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CANCER INCIDENCE PATTERNS AMONG SPECIFIC ASIAN AND PACIFIC ISLANDER POPULATIONS IN THE US. *B A Miller, K C Chu, L A G Ries, B F Hankey, B K Edwards (National Cancer Institute, Bethesda, MD 20892)

US cancer surveillance systems routinely report cancer patterns for the combined grouping of Asians or Pacific Islanders (API). This practice obscures important differences in the cancer experience of these heterogeneous populations. Taking advantage of detailed racial/ethnic information from several population-based cancer registries and from the 2000 decennial census, we analyzed patterns in cancer incidence and in stage at diagnosis for Asian Indian/Pakistani, Chinese, Filipino, Guamanian, Native Hawaiian, Japanese, Kampuchean, Korean, Laotian, Samoan, Tongan, and Vietnamese groups. The reporting areas cover 54% of the total US API population and include over 75,400 invasive cancers diagnosed between 1998 and 2002, making this one of the largest studies of cancer patterns in these racial/ethnic groups. Incidence rates and stage distributions were age-adjusted to the 2000 US standard population. Asian Indian/Pakistani men and women had consistently lower rates for major cancers than other groups while Native Hawaiian and Samoan men and women had among the highest overall rates. Liver cancer rates were particularly high for men and women in many of the API groups, with the rates in Laotian, Samoan, and Vietnamese men exceeding 50 per 100,000. Higher percentages of colorectal cancers were diagnosed at a late stage in Laotian men and women, and Samoan and Vietnamese men relative to the other API groups. Laotian, Samoan, and Tongan women tended to have a higher percentage of late stage breast cancer diagnoses than other groups. These results suggest which specific API populations may benefit most from cancer prevention and control activities.

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CANCER RISK IN A COHORT OF PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) IN CALIFORNIA. *A Parikh-Patel, R White, M Allen and R Cress (California Cancer Registry, Sacramento, CA 95815)

SLE patients are thought to be at increased risk for several types of cancer, although many previous studies have suffered from limited power and generalizability. We conducted a retrospective cohort study to examine cancer risk in a hospitalized cohort of SLE patients in California via electronic linkage of cancer registry and patient discharge data over the period 1991–2002. Patients with a diagnosis of SLE in the patient discharge database were followed up for cancer using registry data. Person-years of follow up were calculated for each individual. Time from the first hospitalization with a diagnosis of SLE to one of the following three events was calculated: date of cancer diagnosis, date of death, or December, 31, 2002. Site-specific standardized incidence ratios (SIRs) and 95% confidence intervals (95% CI) were calculated to compare observed to expected numbers of cancers based on age, race and sex specific incidence rates in the California population. The 30,478 SLE patients were observed for 157,969 person-years. A total of 1273 cancers occurred within the observation period. SIRs for the following cancers were elevated almost threefold: vagina (SIR: 3.27, 95% CI: 2.41, 4.31), liver (SIR: 2.7, 95% CI: 1.54, 4.24) non-Hodgkins lymphoma (SIR: 2.74, 95% CI: 2.22, 3.34) and Hodgkins Disease (SIR: 3.02, 95% CI: 1.60, 5.13). Cohort members had double the risk of kidney, thyroid and lung cancers. Overall cancer risk was elevated in individuals under 40 years old and in Hispanics and Asians. To our knowledge, this is the large cohort study of cancer in SLE patients. Further study into the genetic and exogenous factors thought to contribute to the elevated cancer risk among SLE patients is needed.

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CANCER SURVIVAL BY SOCIOECONOMIC STATUS AND RACE/ETHNICITY IN NEW JERSEY. *X Niu, K Pawlish (NJ Dept of Health & Senior Services, Cancer Epidemiology Services, Trenton, NJ 08625)

Socioeconomic and racial disparities in cancer survival remain an urgent public health problem. This study describes poverty level and racial/ethnic patterns of cancer-specific survival and hazard ratios (HRs) of cancer death for all cancers combined and the four most common cancers (female breast, colorectal, lung and prostate) by area poverty level and race/ethnicity in New Jersey. Cancer cases diagnosed in 1986–1999 among NJ residents were identified from the NJ State Cancer Registry and geocoded to census tracts by address at diagnosis ($n = 476{,}029$). We compared five-year survival rates for two time periods, 1986–91 vs. 1992–99 and calculated HRs using stratified Cox proportional hazard models in the most recent period. For all cancers diagnosed in 1992–99, an area poverty level gradient was observed, with cases residing in the high poverty areas having significantly higher risk of cancer death than those in the wealthiest areas, adjusting for age and stage (HR for males = 1.42, HR for females = 1.34). Higher risk of cancer death was also observed for female breast, colorectal, lung and prostate cancer patients in the poorest areas. Blacks had a higher risk of cancer death compared to other racial groups. From 1986 to 1999, survival rates for all cancers combined improved significantly ($p < 0.01$) for males in all poverty areas and females in the wealthier areas but not for females in the poorest areas. Female breast cancer survival rates improved significantly for non-Hispanic whites and Hispanics but not significantly for blacks and Asian/Pacific Islanders. Cancer survival rates in NJ improved overall and among most racial groups during the 1990s, but socioeconomic and racial disparities in cancer survival persist.

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COMPARISON OF ALL CANCER RATES AMONG URBAN AREAS AND COUNTIES WITHIN TEXAS. *L F Scott, L M Nguyen, M Harris, E Craft, L C Haws (ChemRisk, Houston, TX 77042)

Acute Lymphocytic Leukemia (ALL) is a malignant cancer which accounts for ~80% of acute childhood leukemias and ~20% of all adult leukemias. Recently, a potential increase in ALL among children living within two miles of the Houston Ship Channel (HSC) has been reported in a study funded by the City of Houston raising concerns that benzene and 1,3-butadiene air concentrations may be related to increased rates of ALL. To explore these concerns and contextualize rates of ALL for the Houston area and Harris County, we compared rates of the disease among several urban areas as well as between counties and the state. ALL cancer data collected as part of the Texas Cancer Registry (TCR) were obtained from the Cancer Epidemiology and Surveillance Branch of the Texas Department of State Health. Data was stratified by gender, race, age and geographic location. Statistical testing demonstrated that rates of ALL varied significantly by gender for non-Hispanic White adults regardless of region; however, for children, differences in gender were less clear and sporadic across ethnicities and regions. More notable was the effect of ethnicity/race on rates of disease, regardless of age, with Hispanics having significantly higher rates of ALL relative to non-Hispanic Blacks and Whites statewide and within Houston and Harris County. Comparison of rates by geographic area revealed that rates of ALL for the Houston metro area and Harris County were not significantly different from rates for other urban areas, counties and the state, suggesting that further detailed analyses of ALL rates from census tracts around the HSC are needed at this time.