# 2024 Annual Profile of Substance Use























# **Annual Profile of Substance Use**

# Arkansas State Epidemiological Outcomes Workgroup

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# **Arkansas Statewide Epidemiological Outcomes Workgroup Charter**

The Arkansas Statewide Epidemiological Outcomes Workgroup (SEOW) was developed in 2005. Initially funded through the SPF State Incentive Grant (SPF-SIG) with continued support from the (2013-2023) Strategic Prevention Framework-Partnerships for Success (SPF-PFS) Grant and the (2023-2024) Substance Abuse Block 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' Office of Substance Abuse and Mental Health (OSAMH). 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 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:

- 1) Analyzing, monitoring, and sharing data trends in substance use and other environmental, behavioral, and health-related factors.
- 2) Informing data-driven policy and practice decision-making regarding prevention priorities at local and state levels.
- 3) 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 will support OSAMH and the University of Arkansas at Little Rock/MidSOUTH in the decision-making process regarding the delivery of prevention services. SEOW will facilitate 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 OSAMH, MidSOUTH, the University of Arkansas for Medical Sciences (SEOW Staff), Regional Prevention Providers, and Regional Lead Agencies. OSAMH 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 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 incidence, prevalence, and consequences of substance use. It also highlights risk factors, protective factors, and mental health or behavioral health problems as they relate to substance use. This report is intended to analyze systematically diverse sources of data from across the nation and state and synthesize a comprehensive informational tool. It will serve as a data-based resource to support efforts of key prevention players to assess community needs relating to substance use and its consequences and prioritize evidence-based programs and policies for substance use prevention. Individual and societal factors such as education/income and community support/crime, respectively, impact substance use initiation and prevention. Therefore, it is important to understand the context in which a particular subpopulation exists. For this reason, the State Epidemiological Profile includes a brief overview of Arkansas's population. Change in a variable over time, such as youth smoking rates, provides useful information about any impact of the efforts/actions on that variable. Trend data, where available, were studied to assess changes in substance use and its relating factors over time. 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 # 1B08TI087025-01awarded to the Arkansas Department of Human Services Division of Aging, Adult and Behavioral Health Services (DAABHS) Office of Substance Abuse and Mental Health (OSAMH), 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 OSAMH. 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 compliant with Titles VI and VII of the Civil Rights Act. Revised November 2017.

#### SUGGESTED CITATION

Oliveto AH, Thostenson J, Bollinger M (2024) Arkansas State Epidemiological Outcomes Workgroup: 2023 Arkansas State Epidemiological Profile of Substance Use. Little Rock: Psychiatric Research Institute, University of Arkansas for Medical Sciences.

# **Key Findings**

#### SUBSTANCE USE

#### Youth

- Overall, the rates of current cigarette and smokeless tobacco use among Arkansas youth sharply declined from 2018 to 2023. Compared to the U.S., cigarette use was higher for Arkansas students in grade 12, lower for grade 10, and similar for grade 8. Smokeless tobacco prevalence was higher for Arkansas students in grade12, similar for grade 10, but lower in grade 8 relative to the U.S. students.
- The age at which Arkansas youth start using any E-cigarette product continues to decrease.
- Lifetime and current use of any electronic vaping product increased as grade increased among Arkansas students in 2023, with more than 1 in 4 Arkansas seniors reporting lifetime use, although use was lower among Arkansas students relative to their U.S. counterparts.
- In 2023, the prevalence of lifetime and current vaping of flavoring only among Arkansas students was lower than that among their US counterparts.
- In 2023, a smaller proportion of Arkansans in grades 8, 10, and 12 report lifetime or current use of nicotine-containing electronic vaping products relative to their U.S. counterparts.
- Lifetime and current marijuana vaping among Arkansas youth was lower than among their U.S counterparts in 2023.
- The prevalence of lifetime and current alcohol use decreased slightly from 2022 to 2023 among Arkansas students and was lower relative to their U.S. counterparts.
- The overall rate of current alcohol, alcopop use, or binge drinking among Arkansas youth has generally been declining since 2016; however, current alcohol use, alcopop use, or binge drinking has remained essentially the same or increased among Arkansas 6<sup>th</sup> grade students.
- In 2023, female students again reported higher usage rates across substances than male students for alcohol, marijuana, nicotine e-cigarette, CBD product and nonmedical prescription drug use.
- Rates of lifetime and current marijuana use has generally declined since 2016 among Arkansas youth and prevalence is lower than among their U.S. counterparts.
- In 2023, Arkansas seniors reported lower prevalence of lifetime prescription drug misuse but a similar prevalence of lifetime heroin use, relative to their U.S. counterparts.
- Rates of lifetime prescription drug and heroin use among Arkansas students have generally declined in the state since 2016; however, among 6<sup>th</sup> grade students, lifetime use of prescription drugs or heroin increased. Lifetime prevalence of heroin use was lower among Arkansas 8<sup>th</sup> and 10<sup>th</sup> grade students relative to their U.S. counterparts.
- Arkansas trends in current prescription drug use differed by grade, such that use increased from 2019 to 2023 among 6<sup>th</sup> and 8<sup>th</sup> grade students while decreasing among 10<sup>th</sup> and 12<sup>th</sup> graders.

- Trends in lifetime use/misuse of other substances differed by substance. Lifetime use of:
  - o Inhalants, the most used substance, remained stable from 2015 to 2019, then decreased in 2020 and remained stable from 2020 to 2023.
  - Over-the-counter drug use decreased from 2015 to 2023.
  - Cocaine, methamphetamine, or hallucinogens, already low, decreased from 2015 to 2020, before stabilizing or decreasing slightly from 2020 to 2023.
  - Other chemical products like bath salts generally increased from 2015 to 2022, but no data are available for 2023.
- Current inhalant or hallucinogen use remained relatively stable over time, while use of other chemical products like bath salts increased such that use was slightly higher than inhalant use in 2021 and 2022.
   Current over-the-counter drug, cocaine, and methamphetamine use showed decreasing trends from 2015 to 2023.

#### **Adults**

- In 2022, a higher percentage of Arkansas adults currently smoked cigarettes relative to U.S. adults; however, current cigarette use continued to decline over time among Arkansas adults.
- Electronic cigarette use is more likely among youth and young adults than older adults.
- Among Arkansas college students, any nicotine and marijuana vaping decreased from 2022-2023, whereas frequent past 30-day nicotine or marijuana e-cigarette use generally increased from 2021-2023.
- Since 2016, current alcohol use among Arkansas adults has remained stable and lower than national rates.
- The prevalence of binge drinking generally decreased slightly until 2021 then rose again 2022. Arkansas rates were only slightly lower relative to U.S. adults in 2022. In contrast, heavy drinking prevalence increased very slightly since 2016 among both Arkansas and U.S. adults and was very slightly higher among Arkansas relative to U.S. adults in 2022.
- Among Arkansas college students, past 30-day alcohol use generally increased from 2021 to 2023 while past 30-day frequent use increased among Arkansas college students aged 25-29 years.
- In 2021-2022, the prevalence of past-year and past-month marijuana use remained lower among Arkansas adults relative to their U.S. counterparts.
- Past 30-day marijuana use generally increased from 2021 to 2023 among Arkansas college students.
- The 2021-2022 prevalence of past-year prescription opioid misuse was higher among Arkansas adults relative to their U.S. counterparts, with the higher rate driven by higher prevalence of use among adults 26+ years.
- In 2021-2022, Arkansas and U.S. adults had a similar prevalence of past-year heroin use.
- In 2021-2022, past-year opioid (prescription opioid *OR* heroin) use among Arkansas adults was higher than that among the U.S. population, with Arkansas again ranking 7<sup>th</sup> in the nation for opioid misuse.
- Although prescription opioid dispensing rates have generally decreased from 2013 to 2022, Arkansas continued to rank 2<sup>nd</sup> in the county, with a dispensing rate was almost double that of the U.S. in 2022.

- Prescription opioid misuse and opiate use were generally very low in 2021-2023 among Arkansas college students.
- Past-year cocaine use was less prevalent among Arkansas than U.S. adults in 2021-2022. Cocaine use was higher among Arkansas and U.S. adults aged 18-25 than 26+ years
- Past-year methamphetamine use prevalence was almost double that nationally among Arkansas adults in 2021-2022. Arkansas ranked 3<sup>rd</sup> in the U.S. in prevalence of methamphetamine use.
- Past 30-day prevalence of cocaine or methamphetamine use was generally very low from 2021 to 2023 among Arkansas college students.
- Past 30-day use of sedatives generally increased from 2021 to 2023 among Arkansas college students aged 26-29, but not 18-25, years.
- Past 30-day use of steroids, inhalants, hallucinogens, or designer drugs was generally very low among Arkansas college students in 2021-2023.
- Past 30-day use of illegal drugs was generally very low among Arkansas college students in 2021-2023, although use increased slightly from 2021 to 2023.
- Past-month use of any illicit drug (including marijuana) among Arkansas adults was less prevalent than among U.S. adults in 2021-2022; however, past-month use of any illicit drug *other than* marijuana was similar among Arkansas and U.S. adults in 2021-2022.

#### **CONSEQUENCES**

- The rate of angina/coronary heart disease or COPD remained relatively stable over time among Arkansans and U.S. adults. Rates among U.S. adults were consistently lower than Arkansas rates.
- Arkansans have higher rates of stroke compared to national averages. Rates of stroke have been trending downward in Arkansas but rose in 2022 while remaining relatively stable in the U.S.
- Arkansans have higher rates of heart attack compared to national averages. The Arkansas prevalence of heart attack remained relatively stable from 2016 to 2020 before increasing in 2021 then declining in 2022, while U.S. prevalence remained stable over time.
- Mortality rate from lung cancer in Arkansas is decreasing but remains almost 1.4 times higher than U.S. rates. The Arkansas alcoholic liver disease mortality rate fluctuated between 2017 to 2022, being at or slightly lower than U.S. figures.
- U.S. and Arkansas drug overdose death rates increased from 2017-2021, In 2022, Arkansas rates decreased slightly while U.S. rates remained stable. U.S. drug overdose death rates are higher than for Arkansas; however, drug overdose deaths are likely underreported in Arkansas.
- Most U.S. drug overdose deaths involved opioids, with 75 percent of drug overdose deaths involving at least one opioid and about 68 percent involving synthetic opioids mostly illicitly manufactured fentanyl.
- Suicides have increased in Arkansas since 2019 but fell slightly in 2022. Arkansas continues to have suicide rates higher than national figures.
- Motor vehicle fatalities were significantly higher among Arkansas youth and adults relative to their U.S. counterparts.

- In 2022, fatal vehicle crashes in which the driver had a positive breath alcohol content (BAC) were high among Arkansas drivers with rates 1.5 times higher than their U.S. counterparts.
- Most substance-related arrests in 2022 were for drug/narcotics violations among Arkansas youth and adults.
- Most drug possession arrests in 2022 involved marijuana/hashish among Arkansas youth (83.6%) and adults (38.8%); however, arrests among Arkansas adults involving stimulants (38.3%) was only slightly lower.

#### **CONTRIBUTING FACTORS**

- The percentage of Arkansas students who perceive great risk in smoking at least one pack of cigarettes
  per day is somewhat lower than U.S. students, although this varied by grade. The perception of risk
  increases as grade level increases.
- Perceived great risk in using marijuana once or twice per week decreased as grade level increased among both U.S. and Arkansas students, with perceived risk higher among Arkansas students than their U.S. counterparts.
- The percentage of students who perceive drinking one or two alcoholic beverages every day is higher than for U.S. students.
- Overall the percentage of Arkansas respondents who experienced at least one adverse childhood experience was higher than the national average.
- More than one in three (34.7%) students reported having felt nervous most or all of the time during the past 30 days in 2021-2023
- Almost two in five (39.4%) students reported feeling restless most or all of the time during the past 30 days in 2021-2023.
- About one in five (19.5%) students reported feeling depressed in the past 30 days in 2021-2023.
- Almost one in four (23.3%) students reported feeling hopeless in the past 30 days in 2021-2023.
- Arkansas adults were less likely than U.S. adults to perceive great risk of smoking one or more packs of cigarettes per day in 2021-2022.
- Arkansas adults were slightly less likely than U.S. adults to perceive great risk of alcohol binge use once
  or twice per week in 2021-2022.
- Arkansas adults were slightly more likely than U.S. adults to perceive great risk of smoking marijuana once or twice per month in 2021-2022.
- Arkansas adults were consistently more likely than U.S. adults to report poor mental health in the prior 14 days across time. The prevalence of a major depressive disorder was consistently higher among Arkansas adults relative to their U.S. counterparts.
- The proportion of students in 6<sup>th</sup> and 8<sup>th</sup> grades reporting that parents had attitudes favorable to drug use has steadily increased over time. While the proportion of 10<sup>th</sup> and 12<sup>th</sup> grade students perceiving favorable parental attitudes to drugs decreased very slightly from 2016 to 2021-2022 or so before stabilizing or increasing slightly in 2023.

- The percentage of Arkansas students with peer attitudes favorable to drug use has increased over time among 6<sup>th</sup> grade students from 2016 to 2023 and was higher than that for 8<sup>th</sup> or 12<sup>th</sup> grade students in 2023.
- Among Arkansas college students, past 30-day prevalence of experiencing any sexual assault increased sharply from 2021 to 2022, then decreased in 2023 to very low levels similar to that in 2021.
- Transitions and mobility have remained stable over time.
- The use of alcohol, marijuana, cigarettes, or any drug increases with decreasing academic performance among Arkansas students.
- In 2021-2023, about three in five (59.3%) Arkansas students reported having access to school counseling.
- After a sharp increase in tobacco sales to minors in Arkansas 2020 to 2021, sales decreased through 2023.
- Unemployment rates for Arkansas in 2023 varied widely across counties and were highest in the southern and eastern portions of the state. Arkansas unemployment rates continue to be lower than U.S. rates.
- Like the U.S. poverty rate, the Arkansas poverty rate has declined since 2016, but continues to be higher than the U.S. poverty rate with the gap between the state and the U.S. remaining stable over time.
- The prevalence of food insecurity decreased between 2020 and 2021 for Arkansas but rose again in 2022. The Arkansas prevalence is higher relative to the U.S.
- The prevalence of U.S. disconnected youth has declined since 2017. Arkansas prevalence decreased from 2017 to 2019, then remained stable through 2021; however, prevalence has been consistently higher than nationally.
- The Arkansas death rate from firearm injuries increased from 2016 to 2021 then fell in 2022. Arkansas rates have been consistently higher than U.S. firearm injury death rates.
- The Arkansas homicide death rate increased slightly from 2016 to 2020 then fell again in 2021 and 2022. Rates in the state have been consistently higher than the U.S. rates.

#### TREATMENT ADMISSIONS FOR SUBSTANCE USE DISORDER

- The percentage of admissions to substance abuse treatment have declined over time among youth and young adults from 2000 to 2022, while increasing among adults aged 26+ years. Most Arkansas substance use treatment clients served in 2022 were White (80.5%), followed by Black (17.5%).
- The number of pregnant women in substance use treatment increased between 2008 and 2019 then decreased from 2019 to 2021 and increased sharply in 2022.

# **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 healthcare 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**

Previous Arkansas state profiles focused on the incidence, prevalence, 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 and their consequences specific to Arkansas. For instance, according to the National Survey on Drug Use and Health estimates for 2021-2022, Arkansas tied with three other states for the fifth highest rate of past-year methamphetamine use in the nation among individuals aged 12–17, indicating that Arkansas likely needs to focus on educating communities, parents and students about the dangers related to methamphetamine use, as well as enhancing the reach of efforts that are already in place. Further, knowing the rates and prevalence of consumption and consequences allows policymakers and community leaders to prioritize prevention efforts.

Beginning in the 2013 Arkansas State Epidemiological Profile, additional focus was placed on the shared risk factors that contribute to the development and continuance of both substance use and mental health disorders. In this report, mental health factors are highlighted throughout the contributing factors section since the co-occurrence of mental health disorders and substance use is common. Decreasing the prevalence of shared risk factors such as adverse childhood experiences or extreme economic deprivation means decreasing the likelihood individuals will develop substance use or mental health disorders.

Policymakers and community leaders can use the data presented here to help support 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 process of developing substance use disorders and the end results. These sections include the consumption of substances in both youth and adults, the consequences related to the current levels of usage in the state of Arkansas, the contributing factors specifically associated with the likelihood of either youth or adults developing substance use disorders, and treatment for substance abuse.

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

#### DATA INDICATORS AND SOURCES

State-collected data as they relate to substance use is aggregated by UAMS. Since the establishment of SEOW in 2005, the workgroup has continuously sought and collected data to provide a data-driven core. The UAMS analytics team supporting SEOW developed criteria for inclusion of data into this report. Indicator criteria include:

**Relevant** – Based on input from SEOW members, analytics team members selected indicators that were relevant to the subject of substance use. The usefulness 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 and consequences of substance use or mental health. Meaningful social determinants of health known to influence substance use or mental health were included.

**Available and timely** – National-, state- and county-level indicators are necessary for an effective evaluation of substance use and mental health in the Arkansas population. The feasibility of obtaining data from trusted sources and conducting appropriate analyses was deliberated during indicator selection. Indicators that were accessible to the general public or available through a data request process were evaluated within this report.

**Representative** –Analytics team members reviewed the indicators to determine if major elements of substance use were appropriately assessed. If any elements were missing, additional indicators were sought to fill gaps in analyses. Data elements that were not available were included in the data limitations section of this report.

**Valid and reliable** – Indicators that are true reflections of the intended measure were selected. An indicator that can be consistently measured over time from a credible source was considered reliable. To confirm validity and reliability, the methodology for data collection, compilation and analysis for each data source was reviewed.

**Time series data** – Selected indicators included those that reflect a trend over time. Data sources that reported indicators each year were essential, whereas those indicators that were not consistently collected or collected only once may not have been an appropriate indicator for this report.

This data compilation supports a significant enhancement to 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 related materials and data can be accessed at ARPrevention.org. Exhibit 1 represents data readily available on the website for use by community members.

#### **EXHIBIT 1.**

Indicator	Source	
Arkansas Population Profile (Population,	US Census Bureau, American Community Survey	
Education, Race/Ethnicity, Income)	DP05: ACS DEMOGRAPHIC AND Census Bureau Table, Table	
Education, Nace/Ethnicity, income,	S1901, Table S1501	
Arkansas Unemployment	Department of Labor, Bureau of Labor Statistics	
Arkansas Onempioyment	Bureau of Labor Statistics Data (bls.gov)	
Disconnected Youth	US Census Bureau, American Community Survey	
Disconnected Touth	B14005: SEX BY SCHOOL ENROLLMENT BY Census Bureau Table	
Arkansas Uninsured	US Census Bureau, American Community Survey	
Arkansas omnsarca	S2701: SELECTED CHARACTERISTICS OF Census Bureau Table	
Poverty rates	U.S. and State: American Community Survey, Table S1701	
Toverty rates	County: Small Area Income and Poverty Estimates (SAIPE)	
	https://www.census.gov/programs-surveys/saipe.html	
Arkansas Rural Population	US Department of Agriculture, ERS	
•	https://www.ers.usda.gov/data-products/rural-urban-continuum-	
	codes.aspx	
Self-Rated Health Status	Behavioral Risk Factor Surveillance Survey (BRFSS)	
	BRFSS Prevalence & Trends Data: Explore by Location   DPH   CDC	
Overall Health Ranking	America's Health Rankings America's Health Rankings   AHR	
	(americashealthrankings.org)	
Physical Inactivity	Behavioral Risk Factor Surveillance Survey (BRFSS)	
	BRFSS Prevalence & Trends Data: Explore by Location   DPH   CDC	
Adult Chronic Health Conditions	Behavioral Risk Factor Surveillance Survey (BRFSS)/United Health	
(Hypertension, High Cholesterol, Foundation, America's Health Rankings <u>BRFSS Prevale</u>		
Arthritis, Depression, Obesity)	Trends Data: Explore by Location   DPH   CDC and	
	https://www.americashealthrankings.org/	
Electronic Vapor Product Use	Arkansas Prevention Needs Assessment	
	Arkansas Prevention Needs Assessment Survey	
	(pridesurveys.com)	
	Monitoring the Future Monitoring the Future Dashboards	
	National Health Interview Survey NHIS Interactive Data Query	
	System (cdc.gov) Arkansas Collegiate Survey	
Tobacco Use	Arkansas Prevention Needs Assessment	
Tobacco ose	Arkansas Prevention Needs Assessment Survey	
	(pridesurveys.com)	
	Monitoring the Future Tables and Figures   Monitoring the Future	
	Behavioral Risk Factor Surveillance Survey (BRFSS)	
Alcohol Use	Monitoring the Future Tables and Figures   Monitoring the Future	
	Arkansas Prevention Needs Assessment Survey	
	(pridesurveys.com)	
	(pridesurveys.com)	
	National Survey of Drug Use and Health, State Data Tables and	
	National Survey of Drug Use and Health, State Data Tables and Reports From the 2021-2022 NSDUH (samhsa.gov) United Health Foundation, America's Health Rankings	
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Marijuana Use	National Survey of Drug Use and Health, State Data Tables and Reports From the 2021-2022 NSDUH (samhsa.gov) United Health Foundation, America's Health Rankings BRFSS Prevalence & Trends Data: Explore by Location   DPH   CDC Arkansas Collegiate Survey Arkansas Prevention Needs Assessment Survey	
Marijuana Use	National Survey of Drug Use and Health, State Data Tables and Reports From the 2021-2022 NSDUH (samhsa.gov) United Health Foundation, America's Health Rankings BRFSS Prevalence & Trends Data: Explore by Location   DPH   CDC Arkansas Collegiate Survey	

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	Arkansas Collegiate Survey
Prescription drug misuse	Arkansas Prevention Needs Assessment Survey
	(pridesurveys.com)
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Heroin Use	National Survey of Drug Use and Health, State Data Tables and
Tieroin osc	Reports From the 2021-2022 NSDUH (samhsa.gov)
	Arkansas Prevention Needs Assessment Survey
	(pridesurveys.com)
Cocaine Use	National Survey of Drug Use and Health, State Data Tables and
Cocame ose	Reports From the 2021-2022 NSDUH (samhsa.gov)
Mathamahatamina Haa	Arkansas Collegiate Survey
Methamphetamine Use	National Survey of Drug Use and Health, State Data Tables and
	Reports From the 2021-2022 NSDUH (samhsa.gov)
C. J. P. J. H.	Arkansas Collegiate Survey
Sedative Use	National Survey of Drug Use and Health, State Data Tables and
	Reports From the 2021-2022 NSDUH (samhsa.gov)
	Arkansas Collegiate Survey
Inhalant Use	Arkansas Collegiate Survey
Hallucinogen use	Arkansas Collegiate Survey
Opioid Use	National Survey of Drug Use and Health, State Data Tables and
	Reports From the 2021-2022 NSDUH (samhsa.gov)
	Arkansas Collegiate Survey
Pregnancy related behaviors	Pregnancy Risk Assessment Monitoring System
	Pregnancy Risk Assessment Monitoring System   CDC
Arrests	Arkansas Crime Information Center (ACIC)
	https://www.dps.arkansas.gov/crime-info-support/arkansas-
	crime-information-center/crime-statistics/
Drug overdose deaths in the US	Centers for Disease Control FastStats - Drug Overdoses (cdc.gov)
Opioid related overdose deaths per	Centers for Disease Control FastStats - Drug Overdoses (cdc.gov)
100,000	Centers for Disease control raststats Drug overaoses (cat.gov)
Opioid prescriptions per 100 persons	Centers for Disease Control
Opiola prescriptions per 100 persons	U.S. State Opioid Dispensing Rates, 2020   Drug Overdose   CDC
Date of page at a batimary as a surely and	Injury Center
Rate of neonatal abstinence syndrome	Arkansas Department of Health, Prescription Drug Monitoring
	Program, Annual Report

	PDMP - Reports and Resources Arkansas Department of Health	
	<u>Medicaid.gov</u>	
	https://data.medicaid.gov/dataset/9c9ad0d1-c59b-4a25-9314-	
	<u>8e7e44e7f281</u>	
Age adjusted mortality rate (lung,	Centers for Disease Control Wide-ranging Online Data for	
bronchus, trachea cancer; alcoholic fatty	Epidemiologic Research (WONDER)	
liver disease, suicide, accidents,	https://wonder.cdc.gov/	
firearms, drug overdose)		
Academic Performance	Arkansas Prevention Needs Assessment Survey	
	(pridesurveys.com)	
	Arkansas Collegiate Survey	
Suicide Related Behaviors	National Survey of Drug Use and Health, State Data Tables and	
	Reports From the 2021-2022 NSDUH (samhsa.gov)	
	Arkansas Collegiate Survey	
Fatal Accidents including those related	US Department of Transportation, Fatality Analysis Reporting	
to alcohol use	System	
	https://www.nhtsa.gov/research-data/fatality-analysis-reporting-	
	system-fars	
Self-perceived drug/alcohol problem	Arkansas Collegiate Survey	
Criticized for drug/alcohol use	Arkansas Collegiate Survey	
Risk/Harm perception - smoking, Arkansas Prevention Needs Assessment Survey		
marijuana, alcohol	(pridesurveys.com)	
	National Survey of Drug Use and Health, State Data Tables and	
	Reports From the 2021-2022 NSDUH (samhsa.gov)	
	Monitoring the Future <u>Tables and Figures</u>   Monitoring the Future	
Mental Health	Monitoring the Future <u>Tables and Figures   Monitoring the Future</u>	
	National Survey of Drug Use and Health, State Data Tables and	
	Reports From the 2021-2022 NSDUH (samhsa.gov)	
	Arkansas Prevention Needs Assessment Survey	
	(pridesurveys.com)	
	BRFSS Prevalence & Trends Data: Explore by Location   DPH   CDC	
Access to school counseling services	Arkansas Prevention Needs Assessment Survey	
	(pridesurveys.com)	
Substance Use Injury	Arkansas Collegiate Survey	
Drove under the influence	Arkansas Collegiate Survey	
Trouble with police	Arkansas Collegiate Survey	
Sexual Assault	Arkansas Collegiate Survey	
Hospital Admissions/Emergency	Arkansas Department of Health	
Department Visits		
Adverse Childhood Experiences	National Survey of Children's Health	
Parents/Peers with attitudes favorable	Arkansas Prevention Needs Assessment Survey	
to drug use	(pridesurveys.com)	
Transitions and mobility	Arkansas Prevention Needs Assessment Survey	
·	(pridesurveys.com)	
Rate of homelessness per 100 children	Arkansas Department of Education Data Center	
enrolled in Arkansas public schools	https://adedata.arkansas.gov/statewide/	
Percentage tobacco sales to minors	Arkansas Tobacco Control	
	http://www.arkansas.gov/tcbccs/tcbccs	
People in alcohol or drug treatment	Arkansas Department of Human Services	
	•	

	https://humanservices.arkansas.gov/resources/reports/statistical-reports
Mental Health Clients Served	Arkansas Department of Human Services <a href="https://humanservices.arkansas.gov/resources/reports/statistical-reports">https://humanservices.arkansas.gov/resources/reports/statistical-reports</a>
Mental Health Treatment Admissions	Arkansas Department of Human Services, Division of Aging and Adult Behavioral Health Services
People needing but not receiving treatment	National Survey of Drug Use and Health, State Data Tables and Reports From the 2021-2022 NSDUH (samhsa.gov)
Community Resilience Estimates	Community Resilience Estimates (census.gov)
Food insecurity	U.S. Department of Agriculture, Economic Research Service
Fertility rate	Arkansas Department of Health, Vital Statistics, Natality

#### DATA LIMITATIONS AND GAPS

Various data sources at the national and state level were employed to summarize this report on substance use, contributing factors, consequences, and treatment. However, since every data source has its limitations, it is important that such gaps or limitations are considered in viewing this report.

Important limitations include:

- Underrepresentation of Racial and Ethnic Minority Youth: In states where minorities make up a significant portion of the population—such as in this state, where minorities comprise 30.3 percent, with non-Hispanic Blacks alone constituting 15.1 percent—data on substance use among these groups can be insufficient. As minorities represent the fastest-growing segment of the population, the lack of robust, disaggregated data on specific racial and ethnic groups, including Hispanic, Black, Asian, and Native American youth, can hinder the ability to address the unique risk factors and challenges they face. This gap may also limit the development of culturally tailored interventions, as smaller sample sizes or generalized data may not capture the diversity of experiences within these populations.
- **Limited Data on Military-Connected Youth:** While general youth surveys often do not include military-connected youth (children of service members or veterans), this population may face unique risk factors for substance use due to frequent relocations, parental deployment, or mental health challenges in the family. There may be insufficient data on this specific subgroup.
- Insufficient Data on LGBTQ+ Youth: Surveys may not include detailed questions about sexual
  orientation and gender identity, or sample sizes may be too small to disaggregate data for LGBTQ+
  youth. Given that LGBTQ+ youth are at a higher risk for substance use due to stigma and
  discrimination, this data gap can lead to underestimating their needs.
- Exclusion of Vulnerable or Marginalized Youth: Youth experiencing homelessness, those in foster care, or those involved in the juvenile justice system are often excluded from large-scale surveys. These groups are at higher risk for substance use but are frequently left out of research due to challenges in accessing them.
- **Methodological Variability Across Surveys**: Differences in the design of substance use surveys can lead to inconsistent findings and make it difficult to compare results across studies. For example:
  - Instrumentation: Surveys often use different questions, definitions, or scales to assess substance use, which can result in variations in reported prevalence rates. For instance, some

- surveys may focus on lifetime use, while others examine recent or daily use, leading to inconsistencies in identifying high-risk behaviors.
- Sample Sizes: Some surveys have limited sample sizes, particularly when it comes to subgroups such as military-connected youth, LGBTQ+ youth, or specific racial and ethnic minorities. Small sample sizes can reduce the statistical power of analyses, leading to unreliable estimates or the inability to draw meaningful conclusions for these key populations.
- Data Lags: National and state-level substance use surveys often involve long time lags between
  data collection and reporting. This delay can make it challenging to capture current trends,
  especially with rapidly changing substance use behaviors (e.g., the rise of vaping or synthetic
  drugs). The most recent data available may not reflect the current substance use landscape,
  which hinders timely decision-making and intervention efforts.
- **Limited Longitudinal Data**: There is often a lack of long-term, longitudinal studies tracking substance use from adolescence into young adulthood, which hinders understanding of how substance use behaviors evolve over time and the long-term effects of early use.
- Gaps in Data on Emerging Substances: Surveys may lag in capturing data on emerging substances, such as new synthetic drugs, certain prescription drugs, or vaping products, especially as these trends evolve rapidly.
- Due to concerns with privacy, data at the county or community level may not be publicly available.
- The COVID pandemic not only reduced the time period for collecting data on many of the surveys used in this report, but it also reduced the number of respondents to the surveys. This means that many of the trends we see in the data, particularly those different from patterns pre-pandemic, may not be reliable indicators.
- Reliance on Self-Reported Data: Most youth substance use data is self-reported, which can lead to underreporting or misreporting due to stigma, fear of legal consequences, or social desirability bias.
- Special Note Regarding the National Survey on Drug Use and Health (NSDUH) 2020 Data: NSDUH State estimates for 2020 (or any combination of years that includes 2020) are not available due to methodological concerns. Because of the COVID-19 pandemic, most respondents answered the survey via the web in Quarter 4 of 2020, even though all responses in Quarter 1 were from in-person interviews. It is known that people may respond to the survey differently while taking it online, thus introducing what is called a "mode effect." It was assumed that the mode effect was similar for different groups of people. However, this assumption was proven to be wrong. Because of this and with concerns about the rapid societal changes in 2020, it was determined that averages across any three years that included 2020 could be misleading. The 2020 and 2019-2020 datasets were removed from the NSDUH website in February 2023. Moreover, due to different methodologies used in the conduct of the NSDUH survey starting in 2021, 2021 data cannot be compared to data from prior years. Thus, only 2021-2022 NSDUH data were included in this report.

#### **EXHIBIT 2.**

Data Deficiency	Why Data Are Needed
Illicit drug use	Young adults increasingly report past-month illicit drug use, and emergency department visits related to illicit drug use and prescription drug misuse are rising. Obtaining county-level data on the incidence and prevalence of substance use remains a critical need to better understand and address these trends.

LGBT data	LGBT young adults are at greater risk of harassment and violence. As a result of these and other stressors, sexual minorities are at increased risk for various behavioral health issues including substance use/misuse and suicide. They are also considerably more likely to be homeless. Data are needed on these populations to determine the incidence and prevalence of these and mental health disorders at the state and county level. In 2021, the U.S. Census Bureau added questions to their Pulse survey to assess gender at birth, current gender identity, and sexual orientation. These new data are available to quantify state-level estimates of the LGBT population although not substance use behaviors frequently associated with LGBT populations. 12.4 percent of the Arkansas population identify as Lesbian, Gay, Bisexual or Transgender (LGBT) (Census Bureau Pulse Survey, Phase 4.2 Cycle 08 Household).
Substance use/misuse data on minority populations	Minority populations make up 30.3 percent of the state, but data on substance use/misuse within these groups are limited. Cultural, racial, and ethnic differences must be considered when designing interventions. Due to the state's relatively small population size, national surveys do not provide
Substance use/misuse related suicide data	reliable substance use estimates for minority groups in Arkansas.  Substance use significantly increases suicide risk, both as a contributing factor and as a means for suicide attempts. However, there is a 3-year lag in cause of death data, meaning data may not reflect current trends. Suicide is often underreported or miscoded, further complicating accurate tracking. While recent surveys added mental health and suicide-related questions during the COVID-19 pandemic, reliable suicide data for Arkansas at the state or sub-state level is limited, particularly by age, race, or region.
Military families and Veterans	The needs of these populations are unknown. We do know that Veterans and military members have higher rates of suicide compared to the U.S. population. There is insufficient information on mental health and substance use/misuse, particularly at state and county levels. However, the state of Arkansas has conducted a series of surveys with Veterans and their families through the Arkansas Governor's Challenge suicide prevention initiative. These data are currently being analyzed. While these surveys will not collect data on youth, they will provide mental health and suicide information on Veterans, military members, and adult family members. Additional work is ongoing to identify suicide risk among Veterans for all counties in the U.S.
Over-the-counter (OTC) medication use/misuse	Over-the-counter (OTC) medications, while generally safe when used appropriately, can be misused, posing risks for addiction. There is currently no comprehensive data source to track OTC medication purchases or misuse, making it difficult to assess the scope of this issue.
Incarcerated population	A significant proportion of incarcerated individuals experience co-occurring substance use and mental health disorders. To effectively intervene and develop treatment strategies, it is essential to have reliable state and county-level prevalence data on substance use and mental health disorders in this population.

Co-occurring mental health and substance use disorders or service utilization	The coexistence of both a mental illness and SUD is known as a co-occurring disorder and is common among people in treatment. People with mental illness are more likely to experience an SUD than those not affected by a mental illness. According to SAMHSA's 2022 National Survey on Drug Use and Health, approximately 21.5 million adults in the United States have a co-occurring disorder. Understanding the prevalence of co-occurring disorders at the county level is essential for developing targeted interventions and improving service delivery. See Co-Occurring Disorders and Other Health Conditions   SAMHSA
County-level data	Privacy concerns often limit the availability of publicly accessible county-level data. However, such data is critical to understanding the incidence and prevalence of substance use/misuse in specific regions and counties, enabling the precise targeting of prevention and intervention strategies.
Poly-substance Use	Increasingly, individuals are using multiple substances simultaneously (e.g., alcohol and opioids, or nicotine and marijuana). However, polysubstance use data is often lacking or not sufficiently disaggregated in current reporting systems. Understanding these interactions is crucial for effective prevention and treatment strategies, yet existing surveys may not capture the complexities of multiple drug interactions.
Mental Health Service Gaps	While co-occurring disorders are mentioned, it's also important to address access to mental health and substance use services. Many young adults face barriers to accessing treatment due to factors such as stigma, lack of insurance, or provider shortages. Data on service utilization and unmet needs for substance use treatment at the local level is critical for planning intervention strategies.
Impact of Social Media and Technology	There is emerging concern about the role of <b>social media and technology</b> in promoting or glamorizing substance use among youth. Data on the influence of social media on substance use behaviors is still evolving, but recognizing its potential role could be important for understanding modern substance use trends.

Strategies to address these data deficiencies include the following:

- To mitigate gaps in individual data sources, use multiple data sets to get a more comprehensive picture which is a strategy used in this report.
- Identify access points for survey data that, for privacy reasons, are only available through government data centers.
- Supplement quantitative data with qualitative insights from focus groups, interviews, or case studies. This
  can be particularly useful for understanding the nuances of substance use behaviors among specific
  populations like LGBTQ youth or racial/ethnic minorities.
- Conduct primary data collection activities by fielding surveys within the state that fill identified gaps.
- Identify new data sources to fill existing data gaps.
- Explore methodologies that can be used to allocate data to counties.

#### **DISSEMINATION PLAN**

The Arkansas State Epidemiological Profile can be used to evaluate substance use, factors contributing to substance use, consequences of substance use, and treatment of substance use for program planning, policy changes and support in applying for funding of substance abuse services within communities throughout Arkansas. Prior to establishment of the SEOW and the State Epidemiological Profile, policymakers, community members and healthcare 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, ARPrevention.org.

The Arkansas profile was written with these primary end users in mind: substance use prevention and treatment program planners, public health workers, researchers, policymakers, community coalition members, healthcare 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 SEOW staff community outreach and publications, regional prevention providers (RPP), and other community stakeholders. Communication of the report and supporting materials include the website (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.

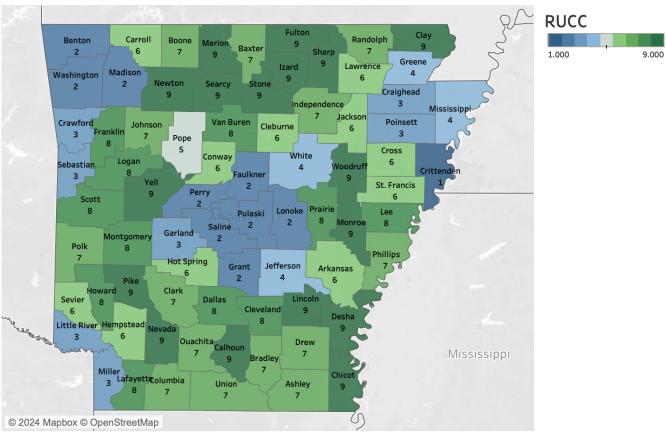
The dissemination plan is evaluated at each semi-annual SEOW meeting. A summary of the distribution of materials since the last meeting is presented, and the discussion revolves around the effectiveness of dissemination activities. The UAMS communications team tracks website traffic to determine what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

# Annual Profile of Substance Use Arkansas State Epidemiological Outcomes Workgroup Arkansas Overview

#### **POPULATION**

Of the 75 counties in Arkansas, 58 are considered rural. Over 70 percent of rural counties have fewer than 20,000 people. In 2022, the total population of Arkansas was slightly over 3 million, placing the state in the bottom half of all states in terms of population. Arkansas ranks 36<sup>th</sup> in terms of population per square mile at 58.0 compared to 111.9 per square mile for the U.S. as a whole.

# Degree of Rurality Across Arkansas



RUCC	Urban-Rural	Description
1	Urban	Metro - Counties in metro areas of 1 million population or more
2		Metro - Counties in metro areas of 250,000 to 1 million population
3	Urban	Metro - Counties in metro areas of fewer than 250,000 population
4	Rural	Nonmetro - Urban population of 20,000 or more, adjacent to a metro area
5	Rural	Nonmetro - Urban population of 2,500 to 19,999, adjacent to a metro area
6	Rural	Nonmetro - Urban population of 2,500 to 19,999, adjacent to a metro area
7	Rural	Nonmetro - Urban population of 2,500 to 19,999, not adjacent to a metro area
8	Rural	Nonmetro - Completely rural or less than 2,500 urban population, adjacent to a metro area
9	Rural	Nonmetro - Completely rural or less than 2,500 urban population, not adjacent to a metro area

RUCC - Rural-Urban Continuum Code

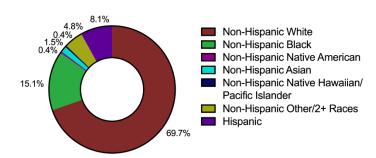
Source: USA ERS - Documentation

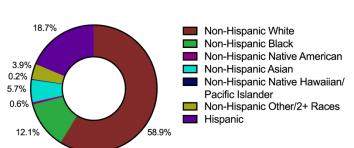
Non-Hispanic Whites comprise most of the population of the state (69.7%), but minority groups are rapidly increasing in Arkansas. In 2022, Hispanics were 8.1 percent of the population while Non-Hispanic Blacks represented 15.1 percent of the population.

Relative to the U.S., there is a higher percentage of Non-Hispanic Whites, Blacks, Pacific Islanders, and those of other/2+ races in Arkansas. In contrast, there is a lower percentage of Hispanic and non-Hispanic Asian individuals in Arkansas versus U.S.

#### **Arkansas Population, 2022**

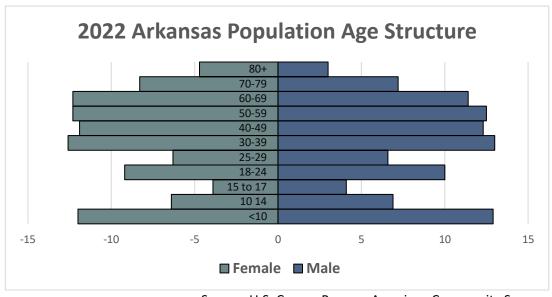
#### **United States Population, 2022**





Source: U.S. Census Bureau, American Community Survey

The population aged 18 and older represents about over three quarters of the Arkansas population in 2022. Median age is 38.4 years for the state versus 38.5 years for the U.S. While this may seem young, in 1960, the median age in the U.S. was 29.5 indicating that the population of the U.S. is aging. The chart below shows the population distribution of the state by age and sex arranged as a population pyramid. Depicting age in this way tells us quite a bit about the age structure of Arkansas. In a growing population, more of the population is concentrated in younger age groups while there are fewer persons in the older age groups with the shape resembling a pyramid. In the pyramid for Arkansas, while the overall shape is essentially square indicating the population will not change very much over time, there do appear to be recent fertility changes with the population aged 10 and younger being substantially greater than the youth population aged 0-17. This is a trend worth watching because it does suggest the need for expanded supported for a growing young population.



Source: U.S. Census Bureau, American Community Survey

#### **EDUCATION**

Arkansas' public-school system enrollment was 475,207 students during the 2023-2024 school year, with 54.7 percent in middle or high school.

The percentage of homeless Arkansas students increased from 2.1 percent in 2020-2021 to 3.3 percent in 2023-2024.

#### Clay 85.8 87.4 87.7 Sharp 89.6 84.6 Izard Lawrence 83.2 82.3 Searcy Stone 82.0 86.1 Independence ssissipp Jackso Crawford Van Buren Poinsett Cleburne Johnson 86.3 85.5 87.9 Pope Cross White 83.5 Sebastian Woodruf 85.0 84.4 Vell Saint Francis Scott Pulaski 89.9 83.5 Montgomer 90.6 Phillip 92.6 89.1 86.0 Lincoln 83.5 Desha 91.9 79.0 83.9 Calhoun 87.4 Mississippi 85.3 Bradley 85.8 Lafayette Columbia 79.6 © 2024 Mapbox © OpenStreetMap Percent 73.5

# AR Adults (25+ yrs) with $\geq$ a H.S. Diploma, 2022

Source: U.S. Census Bureau, American Community Survey

Among the Arkansas population aged 25 and older, 88.2 percent graduated from high school or obtained a GED vs 89.1 percent of the U.S. population in 2022.

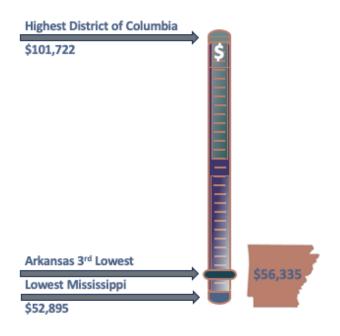
The percentage of Arkansas adults with a high school diploma or GED ranged from 73.5 percent in Sevier County to 93.0 percent in Faulkner County in 2022. Counties with the highest concentration of high school or GED graduates were in the central part of the state. Counties with the lowest concentration of high school or GED graduates were primarily along the eastern border as well as selected counties in the north and west.

Almost one-quarter (24.7%) and more than one-third (34.3%) of Arkansas and U.S. adults aged 25+ years, respectively, have bachelor's degree or higher.

#### **ECONOMY**

#### Income

In 2022, the median income in Arkansas was \$56,335 compared to \$75,149 for the U.S. Arkansas ranks the third lowest in the country, with median income higher only than that in Mississippi and West Virginia.



# Highest and Lowest County Median Income Level, 2022

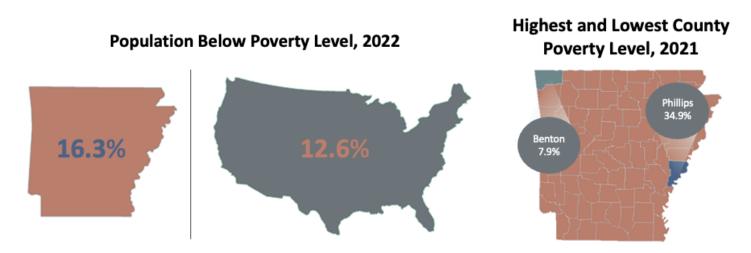


Source: America's Health Rankings

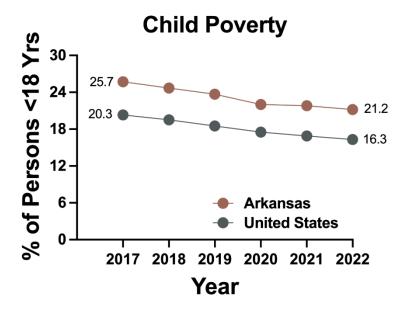
Source: American Community Survey

#### **Poverty**

Given that Arkansas income ranks third lowest in the country, it was unsurprising that the 2022 poverty rate in Arkansas is higher than that of the U.S. overall (16.3% vs 12.6%).



Source: American Community Survey

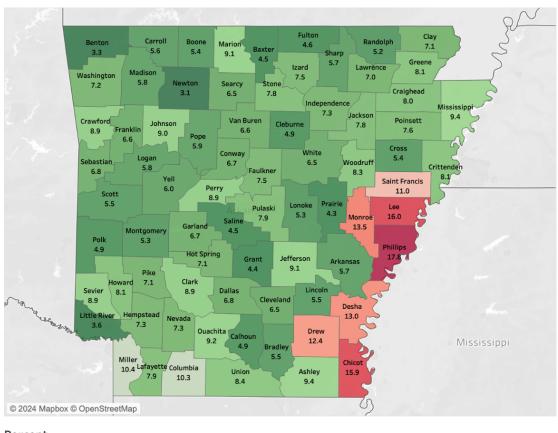


The prevalence of Arkansas and U.S. child poverty has decreased over time from 2017 to 2022, although Arkansas consistently has higher percentage of children living in poverty relative to national rates.

Source: American Community Survey

The U.S. Census Bureau defines "deep poverty" as living in a household with a total cash income below 50 percent of its poverty threshold.

### Deep Poverty, 2022



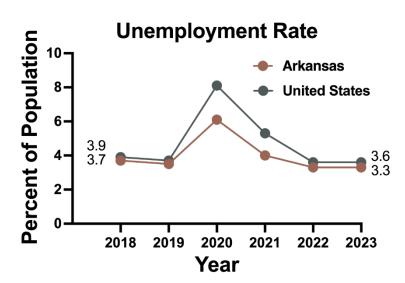
Percent
3.1 17.8

Source: American Community Survey

In 2022, the percentage of the population living in deep poverty was 6.9 percent in Arkansas versus 5.8 percent nationally. Rates of deep poverty in Arkansas varied from 3.3 percent in Benton County to 17.8 percent in Phillips County. The highest rates of deep poverty were typically observed in the eastern and southeastern part of the state.

#### **Unemployment**

Unemployment in the state remained stable from 2018-2019; however, in 2020, unemployment nearly doubled to 6.1 percent (due to pandemic-associated loss of jobs), but then sharply declined to 3.3 percent in 2022 and 2023. The 2023 Arkansas rate (3.3 %) is slightly lower than that of U.S (3.6%).

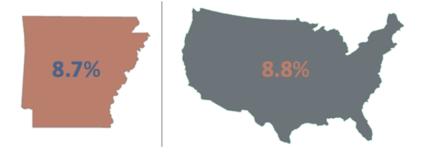


Source: Department of Labor, Bureau of Labor Statistics

#### Uninsured

The rate of uninsured individuals in Arkansas was 8.8 in 2022 compared to 8.7 for the U.S. Among those 18 and younger, the uninsured rate in the state was also only slightly higher than that of the U.S. (5.4% vs 5.3%).





Source: American Community Survey

#### **Food Insecurity**

Food insecurity is defined as a lack of consistent access to enough food for every person in a household.<sup>1</sup> Food insecurity is a marker of material deprivation due to its close link to socioeconomic status<sup>2</sup>. Youth are particularly vulnerable to food insecurity, with 1 in 3 students experiencing food insecurity nationally. Marginalized communities are twice as likely to experience poverty and, thus, food insecurity. Students at all levels are at increased risk of educational failure because food insecurity as hunger can exacerbate any educational obstacle they are already facing. This failure can perpetuate generational poverty. Additionally, food insecurity is associated with mood disorders such as depression, suicidal ideation and anxiety as well as the prevalence of cannabis, cocaine/crack and speed use.<sup>3</sup> Of special concern, food insecurity is associated with increased behavioral problems in children.

In 2023, 18 million households were food-insecure in the U.S.<sup>4</sup> The food insecurity rate for households in 2023 was 18.9 percent for Arkansas and 13.5 percent for the U.S. This represents a statistically significant difference.

The percentage of households with very low food security was also significantly higher in Arkansas versus the U.S. (6.7% vs 5.1%). Food insecurity was higher in Southern states and highest in Texas at 16.9 percent. The lowest food insecurity rate was in New Hampshire at 7.4 percent. Arkansas data at the county level for 2023 are unavailable.

## Households with Food Insecurity, 2023



Source: U.S. Department of Agriculture

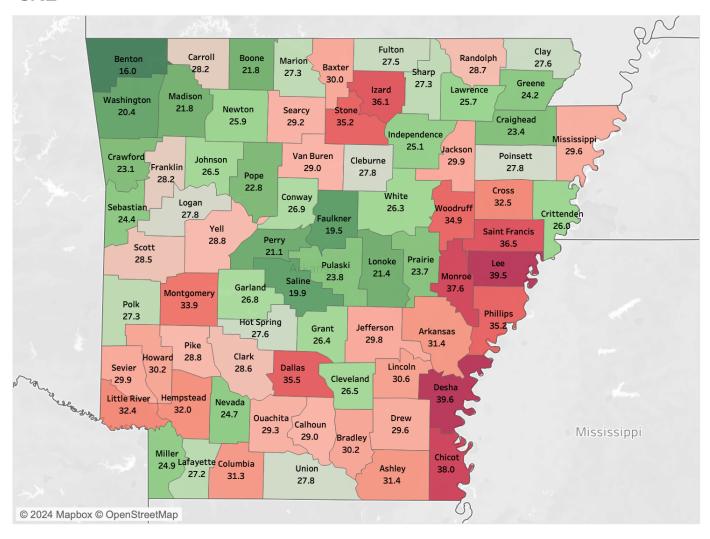
#### **COMMUNITY RESILIENCE ESTIMATE**

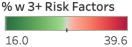
The Community Resilience Estimate (CRE) measures the capacity of individuals and households within a community to absorb the external stressors, such as the COVID-19 pandemic or the loss of a major employer. It includes such things as broadband access, which is a major determinant of health. The CRE is calculated as the percentage of individuals/communities with three or more risk factors that make a community especially vulnerable to external stressors.<sup>5</sup>

In 2022, the U.S. CRE was 20.6 percent versus 24.4 percent for Arkansas, indicating that Arkansas persons have a higher vulnerability to external stressors than nationally.

In 2022, those counties with greatest vulnerability to external stressors can generally be found in the eastern and southern part of the state. Desha County had the highest CRE (39.6%), and Benton County has the lowest CRE (16.0%).

#### **CRE**





Source: Small Area Estimates Program Social, Economic, and Housing Statistics Division U.S. Census Bureau

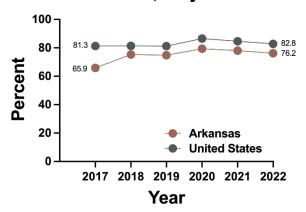
#### **OVERALL HEALTH**

Arkansas ranks 48<sup>th</sup> in overall health in 2022. New Hampshire was the healthiest, while Louisiana ranked the least healthy state in 2022.



Source: America's Health Rankings

#### **General Health Good, Very Good or Excellent**

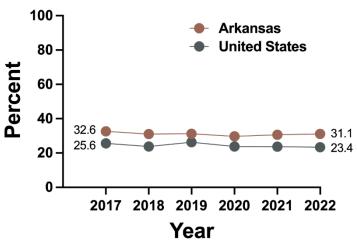


Source: BRFSS

The prevalence of Arkansans rating their health as excellent, very good or good increased from 2017 to 2020, then decreased slightly from 2020 to 2022. The percent of Arkansas rating their health as at least good is slightly less than that of the U.S. population in 2022 (76.2% vs 82.8%). Self-rated health has been shown to be highly correlated with actual health status.<sup>6</sup> Persons reporting high health status have lower mortality rates. This is a good predictor of future healthcare utilization and mortality.<sup>7</sup>

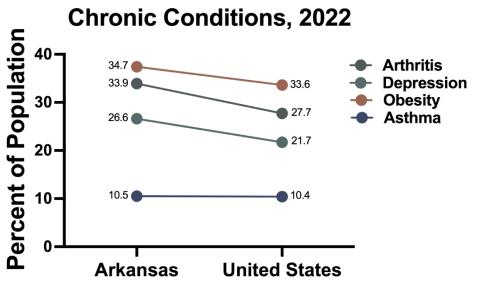
In 2022, 31.1 percent of Arkansans reported being physically inactive in the past month compared to 23.4 percent of all persons in the U.S. In comparison, Washington, DC reported the lowest inactivity prevalence at 15.1 percent while Mississippi had the highest prevalence at 31.9 percent.

# **Physical Inactivity in the Past Month**



Source: BRFSS

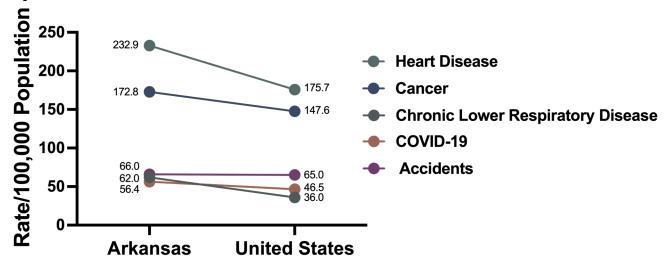
Compared with the general U.S. population in 2022, the proportion of Arkansans reporting a chronic condition was higher for arthritis, depression, and obesity, and similar for asthma.



Source: BRFSS

In 2022, the leading causes of death in Arkansas were heart disease, followed by cancer, chronic lower respiratory disease, COVID-19, and accidents. In the U.S., the leading causes of death were heart disease, followed by cancer, accidents, COVID-19, and Cerebrovascular Disease. Arkansas mortality rates exceeded U.S. figures, although accident mortality rates were only slightly different. Excluding accidents, these conditions can be attributed to tobacco use, physical inactivity, and/or obesity – all of which are higher in Arkansas relative to the U.S.

Top 5 Causes of Death in Arkansas, 2022



Source: Centers for Disease Control & Prevention, CDC WONDER

COVID-19 had much less of an impact on the Arkansan population in 2022, with a COVID-19 mortality rate of 56.4 per 100,000 persons. This is still higher than the national COVID-19 mortality rate of 46.5 per 100,000 persons.

Accident or unintentional injury mortality was the 3<sup>rd</sup> leading cause of death in the U.S. and 5<sup>th</sup> leading cause of death in Arkansas in 2022. The leading causes of accidents include motor vehicle traffic, drug overdose, and falls.

Arkansas youth have consistently slightly higher accident/unintentional death rates than their U.S. counterparts from 2018-2022, with both Arkansas and U.S. rates showing a slight increase over time. Death rates among Arkansas and U.S. adults were similar, but much higher than among youth, and increased from 2019 to 2022 and remained stable through 2022.

2022 2018 2019

Year

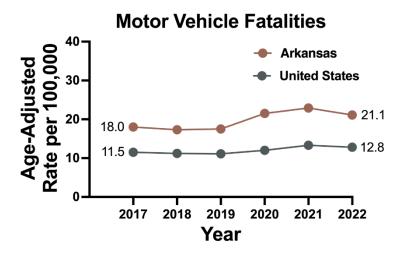
#### **Accident/Unintentional Mortality** 100-18+ Years <18 Years 84.6 #/100,000 pop 80 **Crude Rate** 83.9 63.8 60-62.7 40 **Arkansas** 20 12.9 **United States** 0

Source: Centers for Disease Control & Prevention, CDC WONDER

2021

2022

2020



2019

2018

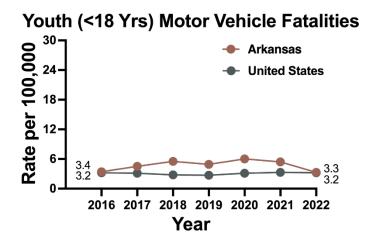
2020

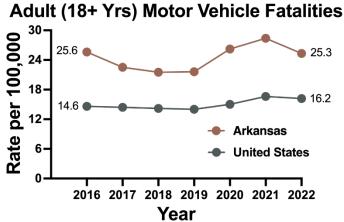
2021

U.S. motor vehicle fatality rates were stable from 2017 to 2019, then increased slightly from 2019 to 2021 and 2022. Arkansas motor vehicle fatality rates have been consistently higher than U.S. figures, which remained relatively stable from 2017 to 2019, then increasing in 2020 where rates remained stable through 2022.

Source: National Highway Transportation Safety Administration, Fatality Analysis Reporting System (FARS)

Motor vehicle fatality rates among Arkansas youth aged less than 18 years increased slightly from 2016 to 2021 before decreasing to 2016 levels in 2922. Rates among U.S. youth remained stable across time. Motor vehicle fatality rates were slightly higher among Arkansas relative to U.S. youth from 2018 to 2021 but were similar in 2022.





Source: CDC WONDER

Motor vehicle fatality rates among Arkansas adults aged 18+ years decreased from 2016 to 2019, then increased sharply from 2019 to 2021, before decreasing to a rate similar to 2016 in 2022. Motor vehicle fatality rates among U.S. adults remained stable from 2016 to 2019 before slightly increasing from 2019 to 2021 and 2022. Motor vehicle fatality rates were consistently much higher among Arkansas relative to U.S. adults.

#### **YOUTH SUBSTANCE USE**

Substance use is a major public health concern, negatively impacting health, legal, and social outcomes. Substance use by adolescents is associated with problems at school such as truancy and poor grades, unprotected sex, both physical and mental health issues, dangerous driving, criminal activity and can lead to substance dependence and substance use disorder.

- Substance dependence is a physical condition in which the body has adapted to the presence of a drug because of constant exposure. Stopping the use of the drug results in physical symptoms known as withdrawal syndrome. Symptoms range from mild to severe and can even result in death depending on the substance.
- Substance use disorder refers to the development of behaviors or symptoms caused by using a substance that an individual continues to take or has difficulty stopping despite its negative effects, including physical and mental health problems, disability, and failure to meet major responsibilities at work, school, or home.

Data related to youth substance use came primarily from the following sources:

- Arkansas Prevention Needs Assessment (APNA) surveys<sup>8</sup>
- Monitoring the Future (MTF) surveys<sup>9</sup>
- National Survey on Drug Use and Health (NSDUH) surveys<sup>10</sup>

#### When reading the data:

- "Lifetime use" indicates the rate of children and adolescents who have tried a specific substance.
- "Current use" gives a snapshot of youth actively using that substance (30-day).
- "Binge drinking" is when men consume five or more drinks and women consume four or more drinks in about two hours.

#### **Tobacco Use**

#### Why this is important

Nine out of 10 adult regular tobacco users started tobacco use by age 18 (99% by age 26) and tobacco use increases risk of developing cancer, cardiovascular disease and chronic respiratory diseases. 11

Nicotine use during adolescence primes the adolescent brain for other addictions, increasing risk for other drug use.<sup>12</sup>

Children and adolescents who have tried tobacco products have a higher risk for trying alcohol and marijuana.

Smoking harms nearly every organ of the body and leads to disease and disability. 13

Smoking is the leading cause of preventable death. 13

Smoking costs the United States billions of dollars each year. 13

Mothers who smoke during pregnancy put their babies at risk for premature birth, birth defects and infant death.

States do not spend much of the money they get from tobacco taxes and lawsuits to prevent smoking and help smokers quit. CDC recommends that states spend 12 percent of those funds on tobacco control.<sup>13</sup>

Lowering the prevalence of tobacco use is critical to tobacco-related disease prevention.

Ideally, education and prevention efforts should begin before the average age of initiation.

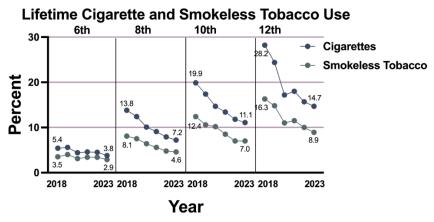
#### What to take away

• Similar to that in 2022, the average age of first cigarette use 12.2 years in 2023; however, age of first cigarette use has decreased over time from 2019.

Age of first cigarette use (years) among		
Arkansas students, 2023:		
Overall:	12.2	
6th Grade:	10.6	
8 <sup>th</sup> Grade:	11.4	
10 <sup>th</sup> Grade:	12.4	
12 <sup>th</sup> Grade:	13.7	

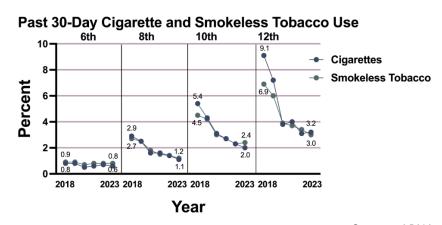
Source: APNA

Lifetime cigarette smoking and smokeless tobacco use decreased over time across all grades in Arkansas.
 Still, for those in grade 12, almost one in seven reporting having ever smoked in 2023, although this is lower than the more than one in four 12<sup>th</sup> graders reporting lifetime cigarette use in 2018. There is a clear gradient with the proportion of students reporting ever smoking or using smokeless tobacco increasing with grade level.



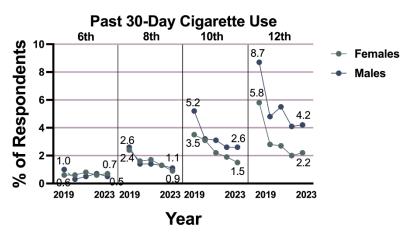
Source: APNA

 Current use of cigarettes and smokeless tobacco have generally declined from 2018 to 2023 across all grades in Arkansas. The percentage reporting current cigarette smoking is highest among 12<sup>th</sup> grade respondents, with slightly less than one in twenty-five reporting they are current smokers.



Source: APNA

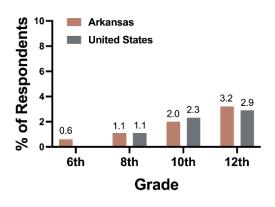
Although the prevalence of current cigarette use was similar for male and female 6<sup>th</sup> and 8<sup>th</sup> grade students from 2019-2023, male 10<sup>th</sup> and, in particular, 12<sup>th</sup> grade students generally had a higher prevalence of cigarette use, even though rates generally declined from 2019-2023.

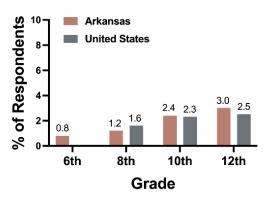


Source: APNA

• Current cigarette smoking in Arkansas Grade 12, but neither 8 nor 10, was higher than U.S. figures in 2023. Current use of smokeless tobacco was also higher compared to the U.S. for Grades 10 and 12, but not 8.

Past 30-Day Cigarette Use, 2023 Past 30-Day Smokeless Tobacco Use, 2023

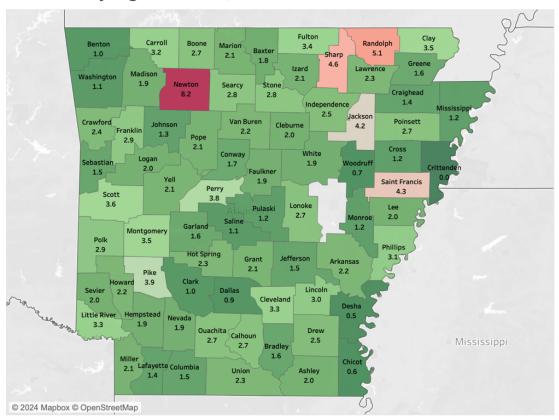




Source: APNA and MTF

Overall, about 1.7 percent of Arkansas students (Grades 6, 8, 10, 12) reported current cigarette use in 2021-2023.

Past 30-day Cigarette Use, 2021-2023



The percentage of youth reporting past 30-day cigarette use ranged from 0.0 percent (Region 7: Crittenden County) to 8.2 percent (Region 2: Newton County).

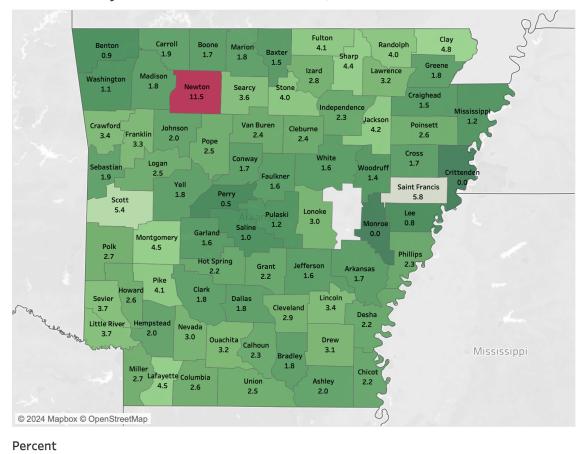
Reported cigarette use appears to be especially prevalent in the north and northeastern parts of the state, suggesting that Regions 2,3, 4 and 7 should consider implementing more focused or intensive cigarette use prevention strategies.

Percent
0.0 8.2

• Overall, about 1.8 percent of Arkansas youth (Grades 6, 8, 10, 12) reported current smokeless tobacco use in 2021-2023.

Past 30-Day Smokeless Tobacco Use, 2021-2023

- The percentage of youth reporting past 30-day smokeless tobacco use ranged from 0.0 percent (Region 7: Monroe County) to 11.5 percent (Region 2: Newton County).
- Especially high prevalence of smokeless tobacco use was observed in Newton County in the northwestern part of the state followed by St.
   Francis County near the eastern border.



0.0 11.5

Source: APNA

• These data suggest that a few regions – most of which are more rural – have more problematic smokeless tobacco use than other parts of the state. Regions 2, 3, 4, 5, and 7, and 10 should consider more focused or intensive smokeless tobacco use prevention strategies.

#### **E-Cigarette Use**

#### Why this is important

E-cigarettes are unsafe for youth.

The e-cigarette vapor that users breathe from the device and exhale can contain harmful and potentially harmful substances, including:<sup>14</sup>

- Nicotine, which has known health effects, including being:
  - Highly addictive
  - Toxic to developing fetuses
  - Harmful to adolescent and young adult brain development
  - o Health danger for pregnant adults and their developing babies
- Ultrafine particles that can be inhaled deep into the lungs
- Flavoring such as diacetyl, a chemical linked to a serious lung disease
- Volatile organic compounds
- · Cancer-causing chemicals
- Heavy metals such as nickel, tin, and lead

E-cigarettes can cause unintended injuries, such as fires and explosions from defective e-cigarette batteries and nicotine poisoning. Children and adults have been poisoned by swallowing, breathing, or absorbing e-cigarette liquid through their skin or eyes.<sup>14</sup>

E-cigarettes are the most used tobacco product among youth and youth are more likely than adults to use e-cigarettes in the U.S.

#### What to take away

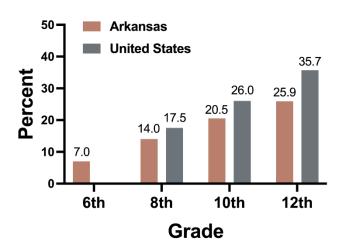
• The average age of first e-cigarette use has been steadily decreasing from 14.0 years in 2018 to 13.0 years in 2023. Among 6<sup>th</sup> graders, average age of first cigarette use was 10.8 years, indicating that prevention efforts need to start at the elementary school level.

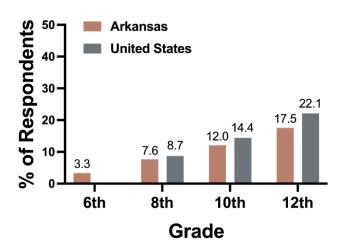
Average age (years) Arkansas students first tried							
any vaping product, 2018-2023							
Grade 2018 2019 2020 2021 2022 2023							
6	10.9	10.9	10.9	10.9	10.8	10.8	
8	12.5	12.4	12.3	12.2	12.1	12.1	
10	14.1	14.0	13.8	13.7	13.5	13.3	
12	15.6	15.4	15.2	14.9	14.8	14.6	
Combined 14.0 13.8 13.5 13.4 13.2 13.0							

• There has been a steady increase over time in the lifetime use of any electronic vaping products with more than one in three 12<sup>th</sup> graders in the U.S. indicating having ever used vapor products in 2023. Among Arkansas students, lifetime use of any electronic vaping devices increased slightly from 2020 to 2023 among 6<sup>th</sup> graders, increased slightly from 2020 to 2021 before decreasing from 2021 to 2023 among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders. Still, more than one in four Arkansas seniors reported ever having used an electronic vaping product in 2023. Lifetime use among Arkansas students was lower than nationally.

# Lifetime Any E-Cig Use, 2023

# Past 30-Day Any E-Cig Use, 2023



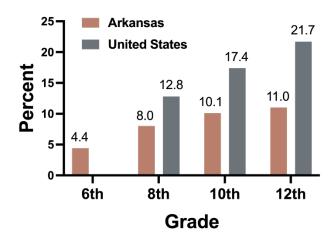


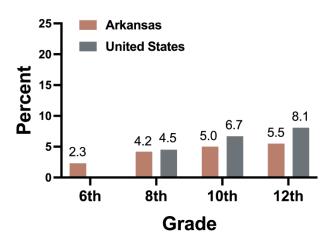
Source: APNA

- In 2023, almost one in six Arkansas seniors and more than one in five U.S. seniors reported any electronic vaping use in the past 30 days.
- In 2023, the prevalence of lifetime and current vaping of flavoring only among Arkansas 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> graders was lower than that among their U.S. counterparts; however, in 2023, Arkansas 8<sup>th</sup> graders had only a slightly lower percentage of current vaping of flavoring only than their U.S. counterparts.

# Lifetime Flavored E-Cig Use, 2023

# Past 30-Day Flavored E-Cig Use, 2023

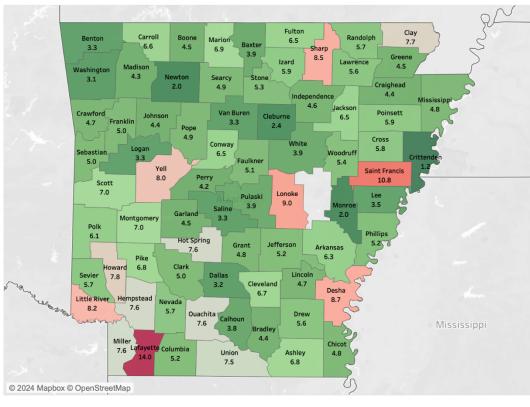




Source: APNA and MTF

• In 2021-2023, about 4.6 percent of Arkansas youth (Grades 6, 8, 10, 12) reported current vaping of flavoring only.

Past 30-Day Flavor Vaping, 2021-2023



The percentage of students reporting past 30-day vaping of flavoring only ranged from 1.2 percent (Region 7: Crittenden County) to 14.0 percent (Region 11: Lafayette County).

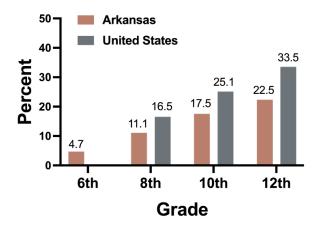
The highest prevalence of vaping flavoring only was found in the southwestern, part of the state, as well as in selected southern, western, central, and northeastern counties. The lowest prevalence of vaping of flavoring only mainly occurred along the eastern and in the northwestern part border of the state.

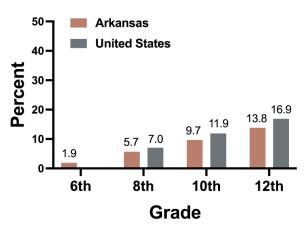
Percent
1.2 14.0

Source: APNA

 These data suggest that the concentrations of higher prevalence of vaping flavoring only was found in many regions across the state, suggesting vaping prevention efforts should continue across the state with particular emphasis in those affected counties.

# Lifetime Nicotine E-Cig Use, 2023 Past 30-Day Nicotine E-Cig Use, 2023

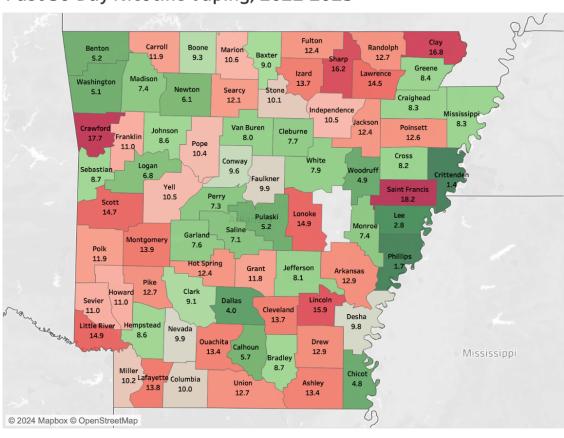




Source: APNA and MTF

- Nicotine vaping products use increases by grade level. In 2023, a smaller proportion of Arkansans in grades 8, 10, and 12 report having ever used nicotine-containing electronic vaping products relative to their U.S. counterparts. Current use relative to the U.S. varied by grade, such that prevalence was the lower among Arkansas students relative to their U.S. counterparts.
- About 8.3 percent of Arkansas youth (Grades 6, 8, 10, 12) reported current vaping of nicotine in 2021-2023.
- The percentage of youth reporting past 30-day vaping of nicotine ranged from 1.4 percent (Region 7: Crittenden County) to 18.2 percent (Region 7: St. Francis County).

# Past 30-Day Nicotine Vaping, 2021-2023



The highest prevalence of vaping nicotine was found in the certain counties in the northern, northeastern, western, central, and southern parts of the state, while the lowest prevalence of vaping of nicotine occurred mainly along the eastern border of the state.

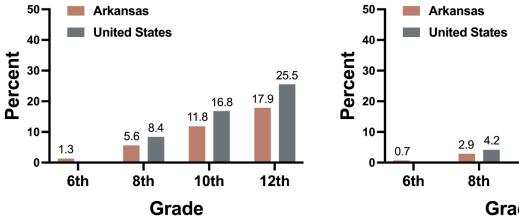
Percent 1.4 18.2

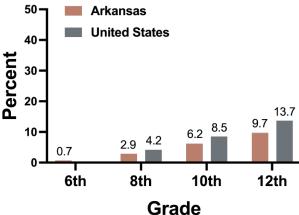
Source: APNA

Overall, the percentage of use was higher in certain counties across Arkansas. These findings suggest
nicotine vaping prevention efforts should continue across the state with particular emphasis in those
affected counties.

The prevalence of both lifetime and current marijuana E-cigarette use is lower among Arkansas 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders relative to their U.S. counterparts in 2023.

# Lifetime Marijuana E-Cig Use, 2023 Past 30-Day Marijuana E-Cig Use, 2023

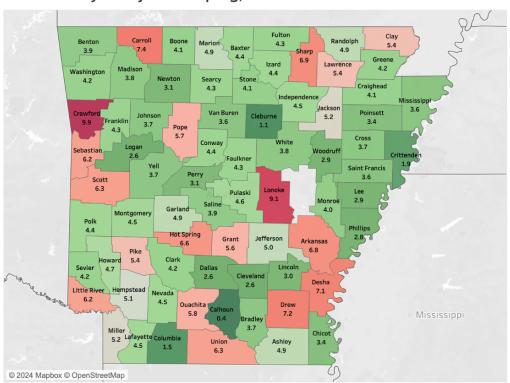




Source: APNA and MTF

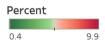
About 4.5 percent of Arkansas youth (Grades 6, 8, 10, 12) reported current vaping of marijuana in 2021-2023 with county-level use ranging from 0.4 percent (Region 11: Calhoun County) to 9.9 percent (Region 5: Crawford County).

Past 30-Day Marijuana Vaping, 2021-2023



Current marijuana vaping was highest in selected counties in the northwestern, northeastern, western, central, southeastern, and southwestern parts of the state.

These data suggest that pockets of higher percentage of use was observed in particular counties in regions 1, 4, 5, 6, 8, 10, 11, 12, and 13. These findings suggest marijuana vaping prevention efforts should be more intensive in those affected counties.



#### **Alcohol Use**

Alcohol is one of the most highly misused substances among youth in the U.S.<sup>15</sup> Binge drinking is also more common among youth than among adults. Youth who engage in alcohol misuse and binge drinking are more likely to engage in risky behavior such as driving while impaired or riding with someone who is impaired, causing unintentional injuries, and tobacco use among others.<sup>16</sup>

#### Why this is important

People who start drinking before age 15 are four times more likely to have an alcohol use disorder later in life. 17

Drinking alcohol can lead to poor decisions about engaging in risky behavior such as drinking and driving, sexual activity (such as unprotected sex), and aggressive or violent behavior.<sup>17</sup>

Youth are more likely to carry out or be the victim of a physical or sexual assault after drinking than others their age who do not drink.<sup>17</sup>

#### What to take away

• Data indicate that the average age of first alcohol use was 12.4 years among Arkansas students in 2023. Age of first use range from 10.5 years for those in 6<sup>th</sup> grade to 14.4 years in Grade 12. These numbers are slightly lower than the 2019 school year, suggesting that more rigorous prevention efforts beginning before age 10 are needed.

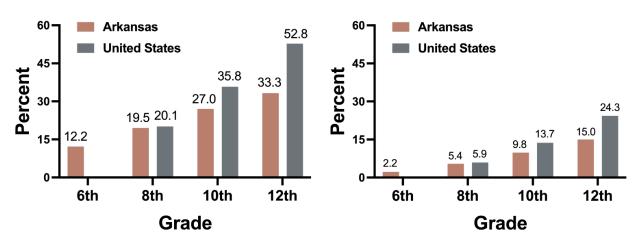
Average age (years) Arkansas students first tried						
alcohol, 2019-2023						
Grade	2019	2020	2021	2022	2023	
6	10.4	10.6	10.5	10.5	10.5	
8	11.6	11.6	11.5	11.4	11.5	
10	13.2	13.2	13.1	13.0	12.9	
12	14.5	14.6	14.5	14.5	14.4	
Combined	12.8	12.6	12.6	12.4	12.4	

Source: APNA

• The percentage of Arkansas students reporting lifetime alcohol use decreased slightly from 23.0 to 21.2 between 2022 and 2023. Compared to U.S. students, rates of lifetime alcohol use are lower among Arkansas students, particularly among 12<sup>th</sup> grade students, with about one in three Arkansas seniors and one in two U.S. seniors reported ever having used alcohol in 2023.

### Lifetime Alcohol Use, 2023

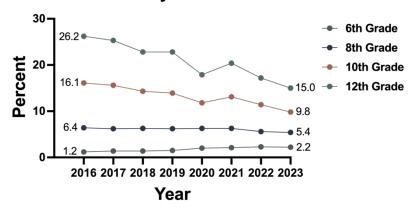
# Past 30-Day Alcohol Use, 2023



Source: APNA and MTF

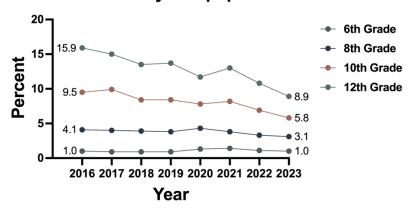
The percentage of Arkansas students reporting current alcohol use decreased from 8.0 in 2022 to 7.0 in 2023. Compared to U.S. students, the 2023 prevalence of current alcohol use was lower among Arkansas students, particularly among 12<sup>th</sup> grade students. Less than one in seven Arkansas seniors and about one in four U.S. seniors reported current alcohol use in 2023.

Past 30-Day Alcohol Use



Rates of current alcohol use vary by grade. Current use among 8<sup>th</sup> grade students decreased slightly from 2016 to 2023, while current use among students in grades 10 and 12 were about 6 and 11 percentage points lower than in 2016, respectively. In contrast, rates of current use in among students in grade 6 increased from 1.2 percent in 2016 to 2.2 percent in 2023.

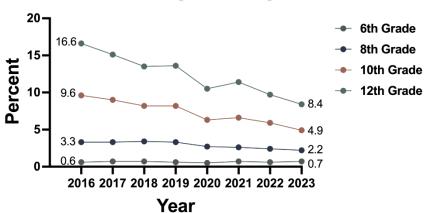
Past 30-Day Alcopop Use



Similarly, rates of current alcopop use vary by grade. Rates in 2023 for students in grades 8, 10 and 12 were 1.0, 3.7, and 7.0 percentage points lower than in 2016, respectively. In contrast, rates of current alcopop use in 2023 were similar to those in 2016 among students in grade 6 (1.0 vs 1.0).

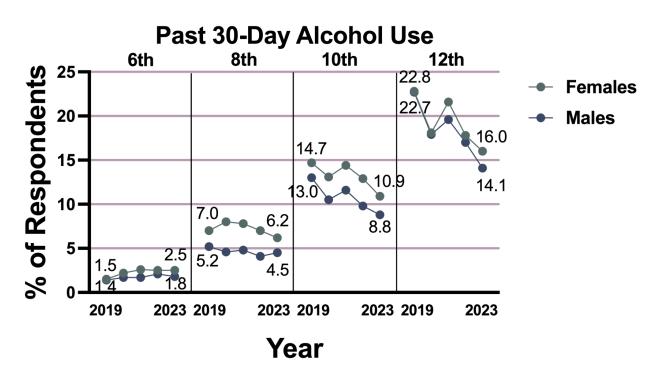
# **Current Binge Drinking**

 Overall, binge drinking among Arkansas students has decreased since 2016. The prevalence of binge drinking increases as grade-level increases and was 8.4 percent for high school seniors in Arkansas in 2023.



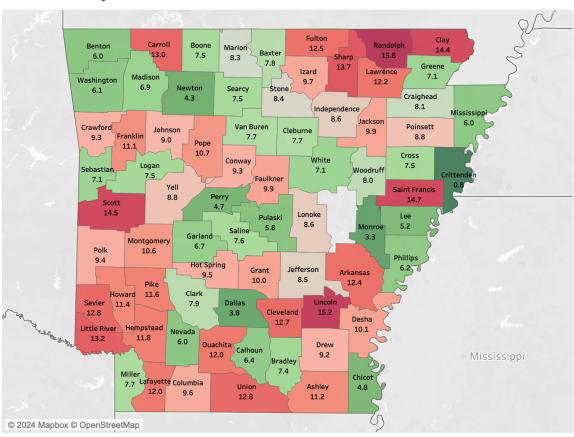
Source: APNA

• The prevalence of current alcohol use increased as grade level increased. Alcohol use prevalence decreased from 2019 to 2023 among 10<sup>th</sup> and 12<sup>th</sup> grade students and was similar among 12<sup>th</sup> grade male and female students; however, 10<sup>th</sup> grade females reported a higher prevalence of alcohol use over time than 10<sup>th</sup> grade males. Although current alcohol use decreased slightly among 8<sup>th</sup> grade students, 8<sup>th</sup> grade females generally reported higher prevalence of alcohol use than males. Alcohol use reported by 6<sup>th</sup> grade students was quite low in 2019 but increased slightly from 2019 to 2023.



- Overall, about 8.0 percent of Arkansas youth (Grades 6, 8, 10, 12) reported current alcohol use in 2021-2023.
- The percentage of youth reporting current alcohol use ranged from 0.8 percent (Region 7: Crittenden County) to 15.8 percent (Region 12: Lincoln County).

## Past 30-Day Alcohol Use, 2021-2023



Alcohol use appears to have been highest in selected counties from the northeastern (e.g., Clay, Randolph, and Sharp Counties), eastern (e.g., Saint Francis and Lincoln Counties), west-central (Scott County), and southeastern (Little River County), and parts of the state.



Source: APNA

• These data suggest that many regions – the majority of which are more rural – have instances of more problematic alcohol use than other parts of the state. Regions 3, 4, 5, 7, 10, 11, 12 and 13 should consider more focused or intensive alcohol use prevention strategies.

#### Marijuana Use

#### Why this is important

Marijuana dulls safe-driving skills, like judgment, coordination, and reaction time, increasing risk of motor vehicle crashes while under the influence.<sup>18</sup>

Marijuana weakens attention, memory, and learning skills, and young people who use marijuana are less likely to finish high school or get a college degree than those who do not.<sup>18</sup>

Large doses of marijuana may also cause acute psychosis including hallucinations, delusions and a loss of the sense of personal identity. 18

Marijuana is the most commonly used and abused illicit substance.<sup>19</sup>

Regular marijuana use is associated with breathing problems, higher risk of lung infections, mental illness, and severe nausea and vomiting.<sup>19</sup>

Marijuana increases heart rate, which can increase risk of heart attack, particularly among older adults and/or those with heart problems.<sup>19</sup>

Use of marijuana during pregnancy can harm fetal development during pregnancy and delay and/or impair post-natal child development.<sup>19</sup>

#### What to take away

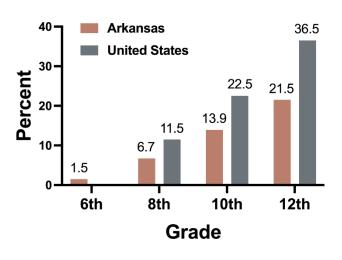
• The average age of first marijuana use has decreased slightly from 2019 (13.8 years) to 2023 (13.6 years). While the data do suggest that prevention activities need to start prior to 6<sup>th</sup> grade, actual prevalence for use in 6<sup>th</sup> grade is quite low. However, research from Monitoring the Future<sup>20</sup> suggests that the behaviors of middle school students may be particularly sensitive to the changing norms about marijuana use in the general population and changing use at this age may, thus, be considered a sentinel event. Arkansas data do suggest that initiation of marijuana use tends to start in grades 8 through 10 so particularly targeting these groups may be critical.

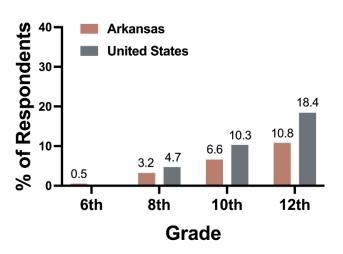
Average age (years) Arkansas students first tried							
alcohol, 2019-2022							
Grade	2019	2020	2021	2022	2023		
6	10.9	11.0	11.3	11.1	11.3		
8	12.2	12.4	12.2	12.3	12.2		
10	13.7	13.6	13.7	13.6	13.5		
12	14.9	15.0	15.0	14.9	14.8		
Combined	13.8	13.8	13.8	13.7	13.6		

• The prevalence of both lifetime and current marijuana use in 2023 was lower among Arkansas 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders relative to their U.S. counterparts.

# Lifetime Marijuana Use, 2023

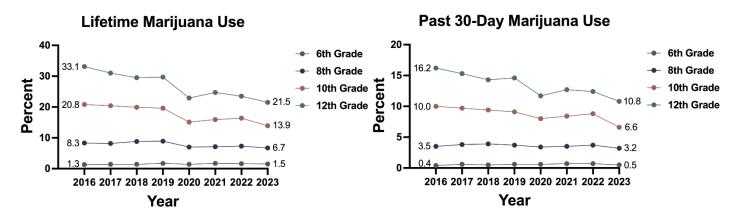
# Past 30-Day Marijuana Use, 2023





Source: APNA and MTF

The lifetime prevalence of marijuana use increased as grade level increased and has generally declined since 2016. The lifetime marijuana use prevalence among 6<sup>th</sup> graders, although low, has increased very slightly over time. The prevalence among 10<sup>th</sup> and 12<sup>th</sup> graders has continued to decrease, most sharply from 2019 to 2020, before rebounding slightly in 2021-2022 before decreasing again in 2023. Among 8<sup>th</sup> graders marijuana use remained stable from 2016 to 2019, followed by a decrease in 2020 and then remained stable through 2023. Despite decreases in use, more than one in five Arkansas seniors report ever using marijuana.

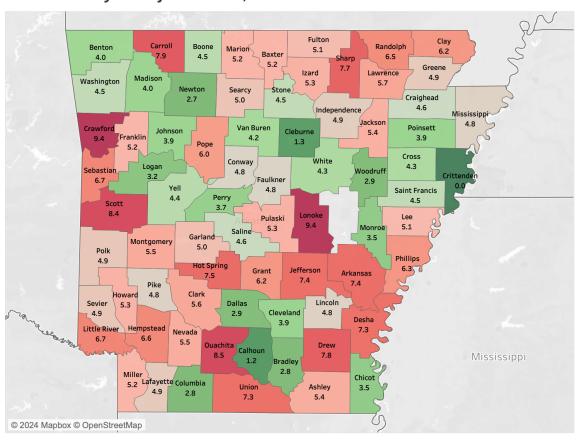


Source: APNA

Current marijuana use among Arkansas 10<sup>th</sup> and 12<sup>th</sup> grade students has generally declined from 2016 to 2020, then increased slightly from 2020 to 2022 before decreasing in 2023. Prevalence of current marijuana use has remained relatively stable among 6<sup>th</sup> and 8<sup>th</sup> grade students.

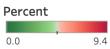
• Overall, about 5.1 percent of Arkansas youth (Grades 6, 8, 10, 12) reported current marijuana use in 2021-2023.

## Past 30-Day Marijuana Use, 2021-2023



The percentage of students reporting past 30-day marijuana use ranged from 0.0 percent (Region 7: Crittenden County) to 9.4 percent (Region 9: Lonoke County).

The highest prevalence of marijuana use appears to have been in the southern, western, northern, and central parts of the state.



Source: APNA

These data suggest that current marijuana use, per se, is relatively low throughout the state.
 Concentrations of higher marijuana use were found in regions 1, 3, 5, 9, 10, 11, and 12 compared to other regions in the state and more intensive interventions for marijuana use prevention in these areas may be warranted.

#### **Prescription Drugs and Opioids**

#### Why this is important

In 2022, Arkansas had the second highest opioid dispensing rate in the country, suggesting that prescription opioid availability is likely high.<sup>21</sup>

Opioids are implicated in the majority of drug overdose deaths in the United States, with about 76 percent of overdose deaths involving an opioid in 2022.<sup>21</sup>

Both adolescents and young adults most commonly obtain opioids free from friends or relatives.<sup>22</sup>

People who misuse prescription opioids are more likely to transition to heroin use than those who do not.<sup>23</sup>

Anyone can become addicted to prescription opioids. Among chronic pain patients, about 1 in 4 misuse opioids and about 1 in 20 develop an opioid use disorder.<sup>24</sup>

Among people aged 12 or older in 2021: 1. 5.1 percent (or about 14.3 million people) reported misusing any prescription psychotherapeutic drug in the past 12 months.<sup>25</sup>

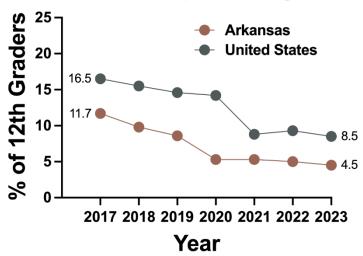
#### What to take away

• The average age of first prescription drug use among Arkansas students has been decreasing from 13.5 years in 2015 to 12.2 years in 2023. The average age at first misuse of prescription drugs among 6<sup>th</sup> grade students was 10.7 years, really emphasizing that prevention programs must begin early.

Average age (years) Arkansas students first							
misused a prescription drug, 2019-2022							
Grade 2019 2020 2021 2022 2023							
6	10.6	10.6	10.6	10.6	10.7		
8	11.8	11.7	11.7	11.6	11.5		
10	13.2	13.2	12.9	12.8	12.5		
12	14.4	14.4	14.1	14.1	14.1		
Combined	12.9	<i>12.6</i>	12.4	12.4	12.2		

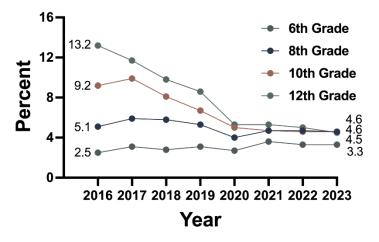
• From 2017 to 2020, lifetime prevalence of prescription drug misuse decreased slightly among U.S. 12<sup>th</sup> grade students, then sharply decreased from 2020 to 2021 where it remained stable through 2023. Arkansas high school seniors reported lower rates of lifetime prescription drug use compared to the U.S., with rates decreasing from 2017 to 2020, then stabilizing from 2020 to 2023. In 2023, the prevalence among Arkansas seniors (4.5 percent) was slightly more than one-half of that for the U.S. (8.5 percent).

# **Lifetime Prescription Drug Misuse**



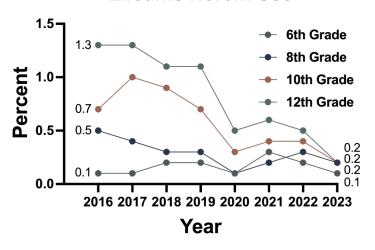
Source: APNA and MTF

### **Lifetime Prescription Drug Misuse**



Except among 6<sup>th</sup> grade students, the lifetime prevalence of prescription drug use generally declined from 2016 to 2020, with the biggest decrease between 2019 and 2020, followed by a slight increase through 2023 among 8<sup>th</sup> graders. Among 6<sup>th</sup> and 10<sup>th</sup> grade students, lifetime prescription drug misuse generally increased and decreased, respectively, from 2016 to 2023.

#### **Lifetime Heroin Use**

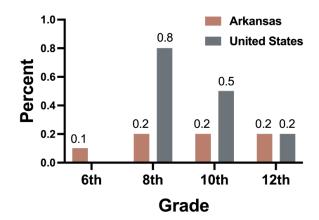


Source: APNA

Lifetime prevalence of heroin use was very low and decreased from 2016 to 2020 among 8<sup>th</sup> and 12<sup>th</sup> grade students, followed by an increase from 2020 to 2022 and 2021, respectively, before decreasing though 2023. Among 10<sup>th</sup> grade students, heroin use decreased from 2017 to 2020, followed by a slight increase from 2020 to 2022 before decreasing in 2023. In contrast, heroin use among 6<sup>th</sup> graders, very low from 2016 to 2020, increased in 2021 then decreased in 2023 to levels similar to those in 2016.

#### Lifetime Heroin Use, 2023

 Lifetime prevalence of heroin use in 2023 was quite low among Arkansas and U.S. students. Use among Arkansas 8<sup>th</sup> and 10<sup>th</sup> grade students was lower than that among their U.S. counterparts. Arkansas and U.S. 12<sup>th</sup> grade students had a similar prevalence of use in 2023.



Source: APNA and MTF

• The overall prevalence of current prescription drug misuse was 2.5 percent in 2023, down from 3.0 percent in 2016 but up from 2.2 percent in 2020. However, the prevalence among 6<sup>th</sup> grade students has more than doubled from 1.1 percent in 2016 to 2.5 percent in 2022. Prevalence among 8<sup>th</sup> grade students remained relatively stable at 2.4 percent in 2016 versus 2.6 percent in 2020, then increased to 3.1 percent in 2023. In contrast, current prescription drug misuse decreased among 10<sup>th</sup> and 12<sup>th</sup> grade students from 2015 to 2023. Noteworthy is that 6<sup>th</sup> and 8<sup>th</sup> grade students reported a higher prevalence of prescription drug misuse than 10<sup>th</sup> or 12<sup>th</sup> graders in 2023.

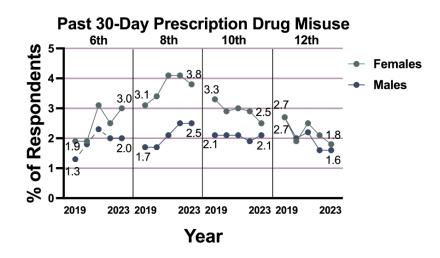
Prevalence of Past 30-Day Rx Drug Misuse (%)	)
Among Arkansas Students:	

GRADE						
YEAR	6 <sup>th</sup>	8 <sup>th</sup>	<b>10</b> <sup>th</sup>	12 <sup>th</sup>	Combined	
2016	1.1	2.4	4.0	5.2	3.0	
2017	1.4	2.7	4.1	4.3	3.0	
2018	1.3	2.7	3.3	3.2	2.5	
2019	1.6	2.4	2.8	2.8	2.3	
2020	1.9	2.6	2.5	2.0	2.2	
2021	2.7	3.1	2.6	2.3	2.7	
2022	2.2	3.3	2.5	1.9	2.6	
2023	2.5	3.1	2.3	1.7	2.5	

Source: APNA

• Trends in current prescription drug misuse differed by grade and sex. The prevalence of current prescription drug use was low among 6<sup>th</sup> graders in 2019, use increased over time from 2019 to 2021, particularly among 6<sup>th</sup> grade female students, before decreasing slightly in 2022-2023. The prevalence of current prescription drug misuse among 8<sup>th</sup> grade male students generally increased from 2019 to 2023; however, use was overall lower than that of their female counterparts. Among 8<sup>th</sup> grade female students,

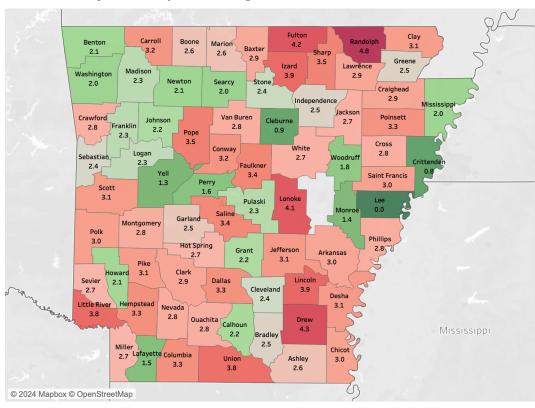
use increased from 2019 to 2021, then generally stabilized through 2023. In contrast, prescription drug misuse was higher overall among 10<sup>th</sup> grade female than male students in 2019 and generally decreased over time among female students, while prevalence remained relatively stable among 10<sup>th</sup> grade males. The prevalence of prescription drug misuse generally was similar among male and female 12<sup>th</sup> graders, generally decreasing over time from 2019 to 2023. These data indicate the importance of addressing prescription drug misuse among younger female students.



Source: APNA

- Overall, about 2.6 percent of Arkansas youth (Grades 6, 8, 10, 12) reported current prescription drug misuse in 2021-2023.
- Past 30-day prescription use ranged from 0.0 percent (Region 7: Lee County) to 4.8 percent (Region 4: Randolph County).

Past 30-Day Prescription Drug Misuse, 2021-2023

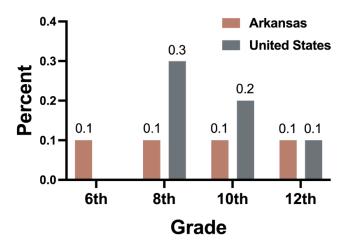


The highest prevalence of prescription drug misuse appears to be scattered across the southeastern, southwestern, central, west-central, and northern parts of the state.

These data suggest that, while the prevalence of prescription drug use itself is relatively low, spikes in prevalence of use occurred in selected counties in regions 1, 3, 4, 5, 6, 9, 10, 11, 12 and 13. These findings suggest more intensive prescription drug use prevention efforts should focus on these regions.



# Past 30-Day Heroin Use, 2023



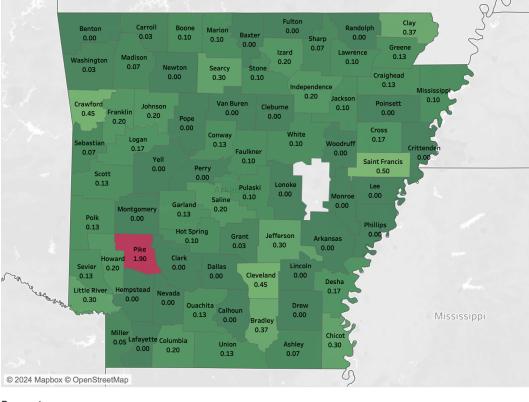
The prevalence of current heroin use was quite low among Arkansas and U.S. students and lower among Arkansas 8<sup>th</sup> and 10<sup>th</sup> graders relative to their U.S. counterparts in 2023.

Source: APNA and MTF

- In 2021-2023, about 0.1 percent of Arkansas youth (Grades 6, 8, 10, 12) reported current heroin use.
- Past 30-day heroin ranged from 0.0 percent in 26 counties scattered across the entire state to 1.9 percent (Region 9: Pike County).

# Past 30-Day Heroin Use, 2021-2023

- Current heroin use was most prevalent in the southwestern, eastern, and western parts of the state.
- While current heroin use itself was nonexistent in over a third of the state, pockets of use were observed in particular counties in regions 2, 4, 5, 7, 9, 10, 12, and 13, suggesting prevention efforts should focus efforts on those affected counties.



Percent
0.00 1.90

#### **Other Substances**

#### Why this is important

In 2022, approximately 8.7 percent of persons ages 12 or older reported misusing methamphetamine and cocaine, respectively, in the past year.<sup>26</sup>

Inhalants when used inappropriately can produce a "high." These are more commonly misused by children and teens than adults.<sup>27</sup>

Addiction to drugs can lead to a series of negative consequences and threats for individuals, families, communities, and society.

Stimulant use can have major negative short- and long-term effects on a person's health, including overheating, cardiovascular complications, seizures, damage to nerves, and changes in brain structure and function.<sup>28</sup>

Age-adjusted rate of drug overdose deaths involving psychostimulants increased more than 34 times from 2002 (0.3) to 2022 (10.4), with different rates of change over time.<sup>21</sup>

In the U.S., stimulants are the second most widely used and abused substances during pregnancy and pregnant women using stimulants in pregnancy are at increased risk of adverse perinatal, neonatal, and childhood outcomes.<sup>29</sup>

Misuse of over-the-counter drugs can be addictive and put abusers at risk for other adverse health effects.<sup>30</sup>

#### What to take away

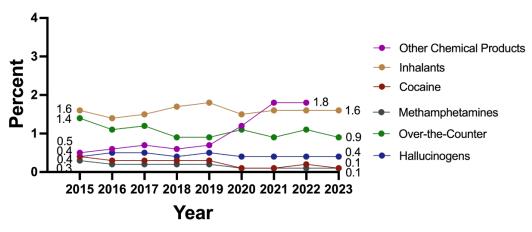
# Lifetime Illicit Drug Use Other Chemical Products Inhalants Cocaine Methamphetamines Over-the-Counter Hallucinogens Year

Source: APNA

Lifetime use/misuse of other substances have been historically low among Arkansas students. Inhalants
are the most used of these substances and their lifetime use remained stable from 2015 to 2019, then
decreased in 2020 and remained stable through 2023.

- The lifetime prevalence of over-the-counter drug use showed a decreasing trend over time from 2015 to 2021, then remained stable through 2023. Similarly, the lifetime prevalence of cocaine, methamphetamine, and hallucinogen use, already low, showed decreases over time from 2015 to 2020, before stabilizing through 2023.
- In contrast, lifetime use of other chemical products like bath salts generally increased from 2015 to 2022. Data for 2023 are unavailable.

Past 30-Day Illicit Drug Use



Source: APNA

- Current use/misuse of inhalants and over-the-counter drugs was most prevalent among Arkansas youth in 2015.
- Current inhalant or hallucinogen use remained relatively stable over time, while use of other chemical products like bath salts increased such that use was now slightly higher than inhalant use in 2021 and 2022. Other chemical product use data for 2023 are unavailable.
- Current over-the-counter drug, cocaine, and methamphetamine use showed decreasing trends from 2015 to 2021. Hallucinogen use remained stable over time.
- The prevalence of lifetime injection drug use ranged from 0.8 percent among 6<sup>th</sup> graders to 1.5 percent among 12<sup>th</sup> graders in 2023, with slightly lower prevalence among in 2023 relative to 2022. Overall, about 1.0 percent of Arkansas students reported ever injecting illicit drugs. Prevention efforts should address this problematic behavior.

Lifetime Prevalence (%) of Injection Drug Use Among Arkansas Students:

GRADE							
YEAR	6 <sup>th</sup>	8 <sup>th</sup>	<b>10</b> <sup>th</sup>	<b>12</b> <sup>th</sup>	Combined		
2021	0.8	1.0	1.2	1.5	1.1		
2022	0.8	1.1	1.2	1.4	1.1		
2023	0.8	1.0	0.9	1.5	1.0		

#### ADULT SUBSTANCE USE

Substance misuse and substance use disorder harm both individuals and the communities in which they live. The effects in terms of lost productivity, healthcare utilization, and crime can be costly. Indirect consequences can include neonatal abstinence syndrome (NAS), liver and pancreatic diseases, hypertension, trauma, stroke, and some cancers. It is important to note that anyone, at any age, can have a substance use problem.

Data related to adult substance use came primarily from the Behavioral Risk Surveillance Survey (BRFSS),<sup>31</sup> the Arkansas Collegiate Survey,<sup>32</sup> and the National Survey on Drug Use and Health (NSDUH).<sup>33</sup>

#### **Tobacco Use**

#### Why this is important

Cigarette smoking remains the leading cause of preventable disease, disability, and death in the United States with more than 480,000 deaths attributable to smoking and secondhand smoke exposure each year and over 16 million U.S. persons having a smoking-related disease.<sup>34</sup>

Measuring cigarette use among adults allows tobacco control programs to monitor the effectiveness of prevention efforts in the community.

Tobacco use puts individuals at greater risk of developing cancer, cardiovascular disease, and chronic respiratory diseases.

Lowering the prevalence of tobacco use is critical to tobacco-related disease prevention.

Mothers who smoke during pregnancy put their babies at risk for premature birth, birth defects and infant death.

Smoking harms nearly every organ of the body and leads to disease and disability.<sup>13</sup>

Smoking is the leading cause of preventable death. 13

Smoking costs the United States billions of dollars each year. 13

States do not spend much of the money they obtain from tobacco taxes and lawsuits to prevent smoking and help smokers quit. CDC recommends that states spend 12 percent of those funds on tobacco control.<sup>13</sup>

In 2022, 14 percent of U.S. adults (36.1 million people) currently smoked cigarettes.<sup>35</sup>

Many adult cigarette smokers want to quit smoking. 13

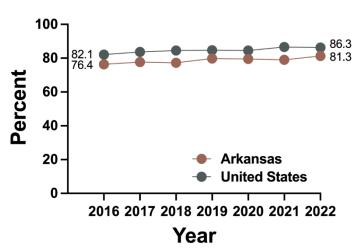
#### What to take away

• The prevalence of smoking among Arkansas and U.S. adults has declined since 2015. Despite this, 2022 smoking prevalence in the state was 4.7 percentage points higher than that for all U.S. adults. Further, Arkansas is ranked 2<sup>nd</sup> highest nationwide in smoking prevalence followed by West Virginia at 21 percent. The state with the lowest prevalence is Utah at 6.7 percent.<sup>31</sup>

# Adult Current Smokers Arkansas United States 24.9 2015 2016 2017 2018 2019 2020 2021 2022 Year

Source: BRFSS

#### **Adult Former/Never Smokers**

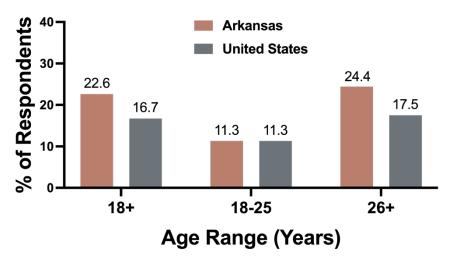


Over time, the proportion of Arkansas adults who indicate they have never or no longer smoked has been slowly increasing from 76.9 percent in 2016 to 81.3 percent in 2022. The prevalence of nonsmoking adults remains lower in Arkansas relative to the U.S., which also showed an increase in the proportion of U.S. adults reporting never or no longer smoking from 2016 to 2022.

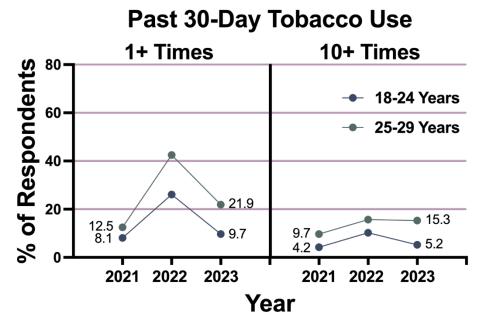
Source: BRFSS

# More than one in five (22.6%) Arkansans adults reported smoking cigarettes in the past month compared to 16.7 percent of U.S. persons. Higher levels of cigarette use among Arkansas relative to U.S. adults occurred among those aged 26+ years. The AR and U.S. prevalence of cigarette smoking was similar among those aged 18-25 years.

# Past-Month Cigarette Use, 2021-2022



Source: NSDUH



Source: Arkansas Collegiate Survey

- The prevalence of past 30-day tobacco use was higher among Arkansas college students aged 25-29 years relative to those aged 18-24 years across all years.
- Among Arkansas college students aged 18-24 years, the prevalence of any tobacco in the past 30 days
  increased sharply from 2021 to 2022 and then decreased in 2023 to a prevalence slightly higher than that
  reported in 2021. The prevalence of frequent tobacco use in the past 30 days increased slightly from 2021
  to 2023.
- Among Arkansas college students aged 25-29 years, the prevalence of any tobacco use in the past 30 days increased sharply from 2021 to 2022 and then decreased in 2023 to a prevalence that was still almost double that reported in 2021. The prevalence of frequent tobacco use in the past 30 days increased from 9.7 percent in 2021 to 15.3 percent in 2023.

#### **E-Cigarette Use**

#### Why this is important

E-cigarettes are unsafe for adults and pregnant adults who do not currently use tobacco products.

E-cigarettes can cause unintended injuries, such as fires and explosions from defective e-cigarette batteries and nicotine poisoning. Children and adults have been poisoned by swallowing, breathing, or absorbing e-cigarette liquid through their skin or eyes.<sup>14</sup>

E-cigarette use among adults has been increasing. It rose from 3.7 percent in 2020 to 5.7 percent in 2022.

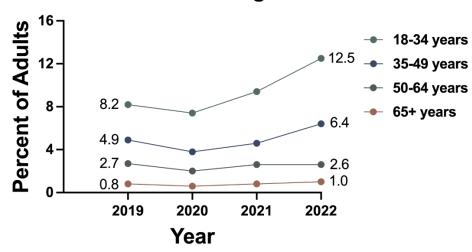
In 2021, about 3 in 10 (29.4%) adults who vaped also smoked cigarettes.<sup>36</sup> This is called dual use, which is thought to be more harmful than use of either alone. Dual use was more common among older adults, with 42.7 and 16.3 percent of adults aged 45+ and 18-24 years, respectively reporting both vaping and

smoking cigarettes. About 7.2 and 61.4 percent of adults aged 45+ and 18-24 years of age, respectively, reported they vaped and had never smoked cigarettes.

#### What to take away

 Among U.S. adults, the prevalence of current electronic cigarette use increased as age decreased. Ecigarette use generally increased from 2019-2020 to 2022 among adults aged 18-49 years while remaining low and stable among adults aged 50+ years.

Current U.S. Adult E-Cigarette Use



Source: CDC National Center for Health Statistics, National Health Interview Survey

• The prevalence of any past 30-day flavor vaping was generally similar among Arkansas college students aged 25-29 and 18-24 years, except in 2022, when use was higher among those aged 25-29 years.

• Among Arkansas college students aged 18-24 years, the prevalence of any flavor vaping in the past 30 days increased sharply from 2021 to 2022 and then decreased in 2023 to a prevalence slightly almost double that in 2021. The prevalence of frequent flavor vaping in the past 30 days remained stable from 2021 to 2023.

#### 1+ Times 10+ Times % of Respondents 40 - 18-24 Years 30 25-29 Years 20 10 5.0 5.1 4.3 2.3 2021 2022 2023 2021 2022 2023 Year

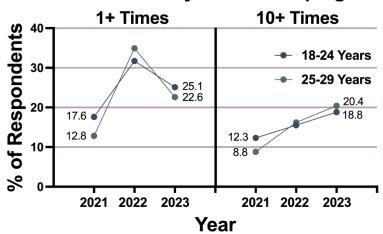
Past 30-Day Flavored Vaping

Source: Arkansas Collegiate Survey

Among Arkansas college students aged 25-29 years, the past-30-day prevalence of any flavor vaping
increased sharply from 2021 to 2022 and then decreased in 2023 to a prevalence similar 2021 levels. The
prevalence of frequent flavor vaping in the past 30 days more than quadrupled from a low of 0.9 percent
in 2021 to 3.7 percent in 2023.

- The prevalence of past 30-day nicotine vaping was generally similar among Arkansas college students aged 18-24 and 25-29 years from 2021 to 2023.
- Among Arkansas college students aged 18-24 years, the prevalence of any nicotine vaping in the past 30 days increased sharply from 2021 to 2022 and then decreased in 2023 to a prevalence 7.5 percent higher than that reported in 2021. The past 30-day prevalence of frequent nicotine vaping also increased from 12.3 percent in 2021 to 18.8 percent in 2023.

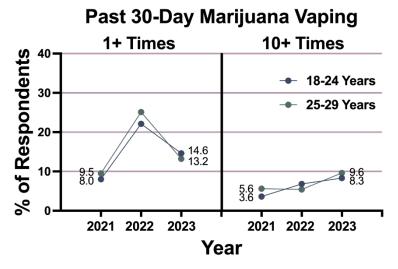
**Past 30-Day Nicotine Vaping** 



Among Arkansas college students aged 25-29 years, the prevalence of any nicotine vaping in the past 30 days increased sharply from 2021 to 2022 and then decreased in 2023 to a prevalence that was still almost double that reported in 2021. The prevalence of past 30-day frequent nicotine vaping more than doubled from 8.8 percent in 2021 to 20.4 percent in 2023.

Source: Arkansas Collegiate Survey

- The prevalence of past 30-day marijuana vaping was generally similar among Arkansas college students aged 18-24 and 25-29 years from 2021 to 2023.
- Among Arkansas college students aged 18-24 and 25-29 years, the past 30-day prevalence of any marijuana vaping increased sharply from 2021 to 2022 and then decreased in 2023 to a prevalence somewhat higher than in 2021.



Source: Arkansas Collegiate Survey

 Among Arkansas college students aged 18-24 years, the past 30-day prevalence of frequent marijuana vaping more than doubled from 3.6 percent in 2021 to 8.3 percent in 2023. Among Arkansas college students aged 25-29 years, the past 30-day prevalence of frequent marijuana vaping almost doubled from 5.6 percent in 2021 to 9.6 percent in 2023.

#### **Alcohol Use**

#### Why this is important

Alcohol is the most common substance used among people 12 and older in the United States with 48 percent of persons indicating current alcohol use in 2022.<sup>37</sup>

In Arkansas, from 2015–2019, 845 traffic fatalities involved alcohol (31.8% of all traffic fatalities). 38

Drinking alcohol affects every organ in the body and can damage a developing fetus.<sup>39</sup>

Heavy alcohol use can increase risk of certain cancers, stroke and liver disease.<sup>39</sup>

Excessive alcohol use - which refers to drinking in ways that can negatively impact health—is a leading preventable cause of death in this country. "At-risk" drinking is:<sup>40</sup>

- More than four drinks per day or more than 14 drinks per week for men
- More than three drinks per day or more than seven drinks per week for women

Binge drinking typically happens when men consume five or more drinks or women consume four or more drinks in about two hours.<sup>40</sup>

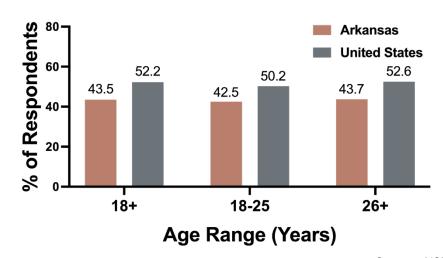
Drinking can impair judgment, leading to aggressive behaviors, high-risk sex and car crashes.<sup>41</sup>

Drinking heavily over a long time or too much on a single occasion can damage the heart, causing problems such as cardiomyopathy, arrhythmias, stroke, and high blood pressure. 42

#### What to take away

 In 2021-2022, current alcohol use was lower among Arkansas adults relative to their U.S. counterparts. Young adults aged 18-25 years had a similar percentage of use relative to those aged 26+ years among both Arkansas and U.S. adults.

# Past-Month Alcohol Use, 2021-2022



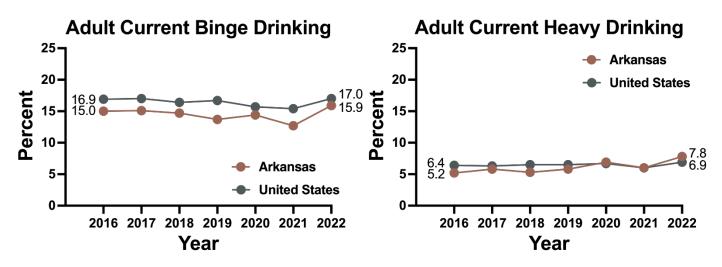
Source: NSDUH

# Adult Current Alcohol Use Arkansas United States 52.9 40 2016 2017 2018 2019 2020 2021 2022 Year

Current alcohol use among Arkansas and U.S. adults has been relatively stable from 2016 to 2022. The prevalence of alcohol use among Arkansas adults has consistently remained lower than national figures.

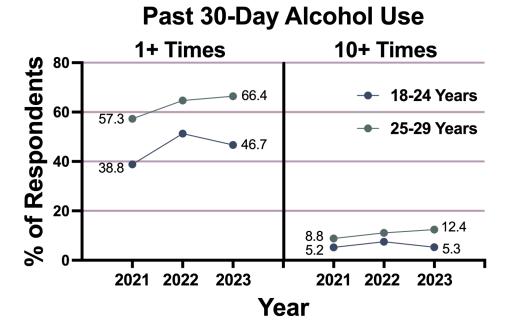
Source: BRFSS

- The prevalence of binge drinking decreased slightly over time from 2016 to 2021, particularly among
  Arkansas adults, but then increased from 2021 to 2022. Binge drinking prevalence was consistently slightly
  lower among Arkansas relative to U.S. adults.
- The prevalence of heavy drinking slightly increased over time among Arkansas adults. Prevalence among Arkansas adults has generally been either slightly lower than, similar to, or slightly higher than that among U.S. adults.



Source: BRFSS

- The past 30-day prevalence of any alcohol use and frequent alcohol use was higher among Arkansas college students aged 25-29 years relative to those aged 18-24 years from 2021 to 2023.
- Among Arkansas college students aged 18-24 years, the past 30-day prevalence of any alcohol use increased sharply from 2021 to 2022 and then decreased slightly in 2023 to a level 9.9 percent higher than in 2021. The prevalence of past 30-day frequent alcohol use remained relatively stable from 2021 to 2023.



Source: Arkansas Collegiate Survey

 Among Arkansas college students aged 25-29 years, the prevalence of any alcohol use in the past 30 days increased from 2021 to 2023. The prevalence of frequent alcohol use in the past 30 days increased from 8.8 percent in 2021 to 12.4 percent in 2023.

#### Marijuana Use

#### Why this is important

Cannabis is the most commonly used federally illegal drug in the United States; 52.5 million people, or about 19 percent of Americans, used it at least once in 2021.<sup>43</sup>

The risk of developing cannabis use disorder is even greater for people who begin to use it before age 18.44

Cannabis use directly affects the parts of the brain responsible for memory, learning, attention, decision-making, coordination, emotion, and reaction time.

Infants, children, and teens (who still have developing brains) are especially susceptible to the adverse effects of cannabis.

Cannabis use has been linked to social anxiety, depression, and schizophrenia (a type of mental illness where people might see or hear things that aren't really there), but scientists don't yet fully understand the relationships between these mental health disorders and cannabis use. 45,46

Regular marijuana use is associated with breathing problems, higher risk of lung infections, mental illness, and severe nausea and vomiting.<sup>19</sup>

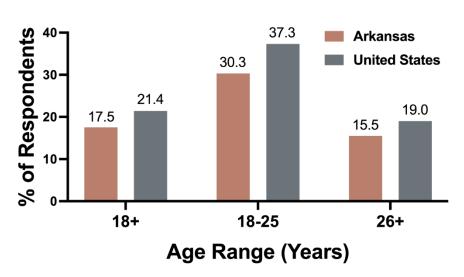
Marijuana increases heart rate, which can increase risk of heart attack, particularly among older adults and/or those with heart problems.<sup>19</sup>

Use of marijuana during pregnancy can harm fetal development during pregnancy and delay and/or impair post-natal child development.<sup>19</sup>

#### What to take away

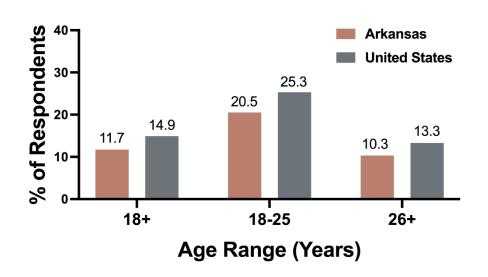
• The prevalence of past-year marijuana use was almost double among adults aged 18-25 years relative to those aged 26+ years in 2021-2022. About 1 in 4 U.S. young adults, 18-25, report using marijuana in the past year. Compared to the national average, Arkansas has a lower prevalence of past-year marijuana use.

# Past-Year Marijuana Use, 2021-2022



Source: NSDUH

# Past-Month Marijuana Use, 2021-2022

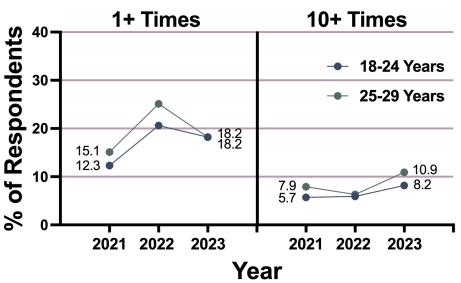


The 2021-2022 prevalence of current marijuana use among adults aged 18-25 was almost double that among adults 26+ years with 1 in 4 U.S. young adults reporting current marijuana use. Arkansas adults had a lower prevalence of current marijuana use relative to their U.S. counterparts.

Source: NSDUH

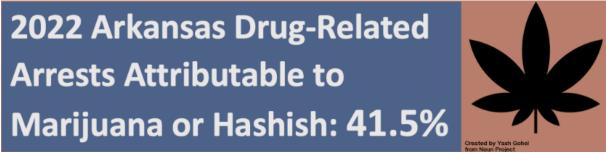
# Past 30-Day Marijuana Use

 Any as well as frequent past 30day marijuana use among Arkansas college students generally increased from 2021 to 2023. In 2023, almost 1 in 5 Arkansas college students reported current marijuana use.



Source: Arkansas Collegiate Survey

• The percentage of arrests for marijuana/hashish possession increased from 38.5 in 2021 to 41.5 percent in 2022, indicating that more than two in five arrests for drug possession involved marijuana or hashish in 2022.



Source: Arkansas Crime Information Center

#### **Opioid Use**

#### Why this is important

Opioids, mainly illegally made fentanyl, are involved in the highest percentage of overdose deaths. The age-adjusted rate of drug overdose deaths involving synthetic opioids other than methadone, which includes fentanyl, fentanyl analogs, and tramadol, was mostly stable from 2002 (0.4 deaths per 100,000 standard population) to 2013 (1.0) and then increased through 2022 (22.7), with different rates of change over time.

The age-adjusted rate of drug overdose deaths involving heroin decreased 35.7 percent from 2.8 in 2021 to 1.8 in 2022.

The age-adjusted rate of drug overdose deaths involving natural and semisynthetic opioids, which includes drugs such as morphine, oxycodone, and hydrocodone, decreased 12.5 percent from 4.0 in 2021 to 3.5 in 2022.

Anyone can become addicted to prescription opioids. Among chronic pain patients, about 1 in 4 misuse opioids and about 1 in 10 develop an opioid use disorder.<sup>24</sup>

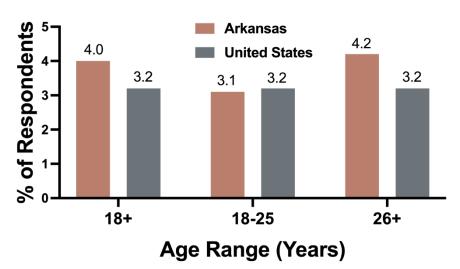
People who misuse prescription opioids are more likely to transition to heroin use than those who do not.<sup>23</sup>

Rates of women with opioid-related diagnosis at delivery and of babies born with withdrawal symptoms increased from 2010–2017. Specifically, mothers with opioid-related diagnoses documented at delivery increased by 131 percent. The incidence of babies born with NAS increased by 82 percent nationally over the same period.<sup>47</sup>

#### What to take away

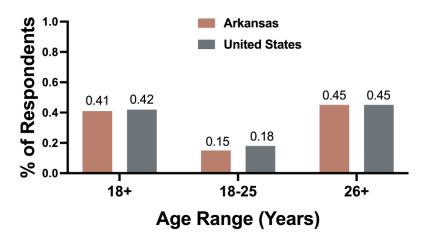
prescription pain reliever use among Arkansas adults was higher than that among the U.S. population, with Arkansas ranking 6<sup>th</sup> in the nation for prescription opioid misuse. This higher prevalence of prescription opioid misuse appears to be driven by higher rates among Arkansas adults aged 26+ years relative to their U.S. counterparts.

# Past-Year Rx Pain Reliever Use, 2021-2022



Source: NSDUH

#### Past-Year Heroin Use, 2021-2022

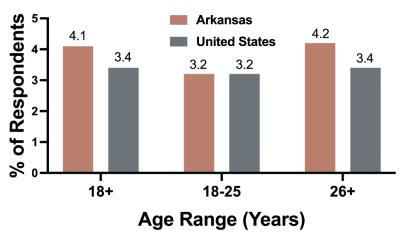


In 2021-2022, past-year heroin use among Arkansas adults was similar to that among U.S. adults. The prevalence of heroin use was higher among Arkansas and U.S. adults aged 26+ than 18-25 years.

Source: NSDUH

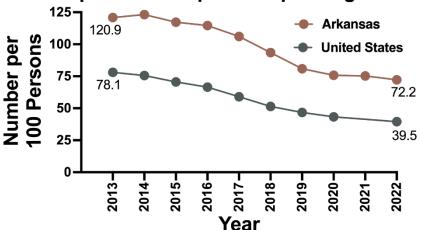
In 2021-2022, past-year opioid (nonmedical prescription opioid *OR* heroin) use among Arkansas adults was higher than that among the U.S. population, with Arkansas ranking 8<sup>th</sup> in the nation for opioid use. The prevalence of opioid misuse was higher among Arkansas adults aged 26+ relative to their U.S. counterparts. Arkansas and U.S. adults aged 18-25 years had a similar prevalence of opioid use.

# Past-Year Opioid Misuse, 2021-2022



Source: NSDUH

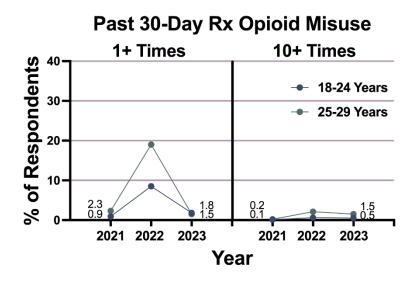
# **Opioid Prescription Dispensing Rates**



Source: Centers for Disease Control

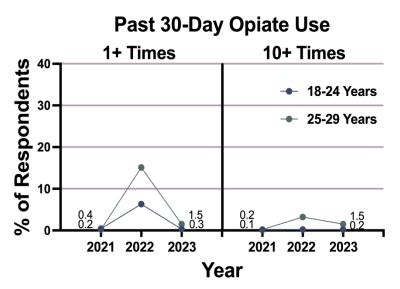
Nationally, the opioid dispensing rate per 100 persons has steadily declined from 78.1 in 2013 to 39.5 in 2022. Although Arkansas opioid dispensing rates also showed a decline from 120.9 in 2013, Arkansas had the second highest opioid prescription rate in the country with 72.2 per 100 persons in 2022. Only Alabama had a higher rate at 74.5 per 100 persons. In contrast, Hawaii had the lowest prescription rate at 24.3 per 100.

- The past 30-day prevalence of any prescription opioid misuse was generally similar among Arkansas college students aged 25-29 years relative to those aged 18-24 years in 2021 and 2023. The past 30-day prevalence of frequent prescription opioid misuse was generally similar among Arkansas college students aged 25-29 and 18-24 years from 2021 to 2023.
- Among Arkansas college students aged 18-24 years, the prevalence of any prescription opioid misuse in the past 30 days increased from 2021 to 2022 and then decreased in 2023 to a level similar to that in 2021. The prevalence of frequent prescription opioid misuse in the past 30 days remained relatively stable from 2021 to 2023.
- Among Arkansas college students aged 25-29 years, the rate of current prescription opioid misuse increased sharply from 2021 to 2022, then decreased sharply to a level lower than in 2021. The past 30-day prevalence of frequent prescription opioid misuse increased from 8.8 percent in 2021 to 12.4 percent in 2023.



Source: Arkansas Collegiate Survey

• The past 30-day prevalence of any opiate use and frequent opiate use was generally higher among Arkansas college students aged 25-29 years relative to those aged 18-24 years from 2021 to 2023.



Source: Arkansas Collegiate Survey

Among Arkansas college students aged 18-24 years, the past 30-day prevalence of any opiate use increased from 2021 to 2022 and then decreased in 2023 to a level similar to that in 2021. Past 30-day prevalence of frequent opiate use remained very low and relatively stable from 2021 to 2023.

Among Arkansas college students aged 25-29 years, the past 30-day prevalence of opiate use spiked from 2021 to 2022, then decreased to a level higher than that in 2021. The past 30-day prevalence of frequent opiate use increased slightly from 2021 to 2023.

#### Other Substance Use

#### Why this is important

Addiction to drugs can lead to a series of negative consequences and threats for individuals, families, communities, and society.

Stimulant use can have major negative short- and long-term effects on a person's health, including overheating, cardiovascular complications, seizures, damage to nerves, and changes in brain structure and function.<sup>28</sup>

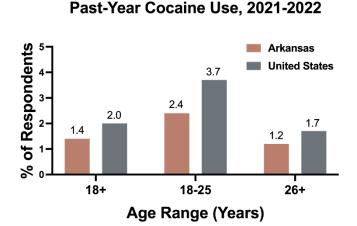
The age-adjusted rate of drug overdose deaths involving psychostimulants with abuse potential (subsequently, psychostimulants), which includes methamphetamine, amphetamine, and methylphenidate, was 4.0% higher in 2022 than the rate in 2021 (10.4 compared with 10.0).<sup>21</sup>

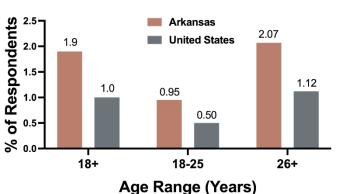
The age-adjusted rate of drug overdose deaths involving cocaine increased slightly from 1.6 deaths per 100,000 standard population in 2002 to 2.5 in 2006, decreased to 1.3 in 2010, then increased to 8.2 in 2022; the rate in 2022 was 12.3 percent higher than the rate in 2021 (7.3).<sup>21</sup>

In the U.S., stimulants are the second most widely used and abused substances during pregnancy and pregnant women using stimulants in pregnancy are at increased risk of adverse perinatal, neonatal, and childhood outcomes.<sup>29</sup>

#### What to take away

• Past-year cocaine use among Arkansas adults was less prevalent than among U.S. adults in 2021-2022. Cocaine use was higher among Arkansas and U.S. adults aged 18-25 than 26+ years.

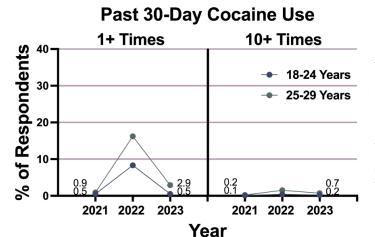




Past-Year Methamphetamine Use, 2021-2022

Source: NSDUH

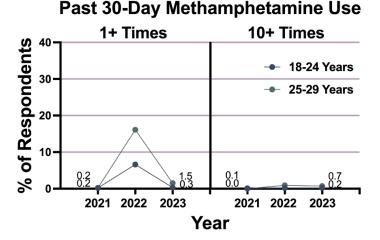
• Past-year methamphetamine use prevalence was higher among Arkansas adults relative to their U.S. counterparts across all age categories, with Arkansas prevalence almost double that of U.S. rates in 2021-2022. Arkansas ranked 3<sup>rd</sup> in the nation for past-year prevalence of methamphetamine use in 2021-2022.



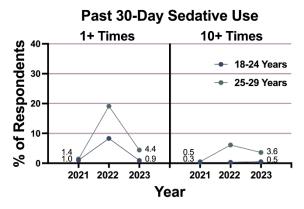
The past 30-day prevalence of any cocaine use was generally similar or somewhat higher among Arkansas college students aged 25-29 years relative to those aged 18-24 years. The past 30-day prevalence of frequent cocaine use was generally similar among Arkansas college students aged 25-29 and 18-24 years from 2021 to 2023.

Source: Arkansas Collegiate Survey

- Among Arkansas college students aged 18-24 years, the prevalence of any cocaine use in the past 30 days
  increased from 2021 to 2022 and then decreased in 2023 to a level similar to that in 2021. Past 30-day
  prevalence of frequent cocaine use was very low and remained relatively stable from 2021 to 2023.
- Among Arkansas college students aged 25-29 years, the past 30-day rate of cocaine misuse increased sharply from 2021 to 2022, then decreased sharply to a level almost triple that in 2021. Current prevalence of frequent cocaine use was very low, though increased slightly from 2021 to 2023.
- Past 30-day prevalence of any methamphetamine use was generally similar among Arkansas college students aged 25-29 years relative to those aged 18-24 years in 2021 and 2023. The past 30-day prevalence of frequent methamphetamine use was very low and generally similar among Arkansas college students aged 25-29 and 18-24 years from 2021 to 2023.
- Among Arkansas college students aged 18-24 years, current prevalence of any methamphetamine use increased from 2021 to 2022, then decreased in 2023 to a level similar to that in 2021. Current prevalence of frequent methamphetamine use remained very low and relatively stable from 2021 to 2023.
- Among Arkansas college students aged 25-29 years, current prevalence of any methamphetamine use increased sharply from 2021 to 2022, then decreased to a level higher than in 2021. Current rate of frequent methamphetamine use was very low in 2021 and increased from 0.1 percent in 2021 to 0.7 percent in 2023.



Source: Arkansas Collegiate Survey

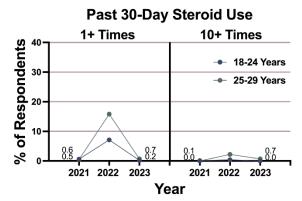


The past 30-day prevalence of any or frequent sedative use was generally somewhat higher among Arkansas college students aged 25-29 years relative to those aged 18-24 years from 2021 to 2023

Among Arkansas college students aged 18-24 years, the past 30-day prevalence of any sedative use increased from 2021 to 2022 and then decreased in 2023 to a level similar to that in 2021. The past 30-day prevalence of frequent sedative use was very low and remained relatively stable from 2021 to 2023.

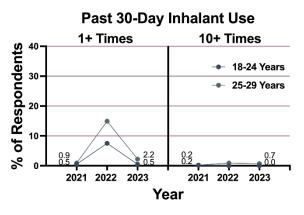
Source: Arkansas Collegiate Survey

- Among Arkansas college students aged 25-29 years, the past 30-day rate of sedative misuse increased sharply from 2021 to 2022, then decreased to a level more than triple that in 2021. The past 30-day prevalence of frequent sedative use increased from 2021 to 2022-2023.
- The past 30-day prevalence of any or frequent steroid use from 2021 to 2023 was generally similar to or somewhat higher among Arkansas college students aged 25-29 years relative to those aged 18-24 years.
- Among Arkansas college students aged 18-24 years, past 30day rate of any steroid use increased from 2021 to 2022 and then decreased in 2023 to a level lower than that in 2021. The past 30-day prevalence of frequent steroid use was very low and remained relatively stable from 2021 to 2023.



Source: Arkansas Collegiate Survey

 Among Arkansas college students aged 25-29 years, the past 30-day rate of steroid misuse increased sharply from 2021 to 2022, then decreased to a level similar to that in 2021. The past 30-day prevalence of frequent steroid use was generally very low from 2021 to 2023.

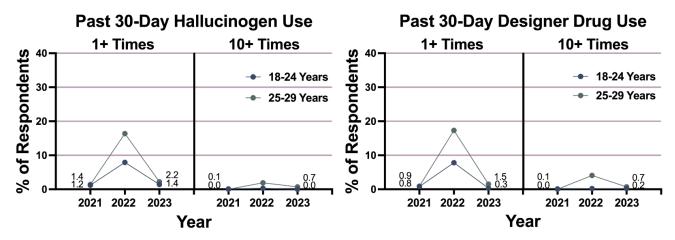


Source: Arkansas Collegiate Survey

The past 30-day prevalence of any or frequent inhalant use from 2021 to 2023 was generally similar to or somewhat higher among Arkansas college students aged 25-29 years relative to those aged 18-24 years.

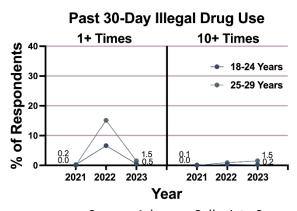
Among Arkansas college students aged 18-24 years, past 30-day rate of any inhalant use increased from 2021 to 2022 and then decreased in 2023 to a level like that in 2021. The past 30-day prevalence of frequent inhalant use was extremely low from 2021 to 2023.

- Among Arkansas college students aged 25-29 years, the past 30-day rate of inhalant misuse increased sharply from 2021 to 2022, then decreased to a level twice that in 2021. The past 30-day prevalence of frequent inhalant use was generally very low from 2021 to 2023.
- The past 30-day prevalence of any or frequent hallucinogen use from 2021 to 2023 was generally similar to or somewhat higher among Arkansas college students aged 25-29 years relative to those aged 18-24 years.
- Among Arkansas college students aged 18-24 years, past 30-day rate of any hallucinogen use increased from 2021 to 2022 and then decreased in 2023 to a level like that in 2021. The past 30-day prevalence of frequent hallucinogen use was essentially nonexistent from 2021 to 2023.
- Among Arkansas college students aged 25-29 years, the past 30-day rate of hallucinogen misuse increased sharply from 2021 to 2022, then decreased to a level almost double that in 2021. The past 30-day prevalence of frequent hallucinogen use was generally very low from 2021 to 2023.



Source: Arkansas Collegiate Survey

- The past 30-day prevalence of any or frequent designer drug use from 2021 to 2023 was generally similar to or somewhat higher among Arkansas college students aged 25-29 years relative to those aged 18-24 years.
- Among Arkansas college students aged 18-24 years, past 30-day rate of any designer drug use increased from 2021 to 2022 and then decreased in 2023 to a level lower than that in 2021. The past 30-day prevalence of frequent designer drug use was extremely low from 2021 to 2023.
- Among Arkansas college students aged 25-29 years, the past 30-day rate of designer drug use increased sharply from 2021 to 2022, then decreased to a level higher than that in 2021. The past 30-day prevalence of frequent designer drug use, very low in 2021, increased in 2022, then decreased in 2023 to a level higher than that in 2021.

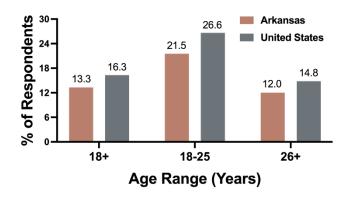


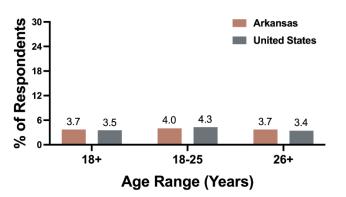
Source: Arkansas Collegiate Survey

- The past 30-day prevalence of any or frequent illegal drug use from 2021 to 2023 was generally similar to or somewhat higher among Arkansas college students aged 25-29 years relative to those aged 18-24 years.
- Among those aged 18-24 years, past 30-day rate of any illegal drug use increased from 2021 to 2022 and then decreased in 2023 to a level somewhat higher than that in 2021. The past 30-day prevalence of frequent illegal drug use was extremely low from 2021 to 2023.
   Arkansas Collegiate Survey
- Among Arkansas college students aged 25-29 years, the past 30-day prevalence of illegal drug use increased sharply from 2021 to 2022, then decreased to a level higher than that in 2021. The past 30-day prevalence of frequent illegal drug use was extremely low but increased from 0.1 percent 2021 to 1.5 percent in 2023.
- Past-month use of any illicit drug including marijuana was lower among Arkansas adults relative to U.S. adults in 2021-2022, with rates among adults 18-25 and 26+ years slightly lower than those among their U.S. counterparts. The past 30-day prevalence of illicit drug use among adults aged 18-25 years was almost double that among those aged 26+ years.

#### Past-Month Illicit Drug Use (Incl MJ), 2021-2022

#### Past-Month Illicit Drug Use (Exc MJ), 2021-2022





Source: NSDUH

Past-month use of any illicit drug other than marijuana was similar among Arkansas and U.S. adults in 2021-2022, with rates among adults 18-25 and 26+ years slightly lower and higher, respectively, than those among their U.S. counterparts. Adults aged 18-25 years reported slightly higher prevalence of illicit drug use relative to those aged 26+ years. These data suggest that illicit marijuana use is more prevalent among adults aged 18-25 relative to those aged 26+ years.

#### **CONSEQUENCES**

Consequences of substance use can be related to:

- Substance use in general (being arrested for driving under the influence)
- Caused by specific substances (liver damage caused by alcohol consumption)
- Related to the route of administration (damage to the lungs caused by smoking)

For this report, developmental, physiological, psychological, and community-related consequences will be shared.

## Developmental

#### Why this is important

About five percent of pregnant women use at least one addictive substance, which has been shown to lead to severe health consequences for the infant, including at least doubling the risk of stillbirth. 48

Use of certain substances, including opioids, alcohol, benzodiazepines, tranquilizers, and caffeine, can result in the infant undergoing substance withdrawal after birth, called neonatal abstinence syndrome (NAS).48

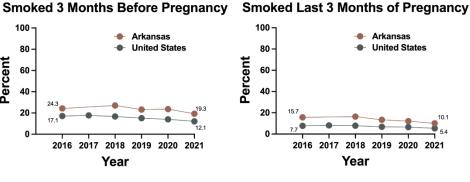
Tobacco use during pregnancy increases risks to the baby's health, including premature birth, low birthweight, increased risks of illness and prolonged hospital stay, birth defects and infant death.<sup>49</sup>

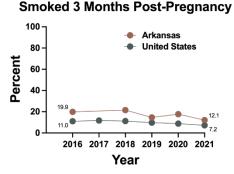
Alcohol use during pregnancy can lead to the baby experiencing fetal alcohol spectrum disorder (FASD), 50 which can affect the following behaviors:

- Learning and remembering
- Understanding and following directions
- Controlling emotions
- Communicating and socializing
- Daily life skills, such as feeding and bathing

#### What to take away

#### 100 Arkansas 80 **United States** Percent 60 40 20 2016 2017 2018 2019 2020 2021 Year

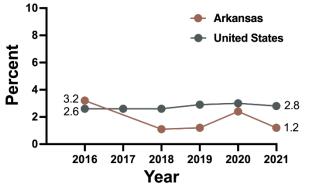




Source: PRAMS

• Cigarette smoking rates among Arkansas women who become pregnant show some improvement, with the prevalence of smoking before, during and after pregnancy declining slightly from 2016 to 2021. Still, rates continue to be universally higher than U.S. rates and increase after delivery.

## **Heavy Alcohol Use 3 Months Before Pregnancy**

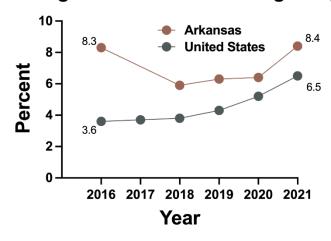


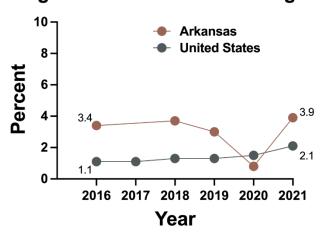
Heavy use of alcohol three months prior to being pregnant among U.S. women has increased very slightly from 2016 to 2021. Although the prevalence of heavy alcohol use among Arkansas women three months before pregnancy was higher than national rates in 2016, prevalence decreased to rates lower than those of the U.S. in 2018-2021.

Source: PRAMS

 The percentage of Arkansas women using e-cigarettes three months before pregnancy decreased from 2016 to 2018 but then increased in 2021 back to levels similar to that in 2016. The prevalence of ecigarette smoking among U.S. women almost doubled from a low rate of 3.6 percent in 2016 to 6.5 percent in 2021. Nevertheless, e-cigarette use three months before pregnancy was consistently higher among Arkansas women relative to their U.S. counterparts.

# E-Cig Use 3 Months Pre-Pregnancy E-Cig Use Last 3 Months of Pregnancy



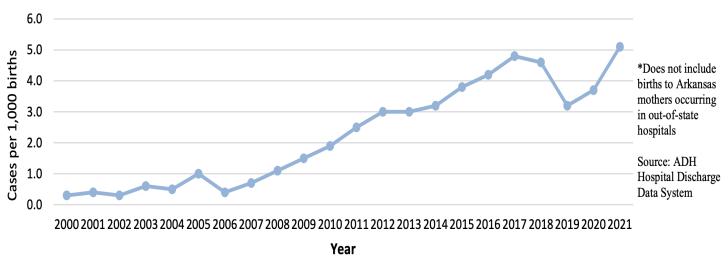


Source: PRAMS

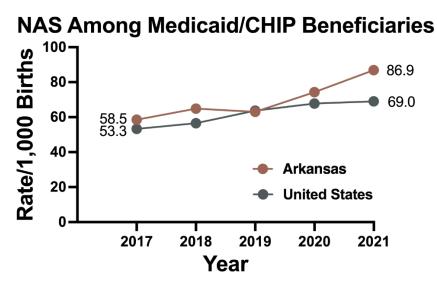
• The percentage of Arkansas pregnant women using e-cigarettes during the last trimester remained relatively stable from 2016 to 2019, decreased sharply in 2020, then increased sharply to a level slightly higher than in 2016. The percentage of U.S. pregnant women using e-cigarettes during the last trimester almost doubled from a very low rate of 1.1 percent in 2016 to 2.1 percent in 2021. Nevertheless, e-cigarette use three months before pregnancy was generally higher among Arkansas women relative to their U.S. counterparts.

• The rate of neonatal abstinence syndrome (NAS) diagnosis in Arkansas increased more than about 17-fold from 0.3 per 1,000 births in 2000 to an all-time high of 5.1 per 1,000 births in 2021, despite a dip in NSA diagnosis rate during 2019-2020.





• The rate of NAS diagnosis among newborns whose deliveries were covered by Medicaid or CHIP increased more rapidly in Arkansas from 2017 to 2021 relative to the U.S. Arkansas generally had similar or higher rates of NAS among newborns whose deliveries were covered by Medicaid or CHIP than the U.S.



## **Physiological**

#### Why this is important

Although various factors contribute to heart and lung disease, monitoring the rates of these diseases in the Arkansas population gives some indication of the impact of substance use.

Smoking and vaping nicotine-containing products contributes to lung disease and cardiovascular disease.<sup>51</sup>

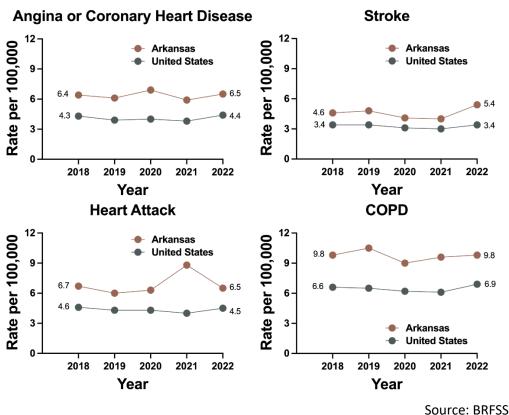
Alcoholic liver disease, caused by drinking too much alcohol, is the primary cause of liver disease in western nations.52

In 2017, Arkansas had the fourth highest death rate from cardiovascular disease in the United States.<sup>53</sup>

In 2017, Arkansas had the highest age-adjusted death rate due to COPD or asthma in the US.<sup>54</sup>

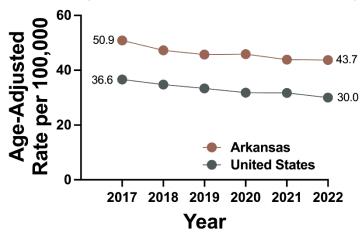
#### What to take away

- The rate of angina or coronary heart disease remained relatively stable over time among Arkansan and U.S. adults. Rates among U.S. adults were consistently lower than Arkansas rates.
- Arkansans have a consistently higher rate of stroke compared to national averages. Rates of stroke have been trending downward in Arkansas from 2019 to 2021 but increased in 2022 while remaining stable in the U.S. from 2018 to 2022.



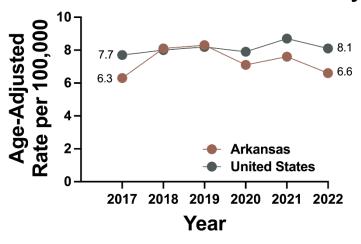
- Arkansans have consistently higher rates of heart attack compared to national averages. Arkansas and U.S. prevalence of heart attack remained relatively stable from 2016 to 2021, except for a spike in rate in 2020, while U.S. prevalence remained stable over time.
- Arkansans have higher rates of COPD compared to national averages. Among Arkansan and U.S. adults, COPD prevalence remained relatively stable over time; however, Arkansas rates were almost 1.5 times higher than the U.S. average in 2022.

# **Lung, Bronchus Cancer Mortality**



The age adjusted mortality rate from lung cancer in Arkansas is decreasing but remains almost 1.5 times higher than U.S. rates.

# **Alcoholic Liver Disease Mortality**



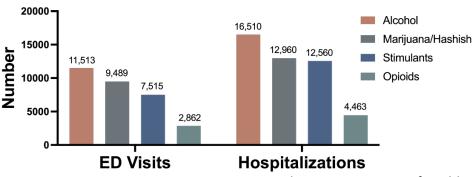
The Arkansas alcoholic liver disease mortality rate has fluctuated from 2016 to 2021, being at or slightly lower than U.S. figures. U.S. alcoholic liver disease mortality rate remained relatively stable from 2017 to 2022.

Source: Centers for Disease Control and Prevention, CDC Wonder

- In 2022, Arkansas emergency department (ED) visits in which a diagnostic code for substance use was included were highest for alcohol. The next highest number of visits involved marijuana/hashish, followed by stimulants, then opioids. In contrast, stimulants were the next highest after alcohol in 2021.
- Arkansas hospitalizations in 2022 showed a similar pattern of substance-involved admissions, with most involving alcohol. The next highest number of admissions involved marijuana/hashish, followed closely by

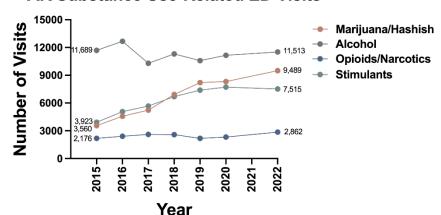
stimulants, then opioids. Similar to ED visits, hospitalizations for stimulants shifted from 2<sup>nd</sup> highest in 2021 to third highest in 2022.

## Arkansas Admissions Involving a Substance, 2022



Source: Arkansas Department of Health

#### AR Substance Use-Related ED Visits

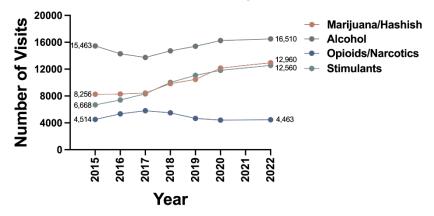


The number of Arkansas substance use-related ED visits was consistently highest for alcohol. Arkansas alcohol-related ED visits remained relatively consistent from 2015 to 2022. Marijuana-related ED visits tripled, and stimulant-related ED visits almost doubled from 2015 to 2022. Opioid-related ED visits increased slightly from 2015 to 2022.

Source: Arkansas Department of Health

The number of Arkansas substance use-related hospitalizations was consistently highest for alcohol and increased slightly from 2015 to 2022. Marijuana-related and stimulant-related hospitalizations almost doubled, respectively, from 2015 to 2022. Opioid-related hospitalizations remained relatively stable from 2015 to 2022.

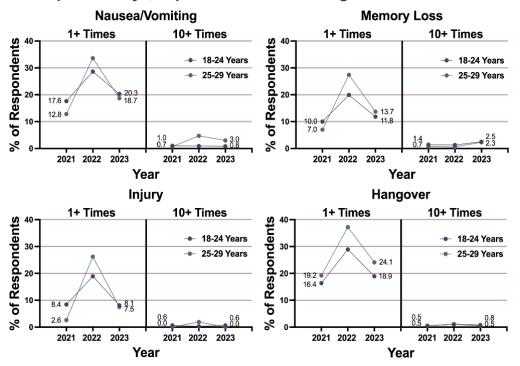
## **AR Substance Use-Related Hospitalizations**



Source: Arkansas Department of Health

- The average past 30-day prevalence of any substance-induced nausea/vomiting was similar among Arkansas college students aged 18-24 (22.2%) and 25-26 (21.7%) years in 2021-2023, with at least one in five students reporting past-month substance-induced nausea/vomiting. Among Arkansas college students aged 18-24 and 25-29 years, past 30-day rate of any substance-induced nausea/vomiting increased from 2021 to 2022 and then decreased in 2023 to a level slightly higher than that in 2021. The past 30-day prevalence of frequent substance-induced nausea/vomiting was very low among those aged 18-24 years from 2021 to 2023 and increased slightly among those aged 25-29 years from 1.0 percent in 2021 to 3.0 percent in 2023.
- The average past 30-day prevalence of any substance-induced memory loss was slightly lower among Arkansas college students aged 18-24 (13.9%) relative to those aged 25-26 (16.0%) years in 2021-2023. Among Arkansas college students aged 18-24 and 25-29 years, past 30-day rate of any substance-induced memory loss increased sharply from 2021 to 2022 and then decreased in 2023 to a level somewhat higher than that in 2021. The past 30-day prevalence of frequent substance-induced memory loss was very low among in 2021 and increased slightly among those in both age groups from 2021 to 2023.





Source: Arkansas Collegiate Survey

Average past 30-day prevalence of any substance-induced injury was similar among Arkansas college students aged 18-24 (11.8%) and 25-26 (12.1%) years in 2021-2023. Among Arkansas college students, past 30-day rate of any substance-induced injury increased sharply from 2021 to 2022 and then decreased in 2023 to a level similar to (18-25 yrs.) or about triple (25-29 yrs.) that in 2021. The past 30day prevalence of frequent substance-induced injury was very low from 2021 to 2023.

• The average past 30-day prevalence of any substance-induced hangover was lower among Arkansas college students aged 18-24 (21.4%) relative to those aged 25-26 (26.8%) years in 2021-2023. Among Arkansas college students aged 18-24 and 25-29 years, past 30-day rate of any substance-induced hangover increased sharply from 2021 to 2022 and then decreased in 2023 to a level somewhat higher than that in 2021. The past 30-day prevalence of frequent substance-induced hangover was very low among those in both age groups from 2021 to 2023.

Although the number of drug overdose deaths appeared to stabilize in 2017 to 2019 after a steady increase from 17,415 in 2000 to 70,237 in 2017, this increased sharply to 106,699 in 2021 before increasing slightly to 107,941 in 2022. The number of overdose deaths among males are more than double that among females.

## **U.S. Drug Overdose Deaths** 150000-**Number of Persons** Total **Females** 107,941 100000-Males 50000-2014-2015-2016-2017-2018-2002 2013 2007 2009 2010 2011 2012 Year

Source: National Center on Health Statistics, CDC WONDER

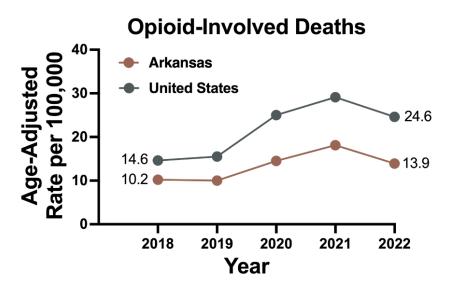
- Overall, the age-adjusted rate of drug overdose deaths nearly quadrupled from 8.2 in 2002 to 32.6 in 2022;
   however, the rate did not significantly change between 2021 (32.4) and 2022 (32.6).<sup>21</sup>
- Over 75 percent of the nearly 107,000 drug overdose deaths in 2022 involved an opioid, more than two thirds of which (68%) involved synthetic opioids other than methadone, principally illicitly manufactured fentanyls (IMFs).<sup>55</sup>
- An animal tranquilizer called xylazine is increasingly being linked to overdose deaths.<sup>56</sup> Xylazine can life threatening and is especially dangerous when combined with opioids like fentanyl. The presence of xylazine in drugs tested in labs increased in every region of the United States from 2020-2021, with the largest increase in the South.<sup>57</sup>

Age-Adjusted Drug Overdose Deaths Rate per 100,000 **Arkansas** 32.6 **United States** 30 21.7 20 15.5 10 0 2017 2018 2019 2020 2021 2022 Year

U.S. age-adjusted drug overdose death rate per 100,000 persons increased from 21.7 in 2017 to 32.6 in 2022 and was higher than Arkansas figures. Arkansas age-adjusted drug overdose death rate per 100,000 persons decreased slightly from 2018 to 2019, before increasing sharply to above the 2017 rate in 2021-2022. Nevertheless, Arkansas drug-involved deaths are likely underreported.

Source: Centers for Disease Control and Prevention, CDC Wonder

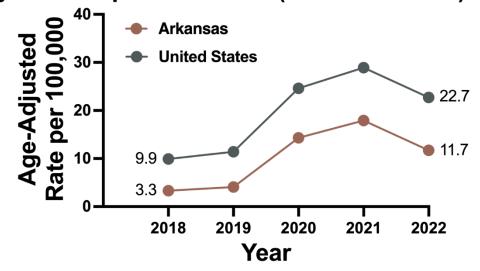
- The number of drug overdose deaths in Arkansas increased 14.8 percent from 547 in 2020 to 628 in 2021, then decreased slightly to 591 in 2022. However, drug overdose deaths are likely under-reported.
- for overdoses involving opioids almost doubled from 10.2 per 100,000 in 2018 to 18.1 per 100,000 in 2021, before decreasing to 13.9 per 100,000 in 2022. U.S. opioid-involved deaths also almost doubled from 14.6 per 100,000 in 2018 to 29.1 per 100,000 in 2021, before decreasing somewhat to 13.9 per 100,000 in 2022. While Arkansas appears to have a significantly lower opioid overdose death rate than nationally, opioid-related deaths are likely under reported.



Source: NCHS FastStats, https://www.cdc.gov/nchs/fastats/drug-overdoses.htm

In Arkansas, the age adjusted mortality rate for overdoses involving synthetic opioids (fentanyl, fentanyl analogs, tramadol) other than methadone increased almost 450 percent from 3.3 per 100,000 in 2018 to 17.9 per 100,000 in 2021, then decreased to 11.7 per 100,000 in 2022. Meanwhile, the U.S. synthetic opioid overdose mortality rate increased about 200 percent from 9.9 per 100,000 in 2018 to 28.9 per 100,000 in 2021, then decreased to 22.7 per 100,000 in 2022. Arkansas appears to have a significantly lower drug overdose death rate, although underreporting is likely.

# Synthetic Opioid-Involved (Exc Methadone) Deaths



Source: NCHS FastStats, https://www.cdc.gov/nchs/fastats/drug-overdoses.htm

## **Psychological**

#### Why this is important

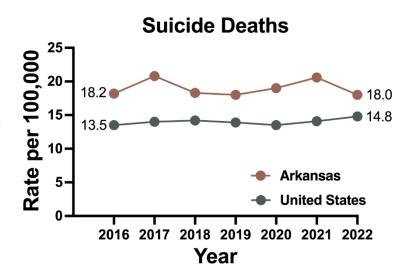
In 2022, suicide was among the top nine leading causes of death for people ages 10-64. Suicide was the second leading cause of death for people ages 10-14 and 25-34.<sup>58</sup>

Many factors can increase the risk for suicide or protect against it. Suicide is connected to other forms of injury and violence. For example, people who have experienced violence, including child abuse, bullying, or sexual violence have a higher suicide risk. Being connected to family and community support and having easy access to healthcare can decrease suicidal thoughts and behaviors.<sup>59</sup>

Use of alcohol, tobacco and other drugs is associated with lower grades and school attendance among adolescents<sup>60</sup> as well as lower likelihood of continuous enrollment in college.<sup>61</sup>

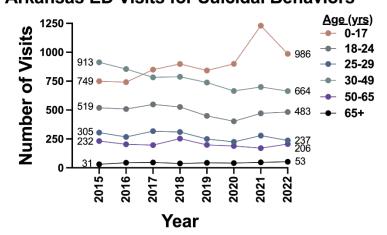
## What to take away

 Suicide death rates in Arkansas fluctuated from 2016 to 2022 but remaining relatively stable. U.S. suicide death rates have increased slightly from 2016 to 2022; nevertheless, Arkansas rates are consistently higher than national figures.



Source: MCD, Intentional Self Harm, CDC Wonder

#### **Arkansas ED Visits for Suicidal Behaviors**



Source: Arkansas Department of Health

The number of suicidal behavior-related Emergency Department (ED) visits among Arkansas youth generally has increased from 2015 to 2021, then decreased slightly in 2022. The majority of ED visits in 2017-2022 were for Arkansas youth aged 0-17 years. ED visits for Arkansas adults generally decreased from 2015 to 2022 across all age categories, except among those aged 65+ years, where the number of suicidal behavior-related ED visits increased slightly.

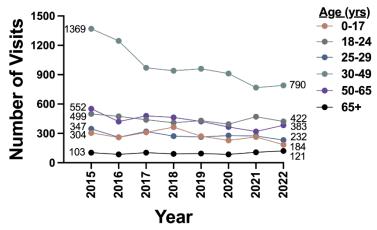
# The majority of AR hospitalizations for suicidal behaviors were among adults aged 30-49 years. The number of hospitalizations for suicidal behaviors generally decreased from 2015 to 2022 across all age categories,

except among those aged 65+ years, where

the number of suicidal behavior-related

hospitalizations increased slightly.

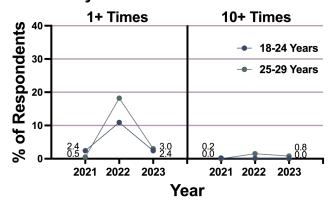
## **AR Hospitalizations for Suicidal Behaviors**



Source: Arkansas Department of Health

- Past year suicidal ideation among Arkansas high school students has fluctuated, but still increased slightly over time from 2009 to 2021 and has generally been similar to or slightly higher than among their U.S. counterparts. Unfortunately, 2022 data are unavailable.
- Except for a spike in the 2017 rate, the prevalence of having made a suicidal plan in the past year among Arkansas high school students has increased slightly from 2009 to 2021 and has been similar to or slightly higher than among their U.S. counterparts. Unfortunately, 2022 data are unavailable.
- The prevalence of past year suicide attempt among Arkansas high school students increased slightly from 2009 to 2022. Arkansas high school student prevalence of suicide attempts was generally higher than national figures, except for 2021. U.S. high school student prevalence of suicide attempts fluctuated, increasing slightly from 2009 to 2022.

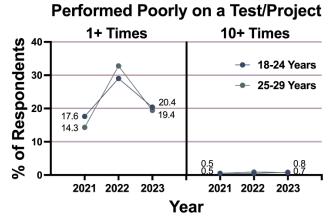
Past 30-Day Substance-Related Suicide Attempt



Source: Arkansas Collegiate Survey

Among Arkansas college students, past 30-day prevalence of any substance-related suicide attempt increased sharply from 2021 to 2022, then decreased to a level similar to (18-24 years) or higher than (25-29 years) that in 2021. The past 30-day prevalence of frequent substance-related suicide attempts was very low (0.0-0.2%) in 2021 and increased slightly among those aged 25-29 years to 0.8 percent in 2023.

• The average past 30-day prevalence of any substance-induced poor performance on a test/project was similar among Arkansas college students aged 18-24 (22.3%) and 25-29 (22.2%) years in 2021-2023.

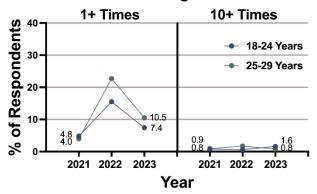


Among Arkansas college students, past 30-day prevalence of any substance-induce poor test/project performance increased sharply from 2021 to 2022, then decreased to a level somewhat higher than that in 2021. Past 30-day prevalence of frequent substance-induce poor test/project performance was very low from 2021 to 2023.

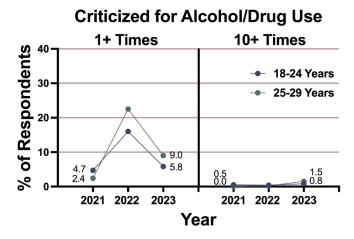
Source: Arkansas Collegiate Survey

- The average past 30-day prevalence of any substance-induced self-perceived alcohol/drug problem among Arkansas college students aged 18-24 (9.2%) was lower than among those aged 25-29 (12.4%) years in 2021-2023.
  - Among Arkansas college students of both age groups, past 30-day prevalence of self-perceived alcohol/drug problem increased sharply from 2021 to 2022, then decreased to a level higher than that in 2021. Past 30-day prevalence of frequent self-perceived alcohol/drug problem was very low and relatively stable from 2021 to 2023.

#### Self-Perceived Alcohol/Drug Problem in Past 30 Days



Source: Arkansas Collegiate Survey



Source: Arkansas Collegiate Survey

The average past 30-day prevalence of being criticized by others at least once for alcohol/drug use was slightly lower among Arkansas college students aged 18-24 (8.8%) relative to those aged 25-29 (11.3%) years in 2021-2023.

Among Arkansas college students of both age groups, past 30-day prevalence of being criticized for alcohol/drug use increased sharply from 2021 to 2022, then decreased in 2023 to levels about double those in 2021. Past 30-day prevalence of frequent self-perceived alcohol/drug problem was very low and increased only slightly from 2021 to 2023.

## Community

#### Why this is important

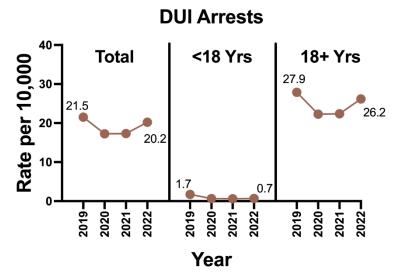
The most common substance among substance-related traffic fatalities is alcohol, followed by marijuana, and other prescription drugs.<sup>62</sup>

In the community setting, the rate of arrests for drugs/narcotics, DUI, drunkenness, and liquor law violations can be an indication of criminal behavior related to substance use or measure of the level of law enforcement.

There is an association between substance use and violence, <sup>63</sup> which could be reflected in the number of arrests.

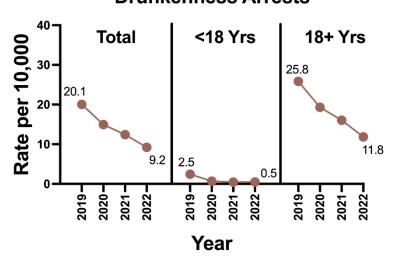
#### What to take away

- In 2021-22, Arkansas drivers (4.0%) reported a lower prevalence of driving after consuming alcohol than their U.S. counterparts (5.2%).<sup>10</sup>
- The Arkansas driving under the influence of alcohol/drugs (DUI) arrest rate decreased from 2019 to 2020 and stayed about the same in 2021 among both those aged <18 and 18+ years. Among Arkansas adults, the rate increased from 2021 towards the level in 2019.



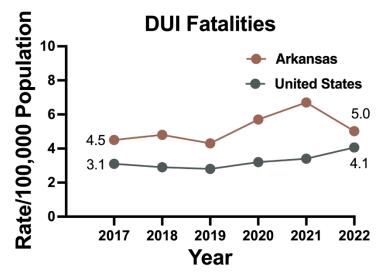
Source: Arkansas Crime Center

#### **Drunkenness Arrests**



The Arkansas arrest rate for drunkenness decreased from 2019 to 2021-2022 among both those aged <18 and 18+ years.

Source: Arkansas Crime Center

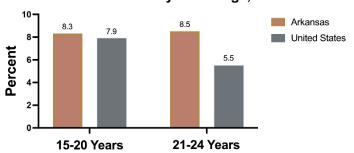


After a slight decrease from 2017 to 2019, the rate of crash fatalities involving an Arkansas Driver with a positive breath alcohol concentration (BAC) increased sharply from 2019 to 2021 before decreasing to a rate slightly higher than that in 2017. In contrast, U.S. crash fatality rates remained stable from 2017 to 2020, before rising slightly from 2020 to 2022. Arkansas rates are consistently higher than U.S. rates.

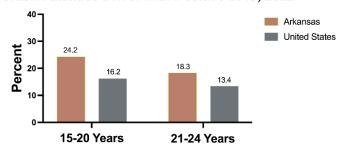
Source: NHTSA FARS

- In 2022, the percent of vehicle crashes involving a fatality was similar among Arkansas persons aged 15-20 and 21-24 years. The percent of fatal vehicle crashes was slightly and much higher among Arkansas persons aged 15-20 years and 21-24 years, respectively, relative to their U.S. counterparts.
- In 2022, the percent of fatal vehicle crashes involving a driver with a positive breath alcohol concentration (BAC) was higher among persons aged 15-20 years relative to those aged 21-24 years. The percent of fatal vehicle crashes involving a driver with a positive (BAC) was much higher among Arkansas persons relative to their U.S. counterparts.

Fatal Vehicle Crashes by Driver Age, 2022



Crash Fatalities Driver with Positive BAC, 2022



Source: NHTSA FARS

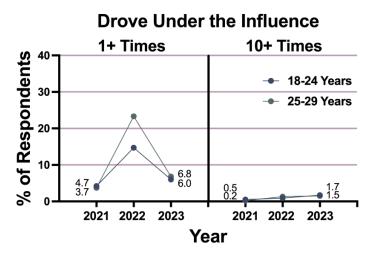
<b>Drug- and Alcol</b>	hol-Related Arrests	per 10,000,	2022:
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		, ,
Type of Arrest	Juveniles (<18 Years)	Adults (18+ Years)
<b>Drug/Narcotics Violations*</b>	14.7	58.9
DUI	0.7	26.2
Drunkenness	0.5	11.8
Liquor Law Violations	1.7	3.8
* Excludes Arrests for Equipment		

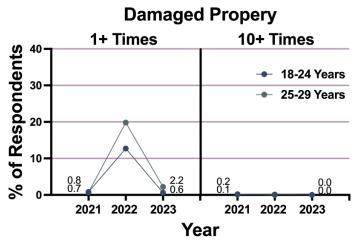
Source: Arkansas Crime Information Center

- Among drug and alcohol related arrests for juveniles, drugs and narcotics violations had the highest rate of arrests (14.7 per 10,000) followed liquor law violations at only 1.7 per 10,000.
- Drugs and narcotics also had the highest rate of adult substance-related arrests (58.9 per 10,000), followed by DUI and drunkenness at 26.2 and 11.8 per 10,000, respectively.

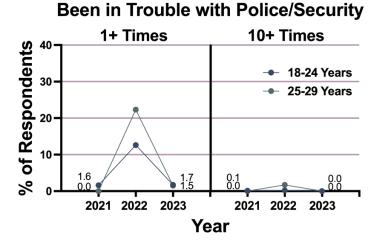
# In the past 30 days, experienced the following due to substance use:



The average past 30-day prevalence of any driving under the influence (DUI) was slightly lower among Arkansas college students aged 18-24 (8.3%) relative to those aged 25-29 (11.3%) years in 2021-2023. Among Arkansas college students of both age groups, past 30-day prevalence of any DUI increased sharply from 2021 to 2022, then decreased to a level higher than that in 2021. Past 30-day prevalence of frequent DUI was very low in 2021 but increased slightly from 2021 to 2023.



The average past 30-day prevalence of any property damage was slightly lower among Arkansas college students aged 18-24 (4.7%) relative to those aged 25-29 (7.6%) years in 2021-2023. Among Arkansas college students of both age groups, past 30-day prevalence of any property damage increased sharply from 2021 to 2022, then decreased to a level similar to or higher than that in 2021. Past 30-day prevalence of frequent self-perceived alcohol/drug problem extremely low from 2021 to 2023.

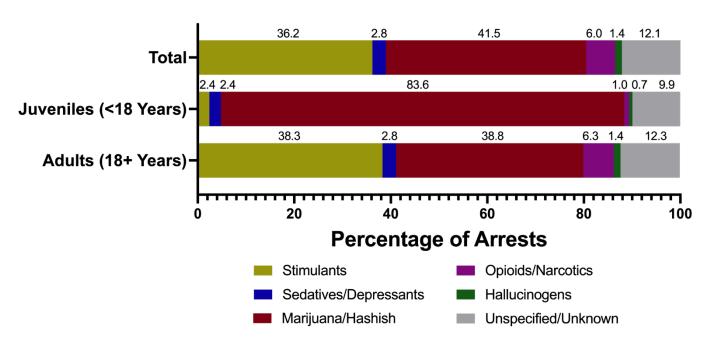


The average past 30-day prevalence of any trouble with police/security was lower among Arkansas college students aged 18-24 (5.3%) relative to those aged 25-29 (7.9%) years in 2021-2023. Among Arkansas college students of both age groups, past 30-day prevalence of trouble with police/security increased sharply from 2021 to 2022, then decreased to a level like that in 2021. Past 30-day prevalence of frequent trouble with police/security almost nonexistent from 2021 to 2023.

Source: Arkansas Collegiate Survey

- In 2022, marijuana/hashish still represented the largest proportion (41.5%) of all drug possession arrests in the state, which is lower than the 44.4 percent in 2018. Stimulants are the next highest proportion of drug possession arrests (36.2%), up from 33.1 percent in 2018. Unspecified/unknown drugs represented 12.1 percent and opioids/narcotics 6.0 percent of drug possession arrests.
- More than four in five (83.6%) Arkansas juvenile drug possession arrests involved marijuana/hashish, followed by unspecified/unknown/multiple drugs (9.9%) and stimulants (2.4%) or sedatives (2.4%).
- Stimulants (38.3%) and marijuana/hashish (38.8%) represent most Arkansas adult possession arrests.
   Unspecified/unknown/multiple drugs represented 12.3 percent and opioids/narcotics 6.3 percent of drug possession arrests.

# Arrests for Possession of a Particular Drug Class (%), 2022



Source: Arkansas Crime Information Center

#### **CONTRIBUTING FACTORS**

Shared protective and risk factors influence the development of substance use or mental disorders. Risk factors increase while protective factors decrease the likelihood that an individual may develop these disorders. Protective and risk factors have been divided into five domains: individual, family, peer, school, and community.

#### Directly related to the individual

#### Why this is important

Perception of risk is a protective factor, and the higher the percentage of Arkansans who perceive risk in using substances, substance use will likely be less. Indeed, for both youth and adults, as perception of risk increases, the likelihood of substance use decreases

Monitoring perceptions of risk to using substances can help inform prevention programs on where and what type of education is needed most.

About half of people who experience a mental illness will also experience a substance use disorder at some point in their lives and vice versa.<sup>64</sup>

Substance use disorders and mental illnesses share many of the same risk factors and having a mental illness may increase the likelihood of developing a substance use disorder and vice versa. <sup>64</sup>

Early life stress (ELS) is a well-established risk factor for many psychiatric and medical disorders, including substance use disorders (SUDs).<sup>65</sup>

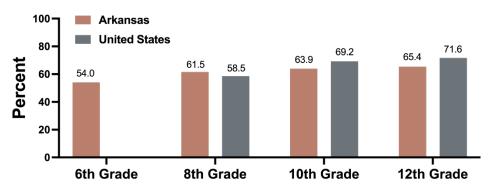
#### What to take away

#### Youth

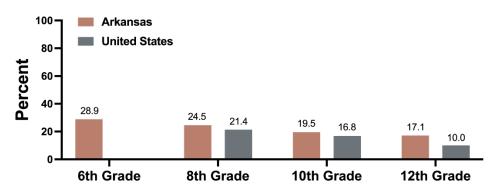
- Compared to their U.S. counterparts, Arkansas students were slightly less likely to perceive great risk in smoking one or more packs of cigarettes per day in 2023 in 10<sup>th</sup> and 12<sup>th</sup>, but not 8<sup>th</sup> graders. Perceived great risk in smoking one or more packs of cigarettes per day increased as grade level increased.
- In contrast, youth perceived great risk in using marijuana once or twice per week in 2023 decreased as grade level increased among both U.S. and Arkansas students, with perceived risk higher among Arkansas students than their U.S. counterparts.
- In 2023, youth perceived great risk in drinking one or two alcoholic beverages every day was higher among Arkansas students relative to their U.S. counterparts.

# Percentage of Youth Who Perceive Great Risk in the Following Activities:

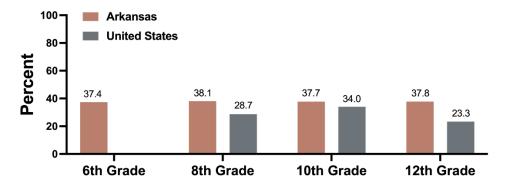
## Smoking One or More Packs/Day of Cigarettes, 2023



Trying Marijuana Once or Twice, 2023



Drinking 1 or 2 Alcoholic Beverages Nearly Every Day, 2023

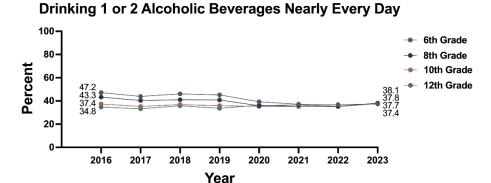


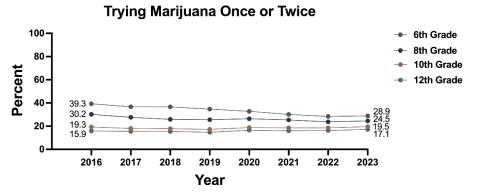
Source: APNA and MTF

- Over time, the proportion of students who perceive "great risk" in nearly daily alcohol use increased slightly from 2015 to 2023 in grades 10 and 12; however, perceived risk declined in grades 6 and 8, such that the percentage of students in these grades perceiving risk is more like that for 10<sup>th</sup> and 12<sup>th</sup> grade.
- Perceived "great" risk of using marijuana once or twice decreased as grade level increased. The prevalence
  of perceived "great risk" of trying marijuana once or twice among Arkansas 6<sup>th</sup> and 8<sup>th</sup> grade students

declined from 2015 to 2023. Perceived "great risk" of marijuana use among 10<sup>th</sup> and 12<sup>th</sup> grade students showed a shallow decline from 2015 to 2019, but then stabilized or increased slightly in 2020-2023.

#### Youth Who Perceive Great Risk in the Following Activities:

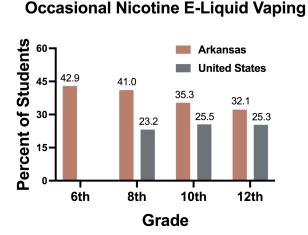


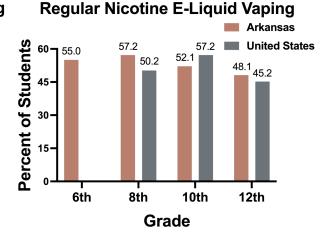


Source: APNA

- These findings suggest that alcohol and marijuana prevention programs should target each grade level with particular focus on 6<sup>th</sup> and 8<sup>th</sup> grade levels and be reinforced across multiple media.
- Only about 1 in 4 U.S. 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> graders perceived harm of occasional nicotine e-cigarette use. A much higher percentage of Arkansas students perceived harm of occasional nicotine e-cigarette use.

# Youth Perceiving Great Risk of Harm from (2023):

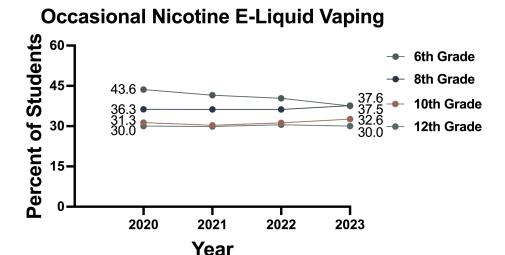


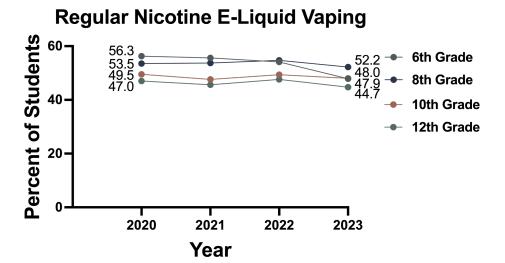


Source: APNA and MTF

- In contrast, about 1 in 2 U.S. students perceived harm of regular nicotine e-cigarette use. A higher percentage of Arkansas 8<sup>th</sup> and 12<sup>th</sup>, but not 10<sup>th</sup>, grade students perceived harm of occasional nicotine e-cigarette use relative to their U.S. counterparts.
- Over time, the proportion of Arkansas students who perceive harm in occasional nicotine e-cigarette use increased slightly from 2020 to 2023 in grades 10 and 12; however, perceived risk declined slightly among 6<sup>th</sup> grade students, such that the percentage of students in these grades perceiving risk is more like that for 10<sup>th</sup> and 12<sup>th</sup> grade.

# Youth Perceiving Great Risk of Harm from:



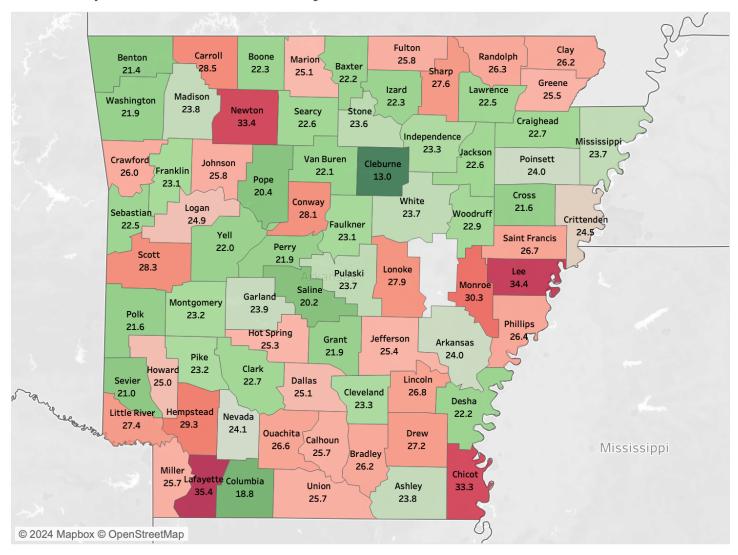


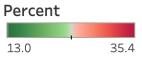
Source: APNA and MTF

Perceived harm of regular nicotine e-cigarette use decreased as grade level increased in 2020. The
prevalence of perceived harm of regular nicotine e-cigarette use among Arkansas 6<sup>th</sup> grade students
declined slightly from 2020 to 2023. The prevalence of perceived harm of regular nicotine e-cigarette use
increased slightly among Arkansas 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students from 2020 to 2023.

- Almost one in four (23.3%) students reported feeling hopeless in the past 30 days in 2021-2023.
- The prevalence of feeling hopeless in the past 30 days ranged from 13.0 percent (Region 3: Cleburne County) to 35.4 percent (Region 2: Newton County).
- Generally, one in every three or four of students reported feeling hopeless in most counties across the state, with highest prevalence occurring in certain norther, southern and eastern counties.

# Felt Hopeless in Past 30 Days, 2021-2023



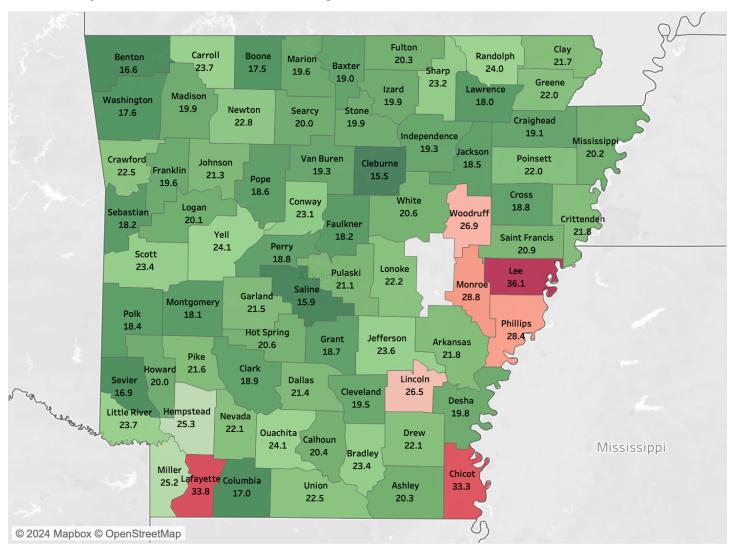


Source: APNA

• These data suggest that feeling hopeless in the last 30 days was relatively prevalent in certain counties across the state, with particularly high incidence in selected counties in regions 1, 2, 3, 6, 4, 5, 7, 10, 11, 12, and 13.

- About one in five (19.5%) students reported feeling depressed in the past 30 days in 2021-2023.
- The prevalence of youth reporting current depression ranged from 15.5 percent (Region 3: Cleburne County) to 36.1 percent (Region 7: Lee County).

# Felt Depressed in Past 30 Days, 2021-2023





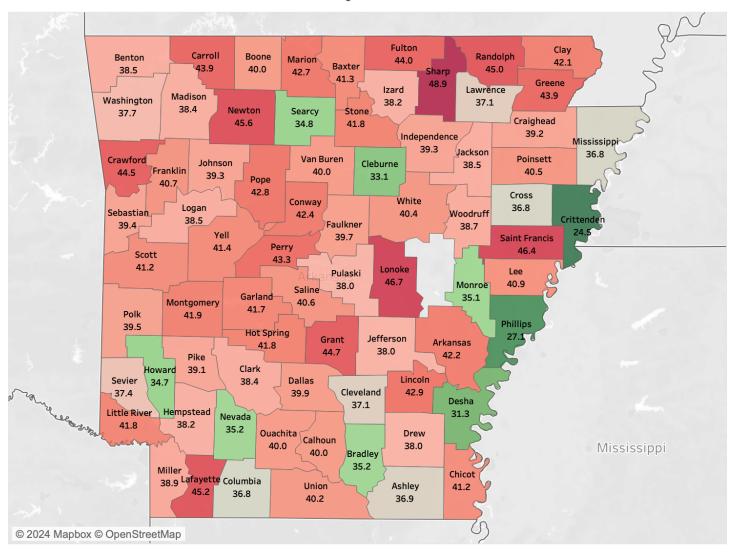
36.1

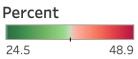
15.5

- Generally, the prevalence of youth reporting current depression was higher in certain eastern and southwestern, and southeastern parts of the state.
- These data suggest that current depression was most prevalent in certain counties in regions 3, 7, 10, 12, and 13.

- Almost two in five (39.4%) students reported feeling restless most or all of the time during the past 30 days in 2021-2023.
- The prevalence of youth reporting current restlessness ranged from 24.5 percent (Region 7: Crittenden County) to 48.9 percent (Region 3: Sharp County).

# Felt Restless in the Past 30 Days

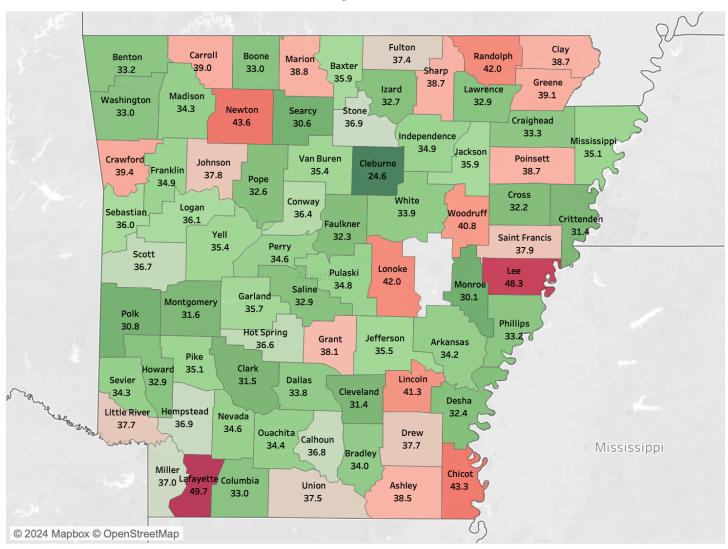




- Except for selected counties in eastern, northern and southern parts of the state, more than one in three students reported feeling restless most or all of the time.
- These data suggest that students in most counties had a high prevalence of current restlessness, except for selected counties in regions 2, 3, 7, 10, 12, and 13.

- More than one in three (34.7%) students reported having felt nervous most or all of the time during the past 30 days in 2021-2023.
- The prevalence having felt nervous most or all of the time ranged from 24.6 percent (Region 3: Cleburne County) to 49.7 percent (Region 10: Lafayette County).

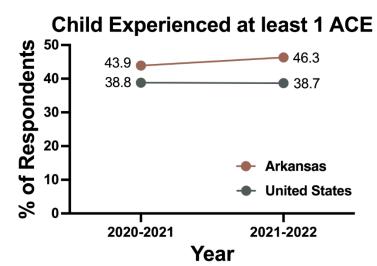
# Felt Nervous in the Past 30 Days, 2021-2023

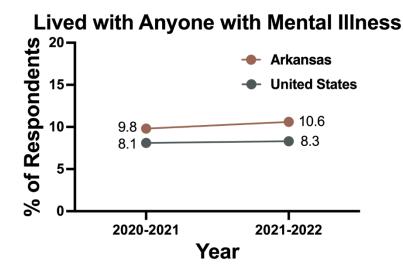


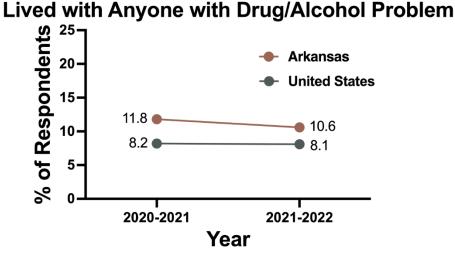


- Counties with the highest past 30-day prevalence of nervousness among Arkansas students were scattered across the state, mainly in the northern, eastern, and southern parts of the state
- These data suggest that students in most counties had a high prevalence of current nervousness in selected counties in regions 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, and 13.

- Overall, the percentage of Arkansas respondents who experienced at least one adverse childhood event (ACE) was higher than national average in 2020-2021 to 2021-2022. The prevalence of experiencing at least one ACE increased slightly from 2020-2021 to 2021-2022 among Arkansas respondents but remained stable among their U.S. counterparts.
- Overall, the percentage of Arkansas respondents who lived with anyone with a mental illness as a child was higher than national average. The prevalence of living with anyone with a mental illness as a child increased very slightly from 2020-2021 to 2021-2022 among Arkansas respondents but remained stable among their U.S. counterparts.
- Overall, the percentage of Arkansas respondents who lived with anyone with a substance use problem as a child was higher than national average. The prevalence of living with anyone with a substance use problem as a child decreased very slightly from 2020-2021 to 2021-2022 among Arkansas respondents and remained stable among their U.S. counterparts.





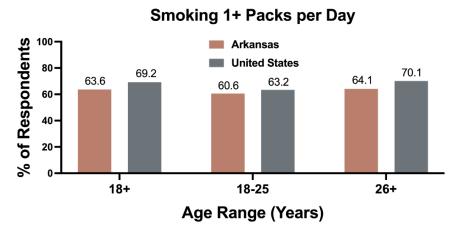


Source: National Survey of Children's Health

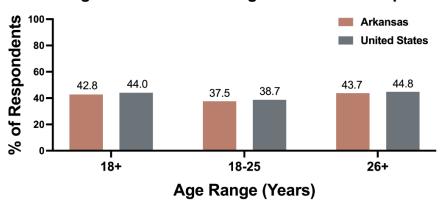
#### **Adults**

- Arkansas adults were less likely than U.S. adults to perceive great risk of smoking one or more packs of cigarettes per day in 2021-2022.
- Arkansas adults were slightly less likely than U.S. adults to perceive great risk of alcohol binge use once or twice per week in 2021-2022.

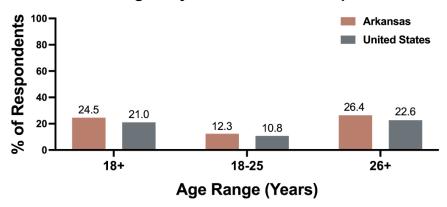
#### Adults Who Perceive Great Risk in the Following Activities (2021-2022):



**Drinking 5+ Alcoholic Beverages Once or Twice per Week** 

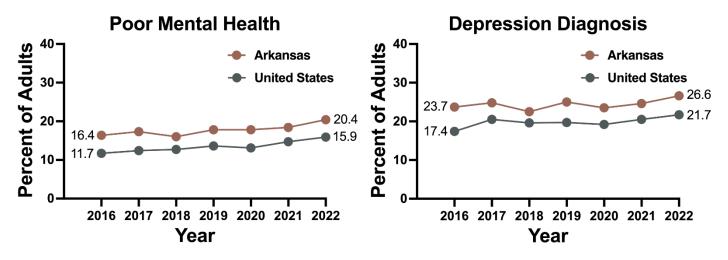


**Smoking Marijuana Once or Twice per Month** 



Source: NSDUH

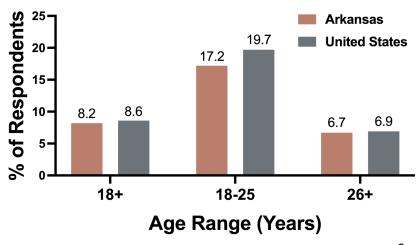
- Arkansas adults were slightly more likely than U.S. adults to perceive great risk of smoking marijuana once or twice per month in 2021-2022.
- Arkansas adults were consistently more likely than U.S. adults to report poor mental health in the prior 14 days across time. The proportion reporting poor mental health increased from 2016 to 2022 for both Arkansas and U.S. adults.
- The proportion of Arkansas and U.S. adults who have been diagnosed with depression has remained relatively stable from 2016 to 2020, before increasing slightly from 2020 to 2023. The prevalence of a major depressive disorder was consistently higher among Arkansas adults relative to their U.S. counterparts, with more than one in four and five Arkansas and U.S. adults, respectively, reporting a depressive disorder in 2022.



Source: BRFSS

• The percentage of Arkansas and U.S. adults aged 18+ years meeting criteria for a depressive disorder in 2021 was 8.2 and 8.6 percent, respectively. Arkansas young adults had a lower incidence, while Arkansas adults aged 26+ years had a similar incidence, of depressive disorder relative to their U.S. cohorts.

## Past-Year Major Depressive Episode, 2021-2022



Source: NSDUH

## In the family

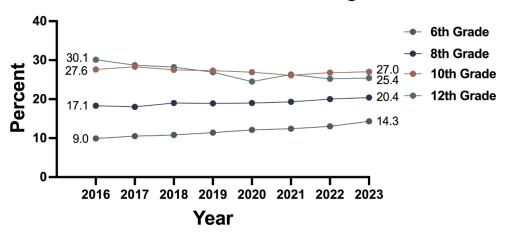
#### Why this is important

Adolescents are more likely to misuse substances if they live in homes where parents have substance use problems,<sup>66</sup> have tolerant attitudes toward moderate drinking and drug use,<sup>67</sup> or poorly monitor their children's activities.<sup>66</sup>

Family rejection of sexual orientation or gender identity<sup>66</sup> or childhood maltreatment<sup>68</sup> increases risk of adolescent substance use.

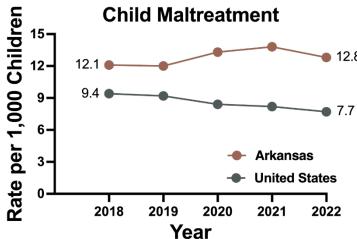
#### What to take away

## Parental Attitudes Favorable to Drug Use



Source: APNA

- The proportion of students in 6<sup>th</sup> and 8<sup>th</sup> grades reporting that parents had attitudes favorable to drug use has steadily increased over time. While the proportion of 10<sup>th</sup> and 12<sup>th</sup> grade students perceiving favorable parental attitudes to drugs decreased very slightly from 2016 to 2021-2022 or so before stabilizing or increasing slightly in 2023, more than one in four 10<sup>th</sup> and 12<sup>th</sup> graders still report their parents have favorable attitudes toward drug use. Although favorable parental attitudes towards drugs generally increase with grade, a similar percentage of 10<sup>th</sup> and 12<sup>th</sup> grade students report favorable parental attitudes towards drugs.
- Overall, the rate of child maltreatment was consistently higher in Arkansas relative to the U.S. from 2018 to 2022 and increased slightly over time. Child maltreatment nationally slightly decreased from 2018 to 2022.



Source: HHS Report, Children's Bureau

#### **Related to Peers**

#### Why this is important

Peer relationships have been shown to influence adolescent substance use, with increased risks associated with deviant peer relationships, popularity, bullying, and association with gangs.<sup>68</sup>

Adolescents are more likely to use substances if they associate with peers who use substances.

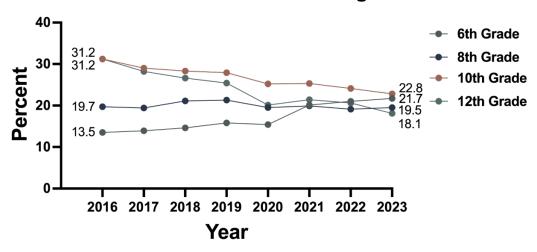
Adolescents are more likely to use substances if they perceive it would make them more popular.

Adolescents who are involved in bullying, whether as the perpetrator and/or victim, have increased risk of mental health disorders and psychosocial problems, including some form of substance use, relative to those who are not involved in bullying.

#### What to take away

• The percentage of Arkansas students with peer attitudes favorable to drug use has increased over time among 6<sup>th</sup> grade students from 2016 to 2023 and was higher than that for 8<sup>th</sup> or 12<sup>th</sup> grade students in 2023. The rate of students with peer attitudes favorable to drug use among 8<sup>th</sup> and 10<sup>th</sup> grade students remained stable and decreased over time, respectively. Among 12<sup>th</sup> graders, the percentage of peers with attitudes favorable to drug use decreased over time from 2015 to 2020, then remained relatively stable through 2022 before decreasing again in 2023; however, the rate was highest among 10<sup>th</sup> graders in 2023, with more and less than one in five 10<sup>th</sup> and 12<sup>th</sup> grade students, respectively, reporting peers with favorable attitudes toward drug use.

# **Peers Attitudes Favorable to Drug Use**

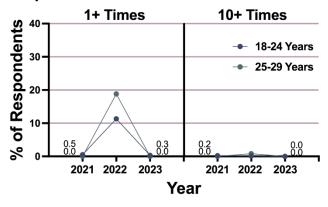


Source: APNA

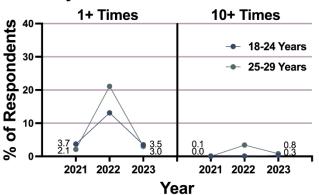
 These findings suggest that substance use prevention programs should target each grade level with particular focus on 6<sup>th</sup> and 8<sup>th</sup> grade levels regarding risk perception and be reinforced with parents.

- In 2021, a higher percentage of high school students in Arkansas reported past-year physical dating violence, past-year sexual violence by anyone, and ever being physically forced to have intercourse than nationally. A similar, slightly higher percentage of Arkansas high school students reported past-year sexual dating violence relative to U.S. high school students. Unfortunately, data are unavailable for 2022.
- The average past 30-day prevalence of experiencing any sexual assault was slightly lower among Arkansas college students aged 18-24 (4.0%) relative to those aged 25-29 (6.3%) years in 2021-2023. Among Arkansas college students of both age groups, past 30-day prevalence of experiencing any sexual assault increased sharply from 2021 to 2022, then decreased to very low levels similar to that in 2021. Past 30-day prevalence of frequently experiencing any sexual assault also extremely low or nonexistent from 2021 to 2023.

#### **Experienced Sexual Assault in Past 30 Days**



#### **Sexually Assaulted Another in Past 30 Days**



Source: Arkansas Collegiate Survey

• The average past 30-day prevalence of sexually assaulting another was slightly lower among Arkansas college students aged 18-24 (6.8%) relative to those aged 25-29 (8.7%) years in 2021-2023. Among Arkansas college students of both age groups, past 30-day prevalence of sexually assaulting another increased sharply from 2021 to 2022, then decreased to levels similar to or slightly higher than that in 2021. Past 30-day prevalence of frequently sexually assaulting another was also very low but increased slightly in 2022 and/or 2023 relative to 2021.

## In the school setting

#### Why this is important

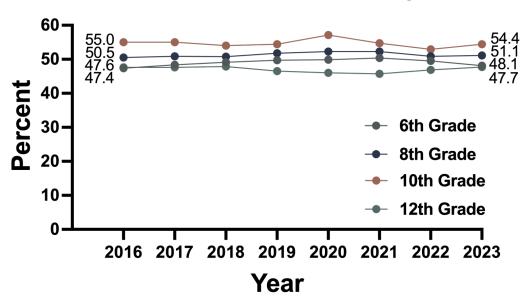
School connectedness, the belief by students that adults and peers in the school care about them as learners and as individuals, is an important protective factor. Transitions (when children move from elementary school to middle school, or from middle school to high school) are risk factors for drug use, school misbehavior, and delinquency. Mobility (when people in a community move) has been associated with risk of drug use and crime problems, including both criminal behavior and drug-related problems in families.

Lack of school and community connectedness as well as low academic performance are associated with increased risk of substance use.<sup>66</sup>

#### What to take away

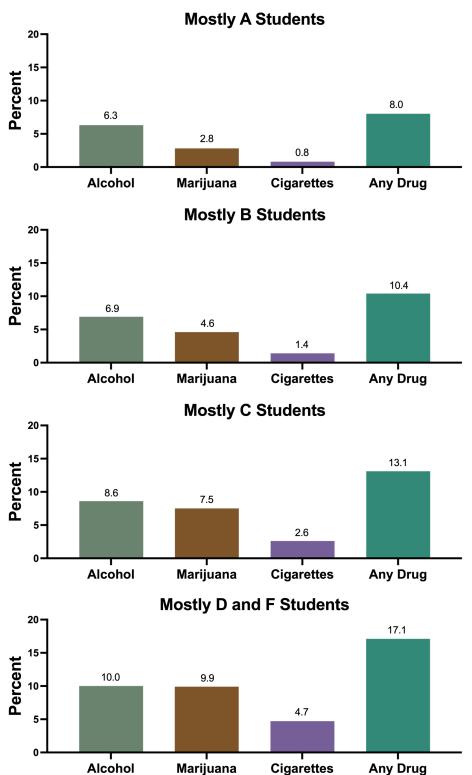
 The prevalence of transitions and mobility among Arkansas students has fluctuated slightly, but generally remained the same across all grades from 2016 to 2023. Those in the 10<sup>th</sup> grade experienced the highest percentage of transitions and mobilities in 2023.

# **Transitions and Mobility**



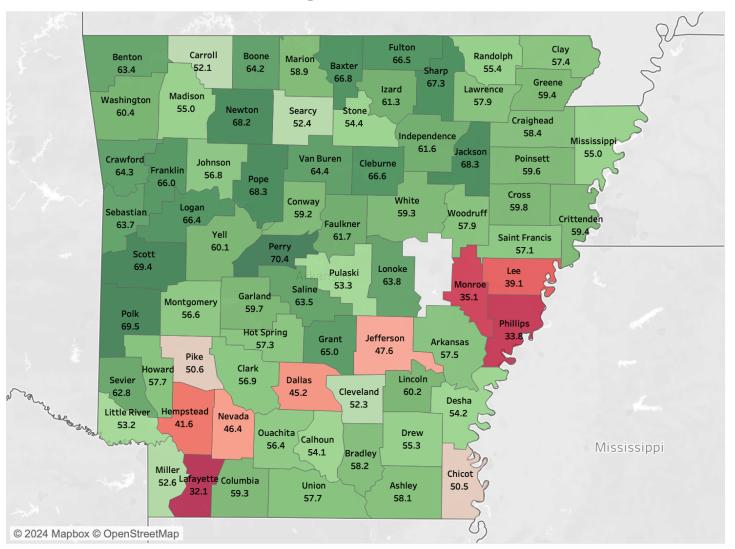
- The use of alcohol, marijuana, cigarettes, or any drug increases with decreasing academic performance. Nearly one in five students who report receiving mostly D's or F's also report using some substance.
- Alcohol appears to be the most prevalent substance used across all grades with one in ten reporting use among mostly F students. Of note, marijuana use increases more than alcohol as academic performance decreases and its prevalence is similar in prevalence to alcohol use among F students.

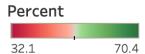
# Each Self-Reported Student Type That Also Reported Using Substances, 2023



- In 2021-2023, about three in five (59.3%) Arkansas students reported having access to school counseling.
- Perceived access varied widely across counties, with the prevalence of school counseling access ranging from 32.1 percent (Region 10: Lafayette County) to 70.4 percent (Region 6: Perry County).

# Access to School Counseling, 2021-2023





- Generally, at least 50 percent of youth reported having access to school counseling most parts of the state, except in certain eastern, southern, and southwestern counties.
- These data suggest that access to school counseling was least prevalent in certain counties in regions 7, 8, 10, 11, 12, and 13.

## In the community

## Why this is important

A CDC best practice for tobacco control programs is limiting minors' access to tobacco products.<sup>69</sup>

Arkansas, like many other states, regularly enforces and documents retailer violations for selling cigarettes to minors.

Economic and environmental hardships have been shown to contribute to both substance use and mental health disorders.<sup>70</sup>

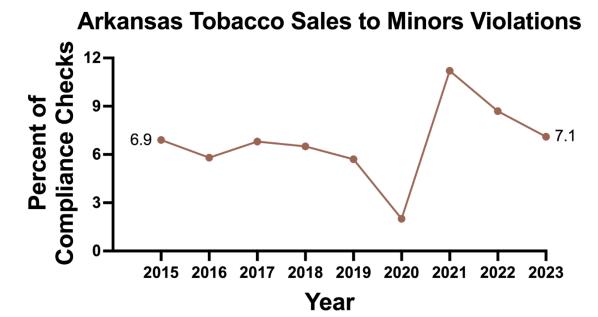
Two indicators for economic hardship are the Unemployment Rate and the Poverty Rate.

Disconnected youth are teens and young adults ages 16-19 who are neither working nor in school. Disconnected youth are at increased risk of violence, smoking, alcohol consumption and marijuana use, and may have emotional deficits and less cognitive and academic skills than their peers who are working and/or in school.<sup>71-75</sup>

Food-insecure households were unable, at times during the year, to provide adequate food for one or more household members because the household lacked money and other resources for food.

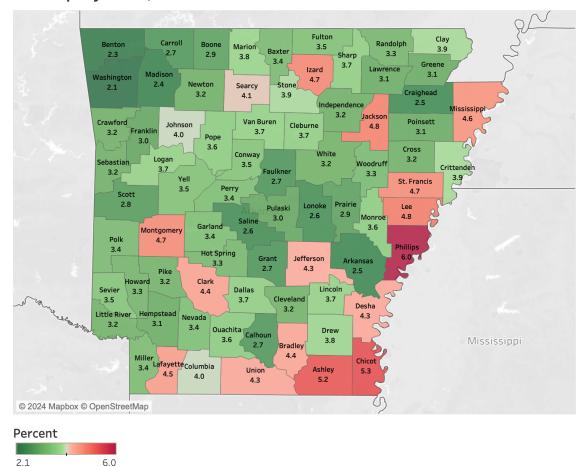
## What to take away

 After a slight decline from 2015 to 2019, the percent of retailers who violated tobacco laws and sold tobacco to Arkansas minors sharply declined in 2020; however, number of inspections in 2020 was less than one fifth that completed in 2019. Unfortunately, the rate of tobacco sales violations increased sharply in 2021 to 11.2 percent before decreasing slightly to 7.1 percent in 2022; however, the 2023 violations rate is like that in 2015, indicating little progress in enforcement of tobacco law.



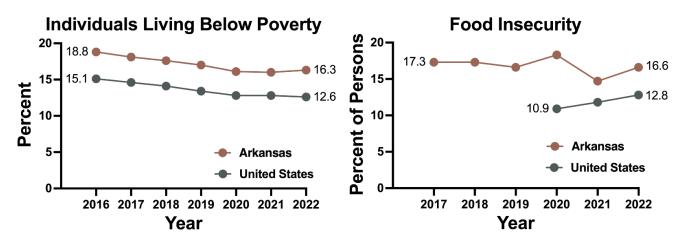
Source: Arkansas Tobacco Control

## Unemployment, 2023



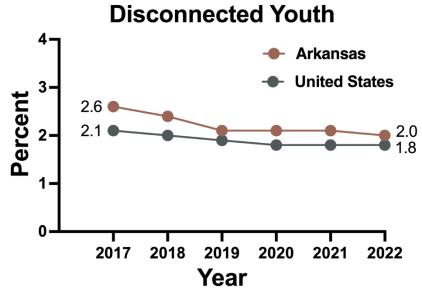
Source: Department of Labor

- In 2023, the average Arkansas unemployment rate was quite low (3.3%) but varied widely across counties, from 2.1 percent in Benton County to 6.0 percent in Phillips County. Unemployment rates were highest mainly in the southern and eastern portions of the state.
- Like the U.S. poverty rate, the Arkansas poverty rate declined from 2016 to 2021 and remained stable through 2022. continues to be higher than the U.S. poverty rate.



Source: Source: American Community Survey and Map the Meal Gap

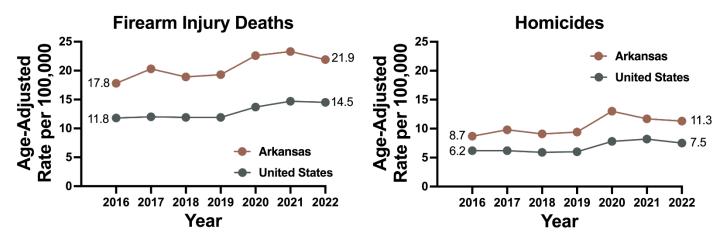
• Although the prevalence of food insecurity in Arkansas remained relatively stable from 2017 to 2020, it decreased in 2021 before increasing in 2022 to levels slightly lower than those in 2017; however, food insecurity in Arkansas was higher than national figures in 2020 to 2022.



The prevalence of U.S. disconnected youth has declined slightly from 2.1 percent in 2017 to 1.8 percent in 2022. Arkansas figures were consistently higher than U.S. data, showing a decrease from 2.6 percent in 2017 to 2.1 percent in 2019, then remaining stable through 2022.

Source: American Community Survey

The Arkansas firearm injury death rate increased from 2016 to 2021, before decreasing slightly in 2022, and was consistently higher than U.S. rates. The U.S. death rate due to firearm injuries remained stable from 2016 to 2019, then increased from 2019 to 2021 and remained stable through 2022.



Source: CDC WONDER

The Arkansas homicide death rate fluctuated over time, but generally increased from 2016 to 2022. The
U.S. homicide death rate remained relatively stable from 2016 to 2019, then increased slightly from 2019
to 2021 and remained stable through 2022. The U.S. homicide death rate was consistently lower than
Arkansas' rate.

### TREATMENT ADMISSIONS

Substance abuse treatment admissions indicate how many people are seeking help for a substance use problem. It is important that these indicators are not used on their own to indicate drug use prevalence, as there are many variables involved in whether a person seeks treatment for a given substance. Treatment admissions are important not only in determining where resources are being utilized as a determinant of costs to the system, but also in determining impact on recovery.

### Why this is important

Assessing the rates of people being admitted to substance abuse treatment assists in organization and evaluation of programs.

Hospital discharges are monitored to determine the prevalence of substance misuse in the inpatient setting.

Without treatment, individuals may not have the tools necessary to recover from substance use disorders.

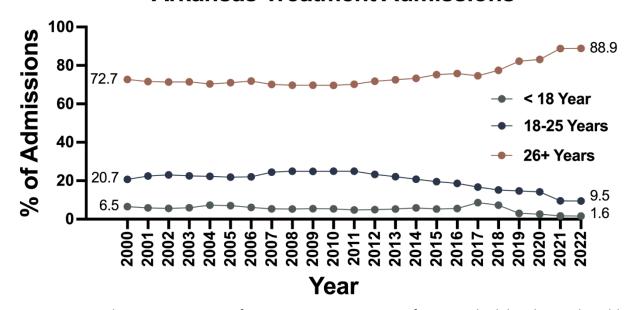
Prenatal smoking is a preventable cause of premature birth, low birth weight and birth defects.

Women who quit smoking during pregnancy are more likely to remain abstinent compared with those who continued to smoke throughout pregnancy.

## What to take away

• The percentage of admissions to substance abuse treatment have declined over time among youth and young adults from 2000 to 2022, while increasing among adults aged 26+ years. These findings suggest that more focus on resources and interventions for younger populations is warranted.

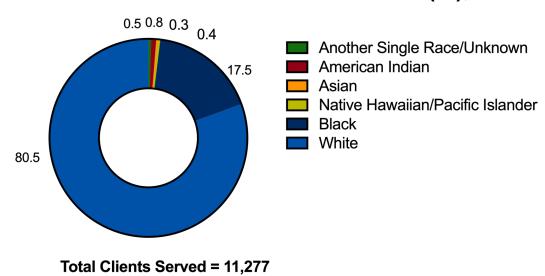
## **Arkansas Treatment Admissions**



Source: Arkansas Department of Humans Services, Division of Aging and Adult Behavioral Health Services

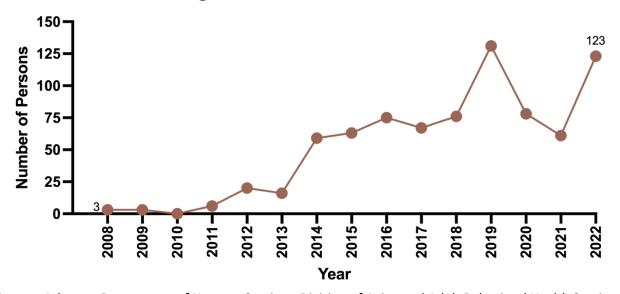
 Those entering treatment for substance or alcohol use in 2022 were predominantly White (80.5%), while 17.5 percent were Black, and about 0.8 percent were American Indian/Alaskan Native. About 3.3 percent of admissions reported Hispanic/Latino ethnicity.

## Arkansas Substance Abuse Treatment Clients Served (%), 2022



• The number of pregnant women in treatment for a drug or alcohol problem increased from three in 2008 to 131 in 2019, then decreased in 2020 and 2021 to a similar level to that in 2016-2018 before increasing to 123 in 2022.

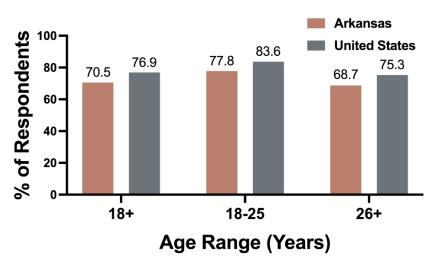
## **Arkansas Pregnant Women in Substance Abuse Treatment**



Source: Arkansas Department of Humans Services, Division of Aging and Adult Behavioral Health Services

• In 2021-2022, the percentage of Arkansas and U.S. adults needing, but not receiving, treatment for substance use was 70.5 and 76.9 percent, respectively. Adults aged 18-25 years had the highest rates of needing, but not receiving, treatment for substance use with a higher prevalence among U.S. relative to Arkansas young adults.

# Not Receiving Needed Substance Use Treatment in Past Year, 2021-2022



Source: NSDUH

#### CONCLUSIONS

Arkansas substance use prevention programs have made great strides in impacting substance use levels on several indicators including lowering smoking levels among youth and adults and lowering alcohol use among teens. However, there are still areas of concern that require attention. Multiple indicators within this report showed that certain Arkansas adult and youth substance usage was higher than national averages -- adult and youth cigarette smoking, youth smokeless tobacco use, and adult prescription drug, methamphetamine, and opioid use. The prevalence of youth vaping is also increasing, although lower than among their U.S. counterparts. Several indicators showed minimal improvement, such as marijuana use rates among youth. These observations should all be considered as programs move forward in prevention planning.

The contributing factors documented within this report are valuable to prevention planning efforts. Although caution should be taken when considering these contributing factors in isolation, taken as a whole, contributing factors provide prevention program planners a more comprehensive understanding of the areas in which to focus efforts for populations at risk. Targeting activities to at-risk youth and adults will further strengthen prevention programs throughout the state.

Monitoring the available treatment options and use of those services also provides valuable information as programs move forward to support individuals who are substance users and unreached by prevention efforts.

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