

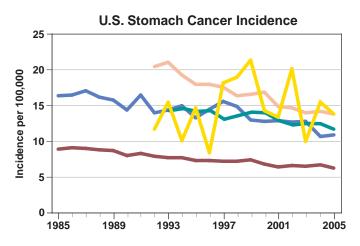
A Snapshot of Stomach (Gastric) Cancer

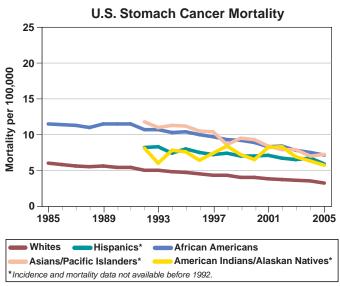
Incidence and Mortality Rate Trends

The overall incidence of stomach cancer in the United States has declined in the past 75 years. In 2005, approximately 63,211 men and women with a history of stomach cancer were living in the United States. However, it is estimated that in 2008, 21,500 U.S. men and women will be diagnosed with stomach cancer and 10,880 will die of this disease. Approximately 1 in 113 men and women will be diagnosed with cancer of the stomach during their lifetime; most people affected by stomach cancer are over 65 years of age.

In the United States, the impact of stomach cancer varies by race and ethnicity. Asians and Pacific Islanders have the highest mortality rates, followed by African Americans, Hispanics, American Indians and Alaskan Natives, and whites. Men have higher stomach cancer incidence and mortality rates than women.

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/.



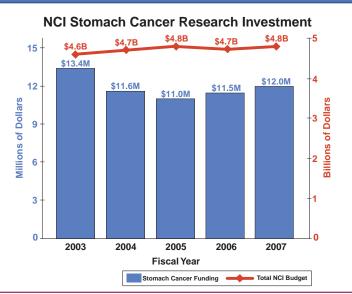


Trends in NCI Funding for Stomach Cancer Research

The National Cancer Institute's (NCI's) investment¹ in stomach cancer research decreased from \$13.4 million in fiscal year 2003 to \$12 million in fiscal year 2007.

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

'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/.



Examples of NCI Activities Relevant to Stomach Cancer

- Five 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
- The **Tumor Microenvironment Network (TMEN)** is exploring the role of the microenvironment, the cells and blood vessels that feed a tumor cell, in tumor initiation and progression. Network investigators are studying the role of inflammation and the tumor microenvironment in stomach cancer. http://tmen.nci.nih.gov/
- NCI's intramural Gastrointestinal Malignancies
 Faculty brings together scientists from across NCI
 to promote a community of investigators working
 together for the prevention, diagnosis, and cure
 of gastrointestinal cancers. http://ccr.cancer.gov/
 faculties/faculty.asp?facid=156
- NCI's Infections and Immunoepidemiology Branch conducts high-impact epidemiologic research on infectious agents and cancer. Researchers are investigating why stomach cancer risk is low in Africa, despite high rates of Helicobacter pylori infection, as well as genetic factors associated with stomach cancer risk. http://dceg.cancer.gov/veb
- The Community Clinical Oncology Program (CCOP) and the Minority-Based Community Clinical Oncology Program (MB-CCOP) are comprehensive clinical trial mechanisms that disseminate the latest cancer prevention and treatment research findings to the community.

What You Need to Know About™ Stomach Cancer



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

Risk factors for stomach cancer include: age, sex, race, diet, *Helicobacter pylori* infection,

smoking, certain health problems (such as stomach surgery, chronic gastritis, or pernicious anemia), and family history of stomach cancer.

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

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

Several CCOP and MB-CCOP groups currently participate in stomach cancer clinical trials. http://prevention.cancer.gov/programs-resources/programs/ccop

- The Stomach/Esophageal Cancers Progress Review Group (PRG), a panel of prominent scientists and patient advocates, assessed the state of the science and identified future research priorities for stomach and esophageal cancers. http://planning.cancer.gov/stomach/stomach_esophageal.pdf
- The **Stomach (Gastric) Cancer Home Page** provides up-to-date information on stomach cancer treatment, prevention, genetics, causes, screening, testing, and other topics. http://www.cancer.gov/stomach

Selected Advances in Stomach Cancer Research

- A study in China found that exposure to H. pylori increases the risk of stomach cancer. http://dceg. cancer.gov/newsletter/Linkage1107.html#SciHigh
- Researchers found and manipulated cells that are very similar to stem cells in the stomachs of mice. They showed that these "gastric progenitor cells" can produce all the different types of specialized cells that form the stomach glands. These findings could inform research on the development of stomach cancer. http://www.news-medical. net/?id=30802
- The Alpha-tocopherol, Beta-carotene (ATBC)
 Cancer Prevention Study found that exposure to
- H. pylori is strongly associated with an increased risk of noncardia stomach cancer and a reduced risk of gastric cardia (the section of the stomach closest to the esophagus) cancer. The decreasing prevalence of H. pylori during the past century may have contributed to lower rates of noncardia cancer and higher rates of cardia cancer in Western countries. http://dceg.cancer.gov/newsletter/Linkage0307.html#article11
- A study of almost 475,000 people found that, compared with nonsmokers, current smokers have a higher risk of stomach cancer. http://dceg.cancer. gov/newsletter/Linkage1107.html#SciHigh