



Department
of Health

August 13, 2019

Measles and Repeal of Non-Medical Exemptions: Current Status, Review of New Law, Resource Materials



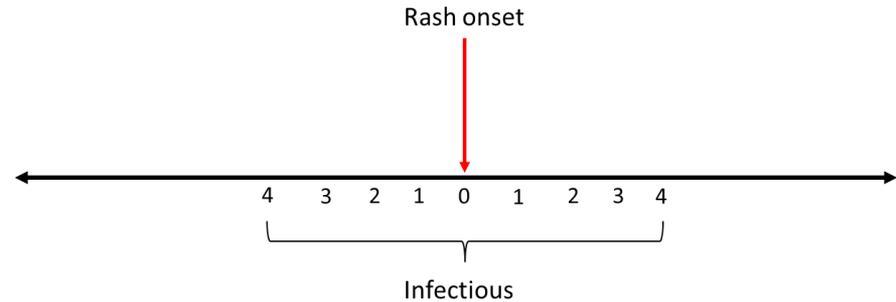
Photos: www.cdc.gov/measles/about/photos.html

The webinar will begin shortly – please mute your phones!

**Questions will be
addressed through
the Chat Box**

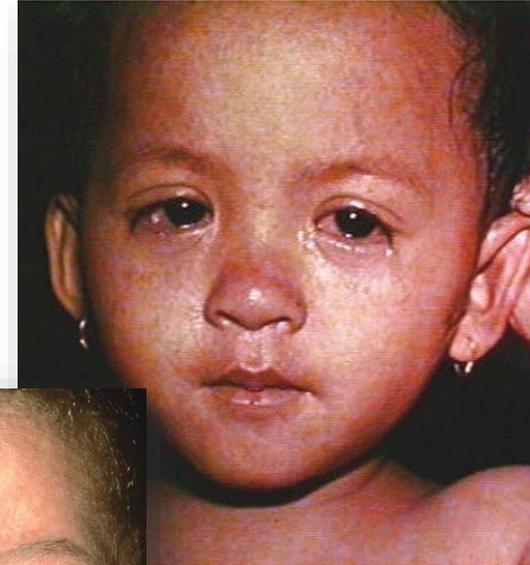
Measles Transmission

- One of the most contagious infections
- 90% of non-immune people close to a person with measles will become infected
- Spread via the airborne route or direct contact with infectious droplets
- **Infectious period:** infected people can spread measles to others from **4 days before through 4 days after the rash appears**
- Measles can **live for up to 2 hours** in the airspace where an infected person breathed, coughed or sneezed
- **Incubation period:** 10-14 days (range 7-21 days)



Measles Prodrome

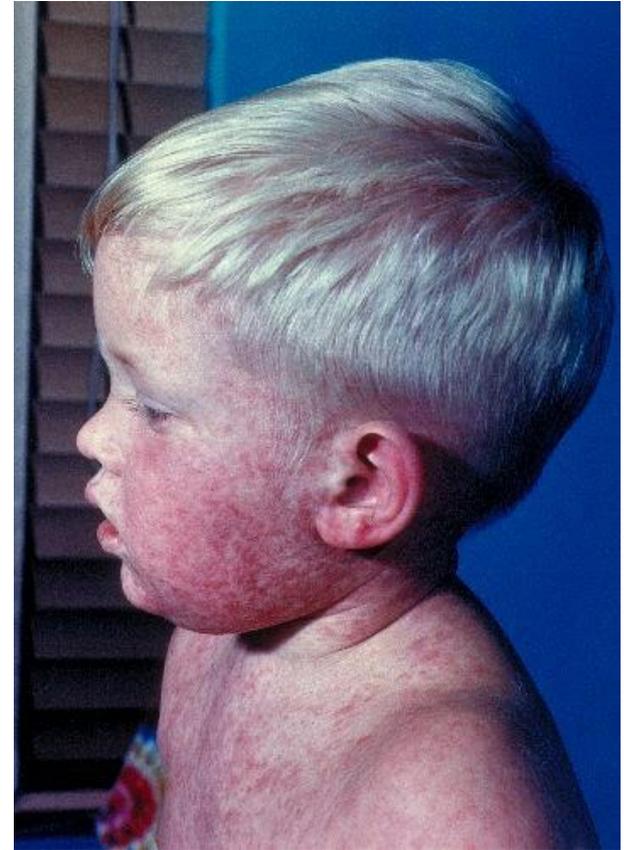
- Prodrome lasts 2-4 days
- Fever, which increases in stepwise fashion, peaking as high as 103°F-105°F
- Followed by cough, coryza, or conjunctivitis



Source: Centers for Disease Control and Prevention

Measles Rash

- Rash follows the 2-4 day prodrome
- Maculopapular rash begins on face at hairline and spreads downward, also affecting palms of hands and soles of feet
- Lesions are usually discrete, but may become confluent, especially on upper body
- Rash gradually recedes, fading first from the face, and last from the thighs and feet



“Non-classic” Presentations

- Young infants with waning immunity from maternal antibodies
- Patients who report receiving 1 or 2 MMRs
- Patients who were born in 1956 or earlier

Measles in Previously Vaccinated People

- History of 2 MMR
- Acneiform rash on forehead
- Mild rash on torso



Differential Diagnosis of Measles

- If you have a patient presenting with a febrile rash illness, consider the patient presentation and differential carefully.
- If measles is a concern, enact infection control practices immediately, and immediately report the case to your local health department.
- **DO NOT WAIT FOR LABORATORY CONFIRMATION TO REPORT**

Measles Complications

- Children younger than 5 years of age, adults older than 20 years of age, and pregnant or immunocompromised individuals are more likely to suffer from measles complications
- Acute otitis media
 - Occurs in about 1 in 10 children with measles
 - Can result in permanent hearing loss
- Pneumonia
 - As many as 1 in 20 children with measles gets pneumonia, the most common cause of death from measles in young children
- Acute Encephalitis
 - Occurs in approximately 0.1% of cases. Case-fatality rate: 15%; Residual neurologic damage: up to 25%

Measles Complications

- **Subacute Sclerosing Panencephalitis (SSPE)**
 - SSPE is a rare but fatal complication of measles
 - Type of brain swelling that is progressive and has no known cure
 - May occur 7-10 years after a natural measles infection
 - Most individuals with SSPE will die within 1-3 years of diagnosis, but some have a more rapidly progressing disease progression
 - Risk of SSPE may be higher in those infected with measles before age 2 years
 - Incidence of SSPE has declined by at least 90% in countries that have practiced widespread measles vaccination
 - Highlights the importance that children should receive their first MMR vaccination between age 12-15 months

Measles and Pregnancy

- Pregnant women with measles are more likely to be
 - Hospitalized
 - Develop pneumonia
 - Die
- Measles and adverse outcomes of pregnancy
 - Pregnancy loss – in some studies
 - Preterm birth
 - Low birth weight
- Risk of congenital birth defects does not appear to be increased
- Neonates with congenital measles: increased risk of SSPE



Measles Prevention = Vaccination

- Getting the measles vaccine is the **best** way to prevent measles at all times, but especially during an outbreak
 - One dose of measles is about 93% effective at preventing the measles if exposed to the virus.
 - Two doses of measles vaccine are about 97% effective
 - About 3% of people who have received 2 doses of MMR vaccine are still at risk of getting the measles if exposed to the virus, but fully vaccinated people who get the measles are:
 - Much more likely to have a milder illness
 - Much less likely to spread measles to other people



Stock Photo: Sherry Yates Young

Suspect Case Identification and Reporting

- ***Early recognition, case investigation, and prompt public health response can limit the spread of disease***
- **Clinical Suspicion:**
 - Know the presentations
 - Classical and atypical presentations
- **Patient History:**
 - Vaccination record
 - Travel history (during incubation period)
 - Contact with international traveler
 - Contact with person with similar symptoms
 - Lives in an outbreak area

***Suspect Case =
Immediately contact
LHD and
Infection Control***

Overview of Current Measles Outbreak

Current Outbreak

The current measles outbreak is the largest in New York State since the 1990's, prior to elimination of measles in the United States.

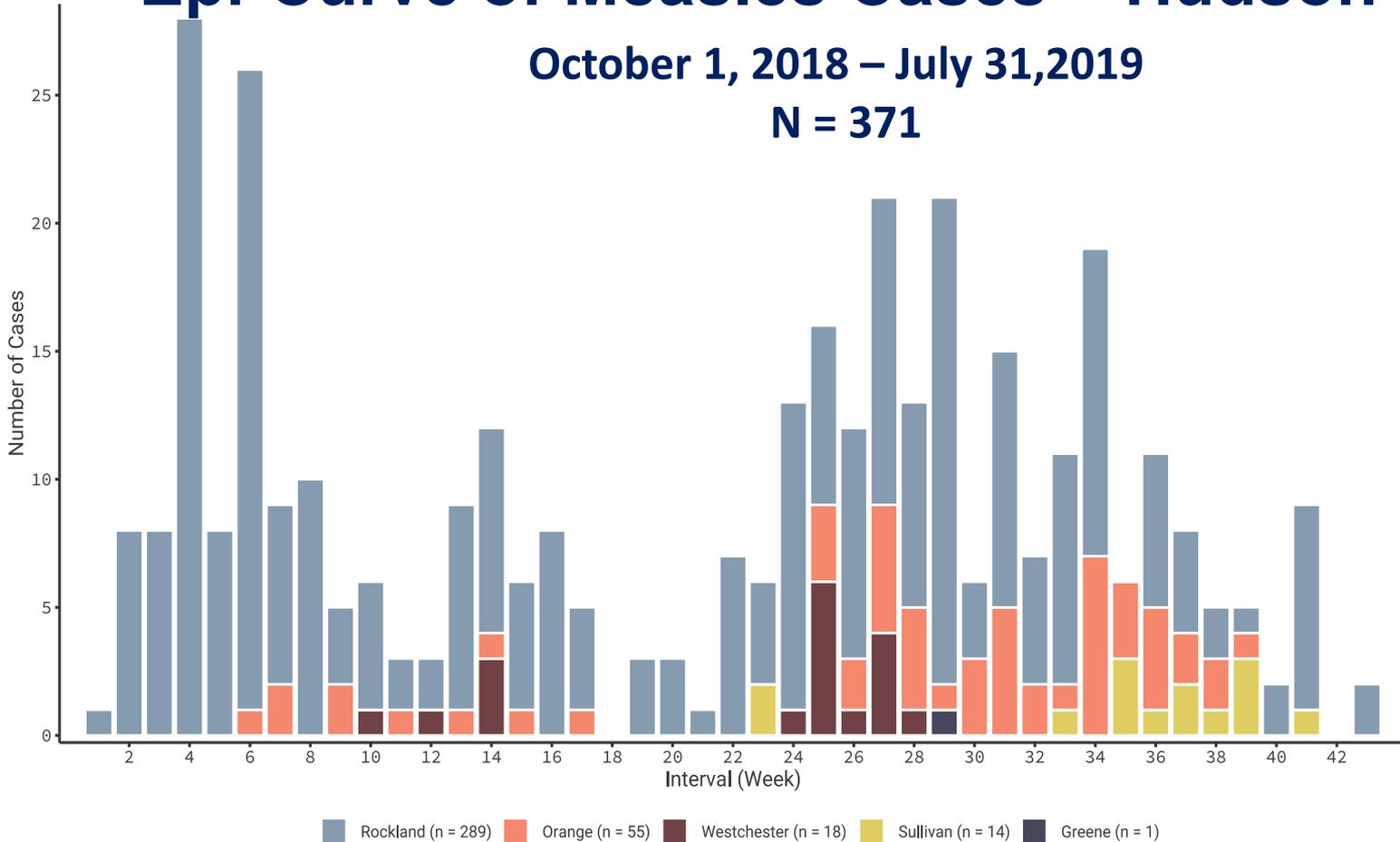
As of 8/8/2019 in New York State, there are:

- 642 cases of measles in NYC (8/5/19)
- 383 cases of measles outside NYC
 - 290 cases in Rockland County
 - 55 cases in Orange County
 - 18 cases in Westchester County
 - 14 cases in Sullivan County
 - 5 cases in Wyoming County
 - 1 case in Greene County

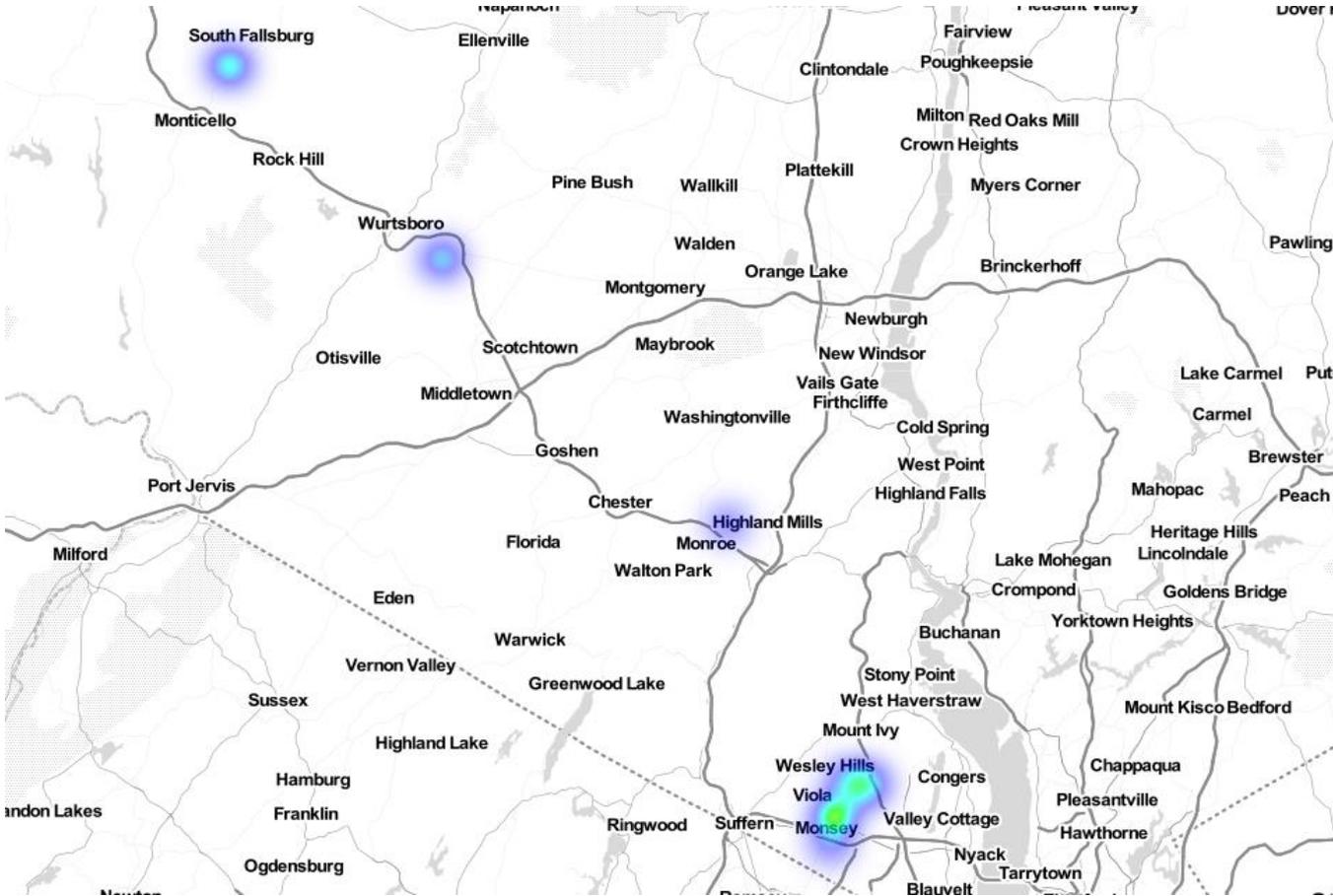
Epi-Curve of Measles Cases – Hudson Valley

October 1, 2018 – July 31, 2019

N = 371



Heatmap of Outbreak-Associated Measles Cases

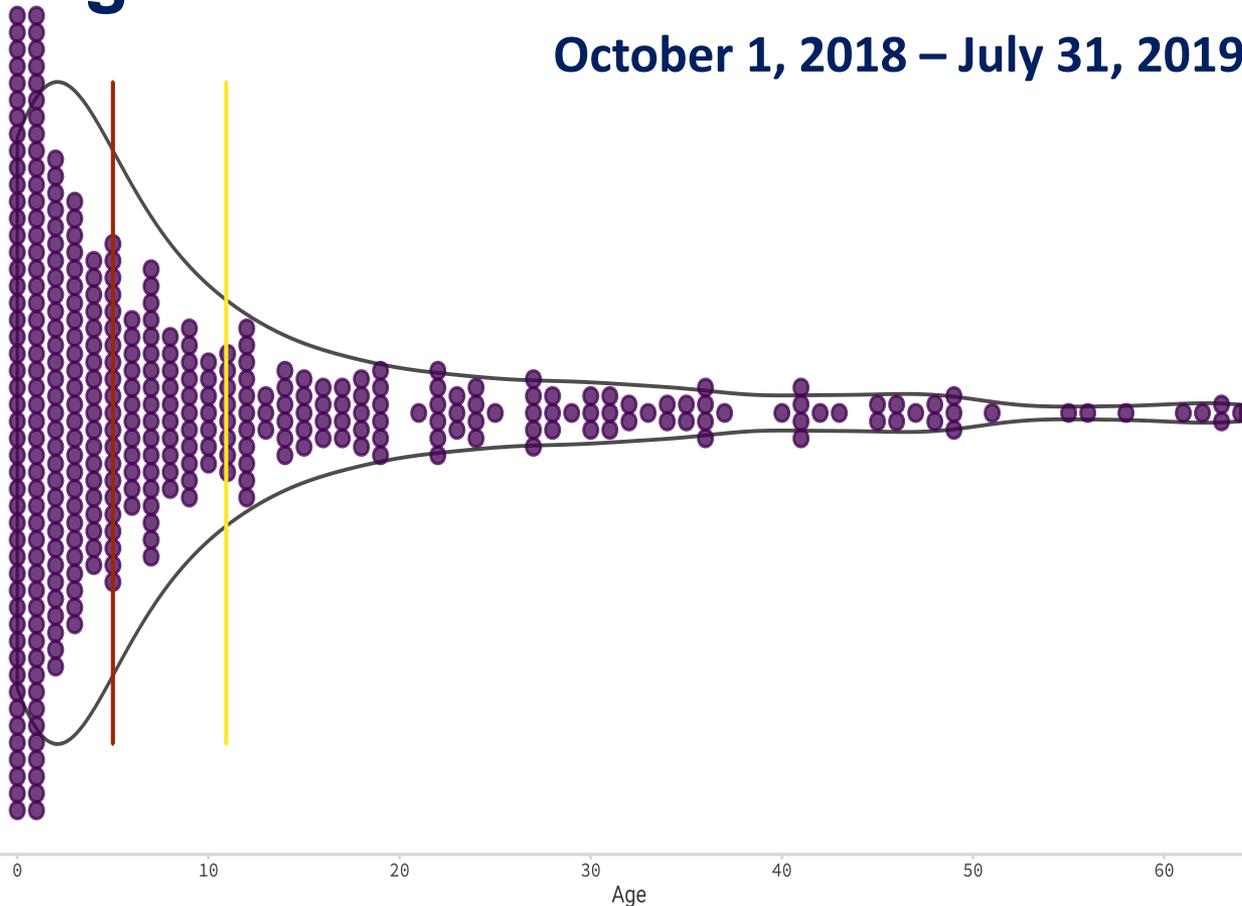


**Hudson Valley –
Last 42 days of Outbreak**

**July 31, 2019
(n = 19)**

Age Distribution Measles Cases – Hudson Valley

October 1, 2018 – July 31, 2019



Median age
(Red line):
5.5 years

Mean age
(Yellow line):
11.4 years

MMR Status of Cases, by Age – Hudson Valley

October 1, 2018 – July 31, 2019

Age Group	# MMR Doses				Total
	0	1	2	Unknown	
< 6 Months	19	0	0	0	19 (5.0%)
6 - 11 Months	28	3	0	0	31 (8.2%)
1-4 Years	109	13	2	1	125 (33.2%)
5-17 Years	111	2	3	6	122 (32.3%)
18+ Years	31	3	7	38	80 (21.2%)
Total	298 (79.0%)	22 (5.8%)	12 (3.2%)	45 (11.9%)	377

Outbreak Response

Multi-faceted Public Health Response

- Vaccinations - As of 7/17/2019, over **58,600** MMR vaccines have been administered since 10/1/2018
 - being provided by local health departments, healthcare providers, community PODs (points of dispensing)
- Case Investigations - Isolation of cases, monitoring and movement restrictions for exposed
- Camps and Summer vacation residential areas (bungalow communities)
- Community Education/Public Information Campaigns
- Healthcare Provider Outreach
- Schools and Daycare

Infection Control

Infection Control in the Outpatient Setting

- Post visual alerts (signage at entrance, posters about measles)
 - Include infection control expectations for patients and family (e.g. facemasks)
- Screen
 - Attempt to triage before arrival or entry into building
 - Phone triage for sick visits
 - Triage at arrival

MEASLES ALERT



If you or your child has measles symptoms:

Fever **AND**:

– rash **OR** cough **OR** red watery eyes

OR if you or your child has been around someone with measles

Do This:

Customizable alert sign for the door(s) to your office.
Available on the NYSDOH measles web page.

Infection Control in the Outpatient Setting

- See patient outside the building if possible
- Otherwise put facemask on patient and take to exam room as quickly as possible
 - Keep facemask on while in exam room (unless it's an AIIR) other than to do NP swab
 - Keep the door closed
- Call your local health department immediately!

Infection Control in the Outpatient Setting

- Keep in mind, if an unmasked patient enters your office, it is likely that the entire office/building will be considered exposed
- If a masked patient enters your office, we might not need to consider everyone exposed as long as presence is brief
 - Quickly walks through waiting room
 - Brought directly to exam room via alternate route

Infection Control in the Outpatient Setting

- Start a list of anyone potentially exposed
 - Offer MMR to susceptible persons before they leave the office
 - Have your staff immunization records easily available
- LHD activities
 - Contact tracing and active monitoring of susceptible exposed persons

Infection Control in the Outpatient Setting

- Remember that the exam room should not be used for 2 hours after the patient exits, even if the patient is masked
- If the patient is not masked, anyone in the air space up to 2 hours after the patient exits will be considered exposed
 - This could mean cancelling appointments and closing your office for 2 hours

New Legislation

New Immunization Legislation

- Effective June 13, 2019, Public Health Law § 2164 as amended by Chapter 35 of the Laws of 2019, only allows for medical exemptions from vaccination for children attending school.
- This means religious exemptions are no longer valid in New York State.

Definitions

- Public Health Law §2164, as amended by Chapter 35 of the Laws of 2019 applies to students attending all schools *to include any public, private or parochial child caring center, day nursery, day care agency, nursery school, kindergarten, elementary, intermediate or secondary schools.*

- Includes those that operate in the summer, year round or with an extended school year

- Regardless if school receives State Aid or not

- Medical exemptions are defined in PHL § 2164 as:

If any physician licensed to practice medicine in this state certifies that such immunization may be detrimental to a child's health, the requirements of this section shall be inapplicable until such immunization is no longer detrimental to the child's health.



A valid medical exemption must:

1. Be on a sample medical exemption form issued by the Department <https://www.health.ny.gov/forms/doh-5077.pdf> or the NYC Department of Education <https://www.schools.nyc.gov/docs/default-source/default-document-library/medical-request-for-immunization-exemption-english>, that certifies that the immunization may be detrimental to a child's health;
2. Be signed by a physician licensed to practice medicine in New York State;
3. Contain sufficient information to identify the medical contraindication to a specific immunization. The Department recommends that health care practitioners consult the ACIP guidelines for contraindications and precautions to childhood vaccinations, available at: <https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html>; and
4. Be confirmed annually.

Requirements – Not Applicable

The new legislation does NOT apply to:

- colleges/universities
- children's camps issued a permit by the State or LHD
- attendance at activities on school property that are open to the general public
- students aged 18 years and older

Requirements

- Prohibits a school from permitting any child to be admitted to, or attend, school in excess of 14 days without sufficient evidence that the child has received **all** age appropriate required vaccinations.
 - Students/children must have receive the 1st dose in each of the required vaccine series by 14 days after school entrance or attendance and provide appointments for subsequent doses by 30 days after entrance or attendance.
 - Appointment intervals must be in accordance with the ACIP catch-up schedule.

What does the June 30, 2020 date mean in the law?

- By June 30, 2020, all students who were attending school with religious exemptions at the time the law was enacted (June 13, 2019) must be vaccinated according to the ACIP catch-up schedule.
 - Students without medical exemptions will not be able to attend school after June 30, 2020 without being vaccinated according to the catch-up schedule

Requirements – Specific Vaccines

- Rotavirus vaccine is not required to attend school
- Pneumococcal and Haemophilus Influenzae type B (Hib) vaccines are only required for day cares and pre-kindergarten programs. Children in K-12 do not need to receive a pneumococcal or Hib vaccine.

Alternative Vaccines

- Only licensed vaccines recommended by the ACIP are acceptable.
 - “Homeoprophylaxis vaccines” are NOT acceptable.
- Out-of-country immunization records are acceptable as long as they are official records and can be read and understood by the school or have been reviewed and signed by a physician licensed to practice medicine in NYS.

Requirements - Serology

- A positive serologic test can be accepted as proof of immunity for school enrollment only for the following diseases: measles, mumps, rubella, varicella (chickenpox), and hepatitis B.
 - Serologic tests against poliovirus may no longer be accepted in place of polio vaccination on or after September 1, 2019
 - Positive serologic tests against all 3 strains of poliovirus which had been accepted by a NYS school prior to September 1, 2019 may continue to be accepted



Multiple Vaccines

- Scientific data show that getting several vaccines at the same time does not cause any health problems.
 - Infants routinely get multiple vaccines at once, according to the ACIP schedule, which is approved by AAP and AAFP and is the standard of practice for vaccination in the U.S.
- If combination vaccines are used, the number of injections can be reduced. The highest number of vaccines that a child might need to attend school or daycare is seven.
 - The number varies by age, and older children need fewer doses to catch up.

Special Education Services

- The new law does apply to students who receive special education services.
- The new legislation does not affect valid medical exemptions.
- The United States Department of Education (“USDE”) has issued guidance to assist schools in ensuring that students with disabilities under the federal Individuals with Disabilities Education Act (“IDEA”) who are medically unable to receive vaccines due to a disability are not discriminated against on the basis of disability.

Resources

Materials Released Regarding the Non-Medical Exemption Legislation

- 6/14/19 Joint Statement from NYS Department of Health, State Education Department and Office of Children and Family Services
- 6/18/19 Frequently Asked Questions (FAQ) About Legislation Removing Non-Medical Exemptions from School Vaccination Requirements
- 7/22/19 Second FAQ document further clarifying Vaccination Requirements Applicable to All Students

Available at: www.health.ny.gov/schoolvaccines

Additional Materials

One page simplified document:

New Law on School Vaccination Requirements

<https://www.health.ny.gov/publications/2196.pdf>

New Law on School Vaccination Requirements

Removing Nonmedical Exemption

On June 13, 2019, Governor Andrew M. Cuomo signed legislation removing nonmedical exemptions from school vaccination requirements for children to help protect the public from the worst measles outbreak in more than 25 years.

What does the new law do?

The new law no longer allows a religious exemption to the requirement that children be vaccinated against measles and other diseases to attend either:

- public, private or parochial school (for students in pre-kindergarten through 12th grade), or
- day care.

Deadlines for vaccination under the new law

For children who are attending school or day care this summer:

Within 14 days of the first day of school or day care – children must receive the first age-appropriate dose in each immunization series to attend or remain in school or day care.

Within 30 days after the first day of school or day care – parents or guardians of such children must show that they have appointments for all required follow-up doses. The deadlines for follow-up doses depend on the vaccine.

For children entering or attending school or day care in the fall:

Within 14 days of the first day of school or day care – children must receive the first age-appropriate dose in each immunization series to attend or remain in school or day care.

Within 30 days after the first day of school or day care – parents or guardians of such children must show that they have appointments for all required follow-up doses. The deadlines for follow-up doses depend on the vaccine.

Catch-up Immunization Schedule to continue to attend school or day care:

The New York State Department of Health expects children to receive all required doses listed on [Table 2](#) at the following link:

<https://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf>

Additional Resources

2019-20 School Year - New York State Immunization Requirements for School Entrance/Attendance

https://www.health.ny.gov/publications/2370_2019.pdf

Center for Disease Control and Prevention (CDC)
Advisory Committee on Immunization Practices (ACIP)
Recommended Schedule (Table 1) and Catch-up schedule (Table 2)

<https://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html>

<https://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf>

Participant Q&A

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