Illicit Drug Use in Rural Communities

Introduction
Popular media often portrays illicit drug use as a problem disproportionately affecting metropolitan communities. However, research and data trends do not support that portrayal. While rural and non-rural communities may face unique challenges when it comes to illicit drug use, data indicates that opioid use prevalence rates are comparable.

Rural and Non-Rural Substance Use Disorders
Borders (2018) conducted a multi-year analysis of National Survey on Drug Use and Health (NSDUH) data relating to all drug use disorders and concluded that rates of past-year use are the same among metropolitan and nonmetropolitan residents. No change was found in drug use prevalence rates from the 2008-2010 time period to the 2014-2015 time period - except for heroin use disorder - which increased significantly in both metropolitan and nonmetropolitan populations. Information about the prevalence of disorders since 2015 was not captured in this study.

Rurality Treatment Comparisons
According to an article in the Journal of Rural Health (Winter 2018), Jones (2018) reports that Federally Qualified Health Centers in nonmetropolitan areas are less likely to use buprenorphine for Medication Assisted Treatment. The author attributes this disparity to a lack of third-party coverage in rural areas, especially in states that did not expand Medicaid. Although medical insurance coverage was expanded for 18 to 25-year-olds from 2008 to 2014 under the Affordable Care Act, young adults in nonmetropolitan areas remained underinsured at greater rates than their counterparts in metropolitan areas (Chavez and colleagues, 2018). Further, the authors report that fewer than 40% of these young adults believe their insurance covers alcohol or drug treatment. Lack of insurance affects access to substance use disorder treatment.

Florida’s Rural Communities Risk Factors
Compared to metropolitan areas, rural Florida may be at an elevated risk for drug misuse based on its sociodemographic characteristics. Research indicates that poverty, education and employment levels impact drug use prevalence rates. According to the United States Department of Agriculture (USDA), Florida’s rural residents lag behind urban residents in income ($33,751 vs $46,389 in 2016) and are more likely to live below the poverty level (19.5% versus 14.6% in 2016). Figure 1 displays Florida’s poverty rates by county. In five rural counties (DeSoto, Dixie, Hamilton, Hendry, and Madison), more than 25% of the population lives in poverty. Additionally, a higher proportion of Florida’s rural population has not completed high school (21.5% vs 12.5% during the 2012-2016 period). Figure 2 presents comparative data for educational attainment between rural and urban Florida counties. A 2009 study of state-level data by Spiller and

Figure 1: Source USDA ERS

Figure 2: Source USDA ERS
colleagues indicates strong positive correlations between poverty rate, unemployment rate, and prescription opioid drug rates - with prescription opioid drug rates increasing as the poverty rate and unemployment rate increase. Failure to graduate from high school was strongly correlated with hydrocodone and methadone use. This same study (Spiller, 2009) found no consistent correlation between population density and prescription opioid drug rates. However, a more recent study by Ruhm (2018) raises questions about research findings related to population density and drug use rates.

Treatment Admissions
Thirty (30) Florida counties are classified as rural (Florida Department of Health). Bureau of Business and Economic Research 2017 population estimates indicate that the non-inmate population of these 30 counties is 904,708 or 4.4% of the state's total population. Substance abuse admissions data from the Florida Department of Children and Families Office of Substance Abuse and Mental Health (Table 1) suggest that Florida's rural county residents are overrepresented among persons admitted for treatment for alcohol, hallucinogens, and stimulants but underrepresented among those admitted for treatment of opioid disorders. Furthermore, the data show regional differences in admission to treatment. For example, the Northeast region's rural counties account for a lower than expected percentage of admissions for substances other than opioids. In contrast, rural counties in the Northwest region include a disproportionately large percentage of treatment admissions - particularly for stimulants. This data should be interpreted cautiously because: 1) admissions by county of residence are preferable to data on the county of treatment because rural counties often lack treatment personnel and facilities; and 2) this data does not include private admissions, which may be more numerous in more affluent urban communities.

Table 1: Percent of Floridians Living in Rural Counties and Percent of Substance Abuse Admissions by County of Residence during Fiscal Year 2016-2017

<table>
<thead>
<tr>
<th>Region</th>
<th>% of population</th>
<th>% of Alcohol admissions</th>
<th>% of hallucinogens admissions</th>
<th>% of opiate admissions</th>
<th>% of stimulant admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest rural</td>
<td>1.6%</td>
<td>2.9%</td>
<td>3.4%</td>
<td>0.8%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Northeast rural</td>
<td>1.3%</td>
<td>1.2%</td>
<td>1.0%</td>
<td>0.9%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Other rural</td>
<td>1.6%</td>
<td>2.3%</td>
<td>3.0%</td>
<td>1.4%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Total rural</td>
<td>6.4%</td>
<td>6.3%</td>
<td>6.3%</td>
<td>3.2%</td>
<td>8.9%</td>
</tr>
</tbody>
</table>

* Totals reflect calculations from raw data and do not reflect rounding errors

Drug-Related Deaths
Data for drug-related deaths (Florida Medical Examiners Commission 2016) and noninstitutionalized population estimates from the Bureau of Business and Economic Research (2017) were combined to calculate the approximate death rate per 100,000 population from various drugs. These calculations were used to compare drug-related deaths in Florida's most rural and sparsely populated region (Medical Examiner Districts 1, 2 & 14 in the North-west region) to state averages. As shown in Figure 3, the death rate for the Northwest region was lower than the rate for the entire state (3.03 per 100,000 population vs 5.02 for heroin; 21.97 per 100,000 vs 30.72 for prescription opioids, and 6.64 per 100,000 versus 14.15 for cocaine). Only for deaths due to benzodiazepines was the rate slightly higher in this rural region (11.30 per 100,000 versus 10.03 statewide). Geographic breakouts for methamphetamine deaths (often considered a disproportionately rural issue) were not included in the Florida Medical Examiners Commission 2016 report because, statewide, methamphetamine is present in only 2.3% of all drug-related deaths.

Summary
Research and data indicate that both rural and metropolitan communities experience comparable illicit drug use rates. However, rural counties face some unique challenges when it comes to addressing risk factors, types of illicit drug use, substance abuse treatment access and admissions. This analysis found that rural Florida has a higher rate of sociodemographic risk factors associated with illicit drug use. Florida's rural counties also account for a somewhat disproportionate share of persons admitted to substance abuse treatment for substances other than opioids. However, the death rates for illicit drug use in Florida's most rural Northwest region are lower than the rates for the entire state.

For additional information and resources about Rural Prevention and Treatment of Substance Use, see: The Rural Health Information Hub SAMSHA Brief Fall 2016 • Volume 9 • Issue 2 Rural Behavioral Health: Telehealth Challenges and Opportunities

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