

Fact Sheet

Rural-Urban Health Disparities among US Adults Ages 50 and Older

Beth Carter & Olivia Dean
AARP Public Policy Institute

Introduction

As of 2019, rural areas were home to 20 million Americans ages 50 and older.¹ While most older adults do not live in rural areas, these localities are experiencing faster growth of the older adult population compared with urban areas.²

Rural communities face many health care challenges that contribute to longstanding health disparities compared with urban residents. Research shows that rural Americans are more likely to die from heart disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke than are those living in urban areas.³ These disparities are closely tied to the social determinants of health—that is, the conditions that impact health in the environments where people are born, live, learn, work, play, worship, and age.⁴ Contributors to rural health disparities include economic factors such as higher rates of poverty and limited job opportunities, health care access factors such as lower rates of health insurance and limited access to health care providers, and environmental factors such as geographic isolation and lack of transportation.

While many studies have analyzed rural health disparities, few have focused specifically on the population ages 50 and older or analyzed racial and ethnic disparities within the older rural population. This report analyzes indicators of health care access, health-related behaviors, and health conditions among the 50 and older age group living in rural versus urban areas. The analysis also explores racial and ethnic differences in health among older adults living in rural versus urban areas to assess whether health disparities by race and ethnicity are exacerbated by residence in a rural area.

Methods

This study utilized data collected from the 2019 Behavioral Risk Factor Surveillance System (BRFSS), the most recent year of available data at the time of publication. BRFSS is a Centers for Disease Control and Prevention-sponsored annual survey of health-related risks, behaviors, and health conditions of a

Key Takeaways

- ✓ There are significant disparities in health care access, health-related behaviors, and health conditions among rural versus urban adults ages 50 and older in the United States.
- ✓ Racial and ethnic health disparities cut across rural and urban populations, but the gap between Black and White older adults is often larger in rural areas.

nationally representative sample of more than 400,000 community-dwelling adults ages 18 and older. The survey is conducted using random digit dialing on both landlines and cell phones and is administered in all 50 states plus the District of Columbia and 3 US territories.

Our analysis focused on the 50-64 and 65-and-older age groups. Variables of interest included health insurance status, individuals who went without medical care due to cost, certain health conditions, health-related behaviors (smoking, drinking, and leisure-time physical activity), urban versus rural place of residence, and race and ethnicity. We chose to focus on the most expensive health conditions in the United States: heart disease, stroke, cancer, diabetes, and obesity.⁵ For more details, see appendix A.

Urban versus rural place of residence was determined using the 2013 National Center for Health Statistics six-level urban/rural classification scheme for counties based on the designation of metropolitan and micropolitan statistical areas.⁶ As defined by the US Office of Management and Budget, each metropolitan statistical area (MSA) must have at least one urbanized area of 50,000 or more inhabitants, while each micropolitan statistical area (MISA) must have at least one urban cluster of at least 10,000 but less than 50,000 population.⁷

Urban is defined as living in one of the following four county types:

1. Large central metropolitan: MSA of 1 million population that
 - a. Contains the entire population of the largest principal city of the MSA, or
 - b. Is completely contained within the largest principal city of the MSA, or
 - c. Contains at least 250,000 residents of any principal city in the MSA.

2. Large fringe metropolitan: MSA of 1 million or more population that does not qualify as large central
3. Medium metropolitan: MSA of 250,000-999,999 population
4. Small metropolitan: MSA of less than 250,000 population

Rural is defined as living in one of the following two types of counties:

1. Micropolitan: Counties in an MISA
2. Noncore: Counties not in an MSA or MISA

The study also analyzed racial and ethnic differences in the prevalence of health-related access barriers, conditions, and behaviors by rurality. BRFSS reports 10 racial categories: White, Black, American Indian or Alaskan Native, Asian, Native Hawaiian or other Pacific Islander, other, no preferred race, multiracial, don't know/not sure, and refused. After cross-tabulating age by race, the only racial categories for which sample sizes were sufficient to produce reliable prevalence estimates among adults ages 50 and older were Black and White. BRFSS includes a separate variable for Hispanic ethnicity, which is also included in the analysis.

Rural Health Data Challenges

- Rural areas are not homogeneous.
- Different definitions of *rural* can make it difficult to compare data sets and make policy decisions.
- Data sources vary in quality and often have small samples of rural residents.

Results

Health Care Access

Adults ages 50 to 64 living in rural areas were more likely to be uninsured compared with those living in urban areas (12.0 percent v. 11.2 percent; figure 1), while there was no difference in insurance status among those ages 65 and older. Despite this lack of difference in insurance status, adults ages 65 and older living in rural areas were more likely to forgo medical care due to cost compared with those living in urban areas (5.5 percent v. 4.6 percent), with a similar result among adults ages 50 to 64 (14.7 percent living in rural areas had to forgo health care due to cost v. 13.1 percent living in urban areas).

In both rural and urban areas, Black and Hispanic adults ages 50 and older were much more likely than their White counterparts to be uninsured and to have skipped medical care due to cost (figure 2). Notably, the uninsured rate among Hispanic older adults living in both rural and urban areas was significantly higher than that among their Black and White counterparts. Among Black and White older adults, those living in rural areas were more likely to report these health care access

barriers compared with those living in urban areas. For both indicators, the Black-White gap was wider in rural areas, suggesting that living in a rural area may exacerbate racial health disparities. The findings, meanwhile, revealed the opposite among Hispanic older adults, with urban residents reporting higher health care access barriers.

Health Conditions

Older adults living in rural areas were more likely compared with those living in urban areas to report having been told by a health professional that they have heart disease, stroke, diabetes, cancer, or obesity (figure 3). The largest difference was in the prevalence of obesity. Older adults living in urban areas had roughly a 5-percentage-point lower prevalence of obesity compared with those living in rural areas: 35.8 percent versus 40.7 percent in adults ages 50 to 64 and 28.4 percent versus 33.2 percent in adults ages 65 and older.

Compared with those living in urban areas, White and Black adults ages 50 and older living in rural areas had a higher prevalence of all five health conditions we analyzed (figure 4). Hispanic adults ages 50 and older living in rural areas had higher prevalence of stroke,

FIGURE 1
Rural Older Adults More Likely to be Uninsured and Forgo Care Due to Cost

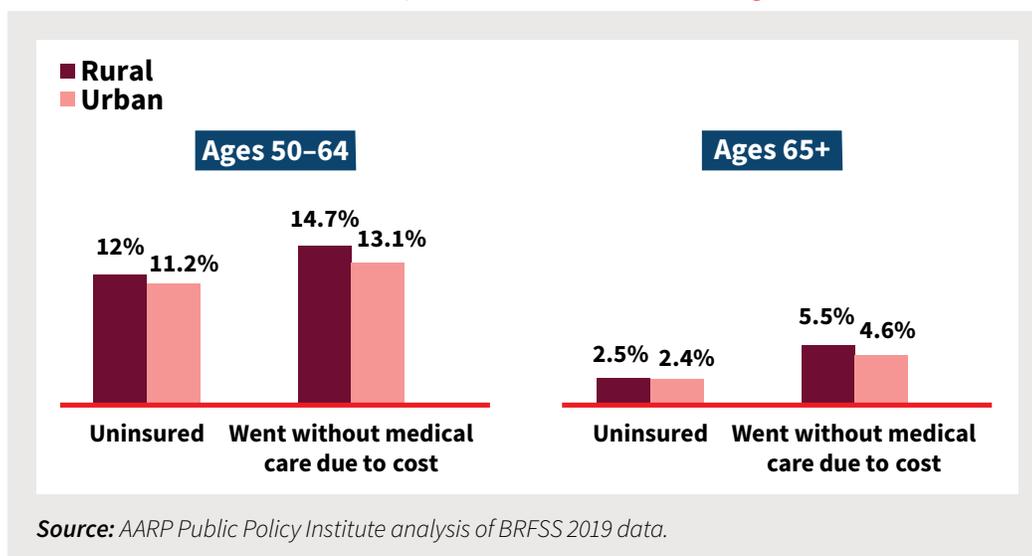


FIGURE 2
Black and Hispanic Adults Ages 50 and Older Face Highest Health Care Access Barriers, Regardless of Rurality

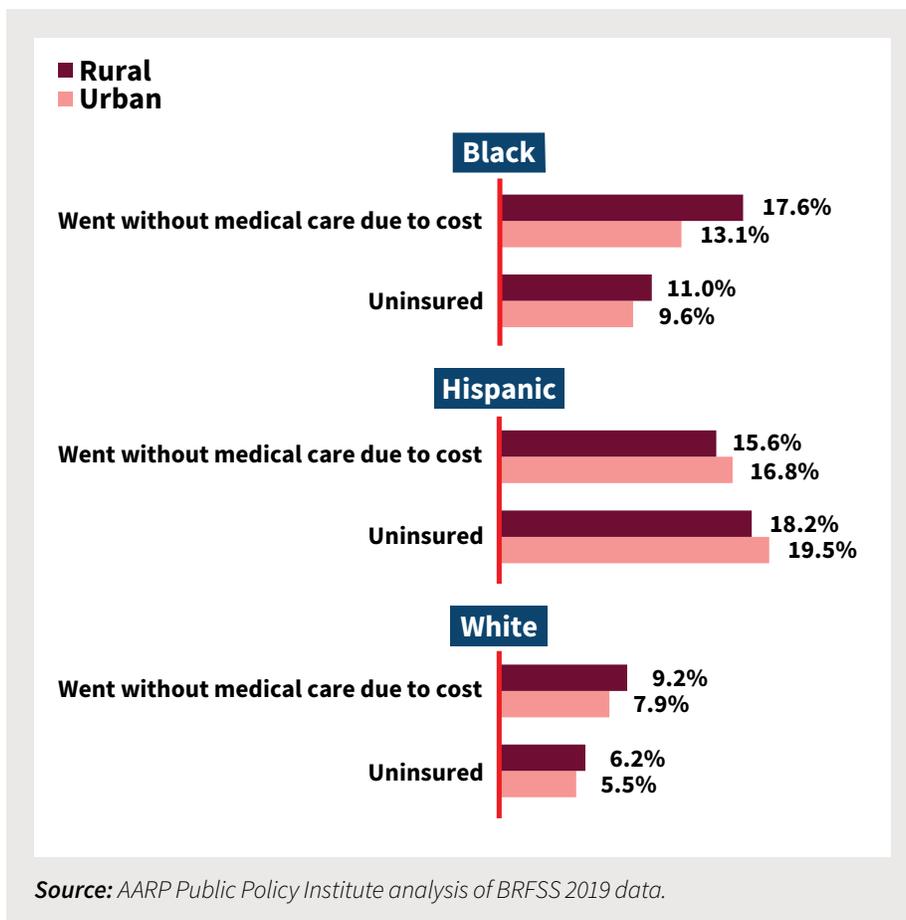


FIGURE 3
Health Conditions More Prevalent among Rural Older Adults

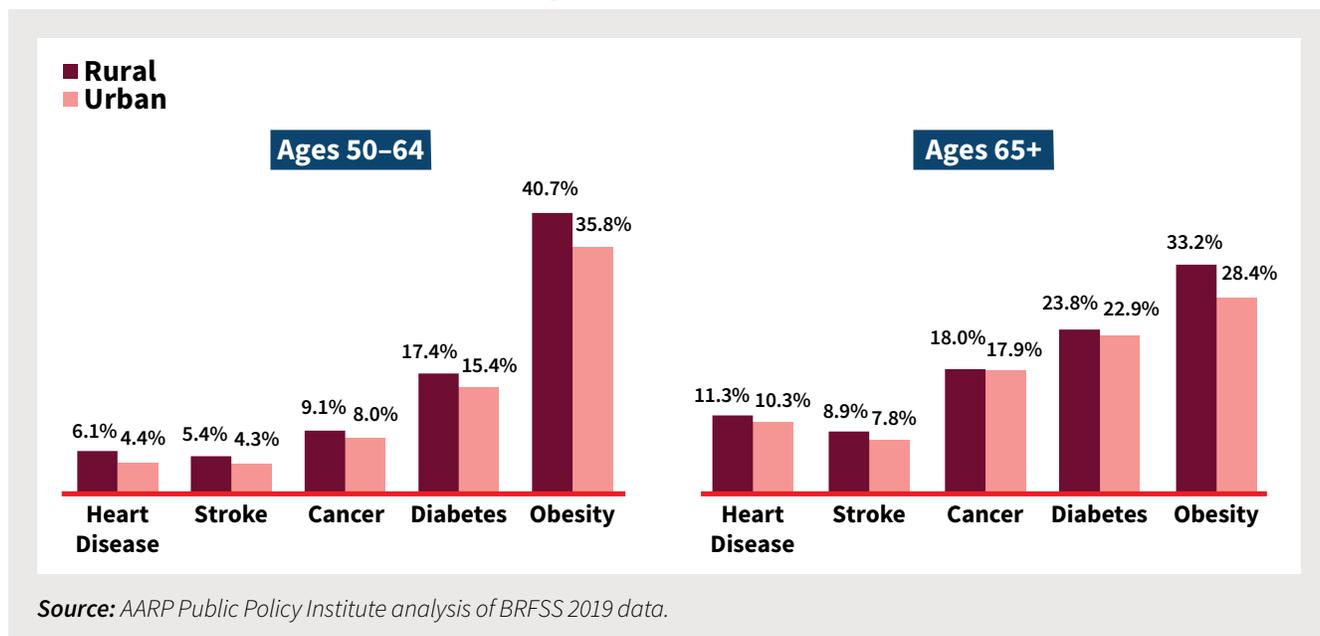
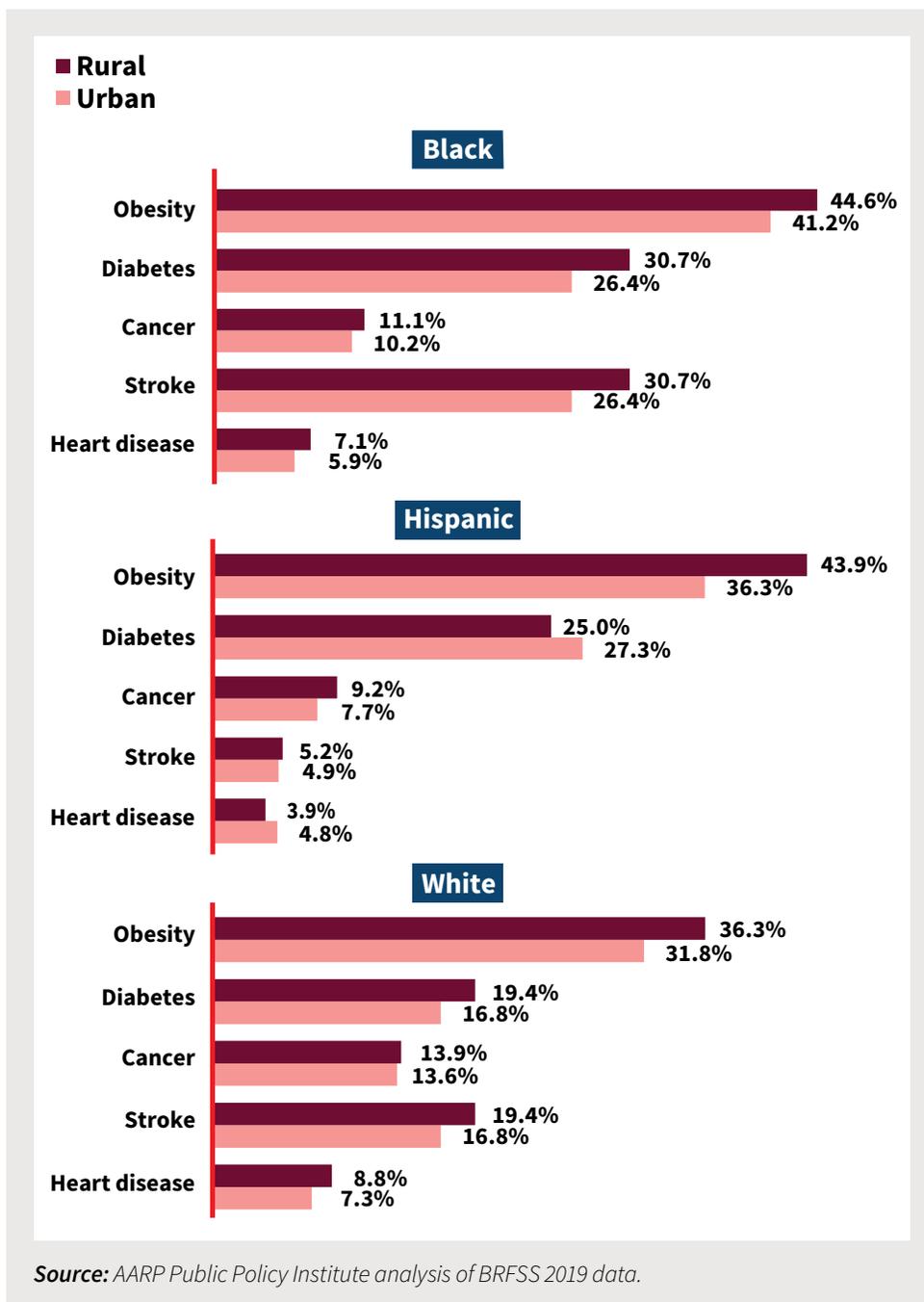


FIGURE 4
Rural Areas See Higher Prevalence of All Five Health Conditions among Black and White Adults Ages 50 and Older, but Results Mixed among Hispanics



cancer, and obesity and lower prevalence of heart disease and diabetes compared with older Hispanics living in urban areas. Regardless of rurality, older Black adults were more likely to report stroke and obesity than were older White and Hispanic adults, while older White adults were more likely to report heart disease and cancer. The Black-White gap in prevalence of stroke and diabetes was greater among those in rural areas than in urban areas. These findings suggest that additional factors, such as more limited access to health care or coverage in rural areas, may exacerbate racial disparities in some health conditions.

Health Behaviors

Older adults living in rural areas were more likely to be current smokers and more likely to not engage in leisure-time physical activity compared with those living in urban areas (figure 5). This was the case among both those ages 50 to 64 and those ages 65 and older. Regardless of rurality, adults ages 50 to 64 were more likely to report being current smokers while those ages 65 and older were

more likely to report not engaging in any type of leisure-time physical activity.

Higher prevalence of smoking and not engaging in leisure-time physical activity in rural areas cut across racial and ethnic groups. Black adults ages 50 and older living in rural areas reported the highest prevalence of smoking and physical inactivity (figure 6). The Black-White gap in prevalence of physical inactivity was larger among the rural group.

Discussion

Our analysis found that there are notable disparities in health care access, health conditions, and health-related behaviors among rural versus urban adults ages 50 and older in the United States. Racial and ethnic disparities exist among both rural and urban older adults, but the gap is often especially pronounced between Black and White older adults living in rural areas. Results among Hispanic older adults were mixed, with higher uninsured rates but lower prevalence of smoking and some health conditions (heart disease, stroke, and

FIGURE 5
Rural Older Adults More Likely to Smoke and Not Engage in Leisure-Time Physical Activity

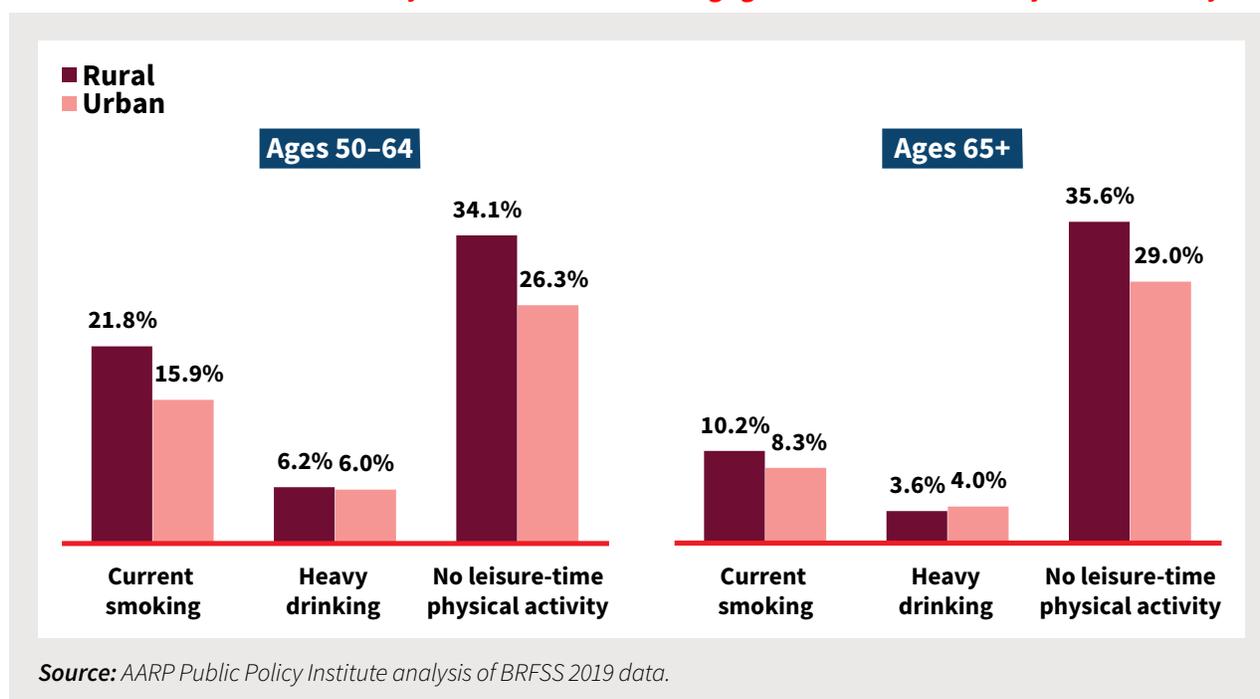
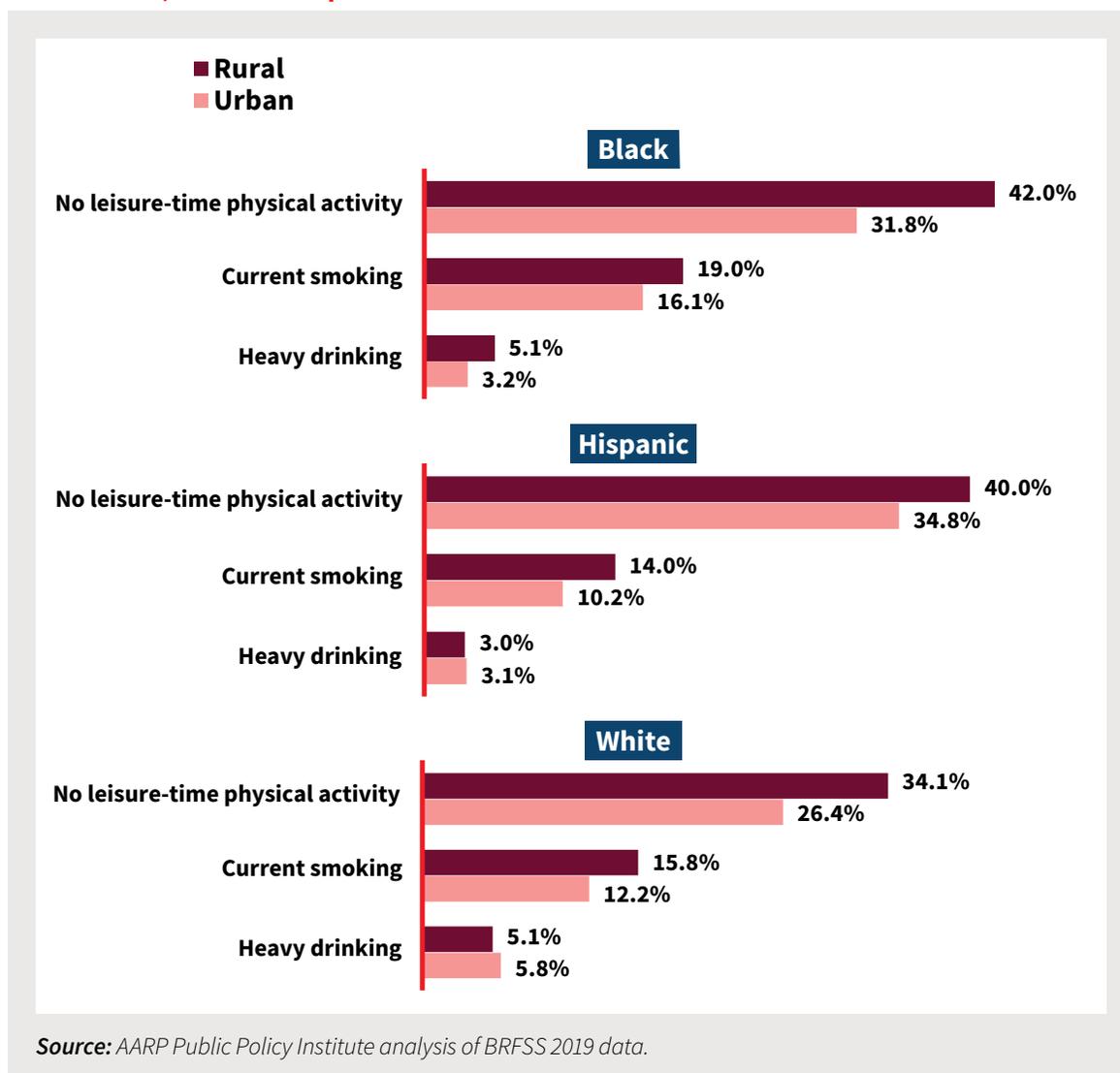


FIGURE 6
Rural Adults Ages 50 and Older More Likely to Report Unhealthy Behaviors
in All Racial/Ethnic Groups Studied



cancer) compared with their Black and White counterparts in both rural and urban areas. These findings are consistent with previous research revealing that Hispanic adults have better outcomes compared with White adults for certain measures of health, despite often facing more socioeconomic and health care access barriers.⁸ This phenomenon is known as the “Hispanic paradox.” More research is needed to better understand how urban versus rural residence influences the health of older Hispanic adults.

One limitation of this study was our inability to produce reliable estimates of these metrics for racial and ethnic groups other than Black, Hispanic, and White due to small sample sizes among certain groups living in rural areas, including American Indian/Alaska Natives, Native Hawaiian and Pacific Islanders, Asian Americans, and individuals who identify as belonging to more than one racial category. Oversampling these underrepresented groups could shed light on ways that living in rural areas may impact their health.

Importantly, rural areas are heterogeneous and study results may differ depending on a rural area's population size, demographics, and other factors. Future research that analyzes health care access, health outcomes, and health behaviors in rural versus urban areas by factors such as income, education, and health insurance status could yield useful insights into what may be driving the rural-urban differences found in this study.

Appendix A: BRFSS Survey Variables

Health Care Access

- Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare or Indian Health Service?
- Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?

Health Conditions

- Have you ever been told by a health professional that you had . . .
 - . . . angina or coronary heart disease?
 - . . . a stroke?
 - . . . any type of cancer other than skin cancer?
 - . . . diabetes?
- Obesity (i.e., a body-mass index of 30 or higher). Body-mass index was based on respondents' self-reported weight and height and is calculated by dividing a person's weight in kilograms by the square of their height in meters.

Health-Related Behaviors

- Heavy drinking: Defined as men having more than 14 drinks per week and women having more than 7 drinks per week based on self-report
- Current smoking: Based on self-report
- Physical activity: Self-report of doing no physical activity during leisure time

- 1 AARP Public Policy Institute analysis of Behavioral Risk Factor Surveillance System (BRFSS) survey data, 2019. BRFSS defines rural areas as nonmetropolitan areas.
- 2 Amy Symens Smith and Edward Trevelyan, "The Older Population in Rural America: 2012–2016," US Census Bureau, Suitland, MD, September 2019, <https://www.census.gov/content/dam/Census/library/publications/2019/acs/acs-41.pdf>.
- 3 "About Rural Health," Centers for Disease Control and Prevention, August 2017, <https://www.cdc.gov/ruralhealth/about.html>.
- 4 "Social Determinants of Health," US Department of Health and Human Services, Office of Disease Prevention and Health Promotion, accessed September 23, 2021, <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>.
- 5 "Health and Economic Costs of Chronic Diseases," Centers for Disease Control and Prevention, June 2021, <https://www.cdc.gov/chronicdisease/about/costs/index.htm>.
- 6 "NCHS Urban-Rural Classification Scheme for Counties," Centers for Disease Control and Prevention, June 2017, https://www.cdc.gov/nchs/data_access/urban_rural.htm.
- 7 "Delineating Metropolitan and Micropolitan Statistical Areas," US Census Bureau, April 2020, <https://www.census.gov/programs-surveys/metro-micro/about.html>.
- 8 Kenneth Dominguez et al., "Vital Signs: Leading Causes of Death, Prevalence of Diseases and Risk Factors, and Use of Health Services Among Hispanics in the United States—2009–2013," Centers for Disease Control and Prevention, Atlanta, GA, May 8, 2015, https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6417a5.htm?s_cid=mm6417a5_w.

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Washington DC 20049

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