Public Health Research in Rural Communities

How CDC Studies and Reports on Rural Health Disparities

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 studying and reporting on rural health disparities and innovative programs to reduce those disparities.

CDC's Morbidity and Mortality Weekly Report has published a series of 13 articles on rural health disparities. Topics included leading causes of death, health behaviors, diabetes education programs, and cancer deaths. In conjunction with this research effort, CDC developed a rural health website to share study results and offer resources.

CDC also hosted rural stakeholders from around the country for a workshop titled “What Works for Rural: From Research to Reality” in December 2017. Ninety-four people from 40 organizations met to identify what tools, resources, and evidence can help states reduce the leading causes of death in rural communities, build relationships with others working in the field, and share resources that work in rural areas.

Other recent CDC publications on rural and urban health differences have included a variety of topics, such as arthritis symptoms, chronic pain, and oral health:

**Arthritis**

Prevalence of arthritis and arthritis-attributable activity limitation by urban-rural county classification — United States, 2015. *MMWR*

**Cancer**

Cost-effectiveness analysis of four simulated colorectal cancer screening interventions, North Carolina. *Preventing Chronic Disease*

Variations in guideline-concordant breast cancer adjuvant therapy in rural Georgia. *Health Services Research*

Compared to urban areas, rural areas have:

- higher rates of unhealthy behaviors
- less access to health care
- less access to healthy foods
Black-white differences in receipt and completion of adjuvant chemotherapy among breast cancer patients in a rural region of the U.S. *Breast Cancer Research and Treatment*


**Chronic Obstructive Pulmonary Disease**


**Chronic Pain**

Prevalence of chronic pain and high-impact pain among adults — United States, 2016. *MMWR*

**Diabetes**

Disparities in recommended preventive care usage among persons living with diabetes in the Appalachian region. *BMJ Open Diabetes Research and Care*

U.S. Associated Pacific Islands health care teams chart a course for improved health systems: implementation and evaluation of a non-communicable disease collaborative model. *Journal of Health Care for the Poor and Underserved*

Issues that impact type 2 diabetes self-management in rural communities. *Journal of the American Association of Nurse Practitioners*

Rural–urban disparities in the prevalence of diabetes and coronary heart disease. *Journal of the American Association of Nurse Practitioners*

Heart Disease and Stroke

Widespread recent increases in county-level heart disease mortality across age groups. *Annals of Epidemiology*

What is the evidence for existing state laws to enhance pre-hospital stroke care? Division for Heart Disease and Stroke report

Improving stroke outcomes in rural areas through telestroke programs: an examination of barriers, facilitators, and state policies. *Telemedicine Journal and E Health*

Nutrition, Physical Activity, and Obesity

Geographic and urban–rural differences in walking for leisure and transportation. *American Journal of Preventive Medicine*

Racial and ethnic differences in perceived safety barriers to walking. United States National Health Interview Survey — 2015. *Preventive Medicine*

Nutrition-related policy and environmental strategies to prevent obesity in rural communities: a systematic review of the literature, 2002-2013. *Preventing Chronic Disease*

Obesity Prevalence Among Adults Living in Metropolitan and Nonmetropolitan Counties — United States, 2016. *MMWR*

Oral Health

Disparities in Preventive Dental Care Among Children in Georgia. *Preventing Chronic Disease*

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