2020 NPCR CALIFORNIA CANCER REGISTRY SUCCESS STORY

STORY CATEGORY: Public Health Impact

STORY TITLE: Assessing the Burden of Tobacco Related Cancers in California

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SUMMARY

Smoking increases the risk of many cancers, and secondhand smoke exposure in nonsmokers is also causally linked to cancer. In 2014, the U.S Surgeon General concluded that smoking is causally associated with twelve different cancers, and cancer patients and survivors who continue to smoke have a higher risk of mortality. The California Tobacco Control Program, established in 1989, has contributed to significant declines in cigarette consumption, lung cancer incidence, and heart disease mortality in California. Despite these successes, California, the largest and most diverse state, still has almost 3 million smokers and a high proportion of light and intermittent smokers. This report highlights disparities in the burden of tobacco-related cancers by sex, race/ethnicity, and age group. We hope that cancer care providers, cancer registries, health plans, public health partners, and policy makers will utilize this information to continue improving tobacco-related cancer incidence and mortality. This collaborative project exemplifies NPCR Program Standards strategies 1 (Program Collaboration), strategy 2 (External Partnerships), and strategy 3 (program evaluation and epidemiological studies).

CHALLENGE

CCR contains very limited information on tobacco use, with a large proportion of missing data. To conduct a comprehensive evaluation, CCR needed to incorporate other sources of information on tobacco use in California into the analysis. Additionally, we need to incorporate expertise on tobacco evaluation, which we did not have within the CCR.

SOLUTION

CCR incorporated several external sources of statewide tobacco data into the analysis, including data from the California Health Interview and Behavioral Risk Factor Surveys. We also partnered with evaluation experts within the California Tobacco Control Program to conduct the analysis and prepare the report. This way we could ensure that the analysis and findings would be relevant to a broader group of stakeholders.

RESULTS

Despite declines in cigarette smoking in California from 22.6% in 1988 to 11.2% in 2018, new tobacco products are emerging. The largest population totals of tobacco product users are represented by low-income populations, non-Hispanic/Latino whites, Hispanic/Latinos, and individuals that did not complete high school. Young adults are among the largest population totals for non-cigarette tobacco products, including vape and smokeless tobacco products. The analysis of cancer incidence in part reflects these trends, with African Americans having the highest incidence and mortality rates for cancers of the lung/bronchus, colon/rectum, and pancreas. American Indians had the highest incidence and mortality rates for cancers of the kidney/renal pelvis, liver/ Intrahepatic Bile Duct (IBD) and esophagus. Hispanics/Latinos had the highest incidence and

mortality rates for stomach cancer while non-Hispanic/Latino whites had the highest incidence and mortality rates for urinary bladder cancer. Among younger age groups (<65 years), colon/rectum cancer was more common than lung/bronchus cancer. The findings in this report highlight sub-populations in California towards which to target public health education and tobacco cessation efforts.

SUSTAINING SUCCESS

We are currently working with our partners within the California Tobacco Control Program and California Comprehensive Cancer Control Program to disseminate the results. As new tobacco products and behaviors emerge, the epidemiologic data and trends over time continue to be important for understanding and mitigating tobacco-related cancer incidence and mortality.

CANCER REGISTRY INFORMATION

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