

## Rural Behavioral Health

Funded by the Federal Office of Rural Health Policy (FORHP), the Rural Health Research Gateway strives to disseminate the work of the FORHP-funded Rural Health Research Centers (RHRCs) with diverse audiences. The RHRCs are committed to providing timely, quality national research on the most pressing rural health issues. This resource provides a summary of their most recent research on behavioral health, all of which may be found on Gateway's website at [ruralhealthresearch.org](http://ruralhealthresearch.org).

### Prevalence

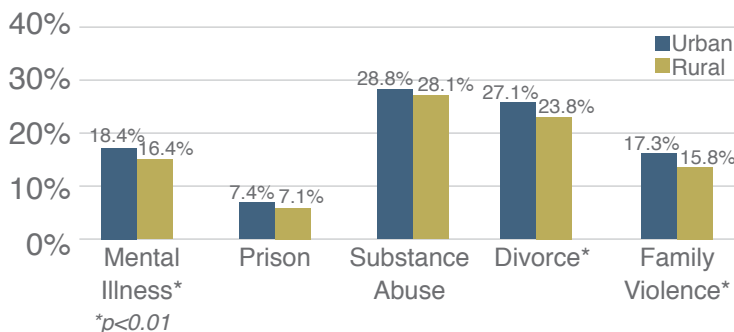
Any mental illness (AMI) is any diagnosable mental, behavioral, or emotional illness other than substance use.<sup>1</sup> During 2015, roughly 43.4 million adults in the U.S. had some kind of mental illness.<sup>2</sup> During 2010-2011, nonmetropolitan counties reported a higher percentage of residents with AMI (19.5%) than metropolitan counties (17.8%).<sup>3</sup> The highest rate of AMI (22.5%) occurred among rural residents in the western U.S. region.<sup>3</sup>

Nationally, 4% reported a serious mental illness, though rates rose with increasing rurality. Rural micropolitan residents in the western U.S. region reported the highest percentage of serious mental illness (6.8%). The lowest rate occurred in large central counties in the southern region of the U.S. (2.7%).<sup>3</sup>

### Adverse Childhood Experiences

Adverse childhood experiences (ACEs) are occurrences in family relationships that prevent children from finding the support and safety they need for healthy growth. The more ACEs, the higher the risk for behavioral and physical health problems in adulthood.<sup>4</sup> More than half (56.5%) of rural residents had been exposed to some form of ACE during 2011-2013.<sup>4</sup> See Figure 1.

**Figure 1. Prevalence of ACE Types in Rural and Urban Adults: Household Dysfunction<sup>4</sup>**



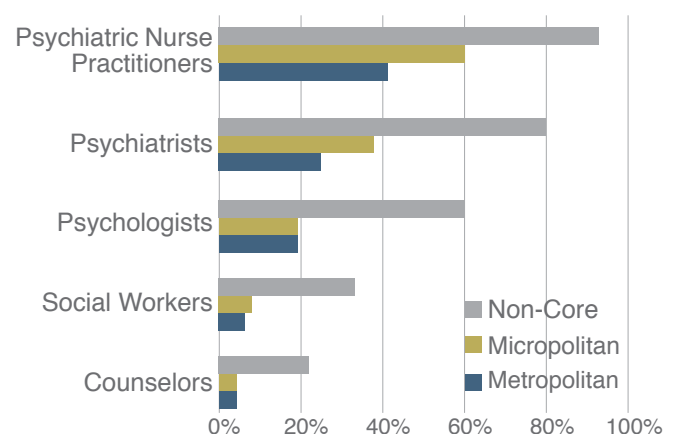
### Access to Behavioral Healthcare

As of October 2015, rural communities reported a smaller proportion of behavioral healthcare providers than urban areas, including fewer psychiatrists, clinical psychologists, psychiatric nurse practitioners, social workers, and counselors.<sup>5</sup> See Table 1 and Figure 2.

**Table 1. Behavioral Health Providers per 100,000 Population in U.S. Counties<sup>5</sup>**

|                                 | Metropolitan | Micropolitan | Non-Core |
|---------------------------------|--------------|--------------|----------|
| Counselors                      | 118.10       | 100.20       | 67.10    |
| Social Workers                  | 66.40        | 45.00        | 29.90    |
| Psychologists                   | 33.20        | 16.80        | 9.10     |
| Psychiatrists                   | 17.50        | 7.50         | 3.40     |
| Psychiatric Nurse Practitioners | 2.20         | 2.10         | 0.90     |

**Figure 2. Percent of U.S. Counties Without Behavioral Health Providers<sup>5</sup>**



Fewer providers may lead to increased utilization of the emergency department (ED) for mental health and substance abuse (MH/SA) treatment.

- Overall in 2013, 14.6% of all ED visits were for a primary MH/SA diagnosis.<sup>6</sup>
- Large rural (58.4%), small rural (62.3%), and isolated small rural (62.1%) residents presenting to the ED with a primary MH/SA diagnosis were more likely to be on public insurance than urban residents (48.0%).<sup>6</sup>
- Among urban MH/SA ED patients, 18.2% were 65 years of age and older compared to 22.3%, 26.4%, and 27.9% of large rural, small rural, and isolated small rural respectively.<sup>6</sup>

Though related to substance abuse, 2016 data indicated a disparity in rural access to buprenorphine-naloxone prescribers as well. Buprenorphine-naloxone is an effective treatment for opioid use disorder.<sup>7</sup> Roughly half (52.5%) of all counties had at least one physician with a Drug Enforcement Agency waiver to prescribe buprenorphine in 2016.<sup>7</sup> Urban counties were more likely than rural to have access to waived providers; 65.9% of metropolitan counties had at least one provider compared to 45.4%, 59.5%, and 23.8% of adjacent to metropolitan, micropolitan not adjacent to metropolitan, and small and remote rural counties respectively.<sup>7</sup>

## Rural Behavioral Health Interventions

### Mental Health First Aid

Mental Health First Aid (MHFA) training is an early intervention program aimed at improving population-level behavioral health treatment-seeking.<sup>8</sup> MHFA rural graduates indicated confidence in their mastery of MHFA. However, given the primary focus of MHFA is to encourage treatment-seeking, rural communities may not have the workforce to meet the demands of those who would then seek treatment.<sup>8</sup>

### Telemental Health

Telemental health refers to providing mental healthcare from one site to another using electronic technology. This intervention can address the most basic hurdles to rural mental healthcare, including shortages of mental health clinicians and extended travel distances.<sup>9</sup> Quality telemental health access in rural areas has grown while

the cost has decreased. However, the fee-for-service reimbursement model does not provide sufficient financial reimbursement or incentive to sustain growth. Growth in telemental health is also burdened by workforce supply challenges, issues with recruitment and retention, and high rates of un-insurance and under-insurance in rural areas.<sup>9</sup> To expand rural access to telemental health, issues regarding reimbursement, administration, and provider supply must be addressed.<sup>9</sup>

## Conclusion

Rural communities report a higher proportion of the population with mental illness, serious mental illness, and substance use. Rural behavioral health issues are compounded by a lack of access to care. Rural solutions need adequate reimbursement and must be sustainable when treating the uninsured and under-insured.

## Resources

1. SAMHSA. (2013). The NSDUH Report. Rockville, MD: U.S. Department of Health and Human Services, available at <https://www.samhsa.gov/data/sites/default/files/NSDUHresultsPDFWHTML2013/Web/NSDUHresults2013.pdf>.
2. Center for Behavioral Health Statistics and Quality. (2016). 2015 National Survey on Drug Use and Health (HHS Publication No. SMA 16-4984, NSDUH Series H-51), available at <https://www.samhsa.gov/data/>.
3. Rural Health Reform Policy Research Center (2014). The 2014 update of the rural-urban chartbook, available on Gateway at <https://www.ruralhealthresearch.org/publications/940>.
4. Maine Rural Health Research Center (2016). Adverse childhood experiences in rural and urban contexts, available on Gateway at <https://www.ruralhealthresearch.org/publications/1035>.
5. WWAMI Rural Health Research Center (2016). Supply and distribution of the behavioral health workforce in rural America, available on Gateway at <https://www.ruralhealthresearch.org/publications/1058>.
6. Rural Health Reform Policy Research Center (2017). Rural and urban utilization of the emergency department for mental health and substance abuse, available on Gateway at <https://www.ruralhealthresearch.org/publications/1118>.
7. WWAMI Rural Health Research Center (2017). Changes in the supply of physicians with a DEA DATA waiver to prescribe buprenorphine for opioid use disorder, available on Gateway at <https://www.ruralhealthresearch.org/publications/1113>.
8. [Maine Rural Health Research Center] Talbot J.A., Ziller E.C., & Szlosek D.A. (2017). Mental health first aid in rural communities: Appropriateness and outcomes. *JRH*, 33(1), 82-91.
9. [Maine Rural Health Research Center] Lambert D., Gale J., Hartley D., Croll Z., & Hansen A. (2016). Understanding the business case for telemental health in rural communities. *J Behav Health Serv Res*, 43(3), 366-379.

For more information, visit the Rural Health Research Gateway website, [ruralhealthresearch.org](http://ruralhealthresearch.org).

Shawnda Schroeder, PhD

701.777.0787 • [shawnda.schroeder@med.und.edu](mailto:shawnda.schroeder@med.und.edu)