

# Vaccine Hesitancy: Moving the Needle for Vaccine Hesitant Parents... and for COVID Vaccine Acceptance

Kenneth Haller, MD, FAAP

Professor of Pediatrics, Saint Louis University School of Medicine

Past President, Missouri Chapter, American Academy of Pediatrics

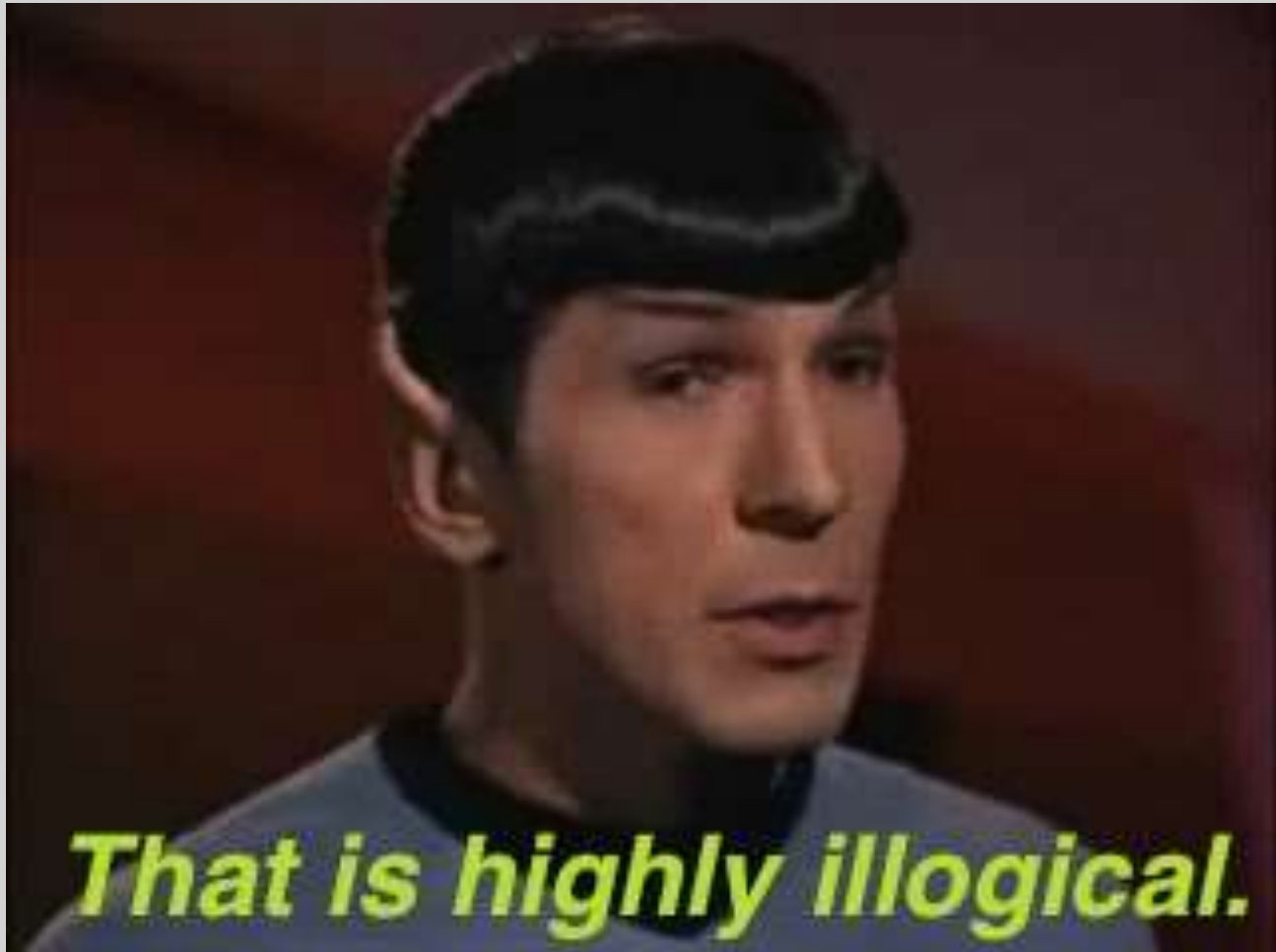
This goals of  
this session  
are to help  
the  
participant:

- Gauge the emotional setting where parents make decisions about vaccination.
- Find common ground with parents to establish a trust relationship.
- Create and utilize effective scripting to present factual information to help parents make healthy decisions about vaccination.

## Disclosures:

- I have no relevant financial relationships with the manufacturer(s) of any commercial products(s) and/or provider(s) of commercial services discussed within this CME activity.
- I do NOT intend to discuss an unapproved or investigative use of a commercial product/device in my presentation.

When a vaccine hesitant parent comes in...  
What do we REALLY want to say?



# The Culture of Health Professions

- Hierarchical
- Faith in Reproducible Evidence
- Geared toward problem solving
- Interrogations vs. conversations
- Positive self-image reinforced externally and internally

# 2021 Vaccination Schedule

**Table 1** Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2021

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 green bars. To determine minimum intervals between doses, see the catch-up schedule (Table 2). School entry and adolescent vaccine age groups are shaded in gray.

Vaccine	Birth	1 mo	2 mos	4 mos	6 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
Hepatitis B (HepB)	1 <sup>st</sup> dose	← 2 <sup>nd</sup> dose →			← 3 <sup>rd</sup> dose →												
Rotavirus (RV): RV1 (2-dose series), RV5 (3-dose series)			1 <sup>st</sup> dose	2 <sup>nd</sup> dose	See Notes												
Diphtheria, tetanus, acellular pertussis (DTaP <7 yrs)			1 <sup>st</sup> dose	2 <sup>nd</sup> dose	3 <sup>rd</sup> dose				← 4 <sup>th</sup> dose →			5 <sup>th</sup> dose					
Haemophilus influenzae type b (Hib)			1 <sup>st</sup> dose	2 <sup>nd</sup> dose	See Notes			← 3 <sup>rd</sup> or 4 <sup>th</sup> dose, See Notes →									
Pneumococcal conjugate (PCV13)			1 <sup>st</sup> dose	2 <sup>nd</sup> dose	3 <sup>rd</sup> dose			← 4 <sup>th</sup> dose →									
Inactivated poliovirus (IPV <18 yrs)			1 <sup>st</sup> dose	2 <sup>nd</sup> dose	← 3 <sup>rd</sup> dose →							4 <sup>th</sup> dose					
Influenza (IIV)					Annual vaccination 1 or 2 doses										Annual vaccination 1 dose only		
Influenza (LAIV4)												Annual vaccination 1 or 2 doses		Annual vaccination 1 dose only			
Measles, mumps, rubella (MMR)						See Notes	← 1 <sup>st</sup> dose →					2 <sup>nd</sup> dose					
Varicella (VAR)							← 1 <sup>st</sup> dose →					2 <sup>nd</sup> dose					
Hepatitis A (HepA)						See Notes	2-dose series, See Notes										
Tetanus, diphtheria, acellular pertussis (Tdap ≥7 yrs)														1 <sup>st</sup> dose			
Human papillomavirus (HPV)														See Notes			
Meningococcal (MenACWY-D ≥9 mos, MenACWY-CRM ≥2 mos, MenACWY-TT ≥2years)			See Notes												1 <sup>st</sup> dose		2 <sup>nd</sup> dose
Meningococcal B																	
Pneumococcal polysaccharide (PPSV23)																	

Range of recommended ages for all children

Range of recommended ages for catch-up immunization

Range of recommended ages for certain high-risk groups

Recommended based on shared clinical decision-making or \*can be used in this age group

No recommendation/ not applicable

# Why these vaccines for kids?

- These microorganisms are – or have been – common in the population.
- They cause terrible disease in kids.
- Researchers have developed vaccines for them.

Microorganism	Bad disease	Common in kids	Got a vaccine
Pneumococcus	YES	YES	YES
Rotavirus	YES	YES	YES
Anthrax	YES	NO	YES
RSV	YES	YES	NO

# Why this schedule/spacing?

- Based on how vaccines were tested and approved.
- Fits the need to get kids immunized as early and safely as possible.
- Represents a consensus of representatives from:
  - Advisory Committee on Immunization Practices (CDC)
  - American Academy of Pediatrics
  - American Academy of Family Physicians
- State and local jurisdictions decide which and when through regulations on entry to daycare and school.



# How do vaccines work?

- They include small parts (proteins, polysaccharides) of microorganisms (Inactivated), or very weakened versions of the microorganism (Attenuated).
- This stimulates the body's immune system to get ready to destroy the living, wild-strain version if it shows up.
- “Wanted Poster”
- Antibodies and white blood cells.

*So why do parents refuse vaccines?*

# What is Vaccine Hesitancy?

“Vaccine hesitancy refers to delay in acceptance or refusal of vaccines despite availability of vaccination services. Vaccine hesitancy is complex and context specific varying across time, place and vaccines. It includes factors such as complacency, convenience and confidence.”

- World Health Organization (WHO)

[http://www.who.int/immunization/programmes\\_systems/vaccine\\_hesitancy/en/](http://www.who.int/immunization/programmes_systems/vaccine_hesitancy/en/)

# Background

- 3% parents refused all vaccines & 19.4% refused or delayed >1 vaccines (2010)
- >1 of 10 parents following vaccination schedule other than that recommended by the CDC (2011)
- Increase in # of infants out of compliance with the ACIP schedule (2012)
- But increase of refusal and requests for alternative schedules → barriers to overcome
- 47% of parents accepted vaccines after initially refusing them (2013)

– Edwards KM, Hackell JM; Committee on Infectious Diseases, The Committee on Practice and Ambulatory Medicine. Countering Vaccine Hesitancy. *Pediatrics*. 2016 Sep;138(3).

# Andrew Wakefield *The Lancet*, Vol 351, February 28, 1998

EARLY REPORT

## Early report

### Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children

A J Wakefield, S H Murch, A Anthony, J Linnell, D M Casson, M Malik, M Berekowicz, A P Dhillon, M A Thomson, P Harvey, A Valentine, S E Davies, J A Walker-Smith

#### Summary

**Background** We investigated a consecutive series of children with chronic enterocolitis and regressive developmental disorder.

**Methods** 12 children (mean age 6 years [range 3–10], 11 boys) were referred to a paediatric gastroenterology unit with a history of normal development followed by loss of acquired skills, including language, together with diarrhoea and abdominal pain. Children underwent gastroenterological, neurological, and developmental

#### Introduction

We saw several children who, after a period of apparent normality, lost acquired skills, including communication. They all had gastrointestinal symptoms, including abdominal pain, diarrhoea, and bloating and, in some cases, food intolerance. We describe the clinical findings, and gastrointestinal features of these children.

#### Patients and methods

12 children, consecutively referred to the department of paediatric gastroenterology with a history of a pervasive developmental disorder with loss of acquired skills, had gastroenterological

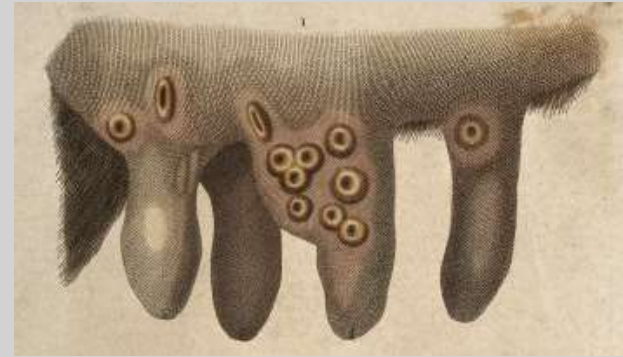


# *The Panic Virus*, Seth Mnookin, 2011

“It’s remarkable how static the makeup, rhetoric, and tactics of vaccine opponents have remained over the past 150 years. Then, as now, anti-vaccination forces fed on anxiety about the individual’s fate in industrialized societies; then, as now, they appealed to knee-jerk populism by conjuring up an imaginary elite with an insatiable hunger for control; then, as now, they preached the superiority of subjective beliefs over objective proofs, of knowledge acquired by personal experience rather than through scientific rigor.”

# Vaccination

- Edward Jenner
- Milkmaids and Cowpox
- *Vaccinus* [Latin] of or from cows
- Ministers railed against vaccination since inoculation sometimes led to death:  
“Thou Shalt Not Kill.”
- Anti-vaccine political cartoons



*The Cow-Pock – or –  
the  
Wonderful  
Effects of the  
New  
Inoculation!  
(1802),  
James Gillray*



*Cow-Pock – or – the Wonderful Effects of the New Inoculation! – See the Publications of J. Anti-Vacc.*



# Beyond vaccines...

- Tuskegee Syphilis Experiments
- Administered by US Public Health Service 1932-1972
- According to one mother:  
“[Tuskegee] always sticks in my mind. That you really don’t know what’s happening, and here these people were guinea pigs, and I just don’t want my children to be part of that.”



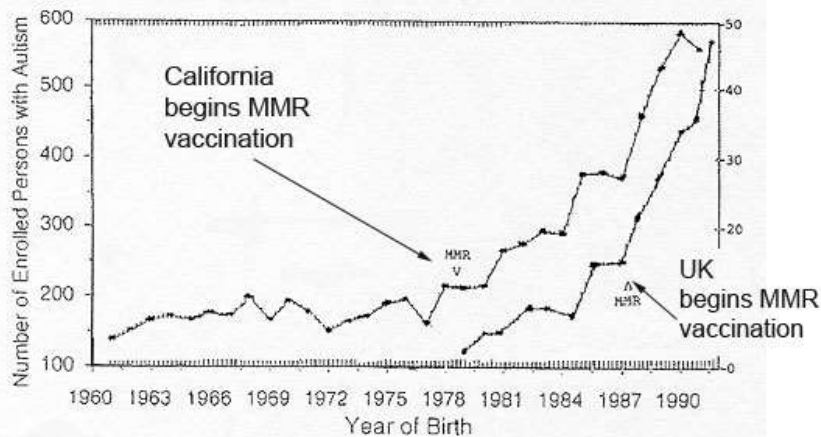
# With science on our side, why doesn't *everyone* believe us?

- Poor risk assessment
- Creation of anti-vaccine martyrs
- Anti-vaccine advocates
  - Compassionate messages with personal narratives
- Pro-vaccine physicians
  - Science-only messages with statistics
  - Annoyance/accusation of parents

# Poor risk assessment

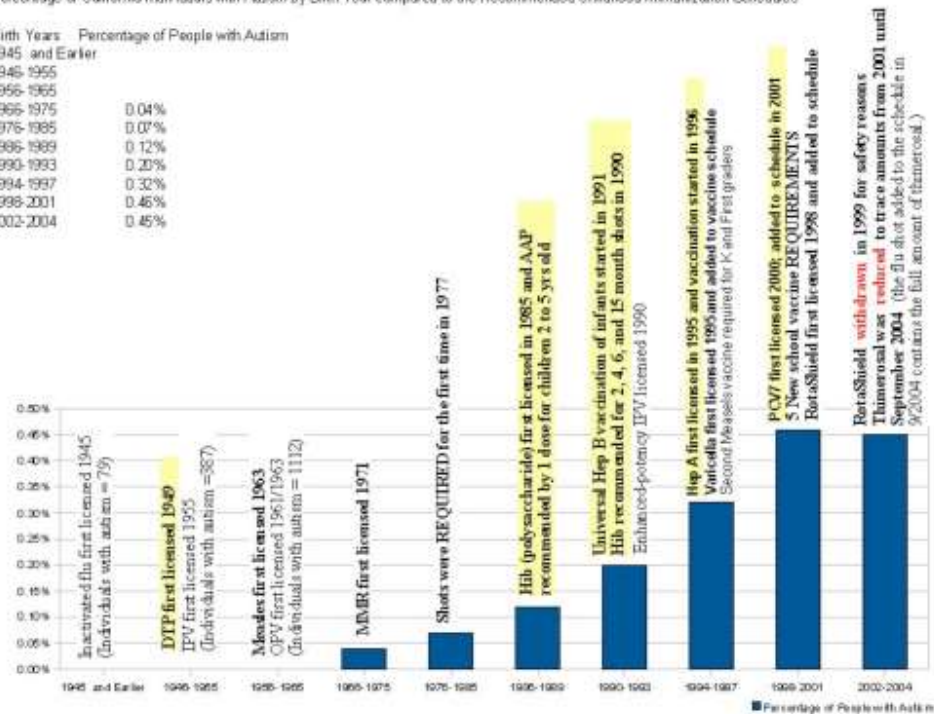
- Proximity
- No experience of real disease risk
- Magical thinking
- Adrenaline: fight/flight/*freeze*
- Complicity with the potentially dangerous act
- Confusing association with causality
- AIDS vs. Pickup truck

# Poor risk assessment association vs. causality

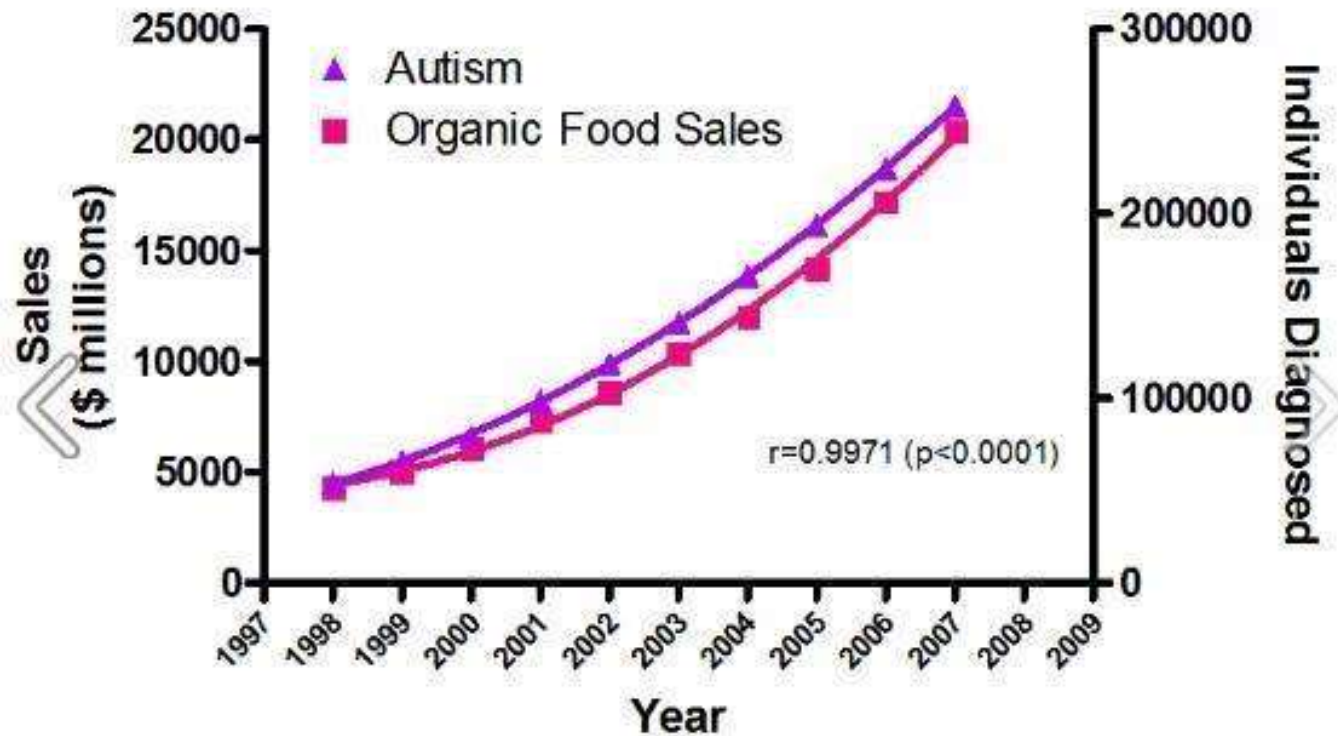


Percentage of California Individuals with Autism by Birth Year compared to the Recommended Childhood Immunization Schedules

Birth Years	Percentage of People with Autism
1945 and Earlier	
1945-1955	0.04%
1956-1975	0.07%
1976-1985	0.12%
1986-1989	0.20%
1990-1993	0.32%
1994-1997	0.46%
1998-2001	0.46%
2002-2004	0.45%



# Poor risk assessment association vs. causality



Sources: Organic Trade Association, 2011 Organic Industry Survey; U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS), OMB# 1820-0043. \*Children with Disabilities Receiving Special Education Under Part B of the Individuals with Disabilities Education Act

# Creation of anti-vaccine martyrs

- Andrew Wakefield's license to practice medicine in the UK was taken away, established his *bona fides* as someone willing to give up everything for what he believes.
- J. B. Handley, co-founder of Generation Rescue: "To our community, Andrew Wakefield is Nelson Mandela and Jesus Christ rolled up into one... He's a symbol of how all of us feel."

# Anti-vaccine advocates: Compassionate messages

- Wakefield: “What happens to me doesn’t matter. What happens to these children does matter.”
- Jenny McCarthy, actress, anti-vaccination stalwart, and president of Generation Rescue: “In profound solidarity with all the families still struggling, I decided to speak up. I wanted to give voice to options too often unspoken, and share hope for victories within reach. My family was given gifts that I wanted to share. Whether you’re in need at 3PM or 3AM, you have come to the right place. We are here for you, together resolving our heartaches and celebrating our victories.”

# Pro-vaccine providers

## Annoyance/accusation of parents

- *Deadly Choices: How the Anti-Vaccine Movement Threatens Us All*, Dr. Paul Offit, ID specialist at CHOP, co-developer of a rotavirus vaccine: “There’s a war going on out there... On one side are parents... On the other side are doctors... Caught in the middle are children...”
- *The Ladue News*, a local pediatrician, 2009: “I tell parents that there is absolutely no data to support [a vaccine-autism link, and failure to vaccinate children is] foolish and dangerous. Immunization is safe and effective with minimal minor side effects. There is a small but real chance of complications, including fatal complications, with both the chicken pox vaccine, which can lead to pneumonia, encephalitis and hepatitis, and the influenza vaccine, which can develop into pneumonia or other secondary bacterial infections.”



# Pro-vaccine providers: Why this is so hard for us

- We are smart people:
  - We believe in Science.
- We are caring people:
  - We do this to help people.
- Vaccine Hesitancy/Denial threatens us at our core.
  - It's a struggle to remember it's not about us.



*So what can we do?*

# Skills of Master Physicians

- Do the little things
- Take time and listen
- Be open
- Find something to like, to love
- Remove barriers
- Let the patient explain
- Share authority
- Be committed and trustworthy

Healing Skills for Medical Practice

Larry R. Churchill, PhD, and David Schenck, PhD

18 November 2008 Annals of Internal Medicine Volume 149 • Number 10

# Create Trust

- Assume parents love their kids.
- Recognize that parents have a very different knowledge base.
- Ask parents about the basis for their fears.
- Honor and value their emotions.
- Acknowledge that parental fear is real and even healthy.
- Share your stories.
- Help parents recognize the appropriate target for fear.
- Provide a fertile ground in which trust can grow.

# “Yes &”: Improv & Health Care

- “Yes, &... is the most important rule in improv... [It] means that whenever two actors are on stage, they agree with each other to the Nth degree.”
  - Halpern C., Close D., Johnson K. H. (1994). Truth in Comedy. Colorado Springs, CO: Meriwether.
- Unconditional Positive Regard: close and positive “regarding,” as active engagement with the other
  - Rogers, Carl r. (1951), Client-centered Therapy: Its Current Practice, Implications, and Theory
- Desired cognitive/emotional stance of the improviser toward their partners.
  - Iberg J. R. (2001). Unconditional positive regard: constituent activities, in Rogers' Therapeutic Conditions: Evolution, Theory and Practice

# Our Roles & Our Scripts

- People respect doctors, nurses, health care providers, caretakers. *Use that.*
  - Be aware of tone of voice, body language, being on the same physical level
- “Yes &...”
  - Avoid contradiction and the conjunction “but.”
    - “That’s wrong, but what you need to know is...”
    - “I care about your kid; if *you* loved your kid...”
  - Agree, and use the conjunction “and.”
    - “I hear the fear in your voice. Fear for your child’s safety is normal and natural and healthy.
    - “I know you love your kid. I want the best for him too, and here’s what I’m afraid of...”

# Scripting the Vaccine Encounter

- Make vaccines an expectation, not an option.
- People come to health care providers for expertise and professional advice.
- Say: “Today we’ll be protecting little Harriet against some bad infections by giving her her first vaccines. It’ll be three shots and a squirt in her mouth.”
- Not: “We recommend giving Harriet her vaccines today. What would you like to do?”
- Your accountant doesn’t say, “It’s April, and we recommend you file your taxes. What would you like to do?”
- EVERYONE in our office has to be on the same page!

# Scripting the Vaccine Encounter

- At the first checkup, give a “roadmap” of encounters for the coming year.
- Say: “We’ll be giving Harriet her first vaccines at her 2 month visit. These will be repeated at 4 and 6 months to make sure she’s fully protected. After that she won’t need vaccines till 12 months. What questions do you have for me?”



# Scripting the Vaccine Encounter

- Make your narrative personal.
- New graduate: “I’ve not seen these diseases because most people have gotten vaccines. I don’t want your child to be the case I remember for my entire career.”
- Seasoned pro: “I’ve seen life-threatening diseases nearly disappear. I don’t want your child to be the next child I see with an infection we can prevent.”
- Both: “And I know you don’t want that either.”

# Scripting the Vaccine Encounter

- “Yes &”
- Find where you can agree
- Make use of everyday metaphors.
- Try: “You know. You’re right. It’s unlikely your child will not get pertussis/measles/flu. It’s also unlikely you’ll be in a car accident on the way home, but I know you’re going to put her in her car seat because it *might* happen. And I know you don’t want to take that chance.”

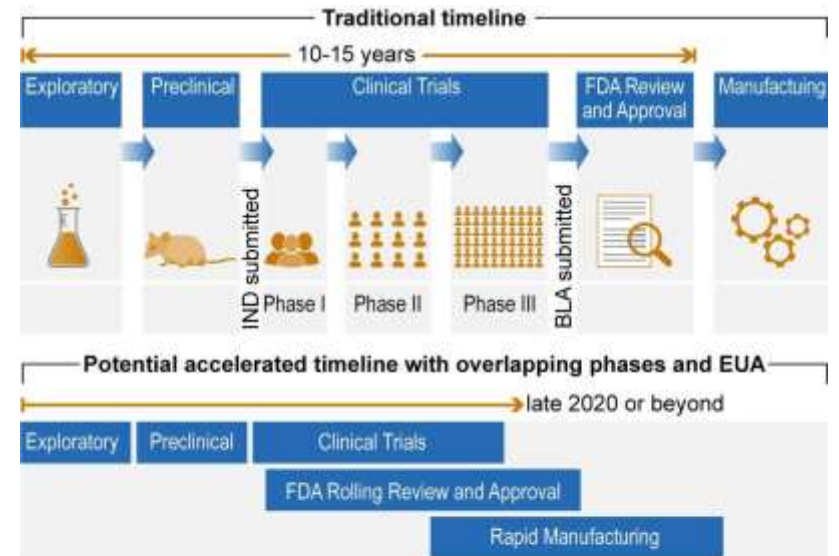
*And now... COVID vaccines!*

# Primary Drivers of COVID Vaccine Hesitancy

- Concerns about safety and side effects from the COVID-19 vaccine
  - Driven by the speed of the clinical development process
  - Exacerbated by the J&JN pause
- Lack of knowledge about the vaccine
- Distrust in the political and economic motives of the government and corporations

# “The COVID vaccines happened so fast!”

- “New technologies allowed for the more rapid development of the vaccines.”
- “No corners were cut.”
- Analogy: “Think of electrical circuits. Stages that used to be done in series were done in parallel.”
- “Kids will get the vaccine later because they are less at risk, and we want to make sure they don’t have long-term problems before kids get them.”

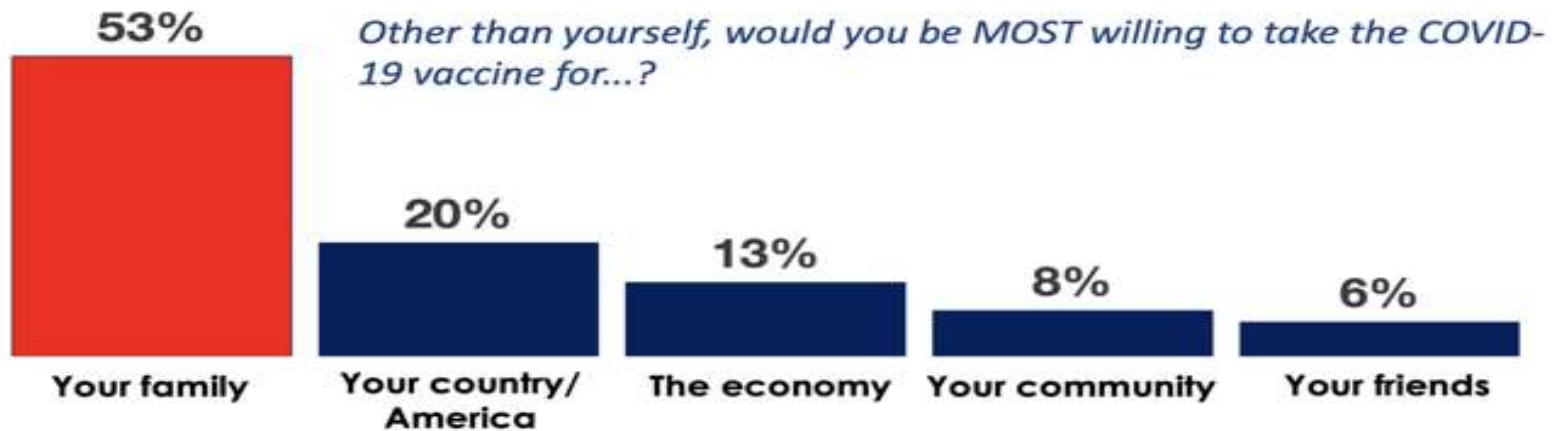


BLA = Biologics License Application      EUA = Emergency Use Authorization      IND = Investigational New Drug

Source: GAO analysis of GAO-20-215SP, FDA, HHS, and Pharmaceutical Research and Manufacturers of America (PhRMA) documentation. | GAO-20-583SP

# Motivators for COVID-19 Vaccine Acceptance

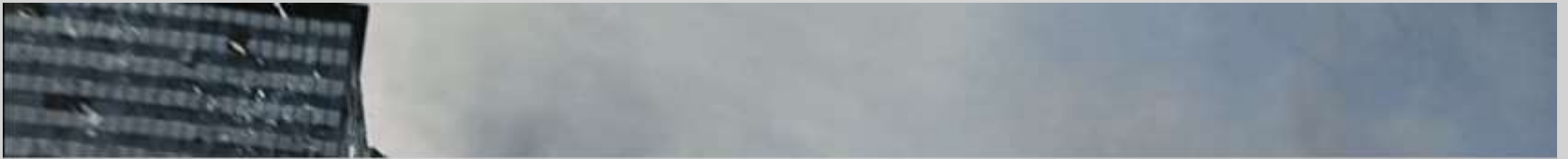
**Family is by far the most powerful motivator. *“Do it for ...”***



# Motivators for COVID-19 Vaccine Acceptance



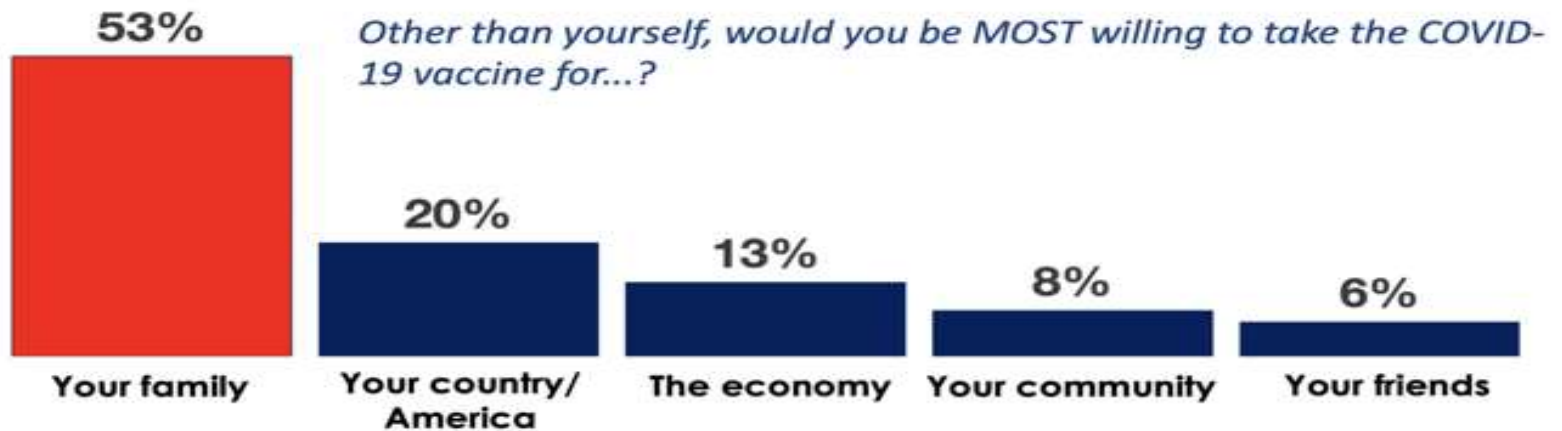
# Motivators for COVID-19 Vaccine Acceptance





# Motivators for COVID-19 Vaccine Acceptance

**Family is by far the most powerful motivator. *“Do it for ...”***



# Our Challenge: Meeting Parents Where They Are While Serving Kids

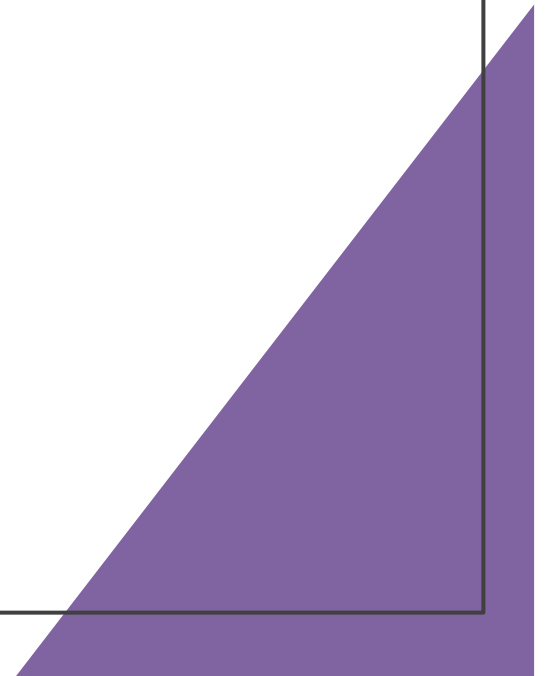
- Assume parents love their kids.
- Ask parents about the basis for their fears and discomfort.
- Honor and value emotions.
- Acknowledge that parental fear and discomfort is real and even healthy.
- Share your stories.
- Help parents recognize the appropriate target for fear.
- Provide a fertile ground in which trust can grow.

Thank  
you!

*Questions?*

*Comments?*

*Conversation?*





kenneth.haller@health.slu.edu  
kenhaller.net