KIDNEY AND RENAL PELVIS istorically, incidence rates for kidney cancer have included cancers of the renal cells (in the main part of the kidney) and the renal pelvis (the lower part of the kidney where urine collects before entering the ureter and continuing to the bladder), although there is evidence that these cancers have different characteristics. They are presented together here for continuity. About one of five

kidney cancers occur in the renal pelvis. Internationally, the highest incidence rates occur in the United States, Canada, Northern Europe, Australia, and New Zealand. The lowest rates are in Thailand, China, and the Philippines. Rates in these countries are about one-third the rates in the high risk countries.

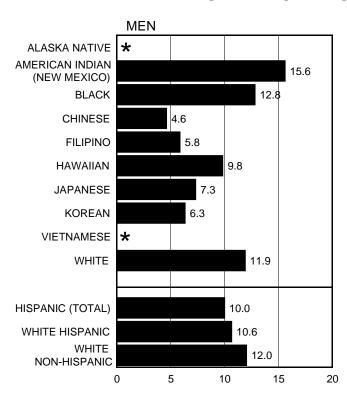
During the years 1988 to 1992, in the SEER regions, the incidence rates for kidney cancers are about twice as high in men as in women. The highest rates in the SEER regions are in American Indian men in New Mexico. Rates are somewhat lower in blacks, Hispanics and white non-Hispanics (ranging from 10 to 13 per 100,000 for men and about six per 100,000 for women). The lowest incidence rates occur in the Asian populations. There were too few cases among Alaska Native and Vietnamese populations to calculate rates. Age-specific incidence rates for kidney cancer demonstrate a small, temporary peak in early childhood due to Wilm's tumor, an uncommon tumor of the kidney with a good prognosis. Rates then decline with age and remain low until they finally surpass the early peak at around age 40. The racial/ethnic patterns for ages 55-69 years and 70 years and over are similar to those for all ages combined. In the 30-54 year old age group, racial/ethnic differences are slight.

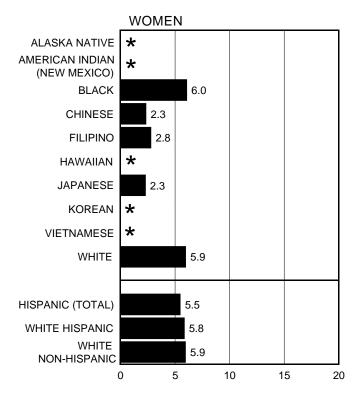
Kidney cancer has a relatively high mortality rate in all racial/ethnic populations. Following the incidence pattern, mortality rates are about twice as high in men as in women, regardless of age. There are too few deaths among American Indian (New Mexico), Alaska Native and Hawaiian populations to calculate reliable rates. Mortality rates for blacks are comparable to those for white non-Hispanics. Rates for the other races are lower. In all racial/ethnic groups the mortality rates increase with age.

Cancers of the kidney and renal pelvis share many risk factors although the strengths of the associations differ. For both types of cancer the only well-established risk factor is cigarette smoking. Compared to nonsmokers, smokers have about twice the risk for renal cell cancer and about four times the risk for renal pelvis cancer than nonsmokers. Other probable risk factors include obesity and, especially for cancer of the renal pelvis, heavy long-term use of analgesics (medications used to relieve pain). Cessation of cigarette smoking is the best single step in preventing these cancers. It is estimated that this measure alone would reduce by one-half the number of renal pelvis cancers and by one-third the number of renal cell cancers.

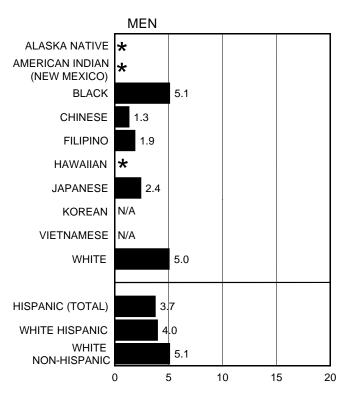
# KIDNEY AND RENAL PELVIS

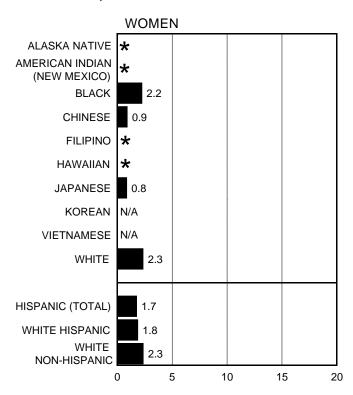
### SEER INCIDENCE Rates, 1988-1992





### United States MORTALITY Rates, 1988-1992

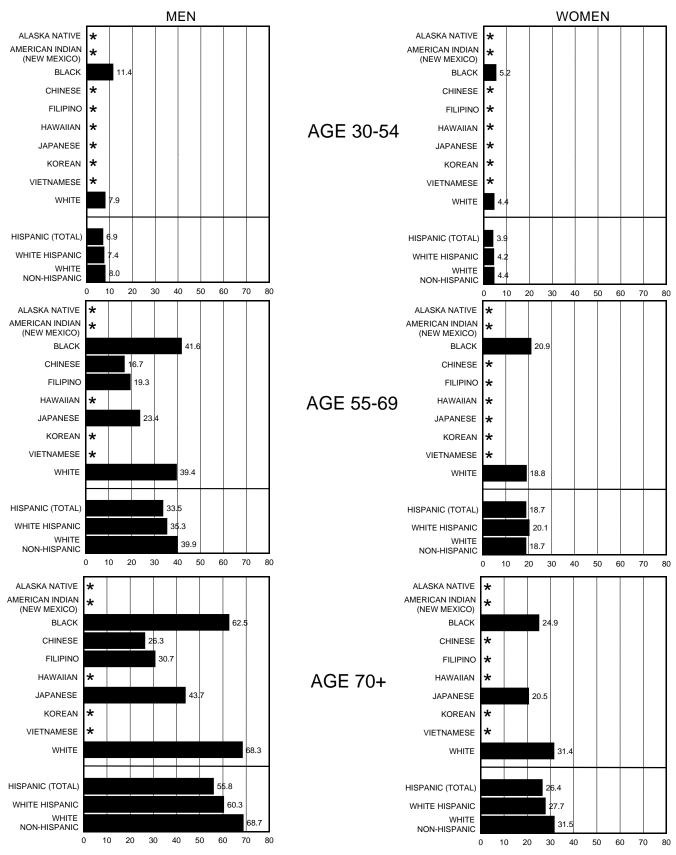




NOTE: Rates are "average annual" per 100,000 population, age-adjusted to 1970 U.S. standard; N/A = information not available;  $\star$  = rate not calculated when fewer than 25 cases.

# KIDNEY AND RENAL PELVIS

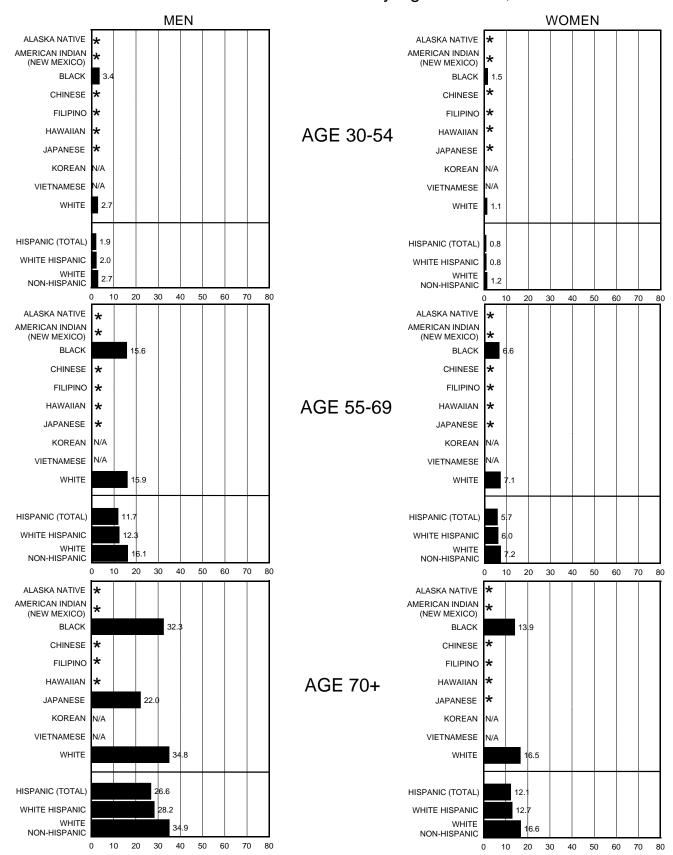
### SEER INCIDENCE Rates by Age at Diagnosis, 1988-1992



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

# KIDNEY AND RENAL PELVIS

### 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.