

# AR STATE OF WELL-BEING

a report on substance abuse

**2018 SPRING BOOK**

ARKANSAS STATE EPIDEMIOLOGICAL OUTCOMES WORKGROUP



**ARKANSAS  
DEPARTMENT OF  
HUMAN  
SERVICES**  
Division of Aging, Adult  
and Behavioral Health Services  
Prevention Services

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# TABLE OF CONTENTS

- Executive Summary ..... 1
- Arkansas State Epidemiological Outcomes Workgroup Charter ..... 3
- Arkansas Overview ..... 4
- Population..... 4
- Education..... 7
- Economy ..... 8
- Health ..... 11
- Substance Use..... 12
- Alcohol ..... 12
- Tobacco ..... 14
- Marijuana..... 16
- Opioids..... 18
- Stimulants and Other Drugs..... 20
- Treatment ..... 22
- What Else Can We Do? ..... 25
- Conclusions ..... 25
- References..... 27



# AR STATE OF WELL-BEING: A REPORT ON SUBSTANCE ABUSE

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## EXECUTIVE SUMMARY

The State Epidemiological Outcomes Workgroup (SEOW) is a group of data experts and prevention stakeholders responsible for bringing data on substance abuse and related behavioral problems to the forefront of the prevention planning process. It serves as a forum for policymakers, researchers, and community representatives to have a data-driven exchange of ideas. One of SEOW's goals is to "bring systematic, analytical thinking to the causes and consequences of the use of alcohol, tobacco, and other drugs in order to effectively and efficiently utilize prevention resources." In support of this goal, SEOW collaborated with AFMC to update the State Epidemiological Profile.

The primary purpose of the State Epidemiological Profile is to devise a tool for data-driven, informed decision-making pertaining to substance abuse prevention. This report provides information on the consumption of substances and consequences of substance abuse. It also highlights the risk factors, protective factors, and mental health or behavioral health problems as they relate to substance abuse issue. This report is intended to analyze systematically disparate sources of data from across the nation and state, and synthesize a comprehensive informational tool. This report serves as a resource in supporting the efforts of key social players to conduct community need assessments relating to substance abuse and its consequences, and strategizing evidence-based programs and policies for substance abuse prevention.

Individual factors such as education and income, and societal factors such as community support and crime, play an influential role in substance abuse initiation and prevention. Therefore, it is important to understand the concerned population. For this reason, the State Epidemiological Profile includes a brief overview of Arkansas' population. A change in variables 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 the changes in substance abuse and its relating factors over time.

Questions pertaining to this report should be directed to the Division of Aging, Adult and Behavioral Health Services (DAABHS), Preventive Services at 501-686-9030.

## PREPARED FOR

- › Arkansas Department of Human Services - DAABHS
- › UA Little Rock MidSOUTH

## PREPARED BY

AFMC developed this material under contract with the Arkansas Department of Human Services, DAABHS.

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# ARKANSAS STATE EPIDEMIOLOGICAL OUTCOMES WORKGROUP CHARTER

The Arkansas SEOW was developed in 2005 and initially funded through the Strategic Prevention Framework State Incentive Grant (SPF SIG) from the Substance Abuse and Mental Health Services Administration's Center for Substance Abuse Prevention (SAMHSA/CSAP). It continues to be funded through the Substance Abuse Prevention and Treatment Block Grant. SEOW is housed in the Arkansas Department of Human Services' DAABHS. The current charter represents an extension of SEOW's important service to the 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 provide policy-relevant analysis to state and community leaders by comprehensively assessing the health and societal factors that contribute to substance abuse. To accomplish this mission, SEOW will:

- › Provide a mechanism for the exchange, access, analysis and utilization of data across organizations related to substance use and consequences
- › Integrate information about the nature and distribution of substance abuse into ongoing assessment, planning and monitoring
- › Facilitate interagency and community collaboration to inform and enhance prevention practices

## GOALS

The two primary goals of SEOW are:

- › To bring systematic, analytical thinking to the causes and consequences of the use of alcohol, tobacco and other drugs to effectively and efficiently utilize prevention resources
- › To promote data-driven decision-making methods to effectively utilize prevention resources throughout the state

## LINKAGE WITH PREVENTION SYSTEM

SEOW will support DAABHS in its decision-making process regarding the delivery of prevention services. SEOW will facilitate interagency communication and collaboration of data. Epidemiological profiles and other work products will be used to provide detailed assessment of priority areas and prevention effectiveness efforts.

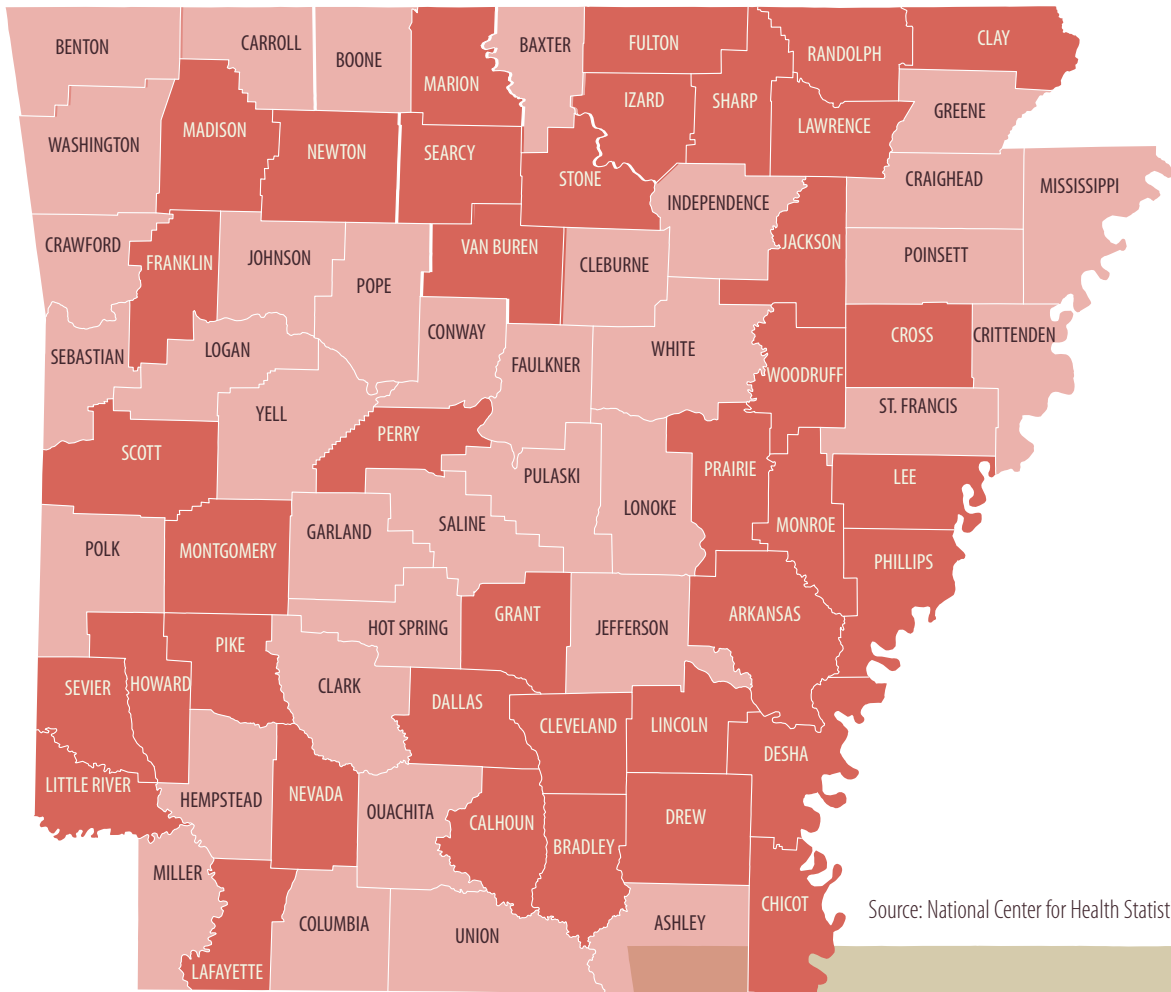
## WORKGROUP MEMBERS

Three classes of members are identified within the charter: managing members, advisory members and analytic members. Managing members form the core of SEOW and hold the primary decision-making authority for SEOW activities. Managing members are drawn from leadership positions at AFMC and DAABHS. Advisory members are invited members from the community who represent constituencies affected directly or indirectly by substance abuse and/or behavioral health. Advisory members will provide information to managing members about community-critical areas of focus, giving SEOW a broader perspective. Finally, analytic members of SEOW provide data analysis and contextual research to inform the decisions of the managing and advisory members. Only managing and advisory members are eligible to serve in the chair position.

# ARKANSAS OVERVIEW

## POPULATION

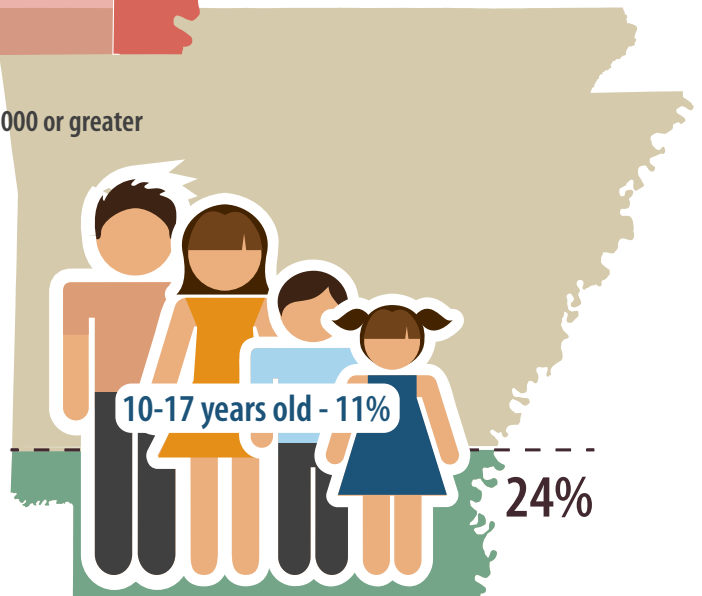
Arkansas is predominantly a rural state, with 39 of the 75 counties having a population of fewer than 20,000 people in 2016.<sup>1</sup> Arkansas' total population in 2016 was 2,988,248.



Source: National Center for Health Statistics

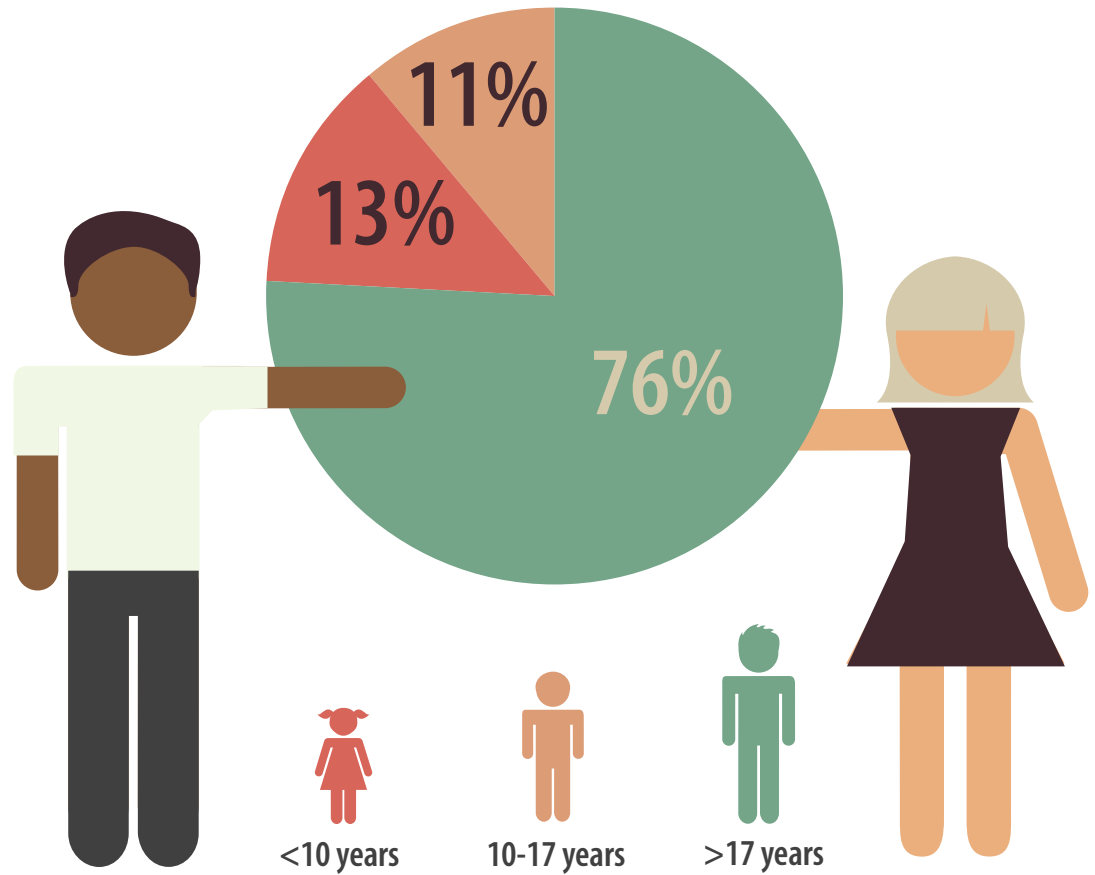


Approximately 24 percent of the state's population consists of children under the age of 18.<sup>2</sup> Of importance in this report are adolescent children (ages 10-17), who accounted for 11 percent of the population for 2016.<sup>1</sup>



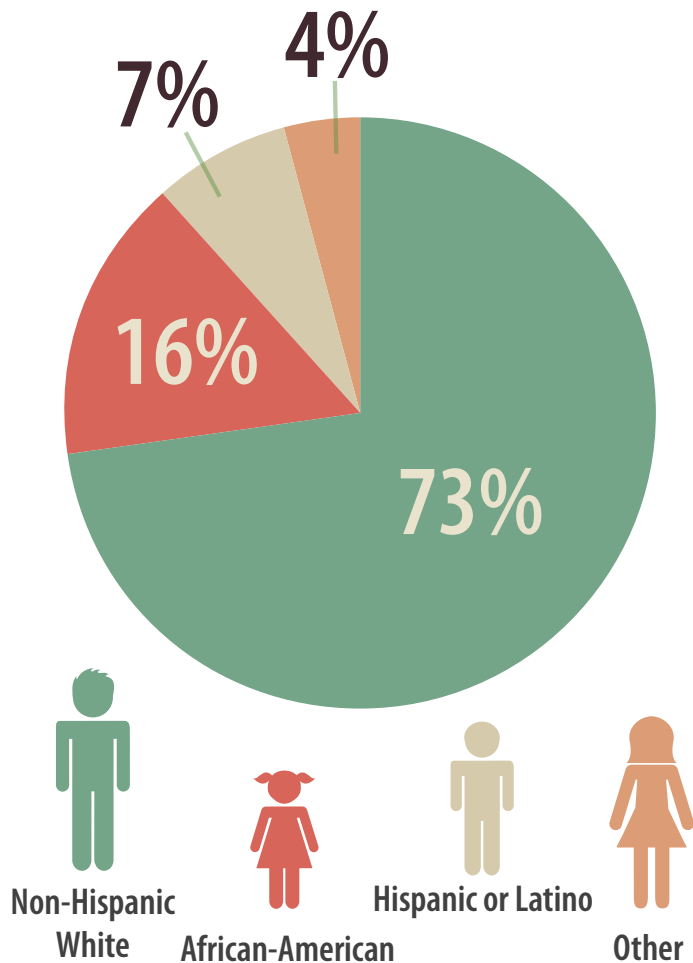


## Arkansas population by age group, 2016



Source: National Center for Health Statistics

## Arkansas population by race/ethnicity, 2016



The state population is largely non-Hispanic white (72.9%) with the largest minority group being African-American (15.7%).<sup>2</sup> However, much like the rest of the United States, the fastest growing minority group is the Hispanic or Latino population.<sup>3</sup>

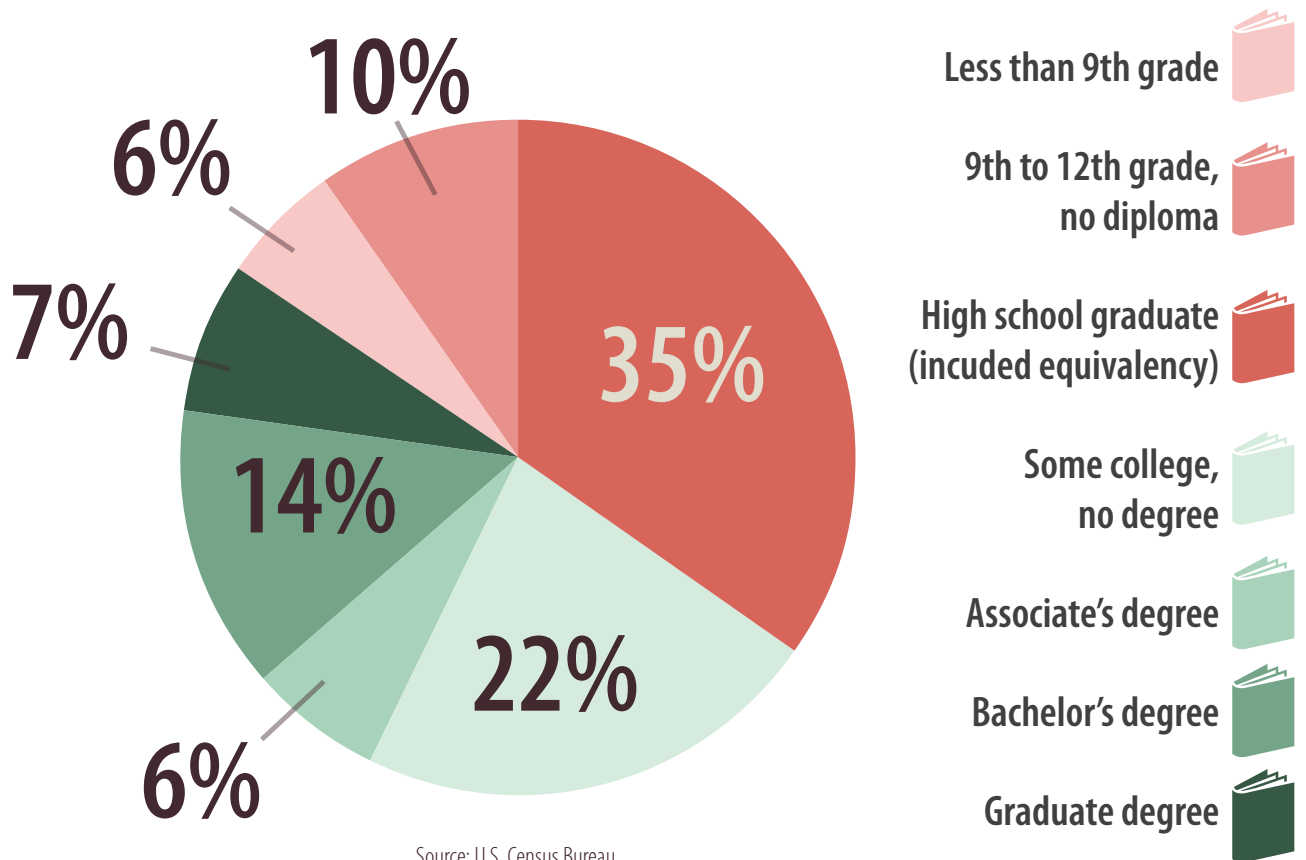
Source: U.S. Census Bureau



# EDUCATION

According to the American Community Survey's (ACS) five-year estimates for 2012–2016, approximately 85 percent of Arkansas adults over 25 years of age have attained at least a high school diploma, and 21 percent are college graduates.<sup>4</sup> Approximately 2 percent of Arkansas students drop out or withdraw from schools in grades 7–12 due to incarceration, failing grades, suspension or expulsion, lack of interest, conflict with school, economic hardship, pregnancy or marriage, peer conflict, enrolling in GED, alcohol or drugs, health problems, and other reasons.<sup>5</sup>

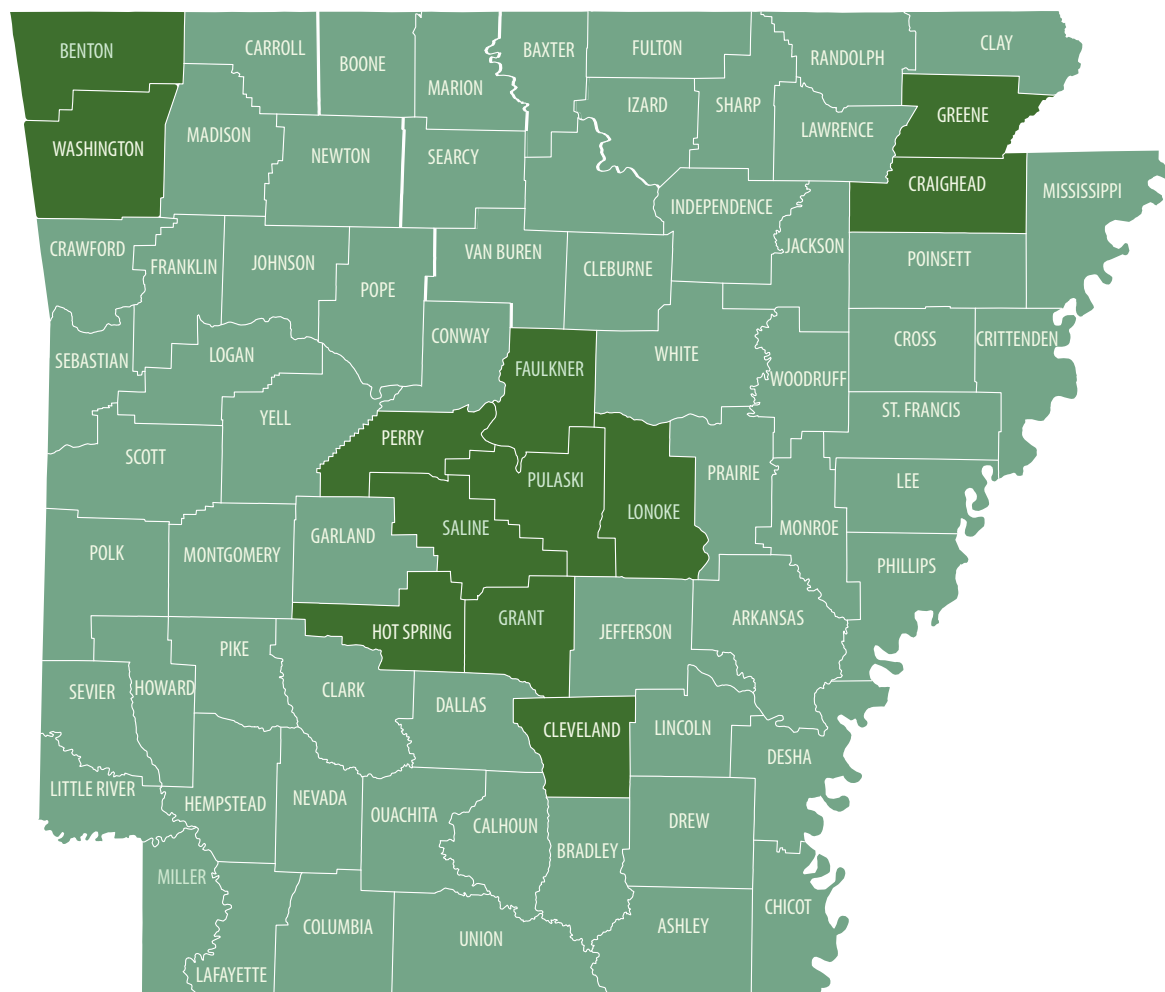
## Arkansas population by education, 2016



# ECONOMY

The median five year household income (2012-2016) for Arkansas was the second lowest in the nation, at \$42,336. Median household income varied by county of residence.<sup>6</sup>

## Arkansas income by county, 2012–2016



Arkansas median household income **less than** (\$42,336)

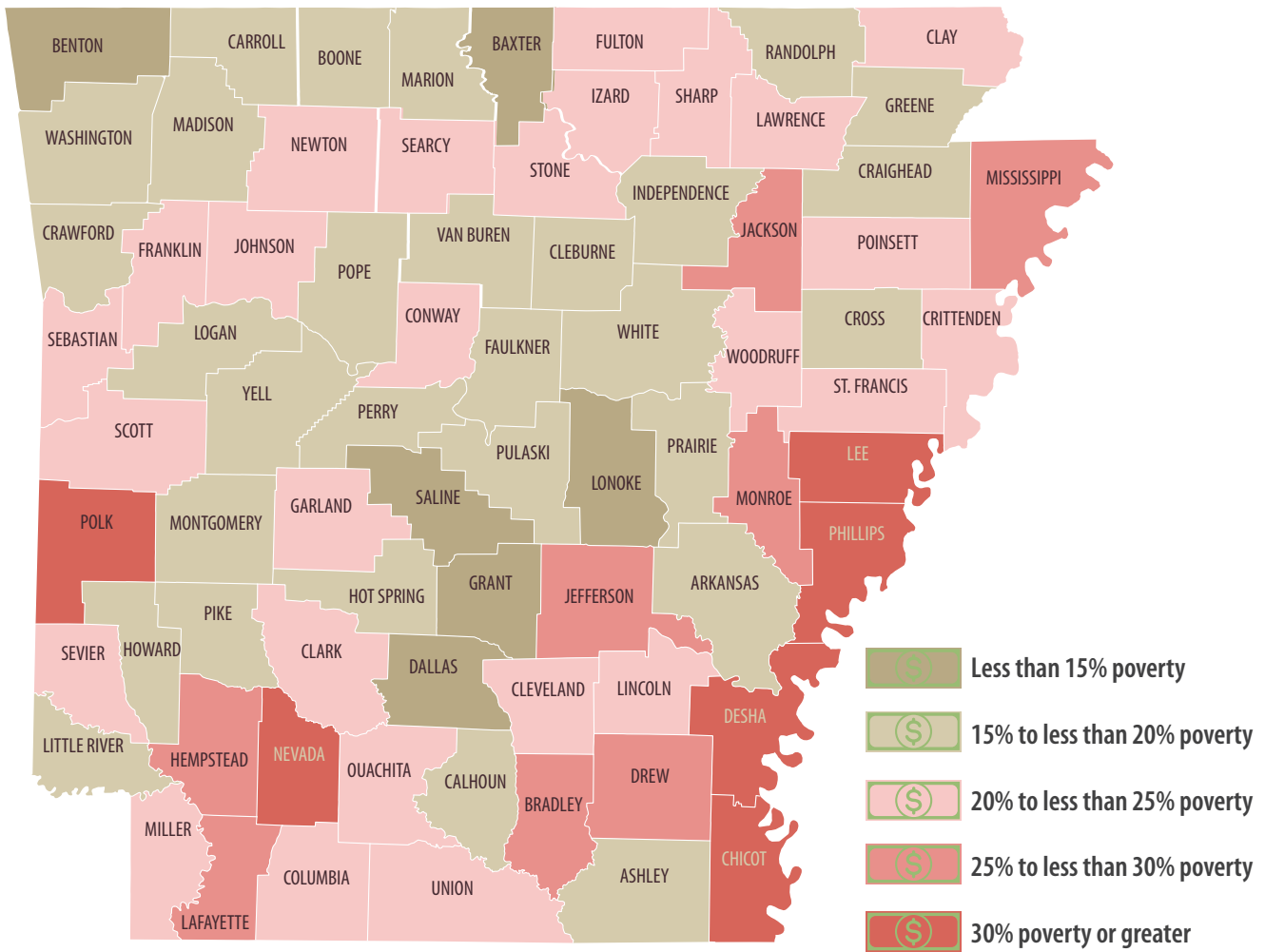


Arkansas median household income **(\$42,336) or greater**

Source: U.S. Census Bureau

The percentage of the population below the poverty level was 18.8 percent for Arkansas in 2016, compared with 15.1 percent for the United States.<sup>7</sup> The percentage of the population below the poverty level also varied by county.

# Arkansas poverty by county, 2012–2016



Source: U.S. Census Bureau

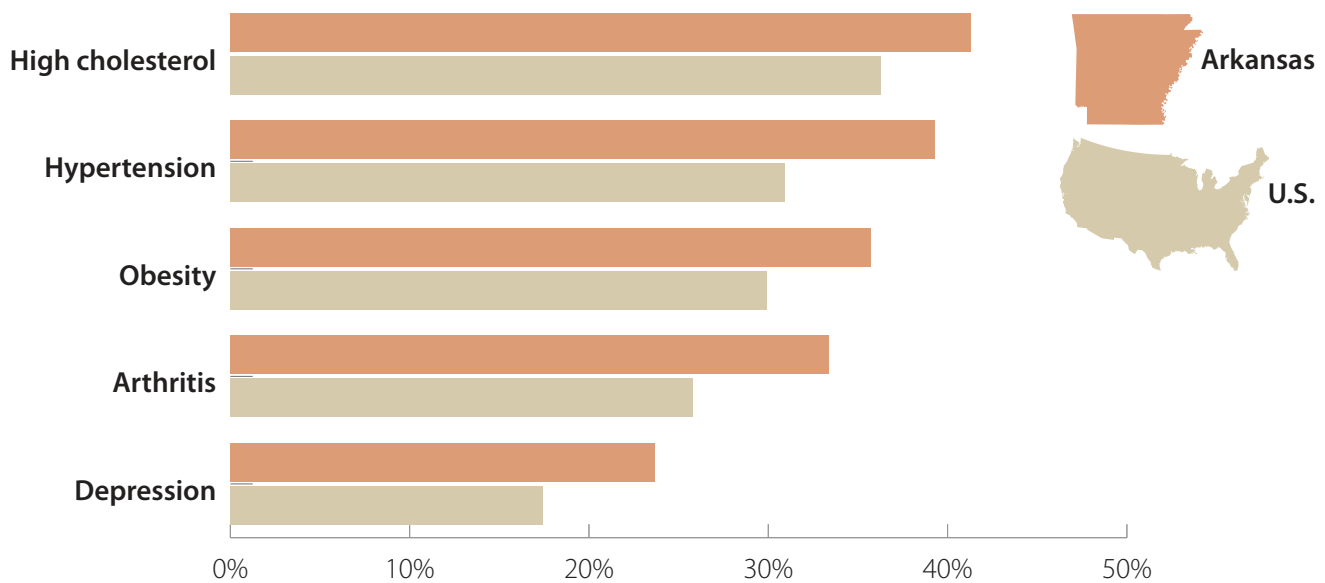




# HEALTH

In overall health, Arkansas ranks 48th among U.S. states according to America's Health Rankings for 2016, conducted by the United Health Foundation.<sup>8</sup> Chronic disease conditions may contribute to poor physical health found in portions of the Arkansas population. Compared with the general U.S. population, Arkansas has a higher prevalence of common chronic conditions, including high cholesterol (AR: 41.3%, US: 36.3%), hypertension (AR: 39.3%, US: 30.9%), obesity (AR: 35.7%, US: 29.9%), arthritis (AR: 33.4%, US: 25.8%) and depression (AR: 23.7%, US: 17.4%), which are among the highest in prevalence in Arkansas of all chronic diseases.<sup>9</sup>

## Chronic disease conditions, 2016



Source: BRFSS Prevalence and Trends Data

Poor physical and mental health can be linked to specific causes of mortality in Arkansas. In 2014, four of the top five causes of deaths in Arkansas, and seven of the top 10, were related to chronic disease, poor mental health and substance abuse.<sup>10</sup> All of the top five causes of death in Arkansas can be caused or exacerbated by alcohol, tobacco or other substance abuse (diseases of the heart, cancer, chronic lower respiratory diseases, cerebrovascular diseases and accidents).

# SUBSTANCE USE

## ALCOHOL

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- › Teenagers who drink are more likely to become alcohol dependent as adults<sup>11</sup>
- › Teenagers who binge drink are risking their lives<sup>11</sup>
- › Drinking can impair judgment, leading to aggressive behaviors, high-risk sex and car crashes<sup>11</sup>
- › When a pregnant woman drinks alcohol, alcohol in her blood passes through the placenta to the baby through the umbilical cord, exposing her unborn baby to alcohol<sup>12</sup>

## SUCCESSSES

- › Fewer Arkansas high school students are drinking
  - According to the Arkansas Prevention Needs Assessment Survey (APNA), the percent of high school students responding that they have used alcohol in the past 30 days has decreased steadily over the last six years<sup>13</sup>
- › Fewer Arkansas high school students are binge drinking
  - The average percentage of students who did binge drink in the past two weeks fell from 8.9 percent in 2012 to 6.6 percent in 2016<sup>13</sup>
- › More Arkansas youth perceive drinking 1–2 alcoholic beverages a day as a great risk, compared with the national average<sup>13</sup>
- › Fewer Arkansas adults drink compared with the national average
  - Arkansas had a much lower rate (41.2%) of adults currently drinking when compared with national rates (55.0%)<sup>9</sup>
- › Fewer Arkansas women are drinking during pregnancy
  - Arkansas had slightly lower rates (9.5%) of pregnant women drinking alcohol during pregnancy when compared with the national rates (10%)<sup>8</sup>

## FOCUS AREAS

- › Out of 10 high school seniors, five had tried alcohol, three drink alcohol and two binge drink<sup>13</sup>

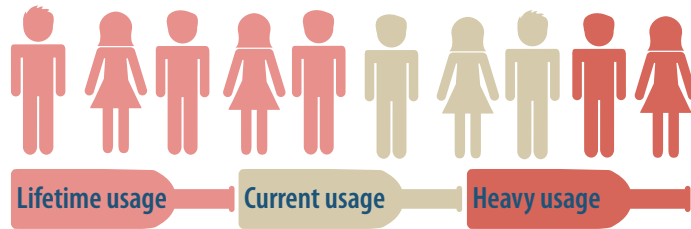


Source: Arkansas Prevention Needs Assessment Survey



- Between 2014 and 2016, there was no change in the percentage of Arkansas adults who drink heavily, but there was a slight increase in the percentage of Arkansas adults that binge drink<sup>9</sup>
- Although the percentage of Arkansas adults who participated in heavy drinking and binge drinking in the past 30 days was lower than the national level, there was no drastic decrease in the rates since 2006<sup>9</sup>
- There should be a continued emphasis on education of the effects of alcohol during pregnancy to support awareness of fetal alcohol spectrum disorders (FASD) and preventable outcomes

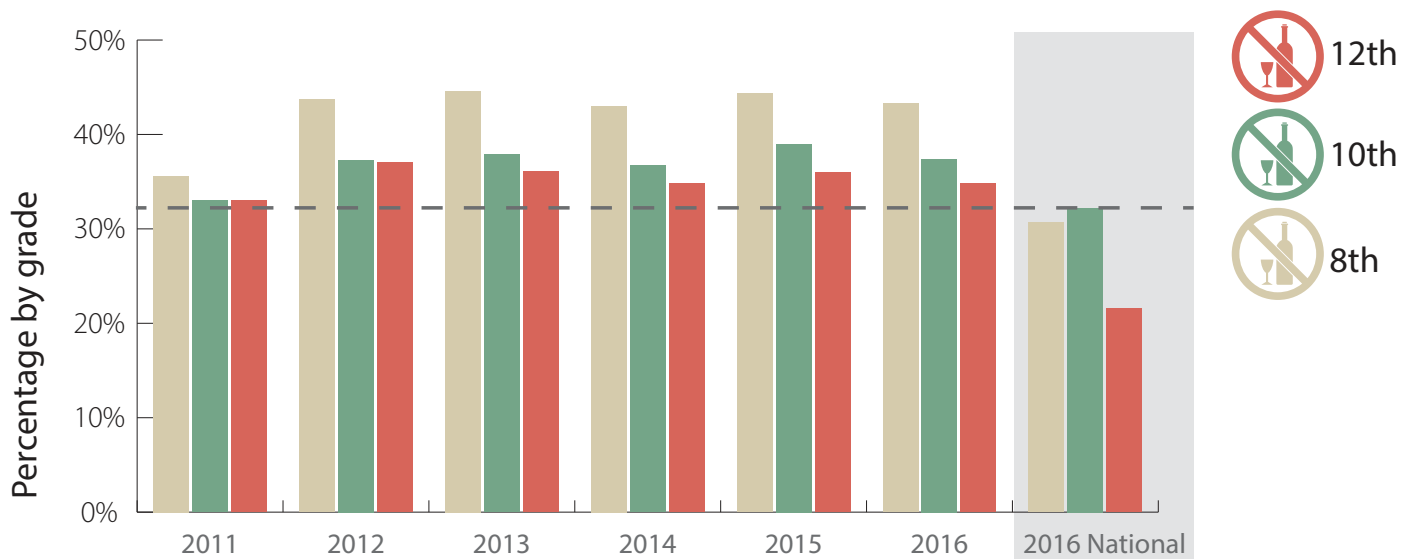
## Arkansas high school seniors alcohol consumption (per 10 students), 2016



Source: Arkansas Prevention Needs Assessment

Fetal alcohol spectrum disorders (FASD) are a group of conditions that can occur in a child whose mother drank alcohol during pregnancy. The effects on the child could include physical and behavioral problems, such as trouble with learning, remembering and following directions. This disorder could even impact daily life skills, such as communicating, feeding and bathing.<sup>12</sup>

## Percentage of youth who perceive drinking 1-2 alcoholic beverages every day as a "great risk", 2011-2016



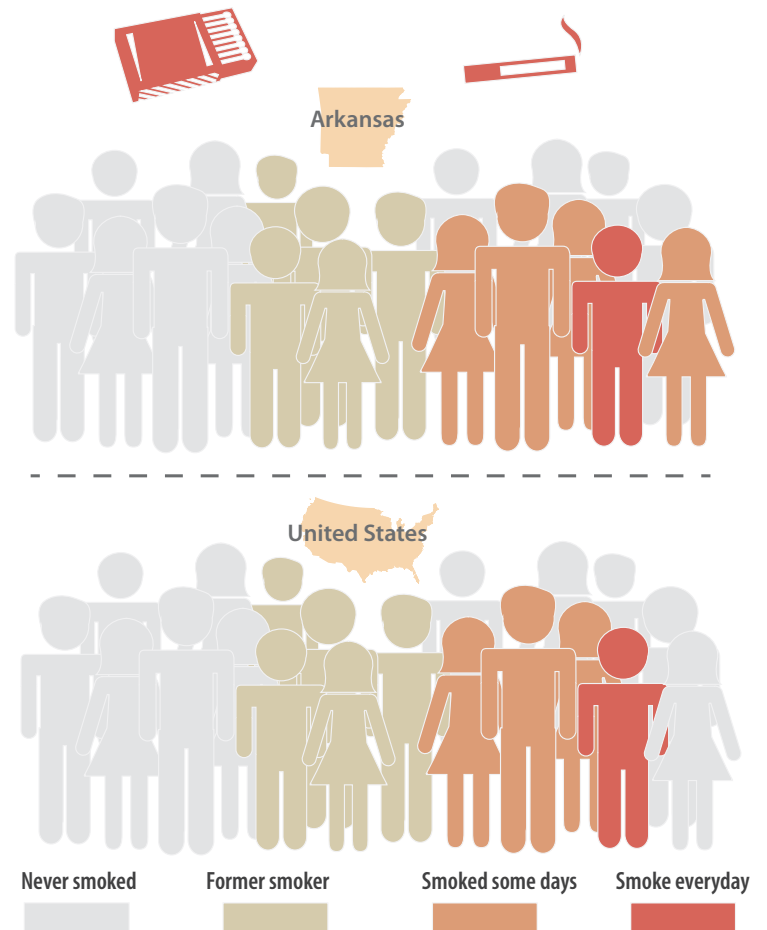
Source: Arkansas Prevention Needs Assessment

# TOBACCO

- › Teens who smoke become adults who smoke<sup>14</sup>
- › Tobacco use puts individuals at greater risk of developing several diseases including cancer, heart and respiratory diseases<sup>14</sup>
- › In 2016, significantly more Arkansans (16.8%) indicated smoking daily than the national rate (12.4%)<sup>9</sup>
- › Mothers who smoke and drink can seriously harm their babies<sup>15</sup>

## SUCCESSSES

- › Fewer students are smoking
  - The percentage of youth reporting current use and lifetime use of cigarettes has been decreasing at each grade level<sup>13</sup>
- › From 2001 through 2013, cigarette smoking rates among youth in grades 9–12 have declined by 15.6 percent<sup>44</sup>
- › Fewer Arkansas adults are using tobacco
  - A reduction in the percentage of Arkansas adults reporting cigarette use was observed from 2014–2016: 24.7 percent in 2014 to 23.6 percent in 2016<sup>9</sup>
- › Fewer Arkansas women are using tobacco during pregnancy
- › The rate of live births to women who used tobacco during pregnancy decreased from 14.9 percent<sup>16</sup>

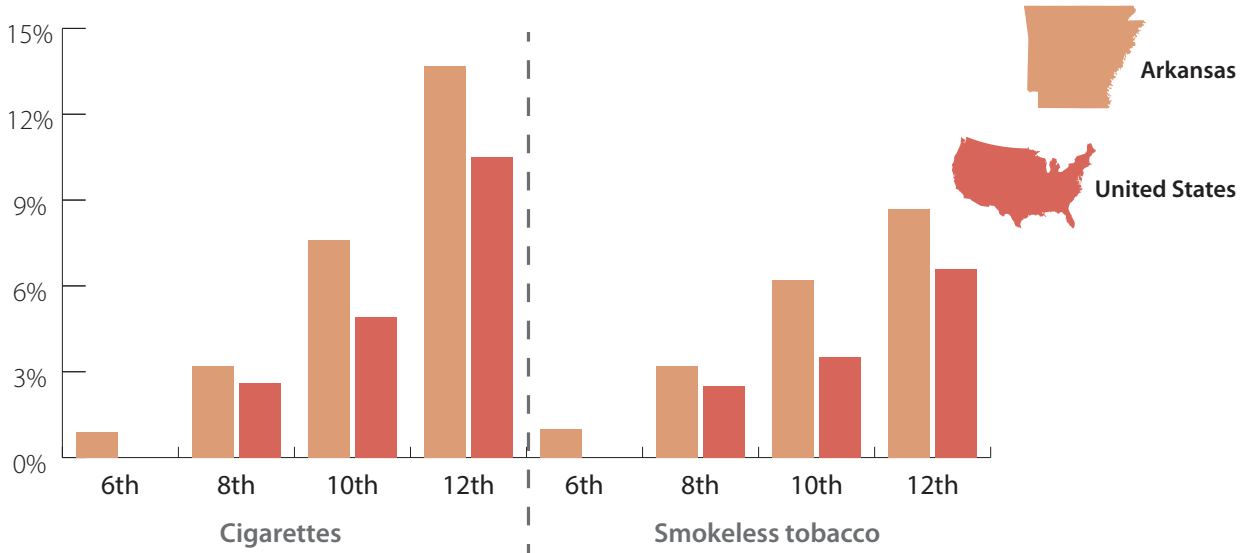


Source: BRFSS Prevalence and Trends Data

## FOCUS AREAS

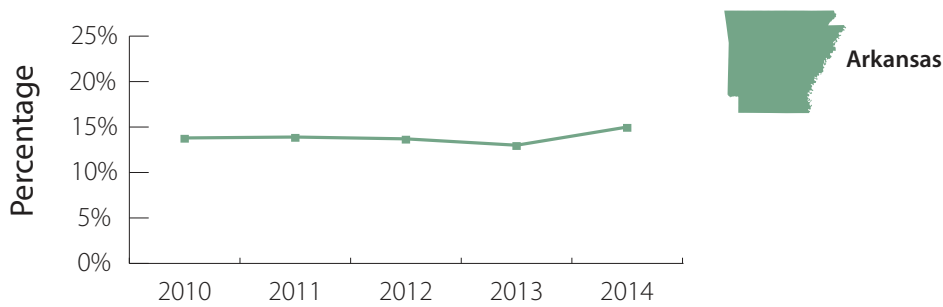
- › A larger proportion of Arkansas youth report current tobacco use (both cigarettes and smokeless) than nationally<sup>13</sup>
- › More Arkansans suffer from cardiovascular and lung disease than the national average<sup>9</sup>
- › More Arkansas women smoke during pregnancy than the national average<sup>17,18</sup>
- › Among Arkansas women, smoking during pregnancy has increased by 15.4 percent since 2013<sup>18</sup>
- › Slightly fewer Arkansas women quit smoking during pregnancy than the national average<sup>18</sup>

## Youth current use of tobacco, 2016



Source: Arkansas Prevention Needs Assessment

## Prevalence of maternal smoking in Arkansas, 2010–2014



Source: National Vital Statistics Reports



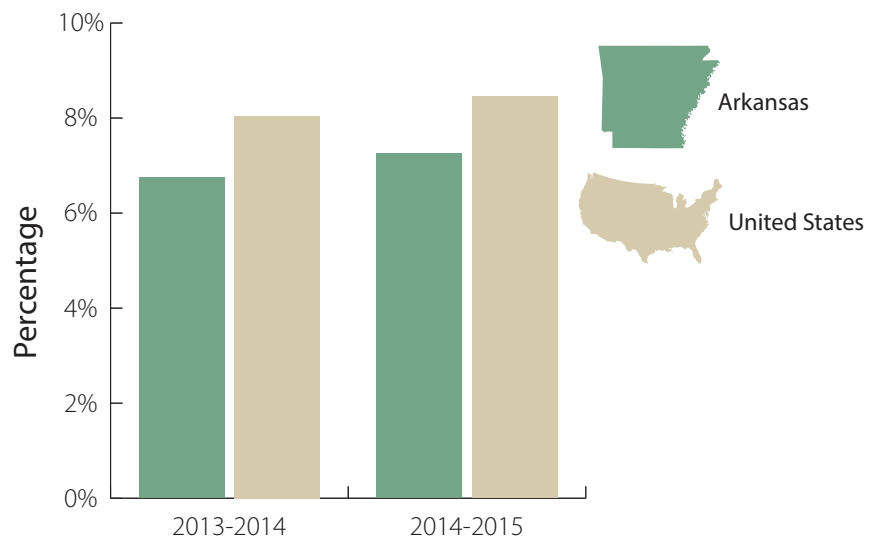
# MARIJUANA

- › Regular marijuana use by teenagers may lead to a lower IQ<sup>19</sup>
- › Teenagers who smoke marijuana are more likely to start using other illegal drugs<sup>19</sup>
- › Large doses of Marijuana may also cause acute psychosis, including hallucinations, delusions and a loss of the sense of personal identity<sup>19,20</sup>
- › Use of marijuana during pregnancy may negatively impact the baby, causing developmental delays and defects often noticed as the child grows older<sup>21</sup>

## SUCCESSES

- › Fewer Arkansas high school students are using marijuana
  - According to APNA, the percent of high school students responding that they have ever used marijuana, or used marijuana in the past 30 days, has decreased steadily over the last six years<sup>13</sup>
- › Fewer Arkansas high school students are using marijuana heavily
  - The average percentage of students who used marijuana heavily fell from 5.1 percent in 2011 to 3.8 percent in 2016<sup>13</sup>
- › Fewer Arkansas adults currently use marijuana compared with the national average
  - Arkansans had a lower rate (7.3%) for adults currently using marijuana when compared with national rates (8.5%)<sup>22</sup>

### Adult current marijuana usage, 2013–2014 to 2014–2015



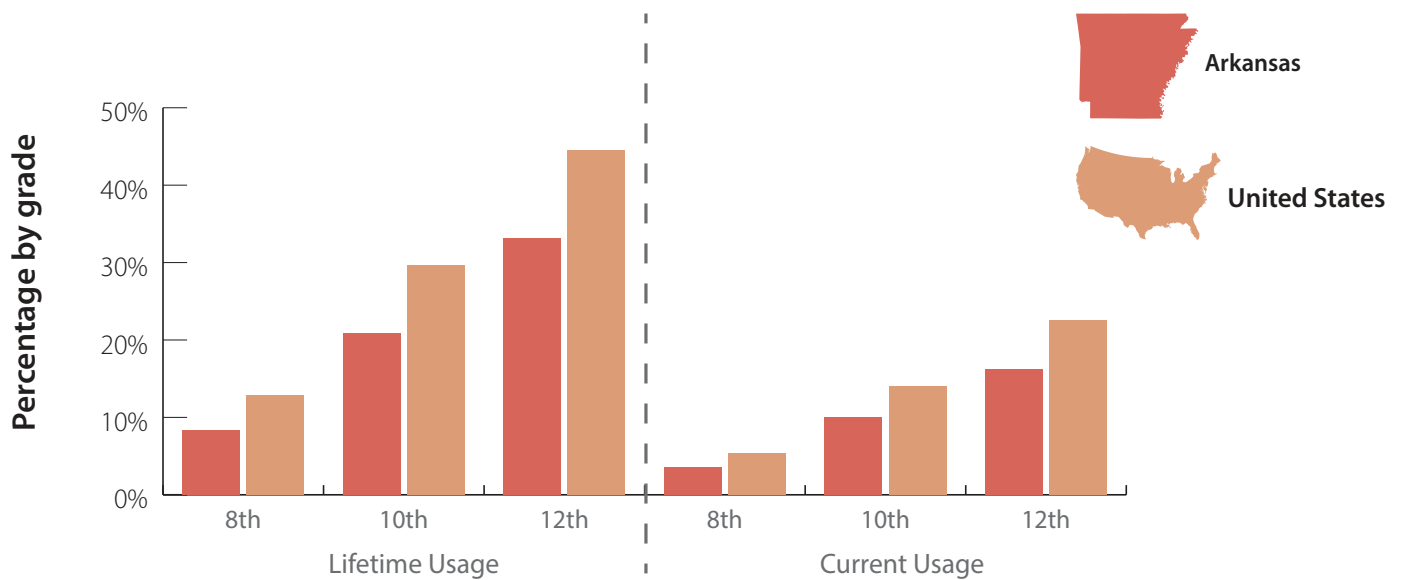
Source: National Survey on Drug Use and Health

## FOCUS AREAS

- › Out of 10 high school seniors, three had tried marijuana, two currently use marijuana, and one heavily uses marijuana<sup>13</sup>
- › Between 2013 and 2015, the percentage of adults in Arkansas who use marijuana increased from 6.8 percent (2013–2014) to 7.3 percent (2014–2015)<sup>22</sup>
- › More than half (53.6%) of the drug-related arrests in Arkansas were attributed to marijuana or hashish<sup>23</sup>
- › Continuing education on the effects of marijuana during pregnancy can help support preventable outcomes like developmental deficits in children



## High School Student Marijuana Usage, 2016



Source: Arkansas Prevention Needs Assessment

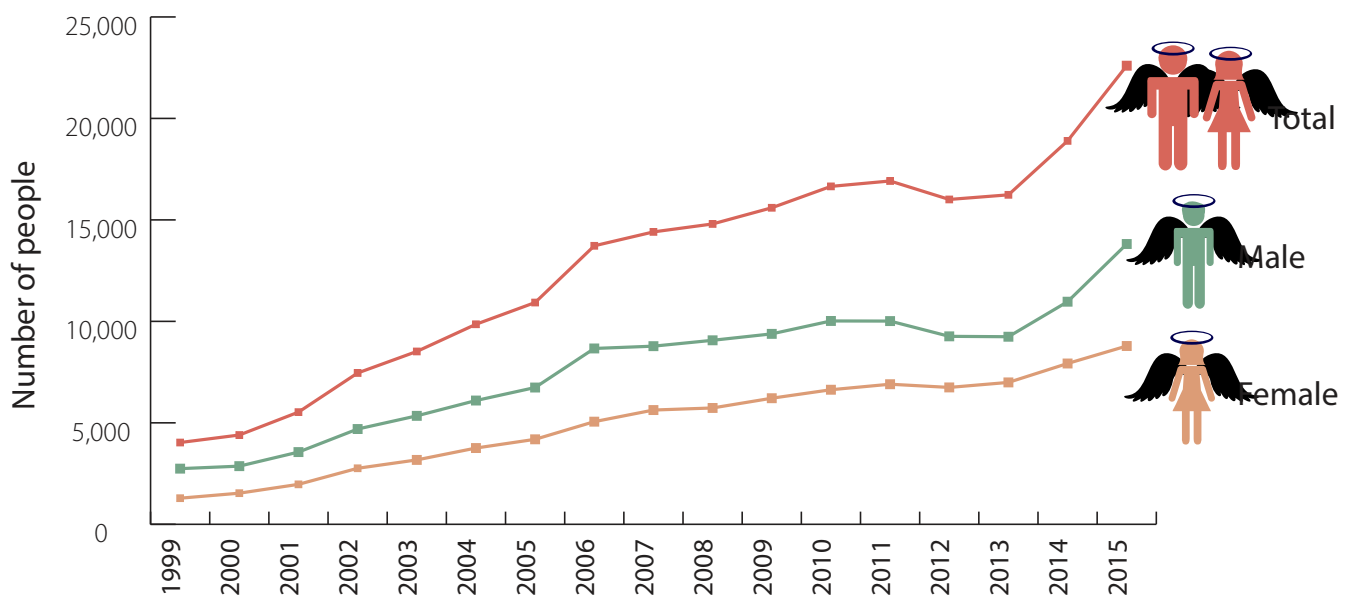
# OPIOIDS

- › The majority of drug overdose deaths in the U.S. involve an opioid (6 out of 10)<sup>24</sup>
- › Anyone can become addicted to prescription opioids. Almost one in four patients who receive long-term opioid therapy struggles with opioid addiction<sup>24</sup>
- › Most adolescents who misuse prescription pain medicines receive them for free from a friend or a relative<sup>25</sup>
- › Prescription pain medicine overdose deaths among women have increased more than 400 percent from 1999 to 2010, compared with 237 percent among men<sup>25,33</sup>
- › People who misuse prescription opioids are more likely to transition to heroin use<sup>26</sup>
- › Prescription pain medicines and heroin are addictive, and misuse of these substances puts an individual at a greater risk for serious complications including HIV, hepatitis and overdose-associated deaths<sup>26</sup>
- › Use of opioids during pregnancy greatly increases the risk of the fetus being born with neonatal abstinence syndrome<sup>27,32</sup>

## SUCCESSSES

- › The percentage of nonmedical use of pain relievers among Arkansas adolescents ages 12–17 has been slowly but steadily declining over the last five years<sup>28</sup>
- › Lifetime and current usage of heroin among Arkansas youth has remained stabled since 2011, at rates less than 1 percent<sup>13</sup>
- › Since 2012, the drug poisoning death rate in Arkansas has remained slightly lower than the national rate<sup>29</sup>
- › On the 14th National Drug Take Back Event conducted Oct. 28, 2017, Arkansas collected a record-setting 14 tons of old or expired prescription drugs, making it the most successful take back event to date for the state<sup>30</sup>

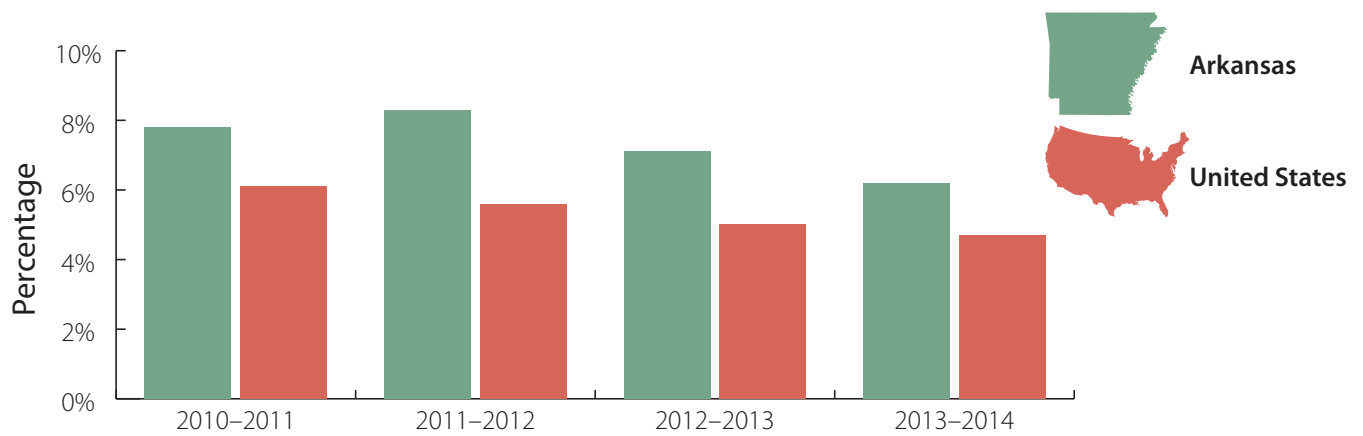
### National overdose deaths from prescription pain relievers (opioids), 1999–2015



## FOCUS AREAS

- › Nonmedical use of prescription pain relievers is higher among Arkansas adolescents ages 12–17 when compared to national average<sup>28</sup>
- › More Arkansas high school seniors use heroin compared with the national average<sup>13</sup>
- › Compared to the U.S. rate, Arkansas has a higher annual rate of opioid pain reliever prescriptions dispensed by retail pharmacies, standing at around 125 prescriptions per 100 population<sup>29</sup>
- › Since 2000, there has been more than a tenfold rise in the number of neonatal abstinence syndrome cases in Arkansas<sup>31</sup>

### Past year nonmedical use of pain relievers among adolescents ages 12–17, 2010–2011 to 2013–2014



Source: Substance Abuse and Mental Health Services Administration



# STIMULANTS AND OTHER DRUGS

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- › Stimulants are psychoactive drugs that heighten energy and alertness.<sup>34</sup>
- › Nearly 1.6 million people ages 12 or older currently report using stimulants, including methamphetamine, for nonmedical reasons.<sup>34</sup>
- › Amphetamine and cocaine abuse during pregnancy is associated with low birth weight, prematurity, and increased maternal and fetal morbidity.<sup>35</sup>
- › Stimulant use may result in several physical and physiological negative effects including stroke, hemorrhage, seizures, paranoia, delusions, depression, etc.<sup>34</sup>
- › Inhalants when used inappropriately can produce a “high.” These are more commonly misused by young kids and teens than by older kids and adults.<sup>36</sup>
- › Short-term use of inhalants produces effects like slurred or distorted speech, lack of coordination, euphoria, and dizziness. Repeated use of inhalants can result in substance use disorder.<sup>37</sup>
- › Misuse of over-the-counter drugs can be addictive and put abusers at risk for other adverse health effects.<sup>37</sup>

## SUCCESSSES

- › Lifetime usage of cocaine among Arkansas adolescents is lower than the national average<sup>13</sup>
- › Fewer Arkansas students are using inhalants<sup>13</sup>
- › Inhalant use has decreased for all grades since 2011<sup>13</sup>
- › Fewer Arkansas students are using prescription drugs<sup>13</sup>
- › Prescription drug usage has declined for grades 8–12 since 2011<sup>13</sup>

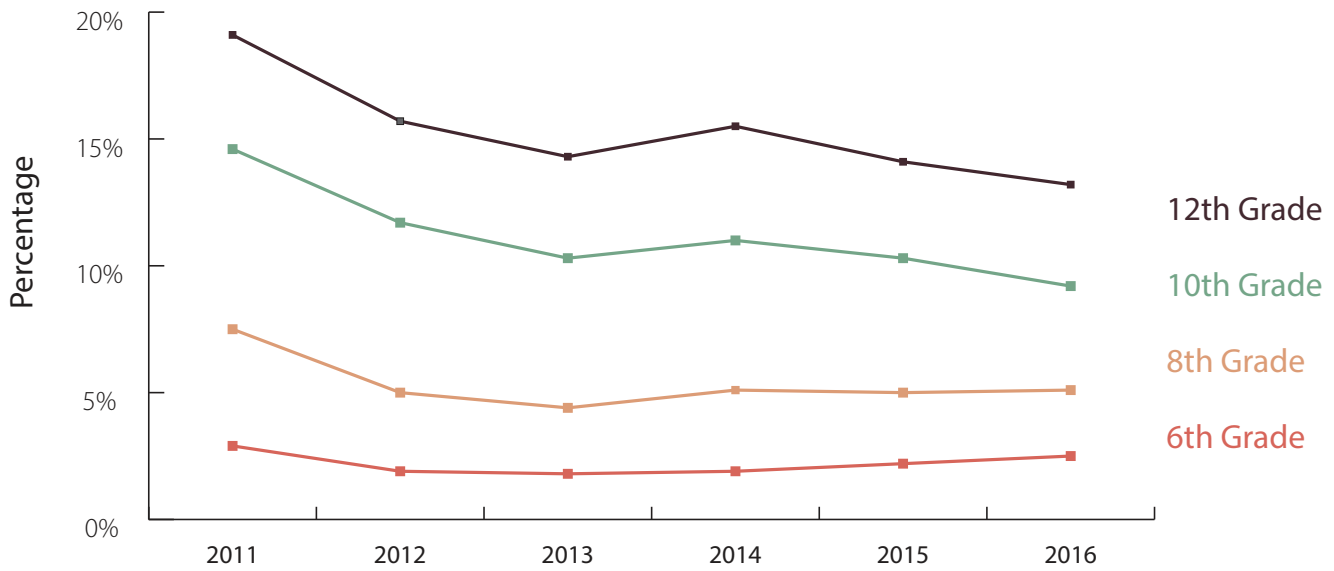
## FOCUS AREAS

- › More Arkansas students are current inhalant users than the national average<sup>13</sup>
- › No significant change has been observed in the usage of methamphetamine among Arkansas high school students since 2011<sup>13</sup>
- › More Arkansas young adults use illicit drugs than those ages 26 and older<sup>46</sup>

Neonatal Abstinence Syndrome (NAS) is a condition where newborn babies experience withdrawal after being exposed to drugs in the womb. NAS can cause low birth weight and other complications, leading to prolonged hospitalization.<sup>32</sup>



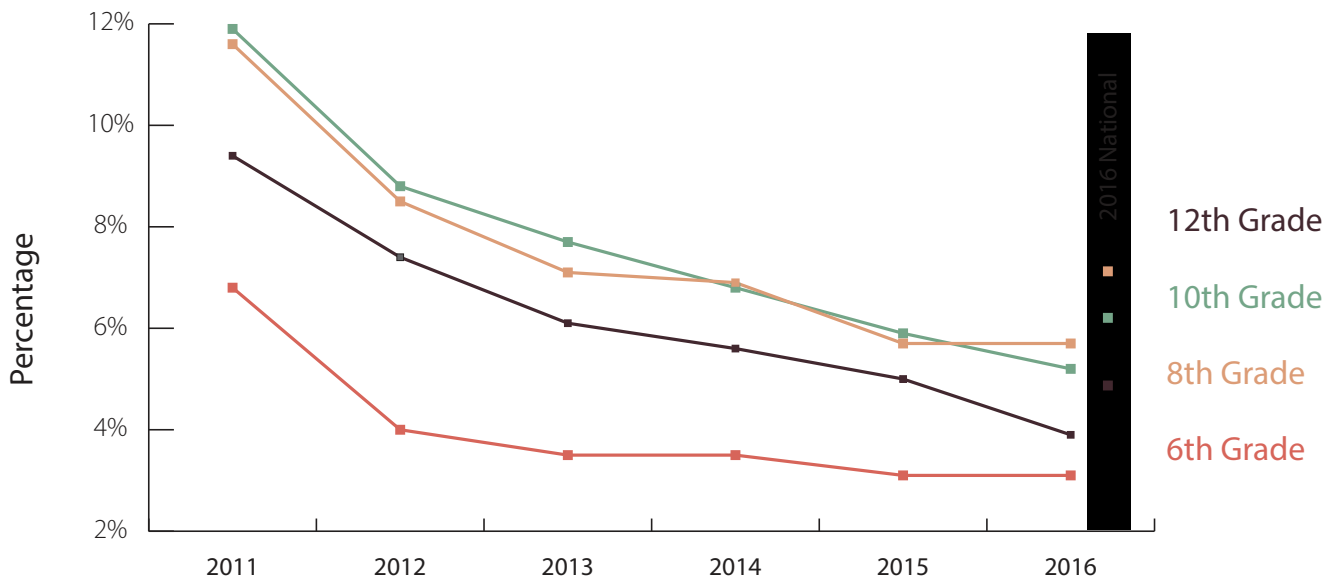
## Percentage of Arkansas youth lifetime prescription drug use, by grade, 2011–2016



Source: Arkansas Prevention Needs Assessment

Each time an individual gets behind the wheel of a vehicle after drinking alcohol or using drugs, they put themselves and other community members at risk for crashes, injuries and fatalities.

## Percentage of Arkansas youth lifetime inhalant use, by grade, 2011–2016



Source: Arkansas Prevention Needs Assessment

# TREATMENT

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- › The Arkansas Tobacco Quitline was established as a public health service to aid smokers in Arkansas in their efforts to quit smoking.
- › The Quitline provides services for both health care providers and the population at large. Information collected over the Quitline is useful when applied to smoking cessation media and provides valuable insight for other substance abuse treatments.<sup>38</sup>
- › Without treatment, individuals may not have the tools necessary to recover from substance abuse. There are many reasons why a person who needs help may not receive treatment, from cost to refusing to stop using drugs or alcohol.

## SUCCESSSES

- › A large percentage of those registering for the Arkansas Tobacco Quitline heard about the program through mass media<sup>39</sup>
- › Since 2013, a 48.3 percent increase was noted in respondents who indicated that they heard about the Tobacco Quitline through the television commercials<sup>39</sup>
- › In 2016, compared with the U.S. (5.8%), a lower percentage of Arkansans (4.7%) needed but did not receive alcohol treatment<sup>40</sup>

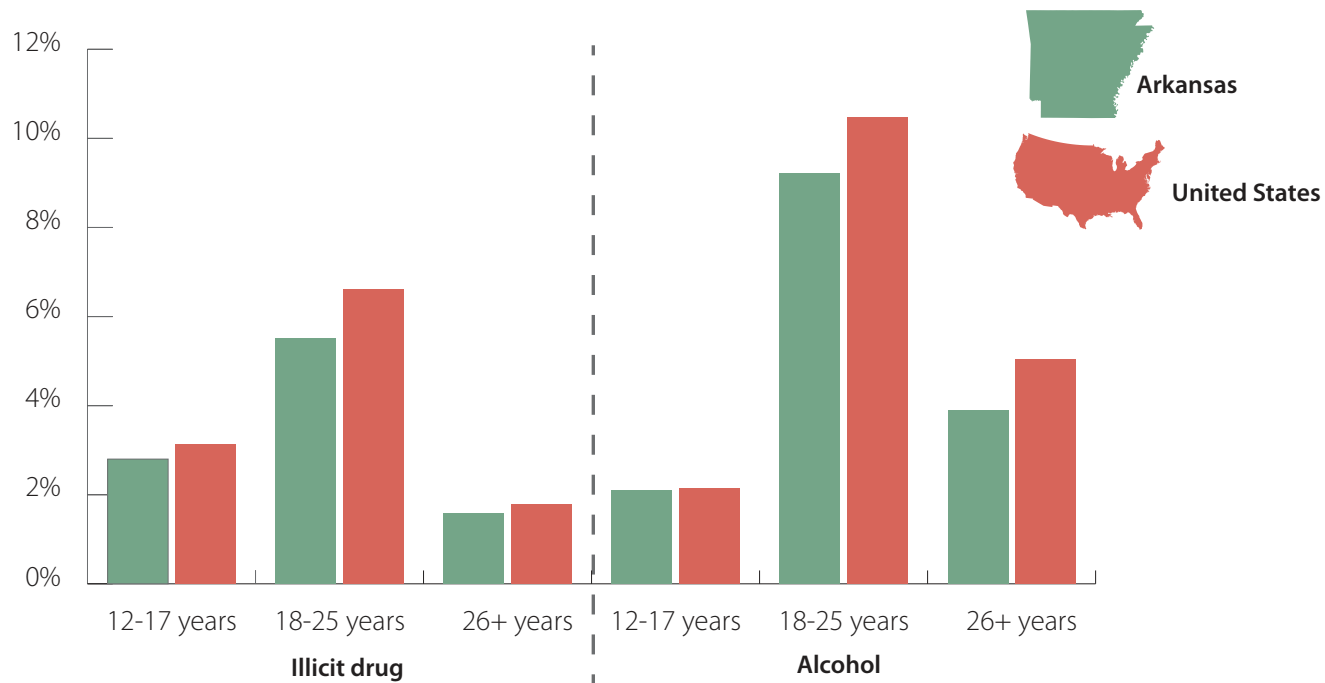
## FOCUS AREAS

- › Compared with 2013, there is a 16.9 percent decrease in the number of 2016 Arkansas Tobacco Quitline respondents who indicated that a health professional had advised them to quit tobacco products<sup>39</sup>
- › Arkansas young adults ages 18–25 represent the highest estimated percentages needing but not receiving treatment for illicit drug and alcohol use<sup>40</sup>





**Estimated percentages for needing, but not receiving, treatment for illicit drug or alcohol use, 2015–2016**



Source: Substance Abuse and Mental Health Services Administration



# WHAT ELSE CAN WE DO?

- › Limit minors' access to tobacco
  - The Centers for Disease Control and Prevention (CDC) recognizes the enforcement of limiting minors' access to tobacco products as a best practice for tobacco control programs.
  - Arkansas regularly monitors retailer violations for selling cigarettes to minors; however, this does not fully limit adolescents' abilities to obtain cigarettes. Public awareness is still needed to help curtail access.
- › Increase participation in Arkansas Take Back
  - Most abusers of prescription medicines, including teens, initially obtain the drugs from a friend or relative – not from a drug dealer. A safe medicine take-back program gets potentially dangerous leftover drugs out of the home.
  - Medicine take-back programs are the only secure and environmentally sound way to dispose of leftover and expired medicines. Arkansas currently has many permanent drop-off locations. You can search for a location that is close to you using [artakeback.org](http://artakeback.org).
- › Stop drugged driving before it starts
  - Increase public education efforts on how marijuana and other drugs impact driving and how long driving is impaired after use
- › Prevent Adverse Childhood Experiences (ACEs) and build resilience
  - Increase public awareness of ACEs and their short- and long-term effects
  - Increase participation in maternal, infant and early childhood visiting programs
  - Encourage health care providers to screen for ACEs and adopt a trauma-informed care model

## CONCLUSIONS

**A**rkansas substance abuse prevention programs have made great strides in impacting substance abuse levels among several indicators, including lowering smoking levels among youth and adults, and lowering inhalant use among teens. However, there are still areas of concern that require attention. Multiple indicators within this report show that Arkansas adult and youth substance usage was higher than national averages, including adult and youth smoking levels, as well as those before, during and after pregnancy. In addition, several indicators showed minimal improvement, such as smokeless tobacco use rates among youth. Differences in use among males compared with females and various age groups were also noted within indicators of consumption, as well as indicators measuring consequences of use. These observations should all be considered as programs move forward in prevention planning.

The contributing factors documented within this report are also valuable to prevention planning efforts. Although caution should be taken when considering these contributing factors in isolation, when taken as a whole, contributing factors provide prevention program planners a more cohesive understanding of the areas in which they can strive to impact the 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 measures.



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