



# **Kansas Substance Abuse Epidemiological Indicators Profile**



Submitted to: Synectics for Management  
Decisions, Inc.

Submitted by: Kansas Department of Social and  
Rehabilitation Services

## **Acknowledgements**

This document was funded through a grant awarded by the U.S. Department of Health and Human Services, Public Health Service, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention under contract through Synectics for Management Decisions, Inc. This report was made possible through the contributions and collective expertise of individuals representing the many agencies and organizations that comprise the Kansas Substance Abuse Profile Team, who offered their time and expertise in the service of completing this project. Additional thanks are extended to the Kansas Epidemiological Profile Design Team, who contributed to the data collection, technical writing, and facilitated development of this document.

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## **EXECUTIVE SUMMARY**

### **INTRODUCTION**

Substance abuse is the most preventable underlying cause of disease and death in Kansas. Thousands of individuals lose their lives to substance abuse each year. Health care costs for treating substance abuse related complications have reached a staggering amount. According to the Centers for Disease Control and Prevention, cigarette use alone accounts for over \$700 million in direct health care costs per year in Kansas. Illicit drugs continue to be the driving force behind many criminal activities. With many correctional facilities already at capacity, substance abuse related crimes are draining public resources. Tax revenues currently collected on alcohol, tobacco, and other drugs are currently substantially lower than estimated health care costs.

This document provides an in-depth look at substance abuse related consequences and consumption patterns. Information is presented from health agencies, treatment agencies, law enforcement agencies, and revenue agencies. The goal is to provide a comprehensive look at the current state of substance abuse so that priority areas may be identified and addressed. Utilizing information from multiple agencies and partners allows for a more complete picture of substance abuse related consequence and consumption pattern. During the compilation of various data sources, specific data gaps have been identified in the realm of substance abuse prevention. These data gaps, while not as significant as the information available, provide examples of possible improvements to build a completely comprehensive picture of substance abuse in Kansas.

### **ALCOHOL RELATED CONSEQUENCES AND CONSUMPTION**

Alcohol is the most commonly consumed substance with the potential for dependence or abuse by both adults and youth. Among adults, alcohol consumption in a controlled manner may even produce some health benefits. However, 13.1% of adults aged 18 years and older report binge drinking in the past 30 days. Binge drinking is highly correlated with acute alcohol deaths as well as alcohol related motor vehicle deaths. Additionally, nearly 4% of adults aged 18 years and older are classified as heavy drinkers. Heavy drinking over a prolonged period of time is highly correlated with chronic liver disease.

Consumption of alcohol by individuals under the age of 21 is illegal in Kansas. However, 54.7% of High School Seniors report drinking alcohol in the past 30 days. Perhaps of even more concern is the fact that nearly 1 in 10 youth in 6<sup>th</sup> grade report drinking alcohol in the past 30 days. Nearly 1 in 4 youth who have tried alcohol did so before the age of 13. This early initiation increases the potential for developmental impacts as well as lifelong dependence or abuse of alcohol, and its consequences.

In total, 8.2% of Kansans aged 12 years or older meet the criteria for alcohol dependence or abuse. Among individuals in the 18-25 years age group, this value is over double the overall population with 20.7% of individuals aged 18-25 years meeting the criteria for alcohol dependence or abuse. This dependence or abuse leads to many adverse outcomes in Kansas. The rate of arrests for Driving Under the Influence (DUI) in Kansas is

comparable to national estimates with a value of 495.8 per 100,000 population in Kansas in 2005. This rate is over four times higher among males than females in Kansas. The age-adjusted death rate for acute alcohol intoxication is 0.4 per 100,000 population, nearly twice the national estimates. These acute conditions are heavy dependent upon binge drinking in the population and provide measurable short-term objectives for alcohol dependence or abuse prevention efforts.

The age-adjusted death rate from chronic liver disease has increased over the past 5 years, and the age specific death rate among individuals 65 years and older is much higher than all other age groups. These data points illustrate the impact of an aging population and the need for prevention efforts to reduce the burden of chronic conditions associated with alcohol.

### **TOBACCO RELATED CONSEQUENCES AND CONSUMPTION**

Tobacco use is the number one preventable underlying cause of death in Kansas. According to the Centers for Disease Control and Prevention nearly 4,000 adult Kansans lose their life to cigarette use each year. While no level of cigarette use is deemed safe, 17.8% of adults aged 18 years and older report being current smokers. This percentage has decreased steadily over the past 5 years. The prevalence of cigarette use is much higher among younger age groups and individuals of lower socioeconomic status. In addition, smokeless tobacco is used by 1 in 10 adult males in Kansas resulting in additional tobacco related consequences each year. Another high risk population is pregnant women. Currently, 12.4% of women report smoking during their pregnancy. This value is higher than national estimates of 10.3% of pregnant women reporting smoking during pregnancy.

The purchase or consumption of tobacco products by youth under the age of 18 years is illegal in Kansas. However, over 21% of high school youth report smoking in the past 30 days and 6% of middle school youth report smoking in the past 30 days. School based suspensions and expulsions related to tobacco have numbered nearly 650 annually. Over 1 in 10 high school youth report using smokeless or spit tobacco in the past 30 days, with males reporting a prevalence that is five times that of female students.

The age-adjusted death rate from lung cancer has remained level over the past 5 years despite the steady declines in current adult smokers. This can be attributed, in part, to the long latency period of lung cancer. The age-adjusted death rate from cardiovascular disease has steadily decreased over the past 5 years. This may be attributed, in part, to the decrease in current adult smokers. However, as only an attributable fraction of cardiovascular disease deaths are attributed to smoking it is difficult to make an association. A sustained reduction in the number of adult smokers will produce a future decrease in chronic conditions related to tobacco use.

## **ILLCIT DRUG RELATED CONSEQUENCES AND CONSUMPTION**

Illicit drug use has multiple adverse consequences. Individuals are often negatively impacted physically, socially, and mentally by illicit drug use. In addition, families and communities suffer as a result.

In Kansas only a small portion of the overall deaths are attributed to illicit drug use. Kansas has a lower than national crude rate of arrest for possession/consumption/sale of illicit drugs and methamphetamine lab and equipment seizures have decreased since 2001. Overall, 2.7% of Kansans meet clinical criteria for illicit drug abuse or dependence, which is about the same as national estimates.

Marijuana was the highest reported illicit drug used among adults in Kansas (4.6%). Individuals in the 18-25 years age group had the highest percentage of reported use. Second in reported illicit drug use by Kansas adults was non-medical use of psychotherapeutics, particularly pain relievers (1.3%). Only a relatively small portion of the adult population reported using other illicit drugs (cocaine, hallucinogens, and inhalants).

Marijuana was also the illicit drug most often used by Kansas youth (grades 9-12). Almost one third of students reported using marijuana at least once in their lifetime (32.5%), yet the rate of current (30-day) use has steadily decreased over the past five years. The current percentage of youth who reported past 30-day use of marijuana (15%) is below the national average (17.4%). Of all the legal and illegal substances, marijuana is the only substance in which Kansas youth are below the national percentage of students reporting use. The second most reported illicit drug used by youth was inhalants (3.6% 30-day, 11.8% lifetime). Likely due to ease of availability, almost two percent more Kansas 10<sup>th</sup> grade students reported current use of inhalants than did older 12<sup>th</sup> grade students.

## **OVERALL SUBSTANCE ABUSE RELATED CONSEQUENCES AND CONSUMPTION**

Suicide, homicide, depression and other mental disorders, domestic violence, property crime, and prostitution are examples of the many consequences of substance abuse. These phenomena are not necessarily caused by substance abuse but are often associated with substance abuse. The high rate of co-occurrence of substance use disorders and other psychiatric disorders is well established and typically associated with negative outcomes. Co-morbidity with substance use has been linked to depression/mood disorders, post-traumatic stress disorder, attention deficit hyperactivity disorder, and schizophrenia.

The age-adjusted death rate from suicide has increased slightly in Kansas and is the highest it has been in five years up from 11.1 per 100,000 population in 2001 to 13.4 per 100,000 population in 2005. The highest percentage of suicide deaths are found among the 25-64 years age group. Kansas has a higher age-adjusted death rate from suicide than the national estimate.

Violence is a common side effect of substance use. The number of reported deaths from homicide has decreased slightly in Kansas over the past five years to an age-adjusted rate of 4.4 per 100,000 population which is lower than the national age-adjusted rate of 6.1 per 100,000 in 2005. Prostitution arrests are also lower in Kansas (12.7 per 100,000 population) than the national estimate (28.8 per 100,000 population).

### **DATA GAPS SUMMARY**

During the creation of this profile, a variety of data gaps have been identified. While these gaps exist, they do not prohibit the interpretation or prioritization of substance abuse prevention efforts in Kansas.

Minority populations are under represented by the data regarding substance abuse. To this end, recommendations and interpretations cannot be made concerning small population groups in Kansas such as the Asian American population or Native populations. This is not the same as finding no substance abuse related consequences among these populations but rather no inferences can be made at this time concerning these populations because of inadequate information available from the small number of individuals within each population subgroup.

Additionally, by utilizing a population based approach to identifying substance abuse consequences and consumption patterns certain groups are excluded. The largest of these populations is the offender population, both adult and youth. Although these individuals are included in population based estimates while they are not institutionalized, the population based estimates of consumption do not include this population. Again, this is not the same as finding no substance abuse related consequences among this population but rather no inferences can be made at this time concerning the offender population.

Due to the unique population distribution in Kansas it is difficult to provide community specific information to all communities in Kansas. Small population communities and counties may have a higher prevalence or age-adjusted death rate from a particular cause, however due to the small size of the underlying population it may not be possible to identify this priority area. Again, this is not the same as finding no substance abuse related consequences among this population but rather no inferences can be made at this time concerning small populations.

## **Introduction**

Substance abuse is the most preventable underlying cause of disease and death in Kansas. In addition to the substantial health impact, few Kansans can claim they are unaffected by substance abuse. Stories of alcohol addiction and treatment have become common place in Kansas communities. Family members discuss loved ones lost to lung cancer and heart attacks caused by tobacco use. Tales of meth related crimes ravaging small communities are declared in newspaper headlines. Most of these events are preventable when effectively addressed with evidence-based programs, policies, and practices that align with data-driven community needs.

The Kansas Substance Abuse Profile is a document created with program planning and evaluation in mind. This document provides a multifaceted approach to substance abuse in Kansas communities. Each indicator, or topic, is designed to be used as one piece of a much larger puzzle. By combining the indicators in a meaningful way, a picture can be developed of the local substance abuse challenges. This picture is the first step in determining the appropriate interventions and programs to have a significant positive impact on the community.

The Kansas Substance Abuse Profile separates out the three major components of substance abuse: Alcohol, Tobacco, and Other Drugs. Each of these substances is significantly different than the others, yet typically no substance is found alone. Within each substance, information is presented on two additional topics: Consequences (unintended outcomes) and Consumption (use).

The Kansas Substance Abuse Profile does not provide novel information. Instead, the goal of the profile is to compile information from various sources to provide a comprehensive picture of the impact of substance abuse in Kansas. Data may be presented in a new format or compiled into aggregate forms in order to be consistent. The compiled information includes, but is not limited to, information from health agencies, treatment agencies, law enforcement agencies, and revenue agencies.

For each indicator a brief summary is provided that explains why it has been included in the Kansas Substance Abuse Profile. In addition, a short summary of the results is included to provide overarching themes. Following the summary, the full presentation of the information is given. Where possible, information is presented based upon gender, race, ethnicity, age, education, and income. This information is included as it might be relevant to program targeting and interventions.

## **Using Indicator Summary Sheets**

The first page of each indicator summarizes the information available on that particular indicator. This summary includes background information on why the indicator is important to substance abuse prevention, how the indicator will change as prevention efforts increase, as well as bulleted summary points about the current data.

## **Using Tables**

Multiple formats are utilized to present a wealth of information in a meaningful and useful manner. Tables of data are prevalent throughout the report and provide detailed information on each individual indicator. Mortality or death related tables utilize age-adjusted rates where possible to provide directly comparable values. Three years of information are combined to allow additional stratification by age, gender, race, and ethnicity. For example, chronic liver disease has an overall age-adjusted death rate of 7.0 per 100,000 population. Males have a higher age-adjusted death rate (9.4 per 100,000 population) than females (4.7 per 100,000 population) in Kansas. This information may be useful for targeting specific high risk groups. In addition to the age-adjusted rates, the absolute number of deaths is also listed for each mortality or death indicator.

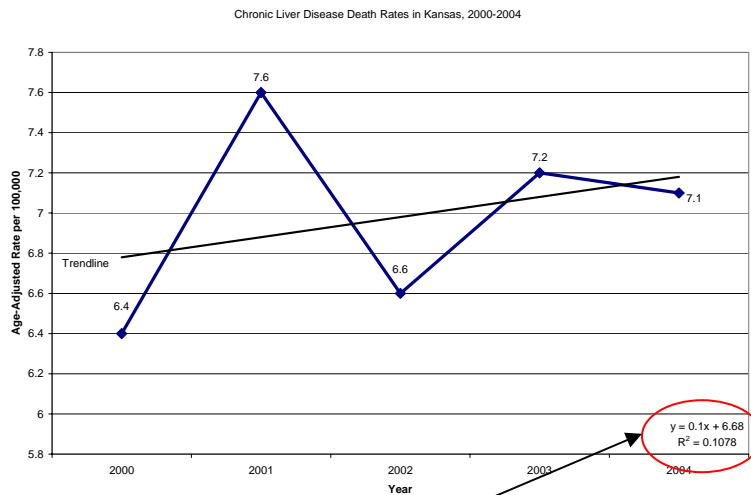
Information on non-mortality consequences is often expressed in crude rates, or the number of occurrences per 100,000 population. While this does not remove the impact of age upon the outcome, it does provide a more comparable number to look across the population. For example, the crude rate of Driving Under the Influence (DUI) arrests in Kansas is 495.8 per 100,000 population. Males have a significantly higher crude rate for DUI (818.6 per 100,000 population) than females (181.3 per 100,000 population).

Consumption or use is expressed as the prevalence among the population. This value represents the percentage of the population that reports consuming the specific product over a given time period. For example, 47.8% of the population aged 18 years and older report consuming alcohol during the past 30 days whereas only 13.1% of the population aged 18 years and older report binge drinking during the past 30 days. This information may be useful for targeting specific high risk groups with targeted interventions to reduce overall use patterns.

## Using Graphs

Where possible, trend information is presented in graphical format. Five years of information are presented to produce an accurate overall trend that is not influenced by dramatic yearly changes. A trendline has been added to graphs to give an overall impression of increases or decreases over time for the general audience of the report. For the purpose of this document a trendline, also known as a best fit line, is a linear line that minimizes the distance between all points in the 5-year trend and the line itself. The equation for the trendline is provided as well as the R-squared, a measure of how well the line fits the data.

Example:



Basic Structure of Best Fit Line:  $y = \alpha x + \beta$

Example of Best Fit Line:  $y = 0.1x + 6.68$

Example of R-squared:  $R^2 = 0.1078$

$\alpha$  (alpha) = The slope of the best fit line. This value represents how quickly the value is changing on an annual basis. A positive value represents an increase; a negative value represents a decrease.

B (beta) = The intercept of the best fit line. This value represents the approximate value of the indicator prior to the 5-year trend.

$R^2$  = This value represents how well the best fit line approximates the data. The highest value is 1, which represents a perfect linear fit. The closer this value is to 1, the better the overall fit

The above mentioned detailed technical information is added for the audience that wishes to use more detailed epidemiological information for the interpretation of trend information.

## **Alcohol Indicators**

**1. Indicator:** Number of deaths from chronic liver disease per 100,000 population

**Why is this indicator important?**

Heavy drinking over a prolonged period of time is the major cause of deaths due to chronic liver disease and cirrhosis.

**How do we want this indicator to change?**

As overall consumption of alcohol decreases, this indicator is expected to decrease slightly.

As overall heavy consumption and the average number of drinks per day decreases, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Health and Environment, Center for Health and Environmental Statistics, Office of Vital Statistics, Death Certificates 2002-2004.

**Important findings**

- Males have a significantly higher age-adjusted death rate than females.
- Age-specific death rates are highest among those individuals aged 65 and older. This highlights the association between lifelong heavy drinking and chronic disease.
- The African American population has a slightly higher age-adjusted death rate than the white population. Individuals of Hispanic ethnicity have a higher age-adjusted death rate from chronic liver disease than those of non-Hispanic ethnicity. Care should be taken when interpreting ethnicity information as many individuals have missing values.
- Over the past 5 years the age-adjusted death rates for chronic liver disease have increased slightly in Kansas. Compared to the National estimates, Kansas has a lower age-adjusted death rate from chronic liver disease.

## Graph of Five-Year Mortality Trend

During the past 5-years, the age-adjusted death rate from chronic liver disease has increased slightly. Caution should be taken when making this interpretation as year to year rates are significantly different from each other.

Nationally, the age-adjusted death rate from chronic liver disease in 2005 was 9.3 per 100,000. Kansas has a significantly lower chronic liver disease age-adjusted death rate than the National estimates for the year 2005.

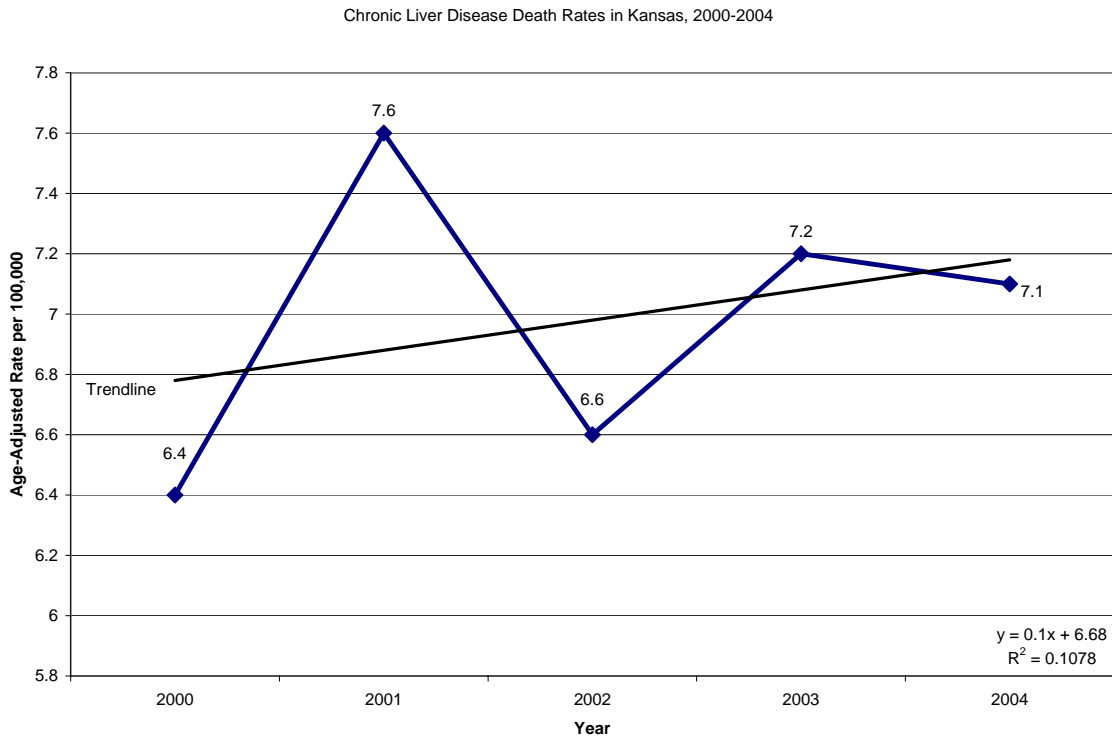


Table 1.1 Number of deaths and age-adjusted death rates due to Chronic Liver Disease for State of Kansas by gender and age group, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000			Age Specific Rates Per 100,000		
	Overall	Gender		Age Group (years)			Overall	Gender		Age Group (years)		
		Male	Female	0-24	25-64	65+		Male	Female	0-24	25-64	65+
Statewide	583	368	215	-	368	214	7.0	9.4	4.7	-	8.9	20.1

Table 1.2 Number of deaths and age-adjusted death rates due to Chronic Liver Disease for the State of Kansas by ethnicity and race, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000					
	Overall	Ethnicity*		Race			Overall	Ethnicity*		Race		
		Hispanic	Non-Hispanic	White	African American	Other		Hispanic	Non-Hispanic	White	African American	Other
Statewide	583	31	519	539	31	13	6.98	17.1	6.4	6.9	8.3	-

\*Ethnicity was not recorded for all individuals in the database; therefore caution should be taken when making comparisons to overall numbers and rates

## **2. Indicator:** Number of deaths from acute alcohol poisoning per 100,000 population

### **Why is this indicator important?**

Acute intoxication of alcohol can result in increased injuries, decreased motor function, and death. Alcohol is a known Central Nervous System (CNS) depressant and high doses of alcohol over a short period of time can result in death.

### **How do we want this indicator to change?**

As overall consumption of alcohol decreases, this indicator is expected to slightly decrease.

As overall public education and intervention programs increase, this indicator is expected to decrease.

As overall binge drinking of alcohol decreases, this indicator is expected to decrease.

### **Where did we get the data?**

Kansas Department of Health and Environment, Center for Health and Environmental Statistics, Office of Vital Statistics, Death Certificates 2002-2004.

### **Important findings**

- Overall death rates and the number of deaths from acute alcohol consumption are low in Kansas. Nationally, age-adjusted death rates from acute alcohol consumption are .2 per 100,000. The age-adjusted death rate in Kansas is approximately twice the rate nationally. This may be a construct of very small numbers both in Kansas and Nationally.
- Males have a higher number of deaths from acute alcohol consumption, however due to small sample sizes age-adjusted death rates could not be calculated.
- Community level analysis is not possible at this time due to small sample sizes.
- Time trend analysis is not possible at this time due to small sample sizes.

Table 2.1 Number of deaths and age-adjusted death rates due to Acute Alcohol Poisoning for the State of Kansas by gender and age group, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000					
	Overall	Gender		Age Group (years)			Overall	Gender		Age Group (years)		
		Male	Female	0-24	25-64	65+		Male	Female	0-24	25-64	65+
Statewide	29	19	10	-	26	-	0.4	-	-	-	0.6	-

Table 2.2 Number of deaths and age-adjusted death rates due to Acute Alcohol Poisoning for the State of Kansas by ethnicity and race, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000					
	Overall	Ethnicity*		Race			Overall	Ethnicity*		Race		
		Hispanic	Non-Hispanic	White	African American	Other		Hispanic	Non-Hispanic	White	African American	Other
Statewide	29	-	24	25	-	-	0.4	-	.3	0.3	-	-

\*Ethnicity was not recorded for all individuals in the database; therefore caution should be taken when making comparisons to overall numbers and rates

### **3. Indicator:** Number of fatal motor vehicle crashes that are alcohol related

#### **Why is this indicator important?**

Nationally, it is estimated that 41% of traffic fatalities are related to drinking and driving. Research has shown that the leading cause of death among youth and young adults is alcohol related vehicle crashes.

#### **How do we want this indicator to change?**

As overall consumption of alcohol decreases, this indicator is also expected to decrease.

As overall public education and intervention programs increase, this indicator is expected to decrease.

#### **Where did we get the data?**

Kansas Department of Transportation – Kansas Accident Records System (KARS), 2002-2004

#### **Important findings**

- Males have a dramatically higher age-adjusted death rate related to alcohol-related motor vehicle crashes than females.
- Rural communities have the highest age specific death rate among adults aged 25-64. Urban communities have the highest age specific rate among youth and young adults aged 0-24.
- Over the past 4 years, the age-adjusted death rate from alcohol related motor vehicle crashes has decreased slightly.

## Graph of Four-Year Mortality Trend

During the past 4-years, the age-adjusted death rate from alcohol related motor vehicle crashes has decreased slightly. Caution should be taken when making this interpretation as it appears that from 2002 to 2003 a significant decrease occurred and subsequently leveled off in 2004 and 2005.

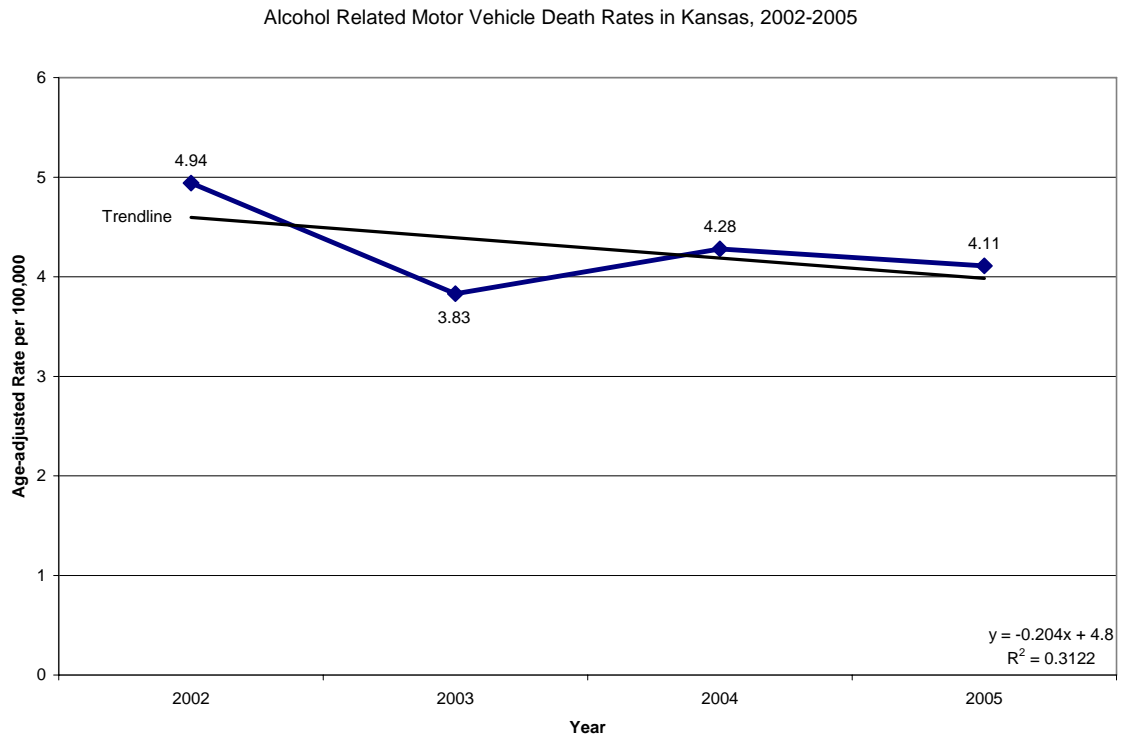


Table 3.1 Number of deaths and age-adjusted death rates due to Alcohol Related Motor vehicle crashes for the State of Kansas by gender and age group, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000			Age Specific Rates Per 100,000		
	Overall	Gender		Age Group (years)			Overall	Gender		Age Group (years)		
		Male	Female	0-24	25-64	65+		Male	Female	0-24	25-64	65+
Statewide	364	308	56	143	213	8	4.4	7.2	1.4	4.8	5.1	-

**4. Indicator:** Percentage of persons aged 12 and older meeting Diagnostic & Statistical Manual for Mental Disorders – Fourth Edition (DSM-IV) criteria for alcohol abuse or dependence

**Why is this indicator important?**

DSM-IV criteria are a clinical assessment of abuse or dependence. Individuals identified via DSM-IV criteria as being dependent or abusing alcohol may be negatively impacted physically, socially, and mentally by their condition and typically require interventions and treatments. Additionally, the community and others surrounding the individual may experience similar negative outcomes.

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

As overall consumption of alcohol, binge drinking, and heavy drinking decrease, this indicator is expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

National Survey on Drug Use or Health, 2002-2003.

**Important findings**

- Highest percentage of adults ages 18-25 are identified via DSM-IV criteria as being dependent or abusing alcohol. This percentage is significantly higher than any other age group.
- Compared the National estimates for the percentage of individuals aged 12 and older who meet the DSM-IV criteria as being dependent or abusing alcohol, Kansas has an approximately equal proportion of individuals who meet this criteria.

Table 4.1 Percentage of persons aged 12 and older meeting DSM-IV criteria for alcohol abuse or dependence for the State of Kansas by age group, 2003-2004

Region	Age Group (years)							
	Overall		12-17		18-25		26 and Older	
	Estimate	95% Predictive Interval	Estimate	95% Predictive Interval	Estimate	95% Predictive Interval	Estimate	95% Predictive Interval
Statewide	8.2%	6.9 – 9.6	7.1%	5.5 – 9.2	20.7%	17.7 – 24.1	5.8%	4.50– 7.6

**5. Indicator:** Number of school suspensions and expulsions related to alcohol

**Why is this indicator important?**

School suspensions and expulsions related to alcohol abuse provide an additional indicator concerning dependence and abuse. Moreover, individuals who are suspended or expelled due to a substance abuse problem will have additional constraints and challenges if they are unable to complete their high school education.

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

As age of initiation increases, this indicator is expected to shift towards high school and decrease overall.

As school policies concerning substance abuse increase, this indicator is expected to initially increase and then decrease in the long-term.

**Where did we get the data?**

Kansas State Department of Education, as reported by Public Schools and School Districts in aggregate form for school years ending in 2004,2005, and 2006.

**Important findings**

- Universally, as age increases the number of suspensions related to alcohol also increases
- More information is required in the future to determine gender, racial, and ethnic differences in the number of suspensions. Additionally, information concerning the proportion of schools with policies related to substance abuse would be required for further analysis.

Table 5.1 Number of school suspensions and expulsions for the State of Kansas by grade level, School years ending in 2004 -2006

	<b>Number</b>			
		<b>Grade Level</b>		
<b>Region</b>	<b>Overall</b>	<b>Elementary</b>	<b>Middle</b>	<b>High</b>
Statewide	138	5	16	117

**6. Indicator:** Number of citations written for Minor in Possession (MIP) of alcohol

**Why is this indicator important?**

The impact of underage drinking in communities is a high priority nationally and in Kansas. Consumption of alcohol by individuals under the age of 21 is illegal in Kansas. Early initiation of alcohol consumption has been shown to be associated with dependence, abuse, and adverse chronic and acute outcomes.

**How do we want this indicator to change?**

As the age of initiation of alcohol increases, this indicator is expected to decrease.

As overall youth consumption of alcohol decreases, this indicator is expected to decrease.

As overall public education and intervention programs increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Bureau of Investigation as reported by offense and arrest reports submitted by local law enforcement agencies, 2005.

**Important findings**

- Overall, the number of citations for a minor in possession of alcohol given to males is higher than the number given to females.
- A high number of citations for minor in possession of alcohol are given to youth aged 16-18 as well as 19-20.

Table 6.1 Number of citations for Minor in Possession for the State of Kansas by gender and age group, 2005

Region	Overall	Gender		Age Groups		
		Male	Female	15 and Under	16-18	19-20
Statewide	4,553*	3,102	1,451	300	2,059	2,194

**\* 611 arrests by state agencies (ABC/KHP) without location of offense to determine county.**

\* Summary data was collected for overall total but not individual counties. Not all summary agencies reported this data.

**7. Indicator:** Number of arrests for Driving Under the Influence (DUI)

**Why is this indicator important?**

In Kansas, it is illegal to operate a motor vehicle if your blood or breath alcohol concentration (BAC) is .08 or above. In addition to being an illegal activity, having a high BAC also increases an individual's chances of being part of a motor vehicle accident.

**How do we want this indicator to change?**

As overall alcohol consumption decrease, this indicator is expected to decrease.

As overall binge drinking decreases, this indicator is expected to decrease.

As overall public education and intervention programs increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Bureau of Investigation as reported by offense and arrest reports submitted by local law enforcement agencies, 2005.

**Important findings**

- The number of citations for DUI given to males is significantly higher than the number given to females.
- As age increases, the number of citations given for DUI decreases significantly.
- The rate of arrests given for DUI offences in Kansas (495.8 per 100,000) is approximately equal to the national rate (458.1 per 100,000).

Table 7.1 Number and rate of arrests for Driving Under the Influence (DUI) for the State of Kansas by gender and age group, 2005

		<b>Gender*</b>		<b>Age Group (years)*</b>					
	<b>Overall</b>	<b>Male</b>	<b>Female</b>	<b>18-24</b>	<b>25-34</b>	<b>35-44</b>	<b>45-54</b>	<b>55-64</b>	<b>65+</b>
Number	13,330	10,875	2,466	4,264	3,689	2,831	1,865	561	131
Crude Rate per 100,000	495.8	818.6	181.3	1547.2	1057.5	673.5	526.6	254.7	36.8

**KHP – 2,801 DUI Arrests KWP-25 DUI Arrests \*not all agencies in county reported gender and age information**

**8. Indicator:** Number of individuals under community supervision as a result of 4<sup>th</sup> time or more Driving Under the Influence (DUI) arrest

**Why is this indicator important?**

In Kansas, it is illegal to operate a motor vehicle if your blood or breath alcohol concentration (BAC) is .08 or above. In addition to being an illegal activity, having a high BAC also increases an individuals chances of being part of a motor vehicle accident. In addition, individuals who have been released with a 4<sup>th</sup> time DUI arrest place additional burden on the community and resources.

**How do we want this indicator to change?**

As overall alcohol consumption decreases, this indicator is expected to decrease.

As overall binge drinking decreases, this indicator is expected to decrease.

As overall public education and intervention programs increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Sentencing Commission - FY2004-2006.

**Important findings**

- The number of convictions for a 4<sup>th</sup> time or more DUI arrest is significantly higher among males than females in Kansas.
- The number of convictions for a 4<sup>th</sup> time or more DUI arrest increases with age until peaking in the 35-44 age range. The number decreases following the peak.

Table 8.1 Number of individuals under community supervision for 4th time Driving Under the Influence (DUI) arrests for the State of Kansas by gender and age group, FY 2004-2006

Region	Overall	Gender		Age Group (years)					
		Male	Female	18-24	25-34	35-44	45-54	55-64	65+
Statewide	2023	1793	182	59	379	791	550	150	38
Crude Rate per 100,000	25.1	45.0	4.5	7.1	36.2	62.7	51.8	22.7	3.6

**9. Indicator:** Number of incidences of domestic abuse reported where alcohol is suspected as being used by at least one individual involved

**Why is this indicator important?**

Alcohol is a known Central Nervous System (CNS) depressant and influences cognitive reasoning and abilities. In addition, alcohol is associated with violent behaviors. Unlike many other indicators, this indicator provides information on other individuals directly impacted by alcohol consumption.

**How do we want this indicator to change?**

As overall alcohol consumption decreases, this indicator is expected to also decrease.

As overall public education and intervention programs increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Bureau of Investigation as reported by offense and arrest reports submitted by local law enforcement agencies, 2005.

**Important findings**

- Care should be taken when interpreting this indicator as it measures only suspected substance abuse and does not support that information with a diagnostic test. Additionally, this variable represents the number of instances, not the number of individuals.
- The number of incidences of domestic abuse where at least one individual is suspected of using alcohol is higher among males in Kansas than females.
- The peak age for the number of incidences of domestic abuse where at least one individual is suspected of using alcohol is among the 25-34 age group. Further analysis is required to determine which age group has the highest proportion of alcohol related domestic abuse among all domestic abuse cases.
- The peak age for the rate of incidences of domestic abuse where at least one individual is suspected of using alcohol is among young adults in the 18-24 age group.

Table 9.1 Number and rate of incidences of domestic abuse reported where alcohol is suspected

	<b>Gender*</b>			<b>Age Group (Suspect)*</b>						
	<b>Overall</b>	<b>Male</b>	<b>Female</b>	<b>Juvenile</b>	<b>18-24</b>	<b>25-34</b>	<b>35-44</b>	<b>45-54</b>	<b>55-64</b>	<b>65+</b>
Number	4,972*	3,364	979	35	835	1,483	1,217	632	109	15
Crude Rate per 100,000	253.2	72.0	4.9	303.0	425.1	289.5	178.5	49.5	4.2	253.2

\* Summary data was collected for overall total but not individual counties. Not all summary agencies reported this data.

**10. Indicator:** Percentage of persons aged 18 and older reporting any use of alcohol within the past 30 days

**Why is this indicator important?**

Misuse of alcohol is associated with a variety of acute and chronic conditions. This indicator will provide information concerning the overall use of alcohol in each Kansas region. Other indicators such as binge drinking and heavy drinking will present information concerning the misuse of alcohol.

**How do we want this indicator to change?**

Unlike many of the indicators, alcohol consumption is not expected to change over time through interventions. It is important to distinguish between alcohol consumption and misuse of alcohol.

**Where did we get the data?**

Kansas Behavior Risk Factor Surveillance System (BRFSS) – 2003, 2004, and 2005.

**Important findings**

- Males have a higher prevalence of 30-day consumption of alcohol than females in Kansas.
- White individuals exhibit the highest levels of 30-day consumption of alcohol across the state.
- As education and income increase, the 30-day consumption of alcohol also increases.
- As age increases, the 30-day prevalence of alcohol consumption decreases. The major exception to this is that individuals in the 18-24 age group have a lower prevalence than those individuals in the 25-34 age group.
- During the past 5 years, the 30-day prevalence of alcohol consumption in Kansas has decreased. Compared to the national estimates, Kansas has a lower 30-day prevalence of alcohol consumption among adults aged 18 and older.

## Graph of Five-Year Consumption Trend

During the past 5 years, the 30-day consumption of alcohol has decreased slightly.

Nationally, the 30-day prevalence of alcohol consumption was 56.2% in 2005. Kansas has a significantly lower 30-day prevalence of alcohol consumption than the National estimates in 2005.

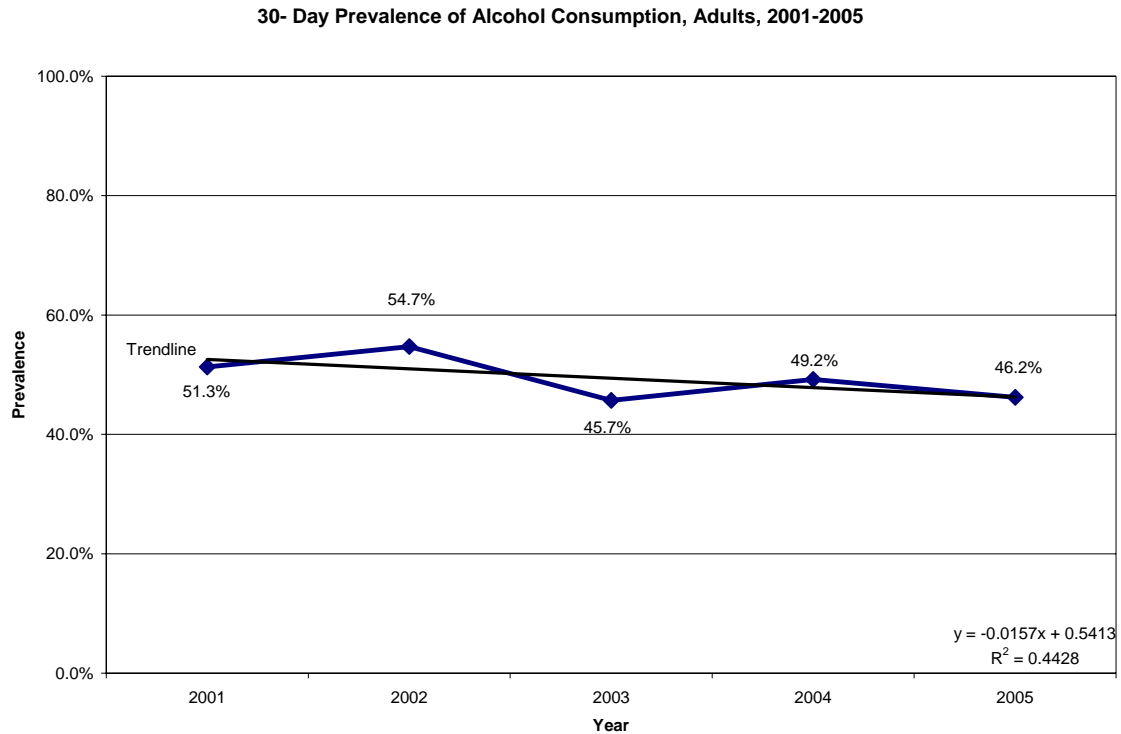


Table 10.1 Percentage of persons aged 18 and older reporting any use of alcohol within the past 30 days for Kansas Counties by gender, race, and ethnicity, 2003-2005

Region	Overall	Gender		Race			Ethnicity	
		Male	Female	White	African American	Other	Hispanic	Non-Hispanic
Statewide	47.8%	56.6%	39.4%	48.7%	33.9%	43.1%	40.0%	48.3%

Table 10.2 Percentage of persons aged 18 and older reporting any use of alcohol within the past 30 days for the State of Kansas by education and income, 2003-2005

Region	Overall	Education				Income				
		< High School	High School or GED	Some College	College Graduate	<\$15,000	\$15,000-\$24,999	\$25,000-\$34,999	\$35,000-\$49,999	\$50,000+
Statewide	47.8%	30.7%	39.1%	49.3%	57.7%	36.5%	37.9%	42.1%	50.1%	63.4%

Table 10.3 Percentage of persons aged 18 and older reporting any use of alcohol within the past 30 days for the State of Kansas by age group, 2003-2005

Region	Overall	Age Group (years)					
		18-24	25-34	35-44	45-54	55-64	65+
Statewide	47.8%	53.4%	57.0%	53.3%	52.2%	45.9%	24.7%

**11. Indicator:** Percentage of persons aged 18 and older reporting having five or more drinks on at least one occasion within the past 30 days

**Why is this indicator important?**

The consumption of five or more drinks on one occasion is the definition of binge drinking. Strong correlations have been found between increased binge drinking and acute alcohol conditions such as injuries, alcohol related vehicle crashes, violence, and fetal alcohol spectrum disorder. There are also associations between binge drinking and chronic liver disease.

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Behavior Risk Factor Surveillance System (BRFSS) – 2003, 2004, and 2005

**Important findings**

- Males have significantly higher prevalence of binge drinking than females.
- Little to no racial or ethnic differences exist in relation to binge drinking.
- Individuals of college age (18-24) and those with some college education exhibit the highest prevalence of binge drinking. It is expected that these two groups overlap significantly, thus producing similar results.
- During the past 5 years, the prevalence of binge drinking in Kansas has decreased. Compared to the national estimates, Kansas has a lower prevalence of binge drinking among adults aged 18 and older.

## Graph of Five-Year Consumption Trend

During the past 5 years, the 30-day prevalence of binge drinking in Kansas has decreased slightly.

Nationally, the 30-day prevalence of binge drinking was 14.4% in 2005. Kansas has a significantly lower 30-day prevalence of binge drinking than the National estimates in 2005.

30- Day Prevalence of Binge Drinking, Adults, 2001-2005

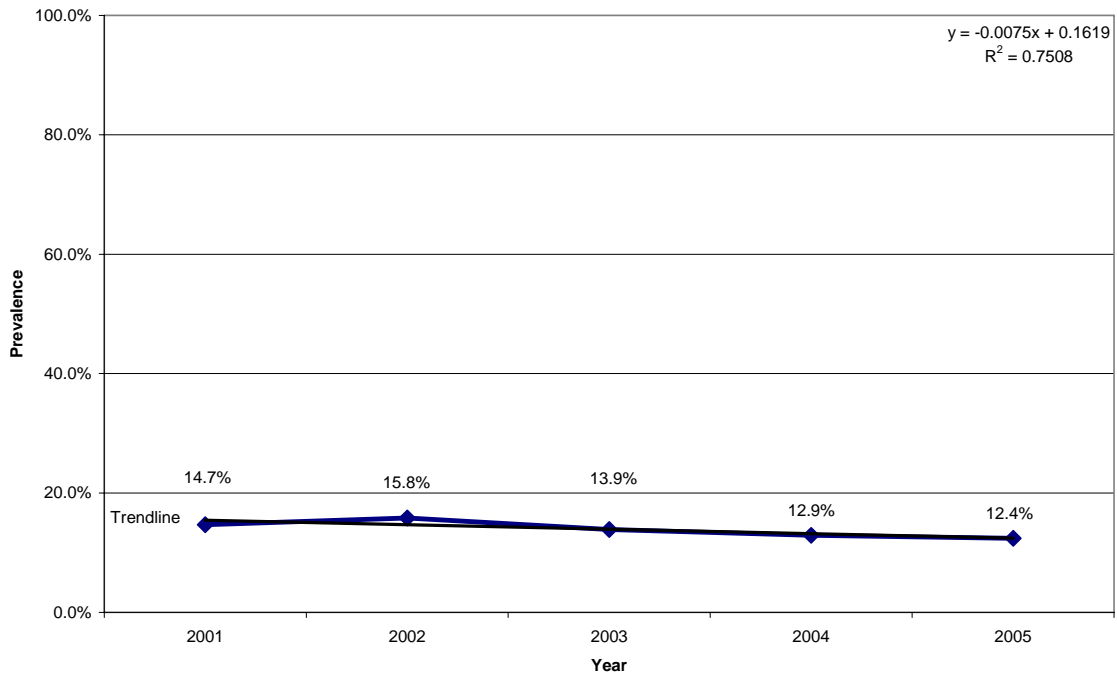


Table 11.1 Percentage of persons aged 18 and older reporting having five or more drinks on at least one occasion within the past 30 days for the State of Kansas by gender, race, and ethnicity, 2003-2005

Region	Overall	Gender		Race			Ethnicity	
		Male	Female	White	African American	Other	Hispanic	Non-Hispanic
Statewide	13.1%	19.6%	7.0%	13.3%	9.2%	12.8%	12.5%	13.2%

Table 11.2 Percentage of persons aged 18 and older reporting having five or more drinks on at least one occasion within the past 30 days for the State of Kansas by education and income, 2003-2005

Region	Overall	Education				Income				
		< High School	High School or GED	Some College	College Graduate	<\$15,000	\$15,000-\$24,999	\$25,000-\$34,999	\$35,000-\$49,999	\$50,000+
Statewide	13.1%	11.9%	12.2%	15.5%	12.1%	17.4%	13.9%	11.6%	13.2%	15.5%

Table 11.3 Percentage of persons aged 18 and older reporting having five or more drinks on at least one occasion within the past 30 days for the State of Kansas by age group, 2003-2005

Region	Overall	Age Group (years)					
		18-24	25-34	35-44	45-54	55-64	65+
Statewide	13.1%	27.5%	18.8%	14.2%	10.9%	6.2%	2.0%

**12. Indicator:** Percentage of persons aged 18 and older reporting average daily alcohol consumption greater than one (women) or two (men) drinks per day

**Why is this indicator important?**

The consumption of greater than one (women) or two (men) drinks on average per day is the definition of heavy drinking. Strong correlations have been found between increased heavy drinking and chronic conditions such as alcohol dependence, chronic liver disease, and increased overall mortality from all causes.

**How do we want this indicator to change?**

As public education and intervention programs increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Behavior Risk Factor Surveillance System (BRFSS) – 2003, 2004, and 2005

**Important findings**

- Males have a higher prevalence of heavy drinking than females in Kansas.
- Few differences exist between racial and ethnic groups. African American adults appear to have a slightly lower prevalence of heavy drinking.
- Individuals with a college education have a lower prevalence of heavy drinking than the overall statewide prevalence.
- No obvious association can be seen between income level and heavy drinking.
- The highest prevalence of heavy drinking is found in the 18-24 age group. This combination with the prevalence of binge drinking could produce a negative synergistic impact on the health of young adults.
- During the past 5 years, the prevalence of heavy drinking has slightly decreased. Compared to the national estimates, Kansas has a lower prevalence of heavy drinking among adults aged 18 and older.

## Graph of Five-Year Consumption Trend

During the past 5 years, the prevalence of heavy drinking in Kansas has decreased slightly.

Nationally, the prevalence of heavy drinking was 4.9% in 2005. Kansas has a significantly lower prevalence of heavy drinking than the National estimates in 2005.

30- Day Prevalence of Heavy Alcohol Consumption, Adults, 2001-2005

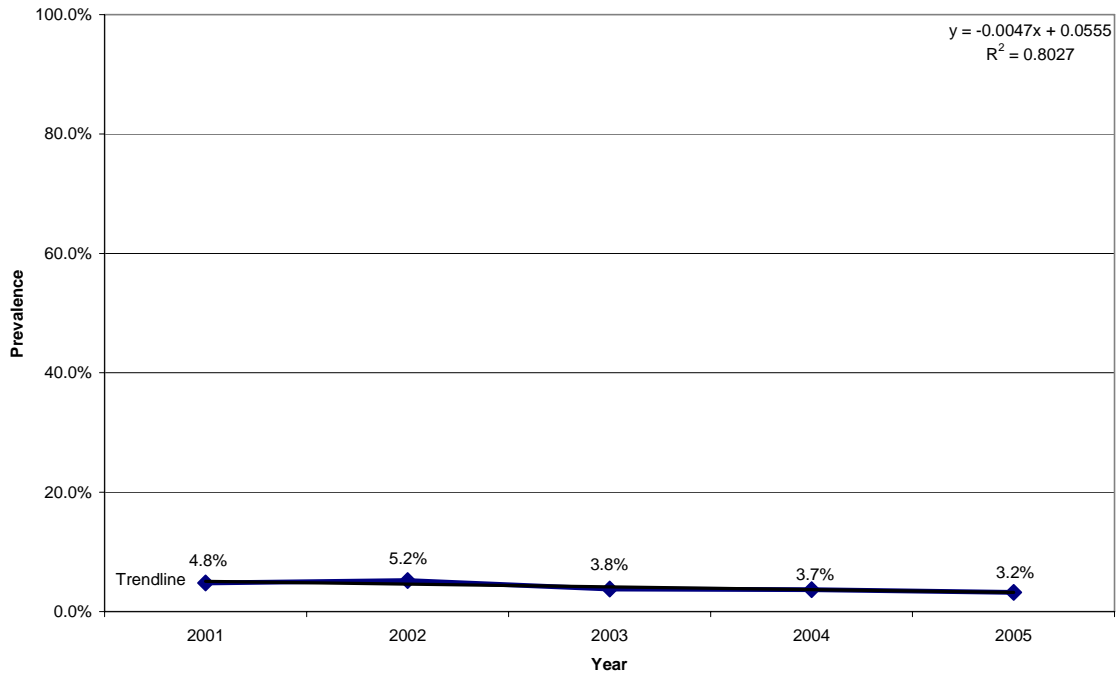


Table 12.1 Percentage of persons aged 18 and older reporting average daily alcohol consumption greater than one (women) or two (men) drinks per day for the State of Kansas by gender, race, and ethnicity, 2003-2005

Region	Overall	Gender		Race			Ethnicity	
		Male	Female	White	African American	Other	Hispanic	Non-Hispanic
Statewide	3.6%	4.7%	2.6%	3.7%	2.1%	3.6%	2.4%	3.7%

Table 12.2 Percentage of persons aged 18 and older reporting average daily alcohol consumption greater than one (women) or two (men) drinks per day for the State of Kansas by education and income, 2003-2005

Region	Overall	Education				Income				
		< High School	High School or GED	Some College	College Graduate	<\$15,000	\$15,000-\$24,999	\$25,000-\$34,999	\$35,000-\$49,999	\$50,000+
Statewide	3.6%	3.7%	4.2%	4.7%	2.1%	4.9%	3.8%	3.7%	3.4%	4.0%

Table 12.3 Percentage of persons aged 18 and older reporting average daily alcohol consumption greater than one (women) or two (men) drinks per day for the State of Kansas by age group, 2003-2005

Region	Overall	Age Group (years)					
		18-24	25-34	35-44	45-54	55-64	65+
Statewide	3.6%	8.3%	3.6%	3.2%	3.2%	3.1%	1.4%

**13. Indicator:** Percentage of women who drank alcohol during pregnancy

**Why is this indicator important?**

Consumption of alcohol during pregnancy is directly related to Fetal Alcohol Spectrum Disorders (FASD). Research suggests the national estimate of FASD during the 1980s and 1990s to be between .5 and 2 per 1,000 births.

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Health and Environment, Center for Health and Environmental Statistics, Office of Vital Statistics, Birth Certificates 2002-2004.

**Important findings**

- The overall prevalence of drinking during pregnancy is extremely low. The highest prevalence of drinking during pregnancy is found in suburban and urban regions throughout Kansas.
- African American women report a slightly higher prevalence of drinking during pregnancy than White women or women of Other races. However, this value is still very small.
- Hispanic women report a slightly lower prevalence of drinking during pregnancy than non-Hispanic women.
- Age does not appear to be a factor affecting the prevalence of alcohol consumption by pregnant women.
- Over the past 5 years, the prevalence of drinking during pregnancy decreased slightly. This may be a construct of unstable, small values. Compared to the national estimates for drinking during pregnancy, Kansas has a lower prevalence of drinking during pregnancy.

## Graph of Five-Year Consumption Trend

During the past 5 years, the prevalence of drinking during pregnancy in Kansas has decreased slightly. Due to the small proportion of individuals who report drinking during pregnancy and the sensitive nature of the indicator, hesitance must be shown when reporting this decrease.

Nationally, the prevalence of drinking during pregnancy was .73% in 2005. Kansas has a significantly lower prevalence of drinking during pregnancy than the National estimates in 2005.

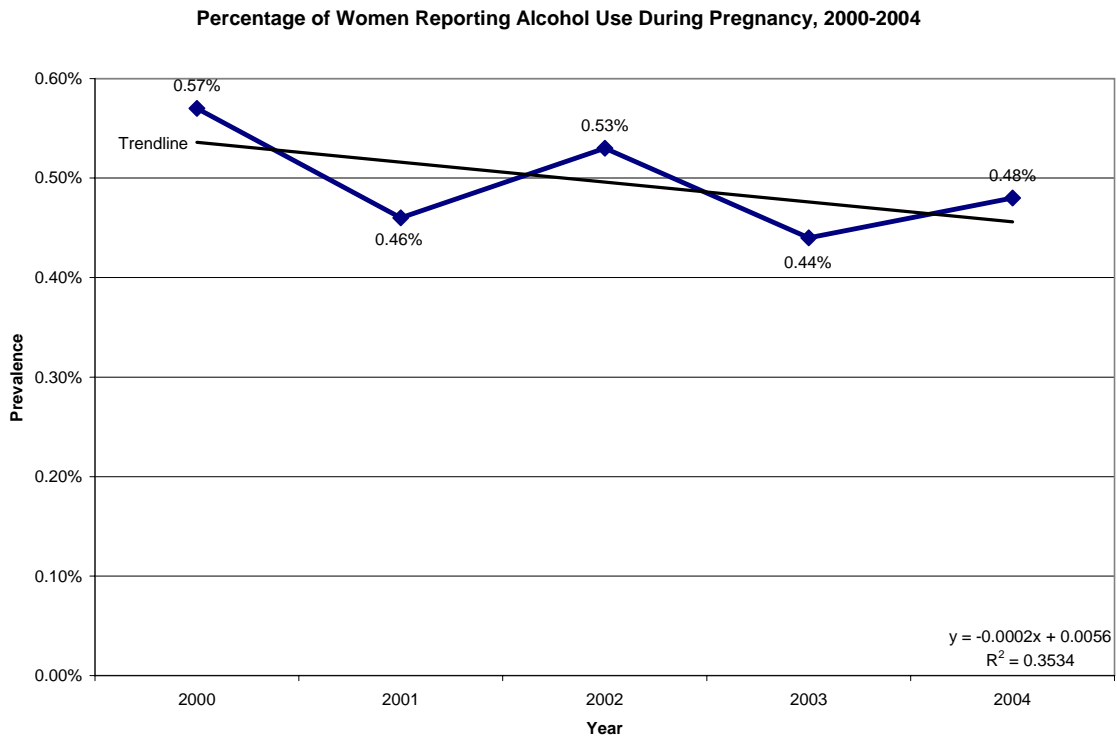


Table 13.1 Percentage of women reporting they drank alcohol during their pregnancy for the State of Kansas by race and ethnicity, 2002-2004

Region	Overall	Race			Ethnicity	
		White	African American	Other	Hispanic	Non-Hispanic
Statewide	0.48%	0.45%	0.99%	0.30%	0.27%	0.54%

Table 13.2 Percentage of women reporting they drank alcohol during their pregnancy for the State of Kansas by age group, 2002-2004

Region	Overall	Age Group (years)				
		Less Than 18	18-24	25-34	35-44	45+
Statewide	0.48%	0.45%	0.56%	0.36%	0.78%	-

**14. Indicator:** Percentage of students in grades 6 through 12 reporting any use of alcohol within the past 30 days

**Why is this indicator important?**

Early initiation of alcohol consumption has been shown to increase the risk of drinking problems later in life. Alcohol is a known Central Nervous System (CNS) depressant and influences cognitive reasoning and abilities. In addition, alcohol is associated with violent behaviors. Additionally, the purchase or consumption of alcohol by any individual under the age of 21 is illegal in Kansas.

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Social and Rehabilitation Services, Kansas Communities That Care (KCTC) Survey, 2005

**Important findings**

- As grade level increases, the prevalence of alcohol consumption significantly increases. Over half of all students in grade 12 reporting consuming alcohol in the previous 30 days.
- No gender difference in the prevalence of alcohol consumption appears to exist.
- White students report a significantly higher prevalence of alcohol consumption than any other race. Additionally, the Hispanic population reports a higher prevalence of alcohol consumption as compared to the non-Hispanic population.
- During the past 5 years, the prevalence of alcohol consumption among youth in grades 9-12 has decreased slightly. As compared to the national trend, the consumption of alcohol among Kansas youth is higher.

## Graph of Five-Year Consumption Trend

During the past 5 years, the prevalence of drinking among youth in grades 9-12 in Kansas has decreased slightly.

Nationally, the prevalence of drinking among youth was 40.1% in 2005. The 30-day prevalence of alcohol consumption in Kansas among youth in grades 9-12 is higher than the national estimates.

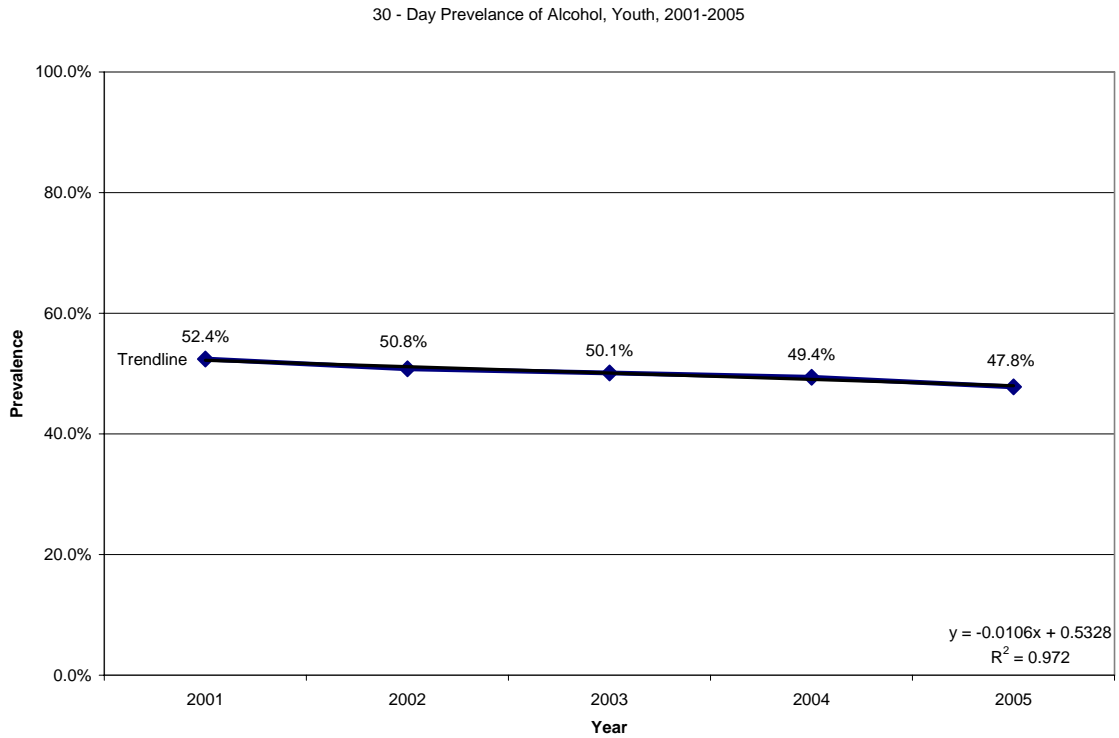


Table 14.1 Percentage of students in grades 6 through 12 reporting any use of alcohol within the past 30 days for the State of Kansas by gender and grade, 2005

Region	Overall	School Level		Grade			
		Middle School	High School	6th	8th	10th	12th
Statewide	31.0%	17.2%	47.8%	9.2%	24.8%	42.5%	54.7%

Table 14.2 Percentage of students in grades 6 through 12 reporting any use of alcohol within the past 30 days for the State of Kansas by race and ethnicity, 2005

Region	Overall	Gender		Race			Ethnicity	
		Male	Female	White	African American	Other	Hispanic	Non-Hispanic
Statewide	31.0%	31.3%	30.9%	32.0%	24.6%	29.4%	34.1%	30.8%

**15. Indicator:** Percentage of students in grades 6 through 12 reporting having five or more drinks in a row on at least one occasion within past two weeks

**Why is this indicator important?**

The consumption of five or more drinks on one occasion is the definition of binge drinking. Strong correlations have been found between increased binge drinking and acute alcohol conditions such as injuries, alcohol related vehicle crashes, violence, and fetal alcohol spectrum disorder. There are also associations between binge drinking and chronic liver disease. Additionally, the purchase or consumption of alcohol by any individual under the age of 21 is illegal in Kansas

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Social and Rehabilitation Services, Kansas Communities That Care (KCTC) Survey, 2005

**Important findings**

- As grade level increases, the prevalence of binge drinking significantly increases.
- Male students appear to have a slightly higher prevalence of binge drinking than female students in Kansas.
- White students report a significantly higher prevalence of alcohol consumption than any other race.
- Additionally, Hispanic students report a higher prevalence of binge drinking as compared to non-Hispanic students.
- During the past 5 years, the two week prevalence of binge drinking has decreased slightly among youth in grades 9-12 in Kansas.

## Graph of Five-Year Consumption Trend

During the past 5 years, the prevalence of binge drinking among youth in grades 9-12 in the past two weeks in Kansas has decreased slightly.

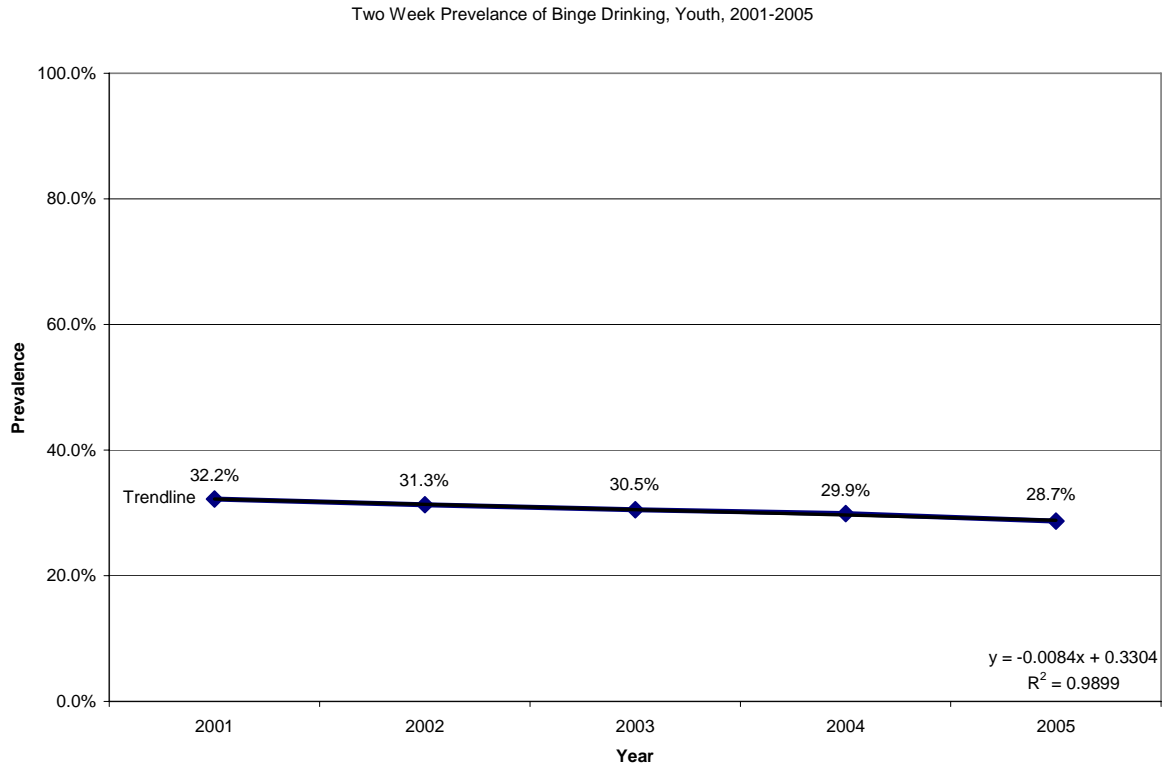


Table 15.1 Percentage of students in grades 6 through 12 reporting having five or more drinks in a row on at least one occasion within past two weeks for the State of Kansas by gender and grade, 2005

Region	Overall	School Level		Grade			
		Middle School	High School	6th	8th	10th	12th
Statewide	16.5%	6.4%	28.7%	2.7%	10.0%	23.7%	35.1%

Table 15.2 Percentage of students in grades 6 through 12 reporting having five or more drinks in a row on at least one occasion within past two weeks for the State of Kansas by race and ethnicity, 2005

Region	Overall	Gender		Race			Ethnicity	
		Male	Female	White	African American	Other	Hispanic	Non-Hispanic
Statewide	16.5%	18.2%	14.9%	16.8%	11.8%	16.9%	19.7%	16.2%

**16. Indicator:** Percentage of students in grades 6 through 12 who report first use of alcohol before age 13

**Why is this indicator important?**

Early initiation, before age 13, of alcohol consumption has been shown to increase the risk of drinking problems later in life. Alcohol is a known Central Nervous System (CNS) depressant and influences cognitive reasoning and abilities. In addition, alcohol is associated with violent behaviors. Additionally, the purchase or consumption of alcohol by any individual under the age of 21 is illegal in Kansas.

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Social and Rehabilitation Services, Kansas Communities That Care (KCTC) Survey, 2005

**Important findings**

- As grade level increases, the prevalence of early initiation of alcohol consumption remains stable then decreases in grade 12. This may be a construct of recall bias as students do not remember the first time they experimented with alcohol.
- Male students have a higher prevalence of early initiation of alcohol consumption than female students in Kansas.
- Students who identify themselves in the “Other” race category have a significantly higher prevalence of early initiation than White students.
- Additionally, Hispanic students report a higher prevalence of early initiation of alcohol consumption as compared to non-Hispanic students
- During the past 5 years, the proportion of youth in grades 6-12 who report early initiation of alcohol has decreased slightly.

## Graph of Five-Year Consumption Trend

During the past 5 years, the proportion of youth in grades 6-12 who report early initiation of alcohol has decreased slightly.

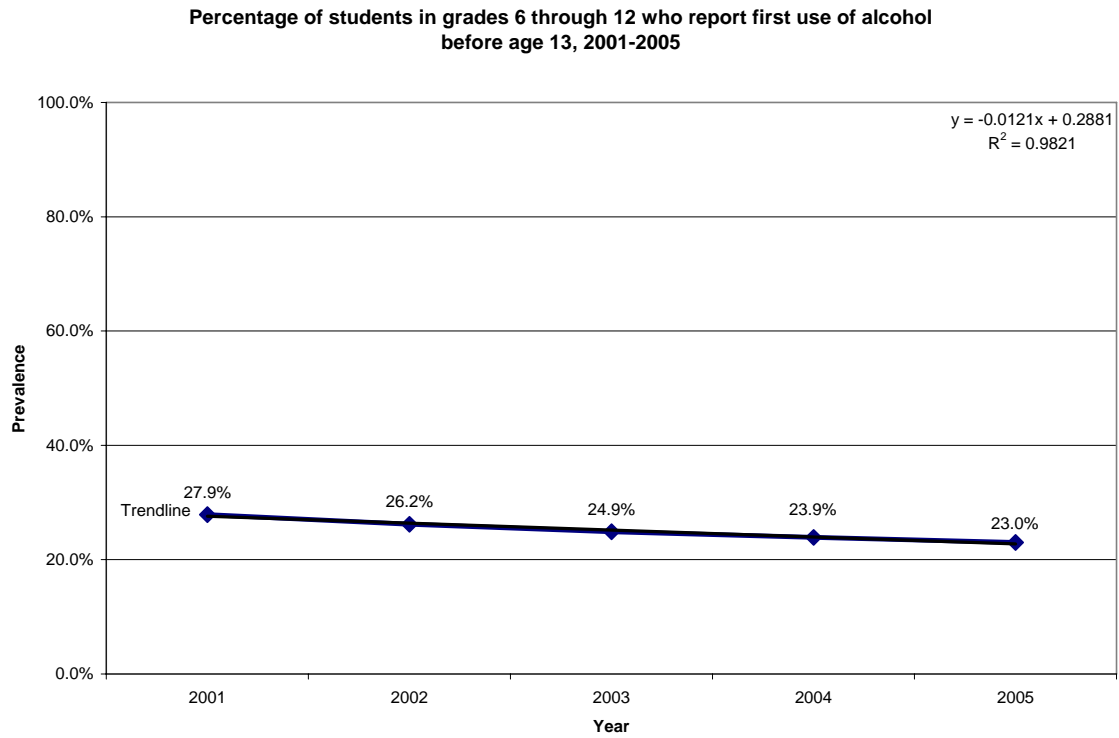


Table 16.1 Percentage of students in grades 6 through 12 who report first use of alcohol before age 13 for the State of Kansas by gender and grade, 2005

Region	Overall	Gender		Grade			
		Male	Female	6th	8th	10th	12th
Statewide	23.0%	26.5%	19.4%	24.1%	28.7%	20.6%	16.1%

Table 16.2 Percentage of students in grades 6 through 12 who report first use of alcohol before age 13 for the State of Kansas by race and ethnicity, 2005

Region	Overall	Race			Ethnicity	
		White	African American	Other	Hispanic	Non-Hispanic
Statewide	23.0%	21.6%	23.4%	28.5%	29.4%	22.0%

## **Tobacco Indicators**

**17. Indicator:** Number of deaths from lung cancer per 100,000 population

**Why is this indicator important?**

Lung Cancer is the leading cause of cancer deaths in Kansas. Research has shown that 80-90% of lung cancer cases are caused by cigarettes, particularly chronic heavy smoking.

**How do we want this indicator to change?**

As overall consumption of cigarettes decreases, this indicator is also expected to decrease.

As overall public education and intervention programs increase, this indicator is expected to decrease.

As physician referrals and cessation resources become more accessible, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Health and Environment, Center for Health and Environmental Statistics, Office of Vital Statistics, Death Certificates 2002-2004.

**Important findings**

- Males have a significantly higher age-adjusted death rate from lung cancer than females.
- The age-specific death rate among individuals aged 65 years and older is dramatically higher than all other age groups. This highlights the association between lifelong smoking and chronic disease.
- African Americans have a higher age-adjusted death rate from lung cancer than the white population. Individuals of Other races have a lower age-adjusted death rate from lung cancer than the white population. Individuals of Hispanic ethnicity have a lower age-adjusted death rate than non-Hispanic individuals. Care should be taken as many individuals have no reported ethnicity.
- During the past 5 years, the age-adjusted death rate from lung cancer has not changed significantly. As compared to national estimates, Kansas has an approximately equal age-adjusted death rate from lung cancer.

## Graph of Five-Year Mortality Trend

During the past 5-years, the age-adjusted death rate from lung cancer has remained stable.

Nationally, the age-adjusted death rate from lung cancer in 2005 is 54.1 per 100,000. Kansas has an approximately equal age-adjusted death rate from lung cancer as the National estimates for the year 2005.

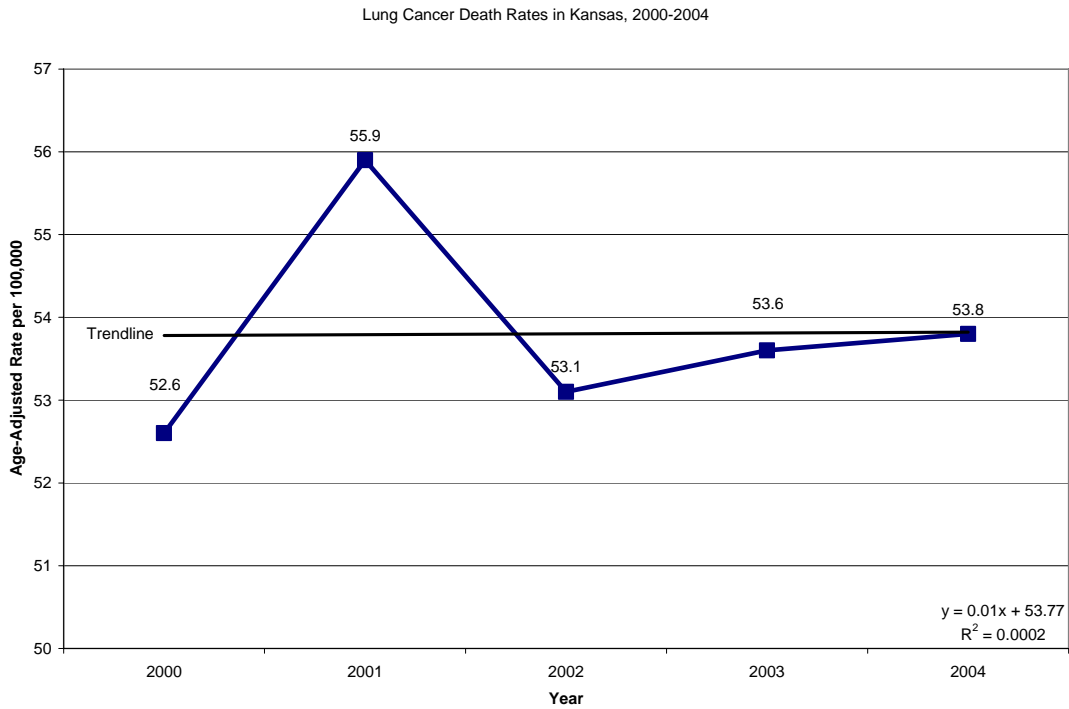


Table 17.1 Number of deaths and age-adjusted death rates due to Lung Cancer for the State of Kansas by gender and age group, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000			Age Specific Rates Per 100,000		
	Overall	Gender		Age Group (years)			Overall	Gender		Age Group (years)		
		Male	Female	0-24	25-64	65+		Male	Female	0-24	25-64	65+
Statewide	4521	2633	1888	-	1251	3270	53.6	72.2	39.9	-	30.2	307.6

Table 17.2 Number of deaths and age-adjusted death rates due to Lung Cancer for the State of Kansas by ethnicity and race, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000					
	Overall	Ethnicity*		Race			Overall	Ethnicity*		Race		
		Hispanic	Non-Hispanic	White	African American	Other		Hispanic	Non-Hispanic	White	African American	Other
Statewide	4521	39	4219	4268	198	54	53.6	24.6	51.1	53.5	61.3	42.2

\*Ethnicity was not recorded for all individuals in the database; therefore caution should be taken when making comparisons to overall numbers and rates

**18. Indicator:** Number of deaths from chronic obstructive pulmonary disease (COPD) and emphysema per 100,000 population

**Why is this indicator important?**

Chronic obstructive pulmonary disease and emphysema are a collection of diseases that have a strong association with cigarette smoking. Research has shown that approximately 80% of all cases are causally associated with cigarette smoking.

**How do we want this indicator to change?**

As overall consumption of cigarettes decreases, this indicator is also expected to decrease.

As overall public education and intervention programs increase, this indicator is expected to decrease.

As physician referrals and cessation resources become more accessible, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Health and Environment, Center for Health and Environmental Statistics, Office of Vital Statistics, Death Certificates 2002-2004.

**Important findings**

- Males have a significantly higher age-adjusted death rate from COPD than females in Kansas
- The age-specific death rate among individuals aged 65 years and older is dramatically higher than all other age groups. This highlights the association between lifelong smoking and chronic disease.
- The age-adjusted death rates from COPD are higher among the White population than any other race. Individuals of Hispanic ethnicity have a lower age-adjusted death rate than non-Hispanic individuals. Care should be taken when interpreting ethnicity information as many individuals had missing values.
- During the past 5 years, the age-adjusted death from COPD has decreased slightly. Compared to the national estimates, Kansas has a similar age-adjusted death rate from COPD.

## Graph of Five-Year Mortality Trend

During the past 5-years, the age-adjusted death rate from chronic obstructive pulmonary disease and emphysema has decreased slightly.

Nationally, the age-adjusted death rate from chronic obstructive pulmonary disease and emphysema in 2005 was 41.9 per 100,000. Kansas has a similar age-adjusted death rate from chronic obstructive pulmonary disease and emphysema as the National estimates for the year 2005.

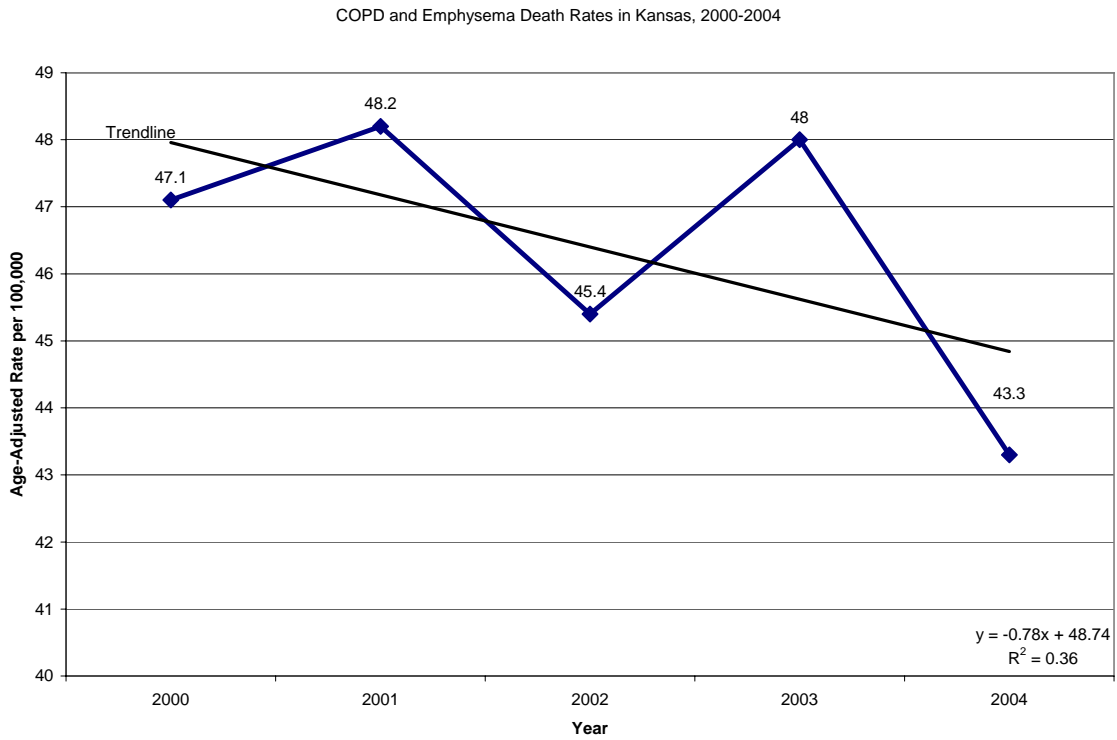


Table 18.1 Number of deaths and age-adjusted death rates due to Chronic Obstructive Pulmonary Disease and Emphysema for the State of Kansas by gender and age group, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000			Age Specific Rates Per 100,000		
	Overall	Gender		Age Group (years)			Overall	Gender		Age Group (years)		
		Male	Female	0-24	25-64	65+		Male	Female	0-24	25-64	65+
Statewide	4020	1977	2043	-	491	3527	45.7	56.4	38.3	-	11.8	331.7

Table 18.2 Number of deaths and age-adjusted death rates due to Chronic Obstructive Pulmonary Disease and Emphysema for the State of Kansas by ethnicity and race, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000						
	Overall	Ethnicity*		Race			Overall	Ethnicity*			Race		
		Hispanic	Non-Hispanic	White	African American	Other		Hispanic	Non-Hispanic	White	African American	Other	
Statewide	4020	26	3808	3864	118	37	45.7	17.6	44.0	46.1	38.7	30.8	

\*Ethnicity was not recorded for all individuals in the database; therefore caution should be taken when making comparisons to overall numbers and rates

**19. Indicator:** Number of deaths from cardiovascular disease per 100,000 population

**Why is this indicator important?**

Cardiovascular disease is the number one cause of death nationally and in Kansas. Tobacco use is considered the major modifiable behavior that leads to cardiovascular disease.

**How do we want this indicator to change?**

As overall consumption of cigarettes decreases, this indicator is also expected to decrease.

As overall public education and intervention programs increase, this indicator is expected to decrease.

As physician referrals and cessation resources become more accessible, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Health and Environment, Center for Health and Environmental Statistics, Office of Vital Statistics, Death Certificates 2002-2004.

**Important findings**

- Males have a significantly higher age-adjusted death rate from cardiovascular disease than females.
- The age-specific death rate among individuals aged 65 years and older is dramatically higher than all other age groups. This highlights the association between lifelong smoking and chronic disease.
- African Americans have a higher age-adjusted death rate from cardiovascular disease than the white population. Individuals of Other races have a lower age-adjusted death rate from cardiovascular disease than the white population. Individuals of Hispanic ethnicity have a lower age-adjusted death rate from cardiovascular disease than individuals of non-Hispanic ethnicity. Care should be taken when interpreting ethnicity information as many individuals had missing values.
- During the past 5 years, the age-adjusted death rate from cardiovascular disease has decreased. Compared to national estimates, Kansas has a similar adjusted death rate as the national estimates.

## Graph of Five-Year Mortality Trend

During the past 5-years, the age-adjusted death rate from cardiovascular disease has decreased significantly.

Nationally, the age-adjusted death rate from cardiovascular disease in 2005 was 285.8 per 100,000. Kansas has a similar age-adjusted death rate from cardiovascular disease as the National estimates for the year 2005.

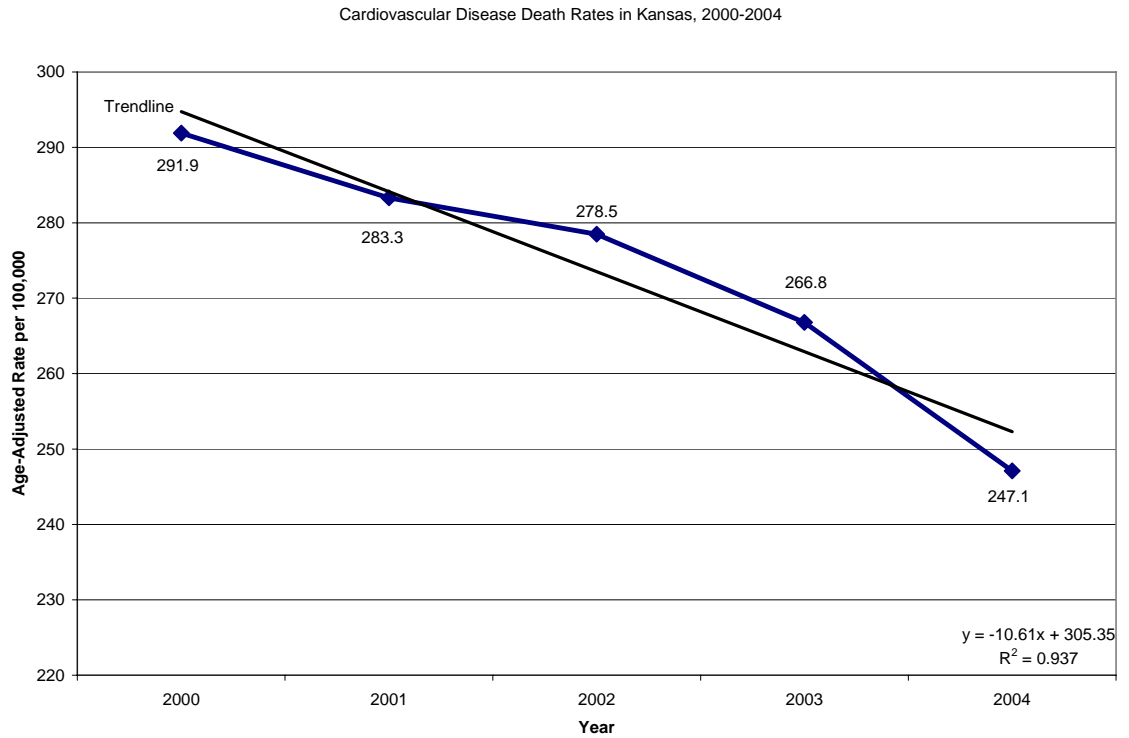


Table 19.1 Number of deaths and age-adjusted death rates due to Cardiovascular Disease for the State of Kansas by gender and age group, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000			Age Specific Rates Per 100,000		
	Overall	Gender		Age Group (years)			Overall	Gender		Age Group (years)		
		Male	Female	0-24	25-64	65+		Male	Female	0-24	25-64	65+
Statewide	24,257	11,117	13,140	53	3382	20,822	262.2	316.0	220.1	1.8	81.5	1958.3

Table 19.2 Number of deaths and age-adjusted death rates due to Cardiovascular Disease for the State of Kansas by ethnicity and race, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000					
	Overall	Ethnicity*		Race			Overall	Ethnicity*		Race		
		Hispanic	Non-Hispanic	White	African American	Other		Hispanic	Non-Hispanic	White	African American	Other
Statewide	24,257	298	22,596	22,916	1124	207	262.2	204.5	247.7	258.9	349.1	179.0

\*Ethnicity was not recorded for all individuals in the database; therefore caution should be taken when making comparisons to overall numbers and rates

**20. Indicator:** Number of school suspensions related to tobacco

**Why is this indicator important?**

School suspensions and expulsions related to tobacco provide another indicator concerning dependence and abuse. Additionally, individuals who are suspended or expelled due to a substance abuse problem will have additional constraints and challenges if they are unable to complete their high school education.

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

As age of initiation increases, this indicator is expected to shift towards high school and decrease overall.

As school policies concerning substance abuse increase, this indicator is expected to initially increase and then decrease in the long-term.

**Where did we get the data?**

Kansas State Department of Education, as reported by Public Schools and School Districts in aggregate form for school years ending in 2004, 2005, and 2006.

**Important findings**

- As age increases the number of suspensions related to tobacco also increases.
- More information is required in the future to determine gender, racial, and ethnic differences in the number of suspensions. Additionally, information concerning the proportion of schools with policies related to substance abuse would be required for further analysis.

Table 20.1 Number of school suspensions and expulsions related to tobacco for the State of Kansas by grade level, School years ending in 2004 -2006

	<b>Number</b>			
		<b>Grade Level</b>		
<b>Region</b>	<b>Overall</b>	<b>Elementary</b>	<b>Middle</b>	<b>High</b>
Statewide	1948	51	236	1661

**21. Indicator:** Percentage of current smokers aged 18 years & older

**Why is this indicator important?**

Tobacco use, and more specifically cigarette use, is considered the leading underlying cause of death in the United States. A significant portion of cardiovascular deaths, lung cancers, and chronic respiratory deaths are directly attributed to cigarette smoking. Additionally, environmental tobacco smoke has been shown to cause cardiovascular disease and lung cancer.

**How do we want this indicator to change?**

As overall public education and interventions increase, this indicator is expected to decrease.

As youth prevalence decreases, this indicator is expected to decrease over time.

As referrals and cessation resources become more accessible, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Behavior Risk Factor Surveillance System (BRFSS) – 2003, 2004, and 2005.

**Important findings**

- Males have a higher prevalence of cigarette consumption than females.
- African American and individuals of Other races have a higher prevalence of cigarette consumption than White individuals
- Individuals of Hispanic ethnicity generally have an approximately equal prevalence of cigarette consumption as non-Hispanic individuals.
- A strong correlation exists between education, income and prevalence of current smokers. As education increases, the prevalence of current smokers decreases. As income increases, the prevalence of current smokers decreases.
- A correlation exists between age group and prevalence of current smokers. As age group increases, the prevalence of current smokers decreases. A dramatic decrease in prevalence occurs in individuals in the 65+ age group.
- During the past 5 years, the prevalence of current smokers has decreased significantly. Compared to national estimates, Kansas has a lower prevalence of current smokers.

## Graph of Five-Year Consumption Trend

During the past 5 years, the prevalence of current smokers has decreased significantly.

Nationally, the prevalence of current smokers was 20.6% in 2005. Kansas has a significantly lower prevalence of current smokers than the National estimates in 2005.

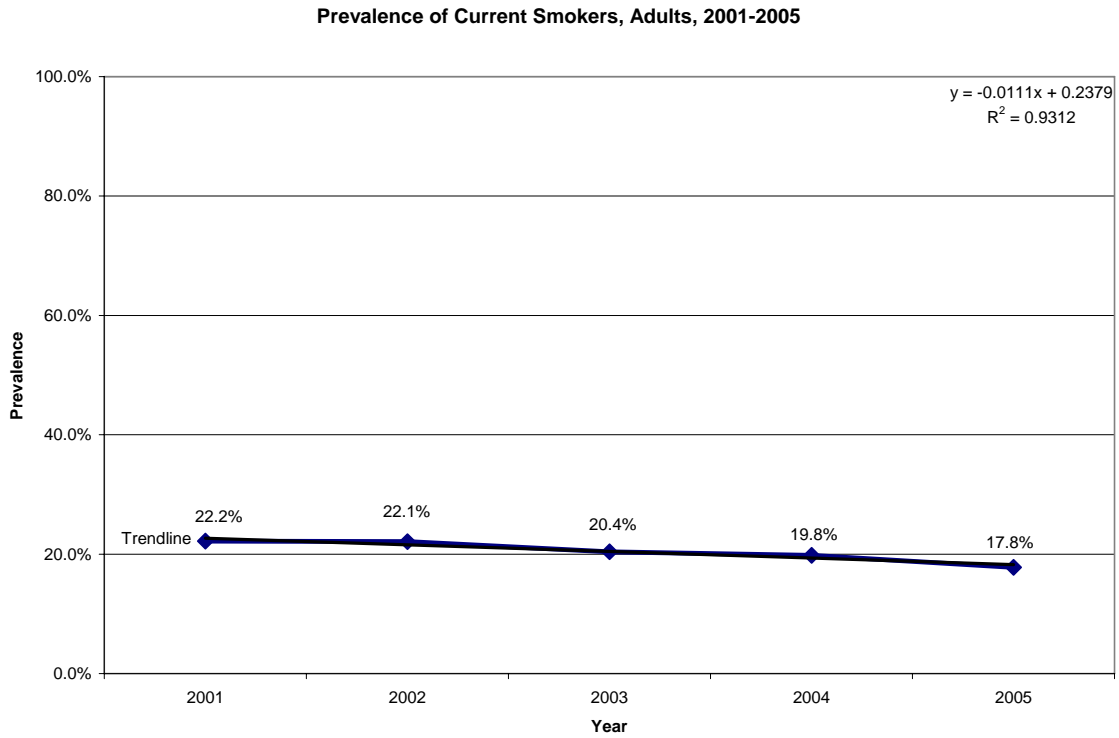


Table 21.1 Percentage of persons aged 18 and older reporting they currently smoke some days or everyday for the State of Kansas by gender, race, and ethnicity, 2003-2005

Region	Overall	Gender		Race			Ethnicity	
		Male	Female	White	African American	Other	Hispanic	Non-Hispanic
Statewide	19.6%	21.1%	18.1%	19.1%	23.6%	23.6%	20.0%	19.5%

Table 21.2 Percentage of persons aged 18 and older reporting they currently smoke some days or everyday days for the State of Kansas by education and income, 2003-2005

Region	Overall	Education				Income				
		< High School	High School or GED	Some College	College Graduate	<\$15,000	\$15,000-\$24,999	\$25,000-\$34,999	\$35,000-\$49,999	\$50,000+
Statewide	19.6%	33.4%	25.2%	20.9%	10.3%	30.3%	26.6%	22.4%	19.5%	14.7%

Table 21.3 Percentage of persons aged 18 and older reporting they currently smoke some days or everyday for the State of Kansas by age group, 2003-2005

Region	Overall	Age Group (years)					
		18-24	25-34	35-44	45-54	55-64	65+
Statewide	19.6%	25.2%	22.9%	21.5%	20.7%	18.8%	8.8%

**22. Indicator:** Percentage of current smokeless tobacco users aged 18 years & older

**Why is this indicator important?**

Smokeless tobacco use is associated with a variety of cancers including: lip, esophageal and throat, bladder, and stomach. There is also a high correlation between smokeless tobacco use and cigarette use, compounding the potential for negative health impacts

**How do we want this indicator to change?**

As overall public education and interventions increase, this indicator is expected to decrease.

As youth prevalence decreases, this indicator is expected to decrease over time.

As referrals and cessation resources become more accessible, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Behavior Risk Factor Surveillance System (BRFSS) – 2004

**Important findings**

- Smokeless tobacco use is almost an exclusively male behavior. The prevalence of smokeless tobacco use is significantly higher among males than females in Kansas
- African Americans have significantly lower prevalence of smokeless tobacco use than White or individuals of Other races
- As education increases, the prevalence of smokeless tobacco decreases. Individuals with an income of less than \$15,000 annually have a lower prevalence of smokeless tobacco use than all other income groups.
- Smokeless tobacco prevalence is high among individuals between the ages of 18 and 44. Individuals aged 45 and older have a much lower prevalence of smokeless tobacco use

Table 22.1 Percentage of persons aged 18 and older reporting they currently use smokeless tobacco some days or everyday for the State of Kansas by gender, race, and ethnicity, 2004

Region	Overall	Gender		Race			Ethnicity	
		Male	Female	White	African American	Other	Hispanic	Non-Hispanic
Statewide	4.3%	10.0%	0.1%	5.1%	1.8%	4.0%	3.2%	5.0%

Table 22.2 Percentage of persons aged 18 and older reporting they currently use smokeless tobacco some days or everyday for the State of Kansas by education and income, 2004

Region	Overall	Education				Income				
		< High School	High School or GED	Some College	College Graduate	<\$15,000	\$15,000-\$24,999	\$25,000-\$34,999	\$35,000-\$49,999	\$50,000+
Statewide	4.3%	7.5%	6.0%	5.6%	3.0%	2.6%	5.8%	5.3%	5.7%	6.0%

Table 22.3 Percentage of persons aged 18 and older reporting they currently use smokeless tobacco some days or everyday for the State of Kansas by age group, 2004

Region	Overall	Age Group (years)					
		18-24	25-34	35-44	45-54	55-64	65+
Statewide	4.3%	6.2%	7.8%	7.1%	3.9%	2.3%	1.6%

**23. Indicator:** Percentage of women who smoke during pregnancy

**Why is this indicator important?**

Smoking during pregnancy has been shown to cause low birth weights, premature births, and is also associated with an increase in spontaneous termination of the pregnancy.

**How do we want this indicator to change?**

As overall prevalence of cigarette consumption decreases, this indicator is also expected to decrease.

As overall public education and interventions increase, this indicator is expected to decrease.

As referrals and cessation resources become more accessible, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Health and Environment, Center for Health and Environmental Statistics, Office of Vital Statistics, Birth Certificates 2002-2004.

**Important findings**

- The highest prevalence of women who report smoking during pregnancy is found in predominately suburban communities in the southern regions of Kansas.
- Women of Other races report a significantly lower prevalence of smoking during pregnancy than White women and African American women.
- Hispanic women report a significantly lower prevalence of smoking during pregnancy than non-Hispanic women.
- Women in the 18-24 age range report a significantly higher prevalence of smoking during pregnancy than women of all the other age groups.
- During the past 5 years, the prevalence of smoking during pregnancy has not significantly change. Compared to the national estimates, Kansas has a higher prevalence of smoking during pregnancy.

### Graph of Five-Year Consumption Trend

During the past 5 years, the prevalence of smoking during pregnancy has not significantly changed.

Nationally, the prevalence of smoking during pregnancy was 10.3% in 2004. Kansas has a significantly higher prevalence of smoking during pregnancy than the National estimates in 2004.

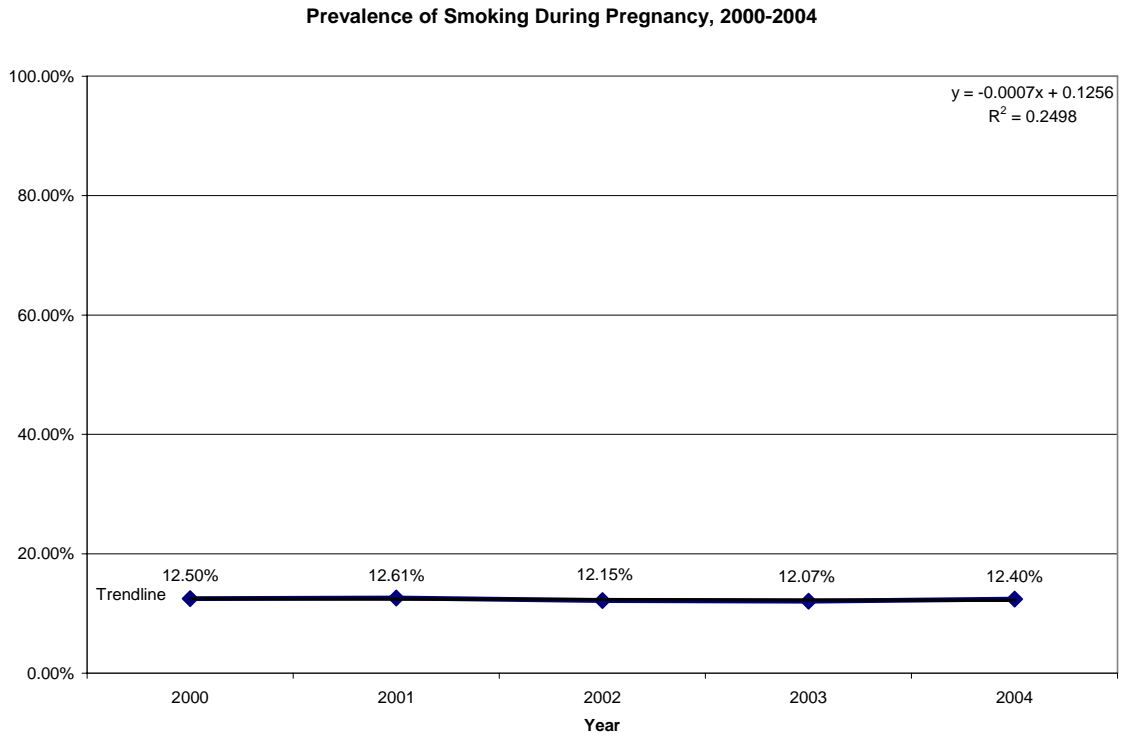


Table 23.1 Percentage of women reporting they smoked during their pregnancy for the State of Kansas by race and ethnicity, 2002-2004

Region	Overall	Race			Ethnicity	
		White	African American	Other	Hispanic	Non-Hispanic
Statewide	12.21%	12.39%	13.48%	6.74%	3.09%	14.38%

Table 323.2 Percentage of women reporting they smoked during their pregnancy for the State of Kansas by age group, 2002-2004

Region	Overall	Age Group (years)				
		Less Than 18	18-24	25-34	35-44	45+
Statewide	12.21%	13.71%	18.39%	8.59%	8.24%	16.09%

**24. Indicator:** Percentage of students in grades 6 through 12 reporting any use of cigarettes within the past 30 days

**Why is this indicator important?**

Tobacco use, and more specifically cigarette use, is considered the leading underlying cause of death in the United States. A significant portion of cardiovascular deaths, lung cancers, and chronic respiratory deaths are directly attributed to cigarette smoking. Environmental tobacco smoke has been shown to cause cardiovascular disease and lung cancer. Additionally, the purchase or consumption of tobacco by any individual under the age of 18 is illegal in Kansas.

**How do we want this indicator to change?**

As overall public education and interventions increase, this indicator is expected to decrease.

As referrals and cessation resources become more accessible, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Social and Rehabilitation Services, Kansas Communities That Care (KCTC) Survey, 2005

**Important findings**

- Female students report a slightly higher prevalence of cigarette use than males.
- As grade level increases, the prevalence of cigarette use significantly increases. Approximately 1 in 4 students in grade 12 report they smoke.
- African American students have a significantly lower prevalence than White or students of Other races.
- Hispanic students report a slightly higher prevalence than non-Hispanic students.

## Graph of Five-Year Consumption Trend

During the past 5 years, the prevalence of smoking cigarettes among youth in grades 9-12 in Kansas has decreased slightly.

Nationally, the prevalence of smoking cigarettes among youth was 19.1% in 2005. The 30-day prevalence of smoking cigarettes in Kansas among youth in grades 9-12 is higher than the national estimates.

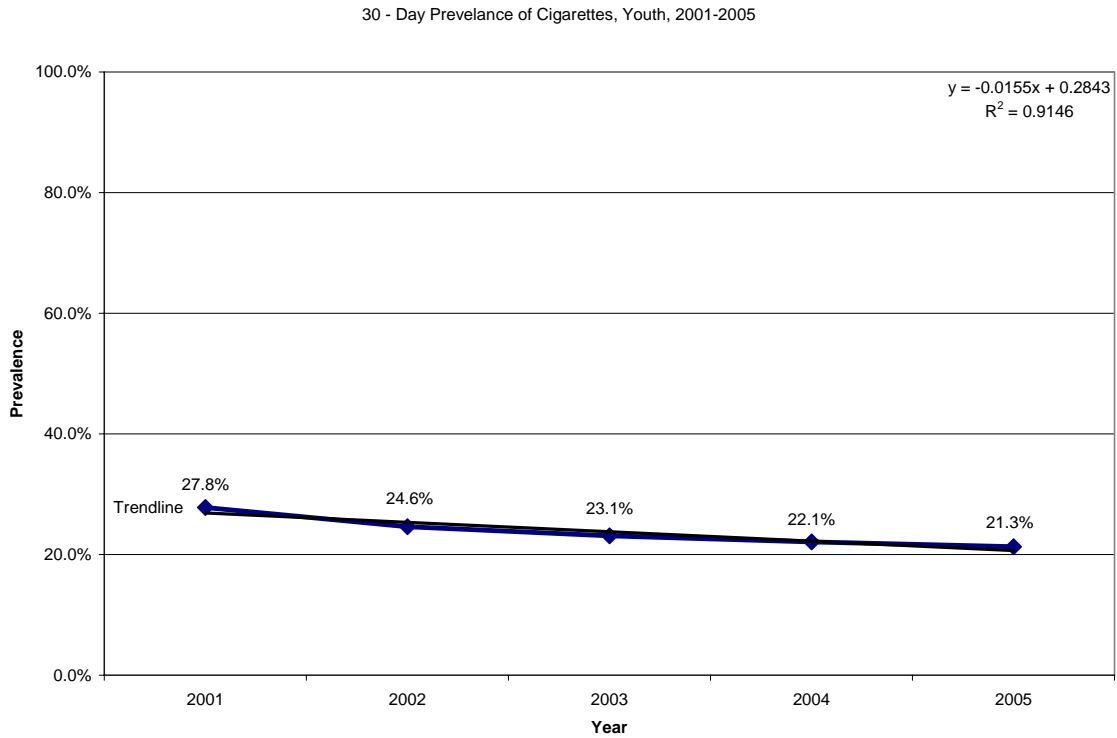


Table 24.1 Percentage of students in grades 6 through 12 reporting any use of cigarettes within the past 30 days for the State of Kansas by gender and grade, 2005

Region	Overall	School Level		Grade			
		Middle School	High School	6th	8th	10th	12th
Statewide	12.9%	5.9%	21.3%	2.4%	9.3%	18.4%	25.1%

Table 24.2 Percentage of students in grades 6 through 12 reporting any use of cigarettes within the past 30 days for the State of Kansas by race and ethnicity, 2005

Region	Overall	Gender		Race			Ethnicity	
		Male	Female	White	African American	Other	Hispanic	Non-Hispanic
Statewide	12.9%	12.7%	13.1%	13.1%	9.2%	13.4%	13.6%	12.8%

**25. Indicator:** Percentage of students in grades 6 through 12 reporting any use of smokeless tobacco within the past 30 days

**Why is this indicator important?**

Smokeless tobacco use is associated with a variety of cancers including: lip, esophageal and throat, bladder, and stomach. There is also a high correlation between smokeless tobacco use and cigarette use, compounding the potential for negative health impacts. Additionally, the purchase or consumption of tobacco by any individual under the age of 18 is illegal in Kansas.

**How do we want this indicator to change?**

As overall public education and interventions increase, this indicator is expected to decrease.

As referrals and cessation resources become more accessible, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Social and Rehabilitation Services, Kansas Communities That Care (KCTC) Survey, 2005

**Important findings**

- Males students reported a significantly higher prevalence of smokeless tobacco use than female students.
- As grade level increases, the prevalence of smokeless tobacco use also increases.
- African American students have a significantly lower prevalence than White or students of Other races.
- No association is seen between the Hispanic and non-Hispanic populations and smokeless tobacco use among youth.
- During the past 5 years, the prevalence of smokeless tobacco use among youth in grades 9-12 in Kansas has decreased slightly. Compared to national estimates, Kansas has a higher prevalence of smokeless tobacco use among youth in grades 9-12.

## Graph of Five-Year Consumption Trend

During the past 5 years, the prevalence of smokeless tobacco use among youth in grades 9-12 in Kansas has decreased slightly.

Nationally, the prevalence of smoking cigarettes among youth was 6.6% in 2005. The 30-day prevalence of smokeless tobacco use in Kansas among youth in grades 9-12 is higher than the national estimates.

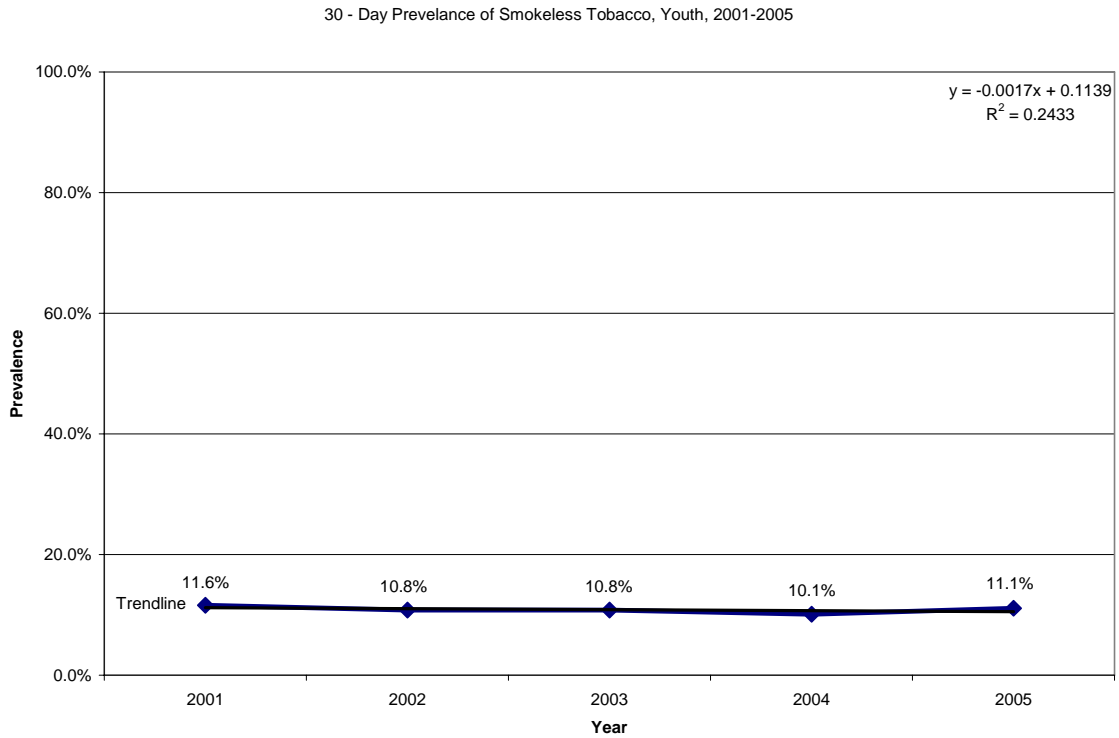


Table 25.1 Percentage of students in grades 6 through 12 reporting any use of smokeless tobacco within the past 30 days for the State of Kansas by gender and grade, 2005

Region	Overall	School Level		Grade			
		Middle School	High School	6th	8th	10th	12th
Statewide	6.6%	2.9%	11.1%	1.5%	4.3%	9.8%	12.9%

Table 25.2 Percentage of students in grades 6 through 12 reporting any use of smokeless tobacco within the past 30 days for the State of Kansas by race and ethnicity, 2005

Region	Overall	Gender		Race			Ethnicity	
		Male	Female	White	African American	Other	Hispanic	Non-Hispanic
Statewide	6.6%	10.7%	2.7%	6.9%	4.5%	6.6%	6.2%	6.7%

**26. Indicator:** Percentage of students in grades 6 through 12 who report first use of cigarettes before age 13

**Why is this indicator important?**

Early initiation, before age 13, of tobacco consumption has been shown to increase the risk of health problems later in life. Nationally it is estimated that among adults who have ever smoked daily, over 80% tried their first cigarette before the age of 18. Additionally, the purchase or consumption of tobacco products by any individual under the age of 18 is illegal in Kansas.

**How do we want this indicator to change?**

As overall public education and interventions increase, this indicator is expected to decrease.

As referrals and cessation resources become more accessible, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Social and Rehabilitation Services, Kansas Communities That Care (KCTC) Survey, 2005

**Important findings**

- Males students report a slightly higher prevalence of early initiation of cigarette use than female students.
- Prevalence of early initiation of cigarette use increases sharply in most communities after 6<sup>th</sup> grade and remains fairly stable in grades 8, 10 and 12.
- African American and students of Other races report a higher prevalence of early initiation of cigarette use than White Students.
- Hispanic students report a higher prevalence of early initiation of cigarette use than non-Hispanic students.
- During the past 5 years, the prevalence of early initiation of cigarette use has decreased slightly.

## Graph of Five-Year Consumption Trend

During the past 5 years, the proportion of youth in grades 6-12 who report early initiation of cigarettes has decreased slightly.

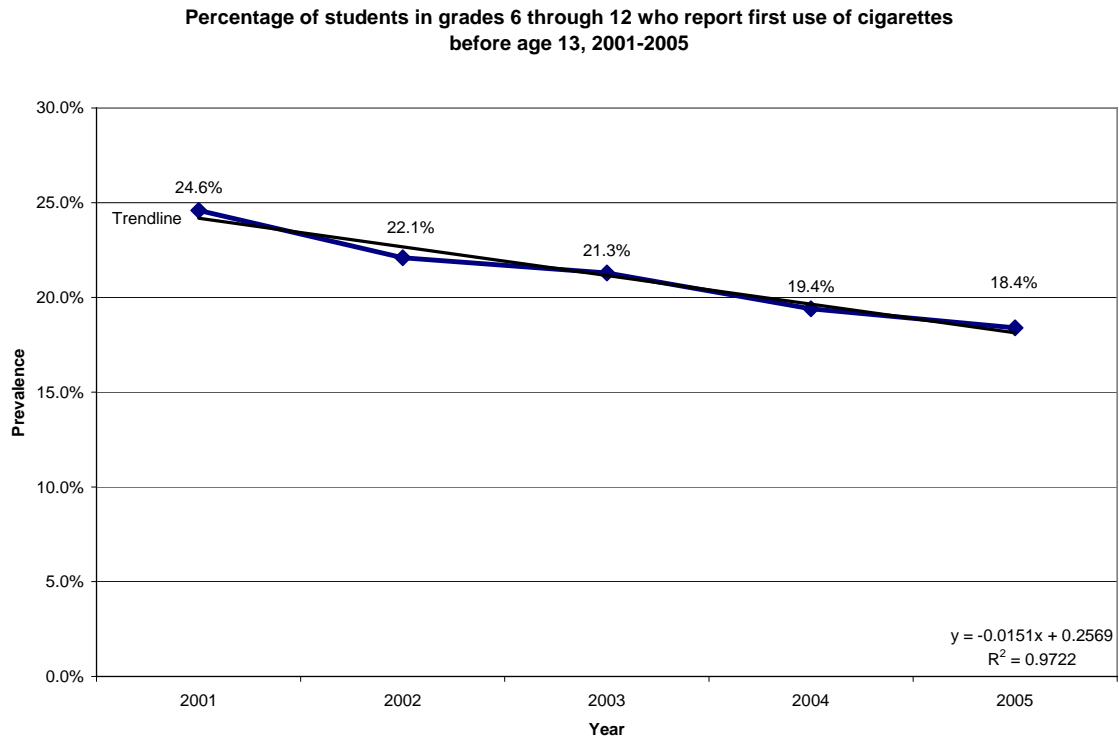


Table 26.1 Percentage of students in grades 6 through 12 who report first use of cigarettes before age 13 for the State of Kansas by gender and grade, 2005

Region	Overall	Gender		Grade			
		Male	Female	6th	8th	10th	12th
Statewide	18.3%	19.4%	17.3%	11.3%	21.1%	21.4%	19.8%

Table 26.2 Percentage of students in grades 6 through 12 who report first use of cigarettes before age 13 for the State of Kansas by race and ethnicity, 2005

Region	Overall	Race			Ethnicity	
		White	African American	Other	Hispanic	Non-Hispanic
Statewide	18.3%	16.7%	23.0%	24.0%	25.2%	17.3%

## **Illicit Drugs Indicators**

**27. Indicator:** Number of deaths from illicit drugs per 100,000 population

**Why is this indicator important?**

Acute poisoning and overdosing with illicit drugs can result from chronic dependence or during the initial usage of the drugs.

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

As availability of various illegal substances decreases, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Health and Environment, Center for Health and Environmental Statistics, Office of Vital Statistics, Death Certificates 2002-2004.

**Important findings**

- A small portion of the overall deaths in Kansas are attributed to illicit drugs.

Table 27.1 Number of deaths and age-adjusted death rates due to Illicit Drugs for the State of Kansas by gender and age group, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000			Age Specific Rates Per 100,000		
	Overall	Gender		Age Group (years)			Overall	Gender		Age Group (years)		
		Male	Female	0-24	25-64	65+		Male	Female	0-24	25-64	65+
Statewide	42	26	16	-	34	7	0.5	0.7	-	-	0.8	-

Table 27.2 Number of deaths and age-adjusted death rates due to Illicit Drugs for the State of Kansas by ethnicity and race, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000					
	Overall	Ethnicity*		Race			Overall	Ethnicity*		Race		
		Hispanic	Non-Hispanic	White	African American	Other		Hispanic	Non-Hispanic	White	African American	Other
Statewide	42	-	37	36	-	-	0.5	-	0.5	0.5	-	-

\*Ethnicity was not recorded for all individuals in the database; therefore caution should be taken when making comparisons to overall numbers and rates

**28. Indicator:** Percentage of persons aged 12 and older meeting Diagnostic & Statistical Manual for Mental Disorders – Fourth Edition (DSM-IV) criteria for drug abuse or dependence

**Why is this indicator important?**

DSM-IV criteria are a clinical assessment of abuse or dependence. Individuals identified via DSM-IV criteria as being dependent or abusing the substance may be negatively impacted physically, socially, and mentally by their condition and typically require interventions and treatments. Additionally, the community and others surrounding the individual may experience similar negative outcomes.

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

As availability of various illegal substances decreases, this indicator is expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

National Survey on Drug Use or Health, 2002-2003.

**Important findings**

- Highest percentage of adults ages 18-25 are identified via DSM-IV criteria as being dependent or abusing drugs. This percentage is significantly higher than any other age group.
- Compared to national estimates, Kansas has approximately the same proportion of individuals who are identified as meeting DSM-IV criteria as being dependent or abusing drugs.

Table 28.1 Percentage of persons aged 12 and older meeting DSM-IV criteria for illicit drug abuse or dependence for Kansas by age group, 2003-2004

Region	Age Group (years)							
	Overall		12-17		18-25		26 and Older	
	Estimate	95% Predictive Interval	Estimate	95% Predictive Interval	Estimate	95% Predictive Interval	Estimate	95% Predictive Interval
Statewide	2.7%	2.2 – 3.3	4.8%	3.6 – 6.4	7.2%	5.6 – 9.2	1.5%	1.1 – 2.1

**29. Indicator:** Number of school suspensions and expulsions related to illicit drugs

**Why is this indicator important?**

School suspensions and expulsions related to substance abuse provide an additionally indicator concerning dependence and abuse. Additionally, individuals who are suspended or expelled due to a substance abuse problem will have additional constraints and challenges if they are unable to complete their high school education

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease

As age of initiation increases, this indicator is expected to shift towards high school and decrease overall

As school policies concerning substance abuse increase, this indicator is expected to initially increase and then decrease in the long-term

**Where did we get the data?**

Kansas State Department of Education, as reported by Public Schools and School Districts in aggregate form for school years ending in 2004, 2005, and 2006.

**Important findings**

- Universally, as age increases the number of suspensions related to drugs also increases.
- More information is required in the future to determine gender, racial, and ethnic differences in the number of suspensions. Additionally, information concerning the proportion of schools with policies related to substance abuse would be required for further analysis.

Table 29.1 Number of school suspensions and expulsions related to illicit drug for the State of Kansas by grade level, School years ending in 2004 -2006

	<b>Number</b>			
		<b>Grade Level</b>		
<b>Region</b>	<b>Overall</b>	<b>Elementary</b>	<b>Middle</b>	<b>High</b>
Statewide	508	16	140	352

**30. Indicator:** Number of arrests related to possession/ consumption/ sale of illicit drugs

**Why is this indicator important?**

The possession and/or consumption of illicit drugs is illegal without the proper prescription appropriate for the substance's DEA schedule. The sale of illicit substances is an indirect measure of the demand for various substances as well as an indirect measure of the quantity of each substance throughout the state.

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Bureau of Investigation as reported by offense and arrest reports submitted by local law enforcement agencies, 2005.

**Important findings**

- Males have a significantly higher crude rate of arrests for possession/consumption/sale of illicit drugs than females in Kansas.
- With the exception of juveniles, as age increases the crude rate of arrest for possession/consumption/sale of illicit drugs decreases.
- Compared to national estimates, Kansas has a lower crude rate of arrest for possession/consumption/sale of illicit drugs.

Table 30.1 Number of arrests and rates related to possession/ consumption/ sale of illicit drugs for the State of Kansas by gender and age group, 2005

Region	Overall	Gender		Age Group						
		Male	Female	Juvenile	18-24	25-34	35-44	45-54	55-64	65+
Statewide*	12,854	7,416	2,214	1,286	3,683	2,322	1,494	730	99	16
Crude Rate per 100,000	478.1	558.2	162.8	180.4	1336.4	665.6	355.4	206.1	44.9	4.5

\* KHP-686 drug arrests, KWP-40, ABC-7, KBI-30.

**31. Indicator:** Number of Meth Lab Seizures

**Why is this indicator important?**

The production of methamphetamine (meth) utilizes and produces many chemical hazards. In addition to being a marker of potential supply, thus giving information on demand, this is also a marker of potentially dangerous sites to the population at large.

**How do we want this indicator to change?**

As law enforcement efforts to detect meth labs increase, this indicator is expected to initially increase.

As the prevalence of meth use decreases, this indicator is also expected to decrease.

**Where did we get the data?**

Environmental Photographic Interpretation Center's (EPIC) National Clandestine Laboratory Seizure System, 2001-2005.

**Important findings**

- The number of equipment seizures decreased from 2001 to 2005.
- The number of lab seizures decreased dramatically from 2001 to 2005.
- The number of dumpsites appears to have remained stable from 2001 to 2005.
- The majority of seizures occurred in rural or semi-urban communities throughout Kansas. The Large Southeastern region of Kansas has had the most seizure of all kind. Urban areas had relatively few seizures during the reporting period.

**Graph of overall rates from highest to lowest**

**Number of Meth Lab Seizures in Kansas, 2001-2005**

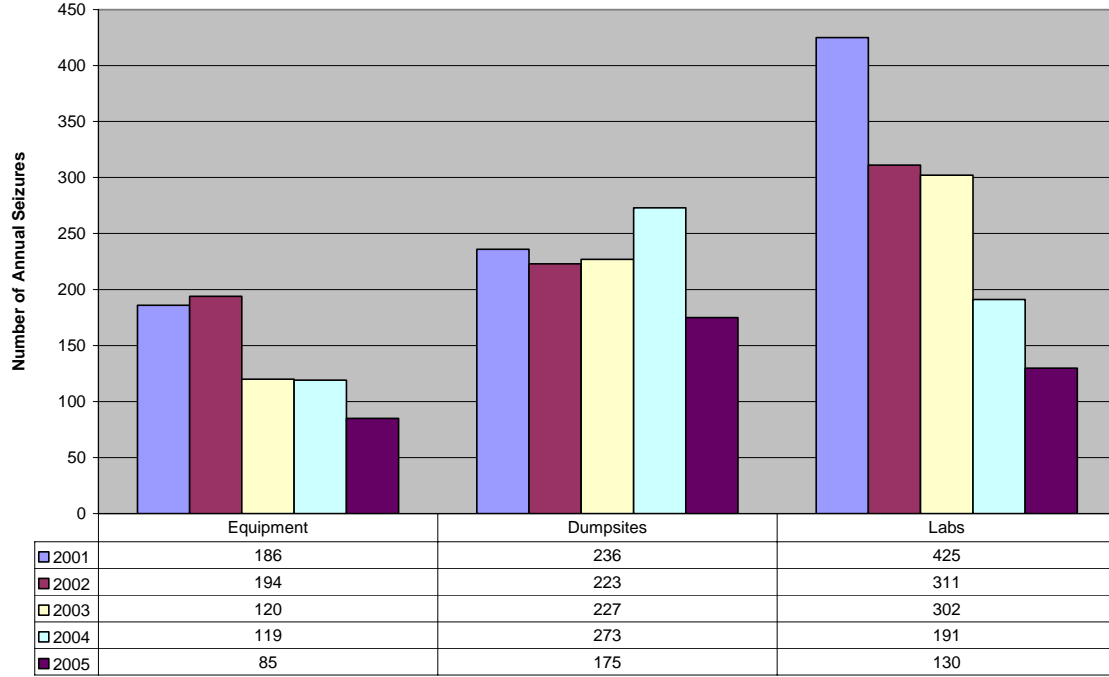


Table 31.1 Number of Meth Lab Seizures for the State of Kansas by type of seizure, 2003-2005

		<b>2003</b>			<b>2004</b>			<b>2005</b>		
<b>Region</b>	<b>Overall</b>	<b>Equipment</b>	<b>Dumpsite</b>	<b>Lab</b>	<b>Equipment</b>	<b>Dumpsite</b>	<b>Lab</b>	<b>Equipment</b>	<b>Dumpsite</b>	<b>Lab</b>
Statewide	1622	120	227	302	119	273	191	85	175	130

**32. Indicator:** Number of individuals under community supervision as a result of probation for possession of drugs

**Why is this indicator important?**

On November 1, 2003 legislation known as SB 123 became effective in Kansas that states that adult offenders sentenced for a first or second drug possession be sentenced to community supervision and be required to successfully complete a certified drug treatment program in lieu of being sentenced to a state correctional facility.

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

As availability of various illegal substances decreases, this indicator is expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Sentencing Commission - FY2004-2006.

**Important findings**

- Males have a significantly higher rate of community supervision sentences than females do.
- As age increases the rate of community supervision sentences under SB 123 decreases.

Table 32.1 Number and rates of individuals under community supervision as a result of probation for possession of drugs for the State of Kansas by gender and age group, FY 2004-2006

Region	Overall	Gender		Age Group (years)					
		Male	Female	18-24	25-34	35-44	45-54	55-64	65+
Statewide	2824	1985	829	964	849	693	281	24	2
Crude Rate per 100,000	35.0	49.8	20.3	116.6	81.1	55.0	26.4	3.6	-

**33. Indicator:** Number of incidences of domestic abuse reported where drugs are suspected

**Why is this indicator important?**

Various illicit drugs are associated with mood alteration and violence. Substances such as PCP destabilize mood and rather than causing sedation actually increase activity and reduce inhibitions. Unlike many other indicators, this indicator provides information on other individuals directly impacted by illicit drug consumption.

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

As availability of various illegal substances decreases, this indicator is expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Bureau of Investigation as reported by offense and arrest reports submitted by local law enforcement agencies, 2005.

**Important findings**

- Care should be taken when interpreting this indicator as it measures only suspected substance abuse and does not support that information with a diagnostic test. Additionally, this variable represents the number of instances, not the number of individuals.
- Males are more likely to be suspected of using illicit drugs during a domestic abuse incidence than females in Kansas.
- The crude rate of domestic abuse where drugs are suspected is highest among individuals aged 25-34.

Table 33.1 Number of incidences of domestic abuse reported where drugs are suspected

Region	Overall	Gender*		Age Group (Suspect)*						
		Male	Female	Juvenile	18-24	25-34	35-44	45-54	55-64	65+
Statewide	1,051	632	145	10	169	267	229	84	11	2
Crude Rate per 100,000	39.1	47.6	10.7	-	61.3	76.5	54.5	23.7	-	-

\* summary data was collected for overall total but not individual counties. Not all summary agencies reported this data.

Illicit drug consumption information is presented in two different categories. The first category is among individuals aged 12 and older in the state of Kansas. The second category looks only at youth in grades 9-12.

Where possible information is presented by past month, past year, and lifetime use. Past month use represents a higher level of dependence on the substance in question. Typically these individuals are at the highest risk for substance abuse related consequences. Past year represents recent experimentation with a particular substance. Increase experimentation may lead to greater levels of dependence over time. Lifetime use represents absolute experimentation with various substances. Particular care must be taken when looking at lifetime use as the laws and social norms surrounding these substances have changed over the lifetimes of many aging adults.

### **Individual Substance Information:**

#### **Marijuana**

The use of marijuana can lead to negative outcomes. In addition to being addictive, marijuana use is also associated with various respiratory illnesses, memory loss or impairment, and a weakened immune system. Possession or consumption of marijuana is illegal in Kansas. Marijuana is a DEA schedule I drug.

#### **Cocaine**

The use of cocaine can lead to negative outcomes. In addition to being highly addictive, cocaine users experience a tolerance that requires more and more product to produce the same level of intoxication. Cocaine use is associated with irregular heart beats, weight loss, respiratory failure, strokes, seizures, and damage to the nasal passage/cavity. Possession or consumption of cocaine is illegal in Kansas without a proper prescription. Cocaine is a DEA schedule II drug.

#### **Crack**

Crack, or crack cocaine, is a relatively inexpensive derivative of powder cocaine. Where powder cocaine is generally snorted, injected, or freebased, crack is typically smoked. Crack use is associated with irregular heart beats, weight loss, respiratory failure, strokes, seizures, and damage to gum tissue resulting in the loss of teeth. Possession or consumption of crack is illegal in Kansas.

#### **Heroin**

The use of heroin can lead to negative outcomes. In addition to being highly addictive, heroin users experience a tolerance that requires more and more product to produce the same level of intoxication. Heroin use is associated with severe withdrawal symptoms, respiratory depression, and death. Additionally, since heroin is generally injected it is also associated with an increased risk of HIV/AIDS and Hepatitis C. Possession or consumption of heroin is illegal in Kansas. Heroin is a DEA schedule I drug.

## **LSD**

The use of LSD can lead to negative outcomes. LSD causes hallucinations that may lead to frequent flashbacks. LSD is also associated with increased body temperatures, increased heart rate, numbness and persistent mental disorders. Possession or consumption of LSD is illegal in Kansas. LSD is a DEA schedule I drug.

## **Ecstasy**

The use of ecstasy may lead to negative problems. Ecstasy is a stimulant associated with mild hallucinogenic effects and increased sensitivity to touch. Additionally, ecstasy use is associated with increased body temperature, dehydration, impaired memory, renal failure, and under certain conditions death. Possession or consumption of ecstasy is illegal in Kansas. Ecstasy is a DEA schedule I drug.

## **Inhalants**

The use of inhalants includes all substances that can be huffed or inhaled in a poorly ventilated area to produce intoxicating effects. Examples include glue, solvents such as paint thinners, and gases such as butane. The use of inhalants is associated with memory impairment, shortness of breath, muscle weakness, unconsciousness and sudden death. The products used as inhalants are generally legal in Kansas and do not require any special process to acquire them.

## **Prescription Drugs – All Types**

Prescription drug abuse includes the non-medical use of psychotherapeutics. Generally three types of prescription drugs are abused: opioids (pain relievers); sedatives and tranquilizers; and stimulants. All substances share the potential for addiction. Each particular substance carries a variety of health and dependence issues with it. The most commonly abused prescription drugs are illegal to possess or consume in Kansas without a proper prescription. Most are DEA schedule II drugs.

## **Prescription Drugs - Pain Relievers**

Abuse of prescription pain relievers carries a strong probability of developing dependence. Prescription pain relievers include opioid and morphine derivatives such as codeine, morphine, oxycodone HCL (OxyContin), and hydrocodone bitartrate (Vicodin). Potential negative impacts include dependence, sedation, respiratory depression, and death. Most pain relievers are DEA schedule II drugs and possession or consumption of such products is illegal in Kansas without a proper prescription. A few, such as codeine, can be found in over the counter DEA schedule V drugs.

### **Prescription Drugs - Tranquilizers**

Abuse of prescription tranquilizers carries a strong probability of developing dependence. Prescription tranquilizers include products such as ketamine and PCP and analogs. Potential negative impacts include increased heart rate and blood pressure, memory loss, impaired motor function, respiratory depression, and death. Possession or consumption of ketamine or PCP is illegal in Kansas without a proper prescription. PCP and analogs are DEA schedule III drugs. Ketamine is a DEA schedule II drug.

### **Prescription Drugs – Stimulants**

Abuse of stimulants increases the probability of developing dependence. Prescription and non-prescription stimulants include amphetamines, methamphetamines, and methylphenidate (Ritalin). Abusing stimulants carries the potential for the following negative impacts: increase heart rate and blood pressure, irregular heart beat, heart failure, addiction, and impaired memory. Possession or consumption of stimulants is illegal in Kansas without a proper prescription. Most stimulants are DEA schedule II drugs.

### **Methamphetamine**

Methamphetamine, or meth, is a stimulant with a high potential for abuse. Non-prescription meth is made in a variety of homegrown labs with highly volatile chemicals. In addition to producing a highly addictive substance, these labs have the potential to contaminate the environment. Abusing meth carries the potential for the following negative impacts: tolerance, irregular heartbeats, memory loss, extreme anorexia, hallucinations, loss of teeth, and death. Possession or consumption of meth is illegal in Kansas without a proper prescription. Meth is a DEA schedule II drug.

### **Steroids**

Anabolic steroids are synthetic substances created to mimic specific male hormones. Traditionally, the use of steroids is associated with an attempt to increase athletic performance. Abuse of steroids may lead to the following negative health outcomes: stunted growth among youth, severe acne, high blood pressure, breast development in males, and facial hair growth in females.

## **Important findings – Individuals aged 12 and older Illicit Drug Use**

### **Marijuana**

- Highest percentage of adults aged 18-25 are identified as past month and past year marijuana users. This percentage is significantly higher than any other age group.
- Over 1 in 3 individuals aged 12 and older report having used marijuana in their lifetime.
- Additional information is required to determine sub-state analysis based upon residence, race, ethnicity, gender, education, and income.

### **Cocaine**

- Highest percentage of adults aged 18-25 are identified as past year cocaine users. This percentage is significantly higher than any other age group.
- Over 1 in 10 individuals aged 12 and older have use cocaine during their lifetime.
- Additional information is required to determine sub-state analysis based upon residence, race, ethnicity, gender, education, and income.

### **Crack**

- Only a relatively small portion of the population report using crack within the past month or past year.
- Nearly five times as many individuals report lifetime use than past year use. This may be indicative of experimentation.

### **Heroin**

- Only a relatively small portion of the population report using heroin within the past month, past year, and lifetime

### **LSD**

- Only a relatively small portion of the population report using LSD within the past month, and past year. A much higher proportion report using LSD in their lifetime and this may be a result of the drugs legality and popularity in the 1960's.

### **Ecstasy**

- Only a relatively small portion of the population report using Ecstasy within the past month, and past year. A higher proportion report using Ecstasy in their lifetime and this may be a result of the drugs legality and popularity in the 1980's and early 1990's.

### **Inhalants**

- Only a relatively small portion of the population report using Inhalants within the past month, and past year. A higher proportion report using Inhalants in their lifetime.

### **Prescription Drugs**

- Only a relatively small portion of the population report abusing prescription drugs within the past month. A higher proportion report abusing prescription drugs with the past year.
- Nearly 1 in 5 individuals aged 12 and older report abusing prescription drugs in their lifetime.

### **Pain Relievers**

- Highest percentage of adults aged 18-25 are identified as past year pain reliever abusers. This percentage is significantly higher than any other age group, representing over 1 in 10 individuals in this age group.
- Over 1 in 10 individuals aged 12 and older have abused pain relievers during their lifetime.

### **Tranquilizers**

- Only a relatively small portion of the population report using Tranquilizers within the past month, and past year. A higher proportion report using Tranquilizers in their lifetime.

### **Sedatives**

- Only a relatively small portion of the population report using Sedatives within the past month, and past year. A higher proportion report using Sedatives in their lifetime.
- Additional information is required to determine the impact of sedatives upon sexual crimes and assaults.

### **Stimulants**

- Only a relatively small portion of the population report using Stimulants within the past month, and past year. A higher proportion report using Stimulants in their lifetime.
- Nearly 1 in 10 individuals aged 12 and older report abusing stimulants in their lifetime.

### **Methamphetamine**

- Only a relatively small portion of the population report using Meth within the past month, and past year. A higher proportion report using Meth in their lifetime.

- Over 1 in 20 individuals aged 12 and older report abusing meth in their lifetime.

**Table 34.1 Types of Illicit Drug Use in Lifetime, Past Year, and Past Month among Persons Aged 12 or Older in Kansas: Percentages, Annual Averages Based on 2002-2004**

Drug	TIME PERIOD		
	Lifetime	Past Year	Past Month
<b>ILLCIT DRUG<sup>1</sup></b>	42.0	12.6	6.1
Marijuana and Hashish	37.0	9.0	4.6
Cocaine	12.4	1.8	0.5
Crack	3.2	0.6	0.0
Heroin	0.7	0.1	*
Hallucinogens	12.8	1.4	0.2
LSD	9.1	0.3	0.1
PCP	2.4	0.1	0.0
Ecstasy	2.6	0.6	0.0
Inhalants	7.4	0.9	0.2
Nonmedical Use of Psychotherapeutics <sup>2</sup>	18.8	5.9	1.9
Pain Relievers	12.0	4.2	1.3
OxyContin <sup>®3</sup>	0.8	0.5	0.3
Tranquilizers	8.0	1.9	0.4
Stimulants	9.2	1.7	0.5
Methamphetamine	6.3	0.9	0.3
Sedatives	3.8	0.3	0.1
<b>ILLCIT DRUG OTHER THAN MARIJUANA<sup>1</sup></b>	26.8	7.2	2.3

\*Low precision; no estimate reported.

-- Not available.

<sup>1</sup> Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Illicit Drugs Other Than Marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

<sup>2</sup> Nonmedical use of prescription-type pain relievers, tranquilizers, stimulants, or sedatives; does not include over-the-counter drugs.

<sup>3</sup> OxyContin<sup>®</sup> use estimates are based on 2004 data only.

Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, and 2004.

## **Important Findings - Youth**

### **Marijuana**

#### **30 Day**

- Males high school students report a slightly higher prevalence of marijuana use than female students.
- As grade level increases, the prevalence of marijuana use increases slightly.
- African American and students of Other races report a significantly higher prevalence of marijuana use than White students.
- Hispanic students report a significantly higher prevalence of marijuana use than non-Hispanic students.

#### **Lifetime**

- Males high school students report a higher prevalence of ever using marijuana than female students.
- As grade level increases, the prevalence of ever using marijuana significantly increases.
- African American and students of Other races report a significantly higher prevalence of ever using marijuana than White students.
- Hispanic students report a significantly higher prevalence of ever using marijuana than non-Hispanic students.

### **Cocaine**

#### **30 Day**

- Male students report a higher prevalence of recent cocaine use than female students.
- In general, students in grade 12 report a slightly higher prevalence of cocaine use than students in grade 6. Caution should be taken when using this marker as individuals with severe dependence problems might not be represented.
- Students in the Other race category report a higher prevalence of cocaine use as compared to White and African American students.
- In general, students of Hispanic ethnicity report a higher prevalence of cocaine use than students of non-Hispanic ethnicity.

### **Lifetime**

- Male students report a higher lifetime prevalence of cocaine use than females.
- Lifetime prevalence of cocaine use increases as grade level increases. This difference is more pronounced than current cocaine use.
- Students in the Other race category report a significantly higher prevalence of lifetime use of cocaine than White or African American students. Additionally, African American students report a significantly lower prevalence of lifetime use of cocaine than White students.
- In general, students of Hispanic ethnicity have a significantly higher prevalence of lifetime cocaine use than students of non-Hispanic ethnicity.

### **Heroin**

#### **Lifetime**

- The highest lifetime prevalence of heroin use is among students in 9<sup>th</sup> grade. It will be important to follow this particular cohort to ensure that this finding is not a construct of survey design.
- No significant difference exists between male and female students with respect to lifetime heroin use.

### **LSD and other psychedelics**

#### **30 Day**

- Male students report a slightly higher recent use of psychedelics than female students.
- Grade level is not a major predictor of recent psychedelics in Kansas.
- Students in the Other race category report a higher prevalence of recent psychedelics use than White or African American students.
- Hispanic students report a slightly higher prevalence of recent psychedelic use than non-Hispanic students.

#### **Lifetime**

- Male students report a slightly higher lifetime use of psychedelics than female students.
- Grade level is not a major predictor of psychedelics in Kansas.
- Students in the Other race category report a higher prevalence of lifetime psychedelics use than White or African American students.
- Hispanic students report a slightly higher prevalence of lifetime psychedelic use than non-Hispanic students.

## **Ecstasy**

### **30 Day**

- Males students report a slightly higher recent use of ecstasy than female students.
- Grade level is not a major predictor of ecstasy in Kansas.
- Students in the Other race category report a higher prevalence of ecstasy use than White or African American students. African American students have a higher prevalence of ecstasy use than White students.
- Hispanic students report a higher prevalence of ecstasy use than non-Hispanic students.

### **Lifetime**

- Male students report a slightly higher lifetime use of ecstasy than female students.
- In general, as grade level increases the lifetime prevalence of ecstasy use increases.
- Students in the Other race category report a higher prevalence of ecstasy use than White or African American students. African American students have a slightly higher prevalence of ecstasy use than White students.
- Hispanic students report a significantly higher prevalence of ecstasy use than non-Hispanic students.

## **Inhalants**

### **30 Day**

- Male students report a slightly higher recent use of inhalants than female students.
- As grade level increases the prevalence of inhalants decreases. This may be due, in part, to limited access of the younger students to other substances.
- Students in the Other race category report a higher prevalence of inhalants than White or African American students.
- Hispanic students report a higher prevalence of inhalants than non-Hispanic students.

### **Lifetime**

- Males students report a slightly higher use of inhalants than female students.

- Universally, as grade level increases the lifetime prevalence of inhalants decreases.
- Students in the Other race category report a higher prevalence of inhalants use than White or African American students. African American students have a significantly lower prevalence of inhalants use than White students.
- Hispanic students report a higher prevalence of inhalants than non-Hispanic students.

## **Methamphetamine**

### **30 Day**

- Male students report a slightly higher use of meth than female students.
- Grade level is not a major predictor of meth in Kansas.
- Students in the Other race category report a higher prevalence of meth use than White or African American students.
- In general, Hispanic students report a higher prevalence of meth use than non-Hispanic students.

### **Lifetime**

- Gender is not a major predictor of lifetime meth use in Kansas.
- As Grade level increases, the lifetime prevalence of meth use also increases.
- Students in the Other race category report a higher lifetime prevalence of meth use than White or African American students. African American students have a lower lifetime prevalence of meth use than White students.
- In general, Hispanic students report a higher prevalence of meth use than non-Hispanic students.

## **Steroids**

### **Lifetime**

- The highest lifetime prevalence of steroid use is among students in 12<sup>th</sup> grade. This may be due to an increase athletic performance before entering college or professional careers. Additionally, a significant proportion of the 9<sup>th</sup> grade students report steroid use. This cohort will need to be tracked to ensure that this information is not due to survey design.
- Male students are twice as likely to report steroid use than female students.

### **Any Illegal Drugs via Injection**

- The highest lifetime prevalence of injection drug use is among students in 12<sup>th</sup> grade. Additionally, a significant proportion of the 9<sup>th</sup> grade students report steroid use. This cohort will need to be tracked to ensure that this information is not due to survey design.
- Male students are more likely to report injection drug use than female students.

Table 35.1 Percentage of students in grades 9 through 12 reporting any use of various illicit substances within the past 30 days for the State of Kansas by gender and grade, 2005

Substance	Overall	Gender		Grade			
		Male	Female	9th	10th	11th	12th
Marijuana	15.0%	16.8%	13.2%	-	13.6%	-	16.8%
Cocaine	2.6%	3.2%	2.1%	-	2.3%	-	3.0%
Heroin	-	-	-	-	-	-	-
LSD and other psychedelics	2.6%	3.2%	2.0%	-	2.4%	-	2.8%
Ecstasy	2.1%	2.6%	1.5%	-	2.1%	-	2.1%
Inhalants	3.6%	4.1%	3.1%	-	4.3%	-	2.6%
Methamphetamine	2.0%	2.3%	1.7%	-	1.9%	-	2.2%
Steroids	-	-	-	-	-	-	-
Any Illegal Drug via Injection	-	-	-	-	-	-	-

Table 35.2 Percentage of students in grades 9 through 12 reporting any use of various illicit substances within the past 30 days for the State of Kansas by race and ethnicity, 2005

Substance	Overall	Race			Ethnicity	
		White	African American	Other	Hispanic	Non-Hispanic
Marijuana	15.0%	13.8%	21.7%	20.2%	19.2%	14.4%
Cocaine	2.6%	2.1%	2.5%	5.0%	5.5%	2.3%
Heroin	-	-	-	-	-	-
LSD and other psychedelics	2.6%	2.1%	2.8%	5.1%	4.6%	2.3%
Ecstasy	2.1%	1.6%	3.6%	4.2%	3.9%	1.9%
Inhalants	3.6%	3.3%	3.2%	5.7%	5.2%	3.4%
Methamphetamine	2.0%	1.7%	1.9%	4.0%	4.0%	1.8%
Steroids	-	-	-	-	-	-
Any Illegal Drug via Injection	-	-	-	-	-	-

Table 35.3 Percentage of students in grades 9 through 12 reporting any use of various illicit substances within their lifetime for the State of Kansas by gender and grade, 2005

Substance	Overall	Gender		Grade			
		Male	Female	9th	10th	11th	12th
Marijuana	32.5%	34.9%	30.2%	-	27.9%	-	38.5%
Cocaine	6.5%	7.3%	5.8%	-	5.5%	-	7.9%
Heroin	2.5%	2.6%	2.4%	3.2%	1.6%	2.7%	2.4%
LSD and other psychedelics	6.4%	7.6%	5.2%	-	5.6%	-	7.4%
Ecstasy	5.5%	6.0%	4.9%	-	5.0%	-	6.1%
Inhalants	11.8%	12.8%	10.9%	-	12.9%	-	10.4%
Methamphetamine	4.8%	4.8%	4.8%	-	4.2%	-	5.6%
Steroids	3.6%	4.8%	2.3%	3.3%	2.1%	3.3%	5.3%
Any Illegal Drug via Injection	2.0%	2.3%	1.8%	2.5%	1.1%	1.7%	2.6%

Table 35.4 Percentage of students in grades 9 through 12 reporting any use of various illicit substances within their lifetime for the State of Kansas by race and ethnicity, 2005

Substance	Overall	Race			Ethnicity	
		White	African American	Other	Hispanic	Non-Hispanic
Marijuana	32.5%	30.6%	42.0%	40.5%	41.4%	31.4%
Cocaine	6.5%	5.8%	4.0%	10.7%	11.8%	5.9%
Heroin	2.5%	-	-	-	-	-
LSD and other psychedelics	6.4%	5.8%	4.1%	10.6%	9.6%	6.0%
Ecstasy	5.5%	4.7%	6.5%	9.6%	9.0%	5.0%
Inhalants	11.8%	11.6%	8.5%	15.1%	13.5%	11.6%
Methamphetamine	4.8%	4.5%	3.7%	7.3%	6.9%	4.5%
Steroids	3.6%	-	-	-	-	-
Any Illegal Drug via Injection	2.0%					

**36. Indicator:** Percentage of students in grades 6 through 12 who report first use of marijuana before age 13

**Why is this indicator important?**

Early initiation, before age 13, of marijuana consumption has been shown to increase the risk of dependence problems later in life. Marijuana use is also associated with various respiratory illnesses, memory loss or impairment, and a weakened immune system. Possession or consumption of marijuana is illegal in Kansas. Marijuana is a DEA schedule I drug.

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Social and Rehabilitation Services, Kansas Communities That Care (KCTC) Survey, 2005

**Important findings**

- Male students have a higher prevalence of early initiation of marijuana use than female students.
- Between grade 6 and grade 8, the proportion of youth who tried marijuana before age 13 dramatically increases. This is due, in part, to the overall age of most students in those two grades. Additionally, following this initial increase the prevalence of early initiation of marijuana use remains stable then decreases in grade 12. This is due, in part, to recall bias among older students.
- African American students and student of Other races report a higher prevalence of early initiation of marijuana use as compared to White students.
- Students of Hispanic ethnicity report a higher prevalence of early initiation of marijuana compared to non-Hispanic students.
- During the past 5 years the prevalence of early initiation of marijuana has decreased slightly.

## Graph of Five-Year Consumption Trend

During the past 5 years, the proportion of youth in grades 6-12 who report early initiation of marijuana has decreased slightly.

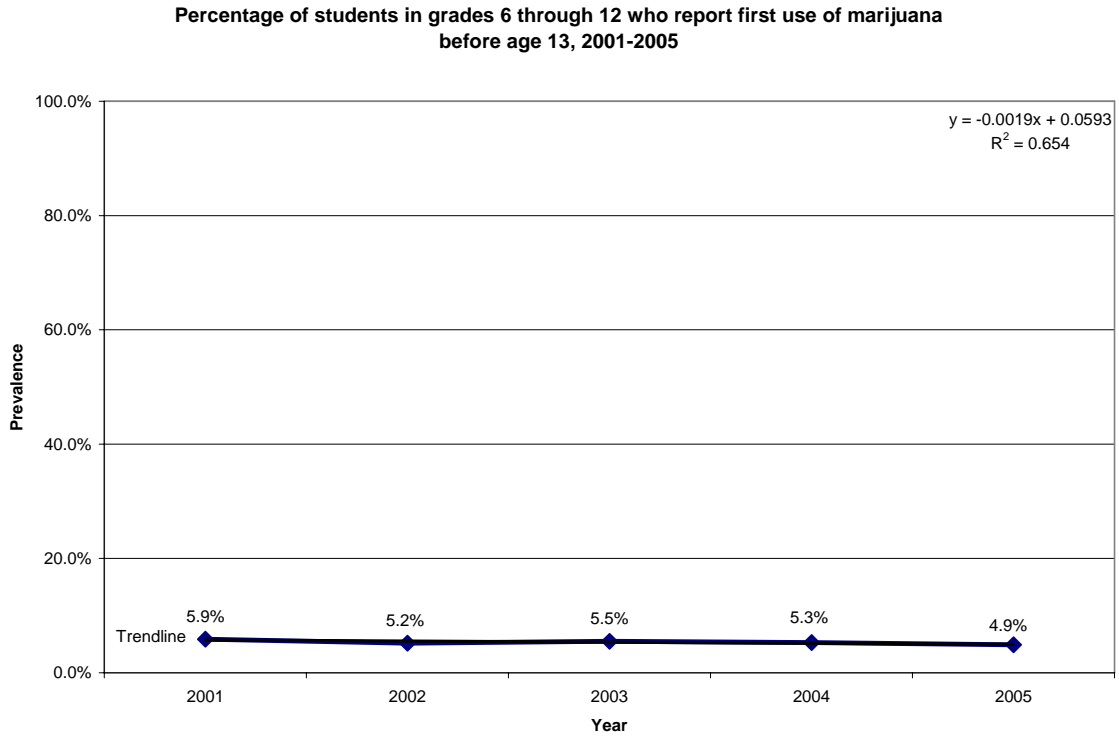


Table 36.1 Percentage of students in grades 6 through 12 who report first use of marijuana before age 13 for the State of Kansas by gender and grade, 2005

Region	Overall	Gender		Grade			
		Male	Female	6th	8th	10th	12th
Statewide	4.9%	6.0%	3.7%	1.7%	6.0%	6.7%	4.9%

Table 36.2 Percentage of students in grades 6 through 12 who report first use of marijuana before age 13 for the State of Kansas by race and ethnicity, 2005

Region	Overall	Race			Ethnicity	
		White	African American	Other	Hispanic	Non-Hispanic
Statewide	4.9%	3.9%	9.0%	7.6%	8.2%	4.3%

**37. Indicator:** Percentage of students in grades 6 through 12 who report they have sold illegal drugs one or more times in the past year

**Why is this indicator important?**

The willingness to sell illegal drugs represents a deep acceptance of drug culture by an individual. Youth who engage in such acts place themselves at greater risk for developing drug dependence problems, criminal charges, and risk of violence.

**How do we want this indicator to change?**

As overall public education and intervention programs increase, this indicator is expected to decrease.

As availability of various illegal substances decreases, this indicator is expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Social and Rehabilitation Services, Kansas Communities That Care (KCTC) Survey, 2005

**Important findings**

- Male students are twice as likely to report they have sold illegal drugs in the past year than female students.
- As grade level increases, the proportion of students who report they have sold illegal drugs increases significantly.
- African American students and students of Other races report a significantly higher prevalence of selling illegal drugs in the past year than White students.
- Hispanic students report a significantly higher prevalence of selling illegal drugs in the past year than non-Hispanic students.
- During the past 5 year, the proportion of youth who report they have sold illegal drugs has decreased slightly.

## Graph of Five-Year Consumption Trend

During the past 5 years, the proportion of youth in grades 6-12 who report they have sold illegal drugs has decreased slightly.

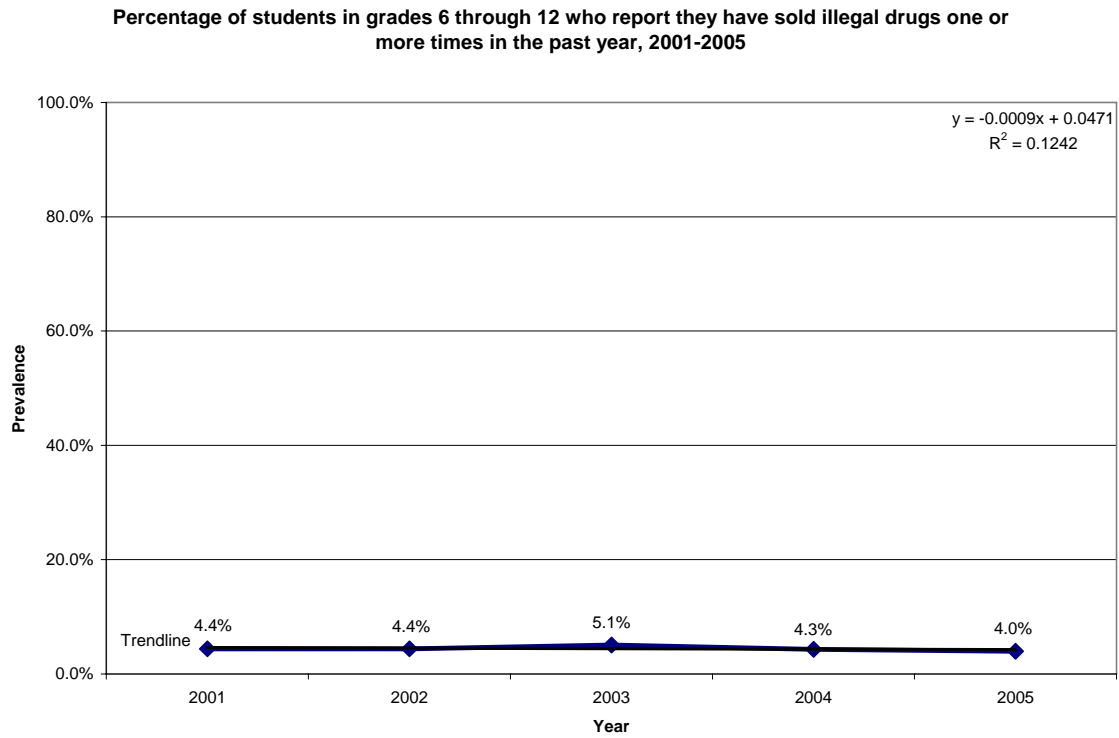


Table 37.1 Percentage of students in grades 6 through 12 who report they have sold illegal drugs one or more times in the past year for the State of Kansas by gender and grade, 2005

Region	Overall	Gender		Grade			
		Male	Female	6th	8th	10th	12th
Statewide	4.0%	5.6%	2.5%	0.6%	2.6%	6.5%	7.4%

Table 37.2 Percentage of students in grades 6 through 12 who report they have sold illegal drugs one or more times in the past year for the State of Kansas by race and ethnicity, 2005

Region	Overall	Race			Ethnicity	
		White	African American	Other	Hispanic	Non-Hispanic
Statewide	4.0%	3.5%	5.7%	5.7%	6.2%	3.7%

# **Overall Substance Abuse Indicators**

**38. Indicator:** Number of deaths from suicide per 100,000 population

**Why is this indicator important?**

Suicide rates are highly correlated to alcohol and illicit drug abuse. Individuals suffering from chronic depression may begin to self medicate themselves, causing a higher than expected suicide rate.

**How do we want this indicator to change?**

As overall alcohol dependence decreases, this indicator is also expected to decrease.

As overall drug dependence decreases, this indicator is also expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Health and Environment, Center for Health and Environmental Statistics, Office of Vital Statistics, Death Certificates 2002-2004.

**Important findings**

- Males have an age-adjusted death rate from suicide that is significantly higher than females.
- Individuals in the 0-24 age range have a significantly lower age-specific death rate from suicide than individuals in the 25-64 or 65+ age ranges.
- The age-adjusted death rate from suicide among African Americans is significantly lower than among Whites. Individuals of Hispanic ethnicity have a lower age-adjusted death rate from suicide than non-Hispanic individuals. Care should be taken when interpreting ethnicity information as many individuals had missing values.
- During the past 5 years, the age-adjusted death rate from suicide has increased in Kansas. Compared to national estimates, Kansas has a higher age adjusted death rate from suicide.

## Graph of Five-Year Mortality Trend

During the past 5-years, the age-adjusted death rate from suicide has increased slightly.

Nationally, the age-adjusted death rate from suicide in 2005 was 10.8 per 100,000. Kansas has a significantly higher age-adjusted death rate from suicide than the National estimates for the year 2005.

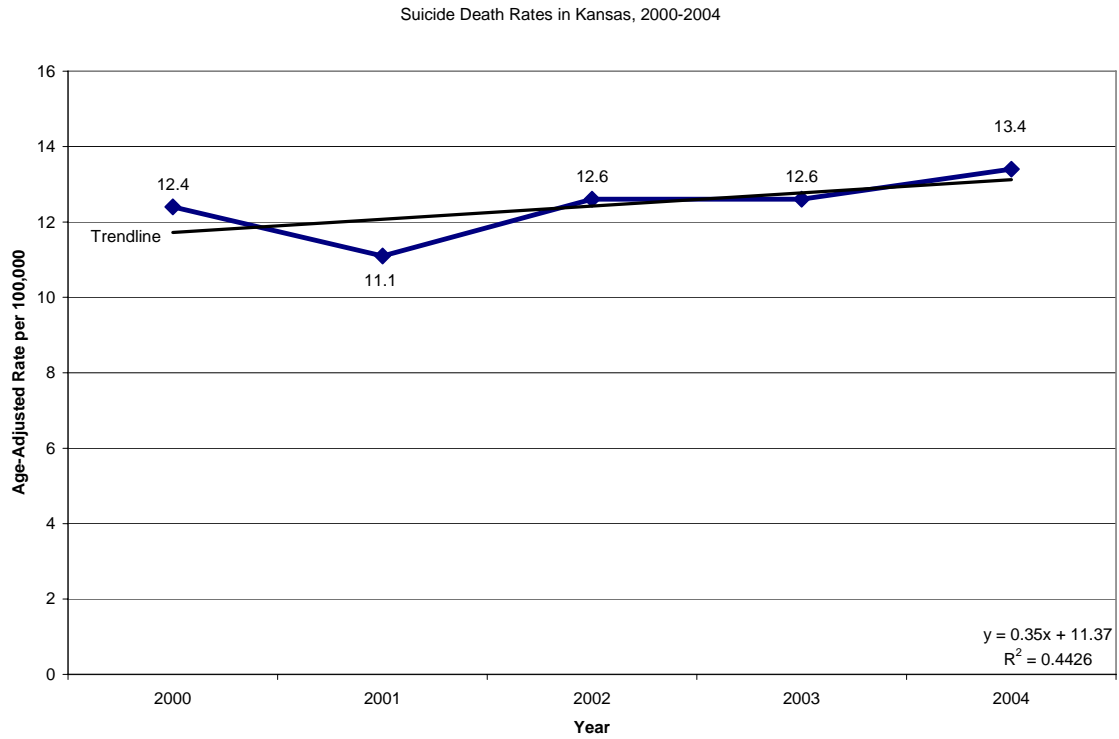


Table 38.1 Number of deaths and age-adjusted death rates due to Suicide for the State of Kansas by gender and age group, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000			Age Specific Rates Per 100,000		
	Overall	Gender		Age Group (years)			Overall	Gender		Age Group (years)		
		Male	Female	0-24	25-64	65+		Male	Female	0-24	25-64	65+
Statewide	1058	844	214	170	713	175	12.8	21.1	5.1	5.7	17.2	16.5

Table 38.2 Number of deaths and age-adjusted death rates due to Suicide for the State of Kansas by ethnicity and race, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000						
	Overall	Ethnicity*		Race			Overall	Ethnicity*			Race		
		Hispanic	Non-Hispanic	White	African American	Other		Hispanic	Non-Hispanic	White	African American	Other	
Statewide	1058	28	975	1012	31	14	12.8	5.7	12.5	13.5	6.1	-	

\*Ethnicity was not recorded for all individuals in the database; therefore caution should be taken when making comparisons to overall numbers and rates

**39. Indicator:** Number of deaths from homicide per 100,000 population

**Why is this indicator important?**

Homicide rates have been found to be correlated to alcohol and illicit drug abuse. Violence is a common side effect of both acute intoxication from alcohol as well as multiple illicit drugs.

**How do we want this indicator to change?**

As overall alcohol dependence decreases, this indicator is also expected to decrease.

As overall drug dependence decreases, this indicator is also expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Department of Health and Environment, Center for Health and Environmental Statistics, Office of Vital Statistics, Death Certificates 2002-2004.

**Important findings**

- Males have a significantly higher age-adjusted death rate from homicide than females.
- Individuals in the 65+ age group have a significantly lower age-specific death rate from homicide than individuals in the 0-24 and 25-64 age groups.
- African Americans have a significantly higher age-adjusted death rate from homicide than individuals who are White. Individuals of Hispanic ethnicity have a higher age-adjusted death rate from homicide than non-Hispanic individuals. Care should be taken when interpreting ethnicity information as many individuals had missing values.
- During the past 5 years, the age-adjusted death rate from homicide has decreased slightly. Compared to national estimates, Kansas has a lower age-adjusted death rate from homicide.

## Graph of Five-Year Mortality Trend

During the past 5-years, the age-adjusted death rate from homicide has decreased slightly.

Nationally, the age-adjusted death rate from homicide in 2005 was 6.1 per 100,000. Kansas has a significantly lower age-adjusted death rate from homicide than the National estimates for the year 2005.

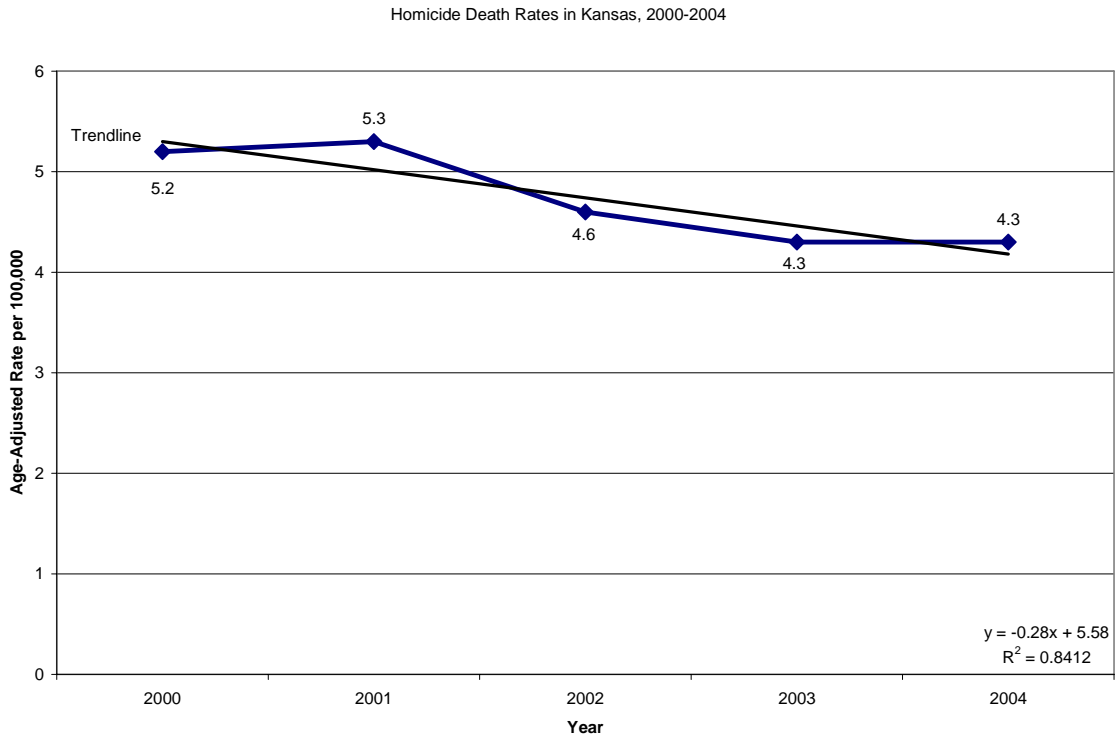


Table 39.1 Number of deaths and age-adjusted death rates due to Homicide for the State of Kansas by gender and age group, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000			Age Specific Rates Per 100,000		
	Overall	Gender		Age Group (years)			Overall	Gender		Age Group (years)		
		Male	Female	0-24	25-64	65+		Male	Female	0-24	25-64	65+
Statewide	362	248	114	130	204	28	4.4	5.9	2.8	4.4	4.9	2.6

Table 39.2 Number of deaths and age-adjusted death rates due to Homicide for the State of Kansas by ethnicity and race, 2002-2004

Region	Number of Deaths						Age Adjusted Rates Per 100,000					
	Overall	Ethnicity*		Race			Overall	Ethnicity*		Race		
		Hispanic	Non-Hispanic	White	African American	Other		Hispanic	Non-Hispanic	White	African American	Other
Statewide	362	45	291	215	136	11	4.4	8.4	3.8	2.9	25.0	-

\*Ethnicity was not recorded for all individuals in the database; therefore caution should be taken when making comparisons to overall numbers and rates

**40. Indicator:** Number of Simple and aggravated assaults, sexual assaults, and robberies reported to police

**Why is this indicator important?**

All types of assaults have been found to be correlated to alcohol and illicit drug abuse. Violence is a common side effect of both acute intoxication from alcohol as well as multiple illicit drugs. Additionally, specific illicit drugs are commonly used in sexual assaults and are referred to as “date rape” drugs.

**How do we want this indicator to change?**

As overall alcohol dependence decreases, this indicator is also expected to decrease.

As overall drug dependence decreases, this indicator is also expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Bureau of Investigation as reported by offense and arrest reports submitted by local law enforcement agencies, 2005.

**Important findings**

- Care should be taken in interpretations as the information concerning assaults is incident based and does not reflect the offender, information is on the victim.
- Females report a higher number of incidences of assault than males in Kansas.
- As age increases, the number and rate of assault incidences decreases significantly. The exception to this is among Juveniles who have a lower reported rate than individuals in the 18-24 age group.

Table 40.1 Number and rate of Simple and aggravated assaults, sexual assaults, and robberies reported to police for the State of Kansas by gender and age group, 2005

Region	Overall	Gender*		Age Group (Victim)*						
		Male	Female	Juvenile	18-24	25-34	35-44	45-54	55-64	65+
Statewide	41,912	18,090	20,995	8,880	10,354	8,683	6,364	3,515	952	451
Crude Rate per 100,000	1559.0	1361.7	1543.8	1245.5	3757.0	2489.0	1514.0	992.5	432.2	126.6

**\*not all agencies in state reported gender and age information**

**41. Indicator:** Number of arrests for Prostitution

**Why is this indicator important?**

Increased prostitution in a region may be indicative of increased drug related crimes and drug use. Prostitution is associated with substance abuse in many ways. Females arrested for prostitution are among the most likely to test positive for drugs at arrest. The street value of methamphetamine is often difficult to assess as many people pay for the drug through prostitution. Depending on the level of addiction and the substance, drug habits can be extremely expensive and require other criminal activities to fund the habit.

**How do we want this indicator to change?**

As overall drug dependence decreases, this indicator is also expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Bureau of Investigation as reported by offense and arrest reports submitted by local law enforcement agencies, 2005.

**Important findings**

- Females have a higher rate of arrest for prostitution than males in Kansas.
- The peak age for arrest rates for prostitution is among the 25-34 age group. Rates of arrest for prostitution increase until the 25-34 age group, then decrease with each age group after.
- Compared to national estimates, Kansas has a lower arrest rate for prostitution.

Table 41.1 Number of arrests for Prostitution for the State of Kansas by gender and age group, 2005

Region	Overall	Gender*		Age Group*						
		Male	Female	Juvenile	18-24	25-34	35-44	45-54	55-64	65+
Statewide	341	50	146	0	27	74	61	23	8	3
Crude Rate per 100,000	12.7	3.8	10.7	-	9.8	21.2	14.5	6.5	-	-

\*not all agencies in state reported gender and age information

**42. Indicator:** Number of Property Crimes reported to police

**Why is this indicator important?**

Drug-related offences include stealing property to pay for a drug habit. The number of property crimes in an area may be indicative of the level of dependence of individuals in the area. Depending on the level of addiction and the substance, drug habits can be extremely expensive and require other criminal activities to fund the habit.

**How do we want this indicator to change?**

As overall drug dependence decreases, this indicator is also expected to decrease.

As treatment opportunities increase and access to current treatment opportunities increase, this indicator is expected to decrease.

**Where did we get the data?**

Kansas Bureau of Investigation as reported by offense and arrest reports submitted by local law enforcement agencies, 2005.

**Important findings**

- A total of 117,439 property crimes were reported to law enforcement agencies throughout Kansas in 2005.
- Care should be taken in interpretations as the information concerning property crimes is incident based and does not reflect the number of individuals involved.

## **Appendix A: Data Sources**

**Behavior Risk Factor Surveillance System (BRFSS)** – The BRFSS is a random digit dialing (RDD) telephone survey. The CDC has developed the questionnaire to ensure compatibility across states. Core questions are asked annually each year in all states and states have the option of adding in additional supplemental questions concerning specific health behaviors and conditions.

**Kansas Adult Tobacco Survey (ATS)** – The ATS is another RDD telephone survey that is used to measure population-based outcomes. The ATS has been conducted in Kansas during 2001-2002. The questionnaire is based upon CDC best practice questions, which allows for compatibility with other states and the BRFSS. The ATS provided in-depth questions concerning tobacco use, adult attitudes concerning smoking, as well as opinions concerning various aspects of tobacco control in Kansas.

**Kansas Bureau of Investigation (KBI)** – Information from local and statewide law enforcement is reported to KBI. The information collected is on the number of offences reported to law enforcement as well as the number or arrests made. In some law enforcement agencies only summary information is report and not detailed individual accounts.

**Kansas Communities That Care (KCTC)** - The KCTC is a school-based survey for students in grades 6, 8, 10, and 12 in Kansas. The KCTC is utilized to gather information concerning youth prevalence of various risk factors such as alcohol, tobacco, other drugs, gang involvement, and many others. In addition, the KCTC is utilized to gather information concerning individual and community risk and protective factors.

**Kansas Department of Revenue Annual Report (KDR)**– The KDR annual report is used to gather information concerning the amount of taxes collected from the sales of alcohol, tobacco, and drug tax stamps.

**Kansas Sentencing Commission (KSR)** – The KSR collects information from local judicial systems and compiles information for statewide analysis. The KSR is responsible for the SB123 initiative that collects information on individuals sentenced to intensive community supervision and treatment following initial arrest for possession/consumption charges related to illicit drugs. The KSR also monitors the number of individuals under supervision for a 4<sup>th</sup> or more Driving Under the Influence offence.

**Kansas State Department of Education (KSDE)** – The KSDE data collection systems provide information on all school based offences. Information is collected on the nature of suspensions and expulsions, including if the offence is related to alcohol, tobacco, or other drugs.

**Kansas Youth Tobacco Survey (YTS)** – The YTS is a school-based survey for students in grades 6-12 in Kansas. The YTS is utilized to gather information concerning youth

prevalence of various tobacco products, youth attitudes concerning tobacco, as well as knowledge of programs designed for youth in the State of Kansas.

**Kansas Vital Statistics (KVS)** – The KVS provide information on all births, pregnancies, marriages, divorces, and deaths in Kansas and among Kansas residents. Information is collected on many risk and protective factors surrounding the event as well as extensive demographic information. Information is available at the statewide and sub-state level.

**Kansas Youth Risk Behavior Survey (YRBS)** – The YRBS is a school-based survey for students in grades 9-12 in Kansas. The YRBS is utilized to gather information concerning youth prevalence of various risk factors such as alcohol, tobacco, other drugs, physical activity, sexual activity, and many other.

**Monitoring The Future (MTF)** – The MTF survey is an annual school-based survey of youth in grades 8, 10, and 12 nationally. The MTF survey is utilized to gather national trend information concerning drug use trend and patterns.

**National Survey on Drug Use or Health (NSDUH)** – The NSDUH is an annual household survey of individuals aged 12 and older. The main foci of the survey are to obtain information concerning consumption patterns and dependence of alcohol, tobacco, and other illicit drugs. Over sampling occurs to provide statewide level estimates in addition to national estimates.

**National Vital Statistics (NVS)** – The NVS provide information on all births, pregnancies, and deaths nationally. Information is collected on many risk and protective factors surrounding the event as well as extensive demographic information. Electronic reporting systems are currently being explored to increase data reliability and completeness as well as to provide a uniform data collection process.

**Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC)** – The SAMMEC system was designed and is maintained by the CDC. It is used to estimate the health outcomes attributable to tobacco, the number of deaths attributable to tobacco, as well as the financial burden of tobacco. Information is available for all states as well as at the national level. SAMMEC provides information on direct medical costs as well as indirect loss of productivity costs.

**State of Kansas Synar report** – Kansas performs unannounced compliance checks on a random sample of all retailers and vendors of tobacco. Specifically these compliance checks are used to monitor the sales of tobacco to minors. Alcohol and Beverage Control (ABC) imposes fines upon individuals failing these checks. Results of the SYNAR report are used in the Kansas Substance Abuse Prevention and Treatment Block Grant.

**Uniform Crime Report (UCR)** – The UCR is compiled by the Federal Bureau of Investigation (FBI) on criminal offences throughout the United States. The UCR provides data based upon agency, state, and national indexes of crime. Law enforcement

agencies are required to submit monthly reports to the FBI. Electronic reporting systems are currently being implemented to increase data reliability and completeness.

## **Appendix B: Data Definitions**

### **Mortality – In order of appearance in document**

**Chronic Liver Disease:** For the purpose of this document, chronic liver disease deaths are defined as those individuals whose underlying primary cause of death is listed on their death certificate as International Classification of Disease, Version 10 (ICD – 10) codes K70 and K73-K74.

**Acute Alcohol Poisoning:** For the purpose of this document, acute alcohol poisoning deaths are defined as those individuals whose underlying primary cause of death is listed on their death certificate as ICD-10 code F10.0.

**Alcohol Related Vehicle Deaths:** For the purpose of this document, alcohol related vehicle deaths are defined as those motor vehicle drivers involved in a fatal accident where alcohol was a contributing factor in the incident.

**Lung Cancer:** For the purpose of this document, lung cancer deaths are defined as those individuals whose underlying primary cause of death is listed on their death certificate as ICD-10 codes C34.

**COPD and Emphysema:** For the purpose of this document, COPD and emphysema deaths are defined as those individuals whose underlying primary cause of death is listed on their death certificate as ICD-10 codes J40-J44 and J47.

**Cardiovascular Diseases:** For the purpose of this document, cardiovascular disease deaths are defined as those individuals whose underlying primary cause of death is listed on their death certificate as ICD-10 codes I00-I09, I11, I13, I20-I51, and I60-I69.

**Illicit Drugs:** For the purpose of this document, illicit drug deaths are defined as those individuals whose underlying primary cause of death is listed on their death certificate as ICD-10 codes F11-F19, F55 and G62.0.

**Suicide:** For the purpose of this document, suicide deaths are defined as those individuals whose underlying primary cause of death is listed on their death certificate as ICD-10 codes X60-X84 and Y87.0.

**Homicide:** For the purpose of this document, homicide deaths are defined as those individuals whose underlying primary cause of death is listed on their death certificate as ICD-10 codes X85-Y09 and Y87.1.

## **Morbidity – In order of appearance in document**

**DSM-IV Alcohol Dependence or Abuse:** For the purpose of this document, DSM-IV criteria for alcohol dependence or abuse is assessed using multiple questions from the National Survey on Drug Use or Health. Dependence and abuse are mutually exclusive terms and will be aggregated together to give an overall picture.

**Youth Suspensions and Expulsions for Alcohol:** For the purpose of this document, youth suspensions and expulsions for alcohol include all individuals where one of the circumstances leading to suspension or expulsion from an elementary, middle, or high school is related to alcohol.

**Youth Suspensions and Expulsions for Tobacco:** For the purpose of this document, youth suspensions and expulsions for tobacco include all individuals where one of the circumstances leading to suspension or expulsion from an elementary, middle, or high school is related to tobacco.

**DSM-IV Illicit Drug Dependence or Abuse:** For the purpose of this document, DSM-IV criteria for illicit drug dependence or abuse is assessed using multiple questions from the National Survey on Drug Use or Health. Dependence and abuse are mutually exclusive terms and will be aggregated together to give an overall picture.

**Youth Suspensions and Expulsions for Illicit Drugs:** For the purpose of this document, youth suspensions and expulsions for illicit drugs include all individuals where one of the circumstances leading to suspension or expulsion from an elementary, middle, or high school is related to illicit drugs.

## **Crimes – In order of appearance in document**

**Minor In Possession of Alcohol:** For the purpose of this document, minor in possession of alcohol will be defined as the number of citations written to individuals under the age of 21 who possess alcohol or have consumed alcohol.

**Driving Under the Influence (DUI) of Alcohol:** For the purpose of this document, driving under the influence of alcohol will be defined as the number of arrests made where an individual is operating a vehicle and has a BAC of .08 or greater.

**Community Supervision for 4<sup>th</sup> time DUI arrest:** For the purpose of this document, community supervision for 4<sup>th</sup> time DUI arrests will be defined as those individuals who are arrested for a DUI and through the Sentencing of the offence it is determined that it is the individual's 4<sup>th</sup> or more DUI. Previous DUI offences can be from any community in Kansas as well as from other States.

**Alcohol Related Domestic Abuse:** For the purpose of this document, alcohol related domestic abuse will be defined as the number of incidences of domestic abuse reported to law enforcement agencies where one or more individuals is suspected of consuming alcohol.

**Possession, Consumption, or Sale of Illicit Drugs:** For the purpose of this document, possession, consumption, or sale of illicit drugs will be defined as the number of arrests made for an offence of possession of a controlled substance, consumption of a controlled substance, or sale of controlled substance.

**Meth Lab Seizures:** For the purpose of this document, meth lab seizures will be defined as the number of law enforcement seizures of meth lab equipment, meth labs, and meth lab dumpsites.

**Community Supervision for Possession of Drugs:** For the purpose of this document, community supervision for possession of drugs will be defined as the number of individuals arrested for a first time offence of possession of a controlled substance and sentenced to community treatment of drug dependence or abuse.

**Drug Related Domestic Abuse:** For the purpose of this document, drug related domestic abuse will be defined as the number of incidences of domestic abuse reported to law enforcement agencies where one or more individuals is suspected of consuming drugs.

**Simple and Aggravated Assaults, Sexual Assaults, and Robberies:** For the purpose of this document, simple and aggravated assaults, sexual assaults, and robberies will be defined as the number of incidences reported to law enforcement agencies for simple assaults, battery, aggravated assault, attempted murder, sexual assault, and robberies.

**Prostitution:** For the purpose of this document, prostitution will be defined as the number of arrests for prostitution.

**Property Crimes:** For the purpose of this document, property crimes will be defined as the number of incidences reported to law enforcement agencies for burglary, all larcenies, auto theft, arson, and criminal damage to property.

## Consumption

### Adult

**Thirty-day Alcohol Use:** For the purpose of this document, 30-Day alcohol use will be defined as the proportion of individuals who respond in the affirmative to the following survey question, “During the past 30 days, have you had at least one drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor?”

**Binge Drinking:** For the purpose of this document, binge drinking will be defined as the proportion of individuals who respond that on one or more of the previous 30 days they have consumed five or more drinks during one occasion. The survey question utilized for this is as follows, “Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks on one occasion?”

**Heavy Drinking:** For the purpose of this document, heavy drinking will be defined as the proportion of males who indicate consuming more than two alcoholic beverages per day and females who indicate consuming more than one alcoholic beverage per day. The survey questions utilized for this are as follows, “During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage?” and ” One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average?”

**Drinking During Pregnancy:** For the purpose of this document, drinking during pregnancy will be defined as the proportion of pregnant women who indicate at the time of birth that they have consumed alcohol during their pregnancy. Information is recorded as part of the live birth records.

**Current Smokers:** For the purpose of this document, current smokers will be defined as the proportion of individuals who have smoked at least 100 cigarettes in their lifetime and currently smoke “some days” or “everyday”. The survey questions utilized for this are as follows, “Have you smoked at least 100 cigarettes in your entire life?” and “Do you now smoke cigarettes every day, some days, or not at all?”

**Current Smokeless Tobacco Users:** For the purpose of this document, current smokeless tobacco users will be defined as the proportion of individuals who report they have ever tried smokeless tobacco and currently use smokeless tobacco “some days” or “everyday”. The survey questions utilized for this are as follows, “Have you ever used or tried any smokeless tobacco products such as chewing tobacco or snuff?” and “Do you currently use chewing tobacco or snuff every day, some days, or not at all?”

**Current Smokers during Pregnancy:** For the purpose of this document, current smokers during pregnancy will be defined as the proportion of pregnant women who indicate at the time of birth that they have smoked cigarettes during their pregnancy. Information is recorded as part of the live birth records.

**Thirty-day Illicit Drug Use:** For the purpose of this document, 30-day illicit drug use is the proportion of individuals who respond they have consumed a particular illicit substance in the past month. Results are tabulated per substance. Possible substances include the following: Marijuana, Cocaine, Crack, Heroin, LSD, Ecstasy, Inhalants, Non-medical Use of Psychotherapeutics, Pain Relievers, Tranquilizers, Sedatives, Stimulants, and Methamphetamine.

**Past Year Illicit Drug Use:** For the purpose of this document, past year illicit drug use is the proportion of individuals who respond they have consumed a particular illicit substance in the past year. Results are tabulated per substance. Possible substances include the following: Marijuana, Cocaine, Crack, Heroin, LSD, Ecstasy, Inhalants, Non-medical Use of Psychotherapeutics, Pain Relievers, Tranquilizers, Sedatives, Stimulants, and Methamphetamine.

**Lifetime Illicit Drug Use:** For the purpose of this document, lifetime illicit drug use is the proportion of individuals who respond they have consumed a particular illicit substance ever in their lifetime. Results are tabulated per substance. Possible substances include the following: Marijuana, Cocaine, Crack, Heroin, LSD, Ecstasy, Inhalants, Non-medical Use of Psychotherapeutics, Pain Relievers, Tranquilizers, Sedatives, Stimulants, and Methamphetamine.

## **Youth**

*Thirty-day alcohol use* is the percentage of 6th, 8th, 10th, and 12th graders who reported drinking alcohol at least once in the 30 days prior to completing the Kansas Communities That Care Survey. The survey question is “On how many occasions have you had beer, wine, or hard liquor during the past 30 days?” The responses 1-2 occasions, 3-5 occasions, 6-9 occasions, 10-19 occasions, 20-39 occasions, and 40 or more occasions were combined to calculate the percentage.

*Binge drinking* is the percentage of 6th, 8th, 10th, and 12th graders who reported having 5 or more drinks in a row at least once in the two weeks prior to completing the Kansas Communities That Care Survey. The survey question is “Think back over the last two weeks. How many times have you had five or more alcoholic drinks in a row?” The responses 1 time, 2 times, 3-5 times, 6-9 times, and 10 or more times were combined to calculate the percentage.

*First use of alcohol before age 13* is the percentage of 6th, 8th, 10th, and 12th graders who reported using alcohol before the age of 13 on the Kansas Communities That Care Survey. The survey question is “How old were you when you first had more than a sip or two of beer, wine, or hard liquor (for example vodka, whiskey, or gin)?” The responses 10 or younger, 11, and 12 were combined to calculate the percentage.

*Thirty-day cigarette use* is the percentage of 6th, 8th, 10th, and 12th graders who reported smoking cigarettes at least once in the 30 days prior to completing the Kansas Communities That Care Survey. The survey question is “How frequently have you smoked cigarettes during the past 30 days?” The responses less than one cigarette per day, one to five cigarettes per day, about

one-half pack per day, about one pack per day, about one and one-half packs per day, and two packs or more per day were combined to calculate the percentage.

*Thirty-day smokeless tobacco use* is the percentage of 6th, 8th, 10th, and 12th graders who reported using smokeless tobacco at least once in the 30 days prior to completing the Kansas Communities That Care Survey. The survey question is “How frequently have you used smokeless tobacco during the past 30 days?” The responses once or twice, once or twice a week, about once a day, and more than once a day were combined to calculate the percentage.

*First use of cigarettes before age 13* is the percentage of 6th, 8th, 10th, and 12th graders who reported smoking cigarettes before the age of 13 on the Kansas Communities That Care Survey. The survey question is “How old were you when you first smoked a cigarette, even just a puff?” The responses 10 or younger, 11, and 12 were combined to calculate the percentage.

*Thirty-day marijuana use* is the percentage of 6th, 8th, 10th, and 12th graders who reported using marijuana at least once in the 30 days prior to completing the Kansas Communities That Care Survey. The survey question is “On how many occasions (if any) have you used marijuana during the past 30 days?” The responses 1-2 occasions, 3-5 occasions, 6-9 occasions, 10-19 occasions, 20-39 occasions, and 40 or more occasions were combined to calculate the percentage.

*Lifetime marijuana use* is the percentage of 6th, 8th, 10th, and 12th graders who reported using marijuana at least once in their lifetime prior to completing the Kansas Communities That Care Survey. The survey question is “On how many occasions (if any) have you used marijuana in your lifetime?” The responses 1-2 occasions, 3-5 occasions, 6-9 occasions, 10-19 occasions, 20-39 occasions, and 40 or more occasions were combined to calculate the percentage.

*First use of marijuana before age 13* is the percentage of 6th, 8th, 10th, and 12th graders who reported using marijuana before the age of 13 on the Kansas Communities That Care Survey. The survey question is “How old were you when you first smoked marijuana?” The responses 10 or younger, 11, and 12 were combined to calculate the percentage.

*Thirty-day cocaine use* is the percentage of 6th, 8th, 10th, and 12th graders who reported using cocaine at least once in the 30 days prior to completing the Kansas Communities That Care Survey. The survey question is “On how many occasions (if any) have you used cocaine or crack during the past 30 days?” The responses 1-2 occasions, 3-5 occasions, 6-9 occasions, 10-19 occasions, 20-39 occasions, and 40 or more occasions were combined to calculate the percentage.

*Lifetime cocaine use* is the percentage of 6th, 8th, 10th, and 12th graders who reported using cocaine at least once in their lifetime prior to completing the Kansas Communities That Care Survey. The survey question is “On how many occasions (if any) have you used cocaine or crack in your lifetime?” The responses 1-2 occasions, 3-5 occasions, 6-9 occasions, 10-19 occasions, 20-39 occasions, and 40 or more occasions were combined to calculate the percentage.

*Thirty-day LSD or other psychedelics use* is the percentage of 6th, 8th, 10th, and 12th graders who reported using LSD or other psychedelics at least once in the 30 days prior to completing the Kansas Communities That Care Survey. The survey question is “On how many occasions (if any) have you used LSD or other psychedelics during the past 30 days?” The responses 1-2 occasions, 3-5 occasions, 6-9 occasions, 10-19 occasions, 20-39 occasions, and 40 or more occasions were combined to calculate the percentage.

*Lifetime LSD or other psychedelics use* is the percentage of 6th, 8th, 10th, and 12th graders who reported using LSD or other psychedelics at least once in their lifetime prior to completing the Kansas Communities That Care Survey. The survey question is “On how many occasions (if any) have you used LSD or other psychedelics in your lifetime?” The responses 1-2 occasions, 3-5 occasions, 6-9 occasions, 10-19 occasions, 20-39 occasions, and 40 or more occasions were combined to calculate the percentage.

*Thirty-day ecstasy use* is the percentage of 6th, 8th, 10th, and 12th graders who reported using ecstasy at least once in the 30 days prior to completing the Kansas Communities That Care Survey. The survey question is “On how many occasions (if any) have you used MDMA (“ecstasy”) during the past 30 days?” The responses 1-2 occasions, 3-5 occasions, 6-9 occasions, 10-19 occasions, 20-39 occasions, and 40 or more occasions were combined to calculate the percentage.

*Lifetime ecstasy use* is the percentage of 6th, 8th, 10th, and 12th graders who reported using ecstasy at least once in their lifetime prior to completing the Kansas Communities That Care Survey. The survey question is “On how many occasions (if any) have you used MDMA (“ecstasy”) in your lifetime?” The responses 1-2 occasions, 3-5 occasions, 6-9 occasions, 10-19 occasions, 20-39 occasions, and 40 or more occasions were combined to calculate the percentage.

*Thirty-day inhalants use* is the percentage of 6th, 8th, 10th, and 12th graders who reported using inhalants at least once in the 30 days prior to completing the Kansas Communities That Care Survey. The survey question is “On how many occasions (if any) have you sniffed glue, breathed the contents of an aerosol spray can, or inhaled other gases or sprays in order to get high during the past 30 days?” The responses 1-2 occasions, 3-5 occasions, 6-9 occasions, 10-19 occasions, 20-39 occasions, and 40 or more occasions were combined to calculate the percentage.

*Lifetime inhalants use* is the percentage of 6th, 8th, 10th, and 12th graders who reported using inhalants at least once in their lifetime prior to completing the Kansas Communities That Care Survey. The survey question is “On how many occasions (if any) have you sniffed glue, breathed the contents of an aerosol spray can, or inhaled other gases or sprays in order to get high in your lifetime?” The responses 1-2 occasions, 3-5 occasions, 6-9 occasions, 10-19 occasions, 20-39 occasions, and 40 or more occasions were combined to calculate the percentage.

*Thirty-day methamphetamine use* is the percentage of 6th, 8th, 10th, and 12th graders who reported using methamphetamines at least once in the 30 days prior to completing the Kansas Communities That Care Survey. The survey question is “On how many occasions (if any) have you taken methamphetamines during the past 30 days?” The responses 1-2 occasions, 3-5 occasions, 6-9 occasions, 10-19 occasions, 20-39 occasions and 40, or more occasions were combined to calculate the percentage.

*Lifetime methamphetamine use* is the percentage of 6th, 8th, 10th, and 12th graders who reported using methamphetamines at least once in their lifetime prior to completing the Kansas Communities That Care Survey. The survey question is “On how many occasions (if any) have you taken methamphetamines in your lifetime?” The responses 1-2 occasions, 3-5 occasions, 6-9 occasions, 10-19 occasions, 20-39 occasions, and 40 or more occasions were combined to calculate the percentage.

*Youth selling illegal drugs in the past year* is the percentage of 6th, 8th, 10th, and 12th graders who reported selling illegal drugs at least once in the past year prior to completing the Kansas Communities That Care Survey. The survey question is “How many times in the past year (the

last 12 months) have you sold illegal drugs?" The responses 1 to 2 times, 3 to 5 times, 6 to 9 times, 10 to 19 times, 20 to 29 times, 30 to 39 times, and 40 + times were combined to calculate the percentage.

## **Appendix C: Data Limitations**

### Mortality Data Limitations

In order to maintain confidentiality, strict suppression guidelines are set for reporting and interpreting vital statistics mortality information. No cell or derivation of a cell (percent, rate) with a value of less than 6 may be displayed. As additional stratification variables are incorporated into the document, the balance between accuracy and confidentiality will become a driving factor for the depth of information available. Sub-state analysis is possible for most mortality indicators; however it may not be possible to produce estimates for all communities for every given year for every indicator. In order to alleviate some concerns, multiple years may be combined to produce estimates as well as multiple communities may be combined to give regional estimates.

In order to provide accurate interpretations of mortality data, absolute values must be converted into age-adjusted rates. Age-adjusted rates become extremely unstable as the absolute number of cases falls below twenty (20). Multiple years may again be combined to produce a large sample for which rates can then be calculated.

### Criminal Offences Data Limitations

Currently, all law enforcement agencies are required to report offences to the Kansas Bureau of Investigation in a timely, standardized fashion. While this is the case with the majority of agencies, select agencies do not consistently report all offences. If the agency represents a large portion of the Kansas population, incorrect interpretations may occur based on this missing information. Additionally, some agencies report only aggregate level information on offences. This limits the ability to stratify indicators by demographic information such as Age, Gender, and Race/Ethnicity.

The Uniform Crime Report (UCR) database controlled by the Federal Bureau of Investigation also has incomplete data collection measures and therefore may misrepresent actual substance abuse related crimes nationwide.

### Survey Data Limitations

Many of the consumption estimates are based upon a variety of surveys in Kansas as well as national surveys. Each survey has a particular design that incorporates strengths and limitations in the data system. The data limitations are discussed below for the major surveys represented in this document.

#### Behavior Risk Factor Surveillance System (BRFSS)

The BRFSS is a random digit dial telephone survey of non-institutionalized individuals. As the BRFSS is a telephone based survey, it excludes community members who do not have a telephone. Additionally, in recent year the BRFSS has had differential non-response based on age due to the growing trend of cell phone usage as the only form of telephone communication. The BRFSS does not

include institutionalized individuals, and therefore may provide an underestimate of individuals with severe substance abuse dependence. As with any survey, the BRFSS captures self-reported information.

#### Kansas Communities That Care (KCTC)

The KCTC survey is a school based survey of risk/protective factors among youth in grades 6, 8, 10, and 12. All schools in Kansas with the selected grades are invited to participate on an annual basis; however the survey methodology is a convenience sample and does not take into account sampling procedures. As the KCTC is a school based survey it may exclude youth with severe substance abuse dependence and therefore provide an underestimate of substance abuse consumption. Additionally, the results of the KCTC are not weighted to reflect sample design or non-response/participation rates. As with any survey, the KCTC captures self-reported information.

#### National Survey on Drug Use and Health (NSDUH)

The NSDUH is a national household survey of substance abuse related behaviors and risk factors. In order to provide state-level estimates for substance abuse related data points, multiple years must be combined as well as imputed to provide estimates. Small Area Estimation (SAE) is used to provide estimates for indicators in Kansas. The limitation for SAE is in the evaluation of change within indicators as they are based upon multiple influences and a change may reflect outside influences rather than an inherent change in the indicator. As with any survey, the NSDUH captures self-reported information.

## **Appendix D: Data Gaps**

Multiple data gaps have been identified through the process of identifying indicators and data sources to populate such indicators. These gaps are identified below.

### Sub-state analysis

In order to provide useful program planning and evaluation information, data points must be able to capture community level change as well as state level change. Community is often defined as a county in Kansas; however large counties are often seen as multiple counties. Absolute indicators such as vital statistics can be broken down to communities with the understanding that if the number of cases becomes too small (fewer than 6) then the value will be masked for confidentiality purposes. For survey information, community level analysis is possible for large communities in Kansas, but is not currently possible for small communities. The Kansas Behavior Risk Factor Surveillance System (BRFSS) requires a minimum denominator of 50 individuals; smaller denominators result in inaccurate information. It is not currently possible to provide BRFSS information for all 105 Kansas counties at this time due to the denominator limitation.

Currently, the National Survey of Drug Use or Health (NSDUH) is not available for community level analysis. This limitation is critical as the NSDUH is the only source for consumption related data among adults aged 18 and over.

### Low participation and response rates

Some databases in Kansas suffer from low participation rates at the community level on an annual basis. This limits analysis of time-trends as the sample from one year may not reflect the sample from the next year. An example includes the Kansas Bureau of Investigation incidence and offence data base. Historically not all law enforcement agencies have reported to the database on a consistent basis. When large agencies in Kansas fail to report, it significantly alters the information available and is generally not compatible with other years of information. At the community level, not all communities participate in survey gathering information each year. This limits the ability to provide local level information for local programs.

### Race and Ethnicity definitions

Each database in Kansas records the race and ethnicity of individuals differently. Some data systems combine the two variables, while other databases have the capability to separate out ethnicity from race. Currently the only uniform definition that exists is the OMB-15 guidelines for recording ethnicity and race, and not all systems follow these guidelines.

Additionally, limited data exists for small, minority populations in Kansas. Currently most data systems are designed to report race in three categories only: White, African American, and Other. The “Other” category does not provide enough information for program planning among each of the groups that comprise the “Other” category.

### Tribal information

Kansas is home to a multitude of Native American populations. Limited information exists on the urban Indian populations in Kansas. Virtually no population based information exists for the four (4) Indian reservations in northeastern Kansas.

### Incarcerated population

The databases that currently contain information on the offender population (both adult and youth) are currently not linked to the population based information. It is unclear from the current surveillance systems how the offender population impacts the population at large as they are reintroduced into the community.

## **Appendix E: Methodology**

### **Indicator Selection**

The Kansas Substance Abuse Profile Team (KSAPT) identified selection criteria as well as specific data sources to populate each substance abuse indicator. All potential indicators were discussed by the KSAPT design team in order to apply the selection criteria. Once the KSAPT design team applied the selection criteria, recommendations were made to the group at large and a final inclusive list was compiled.

#### **Criteria:**

- Directly linked to Alcohol, Tobacco, or Other Drugs. An indicator must be related to one or more of the categories to be considered for inclusion.
- Population based indicator. An indicator based on the entire population or with the ability to be generalized to the entire population is given priority over an indicator that does not reflect the population. Should no indicator be identified as population based, secondary indicator are considered with reservations.
- Index indicator. Due to the complex nature of an index which is dependent on multiple independent variables, no index indicators are included in the statewide profile.
- Statewide and sub-state analysis available. An indicator that provides statewide analysis is required for inclusion. Priority is given to indicators that provide information on a sub-state level including the following, but no limited to; geographic stratification, age stratification, gender stratification, race stratification, ethnicity stratification, and socioeconomic stratification.
- Temporal analysis available. An indicator that provides multiple years of data for analysis is given priority over a one time or periodic indicator.
- Comparable across substances. Indicators that exist in multiple categories of alcohol, tobacco, or other drugs are given priority over indicators that exist in only one of the categories.
- Appropriate at statewide level. An indicator directly related to the consequences and consumption patterns of alcohol, tobacco, and other drugs is required for inclusion in the statewide profile. Indicators that encompass the risk and protective factors, also known as causal factors, are included in the list of potential indicators at the community level.

#### **Sources of Indicators:**

- State Epidemiological Data System (SEDS). The SEDS system provides consequence and consumption indicators and data systems to populate the indicators based upon nationally available data sources.
- Other State epidemiological profiles on substance abuse. Example formats and indicators reviewed based on profiles from Texas, New Mexico, Wyoming, and Illinois.
- Governor's BEST Team on Substance Abuse. A previous collaborative effort in Kansas to streamline substance abuse prevention and treatment across agencies and partners.

- Primary Literature and Expert Opinion. In order to ensure the highest quality profile possible through a collaborative effort, a strong emphasis is placed upon the expert opinion of individual partners. Additionally, knowledge of current trends in substance abuse prevention based upon state of the art science found in primary literature is given a high priority in identifying indicators.
- Available substance abuse data points from surveys. In an effort to utilize pre-existing data, a heavy emphasis is placed upon the data currently and routinely collected throughout Kansas.

#### Data Source Hierarchy of Inclusion

In the event where two data sources are identified to potentially populate an indicator the following selection criteria is applied to determine the best fit, in descending order of priority:

1. Data sources for which absolute values at the State or community level were available with demographic information. Examples include vital statistics and crime reports
2. Data sources for which scientifically valid survey information is available at the State or community level with demographic information. Examples include the Youth Tobacco Survey, Youth Risk Behavior Survey, and Behavior Risk Factor Surveillance Survey.
3. Data sources for which convenient samples are available at the State or community level with demographic information. Examples include Hospital Discharge Data and the Kansas Communities That Care Survey.
4. Data sources for which synthetic estimates are available at the State or community level with demographic information. An example includes the National Survey on Drug Use or Health at the community level.

#### Analysis

##### Software Packages:

SAS<sup>®</sup> statistical software Version 9.1  
Microsoft<sup>®</sup> Excel 2003

##### Age-adjusted Rates

All age-adjusted rates are calculated using the estimates for the Kansas population in the appropriate year. For example, deaths due to cardiovascular disease in 2003 utilize the 2003 Kansas population to calculate the age specific rates. The 2000 US Standard population is utilized to calculate the expected number of deaths and summed across all age strata to produce the age-adjusted rate.