




Implementation of Revised School Immunization Requirements and Impact on Immunization Coverage in New York State

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NYS School Immunization Requirements Prior to Regulatory Change

| Vaccines | Pre-kindergarten | School (k-12) |
|--|--|---|
| Diphtheria, Tetanus, and Pertussis (DTaP) | 3 doses (New York City Schools - 4 doses) ¹ | 3 doses (New York City schools - 4 doses - required for kindergarten entry) |
| Tetanus, Diphtheria, and Pertussis (Td/Tdap) | 3 doses if born on or after 1/1/2000 | 1 dose if born on or after 1/1/2000 or 1 dose if 6 days for previously unvaccinated students 7 years of age or older ² |
| Tetanus, Diphtheria, and Pertussis (Tdap) | Not applicable | None (see after 1/1/2000 and enrolling in grades 6 through 12 for the 2013-2014 school year ³) |
| Polio (IPV or OPV) | 3 doses ⁴ | 3 doses |
| Measles, Mumps, and Rubella (MMR) | 1 dose | 2 doses of measles-containing vaccine and 1 dose each of mumps and rubella (combined as MMR) |
| Measles II | 1 dose | 1 dose ⁵ |
| Hemophilus influenzae type b (Hib) | 3 doses if has been 12 months of age or 3 dose administered on or after 12 months of age ⁶ | Not applicable |
| Pneumococcal Conjugate Vaccine (PCV) | None on or after 1/1/2010 4 doses for 12 months of age, given at age appropriate times and intervals ⁷ | Not applicable |
| Varicella (VZV) vaccine ⁸ | 1 dose | 1 dose ⁹ |



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¹ Demonstrated serologic evidence of either measles, mumps, rubella, hepatitis B or varicella antibodies is acceptable proof of immunity to these diseases. Diagnosis by a physician, physician assistant or nurse practitioner that a child/student has had measles, mumps, or varicella diseases is acceptable proof of immunity to these diseases.

² Children in a pre-kindergarten setting should be age appropriately immunized. The number of doses depends on the schedule recommended by the Advisory Committee on Immunization Practices (ACIP).

³ Please note in this slide that New York State requires 3 doses of diphtheria/tetanus/pertussis (DTaP) for pre-kindergarten and kindergarten only and three doses of polio vaccine for entry into kindergarten and for any student entering a school in New York State for the first time. However, ACIP recommends 4 doses of diphtheria/tetanus/pertussis vaccine by age 18 months and 5 doses by age 4-6 years of age. Children 4-6 years of age should receive 4 doses of polio vaccine unless the 3rd dose is given after 4 years of age.

⁴ DTaP is the vaccine currently recommended for diphtheria, tetanus and pertussis. Three doses of pertussis-containing vaccine are required for students 6 years of age or younger. One dose of Tdap is required for students 7 years of age or older who have not previously received 3 doses of DTaP.

⁵ Students enrolling in grades 6 through 12 includes students who are entering, re-enrolling or transferring into grades 6 through 12 and students who are enrolling in graduate classes and are the age equivalent of grades 6 through 12. Children ages 7-10 who have not been previously vaccinated with DTaP/DTaP and for whom no contraindications exist, should receive a single dose of Tdap.

⁶ The New York State Department of Health's Bureau of Immunization concurs with the ACIP which recommends that vaccine doses administered up to 4 days before the minimum interval or 12 months of age for measles, mumps, rubella and varicella be counted as valid.

⁷ Suggests B - For students in grades 1-12, 1 dose of pneumococcal 13v or 13v conjugate is required, except for those students who received 1 dose of adult pneumococcal 13v conjugate (which was recommended for children 12-18 years old).

⁸ Four doses of hemophilus influenzae type b (Hib) are recommended by 18 months or more of age, however only 3 doses are required for day care entry. If a child enters a day care on or after 18 months of age, and has not received 3 doses of Hib vaccine, only one dose on or after 18 months of age is required.

⁹ Unvaccinated children 7-10 months of age should receive 2 doses, at least 4 weeks apart, followed by a 3rd dose at age 12-15 months. Unvaccinated children 12-23 months of age should receive 2 doses of vaccine at least 8 weeks apart. Previously unvaccinated children 24-36 months of age should receive only 1 dose. PCV13 is the preferred vaccine for use in healthy unvaccinated/partially vaccinated children 2-10 months of age. A single supplemental dose of PCV13 is recommended for children 14-59 months who have already completed the age appropriate series of PCV13.


¹⁰ Two (2) doses of varicella vaccine are recommended for all students, but not required for school entry.

For further information contact: **New York State Department of Health, Bureau of Immunization,**
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Revised Immunization Requirements

- Numbers of doses and intervals between doses must be consistent with the ACIP recommended childhood and adolescent immunization schedule
 - Effective July 1, 2014 for all grades and all required vaccines, except for polio and varicella
- 7-year roll-out of polio and varicella vaccine requirements
 - School year 2014 – 2015 (Year 1): K, 6
 - School year 2015 – 2016 (Year 2): K, 1, 6, 7
 - etc...
 - School year 2020 – 2021 (Year 7): K – 12



2015-16 School Year
New York State Immunization Requirements for School Entrance/Attendance¹

NOTES: Children in a preschool/child care setting should be age appropriately immunized. The number of doses depends on the schedule recommended by the Advisory Committee on Immunization Practices (ACIP). This schedule reflects the minimum doses that are required for grades kindergarten through 12. Intervals between doses of vaccine should be in accordance with the ACIP recommended immunization schedule for persons 0 through 19 years of age. See footnotes for specific information for each vaccine.

Dose requirements MUST be read with the footnotes of this schedule.

| Vaccine | Preschool (See Core Head Start Schedule 10-14) | Kindergarten | Grades 1 through 5 | Grade 6 | Grades 7 through 12 |
|--|--|--------------------------------------|---|--------------------------------------|---------------------------------|
| Diphtheria and tetanus toxoids containing vaccine and Pertussis vaccine (DTaP/DTaP-IPV)² | 4 doses | 1 to 3 doses (See footnote 3a) | 1 to 3 doses (See footnote 3a) | 3 doses (See footnote 3a, c) | 3 doses (See footnote 3a, c) |
| Tetanus and diphtheria toxoids containing vaccine and Pertussis vaccine (Tdap)² <i>(Required only for students enrolling in grades 6-12 who have not previously received a Tdap at 7 years of age or older)</i> | Not applicable | Not applicable | Not applicable | 1 dose (See footnote 3a) | 1 dose (See footnote 3a) |
| Polio vaccine (IPV/OPV)² | 3 doses | 1 to 3 doses (See footnote 4a, d) | 3 doses | 3 to 5 doses (See footnote 4a, d) | 3 doses |
| Measles, Mumps and Rubella vaccine (MMR)² | 1 dose | 1 dose | 2 doses 2 doses required by age 7 ³ | 2 doses | 2 doses |
| Hepatitis B vaccine² | 3 doses | 3 doses | 3 doses | 3 doses | 3 doses |
| Varicella (Chickenpox) vaccine² | 1 dose | 2 doses | 1 dose | 2 doses | 1 dose |
| Human papillomavirus type 9 quadrivalent vaccine (HPV)² | 1 to 4 doses (See footnote 5a-g) | Not applicable | Not applicable | Not applicable | Not applicable |
| Pneumococcal conjugate vaccine (PCV)² | 1 to 4 doses (See footnote 6a-f) | Not applicable | Not applicable | Not applicable | Not applicable |





Children who are enrolling in grade less classes should meet the immunization requirements of the grades for which they are age eligible.
New York State Immunization Requirements by Grade Enrollment in 2015-16

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1. Diphtheria, tetanus and pertussis (DTaP/DTaP-IPV), hepatitis B, varicella and polio are all live vaccines and should be given to children under the age of 19 years of age. DTaP/DTaP-IPV should be given to children under the age of 7 years of age. Hepatitis B should be given to children under the age of 19 years of age. Varicella should be given to children under the age of 19 years of age. Polio should be given to children under the age of 19 years of age.
2. DTaP/DTaP-IPV and Tdap are not given to children under the age of 6 months. DTaP/DTaP-IPV is given to children under the age of 6 months to 5 years of age. Tdap is given to children under the age of 6 months to 65 years of age. DTaP/DTaP-IPV and Tdap are not given to children under the age of 6 months who are immunocompromised or who have had a seizure within the last 12 months.
3. The number of doses of DTaP/DTaP-IPV and Tdap depends on the child's age and whether they have received a previous dose. For children under the age of 6 months, DTaP/DTaP-IPV is given in 4 doses. For children 6 months to 5 years of age, DTaP/DTaP-IPV is given in 3 doses. For children 6 months to 65 years of age, Tdap is given in 1 dose. For children 65 years of age and older, Tdap is given in 1 dose.
4. Polio vaccine is given in 3 doses. For children under the age of 6 months, polio vaccine is given in 3 doses. For children 6 months to 5 years of age, polio vaccine is given in 3 doses. For children 6 months to 19 years of age, polio vaccine is given in 3 doses.
5. Measles, mumps and rubella (MMR) vaccine is given in 2 doses. For children under the age of 6 months, MMR is given in 1 dose. For children 6 months to 12 years of age, MMR is given in 2 doses. For children 12 years of age and older, MMR is given in 2 doses.
6. Hepatitis B vaccine is given in 3 doses. For children under the age of 6 months, hepatitis B vaccine is given in 3 doses. For children 6 months to 19 years of age, hepatitis B vaccine is given in 3 doses. For children 19 years of age and older, hepatitis B vaccine is given in 3 doses.
7. Varicella (chickenpox) vaccine is given in 2 doses. For children under the age of 6 months, varicella vaccine is given in 1 dose. For children 6 months to 12 years of age, varicella vaccine is given in 2 doses. For children 12 years of age and older, varicella vaccine is given in 2 doses.
8. Human papillomavirus (HPV) vaccine is given in 2 doses. For children under the age of 18 years, HPV vaccine is given in 2 doses. For children 18 years of age and older, HPV vaccine is given in 2 doses.
9. Pneumococcal conjugate (PCV) vaccine is given in 1 to 4 doses. For children under the age of 6 months, PCV is given in 1 to 4 doses. For children 6 months to 19 years of age, PCV is given in 1 to 4 doses. For children 19 years of age and older, PCV is given in 1 to 4 doses.



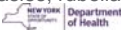
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- ### New Definition of "In Process"
- Children who are not fully immunized can only continue to attend school if they
 1. Have received at least the first dose in each required immunization series and
 2. Have age-appropriate appointments to complete the immunization series according to the ACIP catch-up against schedule or to obtain serologic tests of immunity against measles, mumps, rubella, varicella, hepatitis B or polio
 3. If serologic tests of immunity are negative, then the children must be immunized within 30 days
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- ### New Requirements for Medical Exemptions
- Must contain sufficient information to identify a medical contraindication to specific immunization(s)
 - Must specify length of time the immunization(s) are contraindicated
 - Must be reissued annually
 - Standardized NYSDOH medical exemption form developed
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Revised Provisions for Exclusion During an Outbreak

- Children who have either medical or religious exemptions or who are in the process of receiving required immunizations may be excluded from school during an outbreak of any disease prevented by required vaccines
- Prior to the regulatory changes, the Commissioner had only been authorized to exclude students without documentation of immunity in the event of diphtheria, polio, measles, rubella and mumps outbreaks


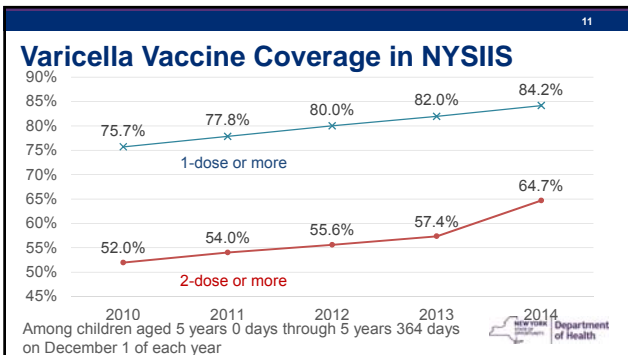


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Selected Kindergarten Vaccine Coverage, NYS, 2013-14 vs. 2014-15

| School Year | MMR | DTaP | | Varicella | | Exemptions | |
|-------------|-------|---------|----------|-----------|---------|------------|-----------|
| | | 3 doses | 4+ doses | 1 dose | 2 doses | Medical | Religious |
| 2013-14 | 96.8% | 98.1% | | 98.2% | | 0.1% | 0.6% |
| 2014-15 | 98.2% | | 97.5% | | 96.4% | 0.1% | 0.7% |


Source: New York State Immunization School Surveys, 2013-14 and 2014-15, unpublished data

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Lessons Learned


- ACIP age-based recommendations do not map well to grade-based school requirements
 - ACIP recommends final doses of MMR, DTaP and polio vaccines at 4 – 6 years of age
 - NYS was unable to require children to receive the final doses until they were 7 years of age
- Interval requirement difficult to implement, particularly for older students who had been vaccinated several years prior



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Implementation Experience


- Use of immunization registries to review vaccine histories was critical to determine if doses and intervals were consistent with ACIP recommendations
 - ↑ use of NYSIIS by school nurses and other school personnel
- ↑ in complexity of requirements → ↑ in need for guidance and technical assistance
 - High volume of calls and emails, often exceeding the NYSDOH's resources to respond to them in a timely manner
 - Several guidance documents developed
 - Multiple updates, clarifications, and FAQs



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New Revised Immunization Regulations – Effective September 1, 2015


- The following complete vaccine series are now required for students entering grades K – 7:
 - 2 doses of MMR
 - 5 doses of DTaP, or 4 doses if the 4th dose was received on or after the 4th birthday
 - 4 doses of polio, or 3 doses if the 3rd dose was received on or after the 4th birthday
- Students entering grades 8 – 12 in the 2015-16 school year are exempt from interval requirements until they graduate
 - In the 2016-17 school year, grades 9 – 12 will be exempt
 - By the 2020-21 school year, no grades will be exempt



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Coming Soon!

- Effective September 1, 2016, meningococcal vaccine will be required for students entering grades 7 and 12
- Regulations and guidance related to this new requirement to be developed



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Questions?

immunize@health.ny.gov

