Please note this meeting will be recorded

This recording and all paper and electronic copies of materials presented or shared on the screen will be subject to Vermont's public records act, 1 V.S.A. §§ 315 et seq., and will be made available to the general public upon request.

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VERMONT
DEPARTMENT OF HEALTH

Key Guidance and Program Updates: Quarterly Vaccine Provider Call

Katie Mahuron, RN – *Adult Nurse Coordinator*
Meghan Carey, RN – *Pediatric Nurse Coordinator*

March 26, 2026

VERMONT
DEPARTMENT OF HEALTH

Today's Agenda

- Program Updates
- Vaccine Preventable Diseases
- Q & A

Objectives

1. Understand changes to Federal and Vermont legislation regarding immunizations.

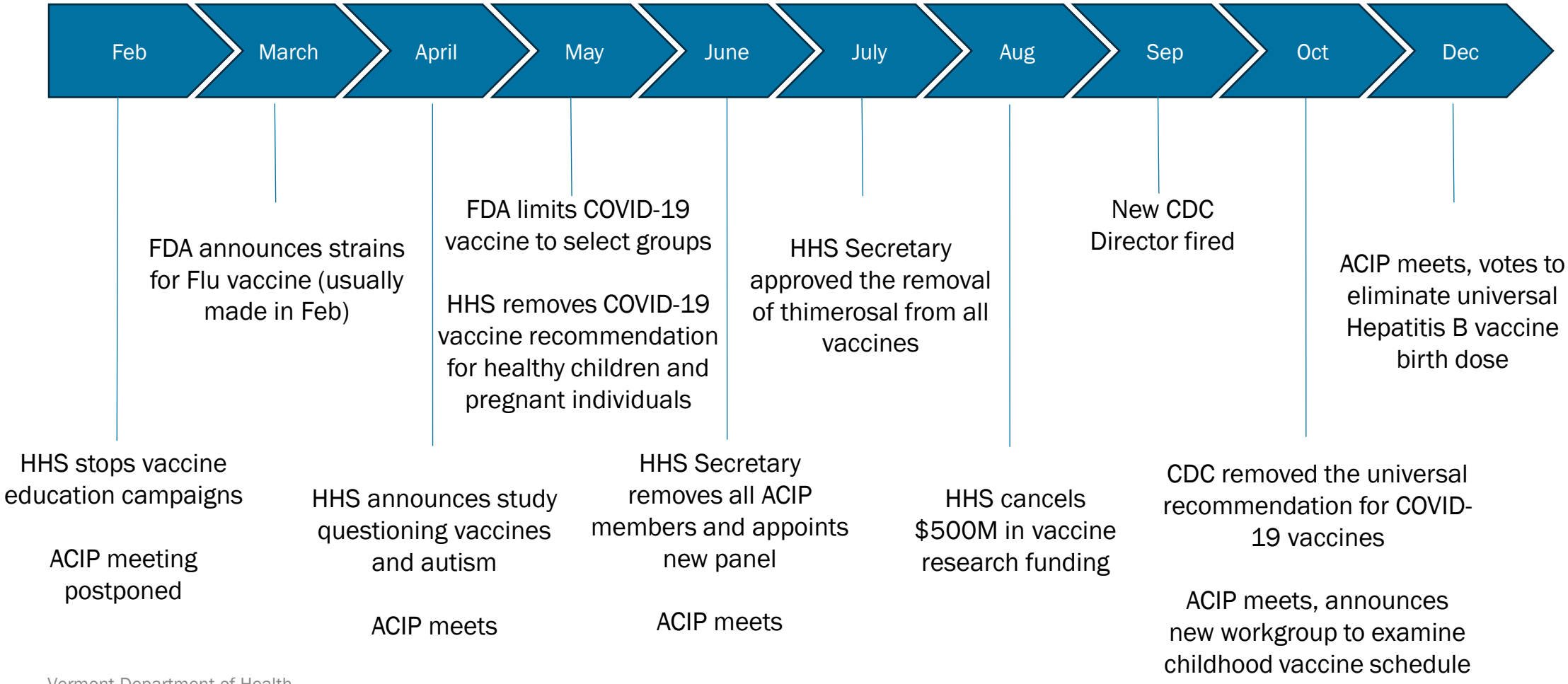
2. Ensure confidence in MMR vaccination recommendations and increase awareness of upcoming provider educational opportunity.

3. Increase awareness of VPD trends in Vermont and review vaccination recommendations for VPDs with increasing case counts.

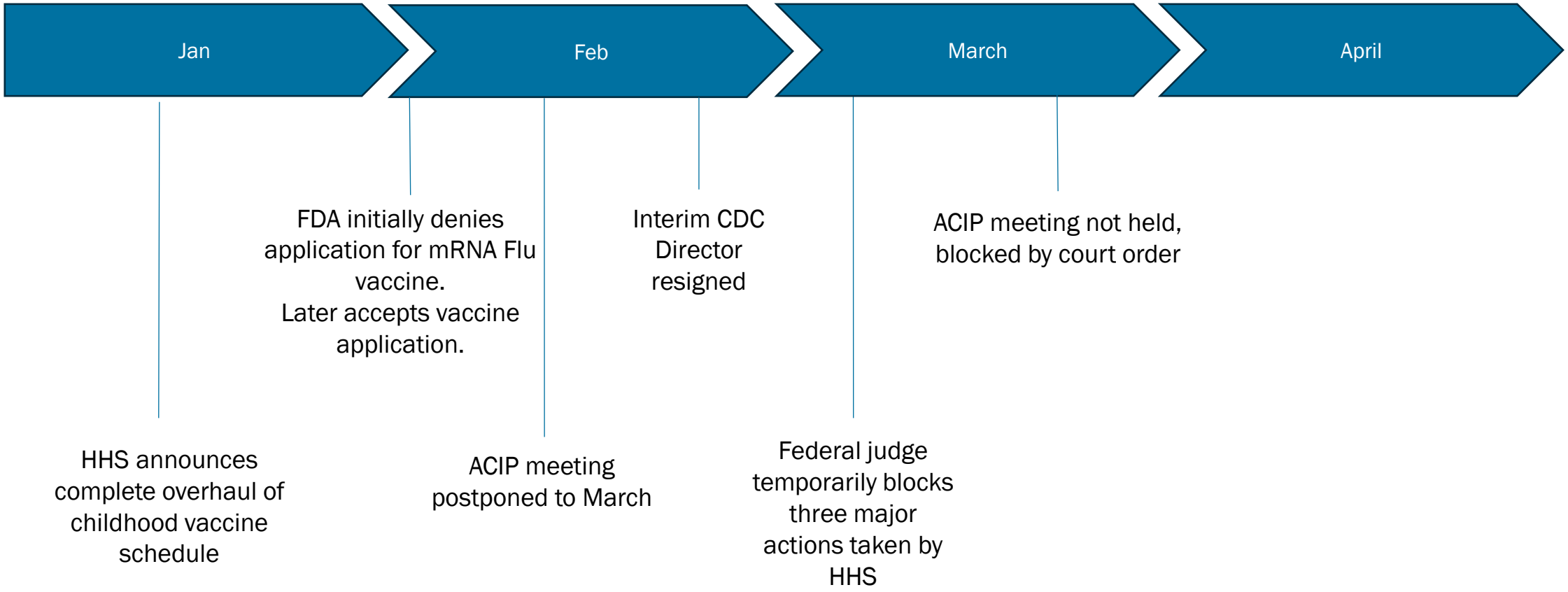
4. Understand provider needs and priorities to guide future discussions on VPDs, immunization guidance, and patient communication.

Program Updates

2025 Recap


Feb
March
April
May
June
July
Aug
Sep
Oct
Dec
HHS stops vaccine education campaigns
ACIP meeting postponed
FDA announces strains for Flu vaccine (usually made in Feb)
HHS announces study questioning vaccines and autism
ACIP meets
FDA limits COVID-19 vaccine to select groups
HHS removes COVID-19 vaccine recommendation for healthy children and pregnant individuals
HHS Secretary removes all ACIP members and appoints new panel
ACIP meets
HHS Secretary approved the removal of thimerosal from all vaccines
HHS cancels $500M in vaccine research funding
New CDC Director fired
CDC removed the universal recommendation for COVID-19 vaccines
ACIP meets, announces new workgroup to examine childhood vaccine schedule
ACIP meets, votes to eliminate universal Hepatitis B vaccine birth dose

2026 Recap


Jan
Feb
March
April
HHS announces complete overhaul of childhood vaccine schedule
FDA initially denies application for mRNA Flu vaccine.
Later accepts vaccine application.
ACIP meeting postponed to March
Interim CDC Director resigned
Federal judge temporarily blocks three major actions taken by HHS
ACIP meeting not held, blocked by court order

VT legislation updates

Bill Status H.545 signed by the Governor March 24, 2026

This bill

- Allows Vermont to make its own vaccine recommendations in consultation with a Vermont Vaccine Advisory Committee
- Allows the Immunization Program to purchase vaccines from other vendors besides CDC
- Insurance companies will continue to pay for vaccines
- Provides limited legal protections for providers that administer vaccines in accordance with the Health Departments recommendations

Provider Call: Measles Preparedness & Response

Join us April 30th from 12- 1pm for a provider focused measles update.

We'll cover:

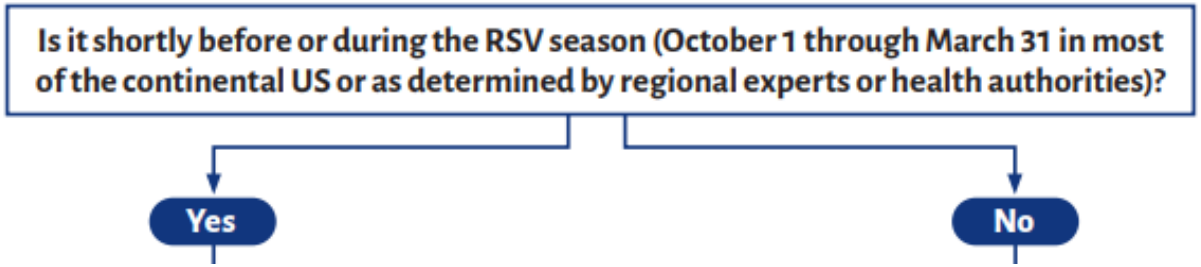
- Testing & reporting guidance
- Vaccine recommendations
- And more

Extended Administration Window for RSV Monoclonal Antibodies

- RSV monoclonal antibodies should be administered to eligible infants through April 30, 2026
  - This does not apply to the maternal RSV vaccine (Abrysvo)

Key deadlines

- Order by March 31, 2026
- Access ends April 30, 2026



- AAP-Immunization-Schedule.pdf
- RSV-Immunization-Adminstration-Visual-Guide.pdf

Supporting Families Traveling for Hajj

Hajj: May 18 – June 15, 2026

- Annually, millions of Muslims around the world travel to Saudia Arabia to perform *Hajj*, a sacred pilgrimage to Mecca

Recommended Actions:

- Review meningococcal travel vaccine guidance to support families who may be travelling for Hajj.

VERMONT DEPARTMENT OF HEALTH

Meningococcal Disease | Vermont Department of Health

American Academy of Pediatrics
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2026 AAP Pediatric Immunization Schedule

AAFP

2026 AAFP Adult Immunization Schedule

Vermont Vaccine Preventable Disease Data

Condition (confirmed and probable cases by year)	2020	2021	2022	2023	2024	2025*	Epi notes
Invasive H. influenzae	9	6	9	22	17	18	Case counts during the COVID-19 Pandemic are included in this table, which may influence trends compared to pre-pandemic years.
Hepatitis B, chronic	17	35	30	42	43	35	Case counts during the COVID-19 Pandemic are included in this table, which may influence trends compared to pre-pandemic years.
Hepatitis B, acute	<5	<5	<5	6	10	<5	Case counts lower than 5 per year are suppressed for this condition.
Measles	0	0	0	0	2	2	
Pertussis	11	0	2	1	106	97	Case counts during the COVID-19 Pandemic are included in this table, which may influence trends compared to pre-pandemic years. Pertussis in pre-pandemic years tended to peak every three to five years, influenced by factors like population immunity and vaccination rates.
Varicella	11	18	17	21	22	20	Case counts during the COVID-19 Pandemic are included in this table, which may influence trends compared to pre-pandemic years.

*2025 data are preliminary and subject to change.

Data Notes: Contextual Factors and Things to Know

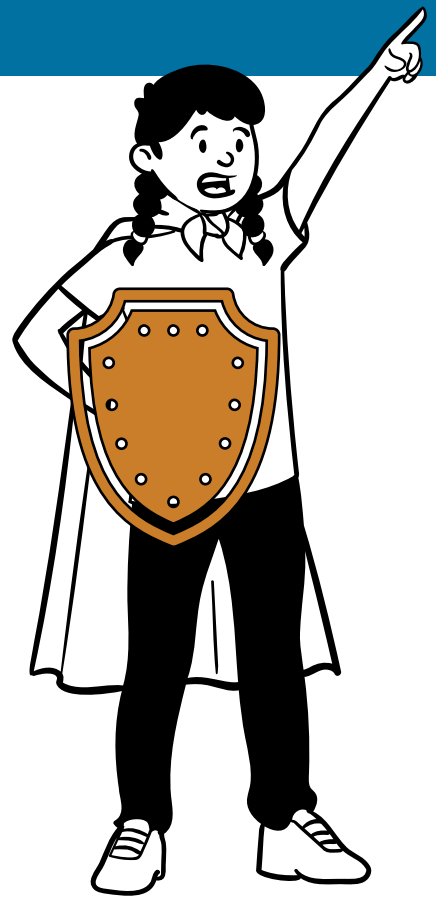
- COVID-19 pandemic has had a huge impact on case counts and trends in last five years.
- There are data gaps where we can't make assumptions.
  - We don't know age of individuals, vaccine status, co-morbidities, strains causing infection (and if the vaccine covered that strain), etc.
- Vaccine preventable diseases each have their own unique characteristics.
  - We expect to seek peaks/waves for pertussis every three to five years due to its epidemiology and cyclical nature.
- We are not correlating these cases with vaccine coverage.
  - Vaccine coverage may be high for these vaccine preventable diseases – we focused on identifying vaccine preventable diseases with highest impact on families and health care systems per case counts.
  - Different vaccines have different levels of effectiveness, different timeframes for protection waning, etc.

Vaccine Preventable Diseases

Common Vaccine Reactions

Localized

- Redness
- Swelling
- Pain



Systemic

- Low grade fever
- Headache
- Tiredness
- Body aches

Vaccine Information Statements (VISs) Overview | Immunize.org| Immunize.org

Measles

Highly Contagious

Microbe: Virus

Spread: Direct respiratory droplets and aerosolized particles

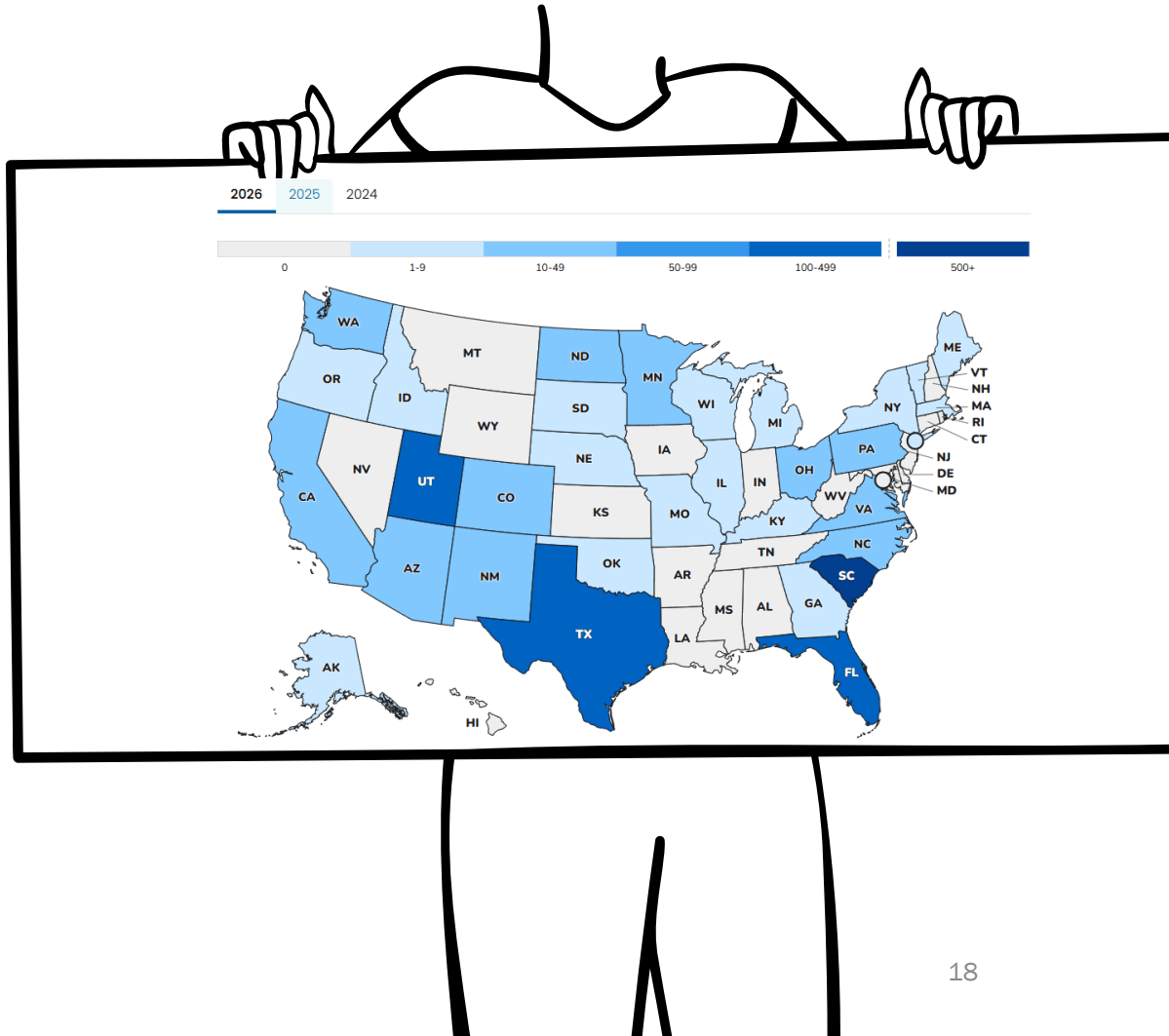
Signs/Symptoms: High fever, cough, runny nose, red eyes, maculopapular rash

Complications: Ear infections, pneumonia, encephalitis, hospitalization, subacute sclerosing panencephalitis (SSPE)

Measles, Mumps and Rubella (MMR): The Diseases & Vaccines | Children's Hospital of Philadelphia
Measles: What Parents Need to Know - HealthyChildren.org

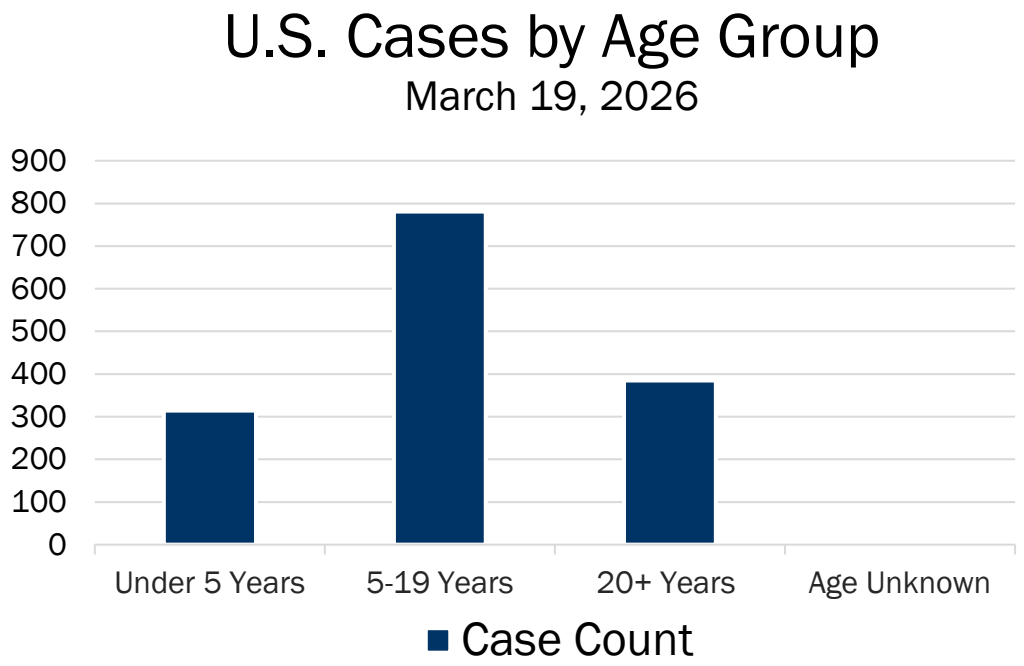
Measles Cases in the United States: 2026 Update

March 19, 2026	
Case Count	1,487
Jurisdictions	32



[Measles Cases and Outbreaks | Measles (Rubeola) | CDC]

Most Measles Cases are Linked to Lack of Vaccination



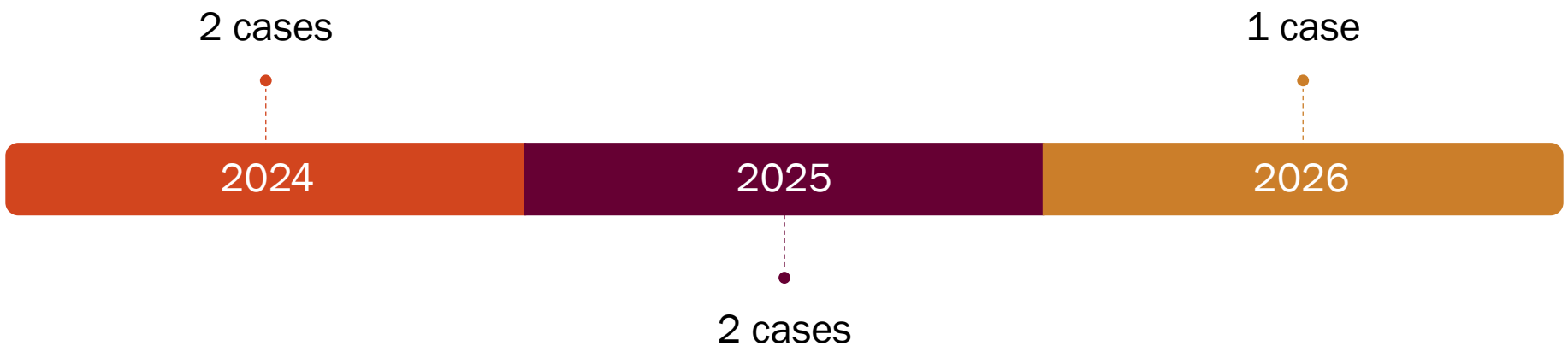
92%

are unvaccinated or had unknown vaccination status

[Measles Cases and Outbreaks | Measles (Rubeola) | CDC]

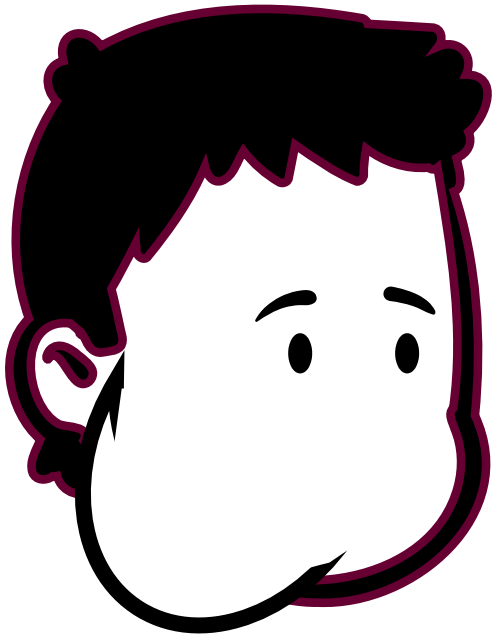
Measles Activity in Vermont

Measles activity remains low in Vermont



[Vermont Department of Health Confirms Case of Measles | Vermont Department of Health]

Mumps



Microbe: Virus

Spread: Respiratory droplets

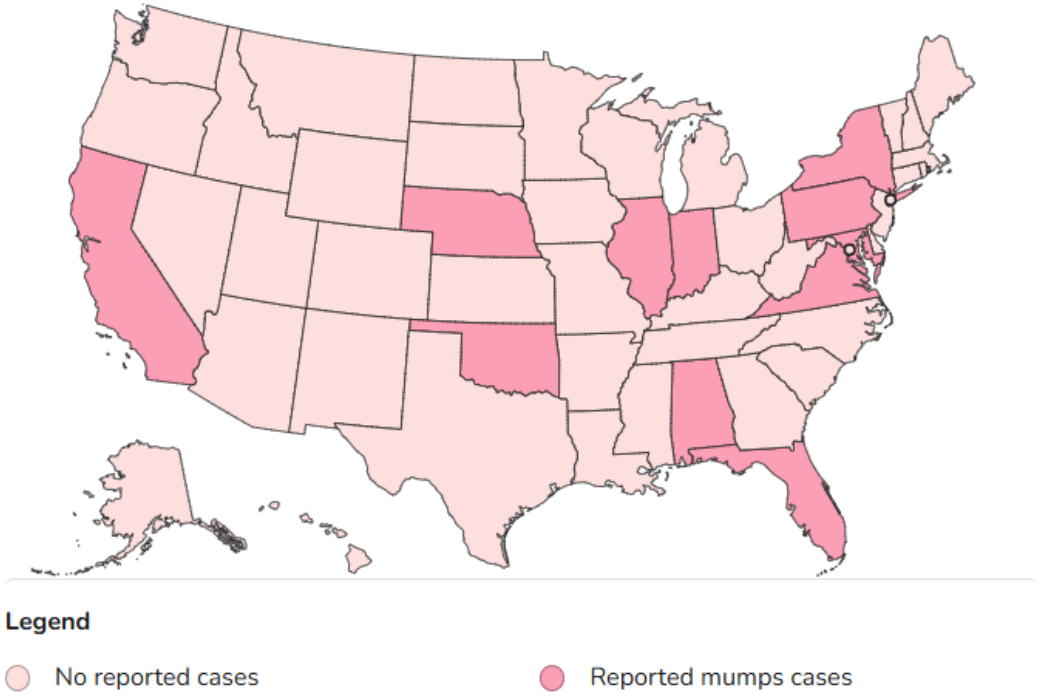
Signs/Symptoms: Swollen salivary glands, fever, low-grade fever, headache, fatigue

Complications: Deafness, meningitis, encephalitis, sterility, miscarriage, and myocarditis.

Measles, Mumps and Rubella (MMR): The Diseases & Vaccines | Children's Hospital of Philadelphia
What to Know About Mumps - HealthyChildren.org

Tracking Mumps Cases

2026 Reported U.S. Mumps Cases by Jurisdiction



[Mumps Cases and Outbreaks | Mumps | CDC]

February 27, 2026	
Case Count	34
Jurisdictions	11

Rubella

Microbe: Virus

Spread: Respiratory droplets

Signs/Symptoms: Low grade fever, swollen lymph nodes, headache, joint pain, maculopapular rash

Complications: Encephalitis, congenital rubella syndrome, and fetal death

Measles, Mumps and Rubella (MMR): The Diseases & Vaccines | Children's Hospital of Philadelphia
Rubella (German Measles): What Parents Need to Know - HealthyChildren.org

MMR Routine Vaccination: Pediatric

Routine

12-15 months

4-6 years

Catch-up Guidance:

- Unvaccinated: 2-dose series; at least 4-weeks apart

Travel Guidance:

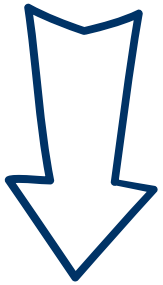
- 6-11 months → 1 dose MMR before international travel
- Doses received prior to 12 months old do not count towards two-dose series.

Destinations | Travelers' Health | CDC

MMR Routine Vaccination: Adults

Routine:

1 dose (if no evidence of immunity)



Evidence of Immunity

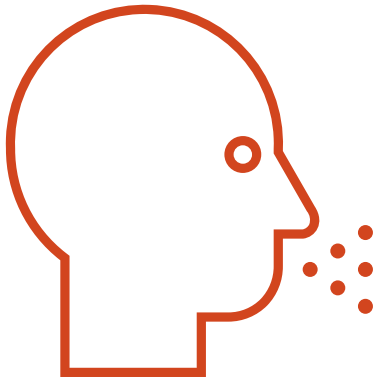
- Born before 1957 (except for health care workers)
- Documentation of MMR vaccine
- Laboratory evidence of immunity or disease

- Most adults already vaccinated
- Avoid during pregnancy and severe immunocompromise

adult-aafp-imm-schedule.pdf

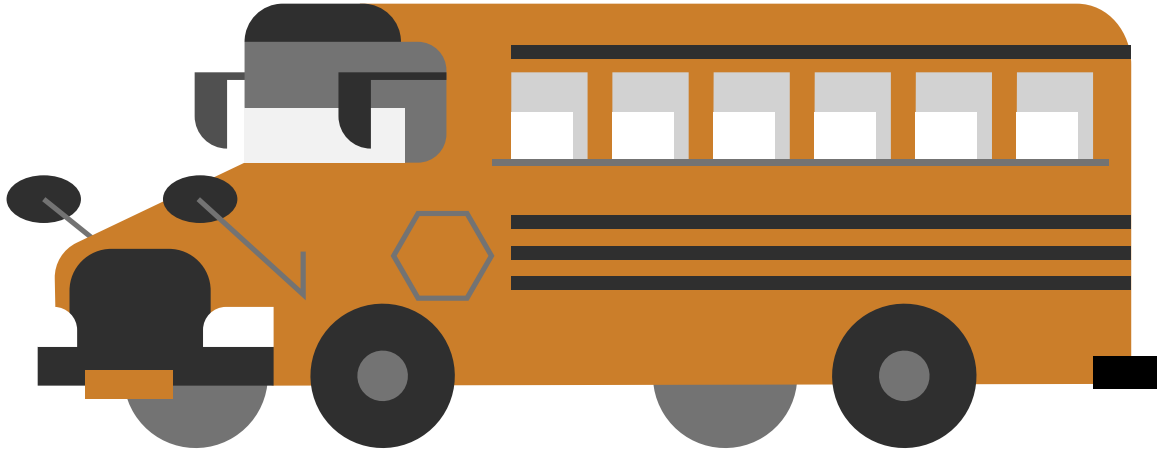
Varicella (Chickenpox)

How it spreads:



Airborne droplets

Direct contact



Incubation period (range): 10 - 21 days

Varicella (Chickenpox)

Common Symptoms:

- Rash
- Fever
- Headache
- Malaise

Complications:

- Secondary bacterial infection
- Pneumonia
- Encephalitis
- Neurological conditions (i.e., cerebellar ataxia)
- Hemorrhaging
- Death

Chickenpox | Boston Children's Hospital

Varicella (Chickenpox): The Disease & Vaccine | Children's Hospital of Philadelphia

Varicella (Chickenpox)

Varicella (Chickenpox): The Disease & Vaccine | Children's Hospital of Philadelphia

Varicella Vaccine Effectiveness

Vaccine Impact:

70-90%

95%

[Varicella-Zoster Virus (Chickenpox) - StatPearls - NCBI Bookshelf]

Vaccine Recommendations: Varicella

12-15 months

4-6 years

Catch-up Guidance:

Age	Minimum Interval
12 months – 12 years	3 months
13 years or older	4 weeks

Adult Recommendations: Varicella

2 doses if no evidence of immunity to varicella

→ 4-8 weeks apart

- U.S.-born before 1980*
- Documentation of 2 doses varicella-containing vaccine at least 4 weeks apart
- Diagnosis or verification of history of varicella or herpes zoster by a HCP
- Laboratory evidence of immunity or disease

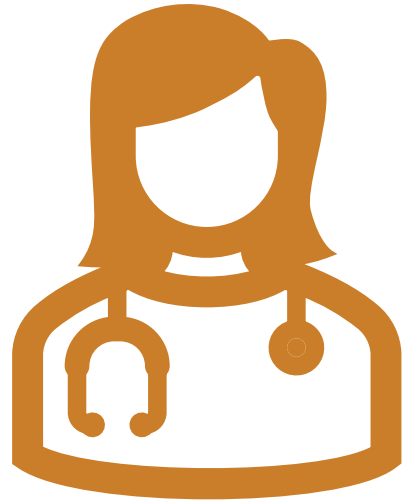
*(The Asterisk) on Adult Recommendations

Pregnant individuals with no evidence of immunity to varicella

- Administer 2 doses of varicella vaccine ***AFTER*** pregnancy before discharge

Health care personnel with no evidence of immunity to varicella

- Administer 2 doses of varicella vaccine.



Varicella Vaccine Side Effect

Post-vaccination rash is a rare vaccine side effect.

- Fewer than 5% of recipients develop a localized or generalized varicella-like rash 5 to 26 days after vaccination.
- Often rash only around vaccine injection site, but may appear elsewhere
- Usually only have 10-30 blisters
- Blisters can contain virus
  - Cover the rash and avoid contact with unprotected individuals until rash heals.

Varicella (Chickenpox): The Disease & Vaccine | Children's Hospital of Philadelphia

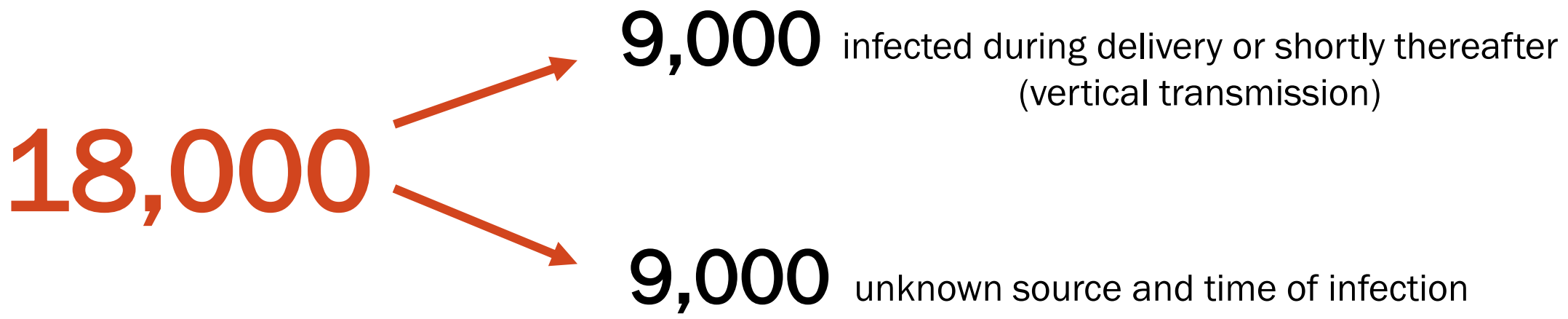
Immunize.org | Ask The Experts | Varicella

Hepatitis B

- Hepatitis B Virus (HBV) is part of the Hepadnaviridae family
  - Small, double-stranded DNA virus
  - Classified by serologic subtype and genotype with variations geographically

- *Transmission*: parenteral or mucosal exposure
  - HBV remains infectious for at least 7 days on environmental surfaces and is transmissible in the absence of visible blood

Hepatitis B: The Disease & Vaccine | Children's Hospital of Philadelphia



Feature Article: 9,000 Reasons for Routine Childhood Hepatitis B Vaccination | Children's Hospital of Philadelphia

Hepatitis B: The Disease & Vaccine | Children's Hospital of Philadelphia

Report: Hepatitis B vaccine safe; delaying would lead to increased infections | AAP News | American Academy of Pediatrics

Pediatric Hepatitis B Vaccine Recommendations

HBsAg-negative

- *Birth weight ≥2000 grams:* 1 dose w/in 24 hrs. of birth if medically stable
- *Birth weight <2000 grams:* 1 dose at chronological age 1 month or hospital discharge (whichever is earlier)

HBsAg-positive

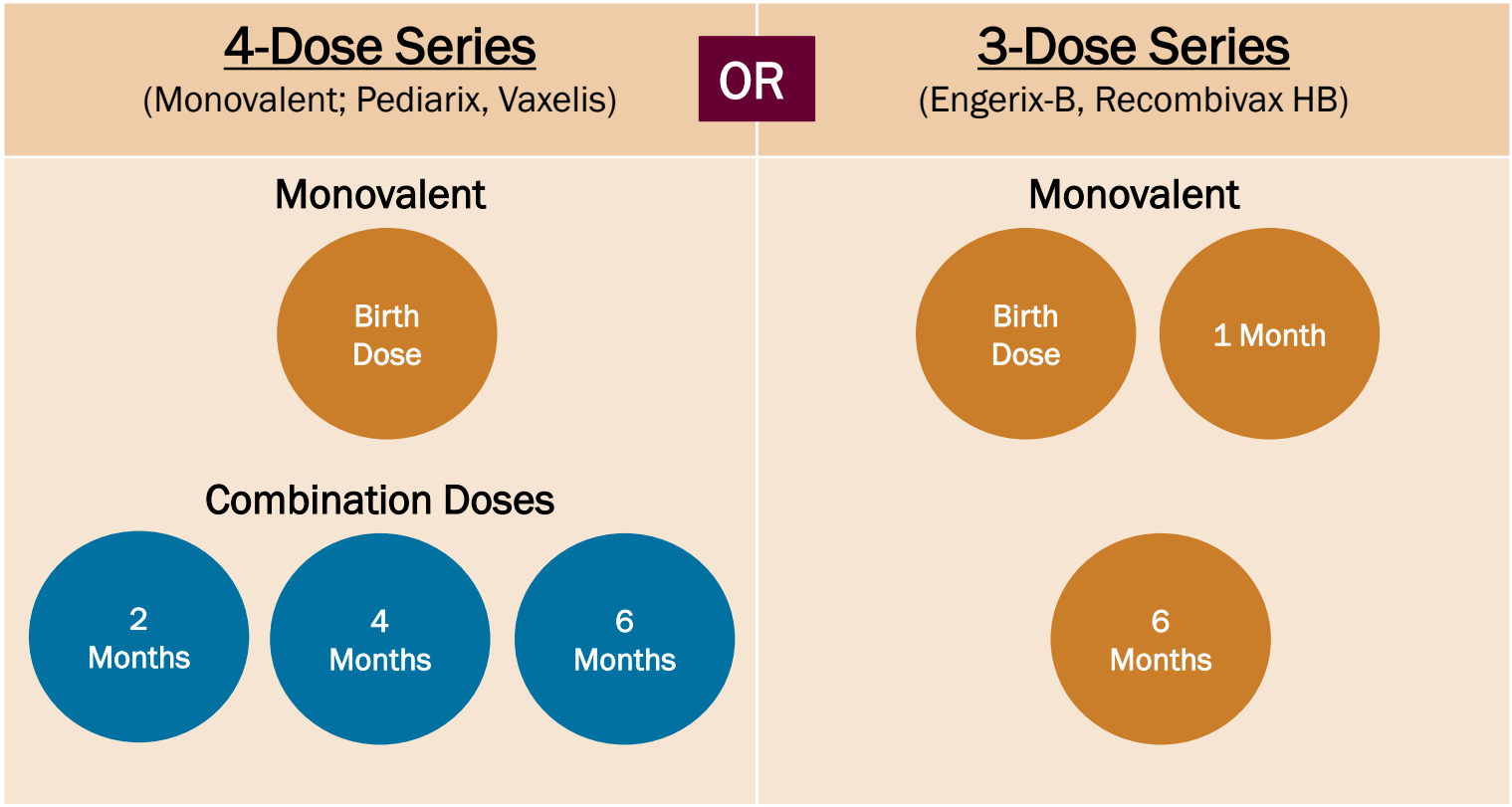
- Administer birth dose and HBIG within 12 hours of birth, regardless of birth weight.
  - *Birth weight <2000 grams:* See AAP recommendations for series guidance.

HBsAg-unknown

- See AAP recommendations for guidance

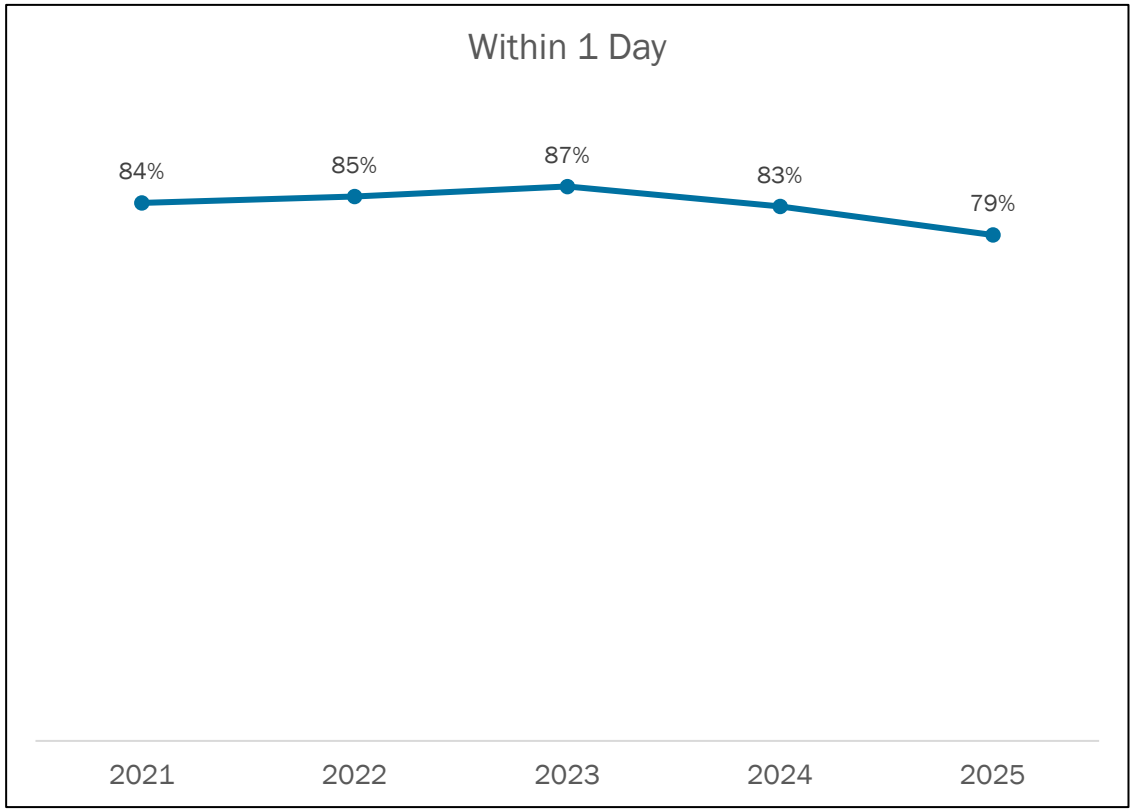
HepB: Vaccine Recommendations for Children

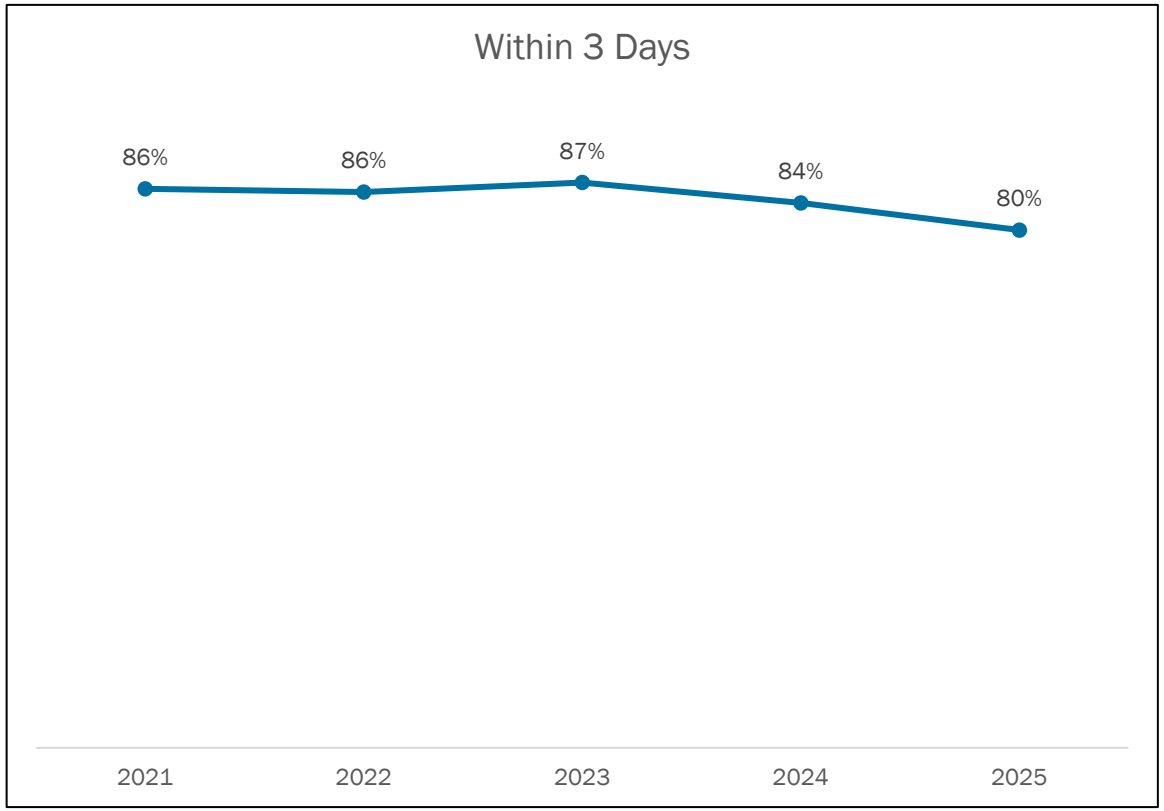
Birth dose



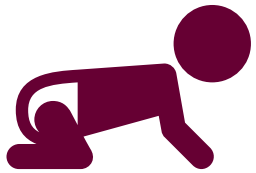
- AAP-Immunization-Schedule.pdf

The Data: Hepatitis B Birth Dose in Vermont



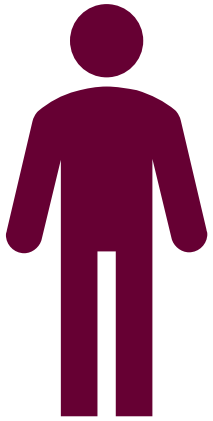


The Science: Hepatitis B Birth Dose



90%

(Age 1-4 yrs)
30%



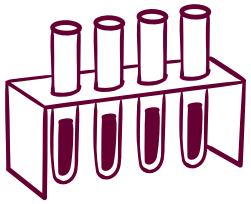
<5%

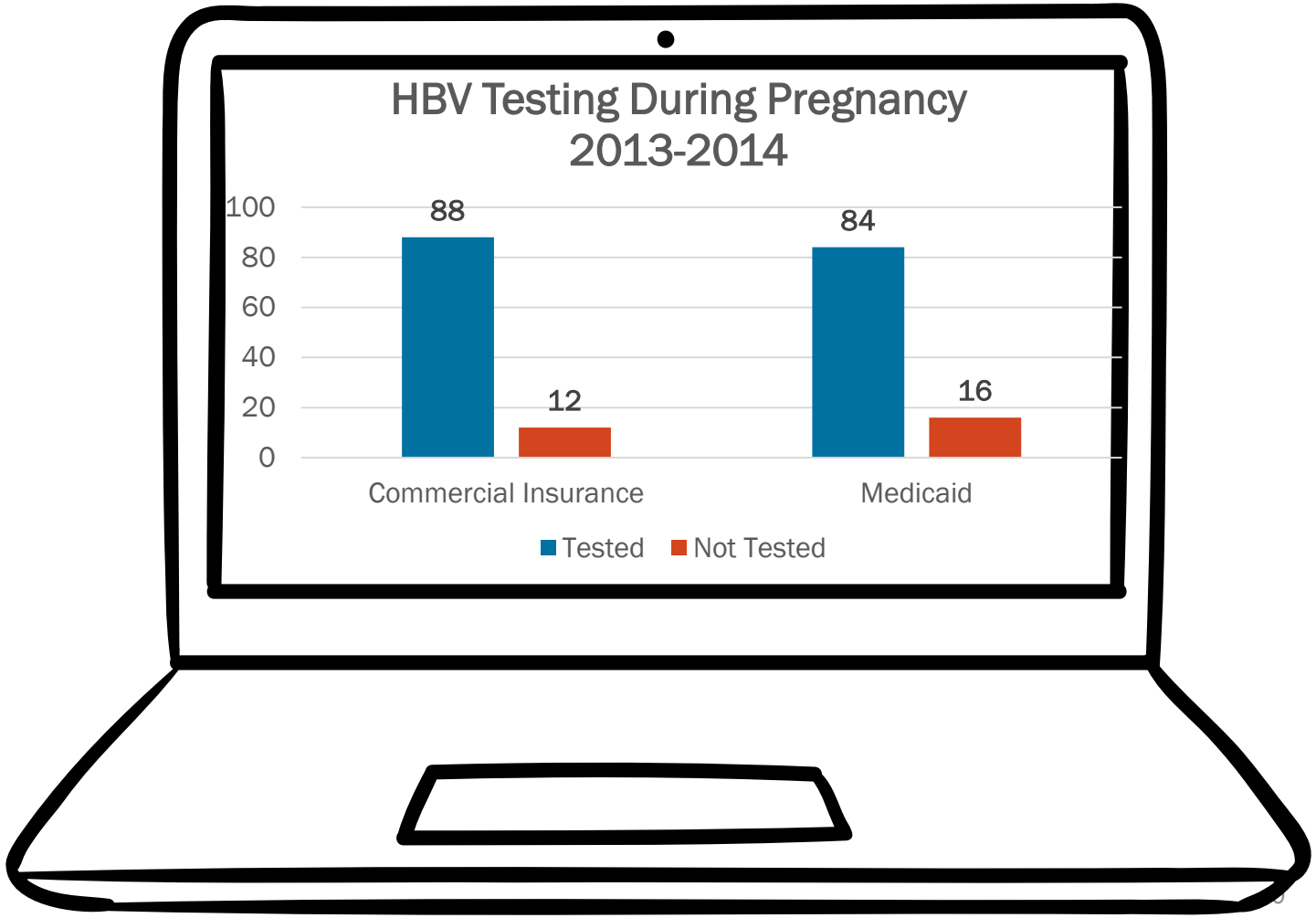
Sources:
Lernout, T., Hendrickx, G., Vorsters, A., Mosina, L., Emiroglu, N., & Van Damme, P. (2014). A cohesive European policy for hepatitis B vaccination, are we there yet? *Clinical Microbiology and Infection*, *20*, 19–24. https://doi.org/10.1111/1469-0691.12535

World Health Organization. (2025, July 23). Hepatitis B. https://www.who.int/news-room/fact-sheets/detail/hepatitis-b

Completing the Data Story: HBV Testing During Pregnancy

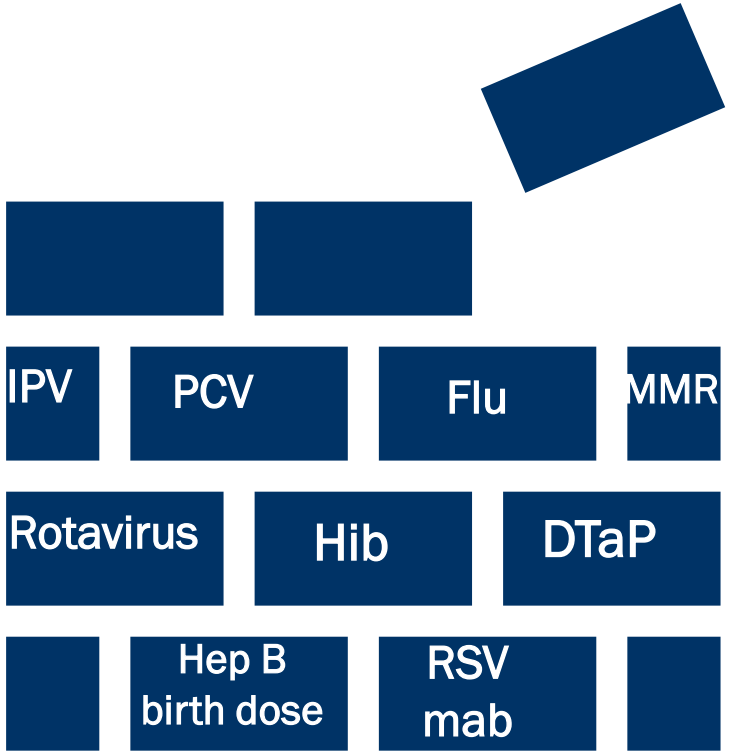
1996





https://www.ncbi.nlm.nih.gov/books/NBK544663/

Completing the Data Story: Setting a Foundation



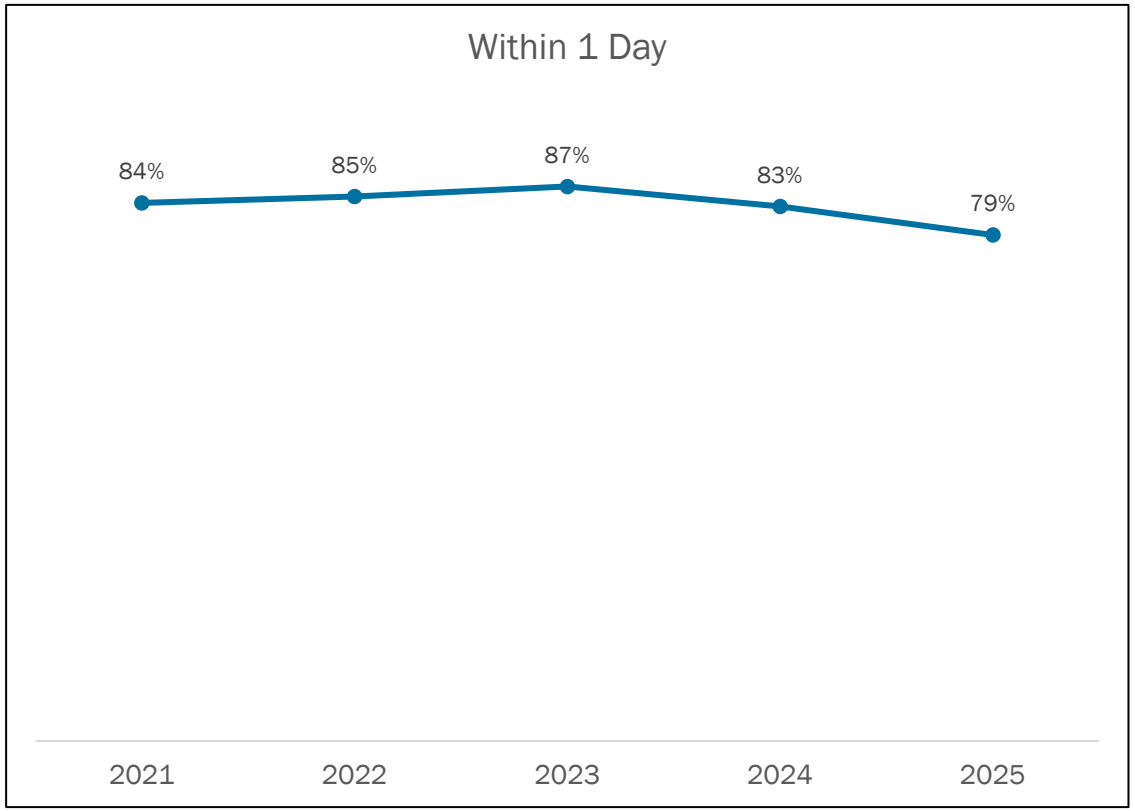
- National research demonstrates that birth dose acceptance/declination predicts future vaccine uptake.
  - Infants who received Hep B birth within 3 days of birth had nearly 3x greater odds of being up to date on their vaccines by 19 months of age
- Parents are building vaccine confidence at this stage.

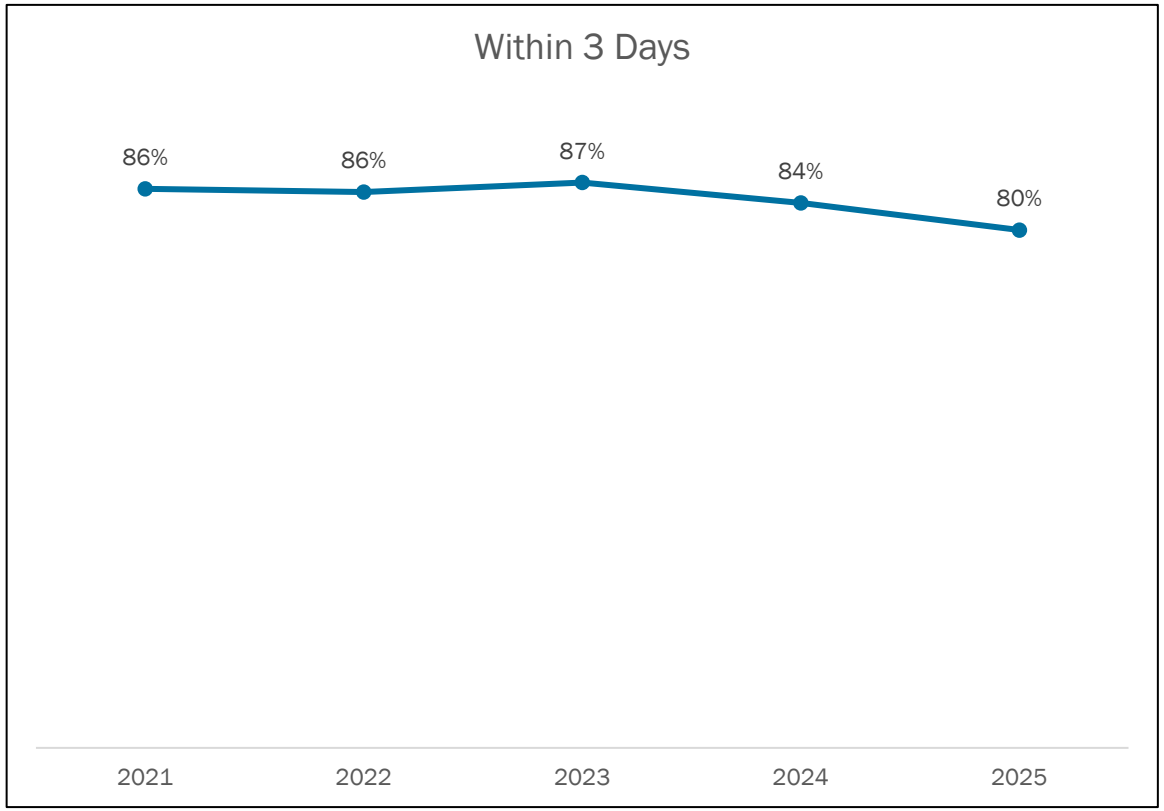
Rhode Island Immunization Program Research Alert: Impacts of Declining Hepatitis B Vaccine Birth Dose on Future Immunization Uptake

Hepatitis B Birth Dose: First Shot at Timely Early Childhood Vaccination – PMC

Missed hepatitis B birth dose vaccine is a risk factor for incomplete vaccination at 18 and 24 months - Journal of Infection

The Data: Hepatitis B Birth Dose in Vermont





Adult Hepatitis B Vaccine Recommendations

Universal

19 - 59 years

Risk-based

60 yrs+ with known risk factors

Risk Factors:

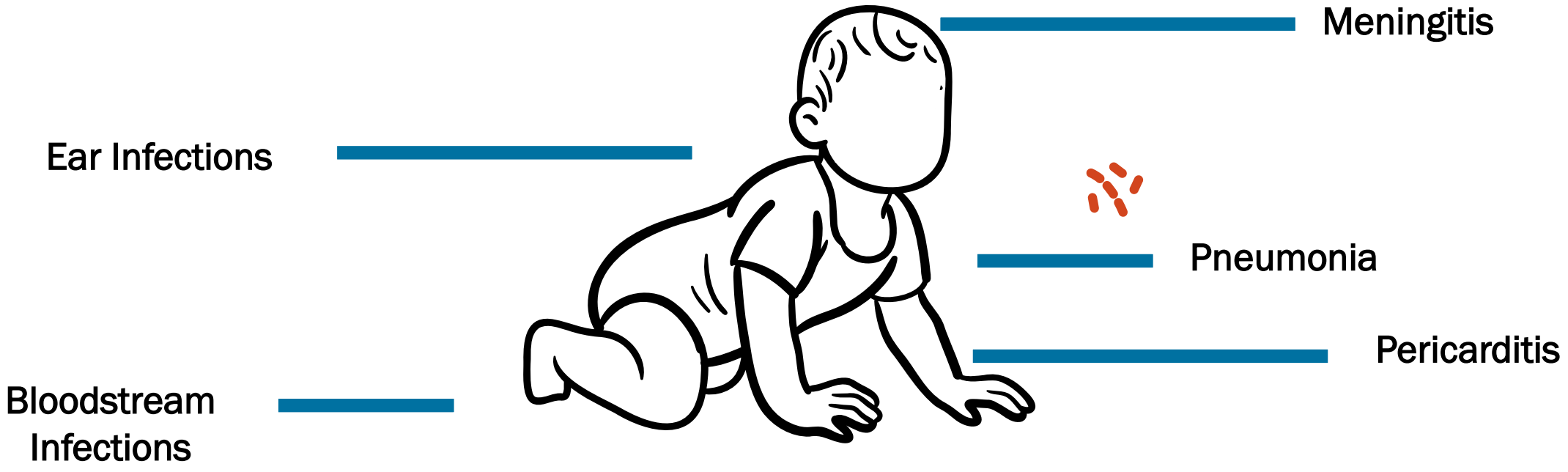
- Chronic liver disease
- HIV infection
- Sexual exposure risk
- Current or recent injection drug use
- Percutaneous or mucosal risk for exposure
- Incarceration
- Travel in countries with high/intermediate

Shared clinical decision making

Any adult 60 yrs+ who requests HepB vaccination.

Age 60 yrs+ with diabetes

Haemophilus Influenzae Type B (Hib)



Haemophilus influenzae Infections | Red Book: 2021–2024 Report of the Committee on Infectious Diseases | Red Book Online | American Academy of Pediatrics

Hib: Vaccine Recommendations for Children

4-Dose Series

(ActHIB, Hiberix, Pentacel, Vaxelis)

Primary Series

- 2 Months
- 4 Months
- 6 Months

+ Booster Dose (not Vaxelis)

- 12-15 Months

OR

3-Dose Series

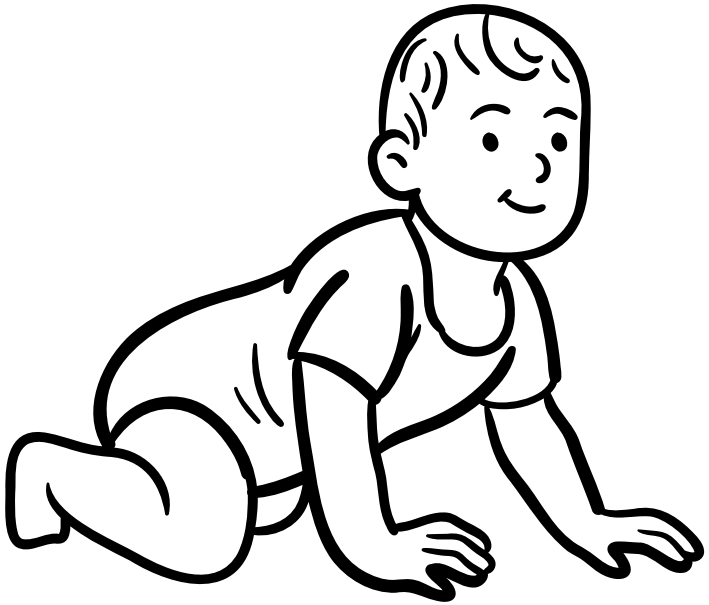
(PedvaxHIB)

Primary Series

- 2 Months
- 4 Months

+ Booster Dose

- 12-15 Months



[Haemophilus influenzae Type b Vaccine Immunogenicity in American Indian/Alaska Native Infants | Pediatrics | AAP]

Hib Catch-Up and Special Considerations

Catch-up Guidance:

- Less than 15 months: Based on age and prior doses
- 15-59 Months: 1-dose
- 5 Years or older: not routinely recommended

American Academy of Pediatrics
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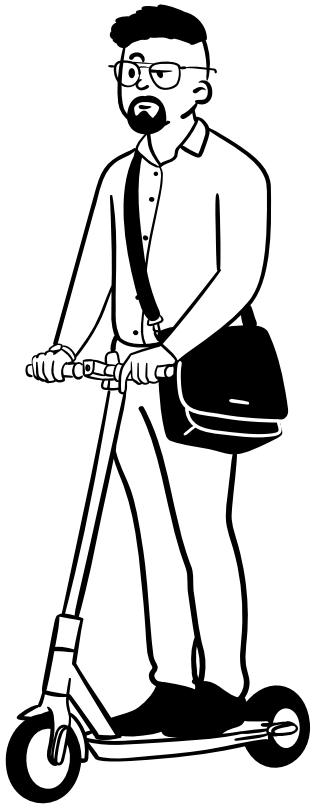
2026 AAP Pediatric Immunization Schedule

Special Considerations:

- Chemotherapy
- Hematopoietic cell transplant
- Anatomic or functional asplenia
- Splenectomy
- HIV
- Immunodeficiency

AAFP

2026 AAFP Adult Immunization Schedule



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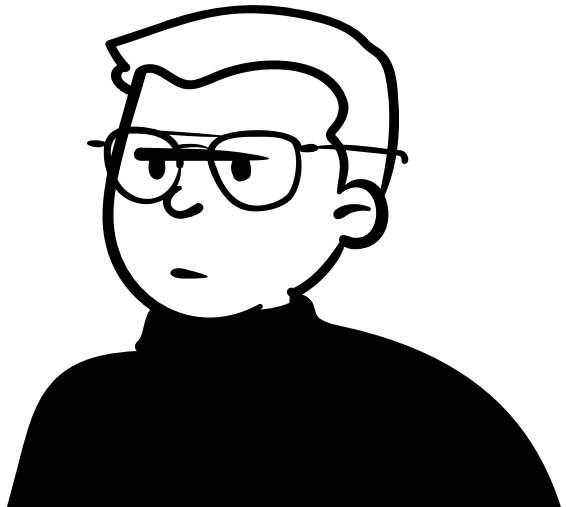
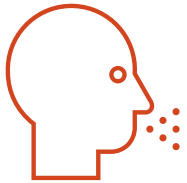
Will the vaccine cause Hib disease?

Why does Billy need Hib? He already received the flu vaccine this year.



Pertussis (Whooping Cough)



Caused by bacterium *Bordetella pertussis*

- Spread through person-to-person contact respiratory droplets or contact with airborne droplets of respiratory secretions

What is That Sound? Whooping Cough

Three stages:

- *First:* mild cough, runny nose, low-grade fever
  - Lasts 1-2 weeks
- *Second:* worsening coughs, severe coughing fits, dry/harsh cough, "whooping" cough, may vomit with coughing
  - Newborns/young infants have trouble breathing – may not have strength to have a whooping cough but they can have bursts/paroxysms that cause trouble breathing
  - Lasts 1-6 weeks
- *Third:* vomiting and whooping cough cease, cough decreases but can continue for next 1-2 months

Most common complication is secondary bacterial pneumonia

Pertussis (Whooping Cough) | Children's Hospital of Philadelphia

Pertussis (DTaP/Tdap) Vaccine Recommendations: Children

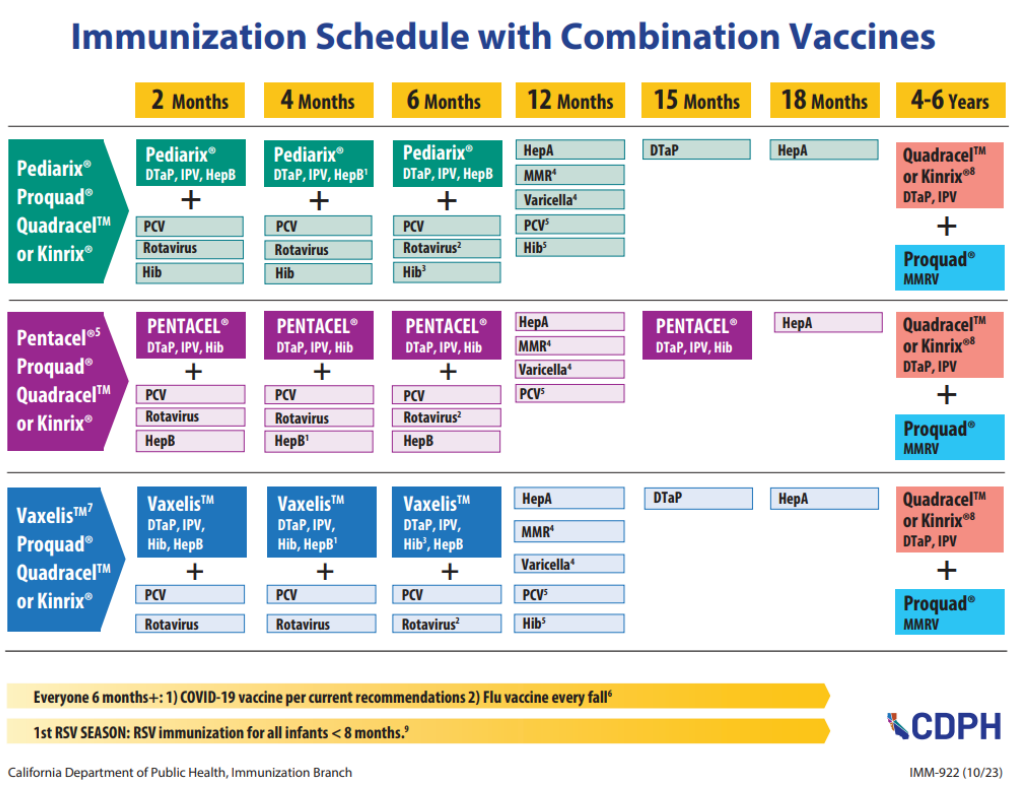
DTaP (Daptacel, Infanrix)
(Combination vaccines: Kinrix, Pediarix, Pentacel, Quadracel, Vaxelis)

- 2 months
- 4 months
- 6 months
- 15 - 18 months
- 4 - 6 years

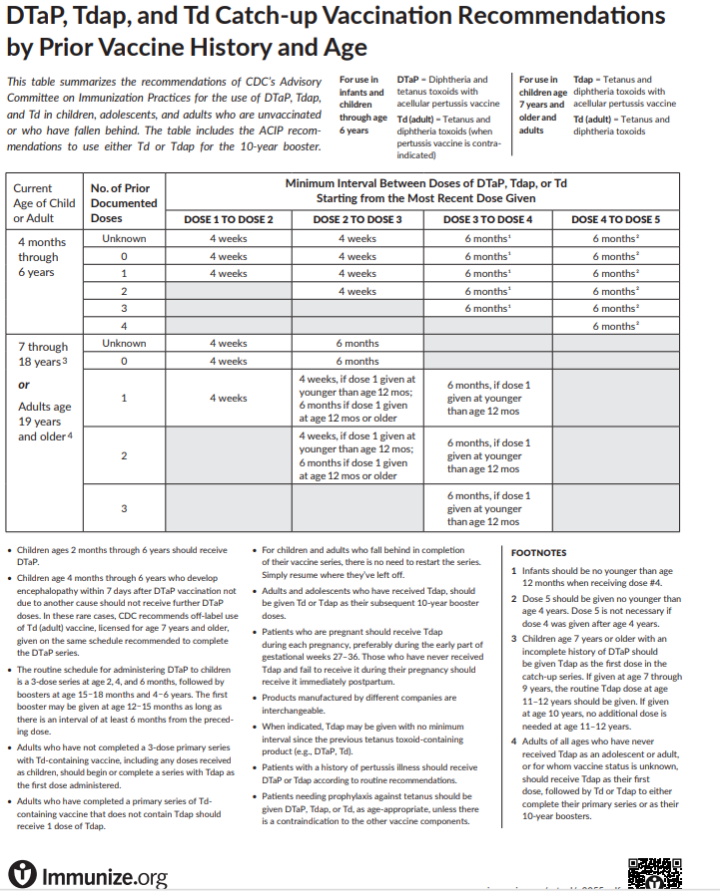
Tdap
(Adacel, Boostrix)

- 11 - 12 years

Pertussis (DTaP/Tdap) Vaccination Clinical Resources



[IMM-922 Immunization Schedule with Combination Vaccines (ADA)]



DTaP, Tdap, and Td Catch-up Vaccination Recommendations by Prior Vaccine History and Age

This table summarizes the recommendations of CDC's Advisory Committee on Immunization Practices for the use of DTaP, Tdap, and Td in children, adolescents, and adults who are unvaccinated or who have fallen behind. The table includes the ACIP recommendations to use either Td or Tdap for the 10-year booster.

For use in infants and children through age 6 years
DTaP = Diphtheria and tetanus toxoids with acellular pertussis vaccine
Td (adult) = Tetanus and diphtheria toxoids (when pertussis vaccine is contraindicated)

For use in children age 7 years and older and adults
Tdap = Tetanus and diphtheria toxoids with acellular pertussis vaccine
Td (adult) = Tetanus and diphtheria toxoids

Current Age of Child or Adult	No. of Prior Documented Doses	Minimum Interval Between Doses of DTaP, Tdap, or Td Starting from the Most Recent Dose Given			
		DOSE 1 TO DOSE 2	DOSE 2 TO DOSE 3	DOSE 3 TO DOSE 4	DOSE 4 TO DOSE 5
4 months through 6 years	Unknown	4 weeks	4 weeks	6 months[1]	6 months[2]
	0	4 weeks	4 weeks	6 months[1]	6 months[2]
	1	4 weeks	4 weeks	6 months[1]	6 months[2]
	2		4 weeks	6 months[1]	6 months[2]
	3			6 months[1]	6 months[2]
	4				6 months[2]
7 through 18 years[3] *or* Adults age 19 years and older[4]	Unknown	4 weeks	6 months		
	0	4 weeks	6 months		
	1	4 weeks	4 weeks, if dose 1 given at younger than age 12 mos; 6 months if dose 1 given at age 12 mos or older	6 months, if dose 1 given at younger than age 12 mos	
	2		4 weeks, if dose 1 given at younger than age 12 mos; 6 months if dose 1 given at age 12 mos or older	6 months, if dose 1 given at younger than age 12 mos	
	3			6 months, if dose 1 given at younger than age 12 mos	

- Children ages 2 months through 6 years should receive DTaP.
- Children age 4 months through 6 years who develop encephalopathy within 7 days after DTaP vaccination not due to another cause should not receive further DTaP doses. In these rare cases, CDC recommends off-label use of Td (adult) vaccine, licensed for age 7 years and older, given on the same schedule recommended to complete the DTaP series.
- The routine schedule for administering DTaP to children is a 3-dose series at age 2, 4, and 6 months, followed by boosters at age 15–18 months and 4–6 years. The first booster may be given at age 12–15 months as long as there is an interval of at least 6 months from the preceding dose.
- Adults who have not completed a 3-dose primary series with Td-containing vaccine, including any doses received as children, should begin or complete a series with Tdap as the first dose administered.
- Adults who have completed a primary series of Td-containing vaccine that does not contain Tdap should receive 1 dose of Tdap.
- For children and adults who fall behind in completion of their vaccine series, there is no need to restart the series. Simply resume where they've left off.
- Adults and adolescents who have received Tdap, should be given Td or Tdap as their subsequent 10-year booster doses.
- Patients who are pregnant should receive Tdap during each pregnancy, preferably during the early part of gestational weeks 27–36. Those who have never received Tdap and fail to receive it during their pregnancy should receive it immediately postpartum.
- Products manufactured by different companies are interchangeable.
- When indicated, Tdap may be given with no minimum interval since the previous tetanus toxoid-containing product (e.g., DTaP, Td).
- Patients with a history of pertussis illness should receive DTaP or Tdap according to routine recommendations.
- Patients needing prophylaxis against tetanus should be given DTaP, Tdap, or Td, as age-appropriate, unless there is a contraindication to the other vaccine components.

FOOTNOTES

1 Infants should be no younger than age 12 months when receiving dose #4.
2 Dose 5 should be given no younger than age 4 years. Dose 5 is not necessary if dose 4 was given after age 4 years.
3 Children age 7 years or older with an incomplete history of DTaP should be given Tdap as the first dose in the catch-up series. If given at age 7 through 9 years, the routine Tdap dose at age 11–12 years should be given. If given at age 10 years, no additional dose is needed at age 11–12 years.
4 Adults of all ages who have never received Tdap as an adolescent or adult, or for whom vaccine status is unknown, should receive Tdap as their first dose, followed by Td or Tdap to either complete their primary series or as their 10-year boosters.

Immunize.org

[DTap, Tdap, and Td Catch-up Vaccination Recommendations by Prior Vaccine History and Age]

Pertussis (Tdap) Vaccine Recommendations: Adults

Completed primary series

Received 1 dose Tdap at age 10 years or older

↓

Tdap/Td every 10 years

Did not receive 1 dose Tdap at age 10 years or older

↓

1 dose Tdap now then Tdap/Td every 10 years

Unvaccinated or incomplete primary vaccination series:

- Administer remaining doses to complete 3-dose primary series.
  - Tdap/Td every 10 years

AAFP

adult-aafp-imm-schedule.pdf

Tdap Vaccination During Pregnancy

- Goal: Help protect pregnant individual and baby against pertussis (whooping cough).
- Vaccinate between 27-36 weeks of pregnancy.
  - Takes approximately 2 weeks to develop antibodies
  - Provides short term protection against serious complications of whooping cough until baby can be vaccinated at 2 months old,
    - About 7 in 10 deaths from whooping cough are among babies younger than 2 months old.
- Lowers risk of whooping cough in babies younger than 2 months by 78%.
- Vaccinate during each pregnancy.

Whooping Cough (Pertussis) – NFID

Looking Ahead

Varicella

Hep B

Measles, Mumps, Rubella

Pertussis

Hib

Opportunity for Feedback

Questions

VERMONT
DEPARTMENT OF HEALTH

Thank you!

Let's stay in touch

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