

Incidence and Mortality Rate Trends

Cancers of the head and neck, which include cancers of the buccal cavity, head and neck subset, larynx, pharynx, thyroid, salivary glands, and nose/nasal passages, account for 6 percent of all malignancies in the United States. Whites currently have the highest incidence rates of head and neck cancers, although mortality is still highest in African Americans.

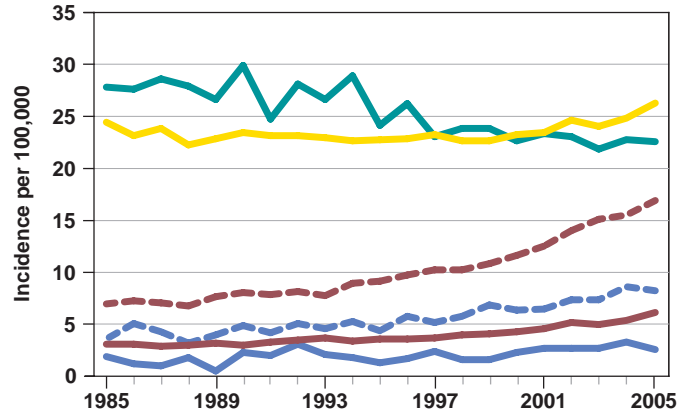
The incidence of thyroid cancer has increased in all races and in both males and females in the past two decades. Thyroid cancer incidence is almost three times higher in females than in males and more than two times higher in whites than in African Americans. However, despite the increase in incidence, mortality rates have remained very low.

It is estimated that approximately \$3.2 billion¹ is spent in the United States each year on treatment of head and neck cancers.

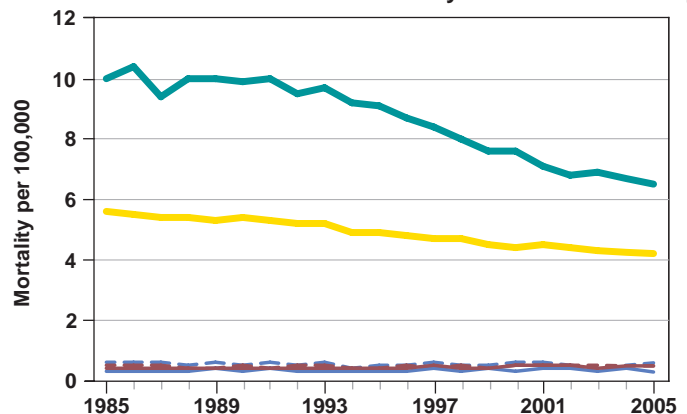
Source for incidence and mortality data: Surveillance, Epidemiology, and End Results (SEER) Program and the National Center for Health Statistics. Additional statistics and charts are available at <http://seer.cancer.gov/>.

¹Cancer Trends Progress Report (<http://progressreport.cancer.gov/>), in 2004 dollars, based on methods described in *Medical Care* 2002 Aug; 40 (8 Suppl): IV-104-17.

U.S. Head and Neck Cancers and Thyroid Cancer Incidence



U.S. Head and Neck Cancers and Thyroid Cancer Mortality



Legend:
 ■ Head & Neck: Whites ■ Head & Neck: African Americans
 ■ Thyroid: White Females ■ Thyroid: African American Females
 ■ Thyroid: White Males ■ Thyroid: African American Males

Trends in NCI Funding for Head and Neck Cancers² Research

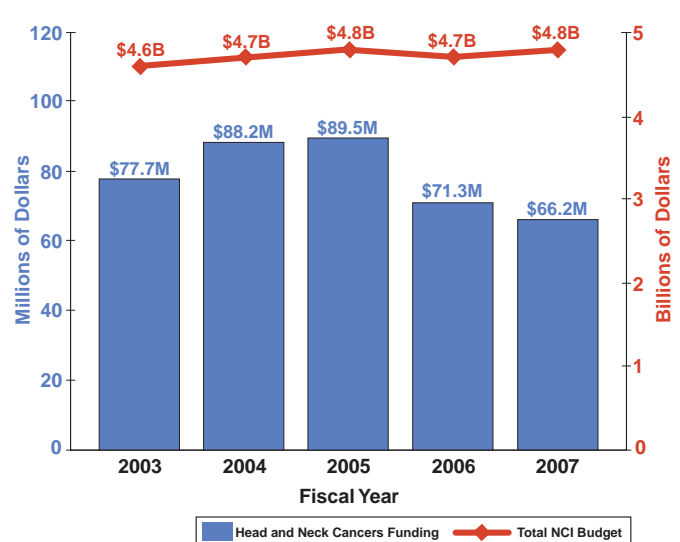
The National Cancer Institute's (NCI's) investment³ in head and neck cancers research decreased from \$77.7 million in fiscal year 2003 to \$66.2 million in fiscal year 2007.

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

²FY03–FY05 data include cancers of the buccal cavity, esophagus, head and neck subset, larynx, parathyroid, pharynx, salivary glands, and thyroid. FY06–FY07 data include cancers of the buccal cavity, head and neck subset, larynx, pharynx, salivary glands, thyroid, and nose/nasal passages.

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/>.

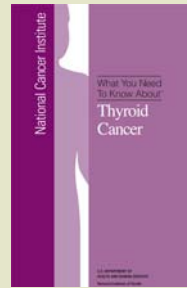
NCI Head and Neck Cancers Research Investment



Examples of NCI Activities Relevant to Head and Neck Cancers

- Five **Specialized Programs of Research Excellence (SPOREs)** in head and neck cancers support translational research on cancers of the upper aerodigestive tract and thyroid cancer. SPORE researchers are addressing markers of genetic susceptibility of head and neck cancers and novel therapies for treatment and prevention. <http://spores.nci.nih.gov/current/hn/hn.html>
- The **Prevention Agents Program** provides scientific and administrative oversight for chemoprevention agent development from preclinical research to early Phase I studies. The program currently supports research on four agents for potential chemoprevention of head and neck cancers. <http://prevention.cancer.gov/programs-resources/groups/cad/programs/agents>
- NCI supports the **Phase I/II Study of Vandetanib in Young Patients with Hereditary Medullary Thyroid Carcinoma**, which is determining whether the investigational agent vandetanib could be the first effective nonsurgical treatment for young patients with this cancer. http://www.cancer.gov/ncicancerbulletin/NCI_Cancer_Bulletin_080707/page3
- The **Nasopharyngeal Family Study** is attempting to elucidate genetic and environmental factors linked to the development of nasopharyngeal cancer. The study, which is being conducted in Taiwan, includes about 150 families with two or

What You Need to Know About™ Cancer of the Larynx, Oral Cavity, and Thyroid



NCI publishes the following booklets on possible causes, symptoms, diagnosis, treatment, and rehabilitation: *What You Need to Know About™ Cancer of the Larynx*, *What You Need to Know About™ Oral Cancer*, and *What You Need to Know About™ Thyroid Cancer*. These

booklets also have information on support and follow-up care for patients.

<http://www.cancer.gov/cancertopics/wyntk/larynx>

<http://www.cancer.gov/cancertopics/wyntk/oral>

<http://www.cancer.gov/cancertopics/wyntk/thyroid>

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

more members affected by nasopharyngeal cancer. <http://dceg.cancer.gov/hreb/research/nasopharyngeal>

- Information on treatment options for oropharyngeal cancer is available on NCI's **PDQ website**. <http://www.cancer.gov/cancerinfo/pdq/treatment/oropharyngeal/HealthProfessional>
- **Clinical trials** are actively recruiting patients with head and neck cancers to test new treatments. <http://www.cancer.gov/search/clinicaltrials/>
- The **Head and Neck Cancers Home Page** provides up-to-date information on head and neck cancers treatment, prevention, genetics, causes, screening, testing, and other topics. <http://cancer.gov/cancerinfo/types/head-and-neck>

Selected Advances in Head and Neck Cancers Research

- A Phase II trial showed that endoscopic transoral (through the mouth) surgery in patients with early-stage laryngeal cancer produced shorter hospital stays and fewer side effects than more invasive surgery. http://www.cancer.gov/ncicancerbulletin/NCI_Cancer_Bulletin_010808/page5
- Researchers are using watery nanoparticles to deliver light-activated drugs to head and neck cancer cells without harming healthy cells. http://nano.cancer.gov/news_center/2007/march/nanotech_news_2007-03-05a.asp
- A blood test that detects proteins commonly released by a growing tumor could be useful for monitoring the effectiveness of chemotherapy and radiation treatment in people with advanced throat cancer. <http://www.cancer.gov/newscenter/pressreleases/ThroatCancerTest>
- The doubling in the incidence of thyroid cancer since the early 1970s may be due to more sensitive imaging technologies and better biopsy techniques, rather than an increase in the actual number of cases. http://www.cancer.gov/ncicancerbulletin/NCI_Cancer_Bulletin_021908/page5