

Vaccine Hesitancy: Recovering Confidence and Trust

September 2022 Jonathan Knoche, MD, MPH, MSt

















Overview

- What is happening?
 - Vaccine Trends in SC

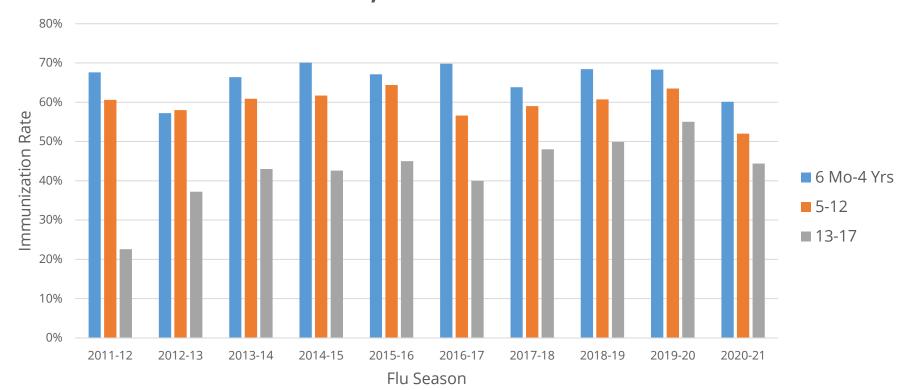
- Why is there a shift in confidence in vaccines and the medical profession?
- How do we respond?



Vaccine Trends in South Carolina

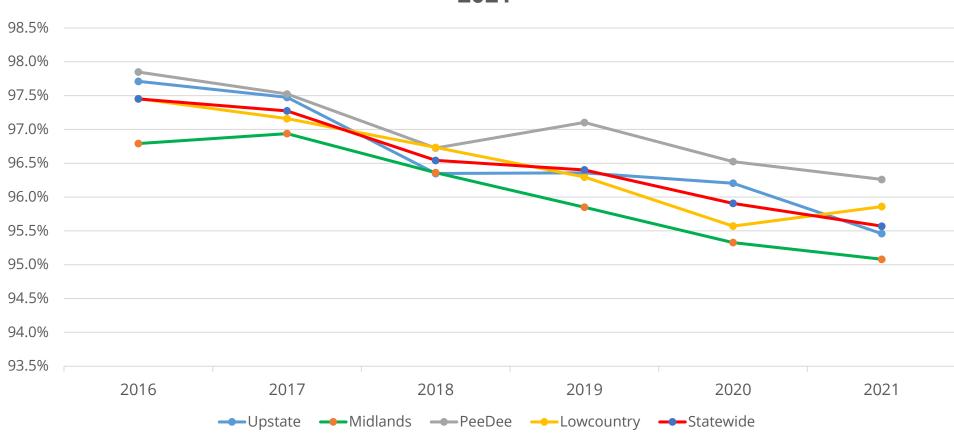
Pediatric Flu Vaccine

End of Season Influenza Vaccination Coverage by Age in SC, 2011/12-2020/21





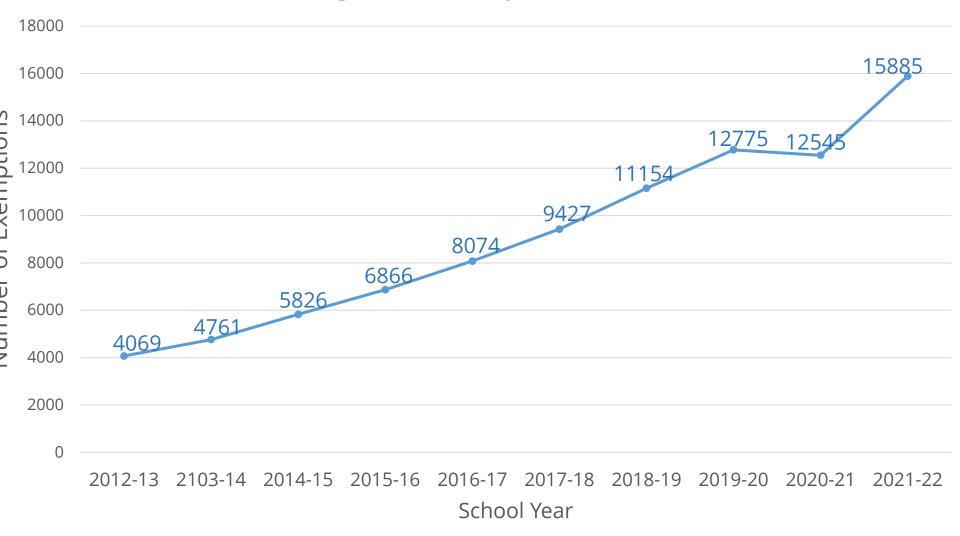
School Required Immunization Rates in South Carolina, 2016-2021



Source: SC School 45-day Report

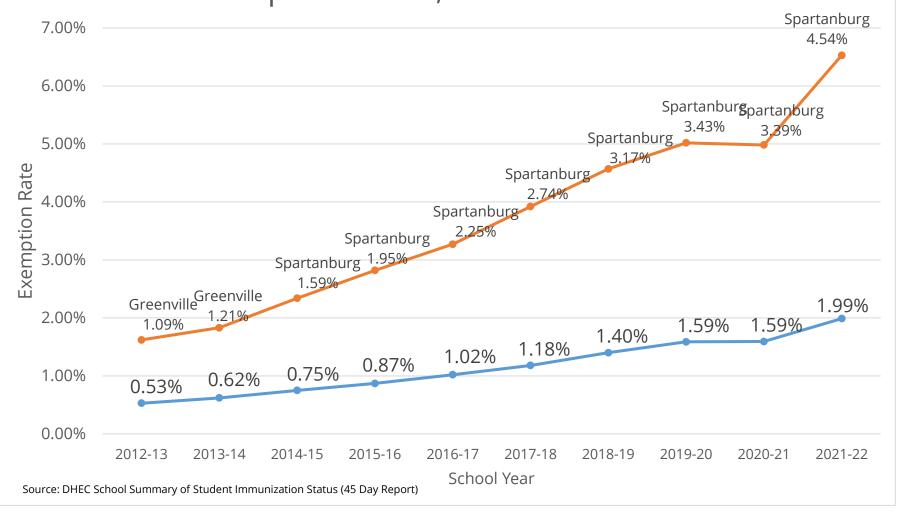


SC K12 School Religious Exemptions, 2012/13-2021/22



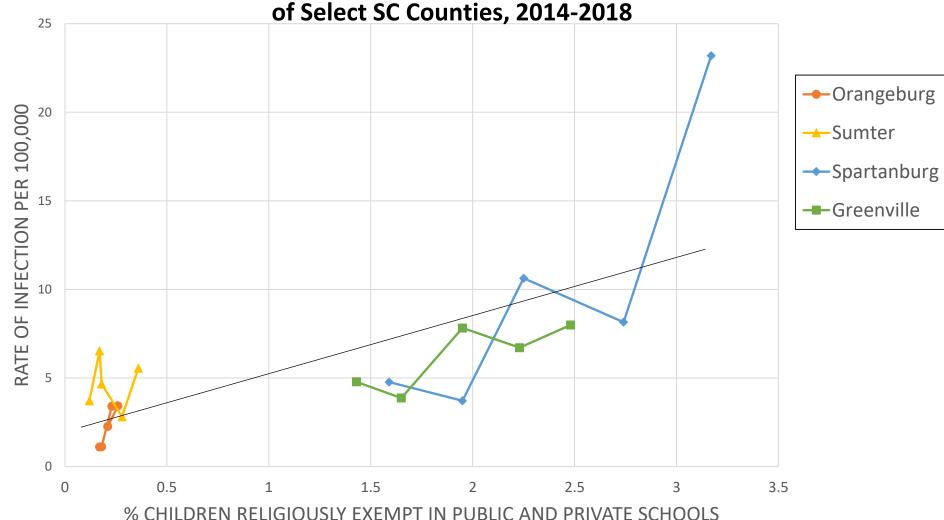


SC and Highest County K12 School Religious Exemption Rates, 2012/13-2021/22





Correlation of VPD Infection Rate and Religious Exemption Rate of Select SC Counties, 2014-2018





Where are we? Why?

- Increased rates of vaccine refusal and parents seeking exemptions for their children
- Outbreaks of Vaccine Preventable Diseases are increasing
- Skepticism and Mistrust of Medicine, Public Health
 - COVID-19 → mask mandates, stay at home orders, vaccine requirements/changes



The Death of Expertise

- "is more than a natural skepticism toward experts."
- "...we are witnessing the *death of the ideal of expertise itself;* a Google-fueled, Wikipediabased, blog-sodden collapse of any division between professionals and laypeople, students and teachers, knowers and wonderers."



Sources of Influence, Authority,



Mistrust

Trust



Sources of Influence, Authority, Expertise





Mistrust

Trust



Challenges & Opportunities



The online anti-vaccine movement in the age of COVID-19

Talha Burki October, 2020 DOI: https://doi.org/10.1016/S2589-7500(20)30227-2

Center for Countering Digital Hate (CCDH)

THE LANCET Digital Health

Social media accts of anti vaxxers has increased by over 7 million since 2019

B1 million people follow anti-vaccine groups on Facebook

17 million on Youtube

The anti-vaccine movement could realize \$1 billion in annual revenues for social media firms

CCDH divides the online anti-vaccine movement into 4 groups:

- 1 Campaigners work full-time to foment distrust they reach 12% of anti-vaxxers
- 2 Entrepreneurs reach 50% of anti- vaxxers to sell products
- 3 Conspiracy theorists
- 4 Communities (mostly facebook)

WHO has warned of an infodemic of false information about COVID-19 spreading online.

The online competition between pro- and antivaccination views

Neil F. Johnson ⊠, Nicolas Velásquez, Nicholas Johnson Restrepo, Rhys Leahy, Nicholas

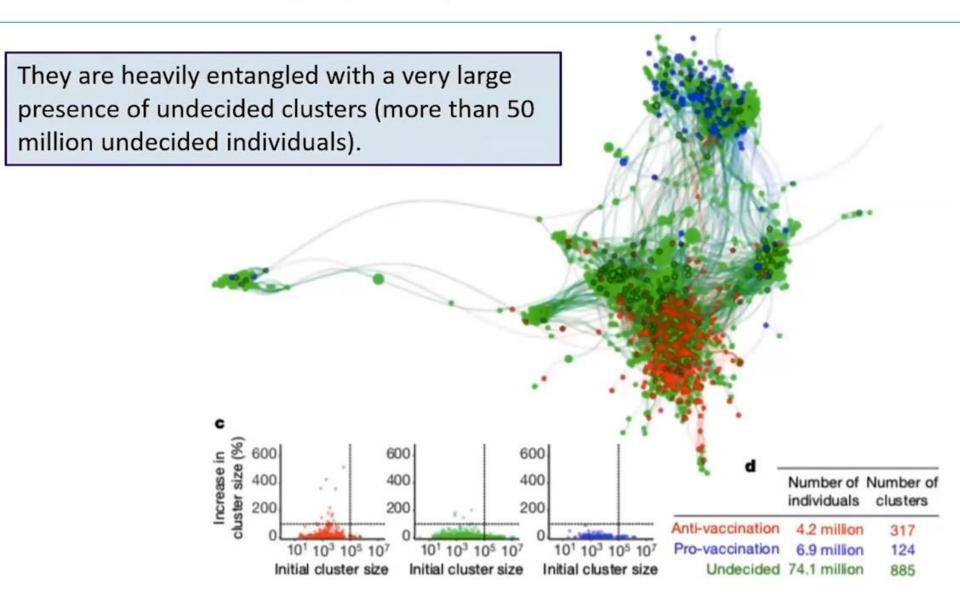
How did this distrust evolve?

System-level analysis of the multi-sided ecology of nearly 100 million individuals expressing views regarding vaccination.

Anti-vaccination clusters manage to become highly entangled with undecided clusters in the main online network, whereas pro-vaccination clusters are more peripheral

Johnson, N Nature 582:230-33 May 2020







Why aren't people getting vaccinated today?



Vaccine Hesitancy Concerns

- whether the vaccines might cause permanent injury, including autism;
- whether it is better to get natural disease;
- whether they or their loved ones are not at risk for the vaccine-preventable disease;
- whether the VPD disease is even really dangerous;
- whether the vaccine will work;
- whether the vaccine poses religious or moral issues;
 and
- whether they can trust the government officials or the pharmaceutical industry.



Challenges

 Almost all the concerns raised by the vaccine hesitant fall in four categories:

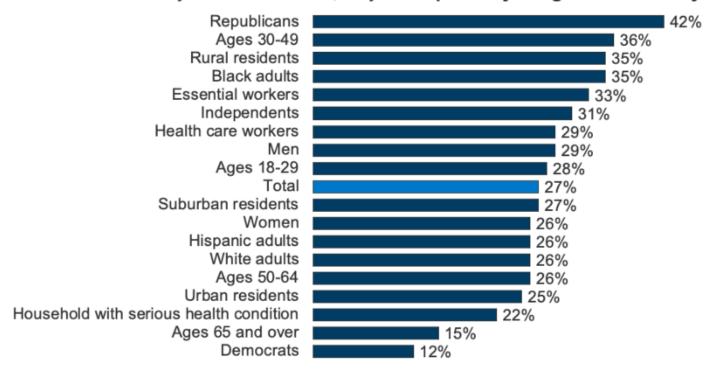
Vaccination may not be

- 1. effective,
- 2. safe,
- 3. needed,
- 4. And/or reasonable alternatives to vaccine may be available.



Which Groups Are Most Likely To Be COVID-19 Vaccine Hesitant?

Percent within each group who say, if a COVID-19 vaccine was determined to be safe by scientists and available for free to everyone who wanted it, they would **probably not get it** or **definitely not get it**:



KFF COVID-19 Vaccine Monitor

SOURCE: KFF COVID-19 Vaccine Monitor (KFF Health Tracking Poll, Nov. 30-Dec. 8, 2020). See topline for full question wording.

Figure 4: Which Groups Are Most Likely To Be COVID-19 Vaccine Hesitant?



Opportunities

Strong Vaccination Recommendation

A strong recommendation by a health care provider is a powerful motivator for patients to comply with vaccination recommendations. A recommendation from a health care provider remains the number one reason parents decide to vaccinate. Even initially reluctant adults are likely to receive an influenza vaccination when the health care provider's opinion of the vaccine is positive.



Personal Health Care Providers Are Most Trusted Source Of Information On COVID-19 Vaccine

Percent who say they have a great deal or a fair amount of trust in each of the following to provide reliable information about a COVID-19 vaccine:

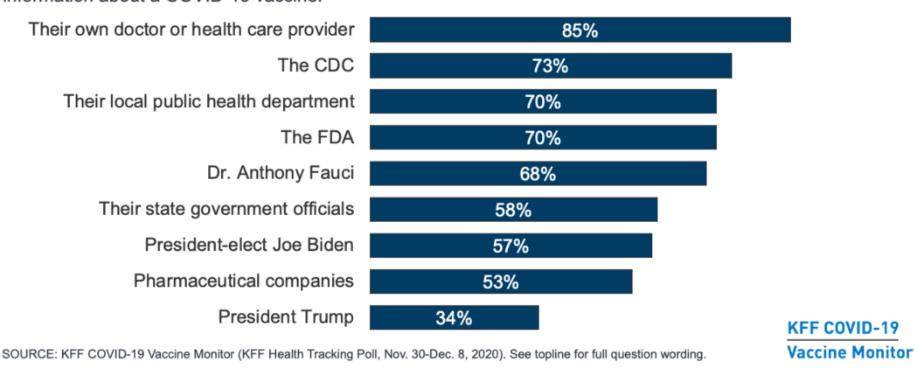


Figure 15: Personal Health Care Providers Are Most Trusted Source Of Information On COVID-19 Vaccine



Language Matters

care providers use in recommending vaccines. Presumptive or announcement language uses phrases such as "The nurse will return with the vaccines due" or "We have to do some shots." Conversational or participatory language uses phrases such as "What are you planning to do about the vaccines?" With parents of infants, more than 70% of health care providers use presumptive or announcement language to signal their recommendations.²⁹ However, parents of adolescents report hearing presumptive language less than 15% of the time.³⁰



Presumptive > Conversational

Opel and colleagues video-recorded 111 preventive care encounters with parents of infants who were 19 months and younger. Their analysis of the encounters showed that parents hearing presumptive language were 17.5 times more likely than parents hearing conversational language to accept the vaccines recommended! In the observational study of

arrived. In 16% of visits, the parent initiated the discussion. In 72% of the visits, where the health care providers used presumptive language, the parent accepted the recommendation for the influenza vaccination as compared to 17% where the health care providers used conversational language.



harmed by vaccination. The results of a recent study in *Pediatrics* showed that 26 percent of parents (women more than men) placed some trust in celebrities on vaccine safety and 73 percent trusted fellow parents who spoke against vaccination.11 As infectious disease expert Paul Offit, MD, said "Anecdote trumps epidemiology every time."12



TARGETTING THE FENCE-SITTERS

Anecdote beats epidemiology

Medical education teaches us the opposite

Dry science cannot compete with emotional appeal



It is easy to scare people and much harder to unscare them



Effective Vaccine Discussion

- C.A.S.E. (Corrobore, About Me, Science, Explain/Advise)
 - Corroborate: identify a shared goal or aspiration.
 - About Me: establish or reestablish the clinician's ethos or professional standing. The clinician needs to convey a command of both experience and evidence to address concerns
 - Science: summarize the relevant scientific information
 - Explain/Advise: in terms of the common ground and the science so that the patient hears the clinician's recommendation in a way that addresses the basis for hesitation



C.A.S.E. in Action

MMR Vaccine

Parent: I don't want my child to have the vaccine that causes autism, the MMR vaccine.

Clinician: If the MMR vaccine caused autism, I wouldn't want your child to have it either. **(CORROBORATE)**

I have been studying this claim for many years and have read the studies about whether the MMR vaccine causes autism. I've also been reading the studies about autism itself. (ABOUT ME)

Dozens of very large, well-done studies have shown that the MMR vaccine does not cause autism. In fact, the studies about autism show that children who are going to get autism display signs long before they receive the MMR vaccine. On the other hand, the MMR vaccine prevents measles, and I have seen how serious measles can be; one in three children become so sick they have to be hospitalized. Some even die. (SCIENCE)

You and I both want your child to be healthy, and we certainly do not want to cause autism. Your choosing not to get the MMR vaccine will not protect your child from autism, and it will leave your child at risk for diseases that can result in hospitalization or worse. As your child's doctor, I urge you to have your child get the MMR vaccine. (EXPLAIN/ADVISE)

https://www.mnmed.org/MMA/media/Minnesota-Medicine-Magazine/Thecaseapproach1304.pdf



Enabling COVID-Related Behavior Change through Motivational Interviewing-Based Brief Conversations

Matt Orr, PhD

Associate Dean – Continuous Professional Development & Strategic Affairs
Clinical Associate Professor – Family & Preventive Medicine
University of South Carolina School of Medicine Columbia—Prisma Health



Enabling Healthcare Providers to Use a Patient-Centered Approach to Educating Patients about the COVID-19 Vaccine in Medically Underserved and Rural Communities in South Carolina

ronmental Control

Brief Conversation Guide for Building Vaccine Confidence

Helping patients make well-informed decisions takes building an atmosphere of trust and respect.

Raise the Subject

"Would it be okay if we talked for a couple of minutes about the COVID-19 vaccine?"

(Recommend the vaccine if this has not already been done)

Listen to Understand

Ask their perspective "What are your thoughts about the vaccine?"

"How do you feel about it?"

Reflect whatthey are saying It's been difficult for you to trust that the vaccine is safe given what's happened in the past."

"You've been considering the vaccine; you just don't like some of the things you've been hearing."

Reflect with affirmation "You're committed to your health, and you want to protect it."

"Your health really matters to you and you're trying to do what's best for yourself."

(Optional Scaling Tool) To Assess Readiness:

- "On a scale from 1 to 10, where 1 is not at all ready to get vaccinated and 10 is absolutely ready, what number would you say you are?"
- "What makes you a 5 (e.g.) and not a lower number?"
- "What would put you at a 6 (e.g.) or a higher number?"

Use Ask-Offer-Ask to Give Key Information

Ask their understanding "What do you understand about the vaccine?"

"Tell me more about what you've heard."

Offer information (Ask permission first)

"Would it be okay if I shared my perspective?"

"I have some information I could share, if that would be okay."

Ask

what the information means to them

"What are your thoughts about that?"
"What do you make of that information?"

Elicit next steps and Offer support

Summarize the conversation:

"I just want to be sure I'm with you. You are concerned about...at the same time, you would like to..."

Elicit next steps:

"Where does this leave you?"

"Where would you like to go from here?"

Offer your support to the patient:

"How can I/we help you (take that step)?"

"I'm here for you when you are ready."

Use Reflective Listening

Emphasize Autonomy

"It's really up to you."

"It's your choice."

Ask Permission

"Would it be okay if..."

"There is information out there that is causing you doubt, at the same time, you like the idea of being protected from the virus."



Enabling Healthcare Providers to Use a Patient-Centered Approach to Educating Patients about the COVID-19 Vaccine in Medically Underserved and Rural Communities in South Carolina

Brief Conversation Guide for Building Vaccine Confidence

Helping patients make well-informed decisions takes building an atmosphere of trust and respect.

Raise the Subject

"Would it be okay if we talked for a couple of minutes about the COVID-19 vaccine?"

(Recommend the vaccine if this has not already been done)



Listen to Understand

Ask their perspective

"What are your thoughts about the vaccine?"
"How do you feel about it?"

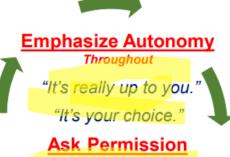
Reflect what they are saying

It's been difficult for you to trust that the vaccine is safe given what's happened in the past."

"You've been considering the vaccine; you just don't like some of the things you've been hearing."

Reflect with affirmation "You're committed to your health, and you want to protect it."

"Your health really matters to you and you're trying to do what's best for yourself."







(Optional Scaling Tool) To Assess Readiness:

- "On a scale from 1 to 10, where 1 is not at all ready to get vaccinated and 10 is absolutely ready, what number would you say you are?"
- "What makes you a 5 (e.g.) and not a lower number?"
- "What would put you at a 6 (e.g.) or a higher number?"

Use **Ask-Offer-Ask** to Give Key Information

Ask their understanding

Offer information (Ask permission first)

Ask
what the information
means to them

"What do you understand about the vaccine?"

"Tell me more about what you've heard."

"Would it be okay if I shared my perspective?"

"I have some information I could share, if that would be okay."

"What are your thoughts about that?"

"What do you make of that information?"





Elicit next steps and Offer support

Summarize the conversation:

"I just want to be sure I'm with you. You are concerned about...at the same time, you would like to..."

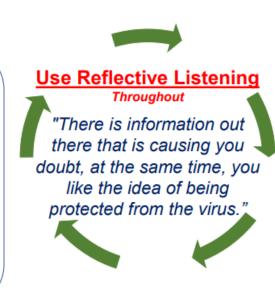
Elicit next steps:

"Where does this leave you?"

"Where would you like to go from here?"

Offer your support to the patient:

"How can I/we help you (take that step)?"
"I'm here for you when you are ready."





Pulling it all together

- Your vaccine recommendation matters
 - Presumptive language is more effective
- In dialogue with a patient regarding their reluctance, consider using CASE approach
 - Ask what they understand about the vaccine (shows respect),
 - Offer Information and anecdotes (CASE) asking permission first (shows respect)
 - Ask for their feedback (shows humility). Stress decision is theirs (respects autonomy)



Summary

- Expect vaccine hesitancy and exemptions to increase post-COVID
- Communicating from a posture of honesty and transparency shows respect for the other person, resists expert hubris, and reflects a posture of humility→ garners trust in you and your medical expertise

Need Help Responding to Vaccine-Hesitant Parents?

Science-based materials are available from these respected organizations

American Academy of Pediatrics (AAP)

Healthcare providers can find numerous resources on the AAP's website to help with parents and caregivers who have questions about vaccinating their child at www.healthychildren.org/jenglish/safety-prevention/immunizations/pages/default.aspx. When parents cannot be convinced, consider using AAP's Refusal to Vaccinate form at www.aap.org/en-us/documents/immunization_refusalto-vaccinate.pdf.

California Department of Public Health

The Immunization Branch of the California Department of Public Health has developed several excellent provider pieces that discuss common questions parents may have regarding vaccines for their children. These include

- "Vaccine Safety: Answers to Parents' Top Questions" www.eziz. org/assets/docs/IMM-916.pdf
- "Community Immunity" www.eziz.org/assets/docs/IMM-1056.pdf

Centers for Disease Control and Prevention (CDC)

Among CDC's many online immunization resources is the "Parent's Guide to Childhood Immunization," a 64-page booklet that can be ordered or printed at www.cdc.gov/vaccines/pubs/parents-guide. In addition, visit CDC's "Talking to Parents about Vaccines" web section at www.cdc.gov/vaccines/hcp/conversations/conv-materials.html.

Other CDC materials, designed to help healthcare providers work with hesitant parents, include the following:

- "If You Choose Not to Vaccinate Your Child, Understand the Risks and Responsibilities" – www.cdc.gov/vaccines/hcp/patient-ed/ conversations/downloads/not-vacc-risks-color-office.pdf
- "Infant Immunizations FAQs" www.cdc.gov/vaccines/parents/ parent-questions.html

Immunization Action Coalition (IAC)

IAC's Talking about Vaccines web section provides healthcare professionals with top vaccination resources from trusted sources such as CDC, AAP, IAC, VEC, and many more. Visit www.immunize.org/talking-about-vaccines. Refer parents to IAC's website for the public at www.vaccineinformation.org.

IAC has developed several patient handouts for vaccine-hesitant parents. These include:

- "Clear Answers and Smart Advice About Your Baby's Shots," an excerpt from the popular book "Baby 411" by Dr. Ari Brown – www.immunize.org/catg.d/p2068.pdf
- "Decision to Not Vaccinate My Child" www.immunize.org/ catg.d/p4059.pdf
- "Reliable Sources of Immunization Information: Where Parents Can Go to Find Answers!" – www.immunize.org/catg.d/p4012.pdf
- "Vaccines Work!" www.immunize.org/catg.d/p4037.pdf

Institute for Vaccine Safety, Johns Hopkins University

The Institute for Vaccine Safety collects vaccine-specific safety information. Of particular interest is its "Components of Vaccines" section, which contains tables specifying the contents of various vaccines: www.vaccinesafety.edu/components.htm.

Vaccinate Your Family (formerly Every Child By Two)

Created by Vaccine Your Family, www.vaccinateyourfamily.org/ questions-about-vaccines focuses on answering parents' commonly asked questions about vaccines. It features video clips and links to current vaccine news stories.

Vaccine Education Center (VEC) Children's Hospital of Philadelphia

VEC offers handouts in English and Spanish as well as four colorful booklets covering immunization of infants, teens, and adults, as well as one about vaccine safety. These educational materials can be downloaded at www.chop.edu/centers-programs/vaccine-education-center/resources. VEC has developed a number of patient handouts covering vaccine topics of interest. These include the following:

- "Vaccine Safety: Are Vaccines Safe?" www.chop.edu/centersprograms/vaccine-education-center/vaccine-safety/ are-vaccines-safe
- "Vaccine Safety: Dosing Safety" www.chop.edu/centers-programs/ vaccine-education-center/vaccine-safety/dosing-safety
- "Vaccine Safety: Immune System and Health www.chop.edu/ centers-programs/vaccine-education-center/vaccine-safety/ immune-system-and-health
- "Vaccine Ingredients" www.chop.edu/centers-programs/vaccineeducation-center/vaccine-ingredients

For parents with concerns about vaccines and autism

AAP has issued a statement that can be printed at www.healthychildren. org/English/health-issues/conditions/Autism/Pages/Where-We-Stand-Autism.aspx. Parents may wish to investigate further at www.healthychildren.org/English/health-issues/conditions/Autism/Pages/default. aspx IAC also recommends these books:

- Autism's False Prophets: Bad Science, Risky Medicine, and the Search for a Cure, by Paul A. Offit, MD
- Unstrange Minds: Remapping the World of Autism, by Roy Richard Grinker, PhD

And, here are two more well-researched handouts for parents, one from IAC and another from VEC:

- "MMR Vaccine Does Not Cause Autism: Examine the Evidence!" www.immunize.org/catg.d/p4026.pdf
- "Vaccines and Autism: What you should know" https://media.chop. edu/data/files/pdfs/vaccine-education-center-autism.pdf

Additional Resources

https://www.immunize.org/catg.d/p2070.pdf





10. What ingredients are in vaccines?

Some vaccine ingredients may sound like foreign substances, but they are familiar to your body. Here are the facts:

- Aluminum is used in very small amounts to boost the body's immune response, making the shots more effective. Aluminum also occurs naturally in soil, water, and air. During the first 6 months of life, your baby gets more aluminum from breast milk or formula, including soy formula¹³ than from all shots combined! Aluminum does not build up, and most leaves the body within a couple of weeks.
- Formaldehyde is sometimes used to keep vaccines germ-free, but it's also produced naturally in the human body as a normal bodily function to produce energy. In fact, studies show that newborns weighing six to eight pounds already have 50-70 times more¹⁴ formaldehyde in their bodies naturally than they would receive from a single dose of vaccine.

Additional Resources

https://www.eziz.org/assets/docs/IMM-916.pdf

• Thimerosal is a mercury-containing preservative that is no longer used¹⁵ in routine vaccines, except some forms of flu vaccine. Though no harm is known to have been caused by thimerosal in vaccines, as a precaution <u>California law</u>¹⁶ prohibits giving thimerosal-containing vaccines to pregnant women and children under age 3. Thimerosal-free flu vaccines are widely available.

- Any vaccine-preventable disease can strike at any time in the U.S. because all of these diseases still circulate either in the U.S. or elsewhere in the world.
- Sometimes vaccine-preventable diseases cause outbreaks, that is, clusters of cases in a given area.
- Some of the vaccine-preventable diseases that still circulate in the U.S. include whooping cough, chickenpox, Hib (a cause of meningitis), and influenza. These diseases, as well as the other vaccine-preventable diseases, can range from mild to severe and life-threatening. In most cases, there is no way to know beforehand if a child will get a mild or serious case.

Telling health care professionals your child's vaccination status is essential for two reasons:

- When your child is being evaluated, the doctor will need to consider the possibility that your child has a vaccinepreventable disease. Many of these diseases are now uncommon, but they still occur.
- The people who help your child can take precautions, such as isolating your child, so that the disease does not spread to others. One group at high risk for contracting disease is infants who are too young to be fully vaccinated. For example, the measles vaccine is not usually recommended for babies younger than 12 months. Very young babies who get measles are likely to be seriously ill, often requiring

Additional Resources

https://www.cdc.gov/vaccines/hcp/patient-ed/conversations/downloads/not-vacc-risks-color-office.pdf

When there is vaccine-preventable disease in your community:

- It may not be too late to get protection by getting vaccinated.
 Ask your child's doctor.
- If there are cases (or, in some circumstances, a single case)
 of a vaccine-preventable disease in your community, you
 may be asked to take your child out of school, childcare,
 or organized activities (for example, playgroups or sports).
- Your school, childcare facility, or other institution will tell you when it is safe for an unvaccinated child to return.
 Be prepared to keep your child home for several days up to several weeks.



Thank You

knochejw@dhec.sc.gov