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DATE: **September 5, 2025**

TO: **Healthcare Providers, Hospitals, Local Health Departments, and Pharmacists**

FROM: **New York State Department of Health and New York City Department of Health and Mental Hygiene**

HEALTH ADVISORY:

2025-2026 COVID-19 IMMUNIZATION GUIDANCE FOR CHILDREN

The New York State Department of Health and New York City Health Department are issuing COVID-19 immunization recommendations for children and adolescents in preparation for the 2025–2026 respiratory virus season.

- Vaccination against COVID-19 remains the most effective defense to prevent severe COVID-19 disease outcomes, including in children.
- We urge providers to discuss vaccination with parents/guardians, and to encourage COVID-19 vaccine particularly for children at increased risk of severe illness due to COVID-19.
- This guidance applies to all available COVID-19 vaccines (i.e. Pfizer, Moderna, Novavax).

COVID-19 RECOMMENDATIONS FOR CHILDREN

The recommendations for children and adolescents (defined as ages 6 months to 18 years), which we are hereby recommending for New York State, are:

- All children ages 6-23 months should be vaccinated.
- Children and adolescents ages 2-18 years who fall within one of the following subgroups should be vaccinated:
  - At high risk for severe COVID-19 (Table 1, Appendix A)
  - Living in a long-term care facility or other congregate setting
  - Have never been vaccinated against COVID-19
  - Whose household members are at high risk for severe COVID-19

- Vaccination may also be provided to children ages 2-18 years who do not fall into one of the above categories, at the request of their parent/guardian.

These recommendations are based on the following evidence-based conclusions:

- COVID-19 continues to cause significant morbidity and mortality in children.

- Children less than 2 years of age have been shown to have a higher rate of hospitalization and morbidity from COVID-19 than those in older age groups.
- Children with underlying chronic conditions remain at higher risk for severe outcomes from COVID-19, regardless of age.
  - Healthy children can experience severe disease, including intensive care unit admission.
  - Vaccination helps prevent post-COVID conditions such as Long COVID.
  - Low rates of COVID-19 vaccination contribute to preventable hospitalization.
  - Health inequities contribute to disproportionate morbidity among some communities.
  - These recommendations are aligned with the COVID-19 vaccination recommendations recently issued by the American Academy of Pediatrics, a nationally recognized authority in immunizations for children and adolescents. Additional information, including with regard to recommended vaccines and other clinical considerations, can be found here.

Note: mNEXSPIKE, a Moderna mRNA COVID-19 vaccine, was approved by the Food and Drug Administration in June 2025 for individuals (subject to availability):
- All persons ≥65 years
- Ages 12 years through 64 years with at least one underlying condition that puts them at high risk for severe outcomes from COVID-19
- It is not indicated for children aged 6-23 months. Post-marketing analysis research has not yet occurred.[1]

VACCINE EFFECTIVENESS AND SAFETY

Multiple studies have demonstrated COVID-19 vaccine effectiveness in preventing both acute illness and longer-term complications in children.

- A 2023 systematic review and metanalysis that included 17 studies involving 10 million vaccinated and 2.6 million unvaccinated children ages 5 to 11 years, revealed two-dose vaccination was associated with lower risks of infection, symptomatic infection, hospitalizations, and MIS-C compared with no vaccination.[2]
- U.S. data from 2024–2025 show that, among children ages 9 months to 4 years, COVID-19 vaccination was 79% effective in preventing COVID-19-related emergency department and urgent care visits compared with vaccine-eligible but unvaccinated children. The percent effectiveness for children 5 to 7 years of age was found to be 57%.[3]
- A 2023 MMWR report found that receiving two or more mRNA COVID-19 vaccine doses was 40% effective in preventing emergency department visits and hospitalization in children younger than 5 years of age.[4]
- A 2024 retrospective cohort study of >1 million children ages 5-17 years found that vaccination reduced the incidence of probable long COVID by 35.4% and the incidence of diagnosed long COVID by 41.7%. Adolescents, who are at greater risk of long COVID, were shown to have the highest vaccine effectiveness of 50.3%.[5]

Comprehensive safety evaluations support the use of COVID-19 vaccines in pediatric populations. The safety profiles of these vaccines have been well-studied in clinical trials and continue to be monitored through post-marketing surveillance systems.

- The most common side effects reported after vaccination include soreness at the injection site, fatigue, headache, muscle aches, joint aches, fever and nausea.[6]
- Myocarditis after COVID-19 vaccination is substantially less common and milder than myocarditis caused by SARS-CoV-2 infection.[7] In the general population, the estimated rate is approximately

19.7 cases per 1 million vaccine doses administered, compared to 2.76 cases per 1,000 COVID-19 infections.[8]

- When post-vaccination myocarditis or pericarditis occurs, it is rare and most often seen in males ages 12 years through 24 years, typically within seven days following the second mRNA COVID-19 vaccine dose, at a rate of about 27 cases per million doses administered in this age group.[9] Cases have also been reported after other vaccine doses.[10,11]
  - Surveys of patients diagnosed with post-vaccination myocarditis and pericarditis have found that 83% recovered after three months.[12]

UNITED STATES DATA

Data demonstrate that children in the United States continue to face risks of severe COVID-19. There are notable differences in risk by age group, with those under two years of age experiencing worse outcomes than children ages 2 years and older. Key risk factors include cardiovascular and neurological disorders, chronic pulmonary conditions (excluding asthma), diabetes, obesity, and immunocompromise (Table 1, Appendix A).[13]

- From July 2024 through June 2025, children under 2 years of age accounted for the largest share (54%) of pediatric COVID-19 deaths.[14]
- Children under 2 years of age are shown to be the most vulnerable pediatric age group, accounting for more than half (57%) of all pediatric hospitalizations for COVID-19 (July 2024 – May 2025).
  - Of vaccine eligible children ages 6 months through 17 years, the highest percentage (41%) of COVID-19 associated hospitalizations occurred among children ages 6 months through 23 months.[15]
- Among all children hospitalized for COVID-19 (April 2024 – March 2025), nearly one in four (24%) required intensive care unit-level care.[16]
  - Among children hospitalized for COVID-19, 25% of those ages 6-23 months required intensive care unit-level care. Most (53%) children under the age of 2 years admitted to the intensive care unit had no underlying medical condition, further highlighting the risk of severe outcomes in otherwise healthy infants and toddlers.[17]
  - Of children who were hospitalized, over 70% of children ages 2-17 years had underlying medical conditions while 54% of children ages 6-23 months had none, underscoring that the absence of underlying conditions does not confer protection from severe disease in children 6-23 months.[18]
  - Similarly, of those hospitalized children admitted to the intensive care unit, children 2 years and older tended to have underlying conditions, whereas younger children did not.[19]
- Of children and adolescents hospitalized between October 2024 and March 2025 only 10% had received a current COVID-19 vaccine.[20]
- From July 2024 to June 2025, COVID-19-associated mortality in children under age 2 years was comparable with influenza associated mortality.[21]

NEW YORK STATE DATA

For COVID-19, the youngest children face greater disease severity than older children.

- Per the Statewide Planning and Research Cooperative System, New York State pediatric hospitalization rates mirror those seen in national data. (Table 4, Appendix A)
  - Infants ages 6 months to 1 year had a hospitalization rate of 2.4 per 1,000
  - Children ages 1-4 years: 0.6 per 1,000
  - Children ages 5-17 years: 0.3 per 1,000

- COVID-19 is associated with higher rates of hospitalization in infants compared to influenza. (Figure 1, Appendix A)
  - In 2024, infants ages 6 months to 1 year were hospitalized for COVID-19 at twice the rate of influenza related hospitalization. (Table 5, Appendix A)
- New York State has a longstanding universal immunization recommendation for influenza in children. Even though there is greater COVID-19 hospitalization burden in some age groups compared to influenza-related hospitalization, COVID-19 vaccine uptake remains substantially lower than influenza vaccination. (Table 2, Appendix A)
- New York State Pediatric COVID-19 Vaccine Coverage (2024-2025 season):[22]
  - Children ages 0-4 years: 3.4%
  - Children ages 5-11 years: 3.4%
  - Children ages 12-18 years: 3.7%
- National Survey COVID-19 Vaccine Coverage Data (April 26,2025):[23]
  - Children ages 6-23 months: 4.5% vaccinated
  - Children ages 12-17 years: 15.7% vaccinated

As of April 26, 2025, COVID-19 vaccination coverage among children ages 6-23 months declined by 0.8 percentage points between 2023-2024 and 2024-2025 seasons (from 5.3% to 4.5%), with coverage significantly lower than in all older pediatric age groups (5-11 years and 12-17 years) during 2024-2025 (Table 6, Appendix A).[24]

OTHER SEQUELAE

Post-COVID Conditions/Long COVID

- These conditions occur in 10-30% of children after COVID-19 infection.[25] [26] [27]
- Even children with mild or asymptomatic infections are at risk of developing long COVID or post-COVID condition.[28] [29] [30]
- Almost 4 in 5 children with long COVID report activity limitations[31].
- Vaccination protects against long COVID in children, reducing incidence by 57-73%.[32]

Multisystem Inflammatory Syndrome in Children (MIS-C) remains a serious complication of COVID-19 and contributes to COVID-19 morbidity in children.

- COVID-19 vaccination has been associated with reduced incidence of MIS-C.[33]
- According to a Morbidity and Mortality Weekly Report, half of patients diagnosed with MIS-C following COVID-19 infection in 2023 required ICU level care, and 80% of cases were in vaccine-eligible but unvaccinated children.[34]

HEALTH EQUITY CONSIDERATIONS

- Families and providers should consider health equity in their COVID-19 vaccine discussions and determinations.
- Pediatric populations already impacted by health disparities, including Black, Hispanic, indigenous, rural, and impoverished communities, have been disproportionately affected by COVID-19.[35]
  - Although Black, Hispanic, and American Indian/Alaska Native youths make up about 41% of the population under 21, they accounted for 78% of COVID-related deaths in that age group in the earliest months of the pandemic.[36]
  - Hospitalization and intensive care unit rates have been shown to be significantly higher for Black and Hispanic children compared to other race/ethnicity groups.[37] [38]

  - Vaccination has been shown to decrease these inequities.[39]
- Preventing cases of COVID-19 via vaccination can decrease unnecessary time off work for adults caring for sick children. Workers in low-wage sectors may not receive paid sick leave, forcing them to incur significant economic hardship if their children become ill. COVID-19 infection can result in increased school absences and contribute to chronic absenteeism, already experienced at higher rates by American Indian students, students of color, and those in low-income school districts.[40]
- COVID-19 vaccination, if utilized at the same rate as influenza vaccination, is estimated to prevent up to 5.5 million days of school absenteeism in the United States due to COVID-19 illness in children 5–17 years old.[41]

Appendix A:

Table 1: Populations Recommended for Vaccination Including Those at High Risk for Severe COVID-19 Among Children Ages 6 Months Through 18 Years*

Population Characteristics	
Infants and children 6 through 23 months of age	
Residents of long-term care facilities or other congregate settings [a]	
Children who have never been vaccinated against COVID-19	
Infants and children with household contacts who are at high risk for severe COVID-19[42,43]	
Underlying Condition or Treatment with Common Examples [b]	
Chronic pulmonary disease	Asthma/reactive airway disease Chronic lung disease of prematurity Compromised respiratory function (e.g., abnormality of airway, tracheostomy, or ventilator dependent)
Cardiovascular disease	Congenital heart disease
Gastrointestinal Disorders	Feeding tube dependent Inflammatory bowel disease
Hepatic Disease	Chronic liver disease
Hematologic Disease	Sickle cell disease
Metabolic Disorders	Diabetes mellitus
Obesity	BMI $\geq$ the 95th percentile in children
Neurologic and neurodevelopmental conditions	Cerebral palsy Epilepsy Intellectual developmental disorder Compromised mobility (e.g., wheelchair dependent)
Immunosuppressive Conditions [c]	Receipt of immunosuppressive therapy Primary immunodeficiency HIV Infection Receipt of hematopoietic cell transplant or solid organ transplant
Rheumatologic, autoimmune disease	Systemic lupus erythematosus Juvenile idiopathic arthritis

a. Congregate care settings refer to places where individuals live together in structured environments outside of their home, including residential treatment facilities, group homes, emergency shelters, juvenile detention centers, etc.
b. List of examples is not exhaustive.
c. Children who are moderately or severely immunocompromised require 2 or more doses of COVID19 vaccine.

Additional doses may be administered at ≥2-month intervals, informed by the clinical judgment of a health care provider and personal preference and circumstances.[44] Refer to AAP Recommended Child and Adolescent Immunization Schedule for dosing guidance.
*Adapted from Committee on Infectious Diseases. (2025, August 19). *Recommendations for COVID-19 Vaccines in Infants, Children, and Adolescents: Policy Statement*. *Pediatrics*. Advance online publication. https://publications.aap.org/pediatrics/article/doi/10.1542/peds.2025-073924/203222/Recommendations-for-COVID-19-Vaccines-in-Infants

Table 2: New York State including NYC COVID-19 and Influenza Data—Hospitalization, Mortality, and Vaccine Coverage Statewide

Age Group	COVID-19 Hospitalization Data Source: SPARCS 2024 Calendar Year	COVID-19 Mortality Data Source: Vital Records, 2024 Calendar Year.	COVID-19 Vaccine Coverage 8/1/24-4/23/25 Data Source: NYSIIS and CIR	Flu Hospitalization Data Source: SPARCS 2024 Calendar Year	Flu Mortality Data Source: Combination from Epi Surveillance & Vital Records as of 6/26/25	Flu Vaccine Coverage 8/1/24-4/23/25 Data Source: NYSIIS and CIR
All Ages	50,156	2,775	1,900,108	21,321	766	853,139
<18 y.o	2,155	15	174,201 (Note: 0-18 y.o)	2,382	26	1,410,740 (Note: 0-18 y.o)
>18 y.o	48,001	2,760	1,725,907 (Note: >19 y.o)	18,939	740	3,442,392 (Note: >19 y.o)

Table 3: Inpatient Admissions with a Diagnosis of COVID-19 or Influenza for the 2024 Calendar Year, All Ages, NYS (Including NYC); Data Source: SPARCS

Age Group	2024 Number of Inpatient Admissions and Incidence Rate			
	COVID-19		Influenza	
	N	Rate (per 1000)	N	Rate (per 1000)
0- <6 m	497	4.5	192	1.74
6 m- <1 yr	268	2.4	137	1.24
1-4 yrs	545	0.6	771	0.87
5-17 yrs	845	0.3	1282	0.45
18-64 yrs	14799	1.2	8219	0.69
65+ yrs	33202	9.9	10720	3.18

Table 4: Inpatient Admissions with a Diagnosis of COVID-19 2020-2024, All Ages, NYS (Including NYC)
Data source: SPARCS

Age Group	Discharge Year and Incidence Rate (per 1000)									
	2020	Rate	2021	Rate	2022	Rate	2023	Rate	2024	Rate
0- <6 m	255	2.3	556	5.0	1217	11.0	630	5.7	497	4.5
6 m- <1 yr	80	0.7	185	1.7	487	4.4	299	2.7	268	2.4
1-4 yrs	268	0.3	552	0.6	1441	1.6	585	0.7	545	0.6
5-17 yrs	836	0.3	1627	0.6	2440	0.8	959	0.3	845	0.3
18-64 yrs	61411	5.1	68210	5.7	57999	4.8	21036	1.8	14799	1.2
65+ yrs	64414	19.1	68632	20.4	83080	24.7	43479	12.9	33202	9.9

Note: *All data are preliminary and subject to change due to reporting lags from facilities.*
The hospitalization data is by calendar year (Jan-Dec) rather than by respiratory season (Oct-Sept, approx.), because in the earlier years COVID did not have a predictable seasonal pattern, and it might not yet have completely settled into a predictable seasonal pattern.

Table 5: Inpatient Admissions with a Diagnosis of Influenza 2020-2024, All Ages, NYS (Including NYC)
Data source: SPARCS

Age Group	Discharge Year and Incidence Rate (per 1000)								
	2020	Rate	2021	Rate	2022	Rate	2023	Rate	2024
0- <6 m	2.3	25	0.2	182	1.6	99	0.9	192	1.74
6 m- <1 yr	2.0	7	0.1	145	1.3	85	0.8	137	1.24
1-4 yrs	1.0	98	0.1	978	1.1	499	0.6	771	0.87
5-17 yrs	0.3	107	0.1	1445	0.5	765	0.3	1282	0.45
18-64 yrs	0.6	543	0.1	6412	0.5	4823	0.4	8219	0.69
65+ yrs	2.1	635	0.2	7540	2.2	5490	1.6	10720	3.18

Note: *All data are preliminary and subject to change due to reporting lags from facilities.*

Table 6 Differences in Cumulative Percentage of Children 6 Months–17 Years Who Are Up to Date with COVID-19 Vaccines by Selected Demographics and by Season, United States. Data Source: National Immunization Survey–Flu[45]

Table 6A: Change in COVID-19 Vaccination Coverage Between 2024-2025 and 2023-2024 Seasons by Age (2024-2025 minus 2023-2024)

Demographic Group	2024-2025 Season Percentage Vaccinated	2023-2024 Season Percentage Vaccinated	Difference in Coverage Between Seasons (%) (current minus previous)	95% CI of the Difference	Statistical Significance
Overall	13.0	14.2	-1.1	-1.8 to -0.5	*
6 months-4 years	5.6	6.4	-0.8	-1.7 to 0.0	
6-23 months	4.5	5.3	-0.8	-2.5 to 0.8	
5-17 years	15.3	16.4	-1.2	-2.0 to -0.3	*

*statistically significant at p<0.05

Table 6B: COVID-19 Vaccination Coverage Differences between Age Groups for 2024-2025 COVID-19 Season

Group 1	Group 2	Group 1 Percentage Vaccinated	Group 2 Percentage Vaccinated	Difference in Coverage (Group 1 - Group 2)	95% CI of the Difference	Statistical Significance
6-23 months	5-17 years	4.5	15.3	-10.8	-12.3 to -9.2	*
6-23 months	5-11 years	4.5	15	-10.5	-12.1 to -8.9	*
6-23 months	12-17 years	4.5	15.7	-11.2	-12.9 to -9.4	*
6 months-4 years	5-17 years	5.6	15.3	-9.7	-10.6 to -8.7	*
6 months-4 years	5-11 years	5.6	15	-9.4	-10.4 to -8.3	*
6 months-4 years	12-17 years	5.6	15.7	-10.1	-11.3 to -8.8	*

*statistically significant at p<0.05

Figure 1: Inpatient Admissions with a Diagnosis of COVID-19 Compared to Inpatient Admissions with a Diagnosis of Influenza Ages 0-18

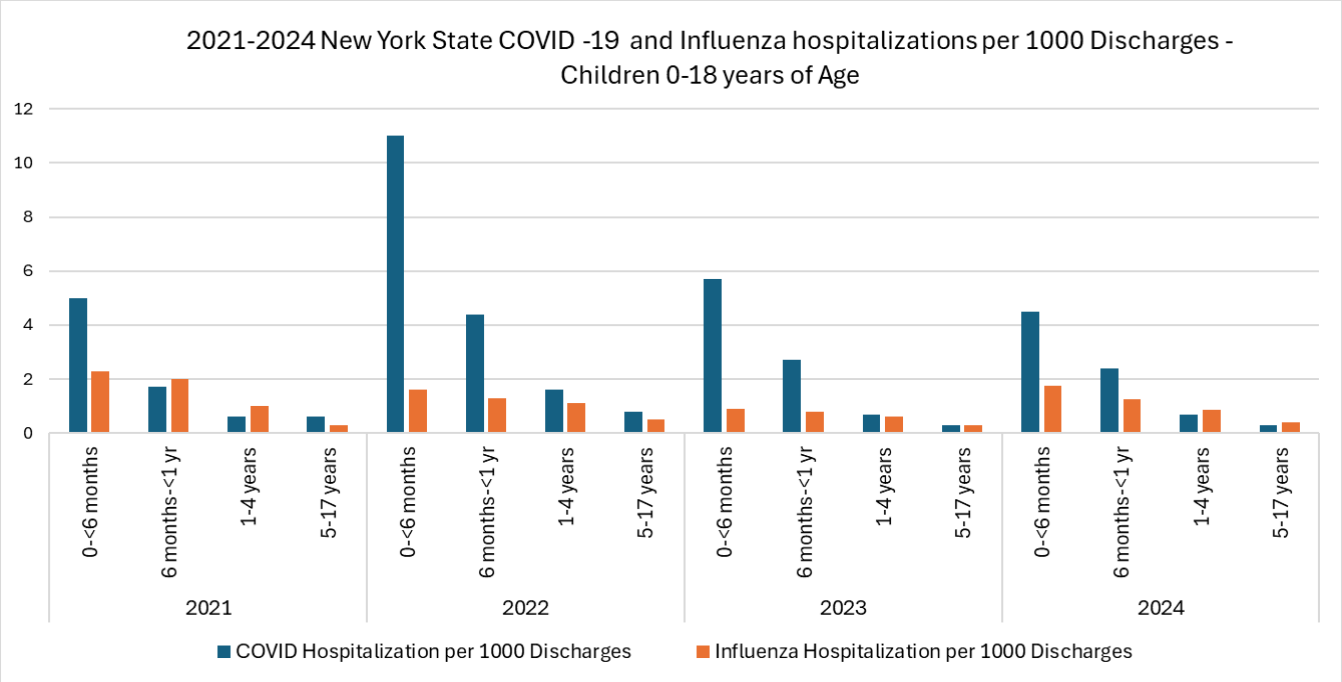

Figure 1 above uses Statewide Planning and Research Cooperative System (SPARCS) data.

Appendix B: Works Cited

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