Process

NYC
Health

Three local components

- Medical Immunization Exemption protocols
- Religious Immunization Exemption protocols
- Monitoring and Compliance Unit



Medical Immunization Exemption Protocols

- Staff
 - 10 Regional Supervising Physicians in the Office of School Health
- Responsibilities
 - Review
 - Follow National guidelines
 - Appeals process



Religious Exemption Protocol

- Staff
 - One non-clinician within the Office of School Health
- Responsibilities
 - Review
 - Follow religious guidelines
 - Check CIR
 - Appeals process



Rate of Exemptions by Affiliation

Affiliation	Religious Exemptions (per 1000 Students)	Medical Exemptions (per 1000 Students)
Independent	4.2	0.5
Jewish	8.6	0.6
Roman Catholic	0.0	0.0
Other	4.9	3.3
All Audited Non-Public Schools	4.7	0.6
Public Schools*	1.6	0.1

- 0.53% (n=44) of the audited students were exempt from receiving immunizations.
- 89% (n=39) of the exemptions were religious and 11% (n=5) were medical.

*April 2, 2012 ATS Data



Program Support Unit (PSU)

- Ten full-time staff within Bureau of Immunization
- Responsible for monitoring and enforcing compliance with New York State Public Health Law 2164 (PHL §2164) and Administrative Law Title 10, Part 66, as it relates to school immunization requirements for students enrolled in pre-kindergarten through grade 12



PSU Collaborations

- State agencies
 - NYS Bureau of Immunization
 - NYS DOE
- City agencies
 - NYC DOHMH Office of School Health
 - NYC Department of Education
 - NYC DOHMH Call Center
- Other external organizations
 - NYC Religious Affiliations
 - Independent Schools



Immunization Compliance Assessment, NYS

- Online School Immunization Survey
 - Self-reporting survey that measures completeness with state school immunization requirements
- Retrospective Study*
 - Assesses immunization levels for age-appropriate vaccines in children aged 24-35 months prior to school entry
- Validation Audit*
 - Measures immunization compliance for public and private schools students in grades 1-12

**PSU collects and submits data to NYS.
(NYS analyzes and utilizes data to report state immunization coverage)*



Immunization Compliance Assessment, NYC

- Private School Verification
 - Onsite record review of selected schools to assess school compliance
 - Data reported on the NYS Online School Immunization Survey is also reviewed for accuracy
 - Audits
 - Special projects conducted at NYC schools with low immunization compliance or significant numbers of religious exemptions



Monitoring Immunization Compliance in NYC Public & Non-Public Schools

	School Type	
	Public	Non-Public
New York State	<ul style="list-style-type: none"> Annual immunization survey data obtained through ATS Computerized Application Audits 	<ul style="list-style-type: none"> Annual self-report survey completed by each school Audits
New York City	<ul style="list-style-type: none"> Monitors compliance on a monthly basis through ATS DOH provides OSH with monthly lists of schools not in compliance OSH distributes list to all Health Liaisons who work closely with their schools to ensure compliance 	<ul style="list-style-type: none"> Audits Additional data obtained from CIR



PSU Site Visits

Site visits are conducted at schools throughout NYC. Through site visits, the following is observed and analyzed:

- Compliance with school immunization requirements
- Immunization documentation compliance
- School enforcement activities, such as exclusion of non-complaint students.
- Validation of medical and religious exemptions
- Immunization coverage as defined by age/grade
- Vaccine intervals and contraindications to vaccinate
- Utilization of the NYC CIR



PSU Site Visit Activities

- Reviews immunization records
- Enters and analyzes data in a CDC software program used to assess immunization practices
- Reviews findings and provides a summary report and a list of non-compliant students needing follow up
- Promotes use of the CIR and provides assistance with initial registration for online access
- Conducts ongoing monitoring and enforcement activities on schools that continues to be non-compliant



Enforcement Activities Public Schools

Warning Letters:

- Issued to schools with less than 95% of students fully vaccinated and/or have more than 30 students in excludable status (a student who lacks a vaccination record and fails to provide proof of immunity within 14 days of school entry). Schools can be issued up to 3 warning letters, 30 days apart.

Commissioners Order:

- Issued to schools that are less than 90% compliance after receiving 3 warning letters. Schools have 30 days to show probable cause or face legal action. Failure to obey commissioners order may result in the imposition of a civil penalty of up to \$2,00 per violation each day.

Notice of Hearing:

- Issued to schools still not in compliance after 30 days of receiving commissioners order. Notice of hearing are set up by the administrative tribunal and school officials must appear before a judge.

Similar enforcement activities are applied to private schools; and currently being implemented for child care facilities.



NYC monitoring activities in Public & Private Schools

Public Schools:

- Receives monthly ATS reports from DOE
- Reviews reports and notify DOE, OSH, and BOI Commissioner about compliance levels and schools not in compliance
- Sends list of non-compliant schools to OSH
- OSH distributes list to Health Liaisons, who works with schools to ensure compliance
- Continues monitoring and enforcement activities, including issuing warning letters, through out the school year

Private Schools:

- Onsite record review audits based on data reported from NYS school survey, large population schools, and schools identified as problematic
- Follow up conducted 2 weeks after initial audit
- Warning letters sent to schools still not in compliance. These schools are targeted for additional audits next school year.
- Additional audits conducted, including enforcement activities, if applicable



Non-Public School Immunization Compliance Audits

- Two audits conducted
 - Selection based on religious affiliation
 - Selection based on <90% completion on NYS self reported survey
- 128 (5%) non public schools were audited
- 10,944 (19%) records reviewed for grades 1, 6, 9
- 92% of students were completely immunized based on the 2011-2012 school requirements
- 95% immunization completion among students in grades 1, 6 & 9 within large schools audited



NYS Survey Versus NYC Audit

- Percent of students with complete immunizations
 - NYS self-reported survey results: 96%
 - NYC audit: 95%
- 15% (9) of schools > 90% immunization completion on the survey but had < 90% completion on audit
- Self-reported survey results were consistent with those found on audit for the majority of schools



Follow-Up Activities

- Telephone calls to schools, CIR searches, faxed updates
- 46% (59) of schools improved from time of assessment to follow-up
- 62% (29) of schools with <90% immunization completion at time of audit achieved $\geq 90\%$ immunization completion post-audit
- Follow-up activities resulted in a significant* increase of the completion rate

* T-test: Sig. (2-tailed) .001



Challenges

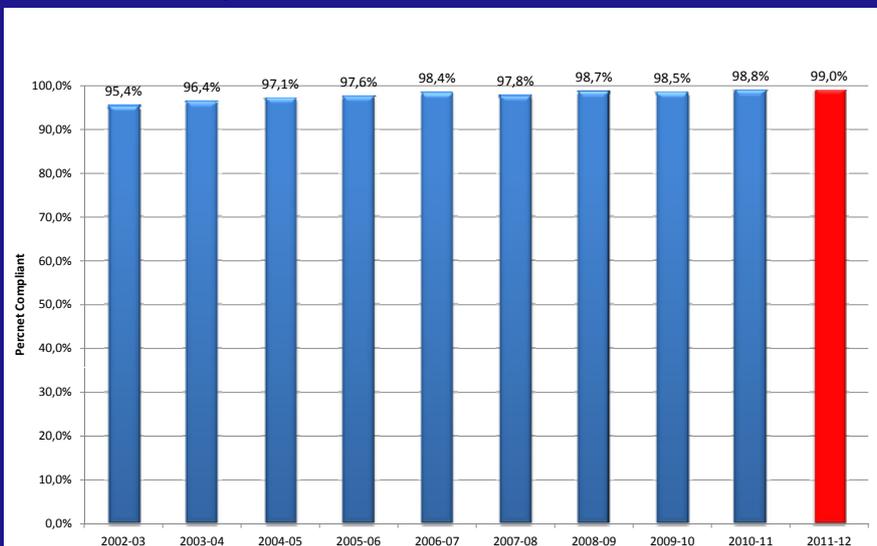
- Parents
 - Trying to evade the system
- Principals
 - Ensuring excludable students are actually excluded from school
- Number of Children
- Health policy in an Educational system



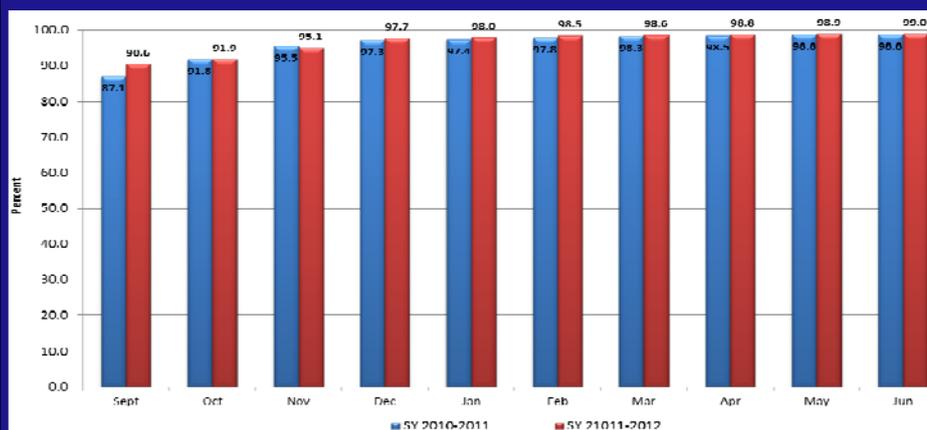
Success story



NYC Public School Immunization Compliance by School Year, 2002-2012



NYC Public School Immunization Compliance by Month, School Years 2010-2011 and 2011-2012



The NYC Department of Education consists of ~ 1,700 schools that serve about 1.1 million students each year. All students attending all New York City (NYC) schools are required to be vaccinated in compliance with New York State Public Health.



Merci Beaucoup



NYC and the Vaccine for Children (VFC) Program

- VFC is a federal funded entitlement program for eligible children from birth through 18 years of age who meet at least one of the following criteria:
 - Medicaid eligible
 - Uninsured
 - American Indian or Alaska Native
 - Underinsured
- 2,023,840 children 0-18 years of age
- ~125,000 births each year
- 1,813 pediatric provider sites
- 1,535 (85%) providers are enrolled in VFC
 - 1,276 private providers and 259 public facilities (NYCDOH clinics, HHC hospitals, and Federal Qualified Health Centers)
- 72% of children 0-18 years of age are eligible for publicly funded vaccines
 - 65% are VFC eligible
 - 7% are SCHIP eligible

