LIVER AND INTRAHEPATIC BILE DUCT rimary cancers of the liver and intrahepatic bile ducts are far more common in regions of Africa and Asia than in the United States, where they only account for about 1.5% of all cancer cases. Five-year survival rates are very low in the United States, usually less than 10%. Reported statistics for these cancers often include mortality rates that equal or exceed the incidence rates. This discrepancy (more deaths

than cases) occurs when the cause of death is misclassified as "liver cancer" for some patients whose cancer originated as a primary cancer in another organ and spread (metastasized) to become a "secondary" cancer in the liver.

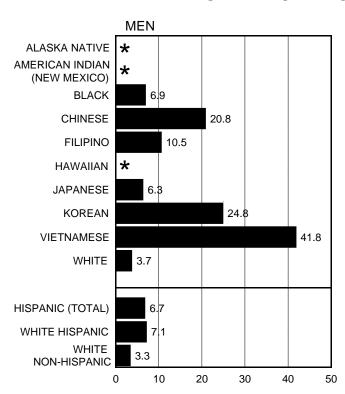
Non-Hispanic white men and women have the lowest age-adjusted incidence rates (SEER areas) and mortality rates (United States) for primary liver cancer. Rates in the black populations and Hispanic populations are roughly twice as high as the rates in whites. The highest incidence rate is in Vietnamese men (41.8 per 100,000), probably reflecting risks associated with the high prevalence of viral hepatitis infections in their homeland. Other Asian-American groups also have liver cancer incidence and mortality rates several times higher than the white population. Age-adjusted mortality rates among Chinese populations are the highest of all groups for which there are sufficient numbers to calculate rates. There were too few cases among Alaska Native and American Indian populations to calculate incidence or mortality rates. Most cases of liver cancer occur in the two older age groups, but younger adults are often affected in the high risk racial/ethnic groups.

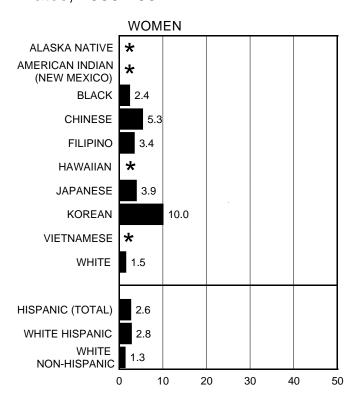
About two-thirds of liver cancers are hepatocellular carcinomas (HCC), which is the cancer type most clearly associated with hepatitis B and hepatitis C viral infections and cirrhosis. Certain molds that grow on

stored foods are recognized risk factors in parts of Africa and Asia. HCC occurs more frequently in men than in women by a ratio of two-to-one. About one-in-five liver cancers are cholangiocarcinomas, arising from branches of the bile ducts that are located within the liver. Certain liver parasites are recognized risk factors for this type of liver cancer, especially in parts of southeast Asia. Angiosarcomas are rare cancers that can arise from blood vessels. including the blood vessels within the liver. They account for about 1% of primary liver cancers and some of them have been associated with industrial exposures to vinyl chloride.

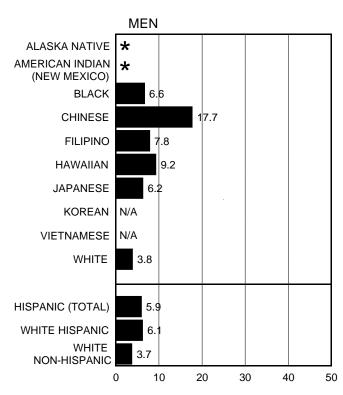
## LIVER AND INTRAHEPATIC BILE DUCT

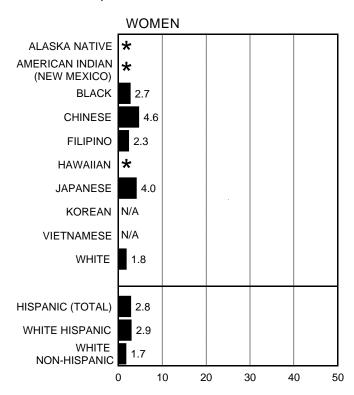
#### SEER INCIDENCE Rates, 1988-1992





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

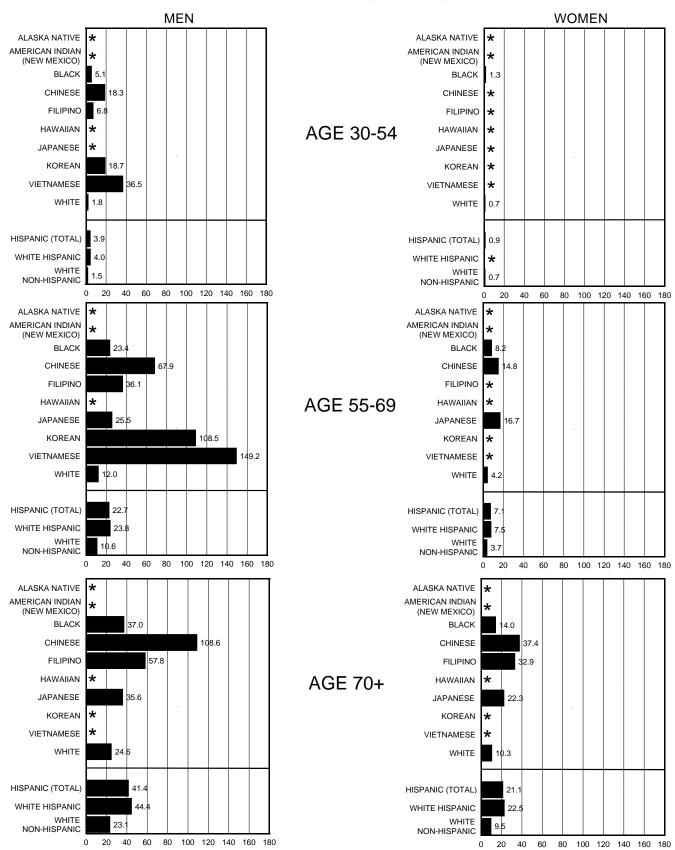




NOTE: Rates are "average annual" per 100,000 population, age-adjusted to 1970 U.S. standard; N/A = information not available; **\*** = rate not calculated when fewer than 25 cases.

## LIVER AND INTRAHEPATIC BILE DUCT

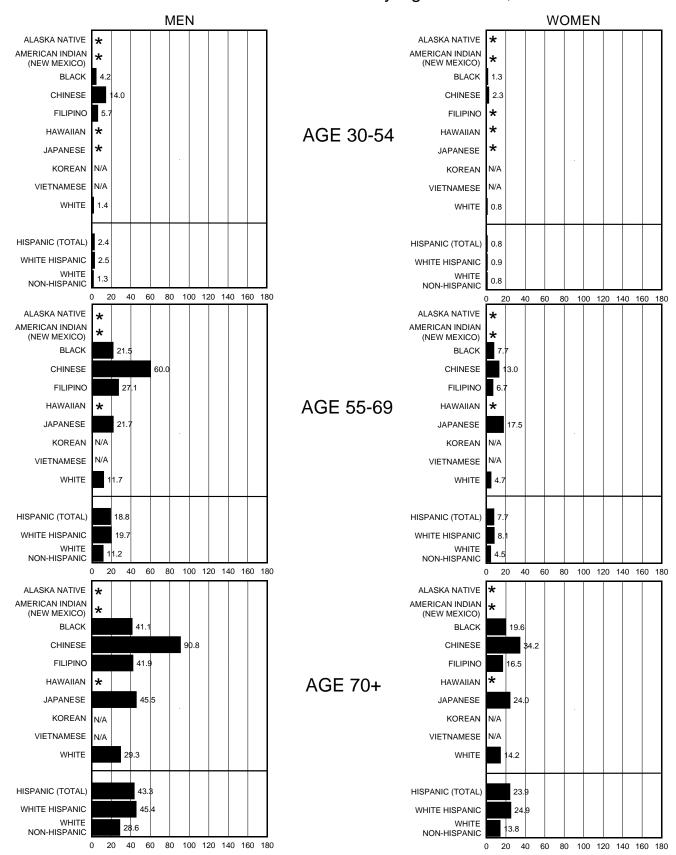
# SEER INCIDENCE Rates by Age at Diagnosis, 1988-1992



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

## LIVER AND INTRAHEPATIC BILE DUCT

#### 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.