

MELANOMA

Malignant melanoma incidence rates show substantial international variation. This variation is related to racial composition and the intensity of sunlight exposure in different geographic areas.

Rates are low in races with the most skin pigmentation, such as blacks and Asians, and are high in whites. Among whites, rates are lowest in England and Scotland, about twice as high

in the United States, Canada, Norway, Switzerland, and Israel and about four times higher in Australia and New Zealand. In almost every white population, but especially in Australia and the United States, malignant melanoma incidence rates have been increasing faster than nearly every other cancer. In the SEER regions, the incidence of this cancer increased rapidly during the 1970's and less so in the late 1980's. This suggests that rates may become more stable in the future.

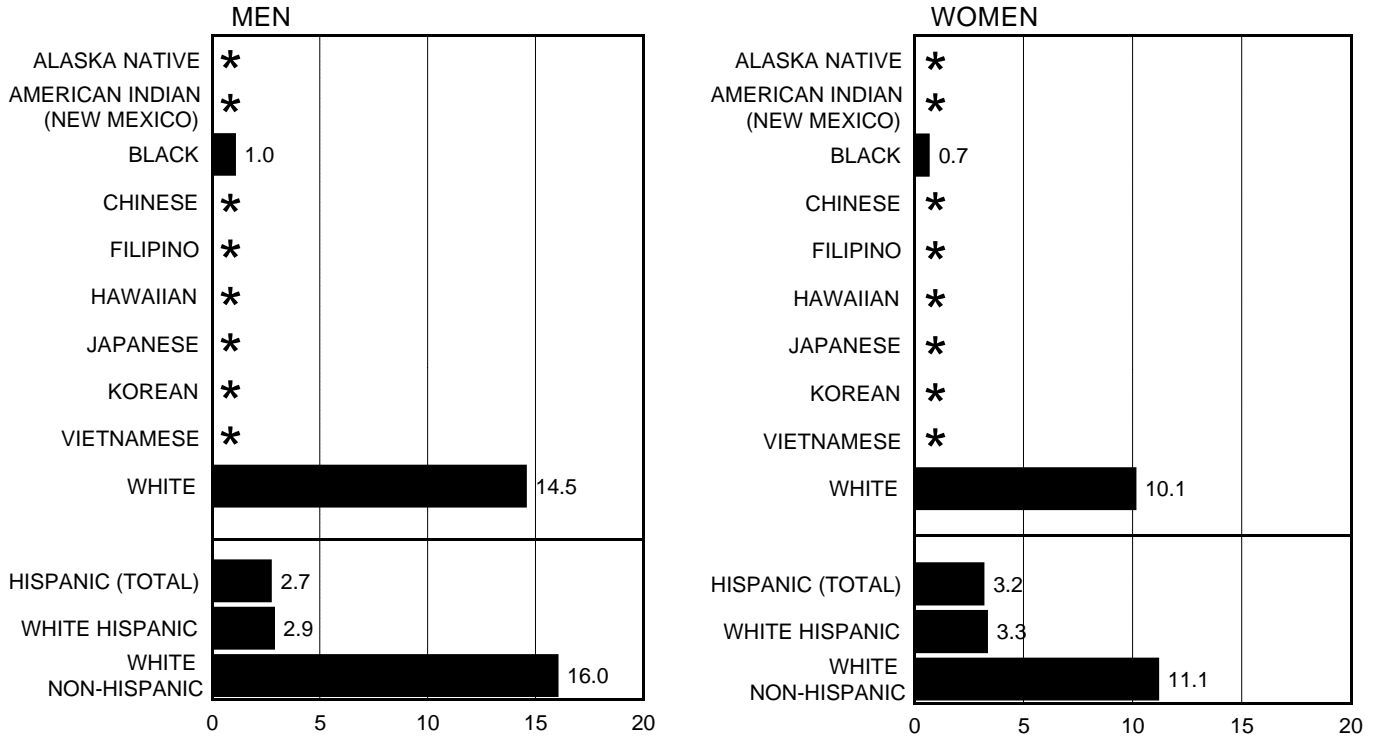
During 1988 to 1992, there are very few cases of malignant melanoma among nonwhites, so incidence rates are very low and for many races the rates could not be calculated. Among whites, age-adjusted incidence rates are over five times higher in non-Hispanic compared to Hispanic men and over three times higher in non-Hispanic women compared to Hispanics.

The incidence rates among whites increase with age in both men and women. The size of this increase is over three-fold in men and only 62% in women. In the 30-54 year age group the difference in the rates between men and women is small. Incidence rates are nearly twice as high in men aged 55-69 years, however, and 2.3 times higher in men 70 years of age or older. Mortality rates are about 20% of the incidence rates and show a similar pattern by race (where rates can be calculated), sex, and age.

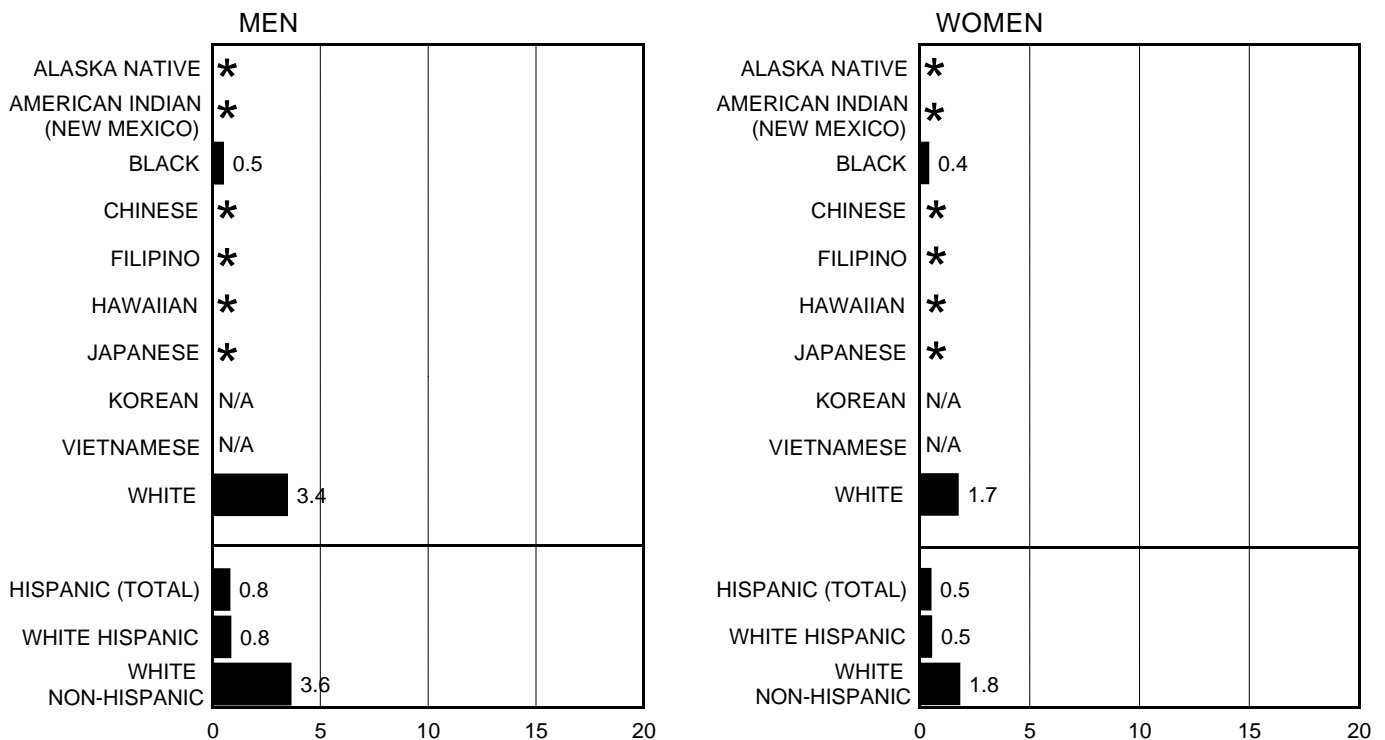
The anatomic distribution of malignant melanoma differs for men and women. Men are more likely to have melanoma on the head, neck and trunk and women are more likely to have melanoma on the lower limbs. Among white populations, the risk for malignant melanoma is highest for fair-skinned people, especially those who lack the ability to tan when exposed to sun. Risk is also higher for individuals with the highest concentration of moles on the body. The process by which sunlight is associated with the development of the disease is not well understood. However, the increasing incidence of the disease seems related to increases in voluntary sun exposure and the use of tanning devices. There is also some indication that severe burning or strong intermittent exposure, especially in childhood, may be especially high risk patterns for the disease. An excess of this cancer has been reported in family members of cases, but it is not clear if this is due to inherited genes or due to common skin type or sun exposure patterns. Currently the most established method to prevent the disease is to avoid sun exposure through use of sun screens or protective clothing when in the sun.

MELANOMA OF THE SKIN

SEER INCIDENCE Rates, 1988-1992



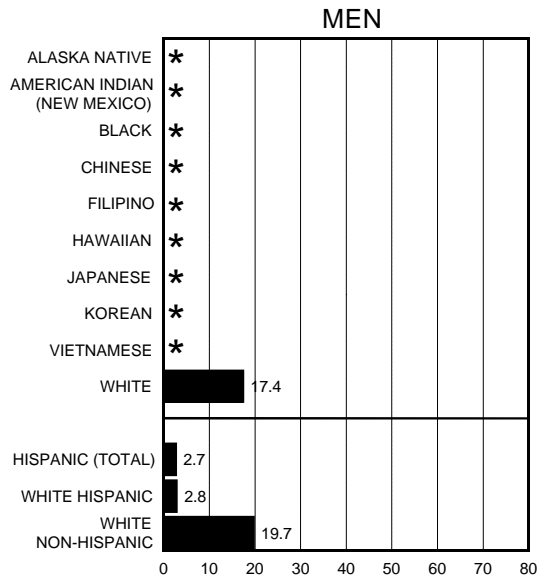
United States MORTALITY Rates, 1988-1992



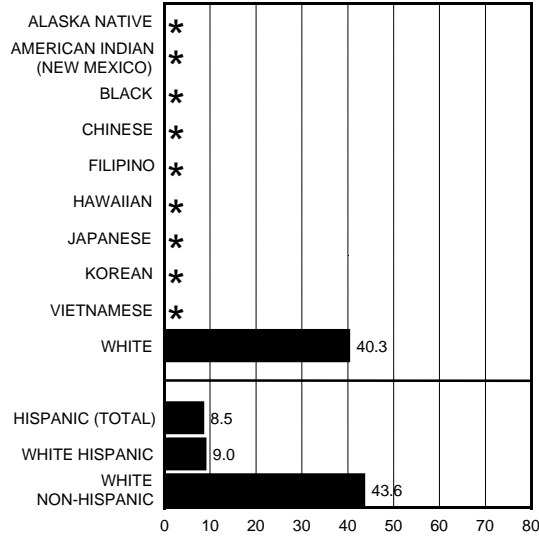
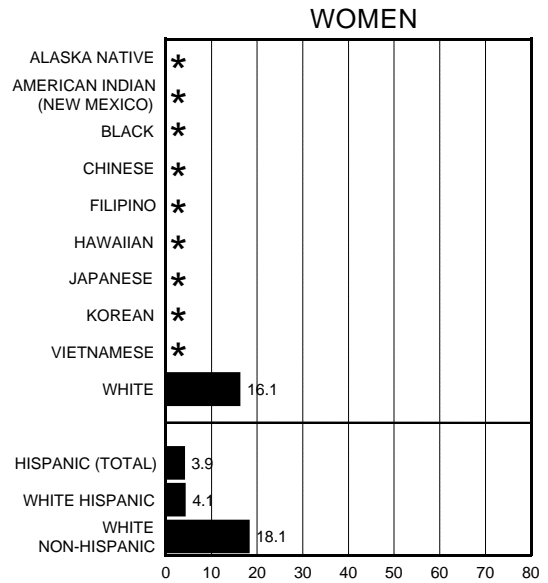
NOTE: Rates are "average annual" per 100,000 population, age-adjusted to 1970 U.S. standard; N/A = information not available; * = rate not calculated when fewer than 25 cases.

MELANOMA OF THE SKIN

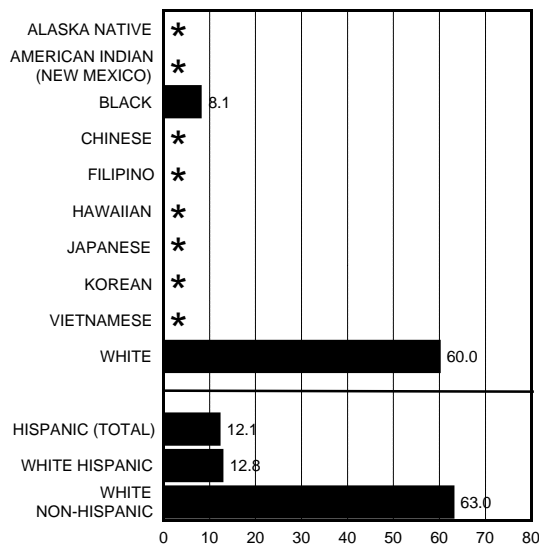
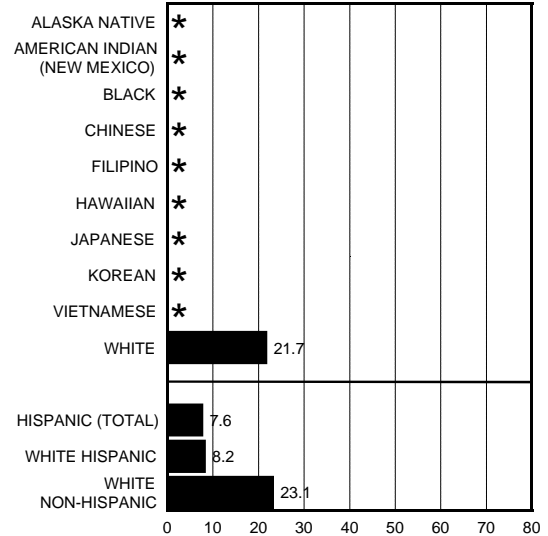
SEER INCIDENCE Rates by Age at Diagnosis, 1988-1992



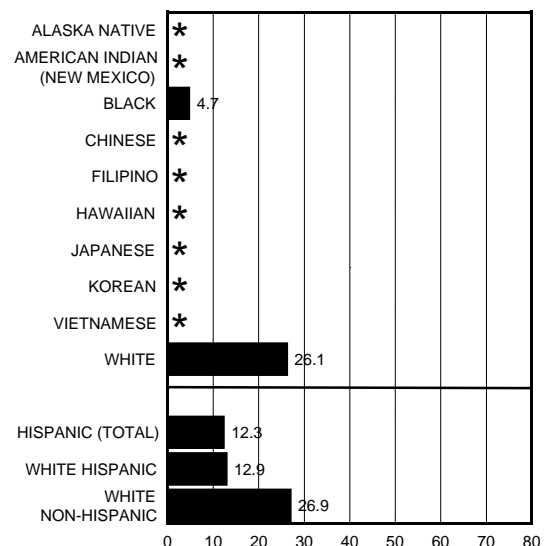
AGE 30-54



AGE 55-69



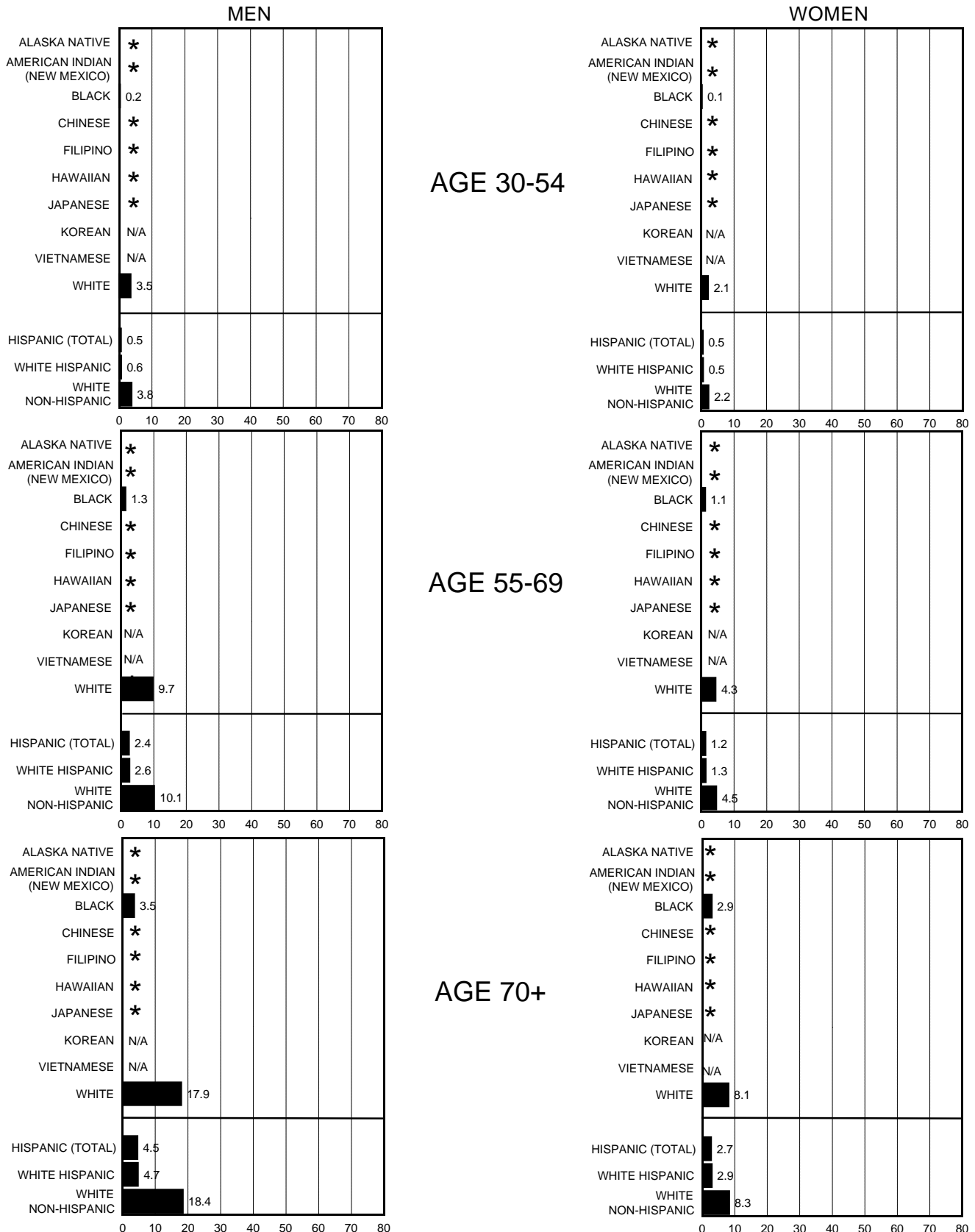
AGE 70+



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

MELANOMA OF THE SKIN

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



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