

Comparisons of the incidence rates for cancers occurring in the brain and elsewhere in the nervous system among different populations are often difficult because of different practices regarding the inclusion or exclusion of benign tumors. Only brain and other nervous system cancers classified as malignant, however, are included in the SEER incidence data. Malignant neoplasms of the brain and other

nervous system are relatively rare, occur more frequently among men than among women; and most racial/ethnic groups have a male-to-female ratio around 1.4. Children and adults have different distributions of subtypes of malignancies in the central nervous system.

There were too few cases to calculate meaningful incidence rates for Japanese women and for men or women in the Alaska Native, American Indian, Hawaiian, Korean, and Vietnamese populations in the SEER areas. Among the remaining race-sex groups, age-adjusted incidence in men ranges from a low of 2.1 per 100,000 for Japanese and 3.1 for Chinese to a high of 7.8 for whites (8.2 for non-Hispanic white men), almost a four-fold difference in the rates. Among women, rates range from a low of 2.1 among Chinese to a high of 5.4 among whites (5.6 for non-Hispanic whites), a 2.6-fold difference. Whites and Hispanics of both sexes have the highest incidence rates. Mortality patterns by racial/ethnic group are similar to those for incidence, with incidence-to-mortality ratios ranging between 1.4 to 2.2 for each sex.

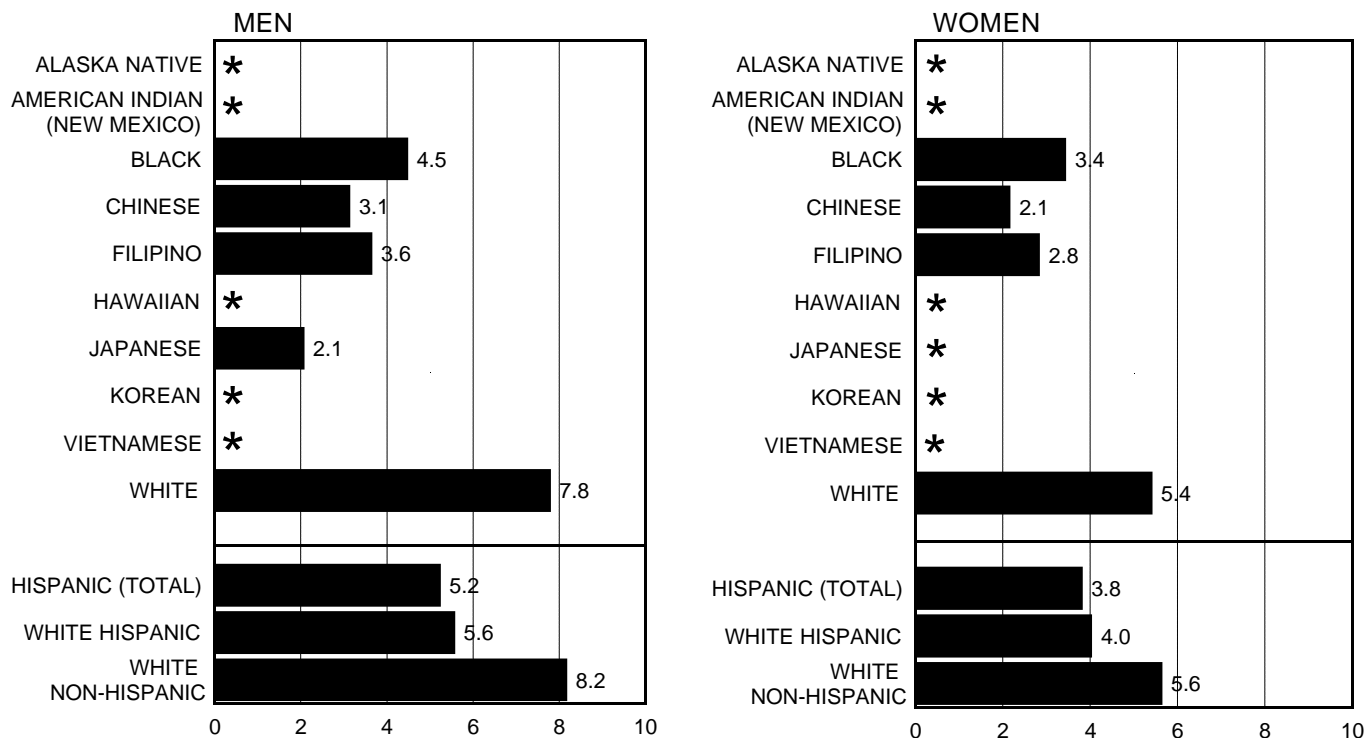
Cancers of the brain and nervous system are bimodal in distribution, with an early peak in the incidence rates during childhood followed by a steady increase in incidence through ages 70 years and older. There are generally too few cancers within the three age groupings to show incidence or

mortality rates for groups other than blacks, whites, and Hispanics. In each of the three age groups for both men and women, incidence is lowest in blacks, slightly higher in Hispanics, and highest in whites. The same pattern occurs in the mortality rates for men. Among women, however, mortality rates for Hispanics and blacks are similar in each age group.

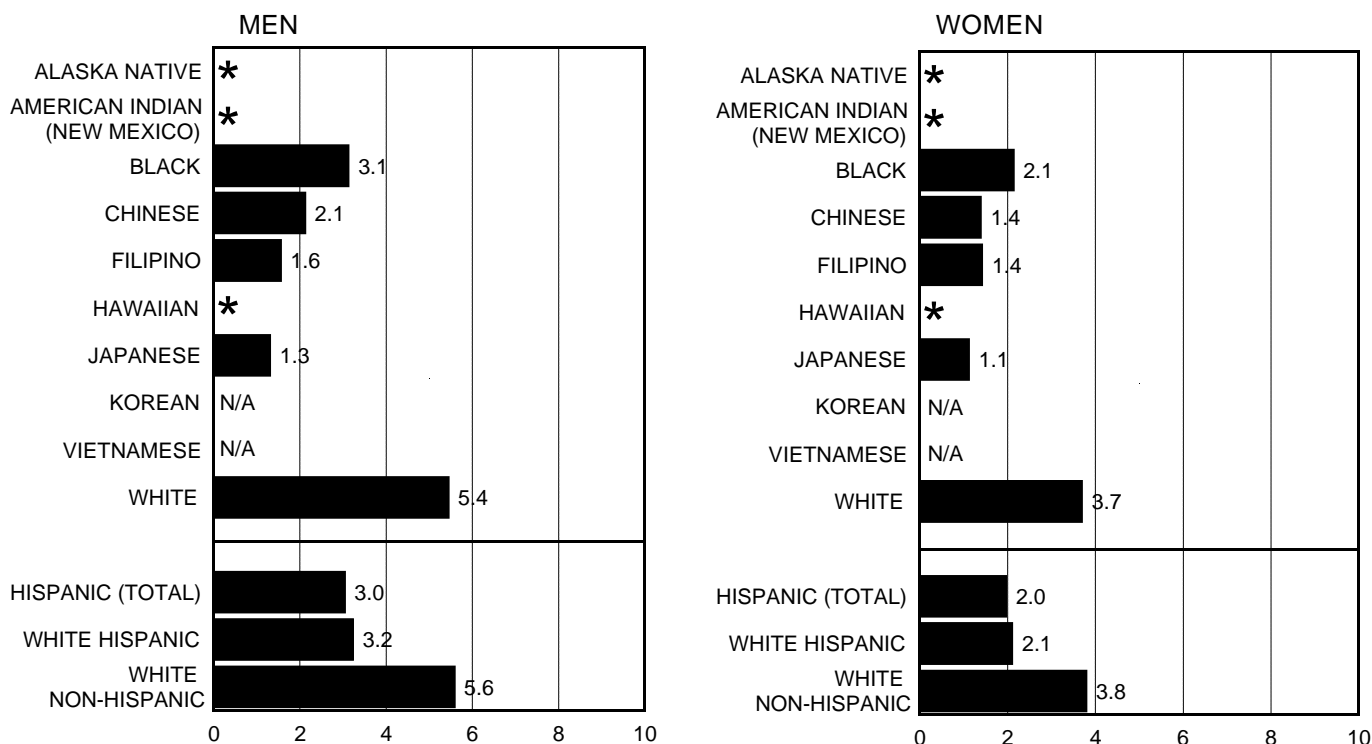
One reported risk factor for both childhood and adult central nervous system cancers is exposure to radiation. Other possible risk factors are currently under study including trauma to the head or spine, certain occupational exposures, and for childhood brain tumors, the occupational exposures of their parents.

BRAIN AND NERVOUS SYSTEM

SEER INCIDENCE Rates, 1988-1992



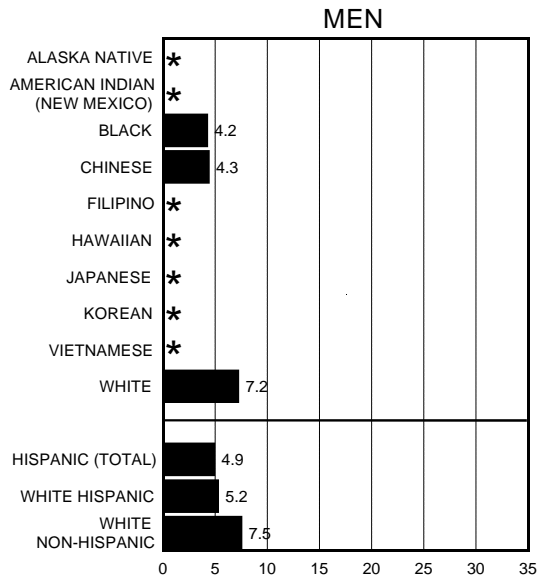
United States MORTALITY Rates, 1988-1992



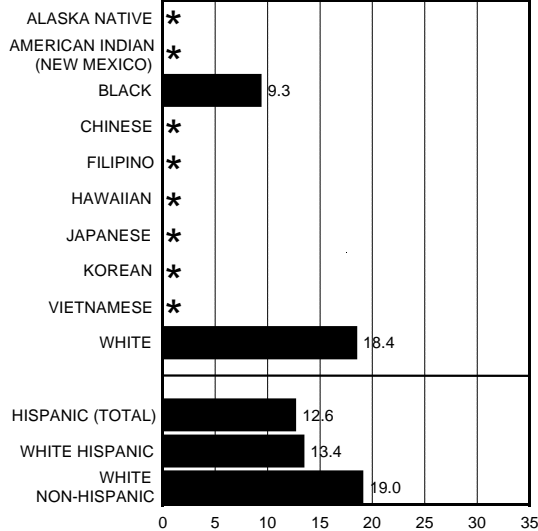
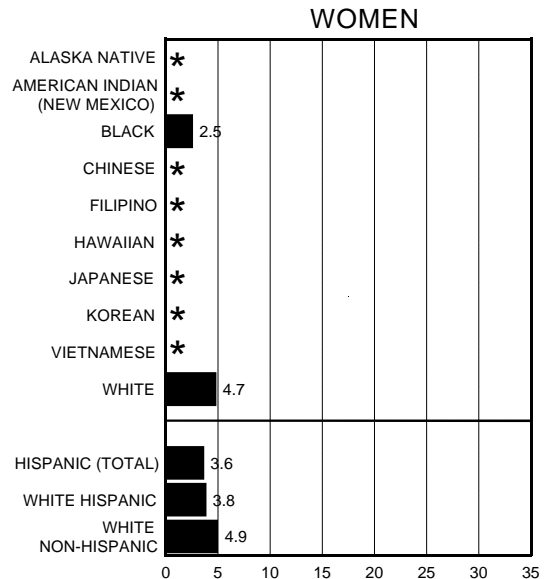
NOTE: Rates are "average annual" per 100,000 population, age-adjusted to 1970 U.S. standard; N/A = information not available; * = rate not calculated when fewer than 25 cases.

BRAIN AND NERVOUS SYSTEM

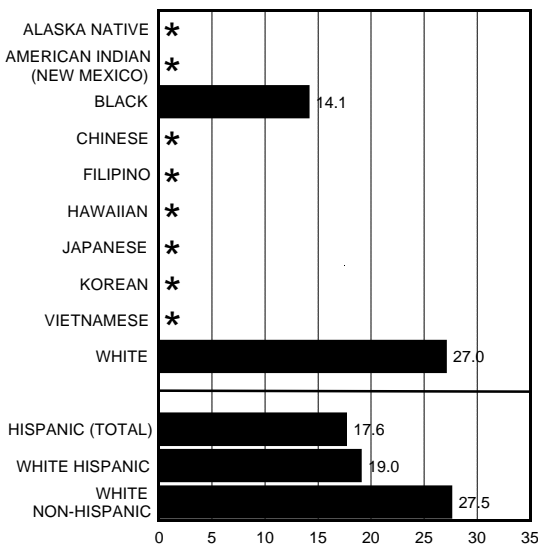
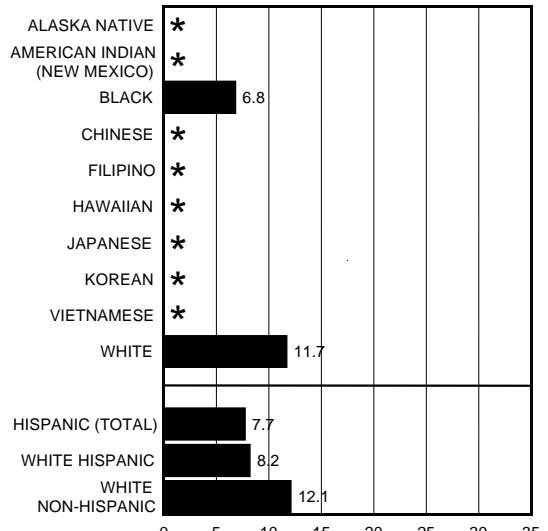
SEER INCIDENCE Rates by Age at Diagnosis, 1988-1992



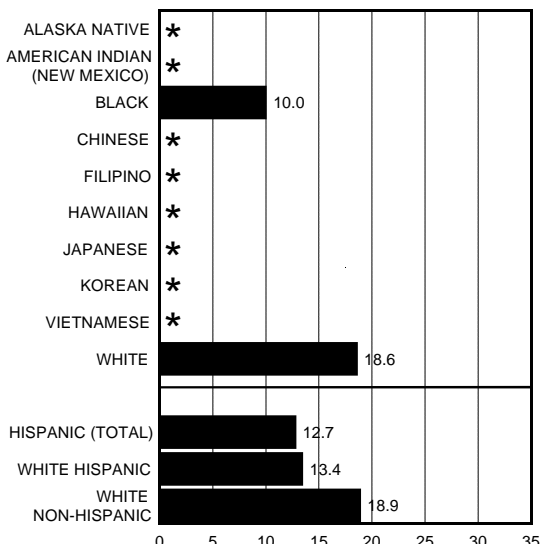
AGE 30-54



AGE 55-69



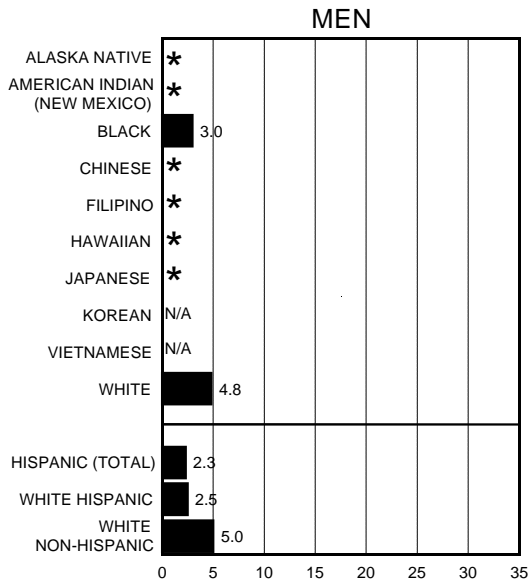
AGE 70+



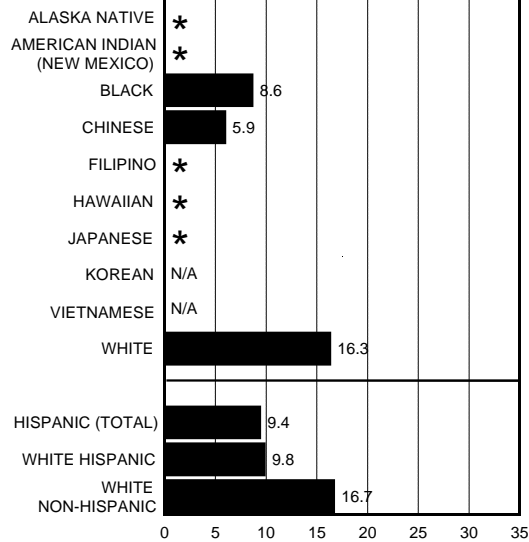
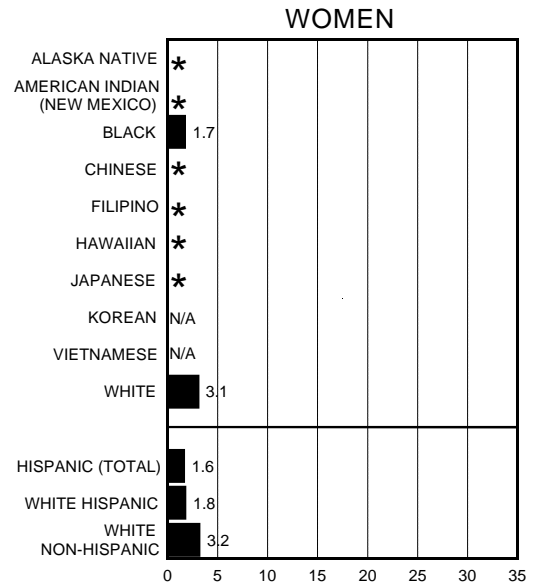
NOTE: Rates are per 100,000 population, age-adjusted to 1970 U.S. standard; * = rate not calculated when fewer than 25 cases.

BRAIN AND NERVOUS SYSTEM

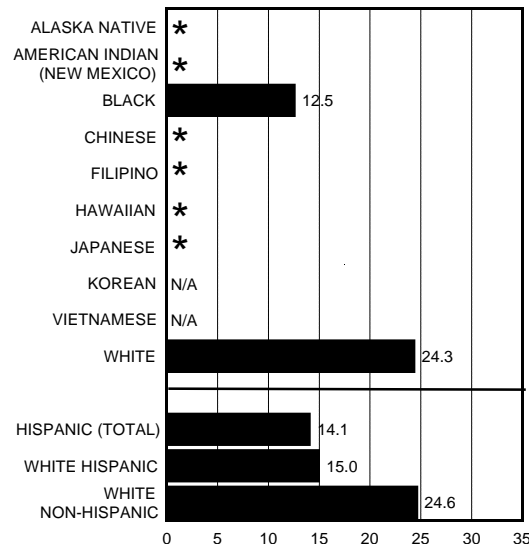
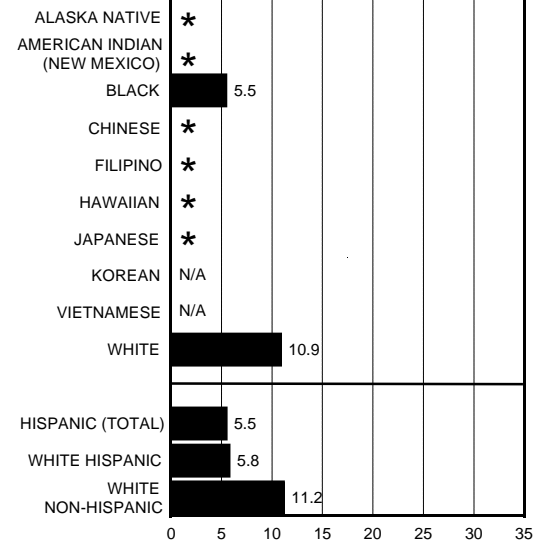
United States MORTALITY Rates by Age at Death, 1988-1992



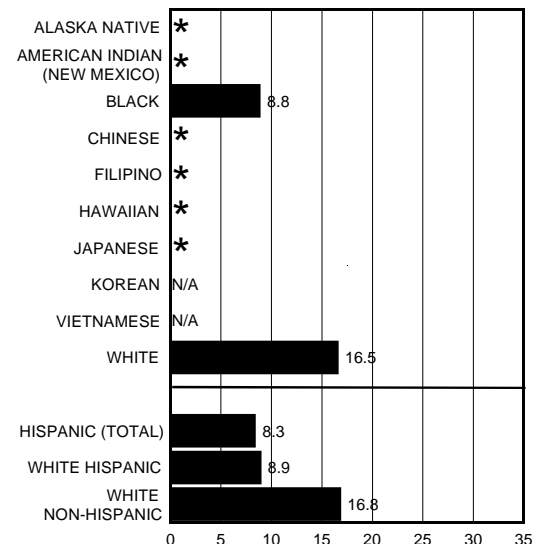
AGE 30-54



AGE 55-69



AGE 70+



NOTE: Rates are "average annual" per 100,000 population, age-adjusted to 1970 U.S. standard; N/A = data unavailable; * = fewer than 25 deaths.