Kenneth Haller, MD
Addressing Vaccine Hesitancy
October 19, 2017
This webinar is designed to help the participant:

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

I have no relevant financial disclosures.

- Kenneth Haller, MD
2017 Vaccination Schedule

Figure 1. Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger—United States, 2017.

For those who fall behind or start late, see the catch-up schedule (Figure 2). School entry and adolescent vaccine age groups are shaded in gray.

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Birth</th>
<th>1 mo</th>
<th>2 mos</th>
<th>4 mos</th>
<th>6 mos</th>
<th>9 mos</th>
<th>12 mos</th>
<th>15 mos</th>
<th>18 mos</th>
<th>19-23 mos</th>
<th>2 yrs</th>
<th>3 yrs</th>
<th>4-6 yrs</th>
<th>7-10 yrs</th>
<th>11-12 yrs</th>
<th>13-15 yrs</th>
<th>16 yrs</th>
<th>17-18 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B (HepB)</td>
<td>1st</td>
<td></td>
<td></td>
<td>2nd</td>
<td></td>
<td>3rd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rotavirus</td>
<td>1st</td>
<td>2nd</td>
<td></td>
<td>3rd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diptheria, tetanus, &amp; cellular pertussis (DTaP)</td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haemophilus influenza type b (Hib)</td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumococcal conjugate (PCV7)</td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
<td></td>
<td></td>
<td>4th</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inactivated poliovirus (IPV)</td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
<td></td>
<td></td>
<td>4th</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza (IV)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Annual vaccination (IV)</td>
<td>1 dose only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles, mumps, rubella (MMR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1st</td>
<td>2nd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicella (VAR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1st</td>
<td>2nd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis A (HepA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1st</td>
<td>2nd</td>
<td></td>
<td></td>
<td>3rd dose series, see footnote 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meningococcal C (HiB; MenC; 3A weeks; MenACWY D+H N; MenACWY C+Y)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2nd</td>
<td>3rd</td>
<td>1st</td>
<td>2nd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetanus, diptheria, &amp; cellular pertussis (Tdap)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1st</td>
<td>2nd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human papillomavirus (HPV)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
<td>4th</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meningococcal B (MenB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1st</td>
<td>2nd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumococcal polysaccharide (PPSV23)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1st</td>
<td>2nd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: The above recommendations must be read along with the footnotes of this schedule.

immunizations LINK. LEARN.
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.

<table>
<thead>
<tr>
<th>Microorganism</th>
<th>Bad disease</th>
<th>Common in kids</th>
<th>Got a vaccine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumococcus</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Rotavirus</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Anthrax</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>RSV</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>
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.
So why do parents refuse vaccines?
ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children


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 pediatric gastroenterology unit with a history of normal development followed by loss of acquired skills, including language, together with diarrhea and abdominal pain. Children underwent gastrointestinal, 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, diarrhea, 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 pediatric gastroenterology with a history of a regressive developmental disorder.
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
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
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 physicians
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.”
Effective Scripting for Successful Vaccination Efforts
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
Skills of Good Actors

• Actively listen & watch what is going on
• Connect with the actor across from you
• Find what you like about characters
• Be prepared before you go onstage
• Do your work, let your colleagues do theirs
• Let your partner explain
• Treat all your colleagues with respect.
• Be committed and trustworthy
Health Care Providers and Actors

• Competence
• Respect for colleagues
• Clear communication
• Awareness of self and others
• Empathy for clients (patients/audience)
• Ability to connect
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.
Our Role & Our Scripts

• People respect doctors, nurses, health care providers. *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…”
“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.”

• Unconditional Positive Regard (Rogers): close and positive “regarding,” as active engagement with the other

• Desired cognitive/emotional stance of the improviser toward her partners.
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 giving little Harriet 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?”
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?”
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.
Missouri’s Pediatric Immunization Rates Using ShowMeVax, Vaccines For Children Program Assessment and National Immunization Survey Data

Kenneth Haller, MD

hallerka@slu.edu

May 21, 2015

Questions?
Criticisms?
Comments?