

1. Mental Health and Substance Abuse

Ranked AL's First Health Indicator

The concern for mental health and substance abuse moved to number one from its previous second highest rank in the 2015 survey. According to the World Health Organization (WHO), mental health is the “state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community.” Mental health affects an individual’s mood, emotional, psychological, and social well-being. Family history, biological factors, and life experiences influence mental health. The most common mental health illnesses are anxiety, depression, and post-traumatic stress disorders.¹

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), 41 percent of AL adults sought medical treatment for a mental health issue between 2017-2019. Early signs of declining mental health can be an individual withdrawing from normal social support, displaying negative emotions, completing daily tasks, and abusing substances.² Substance misuse and abuse refer to the harmful use of alcohol and illicit drugs, including prescription drugs.³ There can be physical, social, and psychological harm in addition to criminal penalties for possession of the substance. Often, practitioners see mental health and substance abuse co-occurring. Treatment solutions could include individual and group psychotherapies. Accountability and social support are an instrumental part of the recovery process. Discrimination, poverty, and segregation towards individuals with mental illness are all barriers to seeking treatment.³ Raising awareness helps reduce stigma towards mental illness.

Vulnerable Populations

Groups at a higher risk of having a persisting mental illness are veterans, individuals who have experienced a traumatic event early in life, and individuals in abusive relationships or families. In the past 20 years, mental illness rates have been rising. While more services are available, rural and minority populations are still underrepresented due to access to care and social stigma.³

Geographic Variation

Health outcomes can vary over regions based on the populations and the opportunities to self-manage care. For mental health concerns, the Northeastern Public Health District had the highest suicide rate in 2019. This area also had the highest substance abuse diagnosis prevalence in Medicaid recipients in 2018.

Topics Addressed for This Indicator are:

- Suicide mortality.
- Depression diagnosis among Medicaid recipients.

- Alabama adults with depression.
- Depression among Medicare recipients.
- Schizophrenia among Medicare recipients.
- Mental health professional shortage areas.
- Substance abuse diagnosis in Medicaid recipients.
- Drug-related overdose.
- Drug poisoning mortality.

Highlights

Data by county can be found in the Appendix. Data for mental health conditions and substance abuse prevalence are not as complete or comprehensive as other health indicators. The Centers for Medicaid and Medicare information only have limited claims data, which do not cover the total population. Data are also retrieved from ADPH Center for Health Statistics, ADPH Office of Primary Care and Rural Health, ADPH Office of Emergency Medical Services (EMS), the Behavioral Risk Factor Surveillance System (BRFSS), and the National Center for Health Statistics:

- In 2019, suicide was the twelfth leading cause of death in AL.
- In 2018, 38.8 percent of the adult Medicaid population-initiated rehabilitation treatment within 14 days of being diagnosed with an alcohol or drug dependency.
- The suicide mortality rate is almost more than four times greater for males compared to females (26.6 deaths compared to 6.9 deaths per 100,000 persons).

Risk Factors:

- Family history.
- Lack of a support system and isolation.
- New, unexpected stressors.
- Chronic illness.
- Difficult life transitions.
- Neglect and abusive relationships.
- Post-traumatic stress disorder.
- Excessive alcohol or previous drug use.

Suicide Mortality

Suicide is one of the leading mental health concerns, ranking as the tenth leading cause of death in the U.S. and twelfth for AL.⁴ Suicide is death caused by self-injury with the intent to die.⁵

- The Northeastern Public Health District (Blount, Calhoun, Cherokee, Clay, Cleburne, DeKalb, Etowah, Shelby, St. Clair, Talladega, and Randolph counties) had the highest rate of suicide mortality in AL.

- The suicide mortality rate is nearly more than four times greater for males than females (26.6 deaths compared to 6.9 deaths per 100,000 persons).
- The highest suicide mortality rate for 2019 is among the 35-44 years old age group, with a significant increase since the 2015 CHA (26.5 deaths compared to 18.7 deaths per 100,000 persons, respectively).
- Among white individuals, the suicide mortality rate is 21.8 deaths per 100,000 persons in 2019, compared to 17.3 deaths in the 2015 CHA.

Table 1.1 – Suicide Mortality Rate, 2019

	Count	Rate per 100,000
AL	804	16.4
U.S.	47,511	14.5
Public Health Districts		
Northern	184	16.9
Northeastern	158	19.5
West Central	66	15.2
Jefferson	102	15.5
East Central	101	14.3
Southeastern	58	15.3
Southwestern	71	17.2
Mobile	64	15.5
Geographic Variation		
Rural	368	17.5
Urban	436	15.6
Sex		
Female	174	6.9
Male	630	26.6
Race/Ethnicity		
White	697	21.8
AA/black	82	6.3
Household Income		
Not Applicable (N/A)	-	-
Age (in years)		
Under 18	25	2.3
18-24	79	17.7
25-34	129	19.9
35-44	157	26.5
45-54	137	22.2
55-64	119	18.1
65+	158	18.6
Education		
Less than high school	164	-
High school or GED	349	-
Some college	168	-
College graduate or higher	116	-
Unknown	7	-

Depression Diagnosis in Medicaid Recipients

Depression is defined as a persistent depressed mood or loss of interest in activities for more than 2 weeks, causing significant impairment in daily life.³ The Medicaid population also includes children:

- In 2018, 3.8 percent of AL Medicaid recipients had a diagnosis of depression, a decrease from 5.4 percent in the 2015 CHA.
- In 2018, AL Medicaid recipients who identified as white individuals had more diagnoses than AL Medicaid recipients who identified as AA/black individuals.
- Mobile had the highest percentage of depression in the state.

Demographic information was not available for previous years. For the district level, only confirmed county diagnoses were included in the calculation.

Table 1.2 – Depression Diagnosis Among Medicaid Recipients, 2018

	Count	%
AL	40,977	3.3
U.S.	-	-
Public Health Districts		
Northern	7,535	3.1
Northeastern	6,614	3.4
West Central	3,908	3.2
Jefferson	4,086	2.5
East Central	4,878	2.6
Southeastern	4,415	3.8
Southwestern	4,082	4.3
Mobile	5,423	4.6
Geographic Variation		
N/A	-	-
Sex		
Female	28,192	-
Male	12,785	-
Race/Ethnicity		
AA/black	13,006	-
Non-Hispanic Asian or Pacific Islander	95	-
White	22,516	-
American Indian/Alaska Native	122	-
Hispanic	625	-
Unknown/Not provided	3,613	-
Household Income		
N/A	-	-
Age (in years)		
Under 21	13,278	-
21 and over	27,699	-
Education		
N/A	-	-

Adults with Depression

Depression is defined as a persistent depressed mood or loss of interest in activities for more than 2 weeks, causing significant impairment in daily life.³

According to BRFSS:

- West Central (25.9 percent) and the Southeastern (26.7 percent) public health districts had the highest prevalence of depression in 2019.
- Females continued to have a higher prevalence of depression with 28.5 percent compared to 19.3 percent in males. In the 2015 CHA, the prevalence of depression was 26.3 percent in females and 17.1 percent in males.
- White adults had a prevalence of depression of 26.6 percent compared to AA/black adults with a prevalence of 17.0 percent. These rates were similar in the 2015 CHA.
- The prevalence is similar throughout age distributions, but sharply declines over age 65 years old with an 18.0 percent prevalence.

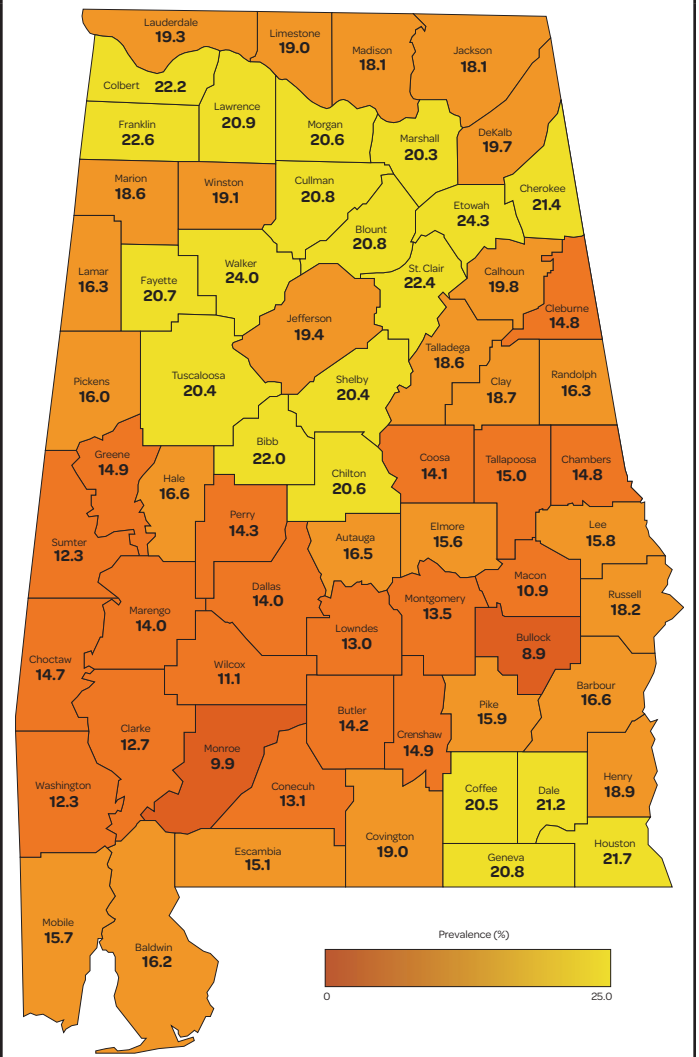
	%	95% Confidence Interval (CI)
AL	24.1	(22.7-25.4)
U.S.	-	-
Public Health Districts		
Northern	25.8	(22.3-29.3)
Northeastern	24.8	(21.5-28.2)
West Central	25.9	(22.0-29.8)
Jefferson	21.1	(17.8-24.5)
East Central	24.4	(20.2-28.6)
Southeastern	26.7	(22.5-30.9)
Southwestern	19.9	(16.5-23.4)
Mobile	21.9	(18.4-25.4)
Geographic Variation		
N/A	-	-
Sex		
Female	28.5	(26.5-30.4)
Male	19.3	(17.3-21.2)
Race/Ethnicity		
White	26.6	(24.9-28.3)
AA/black	17.0	(14.8-19.3)
Household Income		
Less than 15,000	43.5	(38.6-48.4)
\$15,000-24,999	30.2	(26.3-34.2)
\$25,000-34,999	23.8	(18.5-29.1)
\$35,000-49,999	23.7	(19.8-27.6)
\$50,000+	18.5	(16.5-20.6)

Age (in years)		
18-24	24.3	(18.7-29.9)
25-34	26.8	(22.8-30.7)
35-44	25.9	(22.4-29.4)
45-54	26.9	(23.7-30.2)
55-64	25.0	(22.3-27.8)
65+	18.0	(16.1-19.8)
Education		
Less than high school	32.8	(28.0-37.6)
High school or GED	24.1	(21.6-26.5)
Some college	25.7	(23.2-28.2)
College graduate or higher	16.4	(14.5-18.2)

Depression Among Medicare Recipients

Depression can be more prevalent for older adults and persons living with a disability as they experience loss,

Figure 1.1 – This map represents the distribution of depression prevalence by county. Medicare provides insurance to persons over the age of 65 years old and some disabilities. Source: Centers for Medicare and Medicaid Services.



grief, and physical pain. Identifying depression symptoms early can help reduce suicides and other health problems.³

For Medicare recipients:

- The prevalence of depression was 18.4 percent in 2018, affecting 102,710 members. In the 2015 CHA, the prevalence was 13.3 percent.
- The Northern District had the highest prevalence among AL districts.
- Etowah County (a county within the Northeastern District) had the highest county prevalence in 2018 (24.3 percent). In the 2015 CHA, the highest counties were Cullman and Tuscaloosa (Northern and West Central Districts, respectively).

Additional demographic information is not available at this time.

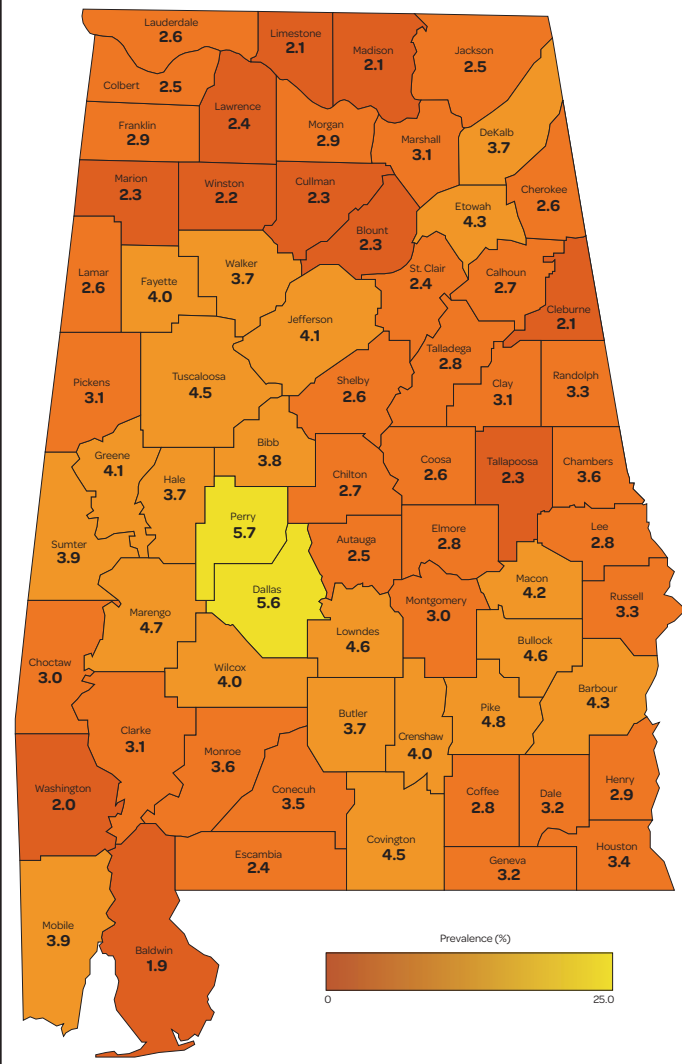
Schizophrenia Among Medicare Recipients

Schizophrenia is a mental health disorder that includes hallucinations, delusions, disorganized speech, grossly disorganized or catatonic behavior, and mood stability symptoms.³ People diagnosed with schizophrenia hear, see, or believe things that are not real. Approximately half of the individuals with schizophrenia have a co-occurring mental or behavioral health disorder:⁶

- In 2018, there was a state prevalence of 3.1 percent with schizophrenia, affecting over 17,000 Medicare fee-for-service recipients. The prevalence of schizophrenia was 3.5 percent in the 2015 CHA.
- Perry and Dallas counties had the highest percentage of schizophrenia (5.7 percent and 5.6 percent, respectively).

Additional demographic information is not available at this time.

Figure 1.2 – This map represents the distribution of schizophrenia prevalence by county. Medicare provides insurance to persons over the age of 65 years old and some disabilities. Source: Centers for Medicare and Medicaid Services.



Mental Health Professional Shortage Areas

A good system of mental health resources can assist all populations in managing their mental health outcomes, which can include: insurance coverage, reduction of barriers associated with social stigma, and awareness of resources.³ One critical resource is access to local mental health providers.

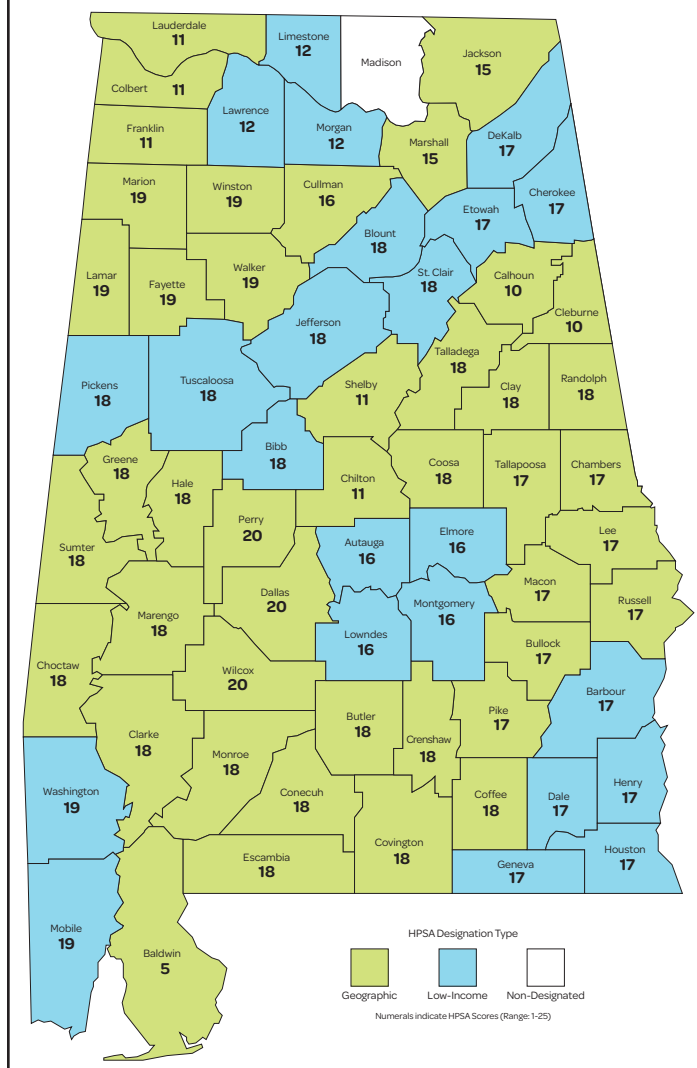
The map in Figure 1.3 depicts:

- Mental health professional areas that have a provider shortage either by geographic or low-income designation.

- Mental health professionals included in this data are medical doctors practicing general medicine and child psychiatry.
- Health Professional Shortage Areas (HPSA) scores range from 125, with 25 being the most significant disparity.

In 2018, Madison County was the only county with sufficient mental health professionals to provide services to its residents. However, services were more adequately covered in the Northern Public Health District than the rest of the state.

Figure 1.3 – This map represents the HPSA score, ranging from 1 to 25, for each county. Source: ADPH Office of Primary Care and Rural Health.



Substance Abuse Diagnosis in Medicaid Recipients

Substance abuse is defined as taking a controlled substance in a harmful dose. This could include consumption of alcohol, prescription pain medication, and other illicit drugs.

Following up with long care support and rehabilitation services is important for recovery in this population. In 2018, 38.8 percent of the adult Medicaid population-initiated treatment within 14 days of being diagnosed:⁷

- In 2018, there were 18,037 Medicaid fee-for-service recipients diagnosed with substance abuse in AL.⁷
- The Northeastern Public Health District had the highest prevalence of substance abuse diagnosis with 1.73 percent of all Medicaid recipients.
- Females were diagnosed more when compared to males.

This information was calculated differently in the 2015 CHA and cannot be used to assess an accurate historical trend. For the district level, only confirmed county diagnoses were included in the calculation.

Table 1.4 – AL Substance Abuse Diagnosis in Medicaid Recipients, 2018

	Count	%
AL	18,037	1.5
U.S.	-	-
Public Health Districts		
Northern	4,018	1.67
Northeastern	3,359	1.73
West Central	2,017	1.67
Jefferson	2,366	1.46
East Central	1,553	0.87
Southeastern	1,496	1.29
Southwestern	1,423	1.26
Mobile	1,565	1.32
Geographic Variation		
N/A	-	-
Sex		
Female	10,876	-
Male	7,161	-

Race/Ethnicity		
White	10,912	-
American Indian/Alaska Native	54	-
Asian	361	-
AA/black	4,419	-
Hispanic	162	-
Other/Not provided	2,471	-
Household Income		
N/A	-	-
Age (in years)		
N/A	-	-
Education		
N/A	-	-

Drug-related Overdose

According to CDC, AL's opioid dispensing rate was the highest prescribing rate in the country with 85.8 medications for every 100 persons in 2019.⁸ This rate was significantly higher than the average U.S. rate of 46.7 prescriptions per 100 persons.⁸

The maps show the rates of all drug and opioid overdose emergency response (911 runs) by county in 2018.

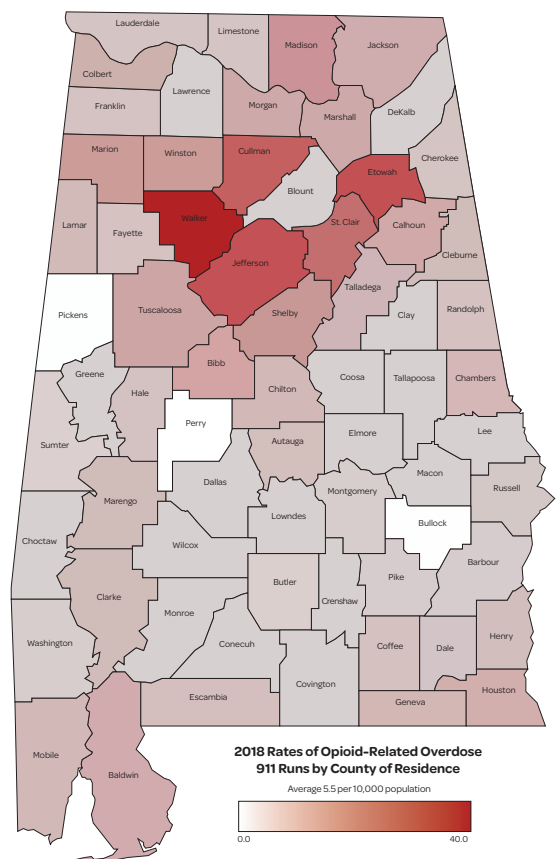
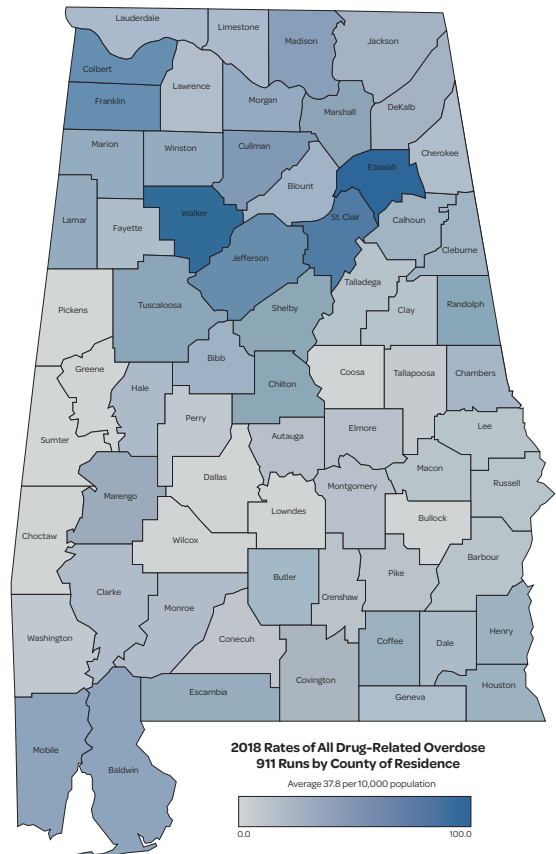
- The average rate of drug-related overdose 911 runs was 37.8 per 10,000 persons, and the average rate of opioid-related overdose runs was 5.5 per 10,000 persons.
- The rate of 911 runs for overdoses were highest in Jefferson County and the surrounding area.

Naloxone is a medication designed to reverse opioid overdose rapidly. One dose of naloxone counts as one administration:

- In 2018, 6,287 doses of naloxone were administered and reported to the Office of EMS, a 34.7 percent increase from 2017 (4,666 doses administered).⁹
- The administration was highest in males 25-44 years old with over 1,500 naloxone administrations. The number of administrations may be higher than the number of persons who may receive more than one injection.

This data does not account for outcomes after administration. Naloxone administration may be affected by availability. ADPH plans to utilize Syndromic Surveillance System data by identifying overdoses through emergency room visits.

Figure 14 – The number of drug-related overdose 911 runs by county. The map is further broken down into opioid-related runs by county. White counties show areas where data was not collected. Source: ADPH Office of EMS.



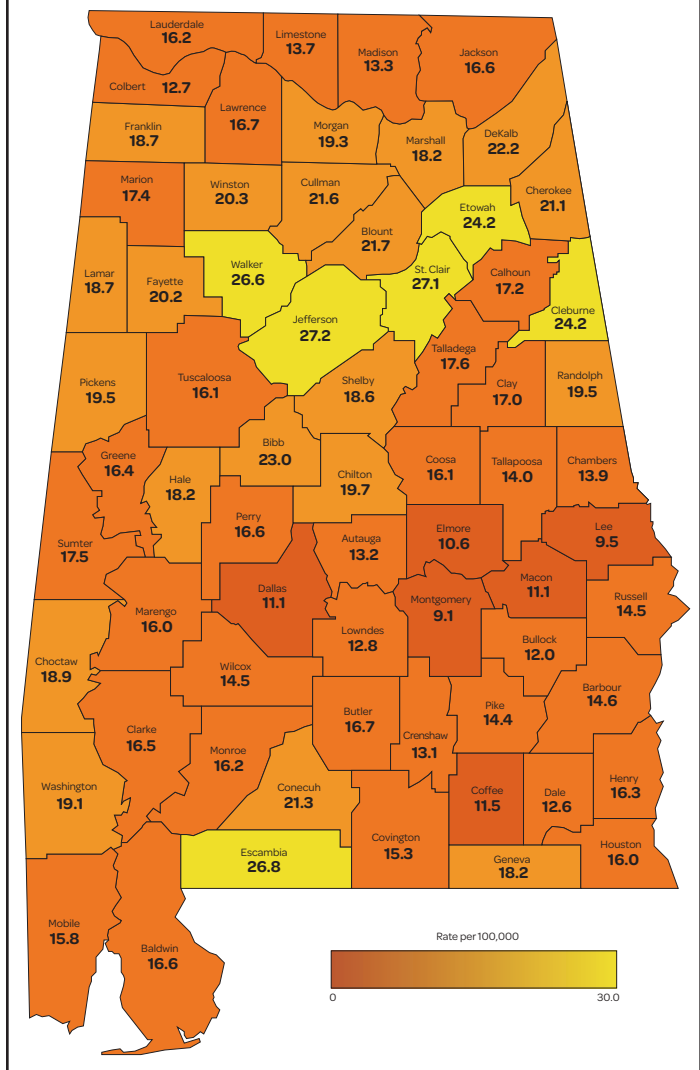
Drug Poisoning Mortality

According to CDC, in 2019, there were 827 drug poisoning deaths in AL with a rate of 16.9 per 100,000 persons compared to the national rate of 23.1 per 100,000 persons. Compared to 2013, there were 648 drug poisoning deaths with a crude rate of 13.4 deaths per 100,000 persons.¹⁰ This includes both intentional and unintentional poisonings noted on death certificates.

In Figure 1.5, the map is modeling age-adjusted drug poisoning deaths from the National Center for Health Statistics:

- In 2019, The highest drug poisoning death rates by county were Russell County with 38.0 deaths, DeKalb County with 32.2 deaths, Jefferson County with 31.0 deaths, and St. Clair County with 25.7 deaths per 100,000 persons.
- In 2013, Walker County previously had the highest death rate with 43.9 deaths per 100,000 persons.

Figure 1.5 – This map represents the mortality rate due to drug poisonings in AL. Source: National Center for Health Statistics.



These rates are an underestimation of the total amount. If poisoning is not suspected, a drug test may not be run. ADPH plans to use Poison Control Center data to better understand the prevalence and distribution in AL.

Data Sources

Table 1.1 – Suicide Mortality, 2019. ADPH, Center for Health Statistics Mortality Files, 2019. Data requested March 2021.

Table 1.2 – Depression Diagnosis Among Medicaid Recipients, 2018. AL Medicaid Agency, 2019. Data requested July 2020.

Table 1.3 – Percentage of Adults Who Ever Had Depression, 2019. CDC, BRFSS, 2019. Data requested March 2021.

Figure 1.1 – Depression Among Medicare Recipients, 2018. Centers for Medicare and Medicaid Services, 2019. Data requested January 2021.

Figure 1.2 – Schizophrenia Among Medicare Recipients, 2018. Centers for Medicare and Medicaid Services, 2019. Data requested January 2021.

Table 1.4 – AL Substance Abuse Treatment Admissions in Medicaid Recipients, 2018–2019. AL Medicaid Agency, 2019. Data requested July 2020.

Figure 1.4 – Rates of Drug Overdose-Related 911 Runs by County of Residence, 2018. ADPH, Office of EMS, 2018. Data requested January 2021.

Figure 1.5 – Drug Poisoning Mortality, 2018. National Center for Health Statistics, 2018. Data requested March 2021.

Written Sources

1. WHO, Mental Well-Being, 2020.
2. SAMHSA, Behavioral Health Barometer Region 4, Volume 6. Adult Mental Health and Service Use, 2020.
3. CDC, Mental Health, 2020.
4. CDC National Center for Health Statistics, Age Adjusted Leading Causes of Death, 2019.
5. CDC, Suicide Prevention, 2020.
6. National Institute of Mental Health, Schizophrenia, 2020.
7. National Alliance on Mental Illness, Substance Abuse Disorders, 2020.
8. CDC, U.S. State Opioid Dispensing Rates, 2019.
9. ADPH, Office of Emergency Management, 2018.
10. CDC National Center for Health Statistics, Drug Poisoning Mortality, 2018.

Community Resources

AL Department of Mental Health

Location: Montgomery County, AL
Type: State Government Organization

AL Department of Rehabilitation Services

Location: Montgomery County, AL
Type: State Government Organization

Alabama Suicide Prevention & Resources Coalition

Location: Jefferson County, AL
Type: Non-profit Organization

Brewer-Porch Children's Center

Location: Tuscaloosa County, AL
Type: Research Institution

CDC

Location: Atlanta, GA
Type: Federal Government Organization

Consumer Product Safety Commission

Location: Atlanta, GA
Type: Federal Government Organization

Health Resources and Services Administration (HRSA)

Location: Washington, DC Metro
Type: Federal Government Organization

Hill Crest Behavioral Health Services

Location: Jefferson County, AL
Type: Behavioral Health Facility

Laurel Oaks Behavioral Health Center

Location: Houston County, AL
Type: Behavioral Health Facility

National Institute on Alcohol Abuse and Alcoholism

Location: Bethesda, MD
Type: Federal Government Organization

National Institute on Drug Abuse

Location: Washington, DC Metro
Type: Federal Government Organization

National Suicide Prevention Lifeline 1-(800) 273-8255

Location: Washington, DC Metro
Type: Federal Government Partnership

Sequel Courtland

Location: Lawrence County, AL
Type: Youth Behavioral Health Facility

Sequel Tuskegee

Location: Macon County, AL
Type: Youth Behavioral Health Facility