

THYROID

Tiny and usually insignificant carcinomas can be found in five to 10% or more of all thyroid glands that are carefully examined under the microscope at autopsy, but relatively few of them grow or spread to produce symptoms that lead to their detection during a person's lifetime. The thyroid cancers that are diagnosed each year represent about 1% of all cancers in the U.S. population. Most types of thyroid

cancer rank quite high in terms of successful treatment and long term survival. However, some rare subtypes may have a poor prognosis.

The highest incidence rates for thyroid cancer in the SEER regions occur in women, particularly in the Pacific Island and Southeast Asian populations living in California and Hawaii. The rates are highest among Filipino women (14.6 per 100,000), Vietnamese women (10.5) and Hawaiian women (9.1), and lowest among black women (3.3). Within each racial/ethnic group, incidence rates in women consistently exceed incidence rates in men by a factor of about three. Among men, highest rates occur in the Filipino population (4.1) and lowest in the black (1.4) and Japanese (1.6) populations.

Mortality rates are lower than incidence rates by a factor of about five to ten in men and eight to twenty in women. Although women have three-fold higher incidence rates than men, the gender difference for mortality is smaller, reflecting somewhat better survival rates for women than for men. Most deaths due to thyroid cancer occur in the older age groups and may occur more than ten years after diagnosis.

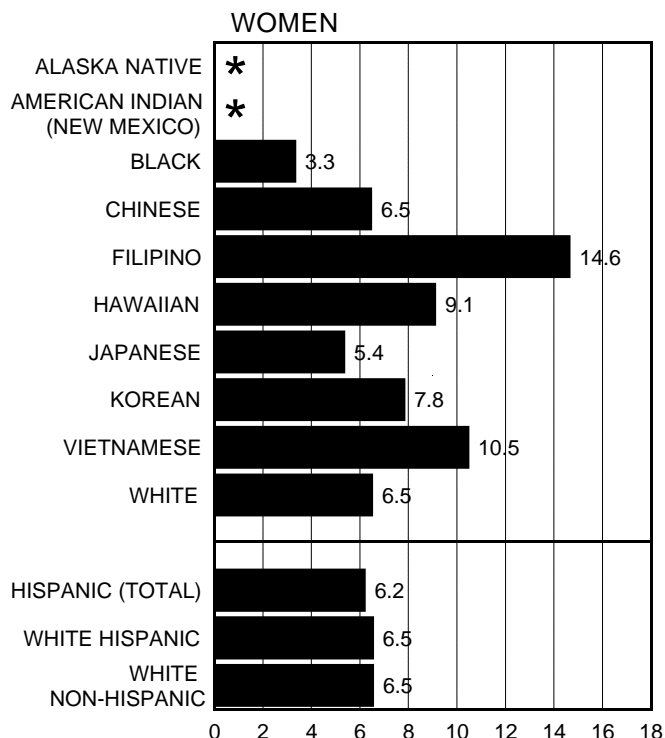
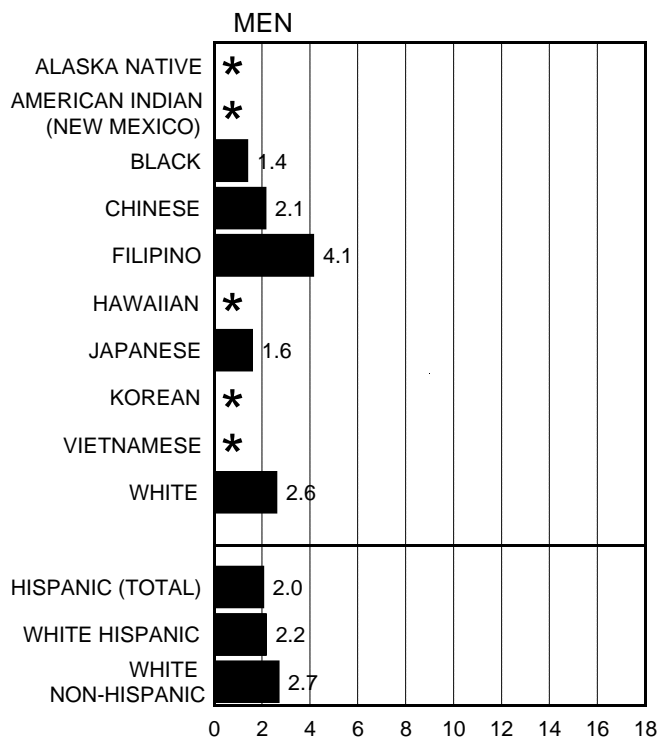
Thyroid cancers occur in all age groups. Whereas the incidence of most other cancers increases markedly with

age, in most of the racial/ethnic groups, thyroid cancer reaches its highest incidence in young adults and remains fairly constant throughout the rest of life. Hispanic men are an exception, with incidence rates which rise from 2.3 in the 30-54 year age group to 4.5 in the 55-69 year age group and 9.2 in the 70 year and older age group.

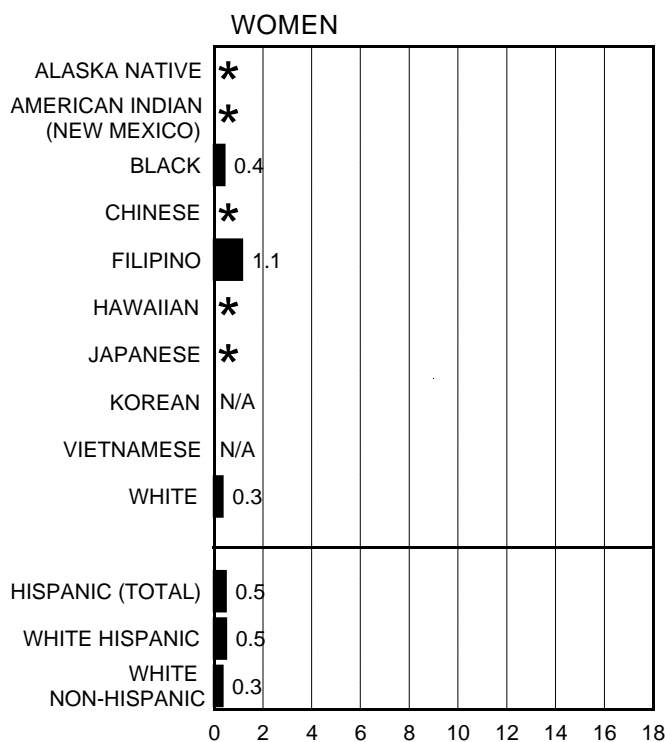
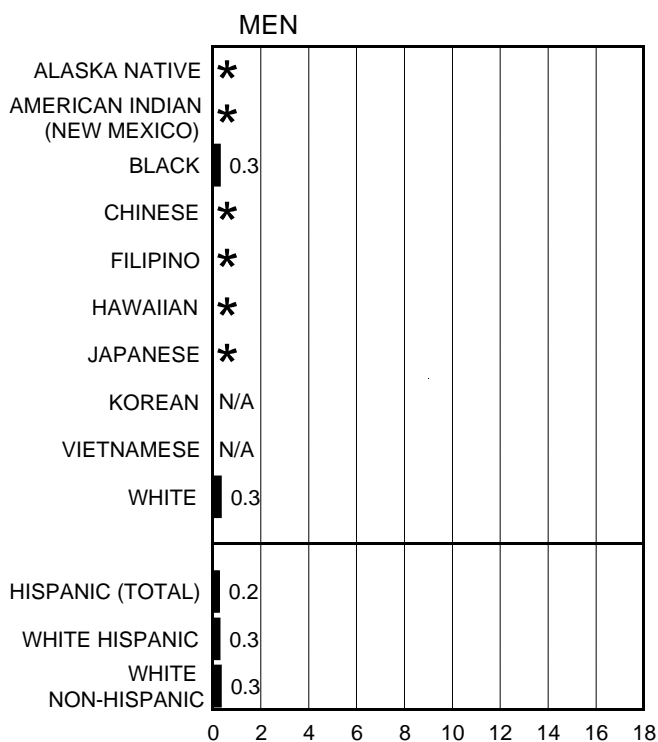
Many studies report an association between thyroid cancer and radiation exposure. In the 1930s and 1940s, X-rays were often used in the treatment of skin diseases and other benign conditions such as enlarged thymus or tonsils. Increased risks have been described in Japanese atomic bomb survivors and in persons exposed to fallout from atomic testing in the Marshall Islands. Populations exposed to radioactive fallout from the nuclear processing facility in Hanford, Washington and from the vicinity of the Chernobyl nuclear plant disaster in the Ukraine are currently being studied. Goiter and other thyroid diseases, as well as diets high or low in iodine, have been suspected risk factors. Medullary carcinomas of the thyroid, which account for about 3% of cases, are often a part of an inherited disease complex called the Multiple Endocrine Neoplasia (MEN) Syndrome.

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SEER INCIDENCE Rates, 1988-1992



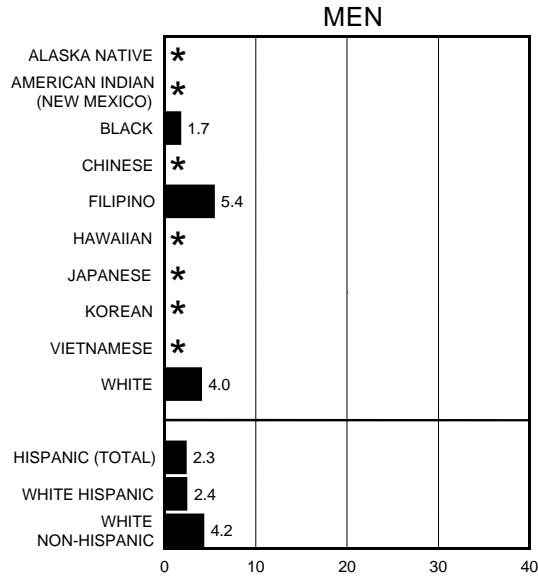
United States MORTALITY Rates, 1988-1992



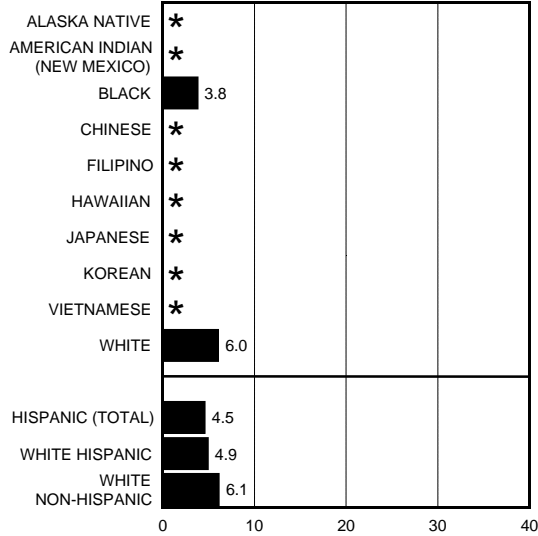
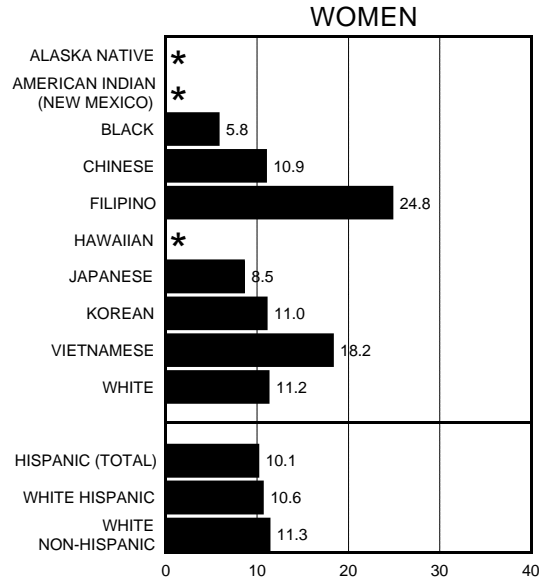
NOTE: Rates are "average annual" per 100,000 population, age-adjusted to 1970 U.S. standard; N/A = information not available; * = rate not calculated when fewer than 25 cases.

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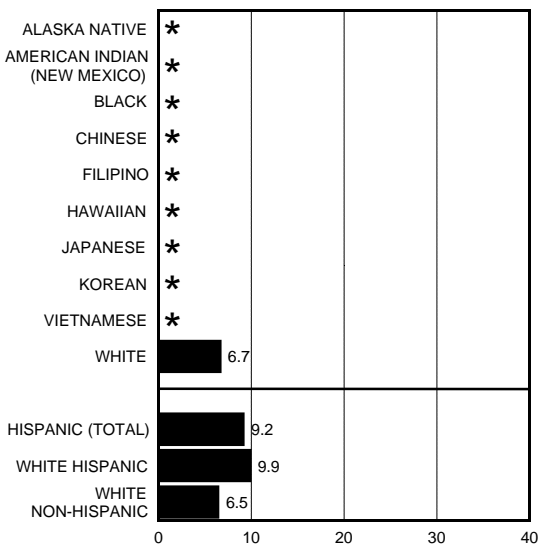
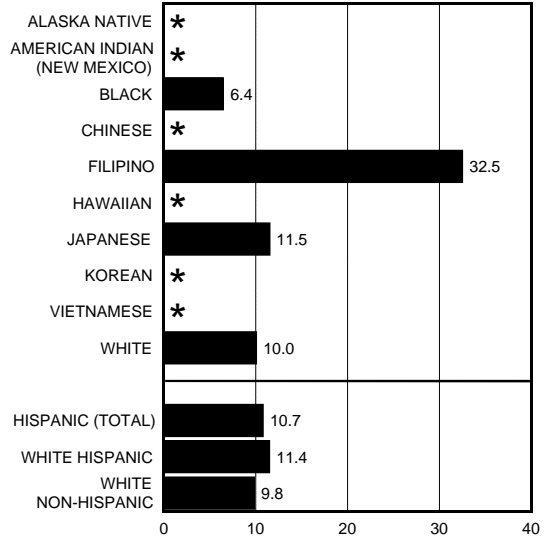
SEER INCIDENCE Rates by Age at Diagnosis, 1988-1992



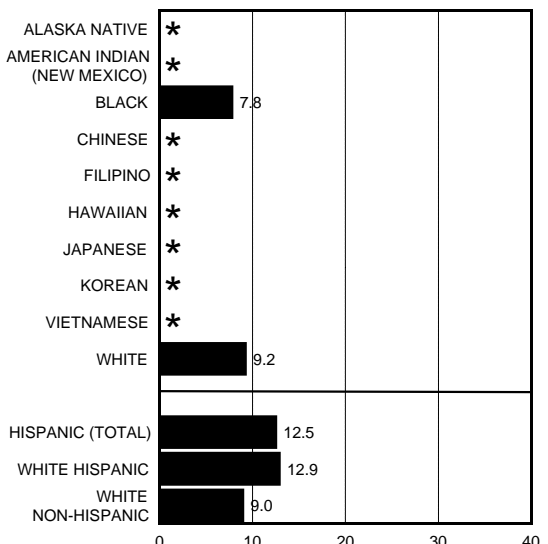
AGE 30-54



AGE 55-69



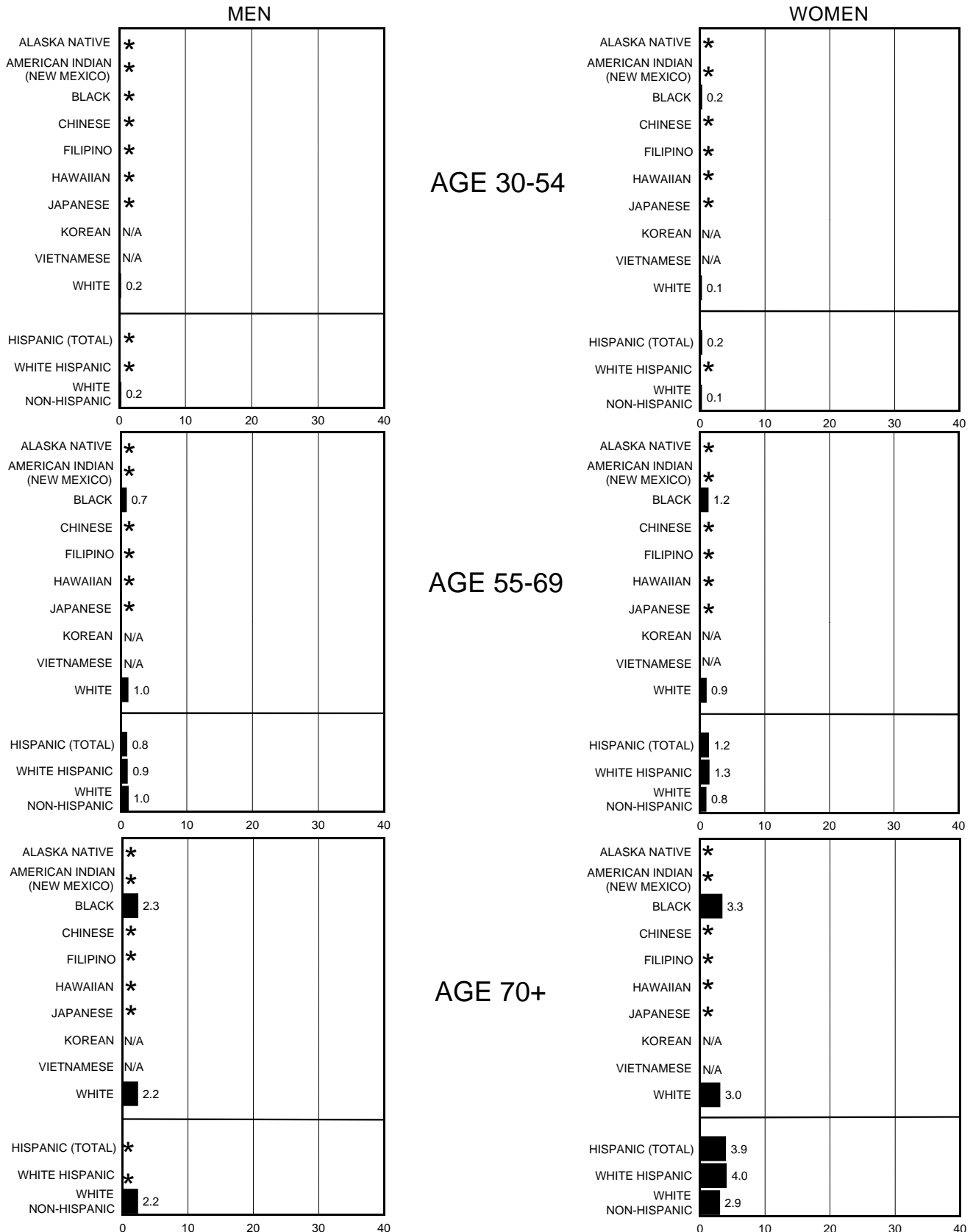
AGE 70+



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

THYROID

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.