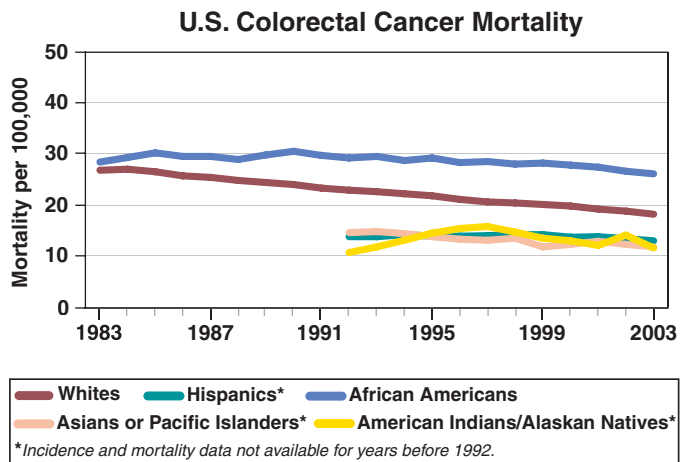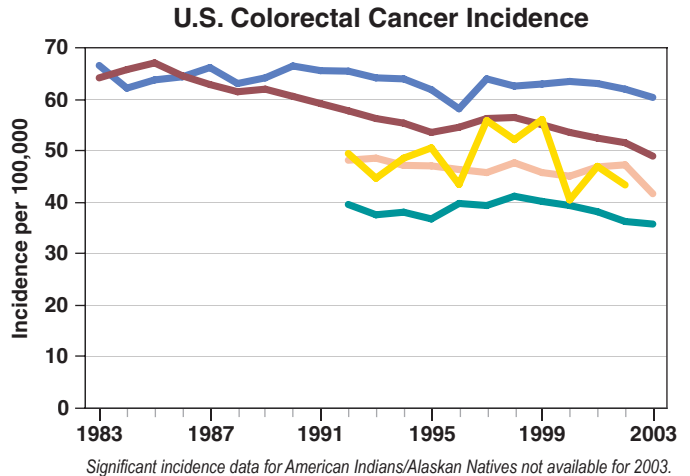# Incidence and Mortality Rate Trends

Colorectal cancer is the third most common cancer and the third leading cause of cancer-related mortality in the United States. Over the past decade, colorectal cancer incidence and mortality rates have modestly decreased or remained level. Until age 50, men and women have similar incidence and mortality rates; after age 50, men are more vulnerable.

There are striking differences between racial and ethnic groups in both incidence and mortality. Mortality rates for Hispanics, Asians or Pacific Islanders, and American Indians/Alaskan Natives are lower than those for Whites or African Americans.

It is estimated that approximately $8.4 billion[1] is spent in the United States each year on treatment of colorectal 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]In 2004 dollars, as reported in Brown ML, Riley GF, Schussler N, and Etzioni RD. Estimating health care costs related to cancer treatment from SEER-Medicare data. *Medical Care* 2002 Aug; 40 (8 Suppl): IV-104–17.
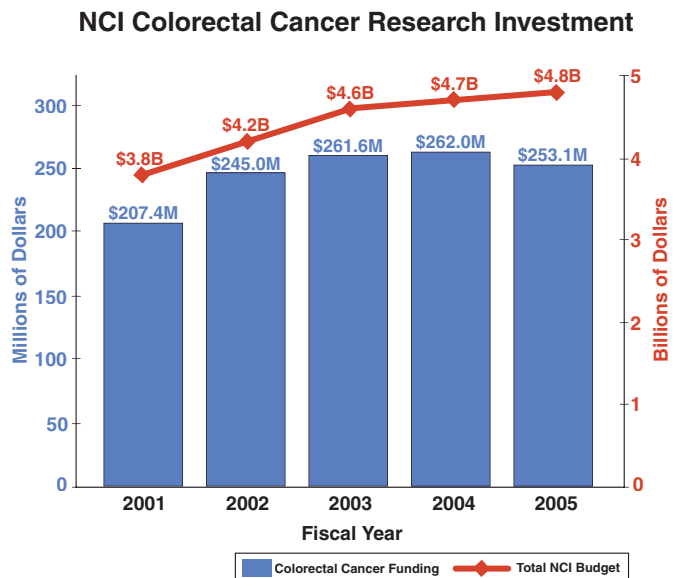
U.S. Colorectal Cancer Incidence

Significant incidence data for American Indians/Alaskan Natives not available for 2003.

U.S. Colorectal Cancer Mortality

▬ **Whites**	▬ **Hispanics***	▬ **African Americans**
▬ **Asians or Pacific Islanders***	▬ **American Indians/Alaskan Natives***	

***Incidence and mortality data not available for years before 1992.*

Trends in NCI Funding for Colorectal Cancer Research

The National Cancer Institute's investment[2] in colorectal cancer research has increased from $207.4 million in fiscal year 2001 to $253.1 million in fiscal year 2005.
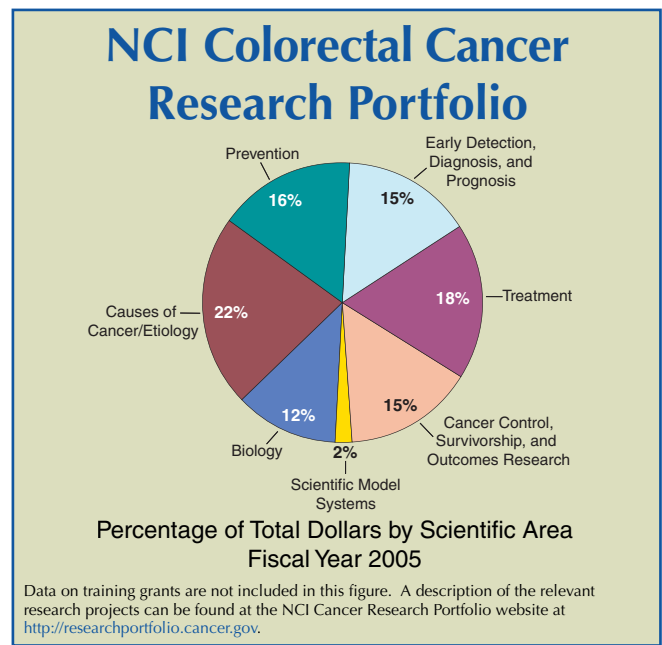
Source: NCI Financial Management Branch
http://fmb.cancer.gov.

[2]The estimated NCI investment is based on funding associated with a broad range of peer-reviewed scientific activities. For additional information on research priorities and funding, see http://www.nih.gov/about/researchpriorities.htm#overview.

NCI Colorectal Cancer Research Investment

Fiscal Year	Colorectal Cancer Funding	Total NCI Budget
2001	$207.4M	$3.8B
2002	$245.0M	$4.2B
2003	$261.6M	$4.6B
2004	$262.0M	$4.7B
2005	$253.1M	$4.8B

■ **Colorectal Cancer Funding** ◆ **Total NCI Budget**

Examples of NCI Research Initiatives Relevant to Colorectal Cancer

- Four gastrointestinal cancer-specific **Specialized Programs of Research Excellence (SPOREs)** are moving results from the laboratory to the clinical setting. http://spores.nci.nih.gov/current/gi/gi.html

- NCI's **Transdisciplinary Research on Energetics and Cancer (TREC)** centers are collaborating to reduce cancer incidence, morbidity, and mortality associated with obesity, low levels of physical activity, and poor diet. Two of the four TREC centers focus on colorectal cancer. http://cancercontrol.cancer.gov/TREC/

- The **Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial (PLCO)**, a large-scale clinical trial, is determining whether specific cancer-screening tests reduce deaths from these cancers. http://www.cancer.gov/prevention/plco/index.html

- The **Colon Cancer Family Registry** is an international infrastructure of investigators conducting population- and clinically based interdisciplinary studies on the genetic and molecular epidemiology of colon cancer and its behavioral implications. http://epi.grants.cancer.gov/CFR/about_colon.html

- The **California Health Interview Survey** provides population-based health-related data from 55,000 households in 58 California counties. The survey is collecting information about colorectal cancer screening practices. http://appliedresearch.cancer.gov/surveys/chis/

NCI Colorectal Cancer Research Portfolio

Percentage of Total Dollars by Scientific Area
Fiscal Year 2005

Data on training grants are not included in this figure. A description of the relevant research projects can be found at the NCI Cancer Research Portfolio website at http://researchportfolio.cancer.gov.

- The **Centers for Excellence in Cancer Communication Research** support interdisciplinary research on cancer communications, including studies on how patients, cancer survivors, and the public seek information on colon cancer and on the development of tailored messages promoting fruit and vegetable intake among African Americans. http://cancercontrol.cancer.gov/hcirb/ceccr/

- The **Colon and Rectal Cancer Home Page** provides up-to-date information on colorectal cancer treatment, prevention, genetics, causes, screening, testing, and other topics. http://www.cancer.gov/cancerinfo/types/colon-and-rectal

Selected Opportunities for Advancement of Colorectal Cancer Research

- Develop and validate new chemopreventive and therapeutic approaches for colorectal cancer, including molecularly targeted drugs as well as combinations of drugs and/or treatment modalities.

- Improve accuracy of diagnosing premalignant and malignant lesions and develop functional imaging technology to assess treatment effect noninvasively.

- Develop methods for subtyping tumors based on genetic and molecular alterations. Use this knowledge to define the biological and clinical characteristics of normal, premalignant, and malignant lesions—such as likelihood of neoplastic transformation, recurrence after initial treatment, and favorable response to a particular treatment.