CDC Immunization Update 2015

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AZ Immunization Conference
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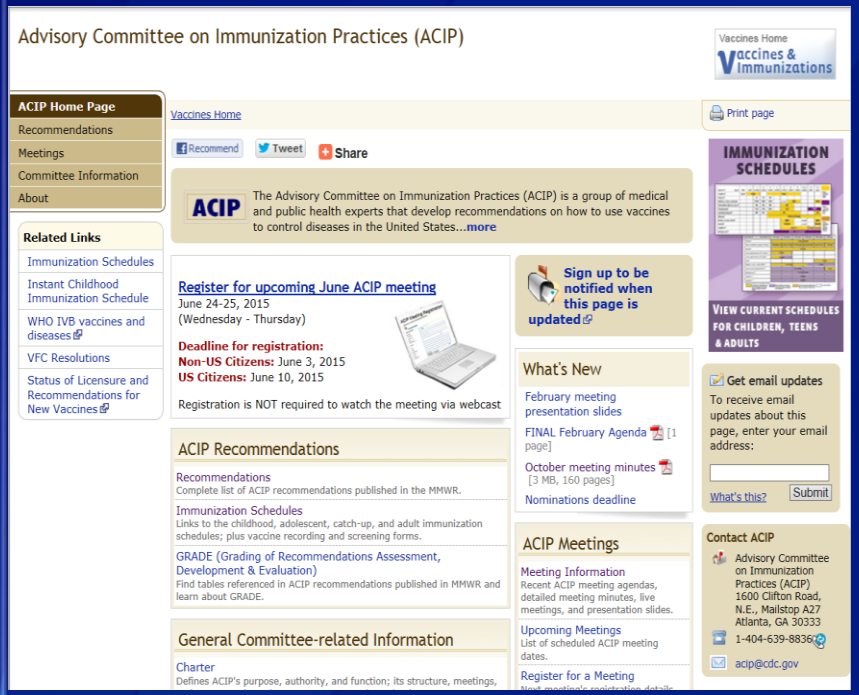
Disclosures

- Donna Weaver is a federal government employee with no financial interest or conflict with the manufacturer of any product named in this presentation
- The speaker will discuss the off-label use of MMR, HPV, and PCV13 vaccines
- The speaker will not discuss a vaccine not currently licensed by the FDA

Disclosures



Next ACIP Meeting
June 24-25, 2015
October 21-22, 2015

- The recommendations to be discussed are primarily those of the Advisory Committee on Immunization Practices (ACIP)
  - Composed of 15 non-government experts in clinical medicine and public health
  - Provides guidance on use of vaccines and other biologic products to DHHS, CDC, and the U.S. Public Health Service

http://www.cdc.gov/vaccines/acip/meetings/meetings-info.html

What's New?

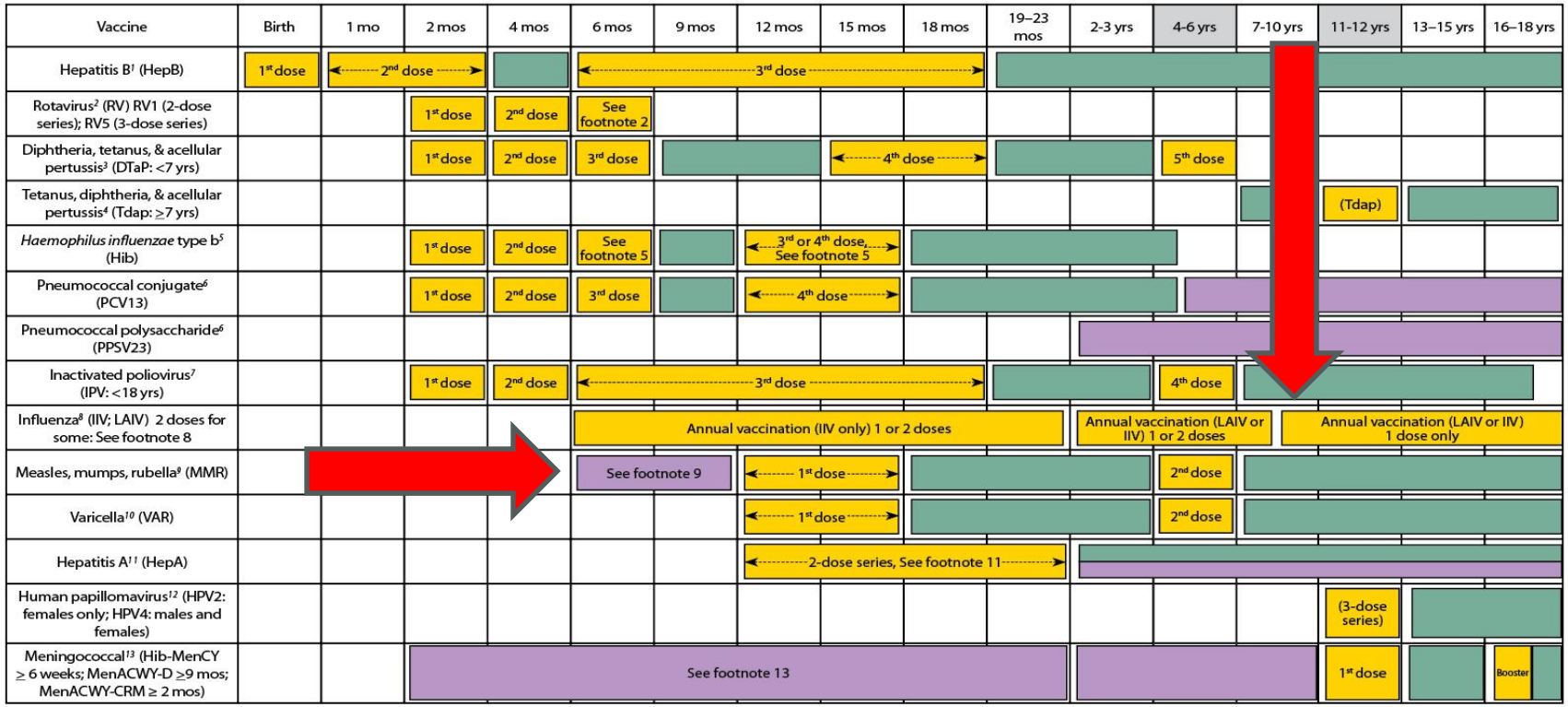
- **2015 Immunization Schedules**
- **Vaccination coverage rates**
- **VIS updates**
- **Measles**
- **Influenza**
- **Recent ACIP Recommendations**
  - HPV
  - PCV13
- **New Immunization Products**
  - MenB
  - DTaP-IPV
- **Immunization resources**

Immunization Schedules

Figure 1. Recommended immunization schedule for persons aged 0 through 18 years – United States, 2015.

(FOR THOSE WHO FALL BEHIND OR START LATE, SEE THE CATCH-UP SCHEDULE [FIGURE 2]).

These recommendations must be read with the footnotes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars in Figure 1. To determine minimum intervals between doses, see the catch-up schedule (Figure 2). School entry and adolescent vaccine age groups are shaded.



This schedule includes recommendations in effect as of January 1, 2015. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Vaccination providers should consult the relevant Advisory Committee on Immunization Practices (ACIP) statement for detailed recommendations, available online at http://www.cdc.gov/vaccines/hcp/acip-recs/index.html. Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS) online (http://www.vaers.hhs.gov) or by telephone (800-822-7967). Suspected cases of vaccine-preventable diseases should be reported to the state or local health department. Additional information, including precautions and contraindications for vaccination, is available from CDC online (http://www.cdc.gov/vaccines/recs/vac-admin/contraindications.htm) or by telephone (800-CDC-INFO [800-232-4636]).

This schedule is approved by the Advisory Committee on Immunization Practices (http//www.cdc.gov/vaccines/acip), the American Academy of Pediatrics (http://www.aap.org), the American Academy of Family Physicians (http://www.aafp.org), and the American College of Obstetricians and Gynecologists (http://www.acog.org).

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

http://www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html

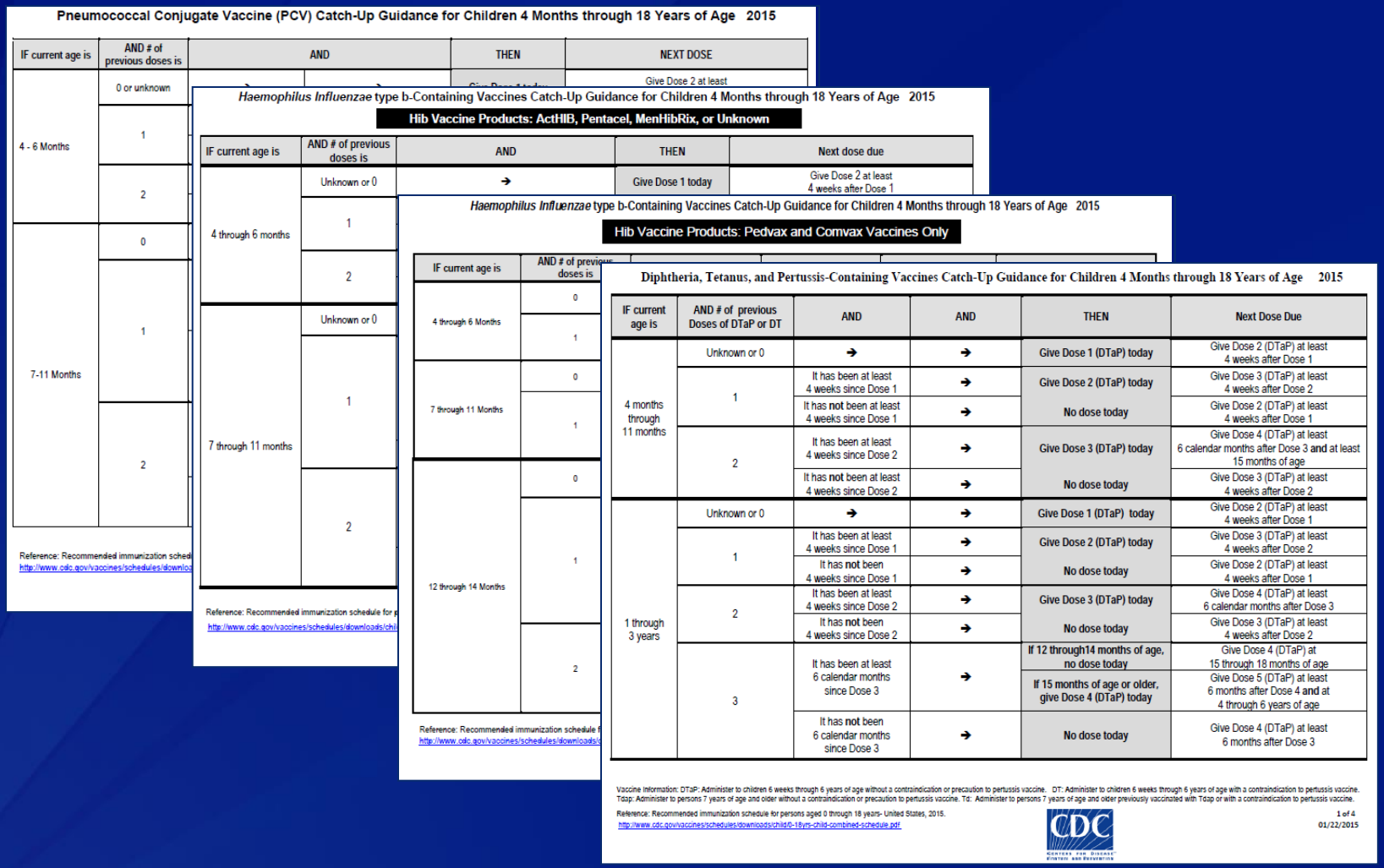
FIGURE 2. Catch-up immunization schedule for persons aged 4 months through 18 years who start late or who are more than 1 month behind —United States, 2015.

The figure below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age. Always use this table in conjunction with Figure 1 and the footnotes that follow.

Vaccine	Minimum Age for Dose 1	Minimum Interval Between Doses			
		Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5
Children age 4 months through 6 years					
Hepatitis B[1]	Birth	4 weeks	8 weeks *and* at least 16 weeks after first dose. Minimum age for the final dose is 24 weeks.		
Rotavirus[2]	6 weeks	4 weeks	4 weeks[2]		
Diphtheria, tetanus, and acellular pertussis[3]	6 weeks	4 weeks	4 weeks	6 months	6 months[3]
Haemophilus influenzae type b[5]	6 weeks	4 weeks if first dose was administered before the 1st birthday. 8 weeks (as final dose) if first dose was administered at age 12 through 14 months. No further doses needed if first dose was administered at age 15 months or older.	4 weeks[5] if current age is younger than 12 months **and** first dose was administered at younger than age 7 months, **and** at least 1 previous dose was PRP-T (ActHib, Pentacel) or unknown. 8 weeks *and* age 12 through 59 months (as final dose)[5] • if current age is younger than 12 months **and** first dose was administered at age 7 through 11 months; OR • if current age is 12 through 59 months **and** first dose was administered before the 1st birthday, **and** second dose administered at younger than 15 months; OR • if both doses were PRP-OMP (PedvaxHIB; Comvax) **and** were administered before the 1st birthday. No further doses needed if previous dose was administered at age 15 months or older.	8 weeks (as final dose) This dose only necessary for children age 12 through 59 months who received 3 doses before the 1st birthday.	
Pneumococcal[6]	6 weeks	4 weeks if first dose administered before the 1st birthday. 8 weeks (as final dose for healthy children) if first dose was administered at the 1st birthday or after. No further doses needed for healthy children if first dose administered at age 24 months or older.	4 weeks if current age is younger than 12 months and previous dose given at <7 months old. 8 weeks (as final dose for healthy children) if previous dose given between 7-11 months (wait until at least 12 months old); OR if current age is 12 months or older and at least 1 dose was given before age 12 months. No further doses needed for healthy children if previous dose administered at age 24 months or older.	8 weeks (as final dose) This dose only necessary for children aged 12 through 59 months who received 3 doses before age 12 months or for children at high risk who received 3 doses at any age.	
Inactivated poliovirus[7]	6 weeks	4 weeks[7]	4 weeks[7]	6 months[7] (minimum age 4 years for final dose).	
Meningococcal[13]	6 weeks	8 weeks[13]	See footnote 13	See footnote 13	
Measles, mumps, rubella[9]	12 months	4 weeks			
Varicella[10]	12 months	3 months			
Hepatitis A[11]	12 months	6 months			
Children and adolescents age 7 through 18 years					
Tetanus, diphtheria; tetanus, diphtheria, and acellular pertussis[4]	7 years[4]	4 weeks	4 weeks if first dose of DTaP/DT was administered before the 1st birthday. 6 months (as final dose) if first dose of DTaP/DT was administered at or after the 1st birthday.	6 months if first dose of DTaP/DT was administered before the 1st birthday.	
Human papillomavirus[12]	9 years	Routine dosing intervals are recommended.[12]			
Hepatitis A[11]	Not applicable (N/A)	6 months			
Hepatitis B[1]	N/A	4 weeks	8 weeks **and** at least 16 weeks after first dose.		
Inactivated poliovirus[7]	N/A	4 weeks	4 weeks[7]	6 months[7]	
Meningococcal[13]	N/A	8 weeks[13]			
Measles, mumps, rubella[9]	N/A	4 weeks			
Varicella[10]	N/A	3 months if younger than age 13 years. 4 weeks if age 13 years or older.			

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

Catch-up Guidance Job Aids



Pneumococcal Conjugate Vaccine (PCV) Catch-Up Guidance for Children 4 Months through 18 Years of Age 2015

IF current age is	AND # of previous doses is	AND	THEN	NEXT DOSE
4 - 6 Months	0 or unknown	→		Give Dose 2 at least
	1			
	2			
7-11 Months	0			
	1			
	2			

Reference: Recommended immunization sched
http://www.cdc.gov/vaccines/schedules/downloa

***Haemophilus Influenzae* type b-Containing Vaccines Catch-Up Guidance for Children 4 Months through 18 Years of Age 2015**

Hib Vaccine Products: ActHIB, Pentacel, MenHibRix, or Unknown

IF current age is	AND # of previous doses is	AND	THEN	Next dose due
4 through 6 months	Unknown or 0	→	Give Dose 1 today	Give Dose 2 at least 4 weeks after Dose 1
	1			
	2			
7 through 11 months	Unknown or 0			
	1			
	2			

Reference: Recommended immunization schedule for p
http://www.cdc.gov/vaccines/schedules/downloads/chil

***Haemophilus Influenzae* type b-Containing Vaccines Catch-Up Guidance for Children 4 Months through 18 Years of Age 2015**

Hib Vaccine Products: Pedvax and Comvax Vaccines Only

IF current age is	AND # of previous doses is
4 through 6 Months	0
	1
7 through 11 Months	0
	1
12 through 14 Months	0
	1
	2

Reference: Recommended immunization schedule f
http://www.cdc.gov/vaccines/schedules/downloads/c

Diphtheria, Tetanus, and Pertussis-Containing Vaccines Catch-Up Guidance for Children 4 Months through 18 Years of Age 2015

IF current age is	AND # of previous Doses of DTaP or DT	AND	AND	THEN	Next Dose Due
4 months through 11 months	Unknown or 0	→	→	Give Dose 1 (DTaP) today	Give Dose 2 (DTaP) at least 4 weeks after Dose 1
	1	It has been at least 4 weeks since Dose 1	→	Give Dose 2 (DTaP) today	Give Dose 3 (DTaP) at least 4 weeks after Dose 2
		It has **not** been at least 4 weeks since Dose 1	→	No dose today	Give Dose 2 (DTaP) at least 4 weeks after Dose 1
	2	It has been at least 4 weeks since Dose 2	→	Give Dose 3 (DTaP) today	Give Dose 4 (DTaP) at least 6 calendar months after Dose 3 **and** at least 15 months of age
		It has **not** been at least 4 weeks since Dose 2	→	No dose today	Give Dose 3 (DTaP) at least 4 weeks after Dose 2
1 through 3 years	Unknown or 0	→	→	Give Dose 1 (DTaP) today	Give Dose 2 (DTaP) at least 4 weeks after Dose 1
	1	It has been at least 4 weeks since Dose 1	→	Give Dose 2 (DTaP) today	Give Dose 3 (DTaP) at least 4 weeks after Dose 2
		It has **not** been 4 weeks since Dose 1	→	No dose today	Give Dose 2 (DTaP) at least 4 weeks after Dose 1
	2	It has been at least 4 weeks since Dose 2	→	Give Dose 3 (DTaP) today	Give Dose 4 (DTaP) at least 6 calendar months after Dose 3
		It has **not** been 4 weeks since Dose 2	→	No dose today	Give Dose 3 (DTaP) at least 4 weeks after Dose 2
	3	It has been at least 6 calendar months since Dose 3	→	If 12 through14 months of age, no dose today	Give Dose 4 (DTaP) at 15 through 18 months of age
				If 15 months of age or older, give Dose 4 (DTaP) today	Give Dose 5 (DTaP) at least 6 months after Dose 4 **and** at 4 through 6 years of age
		It has **not** been 6 calendar months since Dose 3	→	No dose today	Give Dose 4 (DTaP) at least 6 months after Dose 3

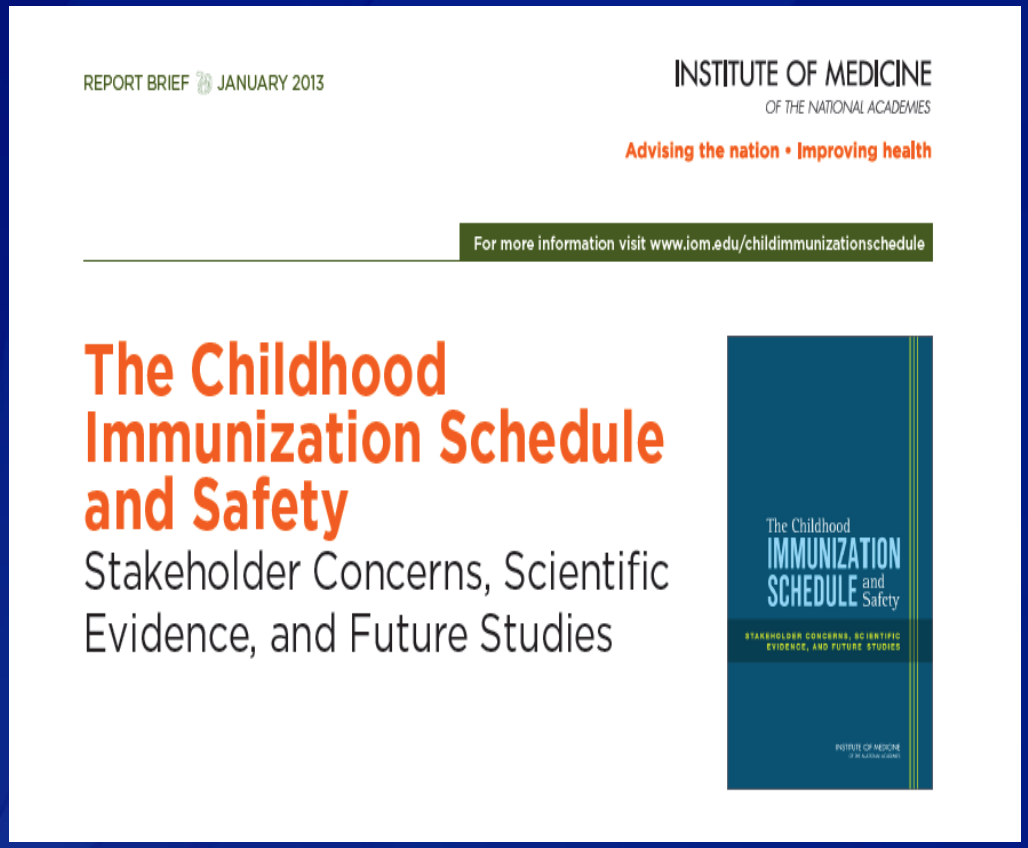
Vaccine Information: DTaP: Administer to children 6 weeks through 6 years of age without a contraindication or precaution to pertussis vaccine. DT: Administer to children 6 weeks through 6 years of age with a contraindication to pertussis vaccine. Tdap: Administer to persons 7 years of age and older without a contraindication or precaution to pertussis vaccine. Td: Administer to persons 7 years of age and older previously vaccinated with Tdap or with a contraindication to pertussis vaccine.

Reference: Recommended immunization schedule for persons aged 0 through 18 years- United States, 2015.
http://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf

1 of 4
01/22/2015

http://www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html#job-aids

Institute of Medicine Report: The Childhood Immunization Schedule and Safety



Upon reviewing stakeholder concerns and scientific literature regarding the entire childhood immunization schedule, the IOM committee finds no evidence that the schedule is unsafe

http://www.cdc.gov/vaccinesafety/Concerns/childhood_immunization_iomstudies.html

2015 Adult Immunization Schedule Changes from 2014

- **September 2014 pneumococcal vaccine recommendation**
  - Routine administration of 13-valent pneumococcal conjugate vaccine (PCV13) in series with 23-valent pneumococcal polysaccharide vaccine (PPSV23) for all adults aged 65 years or older
- **August 2014 influenza vaccine contraindications and precautions for live attenuated influenza vaccine (LAIV)**
  - Move "influenza antiviral use within the last 48 hours" from precautions to contraindications
  - Move asthma and chronic lung diseases; cardiovascular, renal, and hepatic diseases; and diabetes and other conditions from contraindications to precautions
- **October 2014 approval by Food and Drug Administration to expand approved age for recombinant influenza vaccine (RIV)**
  - Adults aged 18 years or older (changed from 18 through 49 years) can receive RIV

Recommended Adult Immunization Schedule—United States - 2014

Note: These recommendations must be read with the footnotes that follow containing number of doses, intervals between doses, and other important information.

Figure 1. Recommended adult immunization schedule, by vaccine and age group[1]

VACCINE ▼ / AGE GROUP ►	19-21 years	22-26 years	27-49 years	50-59 years	60-64 years	≥ 65 years
Influenza [2,*]	1 dose annually					
Tetanus, diphtheria, pertussis (Td/Tdap) [3,*]	Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 yrs					
Varicella [4,*]	2 doses					
Human papillomavirus (HPV) Female [5,*]						
Human papillomavirus (HPV) Male [5,*]						
Zoster [6]						
Measles, mumps, rubella (MMR) [7,*]						
Pneumococcal 13-valent conjugate (PCV13) [8,*]						
Pneumococcal polysaccharide (PPSV23) [9,10]						
Meningococcal [11,*]						
Hepatitis A [12,*]						
Hepatitis B [13,*]						
Haemophilus influenzae type b (Hib) [14,*]						

*Covered by the Vaccine Injury Compensation Program

For all persons in this category who meet the age requirements and who lack documentation of vaccination or have no evidence of previous infection; zoster vaccine recommended regardless of prior episode of zoster

Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indication)

No recommendation

Figure 2. Vaccines that might be indicated for adults based on medical and other indications[1]

VACCINE ▼ / INDICATION ►	Pregnancy	Immuno-compromising conditions (excluding human immunodeficiency virus [HIV])[4,6,7,8,15]	HIV infection CD4+ T lymphocyte count[4,6,7,8,15]: < 200 cells/μL	HIV infection CD4+ T lymphocyte count[4,6,7,8,15]: ≥ 200 cells/μL	Men who have sex with men (MSM)	Kidney failure, end-stage renal disease, receipt of hemodialysis	Heart disease, chronic lung disease, chronic alcoholism	Asplenia (including elective splenectomy and persistent complement component deficiencies)[8,14]	Chronic liver disease	Diabetes	Healthcare personnel
Influenza [2,*]	1 dose IIV annually				1 dose IIV or LAIV annually	1 dose IIV annually					1 dose IIV or LAIV annually
Tetanus, diphtheria, pertussis (Td/Tdap) [3,*]	1 dose Tdap each pregnancy	Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 yrs									
Varicella [4,*]	Contraindicated			2 doses							
Human papillomavirus (HPV) Female [5,*]		3 doses through age 26 yrs				3 doses through age 26 yrs					
Human papillomavirus (HPV) Male [5,*]		3 doses through age 26 yrs				3 doses through age 21 yrs					
Zoster [6]	Contraindicated			1 dose							
Measles, mumps, rubella (MMR) [7,*]	Contraindicated			1 or 2 doses							
Pneumococcal 13-valent conjugate (PCV13) [8,*]		1 dose									
Pneumococcal polysaccharide (PPSV23) [9,10]		1 or 2 doses									
Meningococcal [11,*]		1 or more doses									
Hepatitis A [12,*]		2 doses									
Hepatitis B [13,*]		3 doses									
Haemophilus influenzae type b (Hib) [14,*]		post-HSCT recipients only		1 or 3 doses							

*Covered by the Vaccine Injury Compensation Program

For all persons in this category who meet the age requirements and who lack documentation of vaccination or have no evidence of previous infection; zoster vaccine recommended regardless of prior episode of zoster

Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indications)

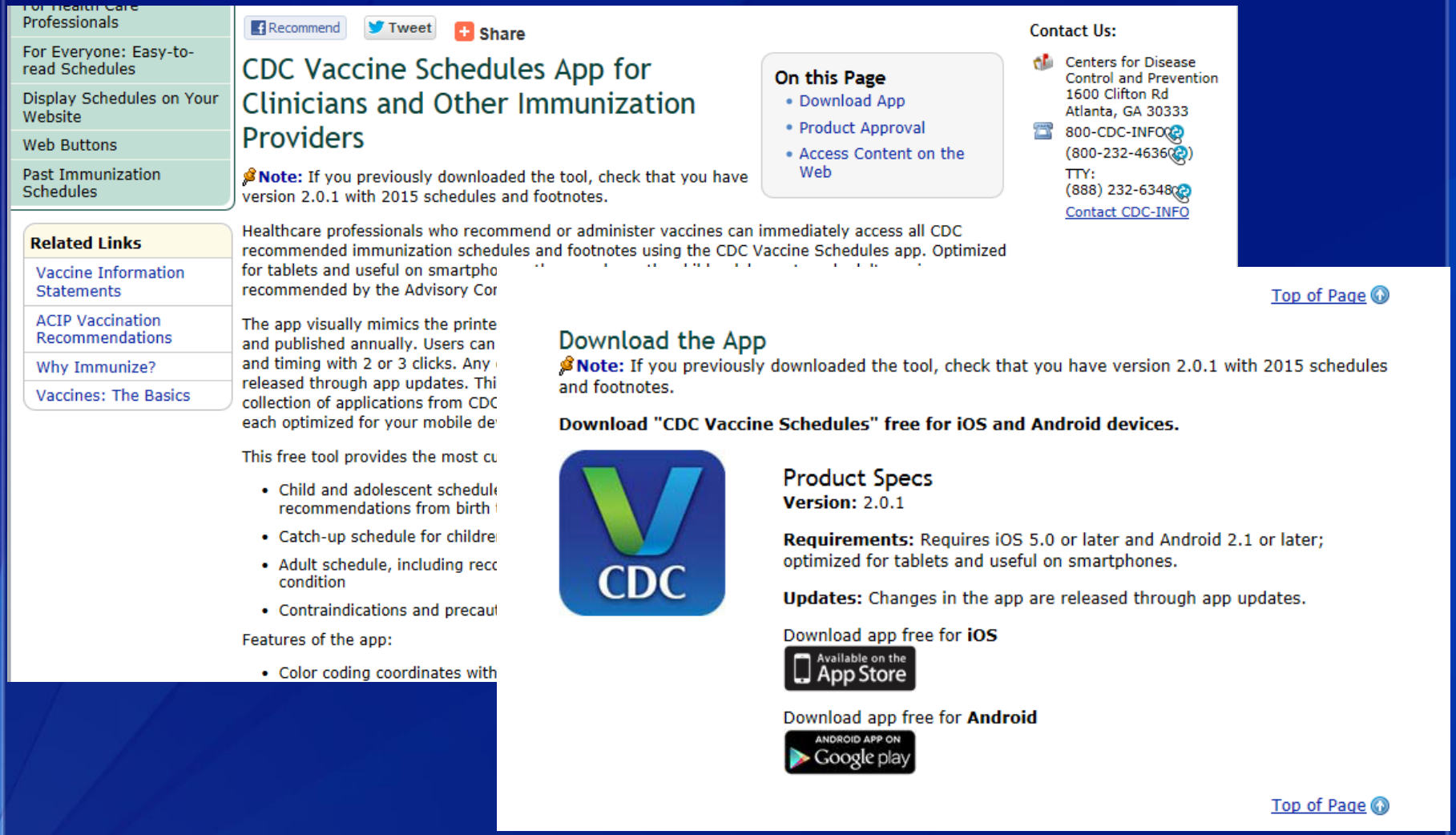
No recommendation

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

These schedules indicate the recommended age groups and medical indications for which administration of currently licensed vaccines is commonly indicated for adults ages 19 years and older, as of February 1, 2014. For all vaccines being recommended on the Adult Immunization Schedule: a vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Licensed combination vaccines may be used whenever any components of the combination are indicated and when the vaccine's other components are not contraindicated. For detailed recommendations on all vaccines, including those used primarily for travelers or that are issued during the year, consult the manufacturers' package inserts and the complete statements from the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/pubs/acip-list.htm). Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

www.cdc.gov/vaccines/schedules/hcp/adult.html

There is a Schedule App!



http://www.cdc.gov/vaccines/schedules/hcp/schedule-app.html#download

Immunization Coverage

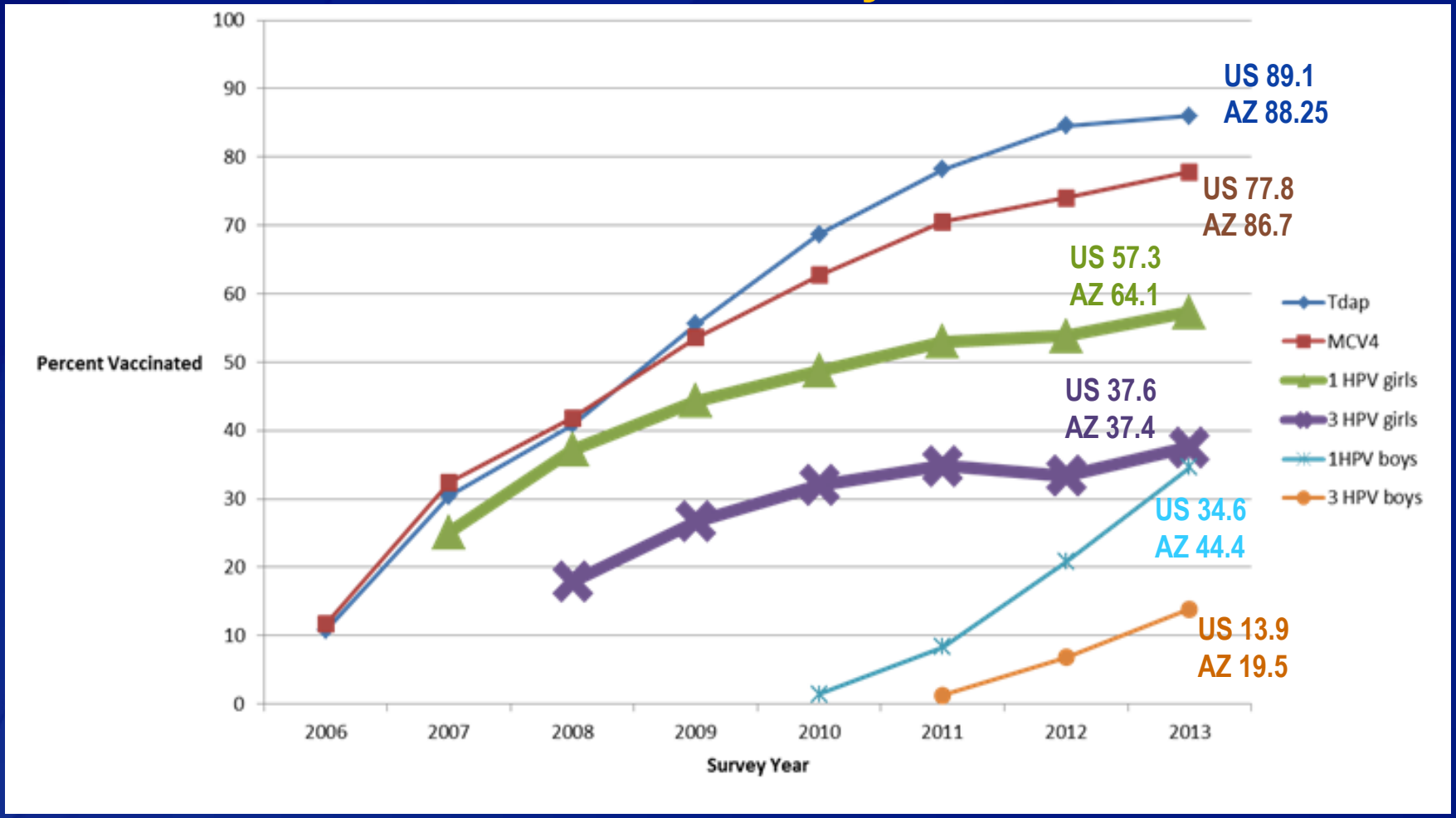
Estimated Coverage of Vaccines Among Children Aged 19-35 Months, NIS 2013

State/Area	Vaccine Series* 4:3:1:4:3:1:4
United States	70.4%
Arizona	65.1%

*Includes ≥4 doses DTaP/DT/DTP, ≥ 3 doses polio, ≥ 1 dose MMR, Full Series Hib, ≥ 3 doses Hep B, dose ≥ 1 varicella, and doses ≥ 4 PCV.

***MMWR* 2014; 63(34): 741-48**

National Estimated Vaccination Coverage Levels among Adolescents 13-17 Years, National Immunization Survey-Teen, 2006-2013



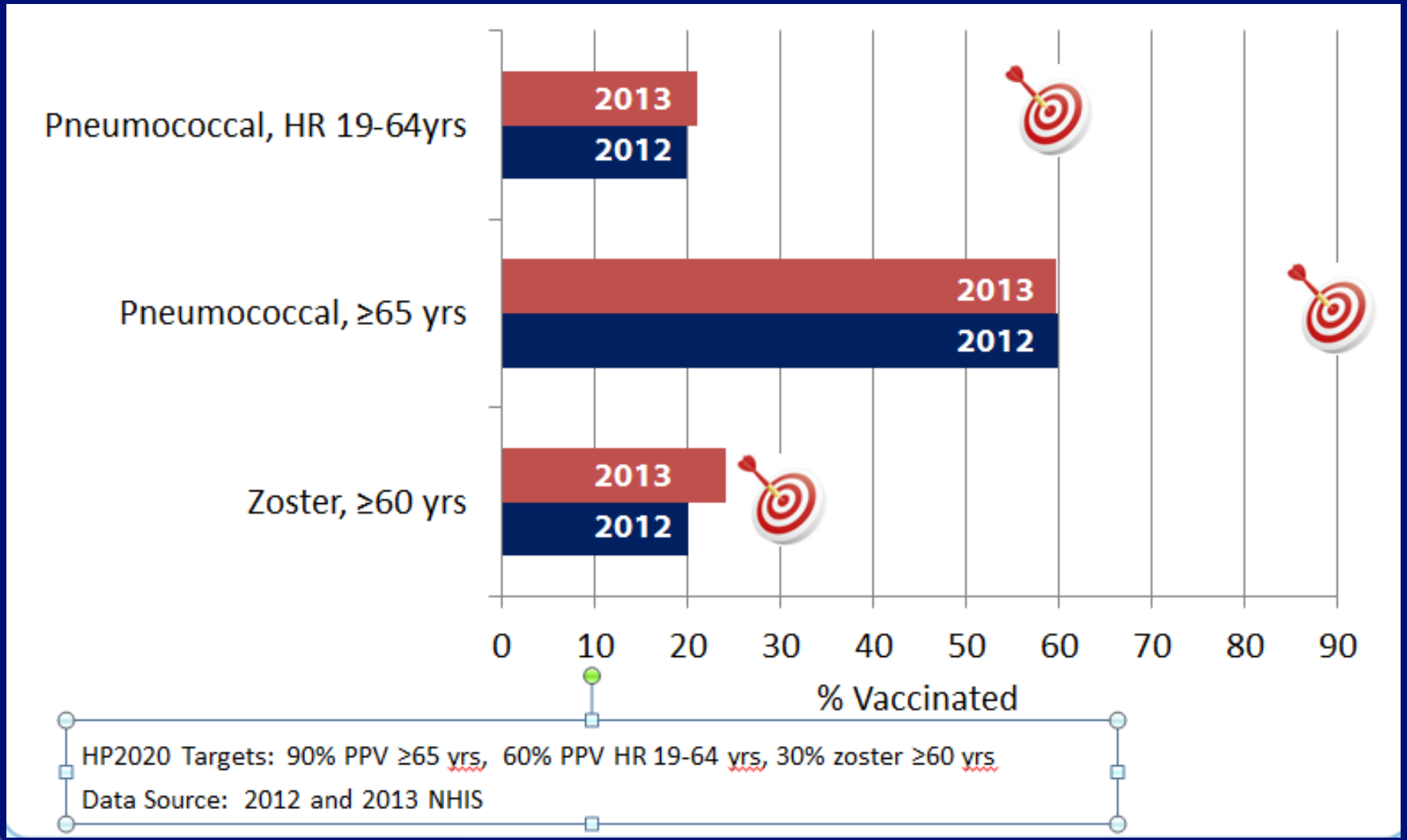
MMWR: July 25, 2014 / 63(29);625-33

Avoid Missed Opportunities

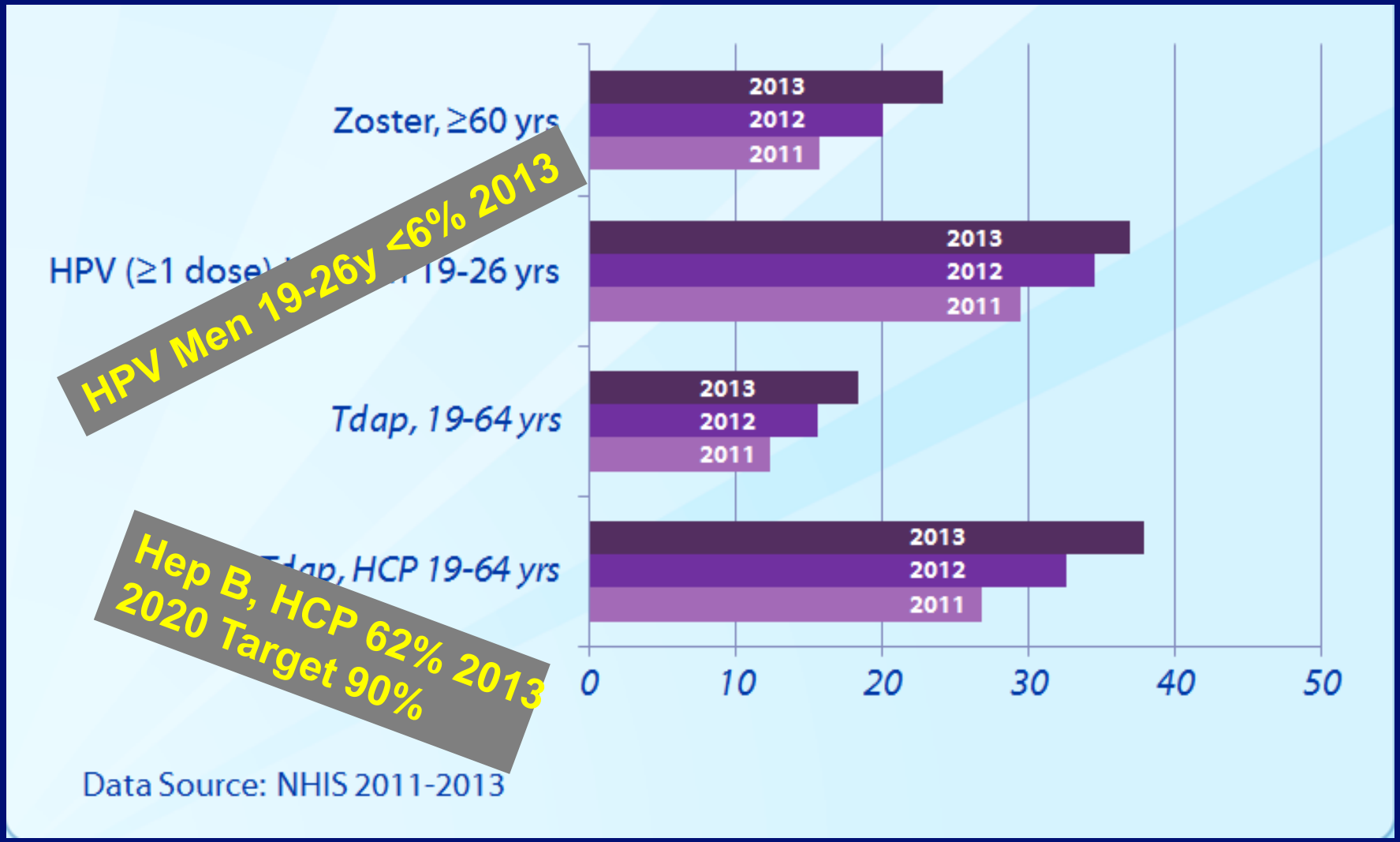
- **Recommend HPV vaccine**
  - Include HPV vaccine when discussing other needed vaccines
- **HPV vaccine can safely be given at the same time as the other recommended adolescent vaccines**
- **Integrate standard procedures**
  - Assess for needed vaccines at every clinical encounter, including acute care visits
  - Immunize at *every* opportunity
  - Use standing orders
- **Document doses in the medical record**
- **Use reminder and recall**

Tools for improving uptake of HPV: www.cdc.gov/vaccines/teens

Adult Immunization Coverage, Selected Vaccines by Age and High-risk Status, United States

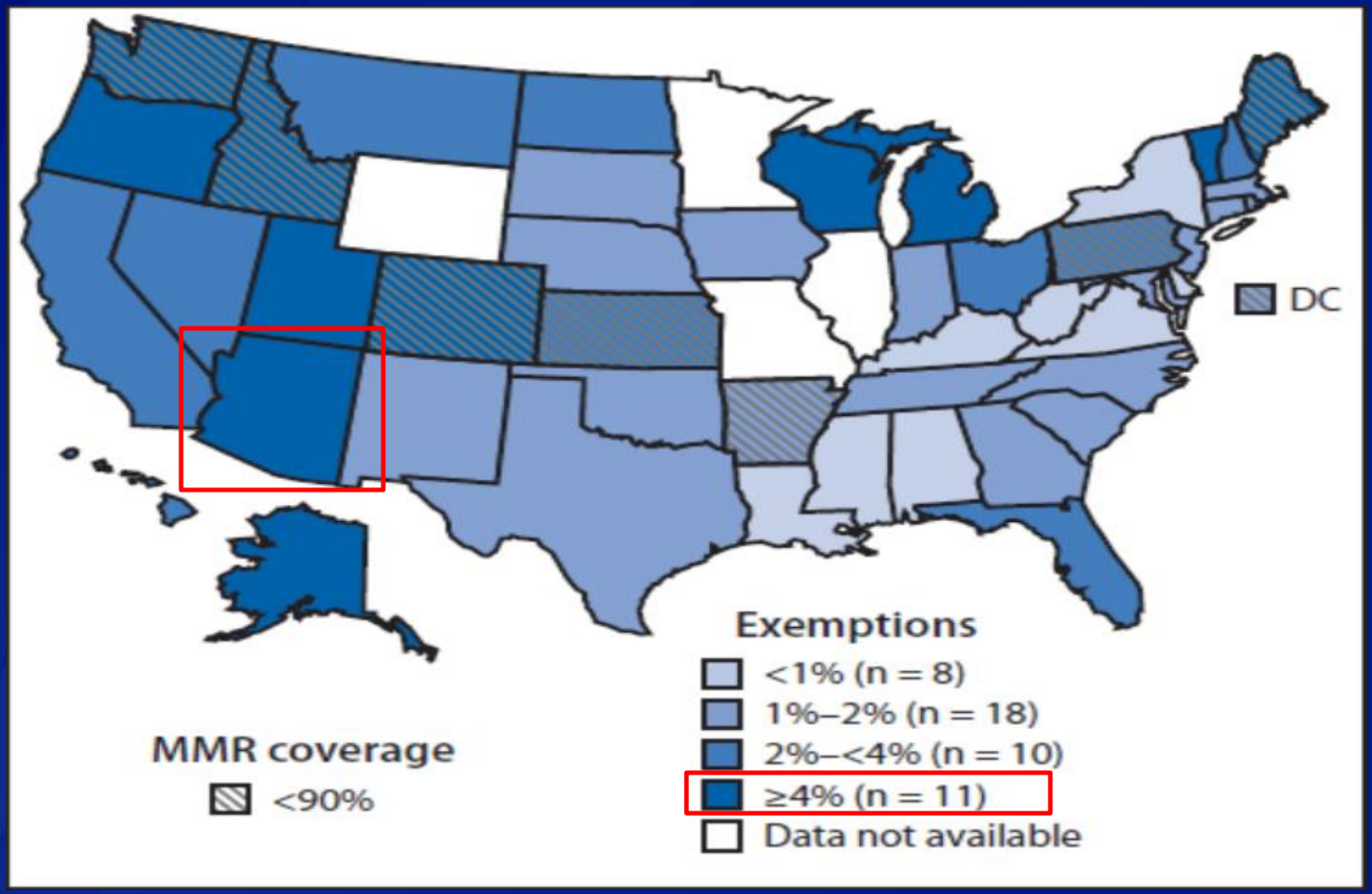


Non-Influenza Adult Vaccination Coverage Vaccines with Increases from 2011 to 2013



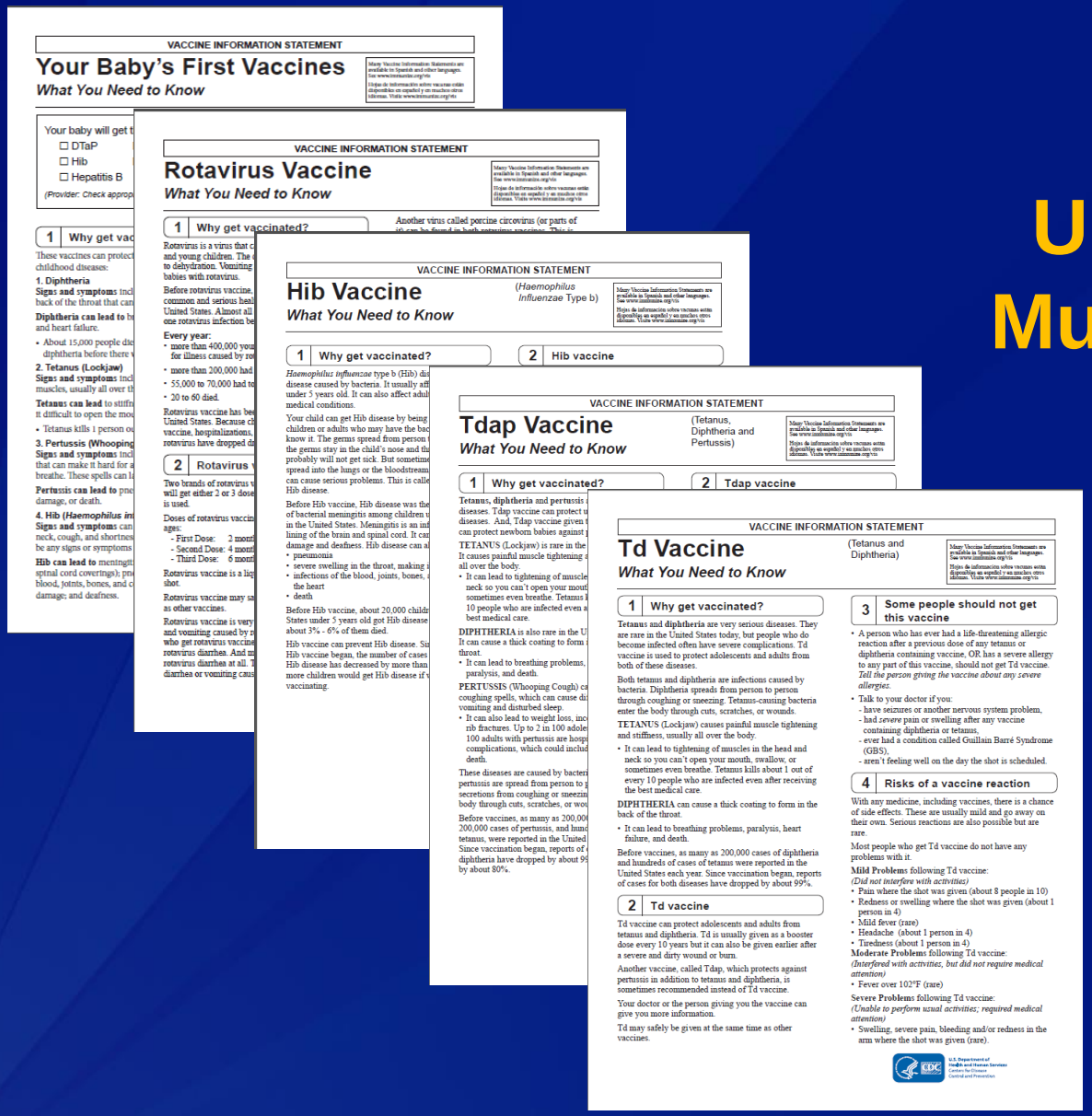
Data Source: NHIS 2011-2013

Estimated Percentage of Kindergarten Children Who Have Been Exempted from Receiving One or More Vaccines, 2013-14 School Year



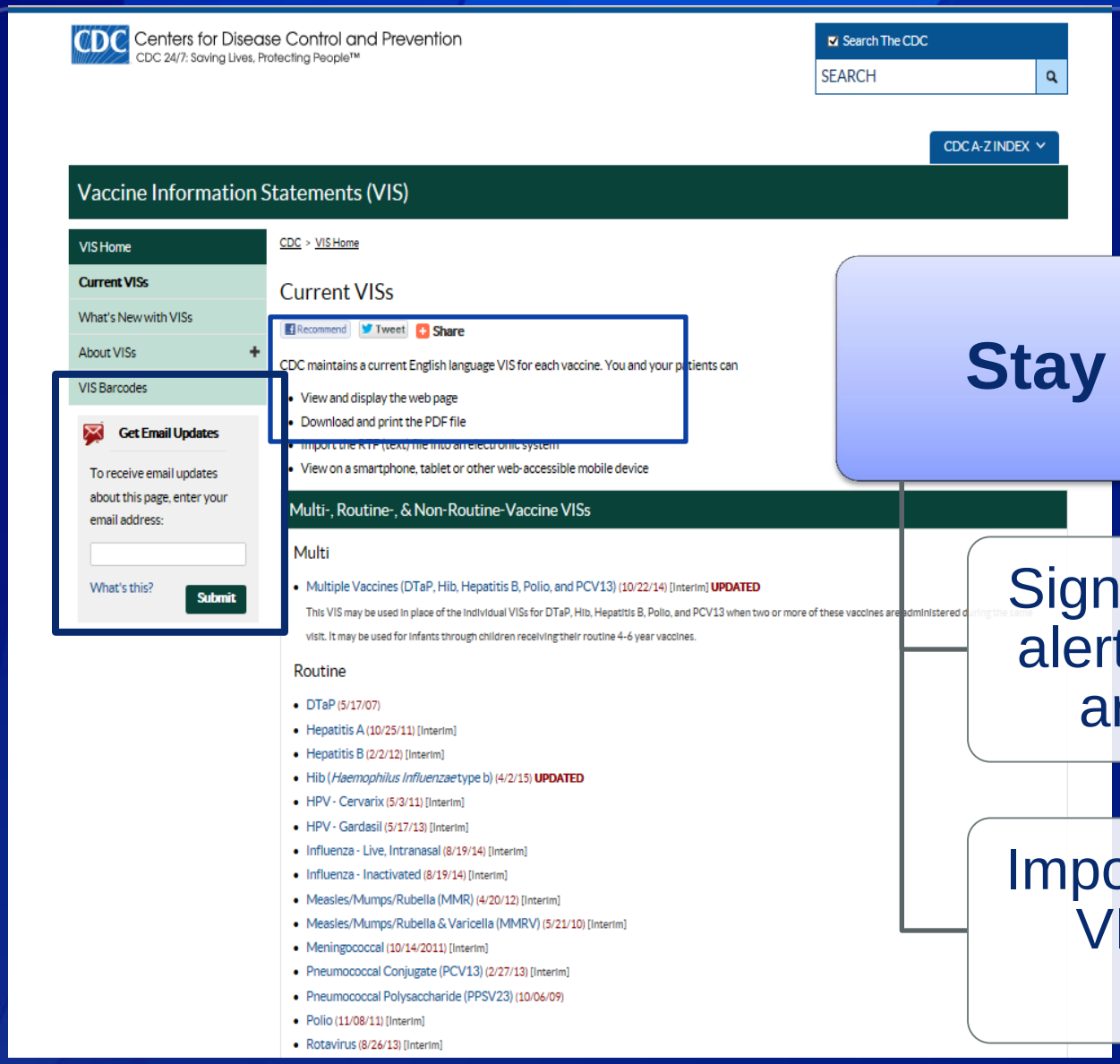
MMWR 2014; 63(41): 913-920

Vaccine Information Statements (VIS)



Updated VIS
Multi-Vaccines
RV
Hib
Tdap
Td

www.cdc.gov/vaccines/hcp/vis/index.html



Stay Current

Sign up for e-mail alerts when VISs are updated

Import the current VISs to your website

www.cdc.gov/vaccines/hcp/vis/current-vis.html

Measles Update

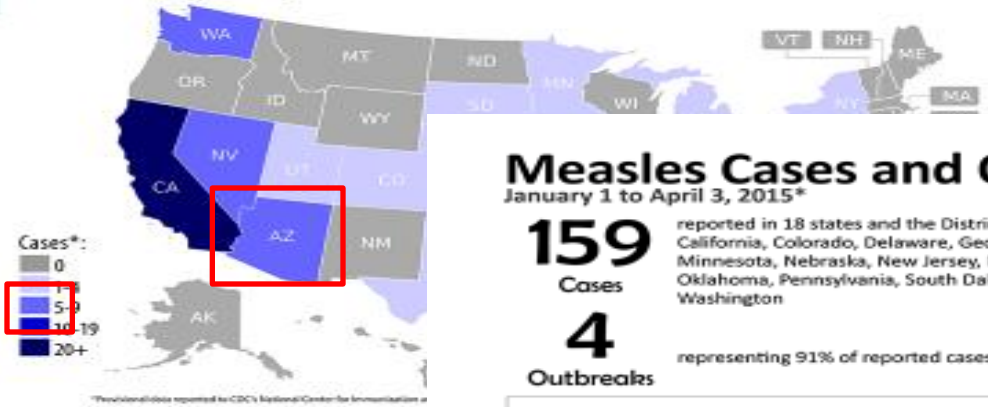
Measles Cases and Outbreaks

Measles Cases

From January 1 to April 3, 2015, 159 people from 18 states and the District of Columbia were reported to have measles [AZ (7), CA (101), CO (1), DC (2), DE (1), GA (1), IL (15), MI (1), MN (1), NE (2), NJ (2), NY (3), NV (9), OK (1), PA (1), SD (2) TX (1), UT (2), WA (7)]†. Most of these cases [117 cases (74%)] are part of a large, ongoing multi-state outbreak linked to an amusement park in California. This week, 19 previously reported measles cases in California were reclassified from 2015 cases to 2014 cases.

2015 Measles Cases in the U.S.

January 1 to April 3, 2015



† CDC will update these data weekly on Mondays.

The United States experienced a record number
Immunization and Respiratory Diseases (NCIRD)

Measles Cases and Outbreaks

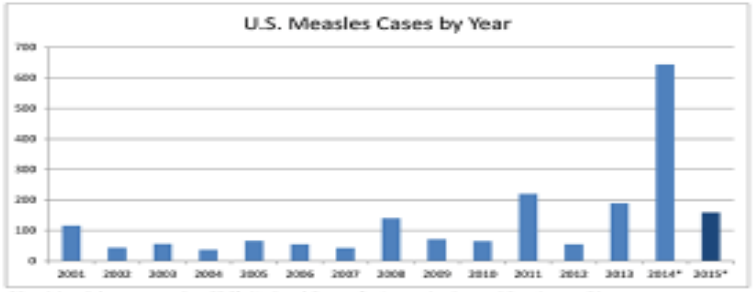
January 1 to April 3, 2015*

159 Cases

reported in 18 states and the District of Columbia: Arizona, California, Colorado, Delaware, Georgia, Illinois, Michigan, Minnesota, Nebraska, New Jersey, New York, Nevada, Oklahoma, Pennsylvania, South Dakota, Texas, Utah, Washington

4 Outbreaks

representing 91% of reported cases this year

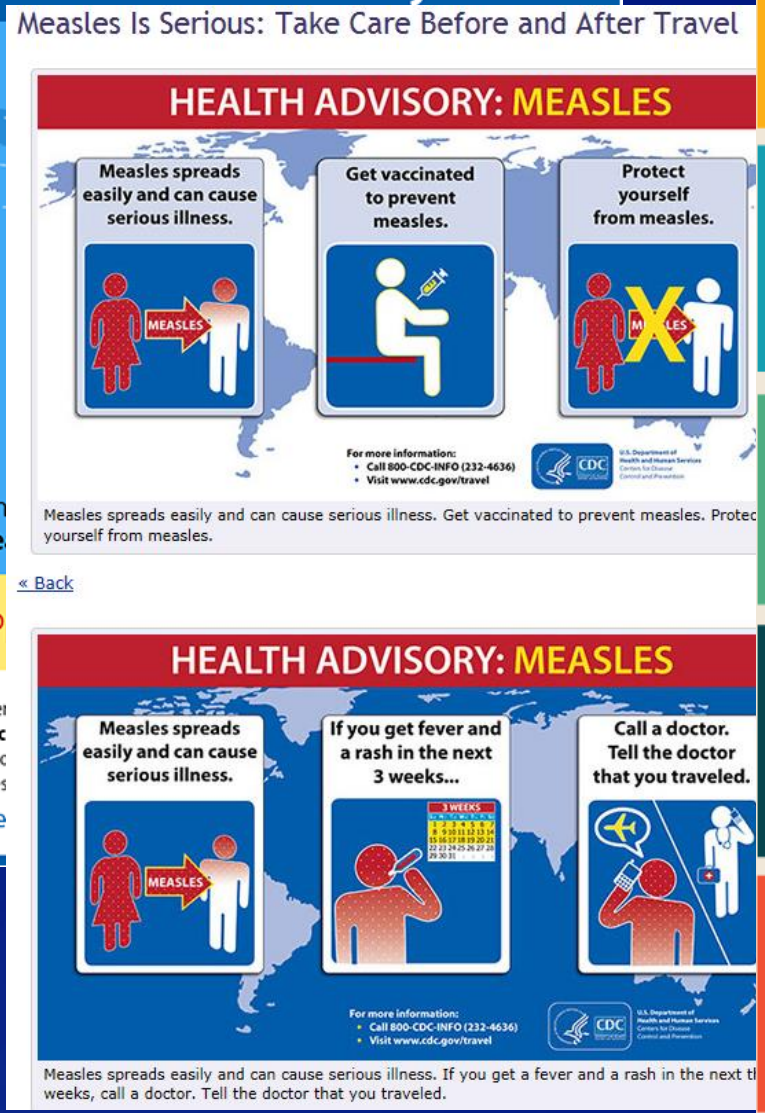


*Provisional data reported to CDC's National Center for Immunization and Respiratory Diseases

CDC

- The majority of people who got measles were unvaccinated.
- Measles is still common in many parts of the world including some countries in Europe, Asia, the Pacific, and Africa.
- Travelers with measles continue to bring the disease into the U.S.
- Measles can spread when it reaches a community in the U.S. where groups of people are unvaccinated.

http://www.cdc.gov/measles/cases-outbreaks.html



www.cdc.gov/measles/importation-infographic.html

Measles Update

Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

SEARCH

CDC A-Z INDEX

Measles (Rubeola)

- Measles Home
- About Measles
- Measles Vaccination
- Cases and Outbreaks
- **For Healthcare Professionals**
- For Travelers
- Lab Tools
- Stats and Surveillance
- Resources

Related Links

- Measles and Rubella Initiative
- World Health Organization
- Pan American Health Organization

Measles Clinical Features

See images of 3 children with measles infection in this 3-minute video.

CDC > Measles Home

For Healthcare Professionals

Recommend Tweet Share

The United States is currently experiencing a large, multi-state outbreak of measles linked to an amusement park in California. The outbreak started in December 2014 and has spread to more than a dozen other states. CDC urges healthcare professionals to consider measles when evaluating patients with febrile rash and ask about a patient's vaccine status, recent travel history, and contact with individuals who have febrile rash illness.

More >

On this Page

Clinical Features

Measles is an acute viral respiratory illness. It is characterized by a prodrome of fever (as high as 105°F) and malaise, cough, coryza, and conjunctivitis -the three "C"s -, a pathognomonic enanthema (Koplik spots) followed by a maculopapular rash. The rash usually appears about 14 days after a person is exposed; however, the incubation period ranges from 7 to 21 days. The rash spreads from the head to the trunk to the lower extremities. Patients are considered to be contagious from 4 days before to 4 days after the rash appears. Of note, sometimes immunocompromised patients do not develop the rash.

CDC's Dr. Jane Seward describes measles clinical features and what to do if a healthcare provider suspects measles, in this 5-minute video.

The Virus

Measles is caused by a single-stranded, enveloped RNA virus with 1 serotype. It is classified as a member of the genus Morbillivirus in the Paramyxoviridae family. Humans are the only natural hosts of measles virus.

Background

In the decade before the live measles vaccine was licensed in 1963, an average of 549,000 measles cases and 495 measles deaths were reported annually in the United States. However, it is likely that, on average, 3 to 4 million people were infected with measles annually; most cases were not reported. Of the reported cases, approximately 48,000 people were hospitalized from measles and 1,000 people developed chronic disability from acute encephalitis caused by measles annually.

In 2000, measles was declared eliminated from the United States. Elimination is defined as the absence

Advice for Travelers

http://www.cdc.gov/measles/hcp/index.html

Guidance for Healthcare Personnel

- **Be vigilant about measles**
- **Ensure all patients are up-to-date on measles-mumps-rubella vaccination**
- **Consider measles in patients with febrile rash illness and clinically compatible measles symptoms (cough, coryza, and conjunctivitis)**
- **Ask patients about**
  - Recent travel internationally
  - Recent travel to domestic venues frequented by international travelers
  - Recent contact with international travelers
  - History of measles in the community
- **Promptly isolate patients with suspected measles**

Guidance for Healthcare Personnel

- Immediately report suspect measles case to the health department
- Obtain specimens for testing from patients with suspected measles, including viral specimens for genotyping
- Contact the local health department with questions about submitting specimens for testing
- Treat severe measles cases among children, such as those who are hospitalized, with vitamin A

http://www.cdc.gov/measles/hcp/

MMR Vaccine

- First dose at 12-15 months, second dose routinely at 4-6 years of age (minimum interval between doses is 4 weeks)
- Infants as young as 6 months should receive MMR before international travel*
- Infants older than 12 months of age can receive a 2nd dose of MMR before international travel (minimum interval between doses is 4 weeks)
- Unless they have evidence of measles immunity, college and other students, healthcare personnel, and international travelers need 2 appropriately spaced doses and other adults need 1 dose
- People who received 2 doses of MMR vaccine as children according to the U.S. vaccination schedule are considered protected for life

*ACIP Off-label recommendation; *MMWR* 2013;62(RR-4)

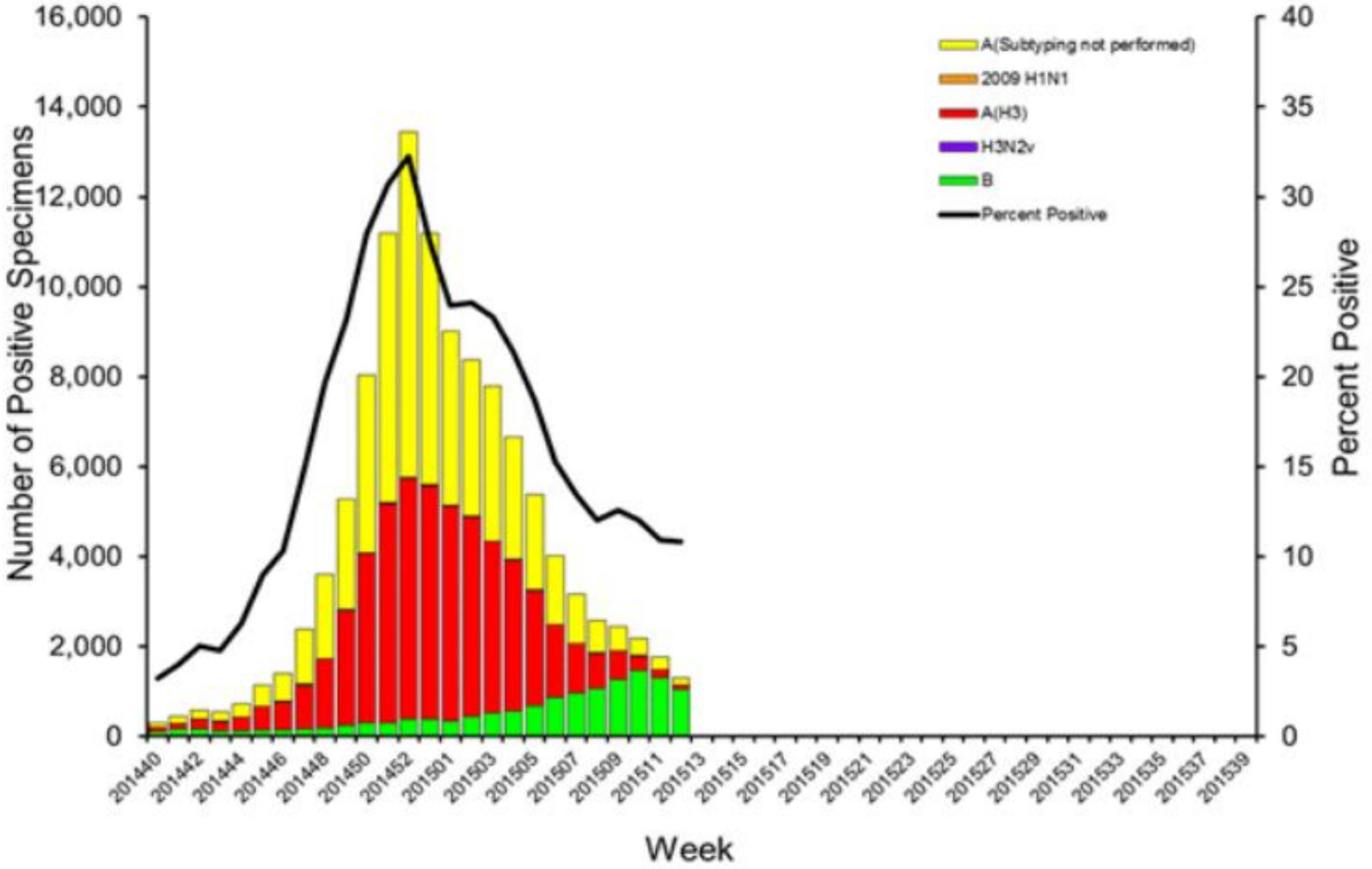
Evidence of Measles Immunity

- **Evidence of measles immunity:**
  - 2 appropriately spaced and documented doses of MMR vaccine
  - Laboratory evidence of immunity, or
  - Laboratory confirmation of disease
- **No additional doses are indicated or recommended even for HCP**
- **No serologic testing is recommended**

***MMWR* 2013;62(RR-4)**

Seasonal Influenza Update

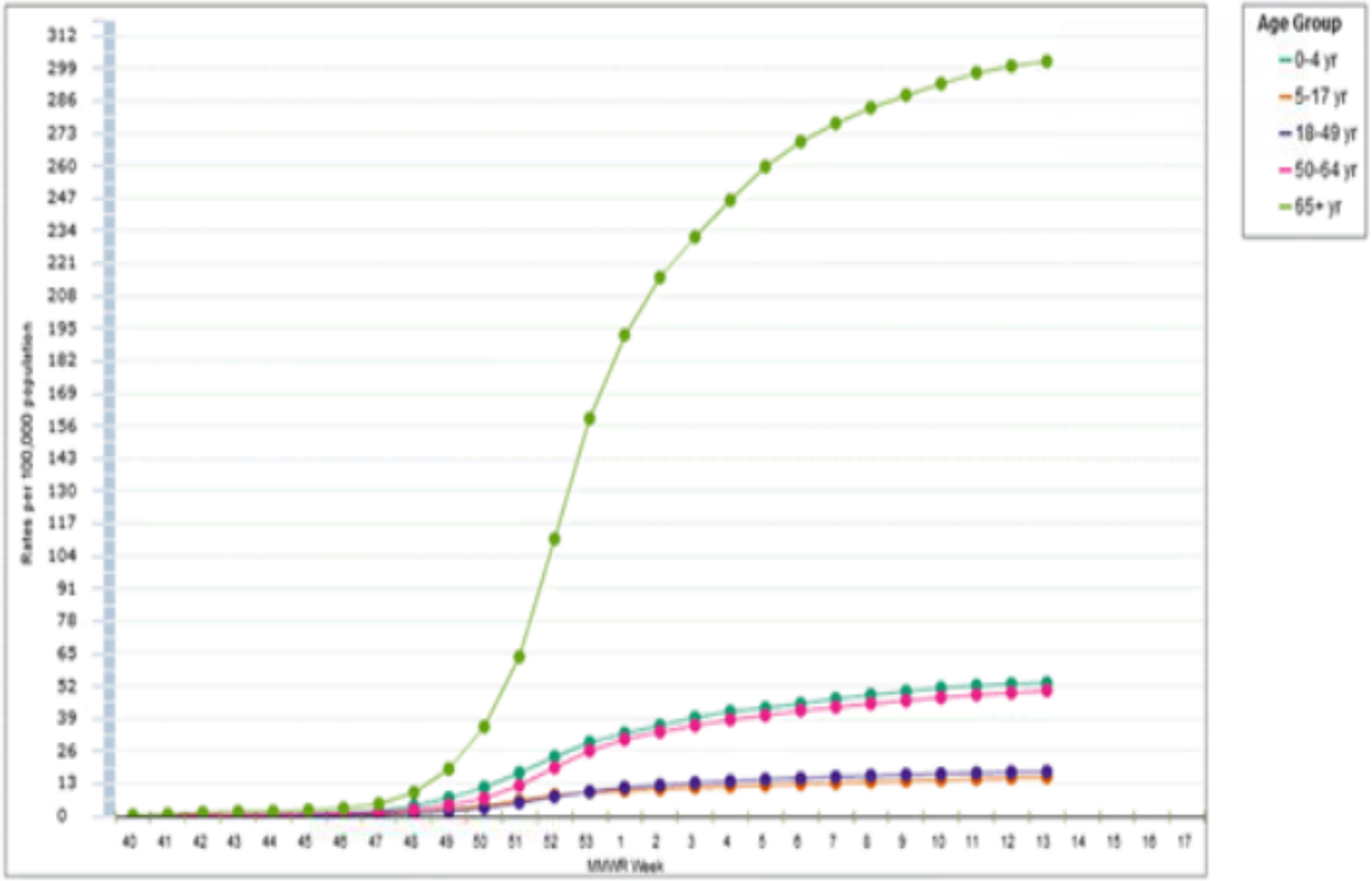
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2014-15



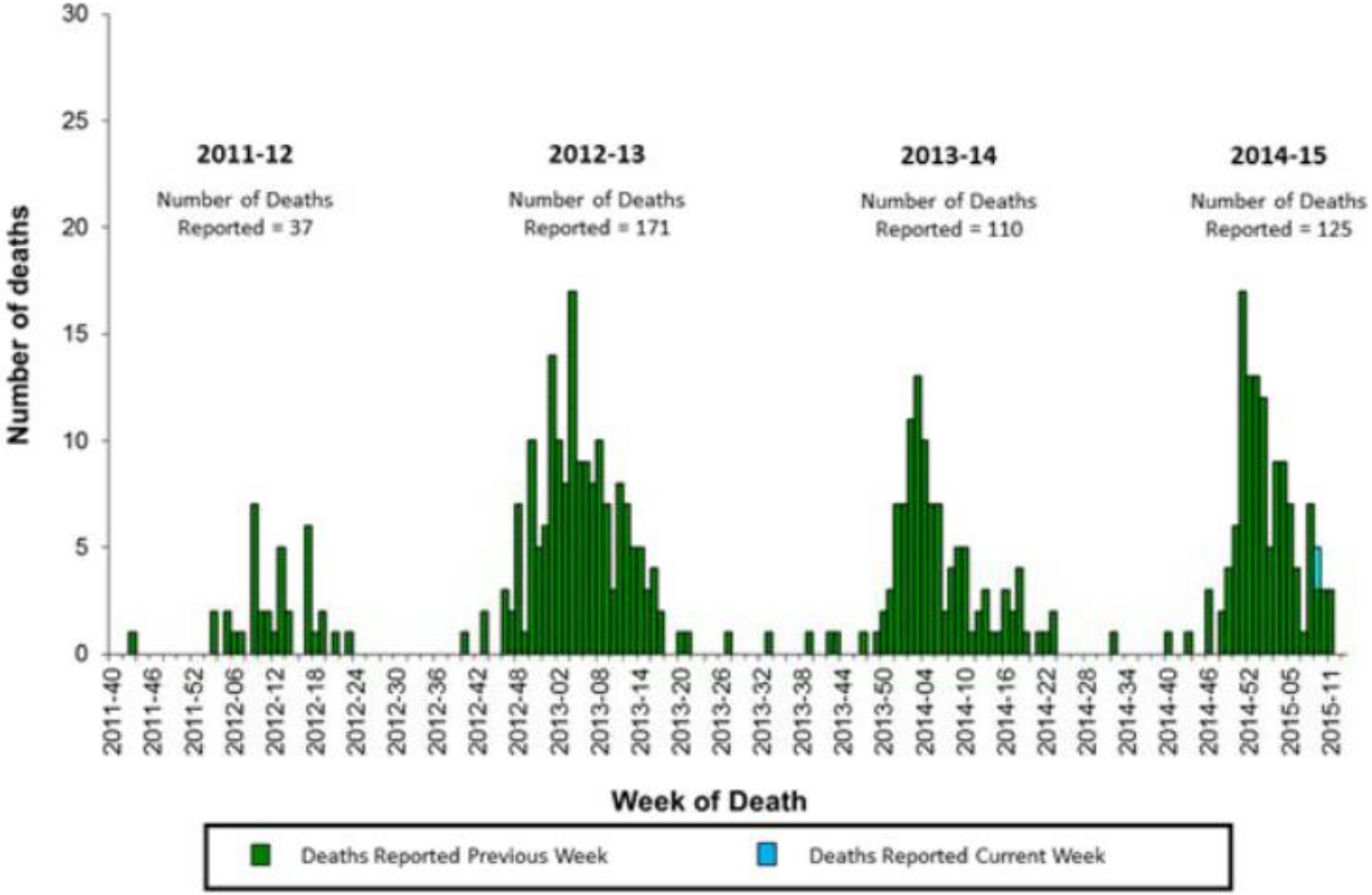
www.cdc.gov/flu

Laboratory-Confirmed Influenza Hospitalizations

Preliminary rates as of Apr 04, 2015



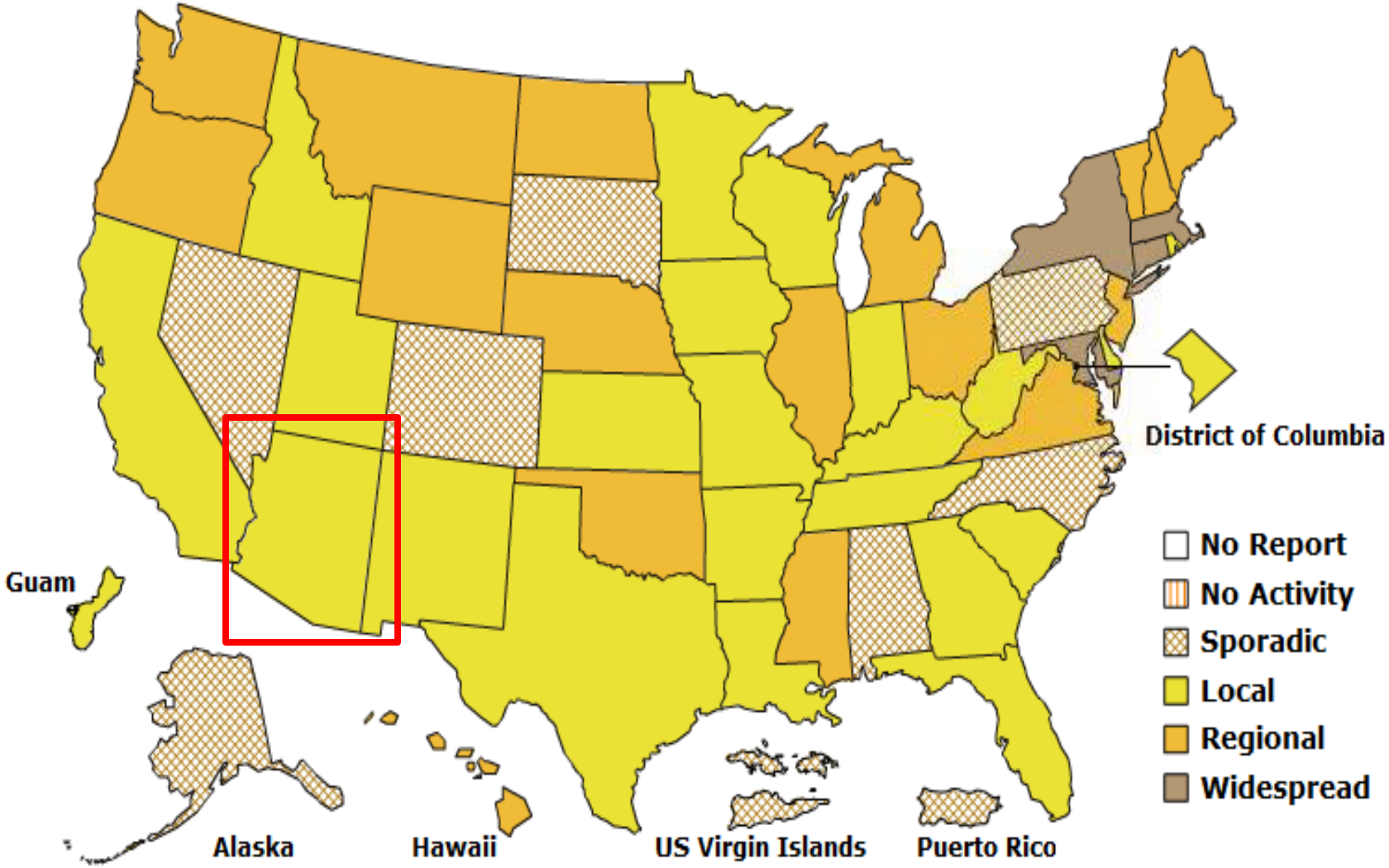
Number of Influenza-Associated Pediatric Deaths by Week of Death: 2011-12 season to present



A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending April 04, 2015- Week 13



Influenza Vaccine Strains 2015-16

- **2 new vaccine strains for 2015-16 season**
- **Trivalent vaccine will contain:**
  - A/California/7/2009 (H1N1)pdm09-like virus
  - New A/Switzerland/9715293/2013 (H3N2)-like virus
  - New B/Phuket/3073/2013-like virus
- **Quadrivalent vaccine contains the above 3 strains plus:**
  - B/Brisbane/60/2008-like virus

Influenza Vaccines for 2015-16

- **Inactivated (IIV3)**
  - Age indications vary by product, formulation, and presentation
  - Intramuscular or intradermal injection
  - Trivalent
- **Inactivated (IIV4)**
  - Age indications vary by product and presentation
  - Intramuscular injection
  - Quadrivalent
- **Live, attenuated vaccine (LAIV4)**
  - 2 years and older, healthy, not pregnant
  - Intranasal
  - Quadrivalent

Choice of Influenza Vaccine, 2014-15

- Randomized controlled trial demonstrated 55% reduction in culture-confirmed influenza amo children w received LAIV compa
- For healthy chil gh 8 years of age LAIV is pref
- If IIV is not a , LA d be used
- Vaccination should not be delayed to procure LAIV

Choice of Influenza Vaccine, ACIP Recommendation, Feb. 26, 2015

- For implementation in 2015-16 season
- For healthy children aged 2 through 8 years who have no contraindications or precautions, either LAIV or IIV is an appropriate option. No preference is expressed for LAIV or IIV for any person aged 2 through 49 years for whom either vaccine is appropriate.
- Data analyses of LAIV and IIV vaccine effectiveness from 2014-15 disclose no significant differences in preliminary analyses

Influenza High-dose Formulation

U.S. Department of Health and Human Services

U.S. Food and Drug Administration
Protecting and Promoting *Your* Health

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Vaccines, Blood & Biologics

Home > Vaccines, Blood & Biologics > Science & Research (Biologics)

Science & Research (Biologics)

6% Hydroxyethyl Starch 130/0.4 in 0.9% Sodium Chloride Injection

Biologics Research Projects

High-dose influenza vaccine is significantly more effective than standard dose in elderly

A team of scientists including several from the U.S. Food and Drug Administration (FDA) found that a high-dose, trivalent, inactivated influenza vaccine provided significantly more protection than the standard dose in people 65 years of age and older. The study, which covered the 2012-2013 influenza season, also found for the first time a significant reduction in influenza-related hospital admissions among the high-dose individuals compared to those receiving the standard dose. The team also included researchers from the Influenza Division of the Centers for Disease Control and Prevention, Centers for Medicare and Medicaid Services, and Acumen LLC.

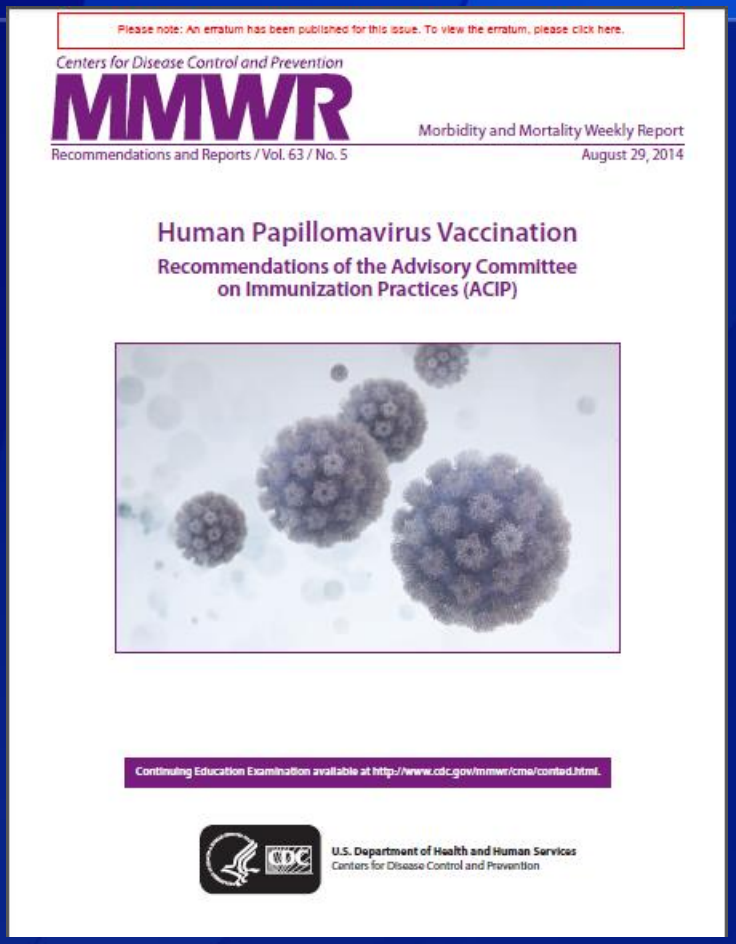
The vaccine, called Fluzone High-Dose, is referred to as trivalent because it contains a key component of each of three specific flu virus types or subtypes, which stimulate protective immune responses against infection and disease.

The findings are important because people aged 65 years and older account for more than 90% of all influenza deaths. Therefore, reducing influenza disease and its complications in this age group is a public health priority. The results of the FDA study offer new information to support healthcare policy makers when they recommend influenza vaccinations for elderly people.

The scientists used Medicare records to compare the rates of influenza among 929,730 recipients of the high-dose vaccine and 1,615,545 recipients of standard-dose vaccines, all of whom received their vaccinations at community pharmacies. The researchers used data from Medicare records to identify vaccine recipients who later were treated for a likely episode of influenza illness.

http://www.fda.gov/BiologicsBloodVaccines/ScienceResearch/ucm441664.htm?source=govdelivery&utm_medium=email&utm_source=govdelivery

ACIP Recommendations



Please note: An erratum has been published for this issue. To view the erratum, please click here.

Centers for Disease Control and Prevention

MMWR

Morbidity and Mortality Weekly Report

Recommendations and Reports / Vol. 63 / No. 5

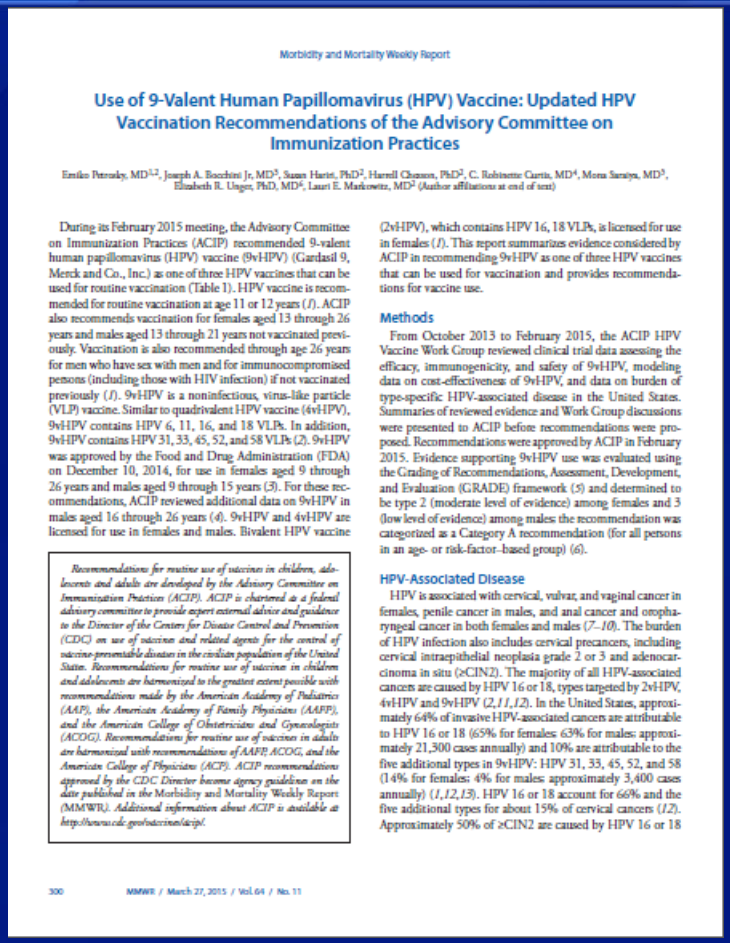
August 29, 2014

Human Papillomavirus Vaccination

Recommendations of the Advisory Committee on Immunization Practices (ACIP)

Continuing Education Examination available at http://www.cdc.gov/mmwr/cme/contact.html.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention



Morbidity and Mortality Weekly Report

Use of 9-Valent Human Papillomavirus (HPV) Vaccine: Updated HPV Vaccination Recommendations of the Advisory Committee on Immunization Practices

Emiko Petrosky, MD[1,2], Joseph A. Bocchini Jr, MD[3], Susan Hariri, PhD[2], Harrell Chesson, PhD[2], C. Robinette Curtis, MD[4], Mona Saraiya, MD[5], Elizabeth R. Unger, PhD, MD[6], Lauri E. Markowitz, MD[2] (Author affiliations at end of text)

During its February 2015 meeting, the Advisory Committee on Immunization Practices (ACIP) recommended 9-valent human papillomavirus (HPV) vaccine (9vHPV) (Gardasil 9, Merck and Co., Inc.) as one of three HPV vaccines that can be used for routine vaccination (Table 1). HPV vaccine is recommended for routine vaccination at age 11 or 12 years (*1*). ACIP also recommends vaccination for females aged 13 through 26 years and males aged 13 through 21 years not vaccinated previously. Vaccination is also recommended through age 26 years for men who have sex with men and for immunocompromised persons (including those with HIV infection) if not vaccinated previously (*1*). 9vHPV is a noninfectious, virus-like particle (VLP) vaccine. Similar to quadrivalent HPV vaccine (4vHPV), 9vHPV contains HPV 6, 11, 16, and 18 VLPs. In addition, 9vHPV contains HPV 31, 33, 45, 52, and 58 VLPs (*2*). 9vHPV was approved by the Food and Drug Administration (FDA) on December 10, 2014, for use in females aged 9 through 26 years and males aged 9 through 15 years (*3*). For these recommendations, ACIP reviewed additional data on 9vHPV in males aged 16 through 26 years (*4*). 9vHPV and 4vHPV are licensed for use in females and males. Bivalent HPV vaccine (2vHPV), which contains HPV 16, 18 VLPs, is licensed for use in females (*1*). This report summarizes evidence considered by ACIP in recommending 9vHPV as one of three HPV vaccines that can be used for vaccination and provides recommendations for vaccine use.

Recommendations for routine use of vaccines in children, adolescents and adults are developed by the Advisory Committee on Immunization Practices (ACIP). ACIP is chartered as a federal advisory committee to provide expert external advice and guidance to the Director of the Centers for Disease Control and Prevention (CDC) on use of vaccines and related agents for the control of vaccine-preventable diseases in the civilian population of the United States. Recommendations for routine use of vaccines in children and adolescents are harmonized to the greatest extent possible with recommendations made by the American Academy of Pediatrics (AAP), the American Academy of Family Physicians (AAFP), and the American College of Obstetricians and Gynecologists (ACOG). Recommendations for routine use of vaccines in adults are harmonized with recommendations of AAFP, ACOG, and the American College of Physicians (ACP). ACIP recommendations approved by the CDC Director become agency guidelines on the date published in the Morbidity and Mortality Weekly Report (MMWR). *Additional information about ACIP is available at http://www.cdc.gov/vaccines/acip/.*

Methods

From October 2013 to February 2015, the ACIP HPV Vaccine Work Group reviewed clinical trial data assessing the efficacy, immunogenicity, and safety of 9vHPV, modeling data on cost-effectiveness of 9vHPV, and data on burden of type-specific HPV-associated disease in the United States. Summaries of reviewed evidence and Work Group discussions were presented to ACIP before recommendations were proposed. Recommendations were approved by ACIP in February 2015. Evidence supporting 9vHPV use was evaluated using the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) framework (*5*) and determined to be type 2 (moderate level of evidence) among females and 3 (low level of evidence) among males; the recommendation was categorized as a Category A recommendation (for all persons in an age- or risk-factor–based group) (*6*).

HPV-Associated Disease

HPV is associated with cervical, vulvar, and vaginal cancer in females, penile cancer in males, and anal cancer and oropharyngeal cancer in both females and males (*7–10*). The burden of HPV infection also includes cervical precancers, including cervical intraepithelial neoplasia grade 2 or 3 and adenocarcinoma in situ (≥CIN2). The majority of all HPV-associated cancers are caused by HPV 16 or 18, types targeted by 2vHPV, 4vHPV and 9vHPV (*2,11,12*). In the United States, approximately 64% of invasive HPV-associated cancers are attributable to HPV 16 or 18 (65% for females; 63% for males; approximately 21,300 cases annually) and 10% are attributable to the five additional types in 9vHPV: HPV 31, 33, 45, 52, and 58 (14% for females; 4% for males; approximately 3,400 cases annually) (*1,12,13*). HPV 16 or 18 account for 66% and the five additional types for about 15% of cervical cancers (*12*). Approximately 50% of ≥CIN2 are caused by HPV 16 or 18

HUMAN PAPILLOMAVIRUS (HPV) VACCINATION

http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hpv.html

HPV Vaccines	Bivalent 2vHPV (Cervarix)	Quadrivalent 4vHPV (Gardasil)	9-Valent 9vHPV (Gardasil9)
L1 VLP types	16, 18	6, 11, 16, 18,	6, 11, 16, 18, 31, 33, 45 ,52, 58
Manufacturer	GSK	Merck	Merck
FDA Indications	**Females (9-25 yrs.):** Cervical precancer and cancer	**Females**: **(9-26 yrs.):** Anal, cervical, vaginal, and vulvar precancer and cancer; Genital warts	**Females (9-26 yrs.):** Anal, cervical, vaginal, and vulvar precancer and cancer; Genital warts
	Males: Not approved for use in males	**Males (9-26 yrs.):** Anal precancer and cancer; Genital warts	**Males (9-15 yrs**.): Anal precancer and cancer; Genital warts

Attribution of HPV 16/18 and HPV 31/33/45/52/58, United States

- **HPV-associated cancers**
  - ~33,000 per year
  - 64% of cancers attributable to HPV 16/18
    - 66% of cervical cancer
    - Other cancers: range, 48% penile -80% anal
  - 10% of cancers attributable to additional 5 types
    - 15% of cervical cancer
    - Other cancers: range, 4% oropharyngeal -18% vaginal
    - Differences by sex: 14% for females; 4% for males
- **≥CIN2 lesions**
  - ~50% attributable to HPV 16/18
  - ~25% attributable to 5 additional types

≥CIN, cervical intraepithelial neoplasia grade 2 or worse
% among all HPV-associated cancers

MMWR 2015;64:300-4 MMWR RR 2014; 63:1-30 Hariri et al. CEBP 2015

Updated ACIP Recommendations

- **Routine vaccination at age 11 or 12 years***
- **Vaccination recommended through age 26 for females and through age 21 for males not previously vaccinated**
- **Vaccination recommended for men who have sex with men and immunocompromised men (including persons HIV-infected) through age 26**
- **Females: Vaccinate with 2vHPV, 4vHPV (as long as this formulation is available), or 9vHPV**
- **Males: Vaccinate with 4vHPV (as long as this formulation is available) or 9vHPV****

*vaccination series can be started at 9 years of age

**ACIP off-label recommendation

MMWR 2015;64:300-4

Updated ACIP Recommendations Interchangeability*

- **If vaccination providers do not know or do not have available the HPV vaccine product previously administered, or are in settings transitioning to 9vHPV, for protection against HPV 16 and 18:**
  - Females: any HPV vaccine product may be used to continue or complete the series
  - Males: 4vHPV or 9vHPV* may be used to continue or complete the series for males

*ACIP off-label recommendation

MMWR 2015;64(29):300-4

Updated ACIP Recommendations Administration

- **Administer in a 3-dose schedule***
  - Dose #2: Administer at least 1 to 2 months after the first dose
  - Dose #3: Administer at least:
    - 12 weeks after dose 2 AND
    - 6 months (24 weeks) after dose 1
  - If the vaccination schedule is interrupted, the series does not need to be restarted
- **IM injection**

*ACIP off-label recommendation

MMWR 2015;64(29):300-4

Updated ACIP Recommendations HPV Vaccination During Pregnancy

- **No change in recommendations**
- **HPV vaccine not recommended for use in pregnancy**
- **Information on vaccine in pregnancy registries updated**
  - A new vaccine in pregnancy registry has been established for 9vHPV. Exposure during pregnancy can be reported to the respective manufacturer
  - Registries for 4vHPV and 2vHPV have been closed with concurrence from FDA
- **Patients and healthcare providers can report an exposure to HPV vaccine during pregnancy to the Vaccine Adverse Event Reporting System (VAERS)**

http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm426445.htm

9vHPV Vaccination for Persons who Completed an HPV Vaccination Series

- The manufacturer did not seek an indication for 9vHPV vaccination for persons who previously completed an HPV vaccination series
- A study of 9vHPV in prior 4vHPV vaccinees was conducted
- Due to time limitations (abbreviated ACIP meeting), this was not discussed; will be discussed at a future ACIP meeting

CDC HPV Vaccination Resources

- **ACIP website with slides, minutes, and recommendations**
  - http://www.cdc.gov/vaccines/acip/index.html
- **Additional resources for providers/patients/clients**
  - http://www.cdc.gov/vaccines/vpd-vac/hpv/
  - http://www.cdc.gov/vaccines/YouAreTheKey
  - http://www.cdc.gov/hpv/

Morbidity and Mortality Weekly Report

Use of 13-Valent Pneumococcal Conjugate Vaccine and 23-Valent Pneumococcal Polysaccharide Vaccine Among Adults Aged ≥65 Years: Recommendations of the Advisory Committee on Immunization Practices (ACIP)

Sara Tomczyk, MSc[1,2], Nancy M. Bennett, MD[3,4], Charles Stoecker, PhD[3], Ryan Gierke, MPH[2], Matthew R. Moore, MD[2], Cynthia G. Whitney, MD[2], Stephen Hadler, MD[2], Tamara Pilishvili, MPH[2] (Author affiliations at end of text)

On August 13, 2014, the Advisory Committee on Immunization Practices (ACIP) recommended routine use of 13-valent pneumococcal conjugate vaccine (PCV13 [Prevnar 13, Wyeth Pharmaceuticals, Inc., a subsidiary of Pfizer Inc.]) among adults aged ≥65 years. PCV13 should be administered in series with the 23-valent pneumococcal polysaccharide vaccine (PPSV23 [Pneumovax23, Merck & Co., Inc.]), the vaccine currently recommended for adults aged ≥65 years. PCV13 was approved by the Food and Drug Administration (FDA) in late 2011 for use among adults aged ≥50 years. In June 2014, the results of a randomized placebo-controlled trial evaluating efficacy of PCV13 for preventing community-acquired pneumonia among approximately 85,000 adults aged ≥65 years with no prior pneumococcal vaccination history (CAPiTA trial) became available and were presented to ACIP (*1*). The evidence supporting PCV13 vaccination of adults was evaluated using the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) framework and determined to be type 2 (moderate level of evidence); the recommendation was categorized as a Category A recommendation (*2*). This report outlines the new recommendations for PCV13 use, provides guidance for use of PCV13 and PPSV23 among adults aged ≥65 years, and summarizes the evidence considered by ACIP to make this recommendation.

Recommendations for routine use of vaccines in children, adolescents, and adults are developed by the Advisory Committee on Immunization Practices (ACIP). ACIP is chartered as a federal advisory committee to provide expert external advice and guidance to the Director of the Centers for Disease Control and Prevention (CDC) on use of vaccines and related agents for the control of vaccine-preventable diseases in the civilian population of the United States. Recommendations for routine use of vaccines in children and adolescents are harmonized to the greatest extent possible with recommendations made by the American Academy of Pediatrics (AAP), the American Academy of Family Physicians (AAFP), and the American College of Obstetrics and Gynecology (ACOG). Recommendations for routine use of vaccines in adults are harmonized with recommendations of AAFP, ACOG, and the American College of Physicians (ACP). ACIP recommendations adopted by the CDC Director become agency guidelines on the date published in the Morbidity and Mortality Weekly Report (MMWR). *Additional information regarding ACIP is available at http://www.cdc.gov/vaccines/acip.*

Epidemiology of Pneumococcal Disease Among Adults Aged ≥65 Years

Streptococcus pneumoniae (pneumococcus) remains a leading infectious cause of serious illness, including bacteremia, meningitis, and pneumonia, among older adults in the United States. Use of a 7-valent pneumococcal conjugate vaccine (PCV7) since 2000 and PCV13 since 2010 among children in the United States has reduced pneumococcal infections directly and indirectly among children, and indirectly among adults. By 2013, the incidence of invasive pneumococcal disease (IPD) caused by serotypes unique to PCV13 among adults aged ≥65 years had declined by approximately 50% compared with 2010, when PCV13 replaced PCV7 in the pediatric immunization schedule (*3*). However, in 2013 an estimated 13,500 cases of IPD occurred among adults aged ≥65 years (*3*). Approximately, 20%–25% of IPD cases and 10% of community-acquired pneumonia cases in adults aged ≥65 years are caused by PCV13 serotypes and are potentially preventable with the use of PCV13 in this population (*3,4*).

PCV13 Vaccine in Adults

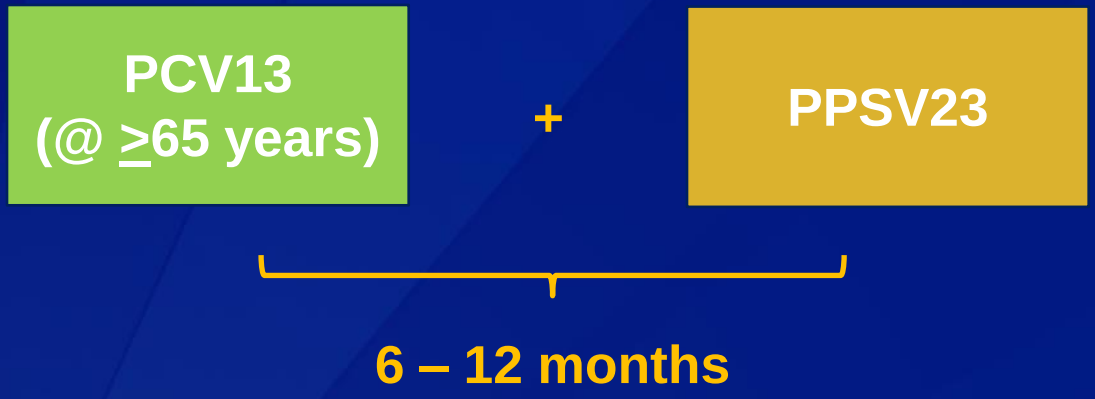
On December 30, 2011, PCV13 was approved for use among adults aged ≥50 years to prevent pneumonia and invasive disease caused by *S. pneumoniae* serotypes contained in the vaccine. The new use for Prevnar 13 was approved under FDA's accelerated approval pathway, which allows for earlier approval of products that provide meaningful therapeutic benefit over existing

PNEUMOCOCCAL (PCV13 & PPSV23) VACCINATION

http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hpv.html

ACIP Recommendations for PCV13 and PPSV23 for Adults 65 Years and Older 2014

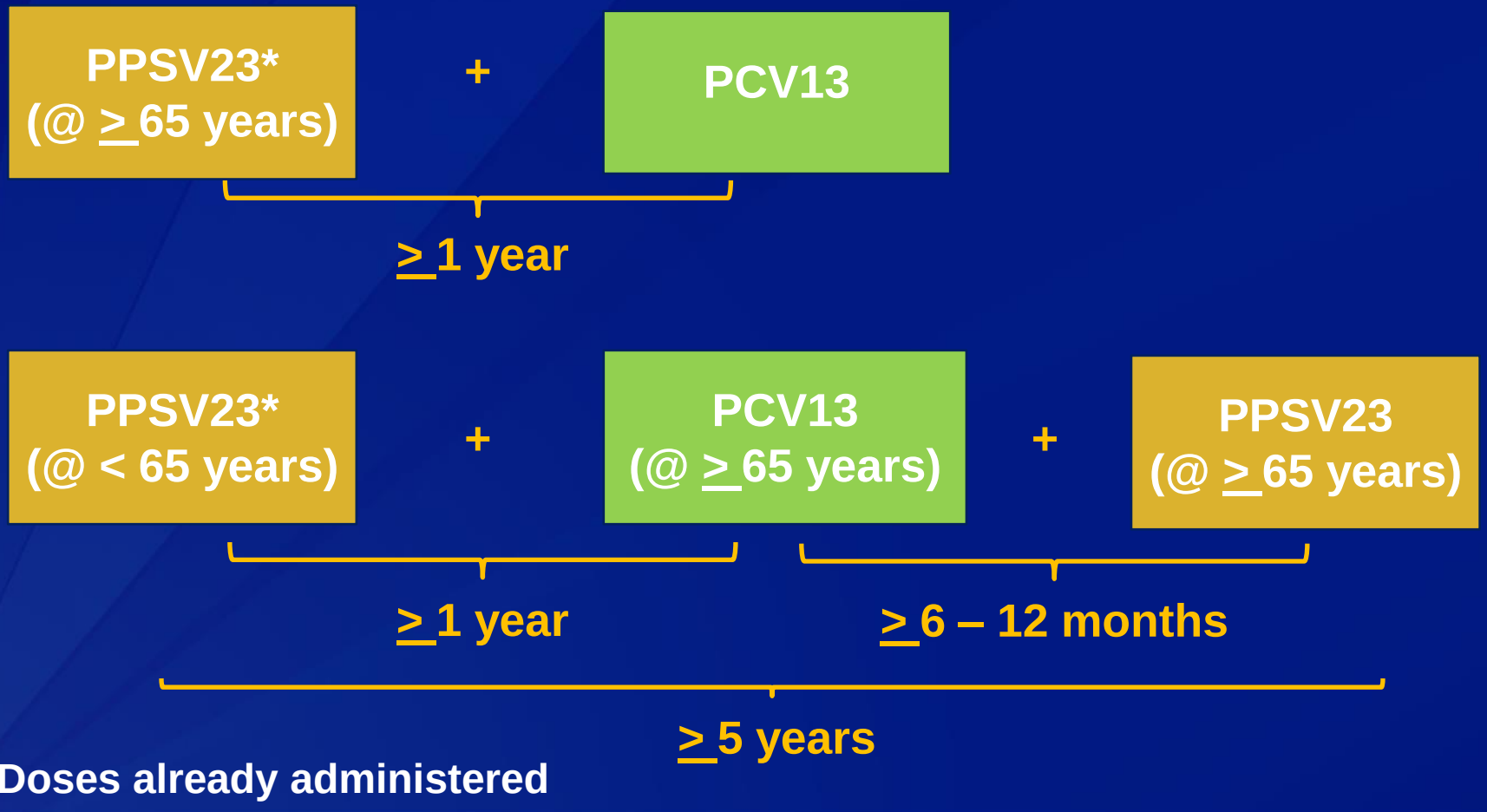
- **Pneumococcal-naïve or Unknown vaccination history**



- **If PPSV23 cannot be given during 6-12 month window after PCV13, a dose of PPSV23 should be given during the next visit**
- **Minimum interval = 8 weeks**

ACIP Recommendations for PCV13 and PPSV23 for Adults 65 Years and Older 2014

- Previously received one or more doses of PPSV23



*Doses already administered

Pneumococcal Disease:
Hard to say it; easy to get vaccinated

Saving Lives: Integrating Vaccines for Adults Into Routine Care

Adult Pneumococcal Vaccination Guide for HCPs

Two types of pneumococcal vaccine are recommended for use in US adults: a 13-valent pneumococcal conjugate vaccine (PCV13) and a 23-valent pneumococcal polysaccharide vaccine (PPSV23). Recommendations for their use vary by age and risk factors. **Every adult age 65 years and older should receive both PCV13 and PPSV23**. The table below will aid in determining which adults age 19 to 64 years need pneumococcal vaccination. Details on sequence and timing of doses for adults in both age groups can be found on page 2 of this document. Additional information and clinical guidance regarding the use of PCV13 and PPSV23 can be found at: cdc.gov/vaccines/vpd-vac/pneumo/.

Indications for PCV13 and PPSV23 Administration for Adults Age 19 to 64 Years by Risk Group
Source: Centers for Disease Control and Prevention (CDC)[1]

Risk Group	Underlying Medical Condition	PCV13	PPSV23	
		Recommended	Recommended	Revaccination 5 years After First Dose
Immunocompromised persons*	Congenital or acquired immunodeficiency†	✔	✔	✔
	HIV	✔	✔	✔
	Chronic renal failure	✔	✔	✔
	Nephrotic syndrome	✔	✔	✔
	Leukemia	✔	✔	✔
	Lymphoma	✔	✔	✔
	Hodgkin disease	✔	✔	✔
	Generalized malignancy	✔	✔	✔
	Iatrogenic immunosuppression**	✔	✔	✔
	Solid organ transplant	✔	✔	✔
	Multiple myeloma	✔	✔	✔
Persons with functional or anatomic asplenia*	Sickle cell disease/other hemaglobinopathy	✔	✔	✔
	Congenital or acquired asplenia	✔	✔	✔
Immunocompetent persons*	Cerebrospinal fluid leak	✔	✔	
	Cochlear implant	✔	✔	
Immunocompetent persons	Chronic heart disease¶		✔	
	Chronic lung disease§		✔	
	Diabetes mellitus		✔	
	Alcoholism		✔	
	Chronic liver disease, cirrhosis		✔	
	Cigarette smoking		✔	

* See Figure 1 for timing of these doses.
† Includes B- (humoral) or T-lymphocyte deficiency, complement deficiencies (particularly C1, C2, C3, and C4 deficiencies), and phagocytic disorders (excluding chronic granulomatous disease).
** Diseases requiring treatment with immunosuppressive drugs, including long-term systemic corticosteroids and radiation therapy.
¶ Including congestive heart failure and cardiomyopathies, excluding hypertension.
§ Including chronic obstructive pulmonary disease, emphysema, and asthma.

1. CDC. Pneumococcal ACIP vaccine recommendations. cdc.gov/vaccines/hcp/acip-recs/vacc-specific/pneumo.html. Accessed November 24, 2014.

National Foundation for Infectious Diseases

This initiative is supported by unrestricted educational grants from Merck & Co., Inc. and Pfizer Inc.
NFID policies restrict funders from controlling program content.

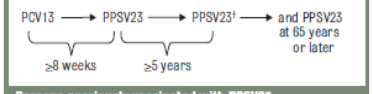
March 2015

People age 19 to 64 years with chronic heart, lung or liver disease, diabetes, alcoholism, cirrhosis, or who are cigarette smokers need one dose of PPSV23.

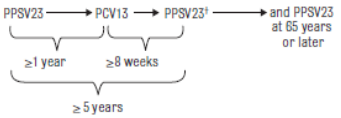
The charts below provide details on timing of PCV13 and PPSV23 doses for all others.

Figure 1: PCV13 and PPSV23 timing for US **adults age 19 to 64 years** with immunocompromising conditions, functional asplenia, CSF leaks, or cochlear implants*

Pneumococcal vaccine-naïve persons



Persons previously vaccinated with PPSV23

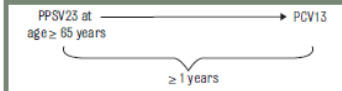


* See Table on page 1 for details on which adults age 19 to 64 years need pneumococcal vaccination
† This dose not indicated for adults with CSF leaks or cochlear implants

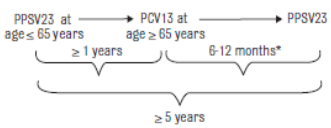
Figure 2: PCV13 and PPSV23 timing for **US adults age 65 years and older**

Pneumococcal vaccine-naïve persons

Persons who previously received PPSV23 at age ≥ 65 years



Persons who previously received PPSV23 before age 65 years because they have a risk factor



*PPSV23 can be given later than 6-12 months after PCV13 if this window is missed; Minimum interval between PCV13 and PPSV23 doses is 8 weeks

Note: While in some cases a second pneumococcal vaccine is recommended as early as six months after the initial vaccination for people age 65 years and older, the second vaccine is only reimbursed by Medicare when administered at least one year (11 full months) after the first.

Additional Facts about Pneumococcal Vaccination

- Mild side effects include redness or pain at the injection site. In rare cases fever, muscle aches, or more severe injection site reactions may develop.
- Vaccination can be administered any time of year and one pneumococcal vaccine can be given at the same time as influenza vaccine.

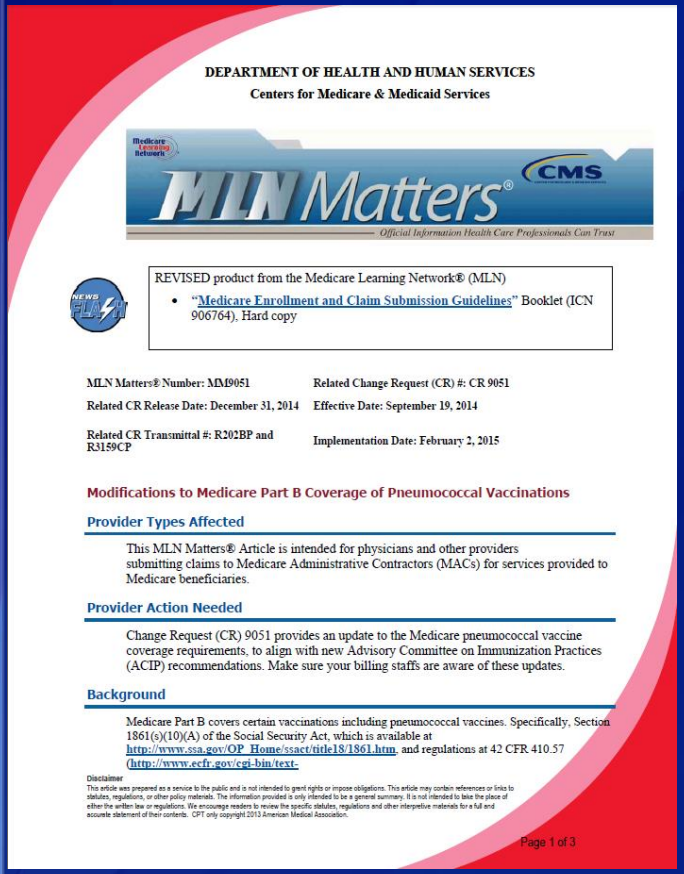
National Foundation for Infectious Diseases

This initiative is supported by unrestricted educational grants from Merck & Co., Inc. and Pfizer Inc.
NFID policies restrict funders from controlling program content.

March 2015

http://www.adultvaccination.org/professional-resources/pneumo/adult-pneumo-guide-hcp.pdf

Modifications to Medicare Part B Coverage of Pneumococcal Vaccinations



DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Medicare & Medicaid Services

MLN Matters®
Official Information Health Care Professionals Can Trust

REVISED product from the Medicare Learning Network® (MLN)

- "Medicare Enrollment and Claim Submission Guidelines" Booklet (ICN 906764), Hard copy

MLN Matters® Number: MM9051 | Related Change Request (CR) #: CR 9051
Related CR Release Date: December 31, 2014 | Effective Date: September 19, 2014
Related CR Transmittal #: R202BP and R3159CP | Implementation Date: February 2, 2015

Modifications to Medicare Part B Coverage of Pneumococcal Vaccinations

Provider Types Affected

This MLN Matters® Article is intended for physicians and other providers submitting claims to Medicare Administrative Contractors (MACs) for services provided to Medicare beneficiaries.

Provider Action Needed

Change Request (CR) 9051 provides an update to the Medicare pneumococcal vaccine coverage requirements, to align with new Advisory Committee on Immunization Practices (ACIP) recommendations. Make sure your billing staffs are aware of these updates.

Background

Medicare Part B covers certain vaccinations including pneumococcal vaccines. Specifically, Section 1861(s)(10)(A) of the Social Security Act, which is available at http://www.ssa.gov/OP_Home/ssact/title18/1861.htm, and regulations at 42 CFR 410.57 (http://www.ecfr.gov/cgi-bin/text-

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Page 1 of 3

- **Medicare Part B now cover full cost of 2nd pneumococcal vaccination for Medicare enrollees, provided 2nd pneumococcal vaccine is:**
  - Different from 1st (e.g., first PCV13 then PPSV23)
  - Administered no less than 11 months after the 1st one

http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/Downloads/MM9051.pdf

New Immunization Products

Meningococcal B Vaccines

Product Name	FDA Age Indications	Dosage/Route/Schedule
Trumenba ® (Pfizer)	10 through 25 years of age	• Three 0.5 mL doses • IM injection • 0-, 2-, and 6-month
Bexsero® (Novartis)	10 through 25 years of age	• Two 0.5 mL doses • IM injection • 0, 1–6 month

February 2015 meeting: ACIP voted to recommend meningococcal B vaccine to certain high-risk persons 10 years of age and older. Immunization recommendations will be published in the *MMWR.* Recorded proceedings at **www.cdc.gov/vaccines/acip/meetings/meetings-info.html**

Quadracel

- **DTaP-IPV**
- **Manufacturer: sanofi pasteur**
- **FDA approved for use in children who received Pentacel or Daptacel**
  - 4 through 6 years of age
  - Fifth dose in the diphtheria, tetanus, pertussis vaccination (DTaP) series, and
  - Fourth or fifth dose in the inactivated poliovirus vaccination (IPV) series

http://www.fda.gov/downloads/BiologicsBloodVaccines/Vaccines/ApprovedProducts/UCM439903.pdf

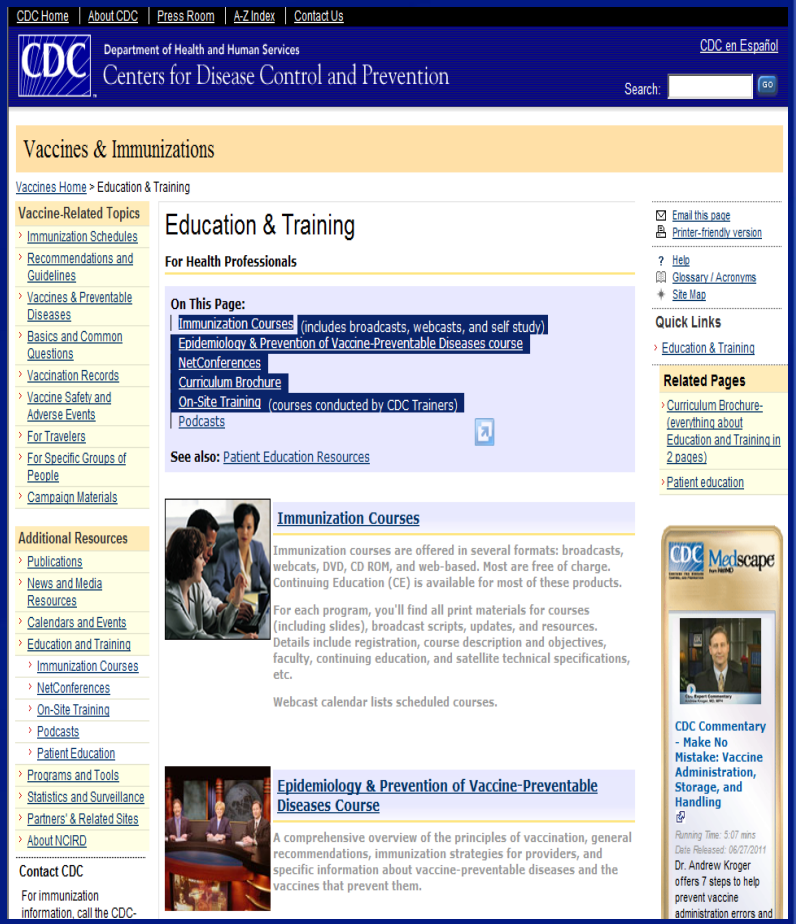
Immunization Resources

CDC Immunization Resources

- **Questions? Email CDC**
  - Providers — **nipinfo@cdc.gov**
  - Parents and patients — **ww.cdc.gov/cdcinfo**
- **Website** — **ww.cdc.gov/vaccines**
- **Influenza** — **www.cdc.gov/flu**
- **Vaccine Safety** — **ww.cdc.gov/vaccinesafety**

CDC Resources for Staff Education

- **Competency-based education for staff is critical**
- **Multiple education products available free through the CDC website**
  - Immunization courses (webcasts and online self- study)
  - Netconferences
  - You Call the Shots self-study modules
- **Continuing education credits available**



www.cdc.gov/vaccines/ed/default.htm

Immunization Twitter Just for You

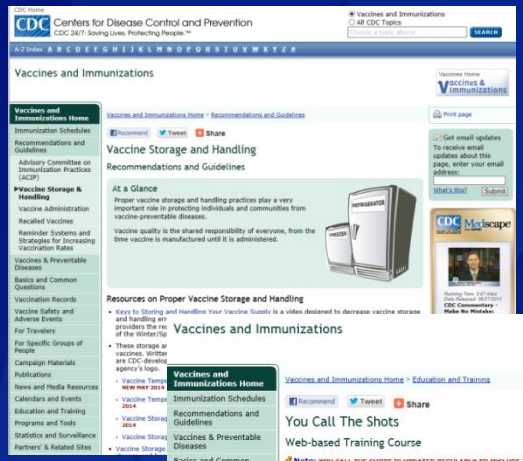
@CDCIZlearn

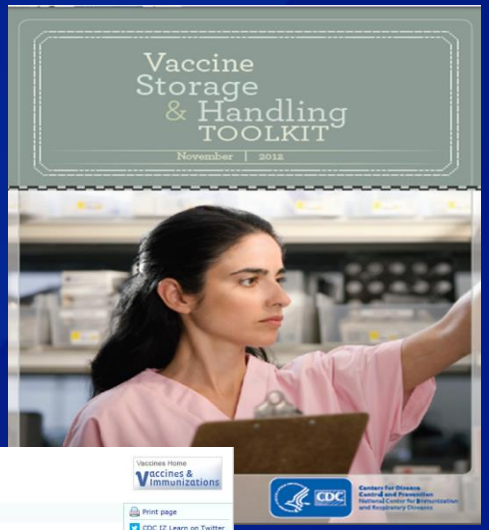
is a leading source for healthcare providers on immunization training, recommendations and information across the lifespan

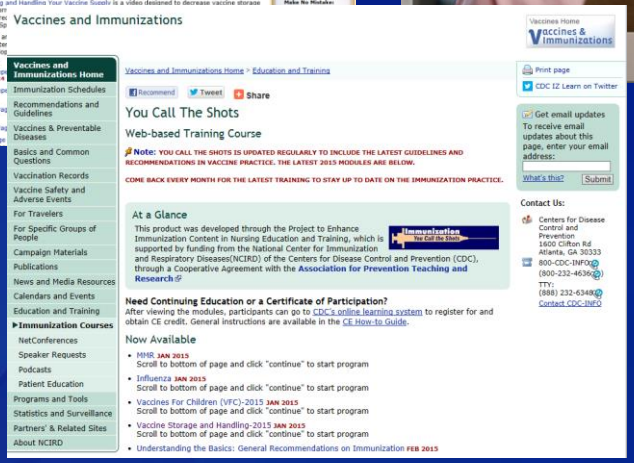
CDC

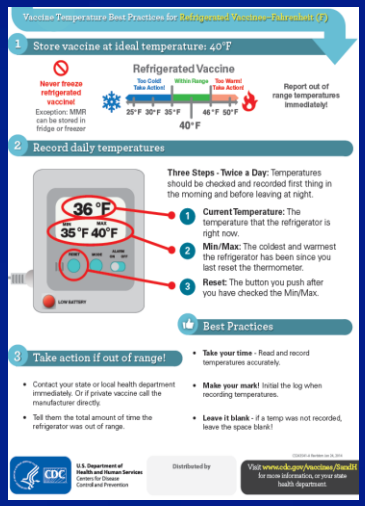
IZ LEARN

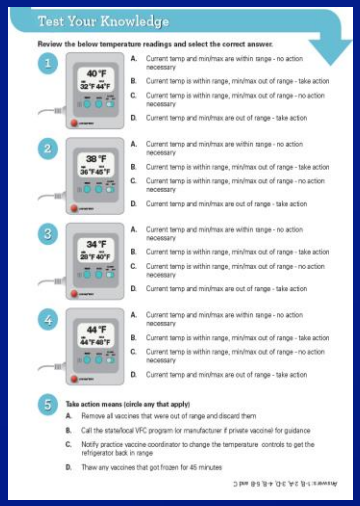
Vaccine Storage and Handling







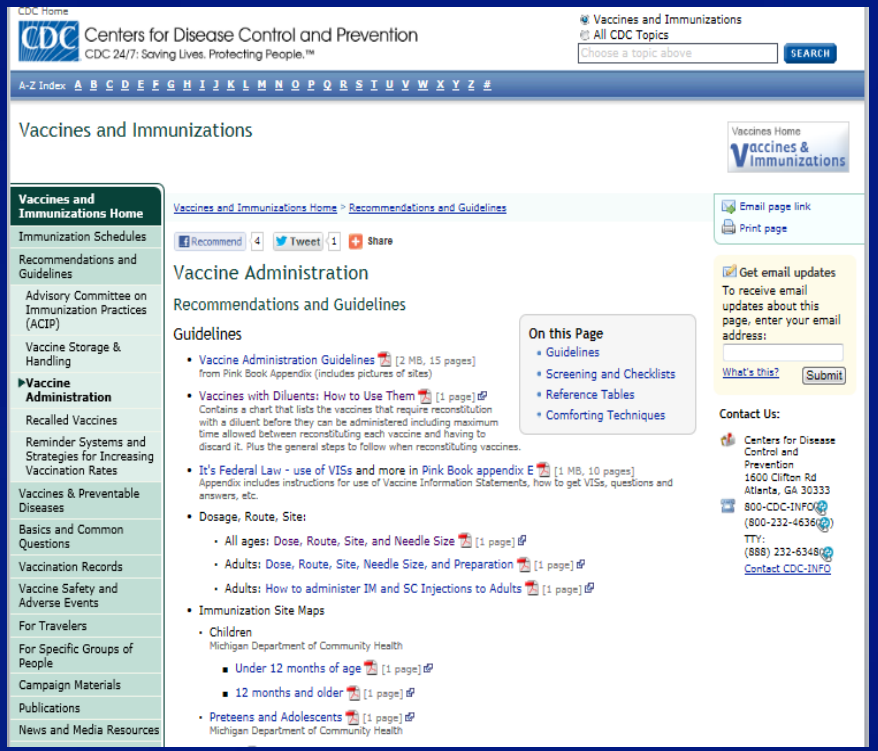




http://www.cdc.gov/vaccines/recs/storage/toolkit/
http://www.cdc.gov/vaccines/ed/youcalltheshots.htm

Vaccine Administration

http://www.cdc.gov/injectionsafety/IP07_standardPrecaution.html



http://www.cdc.gov/vaccines/recs/vac-admin/default.htm

Additional Resources

- **State of Arizona Immunization Program**
  - http://azdhs.gov/phs/immunization/
  - And local public health immunization programs, too!
- **Immunization Action Coalition** www.immunize.org
- **Vaccine Education Center** www.chop.edu
- **American Academy of Pediatrics (AAP)** www.aap.org/immunize
- **National Foundation for Infectious Diseases (NFID)** www.nfid.org

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