State of Iowa Substance Use Epidemiological Profile

Iowa Epidemiological Outcome Workgroup

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Acknowledgements

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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 of Iowa. A separate Data Task Group was formed to develop criteria for selecting adequate indicators for the profile and to utilize those criteria to identify, analyze, and select indicators for inclusion in Iowa's epidemiological profile. The following criteria were developed during the writing of the 2006 Iowa Epidemiological Profile and were used for the 2007 and 2008 Profiles as well:

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

Approximately forty-five indicators were included in the 2007 Iowa Epidemiological Profile, and an additional six new indicators were added to the 2008 Profile. The 2008 Profile also introduces mapping for two existing indicators (mapping plots data on an Iowa map, showing the distribution across counties). Key findings include:

Alcohol

- Alcohol is the most frequently used substance in Iowa and across the United States; 53.09% (approximately 1,317,000) of Iowa residents 12 years of age or older are current alcohol users.
- Alcohol is the most reported primary substance by individuals entering substance abuse treatment in Iowa.
- **Binge Alcohol** use is viewed as less of a risk by Iowans than others in the United States.
- The rates of current **alcohol** use and binge drinking by Iowa adults are significantly higher than the corresponding national rates.
- Among youth, the Iowa rate of current **alcohol** use is similar to the national rate.
- Iowa reports a **binge drinking** rate among 12-to-17-year-old youth that is similar to the national rate.
- While there is a downward trend in **alcohol** use by youth over the last few years, more than 15% of all students surveyed in 2005 reported using alcohol before turning 13. For every five 11th-graders in Iowa, two drank alcohol within the past month.
- Approximately 105 Iowa deaths per year are caused by **alcoholic** cirrhosis, a death rate hovering around 3.5 per 100,000 from 2001 to 2007.

- One-quarter to one-third of all traffic fatalities in Iowa involved a driver with a Blood **Alcohol** Content (BAC) greater than 0.01.
- Approximately 21,000 **drunkenness and liquor law arrests** were recorded in 2007, the majority of these arrests involved 18-24 year olds.
- The rate of juvenile adjudications due to **alcohol** was at its highest point in five years in fiscal year 2008.
- **Operating While Intoxicated** arrests per 100,000 Iowans neared 500 in 2007, similar to the rate from 2004 through 2006.

Tobacco

- **Tobacco** use prevalence in Iowa is similar to that of the nation.
- Approximately 780,000 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 Iowa has been between 15-19% of all pregnancies since 2002. Young mothers are more likely to report **tobacco** use during pregnancy, as mothers 18 years old or younger reported tobacco use that was almost 8 percentage points higher than mothers over the age of 18.
- Youth **tobacco** use in Iowa 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, amount of heavy smoking, and perceived risk of cigarette use.
- **Tobacco** compliance rates have remained steady, near 90 percent compliant, for the last seven years.
- **Lung cancer** death rates have been stable for the past seven years. White men aged 65 years old or older are most at risk to die of lung cancer.

Other Drugs

- **Illicit drug** use in Iowa appears to be holding steady at a level lower than the national prevalence.
- Marijuana is the most reported **illicit drug** used by Iowans; methamphetamine is second.
- Current **marijuana** use by adults in Iowa is significantly lower than the national rate.
- 18-to-25-year-old Iowans are four times more likely to use **marijuana** than older Iowans, and twice as likely to use marijuana as 12-to-17-year-olds.
- Iowa adults' perception of risk associated with **marijuana** use was similar to the perception of adults nationally.
- Marijuana use by 6th, 8th, and 11th-graders has decreased significantly between 1999 and 2005.
- The **illicit drug** dependence or abuse rate in Iowa was significantly lower than the national rate in 2006.
- **Drug arrests** have remained stable in Iowa over the past couple of years. **Marijuana** accounted for almost three-quarters of all drug arrests in 2007.

- **Drug use** is incriminated in the spread of HIV/AIDS infection; approximately 12% of new Iowa HIV cases may be linked to illicit drug use in 2007.
- The rate of juvenile adjudications due to **illicit drugs** was at its highest point in five years in fiscal year 2008.
- Approximately nine in ten inmates who had a completed a Level of Service Inventory Revised (LSI-R) assessment had at least one **alcohol or drug** problem in their life.

Overall Summary

Iowa, through the Department of Public Health, undertook a systematic process to identify and analyze substance use and abuse data. The resulting epidemiological profile provides the basis to quantify and measure substance abuse issues so that prevention services can be prioritized. This epidemiological profile is divided into two sections that summarize data for both consumption patterns and consequences of using various substances.

The indicators show that Iowa has a serious drinking problem, with current alcohol and binge drinking rates for adults higher than national rates. Iowa tobacco use rates are similar to the national rates. The use of illicit drugs appears to be lower than the national rates.

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Introduction

Iowa became the 29th state in 1846. It is known as the Hawkeye State and Des Moines is the capital city. Two of its many attractions are the rare Loess Hills along the Missouri River and the world famous Iowa State Fair in Des Moines. Iowa is bordered by two great American rivers, the Mississippi and the Missouri on its east and west sides, making it part of the Lewis and Clark Expedition.

The State of Iowa has a rich agricultural tradition and ranks first in the nation in corn, egg, and pork production and second in soybean and red meat production from its 93,000 farms. While best known for its agricultural economy, Iowa has the world's most advanced Virtual Reality Technology Center and has been in the forefront of promoting ethanol and wind power as alternative energy sources.

Iowa has a rich cultural history and diverse population of nearly 3,000,000 residents. It is home to 13 public and 44 private institutes of higher learning. Iowa has produced many famous individuals such as Herbert Hoover, John Wayne, Glenn Miller, Meredith Wilson, Abigail Van Buren, Ann Landers, George Washington Carver, and Grant Wood. The first in the nation Iowa political caucuses make it an important stop for presidential candidates every four years. Iowa hosted the first National Special Olympics, and is home to the Hy-Vee World Cup Triathlon, the Iowa Corn Indy 250, and the Drake Relays.

Iowa faces many challenges in effectively addressing substance abuse and mental health problems. The state spent an estimated \$3,678,682,400 in 1998 on burdens imposed by substance abuse (Shoveling Up Report, 2001). An updated figure is expected in 2009, when the next report is due for release. This figure includes substance abuse costs incurred in such programs as health and mental health, corrections, child and family welfare. The amount spent on research, prevention, and treatment of substance abuse in Iowa is less than one half of the national average.

Through its Department of Public Health, Iowa has undertaken a systematic process to identify and analyze the epidemiology of substance use and abuse in the state. The resulting epidemiological profiles of substance abuse will assist Iowans in identifying substance abuse issues and prioritize prevention services. The profiles are divided into sections that summarize data for consumption patterns and consequences of use for the various substances.

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, the Single State Agency for substance abuse prevention and treatment, administers the funding and activities of the SEOW.

Process

Former IDPH Deputy Director Janet Zwick formed the Epidemiological Workgroup (Workgroup) in mid-2006 by inviting representatives from agencies directly involved with preventing substance abuse in the state. The members of the Workgroup include representatives from:

The Governor's Office of Drug Control Policy Iowa Department of Public Health Iowa Department of Education Iowa Department of Corrections Division of Criminal and Juvenile Justice Planning Iowa Consortium for Substance Abuse Research and Evaluation at the University of Iowa (Iowa Consortium)

During the summer and fall of 2006, a separate Data Task Group was formed to identify, analyze and select indicators for inclusion in Iowa's epidemiological profile. This smaller Data Task Group was, in practice, a sub-group of the Workgroup, with added members of an existing data committee from the Iowa Collaboration for Youth Development. The Data Task Group forwarded their findings and recommendations to the Workgroup, which made final decisions about which data should be included in the epidemiological profile. The Data Task Group consisted of individuals with extensive experience in using specific state- and federal-level data collection processes and data sets and included representatives from:

Iowa Department of Public Health Iowa Department of Education Iowa Department of Public Safety Governor's Traffic Safety Bureau Division of Criminal and Juvenile Justice Planning Iowa Consortium

For the approximately 300 possible indicators (See Appendix 2 beginning on page 52 for the complete indicators list), the Data Task Group identified potential data sources for each, where possible, and determined the quality and characteristics of the datasets. They then developed criteria to choose the best indicators for the profile:

The Workgroup decided to emphasize applicable National Outcome Measures (NOMs) in the list of indicators. The Data Task Group compiled an original list of approximately possible 300 indicators (See Appendix 2 beginning on page 52 for the complete indicators list). This extensive list of potential indicators was created from indicators used by other states involved in the Strategic Prevention Framework State Incentive Grant process, and from Iowa Data Task Group recommendations. The Data Task Group identified potential data sources for each indicator, where possible, and determined their quality and characteristics. They developed criteria as a guideline for selecting indicators to be included in the profile. The following criteria were used in the selection process:

- Data available at State (Iowa) level;
- Sample covers all geographic areas;
- 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
- Datasets have adequate sample size.

Additional criteria were applied where similar indicators existed:

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

After the master indicators list was complete and the selection criteria developed, the Data Task Group began to select indicators for the profile (See Appendix 1 beginning on page 50 for the list of indicators included in the Epidemiological Profile). The indicator selection process lasted two months, culminating in the Data Task Group's assistance in securing state-level data. Most of the indicators were discarded for at least one of the following reasons:

- No useful data source was available;
- Significant problems existed with the data source, such as inadequate sample size, unavailability of raw data, and inconsistent reporting; and
- There was a lack of strong relationship or association between ATOD use and a given consequence.

The Data Task Group arranged the indicators according to consumption or consequences for alcohol, tobacco, and illicit drugs and rejected some national datasets that were not representative of Iowa because of small or replacement population samples. The Data Task Group decided to focus on state-level datasets because they were more representative. These datasets included the Behavioral Risk Factor Surveillance System (BRFSS), vital records, birth and death certificates, hospital inpatient and outpatient data, and the Iowa Youth Survey (IYS) (See Appendix 3 beginning on page 60 for the list of datasets in this Epidemiological Profile).

Based on the work of the Data Task Group, the State Epidemiological Outcomes Workgroup in its first year assessed analyzed, interpreted, and communicated data about Iowa substance consumption patterns and their consequences. The two major products produced in the first year of the SEOW were the comprehensive 2007 Iowa Substance Use Epidemiological Profile and a system to collect data for monitoring prevention outcomes. A Key Findings document based on the epidemiological profile can be found on the IDPH Web site at www.idph.state.ia.us. The three major products resulting from the second project year were the community level epidemiological profile, data gap report, and an updated state epidemiological profile. The 2007 Iowa Substance Use Epidemiological Profile can be found on the IDPH Web site at <u>www.idph.state.ia.us</u>.

The four major products resulting from the third project year are a new community level epidemiological profile, updated data gap report, dissemination plan, and an updated state epidemiological profile.

Six indicators appear in the 2008 Profile for the first time. These indicators include alcohol sales, clandestine laboratories seized by law enforcement, and data from inmates in Iowa prisons including current or lifetime alcohol problems and current or lifetime drug problems. These indicators were either discovered this year or developed as part of the SEOW data gap plan, and found to meet all the data requirements for inclusion in the report.

Results

Alcohol

Alcohol is the substance most frequently used by adults and youth in Iowa and across the United States. The National Survey on Drug Use and Health (NSDUH 2006) found that 53.09% (approximately 1,317,000) of Iowa residents 12 years of age or older had used alcohol during the past month. Of these Iowans, it was estimated that more than one-half (674,000) consumed five or more drinks on at least one occasion during the past month. Of Iowans 12 years of age and older, 27.14% had binged on alcohol during the past month. These figures demonstrate Iowa's large problem with alcohol use. The 2006 NSDUH estimated that more than one-third (35.20%) of Iowans aged 12 years or older felt that five or more drinks of alcohol once or twice a week was a great risk. The national rate was 41.69%, approximately 6.5% higher than the Iowa rate; showing that alcohol use is not deemed as high of a risk in Iowa as it is across the nation.

Alcohol is the most reported substance of use by individuals on admission to Iowa substance abuse treatment services, reinforcing alcohol as the primary substance of use in Iowa. Marijuana, methamphetamine, and cocaine are the next most cited substances (Figure 1). These data only reflect the primary substance of use at admission, so additional substance use is not included.

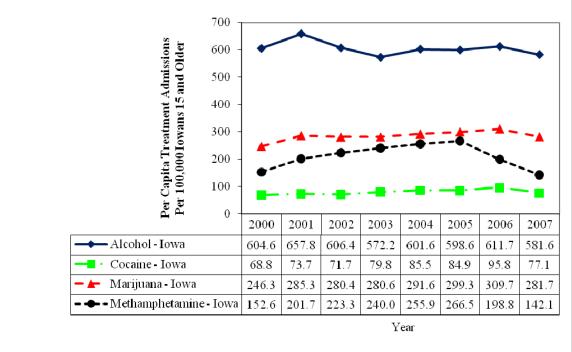


Figure 1: Primary Substance of Use as Reported upon Entry into Treatment¹

Source: Iowa Department of Public Health - SARS

¹ All figures in the profile were designed for electronic viewing. Printing in black and white may cause issues with individual figures throughout the profile.

Adult Consumption Patterns

In 2006, more than one-half of Iowa adults had consumed alcohol in the past month as reported in the BRFSS. More Iowa men than women reported current (past 30-day) alcohol use, similar to the national rates. Estimates based on the 2007 BRFSS show a significant difference between usage rates for men and women between the Iowa and national levels. There is no significant difference in Iowa men's and women's usage rates from year to year (Figure 2). The age groups that reported the highest percent of past 30-day alcohol use include 25-34 year-olds and 35-44 year-olds (Table 1).

Binge drinking, according to the BRFSS, is significantly higher in Iowa than in the United States. Iowa binge drinking rates, estimated by the 2007 BRFSS for women (13.3%) and men (27.0%), are higher than the respective national figures (Figure 3). The wording of the binge drinking question was changed in 2006; this change lowered the number of drinks from five to four per occasion to be considered a binge drinking episode for women. All age groups except the group 65+ had a higher binge drinking rate than the national rates (Table 2). Nearly three in five 18-24 year-old Iowans who reported drinking engaged in binge drinking, according to the 2007 BRFSS. This rate of drinkers who also binge drink decreases as the age group ages (Table 3).

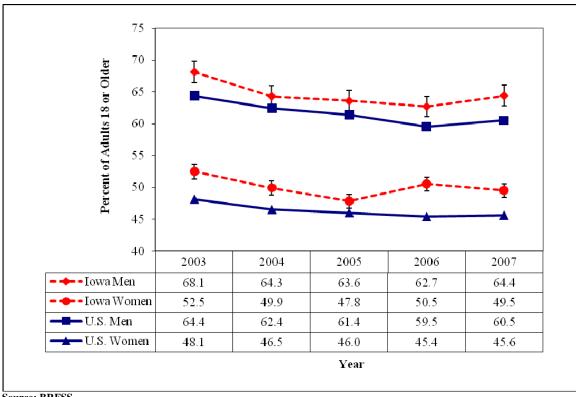
Heavy drinking is defined in the BRFSS as the consumption of more than 2 drinks per day by adult men and more than one drink per day by adult women. In 2007, there was no real difference between the heavy drinking rate for Iowa women and women nationally, or for Iowa men and men nationally (Figure 4). Fewer Iowans over age 12 view the consumption of five or more drinks of alcohol once or twice a week as a great risk (as defined by NSDUH), compared with the national rate. This difference is significant based on the last four NSDUH (Figure 5). The lower perception of great risk in Iowa versus the United States echoes the difference between Iowa and the United States in binge drinking rates.

Due to the small number of Iowa minority participants in the NSDUH and BRFSS and the small Iowa sample sizes, no meaningful comparisons among racial groups can be drawn. Gender strongly relates to alcohol consumption patterns. Men are more likely than women to be current alcohol consumers, to engage in binge drinking, and to be heavy drinkers. This gender effect occurs at both state and national levels.

Alcohol use by pregnant women data are no longer collected as of January 1, 2007. These data are no longer collected due to questions regarding accuracy. These data were reported in previous epidemiological profiles.

Alcohol sales (measured as per capita gallon sales) have grown from 1.5 gallons in fiscal year 2003 to 2.0 gallons in fiscal year 2008 (Figure 6). An Iowa map showing alcohol sales by county reveals that areas of higher population density generally have higher alcohol sales than less populous areas. College towns and resort areas also tend to have higher alcohol sales (Figure 7).

Figure 2: Alcohol Use in Past 30 Days



Source: BRFSS

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

| Area and | | | Age | | | |
|-----------|-------|-------|-------|-------|-------|------|
| Year | 18-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ |
| lowa 2003 | 66.0 | 71.3 | 67.1 | 63.0 | 56.9 | 40.4 |
| lowa 2004 | 60.8 | 67.3 | 65.2 | 59.6 | 52.4 | 37.2 |
| lowa 2005 | 58.1 | 63.3 | 64.8 | 58.2 | 52.4 | 37.6 |
| lowa 2006 | 56.0 | 67.0 | 66.5 | 60.7 | 55.1 | 34.3 |
| lowa 2007 | 52.7 | 69.2 | 66.7 | 61.5 | 55.3 | 36.1 |
| U.S. 2003 | 59.2 | 62.2 | 61.1 | 58.1 | 52.4 | 41.4 |
| U.S. 2004 | 57.5 | 60.2 | 58.9 | 56.1 | 50.1 | 40.5 |
| U.S. 2005 | 53.9 | 59.1 | 58.8 | 56.1 | 50.3 | 40.5 |
| U.S. 2006 | 51.6 | 57.8 | 57.8 | 55.9 | 50.1 | 38.2 |
| U.S. 2007 | 52.6 | 58.0 | 58.2 | 55.8 | 50.8 | 39.4 |

Table 1: Percent Reporting Past-30-Day Alcohol Use by Age

Source: BRFSS

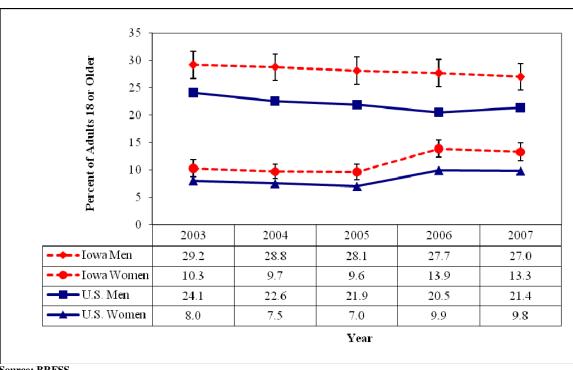


Figure 3: Percent of Adults Binge Drinking in Past Month

Source: BRFSS

Note 2: The binge drinking question was changed in 2006; the number of drinks per occasion to be considered binge drinking for women was lowered from five to four.

| Area and Age | | | | | | | | |
|--------------|-------|-------|-------|-------|-------|-----|--|--|
| Year | 18-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ | | |
| lowa 2007 | 30.8 | 31.3 | 26.5 | 20.6 | 10.9 | 2.7 | | |
| U.S. 2007 | 26.5 | 22.7 | 18.0 | 14.3 | 9.0 | 3.8 | | |

Table 2: Percent Reporting Binge Drinking by Age

Source: BRFSS

Table 3: Percent Reporting Binge Drinking Among Those who Drink

| | Age | | | | | | | |
|--------------------------|-------|-------|-------|-------|-------|------|--|--|
| Percent | 18-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ | | |
| 30-Day Alcohol Use | 52.7 | 69.2 | 66.7 | 61.5 | 55.3 | 36.1 | | |
| 30-Day Binge Drink | 30.8 | 31.3 | 26.5 | 20.6 | 10.9 | 2.7 | | |
| Drinkers who Binge Drink | 58.4 | 45.2 | 39.8 | 33.5 | 19.7 | 7.5 | | |

Source: BRFSS

Note: Drinkers who Binge Drink is a construct of dividing the 30-Day Binge Drink percentage by the 30-day Alcohol Use percentage.

Note1: Confidence intervals allow comparison of Iowa and U.S. results.

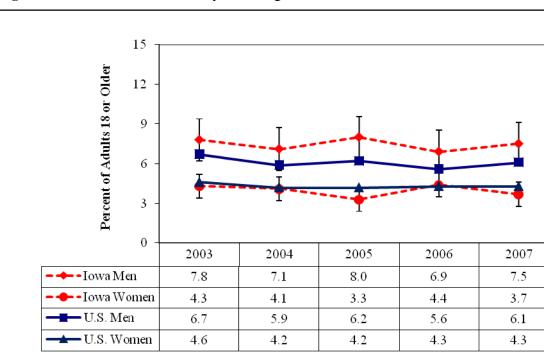
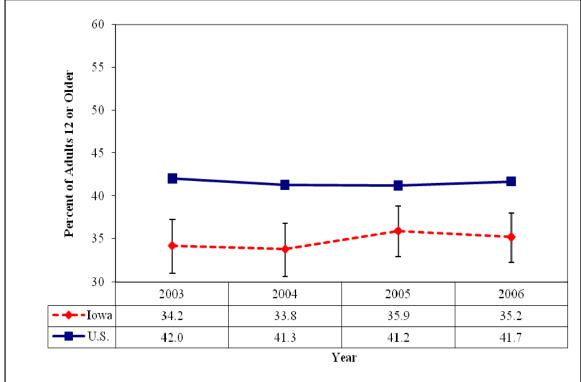


Figure 4: Percent of Adults Heavy Drinking in Past Month

Year

Source: BRFSS Note: Confidence intervals allow comparison of Iowa and U.S. results.

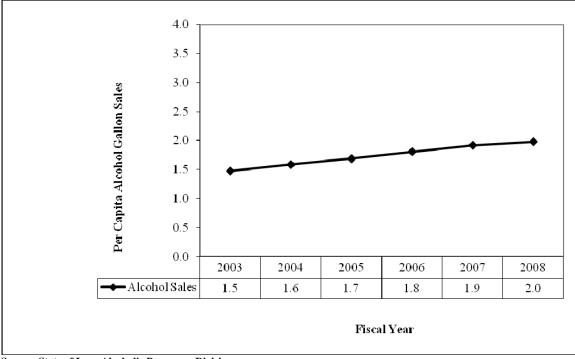
Figure 5: Perceived Risk of Alcohol Use (Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week)



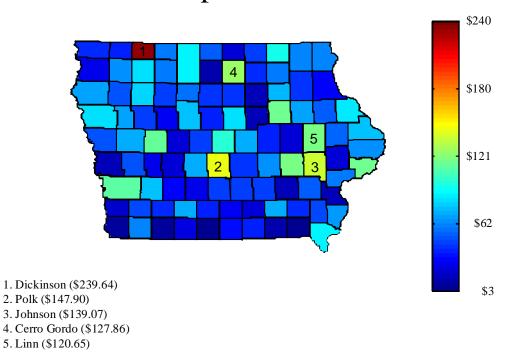
Source: NSDUH

Note: Confidence intervals allow comparison of Iowa and U.S. results. The data source provided the confidence intervals for Iowa, but not for the U.S.

Figure 6: Per Capita Alcohol Gallon Sales



Source: State of Iowa Alcoholic Beverages Division



Per Capita Sales 2007

Source: State of Iowa Alcoholic Beverages Division

Note: All maps in the profile were designed for electronic viewing. Printing in black and white will cause issues with the maps included in the profile.

Youth Consumption Patterns

The Iowa Youth Survey (IYS) is a triennial census assessment of Iowa's 6th, 8th, and 11thgrade students' attitudes toward substance use and actual usage. The IYS was last completed in 2005; by a total of 98,246 Iowa students from 390 school districts (2008 IYS data will be available in Spring 2009). The IYS is used to report youth consumption patterns in this profile because it is much more reflective of 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. National survey methods may not adequately reflect Iowa youth ATOD use and beliefs.

The reported rate of alcohol use before age 13 has fallen from 1999 to 2005 (Figure 8). However, over 15% of all students surveyed in 2005 reported using alcohol before turning 13. Current alcohol use has also fallen for each grade reported in the IYS since 1999 (Figure 9). The downward trend is positive, but the overall number of youth reporting current alcohol use is still alarming. For every five 11th graders in Iowa, two drank alcohol in the past month.

Even though the IYS shows a downward trend in current alcohol use, Iowa teens continue to use alcohol at a similar rate as teens nationally. According to the 2004 NSDUH, there is no real difference in the rate of current alcohol use by 12- to 17-year-olds in Iowa (19.60%) and nationwide (17.65%).

Binge drinking by 6th, 8th, and 11th-graders over the past 30 days as reported on the IYS has decreased since 1999 (Figure 10). Iowa has a similar binge drinking rate among youth as the national rate 11.39% vs. 10.10%.

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 substances or between levels of drug use. As with other measures of youth alcohol use, the reported percentage of youth driving after using any amount of alcohol or other drugs has decreased from 1999 to 2005 (Figure 11). Although the rate of youth driving after using alcohol or other drugs has decreased, many Iowa youth still 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 Iowa feel there is great or moderate risk associated with drinking a considerable amount of alcohol on a regular basis (Figure 12). The expected response to this heavily weighted question would be near 100%, especially for teenagers. Perception of risk among Iowa secondary school students about heavy alcohol use is lower than expected. Female respondents perceived greater risk of alcohol use than males (Table 4). The gender difference remained relatively stable from 1999 to 2005.

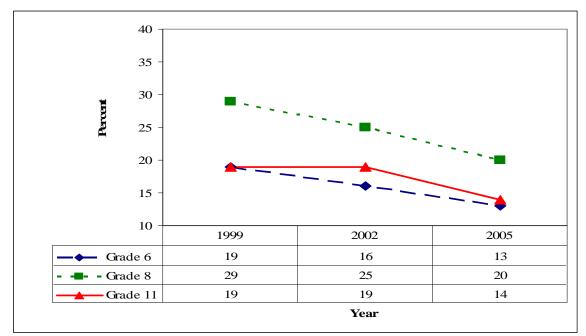


Figure 8: Percent of 6th, 8th, and 11th-Graders Reporting First Use of Alcohol before Age 13

Source: IYS

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

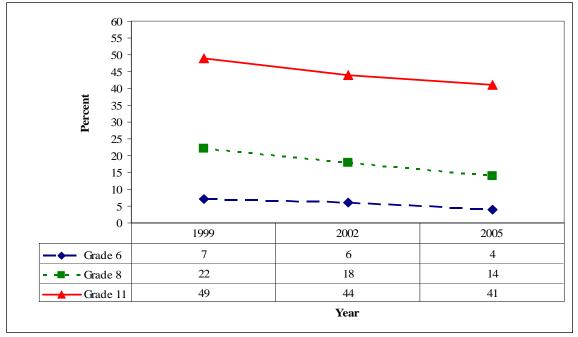


Figure 9: Percent of 6th, 8th, and 11th-Graders Reporting Past 30-Day Use of Alcohol

Source: IYS

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

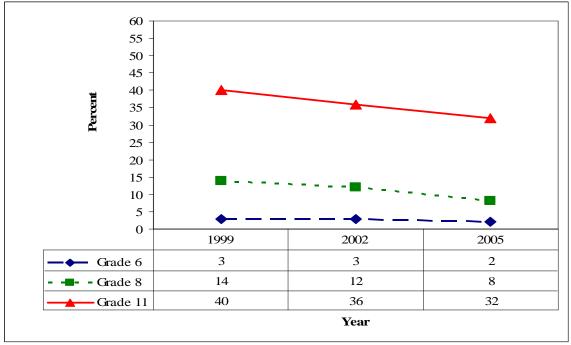
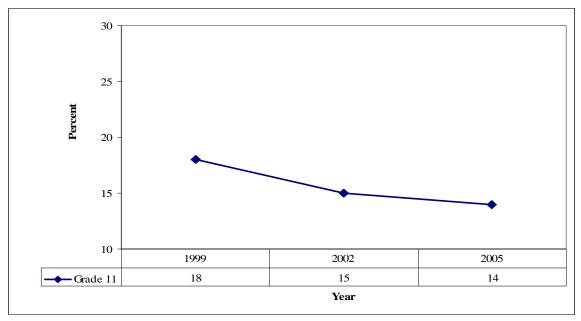


Figure 10: Percent of 6th, 8th, and 11th-Graders Reporting Binge Drinking – Past 30 Days

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

Figure 11: 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%.

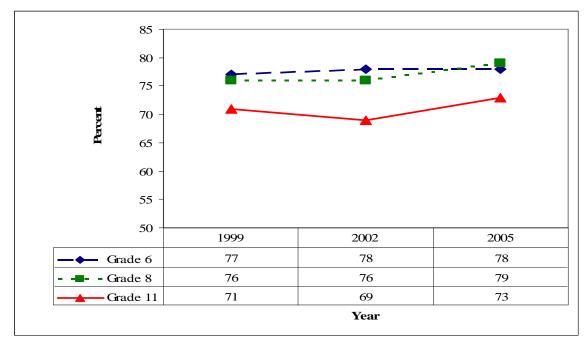


Figure 12: Percent of 6th, 8th, and 11th-Graders Perceiving Alcohol Use as a Moderate or Great Risk

Source: IYS

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

| Table 4: Percent of Perceived Moderate or Great Risk of Al | Icohol Use by Gender |
|--|----------------------|
|--|----------------------|

| | Year | | | | | |
|---------|------|------|------|--|--|--|
| Gender | 1999 | 2002 | 2005 | | | |
| Males | 70 | 71 | 73 | | | |
| Females | 79 | 78 | 80 | | | |

Source: IYS

Alcohol Consequences

Approximately 21,000 drunkenness and liquor law arrests were recorded in 2007. The total has been stable since 2004, with an increase in drunkenness arrests being offset by a corresponding decrease in liquor law arrests (Figure 13). 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.

The overall number of liquor law arrests has fallen each year between 2003 and 2007. Iowans under the age of 25 years old make up the majority of liquor law arrests each year

(Table 5). The number of drunkenness arrests increased from 2003 to 2007. The single largest age group of drunkenness arrests each year was 18-to 24-year-olds (Table 6). The number of convictions for alcohol-related offenses in Iowa has remained relatively stable between 2003 and 2005, with a slight increase in 2006 and 2007 (Figure 14).

The number of Operating While Intoxicated (OWI) arrests per 100,000 Iowans has remained stable since 2004, hovering around 485 (Figure 15). 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 Iowans from 2003 to 2004. Other possible reasons for the increase could be improved law enforcement or zero tolerance policies toward motor vehicle-alcohol offenses. Iowa recorded more than 14,000 OWI arrests during 2007.

Data on problem use of substances, along with a variety of other information, is collected from inmates using the LSI-R (Level of Service Inventory – Revised). The LSI-R is a face-to-face interview conducted by trained correctional counselors that collects self-report data from the inmate. The goal of the Iowa Department of Corrections for the LSI-R is to collect it within 60 days of admission to prison. For offenders with multiple assessments/reassessments, the assessment that was completed closest to the date of prison admission was chosen. Almost two-fifths of inmates with a completed LSI-R assessment had a current alcohol problem, labeled as "interference." More than two-thirds of inmates had an alcohol problem at some point in their lives (Table 7).

Approximately 475,000 youth were enrolled in Iowa public schools for the 2004-2005 through 2007-2008 school years (Project EASIER). Suspensions and expulsions for alcohol and drugs have only been reported consistently for the three most recently completed school years. The rate of suspensions and expulsions for alcohol decreased while suspensions and expulsions for drugs increased from 2006-2007 to 2007-2008. The total suspension and expulsion rate per 100,000 students for alcohol and drugs was 332.6 in 2007-2008 (Figure 16).

An Iowa map showing total suspensions and expulsions per 1,000 students for alcohol and drugs shows great variance in this rate by county. Law enforcement discretion, communication between law enforcement, courts, and the schools, and school policies all may factor into county suspension and expulsion differences (Figure 17).

The rate of juvenile adjudications due to alcohol was at the highest point in five years for fiscal year 2008. The rate of alcohol-related juvenile adjudications in Iowa per 100,000 youth ages 10-17 was 155 in fiscal year 2008 (Figure 18).

Approximately 105 Iowa deaths per year are caused by alcoholic cirrhosis (ICD-10 code K70), for a death rate near 4.4 per 100,000 in 2007 (Figure 19). This rate is quite low compared with the lung cancer death rate of approximately 61 per 100,000 Iowans from 2001-2007. Further analyses suggest that age and gender were the most significant predictors of cirrhosis deaths (Table 8). Males are three times more likely to die of alcoholic cirrhosis than females. Cirrhosis rates did not differ among race or ethnicity groups. Alcoholic cirrhosis usually 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 policies and practices that impact alcoholic cirrhosis.

Between 2000 and 2007, approximately one-quarter to one-third of Iowa traffic fatalities involved an "alcohol-involved driver," defined as having a Blood Alcohol Content (BAC) greater than 0.01. The rate of alcohol-related traffic fatalities has remained relatively constant since 2000 (Figure 20).

A recent study found that, of suicide victims who were tested for alcohol or drugs, approximately 33.3% were positive for alcohol and 16.4% were positive for opiates (Centers 2006). The number of suicides in Iowa has remained relatively stable in recent years, averaging approximately 325 suicides from 2000 to 2007. Adjusted for population, the overall suicide rate, as well as the suicide rate of Iowans under the age of 19 and adult Iowans, also remained relatively stable. The 2007 suicide rate was 10.8 per 100,000 (Figure 21).

Iowans' 2005-2006 (NSDUH) past year alcohol dependence or abuse rate remained statistically unchanged from the previous two years. Based on data from the 2005-2006 NSDUH, the percent of Iowans aged 12 or older who reported alcohol dependence or abuse was significantly higher than the national total (Figure 22). The NSDUH uses the DSM-IV definitions of dependence and abuse.

The number of Iowa domestic violence cases where alcohol was present has remained stable from 2003-2007 (Table 9). The number of domestic violence cases with alcohol involvement has hovered around 1,225; this comprises 15-18% of the total number of domestic violence cases.

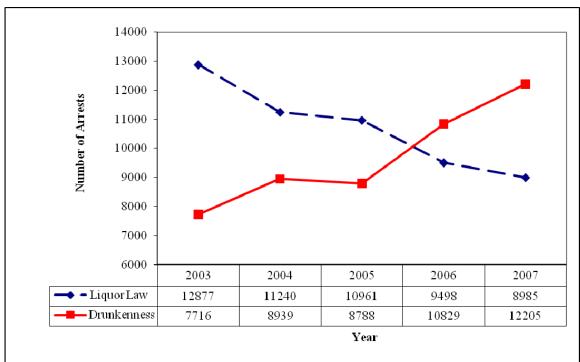


Figure 13: Drunkenness and Liquor Law Arrests

Source: Incident Based Uniform Crime Reporting System

| Age | | | | | | | | |
|------|------------------------------|---|---|---|--|---|---|--|
| <18 | 18-24 | 25-34 | 35-44 | 45-54 | 55-64 | >64 | Total | |
| 2417 | 8315 | 842 | 693 | 474 | 104 | 29 | 12877 | |
| 2187 | 7569 | 614 | 496 | 290 | 59 | 19 | 11240 | |
| 2071 | 7230 | 688 | 533 | 353 | 69 | 15 | 10961 | |
| 2093 | 6140 | 541 | 383 | 277 | 49 | 15 | 9498 | |
| | 2417 2187 2071 2093 | 2417 8315 2187 7569 2071 7230 2093 6140 | 2417 8315 842 2187 7569 614 2071 7230 688 | <18 18-24 25-34 35-44 2417 8315 842 693 2187 7569 614 496 2071 7230 688 533 | <1818-2425-3435-4445-54241783158426934742187756961449629020717230688533353 | <18 18-24 25-34 35-44 45-54 55-64 2417 8315 842 693 474 104 2187 7569 614 496 290 59 2071 7230 688 533 353 69 | <1818-2425-3435-4445-5455-64>642417831584269347410429218775696144962905919207172306885333536915 | |

Source: Incident Based Uniform Crime Reporting System

 Table 6: Number of Drunkenness Arrests by Age

| | Age | | | | | | | | |
|------|-----|-------|-------|-------|-------|-------|-----|-------|--|
| Year | <18 | 18-24 | 25-34 | 35-44 | 45-54 | 55-64 | >64 | Total | |
| 2003 | 227 | 2790 | 1593 | 1678 | 1122 | 264 | 38 | 7716 | |
| 2004 | 237 | 3197 | 1864 | 1900 | 1364 | 339 | 38 | 8939 | |
| 2005 | 253 | 3025 | 2038 | 1705 | 1381 | 316 | 67 | 8788 | |
| 2006 | 426 | 4015 | 2456 | 1958 | 1563 | 326 | 85 | 10829 | |

Source: Incident Based Uniform Crime Reporting System

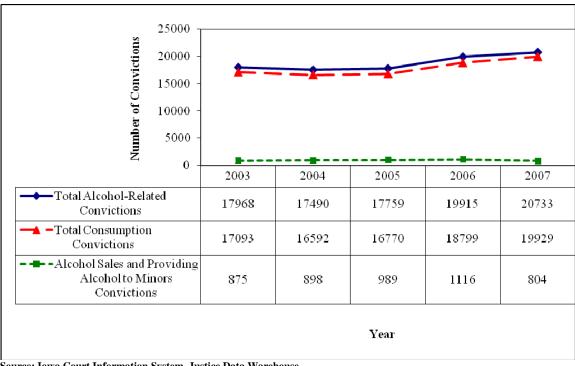


Figure 14: Number of Convictions for Alcohol-Related Offenses

Source: Iowa Court Information System, Justice Data Warehouse

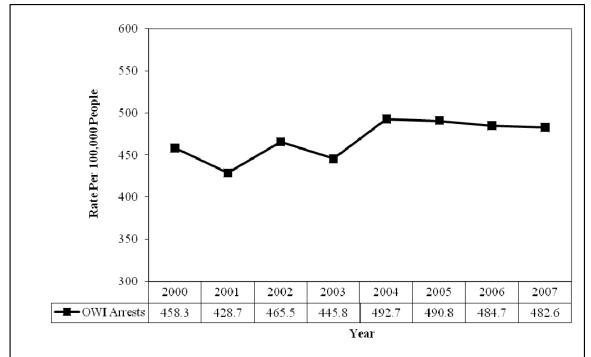


Figure 15: Rate of Operating While Intoxicated Arrests per 100,000 Iowans

Source: Iowa Incident Based Uniform Crime Reporting System

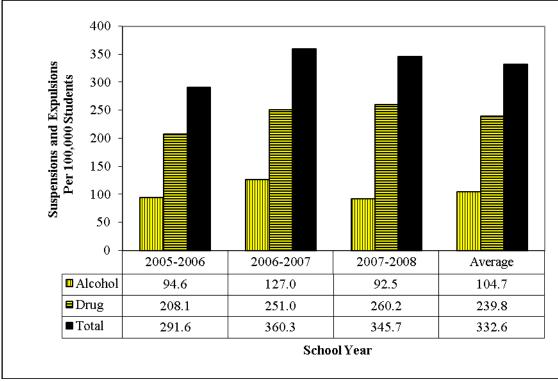
Note: As of July 1, 2003, the "legal limit" in Iowa is .08 BAC, lowered from .10 BAC.

| Alcohol Problem, Currently | Percent | Alcohol Problem, Ever | Percent |
|-----------------------------------|---------|-----------------------|---------|
| Unknown | 1.1% | Unknown | 0.6% |
| No diagnosis/Successful Treatment | 30.8% | No | 29.2% |
| Uses - Little to No Interference | 27.7% | Yes | 70.2% |
| Interference | 40.30% | | |

Table 7: Iowa Prison Inmates – Alcohol Problems, Currently and Ever (N = 8, 092)

Source: Iowa Department of Corrections

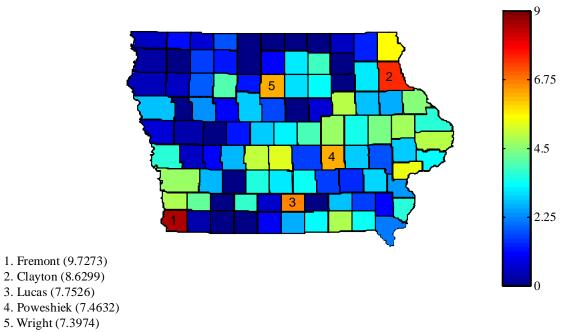
Figure 16: School Suspensions and Expulsions per 100,000 Students Due to Alcohol or Drugs



Source: Project EASIER

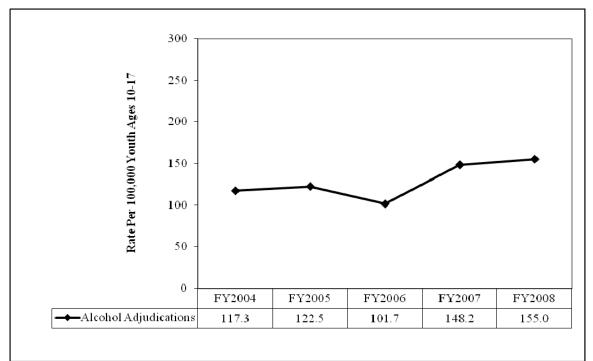
Figure 17: School Suspensions and Expulsions per 1,000 Students Due to Alcohol or Drugs Map

Alcohol and Drug Suspensions and Expulsions per 1,000 Students



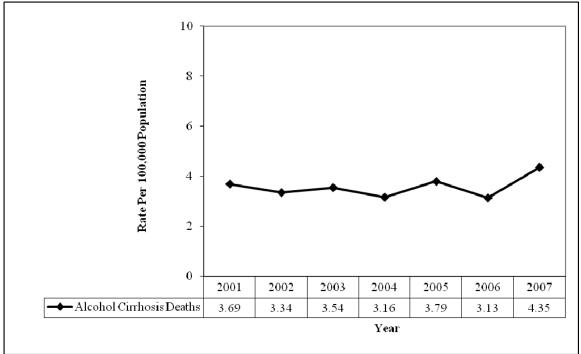
Source: Project EASIER

Figure 18: Juvenile Adjudications due to Alcohol



Source: Iowa Court Information System, Justice Data Warehouse

Figure 19: Alcoholic Cirrhosis Deaths per 100,000



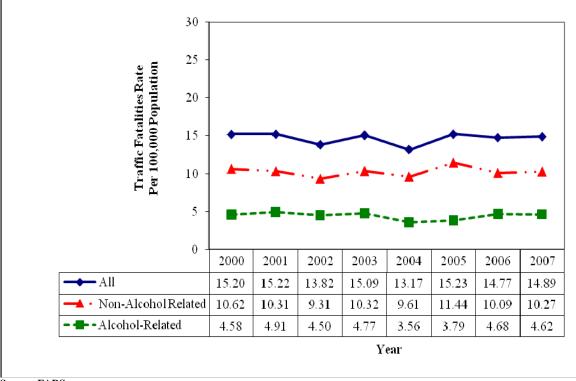
Source: Iowa Vital Records

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Average |
|----------|------|------|------|------|------|------|------|---------|
| Race | | | | | | | | |
| White | 3.6 | 3.5 | 3.9 | 3.5 | 4.5 | 3.1 | 4.3 | 3.8 |
| Black | 6.4 | 1.6 | 6.3 | 0.0 | 3.0 | 1.3 | 6.5 | 3.6 |
| Hispanic | 3.4 | 0 | 2.1 | 2.0 | 4.8 | 0.9 | 1.7 | 2.1 |
| Other | 5.7 | 1.4 | 9.7 | 11.6 | 11.3 | 4.5 | 2.2 | 6.6 |
| Gender | | | | | | | | |
| Female | 1.7 | 1.5 | 1.6 | 1.8 | 2.5 | 1.7 | 2.2 | 1.9 |
| Male | 5.7 | 5.3 | 6.4 | 5.2 | 6.6 | 4.6 | 6.6 | 5.8 |
| Age | | | | | | | | |
| <20 | 0.6 | 0.5 | 0.4 | 0.5 | 0.3 | 0.4 | 0.6 | 0.5 |
| 20-54 | 3.3 | 3.3 | 3.7 | 2.9 | 4.5 | 3.2 | 4.7 | 3.7 |
| 55-64 | 9.9 | 7.6 | 8.0 | 8.1 | 7.4 | 6.6 | 9.6 | 8.2 |
| >65 | 7.1 | 6.2 | 5.8 | 5.5 | 5.3 | 5.3 | 6.2 | 5.9 |

Table 8: Alcoholic Cirrhosis Death Rate per 100,000 Iowans by Characteristics

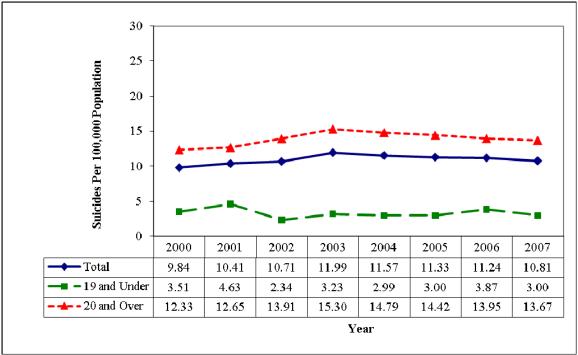
Source: Iowa Vital Records

Figure 20: Traffic Fatalities per 100,000 Population



Source: FARS

Figure 21: Suicides per 100,000 Population



Source: Iowa Vital Records

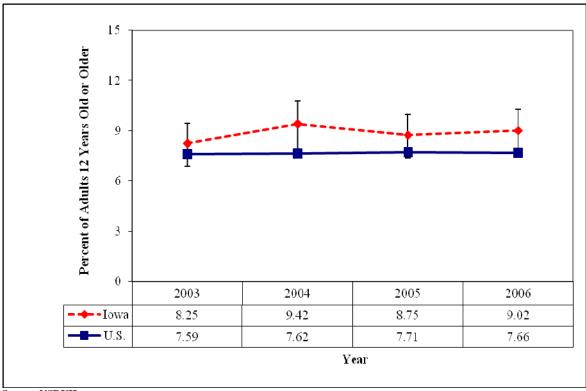


Figure 22: Percent of Adults Past-Year Alcohol Dependence or Abuse

Source: NSDUH

Note: Confidence intervals allow comparison of Iowa and U.S. results. The data source provided the confidence intervals for Iowa, but not for the U.S.

| | 2003 | 2004 | 2005 | 2006 | 2007 |
|------------------------|-------|-------|-------|-------|-------|
| Number of Cases | 1,219 | 1,230 | 1,191 | 1,223 | 1,301 |
| Percent of Total Cases | 15 | 18 | 16 | 17 | 18 |

Source: Incident Based Uniform Crime Reporting System

Tobacco

Adult Consumption Patterns

Based upon NSDUH estimates, adult tobacco use in Iowa remained unchanged from 2003 to 2006, and was similar to national tobacco usage rates. Due to the small sample size and the weighting approach used by the NSDUH, no additional analysis (breaking out race, gender, or age) can be conducted on Iowa tobacco use data.

The 2005-2006 NSDUH estimates that approximately 780,000 Iowans over age 12 used tobacco; cigarette usage comprised the majority of this estimate (630,000). National and state rates of 30-day tobacco use did not differ significantly, nor is there significant difference between the 2003, 2004, 2005, and 2006 Iowa rates (Figure 23). Tobacco use, as defined by the NSDUH, includes cigarettes, smokeless tobacco (chewing tobacco or snuff), cigars, or pipe tobacco. Cigarette use mirrors overall tobacco use rates for Iowa and the U.S. from 2003-2006, with no significant difference between years or between Iowa and national rates (Figure 24).

According to the 2005-2006 NSDUH, approximately two-thirds of Iowans over age 12 feel that smoking at least one pack of cigarettes per day is very risky. This rate was similar to previous years, but is significantly lower than the national rate (Figure 25).

The rate of Iowa mothers reporting using tobacco during pregnancy has been stable since 2002, hovering between 15-19% of all pregnancies since 2002 (Figure 26). Young mothers are more likely to report tobacco use during pregnancy, as mothers 18 years old or younger reported tobacco use that was almost 8 percentage points higher than mothers over the age of 18 (Figure 27). This information was collected and reported on birth certificates, and does not include women who did not have live births. In 2007, the questions used to collect this information changed. Formerly, this data was collected by asking if the mother had smoked during pregnancy. Beginning in 2007, this data is now collected by asking three questions to assess the number of cigarettes smoked during each pregnancy trimester. If a mother reported smoking during any trimester, then she is included in the percent reporting smoking. Both reporting methods may under-report tobacco usage, since mothers may hesitate to report using tobacco while pregnant due to potential legal or social ramifications.

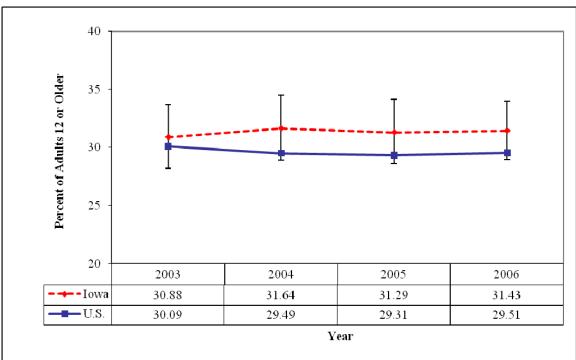


Figure 23: Percent of Adults 12 or Older Past 30-Day Tobacco Use

Source: NSDUH

Note: Confidence intervals allow comparison of Iowa and U.S. results. The data source provided the confidence intervals for Iowa, but not for the U.S.

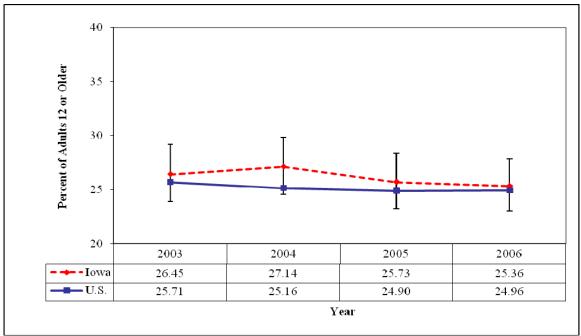
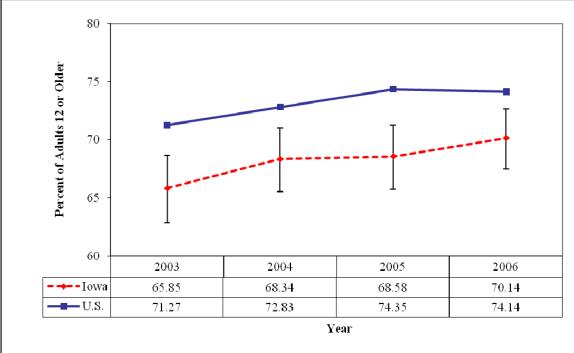


Figure 24: Percent of Adults 12 or Older Past 30-Day Cigarette Use

Source: NSDUH

Note: Confidence intervals allow comparison of Iowa and U.S. results. The data source provided the confidence intervals for Iowa, but not for the U.S.

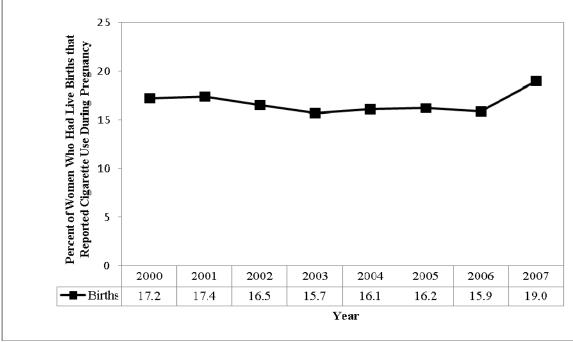
Figure 25: Percent of Adults 12 or Older Perception of Great Risk of Smoking One or More Packs of Cigarettes per Day



Source: NSDUH

Note: Confidence intervals allow comparison of Iowa and U.S. results. The data source provided the confidence intervals for Iowa, but not for the U.S.

Figure 26: Percent of Women Who Had Live Births that Reported Tobacco Use During Pregnancy – All Ages



Source: Iowa Vital Records

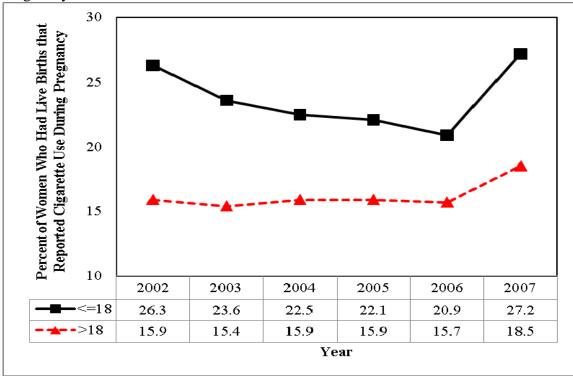


Figure 27: Percent of Women Who Had Live Births that Reported Tobacco Use During Pregnancy

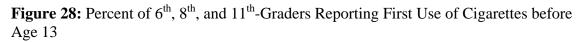
Source: Iowa Vital Records

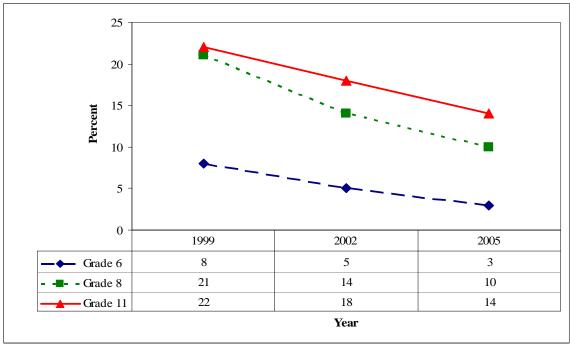
Youth Consumption Patterns

Youth tobacco use in Iowa appears to be on the decline, as evidenced by the number of youth reporting first use of cigarettes before age 13, past 30-day use, amount of heavy smoking, and perceived risk of 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 (Figure 28). Reported past 30-day cigarette use for the same populations has also decreased on each IYS, with the exception that 2% of 6th-graders reported cigarette use in both 2002 and 2005 (Figure 29). Iowa and national youth heavy smoking rates do not differ significantly. The Iowa rate of heavy smoking decreased significantly between 1997 and 2007 (Figure 30). 6th, 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 31. Perceived risk of cigarette use does not appear to differ by gender among middle- and high-school youth (Table 10).

Tobacco compliance check data are compiled by the Iowa Alcoholic Beverages Division. In the last seven fiscal years, the compliance rate was between 88-92% (Figure 32). More than 7,400 tobacco compliance checks were completed during fiscal year 2008 in Iowa.





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

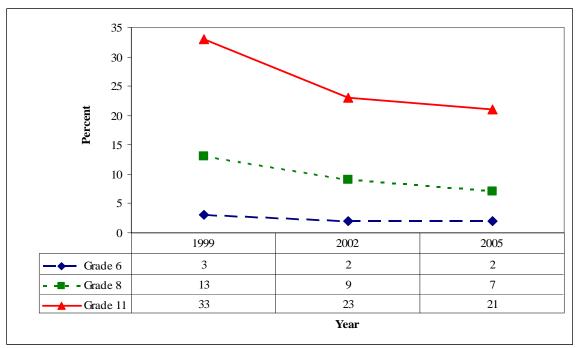
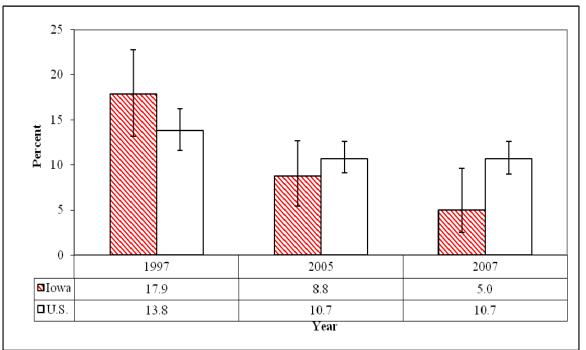


Figure 29: Percent of 6th, 8th, and 11th-Graders Reporting Past 30-Day Cigarette Use

Source: IYS

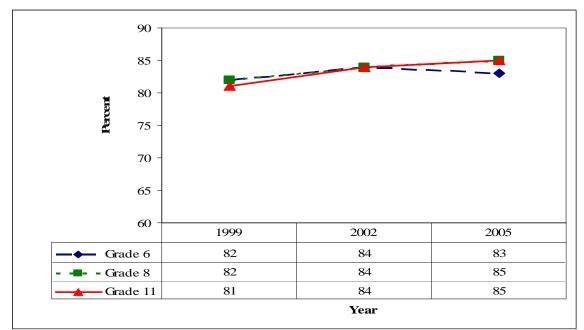
Note: Error bars are too small to represent and are less than +/- 1%.

Figure 30: Heavy Smoking among Youth



Source: YRBSS Note: Confidence intervals allow comparison of Iowa and U.S. results.

Figure 31: 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 10: Percent of 6th, 8th, and 11th-Graders Perceived Moderate or Great Risk of Cigarette Use by Gender

| Gender | Year | | | | |
|---------|------|------|------|--|--|
| | 1999 | 2002 | 2005 | | |
| Males | 80 | 82 | 83 | | |
| Females | 83 | 85 | 85 | | |

Source: IYS

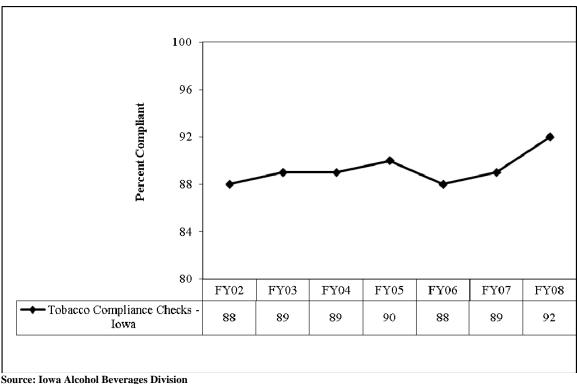


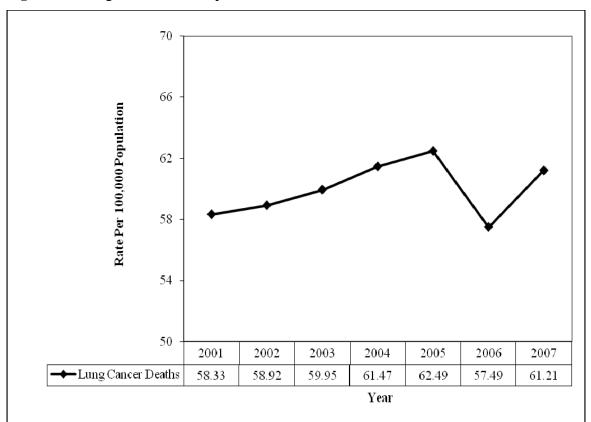
Figure 32: Tobacco Compliance Check – Percent Compliant

Source: Iowa Alconol Beverages Divisio

Tobacco Consequences

Iowa lacks tobacco consequence data meeting the criteria developed by the Data Task Group. Lung cancer deaths is the only indicator that met all requirements for inclusion in the Profile. The lung cancer death rate, as reported on death certificates using ICD-10 code C34 (Malignant neoplasm of bronchus and lung) rose slightly from 2001 to 2005, dropped between 2005 and 2006, and then rose to the 2005 level in 2007 (Figure 33). There were an average of 1770 lung cancer deaths per year from 2001 to 2007. The lung cancer death rate average per 100,000 was 68.4 for Whites; 45.3 for Blacks; and 5.5 for Hispanics. Males were more likely affected then females, and the 65 years old and older age group had the highest risk of death (Table 11).

Figure 33: Lung Cancer Deaths per 100,000



Source: Iowa Vital Records

| Table 11: Lung Cancer Deaths per | 100,000 Iowans by Characteristics |
|----------------------------------|-----------------------------------|
|----------------------------------|-----------------------------------|

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Average |
|----------------|--------------|-------|-------|-------|-------|-------|-------|---------|
| Race | | | | | | | | |
| White | 61.6 | 62.4 | 68.2 | 69.6 | 70.2 | 59.4 | 63.3 | 68.4 |
| Black | 46.3 | 45.6 | 42.4 | 50.9 | 43.7 | 40.2 | 42.6 | 45.3 |
| Hispanic | 6.8 | 5.3 | 4.2 | 3.0 | 9.6 | 5.2 | 4.2 | 5.5 |
| Other | 7.1 | 5.5 | 31.4 | 30.2 | 27.1 | 3.4 | 6.6 | 23.4 |
| Gender | | | | | | | | |
| Female | 47.7 | 45.0 | 51.9 | 52.9 | 53.9 | 47.0 | 53.1 | 52.1 |
| Male | 69.2 | 73.1 | 76.9 | 78.5 | 78.5 | 68.3 | 69.6 | 76.7 |
| Age | | | | | | | | |
| <20 | 2.7 | 2.3 | 2.6 | 3.1 | 3.1 | 2.2 | 3.5 | 2.7 |
| 20-54 | 8.2 | 9.9 | 10.4 | 11.2 | 11.5 | 10.4 | 10.9 | 10.3 |
| 55-64 | 99.2 | 94.4 | 99.2 | 103.3 | 100.6 | 93.1 | 96.1 | 98.2 |
| >65 | 301.2 | 301.7 | 301.1 | 304.0 | 310.2 | 286.3 | 302.4 | 300.7 |
| Source: Iowa V | ital Records | | | | | | | |

Source: Iowa Vital Records

Illicit Drugs

Illicit drug use in Iowa appears to be holding steady, and its prevalence is lower than the national rate. The illicit drug reported as most used by Iowans is marijuana, followed by methamphetamine (Figure 1 and Table 12). Marijuana is also the most widely used illicit drug in the United States – approximately 14.7 million Americans aged 12 and older reported past 30 day marijuana use.

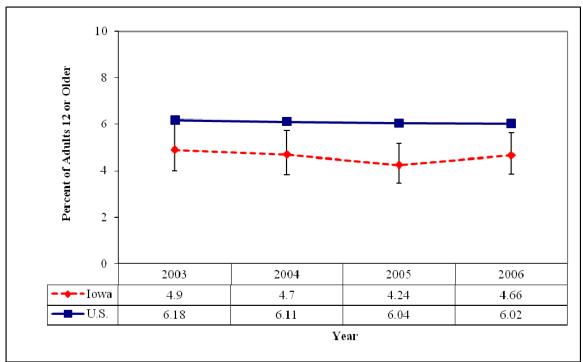
Adult Consumption Patterns

Iowans' current use of marijuana (past 30 days) remained essentially unchanged between the 2002-2003, 2003-2004, 2004-2005, and 2005-2006 NSDUH. According to 2005-2006 NSDUH data, 4.7% of Iowans over age 12 reported current marijuana use. These usage patterns are significantly lower than the national estimate of 6.0% (Figure 34). Iowans 18-25 years old are approximately four times more likely to be current marijuana users than those 26 years old and older, and twice as likely to use marijuana as ages 12 to17.

Iowans' current use of illicit drugs other than marijuana (past 30 days) also remained unchanged from the 2002-2003 NSDUH through the 2005-2006 NSDUH. Data from the 2005-2006 NSDUH showed no significant difference between the percent of Iowans age 12 and older reporting current use of an illicit drug other than marijuana and the national rate (Figure 35).

Iowans perceive the risk of smoking marijuana at least once a month similar to the rest of the nation. The 2005-2006 NSDUH estimated that 39.6% of Iowans believed that it was a great risk to smoke marijuana at least once a month. There is no statistical difference between the Iowa results and the national estimate of 38.9% (Figure 36).

Figure 34: Percent of Adults Past-Month Marijuana Use



Source: NSDUH

Note: Confidence intervals allow comparison of Iowa and U.S. results. The data source provided the confidence intervals for Iowa, but not for the U.S.

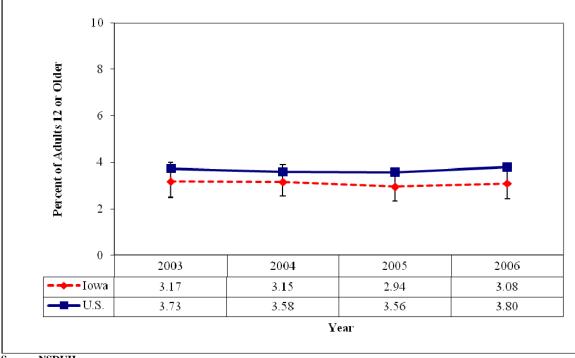


Figure 35: Percent of Adults Past-Month Illicit Drug Use other than Marijuana

Source: NSDUH

Note: Confidence intervals allow comparison of Iowa and U.S. results. The data source provided the confidence intervals for Iowa, but not for the U.S.

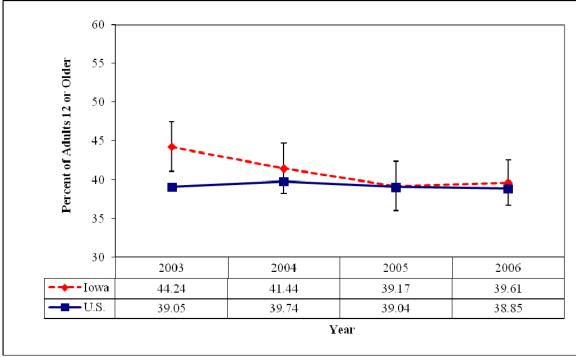


Figure 36: Percent of Adults Perceiving Great Risk from Smoking Marijuana Once a Month

Source: NSDUH

Note: Confidence intervals allow comparison of Iowa and U.S. results. The data source provided the confidence intervals for Iowa, but not for the U.S.

Youth Consumption Patterns

The 2005-2006 NSDUH estimated that 24,000 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, with 13% of 11th-graders reporting current use (Table 12). Marijuana use by 6th, 8th, and 11th-graders has decreased significantly between 1999 and 2005 (Figure 37).

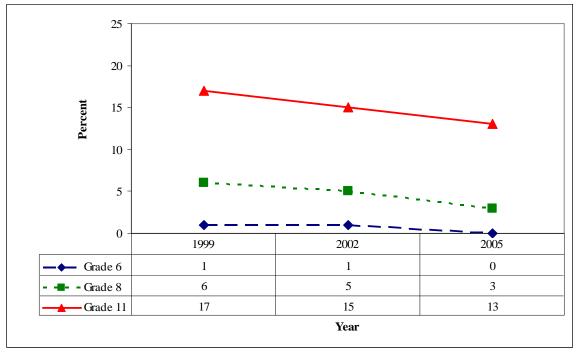
The IYS asks the question, "How much do you think you risk harming yourself if you smoke marijuana once a week?" 80% of 6th and 8th-graders, and 70% of 11th-graders responded "Great Risk" or "Moderate Risk" to this question in 2005 (Figure 38). Female students were about 5% more likely to respond "Great Risk" or "Moderate Risk" than male students in 2005 (Table 13). The percent of students reporting first use of marijuana before age 13 decreased for all three grades between 2002 and 2005 (Figure 39).

| Substance Type | | Grade | |
|-----------------|---|-------|----|
| | 6 | 8 | 11 |
| Marijuana | 0 | 3 | 13 |
| Inhalants | 2 | 3 | 2 |
| Cocaine | 0 | 1 | 2 |
| Methamphetamine | 0 | 1 | 2 |
| Amphetamines | 0 | 0 | 1 |
| Steroids | 0 | 0 | 1 |

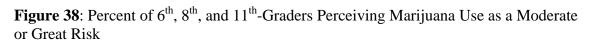
 Table 12: Percent of Youth Reporting Current Drug Use - 2005

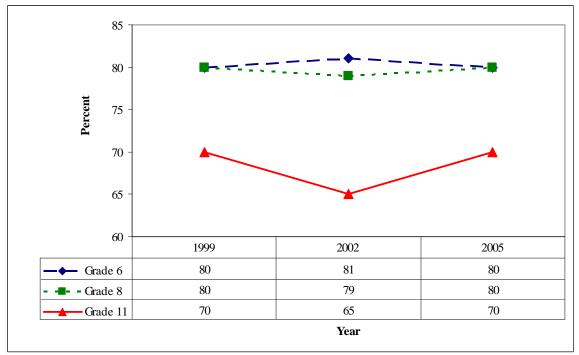
Source: IYS, p. 86

Figure 37: 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%.





Source: IYS

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

Table 13: Perceived Moderate or Great Risk of Marijuana Use by Gender

| | Year | | | | |
|---------|------|------|------|--|--|
| Gender | 1999 | 2002 | 2005 | | |
| Males | 73 | 72 | 74 | | |
| Females | 79 | 77 | 79 | | |

Source: IYS

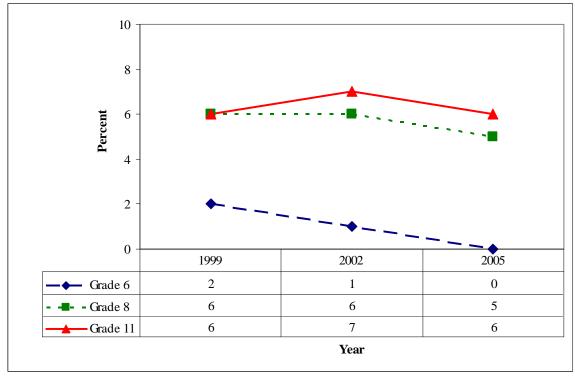


Figure 39: Percent of 6th, 8th, and 11th-Graders Reporting First Use of Marijuana before Age 13

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

Illicit Drug Consequences

Past year illicit drug dependence or abuse in Iowa remained stable from the 2002-2003 NSDUH through the 2005-2006 NSDUH. Iowans age 12 and older are significantly less likely to report illicit drug dependence or abuse (2.1%) than the national total (2.8%) (Figure 40). The NSDUH uses the DSM-IV definitions of dependence and abuse.

Drug arrests per 100,000 dropped between 2005 and 2006 and there were approximately 410 drug arrests per 100,000 in 2007 (Figure 41). Marijuana was the most frequent cause of drug arrests, accounting for almost three-quarters of drug arrests in Iowa during 2007. The only other substance resulting in more than 1,000 arrests in 2007 was methamphetamine (Table 14).

More than one-half of inmates had a current drug problem, labeled as "interference." Approximately four-fifths of inmates with a complete LSI-R assessment had a drug problem at some point in their lives (Table 15). Figures 42 and 43 present LSI-R lifetime substance use data for male and female inmates. Approximately nine in ten inmates who had a completed LSI-R assessment had at least one alcohol or drug problem in their life. One-half of female inmates and three-fifths of male inmates had at least one alcohol and one drug problem in their life.

The rate of juvenile adjudications due to illicit drugs was at its highest point in five years in fiscal year 2008. The rate of illicit drug-related juvenile adjudications in Iowa per 100,000 youth ages 10-17 was 221.2 in fiscal year 2008 (Figure 44).

The percent of confirmed or founded child abuse cases with the presence of illegal drugs (in a child's body) in Iowa has decreased since 2004 (Figure 45). The number of confirmed or founded child abuse cases involving manufacturing methamphetamine in the presence of a minor has decreased annually from 2003 to 2007 (Figure 46). 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 recorded 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.

The number of clandestine laboratories seized in Iowa has decreased from 1500 in 2004 to 201 in 2008 (Figure 47). This may be due to 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. This indicator may also be directly affected by funding changes for local and state law enforcement organizations.

Drug use is incriminated in the spread of HIV/AIDS infection. The AIDS registry has identified 1,910 adults/adolescents with HIV or AIDS living in Iowa; 10% of these are injecting drug users (IDU) and 7% are men who have sex with men and inject drugs (MSM/IDU). 7% of the 127 new adult/adolescent HIV cases identified in 2007 were identified as IDU; 5% were identified as MSM/IDU. The rates of new diagnoses of HIV for both IDU and MSM/IDUs have remained relatively stable in Iowa; at about 0.4 per 100,000 Iowans for IDU and 0.2 for MSM/IDU in 2007 (Figure 48).

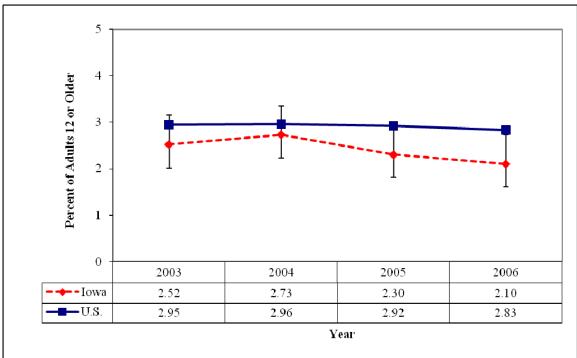


Figure 40: Percent of Adults Past-Year Illicit Drug Dependence or Abuse

Source: NSDUH

Note: Confidence intervals allow comparison of Iowa and U.S. results. The data source provided the confidence intervals for Iowa, but not for the U.S.

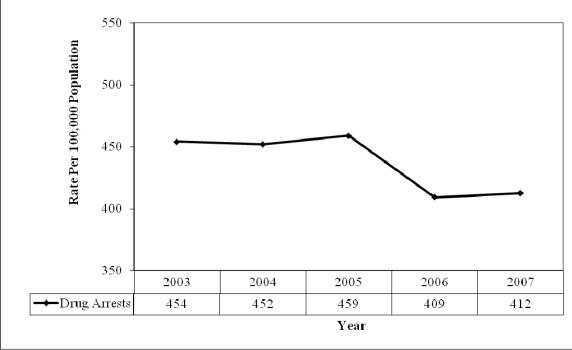


Figure 41: Drug Arrests per 100,000

Source: Iowa Incident Based Uniform Crime Reporting System

| | Year | | | | |
|---------------------|-------|-------|-------|-------|-------|
| Drug | 2003 | 2004 | 2005 | 2006 | 2007 |
| Marijuana | 8670 | 8483 | 8830 | 8277 | 8991 |
| Methamphetamine | 2699 | 2604 | 2410 | 1618 | 1100 |
| Crack | 534 | 648 | 667 | 649 | 682 |
| Other Drugs | 386 | 478 | 495 | 485 | 514 |
| Cocaine | 408 | 430 | 455 | 498 | 431 |
| Unknown | 320 | 325 | 313 | 223 | 185 |
| Other Narcotics | 82 | 113 | 177 | 241 | 224 |
| Other Hallucinogens | 42 | 77 | 76 | 44 | 66 |
| Other Stimulants | 91 | 76 | 47 | 55 | 49 |
| Other Depressants | 31 | 30 | 42 | 28 | 29 |
| Heroin | 20 | 19 | 29 | 9 | 18 |
| Barbiturates | 6 | 9 | 7 | 5 | 4 |
| Opium | 18 | 1 | 7 | 3 | 2 |
| Morphine | 5 | 4 | 6 | 10 | 9 |
| LSD | 5 | 14 | 3 | 14 | 8 |
| Hashish | 15 | 2 | 2 | 8 | 11 |
| РСР | 0 | 6 | 1 | 0 | 0 |
| Total | 13332 | 13319 | 13567 | 12167 | 12323 |

Source: Iowa Incident Based Uniform Crime Reporting System

Table 15: Iowa Prison Inmates – Drug Problems, Currently and Ever (N = 8,092)

| Drug Problem, Currently | Percent | Drug Problem, Ever | Percent |
|-----------------------------|---------|--------------------|---------|
| Unknown | 1.10% | Unknown | 0.50% |
| None or No use in past year | 28.10% | No | 19.50% |
| Rare/Infrequent Use | 18.20% | Yes | 80.00% |
| Interference | 52.70% | | |

Source: Iowa Department of Corrections

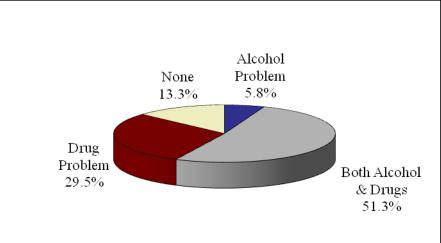


Figure 42: Female Inmate Substance Use History (N = 684)

Source: Iowa Department of Corrections

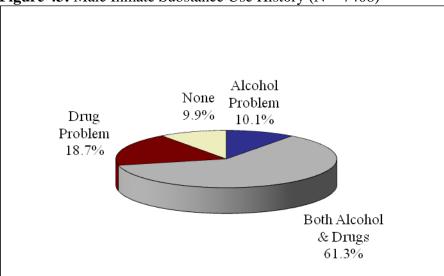


Figure 43: Male Inmate Substance Use History (N = 7408)

Source: Iowa Department of Corrections

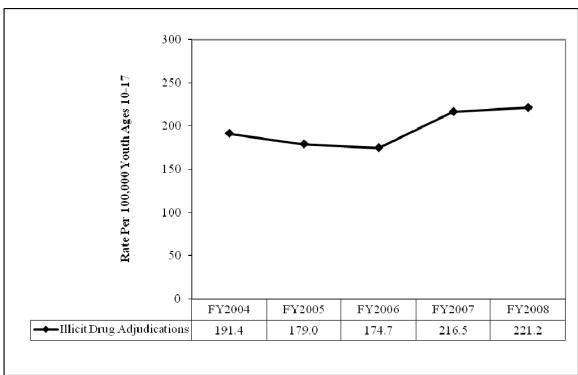
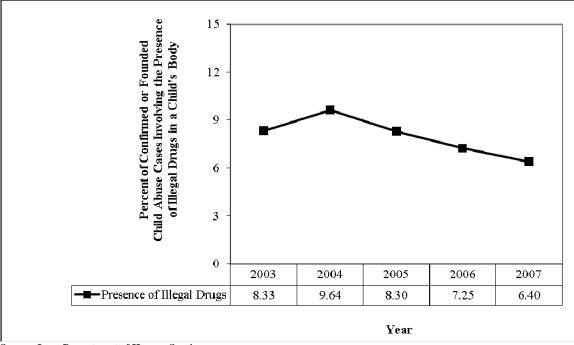


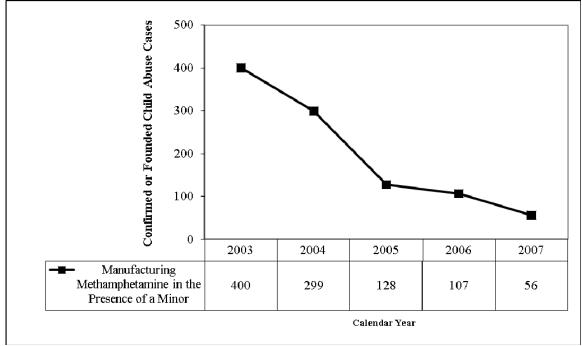
Figure 44: Juvenile Adjudications due to Illicit Drugs

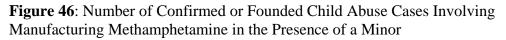
Source: Iowa Court Information System, Justice Data Warehouse

Figure 45: Percent of Illegal Drug Cases Out of All Confirmed or Founded Child Abuse Cases



Source: Iowa Department of Human Services





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.

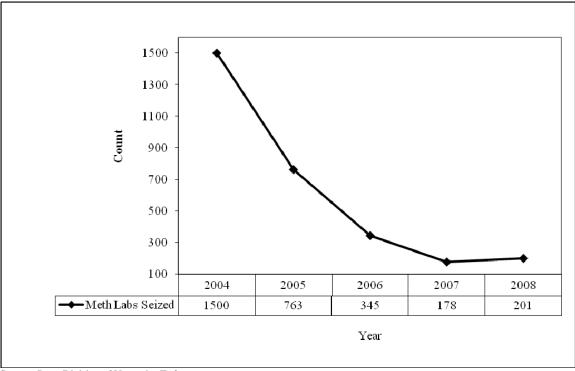


Figure 47: Clandestine Laboratories Seized by State and Local Law Enforcement

Source: Iowa Division of Narcotics Enforcement

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

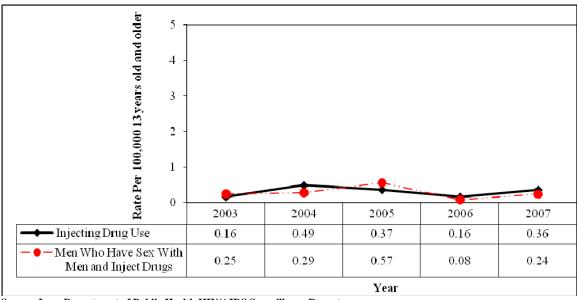


Figure 48: Reported New HIV Cases per 100,000 due to Drug Use

Source: Iowa Department of Public Health HIV/AIDS Surveillance Report

Discussion

General Comments

Iowa is a rural state with many of the same social and substance abuse problems as other rural states: erosion of rural life resulting from disappearance of the family farm, subsequent decaying of the infrastructure of small towns, isolated communities, growing dependence on the gambling industry, and a state budget that is not adequate for addressing substance abuse issues. Bars are sometimes the only viable businesses in small towns with a declining commercial base, and drinking alcohol is a common component of the social life in these communities.

Iowa is among the small number of states not dominated by a major metropolitan area. It is instead comprised of rural areas, small towns, and small cities. Its population is markedly older than most states, better educated, and less likely to be members of minority groups. In the future, it will be necessary to expand the current statewide epidemiological profile to understand how Iowa's fairly unique demographic and geographic characteristics affect substance use and abuse data in different areas of the state. Consideration of Iowa's unique population is important in comparing state or local data with national data.

Iowa has a large higher education system. It has only three state-supported universities, but all three have more than 20,000 students at the undergraduate and graduate levels. This situation results in three small cities with extraordinarily large numbers of students and young adults concentrated in one place, and engaged in a lifestyle where alcohol is widely accessible and accepted. Iowa also has an unusually large number of private four-year colleges, ranging in size from very small to large, and fifteen state-supported two-year colleges and vocational schools.

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 Iowans heavy use rates are considerably higher than national averages. The cause of this high rate of alcohol use and abuse may be intuitively understood from the data on attitudes toward use and abuse of alcohol, namely, that Iowans have markedly higher levels of acceptance of drinking and lower fear of adverse consequences compared with other Americans. It is in the best interest of all citizens of Iowa to reduce the burden of substance abuse and dependence.

This report uses national and state level datasets inventoried from potential databases. Although the national State Epidemiological Data System (SEDS) datasets were expected to be valid and to have integrity, the Data Task Group found that estimates were often not representative of the State of Iowa because of small or replacement population samples and because they did not contain current data. The Data Task Group decided to use some of the state-level datasets initially used to populate the SEDS. These state datasets are more representative and current. Some indicators included in this report have not been updated from the 2007 Iowa Substance Use Epidemiological Profile. Many of the youth consumption indicators are from the Iowa Youth Survey, which is not collected annually. The IYS is next scheduled for collection in late 2008 with results to be released in mid-2009.

Six indicators appear in this report for the first time. These indicators include alcohol sales, clandestine laboratories seized by law enforcement, and data from inmates in Iowa prisons including current or lifetime alcohol problems and current or lifetime drug problems. These indicators were either discovered this year or developed as part of the SEOW data gap plan, and found to meet all the data requirements for inclusion in the report.

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

Alcohol

Alcohol is the most widely used substance among youth and adults in Iowa. Approximately 1.3 million Iowa residents 12 years of age or older used alcohol in the past month, and more than one-half of these Iowans had at least one episode of binge drinking during the same period (NSDUH, 2004). Adult alcohol use in Iowa has remained relatively stable over the past couple of years. The rate of current alcohol use for men and women in Iowa is significantly higher than the national rate, along with the binge drinking rate. Adults in Iowa perceive binge drinking as less of a risk than other adults across the nation do (35% vs. 42%).

Underage drinking is a critical issue in Iowa. 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, glorify drinking and may even promote underage drinking. Many parents view underage drinking as normal for teenagers. Some parents provide alcohol to youth in their homes. The 2005 IYS showed that for every five Iowa 11th-graders, two drank alcohol in the past month.

Tobacco

Tobacco use in Iowa is similar to the national rate, and was level from 2004 to 2005. Approximately 780,000 Iowans over the age of 12 use tobacco. Cigarette smoking makes up most of the tobacco use in Iowa. Rates of smoking during pregnancy have been steady at about 17%. Mothers under the age of 19 were 1.5 times more likely to smoke during pregnancy than mothers older than 18. The rate of smoking among youth has been steadily decreasing since 1999. Most tobacco retail outlets seem to do a good job of not selling tobacco products to youth under the legal age, as tobacco compliance check rates have been near 90 percent for the last seven years.

Illicit Drugs

Illicit drug use in Iowa appears to be holding steady and its prevalence is lower than the national level. The illicit drug used most by Iowans is marijuana, followed by methamphetamine. Current marijuana use by Iowa adults is significantly lower than the national rate (NSDUH, 2006). 18- to 25- year-old Iowans are four times more likely to use marijuana than older Iowans and twice as likely to use marijuana as 12-to 17-year-olds.

Consequences of Substance Abuse in 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.

Approximately 21,000 drunkenness and liquor law arrests were recorded in 2007, the majority of these arrests involved 18- to 24-year-olds. The rate of juvenile adjudications due to alcohol was at the highest point in five years for fiscal year 2008; with a rate of 155 juveniles per 100,000. More than 14,000 OWI arrests were recorded in 2005. Between 2000 and 2006, approximately one-quarter to one-third of Iowa adult traffic fatalities involved an alcohol-involved driver defined as having a Blood Alcohol Content greater than 0.01. The rate of alcohol-related traffic fatalities has remained relatively constant since 2000. Approximately 105 Iowa deaths per year are caused by alcoholic cirrhosis.

Tobacco

Iowa lacks quality tobacco consequence data, so lung cancer death is the only tobacco consequence indicator. The 2007 lung cancer death rate in Iowa was higher than in 2006. Men are more at risk than women, and people over the age of 65 are most at risk to die of lung cancer. Lung cancer can be caused by exposure to environmental toxins, a particular concern for a rural state with a large farming industry. This includes radon, which is more common in Iowa and Minnesota than other parts of the country, and has been linked to significantly higher rates of lung cancer.

Illicit Drugs

The illicit drug dependence or abuse rate in Iowa has remained steady over the last few years, but was lower than the national rate. Drug arrests have remained stable in Iowa over the past couple of years. Marijuana accounted for almost three-quarters of all drug

arrests in Iowa during 2007. Drugs are incriminated in the spread of HIV/AIDS infection, but only a handful of Iowans are affected each year. Fifteen new diagnoses of HIV in adult/adolescent (approximately 12 percent) were potentially linked to illicit drug use in 2007.

Conclusions

- Iowa has a drinking problem; adult current drinking and binge drinking rates, as well as youth binge drinking rates, are higher in Iowa than nationally.
- Current tobacco use in Iowa is similar to the national rate.
- Illicit drug use in Iowa appears to be lower than the national rate.
- Consequences of alcohol, tobacco, and illicit drug use remained relatively stable from the 2007 Iowa Substance Use Epidemiological Profile.
- National datasets do not always adequately portray substance use in Iowa due to the sampling methodologies used.
- The Iowa Youth Survey is a particularly useful tool in assessing youth substance use in the state.

Appendices

Appendix 1

Indicators Included in Profile

Alcohol Consumption:

- 30-Day Alcohol Use (both adult and youth)
- Age of First Use of Alcohol (youth)
- Binge Drinking (both adult and youth)
- Heavy Drinking (adult)
- 30-Day driving after drinking alcohol
- Perception of Risk (both adult and youth)

Tobacco Consumption:

- 30-Day Use of Cigarette Use (both adult and youth)
- Age of First Use of Cigarettes (youth)
- 30-Day Use of Other Tobacco Products
- Heavy Smoking (youth)
- Women reporting the use of cigarettes during pregnancy
- Perception of Risk (both adult and youth)
- Tobacco Compliance Checks

Illicit Drug Consumption:

- 30-Day Marijuana Use (youth)
- 30-Day Any Illicit Drug Use Other Than Marijuana (youth)
- Age of First Use of Marijuana (youth)
- Perception of Risk (both adult and youth)

Alcohol Consequences:

- Alcohol-Related Motor Vehicle Crashes
- Chronic Liver Disease/Alcoholic Cirrhosis Deaths
- Alcohol-Involved Drivers Among All Drivers in Fatal Crashes
- People 12 and Older Meeting DSM IV Criteria for Alcohol Dependence or Abuse
- Treatment Numbers for Alcohol Dependency or Alcohol-Related Disorders from Licensed Public Treatment Facilities
- Suicides
- Alcohol-Related Domestic Violence Arrests
- Liquor Law Arrests
- Drunkenness
- DUI Rates
- Juvenile Adjudications due to Alcohol
- Prison Inmate Alcohol Problems

Tobacco Consequences:

• Lung Cancer Deaths

Illicit Drug Consequences:

- New HIV/AIDS Cases and Annual HIV/AIDS Rates Due to Drug Use
- Drug Possession Arrests
- Presence of Illegal Drugs in Confirmed or Founded Child Abuse Cases
- Manufacturing Methamphetamine in the Presence of a Minor
- Juvenile Adjudications due to Illicit Drugs
- Prison Inmate Drug Problems
- Clandestine Laboratories Seized by State and Local Law Enforcement

Other Indicators:

- ATOD-Related Suspensions
- ATOD-Related Expulsions
- School Attendance
- School Enrollment
- Primary Substance of Use as Reported upon Entry into Treatment

Appendix 2

All Indicators Considered for Inclusion in the 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
- Women reporting the use of alcohol during pregnancy
- Perception of Risk
- Binge Drinking in Past 14 Days
- Total Alcohol Sales
- Percentage of Case Sales
- Percentage of Cash Sales
- Number of Liquor Licenses
- Per Capita Alcohol Consumption, Based on Population >14 years
- Age at Which Started Drinking Regularly
- Lifetime Alcohol Use
- Percentage of Students who had at Least One Drink of Alcohol on School Property on One or More of the Past 30 Days
- Adults Aged 18 and Older Reporting Driving After Having "Perhaps Too Much to Drink" in Past 30 Days
- Students Who During the Past 30 Days Rode in a Car or Other Vehicle Driven by Someone Who had been Drinking Alcohol
- Perception of Disapproval Attitude

Tobacco Consumption:

- 30-Day Use of Cigarette Use
- Age of First Use of Cigarettes
- 30-Day Use of Other Tobacco Products
- Heavy Smoking (youth)
- Women reporting the use of cigarettes during pregnancy
- Perception of Risk
- Past 30-Day Use of at Least 2 Cigarettes
- Ever Tried Cigarette Smoking
- Total Cigarette Sales
- Percent of Students Who Used Chewing Tobacco or Snuff on One or More of the Past 30 Days
- Percentage of Students Who Smoked Cigars, Cigarillos, or Little Cigars on One or More of the Past 30 Days
- Percentage of Students Reporting Any Use of Cigarettes in Their Lifetime

- Total Cigarette Consumption per Capita
- Age of First Use of Smokeless Tobacco
- Percent Reporting Having Smoked at Least 100 Cigarettes in Lifetime
- Of Smokers: the Average Number of Cigarettes Smoked per Day in Last 30 Days
- Of Smokers: the Average Number of Days Smoked in Last 30 Days
- Students Reporting any Use of Smokeless Tobacco in Their Lifetime
- Students Who Used Chewing Tobacco or Snuff on School Property in Last 30 Days
- Students Who Smoked Cigarettes on School Property in Last 30 Days
- Students Who Smoked a Whole Cigarette for the First Time Before Age 13
- Students Who Were Current Smokers and Have Tried to Quit Smoking During the Past 12 Months
- Perception of Disapproval Attitude
- Tobacco Compliance Checks

Illicit Drug Consumption:

- 30-Day Marijuana Use
- 30-Day Any Illicit Drug Use Other Than Marijuana
- Age of First Use of Marijuana
- Perception of Risk
- 30-Day Cocaine Use (both adults and youth)
- 30-Day Inhalant Use (youth)
- 30-Day LSD Use
- 30-Day Stimulant Use
- 30-Day Sedative Use
- 30-Day Heroin Use
- 30-Day Ecstasy Use
- 30-Day Steroid Use
- Lifetime Methamphetamine Use
- Lifetime Stimulant Use
- Lifetime Ecstasy Use
- Lifetime LSD Use
- Lifetime Sedative Use
- Lifetime Steroid Use
- Daily Drug Use in Iowa
- Lifetime Marijuana Use
- Lifetime Cocaine Use
- Lifetime Inhalant Use
- Lifetime Heroin Use
- Lifetime Injecting Drugs for Adults
- Students Who Tried Marijuana for the First Time Before Age 13
- Daily Marijuana Use During Past 30 Days
- Lifetime Injecting Drugs

- Students Who Used Marijuana on School Property One or More Times During the Past 30 Days
- Students Who Were Offered, Sold, or Given an Illegal Drug on School Property During the Past 12 Months
- Persons Aged 16+ Reporting Driving After Having Smoked Marijuana or Using Other Illicit Drugs in the Past Month
- Perception of Disapproval Attitude

Combination Consumption:

- Annual Percentage of Students Reporting Being Drunk or High at School
- Of Students Who had Sexual Intercourse, the Percentage Who Drank Alcohol or Used Drugs Before Last Sexual Intercourse

Alcohol Consequences:

- Alcohol-Related Motor Vehicle Crashes
- Chronic Liver Disease/Alcoholic Cirrhosis Deaths
- ER Visits for Alcohol-Related Issues
- Alcohol-Involved Drivers Among All Drivers in Fatal Crashes
- Alcohol-Related Property Damage
- People 12 and Older Meeting DSM IV Criteria for Alcohol Dependence or Abuse
- Treatment Numbers for Alcohol Dependency or Alcohol-Related Disorders from Licensed Public Treatment Facilities
- Suicides
- Alcohol-Related Domestic Violence Arrests
- Liquor Law Violations
- Drunkenness
- DUI Rates
- Liquor Laws
- Number of Persons Discharged from Hospitals for Alcohol-Related Conditions
- Number of Persons Discharged from Hospitals for Alcohol-Related Injuries
- Number of Persons Admitted to Hospital ER for Alcohol-Related Conditions
- Number of Persons Admitted to Hospital ER for Alcohol-Related Injuries
- Number of Iowa K12 Alcohol-Related Suspensions
- Number of Iowa K12 Alcohol-Related Expulsions
- Number of EMS Medical Response (Intoxication)
- Drunkenness
- Percent of Fatal Motor Vehicle Crashes that are Alcohol-Related
- Alcohol-Related Vehicle Death Rate
- Percentage of Injury Crashes that are Alcohol-Related
- Percentage of Non-Fatal Injuries that are Alcohol-Related
- Number of Boating Injuries with Alcohol Involvement
- Number of Boating Fatalities with Alcohol Involvement

- Rate of Fetal Alcohol Syndrome per 100,000 Live Births
- Alcohol-Related Personnel Actions
- Number of Boating Accidents With Alcohol Involved
- Juvenile Adjudications due to Alcohol

Tobacco Consequences:

- Lung Cancer Deaths
- Adults with Asthma
- Number of deaths from each specific cause that is at least fractionally attributable to tobacco
- Number of Persons Discharged from Hospitals for Conditions Related to Tobacco Use (per International Classification of Diseases (ICD)-10 Codes) Per 100,000 Population

Illicit Drug Consequences:

- ER Visits for Drug-Related Issues
- New HIV/AIDS Cases and Annual HIV/AIDS Rates Due to Drug Use
- Drug Possession Arrests
- Presence of Illegal Drugs in Confirmed or Founded Child Abuse Cases
- Manufacturing Methamphetamine in the Presence of a Minor
- Federal Drug Seizures
- Drug Abuse Violations
- Drug Abuse Convictions
- Drug Manufacture Violations
- Drug Possession Violations
- DEA Drug Violation Arrests
- Controlled Substance Arrests/Charges (Cocaine)
- Controlled Substance Seizures/Purchases (Cocaine)
- Controlled Substance Seizures/Purchases (Crack Cocaine)
- Highway Patrol Cocaine Seizures
- Highway Patrol Cocaine Cases
- Federal Drug Seizures (Cocaine)
- Federal Drug Seizures (Methamphetamine)
- Controlled Substance Seizures/Purchases (Clandestine Labs)
- Highway Patrol Clandestine Lab Seizures
- Number of Methamphetamine Clandestine Lab Seizures DEA
- Other Stimulant Seizures DCI
- Controlled Substance Seizures/Purchases (Heroin)
- Highway Patrol Heroin Seizures
- Controlled Substance Seizures/Purchases (Morphine)
- Controlled Substance Seizures/Purchases (Opium)
- Controlled Substance Seizures/Purchases (LSD)

- Controlled Substance Seizures/Purchases (Hallucinogens)
- Highway Patrol Hallucinogens Seizures
- Controlled Substance Seizures/Purchases (Psilocybin)
- Highway Patrol MDMA Seizures
- Federal Drug Seizures (Ecstasy)
- Controlled Substance Seizures/Purchases (Club Drugs)
- Highway Patrol Pharmaceutical Seizures
- Controlled Substance Arrests/Charges (Marijuana)
- Controlled Substance Seizures/Purchases (Marijuana)
- Controlled Substance Seizures/Purchases (Hashish)
- Controlled Substance Seizures/Purchases (Sinsemilla Plants)
- Controlled Substance Seizures/Purchases (Marijuana Plants)
- Controlled Substance Seizures/Purchases (Ditchweed/Wild Plants)
- Highway Patrol Marijuana Seizures
- Highway Patrol Marijuana Cases
- Federal Drug Seizures (Marijuana)
- Highway Patrol Hashish Seizures
- Highway Patrol Hashish Cases
- Controlled Substance Arrests/Charges (Methamphetamine)
- Controlled Substance Seizures/Purchases (Methamphetamine)
- Highway Patrol Methamphetamine Seizures
- Highway Patrol Methamphetamine Cases
- Highway Patrol Heroin Cases
- Federal Drug Seizures (Heroin)
- Controlled Substance Arrests/Charges (Opiates)
- Controlled Substance Arrests/Charges (Hallucinogens)
- Highway Patrol Hallucinogens Cases
- Highway Patrol MDMA Cases
- Highway Patrol Pharmaceutical Cases
- Controlled Substance Arrests/Charges (Other)
- Controlled Substance Seizures/Purchases (Other Narcotics)
- Number of Iowa K12 Drug-Related Suspensions
- Number of Iowa K12 Drug-Related Expulsions
- Number of EMS Medical Response (Drug Overdose)
- Drug-Related Personnel Actions per 100,000 Employees
- HIV Deaths Due to Drug Use
- Women Reporting the Use of Illicit Drugs During Pregnancy
- Number of Arrests for Possession of Drug Paraphernalia
- Juvenile Adjudications due to Illicit Drugs

Combination Consequences:

• Number of Iowa K12 Alcohol and Drug-Related Suspensions

- Number of Child Assessments Rated as Moderate for Alcohol/Drug as Contributing Factor
- Percentage of Child Assessments Rated as Moderate for Alcohol/Drug as Contributing Factor
- Death from Misuse of Prescription Drugs
- Number of Child Assessments Rated as High for Alcohol/Drug as Contributing Factor
- Percentage of Child Assessments Rated as High for Alcohol/Drug as Contributing Factor
- Number of Assessments Rated as High/Moderate for Alcohol/Drug Contributed
- Percentage of Assessments Rated as High/Moderate for Alcohol/Drug Contributed

Other:

- ATOD-Related Suspensions
- ATOD-Related Expulsions
- School Attendance
- School Enrollment
- Students Who Took Steroid Pills/Shots Without a Doctor's Prescription One or More Times During Their Life
- Students Who Received Grades of Mostly D's and F's in Past Year
- Total Boating Accidents per Year
- Total Boating Fatal Accidents per Year
- Total Boating Fatalities per Year
- Number of Boating Injuries per Year
- Number of Boating Accidents per Year
- Number of EMS Trauma Response (MV Incidents)
- Number of EMS Trauma Response (Fall)
- Number of EMS Trauma Response (Assault)
- Number of EMS Trauma Response (Altercation)
- Number of EMS Trauma Response (Stabbing/Gunshot)
- Number of EMS Trauma Response (Poisoning)
- Number of EMS Trauma Response (Water Accidents)
- Number of EMS Trauma Response (Drowning)
- Number of EMS Trauma Response (Firearm/Self-Inflicted)
- Number of EMS Trauma Response (Suicide Attempts)
- Number of EMS Trauma Response (Stabbing)
- Number of EMS Trauma Response (Sexual Assault)
- Number of EMS Medical Response (Psychological/Emotional)
- Number of EMS Medical Response (Acute Alcohol Intoxication)
- Number of EMS Medical Response (Poisoning)
- Percentage of Students Who had Sexual Intercourse
- Percentage of Students Who had Sexual Intercourse for the First Time Before Age 13

- Percentage of Students Who had Sexual Intercourse With Four or More People During Their Life
- Percentage of Students Who had Sexual Intercourse With One or More People During the Past Three Months
- Of Students Who had Sexual Intercourse During the Past Three Months: the Percentage Who Used a Condom During Last Sexual Intercourse
- Of Students Who had Sexual Intercourse: the Percentage Who Used Birth Control Pills During Last Sexual Intercourse
- Rate per 1,000 Women Aged 15-19 Years with a Reported Case of Chlamydia
- Rate per 1,000 Women Aged 20-44 Years with a Reported Case of Chlamydia
- Adults Who have been Told They Currently Have Asthma
- Number of Property Crimes Reported
- Number of Burglaries Reported
- Number of Larcenies Reported
- Number of Vehicle Thefts Reported
- Amount of Arson Reported
- Number of Violent Crimes Reported
- Number of Murder, Manslaughter Reported
- Number of Rapes Reported
- Number of Robberies Reported
- Number of Aggravated Assaults Reported
- Total Number of Domestic Violence Incidents
- Number of Property Crime Arrests
- Number of Burglary Arrests
- Number of Larceny Arrests
- Number of Vehicle Theft Arrests
- Amount of Arson Arrests
- Vehicle and Traffic Deaths
- Death Rate for Unintentional Injuries Among Children Aged 14 Years and Younger due to Motor Vehicle Crashes
- Death Rate from Unintentional Injuries due to Motor Vehicle Crashes Among 15-24 Year Olds
- Nonfatal Injury Rate due to Motor Vehicle Crashes Among Children Aged 14 and Younger
- Number of Violent Crime Arrests
- Number of Murder/Manslaughter Arrests
- Number of Robbery Arrests
- Number of Aggravated Assault Arrests
- Rate of Single Vehicle Nighttime Crashes
- Malnutrition Deaths
- Deaths Caused by Motor Vehicle Accidents
- Rate of Nonfatal Injuries Caused by Motor Vehicle Crashes
- Rate of Boating Fatalities per Year
- Estimated Number of Cases and Rates of HIV/AIDS

- Death rate due to Unintentional Injuries Among Children Aged 14 and Younger
- Infant Mortality
- Child Deaths
- Percentage of Low Birth Weight Babies
- Percent of Live Singleton Births Weighing Less Than 2,500 g
- Percent of Live Births Weighing Less Than 1,500 g
- Percent of Live Singleton Births Weighing Less Than 1,500 g
- Percent of Live Births Weighing Less Than 2,500 g.
- Number of Substantiated Allegations of Abuse
- Rate of Death of Malnutrition
- Viral Hepatitis Deaths
- Teen Deaths by Accident, Homicides, and Suicide
- Teen Deaths All Causes
- Post-Neonatal Mortality Rate per 100,000 Live Births
- Percentage of Teens not in School or not Working
- Rate of Children per 100,000 Population Who Received Preventive Services
- Number of Children with Substantiated Allegations of Abuse
- Suicide Deaths Among Youth Aged 15-19
- Rate of Other Unintentional Injuries
- Unintentional Accident Deaths
- Infant Mortality Rate per 100,000 Live Births
- Child Death Rate per 100,000 Children Aged 1-14
- Cardiovascular Deaths per 100,000 Population
- Neonatal Mortality Rate per 100,000 Population
- Perinatal Mortality Rate per 1,000 Live Births plus Fetal Deaths
- Teen Births (15-19)
- Teen Births (15-17)
- Teen Births (18-19)
- Percentage of High School Dropouts
- Adoptions of Children with Public Child Welfare Agency Involvement
- Percentage of Children in Foster Care Maltreated by Foster Care Provider
- Offenses Against Family and Children
- Maltreatment Rates
- Homicides per 100,000 Population Using ICD-10 Codes X85-Y09, Y87.1
- Number of Children Reported as Abused and Neglected and Referred for Investigation per 100,000 Children in the Population
- Number of Children Labeled as CINA
- Number of Child Victims and Non-Victims Removed from Home
- Number of Victims of Child Abuse and Neglect
- Number of Child Abuse and Neglect Fatalities
- Persons Incarcerated in Juvenile Detention Facilities Rate per 100,000

Appendix 3

Data Sources

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

HIV/AIDS – State of Iowa 2007 Quarter 3 HIV/AIDS Surveillance Report December 17, 2007. Iowa Department of Public Health, Bureau of Disease Prevention and Immunization.

http://www.idph.state.ia.us/adper/common/pdf/disease_prevention_immunization/0907_r eport.pdf

Iowa Court Information System, Justice Data Warehouse

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

Iowa Vital Records

Iowa Youth Survey http://www.iowayouthsurvey.org/counties/index.html

NSDUH (National Survey on Drug Use and Health) <u>http://www.oas.samhsa.gov/nsduh.htm</u>

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 - Iowa Department of Public Health – Substance Abuse Reporting System 2007

Suicides - Iowa Department of Public Health http://www.idph.state.ia.us/eh/common/pdf/health_statistics/2004/vital_stats_2004.pdf

YRBS (Youth Risk Behavior Surveillance System) http://www.cdc.gov/healthyyouth/yrbs/index.htm

Appendix 4

Sources

Sources

Califano, J.A. (2001 January). Shoveling up: The impact of substance abuse on state budgets. [Monograph]. New York: National Centers on Addiction and Substance Abuse at Columbia University. Retrieved December 13, 2006, from the World Wide Web at: http://www.casacolumbia.org/Absolutenm/articlefiles/47299a.pdf

Centers for Disease Control and Prevention. Toxicology Testing and Results for Suicide Victims – 13 States, 2004. MMWR 2006; 55:1245-1248. (http://www.cdc.gov/mmwr/PDF/wk/mm5546.pdf)

Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, [2003-2005].