Changing hepatocellular carcinoma incidence and liver cancer mortality rates in the United States

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Objectives
To describe Surveillance, Epidemiology and End Results (SEER) hepatocellular carcinoma (HCC) incidence trends and United States liver cancer mortality trends by geography, gender, age, race and ethnicity.

Results
During 2007-2010 overall rates of HCC incidence plateaued (Fig 1). During 2000-2010 HCC incidence and liver cancer mortality rates increased among Blacks, Hispanics and Whites 50+ years of age but decreased among men 35 to 49 and Asian/Pacific Islander women 50-64 years of age (Figs 2 & 3). Liver cancer mortality rates were higher in Louisiana, Mississippi, Texas and Washington, DC than northern tier states (Fig 4).

Conclusions
Decreasing HCC incidence and liver cancer mortality rates among Asian/Pacific Islanders, men 35-49 years of age, and a plateau in overall HCC incidence rates suggest that the peak of the epidemic may be near or have passed. Geographic variation in mortality rates can inform control efforts.

Methods
HCC incidence data from SEER 18 registries and US liver cancer mortality data from the National Center for Health Statistics were analyzed. Rates and joinpoint trends were calculated by demographic subgroup. State-level liver cancer mortality rates and trends were mapped.