

Endometrial Cancer

Incidence and Mortality Rate Trends

Endometrial cancer is both the most common type of uterine cancer and the most common cancer of the female reproductive system, accounting for approximately 6 percent of all cancers in women in the United States. Mortality rates have increased slightly among African Americans since 2000 but have remained relatively stable among other racial/ethnic groups. Although the incidence rate of endometrial cancer is lower in African-American women than in whites, the mortality rate is nearly twice as high.

It is estimated that approximately \$2.3 billion¹ is spent in the United States each year on endometrial cancer treatment.

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 2006 dollars.

Trends in NCI Funding for Endometrial Cancer Research

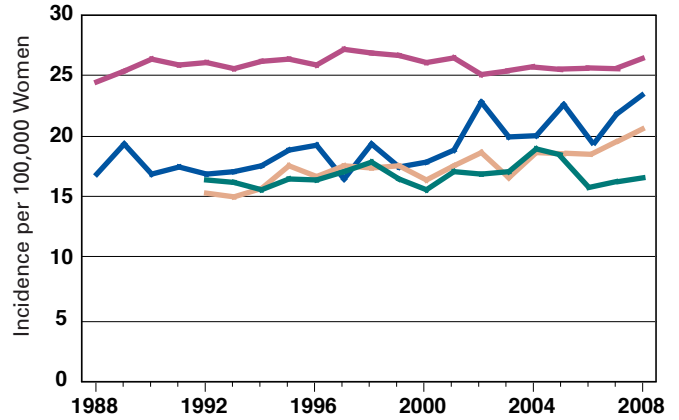
The National Cancer Institute's (NCI) investment² in endometrial cancer research increased from \$16.6 million to \$18.0 million between fiscal years (FY) 2007 and 2009 before decreasing to \$14.2 million in FY 2010. In addition, NCI supported \$8.2 million in endometrial cancer research in FY 2009 and 2010 using funding from the American Recovery and Reinvestment Act (ARRA).³

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

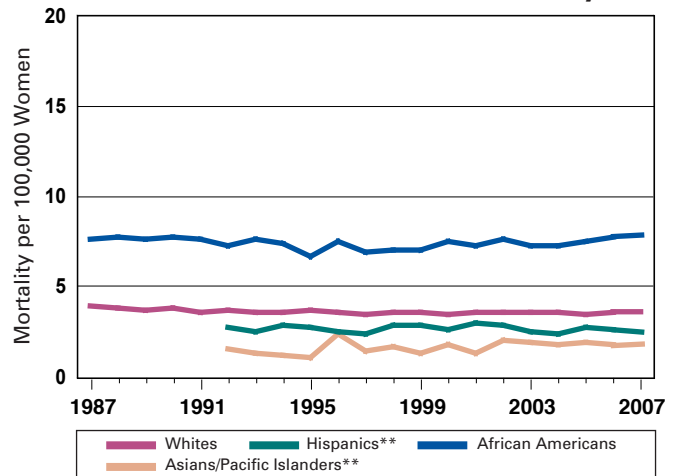
² The estimated NCI investment is based on funding associated with a broad range of peer-reviewed scientific activities. For additional information on research planning and budgeting at the National Institutes of Health (NIH), see <http://www.nih.gov/about/>.

³ For more information regarding ARRA funding at NCI, see <http://www.cancer.gov/aboutnci/recovery/recoveryfunding>.

U.S. Endometrial Cancer Incidence*

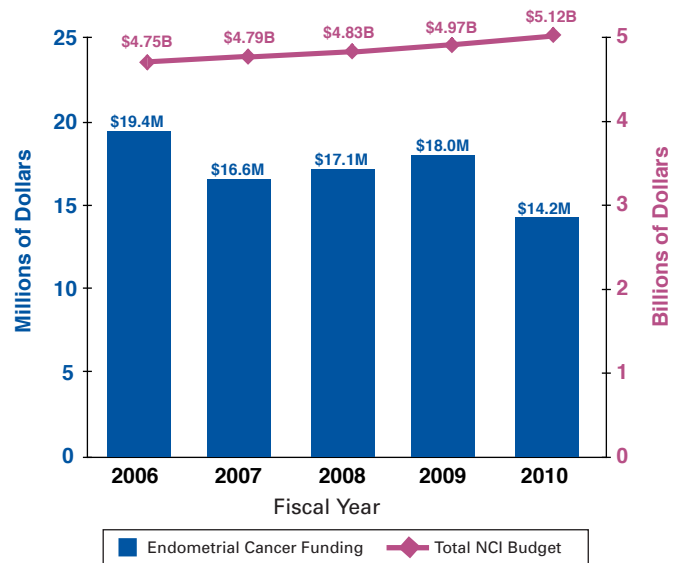


U.S. Endometrial Cancer Mortality*



* Insufficient data available for time trend analysis for American Indians/Alaska Natives.
** Incidence and mortality data not available before 1992.

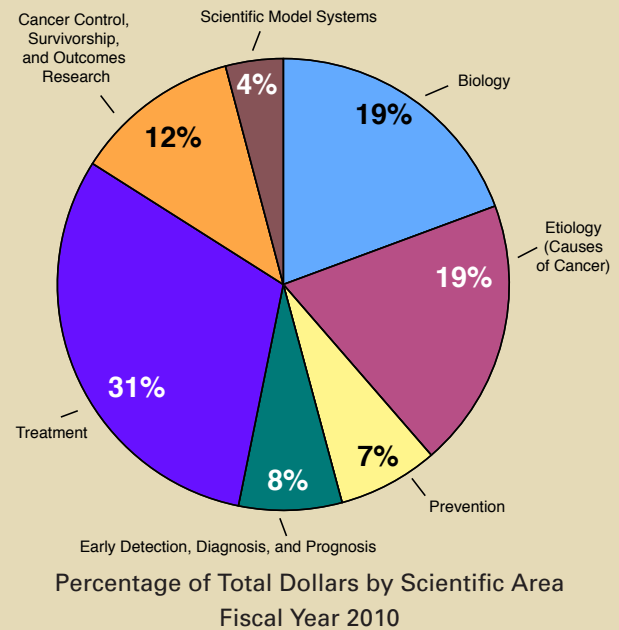
NCI Endometrial Cancer Research Investment



Examples of NCI Activities Relevant to Endometrial Cancer

- The **Ovarian and Endometrial Case Control Study** in Poland explores the effects of physical activity and genetic factors on ovarian and endometrial cancer risks and outcomes. <http://dceg.cancer.gov/hreb/research/ovarianendometrial>
- The **Breast and Gynecologic Cancer Research Group** supports studies on prevention and early detection of endometrial cancer. These include development of new agents, biomarkers, and technologies. <http://prevention.cancer.gov/programs-resources/groups/bgcrgr>
- The **Studies of Energy Balance and Cancer in Humans** program supports research on the impact of diet, physical activity, and weight on the genetic influences of cancer biology and prevention. One study is investigating the relationship between estrogen levels in obese postmenopausal women and increased risk of endometrial cancer. <http://grants.nih.gov/grants/guide/pa-files/PA-09-148.html>
- The **Epidemiology of Endometrial Cancer Consortium** supports molecular epidemiology and genome-wide association studies on endometrial cancer. <http://epi.grants.cancer.gov/Consortia/tables/endometrial.html>
- The **Mouse Models of Human Cancers Consortium (MMHCC)** has developed several endometrial cancer models that are available to the research community. <http://emice.nci.nih.gov/>
- Two **Specialized Programs of Research Excellence (SPOREs)** in endometrial cancer focus on treatment and prevention of gynecologic cancers, including the development of risk and predictive biomarkers for endometrial cancer. <http://trp.cancer.gov/spores/endometrial.htm>

NCI Endometrial Cancer Research Portfolio



Data source: The NCI Funded Research Portfolio. Only projects with assigned scientific area codes are included. A description of relevant research projects can be found on the NCI Funded Research Portfolio Web site at <http://fundedresearch.cancer.gov>

- The **What You Need to Know About™ Cancer of the Uterus** booklet contains information about the possible causes, symptoms, diagnosis, and treatment of cancer of the uterus. Information specialists can also answer questions about cancer at 1-800-4-CANCER. <http://www.cancer.gov/cancertopics/wyntk/uterus/>
- The **NCI Endometrial Cancer Home Page** directs visitors to up-to-date information on endometrial cancer treatment, prevention, genetics, causes, screening, testing, and other related topics. <http://www.cancer.gov/cancertopics/types/endometrial>

Selected Advances in Endometrial Cancer Research

- **Promoter methylation** (a DNA modification that affects the activity of a gene without changing its sequence) **of a gene called HAAO was associated with disease-free survival** in a group of women with the more common form of endometrial cancer. <http://www.ncbi.nlm.nih.gov/pubmed/20211485>
- Researchers have found that **women with the less common (and more lethal) form of endometrial cancer** are more likely than women with the more common form to be older, to be non-white, and to have a history of other cancers and less likely to be obese. <http://www.ncbi.nlm.nih.gov/pubmed/20628804>
- A 20-year follow-up study of women with endometrial hyperplasia has determined that the **risk of endometrial cancer** is much higher for women with atypical hyperplasia than for women with non-atypical hyperplasia. http://dceg.cancer.gov/newsletter/jul10/710_scientifichighlights.shtml and <http://www.ncbi.nlm.nih.gov/pubmed/20065186>
- Results of a large study indicate that **vitamin D does not protect** against endometrial cancer. <http://www.ncbi.nlm.nih.gov/pubmed/20562189>