ancer of the esophagus is a common cancer in developing areas of the world (Asia, Africa and Latin America), but is less common in the United States. Historically, most esophageal cancers were squamous cell tumors. Recently, however, there has been a marked increase in adenocarcinoma of the esophagus, primarily among white men, in developed countries of the world, including the

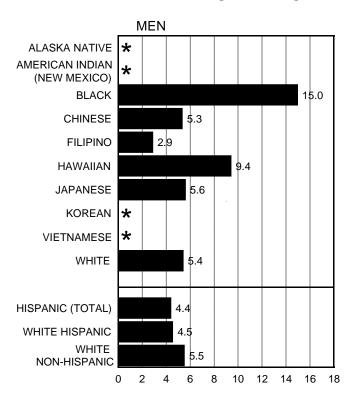
United States. In fact, among white men, rates of adenocarcinoma of the esophagus nearly equal those of squamous cell tumors.

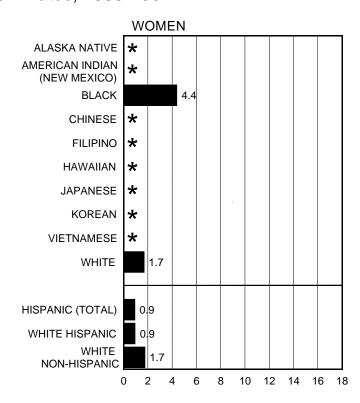
There is a five-fold range in the age-adjusted incidence rates for esophageal cancer among the racial/ethnic groups in the SEER regions. Men are three to five times more likely than women to be diagnosed with esophageal cancer. Among men, blacks have the highest rate (15.0 per 100,000) and Filipinos have the lowest (2.9 per 100,000). The incidence rate for black men is 60% higher than that for Hawaiians and more than 2.7 times greater than the rate for non-Hispanic white men. The rates for Chinese, Japanese and non-Hispanic white men are similar to each other (within the range of 5.3 to 5.6 per 100,000 men) and are modestly higher than the rate for white Hispanic men. Limited data are available for women. Hispanic and non-Hispanic white women have lower rates than black women. Incidence rates generally increase with age in all racial/ethnic groups. In black men, however, the incidence rate for the 55-69 year age group is close to the rate for the 70 and over age group. In black women aged 55-69 years, the incidence rate is slightly higher than for the 70 years and older age group.

United States mortality rates for esophageal cancer are nearly as high as incidence rates in the SEER regions, reflecting the generally poor survival for patients with this cancer. Among black and Hawaiian populations, the incidence-to-mortality rate ratio is less than 1.1. It is 1.1 for non-Hispanic whites, Japanese and Filipinos and 1.3 for Chinese and white Hispanics. Mortality patterns by age are similar to those seen in the incidence rates.

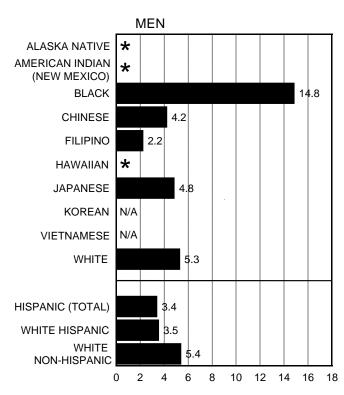
Heavy alcohol consumption, cigarette smoking, and, possibly, other types of tobacco use each substantially increase the risk of esophageal cancer among persons in developed countries. The use of tobacco and alcohol, in combination, results in even larger elevations in risk. In developing countries, nutritional deficiencies related to lack of fresh fruit and vegetables, drinking hot beverages, and a range of chewing and smoking habits are also important risk factors.

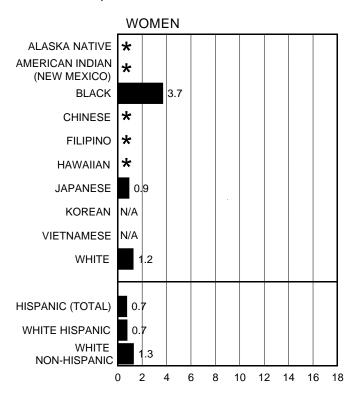
#### SEER INCIDENCE Rates, 1988-1992





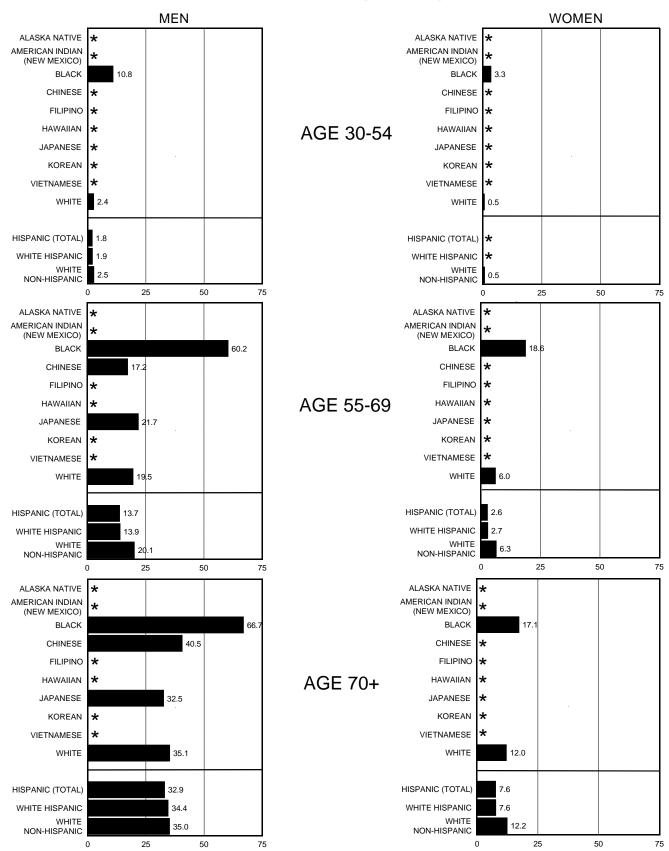
#### United States MORTALITY Rates, 1988-1992





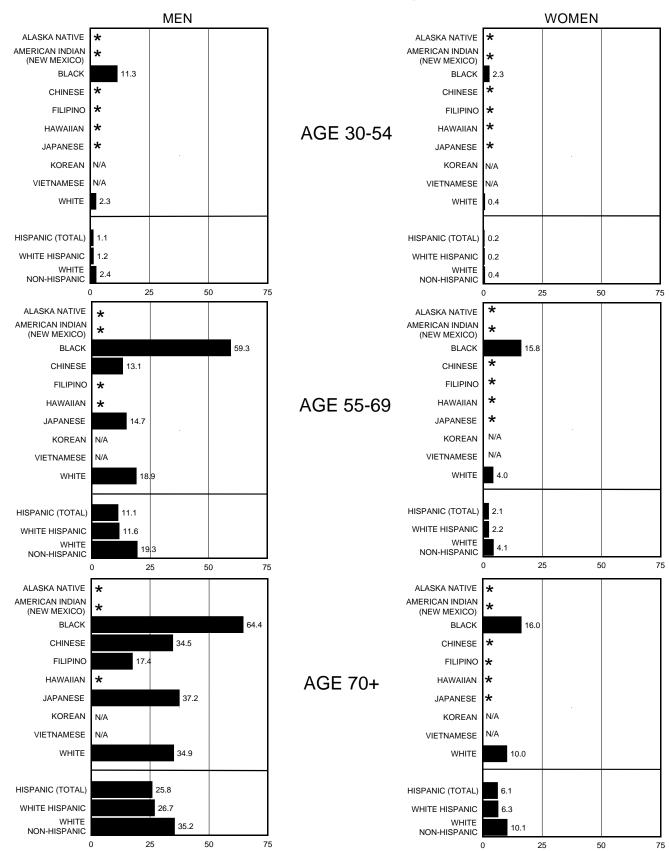
NOTE: Rates are "average annual" per 100,000 population, age-adjusted to 1970 U.S. standard; N/A = information not available; \* = rate not calculated when fewer than 25 cases.

## 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.