Becoming a Vaccine Advocate

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Objectives

1. Understand basic vaccine science and how vaccines are developed to ensure safety.
2. Identify common concerns and questions on vaccines.
3. Understand how to navigate questions or concerns about vaccines.
4. Build confidence in talking about vaccines.
5. Know where to locate reliable vaccine resources.

DEPARTMENT OF HEALTH

Immunization 101

Why do you choose to vaccinate?

Why vaccinate?

- Vaccine-preventable diseases are a leading cause of death in children around the world.
- Vaccines are effective at preventing illness and protecting against many diseases.
- When you get sick, your children, grandchildren, and parents may also be at risk.
- Vaccine-preventable diseases can be expensive.
- Your family and co-workers need you.

Vaccines Work: Comparing US Reported Cases

DISEASE	PRE-VACCINE	2023 REPORTED	DECREASE
DIPTHERIA	21,053	2	>99%
HIB	20,000	27	>99%
HEPATITIS A	117,333	11,500	90%
HEPATITIS B	66,232	13,300	80%
MEASLES	530,217	47	>99%
MUMPS	162,344	429	>99%
PERTUSSIS	200,752	5,611	97%
PNEUMOCOCCAL DISEASE	63,067	17,700	72%
POLIO	16,316	0	100%
ROTAVIRUS	62,500	16,250	74%
RUBELLA	47,745	3	>99%
SMALLPOX	29,005	0	100%
TETANUS	580	15	97%
VARICELLA	4,085,120	26,919	>99%

www.nfid.org

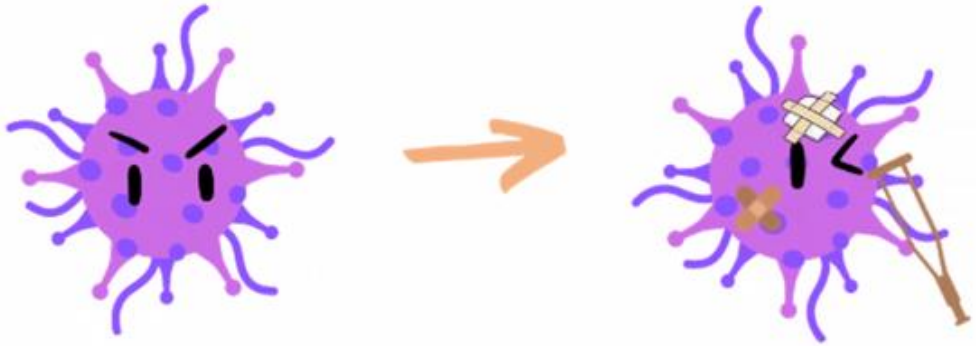
Vaccination activates the immune system

The immune system is designed to fight infections.

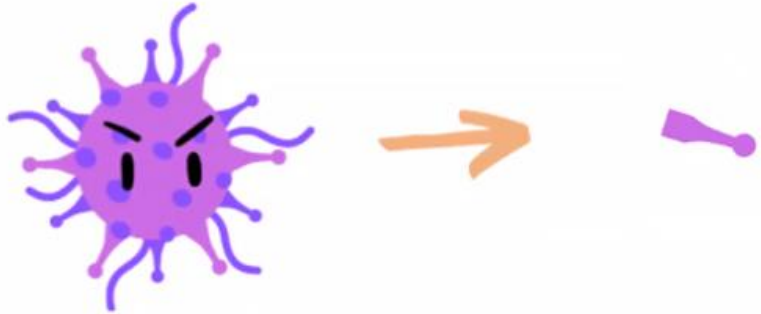
- Two ways our immune system learns:
  - Getting sick
    - Develop antibodies and memory cells.
    - Increased risk of serious illness or dying of the disease.
  - **Getting vaccinated**
    - **Develop <u>antibodies</u> and memory cells.**
    - **Reduces risk of severe disease and death.**
- Immunization develops protection (immunity) without getting sick.
  - **Active immunity**: Vaccine-induced.
  - **Passive immunity**: Mom to baby.

What is a vaccine?

Live Attenuated: MMR, Varicella, Nasal Flu



Polysaccharide, recombinant, conjugate:
HPV, Hep B, Pneumococcal, Meningococcal



Inactivated (killed): IPV, Hep A, Flu shot

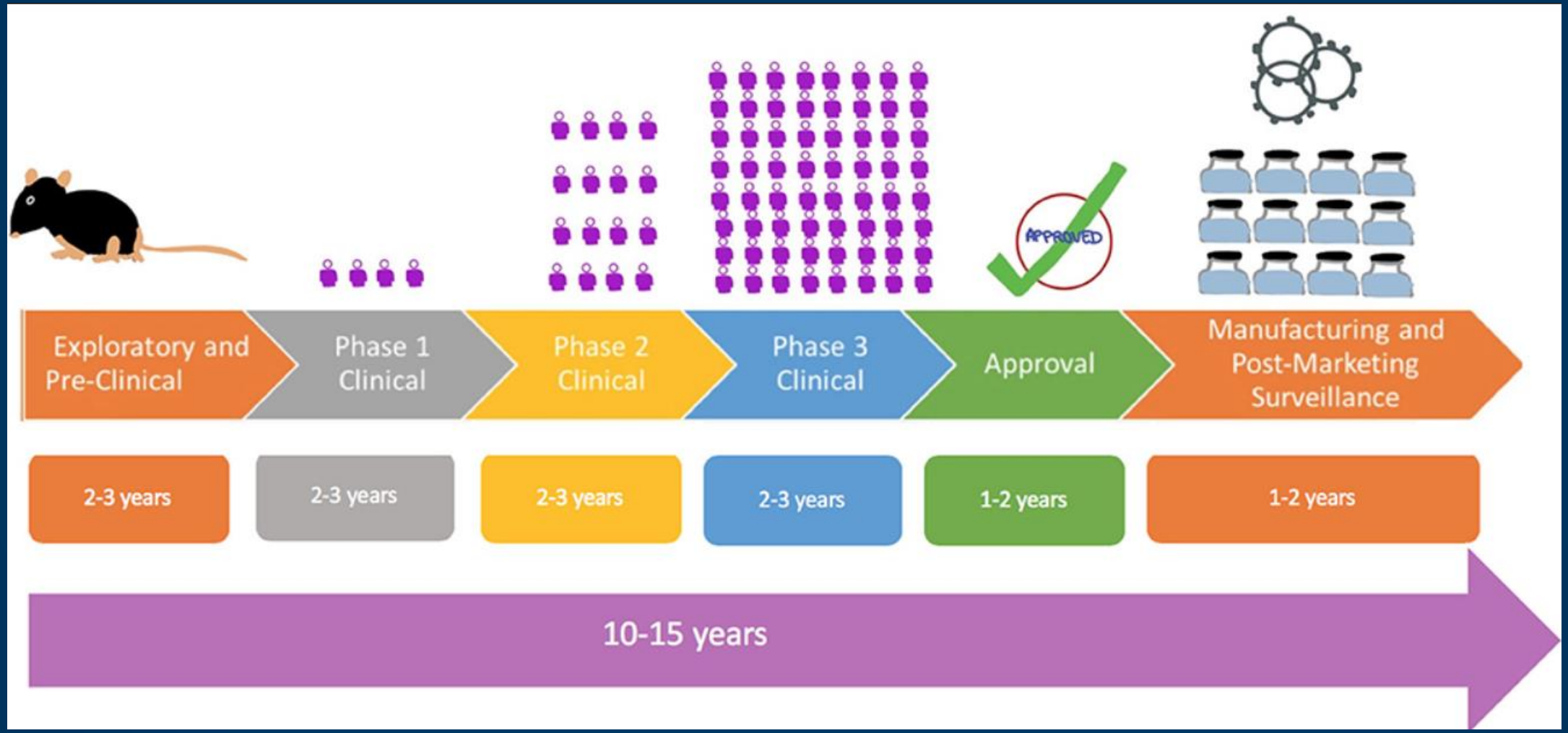
mRNA vaccines: COVID-19, Adult RSV

Explaining mRNA Vaccines — CommunicateHealth and Empowering Conversations for Healthy Communities

Vaccine safety key messages

- Vaccines are one of the greatest success stories in public health.
- Vaccines are held to the highest safety standards because they are given to healthy people.
- The benefits of vaccines far outweigh the risks.
- Side effects are typically mild and resolve after 1-2 days.

Vaccine Development Process



CDC's Immunization Schedule

You need vaccines throughout your life!

2025 Recommended Immunizations for Adults Aged 19 Years and Older

Want to learn more?
Scan this QR code to find out which vaccines you may need. Or visit:
www2.cdc.gov/nip/adultimmsched/

Older children and teens need vaccines too!

2025 Recommended Immunizations for Children 7–18 Years Old

Want t
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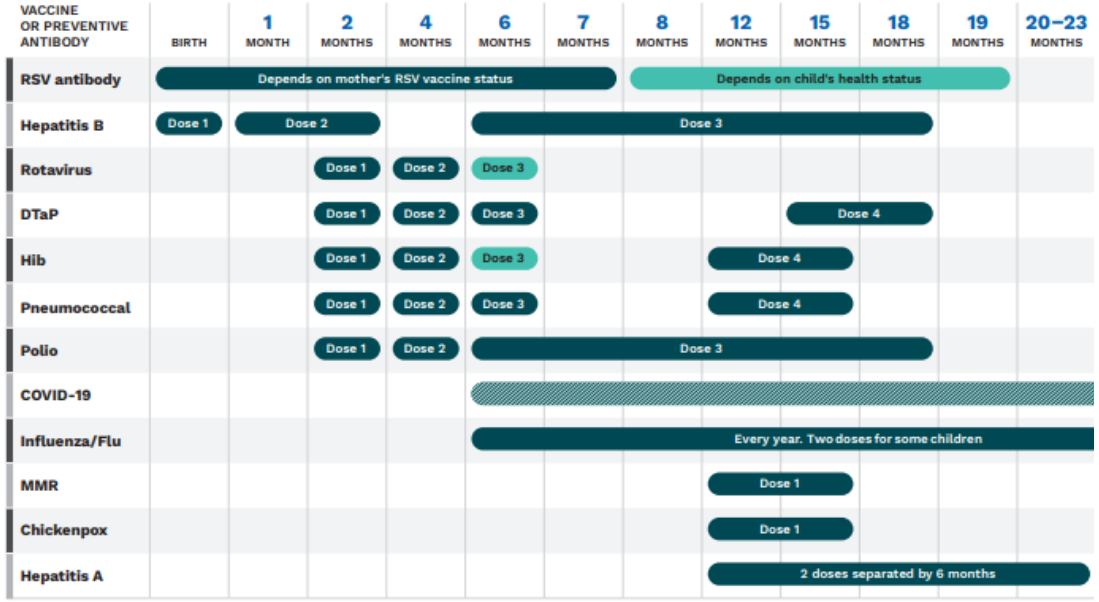
vaccine
www2.

Your child needs vaccines as they grow!

2025 Recommended Immunizations for Birth Through 6 Years Old

Want to learn more?
Scan this QR code to find out w
vaccines your child might need.
www2.cdc.gov/vaccines/childq



KEY

- ALL children should be immunized at this age
- SOME children should get this dose of vaccine or preventive antibody at this age
- Parents/caregivers should talk to their health care provider to decide if this vaccine is right for their child

Talk to your child's health care provider for more guidance if:

1. Your child has any medical condition that puts them at higher risk for infe
2. Your child is traveling outside the United States. Visit wwwnc.cdc.gov/tr
3. Your child misses a vaccine recommended for their age.

CDC U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION

FOR MORE INFORMATION
Call toll-free: 1-800-CDC-INFO (1-800-232-4636)
Or visit: www2.cdc.gov/vaccines/childquiz/

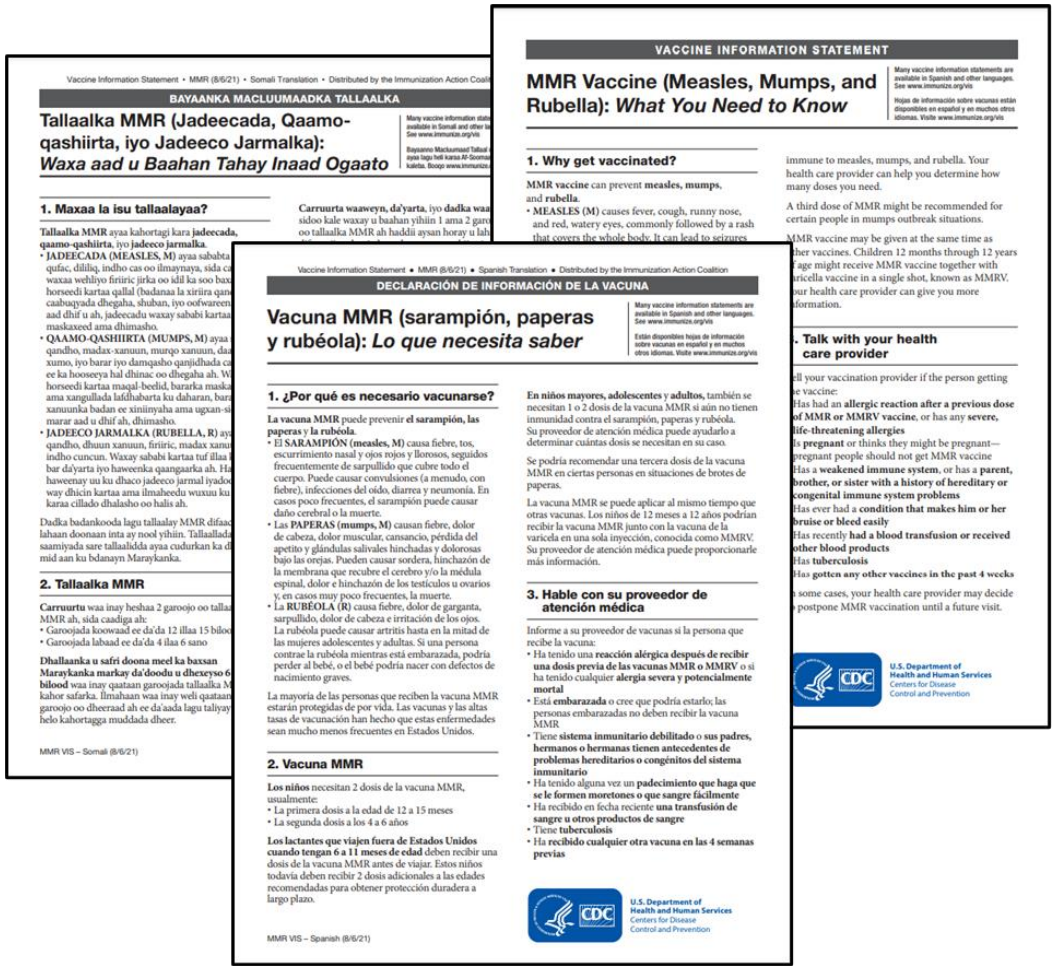
What diseases do these vaccines protect against?

BIRTH–6 YEARS OLD

VACCINE-PREVENTABLE DISEASE	DISEASE COMPLICATIONS
RSV (Respiratory syncytial virus) Contagious viral infection of the nose, throat, and sometimes lungs; spread through air and direct contact	Infection of the lungs (pneumonia) and small airways of the lungs; especially dangerous for infants and young children
Hepatitis B Contagious viral infection of the liver; spread through contact with infected body fluids such as blood or semen	Chronic liver infection, liver failure, liver cancer, death
Rotavirus Contagious viral infection of the gut; spread through the mouth from hands and food contaminated with stool	Severe diarrhea, dehydration, death
Diphtheria* Illness caused by a toxin produced by bacteria that infects the nose, throat, and sometimes skin	Swelling of the heart muscle, heart failure, coma, paralysis, death
Pertussis (Whooping Cough)* Contagious bacterial infection of the lungs and airway; spread through air and direct contact	Infection of the lungs (pneumonia), death; especially dangerous for babies
Tetanus (Lockjaw)* Bacterial infection of brain and nerves caused by spores found in soil and dust everywhere; spores enter the body through wounds or broken skin	Seizures, broken bones, difficulty breathing, death
Hib (Haemophilus influenzae type b) Contagious bacterial infection of the lungs, brain and spinal cord, or bloodstream; spread through air and direct contact	Depends on the part of the body infected, but can include brain damage, hearing loss, loss of arm or leg, death
Pneumococcal Bacterial infections of ears, sinuses, lungs, or bloodstream; spread through direct contact with respiratory droplets like saliva or mucus	Depends on the part of the body infected, but can include infection of the lungs (pneumonia), blood poisoning, infection of the lining of the brain and spinal cord, death
Polio Contagious viral infection of nerves and brain; spread through the mouth from stool on contaminated hands, food or liquid, and by air and direct contact	Paralysis, death
COVID-19 Contagious viral infection of the nose, throat, or lungs; may feel like a cold or flu. Spread through air and direct contact	Infection of the lungs (pneumonia); blood clots; liver, heart or kidney damage; long COVID; death
Influenza (Flu) Contagious viral infection of the nose, throat, and sometimes lungs; spread through air and direct contact	Infection of the lungs (pneumonia), sinus and ear infections, worsening of underlying heart or lung conditions, death
Measles (Rubeola)† Contagious viral infection that causes high fever, cough, red eyes, runny nose, and rash; spread through air and direct contact	Brain swelling, infection of the lungs (pneumonia), death
Mumps† Contagious viral infection that causes fever, tiredness, swollen cheeks, and tender swollen jaw; spread through air and direct contact	Brain swelling, painful and swollen testicles or ovaries, deafness, death
Rubella (German Measles)† Contagious viral infection that causes low-grade fever, sore throat, and rash; spread through air and direct contact	Very dangerous in pregnant women; can cause miscarriage or stillbirth, premature delivery, severe birth defects
Chickenpox (Varicella) Contagious viral infection that causes fever, headache, and an itchy, blistering rash; spread through air and direct contact	Infected sores, brain swelling, infection of the lungs (pneumonia), death
Hepatitis A Contagious viral infection of the liver; spread by contaminated food or drink or close contact with an infected person	Liver failure, death

Vaccine Schedules For You and Your Family | Vaccines & Immunizations | CDC

Vaccine Information Statements (VIS)



- **Vaccine Information Statements** (VIS) are information documents produced by the Centers for Disease Control (CDC) that explain both the benefits and risks of a vaccine.
- Federal law requires that they are handed out before each dose.
- They are available in multiple languages: [Immunize.org: VIS Translations Index (www.immunize.org/vaccines/vis-translations/spanish/)](www.immunize.org/vaccines/vis-translations/spanish/).

How Vaccines Work

What is the main goal of a vaccine?

A. To treat people who are already sick

B. To strengthen the immune system before exposure

C. To replace the immune system

D. To make you feel slightly ill

Answer

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How Vaccines Work

Which part of the immune system "remembers" how to fight a disease after vaccination?

A. Red blood cells

B. Antibodies

C. Platelets

D. Skin cells

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How Vaccines Work

Which of these diseases was eliminated from the U.S. thanks to vaccines?

A. Measles

B. Polio

C. Chickenpox

D. Tetanus

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Vaccine Safety

Before a vaccine is approved for public use, it must go through which of the following?

A. One quick test in the lab

B. A review by the CDC only

C. Multiple phases of clinical trials for safety and effectiveness

D. A vote by Congress

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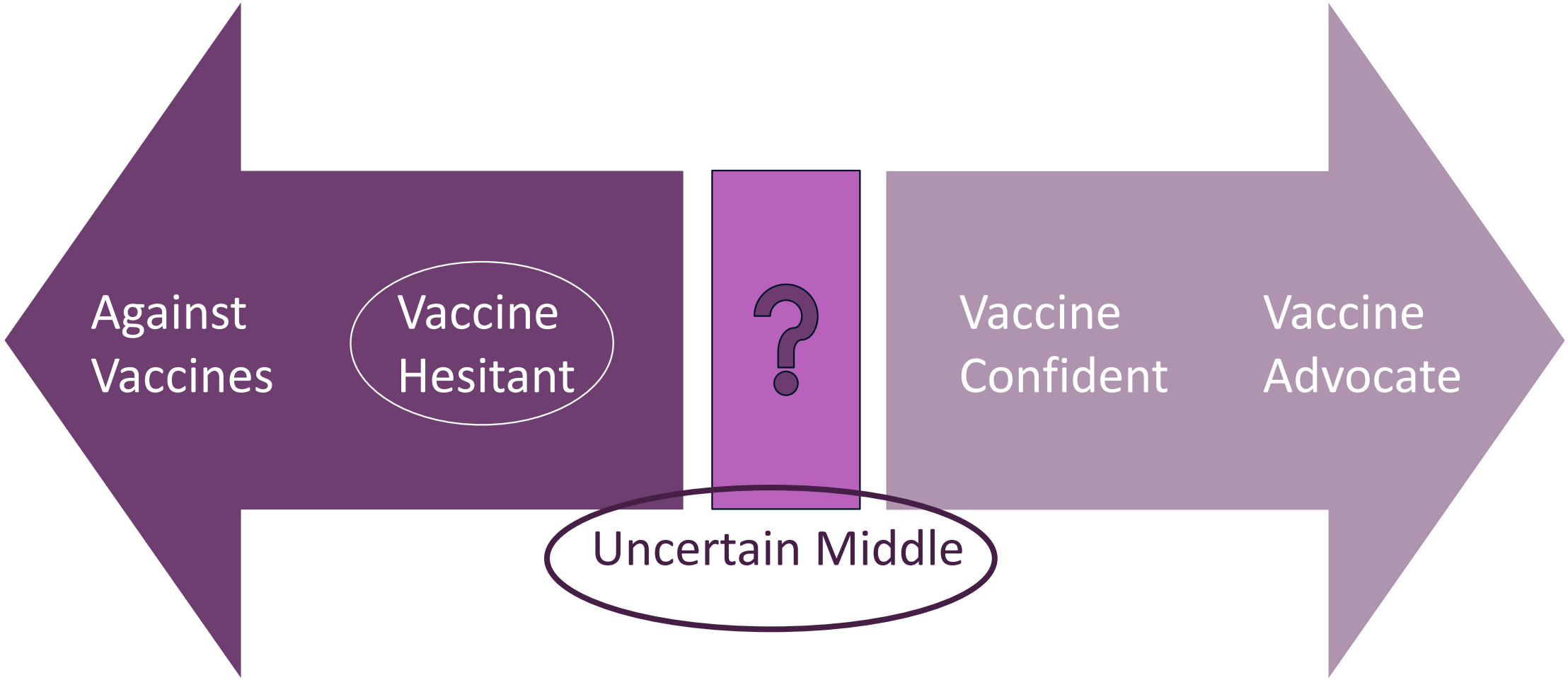
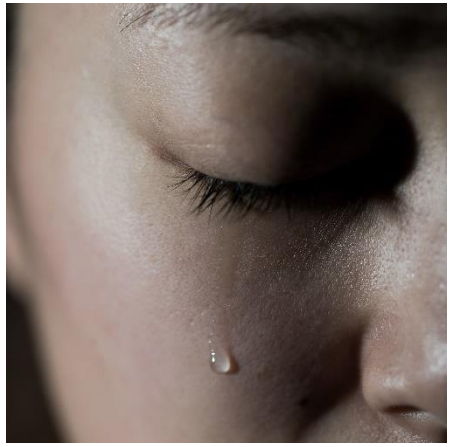
Talking about vaccines and responding to questions

The Spectrum of Vaccine Confidence



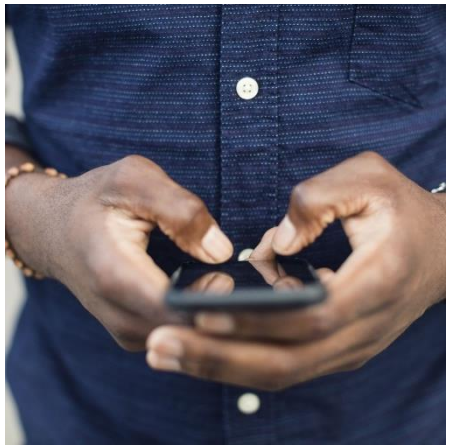
Being Sensitive to Vaccine Hesitancy



Negative healthcare experiences

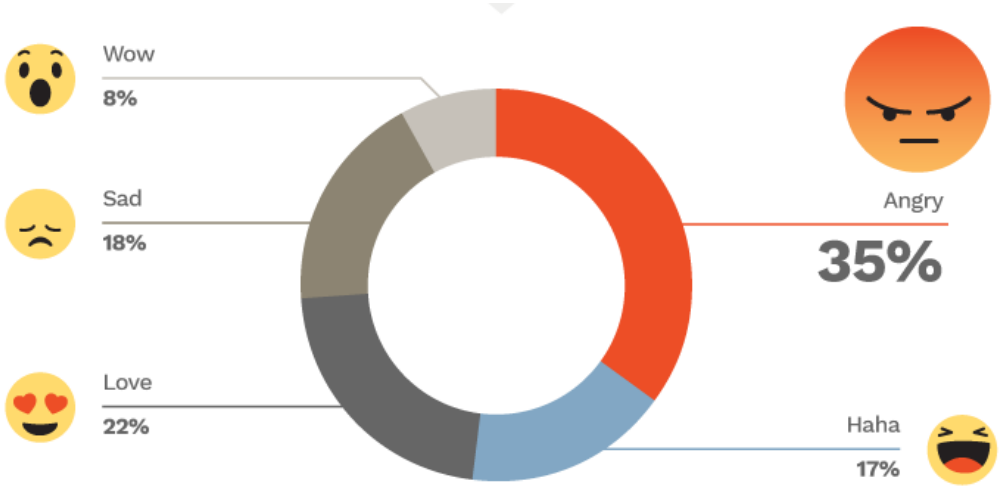
Historical or cultural reasons

Peer group influences



Media or social media bubble

Social media impact on vaccine misinformation



- Outrageous and sensationalized content results in content going viral at higher rates.
- Social media allows for misinformation and disinformation to spread quickly.
- Algorithms reinforce user choices resulting in hyper-personalized content and exposure to only like-minded sources.

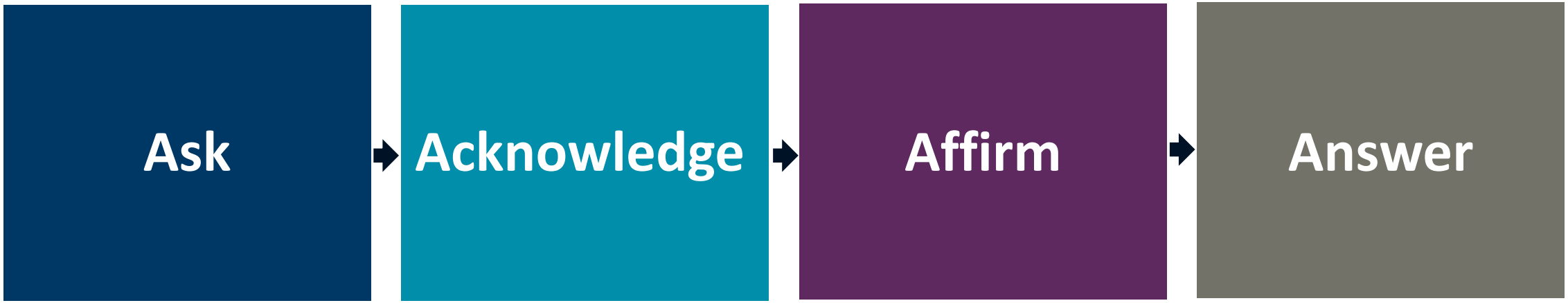
Emotional Content: Boost Social Media Engagement | Fractl

How is a vaccine decision made?

Most people do not make health choices based on facts alone

- Values
- Emotions
- Ease of getting a vaccine
- Costs
- Risk

Talking about Vaccines: The Four As



Voices For Vaccines Organization. *Becoming Trusted Messengers online training.* https://www.voicesforvaccines.org/course/becoming-trusted-messengers/.

1. ASK

- Be curious
- Create trust as the basis of your conversation
  - Listen to learn, not to respond
- Dig deeper
  - Open-ended questions get the other person talking

Asking a Good Question

Make it clear

- Your questions should be easy to understand and to answer.
- Avoid multi-part questions.

?

Make it neutral

- Your question should be neutral enough that any answer would be acceptable.
- Help the person feel free to be honest.

Make it relevant

- Ask a question related to the discussion you are currently having.

?

Examples

- What is your main concern?
- What is the one thing that concerns you most?
- Can you tell me more about it?

2. ACKNOWLEDGE

Acknowledge and build on common beliefs or values.

"You really care about your child's health."

Acknowledge when they have correct information.

"You are right about that."

Acknowledge that they are capable of making good choices.

It's clear you've really looked into this."

3. AFFIRM

- **AFFIRM:** That it's OK to have questions.
  - Provides a sense of understanding, respect, and collaboration.
  - Affirm the experiences and feelings of the other person to build trust and to feel safe to share concerns.
  - "That's a great question. I heard that too so I looked into it."

4. ANSWER

Get **permission** to provide an answer.

- Ways to ask permission:
  - “I’ve come across some data that might be useful; do you mind if I share what I’ve learned?”
  - “Can we explore some facts together? I think it might be helpful for our discussion.”

When you know the answer…

- AND the person has given you permission to answer…
- Provide an answer in a way that teaches them how vaccines work not just informs them that vaccines are safe and effective.
- Keep your answers simple and ask if they want more information.
- Provide one answer at a time.
- Stay on the topic of their concern.

When you DON’T know the answer…

- It is OK to say, “I don’t know.” *Offer to follow-up later with more information.*
- Encourage them to discuss with their health care provider.
- Share reliable resources.
- *“Do you mind if we look at some of the evidence together? It might help us both understand this better.”*

Did I do it right?

- You built trust.
- You listened.
- You are someone who can help.
- You were empathetic.
- You did not argue.
- You left the door open.
- It is ultimately the individual's choice.

Vaccine Conversations

If a patient asks a question about vaccine safety, what's the best first step?

A. Tell them to stop worrying.

B. Listen carefully and provide trusted, evidence-based information.

C. Dismiss their concerns.

D. Refer them to social media discussions.

Answer

If a patient asks a question about vaccine safety, what's the best first step?

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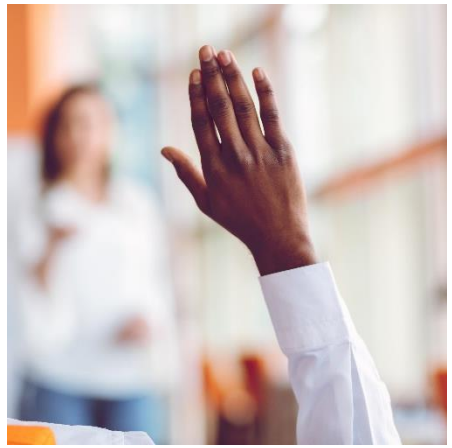
What are the 4 A's?

ASK

ACKNOWLEDGE

AFFIRM



ANSWER

Example scenarios

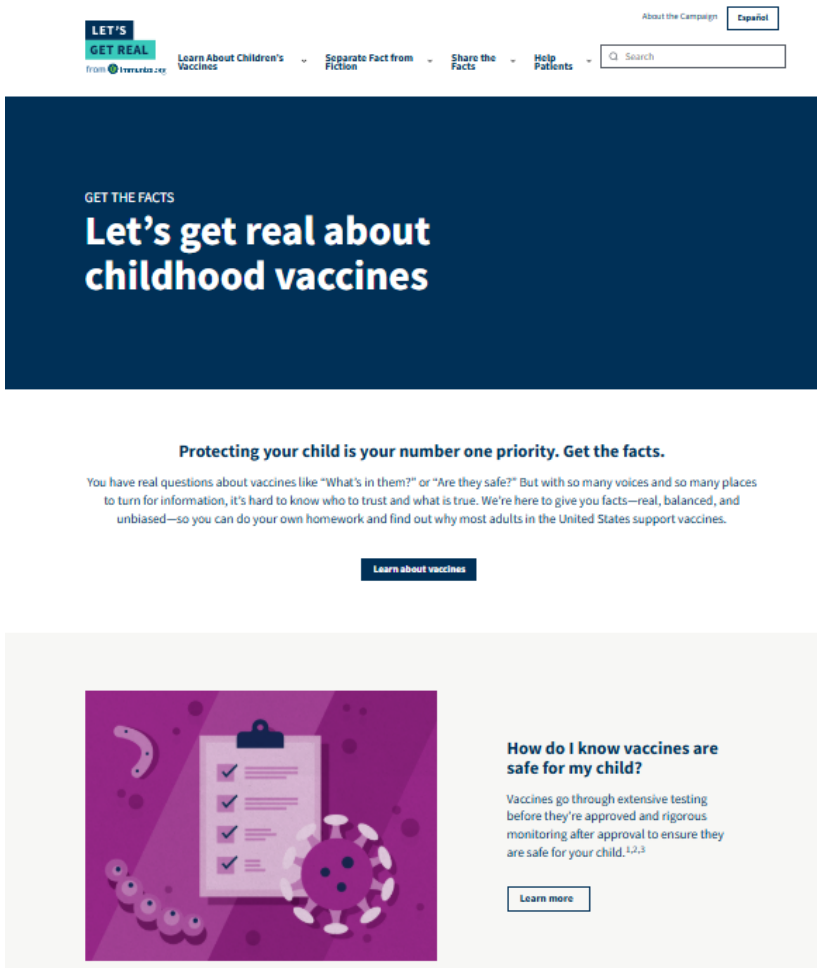
“I’ve heard vaccines have harmful chemicals in them”

Example scenario

“I’m avoiding the MMR vaccine because it causes autism”

Example scenario

Reliable vaccine resources



[Minnesota Department of Health: Reliable Sources of Immunization Information (www.health.state.mn.us/people/immunize/basics/imminfo.html)]

[Vaccinate Your Family: ViralTruths.org]

[Children's Hospital of Philadelphia Vaccine Education Center]

LetsGetRealAboutVaccines.org

Vaccine Resources

Which of these electronic sources provides reliable and accurate vaccine information?

A. Random health blogs

B. American Academy of Pediatrics HealthyChildren.org

C. Celebrity social media accounts

D. Wikipedia

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Vaccine Resources

Where can community health workers find accurate information on which immunizations are required for school and childcare?

A. On packaging inserts

B. In local newspapers

C. Minnesota Department of Health website

D. From online forums

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Are Your Kids Ready?

Minnesota K-12 Immunization Law

Students are required to receive certain vaccines for school or submit an exemption. This requirement applies for all public, private, online, and home schools in Minnesota. Look for your child's grade in the chart below and see how many total doses of each vaccine are needed for their grade.

Required Immunizations	Kindergarten to Sixth Grade	Seventh Grade to Eleventh Grade	Twelfth Grade
Hepatitis B (Hep B)	3 Doses	3 Doses	3 Doses
Polio (IPV)	4 Doses	4 Doses	4 Doses
Measles, mumps, rubella (MMR)	2 Doses	2 Doses	2 Doses
Varicella (Chickenpox)	2 Doses	2 Doses	2 Doses
Diphtheria, tetanus, and pertussis (DTaP)	5 Doses	5 Doses	5 Doses
Tetanus, diphtheria, and pertussis (Tdap)		1 Dose	1 Dose
Meningococcal ACWY (MenACWY)		1 Dose	2 Doses

Note: The number of doses may be different if your child is behind schedule. If your child has fallen behind on their vaccinations it is not too late to catch-up, talk to their health care provider.

Recommended but not required for school

Influenza (flu), COVID-19, Human Papillomavirus (HPV), Meningococcal B (MenB) and other vaccines are recommended for children to ensure they are fully protected. Talk to your health care provider about when your child should receive these immunizatons. For more information visit CDC: Vaccine Schedules For You and Your Family (www.cdc.gov/vaccines/imz-schedules/index.html).

Thank you!

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Questions?