Exploring social determinants of health through small-area mapping of BRFSS variables

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TOPIC/TARGET AUDIENCE: Epidemiologists, public health practitioners, map enthusiasts

ABSTRACT: Maps are often the most effective way to display complex data that is closely related to place, such as social determinants of health. Many social determinants of health can be mapped at a small scale, including economic and environmental data. However, mapping health outcomes is still a challenge. The most comprehensive health data set available to public health practitioners, the Behavioral Risk Factors Surveillance System (BRFSS), is unable to produce small area data for reasons of confidentiality and accuracy. To solve this problem, we use a methodology adapted from CDC and Census researchers. BRFSS and Census data are used to model small area estimates of BRFSS variables such a diabetes, smoking prevalence, and others. This allows us to marry social determinants of health data with health outcome data at a scale that is useful for policy developers. This presentation will describe the process and some examples for how the data can be used to advance impactful policies. Our conclusion is that local public health practitioners can continue to drive innovation by seeking out new approaches to stubborn problems.

OBJECTIVE(S): A learner will be able to demonstrate the interaction between place, social determinants of health, and health outcomes. They will be able to compare different approaches to applying broad data to small geographical scales. They will be able to discuss the pros and cons of small area estimates of health data.

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