Breast and Cervical Cancer Resource Guide

Connecting Health Centers to Resources
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Breast and Cervical Cancer Control Initiative for North Carolina Community Health Centers

The North Carolina Community Health Center Association (NCCHCA) is pleased to offer you this handy prevention and care guide to assist in the treatment of breast and cervical cancer.

We are pleased to offer this resource to empower you and your patients with accurate information. We ask that you notify us of additional resources or corrections so we can update the online version of this resource manual.

Yours in Health,

Sonya Bruton, MPA
Chief Executive Officer, NCCHCA
BREAST CANCER RESOURCES
5-Year Rate Changes - Mortality
North Carolina, 2000-2004
All Ages, Both Sexes, All Races (incl Hisp)

All Cancer Sites
Cervix
Prostate
Melanoma of the Skin
Colon & Rectum
Leukemia
Stomach
Thyroid
Lung & Bronchus
Kidney & Renal Pelvis
Brain & ONS
Non-Hodgkin Lymphoma
Uterus
Pancreas
Ovary
Breast (Female)
Oral Cavity & Pharynx
Liver & Bile Duct
Esophagus
Bladder

Annual Percent Change

Created by statecancerprofiles.cancer.gov on 11/09/2007 2:17 p.m.
Annual Percent Change (APC) over the 5-year period calculated by SEER® Stat.
Source: Death data provided by the National Vital Statistics System public use data file. Death rates calculated by the National Cancer Institute using SEER® Stat. Death rates (deaths per 100,000 population per year) are age-adjusted to the 2000 US standard population (19 age groups:<1, 1-4, 5-9, ..., 80-84, 85+). Population counts for denominators are based on Census populations as modified by NCI.

# - The annual percent change is significantly different from zero (p<0.05).
Promoting Breast and Cervical Cancer Screening in Communities:  
Task Force Recommendations on the Use of Client Reminders

*The Task Force on Community Preventive Services recommends the use of client reminders on the basis of strong evidence of effectiveness in promoting breast and cervical cancer screening.*

**Background**

Screening is effective in detecting breast and cervical cancer at early stages and, combined with appropriate treatment, can reduce cancer deaths. Although the U.S. Preventive Services Task Force (USPSTF) recommends regular screening for breast and cervical cancer, more people, especially in underserved populations, need to be screened regularly. Using its standard age-reporting intervals, the National Health Interview Survey (1) found that 70% of women 40 years and older had had a mammogram in the past two years and 82% of women 25 years and older had had a Pap test in the past three years. People with no usual source of health care, those with no health insurance, and those who immigrated to the United States in the past 10 years had the lowest rates of screening (61–67% for breast cancer and 58–62% for cervical cancer). The use of effective population-based interventions to increase cancer screening is critical for programs that aim to reduce deaths from breast and cervical cancer.

**Systematic Review: Client Reminders**

Client reminders advise people in communities or healthcare systems that they are due or late for screening. Reminders can be in the form of letters, postcards, or telephone calls and the content of reminders varies. Reminders can also be tailored to fit the client’s risk profile or other relevant characteristics, such as the individual’s barriers to screening. A systematic review of published studies, conducted on behalf of the Task Force on Community Preventive Services (the Task Force) by a team of scientists and other consultants, examined the effectiveness of client reminders in increasing cancer screening. The studies in the review were chosen using a process developed for the Community Guide. Of 18,395 titles identified (published in 1966–April 2001), 519 articles were retrieved and read for relevance to the topic of cancer screening. Using Community Guide criteria, 147 articles became candidates for use in the reviews of client-oriented topics in cancer screening; 62 of these articles addressed client reminders. Because of the large number of studies, only 48 studies with greatest suitability of design were considered for inclusion in the review. Of these, 15 were excluded on the basis of limitations in execution or design or because they duplicated information in an already-included study and 11 were not included in the summary measure for these analyses because at least one other intervention was used in common by both the intervention and the comparison group. The remaining 22 studies were considered qualifying studies and provided the evidence evaluated in the systematic review: 12 reports described breast cancer screening by mammography and 10 covered cervical cancer screening by Pap test.

**Task Force Recommendations**

- Breast cancer screening: The Task Force recommends client reminders to increase breast cancer screening on the basis of strong evidence of effectiveness. The effect measures (n = 29) were consistently positive (median = 14.7 percentage points; interquartile range, 3.1 to 18.0).

- Cervical cancer screening: The Task Force recommends client reminders to increase cervical cancer screening on the basis of strong evidence of effectiveness. The effect measures (n = 13) were consistently positive (median = 10.1 percentage points; interquartile range, 4.4 to 12.2).

**Using These Findings**

The Task Force recommendation for use of client reminders to increase breast and cervical cancer screening should be applicable in a broad range of settings and populations, assuming that the interventions are adapted to the target populations. Those interested in more information on breast and cervical cancer screening can:

- Refer to other interventions that have been reviewed by the Task Force for increasing the use of breast and cervical cancer screening.
- Find Research-tested Intervention Programs (RTIPs) providing “how to” materials (e.g., sample letters and tailored brochures) to improve promotion of breast cancer and cervical cancer screening.
- Use additional information from Step 2 of the Cancer Control PLANET to help locate people to conduct studies on additional research questions identified by the Task Force.

**Reference**


**Publications:**

- The Guide to Community Preventive Services (Community Guide) provides recommendations on population-based interventions to promote health and to prevent disease, injury, disability, and premature death, appropriate for use by communities and healthcare systems. For more information about the Community Guide (including links to publications and a variety of resources) see www.thecommunityguide.org and for more information about Task Force findings on early detection and control of cancer see www.thecommunityguide.org/cancer. For frequently asked questions about this review see the FAQ’s section. This information is in the public domain. Copying and disseminating freely is encouraged. However, citation to source is appreciated.
- Updated – February 1, 2005
Background Screening procedures for breast, cervical, and colorectal cancer are effective in detecting these conditions at early stages and, combined with appropriate treatment, are likely to reduce mortality. Although the United States Preventive Services Task Force (USPSTF) recommends regular screening for all three conditions,* increased use of these services is needed to reduce cancer mortality and related health disparities among underserved populations. For more information on why efforts to improve cancer screening are needed click here.

Applying population-based interventions that increase use of cancer screening is a critical component of programs that aim to reduce mortality rates. The question is then, what are effective strategies to promote increased use of breast, cervical, and colorectal cancer screening.

Summary of Findings

The independent Task Force on Community Preventive Services issues the following findings for interventions grouped within larger strategies. Strategies address particular barriers to screening such as client-related (e.g., knowledge or attitudinal) barriers to screening, access barriers, or provider and system barriers. Within each of these larger strategies the Task Force considers specific interventions.

Recommendations are based on the strength of the evidence of effectiveness found through a systematic review of published evidence conducted by a team of experts on behalf of the Task Force. A determination that there is “insufficient evidence to determine effectiveness” does NOT mean that the intervention does not work, but rather indicates that additional research is needed to determine whether or not the intervention is effective. Decision makers should consider these evidence-based recommendations in light of local needs, goals, and constraints when choosing interventions to implement. This list represents interventions for which reviews have been completed; other interventions are in review for which findings will be added as Task Force completes their review of the evidence.

*For breast cancer: Regular screening mammography is recommended every one to two years for women aged 40 or older.
The following cancer screening guidelines are recommended for those people at average risk for cancer (unless otherwise specified) and without any specific symptoms.

People who are at increased risk for certain cancers may need to follow a different screening schedule, such as starting at an earlier age or being screened more often. Those with symptoms that could be related to cancer should see their doctor right away.

**Cancer-related Checkup**

For people aged 20 or older having periodic health exams, a cancer-related checkup should include health counseling, and depending on a person's age and gender, might include exams for cancers of the thyroid, oral cavity, skin, lymph nodes, testes, and ovaries, as well as for some non-malignant (non-cancerous) diseases.

Special tests for certain cancer sites are recommended as outlined below.

**Breast Cancer**

- Yearly mammograms are recommended starting at age 40 and continuing for as long as a woman is in good health.

- Clinical breast exam (CBE) should be part of a periodic health exam, about every 3 years for women in their 20s and 30s and every year for women 40 and over.

- Women should know how their breasts normally feel and report any breast change promptly to their health care providers. Breast self-exam (BSE) is an option for women starting in their 20s.

- Women at high risk (greater than 20% lifetime risk) should get an MRI and a mammogram every year. Women at moderately increased risk (15% to 20% lifetime risk) should talk with their doctors about the benefits and limitations of adding MRI screening to their yearly mammogram. Yearly MRI screening is not recommended for women whose lifetime risk of breast cancer is less than 15%.

**References**


Revised: 03/28/2007

Page 2 of 9 Breast Cancer Adapted from NCI’s Breast Cancer PDQ PIF © 1995, 2005 The University of Texas M. D. Anderson Cancer Center, Revised 01/01/05 Patient Education Office

What is “staging”?  

Once breast cancer has been found, more tests will be done to find out if the cancer has spread from the breast to other parts of the body. This is called staging. Your doctor needs to know the stage of your disease to plan treatment. The following stages are used for breast cancer:

• **Breast cancer in situ**  
  About 15-20% of breast cancers are very early cancers. They are sometimes called carcinoma in situ. There are two types of breast cancer in situ. One type is ductal carcinoma in situ (also known as intraductal carcinoma); the other type is lobular carcinoma in situ. Lobular carcinoma in situ is not cancer, but for the purpose of classifying the disease, it is called breast cancer in situ, carcinoma in situ, or stage 0 breast cancer. Lobular carcinoma in situ is found on some occasions when a biopsy is done for another lump or abnormality that was found on the mammogram. Patients with this condition have a 25% chance of developing breast cancer in either breast in the next 25 years.

• **Stage I**  
  The cancer is no bigger than 2 centimeters (about 1 inch) and has not spread outside the breast.

• **Stage II**  
  Any of the following may be true:
  - The cancer is no bigger than 2 centimeters but has spread to the lymph nodes under the arm (the axillary lymph nodes).
  - The cancer is between 2 and 5 centimeters (from 1 to 2 inches). The cancer may or may not have spread to the lymph nodes under the arm.
  - The cancer is bigger than 5 centimeters (larger than 2 inches), but has not spread to the lymph nodes under the arm.

• **Stage III**  
  Stage III is divided into stages IIIA, IIIB and IIIC.
  - Stage IIIA is defined by either of the following:
    - The cancer is bigger than 5 centimeters, it has spread to the lymph nodes under the arm, and the lymph nodes have grown into each other or into other structures.
    - The cancer is bigger than 5 centimeters and has spread to lymph nodes under the arm.
  - Stage IIIB is defined by either of the following:
    - The cancer has spread to tissues near the breast (skin, chest wall, including the ribs and the muscles in the chest).
    - The cancer has spread to lymph nodes inside the chest wall along the breastbone.
  - Stage IIIC is defined by the following:
    - The cancer has spread to the lymph nodes, inside the neck, near the collarbone.

• **Stage IV**  
  The cancer has spread to other organs of the body, most often the bones, lungs, liver, or brain.

http://www.2.mdanderson.org/app/pe/index.cfm?pagename=opendoc@docid=50
Staging and Survival Rates of Breast Cancer

**Breast Cancer Diagnosis**

**What is Staging?**

Staging is the process physicians use to assess the size and location of a patient’s cancer. Identifying the cancer stage is one of the most important factors in selecting treatment options. Several tests may be performed to help stage breast cancer including clinical breast exams biopsy, and certain imaging tests such as a chest x-ray, mamogram, bone scan, CT scan, and MRI scan. Blood tests are used to evaluate a woman’s overall health and detect whether the cancer has spread to certain organs often follow imaging tests. To stage cancer, the American Joint Committee on Cancer first places the cancer in a letter category using the TNM classification system. Cancers are designated the letter T (tumor size), N (palpable nodes), and/or M (metastasis):

**T: Tumor Size**

The letter T followed by a number from 0 to 4 describes the tumor’s size and whether it has spread to the skin or chest wall under the breast. Higher T numbers indicate a larger tumor and/or more extensive spread to tissues surrounding the breast.

- **TX:** Tumor cannot be assessed
- **T0:** No evidence of a tumor
- **Tis:** Cancer may be lobular carcinoma in situ (LCIS), ductal carcinoma in situ (DCIS) or Paget’s disease
- **T1:** Tumor is 2 cm or less in diameter
- **T2:** Tumor is between 2 and 5 cm in diameter
- **T3:** Tumor is more than 5 cm in diameter
- **T4:** Tumor is any size, has attached itself to the chest wall and spread to the pectoral (chest) lymph nodes

**N: Palpable Nodes**

The letter N followed by a number from 0 to 3 indicates whether the cancer has spread to lymph nodes near the breast and, if so, whether the affected nodes are fixed to other structures under the arm.

- **NX:** Lymph nodes cannot be assessed (lymph nodes were previously removed, etc.)
- **N0:** Cancer has not spread to lymph nodes
- **N1:** Cancer has spread to the movable ipsilateral axillary lymph nodes (underarm lymph nodes on same side of breast cancer)
- **N2:** Cancer has spread to ipsilateral (same side of body as breast cancer) lymph nodes fixed to one another or to other structures under the arm

**M: Metastasis**

The letter M followed by a 0 or 1 indicates whether or not the cancer has metastasized (spread) to distant organs (i.e., the lungs or bones) or to lymph nodes that are not next to the breast, such as those above the collarbone.

- **MX:** Metastasis cannot be assessed
- **M0:** No distant metastasis to other organs
- **M1:** Distant metastasis to other organs

**Numerical Stages of Breast Cancer**

The stage of a breast cancer describes its size and the extent to which it has spread. The staging system ranges from Stage 0 to Stage IV.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Tumor Size</th>
<th>Lymph Node Involvement</th>
<th>Metastasis (Spread)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Less than 2cm</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>II</td>
<td>Between 2-5cm</td>
<td>No or in same side of breast</td>
<td>No</td>
</tr>
<tr>
<td>III</td>
<td>More than 5cm</td>
<td>Yes, on same side of breast</td>
<td>No</td>
</tr>
<tr>
<td>IV</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Stage 0 or “in situ,” Tis, N0, M0 or “in situ”:** The term “in situ” literally means “in place.” Stage 0 cancer is a contained cancer that has not spread beyond the breast ductal system. Fifteen to twenty percent of breast cancers detected by clinical examinations or testing are in Stage 0 (the earliest form of breast cancer). Two types of Stage 0 cancer are lobular carcinoma in situ (LCIS) and ductal carcinoma in situ (DCIS).

**Additional Resources and References**


Updated: September 12, 2007
Mobile Mammography Vans

Here you will find information on Mobile Mammography Vans currently operating in North Carolina. For updated mammography van information, please visit www.ncchca.org

Catawba Valley Medical Center
810 Fairgrove Church Road, SE
Hickory, NC 28602
Mobile Mammography Van
Contact: Sharon Smith
(828) 485-2300
Call for van schedule.
Serving Catawba, Burke, Alexander, Lincoln and Iredell counties.

Coastal Care Van
New Hanover Regional Medical Center
PO Box 9000
Cape Fear Campus Bldg. M
Wilmington, NC 28402
Contact: Iris Baker, Outreach Coordinator,
Iris.Baker@nhhn.org
(910) 452-8297
Call for van schedule.
LaSonia Melvin, Patient Navigator,
LaSonia.Melvin@coastalhec.org
Serving Duplin, New Hanover and Pender counties.
Ms. Baker writes, “In an effort to remove barriers to treatment, New Hanover Regional Medical Center provides a Patient Navigator for patients of its Cancer Center. Barriers to treatment include numerous social and financial factors including low socio-economic status, past traditions, belief systems, lack of knowledge about the disease and its treatment, and fear. These services are available to underserved patients who receive treatment at the Cancer Center. Patient navigators can be reached at (910) 342-3403.”

First Health Mobile Health Services
First Health Moore Regional Hospital
155 Memorial Drive
PO Box 3000
Pinehurst, NC 28374
Contact: Rachel Lovin, Van Coordinator,
rlovin@firsthealth.org
1-888-534-5333
Call for van schedule.
Serving Moore, Montgomery, Richmond and Hoke counties. Along with mammography screenings, First Health Mobile Health Services offers PSA testing, Blood Pressure, Blood, Cholesterol, and Glucose Screenings, Osteoporosis for women only screening and Ultrasound services. The ultrasound services include carotid artery, peripheral vascular disease and abdominal aortic aneurysm screenings. All screening fees are minimal or are on a sliding fee scale.

The Breast Clinic at Novant Health
Forsyth Medical Center
3333 Silas Creek Parkway
Winston-Salem, NC 27103
Contact: Hazel Talton, Coordinator
(336) 718-4703
Call for van schedule or visit their website.
Serving Forsyth and surrounding counties as far away as Madison and Boone.

Rex Healthcare Mobile Mammography Van
Main Campus
4420 Lake Boone Trail
Raleigh, NC 27607
Contact: Wendy Avery, Coordinator
(919) 784-4210
(9190 857-5200-Pager
Call for van schedule or visit their website.
Serving Wake, Durham, Harnett, Wilson, Cumberland and Harnett counties.

Useful Breast Cancer Resources
Find a Susan G. Komen Affiliate in NC

Charlotte Affiliate
www.komencharlotte.org
505 East Boulevard Suite 101
Charlotte, NC 28203
Phone: 704-347-8181
Fax: 704-347-8145
Email Address: director@komencharlotte.org

NC Triangle Affiliate
www.komenctriangle.org
2314 S. Miami Blvd.
Suite 154
Durham, NC 27703
Phone: 919-493-CURE
Fax: 919-361-8049
Email Address: info@komenctriangle.org

NC Foothills Affiliate
www.komenncfoothills.org
Frye Regional Medical Center
420 N. Center Street
Hickory, NC 28601
Phone: 828-781-2873
Fax: 828-315-3927
Email Address: teresa.jarrett@tenethealth.com

North Carolina Triad Affiliate
www.komennctriad.org
1106 Burke Street
Winston-Salem, NC 27101
Phone: 336-721-0037
Fax: 336-721-0681
Email Address: info@komennctriad.org

Thanks to more than 100,000 survivors and activists dedicated to the fight against breast cancer, the Komen Affiliate Network is the nation’s largest private funder of community-based breast health education and breast cancer screening and treatment programs.

Up to 75 percent of the net income from each Komen domestic Affiliate is dedicated to fighting breast cancer in that Affiliate’s community. Every year, Komen Affiliates award grants to local hospitals and community organizations that provide breast health education and breast cancer screening and treatment programs for medically underserved women. Remaining net income (a minimum of 25 percent) supports the Komen Award and Research Grant Program, which funds groundbreaking breast cancer research, meritorious awards and educational and scientific programs around the world.

In order to ensure they are funding programs that address the specific unmet breast health needs of their communities, Komen Affiliates work with local medical experts and community leaders to conduct comprehensive community needs assessments. These community profiles are then used to establish local grant application and review processes consistent with Komen’s standards and mission.

To learn more about funding through the Komen Affiliate network, please contact an Affiliate near you.

Source: www.komen.org

Useful Breast Cancer Resources

Useful Websites for Breast Cancer Resources

The American Cancer Society
www.cancer.org

The Breast Cancer Resource Directory of North Carolina
www.bcresourcedirectory.org/

The Susan G. Komen Foundation
www.komen.org

The Immigrant Health Initiative
Chatham Hospital

North Carolina Office of Minority Health and Health Disparities
Department of Health and Human Services
www.ncminorityhealth.org/omhh

Boat People SOS
Empowering Vietnamese Communities for Tomorrow
Charlotte Affiliate
Email – charlotte@bpsos.org
www.bpsos.org

North Carolina Advisory Committee on Cancer Coordination and Control (NC4C)
North Carolina Division of Public Health
1915 Mail Service Center
Raleigh, NC 27699
www.nccancer.com

North Carolina Cancer Assistance Program
North Carolina Division of Public Health
1915 Mail Service Center
Raleigh, NC 27699
(919) 707-5321

The North Carolina Breast and Cervical Cancer Control Program (BCCCP)

NC Division of Public Health, Chronic Disease and Injury Section
1915 Mail Service Center
Raleigh, NC 27699

This State sponsored program provides screening for breast and cervical cancer at no cost for women who have limited or no insurance, do not have Medicare Part B or Medicaid, and meet income guidelines (at or below 200% of Federal Poverty Guidelines). Priority is given to women 50-65 years of age and ethnic minorities.

For more information about connecting non-health department providers to the BCCCP program, please contact, BCCCP Program Director, Linda Carter at (919) 715-0111 or 1-800-4CANCER.

Useful Websites for Breast Cancer Resources

The American Cancer Society
www.cancer.org

The Breast Cancer Resource Directory of North Carolina
www.bcresourcedirectory.org/

The Susan G. Komen Foundation
www.komen.org

The Immigrant Health Initiative
Chatham Hospital

North Carolina Office of Minority Health and Health Disparities
Department of Health and Human Services
www.ncminorityhealth.org/omhh

Boat People SOS
Empowering Vietnamese Communities for Tomorrow
Charlotte Affiliate
Email – charlotte@bpsos.org
www.bpsos.org

North Carolina Advisory Committee on Cancer Coordination and Control (NC4C)
North Carolina Division of Public Health
1915 Mail Service Center
Raleigh, NC 27699
www.nccancer.com

North Carolina Cancer Assistance Program
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CERVICAL CANCER RESOURCES
Background: Cervical cancer screening with the Pap test is very effective and has been responsible for the remarkable decrease in cervical cancer mortality over the past 50 years. As we increase our understanding of the accuracy, efficacy, and cost-effectiveness of current screening tests, such as conventional cytology (Papanicolou or Pap test) and liquid based cytology, and new screening tests, such as tests for the human papillomavirus (HPV), it is important that guidelines be regularly updated. In 2002 and 2003, national expert groups, such as the American Cancer Society (ACS), the American College of Obstetrics and Gynecologists (ACOG), and the U.S. Preventive Services Task Force (USPSTF), issued guidelines and/or recommendations regarding cervical cancer screening. This statement describes the position of the Early Detection Subcommittee of the NC Advisory Committee on Cancer Coordination and Control in relation to these recent guidelines.

Summary of recent guidelines: While the USPSTF recommendations are based on a systematic review of the literature, the ACS guidelines are produced by an expert panel and the ACOG guidelines by its Committee on Practice Bulletins. Despite differing methodologies, the three sets of guidelines and recommendations are in general agreement on many issues, particularly when to begin screening, whether to screen women who have had a hysterectomy, and appropriate screening intervals. The major discrepancies among the recommendations are in when to discontinue screening and in the use of new technologies. While the ACOG does not recommend an upper age limit for screening, the ACS recommends age 70 and the USPSTF recommends age 65. The USPSTF finds insufficient evidence to determine whether liquid based cytology is more effective than conventional Pap smear screening, whereas ACS and ACOG both recommend liquid based cytology as an alternative to conventional cytology.

The third discrepancy involves the use of DNA testing for the human papillomavirus (HPV), recognized as the causative agent of most cervical cancer. The ACS and ACOG each recommends that combined testing (HPV DNA testing in conjunction with cytology) can be considered as an alternative to routine Pap testing in women aged 30 and older, but that combined testing not be performed more frequently than every three years. The USPSTF finds insufficient evidence to recommend for or against I-WV screening as an adjunct or alternative to regular Pap smear screening. None of these expert groups suggests using HPV testing alone for screening. The American Society for Colposcopy and Cervical Pathology (ASCCP), which focuses on the management of cervical abnormalities, recommends HPV testing as an alternative for the evaluation of Atypical Squamous Cells of Uncertain Significance (ASC-US).
**Position of the Early Detection Subcommittee:** The Early Detection Subcommittee (the Subcommittee) of the NC Advisory Committee on Cancer Coordination and Control (the Advisory Committee) endorses the cervical cancer screening guidelines of the ACS but with concerns regarding the use of HPV testing.

- Specifically, the Subcommittee agrees with recommendations that:
  - Screening should begin three years after the onset of vaginal intercourse or no later than age 21.
  - Screening may be discontinued in women who are age 70 and older, who have had three or more consecutive and technically satisfactory negative tests, and who have had no abnormal tests in the last 10-year period.
  - Screening in women who have had a hysterectomy for benign disease is not indicated.
  - Screening should be performed annually with cytology or every two years using liquid-based cytology; after age 30, women with three consecutive, satisfactory and normal results may be screened every 2 to 3 years (unless they have one or more conditions such as a history of in utero DES exposure or are NIV positive).

- Regarding the use of combined testing: (testing for HPV in conjunction with the Pap test) for screening, at this time the Early Detection Subcommittee does not endorse its use.

**Rationale for the Subcommittee position on combined testing:** Although combined testing shows considerable promise, the Early Detection Subcommittee expresses the following concerns:

- As national expert groups generally agree, additional longitudinal data on the use of combined testing versus Pap test alone is needed to determine cost-effectiveness.

- Mathematical models suggest that combined testing may eventually save costs through decreased visits for follow-up testing and increased intervals between screenings. These savings, however, have not yet been demonstrated in a clinical study. In addition, it is anticipated that extensive patient and provider education will be necessary to ensure the combined test is not used more frequently than every three years.

- There is not yet sufficient evidence to formulate evidence-based clinical guidelines for the management of a screening test that is positive for HPV in the presence of normal cytology or a negative colposcopy. Consensus guidelines have been developed and will soon be available, but published studies are needed.

- The standard Pap test remains an effective method of screening for cervical cancer. Increased recruitment of women who have never been screened or who have not been regularly screened is currently the strategy that will result in the greatest gains in cervical cancers early detection, prevention, and mortality. More public health programs targeting the uninsured and underinsured are faced with limited funding. Without careful consideration of cost-effectiveness, resources should not be shifted toward newer technology at the cost of screening fewer women.

**Anticipated updates to this position statement:** Development and testing of HPV vaccines to prevent cervical cancer is ongoing and may eventually need to be incorporated into consideration of screening. Other technology and the evidence for the cost-effectiveness of various strategies for cervical cancer screening continue to evolve. As more data become available, the Subcommittee will review this position and determine if changes should be brought forward for Advisory Committee consideration.

**ADOPTED: January 23, 2004**

Loop electrocautery excision procedure (LEEP) and conization

These two more extensive methods of diagnosing abnormal tissue may also be used as treatments for CIN and early invasive cervical cancer.

With LEEP, abnormal or suspicious cervical tissue is removed with a sharp wire loop and the site is cauterized -- burned to eliminate any remaining abnormal tissue. With conization, a cone-shaped section of the cervix is cut with a scalpel or a laser and removed for biopsy. This procedure requires general anesthesia and usually is performed as outpatient surgery in the hospital. Most doctors suggest conization only when other diagnostic tests have revealed cancerous abnormalities.

Conization helps to assess how much tissue is diseased. Because it requires removal of part of the cervix, it should be recommended only when invasive cervical cancer is suspected and a comprehensive diagnosis is necessary, and only after biopsies from other tests have indicated severe abnormalities.

Staging Cervical Cancer

The decision about how to treat any invasive cancer is based on how deeply the tumor has grown into the tissue and how much it has spread or metastasized. A classification system, called staging, is used to describe how far cancer has spread. The table below shows the five stages and the rates of survival after treatment for each stage.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Areas Reached</th>
<th>Survival</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
<td>Carcinoma in situ (localized)</td>
<td>100% 5-year survival</td>
</tr>
<tr>
<td>Stage 1</td>
<td>Cancer is confined to the cervix</td>
<td>85% 5-year survival</td>
</tr>
<tr>
<td>Stage II</td>
<td>Cancer extends to the upper third of the vagina, or the tissue around the uterus, but not the pelvic wall</td>
<td>50 to 60% 5-year Survival</td>
</tr>
<tr>
<td>Stage III</td>
<td>The lower third of the vagina and/or the pelvic sidewall and possibly the kidneys are diseased</td>
<td>30% 5-year survival</td>
</tr>
<tr>
<td>Stage IV</td>
<td>Cancer has spread beyond the reproductive tract involving the bladder or rectum, and has invaded distant organs (most often the lungs or liver), the bones, or other systems in the body</td>
<td>5% 5-year survival</td>
</tr>
</tbody>
</table>
Stages of Cervical Cancer

Stage IA
- Microinvasive; identified only microscopically
- IA1: Invasion no greater than 3mm in depth and no wider than 7mm
- IA2: Invasion greater than 3mm and no greater than 5mm and no wider than 7mm

Stage IB
- Clinical lesions confined to the cervix or preclinical lesions greater than Stage IA
- Stage IB1: Clinical lesions no greater than 4 cm
- Stage IB2: Clinical lesions greater than 4 cm

Stage IIA
- Involvement of the vagina but no evidence of parametrial involvement

Stage IIB
- Infiltration of the parametria but not out to the sidewall

Stage IIIA
- Involvement of the lower third of the vagina but not out to the pelvic sidewall if the parametria are involved

Stage IIIB
- Extension onto the pelvic sidewall and, or hydrenephrosis or nonfunctioning kidney

Stage IVA
- Involvement of the mucosa of the bladder or rectum

Stage IVB
- Distant metastasis or disease outside the true pelvis

www.cancerfacts.com/GeneralContent/Cervical/Gen_Diagnosis.asp?CD=12
Recommendations for Human Papillomavirus (HPV) Vaccine Use to Prevent Cervical Cancer and Pre-Cancers

Background

Vaccines have been developed that can help protect women from some HPV infections. So far, a vaccine that protects against HPV types 6, 11, 16, and 18 (Gardasil®) and one that protects against types 16 and 18 (Cervarix®) have been studied. In clinical trials Gardasil® was found to prevent genital warts caused by HPV types 6 and 11 and prevent pre-cancer cervix cell changes caused by types 16 and 18.

Gardasil® is the only FDA-approved HPV vaccine available at this time. The vaccine is used to prevent HPV infection -- before an abnormal Pap test develops. It will not treat an existing infection. The Gardasil® vaccine requires a series of 3 injections over a 6-month period. The second injection is given 2 months after the first, and the third is given 4 months after the second.

ACS Recommendations

- Routine HPV vaccination is recommended for females aged 11 to 12 years.
- Females as young as age 9 years can receive HPV vaccination.
- HPV vaccination is also recommended for females aged 13 to 18 years to catch up missed vaccines or to complete the series.

This means that girls in this age group who have not yet started the series of vaccinations and those who started before age 13 but have not yet completed the vaccination series should be vaccinated.

- At this time there is not enough evidence to recommend for or against vaccination of all 19- to 26-year-old females in the general population. A decision about whether a woman aged 19 to 26 years should get the vaccine should be based on an informed discussion between the woman and her health care provider. This discussion should include the likelihood of previous HPV exposure and potential benefit from vaccination. For the greatest benefit, the vaccine should be given prior to potential exposure to genital HPV through sex. The more sexual partners a woman has had, the less likely the vaccine will be of benefit.

The lack of evidence for the 19 to 26-year old age group is based on the following:

- In clinical trials, women with an average of 2 to 4 lifetime sexual partners got less benefit from the vaccine in terms of reducing the overall incidence of cervical cell changes. (The average number of sexual partners for women 19 to 26 is 3 to 4.)
- The vaccine has not been tested in women who have had more than 4 lifetime sexual partners.
- It is not known if vaccination is cost-effective in this age group.
- At this time vaccination is not recommended for women over age 26 or for males. Research is now being done on the use of Gardasil® in older females and in males.
- Screening for cervical cell changes that are pre-cancers and cancer (with Pap tests and other tests) should continue in both vaccinated and unvaccinated women according to current ACS early detection guidelines.

The vaccine protects against 70% of cervical cancers and doesn't protect against all cancer-causing types of HPV, so even in women who have been vaccinated, cervical cancer is still possible.

Reference


Revised: 03/12/2007
Overview

* The ACIP advises the director of CDC and the Secretary of Health and Human Services (HHS) on the control of vaccine-preventable disease and vaccine usage. The ACIP is comprised of 15 members appointed by the Secretary of HHS. Recommendations made by the ACIP become CDC policy when they are accepted by the director of CDC and are published in CDC’s Morbidity and Mortality Weekly Report (MMWR).

On June 8, 2006, the Food and Drug Administration (FDA) licensed the first vaccine developed to prevent cervical cancer and other diseases in females caused by certain types of genital human papillomavirus (HPV). The quadrivalent vaccine, Gardasil®, protects against four HPV types (6, 11, 16, 18), which are responsible for 70% of cervical cancers and 90% of genital warts. On June 29, 2006, the Advisory Committee on Immunization Practices (ACIP*) voted to recommend use of this vaccine in females, ages 9-26 years.

This prophylactic vaccine, made from non-infectious HPV-like particles (VLP), offers a promising new approach to the prevention of HPV and associated conditions. However, this vaccine will not replace other prevention strategies since it will not work for all genital HPV types.

Provisional HPV Vaccine Recommendations

- The HPV vaccine is recommended for 11-12 year-old girls, but can be administered to girls as young as 9 years of age. The vaccine also is recommended for 13-26 year-old females who have not yet received or completed the vaccine series.

- Ideally, the vaccine should be administered before onset of sexual activity. However, females who are sexually active also may benefit from vaccination. Females who have not been infected with any vaccine HPV type would receive the full benefit of vaccination. Females who have already been infected with one or more HPV type would still get protection from the vaccine types they have not acquired. Few young women are infected with all four HPV types in the vaccine. Currently, there is no test available for clinical use to determine whether a female has had any or all of the four HPV types in the vaccine.

HPV Vaccine Safety

- The HPV vaccine has been tested in over 11,000 females (9-26 years of age) in many countries around the world, including the United States (U.S).

- These studies found that the HPV vaccine was safe and caused no serious side effects. Adverse events were mainly injection site pain. This reaction was common but mild.

- A detailed and coordinated post-licensure safety monitoring plan is in place.

- There is no thimerosal or mercury contained in the vaccine.

HPV Vaccine Efficacy

- The efficacy of this vaccine has mainly been studied in young women (16-26 years of age) who previously had not been exposed to any of the four HPV types in the vaccine. These clinical trials have demonstrated 100% efficacy in preventing cervical precancers caused by the targeted HPV types, and nearly 100% efficacy in preventing vulvar and vaginal precancers and genital warts caused by the targeted HPV types.

- The vaccine has no therapeutic effect on HPV-related disease. If a girl or woman is already infected with one of the HPV types in the vaccine, the vaccine will not prevent disease from that type.

- The ACIP recommendation for vaccine use in girls as young as 9 years of age is based on ‘bridging’ immunogenicity and safety studies, which were conducted in about 1,100 females, 9-to-15 years of age. These studies demonstrated that over 99% of study participants developed antibodies after vaccination; titers were higher for young girls than for older females participating in the efficacy trials.

- While it is possible that vaccination of males with the quadrivalent vaccine may offer direct health benefits to males and indirect health benefits to females, there are currently no efficacy data available to support use of HPV vaccine in males. Efficacy studies in males are ongoing. Information will be available in the future.

Duration of Vaccine Protection

- The duration of vaccine protection is unclear. Current studies (with five-year followup) indicate that the vaccine is effective for at least five years. There is no evidence of waning immunity during that time period. This information will be updated as additional data regarding duration of immunity become available.
HPV Vaccine Delivery
(Provisional Recommendations)

• The vaccine should be delivered through a series of three intra-muscular injections over a six-month period. The second and third doses should be given 2 and 6 months after the first dose.

• The vaccine can be administered at the same visit as other age-appropriate vaccines, such as Tdap, Td, MCV4, and hepatitis B vaccines.

• The HPV vaccine can be given to females who have an equivocal or abnormal Pap test, a positive Hybrid Capture II® high risk test, or genital warts. However, women should be advised that data do not indicate that the vaccine will have any therapeutic effect on existing Pap test abnormalities, HPV infection or genital warts.

• Lactating women can receive the HPV vaccine.

• Immunocompromised females, either from disease or medication, can receive this vaccine; however, the immune response to vaccination and vaccine efficacy might be less than in immunocompetent females.

• The HPV vaccine is not recommended for use in pregnancy. The vaccine has not been causally associated with adverse outcomes of pregnancy or adverse events to the developing fetus. However, data on vaccination in pregnancy are limited. Any exposure to vaccine in pregnancy should be reported to the vaccine pregnancy registry (800-986-8999).

• The HPV vaccine is contraindicated for persons with a history of immediate hypersensitivity to yeast or to any vaccine component.

• The HPV vaccine can be administered to people with minor acute illnesses (e.g., diarrhea or mild upper respiratory tract infections, with or without fever). Vaccination of people with moderate or severe acute illnesses should be deferred until after the illness improves.

• Cervical cancer screening recommendations have not changed for females who receive the HPV vaccine.

• Vaccine providers should notify vaccinated women that they should continue to practice protective sexual behaviors (e.g., abstinence, monogamy, limiting the number of sex partners, and using condoms, which may have a protective effect on HPV acquisition, reduce the risk for HPV-associated diseases, and mitigate the adverse consequences of infection with HPV1 ), since the vaccine will not prevent all cases of genital warts—nor will it prevent other sexually transmitted infections (STIs).

• CDC has developed a list of vaccine questions and answers, which vaccine providers may find useful for patient discussions.

HPV Vaccine Cost

• The private sector list price of the vaccine is $119.75 per dose (about $360 for full series).

• The federal Vaccines for Children (VFC) Program will provide free vaccines to children and adolescents under 19 years of age, who are either uninsured, Medicaid-eligible, American Indian, or Alaska Native. There are over 45,000 sites that provide VFC vaccines, including hospital, private, and public clinics. The VFC Program also allows children and adolescents to receive VFC vaccines through Federally Qualified Health Centers or Rural Health Centers, if their private health insurance does not cover the vaccine.

• Some states also provide free or low-cost vaccines at public health department clinics to people without health insurance coverage for vaccines.

• While some insurance companies may cover the vaccine and cost of administration, others may not. Most large group insurance plans usually cover the costs of recommended vaccines. However, there is often a short lag-time after a vaccine is recommended, and before it is available and covered by health plans.

Cost Effectiveness of HPV Vaccine

• Published cost-effectiveness studies of HPV vaccination suggest that the cost per quality-adjusted life year (or QALY) saved due to vaccination against HPV types 16 and 18 would be in the $15,000 to $25,000 range per QALY. These published estimates were calculated without including the benefits of preventing HPV types 6 and 11. If such benefits were included, the cost effectiveness of vaccination would appear more favorable.

• Both the impact and cost-effectiveness of HPV vaccination were estimated assuming that vaccination occurs in addition to current cervical cancer screening programs in the U.S.
Policies for HPV Vaccination

- There are no federal laws requiring immunization of children with HPV vaccine. School and childcare entry laws for all immunizations are state laws and vary from state to state.

Other Vaccines in Development

A bivalent HPV vaccine is in the final stages of clinical testing in females. This vaccine would protect against the two types of HPV (16,18) that cause 70% of cervical cancers.

Genital HPV Infection

HPV infection is the most common STI in the U.S., with approximately 20 million people currently infected. Each year, an additional 6.2 million people become newly infected in the U.S. As many as half of infected males and females with HPV are adolescents and young adults, 15-24 years of age.

While most HPV infections are asymptomatic and transient, HPV is of clinical and public health importance because persistent infection with certain oncogenic types can lead to cervical cancer. Cervical cancer is one of the most common cancers in women worldwide. Certain oncogenic types also have been associated with other, less common anogenital cancers. Moreover, non-oncogenic HPV types can cause genital warts and, rarely, respiratory tract warts in children.

Over 40 types of HPV infect mucosal surfaces, including the anogenital epithelium (i.e., cervix, vagina, vulva, rectum, urethra, penis, and anus). Genital HPV can be divided into “high-risk” (i.e., oncogenic or cancer-associated) types, and “low-risk” (i.e., non-oncogenic) types.

- HPV 16 and 18 are the most common high-risk types found in cervical cancer
- HPV 6 and 11 are the most common low-risk types found in genital and respiratory tract warts

Natural history of HPV

Over half of sexually active women and men are infected with HPV at some point in their lives. Approximately 90% of women with HPV infection become HPV-negative within two years. The gradual development of an effective immune response is thought to be the likely mechanism for HPV DNA clearance. However, it is possible that the virus remains in a non-detectable dormant state and then reactivates many years later.

Many women with transient HPV infections may develop mild cytologic (Pap test) abnormalities that spontaneously regress.

About 10% of women infected with HPV develop persistent HPV infection. Women with persistent high-risk HPV infections are at greatest risk for developing high-grade cervical cancer precursor lesions (cervical intra-epithelial neoplasia or CIN 2,3) and cancer.

HPV-Associated Disease

Persistent infection with high-risk types of HPV is associated with almost all cervical cancers. The age-adjusted incidence rate for invasive cervical cancer in the U.S. was 8.7 per 100,000 women in 2002 (most recent year for which data are available). In that same year, 3,952 women died from cervical cancer in the U.S.

Persistent infection with high-risk types of HPV also is associated with cancers of the vulva, vagina, penis and anus. However, these cancers are considerably less common than cervical cancer.

Genital HPV infection with low-risk types of HPV is associated with genital warts in men and women. About 1% of sexually active adults in the U.S. have visible genital warts at any point in time.

Rarely, perinatal transmission of low-risk HPV infections can result in respiratory tract warts in infants and children, a condition known as recurrent respiratory papillomatosis (RRP).

Prevention of Cervical Cancer

Cervical cancer once claimed the lives of more American women than any other type of cancer. But over the last 40 years, widespread cervical cancer screening using the Pap test and treatment of pre-cancerous cervical abnormalities have resulted in a marked reduction in cervical cancer incidence and mortality in the U.S.

New technologies, such as liquid-based cytology and an HPV DNA test, are now commercially available and licensed for use in women for cervical cancer screening and management, although they are not recommended by all professional associations.

Today, as many as 82% of women in the U.S. have been screened with a Pap test in the past three years. Despite this, U.S. screening programs are not reaching all women in the U.S. It is estimated that half of the women diagnosed with cervical cancer have never been screened for cervical cancer, and an additional 10% have not been screened in the previous 5 years. Cervical cancer disproportionately affects women of lower socioeconomic status, without regular access to health care, who are uninsured, and who are recent immigrants.
1 Sexually Transmitted Diseases Treatment Guidelines, 2006. MMWR 2006; 55 [No. RR-11].


Cervical Cancer Resource List
Note: This list was developed by the Gynecologic Cancer Foundation’s National Cervical Cancer Public Education Campaign to help women diagnosed with cervical cancer, and their families, find more information about the disease and seek support. The Campaign welcomes additional information about other organizations that may be added to this list. The sources in this list are provided for information only and inclusion does not constitute a recommendation.

American Cancer Society
Web site: www.cancer.org
Telephone: 1.800.ACS.2345
The American Cancer Society is dedicated to eliminating cancer as a major health problem by saving lives, diminishing suffering and preventing cancer through research, education, advocacy and service. Founded in 1913 and with national headquarters in Atlanta, the Society has 14 regional Divisions and local offices in 3,400 communities, involving millions of volunteers across the United States.

American Social Health Association
Web site: www.ashastd.org
Telephone: 919.361.8400
The American Social Health Association is dedicated to improving the health of individuals, families and communities, with a focus on preventing sexually transmitted diseases and their harmful consequences.

CancerCare
Web site: www.cancercare.org
Telephone: 800.813.HOPE (4673)
CancerCare’s mission is to help people face the many challenges of a cancer diagnosis. As the largest national non-profit organization of its kind, CancerCare provides free professional support services including counseling, education, financial assistance and practical help to people across the country. Our services are available to people of all ages, with all types of cancer and at any stage of the disease.

Centers for Disease Control and Prevention
Web site: www.cdc.gov/cancer/nbccedp/index.htm
Telephone: 888.842.6355
The Centers for Disease Control and Prevention (CDC) is recognized as the lead federal agency for protecting the health and safety of people—at home and abroad—providing credible information to enhance health decisions, and promoting health through strong partnerships.

Eyes on the Prize
Web site: www.eyesontheprize.org
EyesOnThePrize.org, a nonprofit online support group, provides information and emotional support from the survivors’ perspective to women with gynecologic cancers, their families and caregivers. As a support community for living with gynecologic cancer, EyesOnThePrize.org offers survivor stories, answers to questions, resources, discussion about cervical, endometrial, uterine, ovarian, vulvar, gestational and other reproductive cancers. The site includes: warning signs, risks, diagnosis, treatment options and side effects for all gynecologic cancers; links to related sites and opportunity to join private discussion list; database of “on-the-ground” local community GYN cancer support groups.

Gynecologic Cancer Foundation
Web site: www.thegcf.org
Telephone: 312.644.6610
The mission of the Gynecologic Cancer Foundation (GCF) is to ensure public awareness of gynecologic cancer prevention, early diagnosis and proper treatment, as well as to support research and training related to gynecologic cancers. GCF advances this mission by increasing public and private funds that aid in the development and implementation of programs to meet these goals.

National Cancer Institute
Web site: www.cancer.gov/cancerinfo/types/cervical/
Telephone: 800.422.6237
The National Cancer Institute (NCI) is a component of the National Institutes of Health, one of eight agencies that compose the Public Health Service in the Department of Health and Human Services. The NCI, established under the National Cancer Act of 1937, is the Federal Government’s principal agency for cancer research and training.

National Cervical Cancer Coalition
Web site: www.nccc-online.org
Telephone: 800.685.5531
The National Cervical Cancer Coalition (NCCC) is a coalition of women and family members/caregivers battling cervical cancer issues. Involved groups include: women’s groups, cytotechnologists, pathologists, laboratories, technology companies, cancer researchers, hospitals, organizations providing cervical cancer screening programs and other related associations.
OncoLink
Web site: www.oncolink.com
Telephone: 215.349.8895
OncoLink was founded in 1994 by University of Pennsylvania cancer specialists with a mission to help cancer patients, families, health care professionals and the general public receive accurate cancer-related information at no charge. OncoLink provides comprehensive information about specific types of cancer, updates on cancer treatments and news about research advances.

Society of Gynecologic Oncologists
Web site: www.sgo.org
Telephone: 312.644.6610
The Society of Gynecologic Oncologists (SGO) is a national medical specialty organization of physicians who are trained in the comprehensive management of women with malignancies of the reproductive tract. Its purpose is to improve the care of women with gynecologic cancer by encouraging research, disseminating knowledge which will raise the standards of practice in the prevention and treatment of gynecologic malignancies and cooperating with other organizations interested in women’s health care, oncology and related fields.

The Agency for Healthcare Research and Quality
Web site: www.ahrq.gov
Telephone: 301.427.1364
The Agency for Healthcare Research and Quality’s mission is to improve the quality, safety, efficiency, and effectiveness of health care for all Americans. Specific information about cervical cancer can be found under “Preventive Services,” “Women’s Health,” and “Consumers & Patients” sections of the Web site.

The American Society for Colposcopy and Cervical Pathology
Web site: www.asccp.org
Telephone: 301.733.3640
Established in 1964, the American Society for Colposcopy and Cervical Pathology (ASCCP) is the organization of health care professionals committed to improving health through the study, prevention, diagnosis, and management of lower genital tract disorders.

The Witness Project of Harlem
Web site: www.witnessprojectharlem.org
Telephone: 212.659.5517
The Witness Project of Harlem is a breast and cervical cancer education project focusing on African-American women.

U.S. Food and Drug Administration’s Office of Women’s Health
Web site: www.fda.gov/womens/
Telephone: 1.800.994.WOMAN (National Women’s Health Information Center)
The mission of the U.S. Food and Drug Administration’s Office of Women’s Health is to serve as a champion for women’s health both within and outside the agency.

Women’s Cancer Network
Web site: www.wcn.org
Telephone: 312.644.6610
The WCN is an interactive Web site dedicated to informing women about gynecologic cancers. Its goal is to assist women who have developed cancer, as well as their families, to understand more about the disease, learn about treatment options, and gain access to new or experimental therapies. The site was developed by the Gynecologic Cancer Foundation and CancerSource. Specific information about cervical cancer can be found by clicking on “Cancer Info” from the main menu and selecting the link to “cervical cancer.”

Useful Cervical Cancer Internet Resources (Continued)
Patient Education Materials
Breast cancer is the most frequently diagnosed cancer among women (aside from skin cancer). An estimated 178,580 women will be diagnosed in 2007. Diagnoses of breast cancer in men will add another 2,030 cases to the 2007 figure. When found and treated early before it spreads, the five-year survival rate for breast cancer is 98 percent.

**PREVENTION**
- Eat a low-fat diet.
- Exercise regularly.
- Drugs are available to help prevent breast cancer in women at high risk.

**RISKS**
- All men and women
- Women more than 50 years old are at higher risk
- Women and men with a family history of breast cancer
- Women and men with inherited abnormal genes
- Women who had breast cancer in one breast
- Obese men and women with a sedentary lifestyle

**SYMPTOMS**
- A lump, mass or thickening in the breast
- Change in the size or shape of a breast
- Nipple pain, tenderness or discharge, including bleeding
- Nipple that is turning inward, or inverted
- Change in skin color and texture: dimpling, puckering or irritation
- Breast that feels warm or swollen and looks red

**EARLY DETECTION**
- Beginning at age 20, perform breast self-exams (BSE) once a month.
- In your 20s and 30s, have breast exams by a health care professional every three years.
- Beginning at age 40, have annual breast exams by a health care professional.
- At age 40, begin annual screening mammography (a breast X-ray).
- Women at high risk should talk to their health care professional about beginning screening mammogram at a younger age.
- Women at very high risk may also have yearly MRI exams (magnetic resonance imaging).

**TREATMENT**
Therapy depends on the type of cancer and whether the cancer has spread beyond the breast.
- Surgery – mastectomy (breast removal) or a lumpectomy (removal of the tumor).

Chemotherapy and/or radiation and/or hormone therapy before or after surgery.

El cáncer de mamas es el tipo de cáncer más frecuentemente diagnosticado en las mujeres (además del cáncer de la piel). Se estima que unas 178,580 mujeres serán diagnosticadas en el 2007. Los diagnósticos de cáncer de mamas en los hombres agregarán unos 2,030 casos al total anterior. Cuando el cáncer de mamas es encontrado y tratado temprano, antes de que se expanda más allá de las mamas, hay un 98 por ciento de posibilidades de sobrevivir 5 años.

**PREVENCIÓN**
- Mantenga una dieta baja en grasas
- Haga ejercicios físicos con regularidad
- Existen drogas que ayudan a prevenir el cáncer de mamas en mujeres con alto riesgo

**RIESGOS**
- Todas las mujeres y los hombres
- Las mujeres mayores de 50 años están a mayor riesgo
- Las mujeres y los hombres con familiares que hayan tenido cáncer de mamas
- Las mujeres y los hombres que hayan heredado genes anormales
- Las mujeres que hayan tenido cáncer en por lo menos una mama
- Las mujeres y los hombres obesos que llevan una vida sedentaria

**SÍNTOMAS**
- Un bulto, una masa o dureza en la mama
- Cambios en el tamaño o en la forma de la mama
- Dolor en el pezón, sensibilidad o líquido que sale del pezón, inclusive sangre
- Pezón que se mete hacia adentro o está invertido
- Cambios en el color de la piel y en la textura: hoyuelos o irritación
- Mamas que se sienten calientes o hinchadas y rojas

**TEMPRANA DETECCIÓN**
- Comenzando a los 20 años, hágase un auto examen de las mamas una vez al mes
- En sus 20 y 30 años, hágase revisar las mamas por su profesional de cuidado de la salud cada tres años
- Comenzando a los 40 años, hágase revisar las mamas por su profesional de cuidado de la salud cada año
- A los 40 años, comience a hacerse una mamografía todos los años (una radiografía de las mamas)
- Las mujeres que están a mayor riesgo deben hablar con su profesional de cuidado de la salud acerca de si es necesario comenzar las mamografías a una edad más temprana
- Las mujeres con un riesgo muy alto también deberían hacerse un examen de imagen de resonancia magnética o MRI

**TRATAMIENTO**
La terapia depende del tipo de cáncer detectado y si se ha expandido a otras áreas más allá de la mama.
- Cirugía – la mastectomía (cuando se extirpa la mama entera) o la tumorectomía (cuando se extirpa solamente el tumor).
- La quimioterapia y/o la radiación y/o la terapia hormonal antes o después de la cirugía.
Cervical Cancer Fact Sheet

Cervical cancer used to be one of the most common causes of cancer death for women in America, but now more and more women are screened for cervical cancer using the Pap test, also known as a Pap smear. In 2007, an estimated 11,150 cases of cervical cancer will be diagnosed in the U.S.

PREVENTION
- Avoid exposure to human papillomavirus (HPV), a sexually transmitted disease, by limiting the number of partners. HPV is a group of more than 100 types of viruses, some strains of which may also cause genital warts.
- Don’t use tobacco in any form.
- Have routine tests, like Pap tests and pelvic exams, to detect precancerous tissue.
- Consider getting the HPV vaccine. The Centers for Disease Control’s Advisory Committee on Immunization Practices recommends this vaccination for girls and women age 11 to 26. The current vaccine can prevent up to 70 percent of cervical cancer cases.

AT RISK—WOMEN
- Infected with HPV
- Infected with human immunodeficiency virus (HIV)
- Who smoke
- Who do not eat a diet rich in fruits and vegetables
- Who are uninsured and don’t have access to regular screening
- Who have used birth control pills for a long period of time
- With a family history of cervical cancer

SYMPTOMS
Precancerous conditions in the cervix usually cause no symptoms and are not detected unless a woman has a pelvic exam and Pap test. If a woman experiences any of the following symptoms, she should discuss them with her health care professional:
- Increased or unusual discharge from the vagina
- Blood spots or light bleeding at time other than during a woman’s normal period
- Bleeding or pain during sex
- Post-menopausal bleeding
- Menstrual bleeding that lasts longer and is heavier than usual

EARLY DETECTION
- Have annual Pap tests beginning no later than three years after starting to have vaginal intercourse, but no later than age 21.
- Women who have had a total hysterectomy (surgical removal of the uterus and cervix to treat cervical cancer or pre-cancer) should continue annual Pap tests.

TREATMENT
If caught early, most cervical cancer can be treated successfully with:
- Surgery
- Cryosurgery – uses extreme cold to treat pre-cancerous conditions
- Radiation
- Chemotherapy

Prevention
- Evite la exposición al virus del papiloma humano (VPH), una enfermedad que se transmite sexualmente. El VPH es un grupo de más de 100 tipos de virus. También el VPH podría causar llagas genitales
- No utilice tabaco en ninguna de sus formas
- Hágase exámenes de rutina, como exámenes pélvicos y el Papanicolao, para detectar tejidos precancerosos que podrían desarrollarse en cáncer del cuello del útero
- Considere aplicarse la vacuna contra el VPH. El Comité Asesor de Inmunizaciones del Centro de Control de las Enfermedades recomienda esta vacuna para las niñas y las mujeres entre los 11 y los 26 años. La vacuna existe puede prevenir hasta el 70 por ciento de los casos de cáncer del cuello del útero

Riesgos
- Las mujeres infectadas con VPH
- Las mujeres infectadas con el virus de inmunodeficiencia humana (VIH)
- Las mujeres que fuman
- Las mujeres que no mantienen una dieta rica en frutas y vegetales
- Las mujeres que no tienen seguro médico y no tienen acceso a los chequeos de rutina
- Las mujeres que tomaron píldoras anticonceptivas por mucho tiempo
- Las mujeres con antecedentes familiares de cáncer del cuello del útero

Síntomas
Las condiciones precancerosas en el cuello del útero generalmente no causan síntomas y no se detectan a menos que una mujer se haga un examen pélvico o un Papanicolao. Si una mujer siente alguno de los siguientes síntomas, debe hablar con su profesional de cuidado de la salud:
- Aumento del flujo vaginal
- Pérdidas de sangre durante los días que no corresponden al periodo menstrual
- Sangre o dolor durante las relaciones sexuales
- Pérdidas de sangre después de la menopausia
- Menstruación con mayor pérdida de sangre que de costumbre y más duradera.

Temprana detección
- Hágase un Papanicolao una vez al año comenzando no más tarde de tres años luego de haber tenido relaciones sexuales por primera vez, pero no más tarde de los 21 años
- Las mujeres que se hayan hecho una histerectomía total (cuando se extirpa el útero y el cuello del útero para tratar el cáncer o un precáncer) deben continuar haciéndose Papanicolao anuales