REGIONAL MENTAL HEALTH AND SUICIDE TRENDS IN INDIANA

INDIANA FAMILY & SOCIAL SERVICES ADMINISTRATION

FSSA

SyraHealth

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INTRODUCTION

Mental health is a broad term that encompasses an individual's emotional, psychological, and social well-being of a person from childhood to adulthood (Mentalhealth.gov, 2022). These factors all play a role in how a person handles stress and interacts with others, and poor mental health can have a negative impact on overall health (CDC, 2022a). Poor mental health can also lead to a mental illness, such as depression or anxiety, but poor mental health does not always indicate the presence of a mental illness. Mental illnesses caused by poor mental health include but are not limited to, anxiety disorders, depression, schizophrenia and many others. In the United States, one in every five adults will suffer from a mental health disorder each year, and one in every six children aged 6 to 15 will suffer from a mental health disorder each year (Nami.org, 2022a). In 2019, one in every three high school students in the United States reported feeling sad or hopeless a 40% increase from those who reported in 2009 (CDC, 2022b).

Individuals with poor mental health are more likely to engage in substance abuse and suicide; it has been reported that 46 percent of those who die by suicide in the United States had a known mental health condition (Nami.org, 2022b). In the United States, alcohol was involved in 22% of suicide deaths, and the use of alcohol and/or illicit drugs increases the likelihood of developing a mental disorder (SAMHSA, 2022).

This report examines the prevalence and consequences of mental illness in Indiana. Data sources are reported from the National Survey of Drug Use and Health (NSDUH), County Health Rankings (CHR), and Indiana Youth Survey (INYS). Data from NSDUH and CHR are included for three time periods: 2010, 2015, and 2018 (the most recent year available). Data for 2015 and 2019 data are available from the National Suicide Prevention Lifeline (NSPL). Due to different regional definitions for prior years in INYS, we chose 2018 as the most recent year for comparison purposes. We also obtain age-adjusted suicide rates from Center for Disease Control and Prevention (CDC) at a county-level aggregated at 5-year averages [2006 to 2010; 2011 to 2015; and 2016 to 2020]

MENTAL ILLNESS PREVALENCE

The Substance Abuse and Mental Health Services Administration (SAMHSA) collects data on mental health and substance abuse at the state level in the United States. According to data from 2012-2014 National Survey on Drug use and Health (NSDUH), 43.7 million U.S. adults aged 18 and up reported having any mental illness (AMI) in the previous year. In NSDUH, AMI is defined as the presence of any mental, behavioral, or emotional disorder. AMI's severity can range from no impairment to mild, moderate, and severe. The West Coast (19% of population) and Midwest region (18.5 %) have the highest prevalence of reported AMI, both of which are higher than the overall prevalence of 18.39% in the United States Oregon had the highest prevalence, with 22.72 percent of the population reporting AMI (Lipari et al., 2017).

Figure 1: Any Mental Illness in the Previous Years in People Aged 18 and Older, by Geographic Area (NSDUH)
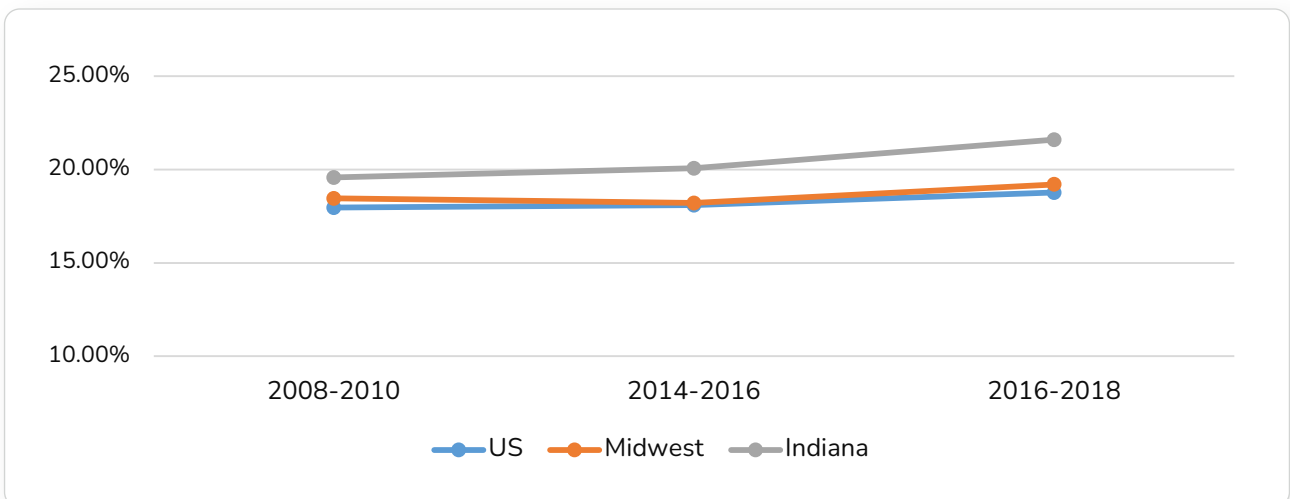
Region	2008-2010	2014-2016	2016-2018
US	17.96%	18.09%	18.76%
Midwest	18.45%	18.21%	19.20%
Indiana	19.57%	20.06%	21.59%

The trends in any mental illness are similar across the United States, the Midwest, and Indiana (Figure 1). From 2008 to 2018, AMI increased in all reported geographic areas, with a more dramatic increase in the second half of the period. In comparison to the rest of the country and the Midwest, Indiana has the highest population percentage that reported AMI in the previous year, at 21.6 percent in 2018.

Table 1: Any Mental Illness in the Previous Years in People Aged 18 and Older, by Indiana Region (NSDUH)

NSDUH Region	2008-2010	2014-2016	2016-2018	Trends
Indiana	19.57%	20.06%	21.59%	
Central	19.86%	18.32%	19.41%	
East	18.76%	19.96%	22.90%	
North Central	19.33%	20.52%	23.06%	
Northeast	19.14%	20.41%	21.13%	
Northwest	19.05%	19.53%	20.02%	
Southeast	20.06%	21.87%	22.49%	
Southwest	19.42%	20.60%	21.46%	
West	20.40%	21.73%	25.09%	

Note: Regions defined by NSDUH are as follows:

Central = Boone, Hamilton, Hancock, Hendricks, Johnson, Marion, Morgan, Shelby.

East = Blackford, Delaware, Fayette, Grant, Henry, Jay, Madison, Randolph, Rush, Union, Wayne.

North Central = Cass, Elkhart, Fulton, Howard, Kosciusko, La Porte, Marshall, Miami, St. Joseph, Tipton, Wabash.

Northeast = Adams, Allen, DeKalb, Huntington, LaGrange, Noble, Steuben, Wells, Whitley.

Northwest = Jasper, Lake, Newton, Porter, Pulaski, Starke.

Southeast = Bartholomew, Brown, Clark, Crawford, Dearborn, Decatur, Floyd, Franklin, Harrison, Jackson, Jefferson, Jennings, Lawrence, Ohio, Orange, Ripley, Scott, Switzerland, Washington.

Southwest = Daviess, Dubois, Gibson, Greene, Knox, Martin, Perry, Pike, Posey, Spencer, Vanderburgh, Warrick.

West = Benton, Carroll, Clay, Clinton, Fountain, Monroe, Montgomery, Owen, Parke, Putnam, Sullivan, Tippecanoe, Vermillion, Vigo, Warren, White.

Map 1: Any Mental Illness in the Previous Years in People Aged 18 and Older (NDSUH)

Except for the Central region, every Indiana region saw an increase in AMI over time (Table 1). The Western region had the highest percentage of AMI to begin with and experienced the greatest increase (4.7%) over the ten-year period. Despite having the lowest percentage of AMI in 2008, the Eastern region finished the year with 22.9 percent, which is higher than the state average of 21.59 percent. The first map depicts the regional distribution of AMI in 2018.

In the NSDUH, serious mental illness (SMI) is defined as diagnosable mental, behavioral, or emotional disorder in adults aged 18 and up. It significantly disrupts or limits one or more major life activities. In the United States, 9.8 million adults aged 18 and up reported SMI in the previous year. The Midwest had the highest prevalence of SMI, at 4.32 percent, slightly higher than the national average of 4.13%. West Virginia has the highest prevalence of SMI at 5.53 percent of the population, which is higher than the national prevalence of 4.13% (State and Substate Estimates of Serious Mental Illness from the 2012–2014 National Surveys on Drug Use and Health).

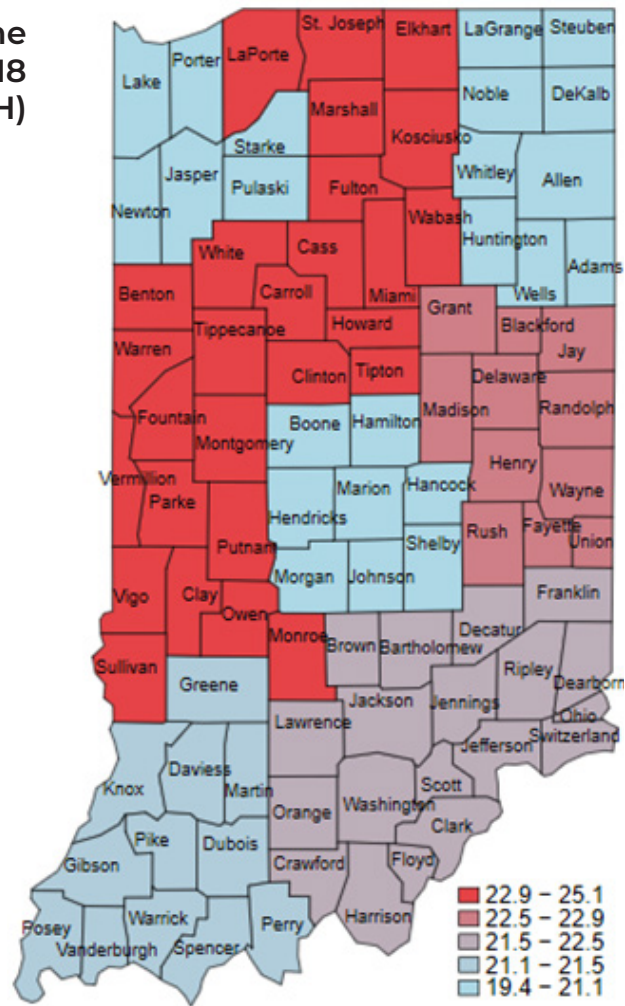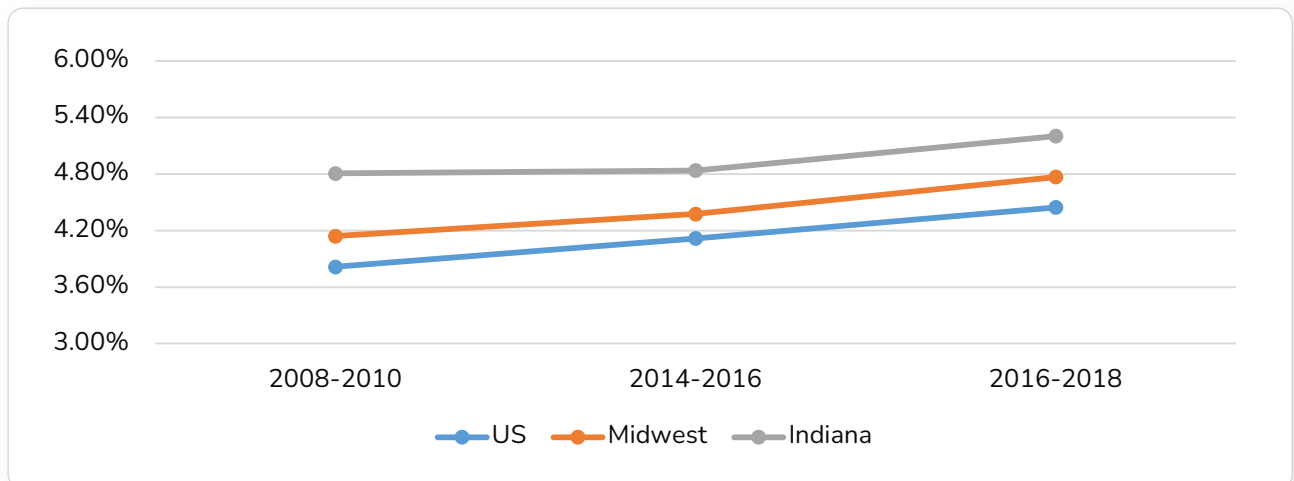|	
■	22.9 – 25.1
■	22.5 – 22.9
■	21.5 – 22.5
■	21.1 – 21.5
■	19.4 – 21.1

Figure 2: Serious Mental Illness in the Previous Years in People Aged 18 and Older, by Geographic Area (NSDUH)

Region	2008-2012	2014-2016	2016-2018
US	3.81%	4.12%	4.45%
Midwest	4.14%	4.38%	4.77%
Indiana	4.81%	4.84%	5.20%

The prevalence of serious mental illness increased across the nation, Midwest and Indiana (Figure 2). SMI, like AMI, is higher in Indiana than in the rest of the country and the Midwest, at 5.2 percent in 2018.

Table 2: Serious Mental Illness in the Past Year in People Aged 18 and Older, by Indiana Region (NSDUH)

NSDUH Region	2008-2010	2014-2016	2016-2018	Trends
Indiana	4.81%	4.84%	5.20%	
Central	4.78%	4.36%	4.63%	
East	4.69%	4.99%	5.42%	
North Central	4.78%	4.72%	5.34%	
Northeast	4.78%	4.93%	5.13%	
Northwest	4.65%	4.69%	4.69%	
Southeast	5.36%	5.48%	6.00%	
Southwest	4.74%	5.02%	5.17%	
West	4.71%	5.32%	6.06%	
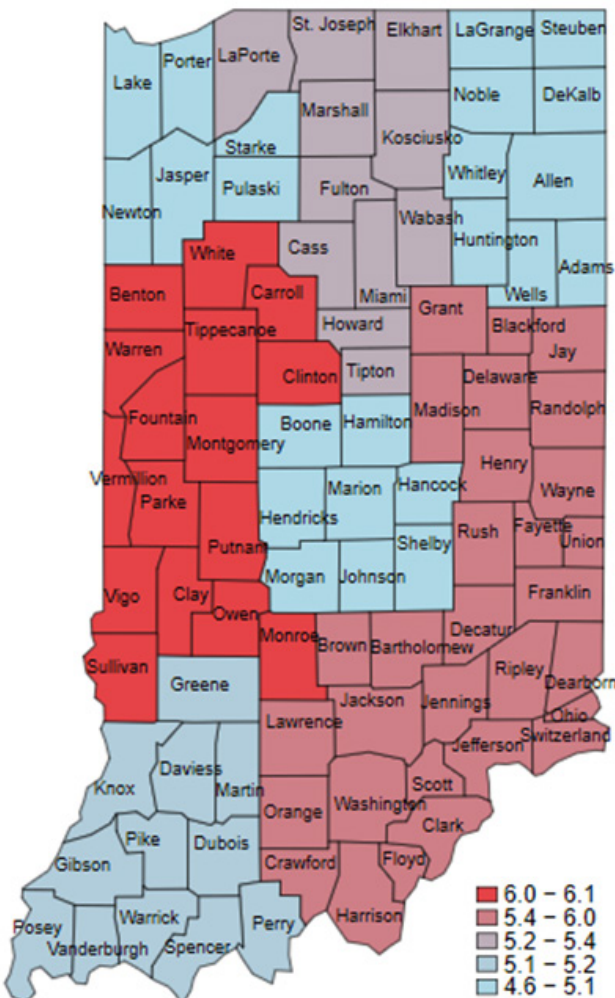
Map 2: Serious Mental Illness in the Past Year in People Aged 18 and Older (NSDUH)

Between 2008 and 2018, SMI increased in six of Indiana's eight regions (Table 2). The Western region experienced the greatest increase in SMI over time, while the Central region experienced the only decrease. Northwestern Indiana had the lowest percentage of SMI, at 4.7 percent. Map 2 depicts the regional distribution of SMI in 2018.

Major Depressive Episode Prevalence

The NSDUH defines a major depressive episode (MDE) as a period of at least two weeks during which a person experienced a depressed mood or loss of interest or pleasure in daily activities, as well as a majority of specified symptoms such as problems with sleep, eating, energy, concentration, or self-worth.

Figure 3: Major Depressive Episodes in the Past Year in People Aged 18 and Older, by Geographic Area (NSDUH)
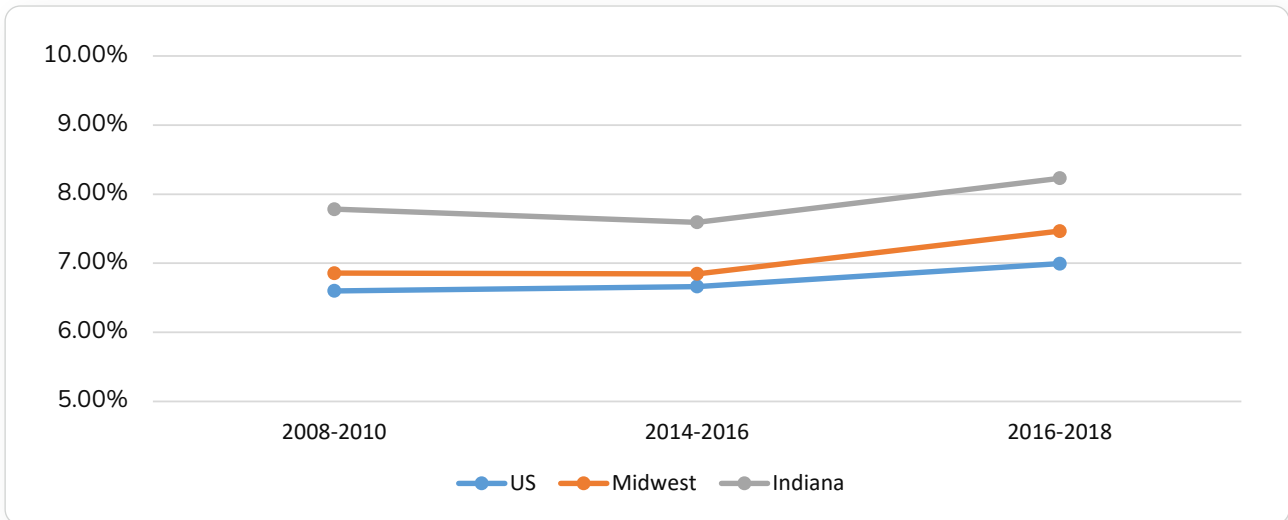
Region	2008-2012	2014-2016	2016-2018
US	6.60%	6.66%	7.00%
Midwest	6.86%	6.85%	7.47%
Indiana	7.78%	7.59%	8.23%

Although all regions experienced an increase in the prevalence of major depressive episode, the increases were all less than 1.0% (Figure 3). Furthermore, these increases occurred only in the second half of the time period. Indiana had the highest percentage of major depressive episodes (8.23 percent), while the national average was 7.0 percent.

Table 3: Major Depressive Episode in the Past Year in People Aged 18 and Older, by Indiana Region (NSDUH)

NSDUH Region	2008-2010	2014-2016	2016-2018	Trends
Indiana	7.78%	7.59%	8.23%	
Central	8.01%	7.73%	7.71%	
East	7.43%	7.31%	8.33%	
North Central	7.79%	7.19%	8.29%	
Northeast	7.36%	7.56%	8.06%	
Northwest	7.47%	7.09%	7.26%	
Southeast	7.88%	7.69%	8.80%	
Southwest	7.61%	7.80%	8.38%	
West	8.25%	8.28%	9.76%	

MDE increased in the majority of regions between 2008 and 2018 (Table 3). However, only the Western region saw highest increases in MDE between 2014 and 2018. The Central region saw a slight decline in MDE since 2008. The regional distribution of MDE as of 2018 is depicted on Map 3.

Map 3: Major Depressive Episode in the Past Year in People Aged 18 and Older (NSDUH)
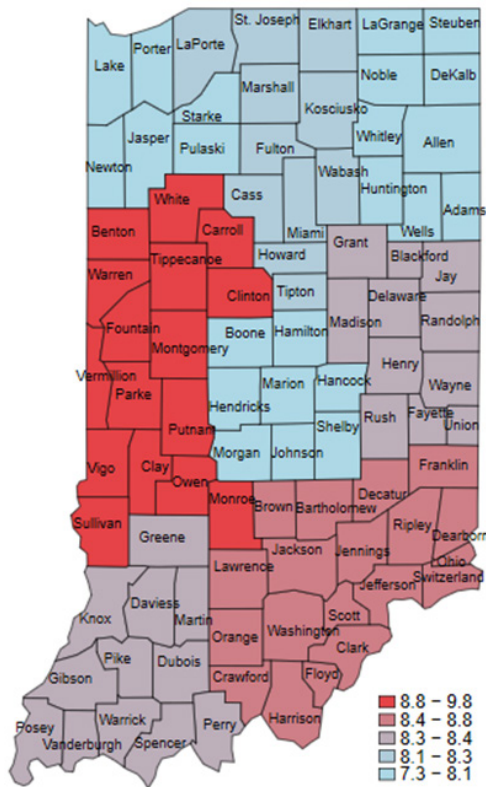
Map 4: Poor Mental Health Days (CHR)
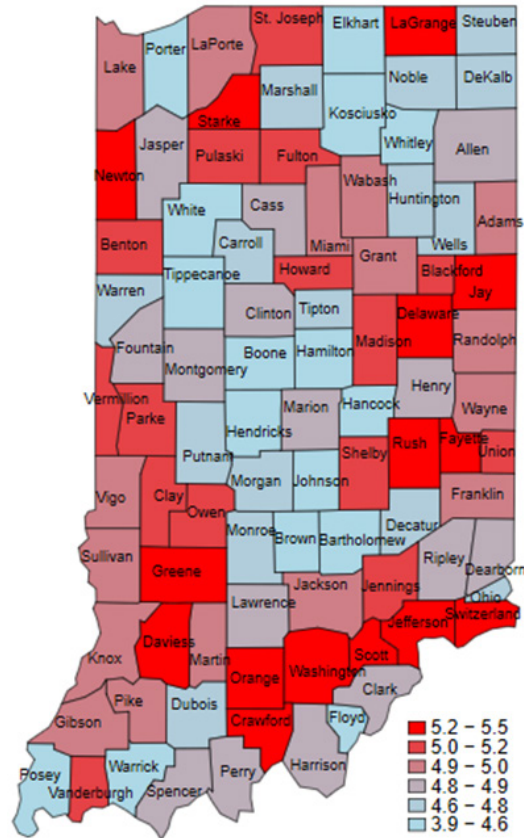
Mental Health Days and Frequent Mental Distress

We analyze the poor mental health days, defined by CHR as age-adjusted average number of mentally unhealthy days that were reported in the past month. Map 4 shows the county distribution of poor mental health days based on the 2018 County Health Rankings.

Table 4 :Poor Mental Health Days, by Indiana Region (CHR)

NSDUH Region	2008-2010	2014-2016	2016-2018	Trends
Central	3.26	3.68	4.40	
East	4.33	4.19	5.11	
North Central	3.60	3.98	4.85	
Northeast	3.24	3.89	4.81	
Northwest	4.05	3.99	4.95	
Southeast	4.06	3.97	4.93	
Southwest	3.66	3.90	4.91	
West	3.52	3.98	4.86	
Indiana	3.7	4.13	4.65	

Between 2006 and 2018, the number of days with poor mental health in Indiana increased by 0.95 days (Table 4). During this time, the average number of days with poor mental health increased in all regions of Indiana. The Northeast saw the greatest increase in poor mental health days, with a 1.6 days increase.

Rural areas house approximately about 20% of the population in the United States, while urban areas house approximately 80% of the population (Urban Areas Facts, n.d.). One-fifth of those living in rural areas of the United States have a mental illness, and the prevalence of mental illness is comparable in rural and urban areas. Individuals who live in rural areas were less likely to receive mental illness treatment than those living in metro areas.

Figure 4: Poor Mental Health Days, Rural vs Metropolitan Areas (CHR)
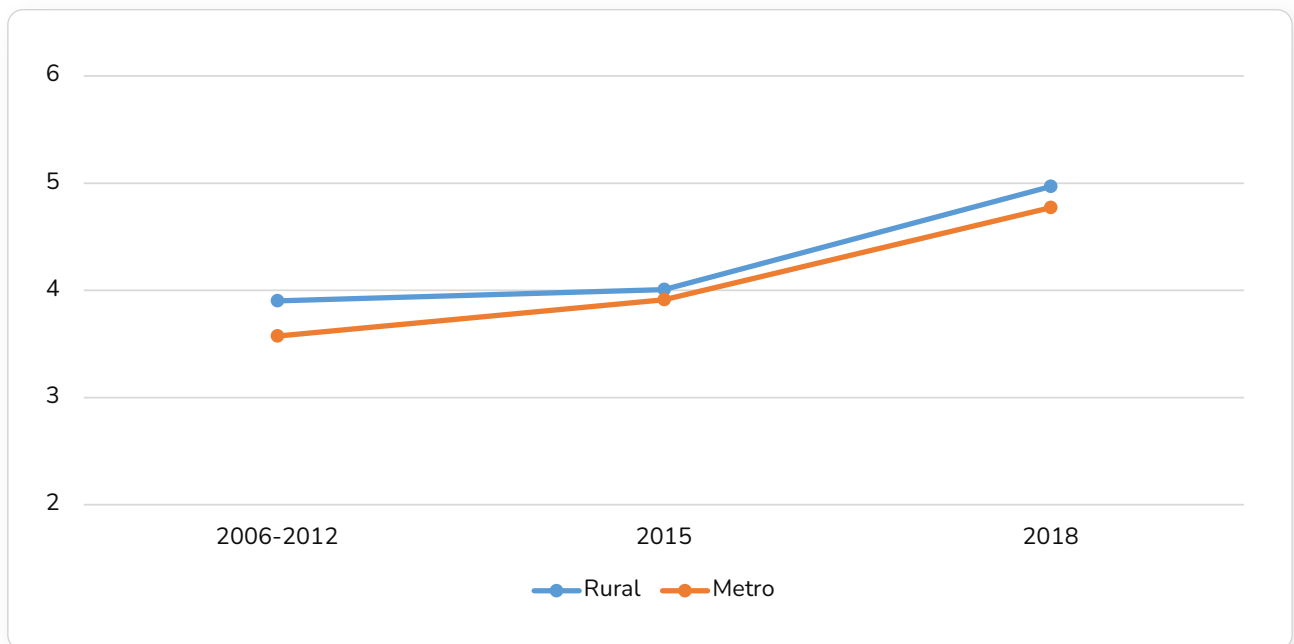
	2008-2012	2015	2018
Rural	3.90	4.00	4.96
Metro	3.57	3.91	4.77
Indiana	3.7	4.13	4.65

Map 5: Frequent Mental Distress (CHR)

Over time, both rural and urban Indiana saw increases of about one day to the average number of poor mental health days (Figure 4). Individuals in metropolitan areas have slightly fewer poor mental health days than those in rural areas on average.

CHR defines frequent mental distress as 14 or more days of self-reported poor mental health per month. In 2018, the county distribution of frequent mental distress is depicted on Map 5.
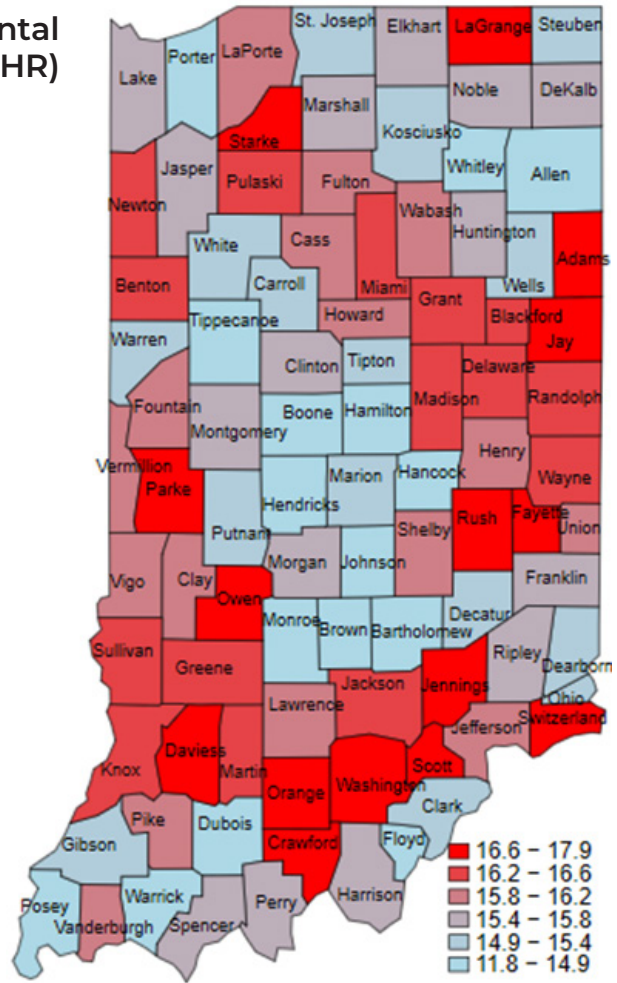
Table 5: Frequent Mental Distress, by Indiana Region (CHR)

NSDUH Region	2015	2018	Trends
Central	10.87	13.82	
East	12.48	16.64	
North Central	11.87	15.71	
Northeast	11.56	15.63	
Northwest	11.82	15.81	
Southeast	11.77	15.90	
Southwest	11.44	15.68	
West	11.85	15.72	
Indiana	12.61	14.68	

Every Indiana region experienced at least a 2.9 percent increase in frequent mental distress between 2015 and 2018 (Table 5). During this time, the state as a whole experienced a 2.0 percent point increase in mental distress.

Figure 5: Frequent Mental Distress, Rural vs Metropolitan Areas (CHR)
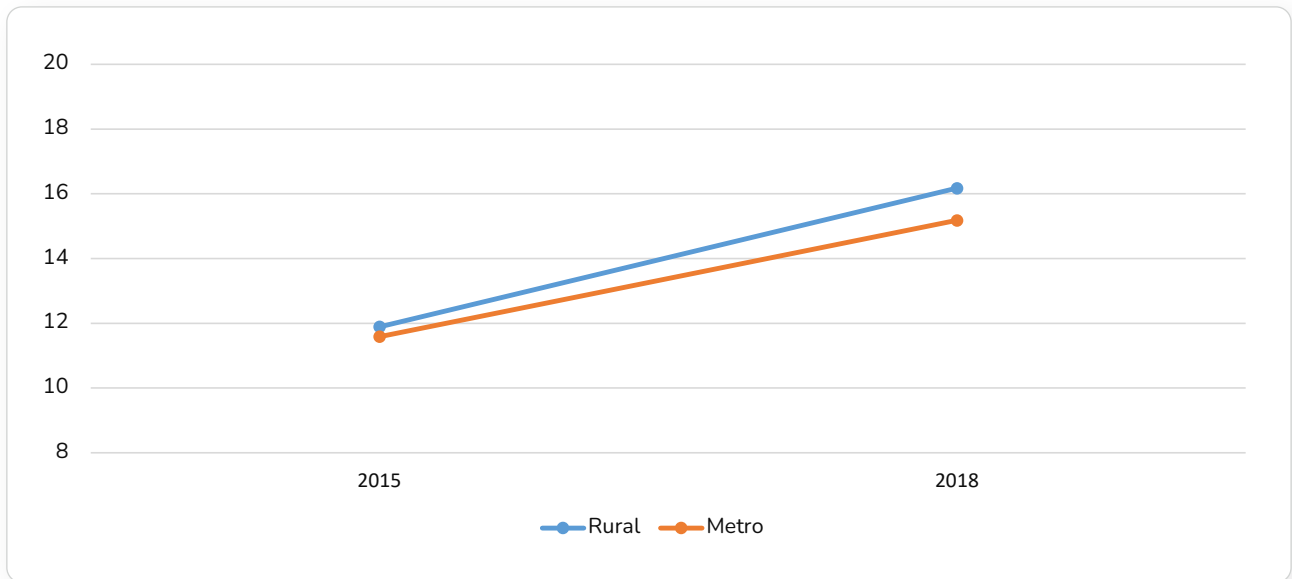
	2015	2018
Rural	11.88%	16.17%
Metro	11.58%	15.17%
Indiana	12.61%	14.68%

From 2015 to 2018, there was a 3% increase in frequent mental distress in both rural and urban areas (Figure 5). In 2018, 16.2 percent of people in rural areas and 15.2 percent of people in urban areas experienced frequent mental distress.

Suicide Prevention Lifeline Call

We now analyze the national suicide prevention lifeline (NSPL) data across Indiana counties. NSPL is a network of local crisis centers that provide emotional support to vulnerable people experiencing emotional distress or suicidal crisis.

In 2018, the county distribution of suicide prevention lifeline call volume rate defined as the number of calls initiated per 1,000 county population, is depicted on Map 6.
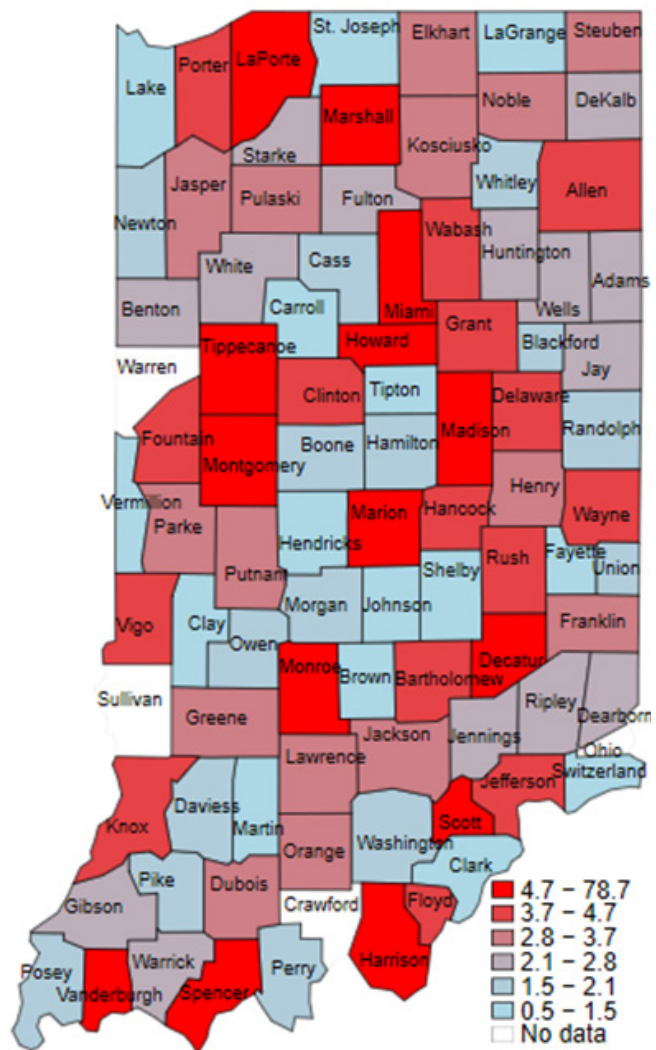
Map 6 Suicide Prevention Lifeline Call Rate (NSPL)

Table 6: Suicide Prevention Lifeline Call Volume Rate by 1000 Population, by Indiana Region (NSPL)

NSDUH Region	2015	2019	Trends
Central	4.10	5.03	
East	7.36	3.92	
North Central	8.01	6.66	
Northeast	7.13	3.55	
Northwest	2.84	1.85	
Southeast	4.16	3.21	
Southwest	6.82	7.12	
West	4.06	5.21	
Indiana	5.30	4.66	

Only three of the eight regions displayed an increase in the number of suicide prevention lifeline calls between 2016 and 2019 (Table 6). The East and Northeast experienced call rate declined more during this time period. Further, the overall call volume rate in Indiana decreased by 0.6 calls per 1000 population.

Figure 6: Suicide Prevention Lifeline Call Volume Rate by 1000 Population, Rural vs Metropolitan areas (NSPL)
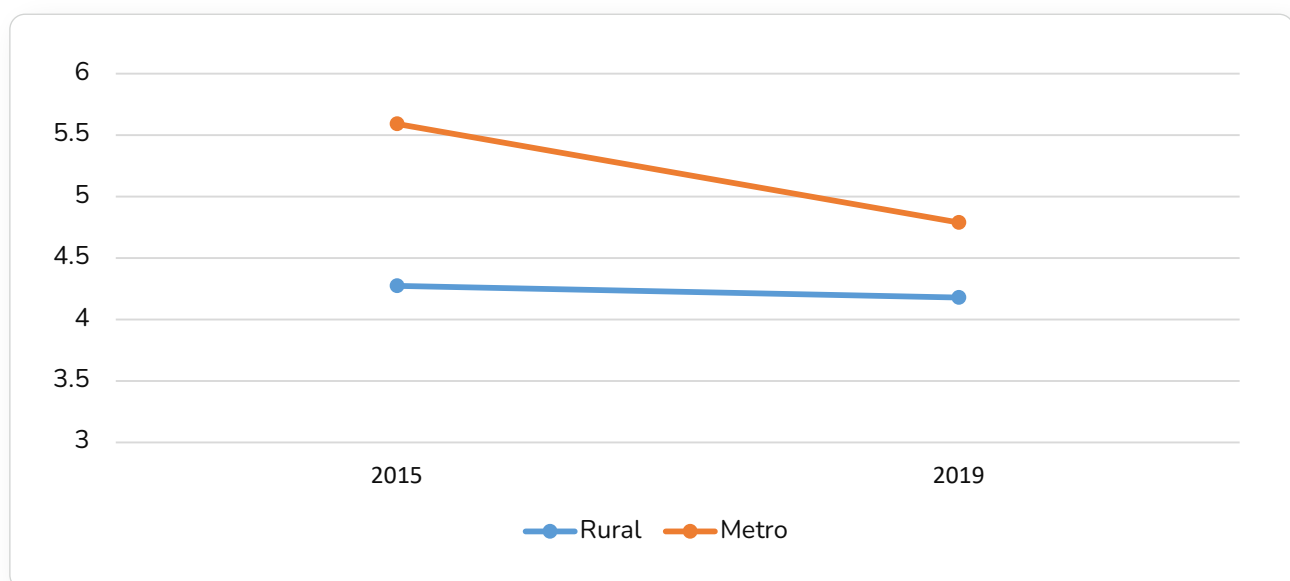
	2015	2019
Rural	4.27	4.18
Metro	5.59	4.79
Indiana	5.30	4.66

During the time period, the suicide prevention lifeline call rate in Indiana's rural areas remained constant, while it fell by 0.8 calls per 1000 population in metro areas (Figure 6). Despite a larger decrease in call volume over the period, the state's metro areas continued to have a higher call rate than their rural counterparts.

Mental Illness Among Youth

According to recent reports, there is an increase in major depressive episodes among adolescents in the United States. In 2019, approximately 2.7 million adolescents aged 12 to 17 reported at least one major depressive episode (Major Depression, 2021). Adolescent youth who develop mental illness, like adults, cannot be linked to a single cause. Many social and biological factors can influence the development of a mental illness, and multiple mental illness can often occur concurrently. 73.8 percent of children aged 3-17 diagnosed with depression also reported having anxiety (Data and Statistics on Children's Mental Health | CDC, 2022). A history of bullying, early or significant loss of a family member or friend, increased academic expectations, socioeconomic status, and many other factors are social and environmental risk factors for a mood disorder or mental mental illness in children. A family history of depression and exposure to psychosocial stress are the two most powerful risk factors for the development of depression in adolescents (Thapar, Collinshaw, Pine and Thapar, 2012).

We now examine the major depressive episodes (MDE) among young people using NSDUH data.

Figure 7: Major Depressive Episodes in the Past Year in People Aged 12 to 17, by Geographic Areas (NSDUH)
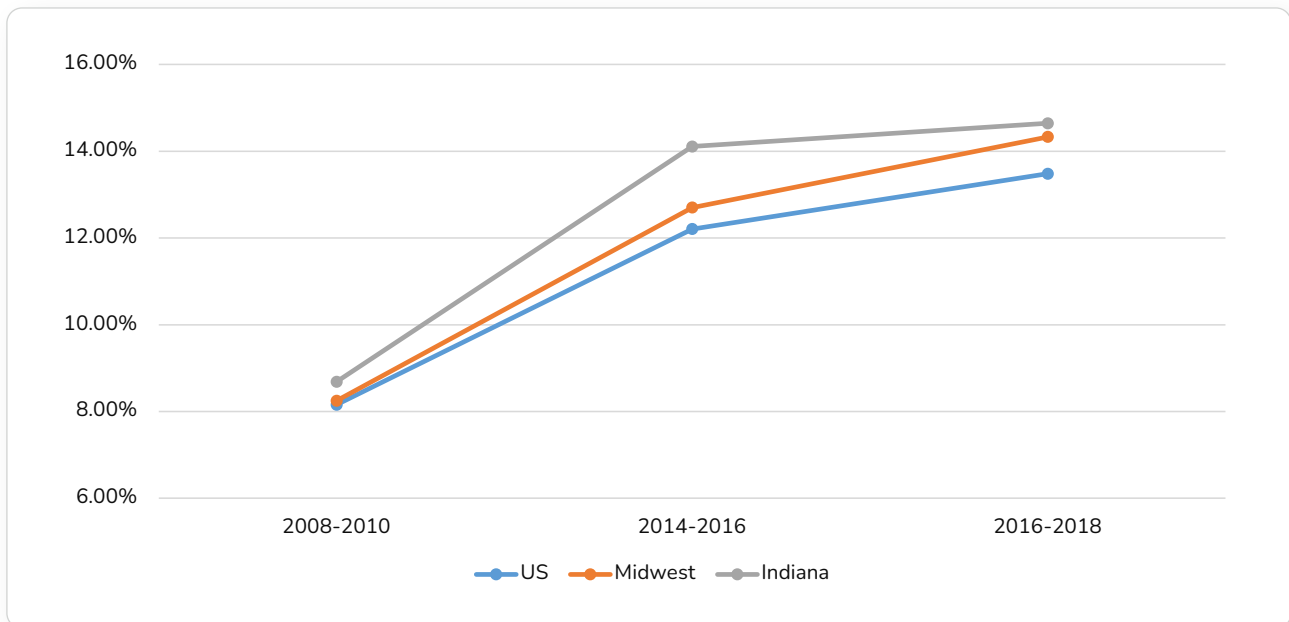
Region	2008-2010	2014-2016	2016-2018
US	8.16%	12.21%	13.48%
Midwest	8.25%	12.70%	14.33%
Indiana	8.69%	14.11%	14.64%

Between 2008 and 2016, there was a significant increase in underage major depressive episodes in all three geographic areas (Figure 7). While the nation and Midwest, in general, saw at least a 4.0 percentage point increase between 2008 to 2016, Indiana showed the greatest change, with a 5.4 percentage point percent increase. Following this increase , the prevalence of underage major depressive episodes increased slightly across all regions.

Table 7: Major Depressive Episodes in the Past Year in People Aged 12 to 17, by Indiana Regions (NSDUH)

NSDUH Region	2008-2010	2014-2016	2016-2018	Trends
Indiana	8.69%	14.11%	14.64%	
Central	8.72%	13.97%	14.08%	
East	8.66%	13.36%	14.37%	
North Central	8.65%	14.72%	15.04%	
Northeast	8.67%	13.77%	14.23%	
Northwest	8.46%	13.39%	13.25%	
Southeast	9.14%	14.34%	16.06%	
Southwest	8.36%	suppressed	suppressed	
West	8.76%	suppressed	16.06%	

Map 7: Major Depressive Episodes in the Past Year in People Aged 12 to 17 (NSDUH)

Between 2008 and 2018, the prevalence of underage major depressive episodes increased in all Indiana regions between 2008 and 2018 (Table 7). In 2018, three out of eight regions have a higher prevalence of underage major depressive episodes (higher than 14.6 percent) than the rest of the state. Map 7 depicts the regional distribution of major depressive episodes in adolescents.
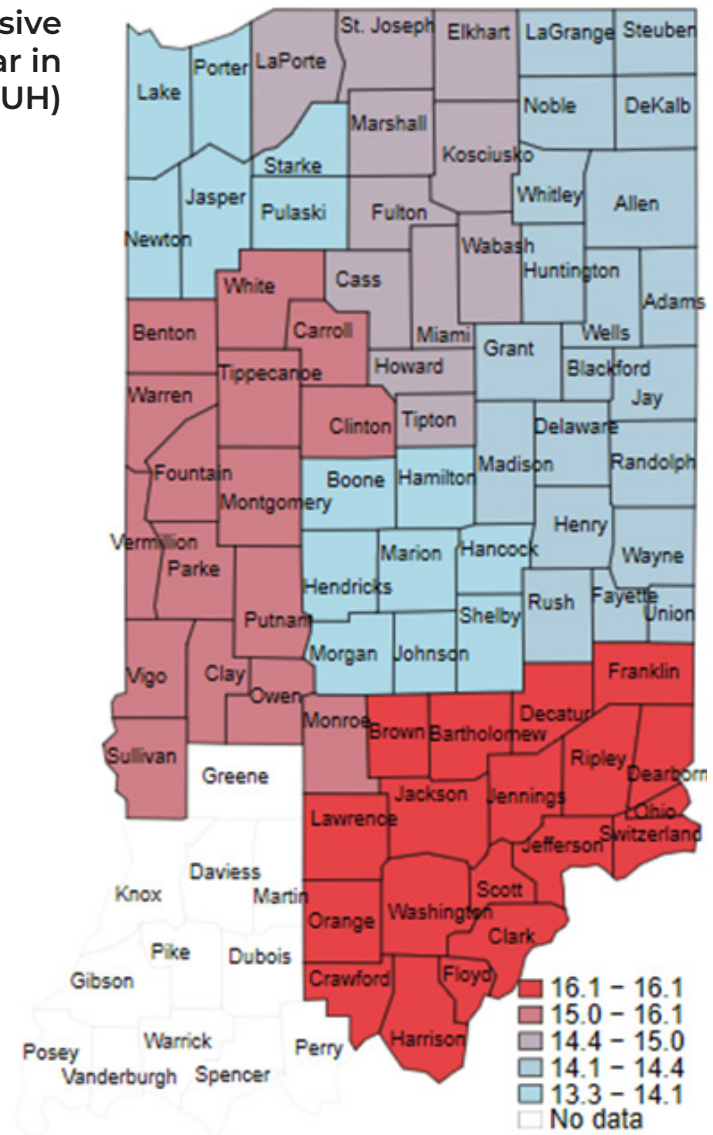
Risk Factors of Suicide Ideation Among Youth

We examined the risk factors or signs of suicide ideation among youth using INYS data for the year 2020.

Figure 8: Percentage of students Who Were Sad or Hopeless for 2 or More Weeks in Past Year, by Grade (INYS)
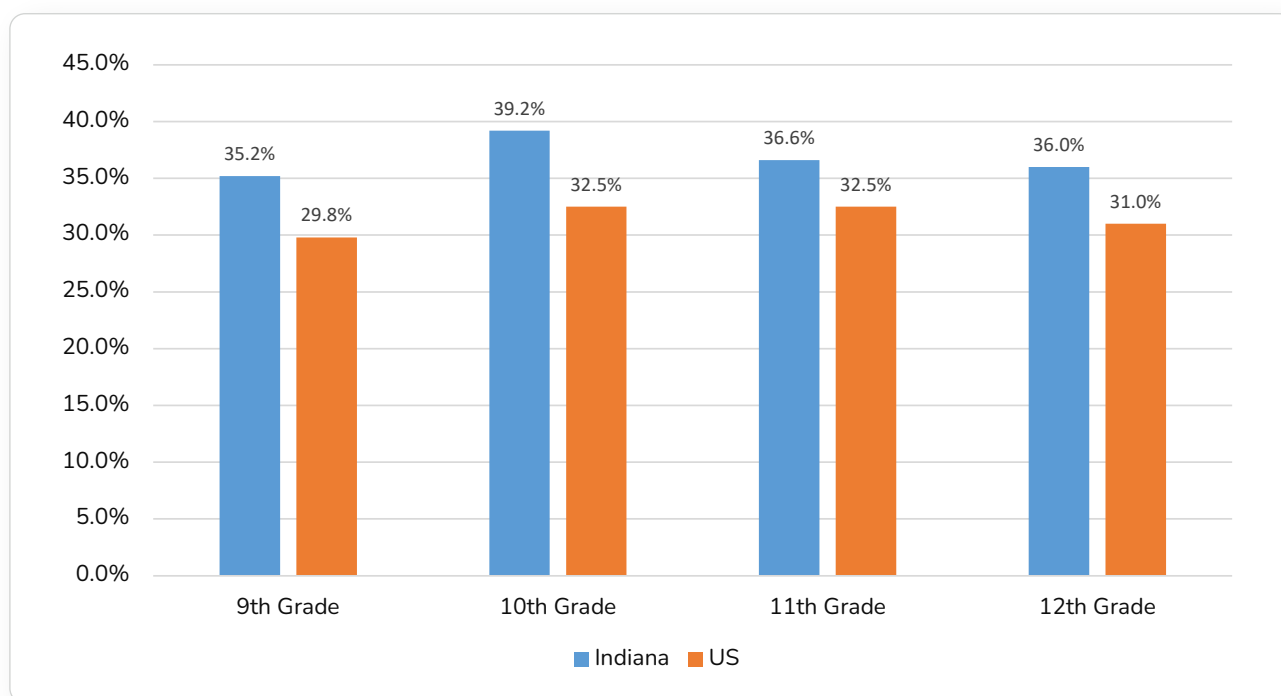
	Indiana	US
9th Grade	35.2%	29.8%
10th Grade	39.2%	32.5%
11th Grade	36.6%	32.5%
12th Grade	36.0%	31.0%

In Indiana, high school students are about 5% more likely to have felt sad or helpless in the previous two weeks relative to the nation in 2020 (Figure 8). These feelings are most common among 10th and 11th graders in both regions.

Table 8: Percentage of Indiana Students Who Were Sad or Hopeless for 2 or More Weeks in 2015 and 2020, by Grade (INYS)

	2015	2020	Trends
6th Grade	21.7%	28.9%	
7th Grade	23.0%	30.5%	
8th Grade	28.5%	33.5%	
9th Grade	29.5%	35.2%	
10th Grade	30.6%	39.2%	
11th Grade	29.7%	36.6%	
12th Grade	26.9%	36.0%	

Indiana high school students are more likely than middle school students to feel sad or hopeless, despite increases in all grade levels between 2015 and 2020 (Table 8). Eight graders had the smallest increase in percent feeling sad or helpless in the last two weeks, at 5.0 percentage point difference between those two time periods, whereas, the 12th graders saw a 9.0 percentage points difference (worse).

CONSEQUENCES
Suicide

Suicide is 12th leading cause of death in the United States in 2020, accounting for14% of all deaths (45,979). [The suicide rate is calculated as (number of suicides / population) x 100,000.] Suicide is the third leading cause of death among people aged 15 to24. A person dies by suicide every 11.5 minutes on average; males die by suicide suicide 41.5 minutes sooner than females (1 male death every 14.4 minutes versus 1 female death every 55.9 minutes).In 2020, males died by suicide at a much higher rate than females (22.5 percent versus 5.6 percent). Whites died by suicide at a higher rate than any other race (15.7 percent versus 7.8 percent of nonwhites), and white males accounted for over 32,000 deaths in 2020.

Suicide by firearm is the most common method (52.8 percent), followed by suffocation/hanging (27.2 percent), and poison (12.0 percent) (Drapeau and McIntosh, 2021). Indiana ranks

27th in the United States for suicide rates with 14 percent [(number of suicides / population) x 100,000]. From 2008 to 2018, Indiana's crude suicide rate (total incidence of suicide per 100,000 people) was higher than the national crude rate. The state's confirmed suicide rate surpassed 1,000 in 2016 and remained above 1,000 until 2019, when the crude rate fell by 10.42 percent. From March 2020 to June 2021,the daily average of EMS/ED visits dealing with suicide/harm increased; the daily average peaked in May 2021 at 195 visits per day. Whites made up the majority of EMS/ED visits due to suicide/self-harm, and the total number of visits increased year by year from 2018-2020. The age group with the highest total number of EMS/ED visits was 25-44 years old, and the total number of visits increased from 2018-2020.This was followed by age groups 45-64, and age groups 18-24 years old (Drapeau, 2021).

Figure 9: The Percentage with Serious Suicidal Thoughts in the Past Year Among People Aged 18 and Older Between 2008 and 2018, by Geographic Region (NSDUH)
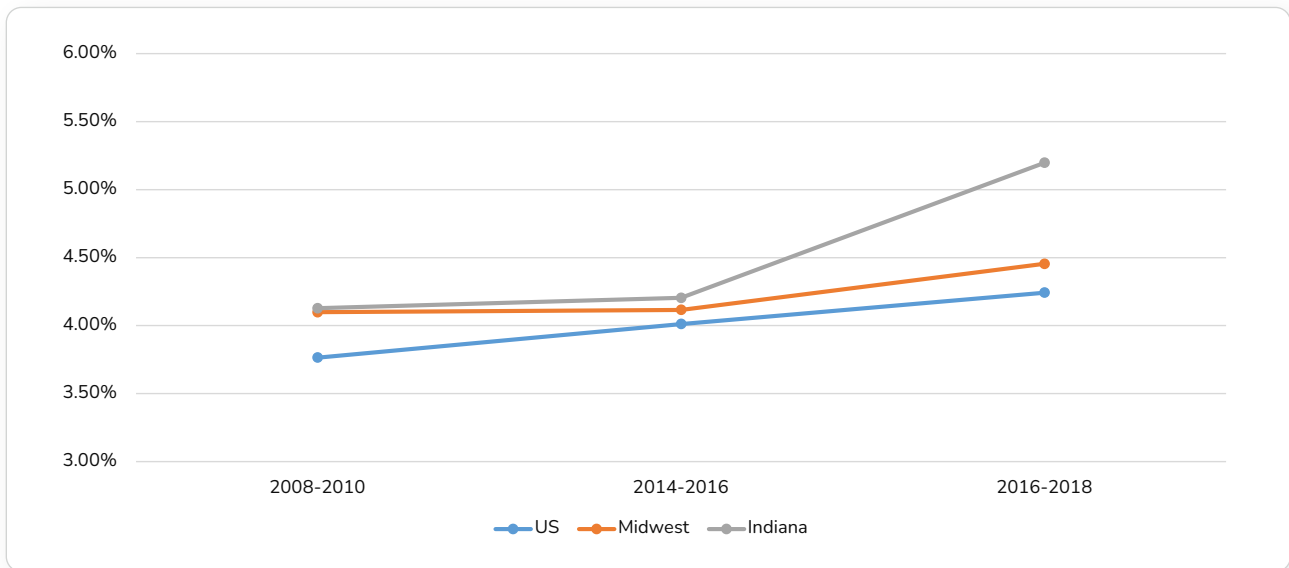
Region	2008-2010	2014-2016	2016-2018
US	3.76%	4.01%	4.24%
Midwest	4.10%	4.12%	4.45%
Indiana	4.13%	4.20%	5.20%

During the past decade, the United States and the Midwest avoided any dramatic increases in adult population with serious suicidal thoughts (Figure 9). Indiana, on the other hand, showed a 1% increase in the latter half of the period.

Table 9: The Percentage with Serious Suicidal Thoughts Among People Aged 18 and Older in Indiana Between 2008 and 2018, by Region (NSDUH)

NSDUH Region	2008-2010	2014-2016	2016-2018	Trends
Indiana	4.13%	4.20%	5.20%	
Central	3.95%	3.92%	4.76%	
East	4.06%	4.26%	5.52%	
North Central	4.15%	4.33%	5.45%	
Northeast	4.35%	4.23%	5.23%	
Northwest	4.17%	3.81%	4.73%	
Southeast	4.09%	4.30%	4.99%	
Southwest	4.22%	4.34%	5.18%	
West	4.29%	4.84%	6.32%	
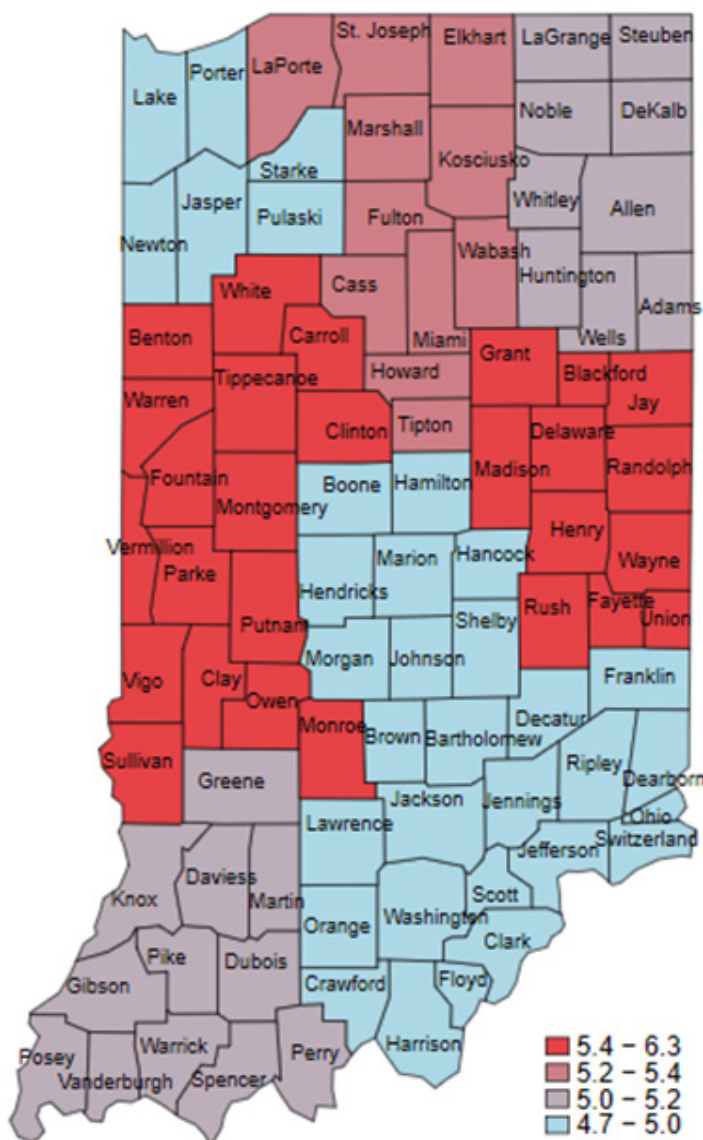
Map 8: The Percentage with Serious Suicidal Thoughts of People Aged 18 and Older in the Previous Years, by Indiana Region (NSDUH)

From 2008 to 2018, every region in Indiana showed an increase in reported serious suicidal thoughts in the previous year among adults 18 and older. (See Table 9). While the majority of the regions increased by less than 1.0 percentage point, the East, North Central, and West increased by up to 2%. In 2018, Map 8 depicts the regional distribution of serious suicidal thoughts among adults.

Legend:
- 5.4 – 6.3
- 5.2 – 5.4
- 5.0 – 5.2
- 4.7 – 5.0

Figure 10: Age-Adjusted Suicide Rate, by Geographic Area (CDC)
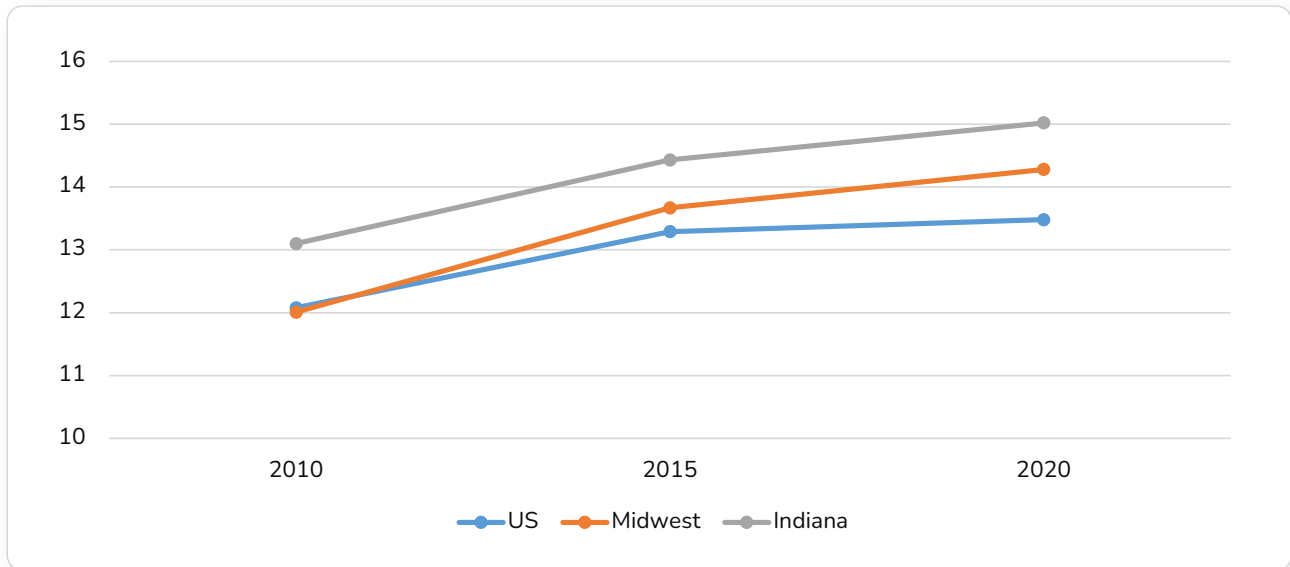
Region	2010	2015	2020
US	12.08	13.29	13.48
Midwest	12.01	13.67	14.28
Indiana	13.1	14.43	15.02

Map 9: Age-Adjusted Suicide Rate (CDC)

Although Indiana had higher age-adjusted suicide rates from 2010 to 2020 similar to Midwest using the data from CDC (Figure 10). Map 9 depicts the county distribution of age-adjusted suicide rate during 2016 to 2020 (five-year average)
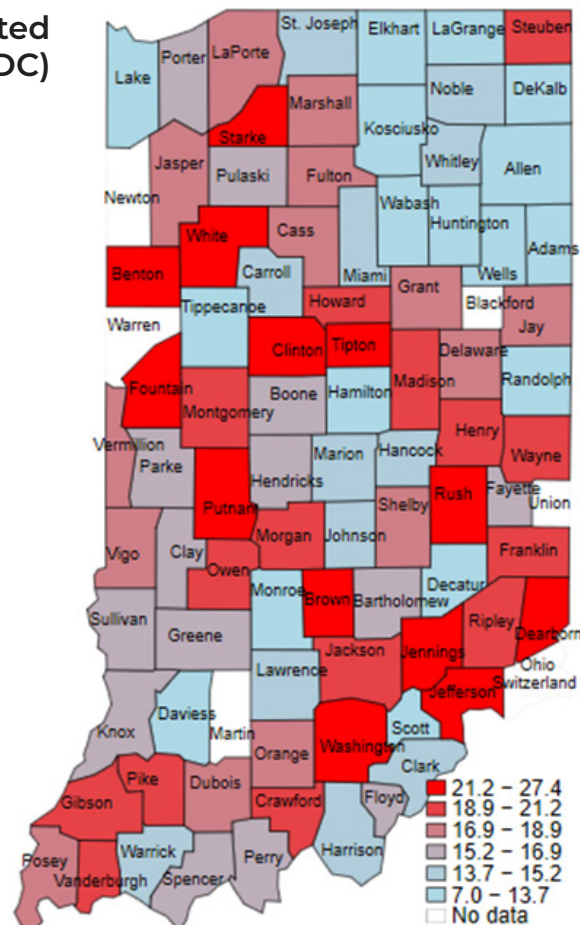
Figure 11: Indiana Years of Potential Life Lost Age-Adjusted Suicide Rate(CDC)
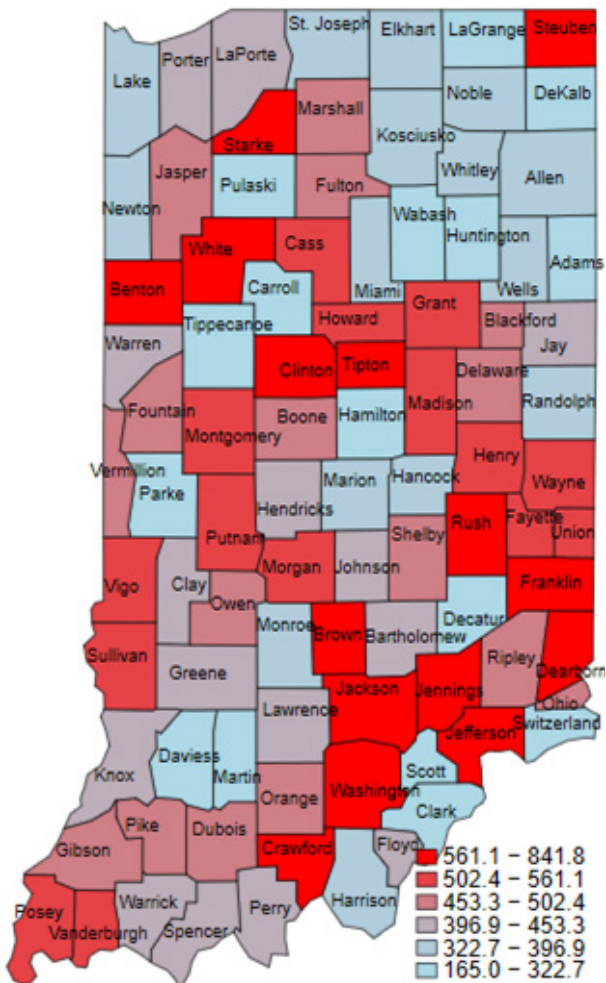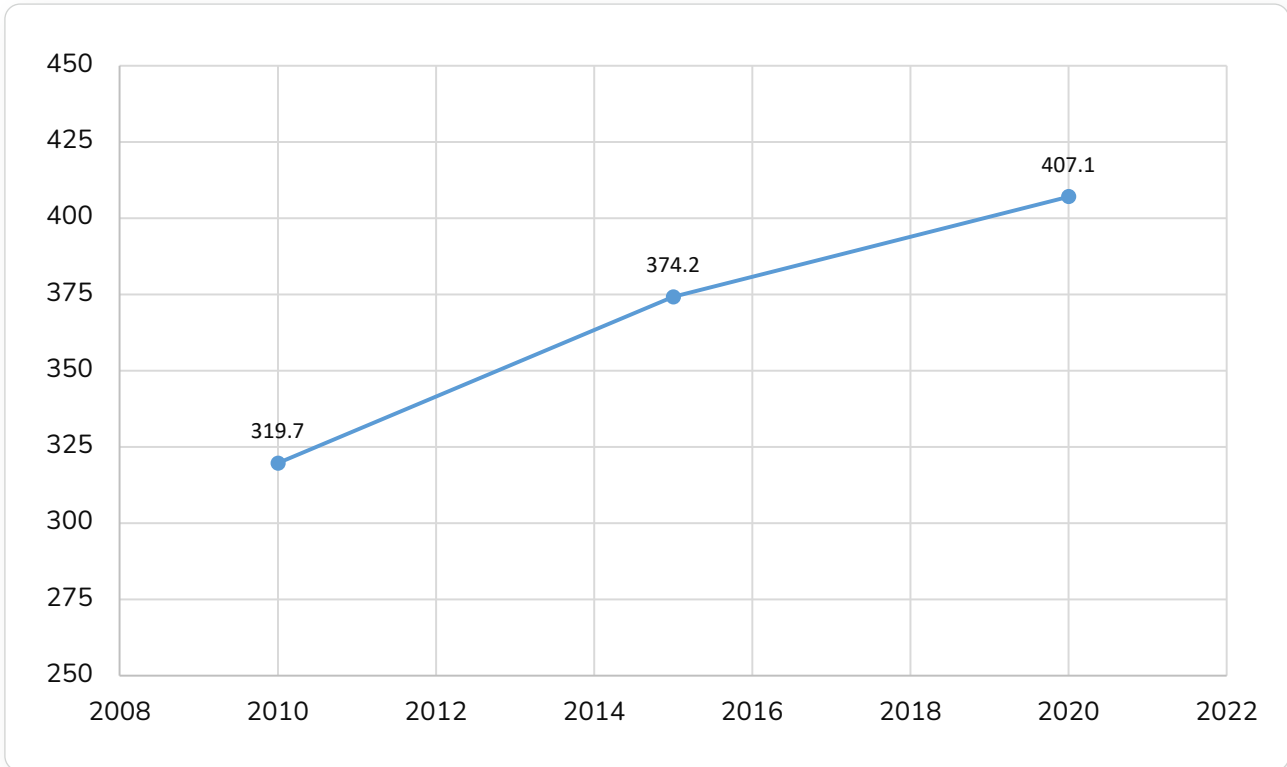
We also analyze the suicide-related years of potential life lost (YPLL) computed by CDC by subtracting age at each death due to suicide from 65 and then adding all individual YPLLs across each suicides. Indiana experienced a nearly 90-point increase in years of potential life lost (YPLL) age-adjusted suicide rate between 2010 and 2020.Figure 11). While the state saw a higher percentage increase in the first five years, Indiana YPLL age-adjusted rates increased significantly between 2015 and 2020. The county distribution of YPLL age-adjusted suicide rate for 2016 to 2020 (five-year average) is depicted on Map 10.

Map 10: Years of Potential Life Lost Age-Adjusted Suicide Rate (CDC)

Suicide Attempts or Made Suicide Plans Among Youth

Figure 12: Percentage of Students Who Considered Attempting Suicide in Last Year, by Grade (INYS)
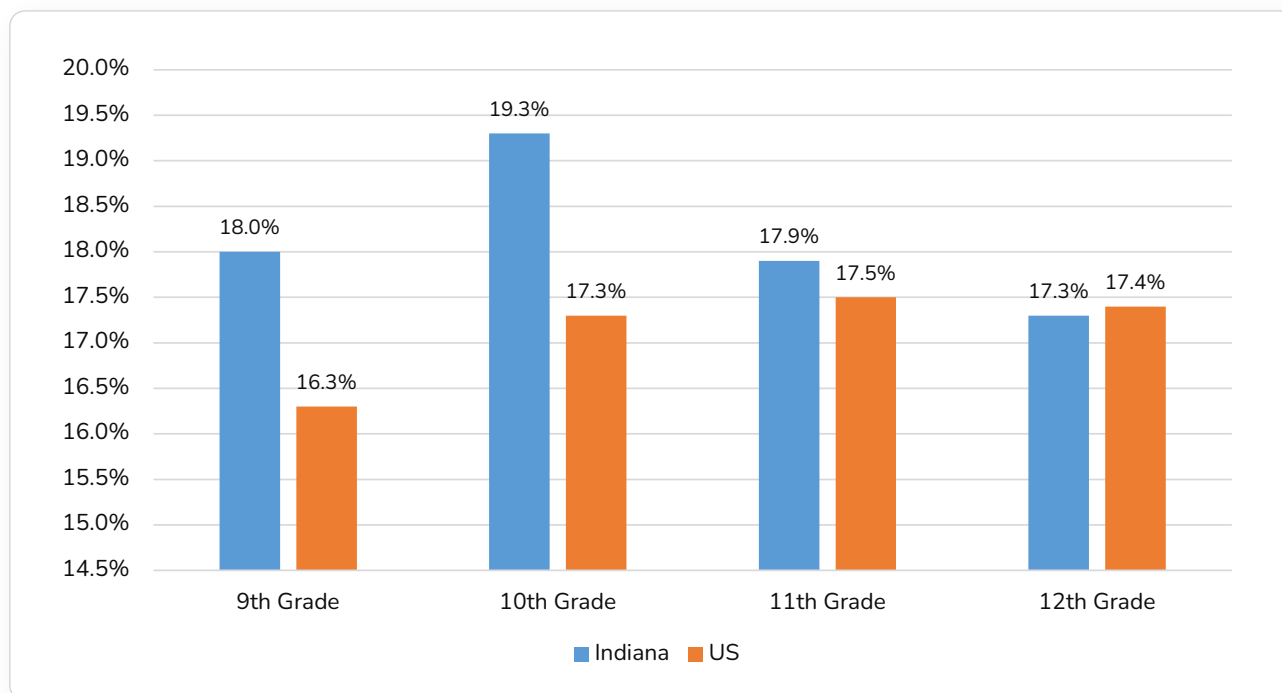
Figure 12 depicts the percentage of high school students in the United States and Indiana who considered suicide in the previous year based on data from the 2020 Indiana Youth Survey. Overall, a higher proportion of Indiana high school students considered suicide than the national average. The disparity between the state and the nation is most visible in grades nine and ten.

Table 10: Indiana Percentage of Students Who Considered Attempting Suicide in Last Year, by Grade (INYS)

	2015	2020	Trends
6th Grade	8.7%	11.8%	
7th Grade	14.1%	15.2%	
8th Grade	18.2%	17.6%	
9th Grade	17.6%	18.0%	
10th Grade	17.1%	19.3%	
11th Grade	16.5%	17.9%	
12th Grade	14.1%	17.3%	

Except for eighth grade, all grades of high school and middle school students saw an increase in the percentage of students who considered suicide between 2015 and 2020 (Table 10). During this time, there was a 3.0 percentage point increase in two grades, sixth and twelfth.

Figure 13: Percentage of Students Who Made Suicide Plan in Last Year, by Grade (INYS)
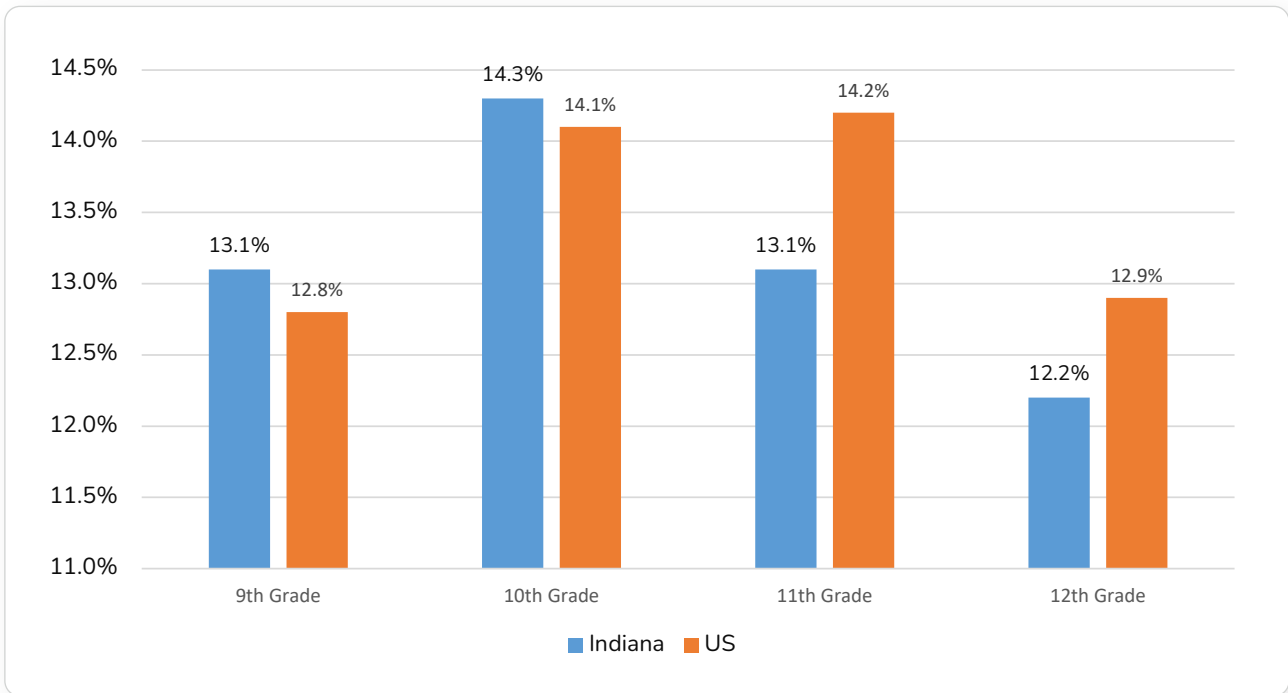
The ninth and tenth grade Indiana high school students are more likely to have made suicide plans than their national counterparts. (Figure 13).

Table 11: The Percentage of Indiana Students Who Made a Suicide Plan in Last Year, by Grade (INYS)

	2015	2020	Trends
6th Grade	6.2%	9.0%	
7th Grade	10.3%	11.7%	
8th Grade	14.0%	13.3%	
9th Grade	13.5%	13.1%	
10th Grade	12.9%	14.3%	
11th Grade	12.3%	13.1%	
12th Grade	10.8%	12.2%	

Between 2015 and 2020, the percentage of eighth and ninth graders in Indiana who made a suicide plan decreased (Table 11). Grade six, on the other hand, increased by nearly 3.0 percentage point during the same time period.

ACCESS TO TREATMENT

Poor mental health and mental illness, do not have a single common cause; mental illness can be caused by a variety of biological and environmental factors. Depression is a type of mental illness characterized by feeling sad or depressed for extended periods of time; risk factors for depression include genetics, environment, social and economic status, and/or the use of illicit drugs or alcohol (Mentalhealth.gov. 2022). It has been discovered that certain individuals who are exposed to abusive households or in households with alcohol use disorders are more likely to develop mental illnesses such as depression and anxiety as well as substance abuse (Shivani, Goldsmith and Anthenelli, 2002). In disorders such as schizophrenia and bipolar disorder, genetics can play a larger role. Having a parent with schizophrenia or bipolar disorder increases the likelihood of the disorder being passed down to offspring by 65-80% (Hyman, 2022). Individuals with chronic diseases are more likely to develop mental illness; for example, people with diabetes or cancer are more likely to develop mental illness (Hyman, 2022). Comorbid depression is diagnosed in 15-25 percent of cancer patients. Cancer is also a major risk factor for death by suicide nearly twice as often as those who did not have cancer (National Cancer Institute, 2022).

Access to appropriate treatment at the appropriate time is critical for mitigating mental illness and its consequences. Map 11 depicts the population-to-mental-health-provider ratios in Indiana counties in 2018. The lower the ratio, the greater the availability of mental health providers.
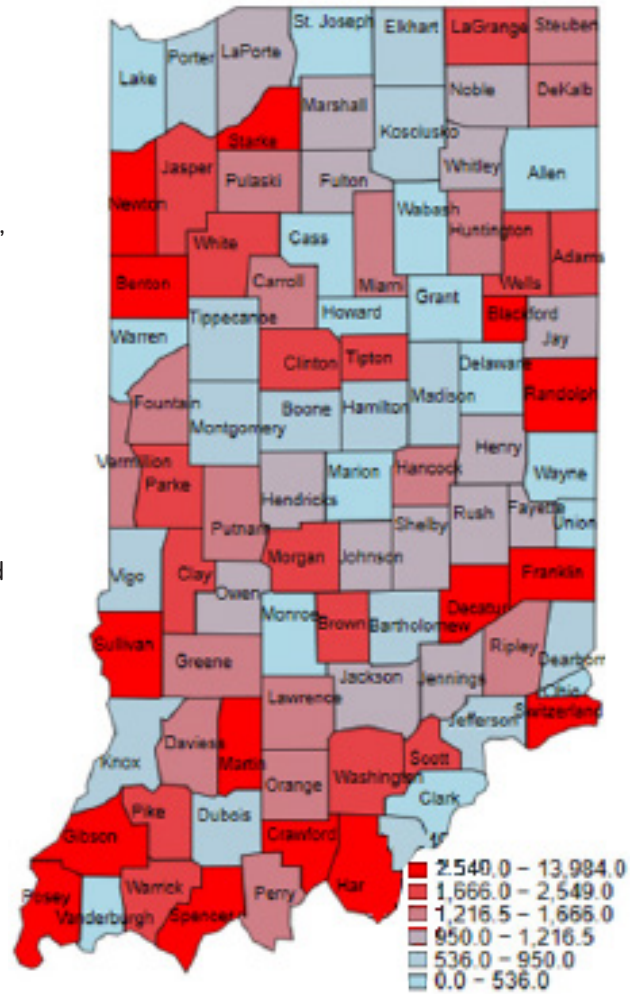
Map 11 Ratio of population to Mental Health Providers (CHR)

Table 12: The Ratio of Population to Mental Health Providers, by Indiana Regions (CHR)

NSDUH Region	2008-2010	2014-2016	2016-2018	Trends
Central	2643:1	601:1	479:1	
East	4001:1	558:1	473:1	
North Central	4494:1	720:1	574:1	
Northeast	5453:1	929:1	714:1	
Northwest	5041:1	727:1	599:1	
Southeast	6417:1	1050:1	887:1	
Southwest	3562:1	994:1	809:1	
West	2791:1	849:1	704:1	
Indiana	3861:1	735:1	594:1	

As shown in Table 12, there has been an increase in mental health providers in response to declining mental health trends. Since 2011, the population-to-mental-health-provider ratio in Indiana has decreased in all regions, possibly leading to increased access over time.

Table 13: Rural vs. Metropolitan Mental Health Providers Ratio (CHR)

Region	2011-2012	2016	2020	Trends
Rural	8337:1	1066:1	876:1	
Metro	3200:1	673:1	544:1	
Indiana	3861:1	735:1	594:1	

Although population to mental health providers ratio is higher in rural areas than in metro areas, both types of regions have shown similar decreases in the ratio over time (Table 13). During this time, the ratio of the entire state fell from 3861:1 to 594:1.

We examine the trends in share of population receiving mental health services using the NSDUH data.

Figure 14: Mental Health Services Received in the Past Year for People Aged 18 and Older, by Geographic Area (NSDUH)
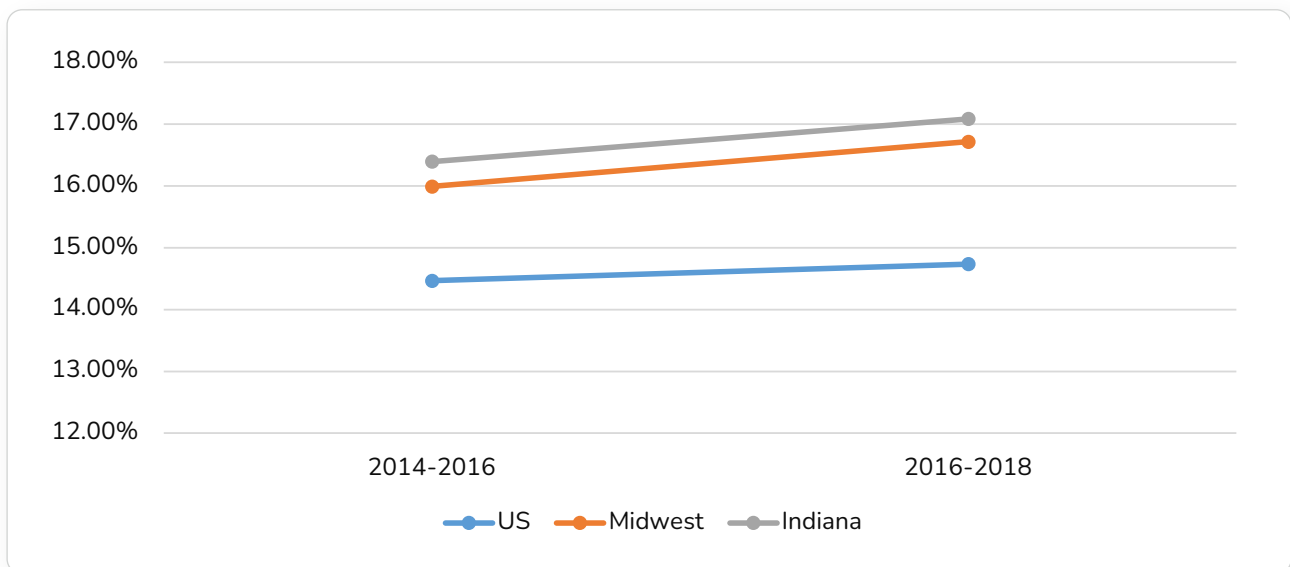
Region	2014-2016	2016-2018
US	14.47%	14.74%
Midwest	15.99%	16.72%
Indiana	16.39%	17.08%

Between 2014 and 2018, there was a slight increase in adults receiving mental health services in all three areas (Figure 14). In 2018, Indiana had the highest percentage of people receiving mental health services, at 17.1 percent. The Midwest region closely followed Indiana, but the United States trailed the others by nearly 2.0 percentage point.

Table 14: Mental Health Services Received in the Past Year for People aged 18 and Older, by Indiana Regions (NSDUH)

Region	2014-2016	2016-2018	Trends
Indiana	16.39%	17.08%	/
Central	15.43%	16.26%	/
East	17.00%	18.26%	/
North Central	16.33%	17.11%	/
Northeast	17.58%	18.00%	/
Northwest	15.26%	14.97%	\
Southeast	16.69%	17.35%	/
Southwest	17.46%	17.94%	/
West	17.32%	18.57%	/

Adults receiving mental health care increased by 1.25 percentage point in Indiana's east and west regions (Table 14). Except for the Northwest region, all other regions saw smaller increases. Northwest Indiana experienced a 0.3 percentage point decrease. The Map 12 depicts the regional distribution of mental health services received in 2018.

Map 12: Received Mental Health Services in the Past Year for People Aged 18 and Older (NSDUH)

Legend:
- 18.0 – 18.6
- 17.9 – 18.0
- 17.3 – 17.9
- 17.1 – 17.3
- 15.0 – 17.1
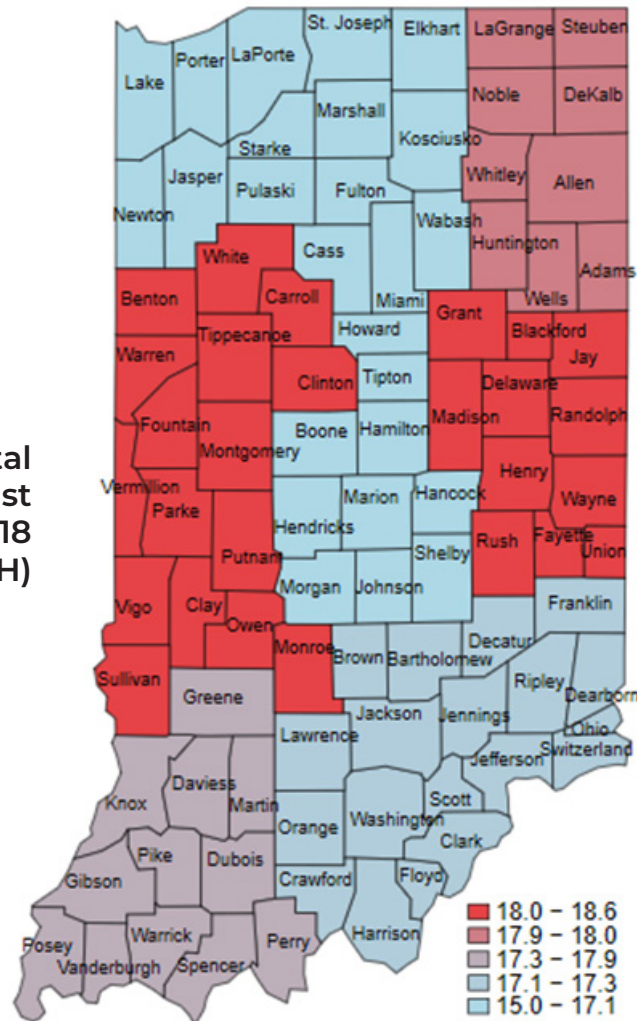
INDIANA SUICIDE PREVENTION PLAN

The Indiana Suicide Prevention Plan for 2021 aims to develop a comprehensive suicide prevention plan by guiding and coordinating suicide prevention activities throughout the state. The plan will be updated every two to three years and will build on previous implementation. During these cycles, five primary groups will meet to oversee various aspects of the plan.

1. Social Determinants of Health Planning Group- focuses on social factors that influence suicide and suicide rates; the group aims to demonstrate the impact of suicide prevention efforts. The goal is to establish a baseline of current social factors, identify current activities for suicide prevention, and develop recommendations for better quality of life for Indiana residents.

2. Continuum of Crisis Care Planning Group- Identifies goals and objectives to improve care quality. The goal is to complete a gap analysis, analyze the results, and identify analysis priorities before providing evidence-based training to clinicians and community.

3. Postvention Response Planning Group- Identifies goals and objectives for the improvement care following a suicide attempt. The goal is to collect evidence-based data and write a best-practices manual for local communities. This will be followed by the creation of marketing materials for suicide prevention and the development of a better support system for residents who have lost a loved one due to suicide.

4. Suicide Prevention Planning Group for Innovation- investigates evidence-based treatment and best practices. The goal is to establish tasks forces and think tanks for suicide prevention, as well as to increase peer support for upcoming suicide prevention programs.

5. Data Quality Planning Group- this group works to improve existing data sources and ensure proper data collection. The goal is to raise funds for suicide prevention efforts as well as to create and share a data repository for suicide- related data.

Currently, these organizations have contributed to the development of a statewide infrastructure to support mental health and addiction, as well as a shift in vision to focus on reducing suicide by improving quality of life. The Indiana Division of Mental Health and Addiction (DMHA) is in charge of the new infrastructure, which includes data collection for suicide prevention, as well as support for organizations and communities looking to ramp up prevention efforts. The DMHA currently has over $4 million in grants to fund suicide prevention in the state and its surrounding communities (Division of Mental Health and Addiction, 2021).

CONCLUSION

Over the last decade, the proportion of the US population suffering from any mental illness (defined as any mental, behavioral, or emotional disorder) has increased. During the same period, the number of major depressive episodes among youth (12 to 17 years old) has increased. According to studies, the COVID-19 pandemic may have harmed both the youth and adult populations' mental health. Our research demonstrates the regional variation in mental health and mental disorders, as well as the consequences in Indiana. In comparison to metro areas, rural counties appear to have more poor mental health days, more frequent mental distress, and less access to mental health providers. Correctly diagnosing the mental disorders and understanding of suicidal behavior/ideation in conjunction with adequate prevention and treatment, may help reduce suicide rates.

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APPENDIX A1

Poor Mental Health Days, by County (CHR)

FIPS	State	County	FSSA Region	NSDUH Region	MSA dummy	2006-2012	2015	2018
18000	Indiana					3.7	4.13	4.65
18001	Indiana	Adams	3	Northeast	0	2.8	3.98	5.01
18003	Indiana	Allen	3	Northeast	1	3.3	3.86	4.82
18005	Indiana	Bartholomew	8	Southeast	1	3.0	3.61	4.48
18007	Indiana	Benton	1	West	1	2.6	4.03	5.02
18009	Indiana	Blackford	4	East	0	5.0	4.10	5.13
18011	Indiana	Boone	9	Central	1	2.8	3.72	3.98
18013	Indiana	Brown	8	Southeast	1	2.5	3.88	4.60
18015	Indiana	Carroll	4	West	1	3.3	3.83	4.74
18017	Indiana	Cass	4	North Central	0	3.6	4.02	4.85
18019	Indiana	Clark	8	Southeast	1	4.8	4.00	4.78
18021	Indiana	Clay	6	West	1	2.3	3.94	5.02
18023	Indiana	Clinton	9	West	0	4.1	3.99	4.84
18025	Indiana	Crawford	7	Southeast	0	4.2	4.33	5.37
18027	Indiana	Daviess	7	Southwest	0	3.8	4.00	5.45
18029	Indiana	Dearborn	8	Southeast	1	3.4	3.81	4.83
18031	Indiana	Decatur	8	Southeast	0	4.7	3.88	4.74
18033	Indiana	DeKalb	3	Northeast	0	3.4	3.92	4.73
18035	Indiana	Delaware	4	East	1	4.9	4.45	5.31
18037	Indiana	Dubois	7	Southwest	0	1.8	3.76	4.67
18039	Indiana	Elkhart	2	North Central	1	3.6	3.99	4.56
18041	Indiana	Fayette	10	East	0	6.7	4.21	5.38
18043	Indiana	Floyd	8	Southeast	1	3.7	3.74	4.57
18045	Indiana	Fountain	9	West	0	3.4	3.92	4.86
18047	Indiana	Franklin	10	Southeast	0	3.1	3.81	4.88
18049	Indiana	Fulton	2	North Central	0	4.0	3.94	5.02
18051	Indiana	Gibson	7	Southwest	0	4.2	3.82	4.94
18053	Indiana	Grant	4	East	0	4.3	4.27	4.89
18055	Indiana	Greene	7	Southwest	0	3.4	3.99	5.17
18057	Indiana	Hamilton	9	Central	1	2.4	3.14	3.89
18059	Indiana	Hancock	10	Central	1	4.0	3.61	4.18
18061	Indiana	Harrison	8	Southeast	1	4.0	3.93	4.87
18063	Indiana	Hendricks	6	Central	1	2.7	3.44	4.23
18065	Indiana	Henry	10	East	0	3.9	4.05	4.88
18067	Indiana	Howard	4	North Central	1	4.9	4.13	5.03
18069	Indiana	Huntington	3	Northeast	0	3.0	3.94	4.72
18071	Indiana	Jackson	8	Southeast	0	4.1	4.10	4.91
18073	Indiana	Jasper	1	Northwest	1	4.6	3.71	4.77
18075	Indiana	Jay	3	East	0	4.0	4.07	5.39
18077	Indiana	Jefferson	8	Southeast	0	4.8	4.11	5.18
18079	Indiana	Jennings	8	Southeast	0	5.1	4.01	5.15
18081	Indiana	Johnson	5	Central	1	3.2	3.65	4.33
18083	Indiana	Knox	7	Southwest	0	5.3	4.02	4.97
18085	Indiana	Kosciusko	3	North Central	0	3.2	3.82	4.59
18087	Indiana	LaGrange	2	Northeast	0	3.7	4.08	5.36

FIPS	State	County	FSSA Region	NSDUH Region	MSA dummy	2006-2012	2015	2018
18089	Indiana	Lake	1	Northwest	1	3.5	4.05	4.96
18091	Indiana	LaPorte	2	North Central	1	3.5	4.13	4.97
18093	Indiana	Lawrence	7	Southeast	0	4.0	4.03	4.78
18095	Indiana	Madison	4	East	1	4.8	4.29	5.11
18097	Indiana	Marion	5	Central	1	3.8	4.23	4.88
18099	Indiana	Marshall	2	North Central	0	3.1	3.97	4.72
18101	Indiana	Martin	7	Southwest	0		3.98	4.99
18103	Indiana	Miami	4	North Central	0	4.0	4.04	4.95
18105	Indiana	Monroe	5	West	1	3.8	4.29	4.71
18107	Indiana	Montgomery	9	West	0	4.0	3.96	4.88
18109	Indiana	Morgan	5	Central	1	2.7	3.85	4.75
18111	Indiana	Newton	1	Northwest	1	5.0	4.06	5.24
18113	Indiana	Noble	3	Northeast	0	3.9	3.99	4.76
18115	Indiana	Ohio	8	Southeast	1		3.65	4.73
18117	Indiana	Orange	7	Southeast	0	6.2	4.24	5.31
18119	Indiana	Owen	6	West	1	3.6	3.99	5.05
18121	Indiana	Parke	6	West	0	3.4	4.28	5.13
18123	Indiana	Perry	7	Southwest	0	4.3	3.95	4.87
18125	Indiana	Pike	7	Southwest	0		3.82	4.97
18127	Indiana	Porter	1	Northwest	1	3.4	3.86	4.45
18129	Indiana	Posey	7	Southwest	1	2.3	3.80	4.64
18131	Indiana	Pulaski	2	Northwest	0	3.0	4.04	5.04
18133	Indiana	Putnam	6	West	1	2.8	3.72	4.68
18135	Indiana	Randolph	4	East	0	3.6	4.23	5.00
18137	Indiana	Ripley	8	Southeast	0	4.0	3.84	4.88
18139	Indiana	Rush	10	East	0	3.0	4.15	5.17
18141	Indiana	St. Joseph	2	North Central	1	3.4	3.99	5.01
18143	Indiana	Scott	8	Southeast	1	4.0	4.17	5.18
18145	Indiana	Shelby	10	Central	1	4.5	3.86	5.02
18147	Indiana	Spencer	7	Southwest	0	3.2	3.76	4.80
18149	Indiana	Starke	2	Northwest	0	4.8	4.23	5.24
18151	Indiana	Steuben	3	Northeast	0	3.7	3.81	4.70
18153	Indiana	Sullivan	7	West	1	4.0	4.24	5.00
18155	Indiana	Switzerland	8	Southeast	0	3.7	4.26	5.33
18157	Indiana	Tippecanoe	9	West	1	3.9	4.09	4.57
18159	Indiana	Tipton	4	North Central	0	3.5	3.77	4.64
18161	Indiana	Union	10	East	1	2.9	3.94	5.03
18163	Indiana	Vanderburgh	7	Southwest	1	4.2	4.27	5.15
18165	Indiana	Vermillion	6	West	1	3.6	3.83	5.05
18167	Indiana	Vigo	6	West	1	4.6	4.11	4.99
18169	Indiana	Wabash	4	North Central	0	2.9	4.02	5.01
18171	Indiana	Warren	9	West	0	3.7	3.70	4.71
18173	Indiana	Warrick	7	Southwest	1	4.1	3.69	4.36
18175	Indiana	Washington	8	Southeast	1	3.9	4.10	5.25
18177	Indiana	Wayne	10	East	0	4.6	4.39	4.97
18179	Indiana	Wells	3	Northeast	1	3.4	3.73	4.75
18181	Indiana	White	4	West	0	3.3	3.76	4.62
18183	Indiana	Whitley	3	Northeast	1	2.0	3.75	4.47

APPENDIX A2

Frequent Mental Distress, by County (CHR)

FIPS	State	County	FSSA Region	NSDUH Region	MSA dummy	2015	2018
18000	Indiana					12.61	14.68
18001	Indiana	Adams	3	Northeast	0	11.92	16.84
18003	Indiana	Allen	3	Northeast	1	11.78	14.86
18005	Indiana	Bartholomew	8	Southeast	1	10.84	13.89
18007	Indiana	Benton	1	West	1	11.99	16.51
18009	Indiana	Blackford	4	East	0	12.16	16.56
18011	Indiana	Boone	9	Central	1	10.46	12.19
18013	Indiana	Brown	8	Southeast	1	11.61	14.66
18015	Indiana	Carroll	4	West	1	11.30	15.35
18017	Indiana	Cass	4	North Central	0	12.08	16.02
18019	Indiana	Clark	8	Southeast	1	11.55	15.16
18021	Indiana	Clay	6	West	1	11.87	16.02
18023	Indiana	Clinton	9	West	0	11.88	15.61
18025	Indiana	Crawford	7	Southeast	0	13.18	17.69
18027	Indiana	Daviess	7	Southwest	0	11.87	17.44
18029	Indiana	Dearborn	8	Southeast	1	10.95	15.16
18031	Indiana	Decatur	8	Southeast	0	11.50	15.21
18033	Indiana	DeKalb	3	Northeast	0	11.68	15.44
18035	Indiana	Delaware	4	East	1	13.23	16.46
18037	Indiana	Dubois	7	Southwest	0	10.99	14.74
18039	Indiana	Elkhart	2	North Central	1	12.14	15.57
18041	Indiana	Fayette	10	East	0	12.80	17.53
18043	Indiana	Floyd	8	Southeast	1	11.17	14.55
18045	Indiana	Fountain	9	West	0	11.56	15.89
18047	Indiana	Franklin	10	Southeast	0	11.33	15.46
18049	Indiana	Fulton	2	North Central	0	11.74	15.97
18051	Indiana	Gibson	7	Southwest	0	11.21	15.33
18053	Indiana	Grant	4	East	0	12.68	16.54
18055	Indiana	Greene	7	Southwest	0	11.69	16.58
18057	Indiana	Hamilton	9	Central	1	9.50	11.75
18059	Indiana	Hancock	10	Central	1	10.44	13.51
18061	Indiana	Harrison	8	Southeast	1	11.45	15.55
18063	Indiana	Hendricks	6	Central	1	10.06	12.98
18065	Indiana	Henry	10	East	0	11.91	15.95
18067	Indiana	Howard	4	North Central	1	12.28	16.13
18069	Indiana	Huntington	3	Northeast	0	11.61	15.36
18071	Indiana	Jackson	8	Southeast	0	11.97	16.26
18073	Indiana	Jasper	1	Northwest	1	10.92	15.40
18075	Indiana	Jay	3	East	0	12.38	17.60
18077	Indiana	Jefferson	8	Southeast	0	12.16	16.24
18079	Indiana	Jennings	8	Southeast	0	12.00	16.87
18081	Indiana	Johnson	5	Central	1	10.69	13.71
18083	Indiana	Knox	7	Southwest	0	11.93	16.32
18085	Indiana	Kosciusko	3	North Central	0	11.18	15.06
18087	Indiana	LaGrange	2	Northeast	0	12.24	17.90

FIPS	State	County	FSSA Region	NSDUH Region	MSA dummy	2015	2018
18089	Indiana	Lake	1	Northwest	1	12.27	15.46
18091	Indiana	LaPorte	2	North Central	1	12.20	16.02
18093	Indiana	Lawrence	7	Southeast	0	11.88	15.95
18095	Indiana	Madison	4	East	1	12.43	16.61
18097	Indiana	Marion	5	Central	1	13.10	14.98
18099	Indiana	Marshall	2	North Central	0	11.81	15.70
18101	Indiana	Martin	7	Southwest	0	11.84	16.34
18103	Indiana	Miami	4	North Central	0	12.13	16.50
18105	Indiana	Monroe	5	West	1	12.72	14.68
18107	Indiana	Montgomery	9	West	0	11.71	15.38
18109	Indiana	Morgan	5	Central	1	11.24	15.59
18111	Indiana	Newton	1	Northwest	1	12.08	16.56
18113	Indiana	Noble	3	Northeast	0	11.80	15.50
18115	Indiana	Ohio	8	Southeast	1	10.59	15.01
18117	Indiana	Orange	7	Southeast	0	12.73	17.46
18119	Indiana	Owen	6	West	1	11.92	16.82
18121	Indiana	Parke	6	West	0	12.93	16.95
18123	Indiana	Perry	7	Southwest	0	11.59	15.71
18125	Indiana	Pike	7	Southwest	0	11.32	16.07
18127	Indiana	Porter	1	Northwest	1	11.11	13.92
18129	Indiana	Posey	7	Southwest	1	10.88	14.71
18131	Indiana	Pulaski	2	Northwest	0	11.97	16.41
18133	Indiana	Putnam	6	West	1	10.96	15.32
18135	Indiana	Randolph	4	East	0	12.60	16.38
18137	Indiana	Ripley	8	Southeast	0	11.12	15.77
18139	Indiana	Rush	10	East	0	12.30	16.84
18141	Indiana	St. Joseph	2	North Central	1	12.13	14.91
18143	Indiana	Scott	8	Southeast	1	12.39	16.93
18145	Indiana	Shelby	10	Central	1	11.53	15.85
18147	Indiana	Spencer	7	Southwest	0	10.89	15.40
18149	Indiana	Starke	2	Northwest	0	12.57	17.16
18151	Indiana	Steuben	3	Northeast	0	11.12	15.09
18153	Indiana	Sullivan	7	West	1	12.61	16.26
18155	Indiana	Switzerland	8	Southeast	0	12.95	17.66
18157	Indiana	Tippecanoe	9	West	1	12.36	14.30
18159	Indiana	Tipton	4	North Central	0	10.99	14.89
18161	Indiana	Union	10	East	1	11.69	16.18
18163	Indiana	Vanderburgh	7	Southwest	1	12.31	15.83
18165	Indiana	Vermillion	6	West	1	11.31	16.20
18167	Indiana	Vigo	6	West	1	12.76	16.16
18169	Indiana	Wabash	4	North Central	0	11.90	16.09
18171	Indiana	Warren	9	West	0	10.77	14.98
18173	Indiana	Warrick	7	Southwest	1	10.76	13.73
18175	Indiana	Washington	8	Southeast	1	12.30	16.66
18177	Indiana	Wayne	10	East	0	13.10	16.49
18179	Indiana	Wells	3	Northeast	1	11.14	15.14
18181	Indiana	White	4	West	0	11.00	15.16
18183	Indiana	Whitley	3	Northeast	1	10.81	14.57

APPENDIX A3

Suicide Prevention Lifeline Call Volume, by County (National Suicide Prevention Lifeline)

FIPS	County	FSSA Region	NSDUH Region	MSA dummy	1000 Population 2015	Calls Initiated 2015	1000 Population 2019	Calls Initiated 2019
18000					6568.645	34,804	6665.703	31,045
18001	Adams	3	Northeast	0	34.642	268	35.376	96
18003	Allen	3	Northeast	1	363.453	3,650	372.575	1,660
18005	Bartholomew	8	Southeast	1	79.488	349	82.481	322
18007	Benton	1	West	1	8.752	6	8.677	24
18009	Blackford	4	East	0	12.476	20	12.013	23
18011	Boone	9	Central	1	60.511	114	65.544	120
18013	Brown	8	Southeast	1	15.011	22	15.064	21
18015	Carroll	4	West	1	20.014	12	20.074	17
18017	Cass	4	North Central	0	38.476	66	37.88	64
18019	Clark	8	Southeast	1	113.181	749	116.507	150
18021	Clay	6	West	1	26.686	25	26.234	22
18023	Clinton	9	West	0	32.835	111	32.273	119
18025	Crawford	7	Southeast	0	10.591	<6	10.569	<6
18027	Daviess	7	Southwest	0	32.411	84	33.12	64
18029	Dearborn	8	Southeast	1	49.679	158	49.479	136
18031	Decatur	8	Southeast	0	26.24	71	26.562	129
18033	DeKalb	3	Northeast	0	42.449	244	42.927	95
18035	Delaware	4	East	1	117.335	1,313	115.02	529
18037	Dubois	7	Southwest	0	42.291	105	42.543	129
18039	Elkhart	2	North Central	1	200.685	902	204.558	734
18041	Fayette	10	East	0	23.773	32	23.194	16
18043	Floyd	8	Southeast	1	75.9	343	77.32	324
18045	Fountain	9	West	0	16.888	64	16.43	75
18047	Franklin	10	Southeast	0	22.935	79	22.774	72
18049	Fulton	2	North Central	0	20.527	103	20.096	52
18051	Gibson	7	Southwest	0	33.668	95	33.656	76
18053	Grant	4	East	0	68.896	285	66.452	304
18055	Greene	7	Southwest	0	32.815	124	32.159	93
18057	Hamilton	9	Central	1	296.635	328	323.117	682
18059	Hancock	10	Central	1	71.328	107	75.164	298
18061	Harrison	8	Southeast	1	39.23	97	39.94	231
18063	Hendricks	6	Central	1	153.435	75	163.799	129
18065	Henry	10	East	0	49.146	118	48.255	149
18067	Howard	4	North Central	1	82.765	283	82.331	488
18069	Huntington	3	Northeast	0	36.863	107	36.359	89
18071	Jackson	8	Southeast	0	43.471	172	44.025	134
18073	Jasper	1	Northwest	1	33.448	77	33.447	115
18075	Jay	3	East	0	21.255	38	20.84	49
18077	Jefferson	8	Southeast	0	32.453	127	32.201	125
18079	Jennings	8	Southeast	0	28.113	117	27.71	59
18081	Johnson	5	Central	1	145.645	198	153.716	204
18083	Knox	7	Southwest	0	38.062	124	37.065	173
18085	Kosciusko	3	North Central	0	77.983	294	79.035	280
18087	LaGrange	2	Northeast	0	38.084	60	39.193	52

FIPS	County	FSSA Region	NSDUH Region	MSA dummy	1000 Population 2015	Calls Initiated 2015	1000 Population 2019	Calls Initiated 2019
18089	Lake	1	Northwest	1	491.596	530	485.707	346
18091	LaPorte	2	North Central	1	111.28	5,429	110.154	3,885
18093	Lawrence	7	Southeast	0	45.814	246	45.548	136
18095	Madison	4	East	1	130.28	1,803	129.455	608
18097	Marion	5	Central	1	926.335	6,230	951.869	7,688
18099	Marshall	2	North Central	0	46.962	127	46.461	227
18101	Martin	7	Southwest	0	10.262	223	10.212	13
18103	Miami	4	North Central	0	36.211	92	35.815	217
18105	Monroe	5	West	1	142.404	991	146.461	1,680
18107	Montgomery	9	West	0	38.172	154	38.287	192
18109	Morgan	5	Central	1	69.403	173	69.922	115
18111	Newton	1	Northwest	1	14.057	7	13.992	26
18113	Noble	3	Northeast	0	47.546	118	47.506	159
18115	Ohio	8	Southeast	1	6.033	<6	5.874	<6
18117	Orange	7	Southeast	0	19.725	45	19.545	71
18119	Owen	6	West	1	21.192	50	20.835	38
18121	Parke	6	West	0	17.107	29	16.946	50
18123	Perry	7	Southwest	0	19.414	37	19.102	34
18125	Pike	7	Southwest	0	12.687	27	12.378	24
18127	Porter	1	Northwest	1	166.57	1,414	168.636	766
18129	Posey	7	Southwest	1	25.567	27	25.56	46
18131	Pulaski	2	Northwest	0	13.047	29	12.559	46
18133	Putnam	6	West	1	37.65	341	37.384	108
18135	Randolph	4	East	0	25.596	61	24.926	50
18137	Ripley	8	Southeast	0	28.612	88	28.391	67
18139	Rush	10	East	0	16.991	65	16.641	65
18141	St. Joseph	2	North Central	1	267.246	81	270.216	141
18143	Scott	8	Southeast	1	23.783	172	23.759	235
18145	Shelby	10	Central	1	44.441	23	44.438	59
18147	Spencer	7	Southwest	0	20.856	1,506	20.447	1,609
18149	Starke	2	Northwest	0	23.117	47	22.952	63
18151	Steuben	3	Northeast	0	34.267	115	34.453	101
18153	Sullivan	7	West	1	21.111	12	20.73	<6
18155	Switzerland	8	Southeast	0	10.5	15	10.685	8
18157	Tippecanoe	9	West	1	180.952	586	191.553	946
18159	Tipton	4	North Central	0	15.573	11	15.162	10
18161	Union	10	East	1	7.299	13	7.113	15
18163	Vanderburgh	7	Southwest	1	181.305	1,055	181.291	1,235
18165	Vermillion	6	West	1	15.86	34	15.539	23
18167	Vigo	6	West	1	108.268	457	107.459	456
18169	Wabash	4	North Central	0	32.358	66	31.389	118
18171	Warren	9	West	0	8.367	<6	8.237	<6
18173	Warrick	7	Southwest	1	60.995	71	62.28	135
18175	Washington	8	Southeast	1	27.93	59	27.848	50
18177	Wayne	10	East	0	67.866	234	66.342	271
18179	Wells	3	Northeast	1	27.796	92	28.011	70
18181	White	4	West	0	24.388	52	24.149	57
18183	Whitley	3	Northeast	1	33.33	43	33.73	55

APPENDIX A4

Age-Adjusted Suicide Rate, by County (CDC)

FIPS	State	County	FSSA Region	NSDUH Region	MSA dummy	2006 -2010	2011 -2015	2016 -2020
18000	Indiana					13.1	14.43	15.02
18001	Indiana	Adams	3	Northeast	0	9.9**	--	7.0**
18003	Indiana	Allen	3	Northeast	1	11.7	12	13.1
18005	Indiana	Bartholomew	8	Southeast	1	10.9	15.9	15.4
18007	Indiana	Benton	1	West	1	--	--	26.4**
18009	Indiana	Blackford	4	East	0	--	--	--
18011	Indiana	Boone	9	Central	1	9.9	16.2	16
18013	Indiana	Brown	8	Southeast	1	16.4**	19.1**	24.6**
18015	Indiana	Carroll	4	West	1	11.2**	17.8**	14.2**
18017	Indiana	Cass	4	North Central	0	13.2	14.2	17.6
18019	Indiana	Clark	8	Southeast	1	13.4	15.8	14.3
18021	Indiana	Clay	6	West	1	17.9	15.9	15.5**
18023	Indiana	Clinton	9	West	0	17.2	12.3**	23.2
18025	Indiana	Crawford	7	Southeast	0	--	--	21.2**
18027	Indiana	Daviess	7	Southwest	0	7.3**	10.4**	10.0**
18029	Indiana	Dearborn	8	Southeast	1	11.3	15.6	26.1
18031	Indiana	Decatur	8	Southeast	0	12.1**	14.9**	11.3**
18033	Indiana	DeKalb	3	Northeast	0	15.9	15.4	12.8
18035	Indiana	Delaware	4	East	1	12.9	12.8	17.4
18037	Indiana	Dubois	7	Southwest	0	10.7	16.6	18.2
18039	Indiana	Elkhart	2	North Central	1	9	10.7	12.5
18041	Indiana	Fayette	10	East	0	13.1**	25.2	16.4**
18043	Indiana	Floyd	8	Southeast	1	13.2	15	16.4
18045	Indiana	Fountain	9	West	0	14.6**	18.7**	21.8**
18047	Indiana	Franklin	10	Southeast	0	13.3**	16.6**	21.1
18049	Indiana	Fulton	2	North Central	0	11.2**	18.1**	17.4**
18051	Indiana	Gibson	7	Southwest	0	16.3	22.8	19.8
18053	Indiana	Grant	4	East	0	11.2	15.5	18.2
18055	Indiana	Greene	7	Southwest	0	9.1**	20.3	15.9
18057	Indiana	Hamilton	9	Central	1	9.4	10.3	11.4
18059	Indiana	Hancock	10	Central	1	11	16	14.8
18061	Indiana	Harrison	8	Southeast	1	12.2	13.5	15.2
18063	Indiana	Hendricks	6	Central	1	10.3	12.5	15.3
18065	Indiana	Henry	10	East	0	15.7	17.8	20
18067	Indiana	Howard	4	North Central	1	13.8	12.2	19
18069	Indiana	Huntington	3	Northeast	0	9.8**	13.8	12.3
18071	Indiana	Jackson	8	Southeast	0	9.0**	13.3	19.9
18073	Indiana	Jasper	1	Northwest	1	15.4	10.5**	17.2
18075	Indiana	Jay	3	East	0	13.5**	9.5**	18.2**
18077	Indiana	Jefferson	8	Southeast	0	17.8	18	22
18079	Indiana	Jennings	8	Southeast	0	16.1	19.8	27.4
18081	Indiana	Johnson	5	Central	1	9.2	11.9	14.6
18083	Indiana	Knox	7	Southwest	0	15.5	19	16.4
18085	Indiana	Kosciusko	3	North Central	0	9.8	13	13.7
18087	Indiana	LaGrange	2	Northeast	0	9.7**	8.9**	11.5**

FIPS	State	County	FSSA Region	NSDUH Region	MSA dummy	2006 -2010	2011 -2015	2016 -2020
18089	Indiana	Lake	1	Northwest	1	11.3	13.2	12.3
18091	Indiana	LaPorte	2	North Central	1	13.3	16	17.5
18093	Indiana	Lawrence	7	Southeast	0	13.5	13.3	14.6
18095	Indiana	Madison	4	East	1	16.7	17.9	20.6
18097	Indiana	Marion	5	Central	1	13.6	14.8	14.8
18099	Indiana	Marshall	2	North Central	0	15.6	13.5	17.6
18101	Indiana	Martin	7	Southwest	0	--	--	--
18103	Indiana	Miami	4	North Central	0	9.9**	9.3**	14.8
18105	Indiana	Monroe	5	West	1	13.8	14.1	13.7
18107	Indiana	Montgomery	9	West	0	16.4	14.2	19.4
18109	Indiana	Morgan	5	Central	1	19.4	16.2	21.2
18111	Indiana	Newton	1	Northwest	1	23.8**	20.9**	--
18113	Indiana	Noble	3	Northeast	0	11.9	13	14.6
18115	Indiana	Ohio	8	Southeast	1	--	--	--
18117	Indiana	Orange	7	Southeast	0	22	14.0**	17.8**
18119	Indiana	Owen	6	West	1	17.6**	18.7**	19.5
18121	Indiana	Parke	6	West	0	21.1**	19.2**	15.8**
18123	Indiana	Perry	7	Southwest	0	15.7**	18.9**	16.9**
18125	Indiana	Pike	7	Southwest	0	--	22.2**	20.6**
18127	Indiana	Porter	1	Northwest	1	13.6	15.4	16.3
18129	Indiana	Posey	7	Southwest	1	17.7	19.5	18.4
18131	Indiana	Pulaski	2	Northwest	0	20.2**	--	15.4**
18133	Indiana	Putnam	6	West	1	15.6	20.5	22
18135	Indiana	Randolph	4	East	0	7.9**	17.6	13.7**
18137	Indiana	Ripley	8	Southeast	0	10.5**	11.2**	19.8
18139	Indiana	Rush	10	East	0	--	17.7**	27.3
18141	Indiana	St. Joseph	2	North Central	1	12.9	13	14.6
18143	Indiana	Scott	8	Southeast	1	22.8	15.8**	12.9**
18145	Indiana	Shelby	10	Central	1	13.7	20.2	18.6
18147	Indiana	Spencer	7	Southwest	0	13.9**	13.4**	16.8**
18149	Indiana	Starke	2	Northwest	0	16.6**	19.4	22
18151	Indiana	Steuben	3	Northeast	0	9.2**	9.5**	21.2
18153	Indiana	Sullivan	7	West	1	17.0**	20.9	16.4**
18155	Indiana	Switzerland	8	Southeast	0	--	22.2**	--
18157	Indiana	Tippecanoe	9	West	1	11	11.3	12.7
18159	Indiana	Tipton	4	North Central	0	--	--	26.0**
18161	Indiana	Union	10	East	1	--	--	--
18163	Indiana	Vanderburgh	7	Southwest	1	19	20.8	19.7
18165	Indiana	Vermillion	6	West	1	20.7**	14.1**	17.8**
18167	Indiana	Vigo	6	West	1	17	22.3	18.9
18169	Indiana	Wabash	4	North Central	0	8.8**	10.5**	8.8**
18171	Indiana	Warren	9	West	0	--	--	--
18173	Indiana	Warrick	7	Southwest	1	14.4	14.2	14.3
18175	Indiana	Washington	8	Southeast	1	20.1	17	22.8
18177	Indiana	Wayne	10	East	0	14.4	12.2	21
18179	Indiana	Wells	3	Northeast	1	7.9**	10.9**	13.3**
18181	Indiana	White	4	West	0	8.8**	12.6**	21.9
18183	Indiana	Whitley	3	Northeast	1	10.7**	14.8	13.8

*Note: ** indicates Unstable values, -- indicates Suppressed values, --* indicates Secondary Suppression*

APPENDIX A5

Years of Potential Life Lost Age-Adjusted Rate, by County (CDC)

FIPS	State	County	FSSA Region	NSDUH Region	MSA dummy	2006 -2010	2011 -2015	2016 -2020
18000	Indiana					319.7	374.2	407.1
18001	Indiana	Adams	3	Northeast	0	250.9	108	165
18003	Indiana	Allen	3	Northeast	1	291.3	301	368.7
18005	Indiana	Bartholomew	8	Southeast	1	269.9	400.1	398.3
18007	Indiana	Benton	1	West	1	701.8	588.7	766.2
18009	Indiana	Blackford	4	East	0	488.5	427.8	455.1
18011	Indiana	Boone	9	Central	1	245.8	431	494.7
18013	Indiana	Brown	8	Southeast	1	417.9	320	796.7
18015	Indiana	Carroll	4	West	1	263.8	531.2	311.1
18017	Indiana	Cass	4	North Central	0	348.2	373.6	526
18019	Indiana	Clark	8	Southeast	1	332.8	400.4	295.8
18021	Indiana	Clay	6	West	1	557.4	402.8	450.3
18023	Indiana	Clinton	9	West	0	517.8	426.1	622.7
18025	Indiana	Crawford	7	Southeast	0	248.9	359	667.6
18027	Indiana	Daviess	7	Southwest	0	185.3	229.8	245.2
18029	Indiana	Dearborn	8	Southeast	1	284	433.9	841.8
18031	Indiana	Decatur	8	Southeast	0	297.9	308.5	271.4
18033	Indiana	DeKalb	3	Northeast	0	445.1	412.5	321.3
18035	Indiana	Delaware	4	East	1	282.5	255.6	459.7
18037	Indiana	Dubois	7	Southwest	0	327.2	473.8	471
18039	Indiana	Elkhart	2	North Central	1	221.4	297.4	346.4
18041	Indiana	Fayette	10	East	0	297	670.5	526.5
18043	Indiana	Floyd	8	Southeast	1	334.4	415.1	398
18045	Indiana	Fountain	9	West	0	419.2	515.3	500.3
18047	Indiana	Franklin	10	Southeast	0	258.5	412.5	627.7
18049	Indiana	Fulton	2	North Central	0	296.9	416	496
18051	Indiana	Gibson	7	Southwest	0	293.8	651.4	487.5
18053	Indiana	Grant	4	East	0	277.7	404.7	525.7
18055	Indiana	Greene	7	Southwest	0	276.2	612	420.6
18057	Indiana	Hamilton	9	Central	1	219.2	253.8	314.7
18059	Indiana	Hancock	10	Central	1	293.5	399.3	367.8
18061	Indiana	Harrison	8	Southeast	1	181.3	326.7	347.2
18063	Indiana	Hendricks	6	Central	1	302.7	331.9	417.9
18065	Indiana	Henry	10	East	0	393.6	527.6	537.8
18067	Indiana	Howard	4	North Central	1	349.8	294.7	555
18069	Indiana	Huntington	3	Northeast	0	296.8	349.2	306.6
18071	Indiana	Jackson	8	Southeast	0	255.9	344.8	654.4
18073	Indiana	Jasper	1	Northwest	1	397.7	281.6	463.5
18075	Indiana	Jay	3	East	0	297.1	254.5	436.8
18077	Indiana	Jefferson	8	Southeast	0	426.5	481.1	598.3
18079	Indiana	Jennings	8	Southeast	0	324.1	598.9	707.9
18081	Indiana	Johnson	5	Central	1	253.1	317.9	406.9
18083	Indiana	Knox	7	Southwest	0	460.1	496.7	415.6
18085	Indiana	Kosciusko	3	North Central	0	205.8	380.7	387.7
18087	Indiana	LaGrange	2	Northeast	0	232.3	215.8	302.1

FIPS	State	County	FSSA Region	NSDUH Region	MSA dummy	2006 -2010	2011 -2015	2016 -2020
18089	Indiana	Lake	1	Northwest	1	280.4	364.5	326.5
18091	Indiana	LaPorte	2	North Central	1	348.8	445.2	443.1
18093	Indiana	Lawrence	7	Southeast	0	335.3	340.8	406.5
18095	Indiana	Madison	4	East	1	438.7	459.1	558.9
18097	Indiana	Marion	5	Central	1	344.2	360.5	380.5
18099	Indiana	Marshall	2	North Central	0	408.9	297.7	474.5
18101	Indiana	Martin	7	Southwest	0	275.4	444.7	178.8
18103	Indiana	Miami	4	North Central	0	243.4	308.9	336.6
18105	Indiana	Monroe	5	West	1	272	303.6	349.6
18107	Indiana	Montgomery	9	West	0	422.7	393.2	539
18109	Indiana	Morgan	5	Central	1	486	439.1	537.3
18111	Indiana	Newton	1	Northwest	1	514.4	590.1	336.1
18113	Indiana	Noble	3	Northeast	0	318.6	346.7	367.2
18115	Indiana	Ohio	8	Southeast	1	376	260.4	478.9
18117	Indiana	Orange	7	Southeast	0	581.9	378.5	492.5
18119	Indiana	Owen	6	West	1	508.7	428.6	463.9
18121	Indiana	Parke	6	West	0	521.9	549.2	296.4
18123	Indiana	Perry	7	Southwest	0	397.7	392.4	424
18125	Indiana	Pike	7	Southwest	0	383.8	619.2	476.9
18127	Indiana	Porter	1	Northwest	1	335.6	421.1	423
18129	Indiana	Posey	7	Southwest	1	612.3	569.5	532.7
18131	Indiana	Pulaski	2	Northwest	0	483.8	340.5	217.2
18133	Indiana	Putnam	6	West	1	458	534.2	561.1
18135	Indiana	Randolph	4	East	0	204.8	484.6	396.9
18137	Indiana	Ripley	8	Southeast	0	260.3	225.9	502.4
18139	Indiana	Rush	10	East	0	207.4	463	585.6
18141	Indiana	St. Joseph	2	North Central	1	306.3	321.8	368.3
18143	Indiana	Scott	8	Southeast	1	597.6	520.9	280.7
18145	Indiana	Shelby	10	Central	1	281.7	552.1	493.3
18147	Indiana	Spencer	7	Southwest	0	294.4	498.1	438.3
18149	Indiana	Starke	2	Northwest	0	514.9	579.6	607.8
18151	Indiana	Steuben	3	Northeast	0	346	279.7	589.7
18153	Indiana	Sullivan	7	West	1	337.3	585.9	509.2
18155	Indiana	Switzerland	8	Southeast	0	250.8	599	251.2
18157	Indiana	Tippecanoe	9	West	1	245.8	266.3	322.7
18159	Indiana	Tipton	4	North Central	0	125.1	122.9	817.2
18161	Indiana	Union	10	East	1	181.2	425.9	509.6
18163	Indiana	Vanderburgh	7	Southwest	1	449.9	507.9	521.3
18165	Indiana	Vermillion	6	West	1	477	282.9	456.7
18167	Indiana	Vigo	6	West	1	397.8	568.7	520.3
18169	Indiana	Wabash	4	North Central	0	199.6	269.4	183.9
18171	Indiana	Warren	9	West	0	230.6	211.7	406.5
18173	Indiana	Warrick	7	Southwest	1	407.7	324.1	451.4
18175	Indiana	Washington	8	Southeast	1	442.6	401.9	647.8
18177	Indiana	Wayne	10	East	0	401	322	517.5
18179	Indiana	Wells	3	Northeast	1	217	356.6	347.6
18181	Indiana	White	4	West	0	210.9	311.6	717.4
18183	Indiana	Whitley	3	Northeast	1	369.2	386.9	324.4

APPENDIX A6

Mental Health Providers, by County (CHR)

FIPS	County	FSSA Region	NSDUH Region	MSA dummy	2011-2012		2016		2020	
					Number	Ratio (Population to 1 Mental Health Provider)	Number	Ratio (Population to 1 Mental Health Provider)	Number	R-atio (Population to 1 Mental Health Provider)
18000					1681	3861:1	9011	735:1	11330	594:1
18001	Adams	3	Northeast	0	1	34419:1	5	6996:1	17	2105:1
18003	Allen	3	Northeast	1	100	3557:1	561	657:1	736	515:1
18005	Bartholomew	8	Southeast	1	20	3844:1	109	745:1	132	635:1
18007	Benton	1	West	1	2	4440:1	1	8681:1	2	4374:1
18009	Blackford	4	East	0			3	4099:1	3	3919:1
18011	Boone	9	Central	1	22	2583:1	49	1293:1	77	881:1
18013	Brown	8	Southeast	1	7	2175:1	9	1664:1	9	1677:1
18015	Carroll	4	West	1	1	20163:1	12	1655:1	15	1350:1
18017	Cass	4	North Central	0	11	3541:1	72	527:1	97	389:1
18019	Clark	8	Southeast	1	18	6144:1	235	491:1	263	450:1
18021	Clay	6	West	1	8	3362:1	13	2039:1	12	2185:1
18023	Clinton	9	West	0	1	33218:1	8	4076:1	14	2314:1
18025	Crawford	7	Southeast	0			4	2621:1	4	2644:1
18027	Daviess	7	Southwest	0			27	1219:1	25	1334:1
18029	Dearborn	8	Southeast	1	4	12522:1	61	811:1	60	824:1
18031	Decatur	8	Southeast	0			9	2947:1	9	2951:1
18033	DeKalb	3	Northeast	0	2	21128:1	23	1852:1	28	1553:1
18035	Delaware	4	East	1	61	1929:1	283	413:1	330	346:1
18037	Dubois	7	Southwest	0	7	5983:1	43	987:1	52	822:1
18039	Elkhart	2	North Central	1	29	6812:1	227	896:1	296	697:1
18041	Fayette	10	East	0	1	24298:1	14	1674:1	19	1216:1
18043	Floyd	8	Southeast	1	11	6785:1	86	893:1	113	695:1
18045	Fountain	9	West	0	2	8631:1	9	1843:1	12	1362:1
18047	Franklin	10	Southeast	0	1	23074:1	6	3812:1	8	2845:1
18049	Fulton	2	North Central	0	1	20839:1	13	1563:1	19	1051:1
18051	Gibson	7	Southwest	0	2	16776:1	7	4825:1	8	4207:1
18053	Grant	4	East	0	13	5384:1	123	553:1	168	391:1
18055	Greene	7	Southwest	0			18	1802:1	21	1520:1
18057	Hamilton	9	Central	1	188	1470:1	388	798:1	508	665:1
18059	Hancock	10	Central	1	9	7804:1	37	1960:1	64	1221:1
18061	Harrison	8	Southeast	1	3	13127:1	8	4947:1	11	3683:1
18063	Hendricks	6	Central	1	30	4862:1	128	1236:1	168	1014:1
18065	Henry	10	East	0	4	12376:1	40	1225:1	42	1142:1
18067	Howard	4	North Central	1	21	3940:1	131	630:1	165	500:1
18069	Huntington	3	Northeast	0	4	9276:1	23	1593:1	30	1217:1
18071	Jackson	8	Southeast	0	6	7098:1	32	1377:1	37	1195:1
18073	Jasper	1	Northwest	1	3	11176:1	15	2231:1	15	2237:1
18075	Jay	3	East	0			19	1112:1	19	1076:1
18077	Jefferson	8	Southeast	0	13	2489:1	28	1158:1	34	950:1
18079	Jennings	8	Southeast	0	4	7119:1	20	1395:1	26	1067:1

FIPS	County	FSSA Region	NSDUH Region	MSA dummy	2011-2012		2016		2020	
					Number	Ratio (Population to 1 Mental Health Provider)	Number	Ratio (Population to 1 Mental Health Provider)	Number	R-atio (Population to 1 Mental Health Provider)
18081	Johnson	5	Central	1	25	5601:1	99	1511:1	142	1114:1
18083	Knox	7	Southwest	0	16	2400:1	51	744:1	62	590:1
18085	Kosciusko	3	North Central	0	10	7734:1	113	696:1	138	576:1
18087	LaGrange	2	Northeast	0	1	37145:1	12	3234:1	18	2201:1
18089	Lake	1	Northwest	1	81	6125:1	752	649:1	905	536:1
18091	LaPorte	2	North Central	1	23	4846:1	87	1275:1	109	1008:1
18093	Lawrence	7	Southeast	0	3	15383:1	23	1978:1	36	1260:1
18095	Madison	4	East	1	22	5984:1	133	975:1	175	740:1
18097	Marion	5	Central	1	360	2513:1	2232	421:1	2906	332:1
18099	Marshall	2	North Central	0	3	15674:1	40	1171:1	47	984:1
18101	Martin	7	Southwest	0	1	10336:1	2	5113:1	2	5128:1
18103	Miami	4	North Central	0	2	18394:1	16	2241:1	22	1614:1
18105	Monroe	5	West	1	96	1442:1	305	474:1	389	382:1
18107	Montgomery	9	West	0	2	19050:1	33	1158:1	41	935:1
18109	Morgan	5	Central	1	8	8637:1	36	1935:1	41	1719:1
18111	Newton	1	Northwest	1			1	14008:1	1	13984:1
18113	Noble	3	Northeast	0	3	15835:1	39	1224:1	45	1061:1
18115	Ohio	8	Southeast	1	1	6111:1	1	5938:1		
18117	Orange	7	Southeast	0	2	9901:1	9	2178:1	12	1637:1
18119	Owen	6	West	1	2	10791:1	16	1305:1	20	1040:1
18121	Parke	6	West	0	3	5779:1	11	1536:1	10	1694:1
18123	Perry	7	Southwest	0			12	1612:1	14	1369:1
18125	Pike	7	Southwest	0			5	2519:1	5	2478:1
18127	Porter	1	Northwest	1	59	2788:1	240	699:1	297	574:1
18129	Posey	7	Southwest	1			3	8504:1	3	8476:1
18131	Pulaski	2	Northwest	0	1	13366:1	3	4296:1	8	1544:1
18133	Putnam	6	West	1	7	5418:1	26	1446:1	30	1253:1
18135	Randolph	4	East	0	1	26156:1	6	4195:1	9	2741:1
18137	Ripley	8	Southeast	0	2	14421:1	12	2392:1	17	1666:1
18139	Rush	10	East	0			13	1282:1	16	1036:1
18141	St. Joseph	2	North Central	1	101	2642:1	531	506:1	645	421:1
18143	Scott	8	Southeast	1			8	2968:1	11	2170:1
18145	Shelby	10	Central	1	4	11091:1	37	1202:1	43	1040:1
18147	Spencer	7	Southwest	0	3	6976:1	3	6905:1	5	4055:1
18149	Starke	2	Northwest	0	1	23376:1	5	4592:1	7	3285:1
18151	Steuben	3	Northeast	0	1	34140:1	24	1432:1	28	1236:1
18153	Sullivan	7	West	1	1	21473:1	6	3488:1	8	2584:1
18155	Switzerland	8	Southeast	0			2	5262:1	3	3584:1
18157	Tippecanoe	9	West	1	60	2881:1	237	784:1	288	680:1
18159	Tipton	4	North Central	0			4	3817:1	9	1683:1
18161	Union	10	East	1						
18163	Vanderburgh	7	Southwest	1	63	2853:1	325	560:1	398	456:1
18165	Vermillion	6	West	1			7	2242:1	12	1292:1
18167	Vigo	6	West	1	60	1798:1	151	715:1	173	619:1

					2011-2012		2016		2020	
FIPS	County	FSSA Region	NSDUH Region	MSA dummy	Number	Ratio (Population to 1 Mental Health Provider)	Number	Ratio (Population to 1 Mental Health Provider)	Number	R-atio (Population to 1 Mental Health Provider)
18169	Wabash	4	North Central	0	2	16425:1	61	527:1	82	378:1
18171	Warren	9	West	0						
18173	Warrick	7	Southwest	1	16	3741:1	19	3258:1	36	1750:1
18175	Washington	8	Southeast	1	2	14139:1	8	3478:1	11	2549:1
18177	Wayne	10	East	0	20	3443:1	315	213:1	318	207:1
18179	Wells	3	Northeast	1			8	3496:1	15	1886:1
18181	White	4	West	0	1	24672:1	10	2429:1	10	2410:1
18183	Whitley	3	Northeast	1	2	16672:1	21	1591:1	34	999:1

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