

MAINE OFFICE OF SUBSTANCE ABUSE  
COMMUNITY EPIDEMIOLOGY SURVEILLANCE NETWORK

# Substance Abuse Trends in Maine

April  
2009



*Office of Substance Abuse*  
*Department of Health and Human Services*

*John E. Baldacci, Governor*

*Brenda M. Harvey, Commissioner*

PRODUCED BY HORNBY ZELLER ASSOCIATES, INC.



# SUBSTANCE ABUSE TRENDS IN MAINE

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THIS REPORT IS PRODUCED FOR:  
MAINE OFFICE OF SUBSTANCE ABUSE  
COMMUNITY EPIDEMIOLOGY SURVEILLANCE NETWORK

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## Introduction and Background

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Organized by the State of Maine Office of Substance Abuse (OSA) within the Department of Health and Human Services and based on a national model from the National Institute on Drug Abuse (NIDA), the Community Epidemiology Surveillance Network (CESN) is a multi-agency work group that studies the spread, growth and development of substance use in Maine and its communities. The CESN aims to provide updated trend reports twice a year.

In addition to the CESN, OSA received funding from the federal Substance Abuse and Mental Health Services Administration (SAMHSA) to perform epidemiological work as part of the Strategic Prevention Framework State Incentive Grant (SPF SIG), currently in its fourth year. The idea behind SPF SIG is for state agencies to use the findings from public health research along with evidence-based prevention programs to build the capacity within states to implement and monitor substance abuse prevention strategies. Moreover, SPF SIG requires data-driven decision making. Pulling from multiple data sources, the State compiled Maine's SPF SIG Substance Abuse Epidemiological Profile in 2005 to examine substance use and consequence information. It is from this work that OSA identified its current SPF SIG-funded prevention priorities of underage drinking, high-risk drinking among 18-25 year olds, and misuse of prescription drugs among 18-25 year olds.

Both the CESN report and the State's epidemiological study draw data from similar sources, including: Behavior and Risk Factors Surveillance System (BRFSS); Fatality Analysis Reporting System (FARS); Juvenile Crime and Data Book; Incidence of Prohibited Behavior and Drug and Violence Prevention, Safe and Drug Free Schools (SDFS); Maine Drug Enforcement Agency (MDEA); Maine General Population Household Survey (MGP); Maine Youth Drug and Alcohol Survey (MYDAUS); National Center for Health Statistics (NCHS), Multiple Cause of Death Public Use Files (ODRVS); National Survey on Drug Use and Health (NSDUH); Prescription Monitoring Program (PMP); Northern New England Poison Center (NNEPC); Treatment Data System (TDS); Uniform Crime Reporting (UCR); Youth Risk Behavior Surveillance System (YRBSS), the state forensic laboratory, and key informants.

This report takes into account the primary objectives of CESN: to identify substance abuse patterns in defined geographical areas, establish substance abuse trends, detect emerging substances, and provide information for policy development and program planning. It also highlights all of the SPF SIG prevention priorities identified in the strategic plan: underage drinking, high-risk drinking among 18-25 year olds, misuse of prescription drugs among 18-25 year olds, marijuana use in 12-25 year olds, and slowing the spread of methamphetamine abuse; as well as showing the progress being made to address these priorities. Finally, this report shows how the use and abuse of substances in Maine compare to these same issues in the nation as a whole.

This report includes data available through December 2008 and, when possible, updates the October 2008 CESN report, which included data through June 2007. Older and unchanged data were included when more recent data was not available. Three major types of indicators are included: self-reported substance consumption, consequences of substance use, and factors contributing to substance use. In addition, interviews with key informants were conducted to examine different perspectives on current and emerging substance abuse trends across the state.

A detailed description of each source is provided in the Appendix, including retrieval and/or contact information.

### Organization of the Report

This report is used by a variety of people for many different reasons. Some need a snapshot of the current status of a particular substance, while others are looking for longer-term trends. Still others may be seeking information on a particular population. Sometimes these points of view do not require new data, but rather different comparisons or presentations. In order to accommodate these diverse needs, the newest edition of this report has been reorganized as follows:

- At the front of the report, the reader can find five one-page **Fact Sheets**. These easy-access pages contain information organized into the following topic areas: Alcohol Use, Marijuana Use, Prescription Drug Misuse, Alcohol and Drug Use Among Youth, and Alcohol and Drug Use Among Young Adults.
- The **Executive Summary** provides the reader with a brief overview of the larger report. It includes statistics and findings, but does not contain graphical illustrations, long-term trends or comparative findings.
- The **Full Report** presents the reader with more in-depth comparative and trend analyses and is broken into five major sections. The first section outlines the problem of substance abuse in Maine overall and provides context for the findings that are presented in subsequent sections. The second examines particular consumption trends and patterns among some of the most abused substances in order to gain a deeper understanding of those substances. The third section examines the consequences related to substance use, such as traffic accidents and poisonings. The fourth section outlines some of the factors that contribute to substance use overall, such as norms and perceptions. The final section contains recent trends in substance abuse treatment and hospital admissions.

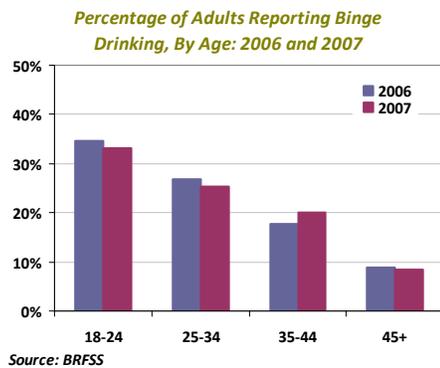
# CURRENT ALCOHOL USE IN MAINE

## Quick Facts:

- Fifty-seven percent of adults over the age of 18 have had at least one drink of alcohol within the past 30 days. Additionally, 6% of all adults drank heavily (more than one or two alcoholic drinks per day) and 16% binge drank within the past month (2007 BRFSS).
- At 11%, young adults ages 18-24 had the highest rate of *heavy drinking* compared to other age groups. This is higher than the national average of 8% (2007 BRFSS).
- Among students in grades 6 to 12, 25% used alcohol at least once within the past 30 days (2008 MYDAUS). This represents a 13% decrease since 2006.

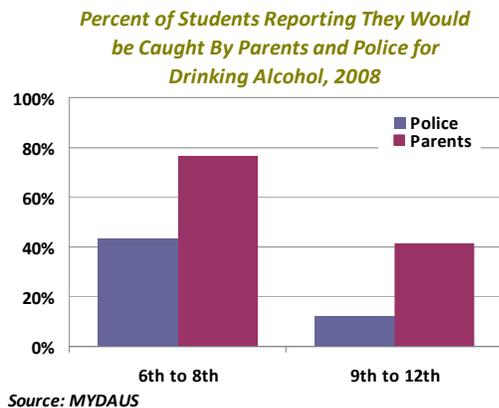
## Binge Drinking

Binge drinking means consuming five or more drinks during one sitting<sup>1</sup>. Eleven percent of high school students engaged in binge drinking within the past two weeks (2008 MYDAUS). At 33%, young adults ages 18-24 have the highest reported rate of binge drinking compared to any other age group in Maine, and higher than the national average of 27% (2007 BRFSS).



## Youth Perceptions about Alcohol

Almost 90% of Maine's middle and high school students say that their parents feel it is "wrong" or "very wrong" to drink alcohol. Students also think that regular alcohol use is harmful (77% of middle schoolers and 69% of high schoolers). Twenty-three percent think kids would be caught for drinking alcohol, but more students think they'll get caught by parents than by police.



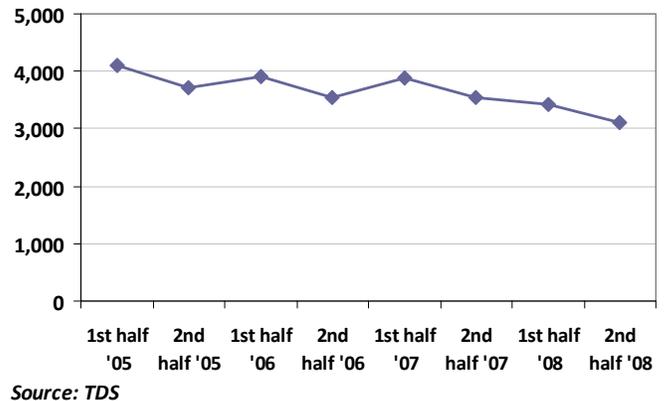
## Consequences Related to Alcohol Use

- Adult OUI arrests increased 6% between 2006 and 2007, although liquor law violations declined by 11%.
- After increasing for two years, juvenile liquor law violation arrests decreased by 12% between 2006 and 2007. Juvenile OUI arrests decreased by 50% (DPS).
- In 2006, 12% of pregnant women reported drinking some alcohol during the last three months of pregnancy (PRAMS).
- There were 76 fatalities from traffic accidents involving alcohol in 2007 (FARS).

## Treatment for Alcohol

Alcohol was the primary reason for almost half (48%) of all admissions to substance abuse treatment programs during the first half of 2008. Among persons entering treatment, 73% were adults over the age of 40 (TDS). Hospitals also reported 15,733 outpatient admissions primarily related to alcohol in 2006 (30% of all substance related admissions).

*Number of Primary Treatment Admissions for Alcohol: January 2005 to December 2008*



<sup>1</sup> In BRFSS, the definition of binge drinking differs for men (5 drinks) and women (4 drinks).

# CURRENT MARIJUANA USE IN MAINE

## Quick Facts:

- In 2007, 6% of adults over the age of 18 used marijuana within the past 30 days. Adult males were over four times more likely to use marijuana in the past 30-days than adult females (2007 BRFSS).
- At 13%, young adults ages 18-24 had the highest rate of using marijuana in the past 30 days compared to other age groups; this was closely followed by 25-34 year olds (12%) (2007 BRFSS).
- Among students in grades 6 to 12, 13% used marijuana at least once within the past 30 days, down from 17% in 2002 (2008 MYDAUS).

## Perceptions about Marijuana

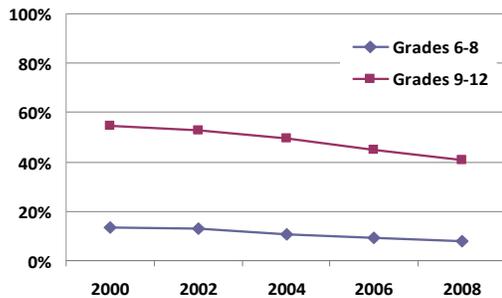
While high school students do not believe trying marijuana a couple of times poses a great risk (18%), they perceive regular use of marijuana as risky (45%). However,

41% believe marijuana is easy to obtain.

Among all youth, 70% did not think they would be caught by the police for smoking marijuana and 13% thought they would be seen as "cool" for smoking marijuana.

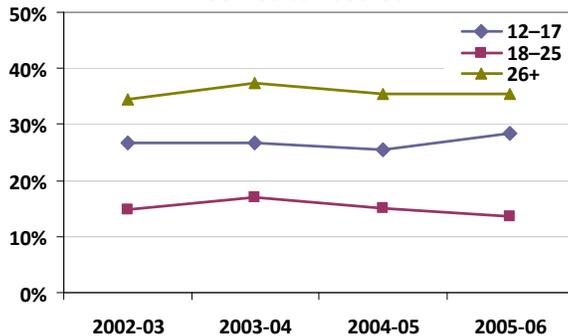
Among the adult population, 18-25 year olds are less likely to perceive great risk associated with smoking marijuana once per month (14%) compared to adults over age 26 (36%; 2005-06 NSDUH).

Perceived Access to Marijuana is "Very Easy", By Grade Groups: 2000 to 2008



Source: MYDAUS

Perceptions of Great Risk from Smoking Marijuana Once A Month, By Age Group: 2002-03 to 2005-06



Source: NSUDH

## Comparisons to National Trends

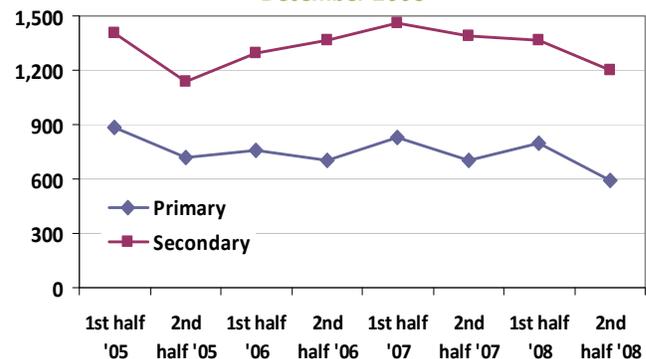
Marijuana makes up the majority of illicit drug use in Maine. Comparisons to national statistics show that Mainers have higher reported rates of using marijuana than the national average.

- In 2007, the rate of past 30-day use of marijuana among high school students in Maine was 22% compared to 20% nationally (2007 YRBSS).
- Among 18-25 year olds, 28% reported that they used marijuana in the past month, the second highest rate in the nation among this age group (the national average was 16%; 2005-06 NSDUH).

## Treatment for Marijuana

There continue to be more secondary treatment admissions for marijuana in the second half of 2008, and this is declining. Sixty-eight percent of persons admitted for marijuana as the primary substance were under the age of 29, and 52 percent of persons admitted for marijuana as the secondary substance were also under the age of 29.

Number of Primary and Secondary Treatment Admissions for Marijuana: January 2005 to December 2008



Source: TDS

# CURRENT PRESCRIPTION DRUG MISUSE IN MAINE

## Quick Facts:

- Among adults, 14% of young adults ages 18-25 have used pain relievers for non-medical purposes within the past year, compared to only 3% of adults age 26 and older (2005-06 NSDUH)
- Among students in grades 6 to 12, 11% had used prescription drugs for a reason other than their intended purpose at least once in their lifetime; 5% had misused prescription drugs in the past 30 days (2008 MYDAUS).
- Among older students (11<sup>th</sup> and 12<sup>th</sup> graders), nearly one in five students has misused prescription drugs at least once in their lifetime (2008 MYDAUS).
- Prescription narcotics comprised 26% of the total admissions to treatment in the second half of 2008, second only to alcohol (TDS).

## Access to Prescription Drugs

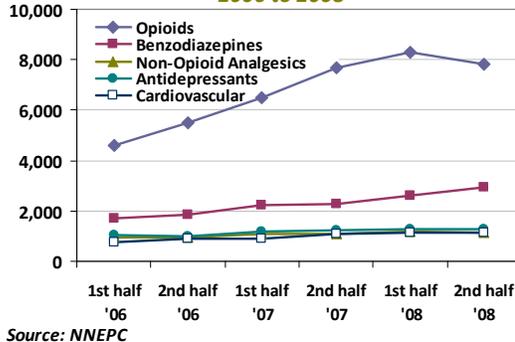
Maine's Prescription Monitoring Program (PMP) receives reports for Drug Classes C-II through C-IV. Between July and December 2008, 1,170,579 prescriptions were reported. Prescription narcotics consistently make up the bulk of prescriptions reported to the PMP, and accounted for more than 50% in the last half of 2008.

## Poisonings and Prescription Drugs

The Northern New England Poison Center has received nearly 42,000 medication verification calls in 2008, over 5,000 more than were received during the previous year. The types of drugs most often requested for identification in 2008 were opioids<sup>2</sup> and benzodiazepines.

In addition, the Poison Center receives reports of substance abuse-related exposures, cases in which a poisoning occurs. In the second half of 2008, opioids were mentioned most frequently in substance abuse-related exposures (50).

**Top 6 Substances Requested for Medication Verification by Non-Law Enforcement: 2006 to 2008**

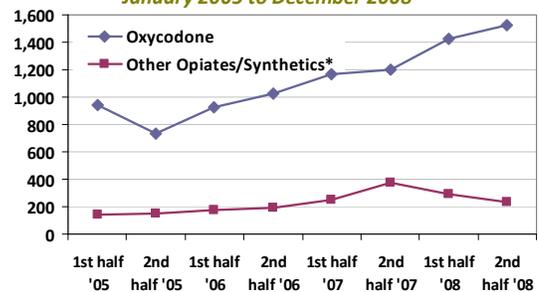


## Treatment for Prescription Drug Abuse

<sup>2</sup> For NNEPC the opioid category is not exclusive to prescription drugs. This differs from other data sources cited.

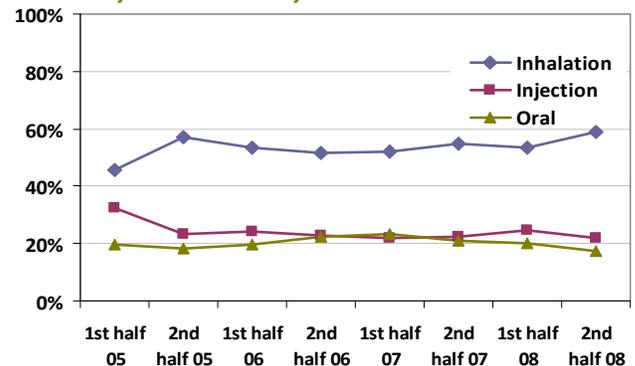
The number of treatment admissions related to opiate abuse (excluding heroin and morphine) has grown by 63 percent (677 admissions) in Maine since the first half of 2005. Admissions for oxycodone (which includes OxyContin<sup>®</sup>) specifically drives this trend.

**Number of Primary Treatment Admissions for Oxycodone and Other Opiates/Synthetics: January 2005 to December 2008**



According to treatment admissions data, users primarily inhale crushed pills, followed by injection and oral consumption. As a proportion of all admissions for oxycodone, inhalation as the route of administration appears to have increased.

**Primary Route of Administration for Oxycodone: January 2005 to December 2008**



# ALCOHOL AND DRUG USE AMONG YOUTH IN MAINE

## Quick Facts:

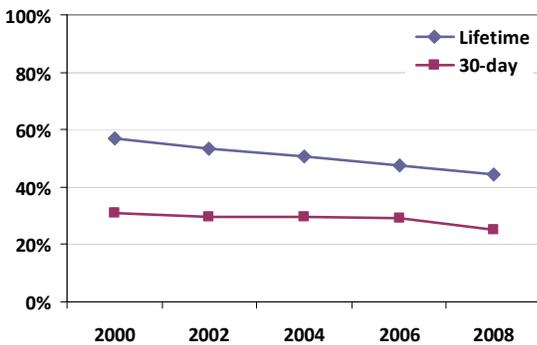
Among Maine's Youth (Grades 6 to 12):

- 25% have used alcohol in the past 30 days (44% have used it at least once in their lifetime).
- 13% have engaged in binge drinking within the past two weeks.
- 13% have smoked marijuana in the past 30 days (23% have used it at least once in their lifetime).
- 11% have used prescription drugs for a reason other than their intended purpose at least once in their lifetime (5% have used them in the past 30 days).
- 3.8% of students in grades 6 through 12 used cocaine in their lifetime, and 1.7% used it in the past 30 days.
- In 2008, 10.6% of students used inhalants at least once in their lifetime. Among 8<sup>th</sup> grade students, the rate of past 30-day use of inhalants was 5.5%.  
*(Source: 2008 MYDAUS)*

## Recent Declines in Alcohol Use

Between 2006 and 2008, those who had used alcohol within the past 30 days declined from 29% in 2006 to 25% in 2008. Lifetime use of alcohol has also declined, from 48% in 2006 to 44% in 2008. Similarly, 13% of students reported that they had engaged in binge drinking within the past two weeks, compared with 15% in 2006 (2008 MYDAUS).

Lifetime and Previous 30-day Use of Alcohol: 2000 to 2008



Source: MYDAUS

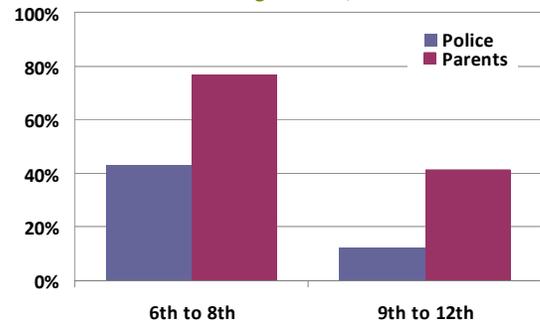
## Recent Declines in Drug Use

In terms of other drugs, the percent of students in grades 6 to 12 who report using marijuana within the last 30 days has declined, from 17% in 2002 to 13% in 2008. The rate of lifetime cocaine use is down also, from 4.5% in 2006 to 3.8% in 2008; this represents the first downward movement since 2000. Lifetime use of inhalants also decreased, from 12% in 2002 to 10.6% in 2008; past 30-day use among younger students, where use is more prevalent, also declined (2008 MYDAUS).

## Youth Perceptions

Almost 90% of Maine's middle and high school students say that their parents feel it is "wrong" or "very wrong" to drink alcohol. Students also think that regular alcohol use is harmful (77% of middle schoolers and 69% of high schoolers). Among high school students, fewer think regular use of marijuana is harmful (45%). Moreover, 41% of high school students believe marijuana is easy to obtain. Among all youth, 23% think kids would be caught for drinking alcohol, but more students think they will get caught by parents than by police. In addition, 70% did not think they would be caught by the police for smoking marijuana.

Percent of Students Reporting They Would be Caught By Parents and Police for Drinking Alcohol, 2008



Source: MYDAUS

## National Comparisons

A nationally comparative data source shows that Maine high school students have lower rates of past 30-day alcohol use than the national average (29% in Maine, compared with 48% nationally). However, it appears that Maine high school students have higher rates of past 30-day use of marijuana; 22% in Maine compared to 20% nationally (YRBSS 2007).

# ALCOHOL AND DRUG USE AMONG YOUNG ADULTS (18-25) IN MAINE

## Quick Facts:

- Among young adults age 18-24, 11% had heavy use of alcohol (more than one or two drinks per day) and 33% binge drank within the past month. These rates are higher than any other age group (2007 BRFSS).
- In 2007, 13% of 18-24 year olds used marijuana within the past month (2007 BRFSS).
- In 2006, 14% of young adults ages 18-25 used pain relievers for non-medical purposes within the past year (2005-06 NSDUH).
- Among 18-25 year olds, 8% used cocaine in the past year, higher than any other age group in Maine (2005-06 NSDUH).

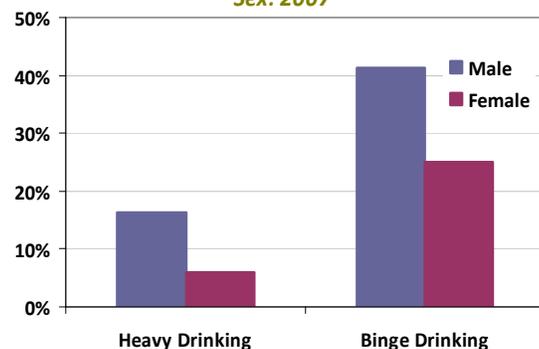
## Substance Use Incidence and Trends

The rate of heavy drinking among young adults in Maine is currently 11%, and has been steadily increasing since 2005. In addition, this is higher than the national average of 8%. At 33%, young adults have the highest rate of binge drinking compared to other Mainers and are higher than the national average of 27% (2007 BRFSS).

Young men are more likely to engage in high risk drinking behaviors than young women. In 2007, 16% of young men reported heavy drinking, and 41% reported binge drinking within the past month. Among young women, these rates were 6% and 25% respectively.

In 2007, 13% of 18-24 year olds used marijuana within the past month (2007 BRFSS) Older data from 2005-06 that can be compared to national trends show that young adults in Maine had the second highest rate of past month marijuana use in the nation (28%, compared to the national average of 16%). The same data source shows that young adults had the highest rates of prescription drug use (14%) and cocaine use (8%) compared to other adults in Maine (2005-06 NSDUH).

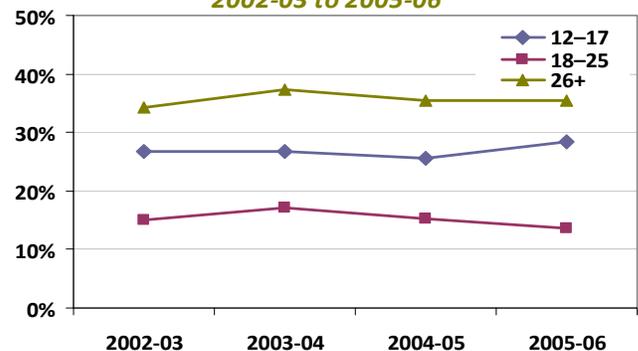
**Heavy Drinking and Binge Drinking In the Past Month Among 18-24 Year Olds, By Sex: 2007**



## Perceptions About Substance Use

Young adults ages 18-25 years old are less likely to perceive great risk associated with drinking five or more drinks once or twice per week (22%) compared to adults over age 26 (41%), and this has declined since 2003. Similarly, this same age group is less likely to see smoking marijuana once per month as risky (14%) compared to older adults (36%) and this has also declined since 2003 (2005-06 NSDUH). Note that fewer young adults perceive great risk from using marijuana compared to using alcohol.

**Perceptions of Great Risk from Smoking Marijuana Once A Month, By Age Group: 2002-03 to 2005-06**



## Treatment for Young Adults

Consumers ages 18-24 sought treatment for a wider array of substances than older adults. More than one-third (34%) were in treatment for use of prescription narcotics and another third were in treatment for alcohol (32%); 11% sought treatment for marijuana and 13% for heroin/morphine. In terms of treatment for marijuana, 68% of persons admitted for marijuana as the primary substance were under the age of 29, and 52% of persons admitted for marijuana as the secondary substance were also under the age of 29.



## Executive Summary

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This report takes into account the primary objectives of the Community Epidemiology Surveillance Network (CESN): to identify substance abuse patterns in defined geographical areas, establish substance abuse trends, detect emerging substances, and provide information for policy development and program planning. It also highlights the Strategic Prevention Framework State Incentive Grant (SPF SIG) prevention priorities of underage drinking, high-risk drinking among 18-25 year olds, and misuse of prescription drugs among 18-25 year olds. To address these areas, data were obtained from various sources. This report includes data available through December 2008 and updates a report produced by the CESN in November 2008.

Key findings of this report include:

### Consumption

#### *Alcohol*

- Alcohol is the most often used substance in Maine. Fifty-seven percent of adults over the age of 18 have had at least one drink of alcohol within the past 30 days. Additionally, six percent of adults reported heavy drinking (one or two alcoholic drinks per day) and 16 percent reported binge drinking<sup>3</sup> within the past month (2007 BRFSS).
- Compared to other adults in Maine, in 2007, young adults ages 18-24 had the highest rate of heavy use of alcohol (one or two drinks per day) at 11 percent. In addition, 33 percent of young adults binge drank within the past month, the highest rate among any age group in Maine, and higher than the national average of 27 percent (2007 BRFSS).
- Overall, men in Maine binge drank more often than women (22 percent compared with 10 percent). This becomes more pronounced among the 18-24 year old population, where 41 percent of young men binge drank compared with 24 percent of young women (2007 BRFSS).
- Among Maine's youth, drinking rates have declined. In 2008, 25 percent used alcohol within the past 30 days compared with 29 percent in 2006. Over the same period, binge drinking among Maine's students declined from 15 percent in 2006 to 13 percent in 2008. However, binge drinking rates increase dramatically between 11th and 12th grades (from 20% to 26%; 2008 MYDAUS). Among 12<sup>th</sup> graders, this was higher than the national average of 24 percent.
- Maine's young people are waiting longer to participate in drinking alcohol. The proportion of 11th and 12th grade students who drank alcohol before the age of 14 is steadily declining, from 28 percent in 2000 to 22 percent in 2008 (2008 MYDAUS).

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<sup>3</sup> Binge drinking is defined as five or more alcoholic drinks at one sitting for males and four or more for females.

### *Prescription Drugs*

- Eleven percent of students in grades 6-12 used prescription drugs for purposes other than their intended use at some point within their lifetime, and nearly 20 percent of students in grades 11 and 12 have misused prescription drugs (2008 MYDAUS).
- Fourteen percent of young adults ages 18-25 had used pain relievers for non-medical purposes within the past year, compared to only three percent of adults age 26 and older (2005-06 NSDUH).
- Prescription narcotics are frequently listed as the primary substance for which clients seek substance abuse treatment, accounting for 26 percent of all treatment admissions in the second half of 2008 (second only to alcohol; TDS).
- According to Maine law enforcement officials and a local needle exchange program, the illicit distribution of buprenorphine (Suboxone®), a drug used to manage opioid dependence, appears to be on the rise. Calls to the Northern New England Poison Control Center (NNEPCC) from the public with questions about buprenorphine have also increased, from 101 mentions in 2007 to 147 in 2008, an increase of 46 percent.

### *Marijuana*

- According to the most recent data, 13 percent of 18-24 year olds had used marijuana in the past 30 days; this was closely followed by 25-34 year olds (12%). Adult males were over four times more likely use marijuana in the past 30-days than adult females (2007 BRFSS).
- Data from 2005-06 indicate that 28 percent of 18-25 year olds had used marijuana in the past month, the second highest rate in the nation among this age group (the national average is 16%). Almost 40 percent of Maine's young adults used marijuana in the past year (2005-06 NSDUH).
- The percent of students in grades 6 to 12 who used marijuana within the last 30 days has declined in the past six years, from 17 percent in 2002 to 13 percent in 2008. Moreover, the prevalence of using marijuana before the age of 14 has decreased since 2002, from 17 percent to 12 percent (2008 MYDAUS).
- A nationally comparative data source shows that Maine high school students have higher rates of past 30-day use of marijuana than the national average; 22 percent in Maine compared to 20 percent nationally (YRBSS 2007).

### *Other Drugs*

- Consumption of illicit drugs decreased from 2003 through 2005 (NSDUH), but remains highest among 18-25 year olds. Only three percent of Mainers age 12 and older used illicit drugs other than marijuana in the past month; eight percent of those ages 18-25 used illicit drugs other than marijuana (2005-06 NSDUH).

- At eight percent, cocaine use in the past year among the 18-25 year old age group is higher than any other age group in Maine and higher than the national average of seven percent (2005-06 NSDUH).
- Among youth, 3.8 percent of students in grades 6 through 12 used cocaine in their lifetime; 1.7 percent had used cocaine in the past 30 days. The rate of lifetime use is down from 4.5 percent in 2006 and represents the first downward movement since 2000 (2008 MYDAUS).
- In 2008, 10.6 percent of students used inhalants at least once in their lifetime, down from 12 percent in 2002. The highest rate of past 30-day use in 2008 was among 8<sup>th</sup> grade students, at 5.5 percent and down from just over seven percent in 2006 (MYDAUS 2008).
- Admissions to treatment for heroin increased sharply in the last six months of 2008. Key informants indicate that heroin use is an increasing problem, particularly in the southern part of the state.

### Consequences

- Arrests for drug abuse violations, OUI, and liquor violations have remained fairly stable, increasing only slightly from 2000 through 2007. Between 2006 and 2007 there was little change in drug abuse violations, a six percent increase in OUI arrests, and an 11 percent decrease in adult liquor violations (DPS).
- In 2006, 12 percent of women who were pregnant drank some alcohol during the last three months of pregnancy, compared with only five percent in 2002. In 2006, this was higher among older women (35+) and women with higher incomes (\$50,000+) (21% and 16% respectively; PRAMS).
- In 2007, 76 fatalities from traffic accidents involving alcohol occurred in the State of Maine. Put another way, over one-third (35%) of all drivers in fatal crashes in 2007 had consumed any alcohol (FARS).
- The Northern New England Poison Center has received nearly 42,000 medication verification calls in 2008, over 5,000 more than were received during the previous year. The types of drugs most often requested for identification in 2008 were opioids<sup>4</sup> and benzodiazepines. In terms of substance-abuse related *exposures* (cases in which a poisoning occurs), opioids continued to account for the most exposures (50) in the second half of 2008, followed by alcohol or alcohol-containing substances (42), stimulants or street drugs (41), and benzodiazepines (29; NNEPC).
- Deaths associated with cocaine and opioids other than heroin and methadone continued to increase in 2006, while deaths from methadone experienced a sharp decline.

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<sup>4</sup> Note that for NNEPC the opioid category is not exclusive to prescription drugs; that is, street drugs such as heroin are also included. This differs from other data sources cited in this report.

However, substance abuse-related deaths in 2006 were still most often attributed to methadone (49 deaths in 2006), followed by other opioids (42) and cocaine (22), although these data are preliminary (ODRVS).

### Contributing Factors

- *Youth Access:* Overall, fewer students believed that alcohol, marijuana and other drugs were easy to get in 2008 compared with 2000. However, 41 percent of high school students continue to believe it is easy to obtain marijuana, while 31 percent think it is easy to obtain alcohol; by 12<sup>th</sup> grade 52 percent feel it is very easy to obtain marijuana, and 39 percent believe it is very easy to obtain alcohol (2008 MYDAUS).
- *Youth Perception of Risk/Harm:* Forty-eight percent of students in grades 6 through 8 believe that a few alcoholic drinks posed great risk of harm, compared with 36 percent of high school students (up from 33% in 2004). In terms of marijuana, among high school students, 18 percent believe trying marijuana a couple of times poses a great risk, and 45 percent think regular use of marijuana as risky (MYDAUS 2008).
- *Youth Perceptions of Enforcement:* In 2008, 24 percent thought kids would be caught for drinking alcohol and 30 percent thought they would be caught for smoking marijuana. Among high school students, only 12 percent thought a kid in their neighborhood would be caught by the police for drinking alcohol, while 41 percent thought they would be caught by their parents.
- *Youth Perceptions of Community/Cultural Norms:* Among middle and high school students, 89 percent reported that their parents feel it is “wrong” or “very wrong” to drink alcohol. This was slightly higher for marijuana (94%). About three out of four students report that adults in their community think that drinking alcohol is “wrong” or “very wrong”, and four out of five report the same community attitude towards marijuana. Nonetheless, almost two in three (59%) reported to have known at least one adult who got drunk or high in the past year.

## Substance Abuse Treatment

- Nearly half (49%) of all admissions to treatment during the second half of 2008 were for treatment of alcohol as a primary presenting problem, followed by prescription drugs (26%), marijuana (9%) and heroin (9%; TDS). However, the raw number of primary alcohol admissions continues to decrease.
- Among persons entering treatment during the second half of 2008, nearly three-quarters (72%) of adults over age 40 received treatment services for alcohol as a primary presenting problem. This differs from younger consumers (ages 18-24) where more than one-third (34%) were in treatment for use of prescription narcotics, one-third in treatment for alcohol (32%), 11 percent for marijuana and 13 percent for heroin/morphine (TDS).
- The number of treatment admissions related to opiate abuse (excluding heroin and morphine) has grown by 63 percent since the first half of 2005. Fifty-seven percent of these admissions were among individuals between the ages of 18 and 29; 27 percent were among adults between the ages of 30 and 39.
- Treatment admissions for heroin/morphine as the primary substance increased sharply in the second half of 2008, from 454 cases to 637 cases, a 40 percent increase (Figure 44). This is higher than any number seen since 2005. As with prescription narcotics, 65 percent of these admissions involve individuals between the ages of 18 and 29.
- There continue to be more secondary treatment admissions for marijuana in the second half of 2008. Sixty-eight percent of persons admitted for marijuana as the primary substance were under the age of 29; 52 percent of persons admitted for marijuana as the secondary substance were also under the age of 29.
- Admissions with a primary diagnosis related to substance abuse account for approximately one percent of both inpatient and outpatient visits to hospitals across the state. Prescription drugs are the most often-associated substance for inpatient substance-abuse related hospital admissions. In terms of outpatient visits for substance abuse, alcohol and opioids (excluding heroin, opium and methadone) dominate the landscape (2006 MHDO).



## Overview: The Problem of Substance Abuse in Maine

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Newly released data indicate that 25 percent of Maine students have used alcohol within the past 30 days, 12 percent engaged in binge drinking within the past two weeks and 12 percent used marijuana within the past 30 days. Eleven percent used prescription drugs for purposes other than their intended use at some point within their lifetime (2008 MYDAUS). While all these indicators have shown modest to significant declines since 2006, a large proportion of underage youth continue to abuse alcohol, marijuana and prescription drugs. Moreover, many youth perceive that alcohol and marijuana are easy to obtain, and that they will not be caught for using them.

Among the adult population, 57 percent of adults over the age of 18 had *at least* one drink of alcohol within the past 30 days, higher than the national average of 55 percent. Adults in their late 20s and early 30s reported the highest rate of past 30 day alcohol use (62% for those ages 25-34, and 66% for those ages 35-44). While one drink within the past 30 days is not considered abuse, heavy alcohol use (one or two drinks per day) is considered a public health concern by the Centers for Disease Control. Compared to other age groups, young adults aged 18-24 had the highest rate of heavy alcohol use at 11 percent, and this has been steadily increasing since 2005. Thirty-three percent of 18-24 year olds also binge drank within the past month (2007 BRFSS).

Data for Mainers over the age of 12 also show that alcohol is used most often (55%), followed by marijuana (10%), prescription pain relievers (5%) and other illicit drugs (4%; 2005-06 NSDUH). Over 13 percent of Mainers ages 12 and older used marijuana in the past year, and nearly five percent use pain relievers recreationally. Less than three percent used cocaine in the past year (2005-06 NSDUH).

Both individuals and communities suffer the consequences of substance abuse in terms of increased health care needs and criminal justice resources.<sup>5</sup> Drug and alcohol violations are increasing statewide and, in 2007, 35 percent of drivers involved in fatal crashes in Maine had consumed alcohol. The proportion of pregnant women who reported drinking any alcohol during the last three months of pregnancy appears to be increasing. Moreover, the number of substance-abuse related poisonings and drug-related deaths are showing upwards trends as well.

Mainers continue to seek out treatment for abuse involving a wide array of substances, notably alcohol and prescription drugs, and heroin appears to be on the rise. The number of Mainers seeking treatment has not changed significantly since 2005.

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<sup>5</sup> For estimates related to the cost of substance abuse to Mainers, please see *The Cost of Alcohol and Drug Abuse in Maine, 2005*. OSA: Augusta, ME. Available online at: <http://maine.gov/dhhs/osa/>

## A Closer Look: Consumption

Across all data sources, Mainers indicate that alcohol is the most often used substance in Maine, and the most commonly used illegal drug is marijuana. Prescription drugs also stand out compared to other illegal drugs, although both tend to impact treatment and enforcement. In order to gain a greater understanding of the patterns and trends, each substance or group of substances is addressed in more depth in the following sections. Population comparisons illustrate more specifically who is using each substance, trending data illustrate how use has changed over time, and specific behaviors associated with the substance (e.g., binge drinking) are described.

### Alcohol

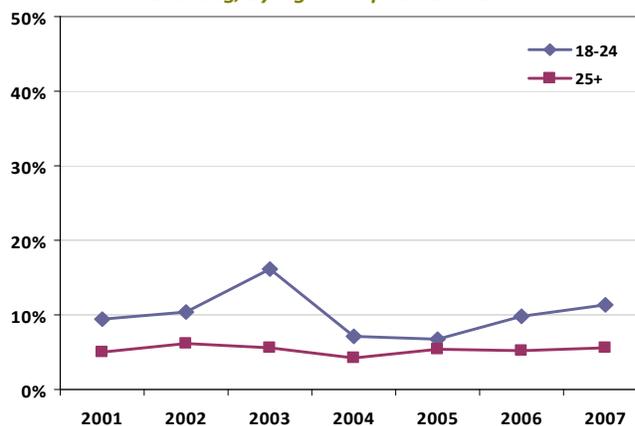
#### *Adult Population*

According to the most recent data available, 57 percent of adults over the age of 18 have had at least one drink of alcohol within the past 30 days (2007 BRFSS). This has remained stable since 2005 and is higher than the national average of 55 percent. Data from the 2005-06 NSDUH corroborate this finding; 55 percent of Maine residents over the age of 12 consumed alcohol in the past month compared to 51 percent nationally. Additionally, six percent of adults drank heavily (one or two alcoholic drinks per day) and 16 percent binge drank within the past month (2007 BRFSS), although both are fairly close to the national averages (5% and 16%, respectively).

However, 11 percent of young adults ages 18-24 used alcohol heavily, the highest of any age group (2007 BRFSS). This has been steadily increasing since 2005 (see Figure 1) and is higher than the national average of eight percent. Heavy alcohol use had been increasing among 25-34 years olds as well, although it appears to have leveled off in recent years.

Young adults also appear to consume larger quantities of alcohol when they drink when compared with other age groups. In 2007, 33 percent of 18-24 year olds binge drank<sup>6</sup> within the past month, compared with 25 percent of 25-34 year olds, 20 percent of 35-44 year olds and only eight percent of adults age 45 and older (2007 BRFSS; see Figure 2 on next page). These rates have changed slightly since 2006, the only year with comparable data available.

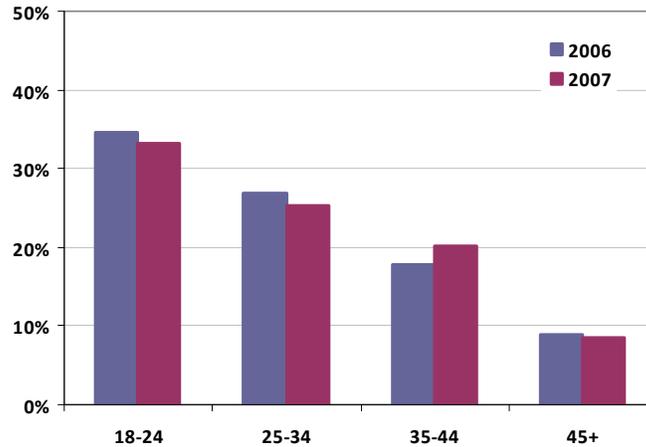
**Figure 1. Percentage of Adults Reporting Heavy Drinking, By Age Group: 2001 to 2007**



Source: BRFSS

<sup>6</sup> Binge drinking in this survey differs according to gender; it is defined as five or more alcoholic drinks in one sitting for men, and four or more alcoholic drinks in one sitting for women.

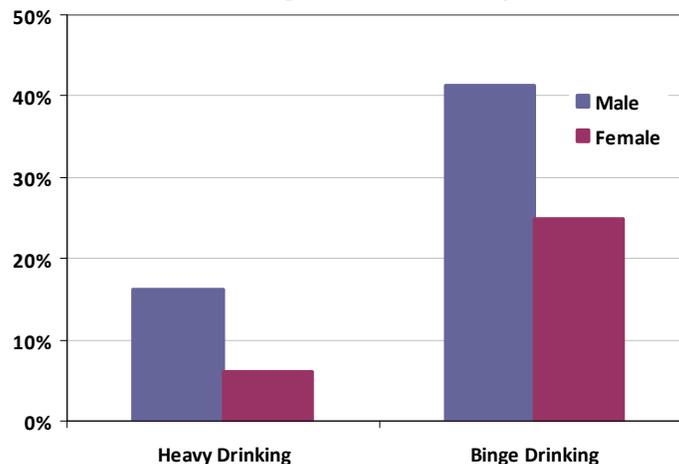
**Figure 2. Percentage of Adults Reporting Binge Drinking, By Age: 2006 and 2007**



Source: BRFSS

Moreover, the prevalence of binge drinking among 18-24 year olds in Maine is much higher than the national average for this age group (27%), while binge drinking rates among 25-34 year olds and 35-44 year olds are also slightly higher than the national averages (23% and 19%, respectively). Overall, men in Maine binge drank more often than women in 2007, (22% compared with 10%). This becomes more pronounced among the 18-24 year old population, as demonstrated in Figure 3, where 41 percent of young men binge drank compared with 24 percent of young women (heavy drinking was 16% and 6%, respectively; 2007 BRFSS).

**Figure 3. Heavy Drinking and Binge Drinking In the Past Month Among 18-24 Year Olds, By Sex: 2007**

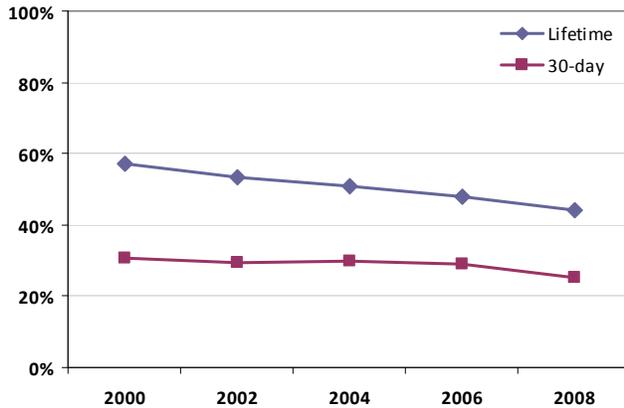


Source: BRFSS

### Underage Population

According to the most recent data available, 25 percent of Maine students in grades 6 through 12 used alcohol within the past 30 days (2008 MYDAUS). This represents a four percentage point decrease, or a 13 percent decline, since 2006 (Figure 4). Lifetime rates of use are also declining.

**Figure 4. Lifetime and Previous 30-day Use of Alcohol: 2000 to 2008**



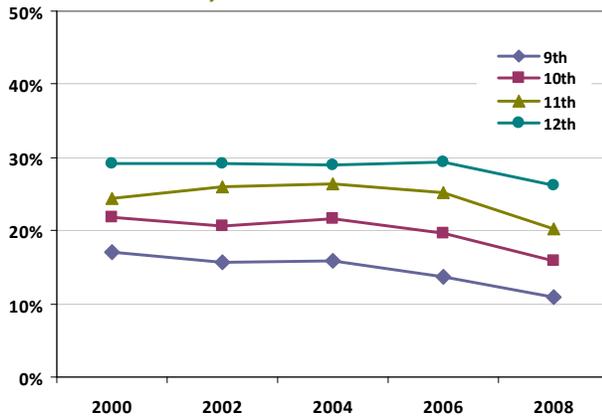
Source: MYDAUS

Other data corroborate this finding, showing a downward progression from 2000 to 2006 in 30-day alcohol use among high school students, from 43 percent in 2005 to 40 percent in 2007 (2007 YRBSS)<sup>7</sup>.

Moreover, while the data show that 38 percent of 11<sup>th</sup> graders and 45 percent of 12<sup>th</sup> graders consumed alcohol in the past month, this represents the first major decrease in the rates of past month use reported by these grades since 2002 (2008 MYDAUS).

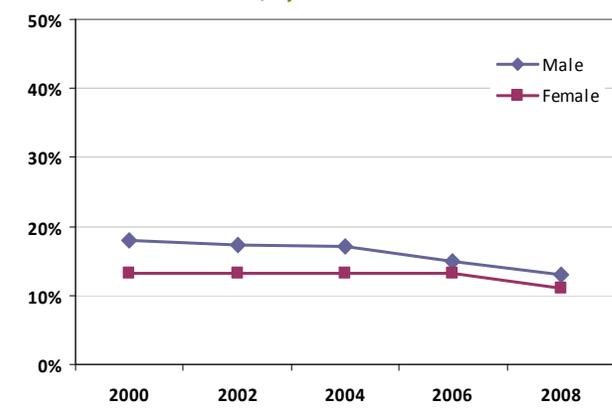
In terms of binge drinking, 13 percent of students had engaged in binge drinking within the past two weeks, compared with 15 percent in 2006 (2008 MYDAUS); previously, binge drinking rates had been stable at 16 percent since 2000. Among high school students, this decrease ranged from three percentage points among 12<sup>th</sup> graders (26% to 23%) to almost five percentage points among 11<sup>th</sup> graders (25% to 20%; see Figure 5). However, the proportion of 12<sup>th</sup> graders who binge drink in the past two weeks was higher than the national average (26% compared with 24%; 2008 MYDAUS Technical Report).

**Figure 5. Binge Drinking Within the Past 2 Weeks, By Grade: 2000 to 2008**



Source: MYDAUS

**Figure 6. Incidence of Binge Drinking Within the Past 2 Weeks, By Gender: 2000 to 2008**



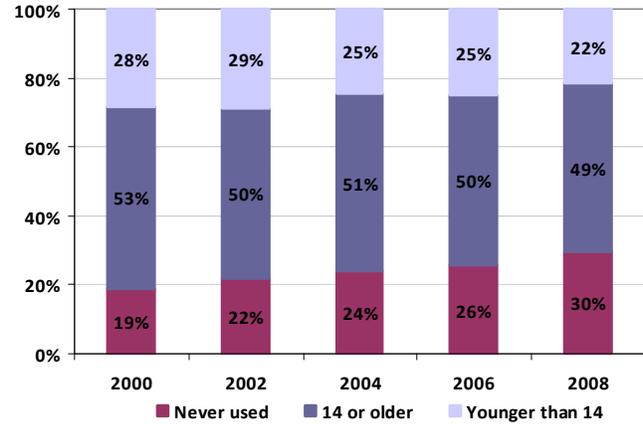
Source: MYDAUS

<sup>7</sup> Note that the rates of use differ between the two data sources because MYDAUS includes middle school students, whereas YRBSS does not.

Previously available data from 2007 had suggested that the gender gap for binge drinking rates was closing. While the 2008 MYDAUS does show that the difference between male and female rates of binge drinking has been shrinking, males were still more likely to report engaging in binge drinking than females (13% compared with 11%; see Figure 6 on previous page).

Finally, it appears that young Mainers are waiting longer to participate in drinking alcohol. The number of 11<sup>th</sup> and 12<sup>th</sup> grade students who drank alcohol before the age of 14 is steadily declining, from 28 percent in 2000 to 22 percent in 2008, while the never using is increasing (see Figure 7).

**Figure 7: Age First Used Alcohol (More Than a Few Sips), Grades 11 and 12: 2000 to 2008**



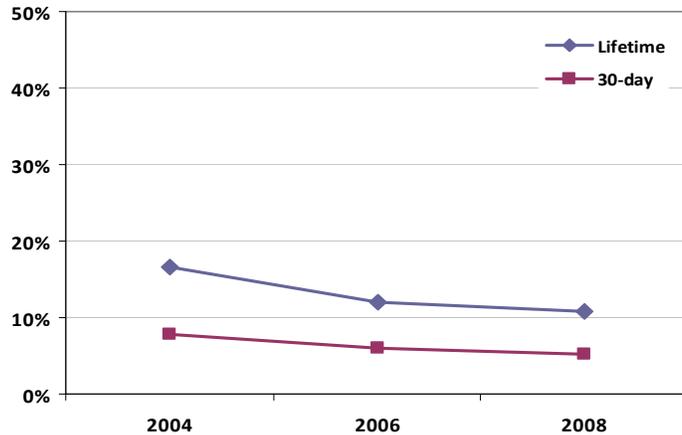
Source: MYDAUS

### Prescription Drugs

Consumption patterns regarding prescription drug use are difficult to pinpoint because of a wide range of definitions among various data sources. However, recent data indicate that 11 percent of students in grades 6-12 have used prescription drugs for a reason other than their intended purpose at least once in their lifetime, and five percent had misused prescription drugs in the past 30 days. For both indicators, data show that use has continued to decrease gradually since 2004 (Figure 8).

Among older students (11<sup>th</sup> and 12<sup>th</sup> graders), nearly one in five students has misused prescription drugs at least once in their lifetime, and there is little difference between male and female students (2008 MYDAUS).

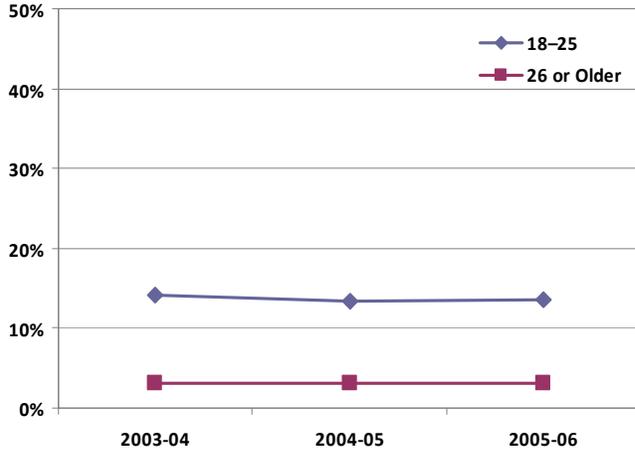
**Figure 8. Lifetime and 30-day Misuse of Prescription Drugs Among 6th - 12th Grade Students: 2004 to 2008**



Source: MYDAUS

Adolescents are not the only population misusing prescription drugs. NSDUH data from 2005-06 show that 14 percent of young adults ages 18-25 have used pain relievers for non-medical purposes within the past year, compared to only 3 percent of adults age 26 and older. Figure 9 on the following page shows that these rates of non-medical use of pain relievers among the adult population have remained fairly stable since 2003.

**Figure 9. Past Year Nonmedical Use of Pain Relievers Among Mainers Age 18 and Older, By Age: 2003-04 to 2005-06**

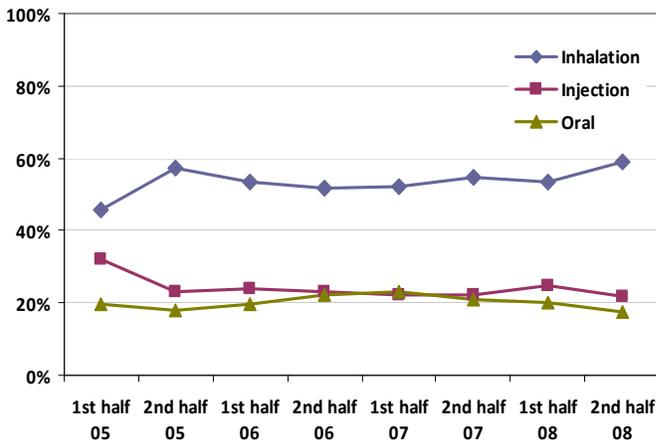


Source: NSDUH

oxycodone, inhalation as the route of administration appears to have increased in the second half of 2008, while injection and oral administration appear to have declined (see Figure 10).

The illicit distribution of buprenorphine (Suboxone®) also appears to be on the rise. Interviews with Maine law enforcement officials and a Portland-based needle exchange program cited

**Figure 10. Primary Route of Administration for Oxycodone (Percent): January 2005 to December 2008**



Source: TDS

Prescription narcotics are among the greatest drug threats in the New England region, including Maine (2008 NDIC). According to the 2008 Drug Threat Assessment, the most abused prescription drugs include oxycodone and hydrocodone. Moreover, the Treatment Data System shows that oxycodone, which includes the trademarked OxyContin®, is the most frequently listed primary drug (not including alcohol). According to treatment admissions data<sup>8</sup>, users primarily inhale crushed pills, followed by injection and oral consumption. As a proportion of all admissions for

buprenorphine as a drug that is increasingly common. Buprenorphine is often used to manage opioid dependence and many persons with substance use disorders state that they take the drug to not feel sick, rather than to get high. In fact, many treatment providers substituted buprenorphine products when it became apparent that those in treatment for opiate abuse were starting to abuse methadone. However, buprenorphine is difficult to obtain most of the time, with addicts having a hard time locating a provider.

Calls to the Northern New England Poison Control Center (NNEPCC) involving buprenorphine have also increased recently. In 2008, the Center received 147 calls from the public that mentioned buprenorphine compared to 101 in 2007, an increase of 46 percent. Moreover, law enforcement personnel asked over 230 questions about buprenorphine in 2007 and 2008. This

<sup>8</sup> These data do not include shelter/detox admissions.

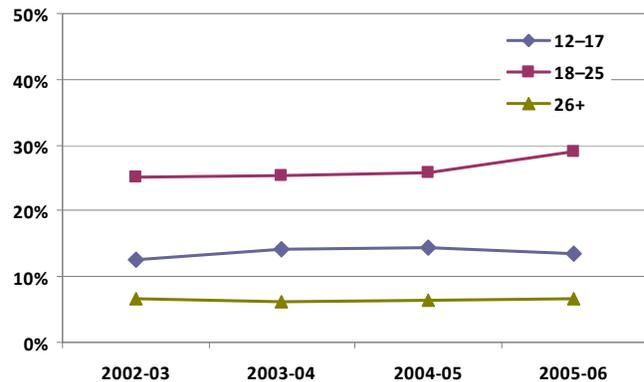
upward trend has been steady since 2004 among both calls from the public and calls from law enforcement. Poisonings involving buprenorphine also appear to be rising steadily over the same time period, both in terms of substance abuse-related poisonings (21 in 2008, up from 10 in 2007) and in terms of poisonings of children under the age of six (23 in 2008, up from 15 in 2007). When including suicide attempts, adverse effects and other types of poisonings, the total number is even higher (114).

### Other Illegal Drugs

Consumption of illicit drugs in Maine increased slightly from 2003 through 2005 and remains highest among 18-25 year olds (NSDUH, see Figure 11). In 2005-06, 29 percent of 18-25 year olds used illicit drugs (including marijuana) in the past month, making Maine the state with the third highest rate of illicit drug use among 18-25 year olds in the nation.

Among that same population, past year abuse or dependence on illicit drugs has remained fairly stable since 2002-03; however, Maine is consistently about three percentage points higher than the national average (11 percent in 2005-06 compared to eight percent nationally).

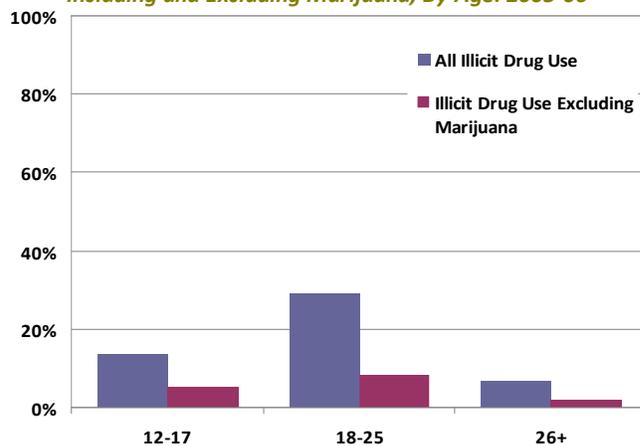
**Figure 11. Past Month Use of Any Illicit Drugs Among Mainers Age 12 and Older, By Age: 2003-04 to 2005-06**



Source: NSDUH

Overall, illicit drug use in Maine is greatly influenced by the prevalence of marijuana. When marijuana is excluded from the analysis of illicit drug use, the picture changes dramatically (see Figure 12). Only three percent of Mainers age 12 and older used illicit drugs (other than marijuana) in the past month; those with the highest rate, nine percent, are aged 18-25 (2005-06 NSDUH). In fact, the use of illicit drugs other than marijuana has decreased in recent years.

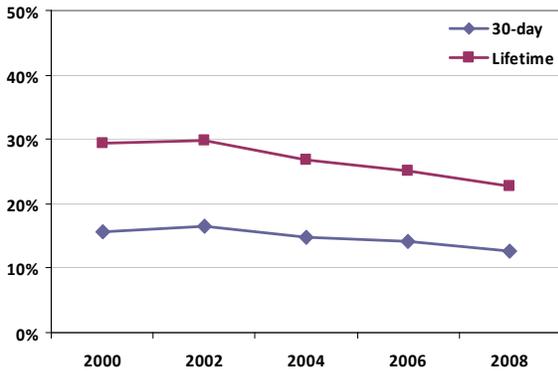
**Figure 12. Illicit Drug Use In the Past Month, Including and Excluding Marijuana, By Age: 2005-06**



Source: NSDUH

**Marijuana.** Marijuana is widely abused in all of New England and most users prefer Canadian higher-potency product over Mexican commercial-grade product (NDIC, 2007). As stated above, marijuana makes up the majority of illicit drug use and has a high rate of use in Maine.

**Figure 13. Lifetime and 30-day Use of Marijuana Among 6th - 12th Grade Students: 2000 to 2008**



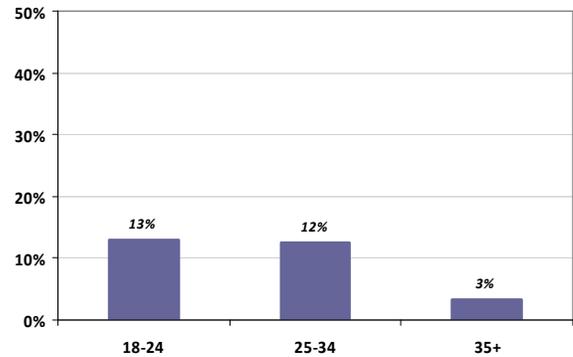
Source: MYDAUS

In Maine, the percent of students in grades 6 to 12 who used marijuana within the last 30 days has declined in the past six years, from 17 percent in 2002 to 13 percent in 2007 (2008 MYDAUS, see Figure 13 on the following page); lifetime use has also declined steadily. The 2007 YRBSS, which is asked of high school students, shows similar downward trends. Moreover, the prevalence of using marijuana before the age of 14 has decreased since 2002, from 17 percent to 12 percent (2008 MYDAUS).

However, comparisons to national statistics show that Maine youth have higher marijuana use than the national average. One 2007 source shows that Maine high school students have higher rates of past 30-day use of marijuana than the national average; 22% in Maine compared to 20% nationally (YRBSS 2007). Another data source shows the rate of past 30-day use of marijuana among 12-17 year olds in Maine was the highest in the nation (11% compared to 7% nationally; 2005-06 NSDUH).

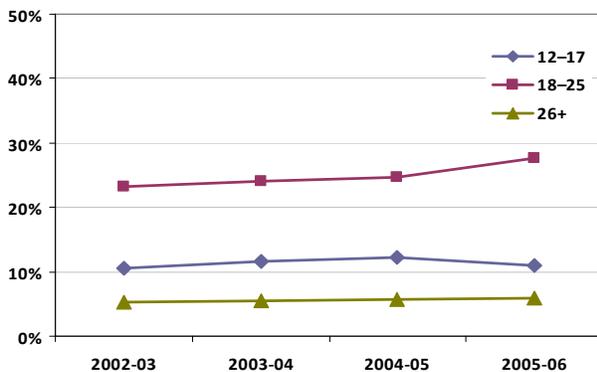
Among the adult population, recent data indicate that 13 percent of 18-24 year olds had used marijuana in the past 30 days; this was closely followed by 25-34 year olds (12%; Figure 14). Adult males were over four times more likely to report having used marijuana in the past 30-days than adult females (2007 BRFSS).

**Figure 14. Marijuana Use in the Past Month, By Age Group: 2007**



Source: BRFSS

**Figure 15. Past Month Marijuana Use, By Age: 2002-03 to 2005-06**



Source: NSDUH

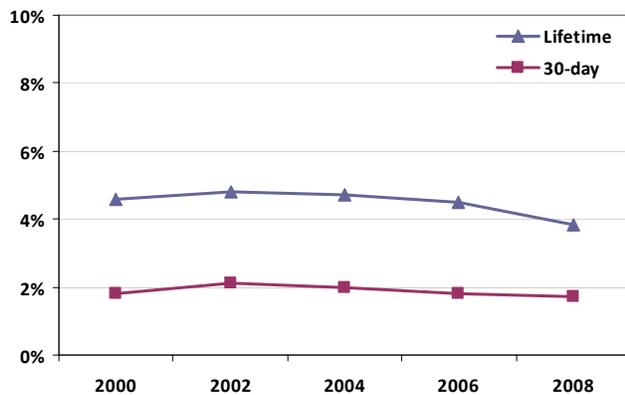
Data from 2005-06<sup>9</sup> show that 28 percent of 18-25 year olds used marijuana in the past month (Figure 15), the second highest rate in the nation among this age group (the national average was 16%). Similarly, almost 40 percent of young adults in Maine used marijuana in the past year. Conversely, only six percent of adults over the age of 25 used marijuana in the past month, and nine percent in the past year (2005-06 NSDUH).

<sup>9</sup>Questions related to marijuana use in BRFSS are new in 2007; for trending and national comparisons, the data from 2005-06 NSDUH represent the most recent data available.

Both past month and past year marijuana use has increased slightly among all Mainers age 12 and older; however, as Figure 15 on the previous page illustrates for past month use, this upward trend is driven by increases among the 18-25 year old population (the same pattern is seen for past year use of marijuana).

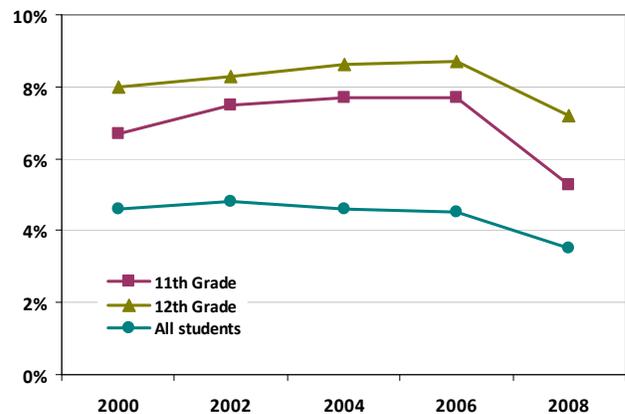
**Cocaine/Crack.** According to the most recent data available, 3.8 percent of students in grades 6 through 12 used cocaine in their lifetime, and 1.7 percent used it in the past 30 days (2008 MYDAUS, see Figure 16). The rate of lifetime use is down from 4.5 percent in 2000 and represents the first downward movement since 2000. This was particularly true among older students, as demonstrated in Figure 17.

**Figure 16. Lifetime and 30-day Use of Cocaine Among 6th - 12th Grade Students: 2000 to 2008**



Source: MYDAUS

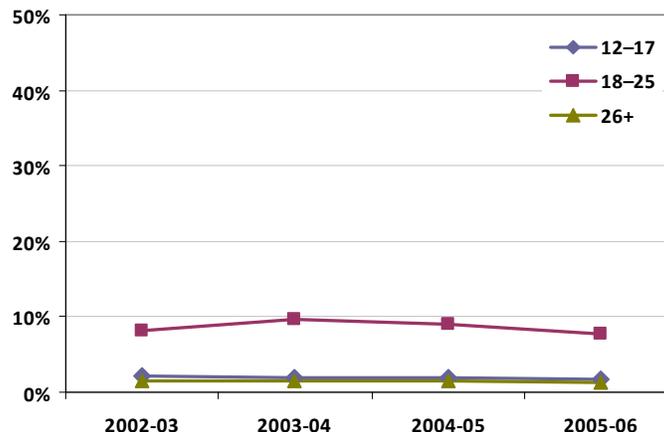
**Figure 17. Lifetime Use of Cocaine Among 11th and 12th Graders: 2000 to 2008**



Source: MYDAUS

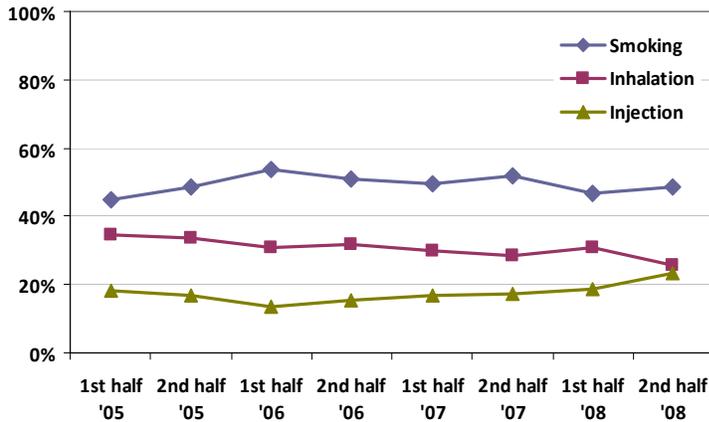
Among the 18-25 year old age group, cocaine use in the past year is eight percent, higher than any other age group in Maine (Figure 18) and higher than the national average of seven percent (2005-06 NSDUH). Nonetheless, this represents a slight decrease since 2003-04. While cocaine abuse—mostly crack—is cited as a large problem in New England, it is centered in southern New England (i.e., Connecticut, Rhode Island, and Massachusetts) rather than in Maine (NDIC, 2007).

**Figure 18. Past Year Cocaine Use, By Age: 2002-03 to 2005-06**



Source: NSDUH

**Figure 19. Primary Route of Administration as a Proportion of All Cocaine/Crack Admissions: January 2005 through December 2008**



Source: TDS

Treatment admissions data indicate that the smoking of crack/cocaine is now more prevalent than inhaling (snorting) it, and while smoking as a route of administration declined in the first half of 2008, it increased slightly in the second half (from 47% to 48%; Figure 19). Injection as the primary route of administration for cocaine appears to be rising (up to 23% in the second half of 2008) while inhalation of cocaine decreased to 26 percent in the second half of

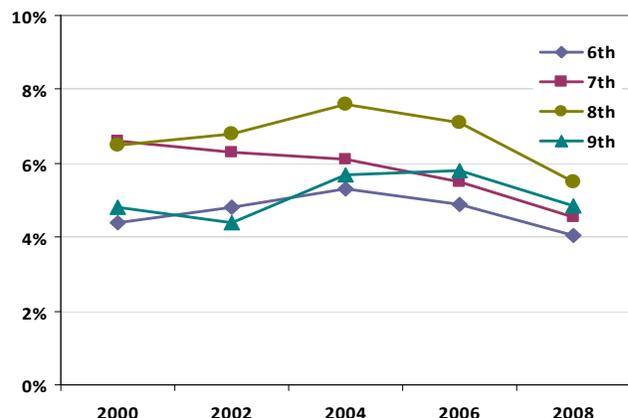
2008 (from 31%). According to admissions data, crack is exclusively smoked, whereas cocaine is administered through all three routes.

**Heroin.** The 2008 Drug Threat Assessment (NDIC, 2007) reports that heroin is the greatest drug threat in New England, with New England as the only region in the country where heroin is the leading problem. As discussed earlier, New England’s heroin problem is fed by abusers of prescription narcotics switching to less expensive heroin. Among Maine’s students, the rate of lifetime heroin use remains low at 1.5% (2008 MYDAUS), and has remained fairly stable since 2002.

However, as the section on treatment trends will show in more detail, admissions to treatment for heroin increased sharply in the last six months of 2008, and key informants indicate that heroin is an increasing problem, particularly in the southern part of the state, where it is entering the state from Massachusetts. The treatment data show that the primary route of administration for heroin remains injection, followed by inhalation. However, as a proportion of all primary admissions for heroin, injection users have remained fairly steady at 75 to 77 percent since the first half of 2005.

**Inhalants.** Inhalant use among the youth population continues to be a concern, particularly among younger students. In 2008, 10.6 percent of students used inhalants at least once in their lifetime (2008 MYDAUS). However, this represents the first decrease since 2002, when lifetime rates were around 12 percent. The incidence of previous 30-day use has also declined, particularly among the lower grades (see Figure 20) where recent

**Figure 20. Past 30-day Use of Inhalants Among 6th to 9th Grade Students, By Grade: 2000 to 2008**



Source: MYDAUS

use is more frequent. The highest rate of past 30-day use in 2008 was among 8<sup>th</sup> grade students, at 5.5 percent and down from just over seven percent in 2006.

***Methamphetamine and Other Illicit Drugs.*** Little data exist regarding consumption rates of methamphetamine. According to national reports, methamphetamine is posing a large threat in the nation as a whole, but poses a relatively low threat in the New England Region (NDIC, 2008). Furthermore, New England is one of the few areas in the United States where methamphetamine is not a large threat at this time.

In 2008, only 1.3 percent of students had used stimulants at least once in their lifetime, and this has been decreasing since 2000 (MYDAUS). However, two key informants reported the use of meth tablets, as opposed to the crystalline form. This was reported among male long-haul truck drivers coming in from Canada to the northern part of the state, as well as within the gay “club” community in the southern part of the state. While the rate of methamphetamine use has been stable over the past few years, the quantity of meth tablets found in individual seizures has increased recently, which may indicate increased demand.

Other drugs with noteworthy levels of use and abuse in Maine and the New England region include MDMA (Ecstasy), abuse of which has been increasing in recent years; khat, an African plant with stimulant effects which has been increasingly smuggled into Maine for use by the Somali population; and hallucinogens such as LSD, PCP, and mushrooms, the use of which has remained stable at low levels in recent years (NDIC, 2008).



## A Closer Look: Consequences

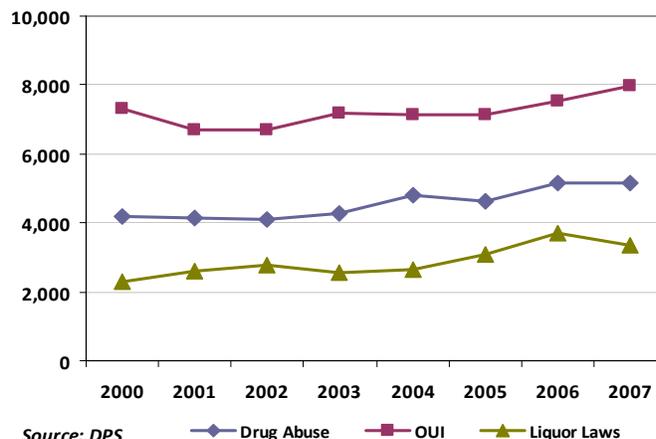
While a great deal of information regarding substance use can be obtained from the survey data described in the previous section, information on the effects of that use on individuals and communities can be derived from what has come to be called “consequence” data. Consequences of substance use and abuse include, but are not limited to: criminal justice involvement; drinking during pregnancy; drinking and driving; as well as substance-related poisonings and deaths.

### Criminal Justice Involvement

The meaning of criminal justice statistics is sometimes difficult to decipher as rises and declines can have as much to do with police *enforcement* of the laws as the actual occurrences of events. Enforcement is often viewed as a contributing factor to substance use, because enforcement impacts both the ability to obtain substances and perceptions that one will be caught. For this reason, perceptions of enforcement are discussed as a contributing factor to substance use. This section deals with criminal justice involvement as a consequence of substance abuse for both the individual and the criminal justice system.

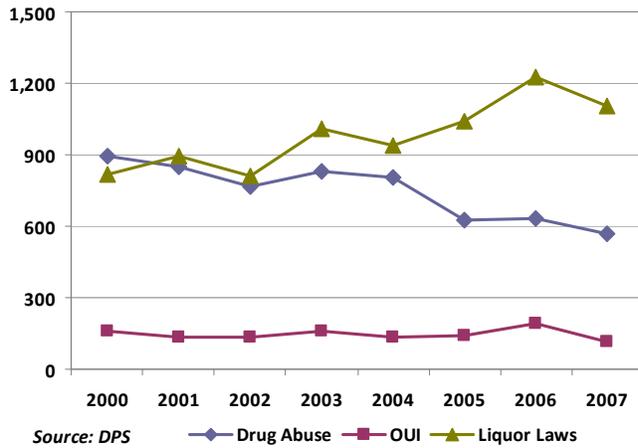
Overall, Department of Public Safety (DPS) data show that arrests for drug abuse violations, OUI, and liquor violations have remained fairly stable, increasing slightly from 2000 through 2007. Figure 21 shows that 2007 saw no change in drug abuse violations from 2006 and a six percent increase in OUI arrests from 2006. There was also an 11 percent decrease in adult liquor violations since 2006 after a steady three-year increase; it may be that adults have become more aware of enforcement activities and are committing fewer violations.

Figure 21. Number of Adult Substance-Related Arrests: 2000 to 2006



Juvenile arrests show a somewhat different pattern. As Figure 22 on the following page illustrates, juveniles are least likely to be arrested for OUI, and the number of juvenile OUI arrests declined slightly in 2007 compared with 2006. In addition, arrests for liquor law violations decreased in 2007 after a steady upward trend. Given that many initiatives across the state have focused on increasing enforcement of liquor law violations among youth (with programs such as Party Patrols), it may be that youth increasingly believe that they will be caught and are therefore changing their behaviors.

**Figure 22. Number of Juvenile Substance-related Arrests: 2000 to 2006**



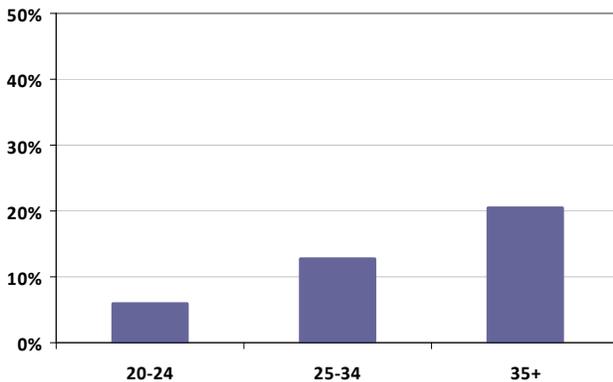
In addition, Maine has both the most law enforcement agencies reporting prescription drugs contributed to property crime (32%), and violent crime (27%) compared to the rest of the nation (2007 National Drug Threat Survey, as reported in Benak et al., 2007). Moreover, a key informant at an agency that provides pretrial services to adult Mainers indicates that the majority of their cases are substance-abuse related, and that the service population most commonly abuses opiates (pills, heroin and methadone). While marijuana use is also very common,

consuming it does not seem to lead to criminal behavior in the same way that addiction to opiates or cocaine does.

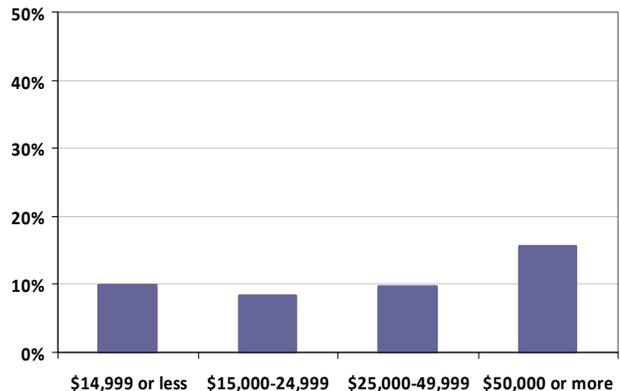
### Substance Use and Pregnancy

Another consequence of substance use is the impact of that use on the fetuses of pregnant women. The State of Maine collects some data on alcohol use while pregnant. Results from the 2006 Maine Pregnancy Risk Assessment Monitoring System (PRAMS) indicate that 12 percent of pregnant women drank any alcohol during the last three months of pregnancy, compared with only five percent in 2002. In 2006, this was higher among older women (35+) and women with higher incomes (\$50,000+) (21% and 16% respectively, see Figures 23 and 24). However, neither of these groups binge drank within the last three months of pregnancy.

**Figure 23. Mother Reported Drinking Any Alcohol During Last 3 Months of Pregnancy, By Age: 2006**



**Figure 24. Mother Reported Drinking Any Alcohol During Last 3 Months of Pregnancy, By Income: 2006**



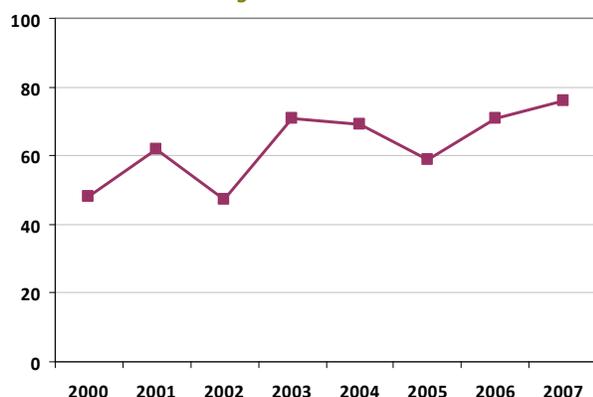
In addition, according to substance abuse treatment admissions data, four percent of all women (112 cases) admitted for substance abuse treatment in the second half of 2008 were pregnant. As a proportion of all female admissions, this has remained fairly stable since the first half of

2005. The majority of pregnant treatment admissions in the second half of 2008 were among women between the ages of 18 and 24 (52%), and almost half (47%) were admitted for prescription narcotic use (TDS).

## Drinking and Driving

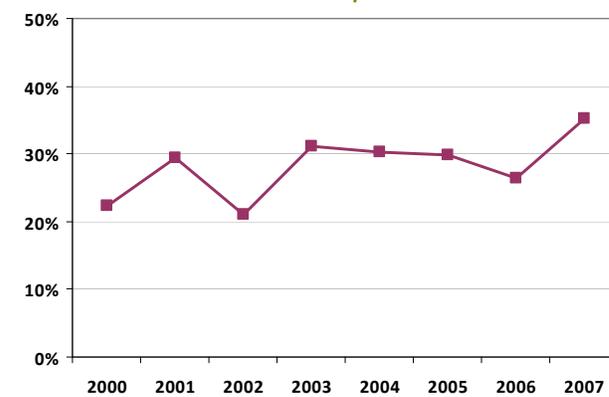
In 2007, the most recent year of data available, 76 fatalities from traffic accidents involving alcohol occurred in the State of Maine (see Figure 25). This continues a generally upward trend. Figure 26 illustrates these data differently, representing the percent of all drivers in fatal crashes who had consumed any alcohol (35% in 2007). This proportion also increased since the previous year and has been on the rise since 2002.

**Figure 25. Number of Fatalities from Crashes Involving Alcohol: 2000 to 2007**



Source: FARS

**Figure 26. Percent of All Drivers in Fatal Crashes Who Were Alcohol-Impaired: 2000 to 2007**

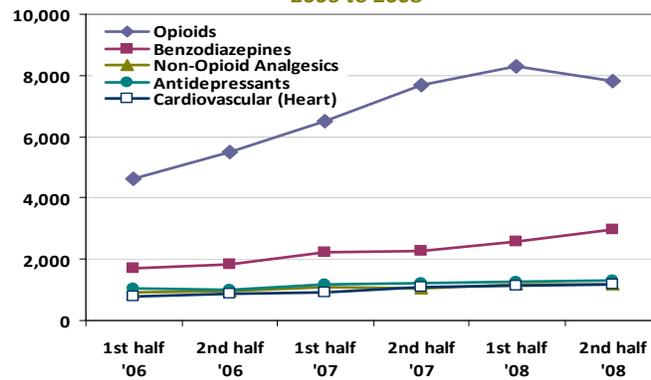


Source: FARS

## Poisonings

The Northern New England Poison Center has received nearly 42,000 medication verification calls in 2008, over 5,000 more than were received during the previous year. Of these, most (over 39,000) were from the public, a great number of which involve medication abuse in the community. The types of drugs most often requested for identification in 2008 were opioids<sup>10</sup> and benzodiazepines (see Figure 27). The Poison Center also received 2,410 calls from law enforcement

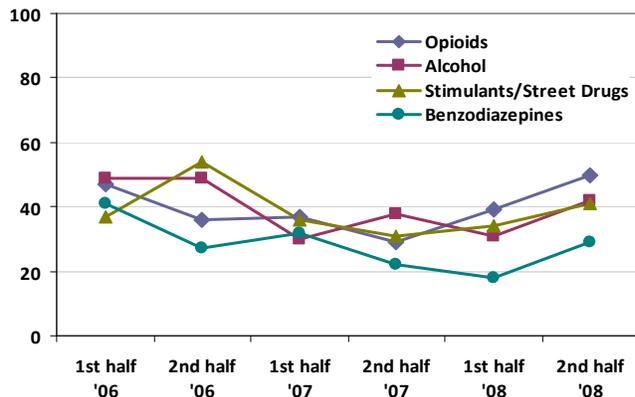
**Figure 27. Top 5 Substances Requested for Medication Verification by Non-Law Enforcement: 2006 to 2008**



Source: NNEPC

<sup>10</sup> Note that for NNEPC the opioid category is not exclusive to prescription drugs; that is, street drugs such as heroin are also included. This differs from other data sources cited in this report.

**Figure 28. Number of Substance-Related Exposures Reported to NNEPC: 2006 to 2008**



Source: NNEPC

stimulants/street drugs (41), and benzodiazepines (29; Figure 28); both opioid and stimulant/street drug exposures show upward trends since 2007.

### Morbidity and Mortality

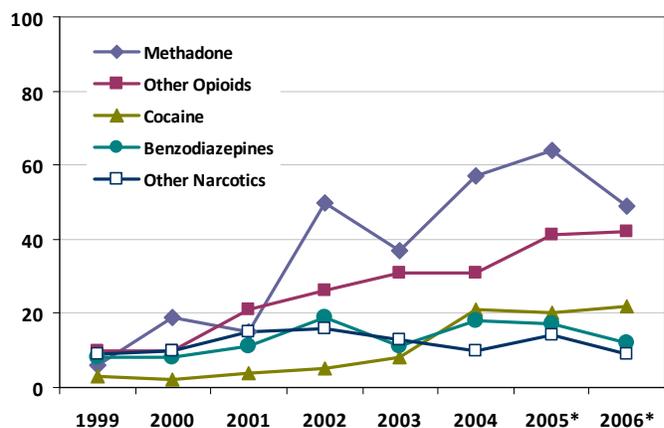
Deaths associated with substance use or abuse have generally shown an upward trend, increasing 123 percent from 1999 through 2006, with some fluctuations throughout the years. As Figure 29 shows, deaths associated with cocaine and opioids (other than heroin and methadone) have continued to increase. Deaths associated with cocaine increased from three in 1999 to 22 in 2006, and deaths associated with opioids other than heroin and methadone increased from 10 in 1999 to 42 in 2006. Deaths associated with methadone decreased from 65 in 2005 to 49 according to preliminary 2006 data, though these data are not complete. It appears that deaths associated with benzodiazepines and other narcotics continued to decrease in 2006.

Also illustrated in Figure 29 is that substance abuse-related deaths were most often attributed to methadone, followed by other opioids and cocaine in 2006. In addition to narcotic replacement treatment, methadone can be prescribed for the treatment of chronic pain. Poly-drug use, meaning using more than one drug simultaneously, has been shown to increase the risk of overdose and in fact many substance-related deaths involve more than one substance (Hickman et al, 2008; Darke and Zador, 1996; ODC, 2002).

requesting identification of or information about substances during 2008; the types of drugs requested for identification were generally consistent with identification requests from the public.

In addition, the Poison Center receives reports of substance abuse-related exposures, cases in which a poisoning occurs. In the second half of 2008, opioids continued to account for the most exposures (50), followed by alcohol or alcohol containing substances (42),

**Figure 29. Number of Deaths Related to Substance Use: 1999 to 2006**



Source: ODRVS

## A Closer Look: Contributing Factors

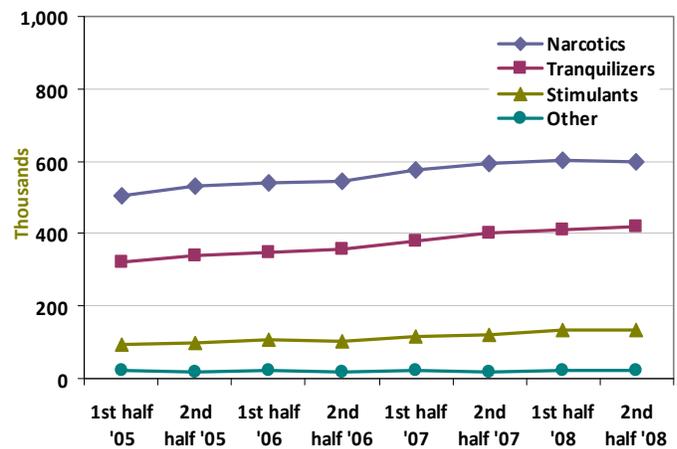
Factors contributing to substance use and abuse patterns include substance availability and accessibility, enforcement of drug and liquor laws, individuals' perceived harm of substances, community/cultural norms, and mental health and co-occurring disorders.

### Availability/Accessibility

An important factor that impacts substance use is the availability and accessibility of substances. There are diverse measures and indicators for multiple substances and age groups, some of which are presented here.

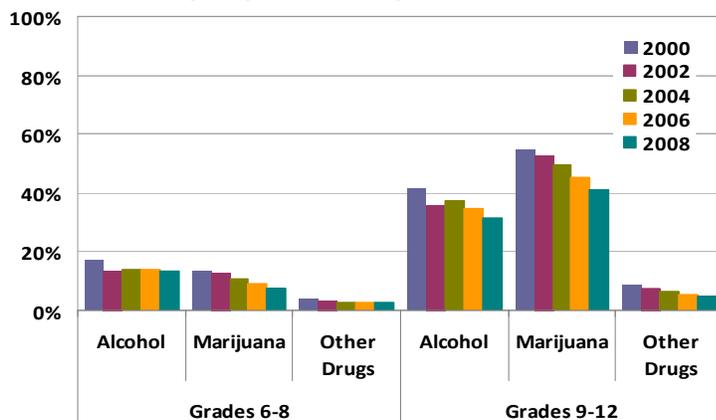
One measure of the availability of prescription drugs is the number of prescriptions being reported to Maine's Prescription Monitoring Program (PMP). Between July and December 2008, 1,170,579 prescriptions were reported to the PMP, which receives reports for Drug Classes C-II through C-IV. This has remained fairly stable in the second half of 2008 after showing an upward trend through 2007. Prescriptions for narcotics consistently account for the bulk of prescriptions reported to the PMP (more than 50% in the last half of 2008), followed by tranquilizers and then stimulants (Figure 30)<sup>11</sup>.

Figure 30. Prescriptions Filled in Maine (Thousands), by Type: January 2005 through December 2008



Source: PMP

Figure 31. Perceived Access to Substances is "Very Easy", By Grade Groups: 2006 and 2008



Source: MYDAUS

Another important measure of availability is student perceptions of how easy it is to obtain alcohol and drugs. Overall, fewer students believed that alcohol, marijuana and other drugs were easy to get in 2008 compared with 2000 (see Figure 31). However, as Figure 31 also shows, 41 percent of high school students continue to believe it is easy to obtain marijuana, and this is higher than the proportion who think it is easy to obtain alcohol (31%).

<sup>11</sup> Note that the quality of data received from pharmacies is not monitored.

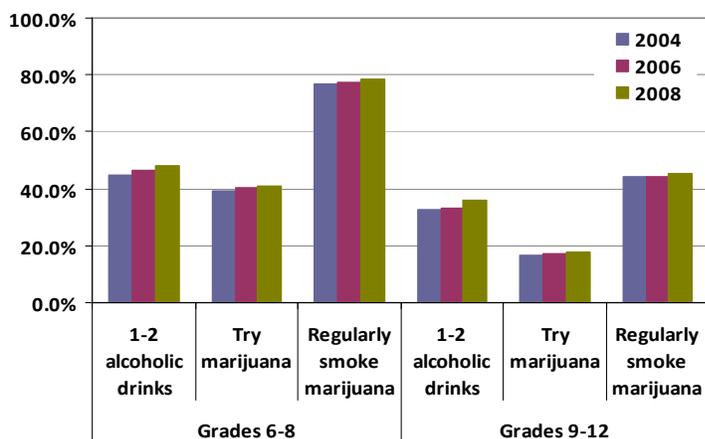
In terms of illicit drugs, most enter Maine and the New England region from the American Southwest Region via New York; Maine’s location as a Canadian border state also makes it a target for smuggling operations (NDIC, 2008). Crack-cocaine availability in Maine is increasing due to increased distribution from Massachusetts and New York-based gangs. The 2008 Drug Threat Assessment reports that Canadian-based Asian drug trafficking organizations have an increasing presence in New England, smuggling marijuana from Canada through the northern border states. Those marijuana smuggling routes are now beginning to include MDMA and some methamphetamine crossing the border into the United States.

The Maine Health and Environmental Testing Laboratory analyzes evidence submitted to the Drug Chemistry Unit of the Maine Health and Environmental Testing Laboratory. During 2008, the Drug Chemistry Unit conducted confirmatory testing on 854 drug samples. Cocaine was the most common form of drug detected, representing 41 percent of all sample submissions; this was consistent from the prior year. Prescription narcotics (15%), marijuana (9%), heroin (9%) and a wide assortment of other drugs (16%) make up the remaining types of drugs detected by the lab.

### Perceived Harm

Studies have shown that if a youth *believes* substance use to be harmful, he or she is less likely to engage in it (OAS, 2001; Bonnie & O’Connell, 2004). Therefore, the perceived level of harm from using substances is an important factor contributing to substance use. According to the 2008 MYDAUS, younger students (grades 6-8) are more likely to perceive substance use as “risky” than are high school students (grades 9-12). Forty-eight percent of students in grades 6 through 8 believe that a few alcoholic drinks posed great risk of harm, compared with 36 percent of high school students. Figure 32 illustrates this point by showing the age difference in perception of risk associated with alcohol and marijuana use.

**Figure 32. Perceived Harm from Substances, By Grade Groups: 2006 and 2008**



Source: MYDAUS

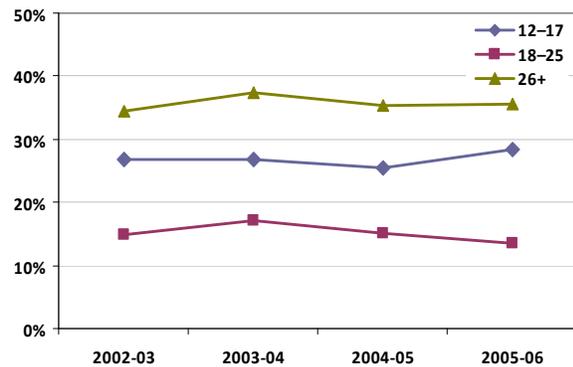
Students are least likely to believe trying marijuana a couple of times poses a great risk, and this is particularly low among students in grades 9 through 12 (18% compared with 41% of students in grades 6 through 8). However, students do perceive regular use of marijuana as risky (45% of high school students, and 78% of middle school students).

However, among all students, the proportion who believe substance use

poses great risks of harm has been increasing gradually each year since 2004 (MYDAUS). In particular, perceptions about the harm from alcohol use have increased; from 33 percent among high school students in 2004 to 36 percent in 2008. The proportion of middle schools students perceiving alcohol use as harmful increased from 46 percent in 2004 to 48 percent in 2008.

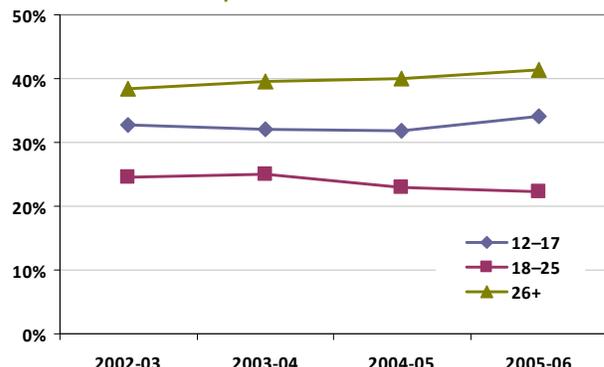
According to the most recent NSDUH, 32 percent of Mainers ages 12 and older perceive great risk associated with smoking marijuana once per month, and 38 percent perceive great risk associated with drinking five or more drinks once or twice per week. However, these data also show that perceptions of risk vary with age. Not surprisingly, 18-25 year olds are least likely to perceive great risk associated with either substance use behavior (as shown in Figures 33 and 34). These trends have remained stable since 2003.

**Figure 33. Perceptions of Great Risk from Smoking Marijuana Once A Month, By Age Group: 2002-03 to 2005-06**



Source: NSUDH

**Figure 34. Perceptions of Great Risk from Drinking Five or More Drinks Once or Twice a Week, By Age Group: 2002-03 to 2005-06**

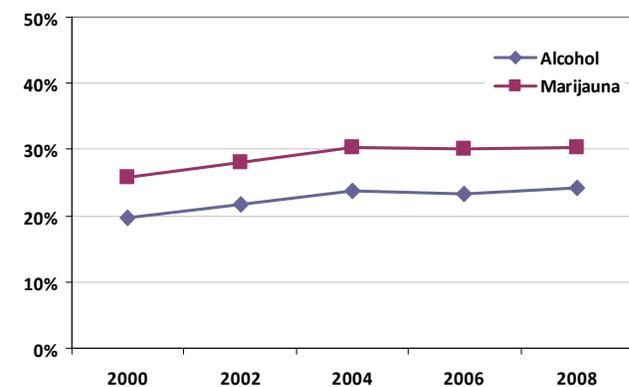


Source: NSUDH

### Perceived Enforcement

Perception of enforcement – that is, the risk of getting caught – has also been shown to impact an individual’s decision to engage in certain behaviors. The proportion of students believing that kids in their neighborhood would get caught for drinking alcohol or smoking marijuana has been increasing consistently since 2000 (Figure 35). In 2008, 24 percent thought kids would be caught for drinking alcohol (compared with 20% in 2000) and 30 percent thought they would be caught for smoking marijuana (compared with 25% in 2000). However, students continue to perceive that they are

**Figure 35. Percent of Students Reporting That Kids Would be Caught By Police for Drinking Alcohol or Smoking Marijuana: 2000 to 2008**



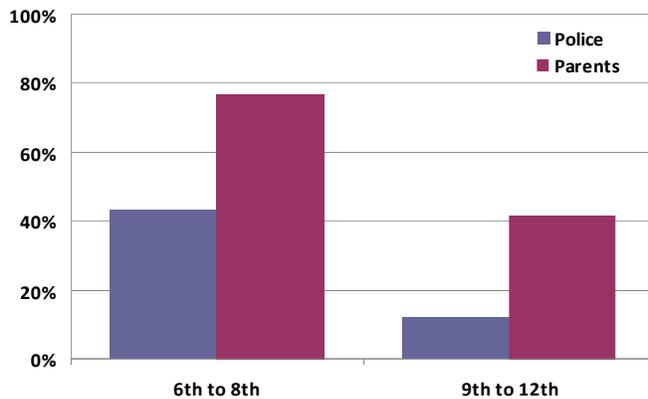
Source: MYDAUS

more likely to be caught by their parents than by police for drinking alcohol. Among high school students, 41 percent thought they would be caught by their parents, compared with only 12 percent who thought a kid in their neighborhood would be caught by the police for drinking alcohol (see Figure 36).

### Community/Cultural Norms

Among middle and high school students, 89 percent reported that their parents feel it is “wrong” or “very wrong” to drink alcohol. This was slightly higher for marijuana (94%). Students report similar attitudes among adults in their community: about three out of four students believe that adults in their community think that drinking alcohol is “wrong” or “very wrong,” and four out of five report the same community attitude towards marijuana. Nonetheless, about two in three (59%) knew at least one adult who got drunk or high in the past year.

**Figure 36. Percent of Students Reporting They Would be Caught By Parents and Police for Drinking Alcohol, 2008**

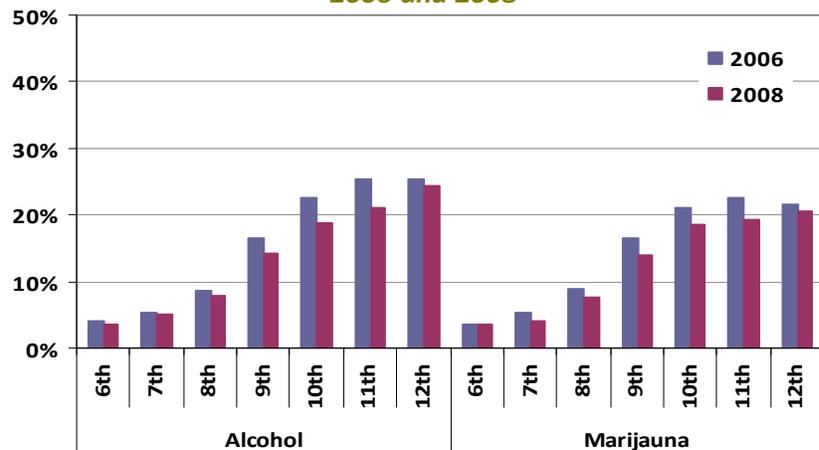


Source: MYDAUS

These indicators have remained fairly stable since 2000 with little to no change from year to year. However, as indicated above, the proportion of students that believe that kids in their neighborhood would get caught for drinking alcohol or smoking marijuana has been increasing consistently since 2000.

Fourteen percent of all students believed that they would be seen as cool for regularly drinking alcohol, and 13 percent thought the same for smoking marijuana. This has decreased slightly since 2006, and across all grades, although the “coolness factor” remains high among older students (Figure 37).

**Figure 37. Students Reporting That They Would Be Seen As “Cool” For Using Alcohol or Marijuana: 2006 and 2008**

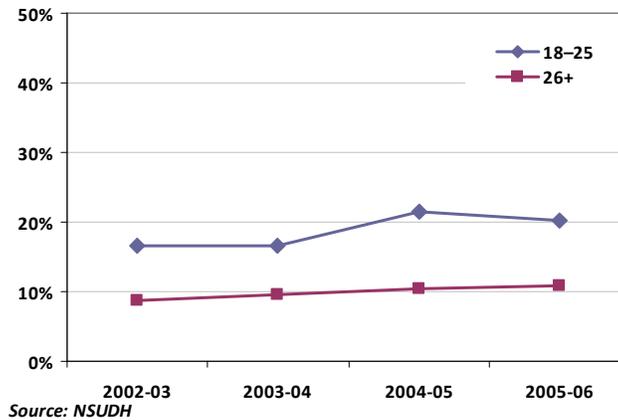


Source: MYDAUS

## Substance Abuse and Co-occurring Disorders

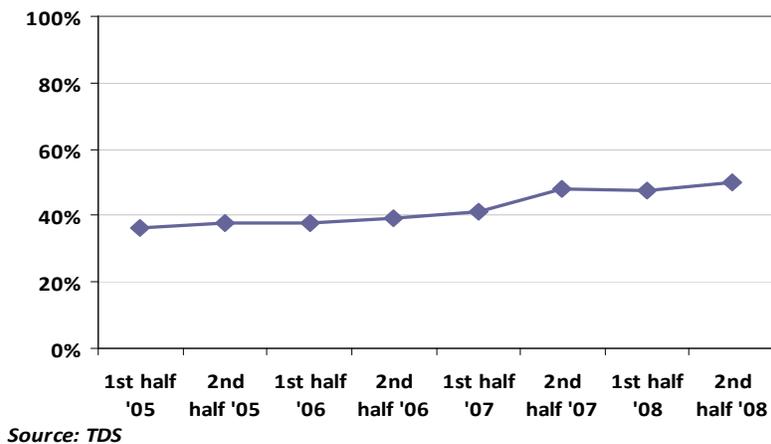
Approximately 12 percent of Mainers age 18 and older have a serious mental illness (2005-06 NSDUH). This is a 50 percent rate increase from 2002-03, and is driven by the 18-25 year old population (Figure 38).

**Figure 38. Percentage of Mainers Age 18 and Older Reporting Serious Mental/Psychological Distress: 2002-03 to 2005-06**



According to TDS, in the second half of 2008, half of all treatment admissions for substance abuse had a co-occurring mental health disorder<sup>12</sup>. This continues the steady increasing trend seen since 2005 (see Figure 39). Forty-three percent of consumers with a diagnosed mental health disorder were in treatment for alcohol as a primary substance, 24 percent for other opiates/ synthetics, 11 percent for heroin and 12 percent for marijuana.

**Figure 39. Percent of Total Treatment Admissions That Reported a Diagnosed Mental Health Disorder: January 2005 through December 2008**



<sup>12</sup> Co-occurring disorders are when both a diagnosable (meeting DSM-IV diagnostic criteria) mental health disorder and a substance abuse disorder occur in the same patient, at the same time.



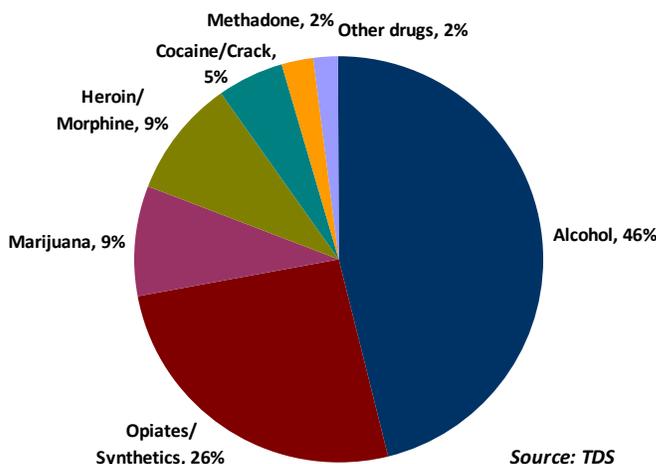
## A Closer Look: Treatment for Substance Abuse

Treatment related to substance abuse is measured in two forms: substance abuse treatment program admissions and general hospital admissions related to substance abuse problems. Substance abuse treatment admissions are an indicator of how many people are seeking treatment for a substance abuse problem. These admissions can be voluntary, but they can also be court-ordered. Hospital admissions (including both inpatient and outpatient services) with the primary diagnosis related to substance abuse problems are an indicator of how many people experiencing hospitalization are doing so with substance abuse problems. These substance-related problems can include diagnoses of intoxication, substance abuse or dependence, and poisonings.

### Treatment Program Admissions<sup>13</sup>

Treatment program data echoes the consumption data indicating that alcohol is a major problem in Maine. Between July and December 2008 there were a total of 6,744 admissions to providers of substance abuse treatment throughout the state. As shown by Figure 40, nearly half (46%) of all admissions were for treatment of alcohol as a primary presenting problem<sup>14</sup>, followed by prescription opiates (26%), marijuana (9%), heroin (9%), and to a lesser extent cocaine/crack (6%), methadone (3%) and other drugs (1%) such as methamphetamine, ecstasy or inhalants (TDS).

**Figure 40. Substances Associated with Primary Treatment Admissions: July to December 2008**



During this same time period, 61 percent of treatment admissions reported a secondary substance for treatment, and 33 percent had a third substance as well. Marijuana was the most frequently cited secondary substance (30%), followed by alcohol (14%) and other opiates/synthetics (13%). Among those entering the treatment system in the second half of 2008, nearly three-quarters (72%) of adults over age 40 received treatment services for alcohol as a primary presenting problem compared to younger

consumers (under 18) who were more likely to receive treatment for use of marijuana (59%) followed by alcohol (25%) (TDS). Consumers ages 18-24 sought treatment for a wider array of substances with more than one-third (34%) in treatment for use of prescription narcotics, one-

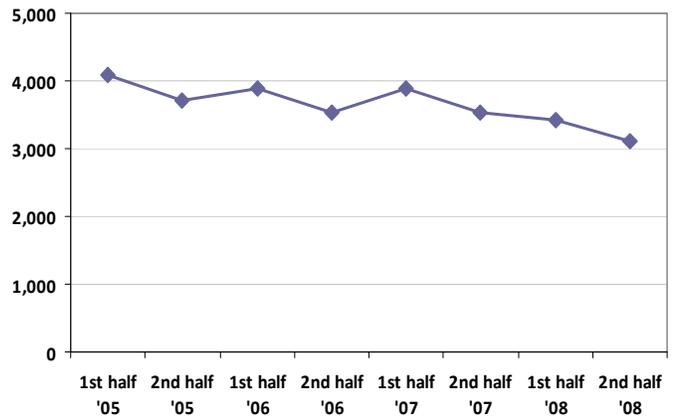
<sup>13</sup> These data exclude shelter/detox admissions.

<sup>14</sup> Primary presenting problem is defined as the first-listed ailment when a consumer enters treatment.

third in treatment for alcohol (32%), 11 percent seeking treatment for marijuana and 13 percent in treatment for heroin/morphine (an additional three percent were seeking treatment for methadone). Consumers, particularly juveniles, are often court-ordered to seek treatment and do not always enter treatment of their own accord.

*Treatment for Alcohol.* The majority of treatment admissions in Maine are still for alcohol as a primary presenting problem although such admissions have decreased since the first half of 2005 (Figure 41). While the first half of 2006 and 2007 both saw a spike in the number of admissions for alcohol, that pattern does not appear for the first half of 2008. Instead, the number of alcohol admissions has been steadily decreasing over the past 12 months.

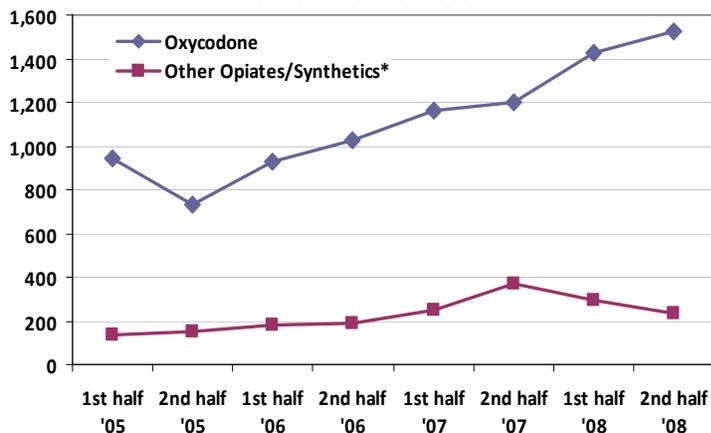
**Figure 41. Number of Primary Treatment Admissions for Alcohol: January 2005 to December 2008**



Source: TDS

*Treatment for Prescription Narcotics.* The number of treatment admissions related to opiate abuse (excluding heroin and morphine) has grown by 63 percent (677 admissions) in Maine since the first half of 2005. As illustrated in Figure 42, treatment admissions for this group of substances as the primary substance has been increasing steadily through 2008. Admissions for oxycodone (which includes OxyContin®) specifically drives this trend. Moreover, 57 percent of these admissions were among individuals between the ages of 18 and 29; 27 percent were among adults between the ages of 30 and 39.

**Figure 42. Number of Primary Treatment Admissions for Oxycodone and Other Opiates/Synthetics: January 2005 to December 2008**

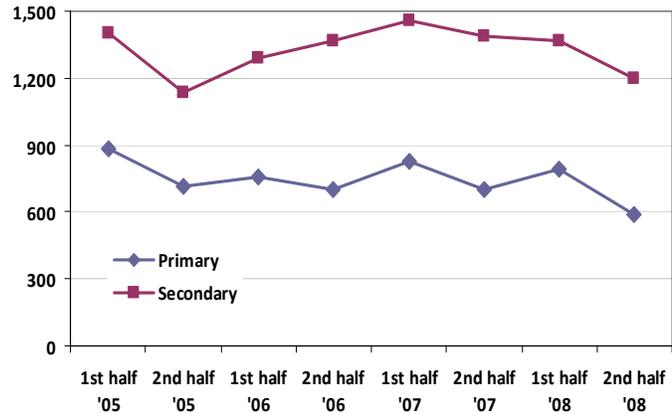


Source: TDS \*Excludes Morphine, Heroin and Methadone

There have been fewer than 50 primary treatment admissions per year for benzodiazepines. As a secondary substance, treatment admissions for this category of prescription drugs increased sharply between 2005 and 2007. However, 2008 has shown a steady decline in secondary admissions for this category of drugs.

*Treatment for Marijuana.* There continue to be more secondary treatment admissions for marijuana in the second half of 2008 (see Figure 43) although both decreased slightly during the past six months. Notably, the number of primary treatment admissions for marijuana decreased by just over 200 cases. Sixty-eight percent of persons admitted for marijuana as the primary substance were under the age of 29, and 52 percent of persons admitted for marijuana as the secondary substance were also under the age of 29.

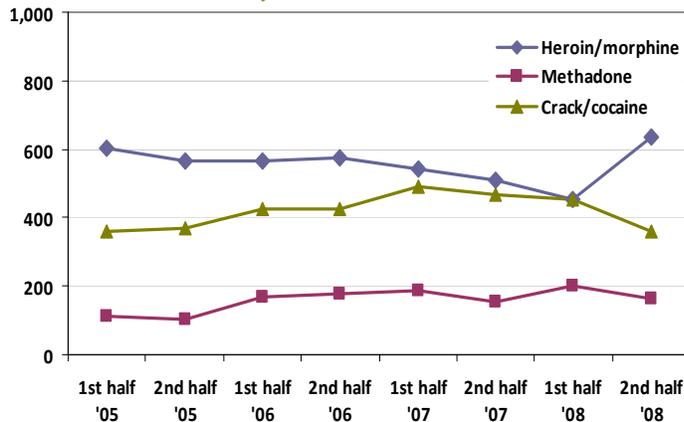
Figure 43. Number of Primary and Secondary Treatment Admissions for Marijuana: January 2005 to December 2008



Source: TDS

*Treatment for Other Illegal Drugs.* Treatment admissions for heroin/morphine as the primary substance increased sharply in the second half of 2008, from 454 cases to 637 cases, a 40 percent increase (Figure 44). This is higher than any number seen since 2005. As with oxycodone, 65 percent of these admissions are between the ages of 18 and 29. Among those admissions, 77 percent report injecting the drug and 18 percent report inhaling it.

Figure 44. Number of Primary Treatment Admissions for Heroin/Morphine, Methadone, and Crack/Cocaine: January 2005 to December 2008



Source: TDS

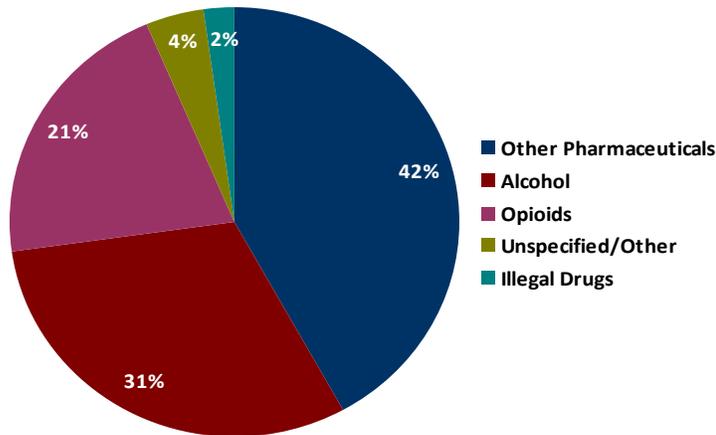
It is unknown if this trend will continue, but it could reflect one of two things, or both: first, in a worsening economy, heroin is cheaper. Second, as more doctors participate in the PMP it is possible that access to prescription narcotics more difficult and people are switching to heroin. According to key informant interviews, "Heroin [use] is surging in York County and up the coast, particularly among people working in the fishing industry." Another stated that "addicts are changing their substance of choice depending upon what is available at the moment".

Figure 44 also shows that primary treatment services for both methadone and crack/cocaine declined during the second half of 2008.

## Hospital Admissions

*Inpatient Admissions.* Substance-related hospital inpatient admissions totaled 2,223 of all 163,705 inpatient hospital admissions in 2006 (1.4%). Of those substance-related hospital admissions, the substance most often associated with primary diagnoses was non-narcotic

**Figure 45. Substances Associated with Primary Diagnosis at Admission to Treatment: 2006**

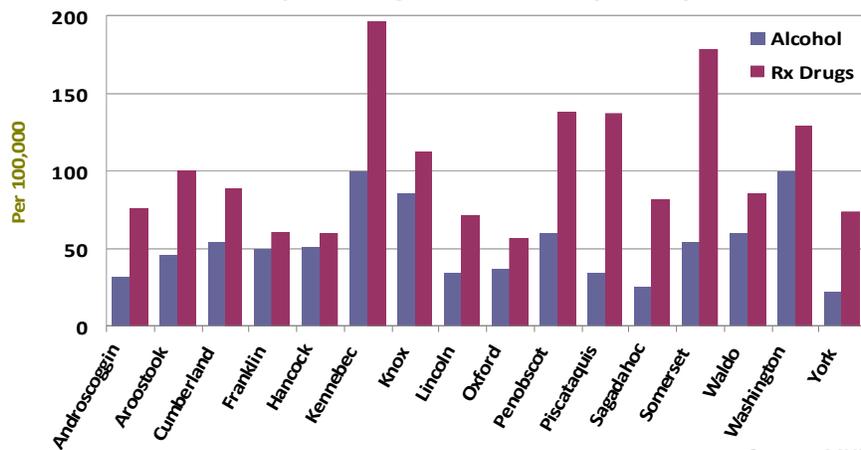


Source: MHDO

prescription drugs, including stimulants and depressants, as well as anti-psychotic medications (2006 MHDO; see Figure 45). Combining opioids (of which all but 20 diagnoses were related to prescription narcotics, with 13 being heroin-specific and seven being opium-specific) and other prescription and over-the-counter medications, legal medications were the substances associated with more than 60 percent of primary diagnosis of substance abuse.

As shown in Figure 46, prescription drugs are the most often-associated substance for substance-related inpatient hospital admissions in all Maine counties, when county population is taken into account<sup>15</sup> (2006 MHDO). Franklin and Hancock counties have relatively equal proportions of admissions related to alcohol and prescription drugs, but there are many more hospitalizations associated with prescription drug

**Figure 46. Hospital Inpatient Admissions Related to Alcohol and Prescription Drugs Per 100,000, by County: 2006**



Source: MHDO

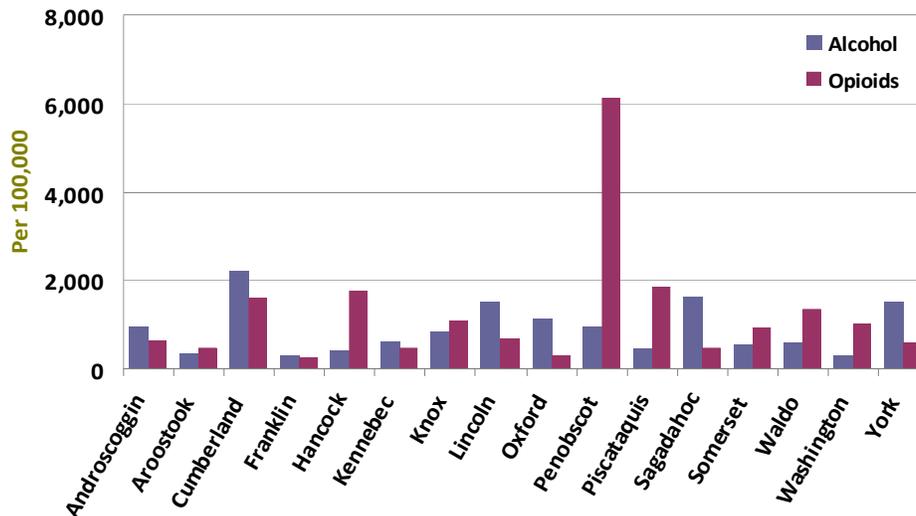
misuse in Kennebec, Penobscot, Piscataquis, Sagadahoc, Somerset, and York counties. These hospital admission data support the self-reported alcohol consumption patterns, but stand out against the relatively low reported levels of prescription drug misuse.

<sup>15</sup> Per capita hospital admission rates were calculated with the following formula: (Number of Hospitalizations)/Total County Population\*100,000.

*Outpatient Admissions.* Outpatient hospital admissions for substance abuse constituted one percent of all outpatient visits in 2006 (46,800 out of 4,096,360 total outpatient visits). Alcohol and opioids (excluding heroin, opium and methadone) dominated the landscape. Overall, there were 15,733 outpatient admissions primarily related to alcohol in 2006, and 19,843 primarily related to opioids<sup>16</sup>.

Moreover, when broken out by county (see Figure 47), it is clear that Cumberland County has a disproportionate number of alcohol-related visits, while hospitals in Penobscot (and to a lesser degree, Hancock and Piscataquis) bear the brunt of opioid outpatient visits. This may reflect disparities in the availability of some types of outpatient treatment services, particularly for rural communities.

**Figure 47. Hospital Outpatient Admissions Related to Alcohol and Prescription Drugs Per 100,000, by County: 2006**



Source: MHDO

*Emergency Room Admissions.* The Drug Abuse Warning Network (DAWN) collects data from a sample of Maine hospitals regarding Emergency Room/Department treatment. While these data must be interpreted with caution and cannot be used to represent the entire state, they reflect similar trends that are seen elsewhere. From January 2008 through June 2008, the majority of cases were for adverse reactions to substances (as opposed to accidental ingestion, malicious poisoning or detoxification). Opiates and narcotic analgesics are most often mentioned as causes of admission, followed by alcohol and marijuana.

<sup>16</sup> This is based on the ICD-9 diagnostic code assigned by the facility providing treatment.



## Conclusions

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Alcohol remains the substance most often used by Mainers across the lifespan and the substance for which most seek treatment. Great progress has been made towards reducing the rate of alcohol use among Maine's youth as evidenced by the most recent data trends that show an overall decline in both lifetime use and past 30-day use of alcohol. However, heavy drinking and binge drinking are high among young adults, and often higher than the national averages. Use of any alcohol among pregnant women also appears to be increasing. Moreover, alcohol as the primary presenting problem still makes up the largest percent of admissions for substance abuse treatment in Maine.

Prescription drugs continue to pose a serious threat to Maine. While pinpointing the extent of prescription drug use is difficult because of a wide range of definitions among various data sources and lack of comparable data, 11 percent of students in grades 6-12 have used prescription drugs for a reason other than their intended purpose at least once in their lifetime, and five percent had misused prescription drugs in the past 30 days. Among adults, 13 percent of young adults ages 18-25 had used pain relievers for non-medical purposes within the past year. Moreover, the majority of criminal cases receiving pretrial services are substance-abuse related, and the service population most commonly abuses opiates (pills, heroin and methadone). Similarly, law enforcement agencies report that prescription drugs contribute to both property crime and violent crime. Finally, prescription drug misuse is having a large impact on treatment and hospitalizations in Maine as the number of primary treatment program admissions attributed to prescription narcotics has grown by 63 percent since the first half of 2005.

In terms of illicit drugs, the most commonly used illegal drug in Maine is marijuana. Among the 18-25 year old population, Maine holds the second highest rate in the nation for marijuana use in the past month. Almost 40 percent of young adults used marijuana in the past year, and only 14 percent think smoking marijuana once per month poses great risks. Moreover, recent data indicate that 13 percent of high school students in Maine have used marijuana in the past 30 days and 23 percent have used it at least once, although both these rates have been declining. However, many students continue to think that trying marijuana once or twice does not pose any risks or harm.

Although there is no current data on consumption of heroin within the adult population, treatment data suggest that heroin use is on the rise. Admissions to treatment for heroin increased by 40 percent in the past six months to levels not seen since 2005, and 65 percent of these admissions involved individuals between the ages of 18 and 29. Moreover, key informants indicate that heroin is an increasing problem in the southern and coastal areas of the state, particularly among people working in the fishing industry. While it is unknown if this trend will continue, the worsening economy coupled with the increased monitoring of prescription drugs could be pushing abusers of prescription narcotics to switch to less expensive heroin.



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## Appendix

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### Description of Sources

Information for this report was gathered from a number of data sources. A detailed description of each source is provided here, consisting of information about the data included in each source, the indicator's strengths and weaknesses, and retrieval or contact information. While each indicator provides a unique and important perspective on drug use in Maine, none should individually be interpreted as providing a full picture of drug trends in Maine.

This report includes data available through December 2008 and updates the November 2008 CESN report. Older and unchanged data were included in this report when more recent data were not available. These data are subject to change.

Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS is a national survey administered on an ongoing basis by the National Centers for Disease Control and Prevention (CDC) to adults in all 50 states and several districts and territories. The instrument collects data on adult risk behaviors, including alcohol abuse. BRFSS defines heavy drinking as adult men having more than two drinks per day and adult women having more than one drink per day, and binge drinking as males having five or more drinks on one occasion and females having four or more drinks on one occasion. The most recent data available are from 2007. Older data are also included for trending analyses. Both state and national data are available. Retrieval: <http://www.cdc.gov/brfss>

Fatality Analysis Reporting System FARS. FARS was created by the National Highway Traffic Safety Administration (NHTSA) and contains data on all fatal traffic crashes within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a traffic way customarily open to the public and result in the death of a person (occupant of a vehicle or a non-occupant) within 30 days of the crash. FARS has been operational since 1975 and has collected information on over 989,451 motor vehicle fatalities and collects information on over 100 different coded data elements that characterize the crash, the vehicle, and the people involved. Retrieval: NHTSA <http://www-fars.nhtsa.dot.gov/Main/index.aspx>

DHHS Health and Environmental Testing Laboratory, forensic section. The forensic laboratory data include information on drugs identified by lab tests. The lab reports results of toxicological analyses of substances submitted in law enforcement operations to the National Forensic Laboratory Information System (NFLIS) of the federal Drug Enforcement Agency (DEA). Data are current through 2008 and reflect only those cases referred to the laboratory, so are not necessarily reflective of all samples seized in Maine. Contact: Chris Montagna, DHHS, [chris.montagna@maine.gov](mailto:chris.montagna@maine.gov) ; (207) 287-1708.

Key informant interviews. Interviews were conducted with representatives from law enforcement, health care, and social services across the state to obtain informal reports on drug trends throughout the state. Each informant was chosen to provide a different perspective of substance use and abuse in Maine, with special knowledge of a particular population or area of the state. Key Informants remain confidential in this report. Questions may be directed to Sarah Goan, Hornby Zeller Associates, Inc. (207) 773-9529.

Maine Health Data Organization (MHDO). MHDO data includes all inpatient admissions to all hospitals in Maine for calendar year 2006. Data categories created by the authors include alcohol, opioids, illegal drugs, and pharmaceuticals. All drug categories include intoxication, abuse, dependence, and poisoning cases related to the drug. The opioid category includes methadone, heroin, and opiates. The illegal drug category includes crack/cocaine, cannabis, and hallucinogens. The pharmaceuticals category includes all other non-opioid medications (including stimulants and depressants). Data are compiled annually and are therefore not available on a more frequent basis. Contact: Maine Health Data Organization (MHDO) – Susan Schow, MPH, Epidemiologist, [susan.e.schow@maine.gov](mailto:susan.e.schow@maine.gov); (207) 287-6745.

Maine Department of Public Safety (DPS), Uniform Crime Reports (UCR). UCR data include drug and alcohol arrests. Drug arrests include sale and manufacturing as well as possession of illegal substances. Liquor arrests include all liquor law violations. OUI arrests are arrests for operating a motor vehicle under the influence of a controlled substance. DPS data are now available from 2007. Arrest data may reflect differences in resources or focus of law enforcement efforts so may not be directly comparable from year to year. Retrieval: Annual report of the Maine Department of Public Safety (<http://www.maine.gov/dps/Docs/2006DPSANNREP.pdf> )

Maine Youth Drug and Alcohol Use Survey (MYDAUS). The MYDAUS is a statewide survey administered biennially by the Maine state Office of Substance Abuse (OSA) to students in grades 6 through 12. This survey collects information on student substance use, including binge-drinking. MYDAUS defines binge-drinking as consuming five or more drinks in a row. As of the date of this report, the most recent data available are from 2008. Trending data from 2000, 2002, 2004 and 2006 are also included in this report. Contact: Melanie Lanctot, Research Analyst, Office of Substance Abuse, [melanie.lanctot@maine.gov](mailto:melanie.lanctot@maine.gov); (207) 287-2964

National Survey on Substance Use and Health (NSDUH). The NSDUH is a national survey administered annually by the Substance Abuse and Mental Health Services Administration (SAMHSA) to youth grades 6 through 12 and adults ages 18 and up. The instrument collects information on substance use and health. NSDUH defines Illicit Drugs as marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used non-medically; Binge Alcohol Use as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least one day in the past 30 days; Dependence or abuse based on definitions found in the fourth edition

of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV); and Serious Mental Illness (SMI) as a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. Data for SMI are not defined for 12 to 17 year olds; therefore, "Total" estimate reflects ages 18 or older for this category. Data are available from 2005-2006. Older data are also included in trending analyses in this report. Regional, state and national data are available. Contact: Jim Colliver, PhD, Division of Population Surveys, Office of Applied Studies, SAMHSA; [James.Colliver@samhsa.hhs.gov](mailto:James.Colliver@samhsa.hhs.gov) ; (240) 276-1252.

Northern New England Poison Center (NNEPC). The Northern New England Poison Center provides services to Maine, New Hampshire, and Vermont. Data include the number of confirmed exposures to illegal substances and misuse exposures to legal substances, as well as the number of information requests received associated with each substance. NNEPC collects detailed data on specific substances involved in poisonings, including the categories of stimulants/street drugs, alcohol, opioids, asthma/cold and cough, benzodiazepines, antidepressants, and pharmaceuticals, as well as other substances. The category of stimulants/street drugs includes marijuana and other cannabis, amphetamine and amphetamine-like substances, cocaine (salt and crack), amphetamine/dextroamphetamine, caffeine tablets/capsules, ecstasy, methamphetamine, GHB, and other/unknown stimulants/street drugs. The category alcohol includes alcohol-containing products such as mouthwash. The opioid category includes Oxycodone, Hydrocodone, buprenorphine, methadone, tramadol, morphine, propoxyphene, codeine, hydromorphone, stomach opioids, Meperidine (Demerol), heroin, Fentanyl, and other/unknown opioids. The asthma/cold and cough category includes eye, ear, nose, and throat medications. Data available from the poison center are reported on a continual daily basis and are included through December, 2008. These data are only reflective of cases in which the Poison Center was contacted. Contact: Northern New England Poison Center – Karen Simone, Director, [simonk@mmc.org](mailto:simonk@mmc.org); (207)662-7221.

Office of Data, Research and Vital Statistics (ODRVS). ODRVS is a program within the Maine CDC and the data include Maine resident deaths included in the death certificate statistical file that included any mention of the drug in question and are tentative for 2005 and 2006. Data include unintentional, self-inflicted, assault and undetermined intent deaths. Drug categories include methadone, cocaine, benzodiazepines, other opioids, and other narcotics. The Other opioids category includes codeine and morphine. The other narcotics category includes both synthetic and unspecified narcotics, excluding heroin, methadone, codeine, and morphine. The death data are compiled on an annual basis so are not available to track changes that may occur over shorter time frames. Contact: Alice Rohman, Health Planner, Office of Data, Research and Vital Statistics, Maine Center for Disease Control and Prevention, [alice.v.rohman@maine.gov](mailto:alice.v.rohman@maine.gov) ; (207) 287-5451

Pregnancy Risk Assessment Monitoring System (PRAMS). PRAMS is an on-going, population-based surveillance system designed to identify and monitor selected maternal behaviors and experiences before, during, and after pregnancy among women who have recently given birth to a live infant. Data are collected monthly from women using a mail/telephone survey. For more information, contact Kim Haggan, PRAMS Coordinator or email [Maine.Prams@maine.gov](mailto:Maine.Prams@maine.gov)

Prescription Monitoring Program (PMP). PMP maintains a database of all transactions for class C-II through C-IV drugs dispensed in the state of Maine. Drug categories used in this report include narcotics, tranquilizers, stimulants, and other prescriptions. Other prescriptions includes those that not narcotics, tranquillizers or stimulants, including products such as endocrine and metabolic drugs, analgesics and anesthetics, gastrointestinal agents, and nutritional products. The counts included in this report represent the number of prescriptions filled between July 2008 and December 2008. Prescription counts do not reflect amounts in terms of dosage or quantity of pills, but do represent the volume of active prescriptions during the time period. Contact: <http://www.qhsinc.com/pmppage.php>.

Treatment Data System (TDS). TDS is a statewide database that includes information about clients admitted to treatment in OSA-funded facilities through December 2008. Analyses in this report are based on clients' reported primary drug of choice. Drug categories included in this report are alcohol, marijuana, cocaine, heroin, and prescription drugs. Contact: Stacey Chandler, Office Specialist I, Office of Substance Abuse, [stacey.chandler@maine.gov](mailto:stacey.chandler@maine.gov); (207) 287-6337

Youth Risk Behavior Surveillance System (YRBSS). The YRBSS is national survey administered biennially by the National Centers for Disease Control and Prevention (CDC) to students in grades 9 through 12. The survey collects information on youth risk behaviors, including substance use. The YRBSS defines binge-drinking as consuming five or more drinks of alcohol in a row; first drink of alcohol as first drink other than a few sips; and inhalant use as sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high. The most recent YRBSS data is available for 2007, and older data is included as well for trending reports. Both state and national data are available. Retrieval: <http://apps.nccd.cdc.gov/yrbss>





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