

Vaccine update Fall 2026

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Disclosures

- I have no financial disclosures or conflicts of interest relevant to this presentation.

Objectives

- Review current measles outbreak in US
- Learn how to recognize, diagnose, and respond to measles cases
- Discuss recent actions related to federal vaccine policy
- Describe current AAP and medical society vaccine recommendations
 - Regular schedule
 - Respiratory season vaccines

Review current measles outbreak
in US

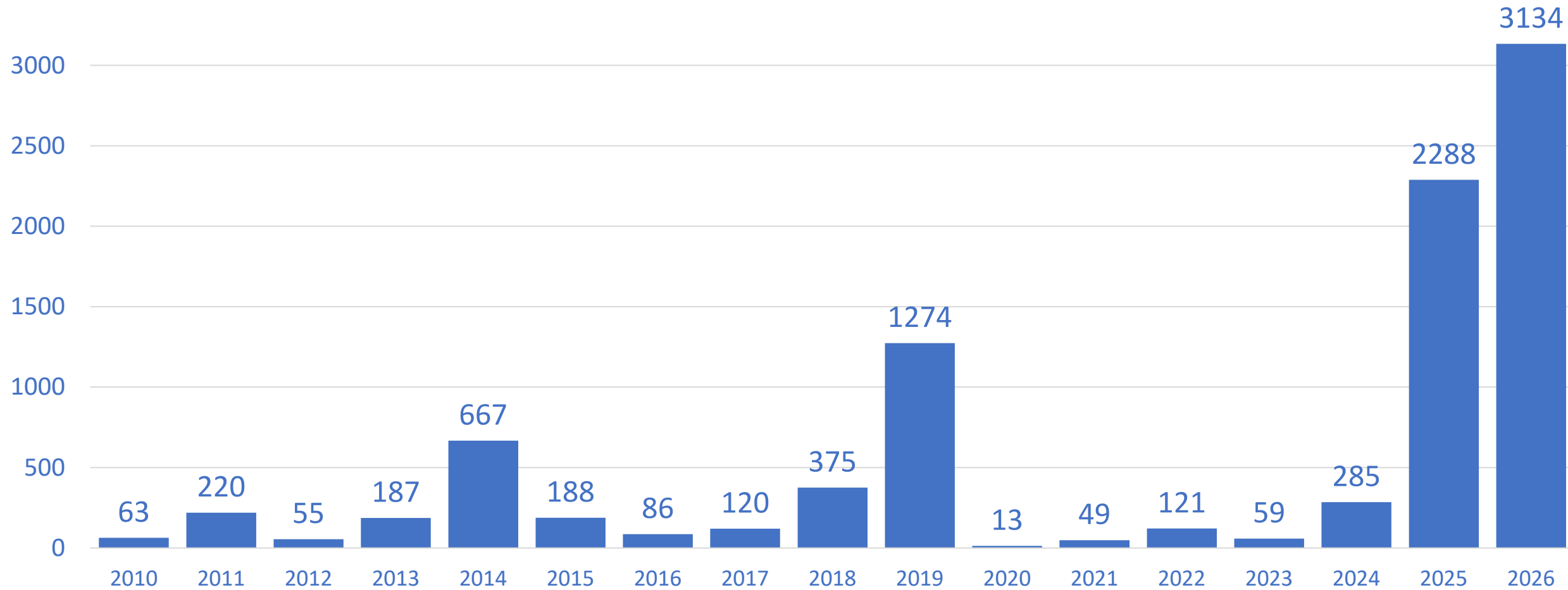
A three-year-old boy comes into your clinic / ED for a sick visit. His chief complaint is **fever**.

When the patient is triaged and roomed, it becomes clear that he **also has a rash**.

After seeing the patient, your colleague tells you that he is **coughing** and has some **rhinorrhea**. His temperature is 39.2.

They ask you if this patient could have **measles**.

Number of Measles Cases in the US Reported by Year 2010-2026*

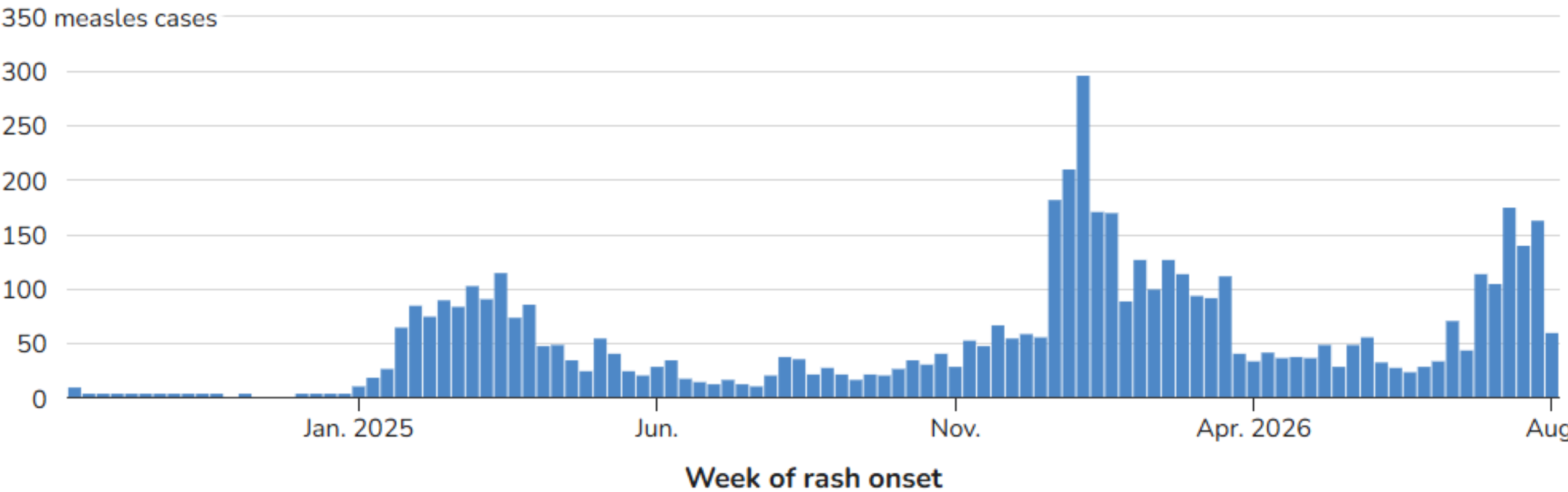


*Cases as of 9/4/2026. Case count is preliminary and subject to change.

Source: Center for Disease Control and Prevention: <https://www.cdc.gov/measles/data-research/>

Weekly measles cases by rash onset date

2022–2026* (as of September 3, 2026)



	2026 To date	2025 Full year
Total Cases	3,134	2,289
Age		
Under 5 years	575 (18%)	584 (26%)
5-19 years	1,418 (45%)	1,018 (44%)
20+ years	1,127 (36%)	674 (29%)
Age unknown	14 (less than 1%)	13 (1%)
Vaccination Status		
Unvaccinated or Unknown	94%	93%
One MMR dose	3%	3%
Two MMR doses	3%	4%

Source: Center for Disease Control and Prevention:
<https://www.cdc.gov/measles/data-research/>
Updated 9/4/26

	2026	2025
Total Hospitalized	8% (248 of 3,134 cases)	11% (244 of 2,289 cases)
Percent of Age Group Hospitalized		
Under 5 years	11% (61 of 575)	18% (106 of 584)
5-19 years	4% (55 of 1,418)	6% (58 of 1,018)
20+ years	12% (132 of 1,127)	12% (80 of 674)
Age unknown	0% (0 of 14)	0% (0 of 13)

2025-2026 Measles Cases

United States, Canada, and Mexico

Filter by Date
Jurisdictions that reported case...

Filter by US State(s)
No category selected

Legend



Scroll to view all legend items.

Measles Cases

2025-2026 Case Count

- 2,000 - 8,000
- > 1,000 - 2,000
- > 700 - 1,000
- > 250 - 700
- > 100 - 250
- > 50 - 100
- > 10 - 50
- > 3 - 10
- 1 - 3

Immunization Coverage

Immunization Coverage

- > 95 - 100
- > 90 - 95
- > 1 - 90
- No data

Confirmed Measles Cases Map

Search for specific locations
using the magnifying glass icon below.

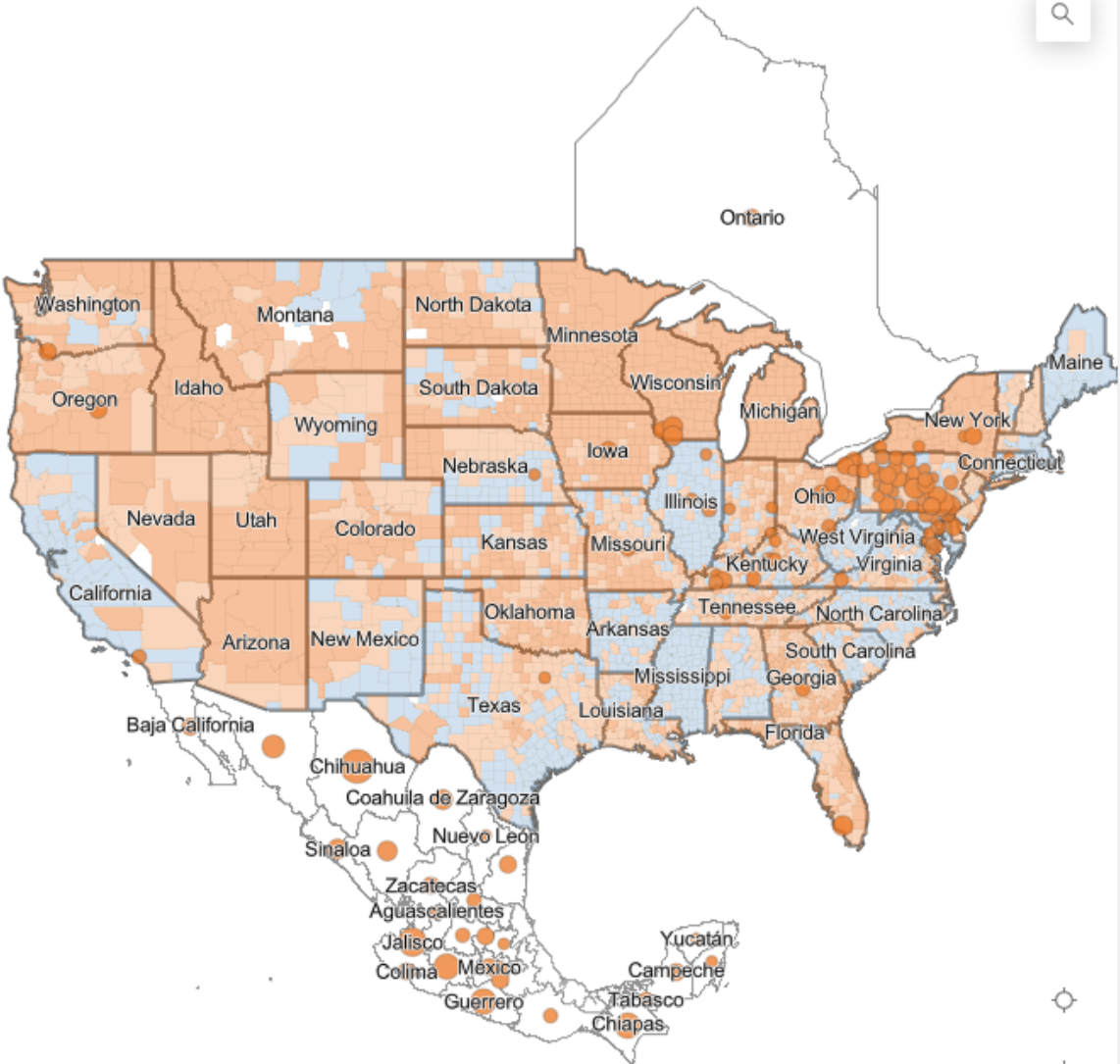


Table of US Measles Cases & Deaths

State	2025 + 202...	2025+2026...	2026 Confir...	2026 Proba...	2026 Deaths
Pennsylvania	578	0	572	0	2
Wisconsin	157	0	157		
Ohio	127	0	96	0	
Florida	96	14	96	14	
Oregon	46	0	46	0	
Maryland	42	0	40	0	
Kentucky	35	0	34		
New York	33	0	33		
Delaware	23	0	23	0	
Iowa	21		21		
Washington	19	0	19		
Illinois	8	0	8		
Indiana	8	0	8		
Georgia	8		8		
Virginia	8	0	8		
California	9	0	7		
Missouri	5	0	5		
Connecticut	3	0	3		
Tennessee	3	0	3		
Nebraska	2	0	2		
Texas	2	0	1		
Total	1,233	14	1,190	14	2

[https://cori.centerforhealthsecurity.org/
outbreak/measles-dashboard/](https://cori.centerforhealthsecurity.org/outbreak/measles-dashboard/)

To suggest data or provide feedback, please fill this [form](#).

2025-2026 data are preliminary. Cases are assigned based on available information (when symptoms began, when test

Measles epidemiology- 9/9/26

- US:
 - South Carolina outbreak ended late April, >1000 total cases
 - Utah/Arizona outbreak ended with almost 1000 cases
 - Large active outbreaks in Pennsylvania, Wisconsin, Florida, Oregon
- Canada:
 - 1,119 cases in 2026
 - Highest numbers in Alberta, Manitoba, recent cases Ontario
- Mexico:
 - >12,000 confirmed cases in 2026, more probable cases
 - Highest numbers in Jalisco, Chiapas, Ciudad de Mexico
- 2025-26 Canadian, US, and Mexico outbreaks are linked

Local and regional measles epidemiology- 7/28/26

- Colorado: 24 cases so far
 - 22 unvaccinated
 - 6 hospitalized
 - 0-4 years: 4
 - 5-17 years: 15
- ~10 cases associated with Broomfield outbreak: 2 schools involved
 - Index case without history of travel
- *Most* other cases with international or US travel to other places with outbreaks

Gift link: https://www.nytimes.com/2025/06/22/us/i-feel-like-ive-been-lied-to-when-a-measles-outbreak-hits-home.html?unlocked_article_code=1.xlA.sbUU.uT1SH0NzMhB7&smid=url-share

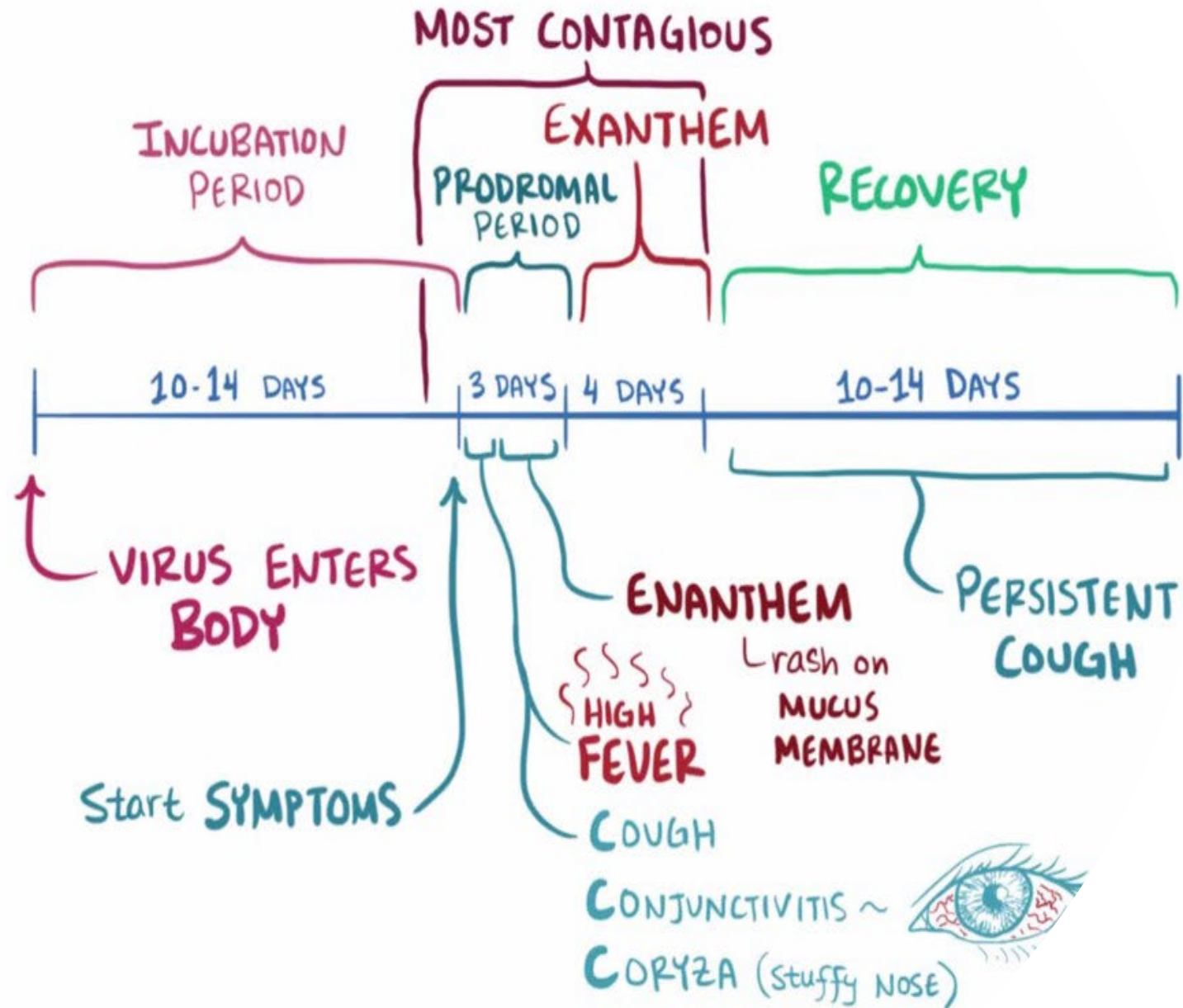
Regular link: <https://www.nytimes.com/2025/06/22/us/i-feel-like-ive-been-lied-to-when-a-measles-outbreak-hits-home.html>

‘I Feel Like I’ve Been Lied To’: When a Measles Outbreak Hits Home

From a lone clinic in Texas to an entire school district in North Dakota, the virus is upending daily life and revealing a deeper crisis of belief.



Learn how to recognize,
diagnose, and respond to
measles cases



Measles symptoms

Long incubation

Contagious 4 days *before* rash

Koplik spots are uncommon

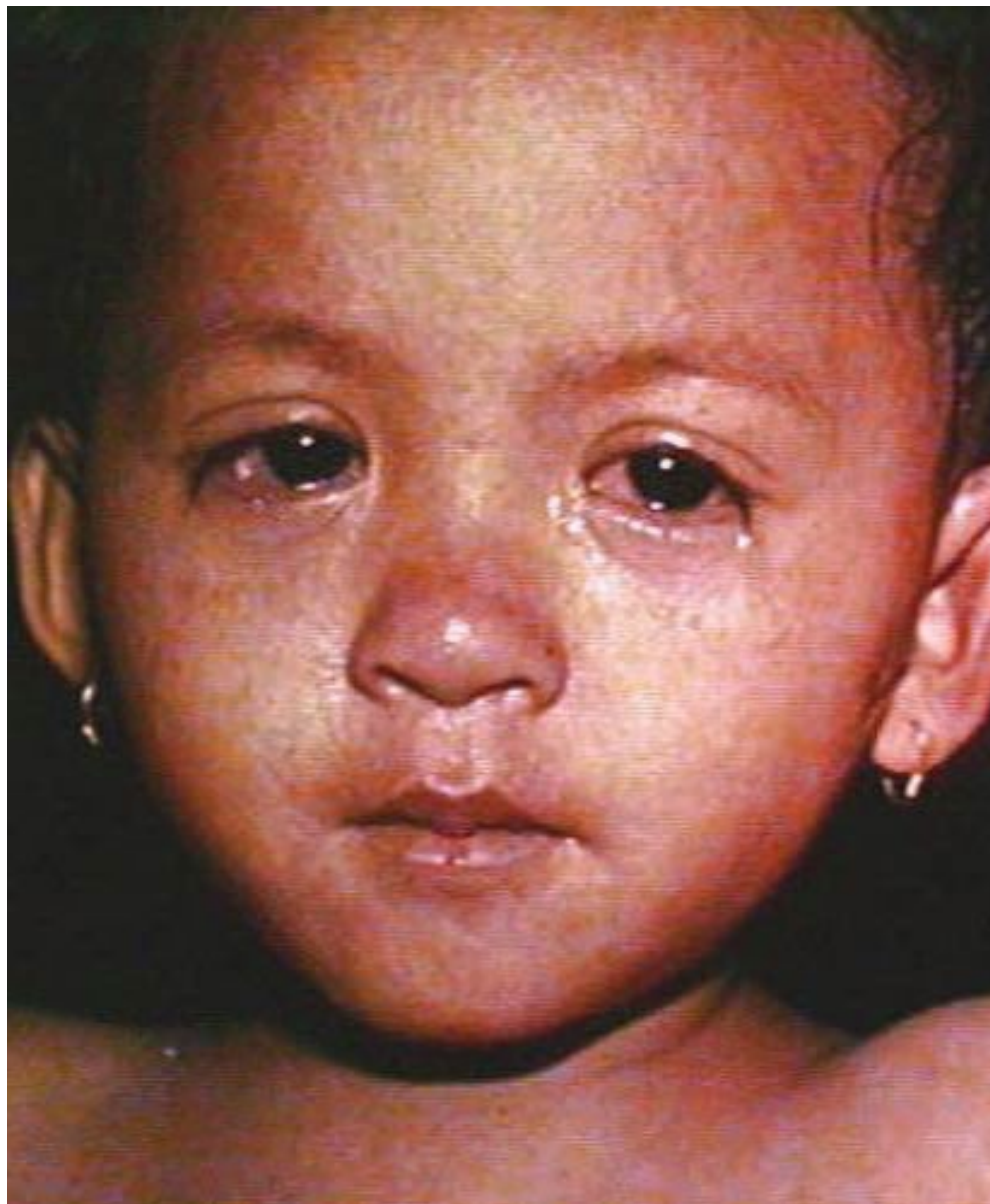
Rash:

- Starts on forehead, sometimes behind ears, then spreads downward
- Maculopapular → confluent





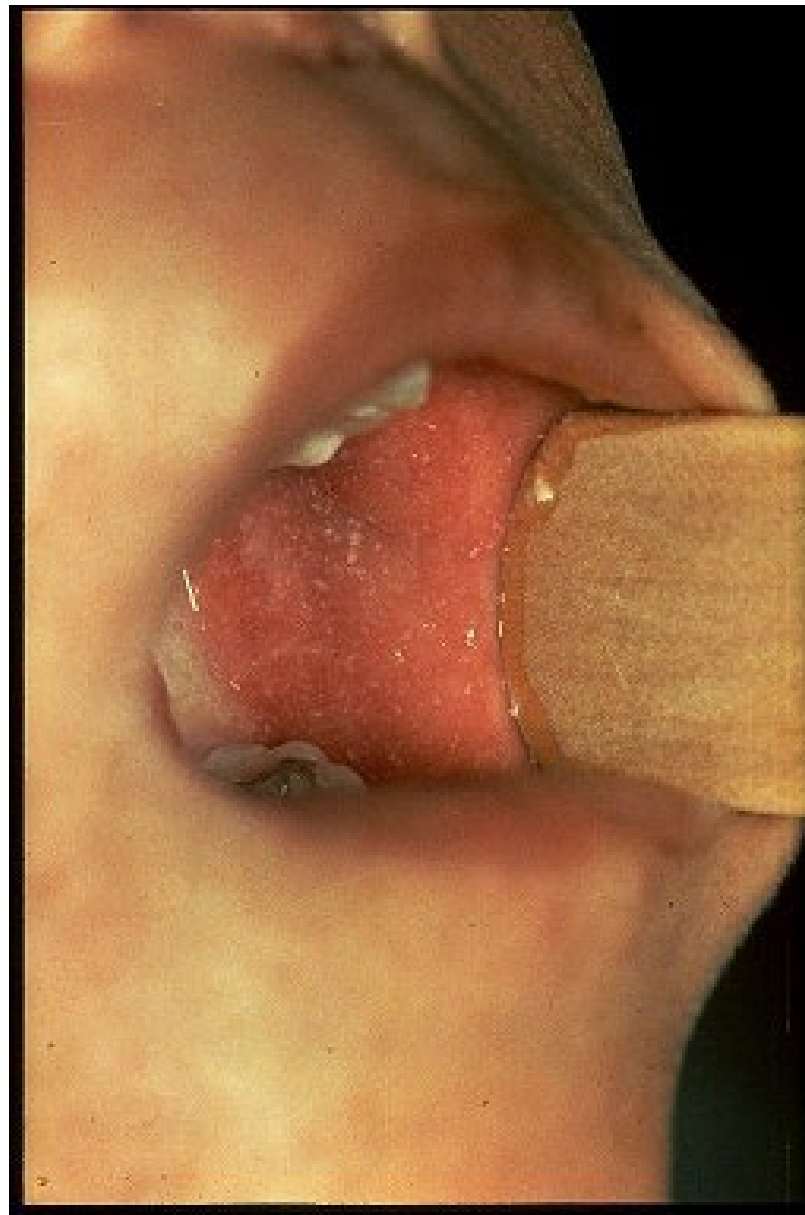
American Academy of Pediatrics Red Book Atlas of
Pediatric Infectious Diseases, AAP 2023.



Centers for Disease Control and Prevention. Photos of Measles and People with Measles.
<https://www.cdc.gov/measles/symptoms/photos.html>



Immunize.org. Photo Library: Measles photos.
<https://www.vaccineinformation.org/photos/measles/>
Courtesy of Centers for Disease Control and Prevention



Immunize.org. Photo Library: Measles photos.
<https://www.vaccineinformation.org/photos/measles/>
Courtesy of Centers for Disease Control and Prevention

IDENTIFY:

Assess History and Epidemiologic Risk factors

- History
 - Fever, cough, coryza, conjunctivitis, followed by rash
 - Rash starting on head, consistent appearance & time course
- Epidemiologic risk factors:
 - Exposure to known measles case
 - International travel or travel within US to areas with known measles cases (check public health websites)
 - Has received fewer than 2 doses of MMR vaccine
 - Immune compromised- may have atypical presentation, less prominent rash

☐ 1. Does the patient have a fever (38.5 C or higher or subjective fever) in ED or at home?	i
☐ 2. Does the rash have any of the following clinical characteristics? • Preceded by cough, red eyes (conjunctivitis), or runny nose (coryza) • Fever overlapping with rash • Rash starting on head or face	
☐ 3. Does the patient have any of the following clinical symptoms? • Cough • Red eyes (conjunctivitis) • Runny nose (coryza)	
☐ 4. Is patient unvaccinated against measles?	i
☐ 5A. Patient exposure to a known measles case?	i
☐ 5B. Patient exposure suspected measles case?	i
☐ 6. Travel (international or within US to areas with measles cases; note this may include some counties on Colorado) or other known high-risk exposure in past 21 days?	i
☐ 7. Is the patient immunocompromised?	

After downloading app/going to website, choose 'Children's Hospital Colorado' setting

Download Firstline on Mobile

Scan the QR code with your device



**Measles
Mimickers:**
consider age,
history, rash
morphology

Infectious

- Roseola
- Enterovirus (hand-foot-mouth)
- EBV/CMV
- Scarlet fever
- Adenovirus
- Parvovirus
- Varicella
- Rickettsial disease
- HIV acute retroviral syndrome

Non-infectious

- Urticaria
- Atopic dermatitis
- **Kawasaki Disease**
- Drug reaction /
DRESS / Stevens
Johnson Syndrome

Kawasaki Disease may
be most difficult to
distinguish: red eyes,
red mouth, fever, rash

A three-year-old boy with a chief complaint of **fever**. He also has a **rash**, is **coughing** and has **rhinorrhea**. His temperature is 39.2. Your colleague asks you if this patient could have measles.

- Has **received 1 MMR. Recent international travel.**
- Fever started 3 days ago; **still febrile with rash**
- **Morbilliform rash started on forehead**, now on trunk and arms
- Has cough, coryza, no conjunctivitis

☒ 1. Does the patient have a fever (38.5 C or higher or subjective fever) in ED or at home?	i
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☐ 7. Is the patient immunocompromised?	

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☒ 1. Does the patient have a fever (38.5 C or higher or subjective fever) in ED or at home?



☒ 2. Does the patient have a rash?

- Pre
- Fev
- Ra

☒ 3. Does the patient have a cough or sore throat?

- Co
- Re
- Ru

☐ 4. Is the patient immunocompromised?

☐ 5A. Patient has been in contact with someone who has measles?

☐ 5B. Patient has been in contact with someone who has measles?

☒ 6. Travel history to a country with a recent measles outbreak?

some

☐ 7. Is the patient immunocompromised?



Measles highly suspected

Management



Infection Prevention

- Mask patient and anyone with them (medical mask [not N95], usually blue or yellow)
- Isolate in Airborne Precautions in negative pressure room (providers use N95 masks)

DO NOT send a patient in to an ED without calling Infectious Diseases/CDPHE unless clinical emergency. This is to prevent in-waiting room spread.

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Measles resources in Firstline

- Targeted Guidance: **Measles Evaluating Risk in Ill Patients**
- Targeted Guidance: **Measles Vaccination and Post-Exposure Prophylaxis**

After downloading app/going to website, choose 'Children's Hospital Colorado' setting

Download Firstline on Mobile

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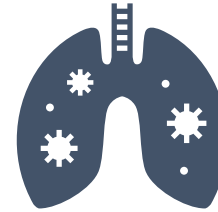
Measles Complications: common

30% have ≥ 1 complication even in well-resourced settings

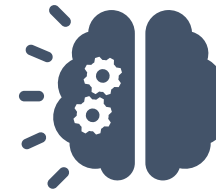
- Diarrhea 8%
- Otitis media 7%
- Pneumonia 6%
 - Viral or bacterial superinfection



Hospitalization: 1 in 5 unvaccinated people with measles



Pneumonia: 1 in 20 children with measles



Encephalitis: 1 in 1000 children with measles



Death: 1-3 in 1000 children with measles

Adapted from CDC:

<https://www.cdc.gov/measles/symptoms/complications.html>

Measles Complications

- **Pregnancy:** higher rates of fetal loss, preterm delivery
- **Immune compromised:** more complications, more severe disease, may have fewer / incomplete symptoms



Measles Complications: rare

- Acute meningoencephalitis (1 in 1000)
 - Viral and post-infectious immune-mediated
 - Supportive care
 - Often mild/self-limited, but can have lasting sequelae
- Subacute sclerosing pan-encephalitis (SSPE, 1 in 100,000)
 - Mean time from infection to SSPE = 10 years
 - Progressive deterioration in cognitive function, behavior → myoclonus → autonomic dysfunction → non-responsive state
 - May have seizures, rate of progression variable, often fatal

Order and send testing

- Call your state and/or local health department
- ≤ 7 days after rash onset:
 - Naso-/oropharyngeal swab for measles PCR testing
 - Blood (1-2mL) in red top or serum separator tube for measles IgM test.
 - For high suspicion cases, typically send these to public health lab

Order and send testing

- >7 days after rash onset:
 - Blood (1-2mL) in red top or serum separator tube for measles IgM test
 - Respiratory specimen less likely to be positive
 - For high suspicion cases, typically send specimen to public health lab

*NOTES:

- Measles PCR & IgM can also be sent to commercial labs
- State health department lab may perform tests only after consultation and for high suspicion of measles

Measles infection prevention and control

- Place patient in airborne and contact precautions immediately
- Gown, gloves, N95 for health care providers
- If negative pressure not available
 - Patient and any accompanying individuals should wear procedure mask
 - Place patient in regular room and keep door closed

Measles infection prevention and control

- After patient leaves:
 - Patient and accompanying individuals should be masked if sending to another facility
 - Exam room (or other enclosed space) considered infectious for 2 hours after patient leaves.
 - Keep door closed.
 - Clean exam room using standard cleaning and disinfection protocols after 2 hours



Preventing exposures:

Ideas for clinic and waiting room safety

- Screening questions:
 - Fever, rash, travel, exposure
 - Pre-visit, at check-in, in clinic
- Assess and record measles vaccination status for all visits
- Assess staff measles vaccination status
- Masking in waiting room:
 - Suspected measles, respiratory symptoms
 - Universal? Maybe if local outbreak
- For suspected measles, place in room ASAP



More ideas for clinic/hospital preparedness

- Parking lot visit for testing
- Know who to contact for suspected cases and testing
 - State and/or local public health
- Review local testing protocol
 - Supplies: swab and media for naso/oropharyngeal PCR
 - Where to send specimens, how to send to public health lab
- Be prepared for worried well
 - Consider proactive communication to families
 - How to approach vaccine record / vaccination requests

Measles exposures, post-exposure prophylaxis

- Measles immunity:
 - Documentation of vaccination
 - +Measles IgG
 - History of measles infection
- **Non-immune contacts of a measles case:**

≥6 months age Immunocompetent	MMR vaccination within 72 hours of exposure
<6 months age Immune compromised Pregnant	Immune globulin within 6 days of exposure
Non-immune contacts still must quarantine- discuss details with public health	

Measles vaccination recommendations

- Routine immunization: 2 dose series at 12-15 months & 4-6 years
- Catch-up: 2 doses given at least 4 weeks apart
- **International travel, travel to or living in outbreak area:**

Infants under 12 months

- **Early dose at 6-11 months**
- Follow regular schedule: another dose at 12-15 months, final dose at 4-6 years

Children over 12 months old

- **First dose immediately**
- **Second dose ≥ 28 days after first dose**

Teens / adults with no evidence of immunity

- **First dose immediately**
- **Second dose ≥ 28 days after first dose**

Measles vaccination questions

- When do we start widespread early MMR doses?
 - Look for guidance from state and local public health
 - Single case different from outbreak, ongoing transmission
- Why not just give all children early doses?
 - MMR at <12 months: may have decreased immune response to later doses, still need 2 doses after 12 months
 - Doses after 12 months of age spaced 28 days apart count
 - Vaccine purchasing, stocking, delivery logistics

Measles vaccination questions

- How to respond to families requesting an early dose?
 - Yes for international travel, living in or traveling to outbreak setting.
 - Others: risk/benefit discussion
- Are MMR vaccines dangerous for immunocompromised people?
 - Immunocompromised person: should NOT get MMR (live vaccine)
 - Household contacts of immunocompromised person: SHOULD get MMR. Other people getting MMR vaccination does not pose risk to immunocompromised person.

Useful Links

CDPHE: <https://cdphe.colorado.gov/diseases-a-to-z/measles>

Includes FAQs for measles in health care settings, EMS guidance

CDC: <https://www.cdc.gov/measles/>

AAP: <https://www.aap.org/en/patient-care/measles>

CHCO Measles Resources for Providers: <https://www.childrenscolorado.org/health-professionals/clinical-resources/measles/>

Charting Pediatrics Podcast: <https://www.childrenscolorado.org/health-professionals/professional-resources/charting-pediatrics-podcast/managing-measles-2025/>

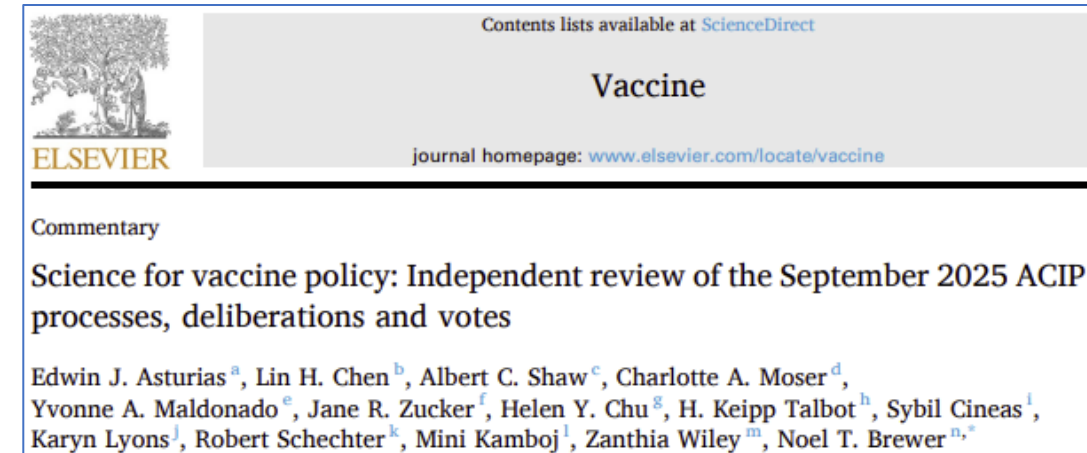
Discuss recent actions related to
federal vaccine policy

What has happened with vaccines 2025-26

- FDA:
 - Restricts license of COVID vaccines
 - Proposal of new approval criteria for vaccines, drugs
 - Decreased transparency around decisions



- ACIP:
 - Dismissal of all 17 ACIP members
 - Disbanding of most work groups
 - New members lack experience, expertise
 - Meeting schedule disrupted
 - Decreased transparency
 - Attempted changes to childhood vaccine schedule Fall 2025-January 2026



AAP vs Kennedy et al (HHS): ongoing lawsuit

- July 2025: Lawsuit filed to block the 2025-2026 changes to CDC vaccine schedule and other actions by ACIP during this time.
 - Claim from AAP and other organizations who joined the suit: failure to follow appropriate administrative procedures in convening ACIP, holding meetings, and making decisions makes those activities by HHS unlawful
- March 2026: judge ruled in favor of AAP, 2025-2026 vaccine policy changes paused
- May 2026: HHS filed appeal, appeal process ongoing
- *June 2026: Kennedy / HHS changed ACIP charter language, may allow for new members who lack vaccine expertise/experience*
- September 2026: awaiting updates on legal appeal



Proposed HHS/CDC changes to childhood vaccine recommendations

Vaccine	Proposed HHS/CDC schedule	CDC 2026 v 2025	AAP Schedule
RSV	Risk-based , but with risk defined as any infant <8 months whose mother did not receive RSV vaccine in pregnancy	No real change	Routine recommendation
MenB	Recommended for those w risk factors Shared clinical decision making (SCDM) for children without risk criteria	No real change	Recommended for those w risk factors, SCDM for others
MenACWY Hepatitis A Hepatitis B	Recommended for those w risk factors SCDM for children without risk criteria	Removes routine recommendation for children without risk factors	Routine recommendation
Rotavirus Influenza COVID	SCDM for all children	Removes routine recommendation for all children	Routine recommendation for rotavirus, flu. COVID for <2 years, older with risk factors
HPV	Single dose recommended routinely	Moves from 2-3 dose series to single dose	Routine recommendation, 2-3 dose series
DTaP/Tdap PCV HiB IPV MMR* VZV*	Routine recommendation *MMRV NOT recommended for younger children	No change	Routine recommendation *acknowledge higher risk of febrile seizure w MMRV in younger children, allow separate or combo vaccine

But wait- there's more!

- August 2026: executive order
 - Restates shortened list of immunizations recommended for all children vs recommended for high-risk groups or shared clinical decision-making
 - Recommends separate shots for measles, mumps, rubella (+other vaccines)
 - Directs states to review immunization requirements, allow more exemptions
 - Directs HHS to look for aluminum alternatives
 - Directs HHS to review vaccine safety further.
- Response:
 - 210 organizations issue statement supporting vaccine safety and benefits
- Effect:
 - Unclear. May see legal challenges if order is acted upon.

Where to turn for vaccine schedule in 2026

- Professional societies (AAP, ACOG, AAFP, ACP, IDSA) issuing vaccine guidance.
 - Recent consensus statements on influenza, RSV, COVID
- Vaccine Integrity Project compiling evidence summaries
- AAP vaccine schedule and recommendations
 - January 2026: full childhood adolescent schedule
 - August 2026: influenza vaccine recommendations
 - September 2026: RSV and COVID recommendations
 - December 2026: HPV vaccine recommendations

American Academy
of Pediatrics



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COVID-19 Policy Statement

COVID-19 Technical Report

Influenza Policy Statement

Influenza Technical Report

RSV Policy Statement

RSV Technical Report

AAP Immunization Recommendations Process

Immunization Facts for Families

Quick Links

Immunization Schedule

Table 1

Recommended Child and Adolescent Immunization Schedule for Ages 18 Years or Younger, United States, 2026

American Academy of Pediatrics

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These recommendations must be read with the Notes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the outlined purple bars . To determine minimum intervals between doses, see the catch-up schedule (Table 2).

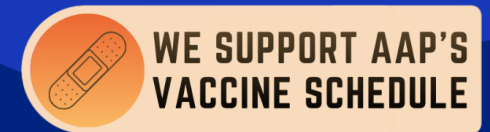
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AAP vaccine schedule is widely agreed upon

The House of Medicine stands with science.

The 2026 AAP immunization schedule has been formally endorsed by **12 top medical and health organizations.**

American Academy of Pediatrics 
DEDICATED TO THE HEALTH OF ALL CHILDREN®



Vaccines keep children healthy and thriving.

We join more than 200 organizations to show our support for vaccine recommendations from the American Academy of Pediatrics.



Vaccine Integrity Project

Providing trusted, science-based information for informed vaccine choices.



Evidence Reviews

Read our recent evidence reviews and access our interactive tools.



Viewpoints

Access our recent Viewpoints addressing timely vaccine topics.

PERSPECTIVE

Respiratory Season Virus Vaccines Restoring Confidence and Trust

Sandra Adamson Fryhofer, MD; Andrea M. Garcia, JD, MPH; Michael T. Osterholm, PhD, MPH; Rochelle P. Walensky, MD, MPH

Respiratory viruses continue to sicken, hospitalize, and kill thousands of people every year. This Perspective article describes the background

sands of people every year, including young children, pregnant women, and those with underlying conditions. It remains the most effective way to prevent hospitalization, and respiratory syncytial virus (RSV) and influenza. Historically, the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices, established in 1964, has been a leading scientific evidence-based



Related articles

trusted by clinicians and the public. The ability of timely, transparent vaccine effectiveness and safety data to restore confidence and trust in the vaccine effectiveness and safety data is needed evidence-based

The uncertainty surrounding the American Medical Association's (AMA) making body of medical or territorial medical organizations, and pro



American College of Obstetricians & Gynecologists - ACOG · Follow

September 4 at 8:01 AM · 🌐



Nearly 70 medical societies and health organizations support ACOG's maternal immunization schedule, which includes recommendations backed by the latest science and evidence. [See more](#)

ACOG's 2026 Maternal Immunization Schedule

Nearly 70 organizations agree
that vaccines are safe and
important during pregnancy.

Supported by

USA Doula Consulting	Gerontological Society of America
American Association of Nurse Practitioners	Hartford County Medical Association
American Association of Psychiatric Nurses	Hawaii American Nurses Association
American College of Clinical Pharmacy	Illinois Pharmacists Association
American College of Osteopathic Podiatrists and Gynecologists	Illinois Public Health Association in the Immunize Illinois Coalition
American College of Physicians	Immunization Alliance of Michigan
American Families for Vaccines	Immunization Coalition of Delaware
American Nurses Association of Idaho	Immunize Colorado
Arizona Families for Vaccines	Immunize Kansas Coalition
Arivisor, Inc.	Immunize Oregon
Florida Families for Vaccines	Immunize South Dakota
Florida Nurses Association	Immunize.org
Illinois Department of Health	Indiana Immunization Coalition
Immunize Illinois	Louisiana Families for Vaccines
Families Fighting Flu	Maine Families for Vaccines
Florida Families for Vaccines	March of Dimes
	Massachusetts Families for Vaccines

ACOG

Supported by

Missouri Nurses Association	Society of Infectious Diseases Pharmacists
Montana Families for Vaccines	South Carolina Families for Vaccines
National Association of Pediatric Nurse Practitioners	South Carolina Nurses Association
National Black Church Initiative	South Dakota Chapter of the American

Special Communication

FREE

Cite Permissions Metrics

COVID-19 Vaccine Effectiveness and Safety for the 2026-2027 Respiratory Season

JAMA
Published Online: September 2, 2026
doi: 10.1001/jama.2026.18191

Rachel A. Lipson, MPH¹; Emily Senerth, MS, MPH¹; Michelle A. Watson, MPH¹; [et al](#)

Special Communication

FREE

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RSV Immunization Effectiveness and Safety for the 2026-2027 Respiratory Season

JAMA
Published Online: September 2, 2026
doi: 10.1001/jama.2026.17871

Emily Senerth, MS, MPH¹; Seyyede Mahsa Sheikholeslamian, DDS, MSc^{1,2}; Ifeoluwa Babatunde, PharmD, MS^{1,2}; [et al](#)

Special Communication

FREE

Cite Permissions Metrics

Influenza Vaccine Effectiveness and Safety for the 2026-2027 Respiratory Season

JAMA
Published Online: September 2, 2026

Emily Senerth, MS, MPH¹



American College of Physicians (ACP)

September 2 at 12:00 PM · 🌐



The American College of Physicians supports the Vaccine Integrity Project and its commitment to providing physicians and patients with evidence-based immunization information. [See more](#)

NEW EVIDENCE REVIEW

**Vaccine Integrity Project
and AMA announce
completed independent
evidence review of
respiratory virus
immunizations.**

**Latest evidence confirms
protection against severe
illness and death, finds
no new safety concerns in
comparative studies, and
informs 2026-27
medical society
recommendations.**

Learn more at www.SpreadTheFacts.org.



Center for Infectious Disease Research and Policy (CIDRAP)

September 2 at 8:02 AM · 🌐

Today, the Vaccine Integrity Project and the [American Medical Association](#) announce a completed independent evidence review of respiratory virus immunizations against in... [See more](#)

<https://jamanetwork.com/journals/jama/fullarticle/2853781>

<https://vaxintegrity.cidrap.umn.edu/2026-27-respiratory-season>

Information sources:

- Diversify resources you use and share with patients:
 - AAP, AAFP, ACOG, IDSA, STAT News, Vaccine Integrity Project
- Avoid misinformation by looking for consensus, expertise, motivation
- AAP, AAFP published immunization schedules
- CDC, ACIP:
 - Healthy skepticism
 - Check dates

Table 1 Recommended Child and Adolescent Immunization Schedule for Ages 18 Years or Younger, United States, 2026

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These recommendations must be read with the Notes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the outlined purple bars . To determine minimum intervals between doses, see the catch-up schedule (Table 2).

Vaccine and other immunizing agents	Birth	1 mos	2 mos	4 mos	6 mos	8 mos	9 mos	12 mos	15 mos	18 mos	19–23 mos	2–3 yrs	4–6 yrs	7–10 yrs	11–12 yrs	13–15 yrs	16 yrs	17–18 yrs
Respiratory syncytial virus (RSV-mAb [nirsevimab, clesrovimab])	1 dose during RSV season depending on maternal RSV vaccination status (See Notes)					1 dose nirsevimab during RSV season (See Notes)												
Hepatitis B (HepB)	1 st dose	2 nd dose			3 rd dose													

What is Colorado doing?

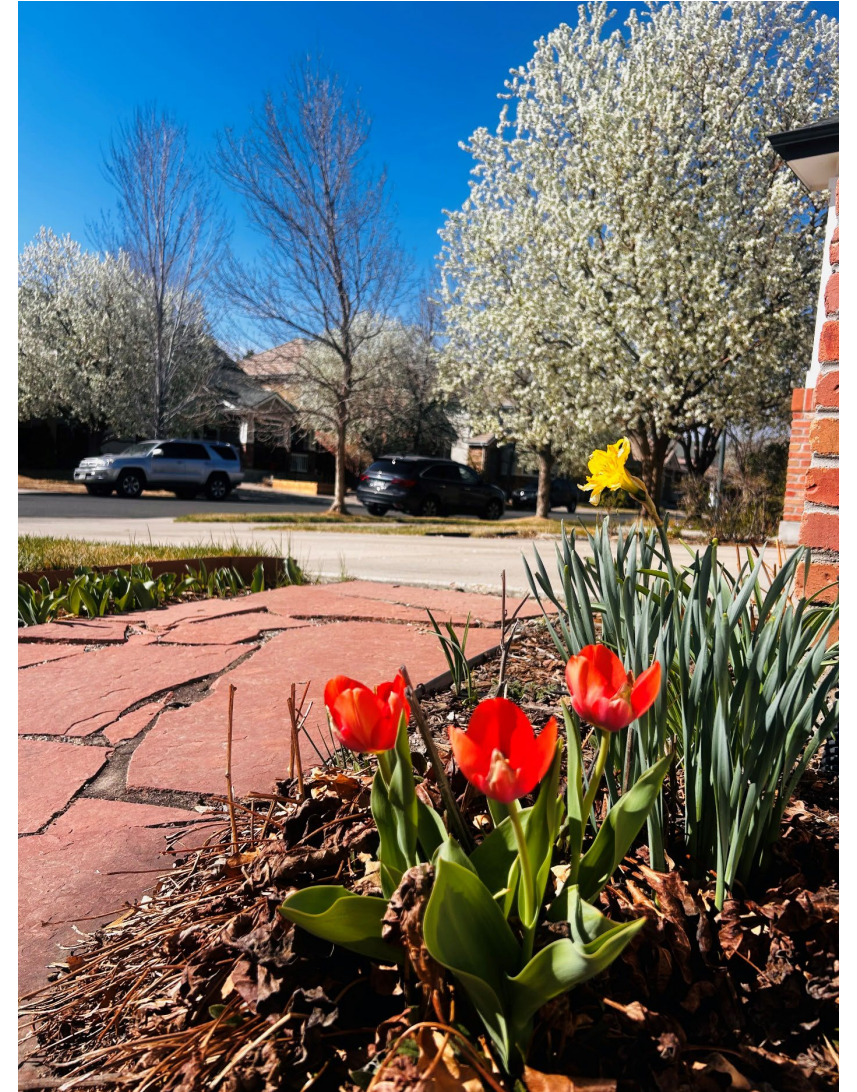
- Several vaccine bills passed in 2025 and 2026
- Allow state to look to sources beyond ACIP for vaccine policy guidance including medical professional organizations. This impacts:
 - School vaccine requirements
 - Insurance coverage for state-regulated plans
- Affirm and strengthen pharmacist role in vaccination
- Liability protections for clinicians following vaccine schedules of medical professional societies
- Current school required vaccinations use AAP schedule for guidance.

Why we still recommend vaccines

- No new science has been presented to support recent HHS/CDC/White house schedule changes.
- No new discoveries about safety or efficacy of vaccines, no new information about risks of diseases.
- These diseases are real: ongoing outbreaks of measles, pertussis, seasonal influenza.
- Vaccines help you prevent what is preventable. Teach your immune system to be prepared.
- Vaccines are part of a healthy lifestyle to keep your family safe.
- I recommend these vaccines for everyone in my family and for my patients.

Closing thoughts & discussion

- It is not easy
- It is important
- Your voice matters
- Change takes time
- Keep trying and share your successes



Resources for health care professionals

- **AAP** immunization website: www.aap.org/immunization
- **AAP:** Communicating with Families, including virtual simulation for conversations-
<https://www.aap.org/en/patient-care/immunizations/communicating-with-families-and-promoting-vaccine-confidence/>
- **AAFP** immunization website: <https://www.aafp.org/family-physician/patient-care/prevention-wellness/immunizations-vaccines.html>
- **CHOP Vaccine Education Center:** <https://www.chop.edu/centers-programs/vaccine-education-center>
- **Immunize.org** Vaccine Confidence & Addressing Concerns:
<https://www.immunize.org/clinical/vaccine-confidence/>
- **Immunize.org** Vaccine Information Sources:
<https://www.vaccineinformation.org/vaccine-basics/trusted-sources/>
- **Vaccine Integrity Project, CIDRAP:** <https://www.cidrap.umn.edu/vaccine-integrity-project>

Resources for Families

- **AAP:** <https://www.healthychildren.org/english/safety-prevention/immunizations/Pages/default.aspx>
- **CHOP Vaccine Education Center:** <https://www.chop.edu/centers-programs/vaccine-education-center>
- **History of Vaccines:** <https://historyofvaccines.org/>
- **Immunize.org:** <http://www.vaccineinformation.org/>
- **Immunize.org Vaccine Information Sources:** <https://www.vaccineinformation.org/vaccine-basics/trusted-sources/>
- **Immunize for Good:** <https://immunizeforgood.com/>
- **Inoculation Science for misinformation:** <https://inoculation.science/inoculation-videos/>
- **Voices for Vaccines:** <https://www.voicesforvaccines.org/>

Extra slides

CLINICAL REPORT Guidance for the Clinician in Rendering Pediatric Care

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™

Strategies for Improving Vaccine Communication and Uptake

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COMMITTEE ON INFECTIOUS DISEASES; COMMITTEE ON PRACTICE AND AMBULATORY MEDICINE; COMMITTEE ON BIOETHICS

Norms

Trust

Vaccine
confidence
and
acceptance

Defaults

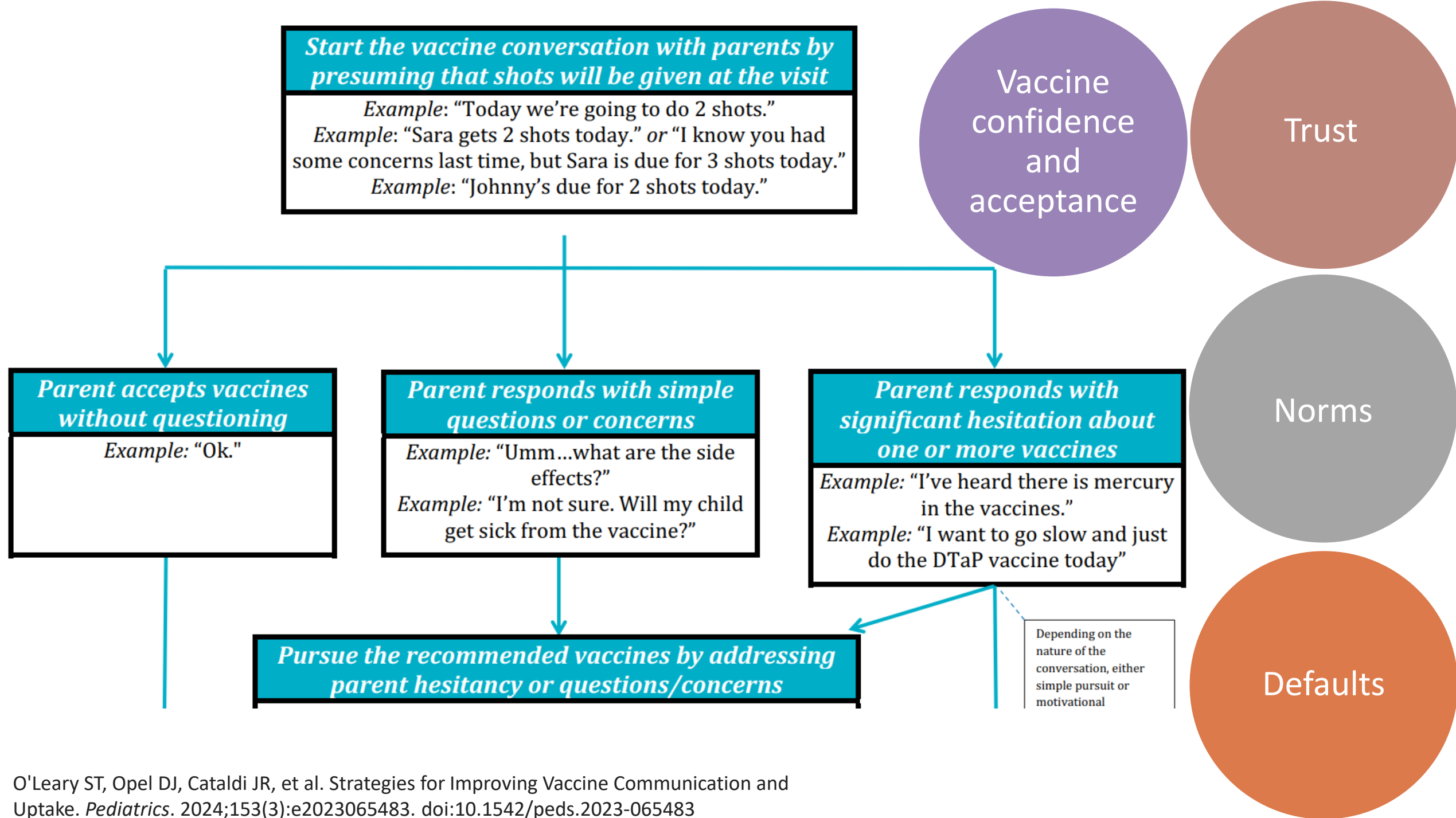
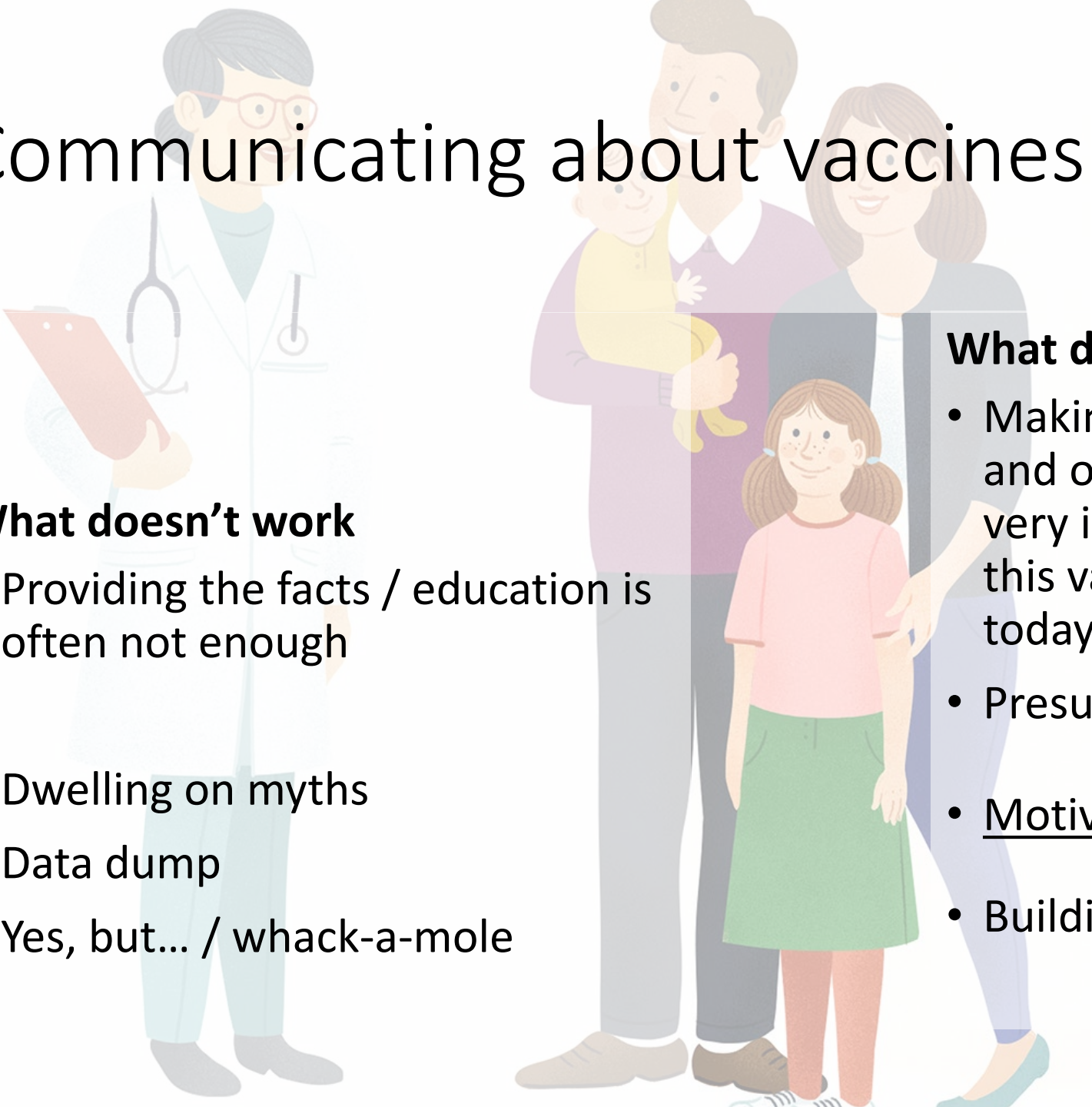


TABLE 4 Common Misconceptions and Myths About Immunizations	
Claims	Facts
“Natural” methods of enhancing immunity, such as contracting the disease and breastfeeding, are better than vaccinations.	Vaccinations are the safest way to achieve immunity; having immunity the “natural way” means being sick with a potentially very serious infectious disease. Immunity from a preventive vaccine provides protection against disease when a person is exposed to it in the future. That immunity is usually similar to what is acquired from natural infection, although several doses of a vaccine may have to be administered for a child to develop an adequate immune response. Although breastfeeding has many benefits, including immunologic, it does not provide anywhere near the same level of protection from vaccine-preventable diseases as vaccines.
Giving multiple vaccines at the same time causes an “overload” of the immune system.	Vaccination does not overburden a child’s immune system; the recommended vaccines use only a small portion of the immune system’s “memory.” Although the number of unique vaccines administered has risen over recent decades, the number of antigens administered has decreased because of advances in science and manufacturing. The National Academy of Medicine (NAM) has concluded that there is no evidence that the immunization schedule is unsafe.
Vaccines are ineffective.	Vaccines have spared millions of people the effects of devastating diseases.
Before the use of vaccinations, these diseases had begun to decline because of improved nutrition and hygiene.	In the 19 th and 20 th centuries, some infectious diseases began to be better controlled because of improvements in sanitation, clean water, pasteurized milk, and pest control. However, vaccine-preventable

Review specific **clinician
communication** techniques for
vaccination

Communicating about vaccines

A stylized illustration of a doctor and a family. On the left, a female doctor with short grey hair and glasses, wearing a white lab coat over a teal shirt, holds a red clipboard and has a stethoscope around her neck. To her right is a family: a man in a purple sweater holding a baby in a yellow shirt, a woman in a grey cardigan over a white shirt, and a young girl in a pink shirt and green skirt. The background is a light grey gradient.

What doesn't work

- Providing the facts / education is often not enough
- Dwelling on myths
- Data dump
- Yes, but... / whack-a-mole

What does work

- Making a strong recommendation and offer for vaccines: "I think it is very important for Daniel to get this vaccine and we can do it today."
- Presumptive framing, social norms
- Motivational interviewing
- Building relationships over time



Starting with a Presumptive Recommendation for Vaccination Improves Uptake

Norms

Defaults

Several studies show a presumptive approach works, while participatory does not.

- **Presumptive:** “I recommend we get you caught up on vaccines today. You’re due for Tdap and influenza. I recommend these vaccines for all of my pregnant patients to keep them and their babies healthy.”
 - **Presumptive:** “Sally’s due for 3 vaccines today.”
- vs
- **Participatory:** “Are you planning to get Sally vaccinated today?”





Formats to Initiate the Vaccine Discussion

Presumptive Format:

- A declarative statement
- Presupposes parents will vaccinate
- “Sara gets 3 shots today.”

Participatory Format:

- An open-ended question
- Shifts decisional control to patients / parents
- Invokes uncertainty
- “How do you feel about shots today?”



Recognizing Patient / Parent Responses

Start the vaccine conversation with parents by presuming that shots will be given at the visit

Example: "Today we're going to do 2 shots."

Example: "Sara gets 2 shots today." or "I know you had some concerns last time, but Sara is due for 3 shots today."

Example: "Johnny's due for 2 shots today."

Accepts vaccines (with or without subsequent questions)

Example: "OK."

Responds with questions or concerns

Example: "Umm...what are the side effects?"

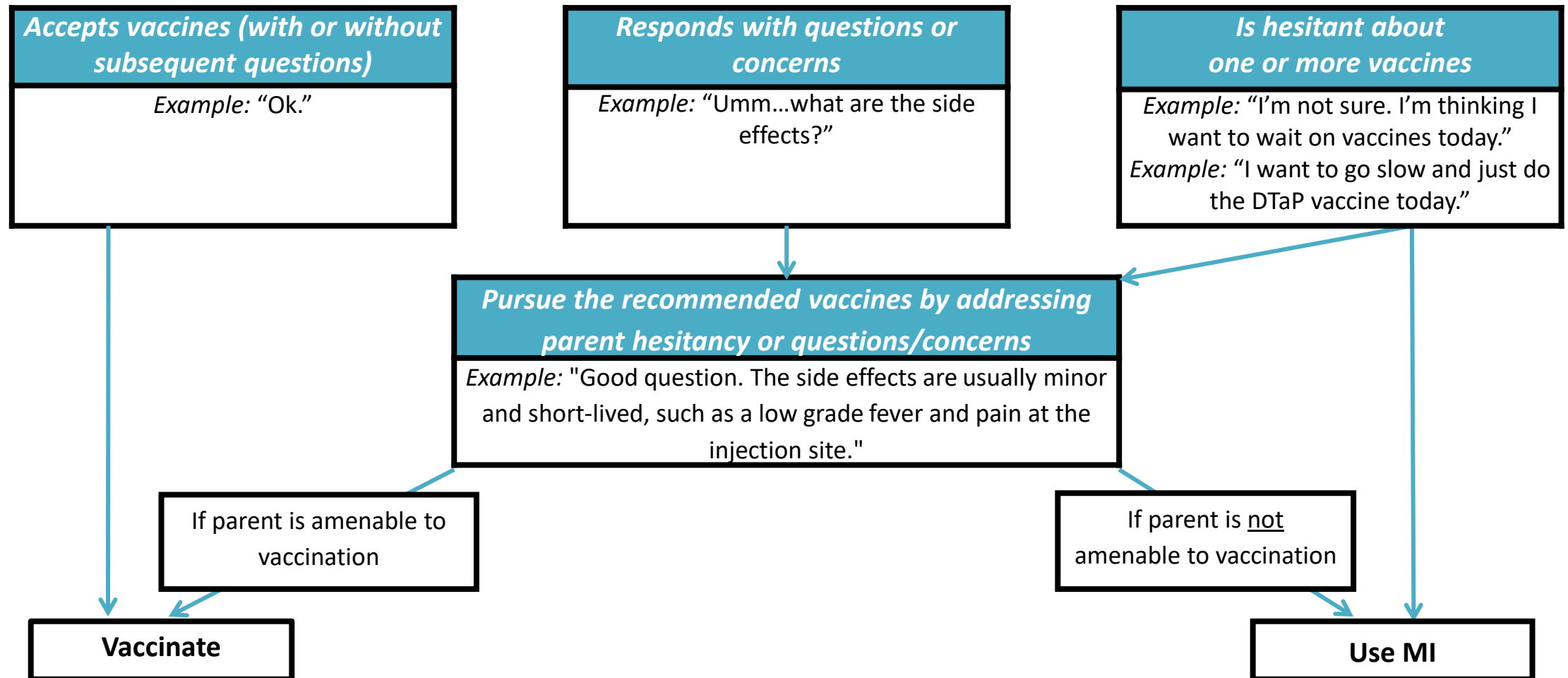
Is hesitant about one or more vaccines

Example: "I'm not sure. I'm thinking I want to wait on vaccines today."

Example: "I want to go slow and just do the DTaP vaccine today"



Pursuing Questions or Concerns





What are we learning?

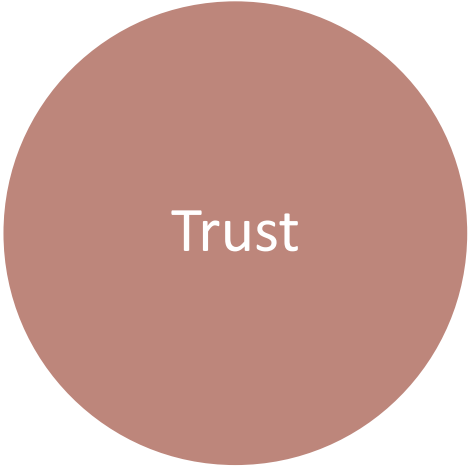
What is Motivational Interviewing (MI)?

- Brief MI skills for vaccine conversations
- The spirit of MI:
 - Partnership
 - Acceptance
 - Compassion
 - Evocation



Motivational Interviewing Skills

- **Open-Ended Questions**
 - Would you mind telling more about your concerns?
 - What benefits of vaccination do you think there might be?
- **Ask Permission to Share**
 - Would you mind if I share with you why I think this vaccine is so important?
 - Can I share with you what I know about some of these diseases?
- **Affirmations**
 - You want to do what's best for your daughter's health.
 - You are a good parent. Your concern shows how much you care about your child's safety.
- **Reflections**
 - It sounds like you're really worried about some of the things you've read online.
 - It sounds like you're concerned about side effects, and you can also see how this vaccine might be important to prevent severe disease.
- **Summarize / Support Autonomy**
 - We've talked a lot about how the HPV vaccine is important to prevent cancer. That said, this is a decision only you can make.
 - This decision about vaccines is up to you.



Trust



Vaccine
confidence
and
acceptance

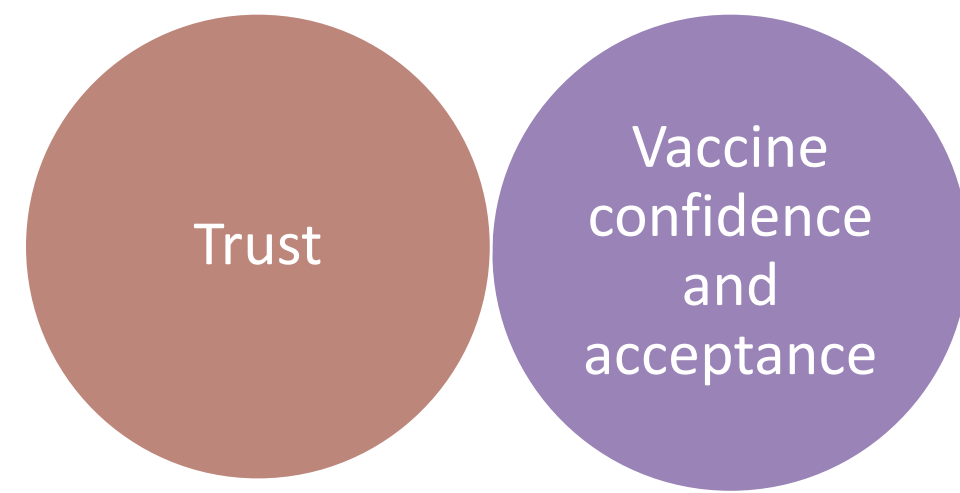


Exploring Ambivalence

- “I’m wondering, do you see any benefits from vaccination today?”
- “Well I guess it would be bad if he got sick with one of these diseases.”
- It’s ok to hear out negative motivations. Don’t need to refute every statement.
- Look for opportunities to re-focus a conversation
 - On benefits of vaccination
 - Reminding patient / parent of their own positive feelings
 - Promoting change talk



Clinician communication



- Longitudinal relationships and trust
 - “No one cares how much you know until they know how much you care” – Theodore Roosevelt (maybe)
- AAP Frameworks recommended messages:
 - Vaccines support and work with body’s immune system
 - Benefit to long-term health and well-being
 - Focus on health rather than disease, preparation rather than fighting
 - Acknowledge risks and benefits

<https://www.aap.org/en/patient-care/immunizations/communicating-with-families-and-promoting-vaccine-confidence/communicating-about-vaccinations-evidence-based-recommendations-to-shift-the-narrative/>



Reflections 2.0: Change-focused Reflection

Parent: I guess the vaccine could be important, but I'm just really worried about side effects. And she's so small.

- **Reflection**

"You want to be sure this vaccine is safe for your baby."

- **Change-Focused Reflection**

"You want to be sure the hepatitis B vaccine is safe and you also appreciate that the vaccine is important."



Autonomy Support 2.0

- **Early in conversation:**

Parent: I don't think I want Michael to get that HPV one yet.

Clinician: The decision is totally up to you, but would you mind telling me about your concerns?

- **Wrapping up conversation:**

Clinician: I'm glad we could talk about this. In the end, this is a decision only you can make.

Conversation Traps

- **Persuasion or Whack-a-Mole**

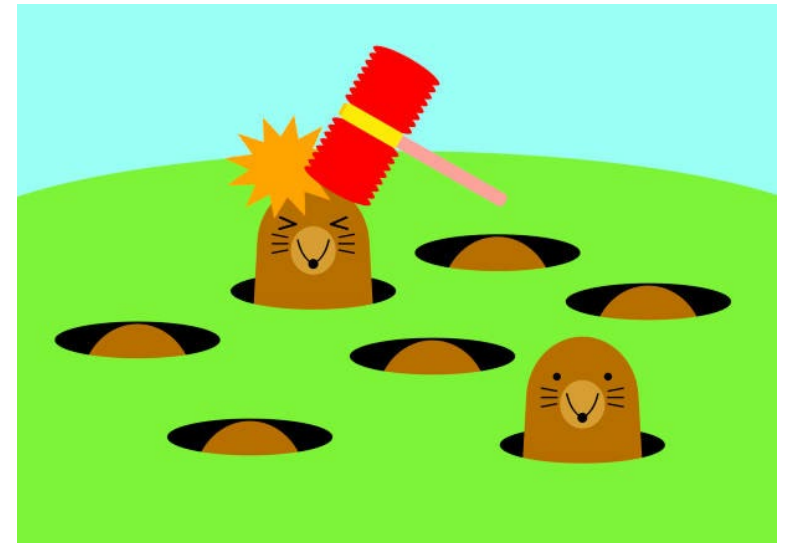
Clinician: “So those are all the ways we know this is safe”

Parent: “Yes, but...”

Clinician: “Well here’s a bunch more info”

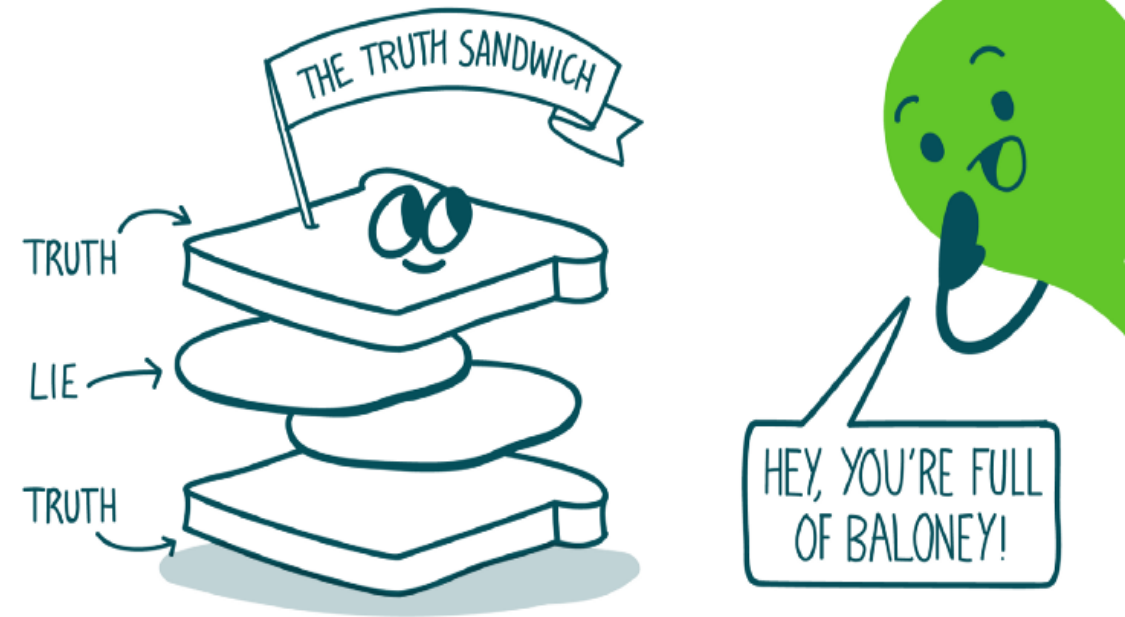
“Ok, but...”

“Well Actually...”



Challenges: Addressing Myths

- Ask permission to share
- State truth, why myth is false, then repeat the true message that you want them to remember
- If you've never heard the myth before, ask if you can look into it more and get back to them. Then be sure to follow through!



 <i>Parent:</i> I'm not sure we want to do all those vaccines today. He got so many already as a baby and I'd rather space these out to give his immune system some time.	Myth: Too many vaccines are bad. Vaccines can overwhelm the immune system
<i>Clinician:</i> It sounds like you are worried about the number of vaccines that Marcus is due for. Would it be ok if I share with you what I know about these vaccines??	Reflection Ask permission to share
<i>Parent:</i> Yeah sure.	
<i>Clinician:</i> Marcus's immune system is strong and able to respond to many different things at once. A child's immune system responds to lots of germs in their day-to-day life and the immune system is able to respond to multiple vaccines at once. Some people think spacing out vaccines is better, but delaying vaccines leaves children vulnerable to those diseases we are trying to prevent. The vaccine schedule is safe and includes vaccines at the ages when children are most in need of protection and best able to respond to a vaccine.	Truth Myth Truth
<i>Parent:</i> Oh really? I hadn't realized that before.	



Challenges: Addressing Myths

- Ask permission to share
- Truth sandwich
- Move conversation toward vaccine benefit and disease severity.
- Avoid a data dump

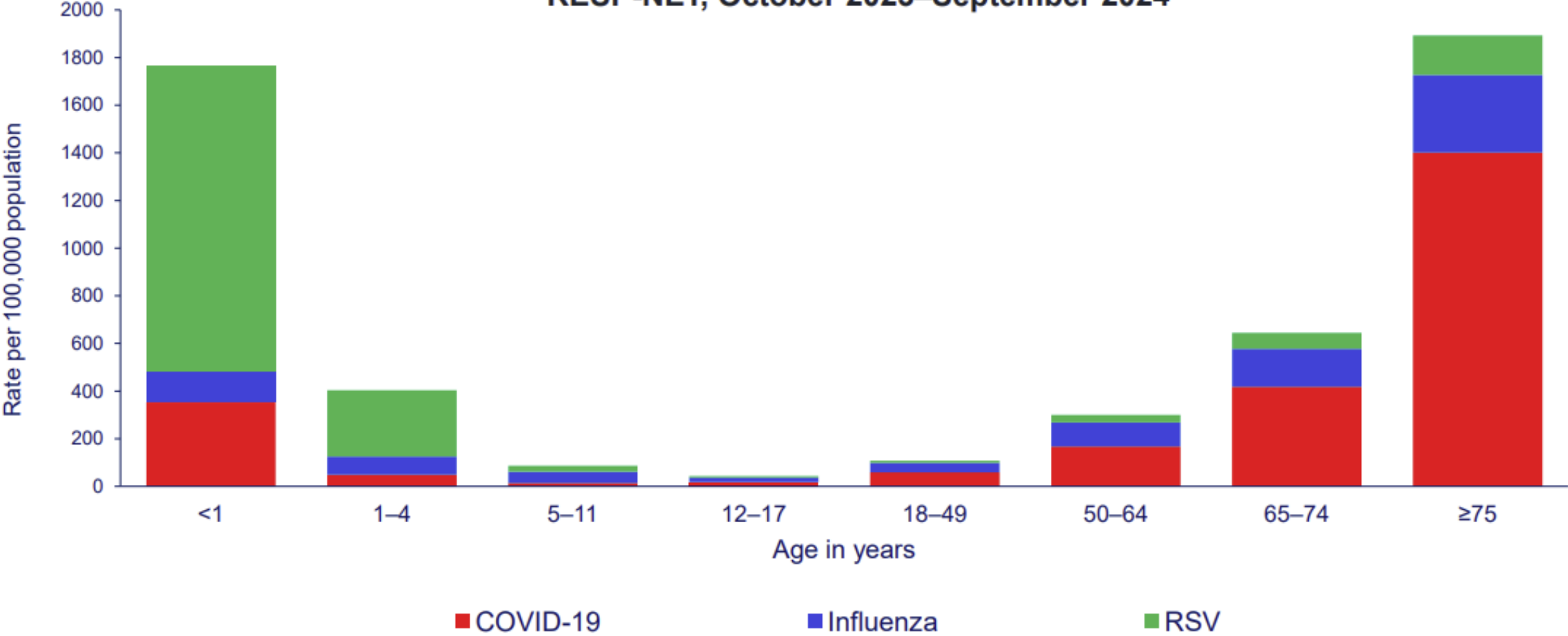
Hot Topics

- COVID vaccination for children:
 - AAP recommends for <2 years
 - ≥ 2 years if risk factors for severe disease
- Influenza vaccination:
 - AAP still recommends for all children
- RSV maternal/infant immunization:
 - 'New' CDC recommendations are actually the same as old
 - Previously was framed as universal- all babies <8 months should have either maternal vaccine protection or infant immunization
 - Now framed as RSV immunization only for 'high risk' and 'high risk' defined as infants whose mother did not get maternal vaccination.

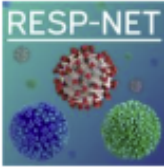
Rates of respiratory virus-associated hospitalizations vary by age group and pathogen.

<https://www.cdc.gov/acip/downloads/slides-2025-04-15-16/03-Havers-COVID-508.pdf>

Cumulative rates of COVID-19-, influenza-, and RSV-associated hospitalizations — RESP-NET, October 2023–September 2024



Rates for all three pathogens (COVID-19, influenza, and respiratory syncytial virus [RSV]) are laboratory-confirmed. Data source: <https://www.cdc.gov/resp-net/dashboard/>
Note that rates are not adjusted for testing or limited to admissions where the respiratory infection is the likely primary reason for admission.



Hot Topics

- MMRV
 - Known increased risk of febrile seizure with MMRV at 12-18 month dose when compared to separate MMR + varicella vaccination
 - No new data to prompt 2025 ACIP decision
- Birth dose hepatitis B
 - Most common way for child to acquire hepatitis B infection is at birth
 - Maternal screening is imperfect
 - Vaccine is safe
 - No new data to prompt 2025 ACIP decision

Hot Topics

Jan 2026 changes that are on hold:
proposed move to shared decision
making or risk-based

- Vaccine schedule
 - Age for vaccines based on immune response, disease risk
 - Cost/benefit and public health criteria for adding vaccines to schedule
 - New vaccines studied in combination with existing vaccine schedule
- Danish schedule
 - Disease epidemiology differs
 - Longer parental leave allows infants protection from communicable disease
 - Universal health care decreases risk of severe disease outcomes and cost of illness
 - Disease surveillance more robust, stronger public health response
 - Other countries frequently add vaccines to schedule after US does (UK added varicella in 2026)

USA	Denmark
Hepatitis B	
RSV	
Rotavirus	
Diphtheria	Diphtheria
Tetanus	Tetanus
Pertussis	Pertussis
Hemophilus	Hemophilus
Pneumococcus	Pneumococcus
Polio	Polio
COVID-19	
Influenza	
Varicella	
Hepatitis A	
Meningitis	
Measles	Measles
Mumps	Mumps
Rubella	Rubella
HPV	HPV