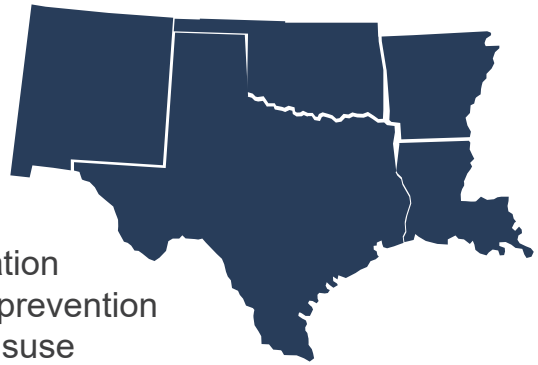
South Southwest Prevention Technology Transfer Center Network

Promising Approaches for Reducing Substance Misuse-Related Health Disparities in Rural Context



Nearly 20 percent of Americans live in a rural environment. Characterized mainly by low population density and isolation from urban centers, rural environments can present unique challenges to prevention practitioners looking to address substance misuse. From the increased burden of substance misuse disorders on the health care system, to the lower overall availability of primary health care services, prevention in rural settings must complement and account for the unique environment in which it exists.

This tool provides prevention practitioners with a foundation for understanding the rural landscape by answering the following questions:

1. How do we define rural?
2. What is the burden of substance misuse in rural communities?
3. What are the unique challenges prevention practitioners may face in a rural setting, and how can we address them?
4. Where can I find resources?

How Do We Define Rural?

Though the stereotypical rural community is small, homogeneous, and embedded in a rolling agricultural landscape, rural communities vary widely in both location and demographics. The U.S. Census Bureau defines “rural” as “anything not urban,” and includes all localities with a small population (less than 10,000) located outside an urban cluster area.[1] This broad definition has inadvertently come to include very different types of localities such as:

- Densely settled small towns.
- Exurban pockets with secluded neighborhoods located on the outskirts of cities.
- Frontier areas comprising fewer than six people per square mile—the remote, sparsely populated areas most often described as rural.

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For health and prevention practitioners, including such a wide assortment of communities under one umbrella category can present a variety of prevention challenges. For example, data on rural access typically reflects combined findings from multiple communities—yet residents of "large lot" exurban neighborhoods tend to have greater access to primary care, including treatment and recovery programs, than people living in smaller, more isolated farming communities. Combining these data can thus give the impression that rural populations, overall, have greater access to care than they in fact do. Similarly, an overly broad definition of rural can create an unintentionally optimistic picture of the burden of rural substance misuse, as exurban communities—which closely resemble suburban communities—actually have lower than average rates of substance misuse.

To better capture the rural experience, a growing number of academic health researchers are encouraging medical and public health professionals to use an augmented classification system that relies on Census Bureau data to distinguish between residents who commute regularly to a large city and those who commute primarily to other small towns.[2] This categorization system, called the Rural-Urban Commuting Area Taxonomy (RUCA) is widely used by the Centers for Medicare and Medicaid Services and other health policy centers to better identify isolated communities and more accurately determine the burden of their health needs. The RUCA codes identify rurality at the census tract (with a corresponding zip code translation file) rather than county level as is the case with other rural classifications systems and allow for a more granular analysis of rurality.

Other Defintions

Health Disparities. "A particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion." Healthy People 2030

Health Equity. "The attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities." Healthy People 2030

Health Inequality. "A health disparity that is not only unfair but may also reflect injustice. To address health inequities, communities must remove obstacles to good health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to well-paying jobs, quality education and housing, safe environments, and health care (Braveman et al., 2017)." County Health Rankings and Roadmaps

What is the Burden of Substance Misuse in Rural Communities?

Consistent with overall health trends, residents of rural communities are more likely than their urban counterparts to be older and poorer, less likely than their urban counterparts to have access to a local physician, less likely to have access employer-provided health insurance, and more likely to utilize Medicare and/or Medicaid. [2,3] They also suffer from higher rates of chronic illness such as heart disease and lower respiratory illnesses, unintentional injury, suicide, and infant mortality, and exhibit higher rates of substance misuse. These trends hold for all substances, from alcohol to non-medical use of prescription drugs.

Underage alcohol consumption. Rural youth are more likely to start drinking at earlier ages and engage in higher risk drinking than their urban counterparts. They are more likely than urban youth to drive while intoxicated and have greater access to alcohol in their homes and through retail outlets. [4]

Adult alcohol consumption. At first glance, high-risk alcohol use and the prevalence of alcohol use disorders (AUD) appear to be similar between rural and urban adults, however, a closer parsing of data reveals demographic differences in alcohol consumption with rural Hispanics more likely to engage in higher-risk alcohol consumption and meet criteria for AUD. Like rural youth, rural adults are more likely to drive while intoxicated. [5]

Illicit drug use (heroin, fentanyl, cocaine, and methamphetamines). Though urban areas have higher overall rates of illicit drug use across all age groups, rural residents experience more consequences from illicit drug use.[6] Rural residents are more likely than their urban counterparts to die from drug overdoses – currently the leading cause of injury-related death across the United States. Choice of illicit drug also varies; residents of rural areas use methamphetamine and natural and semisynthetic opioid-related drugs at higher rates than urban residents.[7]

Non-medical use of prescription drugs (NMUPD). In rural communities, various factors converged to lead to the explosion in NMUPD, and specifically opioids. Rural residents have long suffered from higher rates of unintentional injuries such as falls compared with urban residents. This difference is widely believed to be the result of the more physical nature of rural employment.[8] Rural residents also travel greater distances for medical care, and once there, are more likely to receive greater quantities of opioids for pain; this is in large part due to the well-intentioned recognition by physicians of the difficulty in returning for consistent follow-up care.[9] Complicating this issue is that many rural workers, particularly those employed in seasonal industries or by small business may not have access to paid leave time to access physical therapy and other services requiring multiple encounters within a limited time frame. Additionally, the lack of alternative pain management services in many rural communities has encouraged higher rates of opioid prescribing. Finally, rural residents have larger social networks than

urban residents which can increase access to informal prescription sharing. Rural residents are more likely to share prescription opioids or know how to access others' prescribed opioids.[10] As a result, rural residents are more likely than urban residents to have either medical or social access to prescription opioid than urban residents.[11]

What are the unique challenges prevention practitioners may face in a rural setting, and how can we address them?

Several factors challenge the effectiveness of substance misuse prevention efforts in rural communities. Decreased access to primary care stands out as an important risk factor in accessing and diagnosing rural residents who misuse substances, since physicians may not be able to note changes in substance use as readily. However, other socioeconomic and cultural factors also contribute to the challenge of rural substance misuse prevention. These include the following:

- **Increased social stigma.** Rural cultural values of sharing and helpfulness make it easy to access alcohol and prescription opioids, but conversely create difficulties in publicly admitting problems related to the misuse of these substances.[12] Rural residents place a higher value on self-sufficiency than urban residents, which complicates social acceptance for treatment and recovery programming for substance use disorders.[13]

- **Central role of faith-based organizations in providing social services, including prevention services.** Rural communities are more likely than urban communities to depend on faith-based social services for emergency food aid, low-cost childcare and clothing, and substance misuse services. This can be a double-edged sword when it comes to substance misuse prevention. For example, research has shown that teens who participate in faith-based activities are less likely to use alcohol or begin using illicit drugs.[14] However, faith-based organizations have varying levels of knowledge about alcohol and drug pharmacology and may not be trained in evidence-based prevention or interventions.[15]

- **Lower perceived harm of substance misuse.** Parents of rural teens are more likely than urban parents to downplay the harms of alcohol use and to allow teenagers to consume alcohol in their homes, believing that teen drinking is a "rite of passage".[16] Unsurprisingly, rural teens also perceive alcohol use as not harmful and are more likely than urban teens to begin drinking at earlier ages. Similarly, rural teens and adults perceive less harm from prescription opioid use than their urban counterparts.[17]

- **Fewer first responders trained to reverse opioid overdose.** In contrast to many urban first responders, rural first responders, from police officers to emergency medical service providers, are less likely to carry or be trained to administer the opioid overdose reversal medication naloxone.[18] Rural ambulances are more likely to be staffed by

EMTs, who provide basic medical services such as assisting patients with medications they already take or orally administer glucose or aspirin, rather than paramedics, who are trained to provide advanced life support.[19,20]

- **Decreased access to treatment and recovery programs.** Because people living in rural communities have reduced access to primary care providers, diagnosing substance use disorders is considerably more difficult as a part of routine medical care since changes in patterns of behavior may be harder for physicians to identify.[21] Once diagnosed, patients in rural settings also face challenges accessing local, outpatient treatment and recovery programming that would allow them to maintain their employment and social support networks.[22]

Identifying Promising Approaches and Additional Resources

Rural Prevention and Treatment of Substance Use Disorders Toolkit. This toolkit provides evidence-based examples, promising models, program best practices, and resources that can be used by your organization to implement substance use disorder prevention and treatment programs. https://www.ruralhealthinfo.org/toolkits/substance-abuse

Rural Health Models and Innovations. This section features examples of programs and interventions that have shown success in providing health services in rural areas experiencing health disparities. Models and innovations can be searched by evidence level, topic, source, and state. https://www.ruralhealthinfo.org/topics/rural-health-disparities

Evidence-based Toolkits, Evidence-Based Toolkits for Rural Community Health. Step-by-step guides to help you build effective community health. Resources and examples are drawn from evidence-based and promising programs. By learning from programs that are known to be effective, you can make the best use of limited funding and resources. https://www.ruralhealthinfo.org/toolkits

Rural Community Health Gateway. This resource can assist you at every stage of program implementation, from finding an approach, to securing funding, to planning for long-term sustainability. https://www.ruralhealthinfo.org/community-health

Considerations for Populations. This section provides implementation considerations for each of these populations. Populations include adolescents, American Indian/Alaska Native and Tribal Populations, Women, People with Comorbid Conditions, Veterans, and Farmers. https://www.ruralhealthinfo.org/toolkits/substance-abuse/4/population-considerations

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Prevention of Drug Use and Treatment of Drug Use Disorders in Rural Settings. This Guide was prepared by the United Nations Office on Drugs and Crime (UNODC) Drug Prevention and Health Branch (DHB), with the aim of providing an awareness-raising tool and guidance for policymakers, public health officials, local authorities and other stakeholders in dealing with substance use issues in rural settings in their respective countries.
https://digitalcommons.usm.maine.edu/behavioral_health/25/

Rural Health Equity Toolkit. The toolkit compiles evidence-based frameworks and promising strategies and resources to support organizations working toward health equity in rural communities across the United States.
https://www.ruralhealthinfo.org/toolkits/health-equity

Rural Response to the Opioid Crisis. This guide will help you learn about activities underway to address the opioid crisis in rural communities at the national, state, and local levels across the country. https://www.ruralhealthinfo.org/topics/opioids

CDC, Drug Overdose in Rural America. This site provides information on policy options and other strategies for addressing factors affecting opioid overdoses in rural areas. https://www.cdc.gov/ruralhealth/drug-overdose

Rural Communities at Risk: Widening Health Disparities Present New Challenges in Aftermath of Pandemic. This report examines gaps in rural and urban access to primary care and mental health services, identifying significant vulnerabilities in rural communities to health emergencies like the COVID-19 pandemic that increase the risk for rural health disparities.
https://www.chartis.com/sites/default/files/documents/Rural%20Communities%20at%20Risk_Widening%20Health%20Disparities-Chartis.pdf

Rural Adolescent Substance Abuse: Prevention Implications from Evidence. This resource identifies appropriate adolescent substance abuse prevention programming for rural populations through the application of three concepts: effectiveness (best clinical evidence), efficiency (benefit to rural populations), and equality (access).
https://rnojournal.binghamton.edu/index.php/RNO/article/view/21/214

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