State/Tribal Epi Outcomes Workgroup

STEOW

OKLAHOMA EPIDEMIOLOGICAL PROFILE OF SUBSTANCE USE & MENTAL HEALTH 2020

ACKNOWLEDGEMENTS

The 2020 Oklahoma Substance Use and Mental Health Epidemiological Profile was developed by the Oklahoma State/Tribal Epidemiological Outcomes Workgroup (STEOW). The STEOW is led by Cherokee Nation, Southern Plains Tribal Health Board, and the Oklahoma Department of Mental Health and Substance Abuse Services. The STEOW is comprised of representatives from tribes, tribal organizations, government agencies, universities, and non-profit organizations. The mission of the Oklahoma STEOW is to improve prevention assessment, planning, implementation, and monitoring efforts through the application of systematic, analytical thinking about the causes and consequences of substance misuse.

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ALCOHOL

CONSEQUENCES

- Oklahoma's age-adjusted chronic liver disease death rate remained higher than the U.S. rate from 2008 to 2017. The Indian Health Service (IHS)-linked death rate was 3.2 times as high among American Indians compared to non-Hispanic Whites. The chronic liver disease and cirrhosis death rate peaked in the 55-64 year age group before decreasing by 18% in the 65-74 year age group. (Source: National Vital Statistics System available on CDC WONDER Multiple Cause of Death File)

- According to the Centers for Disease Control and Prevention, approximately 47% of homicides in Oklahoma and in the U.S. are attributable to alcohol. There was an average of 270 homicides per year in Oklahoma from 2008 to 2017. The age-adjusted homicide rate was 27% higher in Oklahoma than in the U.S. in 2017. The age-adjusted rate among males was 4.7 times the rate among females. The homicide rate was highest in the 25-34 year age group (16.3 per 100,000). (Source: National Vital Statistics System available on CDC WONDER Multiple Cause of Death File)

- There were 2,248 fatalities in Oklahoma resulting from motor vehicle crashes that involved alcohol (drivers with a blood alcohol concentration of 0.01 or higher) from 2008 to 2017. The number of deaths per 100,000 residents decreased from 7.4 in 2007 to 4.9 in 2017. The rate remained higher in Oklahoma than in the U.S. throughout this time period. (Source: Fatal Analysis Reporting System, National Highway Safety Office, U.S. Department of Transportation) (Source: Fatal Analysis Reporting System, National Highway Safety Office, U.S. Department of Transportation)

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- In 2017, 29% of motor vehicle crash fatalities in Oklahoma involved a driver with a blood alcohol concentration of >= 0.01. (Source: Fatal Analysis Reporting System, National Highway Safety Office, U.S. Department of Transportation)

- Alcohol-related arrests decreased by 49% among Oklahoma adults and by 74% among Oklahoma juveniles under age 18 from 2008 to 2017. (Source: Oklahoma State Bureau of Investigation)

- According to the National Council on Alcoholism and Drug Dependence, Inc., alcohol is a factor in about 40% of all violent crimes in the U.S. Oklahoma's violent crime rate decreased by 14% from 2008 to 2017, but the rate remained higher than the U.S. rate throughout this time period. (Source: FBI UCR data available on Crime Data Explorer)

EXECUTIVE SUMMARY

- Statistically significant decreases were observed in past year alcohol use disorder from 2008-2009 to 2016-2017 among Oklahomans in the 12-17 and 18-25 year age groups. (Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health)
- Approximately 1 in 20 individuals aged 12 years and older in Oklahoma and the U.S. needed but did not receive treatment for alcohol use at a specialty facility in the past year (2016-2017). The percentage needing treatment was highest in the 18 to 25 year age group. (Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health)

CONSUMPTION

- A statistically significant decrease in past 30 day alcohol use among Oklahoma high school students from 2003 (47.8%) to 2017 (31.6%) was observed. (Source: Youth Risk Behavior Survey)
- One in seven Oklahoma high schools students (14.6%) in 2017 reported that they rode with a driver who had been drinking alcohol (during the 30 days before the survey), which is a statistically significant decrease from 30.6% in 2003. (Source: Youth Risk Behavior Survey)
- Among high school students who had driven a vehicle during the 30 days before the survey, the percentage of Oklahoma students who drove after they had been drinking alcohol decreased significantly from 8.6% in 2013 to 5.3% in 2017. (Source: Youth Risk Behavior Survey)
- Approximately 1 in 2 women reported using alcohol during the 3 months prior to pregnancy and 1 in 20 reported using alcohol during the last three months of pregnancy. (Source: Pregnancy Risk Factor Surveillance System, 2012-2015)
- Approximately 1 in 24 (4.2%) of Oklahoma adults aged 18 years and older engaged in heavy drinking in the past 30 days. The prevalence was 1.4 times as high among males compared to females in 2017 and increased with increasing age group. The percentage of adults engaging in heavy drinking increased with increasing age group until the 45-54 year age group before dropping by 39% in the 55-64 year age group. (Source: Behavioral Risk Factor Surveillance System)
- The prevalence of past 30 day binge drinking among Oklahoma adults aged 18 years and older decreased by 28% from 2011 to 2016 before increasing to 13.4% in 2017. It was lower than the U.S. median throughout this time period (Figure 27). In 2017, the prevalence of past 30 day binge drinking was approximately twice as high among males compared to females and was highest in adults under age 35 years. (Source: Behavioral Risk Factor Surveillance System)

PRESCRIPTION AND ILLICIT DRUG

CONSEQUENCES

- In 2017, Oklahoma had the 30th highest age-adjusted drug overdose death rate (all intents, intentional, unintentional, undetermined) in the nation, falling from 9th highest in 2008. The age-adjusted drug overdose rate decreased by 29% from 15.6 per 100,000 in 2008 to 20.1 in 2017. (Source: National Vital Statistics System available on CDC WONDER Multiple Cause of Death File)
- Age-adjusted prescription opioid-related drug overdose death rates decreased by 23% among Oklahoma residents from 2008 to 2017. (Source: National Vital Statistics System available on CDC WONDER Multiple Cause of Death File)
- The increase in unintentional drug overdose deaths among Oklahoma residents has been driven largely by overdoses involving methamphetamines, which has increased by 668% from 2008 to 2017. The unintentional heroin overdose death rate has also increased dramatically (367%) during this time period. (Source: Oklahoma State Department of Health, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports))
- In 2017, the most common substances involved in fatal unintentional overdoses in Oklahoma were methamphetamine, alcohol, and oxycodone (Figure 32). Methamphetamine was involved in 41% of the 743 total fatal unintentional overdoses. (Source: Oklahoma State Department of Health, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports))
- The unintentional prescription opioid-related overdose death rates ranged from 19% to 55% higher among Oklahoma males than females from 2007 to 2011 before the gender gap narrowed in 2012. The unintentional prescription opioid-related death rate decreased among males and females by 40% and 46%, respectively, from 2013 to 2017. The rate per 100,000 was highest among Oklahomans in the 45-54 year age group (2015-2017). (Source: Oklahoma State Department of Health, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports))
- Indian Health Service (IHS)-linked opioid-related overdose death rates (prescription and illicit) were highest among American Indians followed by Whites. Death rates among American Indians were five times higher than the rates among Blacks/African Americans and over seven times higher the rates among persons of other races. (Source: Oklahoma Vital Statistics, 2013-2015 combined years)
- Nonfatal hospitalization rates related to a drug overdose were approximately 1.5 times higher among females compared to males in 2016 and were highest among Oklahomans aged 45 to 54 years (2014-2016 combined years). (Source: Oklahoma Discharge Public Use Data File, Center for Health Statistics, Oklahoma State Department of Health)

EXECUTIVE SUMMARY

- Nonfatal rates related to a prescription opioid overdose were two times higher among females compared to males in 2016 and were highest among Oklahomans aged 55 to 64 years (2014-2016 combined years). (Source: Oklahoma Discharge Public Use Data File, Center for Health Statistics, Oklahoma State Department of Health)

- There were approximately 89,000 Oklahomans aged 12 years and older who had an illicit (including misuse of prescription drugs) drug disorder in the past year (Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health)

- Treatment admissions by ODMHSAS or Medicaid behavioral health providers increased for treatment for heroin and methamphetamine by 107% and 33%, respectively from fiscal year 2015 to fiscal year 2018. (Source: Oklahoma Department of Mental Health and Substance Abuse Services, ODMHSAS Online Query System)

- Drug use is associated with property crime. The FBI's Uniform Crime Reporting (UCR) Program provides data on property crimes include burglary, larceny-theft, motor vehicle theft, and arson for participating agencies. There were over 1.2 million property crimes in Oklahoma from 2008 to 2017. The number of property crimes per 100,000 Oklahoma residents decreased by 17% from 2008 to 2017. The Oklahoma rate was 22% higher than the U.S. rate in 2017. (Source: FBI UCR data available on Crime Data Explorer)

- There were 182,844 drug-related arrests among Oklahoma adults and 15,235 drug-related arrests among Oklahoma juveniles under age 18 from 2008 to 2017 (Table 25). The number of arrests per 10,000 adults fluctuated over the past 10 years, with a low of 57.3 in 2011 and a high of 71.2 in 2016. There were 15,235 drug-related arrests among Oklahoma juveniles from 2008 to 2017 (Table 26). The number of arrests per 10,000 juveniles decreased by 35% from 2008 to 2017 (Source: Oklahoma State Bureau of Investigation)

CONSUMPTION

- The prevalence of past year misuse of prescription pain relievers was twice as high in the 18-25 year age group as in the 12-17 and 26 and older age groups. (Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health)

- Approximately 4% of Oklahomans aged 12 years and older reported past year pain reliever misuse in the past year. (Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health)

- Lifetime nonmedical use of prescription drugs among adults 18 years and older decreased from 8.4% in 2012 to 5.8% in 2017. Oklahomans aged 18 to 34 years and non-Hispanic multiracial individuals had the highest prevalence of lifetime nonmedical use of prescription drugs (2015-2017 combined years). (Source: Behavioral Risk Factor Surveillance System)

- Approximately 1 in 6 Oklahomans aged 18 to 25 years used marijuana in the past month compared to approximately 1 in 20 in the 12 to 17 and 26 and older age groups (Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health)

- Past year cocaine use was approximately 11 times as high among Oklahomans aged 18-25 compared to those aged 12-17 years and 4.5 times as high compared to those aged 26 years and older. The prevalence decreased from 2008-2009 to 2012-2013 in the 18-25 year age group before increasing to a high of 5.4% or 23,000 in 2016-2017. (Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health)

- The prevalence of past year heroin use in the 18-25 year age group was 55% higher in Oklahoma compared to the U.S. (2016-2017). The prevalence was 14 times as high among Oklahomans aged 18-25 years compared to Oklahomans aged 12-17 years and 2.6 times as high as those aged 26 and older (2016-2017 annual average). (Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health)

- Approximately 25,000 Oklahomans aged 12 years and older used methamphetamine in the past year. The prevalence was 0.77% in Oklahoma compared to 0.56% in the U.S. (Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health)

TOBACCO

CONSEQUENCES

- The Oklahoma age-adjusted death rates for chronic diseases related to cigarette smoking, major cardiovascular disease, chronic obstructive pulmonary disease/emphysema, and lung cancer were 27%, 62%, and 28% higher, respectively than the U.S. rate. (Source: National Vital Statistics System available on CDC WONDER Multiple Cause of Death File)

- Age-adjusted lung cancer death rates decreased by 21% from 2008 to 2017 in Oklahoma. The rate was 28% higher in Oklahoma compared to the U.S. in 2017. (Source: National Vital Statistics System available on CDC WONDER Multiple Cause of Death File)

CONSUMPTION

- A statistically significant decrease in the percentage of high school students who smoked at least one cigarette in the past 30 days from 2003 to 2017 was observed in Oklahoma and in the U.S. (Source: Youth Risk Behavior Survey)

- Approximately 1 in 11 Oklahoma high school students used a smokeless tobacco product during the 30 days before the survey compared to approximately 1 in 18 U.S. students. (Source: Youth Risk Behavior Survey)

- The percentage of Oklahoma adults aged 18 years and older who were current smokers (smoked at least one cigarette in the past 30 days) decreased by 25% from 2011 to 2016 before increasing slightly in 2017. Approximately 1 in 5 adults were current smokers in 2017. (Source: Behavioral Risk Factor Surveillance System)

EXECUTIVE SUMMARY

- Approximately 1 in 15 Oklahomans were current e-cigarette users (used e-cigarettes in the past 30 days) in 2016 and 1 in 14 were users in 2017. The prevalence of past 30 day e-cigarette in Oklahoma was 1.4 times as high as the U.S. median in 2016 and 1.5 times as high in 2017. (Source: Behavioral Risk Factor Surveillance System)

RISK AND PROTECTIVE FACTORS

- Oklahoma's excise tax as of January 2018 was lower for all types of alcohol than the U.S. tax rate. The largest difference is in the tax rate of distilled spirits, with the U.S. tax rate being almost twice the rate of Oklahoma's rate. (Source: Alcohol Policy Information System)

- In accordance with Oklahoma law, the Alcoholic Beverage Laws Enforcement (ABLE) commission aids the Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS) in enforcing the Synar provisions. The goal of Synar is to reduce and maintain Oklahoma's number of successful illegal tobacco purchases by minors to less than 20% of attempted buys. Oklahoma's Synar non-compliance rate, based on a random sample of Oklahoma retailers in federal fiscal year 2020, is 13.2%. (Source: Oklahoma Department of Mental Health and Substance Abuse Services, Synar data)

- According to the Oklahoma Prevention Needs Assessment (OPNA) survey, the percentage of students reporting it would be easy to get alcohol if they wanted to increased with increasing grade from approximately 1 in 5 among 6th graders to approximately 3 in 4 among 12th graders. (Source: Oklahoma Prevention Needs Assessment, 2016)

- Over half (56.4%) of Oklahoma adults have experienced at least one adverse childhood event (ACE) in their lifetime, 1 in 5 (19.1%) have experienced 2-3, and approximately 1 in 7 (14.6%) have experienced 4 or more. The number of lifetime ACEs experienced was similar among Oklahoma males and females. Non-Hispanic multiracial individuals had the highest prevalence of experiencing one or more ACEs, with approximately 1 in 4 (27.7%) experiencing 4 or more. (Source: Behavioral Risk Factor Surveillance System)

MENTAL HEALTH

- The age-adjusted suicide rate among Oklahoma residents increased by 34% from 2008 to 2016 before decreasing by 9% in 2017. The decrease was seen among males but not females. The rate was 36% higher in Oklahoma than in the U.S. in 2017. The age-adjusted rate per 100,000 among males averaged 3.9 times as high as the female rate from 2008 to 2017. The suicide rate was highest among Oklahomans aged 35 to 44 (28.6 per 100,000), followed closely by those aged 45 to 54 (27.8 per 100,000) and aged 25 to 34 (27.3 per 100,000). The age-adjusted IHS-linked suicide rate was highest among non-Hispanic American Indians (19.4 per 100,000), followed by non-Hispanic Whites (14.2 per 100,000). (Source: Oklahoma Vital Statistics, 2014-2016 combined years)

- Age-adjusted rates of hospitalizations related to suicide attempts were 1.5 times higher among females compared to males in 2011 and nearly two times higher among females compared to males in 2016. Hospitalizations related to suicide attempts were higher among those aged 15 to 44 years, with the highest rates being among Oklahomans aged 15 to 24 years (2014-2016). (Source: Oklahoma Discharge Public Use Data file, Health Care

Information Division, Oklahoma State Department of Health)

- Approximately 144,000 Oklahoma adults reported having had a serious mental illness in the past year (2016-2017). There was a statistically significant increase in the prevalence of serious mental illness in the 18-25 year age group from 2008-2009 to 2016-2017 ($p<0.05$). (Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health)

- Approximately 1 in 4 Oklahomans aged 18-25 (100,000) and 1 in 5 aged 26 and older (478,000) reported experiencing a mental illness in the past year (2016-2017 annual average). There was not a statistically significant change from 2008-2009 to 2016-2017 in either age group (Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health)

- According to 2016-2017 estimates, approximately 1 in 15 (224,000) Oklahoma and U.S. (16.9 million) adults reported having had a major depressive episode in the past year (Figure 76; Table 48). (Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015 and 2016)

- The percentage of youth aged 12-17 years who reported experiencing a major depressive disorder in the past year increased from 8.0% in 2008-2009 to 13.9% in 2016-2017, which was a statistically significant change (Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health)

- Oklahoma female high school students were significantly more likely than males to have felt so sad or hopeless almost every day for 2 or more weeks in a row so that they stopped doing some usual activities during the twelve months before the survey at 43.9% and 20.1%, respectively ($p<0.05$). (Source: Youth Risk Behavior Survey)

- The percentage of Oklahoma students who seriously considered attempting suicide during the 12 months before the survey has seen no statistically significant change over the last 14 years with 15.4% in 2003 and 19.1% in 2017. Differences were observed among Oklahoma students by gender as females were more likely than males to have seriously considered attempting suicide during the 12 months before the survey at 27.8% and 10.9%, respectively ($p<.05$). (Source: Youth Risk Behavior Survey)

- The percentage of Oklahoma high school students who made a plan about how they would attempt suicide during the 12 months before the survey has seen no statistically significant change over the last 14 years with 13.3% in 2003 and 13.4% in 2017. (Source: Youth Risk Behavior Survey).

- Differences among Oklahoma high school students were observed by gender as females were significantly more likely than males to have made a plan about how they would attempt suicide during the 12 months before the survey at 18.6% and 8.6%, respectively ($p<.05$) (Source: Youth Risk Behavior Survey).

EXECUTIVE SUMMARY

- The percentage of Oklahoma high school students who attempted suicide one or more times during the 12 months before the survey has seen no statistically significant change over the last 14 years from 7.0% in 2003 to 11.2% in 2017. Differences among Oklahoma students were observed by gender as females were more likely than males to have attempted suicide one or more times during the 12 months before the survey at 15.7% and 6.2%, respectively (p<.05). (Source: Youth Risk Behavior Survey)

INTRODUCTION

The purpose of this profile is to provide a snapshot of substance misuse and poor mental health in Oklahoma by describing the severity of these issues for the state overall as well as by demographic characteristics. While many other reports from various agencies summarize data from each individual data source in great detail, this profile incorporates pieces from various data sources in order to provide a comprehensive description of the burden of substance misuse and poor mental health in one document.

- Indicators were selected based on recommendations for surveillance of substance misuse and mental health by the Council for State and Territorial Epidemiologists, substance misuse prevention state plan, and other indicators determined to be useful by key leaders for substance misuse planning.
- The most recent data for each indicator was used.
- Due to the problem of racial misclassification of deaths among American Indians, Indian Health Service (IHS)-linked rates were used. See the Appendix for additional information.
- Statistical tests were performed on some types of data indicated by the term "statistically significant."
- Information about the data sources used in this profile is in the Appendix.

VIEW FROM ATOP MT. SCOTT, WICHITA MOUNTAINS, OK

WELCOME *to* OKLAHOMA

OKLAHOMA STATE FLAG

BISON STANDING IN OKLAHOMA TALL GRASS PRAIRIE

BEAVERS BEND STATE PARK, OK

OKLAHOMA STATE FAIR

OKLAHOMA STATE CAPITOL

DOWNTOWN OKLAHOMA CITY, OK

GLASS MOUNTAINS STATE PARK, OK

LONGHORN IN OKLAHOMA STATE PANHANDLE

URBAN-RURAL CLASSIFICATION SCHEME FOR COUNTIES

According to the 2010 United States Census, Oklahoma ranks 18th in area among the 50 states and spans over 68,000 square miles.[1] Oklahoma's population in 2017 was 3,930,864.[1] The state is comprised of 77 counties; there are 5 metropolitan statistical areas (MSA), 16 micropolitan statistical areas, and 4 combined statistical areas.[2]

Classification Scheme Definitions according to the National Center for Health Statistics.[3]

METROPOLITAN COUNTIES:

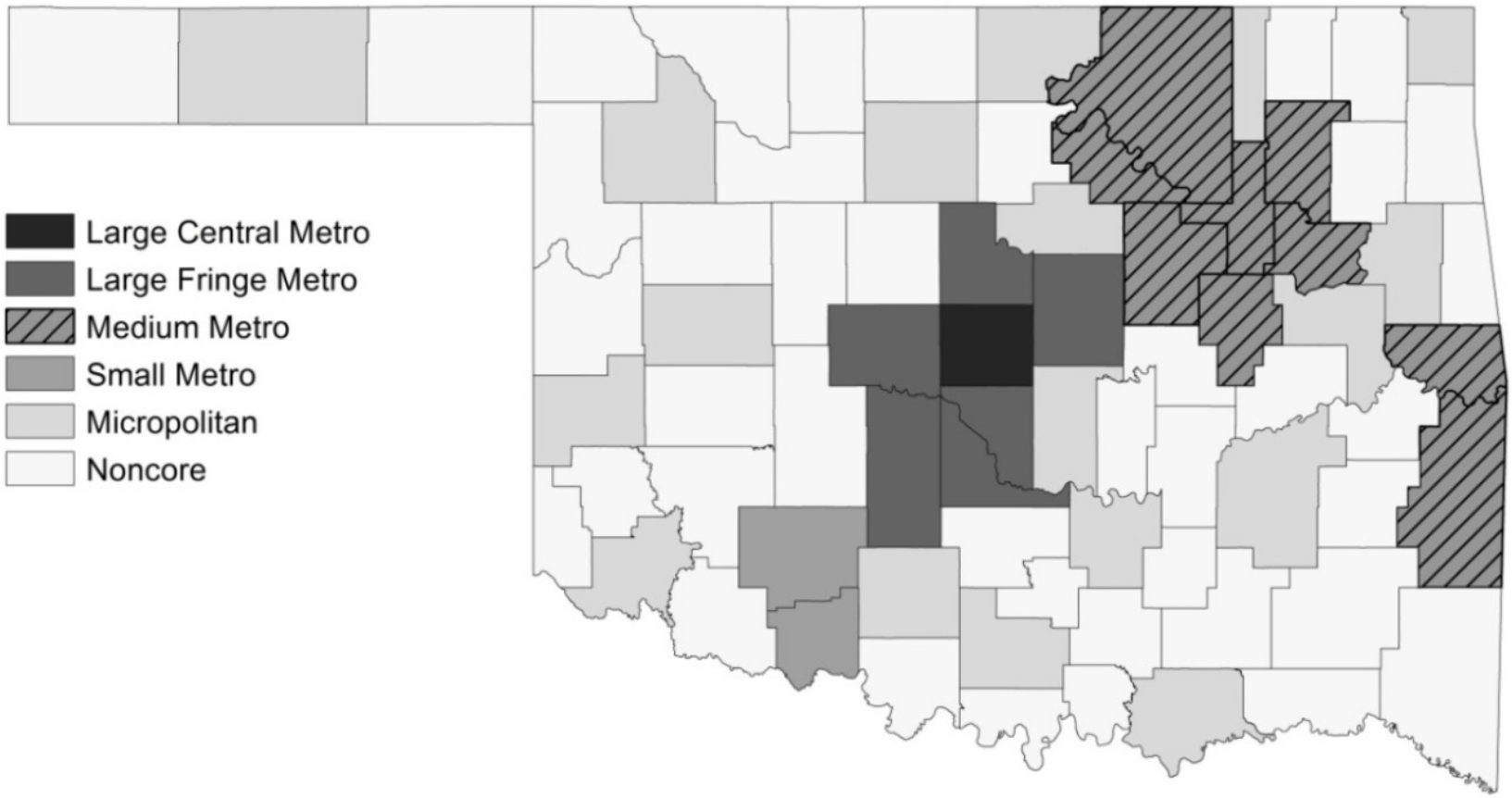
A. Large central metro counties: Counties in MSA of 1 million population that: 1) contain the entire population of the largest principal city of the MSA, or 2) are completely contained within the largest principal city of the MSA, or 3) contain at least 250,000 residents of any principal city in the MSA.
B. Large fringe metro counties: Counties in MSAs of 1 million or more population that do not qualify as large central metro counties.
C. Medium metro counties: Counties in MSAs of populations of 250,000 to 999,999.
D. Small metro: Counties in MSAs of populations less than 250,000.

NONMETROPOLITAN COUNTIES:

A. Micropolitan counties: Counties in micropolitan statistical area.
B. Noncore counties: Nonmetropolitan counties that do not qualify as micropolitan counties.

URBAN-RURAL CLASSIFICATION SCHEME FOR COUNTIES

FIGURE 1. 2013 URBAN-RURAL CLASSIFICATION SCHEME FOR COUNTIES



1. U.S. Census Bureau. (2018). QuickFacts Oklahoma. Retrieved from https://www.census.gov/quickfacts/ok
2. U.S. Census Bureau. (August 2017). Core based statistical areas (CBSAs), metropolitan divisions, and combined statistical areas (CSAs). [Data File]. Retrieved from https://www.census.gov/geographies/reference-files/time-series/demo/metro-micro/delineation-files.html
3. Ingram DD, Franco SJ. 2013 NCHS Urban-Rural Classification Scheme for Counties. Vital Health Stat 2(166). 2014. Retrieved from https://www.cdc.gov/nchs/data_access/urban_rural.htm.

CHARACTERISTICS OF THE OKLAHOMA AND U.S. POPULATIONS

In 2017, Oklahoma's population of American Indian/Alaska Natives alone was 9.2% while 10.6% were Hispanic (Table 1). Oklahoma is home to 38 federally recognized tribes, each with its own unique form of government, culture, and values. With three military bases in the state, Oklahoma is also home to 286,926 veterans, 7.5% of the state's population (Table 1).

Oklahoma's per capita income is $25,628 with a median household income of $48,038. The percentage of persons below poverty level is 16.3%, and 16.1% of Oklahomans younger than 65 years do not have health insurance (Table 1).

TABLE 1. CHARACTERISTICS OF THE OKLAHOMA AND U.S. POPULATIONS*

Characteristic	Oklahoma	U.S.
Total Population[1]	3,930,864	325,719,178
Population per square mile, 2010[2]	54.7	87.4
Percent under 18 years[1]	24.4%	22.6%
Percent 65 years and older[1]	15.3%	15.6%
Percent female[1]	50.5%	50.8%
Percent White alone[1]	74.3%	76.6%
Percent Black or African American alone[1]	7.8%	13.4%
Percent American Indian and Alaska Native alone[1]	9.2%	1.3%
Percent Asian alone[1]	2.3%	5.8%
Percent Native Hawaiian and Other Pacific Islander alone[1]	0.2%	0.2%
Percent Two or More Races[1]	6.1%	2.7%
Percent Hispanic or Latino[1]	10.6%	18.1%
Percent White alone, not Hispanic or Latino[1]	65.7%	60.7%
Number of veterans[3]	286,926	19,535,341
Percent of persons aged 5 years and older living in household where language other than English is spoken[3]	10.0%	21.1%

CHARACTERISTICS OF THE OKLAHOMA AND U.S. POPULATIONS

Percent high school graduate or higher among persons aged 25 and older[3]	87.3%	87.0%
Percent persons aged 25 and older with Bachelor's degree or higher[3]	24.5%	30.3%
Median household income (in 2015 dollars)[3]	$48,038	$55,322
Per capita income in past 12 months (in 2015 dollars)[3]	$25,628	$29,829
Percent persons in poverty[4]	16.3%	12.3%
Percent persons under age 65 years without health insurance[4]	16.1%	10.2%

*Comparisons between geographic areas cannot be made for estimates related to age, gender, race, ethnicity, poverty, and health insurance status due to methodological differences that may exist between data sources.
Data are from the U.S. Census QuickFacts. The following are the specific data sources:

1. U.S. 2017 Population Estimates
2. U.S. 2010 Census
3. U.S. Census Bureau American Community Survey (ACS) and Puerto Rico Community Survey (PRCS), 2012-2016 5-Year Estimates
4. Oklahoma data: U.S. Census Bureau American Community Survey (ACS), 2017 one-year estimates; U.S. data: U.S. Census Bureau Current Population Survey, Annual Social and Economic Supplement (CPS ASEC)

ALCOHOL CONSEQUENCES & CONSUMPTION

CHRONIC LIVER DISEASE AND CIRRHOSIS DEATHS

Heavy drinking can lead to a variety of problems with the liver.[4] **Approximately 5,600 Oklahomans died from chronic liver disease from 2008 to 2017 (Table 2).** Oklahoma's age-adjusted chronic liver disease death rate has remained higher than the U.S. rate over the past decade. Oklahoma's 2017 rate was 38% higher than the U.S. rate (Figure 2).

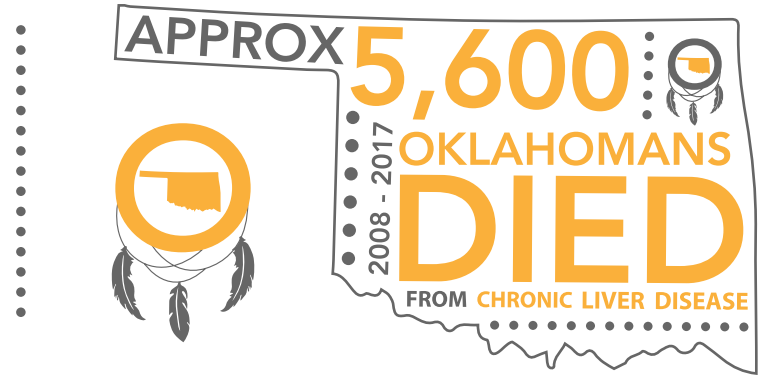
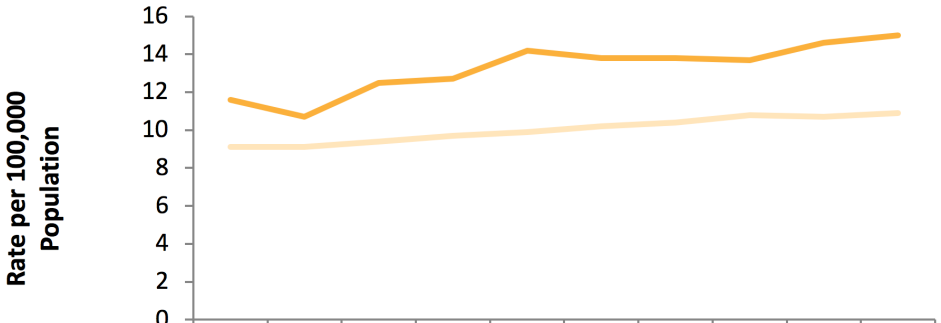


FIGURE 2. AGE-ADJUSTED CHRONIC LIVER DISEASE AND CIRRHOSIS DEATH RATES PER 100,000, OKLAHOMA AND THE U.S, 2008-2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Oklahoma	11.6	10.7	12.5	12.7	14.2	13.8	13.8	13.7	14.6	15.0
U.S.	9.1	9.1	9.4	9.7	9.9	10.2	10.4	10.8	10.7	10.9

Source: CDC WONDER Multiple Cause of Death File, ICD-10 codes: K70, K73-K74

TABLE 2. NUMBER OF DEATHS FROM CHRONIC LIVER DISEASE AND CIRRHOSIS, OKLAHOMA AND THE U.S., 2008-2017

Year	Oklahoma	U.S.
2008	463	29,963
2009	433	30,558
2010	501	31,903
2011	527	33,642
2012	597	34,979
2013	582	36,427
2014	589	38,170
2015	597	40,326
2016	640	40,545
2017	670	41,743

Source: CDC WONDER Multiple Cause of Death File, ICD-10 codes: K70, K73-K74

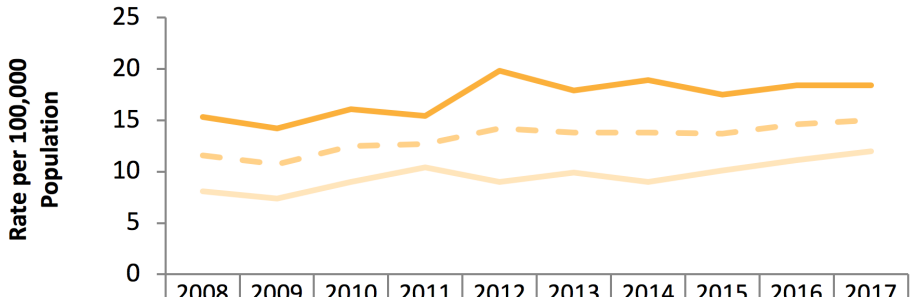
4. Department of Health and Human Services, National Institute on Alcohol Abuse and Alcoholism. Beyond Hangovers Understanding Alcohol's Impact on Your Health. Retrieved from https://www.niaaa.nih.gov/alcohol-health/alcohols-effects-body

ALCOHOL CONSEQUENCES & CONSUMPTION

CHRONIC LIVER DISEASE AND CIRRHOSIS DEATHS

The age-adjusted chronic liver disease and cirrhosis death rate among males was 1.9 times as high as the rate among females in 2008 and 1.5 times as high as the female rate in 2017 (Figure 3).

FIGURE 3. AGE-ADJUSTED CHRONIC LIVER DISEASE AND CIRRHOSIS DEATH RATES PER 100,000 BY GENDER, OKLAHOMA, 2008-2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
All	11.6	10.7	12.5	12.7	14.2	13.8	13.8	13.7	14.6	15
Male	15.3	14.2	16.1	15.4	19.8	17.9	18.9	17.5	18.4	18.4
Female	8.1	7.4	9.0	10.4	9.0	9.9	9.0	10.1	11.1	12.0

Source: CDC WONDER Multiple Cause of Death File, ICD-10 codes: K70, K73-K74

TABLE 3. NUMBER OF DEATHS FROM LIVER DISEASE AND CIRRHOSIS BY GENDER,OKLAHOMA, 2008-2017

Year	Male	Female	Total
2008	294	169	463
2009	279	154	433
2010	318	183	501
2011	304	223	527
2012	402	195	597
2013	369	213	582
2014	386	203	589
2015	373	224	597
2016	389	251	640
2017	400	270	670

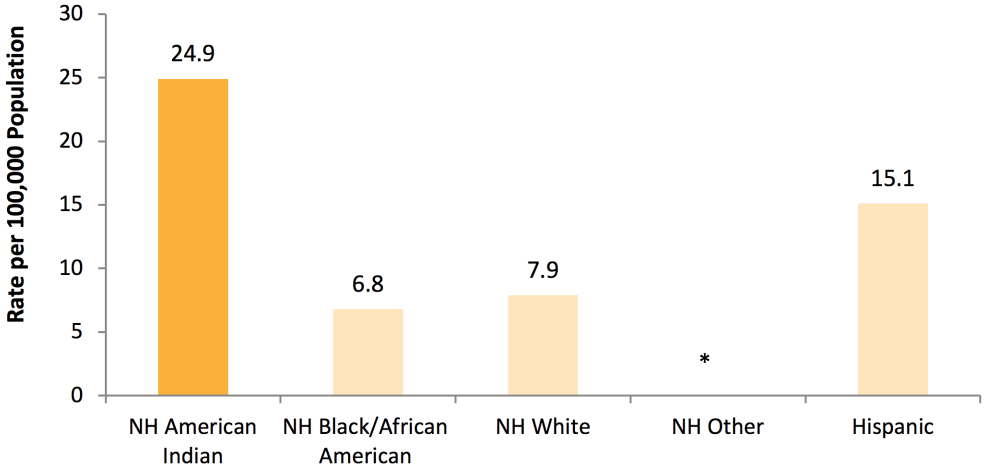
Source: CDC WONDER Multiple Cause of Death File, ICD-10 codes: K70, K73-K74

IHS-LINKED DEATH RATE 3.2X AS HIGH AMONG AMERICAN INDIANS TO NON-HISPANIC WHITES

CHRONIC LIVER DISEASE AND CIRRHOSIS DEATHS

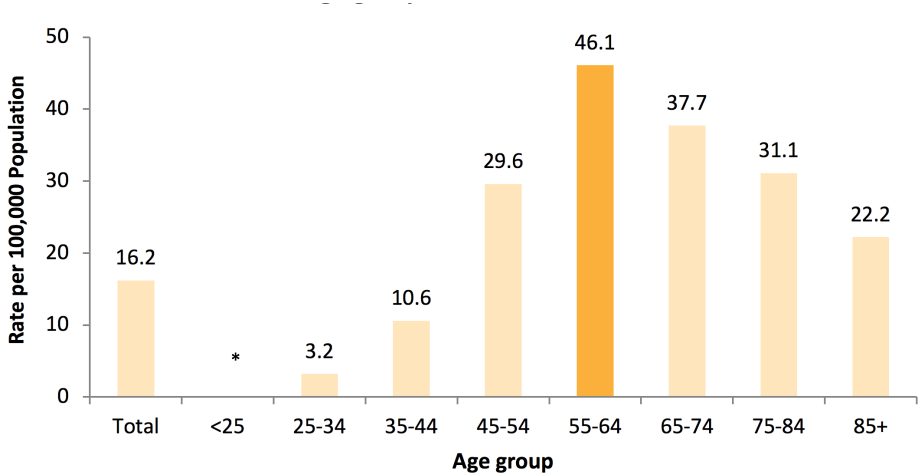
The Indian Health Service (IHS)-linked death rate was 3.2 times as high among American Indians compared to non-Hispanic Whites (Figure 4). The age-adjusted chronic liver disease and cirrhosis death rate peaked in the 55-64 year age group before decreasing by 18% in the 65-74 year age group (Figure 5).

FIGURE 4. AGE-ADJUSTED CHRONIC LIVER DISEASE AND CIRRHOSIS DEATH RATES PER 100,000 BY IHS-LINKED RACE AND ETHNICITY, OKLAHOMA, 2013-2015



NH: non-Hispanic
Source: Oklahoma Vital Statistics available on OK2SHARE
IHS-linked rates were used to account for racial misclassification among American Indians. Additional information about IHS-linked rates can is in the data sources and methods section.

FIGURE 5. DEATH RATES FROM LIVER DISEASE AND CIRRHOSIS PER 100,000 BY AGE GROUP, OKLAHOMA, 2015-2017



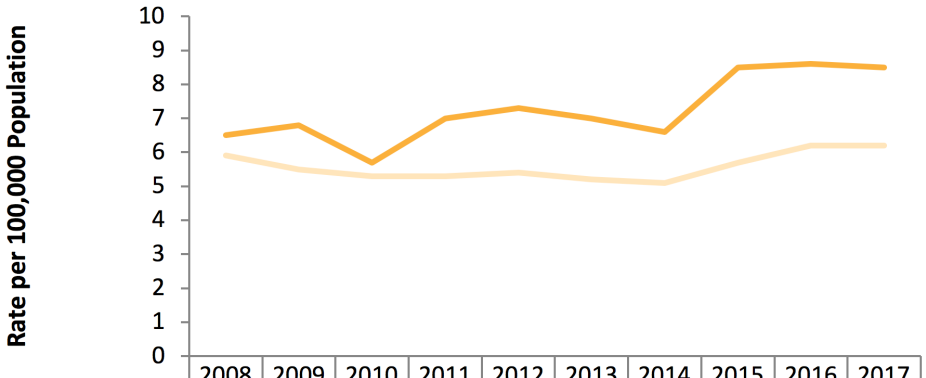
*Suppressed (fewer than 5 deaths)
Source: CDC WONDER Multiple Cause of Death File, ICD-10 codes: K70, K73-K74

ALCOHOL CONSEQUENCES & CONSUMPTION

HOMICIDE

According to estimates from the Centers for Disease Control and Prevention, approximately 47% of homicides in Oklahoma and in the U.S. are attributable to alcohol.[5] There was an average of 270 homicides per year in Oklahoma and 17,246 in the U.S. from 2008 to 2017 (Table 4). The age-adjusted homicide rate was 37% higher in Oklahoma than in the U.S. in 2017 (Figure 6).

FIGURE 6. AGE-ADJUSTED HOMICIDE RATES PER 100,000, OKLAHOMA AND THE U.S., 2008-2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Oklahoma	6.5	6.8	5.7	7.0	7.3	7.0	6.6	8.5	8.6	8.5
U.S.	5.9	5.5	5.3	5.3	5.4	5.2	5.1	5.7	6.2	6.2

Source: CDC WONDER Multiple Cause of Death File, ICD-10 codes: X85-Y09, Y87.1

TABLE 4. NUMBER OF HOMICIDES, OKLAHOMA AND THE U.S., 2008-2017

Year	Oklahoma	U.S.
2008	230	17,826
2009	248	16,799
2010	214	16,259
2011	261	16,238
2012	270	16,688
2013	258	16,118
2014	250	15,872
2015	324	17,788
2016	322	19,362
2017	318	19,508

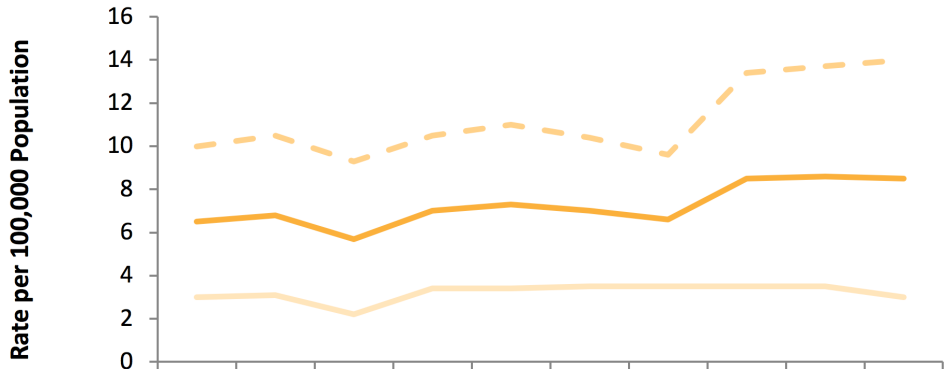
Source: CDC WONDER Multiple Cause of Death File, ICD-10 codes: X85-Y09, Y87.1

5. Centers for Disease Control and Prevention. Averaged Alcohol-Attributable Fractions – Excessive Alcohol Use. Queried from Alcohol-Related Disease Impact (ARDI) Application. Retrieved from https://nccd.cdc.gov/DPH_ARDI

HOMICIDE

The age-adjusted homicide rate among males remained relatively steady until 2015, when it increased by 40% from the 2014 rate, while the female rate remained relatively steady except for a drop in 2010. The age-adjusted homicide death rate among males was 4.7 times the rate among females in 2017. (Figure 7).

FIGURE 7. AGE-ADJUSTED HOMICIDE RATES PER 100,000 BY GENDER, OKLAHOMA, 2008-2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total	6.5	6.8	5.7	7.0	7.3	7.0	6.6	8.5	8.6	8.5
Male	10.0	10.5	9.3	10.5	11.0	10.4	9.6	13.4	13.7	14.0
Female	3.0	3.1	2.2	3.4	3.4	3.5	3.5	3.5	3.5	3.0

Source: CDC WONDER Multiple Cause of Death File, ICD-10 codes: X85-Y09, Y87.1

TABLE 5. NUMBER OF HOMICIDES BY GENDER, OKLAHOMA, 2008-2017

Year	Male	Female	Total
2008	179	51	230
2009	192	56	248
2010	174	40	214
2011	195	66	261
2012	206	64	270
2013	192	66	258
2014	183	67	250
2015	257	67	324
2016	255	67	322
2017	261	57	318

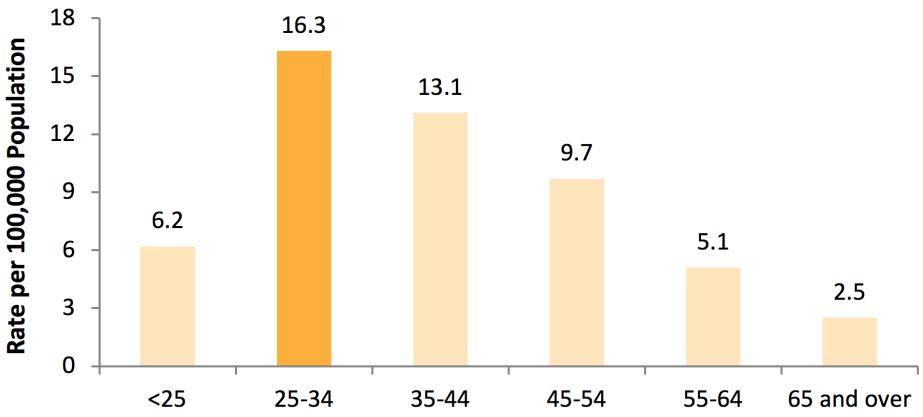
Source: CDC WONDER Multiple Cause of Death File, ICD-10 codes: X85-Y09, Y87.1

ALCOHOL CONSEQUENCES & CONSUMPTION

HOMICIDE

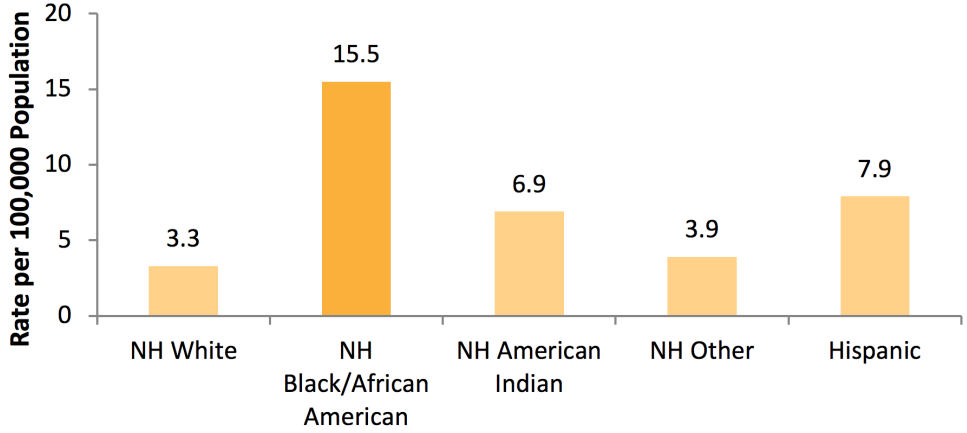
The homicide rate was highest in the 25-34 year age group and then decreased as the age group increased (Figure 8). The homicide among non-Hispanic Blacks/African Americans was 4.7 times the rate of non-Hispanic Whites (Figure 9).

FIGURE 8. HOMICIDE RATE BY AGE GROUP, OKLAHOMA, 2015-2017



Source: CDC WONDER Multiple Cause of Death File, ICD-10 codes: X85-Y09, Y87.1

FIGURE 9. AGE-ADJUSTED HOMICIDE RATE BY IHS-LINKED RACE AND HISPANIC ORIGIN, OKLAHOMA, 2013-2015

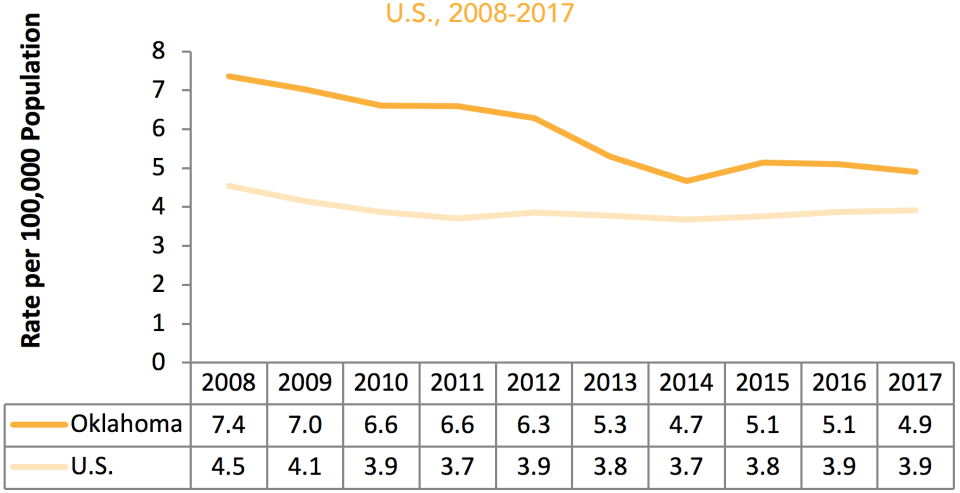


NH: Non-Hispanic
Source: Oklahoma Vital Statistics available on OK2SHARE
IHS-linked rates were used to account for racial misclassification among American Indians. Additional information about IHS-linked rates can be found in the data sources and methods section.

ALCOHOL-RELATED MOTOR VEHICLE FATALITIES

There were 2,248 fatalities in Oklahoma resulting from motor vehicle crashes that involved alcohol (drivers with a blood alcohol content of 0.01 or higher) from 2008 to 2017 (Table 6). The number of deaths per 100,000 residents decreased in Oklahoma and in the U.S. from 2008 to 2017. The Oklahoma rate remained above the U.S. rate throughout this time period (Figure 10).

FIGURE 10. MOTOR VEHICLE CRASH FATALITIES INVOLVING A DRIVER WITH A BLOOD ALCOHOL CONCENTRATION OF ≥ 0.01, OKLAHOMA AND THE U.S., 2008-2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Oklahoma	7.4	7.0	6.6	6.6	6.3	5.3	4.7	5.1	5.1	4.9
U.S.	4.5	4.1	3.9	3.7	3.9	3.8	3.7	3.8	3.9	3.9

Source: Fatal Analysis Reporting System, National Highway Safety Office, U.S. Department of Tranportation.

TABLE 6. NUMBER OF ALCOHOL-RELATED (BAC 0.01 AND HIGHER) MOTOR VEHICLE CRASH FATALITIES, OKLAHOMA AND THE U.S, 2008-2017

Year	Oklahoma	U.S.
2008	270	13,826
2009	261	12,731
2010	248	11,948
2011	250	11,527
2012	240	12,118
2013	204	11,941
2014	181	11,724
2015	201	12,074
2016	200	12,514
2017	193	12,747

Source: Fatal Analysis Reporting System, National Highway Safety Office, U.S. Department of Transportation.

ALCOHOL CONSEQUENCES & CONSUMPTION

ALCOHOL-RELATED MOTOR VEHICLE FATALITIES

From 2008 to 2017, an average of 32% of motor vehicle crash fatalities in Oklahoma involved a driver with a BAC of ≥ 0.01 compared to an average of 36% in the U.S. The percentage decreased in Oklahoma from 36% in 2008 to 29% in 2017 (Figure 11).

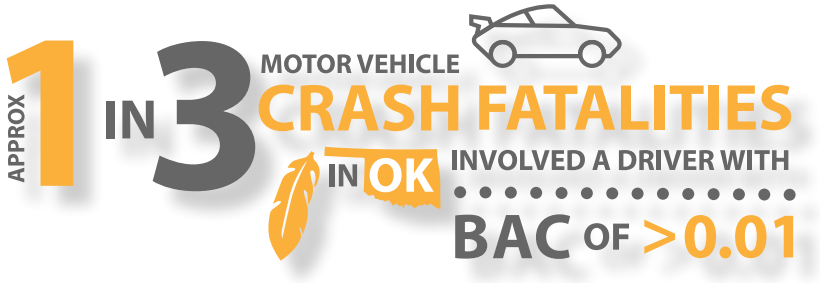
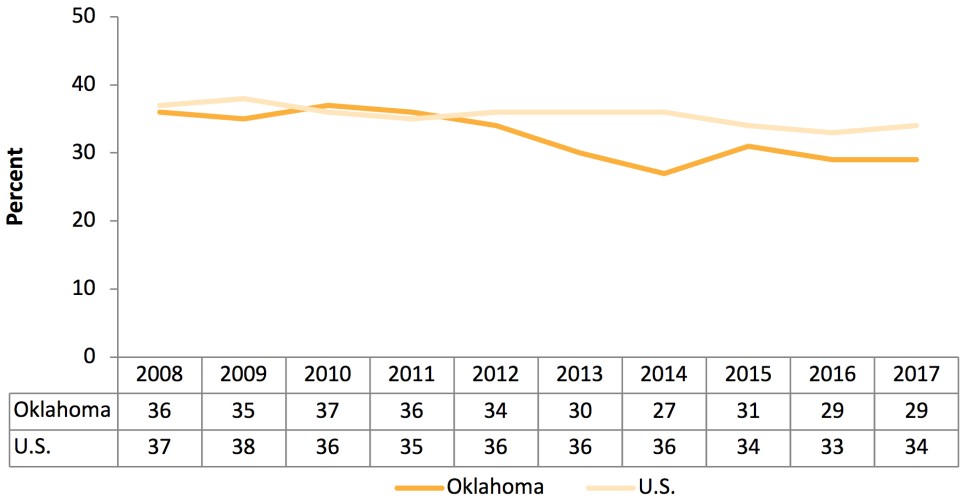


FIGURE 11. PERCENTAGE OF MOTOR VEHICLE FATALITIES INVOLVING A DRIVER WITH A BLOOD ALCOHOL CONCENTRATION OF ≥ 0.01, OKLAHOMA AND THE U.S., 2008-2017



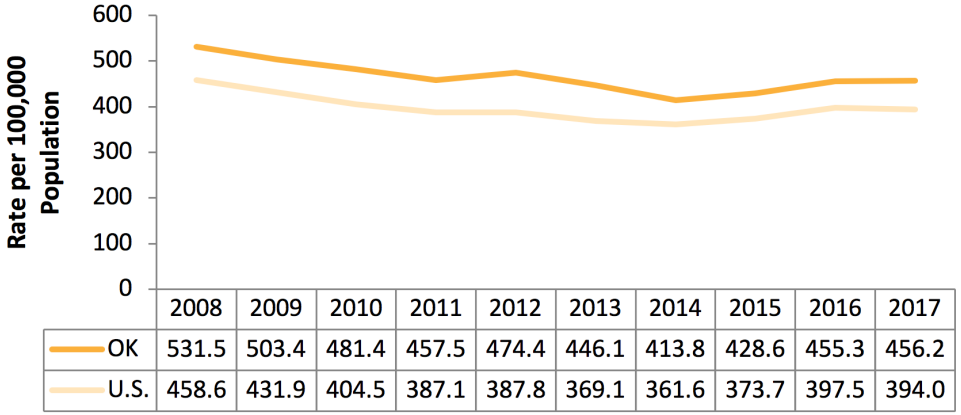
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Oklahoma	36	35	37	36	34	30	27	31	29	29
U.S.	37	38	36	35	36	36	36	34	33	34

Source: Fatal Analysis Reporting System, National Highway Safety Office, U.S. Department of Transportation

VIOLENT CRIME

Alcohol is a factor in about 40% of all violent crimes in the U.S.[6] The FBI's Uniform Crime Reporting (UCR) Program violent crimes include murder and non-negligent manslaughter, rape, robbery, and aggravated assault. There was an average of 17,721 violent crimes in Oklahoma per year from 2008 to 2017 (Table 7). Violent crime rates in Oklahoma fluctuated from 2008 to 2017, dipping to a low of 413.8 in 2014 before increasing to 456.2 per 100,000 residents in 2017. The violent crime rate remained higher in Oklahoma than in the U.S. throughout this time period (Figure 12).

FIGURE 12. VIOLENT CRIME RATES, OKLAHOMA, 2008-2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
OK	531.5	503.4	481.4	457.5	474.4	446.1	413.8	428.6	455.3	456.2
U.S.	458.6	431.9	404.5	387.1	387.8	369.1	361.6	373.7	397.5	394.0

Source: FBI Uniform Crime Reporting Program data accessed from the FBI's Crime Data Explorer

TABLE 7. NUMBER OF VIOLENT CRIMES IN OKLAHOMA AND THE U.S., 2008-2017

Year	Oklahoma	U.S.
2008	19,359	1,394,461
2009	18,560	1,325,896
2010	18,100	1,251,248
2011	17,311	1,206,005
2012	18,102	1,217,057
2013	17,187	1,168,298
2014	16,052	1,153,022
2015	16,746	1,199,310
2016	17,855	1,248,185
2017	17,934	1,283,220

Source: FBI Uniform Crime Reporting Program data accessed from the FBI's Crime Data Explorer

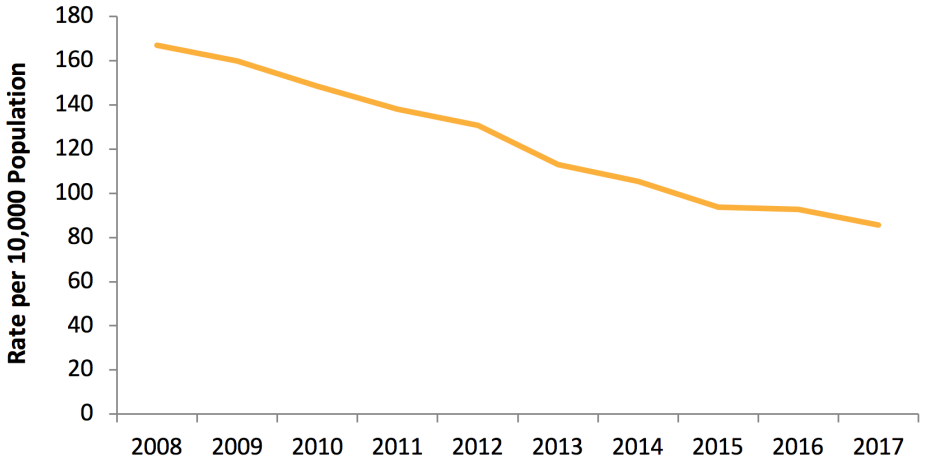
6. National Council on Alcoholism and Drug Dependence, Inc. Alcohol, Drugs and Crime. Retrieved from https://www.ncadd.org/about-addiction/alcohol-drugs-and-crime.

ALCOHOL CONSEQUENCES & CONSUMPTION

ALCOHOL-RELATED ARRESTS

Alcohol-related arrests include driving under the influence, liquor law violations, and drunkenness. The number of alcohol-related arrests per 10,000 Oklahoma adults decreased by 49% from 2008 to 2017 (Figure 13; Table 8).

FIGURE 13. ALCOHOL-RELATED ARRESTS PER 10,000 OKLAHOMA ADULTS AGED 18 YEARS AND OLDER, 2008-2017



Source: Oklahoma State Bureau of Investigation

TABLE 8. NUMBER AND RATE OF ALCOHOL-RELATED ARRESTS AMONG OKLAHOMA ADULTS AGED 18 YEARS AND OLDER, 2008-2017

Year	Number	Rate per 10,000
2008	46,039	166.9
2009	44,660	159.8
2010	41,906	148.5
2011	39,458	138.2
2012	37,606	130.7
2013	32,842	113.1
2014	30,796	105.3
2015	27,671	93.8
2016	27,496	92.8
2017	25,438	85.6

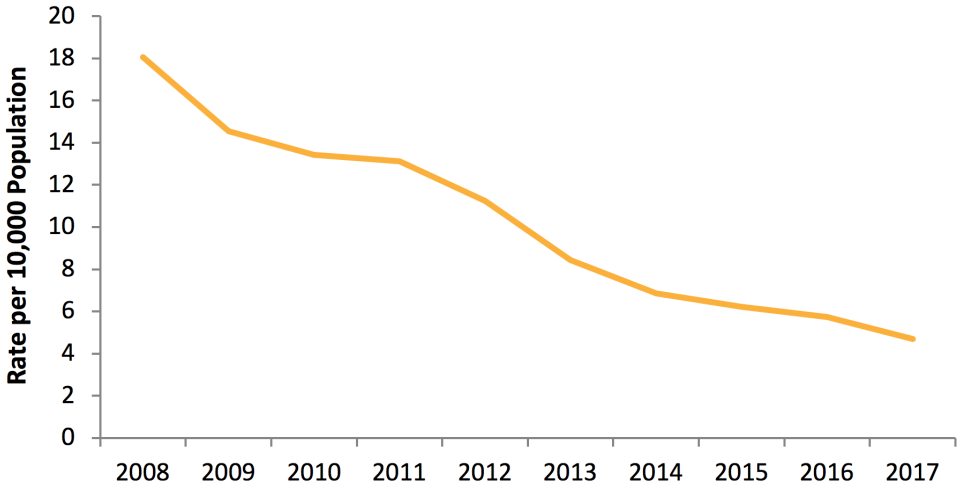
Source: Oklahoma State Bureau of Investigation

25,348 ALCOHOL-RELATED ARRESTS AMONG 18 Y/O IN 2017 IN OK

ALCOHOL-RELATED ARRESTS

The number of alcohol-related arrests among juveniles under age 18 decreased from 1,343 in 2008 to 751 in 2017, while the rate decreased by 74% during this time period (Figure 14; Table 9).

FIGURE 14. ALCOHOL-RELATED ARREST RATES PER 10,000 JUVENILES UNDER AGE 18, 2008-2017



Source: Oklahoma State Bureau of Investigation

TABLE 9. NUMBER AND RATE OF ALCOHOL-RELATED ARRESTS AMONG JUVENILES UNDER AGE 18, OKLAHOMA, 2008-2017

Year	Number	Rate
2008	1,644	18.1
2009	1,343	14.6
2010	1,248	13.4
2011	1,228	13.1
2012	1,053	11.2
2013	799	8.4
2014	653	6.8
2015	597	6.2
2016	551	5.7
2017	451	4.7

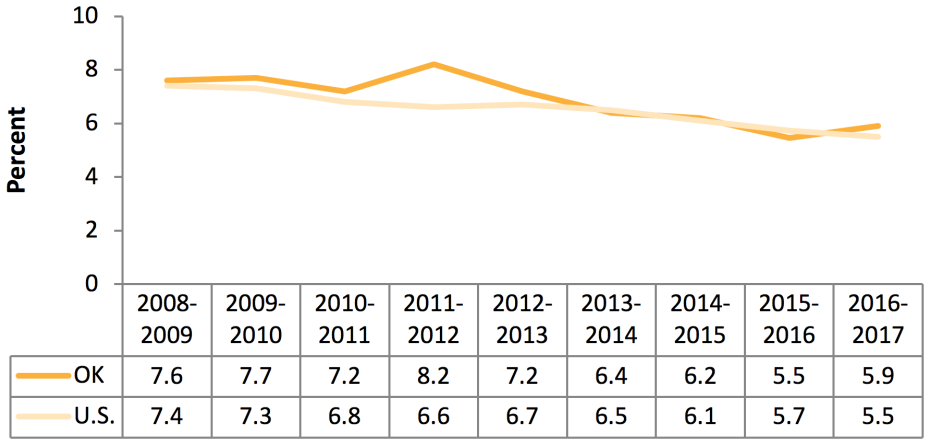
Source: Oklahoma State Bureau of Investigation

ALCOHOL CONSEQUENCES & CONSUMPTION

PAST YEAR ALCOHOL DISORDER

The estimated number of Oklahomans aged 12 years and older with an alcohol use disorder decreased from 223,000 in 2008-2009 to 189,000 in 2016-2017 (Table 10). The percentage of persons aged 12 years and older with alcohol use disorder in the past year decreased significantly from 2008-2009 to 2016-2017 in both Oklahoma and the U.S. ($p<0.05$) (Figure 15).

FIGURE 15. PREVALENCE OF PAST YEAR ALCOHOL USE DISORDER AMONG INDIVIDUALS AGED 12 AND OLDER, OKLAHOMA AND THE U.S., 2008-2009 TO 2016-2017



	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
OK	7.6	7.7	7.2	8.2	7.2	6.4	6.2	5.5	5.9
U.S.	7.4	7.3	6.8	6.6	6.7	6.5	6.1	5.7	5.5

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 10. ESTIMATED NUMBER OF INDIVIDUALS AGED 12 AND OLDER WITH AN ALCOHOL USE DISORDER IN THE PAST YEAR, OKLAHOMA AND THE U.S., 2008-2009 TO 2016-2017 (ANNUAL AVERAGES)

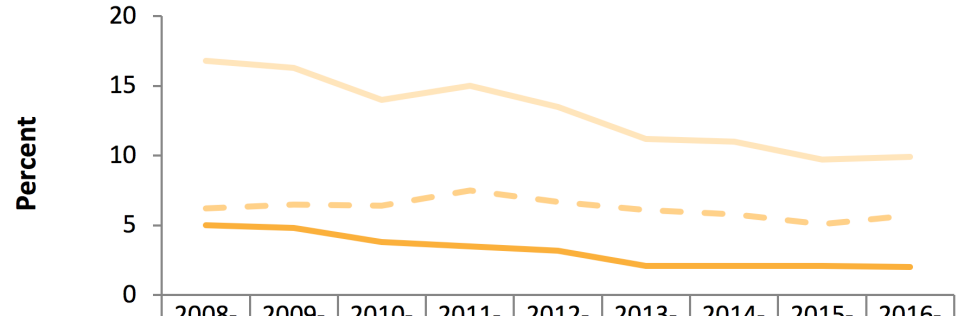
Year	Oklahoma	U.S.
2008-2009	223,000	18,620,000
2009-2010	229,000	18,365,000
2010-2011	218,000	17,320,000
2011-2012	252,000	17,193,000
2012-2013	226,000	17,506,000
2013-2014	200,000	17,147,000
2014-2015	196,000	16,365,000
2015-2016	174,000	15,396,000
2016-2017	189,000	14,781,000

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

PAST YEAR ALCOHOL DISORDER

The estimated number of Oklahomans with an alcohol use disorder decreased in the 12 to 17 and 18 to 25 year age groups (Table 11). Statistically significant decreases were observed in past year alcohol use disorder from 2008-2009 to 2016-2017 among Oklahomans in the 12-17 and 18-25 year age groups ($p<0.05$) (Figure 16). There was no significant decrease in the 26 and older age group. Past year alcohol use disorder among the 18-25 year age group was nearly double that of the 26 and older age group.

FIGURE 16. PREVALENCE OF PAST YEAR ALCOHOL USE DISORDER BY AGE GROUP, OKLAHOMA, 2008-2009 TO 2016-2017



	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
12-17	5.0	4.8	3.8	3.5	3.2	2.1	2.1	2.1	2.0
18-25	16.8	16.3	14.0	15.0	13.5	11.2	11.0	9.7	9.9
26+	6.2	6.5	6.4	7.5	6.7	6.1	5.8	5.1	5.7

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 11. ESTIMATED NUMBER OF RESIDENTS AGED 12 AND OLDER WHO HAD AN ALCOHOL USE DISORDER IN THE PAST YEAR BY AGE GROUP, OKLAHOMA, 2008-2009 TO 2016-2017 (ANNUAL AVERAGES)

Year	12-17	18-25	26 and older
2008-2009	15,000	69,000	140,000
2009-2010	14,000	68,000	147,000
2010-2011	11,000	59,000	147,000
2011-2012	11,000	63,000	178,000
2012-2013	10,000	57,000	159,000
2013-2014	7,000	48,000	146,000
2014-2015	7,000	48,000	142,000
2015-2016	7,000	42,000	126,000
2016-2017	6,000	42,000	141,000

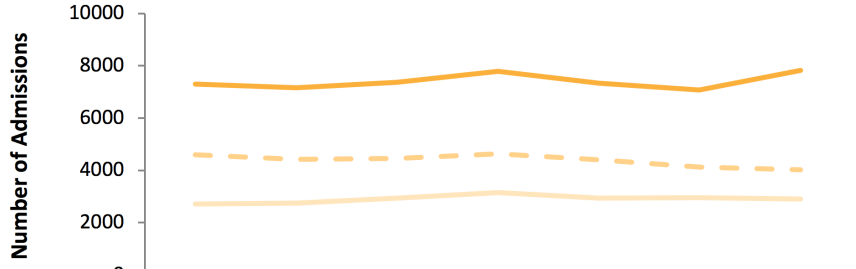
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

ALCOHOL CONSEQUENCES & CONSUMPTION

ALCOHOL-RELATED TREATMENT ADMISSIONS

The number of treatment admissions for alcohol as any drug of choice by the Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS) or Medicaid behavioral health providers increased in fiscal year 2015; however this may have been due to additional providers gaining ODMHSAS certification for substance use disorder treatment. Males accounted for between 51% and 63% of total admissions across the time span of fiscal year 2012 to fiscal year 2018 (Figure 17).

FIGURE 17. NUMBER OF ADMISSIONS FOR TREATMENT BY ODMHSAS OR MEDICAID BEHAVIORAL HEALTH PROVIDERS FOR ALCOHOL AS ONE OF THREE PRIMARY DRUGS OF CHOICE BY GENDER, OKLAHOMA, FISCAL YEAR 2012 TO FISCAL YEAR 2018



	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Male	4,592	4,413	4,446	4,634	4,401	4,122	4,025
Female	2,703	2,740	2,929	3,153	2,939	2,959	2,909
Total	7,295	7,153	7,375	7,787	7,340	7,081	7,817

Source: Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS) Online Query System (OonQues)

NEEDING BUT NOT RECEIVING TREATMENT AT A SPECIALTY FACILITY FOR ALCOHOL USE

There was a change in the way need for treatment at a specialty facility was collected by the National Survey on Drug Use and Health (NSDUH) in 2015; therefore, data collected beginning in 2015 are not comparable to data from prior survey years. Approximately 1 in 20 individuals aged 12 years and older in Oklahoma and the U.S. needed but did not receive treatment for alcohol use at a specialty facility in the past year in 2015-2016 and 2016-2017. The percentage needing treatment was highest in the 18 to 25 year age group (Table 12).

TABLE 12. PERCENTAGE OF INDIVIDUALS NEEDING BUT NOT RECEIVING TREATMENT AT A SPECIALTY FACILITY FOR ALCOHOL USE DISORDER IN THE PAST YEAR BY AGE GROUP, OKLAHOMA AND THE U.S., 2015-2016 AND 2016-2017

Age Group	Oklahoma		U.S.	
	2015-2016	2016-2017	2015-2016	2016-2017
12 and older	5.0	5.3	5.5	5.2
12-17	2.1	1.9	2.2	1.8
18-25	9.4	9.4	10.5	10.0
26 and older	4.7	5.0	5.1	4.9

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 13. ESTIMATED NUMBER OF PERSONS NEEDING BUT NOT RECEIVING TREATMENT AT A SPECIALTY FACILITY FOR ALCOHOL USE IN THE PAST YEAR BY AGE GROUP, 2015-2016 AND 2016-2017

Age Group	Oklahoma		U.S.	
	2015-2016	2016-2017	2015-2016	2016-2017
12 and older	161,000	169,000	14,712,000	14,133,000
12-17	6,000	6,000	534,000	447,000
18-25	40,000	40,000	3,637,000	3,442,000
26 and older	114,000	124,000	10,541,000	10,244,000

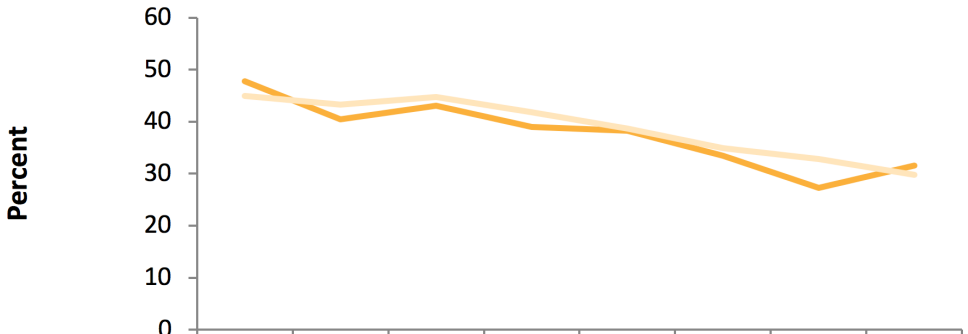
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

ALCOHOL CONSUMPTION

YOUTH (9TH-12TH GRADERS) PAST 30 DAY ALCOHOL USE

The percentage of Oklahoma high school students that had at least one drink of alcohol during the 30 days before the survey has decreased significantly from 47.8% in 2003 to 31.6% in 2017 ($p<.05$). Past 30 day alcohol use has also decreased significantly among U.S. students from 44.9% in 2003 to 29.8% in 2017 (Figure 18). **No differences among Oklahoma students were observed by gender, grade, or race/ethnicity for the percentage of students who had at least one drink of alcohol during the 30 days before the survey.**

FIGURE 18. PERCENTAGE OF HIGH SCHOOL STUDENTS WHO USED ALCOHOL IN THE PAST 30 DAYS, OKLAHOMA AND THE U.S., 2003-2017



	2003	2005	2007	2009	2011	2013	2015	2017
Oklahoma	47.8	40.5	43.1	39.0	38.3	33.4	27.3	31.6
U.S.	44.9	43.3	44.7	41.8	38.7	34.9	32.8	29.8

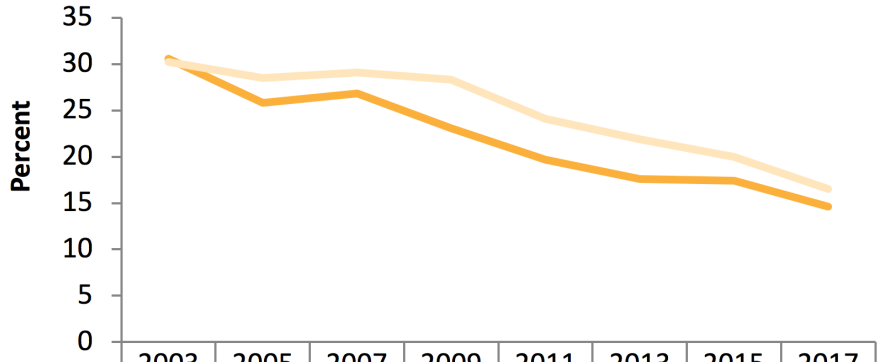
Source: Youth Risk Behavior Survey

ALCOHOL CONSUMPTION

YOUTH (9TH-12TH GRADERS) RIDING WITH A DRINKING DRIVER

One in seven Oklahoma students (14.6%) in 2017 reported that they rode with a driver who had been drinking alcohol (during the 30 days before the survey), which is a statistically significant decrease from 30.6% in 2003 ($p<.05$). A statistically significant decrease from 30.2% to 16.5% was also observed in U.S. students (Figure 19). No differences were observed by gender, grade, or race/ethnicity for the percentage of Oklahoma students who rode with a driver who had been drinking alcohol in 2017.

FIGURE 19. PERCENTAGE OF HIGH SCHOOL STUDENTS WHO RODE WITH A DRIVER WHO HAD BEEN DRINKING ALCOHOL, OKLAHOMA AND THE U.S., 2003-2017



	2003	2005	2007	2009	2011	2013	2015	2017
Oklahoma	30.6	25.8	26.8	23.1	19.7	17.6	17.4	14.6
U.S.	30.2	28.5	29.1	28.3	24.1	21.9	20	16.5

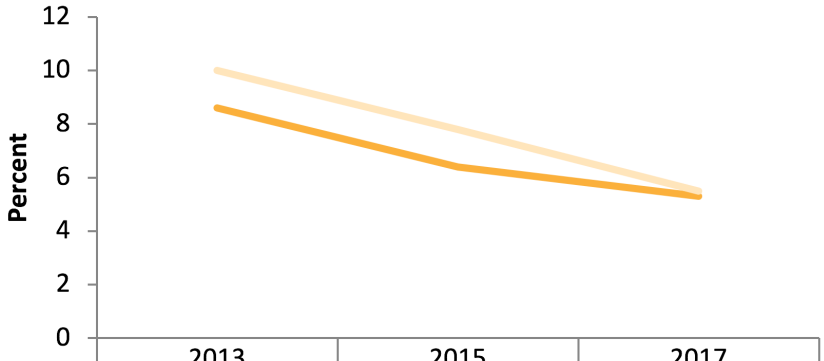
Source: Youth Risk Behavior Survey

ALCOHOL CONSUMPTION

YOUTH (9TH-12TH GRADERS) DRIVING AFTER DRINKING ALCOHOL

Among students who had driven a vehicle during the 30 days before the survey, the percentage of Oklahoma students who drove after they had been drinking alcohol decreased significantly from 8.6% in 2013 to 5.3% in 2017 ($p<.05$). A significant decrease was also observed among U.S. students from 10.0% to 5.5% (Figure 20). No differences were observed by gender, grade, or race/ethnicity for the percentage of Oklahoma students who drove a vehicle after they had been drinking alcohol in 2017.

FIGURE 20. PERCENTAGE OF HIGH SCHOOL STUDENTS WHO DROVE AFTER DRINKING ALCOHOL DURING THE 30 DAYS BEFORE THE SURVEY, OKLAHOMA AND THE U.S., 2013-2017



	2013	2015	2017
Oklahoma	8.6	6.4	5.3
U.S.	10.0	7.8	5.5

Source: Youth Risk Behavior Survey

IN PAST 30 DAYS ALCOHOL USE AMONG HIGH SCHOOL STUDENTS DECREASED FROM 47.8% IN 2013 TO 31.6% IN 2017 IN OK

ALCOHOL CONSUMPTION

ALCOHOL USE BEFORE AND DURING PREGNANCY

Data from the 2012-2015 Pregnancy Risk Assessment and Monitoring System (PRAMS) show that approximately half of Oklahoma women drank alcohol during the three months prior to pregnancy while approximately 1 in 20 drank during the last three months of pregnancy. The highest percentages of alcohol use during the three months prior to pregnancy as well as alcohol use during the last three months of pregnancy were found in women aged 20 and older, Non-Hispanic White women, women with greater than a high school education, married women, and women with a household income of $52,001 or more (Table 14).

TABLE 14. ALCOHOL USE DURING THE 3 MONTHS BEFORE PREGNANCY AND DURING THE LAST 3 MONTHS OF PREGNANCY, OKLAHOMA, 2012-2015

Characteristic	Use 3 months before pregnancy (%)	Use during last 3 months of pregnancy (%)
Overall	53.9	5.4
Maternal Age		
< 20 years	35.5	3.7
20-29 years	57.3	5.0
>=30 years	52.4	6.7
Race and Hispanic Origin		
NH White	59.7	5.8
NH Black/African American	47.5	*
NH American Indian	54.4	*
NH Other	51.4	4.0
Hispanic	29.5	4.0

ALCOHOL CONSUMPTION (CON'D)

ALCOHOL USE BEFORE AND DURING PREGNANCY

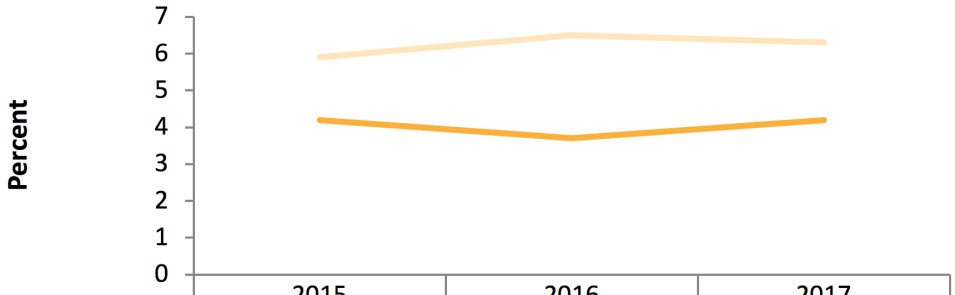
Education		
< High school	31.3	2.7
High school	49.2	4.4
> High school	63.8	6.7
Marital Status		
Married	55.5	5.6
Other	51.5	5.0
Annual Household Income		
<$26,001	46.8	4.4
$26,001-$52,000	55.2	5.5
$52,001 and more	69.7	7.5

*Data suppressed
NH: non-Hispanic
Source: Pregnancy Risk Assessment and Monitoring System

ADULTS (AGED 18 YEARS AND OLDER) HEAVY DRINKING

Excessive alcohol consumption was responsible for 1 out of every 10 deaths among working-age adults (20-64 years old) between 2006 and 2010.[7] Beginning in 2015, the Behavioral Risk Factor Surveillance System (BRFSS) defined heavy drinking as more than 14 drinks per week for adult men and more than 7 drinks per week for adult women. The percentage of Oklahoma adults who engaged in heavy drinking was lower than the U.S. median from 2015 to 2017 (Figure 21). The prevalence of heavy drinking was 1.4 times as high among males compared to females in 2017 (Figure 22).

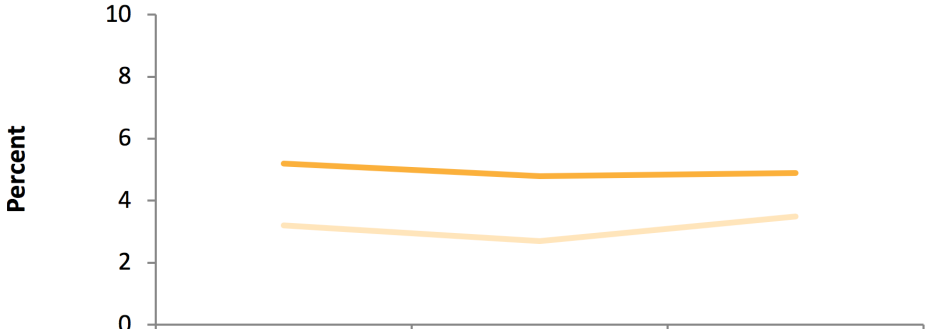
FIGURE 21. PERCENTAGE OF ADULTS AGED 18 YEARS AND OLDER WHO ENGAGED IN HEAVY DRINKING IN THE PAST 30 DAYS, OKLAHOMA AND THE U.S. MEDIAN, 2015-2017



	2015	2016	2017
Oklahoma	4.2	3.7	4.2
U.S.	5.9	6.5	6.3

Source: Behavioral Risk Factor Surveillance System

FIGURE 22. PERCENTAGE OF ADULTS AGED 18 YEARS AND OLDER WHO ENGAGED IN HEAVY DRINKING DURING THE PAST 30 DAYS, BY GENDER, OKLAHOMA, 2015-2017



	2015	2016	2017
Male	5.2	4.8	4.9
Female	3.2	2.7	3.5

Source: Behavioral Risk Factor Surveillance System

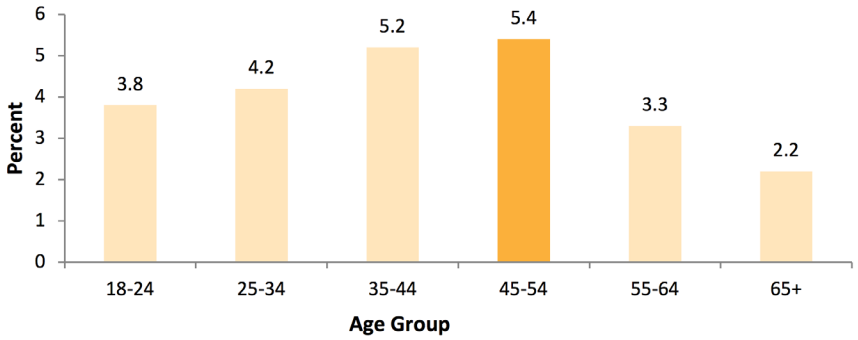
7. Centers for Disease Control and Prevention. (2018). Alcohol Use and Your Health [Fact sheet]. Retrieved from https://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm.

ALCOHOL CONSEQUENCES & CONSUMPTION

ADULTS (AGED 18 YEARS AND OLDER) HEAVY DRINKING

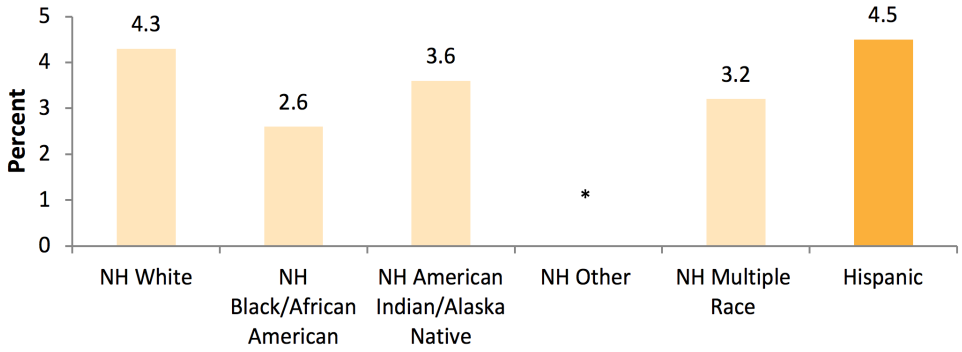
The percentage of adults engaging in heavy drinking increased with increasing age group until the 45-54 year age group before dropping by 39% in the 55-64 year age group (Figure 23). The prevalence of past 30 day heavy drinking was highest among Hispanics and non-Hispanic Whites (Figure 24).

FIGURE 23. PERCENTAGE OF ADULTS AGED 18 YEARS AND OLDER WHO ENGAGED IN HEAVY DRINKING IN THE PAST 30 DAYS BY AGE GROUP, OKLAHOMA, 2015-2017



Source: Behavioral Risk Factor Surveillance System

FIGURE 24. PERCENTAGE OF ADULTS WHO ENGAGED IN HEAVY DRINKING DURING THE PAST 30 DAYS BY RACE/ETHNICITY, OKLAHOMA, 2015-2017



Source: Behavioral Risk Factor Surveillance System
NH=non-Hispanic
*Suppressed (cell size less than 5 or total < 50)

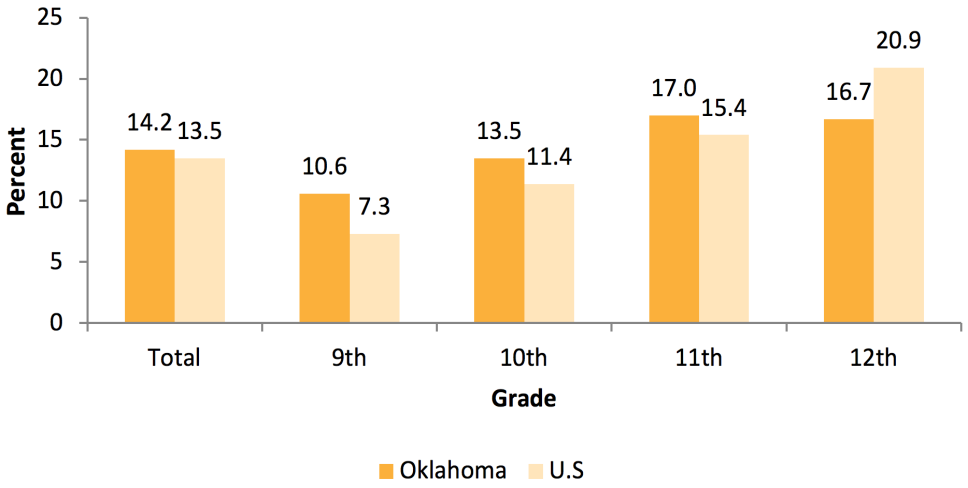
YOUTH (9TH-12TH GRADERS) BINGE DRINKING

Binge drinking is defined in the 2017 YRBS as four or more drinks of alcohol in a row for females or five or more drinks of alcohol in a row for males, within a couple of hours, on at least 1 day during the 30 days before the survey. This definition is different than in previous YRBS administrations, resulting in 2017 data not being comparable to prior years' data.

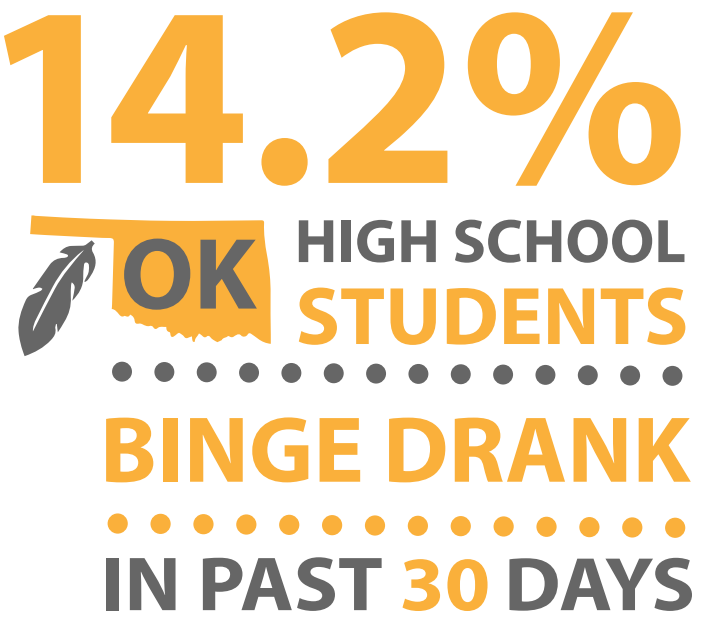
The percentage of students who engaged in binge drinking during the past 30 days was 14.2% in Oklahoma and 13.5% in the U.S.

Differences among Oklahoma high school students were observed by grade for binge drinking as 11th graders (17.0%) were significantly more likely than 9th graders (10.6%) to have engaged in binge drinking during the past 30 days ($p<.05$) (Figure 25).

FIGURE 25. PERCENTAGE OF HIGH SCHOOL STUDENTS WHO ENGAGED IN BINGE DRINKING DURING THE PAST 30 DAYS BY GRADE, OKLAHOMA, 2017



Source: Youth Risk Behavior Survey



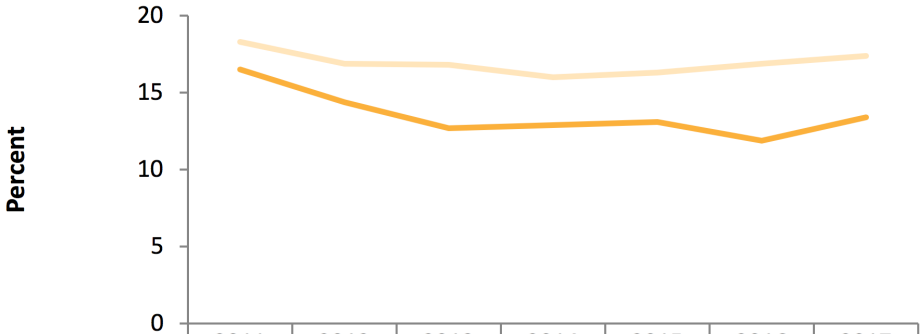
ALCOHOL CONSEQUENCES & CONSUMPTION

ADULT (AGED 18 AND OLDER) BINGE DRINKING

Binge drinking is associated with several poor health issues, including fetal alcohol spectrum disorders; sudden infant death syndrome; chronic diseases and conditions such as high blood pressure, stroke, heart disease, liver disease, and certain cancers; memory and learning problems; and unintentional injuries.[8]

Oklahoma's prevalence of past 30 day binge drinking among adults was lower than the U.S. median from 2011 to 2017 (Figure 26). The prevalence was over twice as high among Oklahoma males than females during this same time period (Figure 27).

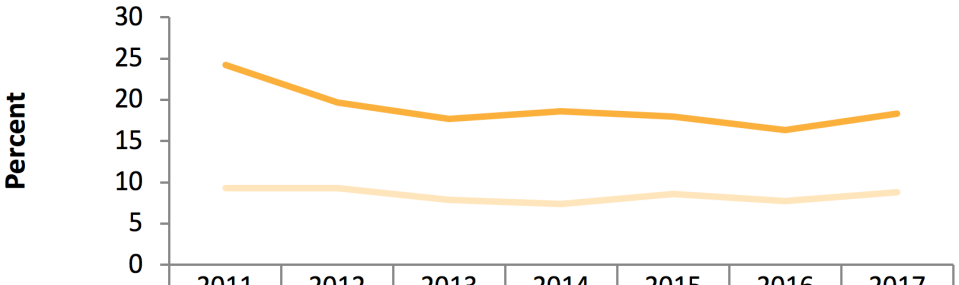
FIGURE 26. PERCENTAGE OF ADULTS AGED 18 AND OLDER WHO ENGAGED IN BINGE DRINKING IN THE PAST 30 DAYS, OKLAHOMA AND THE U.S. MEDIAN, 2011-2017



	2011	2012	2013	2014	2015	2016	2017
Oklahoma	16.5	14.4	12.7	12.9	13.1	11.9	13.4
U.S.	18.3	16.9	16.8	16.0	16.3	16.9	17.4

Source: Behavioral Risk Factor Surveillance System

FIGURE 27. PERCENTAGE OF ADULTS AGED 18 AND OLDER WHO ENGAGED IN BINGE DRINKING IN THE PAST 30 DAYS, BY GENDER, OKLAHOMA, 2011-2017



	2011	2012	2013	2014	2015	2016	2017
Male	24.2	19.7	17.7	18.6	18.0	16.3	18.3
Female	9.3	9.3	7.9	7.4	8.6	7.7	8.8

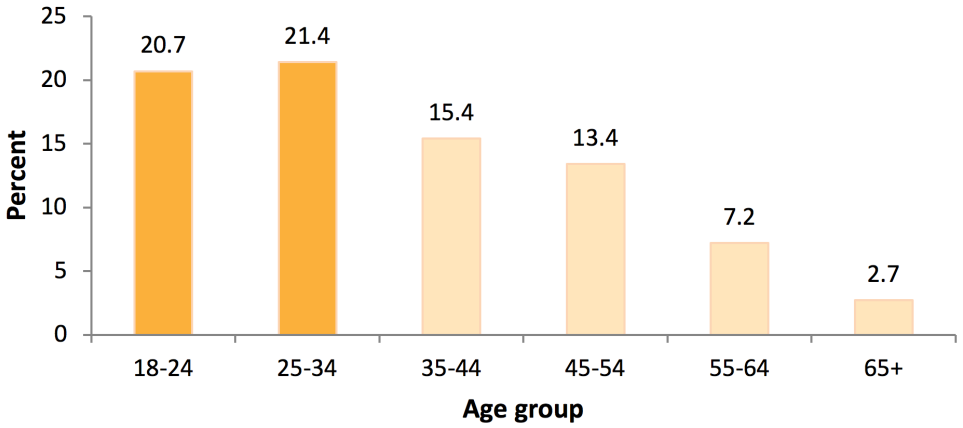
Source: Behavioral Risk Factor Surveillance System

8. Centers for Disease Control and Prevention. (2018). Binge Drinking [Fact sheet]. Retrieved from https://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm.

ADULTS (AGED 18 YEARS AND OLDER) BINGE DRINKING

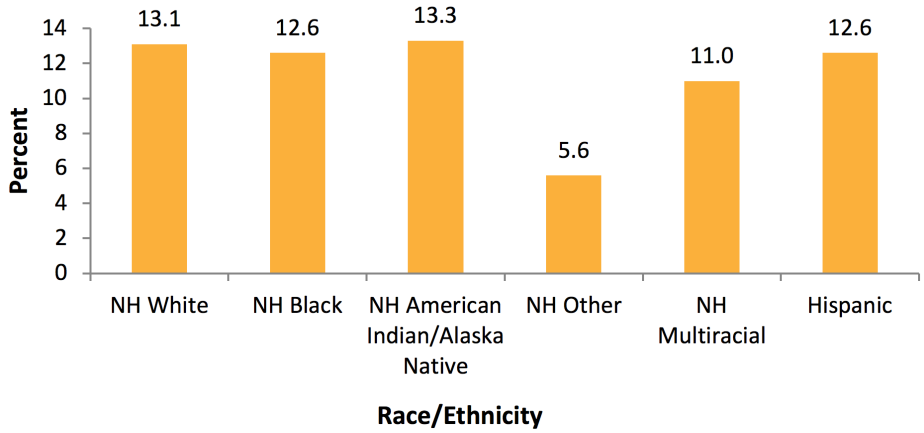
Binge drinking prevalence was highest in adults under age 35 years and then decreased in subsequent age groups (Figure 28). The percentage of adults who engaged in binge drinking ranged from 11%-13% for all racial/ethnic groups except for the other race group, in which the percentage was approximately half the percentage of the other racial/ethnic groups (Figure 29).

FIGURE 28. PERCENTAGE OF ADULTS AGED 18 YEARS AND OLDER WHO ENGAGED IN BINGE DRINKING IN THE PAST 30 DAYS BY AGE GROUP, OKLAHOMA, 2015-2017



Source: Behavioral Risk Factor Surveillance System

FIGURE 29. PERCENTAGE OF ADULTS WHO ENGAGED IN BINGE DRINKING DURING THE PAST 30 DAYS, BY RACE/ETHNICITY, OKLAHOMA, 2015-2017



NH: non-Hispanic
Source: Behavioral Risk Factor Surveillance System

PRESCRIPTION & ILLICIT DRUG CONSEQUENCES & CONSUMPTION

PRESCRIPTION AND ILLICIT DRUG-RELATED CONSEQUENCES

Three types of data are used in this section for drug overdoses:

1. National Vital Statistics System
2. Oklahoma State Department of Health (OSDH), Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System
3. Oklahoma Vital Statistics, IHS-linked deaths

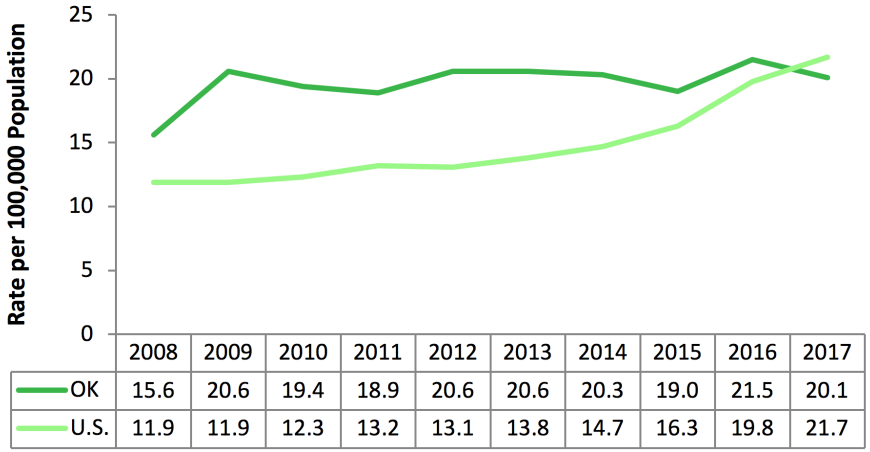
The Injury Prevention Service Fatal Unintentional Poisoning Surveillance System captures data from the full medical examiner report, not relying solely on the cause of death coding; therefore it may pick up additional deaths than what is coded in the National Vital Statistics System. In addition, this database contains data on specific drugs involved in an overdose. However, it does not include overdoses that are intentional or undetermined manner. Therefore, vital statistics data including all intents is also presented. Because of the differences in methodology, it is not appropriate to subtract the deaths from the Fatal Unintentional Poisoning Surveillance System from the deaths from the National Vital Statistics System to determine the number of intentional or undetermined manner drug overdoses. As with the alcohol-related causes of deaths, the IHS-linked deaths and rates are used when reporting deaths by race/ethnicity in order to correct for racial misclassification of American Indians.

DRUG OVERDOSE DEATHS

In 2017, Oklahoma had the 30th highest age-adjusted drug overdose death rate (all intents: intentional, unintentional, undetermined) in the nation, accounting for 775 deaths. Age-adjusted drug overdose death rates were higher in Oklahoma than in the U.S. from 2008 to 2016 before dropping below the U.S. rate in 2017 (Figure 30).

7,391 DRUG OVERDOSE DEATHS 2008-2017

FIGURE 30. AGE-ADJUSTED DRUG OVERDOSE DEATH RATES PER 100,000, OKLAHOMA AND THE U.S., 2008-2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
OK	15.6	20.6	19.4	18.9	20.6	20.6	20.3	19.0	21.5	20.1
U.S.	11.9	11.9	12.3	13.2	13.1	13.8	14.7	16.3	19.8	21.7

CDC WONDER Multiple Cause of Death File, ICD-10 codes: X40-X44, X60-X64, X85, Y10-Y14

TABLE 15. NUMBER OF DRUG OVERDOSES, OKLAHOMA AND THE U.S., 2008-2017

Year	Oklahoma	U.S.
2008	564	36,450
2009	756	37,004
2010	717	38,329
2011	703	41,340
2012	771	41,502
2013	790	43,982
2014	777	47,055
2015	725	52,404
2016	813	63,632
2017	775	70,237

CDC WONDER Multiple Cause of Death File, ICD-10 codes: X40-X44, X60-X64, X85, Y10-Y14

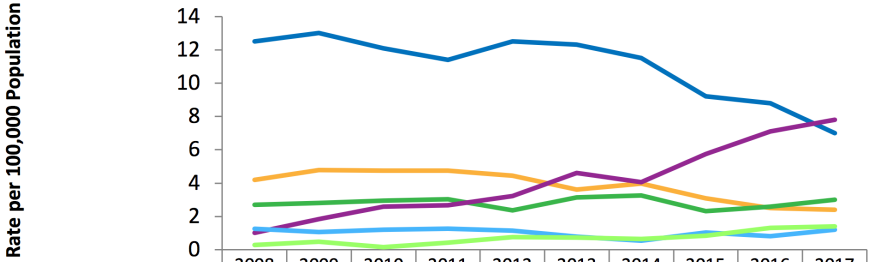
680% INCREASE IN OK

METHAMPHETAMINE-RELATED UNINTENTIONAL OVERDOSES 2008-2017

DRUG OVERDOSE DEATHS

The increase in unintentional drug overdose death rates was driven largely by overdoses involving methamphetamines, which increased by 680% from 2008 to 2017. The unintentional heroin overdose death rate also increased dramatically (367%) during this time period. The death rate involving a prescription opioid decreased by 44% from 2008 to 2017 (Figure 31; Table 16).

FIGURE 31. UNINTENTIONAL FATAL OVERDOSE DEATH RATES BY TYPE OF SUBSTANCE INVOLVED IN DEATH, OKLAHOMA RESIDENTS, 2008-2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Prescription opioids	12.5	13.0	12.1	11.4	12.5	12.3	11.5	9.2	8.8	7.0
Anti-anxiety	4.2	4.8	4.7	4.7	4.4	3.6	4.0	3.1	2.5	2.4
Alcohol	2.7	2.8	3.0	3.0	2.4	3.1	3.2	2.3	2.6	3.0
Methamphetamines	1.0	1.8	2.6	2.7	3.2	4.6	4.0	5.8	7.1	7.8
Cocaine	1.3	1.1	1.2	1.3	1.2	0.8	0.5	1.0	0.8	1.2
Heroin	0.3	0.5	0.2	0.4	0.8	0.7	0.6	0.8	1.3	1.4

Source: OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports)

TABLE 16. NUMBER OF FATAL UNINTENTIONAL OVERDOSES BY TYPE OF SUBSTANCE INVOLVED IN DEATH, OKLAHOMA, 2008-2017

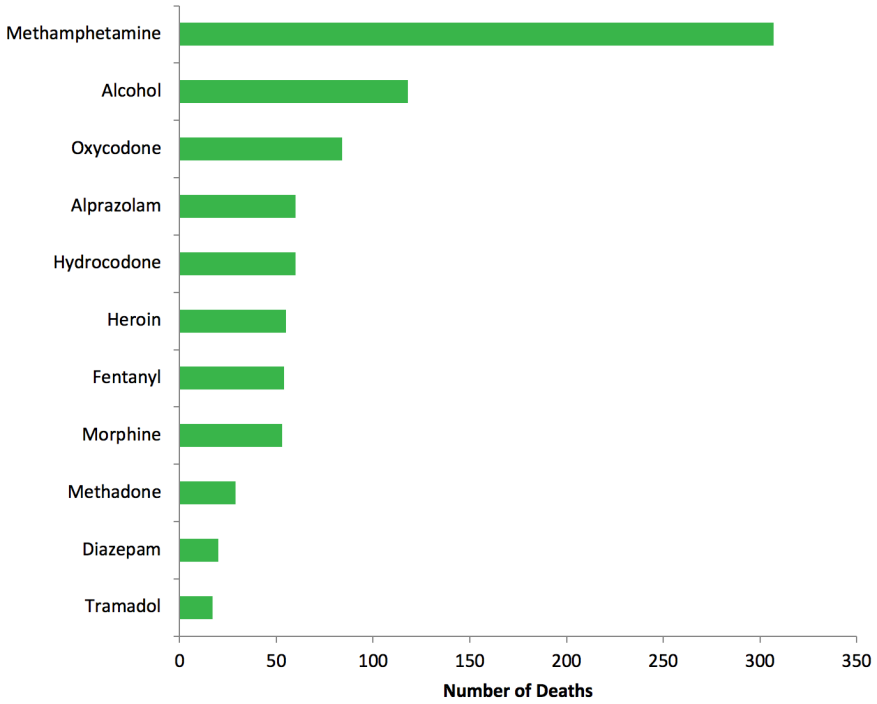
Drug	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Prescription opioids	457	485	454	430	478	475	444	361	347	277
Anti-anxiety	153	176	177	180	169	139	154	121	100	95
Alcohol	98	104	110	115	90	121	126	91	101	119
Methamphetamines	37	68	96	101	123	178	159	227	278	307
Cocaine	46	39	45	48	44	30	21	40	32	47
Heroin	11	18	6	16	29	28	25	33	52	55

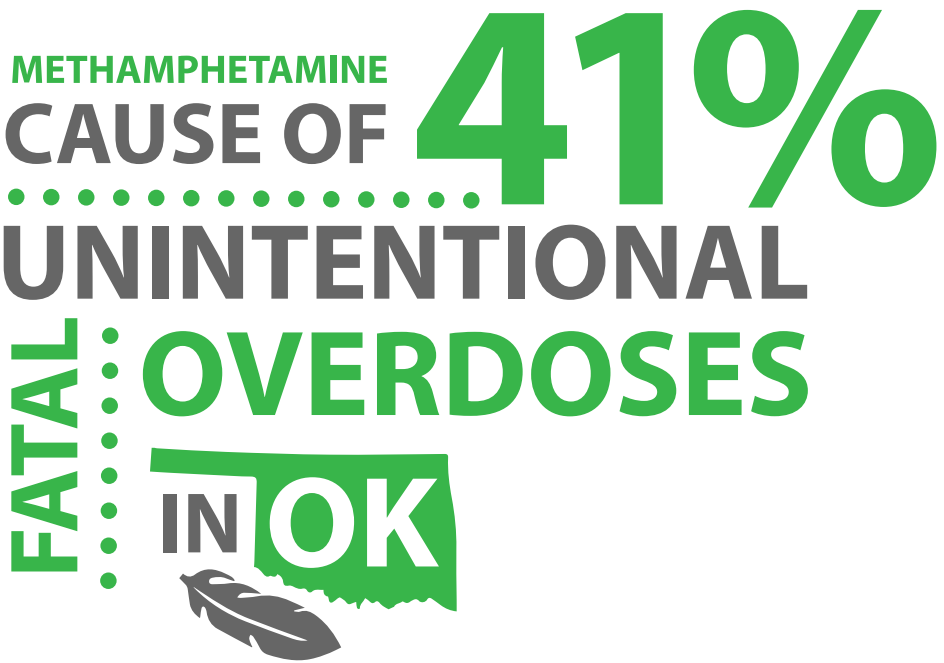
Source: OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports)

DRUG OVERDOSE DEATHS

In 2017, the most common substances involved in a fatal unintentional overdose in Oklahoma were methamphetamine, alcohol, and oxycodone (Figure 32). Methamphetamine was involved in 41% of the 743 total unintentional fatal overdoses in 2017.

FIGURE 32. MOST COMMON SUBSTANCES INVOLVED IN FATAL UNINTENTIONAL OVERDOSES, OKLAHOMA, 2017



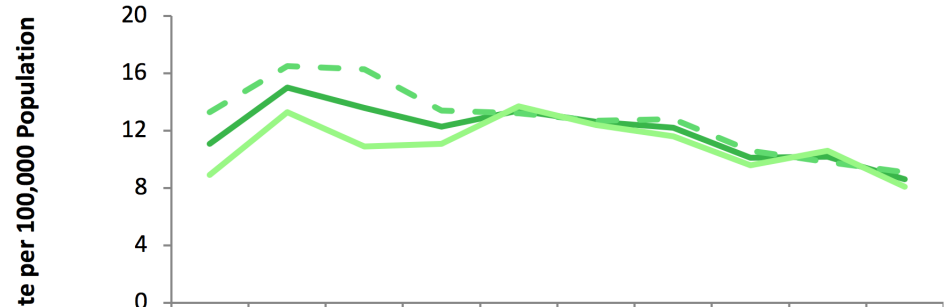


Source: OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports)

OPIOID-RELATED OVERDOSE DEATHS

Age-adjusted prescription opioid-related overdose death rates decreased by 23% among Oklahoma residents from 2008 to 2017. Age-adjusted death rates were higher for males than females from 2008 to 2011 before the gap closed in 2012 (Figure 33; Table 17).

FIGURE 33. AGE-ADJUSTED PRESCRIPTION OPIOID-RELATED OVERDOSE DEATH RATES PER 100,000 BY GENDER, OKLAHOMA, 2008-2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total	11.1	15.0	13.6	12.3	13.4	12.6	12.2	10.1	10.2	8.6
Male	13.3	16.5	16.3	13.4	13.2	12.7	12.8	10.6	9.8	9.1
Female	8.9	13.3	10.9	11.1	13.7	12.4	11.6	9.6	10.6	8.1

Source: CDC WONDER Multiple Cause of Death File
ICD-10 codes (underlying cause of death): X40-X44, X60-X64, X85, Y10-Y14
ICD-10 codes (multiple cause: T40.2, T40.3, T40.4
Prescription opioid overdose deaths may be overestimated for later years. Code T40.4, synthetic narcotics, includes both prescription and illicitly manufactured fentanyl.

TABLE 17. PRESCRIPTION OPIOID-RELATED OVERDOSE DEATHS BY GENDER OKLAHOMA, 2008-2017

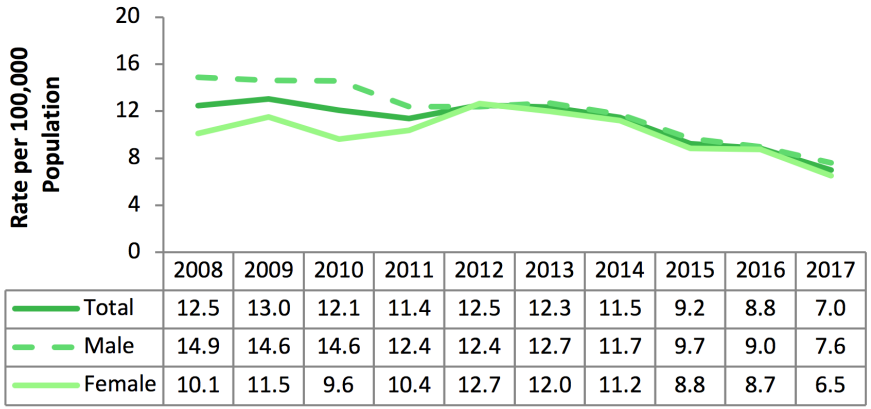
Year	All	Male	Female
2008	399	239	160
2009	547	299	248
2010	500	296	204
2011	456	253	203
2012	505	246	259
2013	482	244	238
2014	471	247	224
2015	389	202	187
2016	392	189	203
2017	325	170	155

Source: CDC WONDER Multiple Cause of Death File
ICD-10 codes (underlying cause of death): X40-X44, X60-X64, X85, Y10-Y14
ICD-10 codes (multiple cause: T40.2, T40.3, T40.4
Prescription opioid overdose deaths may be overestimated for later years. Code T40.4, synthetic narcotics, includes both prescription and illicitly manufactured fentanyl.

OPIOID-RELATED OVERDOSE DEATHS

The unintentional prescription opioid-related overdose death rates ranged from 19% to 55% higher among males than females from 2007 to 2011 before the gender gap narrowed in 2012. The death rate among males and females decreased by 40% and 46%, respectively, from 2013 to 2017 (Figure 34).

FIGURE 34. UNINTENTIONAL PRESCRIPTION OPIOID-RELATED OVERDOSE DEATHS PER 100,000 POPULATION, OKLAHOMA, 2008-2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total	12.5	13.0	12.1	11.4	12.5	12.3	11.5	9.2	8.8	7.0
Male	14.9	14.6	14.6	12.4	12.4	12.7	11.7	9.7	9.0	7.6
Female	10.1	11.5	9.6	10.4	12.7	12.0	11.2	8.8	8.7	6.5

Source: OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports)

TABLE 18. NUMBER OF UNINTENTIONAL PRESCRIPTION OPIOID-RELATED OVERDOSE DEATHS BY GENDER, OKLAHOMA, 2008-2017

Year	All	Male	Female
2007	445	256	189
2008	457	270	187
2009	485	269	216
2010	454	271	183
2011	430	232	198
2012	478	234	244
2013	475	242	233
2014	444	225	219
2015	361	187	174
2016	347	174	173
2017	277	148	129

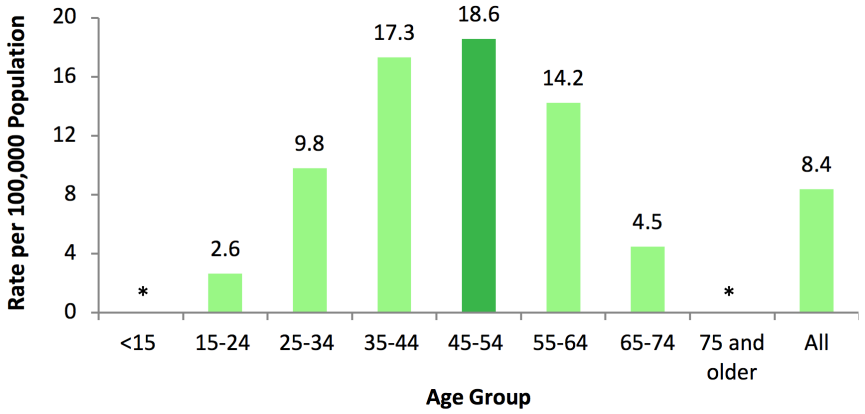
Source: OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports)

OPIOID-RELATED OVERDOSE DEATHS

The unintentional prescription opioid-related overdose death rate was higher among Oklahomans aged 35-64 years compared to those in younger and older age groups, with the 45-54 year age group having the highest rate (Figure 35).

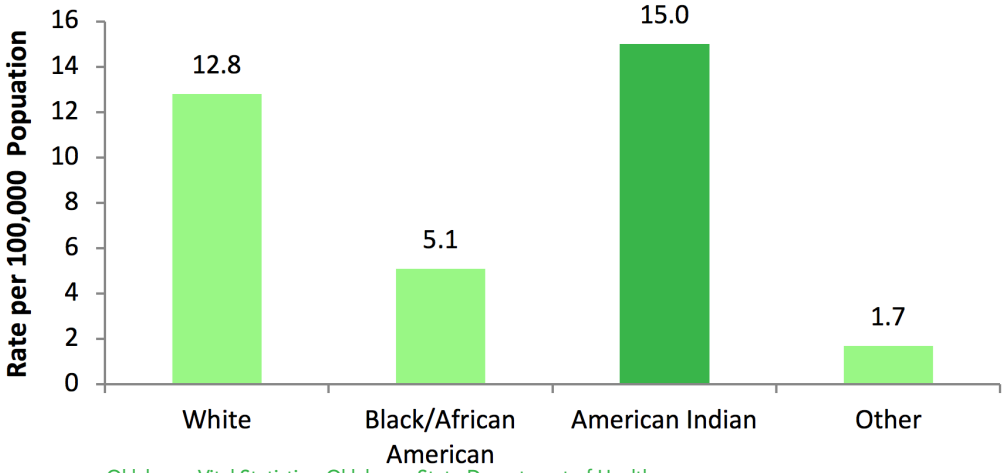
Overdose deaths involving all types opioids were highest among American Indians followed by Whites. Death rates among American Indians were five times higher than the rates among Blacks/African Americans and over seven times higher the rates among persons of other races (Figure 36).

FIGURE 35. UNINTENTIONAL PRESCRIPTION OPIOID-RELATED OVERDOSE DEATHS PER 100,000 BY AGE GROUP, OKLAHOMA, 2015-2017



*Suppressed (fewer than 10 deaths)
Source: OSDH, Injury Prevention Service, Fatal Unintentional Poisoning Surveillance System (Abstracted from Medical Examiner reports)

FIGURE 36. OPIOID-RELATED OVERDOSE DEATH RATES BY INDIAN HEALTH SERVICE-LINKED RATES PER 100,000, OKLAHOMA, 2013-2015

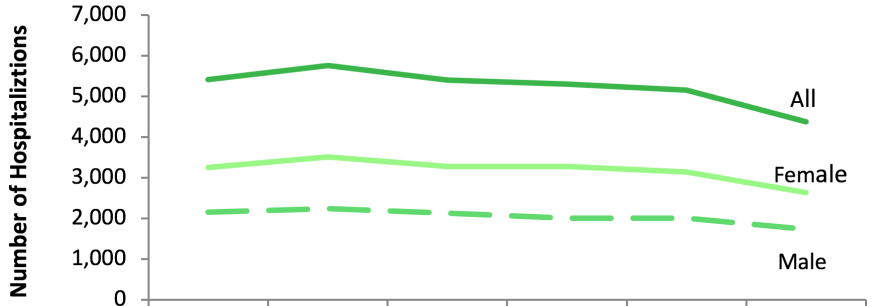


Oklahoma Vital Statistics, Oklahoma State Department of Health
ICD-10 codes (underlying cause of death): X40-X44, X60-X64, X85, Y10-Y14
ICD-10 codes (multiple cause of death): T40.0, T40.1, T40.2, T40.3, T40.4

NONFATAL HOSPITALIZATIONS RELATED TO A DRUG OVERDOSE

Nonfatal inpatient hospitalizations related to drug overdoses in Oklahoma decreased by 24% from 2012 to 2016 and hospitalizations were approximately 1.5 times higher among females compared to males (Figure 37).

FIGURE 37. NONFATAL HOSPITALIZATIONS RELATED TO DRUG OVERDOSES BY GENDER, OKLAHOMA, 2011-2016



	2011	2012	2013	2014	2015	2016*
Total	5,414	5,763	5,412	5,302	5,156	4,377
Male	2,161	2,245	2,129	2,015	2,007	1,742
Female	3,253	3,518	3,283	3,287	3,149	2,635

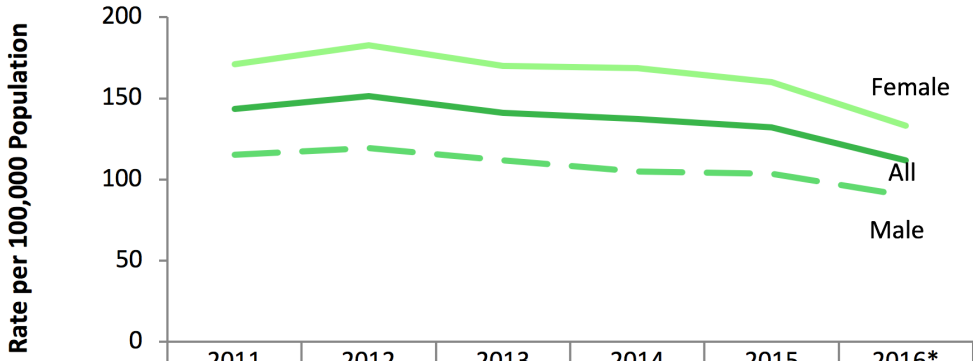
Note:

*The classification system changed from ICD-9-CM to ICD-10 –CM in October 2015. Comparability cannot be assured over the transition from ICD-9-CM-coded to ICD-10-CM-coded hospital discharge data.
Hospital discharge counts are limited to Oklahoma residents and are only collected from Oklahoma state licensed acute care hospitals. This excludes Indian Health Service (IHS)/tribal hospitals, non-acute care, or federal hospitals such as Veteran's Affairs (VA) and military hospitals. Overdose cases with discharge status of death or deceased are excluded. Hospital discharges involving all drug overdoses are identified using ICD-9-CM Principal diagnosis codes: 960.00-979.00 OR first-listed valid external cause of injury codes (E-codes): E850-E858, E950.0-E950.5, E962.0, or E980.0-980.5
2015 and 2016 hospital discharge data are identified using ICD-9-CM mentioned above as well as ICD-10-CM principal diagnosis codes: all drugs T36-T50.
Source: Oklahoma Discharge Public Use Data file, Health Care Information Division, Oklahoma State Department of Health. Additional E-codes for the 2013 and 2014 data, provided by OSDH, Injury Prevention, were merged with the respective Public Use Data File.

NONFATAL HOSPITALIZATIONS RELATED TO A DRUG OVERDOSE

The age-adjusted inpatient hospitalization rates (per 100,000) related to drug overdoses decreased by 26% overall from 2012 to 2016. Inpatient hospitalization rates among females were approximately 1.5 times higher compared to males (Figure 38).

FIGURE 38. NONFATAL AGE-ADJUSTED HOSPITALIZATIONS RELATED TO DRUG OVERDOSES PER 100,000 BY GENDER IN OKLAHOMA, 2011-2016



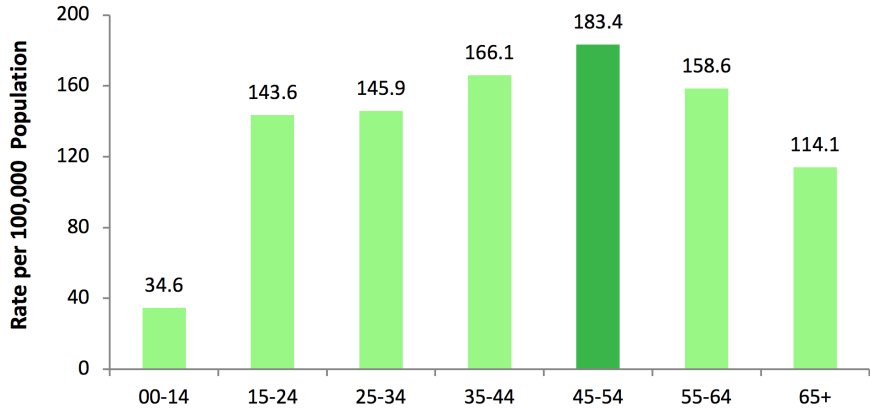
	2011	2012	2013	2014	2015	2016*
Total	143.5	151.5	141.2	137.2	132.1	111.7
Male	115.2	119.5	111.9	105.0	103.7	89.9
Female	171.0	182.6	170.2	168.7	160.1	133.1

Note:
*The classification system changed from ICD-9-CM to ICD-10 –CM in October 2015. Comparability cannot be assured over the transition from ICD-9-CM-coded to ICD-10-CM-coded hospital discharge data.
Hospital discharge counts are limited to Oklahoma residents and are only collected from Oklahoma state licensed acute care hospitals. This excludes Indian Health Service (IHS)/tribal hospitals, non-acute care, or federal hospitals such as Veteran's Affairs (VA) and military hospitals. Overdose cases with discharge status of death or deceased are excluded. Hospital discharges involving all drug overdoses are identified using ICD-9-CM Principal diagnosis codes: 960.00-979.00 OR first-listed valid external cause of injury codes (E-codes): E850-E858, E950.0-E950.5, E962.0, or E980.0-980.5
2015 and 2016 hospital discharge data are identified using ICD-9-CM mentioned above as well as ICD-10-CM principal diagnosis codes: all drugs T36-T50.
Source: Oklahoma Discharge Public Use Data file, Health Care Information Division, Oklahoma State Department of Health. Additional E-codes for the 2013 and 2014 data, provided by OSDH, Injury Prevention, were merged with the respective Public Use Data File.

NONFATAL HOSPITALIZATIONS RELATED TO A DRUG OVERDOSE

Inpatient hospitalizations related to drug overdoses were highest among those aged 35 to 64 years, with the highest rates being among Oklahomans aged 45 to 54 years (Figure 39).

FIGURE 39. NONFATAL HOSPITALIZATIONS INVOLVING DRUG OVERDOSES PER 100,000 BY AGE GROUP, OKLAHOMA, 2014-2016*

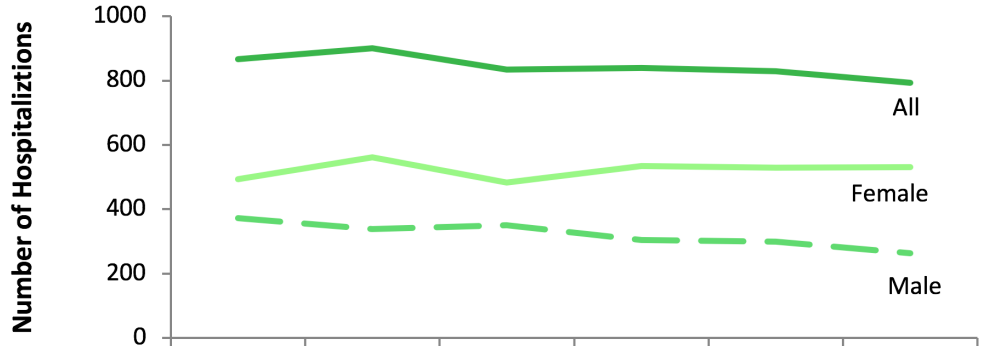


Note:
*The classification system changed from ICD-9-CM to ICD-10 –CM in October 2015. Comparability cannot be assured over the transition from ICD-9-CM-coded to ICD-10-CM-coded hospital discharge data. Hospital discharge counts are limited to Oklahoma residents and are only collected from Oklahoma state licensed acute care hospitals. This excludes Indian Health Service (IHS)/tribal hospitals, non-acute care, or federal hospitals such as Veteran's Affairs (VA) and military hospitals. Overdose cases with discharge status of death or deceased are excluded. Hospital discharges involving all drug overdoses are identified using ICD-9-CM Principal diagnosis codes: 960.00-979.00 OR first-listed valid external cause of injury codes (E-codes): E850-E858, E950.0-E950.5, E962.0, or E980.0-980.5
2015 and 2016 hospital discharge data are identified using ICD-9-CM mentioned above as well as ICD-10-CM principal diagnosis codes: all drugs T36-T50.
Source: Oklahoma Discharge Public Use Data file, Health Care Information Division, Oklahoma State Department of Health. Additional E-codes for the 2013 and 2014 data, provided by OSDH, Injury Prevention, were merged with the respective Public Use Data File.

NONFATAL INPATIENT HOSPITALIZATIONS RELATED TO PRESCRIPTION OPIOID OVERDOSES

Inpatient hospitalizations related to prescription opioid overdoses in Oklahoma decreased by 12% from 2012 to 2016. Hospitalizations were two times higher among females compared to males in 2016 (Figure 40).

FIGURE 40. NONFATAL HOSPITALIZATIONS RELATED TO PRESCRIPTION OPIOID OVERDOSES BY GENDER, OKLAHOMA, 2011-2016



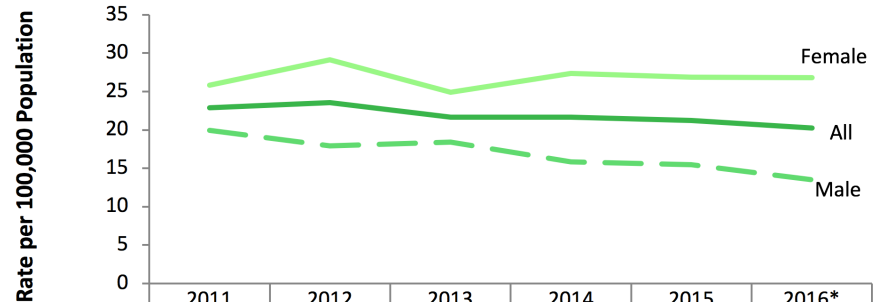
	2011	2012	2013	2014	2015	2016*
Total	867	900	835	839	830	794
Male	373	339	351	304	300	263
Female	494	561	484	535	530	531

Note:
*The classification system changed from ICD-9-CM to ICD-10 –CM in October 2015. Comparability cannot be assured over the transition from ICD-9-CM-coded to ICD-10-CM-coded hospital discharge data.
Hospital discharge counts are limited to Oklahoma residents and are only collected from Oklahoma state licensed acute care hospitals. This excludes Indian Health Service (IHS)/tribal hospitals, non-acute care, or federal hospitals such as Veteran's Affairs (VA) and military hospitals.
Overdose cases with discharge status of death or deceased are excluded. Hospital discharges involving all opioid overdoses excluding heroin are identified using ICD-9-CM Principal diagnosis codes: 965.00, 965.02, 965.09 OR first-listed valid external cause of injury codes (E-codes): E850.1, 850.2
2015 and 2016 hospital discharge data are identified using ICD-9-CM mentioned above as well as ICD-10-CM principal diagnosis codes: opioid T40.0X, T40.2X, T40.3x, T40.4x,T40.60, T40.69, AND a 6th character of 1,2,3, or 4 AND a 7th character of A, D, or missing.
Source: Oklahoma Discharge Public Use Data file, Health Care Information Division, Oklahoma State Department of Health. Additional E-codes for the 2013 and 2014 data, provided by OSDH, Injury Prevention, were merged with the respective Public Use Data File.

NONFATAL INPATIENT HOSPITALIZATIONS RELATED TO PRESCRIPTION OPIOID OVERDOSES

From 2011 to 2016, inpatient hospitalizations related to prescription opioid overdoses were highest in 2012. Age-adjusted hospitalization rates (per 100,000 population) related to prescription opioid overdoses in Oklahoma decreased by 14% from 2012 to 2016 and were approximately two times higher among women compared to men in 2016 (Figure 41).

FIGURE 41. NONFATAL AGE-ADJUSTED HOSPITALIZATIONS RELATED TO PRESCRIPTION OPIOID OVERDOSES PER 100,000 BY GENDER IN OKLAHOMA, 2011-2016



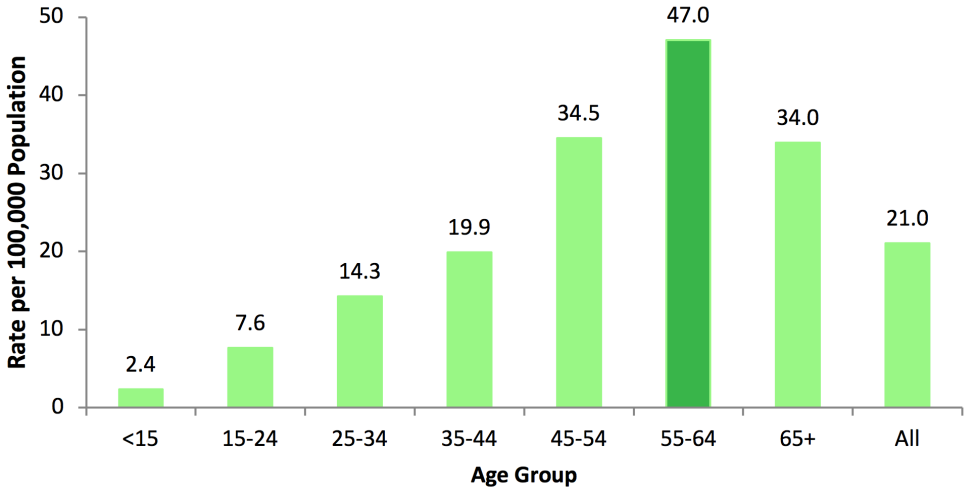
	2011	2012	2013	2014	2015	2016*
Total	22.9	23.6	21.7	21.6	21.2	20.2
Male	19.9	17.9	18.4	15.8	15.5	13.5
Female	25.8	29.1	24.9	27.3	26.9	26.8

Note:
*The classification system changed from ICD-9-CM to ICD-10 –CM in October 2015. Comparability cannot be assured over the transition from ICD-9-CM-coded to ICD-10-CM-coded hospital discharge data. Hospital discharge counts are limited to Oklahoma residents and are only collected from Oklahoma state licensed acute care hospitals. This excludes Indian Health Service (IHS)/tribal hospitals, non-acute care, or federal hospitals such as Veteran's Affairs (VA) and military hospitals.
Overdose cases with discharge status of death or deceased are excluded. Hospital discharges i nvolving all opioid overdoses excluding heroin are identified using ICD-9-CM Principal diagnosis codes: 965.00, 965.02, 965.09 OR first-listed valid external cause of injury codes (E-codes): E850.1, 850.2
2015 and 2016 hospital discharge data are identified using ICD-9-CM mentioned above as well as ICD-10-CM principal diagnosis codes: opioid T40.0X, T40.2X, T40.3x, T40.4x,T40.60, T40.69, AND a 6th character of 1,2,3, or 4 AND a 7th character of A, D, or missing.
Source: Oklahoma Discharge Public Use Data file, Health Care Information Division, Oklahoma State Department of Health. Additional E-codes for the 2013 and 2014 data, provided by OSDH, Injury Prevention, were merged with the respective Public Use Data File.

NONFATAL INPATIENT HOSPITALIZATIONS RELATED TO PRESCRIPTION OPIOID OVERDOSES

Inpatient hospitalizations rates per 100,000 related to prescription opioid overdoses were highest among Oklahoma residents aged 55 to 64 years (Figure 42).

FIGURE 42. NONFATAL HOSPITALIZATIONS RELATED TO PRESCRIPTION OPIOID OVERDOSES PER 100,000 BY AGE GROUP, OKLAHOMA, 2014-2016*



Note:
*The classification system changed from ICD-9-CM to ICD-10 –CM in October 2015. Comparability cannot be assured over the transition from ICD-9-CM-coded to ICD-10-CM-coded hospital discharge data.
Hospital discharge counts are limited to Oklahoma residents and are only collected from Oklahoma state licensed acute care hospitals. This excludes Indian Health Service (IHS)/tribal hospitals, non-acute care, or federal hospitals such as Veteran's Affairs (VA) and military hospitals.
Overdose cases with discharge status of death or deceased are excluded. Hospital discharges involving all opioid overdoses excluding heroin are identified using ICD-9-CM Principal diagnosis codes: 965.00, 965.02, 965.09 OR first-listed valid external cause of injury codes (E-codes): E850.1, 850.2
2015 and 2016 hospital discharge data are identified using ICD-9-CM mentioned above as well as ICD-10-CM principal diagnosis codes: opioid T40.0X, T40.2X, T40.3x, T40.4x,T40.60, T40.69, AND a 6th character of 1,2,3, or 4 AND a 7th character of A, D, or missing.
Source: Oklahoma Discharge Public Use Data file, Health Care Information Division, Oklahoma State Department of Health. Additional E-codes for the 2013 and 2014 data, provided by OSDH, Injury Prevention, were merged with the respective Public Use Data File.

PAST YEAR ILLICIT DRUG USE DISORDER

The NSDUH includes misuse of prescription drugs in their definition of illicit drugs. There was a change in the way data on past year illicit drug disorder was collected by the NSDUH in 2015; therefore, data prior to 2015-2016 are not shown. Approximately 3 out of 100 Oklahoma and U.S. residents had an illicit drug disorder in the past year in 2015-2016 and 2016-2017 (Table 19). The prevalence in the 18 to 25 year age group was over twice as high as the prevalence in the 12 to 17 and 26 and older age groups in both Oklahoma and the U.S. (Table 19).

TABLE 19. PERCENTAGE OF INDIVIDUALS WHO HAD AN ILLICIT DRUG USE DISORDER* IN THE PAST YEAR BY AGE GROUP, OKLAHOMA AND THE U.S., 2015-2016 AND 2016-2017

Age Group	Oklahoma		U.S.	
	2015-2016	2016-2017	2015-2016	2016-2017
12 and older	2.6%	2.8%	2.8%	2.8%
12-17	3.0%	3.1%	3.3%	3.1%
18-25	5.8%	6.9%	7.1%	7.2%
26 and older	2.0%	2.0%	2.0%	2.0%

*Includes misuse of prescription drugs
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015-2016 and 2016-2017

TABLE 20. ESTIMATED NUMBER OF INDIVIDUALS WHO HAD AN ILLICIT DRUG DISORDER* IN THE PAST YEAR BY AGE GROUP, OKLAHOMA AND THE U.S., 2015-2016 AND 2016-2017

Age Group	Oklahoma		U.S.	
	2015-2016	2016-2017	2015-2016	2016-2017
12 and older	84,000	89,000	7,559,000	7,463,000
12-17	9,000	10,000	822,000	765,000
18-25	25,000	29,000	2,479,000	2,470,000
26 and older	50,000	50,000	4,258,000	4,228,000

*Includes misuse of prescription drugs
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015-2016 and 2016-2017

DRUG-RELATED TREATMENT ADMISSIONS

Patients report up to three substances they need treatment for when they seek treatment from ODMHSAS and Medicaid behavioral health providers. Table 21 shows the top ten most reported substances listed as any one of the three drugs of choice. The increase in admissions in fiscal year 2015 is due to additional providers gaining ODMHSAS certification for substance use disorder treatment. Methamphetamine overtook marijuana as the top substance in state fiscal year 2017 (Table 21; Figure 43). All of the top 10 substances decreased from fiscal year 2015 to fiscal year 2018 except for heroin, methamphetamine, and marijuana which increased by 107%, 33%, and 1.6%, respectively (Table 21).

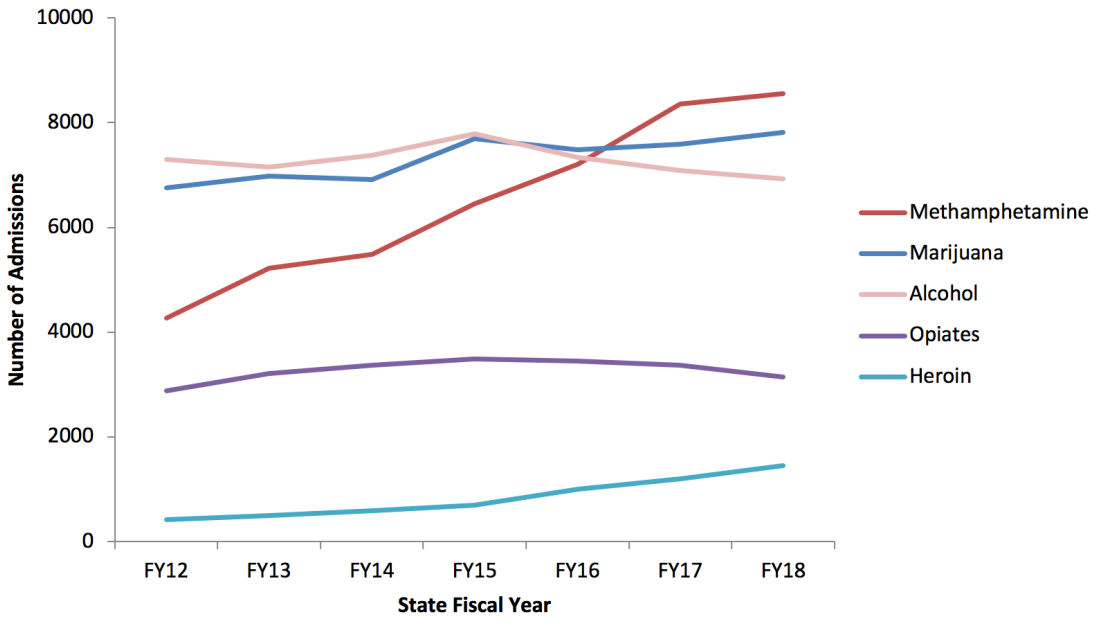
TABLE 21. NUMBER OF ADMISSIONS FOR TREATMENT BY ODMHSAS OR MEDICAID BEHAVIORAL HEALTH PROVIDERS FOR THE TOP 10 SUBSTANCES IN FISCAL YEAR 2018 SELECTED AS ONE OF THREE PRIMARY DRUGS OF CHOICE, OKLAHOMA FISCAL YEARS 2012-2018

Year	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Methamphetamines	4,267	5,225	5,487	6,449	7,207	8,353	8,561
Marijuana	6,754	6,976	6,921	7,700	7,489	7,584	7,817
Alcohol	7,296	7,153	7,375	7,787	7,340	7,081	6,934
Opiates	2,886	3,216	3,366	3,484	3,446	3,364	3,140
Heroin	424	504	588	703	1,001	1,205	1,455
Cocaine	1,320	1,052	928	955	864	865	914
Benzodiazepine	911	960	868	944	919	913	900
Amphetamines	646	636	784	874	798	627	711
Sedatives	315	305	351	388	391	379	298
PCP	212	123	147	218	160	207	121

Source: Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS) Online Query System (OonQues)

DRUG-RELATED TREATMENT ADMISSIONS

FIGURE 43. NUMBER OF ADMISSIONS FOR TREATMENT BY ODMHSAS OR MEDICAID BEHAVIORAL HEALTH PROVIDERS FOR THE TOP FIVE SUBSTANCES SELECTED AS ONE OF THE THREE PRIMARY DRUGS OF CHOICE, OKLAHOMA FISCAL YEARS 2012-2018



Source: Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS) Online Query System (OonQues)

NEEDING BUT NOT RECEIVING TREATMENT FOR ILLICIT DRUG USE

The NSDUH includes misuse of prescription drugs in their definition of illicit drugs. There was a change in the way data on needing but not receiving treatment at a specialty facility in the past year for illicit drug use was collected by the NSDUH in 2015; therefore, data prior to 2015-2016 are not shown. Approximately 2% or 71,000 Oklahomans needed but are not receiving treatment at a specialty facility for an illicit drug use (including misuse of prescription drugs) disorder in 2016-2017 (Tables 22 and 23).

TABLE 22. PERCENTAGE OF INDIVIDUALS NEEDING BUT NOT RECEIVING TREATMENT AT A SPECIALTY FACILITY FOR ILLICIT DRUG USE* IN THE PAST YEAR BY AGE GROUP, OKLAHOMA AND THE U.S., 2015-2016 AND 2016-2017

Age Group	Oklahoma		U.S.	
	2015-2016	2016-2017	2015-2016	2016-2017
12 years and older	2.1%	2.2%	2.5%	2.5%
12-17	3.0%	3.1%	3.1%	2.9%
18-25	5.5%	6.6%	6.6%	6.6%
26 and older	1.3%	1.4%	1.8%	1.7%

*Includes misuse of prescription drugs
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015-2016 and 2016-2017

TABLE 23. ESTIMATED NUMBER OF INDIVIDUALS NEEDING BUT NOT RECEIVING TREATMENT AT A SPECIALTY FACILITY FOR ILLICIT DRUG USE* IN THE PAST YEAR BY AGE GROUP, OKLAHOMA AND THE U.S., 2015-2016 AND 2016-2017

Age Group	**Oklahoma**		**U.S.**	
	2015-2016	2016-2017	2015-2016	2016-2017
12 years and older	65,000	71,000	6,796,000	6,635,000
12-17	9,000	10,000	782,000	727,000
18-25	24,000	28,000	2,298,000	2,265,000
26 and older	33,000	34,000	3,716,000	3,644,000

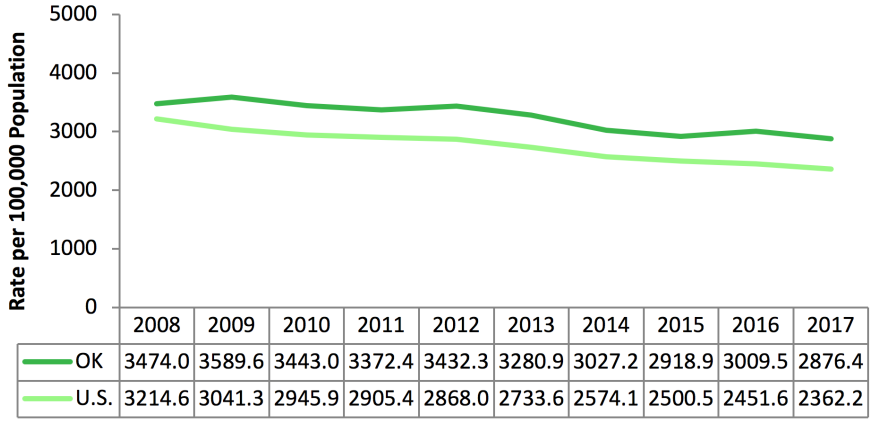
*Includes misuse of prescription drugs
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015-2016 and 2016-2017

PROPERTY CRIME

Drug use is associated with property crime. According to the Bureau of Justice report, approximately 40% of state prisoners and sentenced jail inmates incarcerated for property crimes reported that they had committed the crime to get money for drugs or to obtain drugs.[10]

The FBI's Uniform Crime Reporting (UCR) Program provides data on property crimes include burglary, larceny-theft, motor vehicle theft, and arson for participating agencies. There were over 1.2 million property crimes in Oklahoma from 2008 to 2017 (Table 24). The number of property crimes per 100,000 Oklahoma residents decreased by 17% from 2008 to 2017. The Oklahoma rate was 22% higher than the U.S. rate in 2017 (Figure 44).

FIGURE 44. PROPERTY CRIME RATE PER 100,000 POPULATION, OKLAHOMA AND THE U.S., 2008-2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
OK	3474.0	3589.6	3443.0	3372.4	3432.3	3280.9	3027.2	2918.9	3009.5	2876.4
U.S.	3214.6	3041.3	2945.9	2905.4	2868.0	2733.6	2574.1	2500.5	2451.6	2362.2

Source: FBI Uniform Crime Reporting Program data accessed from the FBI's Crime Data Explorer

TABLE 24. NUMBER OF PROPERTY CRIMES, OKLAHOMA AND THE U.S., 2008-2017

Year	Oklahoma	U.S.
2008	126,535	9,774,152
2009	132,350	9,337,060
2010	129,464	9,112,625
2011	127,618	9,052,743
2012	130,969	9,001,992
2013	126,418	8,651,892
2014	117,445	8,209,010
2015	114,055	8,024,115
2016	118,010	7,919,035
2017	113,066	7,694,086

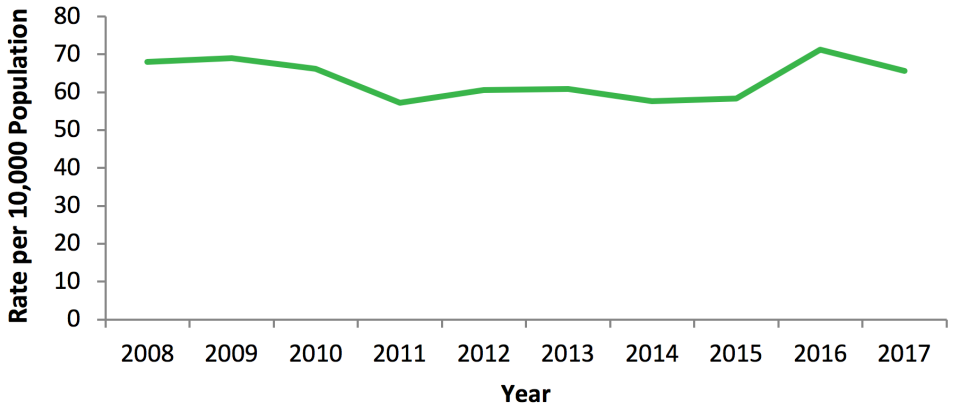
Source: FBI Uniform Crime Reporting Program data accessed from the FBI's Crime Data Explorer

10. U.S. Department of Justice. (2017). Drug Use, Dependence, and Abuse among State Prisoners and Jail Inmates, 2007-2009. Retrieved from https://www.bjs.gov/content/pub/pdf/dudaspji0709.pdf

DRUG-RELATED ARRESTS

Drug-related arrests include all drug arrests reported as sale/manufacturing or possession. Drug-related arrests accounted for 18.9% of adult arrests in 2017.[11] There were 182,844 drug-related arrests among Oklahoma adults from 2008 to 2017 (Table 25). The number of arrests per 10,000 adults fluctuated over the past 10 years, with a low of 57.3 in 2011 and a high of 71.2 in 2016 (Figure 45; Table 25).

FIGURE 45. DRUG-RELATED ARRESTS PER 10,000 OKLAHOMA ADULTS AGED 18 AND OLDER



Source: Oklahoma State Bureau of Investigation

TABLE 25. NUMBER AND RATE OF DRUG-RELATED ARRESTS AMONG OKLAHOMA ADULTS AGED 18 YEARS AND OLDER, 2008-2017

Year	Number	Rate per 10,000
2008	18,754	68.0
2009	19,295	69.0
2010	18,699	66.3
2011	16,361	57.3
2012	17,435	60.6
2013	17,656	60.8
2014	16,846	57.6
2015	17,209	58.4
2016	21,091	71.2
2017	19,498	65.6

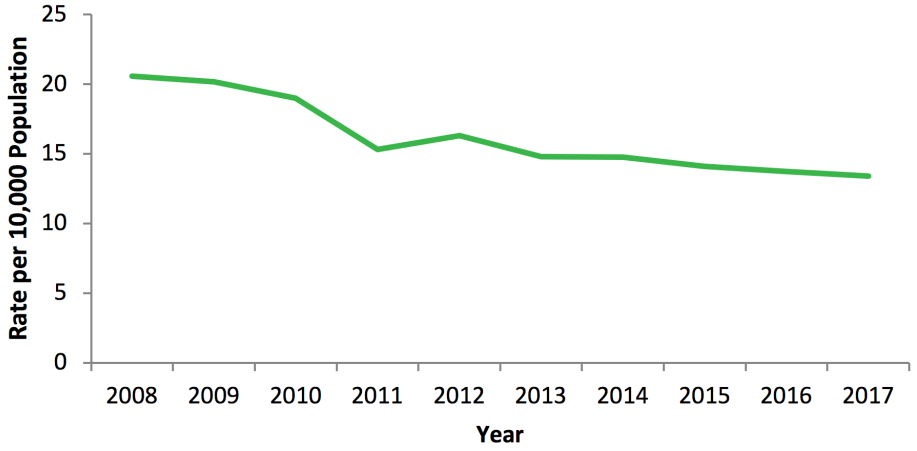
Source: Oklahoma State Bureau of Investigation

11. Oklahoma State Bureau of Investigation, Office of Criminal Justice Statistics (2017). Crime in Oklahoma 2017. Retrieved from https://osbi.ok.gov/sites/g/files/gmc476/f/publications/2018/09/Crime_in_Oklahoma_2017_Final_07.16.18.pdf

DRUG-RELATED ARRESTS

There were 15,235 drug-related arrests among Oklahoma juveniles from 2008 to 2017 (Table 26). The number of arrests per 10,000 juveniles decreased by 35% from 2008 to 2017 (Figure 46).

FIGURE 46. DRUG-RELATED ARRESTS PER 10,000 OKLAHOMA JUVENILES UNDER AGE 18, 2008-2017



Source: Oklahoma State Bureau of Investigation

TABLE 26. NUMBER AND RATE OF DRUG-RELATED ARRESTS AMONG OKLAHOMA JUVENILES UNDER AGE 18, 2008-2017

Year	Number	Rate per 10,000
2008	1,875	20.6
2009	1,862	20.2
2010	1,767	19.0
2011	1,433	15.3
2012	1,528	16.3
2013	1,402	14.8
2014	1,406	14.8
2015	1,356	14.1
2016	1,322	13.7
2017	1,284	13.4

Source: Oklahoma State Bureau of Investigation

SUBSTANCE ABUSE-RELATED CHILD MALTREATMENT

Approximately 1 out of 2 substantiated investigations in Oklahoma found that substance abuse contributed to child maltreatment (Table 27).

TABLE 27. OKLAHOMA DEPARTMENT OF HUMAN SERVICES SUBSTANTIATED INVESTIGATIONS WHERE SUBSTANCE ABUSE CONTRIBUTED TO MALTREATMENT

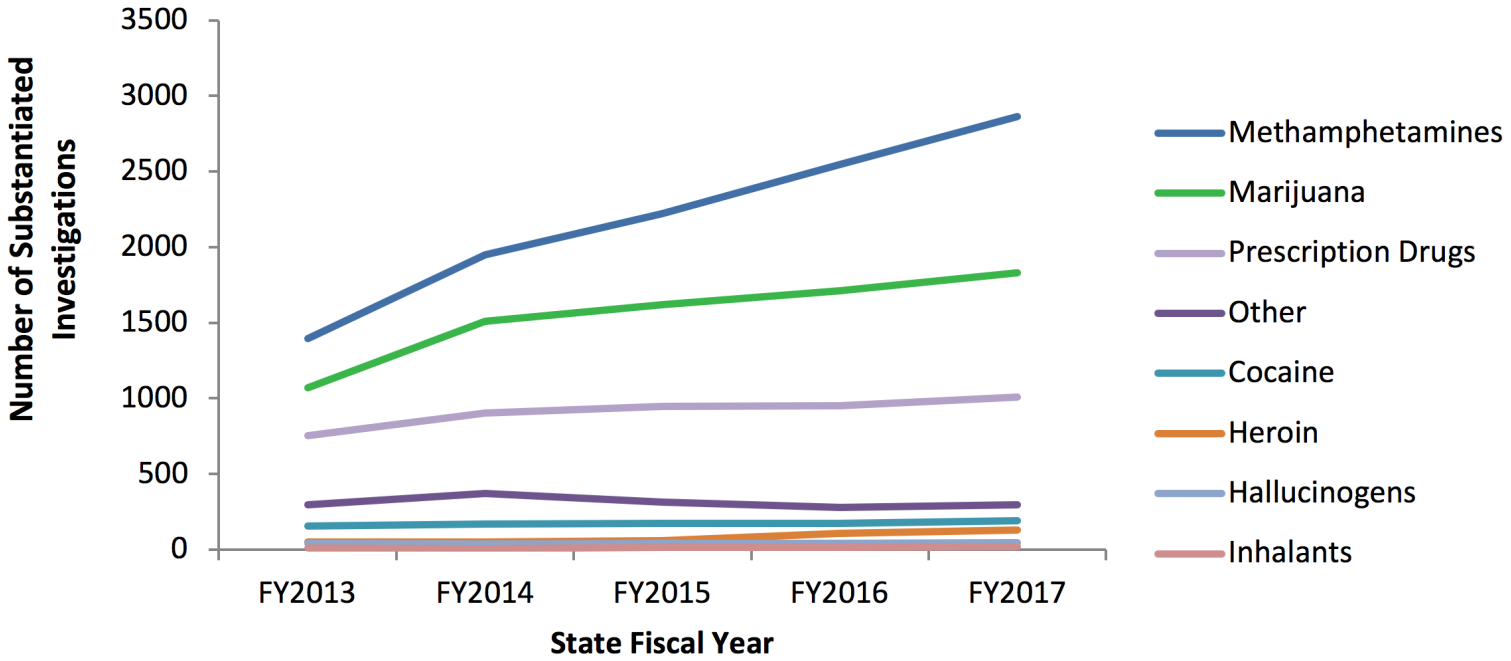
State Fiscal Year	Total substantiated investigations	Alcohol	Drug	Alcohol and drug	Total of alcohol, drug, and both	Percent of total substantiated investigations
SFY2013	6,293	499	1,927	454	2,880	45.8
SFY2014	7,839	558	2,695	552	3,805	48.5
SFY2015	8,347	724	2,925	566	4,215	50.5
SFY2016	8,284	649	3,132	591	4,372	52.8
SFY2017	8,392	588	3,295	638	4,521	53.9

Oklahoma Department of Human Service. Assessment of Child Safety (AOCS) Report. Ran: October 12, 2017.

SUBSTANCE ABUSE-RELATED CHILD MALTREATMENT

The most common type of substance abused in these cases was methamphetamine followed by marijuana (Figure 47).

FIGURE 47. OKLAHOMA DEPARTMENT OF HUMAN SERVICES SUBSTANTIATED INVESTIGATIONS WHERE SUBSTANCE ABUSE CONTRIBUTED TO MALTREATMENT BY TYPE OF DRUG, STATE FISCAL YEAR 2013-2017



Oklahoma Department of Human Service. Assessment of Child Safety (AOCS) Report. Ran: October 12, 2017.

PRESCRIPTION AND ILLICIT DRUG CONSUMPTION

PAST YEAR PRESCRIPTION PAIN RELIEVER MISUSE

There was a change in the way data for nonmedical use of prescription pain relievers were collected by the NSDUH in 2015. This resulted in data collected beginning in 2015 not being comparable to prior years' data. Approximately 4% of Oklahoma and U.S. residents reported pain reliever misuse in the past year (2016-2017) (Table 28). The prevalence in the 18 to 25 year age group was twice as high as in the 12 to 17 and 18 to 25 year age groups (Table 28). Approximately 140,000 Oklahomans misused prescription pain relievers in the past year (2016-2017) (Table 29).

TABLE 28. PAST YEAR PRESCRIPTION PAIN RELIEVER MISUSE BY AGE GROUP, OKLAHOMA AND THE U.S., 2015-2016 AND 2016-2017

Age Group	Oklahoma		U.S.	
	2015-2016	2016-2017	2015-2016	2016-2017
12 and older	4.8%	4.4%	4.5%	4.2%
12-17	4.4%	3.8%	3.7%	3.3%
18-25	8.8%	8.3%	7.8%	7.1%
26 and older	4.2%	3.8%	4.0%	3.8%

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 29. ESTIMATED NUMBER OF INDIVIDUALS REPORTING PRESCRIPTION PAIN RELIEVER MISUSE IN THE PAST YEAR (ANNUAL AVERAGES), OKLAHOMA AND THE U.S, 2015-2016 AND 2016-2017

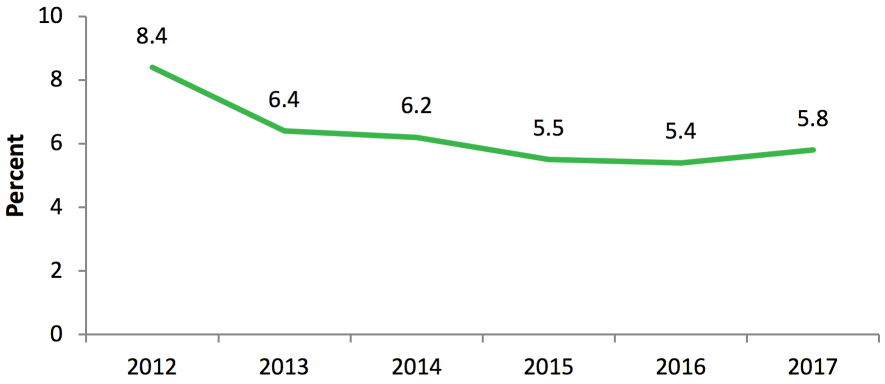
Age Group	Oklahoma		U.S.	
	2015-2016	2016-2017	2015-2016	2016-2017
12 and older	153,000	140,000	11,989,000	11,297,000
12-17	14,000	12,000	925,000	824,000
18-25	38,000	35,000	2,717,000	2,457,000
26 and older	102,000	94,000	8,347,000	8,016,000

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

ADULT (AGE 18 YEARS AND OLDER) LIFETIME NONMEDICAL USE OF PRESCRIPTION DRUGS

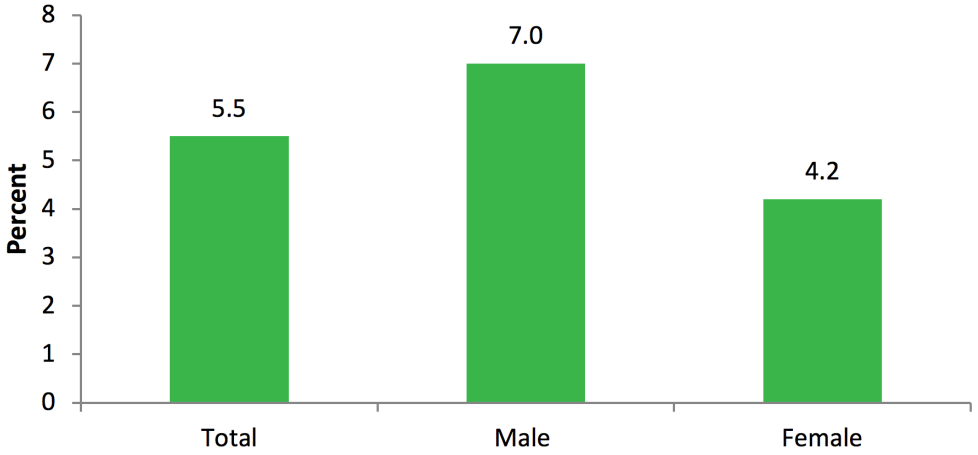
The prevalence of lifetime nonmedical use of prescription drugs was based off of the question:
"During your life, how many times have you taken a prescription drug (such as OxyContin, Percocet, Vicodin, Lortab, Codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription?" There is not a national comparison for this question. The percentage of adults 18 years and older reporting nonmedical use of prescription drugs at least once in their lifetime decreased from 8.4% in 2012 to 5.8% in 2017 (Figure 48). The prevalence was 67% higher among males compared to females (Figure 49).

FIGURE 48. LIFETIME NONMEDICAL USE OF PRESCRIPTION DRUGS AMONG ADULTS AGED 18 YEARS AND OLDER, OKLAHOMA, 2012-2017



Source: Oklahoma Behavioral Risk Factor Surveillance System

FIGURE 49. LIFETIME NONMEDICAL USE OF PRESCRIPTION DRUGS AMONG ADULTS AGED 18 YEARS AND OLDER BY GENDER, OKLAHOMA, 2015-2017

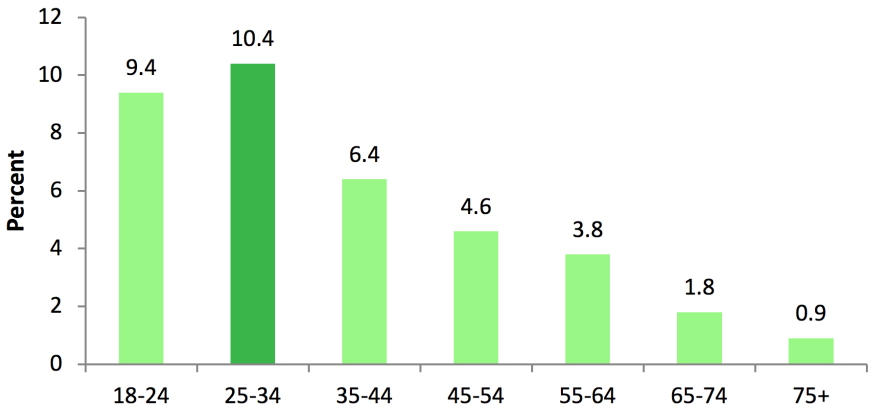


Source: Oklahoma Behavioral Risk Factor Surveillance System
NH: non-Hispanic

ADULT (AGE 18 YEARS AND OLDER) LIFETIME NONMEDICAL USE OF PRESCRIPTION DRUGS

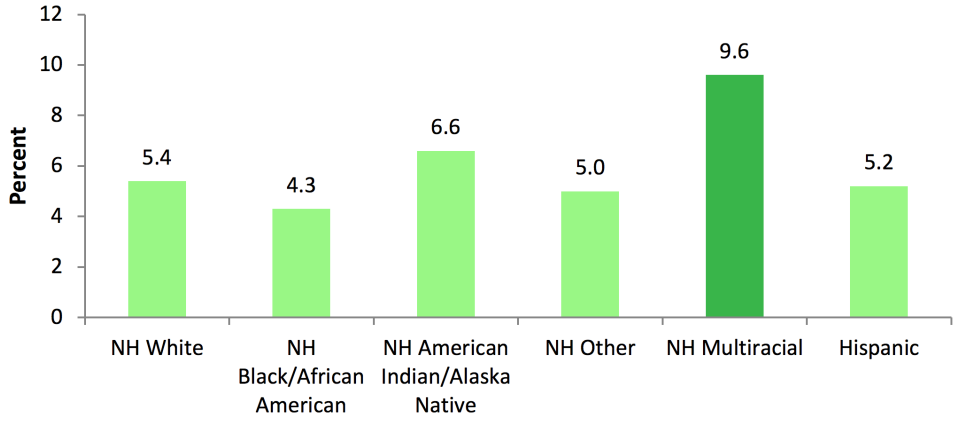
Non-Hispanic multiracial individuals had the highest prevalence of lifetime prescription drug use at 9.5% (Figure 50). Lifetime nonmedical use of prescription

FIGURE 50. LIFETIME NONMEDICAL USE OF PRESCRIPTION DRUGS AMONG ADULTS AGED 18 YEARS AND OLDER BY AGE GROUP, OKLAHOMA, 2015-2017



Source: Oklahoma Behavioral Risk Factor Surveillance System

FIGURE 51. LIFETIME NONMEDICAL USE OF PRESCRIPTION DRUGS AMONG ADULTS AGED 18 YEARS AND OLDER BY RACE/ETHNICITY, OKLAHOMA, 2015-2017

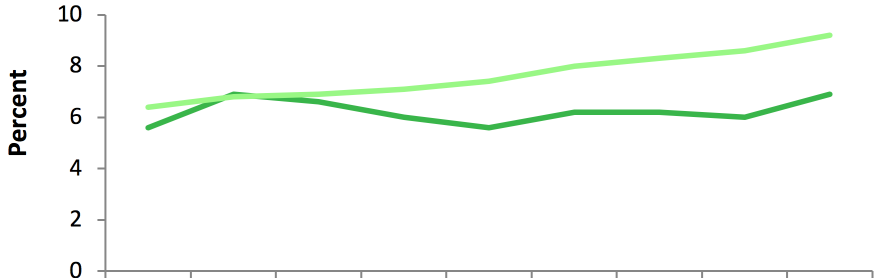


Source: Oklahoma Behavioral Risk Factor Surveillance System

PAST MONTH MARIJUANA USE (12 YEARS AND OLDER)

Past 30 day marijuana use among persons aged 12 and older increased significantly ($p<0.05$) in the U.S. from 2008-2009 to 2016-2017. While an increase was observed in Oklahoma during this time period, the difference was not statistically significant (Figure 52). Approximately 2211,000 Oklahomans aged 12 and older used marijuana in the past month according to NSDUH 2016-2017 estimates (Table 30).

FIGURE 52. PAST MONTH MARIJUANA USE AMONG PERSONS AGED 12 YEARS AND OLDER, OKLAHOMA AND THE U.S., 2008-2009 TO 2016-2017



	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
OK	5.6	6.9	6.6	6.0	5.6	6.2	6.2	6.0	6.9
U.S.	6.4	6.8	6.9	7.1	7.4	8.0	8.3	8.6	9.2

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 30. ESTIMATED NUMBER OF INDIVIDUALS AGED 12 YEARS AND OLDER WHO USED MARIJUANA IN THE PAST MONTH, OKLAHOMA, 2008-2009 TO 2016-2017 (ANNUAL AVERAGES)

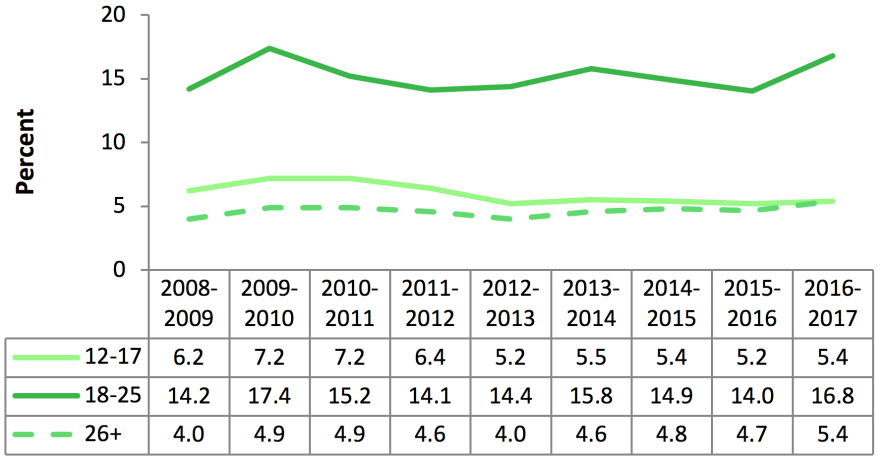
Year	Oklahoma	U.S.
2008-2009	166,000	16,047,000
2009-2010	206,000	17,119,000
2010-2011	200,000	17,741,000
2011-2012	186,000	18,463,000
2012-2013	173,000	19,332,000
2013-2014	196,000	20,999,000
2014-2015	198,000	22,207,000
2015-2016	191,000	23,103,000
2016-2017	221,000	24,988,000

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

PAST MONTH MARIJUANA USE (12 YEARS AND OLDER)

Marijuana use was highest in the 18-25 year age group where the prevalence was approximately three times higher than the prevalence in the 26 and older age group throughout the time period of 2008-2009 to 2016-2017 (Figure 53; Table 31). There was a statistically significant change in use from 2008-2009 (5.5%) to 2016-2017 (7.1%) among Oklahoma adults aged 18 years and older.

FIGURE 53. PAST MONTH MARIJUANA USE BY AGE GROUP, OKLAHOMA, 2008-2009 TO 2016-2017



	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
12-17	6.2	7.2	7.2	6.4	5.2	5.5	5.4	5.2	5.4
18-25	14.2	17.4	15.2	14.1	14.4	15.8	14.9	14.0	16.8
26+	4.0	4.9	4.9	4.6	4.0	4.6	4.8	4.7	5.4

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 31. ESTIMATED NUMBER OF INDIVIDUALS WHO USED MARIJUANA IN THE PAST MONTH BY AGE GROUP, OKLAHOMA, 2008-2009 TO 2016-2017 (ANNUAL AVERAGES)

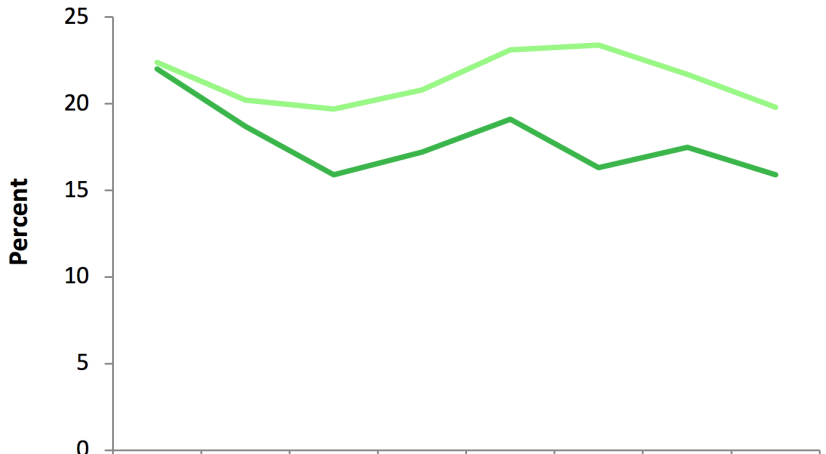
Year	12-17	18-25	26 and older
2008-2009	18,000	58,000	89,000
2009-2010	21,000	73,000	112,000
2010-2011	21,000	64,000	114,000
2011-2012	19,000	60,000	107,000
2012-2013	16,000	62,000	96,000
2013-2014	17,000	68,000	111,000
2014-2015	17,000	64,000	117,000
2015-2016	16,000	60,000	115,000
2016-2017	17,000	71,000	133,000

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

YOUTH (9TH-12TH GRADERS) PAST 30 DAY MARIJUANA USE

The percentage of Oklahoma students who used marijuana during the 30 days before the survey decreased significantly over the last 14 years from 22.0% in 2003 to 15.9% in 2017 (p<.05) (Figure 54). There was no statistically significant change among U.S. students. No differences were observed by gender, grade, or race/ethnicity for the percentage of Oklahoma students who used marijuana during the 30 days before the survey in 2017.

FIGURE 54. PERCENTAGE OF HIGH SCHOOL STUDENTS WHO USED MARIJUANA DURING THE 30 DAYS BEFORE THE SURVEY, OKLAHOMA AND THE U.S., 2003-2017



	2003	2005	2007	2009	2011	2013	2015	2017
Oklahoma	22.0	18.7	15.9	17.2	19.1	16.3	17.5	15.9
U.S.	22.4	20.2	19.7	20.8	23.1	23.4	21.7	19.8

Source: Youth Risk Behavior Survey

15.9%

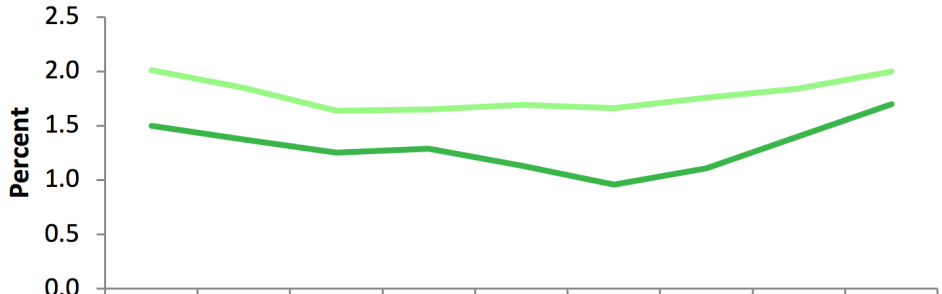
OK HIGH SCHOOL STUDENTS

USED MARIJUANA IN PAST 30 DAYS

PAST YEAR COCAINE USE (12 YEARS AND OLDER)

There was not a significant change in past year cocaine use in Oklahoma or in the U.S. from 2008-2009 to 2016-2017 (Figure 55). The number of Oklahomans who reported using cocaine in the past year ranged from a low of 30,000 in 2013-2014 to a high of 54,000 in 2016-2017 over the past 8 years (Table 32).

FIGURE 55. PAST YEAR COCAINE USE AMONG INDIVIDUALS AGED 12 YEARS AND OLDER, OKLAHOMA AND THE U.S., 2008-2009 TO 2016-2017



	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
OK	1.5	1.4	1.3	1.3	1.1	1.0	1.1	1.4	1.7
U.S.	2.0	1.9	1.6	1.7	1.7	1.7	1.8	1.8	2.0

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 32. ESTIMATED NUMBER OF PERSONS AGED 12 YEARS AND OLDER WHO USED COCAINE IN THE PAST YEAR, 2008-2009 TO 2016-2017 (ANNUAL AVERAGES)

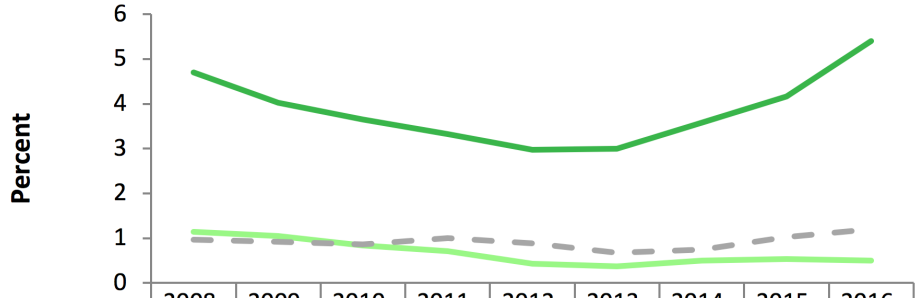
Year	Oklahoma	U.S.
2008-2009	44,000	5,045,000
2009-2010	41,000	4,670,000
2010-2011	38,000	4,195,000
2011-2012	40,000	4,264,000
2012-2013	35,000	4,427,000
2013-2014	30,000	4,368,000
2014-2015	35,000	4,690,000
2015-2016	45,000	4,950,000
2016-2017	54,000	5,507,000

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

PAST YEAR COCAINE USE (12 YEARS AND OLDER)

Past year cocaine use was approximately 11 times as high among Oklahomans aged 18-25 compared to those aged 12-17 years and 4.5 times as high compared to those aged 26 years and older. A significant decrease was observed in past year cocaine from 2008-2009 to 2016-2017 among Oklahoma youth aged 12 to 17 years. The prevalence of past year cocaine use decreased from 2008-2009 to 2012-2013 in the 18-25 year age group before increasing to a high of 5.4% or 23,000 in 2016-2017 (Figure 56; Table 33).

FIGURE 56. PAST YEAR COCAINE USE BY AGE GROUP, OKLAHOMA 2008-2009 TO 2016-2017



	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
12-17	1.1	1.1	0.8	0.7	0.4	0.4	0.5	0.5	0.5
18-25	4.7	4.0	3.7	3.3	3.0	3.0	3.6	4.2	5.4
26+	1.0	0.9	0.9	1.0	0.9	0.7	0.8	1.0	1.2

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 33. ESTIMATED NUMBER OF INDIVIDUALS WHO USED COCAINE IN THE PAST YEAR BY AGE GROUP, OKLAHOMA, 2008-2009 TO 2016-2017 (ANNUAL AVERAGES)

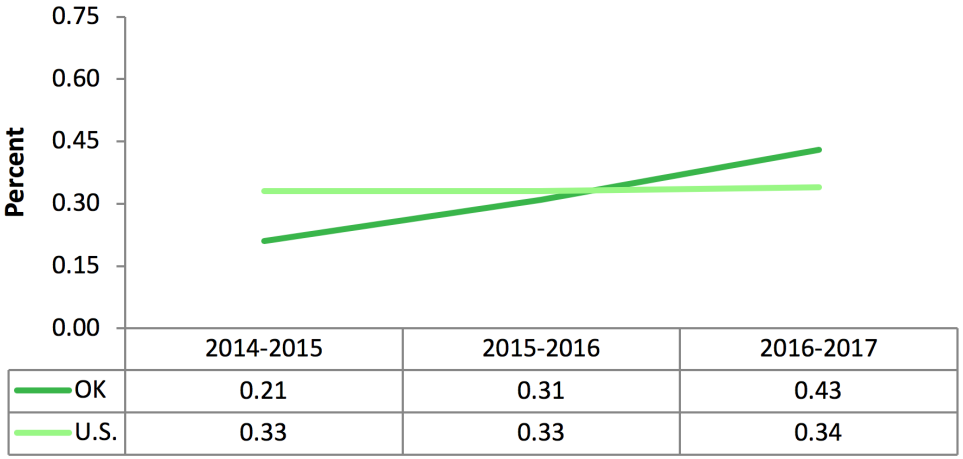
Year	12-17	18-25	26 and older
2008-2009	3,000	19,000	22,000
2009-2010	3,000	17,000	21,000
2010-2011	3,000	15,000	20,000
2011-2012	2,000	14,000	23,000
2012-2013	1,000	13,000	21,000
2013-2014	1,000	13,000	16,000
2014-2015	2,000	15,000	18,000
2015-2016	2,000	18,000	25,000
2016-2017	2,000	23,000	30,000

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

PAST YEAR HEROIN USE (12 YEARS AND OLDER)

There was a statistically significant increase in the prevalence of past year heroin use among Oklahomans aged 12 years and older from 2014-2015 to 2016-2017 ($p<0.05$). The prevalence doubled in Oklahoma from 2014-2015 to 2016-2017 (Figure 57; Table 34).

FIGURE 57. PAST YEAR HEROIN USE AMONG INDIVIDUALS AGED 12 YEARS AND OLDER, OKLAHOMA AND THE U.S., 2014-2015 TO 2016-2017



	2014-2015	2015-2016	2016-2017
OK	0.21	0.31	0.43
U.S.	0.33	0.33	0.34

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 34. ESTIMATED NUMBER OF RESIDENTS AGED 12 YEARS AND OLDER WHO USED HEROIN IN THE PAST YEAR, OKLAHOMA AND THE U.S., 2014-2015 TO 2016-2017 (ANNUAL AVERAGES)

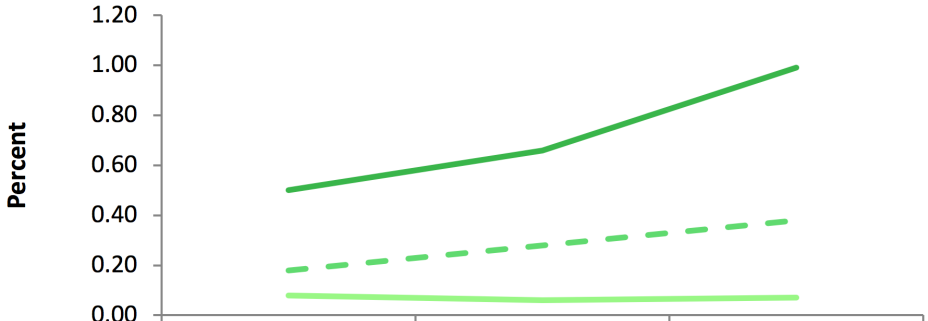
Year	Oklahoma	U.S.
2014-2015	7,000	871,000
2015-2016	10,000	888,000
2016-2017	14,000	917,000

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

PAST YEAR HEROIN USE (12 YEARS AND OLDER)

The prevalence of past year heroin use in the 18-25 year age group was 55% higher in Oklahoma compared to the U.S. in 2016-2017. The prevalence of past year heroin use in Oklahoma increased by approximately 100% among the 18-25 and 26 and older year age groups from 2014-2015 to 2016-2017. Past year heroin was 14 times as high among Oklahomans aged 18-25 years compared to Oklahomans aged 12-17 years and 2.6 times as high as those aged 26 and older in 2016-2017 (Figure 58; Table 35).

FIGURE 58. PAST YEAR HEROIN USE BY AGE GROUP, OKLAHOMA, 2014-2015 TO 2016-2017



	2014-2015	2015-2016	2016-2017
12-17	0.08	0.06	0.07
18-25	0.50	0.66	0.99
26+	0.18	0.28	0.38

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 35. ESTIMATED NUMBER OF INDIVIDUALS WHO USED HEROIN IN THE PAST YEAR BY AGE GROUP, OKLAHOMA, 2008-2009 TO 2016-2017 (ANNUAL AVERAGES)

Year	12-17	18-25	26 and older
2014-2015	*	2,000	4,000
2015-2016	*	3,000	7,000
2016-2017	*	4,000	9,000

*Data not reported (fewer than 500)
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

PAST YEAR METHAMPHETAMINE USE (12 YEARS AND OLDER)

SAMHSA began reporting two-year state synthetic estimate percentages for past year methamphetamine use beginning with 2015-2016 data, but the estimated number of individuals who used methamphetamine are only available for 2016-2017. The Oklahoma prevalence was higher than the U.S. prevalence across all age groups (Table 36). The disparity was greatest in the 18-25 year age group. Approximately 25,000 Oklahomans aged 12 years and older reported using methamphetamine in the past year (Table 37).

TABLE 36. PAST YEAR METHAMPHETAMINE USE BY AGE GROUP, OKLAHOMA, 2015-2016 AND 2016-2017

Age Group	Oklahoma		U.S.	
	2015-2016	2016-2017	2015-2016	2016-2017
12 and older	0.97%	0.77%	0.58%	0.56%
12-17	0.18%	0.22%	0.14%	0.16%
18-25	1.71%	1.75%	0.85%	0.93%
26 and older	0.95%	0.68%	0.58%	0.55%

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 37. ESTIMATED NUMBER OF INDIVIDUALS WHO USED METHAMPHETAMINE IN THE PAST YEAR BY AGE GROUP, OKLAHOMA AND THE U.S., 2016-2017 (ANNUAL AVERAGES)

Age Group	Oklahoma	U.S.
12 and older	25,000	1,512,000
12-17	1,000	40,000
18-25	7,000	320,000
26 and older	17,000	1,152,000

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TOBACCO CONSEQUENCES & CONSUMPTION

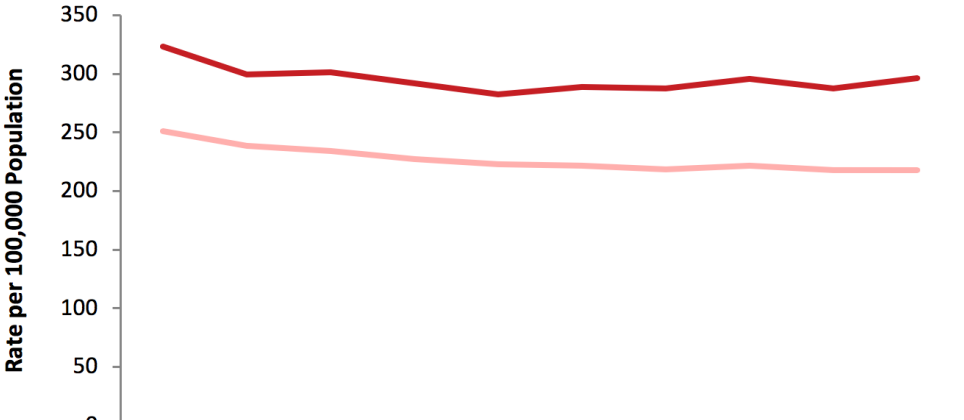
TOBACCO-RELATED CONSEQUENCES

MAJOR CARDIOVASCULAR DISEASE

Cigarette smoking is a significant contributor to deaths from cardiovascular disease (CVD), lung cancer, and chronic obstructive pulmonary disorder (COPD)/ emphysema.

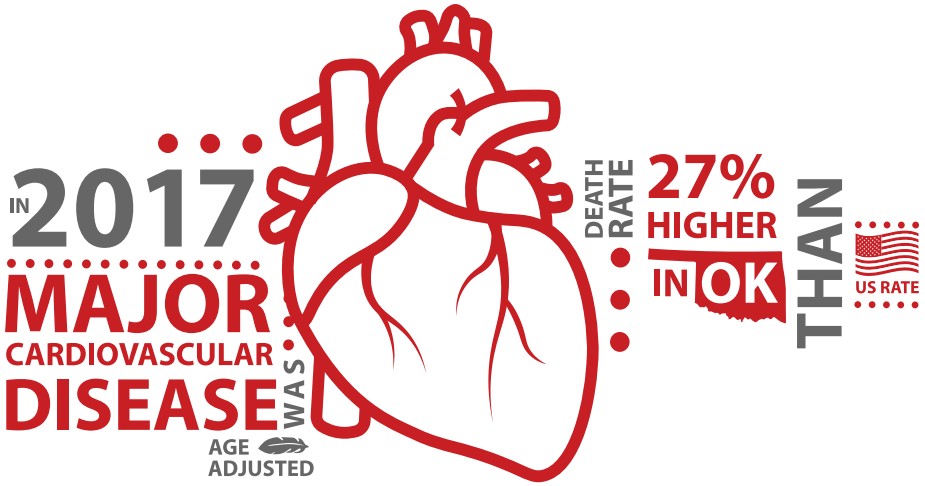
Age-adjusted major cardiovascular disease (CVD) death rates decreased by 8% in Oklahoma and 13% in the U.S. from 2008 to 2017. The Oklahoma age-adjusted death rate was 27% higher than the U.S. rate in 2017 (Figure 59).

FIGURE 59. AGE-ADJUSTED MAJOR CARDIOVASCULAR DISEASE DEATH RATES, OKLAHOMA AND U.S., 2008-2017

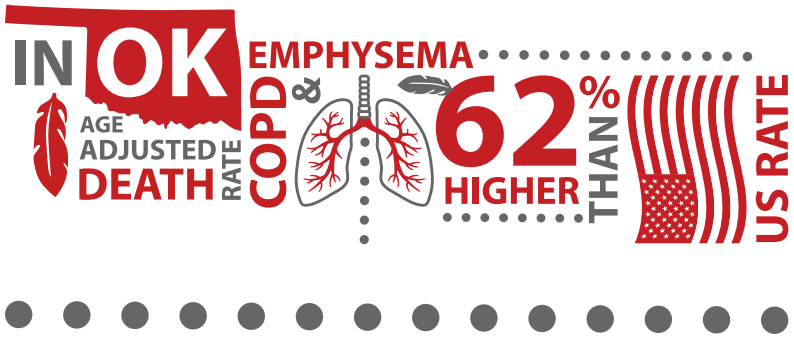


	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
OK	323.6	299.6	301.7	291.7	282.4	289.1	287.7	295.6	287.4	296.7
U.S.	250.9	238.5	234.2	227.3	223.0	221.7	218.6	221.5	218.2	218.1

Source: CDC WONDER Multiple Cause of Death File. ICD-10 codes (underlying cause of death): I00-I78



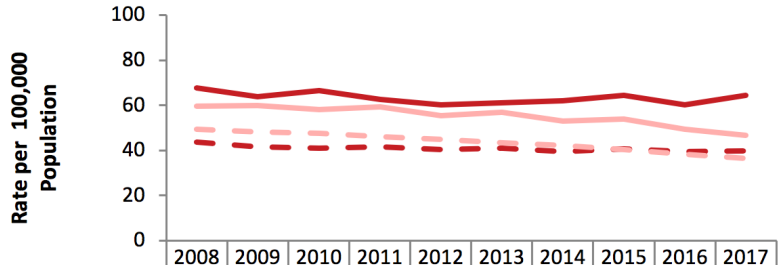
TOBACCO CONSEQUENCES & CONSUMPTION



CHRONIC OBSTRUCTIVE PULMONARY DISORDER (COPD)/EMPHYSEMA AND LUNG CANCER DEATHS

The Oklahoma age-adjusted death rate for COPD/emphysema was 62% higher than the U.S. rate in 2017 (Figure 60). Age-adjusted bronchus and lung cancer death rates decreased by 21% from 2008 to 2017 in Oklahoma and by 26% in the U.S. The age-adjusted death rate was 28% higher in Oklahoma compared to the U.S. in 2017 (Figure 60). From 2008 to 2017, there was an average per year of 12,414 deaths from major CVD, 2,696 deaths from COPD/emphysema, and 2,395 deaths from lung cancer among Oklahoma residents (Table 38).

FIGURE 60. AGE-ADJUSTED COPD/EMPHYSEMA AND BRONCHUS/LUNG CANCER DEATH RATES, OKLAHOMA AND THE U.S., 2008-2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
OK - COPD/Emphysema	67.7	63.9	66.5	62.7	60.1	61.1	61.9	64.5	60.3	64.5
U.S. - COPD/Emphysema	43.6	41.6	41.1	41.5	40.5	41.0	39.4	40.6	39.5	39.9
OK - Lung Cancer	59.5	60.0	58.1	59.4	55.4	56.8	53.1	53.9	49.4	46.8
U.S. - Lung Cancer	49.5	48.3	47.6	46.0	44.9	43.4	42.1	40.5	38.3	36.6

Source: CDC WONDER Multiple Cause of Death File
ICD-10 codes for COPD/Emphysema (underlying cause of death): J40-J42, J43, J44, J47
ICD-10 codes for bronchus and lung cancer (underlying cause of death): C34

TABLE 38. NUMBER OF DEATHS FROM MAJOR CVD, COPD/EMPHYSEMA, AND BRONCHUS/LUNG CANCER, OKLAHOMA, 2008-2017

Year	Major CVD	COPD/Emphysema	Bronchus/Lung Cancer
2008	12,525	2,653	2,386
2009	11,828	2,549	2,444
2010	12,065	2,686	2,402
2011	11,957	2,593	2,501
2012	11,767	2,531	2,380
2013	12,284	2,630	2,490
2014	12,424	2,716	2,373
2015	13,000	2,872	2,459
2016	12,834	2,751	2,300
2017	13,458	2,981	2,210

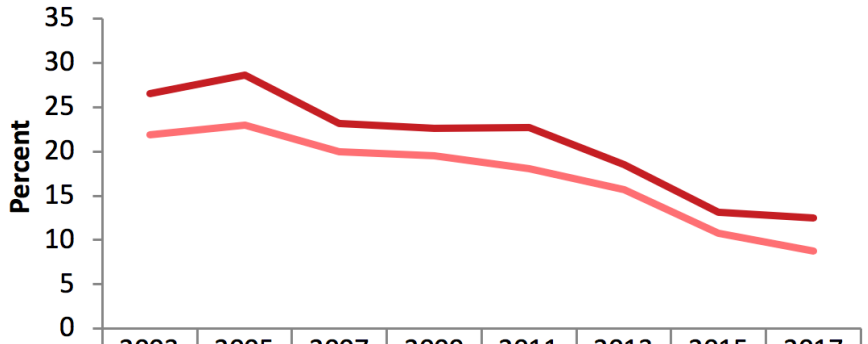
Source: CDC WONDER multiple cause of death file
ICD-10 codes for COPD/emphysema (underlying cause of death): J40-J42, J43, J44, J47
ICD-10 codes for lung cancer (underlying cause of death): C34

TOBACCO CONSUMPTION

YOUTH (9TH-12TH GRADERS) CIGARETTE SMOKING IN PAST 30 DAYS

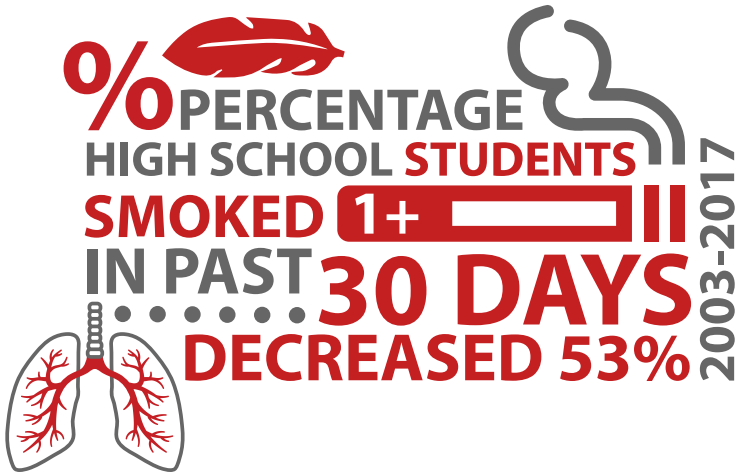
A statistically significant decrease in cigarette smoking in the past 30 days among high school students from 2003 to 2017 was observed in Oklahoma and in the U.S. ($p<0.05$). **The percentage of Oklahoma high school students who smoked at least one cigarette in the past 30 days before the survey decreased by 53% from 2003 to 2017 while the U.S. experienced a 60% decrease during this time period (Figure 61).**

FIGURE 61. PERCENTAGE OF HIGH SCHOOL STUDENTS WHO SMOKED AT LEAST ONE CIGARETTE IN THE PAST 30 DAYS BEFORE THE SURVEY, OKLAHOMA AND THE U.S., 2003-2017



	2003	2005	2007	2009	2011	2013	2015	2017
Oklahoma	26.5	28.6	23.2	22.6	22.7	18.5	13.1	12.5
U.S.	21.9	23.0	20.0	19.5	18.1	15.7	10.8	8.8

Source: Youth Risk Behavior Survey

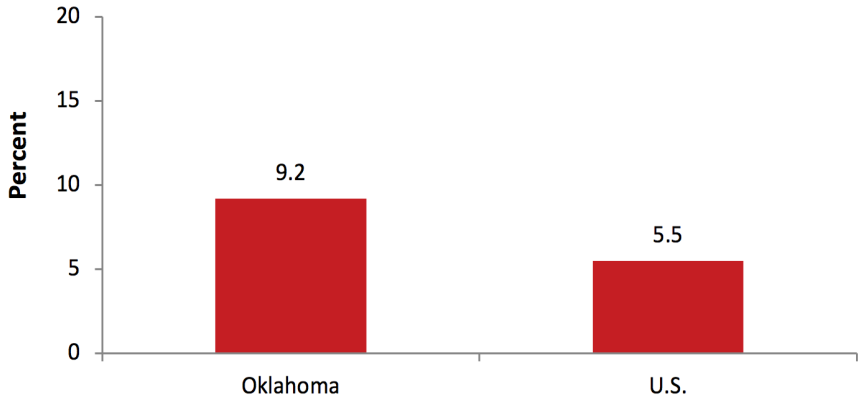


TOBACCO CONSEQUENCES & CONSUMPTION

YOUTH (9TH-12TH GRADERS) SMOKELESS TOBACCO USE IN PAST 30 DAYS

In 2017, approximately 1 in 11 Oklahoma high school students used a smokeless tobacco product during the 30 days before the survey compared to approximately 1 in 18 U.S. students (Figure 62).

FIGURE 62. PERCENTAGE OF HIGH SCHOOL STUDENTS WHO USED A SMOKELESS TOBACCO PRODUCT IN THE PAST 30 DAYS BEFORE THE SURVEY, OKLAHOMA AND THE U.S., 2017

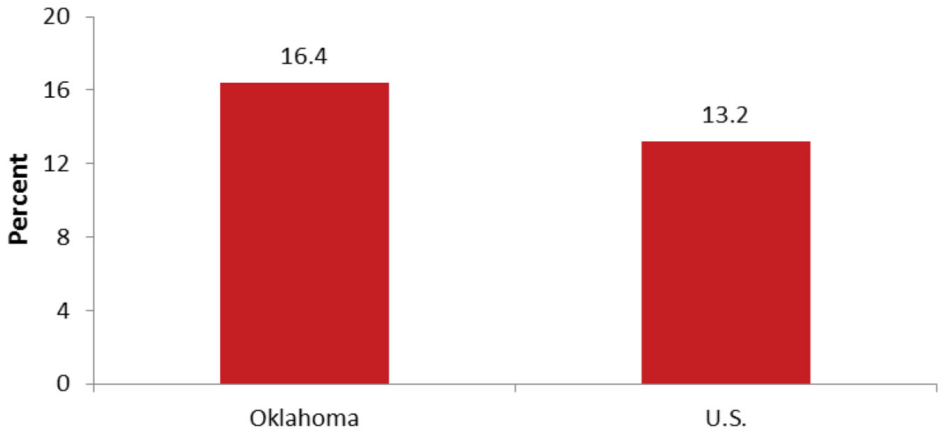


Source: Youth Risk Behavior Survey

YOUTH (9TH-12TH GRADERS) USING AN ELECTRONIC VAPOR PRODUCT IN THE PAST 30 DAYS

In 2017, approximately 1 in 6 Oklahoma high school students and approximately 1 in 8 U.S. students used an electronic vapor product in the past 30 days before the survey (Figure 63).

FIGURE 63. PERCENTAGE OF HIGH SCHOOL STUDENTS WHO USED AN ELECTRONIC VAPOR PRODUCT IN THE PAST 30 DAYS BEFORE THE SURVEY, OKLAHOMA AND THE U.S., 2017

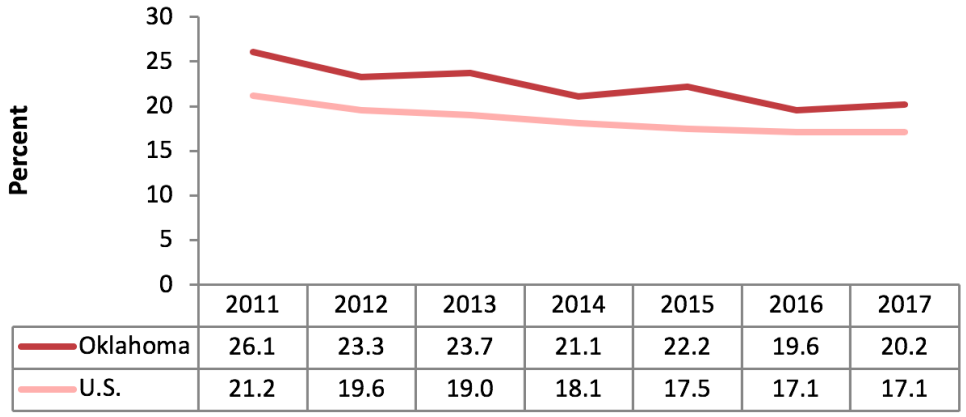


Source: Youth Risk Behavior Survey

ADULT (18 YEARS AND OLDER) CURRENT CIGARETTE SMOKING

The percentage of Oklahoma adults who were current smokers (smoked at least 1 cigarette in the past 30 days) decreased by 25% from 2011 to 2016 before increasing slightly in 2017. Approximately 1 in 5 adults were current smokers in 2017. The U.S. experienced a 19% decrease from 2011 to 2017 (Figure 64).

FIGURE 64. PERCENTAGE OF ADULTS AGED 18 YEARS AND OLDER WHO WERE CURRENT SMOKERS (SMOKED AT LEAST 1 CIGARETTE IN THE PAST 30 DAYS), OKLAHOMA AND THE U.S., 2011-2017



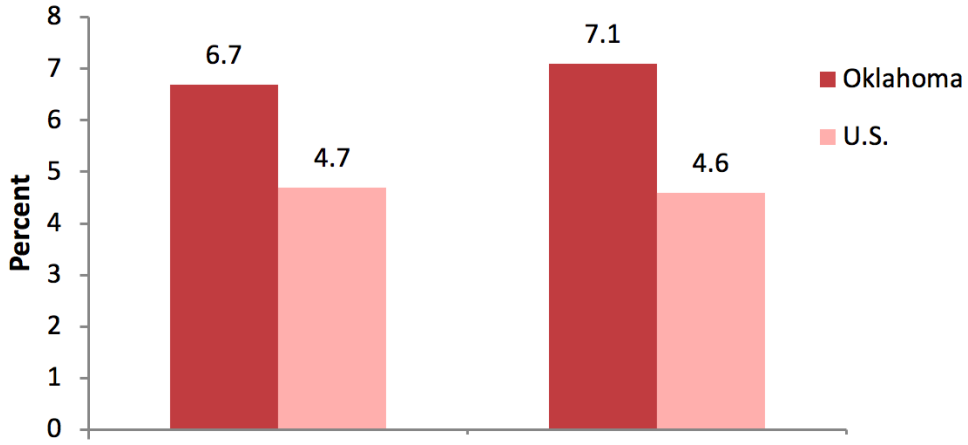
	2011	2012	2013	2014	2015	2016	2017
Oklahoma	26.1	23.3	23.7	21.1	22.2	19.6	20.2
U.S.	21.2	19.6	19.0	18.1	17.5	17.1	17.1

Source: Behavioral Risk Factor Surveillance System

ADULT (18 YEARS AND OLDER) CURRENT E-CIGARETTE USE

Adult e-cigarette use data is only available for 2016 and is not available for the U.S. Approximately 1 in 15 Oklahomans were current e-cigarette users (used e-cigarettes in the past 30 days) in 2016 and 1 in 14 were users in 2017. The prevalence of past 30 day e-cigarette in Oklahoma was 1.4 times as high as the U.S. median in 2016 and 1.5 times as high in 2017 (Figure 65).

FIGURE 65. PERCENTAGE OF ADULTS AGED 18 YEARS AND OLDER WHO USED E-CIGARETTES IN THE PAST 30 DAYS, OKLAHOMA AND THE U.S. MEDIAN, 2016 AND 2017



Source: Behavioral Risk Factor Surveillance System

RISK FACTORS FOR SUBSTANCE USE

RISK FACTORS FOR SUBSTANCE USE

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), risk and protective factors for mental health and/or substance use disorders are characteristics that are associated with either negative or positive outcomes. They operate in multiple contexts:

- AT THE INDIVIDUAL-LEVEL
  - o RISK EXAMPLES: genetic predisposition to addiction, exposure to alcohol prenatally, negative self-image
  - o PROTECTION EXAMPLES: positive self-image, self-control, social and emotional competence

- IN RELATIONSHIPS
  - o RISK EXAMPLE: parents and/or friends who misused drugs and alcohol
  - o PROTECTION EXAMPLES: Strong familial bonds and parents disapproving of substance misuse

- IN COMMUNITIES
  - o RISK EXAMPLES: social norms favorable to substance misuse and neighborhood poverty and violence
  - o PROTECTION: availability of after-school activities and health-related resources

- IN SOCIETY
  - o RISK EXAMPLES: limited economic opportunity and substance
  - o PROTECTION EXAMPLE: laws or policies limiting availability of alcohol

Some risk and protective factors are shared by substance use disorders and mental illness. Other features of risk and protective factors include:
- TEND TO BE CORRELATED AND CUMULATIVE
- ASSOCIATED WITH MULTIPLE OUTCOMES
- CAN HAVE INFLUENCE THROUGHOUT THE LIFESPAN[12]

According to research by Dr. J. David Hawkins, Dr. Richard F. Catalano, and colleagues at the University of Washington have identified risk and protective factors for youth substance use and antisocial behavior that can be grouped into four domains: community, family, school, and peer/individual.

This section will provide examples of factors in various contexts and is not meant to be a comprehensive list of all risk and protective factors.

12. Substance Abuse and Mental Health Services Administration. (2018). Selecting Best-fit Programs and Practices: Guidance for Substance Misuse Prevention Practitioners. https://www.samhsa.gov/sites/default/files/ebp_prevention_guidance_document_241.pdf

AVAILABILITY AND ACCESSIBILITY OF SUBSTANCES

ALCOHOL EXCISE TAX

Oklahoma's excise tax was lower for all types of alcohol than the U.S. tax rate. The largest difference is in the tax rate of distilled spirits, with the U.S. tax rate being almost twice the rate of Oklahoma's rate (Table 39).

TABLE 39. SPECIFIC EXCISE TAX LEVIED PER GALLON OF BEVERAGE AT THE WHOLESALE OR RETAIL LEVEL, BY BEVERAGE TYPE AS OF JANUARY 1, 2018

Beverage Type	Oklahoma	U.S.
Beer	$0.40	$0.58
Wine	$0.72	$1.07
Distilled Spirits	$5.56	$10.80

Source: Alcohol Policy Information System

TOBACCO SALES TO MINORS

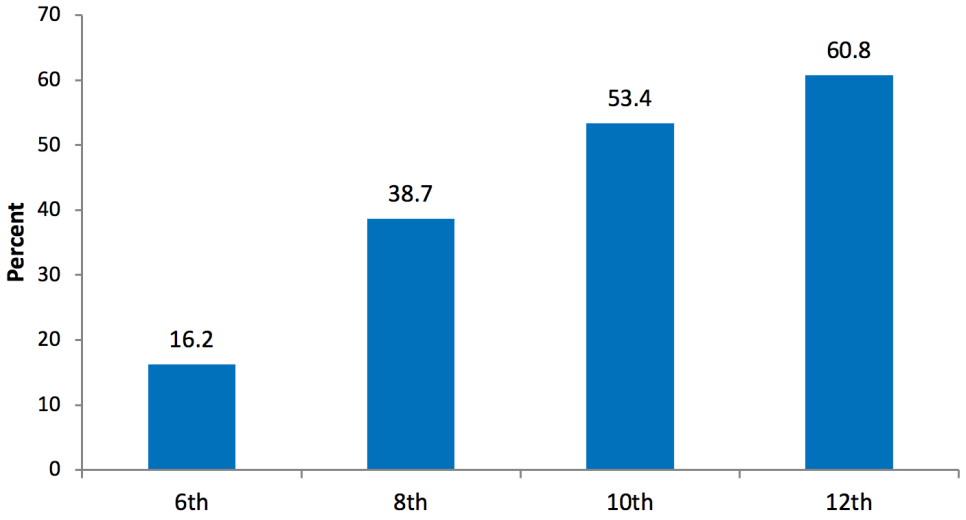
In accordance with Oklahoma law, the Alcoholic Beverage Laws Enforcement (ABLE) commission aids ODMHSAS in enforcing the Synar provisions. The goal of Synar is to reduce and maintain Oklahoma's number of successful illegal tobacco purchases by minors to less than 20% of attempted buys. Oklahoma's Synar non-compliance rate, based on a random sample of Oklahoma retailers in federal 2020, is 13.2%.[14]

14. Oklahoma Department of Mental Health and Substance Abuse Services. (2018). Synar Compliance. Retrieved from https://www.ok.gov/odmhsas/Prevention_/Prevention_Initiatives/Synar_Compliance/index.html

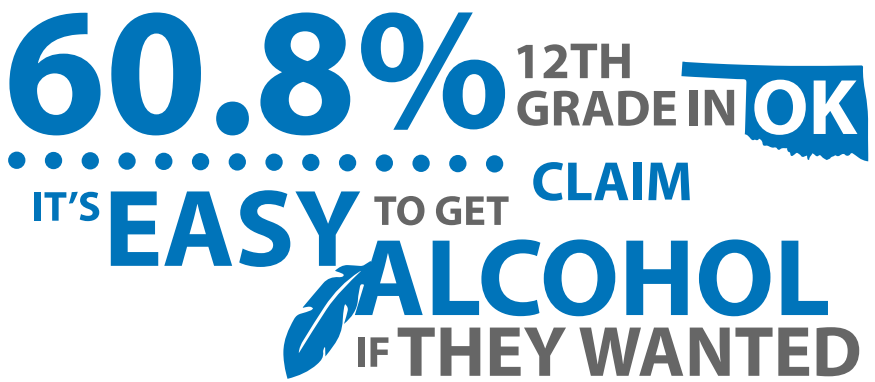
YOUTH (6TH, 8TH, 10TH, 12TH GRADERS) PERCEPTION OF EASE OF ACCESS TO ALCOHOL

According to the Oklahoma Prevention Needs Assessment (OPNA) survey, the percentage of students reporting it would be easy to get alcohol if they wanted to increased with increasing grade from approximately 16% among 6th graders to approximately 61% among 12th graders (Figure 66).

FIGURE 66. STUDENTS REPORTING IT WOULD BE EASY* TO GET ALCOHOL IF THEY WANTED TO BY GRADE, OKLAHOMA, 2017-2018



Based on responses of "sort of easy" or "very easy" to get alcohol
Source: Oklahoma Prevention Needs Assessment Survey



RISK FACTORS FOR SUBSTANCE USE

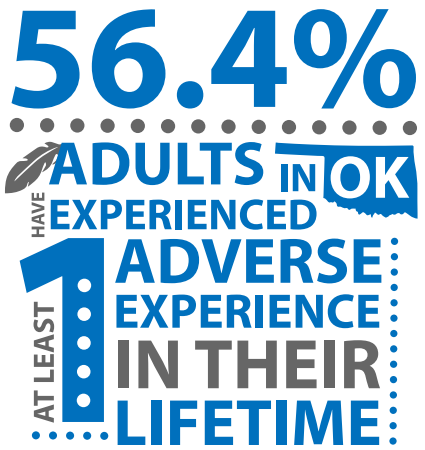
LIFETIME ADVERSE CHILDHOOD EXPERIENCES

Adverse childhood experiences (ACEs) are stressful or traumatic events. ACEs are related to the development of conditions such as substance misuse, mental illness, and negative physical health outcomes.[15] Examples of ACEs include: physical abuse, sexual abuse, emotional abuse, physical neglect, emotional neglect, intimate partner violence, mother treated violently, substance misuse within household, household mental illness, parental separation or divorce, and incarcerated household member.

According to the 2016 Oklahoma BRFSS, over half (56.4%) of Oklahoma adults have experienced at least one ACE in their lifetime, 1 in 5 (19.1%) have experienced 2-3, and approximately 1 in 7 (14.6%) have experienced 4 or more. The number of lifetime ACEs experienced was similar among Oklahoma males and females. Non-Hispanic multiracial individuals had the highest prevalence of experiencing one or more ACEs, with approximately 1 in 4 (27.7%) experiencing 4 or more (Table 40).

TABLE 40. ACES EXPERIENCED IN LIFETIME AMONG ADULTS AGED 18 AND OLDER BY GENDER AND RACE/ETHNICITY, OKLAHOMA, 2012, 2014, AND 2016

	0	1	2 to 3	4 or more
Total	43.6	22.7	19.1	14.6
Gender				
Male	44.4	24.3	18.7	12.6
Female	42.9	21.1	19.6	16.4
Race/Ethnicity				
NH White	46.9	22.3	17.6	13.1
NH Black/African American	28.3	35.4	20.1	16.2
NH American Indian/Alaska Native	41.1	19.1	17.3	22.5
NH Multiple Race	21.8	20.6	33.5	24.0
Hispanic	42.1	20.5	23.2	14.2



Source: Behavioral Risk Factor Surveillance System. NH: non-Hispanic

15. Substance Abuse and Mental Health Services Administration. (2018). Adverse Childhood Experiences. Retrieved from https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/adverse-childhood-experiences.

YOUTH AT RISK FOR SUBSTANCE MISUSE AND PROBLEM BEHAVIOR

Several scales in the various domains were developed to summarize the numerous survey questions related to risk.[16] Each scale is based off of two or more survey questions. Table 41 shows the top five risk factor scales for each grade. The perceived risk of drug use and low commitment to school scales were in the top five among all grades. The community disorganization scale was in the top five for 8th, 10th, and 12th graders. The depressive symptoms scale was in the top five for 8th and 10th graders. Poor family management and attitudes favorable toward antisocial behavior were in the top five high among 6th graders while the low neighborhood attachment scale was one of the top five among high among 10th and 12th graders (Table 41).

TABLE 41. STUDENTS REPORTING HIGH RISK FOR SUBSTANCE USE AND PROBLEM BEHAVIOR BY GRADE,OKLAHOMA, SCHOOL YEAR 2017-2018

Risk Scale	Grade			
	6	8	10	12
Perceived risk of drug use scale	54.7	58.7	68.8	66.0
Attitudes favorable toward antisocial behavior scale	49.1			
Community disorganization scale		46.6	51.6	52.0
Low neighborhood attachment scale	51.9		48.4	53.4
Low commitment to school scale	55.2	56.4	50.3	51.8
Depressive symptoms scale		43.8	46.9	
Poor family management scale	56.1			
Parental attitudes favorable to antisocial behavior		45.0		
Intentions to use scale				49.2

Source: 2017-2018 Oklahoma Prevention Needs Assessment Survey

16. Oklahoma Department of Mental Health and Substance Abuse Services. (2018). Oklahoma Prevention Needs Assessment Survey 2018: Results for State of Oklahoma. Retrieved from https://www.ok.gov/odmhsas/documents/State_of_Oklahoma_Profile_Report%20-%202018.pdf

MENTAL HEALTH

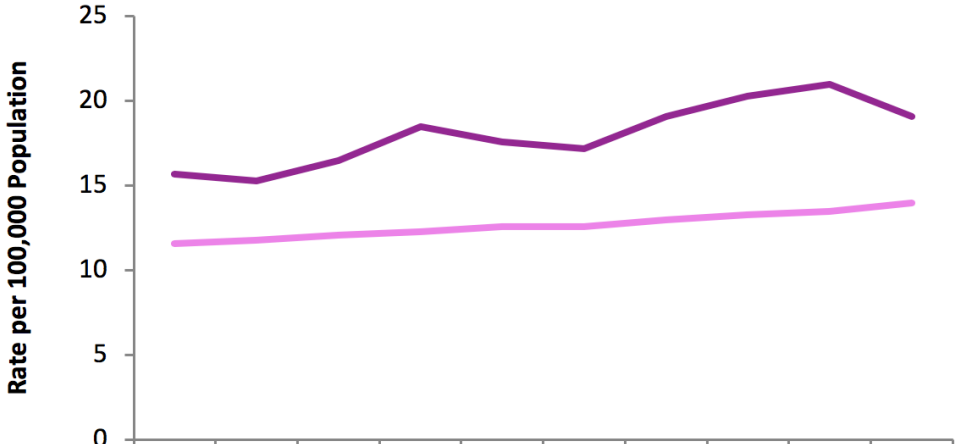
MENTAL HEALTH

SUICIDE

The age-adjusted suicide rate among Oklahoma residents increased by 34% from 2008 to 2016 before decreasing by 9% in 2017 (Figure 67). The suicide rate was 36% higher in Oklahoma than in the U.S. in 2017. There were 6,892 suicides in Oklahoma from 2008 to 2017 (Table 42).

6,892 SUICIDES IN OK 2008-2017

FIGURE 67. AGE-ADJUSTED SUICIDE RATES, OKLAHOMA AND THE U.S., 2008-2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
OK	15.7	15.3	16.5	18.5	17.6	17.2	19.1	20.3	21.0	19.1
U.S.	11.6	11.8	12.1	12.3	12.6	12.6	13.0	13.3	13.5	14.0

Source: National Vital Statistics available on CDC WONDER Online Database, Multiple Cause of Death File.
ICD-10 codes: X60-X84, Y87.0

TABLE 42. NUMBER OF SUICIDES, OKLAHOMA AND THE U.S., 2008-2017

Year	Oklahoma	U.S.
2008	575	26,035
2009	567	36,909
2010	618	38,364
2011	693	39,518
2012	670	40,600
2013	665	41,149
2014	736	42,826
2015	790	44,193
2016	822	44,965
2017	756	47,173

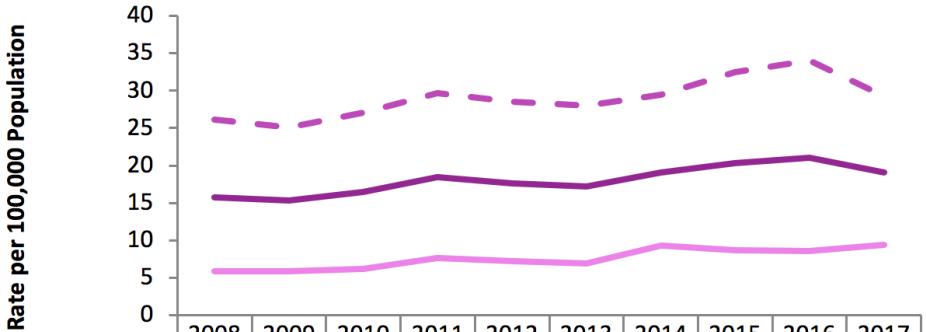
Source: CDCC WONDER Online Database, Multiple Cause of Death File
ICD-10 codes: X60-X84, Y87.0

MENTAL HEALTH

SUICIDE

The age-adjusted suicide rate among males was an average of 3.9 times higher than the rate among females from 2008 to 2017. The rate decreased among males from 2016 to 2017 but increased among females (Figure 68). There were 5,452 Oklahoma males and 1,444 Oklahoma females who died by suicide from 2008 to 2017 (Table 43).

FIGURE 68. AGE-ADJUSTED SUICIDE RATES BY GENDER, OKLAHOMA, 2008-2017



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total	15.7	15.3	16.5	18.5	17.6	17.2	19.1	20.3	21.0	19.1
Male	26.1	25.1	27.1	29.7	28.5	28.0	29.5	32.5	34.0	29.3
Female	5.9	5.9	6.2	7.7	7.2	6.9	9.3	8.7	8.6	9.4

Source: National Vital Statistics available on CDC WONDER Online Database, Multiple Cause of Death File
ICD-10 codes: X60-X84, Y87.0

TABLE 43. NUMBER OF SUICIDES BY GENDER, OKLAHOMA, 2008-2017

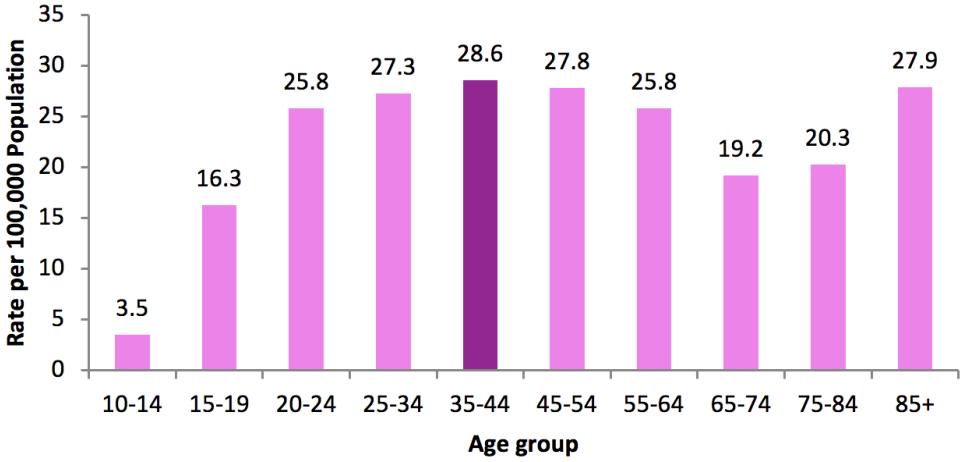
Year	Males	Females
2008	466	109
2009	456	111
2010	500	118
2011	552	141
2012	532	138
2013	531	134
2014	561	175
2015	619	171
2016	661	161
2017	574	182

Source: National Vital Statistics available on CDC WONDER Online Database, Multiple Cause of Death File
ICD-10 codes: X60-X84, Y87.0

SUICIDE

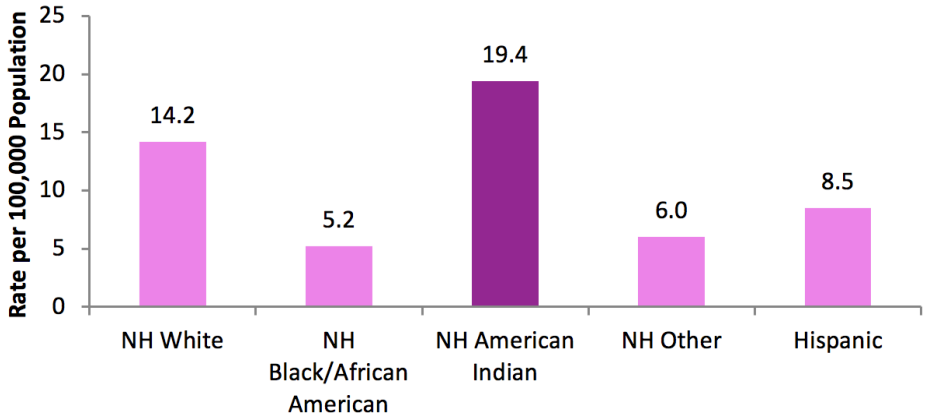
Suicide rates peaked in the 35-44 year age group, decreased in the older age groups, and then increased again in the 85 years and older age group (Figure 69). The age-adjusted suicide rate was highest among non-Hispanic American Indians, followed by non-Hispanic Whites. The rate among non-Hispanic American Indians was 3.7, 3.2, and 2.3 times higher than the rate among non-Hispanic African Americans, other races, and Hispanics, respectively (Figure 70).

FIGURE 69. AGE-ADJUSTED SUICIDE RATES BY AGE GROUP, OKLAHOMA, 2015-2017



Source: CDC WONDER Online Database, Multiple Cause of Death File
ICD-10 codes: X60-X84, Y87.0

FIGURE 70. AGE-ADJUSTED SUICIDE RATE BY IHS-LINKED RACE AND ETHNICITY, 2013-2015



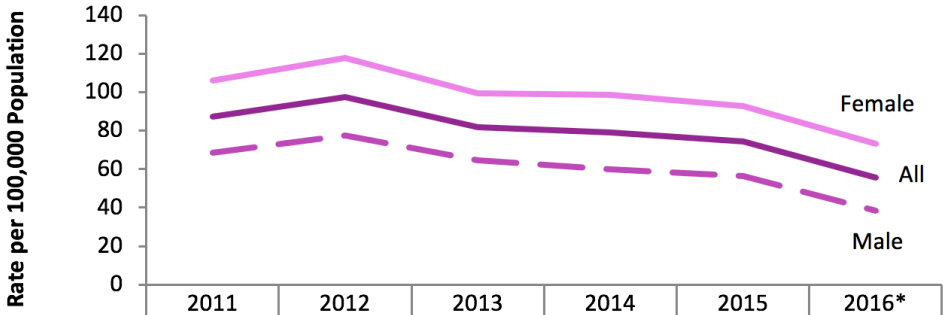
Source: Oklahoma Vital Statistics available on OK2SHARE
NH=non-Hispanic

IN 2016 HOSPITALIZATION RATES RELATED TO SUICIDE ATTEMPTS WERE GREATER WITH FEMALES AT 73.4% TO MALES AT 38.5% PER 100,000 RESPECIVELY

HOSPITALIZATIONS RELATED TO SUICIDE ATTEMPTS

Hospitalization rates (per 100,000) related to suicide attempts in Oklahoma decreased by 43% from 2012 to 2016. Rates of suicide attempt hospitalizations were 1.5 times higher among females compared to males in 2011 and nearly two times higher among females compared to males in 2016 (Figure 71).

FIGURE 71. AGE-ADJUSTED HOSPITALIZATIONS RELATED TO SUICIDE ATTEMPTS BY GENDER, OKLAHOMA, 2011-2016



	2011	2012	2013	2014	2015	2016*
Total	87.1	97.4	81.9	79.1	74.2	55.7
Male	68.7	77.6	64.6	60.1	56.3	38.5
Female	105.9	117.8	99.6	98.6	92.8	73.4

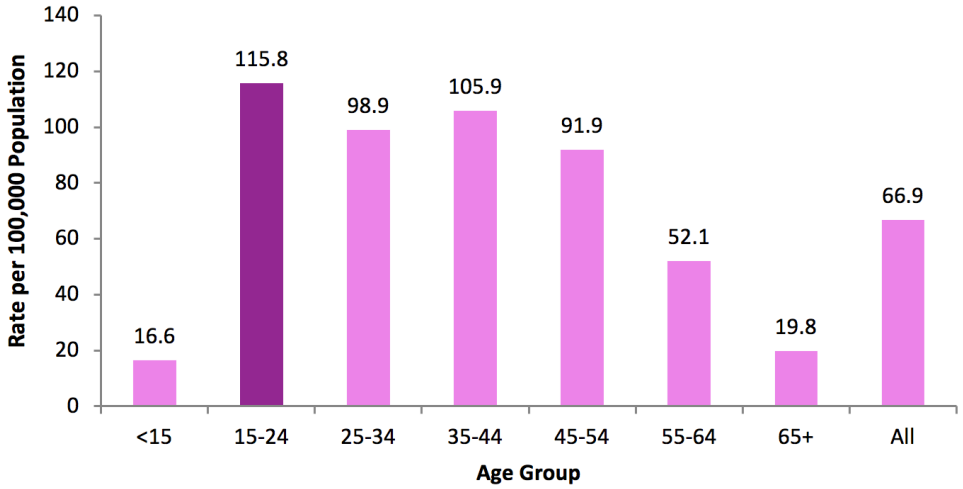
Note:
*The classification system changed from ICD-9-CM to ICD-10 –CM in October 2015. Comparability cannot be assured over the transition from ICD-9-CM-coded to ICD-10-CM-coded hospital discharge data. Hospital discharge counts are limited to Oklahoma residents and are only collected from Oklahoma state licensed acute care hospitals. This excludes Indian Health Service (IHS)/tribal hospitals, non-acute care, or federal hospitals such as Veteran's Affairs (VA) and military hospitals.
Hospital discharges involving suicide and self-harm are identified using ICD-9-CM codes: E950-E959 or first-listed valid E-code in all diagnosis field.
Hospital discharge data in 2015 and onward are identified using ICD-9-CM mentioned above as well as ICD-10-CM principal diagnosis codes: T36 to T65 inclusive where 6th digit is 2, and X71 to X83.

Source: Oklahoma Discharge Public Use Data file, Health Care Information Division, Oklahoma State Department of Health. Additional E-codes for the 2013 and 2014 data, provided by OSDH, Injury Prevention, were merged with the respective Public Use Data File.

HOSPITALIZATIONS RELATED TO SUICIDE ATTEMPTS

Hospitalizations related to suicide attempts were higher among those aged 15 to 44 years, with the highest rates being among Oklahomans aged 15 to 24 years (Figure 72).

FIGURE 72. HOSPITALIZATIONS INVOLVING SUICIDE ATTEMPTS PER 100,000 BY AGE GROUP, OKLAHOMA, 2014-2016



Note:
*The classification system changed from ICD-9-CM to ICD-10 –CM in October 2015. Comparability cannot be assured over the transition from ICD-9-CM-coded to ICD-10-CM-coded hospital discharge data. Hospital discharge counts are limited to Oklahoma residents and are only collected from Oklahoma state licensed acute care hospitals. This excludes Indian Health Service (IHS)/tribal hospitals, non-acute care, or federal hospitals such as Veteran's Affairs (VA) and military hospitals.
Hospital discharges involving suicide and self-harm are identified using ICD-9-CM codes: E950-E959 or first-listed valid E-code in all diagnosis field.

Hospital discharge data in 2015 and onward are identified using ICD-9-CM mentioned above as well as ICD-10-CM principal diagnosis codes: T36 to T65 inclusive where 6th digit is 2, and X71 to X83.

Source: Oklahoma Discharge Public Use Data file, Health Care Information Division, Oklahoma State Department of Health. Additional E-codes for the 2013 and 2014 data, provided by OSDH, Injury Prevention, were merged with the respective Public Use Data File.

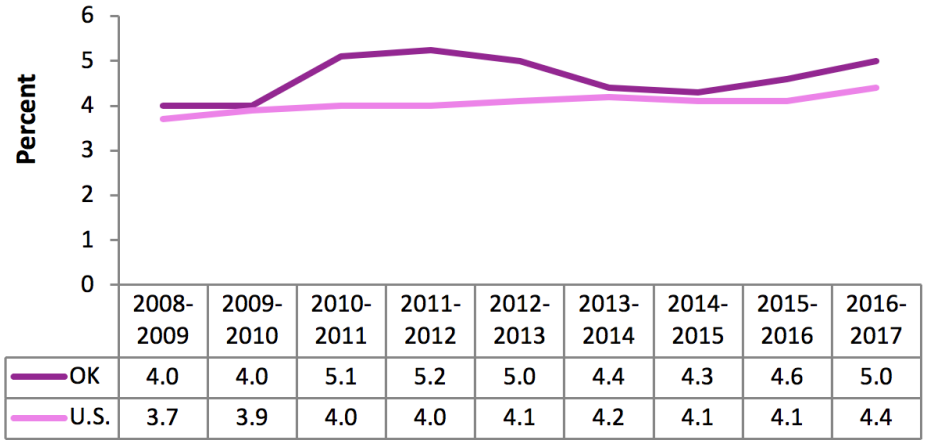
15-24 Y/O
HIGHEST RATE OF HOSPITALIZATIONS
INVOLVING SUICIDE ATTEMPTS

MENTAL HEALTH

ADULT (18 YEARS AND OLDER) PAST YEAR SERIOUS MENTAL ILLNESS

There were 144,000 Oklahoma adults reporting a serious mental illness in the past year (2016-2017) (Table 44). The prevalence of past year serious mental illness among adults was higher in Oklahoma than in the U.S. throughout the 2008-2009 to 2016-2017 time period (Figure 73).

FIGURE 73. PERCENTAGE OF ADULTS AGED 18 YEARS AND OLDER REPORTING SERIOUS MENTAL ILLNESS IN PAST YEAR, OKLAHOMA AND THE U.S., 2008-2009 TO 2016-2017



	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
OK	4.0	4.0	5.1	5.2	5.0	4.4	4.3	4.6	5.0
U.S.	3.7	3.9	4.0	4.0	4.1	4.2	4.1	4.1	4.4

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 44. ESTIMATED NUMBER OF ADULTS AGED 18 AND OLDER REPORTING SERIOUS MENTAL ILLNESS IN THE PAST YEAR, OKLAHOMA AND THE U.S., 2008-2009 TO 2016-2017 (ANNUAL AVERAGES)

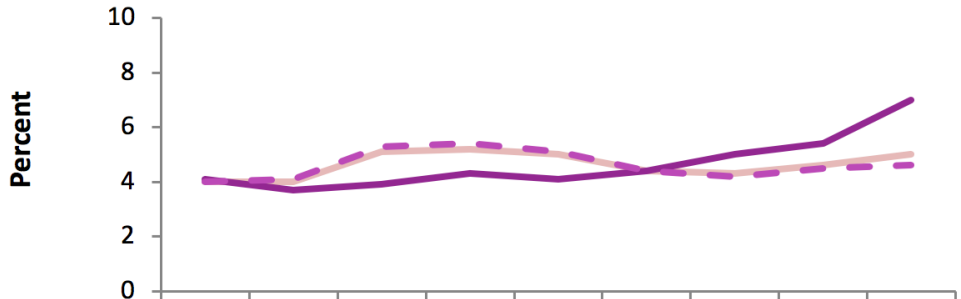
Year	Oklahoma	U.S.
2008-2009	106,000	8,357,000
2009-2010	108,000	8,857,000
2010-2011	139,000	9,135,000
2011-2012	146,000	9,289,000
2012-2013	140,000	9,793,000
2013-2014	123,000	9,919,000
2014-2015	124,000	9,793,000
2015-2016	132,000	10,062,000
2016-2017	144,000	10,775,000

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

ADULT (18 YEARS AND OLDER) PAST YEAR SERIOUS MENTAL ILLNESS

Approximately 1 in 20 Oklahomans aged 18 to 25 and 26 and older reported having had a serious mental illness in the past year (Table 45). There was a statistically significant increase in the prevalence of serious mental illness in the 18-25 year age group from 2008-2009 to 2016-2017 ($p<0.05$) (Figure 74).

FIGURE 74. PERCENTAGE OF ADULTS REPORTING SERIOUS MENTAL ILLNESS IN THE PAST YEAR BY AGE GROUP, OKLAHOMA, 2008-2009 TO 2016-2017



	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
18+	4.0	4.0	5.1	5.2	5.0	4.4	4.3	4.6	5.0
18-25	4.1	3.7	3.9	4.3	4.1	4.4	5.0	5.4	7.0
26+	4.0	4.1	5.3	5.4	5.1	4.4	4.2	4.5	4.6

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 45. ESTIMATED NUMBER OF ADULTS AGED 18 AND OLDER REPORTING SERIOUS MENTAL ILLNESS IN THE PAST YEAR BY AGE GROUP, OKLAHOMA, 2008-2009 TO 2016-2017 (ANNUAL AVERAGES)

Year	18-25	26 and older
2008-2009	17,000	89,000
2009-2010	15,000	93,000
2010-2011	16,000	123,000
2011-2012	18,000	128,000
2012-2013	17,000	122,000
2013-2014	19,000	105,000
2014-2015	22,000	102,000
2015-2016	23,000	109,000
2016-2017	30,000	114,000

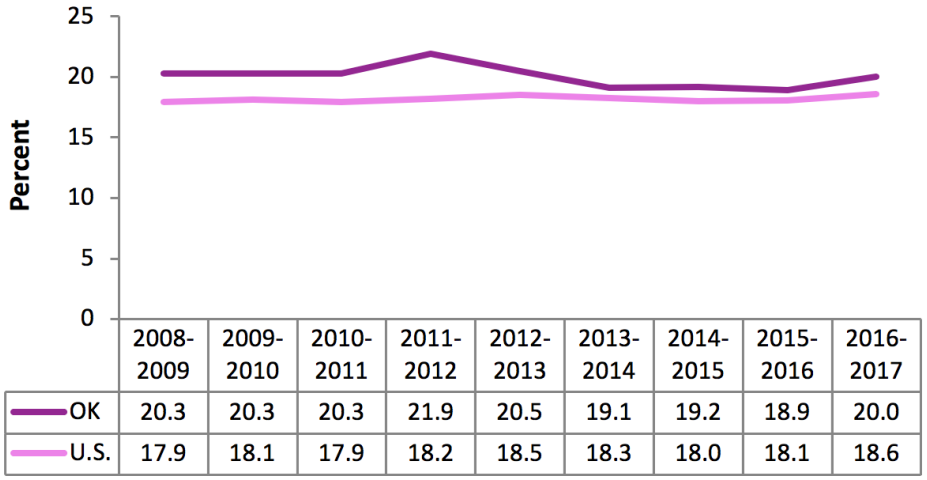
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

MENTAL HEALTH

ADULT (18 YEARS AND OLDER) PAST YEAR ANY MENTAL ILLNESS

One in five Oklahoma adults reported experiencing a mental illness in the past year. The prevalence was slightly higher than the prevalence in the U.S. throughout all years. There was a statistically significant change from 2008-2009 to 2016-2017 in the U.S. ($p<0.05$) (Figure 75; Table 46).

FIGURE 75. PERCENTAGE OF ADULTS AGED 18 YEARS AND OLDER REPORTING ANY MENTAL ILLNESS IN THE PAST YEAR, OKLAHOMA AND THE U.S., 2008-2009 TO 2016-2017



	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
OK	20.3	20.3	20.3	21.9	20.5	19.1	19.2	18.9	20.0
U.S.	17.9	18.1	17.9	18.2	18.5	18.3	18.0	18.1	18.6

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 46. ESTIMATED NUMBER OF ADULTS AGED 18 YEARS AND OLDER REPORTING ANY MENTAL ILLNESS IN THE PAST YEAR, OKLAHOMA AND THE U.S., 2008-2009 TO 2016-2017 (ANNUAL AVERAGES)

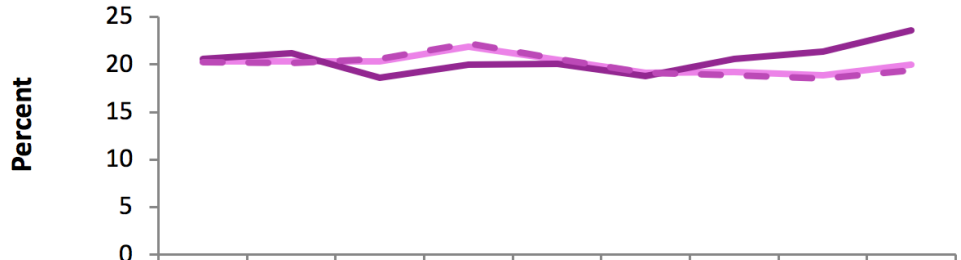
Year	Oklahoma	U.S.
2008-2009	541,000	40,512,000
2009-2010	548,000	41,303,000
2010-2011	559,000	41,423,000
2011-2012	609,000	42,546,000
2012-2013	575,000	43,778,000
2013-2014	540,000	43,697,000
2014-2015	548,000	43,486,000
2015-2016	545,000	44,035,000
2016-2017	578,000	45,641,000

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

ADULT (18 YEARS AND OLDER) PAST YEAR ANY MENTAL ILLNESS

Approximately 1 in 4 Oklahomans aged 18-25 (100,000) and 1 in 5 aged 26 and older (478,000) reported experiencing a mental illness in the past year (2016-2017 annual average). There was not a statistically significant change from 2008-2009 to 2016-2017 in either age group (Figure 76; Table 47).

FIGURE 76. PERCENTAGE OF ADULTS REPORTING ANY MENTAL ILLNESS IN THE PAST YEAR BY AGE GROUP, OKLAHOMA, 2008-2009 TO 2016-2017



	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
18+	20.3	20.3	20.3	21.9	20.5	19.1	19.2	18.9	20.0
18-25	20.6	21.2	18.6	20.0	20.1	18.8	20.6	21.4	23.6
26+	20.3	20.2	20.6	22.2	20.6	19.1	18.9	18.5	19.4

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 47. ESTIMATED NUMBER OF ADULTS AGED 18 YEARS AND OLDER REPORTING ANY MENTAL ILLNESS IN THE PAST YEAR BY AGE GROUP, OKLAHOMA, 2008-2009 TO 2016-2017 (ANNUAL AVERAGES)

Year	18-25	26 and older
2008-2009	84,000	457,000
2009-2010	89,000	459,000
2010-2011	78,000	481,000
2011-2012	85,000	524,000
2012-2013	86,000	489,000
2013-2014	81,000	459,000
2014-2015	89,000	460,000
2015-2016	92,000	453,000
2016-2017	100,000	478,000

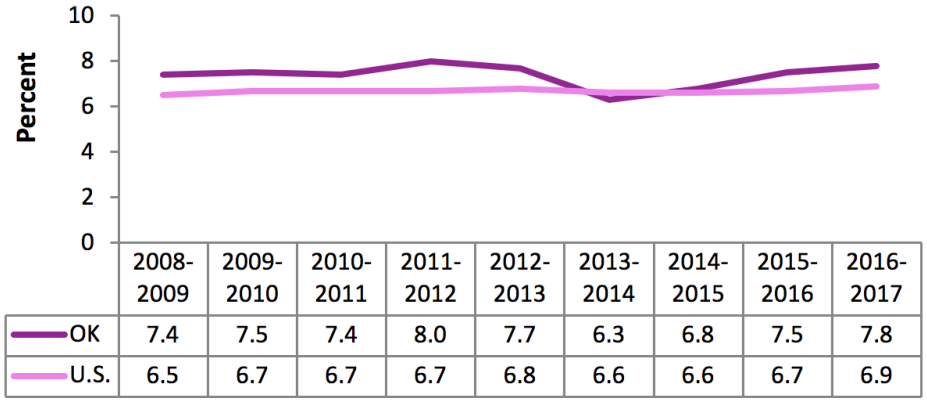
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

MENTAL HEALTH

PAST YEAR MAJOR DEPRESSIVE EPISODE

There are wording differences in the way data were collected from adults and adolescents. Therefore, data from youths aged 12 to 17 were not combined with data from individuals aged 18 and older. According to 2016-2017 estimates, approximately 1 in 15 (224,000) Oklahoma and U.S. (16.9 million) adults reported having had a major depressive episode in the past year (Figure 76; Table 48). There was a statistically significant change from 2008-2009 to 2016-2017 in the U.S. ($p < 0.05$) (Figure 77).

FIGURE 77. PERCENTAGE OF ADULTS AGED 18 YEARS AND OLDER REPORTING HAVING HAD A MAJOR DEPRESSIVE EPISODE IN THE PAST YEAR, OKLAHOMA AND THE U.S., 2008-2009 TO 2016-2017



	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
OK	7.4	7.5	7.4	8.0	7.7	6.3	6.8	7.5	7.8
U.S.	6.5	6.7	6.7	6.7	6.8	6.6	6.6	6.7	6.9

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

TABLE 48. ESTIMATED NUMBER OF ADULTS AGED 18 YEARS AND OLDER REPORTING HAVING HAD A MAJOR DEPRESSIVE EPISODE IN THE PAST YEAR, OKLAHOMA AND THE U.S., 2008-2009 TO 2016-2017 (ANNUAL AVERAGES)

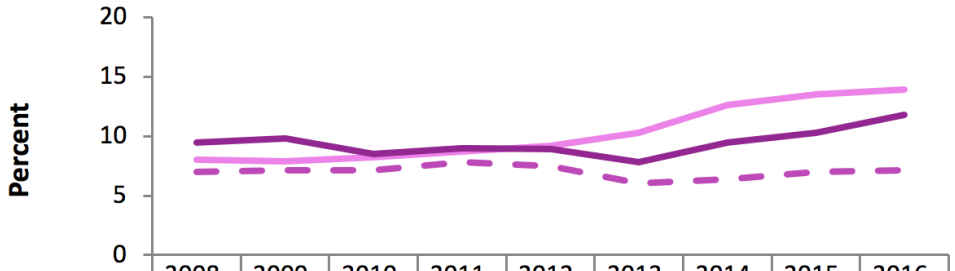
Year	Oklahoma	U.S.
2008-2009	197,000	14,756,000
2009-2010	203,000	15,303,000
2010-2011	201,000	15,464,000
2011-2012	222,000	15,716,000
2012-2013	216,000	15,989,000
2013-2014	178,000	15,826,000
2014-2015	195,000	16,035,000
2015-2016	216,000	16,330,000
2016-2017	224,000	16,949,000

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

PAST YEAR MAJOR DEPRESSIVE EPISODE

The percentage of youth aged 12-17 years who reported experiencing a major depressive disorder in the past year increased from 8.0% in 2008-2009 to 13.9% in 2016-2017, which was a statistically significant change (Figure 78).

FIGURE 78. PERCENTAGE OF PERSONS REPORTING HAVING HAD A MAJOR DEPRESSIVE EPISODE IN THE PAST YEAR BY AGE GROUP*, OKLAHOMA, 2008-2009 TO 2016-2017



	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
12-17	8.0	7.9	8.2	8.7	9.2	10.3	12.6	13.5	13.9
18-25	9.5	9.8	8.5	9.0	8.9	7.8	9.5	10.3	11.8
26+	7.0	7.1	7.1	7.8	7.5	6.0	6.4	7.0	7.1

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health
*There are minor wording differences in the questions in the adult and adolescent major depressive disorder modules.

TABLE 49. ESTIMATED NUMBER OF PERSONS REPORTING HAVING HAD A MAJOR DEPRESSIVE EPISODE IN THE PAST YEAR, BY AGE GROUP, OKLAHOMA, 2008-2009 TO 2016-2017 (ANNUAL AVERAGES)

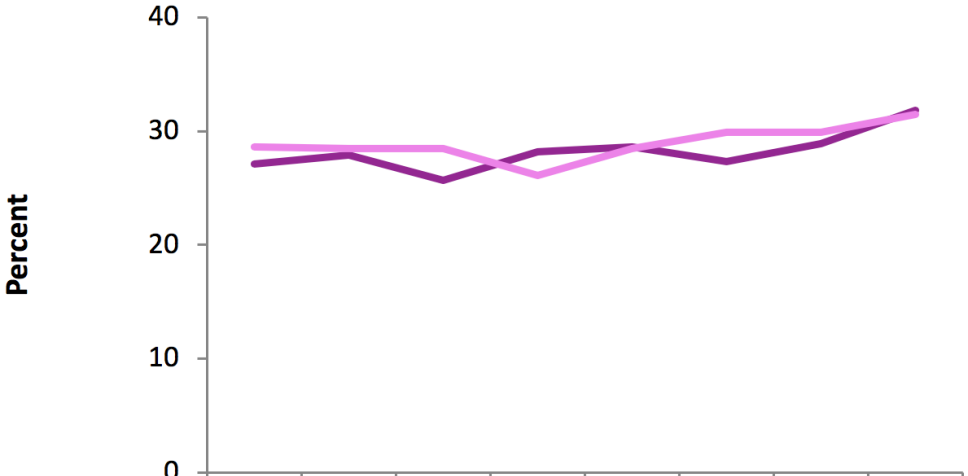
Year	12-17	18-25	26 and older
2008-2009	24,000	39,000	158,000
2009-2010	23,000	41,000	162,000
2010-2011	24,000	36,000	165,000
2011-2012	27,000	38,000	184,000
2012-2013	28,000	38,000	178,000
2013-2014	32,000	33,000	145,000
2014-2015	39,000	41,000	154,000
2015-2016	43,000	44,000	172,000
2016-2017	44,000	50,000	174,000

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

YOUTH (9TH-12TH GRADERS) SIGNS OF DEPRESSION

Data from the YRBS show that the percentage of Oklahoma high school students who felt sad or hopeless almost every day for 2 or more weeks in a row so that they stopped doing some usual activities, during the twelve months before the survey, has seen no statistically significant change over the last 14 years at 27.1% in 2003 to 31.8% in 2017. There was a statistically significant increase among U.S. high school students at 28.6% in 2003 and 31.5% in 2017 ($p<0.05$) (Figure 79).

FIGURE 79. PERCENTAGE OF HIGH SCHOOL STUDENTS WHO FELT SAD OR HOPELESS ALMOST EVERY DAY FOR 2 OR MORE WEEKS IN A ROW SO THAT THEY STOPPED DOING SOME USUAL ACTIVITIES DURING THE TWELVE MONTHS BEFORE THE SURVEY, OKLAHOMA AND THE U.S., 2003-2017



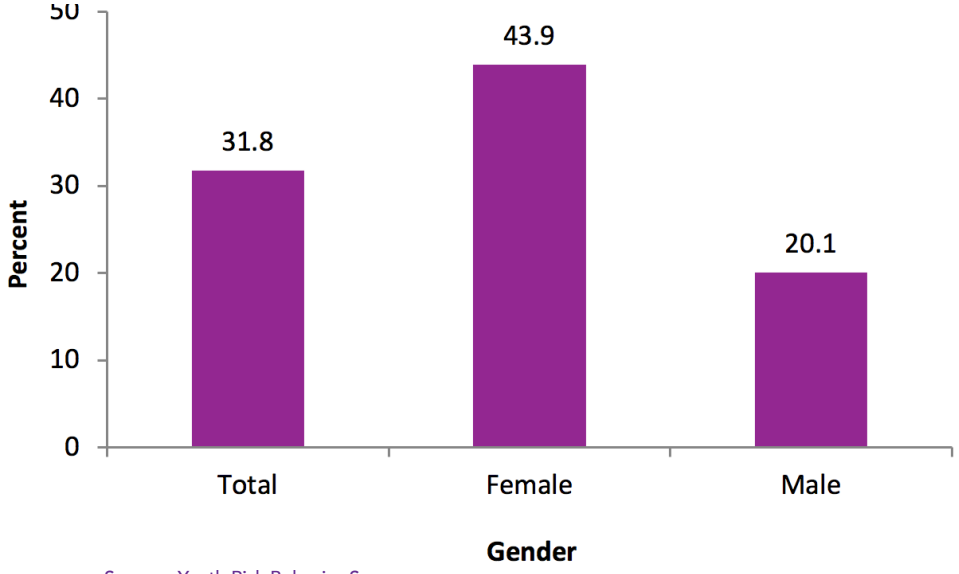
	2003	2005	2007	2009	2011	2013	2015	2017
Oklahoma	27.1	27.9	25.7	28.2	28.6	27.3	28.9	31.8
U.S.	28.6	28.5	28.5	26.1	28.5	29.9	29.9	31.5

Source: Youth Risk Behavior Survey

YOUTH (9TH-12TH GRADERS) SIGNS OF DEPRESSION

Oklahoma females were significantly more likely than males to have felt so sad or hopeless almost every day for 2 or more weeks in a row so that they stopped doing some usual activities during the twelve months before the survey at 43.9% and 20.1%, respectively (p<.05) (Figure 80). No differences were observed by grade or race/ethnicity.

FIGURE 80. PERCENTAGE OF OKLAHOMA HIGH SCHOOL STUDENTS WHO FELT SAD OR HOPELESS ALMOST EVERY DAY FOR 2 OR MORE WEEKS IN A ROW SO THAT THEY STOPPED DOING SOME USUAL ACTIVITIES DURING THE TWELVE MONTHS BEFORE THE SURVEY, BY GENDER, 2017



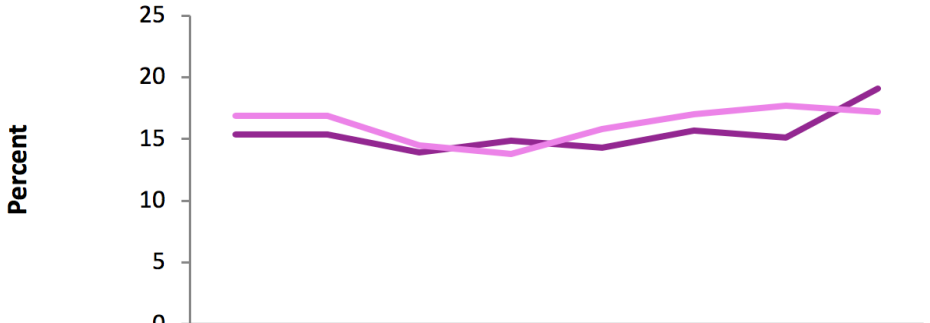
Source: Youth Risk Behavior Survey

MENTAL HEALTH

YOUTH (9TH-12TH GRADERS) CONSIDERED ATTEMPTING SUICIDE IN PAST YEAR

The percentage of Oklahoma students who seriously considered attempting suicide during the 12 months before the survey has seen no statistically significant change over the last 14 years with 15.4% in 2003 and 19.1% in 2017. No significant difference was seen among U.S. students with 16.9% in 2003 and 17.2% in 2017 (Figure 81). Differences were observed among Oklahoma students by gender as females were significantly more likely than males to have seriously considered attempting suicide during the 12 months before the survey at 27.8% and 10.9%, respectively ($p<.05$) (Figure 82). No differences were observed by grade or race/ethnicity among Oklahoma students.

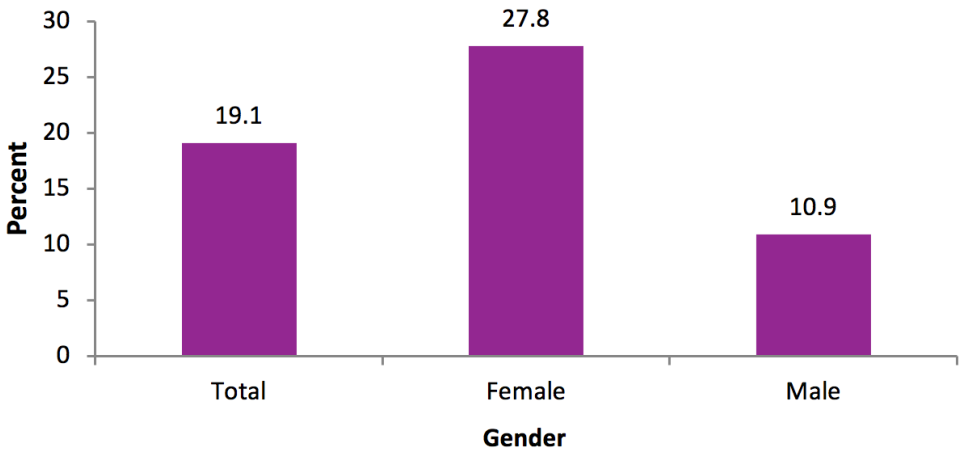
FIGURE 81. PERCENTAGE OF HIGH SCHOOL STUDENTS WHO SERIOUSLY CONSIDERED ATTEMPTING SUICIDE DURING THE 12 MONTHS BEFORE THE SURVEY, OKLAHOMA AND THE U.S., 2003-2017



	2003	2005	2007	2009	2011	2013	2015	2017
Oklahoma	15.4	15.4	13.9	14.9	14.3	15.7	15.1	19.1
U.S.	16.9	16.9	14.5	13.8	15.8	17.0	17.7	17.2

Source: Youth Risk Behavior Survey

FIGURE 82. PERCENTAGE OF STUDENTS WHO SERIOUSLY CONSIDERED ATTEMPTING SUICIDE DURING THE 12 MONTHS BEFORE THE SURVEY, BY GENDER, OKLAHOMA, 2017

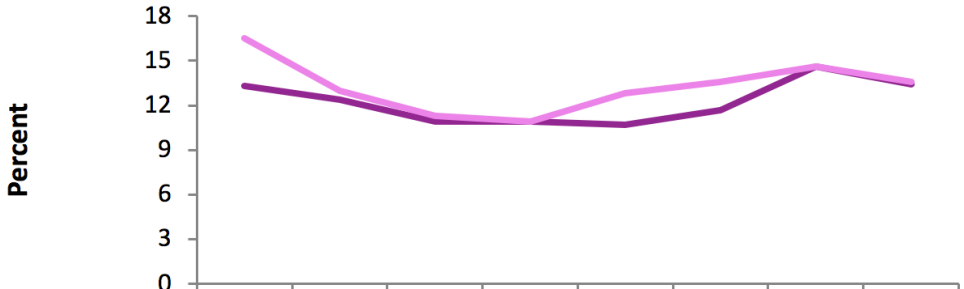


Source: Youth Risk Behavior Survey

YOUTH (9TH-12TH GRADERS) MADE A PLAN TO ATTEMPT SUICIDE IN THE PAST YEAR

The percentage of Oklahoma students who made a plan about how they would attempt suicide during the 12 months before the survey has seen no statistically significant change over the last 14 years with 13.3% in 2003 and 13.4% in 2017. Similarly, no statistically significant change was observed among U.S. students with 16.5% in 2003 and 13.6% in 2017 (Figure 83). Differences among Oklahoma students were observed by gender as females were significantly more likely than males to have made a plan about how they would attempt suicide during the 12 months before the survey at 18.6% and 8.6%, respectively (p<.05) (Figure 84). No differences were observed by grade or race/ethnicity.

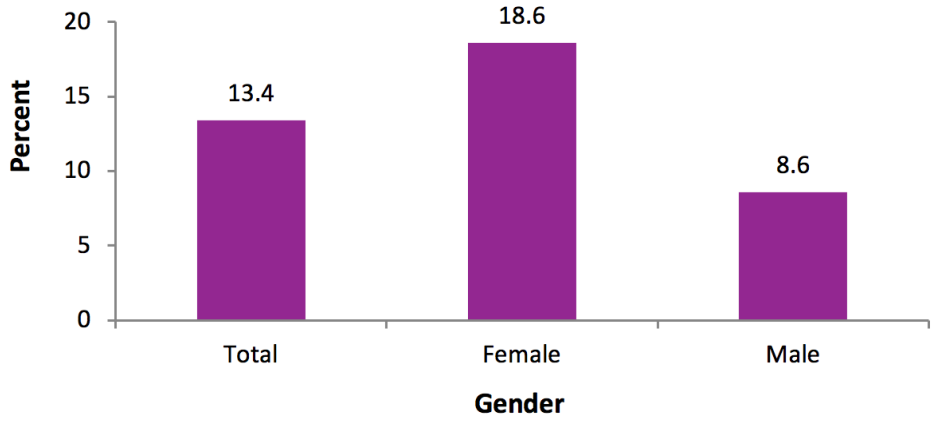
FIGURE 83. PERCENTAGE OF HIGH SCHOOL STUDENTS WHO MADE A PLAN ABOUT HOW THEY WOULD ATTEMPT SUICIDE DURING THE 12 MONTHS BEFORE THE SURVEY, OKLAHOMA AND THE U.S., 2003-2017



	2003	2005	2007	2009	2011	2013	2015	2017
Oklahoma	13.3	12.4	10.9	10.9	10.7	11.7	14.6	13.4
U.S.	16.5	13.0	11.3	10.9	12.8	13.6	14.6	13.6

Source: Youth Risk Behavior Survey

FIGURE 84. PERCENTAGE OF OKLAHOMA HIGH SCHOOL STUDENTS WHO MADE A PLAN ABOUT HOW THEY WOULD ATTEMPT SUICIDE DURING THE 12 MONTHS BEFORE THE SURVEY, BY GENDER, 2017



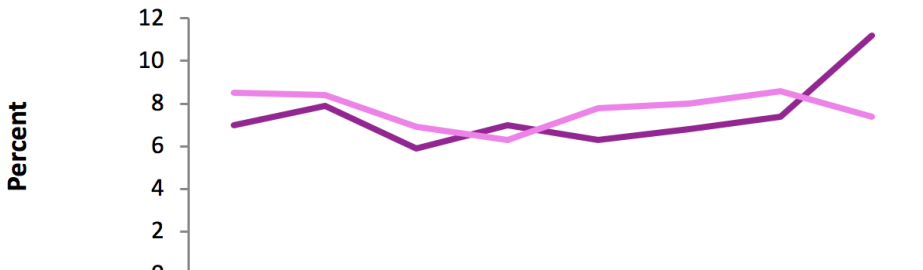
Source: Youth Risk Behavior Survey

MENTAL HEALTH

YOUTH (9TH-12TH GRADERS) ATTEMPTED SUICIDE IN PAST YEAR

The percentage of Oklahoma students who attempted suicide one or more times during the 12 months before the survey has seen no statistically significant change over the last 14 years from 7.0% in 2003 to 11.2% in 2017. No significant change was observed among U.S. students with 8.5% in 2003 and 7.4% in 2017 (Figure 85). Differences among Oklahoma students were observed by gender as females were significantly more likely than males to have attempted suicide one or more times during the 12 months before the survey at 15.7% and 6.2%, respectively ($p<.05$) (Figure 86). No differences among Oklahoma students were observed by grade or race/ethnicity.

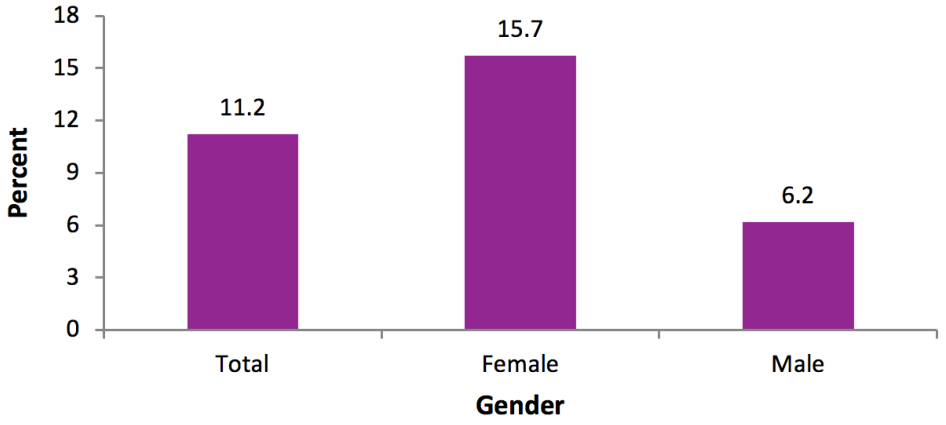
FIGURE 85. PERCENTAGE OF HIGH SCHOOL STUDENTS WHO ATTEMPTED SUICIDE ONE OR MORE TIMES DURING THE 12 MONTHS BEFORE THE SURVEY, OKLAHOMA AND THE U.S., 2003-2017



	2003	2005	2007	2009	2011	2013	2015	2017
Oklahoma	7.0	7.9	5.9	7.0	6.3	6.8	7.4	11.2
U.S.	8.5	8.4	6.9	6.3	7.8	8	8.6	7.4

Source: Youth Risk Behavior Survey

FIGURE 86. PERCENTAGE OF OKLAHOMA HIGH SCHOOL STUDENTS WHO ATTEMPTED SUICIDE ONE OR MORE TIMES DURING THE 12 MONTHS BEFORE THE SURVEY, BY GENDER, 2017

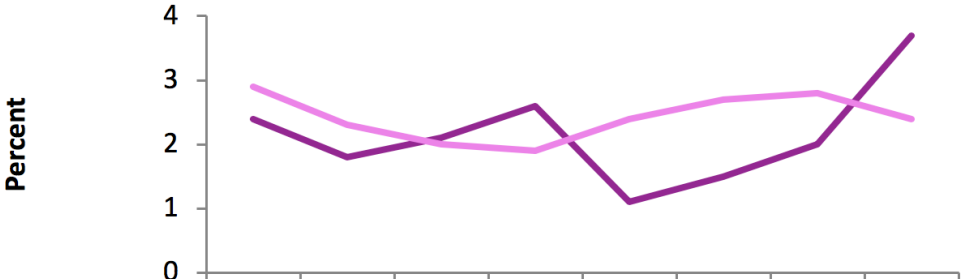


Source: Youth Risk Behavior Survey

YOUTH (9TH-12TH GRADERS) SUICIDE ATTEMPT RESULTING IN INJURY

The percentage of Oklahoma students who attempted suicide that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse during the 12 months before the survey has seen no statistically significant change over the last 14 years from 2.4% in 2003 to 3.7% in 2017. Likewise, there was no statistically significant change among U.S. students with 2.9% in 2003 and 2.4% in 2017 (Figure 87). No differences among Oklahoma were observed by gender, grade, or race/ethnicity for the percentage of students who attempted suicide that resulted in an injury that had to be treated by a doctor or nurse.

FIGURE 87. PERCENTAGE OF HIGH SCHOOL STUDENTS WHO ATTEMPTED SUICIDE THAT RESULTED IN AN INJURY, POISONING, OR OVERDOSE THAT HAD TO BE TREATED BY A DOCTOR OR NURSE*, OKLAHOMA AND THE U.S., 2003-2017



	2003	2005	2007	2009	2011	2013	2015	2017
Oklahoma	2.4	1.8	2.1	2.6	1.1	1.5	2.0	3.7
U.S.	2.9	2.3	2.0	1.9	2.4	2.7	2.8	2.4

*During the 12 months before the survey
Source: Youth Risk Behavior Survey

3.7%
HIGH SCHOOL STUDENTS ATTEMPTED SUICIDE IN OK THAT RESULTED IN: INJURY, POISONING, OR OVERDOSE THAT HAD TO BE TREATED

APPENDIX: DESCRIPTION OF DATA SOURCES & METHODS

APPENDIX: DESCRIPTION OF DATA SOURCES & METHODS

DEMOGRAPHICS

United States Census Bureau • The Census Bureau serves as the leading source of quality data about the Nation's people and economy. The bureau of the Commerce Department, responsible for taking the census, provides demographic information and analyses about the population of the United States. Census Vintage Population Estimates were used to calculate rates for indicators where the rate was not already provided. Oklahoma and U.S. sociodemographic data was obtained from the U.S. Census QuickFacts. Census data were accessed at: http://www.census.gov/main/www/aboutus.html.

MORTALITY

Fatal Unintentional Poisoning Surveillance System, Oklahoma State Department of Health, Injury Prevention Service • The Office of the Chief Medical Examiner (OCME) serves as the centralized medical examiner system for Oklahoma. The Injury Prevention Service (IPS) of the Oklahoma State Department of Health receives reports from the OCME for all non-natural deaths occurring in Oklahoma. IPS personnel review all medical examiner reports received. Deaths with a manner of 'Accident' and mention of a poisoning in the cause of death are included as unintentional poisoning. Exclusions from this definition include: adverse allergic or hypersensitivity reactions, correct drugs properly administered in therapeutic or prophylactic dosages, venomous plants and animals (other than ingestion), bacterial food poisoning, smoke inhalation, injury consequences of substance abuse (motor vehicle crashes, falls, etc.), out-of-state residents, and natural, undetermined, or intentional (e.g., suicide, homicide) manner deaths. Data are abstracted from medical examiner reports by an epidemiologist regarding types of drugs/substances involved in the poisoning (listed in the cause of death). Substances involved in the cause of death are classified using drug categories provided by the OCME. Data collection began with all unintentional poisoning deaths from calendar year 2007 forward. Cases are crosschecked with Vital Statistics death data (ICD-10 underlying cause of death codes X40-X49) and the OCME annual database to ensure complete case ascertainment. For more information about the Fatal Unintentional Poisoning Surveillance System please visit: http://poison.health.ok.gov.

NATIONAL VITAL STATISTICS SYSTEM (NVSS)

The National Vital Statistics System is the oldest and most successful example of inter-governmental data sharing in Public Health and the shared relationships, standards, and procedures form the mechanism by which NCHS collects and disseminates the Nation's official vital statistics. These data are provided through contracts between NCHS and vital registration systems operated in the various jurisdictions legally responsible for the registration of vital events – births, deaths, marriages, divorces, and fetal deaths. Death data from the NVSS were obtained from the CDC WONDER Online Database Multiple Cause of Death File available at: https://wonder.cdc.gov/. The Multiple Cause of Death File was used even for indicators where only the underlying cause of death was required. This was done so that the same data source could be used for all indicators. The following table lists the ICD-10 codes used for all the causes of death presented in this report:

APPENDIX: DESCRIPTION OF DATA SOURCES & METHODS

CAUSES OF DEATH AND CORRESPONDING ICD-10 CODES

Cause of death	ICD-10 underlying cause of death	ICD-10 multiple cause of death
Chronic liver disease/cirrhosis	K70, K73-K74	N/A
Homicide	X85-Y09, Y87.1	N/A
Drug overdose	X40-X44, X60-X64, X85, Y10-Y14	N/A
Prescription opioid overdose	X40-X44, X60-X64, X85, Y10-Y14	T40.2, T40.3, T40.4*
Major cardiovascular disease	I00-I78	N/A
Chronic Obstructive Pulmonary Disorder/emphysema	J40-J42, J43, J44, J47	N/A
Bronchus and lung cancer	C34	N/A
Suicide	X60-X84, Y87.0	N/A

* Prescription opioid overdose deaths may be overestimated for later years. Code T40.4, synthetic narcotics, includes both prescription and illicitly manufactured fentanyl.

OKLAHOMA VITAL STATISTICS

Vital Records is the official registration point and repository for all birth and death certificates for those events that occur in Oklahoma. The revised IHS (Indian Health Service) Racial Categories is a work in progress where Oklahoma Vital Records are matched with IHS records those individuals that were in the IHS database are considered Native Americans, and those not matched are unchanged. Because of the problem of misclassification of American Indian race on death certificates, Indian-Health Service-linked race categories were used for reporting mortality rates by race.

MOTOR VEHICLE CRASH DATA

FATAL ANALYSIS REPORTING SYSTEM (FARS)

FARS contains data on all fatal traffic crashes within the 50 states, the District of Columbia, and Puerto Rico. The data system was conceived, designed, and developed by the National Center for Statistics and Analysis (NCSA) to assist the traffic safety community in identifying traffic safety problems, developing and implementing vehicle and driver countermeasures, and evaluating motor vehicle safety standards and highway safety initiatives. Data used for this report were accessed at: https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars.

Additional data and information about Oklahoma's motor vehicle crash data are available from the Oklahoma Highway Safety Office at: http://ohso.ok.gov/

CHILD SAFETY

OKLAHOMA DEPARTMENT OF HUMAN SERVICES (DHS)

The Oklahoma Department of Human Services-Child Welfare utilizes the Assessment of Child Safety documented in KIDS to comprehensively review and address allegations, identify behaviors and conditions in the home that lead to risk factors, and evaluate the protective capacities of the person responsible for the child's health, safety, and welfare.

TREATMENT

OKLAHOMA DEPARTMENT OF MENTAL HEALTH AND SUBSTANCE ABUSE SERVICES (ODMHSAS)

The ODMHSAS maintains a database of treatment admissions. The system includes individuals who have received a paid behavioral health service for programs which ODMHSAS contracts with or operates. This includes behavioral health services paid for with Medicaid funding or behavioral health services paid for with state-appropriated, grant supported or federally-funded ODMHSAS monies. It includes substance residential, detox and halfway house services contracted directly with ODMHSAS. These data are available at: http://www.odmhsas.org/eda/query.htm

APPENDIX: DESCRIPTION OF DATA SOURCES & METHODS

HOSPITALIZATIONS

OKLAHOMA INPATIENT HOSPITAL DISCHARGE PUBLIC USE DATA FILE

Acute care hospitals are required to submit data on all inpatient discharges for a calendar year by May 1st of the following year to the Oklahoma State Department of Health. A single discharge data record should be submitted for each single patient stay. Discharge records should be submitted for persons discharged from all hospital beds, including acute medical/surgical care, swing, rehabilitation, psychiatric, and skilled nursing beds. Under the provisions of the Health Care Information Statutes (63 O.S. (Supp. 1994) § 1-115 et seq.), the Center for Health Statistics prepares and makes available a public use file for the three datasets; Inpatient, Hospital-based Outpatient Surgery and ASC Discharge Data. The Public files contain patient level data but considerable efforts are taken to ensure that individual patients are not identified in the PUDF. Public files are designed to provide public health personnel, purchasers, payers, providers, consumers and researchers useful information to make informed decisions.

CRIME

OKLAHOMA STATE BUREAU OF INVESTIGATION (OSBI)

The OSBI Uniform Crime Reporting (UCR) Program is part of a nationwide, cooperative statistical effort administered by the Federal Bureau of Investigation. The UCR Program was conceived, developed and implemented to serve law enforcement as a tool for operational and administrative purposes. Prior to its development, no comprehensive system of data collection on a national scale existed. At this time, law enforcement began to collect crime data using standard definitions created by the UCR. The Oklahoma State Bureau of Investigation assumed the statewide administration of the UCR. Data are based only on offenses known to law enforcement, and victims do not always report crime to law enforcement. Therefore, OSBI cautions using these data to make direct comparisons among jurisdictions in the state. Additional information about OSBI's data is available at: https://osbi.ok.gov/statistical-analysis-center/data-and-statistics

THE UNIFORM CRIME REPORT (UCR)

The UCR was conceived, developed, and implemented by law en-forcement for the express purpose of serving as a tool for operational and administrative purposes. Under the auspices of the International Association of Chiefs of Police, the UCR Program was developed in 1930. Prior to that date, no comprehensive system of crime information on a national scale existed. The Oklahoma State Bureau of Investigation assumed the statewide administration of the UCR Program on September 1, 1973. Data are submitted to the FBI's UCR Program by participating agencies across the country. Data for portions of this report were obtained from the FBI's Crime Data Explorer at: https://www.fbi.gov/services/cjis/ucr.

PREVALENCE

BEHAVIORAL RISK FACTOR SURVEILLANCE SURVEY (BRFSS)

Established in 1984 by the Centers for Disease Control and Prevention (CDC), the Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys that collects information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. For many states, the BRFSS is the only available source of timely, accurate data on health-related behaviors. Oklahoma has participated in BRFSS since 1995. BRFSS data and additional information are available at: https://www.cdc.gov/brfss and http://www.health.state.ok.us/ok2share/.

NATIONAL SURVEY ON DRUG USE AND HEALTH (NSDUH)

NSDUH is an annual survey of the civilian, noninstitutationalized population aged 12 or older sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA), an agency of the U.S. Public Health Service and a part of the Department of Health and Human Services (DHHS). Data are collected from the 50 U.S. states and the District of Columbia. The survey provides yearly national- and state-level estimates of alcohol, tobacco, illicit drug, and prescription drug misuse. Other health-related questions also appear from year to year, including questions about mental health.

Data for this profile are from SAMHSA's NSDUH model-based estimates available at: https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health. Additional information regarding the NSDUH and the small area estimation methodology is available at: https://www.samhsa.gov/data/report/2016-2017-nsduh-guide-state-tables-and-summary-sae-methodology. P-values from a SAMHSA report were used to assess for statistical significance between 2008-2009 and 2016-2017 estimates (https://www.samhsa.gov/data/report/comparison-2008-2009-and-2016-2017-nsduh-state-prevalence-estimates). Pregnancy Risk Assessment Monitoring System (PRAMS) • PRAMS was initiated in 1987 with a goal to improve the health of mothers and infants by reducing adverse outcomes such as low birth weight, infant mortality and morbidity, and maternal morbidity. PRAMS provides state-specific data for planning and assessing health programs and for describing maternal experiences that may contribute to maternal and infant health.

YOUTH RISK BEHAVIOR SURVEY

The statewide, randomized YRBS is conducted biennially on odd-numbered years. The survey covers six categories of health-risk behaviors, the prevalence of obesity, and other health-related topics. Health-risk behaviors included behaviors that contribute to unintentional injuries and violence, tobacco use, alcohol and other drug use, sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, unhealthy dietary behaviors, and physical inactivity. Trend test analyses were conducted using a logistic regression model controlling for sex, race/ethnicity, and grade, $p<0.05$. Changes from 2015 to 2017 were conducted using t-test analysis, $p<0.05$.

Samples were selected using a two-stage sampling design. Schools were first selected for participation based on probability proportional to size (school enrollment in grades 9 through 12). Then classes were selected from each school using systematic equal probability sampling with a random start. The sample was weighted to be representative of public high school students in grades 9 through 12 in Oklahoma based on the demographic distribution of the enrolled

student population provided by the Oklahoma State Department of Education.

These data were representative of public school students in grades 9 through 12 in Oklahoma. Adolescents who attended private institutions, were home-schooled, or did not attend any school were not represented in this study. There is potential underreporting of risk behaviors by students participating in the YRBS. Despite efforts to conduct the YRBS in such a manner as to preserve confidentiality, some students may not report events if they feel their answers will in some way identify them. Furthermore, students read and interpret the questions and form their answers without any external assistance; therefore, students may have different interpretations of the YRBS questions and response options.

For more information about the Youth Risk Behavior Survey please call the Maternal and Child Health Service, MCH Assessment at 405.271.6761 or visit URL: http://yrbs.health.ok.gov.

RISK FACTORS

ALCOHOL POLICY INFORMATION SYSTEM

The Alcohol Policy Information System (APIS) provides detailed information on 35 different alcohol-related policies in the U.S. at both the state and federal levels. Available at: https://alcoholpolicy.niaaa.nih.gov/

OKLAHOMA PREVENTION NEEDS ASSESSMENT SURVEY (OPNA)

The Oklahoma Prevention Needs Assessment is a paper/pencil or online survey administered in opposite years of the YRBS in schools to 6th, 8th, 10th and 12th grade students. The survey is designed to assess students' involvement in a specific set of problem behaviors, as well as their exposure to a set of scientifically validated risk and protective factors. The major limitation of this survey is that it is not a random sample; schools choose whether or not they participate, making it a convenience sample. Additional information about the OPNA and data reports are available at: https://www.ok.gov/odmhsas/Prevention_/Prevention_Initiatives/Oklahoma_Prevention_Needs_Assessment_(OPNA)/.