

# Public Health Surveillance in Rural Communities

## How CDC Measures Chronic Diseases and Health Behaviors in Less-Populated Areas

People who live in rural areas of the United States are more likely than urban residents to die prematurely from all of the five leading causes of death: heart disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke.

CDC's [National Center for Chronic Disease Prevention and Health Promotion](#) uses several approaches to help improve the health of rural residents. One approach is measuring how many Americans have chronic diseases or chronic disease risk factors and then reporting data down to the county level. Having more specific data helps rural communities understand and respond to their unique health needs. CDC collects these data in the following ways:

The [Behavioral Risk Factor Surveillance System](#) (BRFSS) collects data from all 50 states, the District of Columbia, and participating US territories. Each summer, BRFSS releases an [annual state-level data set](#) on its public website. BRFSS also releases annual [SMART](#) data subsets for metropolitan and micropolitan statistical areas (MMSAs). The [BRFSS Prevalence and Trends](#) application allows users to access state and MMSA data by location and topic, including health indicators for selected chronic diseases (such as asthma, diabetes, or arthritis), health care access, and health behaviors (such as physical activity or alcohol use).

The [Interactive Atlas of Heart Disease and Stroke](#) is an online mapping tool that allows users to create customized, county-level maps that show the rates of heart disease and stroke, risk factors, health care availability and costs, and demographic, social, and environmental factors, including rural residence. The Atlas allows users to easily explore and compare these maps.

The [US Diabetes Surveillance System](#) is an interactive surveillance application that allows users to view county-level maps and tables of diabetes, obesity, and leisure-time physical inactivity. Similarly, the [U.S. Cancer Statistics Data Visualization](#) tool makes it easy for anyone to access the latest cancer statistics at the county level. Research based on

Compared to urban areas, rural areas have:



higher rates of unhealthy behaviors



less access to health care



less access to healthy foods





these data has shown that rural areas have higher rates of cancers related to smoking (like lung and laryngeal cancers) and cancers that can be prevented by screening (like colorectal and cervical cancers) compared to urban areas.

Information from these surveillance activities helps guide public health efforts in rural communities. For example, evidence about cancer disparities in rural areas shows the importance of partnering with health care systems in these communities to help people quit smoking, increase access to screening, and get more people vaccinated against infections that can cause cancer.

CDC's National Center for Chronic Disease Prevention and Health Promotion prevents chronic disease and promotes health for people of all ages.



IMPROVING  
QUALITY OF LIFE

INCREASING HEALTHY  
LIFE EXPECTANCY

REDUCING HEALTH  
CARE COSTS

## We Work to Improve Health Across the Life Span

### Where People Live, Learn, Work, and Play



#### Infants

Reduce the leading causes of infant death and illness.



#### Children and Adolescents

Help support healthy communities, child care programs, and schools so children can eat well, stay active, and avoid risky behaviors.



#### Adults

Help adults lead healthy and active lives and increase the use of preventive services like cancer screenings.



#### Older Adults

Promote quality of life and independence for people as they age.