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AHC Media

Guidance issued on cervical cancer screening: Update your practice now

Increased interval doesn't replace need for annual well-woman visits

Get ready to add two sets of guidance on cervical cancer screening to your practice database: the most current recommendations from the U.S. Preventive Services Task Force (USPSTF) and joint cervical cancer prevention guidelines issued by the American Cancer Society, American Society for Colposcopy and Cervical Pathology, and American Society for Clinical Pathology (ACS/ASCCP/ASCP).[1,2] The two sets of recommendations are largely congruent and move practice forward toward efficient and effective cervical cancer screening, according to an editorial issued on their release.[3]

Healthcare providers should welcome these new recommendations with enthusiasm and incorporate them into routine clinical practice, says **Jeffrey Peipert**, MD, PhD, Robert J. Terry professor of obstetrics and gynecology and vice chair of clinical research at Washington University in St. Louis School of Medicine. Peipert served as co-author of the current editorial.

"More frequent screening than recommended not only offers no benefit, but it can cause harm," says Peipert. "We should embrace the guidelines."

The new guidelines from USPSTF and ACS/ASCCP/ASCP are for women at average risk, points out an announcement from the American College of Obstetricians and Gynecologists (ACOG).[4] More frequent testing might be appropriate for women with conditions that place them at an increased risk of cervical cancer, such as immunocompromise or human immunodeficiency

EXECUTIVE SUMMARY

New cervical cancer screening guidance has been issued by the U.S. Preventive Services Task Force, as well a joint recommendation from the American Cancer Society, American Society for Colposcopy and Cervical Pathology, and American Society for Clinical Pathology. The two sets of recommendations are largely congruent and move practice forward toward efficient and effective cervical cancer screening.

- Cervical cancer screening should not begin until age 21, regardless of sexual activity, both sets of guidelines state.
- Women ages 21-29 should be screened at three-year intervals with cytology alone. Testing for human papillomavirus should not be part of screening in this age group because the virus is highly prevalent and cytologic abnormalities are often transient.

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virus (HIV) infection, notes ACOG. The association is evaluating the two sets of guidance in developing its own recommendations on the subject. *(See resource box at end of this article for online links to guidance sets.)*

"Each set of recommendations was developed under a separate work plan, with its own policies and procedures for evidence collection and analysis," states ACOG. "The very similar recommendations are reassuring because although they were developed independently and by different methodology, they drew on a common evidence base, which was interpreted the same way by different groups of experts."

How important is the interplay between new molecular tests and traditional cytology in shaping the new guidance? Critical, says **Mark Stoler**, MD, FASCP, past president of the ASCP and professor of pathology, cytology and gynecology at the University of Virginia Health System, Charlottesville. The new guidance, which relies on the interaction between conventional and liquid-based cytology, results in a much better process for women, says Stoler. The "better" comes from more sensitive screening with less frequent doctor visits, he notes.

Take a closer look

Cervical cancer screening should not begin until age 21, regardless of sexual activity, both guidelines state. Women ages 21-29 should be screened at three-year intervals with cytology alone. Testing for human papillomavirus (HPV) should not be part of screening in this age group because the virus is highly prevalent and cytologic abnormalities often are transient.[3]

However, there are slight differences in the two sets of recommendations for women ages 30 to 65. The ACS/ASCCP/ASCP recommendations define the preferred method of screening as cytology with HPV testing ("cotesting") at five-year intervals. These recommendations say use of cytology at three-year intervals is also "acceptable," especially if access to HPV testing is not practical.[3]

The USPSTF guidance notes both methods provide similar benefits and calls for cotesting for women who desire to lengthen the screening interval. The ACS/ASCCP/ASCP guidelines also note that there is insufficient evidence to change screening intervals in this age group in women with a history of negative screens.[3] For women 65 and older who have been adequately screened and have no history of cervical intraepithelial neoplasia 2 (CIN2) or greater do not need to continue cervical cancer screening regardless of sexual activity, the two sets of guidance concur. Adequate screening consists of negative results on two screens in the past 10 years, with one screen occurring in the past five years.[3] Women who have had a hysterectomy and do not have a history of CIN2 or greater should not have screening.[3]

None of the screening recommendations apply if a woman has a history of cervical cancer, was exposed to the synthetic hormone diethylstilbestrol when in the womb, or if her immune system is suppressed due to

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Editorial Questions

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HIV or other conditions or medications.

How about HPV vaccine?

What role does the human papillomavirus (HPV) vaccine play in the new recommendations? While the USPSTF guidance does not address vaccination, the ACS/ASCCP/ASCP guidelines recommend that women who have received HPV vaccination continue routine screening. While evidence shows the vaccine to be highly effective at preventing cancer associated with HPV 16 and 18, 30% of cases of cervical cancer are attributable to other HPV strains.[5]

With the new guidances now in hand, clinicians should press toward better uptake of the HPV vaccine in their younger patients, states the current editorial.

The United States is lagging behind such countries as the United Kingdom and Australia in HPV vaccination, with only 32% of eligible women receiving the complete HPV 16/18 vaccine.[6] *(To read more about the slow U.S. response, see the* Contraceptive Technology Update *article "HPV vaccine rates trail teen vaccines," November 2011, p. 126.)*

Remember to encourage all young women and men, whether or not they have been vaccinated against HPV, to use condoms consistently and correctly, says **Robert Hatcher**, MD, MPH, professor of gynecology and obstetrics at Emory University School of Medicine in Atlanta. Condoms are highly effective in preventing the transmission of HPV, chlamydia, HIV, and other sexually transmitted infections, says Hatcher.

Use visits wisely

With these new guidelines, the challenge as women's health clinicians will be to help patients understand that performing cervical cancer screening less frequently is safe, says **Andrew Kaunitz**, MD, professor and associate chair in the Obstetrics and Gynecology Department at the University of Florida College of Medicine — Jacksonville. On the other hand, clinicians also must help patients understand that the benefits of well-woman visits extend well beyond cervical cancer screening, he notes.

Remind women that during a typical well-woman exam, providers assess current health status; nutrition; physical activity; sexual practices; contraception needs; and tobacco, alcohol, and drug use. The standard physical exam also includes checks of height, weight, body mass index, and blood pressure. Annual breast and abdominal exams begin at age 19 and pelvic exams at 21, notes ACOG.[4]

"The well-woman visit has always been more than just a 'Pap smear,' and the decreased need for cervical screening actually constitutes a minor change to an important aspect of a woman's health care," states ACOG.

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RESOURCES

- To access the U.S. Preventive Services Task Force guidance, go to http://bit.ly/cyDcWj.
- To access the joint cervical cancer prevention guidelines issued by the American Cancer Society, American Society for Colposcopy and Cervical Pathology, and American Society for Clinical Pathology, go to http://bit.ly/w7Ny8w. Under "Guidelines," select the guidance title, "American Cancer Society, American Society for Colposcopy and Cervical Pathology, and American Society for Clinical Pathology Screening Guidelines for The Prevention and Early Detection of Cervical Cancer." ■

Take aim at lowering cervical cancer rates

A study of cervical cancer incidence and mortality in North Carolina has revealed areas where rates are unusually high, prompting public health officials to call for education, screening, and vaccination programs in impacted areas.[1]

The N.C. Cervical Cancer Resource Directory, www.ccresourcedirectory.org, has been developed as an online resource to help uninsured or underinsured

women find screening services, as well as obtain information on human papillomavirus (HPV) vaccination.

Available in English and Spanish, the directory was developed by Cervical Cancer-Free NC Initiative, based at the Gillings School of Global Public Health at the University of North Carolina at Chapel Hill (UNC). The program is working to eliminate or substantially reduce cervical cancer in North Carolina. Each year, more than 12,000 women are diagnosed with cervical cancer, and more than 4,000 die from the disease in the United States.[2] In 2011, almost 400 women in North Carolina received cervical cancer diagnoses, and more than 100 died.[3] Healthcare experts say most of these deaths could have been avoided through regular cervical cancer screenings and timely HPV vaccination.

Promoters of the directory are getting the word out about the new resource by sharing it with members of the North Carolina Cervical Cancer Coalition, as well as other key partners throughout the state, including county health departments, gynecologists, and reproductive health specialists, says **Noel Brewer**, PhD, director of Cervical Cancer-Free NC and associate professor of health behavior at UNC's public health school.

"The response has been phenomenal," notes Brewer. "It is our hope that the directory helps women get the screening and vaccination they deserve to help protect them from cervical cancer."

Who is most at risk?

To perform the North Carolina study, analysts gathered data on all reported invasive cervical cancer cases from 1998 to 2007 from the North Carolina Central Cancer Registry. Age-adjusted incidence and mortality rates were estimated using population data from the National Center for Health Statistics.

The analysis indicates that cervical cancer incidence and mortality rates varied greatly by county and were inversely associated with county prosperity. Hispanic women had the highest incidence rate, with African American women at the highest mortality rate and white women accounting for most cases.

Incidence rates remained fairly steady above age 35, and mortality rates steadily increased with age, the analysis reflects. A later stage at diagnosis was more common for older women and for women without private insurance.[1] Women with private insurance were more likely to be diagnosed at earlier, more treatable stages than women with no insurance or with government-sponsored insurance, such as Medicare, Medicaid, or military benefits, the analysis shows.

10 counties stand out

Ten counties — Anson, Chowan, Duplin, Halifax, Hoke, Lincoln, Randolph, Robeson, Sampson, and Scotland — had both high incidence rates (more than 11 cases per 100,000 women) and mortality rates (more than 3 deaths per 100,000 women) of cervical cancer. Compare these incident rates to national statistics: In 2012, an estimated 12,170 cases of invasive cervical cancer will be diagnosed in the United States, and an estimated 4,220 women will die.[4]

"This indepth, registry-based assessment provides us with a clearer picture of which women in North Carolina are being diagnosed with cervical cancer, and it identifies gaps in our state's cervical cancer prevention health network," says **Jennifer Smith**, PhD, associate professor of epidemiology at the UNC public health school and an author of the study. "The cancer registry data will help us, as a state, initiate targeted and appropriate interventions."

Smith, a member of the UNC Lineberger Comprehensive Cancer Center, also serves as director of the Cervical Cancer-Free America Initiative (www.cervicalcancerfreeamerica.org), which is guiding states to develop cervical cancer prevention programs aimed at eliminating cervical cancer through education, vaccination, screening, and early treatment.

What prompted the initiative?

"We began the Cervical Cancer-Free America Initiative to decrease unnecessary death among women in the United States," says Smith. "In North Carolina, Alabama, California, Indiana, Kentucky,

EXECUTIVE SUMMARY

A study of cervical cancer incidence and mortality in North Carolina has revealed areas where rates are unusually high, prompting public health officials to call for education, screening, and vaccination programs in impacted areas.

- The N.C. Cervical Cancer Resource Directory has been developed as an online resource to help uninsured or underinsured women find screening services, as well as get information on human papillomavirus vaccination.
- A national organization, Cervical Cancer-Free America Initiative, has been formed to decrease unnecessary death among women in the United States. Statewide coalitions have been initiated in North Carolina, Alabama, California, Indiana, and Kentucky to focus intervention activities on preventing cervical cancer with available sensitive screening and vaccination prevention tools.

and Texas, we have built state-level coalitions and focused intervention activities to do more to prevent cervical cancer with available sensitive screening and vaccination prevention tools."

The initiative is based on the Carolina Framework, developed at the UNC Gillings School of Global Public Health. The Carolina Framework identifies four key challenges to eradication of cervical cancer:

• **HPV infection.** HPV vaccination can offer protection against the two HPV types (HPV 16 and 18), which are responsible for more than 70% of cervical cancers.

• **Lack of screening.** Although cervical cancer screening is highly effective for reducing cervical cancer mortality, between 30% and 50% of women in the United States have not been screened in the last three years.[5]

• **Screening errors.** About one-third of cervical cancer deaths are due to Pap screening errors.[6] Combining more sensitive HPV testing with Pap testing might increase detection of precancerous lesions.

• **Not receiving follow-up care.** One in six cervical cancer deaths are due to lack of follow up for abnormal Pap smear results.[7] This problem particularly affects women from minority groups and from rural areas.

The cancer registry data gathered in the current analysis will help NC public health officials initiate targeted and appropriate interventions, an important step toward eradicating cervical cancer in North Carolina, says Smith.

"The analysis also can serve as a model for other states as they bolster the efforts to reduce or end this cancer across the nation," she states.

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Too few young women get tested for chlamydia

How many chlamydia tests were performed on sexually active women ages 15-25 in your clinic last year? If your numbers are similar to a new national analysis, about 38% of sexually active young women ages 15-25 were screened for the sexually transmitted disease (STD).[1]

The Centers for Disease Control and Prevention (CDC) recommends annual screening for sexually active women ages 25 and under.[2] The new analysis examined data from the 2006-2008 cycle of the National Survey of Family Growth, a nationally representative household survey. Results indicate 62%, which is more than nine million young women, were not screened as recommended.[1]

Testing rates were low across all ages; however, investigators did see slightly more encouraging results, notes lead author **Karen Hoover**, MD, MPH, a medical epidemiologist in the CDC's Division of STD Prevention. The likelihood of being tested was higher among some of the groups of young women who are at particularly high risk of chlamydial infection, she states.

For example, 47% of women who had two or more sexual partners said they had received the test, as did 55% of African-American women, 50% of women who received public insurance, and 41% of women who were uninsured, Hoover observes. Women who accessed reproductive health care in the past year for such services as contraception, a Pap test, pelvic examination, or pregnancy test, also were more likely to report having been tested (45%) compared to those who did not access reproductive health care (4%).

In 2010, about 1.3 million chlamydia cases were

EXECUTIVE SUMMARY

According to a new national analysis, only about 38% of sexually active young women ages 15-25 have been screened for chlamydia. Results of the new study indicate 62%, which is more than nine million young women, were not screened as recommended.

• The Centers for Disease Control and Prevention (CDC) recommends annual screening for sexually active women ages 25 and under.

• Retesting plays a vital role in preventing serious future health consequences. CDC guidance suggests retesting approximately three months after a patient's initial chlamydia treatment. If retesting at three months is not possible, clinicians should retest whenever patients next present for medical care in the 12 months following initial treatment.

diagnosed in the United States.[3] Because people with chlamydia often do not have symptoms, many infections go undetected and untreated, Hoover explains Therefore, CDC estimates that the actual number of infections is more than twice that amount, with approximately 2.8 million new cases of chlamydia occurring in this country every year, she states.

"That is why CDC recommends routine annual chlamydia screening for all sexually active women aged 25 and under, as well as retesting for anyone who has been diagnosed with and treated for chlamydia," says Hoover. *(Need a patient handout on chlamydia? Access the CDC fact sheet: http://www.cdc.gov/std/chlamydia/STDFact-Chlamydia.htm.)*

Retesting is key

Retesting plays a vital role in preventing serious future health consequences, say public health officials. When should retesting occur? CDC guidance suggests about three months after a patient's initial chlamydia treatment. If retesting at three months is not possible, clinicians should retest whenever patients next present for medical care in the 12 months following initial treatment.[4]

In a statement accompanying the new chlamydia analysis, **Gail Bolan**, MD, director of the CDC's Division of STD Prevention, said, "It is critical that healthcare providers are not only aware of the importance of testing sexually active young women every year for chlamydia infections, but also of retesting anyone who is diagnosed. Chlamydia can be easily treated and cured with antibiotics, and retesting plays a vital role in preventing serious future health consequences."

Clinicians are finding innovative, simple ways to boost retesting rates. The University at Buffalo (NY) student health center found that a three-step process, including patient counseling and early reminders to return to the clinic, increased chlamydia retesting rates within four months from 16% to 89%.[5] Providers reported their results at the March 2012 National STD Prevention Conference in Minneapolis.

Why the initial low retesting rates? Members of the research team believe that students did not understand the importance of or reasoning for returning for a test of reinfection after treatment, says **Gale Burstein**, MD, former clinical associate professor in the Department of Pediatrics at the School of Medicine and Biomedical Sciences, University of Buffalo. Also, three months after the original treatment date, students no longer were interested in their chlamydia infection, she notes. Providers saw that systems changes needed to be implemented to overcome these challenges, says Burstein, who now serves as commissioner of the Erie County Department of Health in Buffalo.

Beginning in August 2011, work flow, processes, and staff roles and responsibilities were reengineered under leadership of **Susan Mancuso**, NP, a nurse practitioner at the student health center, Burstein explains. Students with a positive chlamydia/gonorrhea test had to return to the clinic to receive directly observed therapy, instead of just picking up a prescription. Medications were dispensed at no cost to students on site, and students received counseling on chlamydia and the importance to return for a test of reinfection, says Burstein.

Providers gave students a standard letter and provided face-to-face counseling with information about treatment and follow-up, including test of reinfection. Students were advised that they would be contacted to return for test of reinfection within six weeks.

Students received a computer-generated test of reinfection reminder from the health center and an individual email from Mancuso 4-5 weeks, rather than three months, after treatment, says Burstein. Students who didn't return also received a telephone reminder. Each step was recorded in the electronic medical record for process monitoring, Burstein states.

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Add treatment option for heavy menstrual bleeding

About three million U.S. women experience heavy menstrual bleeding each year.[1] With the recent Food and Drug Administration

(FDA) approval of Natazia (Bayer HealthCare Pharmaceuticals, Wayne, NJ) for treatment in women who choose an oral contraceptive (OC), clinicians now have another therapeutic option.

The combination pill received FDA approval as a birth control option in 2010. It is a four-phase, estrogen step-down, progestin step-up regimen that contains the estrogen estradiol valerate and the progestin dienogest. *(*Contraceptive Technology Update *reported on the agency's action; see "Estradiol valerate, dienogest OC gets nod," September 2010, p. 100.)*

"As the first oral contraceptive treatment approved for heavy menstrual bleeding in women without organic pathology who choose an OC for contraception, Natazia represents a new treatment approach for appropriate women with this medical condition," said **Pamela Cyrus**, MD, Bayer HealthCare vice president and head of U.S. medical affairs in a statement accompanying the approval.

Heavy menstrual bleeding is more than a nuisance; for some women, the bleeding is severe enough to adversely affect their social, physical, and emotional well-being. Use of oral contraceptives for treatment of heavy menstrual bleeding is not new; a 2009 review of available data looked at their effectiveness compared with other medical therapies, placebo, or no therapy.[2] Having an FDA-approved indication for Natazia as a treatment for heavy menstrual bleeding separates it from other oral contraceptives without this indication. Approval should improve the willingness of insurance companies to cover its use the same as other medications for therapeutic indications aside from contraception, says **Jeffrey Jensen**, MD, MPH, director of the Women's Health Research Unit at Oregon Health & Science University in Portland.

EXECUTIVE SUMMARY

The Food and Drug Administration has approved Natazia (Bayer HealthCare Pharmaceuticals, Wayne, NJ) for treatment of heavy menstrual bleeding in women who choose an oral contraceptive. Natazia is a four-phase, estrogen step-down, progestin step-up regimen that contains the estrogen estradiol valerate and the progestin dienogest.

- About three million U.S. women experience heavy menstrual bleeding each year. Heavy menstrual bleeding is more than a nuisance; for some women, the bleeding is severe enough to adversely affect their social, physical, and emotional well-being.
- Other medical treatments for heavy menstrual bleeding include the levonorgestrel intrauterine system and tranexamic acid.

Check study findings

Jensen served as lead investigator in a 2011 double-blind, placebo-controlled randomized study that looked at women age 18 or older with prolonged, frequent, or heavy menstrual bleeding. Study participants were assigned Natazia or a placebo. To perform the analysis, data from the last 90 days of treatment were compared to information collected from a 90-day pretreatment run-in interval. The primary variable was the complete resolution of qualifying abnormal menstrual symptoms, including a 50% or greater reduction in pretreatment menstrual blood loss volume. Secondary variables included objective changes in menstrual blood loss volume, using alkaline hematin methodology, and iron metabolism parameters.[3]

About three-quarter (75.8%) of the treatment group and 85.7% of the placebo group had heavy bleeding at baseline; resolution was seen in 56% and 26.7%, respectively. Scientists report the mean reduction in blood loss from pretreatment to post-treatment was significantly greater in the treatment group (64.2%) compared to the placebo group (7.8%). Levels of hemoglobin, hematocrit, and ferritin also showed improvement in the treatment group, data suggest.[3]

In a pooled analysis of data from the 2011 study and an identically designed randomized, placebo-controlled, multiple center investigation conducted in Europe and Australia, 63.6% and 11.9% of patients were successfully treated with Natazia and placebo, respectively.[4]

Look at options

When it comes to treatment of heavy menstrual bleeding, the levonorgestrel intrauterine system (Mirena LNG IUS, Bayer HealthCare Pharmaceuticals) has been the gold standard, says Jensen. The device received FDA approval for this indication in 2009. A 2009 review of all available data indicated the Mirena is as effective as endometrial ablation in reducing heavy menstrual bleeding.[5] *(To see* CTU*'s coverage of the levonorgestrel intrauterine system for this use, read "New analysis eyes use of LNG IUS for menorrhagia," September 2009, p. 99, and "Options for treatment of heavy bleeding in focus," December 2009, p. 137.)*

A 2011 single-center, open, randomized clinical trial looked at 112 women with excessive menstruation who desired contraception.[6] The study participants were randomized to receive the LNG IUS or combined oral contraceptives. Results suggested that

the LNG-IUS is a more effective therapy for idiopathic menorrhagia compared to the study pills.

Jensen notes that in earlier studies, which were limited by small sample size, data indicated about a 40% reduction in blood loss with an oral contraceptive. However, if the results of the Natazia studies are added in, reduction in blood loss climbs over 80%, says Jensen. This increase makes pills comparable, although inferior, to the approximate 96% reduction seen with the IUS, he observes.

Another medication option for heavy menstrual bleeding is tranexamic acid. Approved by the FDA in 2009 for treatment of cyclic heavy menstrual bleeding, it is marketed as Lysteda by Ferring Pharmaceuticals of Saint-Prex, Switzerland. (*See "Options for treatment of heavy bleeding in focus," CTU, December 2009, p. 137.)* Its antifibrinolytic activity works downstream of the coagulation cascade and slows the dissolution of fibrin, therefore reducing excessive bleeding. Available evidence indicates that tranexamic acid therapy in women with idiopathic menorrhagia resulted in 34-54% reduction in menstrual blood loss.[7] *(To check* Contraceptive Technology*'s approach to therapeutic treatment of heavy menstrual bleeding, see the story at right.)*

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'Contraceptive Technology' offers treatment reference

What does the latest edition of *"Contraceptive Technology"* say when it comes to therapeutic approaches to heavy menstrual bleeding?

First, clinicians must understand the terminology of heavy menstrual bleeding. Chapter co-authors advance the idea that "a woman's blood loss is excessive when she says it is excessive."[1] The co-authors are **Anita Nelson**, MD, professor in the Obstetrics and Gynecology Department at the David Geffen School of Medicine at the University of California in Los Angeles, and **Suzy Baldwin**, MD, MPH, Health Assessment Unit chief in the Office of Health Assessment and Epidemiology at the Los Angeles (CA) County Department of Public Health.

Consider the following therapeutic options when controlling chronic heavy menstrual bleeding:

• **High-dose nonsteroidal anti-inflammatory drugs (NSAIDs):** High-dose NSAIDs, when taken from onset of menses until the end of heavy flow days, can reduce total menstrual blood loss by 20-45%. A review of data indicates that blood loss reduction was not affected by the type of NSAID used, but that low-dose NSAIDs were less effective than high-dose regimens.[2]

• **Antifibrinolytic therapy:** According to a review of data, use of this therapy resulted in a 40-50% reduction in mean blood loss.[3] The antifibrinolytic therapy tranexamic acid (Lysteda, Ferring Pharmaceuticals of Saint-Prex, Switzerland) has been used in Europe for treatment of heavy menstrual bleeding for more than three decades; it was approved for U.S. use in 2009.

• Hormonal therapies: These approaches are even more effective in treating heavy menstrual bleeding.[1] Progestin-only pills and depot medroxyprogesterone acetate (DMPA) are commonly used to treat heavy or prolonged menstrual bleeding, even though their use for this indication is off-label.[1] Combined pills also are an option; one study of low-dose combined pills showed a 68% reduction in menstrual bleeding.[4]

• Levonorgestrel (LNG) intrauterine contraceptive: The LNG intrauterine device is the most effective medical therapy for heavy menstrual bleeding and carries an approved indication for such treatment.[1]

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Female condom effective in fight against HIV

According to a new economic analysis of the DC Female Condom program, a public-private partnership to provide and promote FC2 Female Condoms (Female Health Co., Chicago), the program prevented enough HIV infections in the first year alone to save more than $8 million in future medical care costs over and above the cost of the program.[1]

The partnership was led by the Washington, DC, Department of Health, supported by the Washington (DC) AIDS Partnership, CVS Caremark of Woonsocket, RI, and the Female Health Co. The coalition provided educational services and distributed more than 200,000 FC2 Female Condoms in areas with disproportionately high HIV female prevalence rates. Financial support from the MAC AIDS Fund based in New York City allowed the project to involve five other women's health and HIV/STD prevention community-based organizations to assist with education and distribution activities.

The Washington, DC, district still has a serious HIV epidemic, and women continue to be at risk, said **Gregory Pappas**, MD, PhD, senior deputy director of the HIV/AIDS STD Administration in the DC Department of Health. At particular risk are African-American women, who constitute just 58% of the district's female population but represent 90% of all new female HIV cases and 93% of living AIDS cases among women.[2]

"It is critical that we empower women, especially those at greatest risk, to take control by increasing awareness of the female condom and providing both education and access to this highly effective and affordable option that empowers women to protect themselves," said Pappas in a statement accompanying the publication of the new research.

The current research paper, a retrospective cost, threshold, and cost-utility analysis, was performed by investigators at the Johns Hopkins Bloomberg School of Public Health of Baltimore. Analysts at the school determined the overall cost of the program, which distributed 200,000 female condoms and provided educational services, at $414,186. This yields a total gross cost per condom used during sex of $3.19, including educational services, the analysis notes.

The number of HIV infections that would have to be averted for the program to be cost-saving was 1.13 in the societal perspective and 1.50 in the public sector payor perspective, with the cost-effectiveness threshold of HIV infections to be averted at 0.46, analysts determined. Overall, mathematical modeling analyses estimated the intervention averted approximately 23 HIV infections and resulted in a "substantial" net cost savings, the scientists conclude.[1]

"These results clearly indicate that delivery of, and education about, female condoms is an effective HIV prevention intervention and an outstanding public health investment," said David Holtgrave, PhD, professor and chair of the Department of Health Behavior and Society at the Johns Hopkins Bloomberg School of Public Health. "Similar community HIV prevention programs involving the female condom should be explored for replication in other high risk areas."

EXECUTIVE SUMMARY

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- The Female Health Co. has launched a free, interactive FC2 Online Training Program for healthcare providers.
- The hour-long program includes detailed product information, provider bias examination, anatomy training, and a variety of "how-to-use" demonstrations.

Check online training

The Female Health Co. has launched a free, interactive FC2 Online Training Program for healthcare providers. Since the U.S. introduction of the FC2 Female Condom in 2009, the company has conducted live trainings across the country to raise awareness of the female condom. The program may be accessed at www.fc2training.com.

How can the online program help clinicians in providing female condoms to their patients? According to **Rebecca Bouck**, U.S. Program Manager at the Female Health Co., the new FC2 online training program helps clinicians on several levels. It provides knowledge and skills training, and it pairs them with access to materials and product samples, she explains.

The program includes detailed product information, provider bias examination, anatomy training, and a variety of "how-to-use" demonstrations to arm clinicians with the knowledge and confidence needed to talk to clients about the FC2 condom, says Bouck. By the end of the hour-long training, participants possess new skills, are able to articulate the benefits of FC2 Female Condom use, and are prepared to tackle previous misconceptions about female condoms, she notes.

Every participant who successfully completes the program also receives a training supply kit, which aids in product demonstration and provides access to materials specific to FC2 Female Condom education, says Bouck. The first participant from an organizational location to successfully complete the FC2 Online Training post-test will receive 100 FC2 Female Condoms to support initiating an FC2 outreach program, notes Bouck.

The online training is available in English. According to company officials, the training will be adapted as needed for global audiences and translated into additional languages, such as French, Portuguese, and Spanish, for use throughout the world.

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COMING IN FUTURE MONTHS

- Science probes potential for HIV vaccine
- Research eyes cancer/DMPA link
- Encourage condom use in college-age women
- Clinical update: female sterilization

Teen TOPICS

Record low teen pregnancy — What is next step?

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A report from the Guttmacher Institute reveals the U.S. teen pregnancy rate is at its lowest level in 40 years and the teen birth rate is at the lowest point since consistent data was collected in the 1950s.[1,2]

In 2008, there were 67.8 pregnancies per 1,000 women ages 15-19, a 42% decrease from a peak rate of 116.9 in 1990. The declines indicate even better outcomes for the youngest female adolescents. Among females under age 15, the pregnancy rate fell 62% from 17.5 in 1990 to 6.6 in 2008.[1]

The most recent data on teen births from the National Center on Health Statistics is just as encouraging. The 2010 birth rate for females ages 15-19 was 34.4 per 1000, a 44% decrease compared to the peak rate of 78 in 1991 and a 64% decrease compared to the all-time peak rate of 96.3 per 1,000 seen in 1957.[2]

Analysis of the 2008-2010 National Survey of Family Growth (NSFG) demonstrates increased contraceptive use as the major force behind declining unintended teen pregnancy and births. While the percent of females 15-19 who reported recent sexual activity remained about the same, the number of girls reporting contraceptive use at last intercourse increased across all methods. Additionally, 23.2% of girls reported dual method use at last intercourse, an increase from 16.1% reported in the 2006-2008 survey.[3] This affirms past research demonstrating the positive effect of increasing contraceptive use on teen pregnancy and birth rates.[4]

However, the U.S. teen pregnancy rate still is drastically high compared to other developed nations.[5] Also, despite the overall decline in the United States, major

disparities in teen pregnancy rates exist when comparing racial and ethnic groups.[1]

The Centers for Disease Control and Prevention (CDC) Pregnancy Risk Assessment Monitoring System (PRAMS) examines maternal attitudes and experiences in 37 states. A January 2012 report analyzing the 2004-2008 PRAMS data reveals reasons young people remain at risk for pregnancy and how providers can help .

About half of the teens with unintended pregnancies reported using no contraception at the time of pregnancy.[6] The most common reason was misunderstanding how one gets pregnant and the risk of becoming pregnant after unprotected intercourse. More than 35% of girls ages 15-17 and 30% of girls ages 18-19 thought they could not get pregnant at the time they had unprotected intercourse. Fourty-two percent of Hispanic girls held this misconception, as compared to 32% of non-Hispanic blacks and 27% of non-Hispanic whites.[6]

Twenty-three percent of girls reported having a partner who was unwilling to use contraception. Fourteen percent of girls said they had trouble getting birth control. Eight percent reported they thought their partner was sterile. Finally, 21% reported they did not mind if they became pregnant. Ambivalence about pregnancy was reported in greater percentages among older girls.[6]

Consider limitations with the PRAMS data. PRAMS operates in 35 states, but adequate responses to questions about contraceptive nonuse were collected only from 19. Additionally, the data was self-reported, and girls were not asked about consistency of method use.

Providers need to provide teens with medically accurate information on how and when one can become pregnant. Providers also might wish to assist teens in condom and contraception negotiation with partners and provide more discreet methods when appropriate.

Policy solutions might help remove financial barriers

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To earn credit for this activity, please follow these instructions.

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CNE/CME QUESTIONS

After reading *Contraceptive Technology Update*, the participant will be able to:

- identify clinical, legal, or scientific issues related to development and provisions of contraceptive technology or other reproductive services;
- describe how those issues affect services and patient care;
- integrate practical solutions to problems and information into daily practices, according to advice from nationally recognized family planning experts;
- provide practical information that is evidence-based to help clinicians deliver contraceptives sensitively and effectively.

1. According to separate guidances issued by the U.S. Preventive Services Task Force and the American Cancer Society, American Society for Colposcopy and Cervical Pathology, and American Society for Clinical Pathology, what is the screening regimen for women ages 21-29?
   A. Screening at three-year intervals with cytology alone
   B. Screening at five-year intervals with cytology alone
   C. Screening at three-year intervals with cytology & HPV test
   D. Screening at five-year intervals with cytology & HPV test

2. How many U.S. women are diagnosed with cervical cancer each year?
   A. About 10,000
   B. More than 12,000
   C. About 20,000
   D. More than 30,000

3. The Centers for Disease Control and Prevention recommend routine annual chlamydia screening for:
   A. All women age 25 and under
   B. All sexually active women age 20 and under
   C. All sexually active women age 25 and under
   D. All sexually active women age 30 and under

4. What are the therapeutic options for treatment of heavy menstrual bleeding that are approved by the Food and Drug Administration?
   A. Mirena levonorgestrel intrauterine system, Lysteda (tranexamic acid), and Natazia (estradiol valerate, dienogest oral contraceptive)
   B. Mirena levonorgestrel intrauterine system, Lysteda (tranexamic acid), and Yaz (ethinyl estradiol/drospirenone oral contraceptive)
   C. Lysteda (tranexamic acid) and Natazia (estradiol valerate, dienogest oral contraceptive)
   D. Mirena levonorgestrel intrauterine system and Ortho Tri-Cyclen (ethinyl estradiol, norgestimate oral contraceptive)

to access. Providers also can improve access by prescribing lower cost methods, providing long-acting methods that are more cost effective, avoiding unnecessary procedures such as pelvic exams that might obstruct accesss, and writing prescriptions to dispense multiple months of supplies.

Addressing reasons for contraceptive nonuse with counseling and education might help bolster decreases in unintended teen pregnancy and births and alleviate disparities faced by vulnerable populations.

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