

## Trends in drug abuse – Nationally and in Minnesota

**Prevalence, prevention, addiction,  
and treatment**

9/30/2010

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651-431-2457




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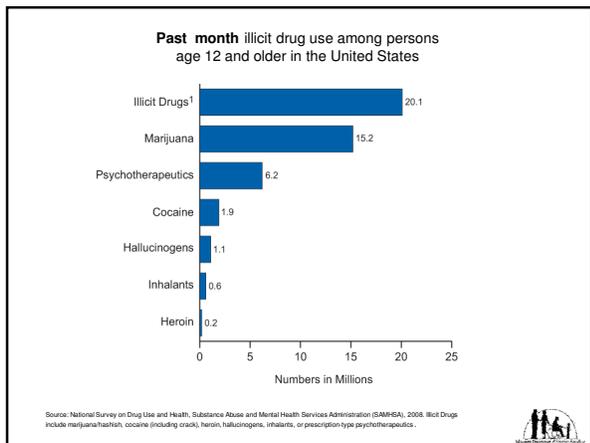
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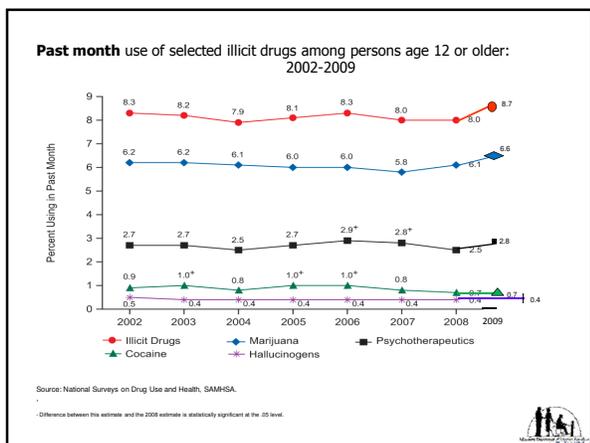
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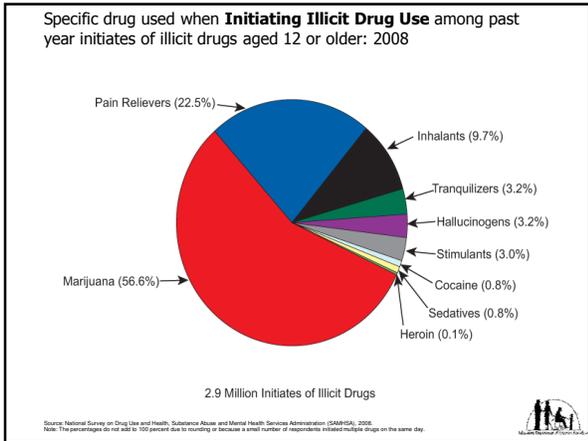
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**NEW in 2010**

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**Synthetic marijuana products**

- Cannabinoid compounds JWH-018 and JWH-073 are produced in a lab and sprayed on herbal mixtures
- Federally unregulated, but banned in a growing number of cities and states
- Marketed as "incense" and sold online and in "head shops"
- Use elevates heartbeat, blood pressure, some vomiting, seizures
- Over 1,300 adverse events nationwide in 2010 (through 9/18)
- 51 cases at Hennepin Regional Poison center in 2010 (through 9/18)

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### Duluth officials vote to ban synthetic marijuana August 31, 2010

Duluth, Minn. (AP) — The Duluth City Council on Monday night voted to ban the sale, purchase and possession of synthetic marijuana - a move that makes Duluth the first Minnesota city to outlaw the drug and could lead to a lawsuit from some local retailers.

### Fake pot, real danger

*Calls to poison-control centers have spiked with wider use of 'synthetic marijuana.' Some are moving to ban the substance.*

By Nick Ferraro  
at St. Paul Pioneer Press  
9/19/2010

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### Substance use: Minnesota compared with other states



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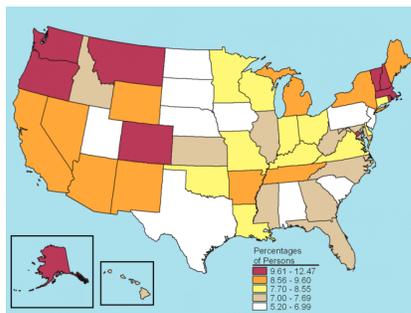
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Illicit Drug Use in Past Month among Persons Aged 12 or Older by State



Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006 and 2007. No differences across age groups



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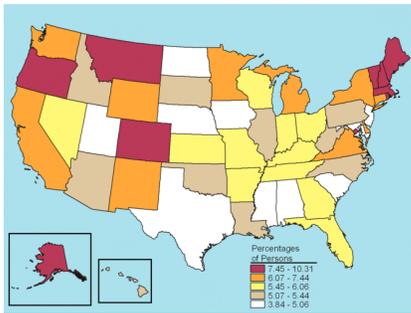
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Marijuana Use in Past Month among Persons Aged 12 or Older by State



Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006 and 2007.



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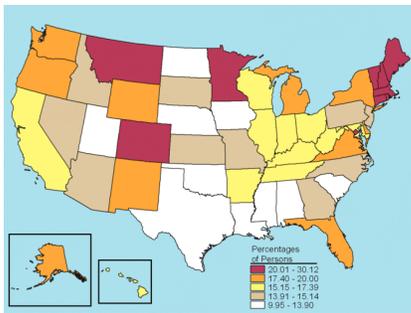
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Marijuana Use in Past Month among Persons Aged 18 -25 by State



Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006 and 2007.



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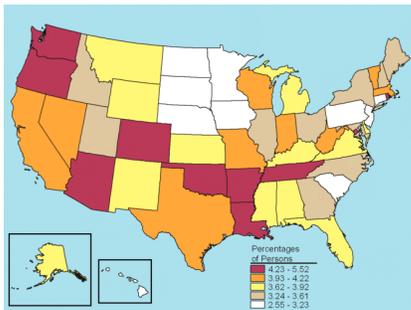
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Illicit Drug Use Other Than Marijuana in Past Month among Persons Aged 12 and Older by State



Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006 and 2007.



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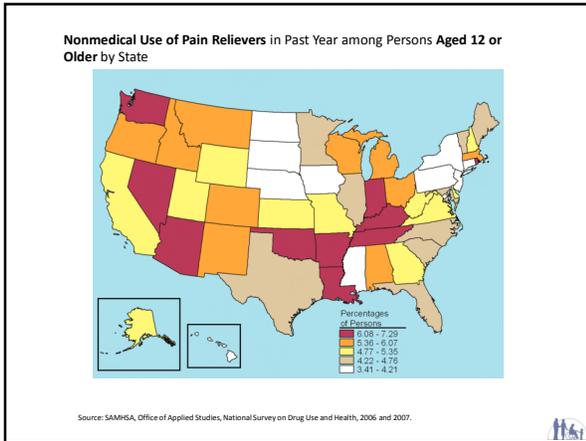
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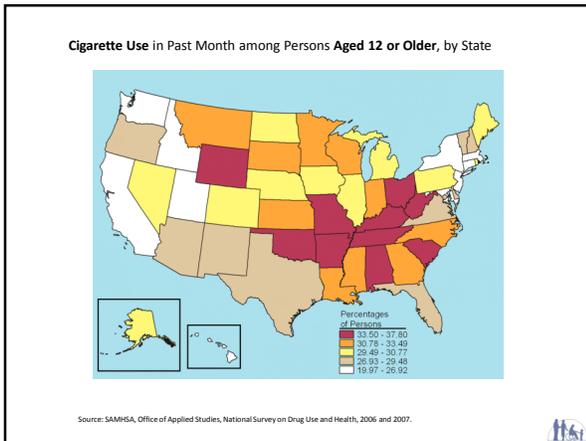
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**Substance use in Minnesota:**

**Illegal drugs** – lower than most states  
(except youth MJ)

**Alcohol** – higher than most states

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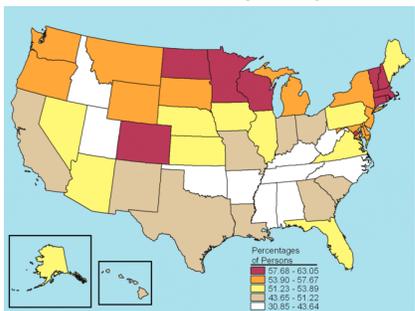
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**Alcohol** Use in Past Month among Persons Aged 12 or Older, by State



Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006 and 2007.



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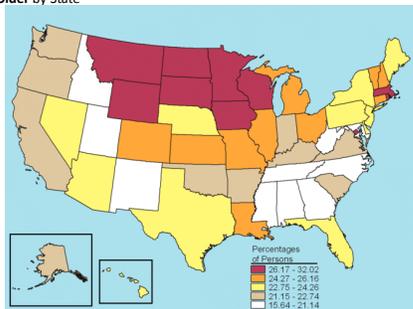
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**Binge Alcohol** Use in Past Month among Persons Aged 12 or Older by State



Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006 and 2007.



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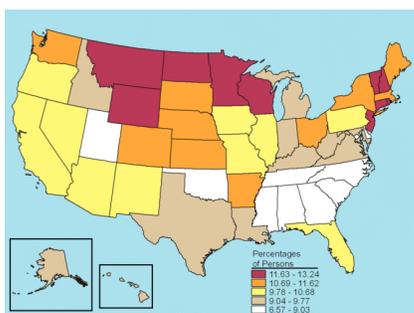
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**Binge Alcohol** Use in Past Month among Persons Aged 12 - 17 by State



Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006 and 2007.



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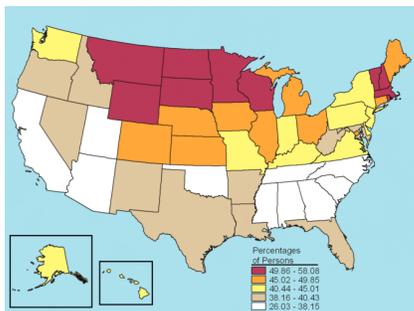
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**Binge Alcohol Use in Past Month among Persons Aged 18 - 25 by State**



Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006 and 2007.



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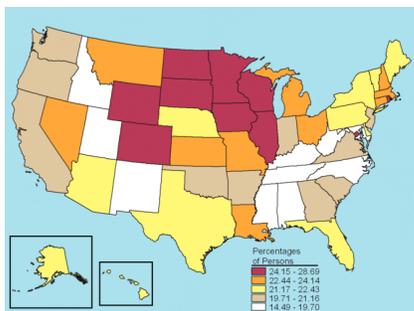
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**Binge Alcohol Use in Past Month among Persons Aged 26 and Older by State**



Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2006 and 2007.



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**Trends in Substance Use among  
Minnesota Youth  
1992 - 2007**

Source: Minnesota Student Surveys, 1992 - 2007



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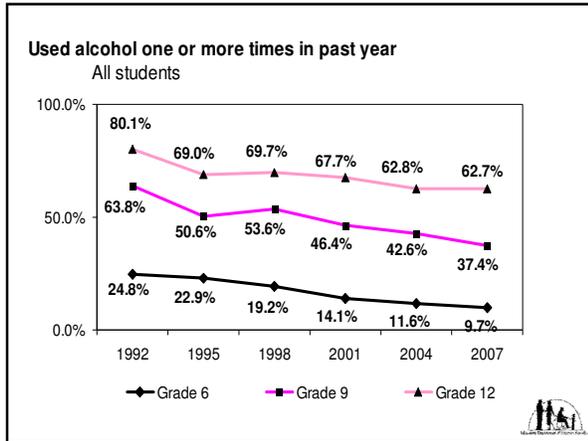
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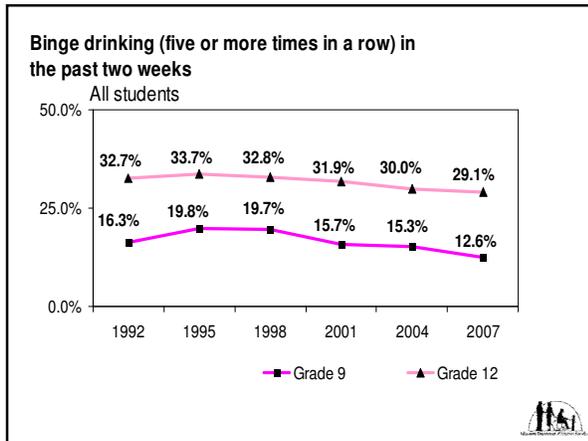
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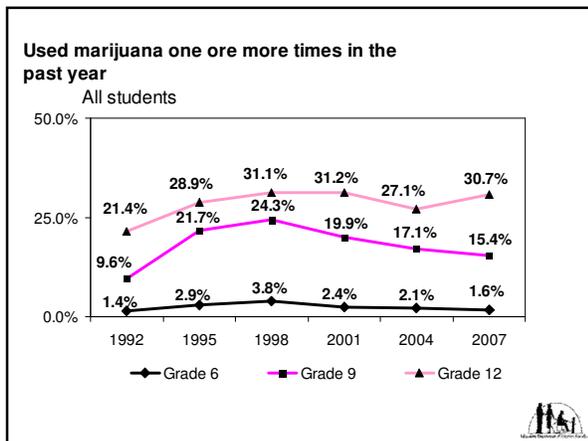
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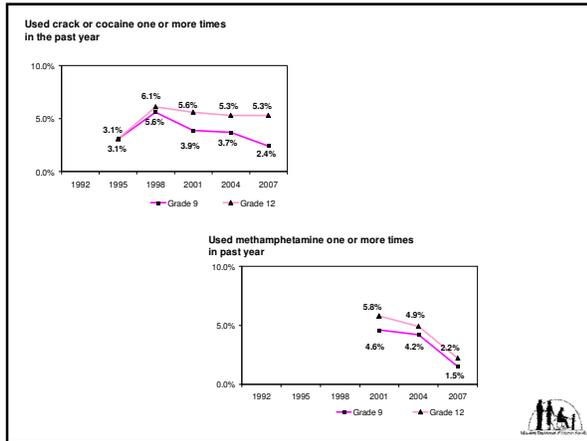
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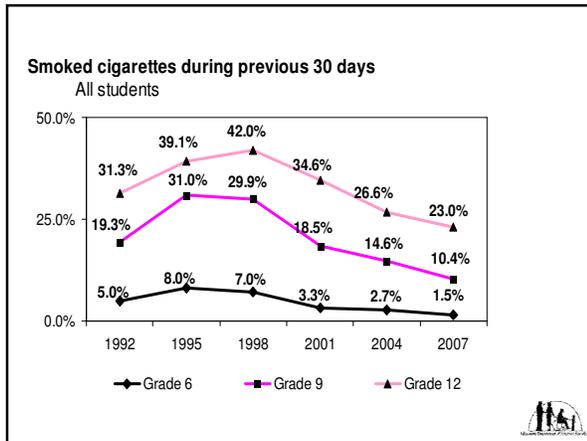
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**Substance use in Minnesota:**

**Illegal drugs** – lower than most states  
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## Why youth drinking matters

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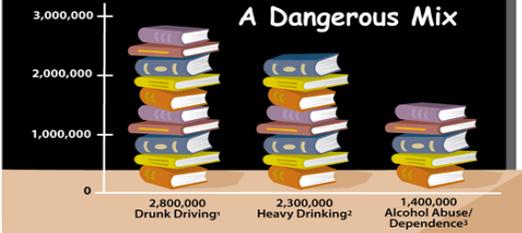
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### Alcohol and Your High School Grad— A Dangerous Mix



Notes:  
1) 2.8 million college students between the ages of 18 and 24 drove under the influence of alcohol last year (Source: Hingson RW, et al., 2005)  
2) 2.3 million youth ages 12 through 20 drank 5 or more drinks on an occasion, 5 or more times/month (Source: Substance Abuse and Mental Health Services Administration, 2008)  
3) 1.4 million youth ages 12 through 17 experienced alcohol abuse or dependence in the past year (Source: Substance Abuse and Mental Health Services Administration, 2008; U.S. Census Bureau, 2009)

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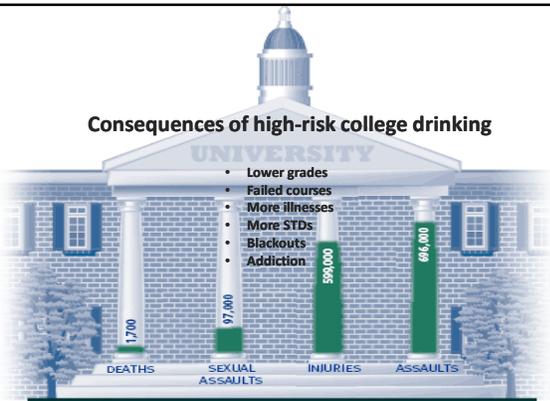
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### Consequences of high-risk college drinking



Source: Hingson, R. et al. Magnitude of Alcohol-Related Mortality and Morbidity Among U.S. College Students Ages 18-24: Changes from 1998 to 2001. Annual Review of Public Health, vol. 26, 259-79; 2005.

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**Injury** is the leading cause of death among young people in the U.S.

**Alcohol** is the leading contributor to injury deaths.

In the U.S., an estimated **5,000** individuals under age 21 die each year from injuries caused by underage drinking. These include:

- **Motor Vehicle Crashes:** 1,900 deaths
- **Homicides:** 1,600 deaths
- **Suicides:** 300 deaths

Source: NIAAA



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**National Longitudinal Epidemiological Study:**

**People who 1<sup>st</sup> drank before age 15**  
40% developed alcoholism

**People who 1<sup>st</sup> drank at age 21, 22**  
10% developed alcoholism

SOURCE: Bridget F. Grant, Ph.D., Ph.D., and Deborah A. Dawson, Ph.D., (1998) *Journal of Substance Abuse*. Based on the NIAAA-sponsored National Longitudinal Alcohol Epidemiologic Survey (NLAES), a national probability sample of nearly 43,000 interviews with field work conducted by the U.S. Census Bureau in 1992.



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**Drug Use and Crime**

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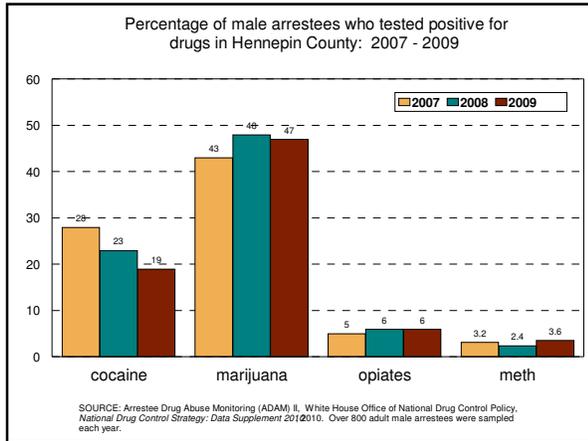
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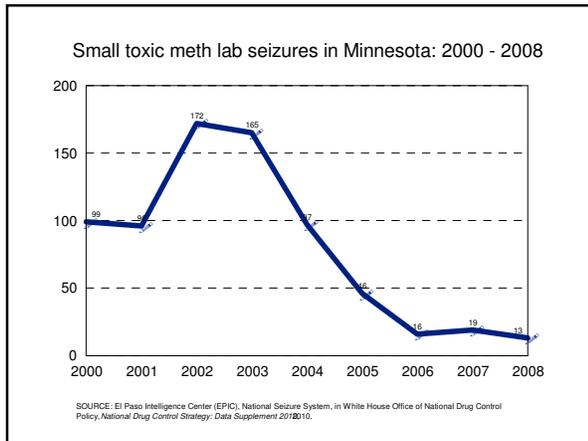
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**What is PREVENTION?**

The role of prevention is to create healthy communities in which people have quality of life.

SAMHSA – Substance Abuse and Mental Health Services Administration, US Dept of Health and Human Services, Center for Substance Abuse Prevention




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### National Prevention Platform:

- ^ Healthy environments in work and school
- ^ Supportive communities and neighborhoods
- ^ Connections with families and friends
- ^ Drug-free and crime-free



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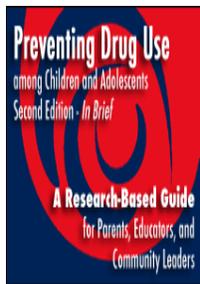
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*Preventing Drug Use: A Research-based Guide*

[www.drugabuse.gov](http://www.drugabuse.gov)



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### Effective prevention programs reduce risk factors

- ineffective parenting/chaotic home environment
- early onset of use
- lack of mutual attachments/nurturing
- inappropriate behavior in the classroom
- failure in school performance
- poor social coping skills
- affiliations with deviant peers
- perceptions of approval of drug-using behaviors in the school, peer, and community environments

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**Effective prevention programs enhance protective factors**

- strong family bonds
- parental monitoring
- parental involvement
- success in school performance
- prosocial institutions (e.g. such as family, school, and religious organizations)
- conventional norms about drug use

NIDA National Institute on Drug Abuse [www.drugabuse.gov](http://www.drugabuse.gov)

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**Effective prevention programs include interactive skills-based training**

- Resist drugs
- Strengthen personal commitments against drug use
- Increase social competency
- Reinforce attitudes against drug use

NIDA National Institute on Drug Abuse [www.drugabuse.gov](http://www.drugabuse.gov)

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**Effective prevention programs are family-focused**

- Provide greater impact than parent-only or child-only programs
- Include at each stage of development
- Involve effective parenting skills

NIDA National Institute on Drug Abuse [www.drugabuse.gov](http://www.drugabuse.gov)

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**Effective prevention programs involve communities and schools**

- Encourage media campaigns and policy changes
- Strengthen norms against drug use
- Address specific nature of local drug problem

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**Effective prevention programs are long-term**

- Prevention programs should be long-term with repeated interventions (i.e., booster programs) to reinforce the original prevention goals.
- Research shows that the benefits from middle school prevention programs diminish without follow-up programs in high school.

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**Effective prevention programs must target all forms of drug use and be culturally specific.**

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**Same message.**  
***Different* messengers.**

Schools, homes, communities



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**What about prevention  
in Minnesota?**



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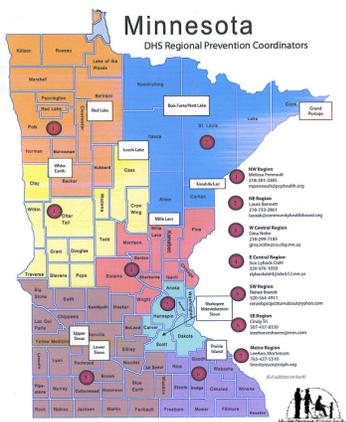
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**Regional  
Prevention  
Coordinators**



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## Minnesota's Web-based Indicators of Substance Abuse

*Substance Use in Minnesota*, an interactive web site devoted to alcohol, tobacco and other drug (ATOD) consumption and consequence statistics, includes over 70 indicators from ten state data sources.

This website provides one-stop-shopping for information that can be utilized by communities and prevention professionals for planning, monitoring, and evaluation.

[www.sumn.org](http://www.sumn.org)




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## Minnesota's Prevention Outcomes

### Due to the funds from the SAMHSA Block Grant:

- 1.2 million Minnesotans received primary prevention services through presentations, school-based curricula, public service announcements and other media.
- Community coalitions provided activities and environmental changes that affected over 3,083,813 individuals in Minnesota.
- 9,086 registered individuals participated in 7,015 recurring event activities, and 81,974 attended single events.
- Synar inspections of retail tobacco outlets found that 90 percent of tobacco retailers obeyed the law and did not sell tobacco to minors in Minnesota in 2009.




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## Minnesota's Prevention Outcomes

### Prevention Efforts Are Key to Reducing Underage Drinking:

Alcohol use shows an overall declining pattern among 12th graders in Minnesota, from 80.1 percent reporting any alcohol use during past year in 1992 to 62.7 percent in 2007, and for 9th graders from 63.8 percent in 1992 to 37.4 percent in 2007.

### Prevention Efforts Are Key to Reducing Underage Smoking:

Cigarette use among Minnesota students also continues a downward trend. The current (past 30 day) smoking rate among 12th graders dropped from 42.0 percent in 1998 to 23.0 percent in 2009. For 6th graders the rate dropped from 7 percent in 1998 to 1.5 percent in 2007 and among 9th graders from 29.9 percent in 1998 to 10.4 percent in 2007.



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### NEW in 2010:



### Strategic Prevention Framework/ State Incentive Grant (SPF-SIG)

Goal is to provide a SOLID FOUNDATION for DELIVERING and SUSTAINING effective prevention services

- Prevent the onset and reduce the progression of substance abuse, including childhood and underage drinking
- Reduce substance abuse-related problems in communities
- Build lasting prevention capacity at the State, Tribal, and community levels



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## What is addiction?



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Addiction is a chronic, relapsing brain disease characterized by compulsive drug seeking and use, despite harmful consequences associated with use.



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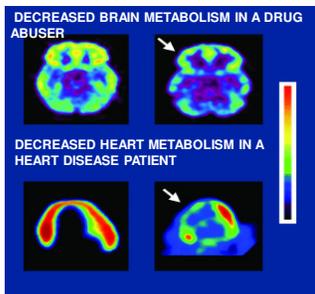
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Both addiction and heart disease disrupt the functioning of the underlying organ, have serious consequences, are treatable, and last a lifetime.



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### THE FAR-REACHING HEALTH IMPACT OF ADDICTION

- Cardiovascular disease
- Stroke
- Cancer
- HIV/AIDS
- Hepatitis B and C
- Lung disease
- Mental disorders



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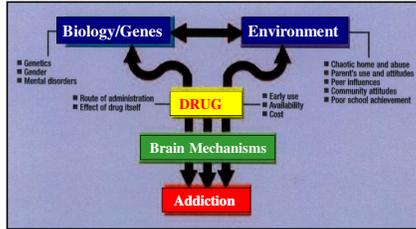
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### Why some people get addicted and others do not



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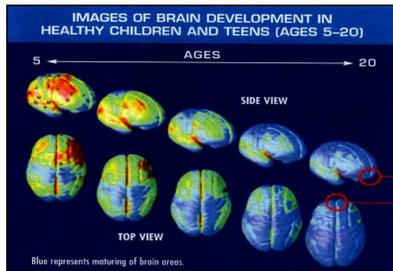
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### Why some people get addicted and others do not



**Prefrontal cortex:**

- Assess situations
- Make sound decisions
- Impulse control

The developing teenage brain heightens the risk of poor decision making such as initiating and continuing drug/alcohol abuse.



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### What about treatment of addiction?



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Not everyone  
who needs addiction  
treatment receives it





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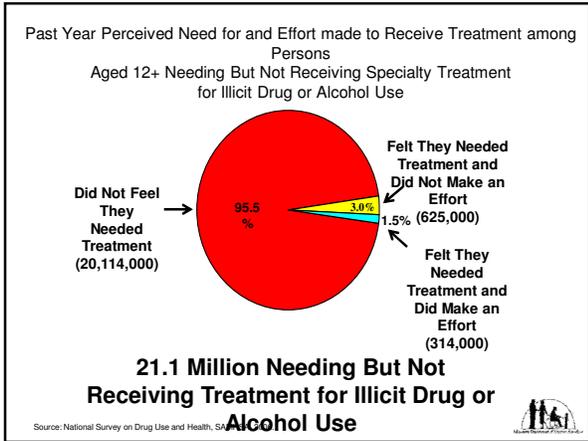
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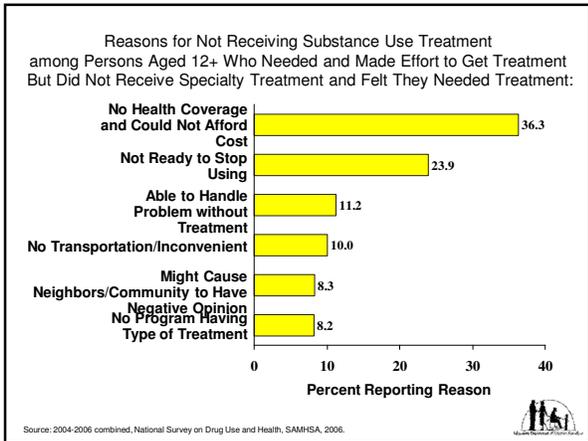
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**What is effective  
addiction treatment?**




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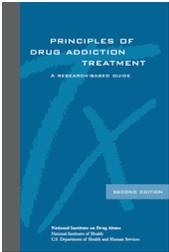
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*Principles of Drug  
Addiction Treatment: A  
Research-based Guide*

[www.drugabuse.gov](http://www.drugabuse.gov)

(NCADI publication BKD347).  
Copies of the booklet can be obtained from the National Clearinghouse for Alcohol and Drug  
Information, P.O. Box 2345, Rockville, MD 20847; 1-800-729-6886 or online at  
[www.drugabuse.gov](http://www.drugabuse.gov).




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**Is drug addiction treatment  
worth the cost?**

“Substance abuse costs our Nation over one half-trillion dollars annually, and treatment can help reduce these costs. Drug addiction treatment has been shown to reduce associated health and social costs by far more than the cost of the treatment itself.

. . . . .

According to several conservative estimates, every \$1 invested in addiction treatment programs yields a return of between \$4 and \$7 in reduced drug-related crime, criminal justice costs, and theft. When savings related to health care are included, total savings can exceed costs by a ratio of 12 to 1.”

Source: National Institute on Drug Abuse, Principles of Addiction Treatment, NCADI publication BKD347




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**Principles of addiction treatment**

- **No single treatment is appropriate for all individuals.** Matching treatment settings, interventions, and services to each patient's problems and needs is critical.
- **Treatment needs to be readily available.** Treatment applicants can be lost if treatment is not immediately available or readily accessible.
- **Effective treatment attends to multiple needs** of the individual, not just his or her drug use. Treatment must address the individual's drug use and associated medical, psychological, social, vocational, and legal problems.

Source: National Institute on Drug Abuse, Principles of Addiction Treatment, NCADI publication BKD347.




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**Principles of addiction treatment**

- **Treatment needs to be flexible and to provide ongoing assessments of patient needs, which may change during the course of treatment.**
- **Remaining in treatment for an adequate period of time is critical for treatment effectiveness.** The time depends on an individual's needs. For most patients, the threshold of significant improvement is reached at about 3 months in treatment. Additional treatment can produce further progress. Programs should include strategies to prevent patients from leaving treatment prematurely.
- **Individual and/or group counseling and other behavioral therapies are critical components of effective treatment for addiction.** In therapy, patients address motivation, build skills to resist drug use, replace drug-using activities with constructive and rewarding nondrug-using activities, and improve problem-solving abilities. Behavioral therapy also facilitates interpersonal relationships.

Source: National Institute on Drug Abuse, Principles of Addiction Treatment, NCADI publication BKD347.




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**Principles of addiction treatment**

- **Medications are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies.**  
 Methadone, Buprenorphine, and levo-alpha-acetylmethadol (LAAM) help persons addicted to opiates stabilize their lives and reduce their drug use. Naltrexone is effective for some opiate addicts and some patients with co-occurring alcohol dependence. Nicotine patches or gum, or an oral medication, such as bupropion, can help persons addicted to nicotine.
- **Addicted or drug-abusing individuals with coexisting mental disorders should have both disorders treated in an integrated way.**  
 Because these disorders often occur in the same individual, patients presenting for one condition should be assessed and treated for the other.
- **Medical detoxification is only the first stage of addiction treatment and by itself does little to change long-term drug use.**  
 Medical detoxification manages the acute physical symptoms of withdrawal.

Source: National Institute on Drug Abuse, Principles of Addiction Treatment, NCADI publication BKD347.




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### Principles of addiction treatment

- **Treatment does not need to be voluntary to be effective.** Sanctions or enticements in the family, employment setting, or criminal justice system can significantly increase treatment entry, retention, and success.
- **Possible drug use during treatment must be monitored continuously.** Monitoring a patient's drug and alcohol use during treatment, such as through urinalysis, can help the patient withstand urges to use drugs. Such monitoring also can provide early evidence of drug use so that treatment can be adjusted.
- **Treatment programs should provide assessment for HIV/AIDS, hepatitis B and C, tuberculosis and other infectious diseases, and counseling to help patients modify or change behaviors that place them or others at risk of infection.** Counseling can help patients avoid high-risk behavior and help people who are already infected manage their illness.

Source: National Institute on Drug Abuse, Principles of Addiction Treatment, NCADI publication BKD347.




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### Principles of addiction treatment

**Recovery from drug addiction can be a long-term process and frequently requires multiple episodes of treatment.**

As with other chronic illnesses, relapses to drug use can occur during or after successful treatment episodes. Participation in self-help support programs during and following treatment often helps maintain abstinence.

Source: National Institute on Drug Abuse, Principles of Addiction Treatment, NCADI publication BKD347.




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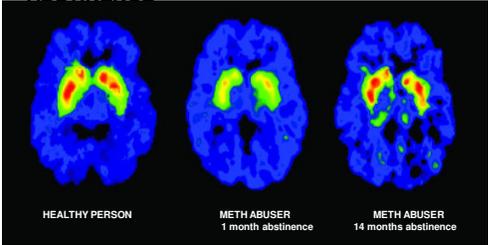
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### BRAIN RECOVERY WITH PROLONGED ABSTINENCE



HEALTHY PERSON      METH ABUSER      METH ABUSER  
1 month abstinence      14 months abstinence

Images of dopamine transporter show the potential of the brain to recover after abstinence

SOURCE: J Neurosci 21:9414-9418, 2001.




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**The outcomes of addiction treatment are comparable to the outcomes of other chronic diseases with behavioral components.**

Source: McLellan, T., et al., *Journal of the American Medical Association*, 284 (2000.)



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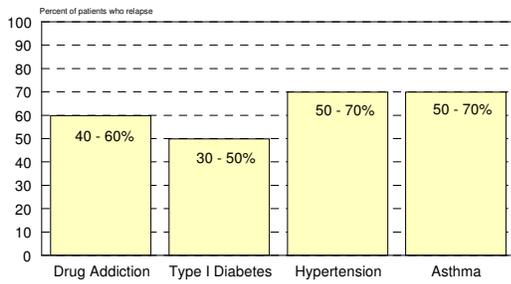
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Comparison of Relapse Rates Between Drug Addiction and Other Chronic Illnesses



Relapse rates for drug-addicted patients are compared with rates for those suffering from diabetes, hypertension and asthma. Relapse is common and similar across these illnesses (as is adherence to medication). Thus, drug addiction should be treated like any other chronic illness, with relapse serving as a trigger for renewed intervention.

SOURCE: McLellan et al, JAMA 284: 1698 - 1695, 2000.



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**What about addiction treatment in Minnesota?**

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### ADAD's Role in Supporting Recovery from Substance Use Problems & Disorders

- ADAD administers Substance Abuse Prevention and Treatment (SAPT) Federal Block grant dollars in the form of grants for recovery support, prevention, special populations
- ADAD encourages integration of addiction treatment with primary health care and mental health care services.
- ADAD partners with multiple organizations to reduce stigma and help advance addiction as a treatable chronic disease with behavioral components.



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### **NEW in 2010:**

#### **Screening, Evaluation and Treatment (SET)**

**Goal:** to provide integrate the identification, evaluation and treatment of substance abuse problems into mainstream primary health care settings.

#### **Recovery Community Centers**

**Goal:** to connect people seeking recovery with resources that help support it, such as treatment, housing, transportation, housing, job training, education, health or other pathways to recovery.

#### **Treatment rate reform**

**Goal:** to bring uniformity to rates that treatment providers receive from the CCDTF for providing treatment to public patients.



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