

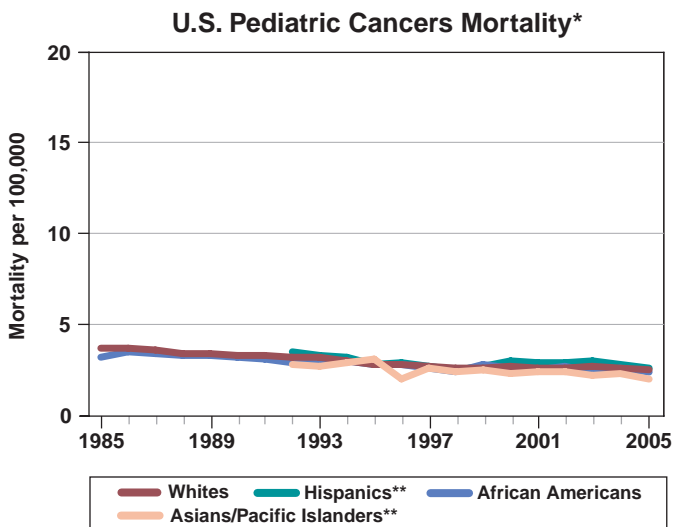
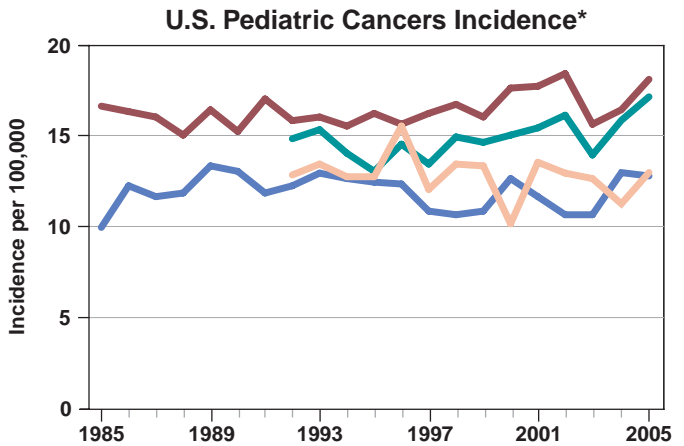
Incidence and Mortality Rate Trends

Cancer is the leading cause of death by disease among U.S. children between infancy and age 15. Approximately 10,730 new cases of pediatric cancer are expected to be diagnosed in children 0–14 years of age in 2008. Among the major types of childhood cancers, leukemias (blood cell cancers) and brain and other central nervous system (CNS) tumors account for more than half of new cases. White children are more likely than children from any other ethnic group to develop cancer.

Although the incidence of invasive cancer in children has increased slightly over the past 30 years, mortality has declined dramatically for many childhood cancers.¹ The combined 5-year survival rate for all childhood cancers has improved from less than 50 percent before the 1970s to 80 percent today, and the 10-year survival rate is almost 75 percent.

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/>.

¹Incidence and mortality data reflect cancers in children 0–18 years of age.



*Significant data for American Indians/Alaskan Natives not available.
**Data for Hispanics and Asians/Pacific Islanders not available before 1992.

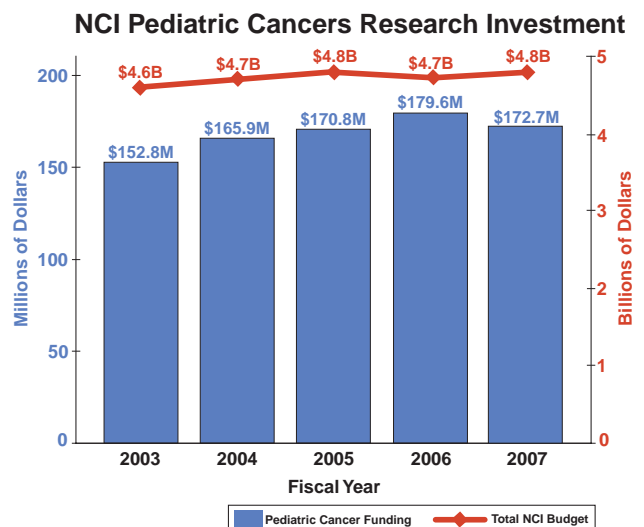
Trends in NCI Funding for Pediatric Cancers² Research

The National Cancer Institute's (NCI's) investment³ in pediatric cancers research increased from \$152.8 million in fiscal year 2003 to \$172.7 million in fiscal year 2007.

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

²Includes cancers in children 0–18 years of age. Does not include research on pediatric AIDS, infant mortality, science enrichment, or anti-smoking.

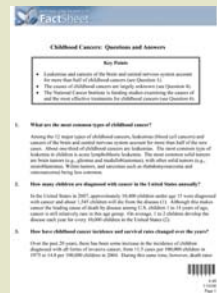
³The estimated NCI investment is based on funding associated with a broad range of peer-reviewed scientific activities. For additional information on research planning and budgeting at the National Institutes of Health, see <http://www.nih.gov/about/>.



Examples of NCI Activities Relevant to Pediatric Cancers

- The **Children's Oncology Group (COG)** is an NCI-supported clinical trials cooperative group devoted exclusively to childhood and adolescent cancer research. <http://www.childrensoncologygroup.org>
- The **Pediatric Brain Tumor Consortium (PBTC)**, a multidisciplinary cooperative research organization, is devoted to the identification of superior treatment strategies for children with primary brain tumors. <http://www.pbtc.org>
- Researchers are following 11 cohorts of more than 70,000 children enrolled in the **International Childhood Cancer Cohort Consortium** to explore factors that increase the risk of pediatric cancer. http://www.cancer.gov/ncicancerbulletin/NCI_Cancer_Bulletin_031808/page5
- The **Childhood Cancer Survivor Study (CCSS)** addresses the long-term effects of cancer and cancer therapy in more than 20,000 survivors of childhood cancer and approximately 4,000 siblings of survivors. <http://www.cancer.gov/cancertopics/coping/ccss>
- The **Childhood Cancer Therapeutically Applicable Research to Generate Effective Treatments (TARGET)** initiative is identifying and validating treatment targets to develop new, more effective treatments for pediatric cancers. http://www.nci.nih.gov/ncicancerbulletin/NCI_Cancer_Bulletin_112106/page3

Questions and Answers on Pediatric Cancers



For additional information on childhood cancers, including suspected risk factors, possible causes, and NCI research studies, see NCI's Fact Sheet on Childhood Cancers.

<http://www.cancer.gov/cancertopics/factsheet/Sites-Types/childhood>

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

- The **Pediatric Preclinical Testing Program (PPTP)** identifies new, more effective agents for treating childhood cancers. <http://ctep.cancer.gov/resources/child.html>
- The **Pediatric Oncology Branch** in NCI's Center for Cancer Research is dedicated to the study and treatment of childhood cancers. <http://home.ccr.cancer.gov/oncology/pediatric/>
- The **Childhood Cancers Home Page** directs visitors to up-to-date information on childhood cancer treatment, genetics, causes, and other topics. <http://www.cancer.gov/cancertopics/types/childhoodcancers>

Selected Advances in Pediatric Cancers Research

- A multinational study showed that the drug carboplatin, which has fewer serious side effects than cisplatin (the current standard treatment), can achieve survival rates similar to those with cisplatin among infants and children with neuroblastoma. http://www.cancer.gov/ncicancerbulletin/NCI_Cancer_Bulletin_061207/page5
- A Children's Oncology Group (COG) task force has issued long-term, risk-based, exposure-related guidelines to help caregivers identify neurocognitive effects in survivors of childhood cancer and guide intervention and advocacy for such children. http://www.cancer.gov/ncicancerbulletin/NCI_Cancer_Bulletin_080707/page4#d
- A genetic variation in the insulin-like growth factor 2 receptor (IGF2R) is associated with an increased risk of osteosarcoma, which typically occurs during growth spurts in adolescents. <http://www.ncbi.nlm.nih.gov/pubmed/17684144>
- Children and young adults with sarcoma are at increased risk for a thromboembolic event, a blood clot that can interfere with normal blood flow, in their veins. <http://www.cancer.gov/newscenter/pressreleases/PediatricSarcoma>