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Results from the South Dakota Health Survey

Overview

- Why the interest in South Dakota?
- Survey design
- Key findings
 - Statewide
 - County
 - Special Populations
 - Interviews with South Dakotans

Why the South Dakota Health Survey?

- SD and other rural states face many challenges in meeting healthcare needs of rural and underserved communities
- Mental illness and substance use conditions are leading causes of disability in the U.S.
- Surveillance of these conditions is limited
- Data are needed to plan and implement effective services

Project Goals:

- Assess prevalence of health conditions, use of and access to care, and key barriers to access
- Gather high quality state wide data on mental health and substance use needs in South Dakota
- Use data to inform decision-making and service delivery models

Study Design

- Health needs assessment survey
 - Domains: Prevalence of health conditions, Access to care, Utilization of care, Health insurance & medical costs, Health behaviors & lifestyle, Adverse childhood experiences, Social support, Demographics
- Phase 1: Mail and phone data collection
 - Representative stratified random sample of 17,000 households with oversampling in rural counties and American Indian communities
 - Mail survey with phone follow-up
- Phase 2: In-person data collection
 - Non-respondent households in tribal communities
 - Homeless individuals in Rapid City and Sioux Falls
 - Immigrant and refugee individuals in Sioux Falls
 - Housing insecure individuals (i.e. “couch surfers” and “doubled-up” families identified through household surveys)

Survey Collection

- Total household sample: 16,001
- Total household responses: 7,686
 - Mail: 6,620
 - Phone: 312
 - Online: 314
 - In-person: 440
- Total Response rate: 48%
- Supplemental samples
 - Immigrant/refugee: 100
 - Homeless: 301
 - Housing insecure: 117
- Total Surveys Completed: 8,204

Results: Participant Characteristics

Characteristic	SD Health Survey (Weighted %)	SD Census Population
Age		
18-34	30.3%	30.8%
35-64	50.6%	49.6%
65 and older	19.1%	19.6%
Gender		
Male	42.6%	49.8%
Female	57.4%	50.2%
Race/Ethnicity		
Hispanic or Latino	1.0%	3.2%
Non-Hispanic White	88.7%	83.4%
American Indian	9.3%	10.5%
Other	1.0%	4.0%
Geography		
Urban	44.4%	39.1%
Rural	33.3%	34.2%
Isolated	17.6%	26.6%
Reservation	4.7%	N/A

Results: Key Findings Overview

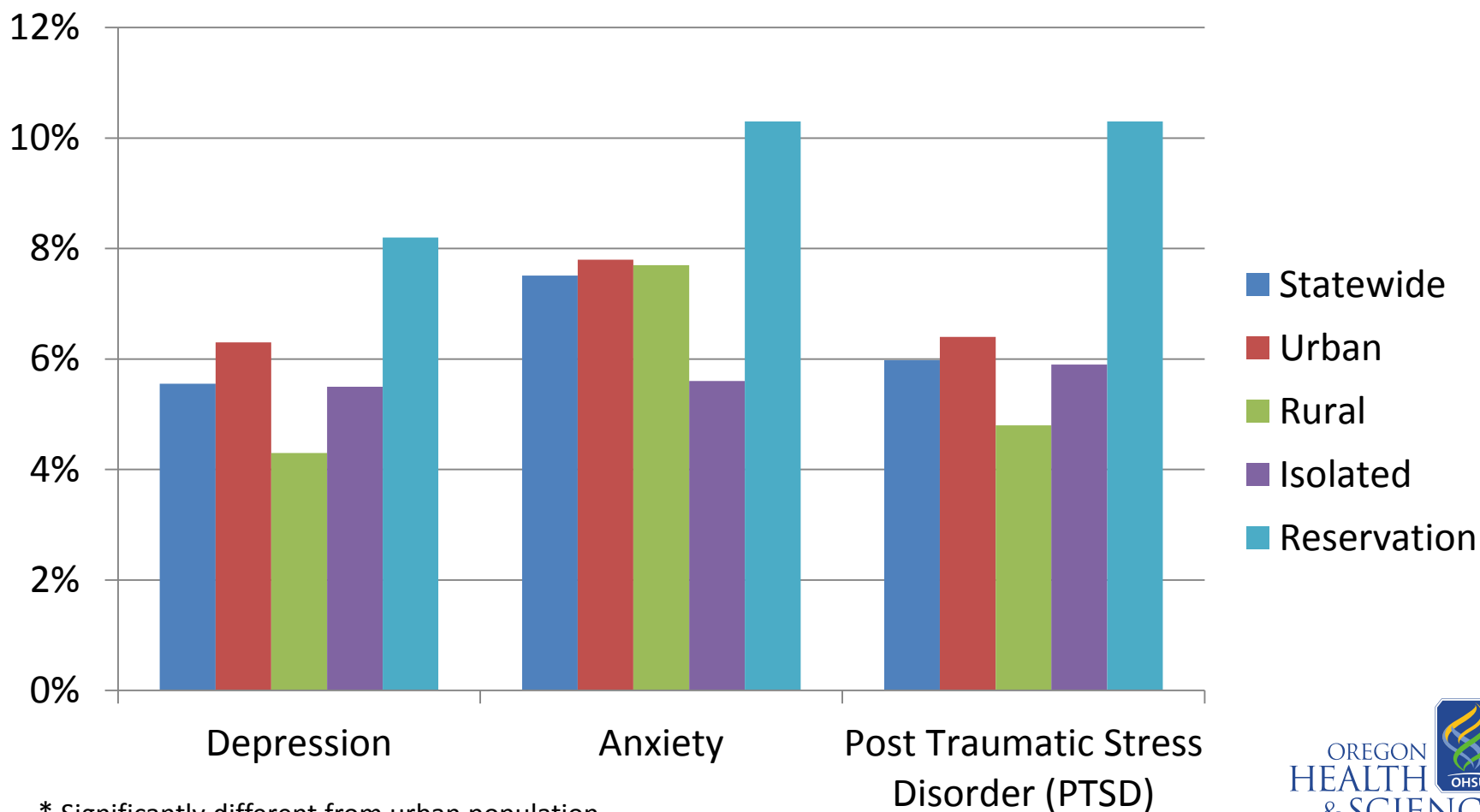
- Statewide
- County-level variation
- Variation by population
- Perceived need for care

Statewide View

Prevalence & Access

Prevalence: Mental Health Screens

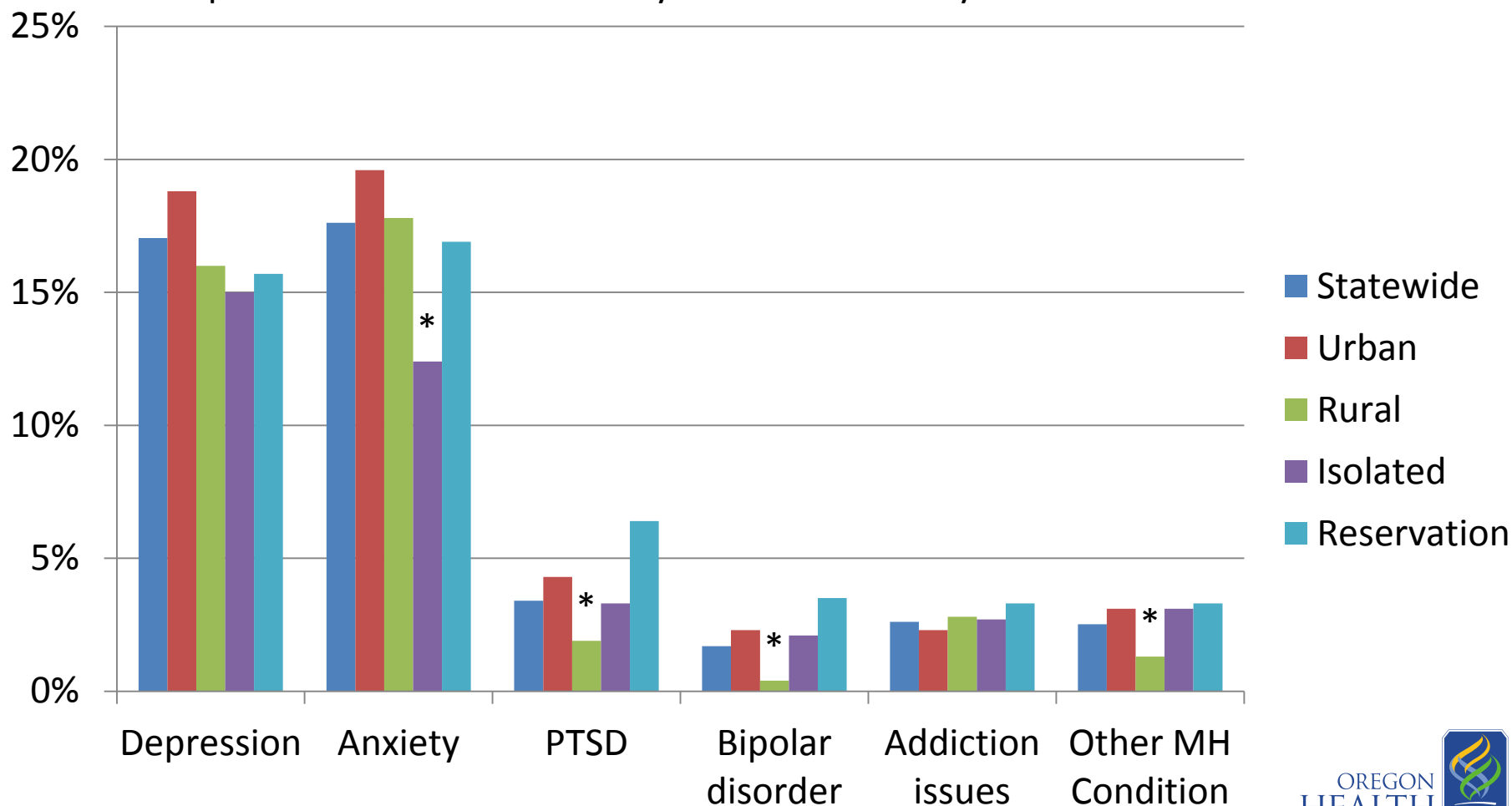
Participants who screened positive for a condition using standardized mental health screening tools



* Significantly different from urban population, adjusted for age and sex ($P < 0.05$)

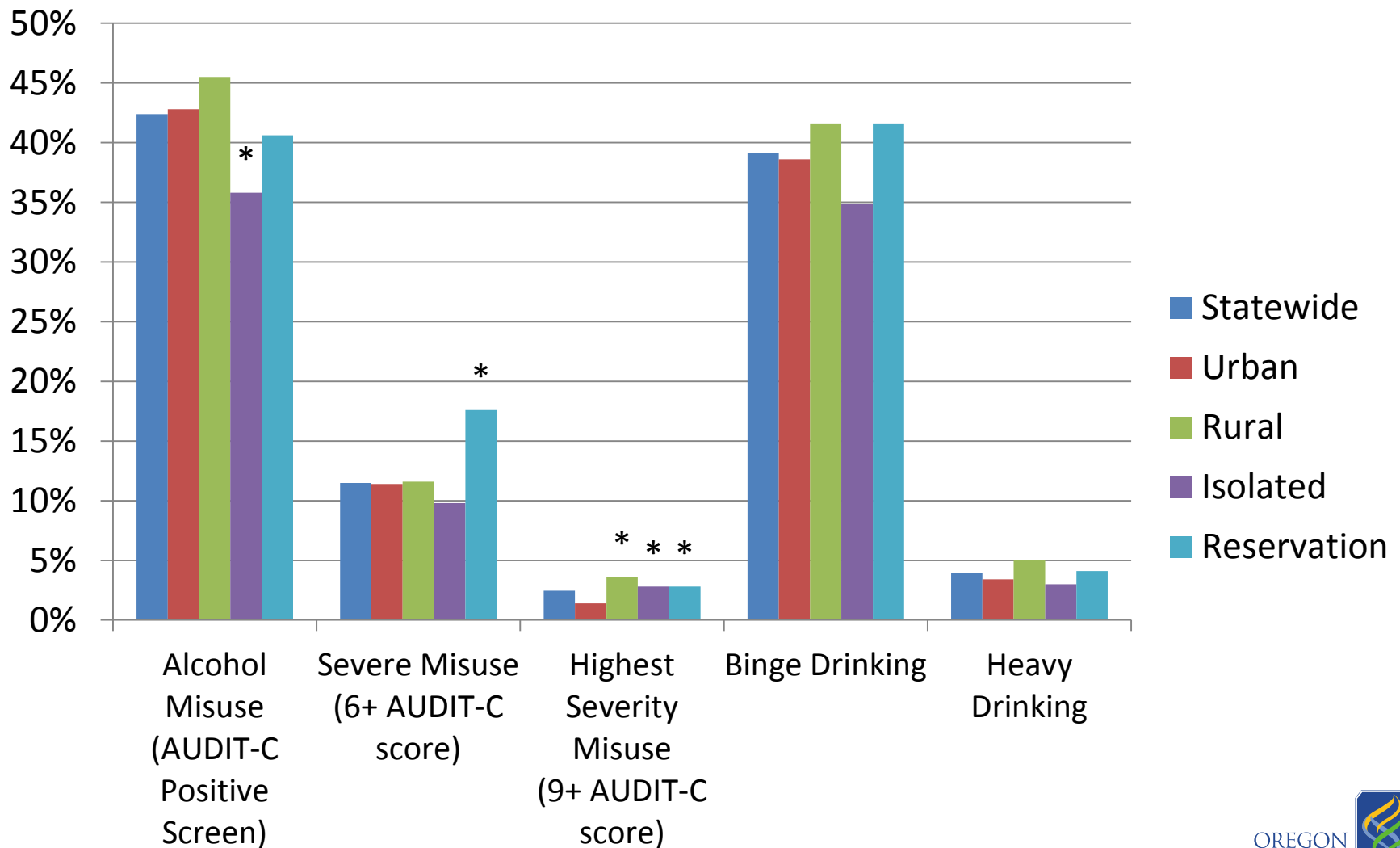
Prevalence: Self-Reported Behavioral Health Diagnosis

Participants who were ever told by a doctor that they had a certain condition



* Significantly different from urban population, adjusted for age and gender ($P < 0.05$)

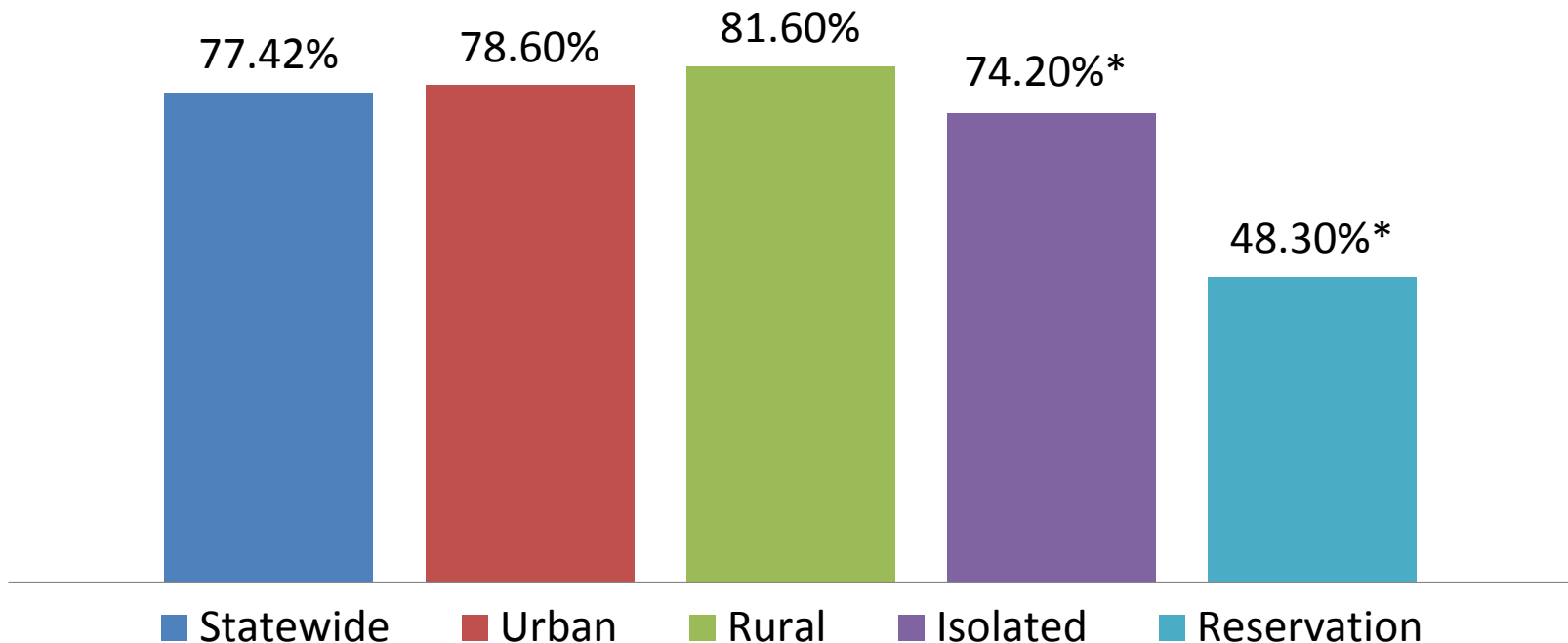
Prevalence: Alcohol Use (AUDIT-C)



* Significantly different from urban population, adjusted for age and sex ($P < 0.05$)

Access to Primary Care Provider

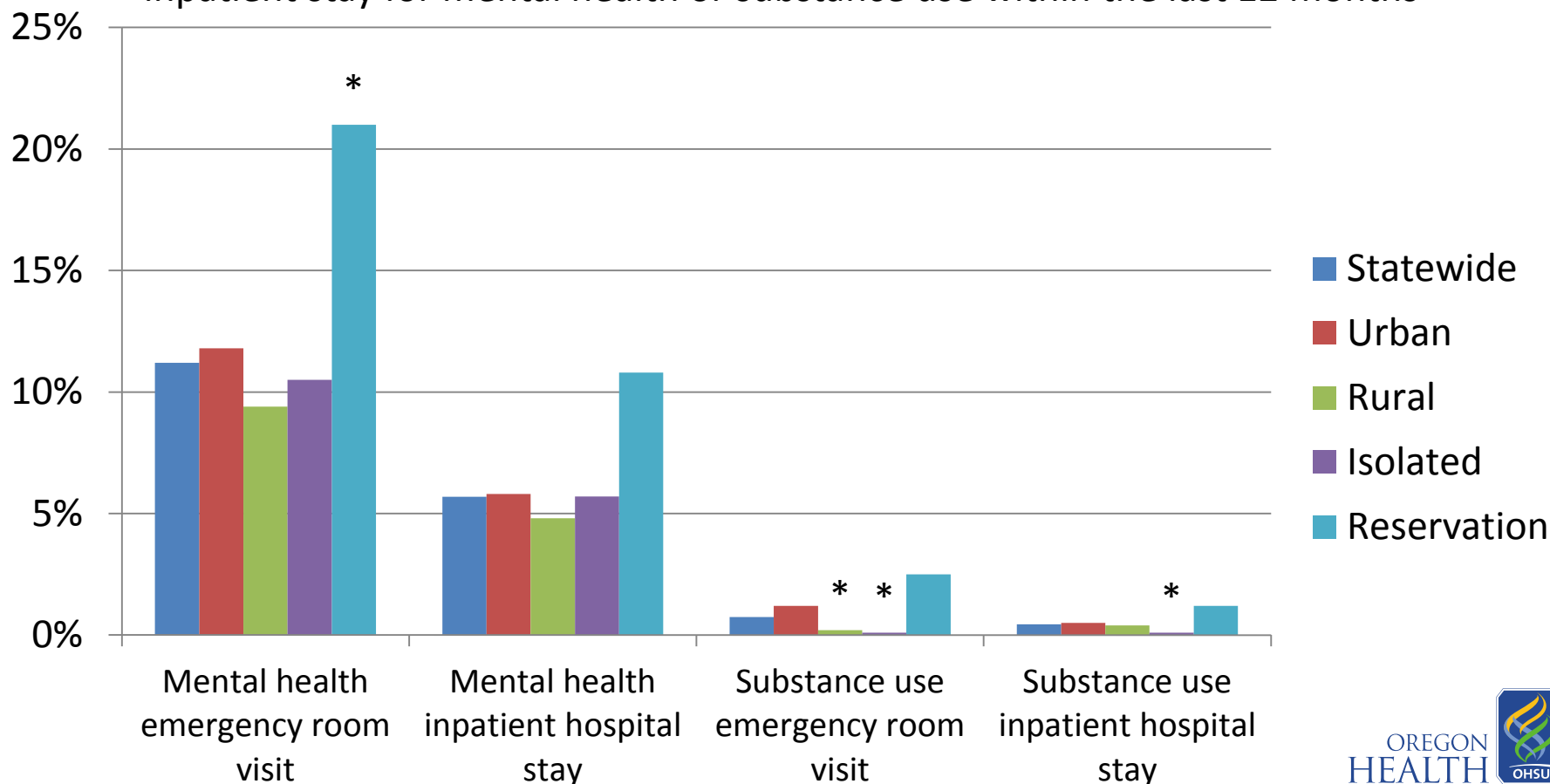
Participants who have one person they think of as their personal doctor or health care provider



* Significantly different from urban population, adjusted for age and sex ($P < 0.05$)

Hospital Utilization for Mental Health and Substance Use

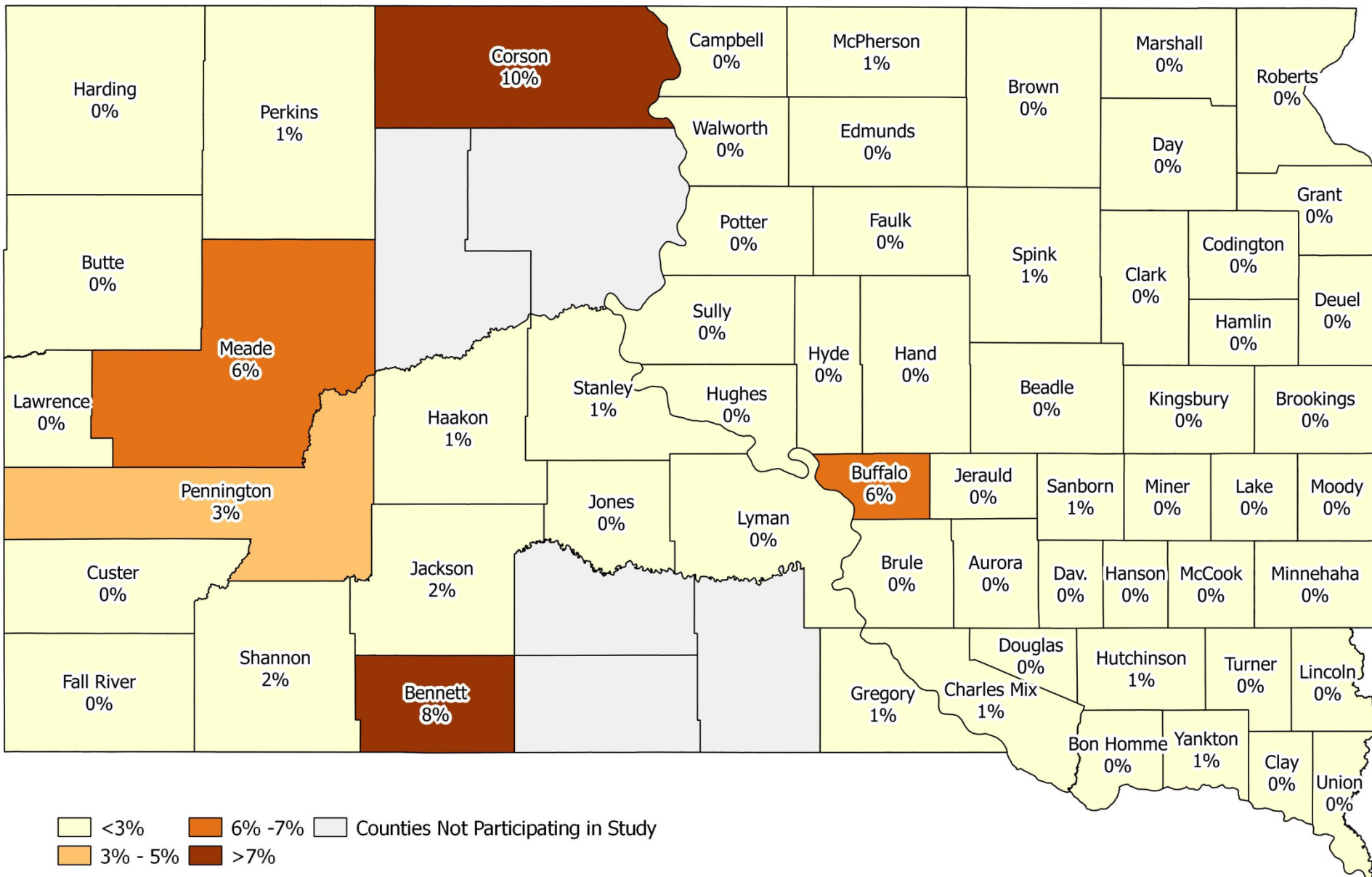
Respondents reported one or more hospital emergency room visit or inpatient stay for mental health or substance use within the last 12 months



* Significantly different from urban population, adjusted for age and sex (P<0.05)

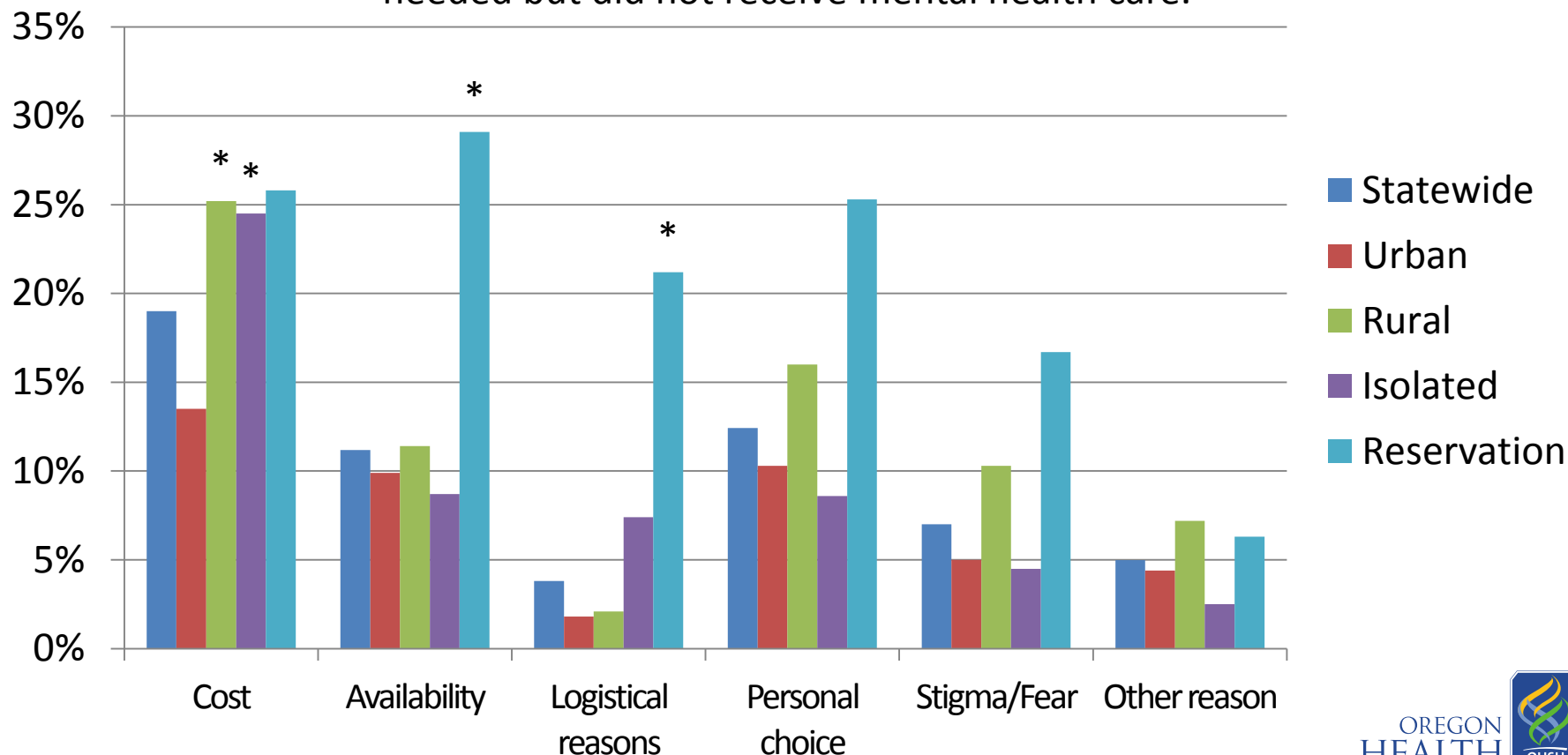
Statewide Prevalence of Emergency Room Use Due to a Substance Use Condition

1 or More ER Visit for SU | Study-wide Average: 1%



Main Reasons for Going Without Needed Mental Health Care

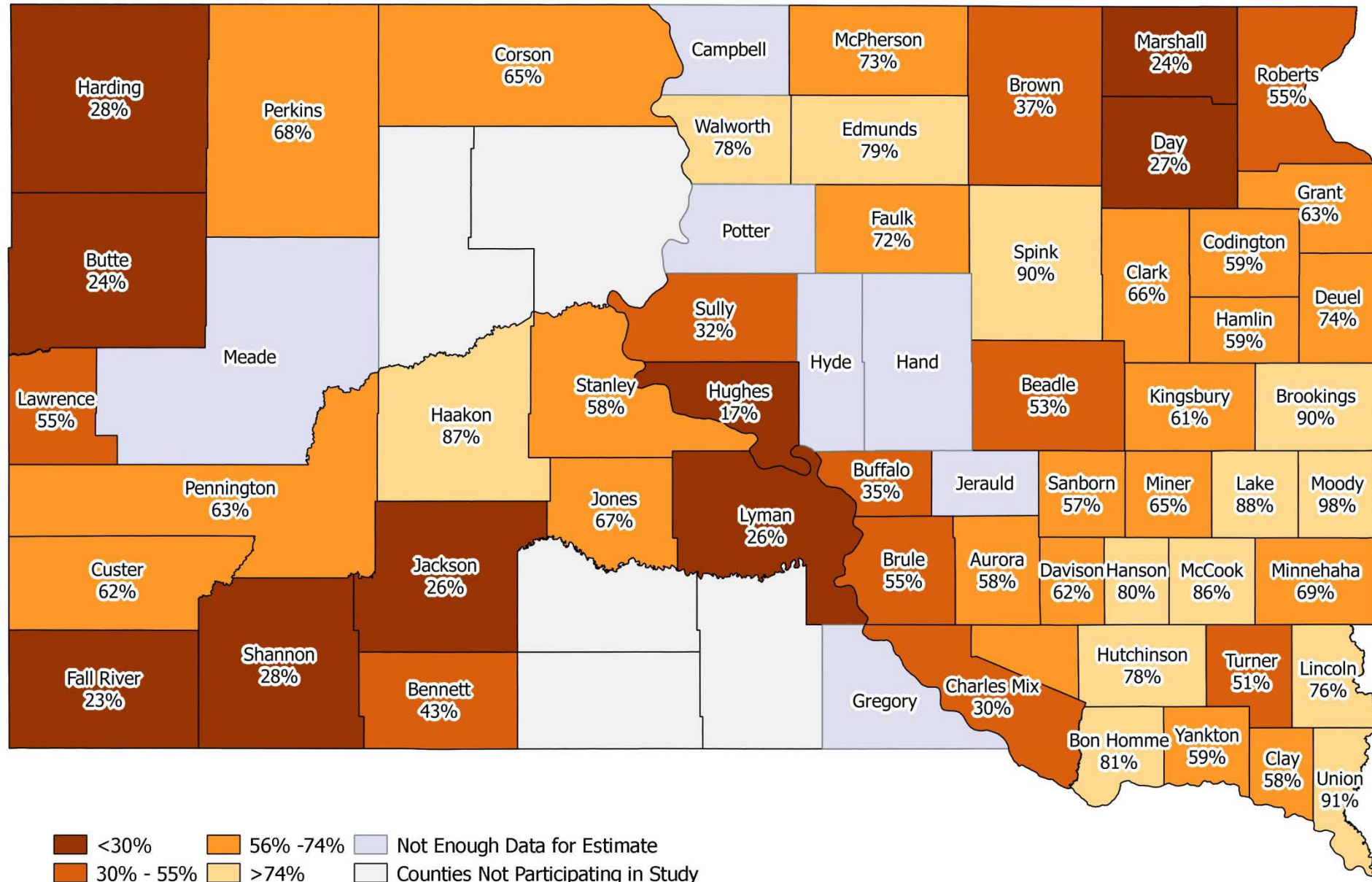
Top reasons for going without care among participants who needed but did not receive mental health care.



* Significantly different from urban population, adjusted for age and sex ($P < 0.05$)

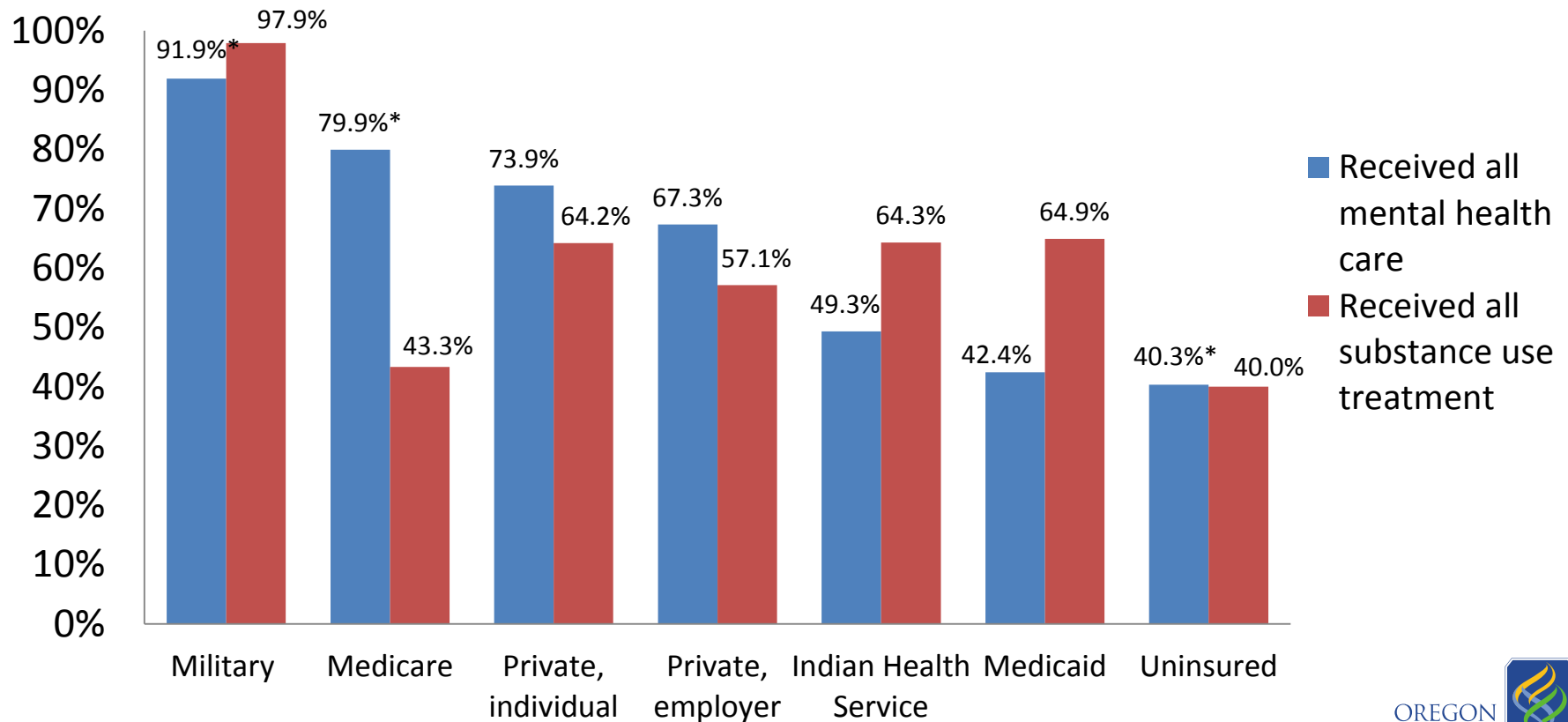
Statewide Prevalence of Having All Mental Health Needs Met

Mental Health Needs Met | Study-wide Average: 64%



Receipt of All Needed Care by Insurance Type

Respondents who reported a perceived need for care and received all the care they needed



* Significant association based on Rao-Scott Chi-Square tests of association between those who reported insurance type compared to those who reported not having that insurance type ($P < 0.05$)

Key Findings: Statewide Assessment

- Similar prevalence of mental health conditions across urban/rural/isolated areas
 - Higher in reservation areas
- Access problems in isolated and reservation communities
- High inpatient and ED utilization for mental health conditions
- Cost of care and insurance coverage associated with receipt of needed care
- Questions?

County View

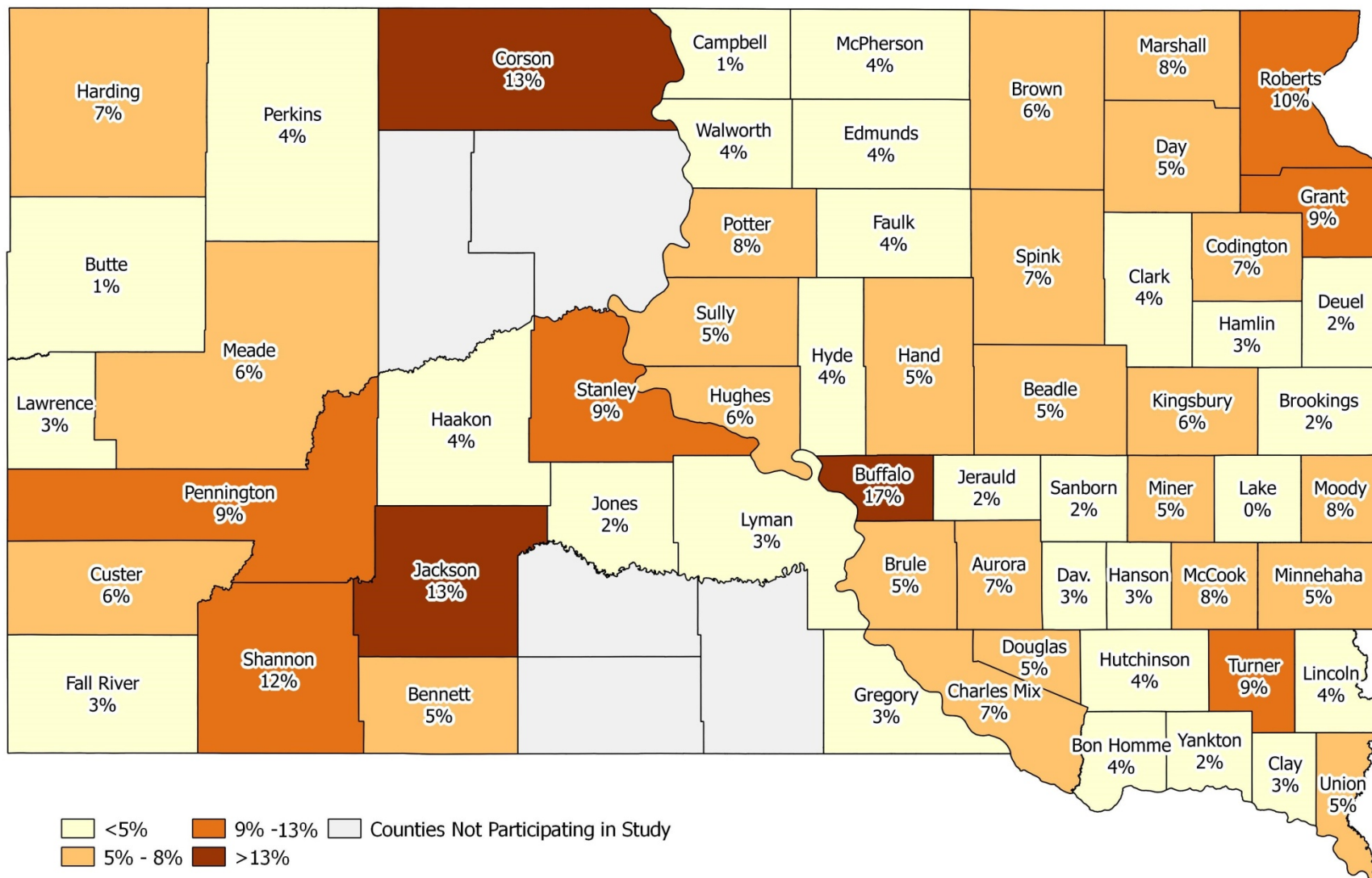
Prevalence & Access: Finding Opportunities to
Maximize Impact

Key Findings: Utilization & Access

- Access problems in isolated and reservation communities
 - 25.8% in isolated areas do not have a primary care provider
 - 51.7% in reservation areas do not have a primary care provider
- Low perceived need for mental health and substance use treatment
 - 98.9% report no perceived need for substance use treatment
 - 90.5% report no perceived need for mental health care
- High hospital utilization for mental health conditions
 - 11.2% statewide and 21% in reservation areas have been to the emergency room for mental health problems one or more times in the past year
- Uninsured are less likely to receive needed mental health care
 - Only 39% of uninsured received the mental health care they needed

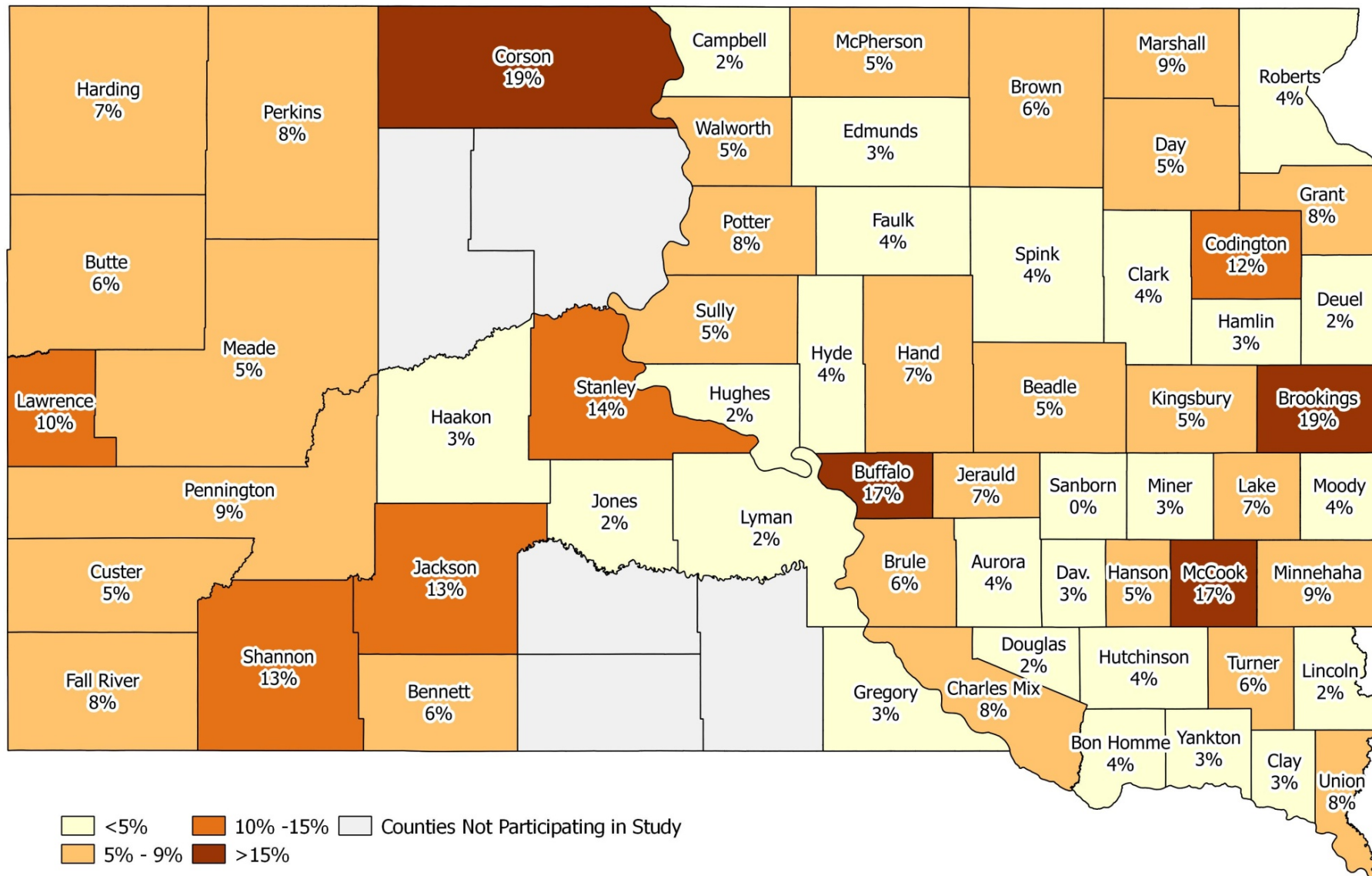
Depression

PHQ-2 Depression Score | Study-wide Average: 6%



Anxiety

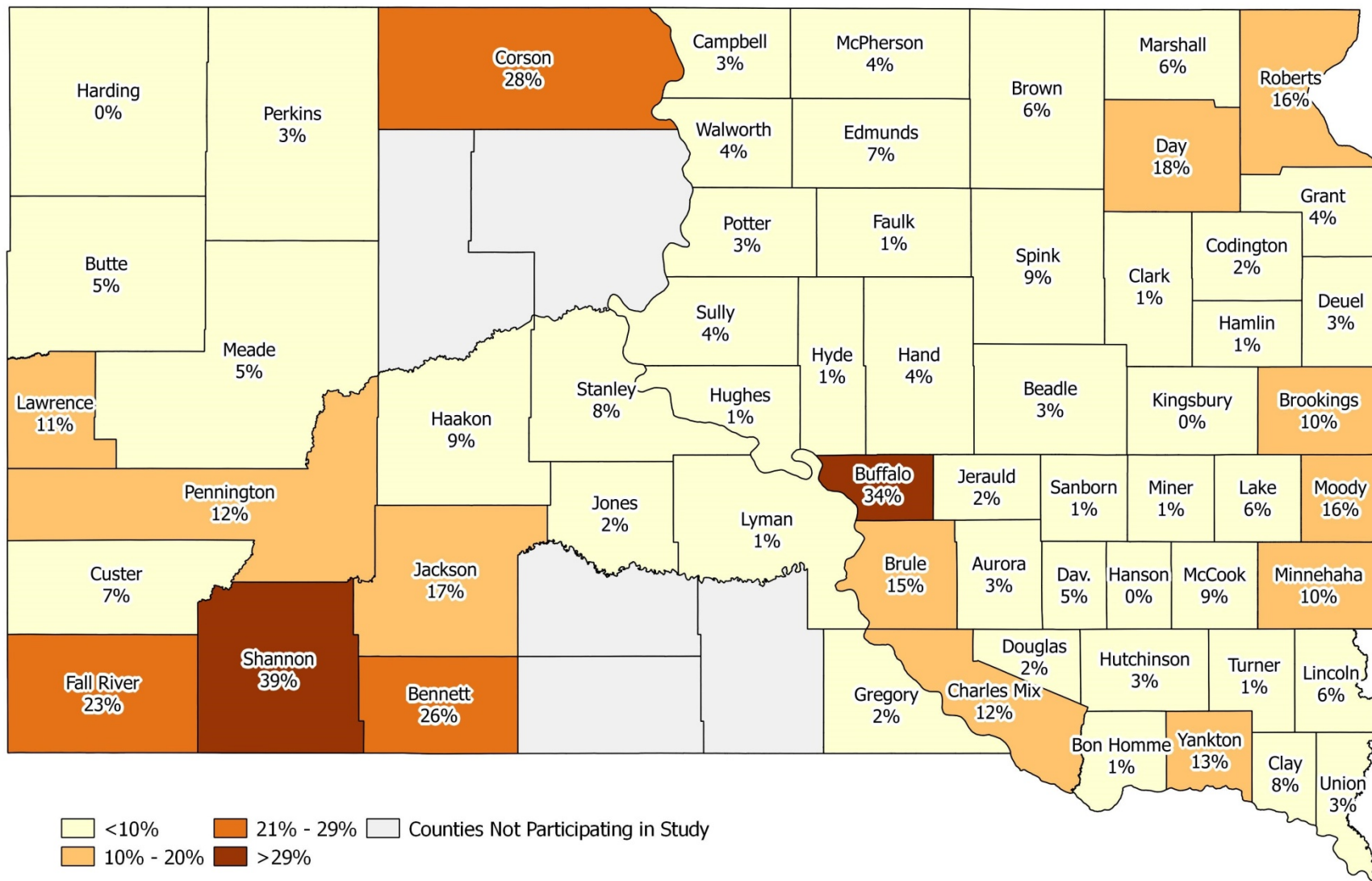
GAD-2 Anxiety | Study-wide Average: 8%



Any Drug Use*

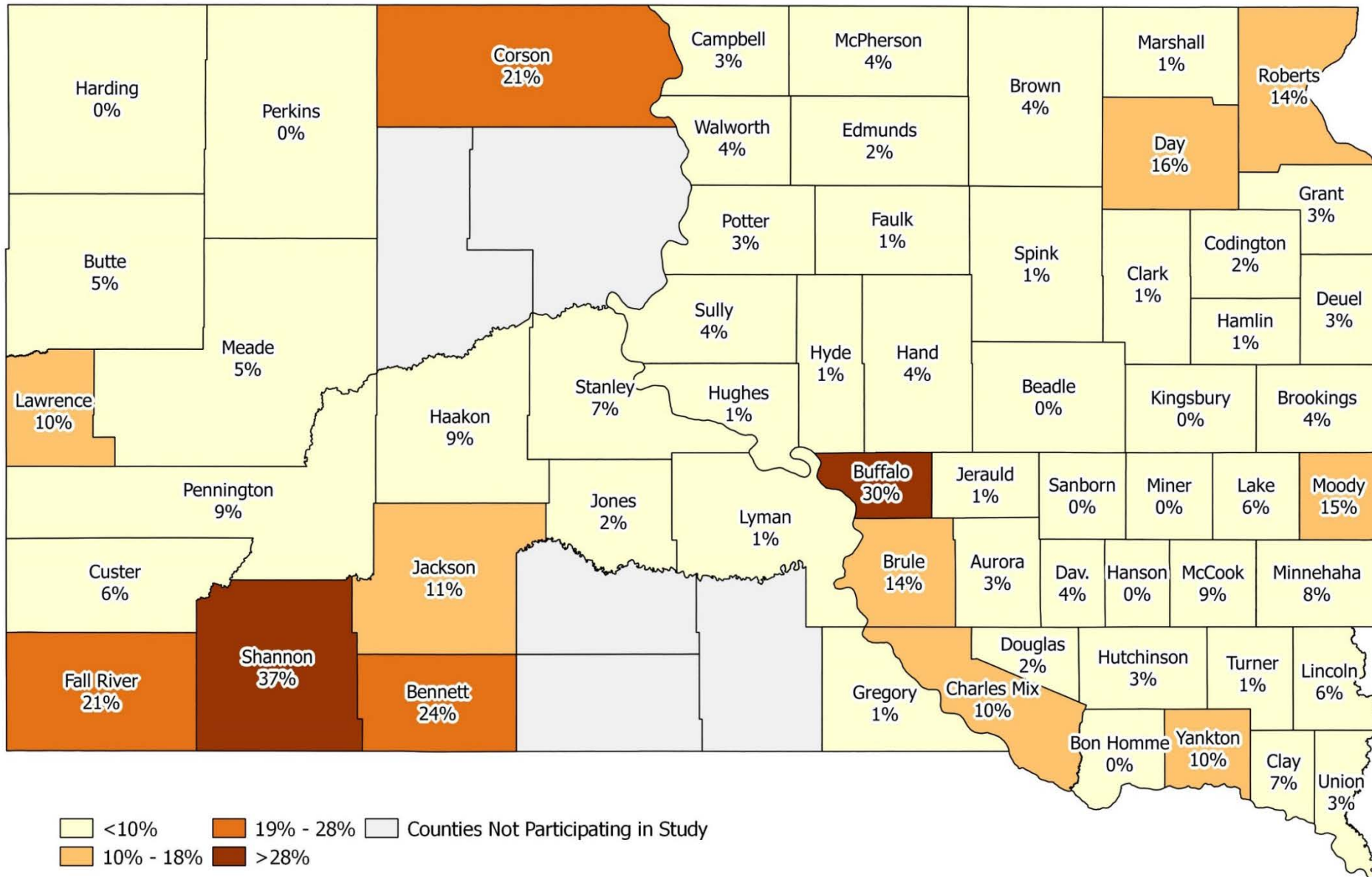
*Includes past-year use of marijuana, Methamphetamines, prescription pain relievers without a prescription and other street drugs.

Any Drug Use- Past Year | Study-wide Average: 8 %



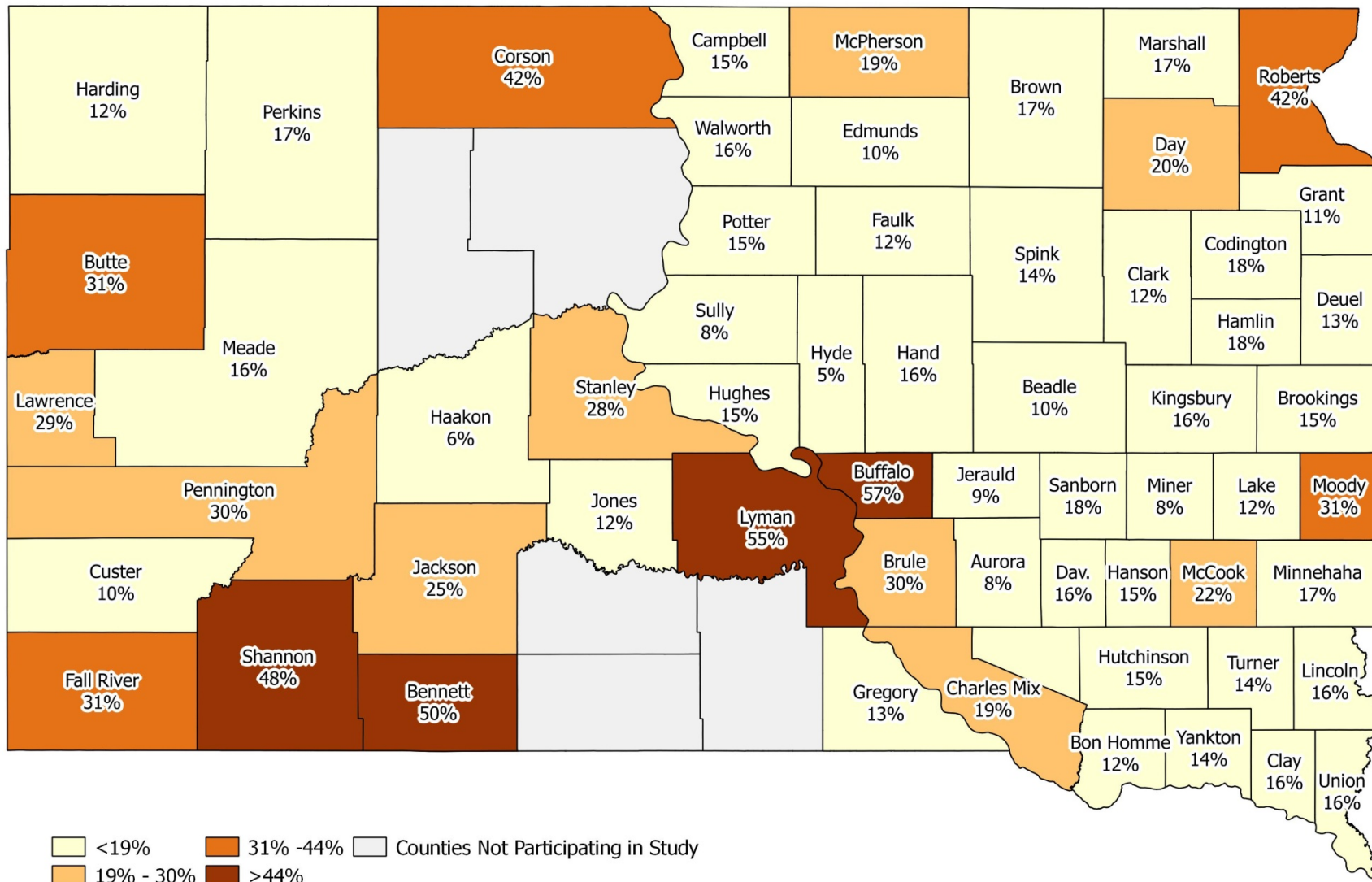
Statewide Prevalence of Marijuana Use in the Past Year

Marijuana Use - Past Year | Study-wide Average: 7%



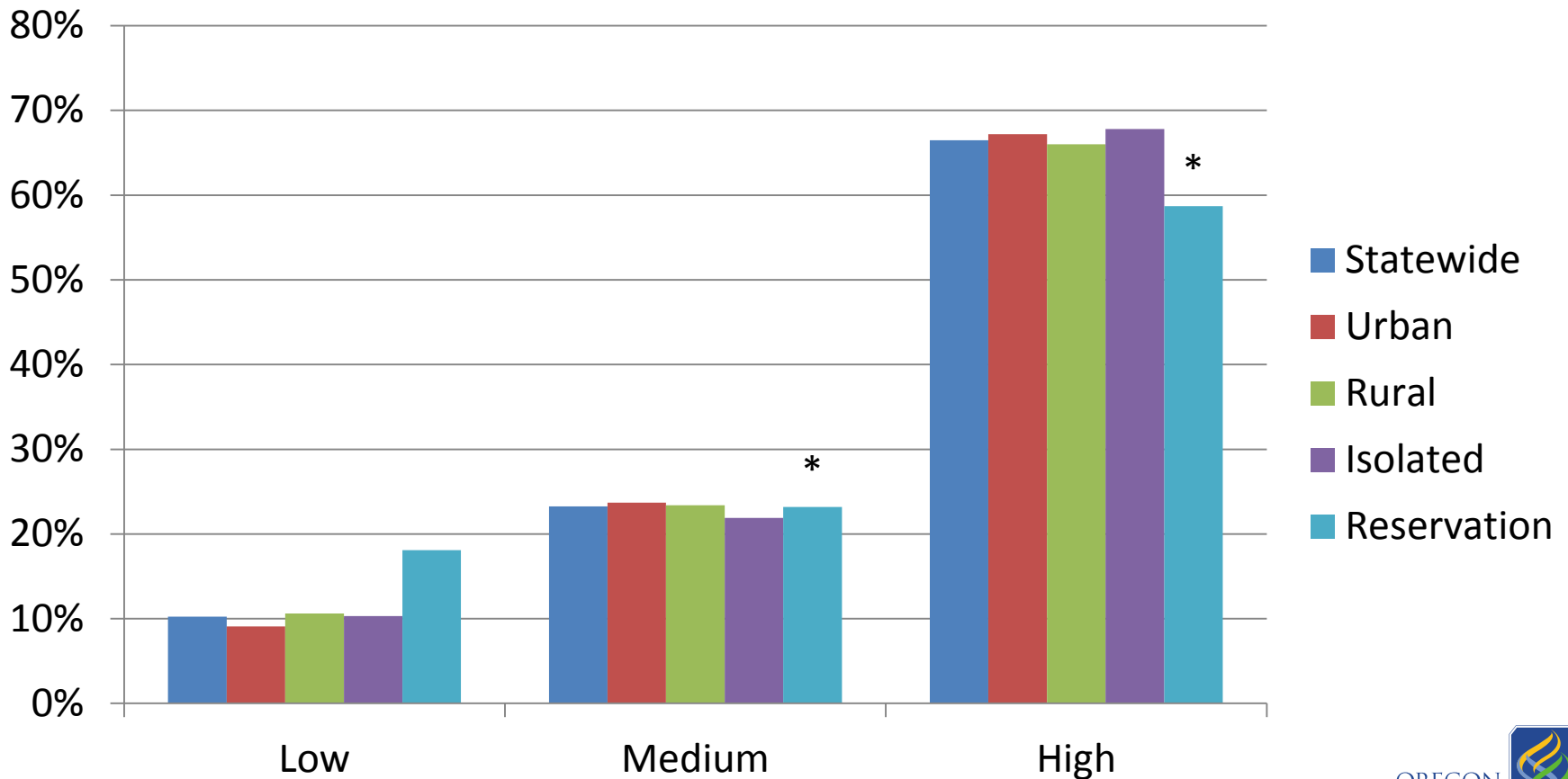
Adverse Childhood Experiences 3+

ACE Score 3+ | Study-wide Average: 20%



Social Support

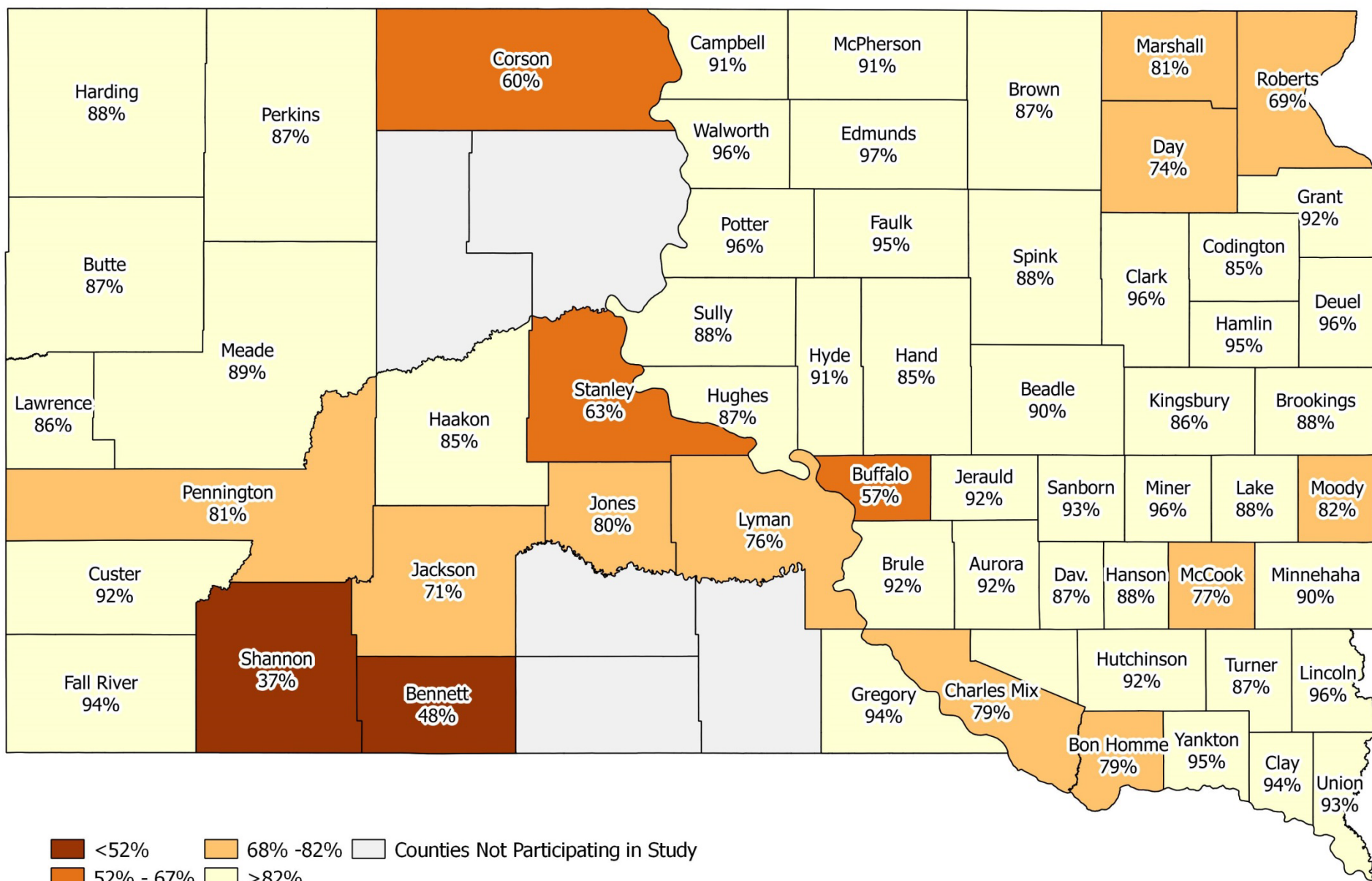
Participants' score on a measure of five different dimensions of social support



* Significantly different from urban population, adjusted for demographic variables

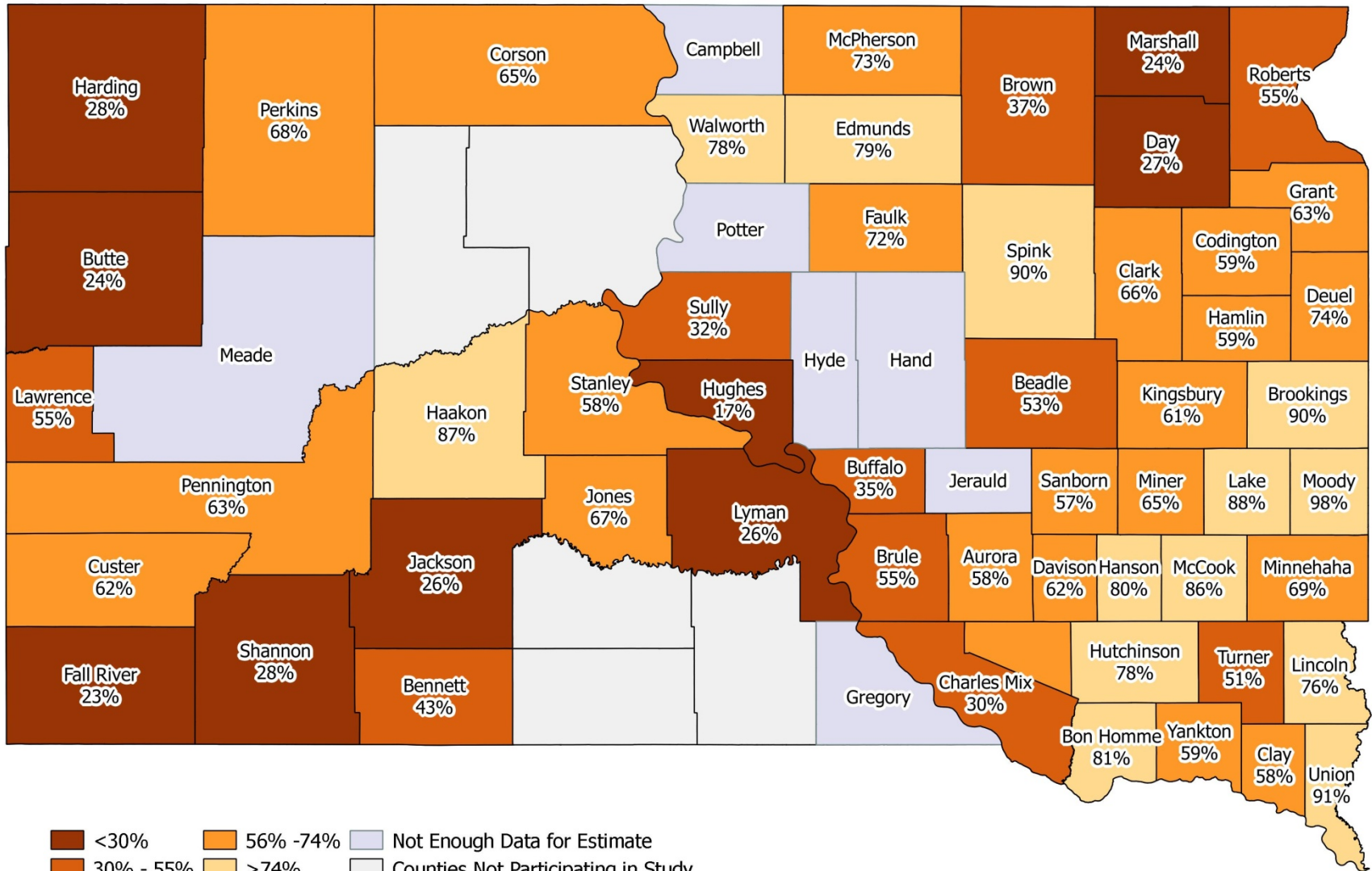
Statewide Prevalence of Having All Medical Needs Met

All Medical Needs Met | Study-wide Average: 87%



All Mental Health Needs Met

Mental Health Needs Met | Study-wide Average: 64%



IDENTIFYING “HOTSPOTS”

States are big places –how do you begin to “smart target” your work where it will have the most impact?

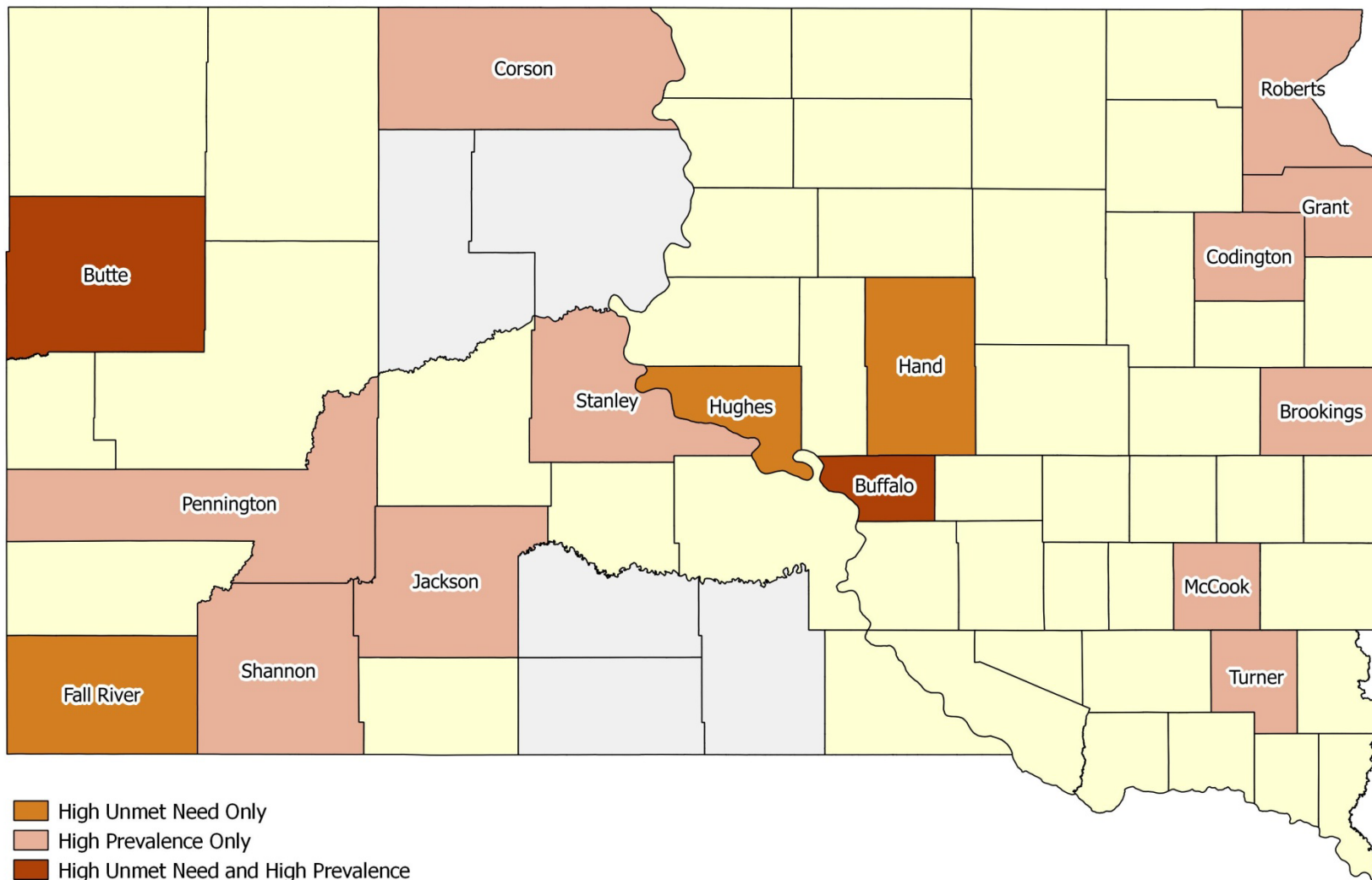
High prevalence and low access are both bad, but the *combination* of those two things is especially bad.

We combined indicators of prevalence and access to find places where high need and low access overlap.

These may be opportunities for maximum impact.

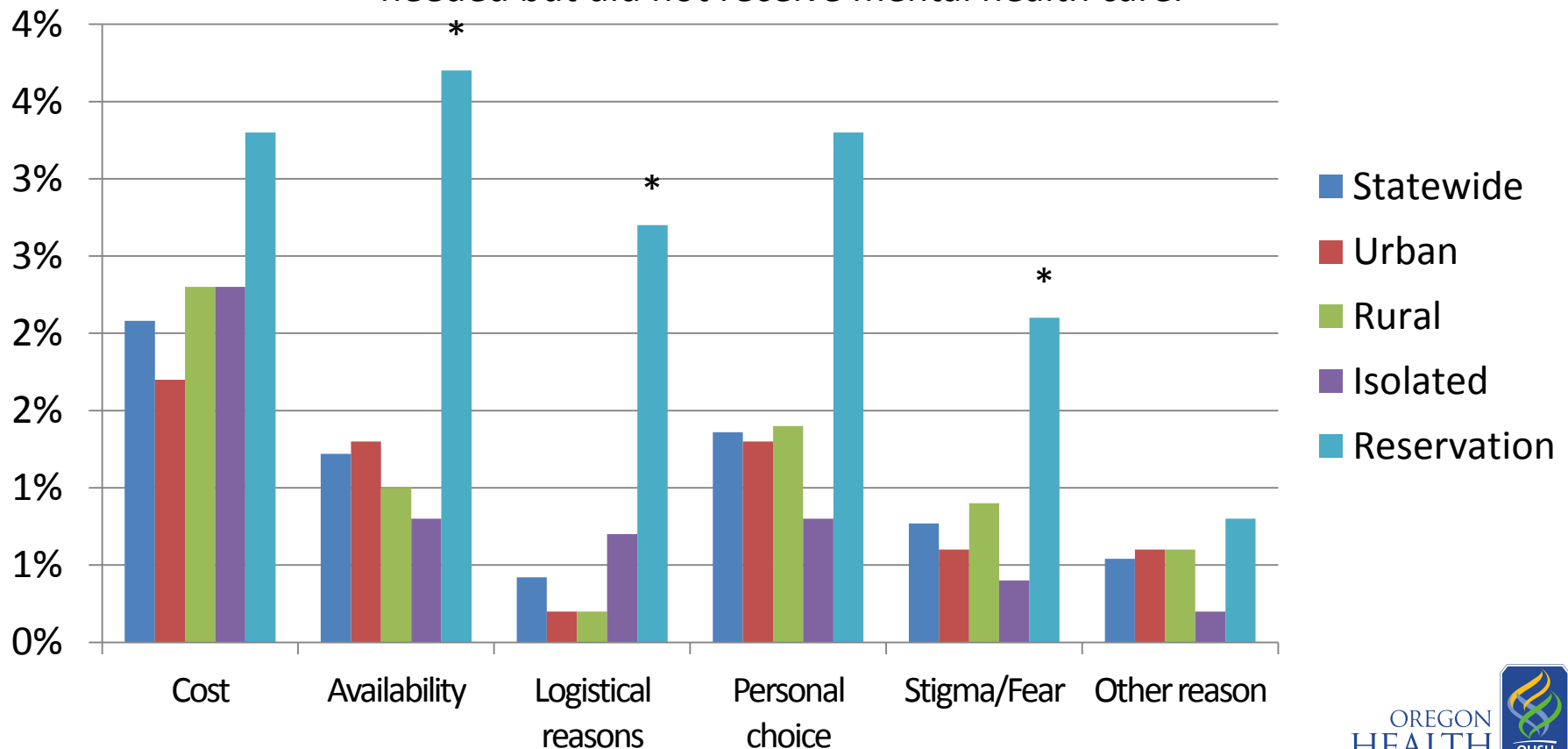
MENTAL HEALTH HOTSPOTS: High Prevalence & High Unmet Need

High Unmet Mental Health Need and High Prevalence of Any Screened Mental Health Issues (Depression, Anxiety and PTSD)



Main Reasons for Going Without Mental Health Care

Top reasons for going without care among participants who needed but did not receive mental health care.

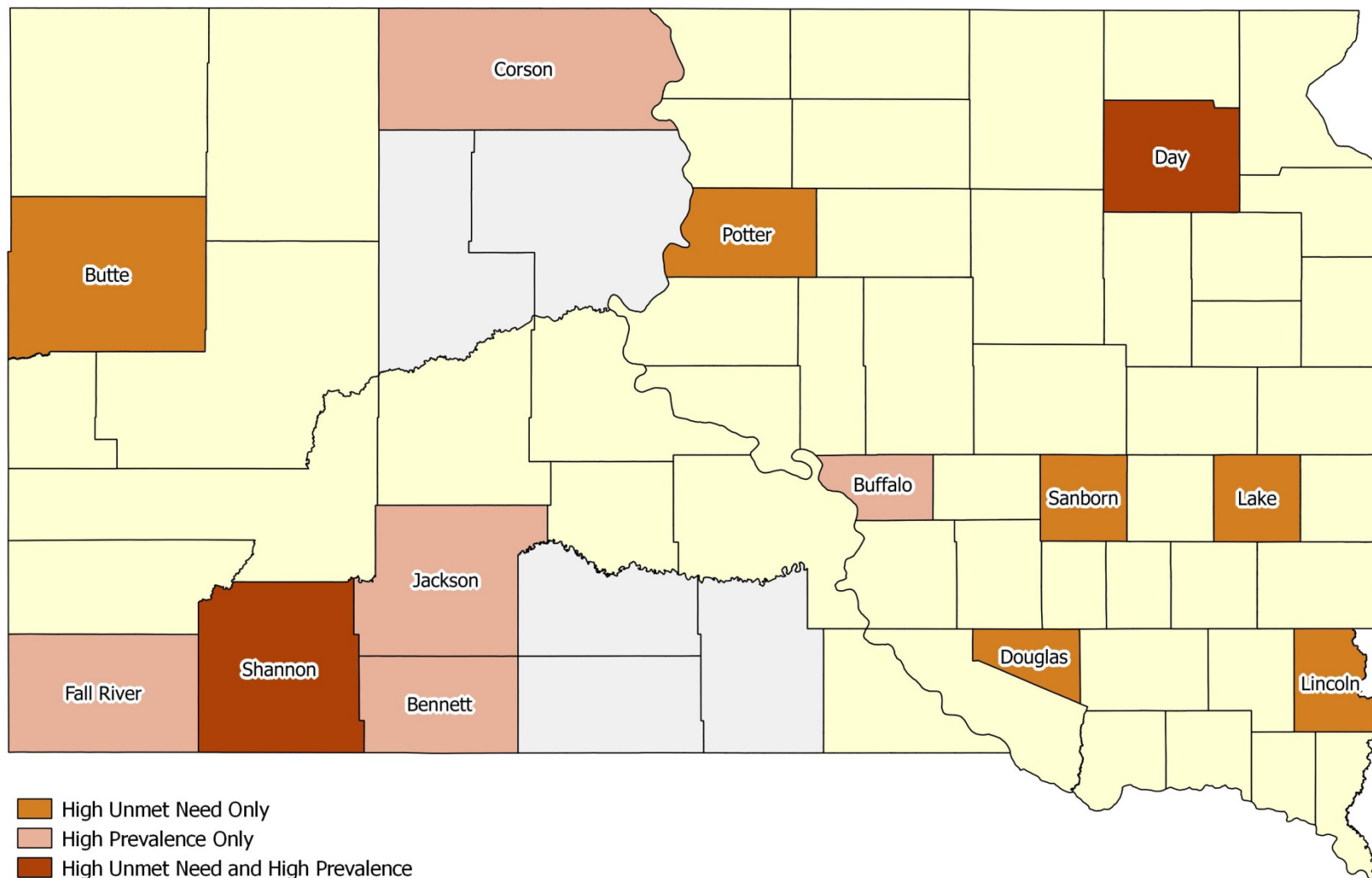


* Significantly different from urban population, adjusted for age and sex

SUBSTANCE USE HOTSPOTS:

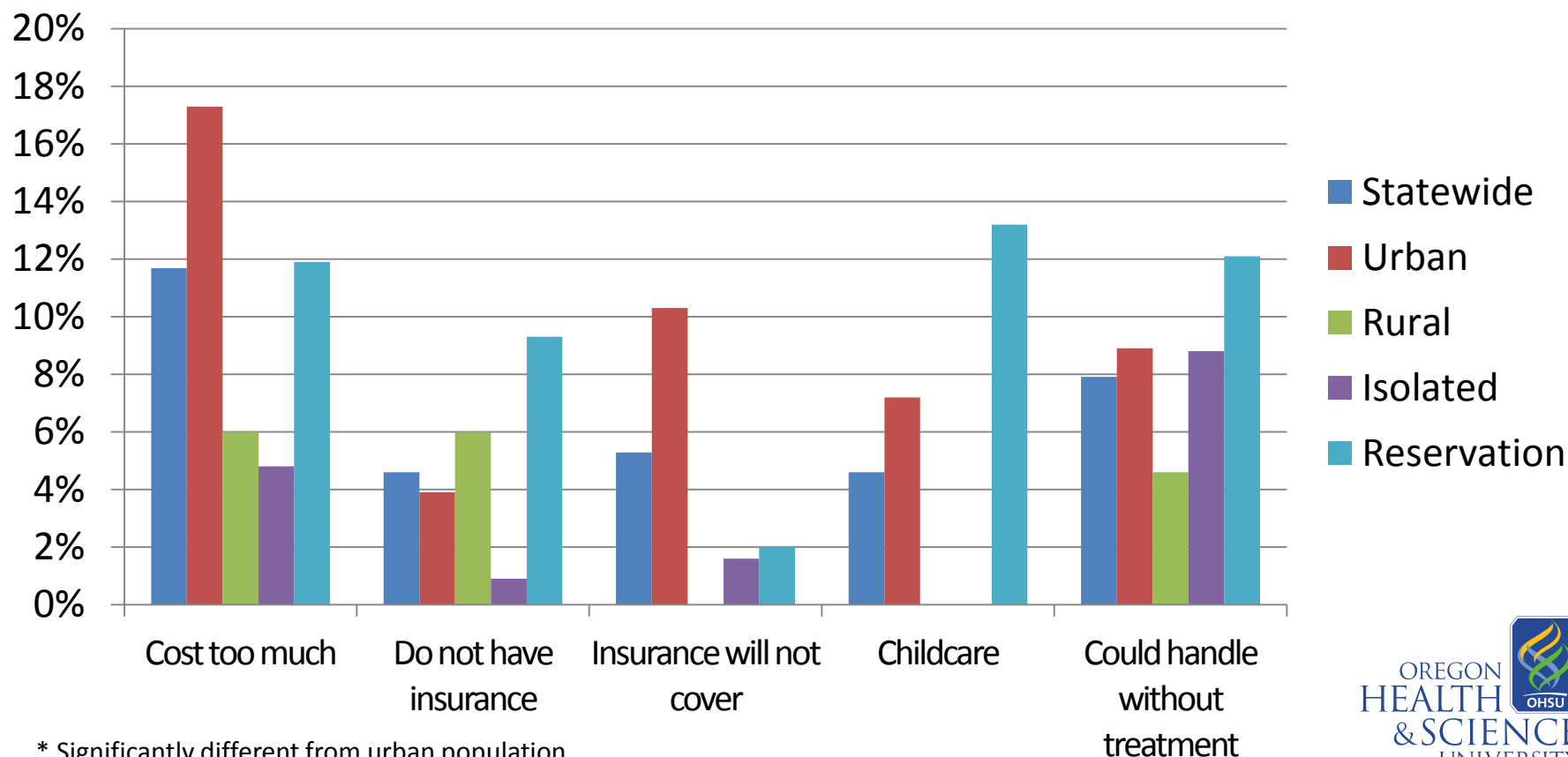
High Use of Drugs + High Unmet Need for Care

High Unmet Substance Abuse Care Need and High Prevalence of Past Year Drug Use



Main Reasons for Going Without Alcohol or Drug Use Treatment

Top reasons for going without care among participants who needed but did not receive alcohol or drug use treatment.



* Significantly different from urban population, adjusted for demographic variables

KEY FINDINGS: COUNTY-LEVEL VARIATION

County-level view shows pockets of variation:

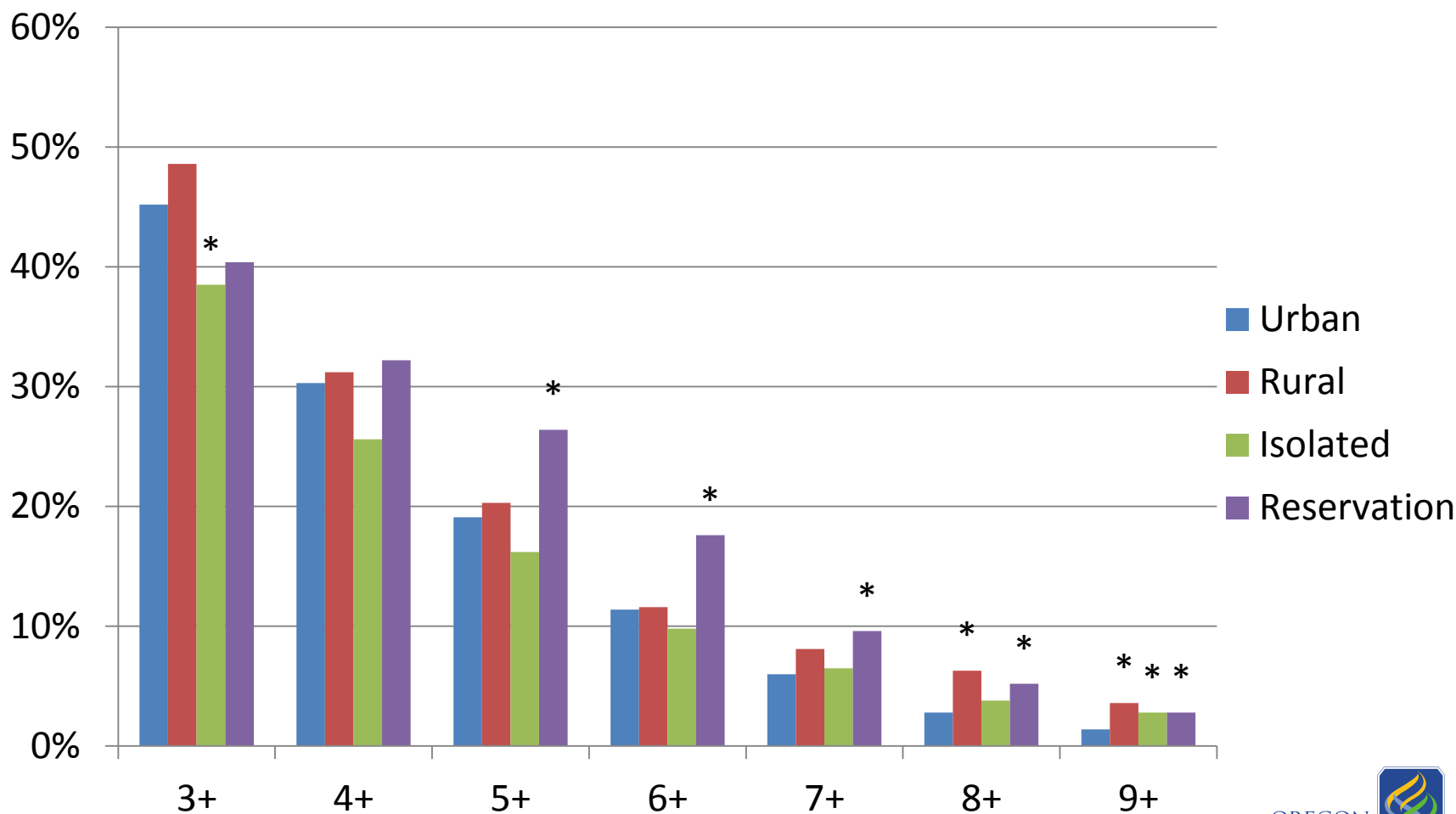
- High mental health conditions: depression, anxiety, PTSD screens
- High drug use & alcohol misuse
- Indicators of poor access to care
- High rates of adverse childhood experiences

Differences were stark – in many cases the high counties were 3-4 times higher than the state average.

“Hotspot” counties were identified where prevalence is high and access to care is low. These may represent optimal points for maximum impact.

Questions?

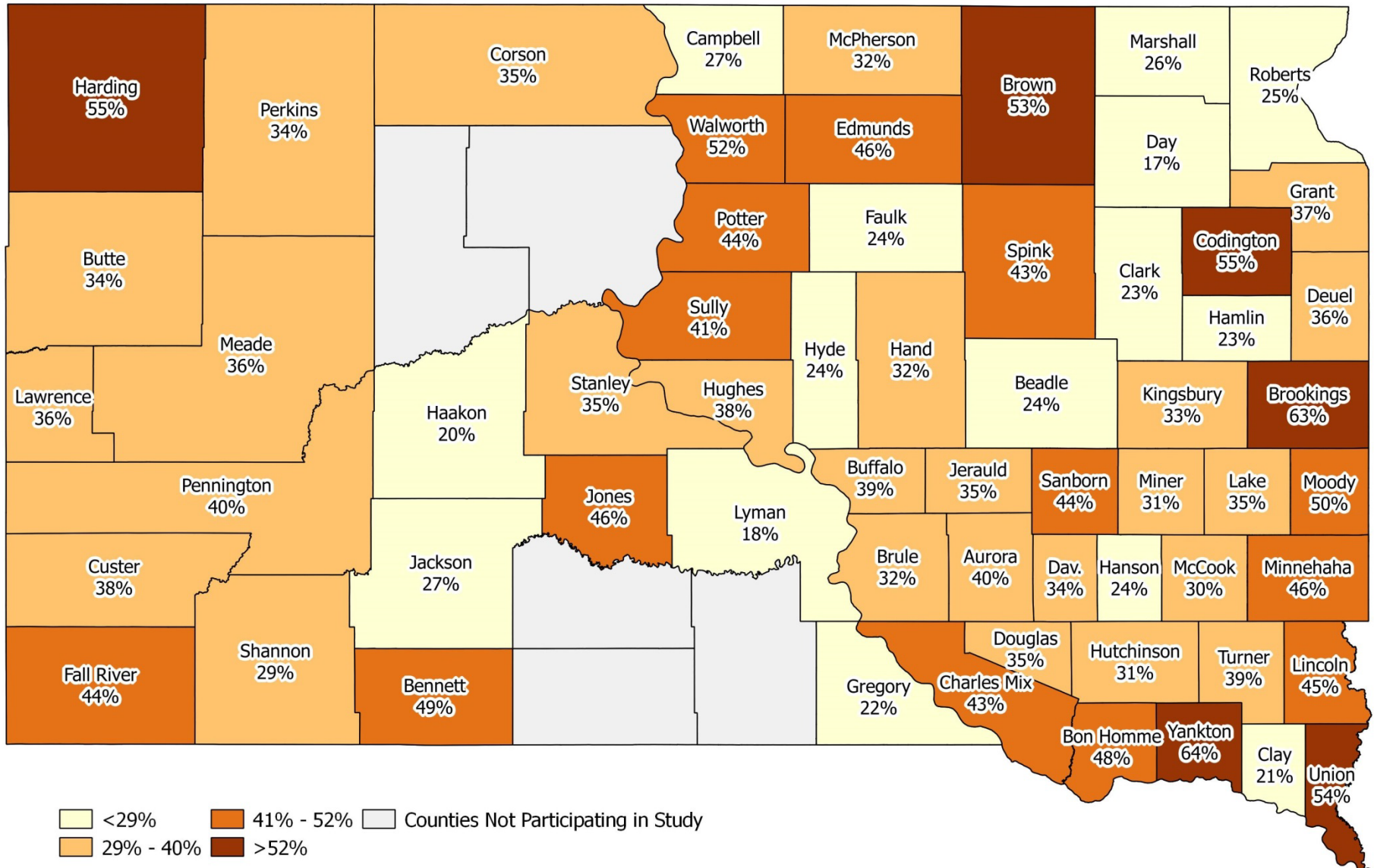
AUDIT-C: Different Cut-points by Geographic Areas



* Significantly different from urban population, adjusted for age and sex

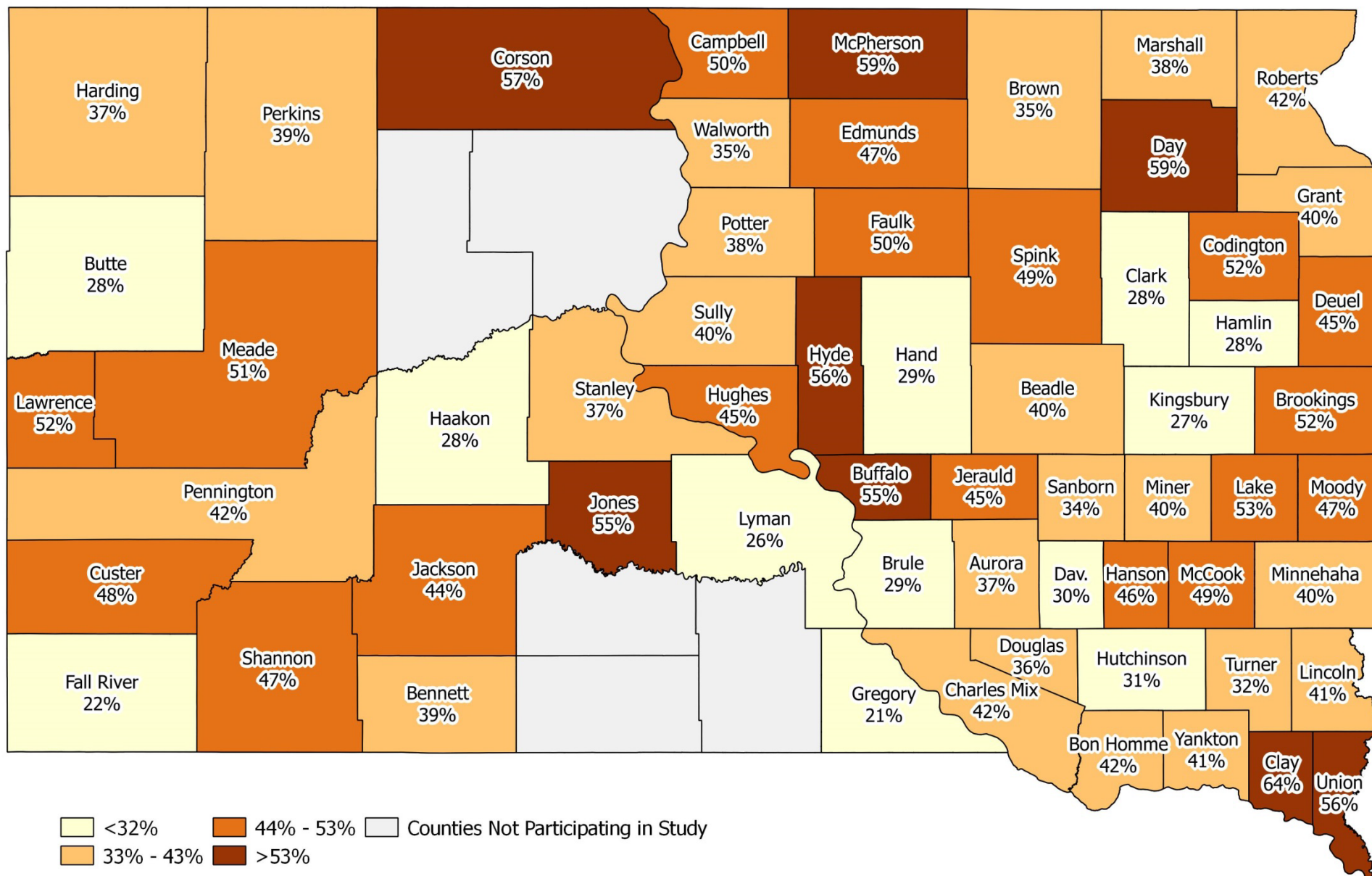
Statewide Prevalence of Problem Drinking among Females (3+ AUDIT-C Score)

Audit C Alcohol Use Females | Study-wide Average: 42%



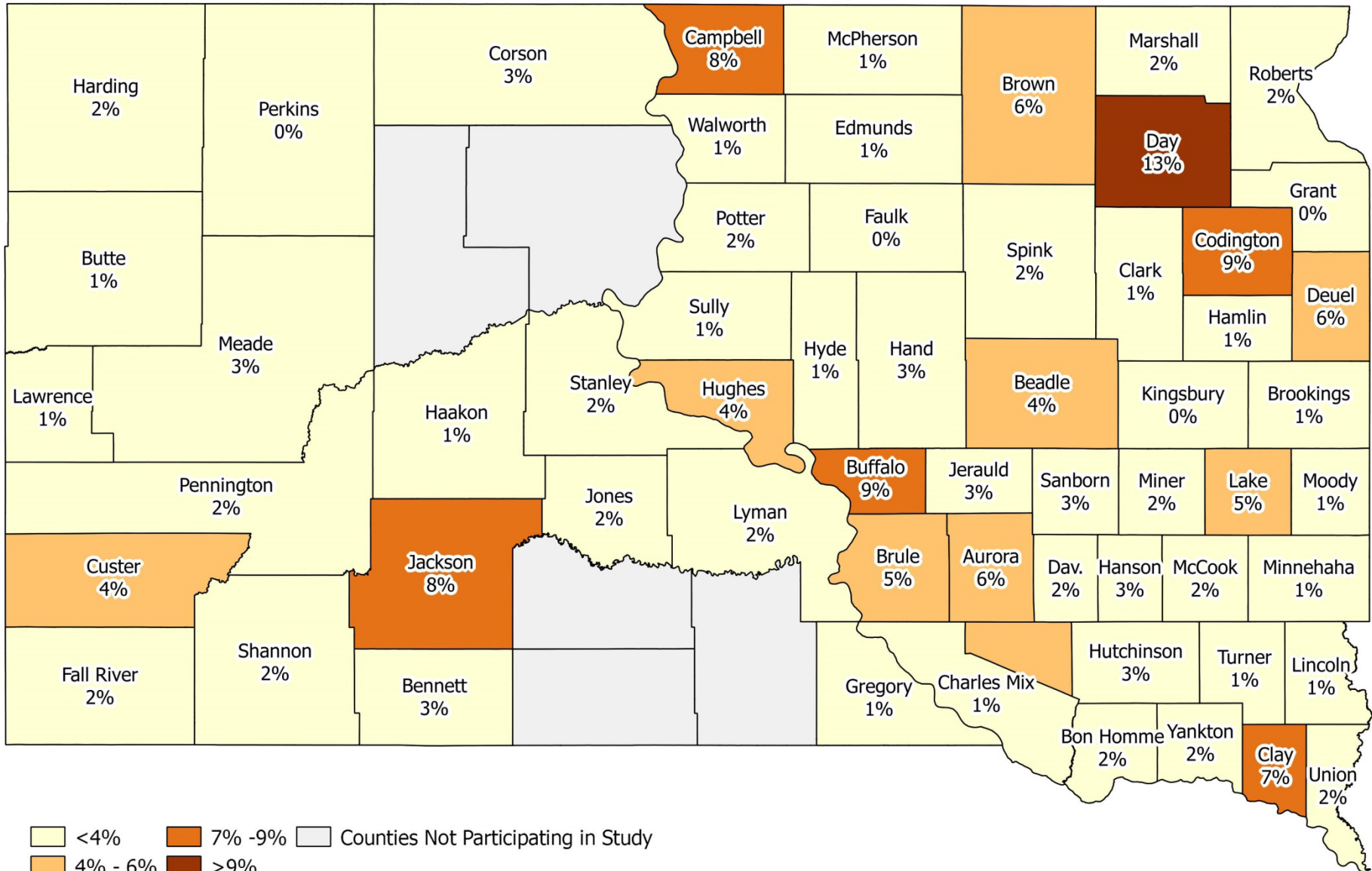
Statewide Prevalence of Problem Drinking among Males (4+ AUDIT-C Score)

Audit C Alcohol Use Males | Study-wide Average: 42%



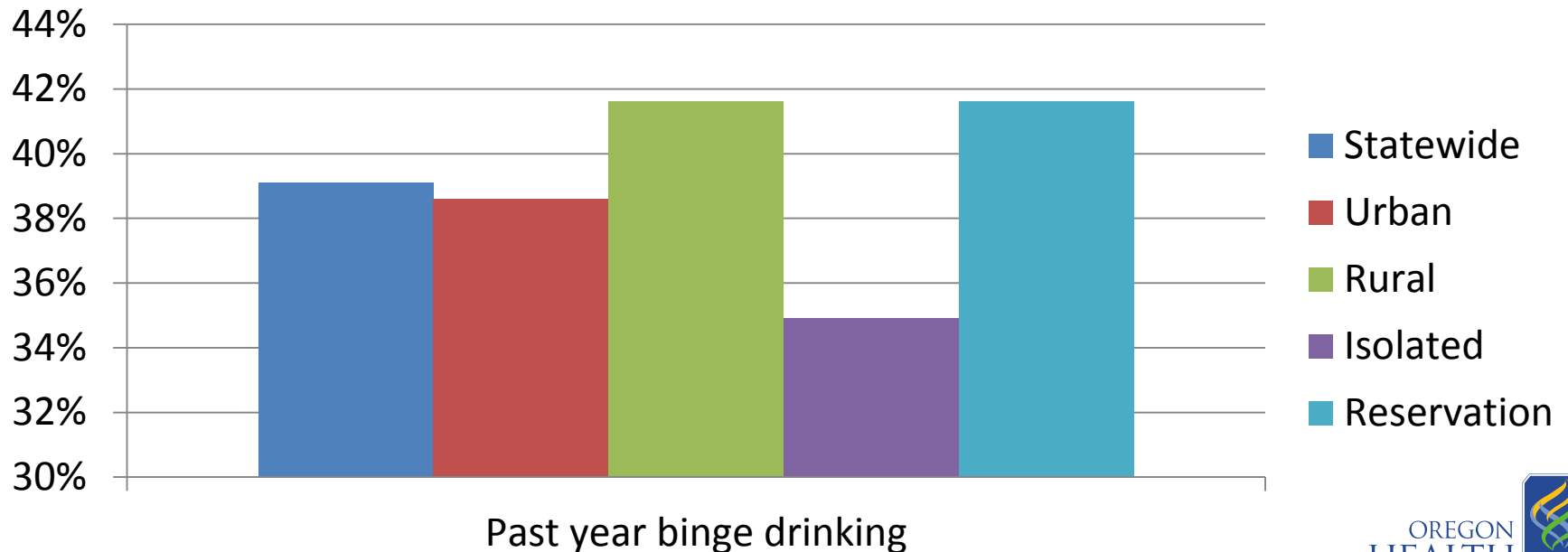
Statewide Prevalence of Highest Severity Alcohol Misuse (9+ AUDIT-C Score)

Audit 9+ | Study-wide Average: 2%



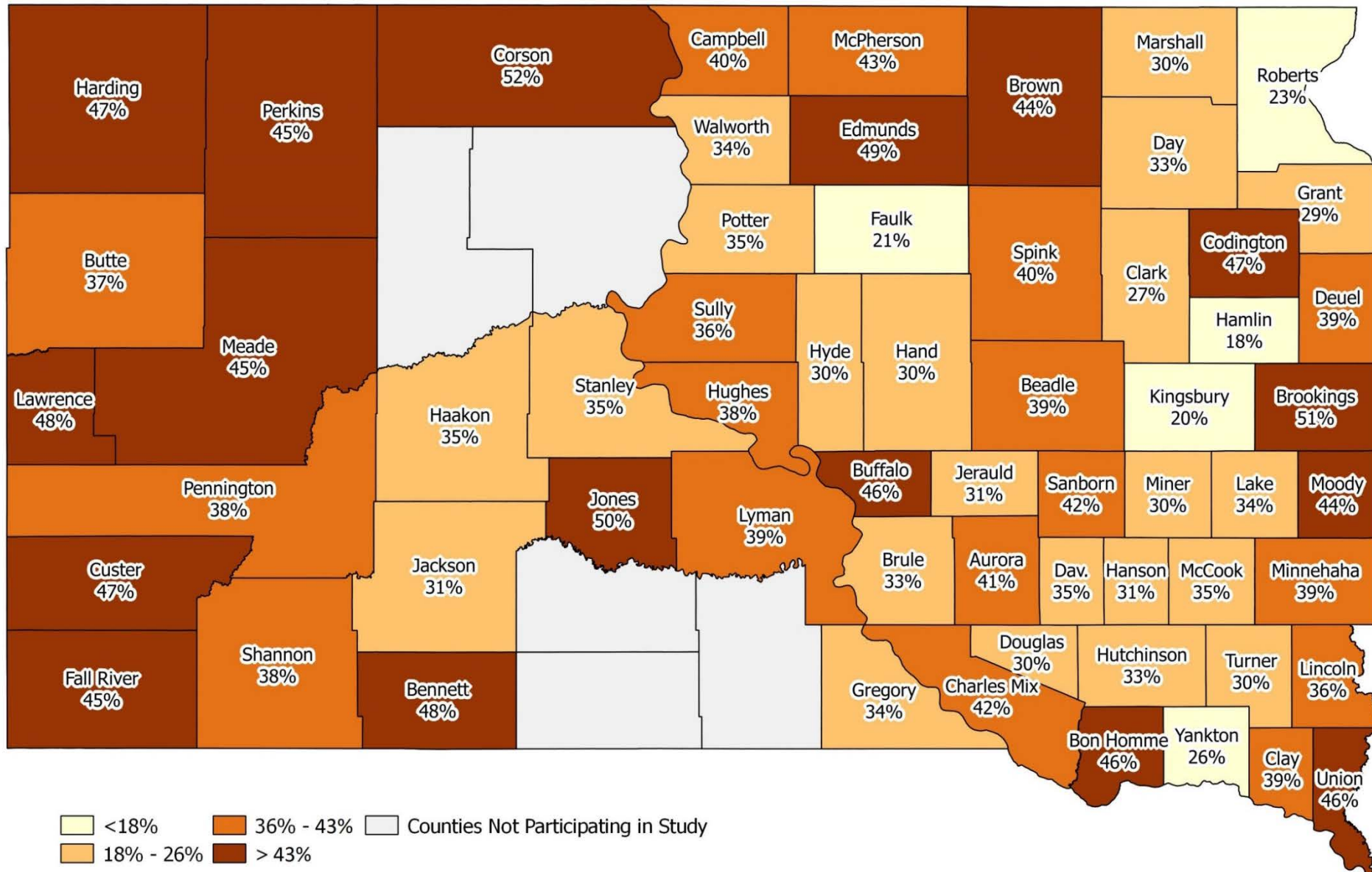
Alcohol Use: Binge Drinking

	SD Health Survey	BRFSS National*	BRFSS South Dakota*
Past Year Binge Drinking	39.1%	16.9%	20.6%
Heavy Drinking (over weekly limits)	3.92%	5%	



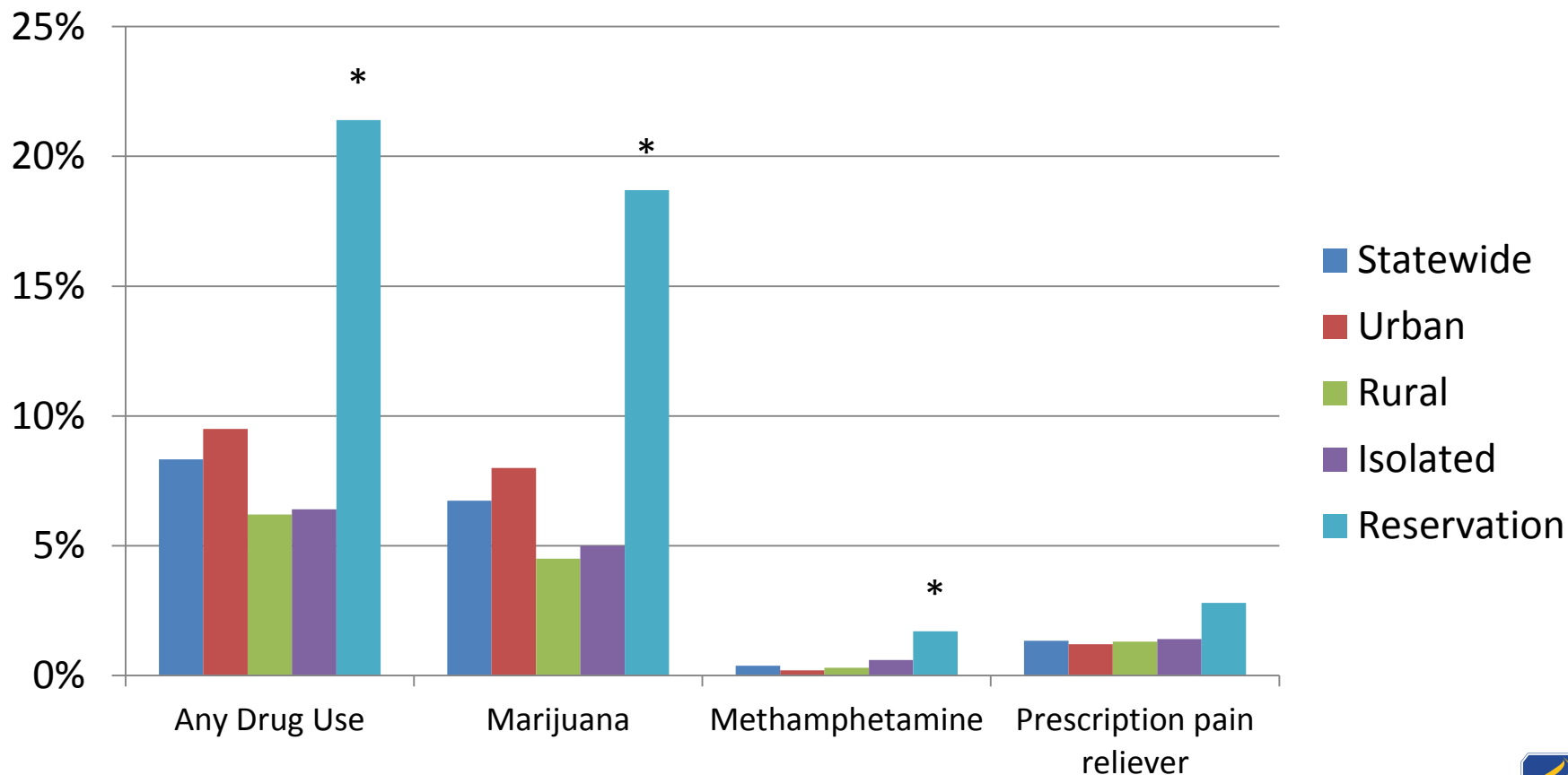
Statewide Prevalence of Binge Drinking

Binge Drinking | Study-wide Average: 39%



Prevalence: Drug Use

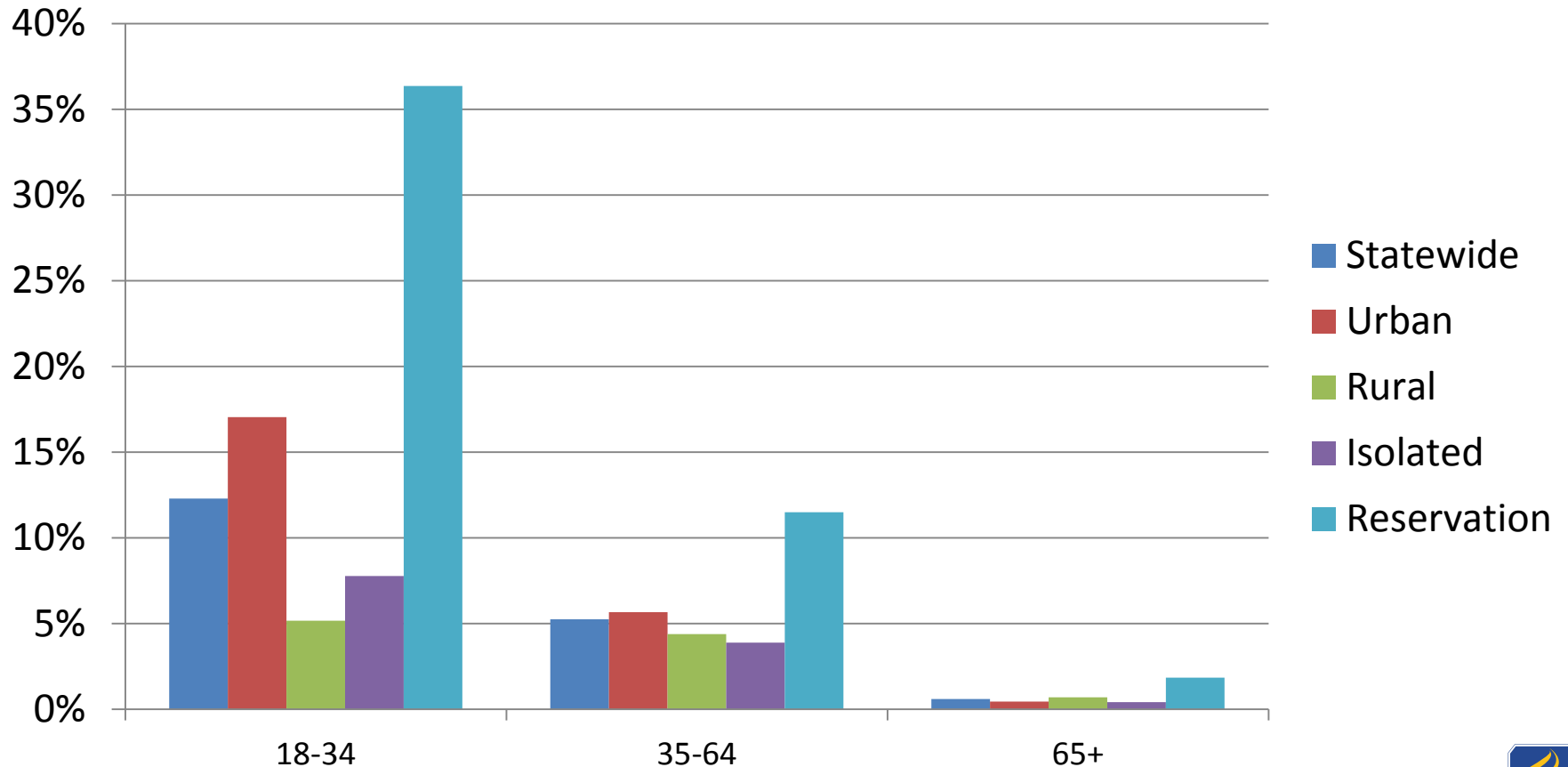
Participants who used drugs within the past year



* Significantly different from urban population, adjusted for age and sex

Marijuana Use by Age

Participants who used marijuana within the past year



National Comparisons: Drug Use

Measure	SD Health Survey	National Comparison*
Past Year Marijuana Use	6.72% (18 or older)	12.5% (18 or older)
Past Year Non-medical Use of Prescription Pain Relievers	1.5% (18 or older)	4.2% (18 or older)
Past Year Methamphetamine Use	0.54% (18 or older)	0.5% (12 or older) 0.8% (18-20) 0.4% (21-25) 0.8% (26-34) 0.3% (35 or older)
Past Year Street Drug Use	Cocaine or crack: <0.01% Bath salts: <0.01% Inhalants: <0.01%	Cocaine, including crack: 1.6%* Crack: 0.2%* Bath salts: not available Inhalants: 0.6%* *persons aged 12 or older

*2013 NSDUH Illicit Drug Use Tables (Prevalence Estimates): <http://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabsPDFHTML2013/Web/PDFW/NSDUH-DetTabsSect1peTabs64to68-2013.pdf> Tables 1.68B, 1.58B, 1.1B-1.8A, Table 1.1B

Discordance between Positive Screen and Perceived Need for Care

Measure	Of those who screened positive, percent who perceived no need for care	95% Confidence Interval
Mental Health	63.84%	(56.02, 71.49)
Substance Use (lower severity alcohol use)	98.09%	(96.75, 98.99)
Substance Use (higher severity alcohol use)	97.21%	(95.42, 98.45)
Substance Use (highest severity alcohol use)	92.57%	(86.82, 96.36)

National Comparisons: Need for Care

Measure	SD Health Survey	National Comparison*
Perceived need for substance use treatment	98.74%- No 1.27% -Yes	8.6% Needed treatment for drug or alcohol problem at specialty facility; 8.0% needed but did not receive treatment
Perceived a need for mental health care but did not receive all care needed	3.55%	4.6%
Self-reported Hospital Utilization for drug or alcohol problem	0.9% 1 or more ER visit for SU 0.44% 1 or more inpatient hospital visit for SU	Approximate estimates: 0.2% 1 or more ER visit for SU 0.35% 1 or more inpatient hospital visit for SU
Self-reported Hospital Utilization for mental health problem	11.35% 1 or more ER visit for MH 5.69% 1 or more inpatient for MH	Approximate estimates: 0.13% 1 or more inpatient for MH

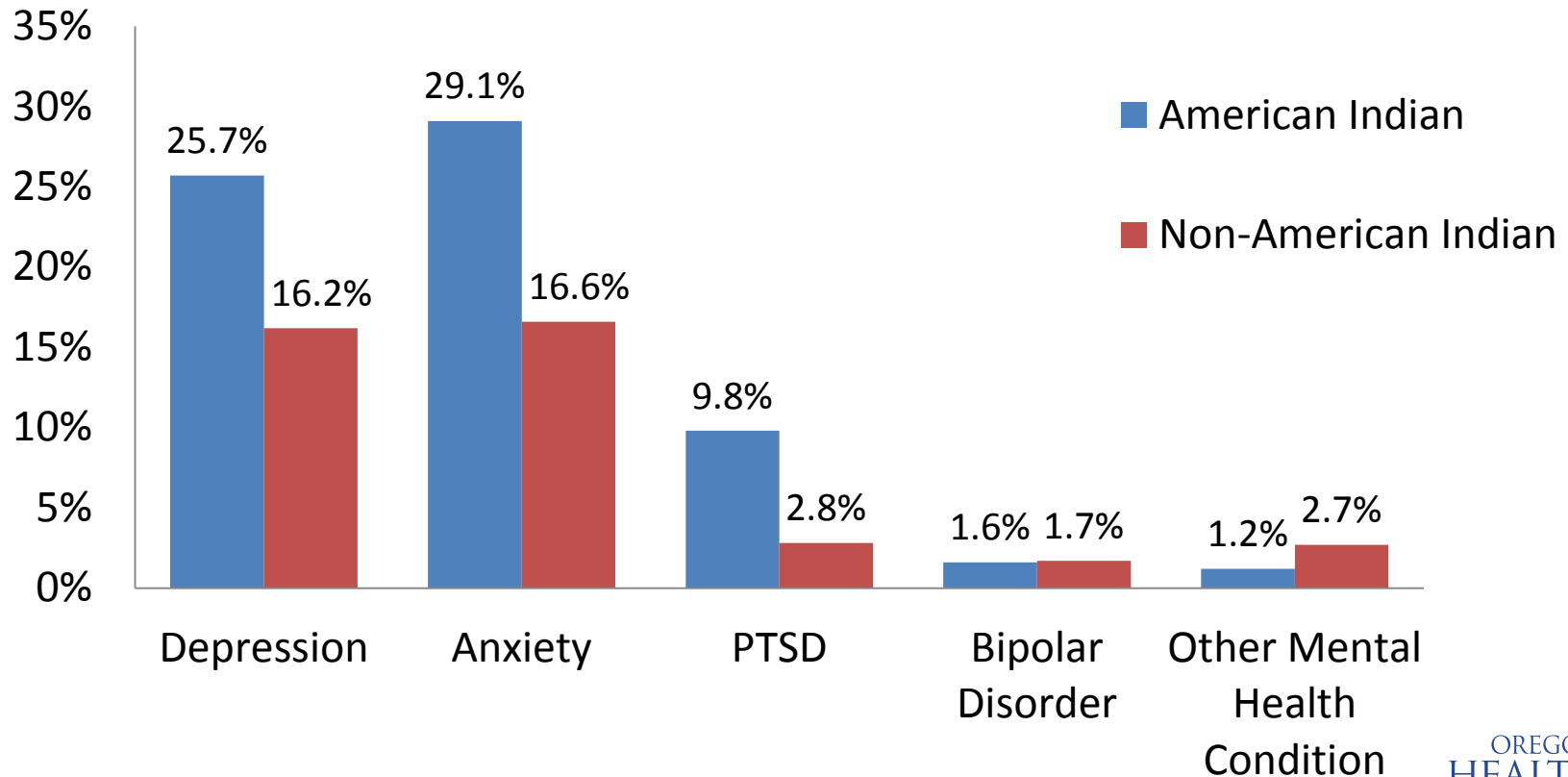
*2013 NSDUH Dependence, Abuse, and Treatment Tables <http://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabsPDFWHTML2013/Web/PDFW/NSDUH-DetTabsSect5peTabs51to53-2013.pdf> Table 5.51A, 5.27-5.40
 2013 NSDUH Mental Health Detailed Tables <http://www.samhsa.gov/data/sites/default/files/2013MHDetTabs/NSDUH-MHDetTabs2013.htm#tab1.23B> Table 1.36B, 1.30B

Selected Populations

Prevalence & Access

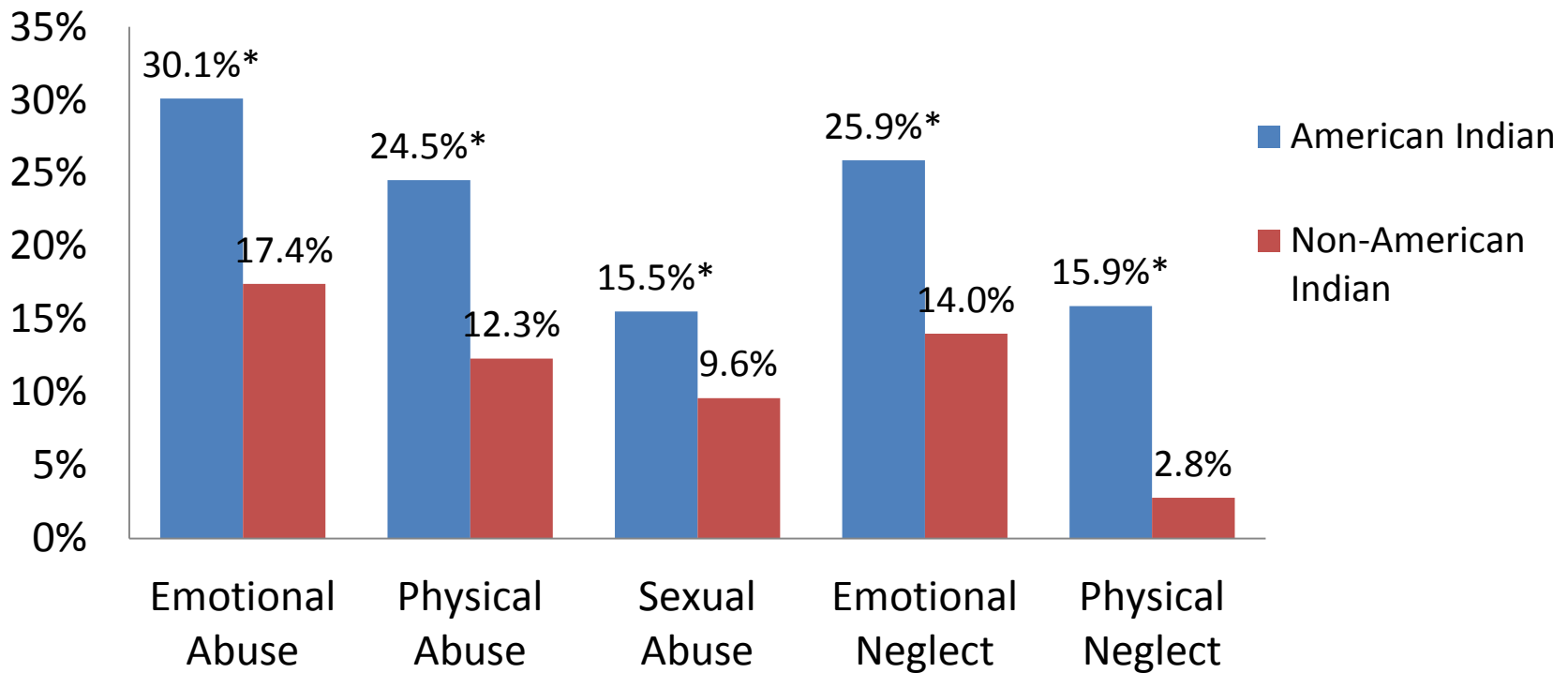
American Indian: Prevalence of Mental Health Conditions

Self-reported diagnoses of behavioral health conditions by American Indian race/ethnicity



American Indian: Adverse Childhood Experiences (ACEs)

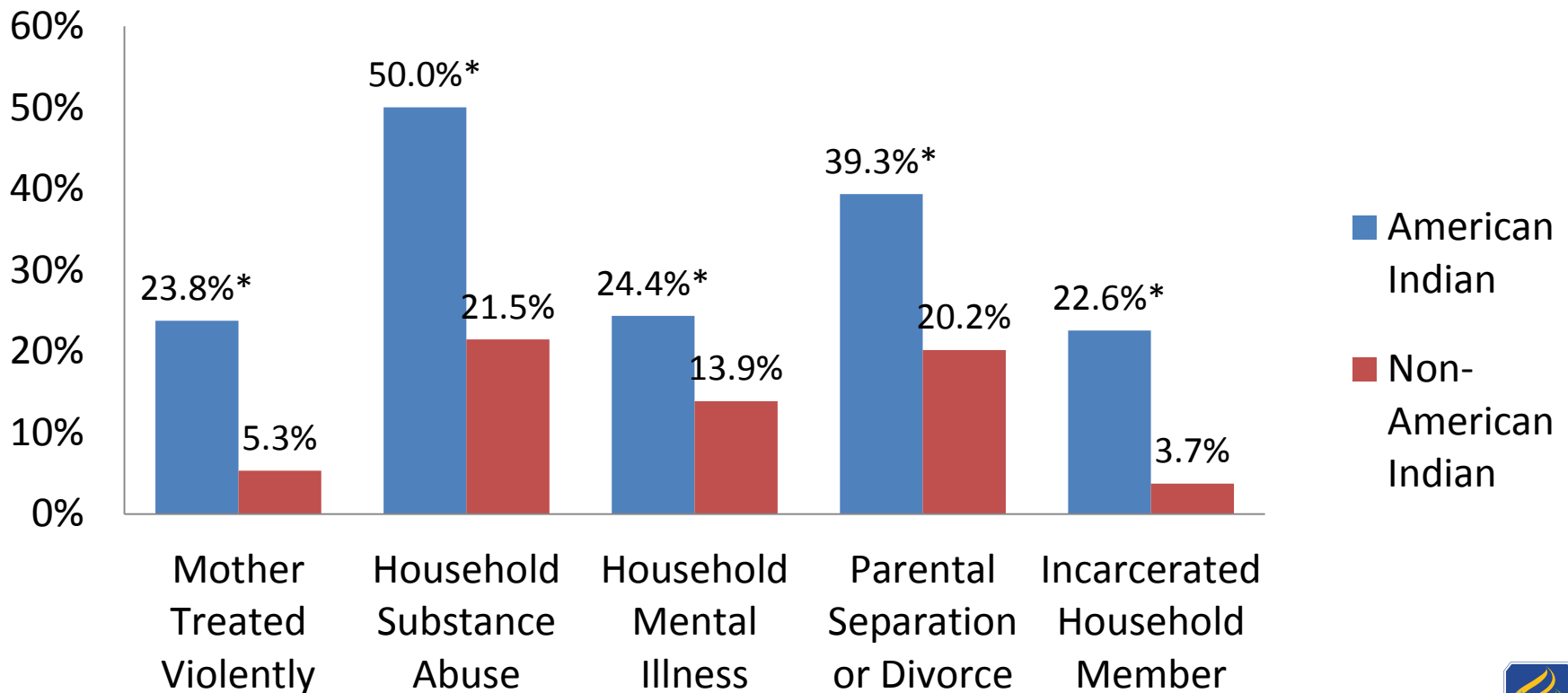
Childhood experiences of abuse and neglect by American Indian race/ethnicity compared to non-American Indian respondents



*Significantly different from non-American Indian respondents ($P < 0.05$)

American Indian: Adverse Childhood Experiences (ACEs)

Childhood experiences of abuse and neglect by American Indian race/ethnicity compared to non-American Indian respondents



*Significantly different from non-American Indian respondents ($P < 0.05$)

ACEs: Associations with Health Conditions

- Statewide, higher ACE Scores were associated with an increased likelihood of:
 - screening positive for depression, anxiety, or PTSD
 - reporting diagnoses of asthma, high blood pressure, heart disease, high cholesterol, and chronic obstructive pulmonary disease (COPD)
- This link is consistent with other research on general US population
- What is novel is high rate of ACEs in AI population

American Indian: Prevalence

Differences in prevalence between American Indian and non-American Indian participants based on screens for mental health, alcohol use, and adverse childhood experiences

Variable	Non-American Indian	American Indian	Significance*
Depression	5.14%	8.51%	0.02
Anxiety	7.40%	8.60%	0.49
PTSD	5.24%	13.34%	<0.01
Alcohol Misuse	42.51%	42.65%	0.99
3 or more ACEs	17.40%	49.80%	<0.01

*P-values calculated from Rao-Scott Chi-Square tests. Results have not been adjusted for confounding.

American Indian: ACEs Statewide

The American Indian population has a high prevalence of adverse childhood experiences

	American Indian	Non-AI	Significance
Abuse			
Emotional Abuse	30.10%	17.41%	0.0008*
Physical Abuse	24.51%	12.31%	0.0002*
Sexual Abuse	15.53%	9.60%	0.0263*
Neglect			
Emotional Neglect	25.87%	14.00%	0.0005*
Physical Neglect	15.89%	2.78%	<0.0001*
Household Dysfunction			
Mother Treated Violently	23.76%	5.31%	<0.0001*
Household Substance Abuse	50.04%	21.49%	<0.0001*
Household Mental Illness	24.36%	13.89%	0.0032*
Parental Separation or Divorce	39.34%	20.17%	<0.0001*
Incarcerated Household Member	22.57%	3.73%	<0.0001*
Number of ACEs (Score)			< 0.0001*
0	16.84%	50.02%	
1	21.59%	23.02%	
2	16.20%	9.60%	
3	12.99%	6.09%	
4	8.93%	4.24%	
5 or more	23.45%	7.02%	

American Indian: ACEs continued

Prevalence of ACEs is high for AIs in both Urban and Reservation areas.

	Urban AI	Reservation AI	Significance
Abuse			
Emotional Abuse	23.07%	34.52%	0.2582
Physical Abuse	23.06%	28.21%	0.5920
Sexual Abuse	11.26%	15.85%	0.5056
Neglect			
Emotional Neglect	17.66%	31.48%	0.1556
Physical Neglect	14.48%	18.83%	0.5958
Household Dysfunction			
Mother Treated Violently	28.55%	20.74%	0.4054
Household Substance Abuse	50.11%	51.84%	0.8787
Household Mental Illness	20.88%	31.18%	0.3093
Parental Separation or Divorce	63.72%	62.06%	0.8762
Incarcerated Household Member	25.06%	28.74%	0.7077
Number of ACEs (Score)			.4604
0	9.87%	16.69%	
1	32.33%	16.89%	
2	12.96%	18.54%	
3	19.25%	13.76%	
4	4.31%	5.87%	
5 or more	21.28%	28.25%	

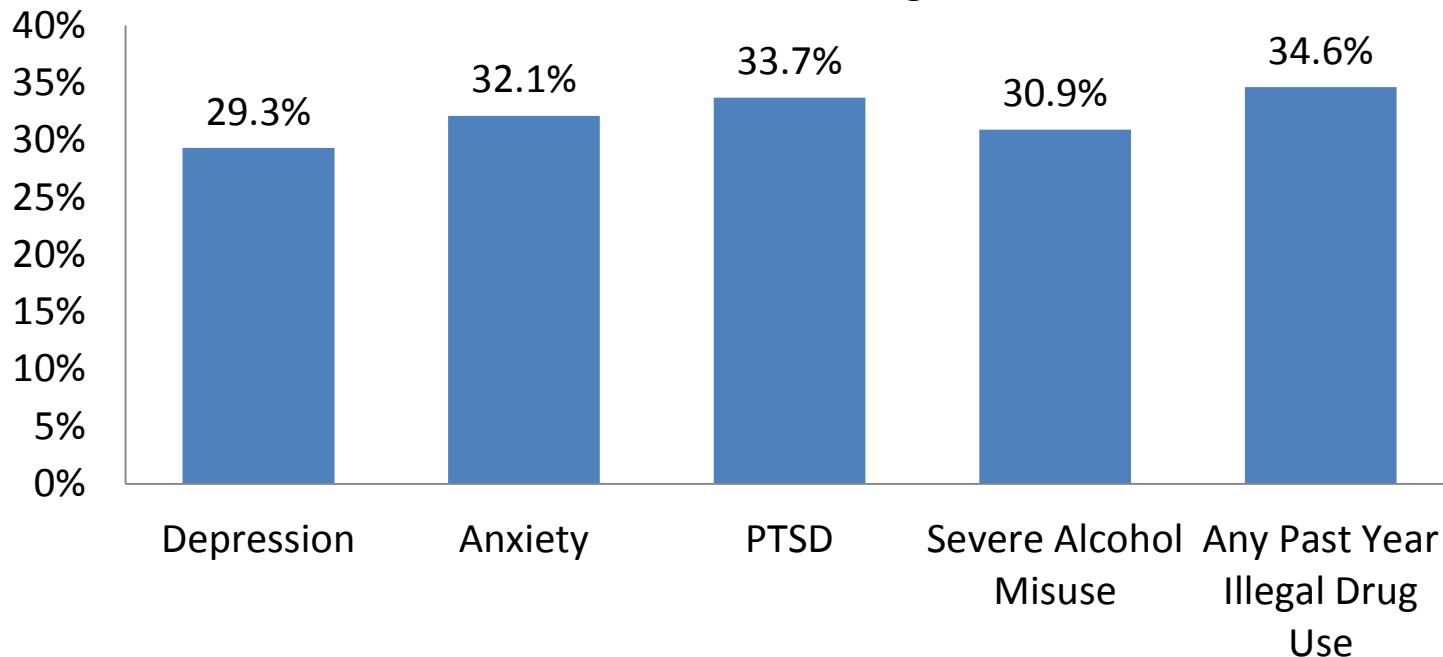
Associations between ACEs and Health Conditions by Race/Ethnicity

	Non-American Indian		American Indian		Interaction
	Odds Ratio	P-value	Odds Ratio	P-value	P-value
Behavioral Health					
PHQ-2 Depression	1.529	<0.0001*	1.483	<0.0001*	<0.0001*
GAD-2 Anxiety	1.489	<0.0001*	1.420	<0.0001*	0.5242
PTSD	1.534	<0.0001*	1.235	0.0576	0.0616
AUDIT-C alcohol use	1.072	0.0070*	0.983	0.8186	0.2670
Self-reported chronic diseases					
Diabetes	1.031	0.3789	0.889	0.1832	0.1159
Asthma	1.137	0.0008*	1.189	0.0376*	0.6450
High blood pressure	1.006	0.8165	1.045	0.5714	0.6331
Heart disease	0.925	0.0287*	1.283	0.0093*	0.0022*
High cholesterol	0.993	0.7719	0.896	0.2150	0.2682
COPD	1.102	0.0354*	1.369	0.0022*	0.0766
Cancer	1.009	0.7660	0.839	0.1097	0.3756

Key Findings: Homeless

- High rates of mental health conditions, alcohol misuse, drug use, and ACEs
- Considerable unmet need for care and access challenges

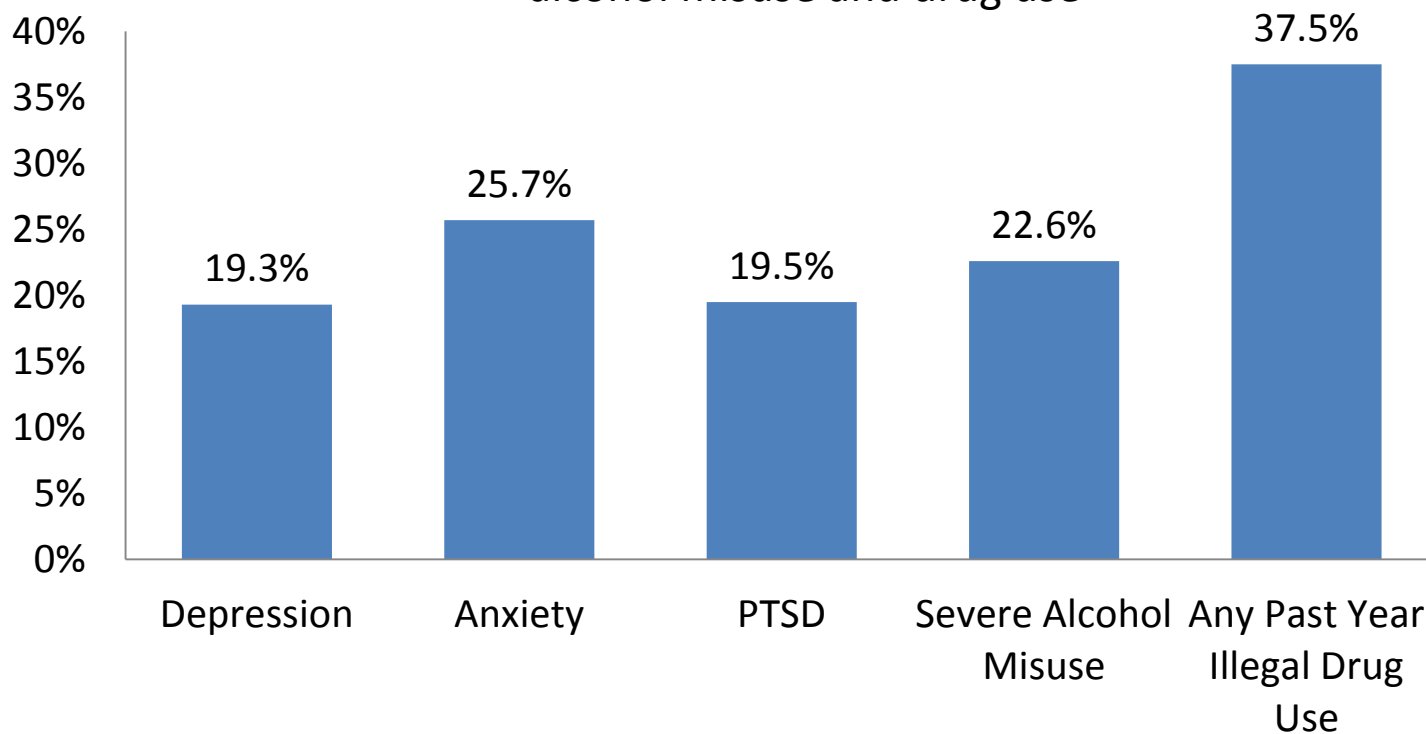
Homeless respondents who screened positive for mental health conditions, alcohol misuse and drug use



Key Findings: Housing Insecure

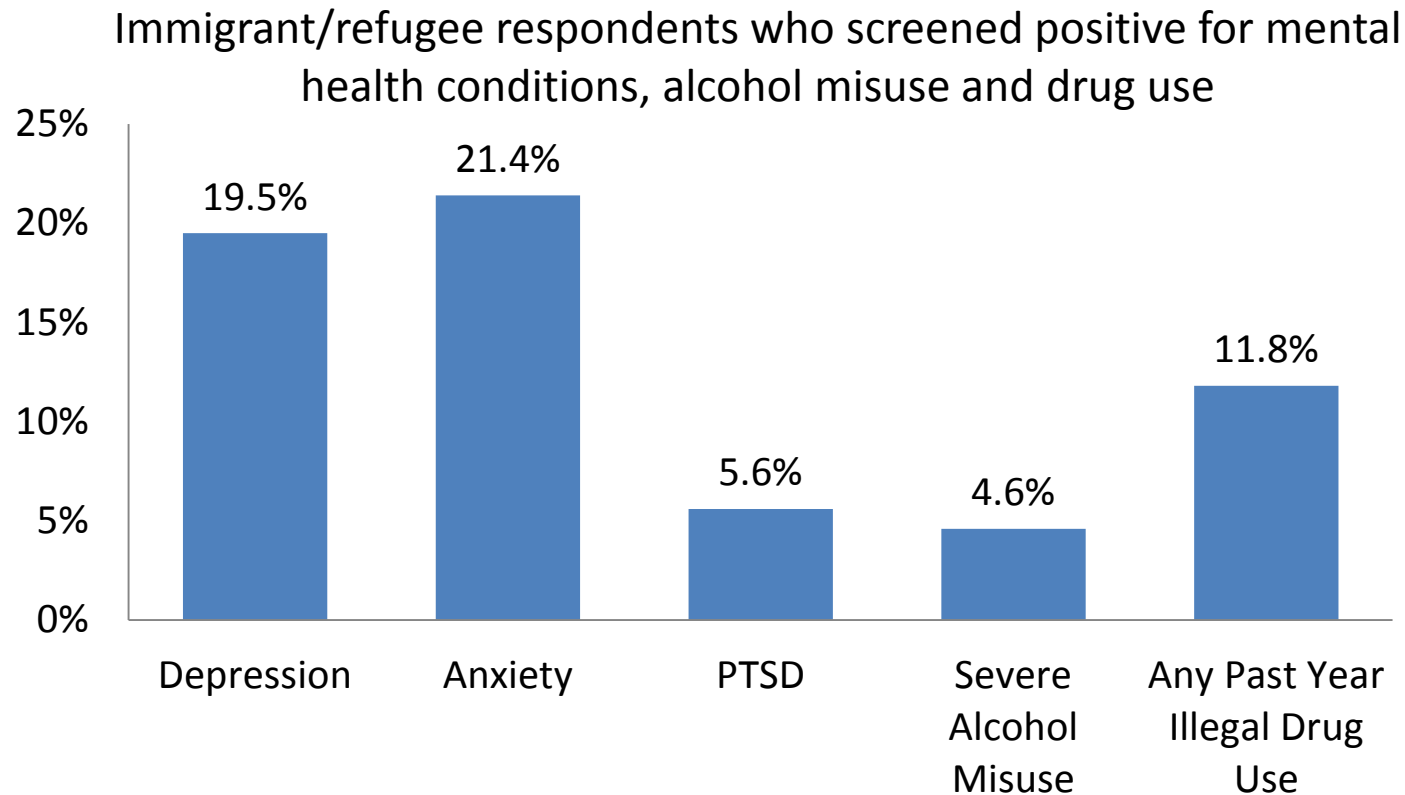
- High rates of mental health conditions and substance use
- High hospital utilization rates and health care access problems

Housing Insecure respondents who screened positive for mental health conditions, alcohol misuse and drug use



Immigrant and Refugee

- High prevalence of some mental health conditions, low prevalence of health risk behaviors, and limited access to health care services



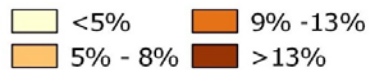
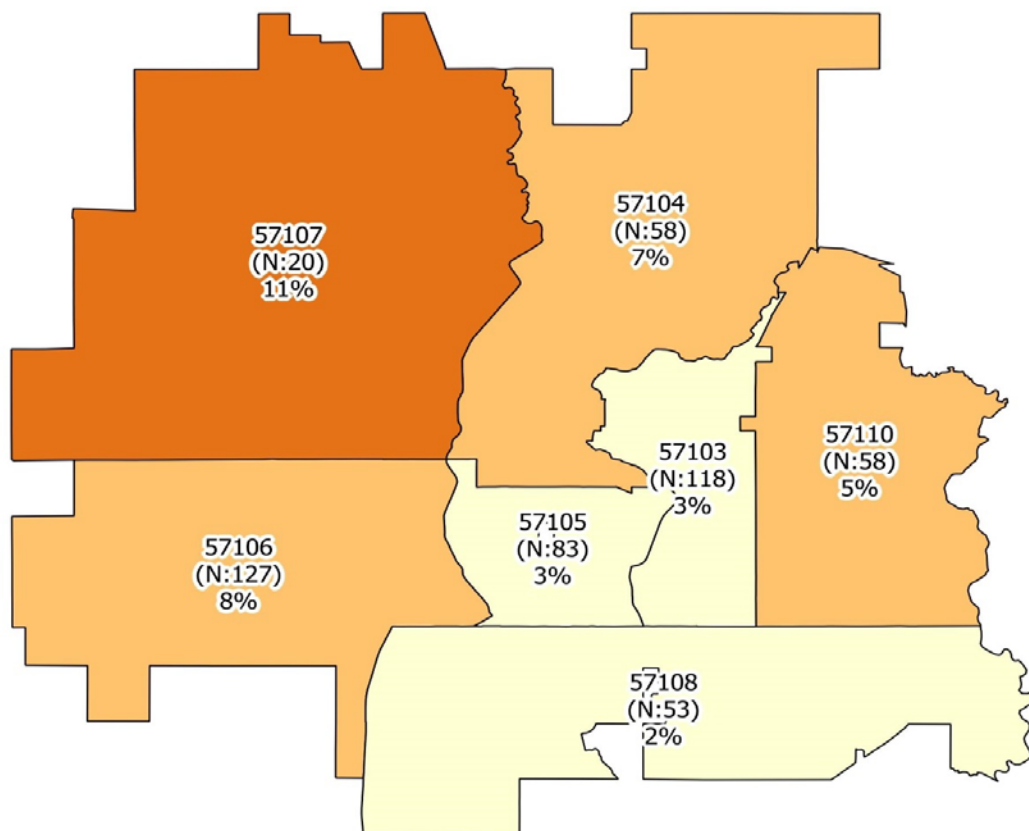
Key Findings

- Substantial health disparities compared to non-American Indian respondents
 - High prevalence rates of mental health conditions
 - High rates of drug use and alcohol misuse, but also high rates of sobriety
 - Significantly elevated prevalence rates of adverse childhood experiences (ACEs)
 - Unmet need for care and limited access to health care services
- High rates of mental illness/drug use disorders in homeless/housing insecure
- Questions?

Sioux Falls Area Maps

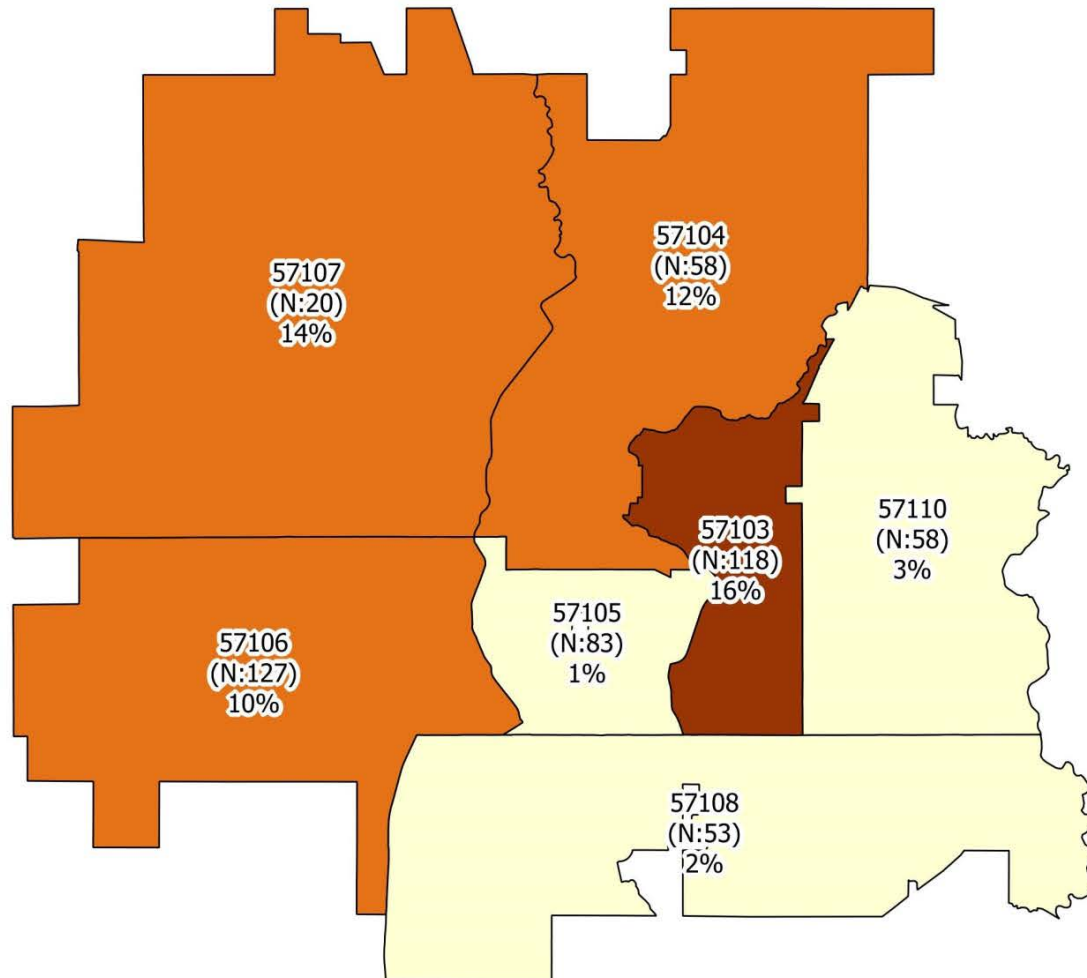
Sioux Falls Prevalence of Depression

Sioux Falls | PHQ-2 Depression Score | Study-wide Average: 6%



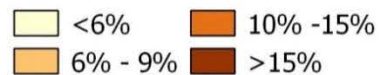
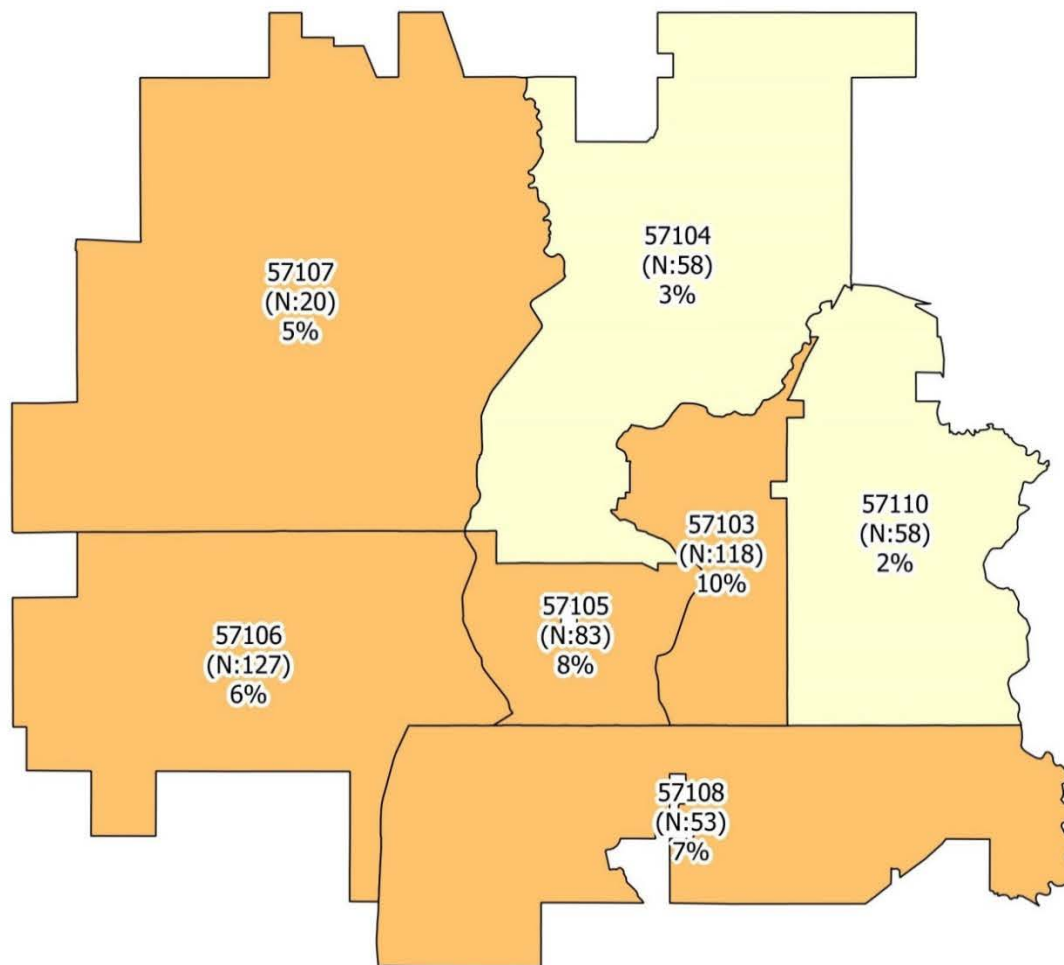
Sioux Falls Prevalence of Anxiety

Sioux Falls | GAD-2 Anxiety | Study-wide Average: 8%



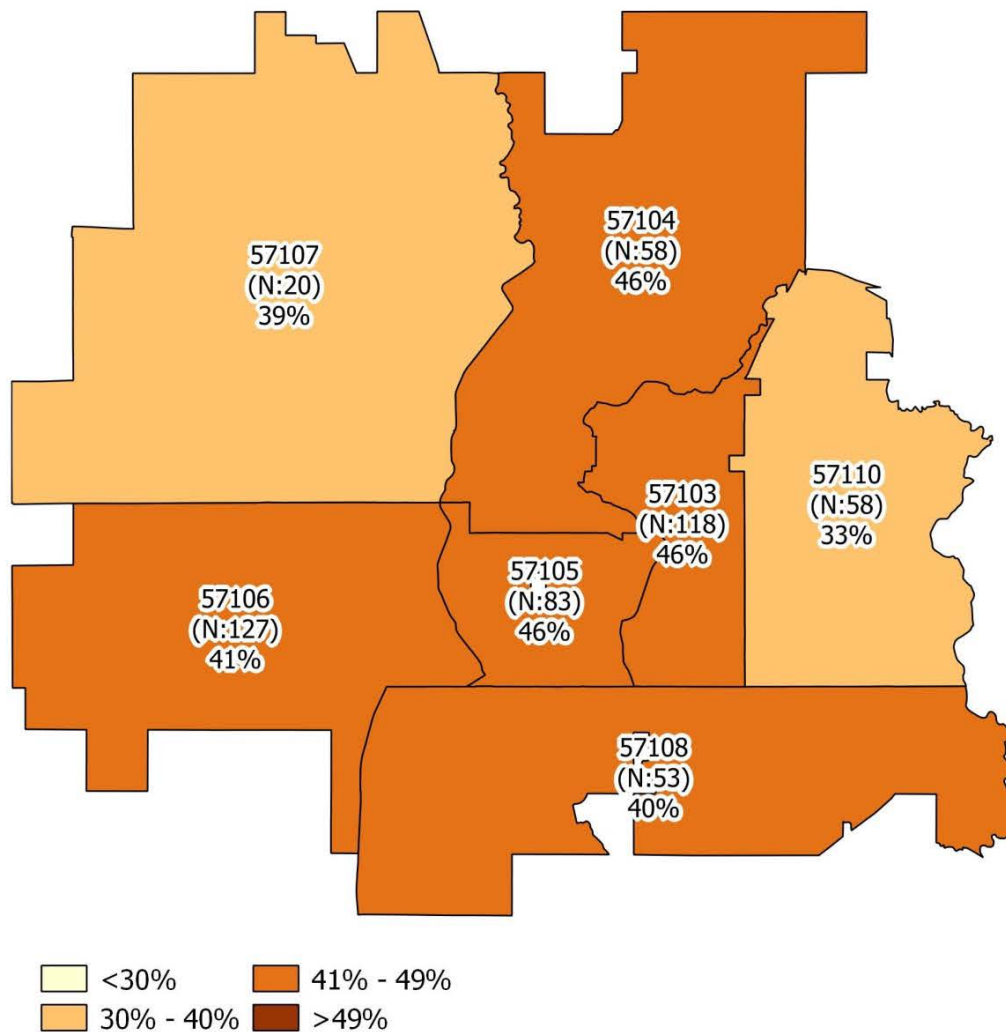
Sioux Falls Prevalence of PTSD

Sioux Falls | PTSD | Study-wide Average: 6%



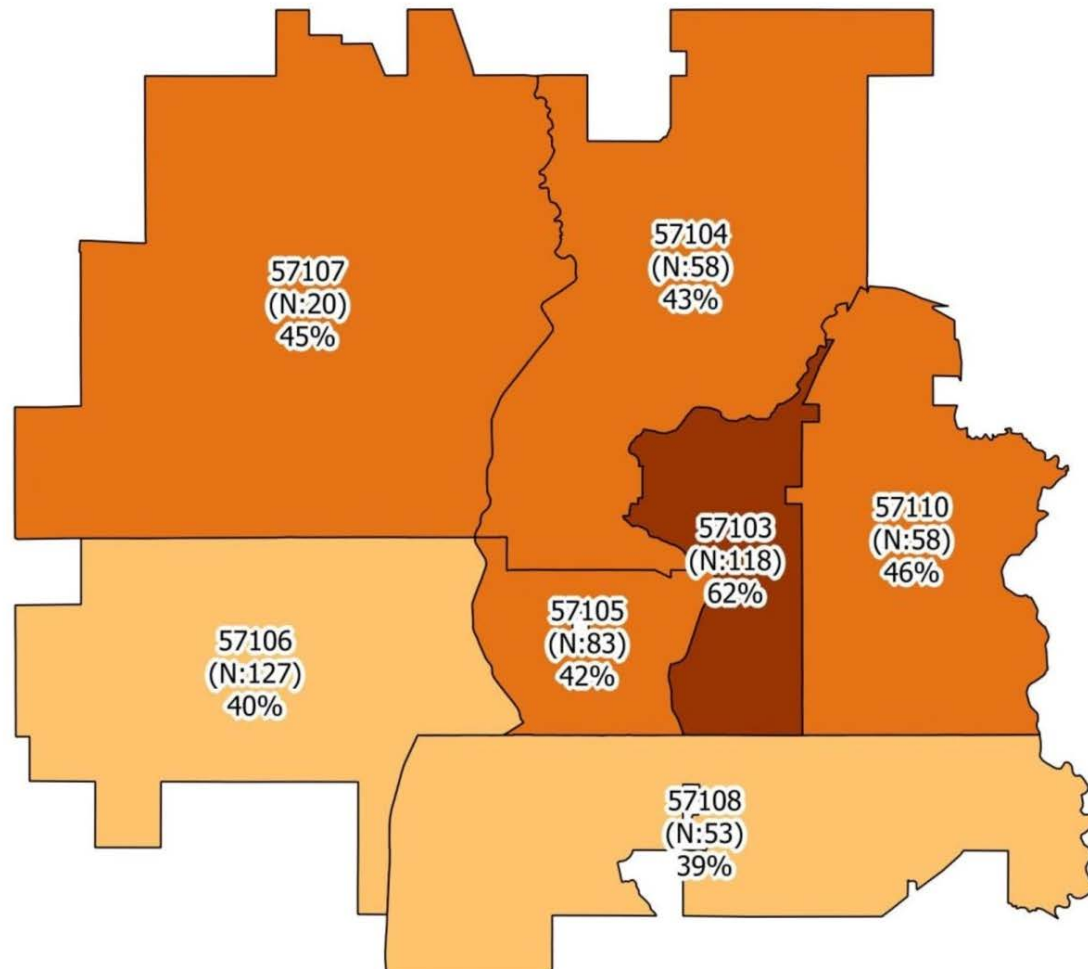
Sioux Falls Prevalence of Problem Drinking

Sioux Falls | Audit-C Alcohol Abuse | Study-wide Average: 42%



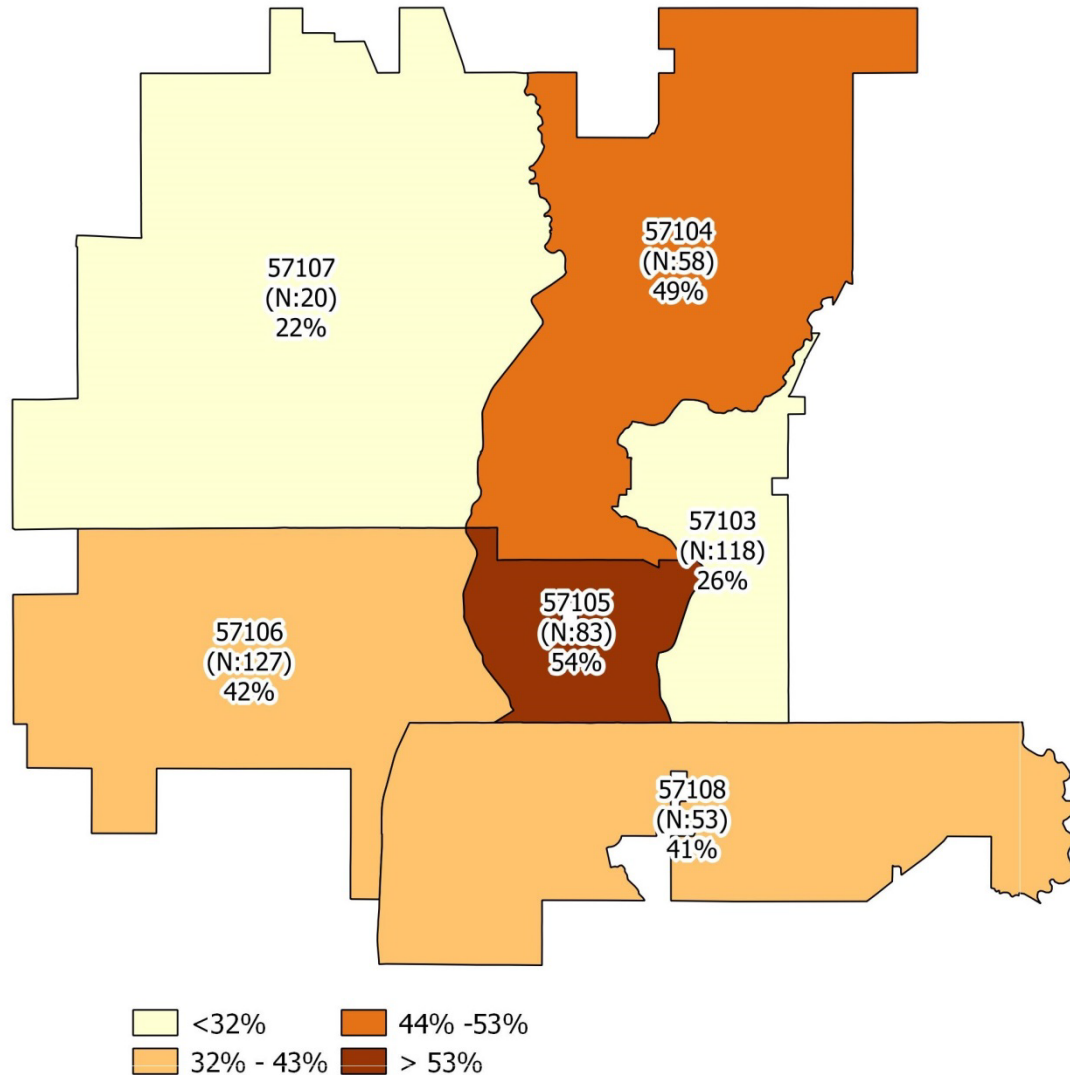
Sioux Falls Prevalence of Problem Drinking among Females (3+ AUDIT-C Score)

Sioux Falls | Audit-C Alcohol Abuse Female | Study-wide Average: 42%



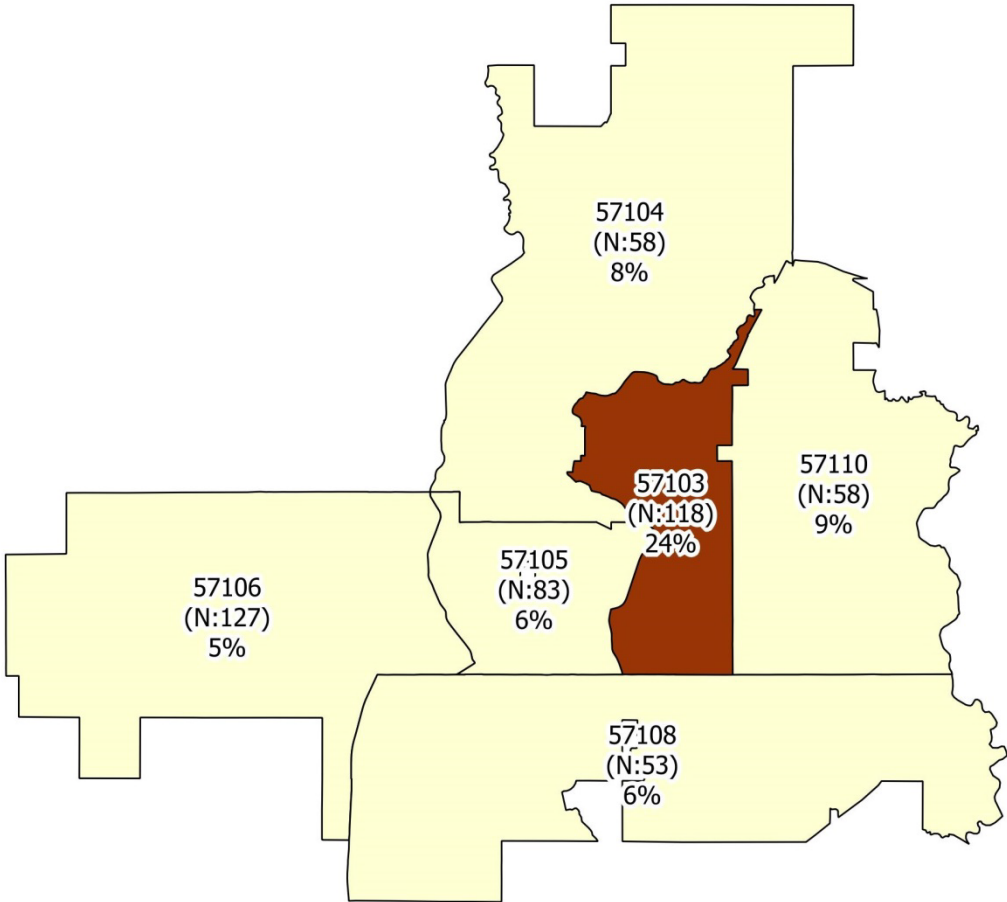
Sioux Falls Prevalence of Problem Drinking among Males (4+ AUDIT-C Score)

Sioux Falls | Audit-C Alcohol Abuse Male | Study-wide Average: 42%

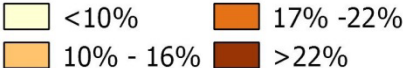


Sioux Falls Prevalence of Severe Alcohol Misuse (6+ AUDIT-C Score)

Sioux Falls | Audit 6+ | Study-wide Average: 11%

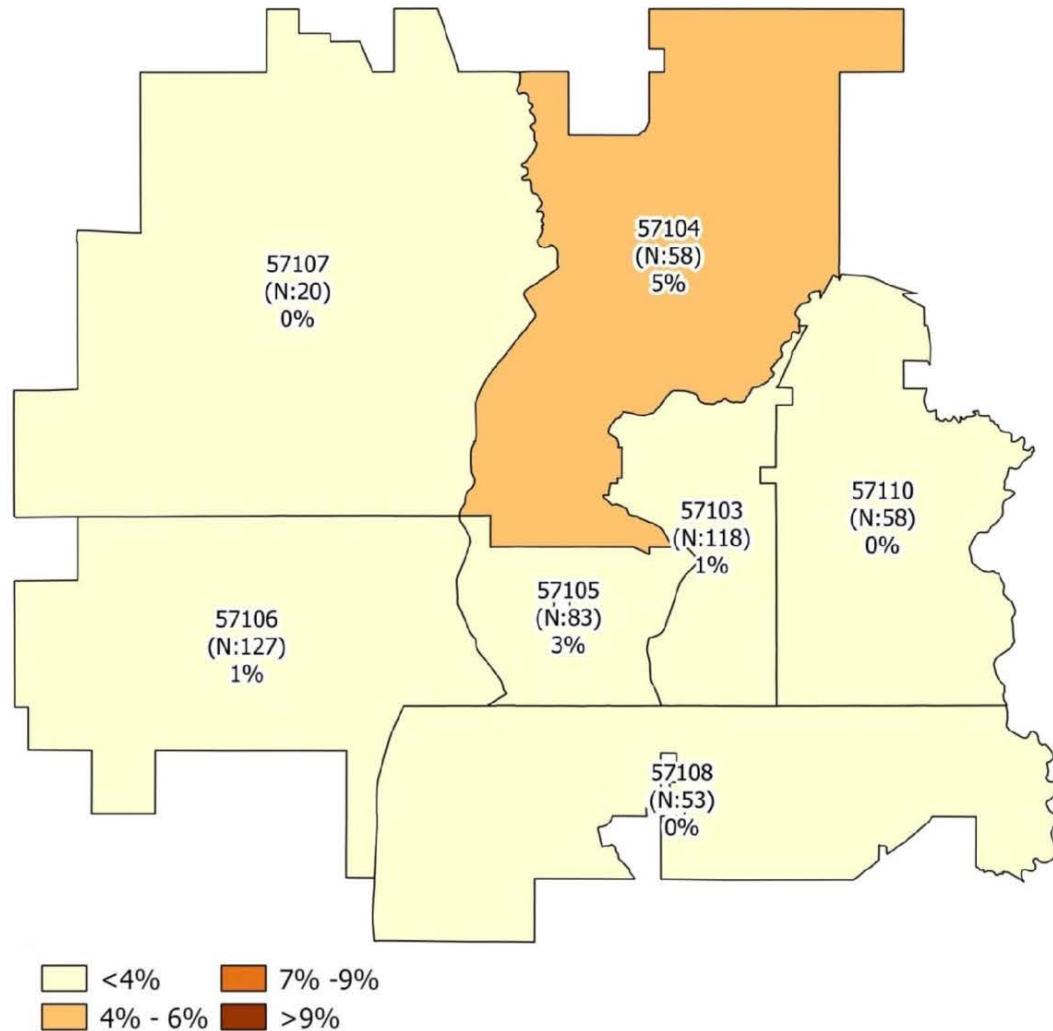


Note: ZIP code 57107 is excluded from this map because there were not enough responses from the ZIP code to report this measure



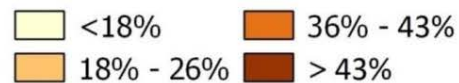
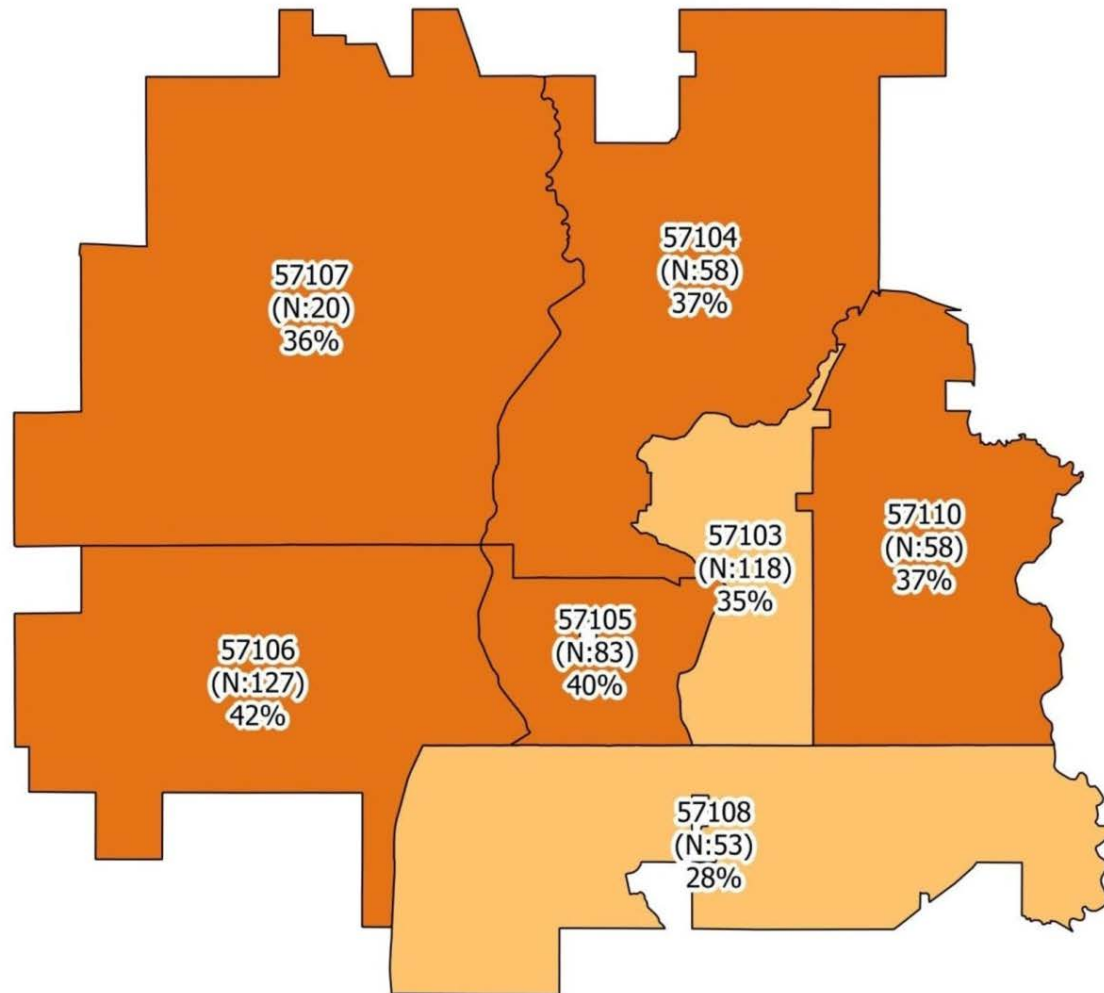
Sioux Falls Highest Severity Alcohol Misuse (9+ AUDIT-C Score)

Sioux Falls| Audit 9+ | Study-wide Average: 2%



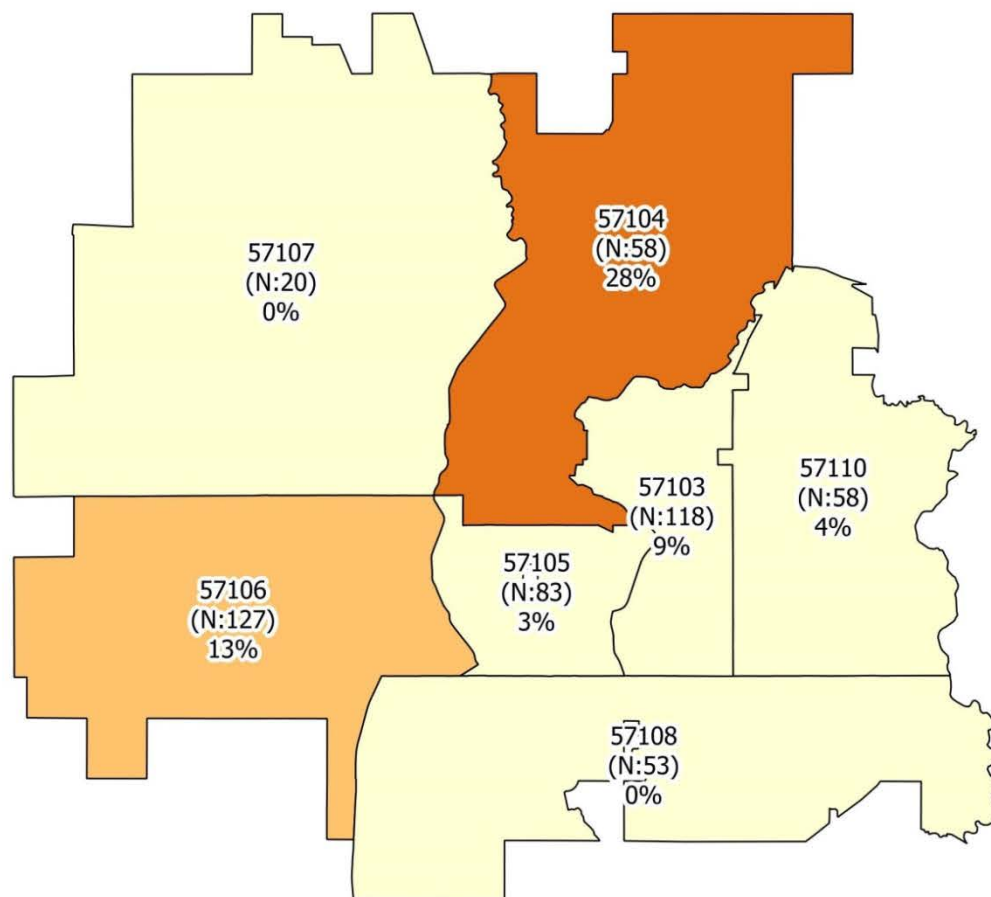
Sioux Falls Prevalence of Binge Drinking

Sioux Falls | Binge Drinking | Study-wide Average: 39%



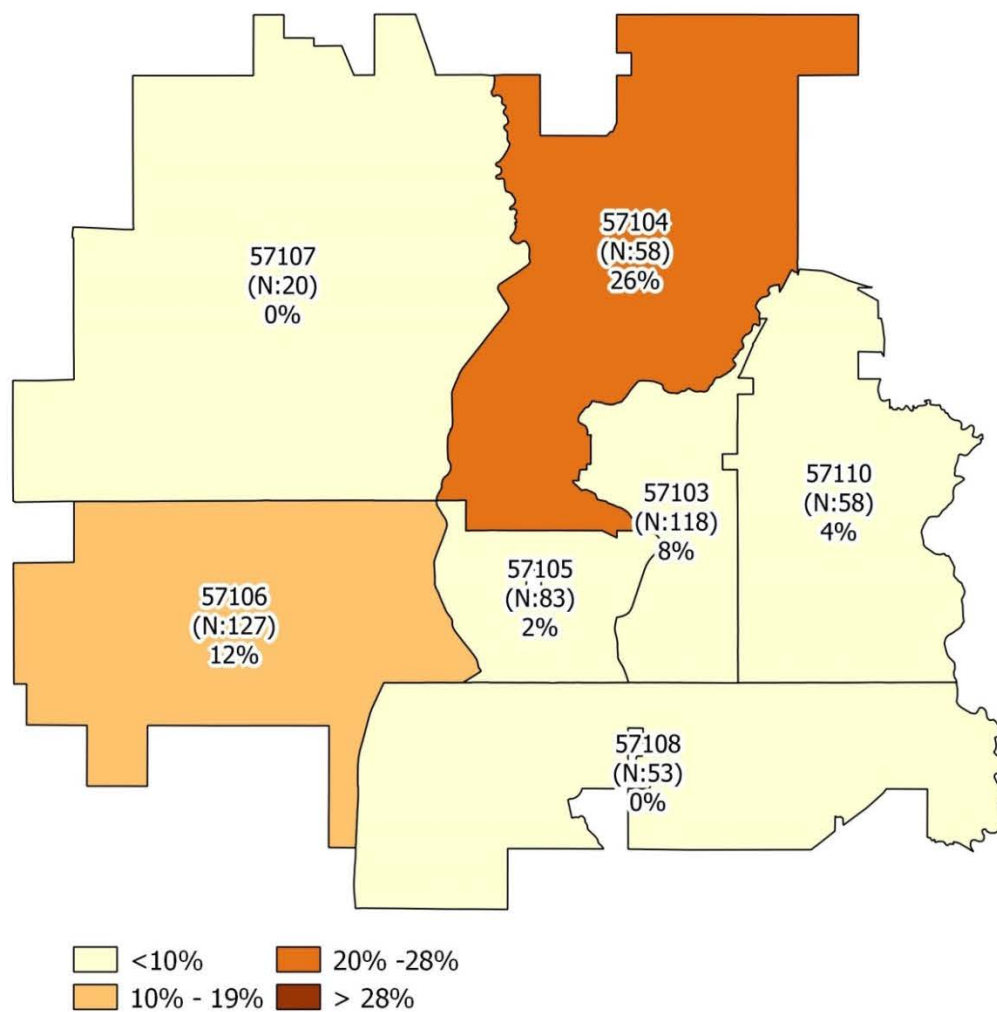
Sioux Falls Prevalence of Any Substance Use in the Past Year

Sioux Falls | Any Drug Use-Past Year | Study-wide Average: 8%



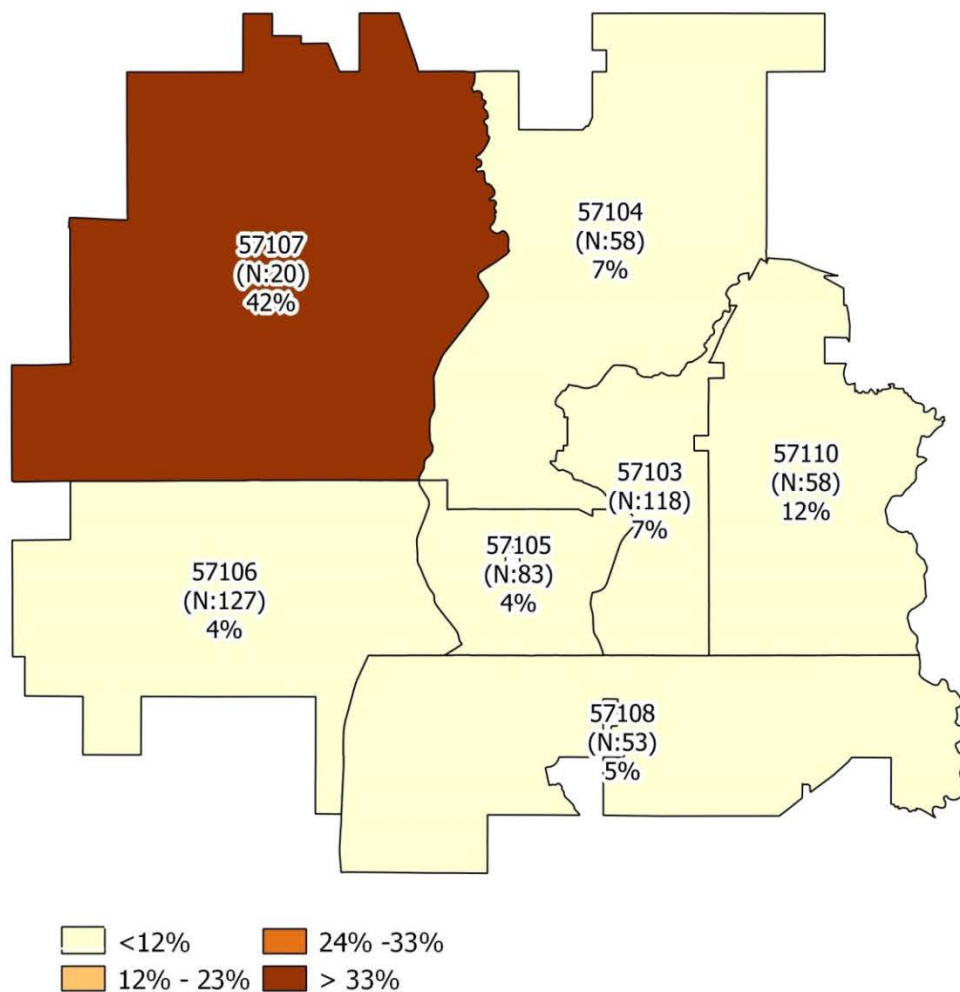
Sioux Falls Prevalence of Marijuana Use in the Past Year

Sioux Falls | Marijuana Use | Study-wide Average: 7%



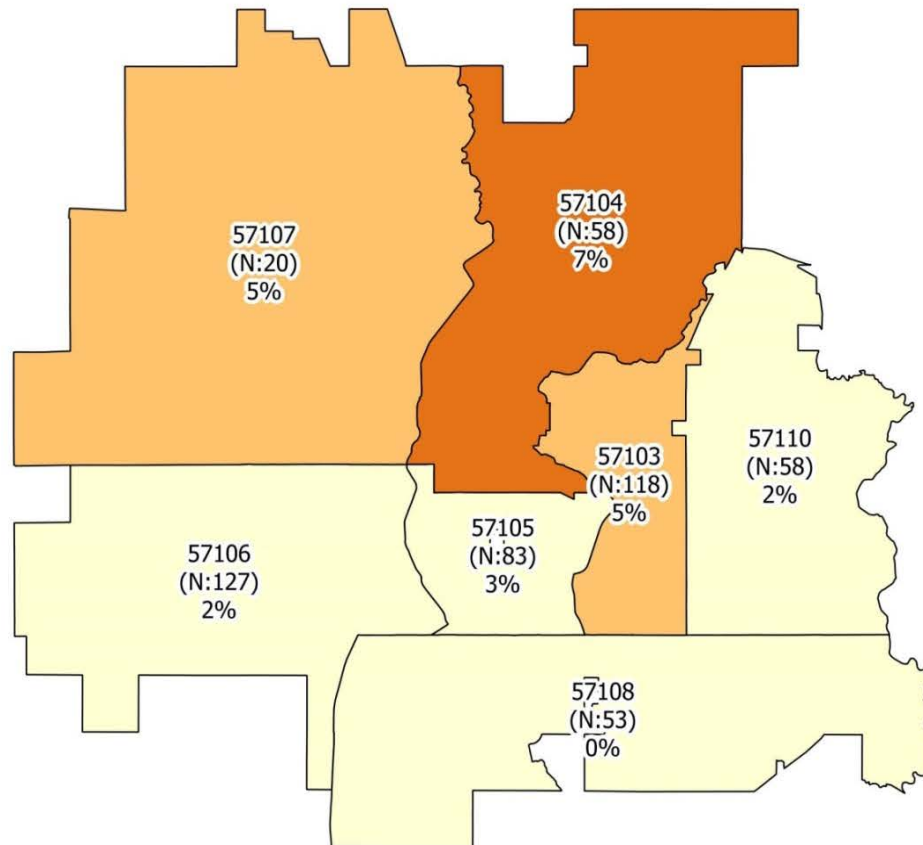
Sioux Falls Prevalence of Unmet Medical Need

Sioux Falls | Unmet Medical Need | Study-wide Average: 9%



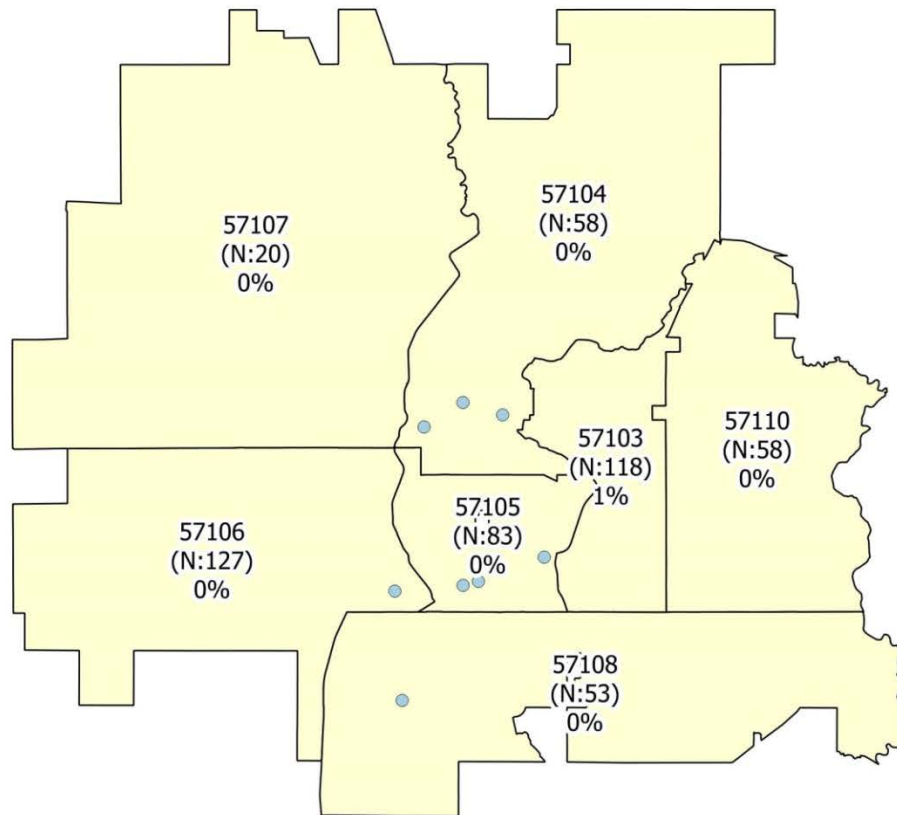
Sioux Falls Prevalence of Unmet Mental Health Need

Sioux Falls | Unmet Mental Health Need | Study-wide Average: 3%



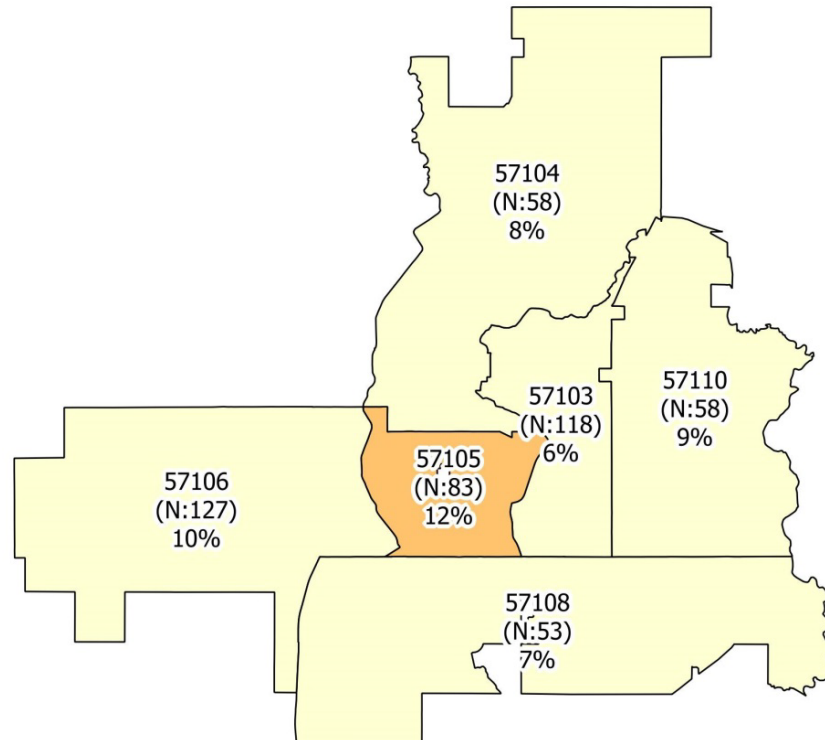
Sioux Falls Prevalence of Unmet Substance Use Need

Sioux Falls | Unmet Substance Abuse Need | Study-wide Average: 0%



Sioux Falls Prevalence of Emergency Room Use Due to a Mental Health Condition

Sioux Falls | 1 or More ER Visit for MH | Study-wide Average: 11%

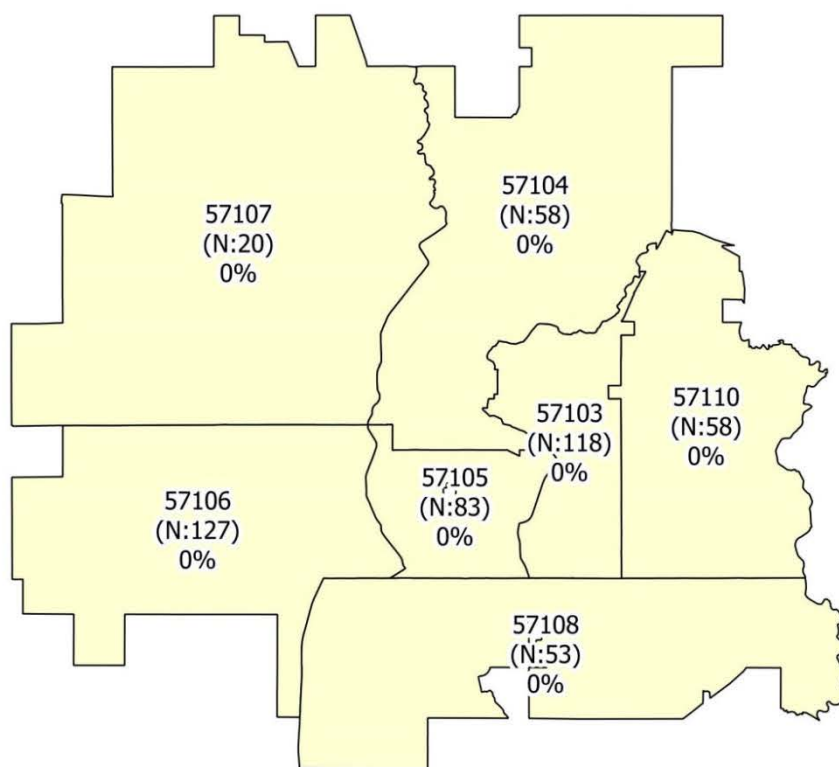


Note: ZIP code 57107 is excluded from this map because there were not enough responses from the ZIP code to report this measure



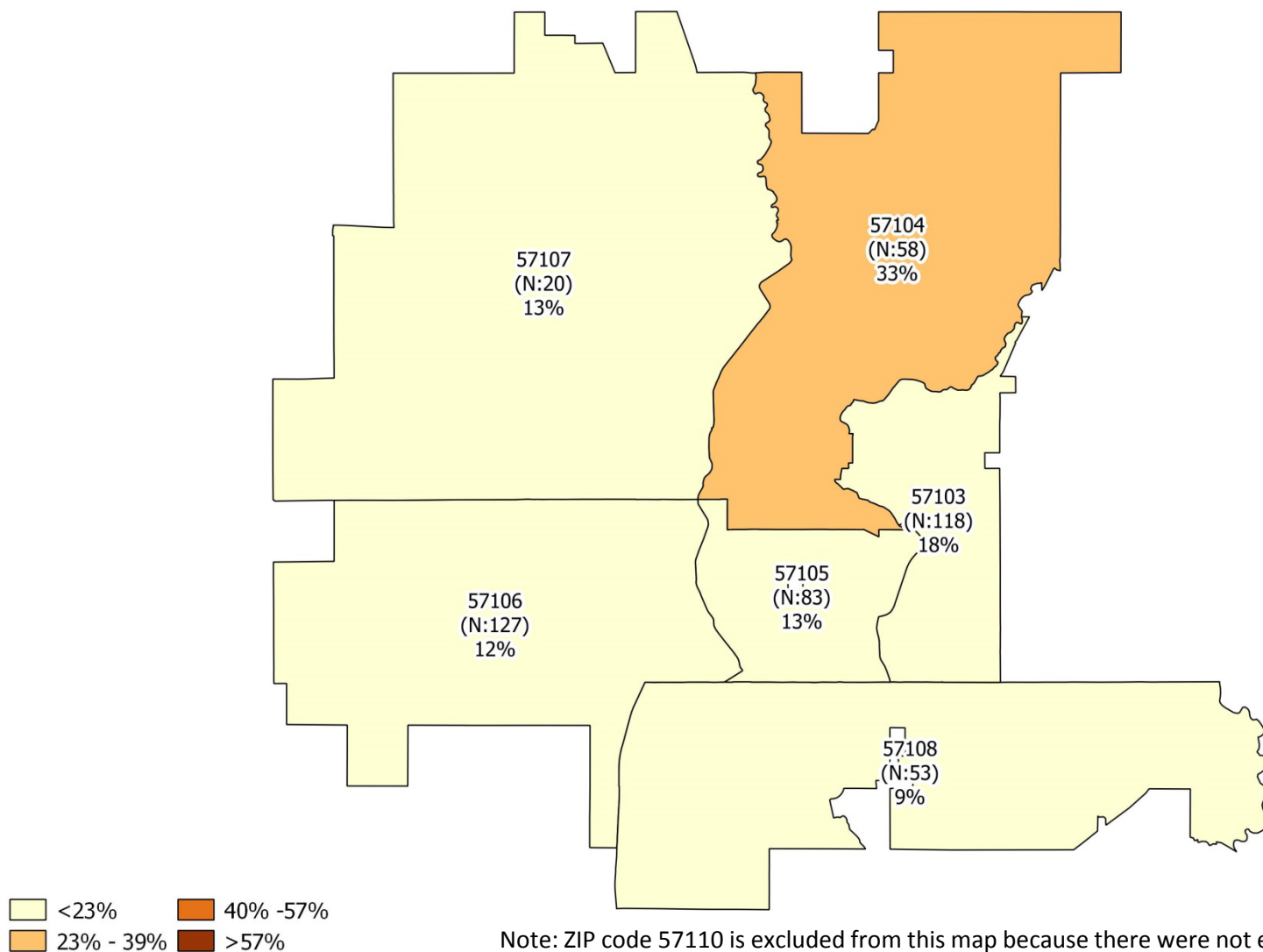
Sioux Falls Prevalence of Emergency Room Use Due to a Substance Use Condition

Sioux Falls | 1 or More ER Visit for SU | Study-wide Average: 1%



Sioux Falls Lack of Access to Primary Care Provider

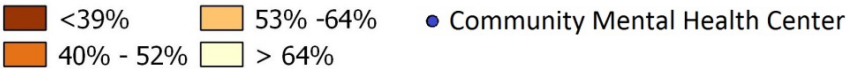
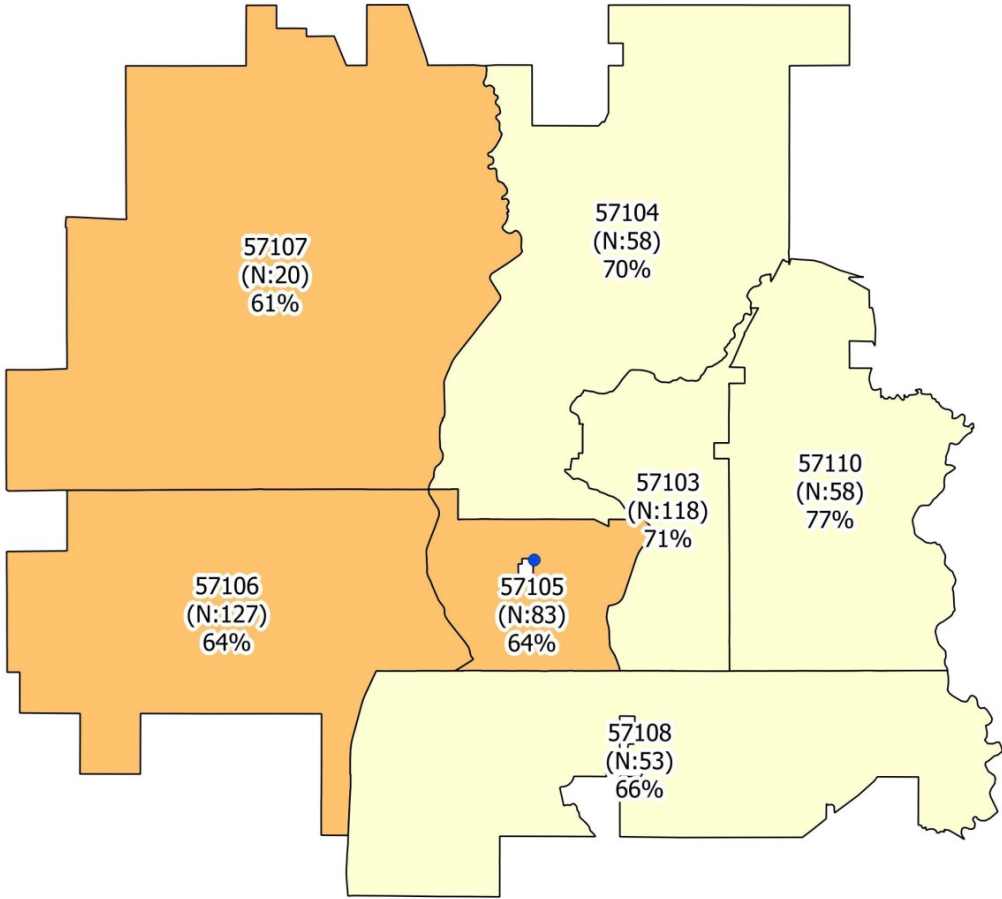
Sioux Falls | No PCP | Study-wide Average: 23%



Note: ZIP code 57110 is excluded from this map because there were not enough responses from the ZIP code to report this measure

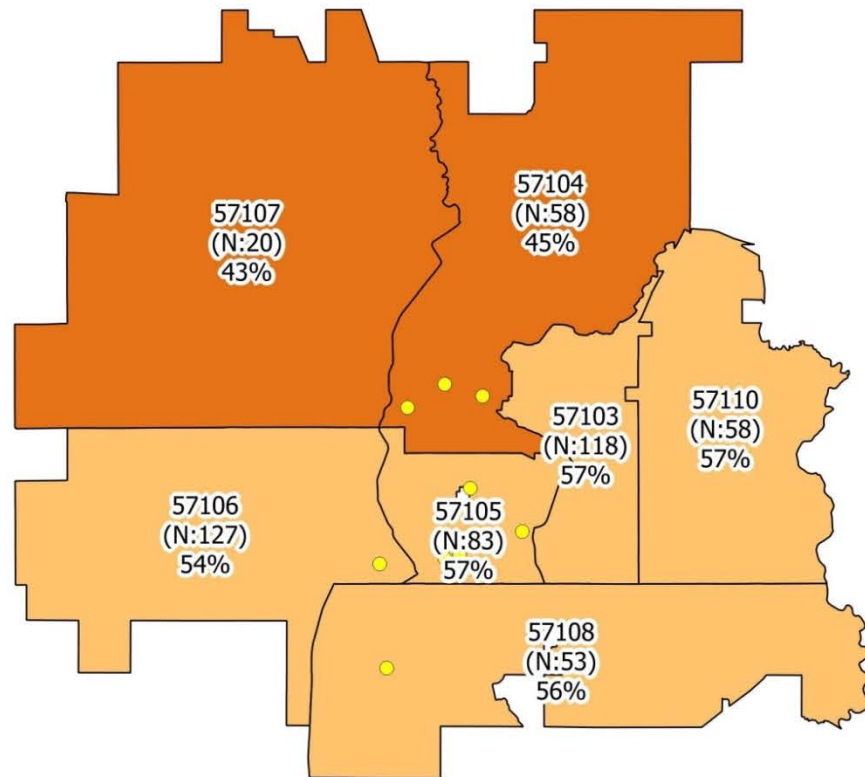
Sioux Falls Knowledge of Mental Health Treatment Options

Sioux Falls | Know Where to go for MH Care | Study-wide Average: 62%



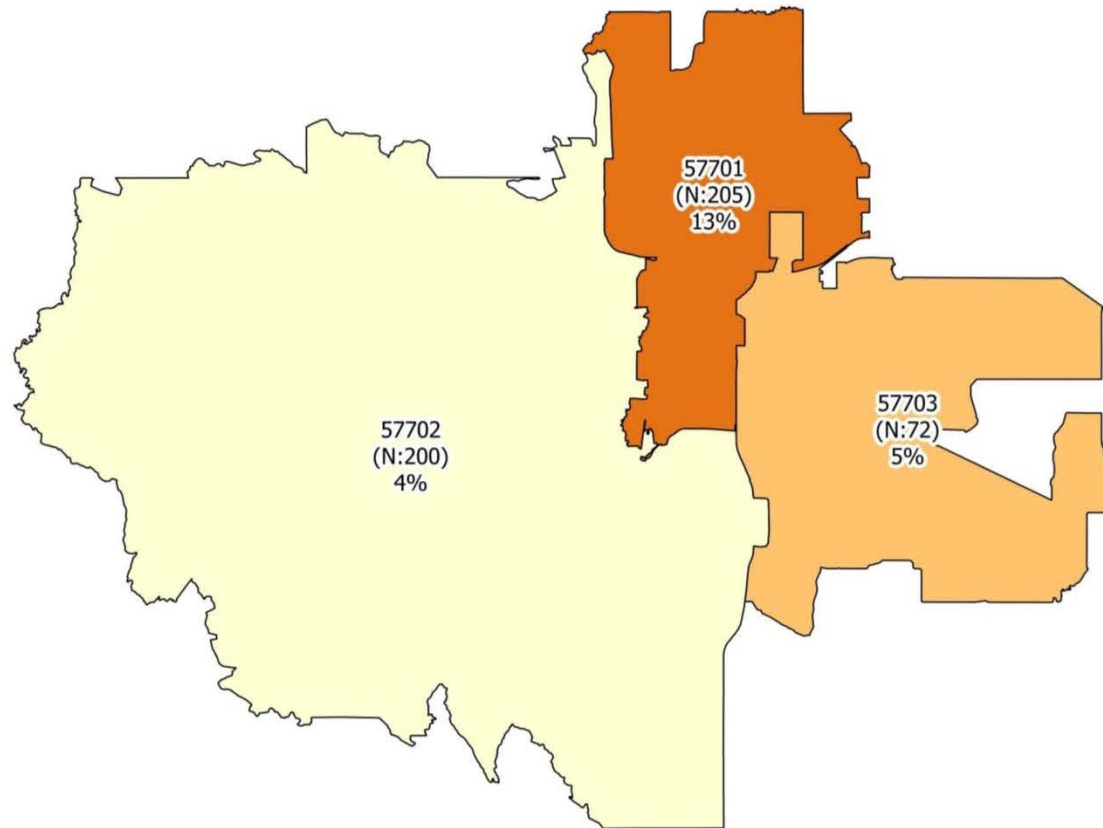
Sioux Falls Knowledge of Substance Use Treatment Options

Sioux Falls | Know Where to go for SA Care | Study-wide Average: 52%



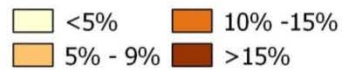
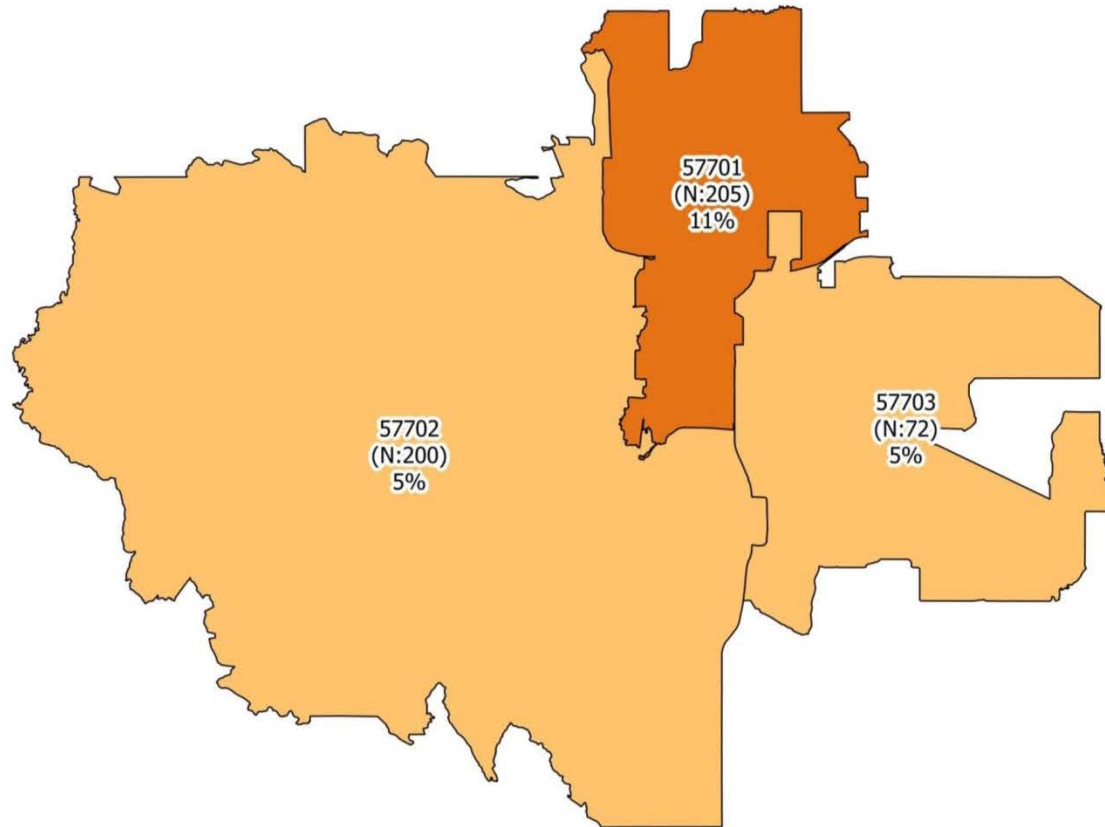
Rapid City Prevalence of Depression

Rapid City | PHQ-2 Depression Score | Study-wide Average: 6%



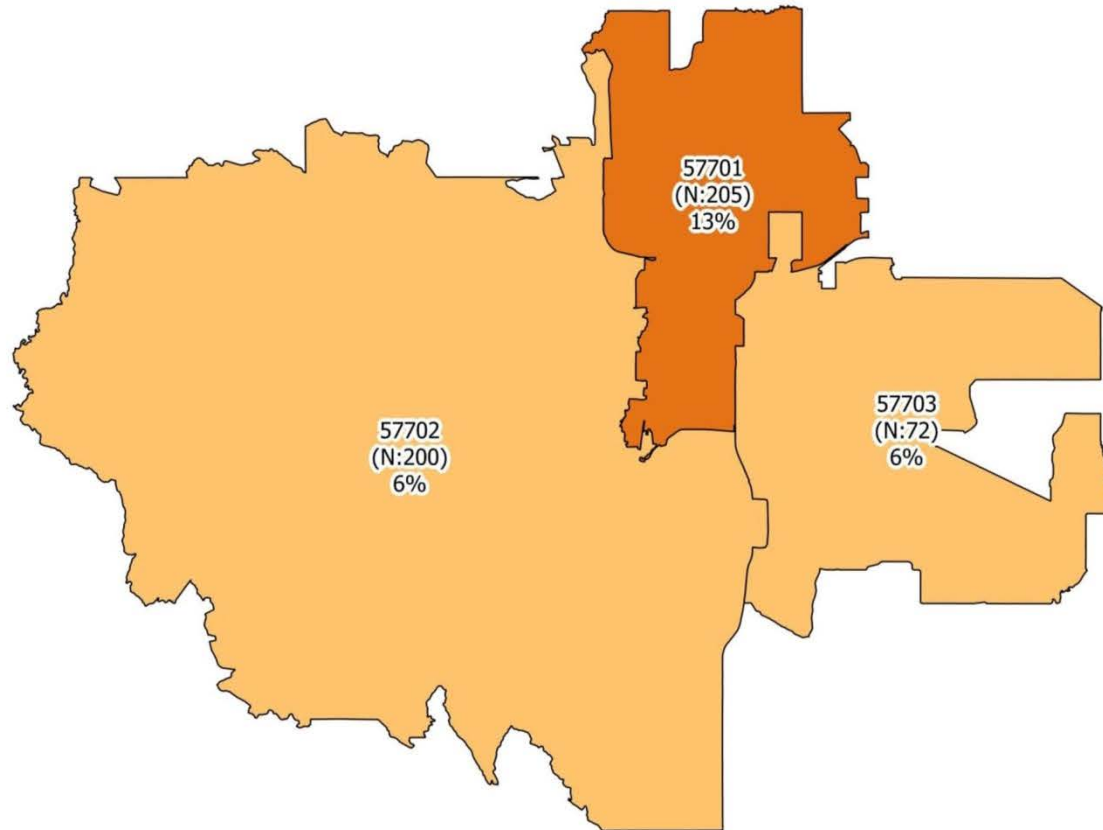
Rapid City Prevalence of Anxiety

Rapid City | GAD-2 Anxiety | Study-wide Average: 8%



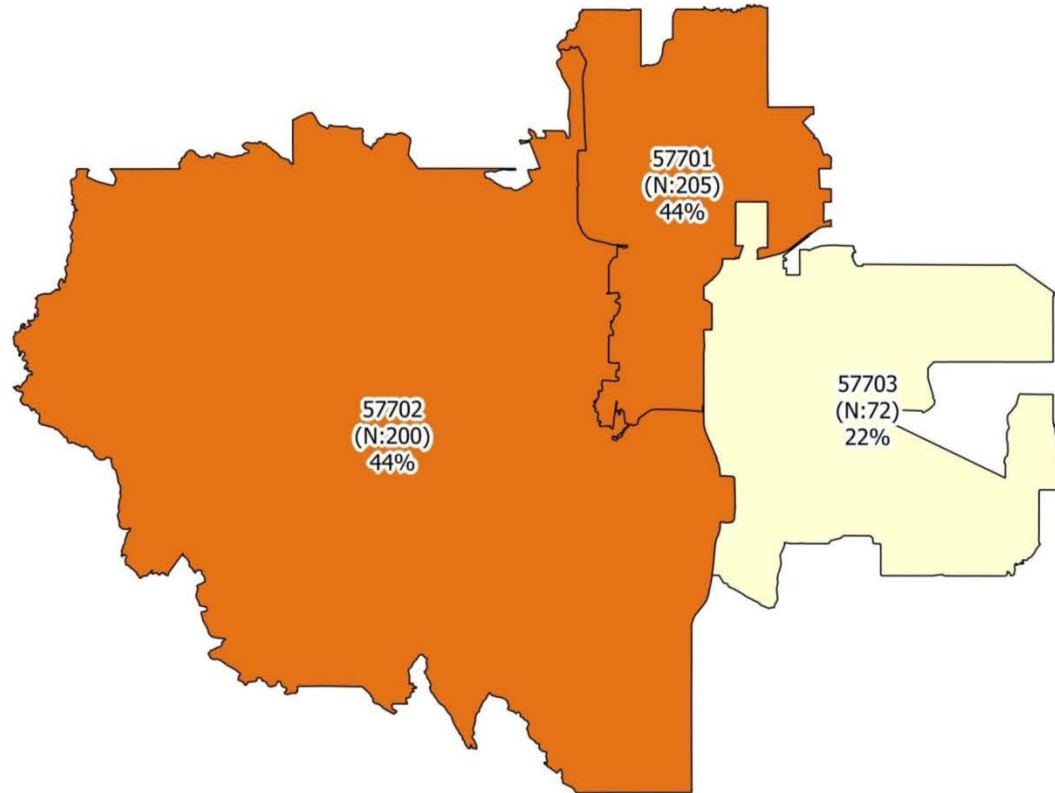
Rapid City Prevalence of PTSD

Rapid City | PTSD | Study-wide Average: 6%



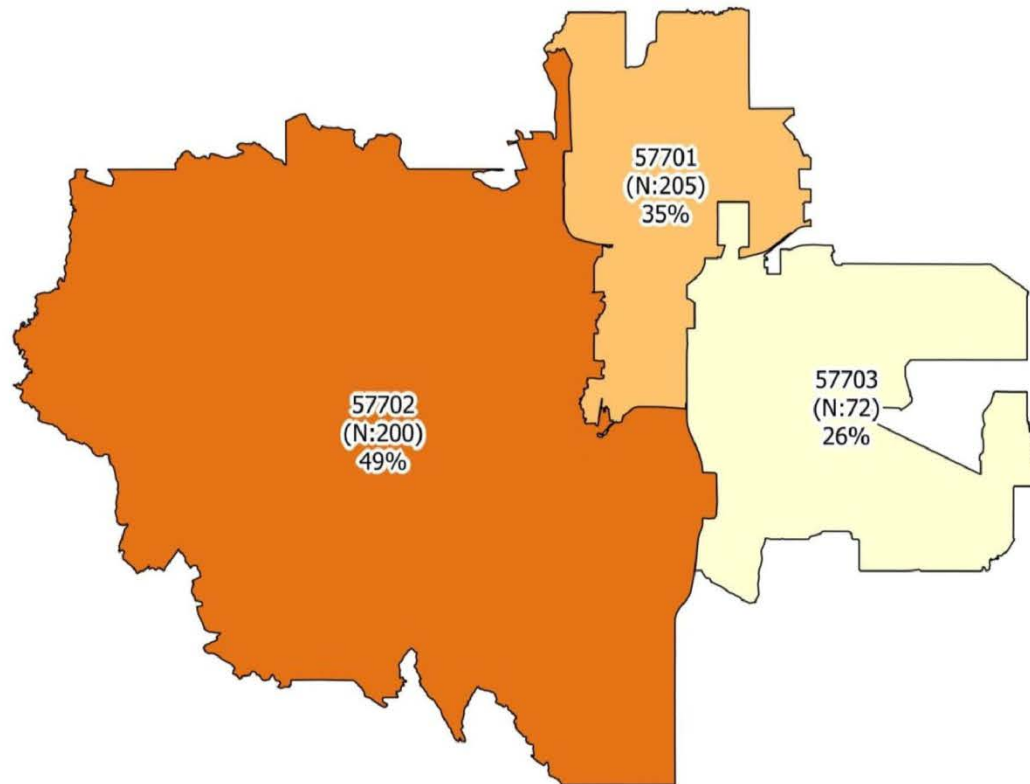
Rapid City Prevalence of Problem Drinking

Rapid City | Audit-C Alcohol Abuse | Study-wide Average: 42%



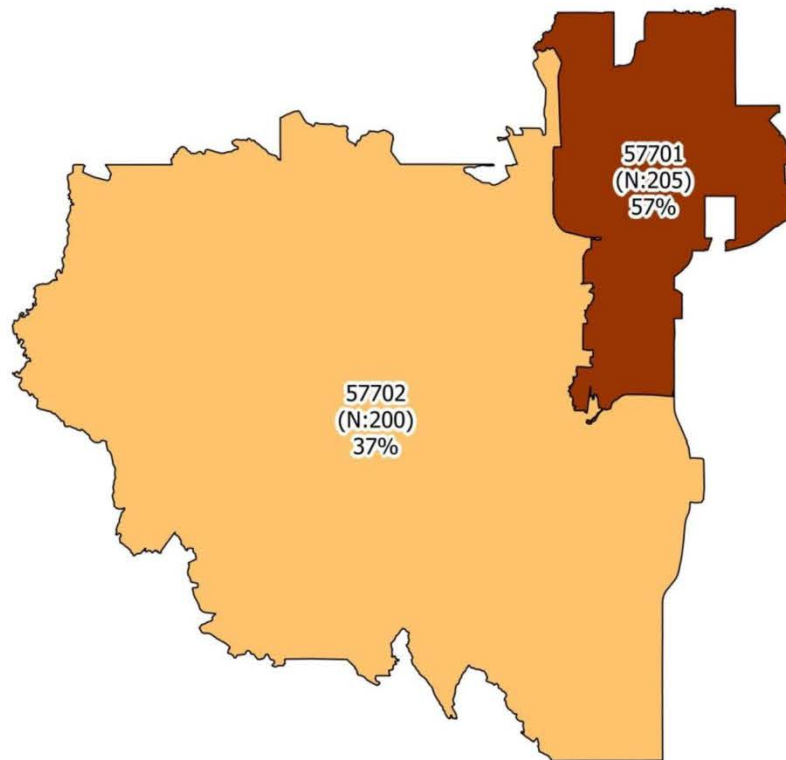
Rapid City Prevalence of Problem Drinking among Females (3+ AUDIT-C Score)

Rapid City | Audit-C Alcohol Abuse Female | Study-wide Average: 42%



Rapid City Prevalence of Problem Drinking among Males (4+ AUDIT-C Score)

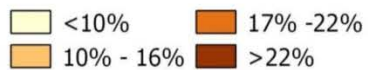
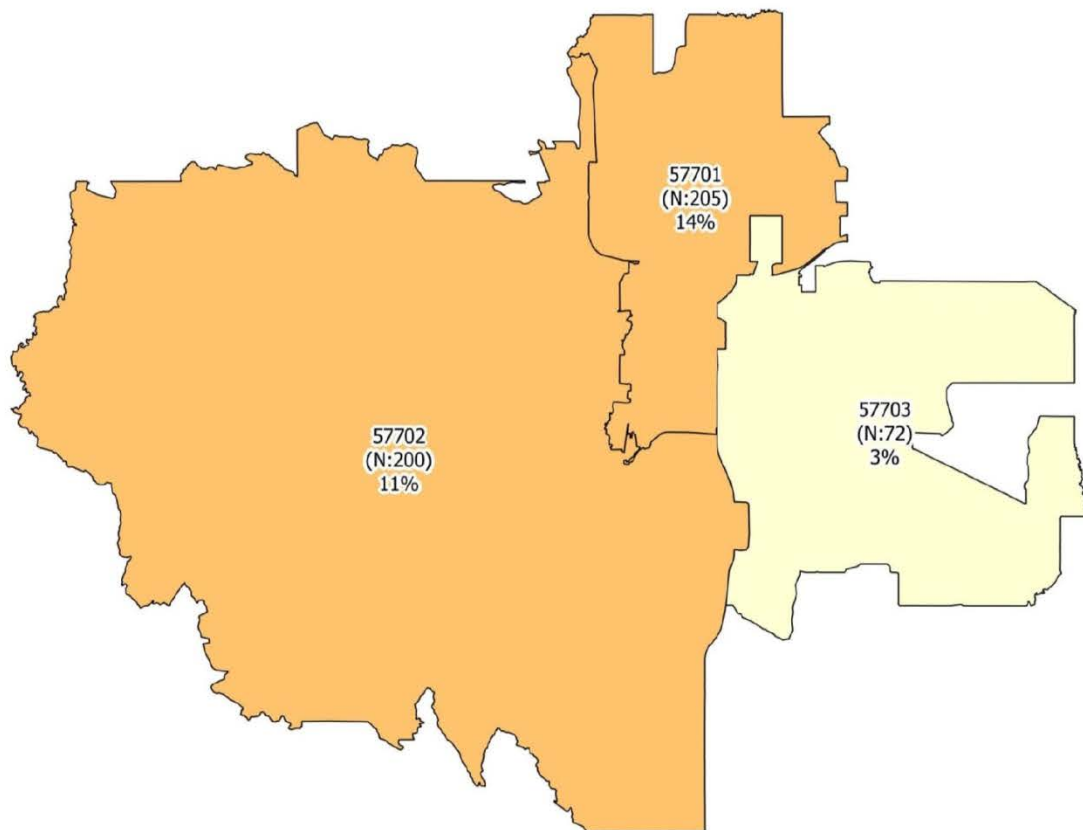
Rapid City | Audit-C Alcohol Abuse Male | Study-wide Average: 42%



Note: ZIP code 57703 is excluded from this map because there were not enough responses from the ZIP code to report this measure

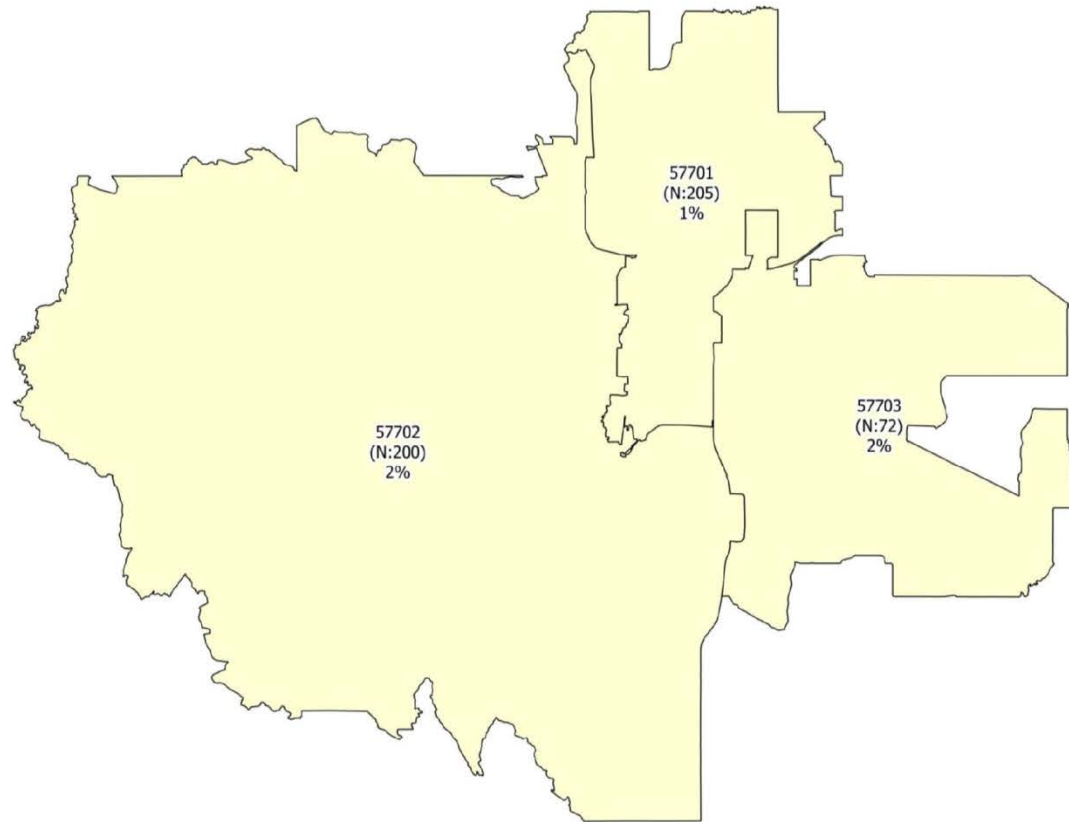
Rapid City Prevalence of Severe Alcohol Misuse (6+ AUDIT-C Score)

Rapid City | Audit 6+ | Study-wide Average: 11%



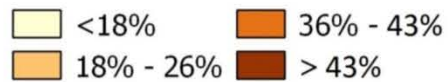
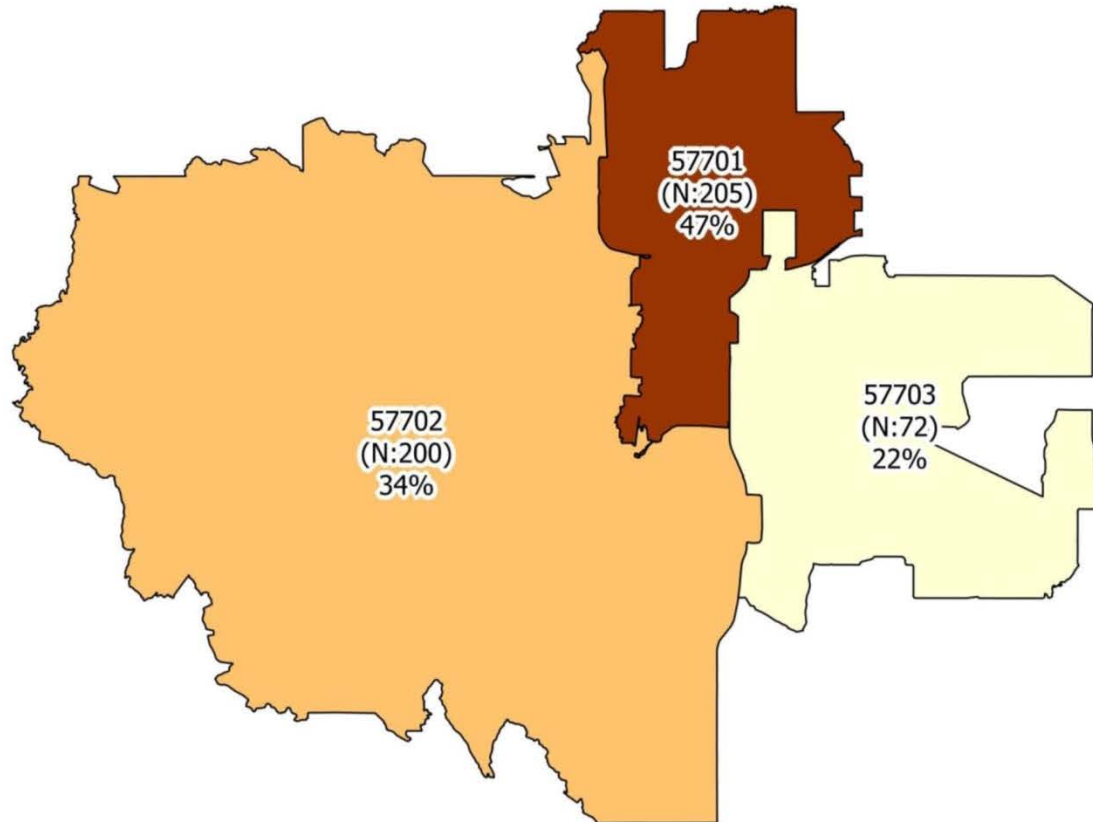
Rapid City Highest Severity Alcohol Misuse (9+ AUDIT-C Score)

Rapid City | Audit 9+ | Study-wide Average: 2%



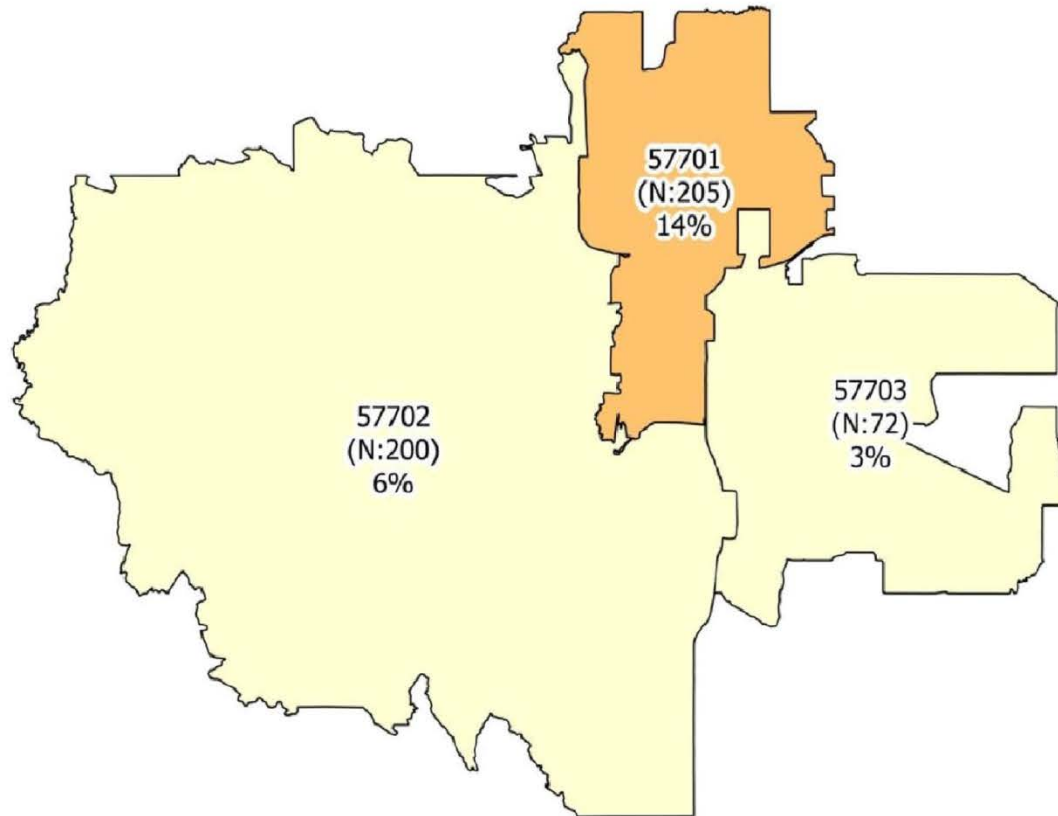
Rapid City Prevalence of Binge Drinking

Rapid City| Binge Drinking | Study-wide Average: 39%



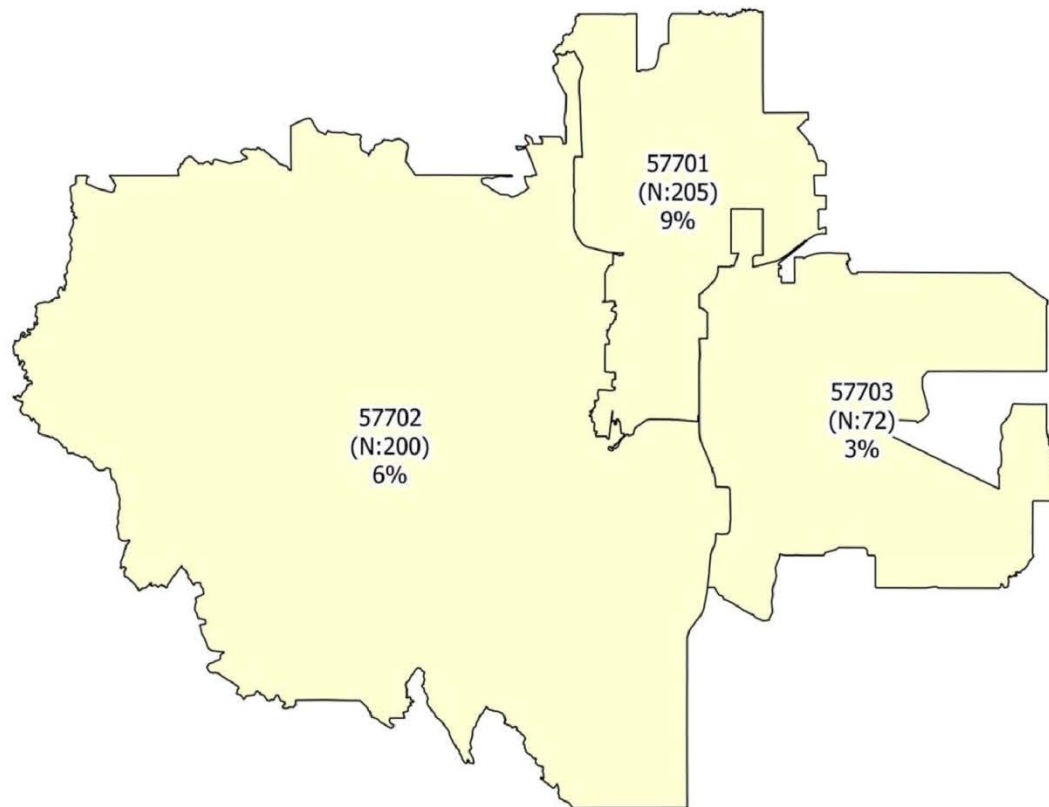
Rapid City Prevalence of Any Substance Use in the Past Year

Rapid City | Any Drug Use-Past Year | Study-wide Average: 8%



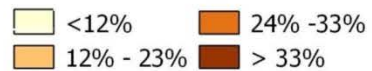
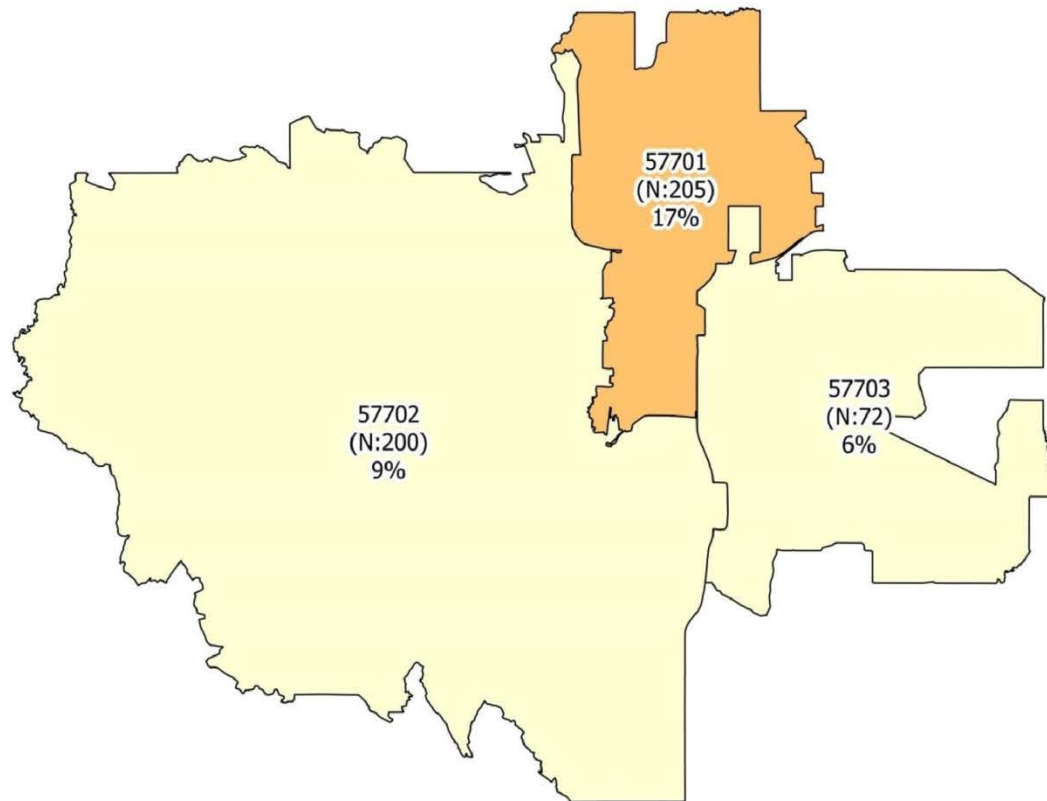
Rapid City Prevalence of Marijuana Use in the Past Year

Rapid City | Marijuana Use | Study-wide Average: 7%



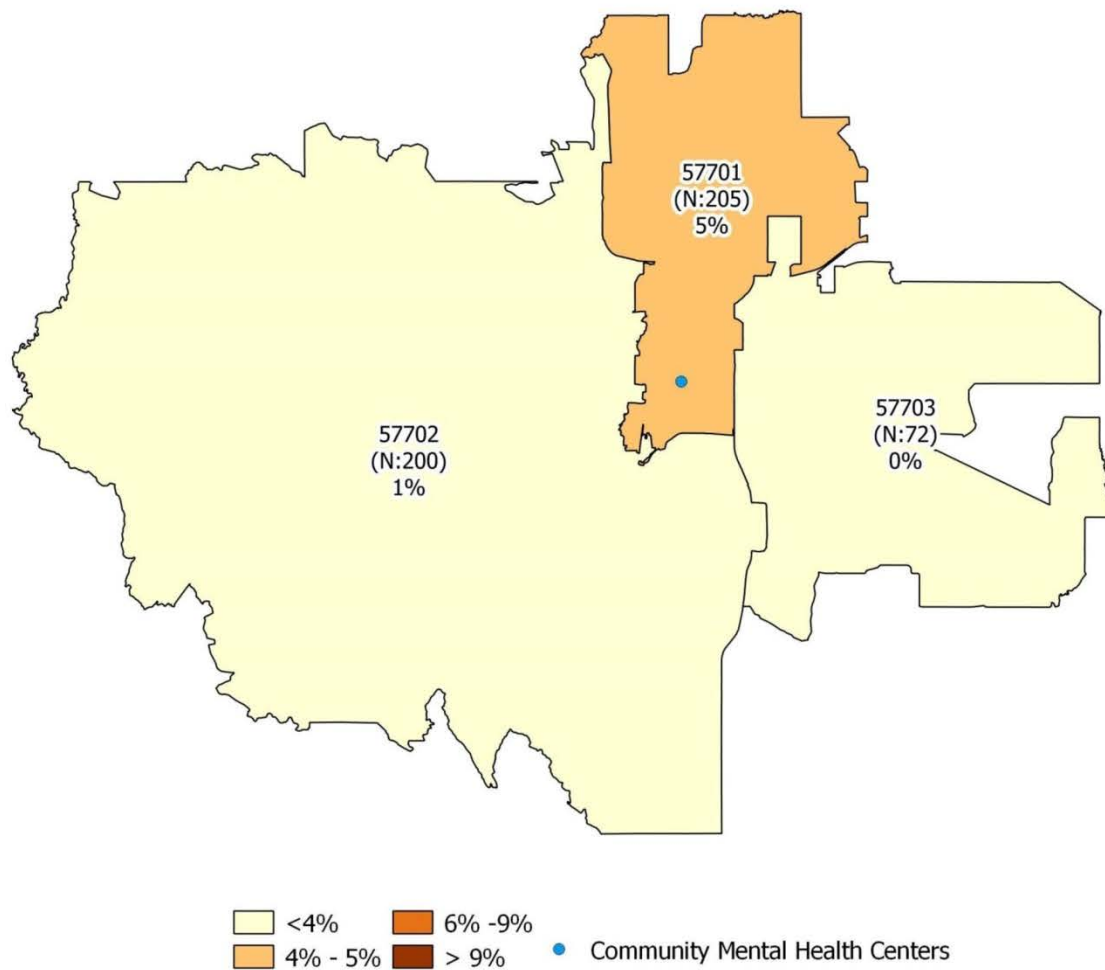
Rapid City Prevalence of Unmet Medical Need

Rapid City | Unmet Medical Need | Study-wide Average: 9%



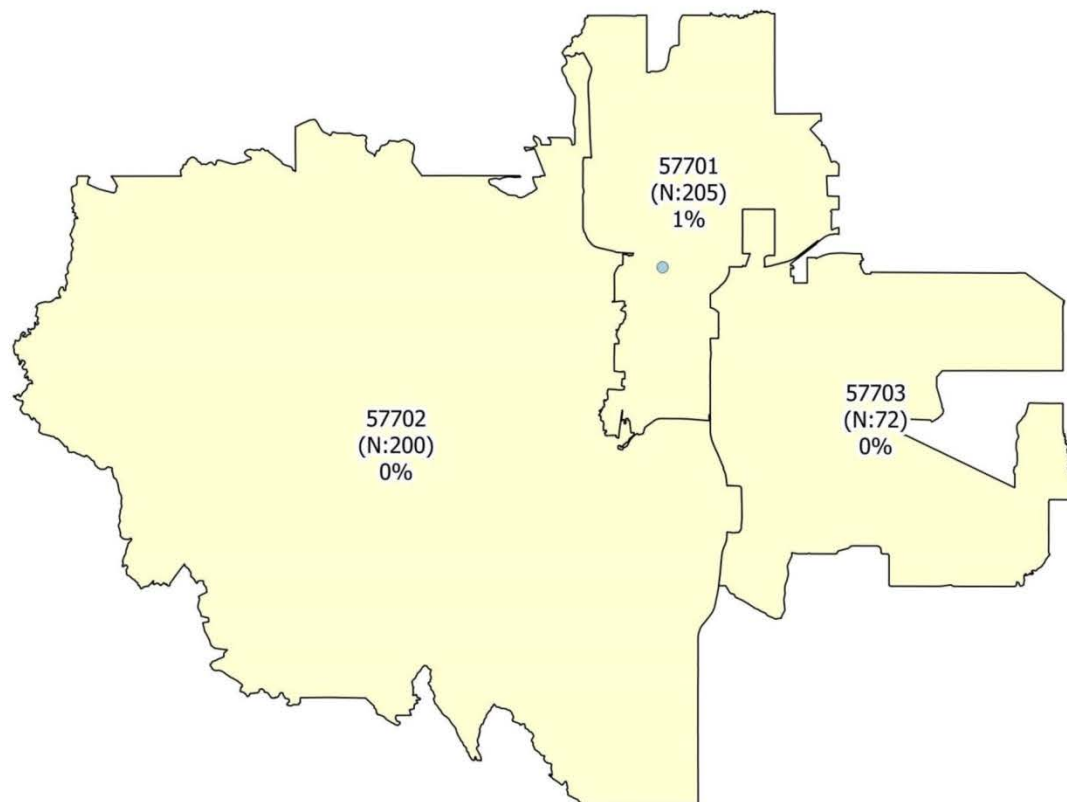
Rapid City Prevalence of Unmet Mental Health Need

Rapid City| Unmet Mental Health Need | Study-wide Average: 3%



Rapid City Prevalence of Unmet Substance Use Need

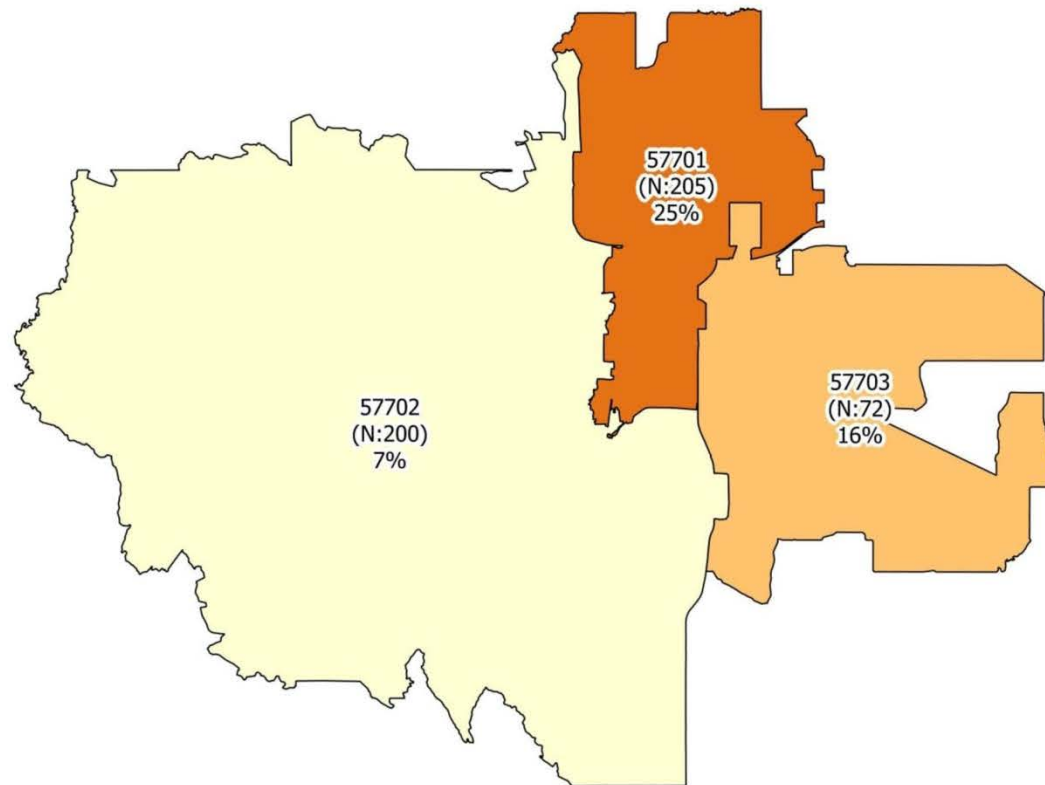
Rapid City | Unmet Substance Abuse Need | Study-wide Average: 0%



<2% 2% 3% >3% Accredited Substance Abuse Providers

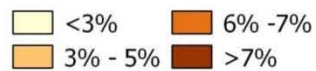
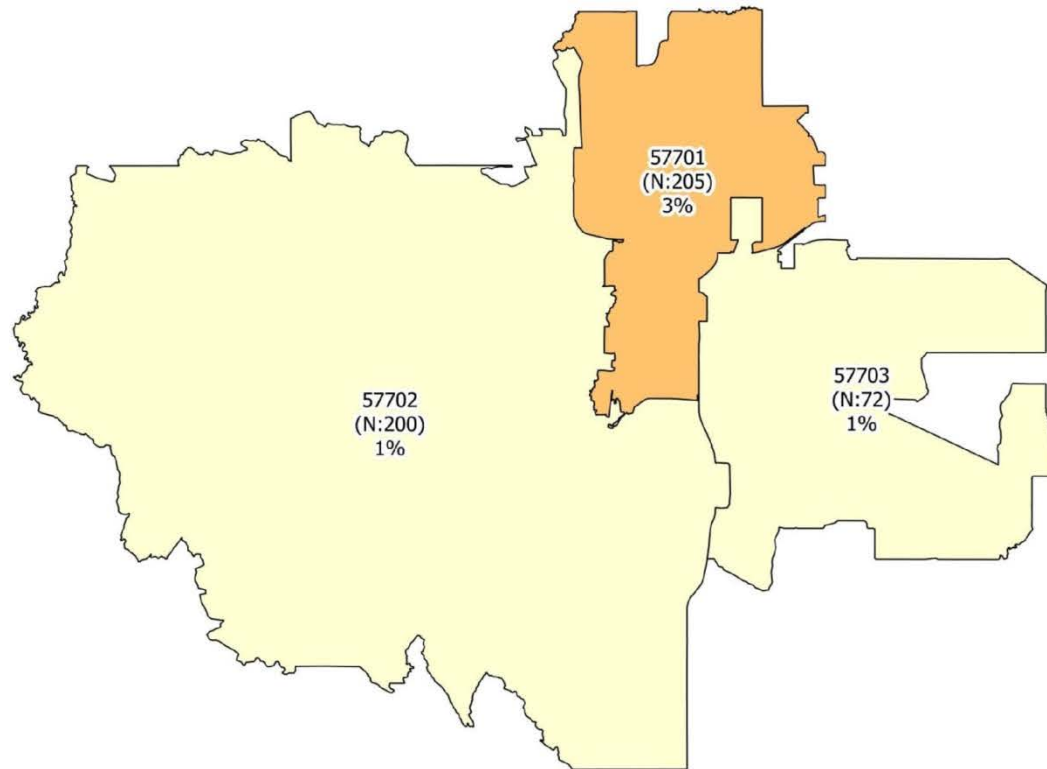
Rapid City Prevalence of Emergency Room Use Due to a Mental Health Condition

Rapid City | 1 or More ER Visit for MH | Study-wide Average: 11%



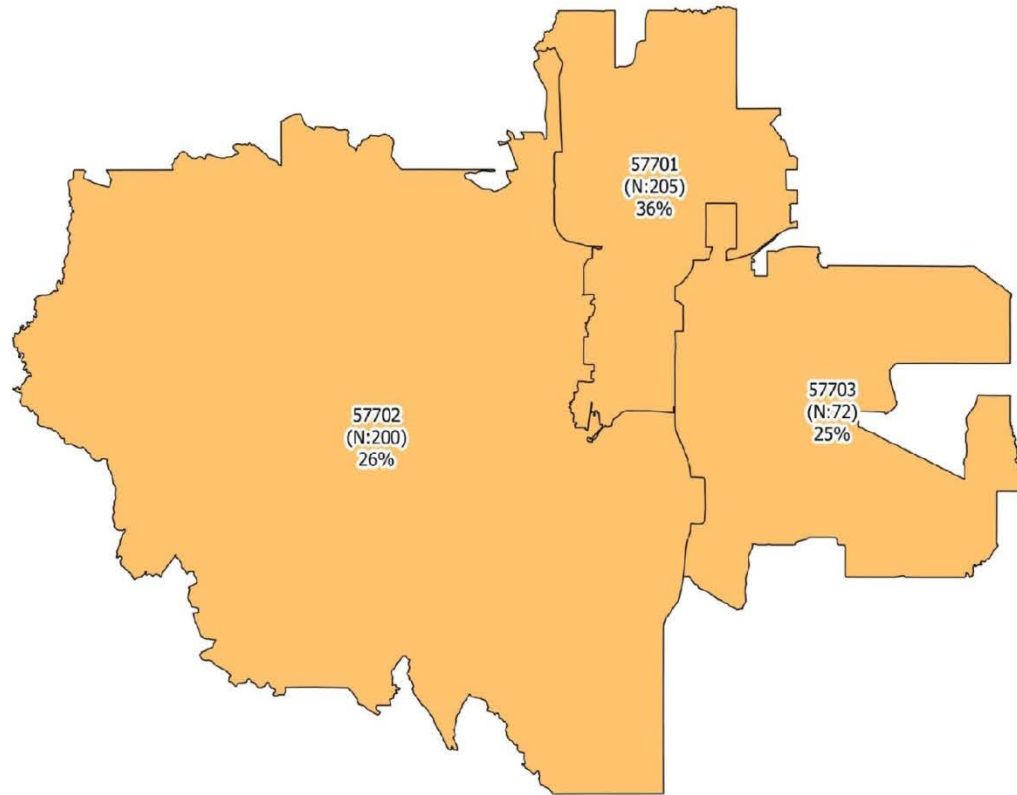
Rapid City Prevalence of Emergency Room Use Due to a Substance Use Condition

Rapid City | 1 or More ER Visit for SU | Study-wide Average: 1%



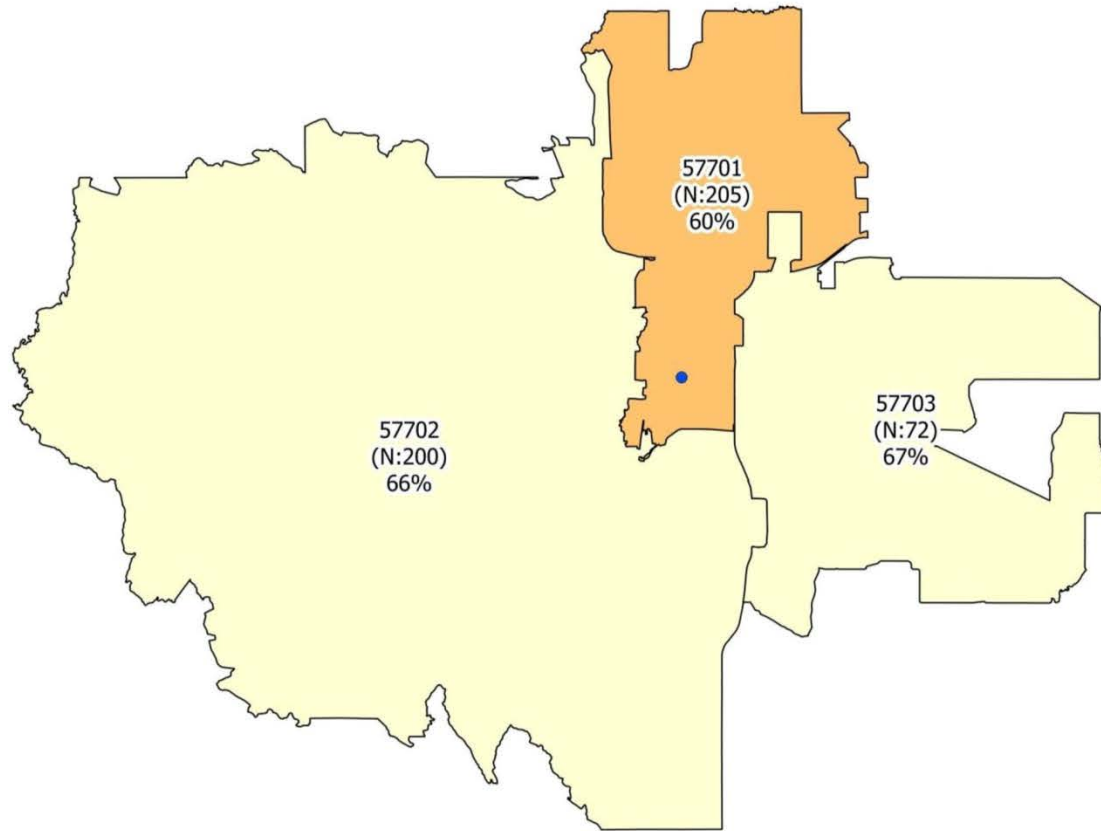
Rapid City Lack of Access to Primary Care Provider

Rapid City | No PCP | Study-wide Average: 23%



Rapid City Knowledge of Mental Health Treatment Options

Rapid City | Know Where to go for MH Care | Study-wide Average: 62%



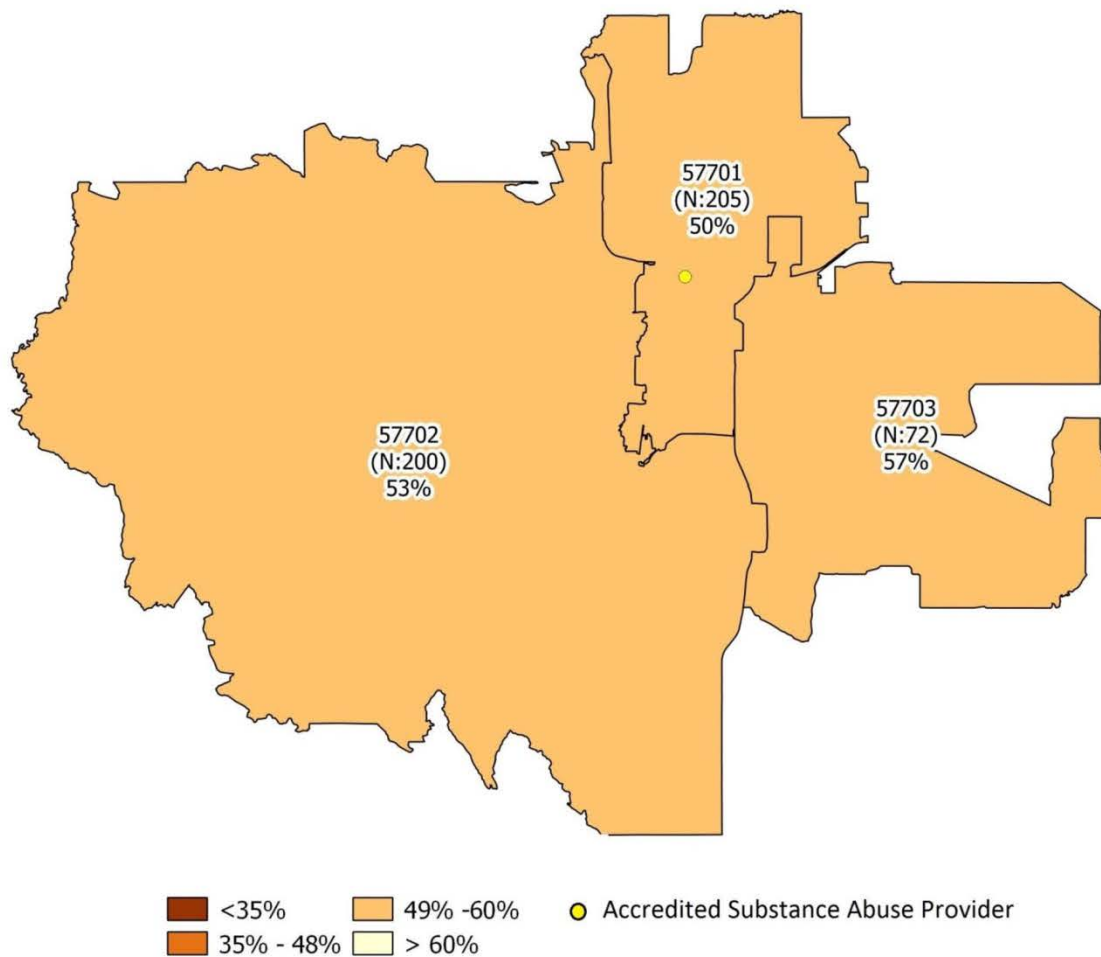
<39%
 40% - 52%
 > 64%

53% - 64%

Community Mental Health Center

Rapid City Knowledge of Substance Use Treatment Options

Rapid City | Know Where to go for SA Care | Study-wide Average: 52%

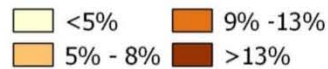
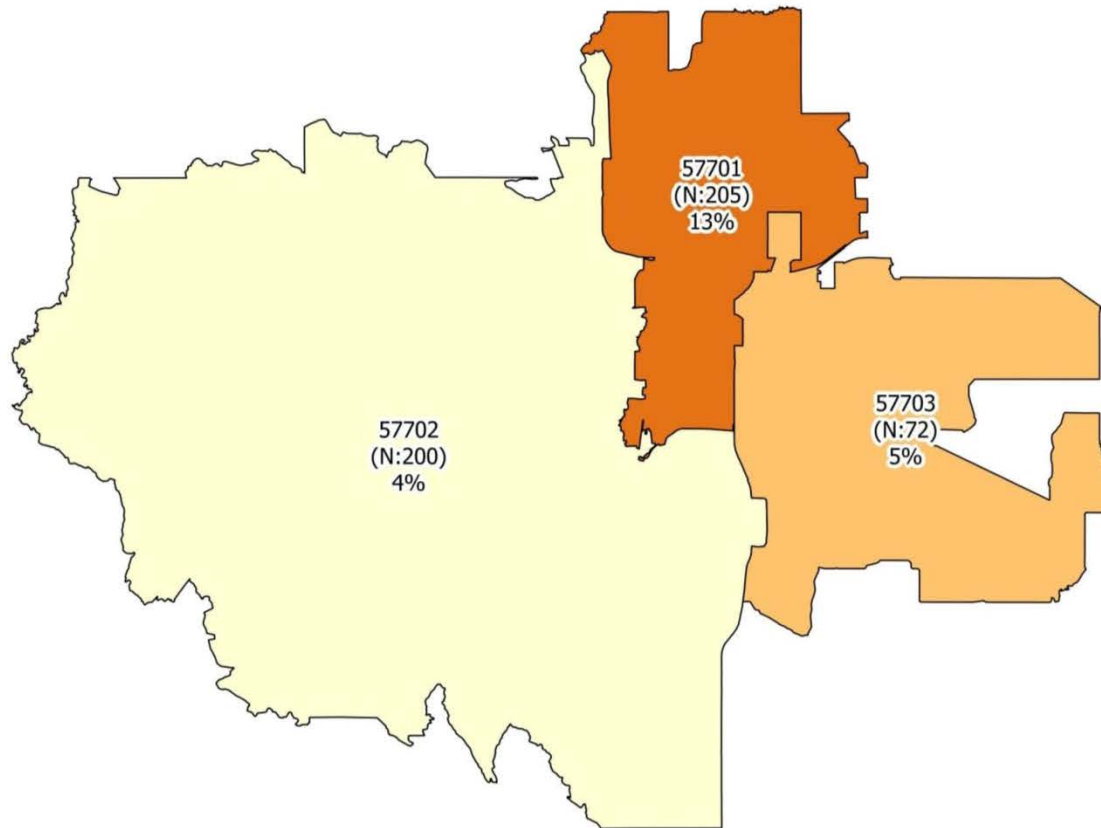




Rapid City Area Maps

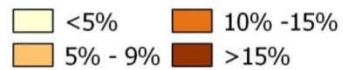
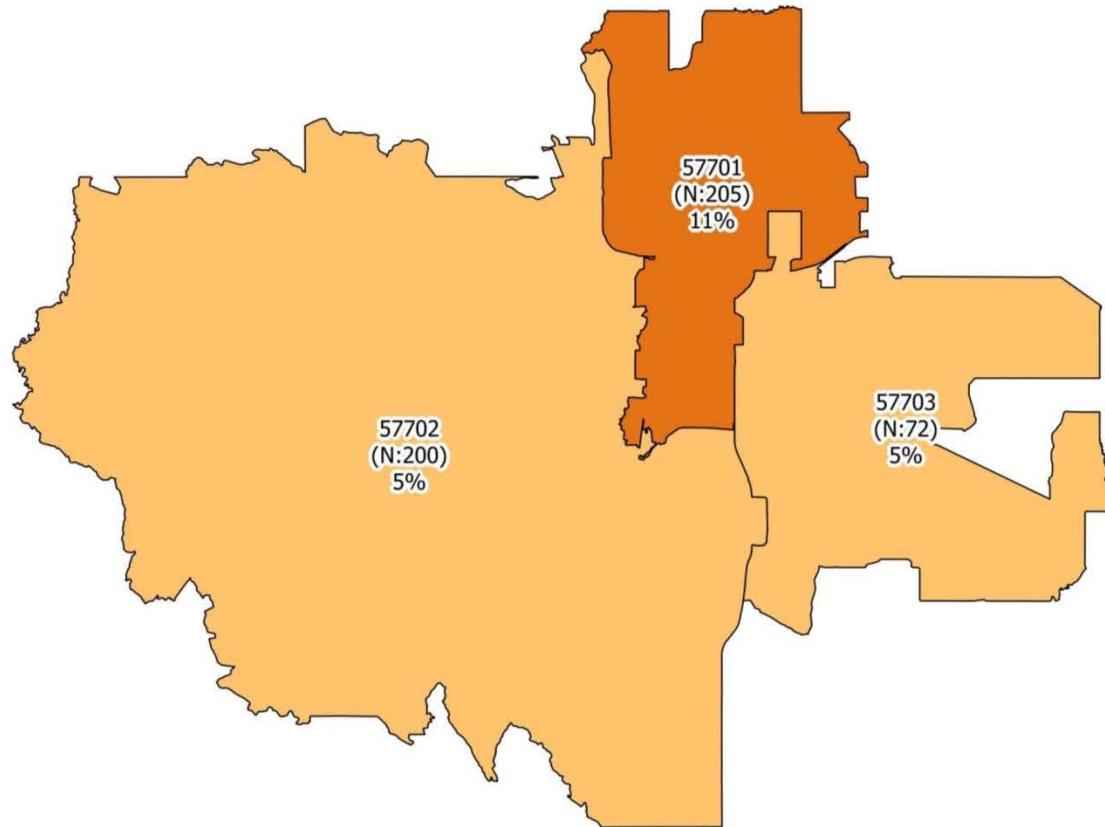
Rapid City Prevalence of Depression

Rapid City | PHQ-2 Depression Score | Study-wide Average: 6%



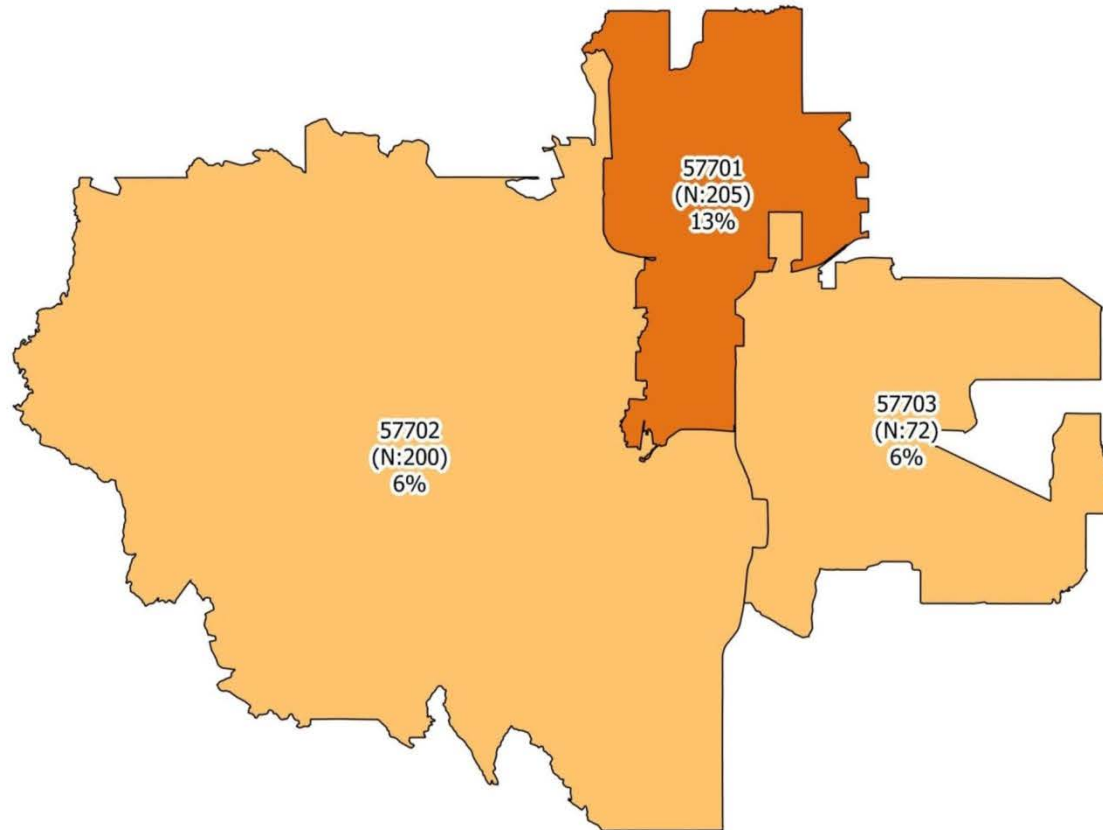
Rapid City Prevalence of Anxiety

Rapid City | GAD-2 Anxiety | Study-wide Average: 8%



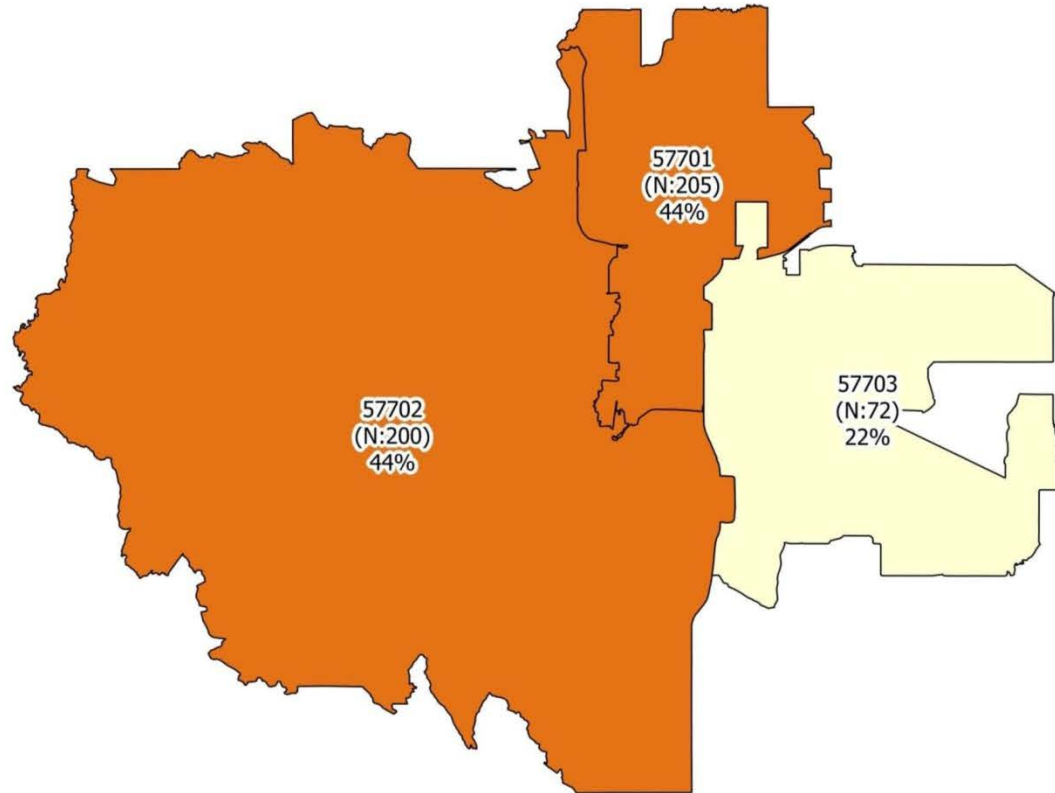
Rapid City Prevalence of PTSD

Rapid City | PTSD | Study-wide Average: 6%



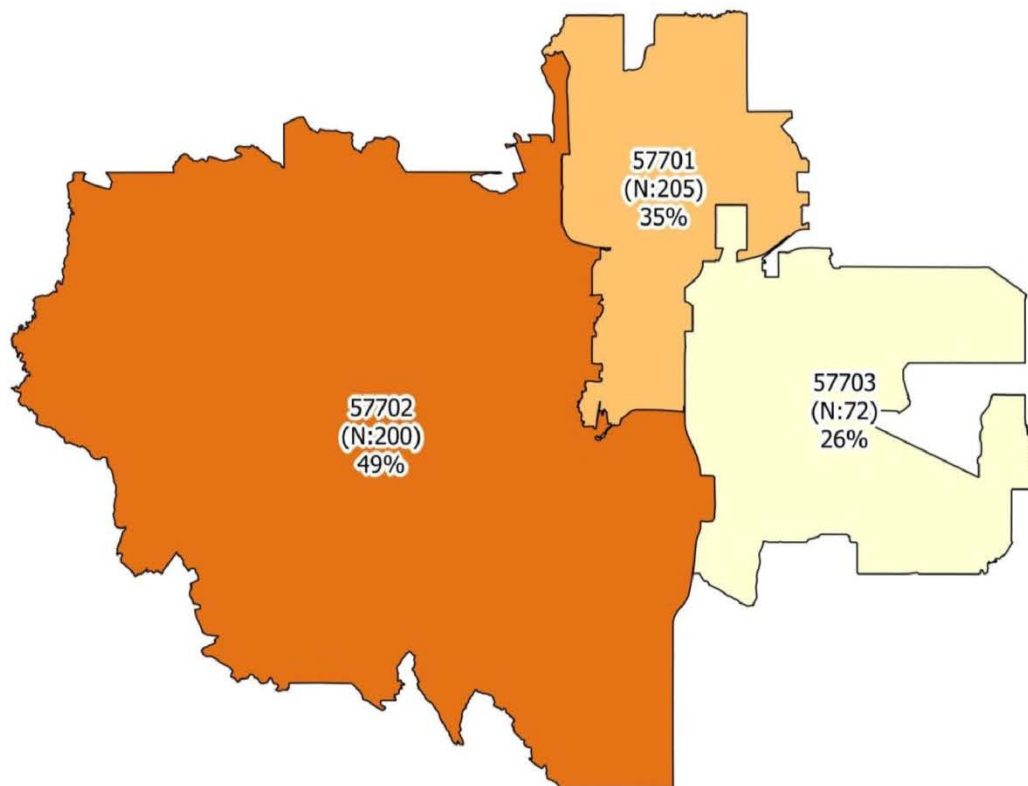
Rapid City Prevalence of Problem Drinking

Rapid City | Audit-C Alcohol Abuse | Study-wide Average: 42%



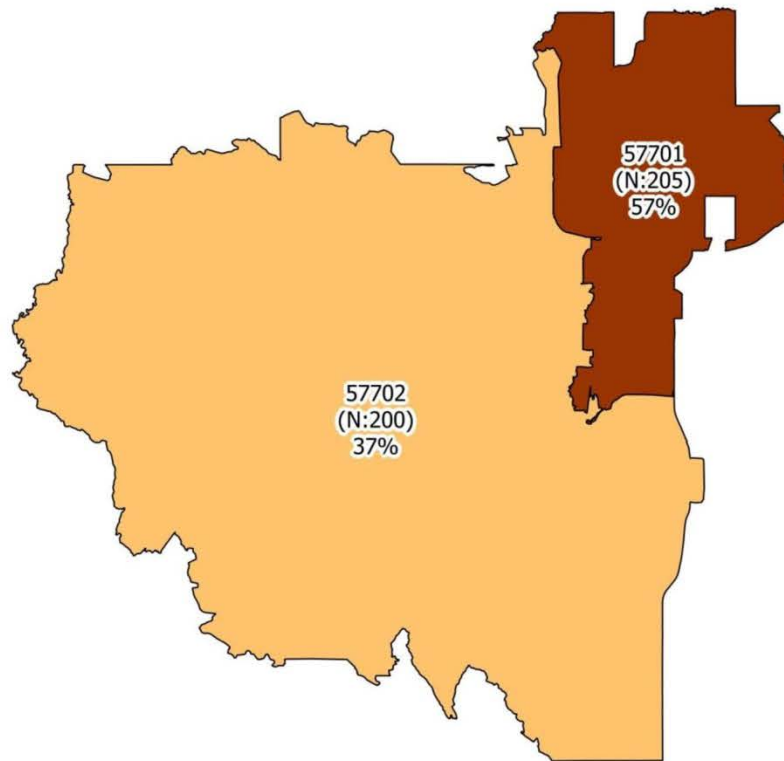
Rapid City Prevalence of Problem Drinking among Females (3+ AUDIT-C Score)

Rapid City | Audit-C Alcohol Abuse Female | Study-wide Average: 42%



Rapid City Prevalence of Problem Drinking among Males (4+ AUDIT-C Score)

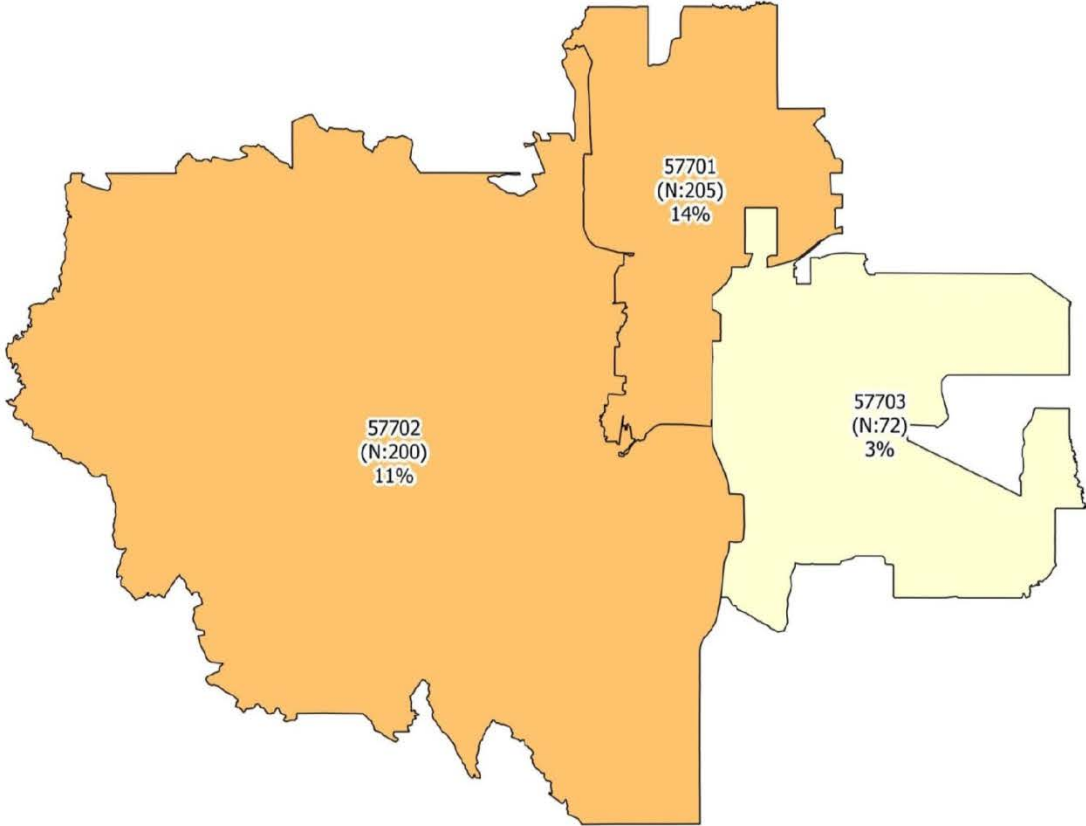
Rapid City | Audit-C Alcohol Abuse Male | Study-wide Average: 42%



Note: ZIP code 57703 is excluded from this map because there were not enough responses from the ZIP code to report this measure

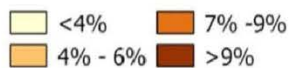
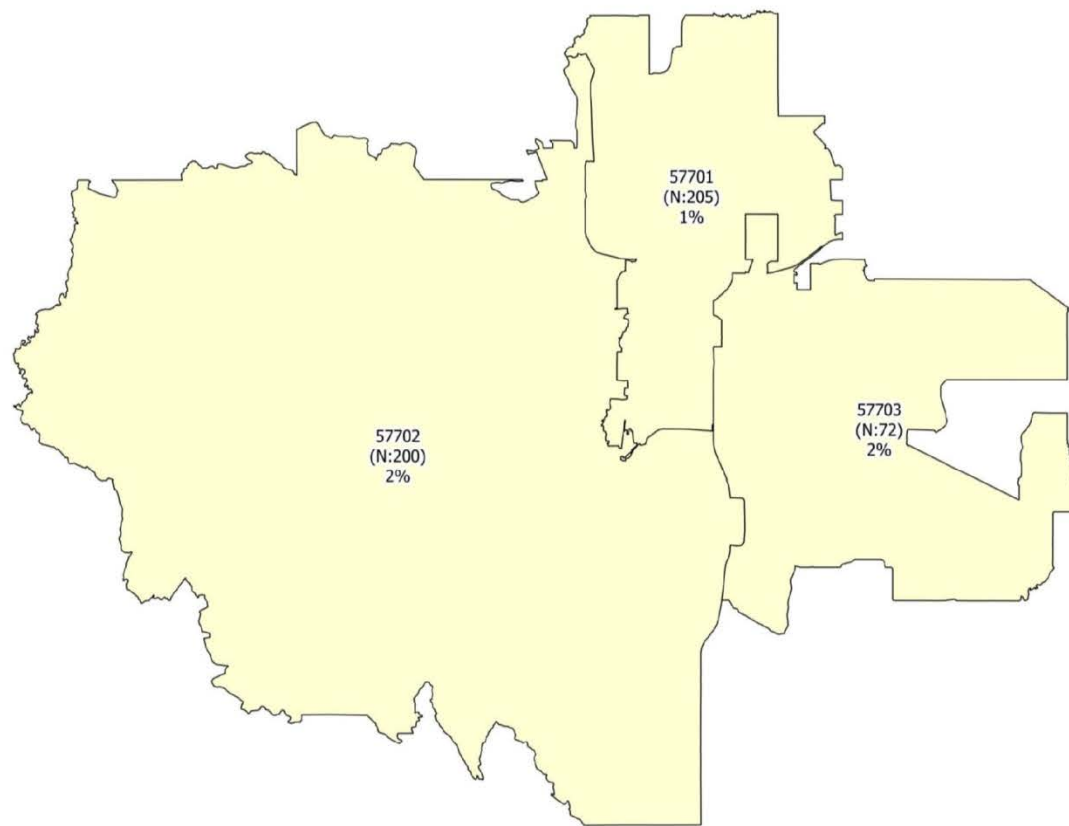
Rapid City Prevalence of Severe Alcohol Misuse (6+ AUDIT-C Score)

Rapid City | Audit 6+ | Study-wide Average: 11%



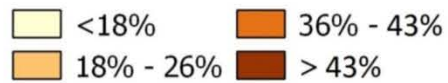
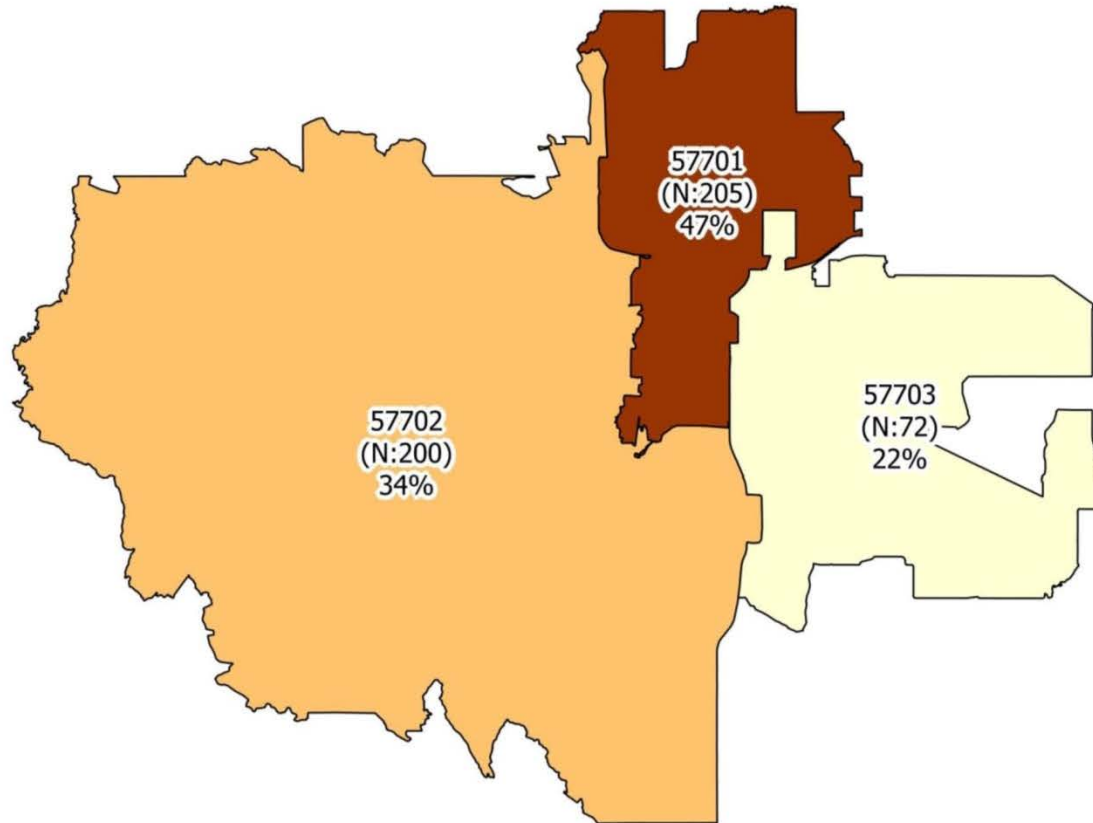
Rapid City Highest Severity Alcohol Misuse (9+ AUDIT-C Score)

Rapid City | Audit 9+ | Study-wide Average: 2%



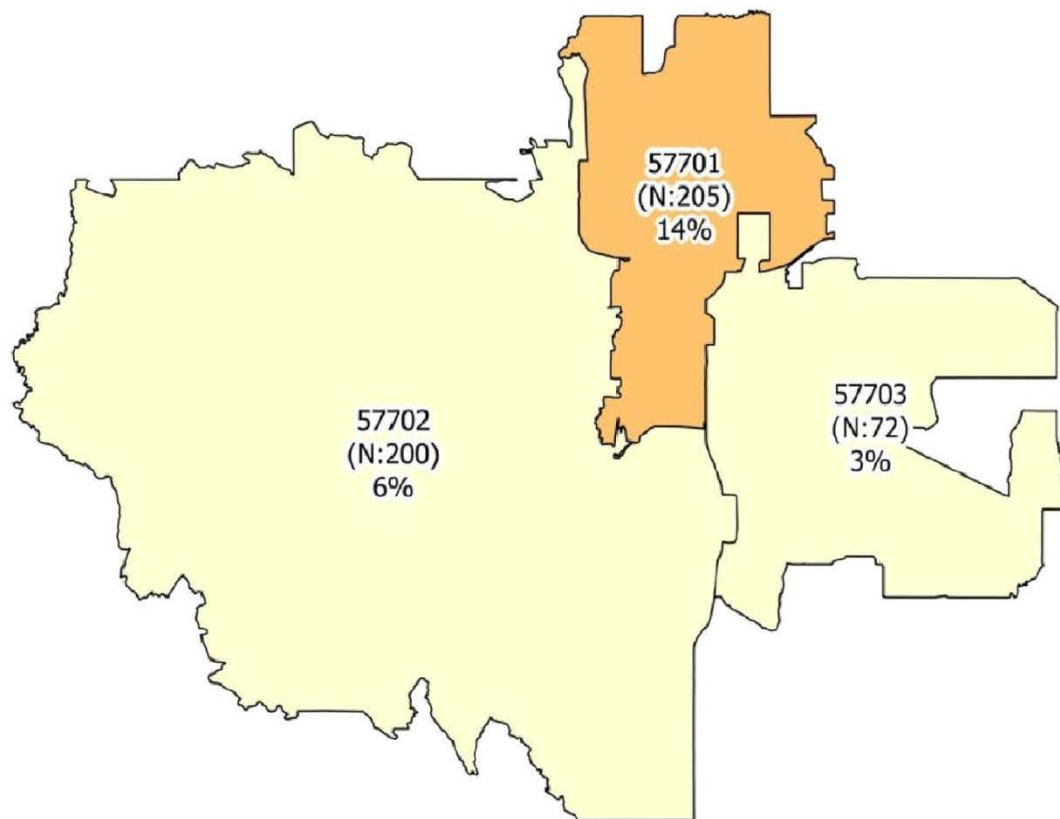
Rapid City Prevalence of Binge Drinking

Rapid City| Binge Drinking | Study-wide Average: 39%



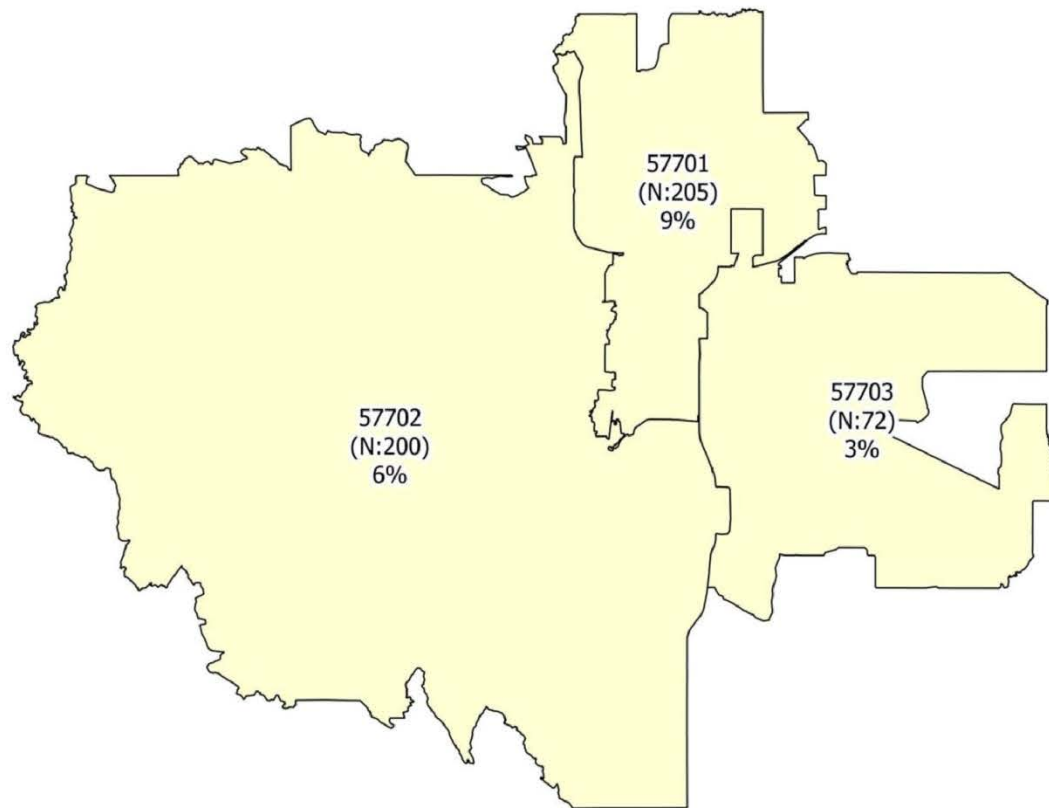
Rapid City Prevalence of Any Substance Use in the Past Year

Rapid City | Any Drug Use-Past Year | Study-wide Average: 8%



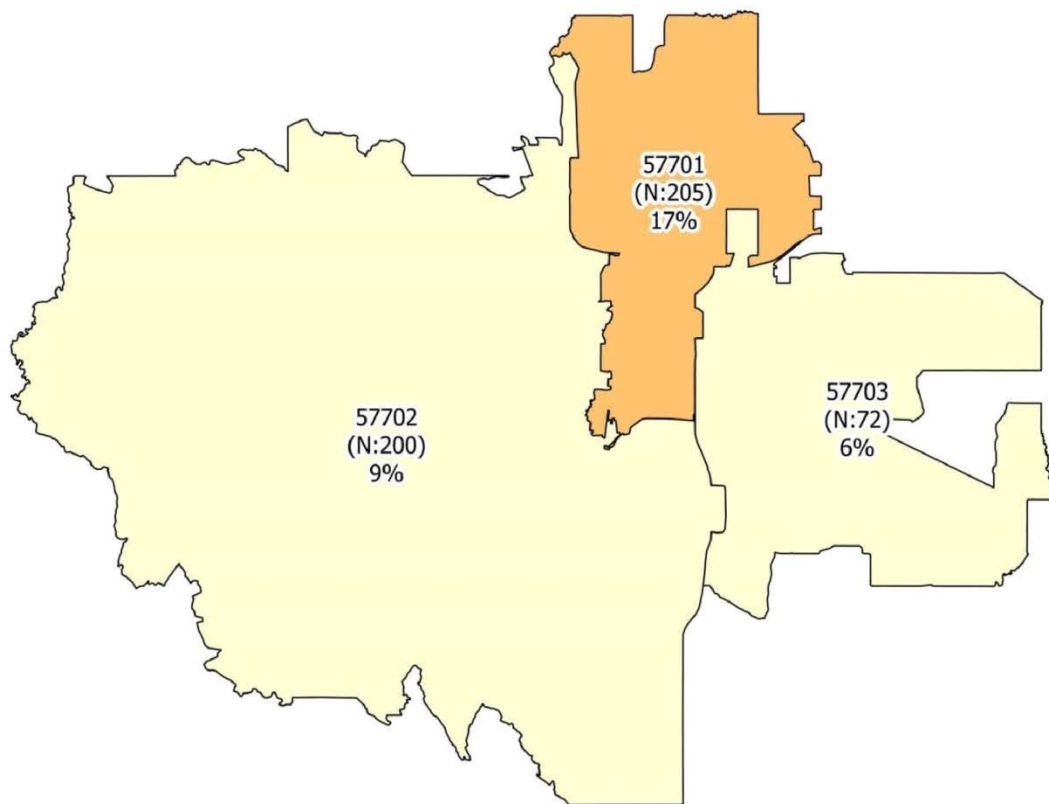
Rapid City Prevalence of Marijuana Use in the Past Year

Rapid City | Marijuana Use | Study-wide Average: 7%



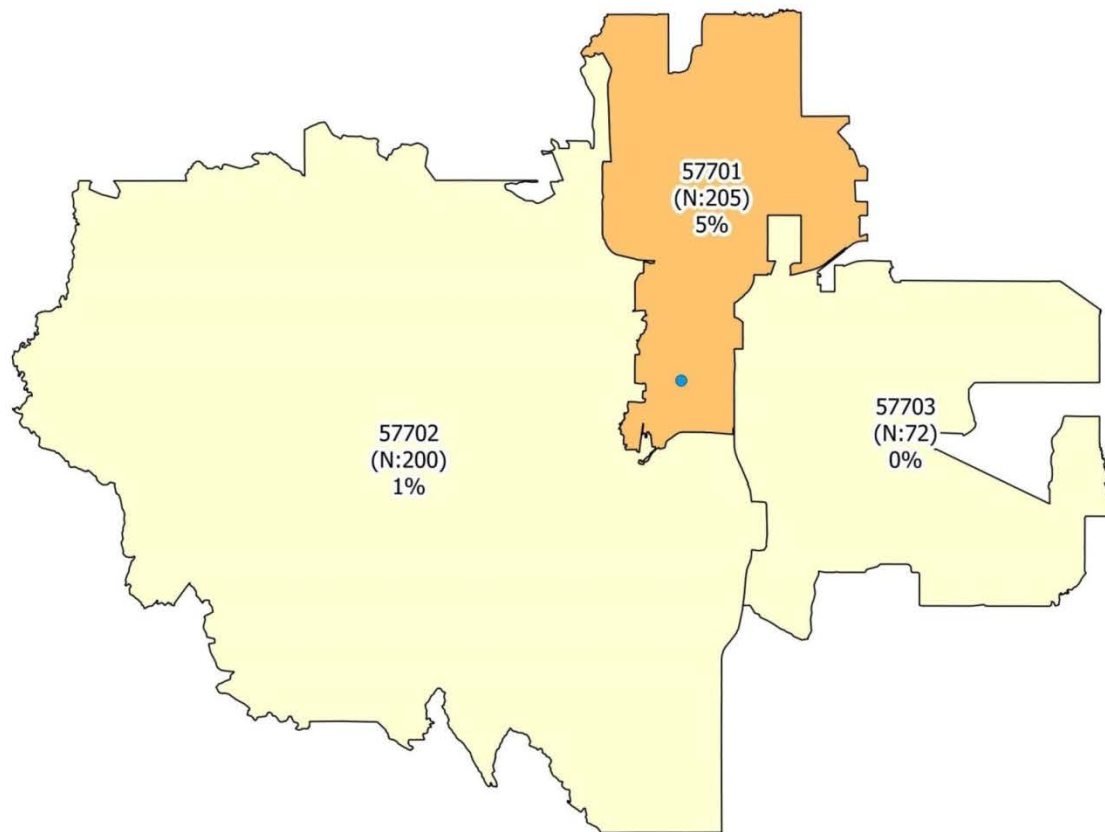
Rapid City Prevalence of Unmet Medical Need

Rapid City | Unmet Medical Need | Study-wide Average: 9%



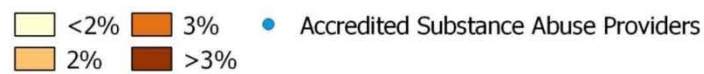
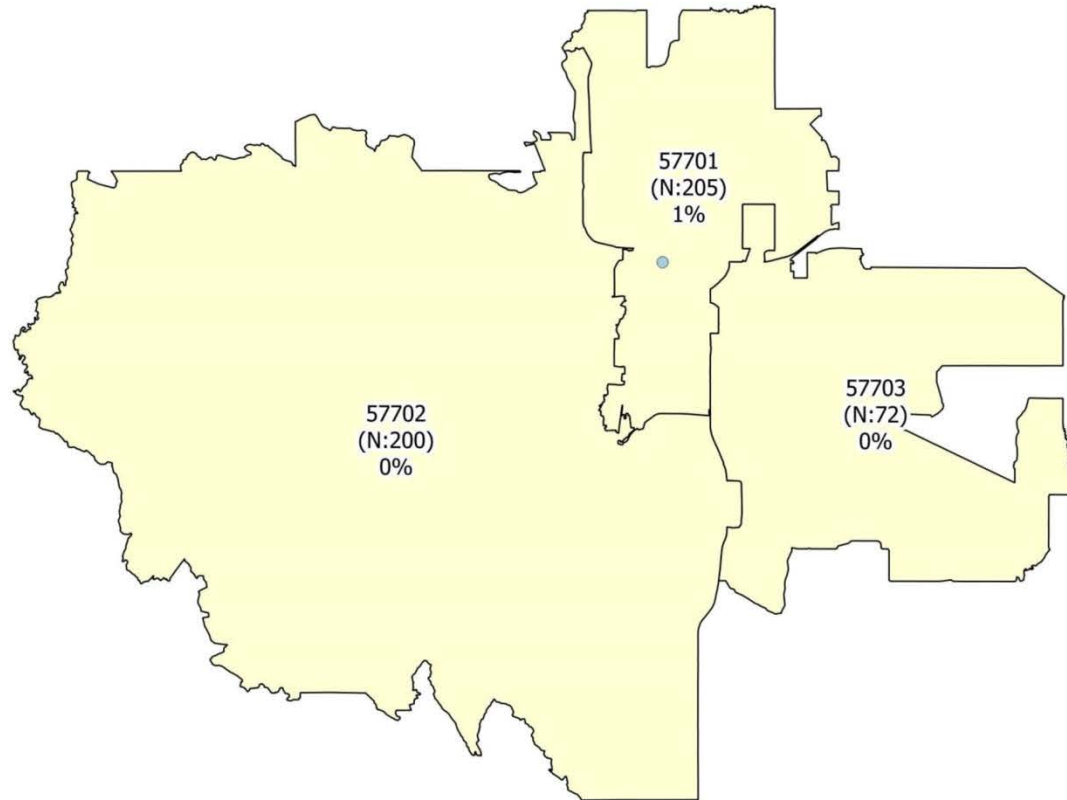
Rapid City Prevalence of Unmet Mental Health Need

Rapid City| Unmet Mental Health Need | Study-wide Average: 3%



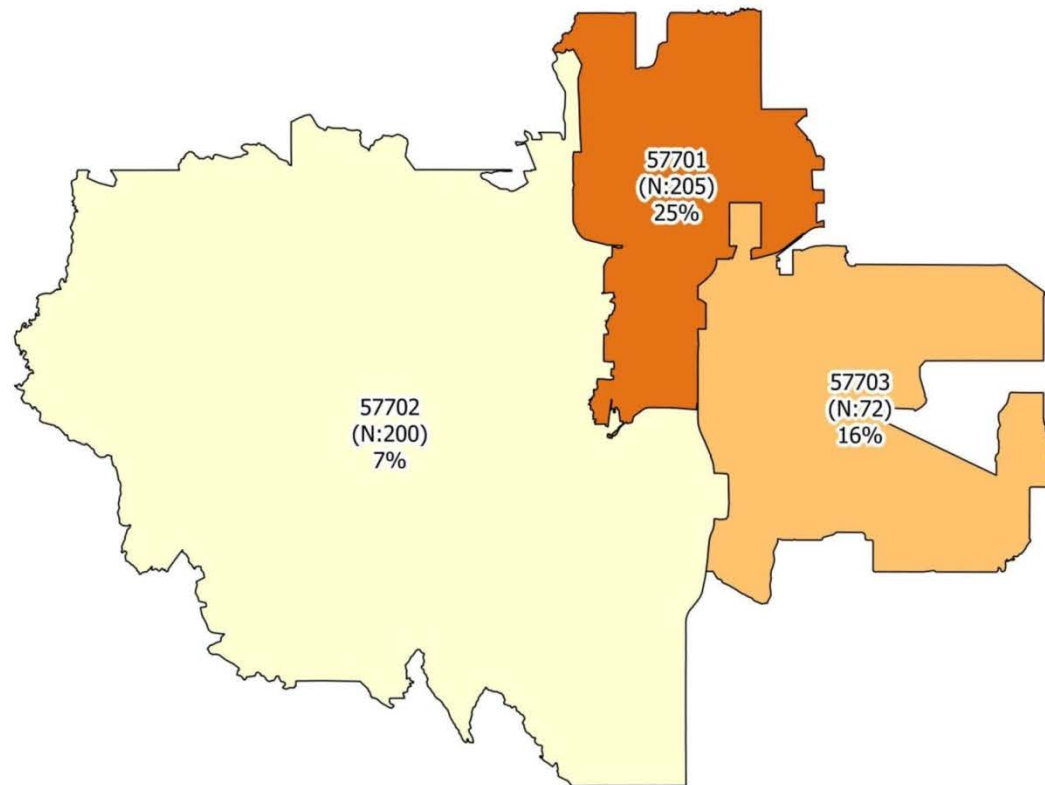
Rapid City Prevalence of Unmet Substance Use Need

Rapid City | Unmet Substance Abuse Need | Study-wide Average: 0%



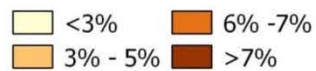
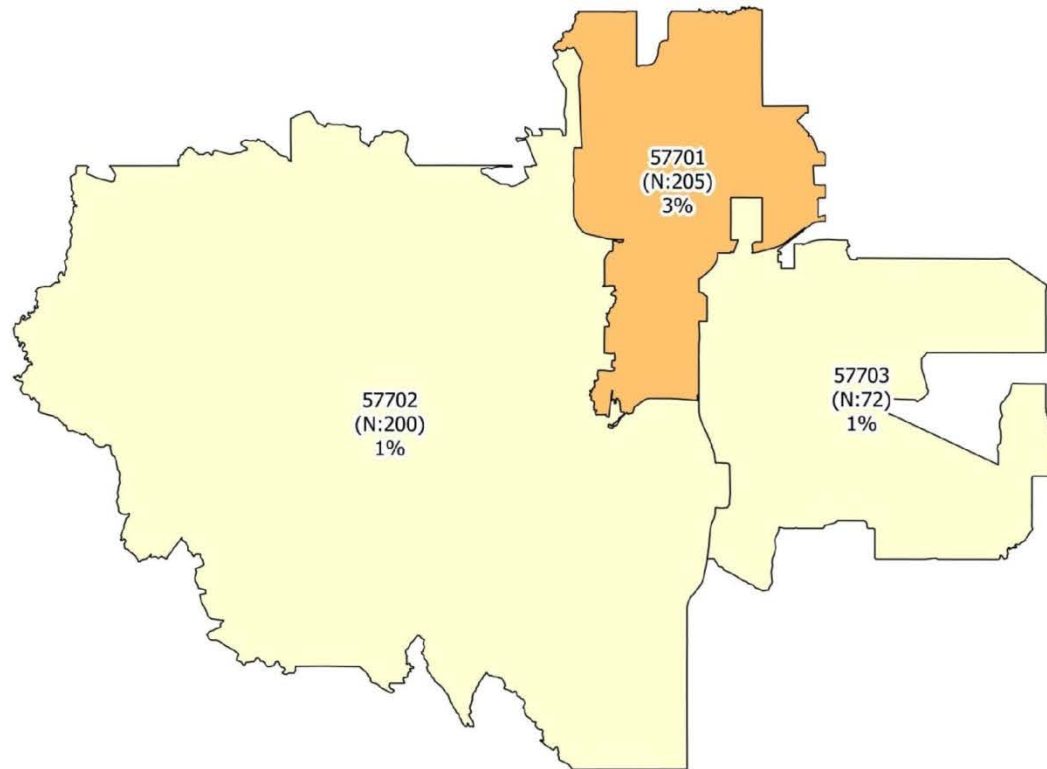
Rapid City Prevalence of Emergency Room Use Due to a Mental Health Condition

Rapid City | 1 or More ER Visit for MH | Study-wide Average: 11%



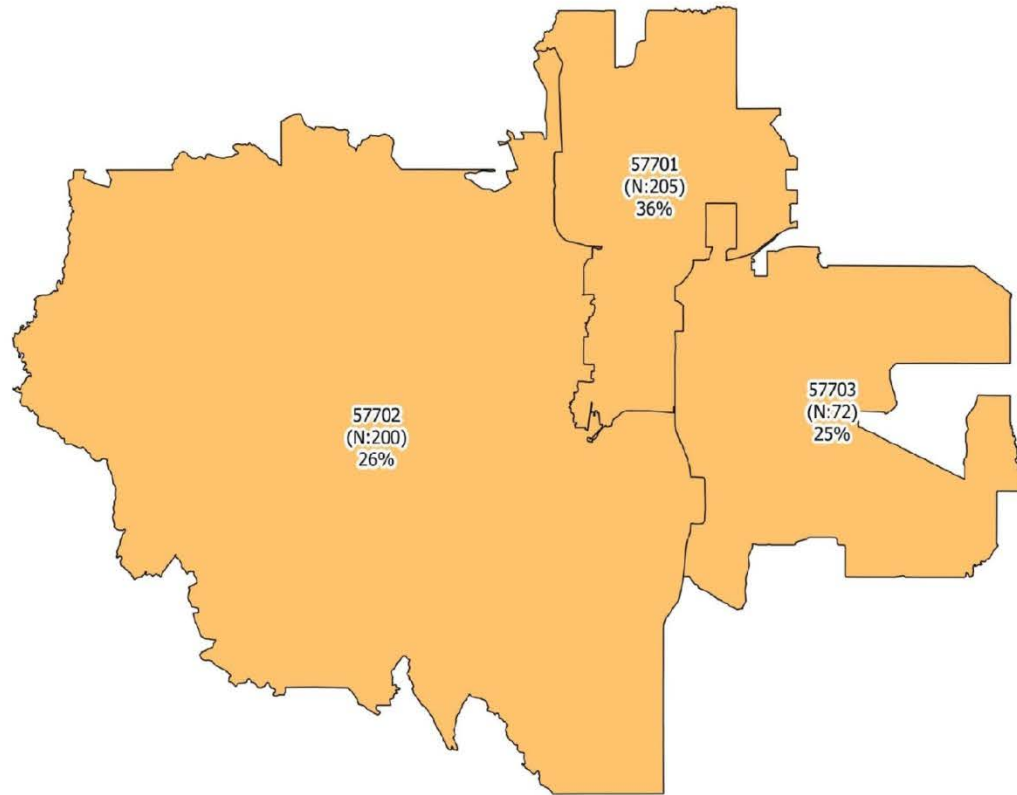
Rapid City Prevalence of Emergency Room Use Due to a Substance Use Condition

Rapid City | 1 or More ER Visit for SU | Study-wide Average: 1%



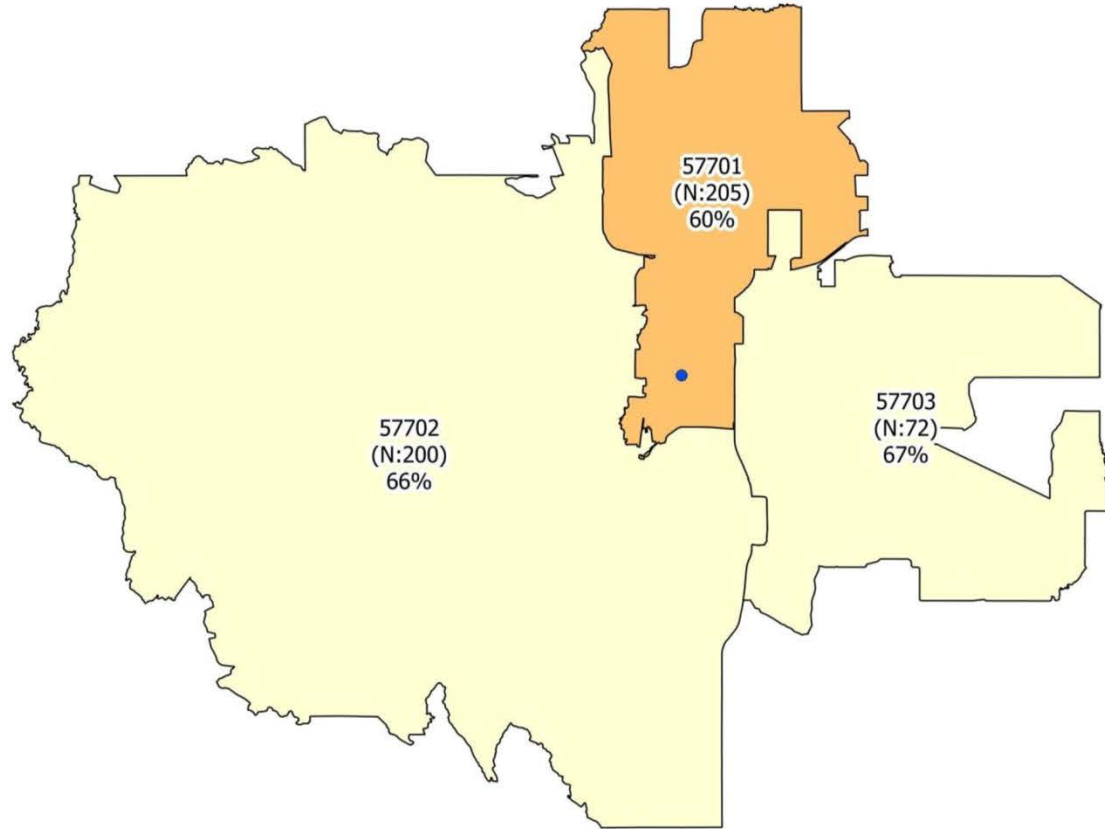
Rapid City Lack of Access to Primary Care Provider

Rapid City | No PCP | Study-wide Average: 23%



Rapid City Knowledge of Mental Health Treatment Options

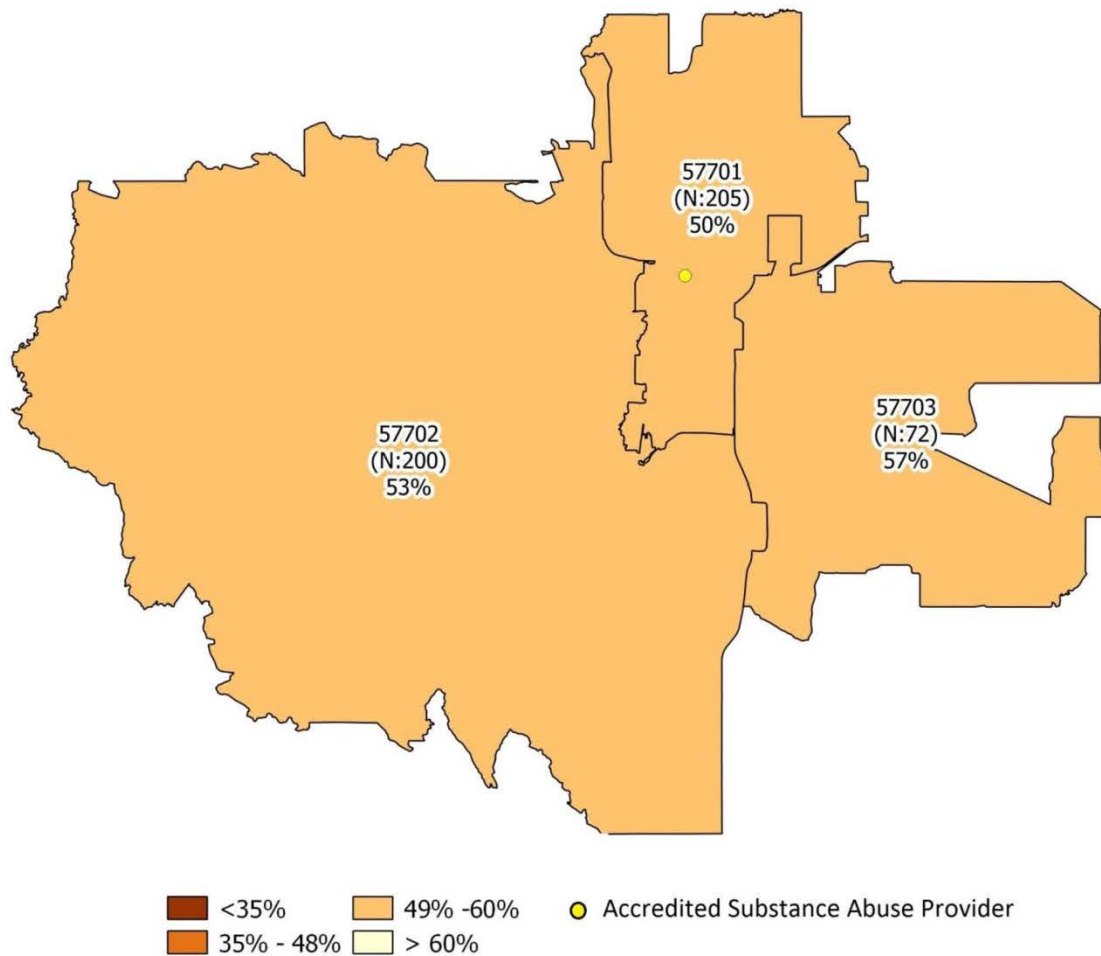
Rapid City | Know Where to go for MH Care | Study-wide Average: 62%



<39% 53% -64% Community Mental Health Center
 40% - 52% > 64%

Rapid City Knowledge of Substance Use Treatment Options

Rapid City | Know Where to go for SA Care | Study-wide Average: 52%



Interviews with South Dakotans

Rationale: Discordance in Perceived Need for Care vs. Screening Results

- Many survey participants screened positive for a behavioral health condition but did not identify a need for care.
 - Mental health: 12.2% of respondents screened positive, only 36.2% of these individuals perceived a need for care
 - Substance use: 42.3% of respondents screened positive, only 1.9% of those individuals perceived a need for care
- Follow-up interviews conducted with focused sample of 35 survey respondents to better understand what contributes to this discrepancy

Interview Method

- Three recruitment steps
 - Identify willing participants
 - Cluster participants on screening/perceived need
 - Recruit purposive sample
- 30-60 minute interviews conducted between July – November 2014
- Multidisciplinary team analyzed transcripts using content analysis framework

Interview Participant Characteristics (N = 35)

Characteristic	N (%)
Age	
18-34	5 (14.3)
35-64	23 (65.7)
65 and older	7 (20.0)
Female Gender	21 (60.0)
American Indian Race/Ethnicity	10 (28.6)
Geography	
Urban	6 (17.1)
Rural	11 (31.4)
Isolated	10 (28.6)
Reservation	8 (22.9)
Screening Status	
Mental Health only	18 (51.4)
Substance Abuse Only	9 (25.7)
Co-occurring	6 (17.1)
Negative Screen	2 (5.7)

Emergent Themes

Two broad constructs emerged as critical to understanding treatment gaps for mental health, alcohol and substance use:

- 1) How the “problem” was defined shaped an individual’s perceptions of need and
- 2) Tipping points that encouraged individuals to seek care.

Participants also shared ideas on how to bridge the treatment gap.

Key Theme: Defining Mental Health Conditions

- Many participants viewed mental health conditions as a normal part of life or a “personal problem” rather than diseases that could be treated.

“I got an ex-wife — something’s the matter with her, but that’s been that way forever and I don’t even know what it is. It’s just a personality quirk. It’s all right, just so long as the neighbors don’t find out. There’s a lot of people that way who have been brought up like me but just can’t cope with the real world.”

Key Theme: Defining Alcohol & Drug Use Problems

- Alcohol use started early and was viewed as normative
- Alcohol abuse was associated with harm of others, neglecting responsibilities, or getting into trouble with the law. Relative comparison factored in to perceptions.

“I think some of it is like, ‘Oh, I’ve never gotten in trouble with the law and when I do drink I’m at home...I’m not out and about, causing problems or going out and driving around.’ And like I say, I haven’t viewed it as a problem.”

- About half of participants viewed any use of drugs as abuse. Others only considered it abuse only if drug use interfered with an individual’s ability to function.

Key Themes: Tipping Points & Individual Willpower

- Coping with a mental health issue or maintaining sobriety was frequently viewed as the result of an individual's willpower
- Family, friends, and court-mandated treatment could play a role in suggesting needed treatment
- Trigger for seeking care often related to a substantial life event (e.g., children)

"I'd seen my mom quit, and a few other family members quit drinking. I was the only one still making an ass out of myself. And then I had kids."

Key Themes: Stigma and Denial

- Stigma was a prominent concern related to seeking mental health or substance use treatment

“[A barrier is] everybody knowing. [It’s a] small community. It doesn’t take long for word to get around. A matter of fact, if I take an ambulance run by the time I get back half the town knows about it – in detail. I mean it surprises the heck out of me how we can run to [larger city] and back which takes about 4-1/2 hours and I’ll get back and go to the grocery store and people will ask me ‘well, how’s so and so doing?’”

- Denial was also viewed as factor that limited treatment seeking.

Participant Recommendations to Bridge the Treatment Gap

- Improve local access and quality of care
- Provide community education about behavioral health conditions, effectiveness of treatment, and how to get help
- Address contextual factors and systemic issues that can contribute to behavioral health conditions

“...if we had things that would be supportive of a healthy lifestyle – because when people go to treatment they come from that environment back into the old environment, and if there’s nothing there for support, you’re going to go right back in with your friends...If there was a support system that helped a person to continue to get outpatient treatment, help them get a job, if they needed some life skills to have that education there for them [this would help].”

Key Findings: Interviews

- Discordance between positive clinical screens and perceived treatment need (63.8% with mental health conditions; 98.1% with substance use needs)
- Discrepancy related to how conditions are defined; stigma and denial
- Treatment seeking encouraged by others, but seen as results of individual's will power and often related to life events
- Participants noted community-based education and system-level interventions were needed in order for improvements in local access to be effective
- Questions?



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Thank you