

New HPV Recommendations and How to Communicate Them

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Disclosures



- I have nothing to disclose
- The opinions and views presented are solely my own and do not necessarily reflect those of my employer.

Objectives



- Understand the recommendations for routine HPV vaccination for cancer prevention
- Review Arkansas's current HPV vaccination coverage data
- Apply best practices when communicating with parents to improve vaccine confidence

Overview of HPV Vaccine



HPV Vaccination is Cancer Prevention



- HPV vaccine prevents cervical, anal, vulvar, vaginal, penile, and oropharyngeal cancer
 - Also prevents genital warts
- HPV vaccination protects against 9 types of Human Papillomavirus that most commonly lead to these cancers
- The earlier the better: 9–11-year-olds have a stronger immune response to vaccination

Vaccine Schedules



How to Use the Immunization Schedule



To make vaccination recommendations, healthcare providers should:

1. Determine recommended vaccine by age ([Table 1 – By Age](#))
2. Determine recommended interval for catch-up vaccination ([Table 2 – Catch-up](#))
3. Assess need for additional recommended vaccines by medical condition or other indication ([Table 3 – By Medical Indication](#))
4. Review vaccine types, frequencies, intervals, and considerations for special situations ([Notes](#))
5. Review contraindications and precautions for vaccine types ([Appendix](#))
6. Review new or updated ACIP guidance ([Addendum](#))

[Child and Adolescent Immunization Schedule by Age | Vaccines & Immunizations | CDC](#)

18 Months to 18 Years

Vaccine and other immunizing agents	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
Human papillomavirus ⓘ (HPV)						See Notes			






[Child and Adolescent Immunization Schedule by Age | Vaccines & Immunizations | CDC](#)



Table 1 Recommended Child and Adolescent Immunization Schedule for Ages 18 Years or Younger, United States, 2025

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														
Rotavirus (RV): RV1 (2-dose series), RV5 (3-dose series)			1 st dose	2 nd dose	See Notes														
Diphtheria, tetanus, and acellular pertussis (DTaP <7 yrs)			1 st dose	2 nd dose	3 rd dose				4 th dose				5 th dose						
Haemophilus influenzae type b (Hib)			1 st dose	2 nd dose	See Notes			3 rd or 4 th dose (See Notes)											
Pneumococcal conjugate (PCV15, PCV20)			1 st dose	2 nd dose	3 rd dose			4 th dose											
Inactivated poliovirus (IPV)			1 st dose	2 nd dose	3 rd dose							4 th dose						See Notes	
COVID-19 (1vCOV-mRNA, 1vCOV-aPS)					1 or more doses of 2025–2026 vaccine (See Notes)				1 dose of 2025–2026 vaccine (See Notes)				1 dose of 2025–2026 vaccine (See Notes)						
Influenza					1 or 2 doses annually (See Notes)				1 dose annually (See Notes)										
Measles, mumps, and rubella (MMR)								1 st dose					2 nd dose						
Varicella (VAR)								1 st dose					2 nd dose						
Hepatitis A (HepA)								2-dose series (See Notes)											
Tetanus, diphtheria, and acellular pertussis (Tdap ≥7 yrs)															1 st dose				
Human papillomavirus (HPV)															2-dose series			See Notes	
Meningococcal (MenACWY-CRM ≥2 mos, MenACWY-TT ≥2 years)				See Notes												1 st dose		2 nd dose	
Meningococcal B (MenB-4C, MenB-FHbp)																			
Respiratory syncytial virus vaccine (RSV [Abrysvo])																			Seasonal administration during pregnancy if not previously vaccinated
Dengue (DEN4CYD: 9–16 yrs)																			Seropositive in areas with endemic dengue (See Notes)
Mpox																			

 Range of recommended ages for all children
  Range of recommended ages for catch-up vaccination
  Range of recommended ages for certain high-risk groups or populations
  Recommended vaccination for those who desire protection
  Recommended vaccination based on shared clinical decision-making



Comparison of ACIP and AAP Recommendations for HPV Vaccination



Recommendations	ACIP	AAP
When to administer	9-12 years of age	11-12 years (may start at 9)
How to offer when 19-45 years of age	Shared clinical decision making	n/a
Number of doses when starting less than 15 years of age	2 doses (0, 6-12 months) of HPV vaccine	Same
Number of doses when starting on or after their 15 th birthday	Give 3 doses (0, 1-2, 6 months) of HPV vaccine	Same

Special considerations:

- Evidence of previous HPV infection is not contraindication to HPV vaccination
- Immunocompromised patients should have a 3-dose series, no matter the age

HPV Vaccine Type, Dosage and Administration



- 9 valent HPV Vaccine: Type 16,18,6,11,31,33,45,52,58
- 0.5mL
- Intramuscular
- Preferred location in deltoid muscle

Why is the AAP recommendation worded differently than ACIP/CDC?

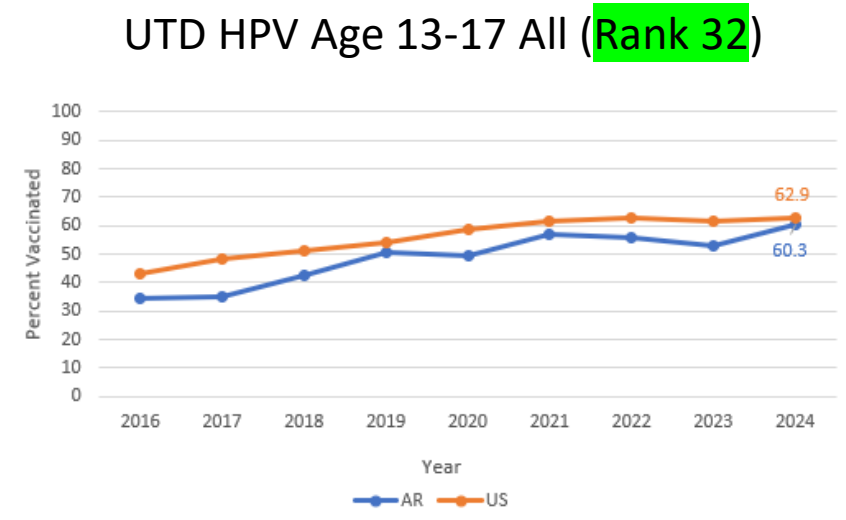
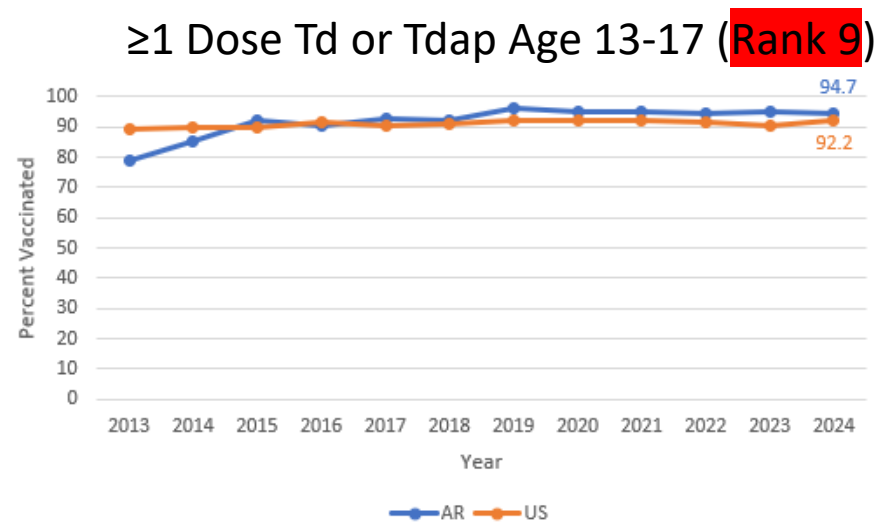
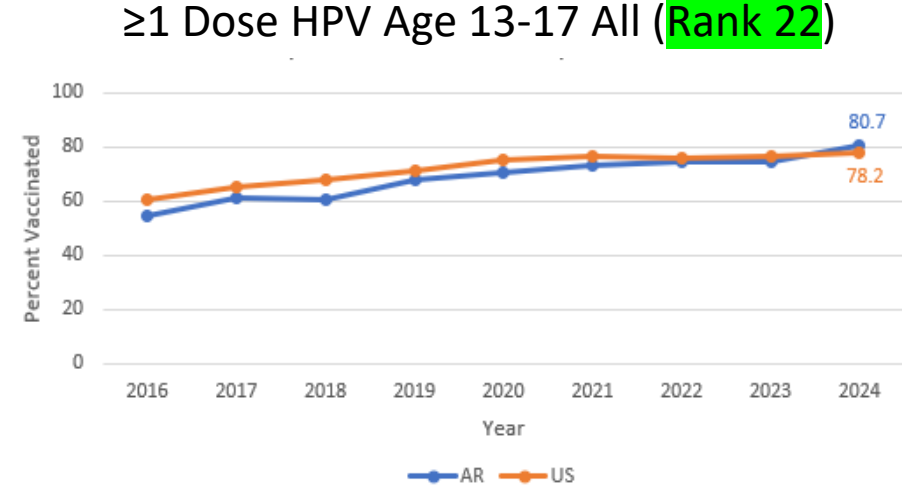
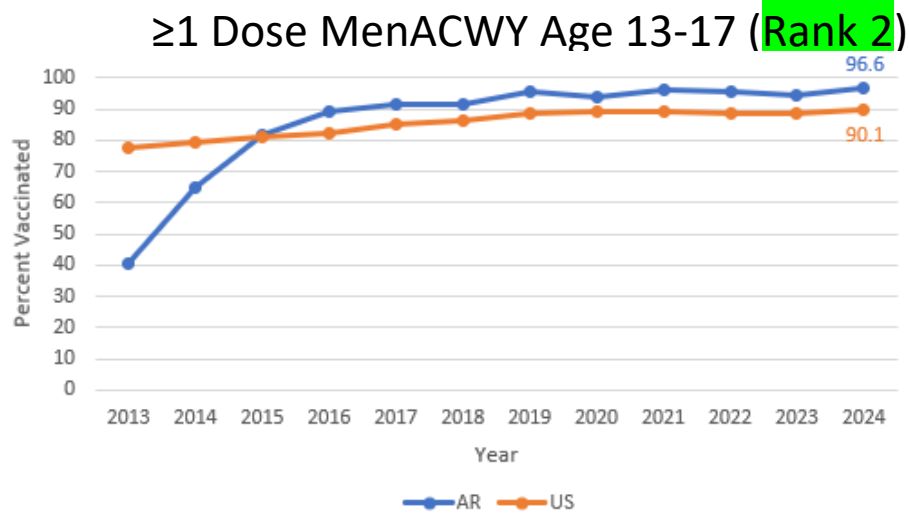


- Retrospective review showed that children who started the series at 9-10 years of age were 22 times more likely to complete the series by age 15 years than those who started at age 11 or 12 years
- The 2- or 3-dose series reduces HPV-associated cancers by 90%

Overview of Arkansas's HPV Vaccination Coverage



HPV Vaccination Coverage is Significantly Lower than Other Adolescent Vaccines in Arkansas



Changes since last year:

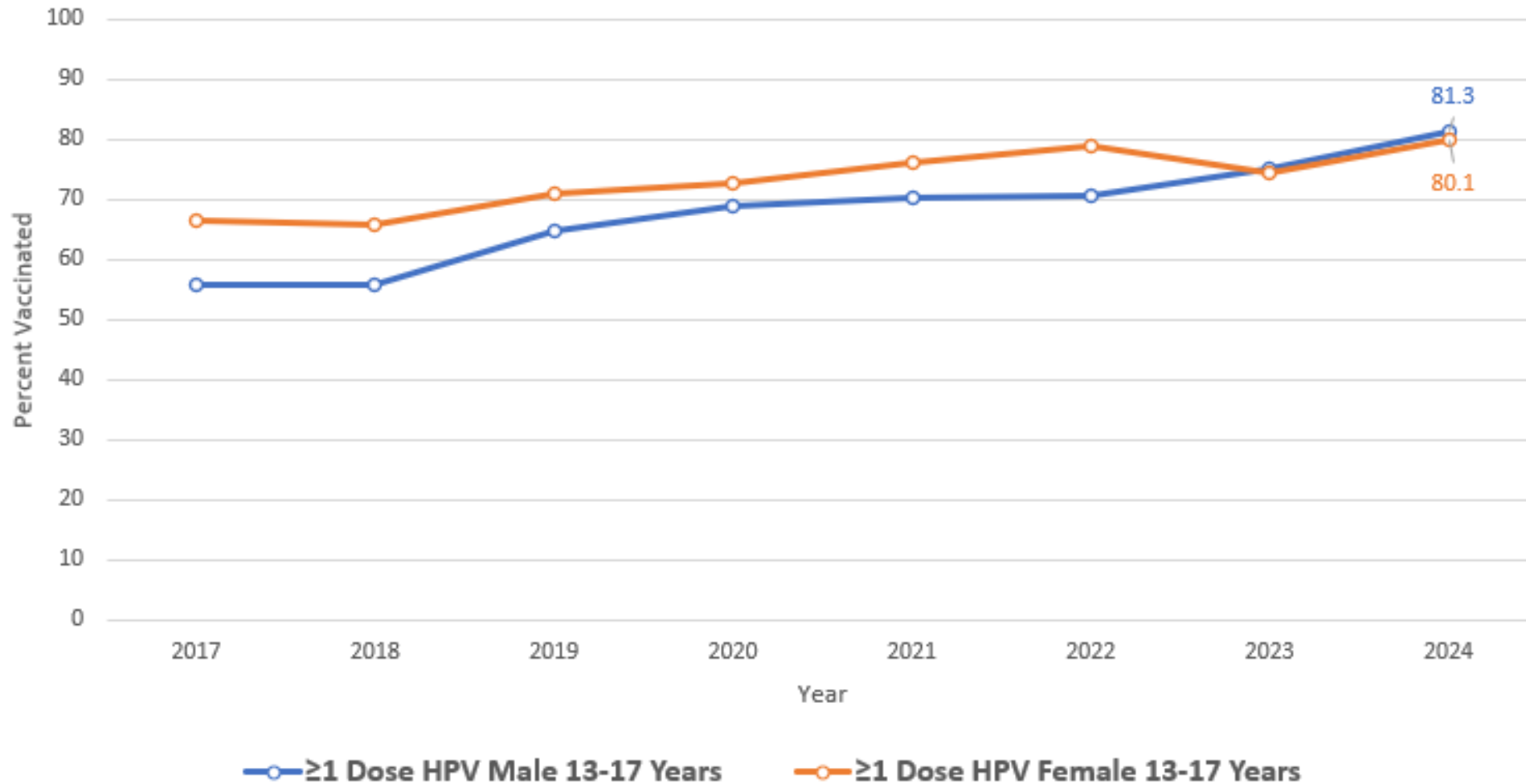
Improved

Declined

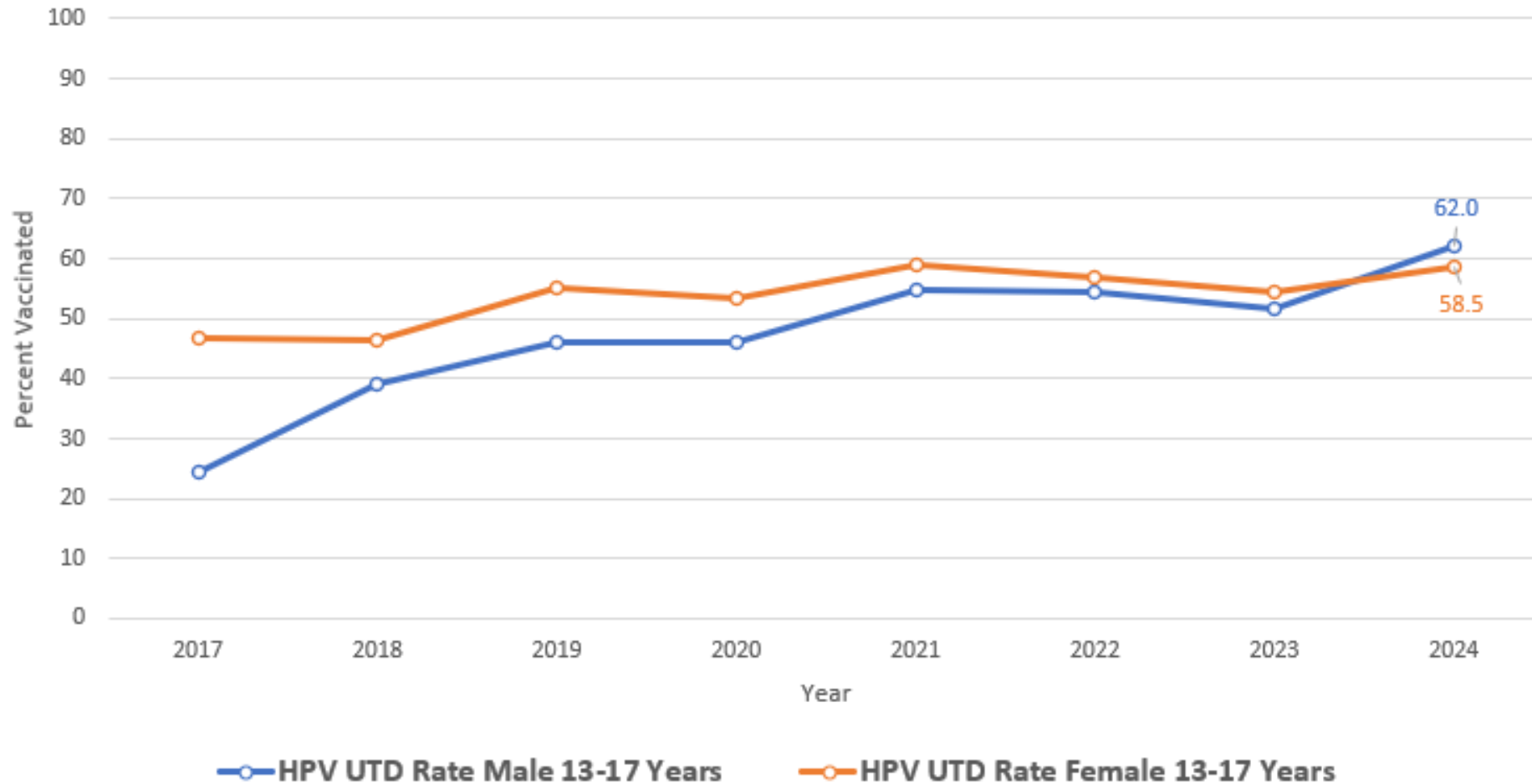
Same Rank

MenACWY: meningococcal
 Td: Tetanus diphtheria
 Tdap: Tetanus diphtheria, pertussis
 HPV: Human Papillomavirus
 UTD: Up-to-date

Males Have Slightly Higher HPV Vaccination Coverage of 1 or more Doses among AR Adolescents (13 – 17 Years)

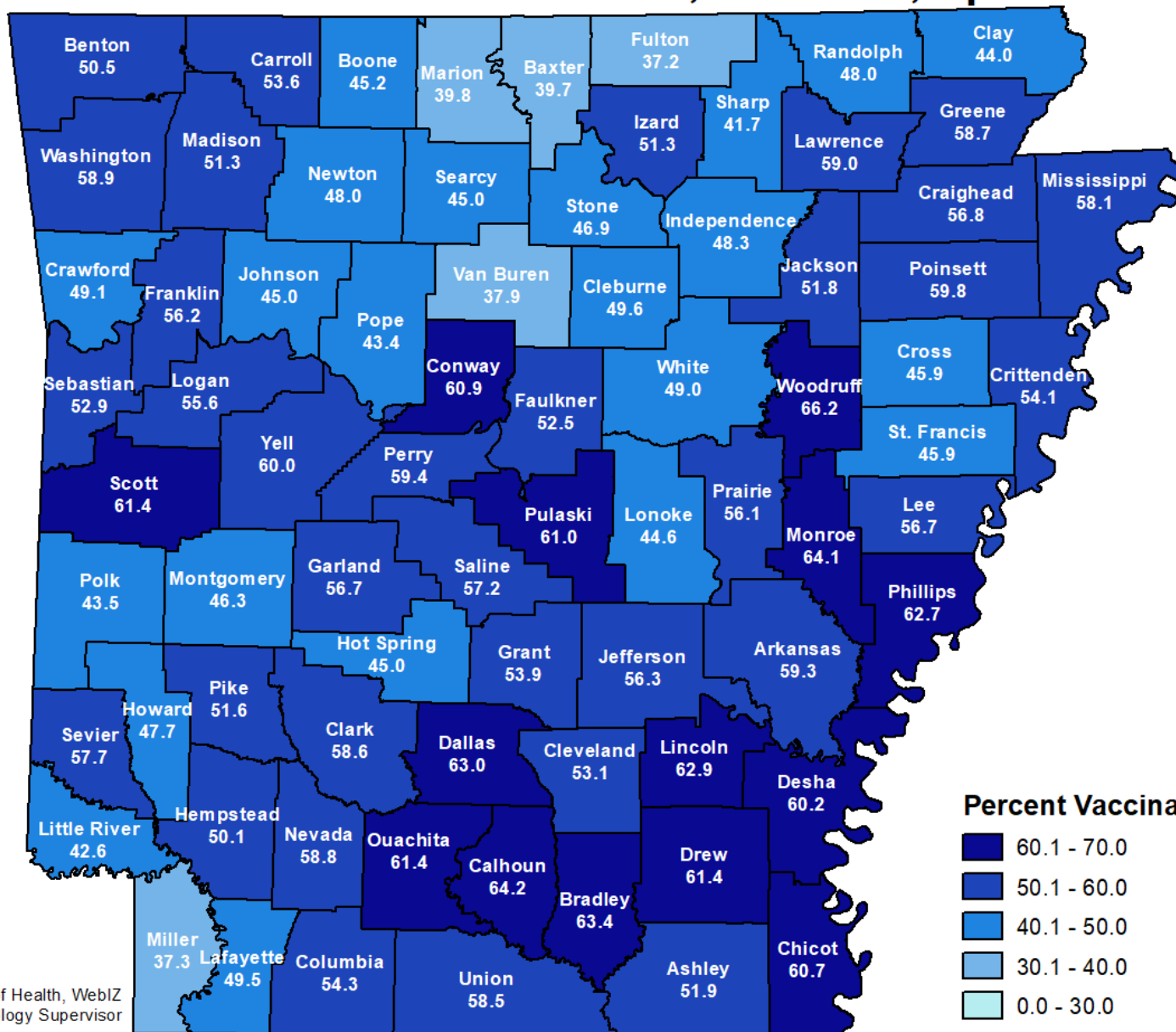


Males also Have Slightly Higher HPV Vaccination Up-to-Date Coverage among AR Adolescents (13 – 17 Years)

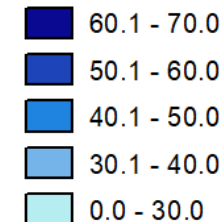


Vaccination Coverage per County for Adolescents Aged 13-17 Years With 1 or More Doses of HPV Vaccine, Arkansas, April 2026*

HPV vaccination coverage among adolescents varies across the state



Percent Vaccinated



Date: April 10, 2026
 Source: Arkansas Department of Health, WebIZ
 Author: Haytham Safi, Epidemiology Supervisor

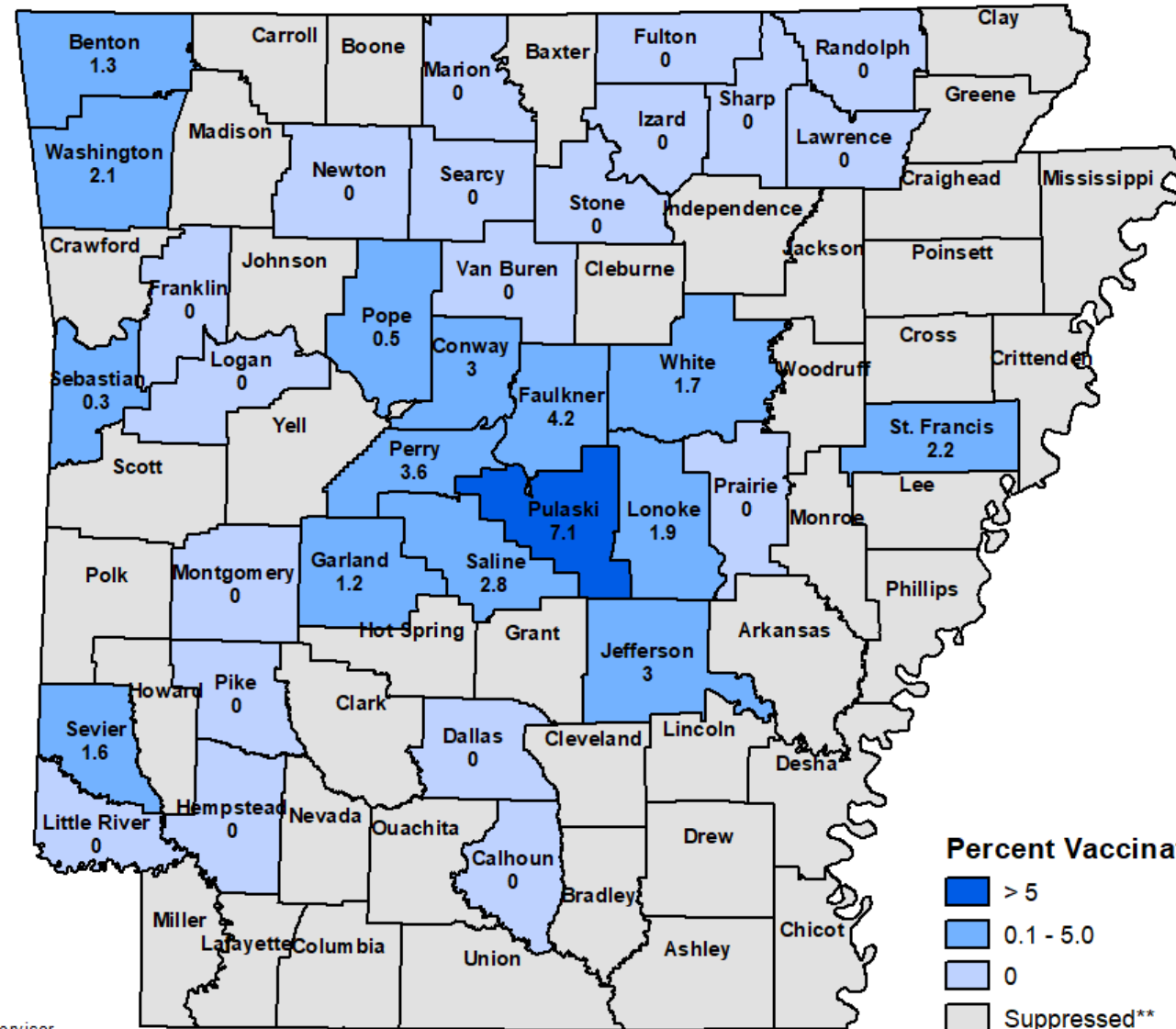
HPV: Human papillomavirus

*Vaccination coverage in this map are for adolescents age 13-17 years as of April 2026



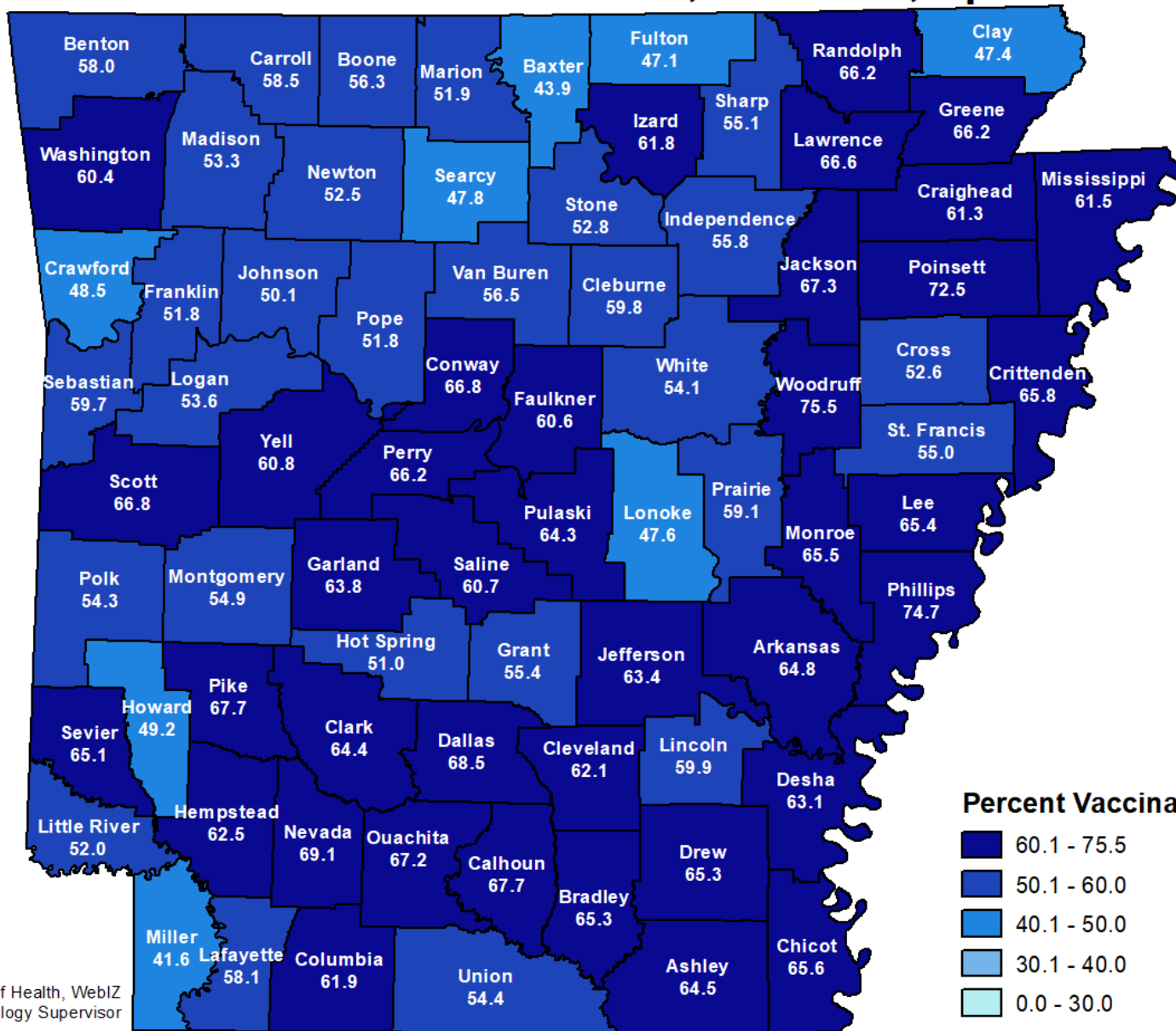
Vaccination Coverage per County for Children Age 9-10 Years With 1 or More HPV Vaccine, Arkansas, April 2026*

There is very low uptake of HPV vaccination among 9–10-year-olds across the state



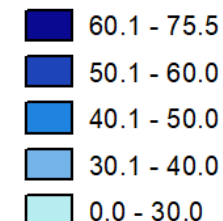
Vaccination Coverage per County for Persons Aged 19-26 Years With 1 or More Doses of HPV Vaccine, Arkansas, April 2026*

There is relatively high coverage of HPV vaccination among persons 19-26 years of age, likely due to introduction of routine immunization in the mid-2000s



Date: April 10, 2026
 Source: Arkansas Department of Health, WebIZ
 Author: Haytham Safi, Epidemiology Supervisor

Percent Vaccinated



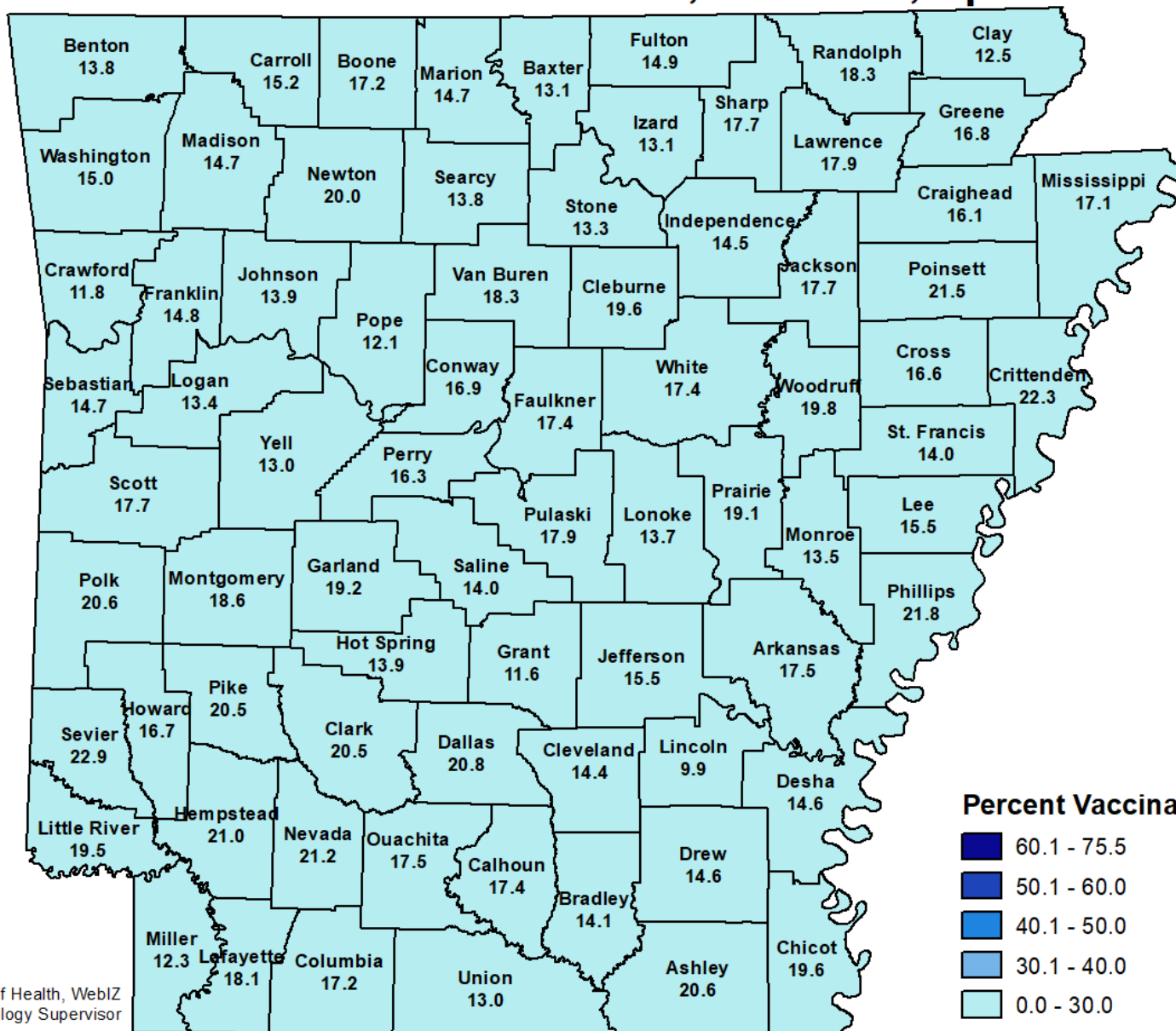
HPV: Human papillomavirus

*Vaccination coverage in this map are for persons age 19-26 years as of April 2026



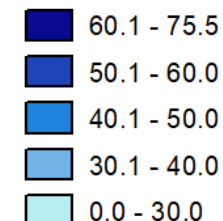
Vaccination Coverage per County for Persons Aged 27-45 Years With 1 or More Doses of HPV Vaccine, Arkansas, April 2026*

There is very low coverage of HPV vaccination among adults 27-45 years of age



Date: April 10, 2026
 Source: Arkansas Department of Health, WebIZ
 Author: Haytham Safi, Epidemiology Supervisor

Percent Vaccinated



HPV: Human papillomavirus

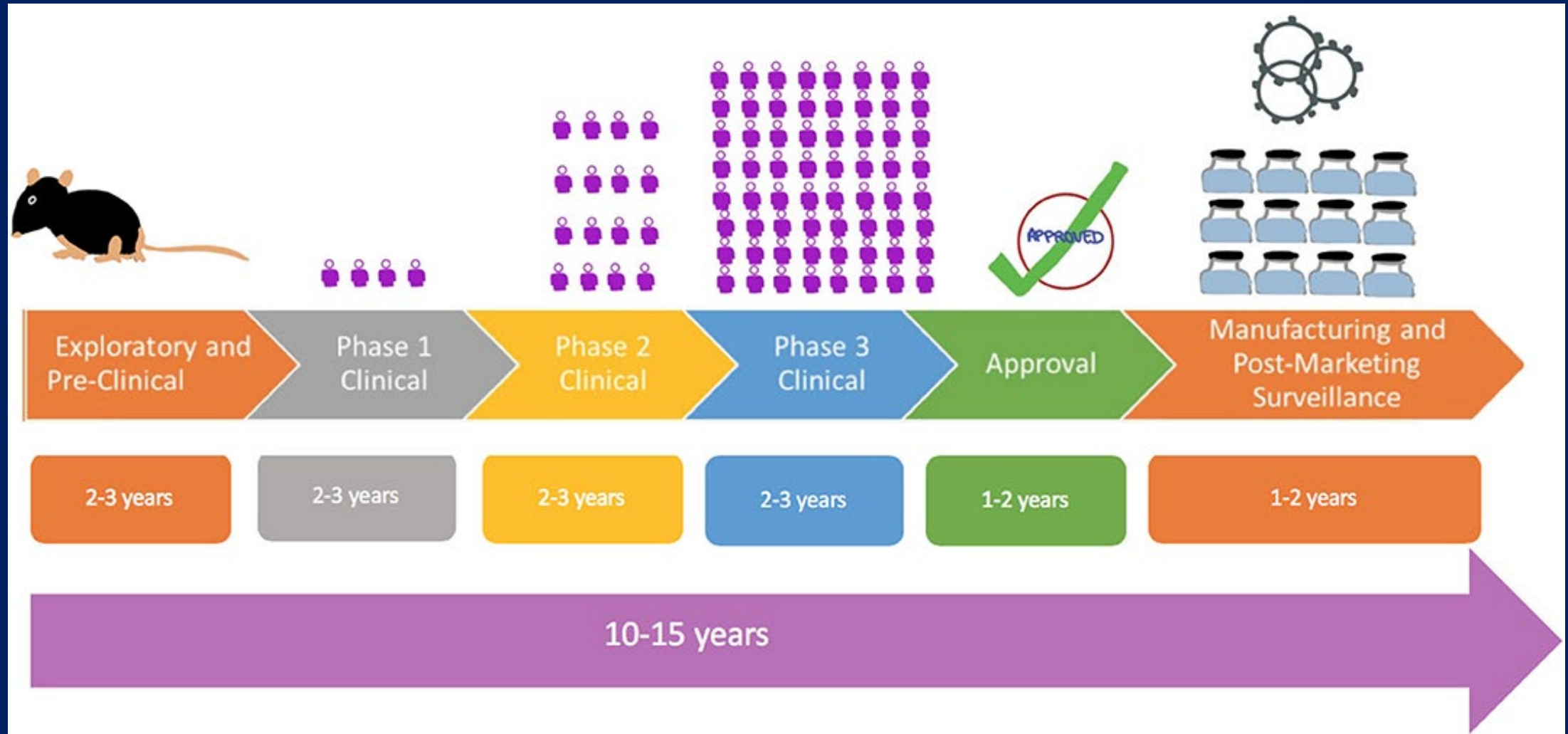
*Vaccination coverage in this map are for persons age 27-45 years as of April 2026



Addressing Misinformation: Immunization Approval and Safety Monitoring Processes



Vaccine Approval Process



Thank you to Allie Staton for allowing me to use this slide!

Citation: Sharma O, Sultan AA, Ding H and Triggler CR (2020) A Review of the Progress and Challenges of Developing a Vaccine for COVID-19. *Front. Immunol.* 11:585354. doi: 10.3389/fimmu.2020.585354

Placebo Controlled Trials



In vaccine trials, appropriate placebos can include:

- Saline (a salt solution)
- Diluent or culture medium (ingredients in the vaccine without the actual components of the pathogen)
- An existing vaccine that protects against the same pathogen
- Other vaccines that would be given to the types of people in the trial

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN®

FACT  CHECKED

Fact Checked

**Fact Checked: Childhood Vaccines Are Carefully Studied—
Including with Placebos—to Ensure They’re Safe and Effective**

Evidence Snapshot

New vaccines for newly identified pathogens and diseases are tested through randomized controlled trials, comparison groups, and placebos. All existing vaccines have been through this process, as well as ongoing safety monitoring that can identify even very rare side effects. Leading medical organizations including the World Health Organization (WHO) and the American Academy of Pediatrics (AAP) [emphasize that childhood vaccines are thoroughly tested to ensure safety and effectiveness.](#)

Thank you to Allie Staton for allowing me to use this slide!

https://www.aap.org/en/news-room/fact-checked/fact-checked-childhood-vaccines-are-carefully-studiedincluding-with-placebosto-ensure-theyre-safe-and-effective/?srsltid=AfmBOoplrcNbn0aom5hyERSO4-NOu9oX8dCUyFZXoMENE6OV9-_0uvpjd

<https://www.chop.edu/vaccine-education-center/science-history/vaccine-science/process-vaccine-development>

Immunization Recommendations



- The ACIP makes recommendations for use of vaccines then the CDC Director must approve the recommendation.
- After the CDC Director approves the recommendation, it becomes “official”.
- Recommendations are published yearly.
 - Addendums can be made throughout the year.

Thank you to Allie Staton for allowing me to use this slide!

IMPORTANT NOTE...



Insurance plans are **not required** to pay for vaccines if they are administered outside of the ACIP/CDC guidelines.

NOTE: FDA approval and package inserts may not be the same as ACIP/CDC guidelines.

If you prescribe and/or administer an immunization outside of ACIP/CDC guidelines...

- Please document the clinical reason for prescribing outside of guidelines
- Counsel the patient on why you recommend it
- Counsel the patient that they may have to pay out of pocket

AHIP Statement on Vaccine Coverage

Press Release

PUBLISHED SEP 16, 2025 • BY AHIP

WASHINGTON – AHIP released the following statement today regarding vaccine coverage.

“Health plans are committed to maintaining and ensuring affordable access to vaccines. Health plan coverage decisions for immunizations are grounded in each plan’s ongoing, rigorous review of scientific and clinical evidence, and continual evaluation of multiple sources of data.

“Health plans will continue to cover all ACIP-recommended immunizations that were recommended as of September 1, 2025, including updated formulations of the COVID-19 and influenza vaccines, with no cost-sharing for patients through the end of 2026.

“While health plans continue to operate in an environment shaped by federal and state laws, as well as program and customer requirements, the evidence-based approach to coverage of immunizations will remain consistent.”

###

<https://www.ahip.org/news/press-releases/ahip-statement-on-vaccine-coverage>



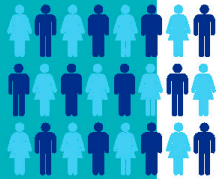
VACCINES ARE SAFE:



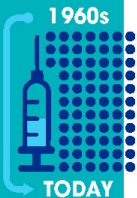
5 phases of research and development that can take **up to 15 years** are completed before a vaccine can be approved by the US Food & Drug Administration for public use¹



4 separate surveillance systems are used to oversee and monitor vaccine efficacy and safety in the US²



3 phases of clinical trials involving THOUSANDS of volunteers are required to ensure the safety of vaccines prior to approval for public use in the US³



BILLIONS of vaccine doses have been safely administered in the US for more than **50** years and serious adverse events are rare⁴



Recommended childhood immunizations in the US protect against **16** dangerous vaccine-preventable diseases⁵

Sources: 1. The History of Vaccines 2. Centers for Disease Control and Prevention 3. US Food and Drug Administration 4. Centers for Disease Control and Prevention 5. American Academy of Pediatrics



nfid.org/vaccine-science

#ShotOfScience

Thank you to Allie Staton for allowing me to use this slide!

<https://www.nfid.org/immunization/vaccine-science-safety/>



Vaccine Safety Monitoring Systems



Vaccine Safety Monitoring Systems *After* Vaccine Approval

- Vaccine Adverse Event Reporting System (VAERS)
- Vaccine Safety Datalink (VSD)
- Clinical Immunization Safety Assessment (CISA)
- Biologic Effectiveness and Safety System (BEST)

Thank you to Allie Staton for allowing me to use this slide!

Infodemiology: The Science of the Spread of Information



Defining Terminology



Infodemiology – first published in 2002, defined as “the study of the determinants and distribution of health information and misinformation”, a contraction of the terms “information” and “epidemiology” [Infodemiology: the epidemiology of \(mis\)information - The American Journal of Medicine](#)

Get started with these essential resources

The graphic features three blue speech bubble-like shapes arranged horizontally. The first bubble on the left contains the ITP logo (a blue globe icon) and the text 'ITP Infodemiology Training Program'. The middle bubble contains an icon of a document with a magnifying glass and the text 'Weekly insights'. The third bubble on the right contains an icon of a computer monitor displaying a bar chart and the text 'Real-time dashboards'. Each bubble has a white shadow and is set against a dark blue background with light blue geometric patterns.

- Actionable trainings**
The first U.S.-based trainings on infodemiology for public health professionals and health care providers.
- Weekly insights**
Contextualizing trending narratives across the nation's most pressing health topics.
- Real-time dashboards**
Real-time intelligence on health narratives trending nationally and regionally.

[Infodemiology.com](https://infodemiology.com)

Defining Terminology



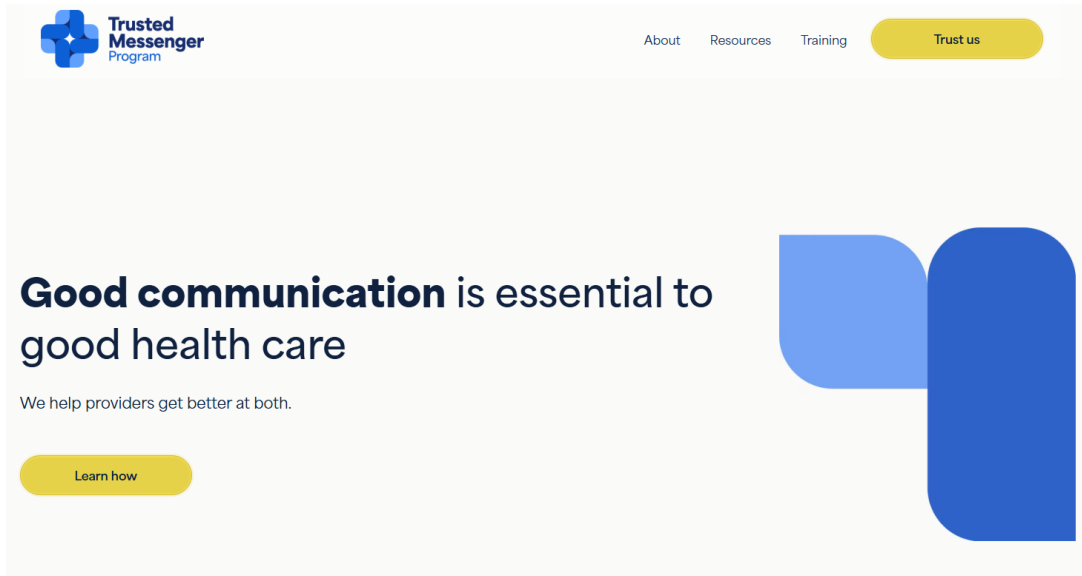
- **Misinformation** – false, incomplete, or misleading information spread inadvertently without the intent to harm
 - Example: “positive association between acetaminophen use during pregnancy and neurodevelopmental disorders in children” – correlation does not equal causation

Defining Terminology



- **Disinformation** – false information spread deliberately to mislead others
 - Example: anti-COVID-19 vaccine videos showing magnets sticking to peoples' arms after administration

Defining Terminology



[Trusted Messenger Program](#)

- **Trusted Messengers** – anyone who is regarded as a credible source of information by community members – in medicine, the most highly ranked are primary care providers
[Clinicians as Trusted Messengers—The “Secret Sauce” for Vaccine Confidence | Pediatrics | JAMA Network Open | JAMA Network](#)

Defining Terminology



Debunk

- Identifying, analyzing, and disproving misinformation



<https://www.thetechadvocate.org/what-is-whack-a-mole/>

Prebunk

- “Prevention, not cure, may be a more effective way to combat misinformation”
- Inoculating people against misinformation
- The process of debunking lies, tactics, or sources before they strike
- [A guide to prebunking: a promising way to inoculate against misinformation](#)

Presumptive Approach to Administering Vaccines



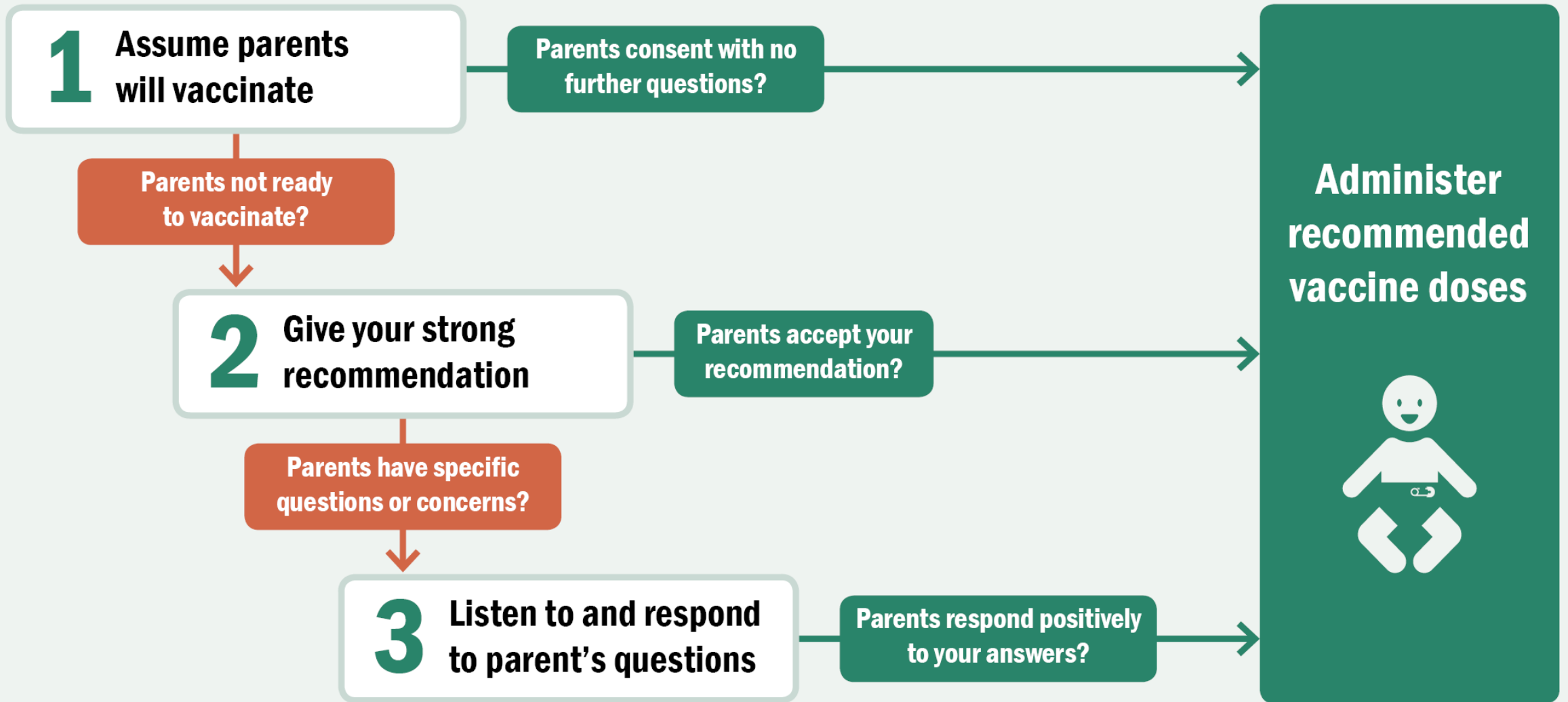


Strategies for Improving Vaccine Communication and Uptake

Sean T. O'Leary, MD, MPH, FAAP,^a Douglas J. Opel, MD, MPH,^b Jessica R. Cataldi, MD, FAAP,^a Jesse M. Hackell, MD, FAAP,^c
COMMITTEE ON INFECTIOUS DISEASES; COMMITTEE ON PRACTICE AND AMBULATORY MEDICINE; COMMITTEE ON BIOETHICS

TABLE 1 Example Archetypes of Parental Attitudes, Intentions, and Behaviors Toward Vaccines^{5,11}

Example Archetypes	
Immunization supporter	Parents recognize the importance of vaccines and vaccinate their children. Parents generally have a strong relationship with their health care provider or have strong trust in health care systems.
Go along to get along	Parents do not question vaccines and generally vaccinate their children but may lack a detailed knowledge of vaccines.
Cautious acceptor	Parents may have minor concerns about vaccines but ultimately vaccinate their children.
Fence-sitter	Parents have significant concerns about vaccines. Parents may be knowledgeable about or have spent time thinking about vaccines. Parents may vaccinate their child with some or all vaccines or may refuse or delay vaccines. Parents may not demonstrate trust in their health care provider regarding vaccine information.
Refuser	Parents refuse all vaccines for their child. Their reasons for refusal may include distrust in the medical system, safety concerns, and religious or other personal beliefs.



<https://www.cdc.gov/vaccines-children/hcp/conversation-tips/index.html>

How to word the “Presumptive Approach”



- Instead of saying *"What do you want to do about shots?"*, say *"Your child needs three shots today."*
- Instead of saying *"Have you thought about the shots your child needs today?"*, say *"Your child needs the HPV shot for cancer prevention today."*

<https://www.cdc.gov/vaccines-children/hcp/conversation-tips/index.html>

How to give a strong recommendation



- *"I strongly recommend your child get these vaccines today."*
- *"These shots are very important to protect him or her from serious diseases."*
- *"I believe in vaccines so strongly that I vaccinated my own children on schedule."*
- *"This office has given thousands of doses of vaccines, and serious reactions are uncommon."*

If parents refuse...



DO

- Continue the conversation
- Explain the seriousness of vaccine-preventable infections
- Remind parents to call ahead if their child is sick so that healthcare workers can take precautions to protect other patients
- Share information from reliable sources

DON'T

- Judge or end the conversation
- Miss the opportunity to compassionately educate
- Close off the opportunity to keep the family engaged in care

“Truth Sandwich” messaging



- Approach a parent or patient who is presenting false information with the “truth sandwich” – starting and ending with repeating the true information and countering/debunking the falsehood in the middle
- For example:
 - Positive: “Parents and doctors agree kids deserve to be safe and healthy.”
 - Debunk: “Anyone holding up one study or statistic to undermine the advice of nearly all pediatricians is painting a misleading picture for their own gain.”
 - Positive: “Instead, let’s support healthy communities by vaccinating children to help their bodies recognize and resist disease.”

<https://www.aap.org/en/patient-care/immunizations/communicating-with-families-and-promoting-vaccine-confidence/talking-with-vaccine-hesitant-parents/>

Motivational Interviewing Skills

Open-ended Questions: helps explore and understand a parent's stance on vaccination

Examples:

- "Tell me more about what you already know?"
- "What might be one good reason to vaccinate your child today?"
- "In your mind, what is the harm if you choose *not* to vaccinate her today?"
- "What are some reasons for getting the vaccination?"

Affirmations: improves parent engagement in an open discussion with you by helping them feel supported, appreciated, and understood

Examples:

- "You are a good parent. Your concern shows how much you care about your child's safety."
- "You are a good mom and you care about your daughter's health."
- "You've always tried to be a good role model for your kids."
- "If you thought the vaccine was safe, you would not hesitate because you want what's best for your daughter."
- "It sounds like you're comfortable with the other vaccines."

Reflections: encourages partnerships, deepens rapport, and allows a parent to understand themselves and their motivations on a deeper level; reflections are particularly useful when encountering strong emotion or hesitancy

Examples:

- "You're frightened by what you've read on the Internet."
- "You're really worried and you want to make the best decision."
- "You're the type of person who really likes to do her research."
- "So it sounds like you're worried about the possibility that the MMR vaccine might cause autism."

Ask Permission to Share: puts parents in a less defensive posture and makes them more receptive to the information you'd like to share

Examples:

- "Could I provide you with some information based on what you just shared?"
- "Would you mind if I shared with you why I think this is such an important vaccine?"
- "May I share what I know about...?"
- "I have a different view, may I share it with you?"

- **Autonomy Support:** enhances a parent's sense of control and makes them feel more at ease with the conversation

Examples:

- "That said, this is a decision only you can make."
- "Only you can choose what is best for your child."



More Trustworthy Resources



- [Navigating vaccine conversations - by Katelyn Jetelina](#) – Your Local Epidemiologist is a great source for evidence and nuanced communication
- [Communicating with Families and Promoting Vaccine Confidence](#) – the American Academy of Pediatrics resource for pediatricians and those who treat pediatric patients
- [Infodemiology training for health care](#) – great training for healthcare workers to understand how to evaluate information sources
- [Immunizations - HealthyChildren.org](#) – the AAP’s parent-facing website in plain language
- [Vaccine Education Center | Children's Hospital of Philadelphia](#) – great resource including for those with questions about ingredients and legal aspects of immunizations

Immunizations Program



- Seavia Dixon, Program Nurse can help with any schedule/policy questions!
 - Seavia.Dixon@arkansas.gov
- Becky Snodgrass, Perinatal Hepatitis B nurse and can help with any questions about exemptions
 - Becky.Snodgrass@arkansas.gov
- Rachel Odom, WebIZ nurse can help with WebIZ questions
 - Rachel.Odom@arkansas.gov
- Vaccines For Children Program provides free vaccines to all un-insured and under-insured children <19 years of age in the state, including all of those on Medicaid
 - Nora.Fawcett@arkansas.gov can help with any question about VFC
- Lots of resources on our website
 - <https://healthy.arkansas.gov/programs-services/community-family-child-health/immunizations/>

Thank you for your attention!



Please contact me with any questions!

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