

A Snapshot of Pancreatic Cancer

Incidence and Mortality

In the United States, [pancreatic cancer](#) is the fourth leading cause of cancer-related death in both men and women. Because it usually is diagnosed at an advanced stage, the survival rate is low compared with those for other cancer types. Overall, the pancreatic cancer [incidence](#) rate has increased since 2000, and the [mortality](#) rate also has increased slightly since 2001.

African Americans have higher pancreatic cancer incidence and mortality rates than whites or other racial/ethnic groups. Pancreatic cancer incidence and mortality rates also are higher in men than in women.

Cigarette smoking is the most important [risk factor](#) for pancreatic cancer, accounting for approximately 20 percent of cases. Additional risk factors include longstanding diabetes, inflammation of the pancreas, and certain hereditary conditions. Standard treatments for pancreatic cancer include surgery, [radiation therapy](#), [chemotherapy](#), [chemoradiation](#), and [targeted therapy](#).

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

¹ [Cancer Trends Progress Report](#), in 2010 dollars.

Trends in NCI Funding for Pancreatic Cancer Research

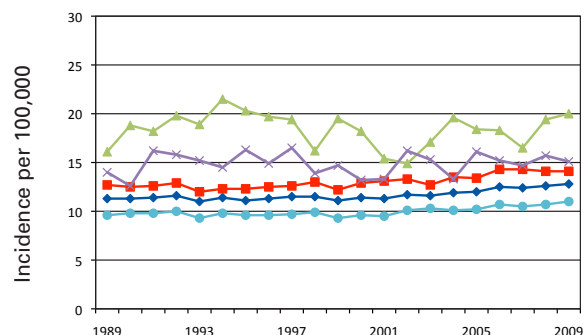
The National Cancer Institute's (NCI) investment² in [pancreatic cancer research](#) increased from \$73.3 million in fiscal year (FY) 2007 to \$99.5 million in FY 2011. In addition, NCI supported \$14.3 million in pancreatic cancer research in FY 2009 and 2010 using funding from the American Recovery and Reinvestment Act (ARRA).³

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

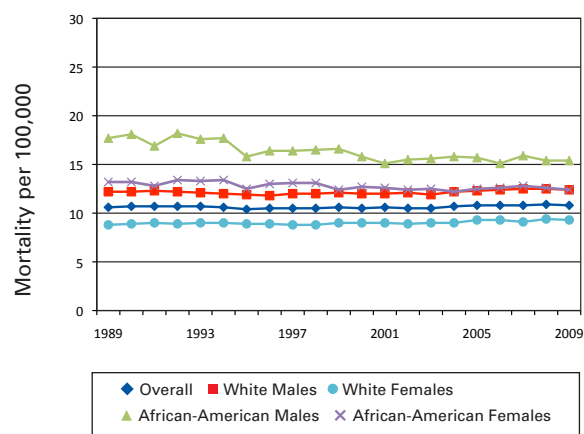
² The estimated NCI investment is based on funding associated with a broad range of peer-reviewed scientific activities. For additional information on research planning and budgeting at the National Institutes of Health (NIH), see [About NIH](#).

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

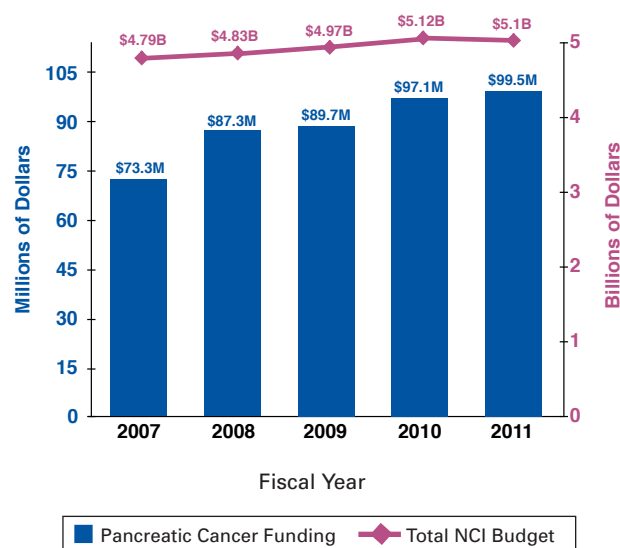
U.S. Pancreatic Cancer Incidence



U.S. Pancreatic Cancer Mortality



NCI Pancreatic Cancer Research Investment

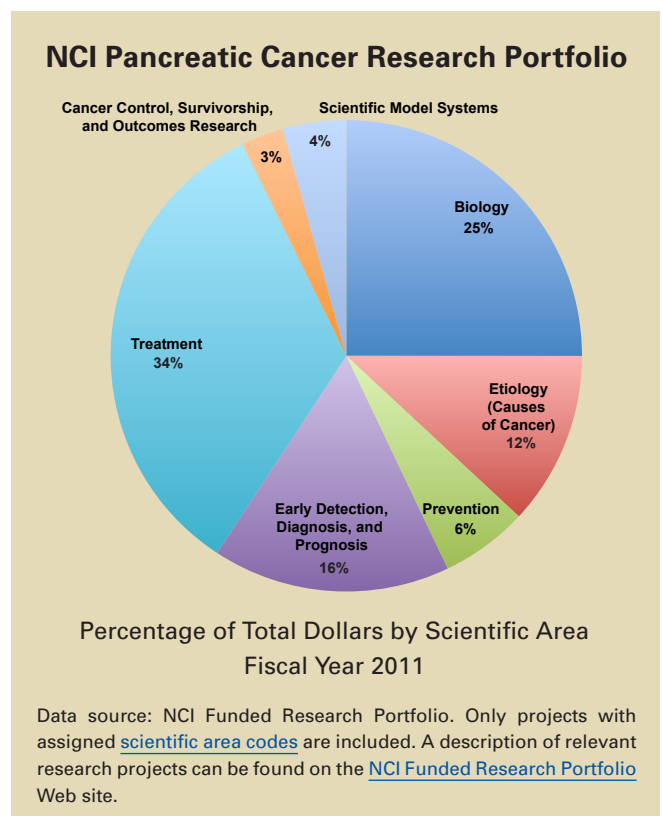


Examples of NCI Activities Relevant to Pancreatic Cancer

- The [Early Detection Research Network \(EDRN\)](#) is identifying and testing new [biomarkers](#) to enhance cancer detection and risk assessment. One EDRN-supported project is studying stem cell biomarkers for early detection of pancreatic cancer.
- The [Pancreatic Cancer Epidemiology Consortia](#) include three research consortia that bring together scientists with various expertise to improve understanding of the causes and natural history (or progression) of pancreatic cancer.
- NCI supports [Pilot Studies in Pancreatic Cancer](#), a funding effort that supports research projects focused on the biology, [etiology](#), detection, prevention, and treatment of the disease.
- The [Tumor Microenvironment Network \(TMEN\)](#) is exploring the role of the microenvironment—the cells and blood vessels that feed a tumor—in tumor initiation and progression. Network investigators are studying the interaction between [pancreatic tumors and their microenvironment](#) during pancreatic cancer development.
- NCI's [Cancer Genomics Research Laboratory \(CGR\)](#) was established to study how inherited genetic variations contribute to cancer susceptibility and outcomes, including in pancreatic cancer.
- Three pancreatic-cancer-specific [Specialized Programs of Research Excellence \(SPORes\)](#) are conducting research to facilitate early detection and treatment of pancreatic cancer.

Additional Resources for Pancreatic Cancer

- The [What You Need To Know About™ Cancer of the Pancreas](#) booklet contains information about risk factors, symptoms, diagnosis, treatment, and follow-up care. Information specialists also can answer questions about cancer at 1-800-4-CANCER.
- The NCI [Pancreatic Cancer Home Page](#) provides up-to-date information on pancreatic cancer treatment, prevention, genetics, causes, screening, testing, and related topics.
- Information on treatment options for pancreatic cancer is available from [PDQ](#), NCI's comprehensive cancer database.
- [Clinical trials for pancreatic cancer](#) can be found in NCI's list of clinical trials.



Selected Advances in Pancreatic Cancer Research

- A whole-exome sequencing study of an uncommon form of pancreatic cancer has identified [gene alterations that may help in prognosis and selection of appropriate targeted therapies](#). Reported January 2011.
- Results of a prospective cohort study confirmed that [people with genetic mutations that cause Lynch syndrome have an increased risk of a number of cancers, including pancreatic cancer](#), but showed that risk was not increased in their relatives who do not carry these mutations. Published February 2012.
- Researchers determined that [loss of a group of genes in a specific chromosomal region in some patients with pancreatic cancer is associated with poor prognosis](#). Reported March 2012.
- Scientists used an [enzyme](#) to [break down the physical barrier that makes pancreatic tumors resistant to therapy](#) and demonstrated that combining the enzyme with a standard chemotherapy drug improved survival in a mouse model of pancreatic cancer. Published March 2012.
- Click [here](#) to access selected free full-text journal articles on advances in NCI-supported research relevant to pancreatic cancer. Click [here](#) to search for additional scientific articles or to complete a [search tutorial](#) on PubMed.