NATIONAL CANCER INSTITUTE

A Snapshot of Cervical Cancer

Incidence and Mortality Rate Trends

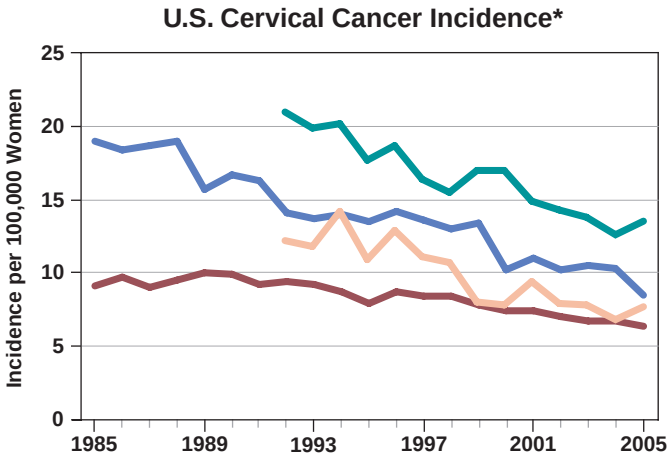
Although cervical cancer incidence and mortality rates have declined approximately 50 percent in the United States over the past three decades, the disease remains a serious health threat. Incidence rates for Hispanic women are higher than those for non-Hispanic women. Even though the mortality rate for African American women has declined more rapidly than the rate for white women, the African American mortality rate continues to be at least double that of whites. Geographic and socioeconomic disparities in cervical cancer mortality also exist.

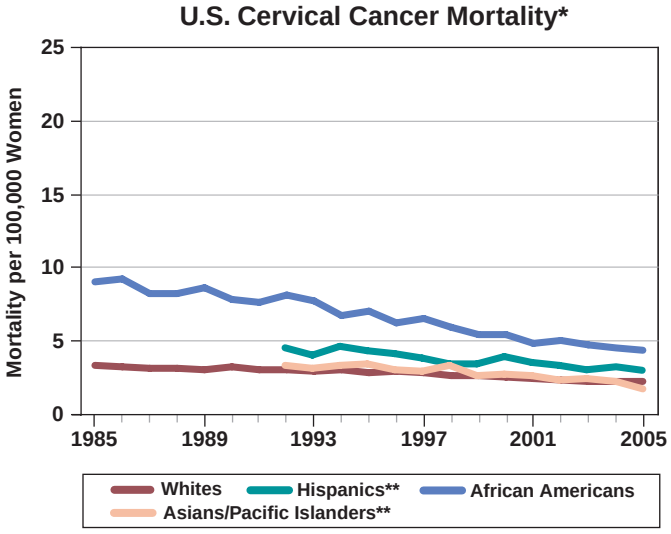
Cervical cancer is preventable and curable if detected early. Important strategies to reduce the risk of cervical cancer include screening with the Papanicolaou (Pap) and human papillomavirus (HPV) tests, as well as prevention of HPV infection with the HPV vaccine. Researchers have identified HPV, which is transmitted through sexual contact, as the main cause of cervical cancer.

It is estimated that approximately $1.7 billion[1] is spent in the United States each year on treatment of cervical cancer.

Source for incidence and mortality data: Surveillance, Epidemiology, and End Results (SEER) Program and the National Center for Health Statistics. Additional statistics and charts are available at http://seer.cancer.gov/.

[1]Cancer Trends Progress Report (http://progressreport.cancer.gov), in 2004 dollars, based on methods described in *Medical Care* 2002 Aug; 40 (8 Suppl): IV-104–17.





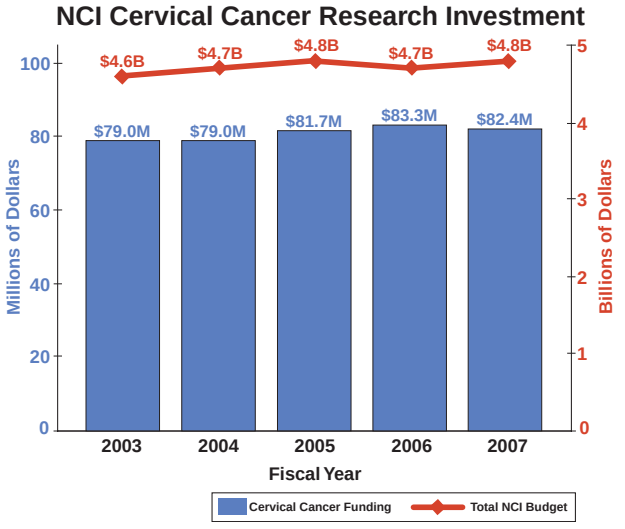
*Significant data for American Indians/Alaskan Natives not available.
**Data for Hispanics and Asians/Pacific Islanders not available before 1992.

Trends in NCI Funding for Cervical Cancer Research

The National Cancer Institute's (NCI's) investment[2] in cervical cancer research has increased from $79 million in fiscal year 2003 to $82.4 million in fiscal year 2007.

Source: NCI Office of Budget and Finance (http://obf.cancer.gov/).

[2]The estimated NCI investment is based on funding associated with a broad range of peer-reviewed scientific activities. For additional information on research planning and budgeting at the National Institutes of Health, see http://www.nih.gov/about/.

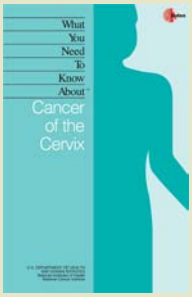


Developed by NCI's Office of Science Planning and Assessment (OSPA) with assistance from SAIC. Snapshots can be found online at: http://planning.cancer.gov/disease/snapshots.shtml.

Examples of NCI Activities Relevant to Cervical Cancer

- Two gynecologic cancer-specific **Specialized Programs of Research Excellence (SPOREs)** are moving results from the laboratory to the clinical setting. http://spores.nci.nih.gov/current/gyn/gyn.html
- The **Portland Kaiser Cohort Study** and the **Study to Understand Cervical Cancer Early Endpoints and Determinants (SUCCEED)** are identifying biomarkers of cervical cancer risk and assessing cervical cancer screening techniques as well as HPV vaccine effectiveness. http://dceg.cancer.gov/hreb/research/cervical-hpv
- The **Breast and Gynecologic Malignancies Faculty** facilitates interactions among basic, epidemiological, and clinical researchers to promote the prevention, diagnosis, and cure of breast and gynecologic cancers. http://ccr.cancer.gov/faculties/faculty.asp?facid=129
- NCI's **Division of Cancer Epidemiology and Genetics (DCEG)** supports a clinical trial to test the efficacy of a vaccine to prevent HPV infection (http://dceg.cancer.gov/veb/research/cervical) and a cervical cancer screening study to detect HPV DNA. http://dceg.cancer.gov/hreb/research/cervical-hpv
- The **ASCUS/LSIL Triage Study for Cervical Cancer (ALTS)** helps women and their doctors respond to Pap test results showing ASCUS (mildly atypical squamous cells of undetermined significance) or LSIL (low-grade squamous intraepithelial lesion). http://dcp.cancer.gov/programs-resources/groups/bgcrg/alts
- **Rapid Access to Preventive Intervention Development (RAPID)** provides funding and resources to develop agents that prevent, reverse, or delay cancer development. One RAPID study is examining the safety of a new HPV vaccine. http://prevention.cancer.gov/programs-resources/programs/rapid/projects
- The **Centers for Population Health and Health Disparities** support research to understand and reduce differences in health outcomes, access, and care. One study targets early detection of cervical cancer in Appalachian women. http://cancercontrol.cancer.gov/populationhealthcenters/index.html
- The **National Survey of Primary Care Physicians' Recommendations & Practice for Breast, Cervical, Colorectal, & Lung Cancer Screening** has the primary aim of characterizing physicians' knowledge, attitudes, recommendations, and practices related to screening for cervical and other cancers. http://healthservices.cancer.gov/surveys/screening_rp/
- The **Cervical Cancer Home Page** directs visitors to up-to-date information on cervical cancer treatment, prevention, genetics, causes, screening, testing, and other topics. http://www.cancer.gov/cervical

What You Need to Know About™ Cancer of the Cervix



This booklet discusses possible causes, symptoms, diagnosis, treatment, and rehabilitation. It also has information to help patients cope with cervical cancer.

Risk factors for cervical cancer include: HPV infection, lack of regular Pap tests, weakened immune system, age, sexual history, smoking, long-term use of birth control pills, and having many children.

http://www.cancer.gov/cancertopics/wyntk/cervix

Information specialists can also answer questions about cancer at 1-800-4-CANCER.

Selected Advances in Cervical Cancer Research

- Compared with hydroxyurea alone, cisplatin-based chemotherapy significantly improves both progression-free and overall survival for women with cervical cancer. http://www.cancer.gov/ncicancerbulletin/NCI_Cancer_Bulletin_052907/page4#c
- A vaccine developed to prevent infection with HPV, which causes cervical cancer, is ineffective for treating women with pre-existing HPV infections. http://www.cancer.gov/ncicancerbulletin/NCI_Cancer_Bulletin_082107/page4
- NCI–sponsored researchers recently created a model of cervical cancer development that helps explain why only some HPV lesions become cancerous. http://ccr.cancer.gov/news/inthejournals/Gius_03.pdf
- Experts developed new physician guidelines for managing patients who have abnormal cervical cancer screening test results. http://www.cancer.gov/ncicancerbulletin/NCI_Cancer_Bulletin_100907/page4