Substance Abuse Trends in Maine

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SUBSTANCE ABUSE TRENDS IN MAINE

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MAINE OFFICE OF SUBSTANCE ABUSE
COMMUNITY EPIDEMIOLOGY SURVEILLANCE NETWORK

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Executive Summary

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 objectives, data were obtained from various sources. This report includes data available through June 2008 and updates a report produced by the CESN in April 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 (2007 BRFSS), and 40 percent of high school students reported using alcohol within the past 30 days (2007 YRBSS).

- In 2007, 23 percent of high school students reported that they had engaged in binge drinking within the past 30 days compared with 25 percent in 2005 (2007 YRBSS). However, according to 2006 data, the rate of binge drinking within the past two weeks has remained fairly stable among 11th and 12th graders (25% and 30% respectively) since 2000.

- Maine’s young people are waiting longer to participate in drinking alcohol. The number of high school students who reported that they drank alcohol before the age of 13 has steadily declined from 28 percent in 1995 to 15 percent in 2007 (YRBSS).

- Compared to other adults in Maine, in 2007, young adults ages 18-24 reported the highest rate of heavy use of alcohol (one or two drinks per day) at 11 percent. In addition, 33 percent of young adults reported binge drinking within the past month, the highest rate among any age group in Maine, and higher than the national average of 27 percent (2007 BRFSS).

Prescription Drugs
- Twelve percent of students in grades 6-12 reported using prescription drugs for purposes other than their intended use at some point within their lifetime (2006
MYDAUS)\(^1\) and nearly 20 percent of students in grades 11 and 12 have misused prescription drugs (2006 MYDAUS).

- Fourteen percent of young adults ages 18-25 have used pain relievers for non-medical purposes within the past year (2005-06 NSDUH).

**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 to report having used marijuana in the past 30-days than adult females (2007 BRFSS).
- Older data indicate that over 13 percent of Mainers age 12 and older reported having used marijuana in the past year (2005-06 NSDUH) and over 14 percent of students in grades 6-12 reported using marijuana within the past 30 days (2006 MYDAUS).
- Data from 2005-06 indicate that 28 percent of 18-25 year olds reported that they had used marijuana in the past month, the second highest rate in the nation among this age group (the national average is 16%); and almost 40 percent of Maine’s young adults reported having used marijuana in the past year (2005-06 NSDUH).

**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 reported using illicit drugs other than marijuana in the past month; eight percent of those ages 18-25 reported such use (2005-06 NSDUH).
- In 2007, almost five percent of high school students reported having used cocaine in the past 30 days, and four percent reported using heroin at least once in their lifetime. Both these reported rates of use have remained fairly stable over the past decade.
- Cocaine use in the past year among the 18-25 year old age group is eight percent, higher than any other age group in Maine and higher than the national average of seven percent (2005-06 NSDUH). Nonetheless, this represents a slight decrease since 2003-04.
- Inhalant use among the youth population continues to be a concern, particularly among younger students. In 2007, 13 percent of high school students reported using inhalants at least once in their lifetime; this had not changed since 2001 (2007 YRBSS).

Consequences

- Drug abuse violations among adults increased 10 percent, OUI arrests increased six percent, and liquor violations increased nearly 20 percent from 2005 to 2006. Over the same time period, juvenile liquor arrests have increased by 18 percent, OUIs by 37 percent, and drug arrests by one percent (DPS).

- In 2006, 12 percent of women who were pregnant reported drinking 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).

- Over 40 percent of substance-abuse related exposures reported to the Northern New England Poison Center in the first half of 2008 were associated with pharmceuticals (opioids, antidepressants or benzodiazepines). Reports of substance-related poisonings have been fairly stable for the past year and a half, with most in the past 6 months related to opioids (39), alcohol (31) and benzodiazepines (18).

- Deaths associated with cocaine and opioids other than heroin and methadone continued to increase in 2006, while deaths from methadone experienced a sharp decline. 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 (Office of Data, Research, and Vital Statistics).

Substance Abuse Treatment

- Nearly half (48%) of all admissions to treatment during the first half of 2008 were for treatment of alcohol as a primary presenting problem followed by prescription drugs (24%), and marijuana (11%) (TDS). However, the raw number of primary alcohol admissions appears to have steadily decreased over the past 12 months.

- Among persons entering treatment during the first half of 2008, nearly three-quarters (73%) 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 (60%) followed by alcohol (29%) and “other drugs” (10%) (TDS).

- The number of treatment admissions related to opiate abuse (excluding heroin and morphine) has grown by 60 percent (641 cases) since the first half of 2005. Admissions for oxycodone\(^2\) specifically drives this trend.

- 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

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\(^2\) This includes the drug OxyContin\textsuperscript{®}.
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).

- Among those entering substance abuse treatment during the first half of 2008, nearly three-quarters of older consumers (over 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 (60%), alcohol (29%) or “other drugs³” (10%) (TDS).

**Contributing Factors**

- **Youth Perception of How Parents Feel:** Among middle and high school students, 88 percent reported that their parents feel it is “wrong” or “very wrong” to drink alcohol. This was slightly higher for marijuana (94%).

- **Youth Access:** More students in grades 9-12 believe it is “very easy” to obtain marijuana (45%) than believe it is “very easy” to obtain alcohol (35%) (2006 MYDAUS).

- **Youth Perception of Risk/Harm:** High school students do not perceive trying marijuana one or two times as risky (2006 MYDAUS). In fact, over six out of 10 report that it poses only slight risks to no risk at all.

- **Adult Attitudes:** Among 11th and 12th graders, only 48 percent of students who drank in the past 30 days reported that other adults in their community thought it was wrong to drink, compared to 72 percent among students who did not drink.

³ Descriptions of drug categories are in the description of sources, located in the Appendix.
Introduction and Background

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, 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 to use the findings from public health research along with evidence-based prevention programs to build capacity within states and the prevention field. 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 from multiple sources. 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. Finally, this report adds to the discussion of substance abuse in Maine through comparison to the nation as a whole.

To address these objectives, data were obtained from various sources. This report includes data available through June 2008 and updates the April 2008 CESN report, which included data
through December 2007, when possible. Older and unchanged data were included in this report when more recent data was not available. These data are subject to change. Three major types of data indicators are included in this report: 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 substance abuse trends across the state.

A detailed description of each source is provided in the Appendix, consisting of information about the data included in each source, the indicator’s strengths and weaknesses, and retrieval or contact information.

**Organization of the Report**

The remainder of this report is broken into five major sections. The first section outlines the problem of substance abuse in Maine and provides an overview of 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 of substance use. The fourth section outlines some of the recent trends in substance abuse treatment and hospital admissions, while the last section describes the factors that contribute to substance use overall.
Overview: The Problem of Substance Abuse in Maine

In 2007, 57 percent of adults over the age of 18 reported having 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 a public health concern. Compared to other age groups, young adults ages 18-24 report the highest rate of heavy alcohol use at 1 percent, and this has been steadily increasing since 2005 (2007 BRFSS). Thirty-three percent of 18-24 year olds also reported binge drinking within the past month.

Older 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 reported having used marijuana in the past year, and nearly five percent reported recreational use of pain relievers. Less than three percent reported having used cocaine in the past year (2005-06 NSDUH).

Additional data is available specific to the adolescent population in Maine. Forty percent of high school students indicated they had used alcohol within the past 30 days, 23 percent reported that they had engaged in binge drinking within the past 30 days, and 22 percent reported using marijuana within the past 30 days (2007 YRBSS). Twelve percent reported using prescription drugs for purposes other than their intended use at some point within their lifetime (2006 MYDAUS).

Moreover, substance use can result in individual consequences of psychological and physical harm, and even death. According to NSDUH, 10 percent of Mainers ages 12 and up had a problem with alcohol or illicit drug abuse or dependence, with 24 percent of 18-25 year-olds reporting they had a problem with alcohol or illicit drug abuse or dependence (2005-06 NSDUH). Past-year abuse or dependence of illicit drugs among 18-25 year olds has remained fairly stable from 2002-2006; however, Maine is consistently about three percentage points higher than the national average (11% in 2005-06 compared to 8% nationally).

Communities suffer the consequences of substance abuse in terms of increased health care needs and criminal justice resources. The proportion of pregnant women who reported drinking any alcohol during the last three months of pregnancy appears to be increasing. Drug and alcohol violations are increasing statewide and, in 2006, one out of four drivers involved in fatal crashes in Maine had consumed alcohol. In addition, Maine has the most law enforcement agencies reporting that prescription drugs contribute to both property crime and violent crime (Benak et al., 2007). Clearly, substance abuse is a critical social concern in Maine.

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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 (see Figure 1) 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 reported consuming alcohol in the past month compared to 51 percent nationally. Additionally, six percent of adults reported heavy drinking (one or two alcoholic drinks per day) and 16 percent reported binge drinking with the past month (2007 BRFSS).

In 2007, adults in their late 20s and 30s reported the highest rate of past 30 day alcohol use (62% for those ages 25-34, and 66% for those ages 35-44). However, 11 percent of young adults ages 18-24 reported heavy use of alcohol (one or two drinks per day), the highest of any age group (2007 BRFSS). This has been steadily increasing since 2005 (see Figure 2).
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 reported binge drinking\(^5\) within the past month, compared with 25 percent of 25-34 year olds and only 20 percent of 35-44 year olds (2007 BRFSS; see Figure 3).

The prevalence of binge drinking among 18-24 year olds in Maine is higher than the national average for this age group (27 percent). Among the older adult population (45 and older), rates of binge drinking are slightly higher, at 25 percent. These rates have changed slightly since 2006, the only year with comparable data available. Lastly, while men reported binge drinking more often than women in 2007, (22 percent compared with 10 percent), there was minimal change since 2006 (see Figure 4).

\(^{5}\) 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.
Underage Population

According to the most recent data available, 40 percent of high school students indicated they had used alcohol within the past 30 days (2007 YRBSS). This continues a steady downward trend since 1995 (see Figure 5). Slightly older data corroborate this finding, showing a downward progression from 2000 to 2006 in 30-day alcohol use among middle and high school students (from 31% to 29%; 2006 MYDAUS)\(^6\).

![Figure 5. Percent of Students Who Had At Least One Drink of Alcohol in the Past 30 Days: 1995 to 2007](image)

However, in 2006, 45 percent of 11\(^{th}\) graders and 49 percent of 12\(^{th}\) graders reported consuming alcohol in the past month and these figures remained virtually unchanged since 2000 (2006 MYDAUS).

In terms of binge drinking, in 2007, 23 percent of high school students reported that they had engaged in binge drinking within the past 30 days, compared with 25 percent in 2005 (2007 YRBSS). However, in 2006, almost one-third of Maine students in grades 11 and 12 reported participating in binge drinking within the past two weeks (25% and 30% respectively), a rate that has remained fairly stable since 2000 (2006 MYDAUS).

An additional finding in 2007 is that there was virtually no difference between male and female students in reported binge drinking, indicating that the gender gap may be closing (see Figure 6). This is corroborated by 2006 MYDAUS, which also indicated that the incidence of binge drinking within the previous two weeks among male students had decreased to almost the same rate as females.

![Figure 6. Percent of Students Who Binge Drank With the Past 30 Days, By Gender: 1995 to 2007](image)

\(^6\) Note that the rates of use differ between the two data sources because MDYAUS includes middle school students.
Finally, it appears that young Mainers are waiting longer to participate in drinking alcohol. The number of high school students who reported that they drank alcohol before the age of 13 is steadily declining (from 28 percent in 1997 to 15 percent in 2007) and the gender gap appears to be closing there as well (see Figure 7).

![Figure 7. Percent of Students Who Drank Alcohol Before the Age of 13, By Gender: 1997 to 2007](chart)

**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 12 percent of students in grades 6-12 report they have used prescription drugs for a reason other than their intended purpose at least once in their lifetime, and six percent had misused prescription drugs in the past 30 days. For both indicators, data show that use has decreased since 2004 (Figure 8). Among older students (11th and 12th graders), nearly one in five students has misused prescription drugs at least once in their lifetime, with little difference between male and female students (2006 MYDAUS).

![Figure 8. Lifetime and 30-day Misuse of Prescription Drugs Among 6th - 12th Grade Students: 2004 to 2006](chart)
Adolescents are not the only population misusing prescription drugs. NSDUH data from 2005-06 show that 13 percent of young adults ages 18-25 have used pain relievers for non-medical purposes within the past year. Use of pain relievers, specifically, has also declined in recent years (NSDUH). Figure 9 shows the decreasing trend of non-medical use of pain relievers since 2003.

Prescription narcotics are among the greatest drug threats in the New England region, including Maine (NDIC, 2007). According to the most recent Drug Threat Assessment, the most abused prescription drugs included oxycodone and hydrocodone. Maine law enforcement officials report increased abuse of methadone and buprenorphine as well. There is a troubling reciprocal relationship between heroin and prescription narcotic use, with prescription narcotic abusers often switching to heroin use, and former heroin abusers abusing methadone and buprenorphine addiction treatment products. A local needle exchange program reports that the most frequently cited drug among its clients is buprenorphine (Suboxone®) due to its cheapness and easy street availability. Clients inject the drug despite the fact that it contains naloxene, an additive that is supposed to inhibit injection by causing withdrawal symptoms.

Treatment data show that oxycodone, which includes the trademarked OxyContin®, is the primary drug most often listed at admission for those abusing prescription drugs. According to treatment admissions data⁷, users primarily inhale crushed pills, followed by injection and oral consumption. Reports of both injection and inhalation increased during the first half of 2008, continuing their upward trend and illustrated in Figure 10a. However, as a proportion

⁷ These data do not include shelter/detox admissions.
of all admissions for oxycodone, the route of administration shows little change over time (see Figure 10b).

**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 reported illicit drug use (including marijuana) in the past month, making Maine the state with the third highest rate of reported illicit drug use among 18-25 year olds in the nation.

Among that same population, reports of abuse or dependence on illicit drugs in the past year have 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).

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, on the following page).
Only three percent of Mainers age 12 and older reported using illicit drugs (other than marijuana) in the past month; those who reported the highest rate, nine percent, are aged 18-25 (2005-06 NSDUH). Figure 13 illustrates that use of illicit drugs other than marijuana has decreased in recent years (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.

Among high school students, the percent of students who report using marijuana within the last 30 days has declined steadily in the past 10 years, from 30 percent in 1997 to 22 percent in 2007 (2007 YRBSS, see Figure 14). While there has been little change overall between 2005 and 2007, it appears that past 30 day of marijuana has decreased for male students and increased for female students during that time period. 2006 MYDAUS shows similar trends among all students (grades 6-12). Approximately 14 percent had used marijuana in the past month in 2006, down from 16 percent in 2002 (2006 MYDAUS). According to another data source, the rate of past 30-day use of marijuana among 12-17 year olds in Maine is the highest in the nation (11% compared to 7% nationally; 2005-06 NSDUH)

The prevalence of using marijuana before the age of 13 has decreased since 1997, from 12 percent to seven percent (YRBSS), a trend that is also reflected in MYDAUS. Figure 15 shows the decreasing trend is stronger for males than females (YRBSS).
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%). Adult males were over four times more likely to report having used marijuana in the past 30-days than adult females (2007 BRFSS).

Older data from 2005-06\(^8\) show that 28 percent of 18-25 year olds reported that they used marijuana in the past month (Figure 16), 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 reported having used marijuana in the past year. Conversely, only six percent of adults over the age of 25 reported using marijuana in the past month, and nine percent in the past year (2005-06 NSDUH).

Both past month and past year marijuana use has increased slightly among all Mainers age 12 and older; however, as Figure 17 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).

\(^8\)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.
**Cocaine/Crack.** According to the most recent data available for high school students, 4.5 percent reported having used cocaine in the past 30 days, a slight increase since 2005 (2007 YRBSS, see Figure 18). When examined over the past 10 years, however, this reported rate of use remains fairly stable.

In addition, according to 2006 MYDAUS (which represents a larger sample of students), 4.5 percent of students in grades 6 to 12 have tried cocaine at least once in their lifetime and this has not changed since 2000. Likewise, 2005-06 NSDUH data show a similar trend for 12-17 year olds for cocaine use in the past year (see Figure 19 below).

Cocaine use in the past year among the 18-25 year old age group is eight percent, higher than any other age group in Maine (Figure 19) 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).
Treatment admissions data indicate that the smoking of cocaine is now more prevalent than inhaling (snorting) it, although smoking as a route of administration declined in the first half of 2008 (Figure 20).

After increasing slightly, injection as the primary route of administration for cocaine appears to have leveled off since the first half of 2007.

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 high school students, the rate of reported lifetime heroin use remained low at four percent (2007 YRBSS), and virtually unchanged since 2001. According to treatment admissions data for the first half of 2008, 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 percent since the first half of 2005.

**Inhalants.** Inhalant use among the youth population continues to be a concern, particularly among younger students. In 2007, 13 percent of high school students reported using inhalants at least once in their lifetime; this had not changed since 2001 (2007 YRBSS). However, it is important to examine use rates among younger students as well. In 2006, 14 percent of 8th graders and 15 percent of 9th graders reported using inhalants at least once in their lifetime (2006 MYDAUS). The incidence of previous 30-day use has remained fairly stable since 2000 and is consistently higher among the lower grades (see Figure 21, on following page). The highest rate of past 30-day use in 2006 was among 8th grade students, at just over seven percent.
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, 2007). Furthermore, New England is one of the few areas in the United States where methamphetamine is not a large threat at this time. In 2007, high school students indicated that only five percent had used methamphetamines at least once in their lifetime (2007 YRBSS), a decrease from eight percent in 2001. This is supported by 2006 MYDAUS data, which shows that only three percent of students reported using stimulants at least once in their lifetime, and this has been steadily decreasing since 2000.

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, use of which has remained stable at low levels in recent years (NDIC, 2007).
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 2006. However, Figure 22 shows that 2006 saw a 10 percent increase in drug abuse violations from 2005, a 6 percent increase in OUI arrests from 2005, and nearly a 20 percent increase in liquor violations from 2005 (other substance-related arrests also saw increases, although to a lesser degree).

![Figure 22. Number of Adult Substance-Related Arrests: 2000 to 2006](image-url)
While adult arrests have increased slightly across all types of offenses, juvenile arrests have followed a different pattern. As Figure 23 illustrates, juvenile liquor arrests have increased 50 percent since 2000, and drug arrests have decreased 29 percent since 2000.

In addition, Maine has both the most law enforcement agencies reporting prescription drugs contributing to property crime (32%), and the most law enforcement agencies reporting that prescription drugs contribute to violent crime (27%) compared to the rest of the nation (2007 National Drug Threat Survey, as reported in Benak et al., 2007). When these proportions are applied to the 2006 crime data reported by the Uniform Crime Report, that translates into 411 violent crimes and 10,710 property crimes that could be attributed to prescription drug abuse.

**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 reported drinking any alcohol during the last 3 months of pregnancy, compared with only 5 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 24a and 24b, on following page). However, neither of these groups reported any binge drinking within the last 3 months of pregnancy.
The data instead indicate that younger pregnant women (under 25) and lower income pregnant women (those earning less than $15,000 per year) were more likely to report binge drinking within the last three months of pregnancy. However, the data must be interpreted cautiously as the margin of error for binge drinking is quite large. Nonetheless, these data suggest that although younger or lower income pregnant women are less likely to drink during pregnancy, those who do drink may be consuming more.

In addition, according to substance abuse treatment admissions data, five percent of all women (144 cases) admitted for substance abuse treatment in the first half of 2008 were pregnant. This proportion has remained fairly stable since the first half of 2005.

The majority of pregnant treatment admissions (80%) in the first half of 2008 were among women between the ages of 18 and 29, and more than one-third (39%) were admitted for prescription narcotic use (TDS).
Drinking and Driving

In 2006, the most recent year of data available, 63 fatalities from traffic accidents involving alcohol occurred in the State of Maine (see Figure 25). This was an increase from 2005 after a steady two-year decline.

![Figure 25. Number of Fatalities from Crashes involving Alcohol: 2000 to 2006](image)

Figure 25 illustrates these data differently, representing the percent of all drivers in fatal crashes who had consumed any alcohol (25% in 2006). This proportion also increased since the previous year and has been on the rise since 2002.

![Figure 26. Percent of All Drivers in Fatal Crashes Who Were Alcohol-Involved: 2000 to 2006](image)
Poisonings

The Northern New England Poison Center has received nearly 21,000 medication verification calls in the first half of 2008, over 3,000 more than within the same period last year. Of these, most (over 19,000) were from the public. A great number of these involve medication abuse in the community. The Poison Center also received 1,154 calls from law enforcement requesting identification of or information about substances, although this is decreasing each year (see Figure 27). The types of drugs most often requested by law enforcement for identification are opioids\(^9\) and benzodiazepines, which is consistent with similar 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 first half of 2008, 163 substance abuse-related exposures involving over 182 substances were reported to NNPEC. As illustrated by Figure 28, the majority of the substances involved were opioids (21%), stimulants/street drugs (19%), and alcohol (17%). Over recent years, exposures reported to the NNEPC are static or decreasing slightly, as are calls from law enforcement. Although it appears that both opioids and antidepressants increased slightly since the last half of 2007, it is not known if this will continue (see Figure 29, on following page). However, inquiries from the community increase greatly each year; as most of these reflect substance abuse, the trend is concerning.

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\(^9\) 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.
NNEPC also receives reports of substance abuse-related poisonings. In the past six months, these reports increased slightly from 150 to 163, although reports have been fairly stable for the past year and a half (see Figure 30).

Of those, most reports were related to opioids (39), alcohol (31) and benzodiazepines (18); reports of poisonings from opioids increased since the second half of 2007, while the other two substances declined (see Figure 31).
Morbidity and Mortality

While the number of substance abuse-related poisonings in Maine decreased over the past two years, 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 32 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.

![Figure 32. Deaths Related to Substance Use: 1999 to 2006](image)

Also illustrated in Figure 32 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).
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

Treatment program data echoes the consumption data indicating that alcohol is a major problem in Maine. Between January and June 2008 there were a total of 7,141 admissions (representing 6,431 people) to providers of substance abuse treatment throughout the state. As shown by Figure 33, nearly half (48%) of all admissions were for treatment of alcohol as a primary presenting problem, followed by prescription opiates (24%), marijuana (11%) and to a lesser extent heroin (6%), cocaine/crack (6%), methadone (3%) and other drugs (1%) such as methamphetamine, ecstasy or inhalants (TDS).

During this same time period, 57 percent of treatment admissions reported a secondary substance for treatment, and 31 percent had a third substance as well. Marijuana was the most frequently cited secondary substance (18%), followed by other opiates/synthetics (13%), alcohol (10%) and cocaine/crack (6%).

Among those entering the treatment system in the first half of 2008, nearly three-quarters (73%) of adults over age 40 received treatment services for

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These data exclude shelter/detox admissions.

Primary presenting problem is defined as the first-listed ailment when a consumer enters treatment.
alcohol as a primary presenting problem compared to younger consumers (under 18) who were more likely to receive treatment for use of marijuana (60%) followed by alcohol (29%) and “other drugs” (10%) (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-third in treatment for alcohol (33%), 13 percent seeking treatment for marijuana and nearly nine percent in treatment for heroin/morphine (an additional five percent were seeking treatment for methadone). Consumers, particularly juveniles, are sometimes 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 34). 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 34. Number of Primary Treatment Admissions for Alcohol: January 2005 through June 2008](image-url)
Treatment for Prescription Narcotics. The number of treatment admissions related to opiate abuse (excluding heroin and morphine) has grown by 60 percent (641 admissions) in Maine since the first half of 2005. As illustrated in Figure 35, treatment admissions for this group of substances as the primary substance has been increasing steadily since the second half of 2005, a trend that continued during the first half of 2008. Admissions for oxycodone (which includes OxyContin®) specifically drives this trend.

![Figure 35. Number of Primary Treatment Admissions for Oxycodone and Other Opiates/Synthetics: January 2005 through June 2008](chart)

For benzodiazepines, there have been fewer than 50 primary treatment admissions per year; however, as a secondary substance, treatment admissions for this category of prescription drugs increased sharply between 2005 and 2007. The first half of 2008 shows a slight decline, although it is too soon to know if this trend will continue.
Treatment for Marijuana. There continue to be more secondary treatment admissions for marijuana in the first half of 2008 (see Figure 36, on following page) and the number increased slightly during the past 6 months. Notably, the number of primary treatment admissions for marijuana increased by almost 100 cases since the second half of 2007.

Treatment for Other Illegal Drugs. After trending downward slightly, treatment services for methadone increased during the first half of 2008 (Figure 37). However, treatment services for heroin/ morphine continued to decrease during this same time period, while primary treatment admissions for crack/cocaine did not change after steadily climbing since 2005.
Hospital Admissions

**Hospital 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 prescription drugs, including stimulants and depressants, as well as anti-psychotic medications (2006 MHDO). Including 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 (see Figure 38).

As shown in Figure 39 on the following page, 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\(^{12}\) (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 drugs 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.

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\(^{12}\) Per capita hospital admission rates were calculated with the following formula: (Number of Hospitalizations)/Total County Population*100,000.
Outpatient hospital admissions for substance abuse treatment 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.\footnote{This is based on the ICD-9 diagnostic code assigned by the facility providing treatment.}

Moreover, when broken out by county (see Figure 40), 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.
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 January and June 2008, 1,037,982 prescriptions were reported to the PMP, which receives reports for Drug Classes C-II through C-IV. Prescriptions for narcotics have consistently accounted for the bulk of prescriptions reported to the PMP, followed by tranquilizers, stimulants, and other prescriptions (Figure 41).[^14]

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[^14]: The counts for the periods between January 1 and June 30 of each year were based on a calculation: the counts of records submitted between July 1 and December 31 were subtracted from the total counts submitted for the state fiscal year.
Another important measure of availability is student perceptions of how easy it is to obtain alcohol and drugs. According to 2006 MYDAUS data, students in grades 9-12 believe it is easier to obtain marijuana than it is to obtain alcohol. As Figure 42 shows, high school students perceive marijuana to be “very easy” to obtain (45%), other drugs to be “very hard” to obtain (50%), and alcohol to be either “sort of easy” (32%) or “very easy” (35%) to obtain.

![Figure 42. Perceived Availability of Substances Among 9-12 Graders: 2006](image)

Most illicit drugs enter Maine and the New England region from the American Southwest Region via New York (NDIC, 2007). Crack-cocaine availability in Maine is increasing due to increased distribution from Massachusetts and New York-based gangs. Maine’s location as a Canadian border state also makes it a target for smuggling operations. 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.

**Enforcement**

As discussed previously, arrest data from the DPS could indicate increased use by the general population and a shift in use from other drugs to alcohol by juveniles, or it could indicate increased enforcement of drug and liquor laws by law enforcement officials and a shift in juvenile enforcement focus from other drugs to alcohol violations.

In 2007, the DEA seized 5.2 kg of cocaine (an increase from 2.2 kg in 2006), 133 dosage units (or du) of methamphetamine (an increase from 19 du in 2006), 78.4 kg of marijuana (an increase from 60.1 in 2006), and 45 du of MDMA (a decrease from 151 du in 2006).
As might be expected, nearly half of all law enforcement drug seizures come from Maine’s southernmost and densely populated areas including Cumberland (25%), Androscoggin (10%) and York counties (9%). Interestingly, law enforcement officials from Washington (7%, pop. 33,941) and Knox counties (7%, pop. 36,618) submitted virtually the same number of drug samples as law enforcement officials from Kennebec county (7%, pop. 117,114), a county with three times the population base.

The map in Figure 43 shows the most common form of drug seized by law enforcement officials in each of Maine’s sixteen counties. Cocaine is most commonly seized in the southern and northern parts of the state, prescription narcotics in the east and marijuana in the western part of the state.

The Maine Health and Environmental Testing Laboratory analyzes evidence submitted to the Drug Chemistry Unit of the Maine Health and Environmental Testing Laboratory. During 2007, the Drug Chemistry Unit conducted confirmatory testing on 1,259 drug samples. Cocaine was the most common form of drug detected, representing one half of all sample submissions. Prescription narcotics (15%), marijuana (11%), heroin (7%) and a wide assortment of other drugs (16%) make up the remaining types of drugs detected by the lab.

Perhaps as a result of these law enforcement efforts, the proportion of students reporting that kids in their neighborhood would get caught for drinking alcohol or smoking marijuana has been increasing consistently since 2000 (Figure 44). In 2006, 23 percent thought kids would be caught for drinking alcohol (compared with 20 percent in 2000) and 30 percent thought they would be caught for smoking marijuana (compared with 25 percent in 2000).
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 2006 MYDAUS, younger students (grades 6-8) are more likely to perceive substance use as “risky” than are high school students (grades 9-12). Figure 45 illustrates this point by showing the age difference in perception of risk associated with trying marijuana once or twice.

Forty percent of students in grades 6 through 8 believe that trying marijuana a couple of times poses a great risk, compared with only 17 percent of students in grades 9 through 12. Older students were also more likely to have used marijuana at least once (30% compared with 7%). However, among all students, the proportion who believe substance use is risky has been increasing gradually each year since 2000 (MYDAUS).

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 5 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 46 and 47, on following page). These trends have remained stable since 2003.
Figure 46. Perceptions of Great Risk from Smoking Marijuana Once a Month, By Age Group: 2002-03 to 2005-06

Source: 2002/03 - 2005/06 NSUDH

Figure 47. Perceptions of Great Risk from Drinking Five or More Drinks Once or Twice a Week, By Age Group: 2002-03 to 2005-06

Source: 2002/03 - 2005/06 NSUDH
Community/Cultural Norms

Among middle and high school students, 88 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 report that adults in their community think that drinking alcohol is “wrong” or “very wrong”, and four out of five reports the same community attitude towards marijuana. Nonetheless, about two in three (60%) reported to have known at least one adult who got drunk or high in the past year.

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 reporting that kids in their neighborhood would get caught for drinking alcohol or smoking marijuana has been increasing consistently since 2000.

Roughly 15 percent of students in all grades reported that they would be seen as cool for regularly drinking alcohol or for smoking marijuana, and this changed little since 2000. The “coolness factor” increases dramatically among older students (Figure 48).

![Figure 48. Percentage of Students Reporting That They Would Be Seen As "Cool" For Using Alcohol or Marijuana, By Grade: 2006](image-url)

Source: 2006 MYDAUS
**Substance Abuse and Co-occurring Disorders**

Approximately 12 percent of Mainers age 18 and older reported having 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 49).

![Figure 49. Percentage of Mainers Age 18 and Older Reporting Serious Mental/Psychological Distress: 2002-03 to 2005-06](source: 2002/03 - 2005/06 NSUDH)

According to TDS, in the first half of 2008, almost half (48%) of all treatment admissions for substance abuse had a co-occurring mental health disorder. This represents a slight decline after steady increases since 2005 (see Figure 50).

![Figure 50. Percent of Total Treatment Admissions That Reported a Diagnosed Mental Health Disorder: January 2005 through June 2008](source: TDS)

In the first half of 2008, 41 percent of consumers with a diagnosed mental health disorder were in treatment for alcohol as a primary substance, 25 percent were in treatment for other opiates/synthetics, and 12 percent for marijuana.

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15 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.
Conclusions

The substance most often used by Maine residents is alcohol. While overall 30-day incidence of alcohol use appears to be decreasing or remaining stable and young Mainers are waiting longer to participate in drinking alcohol, heavy drinking among young adults has increased and more of Maine’s young adults report drinking alcohol than the national average.

In addition, basic demographic analysis suggests that younger pregnant women and lower income pregnant women who do drink may be consuming more, a finding that mirrors the consumption patterns for alcohol use among the young adult population overall. Moreover, alcohol as the primary presenting problem still makes up the largest percent of treatment admissions in Maine although the raw number of admissions has decreased since the first half of 2005.

The most commonly used illegal drug in Maine is marijuana. While marijuana is illegal in the United States, it is comparatively accessible in Maine, where it is grown on local farms and smuggled from Canada and Southern New England. Overall, Maine holds the third highest rate of reported illicit drug use in the past month among 18-25 year olds in the nation. Marijuana makes up the majority of illicit drug use in Maine. 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 reported having used marijuana in the past year. Moreover, recent data indicate that one in five high school students in Maine have used marijuana in the past 30 days, and they do not perceive trying marijuana once or twice as risky behavior.

When marijuana is excluded from the analysis of illicit drug use, the picture changes dramatically. Only three percent of Mainers age 12 and older report using illicit drugs other than marijuana in the past month (49th in the nation), while eight percent of 18-25 year olds did so (31st in the nation among that age group).

However, prescription drugs (which are legal) stand out in comparison to other drugs. 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, nearly 20 percent of students in grades 11 and 12 report having misused prescription drugs, and 13 percent of young adults ages 18-25 report having used pain relievers for non-medical purposes within the past year. Moreover, over 40 percent of reported poisonings were associated with pharmaceutical drugs, and substance abuse-related deaths were most often attributed to methadone, followed by other opioids. Finally, prescription drug misuse is having a large impact on treatment and hospitalizations in Maine and the raw number of primary treatment program admissions attributed to opiate abuse, excluding heroin and morphine, has grown by 60 percent (641 admissions) since the first half of 2005.
References


Office of Diversion Control (2002). *Summary of Medical Examiner Reports on Oxycodone-Related Deaths*. Department of Justice, Drug Enforcement Administration: Washington, DC.

Appendix

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 June 2008 and updates the April 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.

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 2006. Trending data from 2000, 2002, and 2004 are also included in this report. Contact: Melanie Lanctot, Research Analyst, Office of Substance Abuse, melanie.lanctot@maine.gov; (207) 287-2964

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 paint or sprays to get high. The most recent YRBSS data is available for 2005, and older data is included as well for trending reports. Both state and national data are available. Retrieval: http://apps.nccd.cdc.gov/yrbss

Both the MYDAUS and YRBSS surveys are administered on a biannual basis, so while they are useful for tracking long-term trends, they cannot be used to track changes that may occur over shorter periods of time.

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 2006. Older data are also included for trending analyses. Both state and national data are available. Retrieval: [http://www.cdc.gov/brfss](http://www.cdc.gov/brfss)

**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.

Both the BRFSS and NSDUH data compilations are released annually and are useful for tracking long-term trends.

**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. The pharmaceuticals category was created by the authors and includes the categories of asthma/cold and cough, benzodiazepines, and antidepressants. Data available from the poison center are reported on a
continual daily basis and are included through February, 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; (207)662-7221.

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; (207) 287-6745.

OSA Treatment Data System (TDS). TDS is a statewide database that includes information about clients admitted to treatment in OSA-funded facilities through June, 2007. 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; (207) 287-6337

SAMHSA Treatment Episode Data Set (TEDS). TEDS is a national database, maintained by the Substance Abuse and Mental Health Services Administration (SAMHSA), which includes information about clients admitted to OSA-funded facilities through 2006. TEDS includes TDS information from the state of Maine, along with information from other states across the nation. Retrieval: SAMHSA - http://www.oas.samhsa.gov

The primary limitation of treatment data in both TDS and TEDS is that trends in admissions to treatment lag behind use trends in the general population.

Uniform Crime Reports (UCR) of the Maine Department of Public Safety (DPS). 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 2006. 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)

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; (207) 287-5451

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 2007 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; (207) 287-1708.

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 include 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 from January 2006 through June 2006 used in this report were based on a calculation: the counts of records submitted between July 1, 2005 and December 31, 2005 were subtracted from the total counts submitted during state fiscal year 2006. Contact: http://www.ghsinc.com/pmppage.php.

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 travelling on a trafficway 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

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
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.
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