

## **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)



## Hemophilus influenza-b (HIB)

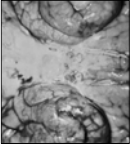


Image courtesy of  
Centers for Disease  
Control and  
Prevention

- Series usually completed by 15 mo
- If >15mo and unvaccinated, give 1 dose
- If unvaccinated and  $\geq 5$  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 are 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

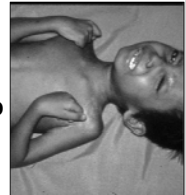


Image courtesy of Centers  
for Disease Control and  
Prevention

## Tdap

- Adults  $\geq 65$  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  $\geq 5$  years since most recent dose

## Zoster



Image courtesy of Medline

- Single dose for  $\geq 60$  yrs regardless of prior episode of zoster
- FDA licensed vaccine:  $\geq 50$  yrs ; ACIP:  $\geq 60$  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

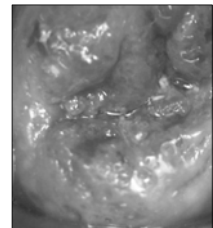


Image courtesy of Centers for Disease Control and Prevention

## 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

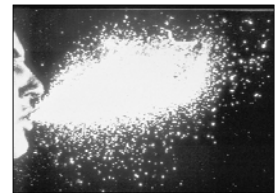


Image courtesy of Centers for Disease Control and Prevention

## 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

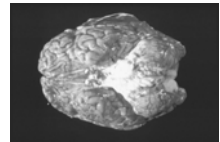


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## IMPROVING VACCINATION RATES

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:  $\geq 10\%$  of parents refused a vaccine
- 20% reported:  $\geq 10\%$  requested altered schedule
- 53% of physicians: spent 10–19 min counseling
- 8%: spent  $\geq 20$  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  $\geq 65$  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

79 Au	Mercury 80 Hg	Thimerosal 81 Tl
197 2.4	200.59 1.9	204.3
Uranium		

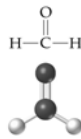
## Aluminum

- 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**