



MESSAGE FROM THE SECTION ADMINISTRATOR

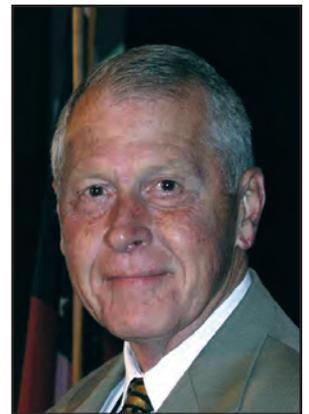
CHARLES H. ALEXANDER

Welcome to the Fall 2014 edition of IMMU-NEWS.

It is hard to believe that summer has come and gone and it is fall already! There is a slight, yet welcome, change in the weather as we prepare for fall festivities such as Halloween and Thanksgiving. Along with these welcomed changes, it is also the time for seasonal illnesses such as the dreaded flu. The good news is that flu is preventable! Read ahead to learn about the flu—you will find interesting facts and tips for prevention. Also in this issue you will read about human papilloma virus (HPV) and prevention, adult immunizations, and perinatal hepatitis B. Be sure not to miss our flu flyer showcase at the end of this edition. The FDOH Communications Office has created several new flyers with a spin on the Halloween season.

We have had some program staff changes of note since the last issue.

Morgan MacLean has left the Immunization Section, but is still with the department and is now working for the Division of Public Health Statistics and Performance Management. We congratulate Morgan on her new position and thank her for providing outstanding service to the Florida SHOTS team.



Charles H. Alexander

The Immunization Section welcomes several new staff members. We are pleased to announce our new Field Operations Manager and CDC Public Health Advisor, Dawn Childs. Dawn is a retired nurse with the United States Air Force. We welcome Jacqueline Senior as our new South Regional Field Staff Manager. Jacqueline was previously an Immunization Consultant from Area 7. Sheila Price also joined our team as the North Regional Field Staff Manager. Sheila previously worked for the department in the HIV/AIDS Section. Welcome Dawn, Jacqueline, and Sheila! We look forward to working with you.

We wish you all a happy and healthy fall. Stay safe, enjoy the cooler weather, and do not forget to get your flu shot.

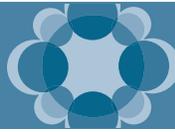
Enjoy this issue and visit us at ImmunizeFlorida.org!

In this Issue:

- MESSAGE FROM THE SECTION ADMINISTRATOR
- Influenza: Questions and Answers—Information About the Disease and Vaccines
- Safe and Effective Vaccine that Prevents Cancer
- Give a Strong Recommendation for HPV Vaccine to Increase Uptake!
- Adults Need Immunizations Too
- FDOH—Orange County School Health
- VFC Program Updates
- Vaccine Information Statements
- Morbidity and Mortality Weekly Report Articles
- Prevention of Perinatal Hepatitis B Virus Transmission
- Vaccinations in the Now: Real-Time Data Upload Debuts



IMMU-NEWS is a publication of the:
Florida Department of Health
Division of Disease Control and Health Protection
Immunization Section



Influenza: Questions and Answers Information About the Disease and Vaccines

What causes influenza?

Viruses cause influenza. There are two basic types, A and B, which can cause clinical illness in humans. Their genetic material differentiates them. Influenza A can cause moderate to severe illness in all age groups and infects humans and other animals.

Influenza B causes milder disease and affects only humans, primarily children. Subtypes of the type A influenza virus are identified by two antigens (proteins involved in the immune reaction) on the surface of the virus. These antigens can change, or mutate, over time. An antigen "shift" (major change) creates a new influenza virus and an epidemic is likely among the unprotected population. This happened when the novel H1N1 influenza virus appeared in March 2009 and led to a major pandemic, lasting until the summer of 2010.

How does influenza spread?

Influenza is transmitted through the air from the respiratory tract of an infected person. It can also be transmitted by direct contact with respiratory droplets.

How long does it take to develop symptoms of influenza after being exposed?

The incubation period of influenza is usually two days but can range from one to four days.

What are the symptoms of influenza?

Typical influenza disease is characterized by abrupt onset of fever, aching muscles, sore throat and nonproductive cough. Additional symptoms may include runny nose, headache, a burning sensation in the chest, and eye pain and sensitivity to light. Typical influenza disease does not occur in every infected person. Someone who has been previously exposed to similar virus strains (through natural infection or vaccination) is less likely to develop serious clinical illness.

What is the best way to prevent influenza?

The best way to prevent influenza is with annual vaccination.

When is a person with influenza contagious?

A person is most likely to pass on the virus during the period beginning one to two days before the onset of symptoms and ending four to five days after the onset.

Who should get influenza vaccine?

Annual influenza vaccination is recommended for all people ages six months and older who do not have a contraindication to the vaccine.



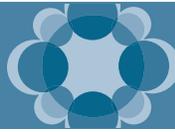
How safe is this vaccine?

Influenza vaccine is very safe. The most common side effects of the injectable (inactivated) influenza vaccine include soreness, redness, or swelling at the site of the injection. These reactions are temporary and occur in 15–20 percent of recipients. Less than 1 percent of vaccine recipients develop symptoms such as fever, chills, and muscle aches for 1 to 2 days following the vaccination. Experiencing these non-specific side effects does not mean that you are getting influenza. Healthy children ages 2 through 4 years who received the live attenuated virus (nasal spray) vaccine during clinical trials appeared to have an increased chance of wheezing. Consequently, children with a history of recurrent wheezing or have had a wheezing episode within the past 12 months are not recommended to receive the live nasal spray vaccine; instead, they should be given the inactivated (injectable) vaccine. Healthy adults receiving the live influenza vaccine reported symptoms such as cough, runny nose, sore throat, chills, and tiredness at a rate 3–18 percent higher than

continued next page

Standard Abbreviations in This Issue

- ACIP: Advisory Committee on Immunization Practices
- CDC: Centers for Disease Control and Prevention
- CHD: County Health Department
- DTaP: Diphtheria-Tetanus-Pertussis
- FDOH: Florida Department of Health
- Florida SHOTS™: Florida State Health Online Tracking System
- Hep A: Hepatitis A
- Hep B: Hepatitis B
- Hib: *Haemophilus influenzae* B
- HPV: Human Papillomavirus
- IIV: Inactivated influenza vaccine
- LAIV: Live attenuated influenza vaccine
- MCV: Meningococcal Conjugate Vaccine
- MMR: Measles-Mumps-Rubella
- MMRV: Measles-Mumps-Rubella-Varicella
- MMWR: Morbidity and Mortality Weekly Report
- PCV: Pneumococcal Conjugate Vaccine
- PPSV: Pneumococcal Polysaccharide Vaccine
- Tdap: Tetanus-diphtheria-pertussis
- VFC: Vaccines For Children



for placebo recipients. Serious adverse reactions to either vaccine are very rare. Such reactions are most likely the result of an allergy to a vaccine component, such as the egg protein left in the vaccine after growing the virus. In 1976, the swine flu (injectable) vaccine was associated with a severe illness called Guillain-Barré syndrome (GBS), a nerve condition that can result in temporary paralysis. Injectable influenza vaccines since then have not been clearly linked with GBS, because the disease is so rare it is difficult to obtain a precise estimate of any increase in risk. However, as a precaution, any person without a high risk medical condition who previously experienced GBS within six weeks of an influenza vaccination should generally not be vaccinated. Instead, their physician may consider using antiviral drugs during the time of potential exposure to influenza.

**DON'T GET THE FLU.
DON'T SPREAD THE FLU.
FLU ENDS WITH U!**

GET VACCINATED.

Can the vaccine cause influenza?

No. Neither the injectable (inactivated) vaccine nor the live attenuated (nasal spray) vaccine can cause influenza. The injectable influenza vaccine contains only killed viruses and cannot cause influenza disease. Fewer than one percent of people who are vaccinated develop influenza-like symptoms, such as mild fever and muscle aches, after vaccination. These side effects are not the same as having the actual disease.

The nasal spray influenza vaccine contains live attenuated (weakened) viruses that can produce mild symptoms similar to a cold. While the viruses are able to grow in the nose and throat tissue and produce protective immunity, they are weakened and do not grow effectively in the lung. Consequently, they cannot produce influenza disease.

Protective immunity develops one to two weeks after vaccination. It is always possible that a recently vaccinated person can be exposed to influenza disease before their antibodies are formed and consequently develop disease. This can result in someone erroneously believing they developed the disease from the vaccination.

Also, to many people “the flu” is any illness with fever and cold symptoms. If they get any viral illness, they may blame it on the influenza vaccination or think they got “the flu” despite being vaccinated. Influenza vaccine only protects against certain influenza viruses, not all viruses.

I heard there was a new influenza vaccine that can be given to people with severe egg allergy. Is that true?

In January 2013 the U.S. Food and Drug Administration (FDA) licensed Flublok[®], the first influenza vaccine available in the United States that is completely egg-free. Unlike current production methods for other influenza vaccines, production of Flublok does not use the whole influenza virus or chicken eggs in its manufacturing process. It is licensed for persons 18 through 49 years of age.

If the severe allergy to eggs is diagnosed as anaphylactic allergy, and the person is age 18 through 49 years, then the provider can consider using Flublok. Flublok is not currently licensed for children younger than 18 years or persons older than 49 years. If Flublok is not available, or the person is younger than 18 years or older than 49 years, inactivated influenza vaccine should be administered by a physician with experience in the recognition and management of severe allergic conditions.

Adapted from the Immunization Action Coalition

Safe and Effective Vaccine that Prevents Cancer

According to data from the CDC 2013 National Immunization Survey, HPV vaccination rates in girls and boys aged 13–17 remain low despite a slight increase in vaccination coverage since 2012. This highlights the need for more education regarding this safe and effective vaccine that prevents cancer.

HPV is the name of a group of viruses that includes more than 100 different types. More than 40 of these viruses infect the genital area, including the skin of the penis, vulva, anus, and the lining of the vagina, cervix, rectum or throat. Some of these viruses, called “high risk types” can cause cancer of the cervix, vulva, vagina, cervix, rectum, or throat. About 70 percent of cervical cancers are caused by HPV types 16 and 18. More than 90 of genital warts are associated with HPV types 6 and 11.

HPV is the most common sexually transmitted infection in the United States. About 79 million Americans are currently infected with HPV and an estimated 14 million persons are newly infected every year. Although most infections cause no symptoms and are self-limited, persistent HPV infection can cause cervical cancer in women as well as other anogenital cancers, oropharyngeal cancer, and genital warts in men and women.

The best way to eliminate the risk of acquiring HPV infection is to refrain from any genital contact with another individual. Condoms can reduce the risk of genital warts and cervical cancer. However, it is not known how much protection a condom provides against HPV, because skin that is not covered by a condom can be exposed to the virus. People can also reduce their risk for acquiring genital HPV infection by getting the HPV vaccine.

continued next page



There are two HPV vaccines currently available, Gardasil[®] and Cervarix[®]. Gardasil is licensed for use in males and females and protects against four HPV types—6, 11, 16 and 18. Cervarix protects against HPV types 16 and 18 and is licensed for use in females. CDC, The American Academy of Pediatrics, The American Academy of Family Physicians, and the American College of Obstetricians and Gynecologists all recommend routine HPV vaccination of boys and girls at 11 or 12 years of age. The CDC's ACIP recommends catch-up vaccination for females through 26 years of age and for males through 21 years of age. In addition, vaccination is recommended for men age 22 through 26 years who have sex with men or are immunocompromised as a result of



disease or medication. The schedule for both Gardasil and Cervarix consists of three injections over a six-month period. The vaccine provides the best protection when given before the onset of sexual activity. However, people who are sexually active may also benefit from vaccination.

Gardasil and Cervarix are highly effective in preventing infection with the types of HPV included in the vaccine. Studies have shown that both Gardasil and Cervarix prevent nearly 100 percent of the precancerous cervical cell changes caused by the types of HPV included in the vaccine for up to 8 years after vaccination. Among males, efficacy of Gardasil for prevention of genital warts was 89 percent and efficacy for the prevention of precancerous lesions of the anus was 78 percent.

For more information, see the ACIP recommendations from CDC at: www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hpv.html. To view the CDC 2013 National Immunization Survey results you may visit: www.cdc.gov/vaccines/imz-managers/coverage/imz-coverage.html.

Give a Strong Recommendation for HPV Vaccine to Increase Uptake!

Dear Colleague:

The American Academy of Family Physicians (AAFP), American Academy of Pediatrics (AAP), American College of Obstetricians and Gynecologists (ACOG), American College of Physicians (ACP), the CDC, and the Immunization Action Coalition (IAC) are asking you to urge your patients to get vaccinated against HPV.

HPV vaccine is cancer prevention. However, HPV vaccine is underutilized in our country, despite the overwhelming evidence of its safety and effectiveness. While vaccination rates continue to improve for the other adolescent vaccines, HPV vaccination rates have not. Missed opportunities data suggest that providers are

not giving strong recommendations for HPV vaccine when patients are 11 or 12 years old. The health care provider recommendation is the single best predictor of vaccination. Recent studies show that a patient who receives a provider recommendation is 4–5 times more likely to receive the HPV vaccine.^{1,2} What you say, and how you say it, matters. A half-hearted recommendation to a patient may not only result in the patient leaving your practice unvaccinated, but may lead the patient to believe that HPV vaccine is not as important as the other adolescent vaccines. The undersigned organization hope that this letter, which provides key facts about HPV vaccine safety and effectiveness, will lead you to recommend HPV vaccination—firmly and strongly—to your patients. Your recommendation will reflect your commitment to prevent HPV-associated cancers and disease in the United States.



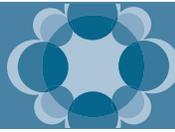
HPV-associated disease³

- Approximately 79 million persons in the United States are infected with HPV, and approximately 14 million people in the United States will become newly infected with HPV each year.
 - Each year, an estimated 26,000 cancers are attributable to HPV; about 17,000 in women and 9,000 in men.
 - Cervical cancer is the most common HPV-associated cancer among women, an oropharyngeal cancers are the most common among men.
- *Despite these statistics, the use of HPV vaccination to prevent HPV infection is limited and immunization rates remain low.*

Prevention of HPV-associated disease by vaccination

- Two vaccines (bivalent/HPV2 [Cervarix] and quadrivalent/HPV4 [Gardasil]) are available to protect against HPV 16 and 18, the types that cause most cervical and other anogenital cancers, as well as some oropharyngeal cancers.
- The ACIP recommends routine vaccination of girls age 11 or 12 years with the three-dose series of either HPV vaccine and routine vaccination of boys age 11 or 12 years with the three-dose series of HPV4.

continued next page



- Vaccination is recommended for females through age 26 years and for males through age 21 years who were not vaccinated when they were younger.
- ▶ *In 2012, only 33 percent of teenage girls ages 13–17 years had received three doses of HPV vaccine. This was the first year in which HPV vaccination coverage rates did not increase from the prior year.*

Safety of HPV vaccine

- More than 175 million doses of HPV vaccine have been distributed worldwide and 57 million doses have been distributed in the United States.
- More than seven years of post-licensure vaccine safety monitoring in the United States provide continued evidence of the safety of HPV4. Data on safety are also available from post-licensure monitoring in other countries for both vaccines and provide continued evidence of the safety of HPV2 and HPV4.
- Syncope can occur among adolescents who receive any vaccines, including HPV vaccine. ACIP recommends that clinicians consider observing patients for 15 minutes after vaccination.
- ▶ *Regardless of a safety profile that is similar to the other adolescent vaccines, parents cite safety concerns as one of the top five reasons they do not intend to vaccinate daughters against HPV.*

Efficacy of HPV vaccines

- Among women who have not been previously infected with a targeted HPV type, both vaccines have over 95 percent efficacy in preventing cervical precancers caused by HPV 16 or 18.
- HPV4 also demonstrated nearly 100 percent vaccine efficacy in preventing vulvar and vaginal precancers, and genital warts in women caused by the vaccine types.
- In males, HPV4 demonstrated 90 percent vaccine efficacy in preventing genital warts and 75 percent vaccine efficacy in preventing anal precancers caused by vaccine types.
- ▶ *Since the vaccine does not protect against all HPV types, it does not replace other prevention strategies, such as regular cervical cancer screening.*

What you say matters; how you say it matters even more.

Based on research conducted with parents and physicians, CDC suggests recommending the HPV vaccine series the same way you recommend the other adolescent vaccines.

Parents may be interested in vaccinating, yet still have questions. Taking the time to listen to parents' questions helps you save time and give an effective response. CDC has created an excellent tip sheet to assist you in answering questions parents may have about HPV vaccines. This tip sheet and many other tools on the HPV vaccine are available at www.cdc.gov/vaccines/youarethekey.

As a health care provider, we urge you to improve the strength and consistency of your recommendation for HPV vaccination to your patients.

Your recommendation is the number one reason why someone will get the HPV vaccine and be protected from HPV-associated cancers and disease.

Signed:

Reid B. Blackwelder, MD, President
American Academy of Family Physicians

Thomas K. McInerney, MD, President
American Academy of Pediatrics

Jeanne Conry, MD, President
American College of Obstetricians and Gynecologists

Molly Cooke, MD, President
American College of Physicians

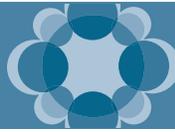
Thomas Frieden, MD, Director
Centers for Disease Control and Prevention

Deborah Wexler, MD, Executive Director
Immunization Action Coalition



REFERENCES:

1. Health care provider recommendation, human papillomavirus vaccination, and race/ethnicity in the U.S. National Immunization Survey. *American Journal of Public Health*. 2013. 103(1):164–169.
2. Factors associated with human papillomavirus vaccine-series initiation and health care provider recommendation in U.S. adolescent females: 2007 National Survey of Children's Health. *Vaccine*. 2012. 30(20):3112–3118.
3. Human papillomavirus-associated cancers – United States, 2004–2008. *MMWR*. 2012. 61(15): 258–261.
4. Human papillomavirus vaccination coverage among adolescent girls, 2007–2012, and Post licensure Vaccine Safety Monitoring, 2006–2013—United States. *MMWR*. 2013. 62(29): 591–595.



Adults Need Immunizations Too

Every year thousands of adults in the U.S. still suffer serious illness, are hospitalized, and even die due to disease for which vaccines are available, such as pertussis (whooping cough), hepatitis A and B, flu and pneumococcal diseases and shingles.

In the U.S., vaccines have greatly reduced or eliminated many infectious diseases that once routinely killed or harmed many infants, children, and adults. However, the viruses and bacteria that cause vaccine-preventable disease and death still exist and can be passed on to people who are not protected by vaccines.

Vaccines are an important step in protecting adult health. Even if you were fully vaccinated as a child, the protection from some vaccines you received can wear off. You may also be at risk for other disease due to your age, job, lifestyle, travel or health conditions. The CDC recommends vaccines for all adults to prevent getting and spreading diseases. Vaccines are especially important for older adults and those with chronic health conditions who are at increased risk to develop complications from certain vaccine-preventable diseases. Complications from typical childhood diseases can be more severe in adults.

Each time you visit your health care provider, ask what vaccines you might need. Health care providers should assess the patient's need for vaccine with every visit. Education and recommendation of needed vaccine(s) should be provided. Health care providers should administer the recommended vaccines or refer to an immunizing provider to receive them.

All adults need:

- Influenza (flu): All adults should get flu vaccine every year.
- Tdap: Every adult should get one dose of Tdap vaccine. Then, every 10 years after that, get a Td (tetanus-diphtheria) vaccine. Pregnant women should get a dose of Tdap during every pregnancy, even if they have had it before.

Other vaccines that may be needed depending on age, job, lifestyle, travel, or health conditions:

- Hep A
- Hep B
- HPV
- MMR
- Meningococcal (MCV4, MPSV4)
- PCV13, PPSV23
- Varicella (Chickenpox)
- Zoster (shingles)
- Hib

Please visit CDC's website for more specific guides on adult vaccines at: www.cdc.gov/vaccines/adults/rec-vac/index.html.

The 2014 Recommended Adult Immunizations Schedule is located at: www.cdc.gov/vaccines/schedules/downloads/adult/adult-schedule-easy-read.pdf.

In the September 19, 2014, MMWR, the CDC published new recommendations for the use of 13-Valent Pneumococcal Conjugate Vaccine and 23-Valent Pneumococcal Polysaccharide Vaccine Among Adults Aged ≥65 Years: Recommendations of the ACIP. The ACIP recommends routine use of 13-valent pneumococcal conjugate vaccine (PCV13 [Pneumovax 13, Wyeth Pharmaceuticals, Inc., a subsidiary of Pfizer Inc.]) among adults aged ≥65 years. Adults 65 years of age or older are at increased risk for pneumococcal disease. One dose of PCV13 is also recommended for adults 19 years or older with conditions that weaken the immune system, such as HIV infection, organ transplantation, leukemia, lymphoma, and severe kidney disease. If you have one of these conditions, talk to your doctor. You can find additional PCV13 vaccine recommendations at: www.cdc.gov/vaccines/vpd-vac/pneumo/vac-PCV13-adults.htm.

Remember immunizations are not just for children. Talk to your health care provider at your next visit regarding which vaccines are right for you! Keep your vaccinations up-to-date.

For more information, call (850) 245-4342 or visit: www.immunizeflorida.com.

FDOH–Orange County School Health

FDOH–Orange County School Health and the Neighborhood Center for Families nurses and staff had a very busy back-to-school season. Work done at Orange County Public Schools Early Learning Coalition, Neighborhood Centers in Taft, Bithlo and Englewood are shown below:

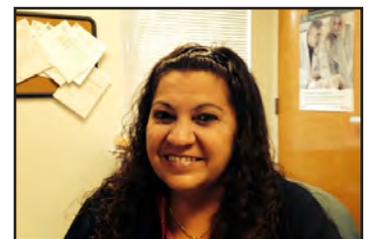
From July 21 to Aug 29, 2014

- Total # of Students seen: **1,533**
- Total # of Vaccinations administered: **2,267**
- Total # of DH Form 687 (Immunization Clinic Record Card): **1,895**
- Total # of DH Form 680 (Certification of Immunization): **1,712**

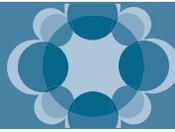
Employees include but not limited to Zulma Martinez, RN; Jossett Samuels, RN; Yaling Chou, RN; Sherran Buckner, HST; Silvia Martinez, RN; Karen O'Brien, RN; and Luz Higuera, RN.



Yaling Chou, RN



Zulma Martinez, RN



VFC Program Updates

The VFC Program is going through a multitude of changes during the last quarter of 2014. As of October 1, 2014 the VFC Blast Fax is a thing of the past. The VFC Program office will now communicate with providers using VFC Primary Contact emails found within Florida SHOTS and any additional emails that providers have requested the office use. If your Florida SHOTS account does not have a primary contact email or you have not communicated additional emails you would like the Program Office to use, please send this information immediately to FloridaVFC@FLHealth.gov. Second, enrollment and reenrollment for each VFC site now requires two completed forms; the Provider Agreement and Provider Profile. The VFC Office CANNOT process information related to any type of enrollment without both of these forms completed. Providers can find these forms at www.floridahealth.gov/programs-and-services/immunization/vaccines-for-children/enrollment.html. Next, the Florida VFC Provider Handbook is now updated, current and available on our website at: www.floridahealth.gov/programs-and-services/immunization/vaccines-for-children/provider-handbook.html. Last, the VFC Temperature Monitoring with Florida SHOTS rollout date was changed from the beginning of October. Training began October 21, 2014 and the functionality will be available within Florida SHOTS the second week of November. Check your emails for communication about training dates and times. Remember, all VFC Temperature Monitoring within Florida SHOTS will be required as of January 1, 2015.



Vaccine Information Statements

Vaccine Information Statements (VISs) are information sheets produced by the CDC that explain both the benefits and risks of vaccine to vaccine recipients. Federal law requires that health care staff provide a VIS to a patient, parent, or legal representative before each dose of certain vaccines.

Multi

THE MULTI-VACCINE VIS IS UPDATED (10/22/14) [Interim]

Routine

- DTaP (5/17/07)
- Hepatitis A (10/25/11) [Interim]

- Hepatitis B (2/2/12) [Interim]
- Hib (2/4/14) [Interim]
- HPV - Cervarix (5/3/11) [Interim]
- HPV - Gardasil (5/17/13) [Interim]
- Influenza - Live, Intranasal (8/19/14) [Interim]
- Influenza - Inactivated (8/19/14) [Interim]
- MMR (4/20/12) [Interim]
- MMRV (5/21/10) [Interim]
- Meningococcal (10/14/2011) [Interim]
- Pneumococcal Conjugate (PCV13) (2/27/13) [Interim]
- Pneumococcal Polysaccharide (PPSV23) (10/06/09)
- Polio (11/08/11) [Interim]
- Rotavirus (8/26/13) [Interim]
- Shingles (Herpes Zoster) (10/06/09)
- Tdap (5/9/13) [Interim]
- Td (Tetanus, diphtheria) (2/4/14) [Interim]
- Varicella (Chickenpox) (3/13/08) [Interim]

I Want Health Insurance for My Child. Who Do I Call?

Florida KidCare is the state health insurance program for uninsured children under age 19. It includes 4 different programs: MediKids, Healthy Kids, Children's Medical Services, and Medicaid. When you apply for the insurance, Florida KidCare will check which program your child may be eligible for based on age and family income.

Fl♥rida KidCare

If you would like to be added to the Immunization Section's mailing list and receive **IMMU-NEWS** electronically via email, please visit our mailing list registration page at: www.floridahealth.gov/programs-and-services/immunization/mailling-list.html.





Morbidity and Mortality Weekly Report Articles

The MMWR is a series prepared by the CDC. Known as “the voice of CDC,” the MMWR series is the agency’s primary vehicle for scientific publication of timely useful public health information and recommendations. The data provided is based on weekly reports to CDC by state health departments.

The following MMWR articles feature immunization information and recommendations:

National, State, and Selected Local Area Vaccination Coverage among Children Aged 19–35 Months—United States, 2013:

Vaccination will prevent an estimated 322 million illnesses, 21 million hospitalizations, and 732,000 deaths during their lifetimes. Since 1994, the National Immunization Survey (NIS) has monitored vaccination coverage among children aged 19–35 months in the United States. This report describes national, regional, state, and selected local area vaccination coverage estimates for children born January 2010–May 2012, based on results from the 2013 NIS. The national average for the combined 4:3:1:3:3:1:4 childhood series is 70.4 percent. Florida’s rate is 70.0 percent. The combined (4:3:1:3*:3:1:4) vaccine series includes ≥4 doses of diphtheria, tetanus and acellular pertussis (DTaP), ≥3 doses of poliovirus vaccine, ≥1 dose of measles-containing vaccine, full series of Hib vaccine (≥3 or ≥4 doses, depending on product type), ≥3 doses of Hepatitis B, ≥1 dose of varicella vaccine, and ≥4 doses of pneumococcal conjugate vaccine. You can read the article in its entirety at: www.cdc.gov/mmwr/preview/mmwrhtml/mm6334a1.htm?s_cid=mm6334a1_e.

Human Papillomavirus Vaccination—Recommendations of the Advisory Committee on Immunization Practices (ACIP):

This report summarizes the epidemiology of HPV and associated diseases, describes the licensed HPV vaccines, provides updated information on vaccines from clinical trials and post-licensure safety studies and compiles recommendations from CDC’s ACIP for use of HPV vaccines. This article is available in its entirety at: www.cdc.gov/mmwr/preview/mmwrhtml/rr6305a1.htm?s_cid=rr6305a1_e.

Prevention and Control of Seasonal Influenza with Vaccines—Recommendations of the Advisory Committee on Immunization Practices—United States, 2014–2015:

Routine annual influenza vaccination is recommended for all persons aged ≥6 months. Vaccine virus strains included in the 2014–15 U.S. trivalent influenza vaccines will contain hemagglutinin (HA) derived from an A/California/7/2009 (H1N1)-like virus, an A/Texas/50/2012 (H3N2)-like virus, and a B/Massachusetts/2/2012-like (Yamagata lineage) virus. Quadrivalent influenza vaccines will contain these antigens, and also a B/Brisbane/60/2008-like (Victoria lineage) virus.

When immediately available, LAIV should be used for healthy children aged 2 through 8 years who have no contraindications or

precautions (Category A). If LAIV is not immediately available, IIV should be used. Vaccination should not be delayed to procure LAIV.

LAIV should not be used in the following populations:

- Persons aged <2 years or >49 years
- Those with contraindications listed in the package insert:
- Children aged 2 through 17 years who are receiving aspirin or aspirin-containing products; Persons who have experienced severe allergic reactions to the vaccine or any of its components, or to a previous dose of any influenza vaccine
- Pregnant women
- Immunosuppressed persons
- Persons with a history of egg allergy
- Children aged 2 through 4 years who have asthma or who have had a wheezing episode noted in the medical record within the past 12 months, or for whom parents report that a health care provider stated that they had wheezing or asthma within the last 12 month;
- Persons who have taken influenza antiviral medications within the previous 48 hours
- Persons of any age with asthma might be at increased risk for wheezing after administration of LAIV

Influenza Vaccination of Persons with a History of Egg Allergy

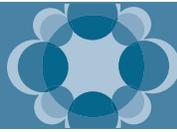
Persons with a history of egg allergy who have experienced only hives after exposure to egg should receive influenza vaccine. IIV or trivalent recombinant influenza vaccine (RIV3) should be used. RIV3 may be used for persons aged 18 through 49 years who have no other contraindications. However, IIV (egg- or cell-culture based) may also be used.

Other influenza vaccine recommendations pertaining to persons with egg allergies are listed in the article. To read the entire report visit: www.cdc.gov/mmwr/preview/mmwrhtml/mm6332a3.htm?s_cid=mm6332a3_e.

National, Regional, State and Selected Local Area Vaccination Coverage among Adolescents Aged 13–17 Years—United States, 2013:

ACIP recommends: Adolescents routinely receive 1 dose of Tdap vaccine, 2 doses of MCV (MenACWY) vaccine, and 3 doses of HPV vaccine.

To assess vaccination coverage among adolescents aged 13–17 years, CDC analyzed data from the 2013 National Immunization Survey-Teen (NIS-Teen). This report summarizes the results of that analysis, which show that from 2012 to 2013, coverage increased for each of the vaccines routinely recommended for adolescents: from 84.6 percent to 86.0 percent for Tdap dose; from 74.0 percent to 77.8 percent for MenACWY dose; from 53.8 percent to 57.3 percent for HPV dose among females, and from 20.8 percent to 34.6 percent for HPV dose among males.



Coverage varied by state and local jurisdictions and by U.S. Department of Health and Human Services region. Healthy People 2020 vaccination targets for adolescents aged 13–15 years were reached in 42 states for Tdap dose, 18 for MenACWY dose, and 11 for varicella doses. No state met the target for HPV dose.

The latest vaccination coverage estimates for adolescents show only small increase for HPV vaccine. CDC officials announced that the number of girls and boys aged 13–17 years receiving HPV vaccine remains unacceptably low. You can read the article in its entirety at: www.cdc.gov/mmwr/preview/mmwrhtml/mm6329a4.htm.

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):

The CDC released a new recommendation for the use of pneumococcal vaccines among adults. Adults 65 years or older are recommended to get the pneumococcal conjugate vaccine PCV13 and the pneumococcal polysaccharide vaccine PPSV23.

As part of the new recommendation, adults 65 years of age or older who have not previously received any pneumococcal vaccines or whose previous vaccination history is unknown should receive a dose of PCV13 first, followed 6–12 months later by a dose of PPSV23. Adults 65 years of age or older who have previously received PPSV23 should receive PCV13 at least one year since their most recent dose of PPSV23.

It is also important to remember that pneumococcal vaccines are also recommended for adults 19 years or older with certain health



conditions and lifestyles. For more information on pneumococcal vaccination visit: www.cdc.gov/vaccines/vpd-vac/pneumo/default.htm.

You can read the article in its entirety at: www.cdc.gov/mmwr/preview/mmwrhtml/mm6337a4.htm?s_cid=mm6337a4_e.

Prevention of Perinatal Hepatitis B Virus Transmission

Hepatitis B virus (HBV) infection is the most common form of chronic hepatitis worldwide. The numbers are very telling. The World Health Organization (WHO) estimates more than 2 billion people have been infected with HBV, 360 million people are chronically infected, and 600,000 people die annually from complications of HBV-related liver disease. Most of those infected with chronic hepatitis B obtained it as an infant through “vertical” transmission from the mother, which occurs either in utero (less common) or during the birthing process, or through “horizontal” transmission, which occurs when the child is exposed to an infected household contact. The hepatitis B virus is not a fragile virus; it can live on surfaces for up to seven days!

In the United States, approximately 25,000 infants are born annually to hepatitis B surface antigen (HBsAg) positive pregnant women. Strategies for reducing new chronic HBV infections in exposed infants include

maternal screening for HBsAg, post-exposure prophylaxis consisting of administration of the hepatitis B vaccination and HBIG (hepatitis B immune globulin) within 12 hours of birth, completion of the series of hepatitis B vaccines per the recommended schedule, and post-serology testing to determine immunity status after the completion of the hepatitis B vaccine series.

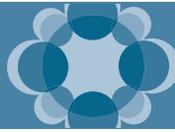


Vertical HBV transmission results in 85–95 percent of infants becoming infected if no post-exposure prophylaxis is given. Once infected, 90 percent will become chronically infected. Up to 25 percent of chronically-infected infants will die from primary liver cancer or cirrhosis of the liver as adults. Conversely, if a person becomes infected with HBV as an adult, they have a 95 percent likelihood of resolving the acute HBV infection, which translates to only a 5 percent risk for developing a chronic HBV infection. Infants have higher premature death rates from liver cancer and cirrhosis due to longer chronic exposure over their lifetimes.

If an HBV infection continues to be active for more than six months, it is considered to be chronic. A resolved acute infection is not considered to be a risk factor for subsequent cirrhosis or liver cancer. These statistics point out the importance of the need for intervention to protect infants and children from HBV infection. In 1989, the FDOH implemented a policy for detection and prevention of perinatal hepatitis B to identify and manage infants born to women who are HBsAg-positive. The program has evolved significantly since then, but the basic goals remain the same.

The Perinatal Hepatitis B Prevention Program (PHBPP) has three general goals: First, is to identify pregnant women who are HBsAg-

continued next page



positive and make appropriate referrals for treatment and follow up, if indicated. Second, is to ensure proper immunoprophylaxis and testing of the infants and identified household contacts of the mother. Third, is to maintain a tracking system for perinatal hepatitis B case management activities. Electronic tracking began in 2000, and perinatal data is now being entered into the Florida Merlin Communicable Disease Tracking System (MERLIN).

The hepatitis B vaccine was first licensed in the United States in 1981 and is the only vaccine given at birth. It is also the first vaccine to prevent a sexually-transmitted disease and the first cancer prevention vaccine. In 2005, in an effort to improve the proportion of infants receiving their first dose of hepatitis B vaccine at birth, The CDC's ACIP recommended routine administration of a birth dose of the hepatitis B vaccine to all medically stable infants. Administering the hepatitis B vaccine shortly after birth provides a safety net to optimize protection of all infants from medical errors in identifying those most at risk.



There are several types of medical errors that can occur: HBsAg screening test is misordered (incorrect test was done), misinterpreted, mistranscribed or miscommunicated. Errors are made by a broad range of perinatal health care providers including obstetricians, family physicians, pediatricians, nurses, lab technicians and clerical staff. Medical errors can occur at any time—beginning with the woman's first prenatal visit and extending beyond the mother's and infant's hospital discharge. Due to the broad scope of these errors, one can conclude that many high-risk infants are not being identified and protected against the HBV infection. Administering the hepatitis B vaccine "birth dose" is a very effective first step in preventing hepatitis B infection. More than 95 percent of infants, children, and adolescents develop immunity to the hepatitis B virus after three doses of the hepatitis B vaccine, per the recommended schedule.

An estimated 800 U.S. newborns are still becoming chronically infected with hepatitis B each year from exposure at birth or during the first months of life, so there is still much work to be done! Through cooperative efforts among the obstetrical and pediatric providers, birth hospitals, laboratories and Florida's perinatal hepatitis B case managers, infants can be protected against chronic hepatitis B infection and its devastating long-term effects.

Vaccinations in the Now: Real-Time Data Upload Debuts

Since the inception of Florida SHOTS, our vision has been to build a tool that would allow health care providers instant and accurate access to their patients' immunization records. For years we have teamed with health care providers, schools and medical software companies to build a robust registry with accurate, up-to-date records of millions of patients across the state.

And now, that large shot record database can be updated in real-time through participating electronic health record (EHR) linkages. With the recent rollout of web services, as soon as patient vaccination records are entered into participating EHRs, they will be available in Florida SHOTS. Participating EHRs that allow for bidirectional record flow will provide data upload offices with the additional ability to receive real-time patient immunization data from the registry back into the office's EHR.



What was once a long-term goal is now a reality. Data upload participants using Florida SHOTS web services can now:

- Certify a DH Form 680 (Certification of Immunization) in real-time.
- Receive a complete patient immunization profile from a Florida SHOTS query.
- Use Florida SHOTS tools for up-to-date vaccine recommendations and forecasts for follow-up exam scheduling.

All EHRs will need to update the technical specifications of their Florida SHOTS data upload linkage in order to take advantage of real-time data transmission. Our Florida SHOTS data upload staff is currently working with EHRs to test and go live with these capabilities so that we can then implement the new functionality in our participating health care provider offices.

Contact your EHR company today to see whether they are working on these capabilities on your behalf. If your EHR has completed the Florida SHOTS web services testing process, contact the Florida SHOTS Implementation Specialist assigned to your software company to determine how you can participate. Visit flshotsusers.com for Implementation Specialist contact information and a complete list of the software packages they support.

Florida Shots™
keeping shots in check



Flu Prevention

These Influenza Prevention publications and many more, are available as Adobe Acrobat PDFs.

Many Immunization Section materials are designed for customizing to display your logo, company name, address, email, web address and phone number. We grant immunization partners rights to display their logo, provided that no parts of the Immunizations Section's or the DOH's materials, logos, or brand are altered in any fashion. In addition, the Section's products may not be sold. If you are interested in commercial printing of these documents, please contact Jennifer Ouzts at 850-245-4444, extension 2382, or by email at jennifer.ouzs@FLHealth.gov, to request print-ready PDFs.



Flu prevention: Vaccine before Halloween—New flyers below created by the FDOH Communications Office are now available on our website for downloading, printing, and dissemination at: www.floridahealth.gov/programs-and-services/immunization/publications/flyers.html#influenza. Enjoy!

