

**Scott County, Iowa
Substance Use
Epidemiological Profile**

Iowa Epidemiological Outcome Workgroup

December 2007

Executive Summary

In 2006, the Iowa Department of Public Health received funding from the federal Department of Health and Human Services, Substance Abuse and Mental Health Administration's Center for Substance Abuse Prevention, for a State Epidemiological Outcome Workgroup (Workgroup) to develop a state epidemiological profile. The Workgroup included representatives from agencies directly involved with preventing substance abuse in the state. In 2007 funding was continued; one of the deliverables was to produce a community level epidemiological profile. The Workgroup defined "community" as a county in Iowa. After a review of data, Scott County was one of the counties selected for the community profiles.

The following criteria were developed during the writing of the 2006 Iowa Epidemiological Profile, and were adapted to guide the data selection process for the 2007 Scott County Profile:

- Data available at the local (Scott County, Iowa) level;
- Sample covers age range;
- Data collected at least every two years;
- Measures directly related or strongly associated with ATOD use;
- Data pertain to consumption or consequence; and
- Data sets have adequate sample size.

Approximately forty indicators were included in the 2006 Iowa Epidemiological Profile, most of which were also included in the Scott County Profile. Key indicator findings include:

- **Alcohol** is the most cited substance of use by individuals entering substance abuse treatment in Scott County.
- More than two-thirds of Scott County adults consumed **alcohol** in the past month, which is significantly higher than the Iowa and national rates.
- The adult binge drinking rate in Scott County is similar to the state rate; both of which are significantly higher than the national rate.
- Among youth, the Scott County rate of current **alcohol** use is similar to the state rate.
- While there is a downward trend in **alcohol** use by youth over the last few years, more than 15 percent of all students surveyed in 2005 reported using alcohol before turning 13. For every five 11th-graders in Scott County, two drank alcohol within the past month.
- The rate of convictions for alcohol-related offenses in Scott County is about one-third the state rate.
- There were 426 **Operating While Intoxicated** arrests per 100,000 Iowans in 2005, the highest rate in three years.
- The average rate of **alcohol**-related suspensions and expulsions in Scott County was similar to the state rate. The average rate of **drug**-related suspensions and expulsions was approximately 35 percent higher than the state average.

- Juvenile adjudications due to **alcohol** are on the rise in Scott County, more than doubling from 2004 to 2006. The rate of juvenile adjudications due to **alcohol** in Scott County is similar to the state rate for fiscal year 2006.
- Approximately 800,000 Iowans over the age of 12 use **tobacco**, the majority of which is cigarette use.
- The reported rate of mothers using **tobacco** during pregnancy in Scott County has been between 18-22 percent of all pregnancies since 2002, which is about 3 percent higher than the state rate.
- Youth **tobacco** use in Scott County appears to be on the decline, as evidenced by the number of youth reporting first use of cigarettes before the age of 13, past 30-day use, and perceived risk of cigarette use. However, these rates are higher in Scott County than in Iowa.
- More than 200 **tobacco** compliance checks were completed each fiscal year in Scott County, with an average compliance rate of 86 percent from FY02-FY07. The success rate in Scott County is similar to the statewide success rate of tobacco compliance checks.
- **Marijuana** use by 6th-, 8th-, and 11th-graders is significantly higher in Scott County than across the state.
- The rate of juvenile adjudications due to **illicit drugs** in Scott County is similar to the state rate.

Regardless of substance, most consumption indicators for Scott County are higher than for Iowa or the nation, but a similar effect is not evident in most consequence indicators. Scott County's geographical position, bordering Illinois, may influence consumption and consequence data, and may account for the observed difference between consumption and consequence data.

Table of Contents

Executive Summary	i
Table of Contents	iii
Table of Figures	iv
List of Tables	vi
Introduction	1
Background	1
Results	3
<i>Alcohol</i>	3
Adult Consumption Patterns	4
Youth Consumption Patterns	11
Alcohol Consequences	17
<i>Tobacco</i>	24
Adult Consumption Patterns	24
Youth Consumption Patterns	27
Tobacco Consequences	32
<i>Illicit Drugs</i>	33
Adult Consumption Patterns	33
Youth Consumption Patterns	34
Illicit Drug Consequences	38
Discussion	41
<i>General Comments</i>	41
<i>Consumption Patterns of Alcohol, Tobacco, and Other Drugs in Scott County, Iowa</i>	41
Alcohol	41
Tobacco	42
Illicit Drugs	42
<i>Consequences of Substance Abuse in Scott County, Iowa</i>	42
Alcohol	42
Tobacco	42
Illicit Drugs	43
<i>Conclusions</i>	43
Appendices	44
Appendix 1	45
Appendix 2	47
Appendix 3	48

Table of Figures

Figure 1: Primary Substance of Use as Reported upon Entry into Treatment.....	3
Figure 2: Per Capita Alcohol Gallon Sales.....	5
Figure 3: Alcohol Use in Past 30 Days.....	6
Figure 4: Percent of Adults Binge Drinking in Past Month	7
Figure 5: Percent of Adults Heavy Drinking in Past Month.....	8
Figure 6: Percent of Adults Reporting Having Driven After Having Perhaps Too Much To Drink in the Past Month	9
Figure 7: Alcohol as Primary Substance of Use as Reported upon Entry into Treatment	10
Figure 8: Percent of Women Who Had Live Births that Reported Alcohol Use during Pregnancy – All Ages	10
Figure 9: Percent of 6 th , 8 th , and 11 th -Graders Reporting First Use of Alcohol before Age 13.....	12
Figure 10: Percent of 6 th , 8 th , and 11 th -Graders Reporting Past 30-Day Use of Alcohol	13
Figure 11: Percent of 6 th , 8 th , and 11 th -Graders Reporting Binge Drinking – Past 30 Days	14
Figure 12: Percent of 11 th -Graders Reporting Driving after Using Any Amount of Alcohol or Other Drugs	15
Figure 13: Percent of 6 th , 8 th , and 11 th -Graders Perceiving Alcohol Use as a Moderate or Great Risk	16
Figure 14: Rate of Drunkenness and Liquor Law Arrests per 100,000.....	19
Figure 15: Rate of Convictions for Alcohol-Related Offenses.....	19
Figure 16: Rate of Operating While Intoxicated Arrests per 100,000 People	20
Figure 17: School Suspensions and Expulsions per 100,000 Students – Total Due to Alcohol or Drugs.....	21
Figure 18: School Suspensions and Expulsions per 100,000 Students Due to Alcohol or Drugs.....	22
Figure 19: Juvenile Adjudications due to Alcohol	23
Figure 20: Alcoholic Cirrhosis Deaths per 100,000	23
Figure 21: Suicides per 100,000	24
Figure 22: Percent of Adults Who Are Current Smokers	25
Figure 23: Percent of Women Who Had Live Births that Reported Tobacco Use during Pregnancy – All Ages	26
Figure 24: Percent of 6 th , 8 th , and 11 th -Graders Reporting First Use of Cigarettes before Age 13.....	28
Figure 25: Percent of 6 th , 8 th , and 11 th -Graders Reporting Past 30-Day Cigarette Use ..	29
Figure 26: Percent of 6 th , 8 th , and 11 th -Graders Perceiving Cigarette Use as a Moderate or Great Risk.....	30
Figure 27: Tobacco Compliance Check – Percent Compliant.....	31
Figure 28: Lung Cancer Deaths per 100,000	32
Figure 29: Marijuana, Cocaine, and Methamphetamine as Primary Substance of Use as Reported upon Entry into Treatment	33
Figure 30: Heroin and Other Opiates/Synthetics as Primary Substance of Use as Reported upon Entry into Treatment.....	34
Figure 31: Percent of 6 th , 8 th , and 11 th -Graders Reporting Past 30-Day Marijuana Use.	36

Figure 32: Percent of 6 th -, 8 th -, and 11 th -Graders Perceiving Marijuana Use as a Moderate or Great Risk.....	37
Figure 33: Percent of 6 th -, 8 th -, and 11 th -Graders Reporting First Use of Marijuana before Age 13.....	38
Figure 34: Juvenile Adjudications due to Illicit Drugs.....	39
Figure 35: Percent of Confirmed or Founded Child Abuse Cases Involving the Presence of Illegal Drugs in a Child’s Body.....	40
Figure 36: Number of Confirmed or Founded Child Abuse Cases Involving Manufacturing Methamphetamine in the Presence of a Minor.....	40

List of Tables

Table 1: Percent of Perceived Moderate or Great Risk of Alcohol Use by Gender 16
Table 2: Alcohol Involvement in Domestic Abuse Incidents..... 24
Table 3: Percent of Perceived Moderate or Great Risk of Cigarette Use by Gender 30
Table 4: Percent of Youth Reporting Current Drug Use - 2005 35
Table 5: Perceived Moderate or Great Risk of Marijuana Use by Gender 37

Introduction

Scott County is geographically nestled in the bend of the Mississippi River and is situated in the southeastern corner of Iowa. It encompasses both a major urban center and rural areas, with the population majority urban and the land agricultural. Davenport and Bettendorf, Iowa join Moline and Rock Island, Illinois to form the Quad Cities; a large metropolitan area with a population of 360,000. Towns such as Buffalo, Eldridge, Princeton, Pleasant Valley, Park View, LeClaire, and McCausland each with a population less than 5,000, serve as hubs for the rural areas. Scott County is geographically situated midway between Minneapolis on the north and St. Louis on the south, Chicago on the east and Des Moines on the west, and is bisected by U.S. Interstate 80. Scott County's population is 158,668 according to the 2000 Census. Estimates based on the 2000 U.S. Census predict that approximately 46,000 young people (ages 19 and under) lived in Scott County in 2006, which comprised about 28 percent of the total population (versus 26% statewide).

Background

In 2006, the Iowa Department of Public Health (IDPH) received funding from the federal Department of Health and Human Services, Substance Abuse and Mental Health Administration's Center for Substance Abuse Prevention, for a State Epidemiological Outcome Workgroup (SEOW). IDPH's Division of Behavioral Health is the Single State Authority for Substance Abuse Prevention and Treatment. IDPH administers the funding and activities of the SEOW. The first year of the SEOW process involved forming an epidemiological team to assess, analyze, interpret, and communicate data about Iowa substance consumption patterns and consequences. The two major products resulting from the first year of the SEOW were the state epidemiological profile (State Profile) and plans for a system to accommodate the ongoing collection of data for monitoring prevention outcomes. The State Profile and a shorter version of Key Findings can be found on the IDPH Web site www.idph.state.ia.us. In the second year of the project, the group was charged with developing a community level epidemiological profile. The Workgroup defined "community" as a county in Iowa. After a review of data, Hardin and Scott counties were selected for the county profiles.

The following criteria were developed during the writing of the 2006 Iowa Epidemiological Profile, and were adapted to guide the data selection process for the Scott County Profile:

- Data available at the local (Scott County, Iowa) level;
- Sample covers age range;
- Data collected at least every two years;
- Measures directly related or strongly associated with ATOD use;
- Data pertain to consumption or consequence; and
- Data sets have adequate sample size.

Additional criteria were applied where similar indicators existed:

- Historical data available;
- Data available at the national level;
- Limited redundancy between indicators (some redundancy is acceptable); and
- Closeness to consequence (where applicable).

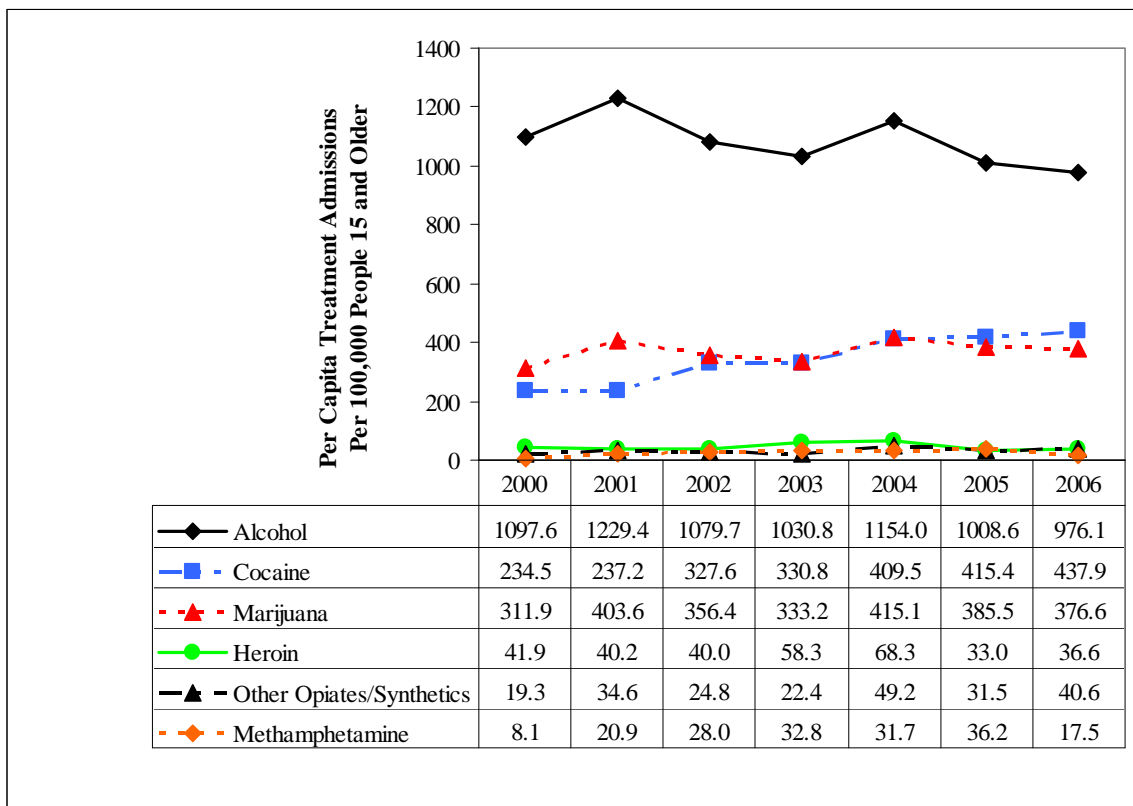
SEOW staff met with Scott County representatives on October 26, 2007 in Davenport. Seventeen people representing the following sectors of the county attended the meeting: law enforcement, treatment and prevention, healthcare, juvenile court services, education, religious organizations, and social services. The meeting was organized by the Center for Alcohol and Drug Services, Inc. An overview of the State Profile was presented, along with sample figures for the Scott County Profile. Feedback about data used, alternative data sources, and profile format was offered by the attendees and has been incorporated in the profile whenever applicable. The same group members were included in the profile review process.

Results

Alcohol

Alcohol is the substance most frequently used by adults and youth in Scott County, across Iowa, and across the United States. Alcohol is the most cited substance of use by individuals from Scott County on admission to substance abuse treatment services, reinforcing alcohol as the primary substance of use in Scott County. Cocaine and marijuana are the next most cited substances (Figure 1). These data only reflect the primary substance at admission so additional substance use is not reported.

Figure 1: Primary Substance of Use as Reported upon Entry into Treatment



Source: Substance Abuse Reporting System (SARS)

Adult Consumption Patterns

Alcohol sales in Scott County (measured as per capita gallon sales) have grown from 2.1 gallons in fiscal year 2003 to 2.5 gallons in fiscal year 2006, which mirrors an increase in alcohol sales for Iowa. Scott County alcohol sales are approximately one-third higher than the state rate (Figure 2). This may be due in part to the fact that there are differences in alcohol taxes between Illinois and Iowa – taxes on wine are lower in Illinois whereas taxes on beer are lower in Iowa, the tax rate on hard liquor in Iowa is not readily available. So alcohol users may cross into or out of Scott County to purchase and consume alcohol.

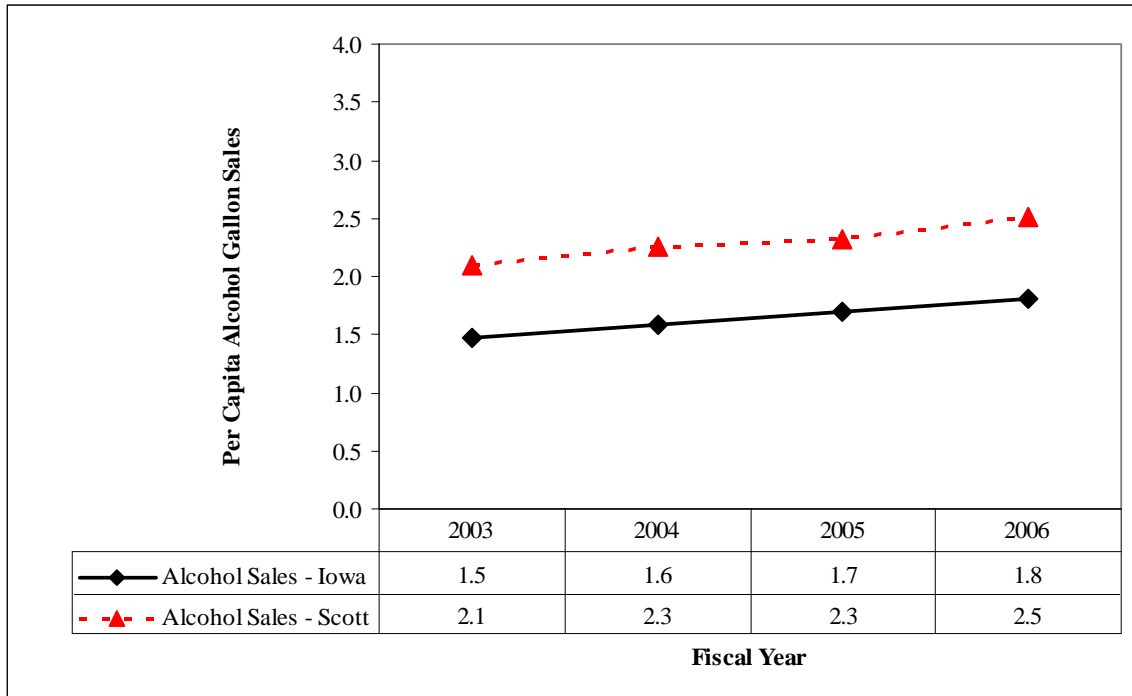
In 2006, more than two-thirds of adults in Scott County had consumed alcohol in the past month as reported in the Behavior Risk Factor Surveillance System (BRFSS). Past 30-day alcohol use by adults in Scott County is significantly higher than the state and national rates (Figure 3). Gender and age group differences were not assessed due to inadequate sample size at the county level.

Binge drinking, defined by BRFSS as consumption of five or more drinks on one occasion, is significantly higher in Scott County and in Iowa, than in the United States. Nearly 25 percent of the adults in Scott County engage in binge drinking according to the 2006 BRFSS (Figure 4). Heavy drinking is defined in the BRFSS as the consumption of more than 2 drinks per day by adult men and more than one drink per day by adult women. There was no real difference between the heavy drinking rate for adults in Scott County, Iowa, and the U.S. (Figure 5). There was also no real difference between the self-reported drinking and driving rate for adults in Scott County, Iowa, and the U.S. (Figure 6). It should be noted that many participants in the BRFSS refused to answer the question about drinking and driving.

The per capita rate of people receiving treatment who reported alcohol as their primary substance of abuse is much higher than the rate for the state as a whole (Figure 7). These data only reflect the primary substance of choice at admission, so additional substance use is not reported.

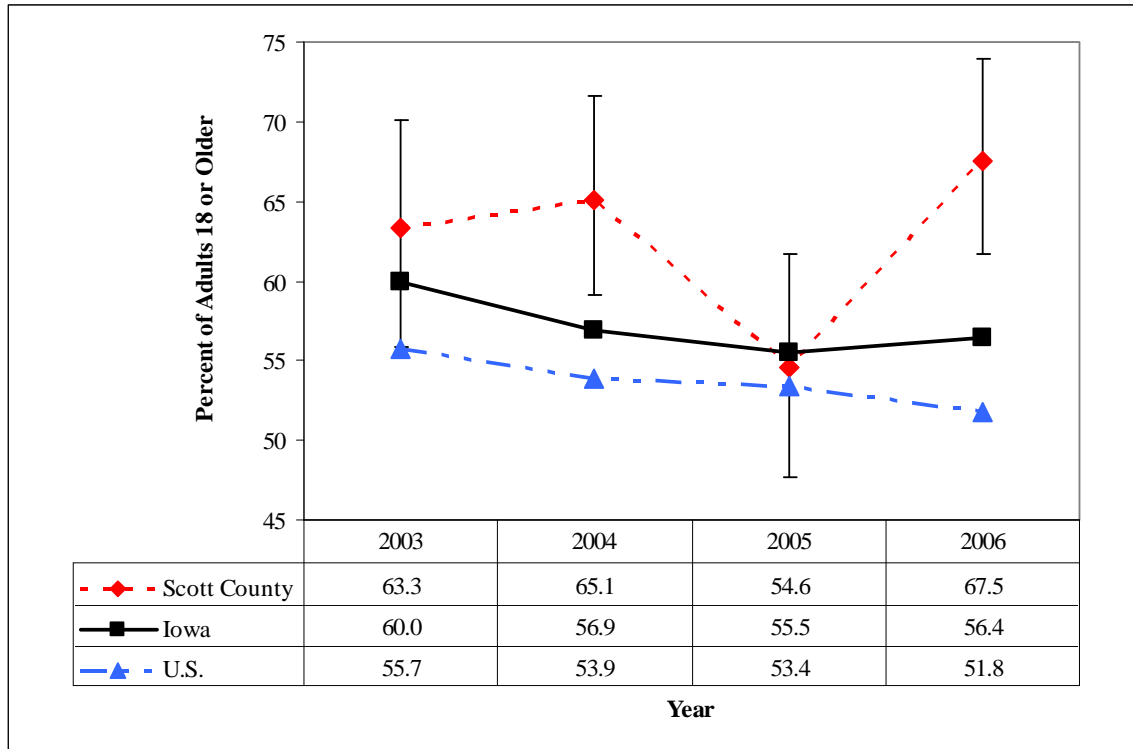
Women who use alcohol during pregnancy increase the risk of adverse health effects for their babies. In Scott County, 0.7 percent of pregnant women who gave birth in 2006 reported they used alcohol. Since 2000, the percent of pregnant women who reported alcohol use during pregnancy in Scott County has tended to be higher than the percent for the state, but was similar in 2006 (Figure 8). This information was collected and reported on birth certificates. This reporting method does not include women who did not have live births because of termination of pregnancy. As a result, the real effect of alcohol on pregnancies cannot be estimated. Some mothers may hesitate to report using alcohol while pregnant because of potential legal or social ramifications, making alcohol usage underreported.

Figure 2: Per Capita Alcohol Gallon Sales



Source: State of Iowa Alcoholic Beverages Division

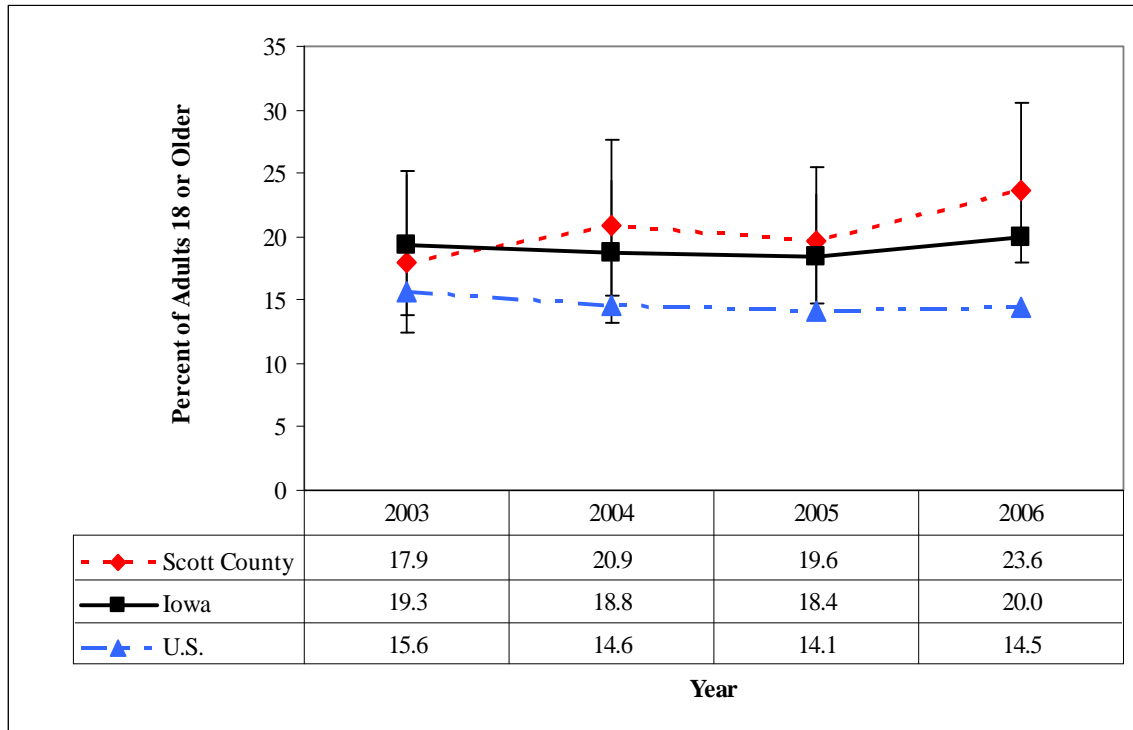
Figure 3: Percent of Adults Using Alcohol in Past 30 Days



Source: BRFSS

Note: Confidence intervals allow comparison of Scott County results to Iowa and U.S. results.

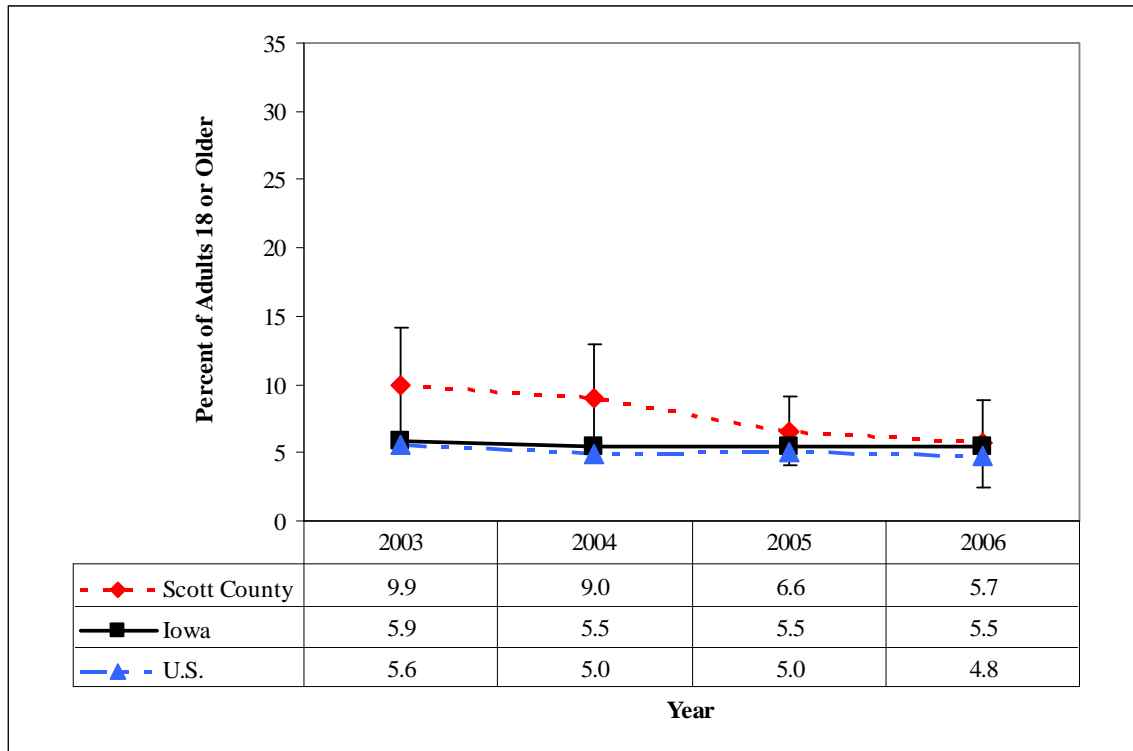
Figure 4: Percent of Adults Binge Drinking in Past Month



Source: BRFSS

Note: Confidence intervals allow comparison of Scott County results to Iowa and U.S. results.

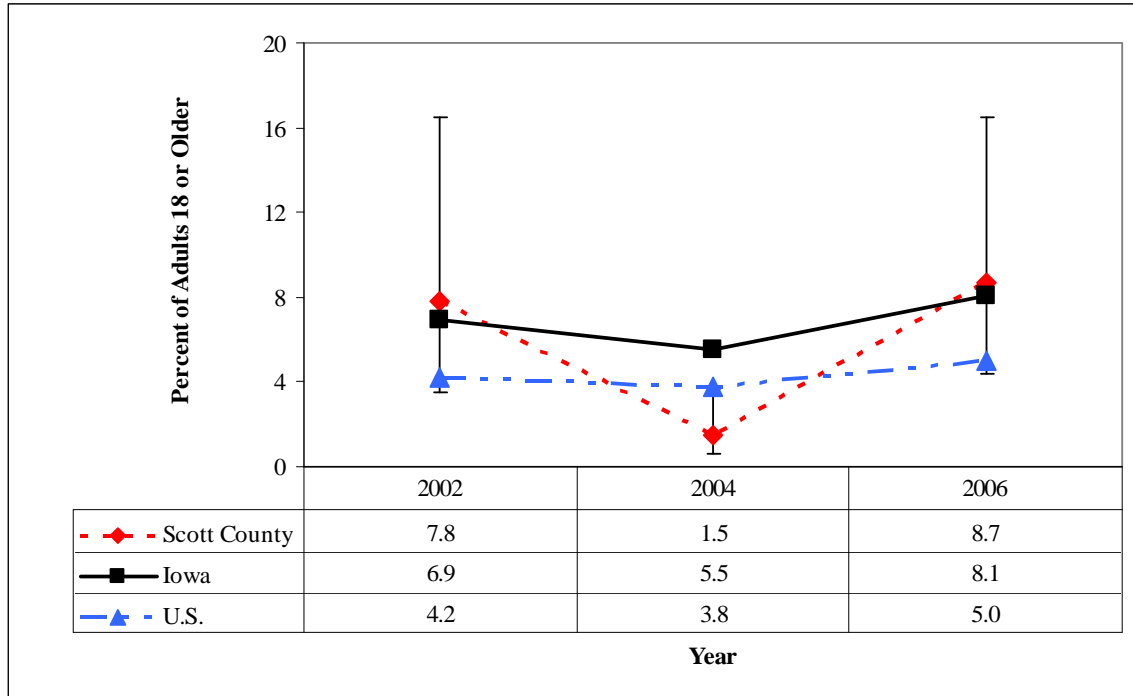
Figure 5: Percent of Adults Heavy Drinking in Past Month



Source: BRFSS

Note: Confidence intervals allow comparison of Scott County results to Iowa and U.S. results.

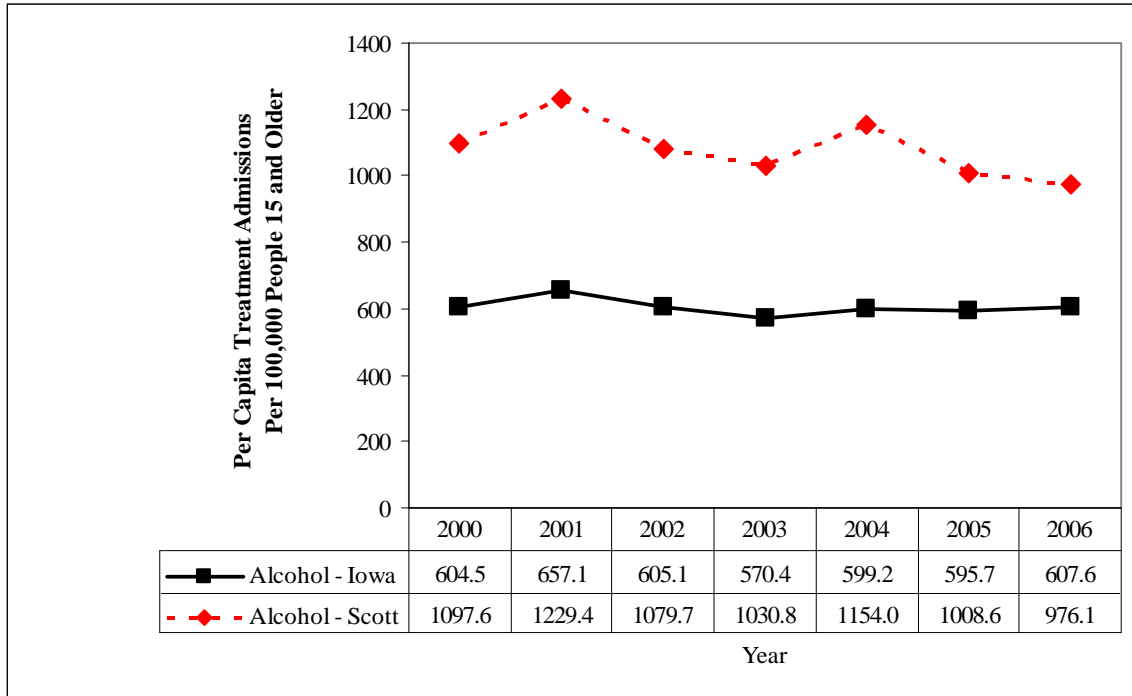
Figure 6: Percent of Adults Reporting Having Driven After Having Perhaps Too Much To Drink in the Past Month



Source: BRFSS

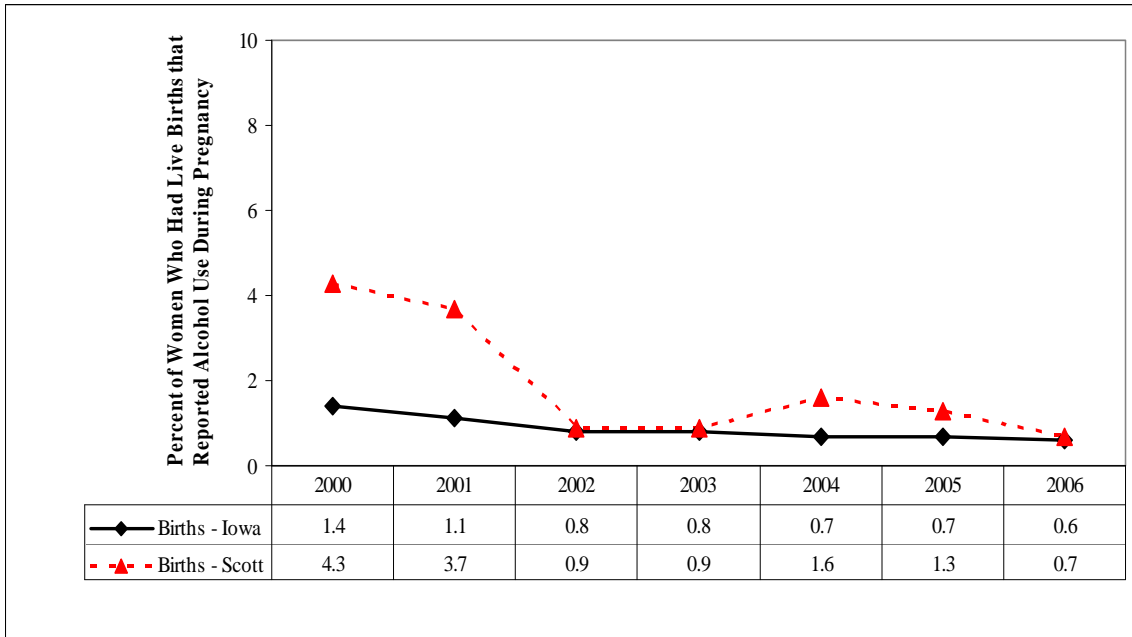
Note: Confidence intervals allow comparison of Scott County results to Iowa and U.S. results.

Figure 7: Alcohol as Primary Substance of Use as Reported upon Entry into Treatment



Source: SARS

Figure 8: Percent of Women Who Had Live Births that Reported Alcohol Use during Pregnancy – All Ages



Source: Vital Records

Youth Consumption Patterns

The Iowa Youth Survey (IYS) is a triennial census assessment of Iowa's 6th-, 8th-, and 11th-grade students' attitudes toward substance use and actual usage. The IYS was last completed in 2005 by a total of 5,463 students from all public school districts in Scott County and 98,246 Iowa students from 390 school districts. Iowa Youth Survey data are reported at the state and county levels, as well as several other sub-state levels. The IYS is used to report youth consumption patterns in this profile because it is much more reflective of Iowa and individual counties in Iowa than the national surveys, which represent Iowa with very small sample sizes, collapse data from multiple years to generate reports, or use data from "similar" states to generate Iowa reports, and do not produce county-level results.

The reported rate of alcohol use before age 13 has fallen from 1999 to 2005 in Iowa and in Scott County (Figure 9). However, over 15 percent of all students surveyed in 2005 reported using alcohol before turning 13. Scott County rates of alcohol use before the age of 13 are similar to the state rate. Past 30-day use of alcohol has also fallen for each grade reported in the IYS since 1999 in Iowa and Scott County (Figure 10). The downward trend is positive, but the overall number of youth reporting past 30-day use is still alarming. Eleventh graders in Scott County report a higher rate of past 30-day alcohol use than 11th graders across Iowa. For every five 11th graders in Scott County, two drank alcohol in the past month.

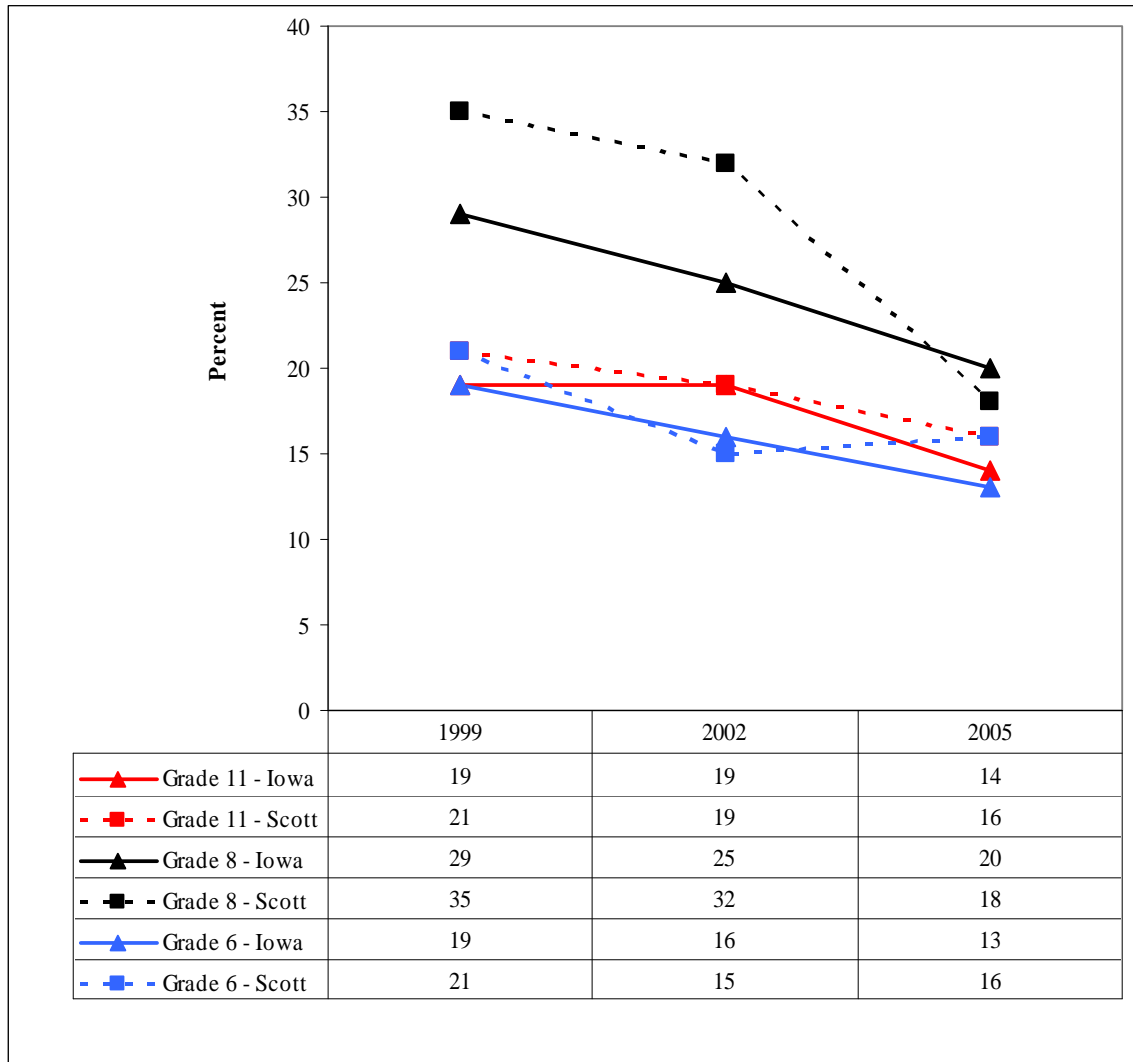
Binge drinking by 6th, 8th, and 11th graders over the past 30 days as reported on the IYS has decreased since 1999 in both Scott County and Iowa (Figure 11). Both 8th and 11th graders in Scott County reported higher counts of binge drinking than the state totals. Iowa reports a significantly higher binge drinking rate among youth than the national rate. According to the 2004 National Survey on Drug Use and Health (NSDUH), 14.08 percent of 12-to 17-year-old Iowans versus 10.86 percent of 12- to 17-year-olds nationally had at least one episode of binge drinking in the past 30 days. So Scott County teenagers, who report higher drinking rates than Iowa teenagers, are also more likely to binge drink than teenagers from across the country.

The IYS asks youth if they drove a motor vehicle after using any amount of alcohol or other drugs in the past 30 days. The reported percent encompasses youth who reported driving whether or not they had a legal driver's license. IYS data do not differentiate between types of substances or between consumption levels of drug use. Scott County 11th graders reported similar results between 1999 and 2005, and the 2005 rate is similar to the state rate (Figure 12). Approximately 14 percent of Scott County youth place their lives at risk by driving after using alcohol or other drugs.

The IYS perceived risk of alcohol use question reads as follows: "How much do you think you risk harming yourself if you drink 3 or more drinks of alcohol nearly every day?" The majority of 6th-, 8th-, and 11th-graders in Scott County and in Iowa feel there is great or moderate risk associated with drinking a considerable amount of alcohol on a regular basis (Figure 13). The Scott County rates are lower than their state counterparts,

suggesting that Scott County teenagers feel that drinking is less of a risk. Female respondents perceived greater risk of alcohol use than males (Table 1). In comparison to state rates, Scott County females perceived less risk of alcohol use than females across the state, whereas Scott County males perceived more risk of alcohol use than males across the state.

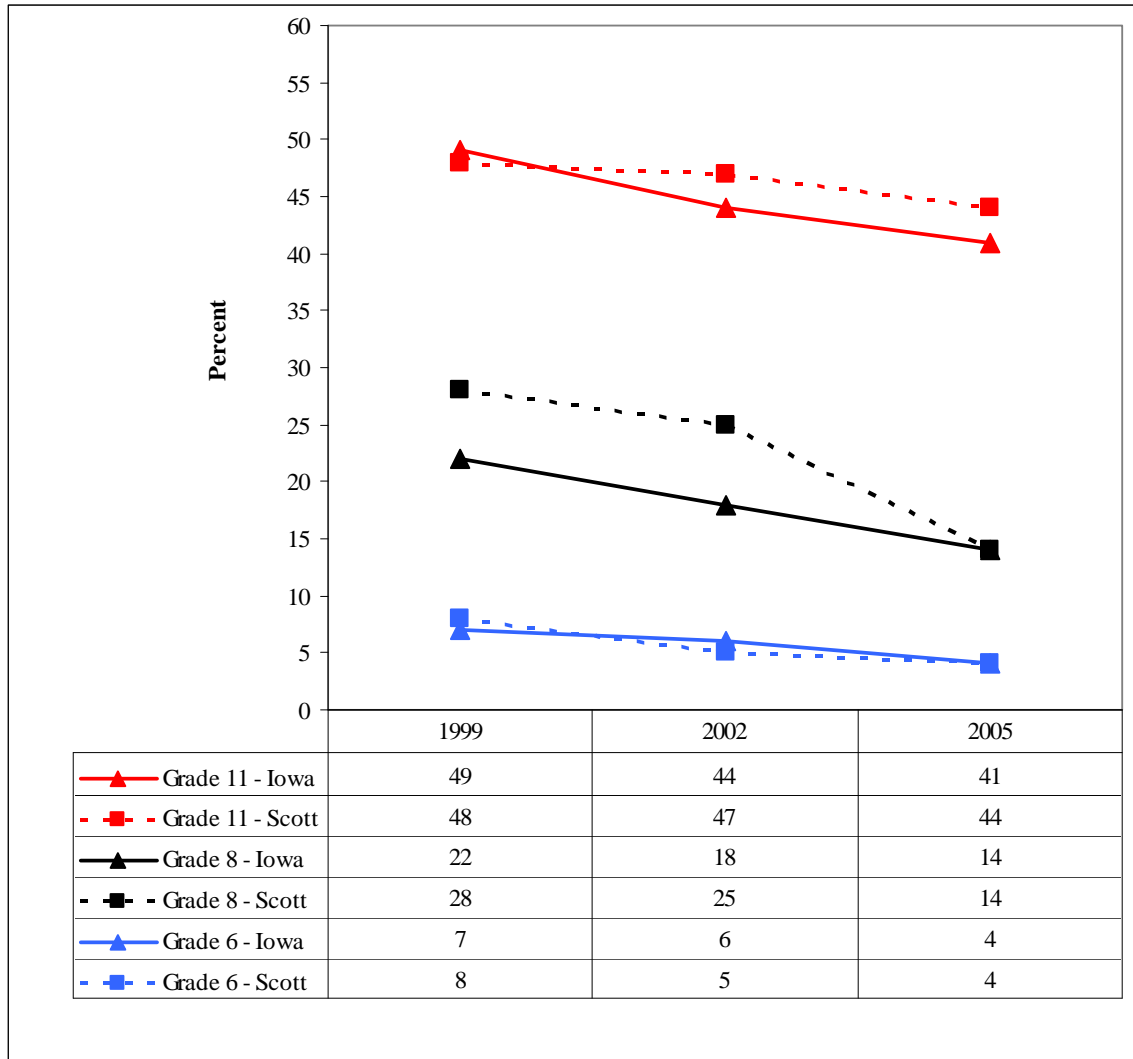
Figure 9: Percent of 6th, 8th, and 11th-Graders Reporting First Use of Alcohol before Age 13



Source: IYS

Note: Error bars are too small to represent and are less than +/- 1%.

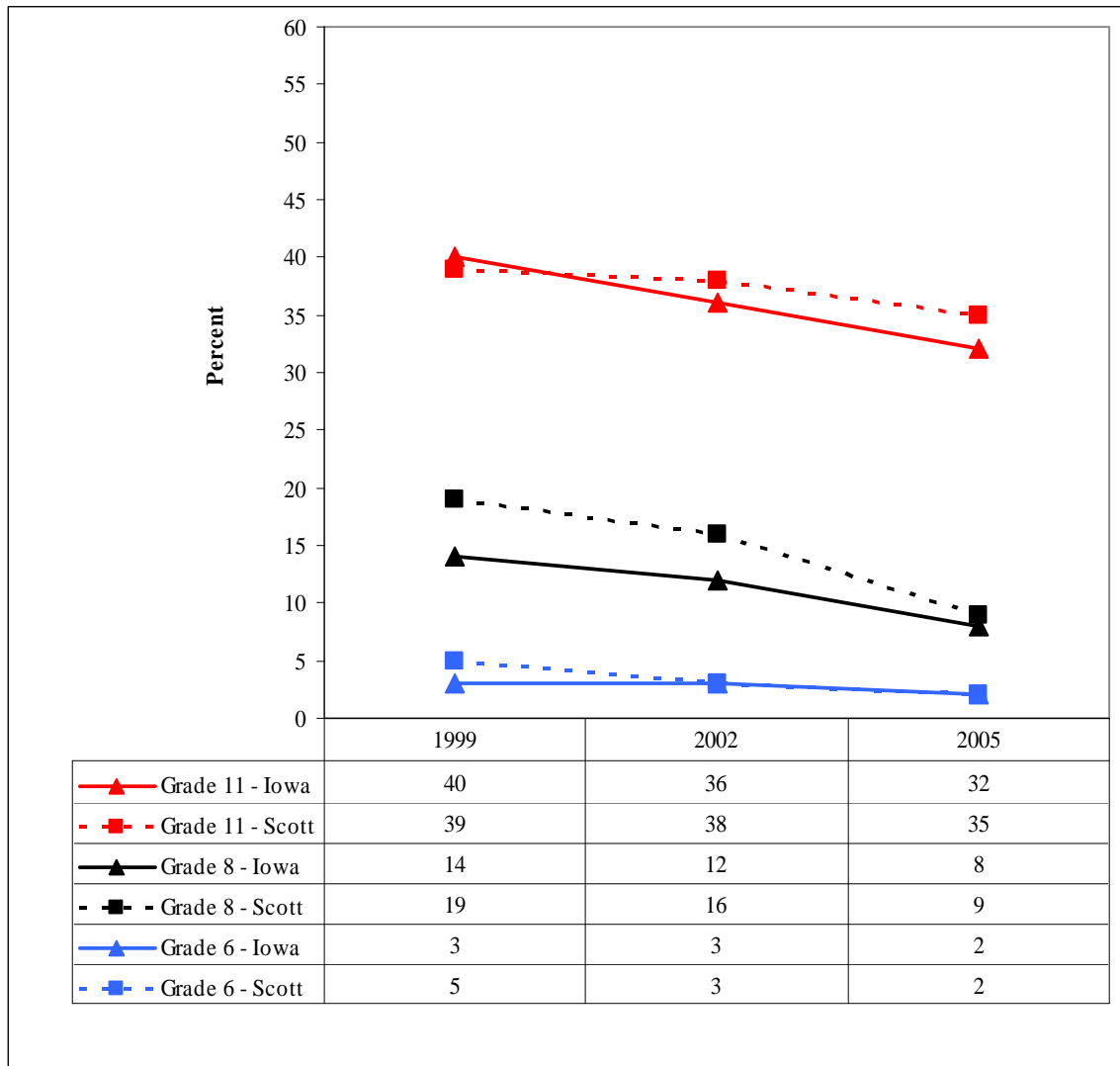
Figure 10: Percent of 6th, 8th, and 11th-Graders Reporting Past 30-Day Use of Alcohol



Source: IYS

Note: Error bars are too small to represent and are less than +/- 1%.

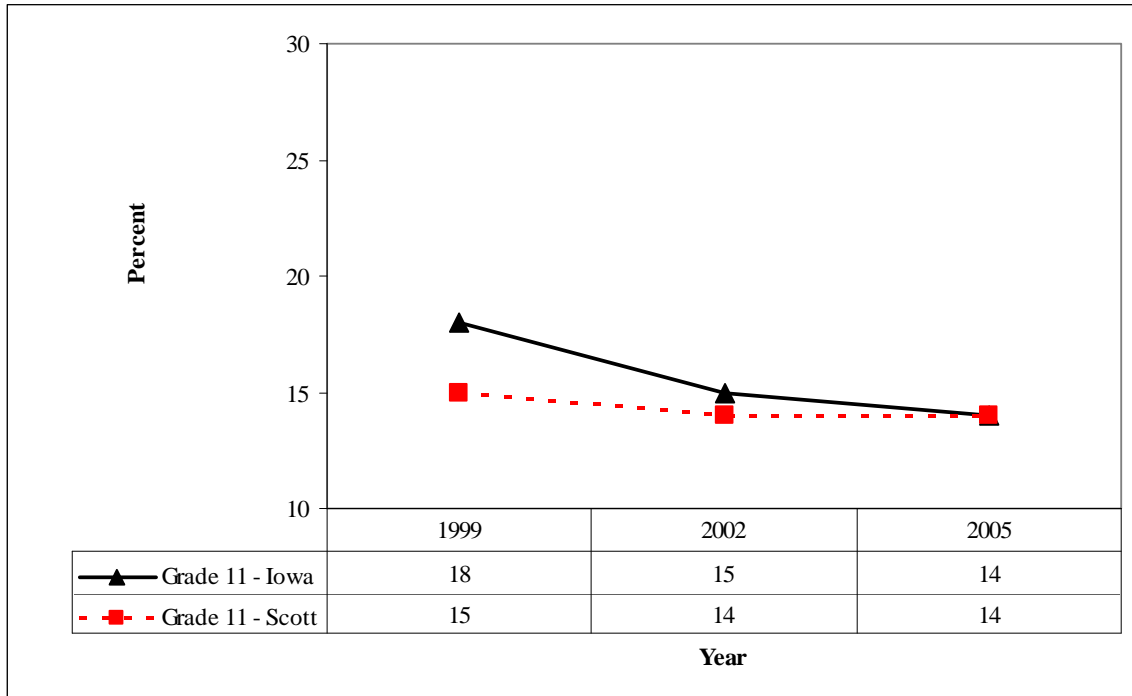
Figure 11: Percent of 6th, 8th, and 11th-Graders Reporting Binge Drinking – Past 30 Days



Source: IYS

Note: Error bars are too small to represent and are less than +/- 1%.

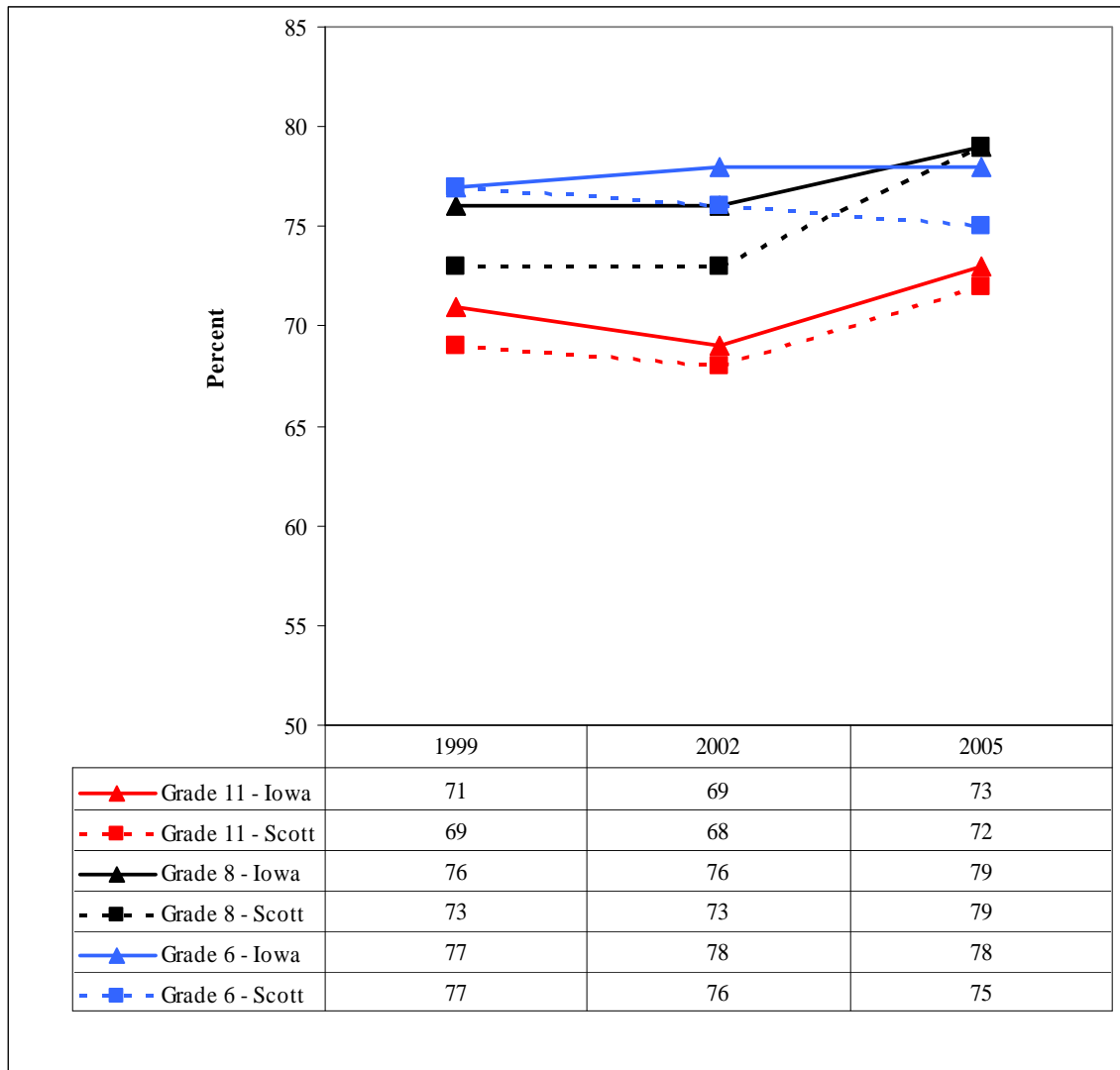
Figure 12: Percent of 11th-Graders Reporting Driving after Using Any Amount of Alcohol or Other Drugs



Source: IYS

Note: Error bars are too small to represent and are less than +/- 1%.

Figure 13: Percent of 6th, 8th, and 11th-Graders Perceiving Alcohol Use as a Moderate or Great Risk



Source: IYS

Note: Error bars are too small to represent and are less than +/- 1%.

Table 1: Percent of Youth Perceived Moderate or Great Risk of Alcohol Use by Gender

Gender	Year		
	1999	2002	2005
Iowa Males	67	69	71
Scott County Males	70	71	74
Iowa Females	77	76	79
Scott County Females	76	74	77

Source: IYS

Alcohol Consequences

The number of liquor law arrests in Scott County has decreased from 2003 to 2005; the number of drunkenness arrests has increased by approximately the same number as liquor law arrests have fallen. The liquor law arrest and drunkenness arrest rates in Scott County have consistently been lower than the Iowa rates (Figure 14). Drunkenness is defined as, "To drink alcoholic beverages to the extent that one's mental faculties and physical coordination are substantially impaired." Drunkenness does not include driving under the influence offenses. A liquor law violation is defined as, "The violation of laws or ordinances prohibiting the manufacture, sale, purchase, transportation, possession, or use of alcoholic beverages." Liquor law violations do not include driving under the influence or drunkenness offenses.

Scott County has a rate of convictions for alcohol-related offenses about one-third the rate for the state of Iowa. This difference holds true for total alcohol-related convictions, total consumption convictions, and alcohol sales and providing alcohol to minors convictions. This difference may be due to the fact that Scott County is a border county, so some offenses may be occurring in Illinois. It also may be influenced by enforcement or prosecution differences between Scott County and the state as a whole. The rate of convictions for alcohol-related offenses in Scott County and across Iowa remained relatively stable between 2003 and 2005, with an uptick in 2006. This uptick may be due to a 2006 change in the Iowa Code, with underage drinking becoming a scheduled violation (similar to a speeding ticket) rather than a simple misdemeanor (Figure 15).

There were 685 Operating While Intoxicated (OWI) arrests in Scott County in 2005, corresponding to a rate of 426 OWI arrests per 100,000 Scott County residents, the highest rate since 2002 (Figure 16). The terms OWI and DUI (Driving Under the Influence) are often used interchangeably. Jurisdictions across the country use one term or the other. The definition of DUI found in the FBI Uniform Crime Reports is, "Driving or operating a motor vehicle or common carrier while mentally or physically impaired as the result of consuming an alcoholic beverage or using a drug or narcotic." In Iowa, the method used to assess impairment is to test the blood alcohol content (BAC). As of July 1, 2003, the "legal limit" in Iowa is .08 BAC, lowered from .10 BAC. The change in the legal BAC limit may be responsible for the notable increase in the OWI arrest rate per 100,000 Scott County residents from 2003 to 2005. Other possible reasons for the increase could be improved law enforcement or zero tolerance policies toward motor vehicle related alcohol offenses.

More than 26,000 youth were enrolled in Scott County public schools for the 2005-2006 and 2006-2007 school years (Project EASIER). The alcohol or drug related expulsion and suspension rate for Scott County was higher than the Iowa rate in both the 2005-2006 and 2006-2007 school years (Figure 17). The average rate of alcohol-related suspensions and expulsions in Scott County was similar to the state rate. The average rate of drug-related suspensions and expulsions was approximately 35 percent higher than the state average (Figure 18).

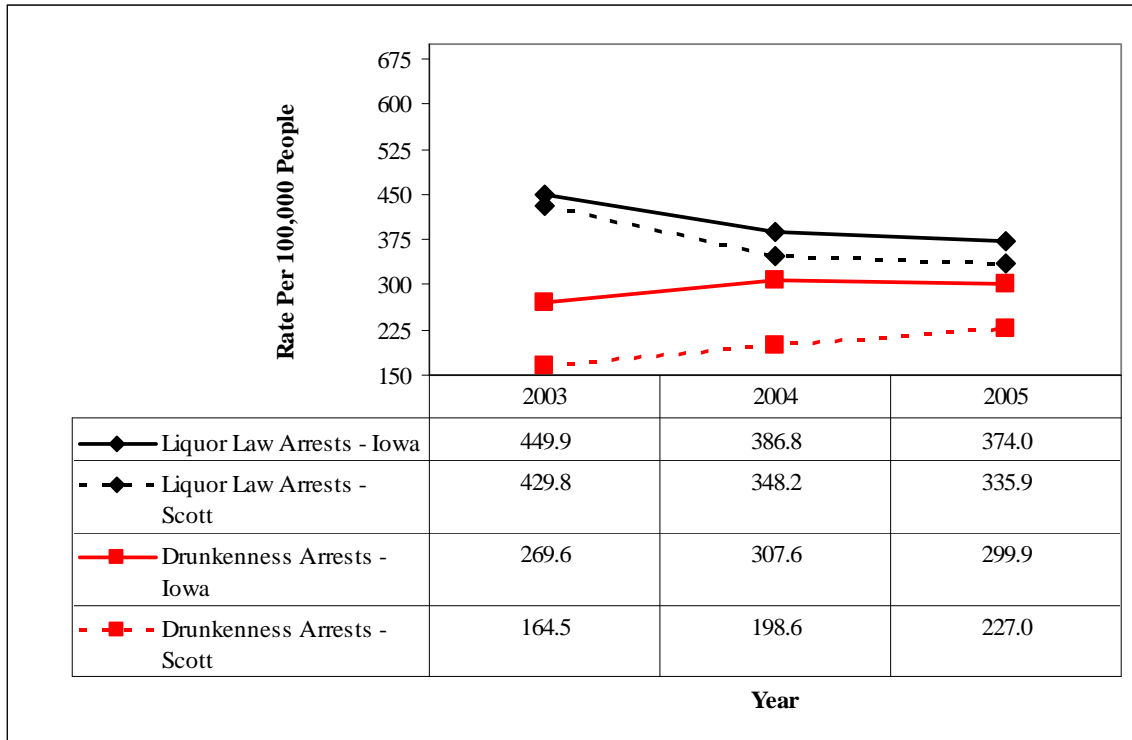
Juvenile adjudications due to alcohol are on the rise in Scott County, more than doubling from 2004 to 2006, whereas the state rate is trending downward. The rate of alcohol-related juvenile adjudications in Scott County is similar to the state rate for fiscal year 2006 (Figure 19).

An average of five Scott County deaths per year are caused by alcoholic cirrhosis (International Classification of Diseases (ICD) 10 code K70), for a death rate similar to the state rate, hovering around 3 per 100,000 from 2003-2006 (Figure 20). This rate is quite low compared with the lung cancer death rate of approximately 59 per 100,000 Scott County residents from 2003-2006. Alcoholic cirrhosis is not manifested for decades after excessive drinking. Today's alcohol usage might not be reflected in alcoholic cirrhosis death rates for 20 or more years, making it difficult to use the rates to implement and evaluate policies and practices that impact alcoholic cirrhosis.

A recent study found that, of suicide victims who were tested for alcohol or drugs, approximately 33.3 percent were positive for alcohol and 16.4 percent were positive for opiates (Centers 2006). The number of suicides in Scott County remained steady from 2000-2006, averaging approximately 19 suicides per year during that period. The suicide rate per 100,000 people for Scott County and Iowa were similar (Figure 21).

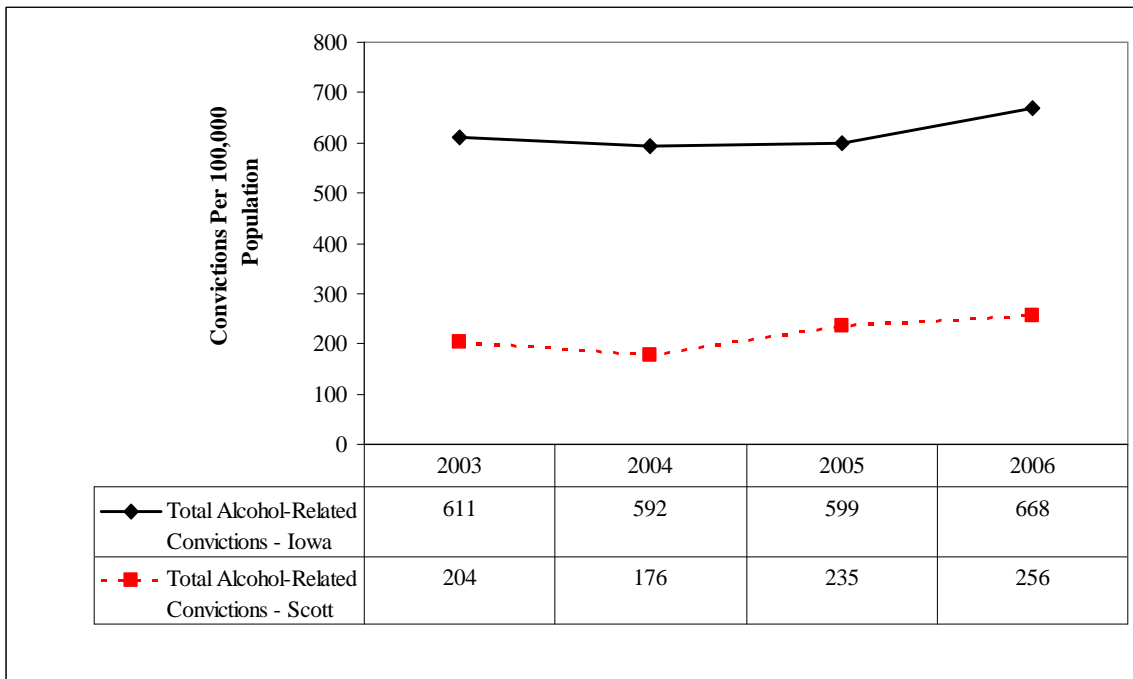
The number of Scott County domestic violence cases where alcohol was present has remained stable from 2003-2005 (Table 2). The number of domestic violence cases with alcohol involvement averaged 16 percent of the total number of domestic violence cases, which is similar to the state average.

Figure 14: Rate of Drunkenness and Liquor Law Arrests per 100,000



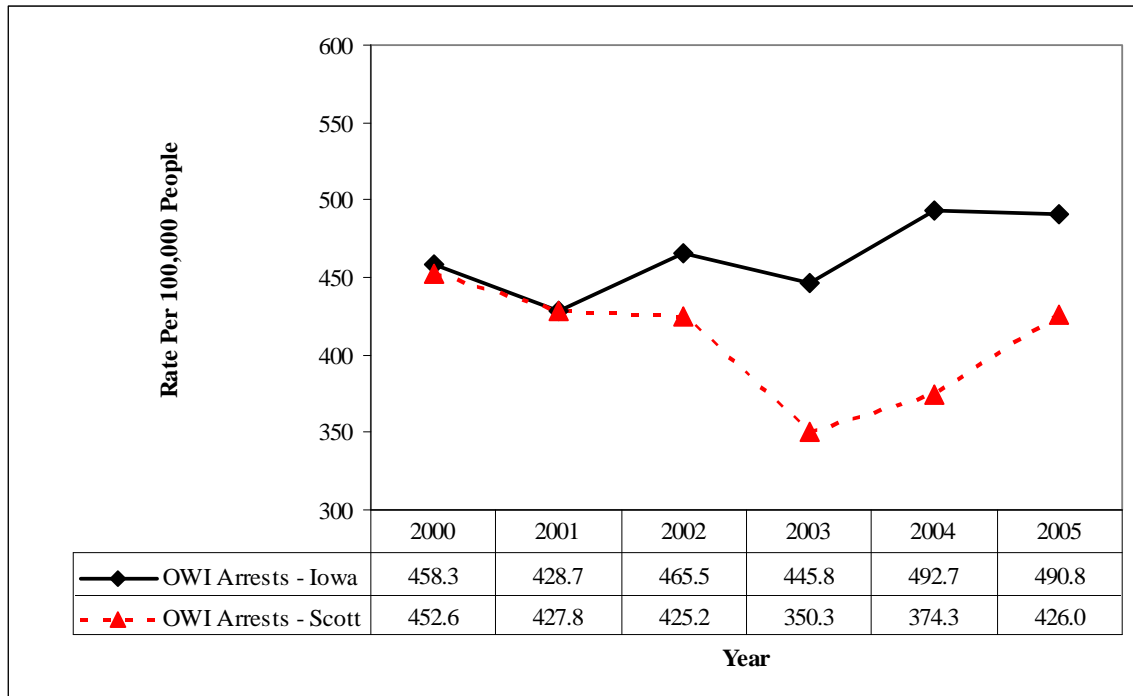
Source: Incident Based Uniform Crime Reporting System

Figure 15: Rate of Convictions for Alcohol-Related Offenses



Source: Iowa Court Information System, Justice Data Warehouse

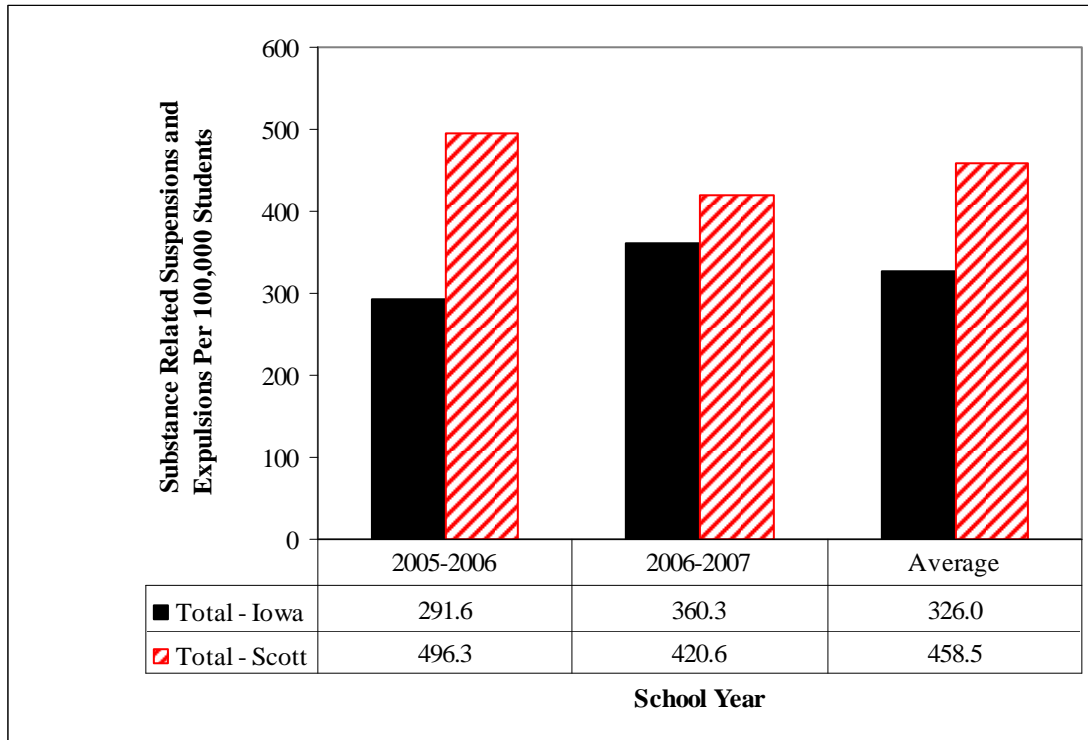
Figure 16: Rate of Operating While Intoxicated Arrests per 100,000 People



Source: Incident Based Uniform Crime Reporting System

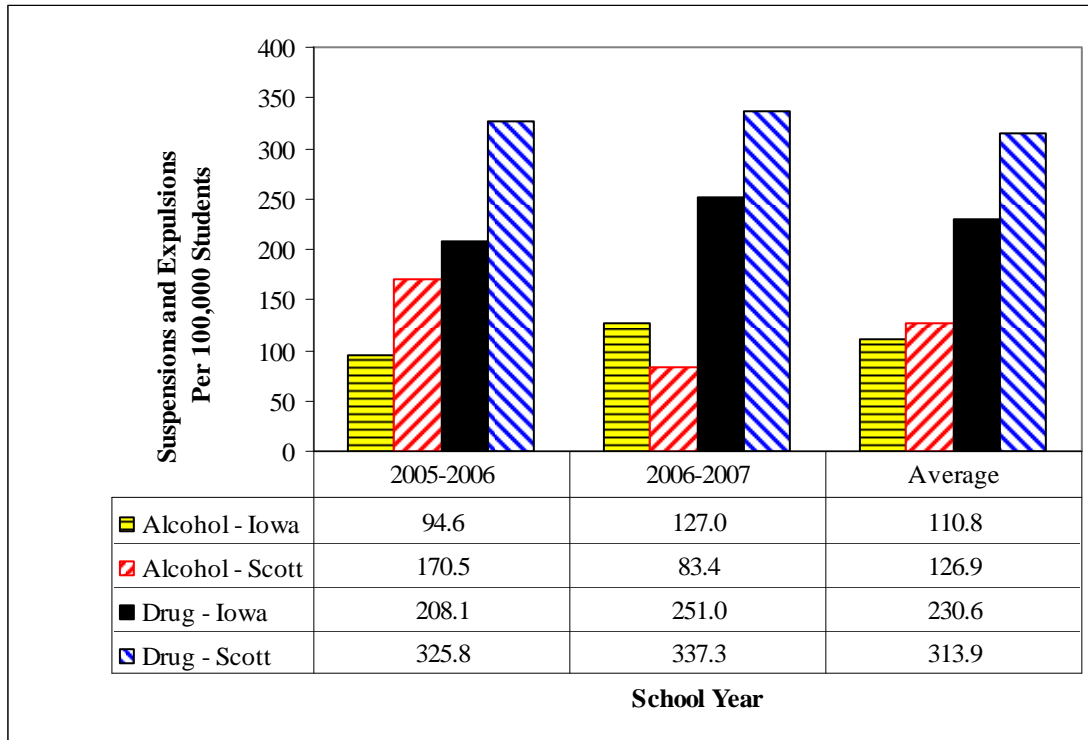
Note: As of July 1, 2003, the “legal limit” in Iowa is .08 BAC, lowered from .10 BAC.

Figure 17: School Suspensions and Expulsions per 100,000 Students – Total Due to Alcohol or Drugs



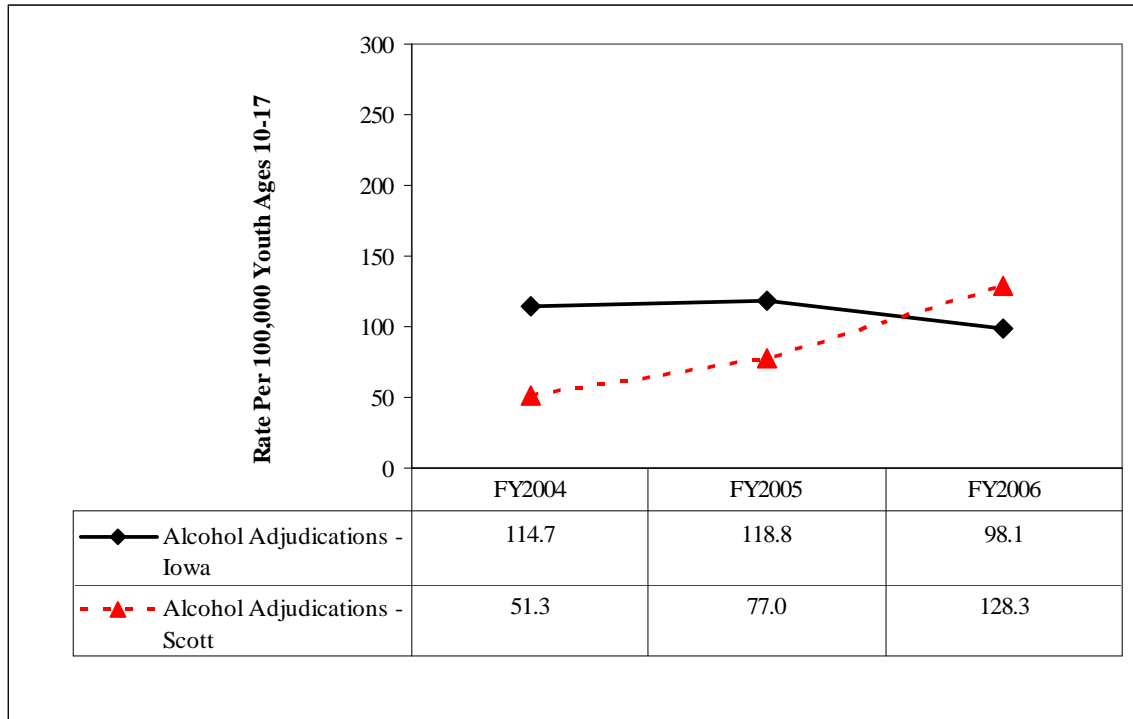
Source: Project EASIER

Figure 18: School Suspensions and Expulsions per 100,000 Students Due to Alcohol or Drugs



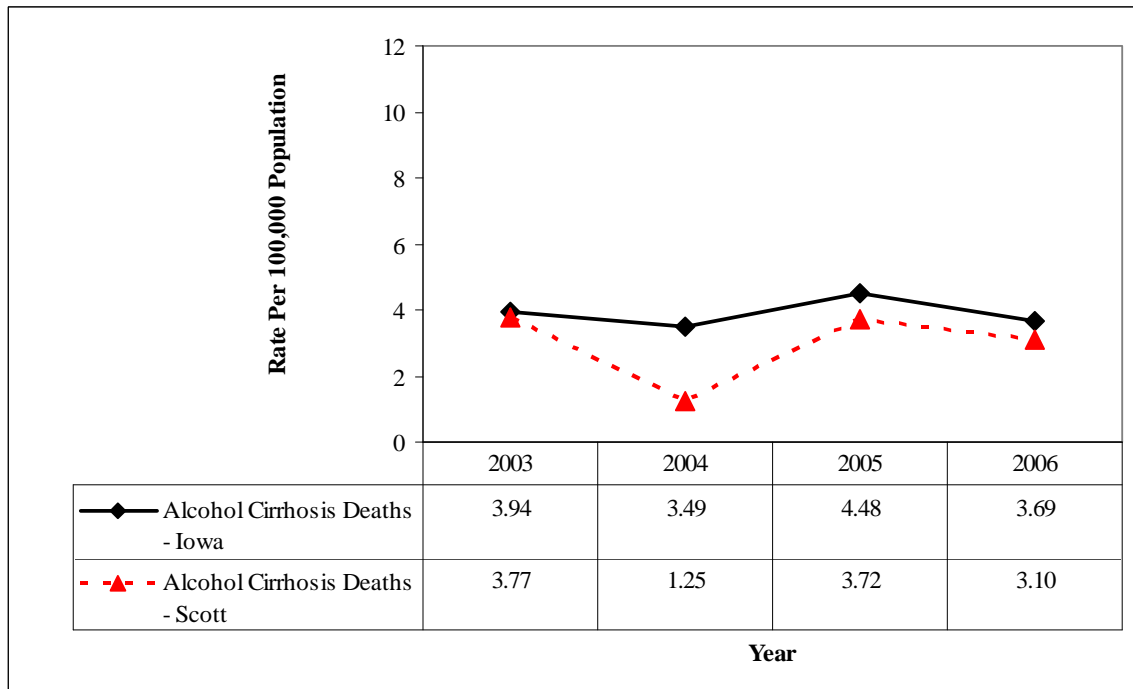
Source: Project EASIER

Figure 19: Juvenile Adjudications due to Alcohol



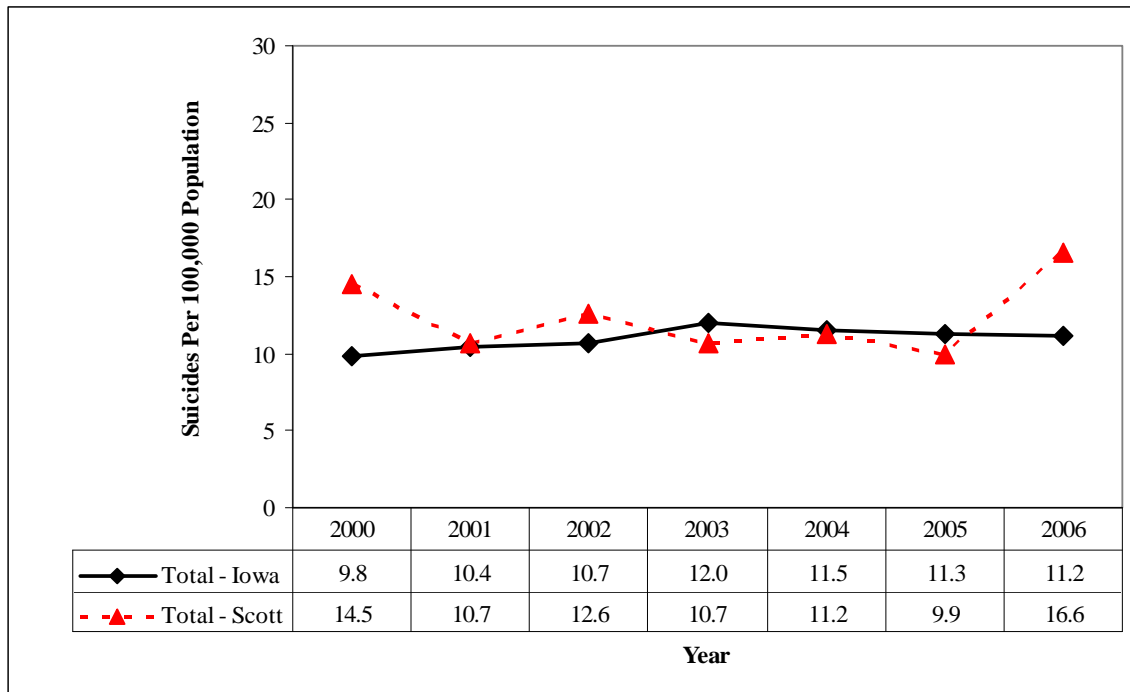
Source: Iowa Court Information System, Justice Data Warehouse

Figure 20: Alcoholic Cirrhosis Deaths per 100,000



Source: Vital Records

Figure 21: Suicides per 100,000



Source: Vital Records

Table 2: Alcohol Involvement in Domestic Abuse Incidents

	2003	2004	2005
Number of Cases - Iowa	1,219	1,230	1,191
Number of Cases - Scott	177	182	191
Percent of Total Cases - Iowa	15	18	16
Percent of Total Cases - Scott	15	16	17

Source: Incident Based Uniform Crime Reporting System

Tobacco

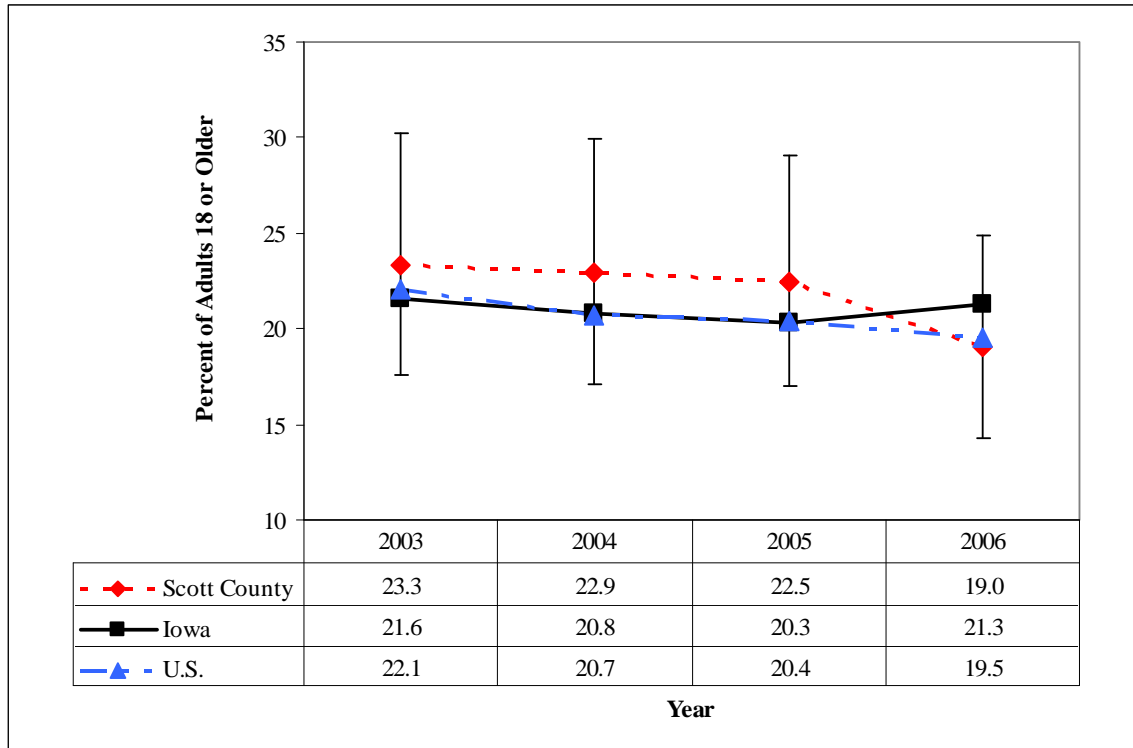
Adult Consumption Patterns

Scott County, state, and national rates of current cigarette use did not differ significantly, nor is there significant difference from 2003-2006 in Scott County rates (Figure 22).

The rate of Scott County mothers reporting tobacco use during pregnancy has been stable since 2002, hovering between 18-22 percent of all pregnancies. The Scott County rate of tobacco use during pregnancy has been consistently higher than the state rate, averaging 3 percent higher per year (Figure 23). This information was collected and reported on birth

certificates, and does not include women who did not have live births. This reporting method may under-report tobacco usage, since mothers may hesitate to report using tobacco while pregnant due to potential legal or social ramifications. The rate of tobacco use during pregnancy is approximately 20 times higher than the rate of alcohol use.

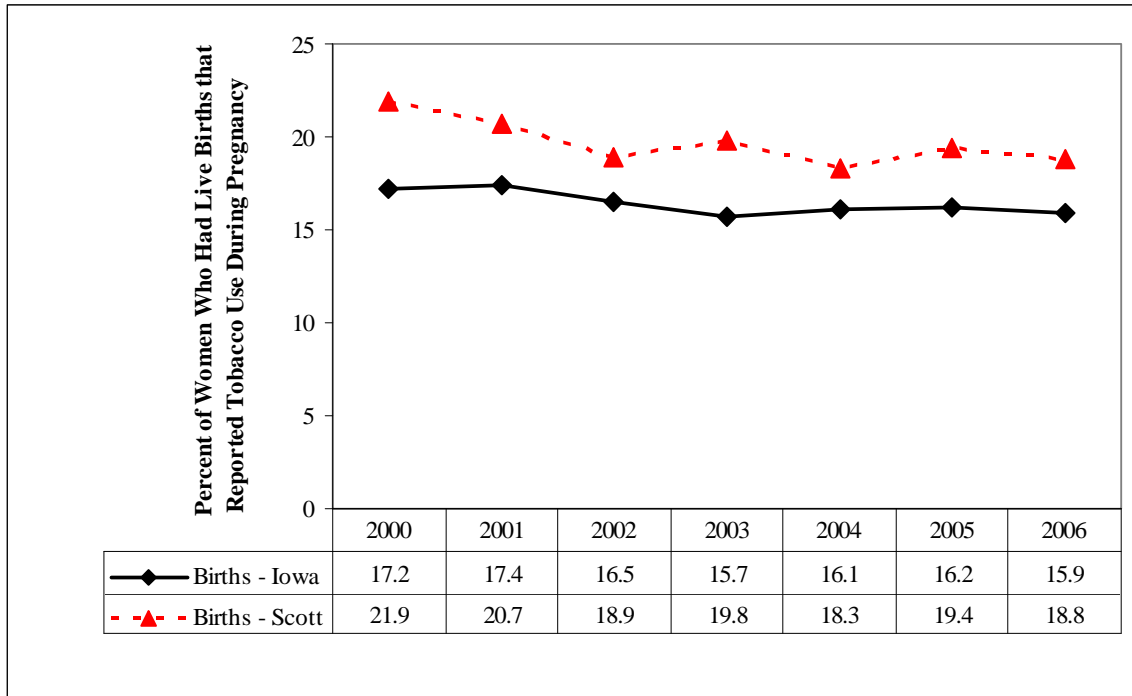
Figure 22: Percent of Adults Who Are Current Smokers



Source: BRFSS

Note: Confidence intervals allow comparison of Scott County results to Iowa and U.S. results.

Figure 23: Percent of Women Who Had Live Births that Reported Tobacco Use during Pregnancy – All Ages



Source: Vital Records

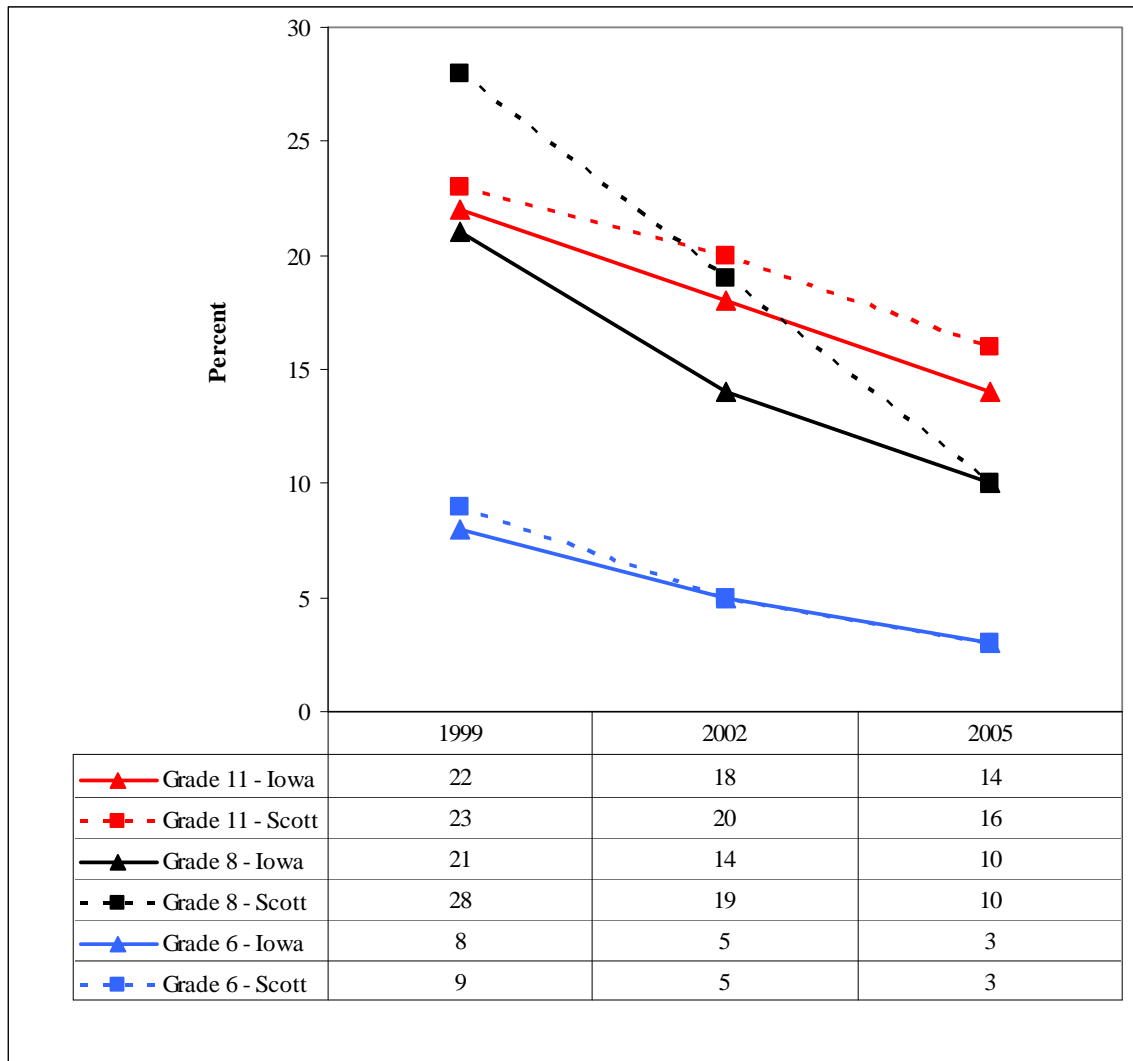
Youth Consumption Patterns

Youth tobacco use in Scott County appears to be on the decline, as evidenced by the number of youth reporting first use of cigarettes before age 13 and past 30-day cigarette use.

The percent of 6th-, 8th-, and 11th-graders who first used cigarettes before age 13 has decreased each time the IYS has been administered since 1999. However, the percent of 11th graders reporting the use of cigarettes before the age of 13 in Scott County is higher than the state rate (Figure 24). Reported past 30-day cigarette use for the same populations has also decreased on each IYS, with the exception that 29 percent of 11th graders reported cigarette use in both 2002 and 2005. Scott County youth report higher rates of past 30-day cigarette use in comparison to the state rates, with the largest difference being 8 percent for 11th graders (Figure 25). Sixth, 8th-, and 11th-grade students responded similarly when asked, “How much do you think you risk harming yourself if you smoke cigarettes every day?” “Great Risk” and “Moderate Risk” response options were combined for Figure 26. As with measurements of use, responses to the perceived risk question show that Scott County youth are more likely to use cigarettes than the state rates. Perceived risk of cigarette use does not appear to differ by gender among middle- and high-school youth, although Scott County males and females respond that it is less risky to smoke cigarettes than their statewide counterparts (Table 3).

Tobacco compliance check data are compiled by the Iowa Alcoholic Beverages Division. In the last three fiscal years, there were no significant differences between Scott County and state tobacco compliance check data (Figure 27). More than 200 tobacco compliance checks were completed each fiscal year in Scott County, with an average compliance rate of 86 percent from FY02-FY07.

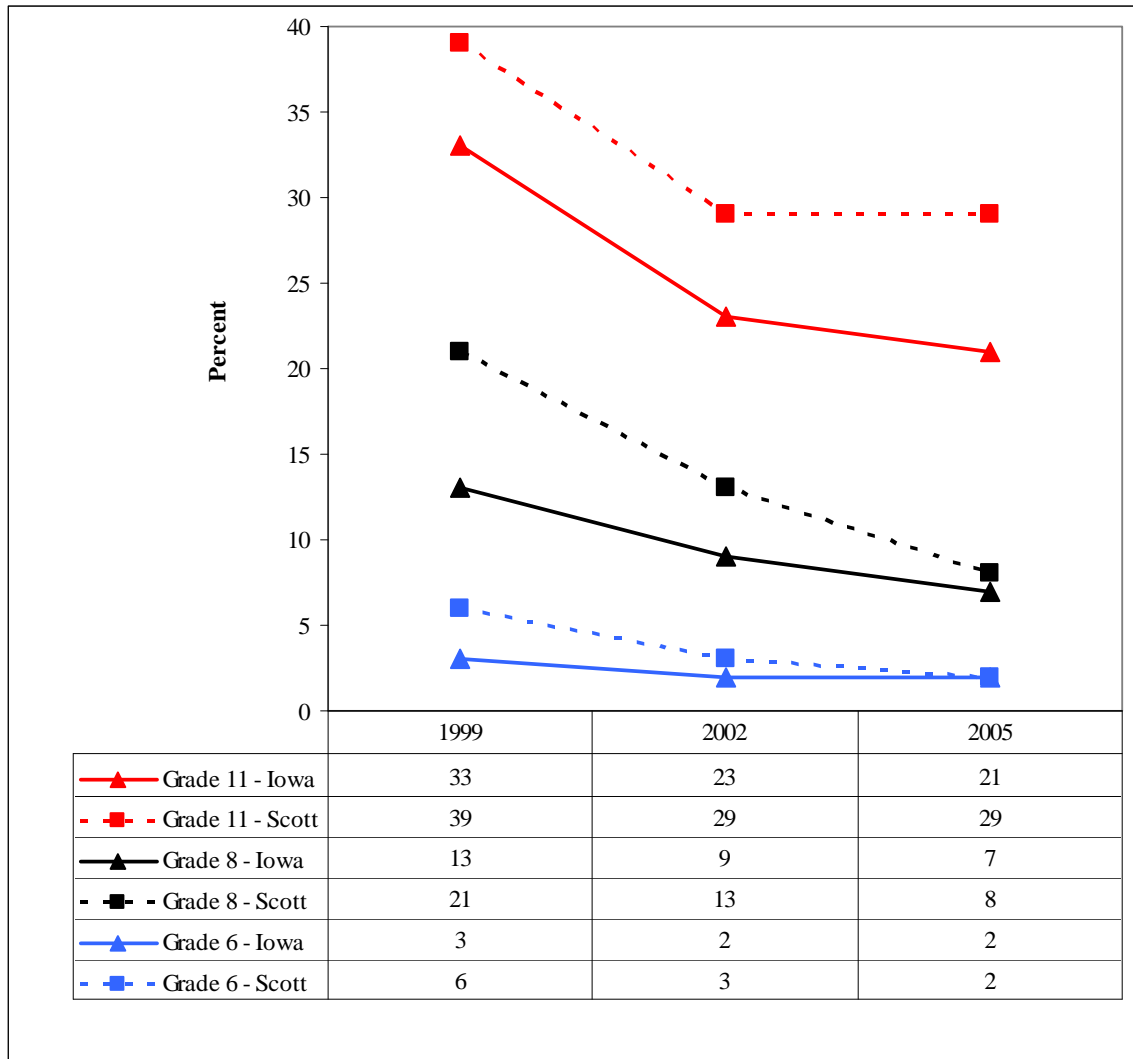
Figure 24: Percent of 6th, 8th, and 11th-Graders Reporting First Use of Cigarettes before Age 13



Source: IYS

Note: Error bars are too small to represent and are less than +/- 1%.

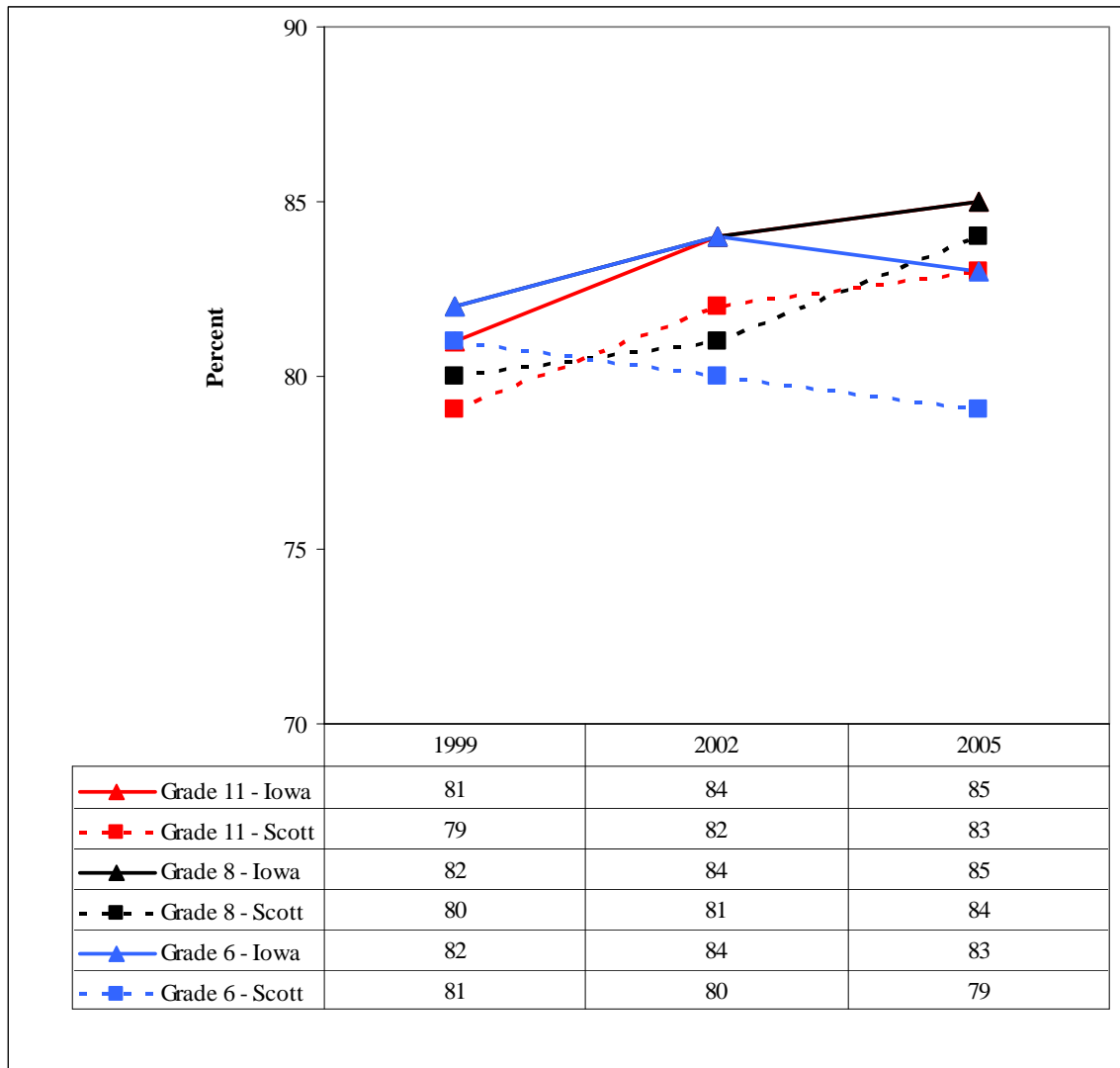
Figure 25: Percent of 6th, 8th, and 11th-Graders Reporting Past 30-Day Cigarette Use



Source: IYS

Note: Error bars are too small to represent and are less than +/- 1%.

Figure 26: Percent of 6th, 8th, and 11th-Graders Perceiving Cigarette Use as a Moderate or Great Risk



Source: IYS

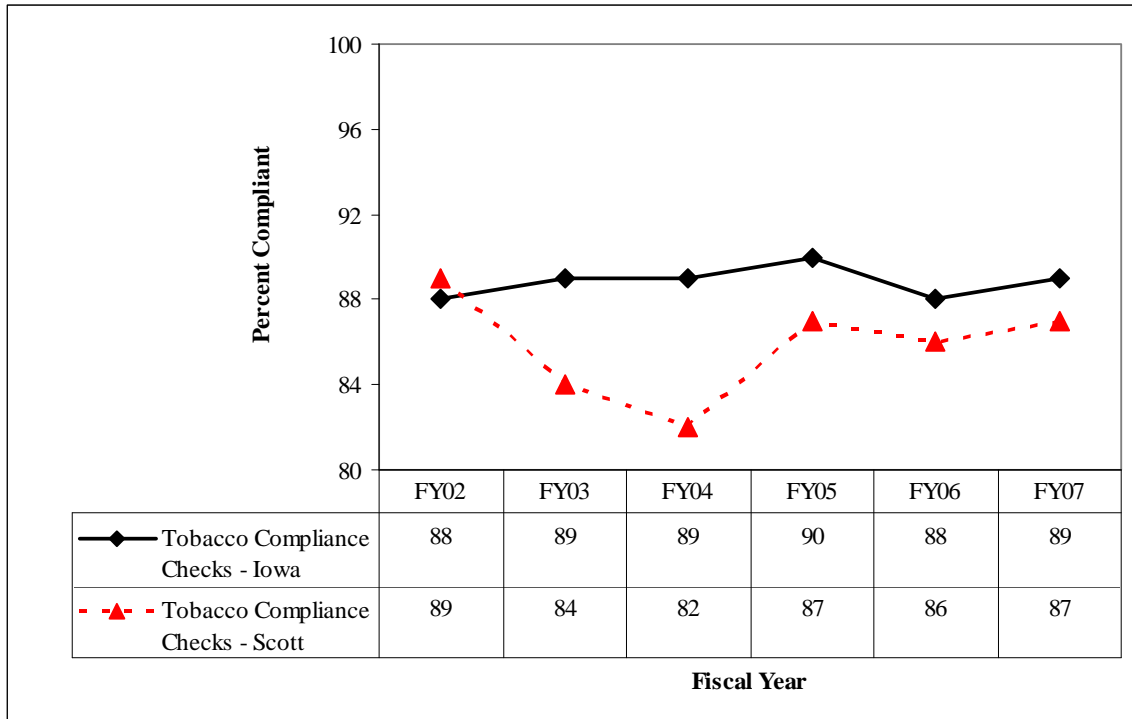
Note: Error bars are too small to represent and are less than +/- 1%.

Table 3: Percent of Perceived Moderate or Great Risk of Cigarette Use by Gender

Gender	Year		
	1999	2002	2005
Iowa Males	80	82	83
Scott County Males	79	80	81
Iowa Females	83	85	85
Scott County Females	81	82	83

Source: IYS

Figure 27: Tobacco Compliance Check – Percent Compliant

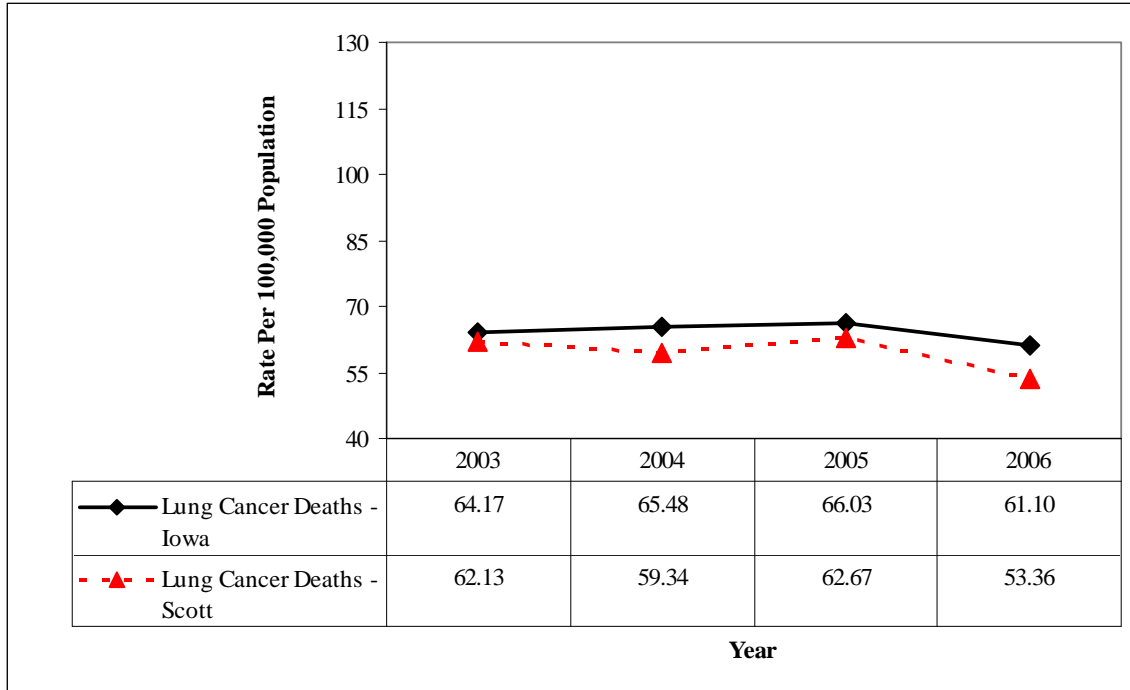


Source: Alcohol Beverages Division

Tobacco Consequences

There is a lack of tobacco consequence data in Scott County, as well as for the state of Iowa. Lung cancer death rate is the only indicator that met all requirements for inclusion in the profile. The lung cancer death rate has decreased slightly from 2003 to 2006 in both Scott County and Iowa, with the Scott County rate tending to be lower than the state rate (Figure 28).

Figure 28: Lung Cancer Deaths per 100,000



Source: Vital Records

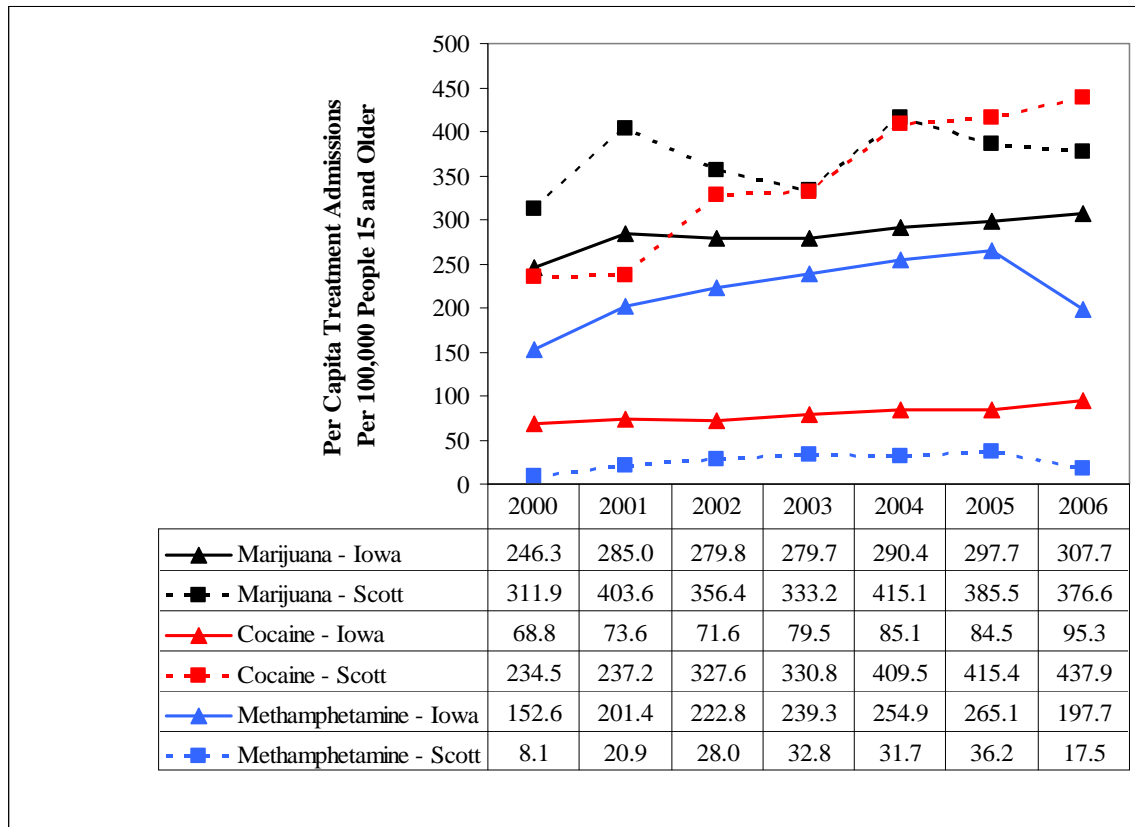
Illicit Drugs

National datasets suggest that illicit drug use in Iowa appears to be holding steady, and its prevalence is lower than the national total. Cocaine, marijuana, heroin, other opiates/synthetics, and methamphetamine follow alcohol as the most cited substances of use by individuals from Scott County on admission to substance abuse treatment services (Figure 1).

Adult Consumption Patterns

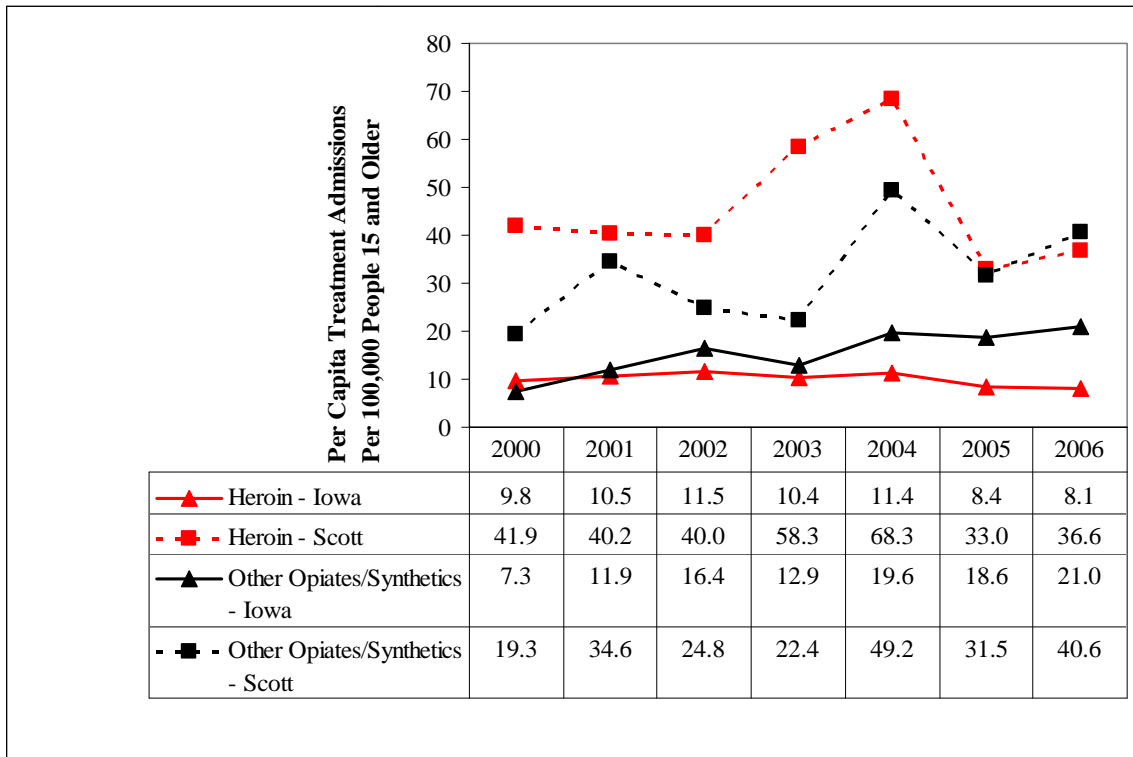
The per capita rate of people receiving treatment who reported marijuana or cocaine as their primary substance of use is higher for Scott County than the state rate as a whole; whereas the rate for methamphetamine is lower in Scott County than in Iowa (Figure 29). The rate of people entering treatment who reported cocaine as their primary substance of use has increased over the past three years for Scott County. The per capita rate of people receiving treatment who reported heroin or other opiates/synthetics as their primary substance of use is higher for Scott County than the state rate as a whole (Figure 30). These data only reflect the primary substance at admission, so additional substance use is not reported.

Figure 29: Marijuana, Cocaine, and Methamphetamine as Primary Substance of Use as Reported upon Entry into Treatment



Source: SARS

Figure 30: Heroin and Other Opiates/Synthetics as Primary Substance of Use as Reported upon Entry into Treatment



Source: SARS

Youth Consumption Patterns

The 2003-2004 NSDUH estimated that 21,000 Iowans 12-17 years old used illicit drugs including marijuana, cocaine, heroin, hallucinogens, inhalants, and prescription psychotherapeutics in a month. This estimate includes 16,000 12-to 17-year-old marijuana users. The 2005 IYS shows that marijuana was the most widely used illicit drug in Scott County, with 20 percent of 11th-graders reporting current use (Table 4). Marijuana use by 6th-, 8th-, and 11th-graders in Scott County has decreased significantly between 1999 and 2005. However, Scott County students report a significantly higher rate of marijuana use than their contemporaries across the state (Figure 31).

The IYS asks the question, “How much do you think you risk harming yourself if you smoke marijuana once a week?” Seventy-five percent of 6th-graders, 77 percent of 8th-graders, and 52 percent of 11th-graders responded “Great Risk” or “Moderate Risk” to this question in Scott County in 2005. The Scott County results were significantly lower than the state rates for perceived risk of marijuana use (Figure 32). Female students were about 4 percent more likely to respond “Great Risk” or “Moderate Risk” than male students in 2005. The difference in both Scott County males and females in comparison to the statewide male and female responses is significant (Table 5). The percent of students reporting first use of marijuana before age 13 decreased for all three grades

between 1999 and 2005, but these rates are higher than the state rates for the same grades (Figure 33).

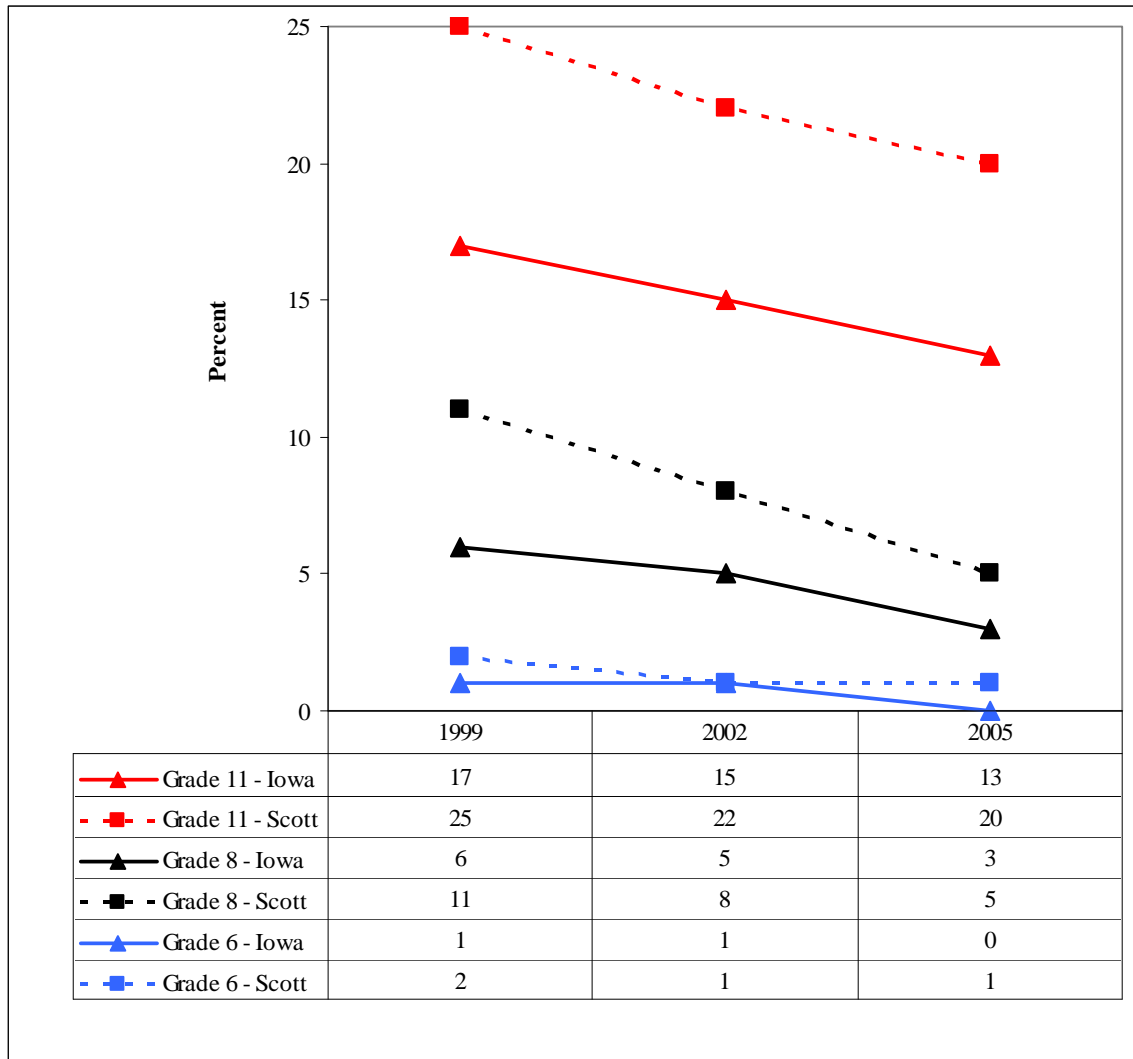
Table 4: Percent of Youth Reporting Current Drug Use – 2005

Substance Type	Grade					
	6 - Iowa	6 - Scott	8 - Iowa	8 - Scott	11 - Iowa	11 - Scott
Marijuana	0	1	3	5	13	20
Inhalants	2	2	3	3	2	3
Amphetamines	0	0	1	1	3	4
Cocaine	0	0	1	1	2	3
Methamphetamines	0	0	1	1	2	2
Steroids	0	0	0	0	1	2

Source: IYS, p. 86

Note: Boldfaced county values are higher than the corresponding state values.

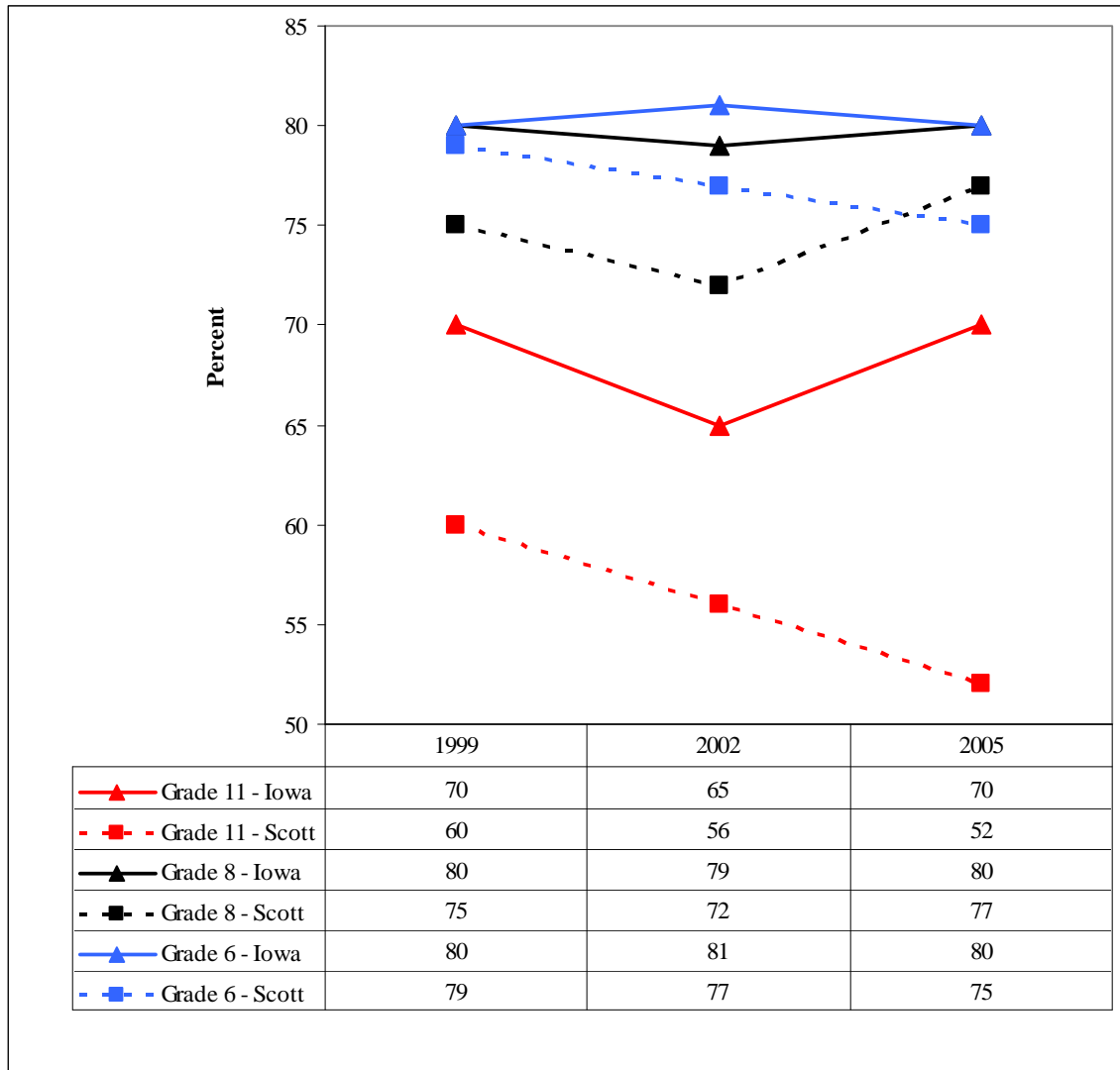
Figure 31: Percent of 6th, 8th, and 11th-Graders Reporting Past 30-Day Marijuana Use



Source: IYS

Note: Error bars are too small to represent and are less than +/- 1%.

Figure 32: Percent of 6th, 8th, and 11th-Graders Perceiving Marijuana Use as a Moderate or Great Risk



Source: IYS

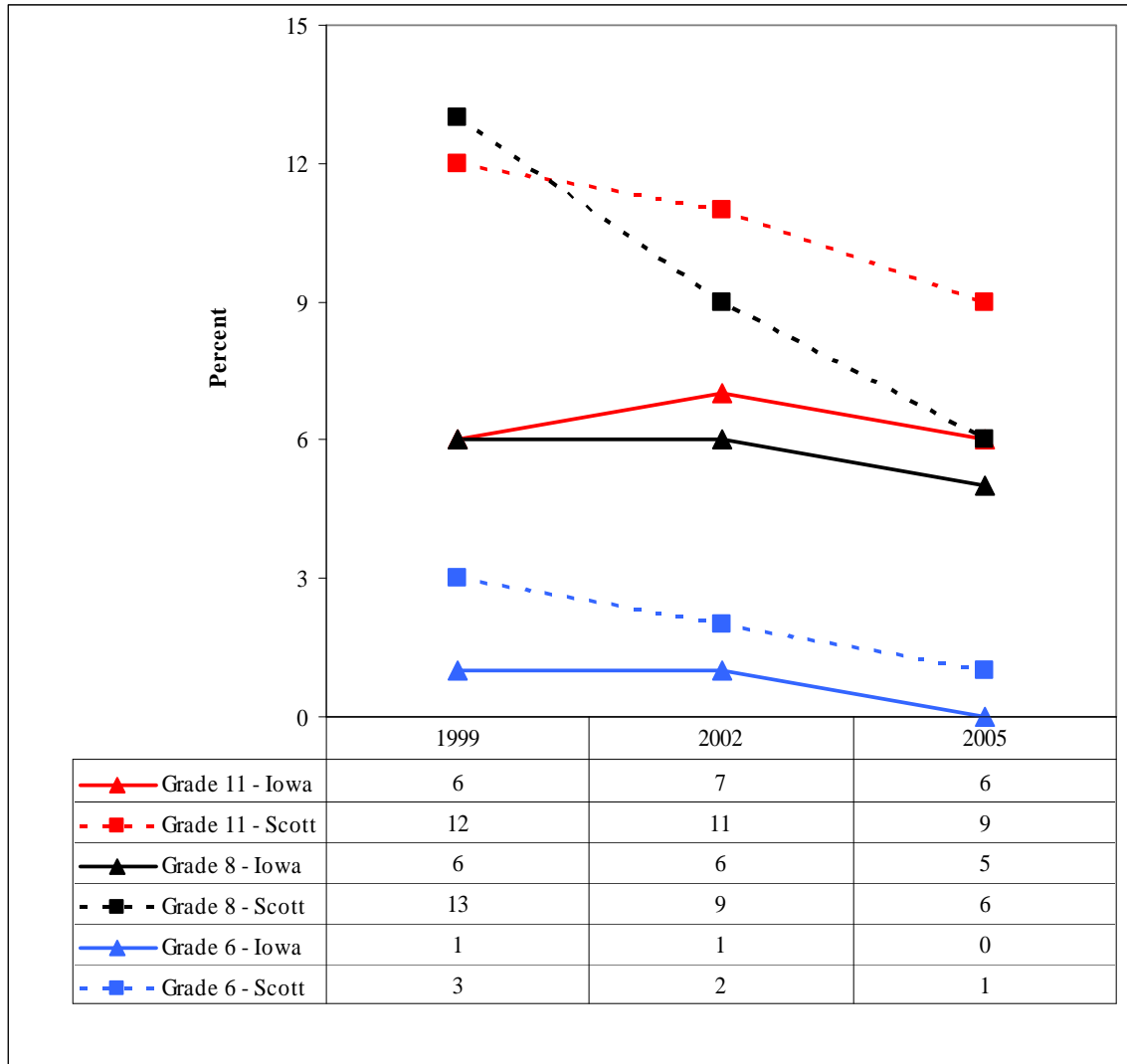
Note: Error bars are too small to represent and are less than +/- 1%.

Table 5: Perceived Moderate or Great Risk of Marijuana Use by Gender

Gender	Year		
	1999	2002	2005
Iowa Males	73	72	74
Scott County Males	69	66	70
Iowa Females	79	77	79
Scott County Females	74	71	73

Source: IYS

Figure 33: Percent of 6th, 8th, and 11th-Graders Reporting First Use of Marijuana before Age 13



Source: IYS

Note: Error bars are too small to represent and are less than +/- 1%.

Illicit Drug Consequences

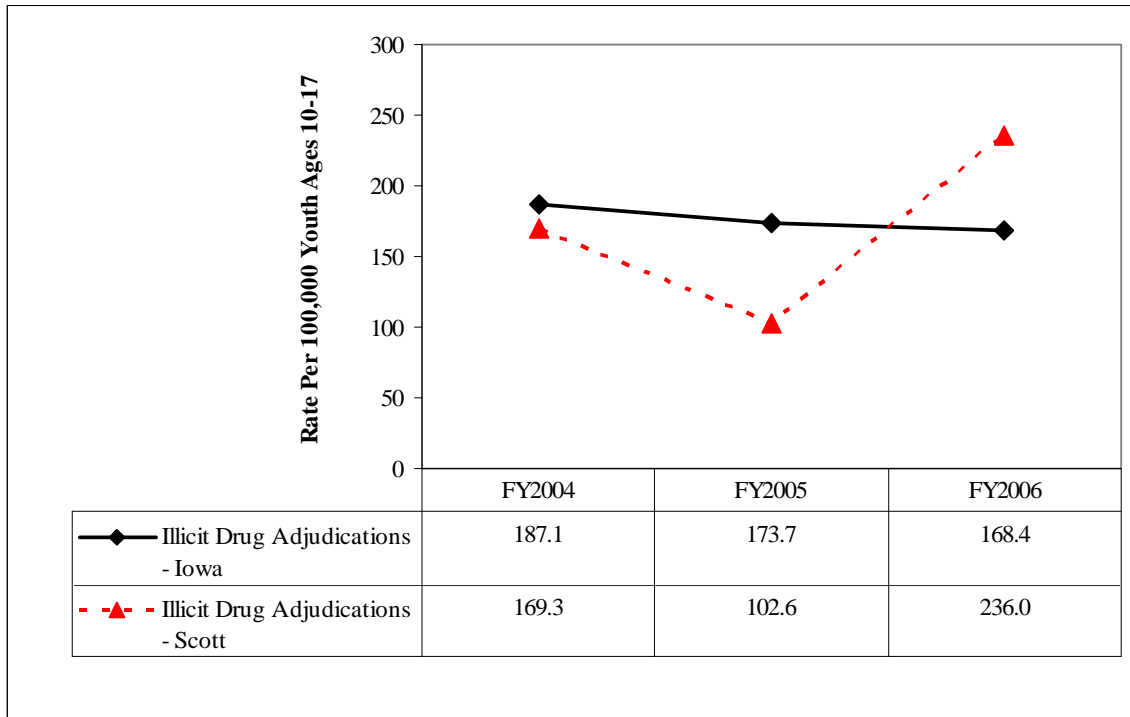
The rate of juvenile adjudications due to illicit drugs in Scott County is similar to the state rate (Figure 34). In fiscal year 2006, there were 46 juvenile adjudications in Scott County for illicit drugs.

The percent of confirmed or founded child abuse cases involving the presence of illegal drugs in a child's body, out of all confirmed or founded child abuse cases, has risen in Scott County since 2003, but remains lower than the state rate (Figure 35). The number of confirmed or founded child abuse cases involving manufacturing methamphetamine in the presence of a minor has been virtually nonexistent in Scott County since the end of 2002, with only 4 cases from 2003-2006 (Figure 36). Many circumstances besides a

change in the use of illegal substances could influence these numbers, including funding for law enforcement and the Department of Human Services, detection technology advances, changes in the Iowa code, and public awareness and pressure. The enactment in May of 2005 of the Iowa Pseudoephedrine Control Act, which required selling pseudoephedrine products from behind the counter rather than on store shelves, probably helped to decrease the number child abuse cases involving manufacturing methamphetamine in the presence of a minor.

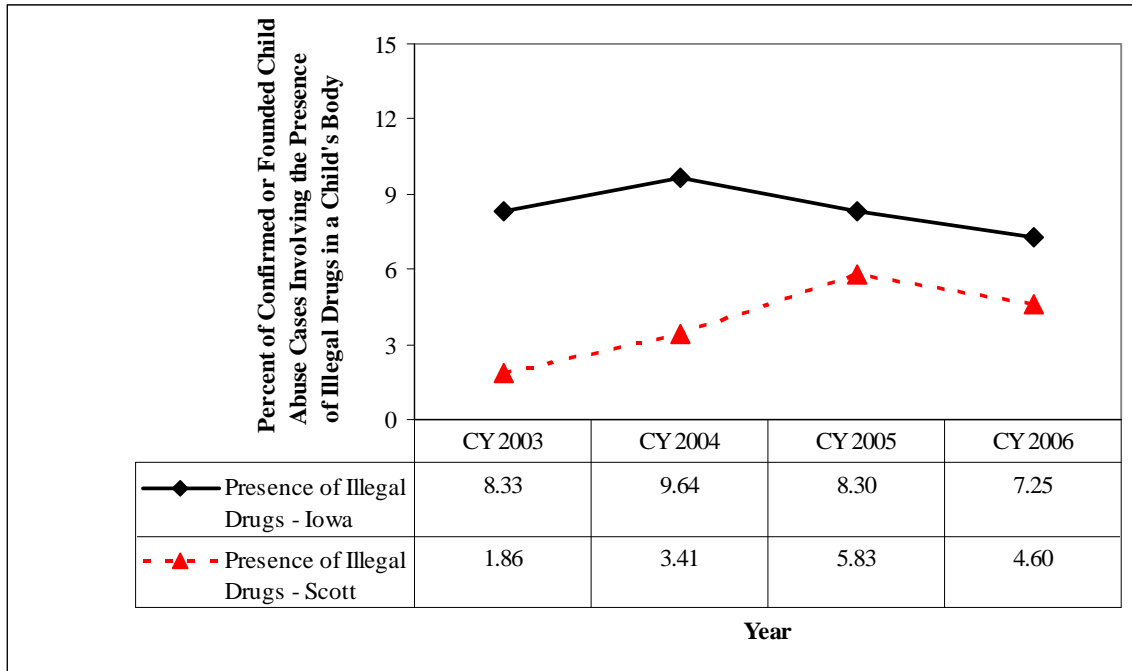
These numbers included each confirmed type of abuse on each report of abuse for each child. Each child may be confirmed to have suffered multiple types of abuse on a single report, and each child may have multiple reports. Presence of an illegal drug is defined as the presence of an illegal drug in a child’s body as a direct and foreseeable consequence of the acts or omissions of the person responsible for the child’s care. Illegal drugs used in this definition include cocaine, heroin, amphetamine, methamphetamine, marijuana, other illegal drugs, or combinations or derivatives of illegal drugs not prescribed by a health practitioner. Manufacturing methamphetamine in the presence of a minor is defined in Iowa Code 232.2 subsection 6, paragraph p. It occurs when the person responsible for the care of a child manufactures a dangerous substance or has possession of the methamphetamine precursors, ephedrine or pseudoephedrine, with the intent to use the product as a precursor or intermediary to a dangerous substance in the presence of a child.

Figure 34: Juvenile Adjudications due to Illicit Drugs



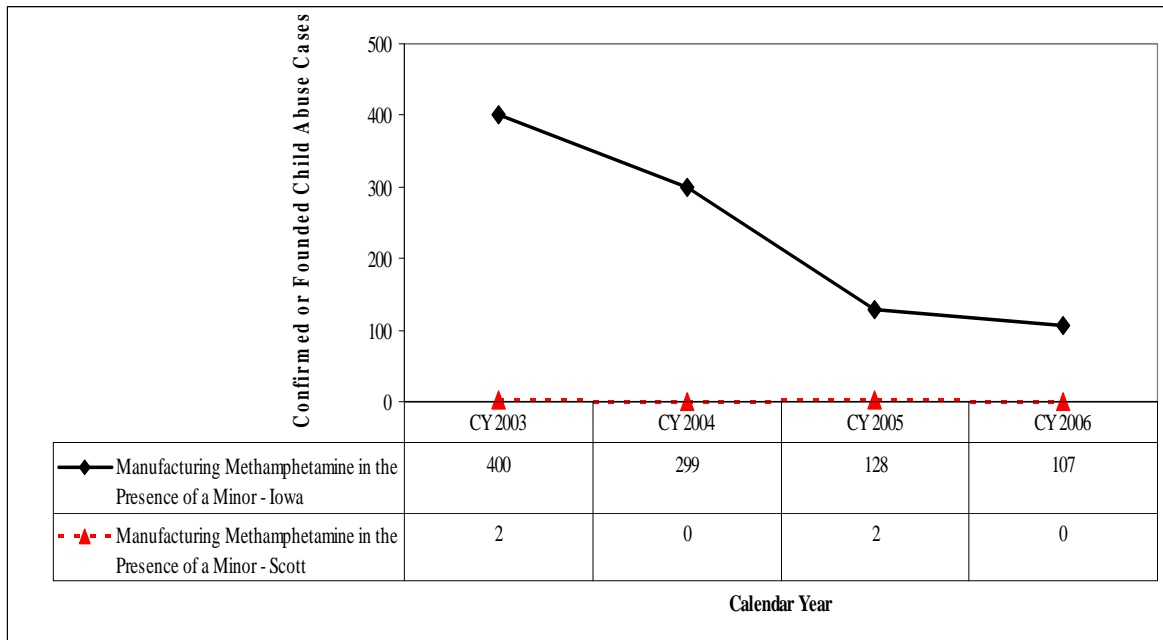
Source: Iowa Court Information System, Justice Data Warehouse

Figure 35: Percent of Confirmed or Founded Child Abuse Cases Involving the Presence of Illegal Drugs in a Child's Body



Source: Iowa Department of Human Services

Figure 36: Number of Confirmed or Founded Child Abuse Cases Involving Manufacturing Methamphetamine in the Presence of a Minor



Source: Iowa Department of Human Services

Note: The Iowa Pseudoephedrine Control Act took effect in May 2005. This Act required that pseudoephedrine products be sold from behind the counter.

Discussion

General Comments

Scott County is unique in that it is one of the few counties in Iowa that includes both a major urban center and rural areas. Scott County encompasses the Iowa side of the Quad Cities; Bettendorf and Davenport, Iowa, along with Moline and Rock Island, Illinois. Scott County straddles Interstate 80, midway between Chicago and Des Moines. According to the U.S. Census, Scott County's population was almost 159,000 in 2000. Estimates based on the 2000 U.S. Census predict that approximately 46,000 young people (ages 19 and under) lived in Scott County in 2006.

The burden of substance abuse, as demonstrated by the consequences data presented in this report, is staggering both financially and in human suffering. The consumption data are disturbing in that Scott County is similar to Iowa when it comes to binge-drinking rates, which are higher than national rates, and higher than state rates for alcohol and illicit drug use. It is in the best interest of all citizens of Iowa to reduce the burden of substance abuse and dependence.

Scott County is a border county with close ties to the Illinois Quad-Cities which makes it more difficult to interpret data and to assess substance use. Both consumption and consequence data may be skewed, as Scott County residents may travel into Illinois to purchase and consume alcohol, tobacco, or illicit drugs. The reverse may be true as well – Illinois residents may travel into Iowa to purchase and consume alcohol, tobacco, or illicit drugs. Extra caution should be used when reviewing substance use data as it may include Illinois residents' consumption and consequences in Scott County or may exclude Scott County residents' consumption and consequences in Illinois. Indicators that are more likely to be affected by this include, in order as they appear in this profile: per capita alcohol gallon sales, drunkenness and liquor law arrests, convictions for alcohol-related offenses, OWI arrests, juvenile adjudications due to alcohol, suicides, alcohol involvement in domestic abuse incidents, and juvenile adjudications due to illicit drugs.

Consumption Patterns of Alcohol, Tobacco, and Other Drugs in Scott County, Iowa

Alcohol

Alcohol is the most widely used substance among youth and adults in Scott County. Adult alcohol use in Scott County has increased over the past couple of years, as evidenced by past 30-day alcohol use. Binge drinking rates in Scott County and across Iowa are significantly higher than the national rate. Heavy drinking and driving after drinking rates in Scott County are similar to both the state and national rates.

Underage drinking is a critical issue in Scott County. Underage drinking rates in Scott County are very similar to state rates. The 2005 IYS showed that 44 percent of Scott County 11th-graders drank alcohol and 35 percent binge drank in the past month. The

social culture in many of Iowa's rural areas and college towns accepts underage drinking as a rite of passage that is part of life activities in small communities. Many community events and activities center on or include drinking alcohol, glorification of drinking, and may even promote underage drinking. Many parents view underage drinking as normal for teenagers. Additionally, some parents provide alcohol to youth in their homes.

Tobacco

Adult tobacco use in Scott County is similar to the state and national rates, and was level from 2003 to 2006. Approximately 800,000 Iowans over age 12 use tobacco. Rates of smoking during pregnancy have been steady at about 19 percent, higher than the state rate by 2-4 percent each year from 2000-2006. The percent of Scott County 11th-graders reporting past 30-day cigarette use is higher than the state rate (29% vs. 21%).

Illicit Drugs

Illicit drug use in Scott County appears to be higher than illicit drug use in Iowa. The per capita rate of people receiving treatment who reported marijuana, cocaine, heroin, or other opiates/synthetics as their primary substance of use is higher for Scott County than the state rate as a whole; whereas the rate for methamphetamine is lower in Scott County than in Iowa. Marijuana use by 6th, 8th, and 11th-graders in Scott County has decreased significantly between 1999 and 2005, but remains higher than the state rate.

Consequences of Substance Abuse in Scott County, Iowa

Alcohol

The consequences of alcohol use in Iowa are severe and multi-faceted. They include: loss of life and injury; lost wages and loss of employment; increased insurance rates and hospitalization charges; costs associated with the legal system; incarceration; and property damage. Because of the higher level of alcohol consumption compared with tobacco or illicit drugs, the adverse consequences of alcohol use may outweigh those associated with tobacco or illicit drugs.

While alcohol use in Scott County appears higher than in Iowa in general, measured alcohol consequences are lower. Legal ramifications of alcohol use in Scott County are lower than in Iowa, including drunkenness and liquor law arrests, convictions for alcohol-related offenses, OWI rate, and juvenile adjudications. Alcohol-related school suspensions or expulsions are lower in Scott County than across Iowa. The alcoholic cirrhosis death rate in Scott County is similar to the state rate.

Tobacco

There is a lack of quality tobacco consequence data for both Scott County and for the state of Iowa as a whole. The lung cancer death rate has remained steady in Scott County for the past four years, and is similar to the state rate. In addition to smoking, lung cancer

may be caused by exposure to environmental toxins, a particular concern for a rural state with a large farming industry.

Illicit Drugs

Although the consumption of illicit drugs in Scott County appears to be higher than across Iowa in general, most indices of illicit drug consequences in Scott County are similar to or lower than state rates. The rate of juvenile adjudications due to illicit drugs and the percent of confirmed or founded child abuse cases involving the presence of illegal drugs in a child's body, out of all confirmed or founded child abuse cases, in Scott County is similar to the respective state rates. The number of confirmed or founded child abuse cases involving manufacturing methamphetamine in the presence of a minor has been virtually nonexistent in Scott County since the end of 2002. This may be due, in part, to the fact that Scott is one of the more urban counties in Iowa. Drug-related school suspensions or expulsions is the only drug consequence indicator that is higher in Scott County than across Iowa.

Conclusions

- Scott County has a binge drinking problem; adult and youth binge drinking rates are higher in Scott County and in the state than nationally. However, the rates of most alcohol consequences are lower in Scott County than in Iowa.
- Cigarette use in Scott County appears to be higher than in Iowa.
- Illicit drug use in Scott County appears to be higher than in Iowa, but measured illicit drug consequences are similar or lower in Scott County.
- Most national datasets are not useful for counties in Iowa, due to insufficient sample sizes.
- The Iowa Youth Survey was a particularly useful tool in assessing youth substance use in Scott County, and provides for the comparison of data between various local measurement areas and across the state.
- A couple of indicators used in the 2006 Iowa Epidemiological Profile were not available at the county-level because of insufficient numbers and confidentiality regulations.
- Data collected at the county level are difficult to assess for a variety of reasons, including a lack of historical data, unclear or inconsistent collecting and reporting procedures, and small sample sizes or incidence rates.

Appendices

Appendix 1

Indicators Included in Scott County Profile

Alcohol Consumption:

- 30-Day Alcohol Use (both adult and youth)
- Age of First Use of Alcohol
- Binge Drinking (both adult and youth)
- Heavy Drinking (adult)
- 30-Day Driving After Drinking Alcohol (both adult and youth)
- Women Reporting the Use of Alcohol During Pregnancy
- Perception of Risk (youth)
- Alcohol as Primary Substance of Use as Reported upon Entry into Treatment

Tobacco Consumption:

- Current Cigarette Use (adult)
- 30-Day Use of Cigarette Use (youth)
- Age of First Use of Cigarettes
- Women reporting the Use of Cigarettes During Pregnancy
- Perception of Risk (youth)
- Tobacco Compliance Checks

Illicit Drug Consumption:

- 30-Day Marijuana Use (youth)
- 30-Day Illicit Drug Use
- Age of First Use of Marijuana
- Perception of Risk (youth)
- Primary Substance of Use as Reported upon Entry into Treatment

Alcohol Consequences:

- Alcoholic Cirrhosis Deaths
- Suicides
- Alcohol-Related Domestic Violence Arrests
- Liquor Law Arrests
- Drunkenness
- DUI Rates
- Alcohol-Related Convictions
- Juvenile Adjudications for Alcohol

Tobacco Consequences:

- Lung Cancer Deaths

Illicit Drug Consequences:

- Presence of Illegal Drugs in Confirmed or Founded Child Abuse Cases
- Manufacturing Methamphetamine in the Presence of a Minor
- Juvenile Adjudications for Illegal Drugs

Other Indicators:

- ATOD-Related Expulsions and Suspensions
- School Enrollment

Appendix 2

Indicators Included in Iowa Epidemiological Profile but not in Scott County Profile

These indicators were not included in the Scott County Profile for a number of reasons. Some indicators were not collected at the county level, others had insufficient sample sizes, and others were suppressed to protect confidentiality.

Alcohol Consumption:

- Perception of Risk (adult)

Tobacco Consumption:

- 30-Day Use of Other Tobacco Products
- Heavy Smoking (youth)
- Perception of Risk (adult)

Illicit Drug Consumption:

- 30-Day Marijuana Use (adult)
- 30-Day Any Illicit Drug Use Other Than Marijuana
- Perception of Risk (adult)

Alcohol Consequences:

- Alcohol Dependence or Abuse
- Alcohol-Involved Drivers Among All Drivers in Fatal Crashes

Illicit Drug Consequences:

- New AIDS Cases and Annual HIV/AIDS Rates Due to Drug Use
- Illicit Drug Dependence or Abuse
- Drug Possession Arrests

Other Indicators:

- School Attendance

Appendix 3

Data Sources

Data Sources

BRFSS (Behavior Risk Factor Surveillance System) -
<http://www.cdc.gov/brfss/index.htm>

Certified Annual Report – Iowa Department of Education, Certified Annual Report (School attendance data)

Iowa Alcoholic Beverages Division – <http://www.iowaabd.com/tobacco/index.jsp>

Iowa Court Information System, Justice Data Warehouse

Iowa Department of Public Safety, Incident Based Uniform Crime Reporting System
<http://www.dps.state.ia.us/commis/ucr/index.shtml>

Iowa Vital Records

Iowa Youth Survey -
<http://www.state.ia.us/government/dhr/cjip/iys/YouthSurvey/ythsurvey.html>

Project EASIER – Iowa Department of Education, Project EASIER Fall Enrollment File

Project EASIER – Iowa Department of Education, Project EASIER Spring Suspension and Expulsion File

SARS - Kantzavelos, A., Barber, K., & Arndt, S. (2006). Outcomes Monitoring System, Iowa Project: Year Eight Report (Iowa Department of Public Health, Contract No. 5885NA01). Iowa City, IA: Iowa Consortium for Substance Abuse Research and Evaluation. <http://iconsortium.subst-abuse.uiowa.edu/>

Suicides -
http://www.idph.state.ia.us/eh/common/pdf/health_statistics/2004/vital_stats_2004.pdf