



OKLAHOMA STATE EPIDEMIOLOGICAL OUTCOMES WORKGROUP  
2008 OKLAHOMA EPIDEMIOLOGICAL PROFILE

CONSUMPTION & CONSEQUENCES OF ALCOHOL, TOBACCO, AND OTHER DRUGS

Oklahoma State Epidemiological Outcomes Workgroup  
Oklahoma Department of Mental Health & Substance Abuse Services  
Prevention Services Division

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Substance Abuse and Mental Health Services Administration, and  
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## contents

SEOW Charter

2

Executive Summary

4

Oklahoma Overview

8

State Profile

10

Community Profiles

32

Appendix

68

# seow charter

The Oklahoma State Epidemiological Outcomes Workgroup (SEOW) was created August 3, 2006 and modeled after the National Institute on Drug Abuse (NIDA) community epidemiological work group. The SEOW is housed in the Oklahoma Department of Mental Health & Substance Abuse Services (ODMHSAS) and is funded through a federal grant from the Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Substance Abuse Prevention (CSAP). ODMHSAS contracted with the Southern Plains Inter-Tribal Epidemiology Center to complete the SEOW deliverables.

Members of the SEOW were invited to be part of the needs assessment process based upon their knowledge and capacity to work with substance-related data. Members were also selected based on their ability to evaluate and understand various data sets. Membership was chosen to reflect as many State agencies as possible, while keeping the group relatively small. The diversity of SEOW membership reflects this effort with a mix of data analysts, epidemiologists, prevention experts, community providers, universities, and State agency representatives.

Oklahoma SEOW membership included representatives of 20 organizations and many individuals who provide information. All organizations and members made significant contributions that were necessary to complete the epidemiological profile.

## mission

The mission of Oklahoma SEOW is to improve prevention assessment, planning, implementation, and monitoring efforts through the application of systematic, analytical thinking about the causes and consequences of substance abuse.

## goals

- Promote systematic and analytical thinking to produce data and accurately assess the causes and consequences of the use of alcohol, tobacco, and other drugs.
- Develop data-driven decision methods to effectively and efficiently utilize prevention resources throughout the state.

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# executive summary

The Oklahoma State Epidemiology Profile of Substance Use is a tool for substance abuse prevention planners at the state, county and community level. The primary purpose is to support goals of reducing substance abuse in the state. The role of the SEOW is to provide a detailed statewide assessment regarding the consumption patterns and consequences of substance use/abuse, build capacity to address those needs, and plan, implement, and evaluate evidence-based programs, policies and practices designed to address the intervening variables related to identify substance-related problems. Obtaining these objectives will be a multi-year process beginning with a global assessment of how Oklahoma compares with the United States with regards to substance consumption and consequences. The community profiles focus at a Regional level so that the communities can focus their prevention efforts.

The main section of the profile presents several major indicators of substance abuse in Oklahoma for 2007. These major indicators include outcome indicators (major causes of alcohol-related death) and indicators of substance abuse consumption behavior (self-reported substance use behavior from statewide surveys). The presentation of each major indicator includes a text description of the key data findings; with results by gender, age-group, and race when available.

## **assessment is the first step toward prevention and treatment**

The Oklahoma SEOW represents many different agencies and representatives working together toward a deeper understanding of Oklahoma substance consumption and consequences across the lifespan. The Oklahoma SEOW hopes to bridge the way for broader data sharing across multiple agencies to improve health outcomes in Oklahoma.



## alcohol

### YOUTH

#### CONSUMPTION

30% of Oklahoma 9th graders reported drinking alcohol before age 13 (YRBS 2007)

In 2007, 43% of Oklahoma high school students reported drinking alcohol in the last month (YRBS)

12th grade students had the highest percentage (39%) of binge drinking among high school students (YRBS 2007)

In 2007, 33% of 12th grade students reported in the last month they have had ridden in a vehicle one or more times where the driver had been drinking alcohol (YRBS)

#### CONSEQUENCES

23% of Oklahoma 12th graders reported drinking and driving in the last month (YRBS 2007)

13% of Oklahoma students reported they drove a vehicle when they had been drinking alcohol one or more time in the past 30 days (YRBS 2007)

11% of Oklahoma youth age 12-17 reported dependence on or abuse of alcohol in the past year (NSDUH 2003-2004)

### ADULT

#### CONSUMPTION

41% of Oklahoma adults reported recent alcohol consumption compared to 55% of U.S. adults (BRFSS 2007)

13% of Oklahoma adults reported binge drinking in the last month, a 133% increase since 1999 (BRFSS 2007)

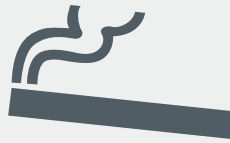
Three times as many men report binge drinking than women (19% and 6.6% respectively) (BRFSS 2007)

5% of Oklahoma men reported heavy drinking (BRFSS 2007)

#### CONSEQUENCES

9% of Oklahoma adults reported dependence on or abuse of any illicit drug or alcohol in past year (NSDUH 2003-2004)

11% of Oklahoma adults with income less than 200% of Federal Poverty Level reported dependence on or abuse of any illicit drug or alcohol in past year (NSDUH 2003-2004)



## tobacco

### YOUTH

#### CONSUMPTION

Consistent with national data, recent declines in youth cigarette smoking rates have stalled and rates among girls have increased since 2003 (YRBS 2007)

23% of Oklahoma high school students reported recent cigarette use. This has decreased from 29% in 2005 (YRBS 2007)

#### CONSEQUENCES

Tobacco addiction is a disease that typically begins in childhood. People who begin to smoke at an early age are more likely to develop severe levels of nicotine addiction than those who start at a later age (1994 Surgeon General's Report)

Tobacco use during adolescence produces significant health problems among young people and is generally the first drug used by young people who enter a sequence of drug use (CDC 2006)

Secondhand smoke causes bronchitis or pneumonia in at least 2,250 Oklahoma infants each year (Oklahoma State Department of Health 2006)

### ADULT

#### CONSUMPTION

Oklahoma has one of the highest rates of tobacco use in the nation (CDC 2006)

26% of Oklahoma adults report current smoking (BRFSS 2007)

Currently, the smoking rate among males (28%) is higher than the smoking rate among females (24%) in Oklahoma. However, the gender gap continues to narrow (BRFSS 2007)

20% of Oklahoma adults reported smoking everyday compared to 15% for the U.S. (BRFSS 2007)

One in four, or about 650,000 Oklahoma adults are current smokers (BRFSS 2006)

#### CONSEQUENCES

Smoking is the leading behavioral cause of death in Oklahoma and the U.S., contributing significantly to deaths from cardiovascular disease, cancer, and chronic obstructive pulmonary disease (OSDH 2006)

Smoking during pregnancy accounts for at least 10% of all infant deaths (OSDH 2006)

Given the greater-than-average rates of cigarette use among Oklahoma adults, it is unlikely the death rates from smoking will decrease significantly in the next several years (BRFSS 2007)





## other drugs

### YOUTH

#### CONSUMPTION

16% of Oklahoma youth reported using marijuana in the past 30 days (YRBS 2007)

21% of Oklahoma 12th grade students reported using marijuana in the past 30 days (YRBS 2007)

More female youth reported using inhalants in 2007 (12%) than in 2003 (8%) (YRBS 2003-2007)

More Oklahoma youth have used ecstasy or methamphetamines in their lifetime compared to the U.S. (YRBS 2007)

7% of Oklahoma 12th grade students reported using methamphetamines in their lifetime compared to 4% of U.S. 12th grade students (YRBS 2007)

6% of Oklahoma high school students reported using ecstasy in their lifetime (YRBS 2007)

#### CONSEQUENCES

Youth drug use is associated with suicide, violence, early unwanted pregnancy, school failure, delinquency, and transmissions of sexually transmitted diseases (CDC 2006)

6% of Oklahoma youth aged 12-17 reported dependence on or abuse of any illicit drug in the past year (NSDUH 2003-2004)

### ADULT

#### CONSUMPTION

39% of Oklahomans (aged 12 and older) report lifetime marijuana use (NSDUH 2005)

31% of Oklahomans (aged 12 and older) report lifetime use of illicit drugs other than marijuana use (NSDUH 2005)

15% of Oklahomans (aged 12 and older) report lifetime use of nonmedical pain relievers (NSDUH 2005)

#### CONSEQUENCES

3% of Oklahoma adults reported any illicit drug dependence or abuse in the past year (NSDUH 2003-2004)

66% of state prison inmates and 67% of inmates in local jails have substance dependence or abuse (ADAM 2004)

72% of all arrestees in Oklahoma and Tulsa counties used at least one drug prior to arrest, with females slightly higher than males (74% vs. 72%, respectively) (ADAM 2002-2004)

# oklahoma overview

## population

Among the 50 states, Oklahoma ranks 20th in land mass size with 69,898 square miles. The distance across the state is 230 miles east to west and 298 miles from north to south. The U.S. Census estimated Oklahoma's total population as 3,579,212 as of July 1, 2006 (US Census, 2006). The population of the two largest urban areas was 691,266 (19%) in Oklahoma City and 577,795 (16%) in Tulsa. Oklahoma ranks 28th in population size nationally.

The 2006 population estimate showed a two percent increase since the 2000 Census. Of the total population, 1,764,514 (49%) were male and 1,814,698 (51%) were female. The majority, 78% were White (alone), followed by 8% Native American or Alaskan Native, 8% Black, and 2% Asian. An estimated 4% of the popula-

tion was of Hispanic or Latino origin. Ninety-three percent of Oklahoma families speak English at home, which is greater than the national rate of 82%. In 2006, approximately 254,718 (7%) were under five years of age, 894,034 (25%) were under the age of 18, and 473,545 (13%) were 65 years of age or older (US Census).

Among the estimated 3,579,212 adults in Oklahoma in 2006, 930,073 (26%) have a reported household income of less than 200 percent of the Federal Poverty Level (FLP) (US Census, 2006). The median family income in 2006 was \$10,571 lower than the national average, and 17% of Oklahomans live below the poverty level, compared to 13% nationally (US Census).

health

Oklahoma has the unfortunate distinction of consistently ranking toward the bottom of national health rankings. Despite efforts to reverse these trends many health status indicators in Oklahoma have failed to move in a significantly positive direction. In fact, Oklahoma has been the only state since 1988 in which age-adjusted death rates have actually increased (OSDH). This caused great concern among Oklahoma’s health leaders, and innovative solutions were sought to reverse these negative trends.

In 1997, an opportunity became available from The Robert Wood Johnson Foundation and the W. K. Kellogg Foundation. The program, Turning Point, issued a request for proposals that encouraged local and state applicants to rethink the delivery of public health, placing emphasis on state and local collaborative partner-

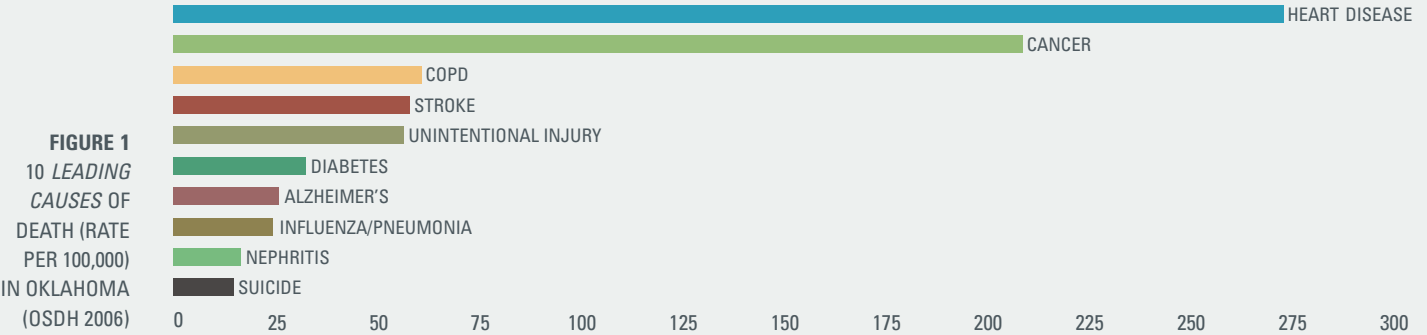
ships and eliciting ideas on intervention priorities from community partners. Implementation of these new approaches represents a radical change in how public health is delivered in Oklahoma.

A brief profile of mortality in Oklahoma helps paint a clear picture of the hurdles Oklahoma faces ahead. This information is provided to help put the substance-related causes of death into a broader context. Figure 1 shows the ten leading causes of death in Oklahoma during the most recent three-year period for which data is available (2004-2006). According to the Oklahoma State Department of Health, heart disease and cancer replace accidents/unintentional injuries as the leading causes of death after age 40.

Of the 10 leading causes of death shown in Figure 1, most are at least partially caused by sub-

stance abuse. For example, the chronic obstructive pulmonary diseases (COPD) including emphysema and several cancers are strongly associated with tobacco use. Chronic lower respiratory diseases have shifted to the third leading cause of death from the fourth position. Chronic liver disease is strongly associated with chronic alcohol abuse, and many accident deaths are associated with acute alcohol abuse.

The consequences of alcohol abuse are severe in Oklahoma. The devastation caused by alcohol abuse in Oklahoma is not limited to death, but can also be linked to domestic violence, crime, poverty, and unemployment, as well as chronic liver disease, motor vehicle crashes, assault injuries, mental illness, and a variety of other medical problems.



# state profile

## alcohol consumption · youth



### Early Initiation

an individual taking his or her first drink of alcohol (other than a few sips) before 13 years of age

### Current Alcohol Use

an individual reporting any use of alcohol within the past 30 days

### Binge Drinking

males having five or more drinks on one occasion and females having four or more drinks on one occasion

### Heavy Drinking

males having more than two drinks per day and females having more than one drink per day

### Youth

(as defined by YRBS)  
an individual between 12 and less than 21 years of age

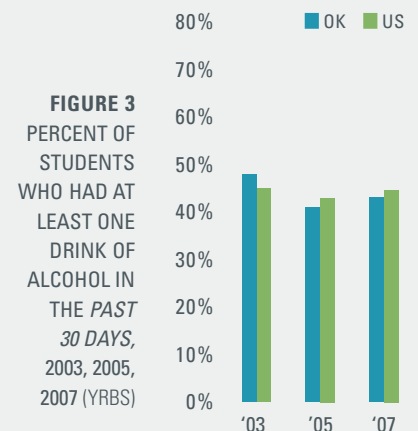
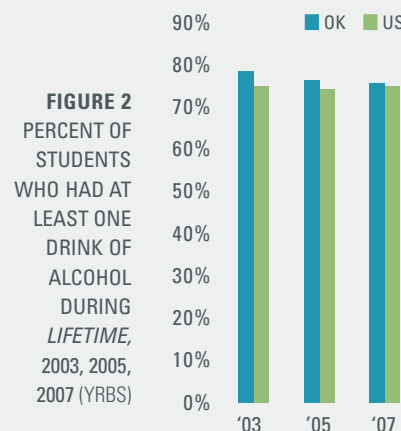
### KEY FINDINGS

Alcohol consumption by youth is a significant problem in Oklahoma and across the United States. Each year in the U.S., approximately 5,000 young people under the age of 21 die as a result of underage drinking; this includes about 1,900 deaths from motor vehicle crashes, 1,600 as a result of homicides, 300 from suicide, as well as hundreds from other injuries such as falls, burns, and drowning (National Institute on Alcohol Abuse and Alcoholism, 2006). It is not only dangerous due to the risks associated with the impairment that results from alcohol consumption, but also from multiple threats to long-term development and well being. These risks have associated economic costs, and in 2005 it is estimated that underage drinking cost the citizens of Oklahoma \$778 million (Pacific Institute for Research & Evaluation, 2006). This translates to a cost of \$2,146 per year for each young person in the state.

### INITIAL USE

One of the precursors to adult problem drinking is early initiation of alcohol use. Using data from the National Survey of Drug use and Health (NSDUH), the Substance Abuse and Mental Health Services Administration (SAMHSA) has reported a strong association between early age of first drinking (age 12 or younger) and subsequent development of adult alcohol dependence. These results suggest that focusing on age of initial use as a target of intervention is a reasonable prevention strategy.

In 2007, it is estimated that 23% of Oklahoma students in grades 9-12 had taken their first drink of alcohol before the age of 13. This is similar to national data (OK - 23% and U.S. - 24%). Overall, males reported a slightly greater tendency to try alcohol at an early age as compared to females (27% of males report first use before age 13 compared to 19% of females).





According to self-report data from the 2007 Youth Risk and Behavior Survey (YRBS), 30% of both males and females in 9th grade reported they had tried alcohol before the age of 13. This percentage is greater than reported by students (particularly females) in grades 10th through 12th.

### LIFETIME USE

Seventy-six percent of youth in grades 9-12 have had at least one drink on one or more days during their life compared to 75% U.S. (YRBS 2007). More Oklahoma youth have consumed at least one drink of alcohol during their life compared to the Nation. The percent of youth who report having had at least one drink of alcohol during their lifetime has been decreasing since 2003.

### CURRENT CONSUMPTION

In general, fewer Oklahoma youth consume alcohol compared to the U.S. as a whole. In 2003, 48% of Oklahoma youth in grades 9-12

reported any alcohol use in the past 30 days. In 2007 that percentage decreased to 43%. This followed the national trend that also decreased from 45% in 2003 to 43% in 2005 and back to 45% in 2007 (Figure 3). Current alcohol use among Oklahomans age 18-20 was greater than the national average in both 2004 and 2005. The national average surpassed current alcohol use among Oklahomans in 2006 (Figure 4).

### BINGE DRINKING

Episodic heavy drinking by youth is associated with outcomes such as death and disability due to injury. Youth binge drinking is also associated with poor academic performance and other risk behaviors such as increased number of sexual partners and use of illegal drugs.

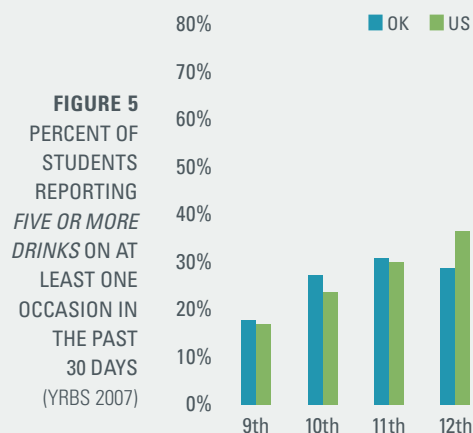
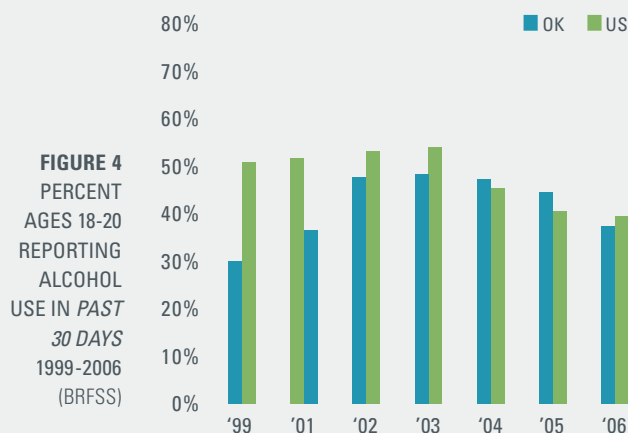
In 2007, binge drinking was slightly more prevalent in Oklahoma than the rest of the nation. Twenty-six percent of U.S. high school students reported binge

drinking, while 28% of Oklahoma high school students reported engaging in this behavior.

Young males were more likely to report engaging in binge drinking than young females. Forty two percent of males and 35% of females in 12th grade reported binge drinking.

In Oklahoma, students in 12th grade were more likely to report past 30-day binge drinking than students in lower grades (Figure 5). Twenty percent more 12th graders reported 30-day binge drinking than 9th graders.

However, a slightly higher percentage of 9th grade students in Oklahoma reported engaging in binge drinking compared to the U.S. (18% and 17% respectively). These data imply that Oklahoma students start binge drinking at an earlier age than students in the United States as a whole and also that both males and females engage in this activity to a similar extent.



## alcohol consequences · youth

Oklahoma high school students were more likely to report driving after drinking alcohol than were U.S. students. Drinking after driving was more common among males than females, and was less common among White Non-Hispanic youth than among Black Non-Hispanic, American-Indian, or Hispanic youth. Eleventh and 12th grade students were more likely to report drinking and driving than 9th and 10th grade students.

**In 2007, over one quarter of Oklahoma youth suicide victims age 13-20 tested positive for alcohol**

**Blood Alcohol Concentration (BAC)**  
the concentration of alcohol in blood and is used to define intoxication and provides a rough measure of impairment

**Driving Under the Influence (DUI)**  
the act or crime of driving while affected by any intoxicating substance

**Fetal Alcohol Syndrome (FAS)**  
the manifestation of specific growth, mental, and physical birth defects associated with the mother's alcohol use during pregnancy

### DRINKING & DRIVING

Motor vehicle-related injuries are the leading cause of death among youth 15 to 19 years of age (CDC). In 2000, 22% of 15-20 year old drivers involved in fatal crashes had been drinking alcohol. By 2007, 13% of Oklahoma high school students reported driv-

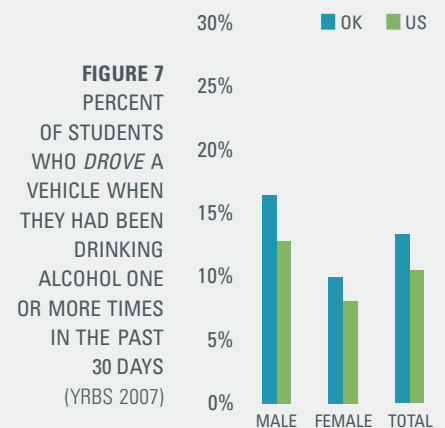
ing after drinking alcohol in the previous month, which is greater than the national rate of 11% (YRBS, 2007). As shown in Figure 7, driving after consuming alcohol was more common among both males and females in Oklahoma than among males and females in the U.S. overall (17% of males and 10% of females in Oklahoma reported drinking and driving compared to 13% and 8% respectively in the U.S.).

Nearly 27% of both male and female Oklahoma students reported riding in a car with someone who had been drinking alcohol (YRBS, 2007). While these rates are slightly lower than the national rate (Figure 8), it demonstrates that a high percentage of youth in Oklahoma are willing to ride in a vehicle with someone they know is under the influence of alcohol.

Students in 11th and 12th grades were more likely to report past

**FIGURE 6**  
PERCENT OF ALCOHOL-INVOLVED FATAL CRASHES BY AGE AND GENDER 2000-2003 (FARS)

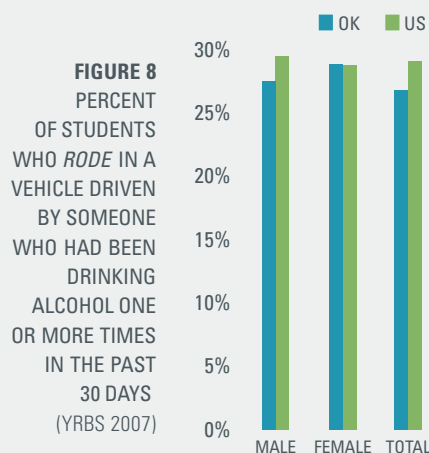
		AGE 12-17		AGE 18-20	
		M	F	M	F
'00	OK	9	11	28	12
	US	18	8	32	16
'01	OK	18	11	34	11
	US	18	10	31	15
'02	OK	12	1	30	8
	US	17	9	32	13
'03	OK	15	17	30	11
	US	19	11	32	14





30-day drinking and driving than were students in 9th and 10th grades. The prevalence of drinking and driving among 12th grade males (27%) was greater than among 12th grade females (18%). The number of DUIs for people who are 21 and under has decreased from 3,076 in 2000 to 1,483 in 2004. For all races/ethnicities, drinking and driving was more common in 11th and 12th grade students than in 9th and 10th grade students (YRBS, 2007). Among Oklahoma youth who reported drinking and driving 13% were White, 13% were Hispanic and 8% were Black. Oklahoma youth who reported drinking and driving were substantially greater than the national averages of 12% White, 10% Hispanic, and 6% Black.

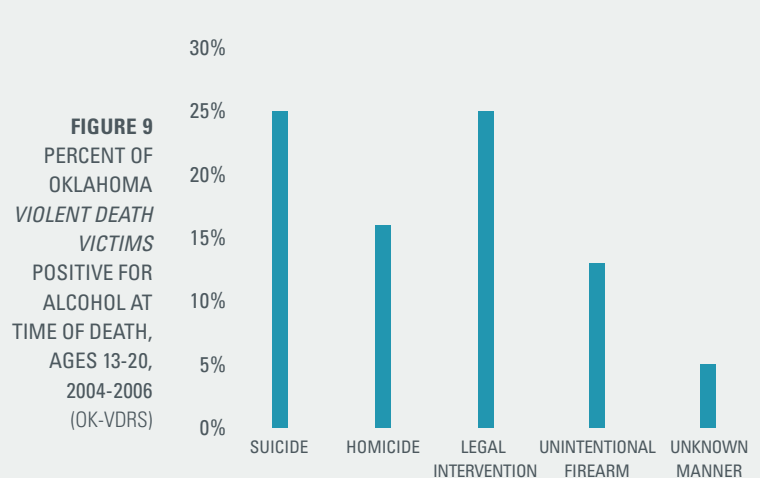
**According to the CDC, alcohol consumption is the primary causal factor in more than one third of motor vehicle crash deaths**



## ALCOHOL-RELATED PROBLEMS

The number of Oklahoma youth with a serious alcohol problem is estimated to be 44,000 (ESAP 2006). Youth with untreated alcohol problems face many increased risks. In 2006, 88% of 12-15, 83% of 16-17, and 84% of 18-20 year olds with an alcohol problem did not receive treatment (ESAP). These data suggest that only a small fraction of those needing help with their substance abuse problems are receiving treatment.

Over the past five years, 280 youth in Oklahoma have died after drinking alcohol, and 3 times as many males die after consuming alcohol than females. Oklahoma minors with alcohol problems are also more likely to participate in negative behaviors — they are 9 times more likely to drive a car after drinking, 8 times more likely to use other drugs, and are 5 times more likely to attempt suicide.



Alcohol consumption plays a significant role in violent deaths (Figure 9). During 2004-2006, 25% of suicides, 25% of legal intervention, 16% of homicides, and 13% of unintentional firearm deaths among persons 13 to 20 years involved alcohol. A substantial number of violent deaths were associated with a current depressed mood, mental health problem, intimate partner problem, or crisis in the past few weeks. Suicide was the most prevalent type of violent death, accounting for 1,544 deaths of Oklahomans during 2004-2006. The rate of suicide increased 5% from 2004 to 2006. Seventy-eight percent of suicide victims were males and 22% were female. White males had the highest suicide rate (24%), followed by Native American males (23%) and Black males (11%) (OK-VDRS).



## alcohol consumption · adult

### KEY FINDINGS

About 1 in every 12 adults abuse alcohol or are alcohol dependent. In general, more men than women are alcohol dependent or have alcohol problems. Alcohol problems are highest among young adults ages 18-29 and lowest among adults ages 65 and older. People who start drinking at an early age are at much greater risk of developing alcohol problems at some point in their lives compared to someone who starts drinking at age 21 or after.

**Alcohol consumption in adults can have social, economic, and health consequences that affect us all**

### CURRENT CONSUMPTION

Oklahoma is currently ranked 39th in the nation for current drinking (Adults who have had at least one drink of alcohol within the past 30

days) and has fewer adults reporting recent drinking than the U.S. as a whole. While over half (55%) of U.S. adults reported drinking in the past 30-days, only 41% of Oklahoma adults reported this behavior (BRFSS, 2007). More adult males than females in Oklahoma reported drinking alcohol in the past 30-days (49% vs. 33%). These percentages are similar to the U.S. percentages for males and females.

As seen in Figure 10, the age groups with the highest percentage of current drinking were 21-29 and 30-34 year olds at 56% and 50% respectively. The racial/ethnic groups with the highest percentage of current drinking reported in the 2007 BRFSS were Hispanics (44%), Whites (42%) and Blacks (39%). For all racial/ethnic groups, Oklahoma rates were below the national rates.

### BINGE DRINKING

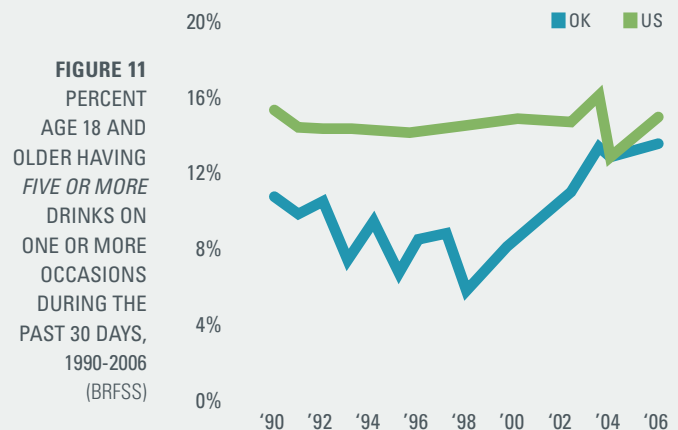
Adult binge drinking (defined as having five or more drinks of alcohol on a single occasion) is associated with significant rates of alcohol-related injury death and disability.

According to the 2007 BRFSS, adult binge drinking was slightly less common in Oklahoma than in the rest of the nation. While 16% of adults across the entire U.S. reported binge drinking in the past 30 days, only 13% of Oklahoma adults reported this behavior. Currently, Oklahoma is ranked 31st in the nation for binge drinking.

Despite being below national levels, adult self-reports of binge drinking increased 133% from 1998 to 2006 (Figure 11). By 2006, Oklahoma rates of binge drinking among adults had almost reached national levels, with 13% of Okla-

**FIGURE 10**  
PERCENT  
REPORTING  
ANY ALCOHOL  
USE IN THE  
PAST 30 DAYS  
BY AGE  
2001-2006  
(BRFSS)

		21-29	30-34	35-54	55-64	65+
'01	OK	61.9	50.7	43.5	29.8	18.7
	US	64.8	60.8	56.4	47.3	38.6
'02	OK	57.0	51.2	43.8	31.2	20.6
	US	64.6	61.2	58.2	49.9	39.3
'03	OK	59.5	51.2	48.3	32.2	21.7
	US	65.6	61.0	59.7	52.4	41.4
'04	OK	57.1	51.4	46.9	36.1	21.7
	US	63.2	59.4	57.6	50.1	40.5
'05	OK	55.1	54.6	45.9	35.0	21.8
	US	61.2	59.1	57.5	50.3	40.5
'06	OK	56.0	20.1	45.3	34	24.1
	US	63.6	57.7	59.1	52.1	38.4







homans age 18 or older reporting engaging in binge drinking compared to 15% at the national level (BFRSS, 2006).

Binge drinking is more prevalent among younger age groups, with 16% of adults aged 21-29 years reporting past-month binge drinking, compared to only 3% of adults age 65 or older reporting binge drinking (BRFSS, 2006).

Oklahoma men were almost three times more likely to report binge drinking than women (19% vs. 7%). Hispanics reported higher rates of binge drinking than other racial/ethnic groups (BRFSS, 2007).

### CHRONIC DRINKING

Adult 'chronic' or 'heavy drinking' is associated with significant rates of alcohol-related chronic disease death and morbidity. According to the latest estimates from the CDC,

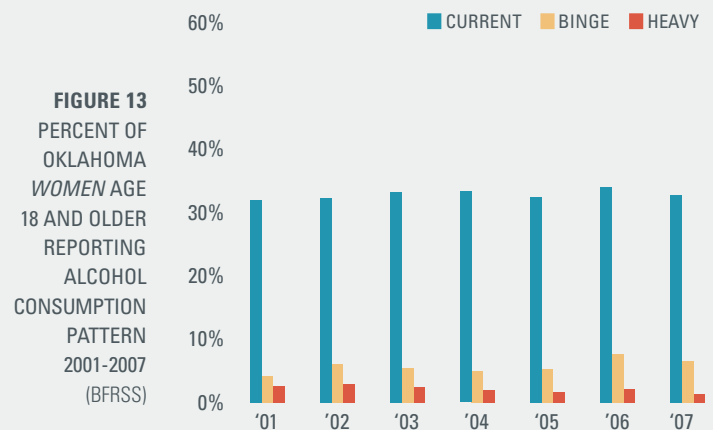
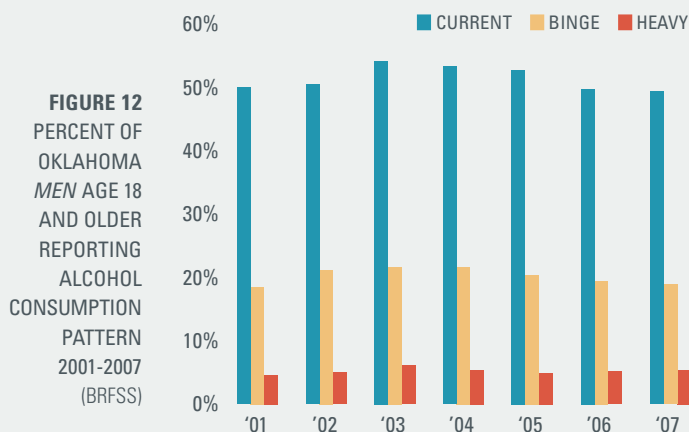
numerous chronic disease conditions (e.g., alcoholic liver disease, alcohol dependence syndrome), and a significant proportion of many other conditions (e.g., unspecified liver cirrhosis, pancreatitis) are alcohol-related. For each of these chronic conditions and related deaths, chronic heavy drinking, as opposed to acute short-term, or binge drinking, is considered responsible. Chronic heavy drinking is also associated with a wide range of other social problems, including domestic violence and family disruption.

In 2007, adult chronic drinking was less commonly reported in Oklahoma than in the rest of the nation. While 5% of U.S. adults reported heavy drinking, only 4% of Oklahoma adults reported this behavior. Currently Oklahoma is ranked 29th in the nation for chronic/heavy drinking.

Chronic drinking was more prevalent among younger age groups compared to older age groups. Oklahoma men were more likely to report chronic drinking than women (Figures 12 and 13).

**Chronic drinking is associated with a wide range of social problems, including domestic violence and family disruption**

When the 2007 BRFSS data are broken down by race/ethnicity, Hispanics had the highest prevalence of chronic/heavy drinking (7%), followed closely by multi-racial (5%), other race/ethnicity (4%), Whites (3%) and Blacks (1%). This prevalence has shifted dramatically from 2005 BRFSS where Blacks had the highest prevalence of chronic/heavy drinking at 6%.



# alcohol consequences · adult

## DRINKING & DRIVING

Adult drinking and driving is associated with injury outcomes such as alcohol-related motor vehicle crash injury and death (Figure 14). According to 2005 estimates from the CDC, alcohol consumption is the primary causal factor in roughly 39% of motor vehicle crash deaths. Among drivers involved in fatal crashes, those with BAC levels of 0.08% or greater were 9 times more likely to have a prior conviction.

In 2006, 4% of adults aged 18-20 and 6% aged 21-29 reported driving when they had “perhaps had too much to drink”. This compares to 4% and 6% respectively for these ages groups across the U.S. (BRFSS, 2006). In both Oklahoma and the U.S. overall, males were more likely to be involved in

fatal drinking and driving accidents than females across all ages (Figure 15).

## BINGE DRINKING

According to the latest estimates from CDC, almost 50% of homicides and more than 20% of suicides are alcohol-related. Likewise, alcohol consumption is the primary causal factor in roughly 50% of motor vehicle crash deaths among males aged 20-44; and in more than a third of motor vehicle crash deaths among females in this age range.

For each of these causes, it is acute short term or binge drinking as opposed to chronic heavy drinking that is considered responsible for the majority of alcohol related injuries and deaths. Binge drinking is also associated

**FIGURE 14**  
NUMBER OF  
DRUG OR  
ALCOHOL  
CONVICTIONS  
BY MOTOR  
VEHICLE  
VIOLATION  
2000-2004  
(FARS)

	'00	'01	'02	'03	'04
DUI	4,098	4,111	5,627	7,419	5,511
FELONY DRUG POSSESSION	1,222	1,817	1,956	2,912	1,954
MISDEMEANOR DRUG POSSESSION	2,408	2,427	2,833	2,989	2,024
DRINKING OR USING DRUGS IN PUBLIC PLACE	2,663	2,892	2,527	4,223	3,878
REFUSED TEST IN PUBLIC PLACE	7,090	6,748	7,367	7,022	6,675
TOTAL	20,557	19,799	21,940	26,108	21,525

**FIGURE 15**  
PERCENT OF  
ALCOHOL-  
INVOLVED  
DRIVERS  
IN FATAL  
CRASHES BY  
AGE AND  
GENDER  
2000-2003  
(FARS)

		21-29		30-34	
		M	F	M	F
'00 OK	US	26	17	22	7
'01 OK	US	29	19	17	9
'02 OK	US	29	22	21	12
'03 OK	US	29	18	16	8
'00 OK	US	27	11	21	12
'01 OK	US	29	18	17	8
'02 OK	US	25	17	15	1
'03 OK	US	28	16	16	8



with a wide range of other social problems including domestic violence, crime, and risk for sexually transmitted disease.

Among adults (age 18 and over) of all ethnicities, binge drinking was more commonly reported by males than females. Young adults (age 18-24) were more likely than other age groups to report binge drinking (BRFSS, 2007).

ALCOHOL-RELATED PROBLEMS

According to CDC, nationally 35% of victims report that their offenders were under the influence of alcohol. Alcohol use is also associated with 2 out of 3 incidents of intimate partner violence. When women consume alcohol during pregnancy they have a greater risk of having a miscarriage or stillbirth. The infant could also

have a combination of physical and mental birth defects that could last throughout their life.

As with youth, adults who consume alcohol are more likely to experience other problems, including engaging in risky behaviors and facing serious health problems. From 2000 to 2003, the number of adults per 1000 who died from chronic liver disease in Oklahoma increased 16%, and the number of adult males dying from chronic liver disease in 2003 was almost 4 times that of females. In addition, 28% of violent death victims aged 13 years and older during 2004 and 2006 tested positive for alcohol (OK-VDRS).

As shown in Figure 16, 28% of suicides, 38% of legal intervention deaths, 35% of homicides,

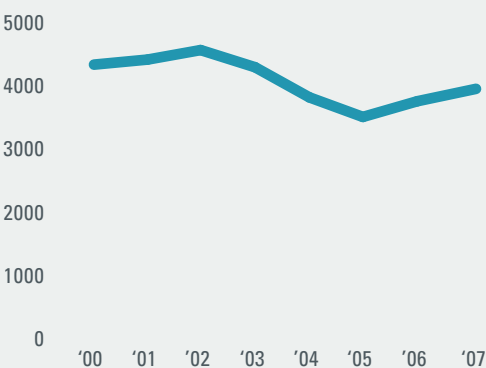
and 33% of unintentional firearm deaths among persons 21 years and older during 2004-2006, involved alcohol. Among youth, 37% of suicides among American Indian youth and 25% of suicides among White youth involved alcohol use. Among adults, 37% of suicides among American Indians, 27% of suicides among Whites, and 25% of suicides among Blacks involved alcohol use (OK-VDRS).

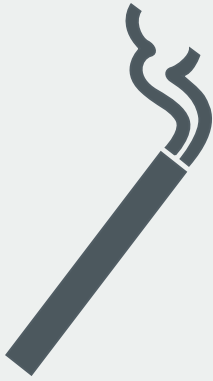
As shown in Figure 17, the number of adults receiving treatment for alcohol use has declined since 2000. This is a contrast to those in need of treatment.

FIGURE 16  
PERCENT OF OKLAHOMA VIOLENT DEATHS TESTING POSITIVE FOR ALCOHOL AT TIME OF DEATH, AGES 21 & OVER 2004-2006 (OK-VDRS)



FIGURE 17  
NUMBER OF OKLAHOMA ADULTS 21 & OVER WHO RECEIVED TREATMENT FOR ALCOHOL ABUSE OR DEPENDENCE, 2000-2007 (ODMHSAS)





## tobacco consumption · youth

### Current Cigarette Use

having smoked at least one cigarette on one or more occasions in the past 30 days

### Current Smokers

all respondents 18 and older who have ever smoked at least 100 cigarettes in their lifetime and reported currently smoking every day or some days

### Lifetime Cigarette Use

having ever tried cigarette smoking, even one or two puffs

### Smokeless Tobacco

the two most popular forms are snuff and chewing tobacco

### INITIAL USE

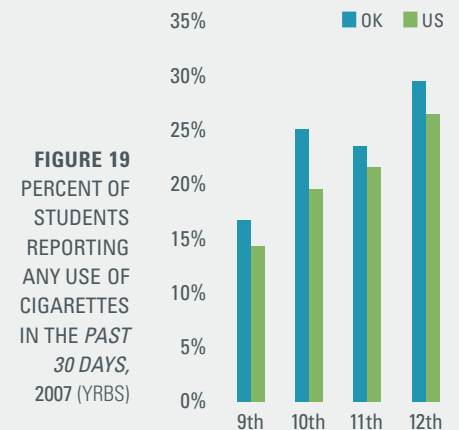
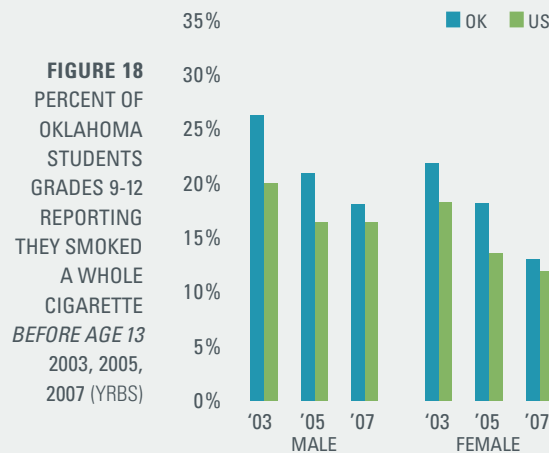
Initial tobacco use before age 13 is more prevalent in Oklahoma than the U.S. overall (Figure 18). Males (18%) tend to use tobacco earlier than females (13%). The prevalence of early tobacco use has declined from 24% in 2003 to 15% in 2007. Tobacco use among middle school students has also been consistently greater than the national average. However, the trend shows decreased levels of cigarette use from 1999-2007. Oklahoma middle school students reported greater use of cigarettes (7%) than their counterparts at the national level (6%).

**The prevalence of early tobacco use has declined from 24% in 2003 to 15% in 2007.**

### CURRENT USE

According to the 2007 YRBS, 23% of Oklahoma high school students reported smoking cigarettes within the previous 30 days. In Oklahoma, males (26%) are more likely to be current smokers than females (21%). Both Oklahoma males and females are more likely than their national counterparts to report current smoking (YRBS 2007). Students in grades 9th through 12th were more likely to report cigarette use than students in the U.S. Overall 12th grade students reported the highest rates of cigarette smoking (Figure 19).

Among Oklahoma males, the prevalence of current cigarette smoking increased by grade





level. While 17% of 9th grade male students reported current smoking, 31% of 12th grade male students reported cigarette use. There was less fluctuation in the current smoking rate by grade level among females. Oklahoma rates of current cigarette use have declined from 28% in 2005 to 21% in 2007. National data has seen recent declines in youth current cigarette smoking from 23% in 2005 to 20% in 2007 (YRBS).

As seen in Figure 20, the percent of middle school students who smoke cigarettes has decreased from 18% in 2000 to 8% in 2007.

In 2007, smoking was more prevalent among Oklahoma high school students (29%) than in the rest

of the nation (23%). Oklahoma females were as likely as males to report current smoking (28% vs. 29%).

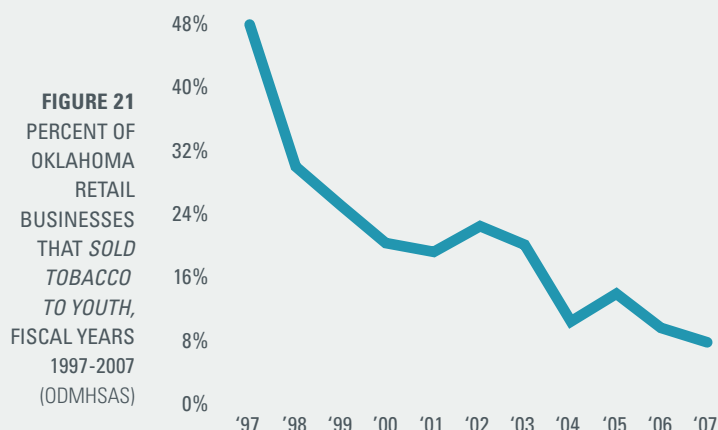
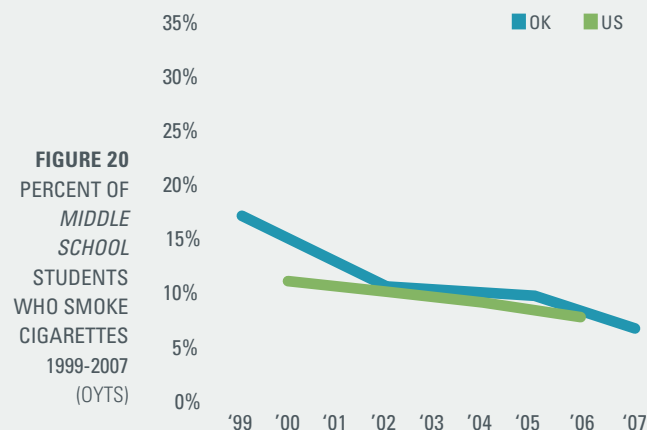
As seen in Figure 21, the percent of Oklahoma retail businesses that sold tobacco to youth has decreased dramatically from 1997.

In 2007, 53% of current middle school smokers and 48% of current high school smokers wanted to stop smoking. Fifty-eight percent of the middle school smokers and 56% of the high school smokers had tried to quit during the past year. When they last tried to quit, 63% of the middle school smokers and 57% of the high school smokers were able to stay off cigarettes for at least 30 days.

## SMOKELESS TOBACCO

In addition to cigarette use, Oklahoma youth also reported using other forms of tobacco. In 2007, 14% of high school students reported they have used spit tobacco (chewing tobacco, snuff, or dip) in the last 30 days (YRBS).

Current use of spit tobacco was greater for males in Oklahoma compared to the U.S. Twenty-five percent of Oklahoma high school males reported using spit tobacco in 2007, compared to 13% nationally. The current use of spit tobacco has increased in male students from 20% in 2005 to 25% in 2007 (YRBS).



## tobacco consequences · youth

People who begin to smoke at an early age are more likely to develop severe levels of nicotine addiction than those who start at a later age. Cigarette smoking during childhood and adolescence produces significant health problems among young people, including asthma, cough and phlegm production, an increased number and severity of respiratory illnesses, decreased physical fitness, an unfavorable lipid profile, and potential retardation in the rate of lung growth and the level of maximum lung function.

Figure 22 represents the percentage of Oklahoma students who report having asthma. According to the National Heart, Lung and Blood Institute, children exposed to tobacco smoke are more likely to develop asthma. According to CDC, youth who smoke are less physically fit and will have more respiratory illnesses than non-smokers.

Smokeless tobacco use by adolescents is associated with early indicators of periodontal degeneration and with lesions in the oral

### Asthma

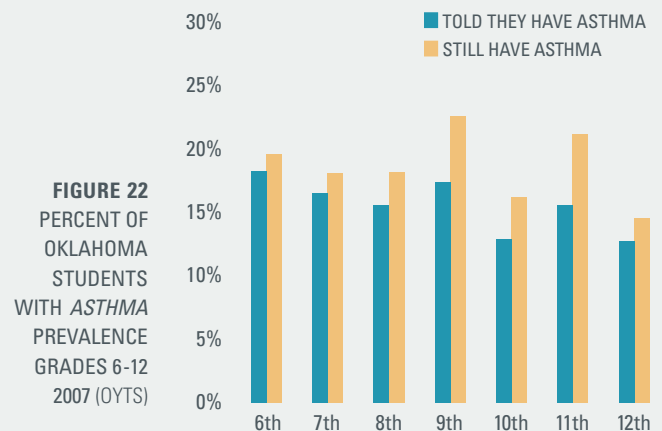
chronic lung disease that inflames and constricts the airways

### Periodontal Degeneration

chronic bacterial infection that affects the gums and bone supporting the teeth

### Secondhand Smoke

a complex mixture of gasses and particles that includes smoke from the burning cigarette, cigar, or pipe tip and exhaled mainstream smoke





soft tissue. Smokeless tobacco use can lead to nicotine addiction and dependence. Adolescent smokeless tobacco users are more likely than nonusers to become cigarette smokers.

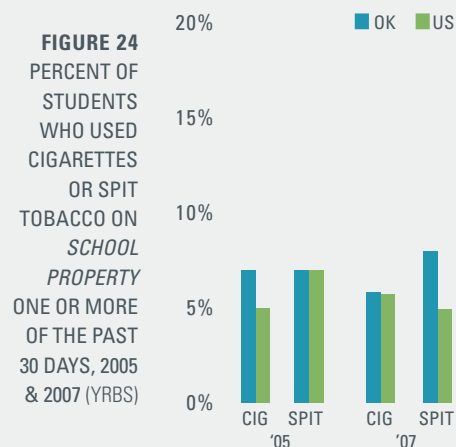
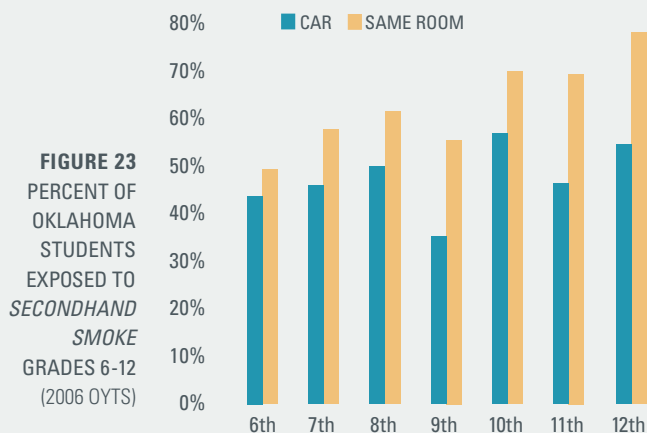
**Adolescent smokeless tobacco users are more likely than nonusers to become cigarette smokers.**

Figure 23 represents the percent of students who are exposed to secondhand smoke either at home or in the car. In 2007, youth were more likely to be exposed to

secondhand smoke while in the same room with someone who was smoking. Secondhand smoke causes bronchitis or pneumonia in at least 2,250 Oklahoma infants each year. An estimated 216,000 Oklahoma children are exposed to secondhand smoke at home each day, including 40% of all 2-year-olds.

Tobacco use is associated with alcohol and illicit drug use and is generally the first drug used by young people who enter a

sequence of drug use that can include tobacco, alcohol, marijuana, and other illicit drugs. Youth caught possessing tobacco products can be subject to school suspensions and/or civil penalties. As seen in Figure 24, the percentage of students who report that they have used spit tobacco on school property has increased from 6% in 2005 to 8% in 2007. Eight percent of Oklahoma high school students reported the use of spit tobacco on school property compared to the U.S. at 5%.



## tobacco consumption · adult

### CURRENT USE

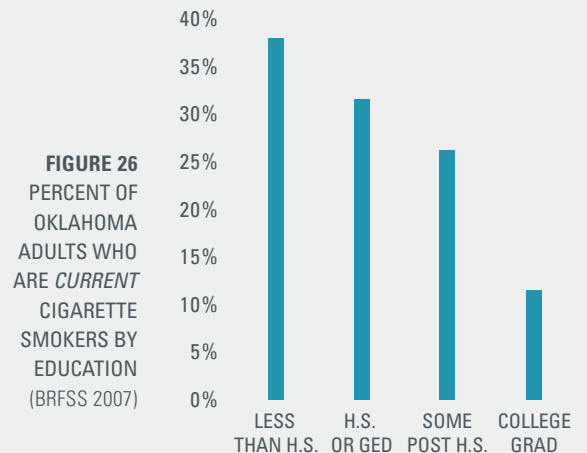
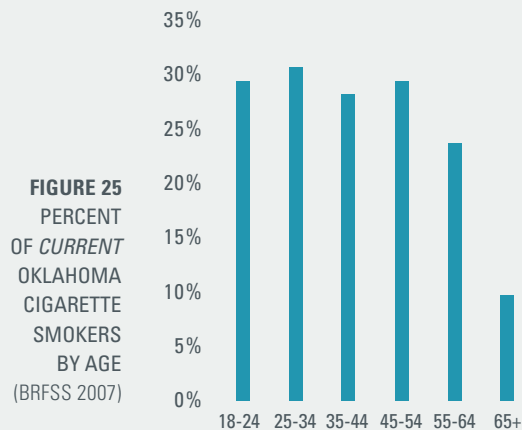
Oklahoma has one of the highest smoking prevalence rates among adults in the nation. In 2007, adult smoking was more commonly reported in Oklahoma than in the rest of the nation with 26% of Oklahoma adults reporting this behavior compared to 20% of adults across the U.S. (BRFSS).

As shown in Figure 25, current smoking was most prevalent among younger age groups, with 18-24 reporting 29% and 25-34 reporting 31%. Oklahoma men were only slightly more likely to smoke than women (28% vs. 24% respectively). As seen in Figure 26, Oklahomans with a high school education or less were

more likely to be current smokers than those with some post high school education.

### SMOKING STATUS

In 2007, 20% of Oklahoma adults reported smoking everyday, which was greater than the national rate of 15%. Fifty-five percent of U.S. adults reported they had never smoked, compared to only 51% in Oklahoma (BRFSS, 2007). The rate of former smokers in Oklahoma has increased in recent years and is now approaching the national rate — 24% of adults in the U.S. and 23% in Oklahoma report being former smokers (BRFSS, 2007).







The rate of former smokers in Oklahoma has increased in recent years and is now approaching the national rate.

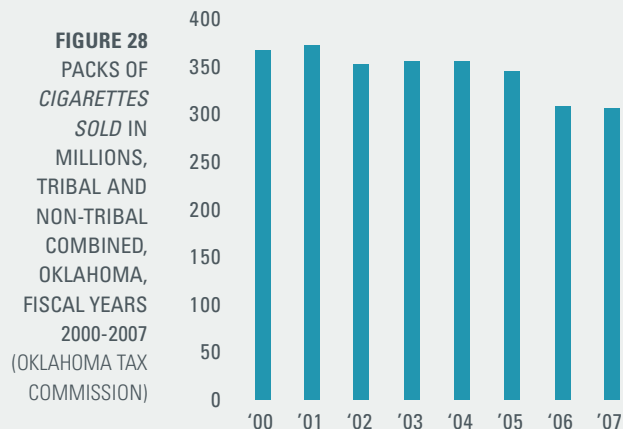
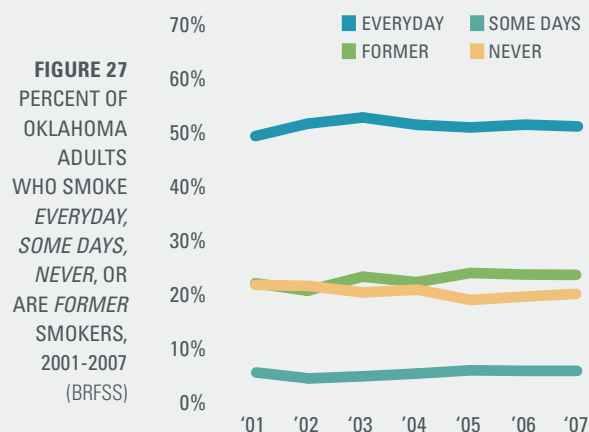
As shown in Figure 27, the percentage of adults who smoke everyday is decreasing and the percentage of former smokers is increasing.

As reported in the 2007 BRFSS, some Oklahomans continue to use tobacco everyday or some days, even when they have significant health problems. Of the everyday users, 5% had a previous heart attack, 4% stroke, 26% high blood pressure and 16%

had 15+ unhealthy days in the past month. Of someday users, 6% had a previous heart attack, 3% stroke, 24% high blood pressure, and 16% had 15+ unhealthy days in the past month. This is in contrast to the people who have never smoked, 3% had a previous heart attack, 3% stroke, and eight or more unhealthy days.

Approximately 30% of Oklahoma mothers smoked during the three months prior to pregnancy, 18% smoked during the last three months and 59% of those who quit during pregnancy began smoking post-partum (PRAMS 2006).

The prevalence of smoking by race/ethnicity was different for adult males than for adult females. Among males, Hispanics (33%) and American Indians (28%) reported a greater prevalence of smoking than White males (26%). For females, the highest prevalence of smoking was among American Indians (31%), Blacks (28%), followed by Whites (23%), and Hispanics (15%) (BRFSS 2005). As shown in Figure 27, the number of packs of cigarettes sold since 2000 has declined.



## tobacco consequences · adult

### Low Birthweight

a fetus that weighs less than 2500 grams (5 lb 8 oz) regardless of gestational age

### Chronic Obstructive Pulmonary Disease (COPD)

chronic bronchitis and emphysema characterized by obstruction to airflow that interferes with normal breathing

Adult smoking (defined as having smoked more than 100 cigarettes in lifetime and currently smoking) is associated with significant greater rates of smoking-related death and morbidity. According to the CDC's Smoking Attributable Mortality, Morbidity, and Economic Costs (SAMMEC), smoking is responsible for a significant proportion of the deaths from numerous types of malignant neoplasms (lung, esophageal, and laryngeal cancers); from numerous cardiovascular diseases (ischemic heart disease, cerebrovascular disease); and from several respiratory diseases (bronchitis, emphysema, chronic airway obstruction). Combined, these smok-

ing-related deaths make smoking the leading behavioral cause of death in the United States.

As shown in Figures 29-31, adult deaths from lung cancer, Chronic Obstructive Pulmonary Disease (COPD) and emphysema, and Cardiovascular Disease (CVD) in Oklahoma have remained high among older adults. Men are more likely than women to die of lung cancer; however women age 65 and older surpass males in the number of deaths from CVD per 1000 each year from 2000 through 2003.

The negative impact of smoking on maternal and child health is

**FIGURE 29**  
LUNG CANCER  
DEATHS  
PER 1000  
POPULATION  
BY AGE AND  
GENDER  
2000-2003  
(NVSS)

	AGE 35-54		AGE 55-64		AGE 65+	
	M	F	M	F	M	F
'00	134	93	283	203	946	662
'01	123	93	298	162	980	658
'02	120	85	317	199	982	691
'03	123	90	318	195	928	655

**FIGURE 30**  
COPD AND  
EMPHYSEMA  
DEATHS  
PER 1000  
POPULATION  
BY AGE &  
GENDER  
2000-2003  
(NVSS)

	AGE 35-54		AGE 55-64		AGE 65+	
	M	F	M	F	M	F
'00	28	34	109	127	871	757
'01	33	26	98	91	828	791
'02	32	35	116	124	835	797
'03	29	26	131	130	902	885



Given the high cigarette use among Oklahoma adults, it is unlikely the death rates from smoking will decrease significantly in the next several years.

also tremendous. Currently, the percentage of Oklahoma women who smoke while pregnant is 18% compared to 11% nationwide. For pregnant women, smoking dramatically increases heartbeat and blood pressure, which in turn can have a negative impact on both her own health and that of her baby. Even more dangerous is the crossover of the poisons in inhaled cigarette smoke to the placenta. Smoking during pregnancy nearly triples the risk

of low birth weight babies, increases the risk of miscarriages, pre-term birth, and stillbirth and accounts for at least 10% of all infant deaths. As seen in Figure 32, women who reported smoking before or during pregnancy were more likely to give birth to a low birthweight baby than non-smokers (9% vs. 6%). Smoking during pregnancy and infant exposure to secondhand smoke both directly increase the risk of sudden infant death syndrome (SIDS). The economic impact of prenatal tobacco use on the cost of health care is immense. The costs of neonatal conditions in Oklahoma attributable to tobacco use during

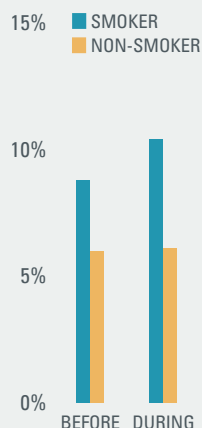
pregnancy have been estimated at \$5.7 million per year, mostly due to increased need for Neonatal Intensive Care Unit services. Additionally, there are the indirect costs in terms of years of life lost due to infant mortality and loss of productivity of the mother (PRAMS 2006). In total, tobacco use costs Oklahomans over 2.2 billion in medical expenses and lost productivity every year or an average of \$600 per person (SAMMEC).

In general, Oklahoma tobacco use patterns and the extent of the consequences are worse compared to the U.S. as a whole.

**FIGURE 31**  
CVD DEATHS  
PER 1000  
POPULATION  
BY AGE AND  
GENDER  
2000-2003  
(NVSS)

	AGE 35-54		AGE 55-64		AGE 65+	
	M	F	M	F	M	F
'00	145	91	152	99	901	1520
'01	123	99	142	93	871	1434
'02	143	82	140	105	886	1548
'03	144	94	137	98	866	1402

**FIGURE 32**  
PERCENT  
OF LOW  
BIRTHWEIGHT  
AMONG  
OKLAHOMA  
WOMEN WHO  
SMOKED  
BEFORE AND  
DURING  
PREGNANCY,  
2006 (OK PRAMS)





### Other Drugs

Other drugs include marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including phencyclidine [PCP], lysergic acid diethylamide [LSD], and Ecstasy [MDMA]), heroin, or prescription-type psychotherapeutics used non-medically, which include stimulants, sedatives, tranquilizers, and pain relievers. Illicit drug use refers to use of any of these drugs.

## other drug consumption

### KEY FINDINGS

Youth drug use is associated with suicide, violence, early unwanted pregnancy, school failure, delinquency, and transmission of sexually transmitted diseases.

Illicit drug use among Oklahoma students overall was slightly less than or equal to U.S. students. Lifetime use of non medical prescription medications in Oklahoma was greater than in the U.S. overall, however use of marijuana, hallucinogens, and ecstasy was slightly lower in Oklahoma compared to the national data (Figure 33). The most commonly used drugs were marijuana with 39% of Oklahomans reporting lifetime use and 9% reporting past year use, and cocaine with 14% reporting lifetime use and 2% reporting past year use.

### MARIJUANA

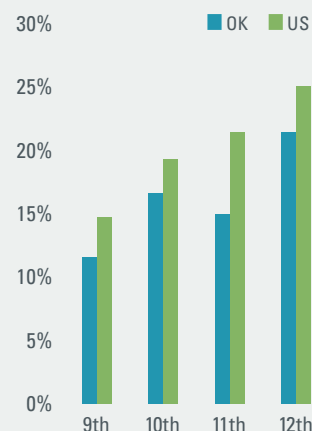
Between 2003 and 2007, youth lifetime marijuana use declined from 43% to 33%. In 2007, past 30-day marijuana use by high school students was less prevalent in Oklahoma (16%) than U.S. (20%). This was true for both males and females — 18% of Oklahoma males and 13% of Oklahoma females reported recent marijuana use, compared to 22% and 17% respectively in the U.S. (YRBS, 2007)

As with alcohol-related behaviors, marijuana use was more prevalent among students in higher grade levels than in lower grades (Figure 34). Among males, marijuana use increased with each grade level, from 17% in 9th grade to 28% in 12th grade. Marijuana use among females varied

**FIGURE 33**  
PERCENT  
OF *ILLICIT*  
*DRUG USE*  
IN LIFETIME  
AND PAST  
YEAR, AMONG  
PERSONS AGE  
12 & OLDER,  
2002-2004  
(NSDUH)

	LIFETIME		PAST YEAR	
	OK	US	OK	US
ILICIT DRUG	46%	46%	14%	15%
MARIJUANA	39%	40%	9%	11%
COCAINE	14%	14%	2%	2%
HALLUCINOGENS	13%	14%	2%	2%
ECSTASY	4%	5%	1%	1%
INHALANTS	9%	10%	1%	1%
NON MEDICAL USE OF PSYCHOTHERAPEUTICS	23%	20%	7%	6%
TRANQUILIZERS	12%	8%	3%	2%
STIMULANTS	11%	8%	2%	1%
SEDATIVES	5%	4%	0%	0%
ILICIT DRUG (OTHER THAN MARIJUANA)	31%	29%	8%	8%

**FIGURE 34**  
PERCENT OF  
STUDENTS  
REPORTING  
ANY USE OF  
*MARIJUANA*  
IN THE PAST  
30 DAYS  
(YRBS 2007)





only slightly by grade level, and these differences were not statistically significant (YRBS, 2007).

Oklahoma high school students reported an average 3% decrease to past month marijuana use between 2003 and 2007.

**Oklahoma high school students reported an average 3% decrease of past month marijuana use between 2003 and 2007.**

## COCAINE

In 2007 Oklahoma youth in grades 10-12 reported less than or similar levels of lifetime cocaine use as youth across the U.S., but 9th grade Oklahoma students reported a greater percentage of any cocaine use than the national average (Figure 35). However, from 2003 to 2007, the level of any cocaine use among Oklahoma

youths has decreased for all high school students except those in the 12th grade.

Similar to lifetime use, the Oklahoma prevalence of past 30-day cocaine use is similar to the national rate. Three percent of Oklahoma youth report recent use of cocaine, compared to 4% in the U.S. This holds true for both males and females in Oklahoma, with 4% of males and 2% of females reporting current cocaine use compared to 4% and 3% respectively for the U.S. (YRBS, 2007)

## INHALANTS

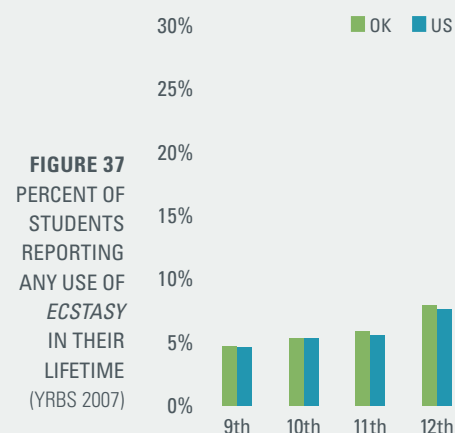
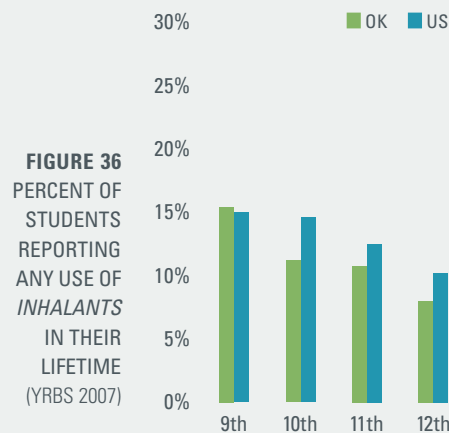
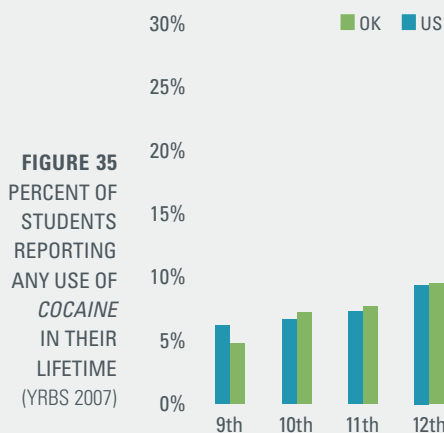
In 2007 fewer Oklahoma 10th grade students reported decreased levels of lifetime inhalant use compared to 2005. However students in 9th, 11th, and 12th

grades reported increased levels of lifetime inhalant use. In 2007, 9th grade females were more likely to report ever using inhalants than males (17% versus 14%) (YRBS).

Compared to the U.S., Oklahoma high school students reported lower levels of any use of inhalants for grades 10 -12. Oklahoma 9th grade students reported a greater percentage of inhalant use compared to the U.S. as a whole (Figure 36).

## ECSTASY

Oklahoma students in 10th and 11th grade reported decreased levels of lifetime ecstasy use from 2005 to 2007 while students in 9th and 12th grade reported an increase in lifetime ecstasy use (Figure 37).



### Non-medical use of Prescription Drugs

Using drugs that were not prescribed to you by a doctor, or using drugs in a manner not intended by the prescribing clinician (e.g., to get high). Nonmedical use does not include taking prescription medications as directed by a health practitioner or the use of over-the-counter medications.

### Psychotherapeutic Drugs

Psychotherapeutic Drugs are prescription-type medications with legitimate medical uses as pain relievers, tranquilizers, stimulants, and sedatives.

In 2007, Oklahoma 9th-12th grade students reported greater levels of lifetime use than their U.S. counterparts (Figure 37).

### METHAMPHETAMINE

Methamphetamine use among Oklahoma high school students in 2007 was greater than the U.S. average. The percentage of Oklahoma 12th grade students who reported using methamphetamines once or more in their lifetimes was 3% higher than in the U.S. (Figure 38). Both males and females in Oklahoma reported slightly higher rates of methamphetamines use than in the U.S. (YRBS, 2007). Oklahoma male high school students were more likely to report any use of methamphetamines than Oklahoma females.

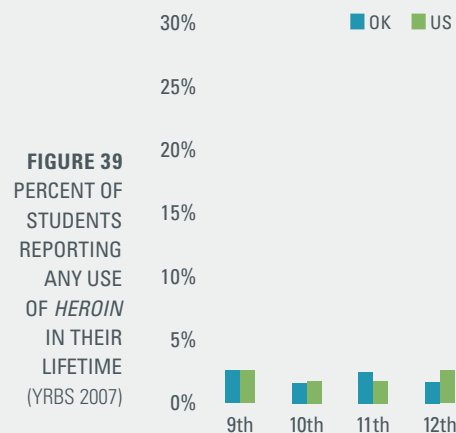
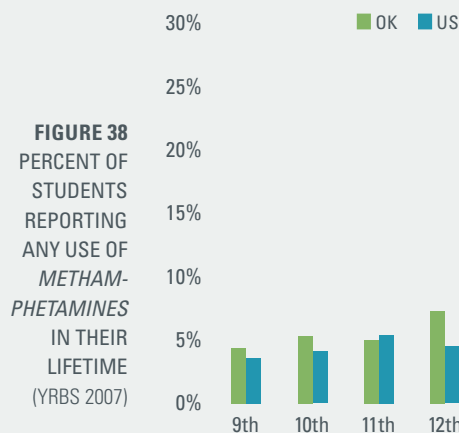
There was a substantial decrease in reported use of methamphet-

amines among Oklahoma high school students between 2003 (10%), 2005 (7%) and in 2007 (6%).

### HEROIN

Oklahoma students in 11th grade were more likely than their counterparts in the U.S. to report heroin use one or more times in their lifetime (Figure 39). Male high school students were more than twice as likely to report trying heroin than females in Oklahoma — 3% of Oklahoma males reported using heroin at least once compared to 1% of females.

In 2007, Oklahoma students in grades 10-12 reported slightly lower levels of heroin use than in 2005 (a decline of 1% in 10th grade, .2% in 11th grade and 1% in 12th grade). Oklahoma 9th grade students reported an increase in heroin use one or more





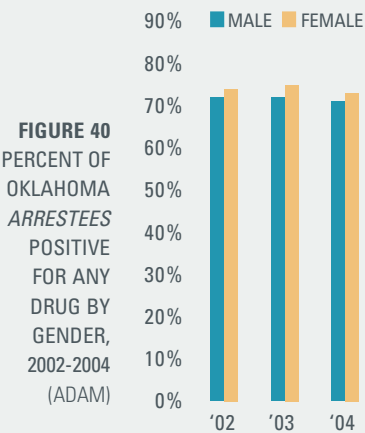
times in their lifetime from 1% in 2005 to 3% in 2007.

Substance abuse consumption behaviors developed early in life can have many short term negative consequences that can lead to death or injury. These behaviors, if continued into adulthood, can also have serious long term consequences associated with chronic drinking and illicit drug use.

**PRESCRIPTION DRUGS**

The non-medical use of prescription drugs is a serious public health concern. Nonmedical use of prescription drugs like opioids, central nervous system (CNS) depressants, and stimulants can lead to abuse and addiction, characterized by compulsive drug seeking and use. Nationally in 2006, 5% of all persons aged 12 or

older reported having used pain relievers nonmedically in the past year, a percentage that reflected an increase from 2004-2005 (4%). In 2006, Oklahoma had the highest percentage (7%) of persons aged 12 or older using pain relievers for tnonmedical purposes in the past year. Oklahoma youth aged 12 to 17 reported 11% of past year nonmedical use of any prescription psychotherapeutic drugs compared to the U.S. at 9%. Oklahoma young adults aged 18 to 25 reported a past year use of any prescription psychotherapeutic drug in 2002, 2003, and 2004 of 20% compared to the U.S. at 14% (NSDUH).



## other drug consequences

### KEY FINDINGS

According to the Oklahoma Department of Corrections, among all states, Oklahoma had the highest rate of female imprisonment in 2006: 132 per 100,000 female residents were imprisoned in 2006, totaling 2,571 imprisoned females (Bureau of Justice 2006).

The State of Oklahoma, 2007 Uniform Crime Report (UCR), reported 20,301 arrests for drug abuse violations in Oklahoma during 2007. Possession of marijuana constituted 51% of the total drug abuse arrests, while sale of marijuana accounted for 6% of arrests. Possession of opium, cocaine and derivatives comprised 13% of the total drug abuse arrests; sale of opium, cocaine and derivatives equaled 2% of the total drug abuse arrests. Alcohol-

related arrests (driving under the influence, drunkenness, and other liquor law violations) accounted for 32% of all arrests in 2007. This percentage represents the arrest of 45,226 adults and 1,661 juveniles (OSBI, 2007).

The results from the Arrestee Drug Abuse Monitoring Program (ADAM) studies indicated that 72% of all arrestees in Oklahoma and Tulsa counties used at least one drug prior to arrest, with females having slightly greater usage rates than males (Figure 40). As seen in Figure 41, drug use after release from prison remains a serious problem. Nine out of ten leading causes of death in Oklahoma are at least partially caused by alcohol, tobacco or other drug use.

**FIGURE 41**  
PERCENT OF  
ILLICIT DRUG  
USE AMONG  
PRISON  
PROBATIONERS  
AND PAROLEES  
IN OKLAHOMA  
BY DRUG  
(ADAM)

	LIFETIME	PAST 18 MONTHS
ALCOHOL	97%	71%
ILLICIT DRUG	85%	40%
MARIJUANA	82%	34%
COCAINE	46%	11%
INHALANTS	13%	1%
HALLUCINOGENS	38%	6%
STIMULANTS	43%	11%
SEDATIVES	28%	9%
HEROIN	28%	1%

**FIGURE 42**  
PERCENT OF  
OKLAHOMANS  
WHO RECEIVED  
SUBSTANCE  
ABUSE  
SERVICES  
BY AGE, 2007  
(ODMHSAS)

AGE 0-6	2%
AGE 7-12	1%
AGE 13-17	7%
AGE 18-25	24%
AGE 26-35	29%
AGE 36-64	37%
AGE 65+	0%

**FIGURE 43**  
VICTIMS  
OF VIOLENT  
DEATHS IN  
OKLAHOMA  
TESTING  
POSITIVE  
FOR A DRUG  
2004-2006  
(OK-VDRS)

SUICIDE	294
HOMICIDE	39
UNDETERMINED MANNER DEATH	169
LEGAL INTERVENTION	11
UNINTENTIONAL FIREARM DEATH	0
TOTAL	513





The rate of substance use among arrestees in Oklahoma County was slightly higher than substance use among arrestees in Tulsa County (73% vs 72% respectively). Among arrestees surveyed at both county jails, 49% tested positive for marijuana, 25% for cocaine, 17% for methamphetamines, 5% for heroin; 3% for PCP, and 31% tested positive for multiple drugs.

DRUG-RELATED DEATHS

If left untreated, drug use can have disastrous results, including serious injury or death. While some individuals are seeking treatment (Figure 42), others face the more serious consequences of drug use.

From 2000 to 2006 the number of Oklahomans dying annually from drug/poisoning deaths almost

doubled from 299 to 513 (OK-VDRS). During 2004-2006, a total of 513 victims of violent death tested positive for drugs (Figure 43). One in five suicide victims in Oklahoma during 2004-2006 tested positive for drugs, with 42% of those testing positive for antidepressants. Additionally, 59% of persons 13 years of age and older with an undetermined manner death tested positive for drugs including 40% that tested positive for an antidepressant. Among all violent death victims, 21% tested positive for drugs including cocaine (1%), methamphetamines (2%) and opiates (8%).

DRUG SEIZURES

In an effort to decrease the amount of drugs available, Oklahoma has implemented measures to limit the sale of drugs. One

of these measures was House Bill 2176, passed in April 2004, which restricted the availability of pseudoephedrine, a component in the making of methamphetamine. This was accompanied by a decrease in the number of methamphetamine labs seized by the Oklahoma Bureau of Narcotics (OBN) (Figure 44). By 2007, the number of operating methamphetamine labs had dropped dramatically, and the majority of existing labs were only dumpsites or equipment and not actual operating labs (OBN, 2007).

The amount of other drugs purchased and seized by the OBN has generally increased since 2000. As shown in Figure 45, seizures of methamphetamines had substantially decreased in 2005, while cocaine had increased in 2005.

FIGURE 44  
METH LABS  
SEIZED  
BY THE  
OKLAHOMA  
BUREAU OF  
NARCOTICS  
1994-2007  
(OBN)

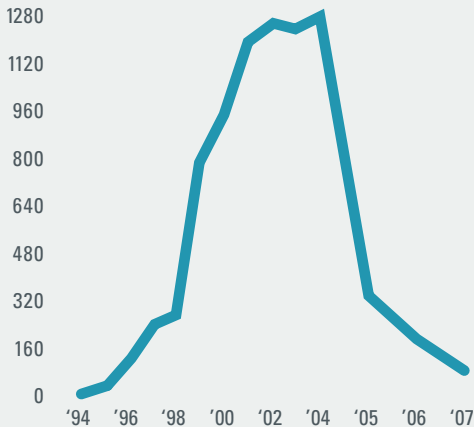


FIGURE 45  
DRUGS  
PURCHASED  
& SEIZED  
BY THE  
OKLAHOMA  
BUREAU OF  
NARCOTICS,  
2000-2007  
(OBN)

	'00	'01	'02	'03	'04	'05	'06	'07
MARIJUANA (LBS)	3059	173	631	342	317	300	1,936	3,066
METH. (GRAMS)	1406	2134	11361	2281	6039	561	16,104	85,835
COCAINE (GRAMS)	2891	7256	4663	4778	3457	4355	31,102	33,687
CRACK (GRAMS)	1220	335	597	367	567	500	5,074	896

## community profiles

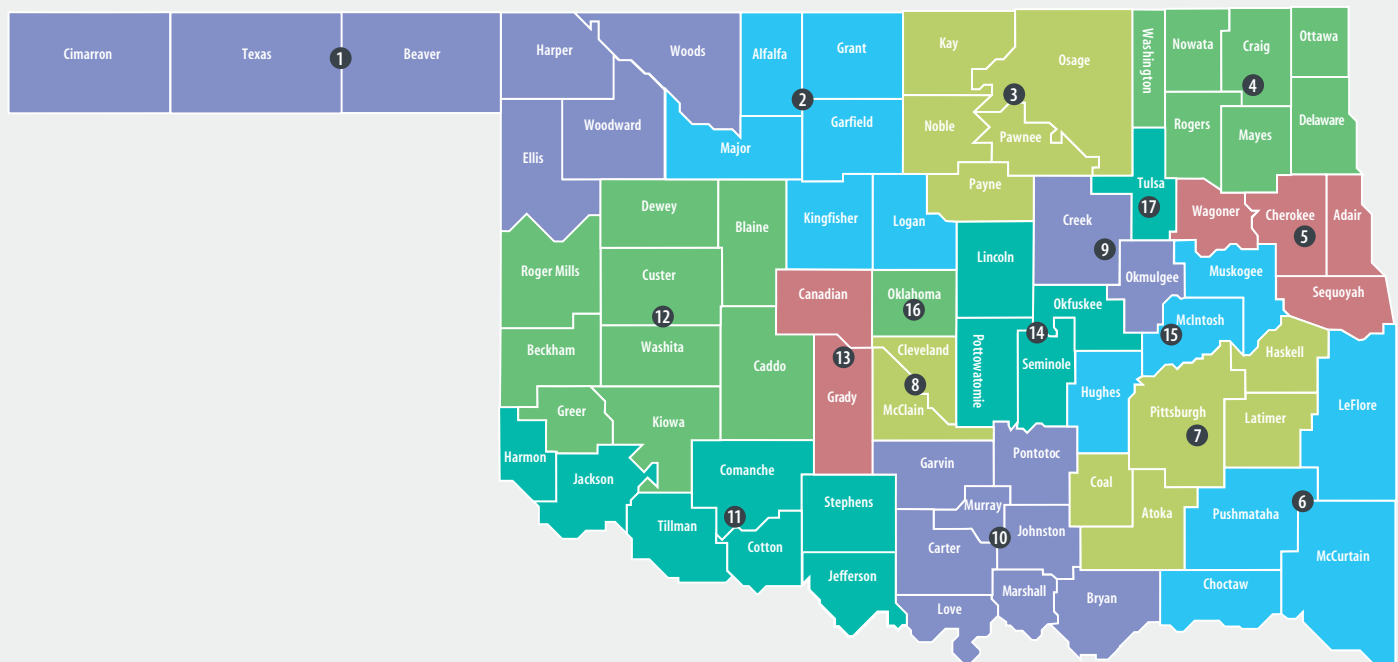
The Oklahoma community profiles of substance abuse consumption and consequences is a baseline effort intended to serve as a resource for planning and prioritizing of substance abuse prevention efforts across the 17 Area Prevention Resource Centers (APRC) in Oklahoma. The Oklahoma Department of Mental Health and Substance Abuse Services funds 17 APRCs serving all of Oklahoma's 77 counties. The services these agencies provide include evidence-based community prevention programs, coalition building and mentorship, resource dissemination, alternative activities and environmental strategies that reduce the availability of alcohol, tobacco and other drugs in the community in their service area.

Area Prevention Resource Centers advocate, establish and sustain alcohol, tobacco and other drug prevention services through training and technical assistance in prevention efforts to local communities. Prevention staff provide Regional services

through the engagement of community members, local organizations, public agencies, and other key community stakeholders to prevent the onset and prevent or reduce problems related to alcohol, tobacco, and other drug use. Prevention staff provide services as part of an integrated effort, at the community and Regional levels, to advance the goals of the following three statewide prevention initiatives: underage drinking prevention, alcohol, tobacco, and other drug prevention across the lifespan; and prevention capacity and infrastructure development.

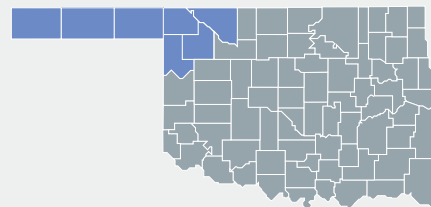
In order to better assess the burden of substance abuse consequences and consumption for local communities it is desirable to have data available for local reference. Oklahoma was faced with a challenge of using Regional data due to the lack of County data because of the small populations. The communities that were chosen were the 17 Area Prevention Resource Center Regions in Oklahoma.

## Oklahoma Area Prevention Resource Centers



# Region 1

Counties · Beaver, Cimarron, Ellis, Harper, Texas, Woods, and Woodward



In 2006, Region 1 had a population of 63,257 people, which made up 2% of Oklahoma's total population. The population per square mile for Region 1 was 6.1. Of the total Regional population, 51% were male and 49% were female. The White race made up 95% of the population in Region 1 which was substantially greater than the Oklahoma White population of 78%. Two percent of the population in Region 1 were Native American or Alaskan Native, 1% Black, and 1% Asian. In 2006, approximately 4,739 (8%) were under five years of age, 16,038 (25%) were under the age of 18, and 9,253 (15%) were 65 years of age or older (US Census). Region 1 reported a median age of 36 years which was similar to the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. As seen in Figure 46, the birth rate and death rate for Region 1 were

15.4 and 9.9 respectively which were similar to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 1 reported a family poverty rate of 9.4 and a child poverty rate of 17.6 which were lower than the Oklahoma average of 11.2 and 19.6 respectively. Region 1 however, did report a greater teen birth rate of 17.3 compared to the Oklahoma rate of 14.8. Region 1 reported a lower infant mortality rate and a lower child mortality rate compared to Oklahoma (6.2 and 1.9 vs. 8.0 and 2.1, respectively).

A brief profile of mortality in Oklahoma helps paint a clear picture of the hurdles that the Regions face ahead. This information is provided to help put the substance-related causes of death into a broader context. Figure 47 shows the 10 leading causes of death in Region 1 during the most recent three-year period for which data

are available (2004-2006). According to the Oklahoma State Department of Health, heart disease and cancer replace accidents/unintentional injuries as the leading causes of death after age 40.

Of the 10 leading causes of death shown in Figure 47, most are at least partially caused by substance abuse. For example, the chronic lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Stroke was the fifth leading cause of death in Region 1 but the fourth leading cause in Oklahoma.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 48 summarizes the violent deaths that occurred in Region 1 from 2004 through 2006. All of the violent death rates for Region 1 were

**FIGURE 46 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 1	OK
BIRTH RATE	15.4	15.1
DEATH RATE	9.9	9.9
TEEN BIRTH RATE	17.3	14.8
INFANT MORTALITY RATE	6.2	8.0
CHILD MORTALITY RATE	1.9	2.1

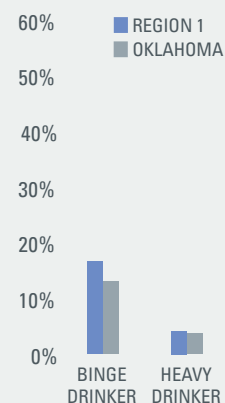
**FIGURE 47 · TEN LEADING CAUSES OF DEATH IN REGION 1, 2006** (OSDH)



**FIGURE 48 · NUMBER & RATE OF VIOLENT DEATHS, 2004-2006** (OK-VDRS)

	REG 1		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	27	14.2	2,673	25.1
HOMICIDE	7	3.7	629	5.9
SUICIDE	20	10.5	1,544	14.5
UNDETERMINED MANNER	0	0	434	4.1
UNINTENTIONAL FIREARM	0	0	30	0.3
LEGAL INTERVENTION	0	0	36	0.3

**FIGURE 49 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)



substantially lower than the Oklahoma violent death rates. More than 74% of the violent deaths were by suicide; the remaining 26% were homicides.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 49, more Region 1 adults reported binge drinking (17%) and heavy drinking (4%) compared to Oklahoma (13% and 3% respectively). As seen in Figure 50, Region 1 adults reported less everyday smokers (17%) and more people who have never smoked (53%) compared to Oklahoma averages (20% and 52% respectively).

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco

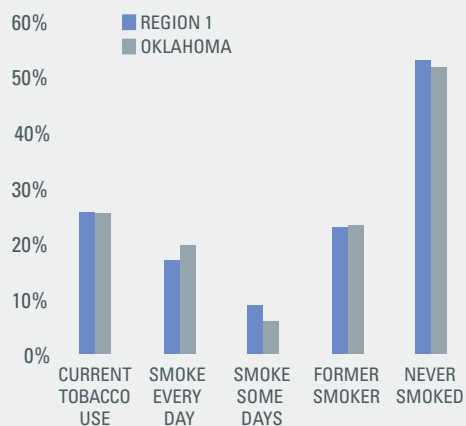
products to individuals under 18 years. To determine compliance with the legislation, the Amendment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for FY 2007 and Region 1 had a Synar non-compliance rate of 25%; the goal was 20% and the state as a whole met the requirement.

In Region 1 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, methamphetamine, and tied for third was marijuana/hashish and cocaine. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

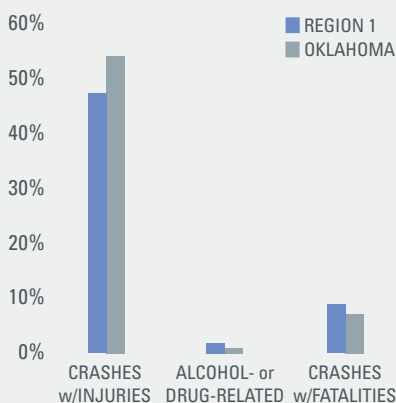
Adult drinking and driving is associated with injury outcomes such as alcohol-related motor vehicle crash injury and death. As seen in Figure 51, Region 1 had fewer crashes with injury but a greater percent of crashes that involved fatalities from alcohol or drug related crashes.

Alcohol-related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug law violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 52, alcohol related arrests (38%) in Region 1 were considerably greater than the Oklahoma average of 29%. The drug law violation arrests and index crime arrests were slightly less in Region 1 than in Oklahoma.

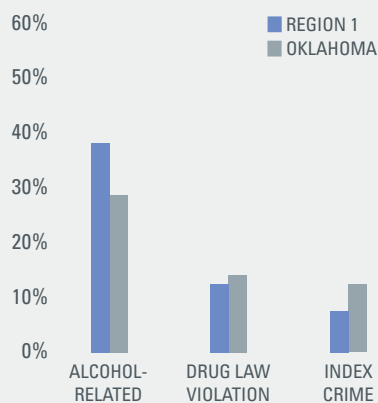
**FIGURE 50 · PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)**



**FIGURE 51 · PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)**

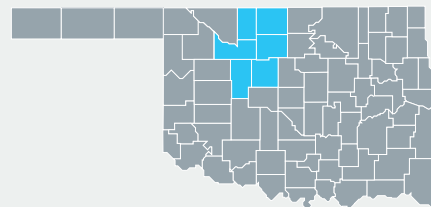


**FIGURE 52 · PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)**



## Region 2

Counties · Alfalfa, Garfield, Grant, Kingfisher, Logan, and Major



In 2006, Region 2 had a population of 126,010 people, which made up 4% of Oklahoma's total population. Of the total Regional population 49% were male and 51% were female. The White race made up 89% of the population in Region 2 which was substantially greater than the Oklahoma White population of 78%. Five percent of the population in Region 2 were Black, 3% were Native American or Alaskan Native, and 1% Asian. In 2006, approximately 8,347 (7%) were under five years of age, 29,986 (23%) were under the age of 18, and 19,230 (15%) were 65 years of age or older (US Census). Region 2 reported a median age of 41 years which was greater than the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. As seen in Figure 53, the birth rate and death rate for Region 2 were 14.6 and 10.9 respec-

tively compared to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 2 reported a family poverty rate of 9.8 and a child poverty rate of 18.1 which were lower than the Oklahoma averages of 11.2 and 19.6 respectively. Region 2 also reported a lower teen birth rate of 13.6 compared to the Oklahoma rate of 14.8. Region 2 reported a greater infant mortality rate and child mortality rate compared to Oklahoma (10.4 and 2.3 vs. 8.0 and 2.1, respectively).

Figure 54 shows the 10 leading causes of death in Region 2 during the most recent three-year period for which data were available (2004-2006). According to the Oklahoma State Department of Health, heart disease and cancer replace accidents/unintentional injuries as the leading causes of death after age 40. In Region 2 the death rate for heart disease was 318.2 which was consider-

ably greater than the death rate of heart disease for Oklahoma which was 273.3 in 2006.

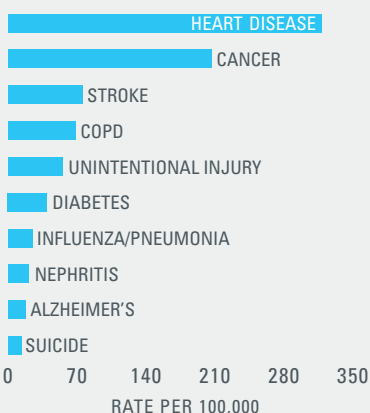
Of the 10 leading causes of death shown in Figure 53, most are at least partially caused by substance abuse. For example, the chronic lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Stroke was the third leading cause of death in Region 2 but the fourth leading cause in Oklahoma.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 55 summarizes the violent deaths that occurred in Region 2 from 2004 through 2006. All of the violent death rates for Region 2 were substantially lower than the Oklahoma violent death rates. More

**FIGURE 53 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 2	OK
BIRTH RATE	14.6	15.1
DEATH RATE	10.9	9.9
TEEN BIRTH RATE	13.6	14.8
INFANT MORTALITY RATE	10.4	8.0
CHILD MORTALITY RATE	2.3	2.1

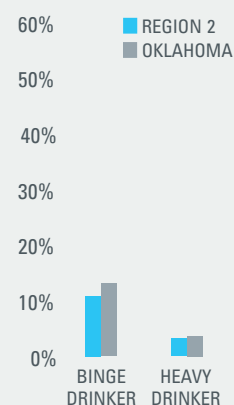
**FIGURE 54 · TEN LEADING CAUSES OF DEATH IN REGION 2, 2006** (OSDH)



**FIGURE 55 · NUMBER & RATE OF VIOLENT DEATHS, 2004-2006** (OK-VDRS)

	REG 2		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	65	17.3	2,673	25.1
HOMICIDE	7	1.8	629	5.9
SUICIDE	42	11.1	1,544	14.5
UNDETERMINED MANNER	13	3.5	434	4.1
UNINTENTIONAL FIREARM	3	0.1	30	0.3
LEGAL INTERVENTION	0	0	36	0.3

**FIGURE 56 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)



than 65% of the violent deaths were by suicide. Of the remaining deaths, 20% were by an undetermined manner, 11% were homicides and 5% were unintentional firearm.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 56, less Region 2 adults reported binge drinking (11%) and heavy drinking (3%) compared to Oklahoma (13% and 4% respectively). Region 2 adults reported less tobacco consumption than Oklahoma on all categories.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance with the legislation, the Amend-

ment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 2 had a Synar non-compliance rate of 6%, which was substantially lower than the state.

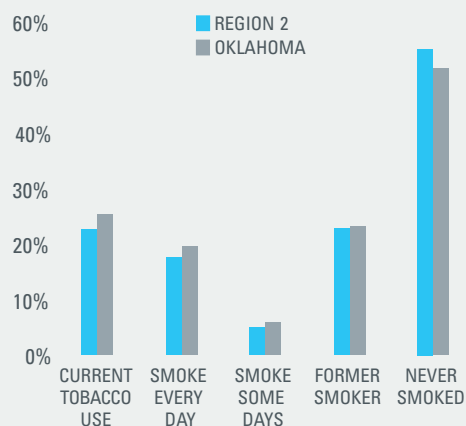
In Region 2 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, marijuana/hashish and methamphetamine. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such as alcohol-related motor vehicle

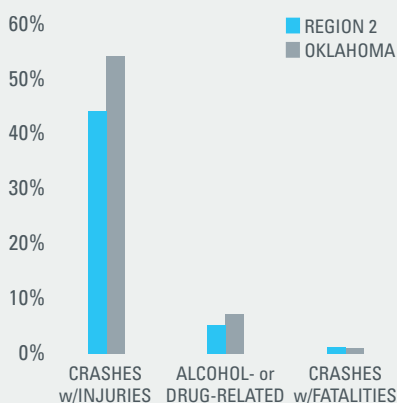
crash injury and death. As seen in Figure 58, Region 2 had fewer crashes with injury and crashes that involved alcohol or drugs but was similar to Oklahoma in percentage of crashes with fatalities in 2006.

Alcohol related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 59, Region 2 alcohol related arrests (28%) and index crime arrests (9%) were lower than the Oklahoma averages of 29% and 12% respectively. The drug violation arrests for Region 2 (20%) were considerably greater than the Oklahoma average (14%).

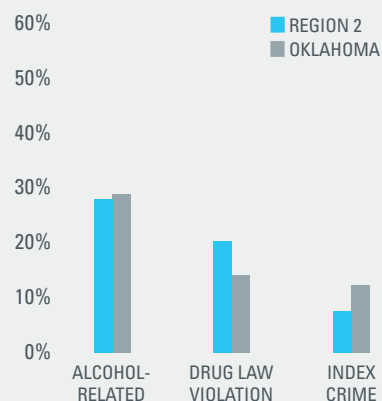
**FIGURE 57 · PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)**



**FIGURE 58 · PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)**



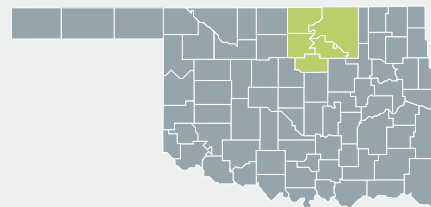
**FIGURE 59 · PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)**





## Region 3

Counties · Kay, Noble, Osage, Pawnee, and Payne



In 2006, Region 3 had a population of 193,252 people, which made up 5% of Oklahoma's total population. Of the total Regional population 50% were male and 50% were female. The White race made up 81% of the population followed by 9% Native American or Alaskan Native, 5% Black, 4% reported 2 or more races and 2% Asian. In 2006, approximately 11,667 (6%) were under five years of age, 42,848 (22%) were under the age of 18, and 26,243 (14%) were 65 years of age or older (US Census). Region 3 reported a median age of 38 was greater than the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. As seen in Figure 60, the birth rate and death rate for Region 3 were 12.6 and 9.0 respectively compared to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 3 reported a fam-

ily poverty rate of 10.9 and a child poverty rate of 18.7 were lower than the Oklahoma averages of 11.2 and 19.6 respectively. Region 3 also reported a lower teen birth rate of 11.3 compared to the Oklahoma rate of 14.8. Region 3 reported a lower infant mortality rate and child mortality rate compared to Oklahoma (4.4 and 1.5 vs. 8.0 and 2.1, respectively).

Figure 61 shows the 10 leading causes of death in Region 3 during the most recent three-year period for which data were available (2004-2006). In Region 3 the death rate for heart disease was 267.5 which was slightly lower than the death rate of heart disease for Oklahoma of 273.3

Of the 10 leading causes of death shown in Figure 61, most are at least partially caused by substance abuse. For example, the chronic lower respiratory diseases also

known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Region 3 had the same top three leading causes of disease as Oklahoma in 2006 but Region 3 had unintentional injuries as the fourth leading cause compared to Oklahoma as the fifth leading cause.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 62 summarizes the violent deaths in Region 3 from 2004 through 2006. The overall violent death rate for Region 3 was substantially lower than the Oklahoma overall violent death rate. Region 3 reported a slightly higher rate for suicide than the state. More than 70% of the violent deaths were by suicide. Of the remaining deaths,

**FIGURE 60 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 3	OK
BIRTH RATE	12.6	15.1
DEATH RATE	9.0	9.9
TEEN BIRTH RATE	11.3	14.8
INFANT MORTALITY RATE	4.4	8.0
CHILD MORTALITY RATE	1.5	2.1

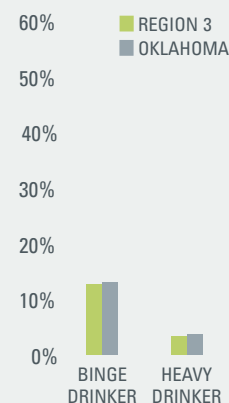
**FIGURE 61 · TEN LEADING CAUSES OF DEATH IN REGION 3, 2006** (OSDH)



**FIGURE 62 · NUMBER & RATE OF VIOLENT DEATHS, 2004-2006** (OK-VDRS)

	REG 3		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	100	17.3	2,673	25.1
HOMICIDE	19	3.3	629	5.9
SUICIDE	70	16.2	1,544	14.5
UNDETERMINED MANNER	8	1.4	434	4.1
UNINTENTIONAL FIREARM	1	0.1	30	0.3
LEGAL INTERVENTION	2	0.3	36	0.3

**FIGURE 63 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)





19% were homicides, 8% were by an undetermined manner, 2% legal intervention and 1% were unintentional firearm.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 63, fewer Region 3 adults reported binge drinking (12%) and heavy drinking (3%) compared to Oklahoma (13% and 4% respectively). Region 3 adults reported similar tobacco consumption as Oklahoma on most categories.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance with the legislation, the Amendment re-

quires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 3 had a Synar non-compliance rate of 14%, which was slightly greater than the state.

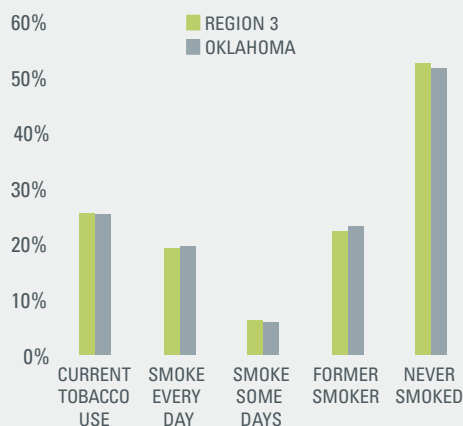
In Region 3 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, marijuana/hashish and methamphetamine. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such as alcohol-related motor vehicle crash injury and death. As seen

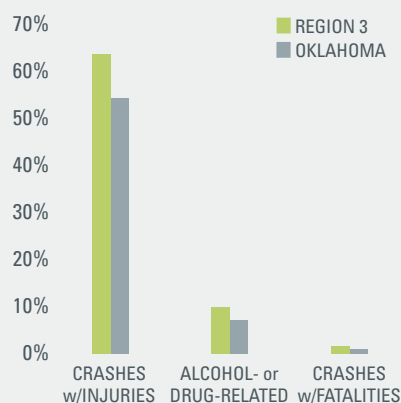
in Figure 65, Region 3 had more crashes with injury, crashes that involved fatalities and alcohol or drug related crashes compared to Oklahoma.

Alcohol related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 66, Region 3 had substantially greater alcohol related arrests (41%) compared to Oklahoma (29%). Index crime arrests (10%) and drug violation arrests (13%) were less in Region 3 than the Oklahoma averages of 12% and 14% respectively.

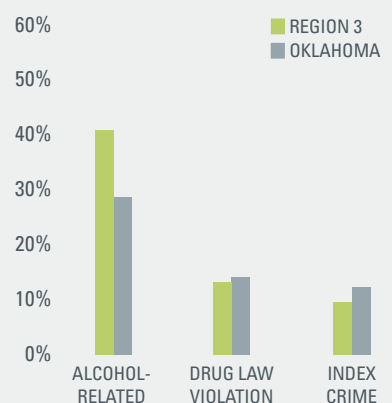
**FIGURE 64 · PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)**



**FIGURE 65 · PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)**

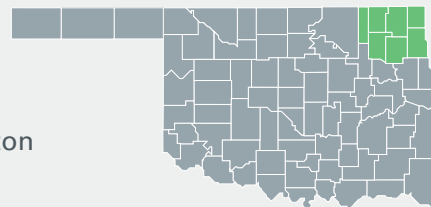


**FIGURE 66 · PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)**



## Region 4

Counties · Craig, Delaware, Mayes, Nowata, Ottawa, Rogers, and Washington



In 2006, Region 4 had a population of 270,368, which made up 8% of Oklahoma's total population. Of the total Regional population 49% were male and 51% were female. The White race made up 76% of the population followed by 15% Native American or Alaskan Native, 7% reported 2 or more races, 1% Black and 1% Asian. In 2006, approximately 16,270 (6%) were under five years of age, 64,745 (24%) were under the age of 18, and 41,908 (16%) were 65 years of age or older (US Census). Region 4 reported a median age of 39 years which was greater than the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. As seen in Figure 67, the birth rate and death rate for Region 4 were 13.1 and 10.9 respectively compared to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 4

reported a family poverty rate of 10.0 and a child poverty rate of 17.9 which were lower than the Oklahoma averages of 11.2 and 19.6 respectively. Region 4 also reported a lower teen birth rate of 13.4 compared to the Oklahoma rate of 14.8. Region 4 reported a lower infant mortality rate and child mortality rate compared to Oklahoma (6.9 and 1.8 vs. 8.0 and 2.1, respectively).

Figure 68 shows the 10 leading causes of death in Region 4 during the most recent three-year period for which data are available (2004-2006). In Region 4 the death rates for heart disease (297.0) and cancer (227.8) were slightly greater than the death rates of heart disease (273.3) and cancer (209.1) for Oklahoma.

Of the 10 leading causes of death shown in Figure 68, most are at least partially caused by substance

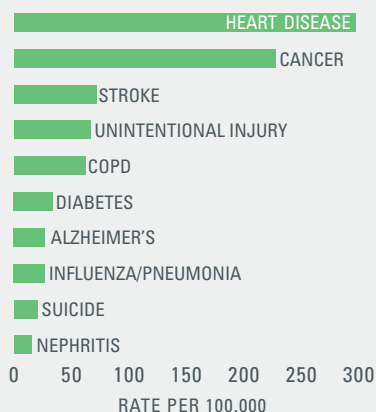
abuse. For example, the chronic lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Region 4 had stroke and unintentional injuries as the third and fourth leading causes in 2006 compared to Oklahoma which had COPD and stroke as third and fourth leading causes.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 69 summarizes the violent deaths in Region 4 from 2004 through 2006. The overall violent death rate for Region 4 was similar to the Oklahoma violent death rate. Region 4 reported a slightly higher rate for suicide and undetermined deaths. More than 64% of the violent deaths were by suicide.

**FIGURE 67 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 4	OK
BIRTH RATE	13.1	15.1
DEATH RATE	10.9	9.9
TEEN BIRTH RATE	13.4	14.8
INFANT MORTALITY RATE	6.9	8.0
CHILD MORTALITY RATE	1.8	2.1

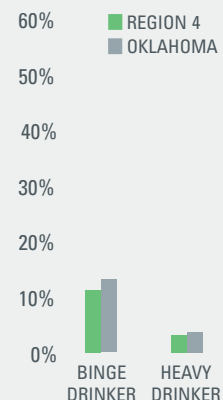
**FIGURE 68 · TEN LEADING CAUSES OF DEATH IN REGION 4, 2006** (OSDH)



**FIGURE 69 · NUMBER & RATE OF VIOLENT DEATHS, 2006** (OK-VDRS)

	REG 4		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	206	25.7	2,673	25.1
HOMICIDE	31	3.9	629	5.9
SUICIDE	131	16.3	1,544	14.5
UNDETERMINED MANNER	40	5.0	434	4.1
UNINTENTIONAL FIREARM	2	0.2	30	0.3
LEGAL INTERVENTION	2	0.2	36	0.3

**FIGURE 70 · PERCENT OF ALCOHOL, 2006** (BRFSS)



Of the remaining deaths 19% were by an undetermined manner, 15% were homicides, 1% legal intervention and 1% were unintentional firearm.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 70, fewer Region 4 adults reported binge drinking (11%) and heavy drinking (3%) compared to Oklahoma (13% and 4% respectively). Region 4 reported greater current tobacco consumption and less adults who never smoked compared to Oklahoma.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance

with the legislation, the Amendment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 4 had a Synar non-compliance rate of 0%, which was considerably lower than the state.

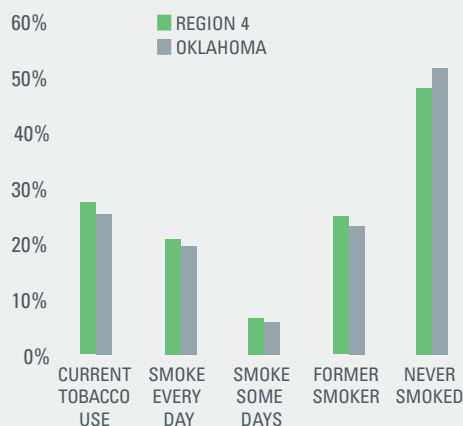
In Region 4 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, methamphetamine, and marijuana/hashish. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such

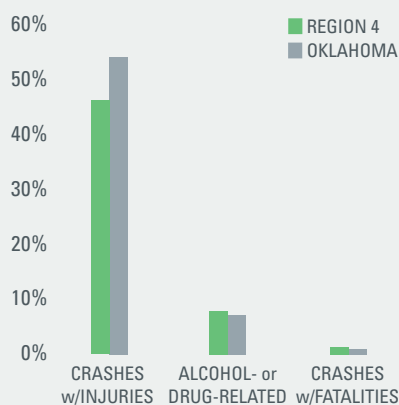
as alcohol-related motor vehicle crash injury and death. As seen in Figure 72, Region 4 had fewer crashes with injury and slightly greater crashes that involved fatalities and alcohol or drug related crashes compared to Oklahoma.

Alcohol related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 73, Region 4 had slightly greater alcohol related arrests (30%) and drug violation arrests (16%) compared to Oklahoma (29% and 14% respectively). Region 4 had fewer index crime arrests (9%) compared to Oklahoma (12%).

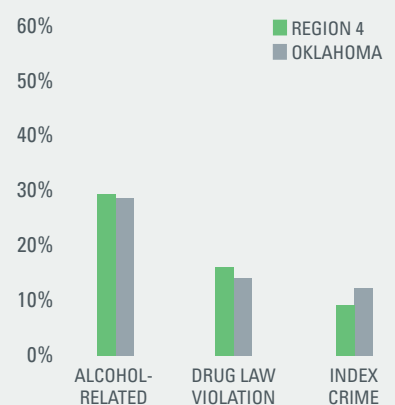
**FIGURE 71** • PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)



**FIGURE 72** • PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)

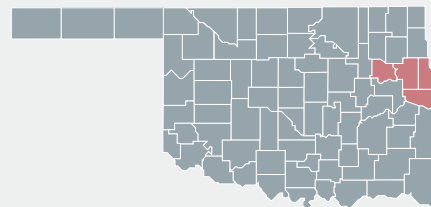


**FIGURE 73** • PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)



## Region 5

Counties · Adair, Cherokee, Sequoyah, and Wagoner



In 2006, Region 5 had a population of 174,896, which made up 5% of Oklahoma's total population. Of the total Regional population 50% were male and 50% were female. The White race made up 69% of the population followed by 21% Native American or Alaskan Native, 7% reported 2 or more races, and 3% Black. In 2006, approximately 11,813 (7%) were under five years of age, 44,768 (26%) were under the age of 18, and 20,282 (12%) were 65 years of age or older (US Census). Region 5 reported a median age of 34 years which was lower than the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. As seen in Figure 74, the birth rate and death rate for Region 5 were 13.7 and 9.0 respectively compared to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 5 reported a fam-

ily poverty rate of 13.2 and a child poverty rate of 21.7 which were higher than the Oklahoma averages of 11.2 and 19.6 respectively. Region 5 also reported a lower teen birth rate of 13.4 compared to the Oklahoma rate of 14.8. Region 5 reported a lower infant mortality rate and child mortality rate compared to Oklahoma (7.2 and 1.9 vs. 8.0 and 2.1, respectively).

Figure 75 shows the 10 leading causes of death in Region 5 during the most recent three-year period for which data are available (2004-2006). In Region 5 the death rates for heart disease (243.0) and cancer (195.0) were slightly lower than the death rates of heart disease (273.3) and cancer (209.1) for Oklahoma.

Of the 10 leading causes of death shown in Figure 75, most are at least partially caused by substance abuse. For example,

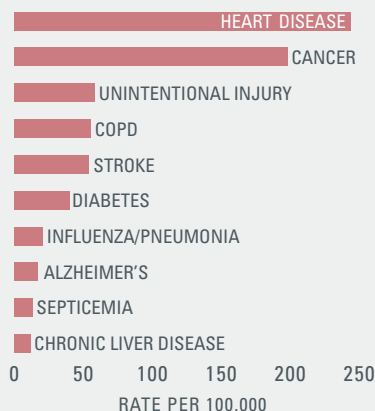
the chronic lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Region 5 has unintentional injuries as the third leading cause of death in 2006 compared to Oklahoma which had unintentional injuries as the fifth leading cause of death.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 76 summarizes the violent deaths in Region 5 from 2004 through 2006. The overall violent death rate for Region 5 was lower than the Oklahoma violent death rate. Region 5 reported a slightly lower rate of suicide and homicide deaths, yet more than 57% of the violent deaths were by suicide. Of the remaining deaths 22% were by an

**FIGURE 74 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 5	OK
BIRTH RATE	13.7	15.1
DEATH RATE	9.0	9.9
TEEN BIRTH RATE	13.4	14.8
INFANT MORTALITY RATE	7.2	8.0
CHILD MORTALITY RATE	1.9	2.1

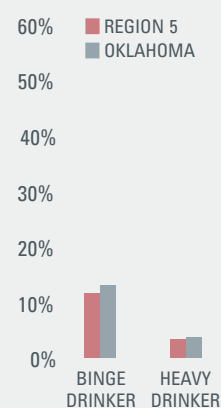
**FIGURE 75 · TEN LEADING CAUSES OF DEATH IN REGION 5, 2006** (OSDH)



**FIGURE 76 · NUMBER & RATE OF VIOLENT DEATHS, 2004-2006** (OK-VDRS)

	REG 5		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	102	22.7	2,673	25.1
HOMICIDE	17	3.8	629	5.9
SUICIDE	59	13.1	1,544	14.5
UNDETERMINED MANNER	23	5.1	434	4.1
UNINTENTIONAL FIREARM	2	0.4	30	0.3
LEGAL INTERVENTION	1	0.2	36	0.3

**FIGURE 77 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)



undetermined manner, 18% were homicides, 2% were unintentional firearm and 1% legal intervention.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 77, fewer Region 5 adults reported binge drinking (12%) and heavy drinking (3%) compared to Oklahoma (13% and 4% respectively). Region 5 adults reported greater current tobacco consumption and lower lower percentage of people who have never smoked compared to Oklahoma.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance

with the legislation, the Amendment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 5 had a Synar non-compliance rate of 16%, which was slightly greater than the state.

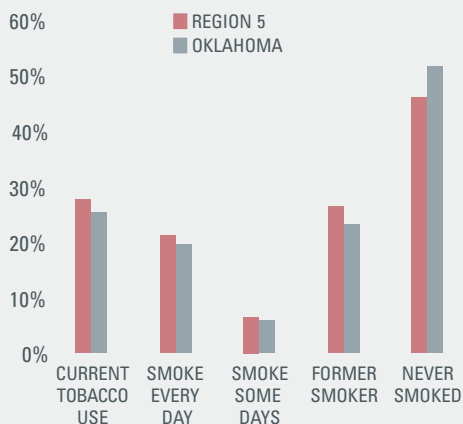
In Region 5 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, methamphetamine, and marijuana/hashish. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such

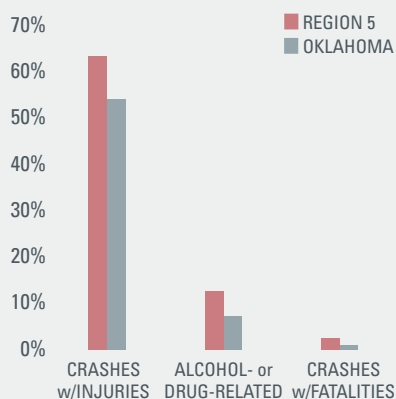
as alcohol-related motor vehicle crash injury and death. As seen in Figure 79, Region 5 had more crashes with injury, crashes that involved fatalities and alcohol or drug related crashes compared to Oklahoma.

Alcohol related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 80, Region 5 had slightly greater alcohol related arrests (33%) and drug law violation arrests (18%) compared to Oklahoma (29% and 14% respectively). Region 5 had fewer index crime arrests (9%) compared to Oklahoma (12%).

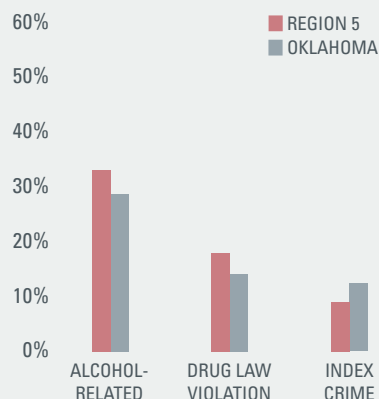
**FIGURE 78 · PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)**



**FIGURE 79 · PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)**

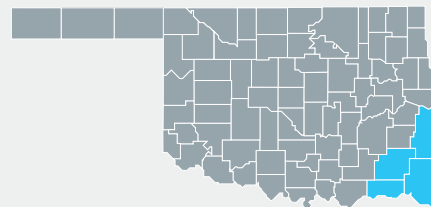


**FIGURE 80 · PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)**



## Region 6

Counties · Choctaw, Leflore, McCurtain, and Pushmataha



In 2006, Region 6 had a population of 111,072, which made up 3% of Oklahoma's total population. Of the total Regional population 49% were male and 51% were female. The White race made up 76% of the total population followed by 13% Native American or Alaskan Native, 5% Black, and 5% reported 2 or more races. In 2006, approximately 7,820 (7%) were under five years of age, 28,497 (26%) were under the age of 18, and 16,341 (15%) were 65 years of age or older (US Census). Region 6 reported a median age of 38 years which was greater than the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. As seen in Figure 81, the birth rate and death rate for Region 6 were 15.1 and 12.2 respectively compared to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 6 reported a

family poverty rate of 18.2 and a child poverty rate of 29.1 which were substantially greater than the Oklahoma average of 11.2 and 19.6 respectively. Region 6 reported a higher teen birth rate of 19.7 compared to the Oklahoma rate of 14.8. Region 6 reported a similar infant mortality rate and a greater child mortality rate compared to Oklahoma (7.9 and 2.4 vs. 8.0 and 2.1, respectively).

Figure 82 shows the 10 leading causes of death in Region 6 during the most recent three-year period for which data are available (2004-2006). In Region 6 the death rates for heart disease (360.1) and cancer (257.5) were substantially greater than the death rates of heart disease (273.3) and cancer (209.1) for Oklahoma.

Of the 10 leading causes of death shown in Figure 82, most are at least partially caused by substance

abuse. For example, the chronic lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Region 6 had unintentional injuries as the third leading cause of death in 2006 compared to Oklahoma which had unintentional injuries as the fifth leading cause of death.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 83 summarizes the violent deaths in Region 6 from 2004 through 2006. The overall violent death rate for Region 6 was substantially greater than the Oklahoma violent death rate. Region 6 reported a slightly higher rate for suicide and homicide deaths. More than 54% of the violent deaths were by

**FIGURE 81 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 6	OK
BIRTH RATE	15.1	15.1
DEATH RATE	12.2	9.9
TEEN BIRTH RATE	19.7	14.8
INFANT MORTALITY RATE	7.9	8.0
CHILD MORTALITY RATE	2.4	2.1

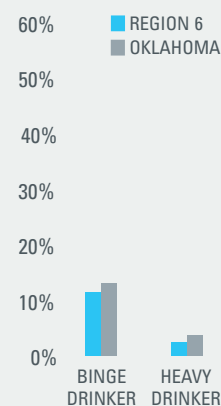
**FIGURE 82 · TEN LEADING CAUSES OF DEATH IN REGION 6, 2006** (OSDH)



**FIGURE 83 · NUMBER & RATE OF VIOLENT DEATHS, 2004-2006** (OK-VDRS)

	REG 6		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	112	33.8	2,673	25.1
HOMICIDE	27	8.1	629	5.9
SUICIDE	61	18.4	1,544	14.5
UNDETERMINED MANNER	17	5.1	434	4.1
UNINTENTIONAL FIREARM	5	1.5	30	0.3
LEGAL INTERVENTION	2	0.6	36	0.3

**FIGURE 84 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)





suicide. Of the remaining deaths 24% were homicides, 15% were by an undetermined manner, 5% were unintentional firearm and 2% legal intervention.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 84, fewer Region 6 adults reported binge drinking (11%) and heavy drinking (3%) compared to Oklahoma (13% and 4% respectively). Region 6 adults reported greater current tobacco consumption and lower former and non-smokers compared to Oklahoma.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance

with the legislation, the Amendment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 6 had a Synar non-compliance rate of 14%, which was slightly greater than the state average.

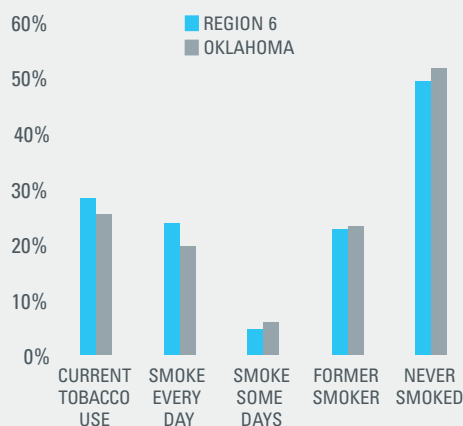
In Region 6 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were methamphetamine, alcohol and marijuana/hashish. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such as alcohol-related motor vehicle

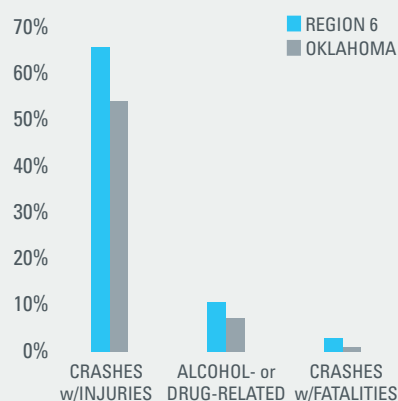
crash injury and death. As seen in Figure 86, Region 6 had far more crashes with injury, crashes that involved fatalities and alcohol or drug-related crashes compared to Oklahoma.

Alcohol-related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 87, Region 6 had slightly greater alcohol related arrests (32%) and drug law violation arrests (17%) compared to Oklahoma (29% and 14% respectively). Region 6 had similar index crime arrests (12 %) compared to Oklahoma (12%).

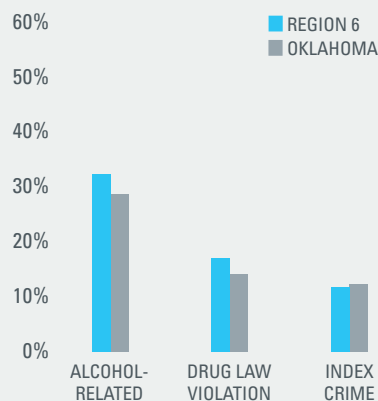
**FIGURE 85** · PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)



**FIGURE 86** · PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)

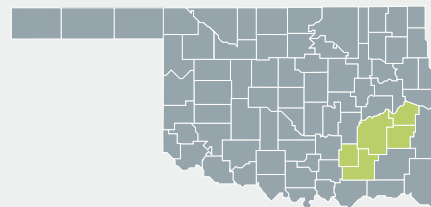


**FIGURE 87** · PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)



## Region 7

Counties · Atoka, Coal, Haskell, Latimer, and Pittsburg



In 2006, Region 7 had a population of 87,693, which made up 3% of Oklahoma's total population. Of the total Regional population 51% were male and 49% were female. The White race made up 77% of the total population followed by 14% Native American or Alaskan Native, 6% reported 2 or more races, and 3% Black. In 2006, approximately 5,128 (6%) were under five years of age, 19,798 (23%) were under the age of 18, and 14,413 (16%) were 65 years of age or older (US Census). Region 7 reported a median age of 38 years which was greater than the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. The birth rate and death rate for Region 7 were 12.9 and 13.3 respectively compared to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 7 reported a family poverty rate

of 15.2 and a child poverty rate of 25.6 which were substantially greater than the Oklahoma averages of 11.2 and 19.6 respectively. Region 7 also reported a greater teen birth rate of 18.0 compared to the Oklahoma rate of 14.8. Region 7 reported a greater infant mortality rate and child mortality rate compared to Oklahoma (9.8 and 2.4 vs. 8.0 and 2.1, respectively).

Figure 89 shows the 10 leading causes of death in Region 7 during the most recent three-year period for which data are available (2004-2006). In Region 7 the death rates for heart disease (435.6) and cancer (245.2) were substantially greater than the death rates of heart disease (273.3) and cancer (209.1) for Oklahoma.

Of the 10 leading causes of death shown in Figure 89, most are at least partially caused by substance abuse. For example, the chronic

lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Region 7 had unintentional injuries as third leading cause of death in 2006 compared to Oklahoma which had unintentional injuries as the fifth leading cause of death.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 90 summarizes the violent deaths in Region 7 from 2004 through 2006. The overall violent death rate for Region 7 was substantially greater than the Oklahoma violent death rate. Region 7 reported a substantially higher rate of suicide deaths than the state. More than 64% of the violent deaths were by suicide. Of the remaining

**FIGURE 88 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 7	OK
BIRTH RATE	12.9	15.1
DEATH RATE	13.3	9.9
TEEN BIRTH RATE	18.0	14.8
INFANT MORTALITY RATE	9.8	8.0
CHILD MORTALITY RATE	2.4	2.1

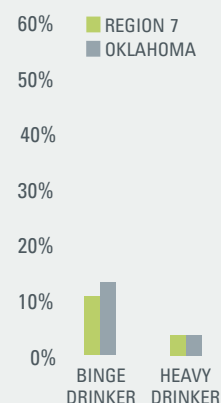
**FIGURE 89 · TEN LEADING CAUSES OF DEATH IN REGION 7, 2006** (OSDH)



**FIGURE 90 · NUMBER & RATE OF VIOLENT DEATHS, 2006** (OK-VDRS)

	REG 7		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	83	31.7	2,673	25.1
HOMICIDE	12	4.6	629	5.9
SUICIDE	53	20.2	1,544	14.5
UNDETERMINED MANNER	16	6.1	434	4.1
UNINTENTIONAL FIREARM	2	0.8	30	0.3
LEGAL INTERVENTION	0	0	36	0.3

**FIGURE 91 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)





deaths, 19% were by an undetermined manner, 14% were homicides, and 2% were unintentional firearm.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 91, fewer Region 7 adults reported binge drinking (11%) compared to the state (13%) and similar heavy drinking (4%) was reported compared to Oklahoma (4%). Region 7 adults reported greater current tobacco consumption and a lower percentage of adults who have never smoked compared to Oklahoma.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance

with the legislation, the Amendment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 7 had a Synar non-compliance rate of 7%, which was substantially lower than the state.

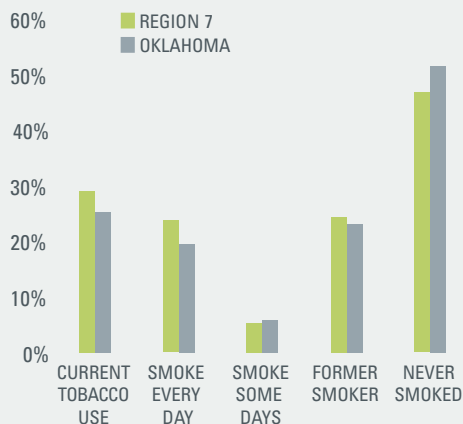
In Region 7 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, methamphetamine, and marijuana/hashish. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such

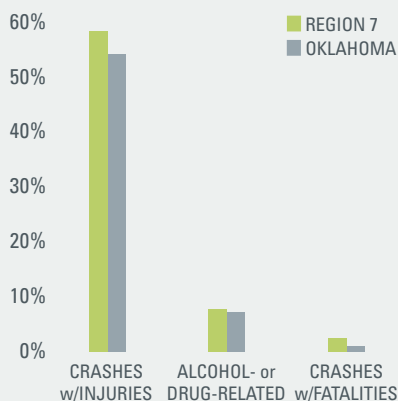
as alcohol-related motor vehicle crash injury and death. As seen in Figure 93, Region 7 had more crashes with injury, crashes that involved fatalities and alcohol or drug related crashes compared to Oklahoma.

Alcohol-related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 94, Region 7 had slightly greater alcohol-related arrests (31%) and substantially greater drug law violation arrests (22%) compared to Oklahoma (29% and 14% respectively). Region 7 had fewer index crime arrests (10%) compared to Oklahoma (12%).

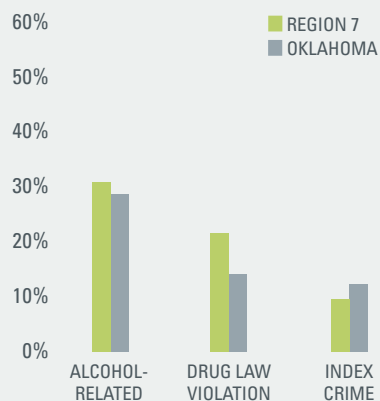
**FIGURE 92 · PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)**



**FIGURE 93 · PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)**

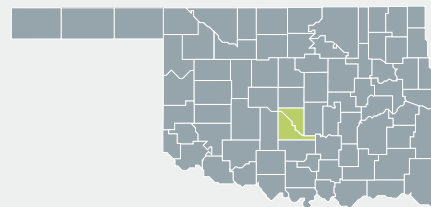


**FIGURE 94 · PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)**



## Region 8

Counties · Cleveland and McClain



In 2006, Region 8 had a population of 259,632, which made up 7% of Oklahoma's total population. Of the total Regional population 50% were male and 50% were female. The White race made up 85% of the total population followed by 5% Native American or Alaskan Native, 4% Black, 4% reported 2 or more races, and 3% Asian. In 2006, approximately 15,569 (6%) were under five years of age, 58,751 (23%) were under the age of 18, and 24,993 (10%) were 65 years of age or older (US Census). Region 8 reported a median age of 35 years which was lower than the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. The birth rate and death rate for Region 8 were 12.5 and 6.9 respectively compared to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 8 reported a family poverty

rate of 6.6 and a child poverty rate of 10.9 which were substantially lower than the Oklahoma averages of 11.2 and 19.6 respectively. Region 8 also reported a lower teen birth rate of 7.6 compared to the Oklahoma rate of 14.8. Region 8 reported a lower infant mortality rate and child mortality rate compared to Oklahoma (7.3 and 1.6 vs. 8.0 and 2.8, respectively).

Figure 96 shows the 10 leading causes of death in Region 8 during the most recent three-year period for which data are available (2004-2006). In Region 8 the death rates for heart disease (197.6) and cancer (146.4) were substantially lower than the death rates of heart disease (273.3) and cancer (209.1) for Oklahoma.

Of the 10 leading causes of death shown in Figure 96, most are at least partially caused by substance

abuse. For example, the chronic lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Stroke was the third leading cause of death in Region 8 in 2006 but the fourth leading cause in Oklahoma.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 97 summarizes the violent deaths in Region 8 from 2004 through 2006. The overall violent death rate for Region 8 was substantially lower than the Oklahoma violent death rate. Region 8 reported a substantially lower rate of suicide and homicide than the state, yet more than 73% of the violent deaths were by suicide. Of the remaining deaths, 13% were homicides,

**FIGURE 95 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 8	OK
BIRTH RATE	12.5	15.1
DEATH RATE	6.9	9.9
TEEN BIRTH RATE	7.6	14.8
INFANT MORTALITY RATE	7.3	8.0
CHILD MORTALITY RATE	1.6	2.1

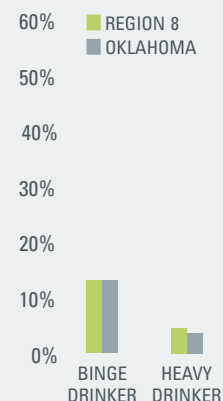
**FIGURE 96 · TEN LEADING CAUSES OF DEATH IN REGION 8, 2006** (OSDH)



**FIGURE 97 · NUMBER & RATE OF VIOLENT DEATHS, 2006** (OK-VDRS)

	REG 8		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	104	13.6	2,673	25.1
HOMICIDE	13	1.7	629	5.9
SUICIDE	76	9.9	1,544	14.5
UNDETERMINED MANNER	0	1.3	434	4.1
UNINTENTIONAL FIREARM	1	0.1	30	0.3
LEGAL INTERVENTION	4	0.5	36	0.3

**FIGURE 98 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)



10% were by an undetermined manner, 4% were legal intervention and 1% were unintentional firearm.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 98, Region 8 adults reported similar binge drinking (13%) and more heavy drinking (5%) compared to Oklahoma (13% and 4% respectively). Region 8 adults reported lower current tobacco consumption and greater percentage of adults who donot smoke compared to Oklahoma.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance

with the legislation, the Amendment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 8 had a Synar non-compliance rate of 13%, which was similar to the state.

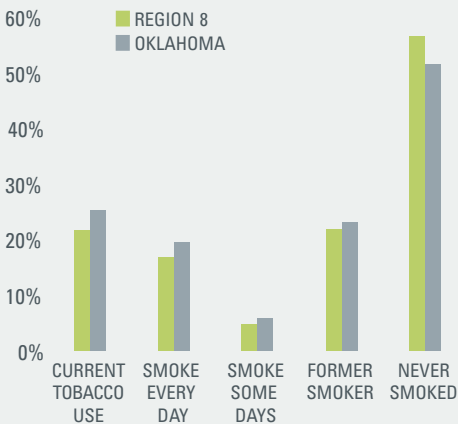
In Region 8 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, methamphetamine, and marijuana/hashish. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such

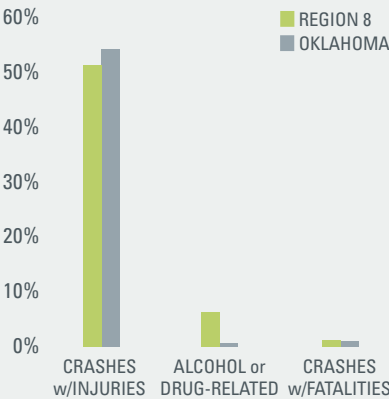
as alcohol-related motor vehicle crash injury and death. As seen in Figure 100, Region 8 reported fewer crashes with injury, but more crashes that involved fatalities and alcohol or drug related crashes compared to Oklahoma.

Alcohol-related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 101, Region 8 had slightly greater alcohol-related arrests (30%) but substantially lower drug law violation arrests (10%) and index crime arrests (7%) compared to Oklahoma (29%, 14% and 12% respectively).

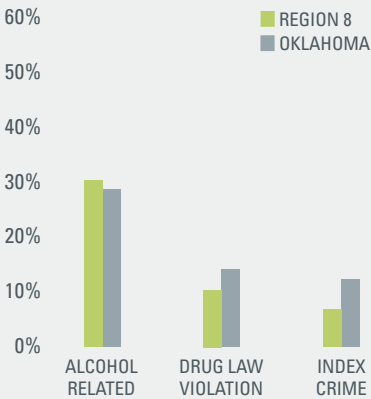
**FIGURE 99 · PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)**



**FIGURE 100 · PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)**

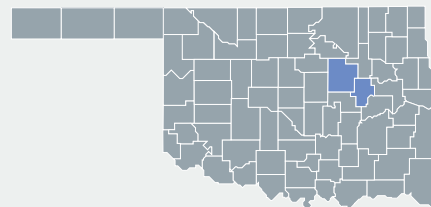


**FIGURE 101 · PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)**



## Region 9

Counties · Creek and Okmulgee



In 2006, Region 9 had a population of 108,816, which made up 3% of Oklahoma's total population. Of the total Regional population 49% were male and 51% were female. The White race made up 78% of the total population followed by 11% Native American or Alaskan Native, 6% reported 2 or more race, and 5% Black. In 2006, approximately 7,199 (7%) were under five years of age, 27,108 (25%) were under the age of 18, and 15,801 (15%) were 65 years of age or older (US Census). Region 9 reported a median age of 38 years which was greater than the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. The birth rate and death rate for Region 9 were 13.1 and 11.7 respectively compared to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 9 reported a family poverty rate of

12.3 and a child poverty rate of 20.4 which were greater than the Oklahoma averages of 11.2 and 19.6 respectively. Region 9 also reported a similar teen birth rate of 14.8 compared to the Oklahoma rate of 14.8. Region 9 reported a greater infant mortality rate and child mortality rate compared to Oklahoma (8.5 and 2.1 vs. 8.0 and 2.4, respectively).

Figure 103 shows the 10 leading causes of death in Region 9 during the most recent three-year period for which data are available (2004-2006). In Region 9 the death rates for heart disease (296.8) and cancer (296.3) were substantially greater than the death rates of heart disease (273.3) and cancer (209.1) for Oklahoma.

Of the 10 leading causes of death shown in Figure 103, most are at least partially caused by substance abuse. For example, the chronic

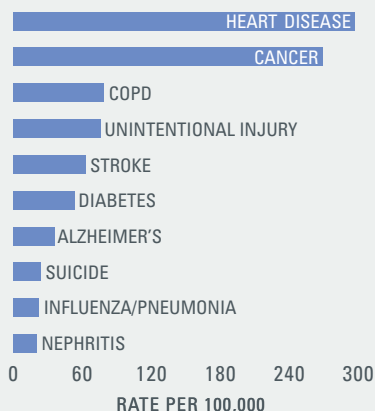
lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Region 9 had the same top three leading causes of disease as Oklahoma in 2006, but Region 9 had unintentional injuries as the fourth leading cause of death compared to Oklahoma which had unintentional injuries as the fifth leading cause of death.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 104 summarizes the violent deaths in Region 9 from 2004 through 2006. The overall violent death rate for Region 9 was slightly greater than the Oklahoma violent death rate. Region 9 reported a substantially higher rate of suicide deaths. More than 66% of the violent

**FIGURE 102 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 9	OK
BIRTH RATE	13.1	15.1
DEATH RATE	11.7	9.9
TEEN BIRTH RATE	14.8	14.8
INFANT MORTALITY RATE	8.5	8.0
CHILD MORTALITY RATE	2.4	2.1

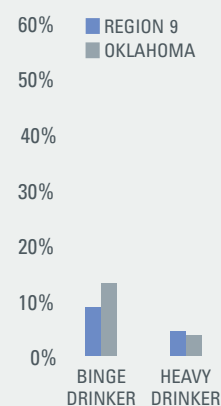
**FIGURE 103 · TEN LEADING CAUSES OF DEATH IN REGION 9, 2006** (OSDH)



**FIGURE 104 · NUMBER & RATE OF VIOLENT DEATHS, 2004-2006** (OK-VDRS)

	REG 9		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	97	29.8	2,673	25.1
HOMICIDE	15	4.6	629	5.9
SUICIDE	64	19.7	1,544	14.5
UNDETERMINED MANNER	16	4.9	434	4.1
UNINTENTIONAL FIREARM	0	0	30	0.3
LEGAL INTERVENTION	2	0.6	36	0.3

**FIGURE 105 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)



deaths were by suicide. Of the remaining deaths, 16% were by an undetermined manner, 15% were homicides, and 2% were legal intervention.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 105, Region 9 adults reported less binge drinking (9%) and more heavy drinking (5%) compared to Oklahoma (13% and 4% respectively). Region 9 adults reported similar current tobacco consumption and similar former and non-smokers compared to Oklahoma.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance

with the legislation, the Amendment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 9 had a Synar non-compliance rate of 18%, which was greater than the state.

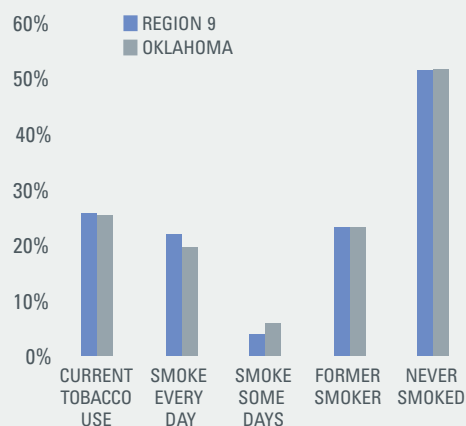
In Region 9 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, marijuana/hashish, and methamphetamine. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such

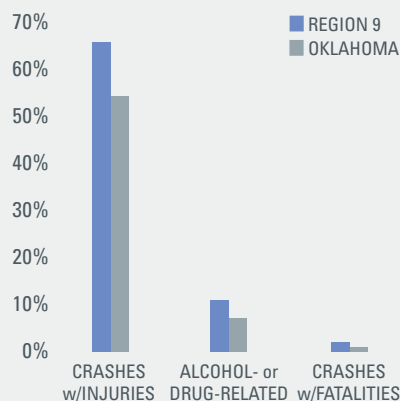
as alcohol-related motor vehicle crash injury and death. As seen in Figure 107, Region 9 reported more crashes with injury, crashes that involved fatalities and alcohol or drug-related crashes compared to Oklahoma.

Alcohol-related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 108 Region 9 had substantially greater alcohol related arrests (43%) but lower drug law violation arrests (11%) and index crime arrests (11%) compared to Oklahoma (29%, 14% and 12% respectively).

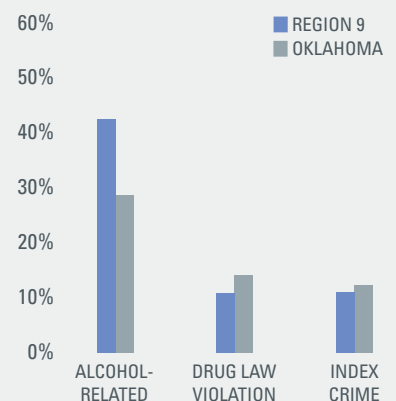
**FIGURE 106 · PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)**



**FIGURE 107 · PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)**

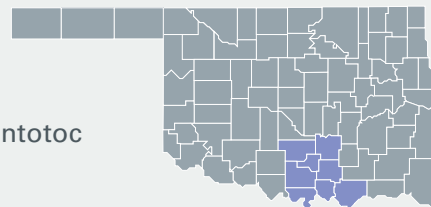


**FIGURE 108 · PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)**



## Region 10

Counties · Bryan, Carter, Garvin, Johnston, Love, Marshall, Murray, and Pontotoc



In 2006, Region 10 had a population of 195,724, which made up 6% of Oklahoma's total population. Of the total Regional population 49% were male and 51% were female. The White race made up 8% of the total population followed by 11% Native American or Alaskan Native, 5% reported 2 or more races, and 3% Black. In 2006, approximately 13,026 (7%) were under five years of age, 47,093 (24%) were under the age of 18, and 31,111 (16%) were 65 years of age or older (US Census). Region 10 reported a median age of 38 years which was greater than the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. The birth rate and death rate for Region 10 were 14.8 and 12.1 respectively compared to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 10 reported a family poverty rate of

12.6 and a child poverty rate of 21.2 which were greater than the Oklahoma averages of 11.2 and 19.6 respectively. Region 10 also reported a greater teen birth rate of 19.0 compared to the Oklahoma rate of 14.8. Region 10 reported a lower infant mortality rate and child mortality rate compared to Oklahoma (7.2 and 2.0 vs. 8.0 and 2.1, respectively).

Figure 110 shows the 10 leading causes of death in Region 10 during the most recent three-year period for which data are available (2004-2006). In Region 10 the death rates for heart disease (314.2) and cancer (241.2) were substantially greater than the death rates of heart disease (273.3) and cancer (209.1) for Oklahoma.

Of the 10 leading causes of death shown in Figure 110, most are

at least partially caused by substance abuse. For example, the chronic lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Region 10 had stroke as the third leading cause of death compared to Oklahoma in 2006 which had stroke as the fourth leading cause of death.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 111 summarizes the violent deaths that occurred in Region 10 from 2004 through 2006. The overall violent death rate for Region 10 was slightly greater than the Oklahoma violent death rate. Region 10 reported a substantially higher rate for suicide deaths. More than 65% of the violent deaths were by

**FIGURE 109 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 10	OK
BIRTH RATE	14.8	15.1
DEATH RATE	12.1	9.9
TEEN BIRTH RATE	19.0	14.8
INFANT MORTALITY RATE	7.2	8.0
CHILD MORTALITY RATE	2.0	2.1

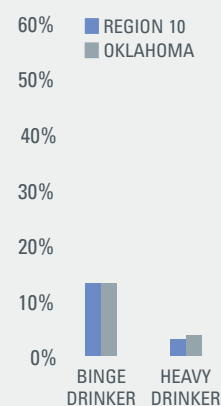
**FIGURE 110 · TEN LEADING CAUSES OF DEATH IN REGION 10, 2006 (OSDH)**



**FIGURE 111 · NUMBER & RATE OF VIOLENT DEATHS, 2006 (OK-VDRS)**

	REG 10		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	170	29.2	2,673	25.1
HOMICIDE	31	5.3	629	5.9
SUICIDE	111	19.1	1,544	14.5
UNDETERMINED MANNER	25	4.3	434	4.1
UNINTENTIONAL FIREARM	3	0.5	30	0.3
LEGAL INTERVENTION	0	0	36	0.3

**FIGURE 112 · PERCENT OF ALCOHOL CONSUMPTION, 2006 (BRFSS)**





suicide. Of the remaining deaths, 18% were homicides, 15% were by an undetermined manner, and 2% were unintentional firearms.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 112, Region 10 adults reported similar binge drinking (13%) and less heavy drinking (3%) compared to Oklahoma (13% and 4% respectively). Region 10 adults reported greater current tobacco consumption and lower former and non-smokers compared to Oklahoma.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance

with the legislation, the Amendment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 10 had a Synar non-compliance rate of 12%, which is similar to the state.

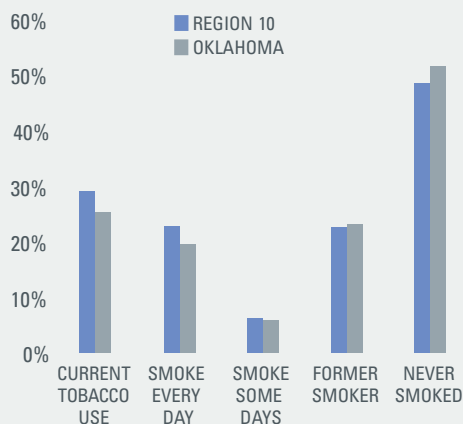
In Region 10 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, methamphetamine, and marijuana/hashish. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such

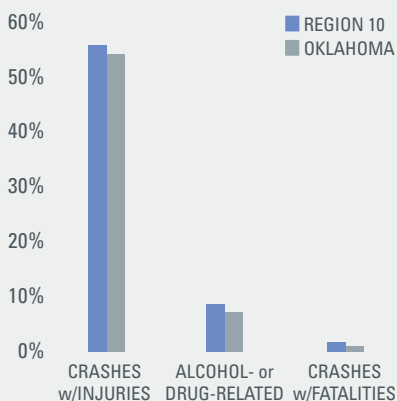
as alcohol-related motor vehicle crash injury and death. As seen in Figure 114, Region 10 reported more crashes with injury, crashes that involved fatalities and alcohol or drug related crashes compared to Oklahoma.

Alcohol-related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 115, Region 10 had substantially greater alcohol-related arrests (39%) and drug law violation arrests (17%), but lower index crime arrests (10%) compared to Oklahoma (29%, 14% and 12% respectively).

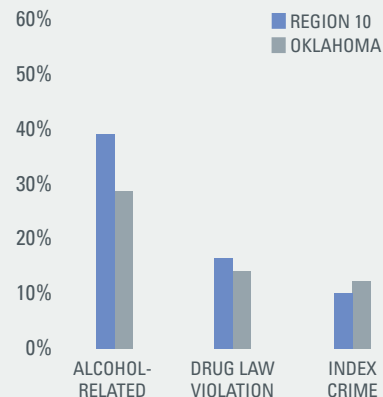
**FIGURE 113 · PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)**



**FIGURE 114 · PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)**

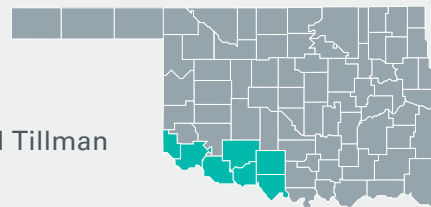


**FIGURE 115 · PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)**



# Region 11

Counties · Comanche, Cotton, Harmon, Jackson, Jeffereson, Stephens, and Tillman



In 2006, Region 11 had a population of 202,864, which made up 6% of Oklahoma's total population. Of the total Regional population 50% were male and 50% were female. The White race made up 77% of the total population followed by 13% Black, 5% Native American or Alaskan Native, 3% reported 2 or more races, and 2% Asian. In 2006, approximately 15,882 (8%) were under five years of age, 56,342 (28%) were under the age of 18, and 26,881 (13%) were 65 years of age or older (US Census). Region 11 reported a median age of 38 years which was greater than the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. The birth rate and death rate for Region 11 were 15.8 and 10.2 respectively compared to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 11 reported a family poverty

rate of 13.3 and a child poverty rate of 22.0 which were greater than the Oklahoma averages of 11.2 and 19.6 respectively. Region 11 also reported a similar teen birth rate of 14.8 compared to the Oklahoma rate of 14.8. Region 11 reported a greater infant mortality rate and child mortality rate compared to Oklahoma (10.8 and 2.5 vs. 8.0 and 2.1, respectively).

Figure 117 shows the 10 leading causes of death in Region 11 during the most recent three-year period for which data are available (2004-2006). In Region 11 the death rates for heart disease (315.5) and cancer (235.1) were substantially greater than the death rates of heart disease (273.3) and cancer (209.1) for Oklahoma.

Of the 10 leading causes of death shown in Figure 117, most are at least partially caused by substance

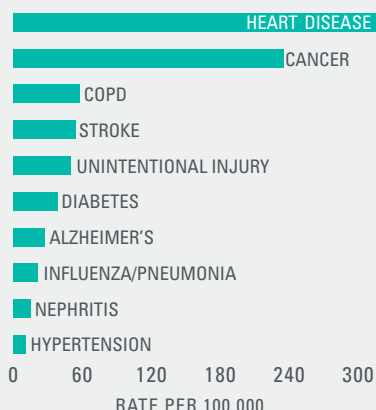
abuse. For example, the chronic lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Region 11 had the exact leading causes of death as Oklahoma in 2006 with the exception of the tenth leading cause, which was hypertension for Region 11 and suicide for Oklahoma.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 118 summarizes the violent deaths in Region 11 from 2004 through 2006. The overall violent death rate for Region 11 was slightly lower than the Oklahoma violent death rate. Region 11 reported a substantially lower rate of suicide deaths. Of all violent deaths more than 50% were by suicide of the

**FIGURE 116 · BIRTH & DEATH RATES, 2006** (OSDH)

	REG 11	OK
BIRTH RATE	15.8	15.1
DEATH RATE	10.2	9.9
TEEN BIRTH RATE	14.8	14.8
INFANT MORTALITY RATE	10.8	8.0
CHILD MORTALITY RATE	2.5	2.1

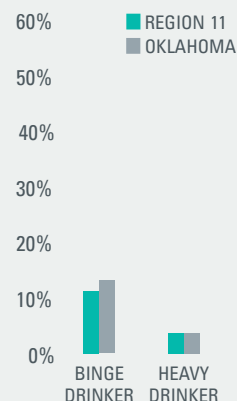
**FIGURE 117 · TEN LEADING CAUSES OF DEATH IN REGION 11, 2006** (OSDH)



**FIGURE 118 · NUMBER & RATE OF VIOLENT DEATHS, 2004-2006** (OK-VDRS)

	REG 11		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	132	21.5	2,673	25.1
HOMICIDE	37	6.0	629	5.9
SUICIDE	66	10.7	1,544	14.5
UNDETERMINED MANNER	25	4.1	434	4.1
UNINTENTIONAL FIREARM	1	0.2	30	0.3
LEGAL INTERVENTION	3	0.5	36	0.3

**FIGURE 119 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)





remaining deaths 28% were homicides, 19% were by an undetermined manner, 2% legal intervention and 1% were unintentional firearms.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 119, Region 11 adults reported less binge drinking (11%) and similar heavy drinking (4%) compared to Oklahoma (13% and 4% respectively). Region 11 adults reported similar current tobacco consumption, former and non-smokers compared to Oklahoma.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance with the legislation, the Amend-

ment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 11 had a Synar non-compliance rate of 0%, which was considerably lower than the state.

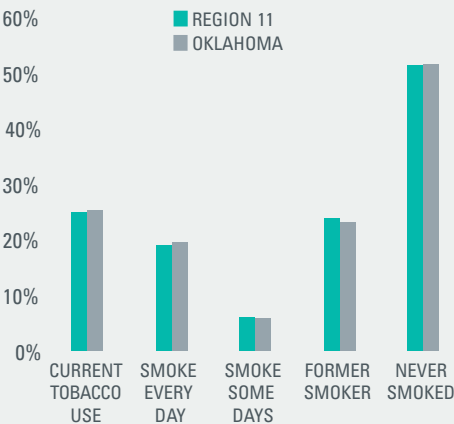
In Region 11 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, methamphetamine, and marijuana/hashish. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such

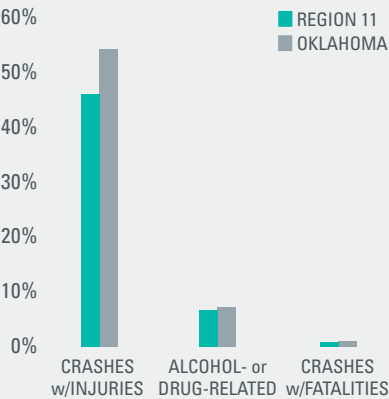
as alcohol-related motor vehicle crash injury and death. As seen in Figure 121, Region 11 reported fewer crashes with injury, crashes that involved fatalities and alcohol or drug related crashes compared to Oklahoma.

Alcohol-related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 122, Region 11 had lower alcohol-related arrests (15%), drug law violation arrests (11%) and index crime arrests (11%) compared to Oklahoma (29%, 14% and 12% respectively).

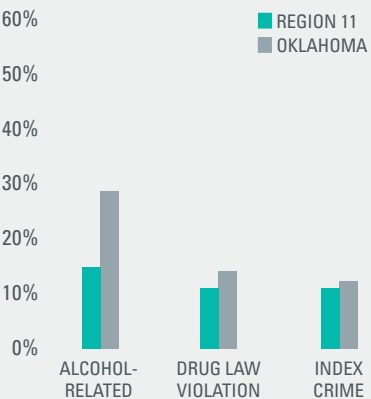
**FIGURE 120** · PERCENT OF *TOBACCO CONSUMPTION*, 2006 (BRFSS)



**FIGURE 121** · PERCENT OF *CAR CRASHES* RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)

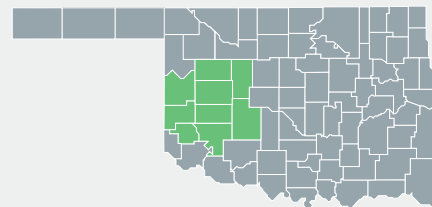


**FIGURE 122** · PERCENT OF *ARRESTS* RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)



## Region 12

Counties · Beckham, Blaine, Caddo, Custer, Dewey, Greer, Kiowa, Roger Mills, and Washita



In 2006, Region 12 had a population of 122,627, which made up 3% of Oklahoma's total population. Of the total Regional population 50% were male and 50% were female. The White race made up 83% of the total population followed by 10% Native American or Alaskan Native, 4% Black, 3% reported 2 or more races, and 1% Asian. In 2006, approximately 8,199 (7%) were under five years of age, 29,050 (24%) were under the age of 18, and 19,133 (16%) were 65 years of age or older (US Census). Region 12 reported a median age of 39 years which was greater than the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. The birth rate and death rate for Region 12 were 14.6 and 13.4 respectively compared to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 12 reported a family

poverty rate of 14.1 and a child poverty rate of 24.8 which were greater than the Oklahoma averages of 11.2 and 19.6 respectively. Region 12 also reported a slightly greater teen birth rate of 15.6 compared to the Oklahoma rate of 14.8. Region 12 reported a lower infant mortality rate and a greater child mortality rate compared to Oklahoma (7.3 and 2.7 vs. 8.0 and 2.1, respectively).

Figure 124 shows the 10 leading causes of death in Region 12 during the most recent three-year period for which data are available (2004-2006). In Region 12 the death rates for heart disease (366.9) and cancer (238.4) were substantially greater than the death rates of heart disease (273.3) and cancer (209.1) for Oklahoma.

Of the 10 leading causes of death shown in Figure 124, most are at

least partially caused by substance abuse. For example, the chronic lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Region 12 had unintentional injuries as the third leading cause of death in 2006 compared to Oklahoma which had unintentional injuries as the fifth leading cause of death.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 125 summarizes the violent deaths in Region 12 from 2004 through 2006. The overall violent death rate for Region 12 was lower than the Oklahoma violent death rate. Region 12 reported a lower rate of suicide and homicide than the state. Of all violent deaths

**FIGURE 123 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 12	OK
BIRTH RATE	14.6	15.1
DEATH RATE	13.4	9.9
TEEN BIRTH RATE	15.6	14.8
INFANT MORTALITY RATE	7.3	8.0
CHILD MORTALITY RATE	2.7	2.1

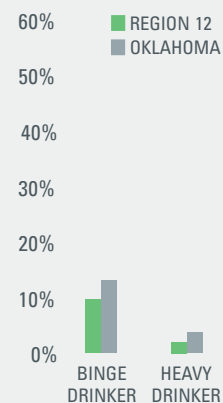
**FIGURE 124 · TEN LEADING CAUSES OF DEATH IN REGION 12, 2006** (OSDH)



**FIGURE 125 · NUMBER & RATE OF VIOLENT DEATHS, 2004-2006** (OK-VDRS)

	REG 12		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	87	23.8	2,673	25.1
HOMICIDE	17	4.6	629	5.9
SUICIDE	51	13.9	1,544	14.5
UNDETERMINED MANNER	15	4.1	434	4.1
UNINTENTIONAL FIREARM	3	0.8	30	0.3
LEGAL INTERVENTION	1	0.3	36	0.3

**FIGURE 126 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)



more than 59% were by suicide. Of the remaining deaths, 20% were homicides, 17% were by an undetermined manner, 3% were unintentional firearms and 1% legal intervention.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 126, fewer Region 12 adults reported binge drinking (10%) and heavy drinking (2%) compared to Oklahoma (13% and 4% respectively). Region 12 adults reported similar current tobacco consumption and similar former and non-smokers compared to Oklahoma.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance

with the legislation, the Amendment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 12 had a Synar non-compliance rate of 23%, which was substantially greater than the state average.

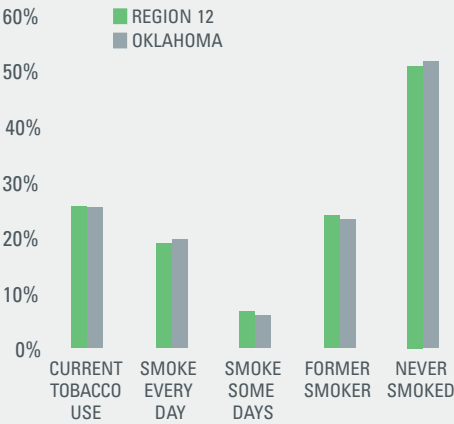
In Region 12 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, methamphetamine, and marijuana/hashish. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such

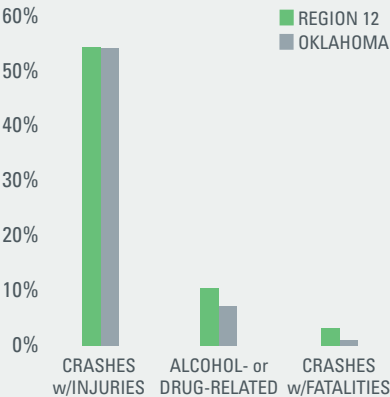
as alcohol-related motor vehicle crash injury and death. As seen in Figure 128, Region 12 reported similar crashes with injury, but more crashes that involved fatalities and alcohol or drug related crashes compared to Oklahoma.

Alcohol-related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 129, Region 12 had substantially greater alcohol-related arrests (40%), and lower drug law violation arrests (13%) and index crime arrests (9%) compared to Oklahoma (29%, 14% and 12% respectively).

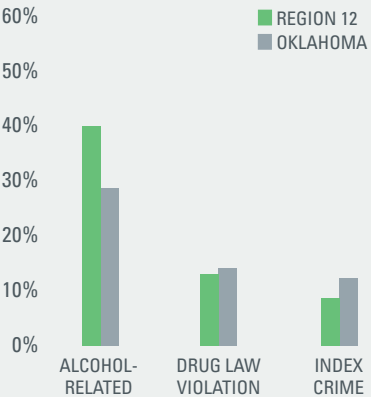
**FIGURE 127** · PERCENT OF *TOBACCO CONSUMPTION*, 2006 (BRFSS)



**FIGURE 128** · PERCENT OF *CAR CRASHES* RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSSO)

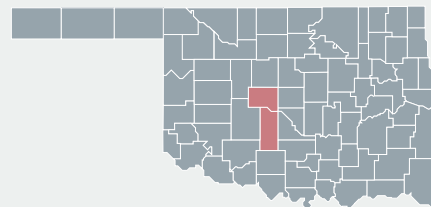


**FIGURE 129** · PERCENT OF *ARRESTS* RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)



## Region 13

Counties · Canadian and Grady



In 2006, Region 13 had a population of 151,825, which made up 4% of Oklahoma's total population. Of the total Regional population 50% were male and 50% were female. The White race made up 88% of the total population followed by 5% Native American or Alaskan Native, 3% reported 2 or more races, 3% Black, and 1% Asian. In 2006, approximately 9,783 (6%) were under five years of age, 37,526 (25%) were under the age of 18, and 16,434 (11%) were 65 years of age or older (US Census). Region 13 reported a median age of 36 years which was similar to the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. The birth rate and death rate for Region 13 were 14.2 and 7.9 respectively compared to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 13 reported a family poverty

rate of 7.4 and a child poverty rate of 12.5 which were considerably lower than the Oklahoma averages of 11.2 and 19.6 respectively. Region 13 also reported a lower teen birth rate of 9.7 compared to the Oklahoma rate of 14.8. Region 13 reported a greater infant mortality rate and child mortality rate compared to Oklahoma (8.9 and 2.5 vs. 8.0 and 2.1, respectively).

Figure 131 shows the 10 leading causes of death in Region 13 during the most recent three-year period for which data are available (2004-2006). In Region 13 the death rates for heart disease (202.2) and cancer (183.8) were substantially lower than the death rates of heart disease (273.3) and cancer (209.1) for Oklahoma.

Of the 10 leading causes of death shown in Figure 131, most are at least partially caused by substance abuse. For example, the chronic

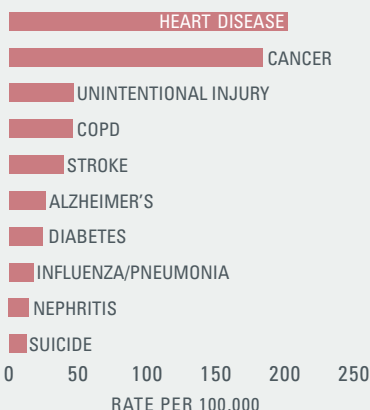
lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Region 13 had unintentional injuries as the third leading cause of death in 2006 compared to Oklahoma which had unintentional injuries as the fifth leading cause of death.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 132 summarizes the violent deaths in Region 13 from 2004 through 2006. The overall violent death rate for Region 13 was lower than the Oklahoma violent death rate. Region 13 reported lower rates for suicide and homicide than the state. Of all violent deaths more than 66% were by suicide. Of the remaining deaths, 17% were by

**FIGURE 130 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 13	OK
BIRTH RATE	14.2	15.1
DEATH RATE	7.9	9.9
TEEN BIRTH RATE	9.7	14.8
INFANT MORTALITY RATE	8.9	8.0
CHILD MORTALITY RATE	2.5	2.1

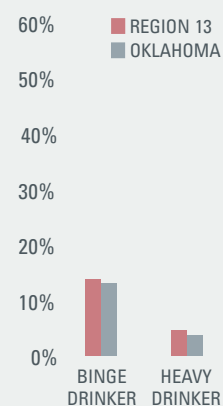
**FIGURE 131 · TEN LEADING CAUSES OF DEATH IN REGION 13, 2006** (OSDH)



**FIGURE 132 · NUMBER & RATE OF VIOLENT DEATHS, 2004-2006** (OK-VDRS)

	REG 13		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	88	19.8	2,673	25.1
HOMICIDE	11	2.5	629	5.9
SUICIDE	58	13.1	1,544	14.5
UNDETERMINED MANNER	15	3.4	434	4.1
UNINTENTIONAL FIREARM	1	0.2	30	0.3
LEGAL INTERVENTION	3	0.7	36	0.3

**FIGURE 133 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)



an undetermined manner, 13% were homicides, 3% legal intervention, and 1% were unintentional firearms.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 133, more Region 13 adults reported binge drinking (14%) and heavy drinking (5%) compared to Oklahoma (13% and 4% respectively). Region 13 adults reported lower current tobacco consumption and greater former and non-smokers compared to Oklahoma.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance

with the legislation, the Amendment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 13 had a Synar non-compliance rate of 13%, which is similar to the state average.

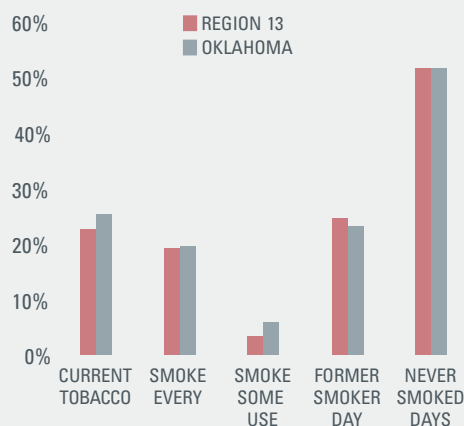
In Region 13 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, marijuana/hashish, and methamphetamine. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such

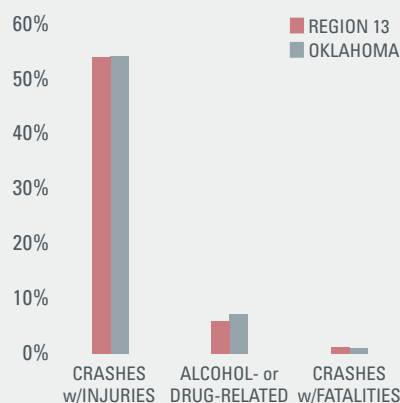
as alcohol-related motor vehicle crash injury and death. As seen in Figure 135, Region 13 reported similar crashes with injury, crashes that involved fatalities and alcohol or drug-related crashes compared to Oklahoma.

Alcohol-related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 136, Region 13 had lower alcohol-related arrests (22%), drug law violation arrests (13%) and index crime arrests (10%) compared to Oklahoma (29%, 14% and 12% respectively).

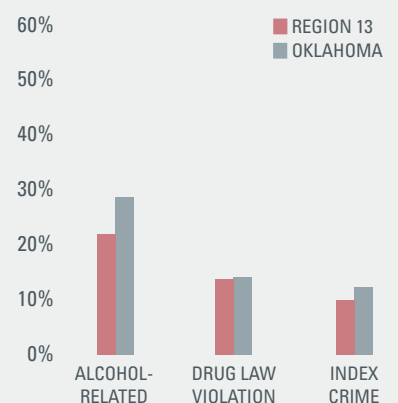
**FIGURE 134 · PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)**



**FIGURE 135 · PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)**

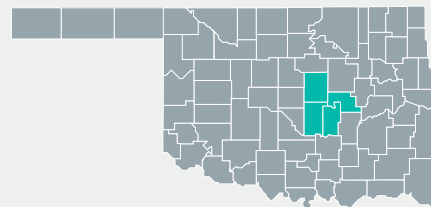


**FIGURE 136 · PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)**



## Region 14

Counties · Lincoln, Okfuskee, Pottawatomie, and Seminole



In 2006, Region 14 had a population of 137,303, which made up 4% of Oklahoma's total population. Of the total Regional population 49% were male and 51% were female. The White race made up 79% of the total population followed by 12% Native American or Alaskan Native, 5% reported 2 or more races, 4% Black, and 1% Asian. In 2006, approximately 8,996 (7%) were under five years of age, 33,522 (24%) were under the age of 18, and 19,898 (15%) were 65 years of age or older (US Census). Region 14 reported a median age of 38 years which was greater than the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. The birth rate and death rate for Region 14 were 13.6 and 11.4 respectively compared to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 14 reported a family poverty

rate of 12.9 and a child poverty rate of 21.9 which were greater than the Oklahoma averages of 11.2 and 19.6 respectively. Region 14 also reported a greater teen birth rate of 17.0 compared to the Oklahoma rate of 14.8. Region 14 reported a similar infant mortality rate and child mortality rate compared to Oklahoma (8.1 and 2.0 vs. 8.0 and 2.1, respectively).

Figure 138 shows the 10 leading causes of death in Region 14 during the most recent three-year period for which data are available (2004-2006). In Region 14 the death rates for heart disease (296.4) and cancer (245.4) were substantially greater than the death rates of heart disease (273.3) and cancer (209.1) for Oklahoma.

Of the 10 leading causes of death shown in Figure 138, most are at least partially caused by substance

abuse. For example, the chronic lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Region 14 had unintentional injuries as the fourth leading cause of death in 2006 compared to Oklahoma which had unintentional injuries as the fifth leading cause of death.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 139 summarizes the violent deaths in Region 14 from 2004 through 2006. The overall violent death rate for Region 14 was slightly higher than the Oklahoma violent death rate. Region 14 reported a greater rate of suicide than the state. Of all violent deaths more than 69% were by suicide. Of

**FIGURE 137 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 14	OK
BIRTH RATE	13.6	15.1
DEATH RATE	11.4	9.9
TEEN BIRTH RATE	17.0	14.8
INFANT MORTALITY RATE	8.1	8.0
CHILD MORTALITY RATE	2.0	2.1

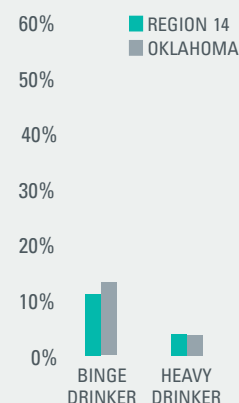
**FIGURE 138 · TEN LEADING CAUSES OF DEATH IN REGION 14, 2006** (OSDH)



**FIGURE 139 · NUMBER & RATE OF VIOLENT DEATHS, 2004-2006** (OK-VDRS)

	REG 14		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	118	28.8	2,673	25.1
HOMICIDE	19	4.6	629	5.9
SUICIDE	82	20.0	1,544	14.5
UNDETERMINED MANNER	16	3.9	434	4.1
UNINTENTIONAL FIREARM	0	0	30	0.3
LEGAL INTERVENTION	1	0.2	36	0.3

**FIGURE 140 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)





the remaining deaths, 16% were homicides, 14% were by an undetermined manner, and 1% legal intervention.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 140, Region 14 adults reported less binge drinking (11%) and similar heavy drinking (4%) compared to Oklahoma (13% and 4% respectively). Region 14 adults reported greater current tobacco consumption, similar former, and less non-smokers compared to Oklahoma.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance with the legislation, the Amend-

ment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 14 had a Synar non-compliance rate of 0%, which was substantially lower than the state.

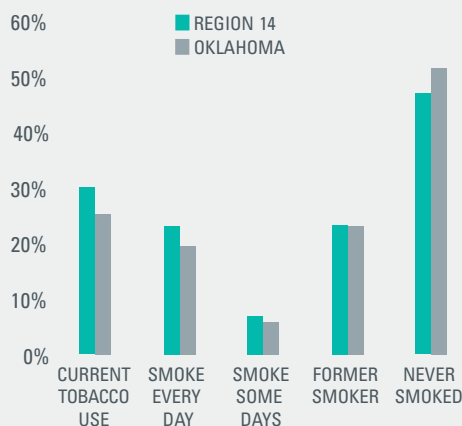
In Region 14 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, marijuana/hashish, and methamphetamine. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such as alcohol-related motor vehicle

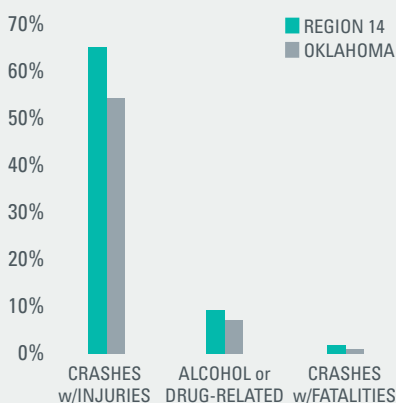
crash injury and death. As seen in Figure 142, Region 14 reported more crashes with injury, crashes that involved fatalities and alcohol or drug related crashes compared to Oklahoma.

Alcohol-related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 143, Region 14 had substantially greater alcohol-related arrests (34%) but lower drug law violation arrests (11%) and index crime arrests (9%) compared to Oklahoma (29%, 14% and 12% respectively).

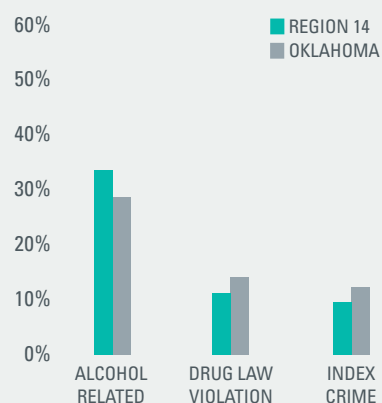
**FIGURE 141.** PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)



**FIGURE 142.** PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)

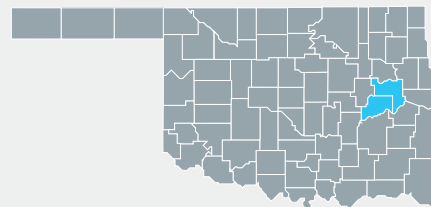


**FIGURE 143.** PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)



## Region 15

Counties · Hughes, McIntosh, and Muskogee



In 2006, Region 15 had a population of 104,810, which made up 3% of Oklahoma's total population. Of the total Regional population 49% were male and 51% were female. The White race made up 68% of the total population followed by 16% Native American or Alaskan Native, 10% Black, 6% reported 2 or more races, and 01% Asian. In 2006, approximately 6,930 (7%) were under five years of age, 24,848 (24%) were under the age of 18, and 17,490 (17%) were 65 years of age or older (US Census). Region 15 reported a median age of 40 years which was greater than the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. The birth rate and death rate for Region 15 were 14.4 and 12.1 respectively compared to Oklahoma's birth rate and death rate of

15.1 and 9.9. Region 15 reported a family poverty rate of 14.3 and a child poverty rate of 25.2 which were considerably greater than the Oklahoma averages of 11.2 and 19.6 respectively. Region 15 also reported a greater teen birth rate of 20.3 compared to the Oklahoma rate of 14.8. Region 15 reported a greater infant mortality rate and child mortality rate compared to Oklahoma (8.7 and 3.2 vs. 8.0 and 2.1, respectively).

Figure 145 shows the 10 leading causes of death in Region 15 during the most recent three-year period for which data are available (2004-2006). In Region 15 the death rates for heart disease (356.8) and cancer (277.4) were substantially greater than the death rates of heart disease (273.3) and cancer (209.1) for Oklahoma.

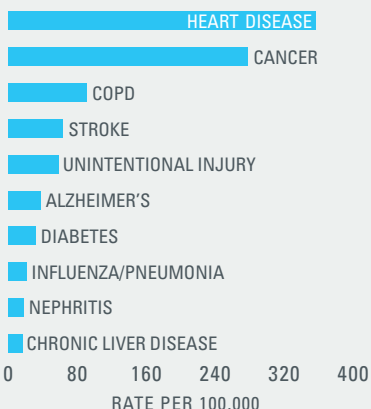
Of the 10 leading causes of death shown in Figure 145, most are at least partially caused by substance abuse. For example, the chronic lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Region 15 had Alzheimer's as the sixth leading cause of death in 2006, compared to Oklahoma which had Alzheimer's as the seventh leading cause of death.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 146 summarizes the violent deaths in Region 15 from 2004 through 2006. The overall violent death rate for Region 15 was slightly lower than the Oklahoma violent death rates. Of all the violent deaths more than 60% were by

**FIGURE 144 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 15	OK
BIRTH RATE	14.4	15.1
DEATH RATE	12.1	9.9
TEEN BIRTH RATE	20.3	14.8
INFANT MORTALITY RATE	8.7	8.0
CHILD MORTALITY RATE	3.2	2.1

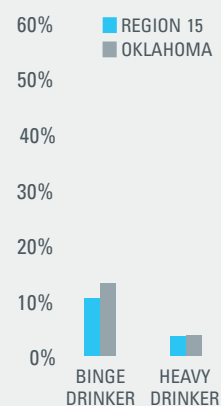
**FIGURE 145 · TEN LEADING CAUSES OF DEATH IN REGION 15, 2006** (OSDH)



**FIGURE 146 · NUMBER & RATE OF VIOLENT DEATHS, 2004-2006** (OK-VDRS)

	REG 15		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	73	23.3	2,673	25.1
HOMICIDE	17	5.4	629	5.9
SUICIDE	44	14.0	1,544	14.5
UNDETERMINED MANNER	11	3.5	434	4.1
UNINTENTIONAL FIREARM	0	0	30	0.3
LEGAL INTERVENTION	1	0.3	36	0.3

**FIGURE 147 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)





suicide. Of the remaining deaths, 23% were homicides, 15% were by an undetermined manner, and 1% legal intervention.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 147, fewer Region 15 adults reported binge drinking (10%) and similar heavy drinking (4%) compared to Oklahoma (13% and 4% respectively). Region 15 adults reported greater current tobacco consumption and former smokers and less non-smokers compared to Oklahoma.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance

with the legislation, the Amendment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 15 had a Synar non-compliance rate of 29%, which was substantially greater than the state.

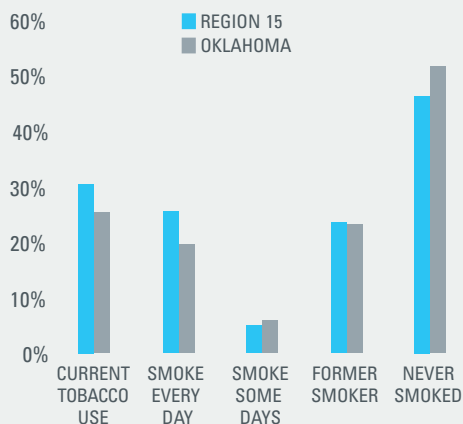
In Region 15 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were methamphetamine, alcohol, and marijuana/hashish. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such

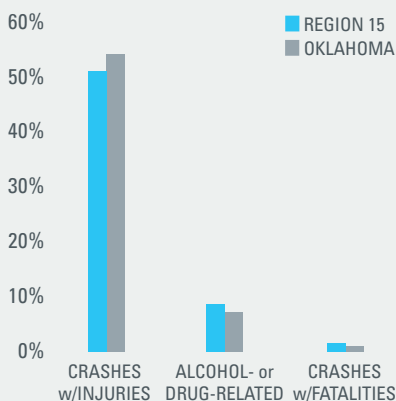
as alcohol-related motor vehicle crash injury and death. As seen in Figure 149, Region 15 reported fewer crashes with injury but greater crashes that involved fatalities and alcohol or drug related crashes compared to Oklahoma.

Alcohol-related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 150, Region 15 has substantially lower alcohol-related arrests (23%), drug law violation arrests (11%) and index crime arrests (7%) compared to Oklahoma (29%, 14% and 12% respectively).

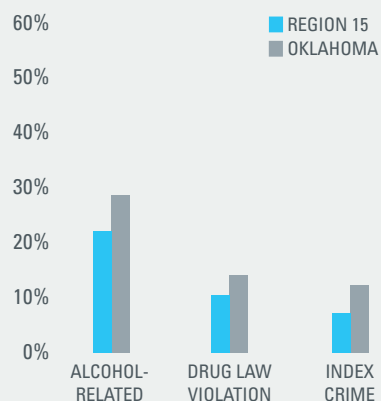
**FIGURE 148** · PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)



**FIGURE 149** · PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)

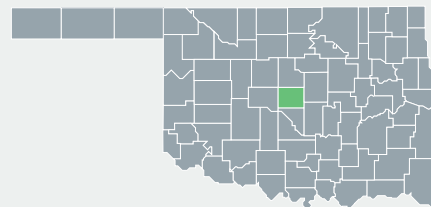


**FIGURE 150** · PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND VIOLENT CRIME, 2006 (OSBI)



# Region 16

County · Oklahoma



In 2006, Region 16 had the largest population in Oklahoma with 691,266, which made up 19% of Oklahoma's total population. Of the total Regional population 49% were male and 51% were female. The White race made up 75% of the total population followed by 16% Black, 3% Native American or Alaskan Native, 3% Asian, and 3% reported 2 or more races. In 2006, approximately 57,341 (8%) were under five years of age, 180,627 (26%) were under the age of 18, and 85,045 (12%) were 65 years of age or older (US Census). Region 16 reported a median age of 35 years, which slightly lower than the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. The birth rate and death rate for Region 16 were 17.7 and 8.9 respectively compared to Oklahoma's birth rate and death rate of 15.1 and 9.9. Region 16

reported a family poverty rate of 11.7 and a child poverty rate of 22.2 which were greater than the Oklahoma averages of 11.2 and 19.6 respectively. Region 16 also reported a greater teen birth rate of 17.1 compared to Oklahoma rate of 14.8. Region 16 reported a lower infant mortality rate and child mortality rate compared to the Oklahoma (7.8 and 1.9 vs. 8.0 and 2.1, respectively).

Figure 152 shows the 10 leading causes of death in Region 16 during the most recent three-year period for which data are available (2004-2006). In Region 16 the death rates for heart disease (234.2) and cancer (189.2) were substantially lower than the death rates of heart disease (273.3) and cancer (209.1) for Oklahoma.

Of the 10 leading causes of death shown in Figure 152, most are at least partially caused by substance

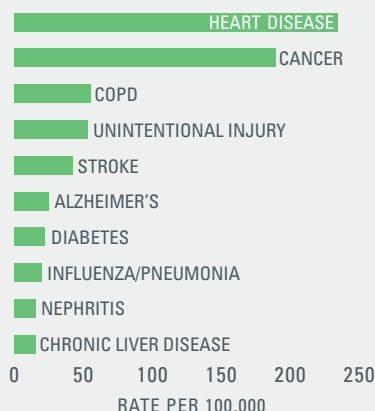
abuse. For example, the chronic lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Region 16 had unintentional injuries as the fourth leading cause of death in 2006, compared to Oklahoma which had unintentional injuries as the fifth leading cause of death.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 153 summarizes the violent deaths in Region 16 from 2004 through 2006. The overall violent death rate for Region 16 was slightly higher than the Oklahoma violent death rate. The homicide rate in Region 16 was higher than the state homicide rate. Of all violent deaths more than 53% were by

**FIGURE 151 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 16	OK
BIRTH RATE	17.7	15.1
DEATH RATE	8.9	9.9
TEEN BIRTH RATE	17.1	14.8
INFANT MORTALITY RATE	7.8	8.0
CHILD MORTALITY RATE	1.9	2.1

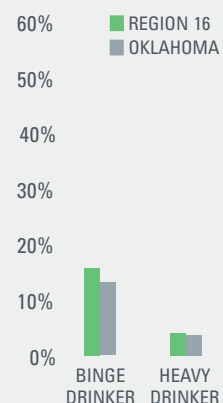
**FIGURE 152 · TEN LEADING CAUSES OF DEATH IN REGION 16, 2006** (OSDH)



**FIGURE 153 · NUMBER & RATE OF VIOLENT DEATHS, 2004-2006** (OK-VDRS)

	REG 16		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	555	27.0	2,673	25.1
HOMICIDE	177	8.6	629	5.9
SUICIDE	292	14.2	1,544	14.5
UNDETERMINED MANNER	77	3.7	434	4.1
UNINTENTIONAL FIREARM	2	0.1	30	0.3
LEGAL INTERVENTION	7	0.3	36	0.3

**FIGURE 154 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)



suicide. Of the remaining deaths 32% were homicides, 14% were by an undetermined manner, and 1% legal intervention.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 154, more Region 16 adults reported binge drinking (16%) and heavy drinking (5%) compared to Oklahoma (13% and 4% respectively). Region 16 adults reported similar current tobacco consumption, less former and higher percentage of non-smokers compared to Oklahoma.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance with the legislation, the Amend-

ment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 16 had a Synar non-compliance rate of 9%, which was substantially lower than the state.

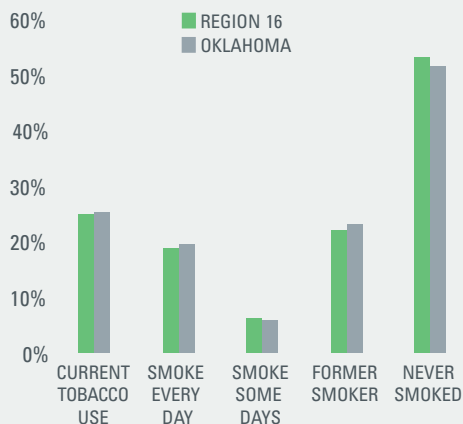
In Region 16 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, marijuana/hashish, and cocaine. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such

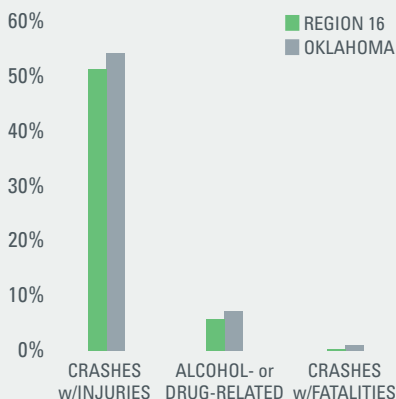
as alcohol-related motor vehicle crash injury and death. As seen in Figure 156, Region 16 reported fewer crashes with injury, crashes that involved fatalities and alcohol or drug related crashes compared to Oklahoma.

Alcohol-related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 157, Region 16 had substantially lower alcohol-related arrests (23%), but greater drug law violation arrests (16%) and index crime arrests (14%) compared to Oklahoma (29%, 14% and 12% respectively).

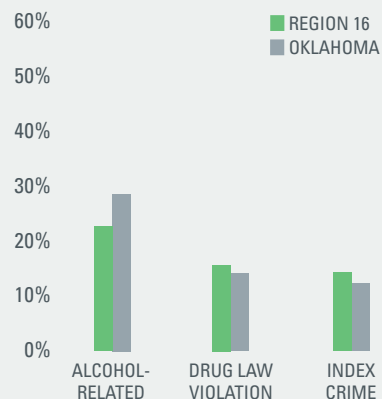
**FIGURE 155** · PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)



**FIGURE 156** · PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)

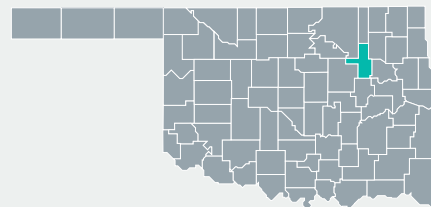


**FIGURE 157** · PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)



# Region 17

County · Tulsa



In 2006, Region 17 had the second largest population in Oklahoma with 577,795, which made up 16% of Oklahoma's total population. Of the total Regional population 49% were male and 51% were female. The White race made up 78% of the total population followed by 12% Black, 5% Native American or Alaskan Native, 4% reported 2 or more races and 2% Asian. In 2006, approximately 46,009 (8%) were under five years of age, 152,486 (26%) were under the age of 18, and 69,089 (12%) were 65 years of age or older (US Census). Region 17 reported a median age of 36 years which was similar to the Oklahoma median age of 36 years. The following rates are expressed as 1,000 per population per year. The birth rate and death rate for Region 17 were 16.9 and 9.2 respectively compared to Oklahoma's birth rate and death rate of 15.1 and

9.9. Region 17 reported a family poverty rate of 8.8 and a child poverty rate of 16.2 which were considerably lower than the Oklahoma average of 11.2 and 19.6 repetitively. Region 17 reported a similar teen birth rate of 15.0 compared to the Oklahoma rate of 14.8. Region 17 reported a greater infant mortality rate and a lower child mortality rate compared to Oklahoma (8.7 and 2.0 vs. 8.0 and 2.1, respectively).

Figure 159 shows the 10 leading causes of death in Region 17 during the most recent three-year period for which data are available (2004-2006). In Region 17 the death rates for heart disease (242.1) and cancer (193.7) were substantially lower than the death rates of heart disease (273.3) and cancer (209.1) for Oklahoma.

Of the 10 leading causes of death shown in Figure 159, most are at

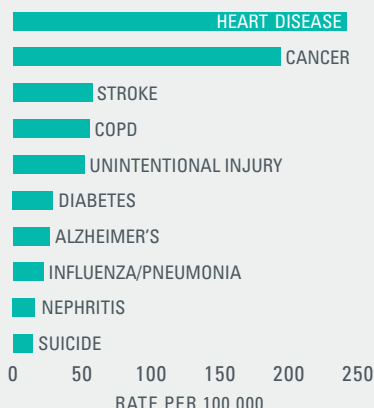
least partially caused by substance abuse. For example, the chronic lower respiratory diseases also known as COPD (emphysema, chronic obstructive pulmonary disease) and several cancers are strongly associated with tobacco use. Region 17 had stroke as the third leading cause of death in 2006 compared to Oklahoma which as stroke as the fourth leading cause.

Violent deaths include homicides, suicides, legal intervention, undetermined manner, and unintentional firearm deaths. Figure 160 summarizes the violent deaths in Region 17 from 2004 through 2006. The overall violent death rate for Region 17 was higher than the Oklahoma violent death rate. The homicide rate in Region 17 was higher than the state homicide rate. Of all violent deaths more than 48% were by suicide.

**FIGURE 158 · BIRTH & DEATH RATES, 2006**  
(OSDH)

	REG 17	OK
BIRTH RATE	16.9	15.1
DEATH RATE	9.2	9.9
TEEN BIRTH RATE	15.0	14.8
INFANT MORTALITY RATE	8.7	8.0
CHILD MORTALITY RATE	2.0	2.1

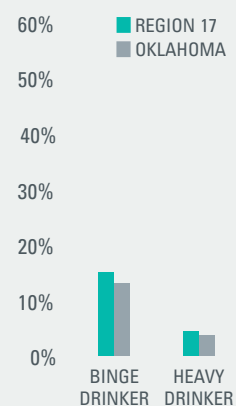
**FIGURE 159 · TEN LEADING CAUSES OF DEATH IN REGION 17, 2006** (OSDH)



**FIGURE 160 · NUMBER & RATE OF VIOLENT DEATHS, 2004-2006** (OK-VDRS)

	REG 17		OK	
	#	RATE	#	RATE
VIOLENT DEATHS	539	31.4	2,673	25.1
HOMICIDE	167	9.7	629	5.9
SUICIDE	257	15.0	1,544	14.5
UNDETERMINED MANNER	104	6.1	434	4.1
UNINTENTIONAL FIREARM	4	0.2	30	0.3
LEGAL INTERVENTION	7	0.4	36	0.3

**FIGURE 161 · PERCENT OF ALCOHOL CONSUMPTION, 2006** (BRFSS)



Of the remaining deaths 31% were homicides, 19% were by an undetermined manner, 1% legal intervention and 1% were unintentional firearm.

Alcohol and tobacco consumption by youth and adults is a significant problem in Oklahoma. As seen in Figure 161, more Region 17 adults reported binge drinking (15%) and heavy drinking (5%) compared to Oklahoma (13% and 4% respectively). Region 17 adults reported lower current tobacco consumption and greater former and non-smokers compared to Oklahoma.

The Synar Amendment, passed in 1992, is aimed at decreasing youth access to tobacco. This amendment requires States to enact and enforce laws prohibiting the sale or distribution of tobacco products to individuals under 18 years. To determine compliance

with the legislation, the Amendment requires each State and U.S. jurisdiction to conduct annual random, unannounced inspections of retail tobacco outlets and to report the findings to the Secretary of the U.S. Department of Health and Human Services (HHS). Oklahoma had a Synar non-compliance rate of 12% for 2007 and Region 17 had a Synar non-compliance rate of 13%, which was similar to the state average.

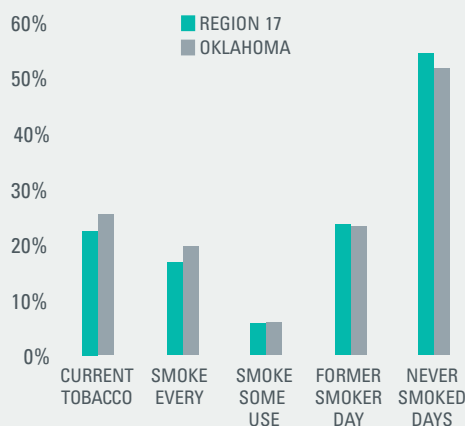
In Region 17 the top three drugs of choice for persons entering ODMHSAS funded substance abuse treatment during 2007 were alcohol, marijuana/hashish, and methamphetamine. Oklahoma reported alcohol, marijuana/hashish and methamphetamine as the top three drugs of choice.

Adult drinking and driving is associated with injury outcomes such

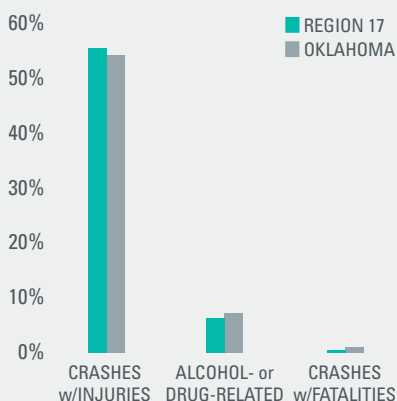
as alcohol-related motor vehicle crash injury and death. As seen in Figure 163, Region 17 reported more crashes with injury but fewer crashes that involved fatalities and alcohol or drug related crashes compared to Oklahoma.

Alcohol related arrests consist of driving under the influence, liquor law violations, and drunkenness; drug violation arrests consist of all drug arrests reported as sale/manufacturing and possession; index crime arrests consist of murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. As seen in Figure 164, Region 17 had slightly lower alcohol related arrests (27%) and drug law violation arrests (14%) but greater index crime arrests (20%) compared to Oklahoma (29%, 14% and 12% respectively).

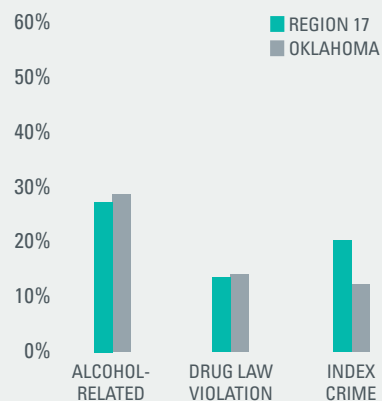
**FIGURE 162** · PERCENT OF TOBACCO CONSUMPTION, 2006 (BRFSS)



**FIGURE 163** · PERCENT OF CAR CRASHES RESULTING IN INJURY, FATALITY, OR ALCOHOL- or DRUG-RELATED, 2006 (OHSO)



**FIGURE 164** · PERCENT OF ARRESTS RELATED TO ALCOHOL, DRUG LAW VIOLATION, AND INDEX CRIME, 2006 (OSBI)



# appendix

## methodology

### INCLUSION CRITERIA

The Oklahoma SEOW followed the methodology supplied from SAMHSA, CSAP through the Pacific Institute for Research and Evaluation when possible.

For each construct included one or more specific measures or 'indicators' have been identified to quantify consumption and substance related consequences.

Unlike the underlying constructs, indicators have specific data sources and precise definitions. Thus, while "alcohol-related mortality" is a relevant construct for monitoring trends of an important consequence of use, it does not provide a precise definition of how this construct can be measured.

There are several indicators available, however, that provide specific measures of this construct (e.g., annual incidence rate of deaths attributable to alcohol related chronic liver disease, suicide, homicide, or crash fatalities).

A complete list of the constructs and indicators available is provided on the following page.

### AVAILABILITY

The data should be readily available and accessible. The measure must be available in disaggregated form at the State level (or lower geographic level).

### CONSISTENCY

The measure must be consistent, i.e., the method or means of collecting and organizing data should be relatively unchanged over time.

Alternatively, if the method of measurement has changed, sound studies or data should exist that determine and allow adjustment for differences resulting from data collection changes.

### VALIDITY

The measure must meet basic criteria for validity. That is, there must be research-based evidence that the indicator accurately measures the specific construct and yields a true snapshot of the phenomenon at the time of assessment.

Periodic collection over at least three to five past years: The measure should be available for the past 3 to 5 past years, preferably on an annual or at least biennial basis. This enables the State to determine not only the level of an indicator but also its trends.

### SENSITIVITY

For monitoring, the measure must be sufficiently sensitive to detect change over time that might be associated with changes in alcohol, tobacco, or illicit drug use.

Supplementing with additional data from state sources: Due to some limitations in the availability of measures from national data sources, Oklahoma chose to identify additional constructs and indicators relevant to substance abuse prevention and for which appropriate data from within the State were available.



# indicators

## ALCOHOL CONSUMPTION

- Percent reporting heavy alcohol consumption (BRFSS)
- 30-day alcohol use (YRBS; BRFSS; NSDUH)
- Percent reporting drinking 5 or more drinks on at least one occasion in the past 30 days (YRBS; BRFSS)
- Lifetime alcohol use (YRBS)
- Age of first use of alcohol (YRBS; NSDUH)
- Per capita consumption (all beverages), based on population >14 years (SEDS)

## ALCOHOL CONSEQUENCES

- Percent of students who during the past 30 days rode in a car or other vehicle driven by someone who had been drinking alcohol (YRBS)
- Percent of students who during the past 30 days drove a car or other vehicles when they had been drinking alcohol (YRBS)
- Percent of adults (18 & older) reporting driving after having “perhaps too much to drink” in past 30 days (BRFSS)
- Chronic liver disease/cirrhosis (OVDRS)
- Suicides (OVDRS; OSDH)
- Homicides (OVDRS)
- DUI convictions (FARS)
- Percent of fatal motor vehicle crashes that are alcohol related (FARS)
- Alcohol-related vehicle death rate (FARS)
- Percent of violent deaths that are alcohol-related (OVDRS)

## TOBACCO CONSUMPTION

- 30-day tobacco use (YRBS; BRFSS; OYTS; NSDUH)
- Percent of businesses that sold tobacco to youth
- 30-Day smokeless tobacco use (YRBS; OYTS)
- Age of first use of tobacco (YRBS; OYTS)
- Percent who smoke during pregnancy (PRAMS)
- Percent tobacco users by status (BRFSS)
- Percent of students who used tobacco on school property (YRBS)
- Percent exposed to secondhand smoke (OYTS)
- Percent of students with asthma (OYTS)

## TOBACCO CONSEQUENCES

- Number of deaths from lung cancer per 1000 population (SEDS)
- Number of deaths from COPD per 1000 population (SEDS)
- Number of deaths from CVD per 1000 population (SEDS)
- Percent of low birthweight births (PRAMS)

## OTHER DRUG CONSUMPTION

- Percent of students in grades 9-12 reporting any use of marijuana in the past 30 days (YRBS)
- Percent of students in grades 9-12 reporting any use of cocaine in the past 30 days (YRBS)
- Percent of students in grades 9-12 reporting any use of inhalants in the past 30 days (YRBS)
- Percent of persons aged 12 and older reporting any use of marijuana in the past 30 days (NSDUH)
- Percent of persons aged 12 and over reporting use of any illicit drug other than marijuana, or an abusable product that can be obtained legally, in the past 30 days (NSDUH)
- Percent of students in grades 9-12 report any use of classes of illicit drugs in their lifetime (YRBS)
- Percent of students in grades 9-12 reporting first use of marijuana before age 13 (YRBS)

## OTHER DRUG CONSEQUENCES

- Number of deaths from illicit drug use per 1000 population (NVSS)
- Percent of persons aged 12 and over meeting DSM-IV criteria for drug abuse or dependence (NSDUH)
- Treatment admission data (ODMHSAS)
- Arrestee data (ADAM)
- Number of drug overdoses (OVDRS)
- Drugs purchased and seized (OBN)

## data sources

The data presented here comes from various sources. Other valuable publications have been written utilizing these data sources. The Oklahoma State Epidemiology Profile should be seen as complementary to these other publications, and serious program planners will want to refer to these documents for further information. These publications include:

**Arrestee Drug Abuse Monitoring Program (ADAM)** · In 2002-2004 Oklahoma participated in a research program of the National Institute of Justice (NIJ) that provides drug use and other characteristics of arrestees in Oklahoma. The information gained from ADAM has demonstrated the prevalence of alcohol and drug abuse among the criminal justice population and the relationship between substance abuse and criminal activity in Oklahoma.

**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. This report focused on 2007 BRFSS data to give a current picture of substance use/abuse in Oklahoma. <http://www.cdc.gov/brfss/about.htm>

**Center for Disease Control and Prevention (CDC)** · The CDC, a part of the U.S. Department of Health and Human Services, is the primary Federal agency for conducting

and supporting public health activities in the United States. CDC's focus is not only on scientific excellence but also on the essential spirit that is CDC – to protect the health of all people. CDC keeps humanity at the forefront of its mission to ensure health protection through promotion, prevention, and preparedness.

**Ensuring Solutions to Alcohol Problems (ESAP)** · Ensuring Solutions is a project of the Center for Integrated Behavioral Health Policy, part of the Department of Health Policy at the School of Public Health and Health Services, The George Washington University Medical Center in Washington, DC.

**Fatality 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.

**National Institute on Alcohol Abuse and Alcoholism (NIAAA)** · The National Institute on Alcohol Abuse and Alcoholism (NIAAA), a component of the National Institutes of Health, U.S. Department of Health and Human Services, is the lead agency in this country for research on alcohol abuse, alcoholism, and other health effects of alcohol.

**National Survey on Drug Use and Health (NSDUH)** · The National Survey on Drug Use and Health (NSDUH) provides annual data on drug use in the United States.

The NSDUH is 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). The survey provides yearly national and state level estimates of alcohol, tobacco, illicit drug, and non-medical prescription drug use. Other health-related questions also appear from year to year, including questions about mental health. The NSDUH findings were used to evaluate substance use/abuse from the age of 12. This survey is not a school based survey so it provides a different perspective than the YRBS for youth. <https://nsduhweb.rti.org/>

**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 National Center for Health Statistics (NCHS) collects and disseminates the Nation's official vital statistics. The 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.

**Oklahoma Bureau of Narcotics and Dangerous Drugs (OBN)** · The Oklahoma State Bureau of Narcotics and Dangerous Drugs Control is a law enforcement agency with a goal of minimizing the abuse of controlled substances through law enforcement measures directed primarily at drug trafficking, illicit drug manufacturing, and major suppliers of illicit drugs.



**Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS)**

· The ODMHSAS was established in 1953 and continues to evolve to meet the needs of all Oklahomans. Collaborating with leaders from multiple state agencies, advocacy organizations, consumers and family members, providers, community leaders and elected officials, the way has been paved for meaningful mental health and substance abuse services transformation in Oklahoma. The ODMHSAS is responsible for providing services to Oklahomans who are affected by mental illness and substance abuse.

**Oklahoma Highway Safety Office (OHSO)**

· The Oklahoma Highway Safety Office was established in 1967 by the Oklahoma Legislature, as a direct result of the National Highway Safety Act of 1966, to combat an alarming increase in the number and severity of traffic crashes and fatalities. The OHSO is under the umbrella of the Department of Public Safety. The Oklahoma Highway Safety Office annually publishes a Crash Facts Book which provides a wide variety of statistical information about traffic crashes in Oklahoma.

**Oklahoma State Bureau of Investigation (OSBI)**

· The Oklahoma State Bureau of Investigation 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.

**Oklahoma State Department of Health (OSDH)**

· The OSDH is a department of the government of Oklahoma responsible for protect-

ing the health of all Oklahomans and providing other essential human services and through its system of local health services delivery, is ultimately responsible for protecting and improving the public's health status through strategies that focus on preventing disease. The OSDH serves as the primary public health protection agency in the state.

**Oklahoma Tax Commission**

· Since 1931, the Oklahoma Tax Commission has held the responsibility of the collection and administration of taxes, licenses and fees that impact every Oklahoman. Under the direction of the state legislature, the Tax Commission manages not only the collection of taxes and fees, but also the distribution and apportionment of revenues to various state funds. The collected revenues fuel such state projects as education, transportation, recreation, social welfare and a myriad of other services.

**Oklahoma Violent Death Reporting System (OKVDRS)**

· Oklahoma and 16 other states (Massachusetts, Maryland, New Jersey, Oregon, South Carolina, North Carolina, Virginia, Alaska, Colorado, Georgia, Wisconsin, Rhode Island, Kentucky, Utah, New Mexico, and California) participate in the National Violent Death Reporting System. Violent deaths include homicides, suicides, deaths from legal intervention, unintentional firearm deaths, deaths of undetermined manner, and deaths from acts of terrorism. Data for OKVDRS are collected from death certificates, medical examiner reports, police reports, supplemental homicide reports, and crime labs. Standardized methodology and coding are used to collect the data and enter into a database that is housed at the Oklahoma State

Department of Health (OSDH). The OSDH partners with the Oklahoma State Bureau of Investigation and the Oklahoma Medical Examiner's Office to collect the data.

**Oklahoma Youth Tobacco Survey (OYTS)**

· Designed to provide comprehensive data for planning and evaluating progress toward reducing tobacco use among youth. Items measured as part of the OYTS survey include correlates of tobacco use such as demographics, minors' access to tobacco, and exposure to secondhand smoke. It provides data representative of Oklahoma middle school and high school youth's tobacco-related beliefs, attitudes and behaviors, and exposure to pro- and anti-tobacco influences such as curricula and media. The data can be compared to results from the National Youth Tobacco Survey and results from other states.

**Pacific Institute for Research and Evaluation (PIRE)**

· PIRE is one of the nation's preeminent independent, nonprofit organizations focusing on individual and social problems associated with the use of alcohol and other drugs. PIRE is dedicated to merging scientific knowledge and proven practice to create solutions that improve the health, safety, and well-being of individuals, communities, nations and the world.

**Pregnancy Risk Assessment Monitoring System (PRAMS)**

· Issued by the Oklahoma State Department of Health. PRAMS is an ongoing, population based study designed to collect information about maternal behaviors and experience before, during and after pregnancy. On a monthly basis, PRAMS samples between 2000 and 250 recent mothers from the Oklahoma live birth registry. Mothers are sent as many as

three mail questionnaires seeking their participation, with follow-up phone interviews for non-respondents.

**Smoking Attributable Mortality, Morbidity, and Economic Costs (SAMMEC)** · SAMMEC is an internet-based, computational application. SAMMEC calculates annual state and national-level smoking-attributable deaths and years of potential life lost for adults and infants in the United States. The Adult application also calculates medical expenditures and productivity costs among adults. Likewise, Maternal and Child Health (MCH) SAMMEC estimates annual state and national-level smoking-attributable deaths and years of potential life lost for infants

**Substance Abuse and Mental Health Services Administration (SAMHSA)** · The Substance Abuse and Mental Health Services Administration (SAMHSA), part of the U.S. Department of Health and Human Services (HHS), focuses attention, programs and funding on promoting a life in the community with jobs, homes and meaningful relationships with family and friends for people with or at risk for mental or substance use disorders. The Agency is achieving that vision through an action-oriented, measurable mission of building resilience and facilitating recovery.

**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 data was used for all Oklahoma demographics. <http://www.census.gov/main/www/aboutus.html>

**Youth Risk Factor Behavioral Survey (YRBS)** · The Youth Risk Behavior Surveillance System (YRBSS) monitors six categories of priority health-risk behaviors among youth and young adults, including 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 (STDs), including human immunodeficiency virus (HIV) infections; unhealthy dietary behaviors; and physical inactivity. YRBSS includes a national school-based survey conducted by CDC and state and local school-based surveys conducted by state and local education and health agencies. Oklahoma has participated in the YRBS since 2003.

## glossary

**Abuse** · A respondent was defined with abuse of a substance if he or she met one or more of the four criteria for abuse included in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (American Psychiatric Association [APA], 1994) and did not meet the definition for dependence for that substance. Additional criteria for alcohol and marijuana abuse are that if respondents reported a specific number of days that they used these drugs in the past 12 months, they must have used these drugs on 6 or more days in that period. These questions have been included in the survey since 2000.

**Alcohol Use** · Measures of use of alcohol in the respondent's lifetime, the past year, and the past month.

**Binge Use of Alcohol** · Binge use of alcohol was defined as drinking five or more drinks on the same occasion on at least 1 day in the past 30 days.

**Blood Alcohol Concentration (BAC)** is the concentration of alcohol in blood and is used to define intoxication and provides a rough measure of impairment.

**Blunts** · Blunts were defined as cigars with marijuana in them.

**Child Mortality Rate** · number of deaths for five years of age and under per 1,000 population.

**Cigar Use** · Measures of use of cigars (including cigarillos and little cigars) in the respondent's lifetime, the past year, and the past month.

**Cigarette Use** · Measures of use of cigarettes in the respondent's lifetime, the past year, and the past month were developed from responses to the questions about cigarette use in the past 30 days and the recency of use.

**Cirrhosis** · Result of chronic liver disease that causes scarring of the liver and liver dysfunction. This

often has many complications, including accumulation of fluid in the abdomen, bleeding disorders, increased pressure in the blood vessels, and confusion or a change in the level of consciousness.

**Cocaine Use** · Measures of use of cocaine in the respondent's lifetime, the past year, and the past month.

**Crack Use** · Measures of use of crack cocaine in the respondent's lifetime, the past year, and the past month.

**Current Use** · Any reported use of a specific drug in the past 30 days.

**Dependence** · A respondent was defined with dependence on illicit drugs or alcohol if he or she met three out of seven dependence criteria (for substances that included questions to measure a withdrawal criterion) or three out of six criteria (for substances that did not include withdrawal questions) for that substance, based on criteria included in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (APA, 1994). Additional criteria for alcohol and marijuana dependence since 2000 are that if respondents reported a specific number of days that they used these drugs in the past 12 months, they must have used these drugs on 6 or more days in that period. This definition did not apply to Nicotine (Cigarette) Dependence.

**Driving Under the Influence** · Respondents were asked whether in the past 12 months they had driven a vehicle while under the influence of alcohol and illegal drugs used together, alcohol only, or illegal drugs only.

#### **Drugs Other Than Marijuana**

These drugs include cocaine (including crack), inhalants, hallucinogens (including phencyclidine [PCP], lysergic acid diethylamide

[LSD], and Ecstasy [MDMA]), heroin, or prescription-type psychotherapeutics used nonmedically, which include stimulants, sedatives, tranquilizers, and pain relievers. This measure includes marijuana users who used any of the above drugs in addition to using marijuana, as well as users of those drugs who have not used marijuana.

**Ecstasy Use** · Measures of use of Ecstasy or MDMA (methylenedioxymethamphetamine) in the respondent's lifetime, the past year, and the past month.

**Fetal Alcohol Syndrome (FAS)** the manifestation of specific growth, mental, and physical birth defects associated with the mother's high levels of alcohol use during pregnancy.

**Hallucinogen Use** · Measures of use of hallucinogens in the respondent's lifetime, the past year, and the past month.

**Heavy Use of Alcohol** · Heavy use of alcohol was defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on 5 or more days in the past 30 days. Heavy alcohol users also were defined as binge users of alcohol.

**Heroin Use** · Measures of use of heroin in the respondent's lifetime, the past year, and the past month.

**Incidence** · Substance use incidence refers to the use of a substance for the first time (new use). Incidence estimates are based on questions about age at first use of substances, year and month of first use for recent initiates, the respondent's date of birth, and the interview date. Incidence statistics in this report reflect first use occurring within the 12 months prior to the interview. This is referred to

as past year incidence. For these statistics, respondents who are immigrants are included regardless of whether their first use occurred inside or outside the United States.

**Infant Mortality Rate** · number of deaths for one year of age and under per 1,000 population.

**Inhalant Use** · Measures of use of inhalants in the respondent's lifetime, the past year, and the past month.

**Lifetime Daily Cigarette Use** · A respondent was defined as having lifetime daily cigarette use if he or she ever smoked part or all of a cigarette every day for at least 30 days.

**Lifetime Use** · Lifetime use indicates use of a specific drug at least once in the respondent's lifetime. This measure includes respondents who also reported last using the drug in the past 30 days or past 12 months.

**LSD Use** · Measures of use of lysergic acid diethylamide (LSD) in the respondent's lifetime, the past year, and the past month.

**Marijuana Use** · Measures of use of marijuana in the respondent's lifetime, the past year, and the past month.

**Methamphetamine Use** · Measures of use of methamphetamine (also known as crank, crystal, ice, or speed), Desoxyn®, or Methedrine® in the respondent's lifetime, the past year, and the past month.

**Need for Alcohol Use Treatment** Respondents were classified as needing treatment for an alcohol use problem if they met at least one of three criteria during the past year: (1) dependence on alcohol; (2) abuse of alcohol; or (3) received treatment for an alcohol use problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only],

and mental health centers).

**Need for Illicit Drug or Alcohol Use Treatment** · Respondents were classified as needing treatment for an illicit drug or alcohol use problem if they met at least one of three criteria during the past year: (1) dependence on illicit drugs or alcohol; (2) abuse of illicit drugs or alcohol; or (3) received treatment for an illicit drug or alcohol use problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals inpatient only], and mental health centers).

**Need for Illicit Drug Use Treatment** · Respondents were classified as needing treatment for an illicit drug use problem if they met at least one of three criteria during the past year: (1) dependence on illicit drugs; (2) abuse of illicit drugs; or (3) received treatment for an illicit drug use problem at a specialty facility (i.e., drug/alcohol rehabilitation facilities [inpatient /outpatient], hospitals [inpatient], mental health centers).

**Nicotine (Cigarette) Dependence**  
A respondent was defined with nicotine (cigarette) dependence if he or she met either the dependence criteria derived from the Nicotine Dependence Syndrome Scale (NDSS) or the Fagerstrom Test of Nicotine Dependence (FTND).

**Non-medical Use of Prescription Drugs** · Using drugs that were not prescribed to you by a doctor, or using drugs in a manner not intended by the prescribing clinician (e.g., to get high). Nonmedical use does not include taking prescription medications as directed by a health practitioner or the use of over-the-counter medications.

**Other Drugs** · Illicit drugs include marijuana or hashish, cocaine (including crack), inhalants, hallu-

cinogens (including phencyclidine [PCP], lysergic acid diethylamide [LSD], and Ecstasy [MDMA]), heroin, or prescription-type psychotherapeutics used nonmedically, which include stimulants, sedatives, tranquilizers, and pain relievers. Illicit drug use refers to use of any of these drugs.

**Past Month Daily Cigarette Use**  
A respondent was defined as having past month daily cigarette use if he or she smoked part or all of a cigarette on each of the past 30 days.

**Past Month Use** · This measure indicates use of a specific drug in the 30 days prior to the interview. Respondents who indicated past month use of a specific drug also were classified as lifetime and past year users.

**Past Year Use** · This measure indicates use of a specific drug in the 12 months prior to the interview. This definition includes those respondents who used the drug in the 30 days prior to the interview. Respondents who indicated past year use of a specific drug also were classified as lifetime users.

**Prevalence** · Prevalence is a general term used to describe the estimates for lifetime, past year, and past month substance use, dependence or abuse, or other behaviors of interest within a given period (e.g., the past 12 months). The latter include delinquent behavior, driving under the influence of alcohol or drugs, perceived need for alcohol or illicit drug use treatment, serious psychological distress, treatment for mental health problems, treatment for a substance use problem, and unmet need for treatment for mental health problems.

**Prior Year Marijuana Use** · A respondent was defined as engaging in prior year marijuana use if he or she

used marijuana or hashish 12 to 23 months prior to the interview date.

**Psychoactive Drugs** · Psychotherapeutic drugs are generally prescription medications that also can be used illicitly to “get high” or for other effects. These include pain relievers, sedatives, stimulants, tranquilizers.

**Psychotherapeutic Drugs** · psychotherapeutic drugs are prescription-type medications with legitimate medical uses as pain relievers, tranquilizers, stimulants, and sedatives.

**Smokeless Tobacco Use** · Measures of use of smokeless tobacco in the respondent’s lifetime, the past year, and the past month.

**Tobacco Product Use** · This measure indicates use of any tobacco product: cigarettes, chewing tobacco, snuff, cigars, and pipe tobacco. Tobacco product use in the past year includes past month pipe tobacco use. Tobacco product use in the past year does not include use of pipe tobacco more than 30 days ago but within 12 months of the interview because the survey did not capture this information. Measures of tobacco product use in the respondent’s lifetime, the past year, or the past month also do not include use of cigars with marijuana in them (blunts).

**Treatment for a Substance Use Problem** · Respondents were asked if they had received treatment for illicit drug use, alcohol use, or both illicit drug and alcohol use in the past 12 months in any of the following locations: a hospital overnight as an inpatient, a residential drug or alcohol rehabilitation facility where they stayed overnight, a drug or alcohol rehabilitation facility as an outpatient, a mental health facility as an outpatient, an emergency room, a private doctor’s office, prison or jail, a self-help group, or some other place.

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