



#### UNIVERSITY OF MINNESOTA RURAL HEALTH RESEARCH CENTER

# Rural Social Isolation and Loneliness: Rates, Importance, and Identifying Risk

#### PRESENTED BY:

Carrie Henning-Smith, PhD, MPH, MSW University of Minnesota Rural Health Research Center

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### Social Isolation, Loneliness, and Health

81

The New York Times

#### How Social Isolation Is Killing Us



Social isolation is a growing epidemic, one that's increasingly recognized as having dire physical, mental and emotional consequences. Damon Winter/The New York Times

#### By Dhruv Khullar

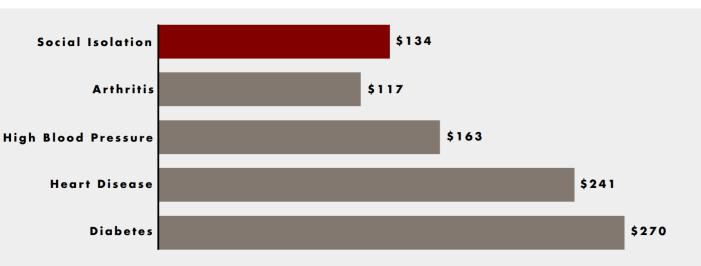
Dec. 22, 2016

• Increased risk of:

- Alzheimer's disease and poorer cognitive functioning
- Poorer immune system functioning
- Blood pressure and heart disease
- Stress
- Substance use
- Depression
- Mortality, including from suicide

### Extent and Cost of Isolation and Loneliness

- Social isolation costs the Medicare program nearly \$7 billion annually
- In a survey of 20,000 Americans conducted by Cigna (2018):
  - Nearly half of Americans feel alone or left out "always" or "sometimes";
  - 54% of Americans feel that "no one knows them well";
  - 40% report feeling "isolated from others"



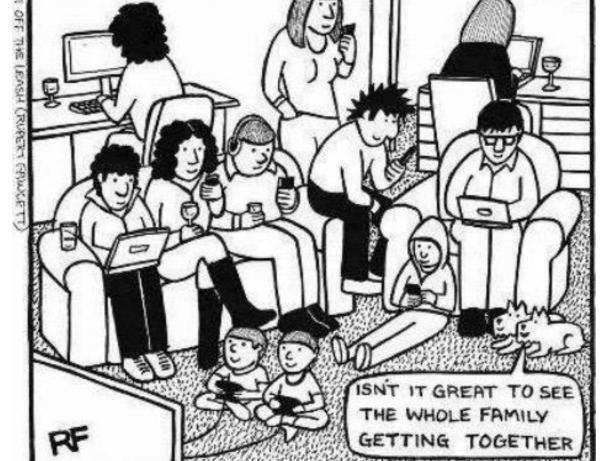
Additional Monthly Cost to Medicare for a Socially Isolated Enrollee and for an Enrollee with Selected Chronic Conditions

Sources: AARP Public Policy Institute, 2017

Sources: Flowers et al., 2017; Cigna, 2018

# Growth of Social Isolation?

- Increase in "deaths of despair"
- Changing role of technology, social media
- Demographic and societal shifts
- Not a new concern, but reaching a tipping point? (even before pandemic)



THANKSGIVING DAY ...

FACEbook.com/DFF THE LEASH DAILY DOG CARTDON'S

### Defining Isolation and Loneliness

- No one, perfect definition:
  - Social isolation, social connectedness, loneliness, and living alone are related, but distinct
  - Social isolation = lack of social connections
  - Loneliness = social needs not being met
- Useful to include multiple measures and methods

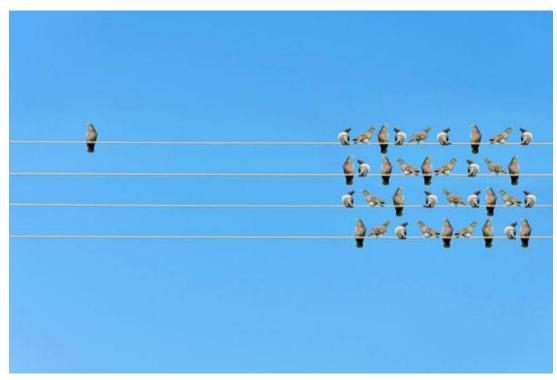


Photo credit: OgnjenO

### Isolation and Loneliness in a Rural Context



NBC News September 30, 2019 · 🚱

Opinion | Carrie Henning-Smith: As rural suicide rates increase in America, studies show risk is not randomly distributed. - NBC News THINK



NBCNEWS.COM Opinion | As rural suicides increase, America must prioritize collective healing • Limited research on rural social isolation and loneliness, despite:

- Structural barriers to connecting (distance, transportation, connectivity)
- Poorer health outcomes
- Older population
- Limited health care resources, including mental health
- Higher suicide rates

# Living Alone More Common in Rural Counties

#### INFOGRAPHIC April 2020



#### Rate of Living Alone by Rurality and Age

#### Carrie Henning-Smith, PhD, MPH, MSW

Jonathan Schroeder, PhD, MA

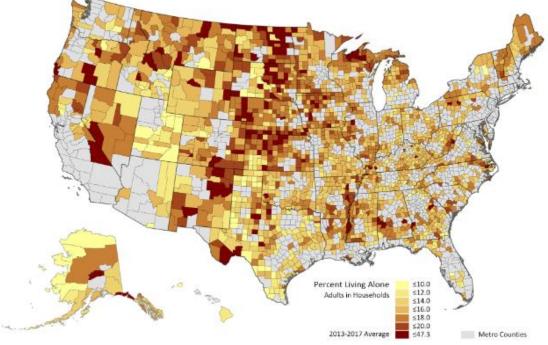
Mariana S Tuttle, MPH

#### **Key Findings**

 Rates of living alone are higher in Censusdefined urban areas than in rural areas across all are catenories but rates are also

#### Purpose

Living alone is increasingly common and is associated with higher risk of social isolation and poor health for populations without access to appropriate support and resources. Little is known about how rates of living alone vary by rurality, however. In this infographic, we identify rates of living alone for all adults and within specific age groups using two different classifications of rurality.



- American Community Survey, 2013-2017 (IPUMS NHGIS)
- 14.9% in rural counties vs.
  13.5% in urban counties
- Geographically patterned
- Disability rates highest among rural adults living alone

### COVID-19 in Rural America: Risks for Isolation

A deadly 'checkerboard': Covid-19's new surge across rural America



Kansas National Guard members wait for cars during a full in people seeking tests at a coronalius testing site May 20 in Dodge City, Kan. (Charlie Riedel/AP) By Reis Thebault and Abigail Hauslohner May 24

• Older population

- More underlying health conditions
- Higher uninsurance rates
- More limited access to care
  - Hospital closures
  - Fewer specialists
  - Disproportionate lack of ICU beds and ventilators
- Broadband/cell connectivity issues
- Barriers to social distancing

Washington Post, May 24, 2020

### Unequal Risk for Isolation



#### **COVID-19 poses an unequal risk of isolation and loneliness**

BY CARRIE HENNING-SMITH, OPINION CONTRIBUTOR — 03/18/20 05:00 PM EDT THE VIEWS EXPRESSED BY CONTRIBUTORS ARE THEIR OWN AND NOT THE VIEW OF THE HILL 97 COMMENTS

- Higher risk for:
  - People with chronic conditions and disabilities
  - People living alone (not by choice)
- Mixed picture by age
- Structural barriers:
  - Transportation, technological connectivity
  - Racism, homophobia, transphobia, xenophobia

# Challenges to Addressing Rural Social Isolation and Loneliness

#### POLICY BRIEF October 2018



#### Key Informant Perspectives on Rural Social Isolation and Loneliness

Purpose

Carrie Henning-Smith, PhD Alexandra Ecklund, MPH Megan Lahr, MPH Alex Evenson, MA Ira Moscovice, PhD Katy Kozhimannil, PhD

Key Findings

 Twenty-two key informants across multiple sectors identified four main arreas in which social isolation may affect health: mental health, general health and well-being, diminished access to basic resources, and quality of life. Mental health was the most frequently mentioned theme.

 Rural-specific issues related to addressing social isolation emerged in five areas: transportation, technology, demographics, access to resources, and rural culture.

 Over time, there have been changes related to technology, resource constraints, demographic shifts, and cultural shifts that have affected those who are socially isolated and those attempting to mitigate the impact of social isolation in rural areas.

 Possible strategies to support socially isolated individuals in rural areas include improvements in transportation, technology, health care, collaboration across sectors, increased support and infrastructure, education and awareness, and increased resources and funding.

rhrc.umn.edu

address isolation among rural residents. This policy brief uses data from interviews with 22 key informants in 12 states, all of whom were experts in the issue of social isolation and/or rural health, to describe key challenges and opportunities related to rural social isolation.

#### **Background and Policy Context**

Social isolation encompasses objective lack of social contact, or social disconnectedness, as well as more subjective feelings of londiness, both of which affect health.<sup>1</sup> It is directly related to increased morbidity and mortality, both of which are elevated in rural areas, compared with urban areas.<sup>23</sup> In fact, recent research shows that social isolation poses as great of a risk to mortality as obesity and smoking.<sup>49</sup> Social isolation has been linked to increased health care costs.<sup>6</sup> and with a variety of poor health outcomes, including increased risk of high blood pressure, stress, substance use, depression, suicide, and Abheimer's disease, as well as diminished immute system functioning.<sup>2</sup>

Social isolation has received widespread recognition as an urgent public health problem, yet limited information specific to rural areas is avail-

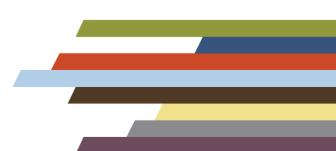
able on this issue, making it difficult to design effective interventions to

Given the geographic and spatial aspects of social isolation as well as the uniqueness of rural communities and life experiences, specific artention should be paid to social isolation in rural areas. Rural-tailored information could inform effective intervention strategies to increase social connection in these communities. However, research on rural-urban differences in social isolation is limited and more information is needed regarding effective strategies to inform policy-making. This policy brief addresses gaps in the literature and provides policy-relevant information by identifying key issues in rural social isolation and potential opportunities to intervene, based on interviews with rural stakeholders who are actively working on issues related to social isolation in their communities.

#### Approach

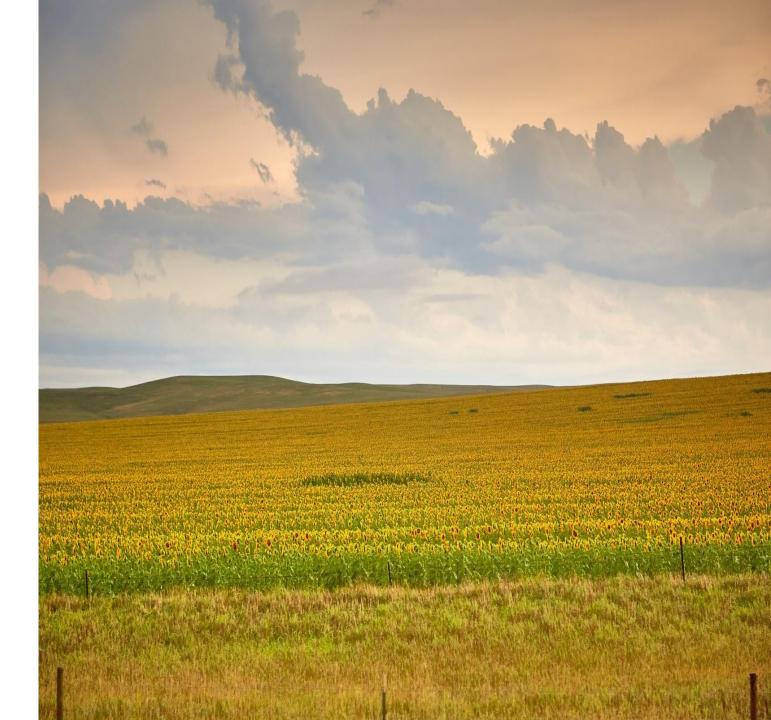
We interviewed 22 key informants across 11 states (CA, GA, IL, IN, MI, MN, MO, MT, NC, NM, and UT), plus the District of Columbia with expertise in the area of rurah health and/or social isolation. We identified key informants through literature and online searches and relied on a snowball sampling technique, in which key informants were asked to nominate others with expertise in the topic. We purposefully included key informants working in different sectors, including academia, health care, advocacy, and direct service. We also included key informants with national, state, and local foci of their work and focusing on different pop-

- Key informant interviews (n=22)
- Semi-structured interviews
- Inductive content analysis



## Key Rural-Specific Challenges

- Five themes:
  - Transportation
  - Technology
  - Demographics
  - Access to resources
  - Rural "culture"



### **Transportation Challenges**

- Most frequently endorsed theme
- Limited transportation resources and infrastructure constrain social contact
- Long distances make access to providers, events, and resources challenging

"Our bus doesn't run on Sundays. So, you're losing that whole weekend day that you could say, 'Hey! We're going to have a big picnic at the park!' because then you have to figure out who's coming and who needs rides...the logistics are really, really hard." Sector: Direct service; Focus: Recent immigrants

### Technology Challenges

- Limited Internet, broadband access, and cell connectivity
- More restricted access to devices and resources, compared with urban

"We have this great idea going out, but can't do it for people in the smaller communities because there's no internet access. No cell signals in the area. There are certain places where there are dead spots and that's where people live." – Sector: Direct service; Focus: Older adults

### Demographics



- Aging population, younger people moving to urban areas
- Families becoming more geographically distant
- Poverty
- Increasing racial and ethnic diversity, but limited availability of culturally- and linguistically-appropriate services for recent immigrant populations

### Access to Resources

- Fewer formal programs and gathering spaces
- Low population density
- Health care constraints and workforce shortages
- Fewer available volunteers



Española , NM, 2019

"As an EMT, I've gone on a lot of 911 calls because they didn't have anyone else in their life. I don't know how many runs I've gone on that are caused by loneliness, but it's more than you would think." – Sector: Health care; Focus: All ages/groups

### Rural "Culture"

- Strength and size of rural families
- May be isolating to be "different"
- Shift toward being less likely to know one's neighbor; increased political divides



### Rural/Urban Differences in Isolation and Loneliness Among Older Adults

THE JOURNAL OF RURAL HEALTH



ORIGINAL ARTICLE

#### Differences in Social Isolation and Its Relationship to Health by Rurality

Carrie Henning-Smith, PhD, MPH, MSW; Ira Moscovice, PhD; & Katy Kozhimannil, PhD, MPA

Rural Health Research CenterUniversity of Minnesota School of Public Health, Division of Health Policy and Management, Minneapolis, Minnesota

#### Abstract

Disclosures: The authors are aware of no conflicts of interest or financial conflicts.

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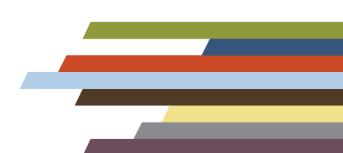
**Purpose:** Social isolation is an urgent threat to public health. Meanwhile, health outcomes across multiple measures are worse in rural areas, where distance to neighbors is often greater and opportunities for social interaction may be scarcer. Still, very little research examines rural-urban differences in social isolation. This study addresses that gap by examining differences in social isolation by rurality among US older adults.

**Methods:** Using Wave 2 of the National Social Life, Health, and Aging Project data (n = 2,439), we measured differences between urban and rural (micropolitan or noncore) residents across multiple dimensions of social isolation. We also conducted multivariable analysis to assess the associations between rurality, sociodemographic characteristics, and loneliness, overall and by rurality. Finally, we conducted multivariable analysis to assess the association between social isolation and self-rated health, adjusting for rurality.

**Findings:** Compared to urban residents, rural residents had more social relationships and micropolitan rural residents were more likely to be able to rely on family members (95.8% vs 91.3%, P < .05). Micropolitan rural residents reported lower rates of loneliness than urban residents after adjusting for sociodemographic and health characteristics (b = -0.32, P < .05), whereas non-core rural, non-Hispanic black residents had a greater likelihood of reporting loneliness (b = 4.33, P < .001).

**Conclusions:** Overall, noncore and micropolitan rural residents reported less social isolation and more social relationships than urban residents. However, there were differences by race and ethnicity among rural residents in perceived loneliness. Policies and programs to address social isolation should be tailored by geography and should account for within-rural differences in risk factors.

- Data from National Social Life, Health, and Aging Project
- Multiple measures of isolation:
  - Relationships, social support, social participation
- 3-item UCLA loneliness scale

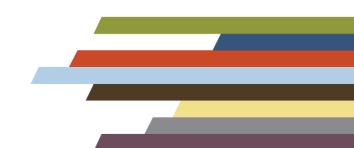


### NSHAP Social Isolation Measures

- Social relationships:
  - Number of close friends and family; number of children and grandchildren
- Social support:
  - Can open up to/rely on friends/family
- Loneliness:
  - 3-item scale: how often respondent felt left out, isolated, or lacked companionship
- Social participation:
  - How often respondent attended group meetings (e.g., hobby group, choir, committee/board, exercise group); place of worship; or socialized with others
- Marital status

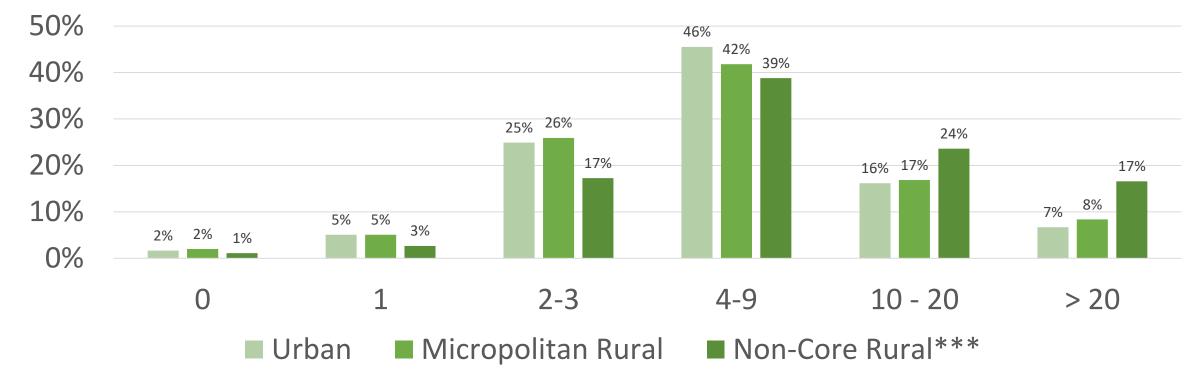
### Other Measures

- Rurality (using RUCA codes):
  - Metropolitan, micropolitan (population centers up to 49,999), and noncore (population centers <10,000)</li>
- Socio-demographic characteristics
- Self-rated health
- Hearing loss that limits social activities
- All analyses used survey weights



### Rural-Urban Differences: Relationships

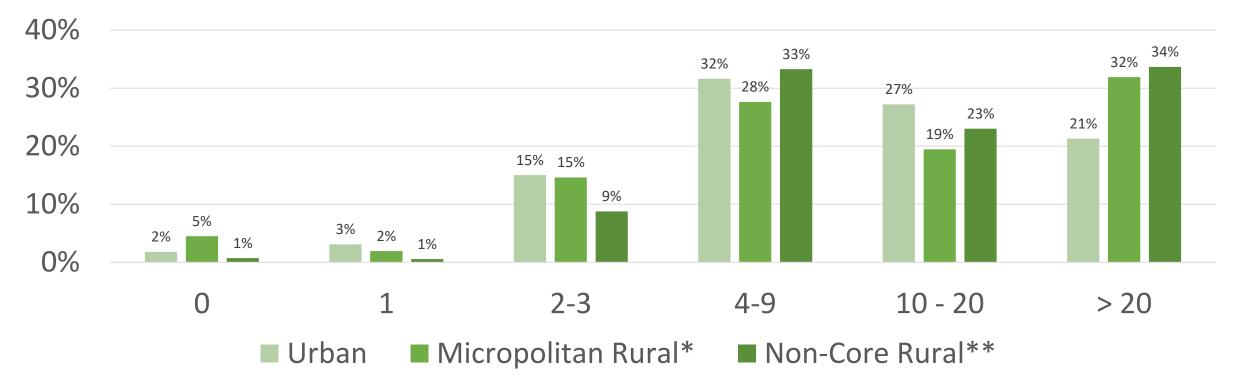
#### Number of Close Relatives



\*\*\*Non-core different than urban at p<0.001

#### Rural-Urban Differences: Relationships

#### Number of Friends



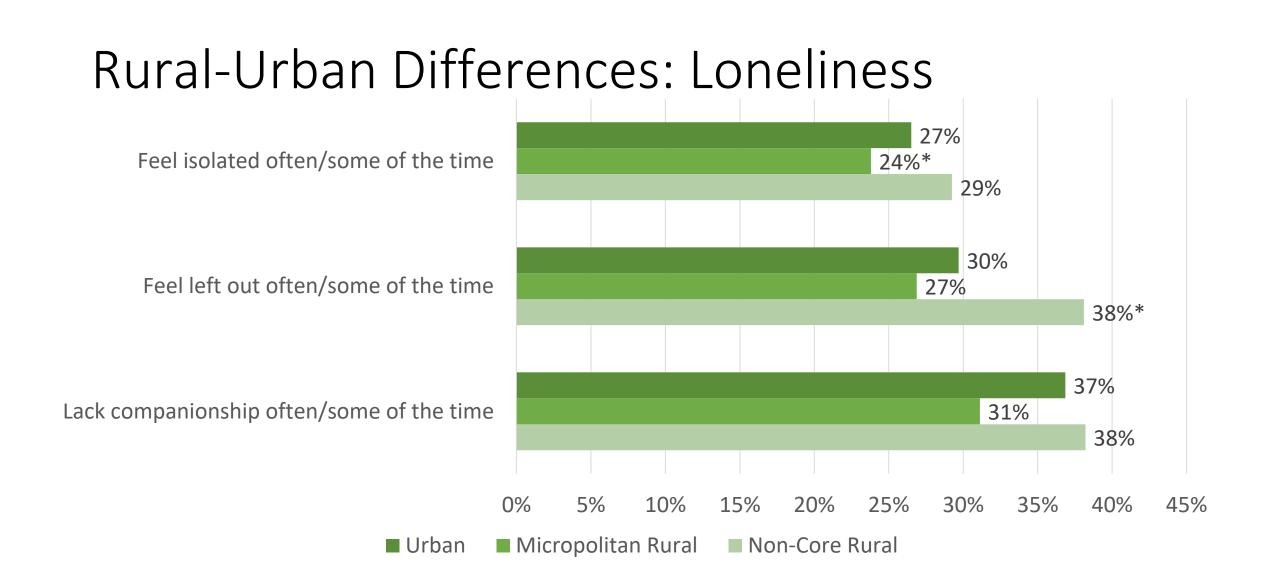
\*Micropolitan different than urban at p<0.05; \*\*Non-core different than urban at p<0.01

### Rural-Urban Differences: Social Support

	Urban	Micropolitan Rural	Non-Core Rural
Respondent can open			
up to family	84.9%	85.3%	85.2%
Respondent can rely			
on family	91.3%	95.8%*	92.8%
Respondent can open			
up to friends	72.6%	68.8%	75.8%
Respondent can rely			
on friends	82.5%	84.7%	90.9%*

### Rural-Urban Differences: Social Participation

	Urban	Micropolitan Rural	Non-Core Rural
Attends group meetings			
<once a="" td="" year<=""><td>36%</td><td>41%</td><td>36%</td></once>	36%	41%	36%
Up to several times a year	17%	15%	21%
Monthly	19%	14%	23%
Weekly or more	27%	30%	21%
Attends a place of worship			
<once a="" td="" year<=""><td>23%</td><td>21%</td><td>21%</td></once>	23%	21%	21%
Up to several times a year	22%	22%	18%
Monthly	8%	8%	12%
Weekly or more	46%	48%	49%
Socializes with others			
<once a="" td="" year<=""><td>2%</td><td>2%</td><td>2%</td></once>	2%	2%	2%
Up to several times a year	21%	24%	16%
Monthly	23%	18%	23%
Weekly or more	54%	56%	60%



\*Different than urban at p<0.05

### Correlates of Loneliness (3-Item Scale)

	Urban	Micropolitan Rural	Non-Core Rural
Female	-0.06	0.43	0.89
Age	-0.01	-0.01	0.02
Married or partnered	-1.20***	-0.97*	-1.58**
Race and ethnicity (Ret: non-Hispanic White)			
Non-Hispanic Black	-0.07	-0.44	4.33***
Hispanic	-0.53	-0.36	-0.71
Other	-0.09	-1.80**	-0.50
Born in the US	0.24	0.27	2.34
Educational attainment (Ref: <hs)< td=""><td></td><td></td><td></td></hs)<>			
High school degree	0.27	0.17	0.23
Some college	0.44**	0.23	0.39
College degree	0.58**	0.47	0.68
Household income of \$50K or above	-0.09	0.00	0.64
Currently employed	-0.18	0.75*	0.03
Physical health	-0 29***	-0 14	-0 14
Hearing limits social activities	0.76**	0.77	1.71***

Results are from stratified OLS models predicting 9-point scale; results adjusted for social support, relationships, and social participation.

# Rural-Specific Challenges for Unpaid Caregivers

#### POLICY BRIEF August 2018



#### Perspectives on Rural Caregiving Challenges and Interventions

Carrie Henning-Smith, PhD

· Forty-one key informants across

multiple sectors identified challenges, recent changes to rural caregiving, and

Main challenges relate to access to

resources, transportation, culture,

 Recent changes to rural caregiving relate to technology, demographic

· Possible strategies to support rural

caregivers include increasing funding,

developing a national strategy, and

expanding access to resources.

demography, and isolation.

strategies related to supporting informal (unpaid) caregivers in rural areas.

shifts, financial pressure, and changes in awareness and information.

#### Megan Lahr, MPH

**Key Findings** 

#### Purpose

Unpaid, informal caregivers provide the vast majority of all long-term care in the United States. However, little is known about specific challenges they face in rural areas or what can be done to support them. This brief presents findings from key informant interviews describing challenges and opportunities related to supporting informal caregivers in rural areas.

A <u>related policy brief</u>, ""Resources for Caregivers in Rural Communities," provides details about specific programs serving caregivers in rural areas.

#### **Background and Policy Context**

Currently, the vast majority of all long-term care needs, broadly defined as an individual needing help with personal care and performing daily activities, is provided by informal (unpaid) caregivers.<sup>1</sup> In fact, recent estimates suggest that 80-90% of all long-term care needs are met by informal caregivers, usually family members, and more than 44 million Americans are currently providing unpaid care to a loved one, with the majority of care recipients being older adults.<sup>1,2</sup> The value of unpaid caregiving has been estimated at nearly \$500 billion annually, yet it receives far less research attention than institutional care or home health services. Caregiving, especially without appropriate support, is associated with various poor health outcomes for the caregiver.<sup>3</sup>

The entire U.S. is aging quickly, leading to increased need for caregiving.<sup>4</sup> Rural areas have an older population structure than urban areas and face shortages in the formal long-term care workforce,<sup>3</sup> pushing even more of the burden of care to unpaid caregivers. Additionally, rural residents anticipate that they will need more assistance from caregivers with activities of daily living as they age than urban residents.<sup>6</sup> Despite this, caregiver support programs are no more prevalent in rural areas, and are scarcer for some populations, including employed caregivers, who have fewer workplace supports available to them.<sup>74</sup> This leaves rural caregivers who may need help most at the greatest risk of not receiving it.

There are multiple ways in which policy can impact the health and wellbeing of caregivers and their care recipients; however, there is limited research on either the specific challenges faced by rural caregivers or policy levers to support their needs, specifically in a rural context. This brief identifies potential strategies for supporting rural caregivers using information from key informant interviews from experts in informal caregiving across the country.

- Key informant interviews (n=41)
- Five themes identified:
  - Access to resources
  - Transportation
  - Rural "culture"
  - Demography
  - Isolation

#### Approach

rhrc.umn.edu

Data for this study come from 41 key informants across 34 interviews (some interviews had multiple informants participate). We identified key

### Rural Caregiving Isolation Quotes

Isolation is also a really big issue. It's a problem for both caregivers and care recipients—for caregivers, if they want to go to town for a quick break, they often can't, because there isn't someone living next door who can come over and help them. The isolation can lead to depression and anxiety. Many older adults used to be social and go into town a lot, but then health problems make it harder for them to do so.

There aren't as many providers (respite, companion care, adult day services)—and people who live on farms or ranches can't leave their care recipient at home, so a lot of them take their care recipient with them as they plow the fields, and leave them in a truck to wait—which is dangerous. It's a huge struggle if there isn't a respite or care center to go to, and those [care centers] need special licenses so aren't that many.

# Addressing Rural Social Isolation and Loneliness

- In clinical setting:
  - Screening for isolation and loneliness, including perceived social needs, instrumental support, and living arrangements
  - Appropriate referrals to community-based organizations, acute and on-going mental health care, structural supports (e.g., meal delivery)
- Community and policy infrastructure examples:
  - Create welcoming spaces
  - Address transportation barriers
  - Expand access to broadband Internet and technology

# Example Programs



#### Get Rural Updates & Alerts



Sign-up to receive our <u>weekly</u> newsletter:

email Subscribe

Daily and weekly custom alerts also available

#### Funding Opportunities





Find Rural Data

The <u>Rural Data Explorer</u> and <u>Chart Gallery</u> provide access to a wide range of data on rural health issues.

Learn how to locate and use data in the <u>Finding Statistics</u> <u>and Data Related to Rural</u> <u>Health</u> topic guide.

#### Am I Rural?



#### The RURAL MONITOR

Trauma Training Initiative Teaches Rural Laypeople how to "Stop the Bleed" On average, rural residents wait twice as long for emergency medical services than urban residents. Stop the Bleed is a trauma



training initiative that teaches laypeople how to pack wounds and apply tourniquets in order to improve survival rates until medical attention arrives.

Making the EHR Work: Rural Healthcare Organizations Use Data Extraction to Improve Patient Care Electronic health records are central to rural healthcare providers' and organizations' transition to value-based care. Several rural



organizations are using their EHR data to make changes for the patient populations they serve.

 Programs highlighted on Rural Health Information Hub (RHIhub)

www.ruralhealthinfo.org

### Geezers, Gulpers, and Gardeners

- Chatham County Council on Aging of North Carolina
- Purpose: "Connect retired men in need of male friends and mutual support"
- Started in 2017; has grown from 10 to 30 regular members
- Member-directed activities include coffee, yard games, cards, checkers, and conversation starters



A 3G Group (Geezers, Gulpers, and Gardeners) meeting at the Pittsboro Senior Center. Photo courtesy of Rose Hoban, North Carolina Health News.

### **Onion River Exchange**



Models for aging in place programs, from individual to

- Central Vermont
- Time-banking model

### Time Banking in a Rural Setting

- ORE's mission statement is to promote "the exchange of skills and talents, using time instead of money, to increase the sustainability and well-being of communities."
- Since it started in 2008, more than 45,500 hours have been exchanged



RENEWS

REPAIR CAFÉ was a great success

ORE Member's Page

ORE in the News



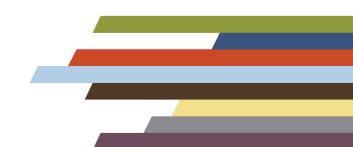
Welcome!

### Where to From Here?: Policy

- Policies could include:
  - Flexible funding (e.g., through Medicaid waiver programs) to address isolation
  - Increased resources for programming, staff, and infrastructure
  - Screening for loneliness and isolation, with appropriate follow up and referral

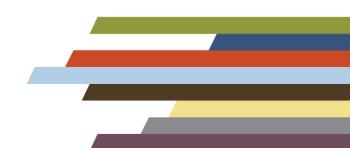
### Where to From Here?: Programs

- Programs could/should include:
  - Intergenerational elements
  - Accessibility for people of all abilities, languages, and backgrounds
  - Avenues for people to contribute
  - Flexible meeting places, spaces, and hours



#### Where to From Here?: Research

- Future research should:
  - Continue to examine multiple measures of isolation
  - Seek to better understand racial, ethnic, and gender differences in isolation
  - Evaluate programs for their efficacy and replicability
  - Examine rural-urban differences across age groups





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#### Thank You!

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