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Disclosure

Dr. Tracie Newman has no relevant financial relationships with ineligible companies to disclose.

3

Objectives

1. Describe current and emerging trends in pediatric respiratory viruses for the 2025-2026 season, including RSV, influenza, and COVID-19.
2. Identify risk factors and populations most vulnerable to severe outcomes from pediatric respiratory infections.
3. Discuss current evidence-based prevention and treatment options and evolving clinical guidelines for managing pediatric respiratory infections.

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4

What the heck is going on?

VACCINES IN THE NEWS

CDC director is out after less than a month; other agency leaders resign
UPDATED AUGUST 27, 2025 · 9:10 PM ET — npr

FDA approves updated COVID-19 shots with limits for some kids and adults — AP

In break with current CDC recommendations, leading pediatrics group recommends Covid-19 shots for young children — CNN

COVID vaccines are no longer recommended for healthy children and pregnant women, Kennedy says — AP

Multiple medical groups say they have been barred from work on CDC's panel of vaccine advisers
HHS said experts will still be included but not based on their organization. — abc NEWS

Kennedy's new CDC panel includes members who have criticized vaccines and spread misinformation — AP

5

Vaccine Recommendation Process: What Usually Happens

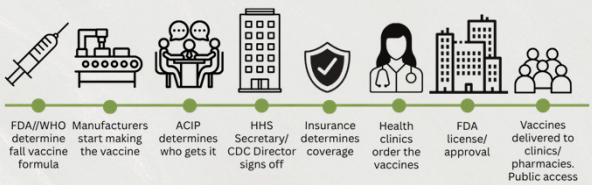

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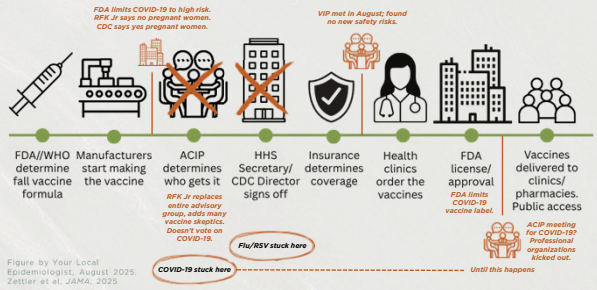
Figure by Your Local Epidemiologist, August 2025.

6

Vaccine Recommendation Process: 2025 Changes



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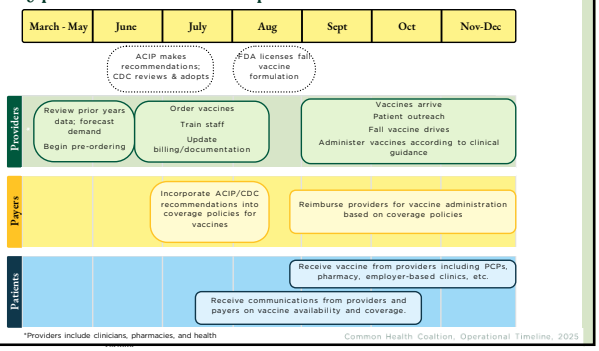
Typical Timeline to Operationalize Vaccines



8

Fall and Winter Immunization Guide: 2025-26

	Influenza (Flu) Vaccine	RSV Immunization	COVID-19 Vaccine
Kids	**All children 6 months and older** Some children 6 months to 8 years may need multiple doses AAP, CDC	**All infants <8 months old and children 8-19 months with risk factors** AAP, CDC	**All children 6-23 months** **Children 2-17 years old with risk factors or if parents desire vaccination** AAP
		OR	
Pregnant Women	**All** At any point in pregnancy ACOG, CDC	**32-36 weeks gestation** ACOG, CDC	**All** At any point in pregnancy ACOG, CDC
Adults	**All** High-dose recombinant or adjuvated flu vaccine preferred for 65+, if available CDC	**All 75+ and adults 5-74 with risk factors** As of now, one lifetime dose CDC	**All** AAFP, CDC

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Figure adapted from Your Local Epidemiologist, 2025.

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Comparing Pediatric Vaccine Recommendations

Virus	AAP Recommendation (Aug 2025)	CDC/ACIP Recommendation (mid-2025)
COVID-19	6–23 months: Universal recommendation (vaccinate all) 2–17 years: Recommend for high-risk, and for others at parental discretion	**DIFFERENT from AAP:** CDC uses a "shared clinical decision-making" model for ages 6 months–17 years: parents should consult their provider, rather than receiving a universal endorsement
RSV	All infants <8 months + children 8-19 months with risk factors Typically Oct-March, if no maternal RSV vaccine	**SAME as AAP:** Infants < 8 months born to unvaccinated or unknown-status mothers High-risk 8–19 month-olds entering second season
Flu	Annual influenza vaccination for all children starting at 6 months Some children 6 months to 8 years may need multiple doses	**SAME as AAP:** Routine annual influenza vaccination for everyone aged ≥6 months

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AAP, 2025; CDC, 2025

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Vaccine Integrity Project

WHAT IS IT?

"CIDRAP's Vaccine Integrity Project is an initiative dedicated to safeguarding vaccine use in the U.S. so that it remains grounded in the best available science, free from external influence, and focused on optimizing protection of individuals, families, and communities against vaccine-preventable diseases."

- Steering committee comprised of 8 members, with input from public health and vaccine experts
- Presented on safety and efficacy of respiratory virus immunizations on August 19th, 2025

University of Minnesota CIDRAP Vaccine Integrity Project, 2025.

11

4 in 5 (79%) of Americans support childhood vaccine requirements. Here's why:

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De Beaumont, 2025

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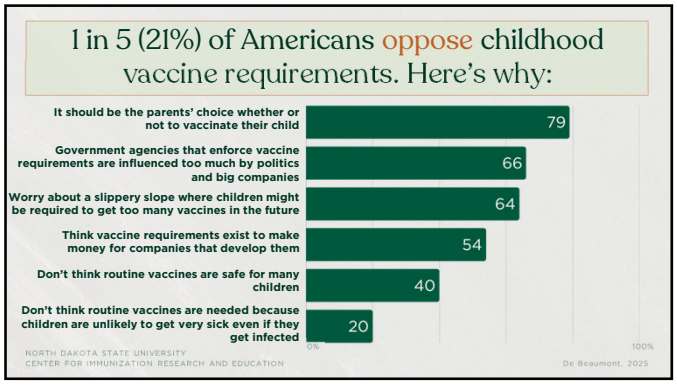

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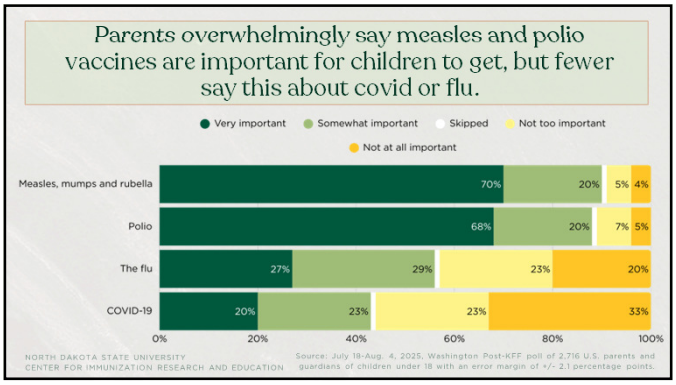

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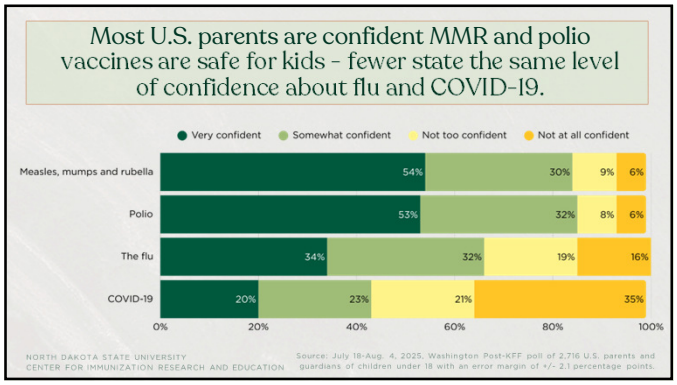

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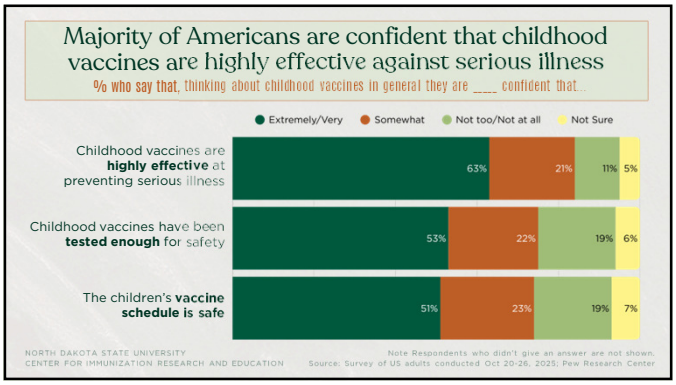

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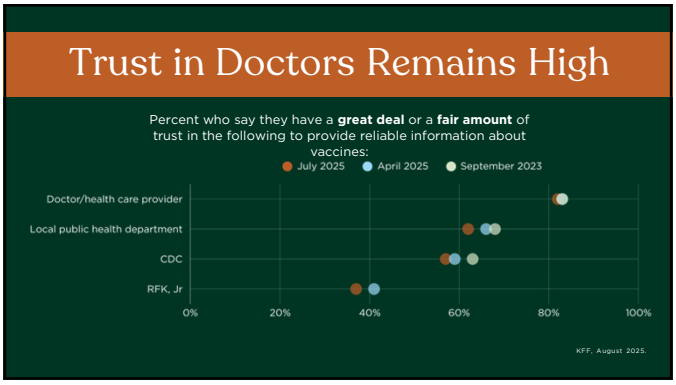

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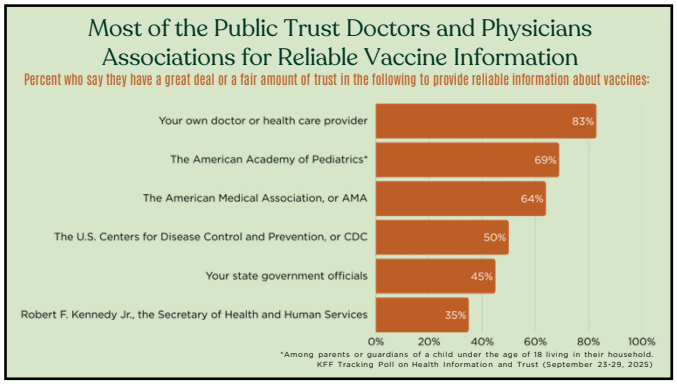

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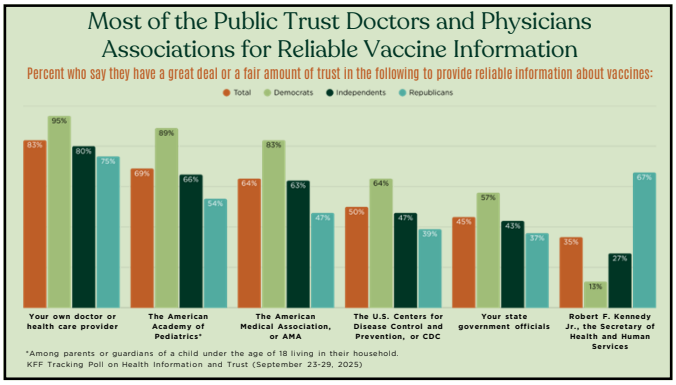

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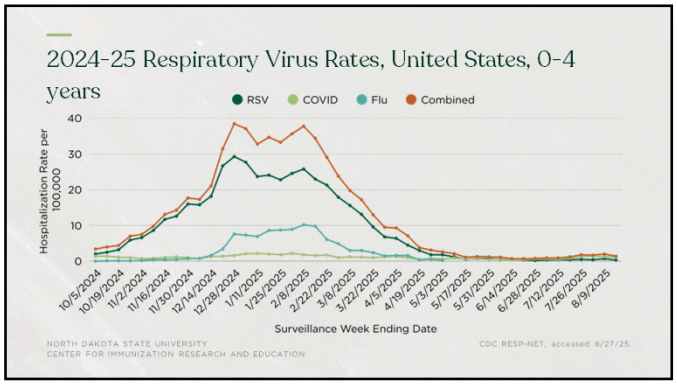

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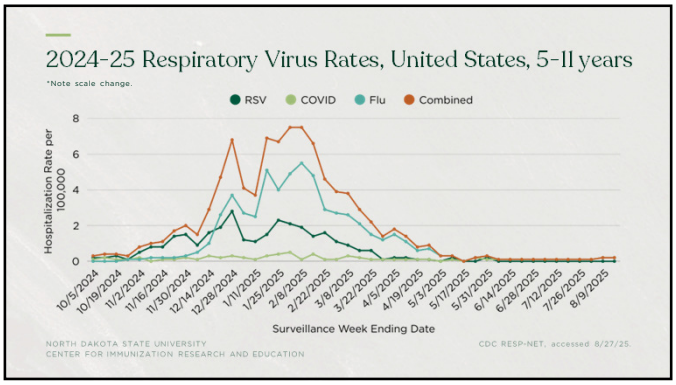

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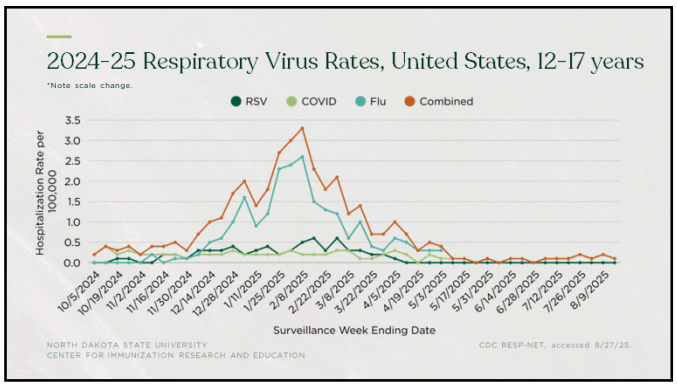

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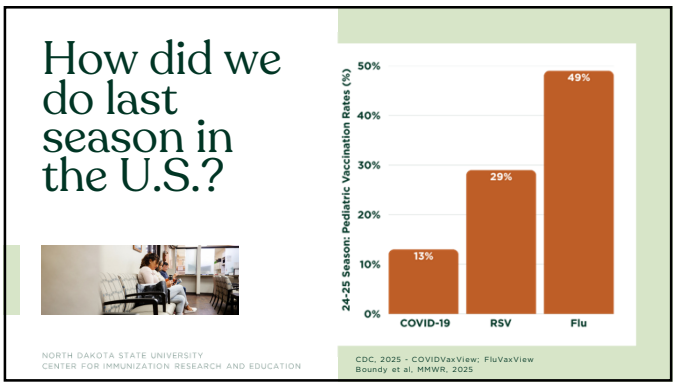

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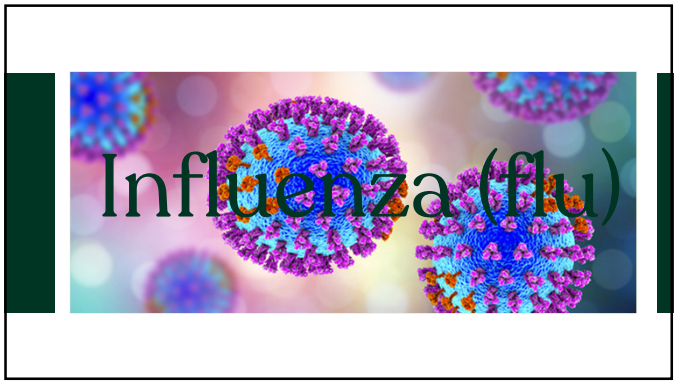

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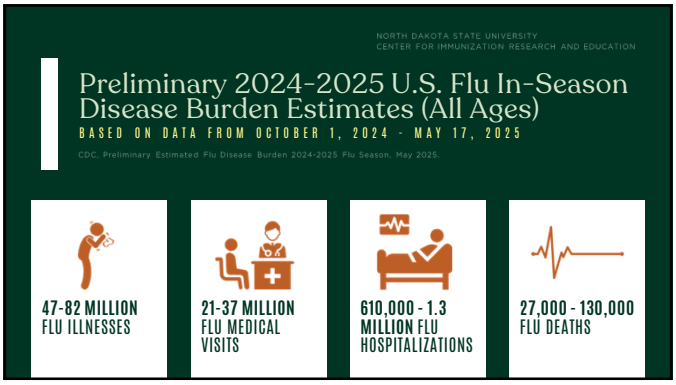

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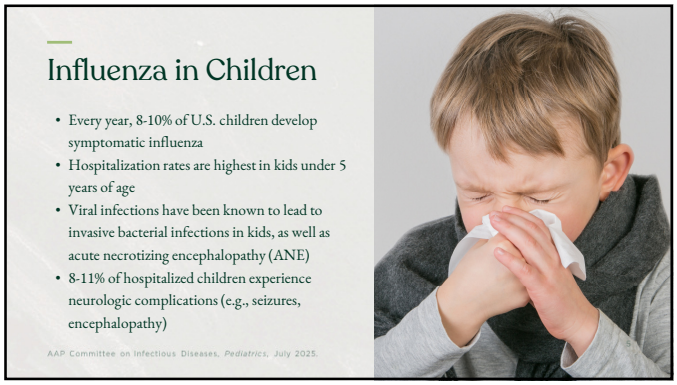

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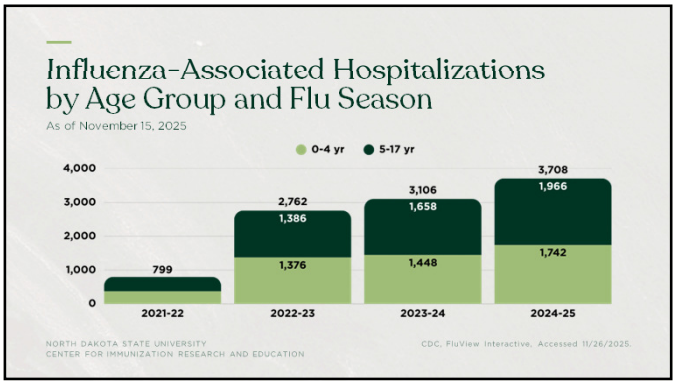

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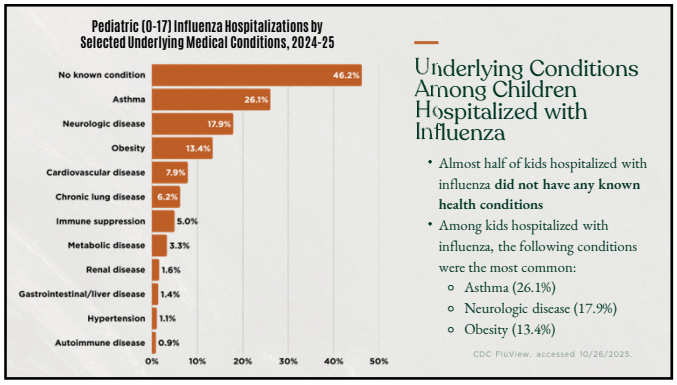

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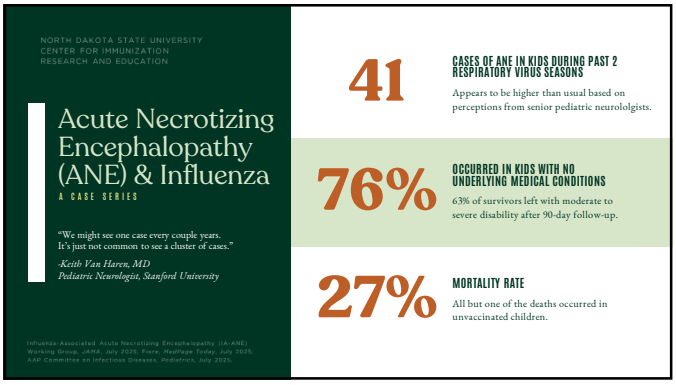

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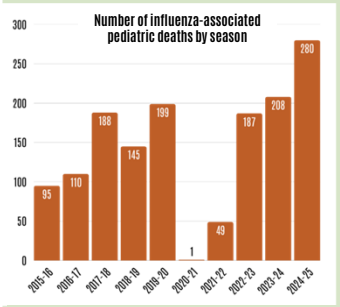
Pediatric Infuenza Deaths on the Rise

The 2024-25 season has seen the highest number of pediatric flu deaths in 15 years.



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CDC FluView Interactive. Accessed 8/25/2025; CDC Influenza-Associated Pediatric Mortality Surveillance System, accessed 8/13/2025; Reinhart et al, MMWR, 2025.

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INFLUENZA-RELATED PEDIATRIC DEATHS IN THE 2024-2025 INFLUENZA SEASON

occurred in children who **weren't fully vaccinated**.

Reinhart et al, MMWR, 2025

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Influenza Vaccines for Kids

2025-2026
RECOMMENDATIONS & UPDATES

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Influenza Vaccine

- Annual flu vaccine is recommended for **everyone 6 months and older**
- Recommended dose(s) ideally received by the end of October
- Pregnant/postpartum individuals should receive the flu vaccine
- Can be coadministered with other vaccines
- New option: Nasal spray flu vaccine available for patients 2 - 49 years of age

AAP Policy Statement, *Pediatrics*, July 2025.

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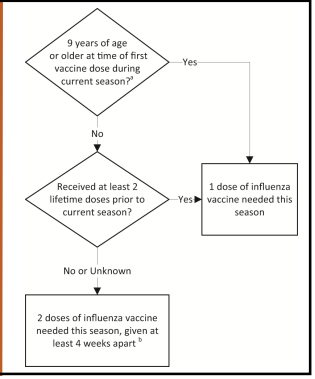

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THIMEROSAL & FLU VACCINES

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AAP Recommendation:

The AAP continues to support the current WHO recommendations for use of thimerosal as a preservative in multiuse vials in the global vaccine supply. **Thimerosal-containing vaccines are not associated with an increased risk of autism spectrum disorder in children.** Thimerosal from vaccines has not been linked to any neurologic condition. Despite the lack of evidence of harm, some states have legislation restricting the use of vaccines that contain even trace amounts of thimerosal and in June 2025, the Advisory Committee on Immunization Practices recommended that children and adults only receive influenza vaccine in single-dose formulations that are free of thimerosal as a preservative. The benefits of protecting children against the known risks of influenza are clear. Therefore, to the extent permitted by state law, **children should receive any available formulation of IIV rather than delaying vaccination while waiting for reduced-thimerosal content or thimerosal-free vaccines.**

AAP Committee on Infectious Diseases, *Pediatrics*, July 2025.

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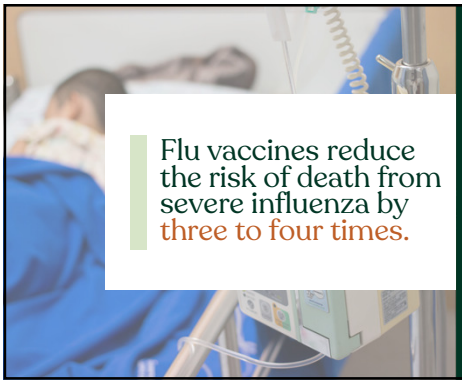

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Flu vaccines reduce the risk of death from severe influenza by three to four times.

- Spanish study analyzing data from 38+ countries and 6.5 million patients.
- Patient data from 2003 - 2023 found flu vaccination to be effective at reducing infection rates and flu-related complications in all age groups.

Presa et al., *European Respiratory Review*, January 2025; Castro, *Medscape*, February 2025.

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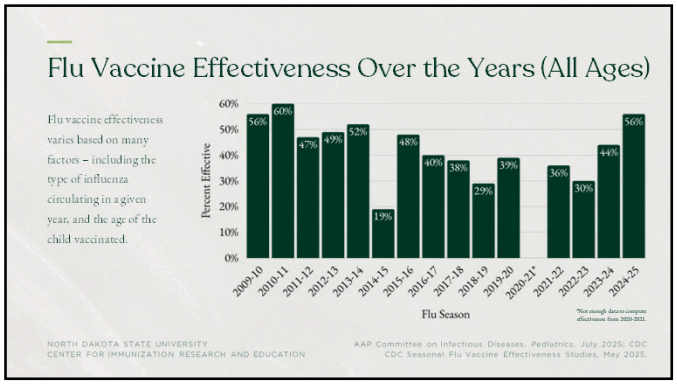

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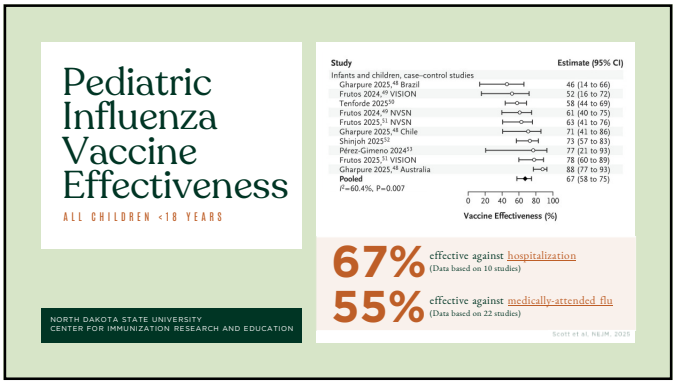

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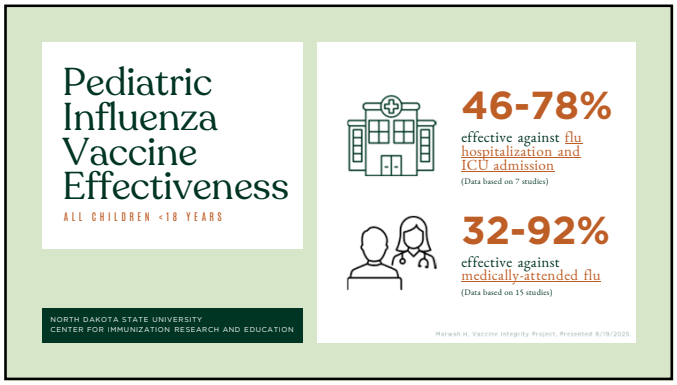

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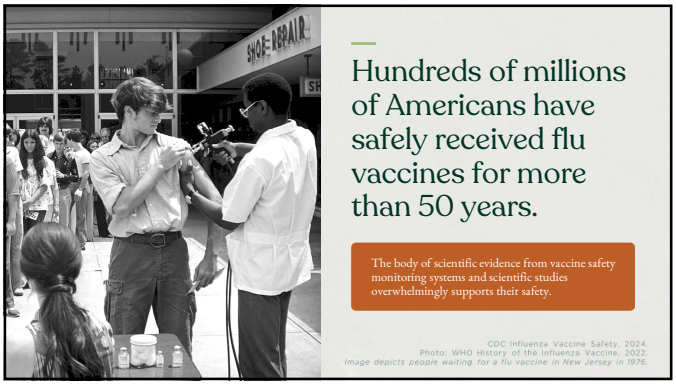

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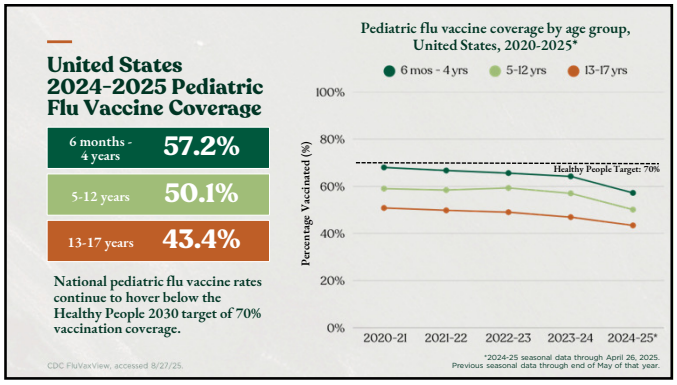

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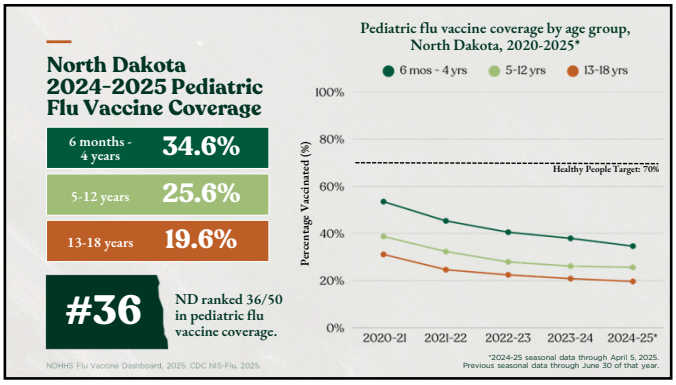

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During the 2024–2025 flu season in the U.S.:

A Pediatric flu deaths decreased compared to the previous year.

B Over 200 children died of influenza, marking the highest toll in over a decade.

C Pediatric deaths were minimal and only occurred in children with chronic medical conditions.

D Nearly all of the pediatric flu deaths occurred in children who had been fully vaccinated.

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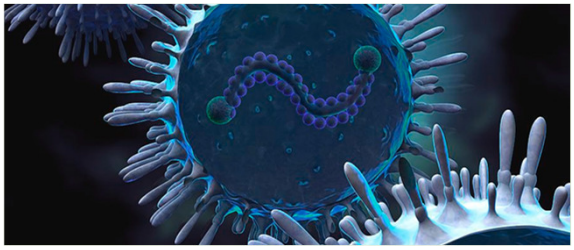

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RSV Epidemiology

- Most infants (68%) infected during the 1st year of life; nearly all (97%) by age 2
- Most common cause of hospitalization in U.S. infants (2-3% of young infants)
  - Prematurity/chronic disease increases risk, but most (79%) are in healthy, term infants
  - Risk of hospitalization higher in younger infants

Mazur et al. *The Lancet*, 2024.

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RSV is the #1 cause of hospitalization among U.S. infants.

79% of children <2 years old hospitalized with RSV have NO underlying medical conditions.

Jones et al., *MMWR*, 2023.

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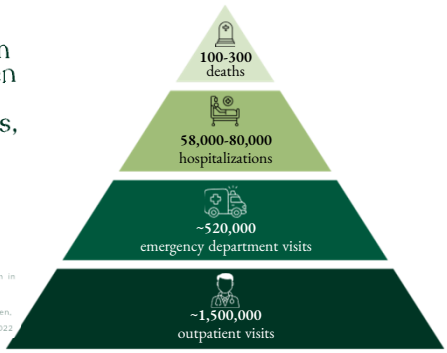
Each year in U.S. children aged less than 5 years, RSV is associated with...



*Estimate 80,000 hospitalization in infants <1 yrs

Thompson et al, JAMA, 2003; Hansen et al, JAMA Network Open, 2022; Hall et al, NEJM, 2009; McLaughlin et al, J Infect Dis, 2022

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RSV Prevention for Kids

2025-2026
RECOMMENDATIONS & UPDATES

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Three Options for Infant Protection

MATERNAL VACCINATION: ABRYSVO

Recommended for pregnant individuals 32 -36 weeks gestation from September - January who have not received the RSV vaccine in a previous pregnancy.

INFANT ANTIBODIES: NIRSEVIMAB

Recommended for infants <8 months born during or entering their first RSV season, and some children 8 - 19 months at increased risk of severe RSV entering their second RSV season.

INFANT ANTIBODIES: CLESROVIMAB

Recommended for infants <8 months born during or entering their first RSV season.

American Academy of Pediatrics, 2025.

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Seasonal Recommendations

It is important that babies have protection before RSV season peaks, typically between December and February.

RSV vaccine (Abrysvo) recommended during weeks 32-36 of pregnancy.

Nirsevimab or clesrovimab recommended for infant.

APRIL | MAY | JUNE | JULY | AUG. | SEPT. | OCT. | NOV. | DEC. | JAN. | FEB. | MAR.

Immunizations are not recommended to protect infants outside of RSV season. Infants born in these months should receive **nirsevimab or clesrovimab** in October.

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AAP Committee on Infectious Diseases, *Pediatrics*, August 2025; Moulia et al., MMWR, August 2025.

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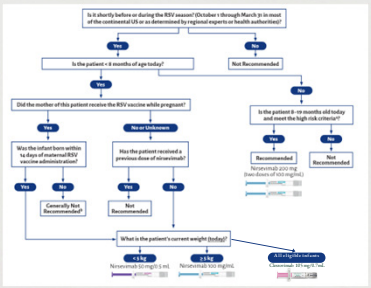
RSV Antibody Administration

- If the mother did not receive the maternal RSV vaccine, nirsevimab or clesrovimab should ideally be administered to babies born during October through March during their birth hospitalization, or within 1 week of birth.



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American Academy of Pediatrics, 2025.
Image adapted from AAP 2024 Visual Guide.

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77%

of pediatricians had ever offered nirsevimab (N=200)

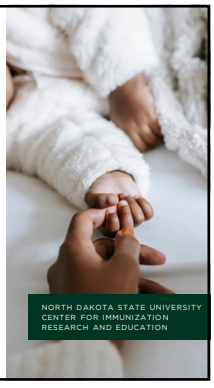
- Most pediatricians agreed that nirsevimab is safe (97%) and effective (96%) for infants.
- The top challenges pediatricians reported with offering nirsevimab were:
  - parent/caregiver concerns around safety (44%)
  - challenges knowing maternal RSV vaccination status to determine infant eligibility (34%)
  - financial burden associated with purchasing nirsevimab (31%)

63%

of OB/GYNs offered RSV vaccine to pregnant women (N=200)

- Most OB/GYNs agreed that maternal RSV vaccination is safe (92%) and effective (94%).
- The top challenges OB/GYNs reported with offering maternal RSV vaccination were:
  - patient concerns around safety (65.5%)
  - cost and reimbursement issues (46%)
  - patient concerns around effectiveness (28%)

CDC Pediatrician and OB/GYN Survey on RSV Immunization, published 11/14/2024. Survey conducted October 2-10, 2024.



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Pediatric Nirsevimab Effectiveness

CHILDREN <24 MONTHS

64-93%
effective against RSV hospitalization
(Data based on 13 studies)

51-91%
effective against RSV ICU admission
(Data based on 6 studies)

17-89%
effective against medically-attended RSV
(Data based on 5 studies)

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Marwah H. Vaccine Integrity Project. Presented 8/19/2025.

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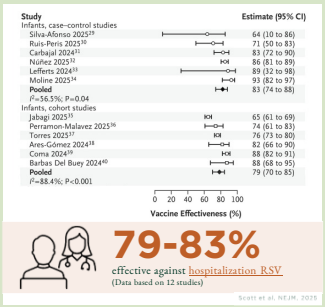
Pediatric Nirsevimab Effectiveness

CHILDREN <12 MONTHS



79-83%

effective against hospitalization RSV

(Data based on 12 studies)

Scott et al. NEJM, 2025

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Pediatric Clesrovimab Efficacy

CHILDREN <12 MONTHS

90.9%

effective against RSV hospitalization

60.4%

effective against medically-attended RSV

Moulia et al., MMWR, August 2025.

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Maternal RSV Vaccine Efficacy

DATA FROM PHASE 3 CLINICAL TRIALS

81.8%

Reduced risk of severe LRTD within 90 days of birth

(91.1% reduced risk among pregnant individuals 32-36 weeks gestation)

69.4%

Reduced risk of severe LRTD within 180 days of birth

(57.3% reduced risk among pregnant individuals 32-36 weeks gestation)

LRTD: lower respiratory tract disease

ACOG, Updated August 2025.
Kampmann et al., NEJM, April 2023.

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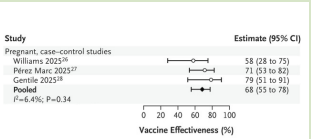
Maternal RSV Vaccine Effectiveness

DATA FROM SYSTEMATIC REVIEW



68%

effective against infant hospitalization

(data based on 3 case-control studies)

Scott et al. NEJM, 2025

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Maternal RSV Vaccine Safety

ACOG, Practice Advisory, Updated August 2025.

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Most common side effects: pain at injection site, headache, myalgia, nausea

Preterm birth

- A small numerical increase in preterm births was observed among Abrysvo recipients (5.7%) vs. placebo (4.7%).
- **No definitive causal link:** the balance of evidence makes a vaccine-caused increase in preterm birth less likely, but it cannot be ruled out yet.

Guillain-Barré syndrome (GBS)

- Updated Abrysvo's label for those 65+ to include possible increased risk of GBS (based on observational study)
- **Does NOT apply to pregnant people,** no current established causal link in this population.

Hypertensive disorder

- Some data suggests a possible, small increased risk of hypertensive pregnancy disorder among vaccinated individuals. But findings may relate to residual confounding and require further research.

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	Advantages	Disadvantages
Maternal RSV Vaccine	◦Immediate protection for baby after birth ◦Reduces number of vaccines for infant at birth ◦Can be given with other vaccines in pregnancy	◦Potentially reduced protection in some situations (e.g., pregnant person is immunocompromised or infant born soon after vaccination) ◦Potential risk of hypertensive disorders of pregnancy (recent data are reassuring)
Infant RSV Antibody Nirsevimab & Clesrovimab	◦Protection may wane more slowly than from maternal RSV vaccine ◦Direct receipt of antibodies rather than relying on transplacental transfer ◦No risk for adverse pregnancy outcomes	◦Requires infant injection ◦Delay in administration could leave the infant unprotected

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RSV-associated hospitalization rates decreased during 2024-25 compared to RSV seasons before prevention products were available

Greatest reductions among infants aged 0-2 months born just before or during RSV season

These trends underscore the **importance of early protection** through maternal vaccination during pregnancy or infant immunization in their first week of life.

% hospitalization reductions in 2024-25	0-2 months	0-7 months
RSV-NET	47%	38%
NVSN	46%	31%

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CDC Coronavirus and Other Respiratory Viruses Division, presented at ACIP on 6/25/2025.

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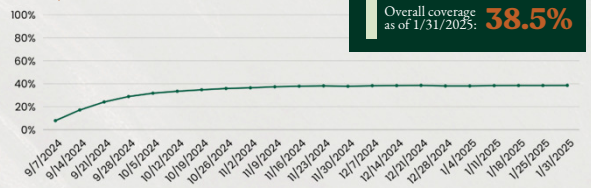
Maternal RSV Vaccine Uptake Increased from 2023-2024 Season

Percent of pregnant women ages 18-49 years vaccinated with RSV vaccine, United States, 2024-2025

Overall coverage as of 1/31/2024: **17.9%**
Overall coverage as of 1/31/2025: **38.5%**



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CDC RSVVaxView, accessed 8/28/2025.

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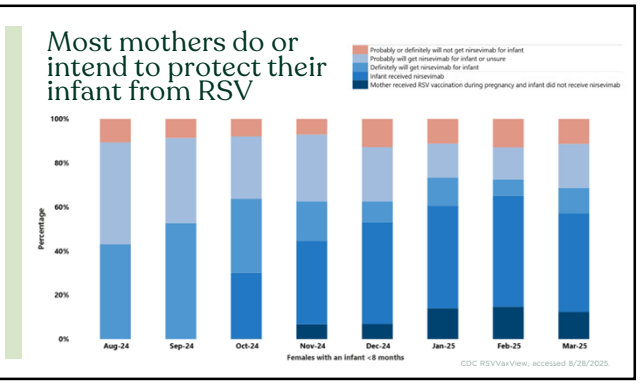
Most mothers do or intend to protect their infant from RSV



CDC RSVVaxView, accessed 8/28/2025.

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Are there maximum volumes of injectable vaccine, antibiotic, or other products that can be administered into each muscle group for different ages?

For example, at the 6-month well-child visit, could an infant receive RSV immunization, COVID-19, influenza, PCV, and DTaP-IPV-HepB-Hib?

Simultaneous administration of RSV immunization with age-appropriate vaccines is recommended. CDC does not address the issue of maximum volumes that can be injected into each muscle group in different age groups.

Based on discussions with CDC, the AAP suggests the following volumes:

- Deltoid: Average 0.5 mL (range 0.5-2 mL)
- Vastus Lateralis: Average 1-4 mL (range 1-5 mL)

Strategies to decrease the number/injection volume include:

- Use professional judgement when administering injections.
- Maintain and utilize combination vaccines in clinic inventory.
- Use an alternative route (other than IM) if possible.
- Take advantage of recommended age ranges for some vaccines.

AAP RSV Immunization Frequently Asked Questions, updated 8/20/2025.

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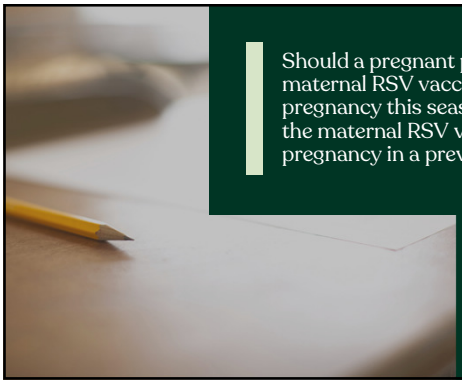

Should a pregnant person receive the maternal RSV vaccine during pregnancy this season if they received the maternal RSV vaccine during pregnancy in a previous season?

No.

Rather, the infant should receive nirsevimab or clesrovimab.

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Which of the following infants is eligible to receive a single dose of clesrovimab for protection against RSV during their first RSV season, according to current U.S. public health guidance?

A
A 10-month-old infant who received RSV maternal vaccination during pregnancy and is entering their second RSV season.

B
A 12-month-old infant entering their first RSV season.

C
A 6-month-old infant born during the RSV season whose mother did not receive RSV vaccination during pregnancy.

D
A 4-month-old infant born to a mother who received RSV maternal vaccination 20 days before birth.

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Which of the following infants is eligible to receive a single dose of clesrovimab for protection against RSV during their first RSV season, according to current U.S. public health guidance?

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Who is being hospitalized?

1 in 4 children hospitalized with COVID required ICU care.

9 in 10 children hospitalized were NOT up to date with COVID-19 vaccination.

COVID-19 impacts infants most:

- >50% of pediatric hospitalizations are in children <2 years
- Most hospitalized children <2 years had no underlying conditions
- Even in ICU, over half (53%) had no underlying conditions

MacNeil, Current Epidemiology of COVID-19, ACIP Meeting June 25, 2025. Free et al., Pediatrics, August 2025.

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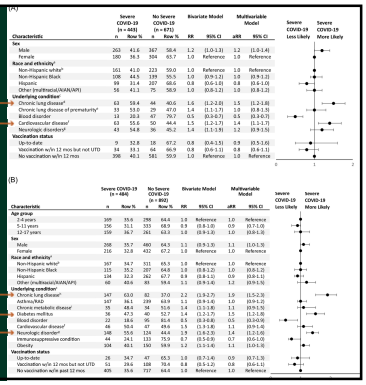
Clinical characteristics significantly associated with severe COVID-19 in children

(A) Children aged 6 to 23 months:
- Chronic lung disease (excluding asthma)
- Cardiovascular disease

(B) Children aged 2 to 17 years:
- Chronic lung disease (excluding asthma)
- Diabetes mellitus
- Neurologic disorders

Free et al, Pediatrics, August 2025.

(A) Demographic and clinical characteristics associated with severe COVID-19 among children aged 6 to 23 months. (B) Demographic and clinical characteristics associated with severe COVID-19 among children aged 2 to 17 years.



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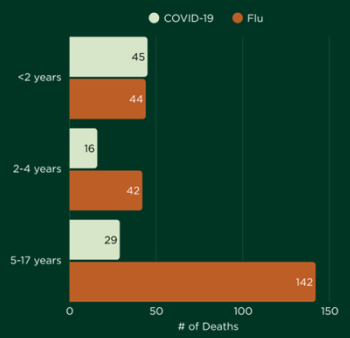
Pediatric Mortality from COVID-19 vs. Influenza (Jul 2024–Jun 2025, Ages 0–17)

The chart compares total number of pediatric deaths due to COVID-19 (green bars) and influenza (copper bars) across three age groups in the United States.



MacNeil, Current Epidemiology of COVID-19, ACIP Meeting June 25, 2025

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Long Term Effects of COVID-19 Infection

IN KIDS

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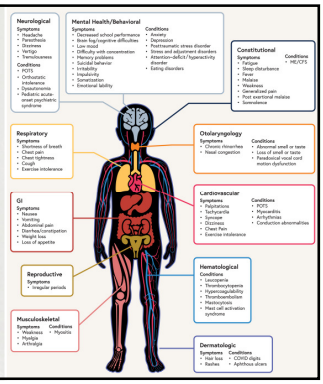
Long COVID in Kids

- Difficult to define
- Inconsistent symptom manifestation
- Absence of diagnostic testing
- Kids unable to verbalize
- Minimal quality studies
- Lack of control group
- Small sample size



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Prevalence of Long COVID in kids varies based on study design and definitions

Source	Study Design	Outcome
Israel Ministry of Health, 2021	Prevalence Survey N = 13,834	11.2% children with Long COVID
Radtke T, JAMA 2021	Retrospective Cohort N = 1,355	No difference in outcomes; low prevalence of Long COVID
Borch L, Eur J Pediatrics 2022	Retrospective Cohort N = 37,522	0.8% SARS-CoV-2 + children had symptoms >4 weeks (Long COVID)
Vahratian A, NCHS Data Brief 2023	National Survey N = 7,464	1.3% U.S. kids had Long COVID
Funk AL, JAMA Netw Open 2022	Prospective Cohort N = 1,884	5.8% SARS-CoV-2 patients with PCCs
Dun-Dery F, JAMA Netw Open 2023	Prospective Cohort N = 1,026	At 6 months: 0.52% of SARS-CoV-2 + kids had Long COVID; 0.67% at 12 months
Camporesi A, eClinicalMedicine 2024	Prospective Cohort N = 1,296	23% Long COVID at 3 months; 7% at 24 months
Rao S, Pediatrics 2024	State-of-the-art Review	Range from 4 to 62% children with Long COVID
Stephenson T, Nature, 2024	National Prospective Cohort (N = 12,632)	7.2% met Long COVID definition consistently across 3, 6, 12, and 24 months

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Long COVID in Kids
What's new?

Lancet Study (2024):
- Some children continued to experience symptoms of Long Covid for **up to 3 years after infection**.
- A meaningful proportion of children reported ongoing issues such as **fatigue, sleep disturbances, and difficulties with concentration.**

Nature Study (2024):
- **7.2% of children with prior COVID-19 consistently met research criteria for post-COVID-condition** at 3, 6, 12, and 24 months - experiencing 5–6 persistent symptoms.
- Higher symptom burden observed in reinfected children, older youth, females, and those from more deprived areas.

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A retrospective cohort study looking at new diabetes diagnoses among 613,000 kids found an increase of:

55% (AT 1 MONTH)

48% (AT 3 MONTHS)

58% (AT 6 MONTHS)

In kids who had COVID vs those diagnosed with ORIs

The risk was elevated in kids that were:

Overweight/ Obese (2X higher)

Hospitalized (3x higher)

Miller, et al. JAMA Open, 2024

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COVID-19 Vaccines for Kids

2025-2026
RECOMMENDATIONS & UPDATES

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2025-26 COVID-19 vaccines will:

Target JN.1 lineage of the Omicron variant, specifically the LP.8.1. strain.

Be "monovalent," meaning it is designed to protect against only one type of viral strain.

Continue to be monitored to assure their safety and effectiveness, along with the evolution of the SARS-CoV-2 virus.

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2025-2026 FDA Approved* COVID-19 VACCINES

PFIZER (COMIRNATY)
- 65 years of age and older, or
- 5-64 years of age with 1+ underlying condition that puts them at high risk for severe outcomes from COVID-19

MODERNA (SPIKEVAX)
- 65 years of age and older, or
- 6 months - 64 years of age with 1+ underlying condition that puts them at high risk for severe outcomes for COVID-19

NOVAVAX (NUVAXOVID) & MODERNA (MNEXSPIKE)
- 65 years of age and older, or
- 12-64 years of age with 1+ underlying condition that puts them at high risk for severe outcomes from COVID-19

EUA PULLED FOR PFIZER'S USE IN YOUNGEST
FDA did not renew the emergency use authorization (EUA) for Pfizer's COVID-19 vaccine for children ages 6 months to 4 years old for the upcoming respiratory virus season

*Data as of 12/1/2025

FDA, Comirnaty, 2025; FDA, Spikevax, 2025; FDA, Nuvaxovid, 2025;FDA, Mnexspike, 2025; Common Health Coalition, 2025

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Comparing COVID-19 Vaccine Recommendations

Group	AAP/ACOG/AAFP Guidance	FDA Label	CDC Current Guidance*	Insurance Coverage (likely)**
Kids	AAP (American Academy of Pediatrics) recommends vaccination for **all children under 2**, plus high-risk kids and those living with high-risk individuals; also "permissive" for others if parents desire protection.	6 mos -17 years old with 1+ high-risk condition (Approval ages vary by product)	CDC has **removed routine recommendations for healthy children,** including under 2; now uses shared clinical decision-making — i.e., offer based on physician-parent discussion, not formal endorsement.	6 mos -17 years old and healthy: Off Label 6 mos -17 years old with conditions that put them at high risk for severe illness: Covered
Pregnant Women	ACOG (American College of Obstetricians and Gynecologists) recommends vaccination **at any point during pregnancy**, planning to conceive, postpartum, or while lactating.	18-64 years old with high-risk conditions; at this moment pregnancy is noted on CDC's "at risk" list	CDC **no longer recommends vaccination for pregnant women**. Recommendation has been withdrawn; pregnant people no longer on routine schedule.	Covered
Adults	AAFP (American College of Family Physicians) recommends all adults 18 years and older should receive a vaccine, especially if you are 65+, at increased risk for severe infection, or have never received a COVID-19 vaccine.	Adults 65+ years old 18-64 years old with high-risk conditions	CDC has moved to **individual-based decision making** (aka shared clinical decision-making) for adults 18+ years old.	65+ years old: Covered 18-64 years old healthy: Off Label 18-64 years old with conditions that put them at high risk for severe illness: Covered

*Data as of 12/1/2025.
**The trade group representing most U.S. health plans said insurers will continue covering all ACIP-recommended vaccines as of September 1, 2025—including updated COVID-19 and flu shots—without patient cost-sharing through 2026.
Your Local Epidemiologist, 2025; AAP, 2025; AAFP, 2025; ACOG, 2025; CDC, 2025.

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What qualifies as "high risk"?

People of all ages, including children and teens, can get very sick from COVID-19, especially those with underlying medical conditions. This includes children and teens with:
- Medical complexity
- Genetic, neurologic, or metabolic conditions
- Congenital heart disease
- Like adults, children and teens with obesity, diabetes, asthma or chronic lung disease, sickle cell disease, or who are immunocompromised can also be at increased risk for getting very sick from COVID-19.

NOTE:
"High risk" is NOT defined by the FDA - it defaults to CDC's list.

CDC, 2025 - definition of high risk as of 8/29/25

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> **Individual health plans and plan sponsors will be prepared to make coverage decisions informed by science, the latest medical evidence and data. This process will be evidence-based, evaluate multiple sources of data, including but not limited to ACIP, and will be informed by customer needs.**
>
> American's Health Insurance Plans (AHIP)

AAP, 2025

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Comparing COVID-19 Vaccine Recommendations

Group	U.S.	Canada	U.K.	Australia
Kids	**6 mos - 17 years:** Not routinely eligible - unless 1+ high-risk condition	**6 mos - 17 years**: Recommended/available with priority for high-risk.	**6 mos - 17 years:** Eligible only if immunosuppressed. No routine offer otherwise.	**6 mos - 5 years:** Primary series for those with risk factors or severe immunocompromise **5 years - 17 years:** With risk factors (primary) or severe immunocompromise (Primary/annual)
Pregnant Women	No broad U.S. routine program beyond risk-based pathways under current limits; prior CDC advice supported vaccination in pregnancy, but 2025 federal changes narrowed general eligibility.	Recommended in pregnancy (fall dose, any trimester).	In spring 2025, the UK's Joint Committee on Vaccination and Immunisation ended universal COVID-19 vaccination in pregnancy on the basis of constrained resources and cost-effectiveness modelling in the context of endemic COVID-19 transmission.	Australia continues to recommend vaccination for unvaccinated pregnant individuals but no longer endorses routine boosters, instead advising shared decision making based on comorbidities and exposure risk.
Adults	**18+ years:** Vaccination based on individual-based decision making (emphasis on those at increased risk according to the CDC list of COVID-19 risk factors)	**18+ years:** (annual fall dose) Available to all adults with emphasis on priority groups (older age, medical risk, HCWs, etc.)	**18-74 years:** Not routinely offered; only if immunosuppressed. **≥75 years:** Eligible (routine).	**18-64 years:** Recommended (annual) for those with severe immunocompromise; eligible (annual) for those w/o immunocompromise **≥65 years:** Recommended annual dose for 65–74; every 6 months for ≥75.

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As of 12/1/25
Jucko & Kampmann, Lancet, 2025; CDC, 2025; NACI, 2025; UK Health Security Agency 2025; ATAGI, 2025

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What about physician liability?

- Clinicians have two protections: malpractice coverage + PREP Act immunity (though not absolute).
- Malpractice liability requires proof of deviation from standard of care; following AAP guidance is strong defense.
- Off-label prescribing is common (~1 in 5 of prescriptions).

NOTE:
Pharmacists have narrower protections, varying by state - may affect vaccine access.

AAP, 2025

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Assessing COVID-19 Vaccine Liability and Coverage

Group	Scenario 1: CDC/ACIP recommendations align with the FDA label for the 2025-26 COVID vaccine	Scenario 2: ACIP doesn't make a recommendation for the 2025-26 COVID vaccine	Scenario 3: CDC/ACIP recommends routine universal vaccination except for pregnant people, for which there is no recommendation and recommends shared clinical decision-making for children.
Child (6 months - 18 years) with a high-risk condition On-label	**Liability:** PREP Act immunity can apply **Coverage:** Covered by Medicaid and commercial coverage	**Liability:** PREP Act immunity can apply for providers authorized to administer or prescribe under state law. **Coverage:** Medicaid and commercial plans may elect to cover	**Liability:** PREP Act immunity can apply **Coverage:** Covered by Medicaid and commercial coverage
Child (6 months - 18 years) without a high-risk condition Off-label	**Liability:** PREP Act immunity may not apply* **Coverage:** Medicaid and commercial plans may elect to cover	**Liability**: PREP Act immunity may not apply* **Coverage:** Medicaid and commercial plans may elect to cover	**Liability:** PREP Act immunity may not apply* **Coverage:** Covered by Medicaid and commercial coverage

*Like any medical care, providers are generally protected if their decision to vaccinate off-label is consistent with accepted standards of care, supported by evidence, and documented with appropriate informed consent. A malpractice claim would require showing the provider deviated from professional standards and caused harm.

Adapted from table created by the Common Health Coalition.

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Pediatric COVID-19 Vaccine Effectiveness

CHILDREN 5-17 YEARS

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Estimated BNT162b2 XBB vaccine effectiveness was:

65%

against COVID-19-associated hospitalization or ED/urgent care visits.

Marwah H, Vaccine Integrity Project. Presented 8/19/2025.

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COVID Vaccination and Long COVID

(PCC - post-COVID Conditions)

Case-control study of 622 kids 5-17 years old, mRNA COVID-19 vaccination had a:

57% decreased odds of 1+ PCC symptoms

73% decreased odds of 2+ PCC symptoms

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COVID Vaccination and Long COVID

Observational cohort study found among adolescents the risk of long COVID was

↓36%

lower in adolescents vaccinated within 6 months before their first infection than in their unvaccinated peers.

Thawakthai et al. Vaccine, 2025.

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Pediatric COVID-19 Vaccine Safety

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- **Extensive safety monitoring:** Millions of doses administered to children worldwide with strong safety record
- **Most side effects are mild and short-lived** (sore arm, fever, fatigue)
- **No unexpected safety concerns identified in post-authorization monitoring**
- **Serious adverse events are rare** (e.g., anaphylaxis ~5 per million doses; Guillain-Barré syndrome not increased in children)
- **Benefits outweigh risks:** vaccines prevent hospitalization, MIS-C, and long-term complications from infection
- **Ongoing surveillance continues to reaffirm a favorable safety profile**

Marwah H, Vaccine Integrity Project, Presented 8/19/2025; AAP, Pediatrics, 2025

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Pediatric COVID-19 Vaccine Safety

MYOCARDITIS

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- Myocarditis following COVID-19 vaccination in children is very rare.
- Higher risk groups include male adolescents (especially ages 12–17) and particularly following the second dose of an mRNA vaccine.
- Booster doses appear to have a further lower incidence.
- Despite the uptick in risk among certain subgroups, these events remain uncommon, and most cases are mild and self-limiting.

Epidemiologic data show that myocarditis in pediatric patients is considerably **more common** and **more severe following COVID-19 infection** than after vaccination.

Marwah H, Vaccine Integrity Project, Presented 8/19/2025; Buoninfante et al, nature, 2024

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Review of Recent Data on Co-Administration of COVID and Flu Vaccination

Source	Study Design	Vaccines co-administered	Outcome studied	Findings + interpretation
Walter, 2024	Randomized controlled trial	COVID mRNA vaccines + inactivated influenza vaccine (IIV4)	Reactogenicity, serious adverse events	30 children ages 5-17 years old enrolled; no serious adverse events reported in this age group in either arm
Xu, 2025	Self-controlled case series	COVID mRNA XBB1.5 vaccine + seasonal influenza vaccine	Tinnitus	No increased risk of tinnitus with influenza vaccine coadministration in any age group (includes 12-39 year olds)

EXTENSIVE DATA SHOWS THAT CO-ADMINISTERING A COVID-19 VACCINE WITH OTHER VACCINES, PARTICULARLY THE SEASONAL FLU SHOT, IS SAFE.

Marwah H. Vaccine Integrity Project. Presented 8/19/2025.

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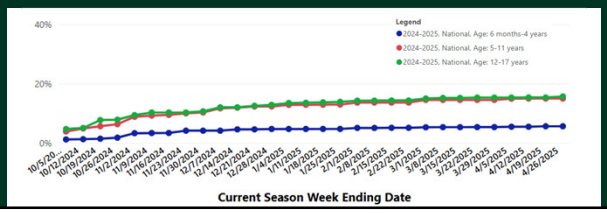
COVID-19 vaccination rates for children remain low, below 20%

RATES FOR KIDS 6M - 4Y ARE EVEN LOWER, HOVERING AROUND 6%



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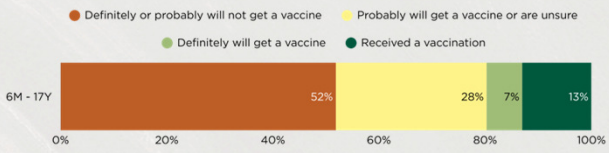
Half of all parents do not intend to get their child the COVID-19 vaccine, while 28% are still unsure

Focusing on the "moveable middle" may have the greatest impact at increasing pediatric COVID-19 vaccination rates.



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Data as of 4/26/2025.
CDC National Immunization Survey, accessed 8/28/2025.

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True or False?

Most children hospitalized for COVID-19 were up-to-date on their COVID-19 vaccinations.

True | **False**

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True or False?

Most children hospitalized for COVID-19 were up-to-date on their COVID-19 vaccinations.

True | **False**

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Fall and Winter Immunization Guide: 2025-26

	Influenza (Flu) Vaccine	RSV Immunization	COVID-19 Vaccine
Kids	**All children 6 months and older** Some children 6 months to 8 years may need multiple doses AAP, CDC	**All infants <8 months old and children 8-19 months with risk factors** AAP, CDC **OR**	**All children 6-23 months** **Children 2-17 years old with risk factors or if parents desire vaccination** AAP
Pregnant Women	**All** At any point in pregnancy ACOG, CDC	**32-36 weeks gestation** ACOG, CDC	**All** At any point in pregnancy ACOG, CDC
Adults	**All** High-dose recombinant or adjuvated flu vaccine preferred for 65+, if available CDC	**All 75+ and adults 5-74 with risk factors** As of now, one lifetime dose CDC	**All** AAFP, CDC

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Figure adapted from Your Local Epidemiologist, 2025.

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Fall and Winter Immunization Guide: 2025-26

	Influenza (Flu) Vaccine	RSV Immunization	COVID-19 Vaccine
How well do they work?	Reduces the risk of going to the doctor by 30-60%	Reduces risk of severe disease by 80-96%	30-60% additional protection against illness and severe disease
What is available?	A vaccine that targets 3 strains of seasonal flu; both a nasal spray and injectable shot are available this year.	**Children:** Monoclonal antibodies nirsevimab or clesrovimab **Pregnancy:** Pfizer (protein) vaccine **Older Adults:** GSK and Pfizer (protein) or Moderna (mRNA) vaccine	Overall access may be limited. Vaccines are updated with Omicron sub-variants JN.1 or LP.8.1. Options: Pfizer (mRNA; 5 year olds+) Moderna (mRNA for 6 months+), Novavax (protein; 12 years+)
When should patients get it?	October is ideal, as vaccine protection wanes over a season	**Infants:** Oct-March **Pregnancy:** Sept-Jan **Older Adults:** Now as protection is durable	For protection against severe disease, get it now. Recently infected? Wait at least 6 months

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Figure adapted from Your Local Epidemiologist, 2025.

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Pediatric Respiratory Viruses Summary

2025-2026

INFLUENZA

- The 2025-26 flu season was particularly severe among our pediatric patients
  - Pediatric deaths have reached a new high at 275 total deaths
- Everyone 6 months and older should get an annual flu vaccine
- The 2024-25 flu vaccine reduced the risk of healthcare visits and hospitalization substantially
- Flu vaccine coverage has decreased markedly over time, with 2024-25 rates reaching the lowest they've been since 2011-2012

RSV

- RSV is the most common cause of hospitalization among infants
- Three options for prevention: monoclonal antibody for the infant (nirsevimab and clesrovimab) or maternal RSV vaccine
  - All three options are safe and effective; preference may vary based on patient situation
  - Monoclonal antibodies should ideally be administered at birth or within 1 week of birth
  - Maternal RSV vaccine should be administered during 32-36 weeks of pregnancy

COVID-19

- COVID-19 hospitalizations still disproportionately affect infants and toddlers, and most hospitalized or ICU-admitted children had no underlying conditions.
- Differing recommendations from CDC and AAP - access may be limited
- Pediatric COVID vaccines reduce the risk of hospitalization, long COVID, and death from the virus
- Vaccine coverage and intent is low

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Questions?

THANK YOU FOR LISTENING

SPECIAL THANKS TO:

- MAEVE WILLIAMS
- LAUREN DYBSAND, MPH

E-MAIL:
ndsu.cire@ndsu.edu

WEB:
www.ndsu.edu/centers/immunize

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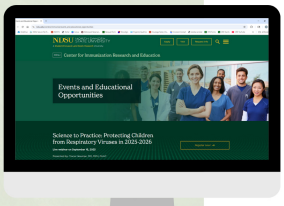

Monthly Webinars

- Different vaccine topics each month
- Nationally-recognized speakers
- Live and recorded presentations
- Free CME and CPE offered

Motivational Interviewing Training Module

- 4 videos, each 10-15 minutes long
- Covers topics such as:
  - The Spirit of MI
  - Elicit-Provide-Elicit (EPE)
  - Change Talk & Scaling Questions
  - Best First Responses

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