Preventing Substance Misuse in Rural Settings

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:

- ✓ How do we define "rural"?
- ✓ What is the burden of substance misuse in rural communities?
- ✓ What are the unique challenges prevention practitioners may face in a rural setting, and how can we address them?

HOW DO WE DEFINE "RURAL"?

Though the stereotypical rural community is small, homogeneous, and embedded in a rolling agricultural landscape, rural communities actually 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."

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

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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.

WHAT IS THE BURDEN OF SUBSTANCE MISUSE IN RURAL COMMUNITIES?

Consistent with overall health trends, residents of RUCA 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, and have less access to either employer-provided health insurance or government programs like Medicaid.[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.[4] 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.[5] 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, a number of 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, widely believed to be the result of the more physical nature of rural

employment.[9] 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.[10] Finally, rural residents have wider social networks and closer ties to neighbors and families than urban residents which paradoxically increases access to prescription opioids, as rural residents are more likely to share prescription opioids or know how to access others' prescribed opioids.[11] As a result, rural residents are more likely than urban to have either medical or social access to prescription opioid than urban residents.[12]

WHAT ARE THE UNIQUE CHALLENGES PREVENTION PRACTITIONERS MAY FACE IN RURAL COMMUNITIES?

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.[13] 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.[14]

- **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.[15] 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.[16]

- **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."[17] 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.[18]

- **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.[19] 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.[20, 21]

- **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.[22] 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.[23]

MOVING FORWARD

While rural settings can present unique prevention challenges, they also present unique features that can help to catalyze prevention efforts. Strategies for making the most of these opportunities include the following:

- **Do your homework.** Get to know the community—both its strengths and challenges. Drive around. Talk to residents. Ask for a tour. Read the local paper to find out what people care about. Read the police log online to find out what law enforcement is prioritizing. Find out the nickname of the local high school and how the sports teams are doing. By taking the time to collect this information, you will establish yourself as someone who cares about the community. You will also be better able to assess the community's readiness to address health issues, and to identify potential supporters and detractors of future prevention efforts.

- **Partner with faith-based organizations.** Faith-based organizations have a vested interest in their communities and established access to congregation and community members. They often assist members with their health needs, focus on youth development, and serve as leaders for positive community change. Many already work with hard-to-reach populations, including people who use drugs, as part of their regular community-building activities, and are known and respected for doing so. Preventing substance use and misuse is a natural fit with these values. When reaching out to faith communities, highlight this alignment of values, and how prevention is really just an extension of work they are already doing. The US Department of Health and Human Services offers a practical toolkit for faith-based organizations to address the opioid epidemic: https://www.hhs.gov/about/agencies/iea/partnerships/opioid-toolkit/index.html

- **Get to know leaders at local schools.** Schools can be a great partner for both youth-based and parent-focused prevention programs. Because the population in rural areas is often dispersed over a large area, schools often serve as community centers and hubs of information for rural families. States that have adopted state-level standards of education in health and wellness are also likely to have school district leaders who are open to prevention programming—especially in those communities where principals have the autonomy to

select and/or create their own school programs. Supportive principals can also serve as important champions for your broader prevention efforts.

- **Use social networks to demystify substance misuse.** Residents of rural communities tend to have wider social networks than those in urban areas; in many communities, this often means that everyone knows at least one person who is affected by substance misuse. Focusing on these personal connections can be a starting point for examining stereotypes about people who use drugs and correcting misperceptions about the nature of addiction.

- **Empower residents to act as first responders.** Over the past five years, rural prevention professionals have made great strides in empowering and preparing residents to respond to opioid emergencies. Activities have included helping residents recognize an opioid overdose, and training community members to administer nasal naloxone, which can be distributed widely and used with minimal training. Since rural residents place a high value on self-sufficiency, community-wide prevention programming that increases autonomy, such as naloxone distribution, is often readily adopted.[24]

- **Increase access to online treatment programs.** Online programming is natural fit for rural residents, who tend to be located far away from traditional treatment and recovery programs. A recent study by researchers at Yale University found that users of drugs were more likely to complete online cognitive behavioral treatment (CBT) compared to traditional in-patient or outpatient CBT treatment for substance misuse issues.[25] After completing the online program, two-thirds of patients no longer met criteria for substance misuse.

- **Take the long view.** Rural prevention practitioners who have been doing things "their way" for a long time may not immediately buy in to new approaches. Understand that patience and an open mind go a long way in building the trust needed to support eventual change. So be a champion. Validate the work already underway. Then work together with your new partners to identify opportunities to strengthen and/or complement these existing efforts.

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