

Arkansas State Epidemiological Outcomes Workgroup  
**A Companion Guide to the 2020  
Arkansas State Epidemiological  
Profile of Substance Use**



Regional Key Findings

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# ARKANSAS STATE EPIDEMIOLOGICAL OUTCOMES WORKGROUP CHARTER

The Arkansas State Epidemiological Outcomes Workgroup (SEOW) was developed in 2005. Initially funded through the SPF State Incentive Grant (SIG) with continued support from the (2013-2018) Strategic Prevention Framework-Partnerships for Success (SPF-PFS) Grant from the Substance Abuse and Mental Health Services Administration's Center for Substance Abuse Prevention (SAMHSA/CSAP), SEOW is housed in the Arkansas Department of Human Services' Division of Aging, Adult and Behavioral Health Services (DAABHS). The SEOW is a nexus of state agency representatives, policy makers, researchers, community representatives and other stakeholders committed to engaging in data-driven exchanges of ideas in order to inform unified substance use prevention messaging and priorities across the state. The current charter represents an extension of SEOW's important service to citizens and policymakers in Arkansas. SEOW serves as a forum for policymakers, researchers and community representatives to have a data-driven exchange of ideas.

## MISSION

The mission of SEOW is to guide successful prevention efforts in the state of Arkansas by:

- Analyzing, monitoring and sharing data trends in substance use and other environmental, behavioral, and health-related factors.
- Informing data-driven policy and practice decision-making regarding prevention priorities at local and state levels.
- Disseminating evidence-based education and prevention materials to the larger public.

## GOALS

The three primary goals of SEOW are:

- Serve as the clearinghouse for data on substance use and health-related risks, protective factors, prevention strategies, and outcomes in Arkansas
- Help develop and disseminate a statewide unified prevention message
- Help expand public awareness and education about substance use and related outcomes

## LINKAGE WITH PREVENTION SYSTEM

SEOW supports DAABHS and University of Arkansas at Little Rock – MidSOUTH Center for Prevention and Training (MidSOUTH) in the decision-making process regarding the delivery of prevention services. SEOW facilitates interagency communication and collaboration regarding data. Epidemiological profiles and other work products will be used for detailed assessment of priority areas and prevention effectiveness efforts, as well as provide information for stakeholders, community education, and prevention efforts.

## WORKGROUP MEMBERS

The workgroup includes a core membership consisting of representatives from DAABHS, MidSOUTH, the University of Arkansas for Medical Sciences (SEOW Staff), Regional Prevention Providers, and Regional Lead Agencies. DAABHS and MidSOUTH hold primary decision-making authority for SEOW activities. Operational partners are drawn from various state and contracting agencies, including relevant data experts, state and community leadership, and constituencies affected directly or indirectly by substance use and/or behavioral health issues.

# EXECUTIVE SUMMARY

The State Epidemiological Outcomes Workgroup (SEOW) is a group of data experts and prevention stakeholders responsible for gathering, analyzing and disseminating data on substance use and related behavioral problems in order to guide prevention planning processes. It serves as a forum for policymakers, researchers, agency representatives and community representatives to have a data-driven exchange of ideas. One of SEOW's goals is to "serve as the clearinghouse for data on substance use and health-related risks, protective factors, prevention strategies, and outcomes in Arkansas." In support of this goal, SEOW members at the University of Arkansas for Medical Sciences (UAMS) worked to update the State Epidemiological Profile.

The primary purpose of this companion guide to the State Epidemiological Profile is as a tool for data-driven, informed decision-making pertaining to substance misuse prevention. This report:

- provides information on the relative prevalence of substance use as well as risk and protective factors at the county and regional level.
- is intended to present data in a way that highlights potential geographic patterns of use and risk/protective factors.
- will serve as a data-based resource for key prevention players to assess regional needs relating to substance use and its consequences, and for prioritizing evidence-based programs and policies for substance use prevention.

Questions pertaining to this report should be directed to SEOW staff at UAMS: Alison Oliveto [olivetoalison@uams.edu] or Mary Bollinger [MJBollinger@uams.edu].

## ACKNOWLEDGEMENTS

This work is supported by the Substance Abuse and Mental Health Services Administration through grant #6H79SP080990-01M001 awarded to the Arkansas Department of Human Services Division of Aging, Adult and Behavioral Health Services (DAABHS), administrated by University of Arkansas at Little Rock/MidSOUTH Center for Prevention and Training and contracted with the Psychiatric Research Institute at UAMS.

## PREPARED BY

Researchers at UAMS developed this material with funding from DAABHS. We are not providing legal or professional medical advice. We make no warranty, expressed or implied, on any subject, including completeness and appropriateness of the information for any purpose. The information presented in this material is consistent with DHS policy as of September 2018. If any Arkansas DHS policy changes made after September 2018 are inconsistent with this material, the policy controls. Arkansas DHS is in compliance with Titles VI and VII of the Civil Rights Act. Revised November 2017.

## SUGGESTED CITATION

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# DATA-DRIVEN PREVENTION PLANNING

The most effective way to lower the cost of substance use and mental health disorders is to focus on prevention efforts. While providing treatment opportunities is important, prevention efforts produce a much larger impact on the cost of these disorders for communities and society at large. These costs can include the cost to the health care system, since many of these individuals are more likely to utilize healthcare resources and less likely to be able to pay for healthcare costs; the financial burden on the justice system due to the resources required to address the levels of crime associated with drug use; and the loss of productivity. It is possible to reduce these costs more broadly through prevention efforts in communities across the state rather than solely treating individuals. Preventing drug use disorders from developing is more cost-effective than treating these disorders after the fact. To turn the focus from improving individual treatment outcomes to reducing the likelihood of individuals developing these types of disorders, SAMSHA/CSAP began funding states to form and sustain SEOWs, which are tasked with developing state epidemiological profiles regarding substance use. These profiles represent an accumulation of various data sources to be used as an aid in the prioritization of data-driven prevention strategies that are specific to the needs within each state.

## HOW TO USE THIS REPORT

The Arkansas State Epidemiological Profile focused on the consumption and consequences of substance use, which is the first step towards developing effective prevention strategies. This information is used to identify the types of substance use disorders and their consequences specific to Arkansas. For instance, a smaller proportion of those in higher grade-levels perceive great risk in marijuana use or drinking compared to those in lower grade-levels. This Companion Guide clarifies the relative prevalence of substance use along with key risk and protective factors in different regions of the state to guide prioritization and intensity of prevention activities.

Policymakers and community leaders can use the data presented here to help support grant initiatives and legislation regarding the funding of prevention programs or to justify the need to fund specific local programs aimed at increasing prevention. This report is divided into sections related to the geographic distribution of substance use and factors that can impact substance use. These sections include the consumption of substances among youth, selected key risk factors associated with greater likelihood of youth substance use, and selected key protective factors associated with reduced likelihood substance use.

For more information related to data-driven prevention planning, please see SAMHSA's Data-Based Planning for Effective Prevention: State Epidemiological Outcomes Workgroups, SMA No. 12-4724, first printed 2012.

# DATA INDICATORS AND SOURCES

For the purposes of this Companion Guide, data from the Arkansas Prevention Needs Assessment (APNA) Surveys conducted in 2017, 2018, and 2019, as available, were aggregated by UAMS. Data from the 2019 Youth Risk Behavior Surveillance Survey were also included as appropriate. The UAMS analytics team supporting SEOW developed criteria for inclusion of data into this report. Indicator criteria include:

**Relevant** – In addition to substance use indicators, the UAMS Analytics team selected indicators shown to be key risk or protective factors with input from SEOW members. The modifiability of each measure was also carefully considered so that indicators could be employed for planning or action toward improvement. Where possible, indicators were limited to those that were a direct measure of consumption of substance use or of substance use-associated factors.

**Time series data** – Selected indicators were averaged across three years in order to obtain a more stable estimate of prevalence.

This data compilation supports the community and provides access to critical data about substance use and its determinants. Data in this report provide a base for informational tools, articles and maps. All APNA-related materials and data can be accessed at [ARPrevention.org](http://ARPrevention.org).

Data Source	Year(s)	Website
Arkansas Prevention Needs Assessment Survey	2017, 2018, 2019	<a href="https://arkansas.pridesurveys.com">https://arkansas.pridesurveys.com</a>
Youth Risk Behavior Surveillance Survey	2019	<a href="https://www.cdc.gov/healthyyouth/data/yrbs/results.htm">https://www.cdc.gov/healthyyouth/data/yrbs/results.htm</a>

# DATA LIMITATIONS AND GAPS

Arkansas Prevention Needs Assessment Survey data from 2017, 2018, and 2019 were utilized for this report to stabilize estimates since measures can vary substantially from year to year, particularly in low population areas. As every data source has its limitations, the following gaps and limitations should be considered in viewing and using this report.

## **Important limitations include:**

- Small sample sizes often restrict detailed analyses particularly at the county level and may not fully represent actual population characteristics.
- Due to privacy concerns, data at the county or community level are not publicly available every year.
- Measures are based on self-report. While research shows self-reported information is usually reliable, in some cases such as substance use, respondents may give the socially desirable response. Thus, the reliability of a measure might be questionable.

Some counties only had one or two years of data, so their data are based on the one year or a two- rather than three-year average. Those counties were:

Region 11: Columbia – based on a two-year average

Region 7: Crittenden – based on one year of data

Region 10: Lafayette – based on a two-year average

# DISSEMINATION PLAN

This Companion Guide can be used to evaluate the relative geographic prevalence of substance use and risk/protective factors associated with substance use for program planning, policy changes and as support in applying for funding of substance abuse services within communities throughout Arkansas. Prior to the establishment of the SEOW and the State Epidemiological Profile, policymakers, community members and health care providers sifted through multiple data resources for relevant information to address issues of substance use. The state profile consolidates disparate data from numerous sources and provides accompanying county profiles and online resources through the website, [www.ARPrevention.org](http://www.ARPrevention.org).

This Companion Guide was written with these primary end users in mind: substance use prevention and treatment program planners, public health workers, researchers, policymakers, community coalition members, health care workers, nonprofit organizations, grant writers, and public officials and legislators. Multiple avenues have been identified for dissemination of the state profile, county profiles and accompanying resources on the AR Prevention website. Individuals, organizations and networks involved in the distribution of materials include representatives from DHS, the Arkansas Department of Health (ADH), coalition contacts, UAMS, regional prevention providers (RPP), and other community stakeholders. Communication of the report and supporting materials include the website ([www.ARPrevention.org](http://www.ARPrevention.org)), and in-person distribution at coalition meetings and to health providers, health fairs, quality improvement project participants, provider outreach representative visits and professional conferences. In addition, articles introducing SEOW, the website, and accompanying resources and promotional materials, such as bags, bookmarks, pens and mugs, have been created and distributed to appropriate audiences.

Potential difficulties with dissemination of materials include cost, time constraints, diversity of the target audience and unidentified members of the community who need access to substance use data. Cost is a considerable limitation to the dissemination of any written reports. However, SEOW members have established distribution and communication of available materials as a high priority. Resource allocation for dissemination was a recurrent topic of discussion for the quarterly workgroup meetings as plans to share information were finalized.

Limitations brought about by time constraints have been addressed proactively through project management and coordination of activities. For example, provider representatives work with clinics on multiple health initiatives. Strategically planning visits after new materials are available aids in facilitating dissemination while keeping time constraints under control.

The diversity of the target audience is a concern that drives the preparation of all materials. Data and accompanying explanations have been presented with both the health care professional and layperson in mind. When possible, writing has undergone plain language editing, particularly informational tools that are distributed to the public. To address these barriers, SEOW members discuss workgroup membership and reaching unidentified members of the community who might benefit from the state profile at each quarterly meeting.

The dissemination plan is evaluated at each quarterly SEOW meeting. A summary of the distribution of materials since the last meeting is presented, and the discussion revolves around the effectiveness of dissemination activities. In addition, the UAMS communications team tracks website traffic to determine what documents are being accessed.



# OVERVIEW OF COUNTY-LEVEL KEY FINDINGS MAPS

SEOW provides a comprehensive resource for identifying, tracking and planning substance misuse prevention efforts in the state. To further strengthen these efforts, it is important to understand how certain key findings are distributed across the state in order to inform prioritization of prevention strategies in different regions. For each of the 75 counties in Arkansas, we have identified and mapped meaningful substance use consumption and various risk and protective factors most strongly related to substance use. County percentages represent the average prevalence of a given indicator across the last three years (2017, 2018, 2019), except for the following counties in which less than three years of data were available:

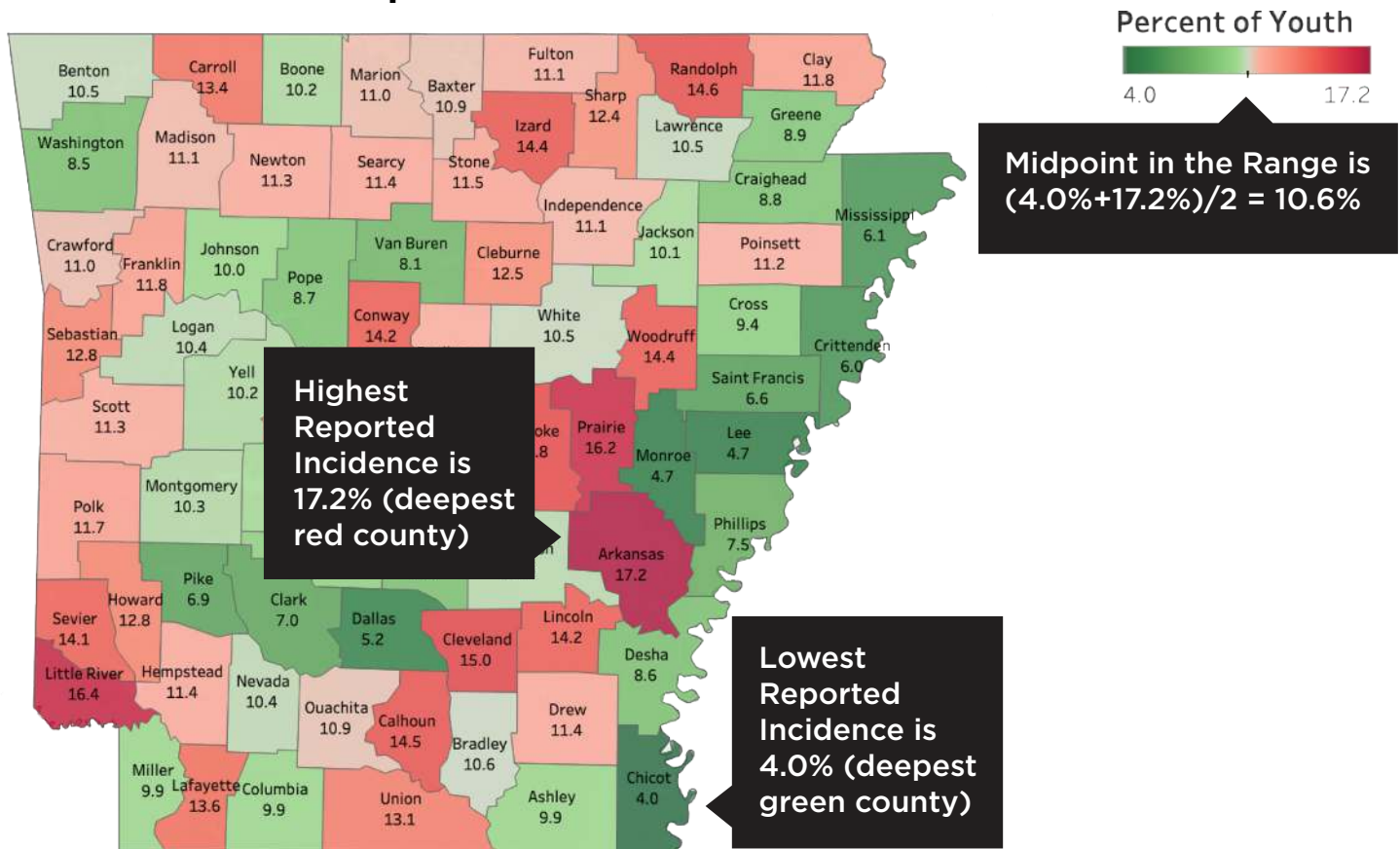
Region 11: Columbia - based on a two-year average

Region 7: Crittenden - based on one year of data

Region 10: Lafayette - based on a two-year average

Data are shown in each map in a way designed to highlight the most and least problematic areas relative to the rest of the state. Prevalence data are shown numerically per county as well as in color based on a scale where red indicates most problematic and green indicates least problematic incidence relative to the rest of the state. Counties in the red range of color have more problematic prevalence rates (i.e., rates above the midpoint of the range). Counties in the green range of color have less problematic prevalence rates (i.e., rates below the midpoint of the range). The regional map on page 27 can be used as a guide when understanding information pertaining to regions.

## How to read each map:



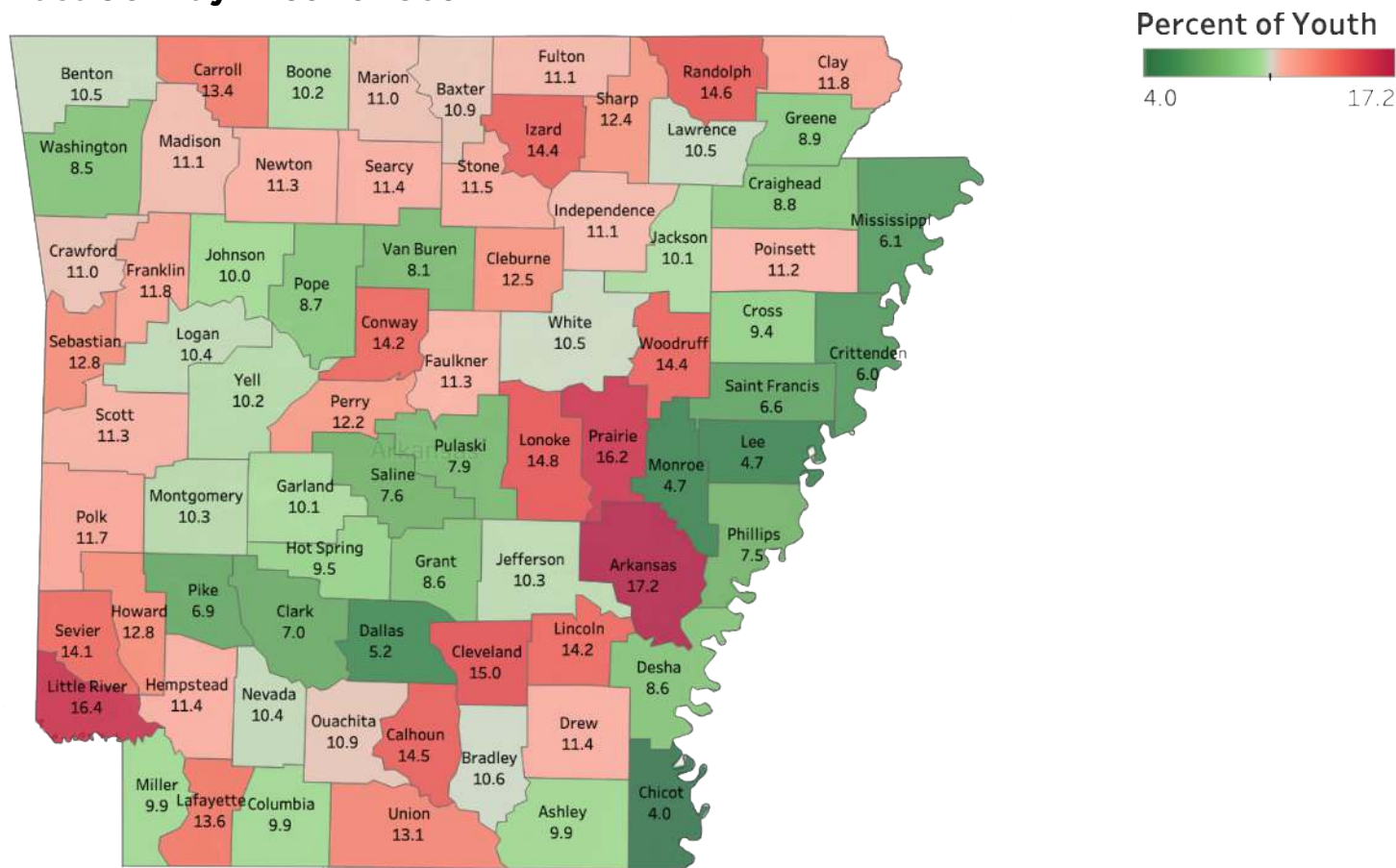
# SUBSTANCE USE

Past 30-day use of selected substances was the substance use measure selected, given that it is a good indicator of current and likely regular use.

## ALCOHOL

- The prevalence of current alcohol use among Arkansas 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> graders was slightly less than that among US youth in 2019.

### Past 30-Day Alcohol Use



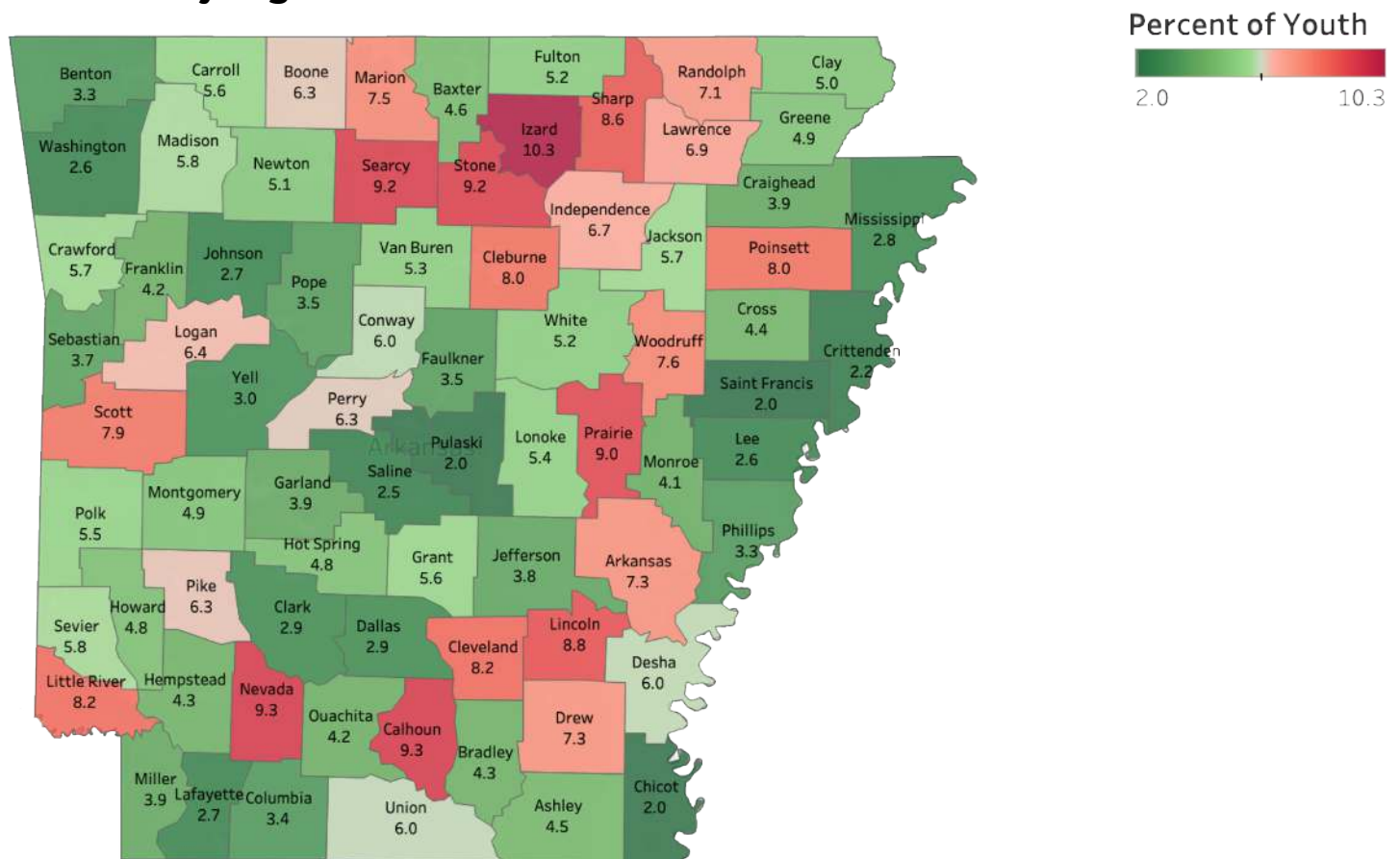
- The percentage of youth reporting current alcohol use ranged from 4.0% (Region 13: Chicot County) to 17.2% (Region 12: Arkansas County).
- Reported alcohol use appears to be highest in the central-eastern (Arkansas, Prairie and Cleveland Counties) and southwestern (Little River County) parts of the state.
- Reported alcohol use was also more prevalent in northern, western and south-central counties than northwest, eastern and southwest-central counties.

These data suggest that many regions - the majority of which are more rural - have more problematic alcohol use than other parts of the state. In particular, Regions 2, 3, 4, 5, 10, 12 and 13 should consider more focused or intensive alcohol use prevention strategies.

## CIGARETTES

- The prevalence of current cigarette use among Arkansas 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> graders was slightly more than that among US youth in 2019.

### Past 30-Day Cigarette Use



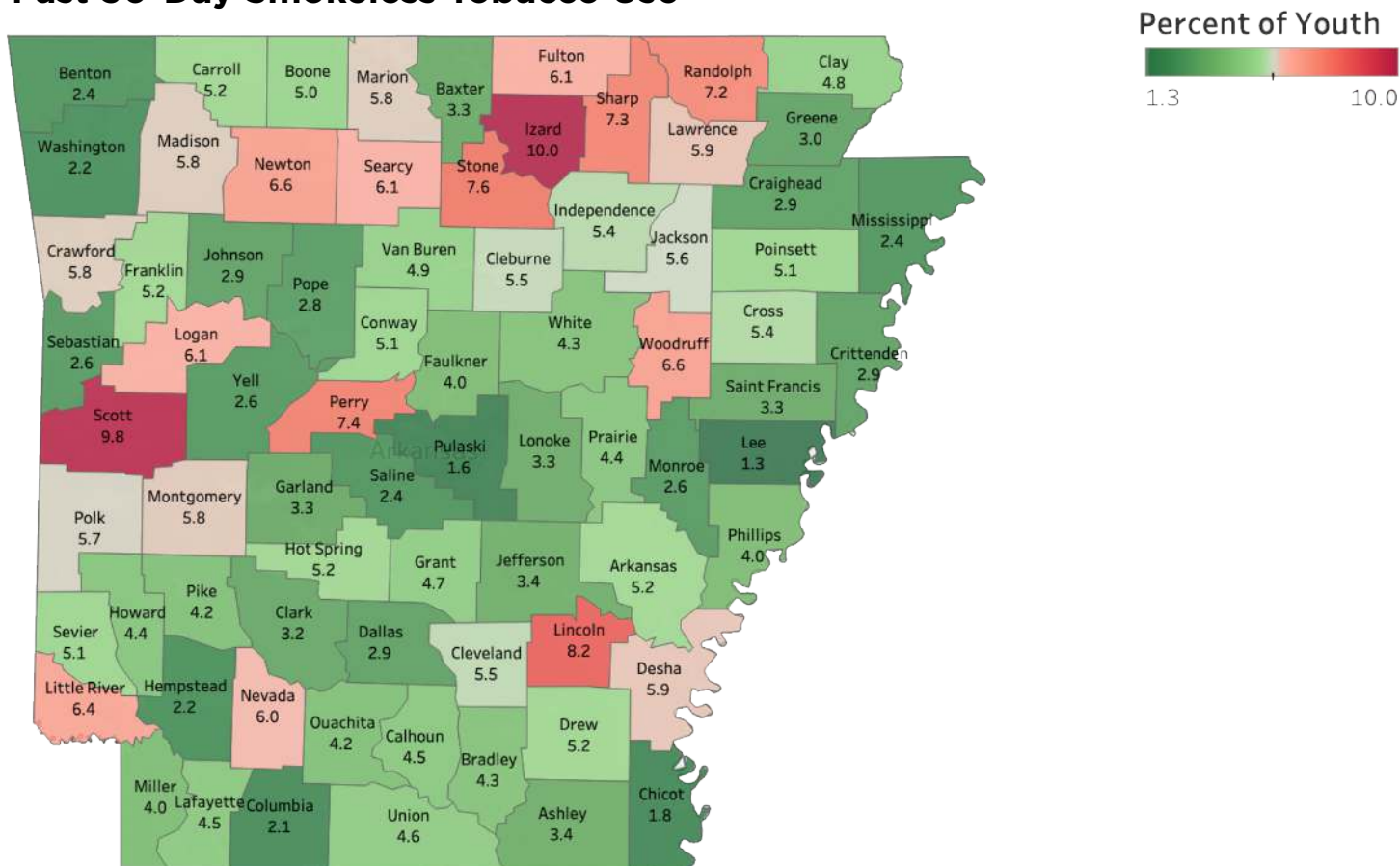
- The percentage of youth reporting past 30-day cigarette use ranged from 2.0% (Region 7: St. Frances County) to 10.3% (Region 13: Chicot County).
- Reported cigarette use appears to be highest in the north-central part of the state (Regions 2 and 3).
- Reported cigarette use was also more prevalent in central northern, central eastern and certain southern and western counties than in other areas of the state.

These data suggest that several regions – many of which are predominantly rural – have one or more counties indicating more problematic cigarette use than other parts of the state. In particular, Regions 2, 3, 4, 5, 10, 11, 12 and 13 should consider implementing more focused or intensive cigarette use prevention strategies.

## SMOKELESS TOBACCO

- The prevalence of current smokeless tobacco use among Arkansas 10<sup>th</sup> and 12<sup>th</sup> graders, but not 8<sup>th</sup> graders, was slightly greater than that among their US counterparts in 2019.

### Past 30-Day Smokeless Tobacco Use



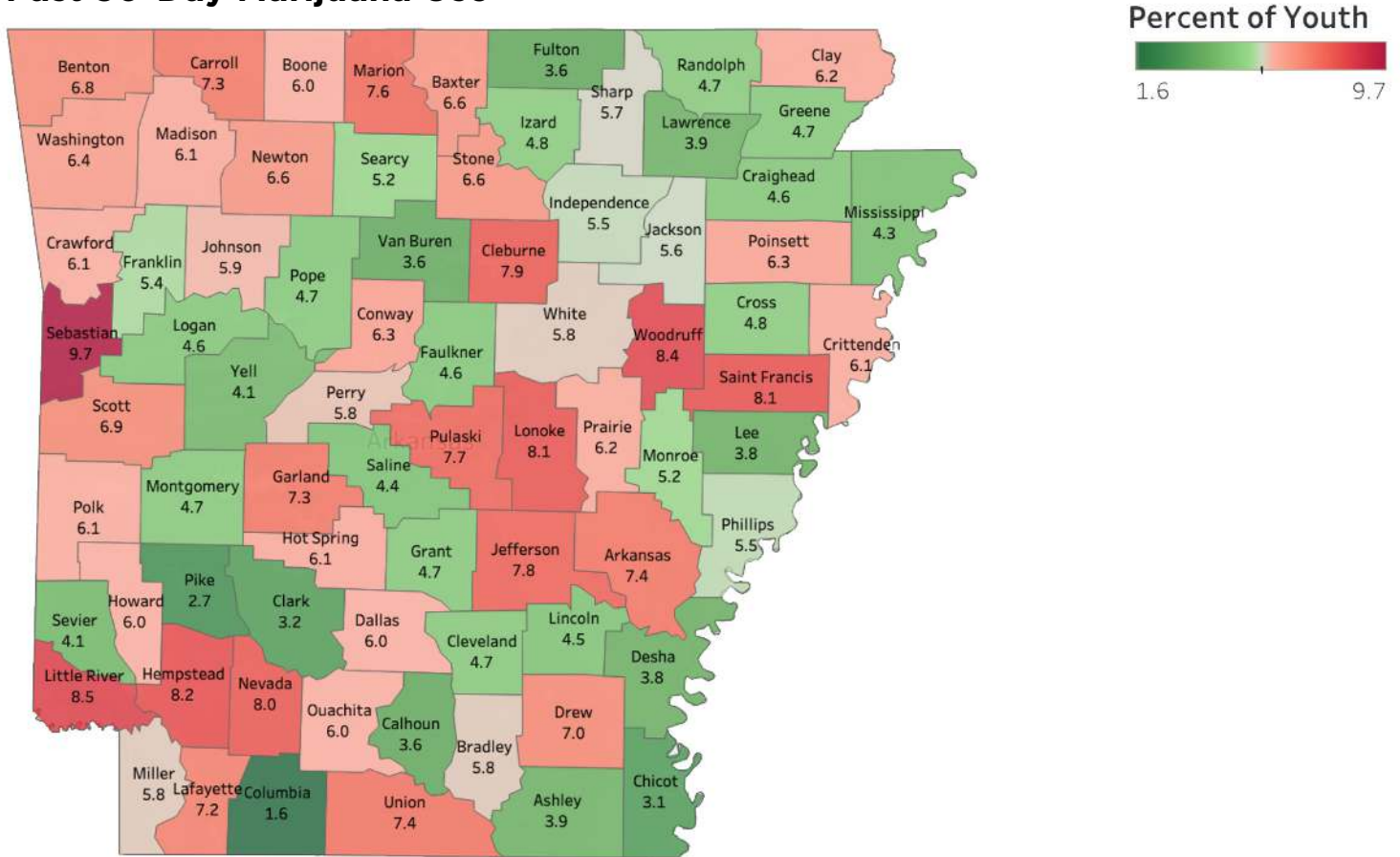
- The percentage of youth reporting past 30-day smokeless tobacco use ranged from 1.3% (Region 7: Lee County) to 10.0% (Region 3: Izard County).
- The concentration of higher smokeless tobacco use appears to be greatest in the north-central part of the state (Regions 2, 3 and 4).
- Reported smokeless tobacco use was also more prevalent in certain northern, western and southeastern counties than the rest of the state.

These data suggest that several regions - many of which are more rural - have more problematic smokeless tobacco use than other parts of the state. In particular, Regions 2, 3, 4 and 5 should consider more focused or intensive smokeless tobacco use prevention strategies.

## MARIJUANA

- The prevalence of current marijuana use among Arkansas 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> graders was less than that among US youth in 2019.

### Past 30-Day Marijuana Use



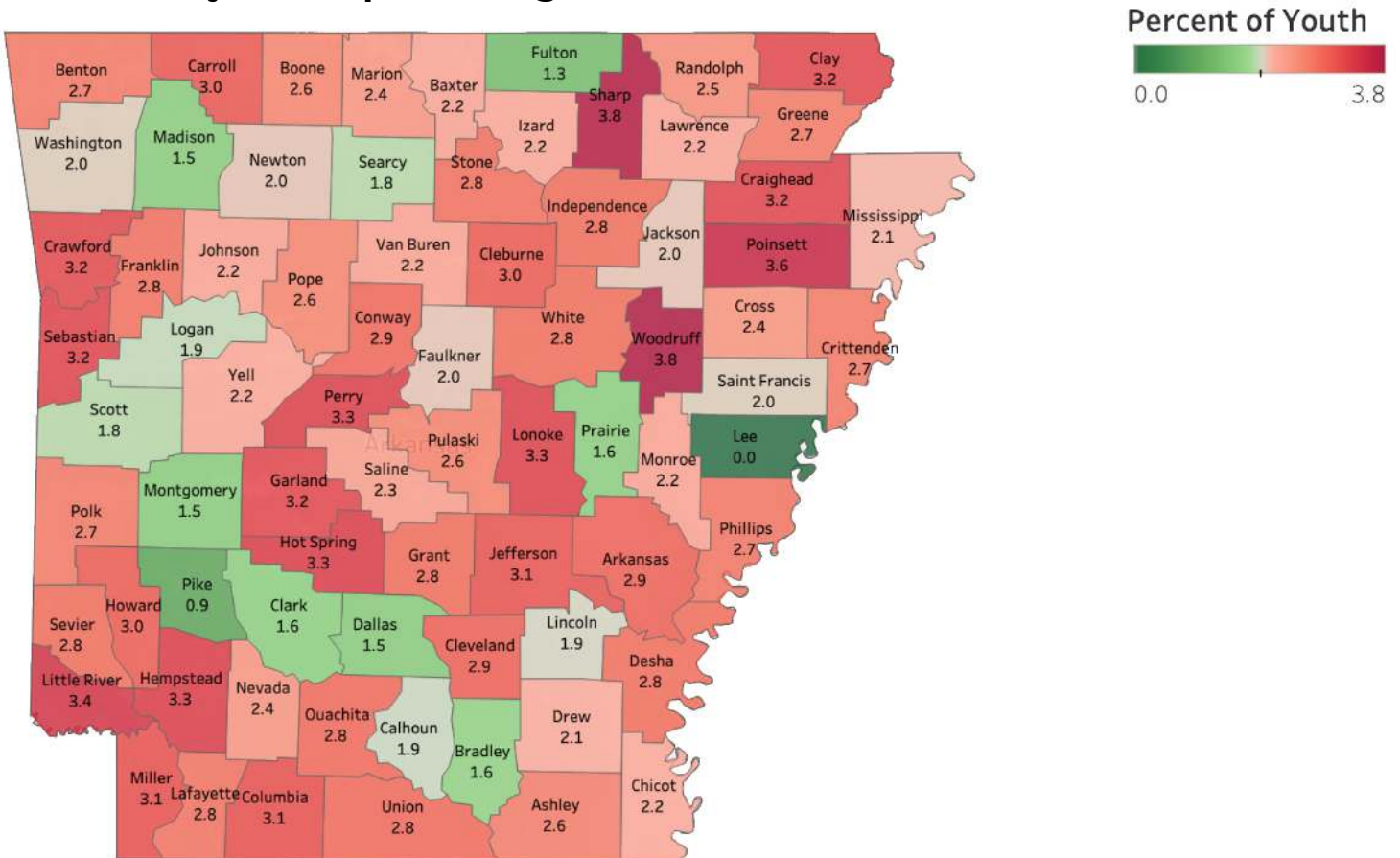
- The percentage of youth reporting past 30-day marijuana use ranged from 1.6% (Region 11: Columbia County) to 9.7% (Region 5: Sebastian County).
- Marijuana use appears most prevalent in the central and central eastern (Regions 7, 9 and 12) and west and southwestern parts of the state (Regions 5 and 10).
- At the same time, prevalence of marijuana use was also higher than the midpoint of the range (4.0%) in the northwest and certain northern counties (Regions 1, 2 and 3) and at least one county in every region indicated marijuana use prevalence above the median.

These data suggest that marijuana use is prevalent throughout the state. Marijuana use is highly prevalent in Regions 1, 2, 3, 5, 7, 9, 10 and 12 relative to other regions in the state. These data suggest that statewide marijuana use prevention efforts are needed, with additional intensity in regions where marijuana use is more prevalent.

## PRESCRIPTION DRUGS

- 2019 data regarding the prevalence of current prescription drug use among Arkansas 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> graders relative to US youth are not available, although lifetime misuse of prescription pain medicine among Arkansas high school students was reportedly higher than among US youth (YRBSS, 2019).

### Past 30-Day Prescription Drug Use



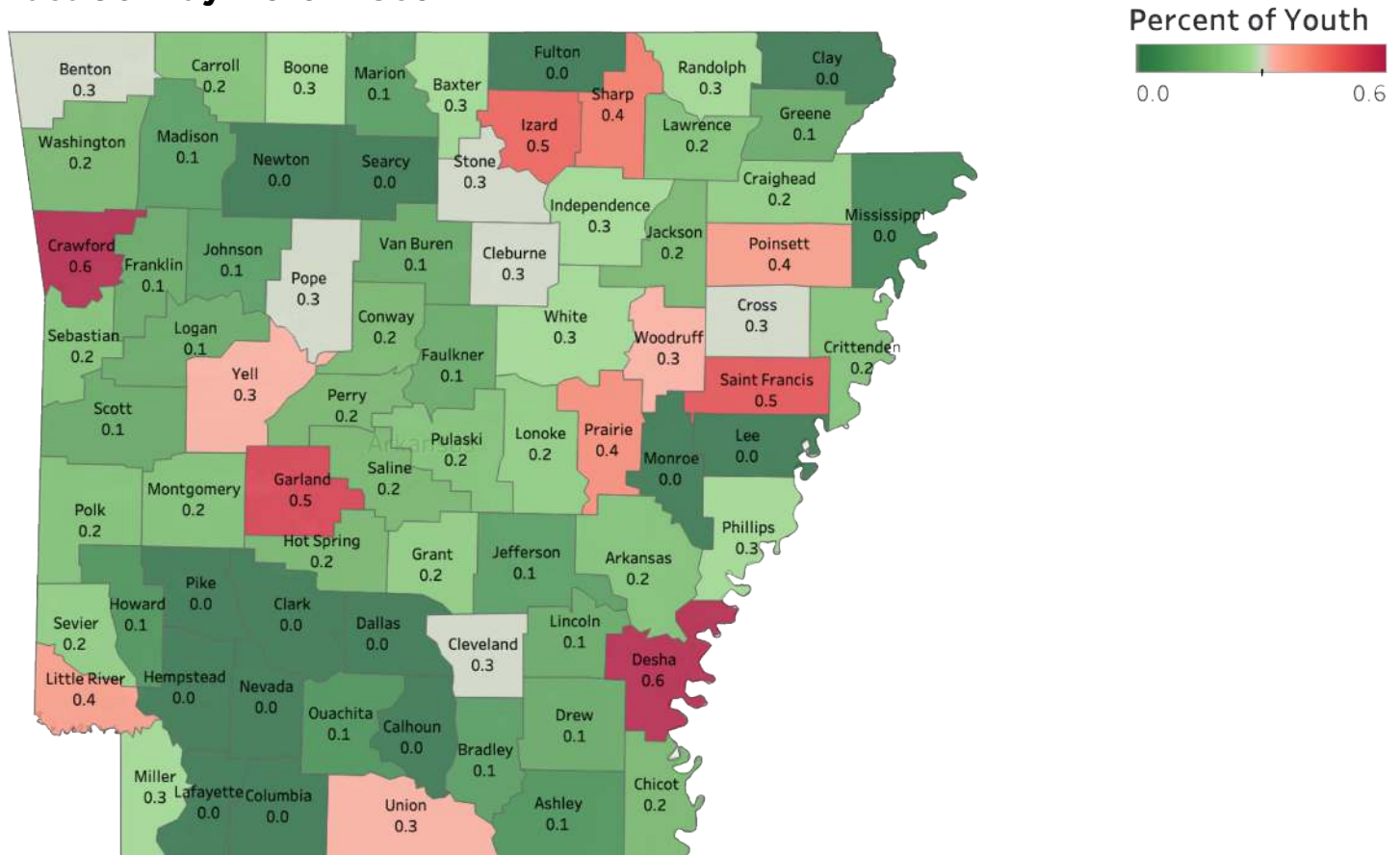
- The percentage of youth reporting past 30-day prescription use ranged from 0.0% (Region 7: Lee County) to 3.8% (Region 3: Woodruff County).
- Although prescription drug use prevalence is greatest in the northeastern part of the state (e.g., Regions 3 and 4), the vast majority of counties report a prescription drug use prevalence above the midpoint in the range (1.6%), particularly in central (Regions 6, 9, 12), western (Regions 5 and 10) and southern (Region 11) parts of the state.
- Few counties reported prescription drug use prevalence below 1.6% and these were mainly in the western-southern part of the state (Regions 5, 8 and 12).

These data suggest that, while the prevalence of prescription drug use itself is relatively low, greater prevalence of use is widely distributed across the state (i.e., Regions 3, 4, 5, 6, 9, 10, 11 and 12). These findings also suggest statewide prescription drug use prevention efforts should continue, with more intensive efforts in northeastern regions of the state.

## HEROIN

- In 2019, Arkansas high school students ranked 5<sup>th</sup> in the US for lifetime heroin use, with 4.7% of Arkansas students reporting lifetime heroin use versus 1.8% nationally (YRBSS, 2019).
- The prevalence of current heroin use among Arkansas 10<sup>th</sup> and 12<sup>th</sup> graders, but not 8<sup>th</sup> graders, was slightly greater than that among their US counterparts.

### Past 30-Day Heroin Use



- The percentage of youth reporting past 30-day heroin ranged from 0.0% in 14 counties scattered in the north, southwestern and central eastern parts of the state to 0.6% (Region 5: Crawford County and Region 13: Desha County).
- Only about 12 counties reported heroin use above the midpoint in the range (2.0%) and these appear to be near state borders on all sides.
- The vast majority of counties reported current heroin use prevalence below 0.2%.

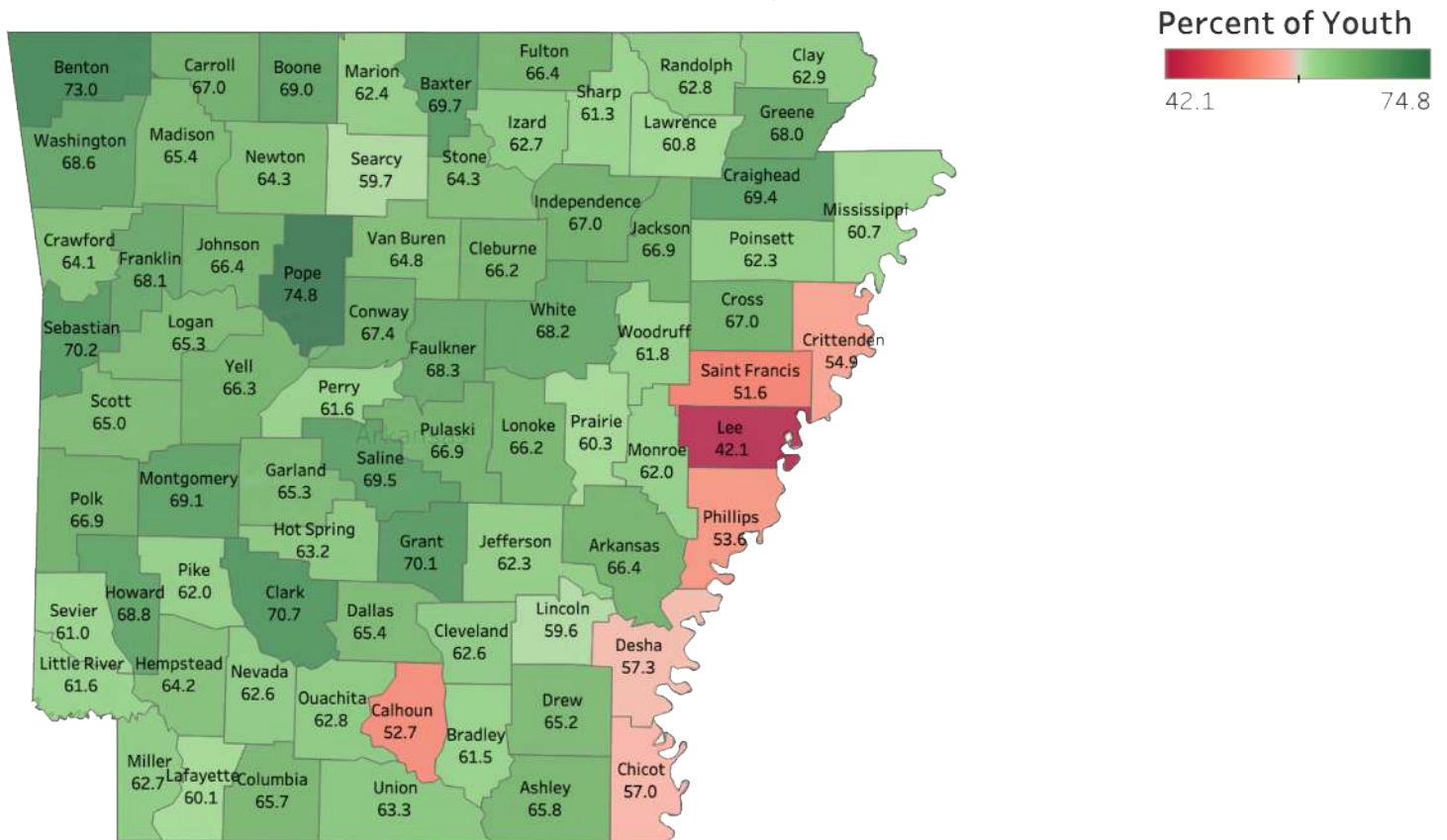
These data suggest that, while the prevalence of current heroin use itself is relatively low across most of the state, pockets of greater prevalence of use is observed in particular, typically rural, counties in Regions 3, 5, 6, 7, 8, 10, 11 and 13. These findings suggest heroin use prevention efforts should focus on those affected counties.

# SELECTED KEY PROTECTIVE FACTORS

Perception of harms associated with drug use has been found to be a key protective factor against drug use.

**Youth who perceive drinking one or two alcoholic beverages every day as a “moderate” or “great risk”**

## Perceived Moderate or Great Risk of Daily Alcohol Use



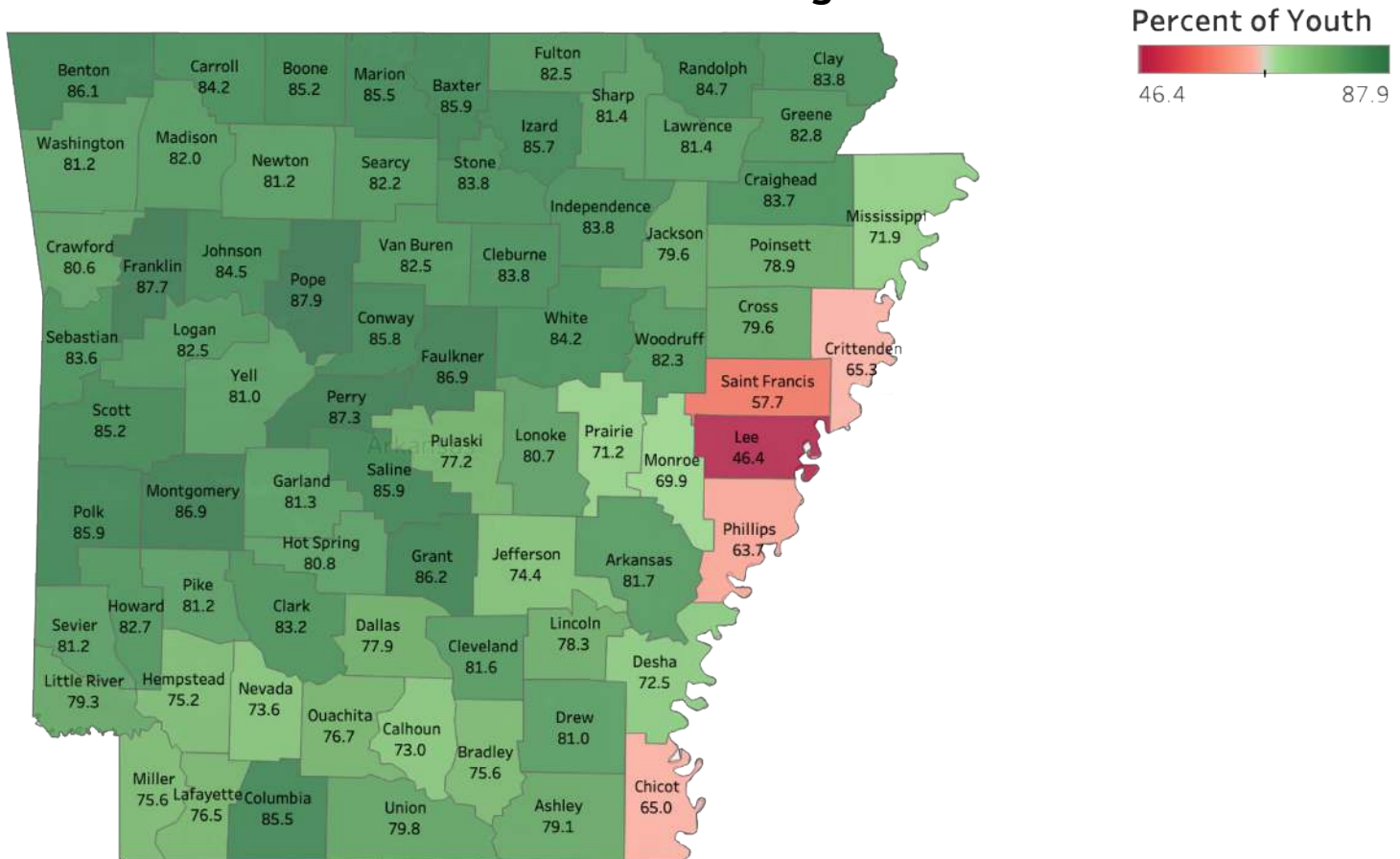
- The percentage of Arkansas youth perceiving at least moderate risk of daily alcohol use ranged from 42.1% (Region 7: Lee County) to 74.8% (Region 6: Pope County).
- The vast majority of counties showed that over 58.5% of youth perceived at least moderate risk of daily alcohol use.
- Counties with less than 58.5% of youth perceiving at least moderate risk of daily alcohol use are along the eastern border of the state (Regions 7 and 13) and one county in Region 11.

Although these data show that in most counties a majority of youth perceive at least moderate risk of daily alcohol use, there is still room for improvement. In addition, these findings suggest that more intensive efforts to help change perceptions of daily alcohol use-associated harm among youth in Regions 7, 11, and 13 are warranted.



## Youth who perceive smoking as a “moderate” or “great risk”

### Perceived Moderate or Great Risk of Smoking

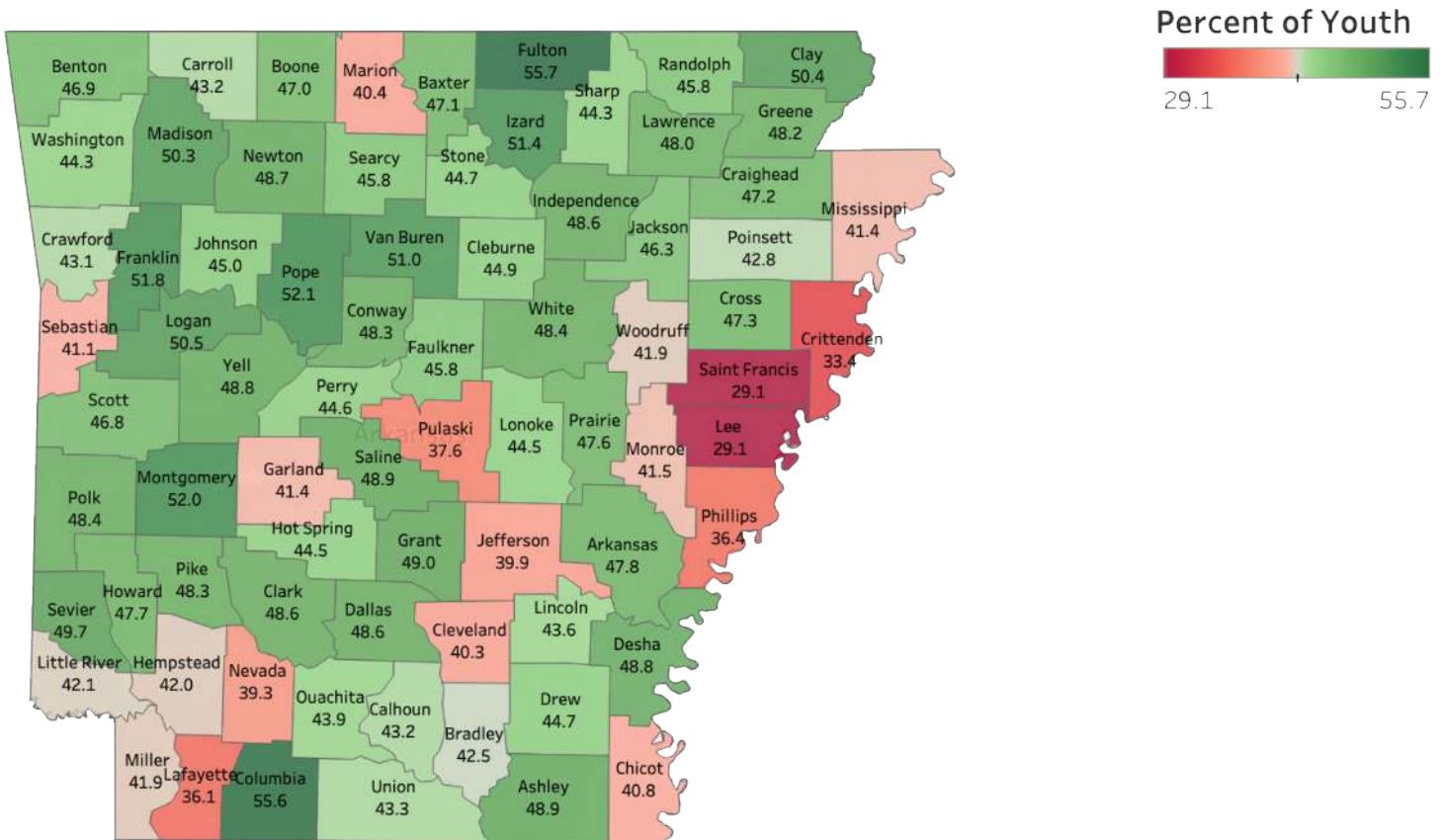


- The percentage of Arkansas youth who perceive at least moderate risk of smoking ranged from 46.4% (Region 7: Lee County) to 87.9% (Region 6: Pope County).
- In the vast majority of counties, over 68.6% of youth perceived at least moderate risk of smoking.
- Counties in which fewer than 68.6% of youth perceived at least moderate risk of daily alcohol use are along the eastern border of the state (Regions 7 and 13).

These data suggest that, while the vast number of counties show that more than two-thirds of youth perceive at least moderate risk of smoking, there is still room for improvement. More intensive efforts to help change perceptions of daily alcohol use-associated harm among youth in Regions 7 and 13 are warranted.

**Students who indicate trying marijuana once or twice puts a person at “moderate” or “great risk”**

**Perceived Moderate or Great Risk of Trying Marijuana Once or Twice**

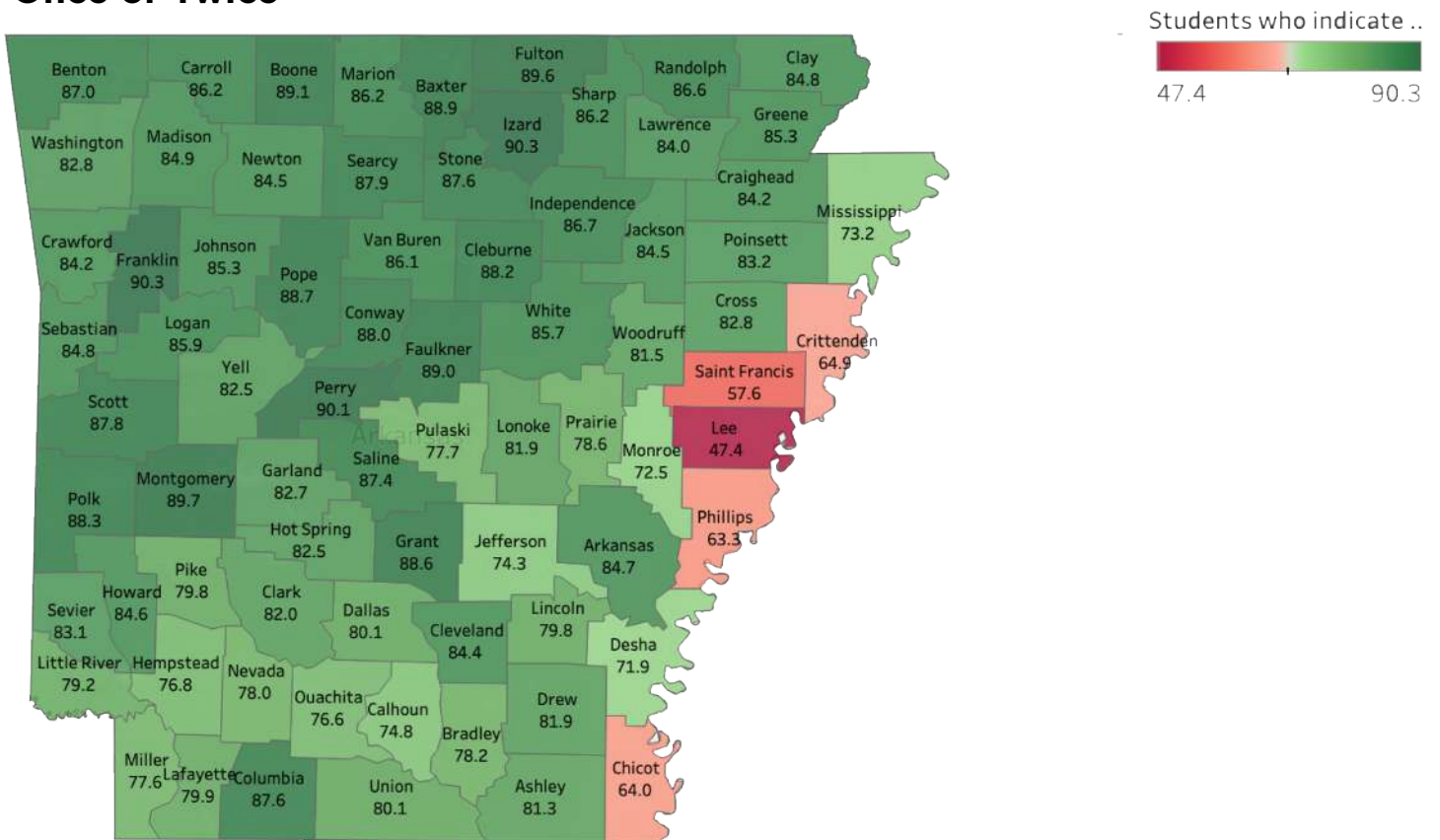


- The percentage of Arkansas youth perceiving at least moderate risk of trying marijuana once or twice ranged from 29.1% (Region 7: Lee and St. Frances Counties) to 55.7% (Region 3: Fulton County).
- In the majority of counties, between 44.4% and 55.7% of youth perceived at least moderate risk of trying marijuana once or twice.
- Counties with less than 44.4% of youth perceiving at least moderate risk of trying marijuana once or twice are located along the eastern border of the state (Regions 3, 4, 7 and 13) as well as central (Regions 8 and 9), south central (Region 12), and southeastern (Regions 10 and 11).

These data suggest that perception of marijuana-associated harms is relatively low overall, indicating that statewide prevention programs focused on educating youth on the dangers of marijuana use need to continue. In addition, these findings indicate that more intensive efforts may be needed in select regions, particularly in those along the eastern border of the state, are warranted.

## Students who indicate trying prescription drugs once or twice puts a person at “moderate” or “great risk”

### Perceived Moderate or Great Risk of Trying Prescription Drugs Once or Twice



- The percentage of Arkansas youth perceiving at least moderate risk of trying prescription drugs once or twice ranged from 47.4% (Region 7: Lee County) to 90.3% (Region 5: Franklin County).
- The majority of counties had over 68.8% of youth who perceived at least moderate risk of trying prescription drugs.
- Counties in which less than 68.8% of youth perceived at least moderate risk of trying prescription drugs are along the eastern border of the state (Regions 7 and 13).

While the majority of counties had more than two-thirds of youth perceive at least moderate risk of trying prescription drugs, there is still room for improvement. More intensive efforts to change perceptions of prescription-drug-use-associated harm among youth in Regions 7 and 13 are warranted.

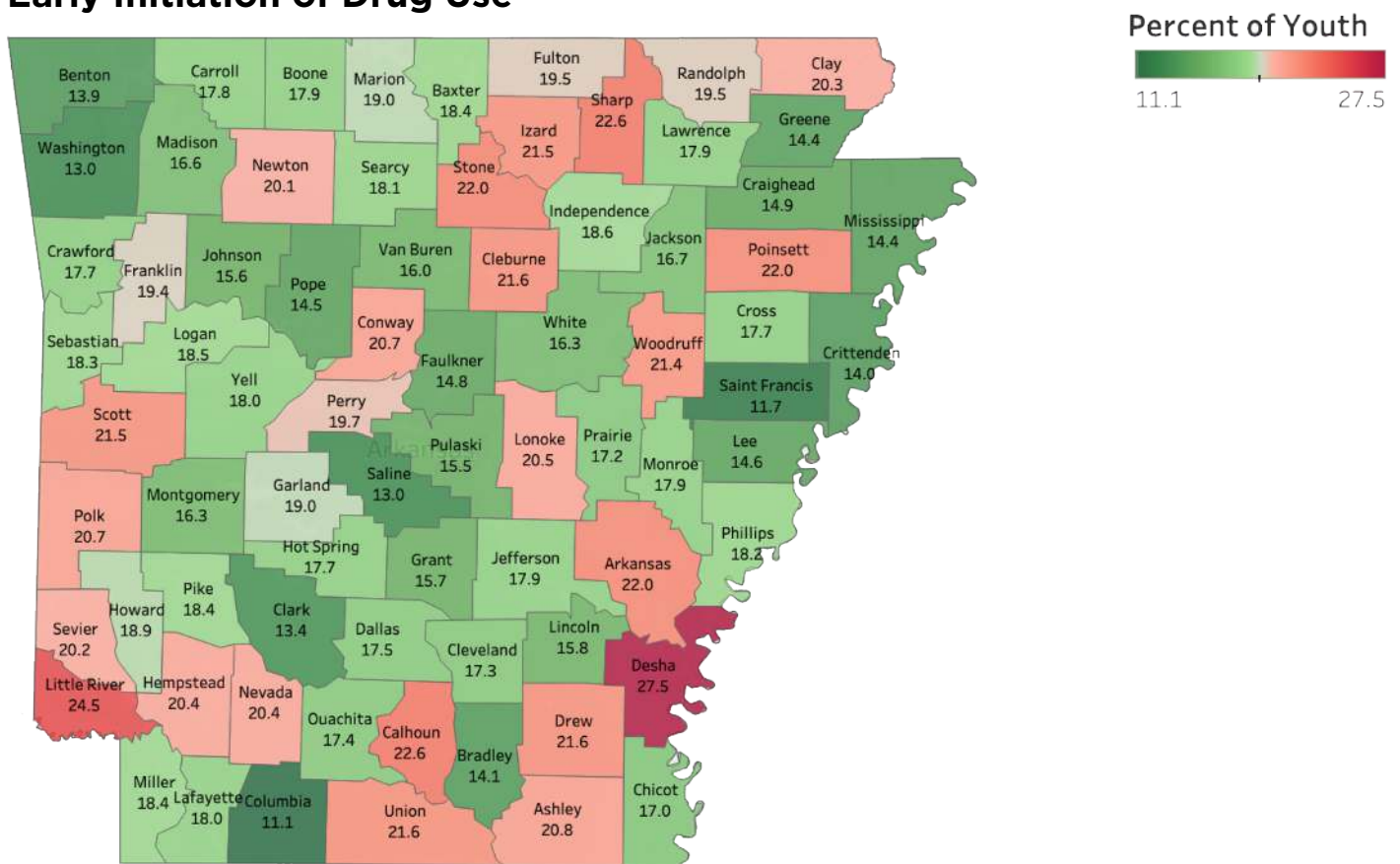
# SELECTED KEY RISK FACTORS

Univariate and multivariate statistical modelling have consistently shown that the following factors are associated with increased risk of substance use:

- Early initiation of substance use (i.e., first use of any substance prior to the age of 15)
- Having parents with attitudes favorable to drug use
- Having peers with attitudes favorable to drug use
- Having friends who use drugs
- Perceived low risk of drug use
- Depressive Symptoms

## Early Initiation of Substance Use

## Early Initiation of Drug Use

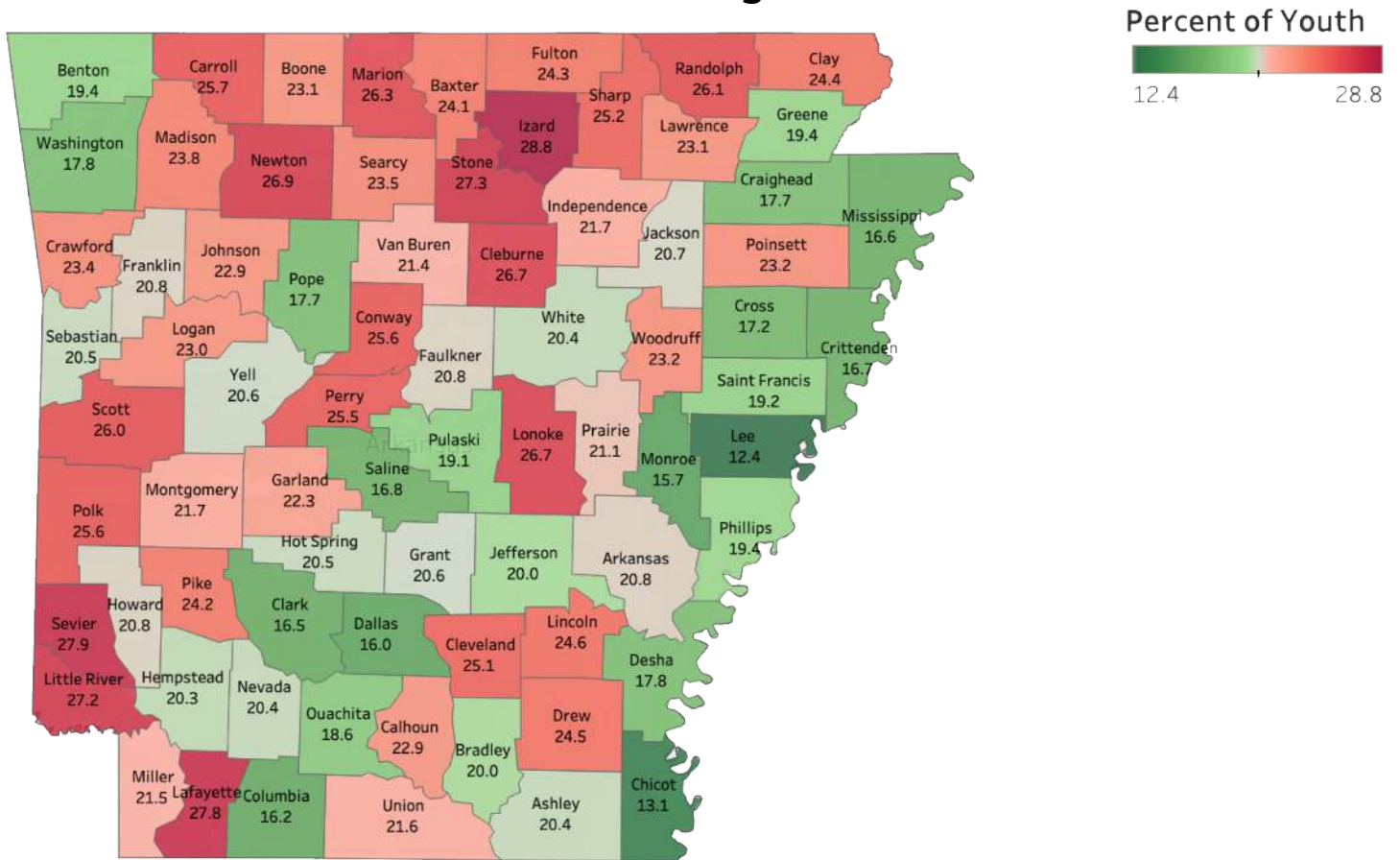


- The percentage of Arkansas youth reporting early drug use initiation ranged from 11.1% (Region 11: Columbia County) to 27.4% (Region 13: Desha County).
- Early drug use initiation appears to be most prevalent in the southeastern part of the state (Region 13); however, early drug use initiation is also more prevalent in northern, west-southern, and southern parts of the state, along with certain counties in the central part of the state.

These data suggest that more intensive efforts to help delay substance use initiation among youth, particularly in Regions 3, 4, 5, 8, 11, 12 and 13, are warranted.

## Parental Attitudes Favorable Toward Drug Use

### Parental Attitudes Favorable Toward Drug Use

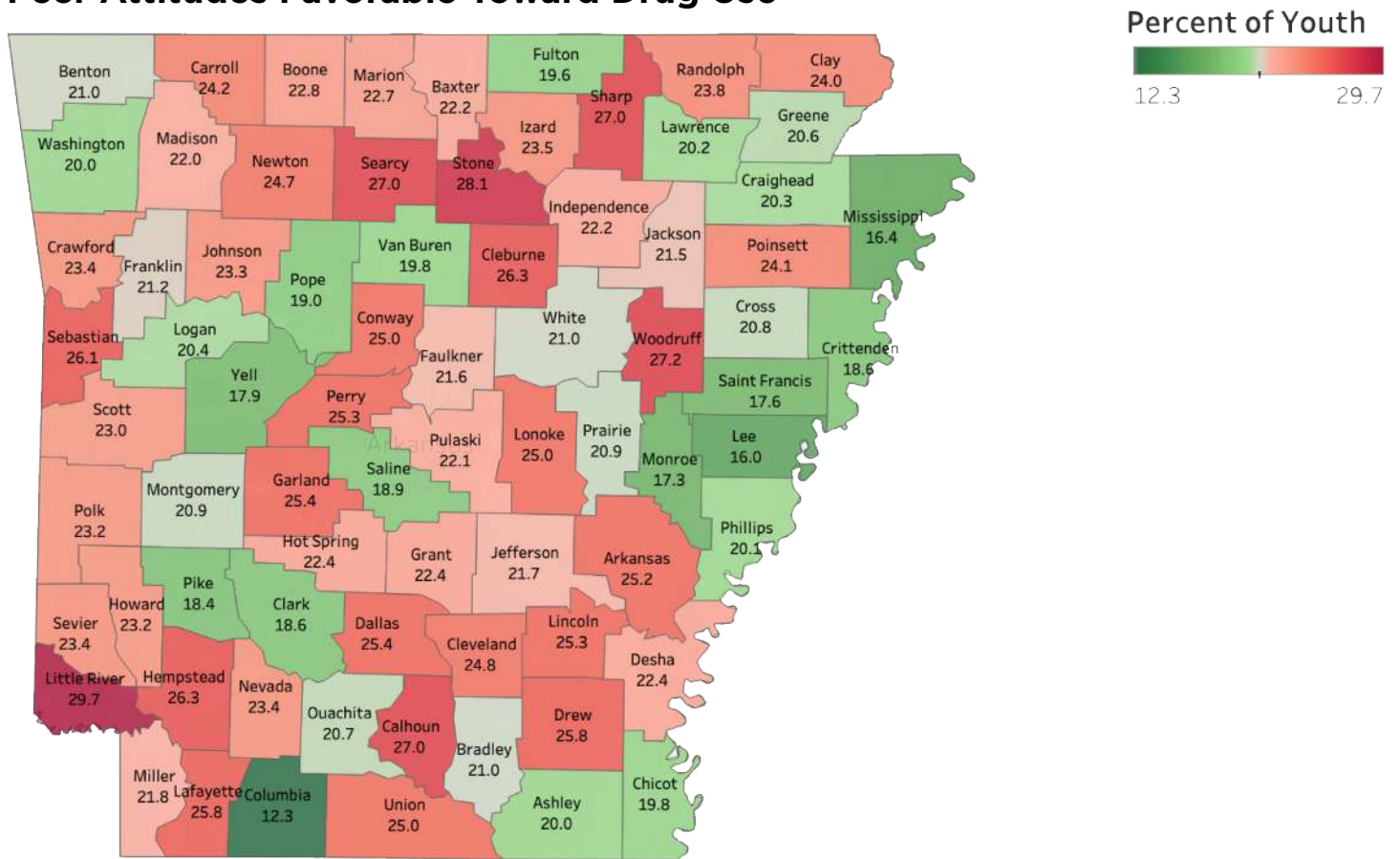


- The percentage of Arkansas youth reporting parental attitudes favorable to drug use ranged from 12.4% (Region 7: Lee County) to 28.8% (Region 3: IZARD County).
- Reported parental attitudes favorable to drug use appears to be most prevalent in the northern (Regions 1, 2, 3 and 4), western (Regions 5 and 10), southern (Region 12 and 13) and certain central (Regions 6, 8 and 9) parts of the state.
- Reported parental attitudes favorable to drug use appears to be the least prevalent along the eastern border (e.g., Region 7) of the state.

These data suggest that more intensive efforts targeting parental attitudes toward drug use, particularly in Regions 1,2, 3, 4, 5, 6, 8, 9, 10, 12 and 13, are warranted.

## Peer Attitudes Favorable Toward Drug Use

## Peer Attitudes Favorable Toward Drug Use

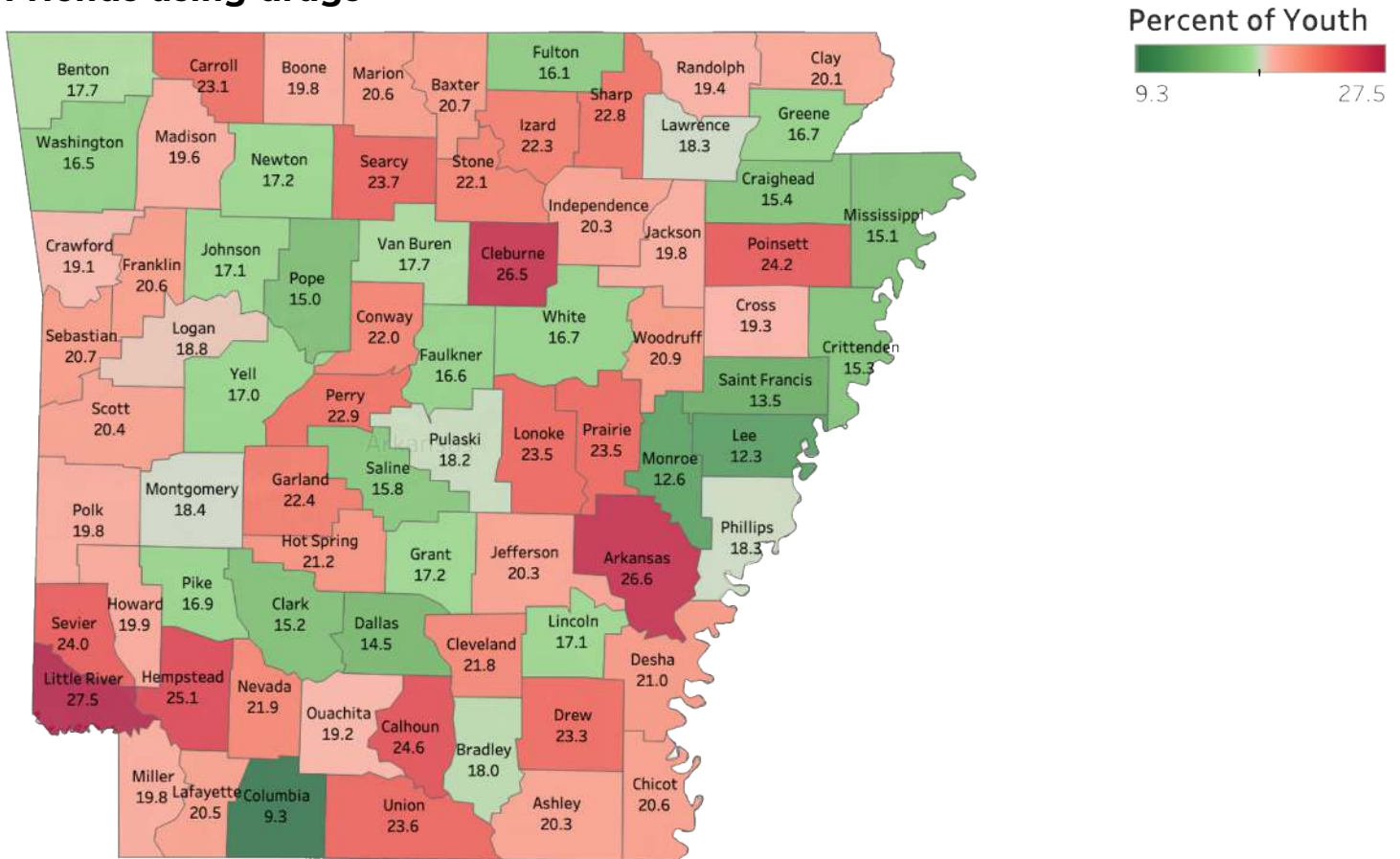


- The percentage of Arkansas youth reporting peer attitudes favorable to drug use ranged from 12.2% (Region 11: Columbia County) to 29.7% (Region 10: Little River County).
- Most counties report a prevalence of peers with attitudes favorable to drug use greater than the midpoint of the range (i.e., 21%) and this is particularly true in the southern (Regions 10, 11, 12 and 13), western (Region 5), northern (Regions 1, 2, 3 and 4) and certain central (Regions 6, 8 and 9) parts of the state.
- Reported peer attitudes favorable to drug use appears to be the least prevalent along the eastern border (e.g., Region 7) of the state.

These data suggest that more intensive statewide efforts targeting youth attitudes toward drug use are warranted.

## Friends using drugs

## Friends using drugs

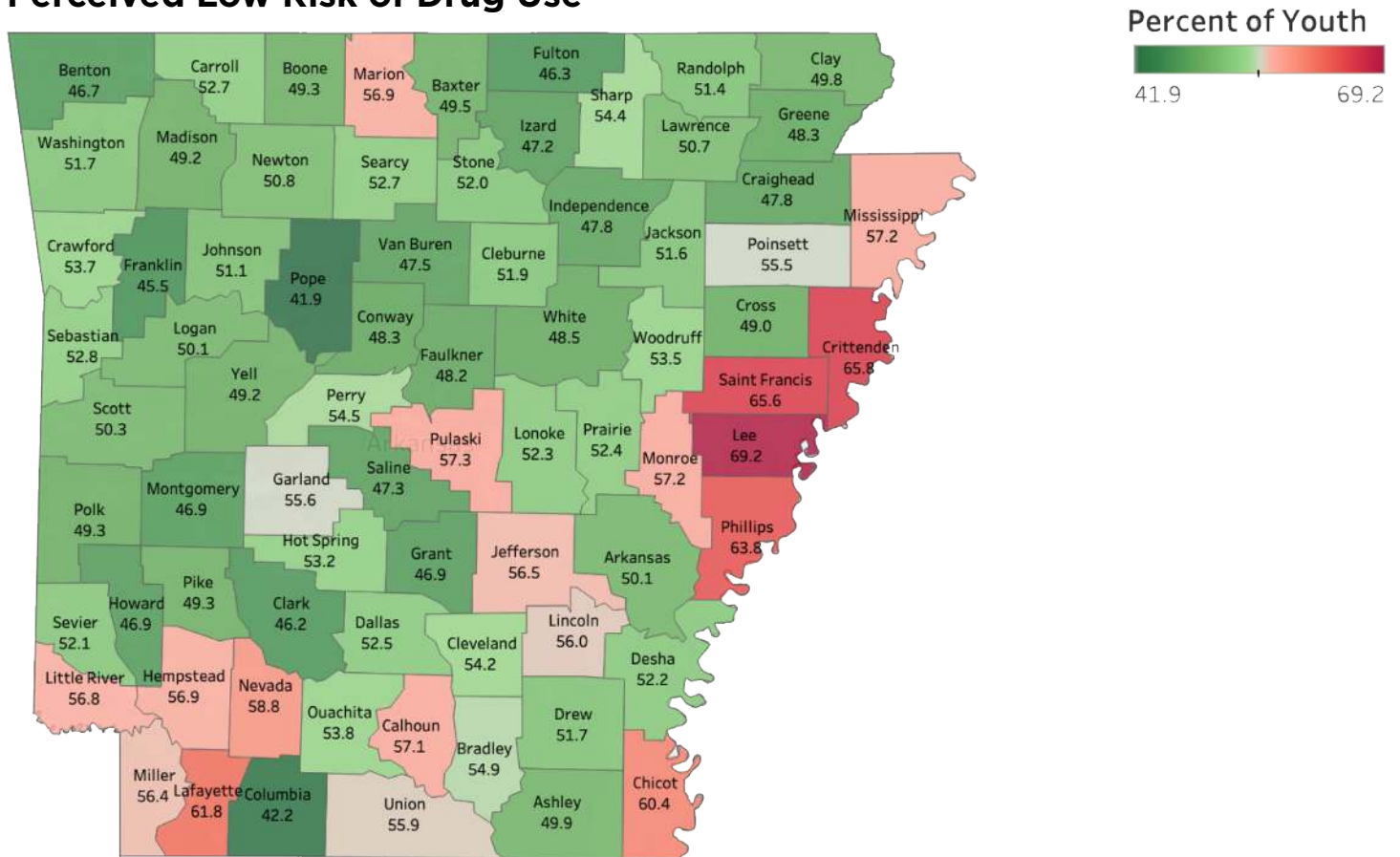


- The percentage of Arkansas youth reporting friends using drugs ranged from 9.3% (Region 11: Columbia County) to 27.5% (Region 10: Little River County).
- Most counties report a prevalence of peers with attitudes favorable to drug use greater than the midpoint of the range (i.e., 18.4%) and this is particularly true in the southern (Regions 10, 11, 12 and 13), western (Region 5), northern (Regions 1, 2, 3 and 4) and certain central (Regions 6, 8 and 9) parts of the state.
- Reported peer attitudes favorable to drug use appears to be least prevalent along the eastern border (e.g., Region 7) of the state.

These data suggest that more intensive statewide efforts targeting youth drug use in general are warranted.

## Low Perceived Risk of Drug Use

### Perceived Low Risk of Drug Use



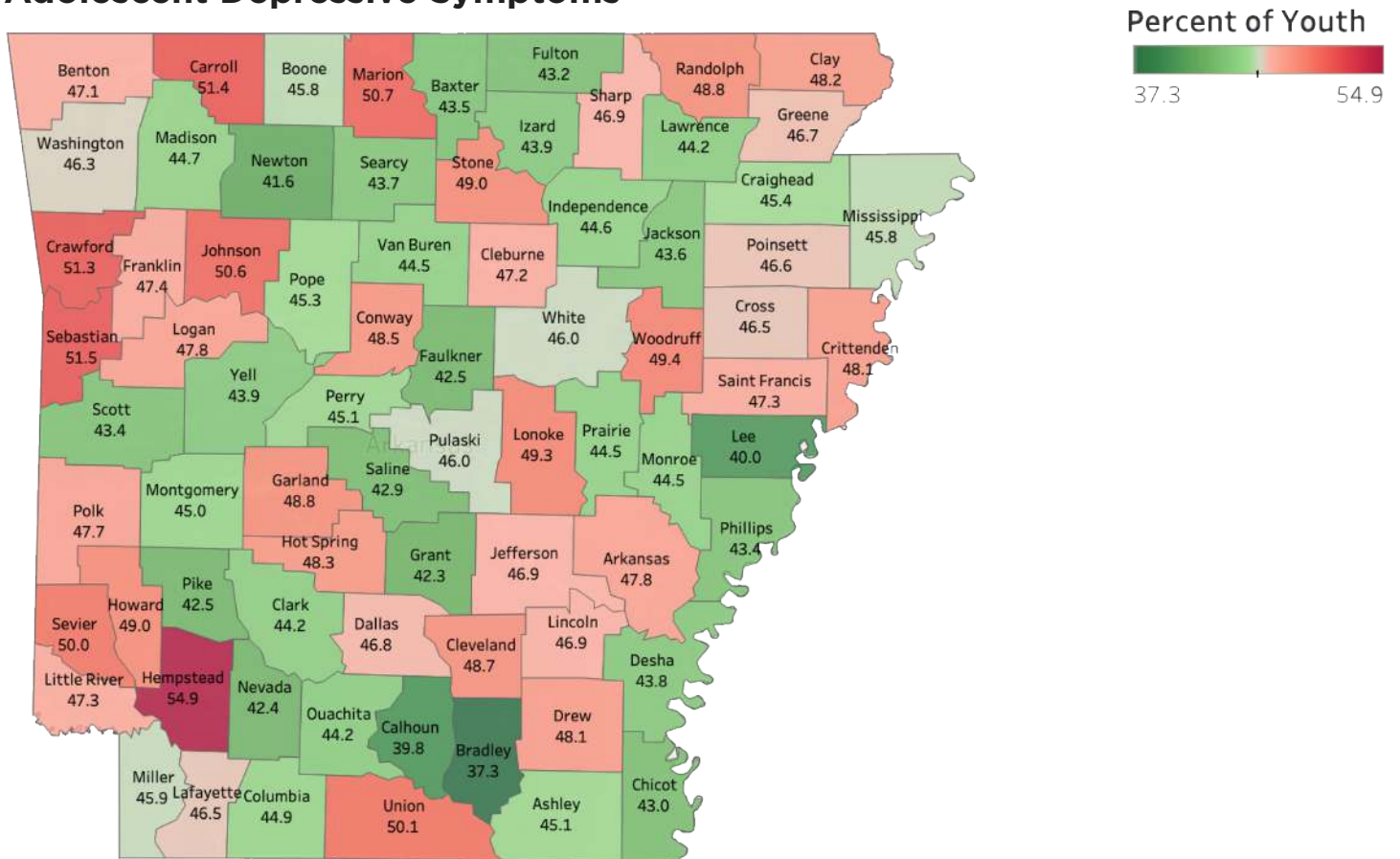
- The percentage of Arkansas youth perceiving low risk of drug use was relatively high, ranging from 41.9% (Region 6: Pope County) to 69.2% (Region 7: Lee County).
- The highest prevalence of youth perceiving low risk of drug use is observed along the eastern border of the state (Regions 4, 7 and 13), followed by southwestern (Regions 10 and 11) and selected counties in the north (region 2) and central (Regions 9 and 12) parts of the state.

These data suggest that more intensive statewide efforts targeting youth perceptions about drug use risks in general are warranted.



## Depressive Symptoms

### Adolescent Depressive Symptoms



- The percentage of Arkansas youth reporting depressive symptoms was relatively high, ranging from 37.3% (Region 12: Bradley County) to 54.9% (Region 10: Hempstead County).
- The highest prevalence of youth reporting depressive symptoms was reported in the southwestern (Region 10), western (Regions 5 and 6) and northern (Regions 1, 2, 3 and 4) parts of the state.
- Other areas with a prevalence of depressive symptoms higher than the midpoint (i.e., 46.1%) include eastern (Region 7) and south central (Region 8, 9, 11 and 12) areas of the state.

Overall, more than a third of youth reported depressive symptoms, indicating that improvements in identification of mental health issues and access to treatment need to be a priority statewide, with more intensive efforts in those areas where prevalence is especially high (Regions 1, 2, 5 and 10).

# APPENDIX - Technical Notes

## TRANSFORMING RAW NUMBERS TO PERCENTAGES

Each measure included in this companion guide is based on the number of survey respondents who indicate positively to a given question. The number might be a good measure to use if you only wanted to know what was happening in County A. What if you wanted to know whether County A was doing better than County B? Suppose that the number of youth reporting alcohol use in County A is 1,000 and the number in County B is 2,000. From these counts, we might assume that County B has a larger substance use problem. A fair comparison, however, means accounting for the total number of youths completing the survey in each county. What if we knew that County A had 10,000 survey completers while County B had 50,000?

Would that change our assumption that County B had a bigger substance use problem? We first convert the numbers into proportions by relating the number of youths indicating alcohol use to the total number of youths completing the survey in the counties.

$$\text{County A: } 1,000/10,000 = 0.10$$

$$\text{County B: } 2,000/50,000 = 0.04$$

This result shows that County A has a higher proportion of youth reporting alcohol use than County B. To make these numbers easier to understand, we multiply each result by 100 to get the percent of youth in each county using alcohol.

$$\text{County A: } 1,000/10,000 = 0.10 * 100 = 10\%$$

$$\text{County B: } 2,000/50,000 = 0.04 * 100 = 4\%$$

Thus, the percentage of youth reporting alcohol use is greater in County A (10% or 10 in 100 persons) compared with County B (4% or 4 in 100 persons). The prevalence of alcohol use in County A is 2.5 times as high as in County B.

# ARKANSAS REGIONAL MAP

Arkansas is divided into 13 regions as listed below:

**Region 1**

Benton  
Carroll  
Madison  
Washington

**Region 2**

Baxter  
Boone  
Marion  
Newton  
Searcy

**Region 3**

Cleburne  
Fulton  
Independence  
Izard  
Jackson  
Sharp

Stone  
Van Buren  
White  
Woodruff

**Region 4**

Clay  
Craighead  
Greene  
Lawrence  
Mississippi  
Poinsett  
Randolph

**Region 5**

Crawford  
Franklin  
Logan  
Polk  
Scott

Sebastian

**Region 6**

Conway  
Faulkner  
Johnson  
Perry  
Pope

**Region 7**

Crittenden  
Cross  
Lee  
Monroe  
Phillips  
St. Francis

**Region 8**

Clark  
Garland

Hot Spring  
Montgomery  
Pike

**Region 9**

Lonoke  
Prairie  
Pulaski  
Saline

**Region 10**

Hempstead, How-  
ard  
Lafayette  
Little River  
Miller  
Sevier

**Region 11**

Calhoun

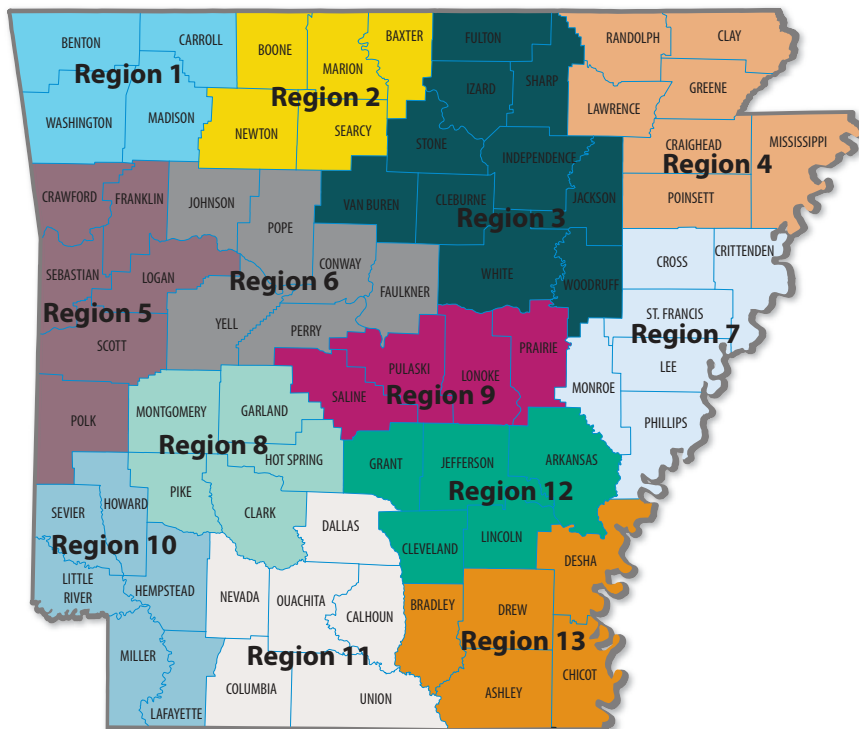
Columbia  
Dallas  
Nevada  
Ouachita  
Union

**Region 12**

Arkansas  
Cleveland  
Grant  
Jefferson  
Lincoln

**Region 13**

Ashley  
Bradley  
Chicot  
Desha  
Drew



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