



THE RELATIONSHIP  
BETWEEN  
SUBSTANCE ABUSE  
AND CRIME IN  
IDAHO

Idaho State Police  
Statistical Analysis Center



# **The Relationship Between Substance Abuse and Crime in Idaho: Estimating the Need for Treatment Alternatives**

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# Introduction

The relationship between drug abuse and crime is complex. Not all individuals who use drugs become addicted, nor do they commit violent crime. Social and economic concerns, such as crime, illness, premature death, and significant loss in productivity are all affected by alcohol and drug abuse. To understand the relationship between drug abuse and crime, this report will emphasize current research as well as drug trends occurring within Idaho. First, current research regarding reasons for drug addiction and the relationship between drugs and crime will be explored. Second, substance abuse trends within Idaho's population from various surveys will be discussed. Third, an analysis of data coming from the criminal justice system including information from adult and juvenile arrests, incarceration, drug courts, traffic crashes, numbers involved in treatment, and mortality. A final synopsis concerning what this means for Idaho will also be addressed.

## Current Research: Reasons for Addiction

Drug addiction theories initially focused on the simple reward potential of drugs and conditioned pleasure reinforcement. Dopamine receptors within the brain are affected by drug use and dopamine floods the individual with desirable emotions, rewarding for substance use (Pinel, 2009). Once dopamine's relationship to reward was discovered, dopamine was thought to be heavily involved as *the* reason for addiction. However further research suggests other factors are involved.

Upon initial use of a psychotropic substance, such as amphetamine or cocaine, changes occur within the brain, influencing a cycle of addiction. Not only do various drugs hold different potential for addiction, individual characteristics (such as mental health, cognition or decision making ability, and social environment) increase the risk for addiction. Cognitive functioning affects whether or not someone initially tries an illicit substance. Once affected by the drug, brain chemistry is altered to perpetuate additional use.

There are various cognitive variables that are common to drug abusers, such as poor decision making, high risk taking and lack of self control (Pinel, 2009). Contrary to the reward hypothesis of dopamine, addicts will continue pursuit of their drug of choice after developing a tolerance to the effects. Thus, even after an addict does not experience the same high as the first initial use, the addict continues in pursuit of the drug. In addition, although many people try various drugs, not all become addicted. If the underlying reason is reward alone, all who experiment should become addicts.



Incentive sensitization theories focus on the addiction potential a person may have (affecting internal anticipation of reward from a drug), mixed with the reward potential of their drug of choice. Different drugs have varying potential for addiction and people do not respond to the same drug in the same way. Anticipated reward, or cravings can be difficult to control. Pinel (2009) states: “Many addicts are miserable, their lives are in ruins, and the drug effects are not that great anymore, but they crave the drug more than ever” (p. 393). A person may experience conditioned pleasure reinforcement and have higher cravings for drugs in certain environments or around people with whom they have used drugs before. Treatment involves developing an understanding of triggering environmental factors for cravings and helping the person develop alternative behaviors while avoiding places and friends associated with the drug.

## **Current Research: Drug Addiction and Crime**

The *basic* relationship between drug use and crime is simple. It is illegal to possess, manufacture or distribute drugs with the potential for abuse such as marijuana, heroin, and methamphetamine or to misuse prescription drug medication. It is also illegal to drive under the influence of drugs and/or alcohol. However, discovering how crime is related to drug use is much more complicated. It is difficult to count offenses of violent behavior resulting from drug effects, stealing to buy drugs, or violence associated with the drug trade as much of what transpires is undocumented. In addition, there are differences between people depending on personality traits, risk factors for violent temperament, risk factors to become addicted to drugs, and risk factors to commit a crime.

Most individuals who either drink or smoke do not engage in serious crime. However, higher rates of substance addiction exists among individuals on probation, parole or incarcerated than among the general population (IDOC, 2009). Crime and drug use both indicate an individual with lower self-control. Those willing to try drugs are more impulsive and may turn to street crime because of addiction. Drug use does not create a criminal offender; however, it may intensify such actions. In addition, individuals who use drugs are less likely to have a legitimate occupation or the education necessary to find a good job (BRFSS, 2009). Lifestyle choices, environmental factors as well as genetic determinants factor into who will abuse drugs as well as who will commit crime.

Behavioral characteristics of users also vary depending upon drug of choice. All drugs are not the same and some have greater likelihood to be related to violent crime than others. Darke et al. (2010) found that methamphetamine users were significantly more likely than heroin users to have



committed violent crime. Gizzi (2010) indicates that in comparison with other drug users, meth users are more likely to be under the influence of either drugs or alcohol at the time of arrest and meth users were also more likely to indicate that their crimes were related to drug use.

In addition, violent crimes are different from property crimes and involve different motives. In comparison to other drug users, meth users often have committed more previous offenses as indicated by arrest records and are more likely to have committed property crimes (Gizzi, 2010). Webster et al. (2010) found that probationers previously convicted of violent crimes were more likely to abuse substances, engage in criminal activity and have other mental health symptoms. Conner, Stein and Longshore (2008) looked at differences in key dimensions involved in low self-control between juveniles engaging in crime and found that volatile temper and risk seeking were most important when looking at crime potential of juveniles.

Other impeding factors make the relationship between drugs and crime difficult to measure. Valdez et al. (2007) found that poverty mediates the relationship between substance use and violent crime within male arrestees. The researchers also found that self-reported alcohol abuse had a greater relationship with violent crime than drug abuse. Poverty and alcohol abuse had more to do with violent crime than drug abuse.

## **Conclusion**

Although many individuals try drugs every year, only a fraction become addicted. Addiction is composed of many environmental as well as genetic factors that determine who will or won't be vulnerable to drug abuse. In addition, many factors contribute to whether or not an individual will commit a criminal act. Variables, such as poverty, social support structure, peer influences, steady employment and family environment contribute to reasons for both drug abuse as well as risk factors for committing crime. This report will uncover current drug and alcohol trends in Idaho and determine the overall risk and prevalence of substance abuse problems and potential for crime.

# Idaho Substance Abuse Trends

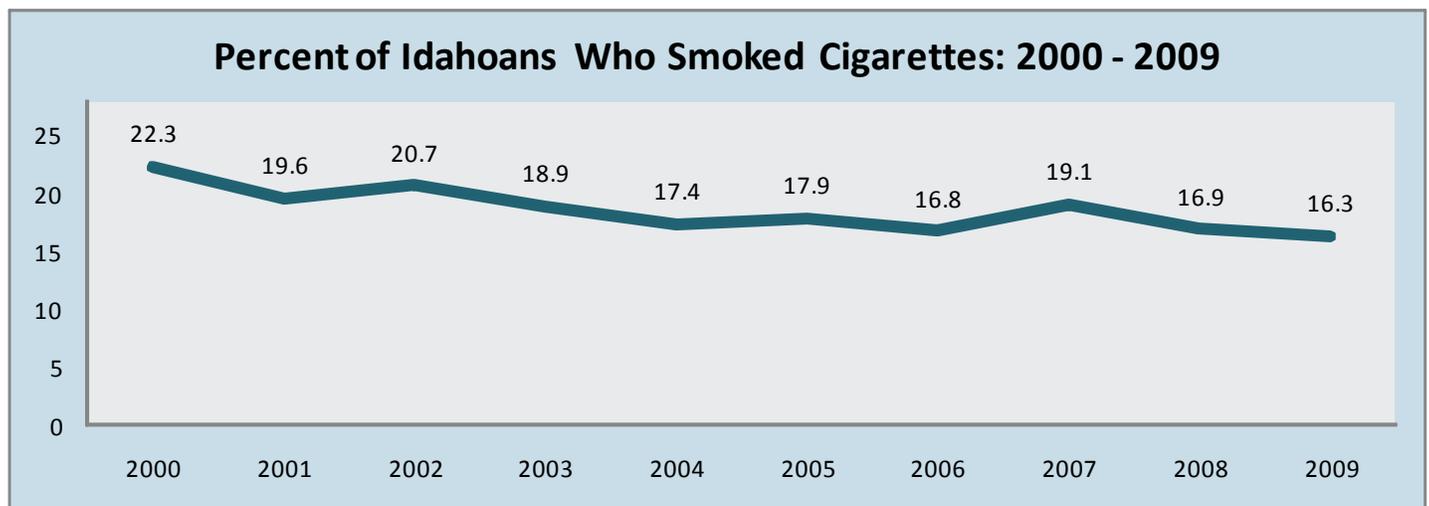
## Idaho's Population

The Behavioral Risk Factor Surveillance System (BRFSS) is a telephone survey of a random sample of adults aged 18 and over living within the United States. The survey provides state estimates of existing drug and alcohol problems within the general population. The following information is taken from the published 2009 BRFSS report written by the Idaho Bureau of Vital Records and Health Statistics. In addition, information regarding juvenile substance abuse is taken from The Idaho Youth Risk Behavior Survey published in 2009 and the 2008 School Climate Survey, both published by Idaho Department of Education. Together the surveys provide valuable information regarding prevalence of substance abuse and help to identify trends.

Information for the total number of Idahoans admitting to an alcohol or drug addiction is estimated using 2009 population figures published by the US Census Bureau. In 2009, there were 1,545,801 estimated Idaho residents. Individuals over age 18 accounted for 72.9% of the total population, or 1,126,889. The US Census Bureau estimates there are 114,328 individuals living in Idaho who are between the ages of 15 to 19. However, the estimated number of students enrolled in grades 9th through 12th in 2009 was approximately 82,000 (NCES). This number will be used to help understand the approximate number of juveniles in Idaho abusing substances.

## Cigarette smoking:

In 2009, 16.3% of Idahoans were classified as cigarette smokers, dropping significantly from numbers reported in 2000. The prevalence of smoking decreases with education and income. Those with less



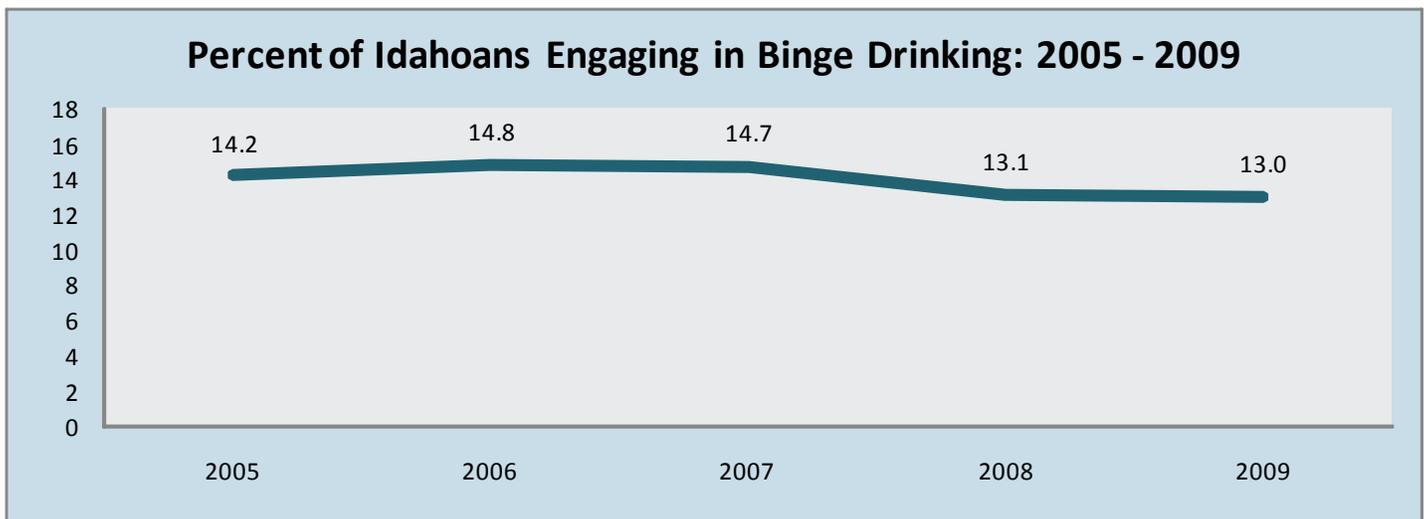
than a high school education are five times more likely to smoke than college graduates. No differences were noted between rates of use between males and females, however smoking tends to decrease with age. In addition, smokers were more likely to be unemployed.

- 16.3% of Idahoans over age 18 equals 183,683 who smoke.
- 15.0% of 9th through 12th grade students equals 12,300 who smoked within prior 30 days.

A positive note from the Idaho School Climate Survey (2008), the percent of 12th graders who have ever tried tobacco decreased between 1998 to 2008 from 42.0% to 36.0%.

### Alcohol Consumption:

The BRFSS report defines binge drinking as 4 or more alcoholic beverages on one occasion within the past 30 days for women and five or more alcoholic beverages on one occasion within the past 30 days for men. In 2009, 13.0% of Idaho adults engaged in binge drinking in the past 30 days. Heavy drinking is defined as more than 30 drinks per month for females and more than 60 drinks per month for males. In 2009, 4.6% of Idaho adults admitted to heavy drinking. Males are more likely to engage in binge drinking in comparison to females. However, no significant differences between men and women were noted with regard to heavy drinking. Both binge drinkers and heavy drinkers are more likely to smoke cigarettes (co-morbid abuse). Illicit drug use was also more prevalent among heavy and binge drinkers.



Students between 9th and 12th grade had higher rates of binge drinking than Idaho adults. Twenty-two percent of Idaho students admitted to drinking five or more drinks in a row within the prior 30 days.

- 13.0% of Idahoans over age 18 equals 146,496 binge drinking in prior 30 days.
- 4.6% of Idahoans over age 18 equals 51,837 engaging in heavy drinking.
- 22.0% of 9th through 12th graders equals approximately 18,040 engaging in binge drinking.

Comorbid substance abuse among adults:

- 34.9% of Idahoans over age 18 who binge drink and smoke equals 51,127.
- 22.7% of Idahoans over age 18 who are heavy drinkers and used illicit drugs in the past year equals 11,767.
- 17.3% of Idahoans over age 18 who are binge drinkers and used illicit drugs in the past year equals 25,344.

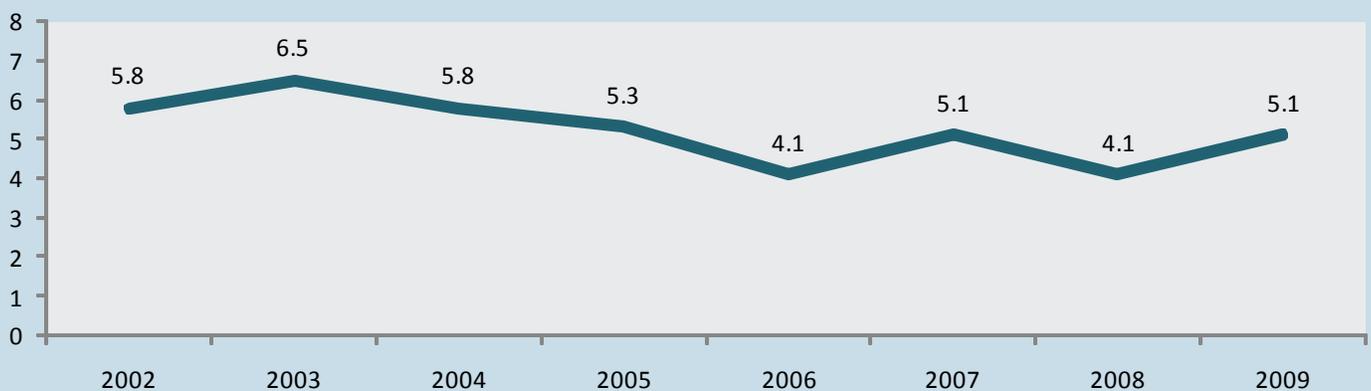
A positive note from the Idaho School Climate Survey (2008), the percent of 12th graders who have ever tried alcohol decreased from 1998 to 2008, from 64.6% to 59.9%.

### Illicit Drug Use

In 2009, 5.1% of Idaho adults admitted using an illicit drug within the preceding 12 month period (BRFSS, 2009). Males are more likely to use illicit drugs than females. Illicit drug use decreases with age and is more common among adults without a high school diploma, the unemployed and those with incomes below \$25,000. In addition, nearly half (49.3%) of illicit drug users were also smokers.

- 5.1% of Idahoans over age 18 equals 57,471.
- 49.3% of Idahoans over age 18 who use illicit drugs and smoke equals 28,333.

**Percent of Idaho Adults Using Illicit Drugs in Past 12 Months:  
2002-2009**



In addition, the National Survey on Drug Use and Health (NSDUH, 2008) indicated fewer participants perceiving great risk from using marijuana once a month between 2007 (38.9%) and 2008 (37.9%). Idaho is one of nine states mentioned that had a *significant decrease* in proportion of individuals perceiving great risk from marijuana use. Therefore, the current trend is that more Idahoans feel little risk is involved in marijuana use.

A higher proportion of Idaho students compared to Idaho adults felt there was little risk involved with drug use. In addition, drug use among 9th through 12th graders is higher than among Idaho adults. Idaho’s YRBS report for 2009 states that 14% of high school students had smoked marijuana within the previous month, and 30% had smoked marijuana at least once in their lifetime. Cocaine, heroin and methamphetamine had been used by 3% of students at some point and previous ecstasy use was admitted by 6% of students. Inhaling substances to get high was admitted by 13% of students.

- 14% of students who have smoked marijuana equals 24,600.
- 3% of students who have tried ecstasy equals 4,920.
- 6% of students who have tried cocaine, heroin and/or methamphetamine equals 2,460.

From the 2008 School Climate Survey, the percent of 12th graders saying they have used any drug within their lifetime increased from 36.2% in 1998 to 38.9% in 2008. Between 1998 to 2008, a slightly higher proportion of 12th graders admitted use of marijuana or hashish, inhaled substances, cocaine, depressants, tranquilizers, and ecstasy.

On the positive side, there were a few substances with decreased proportions of 12th grade students admitting lifetime use. Lifetime methamphetamine use decreased from 8.2% in 1998 to 2.4% in 2008 (Table 1). Admitted hallucinogenic and steroid use also decreased.

Table 1: Percent of 12th Graders Admitting Use:

Drug Type:	1998	2008
<b>Increased use:</b>		
Marijuana/hashish	30.4	33.5
Inhaled substances	7.1	8
Cocaine	6.2	6.9
Depressants	4	6.2
Tranquilizers	4.1	6.7
Ecstasy	4.7	8.5
<b>Decreased use:</b>		
Methamphetamine	8.2	2.4
Hallucinogens	13.9	12.7
Steroids	2.8	2.4



The 2008 School Climate Survey indicates that students with low parental supervision report more drug use than students with high supervision. This is an area targetable by prevention efforts. If more parents are made aware that checking in with children matters, drug use may decrease.

### **Prescription Drugs**

Use of prescription drugs is not illegal, but is of increasing concern as an underlying problem in Idaho. The NSDUH (2009) indicates an increase in the non-medical use of pain relievers among 12 years and up at 5.6% compared to 4.9% nationally. Use is higher among 18 to 25 year olds in Idaho (12.6% compared to 12.1% nationally).

- *5.6% of 9th through 12th graders plus adults over age 18 equals 67,698.*

NSDUH national participants engaging in non-medical use of pain relievers revealed the following when asked where the prescription drugs were obtained from:

- 55.9% a friend or relative for free
- 18.0% from a doctor
- 8.9% bought from friend or relative
- 5.4% took from friend or relative without asking
- 4.3% from a drug dealer or stranger
- 0.4% from internet

The majority (81.7%) of NSDUH survey participants receiving prescription drugs from a friend/relative for free, indicated the friend/relative had obtained drugs from one doctor. Only 1.6% indicated the friend or relative obtained the prescription drug through a drug dealer or stranger.

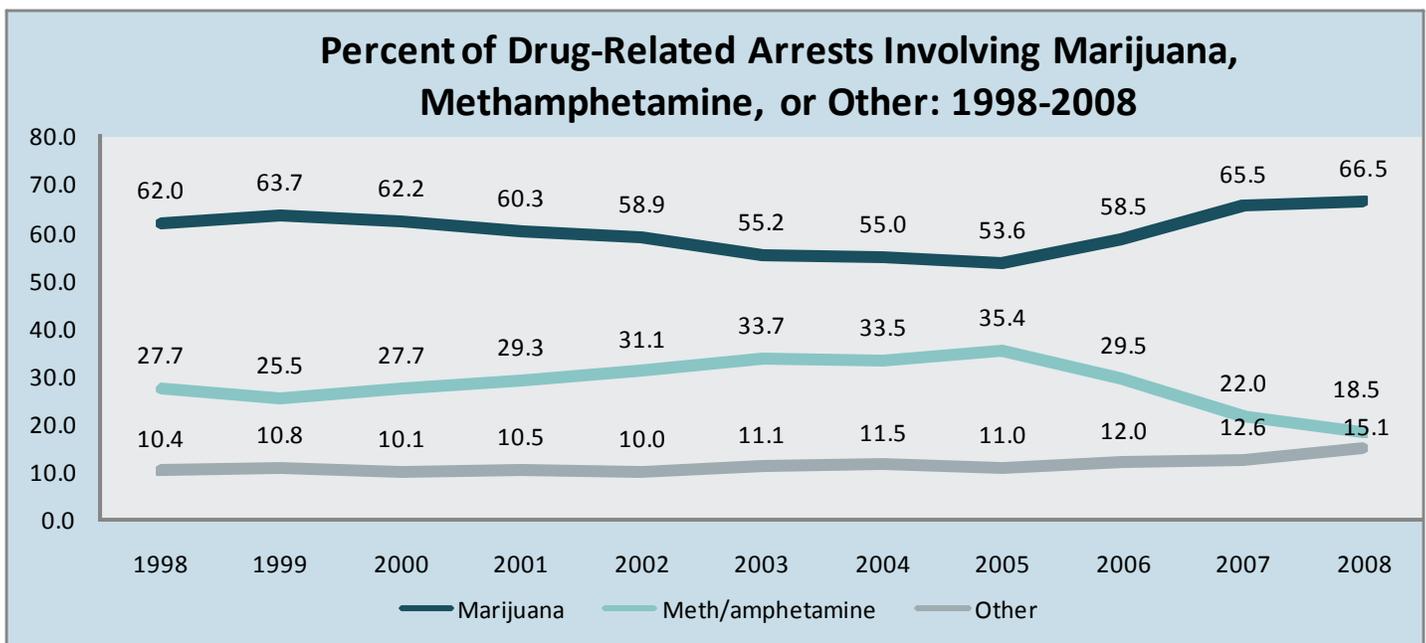
# Criminal Justice Trends

## Drug Arrests

The Idaho Crime Victimization Survey (2008) found that 26.8% of property crime victims who knew the offender, felt the item was stolen for money to buy drugs. In comparison, over half (53.7%) of victims of violent crime indicated the offender was under the influence of drugs and/or alcohol (30.9% alcohol, 6.4% drugs and 16.4% both alcohol and drugs).

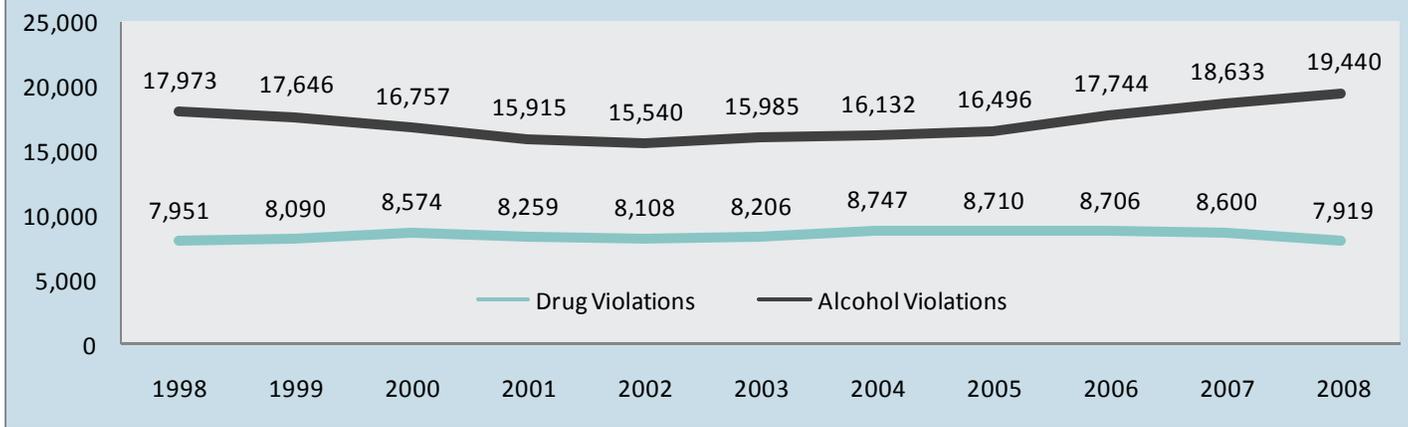
From the Idaho Incident Reporting System (IIBRS) housed within the Idaho State Police, approximately 42.7% of all intimate partner offenses in 2008 involved offenders who were suspected to be under the influence of either alcohol or drugs and 13.9% of offenses involving family members had offenders suspected of alcohol or drug use. Among all substances, alcohol has the greatest relationship with violence. The 2007 Idaho Drug Trends report indicates that 72.4% of those suspected of alcohol use committed a violent offense compared to 5.1% of those suspected to be under the influence of drugs or 16.7% suspected to be under the influence of both.

The following information is taken from IIBRS arrest data for years 1998 through 2008. Since 2005, marijuana related arrests in Idaho have been increasing, accounting for the highest proportion (66.5%) of overall drug arrests within the last ten years. On the other hand, meth related arrests have sharply decreased to 18.5% in 2008. Arrests involving other types of drugs have stayed relatively stable, increasing slightly in recent years.



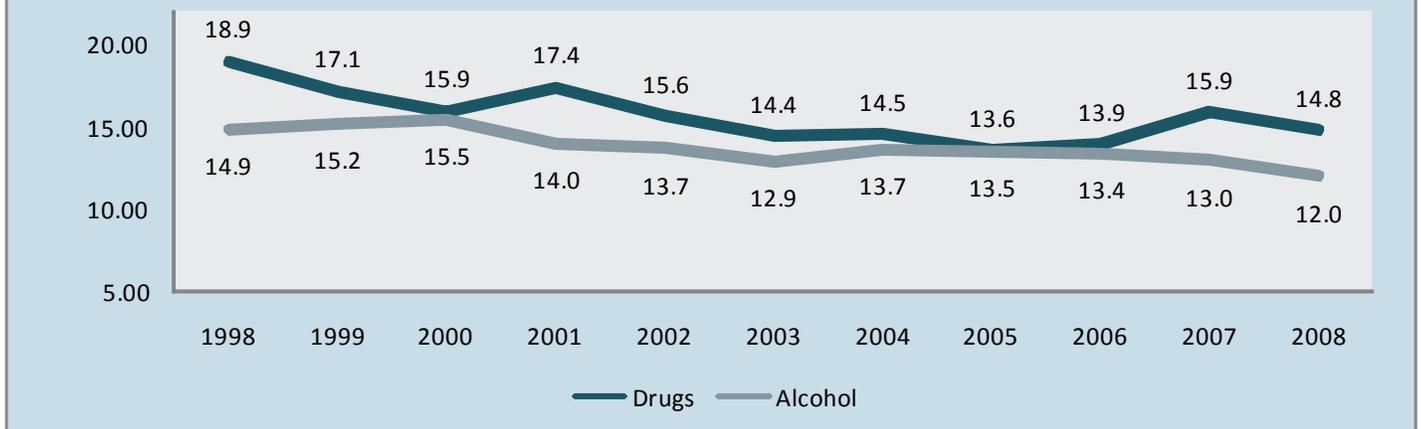
In 2008, drug and alcohol violations accounted for 35.9% of total arrests. Between 1998 through 2008 alcohol violation arrests decreased initially and then increased by 8.2% while drug violation arrests increased initially and then decreased slightly by -0.4%. In addition, 21.4% of violent crime offenses were committed by someone suspected to be under the influence of either drugs and/or alcohol: 18.8% alcohol, 2.0% drugs and 0.6% both.

### Total Number of Alcohol and Drug Violation Arrests: 1998-2008



Between 1998 to 2008 the proportion of alcohol and drug arrestees who were under age 18 varied year to year. However, the proportion of arrestees under age 18 for both alcohol and drug violations in 2008 was lower than in 1998.

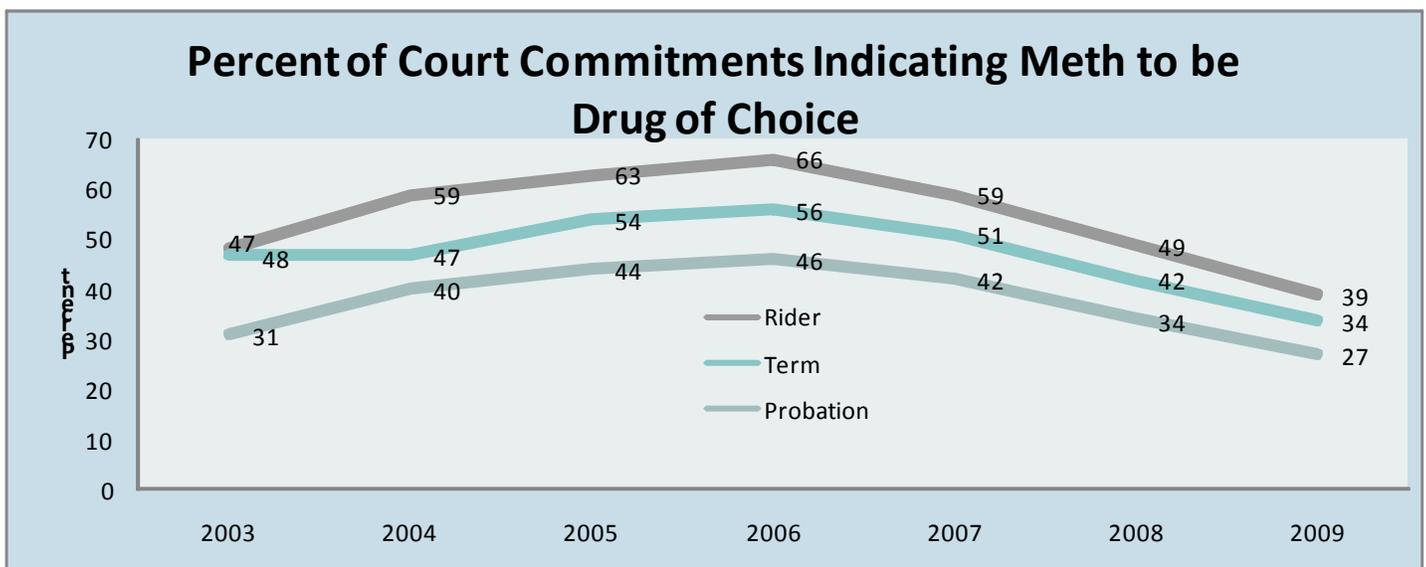
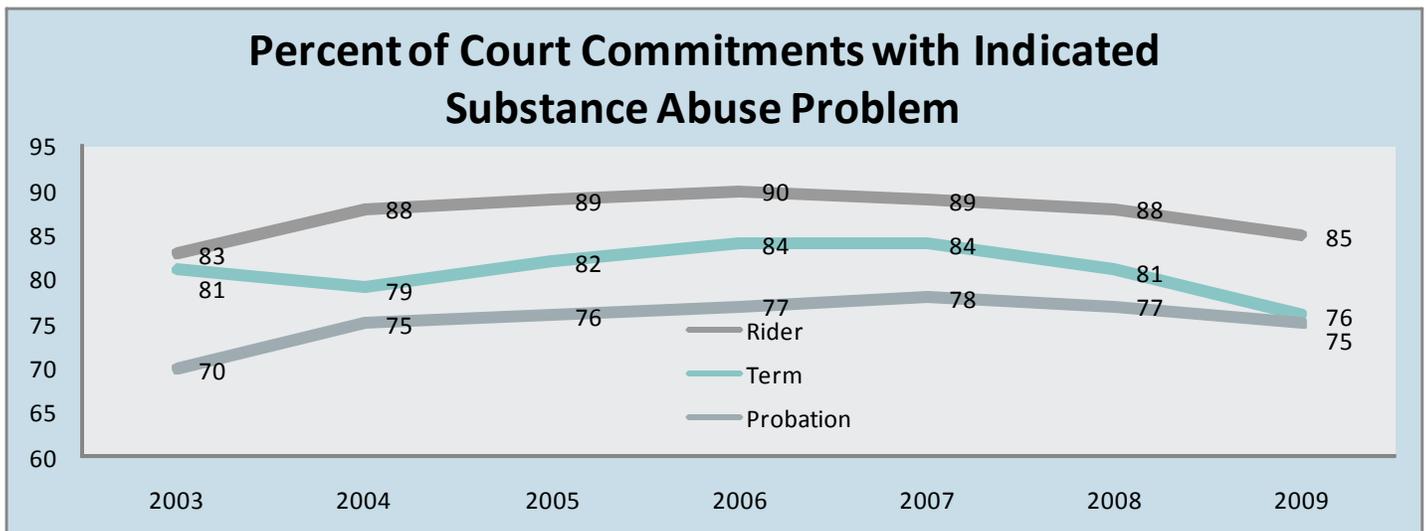
### Percent of Drug and Alcohol Arrestees Under Age 18: 1998 - 2008



## Incarceration

The Adam II (2008) study found that between 49% to 87% of all arrestees tested positive for at least one substance in their system at the time of arrest. In addition, between 15% to 40% tested positive for multiple substances. Adam II was not conducted in any cities in Idaho, but the findings are relevant when looking at the proportion of Idaho's incarcerated population in need of drug treatment.

As the following two charts indicate, the correctional population has a trend of fewer individuals since 2006 indicating a substance abuse problem. However, this is due to the fact that fewer inmates report meth to be their drug of choice. Although the severity of drug abuse is down, the correctional population still has a greater relationship with drug abuse than the general population. The following charts are taken from information in the 2009 Idaho State Corrections Annual Statistical Report.



Among the correctional population, 54% of probationers, 87% of riders (offender committed to 120-day Rider program), and 79% of inmates have a substance abuse problem as indicated by a Level of Service Inventory-Revised (LSI-R) substance abuse domain score of 4 or more (IDOC, 2009).

- *54% of 11,041 = 5,962*
- *87% of 752 = 654*
- *79% of 6,282 = 4,963*
- *Total with substance abuse problem = 11,580*

The Idaho Department of Juvenile Corrections estimates that 65.9% of the 350+ juveniles in state custody have substance abuse-related problems. In addition, when juvenile offenders are booked within county detention centers they are screened for substance addiction and 46% are estimated to have a substance abuse-related diagnosis. Among juvenile offenders on probation, 31% meet the criteria for substance abuse addiction.

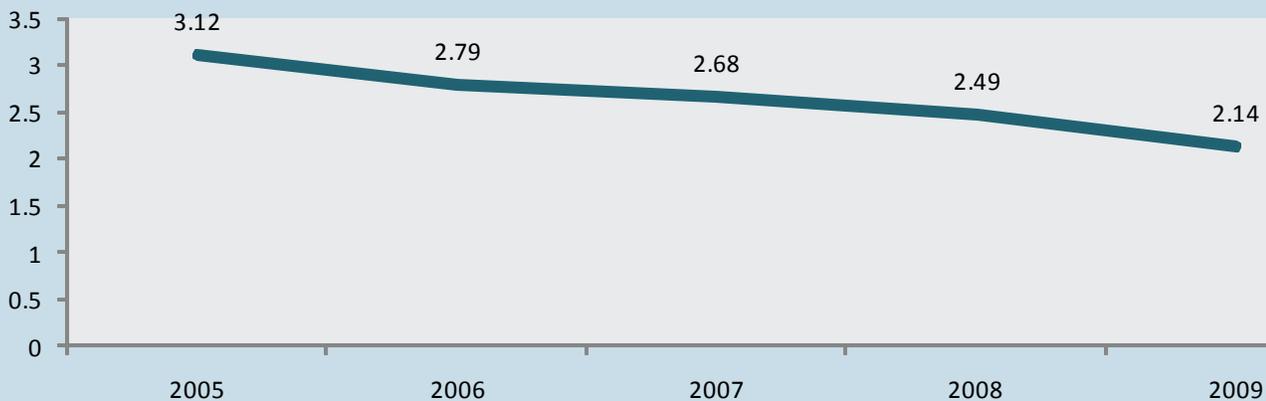
## **Judicial**

The 2009 Annual Report from the Idaho Supreme Court indicates there has been a large increase in the number of DUI filings over the past five years. Since 2005, felony DUI cases have nearly doubled and misdemeanor DUI cases have increased by 20%. However, felony drug cases decreased by 41% over the same period. In 2008, there were 1,983 offenders participating in drug and mental health courts.

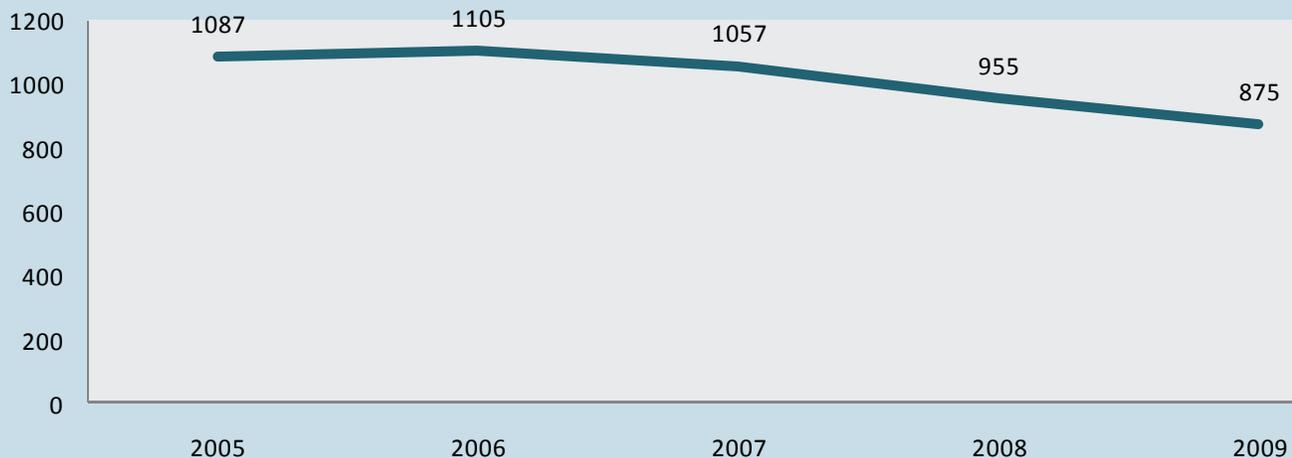
## Highway Safety

From the Idaho Transportation Department (2009), 19% of all fatal crashes, 8% of injury crashes and 6% of all crashes involved alcohol or drug impairment. In addition, driving under the influence accounted for 5.7% of all traffic violations in 2009. As the following chart indicates, the rate of impaired driving fatality and serious injury have decreased by 14.2% since 2005. The proportion of impaired driving crashes compared to total crashes has hovered between 6.8% to 7.7% from 2005 to 2009. Impaired fatal/injury crashes decreased from 1,087 to 875 between 2005 to 2009 by -19.58%.

### Impaired Driving Fatality And Serious Injury Rate per 100 Million Vehicle Miles of Travel



### Impaired Fatal/Injury Crashes



## Substance Abuse Treatment

Bhati and Roman (2010) estimate that nearly 1.5 million arrestees in the US are at risk of abuse or dependence and that treatment alone could avert several million crimes these individuals would otherwise commit. Substance abuse treatment is a necessary component to enable individuals with substance use disorder to function effectively within society. Both the criminal justice system and the treatment system need to effectively work together to address addiction. Because most individuals will not voluntarily seek help, criminal justice alternatives should also be available. Alternative forms of sentencing, use of drug courts and treatment for incarcerated offenders have become increasingly available for Idaho substance abusers.

The Idaho Department of Health and Welfare offers a variety of substance abuse treatment. The following table indicates numbers of individuals receiving treatment in 2008 and 2009. Most receive treatment for an alcohol addiction, followed by marijuana and methamphetamine. The overall number receiving treatment increased by 90.4% between the two years.

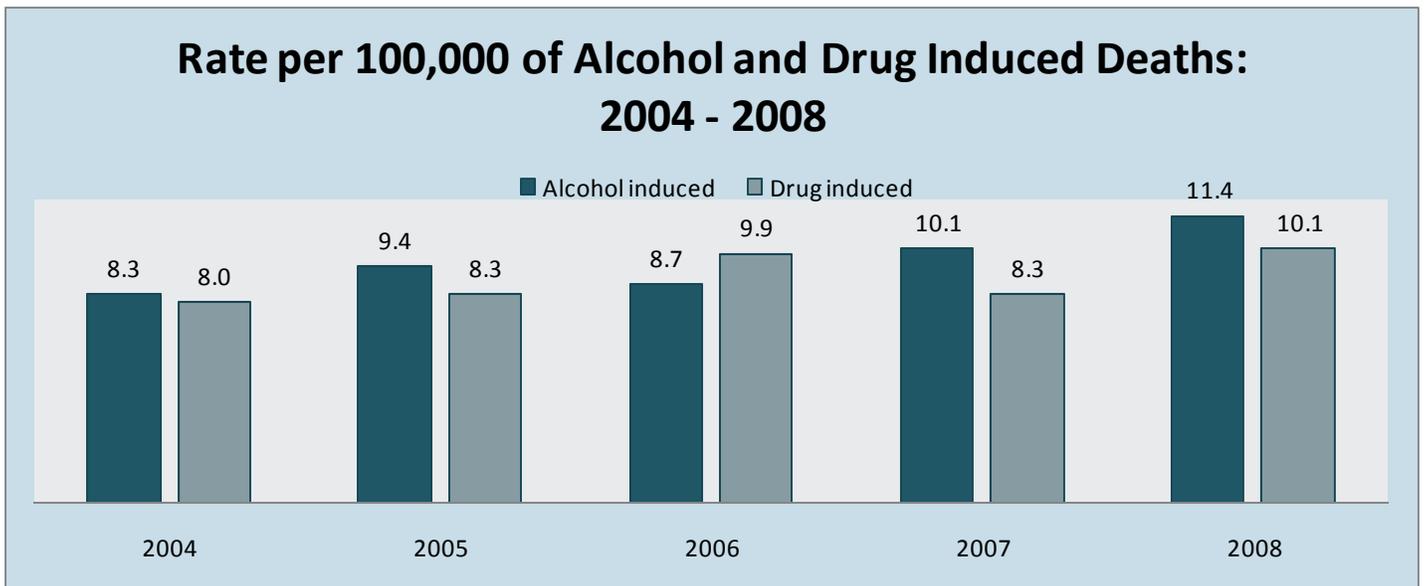
Substance Type	2008	2009
Alcohol	4,554	9,609
Marijuana	3,957	7,487
Methamphetamine	3,598	5,360
Cocaine	616	1,188
Heroin	256	429
<b>Total</b>	7,115*	13,550*

\*Categories contain individuals receiving treatment for more than one substance, therefore column does not equal total

NSDUH (2009) sub-state estimates provide information on survey participants indicating need for substance abuse treatment but not receiving treatment. The most recent survey indicates fewer Idahoans are in need but not receiving treatment for alcohol abuse. Therefore, Idaho delivery of treatment services has improved.

## Mortality

The Idaho Department of Health and Welfare, Bureau of Vital Statistics (2010) provides information regarding mortality for Idahoans. The most recent report lists alcohol as a factor in 3.5% of deaths and drugs as a factor in 3.1%. Since 2004, the rate per 100,000 residents of Idaho with deaths that are either alcohol or drug induced has been increasing. As shown in the chart below, the rate per 100,000 for alcohol induced deaths increased from 8.3 to 11.4 and drug induced deaths increased from 8.0 to 10.1 (between 2004 and 2008). In 2008, individuals dying from alcohol-induced deaths lost an average of 20.8 years before age 75 and individuals dying from drug-induced deaths lost an average of 30.5 years before age 75.



## Summary

The relationship between drugs and crime is complex but worth devoting time to understand the intricacies. In 2008, 21.4% of violent crime offenses were committed by someone suspected to be under the influence of either drugs and/or alcohol (18.8% alcohol, 2.0% drugs and 0.6% both). Among all substances, alcohol has the greatest relationship with violence. The 2007 Idaho Drug Trends report indicates that 72.4% of offenders suspected of alcohol use committed a violent offense compared to 5.1% offenders suspected of drug use or 16.7% suspected of both). Because individuals with a substance addiction have a higher tendency to commit crime, more should be determined to understand how to appropriately treat this population.

CASA (2009) estimated that Idaho spent \$528,139.2 in 2005 on substance abuse which was equivalent to 17.5% of the state budget. Because of the huge amount being spent on substance abuse, it is important to understand the most effective, beneficial treatment for this population. The following estimates for Idaho provide the level of need as indicated by surveys.

- Approximately 195,983 (combined adults and juveniles) smoke tobacco
- Approximately 164,536 (combined adults and juveniles) binge drink, showing a propensity for alcohol addiction
- Approximately 82,071 (combined adults and juveniles) have recently used illicit drugs

Only a certain proportion of individuals using drugs and alcohol will eventually develop an addiction. Co-morbid abuse (using more than one substance) may provide a better indicator for estimating the total number of individuals addicted to drugs or alcohol in Idaho. Those indicating both binge drinking *and* use of illicit drugs equals approximately 25,344 individuals. Health and Welfare provided treatment to 13,550 individuals in 2009 and drug and mental health courts had 1,983 participants. Taking these numbers into account, it is possible there are many individuals in Idaho who require substance abuse treatment but are not receiving it. The positive note is the NSDUH (2008) survey indicated fewer individuals in Idaho *not* receiving needed substance abuse treatment. Therefore, Idaho is making great strides in handling the needs of substance abusers. More improvements can be made through development of more drug courts, treatment and services for substance abusers. Prevention efforts can help ensure problems occurring from substance abuse, such as crime, decrease.

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