

# Employing Treatment and Environmental Interventions to Support Rural Populations

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Mountain Plains (HHS Region 8)

MHTTC

Mental Health Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration

# Disclaimer and Funding Statement

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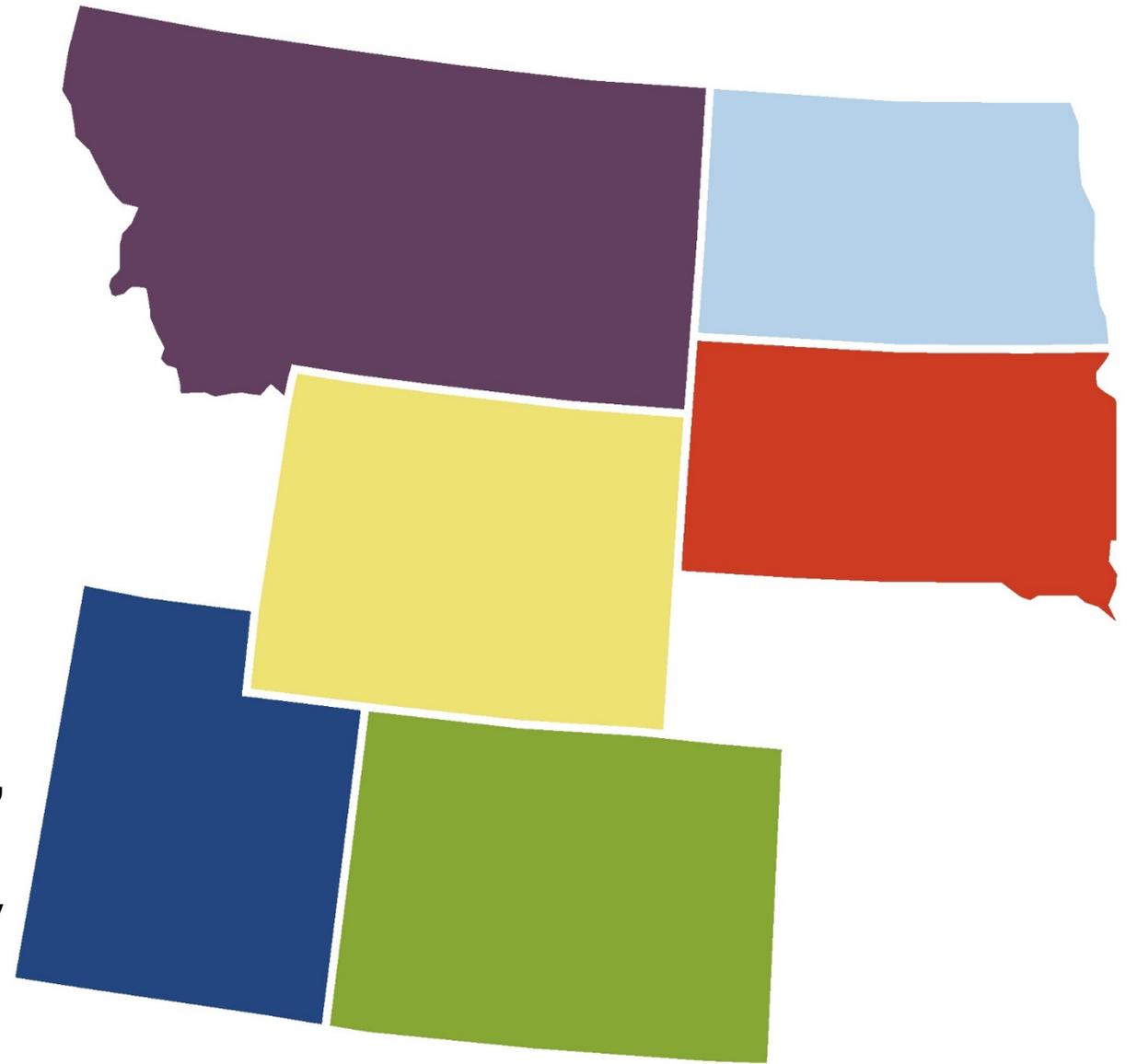
At the time of this presentation, Miriam Delphin-Rittmon, Ph.D. served as acting SAMHSA Assistant Secretary. The opinions expressed herein are the views of Kenneth Flanagan and do not reflect the official position of the Department of Health and Human Services (DHHS), or SAMHSA. No official support or endorsement of DHHS, SAMHSA, for the opinions described in this presentation is intended or should be inferred.

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# The Mountain Plains Mental Health Technology Transfer Center

The Mountain Plains Mental Health Technology Transfer Center (Mountain Plains MHTTC) provides training and technical assistance to individuals who serve persons with mental health concerns throughout Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming).

We belong to the Technology Transfer Center (TTC) Network, a national network of training and technical assistance centers serving the needs of mental health, substance use and prevention providers. The work of the TTC Network is under a cooperative agreement by the Substance Abuse and Mental Health Service Administration (SAMHSA).



The MHTTC Network uses affirming, respectful and recovery-oriented language in all activities. That language is:

STRENGTHS-BASED  
AND HOPEFUL

INCLUSIVE AND  
ACCEPTING OF  
DIVERSE CULTURES,  
GENDERS,  
PERSPECTIVES,  
AND EXPERIENCES

HEALING-CENTERED AND  
TRAUMA-RESPONSIVE

INVITING TO INDIVIDUALS  
PARTICIPATING IN THEIR  
OWN JOURNEYS

PERSON-FIRST AND  
FREE OF LABELS

NON-JUDGMENTAL AND  
AVOIDING ASSUMPTIONS

RESPECTFUL, CLEAR  
AND UNDERSTANDABLE

CONSISTENT WITH  
OUR ACTIONS,  
POLICIES, AND PRODUCTS

*Series Title*  
Addressing  
Rural Co-  
Morbidity of  
Mental Health  
and Social  
Conditions

Individuals living in rural communities face **unique challenges** when attempting to access care for mental health concerns.

The “four A’s” of rural treatment barriers often reference the difficulty of finding services that are available, accessible, affordable, and acceptable care for persons in remote and rural settings.

**Co-morbid mental health and social conditions** increase the complexity of treatment and make delivering evidence-based care challenging for mental health providers of all professions.

The series will review practices that **providers can utilize to support rural populations** presenting with a variety of co-morbid conditions.



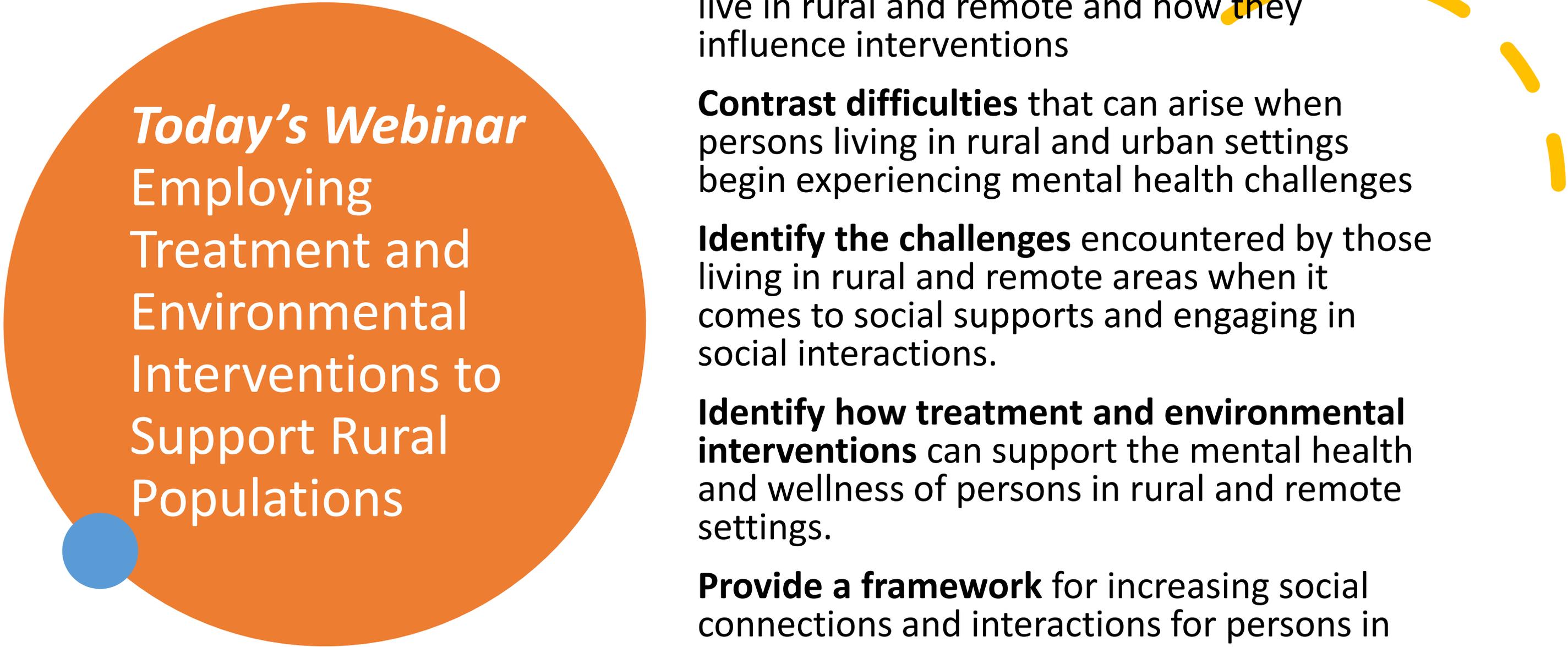
Series  
Topic  
Areas

Employing Treatment and  
Environmental Interventions to  
Support Rural Populations

Supporting Rural Aging Populations

Mental Health Faith Supports in  
Rural Communities





*Today's Webinar*  
Employing  
Treatment and  
Environmental  
Interventions to  
Support Rural  
Populations

**Identify reasons** for individuals to choose to live in rural and remote and how they influence interventions

**Contrast difficulties** that can arise when persons living in rural and urban settings begin experiencing mental health challenges

**Identify the challenges** encountered by those living in rural and remote areas when it comes to social supports and engaging in social interactions.

**Identify how treatment and environmental interventions** can support the mental health and wellness of persons in rural and remote settings.

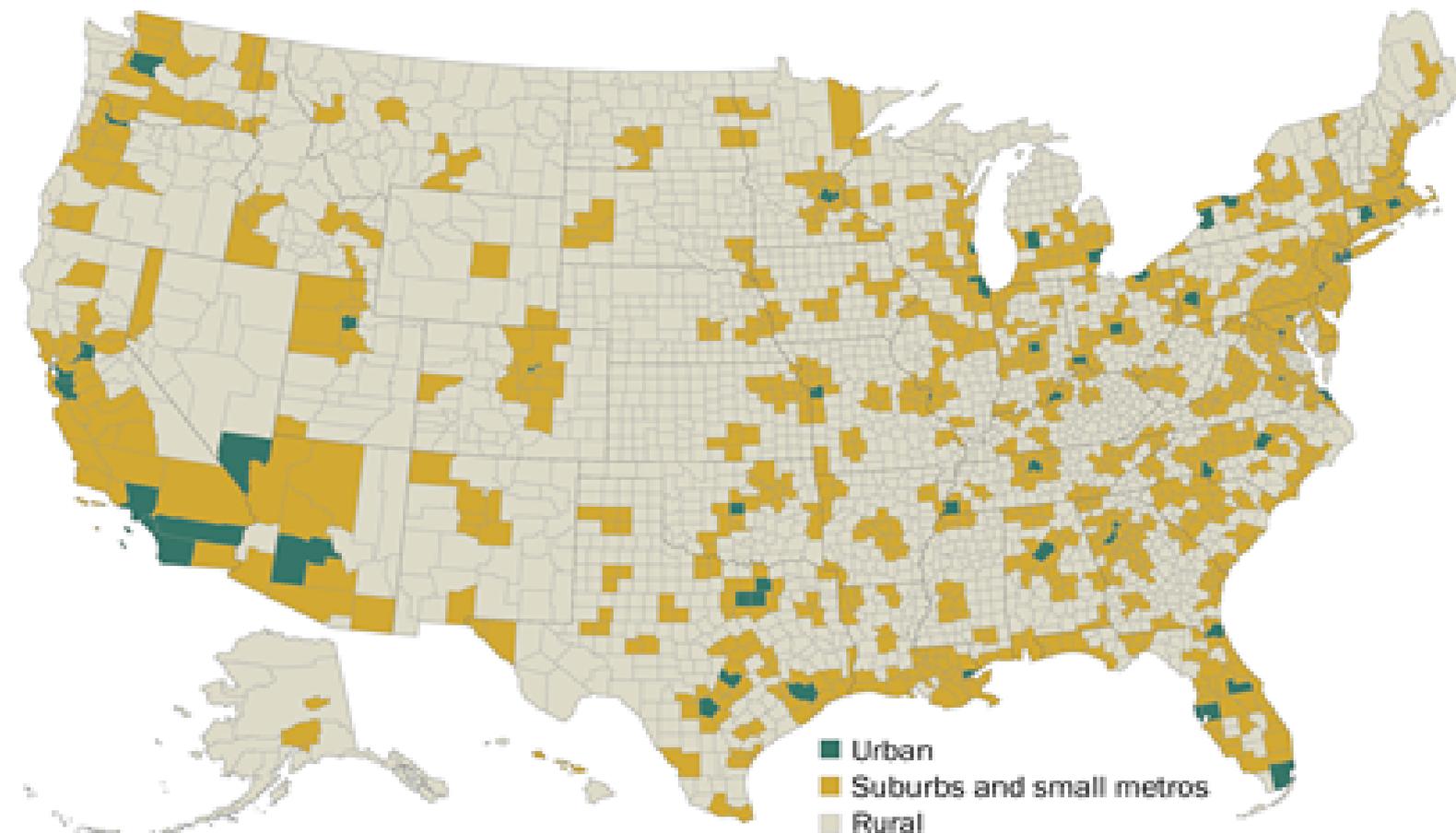
**Provide a framework** for increasing social connections and interactions for persons in rural communities and supporting treatment interventions.

# ***The Rural Context***



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## Majority of U.S. counties are rural, especially in the Midwest



Source: Pew Research Center analysis of National Center for Health Statistics Urban-Rural Classification Scheme for Counties.

"What Unites and Divides Urban, Suburban and Rural Communities"

**PEW RESEARCH CENTER**

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# Reasons for Rural Living

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- lower cost of living
- slower pace of life.
- having access to big, open spaces for recreation.
- **less crowded**
- **more privacy**
- **live near family and friends**
- <https://medlineplus.gov/ruralhealthconcerns.html>



# Challenges of Rural Living

- A disproportionate burden of chronic disease relative to the general public
- **Geographic isolation**
- **Lack of public transportation**
- **Poor infrastructure**
- Low educational attainment
- Low health literacy
- **Poverty and unemployment**
- **A smaller health care workforce and a lack of specialty care**
- **Cultural or social differences, stigma, and norms**

<https://www.ruralhealthinfo.org/toolkits/rural-toolkit/1/rural-issues>



# *Rural-Urban Contrast*



# Are mental disorders more common in urban than rural areas of the United States?

*(Breslau, J., et al (2014))*

- Urban vs. rural residence is commonly cited as a risk factor for depression and other mental disorders, but epidemiological evidence for this relationship in the US is inconclusive
- the prevalence of mental disorders was not higher in the most urban compared with the most rural areas

# Rurality and Risk of Suicide Attempts and Death by Suicide among People Living in Four English-speaking High-income Countries: A Systematic Review and Meta-analysis

The Canadian Journal of Psychiatry

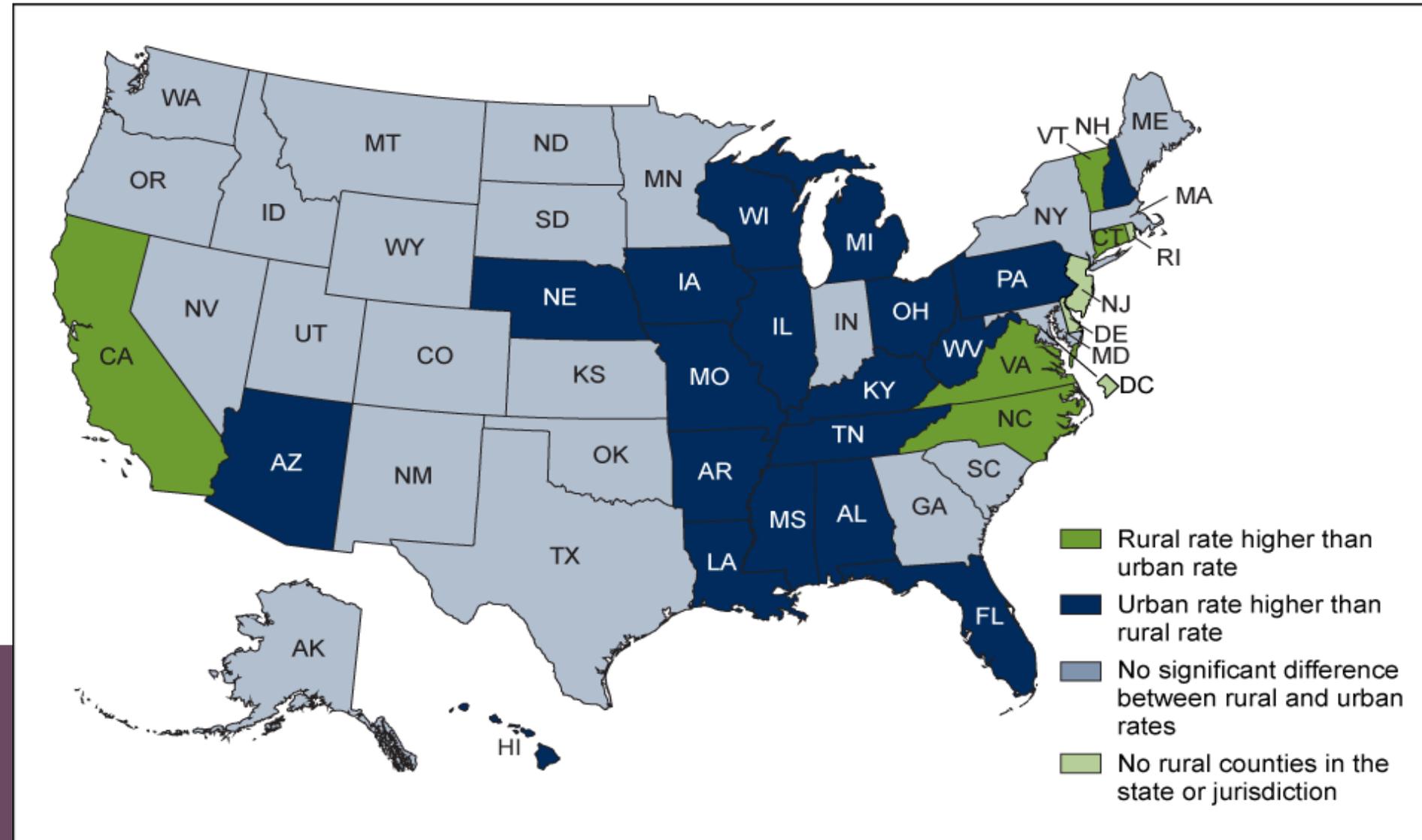
[Rebecca Barry](#), MS, [Jürgen Rehm](#), PhD, [Claire de Oliveira](#), PhD, Paul Gozdyra, MA, Paul Kurdyak, MD., PhD.

First Published January 29, 2020

<https://doi.org/10.1177/0706743720902655>

# Urban-rural differences 2019

Figure 2. Urban-rural differences in age-adjusted rates of drug overdose deaths, by jurisdiction of residence: 2019



NOTES: Drug overdose deaths were identified using *International Classification of Diseases, 10th Revision* underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. Age-adjusted death rates were calculated using the direct method and the 2000 U.S. standard population. Decedent's county of residence was classified as urban or rural based on the 2013 NCHS Urban–Rural Classification Scheme for Counties. Access data table for Figure 2 at:

<https://www.cdc.gov/nchs/data/databriefs/db403-tables-508.pdf#2>.

SOURCE: National Center for Health Statistics, National Vital Statistics System, Mortality.

# Overdose Deaths

- From 1999 through 2019, the rate of drug overdose deaths increased from 6.4 per 100,000 to 22.0 in urban counties and from 4.0 to 19.6 in rural counties.
- In 2019, rates in rural counties were higher than in urban counties in California, Connecticut, North Carolina, Vermont, and Virginia.
- Rates of drug overdose deaths involving natural and semisynthetic opioids (drugs such as oxycodone, hydrocodone, and codeine) were higher in rural than in urban counties from 2004 through 2017 but were similar in 2018 and 2019.
- In 2019, the rate of drug overdose deaths involving psychostimulants with abuse potential (drugs such as methamphetamine) was 1.4 times higher in rural counties (6.7 per 100,000) than in urban counties (4.8)
- (NCHS Data Brief ■ No. 403 ■ March 2021) <https://www.cdc.gov/nchs/products/databriefs/db403.htm>

### Rural and Urban Substance Use Rates

(ages 12 and older, unless noted)

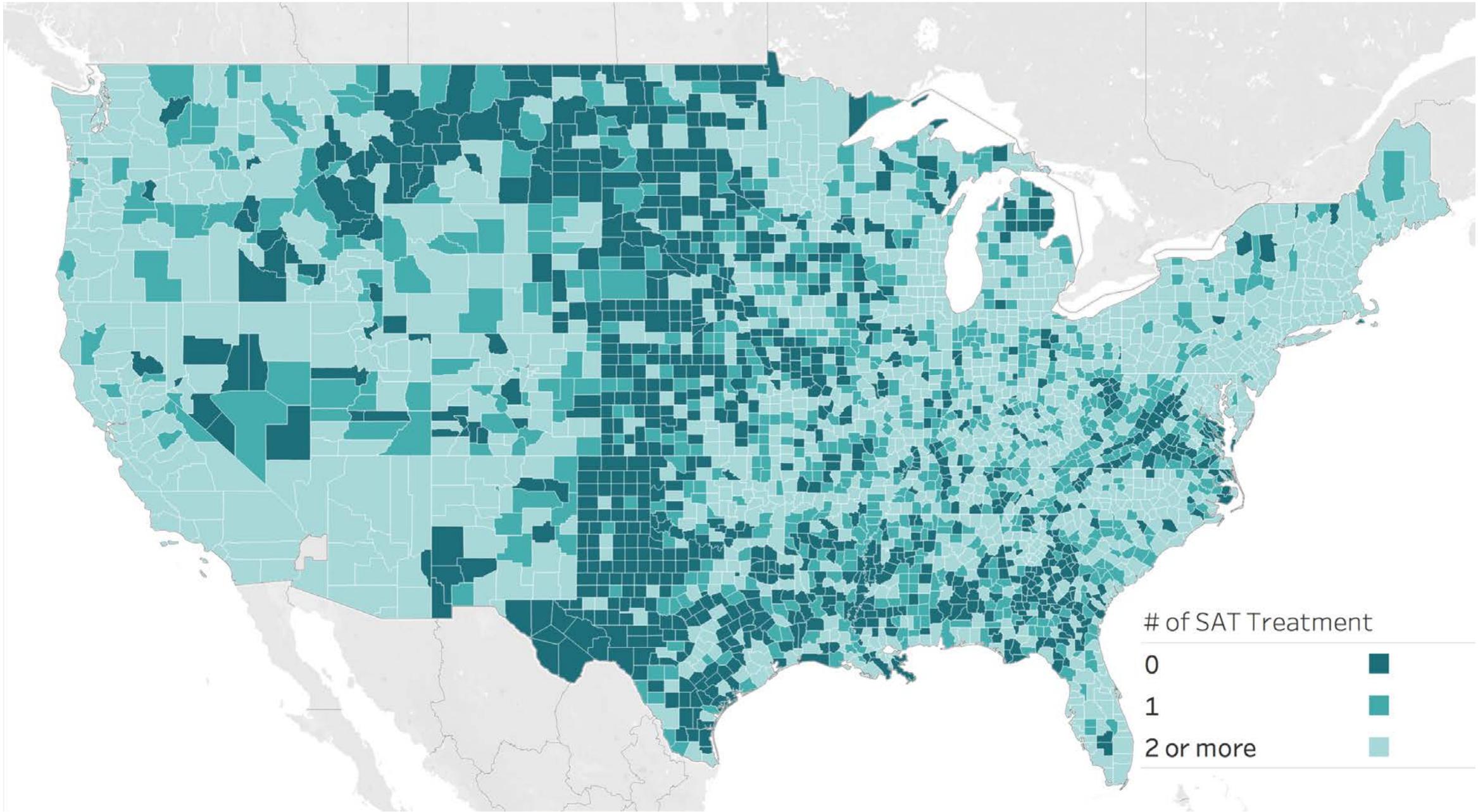
	Non-metro	Small metro	Large metro
Alcohol use by youths aged 12-20	32.7%	34.8%	33.0%
Binge alcohol use by youths aged 12 to 17 (in the past month)	5.4%	4.7%	4.8%
Cigarette smoking	25.2%	22.0%	18.0%
Smokeless tobacco use	7.7%	5.1%	2.8%
Marijuana	14.2%	16.9%	18.7%
Illicit drug use	16.6%	20.5%	22.0%
Misuse of Opioids	3.1%	4.2%	3.5%
Cocaine	1.3%	1.8%	2.2%
Hallucinogens	1.7%	2.1%	2.4%
Methamphetamine	1.2%	0.7%	0.6%

Source: Substance Abuse and Mental Health Services Administration (SAMHSA), [Results from the 2019 National Survey on Drug Use and Health: Detailed Tables](#).

# Barriers to Care

- Desire to Receive Care
- Privacy
- Workforce Shortage
- Transportation
- Affordability

<https://www.ruralhealthinfo.org/toolkits/rural-toolkit/1/rural-issues>



Counties without treatment for SUDs

Source: National Survey of Substance Abuse Treatment Facilities (N-SSATS), 2019. Note: Types of treatment include substance abuse treatment, detoxification, transitional housing or halfway houses, prescribing of buprenorphine and/or naltrexone, or Substance Abuse and Mental Health Services Administration-certified outpatient treatment programs.



# Urban Issues

- Pre-existing risk factors
- Social factors
- Environmental factors

<https://www.urbandesignmentalhealth.com/how-the-city-affects-mental-health.html>



# Co-morbidities & Rurality

# Definition

*Comorbidity is defined as the co-occurrence of **more than one disorder in the same individual**. In its broadest sense, comorbidity can include the co-occurrence of **medical and psychiatric disorders**.*

*(William M. Klykylo, in Encyclopedia of Psychotherapy, 2002)*

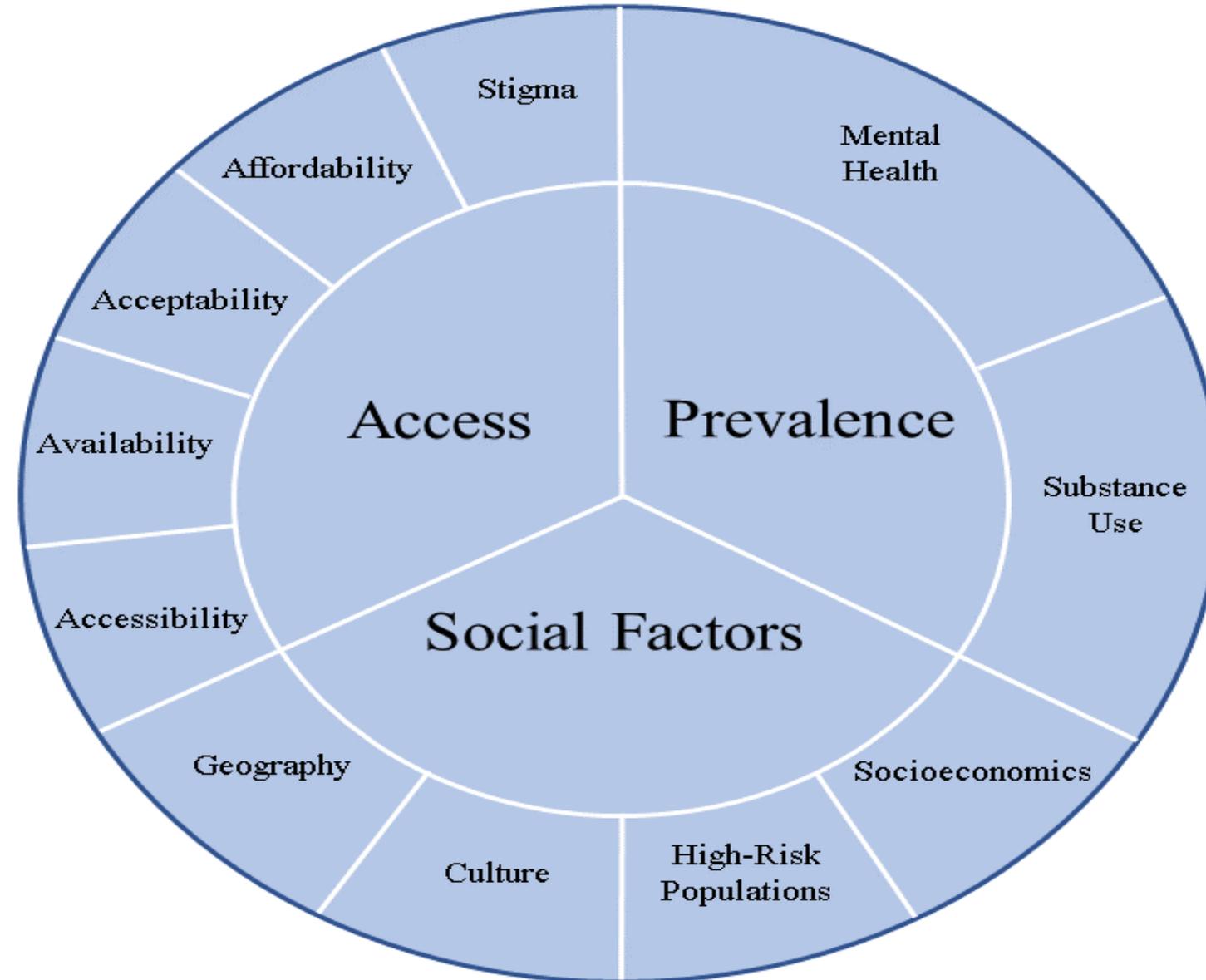
# Social Comorbidities

***Social and/or behavioral phenomena that often accompany or are antecedents and co-occurring phenomena***

*(Hall & Evans, 2020)*

# Context

*(Behavioral Healthcare in Rural America: Challenges & Opportunities)*



# Additional Social Co-morbidities

- Criminal Justice – Law Enforcement
- Educational System

Racism – Historical Trauma



# The Four A's



# Affordability

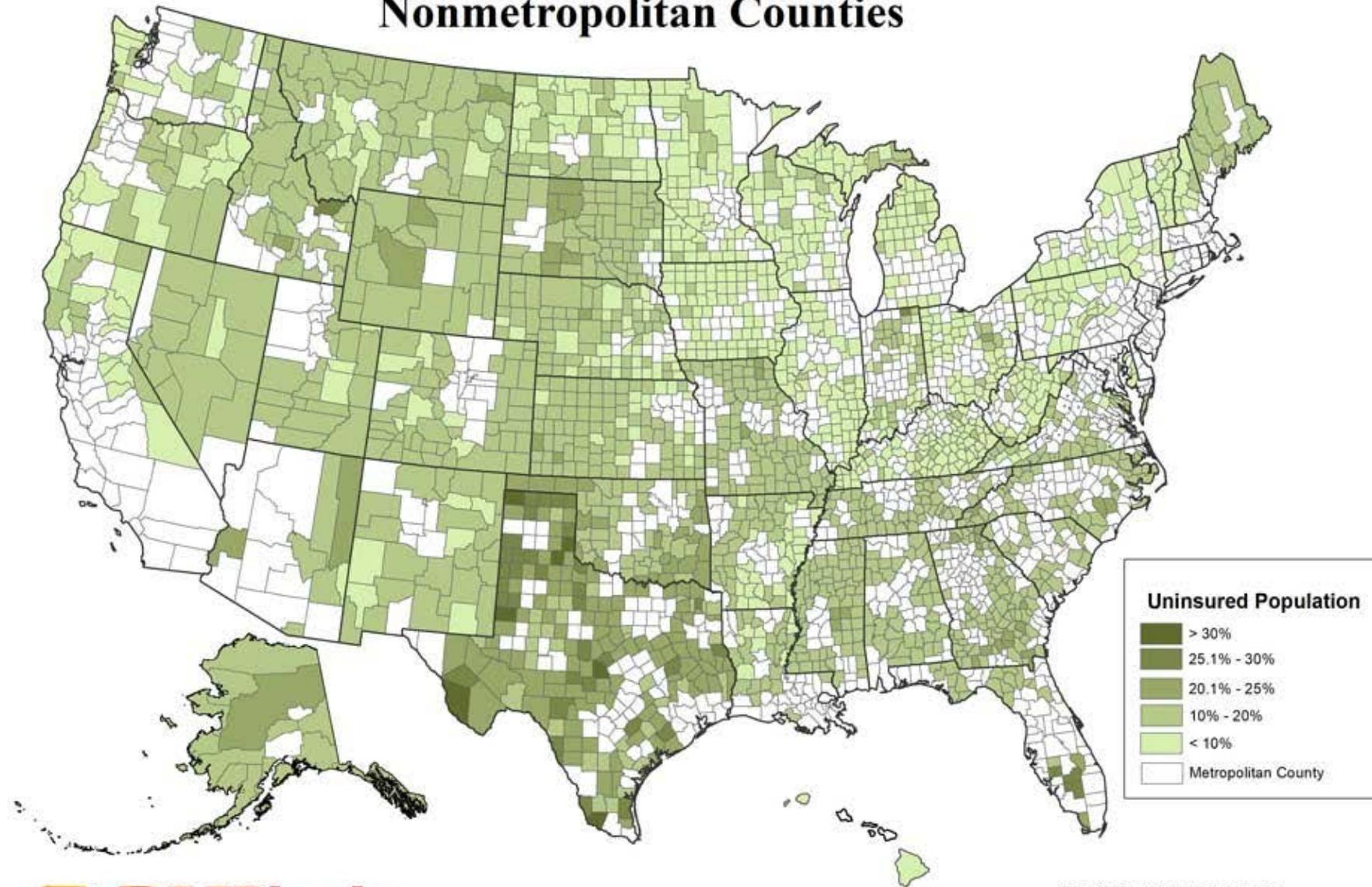
# Affordability

Rural areas have a higher proportion of families living:

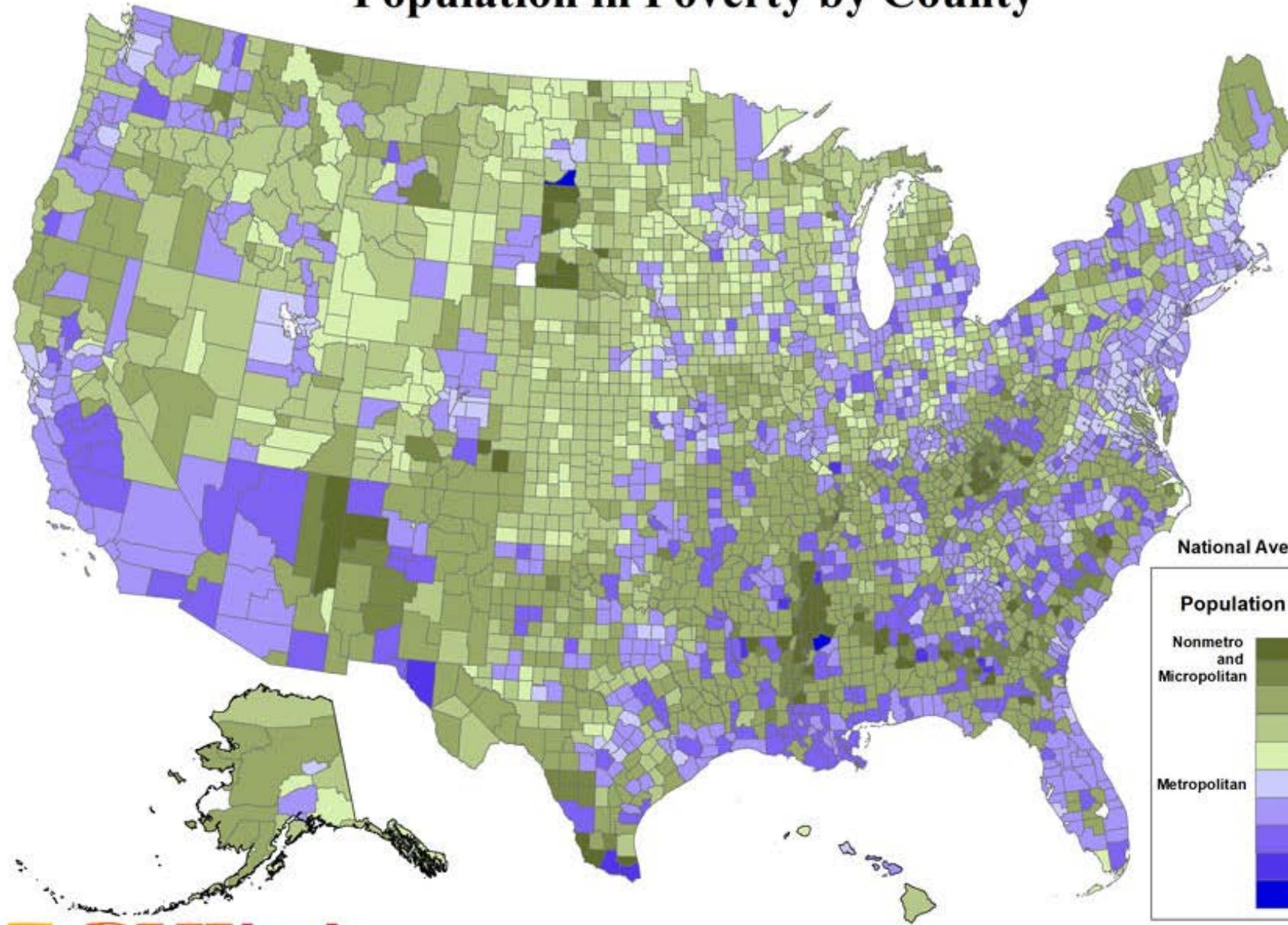
- below the poverty level
- more unemployment
- a greater percentage of residents who have public insurance or are uninsured than do urban areas

(Allen J, Balfour R, Bell R, Marmot M, 2014; Newkirk V, Damico A., 2014)

## Uninsured Population in Nonmetropolitan Counties



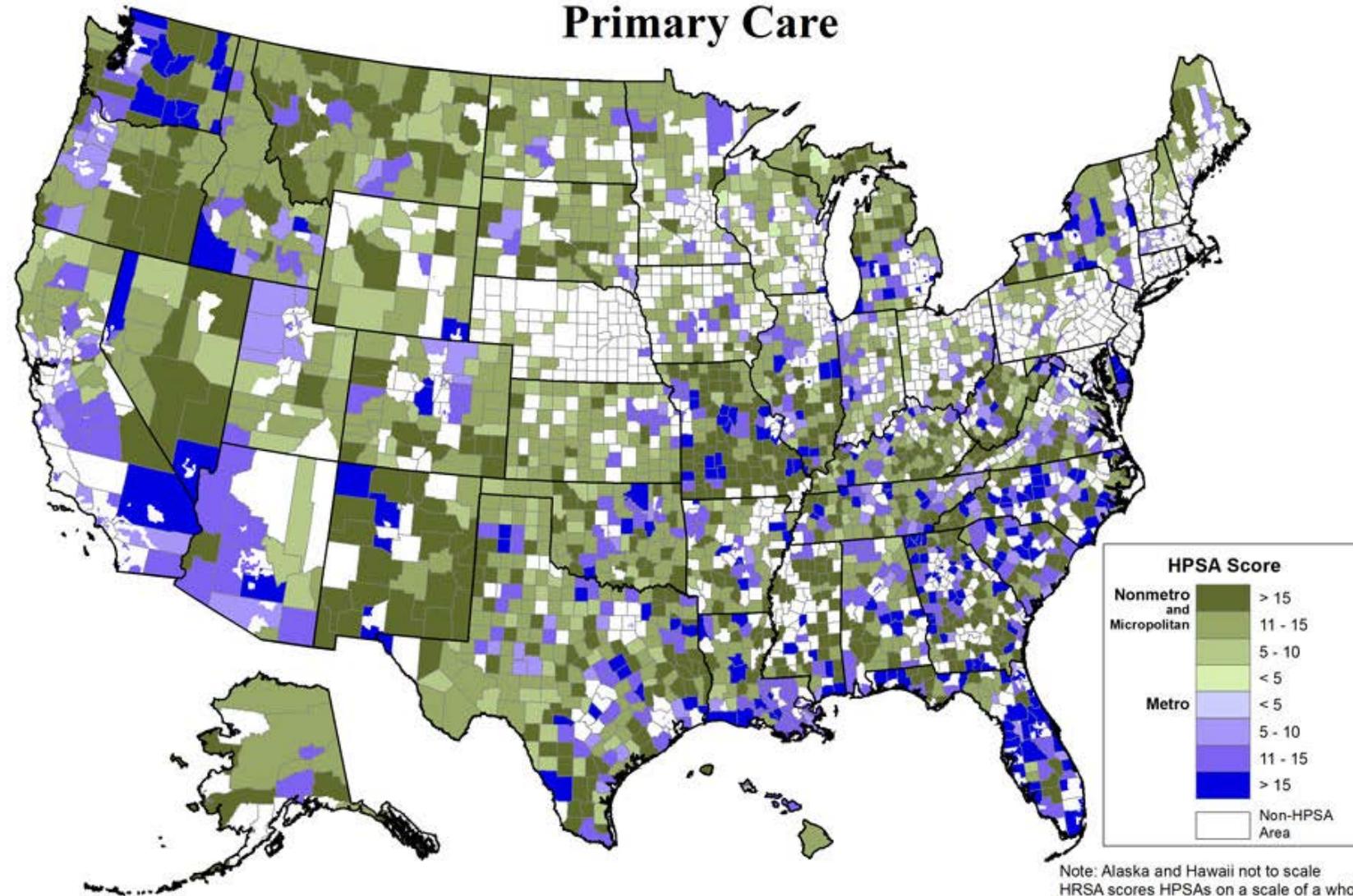
# Population in Poverty by County





# Accessibility

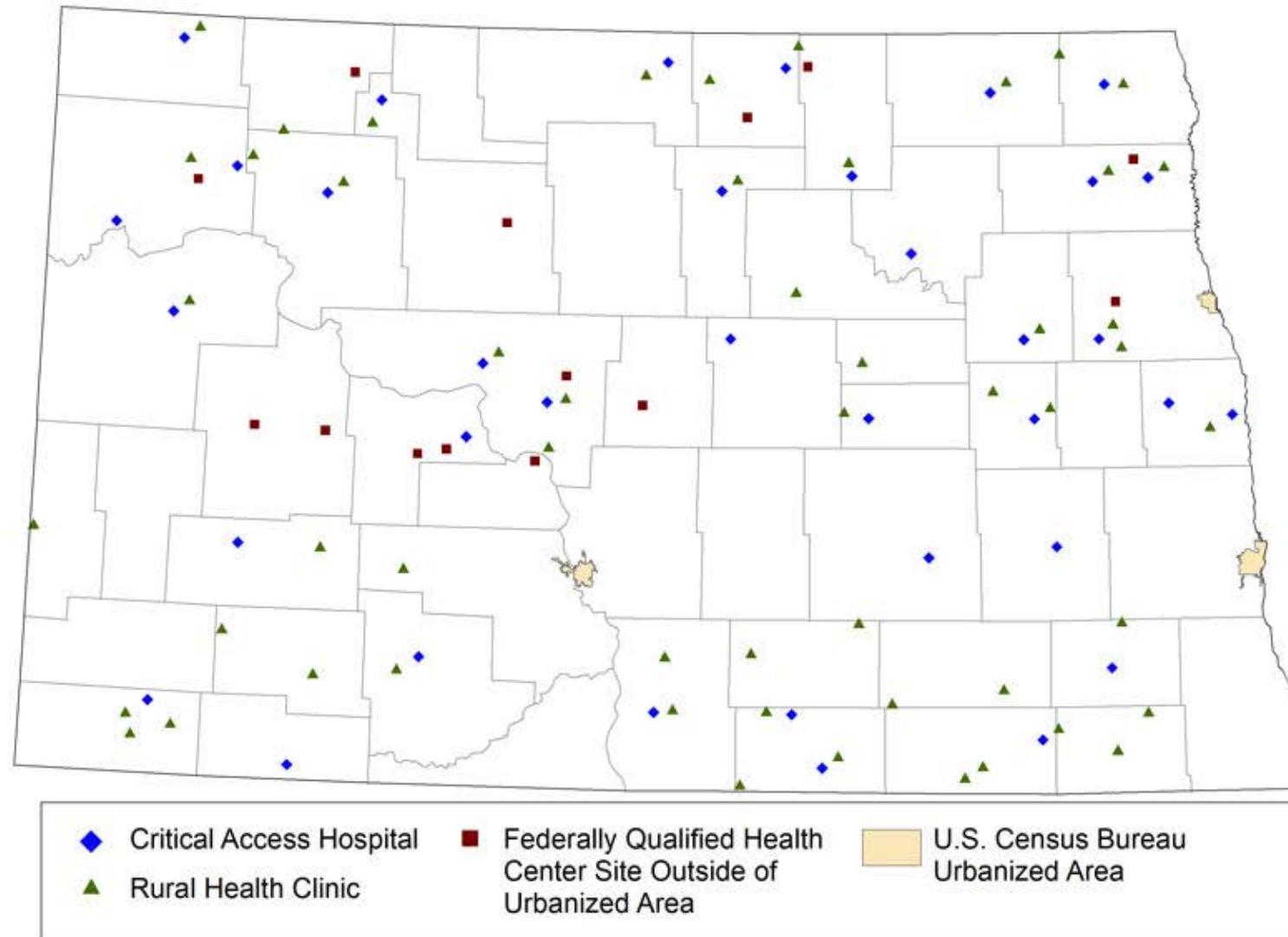
## Health Professional Shortage Areas Primary Care



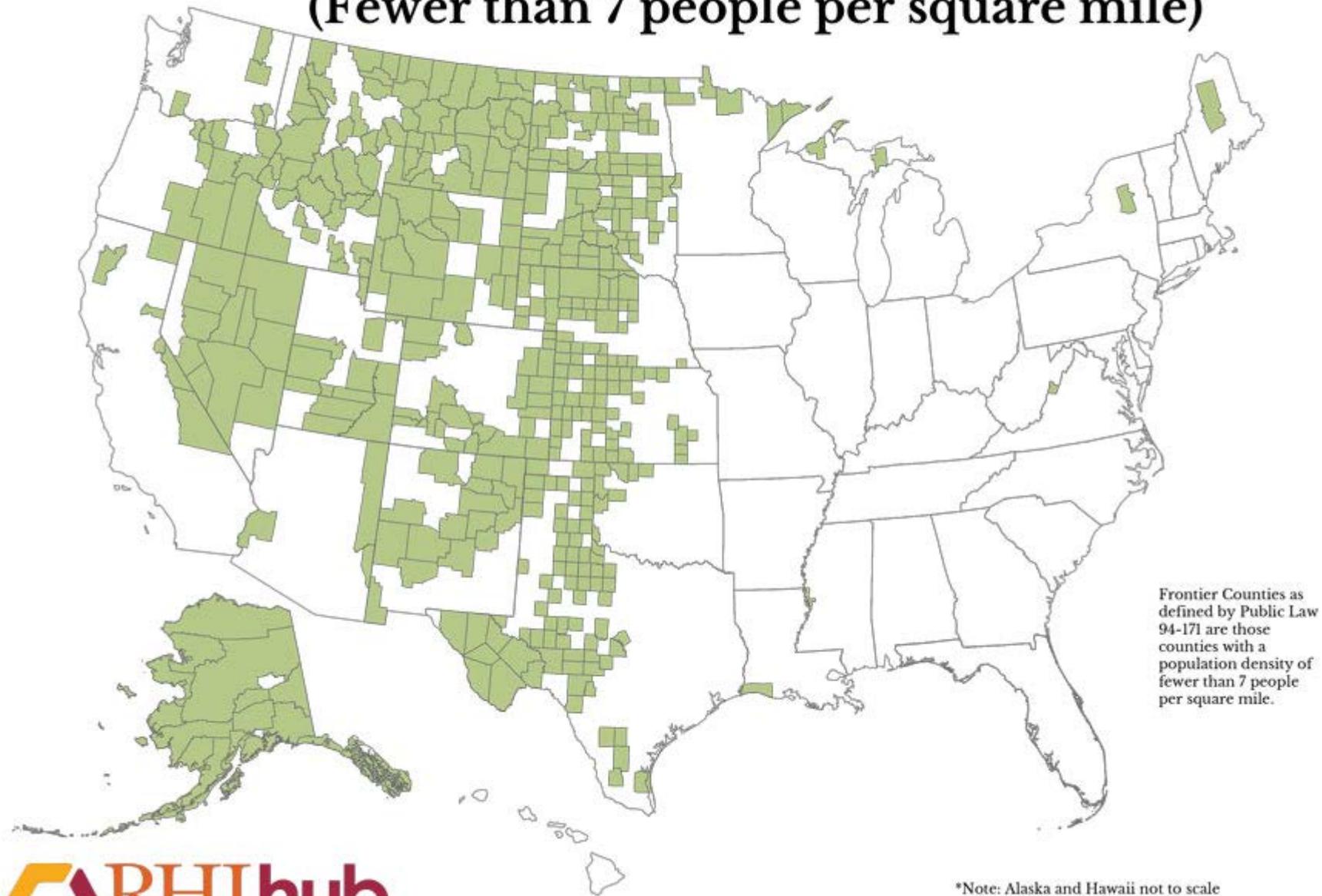
Note: Alaska and Hawaii not to scale  
HPSA scores HPSAs on a scale of a whole number (0-25 for primary care), with higher scores indicating greater need

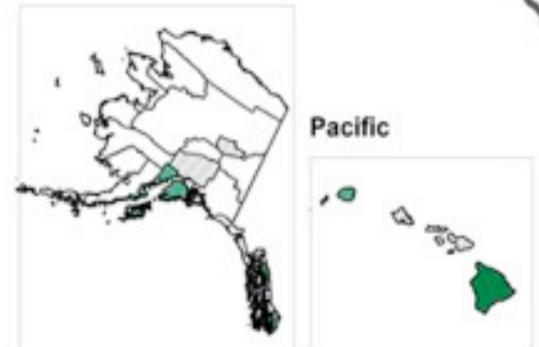
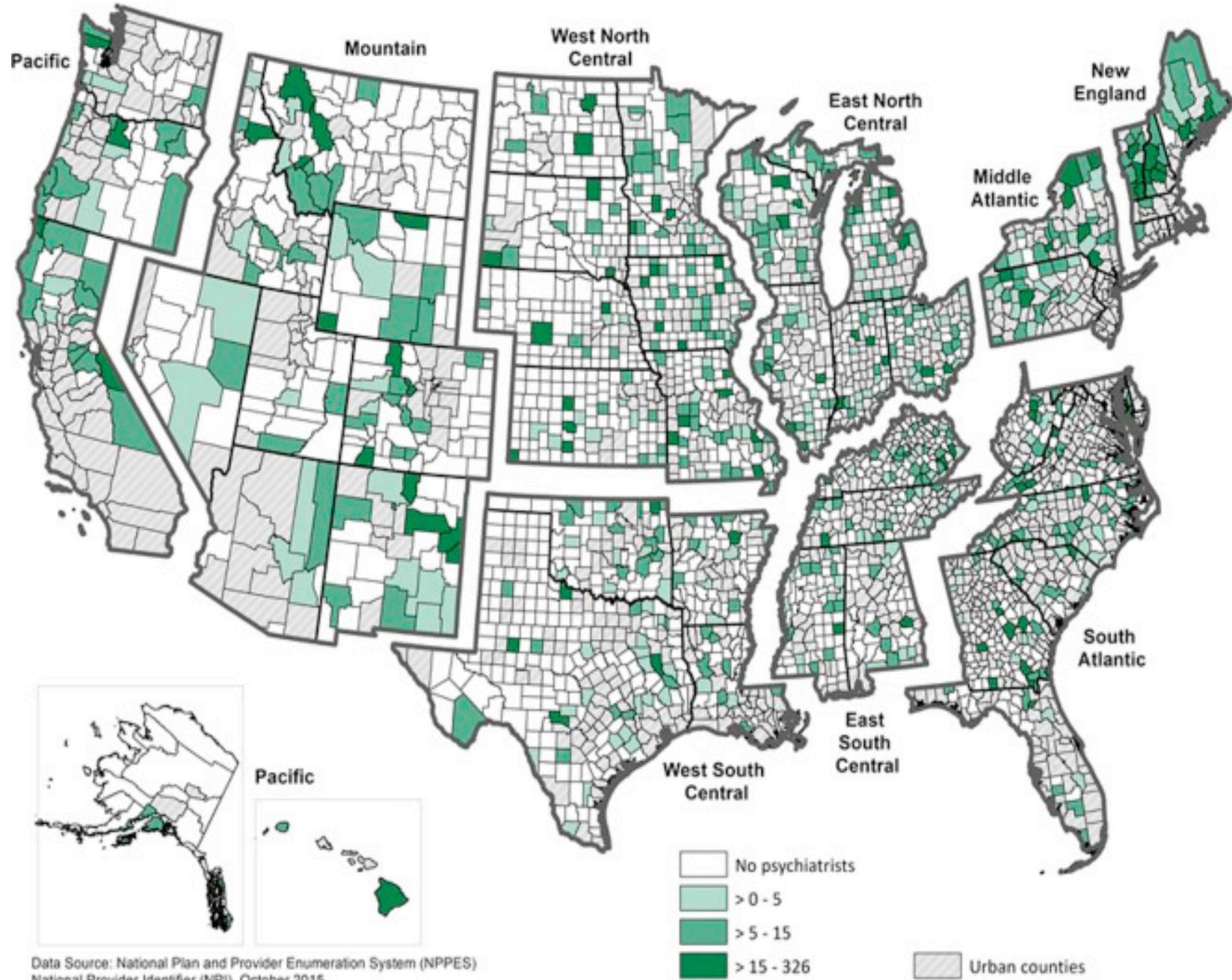
Source(s): data.HRSA.gov, U.S. Department of Health and Human Services, July 2021

## Selected Rural Healthcare Facilities in North Dakota



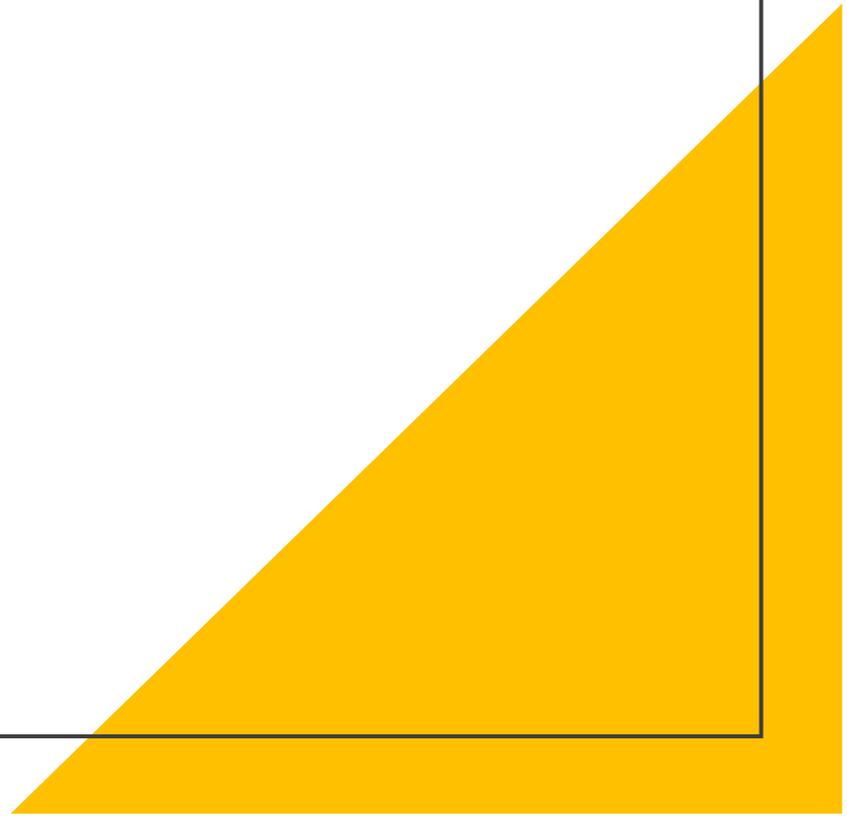
# Frontier Counties (Fewer than 7 people per square mile)

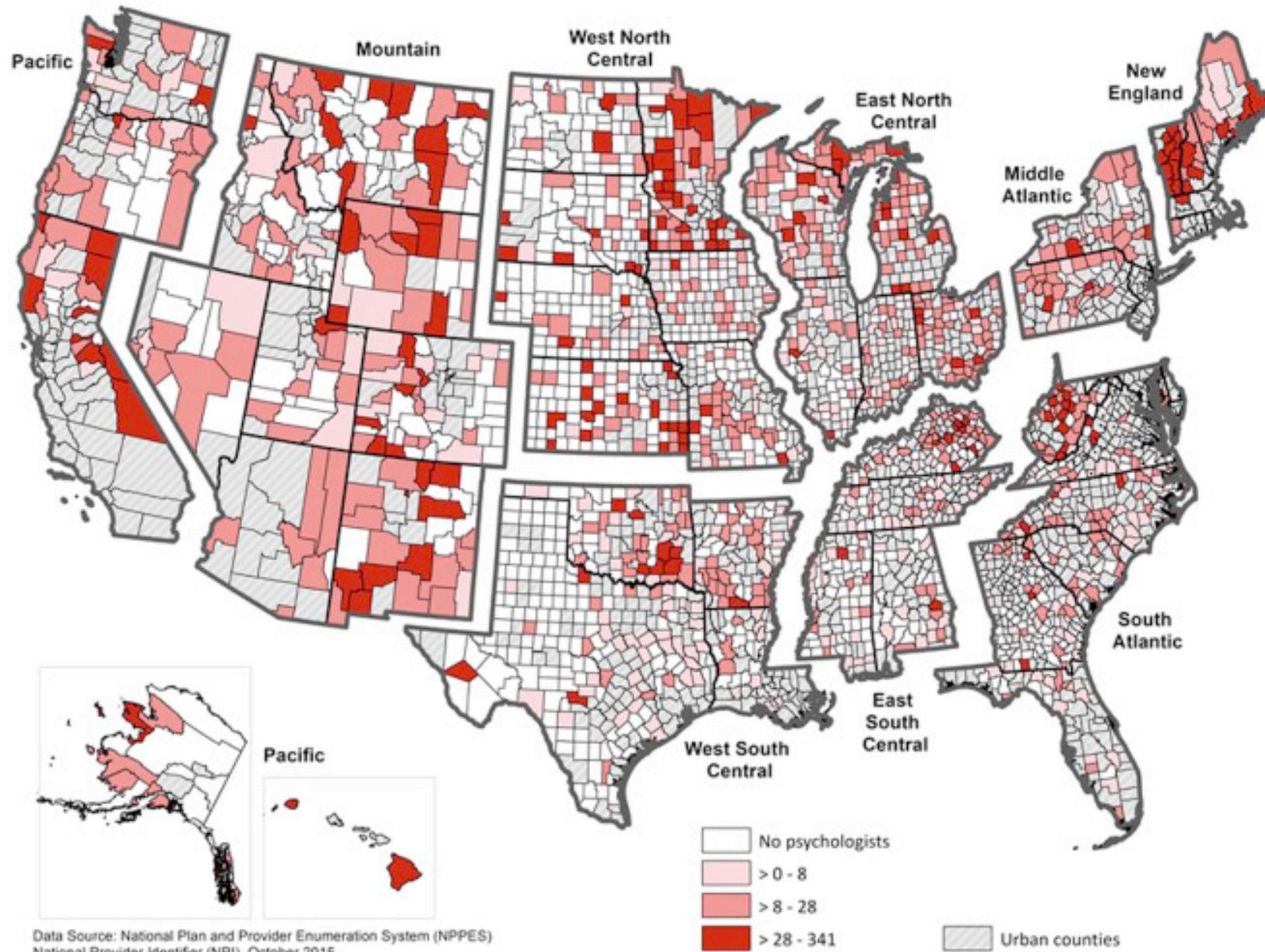




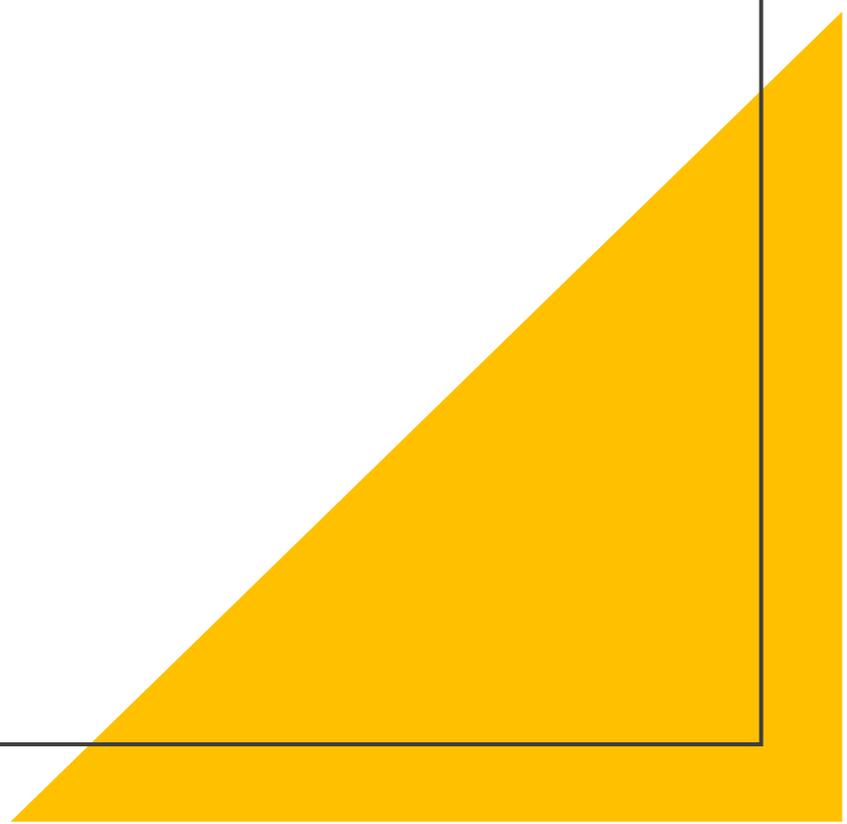
Data Source: National Plan and Provider Enumeration System (NPPES)  
 National Provider Identifier (NPI), October 2015  
 Map Date: July 2017

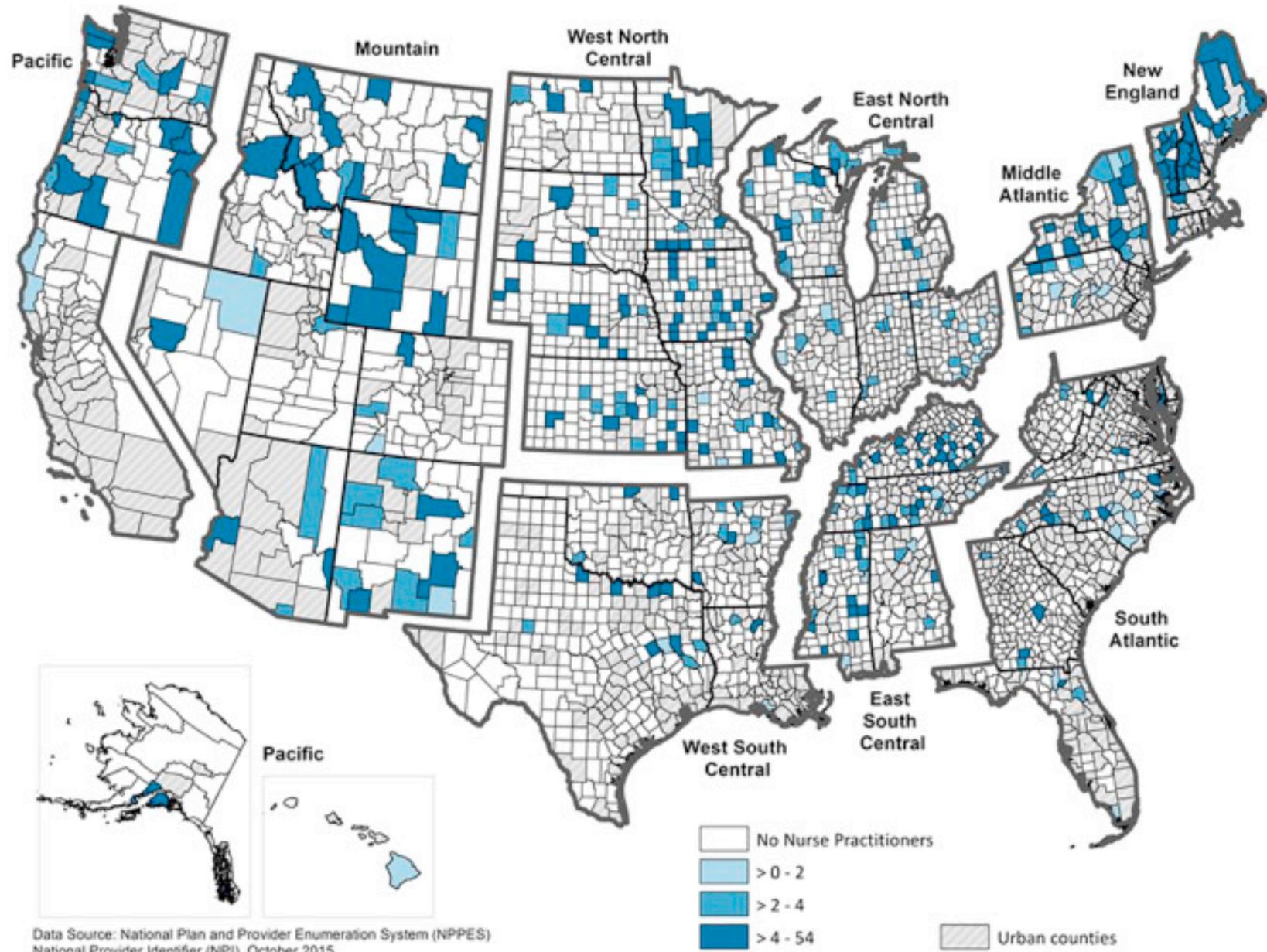
- No psychiatrists
- > 0 - 5
- > 5 - 15
- > 15 - 326
- Urban counties



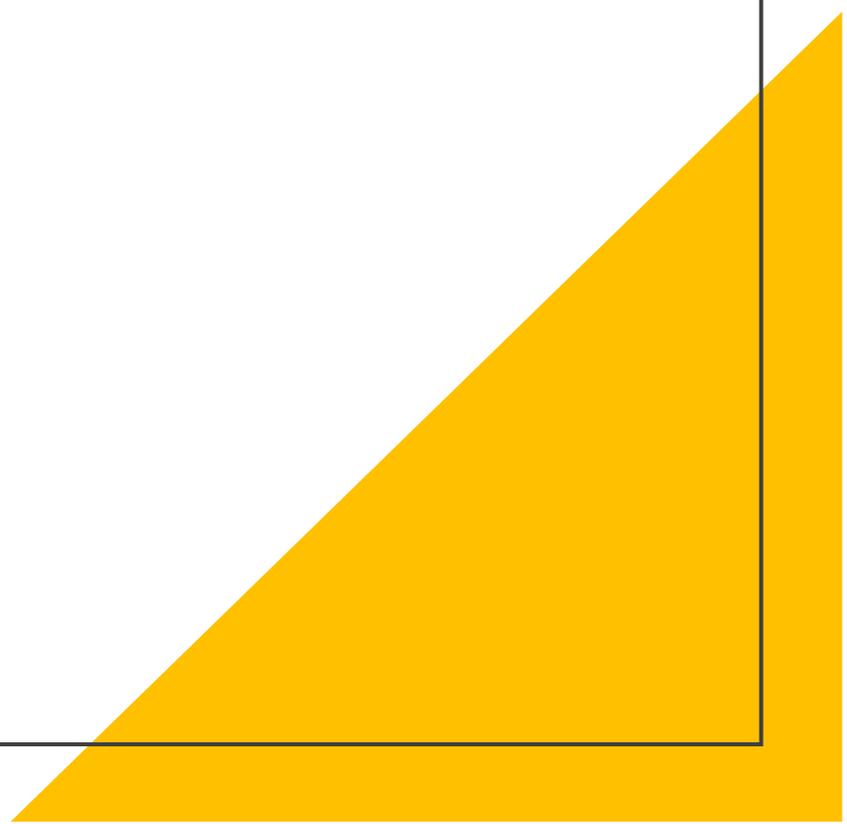


Data Source: National Plan and Provider Enumeration System (NPPES)  
 National Provider Identifier (NPI), October 2015  
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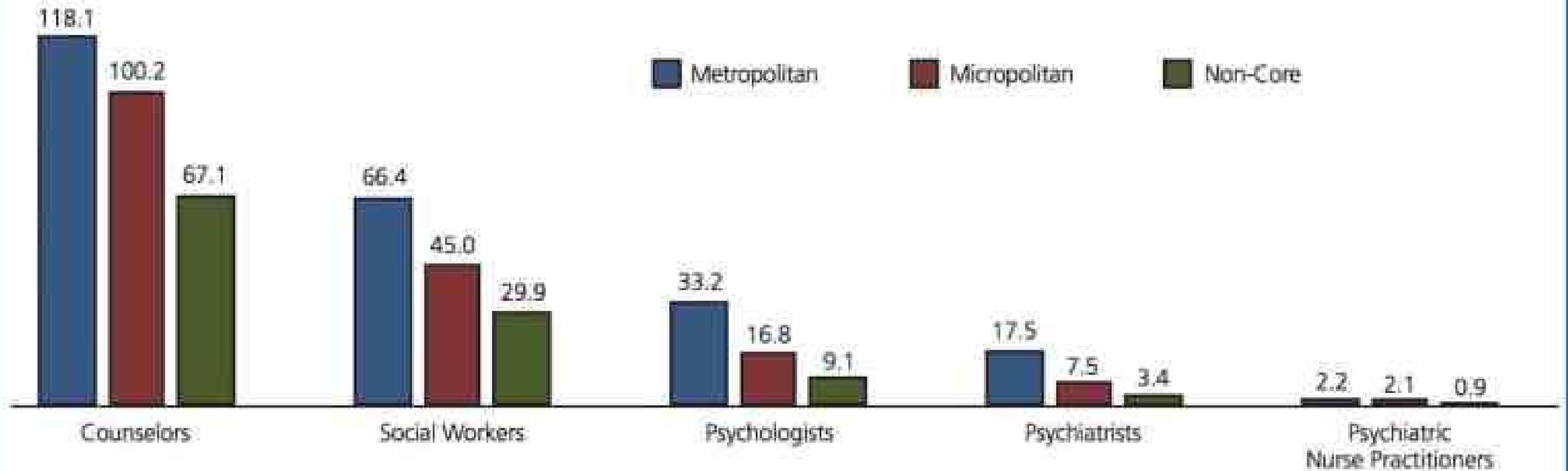




Data Source: National Plan and Provider Enumeration System (NPPES)  
 National Provider Identifier (NPI), October 2015  
 Map Date: July 2017



## Behavioral Health Providers per 100,000 Population in U.S. Counties by Urban Influence Category.



Data Sources: National Plan and Provider Enumeration System (NPPES) National Provider Identifier (NPI) data; October 2015, the U.S. Department of Agriculture Economic Research Service (ERS) Urban Influence Codes, 2013, and the 2014 Claritas U.S. population data.



# Availability

# Availability

- “There when needed”
- A continuum of care not available

# Treatment Intervention Guidelines

University of Sydney, Matilda  
Center

- *Sequential treatment*

The client is treated for one condition first which is followed by treatment for the other condition. With this model, the AOD use is typically addressed first then the mental health problem, but in some cases, it may be whichever disorder is considered to be primary (i.e., which came first).

- *Parallel treatment*

Both the client's care provider use, and mental health condition are treated simultaneously but the treatments are provided independent of each other. Treatment for AOD use is provided by one treatment provider or service, while the mental health condition is treated by another provider or service.

- *Integrated treatment*

Both the client's care provider use, and mental health condition are treated simultaneously by the same treatment provider or service. This approach allows for the exploration of the relationship between the person's AOD use and his/her mental health condition.

- *Stepped care*

Stepped care means the flexible matching of treatment intensity with case severity. The least intensive and expensive treatment is initially used, and a more intensive or different form of treatment is offered only when the less intensive form has been insufficient.

<https://comorbidityguidelines.org.au/about-these-guidelines>



Acceptability

# Acceptability

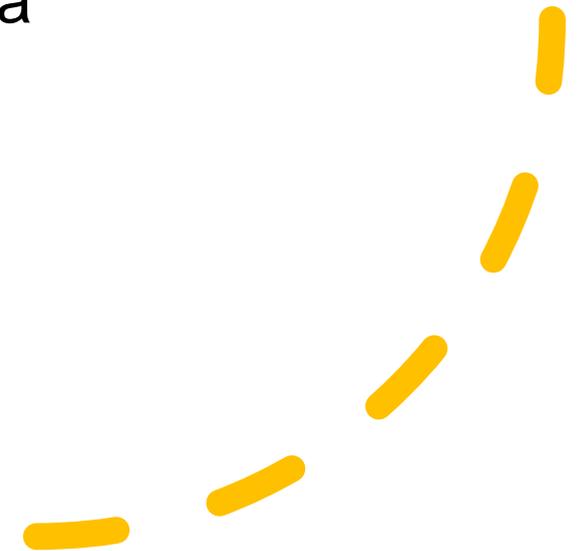
- Concerns about privacy and stigma
- Lack of choices and specialties
- Timeliness of services
- Quality of services



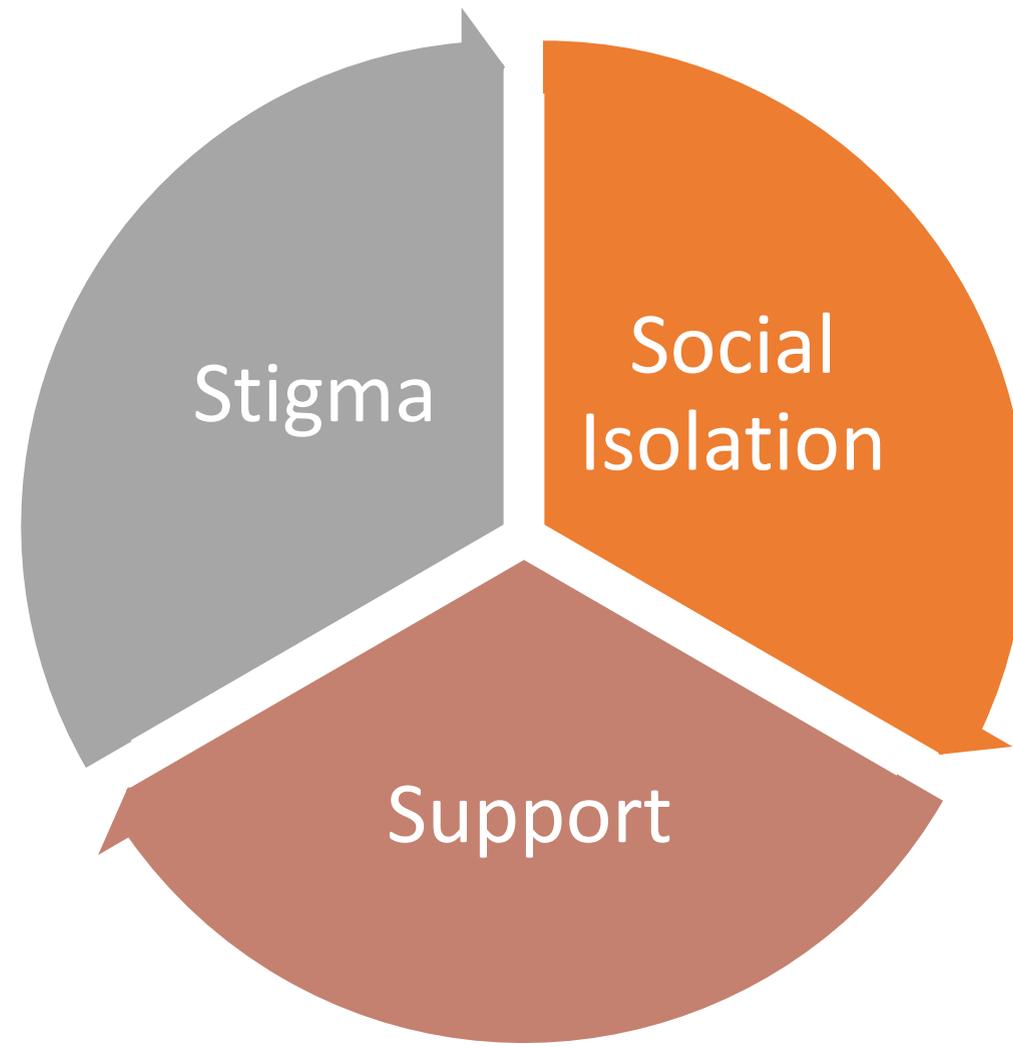
# Framework

# Community Stress

- Caused by events/circumstances that impacts members of a community leading to stress (Hobfoll et al., 1995)
- Can be acute or chronic
- Community stress can impact mental health functioning of community members and impact ability to respond to the stressors (Beehler 2021)
- Need to be sensitive to community trauma



# *Creating Communities that Care*



# Stigma

## *Impact*

- Stigma can affect many aspects of people's lives
- Self-stigma is the process in which people turn stereotypes towards themselves
- How the general public perceive people with mental health problems depends on their diagnosis
- Stigma can be a barrier to seeking early treatment, cause relapse and hinder recovery

Parle, S. (2012)

<https://cdn.ps.emap.com/wp-content/uploads/sites/3/2012/07/120710-How-does-stigma-affect-people-with-mental-illness.pdf>

## Levels of Stigma

- Public stigma
- Self-stigma
- Institutional

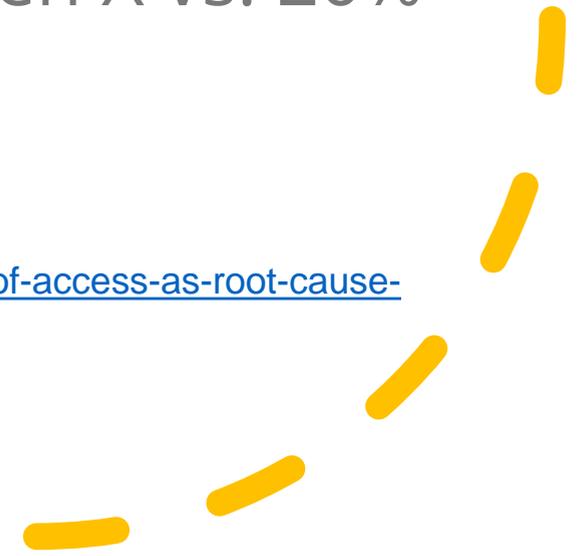
<https://www.psychiatry.org/patients-families/stigma-and-discrimination>



# Stigma

“Nearly one-third of Americans, or 31%, have worried about others judging them when they told them they have sought mental health services, and over a fifth of the population, or 21%, have even lied to avoid telling people they were seeking mental health services. This stigma is particularly true for younger Americans, who are more likely to have worried about others judging them when they say they have sought mental health services (i.e. 49% Gen Z vs. 40% Millennials vs. 30% Gen X vs. 20% Boomers).”

<https://www.thenationalcouncil.org/press-releases/new-study-reveals-lack-of-access-as-root-cause-for-mental-health-crisis-in-america/>



# Stigma

## *Strategies*

- Community education- Mental Health First Aid, Keepin' It Real, Helping Kid's Prosper
  - Promote the concept of emotional wellness
  - Highlight impact of the pandemic
- 
- A decorative graphic consisting of several short, thick yellow dashes arranged in a curved, upward-sloping path in the bottom right corner of the slide.

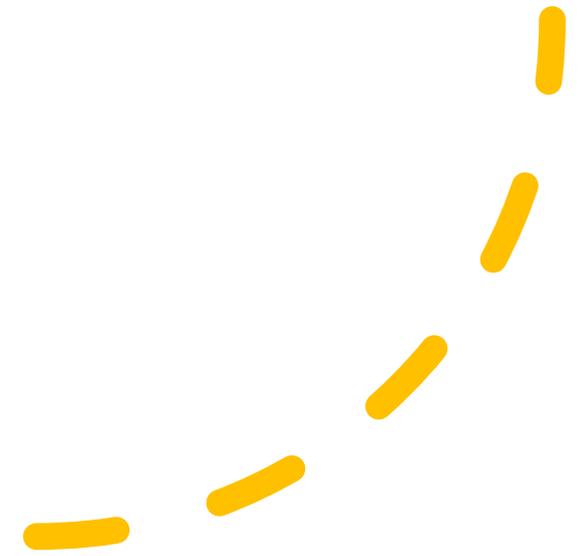
# Social Isolation

## *Impact*

- Increased level of depression
- Suicide risk
- Decreased immunity
- Increased cardiovascular disease & mortality
- Cognitive impairment
- Overall disconnection from life

Pietrabissa, G., & Simpson, S. G. (2020)

- Community isolation



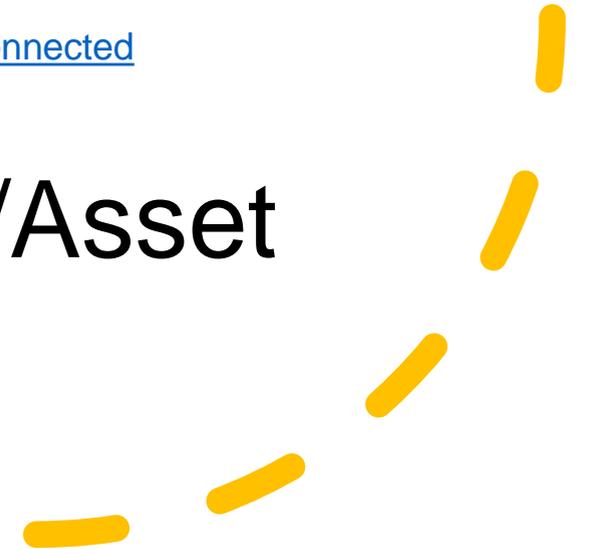
# Social Isolation

## ***Strategies***

- Find an enjoyable activity
- Schedule connection time
- Employ communication technology
- Join or organize social clubs and activities
- Have community navigators

<http://www.nia.nih.gov/health/loneliness-and-social-isolation-tips-staying-connected>

- Community Assessment/Asset Assessment



# Support

## *Impact*

- Similar effects as social isolation



# Support

## ***Strategies***

- Advocacy
- Community Organizing
- Entrepreneurship Orientation



# Resources

- Rural Mental Health & Farm Stress MPMHTTC  
<https://mhttcnetwork.org/centers/mountain-plains-mhttc/rural-mental-health-farm-stress>
- Promoting Positive Mental Health in Rural Schools  
<https://mhttcnetwork.org/centers/mountain-plains-mhttc/school-based-mental-health-program>
- Social Isolation <https://grandchallengesforsocialwork.org/wp-content/uploads/2015/12/WP7-with-cover.pdf>
- Addressing Stigma and Substance Use Disorders  
<https://healtheknowledge.org/course/index.php?categoryid=53>

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# Upcoming Webinars

*Next Tuesday October 12th*

- Supporting Rural Aging Populations

*Tuesday October 19<sup>th</sup>*

- Mental Health Faith Supports in Rural Communities

# Stay Connected



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