

Prevention and Early Intervention B4Stage4:

The State of Mental Health in America 2016



Mental Health America

B4Stage4

Acknowledgments

Mental Health America (MHA), formerly the National Mental Health Association, was founded in 1909 and is the nation's leading community-based nonprofit dedicated to helping all Americans achieve wellness by living mentally healthier lives. Our work is driven by our commitment to promote mental health as a critical part of overall wellness, including prevention services for all, early identification and intervention for those at risk, integrated care and treatment for those who need it, with recovery as the goal.

MHA dedicates this report to all mental health advocates who fight tirelessly to help create parity and reduce disparity for people with mental health concerns. To our affiliates, thank you for your incredible state level advocacy and dedication to promoting recovery and protecting consumers' rights!

Special Thanks To:

- The Substance Abuse and Mental Health Services Administration (SAMHSA) and The Centers for Disease Control and Prevention (CDC) who every year invests time and money to collecting the national survey data for which this report would not be possible.
- Caitlin Dillon and Andrea Wilson – who supported our team in analyzing data, and fulfilling our requests for repeated data and fact checking.

This report was researched, written and prepared by Theresa Nguyen, Kelly Davis, Nathaniel Counts, and Danielle Fritze.

All heat maps, online and in this printed chart book, were created by HealthGrove. HealthGrove's mission is to simplify the process of sharing the world's knowledge by transforming complicated data sets into vivid and contextually-rich visualizations. With dedicated teams of researchers and data scientists, their industry leading data visuals are based on the world's deepest and most interconnected knowledge graph, creating a web of data points and contextual information. Learn more at <https://www.graphiq.com/industry-health>.

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Our Report is a Collection of Data across all 50 states and the District of Columbia and seeks to answer the following questions:

- How many adults and youth have mental health issues?
- How many adults and youth have substance use issues?
- How many adults and youth have access to insurance?
- How many adults and youth have access to adequate insurance?
- How many adults and youth have access to mental health care?
- Which states have higher barriers to accessing mental health care?

Our Goal:

- To provide a snapshot of mental health status among youth and adults for policy and program planning, analysis, and evaluation;
- To track changes in prevalence of mental health issues and access to mental health care;
- To understand how changes in national data reflect the impact of legislation like the Mental Health Parity and Addiction Equity Act (MHPAEA) and the Affordable Care Act (ACA); and
- To increase dialogue and improve outcomes for individuals and families with mental health needs.

Why Gather this Information?

- Using national survey data allows us to measure a community's mental health needs, access to care, and outcomes regardless of the differences between the states and their varied mental health policies.
- Rankings explore which states are more effective at addressing issues related to mental health and substance use.
- Analysis may reveal similarities and differences among states in order to begin assessing how federal and state mental health policies result in more or less access to care.

Mental Health America is committed to promoting mental health as a critical part of overall wellness. We advocate for prevention services for all, early identification and intervention for those at risk, integrated services, care and treatment for those who need it, with recovery as the goal. We believe that gathering and providing up-to-date data and information about disparities faced by individuals with mental health problems is a tool for change.

Key Findings

Southern states have the lowest prevalence of addiction – around 7.5 percent. States in the Mountain West region have the highest prevalence of addiction – around 10.0 percent.

More youth are becoming depressed. There was a 1.2 percent increase in youth with depression, and a 1.3 percent increase in youth with severe depression between 2010 and 2013. States with the highest rates of depression have twice as many severely depressed youth compared to states with the lowest rates.

Nationally, 57 percent of adults with mental illness receive no treatment, and in some states (Nevada and Hawaii), that number increases to 70 percent. Despite low utilization of treatment, individuals in Hawaii are the least likely to say that have unmet treatment needs, with only 12 percent of adults in Hawaii reporting that they do not receive the treatment they need. This leads to the question of whether it is possible that individuals in Hawaii are trying to manage their mental health problems on their own, or perhaps the stigma surrounding mental illness is preventing individuals from acknowledging the need for help.

In 2012-2013, 18 percent (1 in 5) of adults with a mental illness were uninsured. Individuals living in states with the highest percentage of uninsured adults with mental illness are 3 times more likely to be uninsured compared to those who live in the states with highest rates of insurance access. Individuals with mental illness living in Nevada (33.40 percent) are 10 times more likely to be uninsured compared to individuals in Massachusetts (3.30 percent).

Cost is a barrier to treatment – 1 in 5 adults with a disability report difficulty getting care due to costs.

64 percent of youth with depression do not receive any treatment. Even among those with severe depression, 63 percent do not receive any outpatient services. Only 22 percent of youth with severe depression receive any kind of consistent outpatient treatment (7-25+ visits in a year).

Youth with severe depression in Nevada (9.40 percent) are 4 times less likely to get consistent outpatient treatment compared to youth in South Dakota (39.50 percent).

Children with the least access to mental health insurance coverage are 3.5 times less likely to have coverage compared to those that live in states with the most coverage. In Hawaii (20 percent), children are 10 times more likely to be uninsured compared to children in Connecticut (2 percent).

States in the Northeast are 5 times more likely to identify youth with Emotional Disturbance as compared to the rest of the nation. Youth who have a mental health problem are more likely to get better school-based supports in the Northeast.

250:1 vs 1,100:1 - In states with the greatest number of available mental health providers (Massachusetts, Maine, and Vermont), there are approximately 250 individuals for every one mental health provider. In states with the lowest number of available mental health providers (West Virginia, Texas, and Alabama), there are approximately 1,100 individuals for every one provider – that is more than 4 times less access to treatment providers in lower ranking states.

Ranking Overview and Guidelines

This chart book presents a collection of data that provides a baseline for answering some questions about how many people in America need and have access to mental health services. This report is a companion to the online interactive data on the MHA website. The data and table include state and national data and trends over time.

MHA Guidelines

Given the variability of data, MHA developed guidelines to identify mental health measures that are most appropriate for inclusion in our ranking. Indicators were chosen that met the following guidelines:

- Data that are publicly available and as new as possible to provide up-to-date results.
- Data that are available for all 50 states and the District of Columbia.
- Data for both adults and youth.
- Data that captured information regardless of varying utilization of the private and public mental health system.
- Data that could be collected over time to allow for analysis of future changes and trends.

Our 2016 Measures

1. Adults with Any Mental Illness (AMI)
2. Adults with Dependence or Abuse of Illicit Drugs or Alcohol
3. Adults with Serious Thoughts of Suicide
4. Youth with At Least One Past Year Major Depressive Episode (MDE)
5. Youth with Dependence or Abuse of Illicit Drugs or Alcohol
6. Youth with Severe MDE
7. Adults with AMI who Did Not Receive Treatment
8. Adults with AMI Reporting Unmet Need
9. Adults with AMI who are Uninsured
10. Adults with Disability who Could Not See a Doctor Due to Costs
11. Youth with MDE who Did Not Receive Mental Health Services
12. Youth with Severe MDE who Received Some Consistent Treatment
13. Children with Private Insurance that Did Not Cover Mental or Emotional Problems
14. Students Identified with Emotional Disturbance for an Individualized Education Program
15. Mental Health Workforce Availability

A Complete Picture

While the above fifteen measures are not a complete picture of the mental health system, they do provide a strong foundation for understanding the prevalence of mental health concerns, as well as issues of access to insurance and treatment, particularly as that access varies among the states. MHA will continue to explore new measures that allow us to more accurately and comprehensively capture the needs of those with mental illness and their access to care.

Ranking

The rankings are based on the percentages or rates for each state. States with positive outcomes are ranked higher than states with poorer outcomes. The overall, adult, youth, prevalence and access rankings were analyzed by calculating a standardized score (Z score) for each measure, and ranking the sum of the standardized scores. For most measures, lower percentages equated to more positive outcomes (e.g. lower rates of substance use or those who are uninsured). This year, there are two measures where high percentages equate to better outcomes. These include Youth with Severe MDE who Received Some Consistent Treatment, and Students Identified with Emotional Disturbance for an Individualized Education Program. Here, the calculated standardized score was multiplied by -1 to obtain a Reverse Z Score that was used in the sum. All measures were considered equally important, and no weights were given to any measure in the rankings.

Along with calculated rankings, each measure is ranked individually with an accompanying chart and table. The table provides the percentage and estimated population for each ranking. The estimated population number is weighted and calculated by the agency conducting the applicable federal survey. The ranking is based on the percentage or rate. Data are presented with 2 decimal places when available. The tables include the District of Columbia (DC). If DC is ranked 1 or 51 in the table, it is not presented as the highest or lowest ranking “state” in the chart.

Survey Limitations

Each survey has its own strengths and limitations. For example, strengths of both SAMHSA’s National Survey of Drug Use and Health (NSDUH) and the CDC’s Behavioral Risk Factor Surveillance System (BRFSS) are that they include national survey data with large sample sizes and utilized statistical modeling to provide weighted estimates of each state population. This means that the data is more representative of the general population. An example limitation of particular importance to the mental health community is that the NSDUH does not collect information from persons who are homeless and who do not stay at shelters, are active duty military personnel, or are institutionalized (i.e., in jails or hospitals). This limitation means that those individuals who have a mental illness who are also homeless or incarcerated are not represented in the data presented by the NSDUH. If the data did include individuals who were homeless and/or incarcerated, we would possibly see prevalence of behavioral health issues increase and access to treatment rates worsen. It is MHA’s goal to continue to search for the best possible data in future reports. Additional information on the methodology and limitations of the surveys can be found online as outlined in the glossary.

Overall Ranking

A high overall ranking indicates lower prevalence of mental illness and higher rates of access to care. A low overall ranking indicates higher prevalence of mental illness and lower rates of access to care. The combined scores of 13 measures make up the overall ranking. The overall ranking includes both adult and youth measures as well as prevalence and access to care measures.

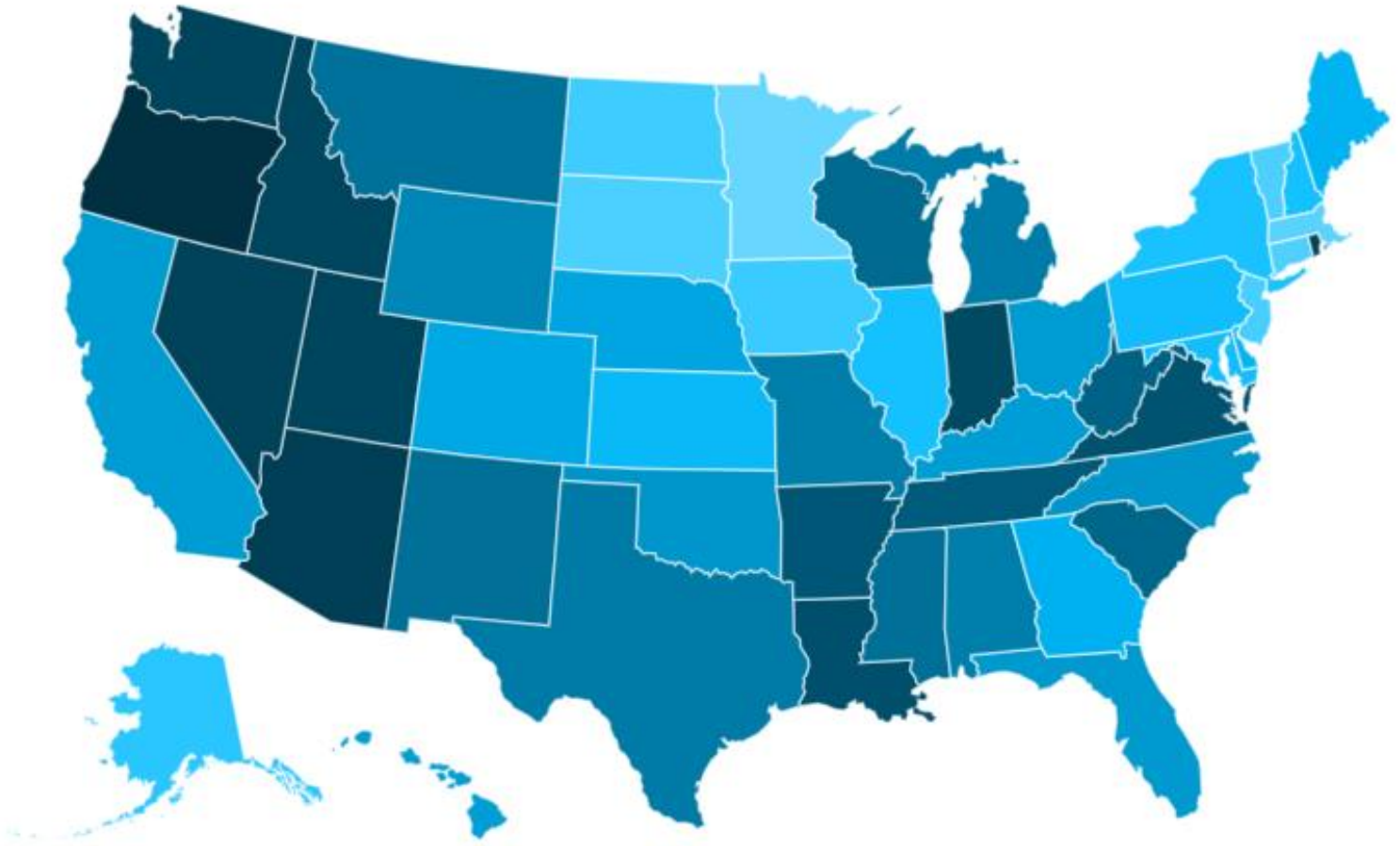
The 13 measures that make up the overall ranking include:

1. Adults with Any Mental Illness (AMI)
2. Adults with Dependence or Abuse of Illicit Drugs or Alcohol
3. Adults with Serious Thoughts of Suicide
4. Adults with AMI who Did Not Receive Treatment
5. Adults with AMI Reporting Unmet Need
6. Adults with Disability who Could Not See a Doctor Due to Costs
7. Youth with At Least One Past Year Major Depressive Episode (MDE)
8. Youth with Dependence or Abuse of Illicit Drugs or Alcohol
9. Youth with Severe MDE
10. Youth with MDE who Did Not Receive Mental Health Services
11. Youth with Severe MDE who Received Some Consistent Treatment
12. Students Identified with Emotional Disturbance for an Individualized Education Program
13. Mental Health Workforce Availability

Because the most recent survey data comes from 2013, which is one year prior to implementation of the Affordable Care Act, the measures “Adults with AMI who are Uninsured” and “Children with Private Insurance that Did Not Cover Mental or Emotional Problems” were left out of calculations from the Overall Ranking.

Overall Ranking

States that rank in the top ten are in the Northeast and Midwest, while most states that rank in the bottom ten are in the South and the West.



Overall Ranking

Rank	State
1	Minnesota
2	Massachusetts
3	Connecticut
4	Vermont
5	South Dakota
6	New Jersey
7	North Dakota
8	Iowa
9	Alaska
10	New York
11	New Hampshire
12	Illinois
13	Maryland
14	Pennsylvania
15	Kansas
16	Delaware
17	Maine

Rank	State
18	Georgia
19	Colorado
20	Nebraska
21	Kentucky
22	Hawaii
23	California
24	Ohio
25	Florida
26	Oklahoma
27	North Carolina
28	DC
29	Wyoming
30	Missouri
31	Alabama
32	Michigan
33	Texas
34	Montana

Rank	State
35	Mississippi
36	New Mexico
37	Wisconsin
38	South Carolina
39	West Virginia
40	Tennessee
41	Arkansas
42	Virginia
43	Louisiana
44	Indiana
45	Idaho
46	Utah
47	Washington
48	Rhode Island
49	Nevada
50	Arizona
51	Oregon

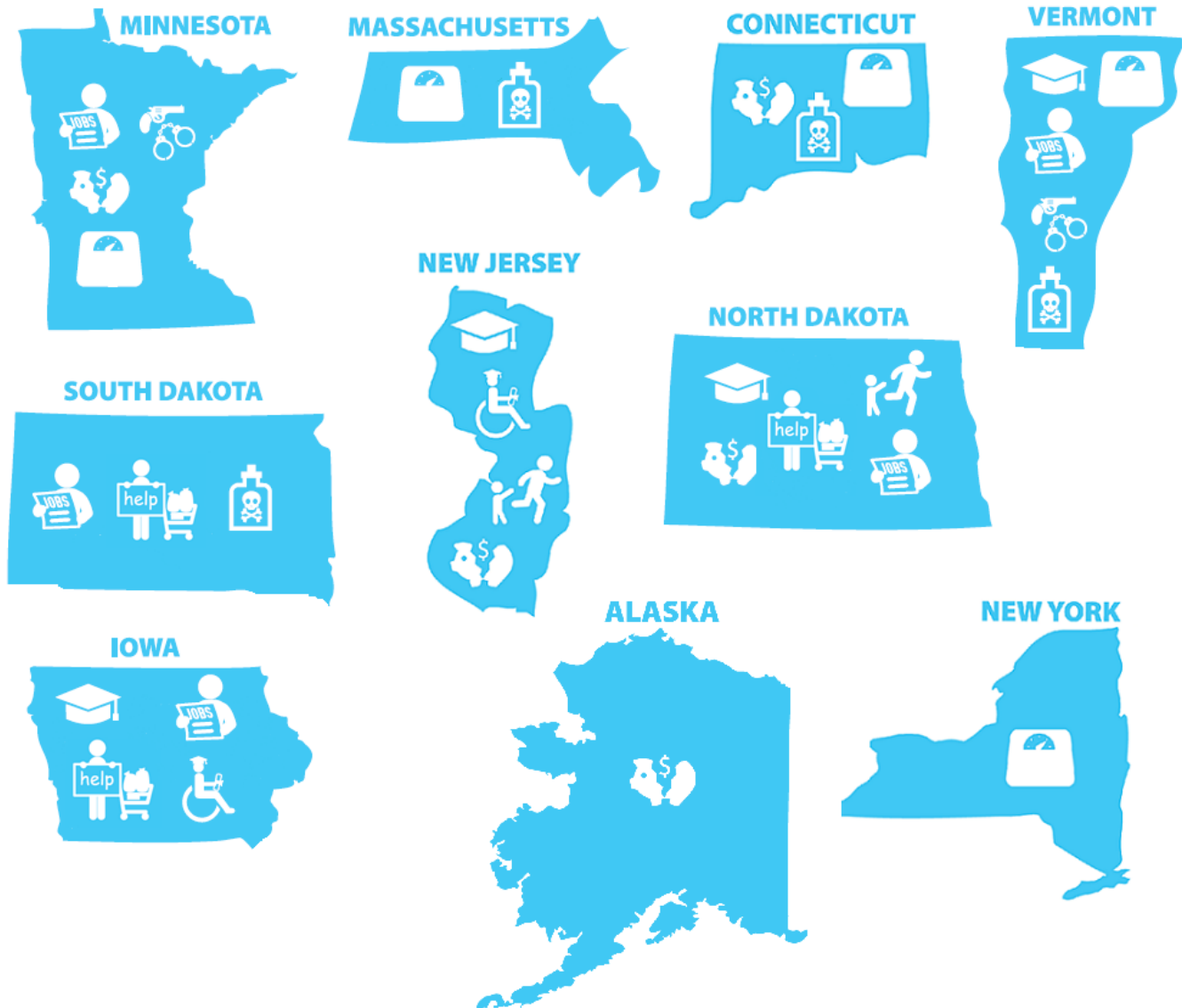
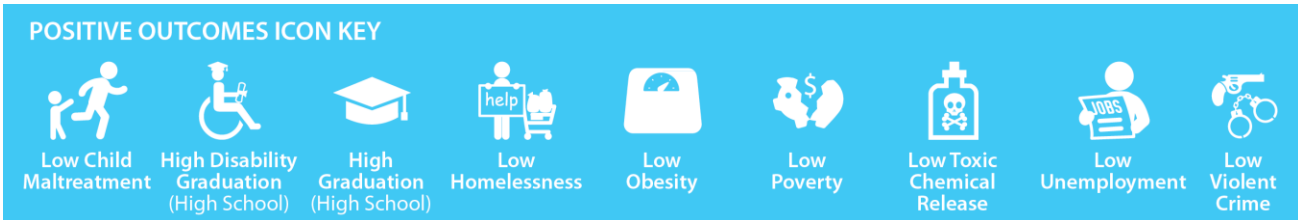
Overall Ranking Compared to Other Positive Outcomes

Mental health, substance use, and suicidal thoughts are influenced by both biological and environmental factors. Environmental factors such as stress, poverty, homelessness, and exposure to interpersonal and community violence are linked to increased rates of mental health and substance use problems.

Top 10 states in the Overall Ranking also rank among the top 10 states in the following positive outcomes.

States with the lowest prevalence of mental illness and highest rates of access to care include:

- | | | | | |
|------------------|----------------|-----------------|-----------------|--------------|
| 1. Minnesota | 3. Connecticut | 5. South Dakota | 7. North Dakota | 9. Alaska |
| 2. Massachusetts | 4. Vermont | 6. New Jersey | 8. Iowa | 10. New York |

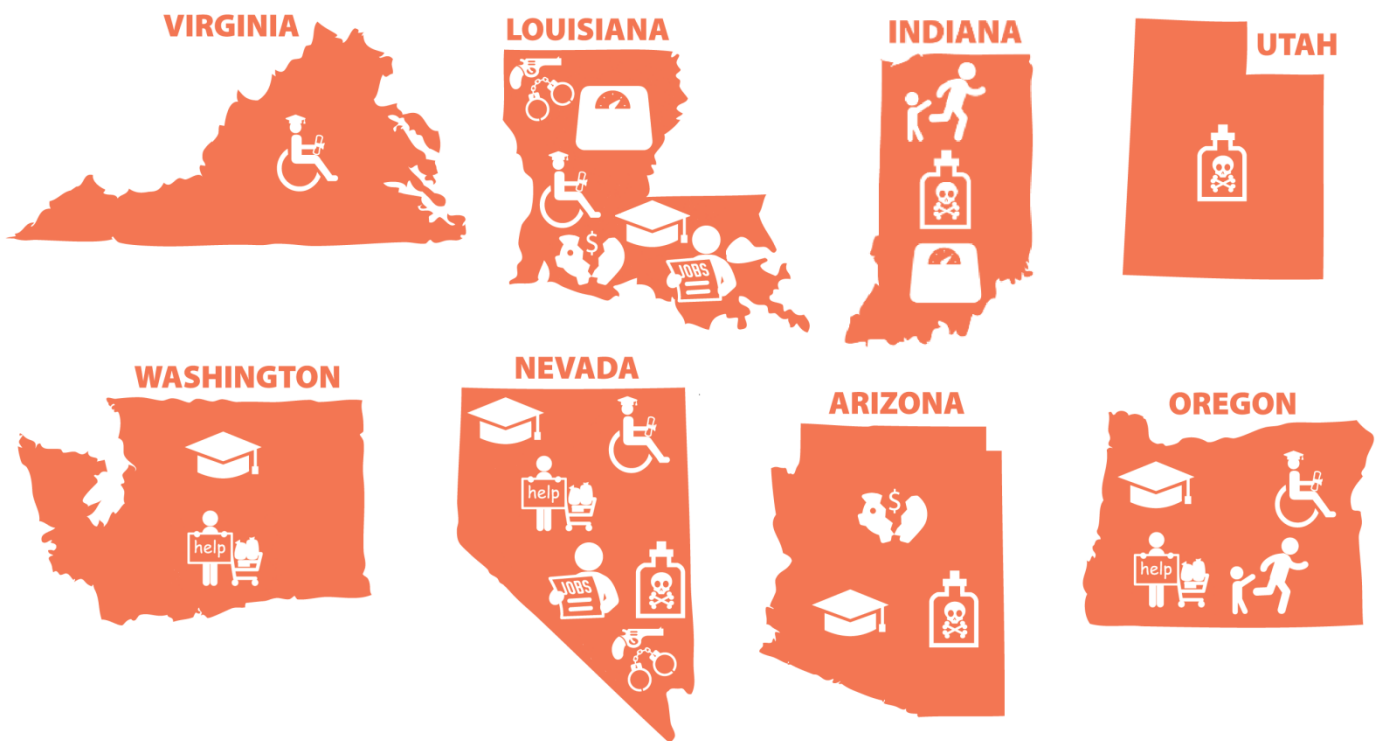
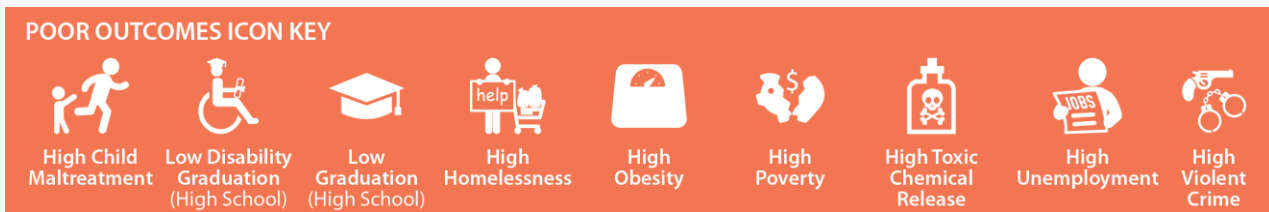


Overall Ranking Compared to Other Poor Outcomes

Bottom 10 states in the Overall Ranking also rank among the bottom 10 states in the following poor outcomes. Among the bottom 10 states in the Overall Ranking, 8 states had correlations with poor outcomes – shown below.

States at the bottom 10 of the Overall Ranking with the highest prevalence of mental illness and lowest rates of access to care include:

- | | | | | |
|--------------|------------|---------------|-----------------|------------|
| 1. Virginia | 3. Indiana | 5. Utah | 7. Rhode Island | 9. Arizona |
| 2. Louisiana | 4. Idaho | 6. Washington | 8. Nevada | 10. Oregon |



Adults and Youth Rankings

States with high rankings have lower prevalence of mental illness and higher rates of access to care for adults and youth. Lower rankings indicate that adults and youth have higher prevalence of mental illness and lower rates of access to care.

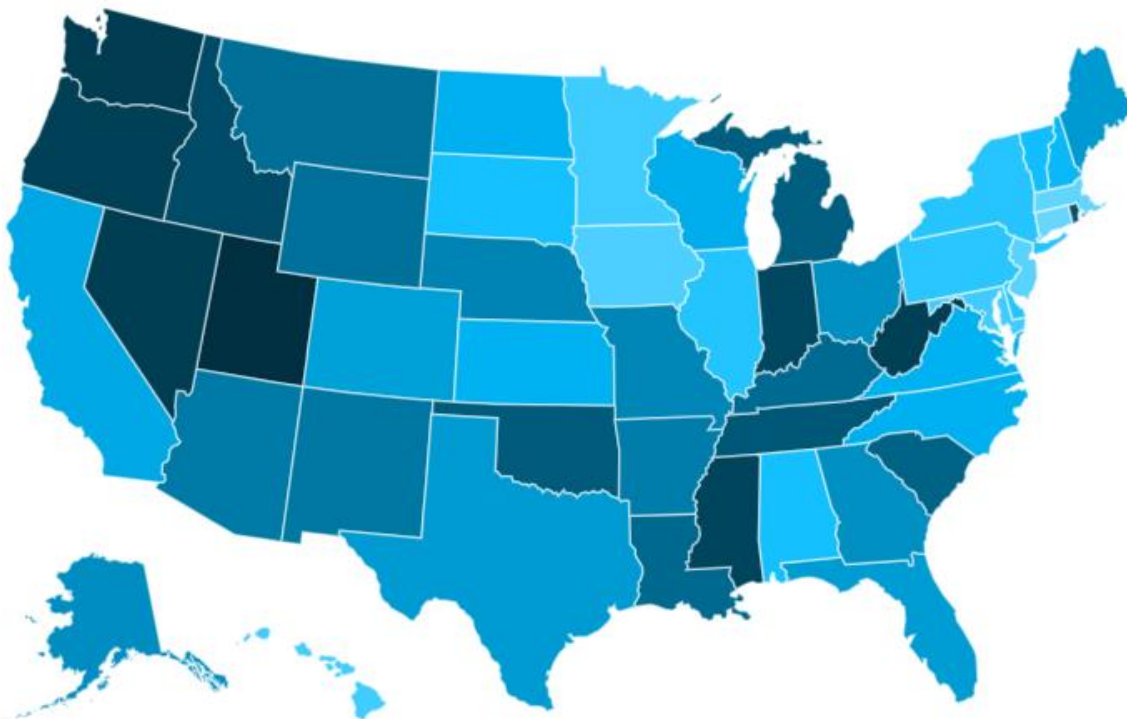
The 7 measures that make up the Adult Ranking include:

1. Adults with Any Mental Illness (AMI)
2. Adults with Dependence or Abuse of Illicit Drugs or Alcohol
3. Adults with Serious Thoughts of Suicide
4. Adults with AMI who Did Not Receive Treatment
5. Adults with AMI Reporting Unmet Need
6. Adults with AMI who are Uninsured
7. Adults with Disability who Could Not See a Doctor Due to Costs.

The 7 measures that make up the Youth Ranking include:

1. Youth with At Least One Past Year Major Depressive Episode (MDE)
2. Youth with Dependence or Abuse of Illicit Drugs or Alcohol
3. Youth with Severe MDE
4. Youth with MDE who Did Not Receive Mental Health Services
5. Youth with Severe MDE who Received Some Consistent Treatment
6. Children with Private Insurance that Did Not Cover Mental or Emotional Problems
7. Students Identified with Emotional Disturbance for an Individualized Education Program.

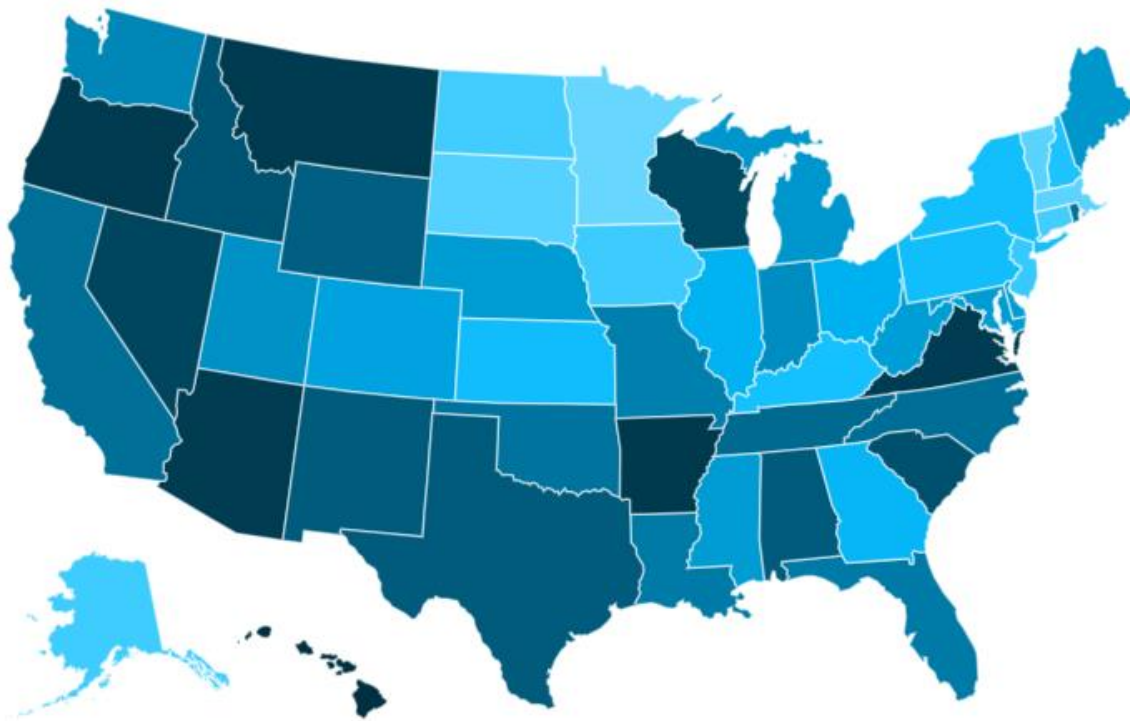
Adult Ranking



Adult Ranking

Rank	State
1	Connecticut
2	Massachusetts
3	New Jersey
4	Iowa
5	Hawaii
6	Maryland
7	Minnesota
8	Pennsylvania
9	New York
10	Illinois
11	Delaware
12	South Dakota
13	Alabama
14	Vermont
15	New Hampshire
16	Kansas
17	Virginia
18	North Carolina
19	North Dakota
20	Wisconsin
21	California
22	Colorado
23	Florida
24	Texas
25	Maine
26	Ohio
27	Georgia
28	Alaska
29	Missouri
30	Nebraska
31	Arkansas
32	Arizona
33	New Mexico
34	Wyoming
35	Montana
36	Kentucky
37	Louisiana
38	South Carolina
39	Michigan
40	Oklahoma
41	Tennessee
42	Rhode Island
43	Idaho
44	Indiana
45	DC
46	Mississippi
47	West Virginia
48	Oregon
49	Nevada
50	Washington
51	Utah

Youth Ranking



States with the lowest prevalence of mental illness and highest rates of access to care:

For adults include:

1. Connecticut
2. Massachusetts
3. New Jersey
4. Iowa
5. Hawaii

For youth include:

1. Minnesota
2. Massachusetts
3. Vermont
4. South Dakota
5. Connecticut

States with the highest prevalence of mental illness and lowest rates of access to care:

For adults include:

47. West Virginia
48. Oregon
49. Nevada
50. Washington
51. Utah

For youth include:

47. Arizona
48. Montana
49. Oregon
50. Arkansas
51. Hawaii

Youth Ranking

Rank	State
1	Minnesota
2	Massachusetts
3	Vermont
4	South Dakota
5	Connecticut
6	North Dakota
7	Alaska
8	Iowa
9	New Jersey
10	DC
11	New Hampshire
12	Kentucky
13	New York
14	Pennsylvania
15	Kansas
16	Georgia
17	Illinois
18	Ohio
19	Colorado
20	West Virginia
21	Maryland
22	Nebraska
23	Delaware
24	Mississippi
25	Michigan
26	Maine
27	Utah
28	Indiana
29	Washington
30	Missouri
31	Florida
32	Louisiana
33	Oklahoma
34	Rhode Island
35	California
36	North Carolina
37	Tennessee
38	Wyoming
39	Alabama
40	New Mexico
41	Texas
42	Idaho
43	South Carolina
44	Wisconsin
45	Nevada
46	Virginia
47	Arizona
48	Montana
49	Oregon
50	Arkansas
51	Hawaii

Prevalence of Mental Illness and Access to Care Rankings

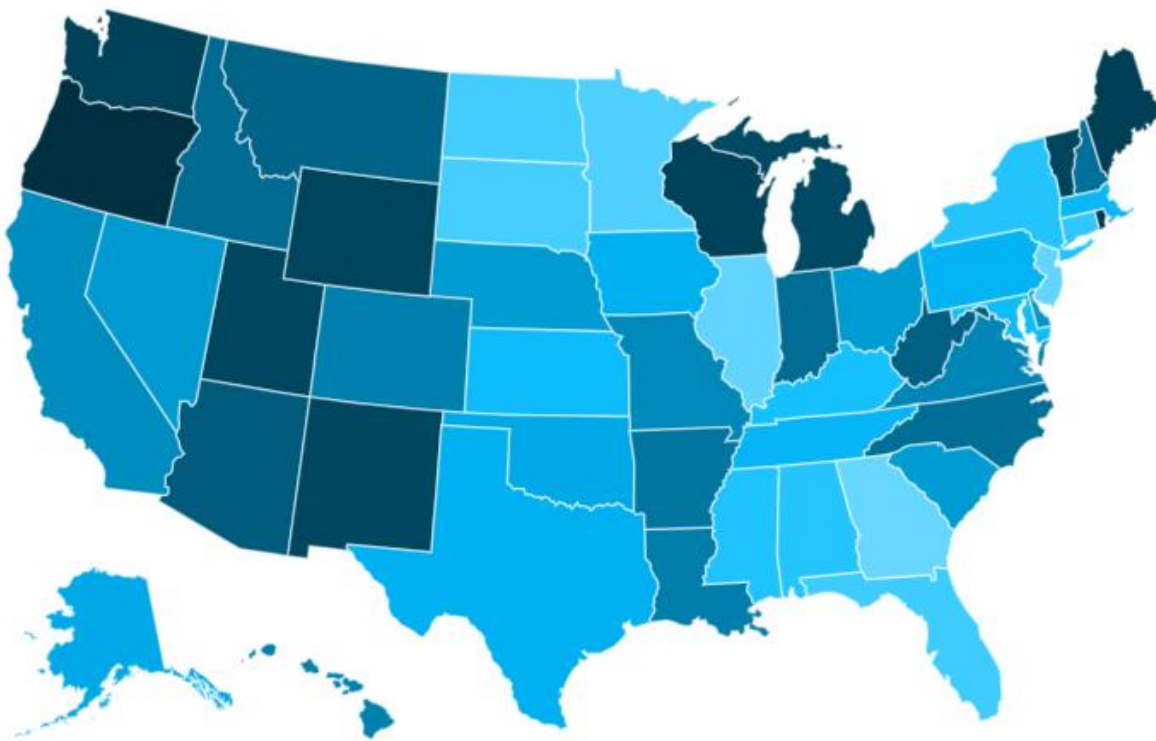
The scores for the six prevalence and nine access to treatment measures make up the Prevalence and Access to Care Ranking.

The 6 measures that make up the Prevalence Ranking include:

1. Adults with Any Mental Illness (AMI)
2. Adults with Dependence or Abuse of Illicit Drugs or Alcohol
3. Adults with Serious Thoughts of Suicide
4. Youth with At Least One Past Year Major Depressive Episode (MDE)
5. Youth with Dependence or Abuse of Illicit Drugs or Alcohol
6. Youth with Severe MDE.

A high ranking on the Prevalence Ranking indicates a lower prevalence of mental health and substance use issues. States that rank 1-10 have lower rates of mental health and substance use problems compared to states that ranked 42-51.

Prevalence Ranking



States with the lowest prevalence:

1. Georgia
2. New Jersey
3. Illinois
4. Minnesota
5. South Dakota

States with the highest prevalence:

47. Wisconsin
48. Washington
49. Maine
50. Rhode Island
51. Oregon

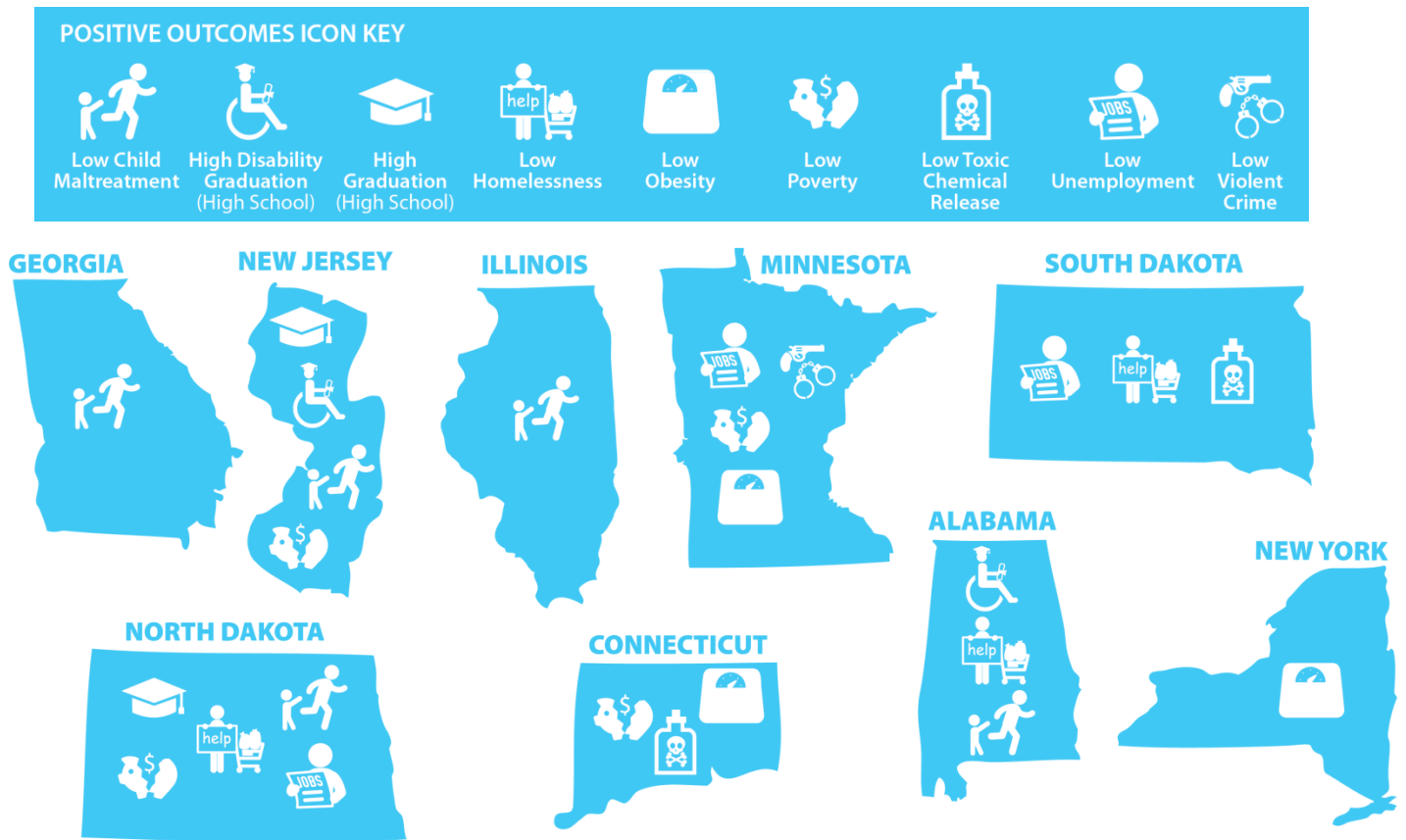
Prevalence Ranking

Rank	State
1	Georgia
2	New Jersey
3	Illinois
4	Minnesota
5	South Dakota
6	North Dakota
7	Florida
8	Connecticut
9	Alabama
10	New York
11	Mississippi
12	Kentucky
13	Maryland
14	Kansas
15	Massachusetts
16	Tennessee
17	Pennsylvania
18	Iowa
19	Texas
20	Oklahoma
21	Alaska
22	Ohio
23	South Carolina
24	Nebraska
25	Nevada
26	Delaware
27	California
28	Missouri
29	Virginia
30	Hawaii
31	Colorado
32	Louisiana
33	Arkansas
34	New Hampshire
35	North Carolina
36	Indiana
37	Idaho
38	Montana
39	West Virginia
40	Arizona
41	DC
42	Michigan
43	Utah
44	New Mexico
45	Vermont
46	Wyoming
47	Wisconsin
48	Washington
49	Maine
50	Rhode Island
51	Oregon

Prevalence Ranking Compared to Other Positive and Poor Outcomes

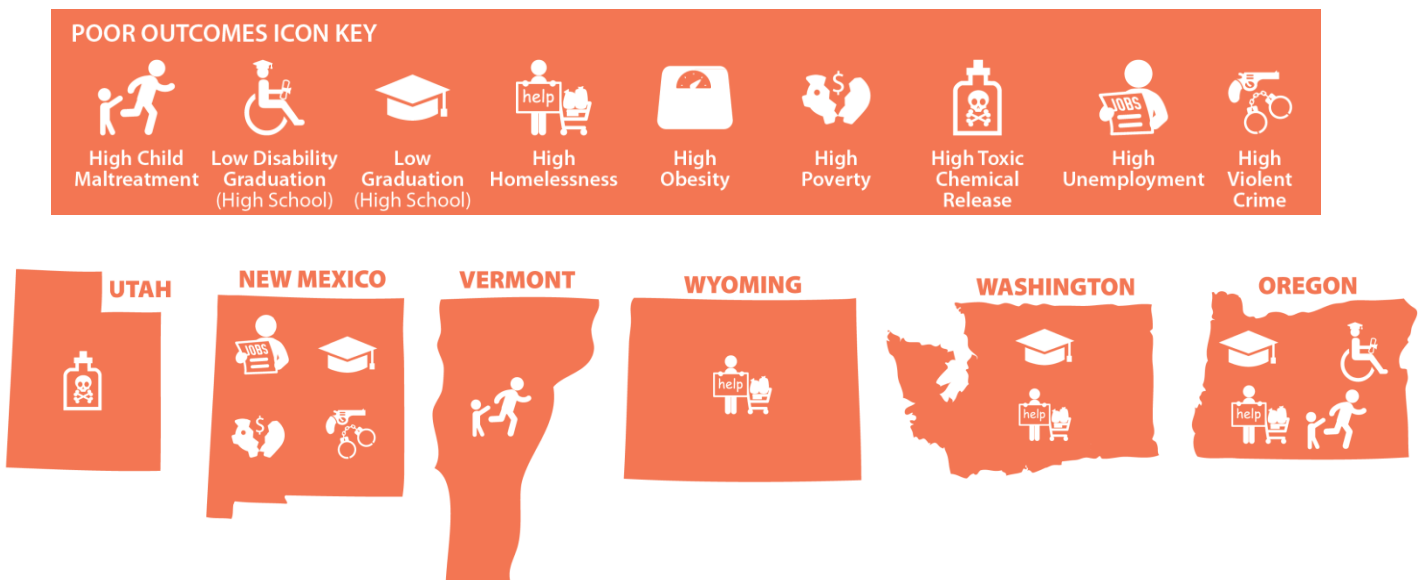
Top 10 states in the Prevalence Ranking also rank among the top 10 states in the following positive outcomes.

Among the top 10 states in the Prevalence Ranking, 9 states had correlations with positive outcomes – shown below.



Bottom 10 states in the Prevalence Ranking also rank among the bottom 10 states in the following poor outcomes.

Among the bottom 10 states in the Prevalence Ranking, 6 states had correlations with poor outcomes – shown below.

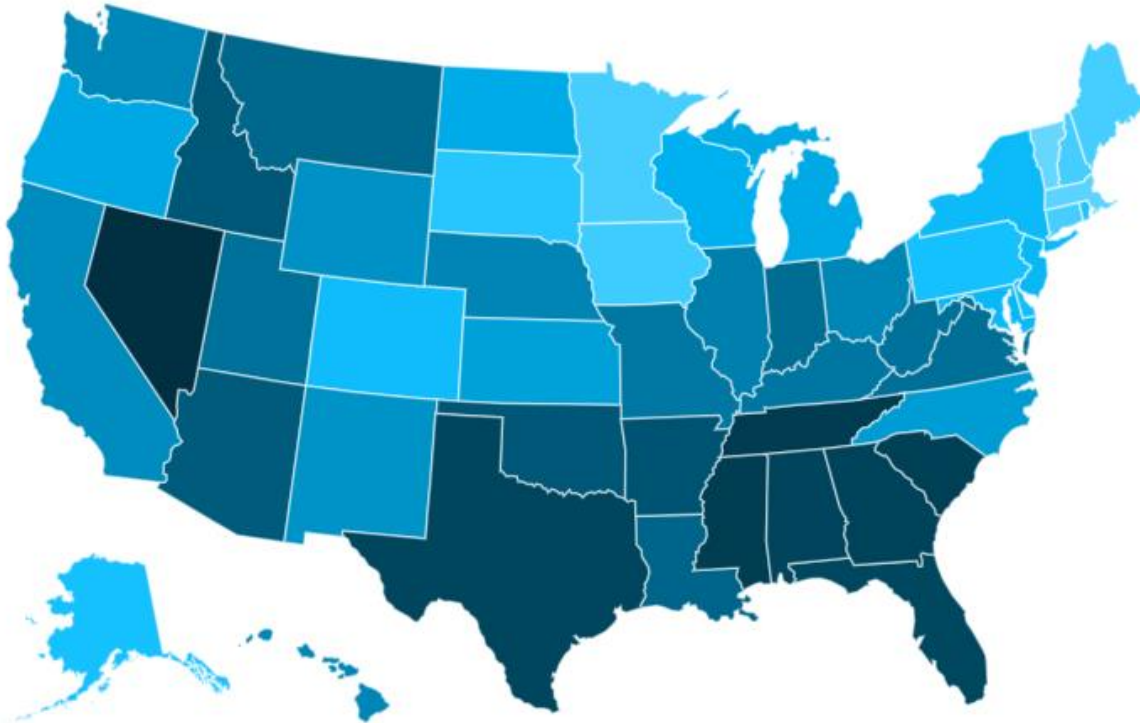


Access to Care Ranking

The Access Ranking indicates how much access to mental health care exists within a state. The access measures include access to insurance, access to treatment, quality and cost of insurance, access to special education, and workforce availability. A high Access Ranking indicates that a state provides relatively more access to insurance and mental health treatment.

The 9 measures that make up the Access Ranking include:

1. Adults with AMI who Did Not Receive Treatment
2. Adults with AMI Reporting Unmet Need
3. Adults with AMI who are Uninsured
4. Adults with Disability who Could Not See a Doctor Due to Costs
5. Youth with MDE who Did Not Receive Mental Health Services
6. Youth with Severe MDE who Received Some Consistent Treatment
7. Children with Private Insurance that Did Not Cover Mental or Emotional Problems
8. Students Identified with Emotional Disturbance for an Individualized Education Program
9. Mental Health Workforce Availability



In Georgia or Florida, despite having lower percentages of individuals who need mental health services, those who have problems are likely to face more difficulty obtaining treatment as compared to other states.

The opposite is true for states like Maine or Vermont, where there are more individuals with mental health and substance use issues and higher rates of access to care.

Among states that rank the poorest, like Arizona, Idaho and Montana, there are comparatively more individuals needing mental health and substance use care, yet lower rates of access to mental health care.

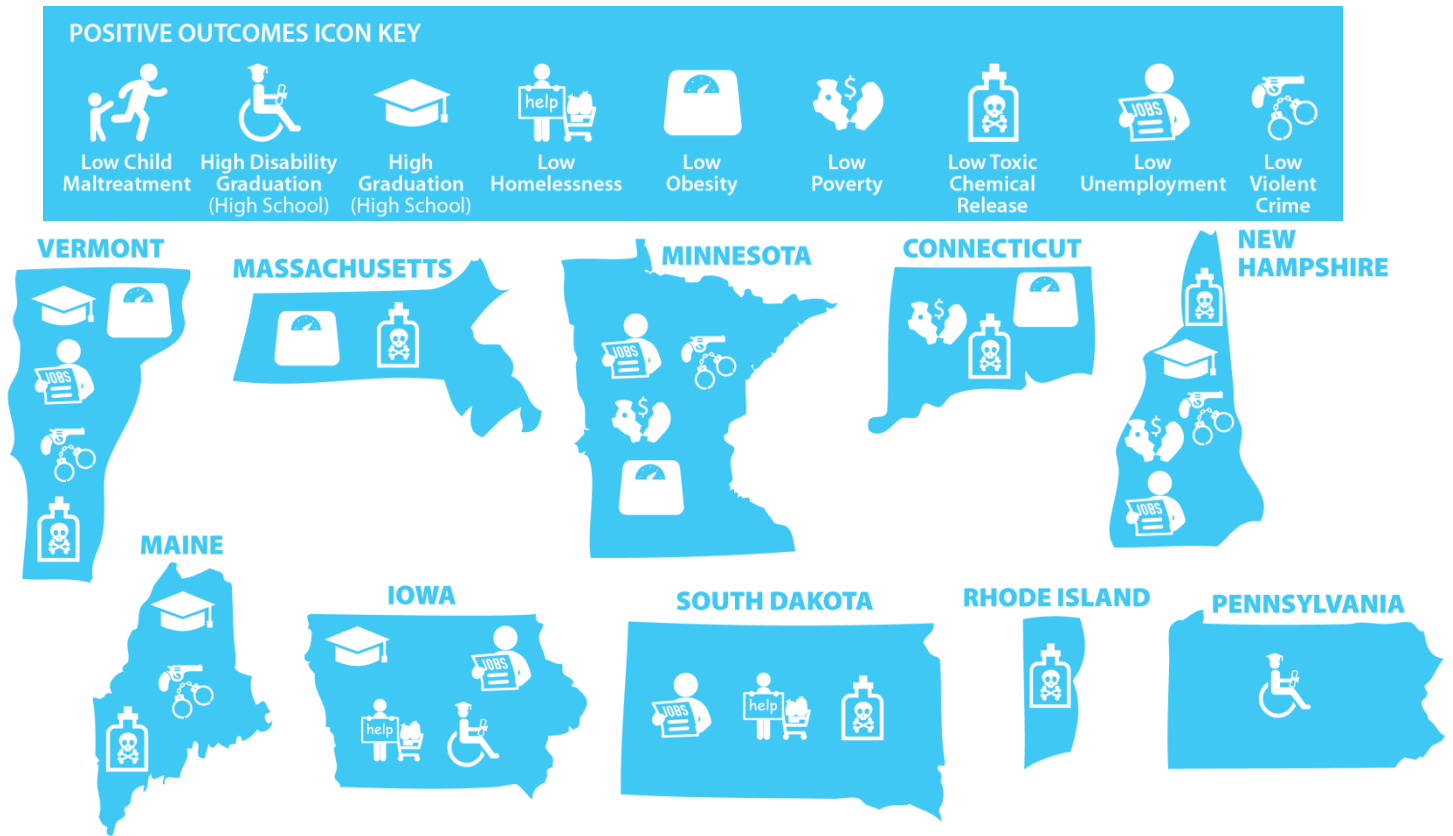
Access to Care Ranking

Rank	State
1	Vermont
2	Massachusetts
3	Minnesota
4	Connecticut
5	New Hampshire
6	Maine
7	Iowa
8	South Dakota
9	DC
10	Rhode Island
11	Pennsylvania
12	Alaska
13	Delaware
14	Colorado
15	New York
16	New Jersey
17	Maryland
18	Wisconsin
19	North Dakota
20	Michigan
21	Oregon
22	Kansas
23	North Carolina
24	New Mexico
25	Wyoming
26	California
27	Washington
28	Hawaii
29	Ohio
30	Nebraska
31	Illinois
32	Missouri
33	Kentucky
34	West Virginia
35	Utah
36	Virginia
37	Indiana
38	Montana
39	Louisiana
40	Arizona
41	Idaho
42	Oklahoma
43	Arkansas
44	Florida
45	Texas
46	Alabama
47	Georgia
48	South Carolina
49	Mississippi
50	Tennessee
51	Nevada

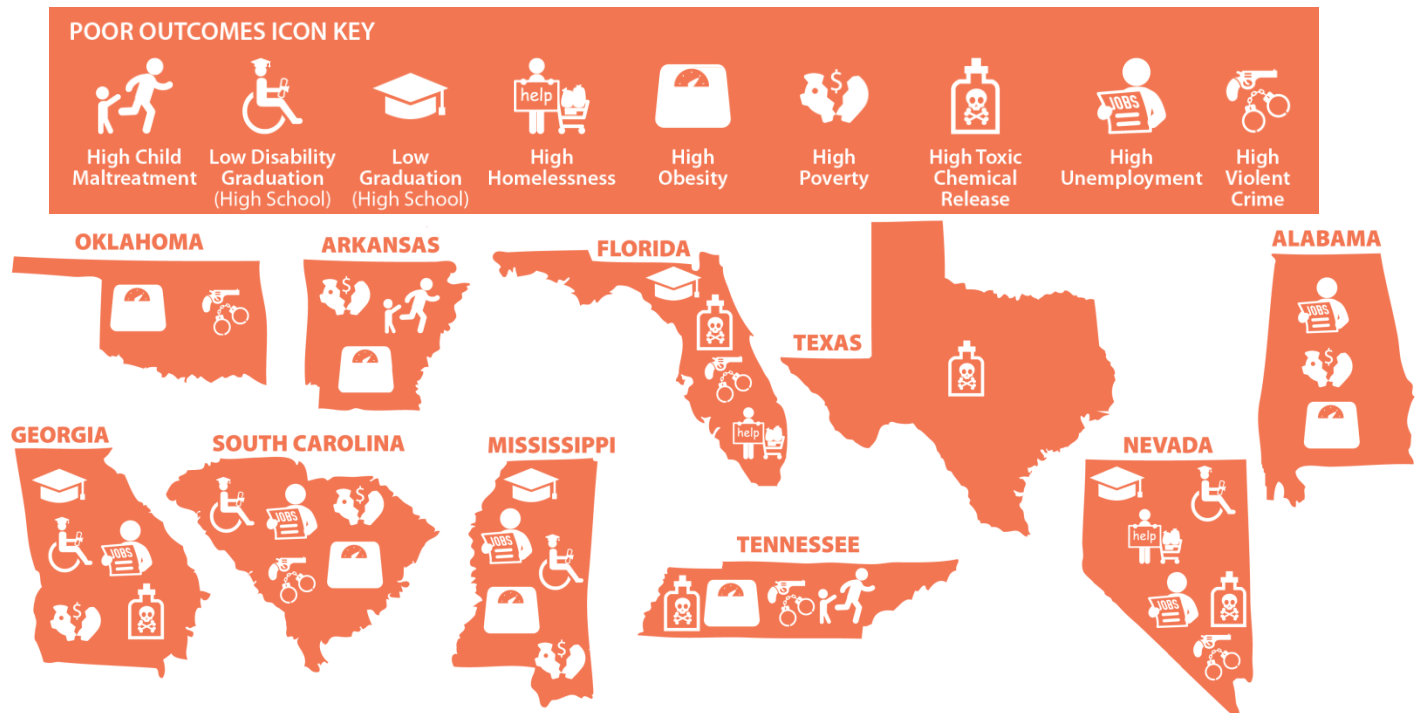
Access to Care Ranking Compared to Other Positive and Poor Outcomes

States that invest in care for individuals with mental illness are likely to provide better services overall. Due to their investment for those in need, the states in the top 10 in the Access to Care Ranking have stronger communities.

Top 10 states in the Access to Care Ranking also rank among the top 10 states in the following positive outcomes.

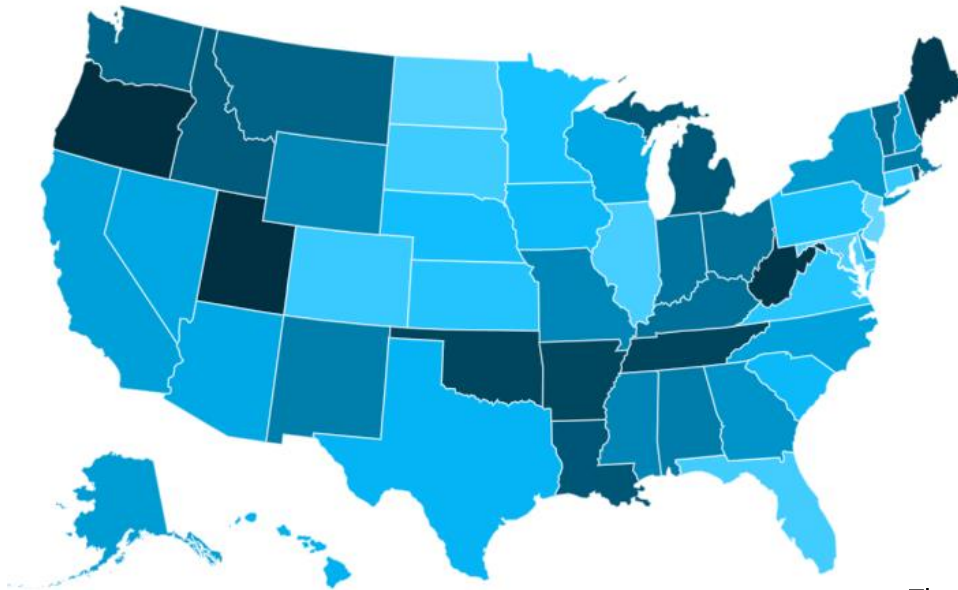


Bottom 10 states in the Access to Care Ranking also rank among the bottom 10 states in the following poor outcomes.



Adult Prevalence of Mental Illness

Adults with Any Mental Illness (AMI)



18.53 % of adults in America reported suffering from a mental illness, a slight increase in percentage from last year (18.19 %). While this is only a .4% increase, the estimated number of adults with mental illness increased by 1.2 million individuals.

All states that had a statistically significant change in percentages of mental illness experienced an increase in rate from last year's estimates. These changes occurred in Texas, North Carolina, Massachusetts, and Nevada. No states experienced a significant decrease in percentage rate of Adults with AMI.

The state prevalence of mental illness ranges from:



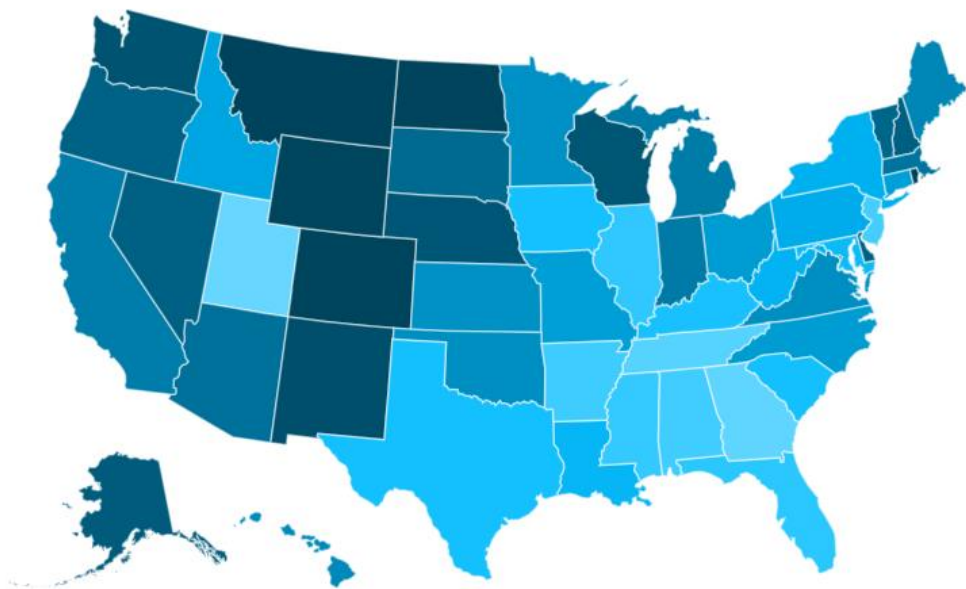
Adult with Dependence or Abuse of Illicit Drug or Alcohol

8.66 % of adults in America report having a substance use or alcohol problem – a .2% increase in percentage as compared to last year (8.46 %).

Southern states have the lowest prevalence of addiction – around 7.5 %.

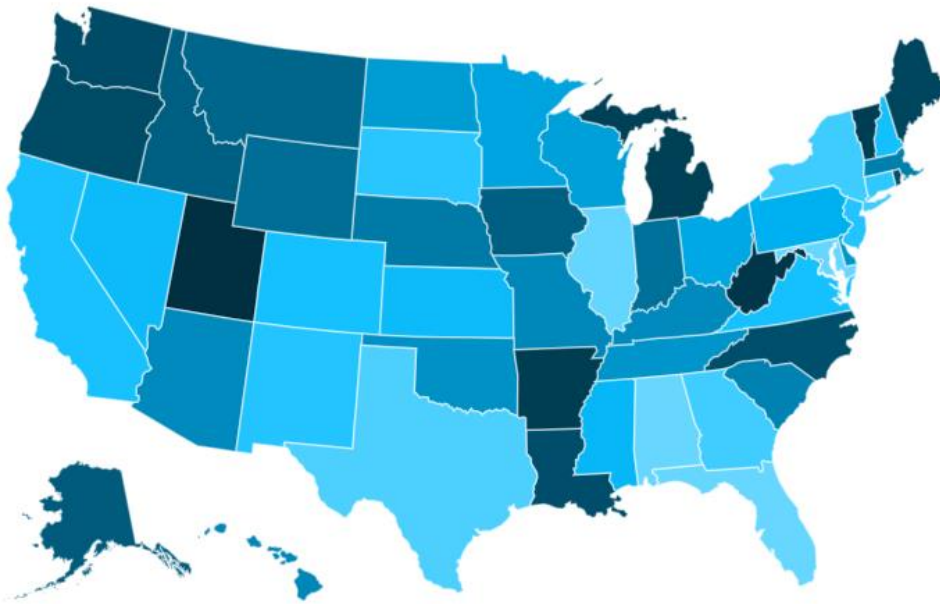
Oklahoma and Illinois have significantly less substance and alcohol use in 2012-2013 as compared to 2011-2012. Virginia, North Carolina, and Alabama experienced a significant increase in substance and alcohol use among adults.

The state prevalence of adult alcohol and substance use ranges from:



Adult Prevalence of Mental Illness

Adults with Serious Thoughts of Suicide



The percentage of adults reporting serious thoughts of suicide is 3.89 %. The estimated number of adults with serious suicidal thoughts equal more than 9 million individuals.

Not surprisingly, the correlation between Adults with AMI and Adults who have Suicidal Thoughts is strong ($r=.72$, $p=000$). This means that higher rates of mental illness are associated with higher rates of suicidal thoughts. Eight of the states with the highest percentages of mental illness also have the highest percentages of suicidal thoughts.

The only state with a significant change in prevalence of suicidal ideation over time was North Carolina – with an increase from 3.62% (2011-2012) to 4.33 % (2012-2013).

The state prevalence of adult with serious thoughts of suicide range from:

Low (Alabama) 3.51 % High 4.84 % (Utah)

According to SAMHSA, “Any Mental Illness (AMI) is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a developmental or substance use disorder. Three categories of mental illness severity are defined based on the level of functional impairment: mild mental illness, moderate mental illness, and serious mental illness. Any mental illness includes persons in any of the three categories.”

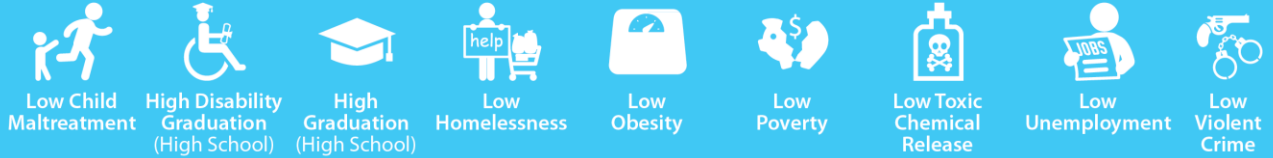
For Adult and Youth Substance and Alcohol Dependence and Abuse, the term “Illicit Drugs” includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically, including data from original methamphetamine questions but not including new methamphetamine items added in 2005 and 2006.

While the national percentage of individuals suffering with a serious mental illness is around 4%, we report on the percentage of Adults with Any Mental Illness (AMI). Along with the significant correlation between Serious Suicidal Thoughts and AMI (above), we use AMI because it is inclusive of people who are showing early warning signs of mental health problems – when their functioning (how well they are doing in other areas of life) is mild and moderately impacted by their mental health symptoms. Every person diagnosed with a serious mental illness experienced mild to moderate symptoms during the progress of their illness. Due to lack of treatment, symptoms and impairment are likely to worsen over time leading individuals to experience significant difficulty in work, school, relationships and daily activities. **We should not wait until people reach serious difficulty before providing needed care.**

Adult Mental Illness Compared to Other Positive and Poor Outcomes

Top 10 states for adults with AMI also rank among the top 10 states in the following positive outcomes.
Among the top 10 states for Adults with AMI, 9 states had correlations with positive outcomes – shown below.

POSITIVE OUTCOMES ICON KEY



NEW JERSEY



NORTH DAKOTA



MARYLAND



ILLINOIS



SOUTH DAKOTA



COLORADO



CONNECTICUT



VIRGINIA

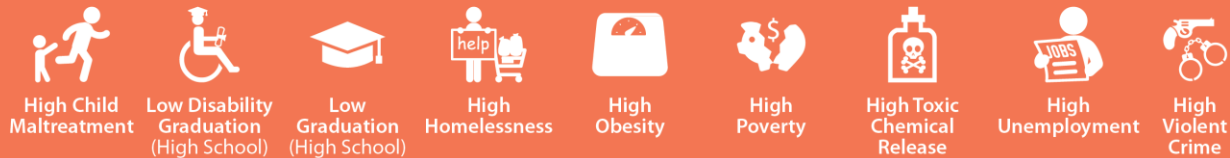


KANSAS



Bottom 10 states for adults with AMI also rank among the bottom 10 states in the following poor outcomes.
Among the top 10 states for Adults with AMI, 7 states had correlations with positive outcomes – shown below.

POOR OUTCOMES ICON KEY



LOUISIANA



ARKANSAS



OKLAHOMA



TENNESSEE



WEST VIRGINIA



UTAH



OREGON



Adults with Any Mental Illness (AMI)

Adults Dependence or Abuse of Illicit Drugs or Alcohol

Adults with Serious Thoughts of Suicide

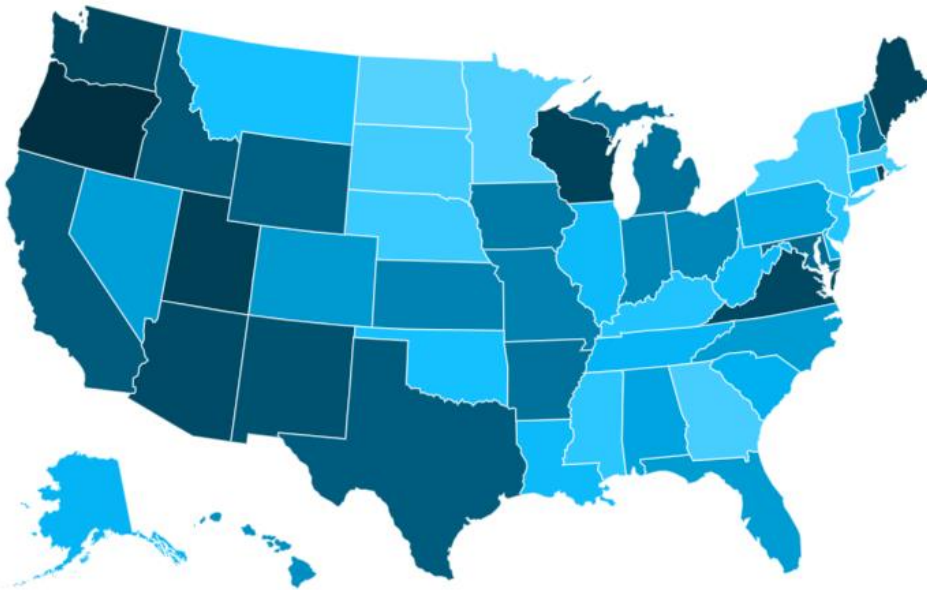
Rank	State	%	#
1	New Jersey	15.62	1,055,000
2	North Dakota	16.35	88,000
3	Maryland	16.55	740,000
4	Illinois	16.68	1,610,000
5	Florida	16.91	2,554,000
6	South Dakota	17.05	105,000
7	Colorado	17.19	670,000
8	Connecticut	17.26	475,000
9	Virginia	17.56	1,080,000
10	Kansas	17.64	371,000
11	Minnesota	17.95	730,000
12	Pennsylvania	17.96	1,768,000
13	Nebraska	17.99	247,000
14	Iowa	18.03	418,000
15	South Carolina	18.04	644,000
16	Texas	18.11	3,394,000
17	Hawaii	18.14	188,000
18	Wisconsin	18.33	797,000
19	Arizona	18.34	892,000
20	Delaware	18.38	129,000
21	Nevada	18.38	381,000
22	North Carolina	18.47	1,347,000
23	California	18.54	5,278,000
24	Alaska	18.63	96,000
25	New Hampshire	18.64	193,000
26	New York	18.69	2,825,000
27	Georgia	18.80	1,364,000
28	Missouri	19.07	863,000
29	Wyoming	19.10	83,000
30	Mississippi	19.12	416,000
31	New Mexico	19.33	297,000
32	Massachusetts	19.34	1,005,000
33	Alabama	19.35	703,000
34	Indiana	19.59	954,000
35	Kentucky	19.68	646,000
36	Ohio	19.69	1,719,000
37	Vermont	19.74	98,000
38	Washington	19.85	1,039,000
39	Montana	19.87	153,000
40	Idaho	19.97	231,000
41	DC	20.00	104,000
42	Michigan	20.05	1,509,000
43	Louisiana	20.08	681,000
44	Rhode Island	20.13	165,000
45	Arkansas	20.46	449,000
46	Oklahoma	20.48	575,000
47	Tennessee	20.52	1,001,000
48	Maine	21.36	225,000
49	West Virginia	21.73	314,000
50	Utah	22.30	437,000
51	Oregon	22.31	673,000
	National	18.53	43,778,000

State	%	#
Utah	7.43	146,000
Georgia	7.53	547,000
Tennessee	7.63	373,000
New Jersey	7.84	530,000
Alabama	7.90	287,000
Arkansas	7.93	174,000
Mississippi	8.01	174,000
Illinois	8.03	775,000
Florida	8.07	1,219,000
Kentucky	8.20	269,000
Iowa	8.22	191,000
Texas	8.23	1,542,000
South Carolina	8.24	294,000
Maryland	8.31	371,000
Louisiana	8.39	285,000
West Virginia	8.44	122,000
New York	8.47	1,280,000
Pennsylvania	8.52	839,000
Idaho	8.59	99,000
Connecticut	8.65	238,000
Missouri	8.66	392,000
North Carolina	8.69	634,000
Ohio	8.69	759,000
Minnesota	8.78	357,000
Kansas	8.79	185,000
Oklahoma	8.81	247,000
Virginia	8.81	541,000
Hawaii	8.86	92,000
Maine	8.89	93,000
California	9.08	2,583,000
Michigan	9.09	684,000
Indiana	9.12	444,000
Massachusetts	9.23	479,000
Arizona	9.31	452,000
South Dakota	9.42	58,000
Vermont	9.47	47,000
Oregon	9.54	288,000
Nevada	9.56	198,000
Delaware	9.58	67,000
New Hampshire	9.58	99,000
Alaska	9.65	50,000
Nebraska	9.72	133,000
Wisconsin	9.73	423,000
Washington	9.76	511,000
New Mexico	9.83	151,000
Wyoming	9.96	43,000
Colorado	10.07	393,000
North Dakota	10.22	55,000
Montana	10.48	81,000
Rhode Island	11.18	92,000
DC	14.29	74,000
National	8.66	20,464,000

State	%	#
Alabama	3.51	128,000
Florida	3.51	530,000
Maryland	3.51	157,000
Illinois	3.52	340,000
Texas	3.61	676,000
Georgia	3.66	265,000
New York	3.67	555,000
Connecticut	3.72	102,000
South Dakota	3.74	23,000
New Jersey	3.76	254,000
New Mexico	3.76	58,000
California	3.79	1,080,000
Colorado	3.80	148,000
Virginia	3.80	233,000
New Hampshire	3.81	39,000
Kansas	3.84	81,000
Nevada	3.84	80,000
Mississippi	3.87	84,000
Pennsylvania	3.91	385,000
Ohio	3.93	344,000
Minnesota	3.94	160,000
Wisconsin	3.95	172,000
North Dakota	3.96	21,000
Delaware	3.99	28,000
Tennessee	3.99	195,000
Oklahoma	4.01	113,000
Arizona	4.04	196,000
Kentucky	4.04	133,000
Missouri	4.05	183,000
Hawaii	4.06	42,000
South Carolina	4.07	145,000
Massachusetts	4.08	212,000
Nebraska	4.10	56,000
DC	4.13	21,000
Indiana	4.13	201,000
Wyoming	4.14	18,000
Montana	4.17	32,000
Idaho	4.19	49,000
Iowa	4.19	97,000
Alaska	4.21	22,000
North Carolina	4.33	316,000
Rhode Island	4.33	36,000
Louisiana	4.35	147,000
Washington	4.38	230,000
Oregon	4.39	133,000
Maine	4.44	47,000
Michigan	4.53	341,000
Arkansas	4.59	101,000
Vermont	4.59	23,000
West Virginia	4.71	68,000
Utah	4.84	95,000
National	3.89	9,196,000

Youth Prevalence of Mental Illness

Youth with At Least One Past Year Major Depressive Episode (MDE)



The state prevalence of youth with MDE ranges from:

Low (North Dakota) 7.95 % High (Oregon) 12.65 %

9.86 % of youth (age 12-17) report suffering from at least one major depressive episode (MDE) in the past year. Major Depression is marked by significant and pervasive feelings of sadness that are associated with suicidal thoughts and impair a young person's ability to concentrate or engage in normal activities.

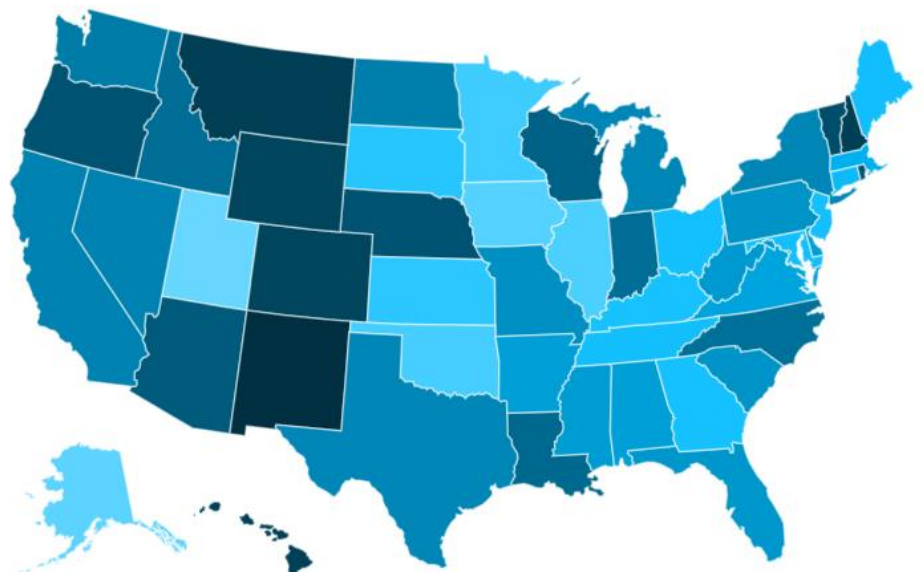
In 2012-2013, America experienced a 1.2% increase in the percentage of youth who experienced a MDE. According to SAMHSA, 18 states experienced a significant change in percentage rate from 2011-2012. Among those 18 states, every one experienced a significant increase in percentage rate.

Rhode Island, Oregon, and Wisconsin experienced the highest increase in percentage rate over time (roughly +2.5 %).

Youth with Dependence or Abuse of Illicit Drugs or Alcohol

5.66 % of youth in America report having a substance use or alcohol problem – a nearly 1% decrease compared to last year (6.48 %).

According to SAMHSA, 15 states experienced a significant change in percentage rate of youth substance and alcohol use from 2011-2012. Among those 15 states, every one experienced a significant decrease in percentage rate. Those states include (in order of those with the largest % change first): New Mexico, Alaska, South Dakota, Minnesota, New Jersey, California, Oklahoma, Massachusetts, Michigan, Arizona, Illinois, Pennsylvania, and Texas.

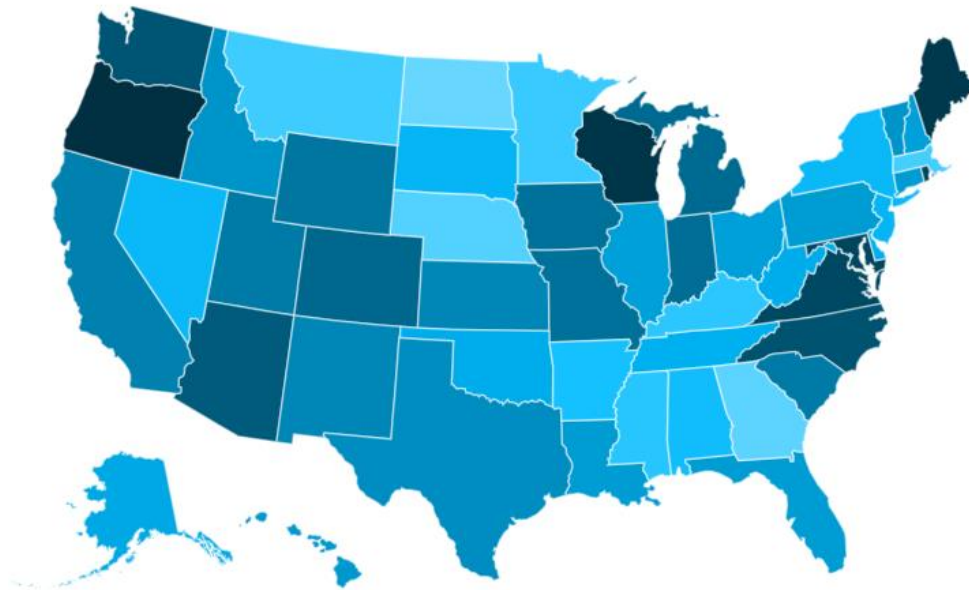


The state prevalence of youth alcohol and substance use ranges from:

Low (Utah) 4.56 % High (New Mexico) 7.20 %

Youth Prevalence of Mental Illness

Youth with Severe Major Depressive Episode




7% of youth (or 1.7 million youth) experienced severe depression. These youth experienced very serious interference in school, home and in relationships.

Wisconsin had the largest percentage change in Youth with Severe MDE with an increase of 6.4% between 2010-2011 (4.1%) and 2012-2013 (10.4%).

There is a significant difference in states with the lowest and highest rates of seriously depressed youth.

States with highest rates (bottom 10 states) have almost **TWICE as many** severely depressed youth than states with the lowest rates (top 10 states).

The state prevalence of youth with Severe MDE ranges from:

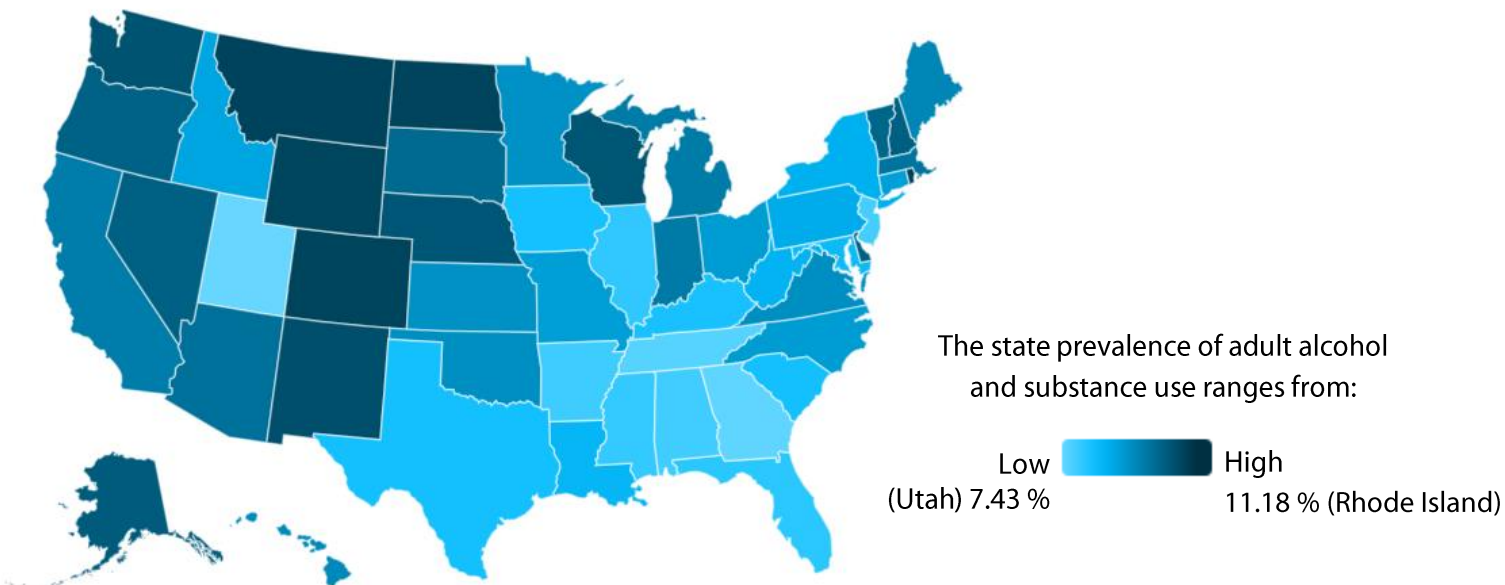
Low  High
(North Dakota) 3.8% 10.8% (Oregon)

According to SAMHSA, youth who experience a major depressive episode in the last year with severe role impairment (Youth with Severe MDE) reported the maximum level of interference over four role domains including: chores at home, school or work, family relationships, and social life.

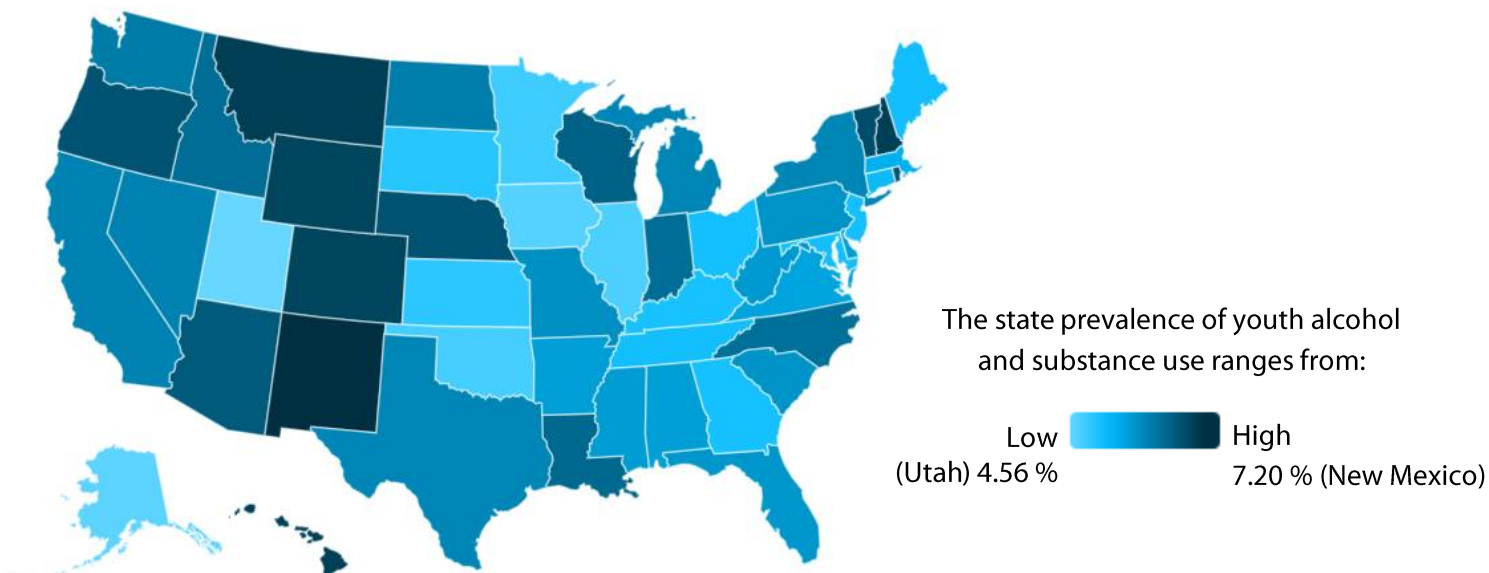
Adult and Youth Substance and Alcohol Problems

There is a moderate correlation between percentages of adult substance/alcohol use and youth substance/alcohol use ($r = .52, p = 0.00$). Utah has the lowest rates of both adult and youth substance/alcohol use. Georgia, Illinois, and Kentucky also have low rates (top 10) of both adult and youth substance/alcohol use. Nebraska, New Mexico, Wyoming, Colorado, Montana, and Rhode Island have high rates of both adult and youth substance/alcohol use.

Adult with Dependence or Abuse of Illicit Drug or Alcohol

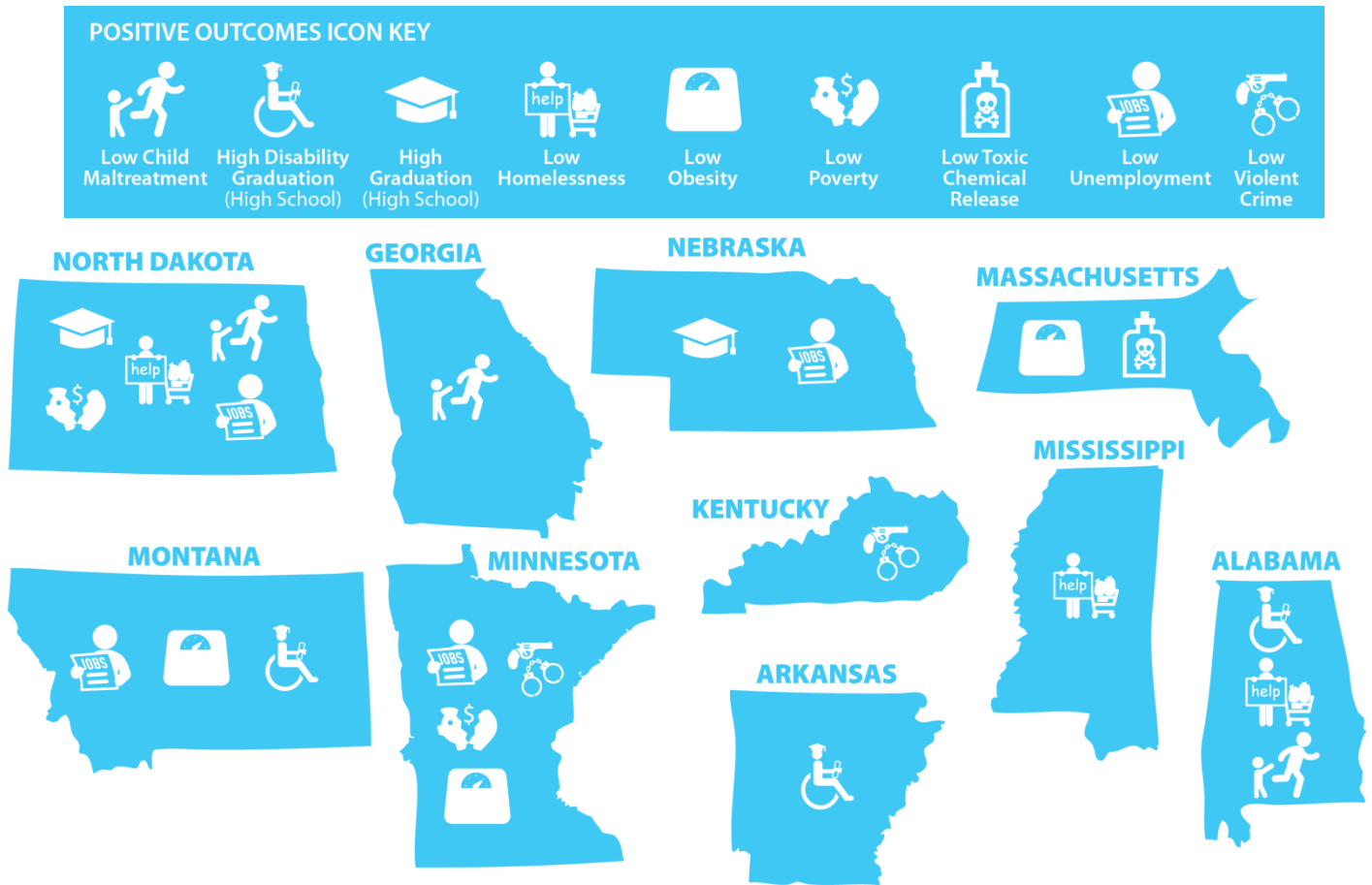


Youth with Dependence or Abuse of Illicit Drugs or Alcohol



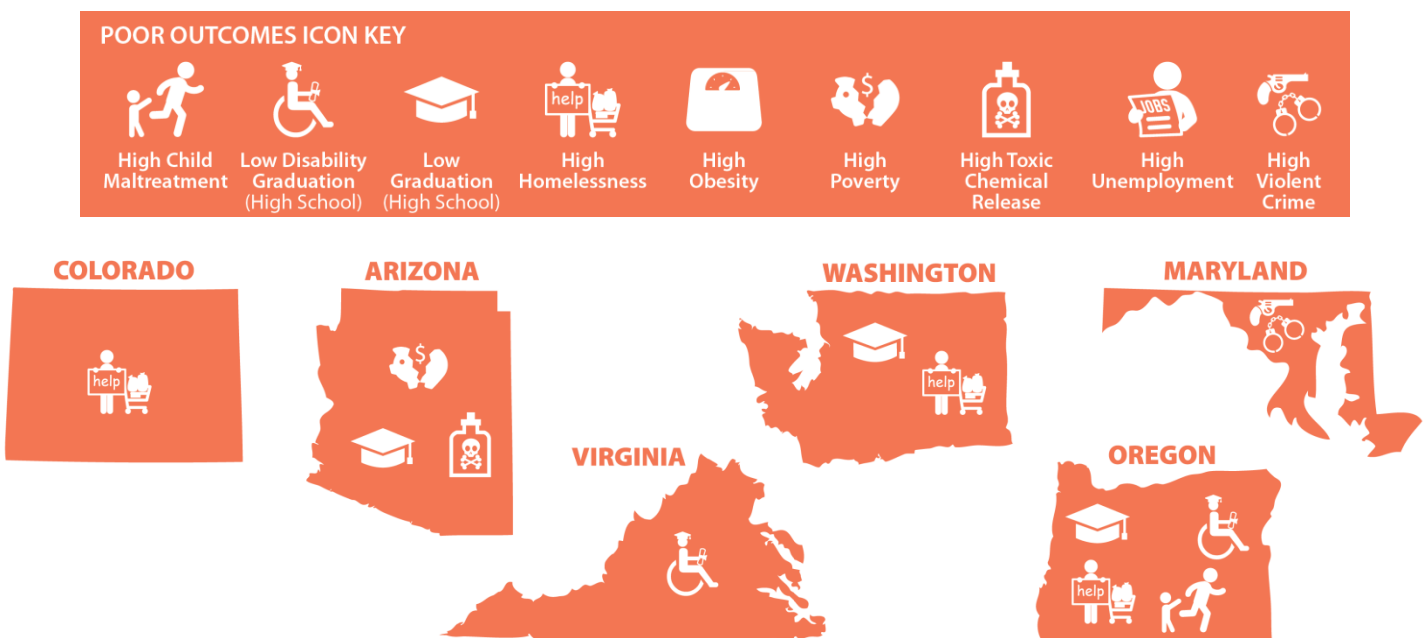
Youth Severe Depression Compared to Other Positive and Poor Outcomes

Top 10 states for Youth with Severe MDE also rank among the top 10 states in the following positive outcomes.



Bottom 10 states for Youth with Severe MDE also rank among the bottom 10 states in the following poor outcomes.

Among the bottom 10 states for Youth with Severe MDE, 6 states had correlations with poor outcomes – shown below.



Youth with At Least One Past Year Major Depressive Episode (MDE)

Rank	State	%	#
1	DC	7.38	2,000
2	North Dakota	7.95	4,000
3	Minnesota	8.20	35,000
4	Georgia	8.49	71,000
5	Massachusetts	8.61	42,000
6	South Dakota	8.61	6,000
7	New York	8.76	128,000
8	Nebraska	8.80	13,000
9	Mississippi	8.98	22,000
10	New Jersey	9.06	64,000
11	Kentucky	9.09	31,000
12	Montana	9.23	7,000
13	Oklahoma	9.23	28,000
14	Illinois	9.31	97,000
15	Louisiana	9.31	34,000
16	West Virginia	9.34	12,000
17	Tennessee	9.39	47,000
18	Alaska	9.40	6,000
19	Connecticut	9.40	27,000
20	Delaware	9.44	6,000
21	South Carolina	9.44	34,000
22	Vermont	9.50	4,000
23	Pennsylvania	9.54	91,000
24	Alabama	9.56	37,000
25	Nevada	9.62	21,000
26	Florida	9.64	134,000
27	North Carolina	9.64	74,000
28	Colorado	9.66	39,000
29	Hawaii	9.75	9,000
30	Ohio	9.81	91,000
31	Indiana	9.82	53,000
32	Kansas	9.87	23,000
33	Missouri	9.91	47,000
34	Iowa	10.03	24,000
35	Arkansas	10.17	24,000
36	Michigan	10.19	82,000
37	New Hampshire	10.27	10,000
38	Maryland	10.28	47,000
39	Wyoming	10.41	5,000
40	Texas	10.47	240,000
41	California	10.48	327,000
42	Idaho	10.55	15,000
43	New Mexico	10.73	18,000
44	Arizona	10.91	59,000
45	Virginia	10.96	68,000
46	Washington	11.08	59,000
47	Maine	11.20	11,000
48	Rhode Island	11.32	9,000
49	Wisconsin	11.40	51,000
50	Utah	11.45	32,000
51	Oregon	12.65	37,000
	National	9.86	2,457,000

Youth with Dependence or Abuse of Illicit Drugs or Alcohol

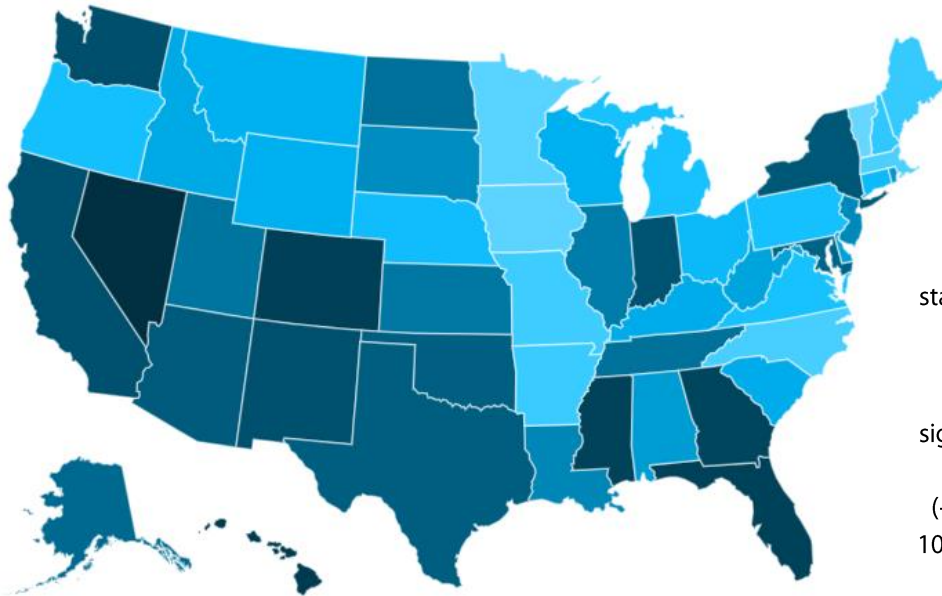
State	%	#
Utah	4.56	13,000
Alaska	4.65	3,000
Iowa	4.73	11,000
Illinois	4.79	50,000
Oklahoma	4.87	15,000
Minnesota	4.93	21,000
Kansas	5.02	12,000
South Dakota	5.04	3,000
Kentucky	5.12	17,000
Georgia	5.13	43,000
New Jersey	5.16	36,000
Ohio	5.16	48,000
Maryland	5.18	24,000
Tennessee	5.18	26,000
Maine	5.20	5,000
Connecticut	5.29	15,000
Massachusetts	5.55	27,000
Virginia	5.64	35,000
Alabama	5.67	22,000
Arkansas	5.67	13,000
Delaware	5.68	4,000
Mississippi	5.69	14,000
West Virginia	5.70	7,000
Florida	5.72	79,000
Pennsylvania	5.74	55,000
South Carolina	5.74	21,000
Missouri	5.76	27,000
Michigan	5.82	47,000
New York	5.82	85,000
Texas	5.82	134,000
California	5.83	182,000
Nevada	5.83	13,000
North Dakota	5.84	3,000
Washington	5.85	31,000
North Carolina	5.88	45,000
Idaho	5.94	8,000
Indiana	5.94	32,000
Louisiana	6.07	22,000
Wisconsin	6.22	28,000
DC	6.27	2,000
Arizona	6.38	34,000
Rhode Island	6.48	5,000
Nebraska	6.49	10,000
Oregon	6.49	19,000
Vermont	6.56	3,000
Colorado	6.68	27,000
Wyoming	6.69	3,000
Hawaii	6.81	7,000
New Hampshire	6.82	7,000
Montana	6.84	5,000
New Mexico	7.20	12,000
National	5.66	1,410,000

Youth with Severe Major Depressive Episode

State	%	#
North Dakota	3.80	2,000
Georgia	4.10	33,000
Nebraska	4.40	6,000
Massachusetts	4.80	23,000
Montana	5.00	4,000
Minnesota	5.10	21,000
Kentucky	5.30	18,000
Mississippi	5.40	13,000
Arkansas	5.70	13,000
DC	5.70	2,000
Alabama	5.80	22,000
Nevada	5.90	13,000
New York	5.90	84,000
New Jersey	6.00	42,000
South Dakota	6.00	4,000
Delaware	6.10	4,000
Tennessee	6.10	30,000
Oklahoma	6.20	19,000
West Virginia	6.20	8,000
Alaska	6.30	4,000
Illinois	6.50	67,000
New Hampshire	6.50	6,000
Ohio	6.50	59,000
Connecticut	6.60	19,000
Florida	6.60	90,000
Louisiana	6.60	24,000
Pennsylvania	6.60	61,000
Hawaii	6.70	6,000
Idaho	6.80	9,000
Vermont	6.80	3,000
Texas	7.00	158,000
Kansas	7.20	17,000
New Mexico	7.20	12,000
California	7.30	224,000
South Carolina	7.40	25,000
Utah	7.40	20,000
Wyoming	7.50	3,000
Iowa	7.60	18,000
Missouri	7.60	36,000
Indiana	7.70	40,000
Michigan	7.80	61,000
Colorado	7.90	31,000
Arizona	8.30	44,000
Washington	8.70	45,000
North Carolina	8.80	64,000
Virginia	9.40	56,000
Maryland	9.60	43,000
Rhode Island	9.70	7,000
Maine	10.30	10,000
Wisconsin	10.50	46,000
Oregon	10.80	31,000
National	7.00	1,701,000

Adult Access to Care

Adults with AMI who Did Not Receive Treatment



The state prevalence of untreated adults with mental illness ranges from:

Low (Vermont) 41.7% High 70.7% (Nevada)

57.2% of adults with a mental illness received no treatment in 2012-2013. Although this is a slight decrease in percentage from 2010-2011 (58.34%) the percentage of those who are likely to need some support before problems worsen is high.

States with most utilization of treatment have 30% more adults receiving treatment compared to the states with least utilization. In Nevada, 70.7% of adults with mental illness did not receive any treatment.

From 2010-2011 to 2012-2013, six states had significant changes (more than 10 percentage points). Iowa (-15.50%), Minnesota (-12.80%), Louisiana (-10.90%), and Missouri (-10.60%) experienced over a 10% reduction in the number of untreated adults with mental illness.

Colorado (+10.40%) and Washington (+10.60%) experienced over a 10% increase in the number of untreated adults with mental illness.

1:5

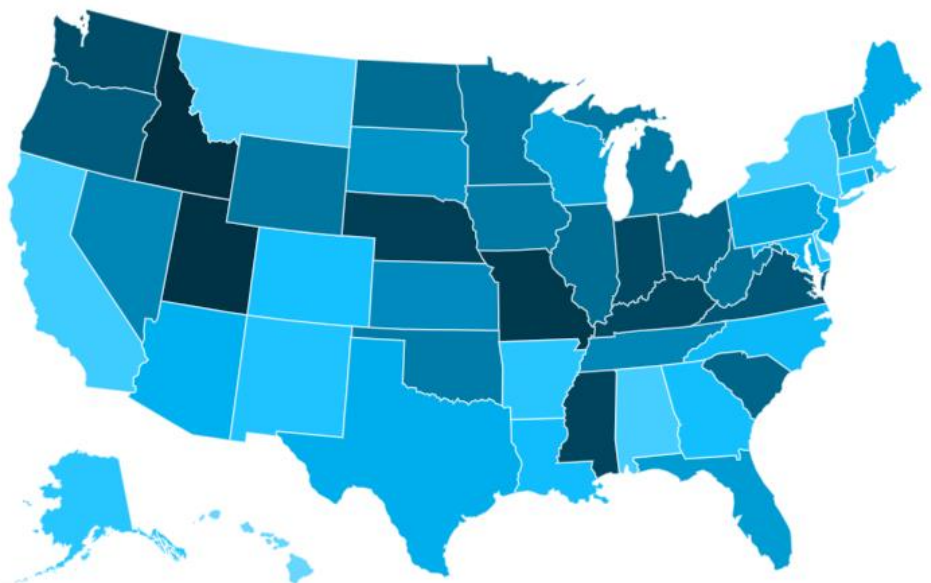
One out of five (20.1%) adults with a mental illness report they are not able to get the treatment they need.

States with the highest levels of unmet need (bottom 10) are 1.6 times more likely to have people report unmet need.

Unlike the number of people with mental illness who did not receive treatment, the individuals who are reporting unmet need are seeking treatment and facing barriers to getting the help they need.

Having insurance does not mean access to care. In areas like Massachusetts, DC, or Vermont, many people with mental illness report having an unmet need even though most are insured. This difference speaks to the importance of reviewing adequacy of insurance. For example, does the insurance cover sufficient types of treatment, include enough access to providers, or cover the cost of treatment?

Adults with AMI Reporting Unmet Need



The state prevalence of adults with AMI reporting unmet treatment needs ranges from:

Low (Hawaii) 11.8% High 27.3% (Idaho)

**Adults with AMI who
Did Not Receive Treatment**

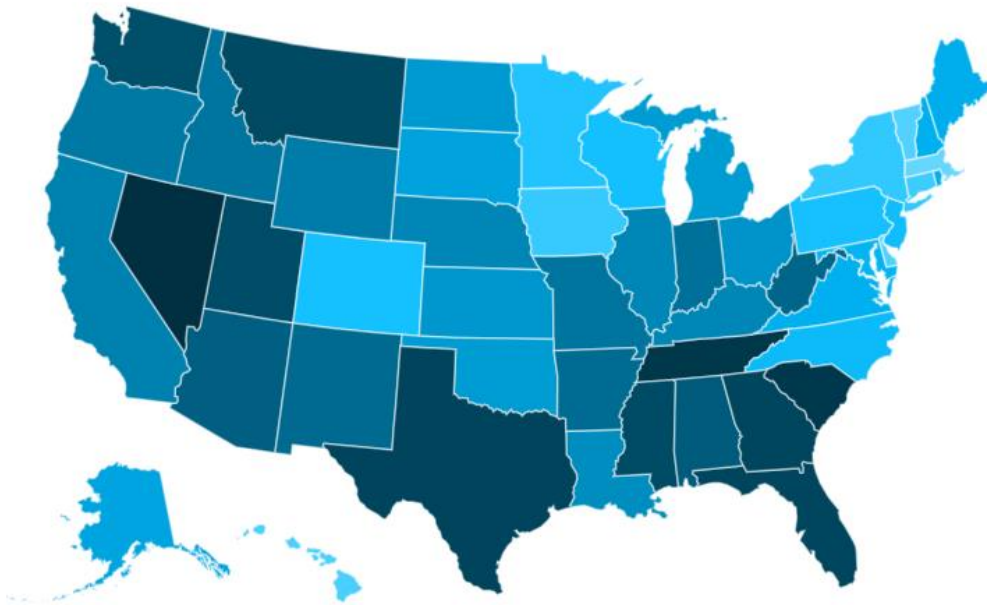
Rank	State	%	#
1	Vermont	41.70	42,000
2	Iowa	43.30	173,000
3	Minnesota	43.80	316,000
4	Massachusetts	45.60	458,000
5	North Carolina	46.50	608,000
6	Missouri	47.90	408,000
7	Arkansas	48.40	221,000
8	Maine	48.90	119,000
9	New Hampshire	49.40	97,000
10	Michigan	52.10	791,000
11	Virginia	52.10	566,000
12	Pennsylvania	52.30	897,000
13	Oregon	52.40	394,000
14	Nebraska	52.60	129,000
15	Connecticut	52.80	253,000
16	Ohio	52.90	917,000
17	Montana	53.60	81,000
18	Wisconsin	53.60	417,000
19	Wyoming	53.60	45,000
20	Kentucky	54.00	344,000
21	South Carolina	54.00	332,000
22	Idaho	54.20	126,000
23	West Virginia	54.60	180,000
24	Delaware	54.90	73,000
25	Alabama	55.30	395,000
26	Rhode Island	55.40	98,000
27	DC	55.70	64,000
28	South Dakota	55.70	54,000
29	New Jersey	55.80	518,000
30	Louisiana	55.90	385,000
31	Illinois	56.60	883,000
32	Kansas	57.00	203,000
33	Utah	57.20	272,000
34	Tennessee	57.40	588,000
35	North Dakota	57.50	45,000
36	Alaska	58.80	60,000
37	Maryland	59.70	419,000
38	Oklahoma	60.60	366,000
39	Texas	60.70	2,047,000
40	Arizona	61.20	546,000
41	New York	61.40	1,735,000
42	Indiana	61.70	593,000
43	California	61.90	3,270,000
44	New Mexico	61.90	186,000
45	Washington	62.00	674,000
46	Georgia	62.70	891,000
47	Mississippi	63.80	257,000
48	Florida	64.10	1,631,000
49	Colorado	64.40	407,000
50	Hawaii	66.60	136,000
51	Nevada	70.70	276,000
	National	57.20	24,985,000

**Adults with AMI
Reporting Unmet Need**

Rank	State	%	#
1	Hawaii	11.80	24,000
2	Montana	15.90	24,000
3	Alabama	16.30	117,000
4	Delaware	16.50	22,000
5	New York	17.00	480,000
6	California	17.10	907,000
7	Massachusetts	17.60	177,000
8	Alaska	17.90	18,000
9	Arkansas	17.90	82,000
10	New Mexico	18.20	54,000
11	Connecticut	18.40	87,000
12	Colorado	18.50	116,000
13	Georgia	18.60	264,000
14	Louisiana	18.70	129,000
15	North Carolina	18.90	249,000
16	Arizona	19.40	174,000
17	Maryland	19.40	137,000
18	New Jersey	19.40	180,000
19	Texas	19.50	658,000
20	Maine	19.60	48,000
21	Pennsylvania	19.80	339,000
22	Wisconsin	19.80	153,000
23	New Hampshire	19.90	39,000
24	Florida	20.00	508,000
25	Vermont	20.10	20,000
26	South Dakota	20.20	19,000
27	Rhode Island	20.30	36,000
28	Kansas	20.40	73,000
29	Nevada	20.50	80,000
30	Tennessee	20.50	212,000
31	Oklahoma	21.10	127,000
32	Iowa	21.30	85,000
33	Michigan	21.30	325,000
34	Wyoming	21.50	18,000
35	West Virginia	21.70	72,000
36	Minnesota	21.80	157,000
37	Illinois	22.00	345,000
38	North Dakota	22.00	17,000
39	South Carolina	22.30	137,000
40	Ohio	22.50	389,000
41	Oregon	22.80	169,000
42	Virginia	23.20	252,000
43	Washington	24.10	261,000
44	Indiana	24.40	227,000
45	Kentucky	24.70	158,000
46	DC	24.80	28,000
47	Mississippi	25.00	101,000
48	Nebraska	25.60	63,000
49	Missouri	26.20	224,000
50	Utah	27.00	129,000
51	Idaho	27.30	63,000
	National	20.10	8,771,000

Adult Access to Care

Adults with AMI who are Uninsured



The state prevalence of uninsured adults with mental illness ranges from:



18.5% (over 8 million) of adults with a mental illness were uninsured in 2012-2013, a slight decrease in percentage as compared to 2010-2011 (19.10%).

Most states (30 out of 50) experienced a decrease in the number of uninsured adults with mental illness between 2010-2011 and 2012-2013.

Individuals in states at the bottom 10 are **3 times** more likely to be uninsured compared to those at the top 10.

Those in Nevada (ranked 51) are **10 times** more likely to be uninsured compared to individuals in Massachusetts (ranked 1)

Two states experienced a larger than 10% change in percentage points over time. In both states, more individuals became uninsured over time:

Tennessee (+11% more uninsured)
South Carolina (+12.1% more uninsured).

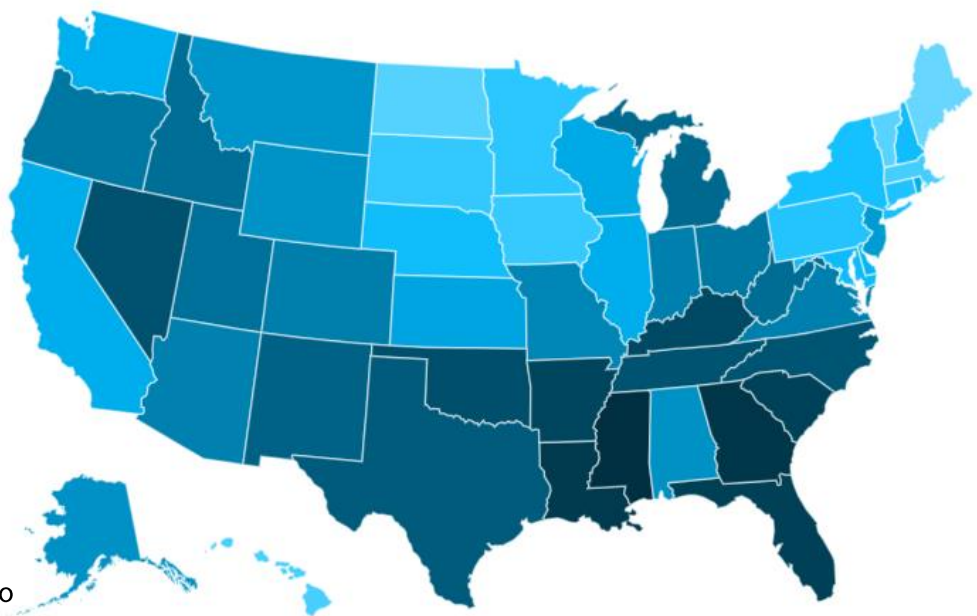
Adults with Disability Who Could Not See a Doctor Due to Costs

1:4

25.5%, (1.2 million) of adults with a disability were not able to see a doctor due to costs. The inability to pay for treatment, due to high treatment costs and/or inadequate insurance coverage remains a barrier for individuals despite being insured.

Overall, individuals in the South face the most difficulty in barriers related to costs, access to insurance, and access to treatment.

The prevalence of adults with disability who couldn't see a MD due to cost ranges from:



**Adults with AMI
Who are Uninsured**

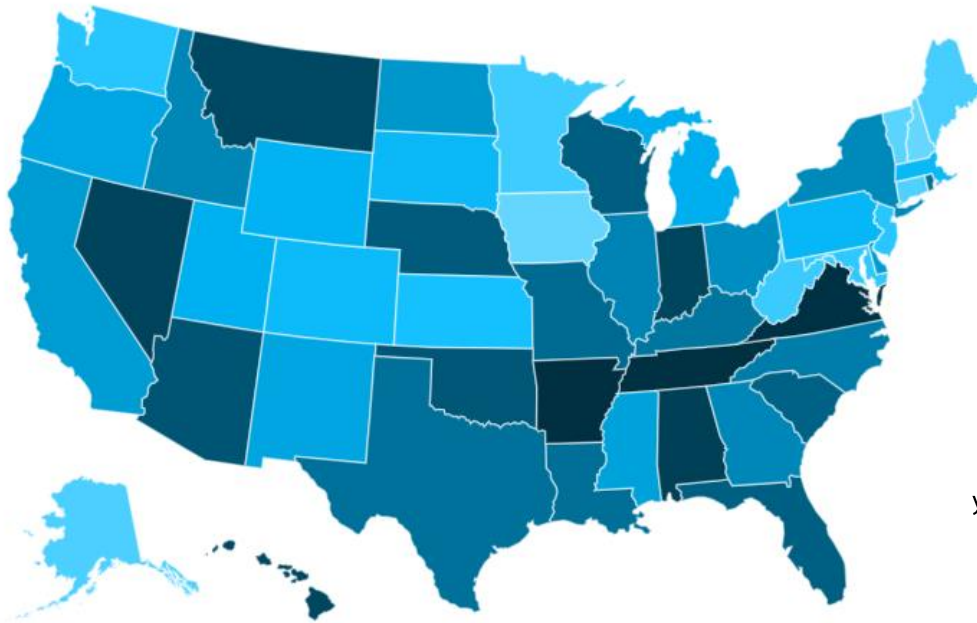
Rank	State	%	#
1	Massachusetts	3.30	33,000
2	DC	3.80	4,000
3	Vermont	6.20	6,000
4	Delaware	6.70	9,000
5	Hawaii	7.30	15,000
6	Connecticut	9.10	44,000
7	Iowa	9.90	39,000
8	New York	10.30	293,000
9	Minnesota	11.80	85,000
10	Pennsylvania	12.80	220,000
11	Colorado	12.90	82,000
12	Wisconsin	13.00	101,000
13	New Jersey	13.50	126,000
14	North Carolina	13.90	183,000
15	Maryland	14.90	105,000
16	New Hampshire	15.30	30,000
17	Rhode Island	15.30	27,000
18	Virginia	15.40	168,000
19	Maine	15.50	38,000
20	Alaska	16.20	16,000
21	South Dakota	16.30	16,000
22	Michigan	16.80	256,000
23	Oklahoma	16.80	102,000
24	North Dakota	16.90	13,000
25	Kansas	17.10	61,000
26	Ohio	17.30	301,000
27	Louisiana	17.70	123,000
28	Illinois	18.20	285,000
29	Kentucky	18.20	116,000
30	Nebraska	18.20	45,000
31	California	18.70	988,000
32	Wyoming	19.30	16,000
33	Oregon	19.70	148,000
34	Idaho	20.10	47,000
35	Missouri	20.10	172,000
36	Indiana	20.60	198,000
37	Arkansas	21.10	96,000
38	New Mexico	21.20	64,000
39	West Virginia	21.60	71,000
40	Arizona	22.20	200,000
41	Alabama	22.60	161,000
42	Washington	23.90	260,000
43	Utah	24.10	115,000
44	Mississippi	24.30	98,000
45	Montana	24.40	37,000
46	Florida	24.80	632,000
47	Georgia	24.90	354,000
48	Texas	25.30	856,000
49	South Carolina	30.20	186,000
50	Tennessee	30.30	315,000
51	Nevada	33.40	131,000
	National	18.50	8,087,000

**Adults with Disability
Who Could Not See a Doctor Due to Cost**

Rank	State	%	#
1	Maine	14.14	33,593
2	Vermont	14.92	15,210
3	North Dakota	15.04	13,841
4	Hawaii	15.83	26,280
5	Massachusetts	15.91	150,216
6	DC	16.31	15,098
7	Iowa	17.38	77,440
8	South Dakota	17.80	21,274
9	Minnesota	18.61	117,057
10	Pennsylvania	19.52	389,438
11	Connecticut	20.17	97,324
12	New York	21.20	618,564
13	Nebraska	21.49	55,411
14	New Hampshire	21.52	43,856
15	Maryland	21.61	162,791
16	Delaware	22.11	29,272
17	Washington	22.57	290,779
18	California	22.79	1,093,765
19	Rhode Island	22.85	38,387
20	Illinois	22.87	378,272
21	Wisconsin	23.17	186,586
22	Kansas	23.58	97,127
23	New Jersey	24.26	260,187
24	Montana	24.72	43,804
25	Wyoming	24.86	21,352
26	Alaska	24.95	27,280
27	Alabama	25.00	251,241
28	Missouri	25.68	284,920
29	Arizona	25.84	247,786
30	Indiana	25.86	258,297
31	Virginia	25.88	283,400
32	Colorado	25.92	187,295
33	Ohio	26.11	464,190
34	Oregon	26.11	164,361
35	Utah	26.33	90,100
36	Idaho	26.49	63,436
37	West Virginia	26.59	107,728
38	Michigan	26.92	466,150
39	New Mexico	27.39	93,389
40	Texas	27.87	836,586
41	North Carolina	28.82	458,265
42	Tennessee	29.11	355,622
43	Nevada	29.27	115,599
44	Oklahoma	29.59	212,660
45	Kentucky	30.41	256,624
46	Arkansas	31.00	180,129
47	South Carolina	31.65	268,204
48	Florida	31.84	1,017,799
49	Louisiana	32.86	260,354
50	Georgia	33.49	455,834
51	Mississippi	34.67	190,193
	National	25.50	12,020,000

Youth Access to Care

Youth with MDE who Did Not Receive Mental Health Services



The state prevalence of untreated youth with depression ranges from:

Low (New Hampshire) 42.1 % High 77.0 % (Arkansas)

64.1% of youth with major depression do not receive any mental health treatment.

That means that **6 out of 10** young people who have depression and who are most at risk of suicidal thoughts, difficulty in school, and difficulty in relationships with others do not get the treatment needed to support them.

3:4

In the lowest ranking states like Virginia, Tennessee, and Arkansas, more than 75% of youth with depression are not getting any treatment at all.

Even in the highest ranking states, 4 out of 10 youth report that they are not getting treatment.

Hope

There was a 1.9% decline in the number of untreated youth with depression, down from 66.0% in 2010-2011. Hopefully this change represents an increasing commitment to early intervention and prevention of the negative impact of untreated mental illness among our most vulnerable population.

Youth with Severe MDE who Received Some Consistent Treatment

Nationally, only 21.7% of youth with severe depression receive some consistent treatment (7-25+ visits in a year).

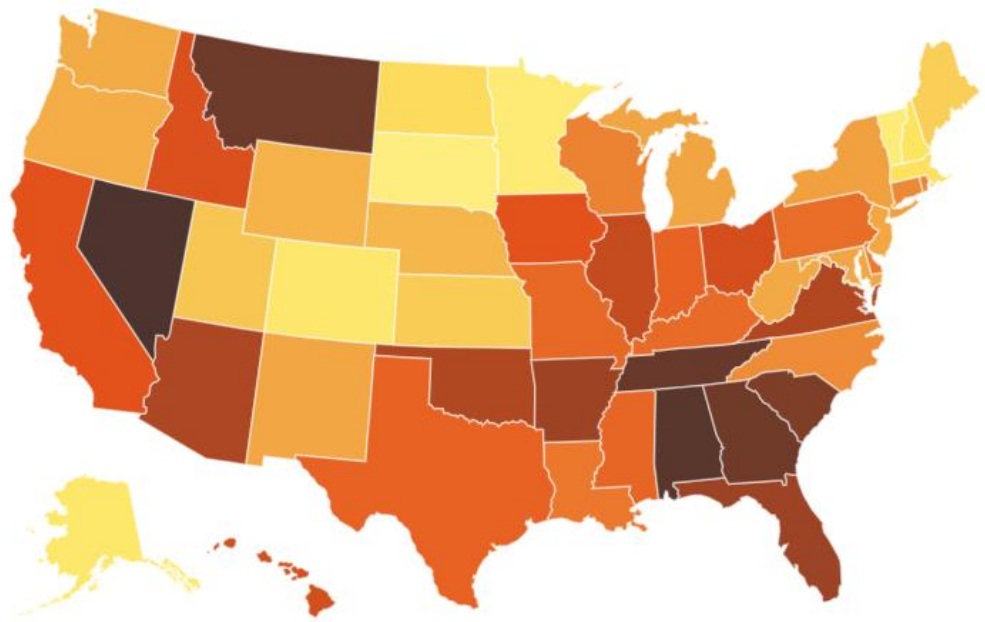
15.7% received only 1-6 visits of treatment in the year.

Even among youth with severe major depression, 62.6% did not receive any mental health treatment.

In Nevada (ranked 51), youth with severe depression are **4 times** less likely to get some outpatient treatment compared to youth in South Dakota (ranked 1).

The state prevalence of youth with severe depression who received some outpatient treatment ranges from:

Low (Nevada) 9.4 % High 39.5 % (South Dakota)



Yellow/Brown maps are used where high percentages are associated with positive outcomes and low percentages are associated with poorer outcomes.

Youth with MDE who Did Not Receive Mental Health Services

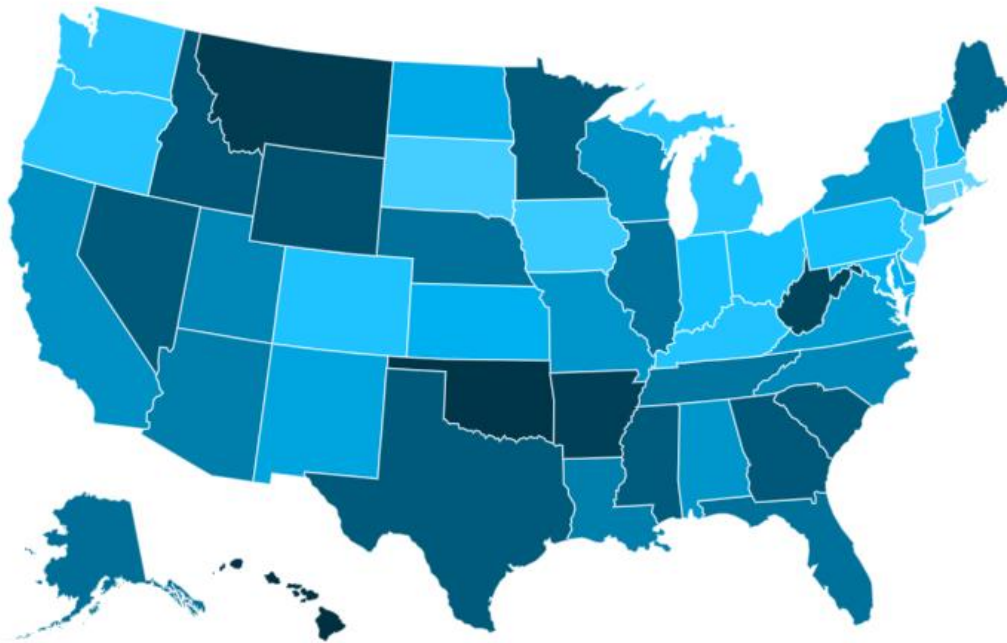
Rank	State	%	#
1	New Hampshire	42.10	4,000
2	Iowa	42.50	9,000
3	Vermont	44.90	2,000
4	Connecticut	47.20	12,000
5	Alaska	48.10	2,000
6	Maine	49.40	6,000
7	Minnesota	51.20	15,000
8	West Virginia	51.60	6,000
9	Maryland	53.30	29,000
10	New Jersey	54.00	30,000
11	Washington	54.20	33,000
12	Kansas	56.60	15,000
13	Colorado	58.40	23,000
14	Massachusetts	58.80	21,000
15	South Dakota	58.90	3,000
16	Pennsylvania	59.40	51,000
17	Wyoming	60.60	3,000
18	Utah	61.10	19,000
19	Michigan	61.30	50,000
20	Oregon	62.00	26,000
21	New Mexico	62.20	11,000
22	Mississippi	62.50	13,000
23	California	63.00	199,000
24	Delaware	63.10	4,000
25	North Dakota	63.40	2,000
26	Ohio	64.00	56,000
27	New York	64.30	76,000
28	Georgia	64.50	37,000
29	Idaho	64.60	10,000
30	Illinois	64.80	61,000
31	North Carolina	65.70	50,000
32	Kentucky	66.70	19,000
33	Rhode Island	67.10	6,000
34	Texas	67.30	159,000
35	Louisiana	67.40	23,000
36	Missouri	67.80	30,000
37	South Carolina	68.60	22,000
38	Florida	68.80	89,000
39	Wisconsin	68.90	40,000
40	Nebraska	69.20	7,000
41	Oklahoma	69.60	17,000
42	Arizona	69.70	43,000
43	Montana	70.80	4,000
44	Hawaii	70.90	7,000
45	Indiana	71.10	37,000
46	Nevada	71.60	13,000
47	Alabama	72.50	29,000
48	DC	73.10	1,000
49	Virginia	76.40	56,000
50	Tennessee	76.50	34,000
51	Arkansas	77.00	16,000
	National	64.10	1,531,000

Youth with Severe MDE who Received Some Consistent Treatment

Rank	State	%	#
1	South Dakota	39.5	2,000
2	Vermont	38	1,000
3	Minnesota	37.4	8,000
4	Colorado	35.4	9,000
5	Alaska	35.1	1,000
6	New Hampshire	32.7	2,000
7	Massachusetts	32.4	8,000
8	North Dakota	31.6	1,000
9	Maine	30	2,000
10	Kansas	29.6	5,000
11	Utah	29	4,000
12	Nebraska	27.6	2,000
13	Wyoming	27.3	1,000
14	Oregon	26.8	6,000
15	Washington	26.7	10,000
16	West Virginia	26.5	2,000
17	New Jersey	26.4	9,000
18	Maryland	26.3	8,000
19	New Mexico	26.3	3,000
20	Michigan	26.2	15,000
21	New York	25.9	20,000
22	North Carolina	24.2	12,000
23	Connecticut	24	4,000
24	Rhode Island	23.7	1,000
25	Wisconsin	23.4	7,000
26	Delaware	22.7	1,000
27	Louisiana	22.5	5,000
28	Pennsylvania	21.7	12,000
29	Kentucky	21.5	4,000
30	Missouri	21.3	7,000
31	Mississippi	21.2	3,000
32	Indiana	21	6,000
33	Texas	21	29,000
34	California	20.1	37,000
35	Iowa	20.1	3,000
36	Idaho	19.5	2,000
37	Ohio	19.1	10,000
38	Hawaii	19	1,000
39	Illinois	18.1	11,000
40	Virginia	16.9	8,000
41	Oklahoma	16.8	3,000
42	Arizona	16.7	6,000
43	Arkansas	16	2,000
44	DC	15.9	< 1,000
45	Florida	15.9	13,000
46	South Carolina	14.6	3,000
47	Georgia	13.1	6,000
48	Montana	12.8	< 1,000
49	Tennessee	12.3	3,000
50	Alabama	10.8	2,000
51	Nevada	9.4	1,000
	National	21.70	322,000

Youth Access to Care

Children with Private Insurance that Did Not Cover Mental or Emotional Problems



The state prevalence of children lacking mental health coverage ranges from:

Low  High
(Connecticut) 2.0 % 19.7 % (Hawaii)

Rank	State	%	#
1	Connecticut	2.00	3,000
2	Massachusetts	2.30	7,000
3	Rhode Island	4.00	2,000
4	South Dakota	4.10	1,000
5	New Jersey	4.50	18,000
6	Iowa	4.60	7,000
7	Vermont	4.60	1,000
8	Michigan	5.40	23,000
9	Oregon	5.40	8,000
10	Washington	5.40	15,000
11	Kentucky	5.60	10,000
12	Colorado	5.70	12,000
13	Indiana	6.00	17,000
14	Ohio	6.00	29,000
15	Pennsylvania	6.00	31,000
16	DC	6.20	1,000
17	New Hampshire	6.50	4,000
18	Maryland	6.60	18,000
19	Kansas	6.70	8,000
20	North Dakota	7.00	2,000
21	Delaware	7.10	3,000
22	New Mexico	7.20	4,000
23	Virginia	7.50	23,000
24	New York	7.70	54,000
25	Alabama	7.80	12,000
26	Missouri	7.80	19,000
27	California	8.10	109,000
28	Wisconsin	8.10	20,000
29	North Carolina	8.50	24,000
30	Utah	8.60	14,000
31	Arizona	8.90	22,000
32	Louisiana	8.90	13,000
33	Tennessee	9.20	20,000
34	Illinois	9.30	46,000
35	Florida	9.40	50,000
36	Nebraska	9.40	6,000
37	Alaska	9.60	3,000
38	Maine	10.00	5,000
39	Mississippi	10.80	9,000
40	Minnesota	10.90	28,000
41	Nevada	11.00	10,000
42	South Carolina	11.00	14,000
43	Texas	11.00	96,000
44	Georgia	11.10	29,000
45	Idaho	11.50	7,000
46	Wyoming	12.00	3,000
47	West Virginia	13.30	8,000
48	Arkansas	14.60	14,000
49	Montana	16.00	5,000
50	Oklahoma	17.80	19,000
51	Hawaii	19.40	7,000
	National	7.90	914,000

Children and youth are more likely to have insurance coverage compared to adults.

7.9% of youth had private health insurance that did not cover mental or emotional problems. With the passage of the Affordable Care Act, and Mental Health Parity, fewer youth should lack coverage in the future.

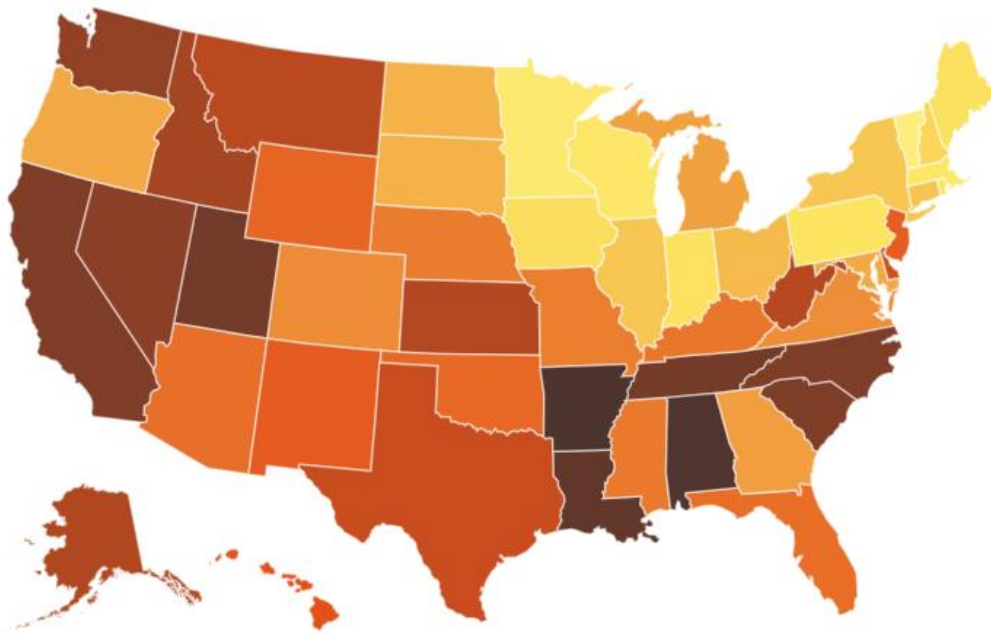
However, like adults, having insurance coverage does not mean that youth are able to access needed treatment. Given the complexities of youth mental health treatment, such as lack of child psychiatrists in the workforce, it is likely that youth will continue to face more barriers to getting needed care compared to adults.

Children in states ranked at the bottom 10 are **3.5 times** more likely to lack mental health coverage compared to those in the top 10 ranked states.

Those in Hawaii (ranked 51) are **10 times** more likely to be uninsured compared to individuals in Connecticut (ranked 1).

Youth Access to Care

Students Identified with Emotional Disturbance for an Individualized Education Program



The state rate of students identified as having an emotional disturbance for and IPE ranges from:

Low (Arkansas) 1.72  High 25.51 (Vermont)

.786% of students are identified as having an Emotional Disturbance (ED) for an Individualized Education Program (IEP).

States in the top 10 (mostly in the Northeast) are **5 times** more likely to identify youth with ED as compared to states in the bottom 10.

The term “Emotional Disturbance” is used to define youth with a mental illness for purposes of an IEP. Often times youth with emotional or mental health problems are identified as having other issues rather than an emotional or mental health problem. In such cases, it is unclear whether their mental health problems are taken into consideration in planning for appropriate educational modifications and accommodations in their IEP.

The rate for this measure is shown as a rate per 1,000 students.

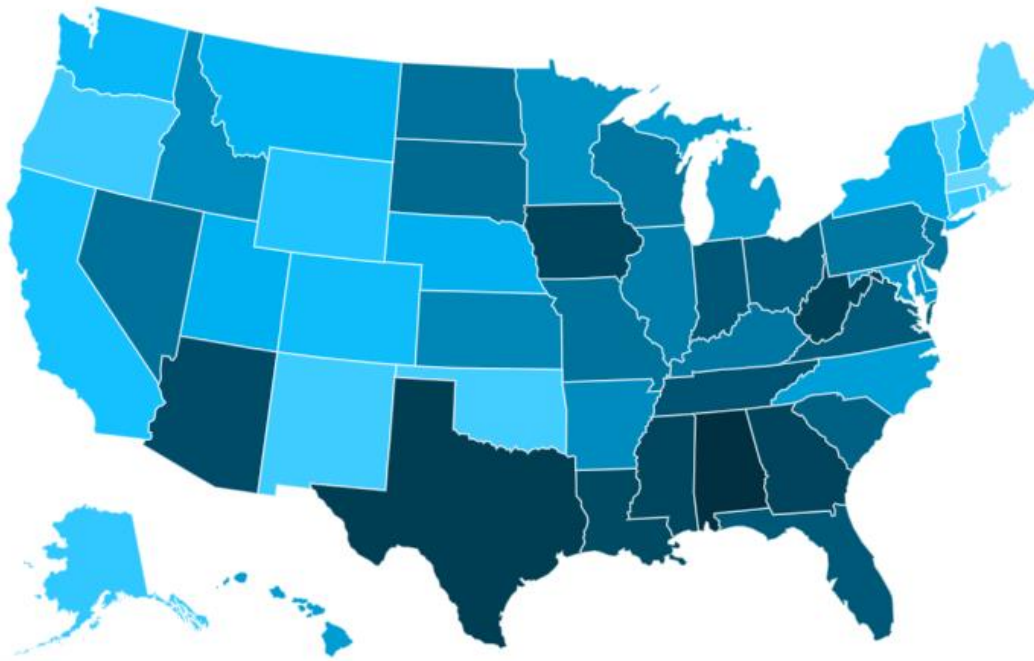
The calculation was made this way for ease of reading. Unfortunately, doing so hides the fact that the percentages are significantly lower.

For example, in Vermont (ranked 1), the rate is 25.51, but the actual percentage is 2.55 %. That is, 2.55 % of students in Vermont are identified as having an emotional disturbance compared to only .17 % of students in Arkansas.

Yellow/Brown maps are used where high percentages are associated with positive outcomes and low percentages are associated with poorer outcomes.

Rank	State	Rate Per 1,000 Students	#
1	Vermont	25.51	1,981
2	Minnesota	19.20	14,691
3	DC	17.17	991
4	Massachusetts	16.85	14,438
5	Wisconsin	16.34	12,336
6	Pennsylvania	13.90	22,572
7	Rhode Island	13.79	1,787
8	Indiana	13.51	12,858
9	Maine	13.41	2,241
10	Iowa	13.15	5,666
11	New Hampshire	12.27	2,132
12	Illinois	10.71	19,758
13	New York	10.67	26,233
14	Connecticut	10.54	5,221
15	Ohio	9.84	15,451
16	North Dakota	9.38	851
17	South Dakota	9.27	1,070
18	Oregon	8.69	4,526
19	Maryland	8.68	6,625
20	Michigan	8.51	11,999
21	Georgia	8.45	12,854
22	Virginia	8.05	9,140
23	Colorado	8.01	6,139
24	Missouri	7.79	6,357
25	Nebraska	7.78	2,083
26	Mississippi	7.74	3,457
27	Kentucky	7.68	4,644
28	Arizona	7.59	7,543
29	Florida	7.57	18,368
30	Oklahoma	7.22	4,158
31	Wyoming	7.13	591
32	New Jersey	6.68	8,295
33	New Mexico	6.55	1,985
34	Hawaii	6.09	1,009
35	Delaware	5.82	684
36	Texas	5.75	25,514
37	Montana	5.57	724
38	West Virginia	5.52	1,356
39	Kansas	5.49	2,373
40	Alaska	5.46	643
41	Idaho	5.20	1,351
42	Washington	4.70	4,505
43	Nevada	4.51	1,833
44	California	4.24	24,326
45	South Carolina	4.21	2,754
46	North Carolina	4.18	5,715
47	Tennessee	3.69	3,264
48	Utah	3.59	1,979
49	Louisiana	2.78	1,734
50	Alabama	1.96	1,322
51	Arkansas	1.72	743
	National	7.86	350,870

Mental Health Workforce Availability



The state rate of mental health workforce ranges from:

Low  High
(Massachusetts) 216:1 1289:1 (Alabama)

Nationally, there is only one mental health provider for every 566 individuals. The term mental health provider includes: psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health care.

In 2014, County Health Rankings added marriage and family therapists and mental health providers that treat alcohol and other drug abuse to the measure.

250:1 vs 1,100:1

In states with the greatest number of available mental health providers (Massachusetts, Maine, and Vermont), there are approximately 250 individuals for every one mental health provider.

In states with the lowest number of available mental health providers (West Virginia, Texas, and Alabama), there are approximately 1,100 individuals for every one provider – more than **4 times** less access compared to the best states. Individuals in Alabama have 6 times less access to treatment providers than individuals in Massachusetts.

Peer support specialists, workforce development programs, and innovative models of integrated care like Collaborative Care are possible solutions to the significant mental health workforce gap in the states.

Rank	State	Rate
1	Massachusetts	216:1
2	DC	238:1
3	Maine	250:1
4	Vermont	273:1
5	Oklahoma	285:1
6	New Mexico	295:1
7	Rhode Island	298:1
8	Oregon	299:1
9	Connecticut	323:1
10	Alaska	325:1
11	Wyoming	353:1
12	California	376:1
13	Colorado	392:1
14	Washington	409:1
15	New Hampshire	412:1
16	Montana	428:1
17	Utah	434:1
18	Nebraska	435:1
19	New York	443:1
20	North Carolina	472:1
21	Delaware	473:1
22	Hawaii	475:1
23	Michigan	487:1
24	Maryland	502:1
25	Minnesota	529:1
26	Idaho	554:1
27	Arkansas	556:1
28	Kansas	581:1
29	Illinois	604:1
30	Kentucky	621:1
31	New Jersey	623:1
32	Pennsylvania	623:1
33	Wisconsin	623:1
34	Missouri	632:1
35	Nevada	637:1
36	North Dakota	638:1
37	South Dakota	664:1
38	South Carolina	702:1
39	Ohio	716:1
40	Virginia	724:1
41	Florida	744:1
42	Indiana	750:1
43	Tennessee	786:1
44	Arizona	839:1
45	Louisiana	859:1
46	Mississippi	887:1
47	Iowa	904:1
48	Georgia	914:1
49	West Virginia	963:1
50	Texas	1,034:1
51	Alabama	1,289:1
	National	566:1

Issue Spotlight – Prevention and Early Intervention in Mental Health

“If only” is a phrase we hear too often in mental health. If only we knew what was going on. If only they knew they weren’t alone. If only we had recognized the signs. If only we had access to treatment. If only. Unfortunately, the conversation tends to be short and after tragedy has already struck – suicides, homelessness, unemployment, and incarceration.

Fortunately, we know how to act early. Studies around the country prove over and over again that we are able to prevent or mitigate the effects of mental illness and allow individuals to live fulfilling, productive lives in the community. From the influence of genetics and prenatal health all the way into early adulthood, we are learning more about the critical points in brain development and life experiences that increase the risk for or provide protection against the development of mental health disorders.

Studies show that half of those who will develop mental health disorders show symptoms by age 14.ⁱⁱⁱ We know that the time between prenatal development and early adulthood is crucial for the brain. Despite this knowledge, we continue to fail our children by ignoring problems until they reach crisis levels. Instead of investing in prevention and early intervention programs and providing access to appropriate services, we have unconscionable rates of suicide, school drop-out, homelessness, and involvement in the juvenile justice system.^{iii,iv,v,vi} While we can work to provide mental health services and supports and to promote recovery for individuals in need, the overwhelming number of those struggling is a reminder of how often we wait too long to take action.

The information below presents a timeline of important factors we know are harmful to mental health throughout the early lifespan, and highlights several programs and policies that address risk factors and increase protective factors in order to promote the prevention and early intervention of mental illness.

Harmful or Helpful

Risks and protective factors are often used as a framework for addressing issues that impact prevention and early intervention of mental illness. Risk factors are harmful and impede recovery, while protective factors are helpful and support recovery. We have chosen to address harmful or helpful factors in four categories. While there is some overlap among the categories and no exact formula for how much a specific factor will affect an individual, these four categories provide a good framework for exploring the different ways we can support people in reaching their recovery goals. The categories are:

1. Health

Does my brain and body have the ability to do the things I need? Traumatic brain injuries, chronic illnesses, and mental health disorders are common examples of health issues that impact our body and brain’s ability to do the things we would like. Health related issues that influence mental health also include toxic exposure, nutrition, and sleep, among others. Harmful or helpful factors that fall into this category are directly related to the physical body and brain’s ability to perform functions needed for people to live fulfilling lives.

2. Safety or Security

Are there environmental or interpersonal factors that affect my ability to attend to or pay attention to the things I need?

Trauma like abuse, neglect, experiencing sexual or physical violence, or exposure to violence interferes with our ability to pay attention to what we need. After traumatic experiences, many survivors respond with hypervigilance – a heightened state of fear and attention to one’s surroundings. In this way, many

children who experience trauma become like child soldiers, paying close attention to any factor that might bring imminent harm. This change in attention makes it difficult for children when they try to focus on or respond to daily demands such as school or other everyday activities. Harmful or helpful factors in this category refer to external influences that impact how a person can lend *appropriate and required attention* to the things they need and want to do.

3. Resources

Do I have the tangibles or services available to meet my needs? This includes access to resources like adequate housing, nutritious food, finances, and education, as well as mental health services, like school based supports and mental health treatment. As Abraham Maslow understood in his Hierarchy of Needs, physiological needs like air, water, food, and shelter are the most basic requirements for an individual to function and thrive. When youth experience the early signs of mental illness (typically around puberty), having access to needed mental health resources like therapy, peer services, supported education, case management, integrated school and community care, and sometimes medication is crucial to prevent mental illness from getting worse. Harmful or helpful factors in this category refer to goods or services that support an individual's physical and mental health and overall well-being.

4. Relationships

Do I have interpersonal supports that help me meet my needs? This includes healthy and appropriate relationships with others, including caregivers, family, friends, or classmates. This also includes the extent to which the individual feels like a valued member of his or her community. While relationships can be a resource and contribute to whether we feel safe or insecure, they are given a separate category because of the special role healthy or unhealthy relationships can have for individuals. The negative effects of isolation are an all too common experience for individuals with mental illness. Programs and policies that address isolation or family and peer support deserve extra attention. Harmful or helpful factors in this category refer to the support a person needs and receives from those around him or her that impact health and well-being.

In addition to the four categories of harmful (risk) or helpful (protective) factors, we divided early lifespan into three distinct periods where specific social, emotional, and biological changes occur: the prenatal period to early childhood, early childhood to puberty, and puberty to early adulthood. These periods are critical times where we can take action to support children and young adults before they reach a crisis or when recovery becomes more difficult. For each stage, we provide research on important risk or protective factors and offer several policy and program options that have been shown to remove harmful factors or increase helpful factors. The hope is that support for these policy changes and implementation of prevention and intervention programs will reduce the number of families who will reflect on "if only" as well as decrease the over reliance on hindsight and reactionary practices that are used now to address mental illness.

Genetics and Brain Development

While many of the helpful and harmful factors discussed below address environmental factors, it is important to acknowledge the influence of genetics and brain development. Like many physical health problems, genes and brain development play a role in mental illness, and an individual has an increased likelihood for developing a specific disorder if others in his or her family have been diagnosed with that disorder.^{vii} However, having a genetic predisposition to mental illness does not necessarily mean an individual will develop a mental illness. It does imply that there is an increased risk, which, when combined with other harmful factors, increases the possibility that

someone will suffer with mental health problems. To further complicate, sometimes random mutation in brain development occurs such that even people born into safe and supportive environments, with access to needed resources, can continue to struggle with mental health problems.

Luckily, we know that genes and physical characteristics of the brain do not operate outside of influence from the environment. While we cannot yet change the genetic code someone is born with, by influencing the environment they live in we can have a positive influence on how a brain works and continues to grow (called neuroplasticity). This is not unlike how physical or occupational therapy supports a person following any physical injury.

There are critical periods during brain development where the brain goes through rapid growth and change. At birth, an infant will have almost all the neurons (nerve cells) it will ever have in its lifetime. However, within the first few years of life, the brain will develop twice the amount of synapses (structures that allows a neuron to transmit chemical and electrical signals to another neuron) as it will in adulthood.^{viii} This process, called blooming, makes infancy a sensitive time for learning and engaging with outside information. Synapses that are engaged and used repeatedly become stronger. Blooming is followed by pruning – the elimination of unnecessary connections between neurons and strengthening of important connections. The pruning process has been especially tied to important brain development and mental health issues in adolescent years.^{ix,xi} The timing of these changes (from infancy through puberty) provide additional evidence for why focusing on mental health problems among youth is critical, and why waiting until someone reaches adulthood is harmful. If we truly want to address mental illness, we must *address all of the factors* we know play a role in its development and we must *address these factors early*.

Prenatal Period- Early Childhood

Addressing mental health begins before birth. Throughout the prenatal period and into the first years of life, a child's brain and body develop rapidly, leaving the child particularly vulnerable to outside influences. The infant brain is developing abilities like language and motor skills with feedback from external sources, and is more vulnerable to substances than the brains of older children and adults. While the changes from conception to early childhood are obvious from the outside, research on brain development continues to show us why this period is so important for later brain architecture and future functioning.

As noted above, infancy and early childhood is an especially important time for brain development. Outside of the environmental factors that affect brain development outlined below, scientists have also long considered the importance of looking at the blooming brain of infants for indication of developmental disabilities like Autism Spectrum Disorder (ASD).^{xii,xiii,xiv} Specifically, these scientists have considered that ASD might be linked to processes that result in an over blooming or abnormally high levels of brain growth in the first years of life.

Health:

- **Prenatal Substance Use:** The use of alcohol, tobacco, and recreational drugs during pregnancy can have a serious, lasting impact on the child. Substances are particularly harmful at this stage, as the barrier of cells adults have to protect the brain from chemicals does not yet exist. Substance use and abuse can also lead to premature birth or very-low to low birth weight. Very-low birth weight (under 3 lbs.) is associated with an up to 4.5 times higher risk for psychiatric problems, while low birth weight (under 5 lbs.) increases risk for psychiatric problems in adulthood by 2.5 times.^{xv} Alcohol has the most damaging effects of all substances during pregnancy, with strong links to delayed development, reduced emotional control, problems with attention, and hyperactivity.^{xvi} Tobacco use has also been linked to disruptions in cognitive, emotional, and behavioral development.^{xvii} Other recreational drugs, like cocaine and methamphetamines, appear to have a

more delayed effect with a slight impact during early life but difficulties in mood, attention, and hyperactivity during adolescence. Given the sensitivity of the prenatal and infant brain, even medications like acetaminophen (Tylenol) have been recently linked to increased rates of autism, attention deficit, problematic psychomotor, cognitive, and emotional development.^{xviii,xix,xx} This new research is especially concerning since acetaminophen is often the recommended pain reliever for pregnant women. Further research is certainly needed to explore these connections.^{xxi} Until more is known, it is important that families are informed of the risks of taking substances during pregnancy and the first years of life.

- **Maternal Health:** Some common health issues during pregnancy have been linked to a child's future mental health. For example, studies suggest that the risk for developing schizophrenia is three times greater in children whose mothers' had the flu during pregnancy.^{xxii} Other studies show children born to mothers with iron deficiencies are four times as likely to develop schizophrenia.^{xxiii} In terms of maternal mental health, high levels of stress, anxiety, and depression during pregnancy have been linked to preterm birth and low birth weight.^{xxiv} In multiple large studies, maternal trauma has been associated with higher rates of psychiatric disorders in the child, and its effect may actually be underestimated due to reliance on hospital records of disorders.^{xxv}
- **Toxic Exposure:** Exposure to mercury, lead, manganese, and organophosphates, among other chemicals, are dangerous from the early stages of pregnancy into early childhood.^{xxvi} Exposure can occur through water, food, or synthetic materials like paint or gasoline. While all toxic exposures have the potential to affect future development, mercury can be particularly dangerous, as it may leave the brain more exposed to additional toxins.^{xxvii} Lead exposure has also been repeatedly linked to disrupted brain formation, leading to learning, behavioral, and attentional difficulties.^{xxviii} In a 2006 report, the national Scientific Council on the Developing Child estimated that the cost of cognitive impairments from lead alone is close to \$43 billion each year.^{xxix}

Safety & Security:

- **Exposure to Intimate Partner Violence:** Intimate partner violence (IPV), also referred to as domestic violence, includes physical, sexual, emotional, verbal, and psychological abuse. While it can be difficult to find reliable data on its prevalence, some research shows women are at an increased risk for intimate partner violence from a year prior to pregnancy until a year following birth.^{xxx} Exposure to intimate partner violence during pregnancy is associated with more than twice the risk for preterm birth and low birth weight, both of which are associated with increases in attentional, behavioral, and psychological disorders in children.^{xxxi} For the mother, exposure to intimate partner violence has been associated with increased likelihood of abdominal trauma, health problems, mood and anxiety disorders, and symptoms of posttraumatic stress disorder (PTSD), all of which may be related to the impact of IPV on a developing child.^{xxxii}

Resources:

- **Health Care:** While the Affordable Care Act (ACA) has increased access to health insurance and mandated coverage of maternity and newborn care, there is limited knowledge of the percent of pregnant women who experience inconsistent or inadequate care. Mothers who are uninsured and do not qualify for Medicaid cannot enroll outside of an insurance company's open enrollment period because pregnancy is not considered a "qualifying life event."^{xxxiii} This is dangerous for women and their children, particularly for women living in states that have not expanded Medicaid. Half of all pregnancies are unplanned, which means some women who become pregnant may not find out that they do not have adequate coverage

until it is too late.^{xxxiv} Statistics show that mothers who do not receive medical care during pregnancy have three times the rate of low birth weight and five times the rate of infant mortality as mothers who received care during pregnancy.^{xxxv} Maternal mortality is also five times higher among those who do not receive care.^{xxxvi}

- **Housing:** Young women experiencing homelessness are almost five times more likely than their peers to become pregnant.^{xxxvii} Mothers experiencing homelessness during pregnancy at all ages are less likely to receive medical care. Additionally, we know that those experiencing homelessness have higher rates of exposure to violence and substance abuse, both of which are tied to disruptions in development.^{xxxviii} Children born to mothers experiencing homelessness are three times as likely to be born preterm and have a greater chance of low birth weight.^{xxxix}
- **Access to Food:** Access to food during pregnancy and early life is crucial for the rapidly developing child. Multiple, cross-cultural studies have shown that children born to undernourished mothers had significantly increased likelihood of developing depression, mania, and schizophrenia.^{xl} It is important to focus not only on whether food is available but also on what type of food is available, as ensuring adequate nutrition, not just caloric intake, is important in pregnancy and early life.^{xli} In some environments, such as urban “food deserts,” nutritious food is more difficult to access and consumption of higher calorie, less nutritious food is promoted, placing mothers in these environments at risk.^{xlii}

Relationships:

- **Parenting:** Nurturing parenting or caregiving during infancy and early life is essential for healthy physical, psychological, and social development. This includes sensitivity to the needs of the infant, using praise or rewards for positive behavior, using appropriate and consistent negative consequences for undesired behavior, and spending positive time with children doing activities like playing or reading.^{xliii} Nurturing parenting is affected in part by the parent’s socioeconomic resources – is the new family supported by positive relationships or are they under a lot of stress?^{xliiv} Parenting related challenges during infancy and early childhood can impact the development of important neural pathways and the architecture of the brain. Mounting research shows this disruption can increase the likelihood of future mental health problems.^{xliv}

Interventions:

Interventions that ensure that new families have access to necessary medical care, food, housing, and social supports are necessary to child health and nurturing parenting. In addition, home intervention programs have proven helpful in addressing short-term difficulties and long-term mental health risks. While formats and content vary, these programs work with pregnant women and new mothers into early childhood to provide education about child development and positive parent-child interactions, serve as social support, and increase access to social and health services. For example, women who enrolled in Healthy Families New York prior to their 31st week of pregnancy saw a 48% reduction in low birth weight deliveries.^{xlvi} Healthy Families New York provides home-based services to new and expectant parents and offers participation until the child reaches school age.^{xlvii} Another program called Nurse Family Partnerships focuses on first-time mothers and provides in-home visits by nurses. Nurse Family Partnerships was founded to improve maternal caregiving, reduce rates of antisocial behavior in children, and decrease maternal tobacco use. One study on Nurse Family Partnerships showed a drop in average nicotine levels from 250 ng/ml at the start of the study to 12.32 ng/ml after intervention.^{xlviii} The Incredible Years also offers home visitation for parents of infant, toddler, preschool, and school age children. After family participation in the Incredible Years program, two-thirds of the children diagnosed with oppositional defiant disorder and ADHD no

longer met criteria for those diagnoses at 3 and 10 year follow-ups, and with a large effect size relative to the control groups.^{xlix} One meta-analysis using 60 home visitation programs determined that, even with the difficulty of evaluating the different programs as a group, families who participated in home visitation programs generally had better outcomes than those who did not.^l Across the board, mothers were more likely to pursue additional education, and children performed better in three out of five areas of cognitive and social-emotional functioning. Another meta-analysis of 25 programs noted that average benefits outweighed the costs of the programs.^{li} Home visitation programs are a cost-effective way to promote healthy development and address many of the risk factors for mental health disorders in a comfortable setting for the whole family.

Early Childhood- Puberty

Early childhood through puberty is an important time in childhood development, as it comes with more time spent outside of the home and increasingly complex thought processes for kids.^{lii} Children become more socially aware, starting to compare themselves to their peers and becoming more interested in their place in the world.^{liii} Self-esteem, individuality, and relationships all grow in importance, and children begin to reason as they are exposed to different people and ideas. These changes increase the importance of not only having a healthy and stable support system at home but also trying lots of new things in a safe way.^{liv} This is a sensitive period in brain development as children are more receptive to receiving new information and internalizing experiences.^{lv} During this stage, children begin to understand themselves and the rules of the world, leaving them particularly vulnerable to intense experiences.^{lvi}

Health:

- **Nutrition:** Nutrition during early childhood through puberty is important for both daily functioning and brain development. Nutrition is not only calories but the quality of the food as well. Generally, a healthy diet should consist of fewer processed foods and more nutrient-dense foods like vegetables, fruits, fish, and good fats.^{lvii,lviii} In a review of 12 studies examining the impact of diet and on children’s mental health, healthy diet was associated with better mental health in children in multiple studies and children with high levels of unhealthy food intake consistently reported higher levels of internalizing behavior, like social withdrawal or anxiety, and externalizing behavior, such as aggression or fighting.^{lix,lx} This information is particularly concerning in the United States, where empty calories from added sugars and solid fats make up almost half of what children consume on a daily basis, and 6.5 million children live in food deserts—areas more than a mile away from a super market—making it more difficult to access quality food.^{lxi}

Safety & Security:

- **Adverse Childhood Experiences:** A large amount of research has been done on Adverse Childhood Experiences (ACES) and their impact on later health problems.

The ten experiences included in studies of ACES are:

- | | |
|----------------------|---|
| 1) Physical abuse | 6) Living with a family member who is incarcerated |
| 2) Verbal abuse | 7) Living with a family member who is diagnosed with a mental illness |
| 3) Sexual abuse | 8) Living with a family who abuses substances |
| 4) Physical neglect | 9) Exposure to violence against one’s mother |
| 5) Emotional neglect | 10) The absence of one parent through divorce, separation, or other factors |

Studies consistently find that the more Adverse Childhood Experiences an individual has the more likely he or she is to develop health problems later in life, including heart and lung disease. ACEs have also been strongly linked to long-term mental health and substance use disorders. Higher ACEs are associated with earlier first time tobacco and alcohol use,^{lxii} and increase one's likelihood of heavy drinking and self-reported alcoholism by two to fourfold.^{lxiii} Compared to those with no ACEs, individuals with exposure to five or more Adverse Childhood Experiences are seven to ten times more likely to report illicit drug use or addiction.^{lxiv} There is also a relationship between the amount of ACEs experienced and the likelihood of suicide attempts into adolescence and adulthood.^{lxv} In terms of specific mental health disorders, each experience increases the likelihood of both lifetime and recent major depressive episodes, and experiencing seven or more ACEs is linked to a fivefold increase in reporting hallucinations.^{lxvi, lxvii} These early experiences, which occur at surprisingly high rates across all socioeconomic groups, have a clear impact on long-term development and health outcomes.

- **Community Violence:** A child's sense of safety in their community also affects their mental health. Studies estimate that 50% to 96% of children living in urban areas have been exposed to some form of community violence, with rates of exposure staying stable over time.^{lxviii} Exposure to community violence is split into three areas: victimization, witnessing violence, and hearing about violence. A child's reaction is related to both the level of exposure and age. While victimization has the largest association with externalizing and internalizing behaviors, all three types have significant effects on experiencing symptoms of posttraumatic stress disorder (PTSD), including being constantly on guard and repeatedly thinking about the trauma.^{lxix} These effects are likely related to the 'collective traumatization' that results from consistently being exposed to the idea that no one is safe and the world is a dangerous place.^{lxx} Young children are more likely to show internalizing behaviors, while adolescents are more likely to respond with externalizing behaviors like 'acting out.' Even though children may not be able to express feelings in a way that adults can understand, children still need help and support after exposure to violence.^{lxxi}

Resources:

- **Homelessness:** Children experiencing homelessness are exposed to many factors that impact both their short- and long-term mental health, including increased exposure to trauma and fewer school supports. By age 12, 83% of children experiencing homelessness will have experienced at least one serious violent event.^{lxxii} Around 80% of children experiencing homelessness report symptoms of posttraumatic stress disorder (PTSD), and over 60% report symptoms of depression.^{lxxiii} This results in three times the rate of emotional and behavioral problems as non-homeless youth in schools.^{lxxiv} Children experiencing homelessness are four times as likely to show delayed development and twice as likely to experience learning disabilities compared to other children.^{lxxv} Long-term, about 75% of these students drop out of school.^{lxxvi}

Relationships:

- **Family:** As children are being exposed to different types of people and events outside of the home, stable, engaged family supports are important for mental health. For example, studies show that children living in single parent homes, where the parent may not be as available due economic and other pressures, have twice the rate of emotional, behavioral, and attentional disorders compared to children in two-parent homes.^{lxxvii}

Interventions:

During this stage, sometimes referred to as middle childhood, schools provide an important opportunity for addressing the mental health and well-being of children. In terms of prevention and early intervention, schools allow us to provide all students with the tools they need to be mentally well and to watch for early signs that a child might need extra support. Programs that target an entire class, in addition to providing a spectrum of mental health services as needed, can change each child's long-term development, even for those who are at-risk for developing mental health disorders. A well-researched example of a school-based prevention program is PAX Good Behavior Game (GBG). PAX GBG, which is on SAMHSA's National Registry of Evidence-based Programs and Practices, is a game that targets early elementary school students using a classroom game of 'kernels' to promote positive behavior and decrease unwanted behavior called 'spleems.'^{lxxxviii} PAX GBG has been found to improve a number of outcomes. For example, schools that use PAX GBG had a 50 to 90% decrease in disruptive or disorderly behavior in school settings, a 10 to 30% decrease in the need for special education services, and a 30 to 60% reduction in referrals, suspensions, or expulsions.^{lxxxix} The Washington State Institute for Public Policy found that the benefits of the program far outweighed the costs, with the state seeing \$58.56 of benefits for each \$1 they spent on the program.^{lxxx} Long-term, PAX GBG improves mental health and related outcomes, particularly for those with the highest levels of aggression. After participating in PAX GBG in first grade, those with the highest levels of aggression were half as likely to use special education services by the age of 21, more than twice as likely to graduate from high school, and 20% less likely to have a personality disorder by age 21.^{lxxxi} It has also been linked to reductions in suicidal thoughts and actions.^{lxxxii}

Puberty to Early Adulthood

Puberty to early adulthood is the final critical stage of blooming and pruning cells in the brain, similar to that seen in the early years of life. Rapid growth in the brain's gray matter before puberty is met by a strengthening of pathways that are used most often and a weakening of those that are not used often as the brain refines itself through pruning.^{lxxxiii} Research has started to explore the connection between brain changes such as an abnormal pruning of the brain (exacerbated by disruptions in sleep and increased stress) with the onset of various mental health problems including schizophrenia, substance use, mood disorders, anxiety disorders, and eating disorders.^{lxxxiv,lxxxv,lxxxvi,lxxxvii,lxxxviii} The brain changes are combined with changes in friendships, social roles, self-esteem, hormones, and challenging expectations. Most students will be advancing to high school, which can be massively stressful, particularly for vulnerable students. This is also a time when many mental health disorders become more apparent or when teens start showing symptoms of mental health disorders. With so many transitions and new stressors, puberty to early adulthood is an especially vulnerable time for teens' mental health.

Health

- **Sleep:** The rapid changes in the brain and body that occur during puberty make it a crucial time for sleep. As a child hits puberty, the body's relationship with sleep begins to change. The circadian rhythm, or the combination of internal influences that determine the body's schedule of wakefulness and sleep, leads those in this age group to begin feeling tired about two hours later than they did in childhood.^{lxxxix} They also begin to require an increased amount of sleep each night. Current pressures on kids, teens, and young adults emphasize success in academics and sports or clubs, in addition to dealing with peer pressure and part-time jobs. For many, overscheduling, early school start times, and other concerns take priority over sleep at a time when sleep is increasingly important. Disruptions in sleep can result in trouble concentrating, mood swings, hyperactivity, nervousness, and aggressive behavior.^{xc} One study showed that adolescents

who slept fewer than six hours a night were three times as likely to experience psychological distress than those who slept a healthy amount.^{xc1}

- **Substance Use:** Substance use during this time may also be associated with later mental health problems.^{xcii} In particular, studies have found a potential causal relationship between the amount of marijuana used during this time and likelihood of later experiencing psychotic symptoms.^{xciii} Studies show the clearest link between marijuana use and later symptoms of psychosis among heavy users with preexisting vulnerability. For example, one study showed daily users with a specific gene variant were seven times as likely to develop psychosis than infrequent or non-users with the same gene.^{xciv}
- **Physical Activity:** Regular physical activity in childhood and adolescence has been associated with improved mental health, while screen time has been associated with poorer mental health.^{xcv}

Safety or Security

- **Intimate Partner Violence:** For many, puberty to early adulthood is when romantic relationships become more common and important. While these relationships can be a healthy part of growing up, this is also when people young people may begin experiencing intimate partner violence, including physical, emotional, psychological, and sexual abuse. 10 to 30% of teens report being physically abused by their romantic partner. Anywhere from 20 to 50% report being psychologically or emotionally abused. 10 to 13% report sexual coercion or assault by their partner.^{xcvi} Those who experience intimate partner violence are more likely to show symptoms of depression and anxiety, abuse substances, and report thoughts of suicide, in addition to being at an increased risk for victimization during college.^{xcvii}

Resources

- **Supports:** For students who are struggling, it can be challenging to get help, especially with fears of talking about mental health or asking for help. Even when one asks for help, access to supports might be influenced by insurance coverage, cost of treatment, and availability of providers in the area. Schools are mandated to provide Individualized Education Programs (IEPs), which are designed to give children with mental health problems the supports and accommodations they need to be successful in school. However, funding for IEPs is limited so many children with mental health problems will not receive an IEP or receive inadequate support from their IEP. As a result, children that are considered to have an emotional disturbance qualifying them for an IEP have a high school graduation rate of 43.3%, the lowest of all disabilities.^{xcviii} In addition to difficulties in obtaining treatment and supports at schools, community providers and IEP teams are not often coordinated to ensure that they are working effectively together. Care needs to be integrated between school and community treatment and supports to best support children.

Relationships

- **Bullying:** With the increases in opportunities for communication and anonymity brought about by technology, the nature of bullying is constantly changing. One study stated 43% of students had been cyberbullied in the past year.^{xcix} With Mental Health America's Bullying Survey, over 60% of respondents in seventh through twelfth grade reported being cyberbullied. When it comes to bullying in schools, a 2013 report by the Bureau of Justice Statistics stated that 28% of students age 12-18 reported being bullied in the past year.^c A report by the Centers for Disease Control and Prevention in 2013 stated 7.2% of students report not going to school due to personal safety concerns.^{ci} The same study highlighted the dramatically increased risk for bullying among students who self-identify, are identified by others, or are questioning

their identification as LGBT. 12 to 28% of students in this group reported being threatened or injured with an object on school property within the past year.^{ci} Those who experience bullying are at an increased risk for depression, anxiety, substance abuse, poor school performance, and suicidal behavior. Conversely, students, regardless of sexual orientation, who reported a positive school climate and were not experiencing homophobic teasing, had the lowest levels of depression, suicidal feelings, substance use, and unexcused absences.^{ciii}

- **Isolation:** Puberty into early adulthood is a time when relationships with peers are especially important, as young people are forming their identities and navigating their transition to adult roles. Adolescents who report high levels of social isolation also report more depressive symptoms, lower self-esteem, and are at a higher risk for suicide or suicide attempts than those who do not feel isolated.^{civ} This demonstrates that socially inclusive environments are important for ensuring adolescents get the support they need during this time.

Interventions:

Prevention and early intervention at this stage take into account the unique challenges of high school and transition to adulthood. Many of the universal prevention programs focus on managing high-risk behaviors, like substance abuse, which can be linked to later mental health. Life Skills Training is an example of a middle school curriculum that reinforces self-esteem and resilience to social pressures. This program demonstrates decreased substance use in adolescents and the Washington State Institute of Public Policy calculated that it has a return on investment of \$13 for every \$1 spent.^{cv}

Because puberty into adulthood is a time when symptoms of specific disorders become more apparent, three key steps are important in getting youth the care they need to stop the progression of worsening problems. First, providing universal mental health screenings is a necessary and critical first step for intervention. Screening for mental health problems should be as ubiquitous as vision or hearing screenings and provided during puberty. A positive screen should be followed by a comprehensive mental health assessment. Secondly, universal education about early signs is important to bring in key community members who are mostly likely to catch problems when they occur. A commitment to funding outreach and education to individuals including teachers, mentors, churches, pediatricians and hospitals is necessary to identifying youth who are often tentative about sharing their mental health problems. Finally, once a youth has received a full psychosocial assessment, we must provide access to specialized services that have been proven effective. Examples of evidenced based specialty mental health care should include wraparound services like those included in Family-Aided Assertive Community Treatment or Coordinated Specialty Care for First Episode Psychosis.^{cvi} Currently, getting early care often comes down to a combination of resources, knowledge of the mental health system, location, and timing, since even with adequate resources and insurance coverage, getting help can still come down to whether or not good treatment is available in your area. For those that do not have access to specialty care during this critical time, focusing on reducing stress, increasing sleep, and proper nutrition has been shown to help build protective factors. For example, in one study, adolescents deemed ultra-high risk for developing psychotic disorders who took 1200 mg of fish oils were four times less likely to develop a psychotic disorder 2 years later.^{cvi} For adolescents who might be showing early signs of mental illness, it is crucial for us to provide them treatment to keep them in school and engaged in the community, with supports that allow them to reach their personal recovery goals.

Consequences of Failing Our Children

From the prenatal period into early adulthood, there are many opportunities to support the mental health of our young people. From providing support for families, to promoting programs in schools, to providing access to a full spectrum of mental health support in the community, we can address risk factors and intervene early. Unfortunately, signs are often ignored and not met with supports for the child. When we do not act early to support our children and young adults, we face consequences like suicide, incarceration, homelessness, and school drop-out. This is not the result of a particular individual's actions but of a system that does not yet promote and support mental health as needed.

- **Suicide:**

Suicide is the 3rd leading cause of death among 10 to 24 year-olds in the United States, with about 13 lives lost every day and 4,600 lives lost each year.^{cvi} In a nationwide survey of 9th to 12th grade students in both public and private schools, 8% of students reported having attempted suicide in the past year.^{cix}

- **Incarceration**

Of the more than 600,000 youth placed in juvenile detention centers annually, 65 to 70% have diagnosable mental health disorders. ^{cx}More than 90 percent have been exposed to Adverse Childhood Experiences (ACES), with the majority having six or more ACES. At least three quarters have experienced traumatic victimization.^{cx}

- **Homelessness**

The National Alliance to End Homelessness estimates that approximately 550,000 unaccompanied youth and adults under 24 experience at least one week of homelessness each year.^{cxii} The U.S. Department of Housing and Urban Development (HUD)'s 2014 Annual Homeless Assessment Report using community reported data estimated 194,301 homeless youth on a single night.^{cxiii} Among youth experiencing homelessness, 20 to 40% identify as LGBT.^{cxiv}

- **School Drop-out and Job Loss**

In 2005–2006, the percentage of students with disabilities exiting school with a regular high school diploma was 57%, an increase from 43% in 1996–1997; however, only 43% of students with an emotional disturbance graduated with a diploma.^{cxv} Those who drop-out are more likely to be institutionalized than their peers, particularly in jails and prisons. 1 in 10 individuals who dropped out of high school were institutionalized compared to 1 in 33 of those who graduated high school, and only 1 in 500 individuals with Bachelor's Degrees were institutionalized.^{cxvi}

When we add up these losses of life and human potential, we see the incredibly high cost of not acting early. The statistics outlined above do not even include other bad outcomes, like losses in productivity, damage to relationships, and losses in life satisfaction as a whole. With prevention and early intervention, we can make sure we don't leave families all across America wondering, "What if?"

Prevention and Early Intervention Policy

Not a lot of Prevention and Early Intervention

Prevention and early intervention (PEI) is effective, but it only exists in pockets throughout the country. Even when an area implements PEI and gets great results, it can be challenging to continue the program let alone spread it to other places. Because most PEI is paid for through grants, it often requires a motivated community with strong leadership to start and continue PEI.

When government, businesses, or foundations offer grant money for groups to implement PEI, the funding usually only lasts a few years before it becomes necessary to reapply or find different sources of funding. This means that most PEI struggles to stay funded, taking a toll on the work and those involved. This is clearly not the best system for encouraging long-term and widespread use of strategies that we already know can make a large impact.

Not Designed for Prevention and Early Intervention

With so much evidence to support PEI, why isn't it easier to fund? Not only does PEI help and support individuals before they reach a crisis, it also benefits the community and country as a whole. We spend less than we do with later stage expenses like hospital stays and disability benefits, and we gain more with more people contributing to and working in the community.

Although PEI is the right choice for most communities, our current system makes it difficult to implement. In addition to challenges with grants, governments struggle to support PEI because of the initial costs, even if it is a responsible investment that would save us lives and money. Our health care system was not designed to support PEI, and most government programs only provide assistance when individuals reach a certain threshold, like poverty or disability. We only provide help when something has already gone wrong, treating when you are already sick or providing help when you have already lost a lot. When we made our system, we did not have as much research about prevention and early intervention, and we did not leave space for it. Now that we have the research, we need to make that space.

Investing in PEI makes sense, but many people do not have incentives to work on prevention and early intervention due to something called the wrong pocket problem. In the wrong pocket problem, those who invest in the programs are not the people who get the money back in savings – it goes into the wrong pocket. For example, as a member of the community or a local business, I benefit from improved mental health outcomes for me and the people around me, but I may or may not see concrete savings. As a government agency, I may save money that would have been spent long-term but do not have an easy way to measure my outcomes. As an insurance company, I may have to pay fewer claims but do not see as many benefits because people switch insurance so frequently.

Making our system make sense

In order to create a system that helps people before they reach crisis, we need to get serious about prevention and early intervention. To begin, we suggest three approaches:

1. *Fix the Wrong Pocket Problem*

We could fix the wrong pocket problem with regulations so everyone shares incentives to pay for prevention and early intervention. There are many ways we can do this, but one way is with sharing savings. Right now groups of providers called Accountable Care Organizations (ACOs) can share savings with the government when they spend less on health care while demonstrating good outcomes. If ACOs and others could share savings in other areas where prevention and early intervention save money, then more people would be motivated to work together toward prevention and early intervention.

2. *Cover Prevention and Early Intervention*

We could expand coverage of preventive care in health insurance. Right now, health insurers mostly only cover prevention and early intervention inside a doctor's office. Think about what we know effective PEI

looks like and what we would need to change. We need to pay for PEI because these are as important to mental health as services in a doctor's office. This includes paying for services out in the community, to individuals without a diagnosable condition, to groups, to family-members and teachers, and using texts, phone calls, and other technology.

3. *Engage Communities*

We also need to get communities engaged in prevention and early intervention. Community-based coalitions, made up of members of state and local government, hospitals, health insurers, provider groups, consumers, families, business owners, and other leaders, should coordinate funding. Similar coalitions should exist in every state and each member should have a designated role in the coalition. Community engagement will ensure not only that the money goes to the right places, but also that the community sees the wins they get. Seeing wins is important to make sure the programs that work keep getting funded.

These three changes would have a tremendous impact on the 50% of Americans who will meet criteria for a diagnosable mental health condition at some point in their lives.^{cxvii} Whether it is you, someone in your family, or a friend, we all know someone who needs help. Reducing risk factors and promoting protective factors is something we all benefit from, especially those who are at the greatest risk. When we have a system that is consistent with what we know about prevention and early intervention in mental health, we can prevent suffering and use our money responsibly. By investing in early programs and providing access to appropriate services where needed, we can stop failing our children and begin supporting them in our communities.

Glossary – In Alphabetical Order

Indicator	Description of Measure	Source
Adults with Any Mental Illness (AMI)	<p>Any mental illness (AMI) is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a developmental or substance use disorder, as assessed by the Mental Health Surveillance Study (MHSS) Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition—Research Version—Axis I Disorders (DSM-IV), which is based on the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). AMIYR_U, is an indicator for Any Mental Illness (AMI) based on the 2012 revised predicted probability of SMI. (SMIPP_U). If SMIPP_U is greater than or equal to a specified cutoff point (0.0192519810) then AMIYR_U=1, and if SMIPP_U is less than the cutoff point then AMIYR_U=0. This indicator based on the 2012 model is not comparable with the indicator based on the 2008 model. AMI is defined as having Serious, Moderate, or Mild Mental Illness. Specific details about this variable can be found in the Recoded Mental Health Module Variable Documentation Appendix.</p> <p>For details, see Section B of the "2011-2012 NSDUH: Guide to State Tables and Summary of Small Area Estimation Methodology" at http://www.samhsa.gov/data/population-data-nsduh/reports?tab=33. Data survey years 2011-2012, 2012-2013.</p>	<p>SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2011, 2012, and 2013. http://www.samhsa.gov/data/sites/default/files/NSDUHStateEst2012-2013-p1/ChangeTabs/NSDUHsaShortTermCHG2013.htm</p>
Adults with AMI Reporting Unmet Need	<p>Adults with AMI reporting unmet need is calculated from variable AMHTXND2 and AMIYR_U. AMIYR_U is defined as above in Adults with AMI. AMHTXND2, is defined as feeling a perceived need for mental health treatment/counseling that was not received. This is often referred to as "unmet need." Data survey years 2010-2011, 2012-2013.</p>	<p>Substance Abuse and Mental Health Services Administration. Center for Behavioral Health Statistics and Quality. National Survey on Drug Use and Health: 2-Year R-DAS. https://www.icpsr.umich.edu/content/SAMHDA/index.html. Downloaded and calculated on 7/16/2015. *Note Regarding SAMHDA R-DAS Below</p>
Adults with AMI Who are Uninsured	<p>Adults with AMI who are uninsured is calculated from variable IRINSUR4 and AMIYR_U. AMIYR_U is defined as above in Adults with AMI. A respondent is classified as NOT having any health insurance (IRINSUR4=2) if they meet EVERY one of the following conditions. (1) Not Covered by private insurance (IRPRVHLT=2) (2) Not Covered by Medicare (IRMEDICR=2) (3) Not Covered by Medicaid/CHIPCOV (IRMCDCHP=2) (4) Not Covered by Champus, ChampVA, VA, or Military (IRCHMPUS=2) (5) Not Covered by other health insurance (IROTHHLT=2). Data survey years 2010-2011, 2012-2013.</p>	<p>Substance Abuse and Mental Health Services Administration. Center for Behavioral Health Statistics and Quality. National Survey on Drug Use and Health: 2-Year R-DAS. https://www.icpsr.umich.edu/content/SAMHDA/index.html,"https://www.icpsr.umich.edu/content/SAMHDA/index.html." Downloaded and calculated on 7/16/2015 *Note Regarding SAMHDA R-DAS Below</p>

Indicator	Description of Measure	Source
Adults with AMI who Did Not Receive Treatment	Adults with AMI who did not receive treatment is calculated from variable AMHTXRC3 and AMIYR_U. AMIYR_U is defined as above in Adults with AMI. A respondent is classified as not receiving treatment if they responded NO to receiving any mental health treatment in the past year which is coded as AMHTXRC3. AMHTXRC3 is defined as having received inpatient treatment/counseling or outpatient treatment/counseling or having used prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for drug or alcohol use. Respondents with unknown treatment/counseling information were excluded. Data survey years 2010-2011, 2012-2013.	Substance Abuse and Mental Health Services Administration. Center for Behavioral Health Statistics and Quality. National Survey on Drug Use and Health: 2-Year R-DAS. https://www.icpsr.umich.edu/content/SAMHDA/index.html ," https://www.icpsr.umich.edu/content/SAMHDA/index.html . Downloaded and calculated on 7/16/2015. *Note Regarding SAMHDA R-DAS Below
Adult Dependence or Abuse of Illicit Drugs or Alcohol	Dependence or abuse is based on definitions found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically, including data from original methamphetamine questions but not including new methamphetamine items added in 2005 and 2006. Data survey years 2011-2012, 2012-2013.	SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2011, 2012, and 2013. http://www.samhsa.gov/data/sites/default/files/NSDUHStateEst2012-2013-p1/ChangeTabs/NSDUHsaeShortTermCHG2013.htm
Adults with Disability Who Could Not See a Doctor Due to Costs	Disability questions were added to the Behavioral Risk Factor Surveillance System (BRFSS) core questionnaire in 2004. Disability was determined using the following BRFSS question: "Are you limited in any way in any activities because of physical, mental or emotional problems?" (QLACTLM2). Respondents were defined as having a disability if they answered "Yes" to this question. Respondents were also asked: "Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?" (MEDCOST). The measure was calculated based on individuals who answered Yes to MEDCOST among those who answered Yes to QLACTLM2. Data survey year 2012 & 2013.	Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2013. http://www.cdc.gov/brfss/annual_data/annual_2013.html ," http://www.cdc.gov/brfss/annual_data/annual_2013.html . Downloaded and calculated on 7/29/15.
Adults with Serious Thoughts of Suicide	Adults aged 18 or older were asked whether they had seriously thought about, made any plans, or attempted to kill themselves at any time during the past 12 months, or if they had received medical attention from a health professional or stayed overnight in a hospital in the past 12 months because of a suicide attempt. Data survey year 2011-2012, 2012-2013.	SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2011, 2012, and 2013. http://www.samhsa.gov/data/sites/default/files/NSDUHStateEst2012-2013-p1/ChangeTabs/NSDUHsaeShortTermCHG2013.htm

Indicator	Description of Measure	Source
Children with Private Insurance that Did Not Cover Mental or Emotional Problems	Children with private insurance that did not cover mental or emotional problems is defined as any child age 0-17 responding YES to HLTINMNT. HLTINMNT is defined as: "Does [SAMPLE MEMBER POSS] private health insurance include coverage for treatment for mental or emotional problems? Data survey year 2011-2012, 2012-2013.	Substance Abuse and Mental Health Services Administration. Center for Behavioral Health Statistics and Quality. National Survey on Drug Use and Health: 2-Year R-DAS. https://www.icpsr.umich.edu/content/SAMHDA/index.html ." https://www.icpsr.umich.edu/content/SAMHDA/index.html . Downloaded and calculated on 7/21/2015. *Note Regarding SAMHDA R-DAS Below
Mental Health Workforce Availability	Mental health workforce availability is the ratio of the county population to the number of mental health providers including psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health care. In 2015, marriage and family therapists and mental health providers that treat alcohol and other drug abuse were added to this measure. Survey data year 2013, 2014.	County Health Rankings & Roadmaps. http://www.courtyhealthrankings.org/app/north-dakota/2015/measure/factors/62/description . This data comes from the National Provider Identification data file, which has some limitations. Providers who transmit electronic health records are required to obtain an identification number, but very small providers may not obtain a number. While providers have the option of deactivating their identification number, some mental health professionals included in this list may no longer be practicing or accepting new clients.
Students Identified with Emotional Disturbance for Individualized Education Program	Percent of Children Identified as having a Emotional Disturbance among enrolled students Grade 1-12 and Ungraded. This measure was calculated from data provided by IDEA Part B Child Count and Educational Environments, Common Core of Data. Under IDEA regulation, Emotional Disturbance is identified as a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance: (A) An inability to learn that cannot be explained by intellectual, sensory, or health factors. (B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers. (C) Inappropriate types of behavior or feelings under normal circumstances. (D) A general pervasive mood of unhappiness or depression. (E) A tendency to develop physical symptoms or fears associated with personal or school problems. Emotional disturbance includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance under paragraph (c)(4)(i) of this section. 2012-2013	IDEA Data Center, 2013 IDEA Section 618, State Level Data Files, Child Count and Educational Environments. http://www2.ed.gov/programs/osepidea/618-data/state-level-data-files/index.html#bccee . US Department of Education, National Center for Education Statistics, Common Core of Data. http://nces.ed.gov/ccd/stnfnis.asp Downloaded and calculated on 7/3/2015.

Indicator	Description of Measure	Source
Youth with At Least One Past Year Major Depressive Episode (MDE)	Among youth age 12-17, major depressive episode (MDE) is defined as in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms. For details, see Section B of the "2011-2012 NSDUH: Guide to State Tables and Summary of Small Area Estimation Methodology" at http://www.samhsa.gov/data/population-data-nsduh/reports?tab=33 .	SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2011, 2012, and 2013. http://www.samhsa.gov/data/sites/default/files/NSDUHstateEst2012-2013-p1/ChangeTabs/NSDUHsaeshortTermCHG2013.htm
Youth with Dependence or Abuse of Illicit Drugs or Alcohol	Among youth age 12-17, dependence or abuse is based on definitions found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically, including data from original methamphetamine questions but not including new methamphetamine items added in 2005 and 2006. Data survey year 2011-2012, 2012-2013.	SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2011, 2012, and 2013. http://www.samhsa.gov/data/sites/default/files/NSDUHstateEst2012-2013-p1/ChangeTabs/NSDUHsaeshortTermCHG2013.htm
Youth With MDE who Did Not Receive Mental Health Services	Youth with Past Year MDE who Did Not Receive Treatment is defined as those who apply to having Past Year MDE as defined above ("Youth with At Least One Past Year Major Depressive Episode") and respond NO to ANYSMH. ANYSMH indicates whether a youth reported receiving specialty mental health services in the past year from any of 7 specific inpatient/residential or outpatient specialty sources for problems with behavior or emotions that were not caused by alcohol or drugs. This variable was created based on the following 7 source of treatment variables: stayed overnight in a hospital (YHOSP), stayed in a residential treatment facility (YRESID), spent time in foster care (YFOST), spent time in a day treatment facility (YDAYTRT), received treatment from a mental health clinic (YCLIN), from a private therapist (YTHER), and from an in-home therapist (YHOME). Youths who reported a positive response (source variable=1) to one or more of the 7 questions were included in the yes category regardless of how many of the 7 questions they answered. Youths who did not report a positive response, but answered all 7 of the questions were included in the no category. Youths who did not report a positive response and did not answer all the questions, and adults were included in the unknown/18+ category. Data survey years 2010-11, 2012-2013.	Substance Abuse and Mental Health Services Administration. Center for Behavioral Health Statistics and Quality. National Survey on Drug Use and Health: 2-Year R-DAS. https://www.icpsr.umich.edu/content/SAMHDA/index.html ," https://www.icpsr.umich.edu/content/SAMHDA/index.html ". Downloaded and calculated on 7/21/2015. *Note Regarding SAMHDA R-DAS Below

Indicator	Description of Measure	Source
Youth with Severe MDE	<p>Youth with severe MDE is defined as having had MDE in the past year were then asked questions from the SDS to measure the level of functional impairment in major life activities reported to be caused by the MDE in the past 12 months (Leon, Olfson, Portera, Farber, & Sheehan, 1997). The SDS measures mental health-related impairment in four major life activities or role domains. The following variable, YSDSOVRL, is assigned the maximum level of interference over the four role domains of SDS: chores at home (YSDSHOME), school or work (YSDSWRK), family relationships (YSDSREL), and social life (YSDSSOC). Each module consists of four questions that are assessed on a 0 to 10 visual analog scale with categories of "none" (0), "mild" (1-3), "moderate" (4-6), "severe" (7-9), and "very severe" (10). The four SDS role domain variables were recoded so that no interference = 1, mild = 2, moderate = 3, severe = 4, and very severe = 5. A maximum level of interference over all four domains was then defined as YSDSOVRL. A maximum impairment score (YSDSOVRL) is defined as the single highest severity level of role impairment across all four SDS role domains. Ratings greater than or equal to 7 on the scale YSDSOVRL=4, 5 were considered severe impairment.</p> <p>"Youth with Severe MDE" is defined as the following variable MDEIMPY. MDEIMPY is derived from the maximum severity level of MDE role impairment (YSDSOVRL) and is restricted to adolescents with past year MDE (YMDEYR). Youth met criteria for MDEIMPY if they answered YES to YSDSOVRL and YES to YMDEYR. Data survey years 2010-2011, 2012-2013.</p>	<p>Child and Adolescent Substance Abuse and Mental Health Services Administration. Center for Behavioral Health Statistics and Quality. National Survey on Drug Use and Health: 2-Year R-DAS. https://www.icpsr.umich.edu/content/SAMHDA/index.html,"https://www.icpsr.umich.edu/content/SAMHDA/index.html. Downloaded and calculated on 7/21/2015. *Note Regarding SAMHDA R-DAS Below</p>
Youth with Severe MDE who Received Some Consistent Treatment	<p>The following variable calculated as how many youth who answered YES to MDEIMPY from "Youth with severe MDE" defined above and SPOUTVST. The variable SPOUTVST, indicates how many times a specialty outpatient mental health service was visited in the past year. The number of visits is calculated by adding the number of visits to a day treatment facility (YUDYTXNM), mental health clinic (YUMHCRNM), private therapist (YUTPSTNM), and an in-home therapist (YUIHTPNM). A value of 6 (No Visits) was assigned whenever a respondent said they had used none of the services (YUDYTYR, YUMHCRYR, YUTPSTYR, YUIHTPYR all equal 2). A value of missing was assigned when the response to whether received treatment or number of visits was unknown for any of the 4 locations (any of YUDYTYR, YUMHCRYR, YUTPSTYR, YUIHTPYR=85, 94, 97, 98 OR any of YUDYTXNM, YUMHCRNM, YUTPSTNM, YUIHTPNM=985, 994, 997, 998), unless sum of the visits for services with non-missing information was greater than or equal to 25, in which case a value of 5 (25 or more visits) was assigned. A missing value was also assigned for respondents aged 18 or older. The variable SPOUTVST was recoded for visit distribution as 0 Visits, 1-6 Visits, and 7-25+ Visits. Data survey years 2010-2014.</p>	<p>Substance Abuse and Mental Health Services Administration. Center for Behavioral Health Statistics and Quality. National Survey on Drug Use and Health: 4-Year R-DAS. https://www.icpsr.umich.edu/content/SAMHDA/index.html,"https://www.icpsr.umich.edu/content/SAMHDA/index.html. Downloaded and calculated on 7/21/2015. *Note Regarding SAMHDA R-DAS Below</p>

*Note Regarding SAMHDA R-DAS – Per PCPSR Website: Mental Health and Substance Abuse Data - As of August 21, 2015 SAMHSA contracted with a different vendor to distribute NSDUH, DAWN, and other SAMHDA restricted-use data. Questions about SAMHSA restricted-use data should be sent to samhda-support@samhsa.hhs.gov. ICPSR will continue to distribute public-use files created by the SAMHDA project. Users interested in substance abuse data are encouraged to search the ICPSR catalog and to visit the National Addiction & HIV Data Archive Program.

Citations for Infographics of Poor and Positive Outcomes

Outcome	Source
Child Maltreatment	U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2015). Child Maltreatment 2013. Retrieved September 28, 2015 from http://www.acf.hhs.gov/programs/cb/resource/child-maltreatment-2013 .
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Endnotes for Issue Spotlight

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