

# “No Thanks, Doc”: Tools to Improve Difficult Conversations in the Medical Encounter

## Presenter Information

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# Objectives

**01.** Discuss the history of vaccine hesitancy and the current state of ambivalence.

**02.** Analyze strategies for addressing ambivalence and vaccine hesitancy with patients at the medical encounter.

**03.** Improve confidence and comfort addressing common vaccine concerns.



**Vaccine Hesitancy**

**Top ten threats to global health in 2019**

### Comparison of 20<sup>th</sup> Century Annual Morbidity and Current Morbidity: Vaccine-Preventable Diseases

Disease	20th Century Annual Morbidity <sup>†</sup>	2023 Reported Cases <sup>††</sup>	Percent Decrease
Smallpox	29,005	0	100%
Diphtheria	21,053	2	> 99%
Measles	530,217	47	> 99%
Mumps	162,344	429	> 99%
Pertussis	200,752	5,611	97%
Polio (paralytic)	16,316	0	100%
Rubella	47,745	3	> 99%
Congenital Rubella Syndrome	152	0	100%
Tetanus	580	15	97%
<i>Haemophilus influenzae</i>	20,000	27*	> 99%

<sup>†</sup> JAMA. 2007;298(18):2155-2163

<sup>††</sup> CDC. National Notifiable Diseases Surveillance System, Weekly Tables of Infectious Disease Data. Atlanta, GA. CDC Division of Health Informatics and Surveillance. Available at: [Weekly statistics from the National Notifiable Diseases Surveillance System \(NNDSS\)](https://www.cdc.gov/nndss/). (cdc.gov). Data submitted through Dec 31, 2023; accessed on Jan 24, 2024; diphtheria and polio case counts reported by CDC Program.

\* *Haemophilus influenzae* type b (Hib) < 5 years of age. An additional 12 cases of Hib are estimated to have occurred among the 257 notifications of *Haemophilus influenzae* (< 5 years of age) with unknown serotype.

National Center for Immunization & Respiratory Diseases

Historical Comparisons of Vaccine-Preventable Disease Morbidity in the U.S.



2/14/2024

## 9 million children to be vaccinated against polio in Africa after outbreak in Malawi

Published: March 22, 2022 at 7:41 a.m. ET

THE JERUSALEM POST CORONAVIRUS ISRAEL NEWS WORLD NEWS MIDDLE EAST BUSINESS & INNOVATION

## Israel's current polio outbreak is tip of the iceberg - Health Min. D-G

Health Ministry director-general Nachman Ash stressed that polio can be eradicated through the use of vaccines.

By 103FM Published: APRIL 5, 2022 11:11



## Measles cases across Europe continue to surge, putting millions of children at risk

Rapid response to measles outbreak is critical, as cases this year predicted to soon exceed total number reported in 2023

28 May 2024

## First Polio Case in Nearly a Decade Is Detected in New York State

A man who lives in Rockland County was infected by someone who received the oral polio vaccine, which is no longer used in the United States, officials said.

CNN health Life, But Better Fitness Food Sleep Mindfulness Relationships

## Polio makes a comeback in the Philippines 19 years after the country was declared free of the disease

By Kate Hunt CNN Updated 11:46 AM EDT, Thu September 19, 2019

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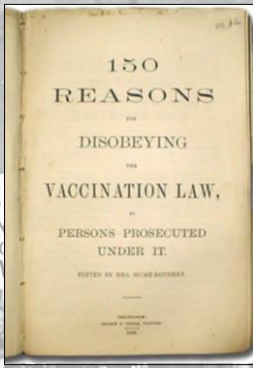
CIDRAP Center for Infectious Disease Research and Policy

News & Perspective Infectious Disease Topics Antimicrobial Stewardship Ongoing Programs

FEATURED NEWS TOPICS COVID-19 Flu Vaccines Roadmap MERS-CoV Chronic Wasting Disease

## US measles cases hit 1,234 as Brooklyn outbreak called over

Filed Under: Measles Stephanie Soucheray | News Reporter | CIDRAP News | Sep 03, 2019



# Vaccine Hesitancy is Not New

## Top 10 Reasons Not to Let Your Child Get a COVID Shot



On May 10, 2021, the U.S. Food and Drug Administration (FDA) extended its emergency use authorization (EUA) for the Pfizer/BioNTech COVID-19 vaccine to adolescents 12 through 15 years of age, amending the EUA (issued December 11, 2020) that authorized the injection for individuals age 16 and up. Moderna has indicated that it plans to request similar EUA expansion to 12-17 year-olds for its COVID vaccine, and Johnson & Johnson/Janssen is conducting clinical trials in that age group. In giving its green light to Pfizer, the FDA chose to ignore the following facts, all of which make it abundantly clear that vaccinating children and adolescents against COVID-19 is both medically indefensible and unethical.



1. American children are at negligible risk' for COVID-19. As of May 29, 2021, the Centers for Disease Control and Prevention (CDC) attributed 366 deaths in children aged 0-18 to COVID-19 out of a child population

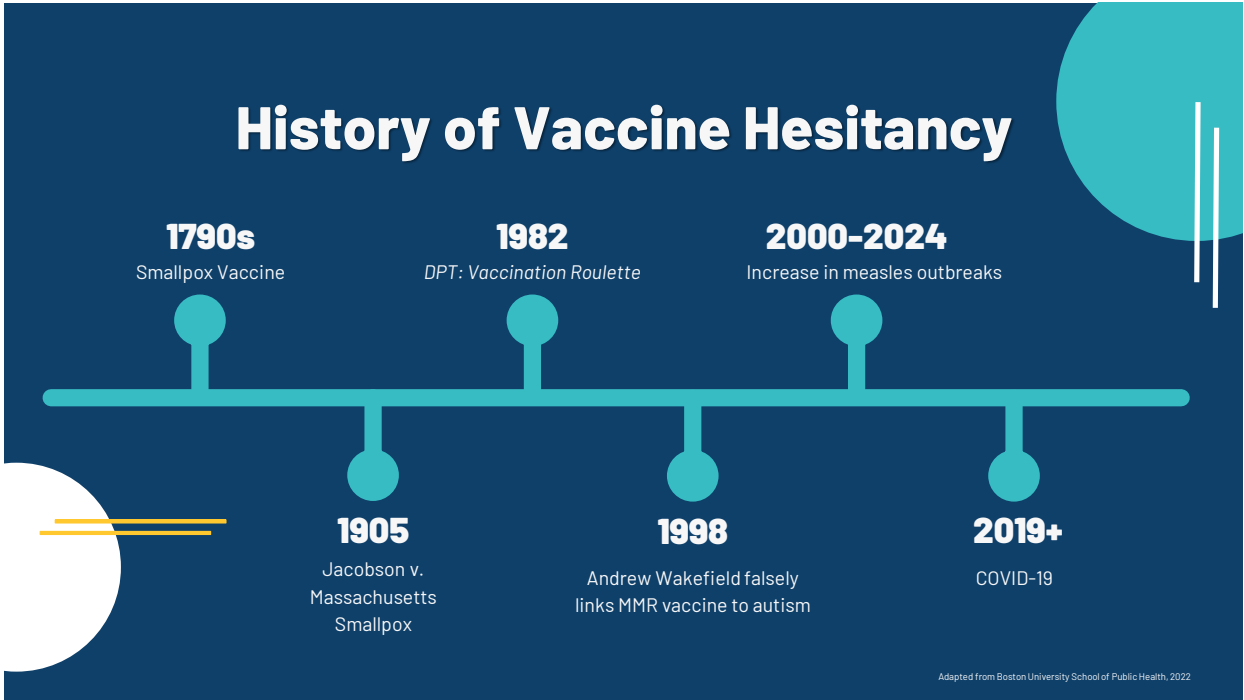
at the time. With about 1,000 adolescents 12-15 years old in Pfizer's clinical trial vaccine group—and about the same number in Moderna's trial—the death rate following either vaccination in this age group may be approximately 0.3%



# Vaccine Hesitancy is Not New



# History of Vaccine Hesitancy



## Provider comfort addressing HPV vaccine hesitancy

Francis et al., Preventative Medicine Reports, 2021.

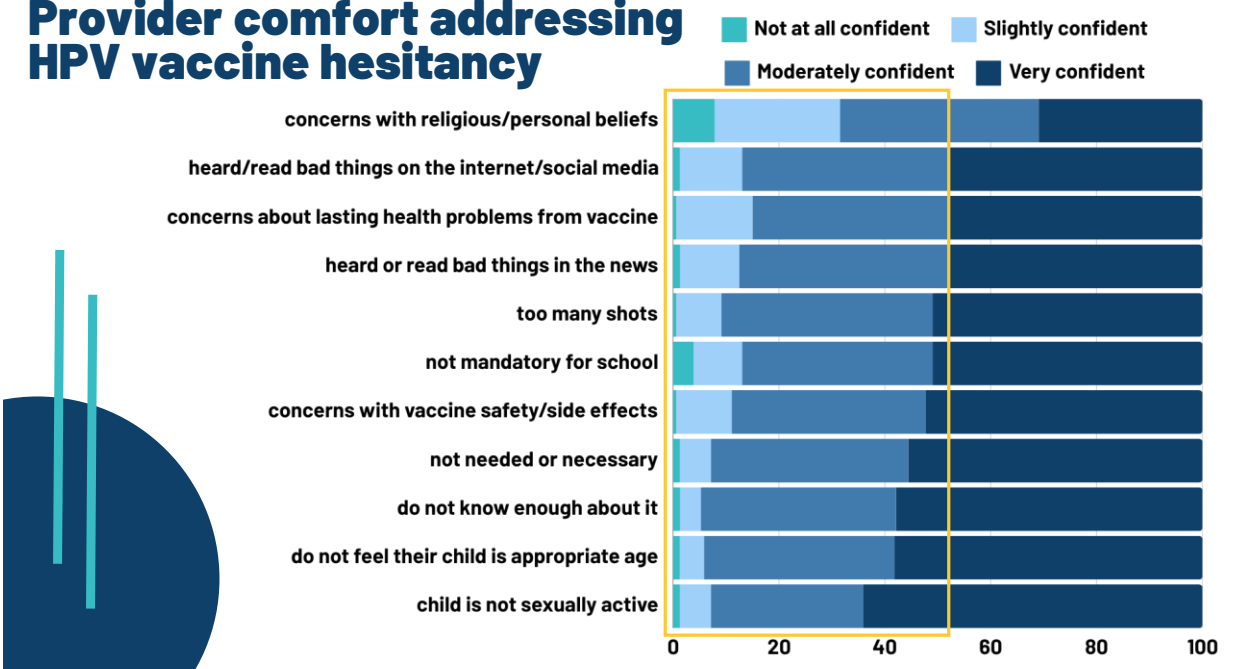
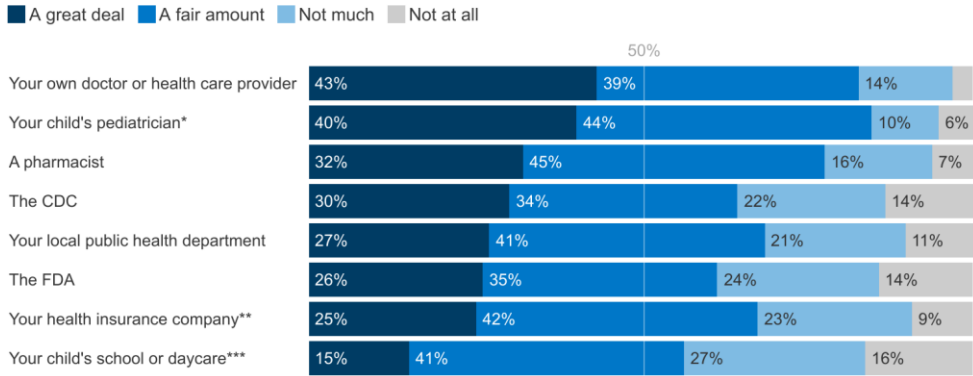


Figure 11

### Health Care Providers Are The Most Trusted Sources For Vaccine Information

In general, how much do you trust each of the following to provide reliable information about vaccines?



NOTE: \*Item asked of parents or guardians of children under the age of 18. \*\*Item asked of those with health insurance. \*\*\*Item asked of those with at least one child in school or daycare. See topline for full question wording.  
SOURCE: KFF COVID-19 Vaccine Monitor (Sept. 6-13, 2023)

**KFF COVID-19**  
VACCINE MONITOR

# Parents are less concerned than we think

Parent and provider perspectives on immunization: Are providers overestimating parental concerns?

C. Mary Healy<sup>a,c,\*</sup>, Diana P. Montesinos<sup>a,c</sup>, Amy B. Middleman<sup>b</sup>

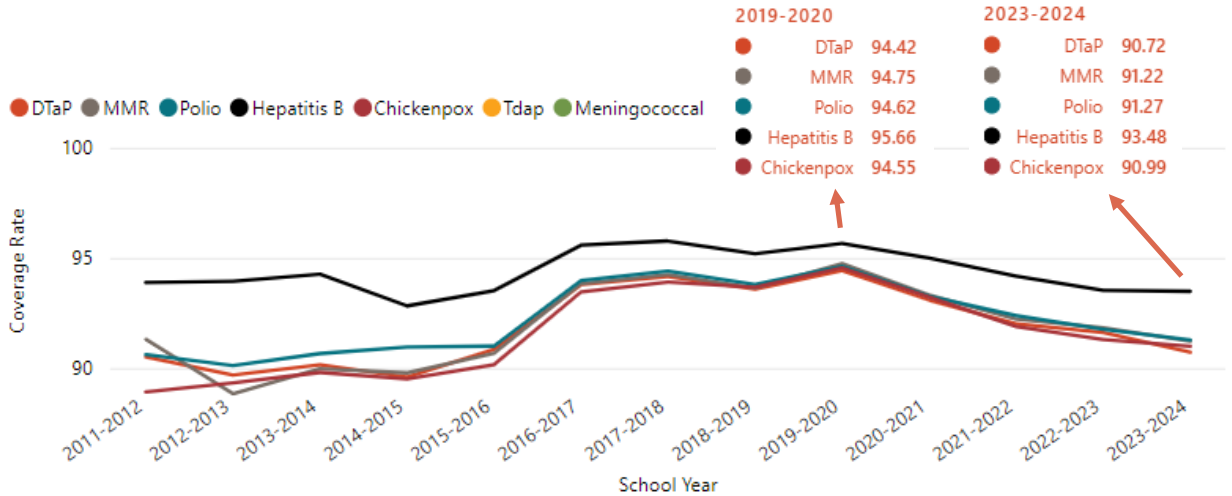
<sup>a</sup> Department of Pediatrics, Section of Infectious Diseases, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA

<sup>b</sup> Department of Pediatrics, University of Oklahoma Health Sciences Center, Oklahoma City, USA

**Providers underestimated the importance of vaccines to parents in every category**

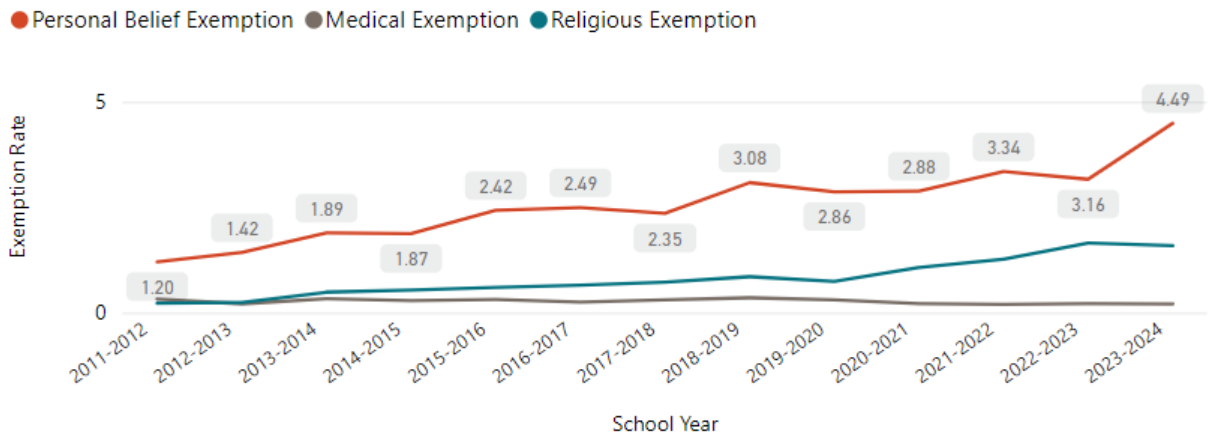
Child Health	9.5 (0-10)	9.3 (4-10)	<0.001
Meningitis <sup>b</sup>	9.4 (0-10)	9.2 (5-10)	0.002
Hepatitis <sup>b</sup>	9.5 (0-10)	8.7 (3-10)	<0.001
Rotavirus <sup>b</sup>	9.0 (0-10)	8.4 (2-10)	0.535
Pertussis <sup>b</sup>	9.5 (0-10)	9.3 (0-10)	0.006
Influenza	9.3 (0-10)	7.0 (1-10)	<0.001
HPV	9.3 (0-10)	5.2 (0-10)	<0.001
Adolescent vaccines <sup>c</sup>	9.2 (0-10)	7.8 (4-10)	<0.001

# ND Kindergarten Coverage Rates for School-Required Vaccines



# ND Kindergarten Exemption Rates for School-Required Vaccines

Some counties have seen personal belief exemption rates **TRIPLE** since 2021-2022.



# Be Not Afraid



Familiarize yourself with vaccine safety monitoring systems



Be comfortable responding to common vaccine concerns



Don't underestimate your expertise!

# Communication Strategies to Address Vaccine Hesitancy



# Effective Messages in Vaccine Promotion: A Randomized Trial



Which message worked the best to increase vaccination rates for MMR?

- A) Corrective information about lack of evidence for MMR causing autism
- B) Text describing dangers of diseases prevented by MMR vaccine
- C) Images of children with diseases MMR vaccine prevents
- D) Narrative of near-death experience of an infant with measles

**NONE OF THE ABOVE!!**

Nyhan et al., 2014.

**None of the interventions increased parental intent to vaccinate a future child.**

Decreased intent to vaccinate in the most hesitant parents.

Increased belief in a vaccine/autism link.

Increased belief in serious vaccine side effects.

Which message worked the best to increase vaccination rates for MMR?

- A) Corrective information about lack of evidence for MMR causing autism
- B) Text describing dangers of diseases prevented by MMR vaccine
- C) Images of children with diseases MMR vaccine prevents
- D) Narrative of near-death experience of an infant with measles

Nyhan et al., 2014.



# Addressing vaccine hesitancy: One size does not fit all

## Communication Strategies by Motivation to Act and Level of Resistance

**Presumption**

**Motivational Interviewing & Empathy**

**Vaccine Hesitancy**

High Motivation to Act  
Low Resistance

Some Motivation to Act  
Some Resistance

Low Motivation to Act  
High Resistance

## Presumption of Vaccination

Strong provider recommendations are correlated with increased vaccine acceptance versus participatory communication.

"Your child needs the MMR and varicella vaccines today."

Presumptive

vs

"Are we doing shots today?"

Participatory

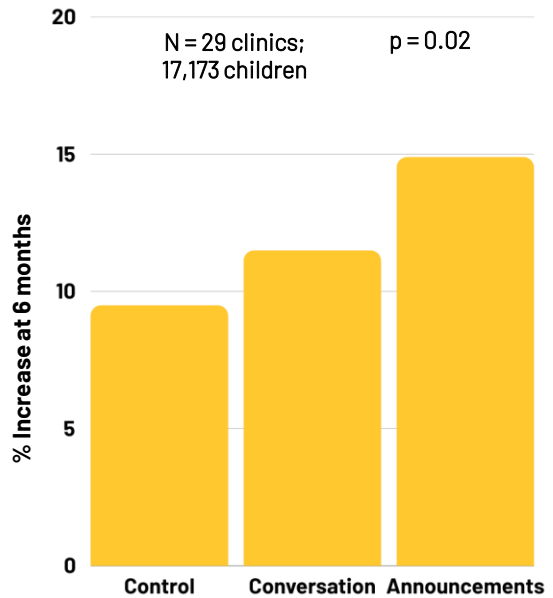
2/3 of patients who received a provider recommendation for flu vaccine received the vaccine within 12 months; 84% of those without a recommendation remained unvaccinated.

Williams J, et al. Caring for the Vaccine-Hesitant Family: Evidence-Based Alternatives to Dismissal. *The Journal of Pediatrics*. 2020;4(224):137-140.  
Nowak GJ, et al. *Int J Environ Res Public Health*. 2018;15(4):711.

## Improving HPV Vaccine Acceptance: Announcements vs Conversation

Announcements [presumption] resulted in greater vaccine acceptance compared to conversations [participatory].

Brewer et al., *Pediatrics* 2016.



# Advantages of the Presumptive Method



## It works!

Presumptive approach improves vaccine acceptance.



## Similar approach to making other medical recommendations

The more confident you are, the more confident the patient is likely to be.

"She has strep throat. I'll prescribe you an antibiotic called amoxicillin to treat it."

"She has strep throat. Do you want her to have amoxicillin to treat it?"



## Saves time

Most patients and families are highly accepting of vaccines.



## Based upon the information we just covered, is this a 🗑️ or a 👍?



Since Tyree just turned 11, he needs a tetanus booster and a meningitis shot, which are required for 7<sup>th</sup> grade. He can also have the HPV vaccine if you want him to have that too.

We will take the tetanus and meningitis vaccines, but we will skip that other one. Three shots is a lot.



**Based upon the information we just covered, is this a  or a  ?**



Tyree is 11, so he is due for his tetanus booster, HPV, and meningitis vaccines today. Do you have any questions?

No, that sounds good!



**What if presumption  
doesn't work?**

# Communication Strategies by Motivation to Act and Level of Resistance

Presumption

Motivational  
Interviewing & Empathy

Vaccine Hesitancy

High Motivation to Act  
Low Resistance

Some Motivation to Act  
Some Resistance

Low Motivation to Act  
High Resistance

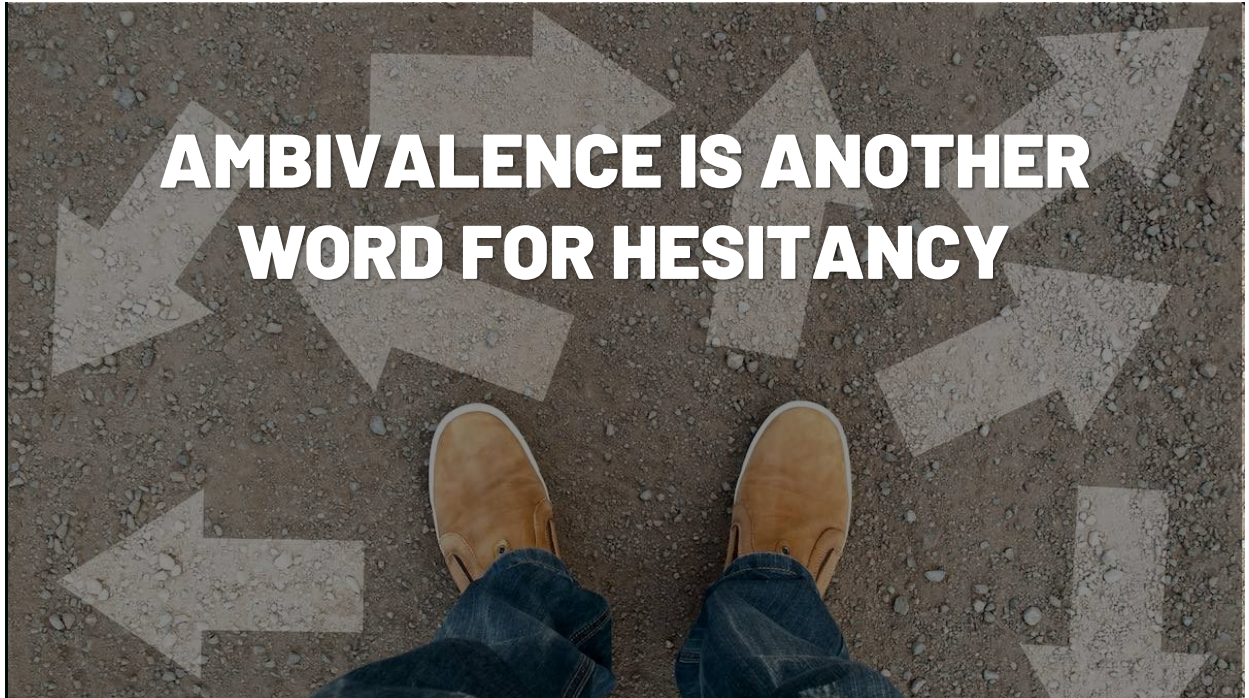
## Motivational Interviewing (MI)



Patient-centered, *guiding* communication style for enhancing a person's own *motivation* for health behavior change by exploring and resolving **ambivalence**.

Studies have illustrated the effectiveness of using MI with patients' considering behavior, lifestyle, and addiction changes when **ambivalence** is present.

MI is being applied to help health care providers address vaccinations when **hesitancy** is present.



**Rather than argue against a  
person's ambivalence...**



### **HONOR AMBIVALENCE**

**Understand that  
ambivalence is a **NORMAL**  
part of the change process.**

**Recognize that ambivalence  
is a state of mind – **coexisting  
but conflicting** feelings.**

# Communication Techniques

<p><b>Open-Ended Questions</b></p> <p><i>"You aren't sure about the HPV vaccine today. What worries you?"</i></p>	<p><b>Reflect Back</b></p> <p><i>"You are really worried about the ingredients in vaccines."</i></p>	<p><b>Honor Ambivalence</b></p> <p><i>"So you don't want her to get cervical cancer, and you are worried about the long term effects of this vaccine. Many parents feel that way."</i></p>
<p><b>Ask Permission to Share</b></p> <p><i>"Can I share some information that I think might ease your mind?"</i></p>	<p><b>Personal Recommendation</b></p> <p><i>"My own children have gotten the vaccine, and I recommend it to all of my patients."</i></p>	<p><b>Support Autonomy</b></p> <p><i>"He is your child and this is your decision."</i></p>

## MI-Consistent Strategies to Consider

- Scaling Questions: Importance, Confidence, and Readiness**
- Elicit-Provide-Elicit (E-P-E)**





# Scaling Questions

Assess a patient's readiness, confidence, and priorities.

## SCALING QUESTIONS



"On a scale of 0 to 10, how **important** is it for you to get the vaccine today?"



"Why did you say **5** and not a lower number, like **4**?"



"What would it take to get you to a higher number, like **6**?"

## Case #1

You are wrapping up your last patient of the day, a 12-year-old who is totally up-to-date on her vaccines. It's flu season, and since she has never missed an influenza vaccine, you make the fair presumption this family will agree to vaccinate.



All right Kate, you look great! You've grown so much this year. Good luck with the rest of your volleyball season. Last thing, it's October, and you are due for your flu vaccine. I can have my nurse give that to you before you head to practice.

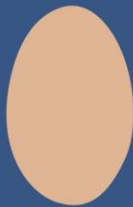
Um, I'm not sure we are going to do that this year. I know we have gotten it every year, but last year she got it and it made her sick!



## Influenza Vaccine Types

### Traditional Inactivated Vaccine

Contains whole influenza viruses that have been grown in eggs and inactivated (killed), so they can't cause influenza after vaccination.



### Recombinant Influenza Vaccine

Only contains one protein from influenza virus, called hemagglutinin, so it can't cause influenza after vaccination.



### Intranasal Influenza Vaccine

Contains live, weakened influenza virus that can reproduce in the nose but not the lungs, so it can't cause influenza after vaccination.



### Cell Culture-based Influenza Vaccine

Vaccine virus is grown in cells in the lab instead of in eggs. The viruses are then inactivated (killed), so they can't cause influenza after vaccination.



## Why might people think the influenza vaccine makes them sick?



### Immune response after vaccine (fever, muscle aches)

Occurs in fewer than 1% of recipients.



### Takes 1-2 weeks to reach peak protection

People may get sick before their body has created influenza antibodies.



### Only prevents influenza

Many viruses circulate during this season that could be mistaken for influenza.



### Effectiveness varies

Effectiveness is 40-60% depending on the season and age of recipient.  
Other things that are not 100% effective: seatbelts, bike helmets, condoms, handwashing.

## Back to Case #1

So you are worried that the vaccine might make Kate sick, but you have had her vaccinated against the flu in the past. Tell me, on a scale of 0-10, 10 being you will get the vaccine today, and 0 being you definitely won't, how important is it to you that she get the vaccine today?

Oh, I would say a 4.

Okay, so you're pretty unsure. That's fair. Why did you say 4 and not 2 or 3?

Well, my dad just started chemotherapy, and we see him a lot. I really don't want Kate to get him sick, especially now.



# Case #1: Continued

Gosh, I'm so sorry to hear about your dad. I can understand why you would want to protect him while he is immunocompromised. What made you say 4 and not 5 or 6?

She was just sick constantly last year, and I think it was from that shot! Plus, she has a volleyball game tonight, and I don't want her to be sore.

So if I could assure you that the shot won't make her sick, and we can talk about how to handle any soreness from the vaccine, you might be ready to get her vaccinated today?

Maybe.

Can I share some ideas?

Sure.



**Elicit**  
**Provide**  
**Elicit**  
**(EPE)**

Share information and advice with patients.

# Sharing Information Using EPE

ELICIT	PROVIDE	ELICIT
<p><b>Elicit knowledge and/or needs from the patient</b></p> <ul style="list-style-type: none"> <li>• Question with empathy</li> <li>• Learn what the patient has tried/already knows</li> </ul>	<p><b>Provide information after <u>asking permission</u></b></p> <ul style="list-style-type: none"> <li>• Stay neutral</li> <li>• Validate feelings</li> <li>• Debunk myths without reinforcing them</li> </ul>	<p><b>Elicit patient's response</b></p> <ul style="list-style-type: none"> <li>• Reflect on discussion</li> <li>• Emphasize autonomy</li> </ul>
<p>“</p> <ul style="list-style-type: none"> <li>• What are your specific concerns?</li> <li>• What have you heard?</li> <li>• What would you most like to know?</li> </ul>	<ul style="list-style-type: none"> <li>• May I make a suggestion?</li> <li>• This may not fit for you, but some people find ...</li> <li>• Would you be interested in some resources?</li> </ul>	<ul style="list-style-type: none"> <li>• What are your thoughts on that?</li> <li>• How do you think that would work for you?</li> </ul> <p>”</p>

## Eliciting the Main Concern: Varicella Vaccine

Could translate to:

- "My child has already had chickenpox."
- "I don't think chickenpox is that bad."
- "I'm pregnant and I'm not sure about my child getting a live vaccine."

"I don't want my child to get this vaccine."

# Eliciting the Main Concern: COVID Vaccine

"I don't think  
this vaccine  
is safe."

Could translate to:

- "I think this vaccine causes female infertility."
- "I am concerned about myocarditis."
- "I heard this vaccine didn't complete the usual clinical trials."
- "I am concerned about what is in the vaccine."

## Case #2



The nurse just told me that Johnny is due for his MMR shot today. I'm don't think I want him to have that.

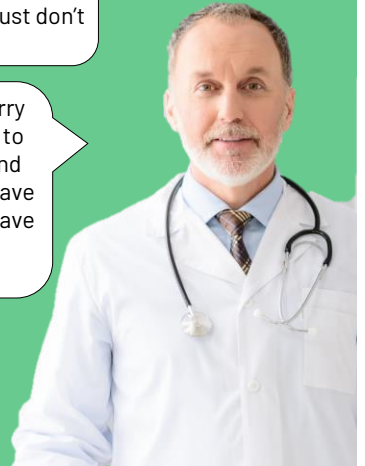
You have some concerns about the MMR vaccine. What is worrying you?



# Case #2: Continued

I am worried that the vaccine might cause autism. My cousin's son has autism, and he was perfectly healthy before he got his MMR vaccine. I know doctors think there is no link, but a lot of moms in my Facebook parenting group have said the same thing. I just don't think it is worth the risk.

Thanks for telling me about your concern. I'm so sorry about your cousin's son, and I understand you want to do everything you can to support Johnny's health and development. Since I give vaccines every day and have a number of children with autism in my practice, I have read a lot about this. May I share some additional information with you?



# The Facts Behind the Claim



In 1998, Andrew Wakefield and colleagues published a case series in the *Lancet* hypothesizing that MMR vaccine might predispose children to autism.

Hypothesis: MMR vaccine causes intestinal damage, allowing proteins from the vaccine to enter the bloodstream and cause brain damage leading to autism.



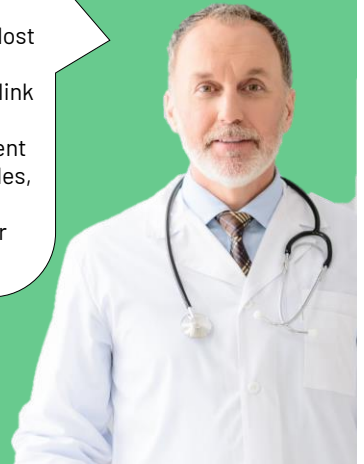
# The Problems (just some!)

- Case series with no control group
- No IRB approval
- Several of the children didn't actually have autism
- Results were falsified - in 9 cases the results were changed from "unremarkable" to "non-specific colitis" after review
- Most kids were referrals by anti-vaccine groups (not disclosed)
- Wakefield had a patent pending for a vaccine to replace the MMR vaccine (not disclosed)
- 10 of his 12 co-researchers asked for their names to be removed
- Paper was retracted and Wakefield eventually lost his medical license
- His findings are not replicable, and numerous research studies with millions of children show no link between MMR vaccine and autism



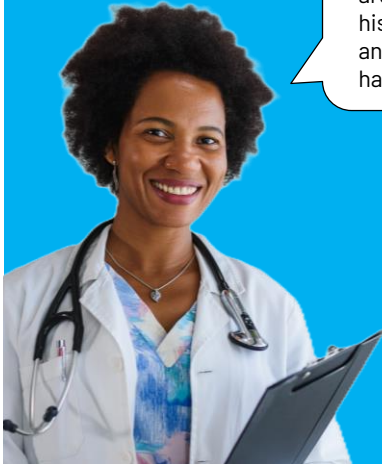
## Back to Case #2

The publication that suggested a link between autism and the MMR vaccine was based on a study of 12 children in 1998. There were lots of problems with the paper that led it to be retracted, and the doctor who wrote it lost his medical license. Since then, there's been lots more studies on millions of children that have not found any link between autism and the MMR vaccine. My own children received the MMR vaccine because I'm confident that the benefits of the vaccine - like preventing measles, which can cause brain damage and even death -- outweigh the risks. That said, this is your child and your decision. What are your thoughts?



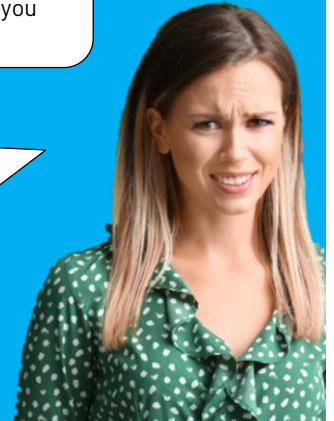


## Case #3



Jack looks great! He is growing and developing perfectly. You are doing a fantastic job. Since he is 2 months old, he is due for his first set of vaccines today. That means 3 shots in his legs and one vaccine that is a drink he will take by mouth. Do you have any questions?

Three shots is a lot! I am not anti-vax, but I don't want to do them all today. It sounds like too much for his little body. Can we do the most important one today and I'll come back every few weeks for the other ones?



## Too Many Too Soon?

- When babies are born, they leave a sterile environment (the womb) and are exposed to thousands of different bacteria and organisms within minutes.
  - Immune systems are well equipped to handle multiple challenges at once.
- The immune response is not dependent of the number of *shots* an infant or child receives, but rather on the number of *antigens* in the vaccines.
  - Antigens are substances (proteins and sugars) that elicit an immune response inside the body.



# Vaccine Schedules Through Time

	Prior to 1960	1980	2021
Diseases protected against	Smallpox	Diphtheria, Tetanus, Pertussis, Polio, Measles, Mumps, and Rubella	Diphtheria, Tetanus, Pertussis, Polio, Measles, Mumps, Rubella, Hib, Pneumococcus, Rotavirus, Influenza, Hepatitis A, Hepatitis B, and Varicella
Antigenic exposure	200	3,041	149-157 (depending on certain versions of vaccines)

## Spacing Out Vaccines: The Problems

- More time in between vaccines leaves infants and children vulnerable to deadly disease for a longer period of time
- Vaccine errors more likely
- Excessive appointments mean more missed work and school, and can overwhelm healthcare systems during busy times
- More clinic visits = more exposures to infectious diseases in busy waiting rooms
- Easy to fall behind on shots
- Multiple appointments can be more stressful for kids

### Developmental Change in Infant Cortisol and Behavioral Response to Inoculation

Douglas S. Ramsay and Michael Lewis  
*Institute for the Study of Child Development  
 and Robert Wood Johnson Medical School*

RAMSAY, DOUGLAS S., and LEWIS, MICHAEL. Developmental Change in Infant Cortisol and Behavioral Response to Inoculation. *Child Development*, 1994, 65, 1491-1502. Infant cortisol and behavioral responses to receiving 1 versus 2 inoculations on 1 pediatric office visit were observed at 2 and 6 months of age. Cortisol level (pre- plus postinoculation level) decreased with age, whereas cortisol response (post- minus preinoculation level) did not vary with age when the data were aggregated over infants showing a pre- to postinoculation cortisol increase and those showing a decrease. Nonetheless, for those infants who showed a cortisol increase, cortisol level and response decreased with age. Infants quieted faster at the older age. There was a moderate relation between quieting behavior and cortisol response, at least for infants who showed a pre- to postinoculation cortisol increase. These findings indicate a developmental trend for a decline over age in adrenocortical reactivity to inoculation for infants showing a cortisol release following the perturbation. Results were comparable whether infants received 1 or 2 inoculations.

Adrenocortical reactivity, specifically release of cortisol over basal levels, provides a reliable index of stress in humans and animals (e.g., Levine & Wiener, 1989; Suomi, 1991). A cortisol stress response has been found in human newborns and older infants (Anders, Suchar, Kream, Roffwarg, & Hellman, 1970; Gunnar, Fisch, & Malone, 1984; Gunnar, Larson, Hertzogard, Harris, & Broderick, 1992; Gunnar, Mangelsdorf, Larson, & Hertzogard, 1989; Lewis, Ramsay, & Kawakami, 1993; Lewis & Thomas, 1990; Magiano, Gardner, & Karmel, 1992; Tenness & Carter, 1973; Tenness, Downey, & Vernadakis, 1977). The present study examined age changes in infant adrenocortical reactivity.

Infant cortisol reactivity has been examined for various physically painful stressors (e.g., circumcision or inoculation) and for maternal separation, a psychologically painful stressor (see Gunnar, 1996, 1987, 1993,

level) (pre- plus postinoculation cortisol level), with some evidence for a decrease with age in cortisol response (post- minus preinoculation level). In a longitudinal study, Gunnar, Mangelsdorf, Larson, and Hertzogard (1989) observed 9- and 13-month-old infants' salivary cortisol levels before and after maternal separation. There was only a small cortisol increase in response to the separation, and the increase was significant at 9 but not 13 months of age. Similarly, Tenness et al. (1977) did not find a significant urinary cortisol response to maternal separation at 12 months of age. Cortisol levels for the 6- and 13-month-old infants in the Gunnar, Mangelsdorf, Larson, and Hertzogard (1989) study were lower than for the 2- to 6-month-old infants in the Lewis and Thomas (1990) study.

This evidence does not necessarily indicate any underlying decline in adrenocortical reactivity with age. There may be a de-

## Back to Case #3

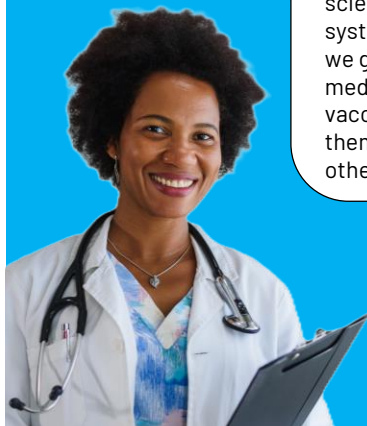


It IS a lot of shots! I get it! And certainly having concerns doesn't make you "anti-vax." I want you to feel comfortable with whatever decision you make, so these conversations are really important. Can we talk about why I would recommend getting all of the vaccines today instead of spreading them out?

Sure.



## Case #3: Continued



We give all of these vaccines at this young age because we want to protect Jack as soon as possible from diseases that can cause serious illness or even death. Spacing them out will make him vulnerable longer. Even though it is a lot of shots, science has advanced so much that stress on his immune system is actually much less than it was when the only vaccine we gave was the smallpox vaccine! There is really no medication that is better studied than these childhood vaccines—we take safety very seriously since we are giving them to young, healthy patients. Does that make sense? What other questions do you have?

No, that makes sense, I guess we can do them all today. I am just really nervous because I don't want to cause him pain and I don't want him to be sick tonight with a fever or something.



## Case #3: Continued



Of course you don't, I don't want him to be miserable either! I do have some ideas on how we can keep him as comfortable as possible, both while he is getting vaccines and later tonight. Should we talk about that?



Sure, that would be great.

## Improving Comfort with Vaccinations



**Improving patient  
experience may  
improve  
compliance!**

- Positioning
  - Supine is generally the worst
  - Allow parents to hold children in their laps when practical
- Breastfeeding during/after injections
- Sucrose for infants
- Simultaneous versus sequential administration
- Topical numbing creams (available OTC), apply about 30 minutes prior to administration
- Distraction (bubbles, videos, light up toys)
- Acetaminophen (AFTER vaccines only)
  - May decrease immune response if given before

# Key Takeaways

**01.** Start with the presumptive approach and move to motivational interviewing techniques when ambivalence is present.

**02.** Familiarize yourself with common vaccine concerns so you can debunk myths and answer questions.

**03.** Showing empathy and supporting autonomy will break down barriers and build trust between you and your patient.

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