

Providing higher resolution indicators of rurality in the SEER database

Moss *et al.* _____ Page 1409

Increasingly, research studies have found higher burden of most cancers in rural areas compared to urban areas. Examining these patterns at smaller geographic units (e.g., census tracts instead of counties) can increase the precision of these findings, but patient privacy must be maintained. Moss and colleagues demonstrated that adding two census tract-level rurality variables to NCI SEER does not appreciably increase the risk of deductive disclosure, but does support novel analyses for surveillance and etiologic research on geographic disparities in cancer. Interested researchers can request access to this database to study urban/rural differences in cancer incidence and survival.

Disparities in mortality from noncancer causes among adolescents and young adults with cancer

Anderson *et al.* _____ Page 1417

Adolescents and young adults (AYAs, age 15-39 years) with cancer represent an understudied patient population in the U.S. Using population-based data, Anderson and colleagues investigated factors associated with mortality from noncancer causes after an AYA cancer diagnosis, with a focus on disparities related to race/ethnicity, county-level socioeconomic status indicators, geographic region, and rural-urban continuum. Results suggest that the risk of noncancer mortality after AYA cancer is highest among survivors who are non-Hispanic Black or live in the South or in rural counties. Further research is needed to better understand the specific factors underlying the risk of poor outcomes in these groups.

Associations of cigarettes smoked per day with biomarkers of exposure in wave 1 of the PATH study

Rostron *et al.* _____ 1443

Given limited available data, Rostron and colleagues assessed the relationship between biomarkers of exposure (BOE) and cigarettes per day (CPD) in over 2700 adult daily cigarette smokers in Wave 1 of the PATH Study. Among exclusive cigarette smokers, dual cigarette and e-cigarette users, and dual cigarette and smokeless tobacco users, biomarker concentrations consistently increased with CPD, although they often leveled off at high smoking levels. Dual users were exposed to higher levels of certain toxicants than exclusive cigarette smokers. Thus, while BOE display a dose-response relationship with CPD, the relationship may not be linear, and smokers of few CPD receive appreciable levels of exposure.

Adherence to the WCRF/AICR 2018 recommendations for cancer prevention and risk of colorectal cancer

Petimar *et al.* _____ Page 1469

In 2018, the World Cancer Research Fund/American Institute for Cancer Research (WCRF/AICR) released updated recommendations on diet, adiposity, and physical activity for cancer prevention. Petimar and colleagues developed a score that measures adherence to these recommendations and examined associations of this score with incident colorectal cancer among 114,419 participants of the Nurses' Health Study and Health Professionals Follow-up Study. Greater adherence to the 2018 WCRF/AICR recommendations was associated with lower colorectal cancer risk, with stronger results in men than women. These results support the hypothesis that a high-quality diet, healthy weight, and physical activity are important for colorectal cancer prevention.