

State of Idaho

Epidemiological Profile

of Substance Use: 2006

*State Epidemiological Outcomes
Workgroup (SEOW) Report*

Prepared By:
Robert Graff, Ph.D & Boyd Wilmoth, M.S.
Idaho Department of Health & Welfare
Substance Abuse Program



IDAHO DEPARTMENT OF
HEALTH & WELFARE

Executive Summary

State Information

Population demographics: Idaho's estimated 2005 population is 1,429,096 persons. The state's population is thinly distributed, with only 9 of its 44 counties having a density of 25 or more persons per square mile. Despite its small populace Idaho is growing quickly having increased its population 36% from 1990 to 2003. Ninety-five percent of the population is white and roughly 10% of the population report Hispanic ethnicity (with Hispanics residing predominately in the southern third of the state). Idaho's median household income (\$40,230) is slightly below that of the national average (\$43,527). Idaho is above the national average of the percent of people attending some college yet falls below average for the percent of persons with a BA degree or above.

Geography: Idaho can be divided into three geographic regions; the 1) Northern Panhandle, 2) Central Mountains, and 3) Snake River Plain in the south. Approximately 70% of the state's population resides on the Snake River Plain, making the Snake River the lifeblood of the state. Roughly 70-80% of Idaho's 133 government funded substance abuse programs are located in this region as well. The Central Mountains consist of a vast mountainous region largely designated as National Forest land. With the exception of a few resort communities this region is sparsely populated. Access to health and prevention resources in this region is extremely limited during winter months. The state's second most populous region lies in the Northern Panhandle and combines expanding recreational tourism with heavily forested mountains. Most of the population is based in one county, with the rest ranging from rural to frontier. Recreational tourism, a major interstate, proximity to the Canadian border and a history of mining towns all play a role in substance use and abuse in the area. Idaho's geography makes it a predominately rural state with scattered urban areas in the South and North. The climate and mountainous regions limit the size of and access to many communities, making 26 of the state's 44 counties "frontier" (as defined by the National Center for Frontier Communities) rather than "rural".

Relevant Political/Economic events: Recently, and in large part due to attention to both the national and state methamphetamine epidemic, numerous events have indicated a heightened interest and support of substance abuse programs in Idaho. These include an increased visibility of the Idaho Dept. of Health and Welfare's Substance Abuse Program as it moved from the Division of Family and Community Services to the Division of Behavioral Health. Idaho also appointed its first Drug Czar in 2006, will implement a multi-agency statewide plan for prevention and treatment in 2007, and anticipates opening a new detox facility in 2008.

Workgroup Background

The Idaho Substance Abuse Epidemiological Workgroup consists of approximately 20 members, with 10-12 core members. Members represent a range of governmental and private agencies including the Departments of Health and Welfare, Corrections and Education, Idaho State Police, the Idaho Supreme Court, and the Governor's Office. The epidemiological team itself works within the Department of Health and Welfare's Substance Abuse Program and is thus well situated to advocate in favor of any recommendations put forth by the workgroup.

Information on Substance Use

In Idaho there is limited data on consumption patterns and consequences of substance use at the county level. For this reason, Idaho primarily relied on statewide surveys (such as Youth Risk Behavior Survey, Behavioral Risk Factor Surveillance Survey, and National Survey on Drug Use and Health) for this year's profiles. For these surveys and the other major data sources (state arrest and treatment data) we utilized the most recent years available. Profiles on seven substances were created. Abuse of prescription drugs was also perceived to be a problem in Idaho however no profile was created due to a lack of available data. The workgroup hopes, in the next year, to develop systems necessary to collect additional data (such as substance use-related poison control reports, hospital admissions, and coroner data) for an enhanced substance use surveillance system.

Summary Findings

Alcohol- The primary substance problem in Idaho is alcohol. More people are in treatment, and the documented economic impact is greater, for alcohol than any other substance. While alcohol-induced deaths have been decreasing nationally they have been steadily increasing in Idaho.

Methamphetamine- Like most Western states Idaho has been hit hard by the methamphetamine epidemic, particularly in law enforcement and correctional institutions. Most measures (including those in law enforcement, treatment, and prevalence) seem to indicate that the methamphetamine problem in Idaho is either stabilizing or, perhaps, has already peaked and begun to slowly decline.

Marijuana- Marijuana is by far the most widely used illicit substance in Idaho and represents the third highest treatment category. It is the most commonly used illicit drug among 8th-12th graders.

Tobacco- Prevention efforts appear to have significantly reduced cigarette smoking in Idaho (the percent of current student smokers in Idaho now surpasses the national *Healthy People 2010* goal), yet the use of smokeless tobacco is increasing.

Cocaine- Overall prevalence of cocaine use is low in Idaho although past year use of cocaine among 12-17 year olds is above the national average.

Heroin- While most measures indicate that heroin is a small problem in Idaho there are limited services (i.e., methadone treatment, risk reduction) available making the true extent of use difficult to determine.

Inhalants- Nationwide, inhalant use is notoriously difficult to track and Idaho is no exception to this tendency. However inhalants are reported to be the most commonly abused substance among 6th graders.

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Acknowledgements:

Special thanks to members of the SEOW and the numerous individuals from public and private agencies throughout the state for their cooperation and effort in putting together this report.

Alcohol

Consumption

Idahoans consume 2.33 gallons of ethanol* per person (2003 data) per year. By comparison, the national average is 2.22 gallons per capita¹.

Wine is the most consumed alcoholic beverage in Idaho and is nearly twice the national per capita average (.64 gallons per person versus .34 gallons nationally)¹.

Adult Prevalence

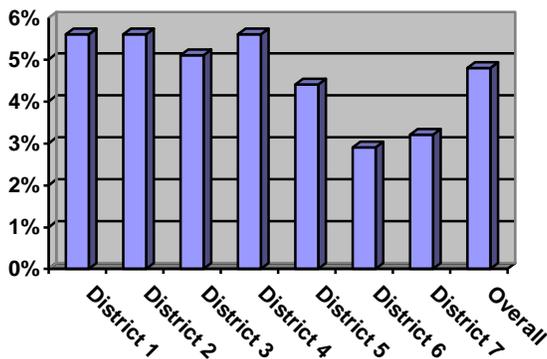
7.99% of Idahoans age 12 and older meet DSM-IV criteria for alcohol abuse or dependence, compared to 7.62% nationally².

The prevalence of binge drinking for those 18 years of age and older, within Idaho, (consuming five or more alcoholic beverages on one occasion) is 12.8%³.

Idaho in the age group 18-25 reported binge drinking in the month prior to the survey at a rate of 39.7% while this rate nationally was 41.4%⁴.

Heavy drinking among those 18 years of age and older (consuming 60 or more alcoholic beverages in the last 30 days) in Idaho dropped from 5.8% in 2003 to 4.8% in 2004. Heavy drinking is most prevalent in health districts 1, 2, and 4, where all three districts display a heavy drinking percentage of 5.6%⁵.

Percent of Idaho Adults Reporting Past Month Heavy Drinking by Health District, 2004

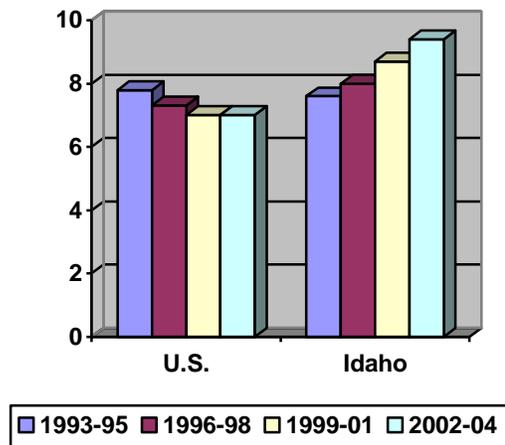


Consequences

Health Risks and Alcohol-Related Deaths

- Alcohol-induced deaths make up a small percentage of all fatalities in Idaho (about 1%), yet the average rate of alcohol-induced deaths in Idaho from 2002-04 (9.4 per 100,000 population) exceeds the national rate during this period of 7.0 per 100,000 population¹¹.

Rate of Alcohol Induced Deaths Per 100,000 Population, 1993-2004



- Chronic liver disease and cirrhosis was the 10th leading cause of death in Idaho in 2004 based on premature death (before age 75). A total of 1,803.5 years of potential life (before age 75)[†] were lost in Idaho due to these diseases¹².
- Idaho's suicide rate, the 8th highest in the country, is well above the national rate (16.2 vs. 10.7 per 100,000)¹³. Suicide is the 4th leading cause of premature death in Idaho. Alcohol was associated with approximately 23% of suicides in Idaho¹⁴.
- In 2004, 36% of Idaho's driving fatalities were attributed to drunk driving. Thirty-one percent of these accidents occurred with blood alcohol concentrations above 0.08 %¹⁵.

Consumption

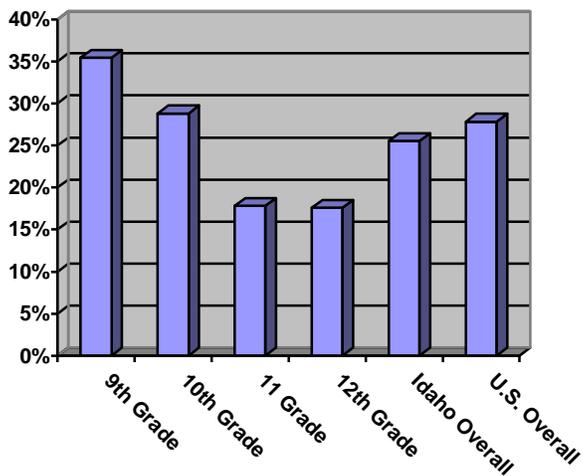
Student Prevalence

In 2001, underage drinkers consumed 14.4% of all alcohol sold in Idaho (compared to 16% nationally), totaling \$68 million in sales. These sales provided profits of \$33 million to the alcohol industry⁶.

In Idaho, 17.21% of those in the age group 12 to 17 said they had used alcohol in the past month⁷.

Although Idaho students are slightly less likely than the national average to have their first drink of alcohol before the age of 13⁸, over 25% still had their 1st drink of alcohol before the age of 13. For every grade level, males are significantly more likely than females to have drank prior to age 13⁸.

Percentage of Idaho Students Who Had Their 1st Drink of Alcohol, Other Than a Few Sips, Before Age 13

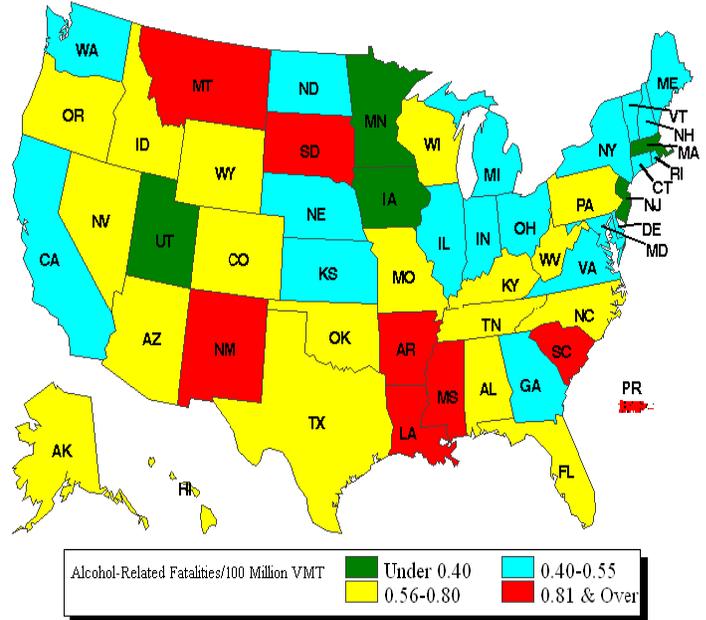


Based upon 2003/2004 annual averages in Idaho, binge drinking among youth 12 to 17 years of age occurs in 11.64% of those surveyed⁹.

Consequences

- Idaho ranks comparably high (.63) nationally regarding alcohol related driving fatalities per 100 million vehicle miles traveled¹⁵.

Alcohol Related Fatalities per 100 Million Vehicle Miles Traveled, 2004: U.S. Rate =.56



Source: National Center for Statistics and Analysis, 2004 FARS Annual Report File

Treatment

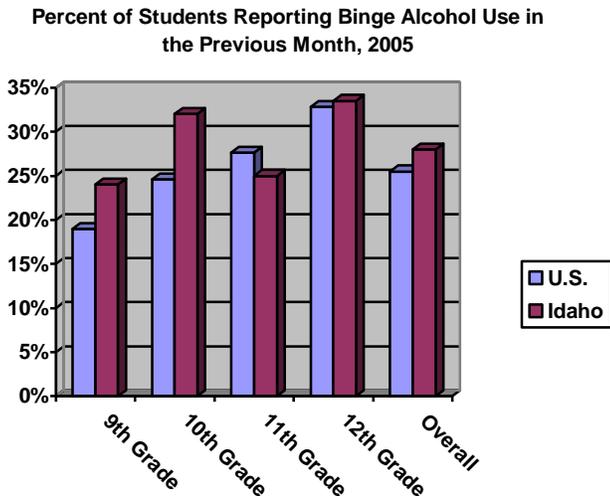
- In 2004, 444 Idaho youth 12-20 were treated for alcohol dependence, dropping the rate of youth per total admissions for alcohol treatment from 22.8% (in 2002) to 18.7%¹⁶.
- From 2003 to 2004 the percentage of those in the age group 18-25 needing treatment for alcohol dependence but not receiving it decreased from 18% to 15.58%¹⁷.

Alcohol-Related Crime

- The homicide rate in Idaho is 2.3 per 100,000 (nationally there were 5.5 per 100,000¹⁸), alcohol is responsible for an estimated 47% of homicides¹⁴.

Consumption

With the exception of 11th graders, Idaho 9-12th graders rate higher on binge drinking than their national peers¹⁰.

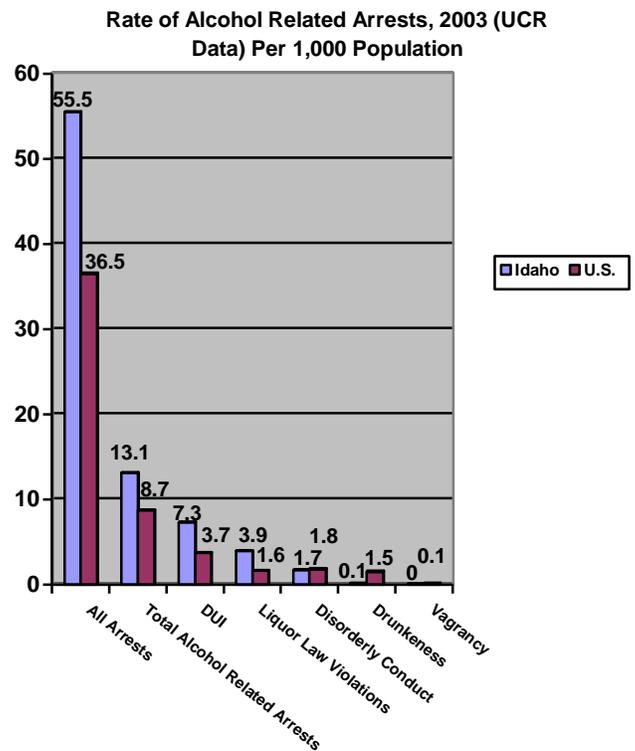


Idaho students (9th-12th) are less likely to ride in a car driven by someone who had been drinking than their peers⁷ nationally (28% Idaho, 30% U.S.)¹⁰.

However, Idaho students were more likely than their national peers to drive a car (one or more times in the past 30 days) after they had been drinking alcohol (12.9% Idaho, 9.9% U.S.)¹⁰.

Consequences

- Nationally, violent crimes occurring with alcohol or drugs are 10% more likely to result in a serious injury to the victim than violent crimes that occur without a relationship to drugs or alcohol. Here in Idaho, violent crimes where the offender has been using drugs or alcohol occur in 15.7 % of these crimes. 65.6% of the crimes that occur when the offender is under the influence of drugs or alcohol, take place in a residence¹⁹.



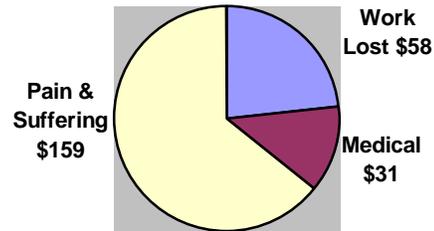
Economic Impact

- The 2005 gross revenue from Beer and Wine taxes collected in Idaho were: Beer \$4,142,095 Wine \$2,810,051²⁰.
- The percent of problem drinkers in the work force averages 9% nationally. The national average of business costs due to alcohol use is \$407 per employee²¹.

Consequences

- Underage drinking cost the citizens of Idaho \$248 million in 2001. Excluding pain and suffering expenses, the direct costs of underage drinking incurred through medical care and loss of work costs Idaho \$89 million per year. This translates to a cost of \$1,643 per year for each underage youth in the State²².

Costs of Underage Drinking in Idaho (In Millions), Total: \$248



- Idaho Department of Transportation identifies 100 impaired traffic fatalities in 2005 accounting for 7% of all fatal crashes and 36% of all driving fatalities²³.

Idaho Economic Costs of Impaired Driving Collisions: 2005 Estimates²³

Incident Description	Total Occurrences	Cost per Occurrence	Cost per Category
Fatalities	100	\$3,321,330	\$332,133,027
Serious Injuries	367	\$229,938	\$84,387,338
Visible Injuries	522	\$45,988	\$24,005,553
Possible Injuries	630	\$24,271	\$15,290,894
Property Damage Only	865	\$2,555	\$2,209,962
Total Estimate of Economic Cost			\$458,026,774

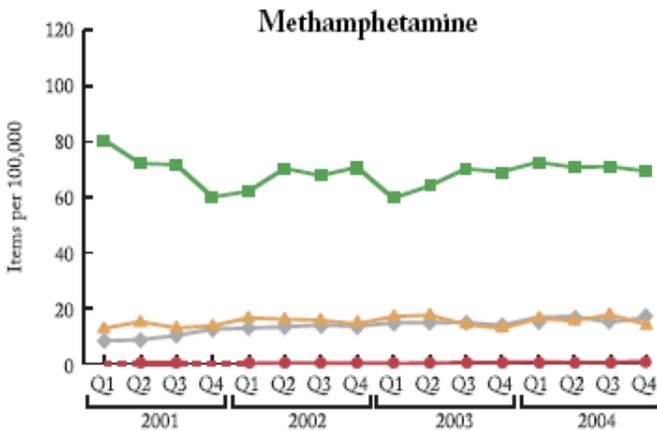
- In Idaho during 2006, 3,222 clients received publicly funded treatment for alcoholism at a total cost of \$4,201,081 resulting in an average cost of \$1,304 per client for alcohol related treatment²⁴.

Methamphetamine

Consumption

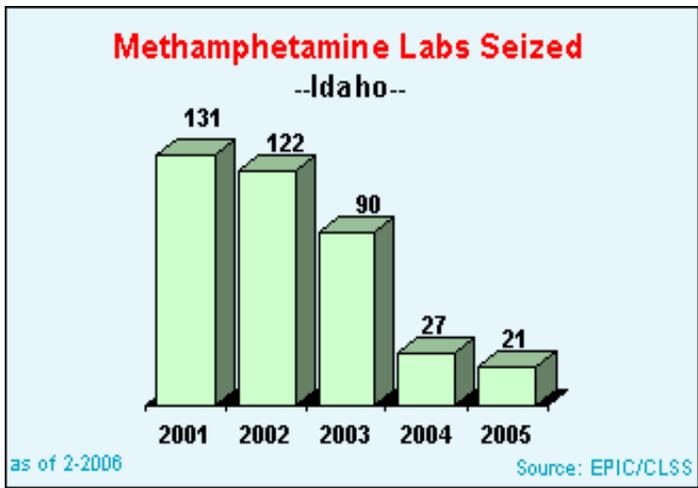
Methamphetamine is the most popular drug in the U.S. to be used in combination with other drugs (35%) such as ephedrine, MDMA, cannabis, or cocaine²⁵.

In 2004, the western U.S. reported 69 methamphetamine cases per 100,000 drug cases while the rest of the U.S. reported from nearly zero to 17 cases per 100,000²⁵.



*A dashed line implies unstable estimates due to small sample sizes.

According to the U.S. Drug Enforcement Agency (DEA), methamphetamine is one of the most widely abused drugs in Idaho. Idaho, however, has seen a dramatic decline in methamphetamine labs. The DEA credits this decrease to stricter sentencing of violators, as well as increased drug manufacturing in Mexico and California²⁶.



Consequences

Education

- Methamphetamine can increase the sex drive of users, and thus their exposure to unsafe sex practices. Increased risk of HIV and Hepatitis B and C transmission are likely results of methamphetamine abuse, particularly in individuals who inject the drug and share injection equipment³⁰.
- Abuse of methamphetamine has a toxic effect on the brain. Long term use can result in symptoms similar to Parkinson's disease³⁰.
- High doses can cause convulsions and raise body temperature to lethal levels³⁰.

Arrests

- Idaho State Police report that methamphetamine represents the second largest category of drug arrests[†] (32%). Marijuana is the only drug responsible for more arrests in Idaho (54%)³¹.
- In Idaho, 70% of methamphetamine arrestees, since 1998, are male (83% non-Hispanic). The average age of arrestees is 30.2 years old³².
- Methamphetamine arrests in Idaho have been declining since their peak in 2003³².
- In a 2005 exit survey of offenders as they were released from prison, the Idaho Department of Correction found that 52% said that methamphetamine was the primary reason that contributed to their arrest and incarceration³³.
- A 2005 Idaho State Police survey found that 83% of the female inmates surveyed had previously used an illicit drug. Of that group, 91.4% reported using methamphetamine³⁴.

Consumption

Student Prevalence

Idaho school students are much less likely to perceive that methamphetamines are “fairly/very easy” to get than their national counterparts (30.3% of Idaho high school seniors compared to 55.4% nationally)²⁷.

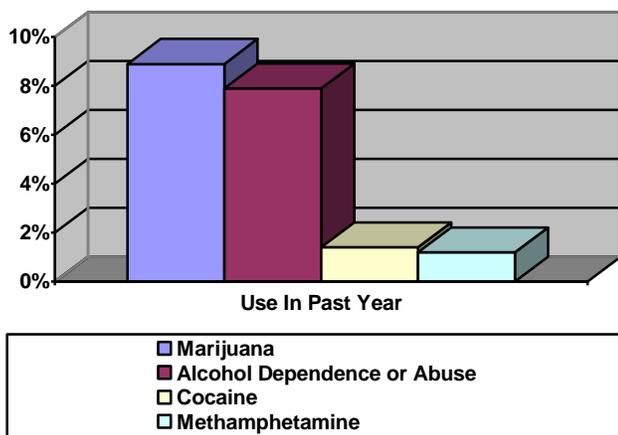
The percent of Idaho students (9-12th grade) who have tried methamphetamine at least once is less than the national average (5.3% versus 6.2% nationally)²⁸.

While the lifetime prevalence of methamphetamine use has been on a general decline, since 1996, among 8th, 10th, and 12th graders it has slightly increased among 6th graders²⁷.

Adult Prevalence[‡]

The percent of Idahoans who have tried, at least once, methamphetamine is higher than that for the U.S. (8.7% Idaho vs. 5.7% U.S.). However, current methamphetamine use is much less than other substances commonly abused in Idaho²⁹. Marijuana continues to have the highest past year use in Idaho.

Methamphetamine, Alcohol and Other Illicit Drug Use in Idaho: % of Population 12 or Older, 2002-04²⁹



Consequences

Treatment

- National best practices recommend specific methamphetamine treatment that is longer, and more intensive than treatment required for other substances. However, currently Idaho has only limited methamphetamine specific treatment services. Consequently in Idaho, methamphetamine treatment, with the exception of ancillary services*, is not significantly longer, more intensive[§], or more expensive per client when compared to non-methamphetamine treatment. Under the present system, roughly 23% of individuals successfully complete methamphetamine treatment (by comparison, 32% of those in treatment for alcohol, 29% for marijuana, and 20% for “other” drugs complete treatment successfully)³⁵.
- Among Idaho adults in treatment, methamphetamine ranked second (30%) behind alcohol as the primary drug of abuse in 2005. This marked the first drop of the adult population in methamphetamine treatment since 1997. For Idaho youth in treatment, methamphetamine (13%) is behind marijuana (48%), and alcohol (33%) as the primary drug of abuse³⁶.

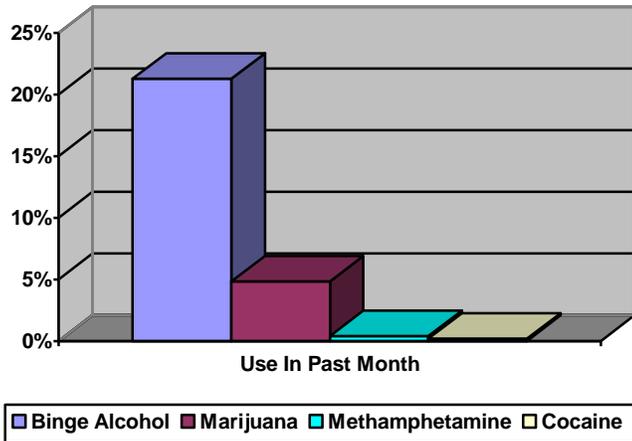
Social and Economic Costs

- Anecdotal reports from Child Welfare Services in Idaho suggest increasing numbers of methamphetamine-related foster care placements. However available data³⁷ is unable to confirm this, revealing only a sporadic relationship between methamphetamine arrests and foster care placements.
- The average cleanup cost of a methamphetamine lab in Idaho is about \$9,000 per site³⁸. Expenses for direct lab cleanup resulted in an estimated cost of \$189,000 to Idaho in 2005³⁹.

Consumption

Past month use of methamphetamine is lower than both the use of marijuana and binge alcohol drinking in Idaho²⁹.

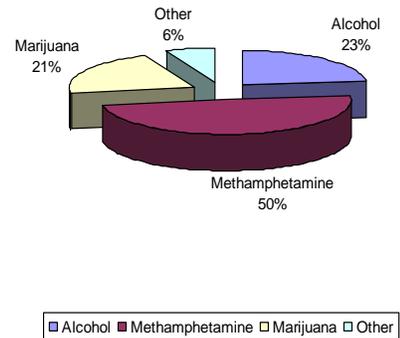
Methamphetamine, Alcohol and Other Illicit Drug Use in Idaho: % of Population 12 or Older, 2002-04²⁹



Consequences

- For FY 2006, methamphetamine treatment in Idaho cost \$4.8 million (roughly 41% of client treatment costs)³⁵.
- Methamphetamine was the primary drug of choice for about 50% of Idaho Drug Court participants, accounting for the bulk of the Drug Court's approximate \$2 million in direct service expenditures for 2005³⁵.

Primary Drug of Choice among Drug Court Participants, 2005

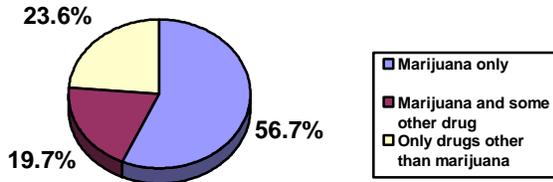


Marijuana

Consumption

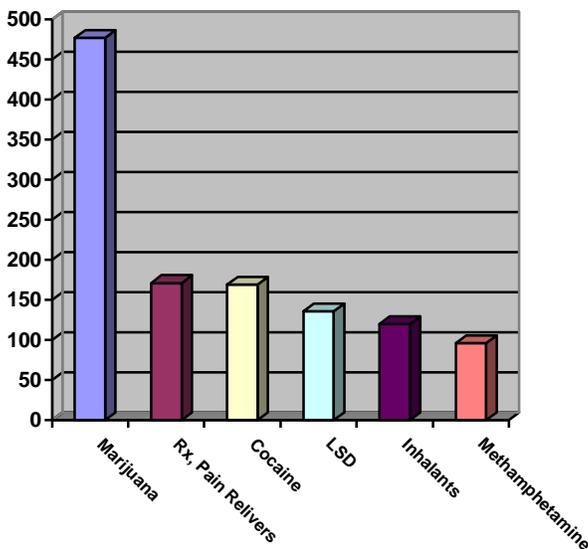
Marijuana is the most commonly used illicit drug (14.6 Million past month users) in the U.S.⁴⁰

Marijuana Usage Among Illicit Drug Users, U.S.-2004



In Idaho, consumption of marijuana follows this same national trend as its use greatly exceeds that of all other illicit substances⁴¹.

Illicit Drug Use in Lifetime (Idahoans 12 or older): Numbers in Thousands, '02-04



Marijuana is both imported (from surrounding U.S. states as well as Canada and Mexico) and grown domestically in Idaho, with domestically grown varieties often considered to be of higher quality. According to the DEA, street prices of marijuana (domestic sinsemilla) in Boise are among the cheapest in the Northwest region⁴².

Consequences

Health-Related Effects of Marijuana

A pharmaceutical pill known as Marinol can be used to deliver the active compounds found in marijuana for the treatment of nausea and appetite. As a result, smoking marijuana has been advocated medically to control nausea and to promote appetite. However, since the smoke from marijuana contains 50% - 70% more carcinogenic hydrocarbons than does tobacco, the efficacy of smoking marijuana for medical purposes has been challenged⁴⁹.

While biological and chemical experiments have indicated that marijuana smoke is more carcinogenic than tobacco smoke the link between actually smoking marijuana and increased cancer rates is proving to be more complex⁵⁰. Early studies seemed to support this link however recent research has highlighted the confounding nature of tobacco, as many participants in previous studies smoked both tobacco and marijuana⁵¹. Additionally, while marijuana smoke is more carcinogenic THC itself appears to afford some protection against the production of specific carcinogenic compounds (although marijuana with low THC content could actually increase carcinogenic production)⁵⁰. Despite the need for further research on the degree to which marijuana smoking causes cancer, the increased risk of chronic bronchitis and emphysema from marijuana smoke still exists⁵¹.

Marijuana abuse can damage locations within the brain responsible for critical cognitive thinking such as: long-term memory, control of emotions, awareness, and coordination⁵². These deficits in cognitive functioning have been found to last up to 28 days after the last use of marijuana⁵³.

This research suggests that these lengthy periods of impaired cognitive functioning (lasting a month or longer) hamper the learning process. This lost momentum in learning represents the true long-term danger associated with marijuana abuse⁵⁴.

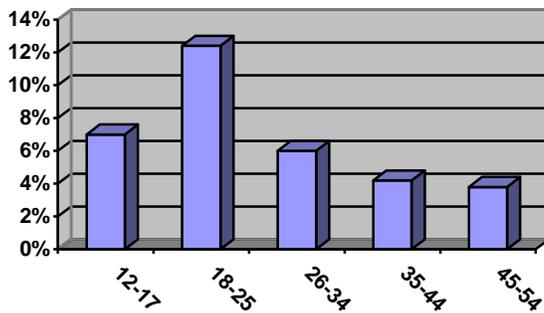
Consumption

While use of marijuana is widespread, it's perceived harmfulness is also relatively low; only 39.5% of Idahoans feel that there is a great risk in smoking marijuana once a month⁴³.

Adult Prevalence

Nationally, regular marijuana use (i.e., reported use in the past month) peaks around high school and early twenties, with steep declines after age 26 and again after age 35⁴⁴. This same pattern holds for Idaho*, with past month use peaking in mid-teens and early twenties⁴⁵.

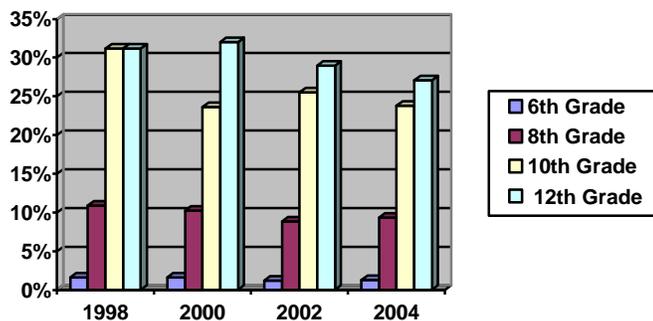
Percent of Marijuana Users (in Past Month) in Idaho by Age Group- 2002-05



Student Prevalence

As in previous years, *marijuana was the most commonly used drug* for students in 8th grade and above (for 6th graders inhalants were the most common) and accounted for most of the reported drug use in Idaho Schools⁴⁶.

Percentage of Idaho Students Who Have Used Marijuana or Hashish



Consequences

Researchers have also found that men and women who smoked marijuana before the age of 17 are 3 ½ times more likely to attempt suicide as those who began smoking marijuana later in life⁵⁵.

Arrests

From 1998 to 2004, nearly 60% of all drug-related arrests in Idaho involved marijuana. 89.3% of marijuana arrests involved possession. 61.5% of those arrested for marijuana possession were under the age of 24, with an average of 21% of those arrested being juveniles⁵⁶.

As in other Western states, marijuana is increasingly grown on public lands in Idaho. These outdoor crops can be protected by armed individuals or crudely made booby traps. In September 2005, the DEA eradicated 19,000 marijuana plants from eight outdoor grow areas on public lands in eastern Oregon and western Idaho⁴².

Treatment

In SFY 2005, 39% of adult substance abuse clients served by Idaho Health & Welfare list Marijuana as their primary substance for abuse. In comparison, 48% of adolescent substance abuse clients served by Idaho Health & Welfare list marijuana as their primary substance for abuse. These findings suggest that marijuana abuse has a younger target population than other drugs (except inhalants)⁵⁷.

In SFY 2006, 8,731 Idahoans sought treatment for substance abuse. 1825 (21%) of those treatment admissions were for treatment relating to marijuana or hashish. Only methamphetamine (34%) and alcohol (38%) created more admissions⁵⁸.

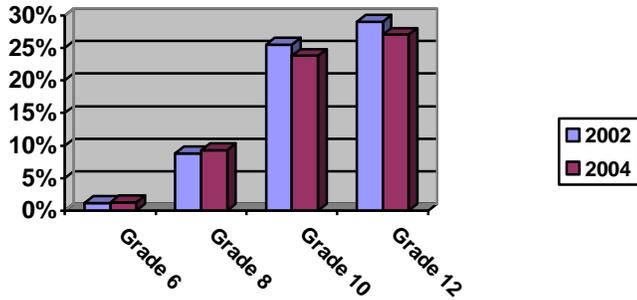
THC Potency

Marijuana grown in the 70's had an average THC content of about .85%. Current cultivars have a potency of 6%, with a new variant from Canada reaching 30% THC content⁵⁹.

Consumption

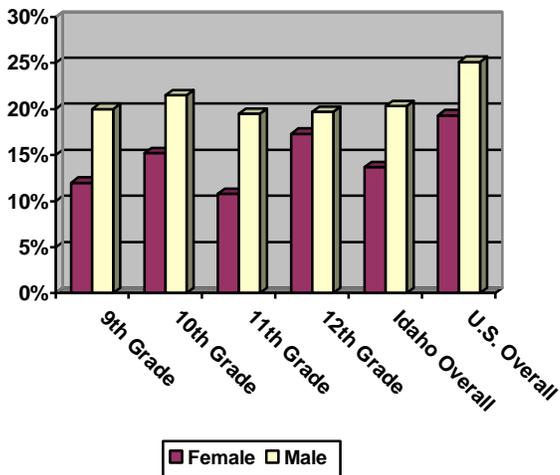
Marijuana use increases throughout high school, until, by 12th grade, about three in ten Idaho students (27.1%) have tried marijuana⁴⁶.

Lifetime Prevalence of Any Marijuana Use, Idaho Students



Boys consistently report more use of marijuana than girls in grades 9-12. In addition, Idaho students remain far less likely than their national peers to have both ever tried⁷ marijuana *or* used it in the past 30 days⁴⁷.

Percentage of Students Who Used Marijuana One or More Times During the Past 30 Days⁸



However, despite the lower figures for Idaho students reported usage of marijuana in the past month has increased 17.6% among all Idahoans since 2001⁴⁸.

Consequences

Nationwide, mentions of marijuana in emergency room visits have more than doubled since 1995⁶⁰. In 2004, marijuana was mentioned in 10% of drug-related emergency room visits (second only to cocaine at 19%)⁶¹.

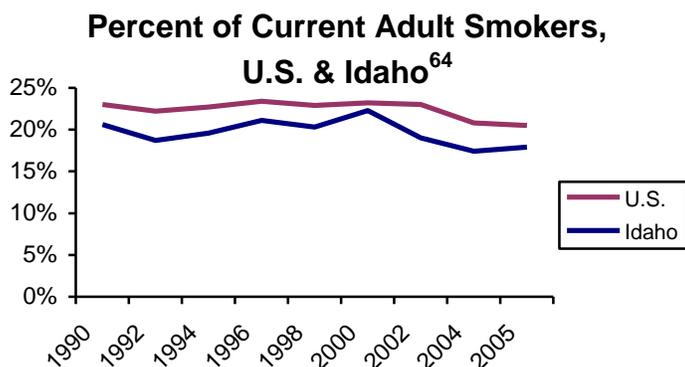
Increasing levels of emergency room mentions of marijuana may be related to both increased potency of the drug as well as new ways in which marijuana is used. Since the mid-90's the use of "blunts" has increased, especially among young adults and adolescents⁶². "Blunts" are gutted out cigars re-filled with marijuana (often in combination with other drugs such as marijuana-cocaine or marijuana-embalming fluid-PCP).

Tobacco

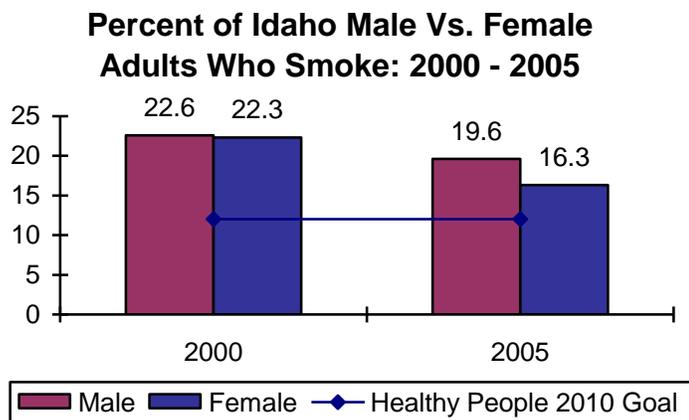
Consumption

Adult Prevalence

Nationally, cigarette smoking prevalence among adults* stagnated in the 1990's, and then began to slowly taper off through today. In Idaho, smoking among adults spiked in 2000 then declined rapidly before leveling off most recently⁶³. Data from the Centers for Disease Control and Prevention found that Idaho was among the three lowest states regarding percent of smokers within the states' populations⁶⁴.



Smoking prevalence among Idaho adults sharply declined 22.3% in 2000 to 17.9% in 2005⁶⁵. The biggest decline was among 18-24 year olds (27 to 19.3%), however Idaho is still far from making the *Healthy People 2010*⁷ goals for current adult smoking.



Consequences

Education

The smoke from a cigarette contains more than 4000 chemicals including, carbon monoxide, tar, benzene, radon, and nicotine⁷⁴.

Nicotine increases dopamine levels and stimulates the same brain pathways as most addictive drugs⁷⁵.

A chemical found in tobacco smoke (acetaldehyde), and also formed when alcohol is metabolized, produces stronger and longer-lasting pleasurable effects of substances like tobacco and alcohol⁷⁵. Physically non-mature brains are especially vulnerable to this chemical, which might explain why adolescents are more prone to tobacco addiction⁷⁶.

In 2005, the rate of current illicit drug use[¥] was approximately 8 times higher among youths aged 12 to 17 who smoked cigarettes in the past month (46.7 %) than it was among youths who did not smoke cigarettes in the past month (5.5 %) ⁷⁷.

Health Risks and Tobacco-related Deaths

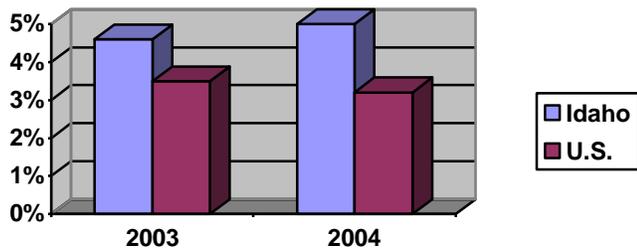
Smoking during pregnancy increases the risk of pre-term and low birth weight babies as well as infant deaths. In 2004, approximately 13% of live births in Idaho were to mothers who smoked during pregnancy. Nearly a fourth of the births from women between the ages of 15 and 19 were from mothers who smoked during pregnancy⁷⁸.

Over the past 40 years, cigarette smoking has caused an estimated 12 million deaths, including 4.1 million deaths from cancer, 5.5 million deaths from cardiovascular diseases, 2.1 million deaths from respiratory diseases, and 94,000 infant deaths related to mothers smoking during pregnancy⁷⁹.

Consumption

The percent of Idaho adults (18 and older) who reported that they currently use smokeless tobacco⁶⁶ has remained relatively stable, ranging from a low of 3.3% in 2000 to a high of 5% in 2004⁶⁶. However, these figures are well above national numbers of adult smokeless tobacco users⁶⁷.

Percent of Adult Current Smokeless Tobacco Users: Idaho⁶⁶ & U.S.⁶⁷



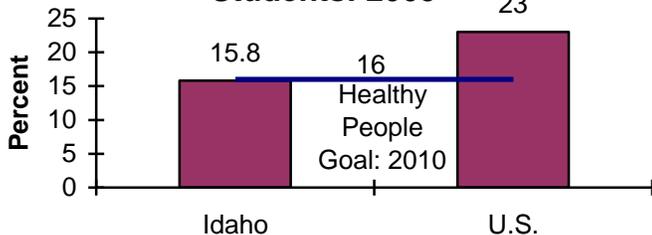
The use of any tobacco product (cigarettes, smokeless tobacco, cigars, or pipe tobacco) by persons 12 and older is comparatively steady across Idaho Health and Welfare Regions and averages 27% (2002-04)⁶⁸.

Student Prevalence

Education and smoking are associated. More than one-in-three (38.3%) of adults (18 and older) with less than a high school education smoked cigarettes compared with 7% of college graduates⁶⁹.

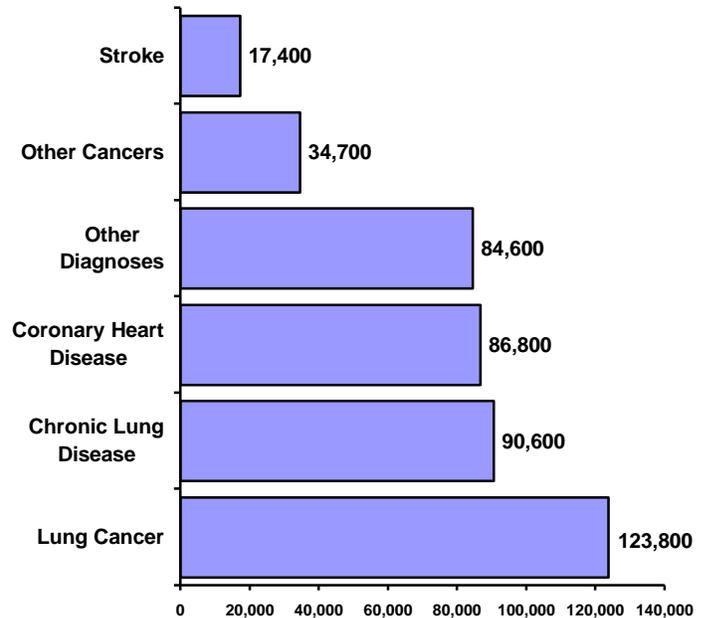
Current cigarette use (one or more in the past 30 days) among Idaho students is significantly less than the national average and surpasses *Healthy People 2010* goals for youth cigarette smoking⁷⁰.

Percent of Current Smokers Among Students: 2005



Consequences

About 438,000 U.S. Deaths Are Attributable Each Year to Cigarette Smoking⁷⁹.

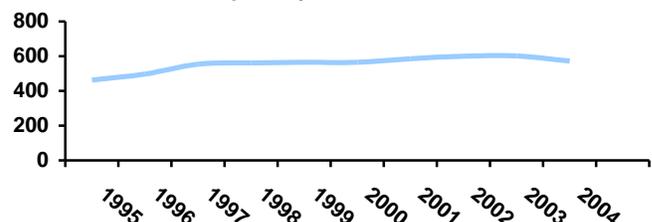


The average annual number of deaths in Idaho from lung cancer between 1997-2001 was .455 per 1000 population. This compares to a national rate of .562 per 1000 population for deaths due to lung cancer⁸⁰.

Smoking is a primary risk factor for cancers of the trachea, bronchus, and lung. Over the past decade, Idahoans died from these cancers at a rate of between 4 and 5 deaths per 10,000 population⁸¹.

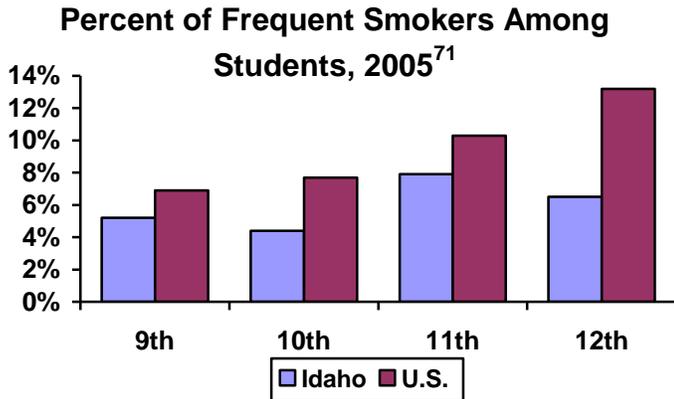
Smoking is also the principal factor contributing to death from chronic lower respiratory diseases (ex. emphysema, chronic bronchitis)⁸². In Idaho, nearly 600 people per year die from these diseases⁸³.

Number of Idaho Resident Deaths from Chronic Lower Respiratory Diseases, 1995-2004⁸³



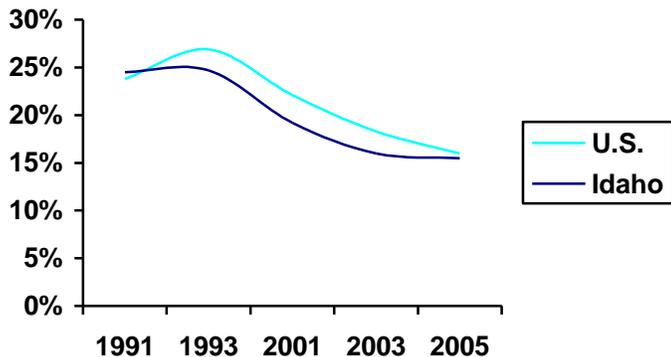
Consumption

Frequent smoking (smoking on 20 or more days within the past month) among Idaho students is also below the national average⁷¹.



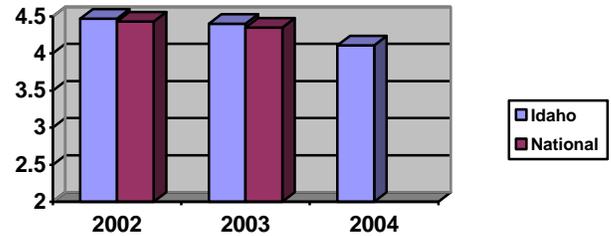
The percent of Idaho students (9-12) smoking before age 13 has significantly declined since 1991. Much of this decline can be attributed to statewide efforts to restrict the access of tobacco to minors⁶. However, this decline has recently leveled off and, for the first time in over a decade, Idaho numbers are approaching the national average⁷⁰.

Percent of Students Who Smoked a Whole Cigarette for the First Time Before Age 13⁷⁰



Consequences

Rate of Deaths Due to Chronic Lower Respiratory Diseases: Idaho and U.S. (per 10,000 population)



*2004 National data not available

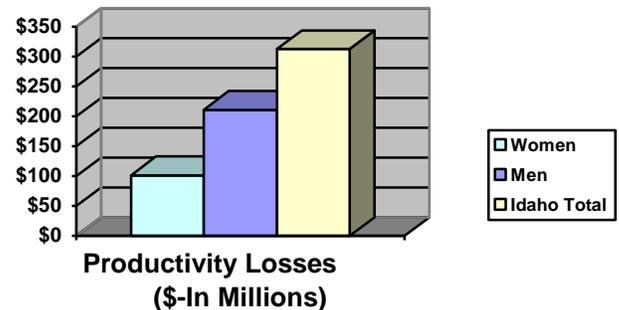
Economic Impact

Rising taxes on cigarettes have resulted in an increasingly lucrative blackmarket on cigarettes in Idaho. In 2005 alone, the ATF arrested four Idahoans who smuggled contraband cigarettes from Idaho to their co-conspirators in Washington state. The ATF estimates that the four year long operation resulted in a \$56 million tax loss to the state of Washington⁸⁴.

Based on the most current available data (1998), Idaho medical expenditures⁵ attributable to smoking totaled \$249 million dollars in 1998⁸⁵.

Smoking-attributable productivity losses in Idaho[†] totaled more than \$312 million between 1997-2001⁸⁶.

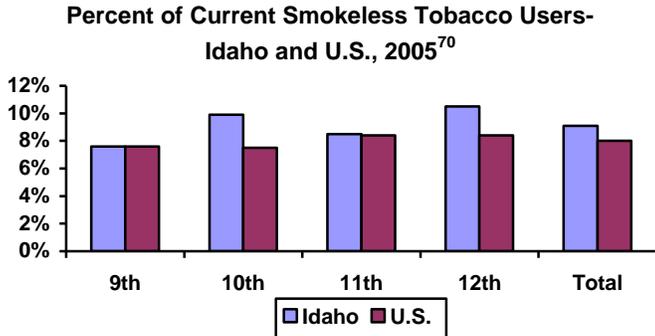
Idaho Average Annual Smoking-Attributable Productivity Losses (1997-2001)



The cigarette tax (per pack) in Idaho, 2005, was \$.57. The gross tax revenue from Idaho cigarette and tobacco sales in 2005 was \$51,782,744⁸⁷. In 2006, 0.45% of the tax revenue from cigarettes was placed back into tobacco prevention programs⁸⁸.

Consumption

Despite the strides made in lowering youth cigarette smoking, the current use of smokeless tobacco[◇] among Idaho students is well above the national average⁷⁰.



Per Capita Tobacco Usage

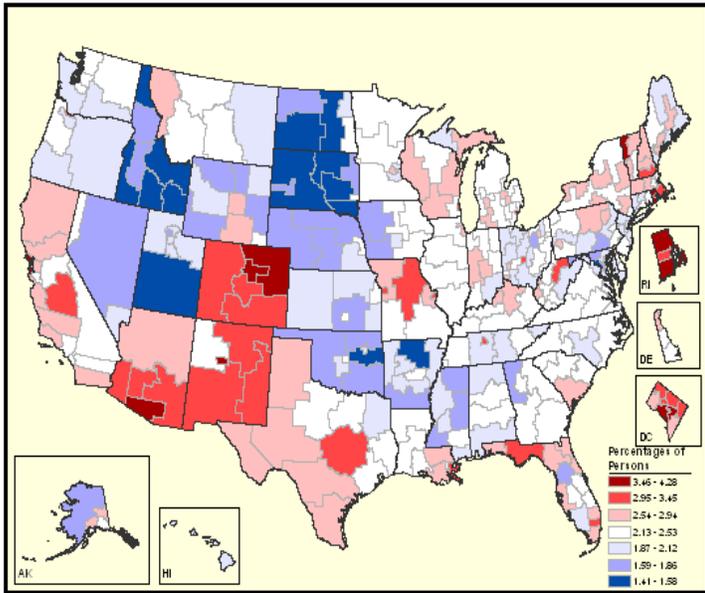
The Idaho Tax Commission estimates that, in 2005, 1,648,023,460 individually taxed cigarettes and 1,613,602,190 exempt[§] cigarettes were distributed in Idaho, totaling an estimated 163,081,283 *packs* distributed. Based on 2005 census estimates⁷², Idahoans use 114.1 packs of cigarettes per person. Excluding exempt cigarettes, Idahoans consume 57.7 packs of cigarettes per person per year. This is just below the national estimate of 63.8 packs of cigarettes consumed per person per year⁷³.

Cocaine

Consumption

Nationally, the average percentage of persons to use cocaine in the past year is 2.46 %. When compared to the U.S., the percentage of Idahoans to use cocaine in the previous year is quite low (1.410. – 1.86 %) ⁸⁹.

*% of Persons Reporting Past Year Cocaine Use: U.S. 2004
(Dark Red=High, Dark Blue=Low)*



Historically, crack cocaine has been virtually nonexistent in Idaho. The Drug Enforcement Administration (DEA) does however report that cocaine is readily available throughout Idaho, although its use is at a lower level when compared to other drugs. Cocaine is making a comeback in areas bordering Idaho. Law enforcement pressure on methamphetamine traffickers has, for instance, enabled cocaine traffickers to re-establish themselves in the Spokane region ⁹⁰.

Based on treatment data ⁹¹, the usual route of cocaine administration nationally was to smoke it (i.e., crack). The route of cocaine use in Idaho appears to be the opposite: with 67% through non-smoked routes (i.e., inhalation) and 33% smoked ⁹².

Consequences

Education

The release of dopamine created by cocaine use is known to cause intense feelings of well-being, euphoria, and irritability ¹⁰⁰.

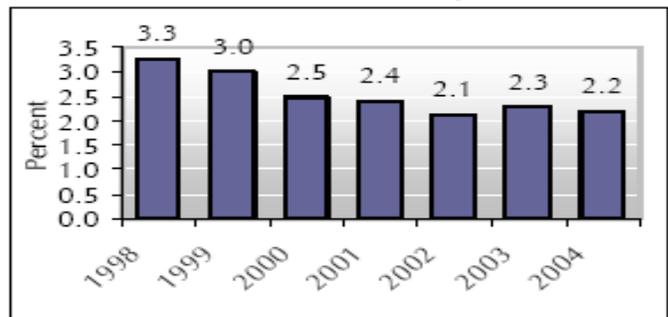
The toxic effects of cocaine use on the body often result in nervousness, dizziness, blurred vision, and tremors, and may lead to convulsions, cardiac arrhythmias, and respiratory arrest. Chronic use is associated with weight loss, insomnia, anxiety, paranoia, and hallucination ¹⁰¹.

Cocaine produces a dose dependent increase in blood pressure and heart rate. The risk of stroke and cerebral bleeding is considerably increased with cocaine use. Heart attacks can occur minutes after cocaine administration or as late as a few days afterwards. The highest risk is in the first hour after cocaine use ¹⁰².

Arrests

Cocaine is the 3rd largest drug in possession of Idaho arrestees. In 2004, Idaho State Police recorded 1045 arrests (or 2.2 % of arrestees) where the offender was in possession of cocaine or crack ¹⁰³. By comparison, 54.2% of drug-related arrests involved marijuana and 31.8% involved methamphetamine in 2004 ¹⁰⁴.

Percent of Individuals Arrested With Cocaine/Crack ¹⁰⁴



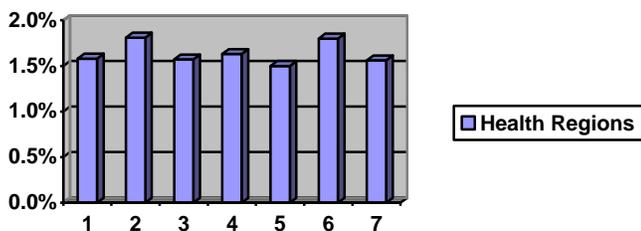
Consumption

Adult prevalence

Between 2002-2004, Idaho had an annual average of 15,000 persons (or 1.4% of the population) who used cocaine in the past year⁹³. Annually, approximately 4,000 Idahoans use cocaine for the first time*. The estimated average age of Idaho first time cocaine users is slightly less than that for the U.S. (18.3 versus 19.7)⁹⁴.

There is very little regional variation of cocaine use within Idaho⁹⁵.

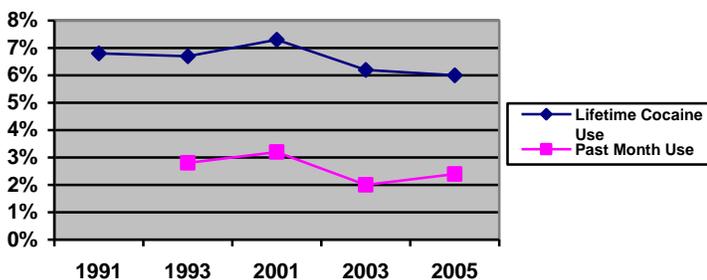
Percentage of Idahoans Who Used Cocaine in the Past Year, Annual Averages Based on 2002-04⁹⁴



Student Prevalence

In Idaho, cocaine use among students peaked in 2001. Most recently, lifetime users (those who ever tried cocaine) have been declining while current users (those using cocaine within the past month) are on the rise⁹⁶.

Cocaine Use Among Idaho Students (Grades 9-12)⁹⁶



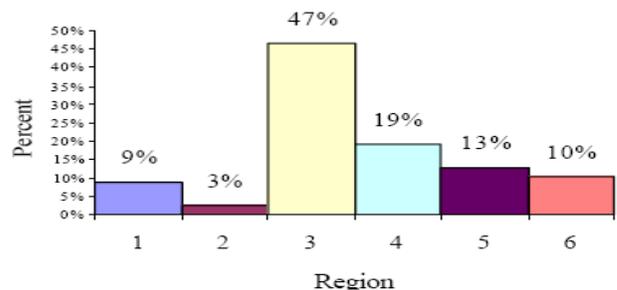
The percentage of Idaho high school students who have ever tried cocaine (6%) is 30% less than the national average (7.6%)⁹⁷.

Consequences

Nearly 5% of the offenders with cocaine were juveniles. The mean age for arrestees with cocaine was 30.9 years¹⁰⁵. Historically, the majority of cocaine arrestees are male (77%) and non-Hispanic Whites (63%)¹⁰⁵.

While the reported use of cocaine shows very little regional variation, cocaine drug enforcement (measured by arrests) reveals considerable differences between Idaho State Police Regions¹⁰⁶.

Percent Change of Cocaine Arrests by Idaho State Police Region 1998-2003



Overall numbers of cocaine arrests are closely linked to Idaho's most populous counties, with the notable exceptions of Bannock (ranked 3rd in cocaine arrests) and Blaine (4th). Ada (1st) and Kootenai (5th) counties have the most stable yearly cocaine arrestee numbers, Ada averages about 40 and Kootenai about 15/yr.¹⁰⁵

Treatment

The rate of cocaine treatment admissions has continually decreased nationally since 1994, from just under 18% to 14% in 2002¹⁰⁷.

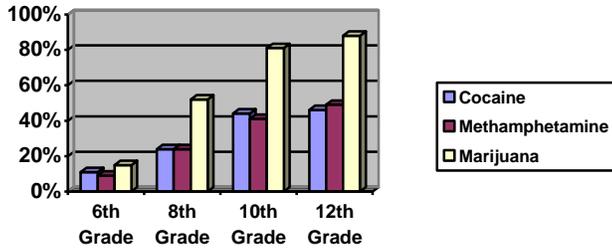
Persons in treatment for cocaine are highly likely (roughly 70% of cocaine admissions nationally) to report abuse of other substances. The most commonly reported secondary substances are alcohol, followed by marijuana¹⁰⁸.

Treatment data in Idaho reveals that in 2004, 58% of cocaine admissions were male (42% female). The majority of cocaine treatment admissions (55%) were between the ages of 25-44 at the time of admission¹⁰⁸.

Consumption

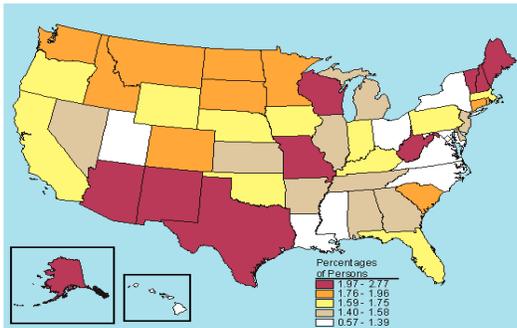
However, a substantial amount of Idaho high school students report that cocaine is “fairly” or “very easy” to get⁹⁸.

Percent of Idaho Students Who Answered "Fairly Easy" or "Very Easy" When Asked "How Difficult Would It Be For You To Get The Following Drugs?"⁹⁸



Despite an overall low prevalence of cocaine use among students, Idaho is actually above the national average (and among the top third highest ranked states) for past year cocaine use among youths aged 12-17 (Idaho 1.85%, U.S. 1.69%)⁹⁹.

Cocaine Use in Past Year among Youths Aged 12 to 17, by State: Percentages, Annual Averages Based on 2003-04 NSDUHs (Red=High, White=Low)⁹⁹



Consequences

Crime

It has been widely held that a need to support a drug habit results in higher rate of crime among drug users. However, research on arrestees found that the correlation between cocaine use and crime was highly variable depending on the city being studied. This research found that in general cocaine use rates were not significantly correlated to either property crime rates nor violent crime rates and that social-economic conditions (quality of life for the underclass) correlated to both¹⁰⁹.

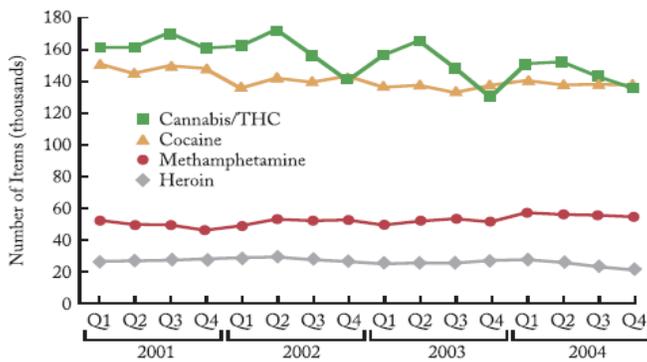
Heroin

Consumption

Heroin users, particularly injectors, are historically one of the most stigmatized groups of drug users. This has resulted in heroin users being the most hidden, and difficult to estimate, drug using population¹¹⁰.

Drug seizure data reveals that heroin use is less prevalent nationally than marijuana, cocaine, and methamphetamine¹¹¹. However, worldwide heroin production has recently seen dramatic increases¹¹².

National estimates for the top four drugs by quarter, 2001–2004.



Idaho is located in close proximity to one of the largest heroin drug markets in the Western U.S. (Seattle, WA). In Portland (OR), heroin also continues to be one of the primary illegal drugs of choice¹¹³.

Regionally, heroin purity levels range in the high single-digits to mid-teens with bulk amounts* being as high as 70 percent pure. Purity levels for bulk shipments of heroin in Boise range from 50-63%. Boise is a known distribution point to other Northwestern areas, although it is uncertain as to precisely where it is being distributed¹¹³

Heroin Use Patterns

Research indicates that there are differences between heroin injectors and heroin inhalers. Inhalers tend to be younger, less likely to be homeless, and less likely to be involved with the legal system. Injectors tended to use heroin more consistently than inhalers¹¹⁴.

Consequences

Morbidity and Mortality

In response to an outbreak of overdoses and deaths in 2006, SAMHSA released a nationwide alert warning of the introduction of a potentially deadly combination of heroin and fentanyl (a narcotic 50-80 times more powerful than morphine) across the country¹²¹.

Sharing drug paraphernalia, puts heroin injection drug users (IDUs) at elevated risk to infections such as HIV, hepatitis B, C and a variety of blood-borne viruses¹²².

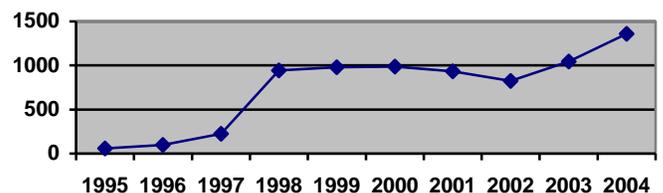
In 2000, there were 42,156 new cases of AIDS reported in the US. Of these new cases, 11,635 (28%) were associated with injection drug use¹²³.

Research suggests that heroin quality makes IDUs in the Western U.S. much less likely to contract HIV than heroin IDUs in the East. Black tar heroin, a gummy resin which causes syringes to clog (requiring frequent cleaning), is more common in the West while powdered heroin is common in the East. This cleaning likely removes HIV contaminated blood from the syringe¹²⁴.

Injection drug use is the major risk factor for hepatitis C (HCV) infection. Between 50%-80% of IDUs become infected within 5 years of injecting¹²⁵.

Approximately 60% of new HCV cases are attributable to injection drug use¹²⁶. Idaho HCV cases have sharply increased over the past decade to a rate of 97.5/100,000 in 2004¹²⁷. In contrast, New York State (excluding NYC) had an approximate rate of 71/100,000¹²⁸.

Number of Hepatitis C Cases Reported in Idaho¹²⁷



Consumption

Increasing levels of heroin purity allow the drug to be more readily snorted, attracting new users that once feared the stigma of injection drug use¹¹⁵.

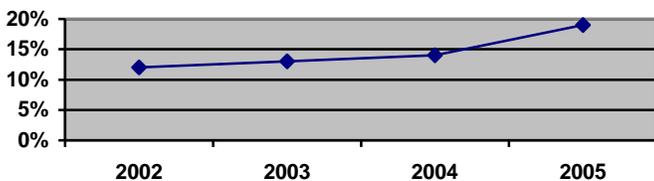
Another form of heroin inhalation is known as “chasing the dragon” where heroin is placed on aluminum foil and heated from below. Inhalation of fumes from heated aluminum is associated with nerve disorders¹¹⁶.

Adult Prevalence

A 2004 national survey found that 3.1 million Americans aged 12 or older (1.3% of the population) have used heroin in their lifetime and 398,000 (0.2%) used heroin in the last year¹¹⁷. Idaho figures closely mirrors this trend with 12,000 persons reporting lifetime heroin use (1%) and 1,000 (.1%) reporting use in the past year¹¹⁷.

In Idaho, the percentage of persons (aged 14 or older) reporting injection drug use when receiving publicly funded HIV tests has increased from 12% in 2002 to 19% in 2005¹¹⁸. This appears to be slightly above percentages found in other HIV testing databases¹¹⁹.

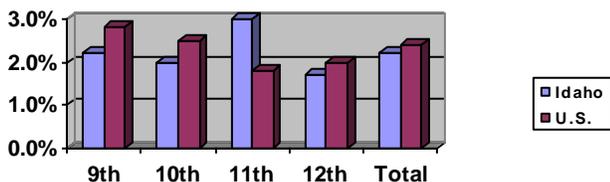
Percent of HIV Tests with Self-Reported Injection Drug Use, Idaho 2002-05¹¹⁸



Student Prevalence

Nationally, 2.4% of students grade 9-12 (versus 2.2% of Idaho students) have used heroin in their lifetime¹²⁰.

Student Lifetime Heroin Use



Consequences

Drug-related arrests

In the U.S., trafficking involved approximately 97.8% of federal heroin-related charges¹²⁹. In 2005, 66% of Idaho heroin arrests were for possession. The majority of these arrests (58%) have been in Ada county. The 2nd highest is Kootenai county (7%). Apart from these two counties, heroin-arrests are relatively infrequent. Arrestees are overwhelmingly male (70%) and non-Hispanic (75%)¹³⁰.

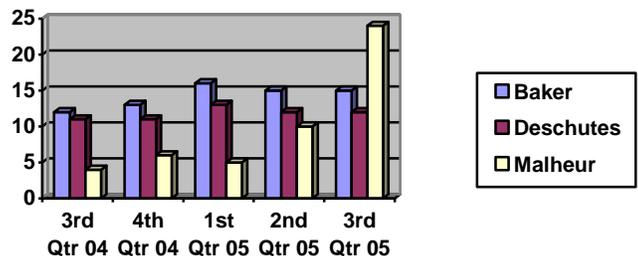
Treatment

In Idaho, those seeking treatment for heroin abuse (69) comprise 1% of total admissions (6497). The age group 21-25 made up 43.5 % of heroin admissions¹³¹. Those seeking treatment for heroin are overwhelmingly from Eastern Idaho (over 50% from Regions 6 and 7)¹³².

Numbers of heroin treatment admissions likely do not accurately reflect the scope heroin use in Idaho, as there are no public or private registrants in the state who can legally dispense methadone (the primary method of heroin treatment) to treat opioid addiction¹³³.

Further adding to the lack of understanding regarding the use of heroin in Idaho is that Idaho heroin users may be seeking treatment outside of the state¹³⁴. Clients treated for heroin abuse have remained steady in bordering Malheur County (OR) yet in the Third Quarter of 2005, 24 people were treated. This spike in treatment numbers coincides with the takedown of a Boise heroin investigation in the First Quarter of 2005. Oregon officials have not seen much, if any heroin in that region and it is unlikely that the population of those counties would include such a large number of heroin addicts¹¹³.

Heroin Treatment Cases in Central and Eastern Oregon



Inhalants

Consumption

Demographically, those who use inhalants are 3.3% more likely to be from a household that makes \$80,000/yr. than is the general population. Whites are significantly more at risk for inhalant abuse, and surprisingly, females are slightly more at risk than are males¹³⁵.

Types of inhalants and their use (2002-2004); Percentages¹³⁵

- 30.3% Glue, shoe polish, or toluene
- 24.9% Gasoline or lighter fluid
- 24.9% Nitrous oxide or "whippets"
- 23.4% Spray paint
- 18.4% Correction fluid, degreaser, or cleaning fluid
- 18.0% Other aerosol sprays
- 14.7% Amyl nitrite, "poppers," locker room deodorizers, or "rush"
- 11.7% Lacquer thinner or other paint solvents
- 9.4% Lighter gasses, such as butane or propane
- 3.4% Halothane, ether, or other anesthetics

Nitrites

Originally used medically to treat angina¹³⁶, later formulations of nitrites ("poppers") became popular among homosexual men as a sex drug. Today, nitrite products are marketed to both hetero and homosexual youth. These products are sold via the internet as "liquid incense" and "video head cleaner"¹³⁷. Product names include Rush¹³⁸ and are sold for \$5-\$25 per bottle.



Consequences

Inhalants make up a broad group of volatile solvents, gases, or nitrites that are inhaled for the purpose of producing a mind-altering effect. Most inhalants are inexpensive, legal to use, and simple to conceal.

Teenagers assume that inhalants pose no harmful or addictive effects. In fact, inhalants trigger the same neurotransmitter (dopamine) as does cocaine, heroin, and methamphetamine¹⁴⁷. Long term toxic effects include damage to heart, lungs, liver, kidneys, and brain¹⁴⁸.

Adolescent inhalant use has been associated with the abuse of multiple illicit drugs, delinquency, depression, suicide, and antisocial personality disorder¹⁴⁹. However, research on the precise role of inhalant use with these behaviors is on-going¹⁵⁰.

Nitrites

The effect of nitrite inhalation is similar to the function of nitroglycerine taken by heart patients. The chemical, which has been used as a jet propellant and in the formulation of fuels, dilates blood vessels when inhaled. The rapid opening of blood vessels results in a drop in blood pressure, creating a euphoric light-headedness followed by headache.

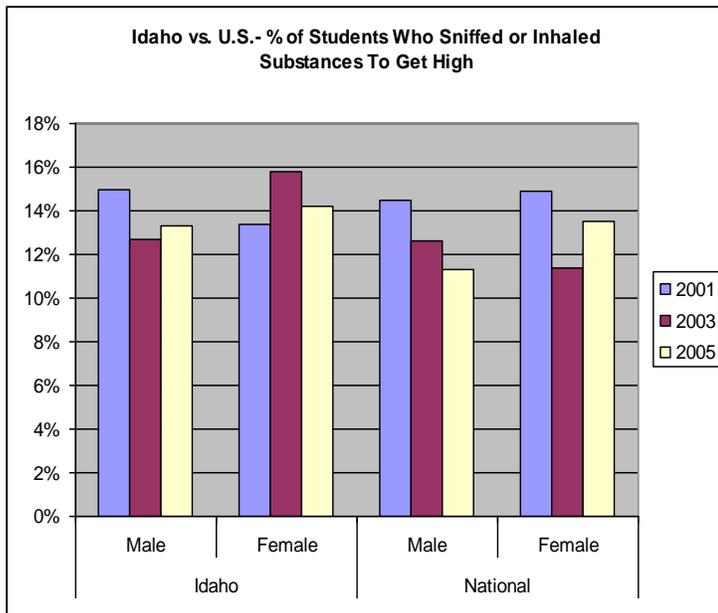
Isobutyl nitrite used in the above products has been found to cause cell mutations. Toxicology reports found evidence that isobutyl nitrite exposure caused several kinds of lung cancers, abnormal lung enlargement, and tumors on the thyroid gland. Isobutyl nitrate was also associated with the destruction of mucous membranes in the nose causing the sense of smell to fail¹⁵¹.

The occupational exposure limit for isobutyl nitrite is 1 ppm (parts per million), meaning a person should not be exposed for an instant to anything above 1 ppm. However, those who use nitrites generally expose themselves to doses that exceed 1500 ppm¹⁵².

Consumption

Student Prevalence

The rate of students (grades 9-12) in Idaho who have inhaled paint/sprays or sniffed glue to get high one or more times in their life was 13.8% in 2005, compared to 12.4% nationally¹³⁹.



Inhalants are more popular among younger students with use peaking somewhere between the 7th and 9th grade¹⁴⁰. Inhalants were the most commonly used drugs among sixth graders, according to the 2004 Idaho Substance Use, Safety and School Climate Survey (SUSSC)¹⁴¹.

The figures representing inhalant abuse in Idaho vary depending on the source. Generally, data retrieved from the Idaho SUSSC found that inhalant abuse is less* than that found in the Youth Risk Behavior Surveillance (YRBS) survey¹⁴².

Healthy People 2010's goal is to reduce past year inhalant use among adolescent (12-17) to .7%. However, since neither YRBS nor the Idaho SUSSC measure past year inhalant use it is nearly impossible to know how close Idaho is to reaching this goal¹⁴³.

Consequences

Data Gaps

Inhalant use is difficult to assess, in part because of varying conceptions of what is an inhalant. Fredlund¹⁵³ found that 24% of the 7th graders he studied acknowledged that they had "sniffed" or "huffed" various substances on a list. However, when the same students were later asked about their "inhalant use," half denied using inhalants.

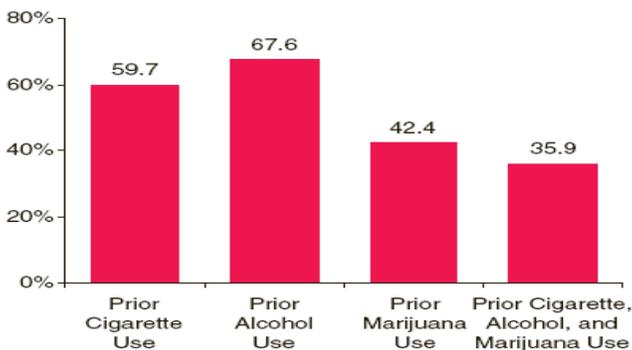
Deaths due to inhalants are assumed to be underreported (due to lack of specialized training among medical examiners/coroners and availability of specific testing), however to what degree is unknown¹⁵⁴. The National Inhalant Prevention Coalition is able to document from 100 to 125 inhalant deaths annually¹⁵⁵. The Rocky Mountain Poison & Drug Center reported only three deaths due to inhalants in Idaho, from 2000-2006¹⁵⁶. Researchers in other states have reported rates ranging from 3 to 14 inhalant deaths per year¹⁵⁷. Nationwide, gasoline (45%), air fresheners (26%) and propane/butane (11%) are responsible for most of the volatile substance use cases reported to US Poison Centers¹⁵⁸.

Consumption

Native Americans as a group are often perceived to have high rates of inhalant use, however research indicates that usage has fallen considerably since the late 80s¹⁴⁴. While actual numbers vary, most research indicates that Native American usage resides somewhere between that of the White and Hispanic populations¹⁴⁵.

Students using inhalants are both more likely to use other substances than the general adolescent population and to use other substances prior to starting inhalant use¹⁴⁶.

Percentage of Recent Inhalant Initiates Aged 12 to 17 Reporting Cigarette, Alcohol, and Marijuana Use Prior to Their Initiating Inhalant Use, 2002, 2003, & 2004¹⁴³



* AEDS uses an estimate of average ethanol content in the alcoholic beverages to convert the gallons of sold or shipped beer, wine, and spirits into gallons of ethanol (pure alcohol) before calculating per capita consumption estimates. The ethanol conversion coefficients (ECC, i.e., proportion of pure alcohol for each beverage type) are 0.045 for beer, 0.129 for wine, and 0.411 for spirits. <http://pubs.niaaa.nih.gov/publications/surveillance73/CONS03.htm>

¹ Alcohol Epidemiologic Data System. Lakins, N.E.; Williams, G.D.; Yi, H.; and Hilton, M.E. Surveillance Report #73: Apparent Per Capita Alcohol Consumption: National, State, and Regional Trends, 1970–2003. Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism, Division of Epidemiology and Prevention Research (August 2005). Alcohol Epidemiologic Data System. Nephew, T.M., Yi, H., Williams, G.D., Stinson, F.S., and Dufour, M.C. U.S. Alcohol Epidemiologic Data Reference Manual, Vol. 1, 4th ed. U.S. Apparent Consumption of Alcoholic Beverages Based on State Sales, Taxation, or Receipt Data. Washington, DC: NIAAA. NIH Publication No. 04-5563 (June 2004). <http://www.niaaa.nih.gov/Resources/DatabaseResources/QuickFacts/AlcoholSales/consum03.htm>

² Idaho National Survey on Drug Use and Health, 2004. <http://www.oas.samhsa.gov/2k4State/AppB.htm#TabB.16>

³ Idaho Behavioral Risk Factor Surveillance System, 2004.

⁴ Idaho National Survey on Drug Use and Health, Table 26 based on annual averages 2003-04, and Nationally Table 2.54B <http://oas.samhsa.gov/nsduh/2k4nsduh/2k4tabs/Sect2peTabs1to57.htm#tab2.54b>.

⁵ Idaho Behavioral Risk Factor Surveillance System, 2004.

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- ⁶ Levy, D.T., Miller, T.R., & Cox, K.C. (2003). Underage drinking: societal costs and seller profits. Working Paper. Calverton, MD: PIRE. , and Miller, T., Levy, D.T., Spicer, R.S., Taylor, D.M. (2006). Societal Costs of Underage Drinking. *Journal of Studies on Alcohol*. 67(4):519-528. http://www.iaaonline.org/pdf/ID_Underage.pdf
- ⁷ Idaho National Survey on Drug Use and Health, 2004. Table 26.
- ⁸ Idaho Youth Risk Behavior Surveillance, 2005. National Youth Risk Behavior Surveillance, 2005.
- ⁹ Idaho National Survey on Drug Use and Health, 2004. <http://oas.samhsa.gov/2k4State/AppB.htm#TabB.10>
- ¹⁰ Idaho Youth Risk Behavior Surveillance, 2005. National Youth Risk Behavior Surveillance, 2005.
- ¹¹ Idaho Dept. of Health & Welfare, Bureau of Health Policy and Vital Statistics. 1993-98 data from Idaho Vital Statistics Health District Report (June '03). As per this report, Idaho '93-95 and '96-98 data have been revised using the Modified ICD-9 codes and comparability ratios, U.S. 1994 and 1997 data have also been modified by comparability ratios. All rates are age-adjusted.
- [†] Years of Potential Life Lost is a measure of total life lost within a population because of premature death. It is calculated by subtracting the age of death of each decedent from 75 and summarizing the differences.
- ¹² 2004 Idaho Vital Statistics
- ¹³ 2003 National Center for Health Statistics Web-based Injury Statistics Query and Reporting System-CDC. <http://webappa.cdc.gov/cgi-bin/broker.exe> Rates are age-adjusted.
- ¹⁴ 2001 Relative Risk and Alcohol-Attributable Fractions Data Set, US-CDC (National Center for Chronic Disease Prevention and Health Promotion)- Idaho Profile <http://apps.nccd.cdc.gov/ARDI/Report.aspx?T=RelRiskAAF&R=c22869f8-a1d3-48a8-8095-9142c6de5baf>
- ¹⁵ Fatality Analysis Reporting System (FARS)- National Highway Traffic Safety Administration, 2004 <http://www-fars.nhtsa.dot.gov/finalreport.cfm?title=States&stateid=0&year=2004&title2=Alcohol>, for graph see <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/RNotes/2006/810556/pages/810%20556.pdf>
- ¹⁶ Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS) Based on administrative data reported by States to TEDS through July 10, 2006. <http://www.dasis.samhsa.gov/webt/quicklink/ID04.htm>
- ¹⁷ Idaho National Survey on Drug Use and Health, 2004. <http://www.oas.samhsa.gov/2k4state/pdf/AppC.pdf>
- ¹⁸ http://www.fbi.gov/ucr/cius_04/offenses_reported/violent_crime/murder.html
- ¹⁹ Suspected Alcohol or Drug Related Crimes 1998-2004. Idaho State Police, and Bureau of Justice Statistics, Sourcebook of Criminal Justice Statistics. Arrests for Alcohol Related Offenses, Table 4.28.2003. <http://www.albany.edu/sourcebook/pdf/t4282003.pdf>
- ²⁰ 2005 Idaho State Tax Commission Annual Report, pp. 7
- ²¹ <http://www.alcoholcostcalculator.org/business/>
- ²² Pacific Institute for Research and Evaluation- State Underage Drinking Cost Fact Sheets, 2004 <http://www.niaaa.nih.gov/Resources/DatabaseResources/QuickFacts/AlcoholSales/consum03.htm>
- ²³ Idaho Dept. of Transportation, <http://itd.idaho.gov/ohs/2005data/05impaired.pdf>
- ²⁴ Idaho Department of Health and Welfare
- ²⁵ National Forensic Laboratory Information System, 2004
- ²⁶ DEA Idaho Factsheet 2006
- ²⁷ 2004 Idaho Substance Use, Safety, and School Climate Survey
- ²⁸ Idaho Youth Risk Behavior Surveillance, 2005
- [¥] Adult prevalence data consists of both 12-17 year olds and individuals 18 and older as this is the available data collected from the National Survey on Drug Use and Health (NSDUH).
- ²⁹ Source: NSDUH, Type of Illicit Drug Use in Lifetime, Past Year, Past Month 2002-2004. Table 6.13B <http://www.oas.samhsa.gov/2k5States/statePE.doc> , Table 13.4 Alcohol Use in Past Month, Binge Alcohol Use in Past Month, and Perceptions of Great Risk of Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week in Idaho among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs, Table 13.8 Alcohol Dependence or Abuse in Past Year, Any Illicit Drug Dependence or Abuse in Past Year, and Dependence on or Abuse of Any Illicit Drug or Alcohol in Past Year in Idaho among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs <http://oas.samhsa.gov/substate2k6/word/Idaho.doc>
- ³⁰ National Institute of Drug Abuse (NIDA), NIDA Info Facts- Methamphetamine, May 2005
- [†] All offenders who were in possession of drugs or drug equipment fall into the 'drug-related' arrest category, this category does not include alcohol-related violations.
- ³¹ Idaho State Police Drug Related Arrests, 2004
- ³² Analysis based on arrestee data from 1998-2005 from Idaho Statistical Analysis Center, Idaho State Police. 98% of population reporting for years prior to 2004, 99% of population reporting in 2005.
- ³³ Personal communication with Melinda O'Malley Keckler, Public Relations Officer- Idaho Dept. of Correction.
- ³⁴ Supplied by Janeena Wing, Idaho Statistical Analysis Center, Idaho State Police.
- * Ancillary treatment services include primary pediatric care and medical care for women, gender specific treatment interventions (ex., relating to relationship, parenting, abuse issues), interventions for children (ex., relating to abuse, neglect), and case management and transportation services for women and children.

⁸ Based on analysis of FY06 Dept. of Health and Welfare data. As measured by unit of service billed. One unit equals 15 minutes of billable time.

³⁵ Idaho Department of Health and Welfare FY2006

³⁶ Idaho Department of Health and Welfare Facts/Figures/Trends 05-06

³⁷ Idaho State Drug Related Arrests, 2004 and Idaho Dept. of Health and Welfare Facts/Figures/Trends 04-05, and 05-06.

³⁸ Idaho Clandestine Drug Laboratory Cleanup Senate Act and Rules, Idaho Dept. of Health and Welfare- Bureau of Community and Environmental Health.

³⁹ Based on # of seized labs (21) x avg. cleanup cost (\$9,000)= \$189,000

⁴⁰ 2004 National Report, National Survey of Drug Use and Health (NSDUH)

⁴¹ Type of Illicit Drug Use in Lifetime, Past Year, Past Month 2002-2004.

Table 6.13A <http://www.oas.samhsa.gov/2k5States/statePE.doc>

⁴² Drug Enforcement Administration (DEA) Fourth Quarter Fiscal Year 2005 Report, Seattle Field Division.

⁴³ Table C2. Marijuana Use in Past Month, Average Annual Rate of First Use of Marijuana, and Perceptions of Great Risk of Smoking Marijuana Once a Month among Persons Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs <http://oas.samhsa.gov/subState2k6/MJ.htm>

⁴⁴ Office of National Drug Control Policy, October 2002 Report- Table 3.

* Numbers of past month use for Idaho students differ substantially between the 2004 Idaho Substance Use, Safety, and School-Climate Survey and 2004 National Survey of Drug Use and Health www.oas.samhsa.gov/2k4state/Idaho.htm , Table 26

⁴⁵ 2004 Idaho Substance Use, Safety, and School Climate Survey, 2004 National Survey of Drug Use and Health www.oas.samhsa.gov/2k4state/Idaho.htm , Table 26, and Table SP12.1AB (prepared by special request, Office of Applied Studies).

⁴⁶ 2004 Idaho Substance Use, Safety, and School Climate Survey

⁴⁷ 2005 Youth Risk Behavior Survey (YRBS) <http://apps.nccd.cdc.gov/yrbss/SelHealthTopic.asp?Loc=ID>

⁴⁸ Using averages from 1999, 2000, & 2001 NSDUHs compared to averages from 2002, 2003, & 2004

<http://oas.samhsa.gov/substate/tabs/id.htm> and <http://oas.samhsa.gov/substate2k6/word/idaho.doc>

⁴⁹ National Institute of Drug Abuse (NIDA), 2005, www.drugabuse.gov/pdf/rrmarijuana.pdf

⁵⁰ Roth, M. D., Marques-Magallanes, J. A., Yuan, M., Sun, W., Tashkin, D. P., & Hankinson, O. (2001). Induction and regulation of the carcinogen-metabolizing enzyme CYP1A1 by marijuana smoke and delta 9-tetrahydrocannabinol. *American Journal of Respiratory Cell and Molecular Biology*, 24, 339-334.

⁵¹ Hashibe, M., Morgenstern, H., Cui, Y., Tashkin, D. P., Zhang, Z. F., Cozen, W., Mack, T. M., & Greenland, S. (2006). Marijuana use and the risk of lung and upper aerodigestive tract cancers: Results of a population-based case-control study. *Cancer Epidemiology, and Biomarkers Prevention*, 15, 1829-1834.

⁵² NIDA, 2005, www.drugabuse.gov/pdf/rrmarijuana.pdf

⁵³ NIDA, 2003, http://137.187.56.161/NIDA_notes/nnvol18n4/twins.html

⁵⁴ NIDA, 2005, www.drugabuse.gov/pdf/rrmarijuana.pdf

⁵⁵ Zickler, Patrick "Twin Study Links Marijuana Abuse, Suicide, and Depression", NIDA Notes, (NIDA, 2005, http://drugabuse.gov/NIDA_notes/NNvol20N2/Twin.html)

⁵⁶ Idaho Drug-related arrests: 1998 - 2004

⁵⁷ Facts/Figures/Trends 2005-2006, Idaho Department of Health & Welfare

⁵⁸ **Based** on analysis of admission data from Idaho Dept. of Health and Welfare

⁵⁹ SAMHSA Family Guide (n. d.). Marijuana potency has increased over time.

<http://www.family.samhsa.gov/set/marijuana.aspx>

⁶⁰ Emergency Department Trends from the Drug Abuse Warning Network. Final Estimates 1995-2002.

⁶¹ Drug Abuse Warning Network (DAWN) 2004: National Estimates of Drug-Related Emergency Department Visits.

⁶² A Retrospective Analysis of Drug Abuse Data/Information Reported by the Community Epidemiology Work Group (CEWG), National Institutes of Drug Abuse.

* Current adult smoking is defined as the % of persons 18 and older who report smoking 100 or more cigarettes in their lifetime and now smoke cigarettes either every day or on some days

⁶³ 2005 Behavioral Risk Factor Surveillance System, Idaho and U.S. data

⁶⁴ 2004 BRFSS CDC, <http://www.dce.gov/mmwr/preview/mmwrhtml/mm5444a3.htm>

⁶⁵ Idaho BRFSS, 2005

[∇] Healthy People is a national set of health objectives issued every ten years

[◊] Current smokeless tobacco use is defined as using one or more times in the past 30 days

⁶⁶ 2006 Idaho Health and Safety Assessment

⁶⁷ 2004 National Survey on Drug Use and Health (NSDUH),

<http://oas.samhsa.gov/NSDUH/2k4nsduh/2k4tabs/Sect2peTabsIto57.htm#tab2.41b> . Numbers were calculated based on weighted averages of respondents 18+ years old.

⁶⁸ 2004 NSDUH, NSDUH <http://www.oas.samhsa.gov/subState2k6/word/idaho.doc>

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- ⁶⁹ Idaho BRFS, 2005, <http://www.healthandwelfare.idaho.gov/DesktopModules/DocumentsSortable/DocumentsSrtView.aspx?tabID=0&ItemID=4128&Mid=10759&wversion=Staging>
- ⁷⁰ Youth Risk Behavior Survey (YRBS) 2005, Idaho and U.S., <http://www.cdc.gov/mmwr/PDF/SS/SS5505.pdf>
- ⁷¹ Idaho YRBS 2005
- ⁶ Retailer violation rates (retailers who sold to minor's during checks by the Department of Health and Welfare) have remained under 15% since 2002.
- ⁸ Tax exempt cigarettes include cigarettes sold on an Indian reservation, a military commissary, and in a transaction between wholesalers.
- ⁷² The U.S. census estimates Idaho's 2005 population at 1,429,096, <http://quickfacts.census.gov/qfd/states/16000.html>
- ⁷³ Nationally, 378 billion cigarettes (or 18.9 billion packs) were consumed in 2005 (CDC, 2006, http://www.cdc.gov/tobacco/factsheets/EconomicsTobaccoProduction_factsheet.htm). Calculations based on a 2005 population of 296.4 million (US Census Bureau, <http://www.census.gov/Press-Release/www/releases/archives/population/006142.html>)
- ⁷⁴ http://www2.state.id.us/phd6/services_Provided/hp/tobacco_education/smoking.htm
- ⁷⁵ NIDA, Tobacco Addiction Research Report, <http://www.nida.nih.gov/ResearchReports/Nicotine/Nicotine.html>
- ⁷⁶ Zickler, NIDA Notes, http://drugabuse.gov/NIDA_notes/NNvol20N3/Study.html
- [¥] "Illicit drug use" does not include alcohol use
- ⁷⁷ 2005 NSDUH
- ⁷⁸ 2004 Idaho Vital Statistics report
- ⁷⁹ National Centers for Chronic Disease and Prevention, CDC <http://www.cdc.gov/nccdphp/publications/aag/osh.htm>
- ⁸⁰ Division of Cancer Prevention and Control, CDC <http://www.cdc.gov/cancer/CancerBurden/id.htm>
- ⁸¹ 2006 Idaho Health and Safety Assessment
- ⁸² Lung Disease. JAMA 2003 290(17):2362
- ⁸³ 2004 Idaho Vital Stats, and Idaho Dept. of Health and Welfare, Bureau of Health Policy and Vital Statistics 2006 www.atf.treas.gov/press/fy05press/field/081705sea_contraband_cigarettes.htm
- ⁸⁴ www.atf.treas.gov/press/fy05press/field/081705sea_contraband_cigarettes.htm
- ^Ω Smoking-attributable health care expenditures are defined as the excess personal health care costs of smokers and former smokers compared to those residents who have never smoked. Includes ambulatory, hospital, nursing home, prescription drugs, and 'other' (including home health, nonprescription drugs, and nondurable medical products) expenditures.
- ⁸⁵ Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) program- CDC National Center for Chronic Disease Prevention and Health Promotion
- [†] Defined as the present value of foregone future earnings (PVFE) from paid labor and of foregone future imputed earnings from unpaid household work
- ⁸⁶ Smoking Attributable Morbidity, Mortality and Economic Costs, note-productivity losses are average annual totals, among adults 35 years and older, and do not include burn or secondhand smoke deaths. <http://apps.nccd.cdc.gov/sammec/login.asp>
- ⁸⁷ Idaho State Tax Commission 2005 Annual Report
- ⁸⁸ As reported by Project Filter staff, Idaho Department of Health and Welfare
- ⁸⁹ National Survey of Drug Use and Health (NSDUH), 2004 <http://www.oas.samhsa.gov/subState2k6/cocaine.htm#CM>
- ⁹⁰ DEA 4th Quarter 05, Quarterly Trends in Traffic
- ⁹¹ 2002 data, the 2005 SAMHSA DASIS Report
- ⁹² SAMHSA TEDS, 2004 (<http://www.oas.samhsa.gov/2k5/crackTX/crackTX.pdf>)
- ⁹³ NSDUH 2004, Table 6.13A
- * SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, and 2005. Table SP16.1A Past Year Initiation of Cocaine among Persons Aged 12 or Older Residing in Idaho: Number in Thousands, Percentages, and Standard Errors of Numbers in Thousands and Percentages, Annual Averages Based on 2002-2005
- ⁹⁴ SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004, and 2005. Table SP16.2B Mean Age at First Use and Standard Error of Mean Age at First Use among Past Year Initiates of Cocaine Aged 12 or Older Residing in Idaho: Annual Averages Based on 2002-2005, 2005 NSDUH for U.S. average age.
- ⁹⁵ NSDUH 2004, <http://oas.samhsa.gov/substate2k6/word/Idaho.doc>
- ⁹⁶ 2005 Idaho Youth Risk Behavior Survey (YRBS)
- ⁹⁷ YRBS 2005 (<http://www.cdc.gov/mmwr/PDF/SS/SS5505.pdf>)
- ⁹⁸ 2004 Idaho Substance Use, Safety and School Climate Survey
- ⁹⁹ NSDUH 2004, Figure 2.25 *Cocaine Use in Past Year among Youths Aged 12 to 17*, by State: Percentages, Annual Averages Based on 2003 and 2004 NSDUHs

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- ¹⁰⁰ SAMHSA NCADI, <http://www.health.org/govpubs/rpo926>
- ¹⁰¹ CDC's Morbidity and Mortality Weekly Report <http://www.cdc.gov/mmwr/preview/mmwrhtml/00001101.htm>
- ¹⁰² Cocaine and the heart. M Egred and G K Davis Postgraduate Medical Journal 2005;81:568-571
- ¹⁰³ http://www.isp.state.id.us/pgr/Research/documents/drugtrends2005_001.pdf
- ¹⁰⁴ Drug-Related Arrests 1998-2004, Idaho State Police (ISP)
- ¹⁰⁵ Based on arrestee data from 1998-2005, data supplied by Idaho Statistical Analysis Center, Idaho State Police. 98% of population reporting for years prior to 2004, 99% of population reporting in 2005.
- ¹⁰⁶ Drug Arrests and Violent Crime Trends, ISP, 2004
- ¹⁰⁷ 2005 DASIS Report <http://oas.samhsa.gov/2k5/CocaineTX/CocaineTX.pdf>
- ¹⁰⁸ SAMHSA TEDS, 2004
- ¹⁰⁹ Martin, S.E., Maxwell, C.D., White, H.R., & Zhang, Y. (2004). Trends in alcohol use, cocaine use, and crime: 1989-1998. *Journal of Drug Issues*, 34, 333-359.
- ¹¹⁰ Friedman, S. et al. 2004 Estimating numbers of injecting drug users in metropolitan areas for structural analyses of community vulnerability and for assessing relative degrees of service provision for injecting drug users. *Journal of Urban Health*. 81(3):377-400.
- ¹¹¹ National Forensic Laboratory Information System, 2004 Report
- ¹¹² Office of National Drug Control Policy, <http://www.whitehousedrugpolicy.gov/drugfact/heroin/index.html>
- ¹¹³ DEA 4th Quarter 05, Quarterly Trends in Traffic
- * Bulk shipments are subsequently "cut" (diluted with other ingredients) and distributed for individual sale.
- ¹¹⁴ Maxwell, J.C., Bohman, T. M., & Spence, R. T. (2004). Differences in characteristics of heroin inhalers and heroin injectors at admission to treatment: A preliminary study using a large data base of client records. *Substance Use & Misuse*, 36, 993-1012. Inhalers are younger (31 vs 36), homeless (39%), involved in criminal system (31%).
- ¹¹⁵ National Drug Intelligence Center, National Drug Threat Assessment, 2005
- ¹¹⁶ Keogh, Andrews, Spacey, Forkheim, and Graeb (2003)
<http://www.merck.com/mrkshared/mmanual/section14/chapter180/180a.jsp>
- ¹¹⁷ 2004 National Survey on Drug Use and Health (NSDUH)
- ¹¹⁸ Idaho HIV Counseling and Testing Data, Division of Health
- ¹¹⁹ HIV Counseling and Testing in Public Funded Sites, Annual Report 1997 and 1998, CDC. 2005 Texas Counseling and Testing Data is at approx. 15%, personal communication UTSW Medical Center.
- ¹²⁰ 2005 Youth Risk Behavioral Surveillance (YRBS) survey.
- ¹²¹ 2006 Press Release, <http://www.google.com/search?hl=en&q=fact+sheet%3A+heroin+fentanyl>
- ¹²² www. Drugstory.org
- ¹²³ CDC, 2002, <http://www.cdc.gov/hiv/resources/factsheets/idu.htm>
- ¹²⁴ Ciccarone, D. H., & Bourgois, P. (2003). Explaining the geographical variation of HIV among injection drug users in the United States. *Substance Use & Misuse*, 38, 2049-2063
- ¹²⁵ Viral Hepatitis and Injection Drug Users September 2002 http://www.cdc.gov/idu/hepatitis/viral_hep_drug_use.htm
- ¹²⁶ Centers for Disease Control and Prevention,
http://www.cdc.gov/ncidod/diseases/hepatitis/resource/PDFs/hiv_comm_planners.pdf
- ¹²⁷ 2006 Idaho Health and Safety Assessment prior to 1997 Idaho did not collect data on chronic or resolved Hepatitis C cases.
- ¹²⁸ Using 2004 data in the New York State 2005 Chronic Hepatitis C Profile
http://www.health.state.ny.us/diseases/communicable/hepatitis/docs/hbv_hepc_chronic_report_2005.pdf
- ¹²⁹ Office of National Drug Control Policy, <http://www.whitehousedrugpolicy.gov/drugfact/heroin/index.html>
- ¹³⁰ Based on arrestee data from 1998-2005, data supplied by Idaho Statistical Analysis Center, Idaho State Police. 98% of population reporting for years prior to 2004, 99% of population reporting in 2005.
- ¹³¹ 2004 Treatment Episode Data Set, SAMHSA
- ¹³² Based on FY 06 treatment data.
- ¹³³ Personal communication with Idaho State Board of Pharmacy. In the U.S., no physicians can prescribe methadone for opioid therapy but may dispense methadone for this purpose if federally approved. Idaho law has a higher standard than some other states in that only a practitioner or pharmacist, as opposed to a registered nurse, may dispense methadone.
- ¹³⁴ This is a choice made by heroin users individually since Idaho treatment centers, while currently unable to use methadone maintenance, can and do treat heroin addiction by other means.
- ¹³⁵ NHDUH, 2006, <http://www.oas.samhsa.gov/2k6/inhalants/inhalants.cfm>
- ¹³⁶ <http://www.medsafe.govt.nz/Profs/datasheet/a/Amylnitrateinh.htm>
- ¹³⁷ Product labels state; Note: All our nitrite based products are sold as as room odorants, liquid incense, liquid aromas, or video head cleaner only. Although research indicates it is generally safe to do so, we do not encourage the misuse of our products as poppers. We are not responsible for the media claims that liquid aromas or poppers are said to be

aphrodisiacs or sex drugs, and we do not endorse such claims. Our products do not contain amyl nitrite or butyl nitrite. They contain highly pure isobutyl nitrite, alkyl nitrites, cyclohexyl nitrite or hexyl nitrites only.

(<http://www.pwdbrands.com/product.php>)

¹³⁸ <http://www.pwdbrands.com/product.php>

¹³⁹ 2005 Youth Risk Behavioral Surveillance survey

¹⁴⁰ NIDA, Community Drug Alert Bulletin – Inhalants, 2005

¹⁴¹ 2004 Idaho Substance Use, Safety, and School Climate Survey

* By about 5 percentage points

¹⁴² 2004 Idaho Substance Abuse and School Climate Survey,

<http://www.sde.state.id.us/safe/publications/survey2004.asp>

¹⁴³ The NSDUH estimates past year inhalant use among Idahoans (12 or older) to .8%. However, this number is likely to be substantially higher among Idaho adolescents (12-17). (2004 NSDUH)

¹⁴⁴ Beauvais, F. B., Wayman, J. C., Jumper-Thurman, P., Plested, B., & Helm, H. (2002). Inhalant abuse among American Indian, Mexican American, and non-Latino white adolescents. *American Journal of Drug and Alcohol Abuse*, 28, 171-187.

¹⁴⁵ NSDUH 2004 www.oas.samhsa.gov/2k4/inhalants/inhalants.pdf

¹⁴⁶ NSDUH, 2004 & NSDUH, 2006, <http://www.oas.samhsa.gov/2k6/inhalants/inhalants.cfm>

¹⁴⁷ Riegel, A. C., Ali, S. F., Torinese, S., & French, E. D. (2002). Repeated exposure to the abused inhalant toluene alters levels of neurotransmitters and generates peroxynitrite in nigrostriatal and mesolimbic nuclei in rat. *Annals of the New York Academy of Sciences*, 1095, 543-551.

¹⁴⁸ Sherman, NIDA Notes, 2005, http://www.drugabuse.gov/NIDA_notes/NNvol19N5/Dopamine.html

¹⁴⁹ Wu, L. T., Pilowsky, D. J., & Schlenger, W. E. (2004). Inhalant abuse and dependence among adolescents in the United States. *Journal of American Academy of Child & Adolescent Psychiatry* 43, 1206-1214.

¹⁵⁰ Sakai, J.T., Mikulich-Gilbertson, S.K., & Crowley, T.J. (2006). Adolescent inhalant use among male patients in treatment for substance and behavior problems: Two-year outcome. *The American Journal of Drug and Alcohol Abuse*, 32, 29-40.

¹⁵¹ National Toxicology Program, 1996, <http://ntp-server.niehs.nih.gov/index.cfm?objectid=070A37EF-AD43-E81D-A97101E98A3FB614>

¹⁵² Kielbasa, W., & Fung, H. L. (2000). Relationship between steady-state pharmacokinetics and hemodynamic effects of inhaled isobutyl nitrite in conscious rats. *AAPS Pharmsci*, 2, article 11.

¹⁵³ Freedland 1992. Epidemiology of volatile solvent abuse; The Texas experience, in: Sharp, C. W., Beauvais, F. & Spence, R. (Eds) *Inhalant abuse: A volatile research agenda*, pp. 43-49, research monograph 129 (NIDA).

¹⁵⁴ National Inhalant Prevention Coalition (n.d.). Guidelines FOR MEDICAL EXAMINERS, CORONERS AND PATHOLOGISTS: DETERMINING INHALANT DEATHS. http://www.inhalants.org/final_medical.htm

¹⁵⁵ National Inhalant Prevention Coalition <http://www.inhalants.org/VPT.htm>

¹⁵⁶ Personal communications with Greg Bogdon, Rocky Mountain Poison and Drug Center

¹⁵⁷ Bowen, S. E., Daniel, J., & Balster, R. L. (1999). Deaths associated with inhalant abuse in Virginia from 1987 to 1996. *Drug and Alcohol Dependency*, 53, 239-245. Maxwell, J. C. (2001). Deaths related to the inhalation of volatile substances in Texas: 1988-1998. *American Journal of Drug and Alcohol Abuse*

¹⁵⁸ Spiller, H. A. (2004). Epidemiology of volatile substance abuse (VSA) cases reported to US poison centers. *The American Journal of Drug and Alcohol Abuse*, 30, 155-165.