



## Structural Factors that Impact Rural Life Expectancy

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### Introduction

Life expectancy is an important demographic indicator used to compare different population groups.<sup>i</sup> In 2019, rates for the ten leading causes of death were higher in rural areas than in urban areas<sup>ii</sup> (Figure 1). The greatest difference was due to rates of death from heart disease, cancer, and chronic lower respiratory disease.<sup>ii</sup> Those living in rural areas tend to be older and sicker, are more likely to smoke, are more at risk for high blood pressure, and are more obese than residents living in urban areas.<sup>iii,iv</sup> In 2019, the age-adjusted death rate was 20 percent higher in rural areas than urban areas, which is a significant increase from 1999 when it was seven percent higher (Figure 2).<sup>ii</sup> While the age-adjusted death rate in urban areas has continued to decline by 0.3 percent annually, rural areas have not seen improvement since 2010.<sup>ii</sup>

Challenges to increasing life expectancy in rural areas include, but are not limited to:

- Rural health disparities are impacted by access (provider shortages, high rates of uninsured, lack of specialists and transportation), socioeconomic status (low income, uninsured), and health behaviors (diet, exercise, smoking).<sup>iii,iv</sup>
- Rural Americans make up 17 percent of Medicaid beneficiaries.<sup>v</sup> States that have not expanded Medicaid continue to have a high number of uninsured adults which is a barrier to accessing health care.
- Rural communities have been disproportionately impacted by the opioid epidemic<sup>vi</sup> which has increased the life expectancy gap between urban and rural.<sup>vii</sup> Use of opioids is higher in rural communities where employment opportunities are often limited, and isolation is pervasive. During a fifteen-year period between 1999 and 2015, opioid death rates in rural areas quadrupled among those aged 18 to 25 and tripled for females.<sup>viii</sup>
- Rural communities have seen decreased access to prenatal care.<sup>viii</sup> The maternal mortality ratio is 23.8 deaths per 100,000 live births in rural counties compared to 14.6 per 100,000 live births in large metropolitan counties.<sup>ix</sup>
- The conditions that lead to decreasing life expectancy for rural residents have also elevated the risks and consequences during the COVID-19 pandemic. While urban areas were the hardest hit in

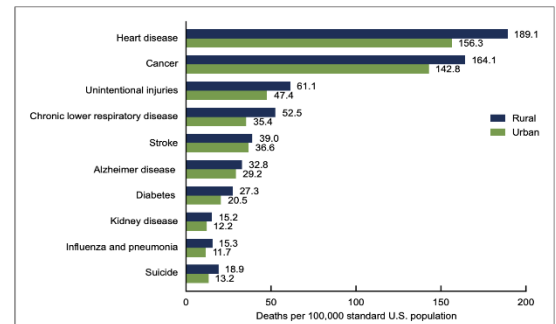


Figure 1  
NOTES: Urbanicity of county of residence is based on the 2013 NCHS Urban-Rural Classification Scheme for Counties; see Data source and methods. Causes of death are ranked according to the number of deaths for the total population. Rates for all causes in rural areas were significantly higher than rates in urban areas ( $p < 0.05$ ). Access data table for Figure 1 at: <https://www.cdc.gov/nchs/data/tables/ubr17-tables.pdf#3>. SOURCE: National Center for Health Statistics, National Vital Statistics System, Mortality.

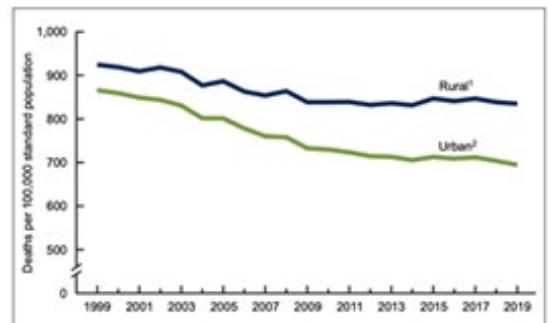


Figure 2  
Significant decreasing trend from 1999 through 2010; stable trend from 2010 through 2019 ( $p < 0.05$ ). Significant decreasing trend from 1999 through 2019, with different rates of change over time ( $p < 0.05$ ). NOTES: Urbanicity of county of residence is based on the 2013 NCHS Urban-Rural Classification Scheme for Counties; see Data source and methods. Access data table for Figure 1 at: <https://www.cdc.gov/nchs/data/tables/ubr17-tables.pdf#1>. SOURCE: National Center for Health Statistics, National Vital Statistics System, Mortality.



the initial surges, incidence and mortality rates have continually risen in rural communities during the pandemic with rural communities experiencing 24 more deaths per 100,000 people due to COVID-19.<sup>ix</sup> Rural residents are at a greater risk for COVID-19 complications because of the higher proportion of older residents, higher prevalence of pre-existing conditions and comorbidities, and limited access to public health information and services.<sup>x</sup> In addition, COVID-19 vaccination rates in rural counties are significantly lower than urban counties, 67% and 79% respectively, as of November 2021.<sup>xi</sup>

- Access to funding is an ongoing challenge for rural communities. The complexity of seeking federal funding is daunting for a rural community with limited resources.<sup>xii</sup> Funding is frequently allocated on a population basis, often resulting in underfunded rural programs.<sup>v</sup> This is an example of structural urbanism, a bias toward urban areas, which prevents many rural communities from accessing federal funding and benefiting from federal policy to the same degree as urban communities.<sup>xiii</sup>
- Economic factors can impact health outcomes, with lower income and poverty strongly associated with higher mortality rates.<sup>xiv</sup> Prosperity is not spread equally across the nation. Rural areas in the aggregate experienced post-recession growth of 14.8 percent while urban areas registered 19.2 percent growth.<sup>xv</sup>

## Policy Recommendations

Focusing on access to health care is not sufficient to address complex health outcomes, especially mortality among rural populations.<sup>xvi</sup> The structural factors impacting life expectancy in rural America are multifaceted and require increased rural access to resources and funding through policy change.

### *Increasing Reimbursement and Coverage*

- Increase support for Medicare rural care coordination and chronic care management: Targeted, needs-based prevention efforts, combined with improved access to treatment for chronic conditions, have the potential to reduce the rural-urban gap in age-adjusted death rates and excess mortality from the five leading causes of death.<sup>v</sup> Expand Medicare-eligible practitioners and calendar limits on payable chronic care management service codes:
  - Expand the eligible practitioners allowed to submit chronic care management payable service codes to include health educators, patient navigators, care managers, community health workers, social workers, public health workers, and recovery specialists.
  - Allow chronic care management to be provided and reimbursed via telehealth visits.
  - Eliminate the limit of one chronic care management service code per provider per calendar month so that rural patients and their provider can address multiple issues per visit and be reimbursed appropriately.
  - Identify and address limitations of Rural Health Clinics including reimbursement for services provided by allied health professionals, including dietitians and pharmacists, and limited funding for primary preventive care.
- Increase access to care for rural populations through Medicaid expansion and increase federal government share of Medicaid funding
  - Incentivize Medicaid expansion in the twelve remaining non-expansion states by providing a temporary fiscal incentive for states to implement the ACA Medicaid expansion.



- Update the Federal Medical Assistance Percentage formula to increase the federal share of costs.

## *Supporting the Health Professional Workforce*

- Increase access to care by training rural-based providers
  - Expand funding for new rural-based post-graduate medical residencies through the Rural Residency Planning and Development program from the Federal Office of Rural Health Policy.
  - Congress should amend existing Graduate Medical Education (GME) policy that create incentives that permit rural hospitals to establish fair ‘total resident amounts’ for GME funding and decrease the disparities between urban and rural funding.
- Increase use of rural health workforce extenders
  - Due to the continued closure of rural hospitals and other existing services, rural areas depend heavily on the use of workforce extenders such as paramedicine, community health workers, midwives, dental hygienists, nurse practitioners, and physician assistants to fulfill their health care needs. However, for these services to be sustainable, policies and legislation need to expand the practice scope of work that can be completed and billed for under licensure.

## *Building the Infrastructure*

- Creating a strong, integrated rural health care infrastructure
  - Approaches to addressing disparities in rural areas must focus on strengthening the rural health care delivery system and improving the integration of primary, specialty, mental health, and substance abuse services.<sup>v</sup>
- Eliminate structural urbanism in the federal funding process
  - Structural urbanism, a bias toward urban areas, must be overcome. Policies based on the needs of the urban majority do not account for the rural reality. Legislation should include evidence-based policy options to improve rural health outcomes.<sup>xiii</sup> Effective strategies can be implemented to increase access to federal programs for rural stakeholders including:
    - An emphasis on funding strategies to support rural participation in grant programs such as rural pilot sites and testing on a smaller scale.<sup>xvii</sup>
    - Reviewing and scoring rural grant applications separately from urban grant applications and/or using priority points when this is not possible.<sup>xviii</sup>
    - Allowing communities of comparable size to compete against each other for funding will help mitigate challenges faced by rural communities that may have smaller populations and fewer resources.<sup>xiii</sup>
    - The federal government should provide technical assistance to rural communities to help define local needs and align them with federal funding opportunities as well as help rural communities navigate federal grants and resources and preference points.<sup>xiii</sup>
    - Through Congressional appropriations and directives, encourage federal agencies to include a designated percentage or “carve-out” for rural residents in funding opportunities.<sup>xix</sup>

## **Conclusion**

Life expectancy is an important demographic indicator used to compare different population groups, with rural life expectancy rates lower than their urban counterparts. The structural factors impacting life



expectancy in rural America are multifaceted and require increasing access to resources and funding to rural through policy change is needed.

<sup>i</sup>NVSS - life expectancy. Centers for Disease Control and Prevention. <https://www.cdc.gov/nchs/nvss/life-expectancy.htm>. Published October 13, 2021. Accessed November 15, 2021.

<sup>ii</sup> Leading causes of death in rural America. Centers for Disease Control and Prevention. <https://www.cdc.gov/ruralhealth/cause-of-death.html>. Published November 7, 2019. Accessed November 15, 2021.

<sup>iii</sup> Rural Health Information Hub. Rural Health Disparities Overview. <https://www.ruralhealthinfo.org/topics/rural-health-disparities>. Published April 22, 2019. Accessed November 16, 2021.

<sup>iv</sup> Examining rural cancer prevention and control efforts. Department of Health and Human Services. <https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/rural/publications/2019-Cancer-Control.pdf>. Published August 2019.

<sup>v</sup> Medicaid and CHIP Payment and Access Commission. Issue Brief: Medicaid and Rural Health. <https://www.macpac.gov/wp-content/uploads/2021/04/Medicaid-and-Rural-Health.pdf>. Published April 2021. Accessed January 11, 2022.

<sup>vi</sup> Shipley A. Opioid crisis affects all Americans, Rural and Urban. USDA. <https://www.usda.gov/media/blog/2018/01/11/opioid-crisis-affects-all-americans-rural-and-urban>. Published August 3, 2021. Accessed November 16, 2021.

<sup>vii</sup> The additional risks and challenges for pregnant women in rural and underserved communities. U.S. Government Accountability Office. <https://www.gao.gov/blog/additional-risks-and-challenges-pregnant-women-rural-and-underserved-communities>. Published March 16, 2021. Accessed November 16, 2021.

<sup>viii</sup> The additional risks and challenges for pregnant women in rural and underserved communities. U.S. Government Accountability Office. <https://www.gao.gov/blog/additional-risks-and-challenges-pregnant-women-rural-and-underserved-communities>. Published March 16, 2021. Accessed November 16, 2021.

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<sup>x</sup> The COVID-19 crisis in urban and rural areas. OECD Regional Outlook 2021: Addressing COVID-19 and Moving to Net Zero Greenhouse Gas Emissions | OECD iLibrary. <https://www.oecd-ilibrary.org/sites/c734c0fe-en/index.html?itemId=%2Fcontent%2Fcomponent%2Fc734c0fe-en>. Accessed November 16, 2021.

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<sup>xiii</sup> Kozhimannil KB, Henning-Smith C. Improving Health Among Rural Residents in the US. *JAMA*. 2021;325(11):1033-1034. doi:10.1001/jama.2020.26372

<sup>xiv</sup> Frakt AB. How the Economy Affects Health. *JAMA*. 2018;319(12):1187-1188. doi:10.1001/jama.2018.1739

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