Arizona Department of Health Services

IMMUNICATIONS

Vaccinate at Every Life Stage — Plant the Seeds of Protection Through Immunization

Winter 2013

New Vaccine Policies and Serving Underinsured Children

VFC Providers: Keep Immunizing Underinsured Children with VFC Vaccines! Do not stop until you hear from ADHS in the spring of 2013 (possibly as late as June).

By Patty Gast, M.S., AIPO Office Chief

More changes to Arizona's Vaccines for Children (VFC) Program will be rolling out in 2013. Currently, VFC providers can immunize underinsured children with VFC vaccine, but this will have to stop for most VFC providers later this year (most likely May or June) due to funding shortfalls. The exceptions are VFC enrolled hospitals for the hepatitis B birth dose and HBIG, as well as county health departments (CHDs), Federally Qualified Health Centers (FQHCs), and Rural Health Centers (RHCs) for all vaccines – these are the only providers that will always be able to use VFC vaccine for underinsured children. Please continue immunizing Arizona's underinsured children until the Arizona VFC Program notifies you to stop.

After you receive notification to stop, underinsured children will have the option to pay out of pocket in your office. Or, they can be referred to FQHCs, RHCs, CHDs, or one of the 24 newly deputized providers. These entities are required to accept non-established patients to provide them with needed vaccines. Please see the list of deputized providers, included as an insert.

Once the Affordable Care Act (ACA) is implemented in 2014, there will eventually be first dollar coverage for immunizations for all children. This will mean no copays or deductibles for vaccinations and no underinsured children.

Additional changes to the Arizona VFC Program vaccine policy have been taking place since October 2012. CHDs stopped providing public vaccine to be administered to privately insured children effective October 2012. CHDs have been working on the challenge of establishing privately purchased stocks of vaccine and reimbursement programs with private insurance companies in order to serve privately insured children who present at their clinics. Many CHDs have met this challenge with a fair amount of success, although none are yet able to bill all major private insurance plans. The diligent work of establishing sustainable private insurance billing systems in CHDs continues because of the important role CHDs play in serving all children who are not able to access vaccines elsewhere.

VFC providers should continue immunizing VFC-eligible children – those who are uninsured, are on AHCCCS, or are Native American/ Alaskan Native. VFC providers should continue immunizing children in the state insurance program, KidsCare. There will always be sufficient vaccines for these children.

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Definitions

Underinsured: A person who has health insurance, but the coverage does not include vaccines or a person whose insurance covers only selected vaccines. Children who are underinsured for selected vaccines are VFC-eligible for non-covered vaccines only. Underinsured children are eligible to receive VFC vaccine only through a FQHC, RHC, CHD or by a provider with an approved deputization agreement.

Insured: Anyone with insurance that covers the cost of vaccine, even if the insurance includes a deductible or co-pay, or if a claim for the cost of the vaccine and its administration would be denied for payment by the insurance carrier because the plan's deductible had not been met. *If you have questions about these new vaccine policies, please contact the Arizona VFC Program at (602) 364-3642.*

Influenza Is Here and It Is Not Too Late to Vaccinate!

By Karen Lewis, M.D., AIPO Medical Director

Influenza has started circulating this season in the United States much earlier than in recent seasons. As of 2/14/2013 there have been 64 pediatric deaths, surpassing last years total of 34 for the entire flu season. Clinicians can follow the progression of influenza activity in Arizona and the United States by going to the influenza websites of the Arizona Department of Health (http://azdhs.gov/flu/)and the Centers for Disease Control and Prevention (http://www.cdc.gov/flu/).

So far, the influenza vaccine is well matched to the circulating strains of influenza A (both H1N1 and H3N2) and to a majority of the influenza B isolates. Almost all of currently circulating influenza viruses are susceptible to oseltamivir (Tamiflu®) and zanamivir (Relenza®). However, rare sporadic cases of oseltamivir-resistant influenza A (2009 H1N1) and influenza A (H3N2) viruses have been detected worldwide.

It is not too late to vaccinate with influenza vaccine because influenza will be circulating widely for several more months in Arizona. It takes about two weeks to build up protective influenza antibodies after vaccination, so vaccinating patients now will give them protection throughout the remainder of the influenza season. It is important to educate patients that most respiratory or gastrointestinal symptoms that occur after influenza vaccine are not caused by the vaccine. Influenza vaccine will not protect against hundreds of bacteria and viruses that cause respiratory or gastrointestinal symptoms.

There has been more of a demand for influenza vaccine this year, so some providers have already used up their vaccine supply. People should call ahead to their health care provider, immunization clinic, or pharmacy to make sure influenza vaccine is available at that site.

Influenza vaccine is recommended for everyone 6 months and older unless there is a contraindication. People who are high risk for complications and death from influenza should be given additional encouragement to be vaccinated. These include children under 5 years old; children receiving chronic aspirin treatment; pregnant women; adults 50 years and older; immune suppressed people; diabetics or those with other metabolic diseases; asthmatics; people with chronic diseases of the heart, lung, kidney, or liver; people who are morbidly obese; residents of chronic-care facilities; American Indians/ Alaska Natives; health care personnel; and people who are caregivers or household contacts of these high risk people.

There are four formulations of influenza vaccines this year. All of them are trivalent, containing influenza A H1N1, influenza A H3N2, and influenza B. Live-attenuated influenza vaccine given as a nasal spray is approved for nonpregnant, healthy people ages 2-49 years old.

Three types of inactivated influenza vaccines are available. An intradermal vaccine with a tiny needle is approved for people 18-64 years old. A high-dose vaccine with four times the regular amount of antigen is licensed for people 65 years and above. The regular intramuscular form of influenza vaccine is licensed for ages ≥ 6 months old, although some manufacturers' inactivated vaccines are not licensed for children as young as six months old.

Recommendations regarding people with egg allergies have been changed. People with only mild egg allergies can safely receive inactivated influenza vaccines. Finally, children ages 6 months-8 years old receiving influenza vaccine for the first time should receive two doses of influenza vaccine. For more details, see *Morbidity and Mortality Weekly Report* (MMWR), August 17, 2012 (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6132a3.htm?s_cid=mm6132a3_w) and MMWR, August 6, 2010. (http://www.cdc.gov/mmwr/pdf/rr/rr5908.pdf)

Women Need Pertussis Vaccine During Each Pregnancy

By Karen Lewis, M.D., AIPO Medical Director

All pregnant women should receive pertussis vaccine (Tdap) with every pregnancy, irrespective of whether she has ever received a previous Tdap vaccine, according to the October 24, 2012 vote of the Advisory Committee on Infectious Diseases (ACIP) of the Centers for Disease Control and Prevention (CDC). At the time of writing this article (1/23/2013), this is still a provisional recommendation (http://www.cdc.gov/vaccines/recs/provisional/default.htm). ACIP provisional recommendations become official CDC recommendations once they are published in *Morbidity and Mortality Weekly Report* (MMWR) (http://www.cdc.gov/mmwr/).

This new ACIP recommendation was made because pertussis antibodies from previous pertussis vaccines or infection decrease over time. Therefore, pregnant women often have very low levels of pertussis antibodies. If so, the baby receives very little pertussis antibody from its mother, and is susceptible to pertussis from birth.

However, if a mother receives Tdap during pregnancy, she will have higher levels of pertussis antibodies, and these antibodies will pass through her placenta to the baby. The baby then has high levels of pertussis antibodies during the first few months of life, protecting it during the period when it is most likely to die if it is infected with pertussis.

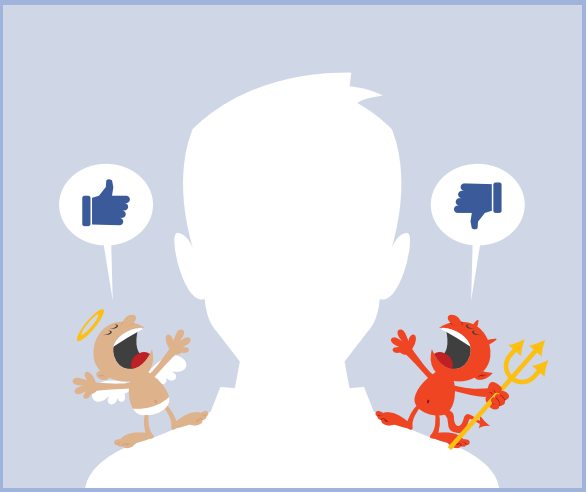
For women who have not previously been vaccinated with Tdap, and if Tdap is not given during pregnancy, Tdap should be given to the woman immediately after birth.

This new ACIP provisional recommendation (http://www.cdc.gov/vaccines/recs/provisional/default.htm) amplifies previous CDC recommendations by adding that the best timing for Tdap administration during pregnancy is between 27 and 36 weeks of gestation in order to maximize the mother's antibody response and the antibody transfer to the infant.

DTap and Tdap Errors

Error

- Tdap given to child < 7 yrs as DTaP #1, 2 or 3
- Tdap given to child < 7 yrs as DTaP #4 or 5
- DTaP given to person > 7 yrs



Action

- *Do not count dose,* give DTaP now
- Vaccine error but may count dose as valid
- Vaccine error but may count dose as valid

National Infant Immunization Week (NIIW) is an annual observance to promote the benefits of immunizations and to improve the health of children two years old or younger. Since 1994, local and state health departments, national immunization partners, healthcare professionals, community leaders, and the Centers for Disease Control and Prevention (CDC) have worked together through NIIW to highlight the positive impact of vaccinations on the lives of infants and children, and to call attention to immunization achievements. Vaccines have drastically reduced infant death and disability caused by preventable diseases in the United States. In addition:

- We can now protect infants and children from 14 vaccine-preventable diseases before age two.
- In the 1950s, nearly all children developed measles, and some even died from this serious disease. Today, few physicians just out of medical school will ever see a case of measles during their careers.
- Routine childhood immunization in one birth cohort prevents about 20 million cases of disease and about 42,000 deaths. It also saves about $13.6 billion in direct costs.
- In September 2011, CDC announced that childhood immunization rates for vaccines routinely recommended for children remain at or near record highs.

Yet without diligent efforts to maintain immunization programs in the United States and to strengthen them worldwide, vaccine-preventable diseases will remain a threat to children. Please join us in educating the public on the dangers of vaccine-preventable diseases, especially to infants and young children, and promoting the importance and benefits of childhood immunizations during National Infant Immunization Week, April 20 - 27th, 2013!

National Infant Immunization Week

IMMUNIZATION.
POWER TO PROTECT.

CDC
Childhood Immunization
CHAMPION AWARD

The *CDC Childhood Immunization Champion Award* is an annual award to recognize individuals who make a significant contribution toward improving public health through their work in childhood immunization.

Started in 2012, one *CDC Childhood Immunization Champion* from each of the 50 states and the District of Columbia will be honored each year.

Award recipients for the 2012 inaugural year were announced during National Infant Immunization Week (NIIW), April 21-28, 2012.

Young children rely on the champions in their lives to keep them safe and healthy.

Those champions may be parents who keep a record of their child's vaccinations and ask at each doctor appointment whether their child is up-to-date on immunizations. Those champions may also be doctors, nurses, physician assistants, and other healthcare professionals who ensure that the children in their care receive all the recommended vaccines.

The *CDC Childhood Immunization Champions* are an inspiration to everyone who cares about children's health. CDC and the CDC Foundation are pleased to recognize the recipients of the award for the special contributions they have made through their work in childhood immunization.

This year all nominations for the TAPI Hot Shot Award will be considered for the *CDC Childhood Immunization Champion Award.* For more information and to nominate an outstanding immunization supporter please go to http://www.whyimmunize.org/img/upload/files/Big%20Shots%20nomination%20flat(1).pdf

Arizona 2012 Nominees:

Alejandro Figuero (Adelante Healthcare)

Alycia Ernst (Scottsdale Unified School District)

Dr. Amy Shoptaugh (All About Kids Pediatrics)

Diana Grazier (La Paz County Health Department)

Dr. Arturo Gonzalez (Scottsdale Children's Group PLLC)

Patrice Sparks (Yavapai County Community Health Services)

Rahoma Fernandez (Fort Mojave Indian Health Center)

Arizona 2012 Champion: Leslie Maier

Leslie Maier's passionate advocacy for the meningococcal vaccine stems from a personal tragedy she hopes other parents never have to face. Ms. Maier's son, Chris, was a healthy, 17 year-old high school senior when he suddenly became ill with bacterial meningitis. He died within 18 hours of showing the first symptoms of illness. After losing her son to this vaccine-preventable disease, Ms. Maier was determined to do everything in her power to help keep other families from experiencing the same heart-breaking loss. She immediately joined the National Meningitis Association's coalition "Moms on Meningitis" and later was elected a board member in 2006.

As a result of Ms. Maier's persistence, the amendment for adding meningococcal and pertussis vaccines to Arizona school immunization requirements went into effect in January 2008. Once the law was passed, Ms. Maier kept up her efforts to routinely educate parents, school personnel, and health care providers about the importance of vaccination. She also co-authored an article for the *Kappa Key,* a national sorority publication, in which she reflected on her experience of losing a son to meningitis.

It is Leslie Maier's ongoing mission to promote meningitis awareness that makes her Arizona's *CDC Childhood Immunization Champion.*

Chris Maier, a healthy 17 year old, died because of bacterial meningitis

Vaccination Coverage among American Indian and Alaska Native Children

By Karen Lewis, M.D., AIPO Medical Director

In the pre-vaccine era, American Indians/Alaska Natives (AI/AN) suffered more from vaccine-preventable illnesses than the rest of the United States. The development of vaccines reduced vaccine-preventable diseases throughout the United States, but vaccine coverage disparities existed between AI/AN and white children. For example, during 2001-2004, a study showed that there was lower vaccine coverage in AI/AN children than among white children. However, in 2005 the disparities in coverage were absent. Therefore, researchers examined the period of 2006-2010 to assess for any recurrence in vaccine coverage disparities.

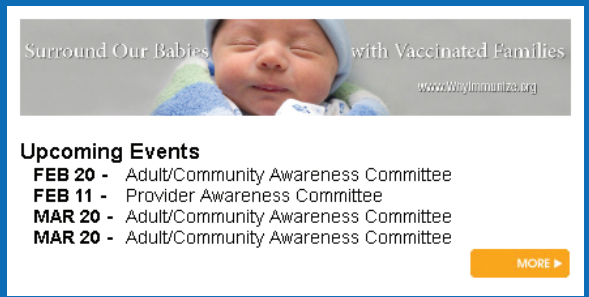
Overall, vaccination coverage was similar between 19-35 month old AI/AN and white children in most years of the period 2006-2010, and by 2010 there was no evidence of vaccination coverage disparities between AI/AN children and white children. Even when stratified by geographic regions, AI/AN children had vaccine coverage that was similar to or higher than that of white children for most vaccines in most of the 2006-2010 period.

However, AI/AN children had lower coverage of ≥ 4 doses of pneumococcal conjugate vaccine in 2008 and 2009, and the vaccine coverage when measured by the entire 19-35 month old vaccine series was lower in AI/AN children in 2006 and 2009.

In the Southwest and Alaska, coverage for AI/AN children was frequently higher than that for white children. Even during the *Haemophilus influenzae* type b (Hib) vaccine shortage in 2008 and 2009, AI/AN children in Alaska and the Southwest had higher Hib vaccine coverage when compared with white children. More details are available in *Pediatrics,* (http://pediatrics.aappublications.org/content/130/6/e1592.abstract) December 2012.

The Arizona Partnership for Immunization (TAPI) www.TAPI.org

2013 brings The Arizona Partnership for Immunization's (TAPI) Provider webpage to you via www.TAPI.org. This new URL will enable you to go directly to the Provider site which contains resources specifically for our provider community. Below are some highlights of this page. As always, the main page and community resources can be accessed via www.WhyImmunize.org.



The Upcoming Events section lists TAPI events and other important events that are occurring in the state. You can click MORE for more information as well as to register on our internet site.

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CON'T FROM PAGE 5

Vaccines For Children Update
Important Changes to the VFC Program

By Tiffany McRae, M.S., Vaccine Center Manager

Over the past several months, CDC has been in contact with state Immunization Programs across the nation regarding anticipated changes to the vaccine storage, handling and accountability policies for the VFC program. Please be aware that as of January 1, 2013, the following changes have been incorporated into the Arizona VFC program.

- **Dorm Style or Bar Style Refrigerators:** Dorm style and bar style refrigerators are not allowed to be used for permanent or **temporary storage** of federally funded VFC vaccines. If you are currently using a dorm style or bar style refrigerator, **please discontinue use IMMEDIATELY!**
- **Unannounced Storage and Handling Site Visits:** VFC site visit representatives will be tasked with identifying VFC providers statewide to perform "spot checks" of storage and handling practices in the VFC provider offices. Providers will be chosen based upon previous storage and handling compliance issues, time since the last visit and geographic distance from those providers who will receive a VFC compliance visit during the year. These visits will provide us with information to assist in creating targeted education and the opportunity to assist providers in complying with storage and handling requirements.
- **Education Compliance Visits:** VFC providers will be required to attend at least one VFC educational training per calendar year. These trainings can consist of one or more of the following: the annual immunization conference, VFC webinars, Learn at Lunch session, VFC in-service or completion of a VFC on-line training. These trainings can be attended by the VFC coordinator, office manager, physician or used as an opportunity to educate all staff on VFC requirements. More information will be available on VFC webinars and VFC on-line trainings in the near future.
- **Refrigerator/Freezer Unit:** CDC **recommends** the use of stand-alone refrigerator and freezer units, meaning a self-contained unit that only refrigerates or freezes and is suitable for vaccine storage. These units can vary in size, from a compact, under-the counter style to a large, stand-alone, pharmaceutical grade storage unit. CDC has made the use of stand-alone freezer and

stand-alone refrigerator units **optional** at this time. However, in the future this may become a CDC requirement. **At this time, if you do not have stand-alone units, you may continue to use your current combination refrigerator/freezer units.** If you anticipate the need to purchase a new unit, we are advising all providers to purchase the stand-alone refrigerator and stand-alone freezer units in preparation for the future requirement.

- **The characteristics of an appropriate vaccine storage unit include:**
  - Enough room to store the year's largest inventory without crowding;
  - Provide sufficient room to store water bottles in the refrigerator and frozen coolant packs in the freezer to stabilize the temperature;
  - Having a working calibrated thermometer with the Certificate of Traceability and Calibration placed in a central area inside each storage compartment. Each thermometer probe should come placed in glycol to measure vaccine temperature and not the ambient air of the refrigerator or freezer
- **Digital Data Loggers:** CDC **recommends** the use of continuous digital data loggers with detachable probes for temperature monitoring. This device will allow for twice daily temperature monitoring and recording.
  At this time, the Arizona Immunization Program does not require the use of data loggers. Please continue to use the NIST calibrated and certified thermometers that are currently being used to monitor VFC vaccines.

VFC Vaccine Administration Fee

As you may have heard, the allowable vaccine administration fee has been revised for the first time in VFC history. Effective January 1, 2013, the maximum allowable rate for Arizona providers is $21.33. This is the maximum rate you can charge all non-Medicaid VFC eligible patients, per vaccine dose. Please remember that for non-Medicaid VFC eligible clients, you must **waive the fee if the parent/guardian tells you they cannot afford it.**

MMR-V: ProQuad®

ProQuad® **NDC** 00006-4999-00, single dose vial presentation (package of 10) is available to order in VOMS.

ASIIS UPDATE

By Steven "Rob" Bailey, ASIIS Manager

The Arizona State Immunization Information System (ASIIS) has completed a transition to electronic inventory management for nearly 900 active providers enrolled in the Vaccines for Children Program. Most providers who currently report their immunizations manually to ASIIS were transitioned to the new system during the months of September, October, and November. Providers who report electronically were transitioned in December and early January. ASIIS wants to thank all of the providers who worked with us to bring about this big change with minimal disruption to the provision of vaccine. For this system to work well, we would like to encourage providers to diligently maintain current (within 30 days of the shot administration) reporting. If this is done, with some minor bumps as we adjust to this new system, we are confident that most providers will find the new system works very efficiently for them.

Looking forward to the coming months, the ASIIS program will be putting the finishing touches on some new ways of submitting immunization records directly from electronic medical record systems. This should include DIRECT and SFTP. We expect that the SFTP option will work well with several types of transport software which are available at no cost, and easy to use. We want to encourage our providers who are not currently reporting immunizations via electronic means to consider these new options since they will alleviate some of the burden and time pressure on their office staff by eliminating the need to manually report vaccinations to ASIIS. ASIIS is gearing up to expand our support and assistance to providers who are willing to begin moving toward the next stage of Meaningful Use.

Other plans for the near future which ASIIS will soon be developing include the implementation of an electronic cold-storage reporting system that should eliminate the need for hard copy temperature logs.

New Employee:

Brenda Jones, RN, BSN, MA

Immunization Services Manager

IMMUNICATIONS
Vaccinate at Every Life Stage — Plant the Seeds of Protection Through Immunization

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If you need this publication in an alternative format, contact the Arizona Immunization Program Office at (602) 364-3630 or 1-800-376-8939 (State TDD/TYY Relay)

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The Arizona Department of Health Services Immunization Program Office would like to invite you to the Twentieth Annual Arizona Immunization Conference on April 18th and 19th, 2013, at the Black Canyon Conference Center in Phoenix, Arizona.

This year's speakers represent professionals from the Centers for Disease Control and Prevention, the Southwest Autism Research & Resource Center, the University of Arizona, Maricopa County Health Department and The Arizona Partnership for Immunization (TAPI) (http://www.whyimmunize.org/event/view/109?date=2013-04-17).

Registration is now available online. There is also the option to mail in the registration form (http://azdhs.gov/phs/immun/pdf/2013-conference/2013-conference-registration-form.pdf). It is included as an insert as well.

azdhs.gov

Arizona Department of Health Services

tapi The Arizona Partnership for Immunization

Arizona Deputized Providers

Starting July 1, 2013, VFC Providers will not be able to serve underinsured children with VFC vaccine and will need to purchase private vaccine and charge the underinsured child out-of-pocket for immunizations or refer the underinsured child to one of the providers listed below or to a Federally Qualified Health Center or a Rural Health Center. The providers listed below have deputization agreements in-place that allow them to use Arizona VFC vaccine for immunizing underinsured children.

ALL VFC PROVIDERS MAY CONTINUE IMMUNIZING UNDERINSURED CHILDREN WITH ARIZONA-SUPPLIED VFC VACCINE UNTIL JULY 1, 2013

Arizona Department of Health Services

All 15 County Health Departments are deputized.

Deputized Private VFC Providers

Gila County

Payson Pediatrics
126 E Main Street, Suite B
Payson, AZ 85541
(928) 472-4675

Maricopa County

Arizona Medical Clinic
1847 W Heatherbrae Dr
Phoenix, AZ 85015
(602) 274-2100

Arizona State University Health Services Campuses
Tempe, Polytechnic & West
(480) 965-1145

CRMC KidShots Community Wellness
1874 W Frye Road, Suite M-7
Chandler, AZ 85224
(480) 728-5697

Del Lago Family Medicine
20470 N Lake Pleasant Rd, Suite 110
Peoria, AZ 85382
(623)266-4699

Desert View Pediatrics
727 E Bethany Home Rd, Suite A-101
Phoenix, AZ 85014
(602) 279-2400

Dominick A. Barone,DO/FACOP/FAAP
4921 E Bell Rd, Suite 202
Scottsdale, AZ 85254
(602) 971-3700

El Pueblo Medical Clinic
3911 W McDowell Rd, #1
Phoenix, AZ 85009
(602) 353-9531

Gilbert Pediatrics
4540 E Baseline Rd, Suite 108
Mesa, AZ 85206
(480) 892-3880

Kids Kare
Site 1
521 W Thomas Rd, 2nd Floor
Phoenix, AZ 85013
(602) 254-0390

Site 2
3305 E Greenway Rd, Suite 6
Phoenix, AZ 85032
(602) 867-1252

Site 3
6211 N 35th Ave, Suite 1
Phoenix, AZ 85017
(602) 242-5000

Site 4
455 N Mesa Dr, Suite 16E
Mesa, AZ 85201
(480) 610-0752

Site 5
3130 E Baseline Rd, Suite 103
Mesa, AZ 85204
(480) 539-7618

Site 6
9515 W Camelback Rd, Suite 142
Phoenix, AZ 85037
(602) 903-5365

Mesa Fire Department
4530 E McKellips Rd, #101
Mesa, AZ 85215
(480) 644-6829

Mollen Immunization Clinics
8324 E Hartford Drive
Scottsdale, AZ 85255
(480) 214-2000 #327

Phoenix Fire Department – Baby Shots
1818 South 16th St
Phoenix, AZ 85034
(602) 534-8640

Providence Pediatrics, Corp.
Site 1
8410 W Thomas Rd, Suite 140
Phoenix, AZ 85037
(623) 846-7337

Site 2
9220 N Central Ave
Phoenix, AZ 85020
(602) 997-9898

Site 3
1701 W Glendale Ave, Suite 3
Phoenix, AZ 85021
(602) 246-9090

Pueblo Family Physicians, Ltd.
Site 1
4350 N 19th Ave, Suite 6
Phoenix, AZ 85015
(602) 264-9191

Site 2
15425 N. Greenway Hayden Loop, Suite A-300
Scottsdale, AZ 85260
(480) 607-1124

Straight From the Heart Medical Professionals, Inc.
8607 N 59th Ave, Suite C-3
Glendale, AZ 85302
(623) 847-0464

Young Arizona Pediatrics
15653 N Reems Rd, Suite 110
Surprise, AZ 85374
(623) 214-3454

Pima County

Catalina Pediatrics, PC
3085 N Swan Rd
Tucson, AZ 85712
(520) 323-3099

Challenger School-Based Clinic
100 East Elvira
Tucson, AZ
(520) 545-4611

Shubitz Family Clinic; and Women's Clinic
1450 N Cherry St
Tucson, AZ 85719
(520) 626-7435

Yavapai County

Family Health Providers
3700 W St. Route 89A
Sedona, AZ 86336
(928) 204-4944

Red Rock Pediatrics
800 Cove Parkway
Cottonwood, AZ 83325
(928) 649-3003

Valley Medical Center
214 S Main St
Cottonwood, AZ 86326
(928) 634-7534

Yavapai County Ed. Service Agency
2970 Centerpointe East Drive
Prescott, AZ 86301
(928) 713-5344

February 21, 2013

20th Annual Arizona Immunization Conference

Thursday & Friday
April 18th & 19th, 2013
Black Canyon Conference Center
9440 North 25th Avenue, Phoenix, AZ 85021

Name _____ **Title** _____
Print all information (one registration form per participant)

Organization _____
Spell out full name of organization

Address _____ **City** _____ **Zip** _____

Phone ( ) _____ **Fax ( )** _____ **E-Mail** _____

Please check (√) all that apply:

____ MD ____ DO
____ Pharmacist
____ PA ____ NP
____ Epidemiologist
____ RN
____ LPN
____ School nurse (check RN or LPN also)
____ Public Health Nurse (check RN or LPN)
____ Lab Technician
____ Immunization Manager
____ MA ____Other Office Staff
____ Other School Personnel

Please check (√) description of organization type:

____ Community Health Center
____ Corrections
____ County Health Department
____ Family/General Practice
____ Family Health Center
____ Hospital
____ Hospital-Based Clinic
____ Indian Health Services
____ Pediatrician
____ School Based Clinic
____ Other _____

17th Annual Big Shots for Arizona Awards Dinner ($75)
Wednesday, April 17th
Phoenix Country Club (2901 N 7th St. Phoenix, AZ 85014)

Yes ☐

No ☐

Conference Fees		Please Check One
April 18th & 19th *Thur & Fri*	$250	
April 18th *Thursday Only*	$125	
April 19th *Friday Only*	$125	

- ✓ **PLEASE NOTE!** **Your registration will not be complete until payment is received in-full.**
- ✓ **For questions** about registration or the conference, or for dietary restrictions please contact Wendy O'Donnell at (602) 364-3635 or Wendy.ODonnell@azdhs.gov
- ✓ **Registration ends** Wednesday, April 3rd, or as soon as maximum capacity is reached.
- ✓ **Make check payable to TAPI**(The Arizona Partnership for Immunization)and **Mail Registration(s) & Payment to**: Arizona Immunization Program Office
  Attn: Wendy O'Donnell
  150 N. 18th Ave., Suite 120
  Phoenix AZ 85007-3233

Advisory Committee on Immunization Practices (ACIP) Recommended Immunization Schedule for Persons Aged 0 Through 18 Years — United States, 2013

ACIP Childhood/Adolescent Immunization Work Group
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Each year, the Advisory Committee on Immunization Practices (ACIP) reviews the current recommended immunization schedules for persons aged 0 through 18 years to ensure that the schedule reflects current recommendations for licensed vaccines. In October 2012, ACIP approved the recommended immunization schedules for persons aged 0 through 18 years for 2013, which includes several changes from 2012.

Health-care providers are advised to use both the recommended schedule and the catch-up schedule (Figures 1 and 2) in combination with their footnotes (pages 6–8) and not as stand-alones. For guidance on the use of all the vaccines in the schedules, including contraindications and precautions to use of a vaccine, providers are referred to the respective ACIP vaccine recommendations.

Printable versions of the regular and catch-up schedules are available at http://www.cdc.gov/vaccines/schedules in various formats, including landscape and pocket-sized, in regular paper or laminated versions. A "parent friendly" regular schedule is available at http://www.cdc.gov/vaccines/schedules/easy-to-read/child.html#print.

For 2013, several new references and links to additional information have been added, including one for travel vaccine requirements and recommendations (*1*). New references also are provided for vaccination of persons with primary and secondary immunodeficiencies. Changes to the previous schedules (*2*) include the following:

- Figure 1, "Recommended immunization schedule for persons aged 0 through 18 years" replaces "Recommended immunization schedule for persons aged 0 through 6 years" and "Recommended immunization schedule for persons aged 7 through 18 years."
  - Wording was added to bars to represent the respective vaccine dose numbers in the series.
  - The meningococcal conjugate vaccine (MCV4) purple bar was extended to age 6 weeks, to reflect licensure of Hib-MenCY vaccine.
  - The hepatitis A (HepA) vaccine yellow bar was extended to better reflect routine age recommendations for use of HepA vaccine. New green and purple bars were added to reflect hepatitis A vaccine recommendations for older children.
  - Abbreviations for influenza vaccine were updated with the anticipation of quadrivalent vaccine for the 2013–14 influenza season.
  - Pneumococcal polysaccharide vaccine (PPSV23) was added to Figure 1.
- Footnotes were combined and standardized formatting was used to provide recommendations for each vaccine related to routine vaccination, catch-up vaccination, and vaccination of persons with high-risk medical conditions or under special circumstances.
  - Meningococcal conjugate vaccine (MCV4) footnotes were updated to reflect recent recommendations (*3*).
  - Tetanus and diphtheria toxoids and acellular pertussis (Tdap) vaccine footnotes were updated to reflect recent recommendations (*4*).
  - Influenza vaccine footnotes were updated to provide dosing guidance for children aged 6 months through 8 years for the 2012–13 and 2013–14 influenza seasons (*5*).
- Meningococcal conjugate (MCV4) vaccine minimum ages and intervals were updated in 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, 2013," to reflect licensure of Hib-MenCY vaccine.

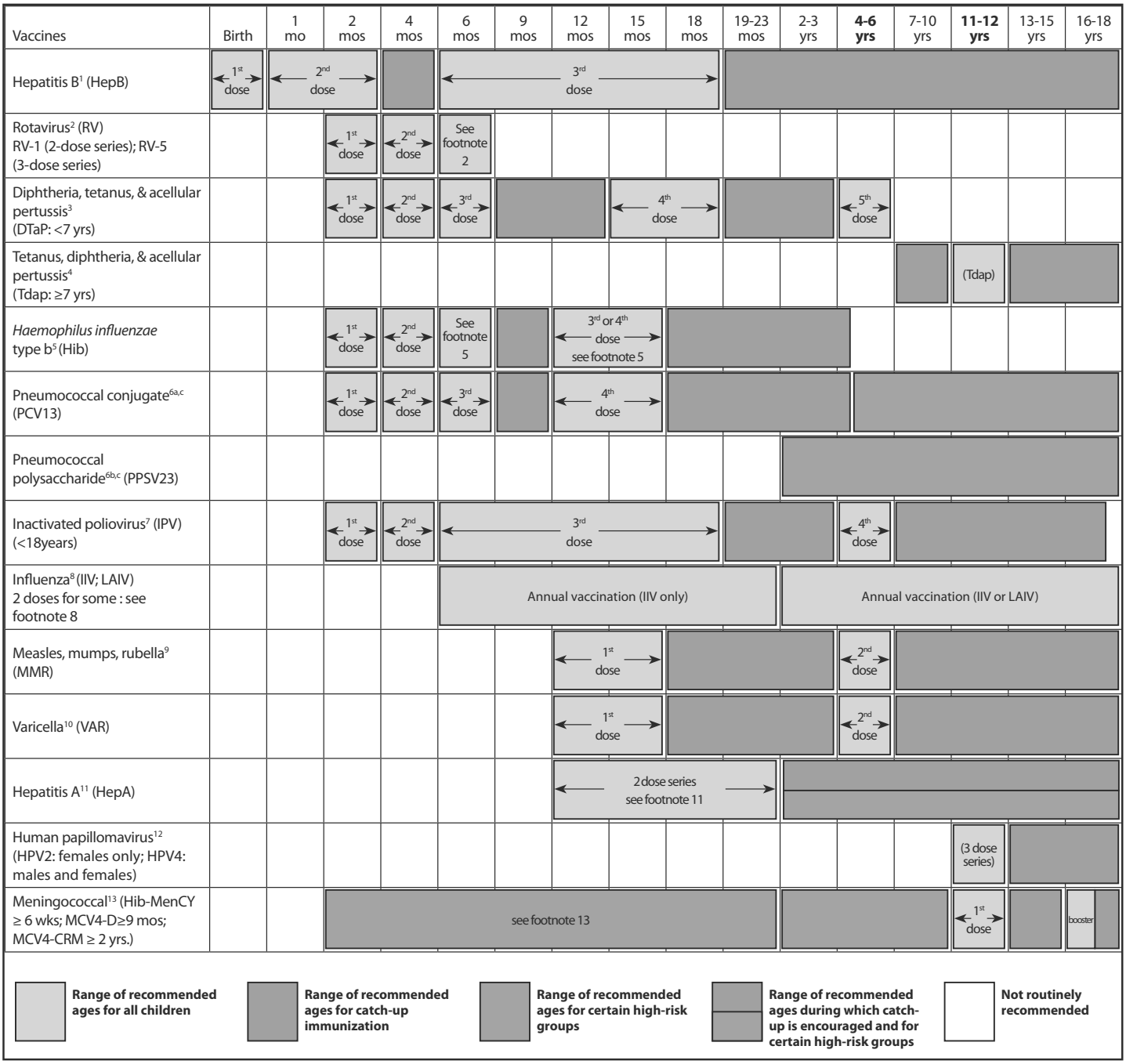
References

1. CDC. Traveler's health: vaccinations. Atlanta, GA: US Department of Health and Human Services, CDC; 2012. Available at http://wwwnc.cdc.gov/travel/page/vaccinations.htm.
2. CDC. Recommended immunization schedules for persons aged 0–18 years—United States, 2012. MMWR 2012;61(5).
3. CDC, Advisory Committee on Immunization Practices. Resolution no. 10/12-2. Vaccines to prevent meningococcal disease. Atlanta, GA: US Department of Health and Human Services, CDC, Advisory Committee on Immunization Practices; 2012.
4. CDC. Update on use of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) vaccine in pregnant women. Atlanta, GA: US Department of Health and Human Services, CDC.
5. CDC, Advisory Committee on Immunization Practices. Resolution no. 10/12-3. Vaccines to prevent influenza. Atlanta, GA: US Department of Health and Human Services, CDC, Advisory Committee on Immunization Practices; 2012. Available at http://www.cdc.gov/vaccines/programs/vfc/downloads/resolutions/1012-3-flu.pdf.

ACIP Childhood/Adolescent Immunization Work Group

FIGURE 1. Recommended immunization schedule for persons aged 0 through 18 years —2013 (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 in bold.



This schedule includes recommendations in effect as of January 1, 2013. 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/pubs/acip-list.htm. 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) 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/index.html), 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 on pages 6–8.

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, 2013

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.

Persons aged 4 months through 6 years					
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
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, 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 administered at younger than age 12 months 8 weeks (as final dose) if first dose administered at age 12–14 months No further doses needed if first dose administered at age 15 months or older	4 weeks[5] if current age is younger than 12 months 8 weeks (as final dose)[5] if current age is 12 months or older and first dose administered at younger than age 12 months and second dose administered at younger than 15 months No further doses needed if previous dose administered at age 15 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	
Pneumococcal[6]	6 weeks	4 weeks if first dose administered at younger than age 12 months 8 weeks (as final dose for healthy children) if first dose administered at age 12 months or older or current age 24 through 59 months 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 8 weeks (as final dose for healthy children) if current age is 12 months or older 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	4 weeks	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			
Persons aged 7 through 18 years					
Tetanus, diphtheria; tetanus, diphtheria, pertussis[4]	7 years[4]	4 weeks	4 weeks if first dose administered at younger than age 12 months 6 months if first dose administered at 12 months or older	6 months if first dose administered at younger than age 12 months	
Human papillomavirus[12]	9 years	Routine dosing intervals are recommended[12]			
Hepatitis A[11]	12 months	6 months			
Hepatitis B[1]	Birth	4 weeks	8 weeks (and at least 16 weeks after first dose)		
Inactivated poliovirus[7]	6 weeks	4 weeks	4 weeks[7]	6 months[7]	
Meningococcal[13]	6 weeks	8 weeks[13]			
Measles, mumps, rubella[9]	12 months	4 weeks			
Varicella[10]	12 months	3 months if person is younger than age 13 years 4 weeks if person is aged 13 years or older			

NOTE: The above recommendations must be read along with the footnotes on pages 6–8.

Footnotes: Recommended Immunization Schedule for Persons Aged 0 Through 18 Years — United States, 2013

Additional guidance for use of the vaccines described in this publication is available at http://www.cdc.gov/vaccines/pubs/acip-list.htm

1. **Hepatitis B (HepB) vaccine. (Minimum age: birth)**
   Routine vaccination:
   At birth
   - Administer monovalent HepB vaccine to all newborns before hospital discharge.
   - For infants born to hepatitis B surface antigen (HBsAg)–positive mothers, administer HepB vaccine and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth. These infants should be tested for HBsAg and antibody to HBsAg (anti-HBs) 1 to 2 months after completion of the HepB series, at age 9 through 18 months (preferably at the next well-child visit).
   - If mother's HBsAg status is unknown, within 12 hours of birth administer HepB vaccine to all infants regardless of birth weight. For infants weighing <2,000 grams, administer HBIG in addition to HepB within 12 hours of birth. Determine mother's HBsAg status as soon as possible and, if she is HBsAg-positive, also administer HBIG for infants weighing ≥2,000 grams (no later than age 1 week).

   Doses following the birth dose
   - The second dose should be administered at age 1 or 2 months. Monovalent HepB vaccine should be used for doses administered before age 6 weeks.
   - Infants who did not receive a birth dose should receive 3 doses of a HepB-containing vaccine on a schedule of 0, 1 to 2 months, and 6 months starting as soon as feasible. See Figure 2.
   - The minimum interval between dose 1 and dose 2 is 4 weeks and between dose 2 and 3 is 8 weeks. The final (third or fourth) dose in the HepB vaccine series should be administered no earlier than age 24 weeks, and at least 16 weeks after the first dose.
   - Administration of a total of 4 doses of HepB vaccine is recommended when a combination vaccine containing HepB is administered after the birth dose.

   Catch-up vaccination:
   - Unvaccinated persons should complete a 3-dose series.
   - A 2-dose series (doses separated by at least 4 months) of adult formulation Recombivax HB is licensed for use in children aged 11 through 15 years.
   - For other catch-up issues, see Figure 2.
2. **Rotavirus (RV) vaccines. (Minimum age: 6 weeks for both RV-1 [Rotarix] and RV-5 [RotaTeq]).**
   Routine vaccination:
   - Administer a series of RV vaccine to all infants as follows:
     1. If RV-1 is used, administer a 2-dose series at 2 and 4 months of age.
     2. If RV-5 is used, administer a 3-dose series at ages 2, 4, and 6 months.
     3. If any dose in series was RV-5 or vaccine product is unknown for any dose in the series, a total of 3 doses of RV vaccine should be administered.

   Catch-up vaccination:
   - The maximum age for the first dose in the series is 14 weeks, 6 days.
   - Vaccination should not be initiated for infants aged 15 weeks 0 days or older.
   - The maximum age for the final dose in the series is 8 months, 0 days.
   - If RV-1 (Rotarix) is administered for the first and second doses, a third dose is not indicated.
   - For other catch-up issues, see Figure 2.
3. **Diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine. (Minimum age: 6 weeks)**
   Routine vaccination:
   - Administer a 5-dose series of DTaP vaccine at ages 2, 4, 6, 15–18 months, and 4 through 6 years. The fourth dose may be administered as early as age 12 months, provided at least 6 months have elapsed since the third dose.

   Catch-up vaccination:
   - The fifth (booster) dose of DTaP vaccine is not necessary if the fourth dose was administered at age 4 years or older.
   - For other catch-up issues, see Figure 2.
4. **Tetanus and diphtheria toxoids and acellular pertussis (Tdap) vaccine. (Minimum age: 10 years for Boostrix, 11 years for Adacel).**
   Routine vaccination:
   - Administer 1 dose of Tdap vaccine to all adolescents aged 11 through 12 years.
   - Tdap can be administered regardless of the interval since the last tetanus and diphtheria toxoid-containing vaccine.
   - Administer one dose of Tdap vaccine to pregnant adolescents during each pregnancy (preferred during 27 through 36 weeks gestation) regardless of number of years from prior Td or Tdap vaccination.

   Catch-up vaccination:
   - Persons aged 7 through 10 years who are not fully immunized with the childhood DTaP vaccine series, should receive Tdap vaccine as the first dose in the catch-up series; if additional doses are needed, use Td vaccine. For these children, an adolescent Tdap vaccine should not be given.
   - Persons aged 11 through 18 years who have not received Tdap vaccine should receive a dose followed by tetanus and diphtheria toxoids (Td) booster doses every 10 years thereafter.
   - An inadvertent dose of DTaP vaccine administered to children aged 7 through 10 years can count as part of the catch-up series. This dose can count as the adolescent Tdap dose, or the child can later receive a Tdap booster dose at age 11–12 years.
   - For other catch-up issues, see Figure 2.
5. ***Haemophilus influenzae* type b (Hib) conjugate vaccine. (Minimum age: 6 weeks)**
   Routine vaccination:
   - Administer a Hib vaccine primary series and a booster dose to all infants. The primary series doses should be administered at 2, 4, and 6 months of age; however, if PRP-OMP (PedvaxHib or Comvax) is administered at 2 and 4 months of age, a dose at age 6 months is not indicated. One booster dose should be administered at age 12 through15 months.
   - Hiberix (PRP-T) should only be used for the booster (final) dose in children aged 12 months through 4 years, who have received at least 1 dose of Hib.

   Catch-up vaccination:
   - If dose 1 was administered at ages 12-14 months, administer booster (as final dose) at least 8 weeks after dose 1.
   - If the first 2 doses were PRP-OMP (PedvaxHIB or Comvax), and were administered at age 11 months or younger, the third (and final) dose should be administered at age 12 through 15 months and at least 8 weeks after the second dose.
   - If the first dose was administered at age 7 through 11 months, administer the second dose at least 4 weeks later and a final dose at age 12 through 15 months, regardless of Hib vaccine (PRP-T or PRP-OMP) used for first dose.
   - For unvaccinated children aged 15 months or older, administer only 1 dose.
   - For other catch-up issues, see Figure 2.

   Vaccination of persons with high-risk conditions:
   - Hib vaccine is not routinely recommended for patients older than 5 years of age. However one dose of Hib vaccine should be administered to unvaccinated or partially vaccinated persons aged 5 years or older who have leukemia, malignant neoplasms, anatomic or functional asplenia (including sickle cell disease), human immunodeficiency virus (HIV) infection, or other immunocompromising conditions.

6a. **Pneumococcal conjugate vaccine (PCV). (Minimum age: 6 weeks)**
   Routine vaccination:
   - Administer a series of PCV13 vaccine at ages 2, 4, 6 months with a booster at age 12 through 15 months.
   - For children aged 14 through 59 months who have received an age-appropriate series of 7-valent PCV (PCV7), administer a single supplemental dose of 13-valent PCV (PCV13).

   Catch-up vaccination:
   - Administer 1 dose of PCV13 to all healthy children aged 24 through 59 months who are not completely vaccinated for their age.
   - For other catch-up issues, see Figure 2.

   Vaccination of persons with high-risk conditions:
   - For children aged 24 through 71 months with certain underlying medical conditions (see footnote 6c), administer 1 dose of PCV13 if 3 doses of PCV were received previously, or administer 2 doses of PCV13 at least 8 weeks apart if fewer than 3 doses of PCV were received previously.
   - A single dose of PCV13 may be administered to previously unvaccinated children aged 6 through 18 years who have anatomic or functional asplenia (including sickle cell disease), HIV infection or an immunocompromising condition, cochlear implant or cerebrospinal fluid leak. See MMWR 2010;59 (No. RR-11), available at http://www.cdc.gov/mmwr/pdf/rr/rr5911.pdf.
   - Administer PPSV23 at least 8 weeks after the last dose of PCV to children aged 2 years or older with certain underlying medical conditions (see footnotes 6b and 6c).

6b. Pneumococcal polysaccharide vaccine (PPSV23). (Minimum age: 2 years)
Vaccination of persons with high-risk conditions:
- Administer PPSV23 at least 8 weeks after the last dose of PCV to children aged 2 years or older with certain underlying medical conditions (see footnote 6c). A single revaccination with PPSV should be administered after 5 years to children with anatomic or functional asplenia (including sickle cell disease) or an immunocompromising condition.

6c. Medical conditions for which PPSV23 is indicated in children aged 2 years and older and for which use of PCV13 is indicated in children aged 24 through 71 months:
- Immunocompetent children with chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure); chronic lung disease (including asthma if treated with high-dose oral corticosteroid therapy), diabetes mellitus; cerebrospinal fluid leaks; or cochlear implant.
- Children with anatomic or functional asplenia (including sickle cell disease and other hemoglobinopathies, congenital or acquired asplenia, or splenic dysfunction);
- Children with immunocompromising conditions: HIV infection, chronic renal failure and nephrotic syndrome, diseases associated with treatment with immunosuppressive drugs or radiation therapy, including malignant neoplasms, leukemias, lymphomas and Hodgkin disease; or solid organ transplantation, congenital immunodeficiency.

7. Inactivated poliovirus vaccine (IPV). (Minimum age: 6 weeks)
Routine vaccination:
- Administer a series of IPV at ages 2, 4, 6–18 months, with a booster at age 4–6 years. The final dose in the series should be administered on or after the fourth birthday and at least 6 months after the previous dose.

Catch-up vaccination:
- In the first 6 months of life, minimum age and minimum intervals are only recommended if the person is at risk for imminent exposure to circulating poliovirus (i.e., travel to a polio-endemic region or during an outbreak).
- If 4 or more doses are administered before age 4 years, an additional dose should be administered at age 4 through 6 years.
- A fourth dose is not necessary if the third dose was administered at age 4 years or older and at least 6 months after the previous dose.
- If both OPV and IPV were administered as part of a series, a total of 4 doses should be administered, regardless of the child's current age.
- IPV is not routinely recommended for U.S. residents aged 18 years or older.
- For other catch-up issues, see Figure 2.

8. Influenza vaccines. (Minimum age: 6 months for inactivated influenza vaccine [IIV]; 2 years for live, attenuated influenza vaccine [LAIV])
Routine vaccination:
- Administer influenza vaccine annually to all children beginning at age 6 months. For most healthy, nonpregnant persons aged 2 through 49 years, either LAIV or IIV may be used. However, LAIV should NOT be administered to some persons, including 1) those with asthma, 2) children 2 through 4 years who had wheezing in the past 12 months, or 3) those who have any other underlying medical conditions that predispose them to influenza complications. For all other contraindications to use of LAIV see MMWR 2010; 59 (No. RR-8), available at http://www.cdc.gov/mmwr/pdf/rr/rr5908.pdf.
- Administer 1 dose to persons aged 9 years and older.

For children aged 6 months through 8 years:
- For the 2012–13 season, administer 2 doses (separated by at least 4 weeks) to children who are receiving influenza vaccine for the first time. For additional guidance, follow dosing guidelines in the 2012 ACIP influenza vaccine recommendations, MMWR 2012; 61: 613–618, available at http://www.cdc.gov/mmwr/pdf/wk/mm6132.pdf.
- For the 2013–14 season, follow dosing guidelines in the 2013 ACIP influenza vaccine recommendations.

9. Measles, mumps, and rubella (MMR) vaccine. (Minimum age: 12 months for routine vaccination)
Routine vaccination:
- Administer the first dose of MMR vaccine at age 12 through 15 months, and the second dose at age 4 through 6 years. The second dose may be administered before age 4 years, provided at least 4 weeks have elapsed since the first dose.
- Administer 1 dose of MMR vaccine to infants aged 6 through 11 months before departure from the United States for international travel. These children should be revaccinated with 2 doses of MMR vaccine, the first at age 12 through 15 months (12 months if the child remains in an area where disease risk is high), and the second dose at least 4 weeks later.
- Administer 2 doses of MMR vaccine to children aged 12 months and older, before departure from the United States for international travel. The first dose should be administered on or after age 12 months and the second dose at least 4 weeks later.

Catch-up vaccination:
- Ensure that all school-aged children and adolescents have had 2 doses of MMR vaccine; the minimum interval between the 2 doses is 4 weeks.

10. Varicella (VAR) vaccine. (Minimum age: 12 months)
Routine vaccination:
- Administer the first dose of VAR vaccine at age 12 through 15 months, and the second dose at age 4 through 6 years. The second dose may be administered before age 4 years, provided at least 3 months have elapsed since the first dose. If the second dose was administered at least 4 weeks after the first dose, it can be accepted as valid.

Catch-up vaccination:
- Ensure that all persons aged 7 through 18 years without evidence of immunity (see MMWR 2007;56 [No. RR-4], available at http://www.cdc.gov/mmwr/pdf/rr/rr5604.pdf) have 2 doses of varicella vaccine. For children aged 7 through 12 years the recommended minimum interval between doses is 3 months (if the second dose was administered at least 4 weeks after the first dose, it can be accepted as valid); for persons aged 13 years and older, the minimum interval between doses is 4 weeks.

11. Hepatitis A vaccine (HepA). (Minimum age: 12 months)
Routine vaccination:
- Initiate the 2-dose HepA vaccine series for children aged 12 through 23 months; separate the 2 doses by 6 to 18 months.
- Children who have received 1 dose of HepA vaccine before age 24 months, should receive a second dose 6 to 18 months after the first dose.
- For any person aged 2 years and older who has not already received the HepA vaccine series, 2 doses of HepA vaccine separated by 6 to 18 months may be administered if immunity against hepatitis A virus infection is desired.

Catch-up vaccination:
- The minimum interval between the two doses is 6 months.

Special populations:
- Administer 2 doses of Hep A vaccine at least 6 months apart to previously unvaccinated persons who live in areas where vaccination programs target older children, or who are at increased risk for infection.

12. Human papillomavirus (HPV) vaccines. (HPV4 [Gardasil] and HPV2 [Cervarix]). (Minimum age: 9 years)
Routine vaccination:
- Administer a 3-dose series of HPV vaccine on a schedule of 0, 1-2, and 6 months to all adolescents aged 11-12 years. Either HPV4 or HPV2 may be used for females, and only HPV4 may be used for males.
- The vaccine series can be started beginning at age 9 years.
- Administer the second dose 1 to 2 months after the **first** dose and the third dose 6 months after the **first** dose (at least 24 weeks after the first dose).

Catch-up vaccination:
- Administer the vaccine series to females (either HPV2 or HPV4) and males (HPV4) at age 13 through 18 years if not previously vaccinated.
- Use recommended routine dosing intervals (see above) for vaccine series catch-up.

13. Meningococcal conjugate vaccines (MCV). (Minimum age: 6 weeks for Hib-MenCY, 9 months for Menactra [MCV4-D], 2 years for Menveo [MCV4-CRM]).
Routine vaccination:
- Administer MCV4 vaccine at age 11–12 years, with a booster dose at age 16 years.
- Adolescents aged 11 through 18 years with human immunodeficiency virus (HIV) infection should receive a 2-dose primary series of MCV4, with at least 8 weeks between doses. See MMWR 2011; 60:1018–1019 available at: http://www.cdc.gov/mmwr/pdf/wk/mm6030.pdf.
- For children aged 2 months through 10 years with high-risk conditions, see below.

Catch-up vaccination:
- Administer MCV4 vaccine at age 13 through 18 years if not previously vaccinated.
- If the first dose is administered at age 13 through 15 years, a booster dose should be administered at age 16 through 18 years with a minimum interval of at least 8 weeks between doses.
- If the first dose is administered at age 16 years or older, a booster dose is not needed.
- For other catch-up issues, see Figure 2.

Vaccination of persons with high-risk conditions:

- For children younger than 19 months of age with anatomic or functional asplenia (including sickle cell disease), administer an infant series of Hib-MenCY at 2, 4, 6, and 12-15 months.
- For children aged 2 through 18 months with persistent complement component deficiency, administer either an infant series of Hib-MenCY at 2, 4, 6, and 12 through 15 months or a 2-dose primary series of MCV4-D starting at 9 months, with at least 8 weeks between doses. For children aged 19 through 23 months with persistent complement component deficiency who have not received a complete series of Hib-MenCY or MCV4-D, administer 2 primary doses of MCV4-D at least 8 weeks apart.
- For children aged 24 months and older with persistent complement component deficiency or anatomic or functional asplenia (including sickle cell disease), who have not received a complete series of Hib-MenCY or MCV4-D, administer 2 primary doses of either MCV4-D or MCV4-CRM. If MCV4-D (Menactra) is administered to a child with asplenia (including sickle cell disease), do not administer MCV4-D until 2 years of age and at least 4 weeks after the completion of all PCV13 doses. See MMWR 2011;60:1391–2, available at http://www.cdc.gov/mmwr/pdf/wk/mm6040.pdf.
- For children aged 9 months and older who are residents of or travelers to countries in the African meningitis belt or to the Hajj, administer an age appropriate formulation and series of MCV4 for protection against serogroups A and W-135. Prior receipt of Hib-MenCY is not sufficient for children traveling to the meningitis belt or the Hajj. See MMWR 2011;60:1391–2, available at http://www.cdc.gov/mmwr/pdf/wk/mm6040.pdf.
- For children who are present during outbreaks caused by a vaccine serogroup, administer or complete an age and formulation-appropriate series of Hib-MenCY or MCV4.
- For booster doses among persons with high-risk conditions refer to http://www.cdc.gov/vaccines/pubs/acip-list.htm#mening.

Additional Vaccine Information

- For contraindications and precautions to use of a vaccine and for additional information regarding that vaccine, vaccination providers should consult the relevant ACIP statement available online at http://www.cdc.gov/vaccines/pubs/acip-list.htm.
- For the purposes of calculating intervals between doses, 4 weeks = 28 days. Intervals of 4 months or greater are determined by calendar months.
- Information on travel vaccine requirements and recommendations is available at http://wwwnc.cdc.gov/travel/page/vaccinations.htm.
- For vaccination of persons with primary and secondary immunodeficiencies, see Table 13, "Vaccination of persons with primary and secondary immunodeficiencies," in General Recommendations on Immunization (ACIP), available at http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6002a1.htm; and American Academy of Pediatrics. Passive immunization. In: Pickering LK, Baker CJ, Kimberlin DW, Long SS eds. Red book: 2012 report of the Committee on Infectious Diseases. 29th ed. Elk Grove Village, IL: American Academy of Pediatrics.

VACCINE INFORMATION STATEMENT

Your Baby's First Vaccines

What You Need to Know

Many Vaccine Information Statements are available in Spanish and other languages. See www.immunize.org/vis.

Hojas de Información Sobre Vacunas están disponibles en español y en muchos otros idiomas. Visite http://www.immunize.org/vis

Your baby will get these vaccines today:

- ☐ DTaP
- ☐ Polio
- ☐ Hib
- ☐ Rotavirus
- ☐ Hepatitis B
- ☐ PCV13

(Provider: Check appropriate boxes.)

Ask your doctor about "combination vaccines," which can reduce the number of shots your baby needs. Combination vaccines are as safe and effective as these vaccines when given separately.

These vaccines protect your baby from **8 serious diseases**:

- diphtheria
- tetanus
- pertussis (whooping cough)
- *Haemophilus influenzae* type b (Hib)
- hepatitis B
- polio
- rotavirus
- pneumococcal disease

ABOUT THIS VACCINE INFORMATION STATEMENT

Please read this Vaccine Information Statement (VIS) before your baby gets his or her immunizations, and take it home with you afterward. Ask your doctor if you have any questions.

This VIS tells you about the benefits and risks of six routine childhood vaccines. It also contains information about reporting an adverse reaction and about the National Vaccine Injury Compensation Program, and how to get more information about vaccines and vaccine-preventable diseases. (Individual VISs are also available for these vaccines.)

HOW VACCINES WORK

Immunity from Disease: When children get sick with an infectious disease, their immune system usually produces protective "antibodies," which keep them from getting the same disease again. But getting sick is no fun, and it can be dangerous or even fatal.

Immunity from Vaccines: Vaccines are made with the same bacteria or viruses that cause disease, but they have been weakened or killed – or only parts of them are used – to make them safe. A child's immune system produces antibodies, just as it would after exposure to the actual disease. This means the child will develop immunity in the same way, but without having to get sick first.

VACCINE BENEFITS: WHY GET VACCINATED?

Diseases have injured and killed many children over the years in the United States. **Polio** paralyzed about 37,000 and killed about 1,700 every year in the 1950s. **Hib disease** was once the leading cause of bacterial meningitis in children under 5 years of age. About 15,000 people died each year from **diphtheria** before there was a vaccine. Up to 70,000 children a year were hospitalized because of **rotavirus** disease. **Hepatitis B** can cause liver damage and cancer in 1 child out of 4 who are infected, and **tetanus** kills 1 out of every 5 who get it.

Thanks mostly to vaccines, these diseases are not nearly as common as they used to be. But they have not disappeared, either. Some are common in other countries, and if we stop vaccinating they will come back here. This has already happened in some parts of the world. When vaccination rates go down, disease rates go up.

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

Vaccine Information Statement (Interim)
42 U.S.C. § 300aa-26
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Office Use Only

Childhood vaccines can prevent these 8 Diseases

1. DIPHTHERIA

Signs and symptoms include a thick covering in the back of the throat that can make it hard to breathe.

Diphtheria can lead to breathing problems, and heart failure.

2. TETANUS (Lockjaw)

Signs and symptoms include painful tightening of the muscles, usually all over the body.

Tetanus can lead to stiffness of the jaw so victims can't open their mouth or swallow.

3. PERTUSSIS (Whooping Cough)

Signs and symptoms include violent coughing spells that can make it hard for a baby to eat, drink, or breathe. These spells can last for weeks.

Pertussis can lead to pneumonia, seizures, and brain damage.

4. HIB (*Haemophilus influenzae* type b)

Signs and symptoms can include trouble breathing. There may not be any signs or symptoms in mild cases.

Hib can lead to meningitis (infection of the brain and spinal cord coverings); pneumonia; infections of the blood, joints, bones, and covering of the heart; brain damage; and deafness.

5. HEPATITIS B

Signs and symptoms can include tiredness, diarrhea and vomiting, jaundice (yellow skin or eyes), and pain in muscles, joints and stomach. But usually there are no signs or symptoms at all.

Hepatitis B can lead to liver damage, and liver cancer.

6. POLIO

Signs and symptoms can include flu-like illness, or there may be no signs or symptoms at all.

Polio can lead to paralysis (can't move an arm or leg).

7. PNEUMOCOCCAL DISEASE

Signs and symptoms include fever, chills, cough, and chest pain.

Pneumococcal disease can lead to meningitis (infection of the brain and spinal cord coverings), blood infections, ear infections, pneumonia, deafness, and brain damage.

8. ROTAVIRUS

Signs and symptoms include watery diarrhea (sometimes severe), vomiting, fever, and stomach pain.
Rotavirus can lead to dehydration and hospitalization.

Any of these diseases can lead to death.

How do babies catch these diseases?

Usually from contact with other children or adults who are already infected, sometimes without even knowing they are infected. A mother with **Hepatitis B** infection can also infect her baby at birth. **Tetanus** enters the body through a cut or wound; it is not spread from person to person.

Routine Baby Vaccines

Vaccine	Number of Doses	Recommended Ages	Other Information
DTaP (diphtheria, tetanus, pertussis)	5	2 months, 4 months, 6 months, 15-18 months, 4-6 years	Some children should not get pertussis vaccine. These children can get a vaccine called DT.
Hepatitis B	3	Birth, 1-2 months, 6-18 months	Children may get an additional dose at 4 months with some "combination" vaccines.
Polio	4	2 months, 4 months, 6-18 months, 4-6 years	
Hib (*Haemophilus influenzae* type b)	3 or 4	2 months, 4 months, (6 months), 12-15 months	There are 2 types of Hib vaccine. With one type the 6-month dose is not needed.
PCV13 (pneumococcal)	4	2 months, 4 months, 6 months, 12-15 months	Older children with certain chronic diseases may also need this vaccine.
Rotavirus	2 or 3	2 months, 4 months, (6 months)	Not a shot, but drops that are swallowed. There are 2 types of rotavirus vaccine. With one type the 6-month dose is not needed.

Annual **flu vaccination** is also recommended for children 6 months of age and older.

Precautions

Most babies can safely get all of these vaccines. But some babies should not get certain vaccines. Your doctor will help you decide.

- A child who has ever had a serious reaction, such as a life-threatening allergic reaction, after a vaccine dose should not get another dose of that vaccine. *Tell your doctor if your child has any severe allergies, or has had a severe reaction after a prior vaccination.* (Serious reactions to vaccines and severe allergies are rare.)
- A child who is sick on the day vaccinations are scheduled might be asked to come back for them.

Talk to your doctor . . .

- . . . before getting **DTaP vaccine**, if your child ever had any of these reactions after a dose of DTaP:
  - A brain or nervous system disease within 7 days,
  - Non-stop crying for 3 hours or more,
  - A seizure or collapse,
  - A fever of over 105°F.
- . . . before getting **Polio vaccine**, if your child has a life-threatening allergy to the antibiotics neomycin, streptomycin or polymyxin B.
- . . . before getting **Hepatitis B vaccine**, if your child has a life-threatening allergy to yeast.
- . . . before getting **Rotavirus Vaccine**, if your child has:
  - SCID (Severe Combined Immunodeficiency),
  - A weakened immune system for any other reason,
  - Digestive problems,
  - Recently gotten a blood transfusion or other blood product,
  - Ever had intussusception (bowel obstruction that is treated in a hospital).
- . . . before getting **PCV13** or **DTaP** vaccine, if your child ever had a severe reaction after any vaccine containing diphtheria toxoid (such as DTaP).

Risks

Vaccines can cause side effects, like any medicine.

Most vaccine reactions are **mild**: tenderness, redness, or swelling where the shot was given; or a mild fever. These happen to about 1 child in 4. They appear soon after the shot is given and go away within a day or two.

Other Reactions: Individual childhood vaccines have been associated with other mild problems, or with moderate or serious problems:

DTaP Vaccine

Mild Problems: Fussiness (up to 1 child in 3); tiredness or poor appetite (up to 1 child in 10); vomiting (up to 1 child in 50); swelling of the entire arm or leg for 1-7 days (up to 1 child in 30) – usually after the 4th or 5th dose.

Moderate Problems: Seizure (1 child in 14,000); non-stop crying for 3 hours or longer (up to 1 child in 1,000); fever over 105°F (1 child in 16,000).

Serious problems: Long term seizures, coma, lowered consciousness, and permanent brain damage have been reported. These problems happen so rarely that it is hard to tell whether they were actually caused by the vaccination or just happened afterward by chance.

Polio Vaccine / Hepatitis B Vaccine / Hib Vaccine

These vaccines have not been associated with other mild problems, or with moderate or serious problems.

Pneumococcal Vaccine

Mild Problems: During studies of the vaccine, some children became fussy or drowsy or lost their appetite.

Rotavirus Vaccine

Mild Problems: Children who get rotavirus vaccine are slightly more likely than other children to be irritable or to have mild, temporary diarrhea or vomiting. This happens within the first week after getting a dose of the vaccine.

Serious Problems: Studies in Australia and Mexico have shown a small increase in cases of intussusception within a week after the first dose of rotavirus vaccine. So far, this increase has not been seen in the United States, but it can't be ruled out. If the same risk were to exist here, we would expect to see 1 to 3 infants out of 100,000 develop intussusception within a week after the first dose of vaccine.

What if my child has a serious problem?

What should I look for?

Look for anything that concerns you, such as signs of a severe allergic reaction, very high fever, or behavior changes.

Signs of a severe allergic reaction can include hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, and weakness. These would start a few minutes to a few hours after the vaccination.

What should I do?

- If you think it is a severe allergic reaction or other emergency that can't wait, call 9-1-1 or get the person to the nearest hospital. Otherwise, call your doctor.
- Afterward, the reaction should be reported to the "Vaccine Adverse Event Reporting System" (VAERS). Your doctor might file this report, or you can do it yourself through the VAERS web site at www.vaers.hhs.gov, or by calling 1-800-822-7967.

VAERS is only for reporting reactions. They do not give medical advice.

The National Vaccine Injury Compensation Program

The National Vaccine Injury Compensation Program (VICP) was created in 1986.

People who believe they may have been injured by a vaccine can learn about the program and about filing a claim by calling **1-800-338-2382**, or visiting the VICP website at **www.hrsa.gov/vaccinecompensation**.

For More Information

- Ask your doctor or other healthcare professional.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call **1-800-232-4636** (**1-800-CDC-INFO**) or
  - Visit CDC's website at **www.cdc.gov/vaccines**