

# A Snapshot of Endometrial Cancer

## Incidence and Mortality

[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.

Several factors are associated with an increased risk of endometrial cancer, including obesity, exposure to endogenous or exogenous [estrogens](#), [tamoxifen](#) use, and certain inherited conditions. Engaging in physical activity, taking combination oral contraceptives, and having a history of pregnancy and/or breastfeeding are associated with reduced risks. Surgical removal of the uterus or [hormone therapy](#) is used to [prevent endometrial cancer in women with abnormal overgrowth](#) of the [endometrium](#). There is no standard or routine [screening](#) test for endometrial cancer. Standard treatments for endometrial cancer include surgery, [radiation therapy](#), and hormone therapy.

It is estimated that approximately \$2.6 billion<sup>1</sup> 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 the [SEER](#) Web site.

<sup>1</sup> [Cancer Trends Progress Report](#), in 2010 dollars.

## Trends in NCI Funding for Endometrial Cancer Research

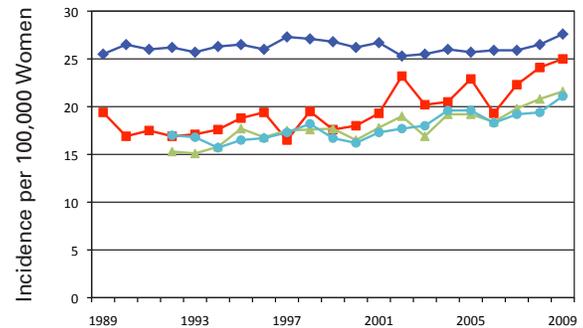
The National Cancer Institute's (NCI) investment<sup>2</sup> in [endometrial cancer research](#) increased from \$16.6 million in fiscal year (FY) 2007 to \$18.0 million in FY 2009 before decreasing to \$15.9 million in FY 2011. In addition to this funding, NCI supported \$8.2 million in endometrial cancer research in FY 2009 and 2010 using funding from the American Recovery and Reinvestment Act (ARRA).<sup>3</sup>

Source: NCI [Office of Budget and Finance](#).

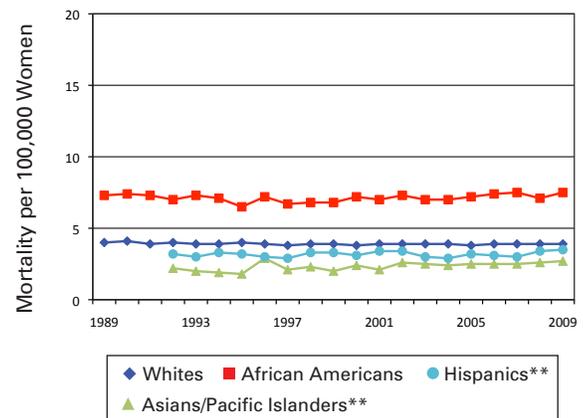
<sup>2</sup> The estimated NCI investment is based on funding associated with a broad range of peer-reviewed scientific activities. For additional information on research planning and budgeting at the National Institutes of Health (NIH), see [About NIH](#).

<sup>3</sup> For more information regarding ARRA funding at NCI, see [Recovery Act Funding at NCI](#).

U.S. Endometrial Cancer Incidence\*

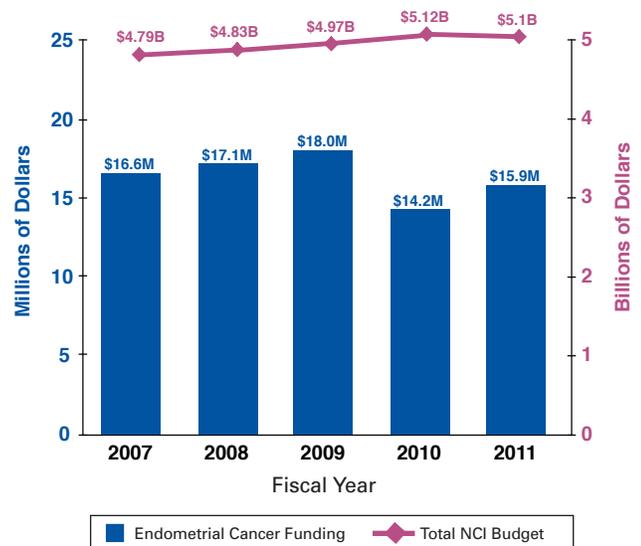


U.S. Endometrial Cancer Mortality\*



\* 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



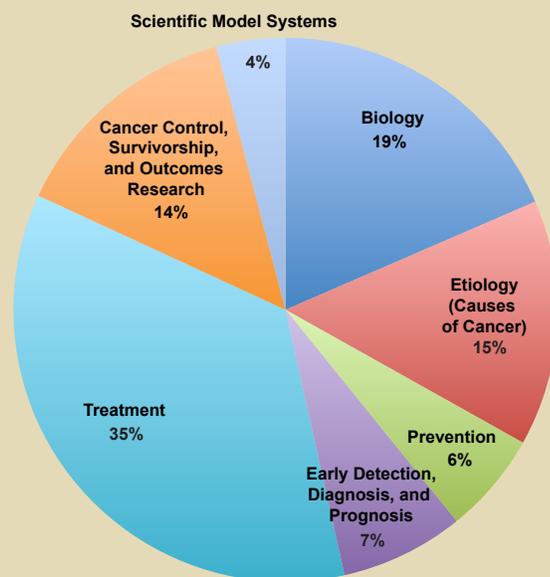
## Examples of NCI Activities Relevant to Endometrial Cancer

- The Division of Epidemiology and Genetics conducts a number of endometrial-cancer-related studies including the [Ovarian and Endometrial Cancer Case-Control Study](#) in Poland, which explores the association of physical activity and genetic factors with ovarian and endometrial cancer risks and outcomes.
- The [Breast and Gynecologic Cancer Research Group](#) supports studies on prevention and early detection of endometrial cancer, including a clinical trial exploring whether hormone therapy can prevent endometrial cancer in women who have [hereditary nonpolyposis colon cancer](#) syndrome, which increases the risk for endometrial cancer.
- The [Epidemiology of Endometrial Cancer Consortium](#) supports molecular [epidemiology](#) and genome-wide association studies of endometrial cancer.
- The [Mouse Models of Human Cancers Consortium \(MMHCC\)](#) has developed several mouse models of endometrial cancer that are available to the research community.
- [The Cancer Genome Atlas \(TCGA\)](#) researchers are systematically identifying the major [genomic](#) changes involved in more than 20 cancers using state-of-the-art genomic analysis technologies. TCGA researchers hope to identify unique genomic changes that distinguish between endometrial tumor subtypes and stages as well as patterns of genomic changes that relate to tumor recurrence after therapy.
- Two [Specialized Programs of Research Excellence \(SPOREs\)](#) in gynecologic cancers focus on treatment and prevention of endometrial cancer, including the development of novel therapeutics (for example, [targeted therapies](#)), strategies for [chemoprevention](#), and tools to understand which women are at highest risk of recurrence.

## Additional Resources for Endometrial Cancer

- 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 also can answer questions about cancer at 1-800-4-CANCER.
- The NCI [Endometrial Cancer Home Page](#) directs visitors to up-to-date information on endometrial cancer treatment, prevention, genetics, causes, screening, testing, and related topics.
- Information on treatment options for endometrial cancer is available from [PDQ](#), NCI's comprehensive cancer database.
- [Clinical trials for endometrial cancer](#) can be found in NCI's list of clinical trials.

## NCI Endometrial Cancer Research Portfolio



Percentage of Total Dollars by Scientific Area  
Fiscal Year 2011

Data source: 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.

## Selected Advances in Endometrial Cancer Research

- Results of a [small phase II trial](#) indicate that the [targeted drug bevacizumab is well tolerated and active in women with persistent or recurrent endometrial cancer](#) and warrants further investigation. Published May 2011.
- Researchers discovered that [the phosphatidylinositol 3-kinase \(PI3K\) signaling pathway is a critical driver](#) of endometrial cancer. Published June 2011.
- In a large and ethnically diverse cohort, [postmenopausal women who consumed greater amounts of isoflavone-containing foods such as soy had a lower risk of endometrial cancer](#). Published December 2011.
- Researchers used genetically engineered mouse models to investigate the [role of estrogen signaling in the development of endometrial cancers](#) with a common genetic alteration, which may have implications for the treatment of [endometrial hyperplasia](#) and cancer. Published April 2012.
- Click [here](#) to access selected free full-text journal articles on advances in NCI-supported research relevant to endometrial cancer. Click [here](#) to search for additional scientific articles or to complete a [search tutorial](#) on PubMed.