eukemias are cancers of the blood-forming tissues. They may be subdivided according to the particular cell type involved, the major types being lymphocytic and myelocytic (granulocytic) leukemias. Leukemias are also classified by their behavior, as either "acute" or "chronic." Childhood leukemias are mostly acute, with the lymphocytic form predominating. Both acute and chronic leukemias occur

among adults; most lymphocytic leukemias among adults are chronic.

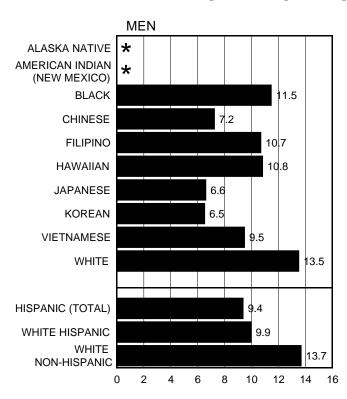
In both men and women, leukemia incidence is highest among whites and lowest among Chinese, Japanese, and Koreans. Incidence rates are shown for all leukemia types combined, but it can be noted that the ethnic patterns are generally similar to those seen when incidence is calculated separately for the lymphocytic and non-lymphocytic forms of the disease. The incidence in men is about 50% higher than in women for all racial/ethnic groups except Vietnamese, among whom the male rates are only slightly higher. Ethnic differences in the incidence rates are small in the youngest adult age group (30-54 years), but become more evident in each of the older age groups. Data for childhood leukemia (0-14 years) are not shown separately in the figures. However, we found that childhood leukemia rates are highest among Filipinos, followed by white Hispanics, non-Hispanic whites and blacks. Reliable rates could not be computed for children in the remaining racial/ethnic groups.

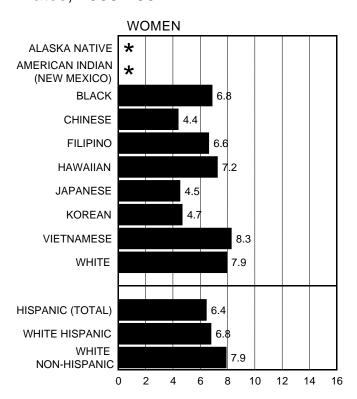
United States mortality rates are shown for all leukemia types combined. The mortality rates for men are generally 50% to 100% higher than those for women for all ages combined, ages 55-69 years and ages 70 years and older. Leukemia mortality rates are highest in white and black

populations and in Hawaiian men. Rates among Asian populations are noticeably lower. The ratio of mortality-to-incidence rates is higher for adult leukemias than for childhood leukemias. Because treatment for childhood leukemias is quite successful, mortality from this cancer is comparatively low among children.

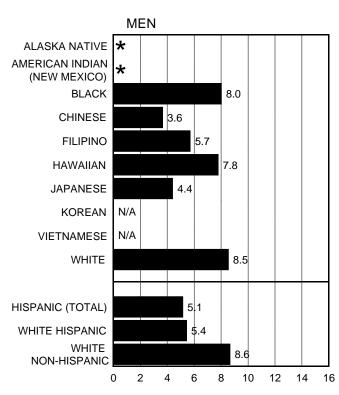
Established causes of leukemia include ionizing radiation (such as occurs from x-irradiation), certain drugs used in the treatment of cancer, and some chemicals (most notably benzene) used largely in industrial settings. Ionizing radiation has been associated with all forms of leukemia except the chronic lymphocytic form. It is suspected that many childhood leukemias may result from parental exposures before the time of conception or during early fetal development.

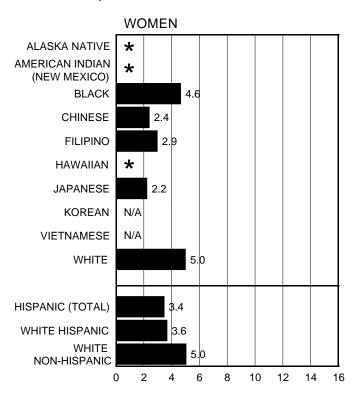
SEER INCIDENCE Rates, 1988-1992





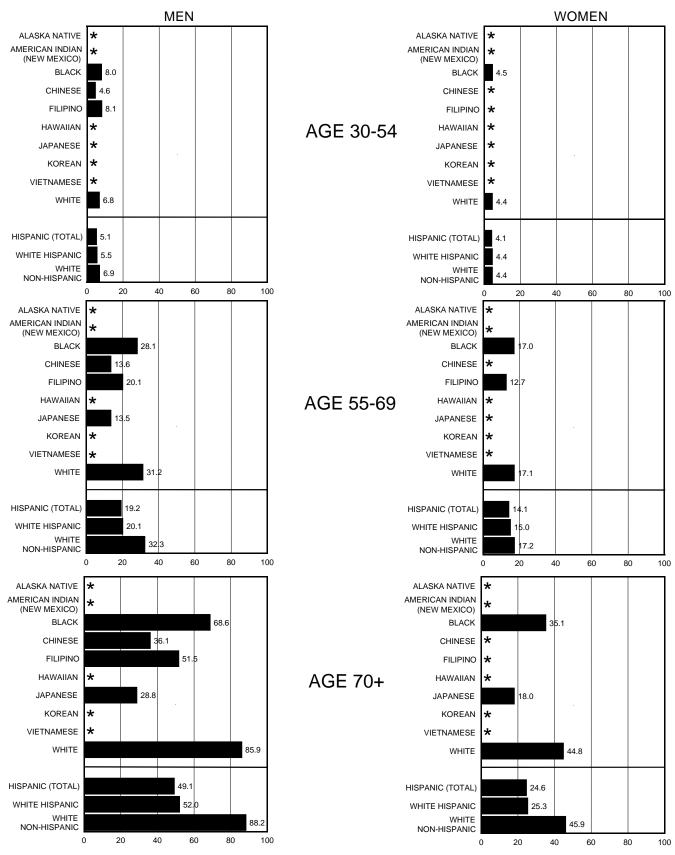
United States MORTALITY Rates, 1988-1992





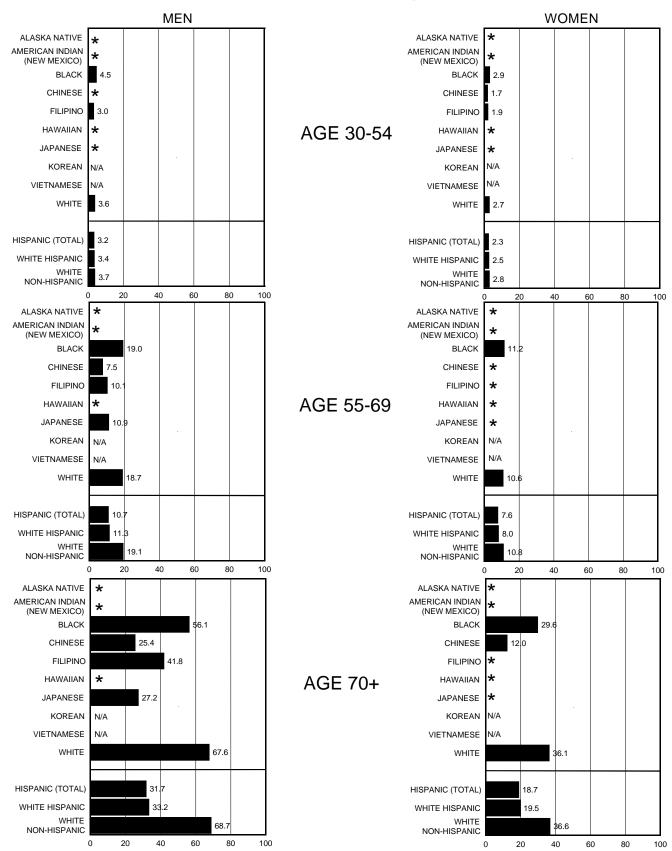
NOTE: Rates are "average annual" per 100,000 population, age-adjusted to 1970 U.S. standard; N/A = information not available; \star = rate not calculated when fewer than 25 cases.

SEER INCIDENCE Rates by Age at Diagnosis, 1988-1992



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

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.