Immunization Update 2013

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Outline

- Vaccine update
  - Combined child/adolescent immunization schedule
  - Updated recommendations for certain vaccines
  - Vaccines in pipeline
- Improving vaccination rates
  - Methods to increase immunization rates in your clinical practice
  - Patients/parents who refuse
- Vaccines and the Affordable Care Act

VACCINE UPDATE

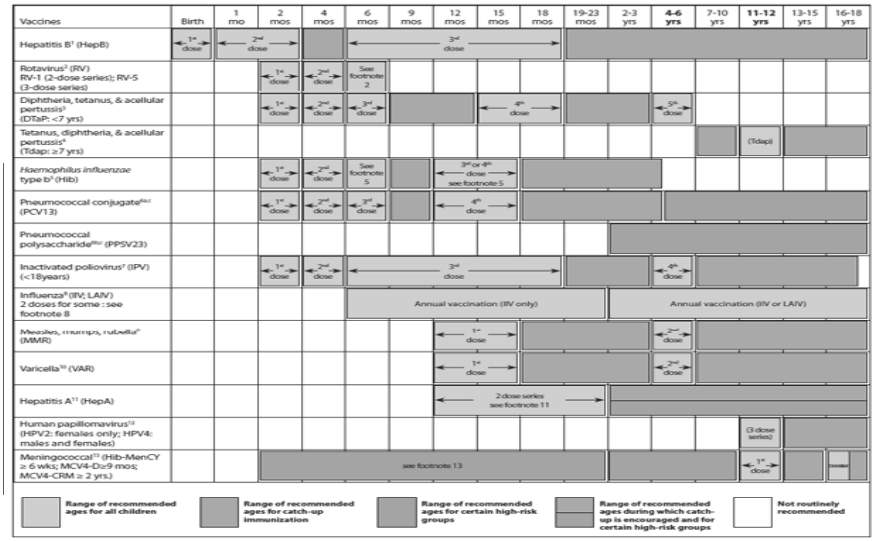
Combined child/adolescent immunization schedule

Advisory Committee on Immunization Practices (ACIP) and CDC Immunization Schedule

- Published at least annually in the MMWR
- Schedule approved by:
  - American College of Physicians (ACP)
  - American Academy of Family Physicians (AAFP)
  - American College of Obstetrics and Gynecology
  - American College of Nurse-Midwives
  - American Academy of Pediatrics (AAP)

Combination of the Pediatric and Adolescent Schedules

http://www.cdc.gov/mmwr/preview/mmwrhtml/su6201a2.htm



MMR

- **Administer to infants 6-11 months old traveling internationally**
- **Revaccinate with a 2 dose series at ages 12 -15 months and second dose at ages 4 -6 years**
- **A provider diagnosis of measles, mumps, or rubella is <u>not</u> considered acceptable evidence of immunity**

Image courtesy of Centers for Disease Control and Prevention

Pneumonia - PCV-13

- PCV-13 has replaced PCV7 as the primary series
- Administer a 3-dose series at ages 2, 4, 6 months and a booster at 12-15 months
- Administer 1 dose of PCV-13:
  - 2-5 years of age whether they have received appropriate PCV7 series or if not
  - 6-18 years of age if immunocompromised and previously unvaccinated

Rotavirus (RV-1, RV-5)

- RV-1: 2-dose series at 2, 4 mo
- RV-5: 3-dose series at 2, 4, 6 mo
- If any dose in series was RV-5 or unknown, a total of 3 doses of RV vaccine should be administered
- The maximum age for first dose in the series is 14 wk, 6 d and the maximum age for the final dose in the series is 8 mo, 0 d

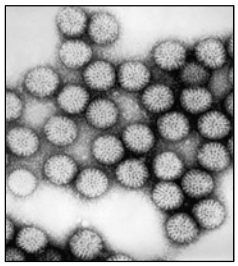


Image courtesy of Centers for Disease Control and Prevention

Hemophilus influenza-b (HIB)

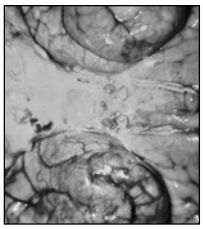


Image courtesy of Centers for Disease Control and Prevention

- Series usually completed by 15 mo
- If >15mo and unvaccinated, give 1 dose
- If unvaccinated and ≥5 yrs *and* have sickle cell disease, leukemia, HIV infection, or anatomic/functional asplenia, give 1 dose

Key point

Use the schedule *and* the footnotes as there as numerous special situations that require modification of an individual patient's schedule

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Tetanus-diphtheria-acellular pertussis (Tdap)

- **Administer 1 dose to all adolescents ages 11-12 years**
- **All adults (>18 years):**
  - **Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 years**
  - **Administer to all adults who have not previously received Tdap**
  - **Give regardless of interval since most recent Td**

Image courtesy of Centers for Disease Control and Prevention

Tdap

- Adults ≥ 65 years should receive one dose
- Give to all pregnant women in every pregnancy regardless of their Tdap immunization history

Image courtesy of Centers for Disease Control and Prevention

Pneumovax (PPSV23)

- Indications in children
  - Immunocompromised, cochlear implants, chronic lungers, chronic heart disease
- Adults with certain medical conditions: should receive 2 doses before age 65
- Give at age 65 as long as it has been ≥5 years since most recent dose

Zoster

Image courtesy of Medline

- Single dose for ≥ 60 yrs regardless of prior episode of zoster
  - FDA licensed vaccine: ≥ 50 yrs ; ACIP: ≥60 yrs
  - Contraindicated in "severe immunodeficiency"

Gardasil (HPV4)

- All adolescents ages 11-12 yrs
- Now recommended routinely for males
- May be administered as young as 9 yrs
- Give to all adolescents ages 13-18 if not previously vaccinated

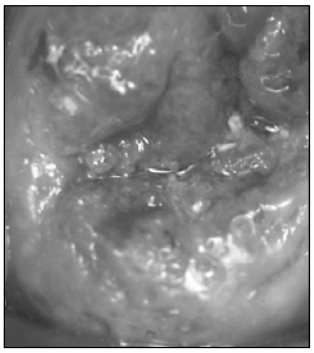


Image courtesy of Centers for Disease Control and Prevention

Vaccines in pipeline

- No consistent list; multiple stakeholders
- Emphasis on worldwide diseases:
  - Malaria
  - Dengue

Group B Streptococcus (GBS)

- Leading cause of sepsis and meningitis in first 3 months of age
- >8 million deaths in 2008
- Maternal GBS vaccine planned Phase III trials this year

Zoster

- Current phase III trials using recombinant DNA technology

Influenza

- Much work being done; various stages of development
- "Universal" influenza vaccine

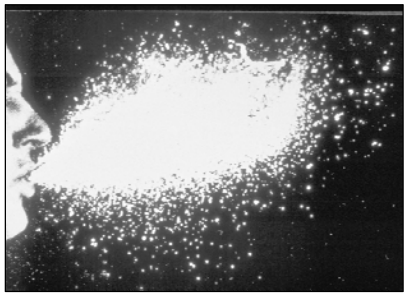


Image courtesy of Centers for Disease Control and Prevention

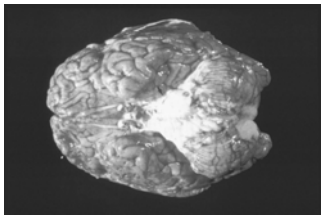
Early trials

- HIV
- Staph aureus
- Hepatitis C
- Clostridium difficile

In regulatory process

Image courtesy of IAC

- MenHibrix (Hib-MenCY-TT): Neisseria meningitis groups C & Y & Haemophilus influenzae type b disease
- Nimenrix (MenACWY-TT): Neisseria meningitis groups A, C, W & Y disease



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IMPROVING VACCINATION RATES

Practice efficiency and systems to improve vaccination rates

Steps to increasing immunization rates

- Appoint a champion
- Obtain adequate amounts of vaccine
- Document in one location of the EMR
- Educate residents, faculty, staff, families

Steps to increasing immunization rates

- Display CDC immunization recommendations in clinical areas
- Update list of vaccines in clinical areas
- Measure improvement quarterly

Key strategies

- Educate staff and patients
  - Provide physicians, nurses with information about vaccine requirements
  - Emphasize the importance of documenting immunizations
  - Distribute handouts that emphasize the importance of vaccines

Key strategies

- Be consistent with follow-up and reminders
  - Publish/post a reminder schedule for routine immunizations
  - Discuss this schedule during non-wellness office visits
  - Implement an immunization reminder system so that all patients are contacted regularly by phone, e-mail, postcards

Key strategies

- Accommodate patients
  - Offer evening/weekend access
  - Provide open/flexible scheduling to accommodate busy parents
  - Participate in the Vaccines for Children Program (VFC) to provide free immunizations to those who qualify

Key strategies

- Focus on one vaccine at a time
  - Use your EMR to develop a list of patients who have not received the vaccine
  - Determine last documented vaccination
  - Contact patient and offer appointment to patient who needs the vaccine

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IMPROVING VACCINATION RATES

The "vaccine hesitant" patient/parent

Headlines

Doctors "fire" patients who refuse vaccines for their children: Ethical?

CBS NEWS 11/30/12

Refuse vaccines and risk dismissal by doctor **USA TODAY 11/14/11**

Forcing Flu Shots on Health Care Workers: Who Is Next?

National Vaccine Information Center 9/29/10

Prevalence of vaccine refusal

- **8% of physicians: ≥10% of parents refused a vaccine**
- **20% reported: ≥10% requested altered schedule**
- **53% of physicians: spent 10–19 min counseling**
- **8%: spent ≥20 minutes counseling**

Reasons for refusal

- Fear of side effects heard from media and word of mouth (52%)
- Belief that the disease not harmful (26%)
- Other

Adults

- Little or no increase in vaccine rates from 2010 to 2011:
  - HPV vaccine: 30%
  - Tdap: 13% of adults 19-64 years
  - Pneumococcal: 62% adults aged ≥65 years
  - Herpes zoster: 16%

- **Refusers more likely to reside in well-educated, higher income areas than non-refusers**

"Because these diseases are being prevented by vaccines, people no longer remember how bad they were."

So, why aren't vaccination rates improving?

- Decreased perception of gravity of problem
  - Doctors don't offer
  - Patients refuse
- Doctors uncomfortable or not knowledgeable in responding to parent/patient concerns
  - Requires time and resources
- No information clearinghouse

Individual *vs* Population health

Tips

- **Patients/parents should be comfortable voicing concerns in a non-threatening environment**

Tips

- **Determine if valid contraindications**
- **Assess parental reasons for objection in non-threatening manner; background?**

- **Provide factual information that addresses the misconceptions or specific concerns**
- **Be able to recommend good websites**

Resources

- **IAC—Immunization Action Coalition**
  - **http://www.immunize.org**
  - **Information and resources for physicians, staff, and patients**
  - **Unprotected People Reports**
  - **Vaccines for adults**
  - **Talking points for busy physicians**

Resources

- CDC
  - Resources for physicians and practices
  - Handouts for patients/families
- American Academy of Pediatrics
  - Information on preparing for the visit, during the visit, and after the visit
  - Information for physicians and for families

Common concerns/challenges

- Brief points about the most common objections; adapted from the IAC materials

Image courtesy of Centers for Disease Control and Prevention

Mercury and autism

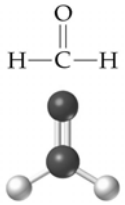
- Thimerosal (preservative)
- 2 forms of mercury:
  - Ethylmercury– not dangerous; in thimerosal
  - Methylmercury- causes in nervous system damage; NOT in thimerosal nor vaccines
- Thimerosal not used since 2001

Aluminum

- Used as adjuvant in vaccines for >70 yr
- Most common metal found in nature
- Rapidly eliminated
- Infants get more aluminum in breast milk or formula than in vaccines

Formaldehyde

- Inactive viruses; detoxify tetanus and diphtheria antigens
- Found in multiple household products
- Usual levels in blood stream higher than levels found in vaccines



MMR and autism

- Multiple large well-designed studies have found no link
- The one 1998 study that started this concern was retracted as fraudulent

Better sanitation

- Better sanitation helps
- Disease incidence/prevalence have only decreased with vaccines
- Outbreaks of measles, pertussis and varicella traced to pockets of unvaccinated children

Infection develops immunity

- Many cases: true
- Serious and life threatening or fatal complications of natural disease

It's my right not to vaccinate

- All states offer medical exemption
  - 48 states religious exemption
  - 21 states personal exemption
- Unvaccinated children at higher risk contracting serious disease
- Time out of school/daycare; parental time away from work

Key point

Be prepared

- Know most common questions and objections
- Have easy access to materials and handouts for you and your patients
- Bookmark useful sites

Reference document

Don’t worry about anticipating every possible question; most concerns haven’t changed in decades!

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AFFORDABLE CARE ACT

Vaccine Implications

Impact on Immunizations

- **Intent: assure near-universal, accessible and affordable coverage by leveraging the existing system of private and public health insurance**
  - **Note: intent is to improve access, not to improve payment to providers**

Private Insurance Plans

- ACA: mandates provision of ACIP-recommended vaccines with no co-pay
- New ACIP recommendations must be adopted within a year of CDC adoption
- No plan is required to cover vaccinations delivered by an out-of-network provider (pharmacies, community vaccine blitz)

Grandfathered Plans

- Existing individual and group health plans can continue with grandfathered status

Grandfathered status continued if:

- Addition of new benefits
- Modest adjustments to existing benefits and cost
- Voluntarily adopting new patient protections established under ACA
- Changes comply with state or federal requirements

Grandfathered status lost if:

- Plans reduce or eliminate existing coverage
- Plans increase deductibles or co-payments
- Require patients to switch to different grandfathered plan with fewer benefits or higher cost-sharing to avoid new patient protections in ACA
- Plans are acquired by, or merge with, another plan to avoid complying with ACA

Up to half may lose that status by the end of this year

Medicaid

- **Effective 2014: all non-elderly persons with income up to 138% Federal Poverty Level are Medicaid eligible**
  - **>19 million more Americans are expected to be eligible for Medicaid benefits, a 25% increase**
- **Increased coverage for immunizations for newly eligible enrollees**

Medicare

- **All Medicare beneficiaries receive a personalized prevention plan that incorporates ACIP-recommended vaccines**
- **All cost-sharing and copayment is eliminated for Part B vaccines; Part D still has copayment**
- **GAO study on impact of Medicare Part D payment on access to immunizations**

Community Health Centers (CHC)

- Community Health Center Fund established, $11 billion over 5 years to expand CHC operations
- Number of patients served expected to double to 35 million by 2019
- Increases access to immunizations for millions of children and adults in medically underserved communities

Key points

- Near universal immunization coverage
- Access for newly insured especially in medically underserved communities
- Up to one year lag time in health plan implementation of ACIP recommendations
- Medicare part D vaccine cost to patient uncertain