

Breast cancer is the most common form of cancer among women in the United States. The incidence of breast cancer has been rising for the past two decades, while mortality has remained relatively stable since the 1950s. Much of the increase in incidence over the past 15 years is associated with increased screening by physical examination and mammography. However, screening alone does not seem to

explain all of this increase. Breast cancer occurs among both women and men, but is quite rare among men. Since the incidence rates among men are so low, there are too few cases to explore ethnic diversity. This description is limited to breast cancer among women.

The age-adjusted incidence of invasive breast cancer reveals that white, Hawaiian, and black women have the highest rates in the SEER regions. The lowest rates occur among Korean, American Indian, and Vietnamese women. The incidence rate for white non-Hispanic women is four times as high as that for the lowest group (Korean women).

In situ breast cancer occurs at much lower rates than invasive breast cancer, but has a similar racial/ethnic pattern to that for the invasive cancers. White non-Hispanic women have the highest rates, over twice the rate for Hispanic women. Rates could not be calculated for Alaska Native, American Indian, Korean, and Vietnamese women due to the small numbers of cases.

Age-specific incidence rates for invasive breast cancer present similar ethnic patterns. Among women aged 30-54 years, however, the rates among Hawaiian women are comparable to those for the white non-Hispanic women. Among women aged 55-69 years and 70 years and older, rates are highest for white, Hawaiian, and black

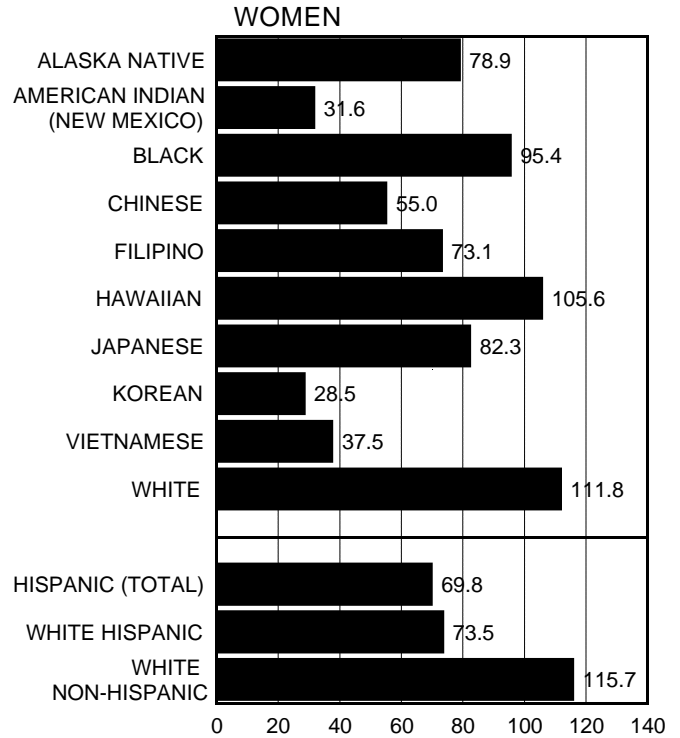
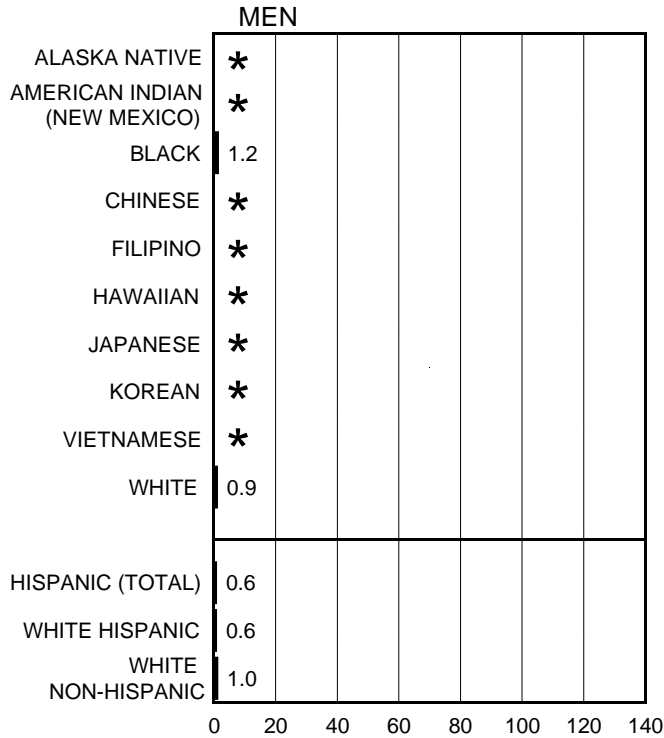
women. *In situ* breast cancer incidence among women aged 30-54 years and 70 years and older is highest among white non-Hispanic women, followed by Japanese women, and white (total) women. At ages 55-69 years, *in situ* breast cancer is highest among white women, followed by Japanese women and black women.

Mortality rates are much lower than incidence rates for breast cancer, ranging from just 15% of the incidence rate for Japanese women to 33% of the incidence rate for black women. Racial/ethnic patterns of mortality differ slightly from those observed for incidence. The highest age-adjusted mortality occurs among black women, followed by white, and Hawaiian women. The higher breast cancer mortality among black women is related to the fact that, relative to white women, a larger percentage of their breast cancers are diagnosed at a later, less treatable stage. In the age groups 30-54 years and 55-69 years, black women have the highest rates, followed by Hawaiian, and white non-Hispanic women. In the 70 year and older age group, the mortality rate for white women exceeds that for black women.

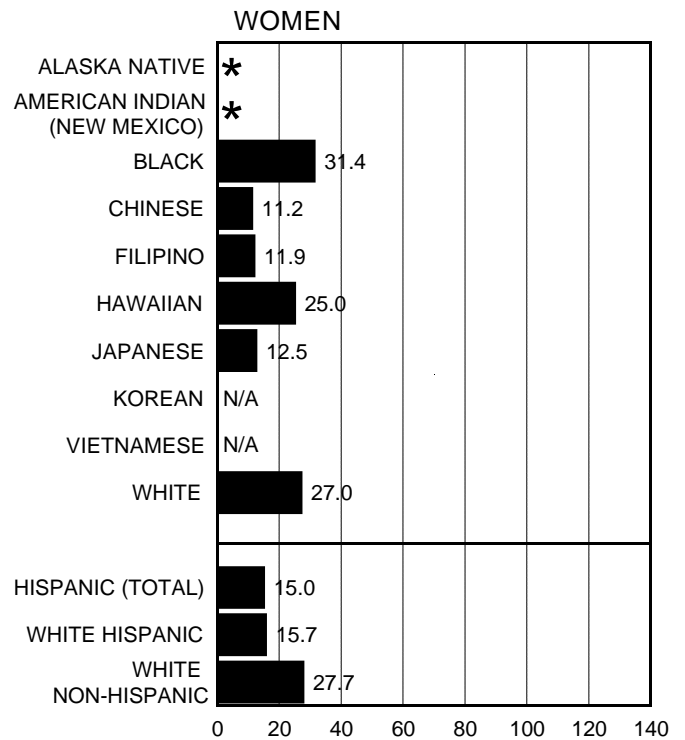
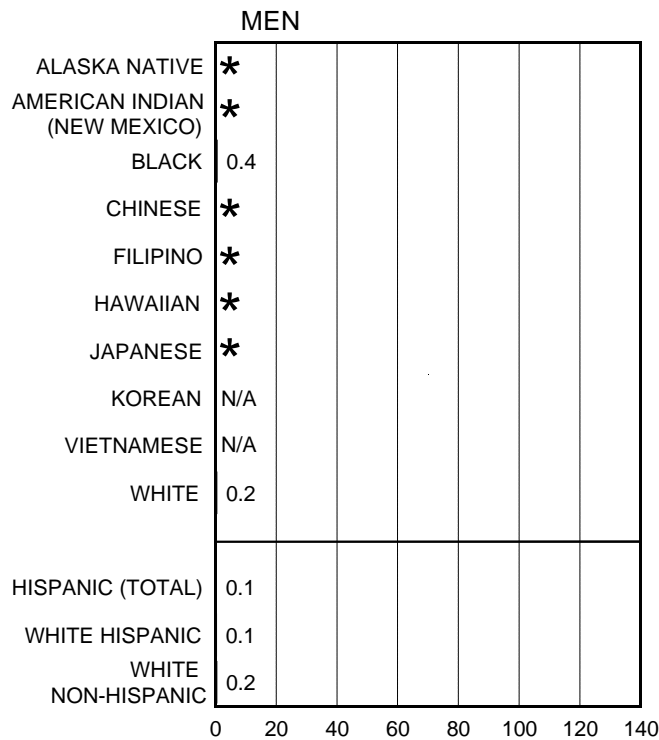
Important risk factors for female breast cancer include early age at onset of menarche, late age at onset of menopause, first full-term pregnancy after age 30, a
(continued on page 32)

BREAST, INVASIVE

SEER INCIDENCE Rates, 1988-1992



United States MORTALITY Rates, 1988-1992



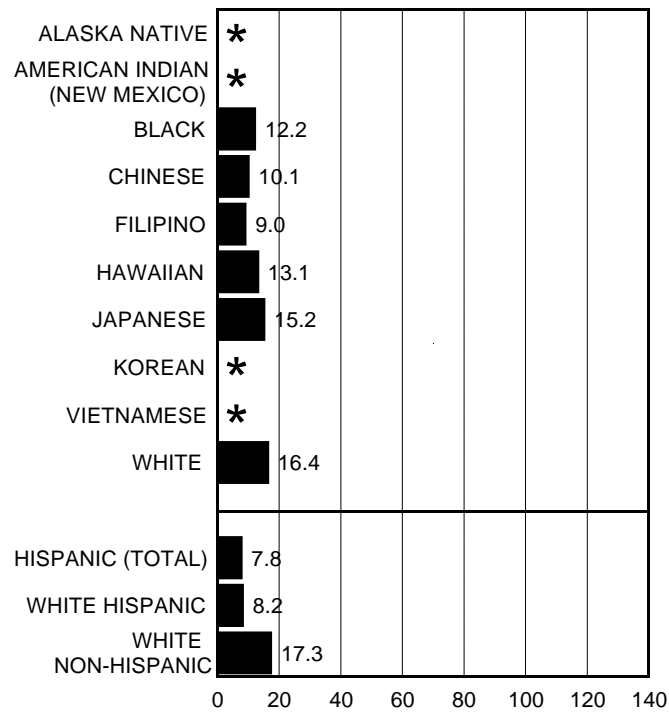
NOTE: Rates are "average annual" per 100,000 population, age-adjusted to 1970 U.S. standard; N/A = information not available; * = rate not calculated when fewer than 25 cases.

history of pre-menopausal breast cancer for mother and a sister, and a personal history of breast cancer or of benign proliferative breast disease. Obesity, nulliparity, and urban residence also have been shown to be associated with increased risk of breast cancer.

Although there are no proven methods of preventing breast cancer, randomized trials are currently underway to assess the effectiveness of tamoxifen in preventing breast cancer among high risk women and to determine whether reducing the percentage of dietary fat will reduce the incidence of breast cancer. Recent studies suggest that physical activity may have preventive potential, as well.

BREAST, IN SITU

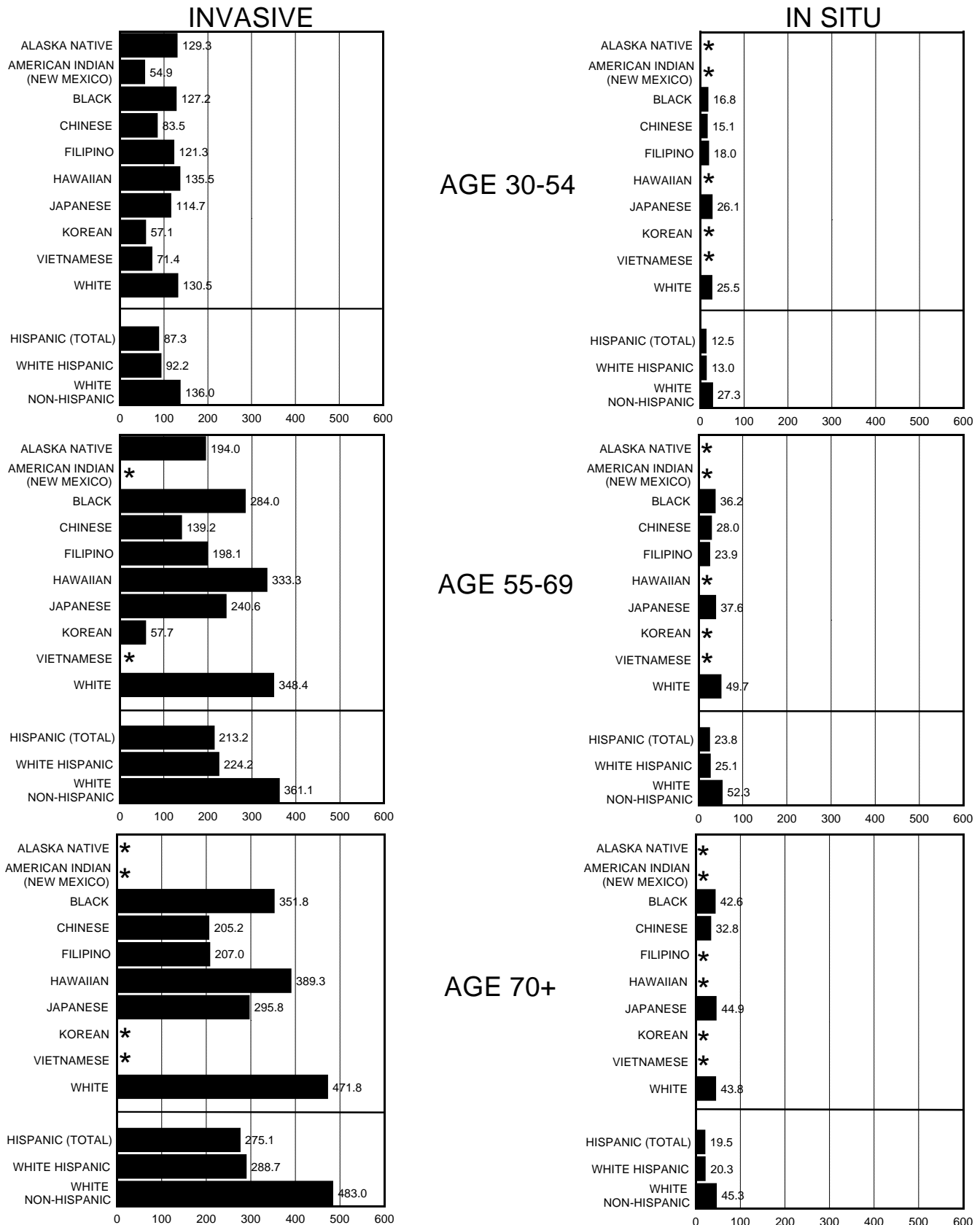
SEER INCIDENCE Rates Among Women, 1988-1992



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

BREAST

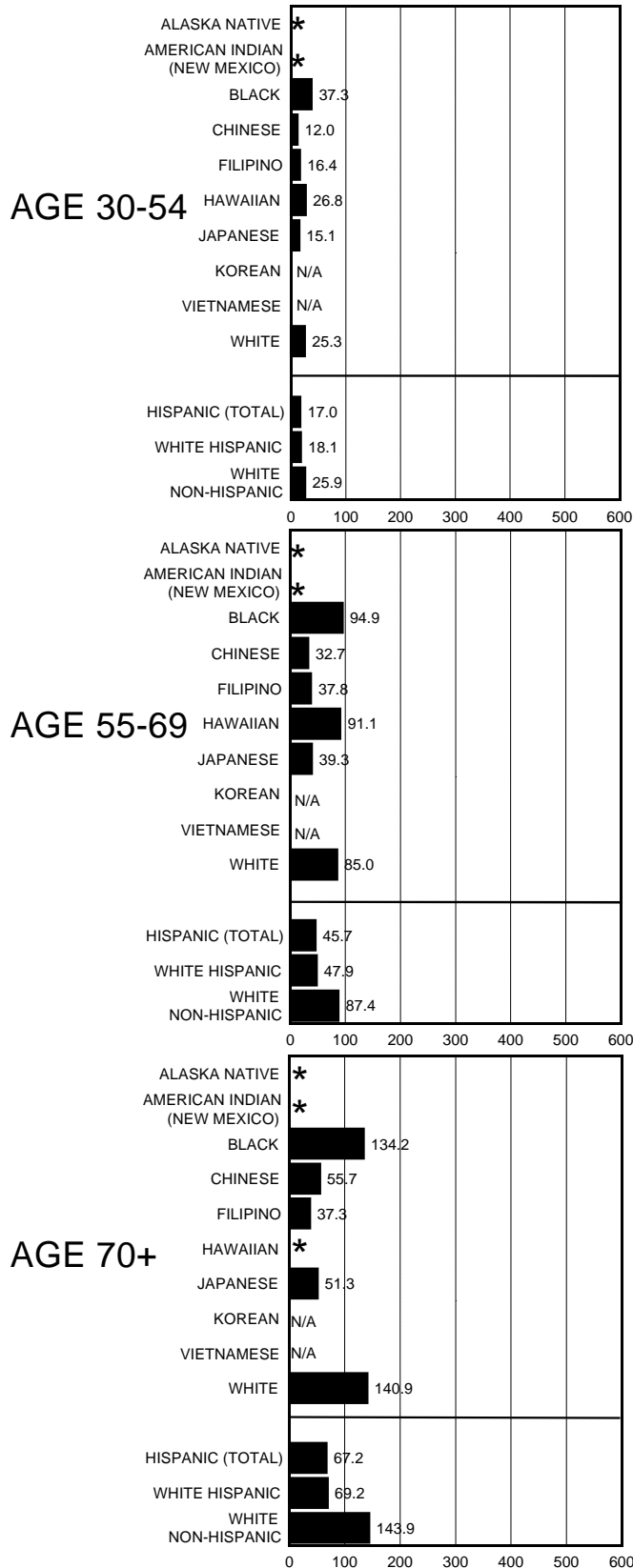
SEER INCIDENCE Rates Among Women by Age at Diagnosis, 1988-1992



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

BREAST, INVASIVE

United States MORTALITY Rates Among Women 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.