Immunizations: The 2009 Adult and Child Update
Margaret A. Fitzgerald, DNP, FNP-BC, NP-C, FAANP, CSP

The Advisory Committee on Immunization Practices (ACIP) annually reviews the recommended Adult Immunization Schedule to ensure that the schedule reflects current recommendations for the licensed vaccines. Here are some highlights from these recommendations.

Tetanus, diphtheria, and acellular pertussis (Td/Tdap) vaccination

- Tdap should replace a single dose of Td for adults aged 19 through 64 years who have not received a dose of Tdap previously. For adults with uncertain or incomplete history of primary vaccination series, tetanus and diphtheria toxoid-containing vaccines should begin or complete a primary vaccination series of 3 doses. Tdap can substitute for any one of the doses of Td in the 3-dose primary series.

- If a woman is pregnant and received the last Td vaccination 10 or more years previously, Td should be administered during the second or third trimester. If the woman received the last Td vaccination less than 10 years previously, Tdap should be administered during the immediate postpartum period. A dose of Tdap is recommended for postpartum women, and people in close contact to infants aged less than 12 months as this age group has the highest pertussis-related morbidity. Tdap is also suggested for all health-care personnel with direct patient contact if they have not previously received the vaccine. An interval as short as 2 years from the last Td is suggested, but shorter intervals can also be used. Td may be deferred during pregnancy and Tdap substituted in the immediate postpartum period. Tdap may also be administered instead of Td after an informed discussion with the woman.

(Continued on page 5)
Should Breastfeeding Women Take a Vitamin D Supplement?
By Marie L Bosco, BSN, RNC, IBCLC

Due to an increase in the rate of vitamin D deficiency in recent years, guidelines for supplementation of this vital micronutrient have been recently revised. The American Academy of Pediatrics recommends that all breastfeeding newborns receive a supplemental daily dose of vitamin D (400 IU/d) in order to prevent rickets; one of the many consequences of vitamin D deficiency is reduced calcium absorption. A combination of dietary intake of foods rich in vitamin D, such as fatty fish and enriched dairy products, in addition to regular periods of skin exposure to the sun should provide the body with an adequate supply. However, much of the US population is not exposed to enough sunlight to synthesize adequate vitamin D. Given that many adults are documented to be deficient of this important vitamin one might wonder if a breastfeeding mother should take a vitamin D supplement along with her multivitamin supplement.

Minimal research has been done in the arena which has left health care providers with little evidence to support or dismiss vitamin D supplementation in breastfeeding mothers. The Medical University of South Carolina designed a study looking at the effect of high-dose vitamin D supplementation on serum vitamin D levels and breast milk calcium concentration in lactating women. At one month, postpartum breastfeeding mothers were given a daily dose of either 2000 IU or 4000 IU of vitamin D for three months, aimed at achieving optimal vitamin D status with a serum concentration of 32 ng/ml. The 4000 IU group was more effective in raising both maternal, infant, and breast milk vitamin D levels. Taking this information into account, breastfeeding mothers and their infants will likely benefit from a maternal supplement of vitamin D 4000 IU daily as well as the established multivitamin with calcium.

For additional information on the effects of vitamin D deficiency see Vitamin D Deficiency: A 2008 Update by Dr. Margaret A. Fitzgerald available at: http://www.fhea.com/Newsletter/FHEAnewsVolumeVIII-Issue11.pdf

References


Notice of System Maintenance for Testing & Learning Site
Routine maintenance is scheduled for February 21st, 2009.
FHEA is committed to providing our customers maximum uptime, reliability, and security for our On-line Testing and Learning Site. Regular system maintenance is critical to achieving this goal. System maintenance is normally performed the 3rd Saturday of each month.
Six Day Clinical Pharmacology for NPs & Advanced Practice Clinicians

Presented by:
Margaret A. Fitzgerald, DNP, FNP-BC, NP-C, FAANP, CSP and Sally K. Miller, PhD, ACNP-BC, ANP-BC, FNP-BC, GNP-BC, FAANP

Presented live in Manhattan, NY
March 11-16, 2009

Presented live in Los Angeles, CA
September 14-19, 2009

This course addresses the growing need for a thorough course in the principles of pharmacotherapeutics. Prescribing has become a major part of the role of advanced practice nurses while at the same time, prescribing has become more complex and polypharmacy is more prevalent with the possibility of adverse interactions. Thus, a course of this caliber is critical to the preparation of advanced practice nurses.

The course is taught in an intensive format by two of the nation’s most respected NP educators. The instructors have taught this curriculum at several universities most recently at Pennsylvania State, Lasalle, and Samford Universities. In addition, recorded lectures of this course form the basis for other university NP pharmacology courses. The material constitutes the equivalent of a three credit university course in pharmacology.

Pharmacology contact hours: 45.0*

Code: PCON — standard $775; advance: $750¹; early bird: $699²

Note 1: Registrations received or postmarked between two months and two weeks prior to the start of the course qualify for this rate.

Note 2: Registrations received or postmarked more than two months prior to the start date of the course qualify for this rate.

Upon receipt of your enrollment and full payment, you will receive a confirmation of registration and directions to the course. An administrative fee of $50.00 will be charged for cancellation. No refunds will be granted within two weeks of the starting date. All cancellations and changes must be received in writing.

*Because states’ requirements vary, it is important that you contact your Board for details regarding educational requirements for prescriptive authority.

Topics covered:
· National Legal and Practice Issues
· Principles of safe prescribing: Pharmacokinetics, pharmacodynamics, pharmacogenomics, drug interactions
· Prescribing in special populations: Pregnancy, lactation, children, older adults
· Hormonal contraception
· Pharmacologic management in type 1 and type 2 DM: Oral agents, insulin and non-insulin preparations
· Principles of antimicrobial therapy: Intervention in bacterial infection
· Drugs that affect the respiratory system: Beta2 agonists, methylxanthines, anticholinergics, mast cell stabilizers, inhaled and systemic corticosteroids, leukotriene modifiers, over-the-counter cough and cold medications
· Drug management of thyroid disorder
· Intervention in select hematologic conditions
· Drugs that affect the cardiovascular systems: Antihypertensives, antianginals, dysrhythmics, medications used in the management of heart failure
· Anti-lipemics
· Drugs that affect clotting
· Drugs that affect the GI system: H2 receptor antagonists, proton pump inhibitors, antacids, prokinetics, anti diarrheals, including over-the-counter medications

For additional topic information, and to register online visit: www.fhea.biz
This Month’s Featured FHEA Faculty Member-
Christy M Yates
MS, FNP-BC, NP-C, AE-C
Certified FNP and Asthma Educator

Christy M. Yates is a Senior Lecturer with Fitzgerald Health Education Associates, Inc., an international provider of NP Certification Exam Review and Advanced Practice Update and continuing education for healthcare providers. She presents the Fitzgerald Health Education Associates, Inc. NP Certification Exam Review and Advanced Practice Preparation Course for Family and Adult Nurse Practitioners.

Ms. Yates is certified as a Family Nurse Practitioner by the American Nurses Credentialing Center and the American Academy of Nurse Practitioners. Ms. Yates is certified as an asthma educator by the National Asthma Educator Certification Board. Ms. Yates currently practices as a Family Nurse Practitioner full-time at Family Allergy and Asthma and part-time as a primary care provider at Family Health Centers, Inc. in Louisville, Kentucky. In April 2007, she received the outstanding preceptor award from Spaulding University, Louisville, KY in recognition of her years of mentoring nurse practitioner students.

To see the complete biography of Christy M. Yates and to learn more about FHEA faculty please visit: http://www.fhea.com/faculty/faculty.shtml

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Upcoming Conferences Featuring FHEA Speakers

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<th>March 18, 2009</th>
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<td>Location:</td>
<td>Williamsburg Lodge</td>
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<td>Topics:</td>
<td>Pediatric Emergencies: Assessment and Treatment of the pediatric patient presenting with emergent respiratory, neurologic, infectious, gastrointestinal and cardiac disorders</td>
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<td>Speaker:</td>
<td>Dr. John D. Rowlett</td>
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<tr>
<th>April 25-28, 2009</th>
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<td>Topics:</td>
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<td>Speakers:</td>
<td>Margaret A. Fitzgerald, Bruce D. Askey, Linda S. Blasen, Victor Czerkasij, Louise McDevitt, Shawn M. Stewart, Monica N. Tombasco, Diane C. Viens, Christy M. Yates</td>
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<tr>
<th>May 19, 2009</th>
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<td>Salt Lake City, UT</td>
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<td>Topics:</td>
<td>Acute Bacterial Sinusitis: The latest treatment recommendations, What is on the shelf? Over-the-counter medications for the treatment of cough and cold symptoms</td>
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<td>Speaker:</td>
<td>Monica N. Tombasco</td>
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Human papillomavirus (HPV) vaccination

- HPV vaccination is recommended for all females aged 11 through 26 years and immunization can start as young as age 9. History of genital warts, abnormal Papanicolaou test, or positive HPV DNA test is not evidence of prior infection with all vaccine HPV types. HPV vaccination is recommended for persons with such histories. Health-care personnel are not at increased risk because of occupational exposure, and should be vaccinated consistent with age-based recommendations.

- A complete series consists of 3 doses. The second dose should be administered 2 months after the first dose; the third dose should be administered 6 months after the first dose.

Varicella vaccination

- All adults without evidence of immunity to varicella should receive 2 doses of single-antigen varicella vaccine if not previously vaccinated, or the second dose if they have received only 1 dose, unless they have a medical contraindication. Special consideration should be given to those who have close contact with persons at high risk for severe disease including health-care personnel and family contacts of persons with immunocompromising conditions. Care should also be given to those at high risk for exposure or transmission including teachers, child care employees, residents and staff members of institutional settings (including correctional institutions), college students, military personnel, adolescents and adults living in households with children, nonpregnant women of childbearing age and international travelers.

- Pregnant women should be assessed for evidence of varicella immunity. Women who do not have evidence of immunity should receive the first dose of varicella vaccine upon completion or termination of pregnancy and before discharge from the health-care facility. The second dose should be administered 4 to 8 weeks after the first dose.

Herpes zoster vaccination

- A single dose of zoster vaccine is recommended for adults aged 60 years and older regardless of whether they report a prior episode of herpes zoster. Persons with chronic medical conditions may be vaccinated unless their condition constitutes a contraindication.

Pneumococcal polysaccharide (PPSV) vaccination

- Medical indications for this vaccine include chronic lung disease (including asthma), chronic cardiovascular diseases, diabetes mellitus, chronic liver diseases, cirrhosis, chronic alcoholism, chronic renal failure or nephrotic syndrome, functional or anatomic asplenia (e.g. sickle cell disease or splenectomy [if elective splenectomy is planned, vaccinate at least 2 weeks before surgery]), immunocompromising conditions, and cochlear implants and cerebrospinal fluid leaks. Vaccinate as close to HIV diagnosis as possible. Other indications include residents of nursing homes or other long-term care facilities and persons who smoke cigarettes.

- One-time PPSV revaccination after 5 years is recommended for persons with chronic renal failure or nephrotic syndrome, functional or anatomic asplenia (e.g. sickle cell disease or splenectomy) and for persons with immunocompromising conditions. For persons aged 65 years and older, one-time revaccination is recommended if they were vaccinated 5 or more years previously and were less than 65 years old at the time of primary vaccination.

Haemophilus influenzae type b (Hib) vaccine use in adults

- Hib vaccine generally is not recommended for persons aged 5 years and older. No efficacy data is available on which to base a recommendation concerning use of Hib vaccine for older children and adults. However, studies suggest good immunogenicity in patients who have sickle cell disease, leukemia, or HIV infection or who have had a splenectomy. Administering 1 dose of vaccine to these patients is not contraindicated.

The recommended immunization schedules for persons aged 0 through 18 years and the catch-up immunization schedule for 2009 have been approved by the Advisory Committee on Immunization Practices, the American Academy of Pediatrics and the American Academy of Family Physicians.

(Continued on page 6)
The Advisory Committee on Immunization Practices (ACIP) also annually publishes immunization schedules that summarize recommendations for currently licensed vaccines for children aged 18 years and younger. Here are some highlights of the changes in these recommendations.

- Routine annual influenza vaccination is recommended for all children aged 6 months through 18 years. Children aged younger than 9 years who are receiving influenza vaccine for the first time, or who were vaccinated for the first time during the previous season but only received 1 dose, should receive 2 doses of influenza vaccine at least 4 weeks apart. Healthy nonpregnant persons aged 2 through 49 years may receive either live attenuated influenza vaccine or inactivated influenza vaccine.

- The minimum interval between tetanus and diphtheria toxoids (Td) and tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap) for persons aged 10 through 18 years is clarified; an interval less than 5 years can be used if pertussis immunity is needed.

To view copies of the adult and child immunizations schedules visit http://www.cdc.gov/vaccines/recs/schedules/.

References

Centers for Disease Control and Prevention. Recommended immunization schedules for persons aged 0 through 18 years---United States, 2009. MMWR 2008;57(51&52).

One H.E.A.R.T, One Goal; Bringing Healthcare to Women and Children In Need

A recent study conducted by the World Health Organization found that an estimated 500,000 women die annually due to complications resulting from childbirth. Additionally, recent worldwide infant mortality rates reached approximately 7 million. The majority of these deaths stem from third world countries.

In 1997 during a medical trip to Tibet, nurse practitioner Arlene Samen found disturbing instances of poor education regarding childbirth. Samen says, "I witnessed deliveries where the infant did not even have a blanket." This prompted Samen to form One H.E.A.R.T (Health Education And Research in Tibet). Objectives of this program include traveling to remote areas to provide education on birthing techniques, while supplying birth kits which contain everything from razor blades, to gloves and blankets.

To read the full article visit:
http://www.cnn.com/2008/LIVING/03/12/heroes.samen/index.html#cnnSTCText

Dermatology NP Fellowship
Lahey Clinic, Burlington, MA

We are accepting applications for our NP Fellowship Program for admission in September 2009 to August 2010

Applications must be completed by March 1, 2009.

Please visit our website for more details and application information.

http://www.lahey.org/Medical/Dermatology/Dermatology_NurseFellowship.asp

2009 Cruises
Continuing Education with Margaret Fitzgerald while at Sea - 12 contact hours

Topics*
- Hot Topics in Drug Therapy: New products, new uses, new warnings
- Worst Case Scenario: Uncommon outcomes in common diseases
- Challenging Case Studies in Laboratory Diagnosis
- Dangerous Liaisons: Case studies in drug interactions
- Antimicrobial Update: A focus on prescribing in the age of resistant organisms

*For a full list of topics visit www.fhea.biz

Tuition: US$450

Southern Caribbean & Panama Canal
March 29—April 8, 2009

10-Day Itinerary
- Depart Fort Lauderdale, FL
- Half Moon Cay, Bahamas
- Aruba
- Curacao
- Cruising Panama Canal & Gatun Lake
- Costa Rica
- Disembark Fort Lauderdale

Cabins $1,399—$2,599 per person*

Includes:
- All airport—ship transfers
- All taxes & port charges
- Fuel surcharge
- Cruise staff gratuities

* add gratuities, transfers and fees US$686pp

Two Days in Rome & Western Mediterranean
October 4—17, 2009

12-Day Itinerary
- Special tour of Vatican
- Embark Civitavecchia
- Pisa / Florence
- Monte Carlo
- Barcelona
- Mallorca
- Carthage
- Palermo
- Naples
- Disembark Civitavecchia

Cabins $1,399—$2,599 per person*

Includes:
- Hotel—ship—airport transfers
- All taxes & port charges
- Fuel surcharge
- Cruise staff gratuities

* add gratuities, transfers and fees US$547pp

1 Tour fee to be determined
Margaret Fitzgerald’s Upcoming Speaking Engagements

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<td>Special Considerations in Geriatric Prescribing: Issues of safety and efficacy</td>
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