

# CDC Updates Adult Immunization Schedule

BY DIANA MAHONEY

Revised recommendations for human papillomavirus vaccination—including a permissive recommendation for young men—are part of the newly issued 2010 adult immunization schedule from the Advisory Committee on Immunization Practices at the Centers for Disease Control and Prevention.

The schedule, approved by the American College of Obstetricians and Gynecologists, includes these changes:

- ▶ For human papillomavirus (HPV), a bivalent vaccine (HPV2) has been licensed for use in females. Therefore, either the bivalent or quadrivalent (HPV4) vaccination can be used for women between 19 and 26 years. In addition, HPV4 may be given to males aged 9-25 years “to reduce their likelihood of acquiring genital warts,” according to the revised schedule.
- ▶ For influenza vaccination, the term “seasonal” has been added to distinguish between seasonal and pandemic influenza vaccines.
- ▶ For measles, mumps, rubella (MMR) vaccination, most adults born after 1957

do not require repeat vaccination if they have documentation of having received at least one dose of the vaccine. Women without documentation of rubella vaccination should receive a dose of the MMR vaccine.

Health care workers, college students, international travelers, and individuals who have been exposed to measles or mumps in an outbreak setting should receive two doses of MMR. When a second MMR dose is indicated, it should be administered 4 weeks after the first dose.

During an outbreak, MMR vaccination is recommended for unvaccinated health care workers born before 1957 who do not have evidence of immunity or disease.

▶ For hepatitis A, vaccination is recommended for unvaccinated individuals who anticipate close personal contact with an international adoptee from a country with intermediate or high endemicity to hepatitis A. The first dose should be given at least 2 weeks before the arrival of the adoptee.

▶ For the three-dose hepatitis B vaccine, the second dose should be administered 1 month after the first dose, and the third

dose should be administered at least 2 months after the second. If using the combined hepatitis A and B vaccine, three doses should be administered at 0, 1, and 6 months. Alternatively, a four-dose schedule, administered on days 0, 7, 21, and 30, followed by a 12-month booster, may be used.

▶ For meningococcal vaccination, the conjugate vaccine (MCV4) is preferred for adults aged 55 years or younger, while the polysaccharide vaccine (MPSV4) is recommended for adults older than 55 years. Revaccination with MCV4 after 5 years is recommended for individuals who continue to be at risk for infection, such as adults with anatomic or functional asplenia. However, it is not recommended for individuals whose only risk factor is continued on-campus residence.

▶ For *Haemophilus influenzae* type B (Hib) vaccination, there is no recommendation for individuals older than age 5 years. One dose of the vaccine may be given to certain high-risk unvaccinated patients (Ann. Intern. Med. 2010;152:36-9).

“Deaths from vaccine-preventable illnesses still occur in the United States,” noted Dr. Robert H. Hopkins Jr. and Dr.

Keyur S. Vyas of the University of Arkansas, Little Rock, in an accompanying editorial.

Clinicians’ “challenge is to change this perception and to make immunizations integral to each encounter for physicians who care for adults in primary and specialty care settings,” they added.

In addition, the importance of immunization should be imparted to students and residents early in their training, as an essential component of the comprehensive care of adults in ambulatory and inpatient settings, they said (Ann. Intern. Med. 2010;152:59-60). ■

The complete 2010 Adult Immunization Schedule will be available at [www.cdc.gov/vaccines/recs/schedules/adult-schedule.htm](http://www.cdc.gov/vaccines/recs/schedules/adult-schedule.htm).

**Disclosures:** Members of ACIP disclosed relationships with MedImmune, Sanofi Pasteur, Novartis, and Wyeth. According to the report, members with conflicts are not permitted to vote if the conflict involves the vaccine or agent being considered. Dr. Hopkins and Dr. Vyas reported no potential conflicts of interest.

## Age, Steroid Use, Low BMD Predict Bisphosphonate Scrips

BY KERRI WACHTER

DENVER — Significant predictors of receiving a bisphosphonate prescription within 90 days of a fracture for women are a low bone mineral density score after a fracture, being aged 65-74 years, and oral corticosteroid use, according to the results of a study of 2,000 women.

Women with a bone mineral density (BMD) T score of  $-2.5$  or less in the 90 days after a fracture were almost five times as likely to receive a bisphosphonate prescription than women with higher T scores, according to a poster presented by Carl Asche, Ph.D., at the annual meeting of the American Society for Bone Mineral Research.

Women who were aged 65-74 years at the time of fracture were almost twice as likely to receive a prescription, compared with women younger than 65. Similarly, women taking oral corticosteroids also were more likely to receive a bisphosphonate prescription, wrote Dr. Asche of the pharmacotherapy department at the University of Utah, Salt Lake City.

Using electronic health records from Geisinger Health System from Jan. 1, 2000, to June 30, 2007, women 50 years of age and older who had had a fracture were included. They also had to have continuous

electronic health record activity for at least 365 days before and after the date of the fracture. Women were excluded if they had a diagnosis of osteoporosis, a bone mineral density score of  $-2.5$  or less at the time of the fracture, a fracture in the 6 months prior to the index date, or a diagnosis of conditions known to impact bone density and quality.

A total of 2,000 women met the inclusion criteria, but less than 10% (188) received a prescription for a bisphosphonate within 90 days of fracture. “Very few women aged [over] 50 receive treatment with an oral bisphosphonate after having a fracture, leaving them potentially vulnerable to future fractures,” he noted. ■

**Disclosures:** The study was supported by the Alliance for Better Bone Health—Procter & Gamble Pharmaceuticals and Sanofi-Aventis U.S., which co-promote Actonel. Dr. Asche reported that he has a significant financial relationship with Sanofi-Aventis U.S.

### Factors Predicting Bisphosphonate Prescription

Risk Factor	Odds Ratio	P value
T score $\leq -2.5$	4.90	<.001
Age 65-74 years	1.76	<.001
Oral corticosteroid use	1.67	<.05
Obesity	0.53	<.05

Note: Based on a study of 2,000 women, 188 of whom received a bisphosphonate.  
Source: Dr. Asche

## Racial Differences Found in Urethral Closure Pressure

BY DAMIAN McNAMARA

HOLLYWOOD, FLA. — A cohort of 91 continent black women had a 22% higher maximal urethral closure pressure (mean 68.0 cm H<sub>2</sub>O) than a group of 46 continent white women (55.8 cm H<sub>2</sub>O) in a study.

Dr. John O. DeLancey and his colleagues previously assessed 335 community-dwelling women both with and without urge and stress urinary incontinence. They found the prevalence of urinary incontinence was 15% for black women and 33% for white women (J. Urol. 2008;179:1455-60).

The only other difference between groups was that 39% of white women with incontinence reported pure stress incontinence symptoms, compared with 25% of black women. In contrast, 24% of black women reported pure urge incontinence symptoms, compared with 11% of white women.

So they decided to search further. They conducted urethral pressure profilometry, the Q-tips test, a cystometrogram, Pelvic Organ Prolapse Quantification, and a vaginal closure force test for each of the 335 participants. The National Institutes of Health sponsored the research.

The white cohort consisted of 46 continent women, 55 with stress urinary incontinence, and 44 with urge urinary incontinence. The black cohort was composed of 91 continent women, 47 with stress urinary incontinence, and 52 with urge urinary in-

continence. The inclusion of continent women was a strength of the study, Dr. DeLancey said at the annual meeting of the American Urogynecologic Society.

They found no significant differences between black and white women in terms of the Q-tips test results at rest or during a Kegel contraction or Valsalva maneuver. In addition, there were no significant differences between groups in ureterovaginal support on physical examination or the vaginal closure force test at rest or with contraction.

“When we asked women to perform a Kegel contraction, urge incontinent white women were less able to contract than stress incontinent white women,” said Dr. DeLancey, professor of obstetrics and gynecology and director of the Pelvic Floor Research Group at the University of Michigan in Ann Arbor. This difference was not found among black women.

In addition to overall differences in maximal urethral closure pressures (MUCPs) by race, they found some subgroup differences as well. For example, continent white women had 19% higher MUCPs than white women with either stress or urinary urge incontinence. Among white women, the group with urge urinary incontinence had the lowest increases in urethral closure pressure during muscle contraction, 45% lower than continent women and 43% lower than those with stress incontinence. ■

**Disclosures:** None was reported.