

Immunization "201" – Challenging Immunization Scenarios

Ronald C. Samuels, MD, MPH
Associate Director
Children's Hospital Primary Care Center
10/12/17



Children's Hospital



Harvard Medical School

Disclosures

- *I, Ronald Samuels, have been asked to disclose any significant relationships with commercial entities that are either providing financial support for this program or whose products or services are mentioned during my presentations.*
 - *I have no relationships to disclose*
- *I will discuss the use of vaccines in a manner not approved by the U.S. Food and Drug Administration.*
 - *But in accordance with ACIP recommendations and expert opinion.*

Today's Objectives

- Thinking about/approaching vaccinating children
 - Communication Strategies
- CASES

Challenges To Effective Communication With Patients

- Finding the time to communicate
- The science of vaccines and immunology is complicated
- Language barriers
- Information resources

Strategies To Reduce Myths and Misperceptions about Vaccines

- Listen to the patient
- Be a role model
- Speak from your experience

Approaches To Vaccine Communication Challenges

- Keep your message simple
- Advise the patients what to expect after the vaccination
- Emphasize the return visits



One of the most important factors that influence a patient's decision to be vaccinated is a clear and unequivocal recommendation of the vaccine from the provider

Strong, Clear Concise Recommendation for HPV Vaccine (and all vaccines)

- Recommend HPV as a routine vaccine in the same manner as others
- **“ Your child needs 3 vaccines today: HPV, Tdap and MCV4”**
- Listen carefully and welcome questions

Dear colleague letter
 Endorsed by AAP, AAFP, ACOG, CDC and IAC
http://www.immunize.org/letter/recommend_hpv_vaccination.pdf

Immunization Pearls

GIVE ALL SHOTS

- If they're due for many shots - they've missed visits - and will miss them again

• Think about EACH antigen separately with combination vaccines

- ie., Pentacel - think about DTaP, then IPV, then HIB

• When looking at lists of shots, think about any vaccines that the patient hasn't received AT ALL

- It's much easier to notice that a patient is short a vaccine (ie., only had one VZV), then it is to recognize they've never received a vaccine (ie., never had Hep A)

Cases

- Mostly no right answers
 - some wrong answers...
- When no right answers... If in doubt, discuss with the family
- Ignore Flu vaccine – they're ALL due for flu vaccine

Case 1

- 12 month old patient, presents for routine well child care visit. New to your practice
 - no immunization records
- What do you do?

Case 2

- 16 month old patient, presents for ringworm. Known to your practice
 - Not up to date with immunizations
- What do you do?
 - If you vaccinate today will that decrease the chance that he/she will return for well child care?

Case 3

- 18 month old patient, presents for routine well child care visit. Known to your practice
 - Reviewing immunization records, there's no DTaP given at 4 months of age, but IPV, PCV, HIB and rotovirus were all given at 4 months of age. All other vaccines are Up To Date including DTaP's at 2, 6 and 15 months of age.
- What do you do?

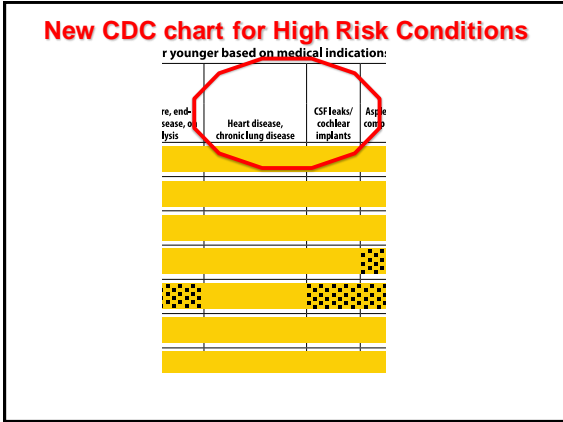
Case 3 (cont)

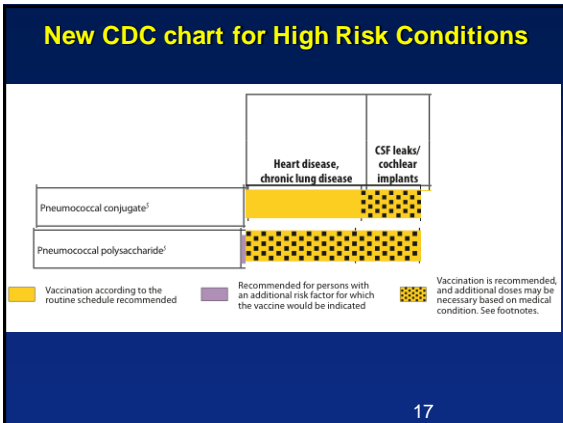
- Review original records (if available)
 - This patient had a DTaP/HIB/IPV written in records as just HIB
- Just vaccinate otherwise
- “Unusual” missing shots should make you think about recording errors
 - Shots you commonly give together with only one recorded

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Case 4

- 3 year old with Cerebral Palsy comes in for routine visit today. She has had all her routine shots through 3 years of age.
- Given that she has CP what additional shot(s) should you be advising.
- Are there more shot(s) you should give if has cochlear implant?





Case 4

- Children with CP may be at increased risk for respiratory disease. They may need an extra PCV vaccine (if they haven't had four) and the Polysaccharide Pneumococcal Vaccine would be recommended as well
- Children with Cochlear implants are at increased risk from pneumococcal meningitis
<https://www.cdc.gov/vaccines/vpd/mening/hcp/dis-cochlear-gen.html>

Case 5

- 1 year old, newly adopted baby from overseas. Family brings in shot record from overseas. All the shots are there, but the family is worried – they felt the care in the orphanage had been bad and don't believe the record.
- Do you feel better/ worse when you notice ALL the shots are given on the first day of a month

Case 5

- Choices
 - Revaccinate
 - Trust Records
 - Spot check titers (and what do you do if only some of the titers are positive)
- Some “good” orphanages are organized and always vaccinate beginning of the month – but “bad” orphanages this would be a worry

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Case 5b

- The adopted baby's shot records are beautifully written out – but you've got no idea what they mean since they're in another language
- What are your options at this point?

Options

- Revaccinate
- Titers?
- Have family get it translated
- Use facility translators if available
- **PINK BOOK**
 - <http://www.cdc.gov/vaccines/pubs/pinkbook/index.html>
- www.immunize.org

Quick Chart of Vaccine-Preventable Disease Terms in Multiple Languages (Page 1 of 2)

Common English Languages								
English	Spanish	Chinese	Arabic	Russian	Hebrew	French	Arabic	Hebrew
MM2	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
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MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
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MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P
MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P	MM2P

Case 6

- 9 month old comes into the clinic. The mom tells you they are traveling to Haiti next month. What shot(s) do you need to give

Travel

- cdc.gov/travel
- Figure out quickly if needs yellow fever and needs to go to travel clinic
- Don't forget malaria prophylaxis!
- Don't forget MMR (but don't give if might need YF)

Reminder re MMR

- MMR recommendations
 - If possible, 2 doses prior to travel
 - Immunize as early as 6 months of age
 - Careful planning if YF or other live virus immunization being considered as well
- CDC web site does not generally include MMR

Injectable vs Oral Typhoid Vaccine

- **Injectable**
 - 1 dose for children ≥ 2 yrs; protection 2 yrs
- **Oral**
 - 4 doses, refrigerate, one dose every other day
 - Live attenuated Vaccine
 - ≥ 6 years of age, protection 5 yrs
 - VERY effective

Case 7

- 9 month old comes into the office. The family is returning to “another country” for a year, and mom knows they don’t give the same vaccines. She asks for what vaccines would you recommend they get.

Case 7

- Vaccine recommendations in specific countries are a combination of vaccines available, funding available, and local disease risk
- Transporting vaccines not simple – so cannot just bring vaccines (cold chain for instance)
- Give copy of our recommendations, have them get copy of their recommendations and discuss with provider in their country

Case 8

- 15 month old comes into your office for routine visit and vaccines. Dad comments, the week after the 12 month visit (when you gave MMR) she was hospitalized for Kawasaki’s Disease.
- How do you need to change your vaccine recommendations today?

Case 9

- 7 year old patient comes in to see you for the first time in a long while. He recently completed treatment for Leukemia, including a Bone Marrow Transplant. Mom says that her oncologist told her to talk to you about vaccines.
- What vaccines does this child need?

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Vaccines and Cancer

- While on chemo, no live vaccine
- Flu Vaccine (injectable) should be given to children over 6 mo of age (if not on intensive chemotherapy or receiving anti-B-cell antibodies)
- Inactivated vaccines may be given (not considered "valid" unless documentation of protective antibody level)
- Three months after chemo, inactivated and live viral vaccines for varicella, MMR may be given; if anti-B-cell, wait 6 months

Vaccines and Bone Marrow Transplant

- Flu (inactivated) should be given annually if over 6 mo of age starting 6 mo after BMT, (4 mo during local outbreak) 2 doses if between 6 mo to 8 yrs old.
- No live vaccines if active Graft vs Host Disease (GVHD) or ongoing chemotherapy
- Always confirm with oncologist if any questions

Vaccines After BMT

- 3 doses of Hib (6-12 mo after BMT)
- 3 doses of PCV 3-6 mo after BMT, with 12 mo booster with either 1 dose of PPS23 if no cGVHD, or 1 dose of PCV if cGVHD
- 2 doses of MCV4 6-12 mo after BMT
- 3 doses each of Tetanus, IPV, Hep B
- 2 MMR and 2 VZV if seronegative for measles, no ongoing immunosuppression, no GVHD and 8-12 mo after last IVIG

Case 10

- 6 month old new to your practice has a scattering of shots (2 DTaPs, 1 IPV, 1 HIB, 1 PCV, 1 Hep B, 1 rotovirus)
- Family has Dr. Sears book and wants to follow his schedule
- How do you respond?

Summary

- Give all vaccines due
- Think about each portion of combination vaccines separately when thinking about being up-to-date
- Odd vaccine schedules should make you look more closely
- Look closely for MISSING vaccines

Summary (cont)

- Don't forget about interference between live virus vaccines (or immunoglobulins)
- High Risk Children may need additional vaccines (exposures/illness or travel)
 - Check travel web sites frequently for recommendations (they change!)

For More Information

- Massachusetts Department of Public Health Immunization Program
 - 1-617-983-6800
 - 1-888-658-2850
 - Website <http://www.mass.gov/dph>
- CDC/NIP
 - 1-800-232-2522 (English)
 - 1-800-232-0233 (Spanish)
 - Website <http://www.cdc.gov/vaccines>
- www.immunize.org
