



## Head and neck cancer in the Greater San Francisco Bay Area, 1988-2003

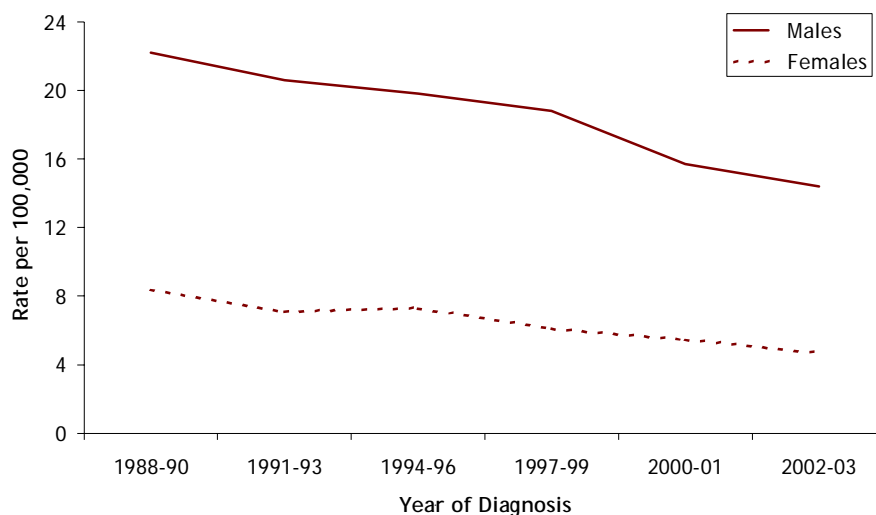
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Head and neck cancer, including squamous cell carcinomas of the oral cavity, pharynx, larynx, nasal cavity, paranasal sinuses, and salivary glands, accounted for nearly 600 new diagnoses and over 200 deaths in the Greater Bay Area in 2003. The declining incidence and mortality of head and neck cancers in the United States since the 1970s has been attributed largely to the decreasing prevalence of cigarette smoking and occupational exposure to carcinogens, although risk factors vary by site.

### INCIDENCE TRENDS

The incidence rate of head and neck cancer in the Greater Bay Area declined between 1988 and 2003, with a total percentage change of about -40% in both males and females (below, Figure 1). Head and neck cancer is approximately three times more common in males than in females.

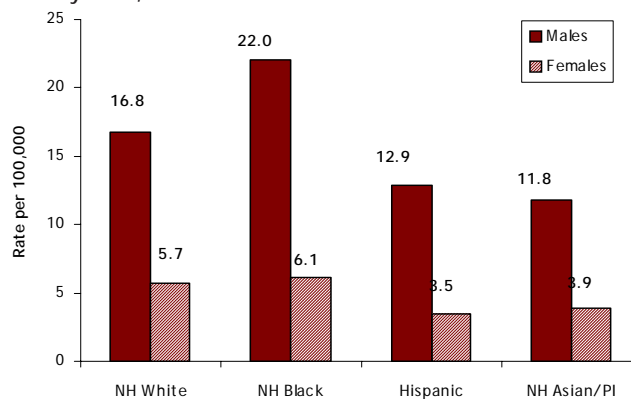
Figure 1. Age-adjusted incidence rates of head and neck cancer by sex and year of diagnosis, Greater San Francisco Bay Area, 1988-2003



### RACIAL/ETHNIC PATTERNS

Among males in the Greater Bay Area, the incidence of head and neck cancer is highest in non-Hispanic blacks, then non-Hispanic whites (right, Figure 2). Among females, the racial/ethnic variation in incidence is less marked, although rates are still highest in non-Hispanic blacks, followed by non-Hispanic whites, Asians/Pacific Islanders, and Hispanics.

Figure 2. Age-adjusted incidence rates of head and neck cancer by sex and race/ethnicity, Greater San Francisco Bay Area, 1999-2003





## AGE-SPECIFIC INCIDENCE

After early adulthood, the incidence of head and neck cancer rises sharply among males and females, and peaks between ages 70 and 79 years in both sexes (right, Figure 3). The disparity in incidence between males and females becomes apparent after ages 35-39 years.

Figure 3. Age-specific incidence rates of head and neck cancer by sex, Greater San Francisco Bay Area, 1999-2003

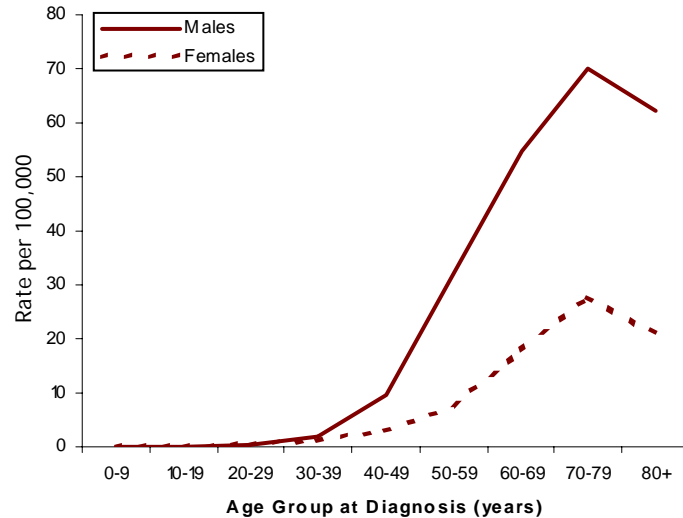
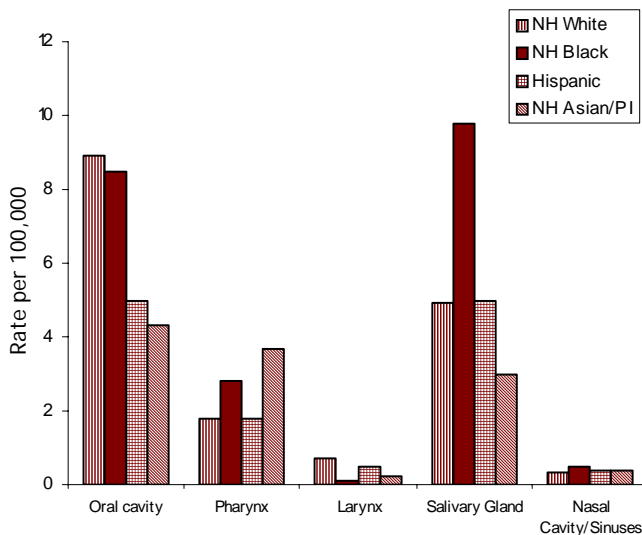


Figure 4. Age-adjusted incidence rates of site-specific head and neck cancer among males by race/ethnicity, Greater San Francisco Bay Area, 1999-2003



## SITE-SPECIFIC INCIDENCE BY RACE/ETHNICITY

The racial/ethnic distribution of head and neck cancer varies by site (left, Figure 4). Among males, the incidence rate of oral cancer is highest in non-Hispanic whites and blacks; cancer of the pharynx is most common in Asians/Pacific Islanders and non-Hispanic blacks; and salivary gland cancer occurs most often in non-Hispanic blacks. The incidence rates of cancers of the larynx or nasal cavity and paranasal sinuses do not vary substantially by race/ethnicity.

**Technical Notes:** Because age distributions vary by population, a standard statistical procedure called “age-adjustment” was used so that we can examine differences in cancer incidence and mortality rates due to factors other than age. Rates are age-adjusted (using the Year 2000 population standard) unless noted to be age-specific. Race/ethnicity was categorized as four mutually-exclusive racial/ethnic groups: non-Hispanic whites (whites), non-Hispanic blacks (blacks), Hispanics, and non-Hispanic Asians/Pacific Islanders (Asians/Pacific Islanders).

**About the data:** Cancer data have been collected in Alameda, Contra Costa, Marin, San Francisco, and San Mateo counties since 1973, and in Monterey, San Benito, Santa Clara, and Santa Cruz counties since 1988, forming two parts (Regions 1 and 8) of the California Cancer Registry. These counties, referred to as the Greater San Francisco Bay Area are also part of the National Cancer Institute’s Surveillance, Epidemiology, and End Results (SEER) registry program.

Founded in 1974, the mission of the Northern California Cancer Center is to reduce the burden of cancer through surveillance, epidemiology, prevention research and education. Essential to this mission is collaboration with partners in cancer research, education and the community.

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