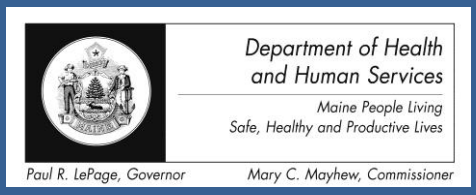
Substance Abuse Trends in Maine
State Epidemiological Profile 2014



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Office of Substance Abuse and Mental Health Services
***by* Hornby Zeller Associates, Inc.**

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Substance Abuse Trends in Maine
State Epidemiological Profile 2014

THIS REPORT IS PRODUCED FOR
THE MAINE OFFICE OF SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES
COMMUNITY EPIDEMIOLOGY SURVEILLANCE NETWORK (CESN)

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Executive Summary

This report takes into account the primary objectives of the Office of Substance Abuse and Mental Health Services (SAMHS): 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 the prevention priorities identified in the SAMHS strategic prevention plan: underage drinking, high-risk drinking among 18-25 year olds, misuse of prescription drugs among 18-25 year olds, and marijuana use in 12-25 year olds; as well as monitors the progress being made to address these priorities. This report includes data available through December 2013 and when possible updates the March 2013 report which included data through December 2012.

Key findings of this report include:

Consumption of Substances

- The proportion of high school students in Maine who report consuming alcohol in the past month has decreased notably since 2009.
- From 2009 to 2013 there has been a decrease in the proportion of high school students who report binge drinking within the past month.
- In 2012, four in ten underage adults (18 to 20) reported any alcohol use in the past month while almost one in four had engaged in binge drinking at least once within the past month.
- In 2012, 18 to 25 year olds appeared to be at greatest risk from heavy alcohol use, with one in ten reporting that they consumed at least one alcoholic drink per day in the past 30 days.
- In 2012, the highest binge drinking rates were found among 18 to 25 year olds (33%) and 26 to 35 year olds (29%). Rates of binge drinking have remained fairly stable over time.
- In 2013, more than one in ten students reported either having smoked a cigarette or cigar with the past 30 days. The use of any cigarettes by high school students has been decreasing steadily since 2009.
- In 2012, one in five Mainers 18 and older reported smoking at least one cigarette in the past month. The highest rate was observed among adults between the ages of 26 and 35, with almost one in three having smoked at least one cigarette within the past 30 days. Rates among Mainers between 18 and 49 years of age decreased from 2011 to 2012.
- In 2013, more than one out of ten high school students reported misusing a prescription drug in their lifetime. Among high school students, the rates for lifetime as well as past month misuse of prescription drugs decreased from 2009 to 2013.
- Non-medical use of prescription pain relievers is more likely among 18 to 25 year olds compared to adults age 26 and older. More than one in ten 18 to 25 year olds reported

having misused pain relievers in the past year, although this has decreased in recent years.

- In 2012, the highest rate of lifetime prescription drug misuse was observed among adults between the ages of 26 and 35; almost one in ten reported misusing prescription drugs within their lifetime.
- More than one in five high school students reported using marijuana within the past month; similar rates are seen within the young adult (18 to 25) population. Rates of marijuana use among all Mainers have remained stable over time.
- Among adults, those between the ages of 18 to 25 reported higher rates of cocaine use in the past year than adults age 26 and older. It appears that the proportion of high school students who have used cocaine in their lifetime decreased slightly from 2011 to 2013.
- In 2013, about one in eleven high school students reported having used an inhalant during their lifetime. Rates of inhalant use have decreased over the past several years.
- Almost one in ten homeless youth in Maine have used heroin during their lifetime, a rate that was almost twice as much as Maine high school students.

Consequences Resulting from Substance Use and Abuse

- Almost one in five women reported smoking in the last trimester, and eight percent reported drinking alcohol. More than one in ten pregnant women age 25 or older reported to have consumed alcohol in their last trimester.
- In 2013, three percent of all women who have been admitted to substance abuse treatment were pregnant. Recently, the proportion of pregnant admissions primarily due to synthetic opioids has decreased while the proportion related to heroin has increased significantly.
- More adult arrests related to alcohol came from OUIs than from other violations of liquor laws, whereas alcohol-related arrests among juveniles show the opposite pattern. Rates for other liquor law violations and OUIs have been steadily decreasing among Maine residents (both juveniles and adults) over the past several years.
- Most drug-related offenses in 2012 were for possession rather than sale and manufacturing. Since 2008, it appears that adult arrests related to drugs have remained stable, while juvenile arrests have generally declined.
- Since 2009, the majority of drug offense arrests made by Maine DEA involved pharmaceutical narcotics. Drug offenses related to heroin have been steadily increasing, and in 2013 one in five drug offenses involved heroin.
- After observing a steady increase in pharmacy robberies from 2009 to 2012, Maine saw a dramatic decrease in 2013.
- Both the number and proportion of alcohol related motor vehicle crashes have decreased within the past several years, from 1,494 (5%) in 2009 to 1,205 (4%) in 2013.
- In 2013, almost one in four (23%) of fatal motor vehicle crashes involved alcohol.

Drivers between the ages of 21 and 24 had the highest alcohol-related crash rates, followed by drivers between the ages of 25 and 34. Rates among 16 to 20 year olds have been steadily decreasing since 2009.

- In 2013, the rates of alcohol related motor vehicle fatalities were highest among 21 to 24 year olds, followed by 16 to 20 year olds.
- The majority of inpatient hospital admissions related to substance use is due to alcohol, followed by opiates, marijuana, sedatives, and cocaine.
- In 2010 and 2011, the majority of outpatient hospital admissions related to substance use was due to opiates, followed by alcohol, marijuana, cocaine, and sedatives.
- Both the number and proportion of total poisonings reported to NNEPC related to substance abuse have increased since 2009. In 2013, almost one in seven poisonings was a suspected suicide.
- In 2012, there were 163 overdose deaths due to substance use in Maine. The vast majority of overdose deaths were related to pharmaceutical drugs. A dramatic increase in the number of illicit drug related overdose deaths was observed from 2011 to 2012.
- In 2012, overdose deaths were most likely to involve oxycodone, benzodiazepines and methadone. While overdose deaths involving methadone have been decreasing, those related to heroin increased sharply from 2011 to 2012.
- Adults between the ages of 35 to 54 had the highest rate of death due to substance abuse or overdose during 2012.
- Ischemic cerebrovascular (stroke) diseases were more prevalent among Mainers in 2012 than cardiovascular diseases and alcoholic cirrhosis. Cirrhosis and liver disease related to alcohol were three times more likely among men than women.

Factors Contributing to Substance Use and Abuse

- Overall, about two out of three high school students think it would be easy to obtain alcohol; this represents a slight decrease since 2009.Students who thought alcohol was easy to obtain were three times as likely to report consuming alcohol within the past month compared to students who did not think it was easy to obtain.
- In 2013, over half of high school students believe that marijuana is easy to obtain. This has decreased slightly from 2009. Students who thought marijuana was easy to obtain were nearly eight times as likely to use marijuana in the past 30 days compared to their peers who thought it was difficult to obtain.
- More than one in five high school students were sold, offered or given an illegal drug on school property; this rate decreased slightly from 2011. Students who reported they were offered drugs at school were 2.5 times as likely to use marijuana as their peers who were not offered drugs at school.
- Overall, the number of schedule II prescriptions filled involving narcotics, tranquilizers, and stimulants have decreased from 2009 to 2013; this was driven greatly by the decrease in prescriptions for narcotics. Narcotics accounted for the most prescriptions filled as well as pills per capita in Maine for the past several years. Narcotic pills per capita have been steadily decreasing, while stimulant pills per capita appear to be rising.

- Most calls to NNEPC requesting substance verification involved opioids, followed by benzodiazepines. The numbers of requests for verification for opioids and benzodiazepines have decreased substantially since 2010.
- Although most high school students think there is moderate to great risk of harm from drinking alcohol regularly, almost two out of five students in 2013 did not think regular use was risky. Perception of harm from regular alcohol use decreased slightly from 2009 to 2013. Students who do not perceive regular alcohol use (one to two drinks per day) as risky were almost twice as likely to drink in the past month than students who did perceive harm
- Perception of risk of harm from binge drinking among high school students has increased significantly from 2009 to 2013. While perception that binge drinking a few times a week posed a moderate to great risk of harm has increased, seven out of ten young adults thought that binge drinking a few times a week was not risky. Students who do not perceive a moderate to great risk of harm from binge drinking once or twice a week are more than twice as likely to drink in the past month as High school students who do perceive risk of harm.
- Perception of risk of harm from regular marijuana use has decreased dramatically from 2009 to 2013 among high school students. In 2013, over half of students felt smoking marijuana on a regular basis is not risky. Students who do not believe there is moderate to great risk in smoking marijuana regularly are almost eight times as likely to smoke marijuana as their peers who do perceive risk of harm.
- The perceived risk of harm from regular marijuana use has been declining steadily among adults as well. In 2011-12, nearly nine in ten 18 to 25 year olds did not perceive smoking marijuana at least once a month as risky.
- High school students think they are more likely to be caught by their parents for drinking alcohol than by the police. Perceptions of getting caught by parents steadily increased from 2009 to 2013. Students who believe they will be caught by their parents are one-fifth as likely to drink in the past month as compared to students who do not think they will be caught. Students who believe that they would be caught by the police are half as likely to drink alcohol in the past month as those who do not think they would be caught.
- The majority of high school students do not think they will be caught by police for smoking marijuana. Less than one in four students felt kids in their community would be caught by the police for smoking marijuana. Students who believe they would be caught by the police are less than half as likely to smoke marijuana as their peers.
- In 2013, six out of ten high school students thought they would be seen as at least a little “cool” if they drank alcohol. In addition six in ten students thought they would be seen as at least a little “cool” in they used marijuana. Rates have remained relatively stable since 2009.
- High school students generally believe that their parents and adults in their community think it would be wrong for them to drink alcohol. The perception of disapproval increased in both parents and adults in community from 2009 to 2013. Students who do

not believe their parents feel it would be wrong for them to drink are 2.5 times as likely to drink as their peers who do feel their parents would think it was wrong.

- Although high school students generally believe that their parents and adults in their community think it would be wrong for them to smoke marijuana, perception of disapproval for both parents and adults in the community decreased slightly from 2009 to 2013. Students who believe their parents feel it is wrong for them to smoke marijuana are one fourth as likely to use marijuana as students who do not believe their parents would think it is wrong.
- Almost nine in ten high school students in Maine report that their family has clear rules around alcohol and drug use. Students who believe their parents have clear rules about substance use are half as likely as their peers to drink alcohol.

Mental Health, Suicide and Co-occurring Disorders

- One in five adults in Maine report experiencing any mental illness in the past year. Major depressive episodes are most prevalent among 18 to 25 year olds with about one in ten experiencing at least one episode within the past year.
- One in four adults in Maine reported having ever been diagnosed with depression, compared to one in five reporting to have been diagnosed with anxiety. Adults ages 18 to 35 reported the highest rates of anxiety while those between 26 and 46 had the highest rates of depression.
- In 2013, almost a quarter of high school students reported feeling sad or helpless during the past year. Rates of students reporting having seriously considered suicide or planned suicide increased from 2011 to 2013. About one in seven high school students in Maine had either seriously considered suicide or made a plan for suicide.
- Since 2009, students who have considered suicide seriously were about twice as likely to have consumed alcohol within the past 30 days.
- In 2013, over half of all substance abuse treatment admissions also involved a mental health disorder; this rate has been increasing steadily over the past several years. Nearly one-third of those admitted had received outpatient mental health services in the past year.

Treatment Admissions for Substance Abuse

- In 2011-12, about one in seven 18 to 25 year olds in Maine were identified as needing but not receiving treatment for alcohol and nearly one in ten needing but not receiving treatment for illicit drug use. Young adults were three times as likely to be perceived as needing but not receiving treatment for alcohol as those who were 26 and older.
- The overall number of Mainers seeking treatment has been declining since 2011, from 12,740 to 11,815 in 2013. Mainers continued to seek out treatment for abuse involving a wide array of substances with 4,145 admissions for alcohol as the primary substance, followed by synthetic opioids (3,681) and heroin (1,992).

- Alcohol continues to be the most frequent substance for which Mainers seek treatment, although the number of treatment admissions for alcohol has decreased since 2009. Alcohol accounts for a gradually decreasing proportion of primary admissions since 2009.
- Nearly one in three of all primary and one in four of all secondary admissions are due to synthetic opiates. The number of primary treatment admissions involving synthetic opiates has remained stable since 2012, however.
- Marijuana tends to be listed as a secondary or tertiary substance for which treatment is sought. About one in four secondary admissions is related to marijuana. Overall, treatment admissions for marijuana have been decreasing since 2009.
- Total treatment admissions for heroin or morphine have been steadily increasing since 2010. About one in six primary admissions and one in ten secondary admissions were due to heroin or morphine.
- The numbers as well as proportions of primary, secondary, and tertiary admissions in which treatment was sought for crack or cocaine abuse have remained stable since 2010. About one in ten secondary and one in seven tertiary admissions were related to crack or cocaine.
- Overall, the number of treatment admissions related to methadone has increased gradually since 2009. About one in twenty (5%) of primary, secondary, and tertiary treatment admissions are due to methadone.
- Both the number and proportion of total treatment admissions involving benzodiazepines have remained relatively stable since 2009.
- There were 107 total treatment admissions related to bath salts in 2013; this was five times as many admissions as there were in 2011.

Introduction

Overview of Maine

The state of Maine had an estimated population of 1,328,302 people in 2013. Maine is considered an "aging" state, with 17 percent of the population being 65 years old and older, a higher rate than the overall US population (14%). On the other hand, 20 percent of the state's population is under the age of 18 years old, a lower rate than the United States average (24%). According to the 2011 U.S. Census estimate, 95 percent of Maine's population is White, non-Hispanic, followed by 1.4 percent Hispanic, 1.3 percent who are Black, 1.1 percent who are Asian, and 0.7 percent who are American Indian. There are five Native American tribal communities in Maine: the Penobscot, the Passamaquoddy (Pleasant Point and Indian Township), the Maliseet and the Micmac, whose numbers likely are underreported on the census. In Washington County, 4.7 percent of the population reports being Native American. Androscoggin and Cumberland counties are the most diverse communities, each home to communities with many ethnic backgrounds and national origins due in large part to refugee resettlement programs there.

Maine has four metropolitan areas throughout the state, numerous small towns and communities and vast areas that are virtually unpopulated. While the average number of people per square mile was 43.1 in 2012, this greatly varies by county. The most populated counties were Cumberland with 337.2 people per square mile and Androscoggin with 230.2 persons per square mile, while the least densely populated counties were Piscataquis with 4.4, Aroostook with 10.8 and Washington with 12.8 persons per square mile.

Maine is a diverse state economically. The median household income was $48,219 for the period of 2008-12, lower than the United States median income of $53,046. Income varies greatly by location in a similar fashion as population density. The southern coastal counties, such as Cumberland (where most of the population is located) have much higher median incomes than the northern, rural, and less densely populated counties such as Piscataquis and Washington. At $57,159, Cumberland has the highest median income and is one of only three Maine counties where the median income is higher than the United States median income (the others are Sagadahoc at $55,634 and York at $56,656). At the other end of this range, Washington County has the lowest median income at $36,486 a year. Piscataquis, the county with the lowest population density, has a median income of $36,606, the second lowest in the state.

It is within the context of these demographic characteristics that substance abuse in Maine must be examined.

Purpose of this Report

This report takes into account the primary objectives of the Office of Substance Abuse and Mental Health Services (SAMHS): to identify substance abuse patterns in defined geographical areas, examine substance abuse trends, detect emerging substances, and provide information for policy development and program planning. It also highlights all the prevention priorities identified in the SAMHS 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 monitors the progress being made to address these priorities.

This report includes data available through December 2013 and when possible updates the April 2013 report which included data through December 2012. Older and unchanged data are included when more recent data were not available. Five major types of indicators are included: self-reported substance consumption, consequences of substance use, factors contributing to substance use, indicators about mental health and substance abuse, and treatment admissions. Previous reports are available at the www.maineosa.org website.

Organization of the Report

This report is used by a variety of people for many 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 special comparisons or presentations. To accommodate these diverse needs, the report is organized as follows:

- 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 section **Data Sources, Indicators and Selection Criteria** describes the data sources and indicators that are included in the profile, as well as the process used to decide which indicators should be included in the profile.
- The **Full Report** presents the reader with more in-depth comparative and trend analyses for indicators that are critical to substance abuse and is broken into five major sections.
    - *Consumption* trends and patterns among some of the most abused substances, in order to provide the reader a deeper understanding of those substances.
    - *Consequences* related to substance use, such as traffic accidents and poisonings.
    - *Factors* that contribute to substance use overall, such as norms and perceptions.
    - *Mental Health* indicators and how they relate to substance abuse.
    - Recent trends in *substance abuse treatment* admissions.

Data Sources, Indicators and Selection Criteria

This report includes data that was gathered from a number of sources. A detailed description of each source is provided below, consisting of information about the data included in each source, the strengths and weaknesses, and retrieval or contact information. The report includes data that were available through December 2013 and updates the April 2013 report.

A number of criteria are used annually to determine what information should be included in this report. A small SEOW workgroup applies these standards to each indicator and selects the best possible data source (or sources) to be included. Indicators that are determined to be redundant, no longer useful, or too confusing are updated in order to provide the reader with a streamlined and more comprehensive report. Each criterion is defined below:

- **Relevance:** To be included, each of the indicators must be directly related to substance use. The indirect effects of substance use reach throughout society in such areas as crime, health and education. However, this report limits indicators to those which can be directly related to substance use (e.g., hospital admissions in which substance use was recorded as a factor, rather than generating an estimate of the percentage of all hospital admissions that could be related to substance use).
- **Timeliness:** Each of the indicators includes the most updated data available from the source. The timeliest data included are from the previous six months or year, but some data as old as three years may be included; this happens when the most recently collected data from the source are not yet available due to the timing of data collection and the publication of this report. The sources that reflect older information are included when they meet other important criteria. For example, the National Survey on Drug Use and Health, for which the most recent data available are from 2011-12, provides data that are highly relevant and reliable.
- **Availability:** For an indicator to be included in this report, data regarding its use must be available from a reliable source. That is, a question must be asked on a representative survey or an office must record incidents, and the source must be willing to release the results either to the general population, or the SEOW and/or its members. As stated above, the most recent data available from those sources are included in this report.
- **Reliability:** In order to include trended data in this report, the data available for each indicator must be reliable and comparable from year to year. They need to reflect the same indicator in the same manner for the same population each year.
- **Trending:** Trends are included in this survey for indicators in which reliable and comparable data are available from multiple years. In some instances, trending is limited or not possible due to limited availability of the data. For example, questions regarding the use of specific substances have been included and discontinued in use surveys as those substances have become more or less of a concern. Therefore, trending is only available for their use in the years those questions were included in the survey.

As described previously, there are multiple purposes for this report. One is to provide a snapshot of the most recent data regarding substance abuse, while another is to examine trends over time. Therefore, each indicator may have multiple sources of data that are included. 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. In particular, the percentages and figures from one data source do not always align with the data and percentages from a similar source. Older data are often included in order to examine an indicator among a specific population or to find trends over time. When discussing rates of prevalence, however, the user should rely upon the most recent data source available.

Description of Data Sources

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 2013. **Due to methodological changes in weighting and sampling, data prior to 2011 cannot be trended with more current data.** Contact: Melissa Damren, Maine BRFSS Coordinator; melissa.damren@maine.gov; (207) 287-1420.

Maine Department of Public Safety (DPS), Bureau of Highway Safety (BHS), Maine Department of Transportation (MDOT). The Bureau of Highway Safety is responsible for tracking all fatalities that occur on Maine's highways and reporting this information through the Fatal Analysis Reporting System (FARS). The data represented provides information on highway crashes and fatalities. Much of this information is gathered from our FARS system, which records data on fatal crashes in Maine for input into a larger national record-keeping system of statistical data. FARS data is also used by BHS and the Maine State Police to analyze enforcement priorities and schedules. Impaired driving is one of the most serious traffic risks facing the nation, killing thousands every year. Contact: Duane Brunell, Safety Performance Analysis Manager; duane.brunell@maine.gov; (207) 624-3278.

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 2012. Arrest data may reflect differences in resources or focus of law enforcement efforts, so may not be directly comparable from year to year.
Retrieval: http://www.maine.gov/dps/cim/crime_in_maine/cim.htm

Maine Drug Enforcement Agency (MDEA). The MDEA through its regional multi-jurisdictional task forces is the lead state agency in confronting drug trafficking crime. The data included in this report represents those arrested for a drug offense but does not indicate what other drug(s) may have been seized. For example, a person may be arrested for the sale of cocaine but also be in possession of oxycodone and marijuana. It is important to note that arrests and multi-jurisdictional drug enforcement are resource-dependent; such funds fluctuate from year to year, and must be reallocated to combat highest priority threats. Contact: Roy E. McKinney, Director; roy.e.mckinney@maine.gov; (207) 626-3852.

Maine Emergency Medical Services (EMS). Maine EMS is a bureau within the Maine Department of Public Safety (DPS) and is responsible for the coordination and integration of all state activities concerning Emergency Medical Services and the overall planning, evaluation, coordination, facilitation and regulation of EMS systems. EMS collects data statewide from the 272 licensed ambulance and non-transporting services. It is mandated that services submit an electronic patient care report to Maine EMS within one business day of patient contact. Data are compiled upon request. Contact: Jon Powers, Maine Emergency Medical Services; jon.powers@maine.gov; (207) 626-3860.

Maine Health Data Organization (MHDO). MHDO data includes all inpatient admissions to all hospitals in Maine for calendar years 2010 and 2011. 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 opiate 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). Contact: Maine Health Data Organization (MHDO), lisa.parker@maine.gov; (207) 287-3225.

Maine Integrated Youth Health Survey (MIYHS). The MIYHS is a statewide survey administered biennially through a collaborative partnership by the Maine Office of Substance Abuse and Mental Health Services (SAMHS) the Maine Center for Disease Control and Prevention and the Maine department of Education to students in grades 5 through 12. The survey collects information on student substance use, risk factors related to substance use, as well as consequences, perceptions and social risk factors related to substances, and collects information on many other health factors. MIYHS 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 2013. Contact: Anne Rogers, Data and Research Manager, Substance Abuse and Mental Health Services; anne.rogers@maine.gov; (207) 287-4706.

Maine Homeless Youth Survey. The Maine Homeless Youth Health Survey purpose is to measure the personal safety, sexual, and substance use behaviors of homeless youth in Maine. The survey has necessarily relied on community-based organizations that provide services to homeless youth to administer the survey. Thus, the survey participants represent youth who are using drop-in, outreach or residential services at agencies in some of Maine's largest cities.

The survey was administered to as diverse and representative a group of homeless youth as possible. Ten agencies distributed the survey to the youth in their programs. The survey was anonymous, voluntary, and self-administered. It was completed by 305 youth (aged 20 or younger) from January through April, 2012. Youth were given food coupons equal to a five dollar value for their participation. They were asked 31 questions (several of which included a follow-up question) about a range of topics, including: demographic identifiers, educational achievement, personal safety, substance use, and sexual experiences. Contact: Jean Zimmerman, Health Consultant; jean.zimmerman@maine.gov; (207) 624-6687.

Maine Office of the Chief Medical Examiner. The Maine Office of the Chief Medical Examiner maintains records of all deaths associated with drug overdose. Drug categories include methadone, cocaine, benzodiazepines, oxycodone and heroin/morphine. The death data are compiled on an annual basis and must be finalized prior to release, and so are not available to track changes that may occur over shorter time frames. Contact: Dr. Marcella Sorg, Director, Rural Drug & Alcohol Research Program, Margaret Chase Smith Policy Center, University of Maine; marcella.sorg@umit.maine.edu; (207) 581-2596.

National Survey on Drug 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 at the national, regional and state levels. The advantage of NSDUH is that it allows comparisons to be made across the lifespan (that is, ages 12 and up). However, NSDUH is not as current as other data sources; as of this report, data at the state level are available from 2011-12. Older data are included for trending and comparative purposes.

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. Retrieval: https://nsduhweb.rti.org/

Northern New England Poison Center (NNEPC). The Northern New England Poison Center provides services to Maine, New Hampshire, and Vermont. A poisoning case represents a single individual's contact with a potentially toxic substance. Intentional poisoning includes those related to substance abuse, suicide and misuse. Data include the number of confirmed cases where exposures are judged to be substance abuse-related (i.e., an individual's attempt to get high). 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 2013. These data are only reflective of cases in which the Poison Center was contacted. Contact: Karen Simone, Director, Northern New England Poison Center; simonk@mmc.org; (207) 662-7221.

Office of Data, Research and Vital Statistics (ODRVS). ODRVS is a program within the Maine CDC. The data include Maine resident deaths in which the death certificate statistical file included any mention that alcohol or drug use may have had a role. Data include unintentional, self-inflicted, assault and undetermined intent deaths. Contact: Kim Haggan, Office of Data, Research and Vital Statistics; kim.e.haggan@maine.gov; (207) 287-5459.

Pregnancy Risk Assessment Monitoring System (PRAMS). PRAMS is an ongoing, 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. Contact: Thomas Patenaude, PRAMS Coordinator, Maine CDC; Thomas.Patenaude@maine.gov; (207) 287-5469.

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 drugs that are not classified as narcotics, tranquillizers or stimulants, including products such as endocrine and metabolic drugs, analgesics and anesthetics, gastrointestinal agents, and nutritional products. Prescription counts do not reflect amounts in terms of dosage or quantity of pills, but rather represent the volume of active prescriptions during the time period. The counts included in this report represent the number of prescriptions filled between 2009 and 2013. Contact: John Lipovsky, PMP Coordinator, Substance Abuse and Mental Health Services; john.lipovsky@maine.gov; (207) 287-3363.

Treatment Data System (TDS). TDS is a statewide database that includes information about clients admitted to treatment in SAMHS-funded facilities through December 2013. Analyses in this report are based on clients' reported primary, secondary and tertiary drug(s) of choice as well as other demographic and background information that is collected at intake. Drug categories included in this report are alcohol, marijuana, cocaine, heroin, synthetic opiates,

methadone/buprenorphine and benzodiazepines. Contact: Stacey Chandler, Substance Abuse and Mental Health Services; stacey.chandler@maine.gov; (207) 287-6337.

Consumption of Substances

Consuming harmful substances can have detrimental effects on an individual's well-being, including increased risks of morbidity, addiction and mortality, and has a harmful effect on society as a whole including increased motor vehicle accidents and crime. However, it is the manner and frequency with which people drink, smoke, and use drugs that are often linked to particular substance-related consequences. To understand fully the magnitude of substance use consequences, it is important to first understand the prevalence of substance use consumption itself. Consumption includes overall use of substances, any use or heavy consumption, and consumption by high risk groups (e.g., youth, college students, 18 to 25 year olds, etc.).

As demonstrated by the indicators below, alcohol remains the substance most often used by Mainers across the lifespan. In particular, high-risk drinking among the 18 to 25 year old population continues to be a concern, although it appears that the rates of use among those who are below the legal age to drink are declining. After alcohol, prescription drugs and marijuana are the next most commonly used drugs in Maine. Again, the young adult population rises to the top in terms of high rates of using these substances.

Alcohol

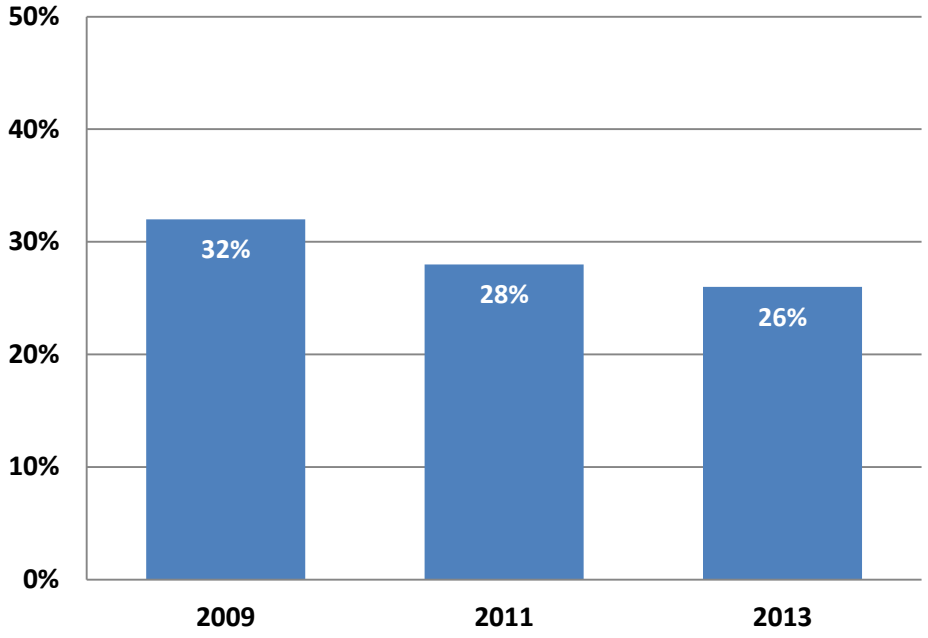
Indicator Description: CURRENT ALCOHOL USE AMONG YOUTH. This measure shows the percentage of high school students who reported having had one or more alcoholic drinks on one or more days within the past month.

Why Indicator is Important: Alcohol is the most often used substance among youth in Maine. In addition to the risks alcohol consumption carries for adults, developing adolescent brains are especially susceptible to the health risks of alcohol consumption. Adolescents who consume alcohol are more likely to have poor grades and be at risk for experiencing social problems, depression, suicidal thoughts, assault, and violence.

Data Source(s): MIYHS, 2009-2013

Summary: The proportion of high school students in Maine who report consuming alcohol in the past month has decreased notably since 2009.

Figure 1. Percent of high school students reporting alcohol use in the past month: 2009-2013



Source: MIYHS, 2009-2013

- The percentage of high school students consuming alcohol in the past month fell from 28 percent in 2011 to 26 percent in 2013.
- Although not shown, 26 percent of high school students who ever consumed alcohol reported having their first drink of alcohol before the age of 13.

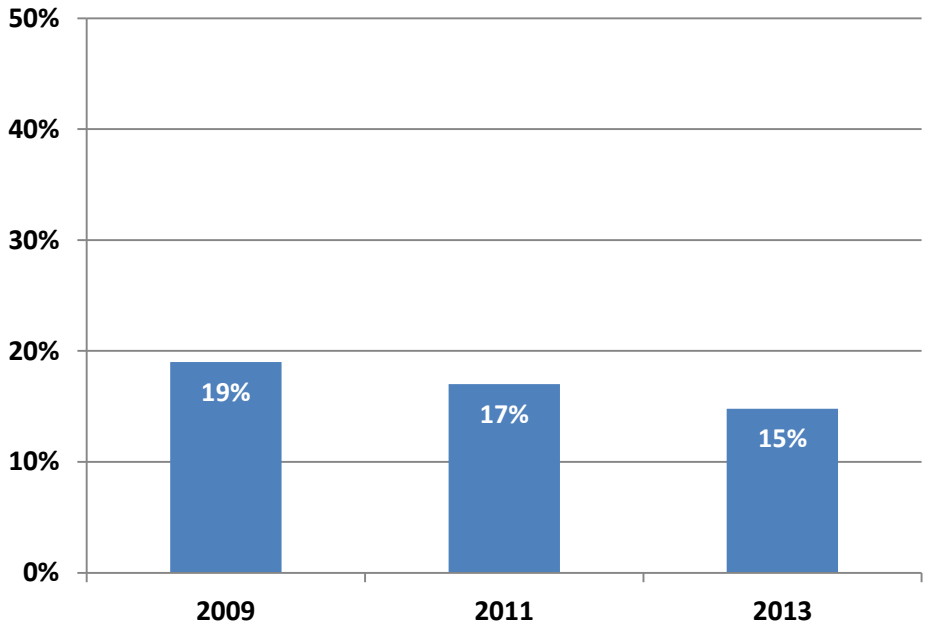
Indicator Description: CURRENT HIGH-RISK ALCOHOL USE AMONG YOUTH. This indicator presents the percentage of youth who reported having had five or more alcoholic drinks in a row in the past two weeks and on at least one day within the past month.

Why Indicator is Important: Youth are more likely than adults to binge drink when they consume alcohol. High risk alcohol use contributes to violence and motor vehicle crashes and can result in negative health consequences for the consumer, including injuries and chronic liver disease. Youth who engage in high-risk drinking are also more likely to use drugs and engage in risky and antisocial behavior.

Data Source(s): MIYHS, 2009-2013.

Summary: From 2009 to 2013, the proportion of high school students who report binge drinking within the past month decreased.

Figure 2. Percent of high school students who had five or more drinks in a row at least once in the past month: 2009-2013



Source: MIYHS, 2009-2013

- The percentage of high school students who reported having consumed five or more drinks in a row (within a couple of hours) during the past 30 days fell from 17 percent in 2009 to 15 percent in 2011.

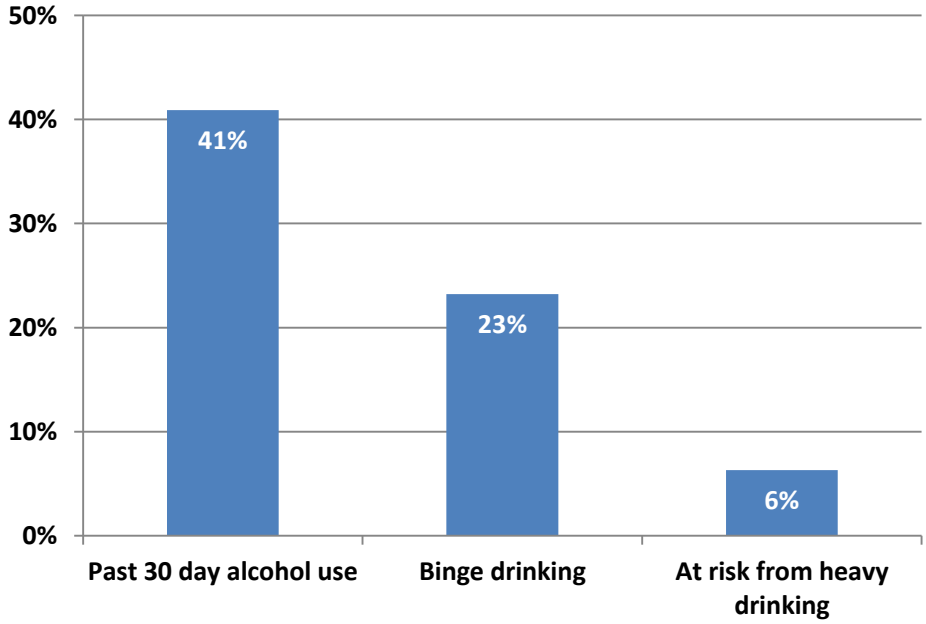
Indicator Description: **CURRENT ALCOHOL USE AMONG UNDERAGE ADULTS.** This indicator portrays the percentage of adults between the age of 18 and 20 who reported having consumed one or more alcoholic drinks on one or more days within the past month.

Why Indicator is Important: Alcohol is one of the most often-used substances by underage adults in Maine. Excessive and high-risk alcohol use may contribute to violence and result in many negative health consequences for the consumer. Moderate drinking can also have negative health effects and lead to such consequences as alcohol-related motor vehicle crashes and increased injuries.

Data Source(s): BRFSS, 2011-12

Summary: Among underage adults (18 to 20), four in ten reported any alcohol use in the past month while almost one in four had engaged in binge drinking at least once within the past month.

Figure 3. Percent of adults ages 18 to 20 reporting drinking in past 30 days by type of drinking: 2011-12



Source: BRFSS, 2011-12

- In 2012, among Mainers between the ages of 18 and 20, 41 percent reported consuming any alcohol in the past 30 days, 23 percent reported binge drinking, and six percent were at risk from heavy alcohol use[1].

[1] Heavy drinking is defined as more than two drinks per day for a man or more than one drink per day for a woman.

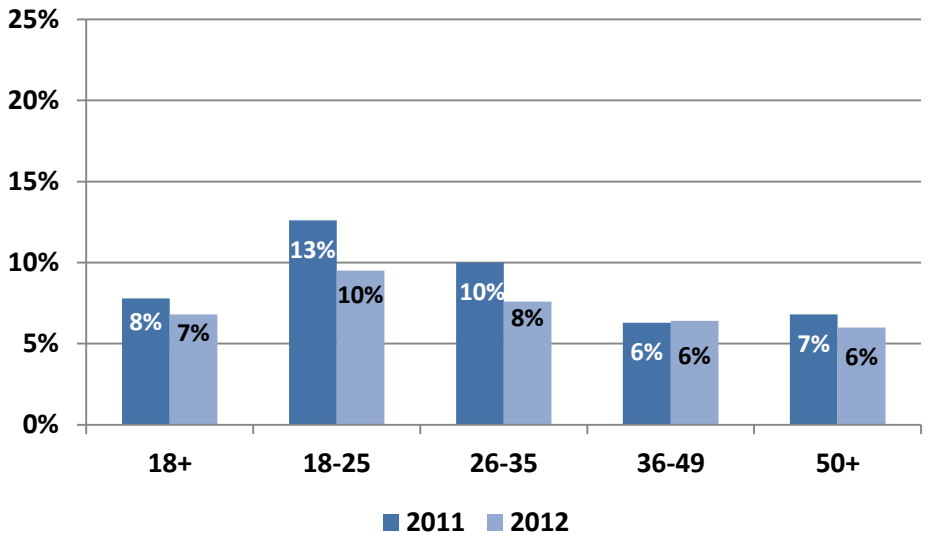
Indicator Description: AT RISK FROM HEAVY ALCOHOL USE. This indicator examines the percentage of Maine residents who are at risk of suffering consequences from heavy drinking in the past month. Heavy drinking is defined as more than two drinks per day for a man or more than one drink per day for a woman.

Why Indicator is Important: Heavy drinking increases the risk for many health and social related consequences. People who consume alcohol heavily are at increased risk for a variety of negative health consequences, including alcohol abuse and dependence, liver disease, certain cancers, pancreatitis, heart disease, and death. It has also been found that the more heavily a person drinks the greater the potential for problems at home, work, and with friends.[2]

Data Source(s): BRFSS, 2011-2012

Summary: In 2012, 18 to 25 year olds appeared to be at greatest risk from heavy alcohol use, with one in ten reporting that they consumed at least one alcoholic drink per day in the past 30 days.

Figure 4. Percent of adults at risk from heavy alcohol use in past 30 days, by age group: 2011-2012



Source: BRFSS, 2011-2012

- In 2012, seven percent of adults over the age of 18 reported having consumed alcohol on a daily basis, putting them at risk from heavy alcohol use. Eighteen to 25 year olds reported the highest rate at 10 percent while 26 to 35 year olds reported the second highest rate at eight percent. Rates of use among 18 to 25 year olds decreased by three percentage points from 2011 to 2012.

[2] Citation from Alcoholscreening.org, a service of Join Together and the Boston University School of Public Health. Retrieved from http://www.alcoholscreening.org/Learn-More.aspx?topicID=8&articleID=26 on 5/1/2014.

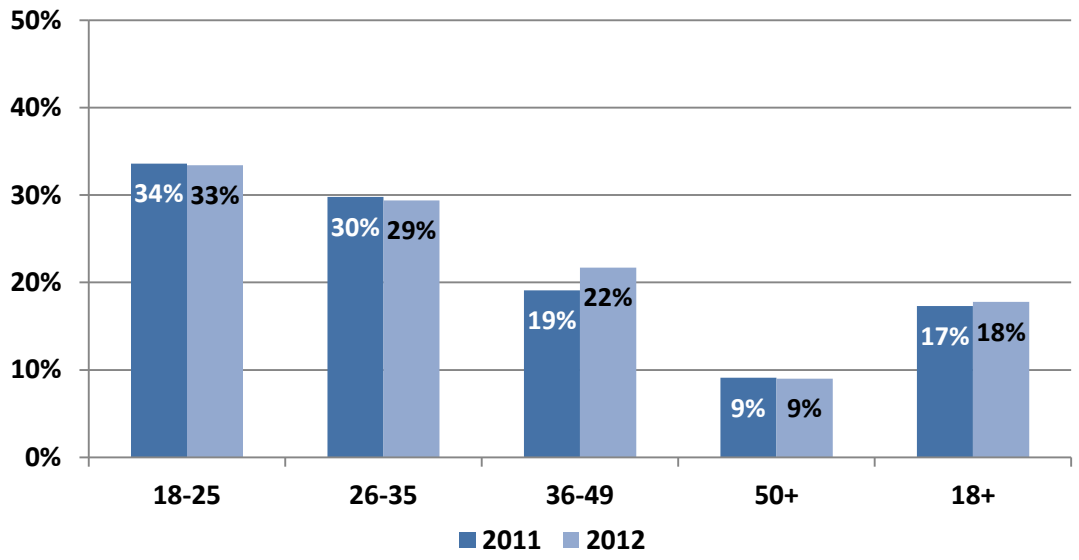
Indicator Description: CURRENT HIGH-RISK ALCOHOL USE AMONG ADULTS. This indicator reflects the percentage of adults who reported consuming five or more alcoholic drinks in a row on at least one day within the past month.[3] Due to differences in data collection and methodology, similar indicators may vary among data sources (as shown below).

Why Indicator is Important: Binge drinking is considered to be a type of high-risk drinking, meaning it increases the risk for many health and social related consequences. High-risk alcohol use has been linked to injury (such as falls, fights, and suicides), violence, crime rates, motor vehicle crashes stroke, chronic liver disease, addiction, and some types of cancer.

Data Source(s): BRFSS, 2011-2012; NSDUH, 2007-08 to 2011-12

Summary: In 2012, the highest binge drinking rates were found among 18 to 25 year olds (33%) and 26 to 35 year olds (29%). Rates of binge drinking have remained fairly stable over time.

Figure 5. Percent of adults reporting binge drinking in past 30 days, by age group: 2011-2012

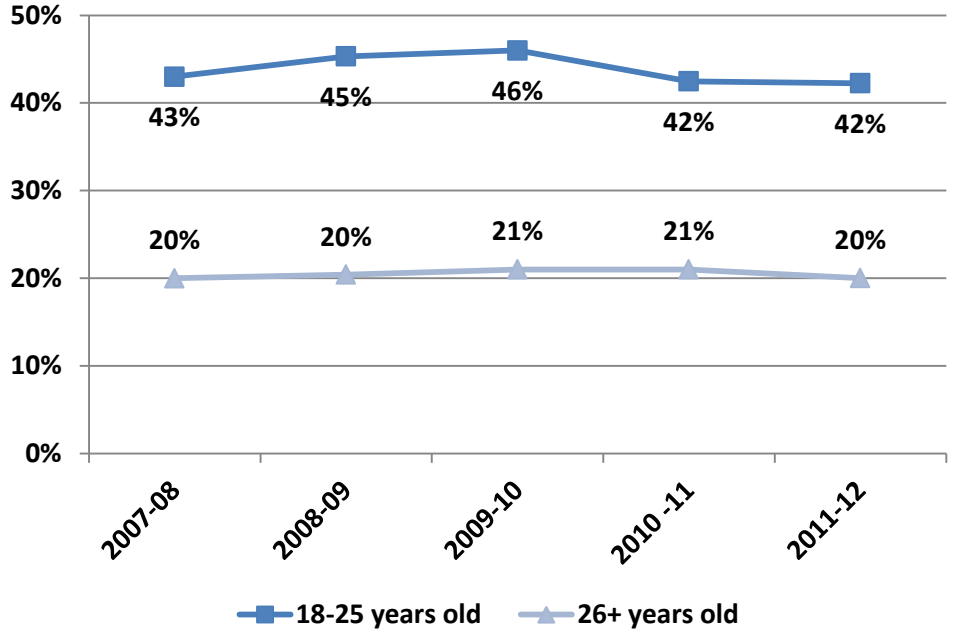


Source: BRFSS, 2011-2012

- In 2012, 18 percent of Maine adults age 18 and over reported binge drinking at least once in past 30 days. Adults between the ages of 18 and 25 reported the highest rate at 33 percent; this was followed by 26 to 35 year olds with a rate of 29 percent. The lowest rate of binge drinking was reported among Mainers over the age of 50 (9%). The rate among 36 to 49 year olds increased by three percentage points from 2011 (19%) to 2012 (22%).

[3] BRFSS defines binge drinking as five or more drinks in one sitting for a male and four or more drinks in one sitting for a female.

Figure 6. Percent of Maine residents (age 18 and older) reporting binge alcohol use in past month, by age group: 2007-08 through 2011-12



Source: NSDUH, 2007-08 to 2011-12

- The higher rate of binge drinking among young adults age 18 to 25 appears to be a relatively stable pattern, fluctuating between 42 and 46 percent since 2007-08. This is compared to older Mainers, where about one in five consistently reported binge drinking.

Tobacco

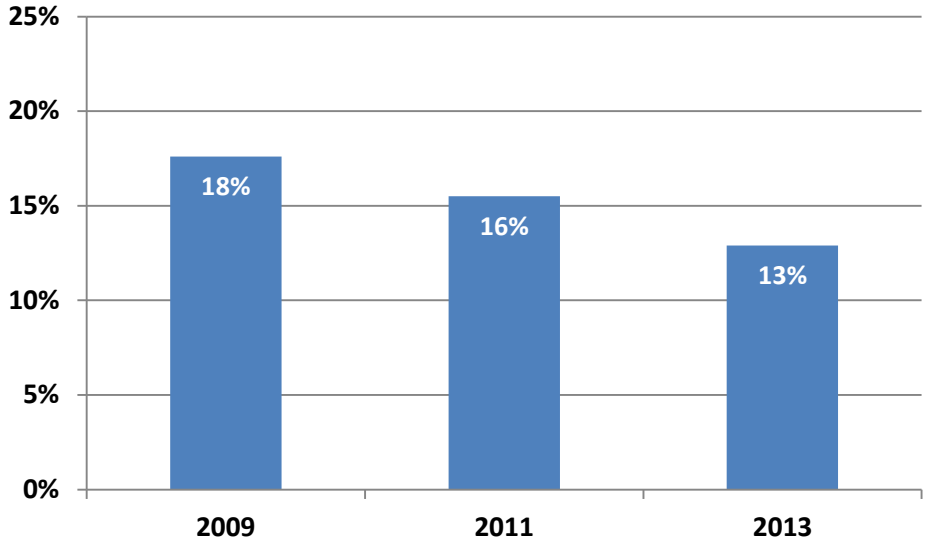
Indicator Description: CURRENT TOBACCO USE AMONG YOUTH. This indicator illustrates the percentage of youth who reported using of cigarettes, cigars, and smokeless tobacco on at least one occasion in the past month.

Why Indicator is Important: Use of tobacco is associated with greater risk of negative health outcomes, including cancer, cardiovascular, and chronic respiratory diseases, as well as death.

Data Source(s): MIYHS, 2009-2013

Summary: The use of cigarettes by high school students has been decreasing steadily since 2009. In 2013, more than one in ten students had reported either having smoked a cigarette or cigar within the past 30 days.

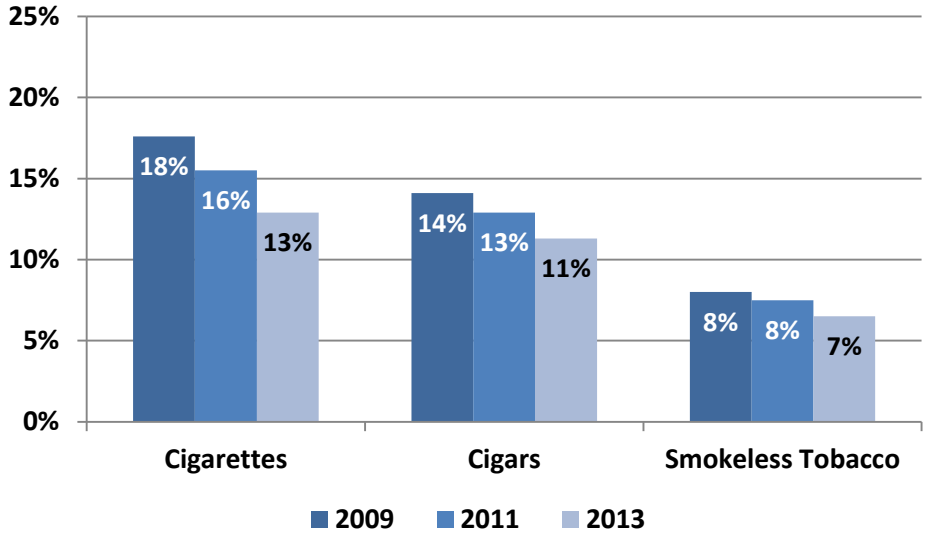
Figure 7. Percent of high school students who smoked at least one cigarette during past month: 2009-2013



Source: MIYHS, 2009-2013

- The proportion of high school students who reported having smoked any cigarettes on at least one day during the past 30 days decreased by five percentage points, from 18 percent in 2009 to 13 percent in 2013.
- Although not pictured, among students who reported current cigarette use in 2013, 13 percent reported smoking more than 10 cigarettes per day.

Figure 8. Percent of high school students who used tobacco during past month, by tobacco type: 2009-2013



Source: MIYHS, 2009-2013

- In 2013, cigarettes continued to be the preferred form of tobacco for high school students during the previous 30 days (13%), closely followed by cigars (11%), and then smokeless tobacco (7%). The rate of cigarette and cigar use has steadily decreased between 2009 and 2013, while the use of smokeless tobacco has remained relatively stable.

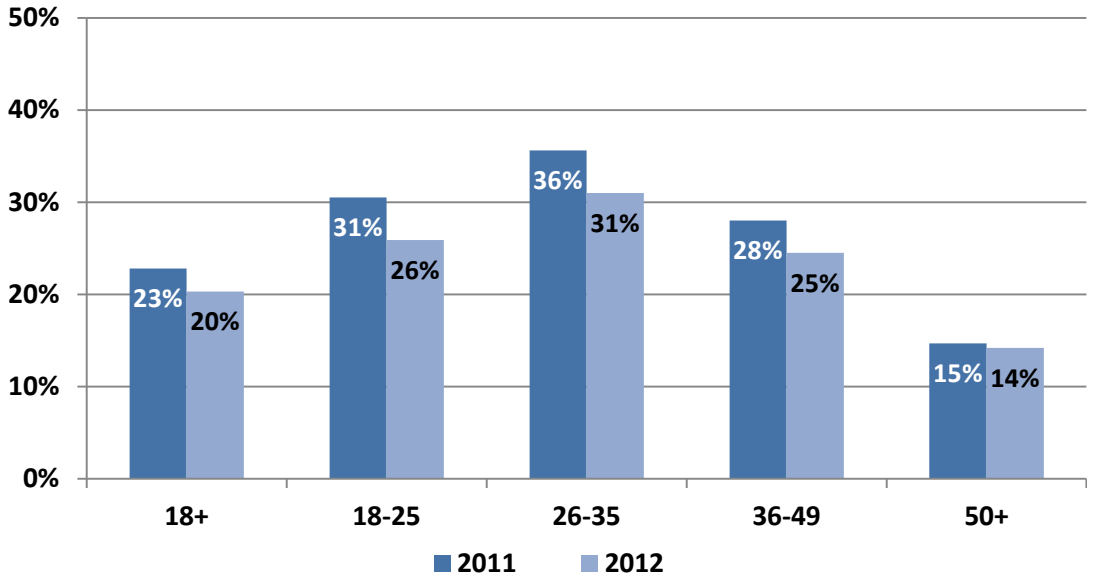
Indicator Description: CIGARETTE USE AMONG ADULTS. This measure depicts cigarette use among adults who reported smoking at least one cigarette in the past month.

Why Indicator is Important: Tobacco use has been linked to several negative health outcomes, including cancer, cardiovascular, and chronic respiratory diseases, as well as death. Second-hand smoke is also associated with many negative health outcomes, such as increased colds, flu, asthma, bronchitis, lung cancer, low birth weight babies.

Data Source(s): BRFSS, 2011-2012

Summary: In 2012, one in five Mainers 18 and older reported smoking at least one cigarette within the past 30 days. Adults between the ages of 26 and 35 were the most likely to smoke cigarettes, with almost one in three having smoked at least one cigarette within the past 30 days. Rates among Mainers between 18 and 49 observed significant decreases from 2011 to 2012.

Figure 9. Past month cigarette use among adults, by age group: BRFSS, 2011 and 2012



Source: BRFSS, 2011-2012

- In 2012, 20 percent of Maine adults reported smoking at least one cigarette in the past 30 days. Mainers ages 26 to 35 reported the highest rate of daily cigarette use, at 31 percent, followed by 18 to 25 year olds at 26 percent, and 36 to 49 year olds at 25 percent. Cigarette use among 18 to 25 year olds and 26 to 35 year olds decreased by five percentage points from 2011 to 2012.

Prescription Drugs

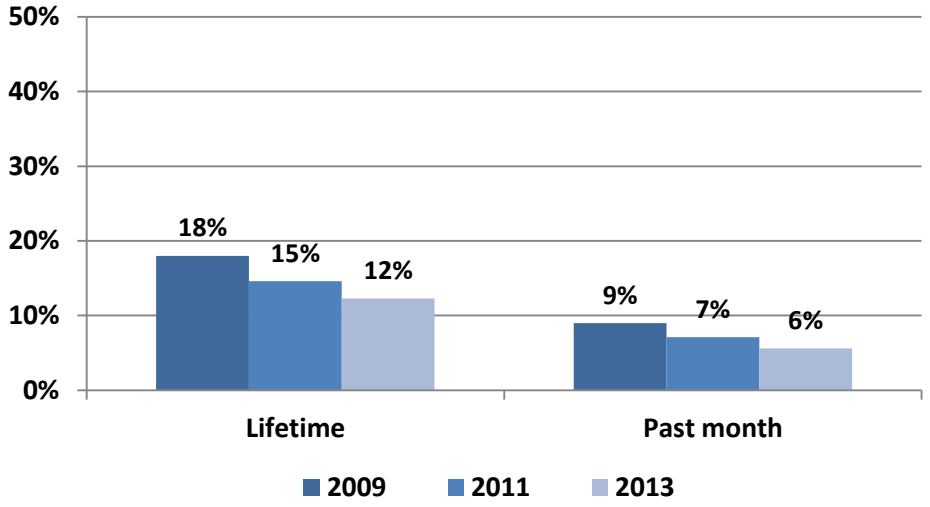
Indicator Description: MISUSE OF PRESCRIPTION DRUGS AMONG YOUTH. This indicator presents the percentage of youth who reported using prescription drugs that were not prescribed to them by a doctor. The indicator examines both current use (i.e., within the past month) and lifetime use (i.e., ever).

Why Indicator is Important: Young people use available prescription drugs, including stimulants and opiates, instead of illegal drugs to get high. Abuse of prescription drugs may lead to consequences such as unintentional poisonings or overdose, automobile crashes, addiction, and increased crime.

Data Source(s): MIYHS, 2009-2013.

Summary: In 2013, more than one out of ten high school students reported misusing a prescription drug in their lifetime. Among high school students, the rates for lifetime as well as past month misuse of prescription drugs decreased from 2009 to 2013.

Figure 10. Percent of high school students who have taken prescription drugs that were not prescribed to them in their lifetime and in the past month: 2009-2013



Source: MIYHS, 2009-2013

- From 2009 to 2013, the proportion of high school students who reported having taken a prescription drug that had not been prescribed to them by a doctor at least once in their lifetime decreased from 18 percent to 12 percent. The rate of students who reported having done so within the past month fell from nine percent in 2009 to six percent in 2013.

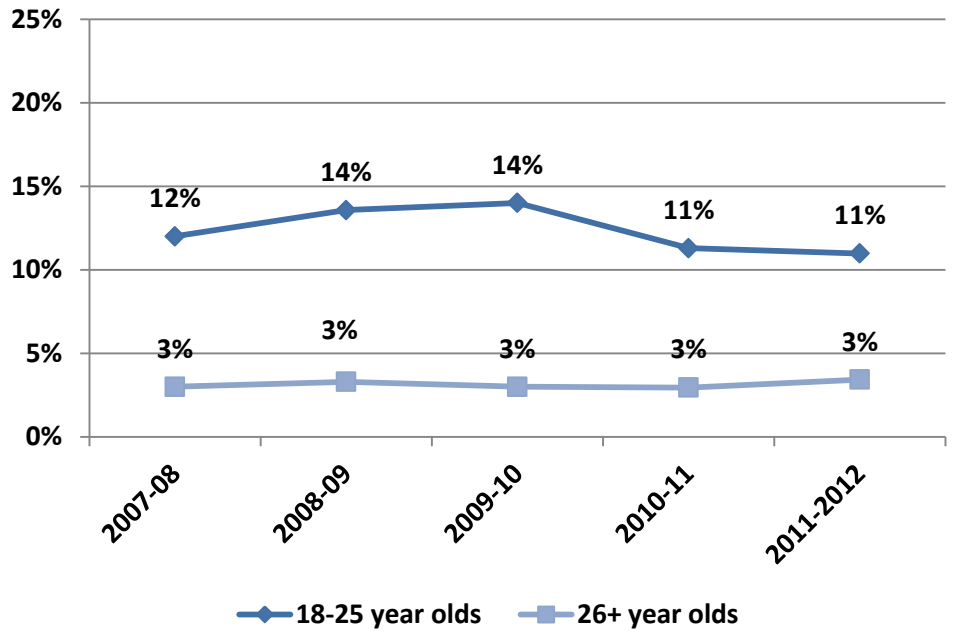
Indicator Description: NONMEDICAL USE OF PAIN RELEIVERS AMONG ADULTS. This measure reflects the percentage of adults who reported using prescription drugs, particularly prescription pain relievers, for reasons other than their intended purpose.

Why Indicator is Important: Some Mainers misuse available prescription pain relievers instead of illegal drugs to get high. Abuse of prescription drugs may lead to consequences such as unintentional poisonings, overdose, dependence and increased crime.

Data Source(s): NSDUH, 2007-08 to 2011-12

Summary: Non-medical use of prescription pain relievers is more likely among young adults between the ages of 18 and 25 compared to adults age 26 and older. More than one in ten 18 to 25 year olds reported having misused pain relievers although this may be decreasing.

Figure 11. Non-medical use of pain relievers among Maine residents in the past year, by age group: 2007-08 through 2011-12



Source: NSDUH, 2007-08 to 2011-12

- Among Mainers 18 to 25 years old, 11 percent reported non-medical use of pain relievers in the past year in 2011-12, a decrease of three percentage points since 2009-10. Use among those ages 26 and older was consistent at three percent across all years shown.

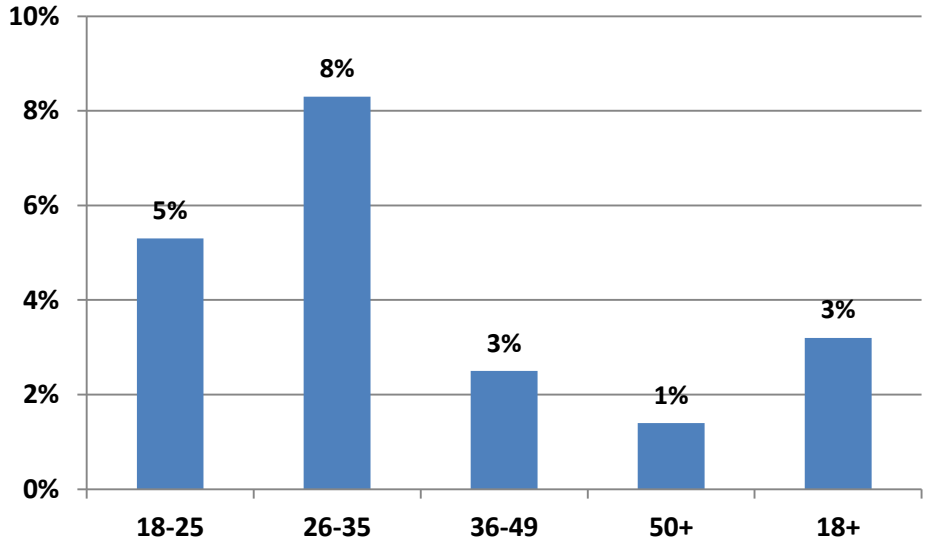
Indicator Description: MISUSE OF PRESCRIPTION DRUGS AMONG ADULTS. This measure reflects the percentage of adults in Maine who reported using prescription drugs not prescribed to them by a doctor, or using them in a way other than the one prescribed, at least once in their lifetime.

Why Indicator is Important: Some Mainers misuse available prescription drugs (including stimulants and opiates) instead of illegal drugs to get high. Abuse of prescription drugs may lead to consequences such as unintentional poisonings, overdose, dependence and increased crime.

Data Source(s): BRFSS, 2011-12

Summary: In 2012, the highest rate of lifetime prescription drug misuse was among adults between the ages of 26 and 35; almost one in ten reported misusing prescription drugs within their lifetime.

Figure 12. Misuse of prescription drugs among Maine residents in their lifetime, by age group: 2011-12



Source: BRFSS, 2011-12

- In 2011-12, three percent of adults 18 and older in Maine reported having misused prescription drugs during their lifetime. The highest rate of misuse was among adults 26 to 35 years old (8.3%), followed by 18 to 25 year olds (5.3%).

Other Illegal Drugs

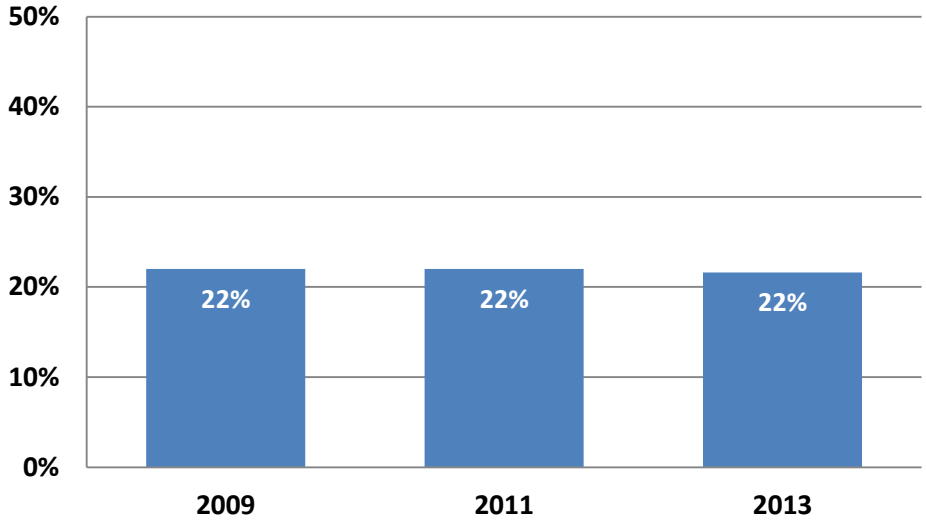
Indicator Description: CURRENT MARIJUANA USE. This measure shows the percentage of Mainers who reported using marijuana in the past month. This is presented for high school students and across the lifespan (i.e., among Mainers over the age of 12).

Why Indicator is Important: Marijuana can be addictive and is associated with increased risk for respiratory illnesses and memory impairment. Also, youth who begin smoking marijuana at an early age are more likely to develop substance abuse and dependence later in life.[4]

Data Source(s): MIYHS 2009-2013; NSDUH, 2007-08 to 2011-12; BRFSS, 2011-2012

Summary: More than one in five high school students reported using marijuana within the past month; similar rates are seen within the young adult (18 to 25) population. Rates of marijuana use among Mainers have remained stable over time. In 2013, one fifth of high school users started before the age of 13.

Figure 13. Percent of high school students who have used marijuana at least once in the past month: 2009-2013

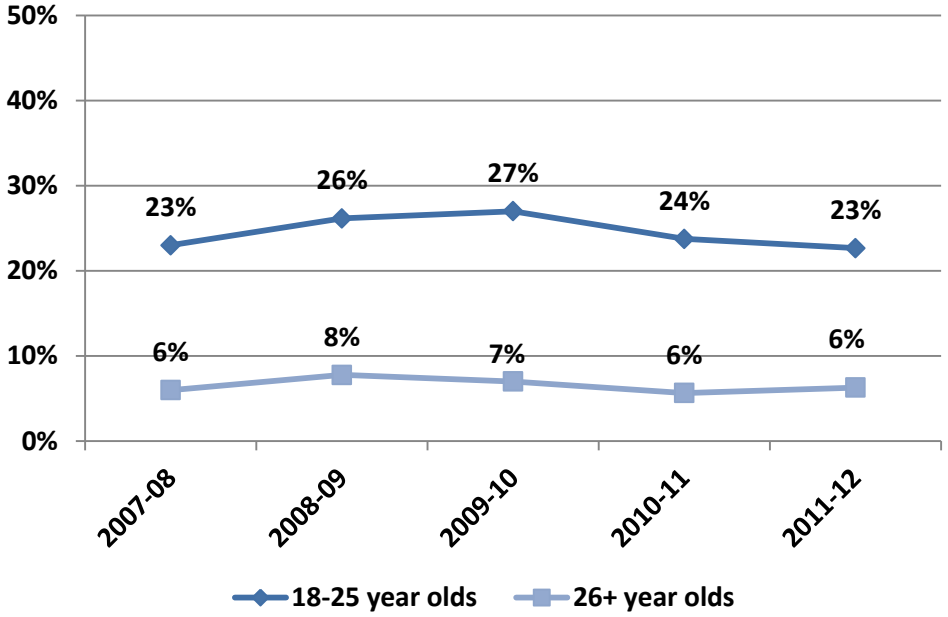


Source: MIYHS, 2009-2013

- The percentage of high school students who used marijuana one or more times during the previous 30 days has maintained a rate of 22 percent from 2009 to 2013.
- Although not pictured, in 2013, among high school students who had ever used marijuana, 20 percent did so before the age of 13.

[4] Kosterman, R., Hawkins, J. D., Guo, J., Catalano, R. F., & Abbott, R. D. (2000). The dynamics of alcohol and marijuana initiation: Patterns and predictors of first use in adolescence. *American Journal of Public Health, 90*, 360-366.

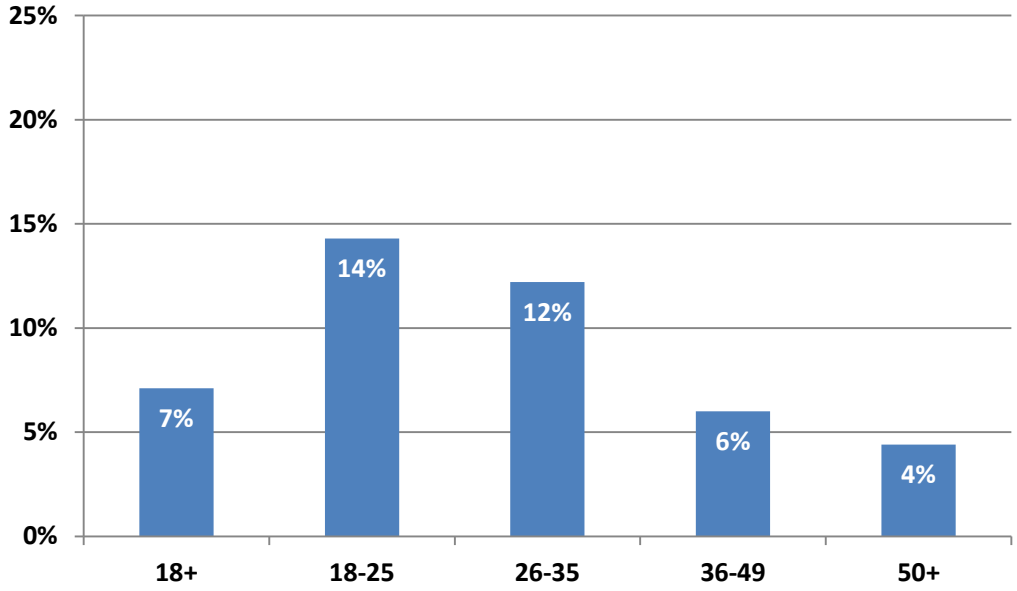
Figure 14. Percent of Maine residents (age 18 and older) reporting marijuana use in past month, by age group: 2007-08 through 2011-12



Source: NSDUH, 2007-08 to 2011-12

- Twenty-three percent of Maine residents between the ages of 18 and 25 used marijuana in the past month in 2011-12, a decrease of four percentage points since 2009-10. Marijuana use rates among those 26 and older remained relatively stable between 2007-08 and 2011-12, ranging from six to eight percent.

Figure 15. Percent of Maine adults reporting marijuana use in past month, by age group: 2012



Source: BRFSS, 2011 to 2012

- According to the 2012 BRFSS, about seven percent of Maine adults (18 and older) reported using marijuana within the past 30 days. The highest rate was among 18 to 25 year olds (14%), followed by 26 to 35 year old (12%).
- In 2011 (not pictured), eight percent of adults reported using marijuana recreationally while 2% reported using it medically. Recreational use as well as medical use was greatest among adults ages 26 to 35, at 18 percent and five percent respectively. Because of the difference in how the questions were asked in each year, trending is not recommended.

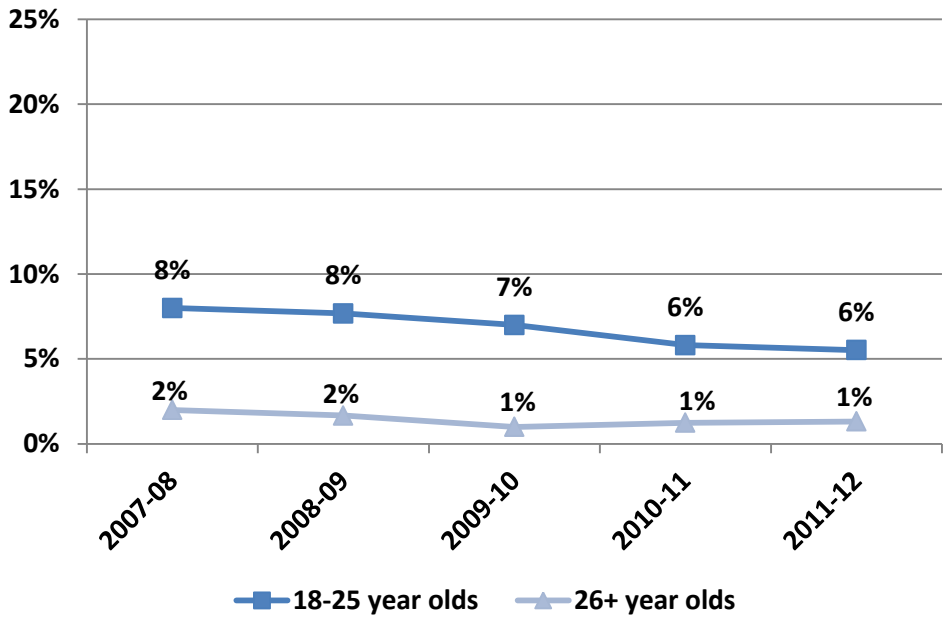
Indicator Description: COCAINE USE. This indicator illustrates the percentage of Maine residents who used cocaine. For adults, the measure reflects rates of use within the past year. For youth, the measure shows rates of lifetime use (i.e., if a youth ever used cocaine).

Why Indicator is Important: Cocaine is highly addictive. Use of cocaine is associated with adverse health effects such as cardiac events, seizures, and stroke. It also increases the risk of cognitive impairment, injury, and crime.

Data Source(s): NSDUH, 2007-08 to 2011-12; MIYHS, 2009-2013

Summary: Among adults, those between the ages of 18 to 25 reported higher rates of cocaine use in the past year than adults 26 and older. The proportion of high school students who have used cocaine in their lifetime is low and decreased slightly from 2011 to 2013.

Figure 16. Percent of Maine residents (age 18 and older) reporting cocaine use in past year, by age group: 2007-08 through 2011-12



Source: NSDUH, 2007-08 to 2011-12

- In 2011-12, six percent of young adults ages 18 to 25 reported cocaine use in the past year, compared to just one percent among those 26 years old and older.
- Although not shown, according to the Maine Integrated Youth Health Survey, the reported rates of lifetime cocaine use among high school students decreased from seven percent in 2011 to six percent in 2013.

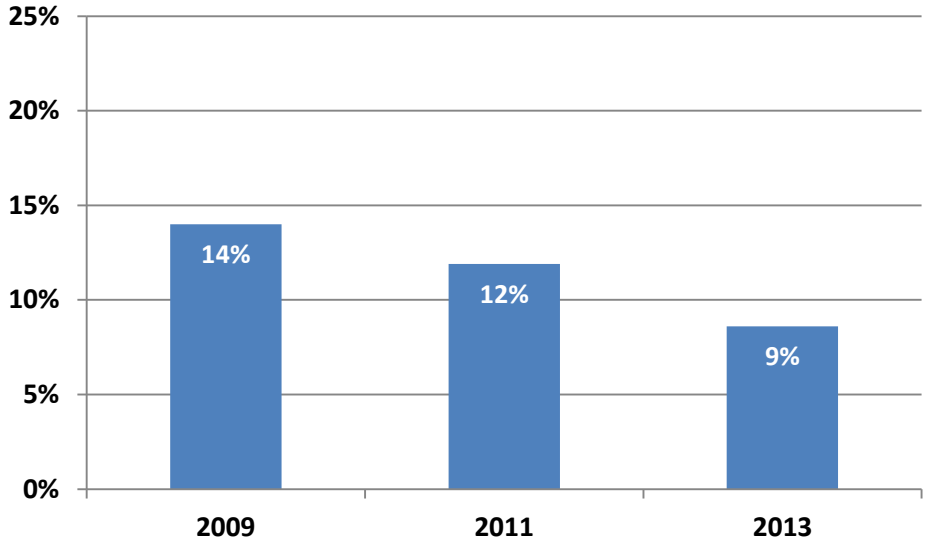
Indicator Description: INHALANT USE. This indicator depicts the percentage of high school students who reported having used inhalants in their lifetime and in the past month. Inhalants include substances such as glue, aerosol spray cans, paints or sprays.

Why Indicator is Important: Chronic use of inhalants risks impaired brain function and damage to the nervous system and other organs. Even occasional use may cause heart attack, suffocation, or death.

Data Source(s): MIYHS, 2009-2013

Summary: In 2013, about one in ten high school students reported having used an inhalant during their lifetime. Rates of inhalant use have continued to decrease over the past several years.

Figure 17. Percent of high school students reporting inhalant use (ever): 2009-2013



Source: MIYHS, 2009-2013

- The rate of reported lifetime inhalant use among high school students decreased by five percentage points, from 14 percent in 2009 to nine percent in 2013.

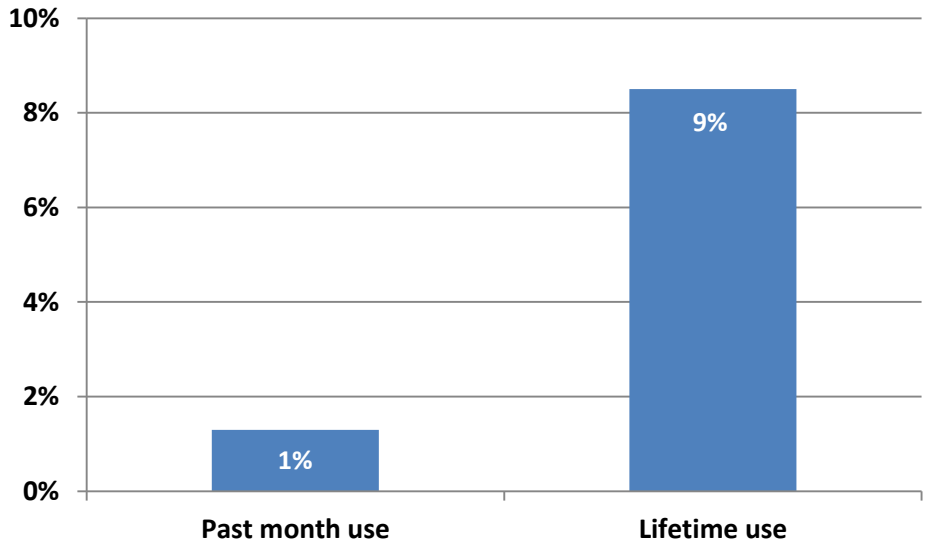
Indicator Description: HEROIN USE AMONG YOUTH. This indicator depicts the percentage of homeless youth in Maine who reported having used heroin in their lifetime and in the past month.

Why Indicator is Important: Chronic use of heroin risks collapsing veins, infection of heart lining and valves, abscesses, cellulites, and liver disease. Heroin is highly addictive and has been linked to detrimental health problems such as the transmission of HIV/AIDS, Hepatitis B and C, and birth defects. Key informants indicate that heroin use is an increasing problem, particularly in the southern part of the state and people addicted to opiate pharmaceuticals may use heroin if they cannot get access to their drug of choice.

Data Source(s): Maine Homeless Youth Survey, 2012

Summary: Almost one in ten homeless youth in Maine have used heroin during their lifetime, a rate that was almost twice as much as Maine high school students.

Figure 18. Percent of homeless youth reporting lifetime and current heroin use: 2012



Source: Maine Homeless Youth Survey, 2012

- In 2012, nine percent of Maine homeless youth reported using heroin at least once in their lifetime. This was compared to one percent who reported using heroin within the past month.
- Although not shown, according to the Maine Integrated Youth Health Survey, the rate of high school students reporting heroin use in their lifetime decreased between 2009 and 2013 (from 6.5% to 3.9%).

Consequences Resulting from Substance Use and Abuse

Both individuals and communities suffer the consequences of substance abuse in terms of increased health care and criminal justice needs, resources, and costs. While a great deal of information regarding substance use can be obtained from the 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 are defined as the social, economic, and health problems associated with the use of alcohol and illicit drugs. Examples of these include illnesses related to alcohol, drug overdose deaths, property and personal crimes, as well as driving accidents, poisonings, and suicides that involve alcohol or drugs.

Alcohol and drugs/medications (particularly opiates) are involved in the majority of substance use related consequences (e.g. hospitalizations, poisonings, and overdoses) in Maine. Adults between the ages of 30 and 54 have the highest rates of death due to substance abuse or overdose. This age group also has the highest suicide rate. Substance abuse related diseases such as stroke, heart attack, or cirrhosis of the liver tend to be more prevalent among men than women; in 2012, men were three times as likely to have alcohol-related cirrhosis of the liver than women.

As consequences related to pharmaceutical opiates have begun to level off, consequences as a result of heroin use have risen. In recent years, rates in treatment admissions due to heroin among pregnant women have increased significantly. In addition, arrests related to heroin have also increased with one in five DEA drug offenses having involved heroin in 2013.

Nearly one in four fatal motor vehicle crashes in 2013 were related to alcohol; rates are particularly high among drivers between the ages of 21 to 24. Overall, rates for liquor law violations and OUIs have been steadily decreasing among Maine residents over the past several years.

Substance Use and Pregnancy

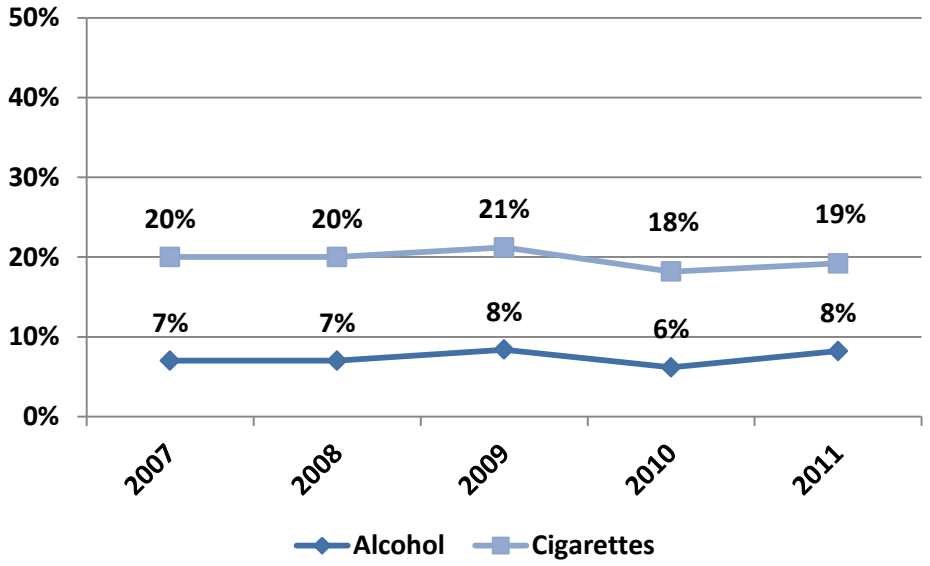
Indicator Description: ALCOHOL AND CIGARETTE USE DURING THE LAST TRIMESTER. This measure reflects the percentage of mothers who reported smoking cigarettes or drinking any alcohol during the last three months of pregnancy.

Why Indicator is Important: Exposure to alcohol can cause damage to the fetus during all stages of pregnancy. Because the minimum quantity of alcohol required to produce those damaging effects is unknown, the American Academy of Pediatrics recommends complete abstinence from alcohol for pregnant women. Babies born to mothers who smoked during pregnancy have lower birth weights than their peers whose mothers did not smoke. The Surgeon General warns against smoking during pregnancy. Substance use during pregnancy can cause a host of short term and long term developmental delays to the fetus and child.

Data Source(s): PRAMS, 2007-2011

Summary: Almost one in five women reported smoking in the last trimester, and eight percent reported drinking alcohol. More than one in ten pregnant women 25 or older reported to have consumed alcohol in their last trimester.

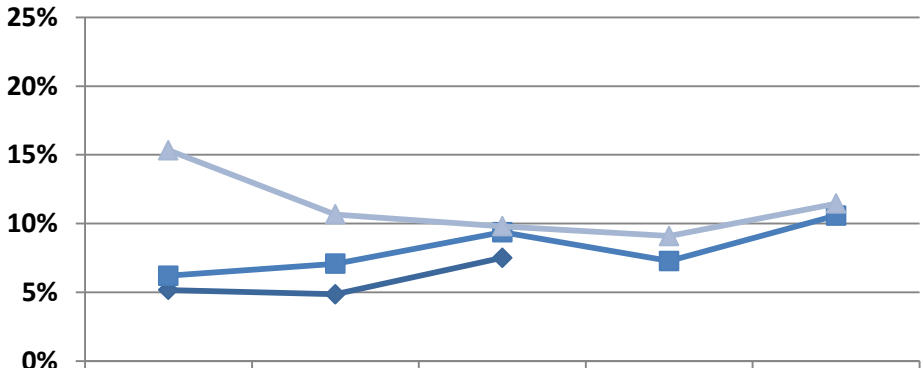
Figure 19. Percent of women reporting alcohol and/or cigarette use during last trimester of pregnancy: 2007-2011



Source: PRAMS, 2007-2011

- Alcohol and cigarette use during the last three months of pregnancy has remained relatively constant between 2001 and 2011. Nineteen percent of women reported smoking cigarettes during the last three months of pregnancy in 2011, and alcohol was reportedly used by eight percent of women during the same timeframe.

Figure 20. Percent of women who reported drinking alcohol during last trimester of pregnancy, by age group: 2007-2011



	2007	2008	2009	2010	2011
20-24 years old	5%	5%	8%		
25-34 years old	6%	7%	9%	7%	11%
35+ years old	15%	11%	10%	9%	11%

Source: PRAMS, 2007-2011

**Due to small cell sizes, rates for pregnant women under the age of 20 have been suppressed; rates among 20 to 24 year olds in 2010 and 2011 have also been suppressed.*

- In 2011, alcohol use during the last three months of pregnancy increased among pregnant 25 to 34 year olds, from seven percent in 2010 to 11 percent in 2011. Similarly, a two point increase was observed among 35 year olds during the same period. Rates among 25 to 34 year olds have been rising overtime. From 2005 to 2009, the lowest reportable* rates were among women who were between the ages of 20 and 24, ranging between five and eight percent.
- Although not pictured, in 2011 over half of the women who reported drinking during their last trimester had a household income of $50,000 or greater. In 2011, 16 percent of women from households earning $50,000 or more had consumed alcohol during their last trimester, an increase of seven percentage points since 2010.

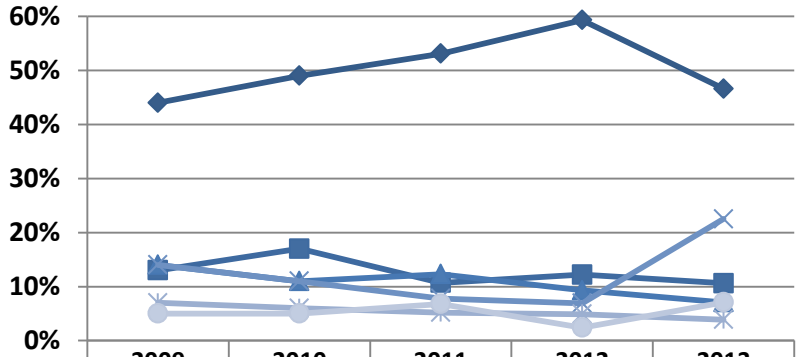
Indicator Description: SUBSTANCE ABUSE TREATMENT ADMISSIONS WHILE PREGNANT. This indicator explores the primary substances for which pregnant women sought treatment.

Why Indicator is Important: Exposure to alcohol and drugs damage a fetus during all stages of pregnancy. Babies born to mothers who used drugs during pregnancy are at greater risk of experiencing long-term behavioral difficulties and developmental delays. The American Academy of Pediatrics recommends complete abstinence from alcohol and drugs for pregnant women. However, medical professionals advise pregnant women suffering from addiction to seek treatment rather than attempt to quit without medical supervision.

Data Source(s): TDS, 2009-2013

Summary: In 2013, three percent of all women admitted to substance abuse treatment were pregnant. Recently, the proportion of admissions primarily due to synthetic opioids has decreased while the proportion related to heroin has increased significantly.

Figure 21. Percent of pregnant treatment admissions, by primary substance: 2009-2013



	2009	2010	2011	2012	2013
Synthetic opioids	44%	49%	53%	59%	47%
Methadone/buprenorphine	13%	17%	11%	12%	11%
Alcohol	14%	11%	12%	9%	7%
Heroin/morphine	14%	11%	8%	7%	23%
Marijuana	7%	6%	5%	5%	4%
Cocaine/crack	5%	5%	7%	2%	7%

Source: TDS, 2007-2012

- In 2013, 311 women admitted to substance abuse treatment were pregnant, a 20 percent increase since 2012 (246). Of those 311, 47 percent were seeking treatment for synthetic opioids, followed by heroin/morphine (23%), and methadone/ buprenorphine (11%).
- The proportion of pregnant women who were admitted for treatment primarily due to synthetic opiates has decreased since 2012, from 59 percent to 47 percent. Over the

same period, the proportion of pregnant women admitted for heroin increased by 16 percentage points, from seven percent in 2012 to 23 percent in 2013.

Criminal Justice Involvement

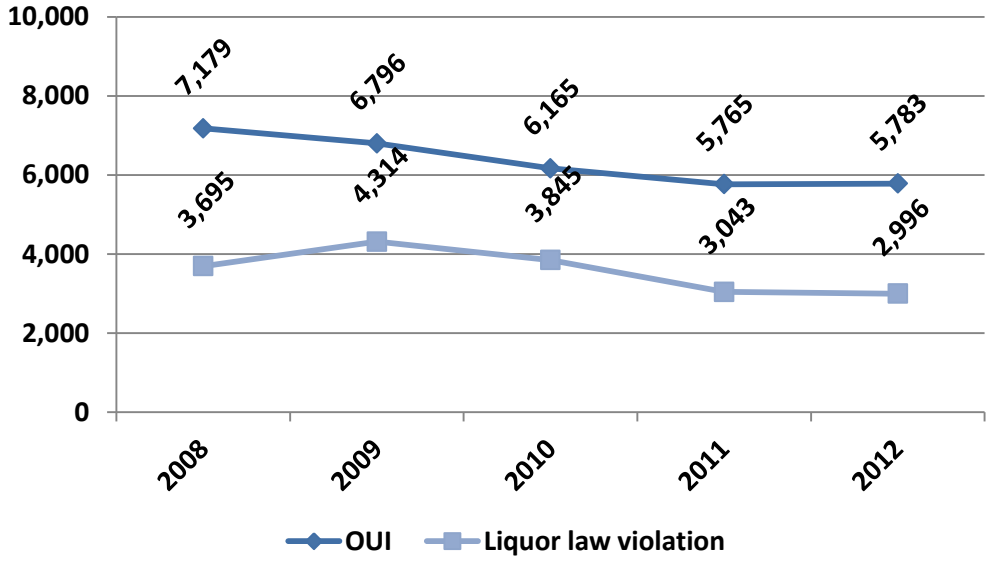
Indicator Description: ARRESTS RELATED TO ALCOHOL. This indicator reflects arrests related to alcohol and includes Operating Under the Influence (OUI) and liquor law violations. The data includes those who were released without having been formally charged.

Why Indicator is Important: OUI and liquor law arrest rates can be an indication of the rate of criminal behavior, but it is important to note that they are also an indication of the level of law enforcement. Arrests rates are expected to increase with increased enforcement regardless of whether criminal behavior changes. The education component of Maine's Driver Education and Evaluation Program served 5,174 Maine residents who received alcohol OUIs during the 2013 state fiscal year.

Data Source(s): DPS-UCR, 2008-2012

Summary: More adult arrests related to alcohol came from OUIs than from violations of liquor laws, whereas alcohol-related arrests among juveniles show the opposite pattern. Rates for liquor law violations and OUIs have been steadily decreasing among Maine residents (both juveniles and adults) over the past several years. Liquor law violations are most prevalent among 18 to 20 year olds whereas OUIs are observed most among Mainers ages 21 to 29.

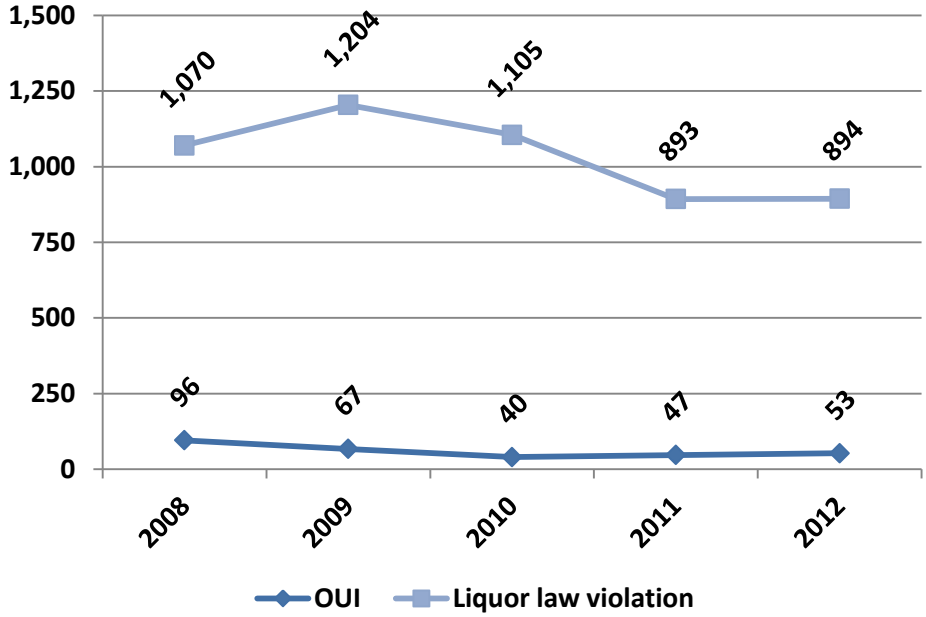
Figure 22. Adult arrests (18+ years old) related to alcohol, by arrest type: 2008-2012



Source: DPS-UCR, 2008-2012

- In 2012, there were 5,783 adult arrests for OUIs compared to 2,996 arrests for breaking liquor laws. However, the number of OUIs decreased by 20 percent since 2008.

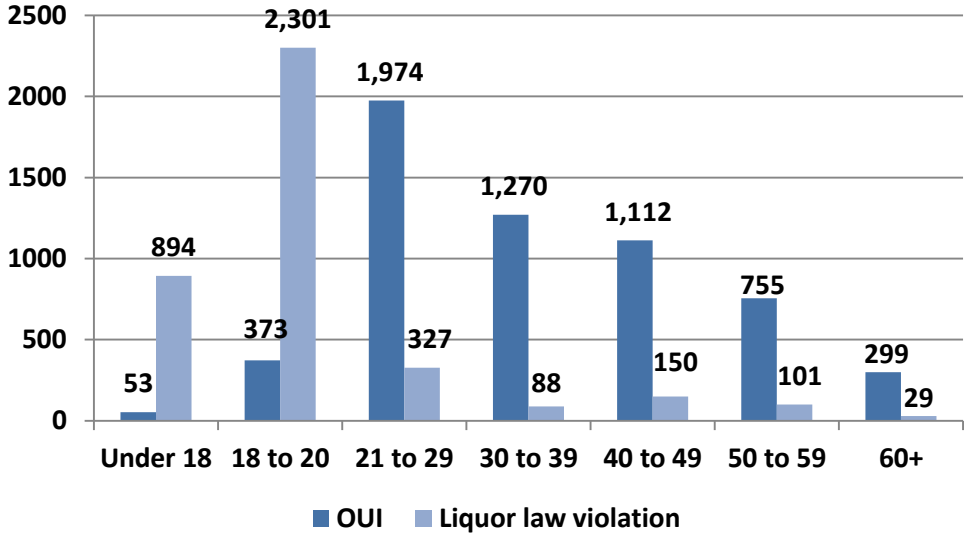
Figure 23. Juvenile arrests (<18 years old) related to alcohol, by arrest type: 2008-2012



Source: DPS-UCR, 2008-2012

- Alcohol related arrests among juveniles differ from adult arrests related to alcohol in that there are more arrests for liquor law violations than OUIs. In 2012, there were 894 arrests for breaking liquor laws and 53 for OUI. Juvenile liquor law violations have decreased by about 20 percent since 2010.

Figure 24. Arrests related to alcohol, by age group: 2012



Source: DPS-UCR, 2012

- As previously noted, the number of arrests related to OUI and liquor law violations differs among adults and juveniles. This pattern remains when comparing the number of arrests among those of legal drinking age to those who are under 21. In 2012, there were 894 liquor law violations for people under 18 and 2,301 for people between the ages of 18 to 20. This is compared to 327 liquor law violations for those between the ages of 21 and 29, and even fewer among older age groups.
- Conversely, the opposite can be seen in OUI violations: in 2012, there were 53 arrests for those under the age of 18 and 373 for 18 to 20 year olds, compared to 1,974 OUIs for those between the ages of 21 and 29 (more than any other age group). The number of OUIs appears to decrease across the lifespan.

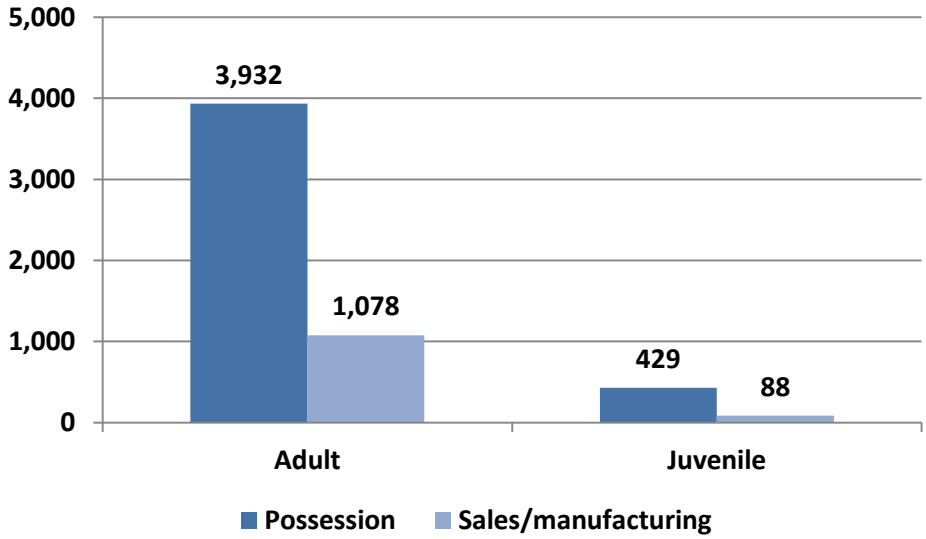
Indicator Description: ARRESTS RELATED TO DRUGS. This indicator reflects the number of arrests that were related to drugs and includes manufacturing, sales, and possession.

Why Indicator is Important: Arrest rates for drug sales, manufacturing and drug possession can be an indication of the rate of criminal behavior, but it is important to note that they are also an indication of the level of law enforcement. Arrests rates are expected to increase with increased enforcement regardless of whether criminal behavior changes.

Data Source(s): DPS-UCR, 2008-2012

Summary: Most drug-related offenses in 2012 were for possession rather than sale and manufacturing. Since 2008, it appears that adult arrests related to drugs have remained stable, while juvenile arrests have generally declined.

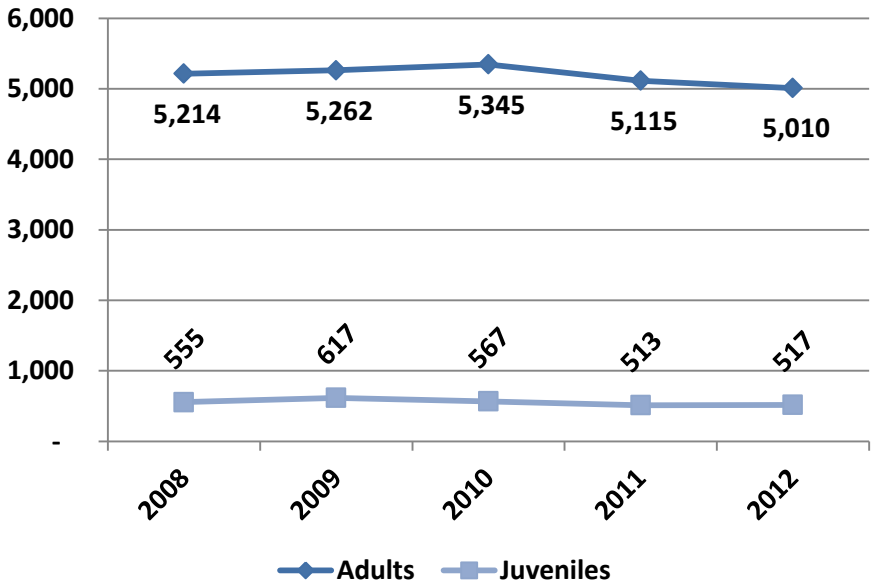
Figure 25. Adult and juvenile drug offenses, by type: 2012



Source: DPS-UCR, 2012

- Most drug offenses in 2012 for both adults and juveniles were for possession (3,932 for adults, 429 for juveniles) rather than sales/manufacturing (1,078 for adults and 88 for juveniles).

Figure 26. Adult and juvenile drug arrests: 2008-2012



Source: DPS-UCR, 2008-2012

- In general, arrests related to drugs have remained relatively stable between 2008 and 2012. The number has declined slightly among adults (from 5,345 in 2010 to 5,010 in 2012). The number of juvenile arrests decreased by 16 percent among juveniles from 2009 (617) to 2012 (517).

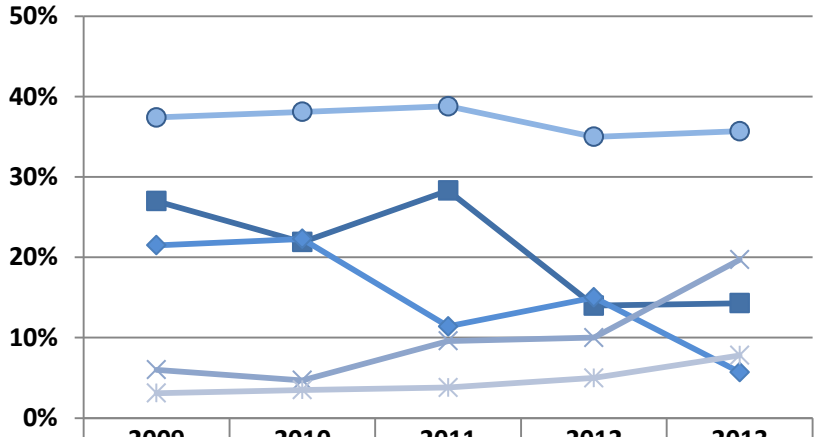
Indicator Description: DRUG OFFENSE ARRESTS BY TYPE. This indicator reflects drug offense arrests made by the Maine's Drug Enforcement Agency, by drug type.

Why Indicator is Important: Drug arrest rates can be an indication of the rate of criminal behavior, but it is important to note that they are also an indication of the level of law enforcement. Drug arrest rates are expected to increase with increased enforcement regardless of whether criminal behavior changes.

Data Source(s): DEA-UCR, 2009-2013

Summary: Since 2009, the majority of drug offense arrests by Maine DEA have involved pharmaceutical narcotics. Drug offenses related to heroin and methamphetamine have increased. In 2013, one in five drug offenses involved heroin.

Figure 27. Drug offense arrests in Maine, by drug type: 2009-2013



	2009	2010	2011	2012	2013
Pharm-narcotic	37%	38%	39%	35%	36%
Cocaine/crack	27%	22%	28%	14%	14%
Marijuana	22%	22%	11%	15%	6%
Heroin	6%	5%	10%	10%	20%
Methamphetamine	3%	4%	4%	5%	8%

Source: MDEA, 2009-2013

- In 2013, for the fifth year in a row, pharmaceutical narcotics accounted for the largest proportion of drug offense arrests (36%).
- The proportion of arrests related to heroin has been increasing since 2009 and accounted for 20 percent of all drug offense arrests in 2013. Similarly, arrest rates related to methamphetamine have increased over time (from 3% in 2009 to 8% in 2013).
- The proportions of arrests related to cocaine and marijuana decreased from 2009 to 2013.

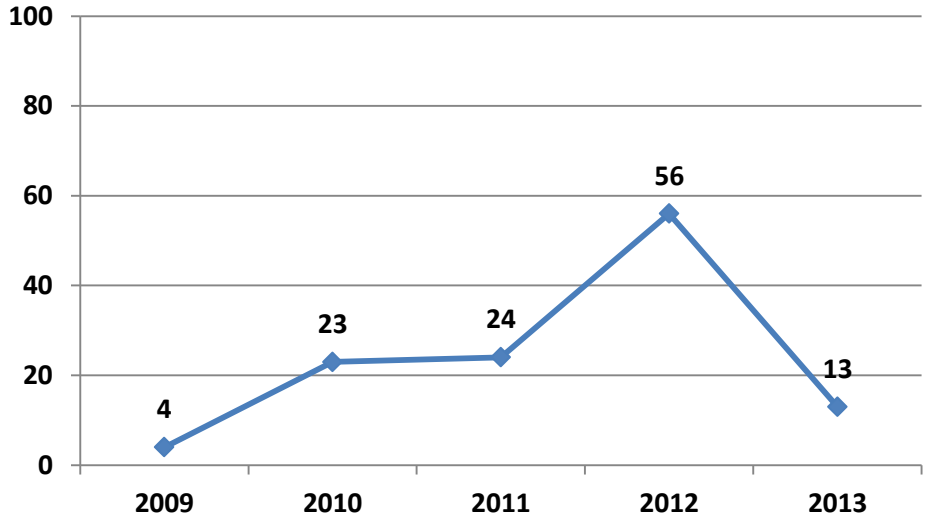
Indicator Description: PHARMACY ROBBERIES. This indicator reflects the number of pharmacy robberies in the state of Maine as tracked by the Maine Drug Enforcement Agency (MDEA).

Why Indicator is Important: The number of pharmacy robberies can indicate the demand for pharmaceutical drugs. Pharmacy robberies contribute to a higher demand for law enforcement resources, lost earnings for retailers, and trauma to those involved. In addition, robberies increase the availability of prescription drugs in the community, which contributes to misuse by individuals without a prescription.

Data Source(s): MDEA-UCR, 2009-2013

Summary: After observing a steady increase in pharmacy robberies from 2009 to 2012, Maine saw a dramatic decrease in 2013.

Figure 28. Number of pharmacy robberies in Maine: 2009-2013



Source: MDEA, 2009-2013

- From 2009 to 2012, the number of pharmacy robberies increased from four to 56. In 2013, there were 13 pharmacy robberies in Maine, representing a 76 percent decrease in one year.

Motor Vehicle Crashes Involving Alcohol

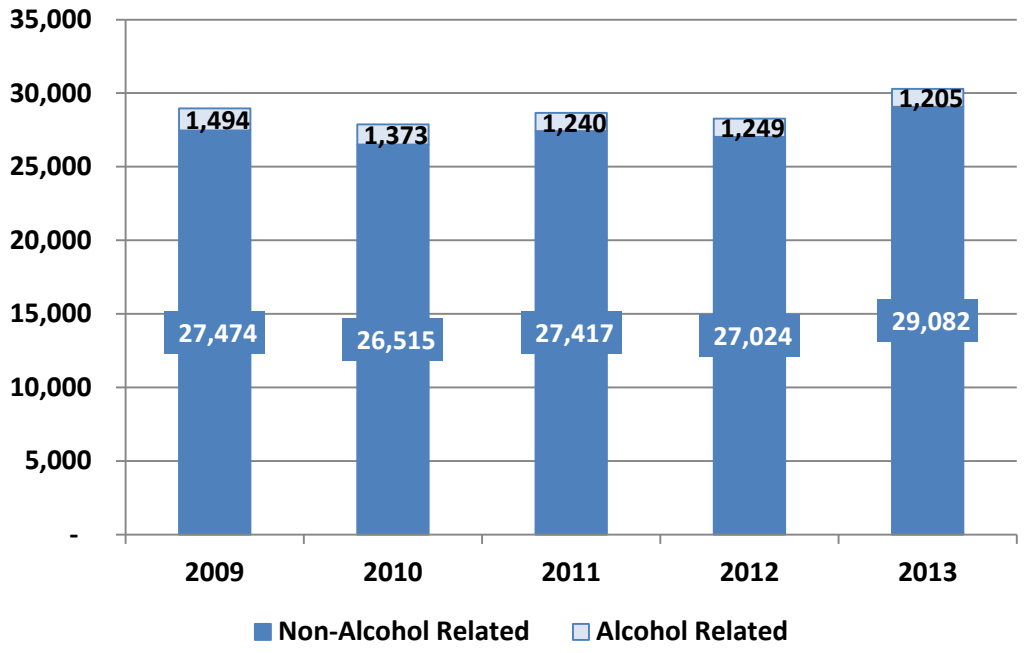
Indicator Description: MOTOR VEHICLE CRASHES INVOLVING ALCOHOL. This indicator shows the number of motor vehicle crashes in which alcohol was a factor, meaning at least one driver had consumed alcohol.

Why Indicator is Important: About four percent of all reported motor vehicle crashes involve alcohol. However, the resulting injuries and fatalities from alcohol-related crashes tend to be much higher. Motor vehicle crashes are the second leading cause of traumatic brain injury, with 29 percent of traumatic brain injuries occurring from motor vehicle crashes.[5]

Data Source(s): MDOT, BHS, 2009-2013

Summary: Both the number and proportion of alcohol related motor vehicle crashes have observed an overall decrease within the past several years.

Figure 29. Number of motor vehicle crashes, by whether they involved alcohol: 2009-2013



Source: MDOT, BHS, 2009-2013

- Although the overall number of motor vehicle crashes has increased from 2009 to 2013, both the number and proportion of crashes related to alcohol have decreased, from 1,494 (5%) in 2009 to 1,205 (4%) in 2013.

[5] 2006 Maine Injury Report, Maine Center for Disease Control, Injury Prevention Program. Retrieved on 5/1/2014 from http://www.maine.gov/dhhs/mecdc/population-health/inj/documents/final08year3maine2006injuryreport.pdf

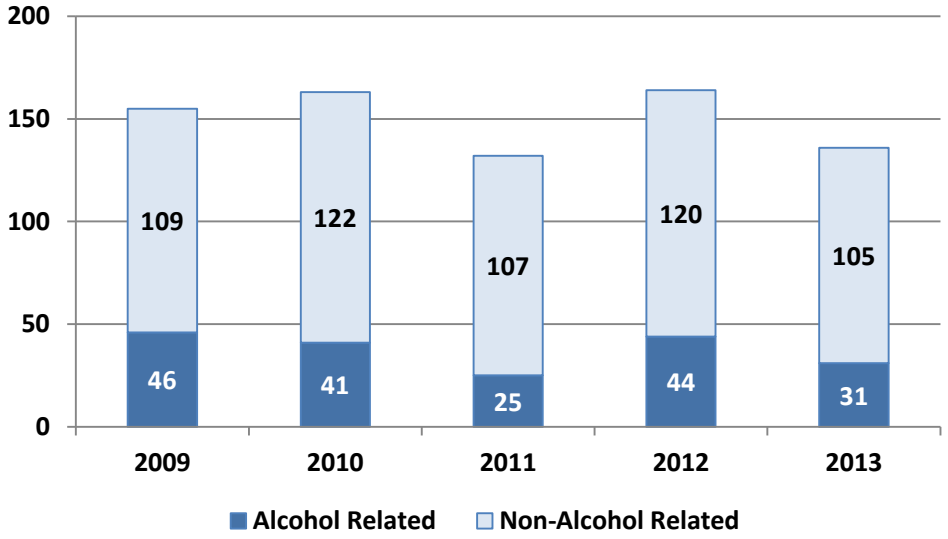
Indicator Description: **NUMBER OF FATAL MOTOR VEHICLE CRASHES INVOLVING ALCOHOL.** This indicator presents the number fatal motor vehicle crashes where alcohol was a factor in the crash. This means that at least one driver had consumed alcohol. It is important to note that small fluctuations from year to year do not indicate overall trends.

Why Indicator is Important: Alcohol related crash fatalities are a major consequence of alcohol consumption. Although alcohol was involved in only four percent of all crashes, more than one-fifth of all fatal motor vehicle crashes in 2013 involved alcohol.

Data Source(s): MDOT, BHS, 2009-2013

Summary: In 2013, nearly one in four (23%) of fatal motor vehicle crashes involved alcohol.

Figure 30. Number of fatal motor vehicle crashes, by whether they involved alcohol: 2009-2013



Source: MDOT, BHS, 2009-2013

- Although alcohol was involved in four percent of total motor vehicle crashes, it was involved in 23 percent of fatal crashes in 2013 (31 out of 136 total fatal crashes). This proportion decreased by four percentage points between 2010 and 2012 (from 27%).

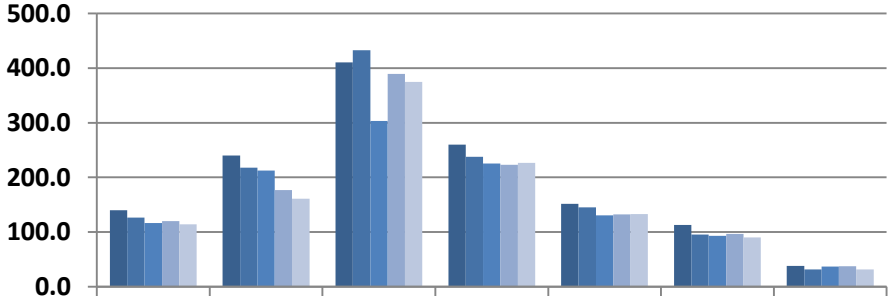
Indicator Description: ALCOHOL RELATED MOTOR VEHICLE CRASH RATE. This indicator presents the number of motor vehicle crashes involving alcohol (drivers with a blood alcohol content of .08 or greater), relative to the licensed population. The rate per 100,000 allows us to see frequency with which an occurrence shows up within a population over time. In this case, the population is the number of licensees (among a particular age group) in Maine. Where applicable, the number of licensees used to calculate the rate reflects the relevant age group or gender.

Why Indicator is Important: More than one-fifth of all motor vehicle crashes resulting in fatalities involve alcohol.

Data Source(s): MDOT, BHS, 2009-2013

Summary: In 2013, drivers between the ages of 21 and 24 had the highest alcohol-related crash rates, followed by drivers between the ages of 25 and 34. Rates among 16 to 20 year olds have been steadily decreasing since 2009.

Figure 31. Alcohol-related motor vehicle crash rate per 100,000 licensees, by age group: 2009-2013



	16+	16-20	21-24	25-34	35-44	45-54	55+
2009	140	240	410	260	152	113	38
2010	127	218	433	238	145	95	31
2011	117	212	303	226	131	93	37
2012	120	177	389	223	132	97	37
2013	114	161	375	226	133	90	32

Source: MDOT, BHS, 2009-2013

- Maine drivers ages 21 to 24 had the highest alcohol-related crash rate in 2013 (375 per 100,000 licensees), this was a slight decrease from 2012 (389 per 100,000 licensees).
- In 2013, the second highest rate of alcohol-related motor vehicle crashes was observed among drivers ages 25 to 34 (226 per 100,000 licensees), this rate has remained relatively stable since 2011.
- Rates among drivers ages 16 to 20 have steadily decreased from 2009 (240 per 100,000 licensees) to 2013 (161 per 100,000 licensees).

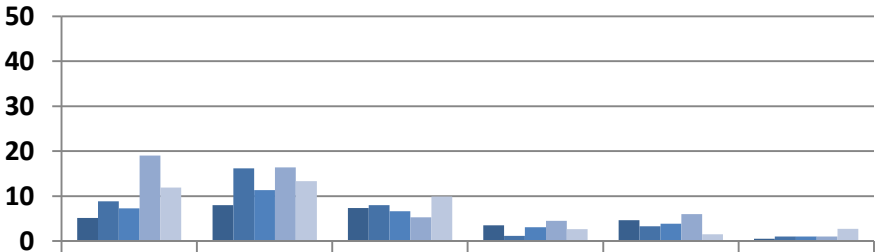
Indicator Description: ALCOHOL RELATED MOTOR VEHICLE CRASH FATALITY RATE. This indicator presents the number of fatalities resulting from motor vehicle crash fatalities that involved alcohol (drivers with a blood alcohol content of .08 or greater), relative to the licensed population. The rate per 100,000 allows us to see frequency with which an occurrence shows up within a population over time. In this case, the population is the number of licensees in Maine. Where applicable, the number of licensees used to calculate the rate reflects the relevant age group or gender.

Why Indicator is Important: More than one-fifth of all motor vehicle crashes resulting in fatalities involve alcohol.

Data Source(s): MDOT/BHS, 2009-2013

Summary: In 2013, the rates of alcohol related motor vehicle crash fatalities were highest among 21 to 24 year olds, followed by 16 to 20 year olds.

Figure 32. Alcohol related motor vehicle crash fatality rate per 100,000 licensees, by age: 2009-2013



	16 to 20	21to 24	25 to 34	35 to 44	45 to 54	55+
2009	5	8	7	4	5	1
2010	9	16	8	1	3	1
2011	7	11	7	3	4	1
2012	19	16	5	5	6	1
2013	12	13	10	3	2	3

Source: MDOT, 2009-2013

- In 2013, the highest rate of fatalities from alcohol related motor vehicle crashes was among drivers ages 21 to 24 (13 per 100,000 licensees). Rates among this age group have remained relatively stable since 2010.
- The second highest rate in 2013 was among 16 to 20 year olds with 12 alcohol-related motor vehicle fatalities per 100,00 licensees, this was a significant decrease from 2012 (19 per 100,00 licensees).

Hospital Visits Related to Substance Abuse

Indicator Description: INPATIENT ADMISSIONS RELATED TO SUBSTANCE USE. This indicator shows the number of inpatient hospital admissions (per 10,000 people) where alcohol, opiates, or other drugs were recorded as the primary diagnosis for which services were sought at admission. "Inpatient" refers to a patient whose treatment needs at least one night's residence in a hospital. The substance for which treatment was received was identified through hospital codes (ICD-9 codes) and includes those related to alcohol and psychoactive substances (303-305). More than one substance may be involved in a single visit. The rate per 10,000 allows us to see frequency with which an occurrence shows up within a population over time, as well as make relative comparisons between small and large population areas.

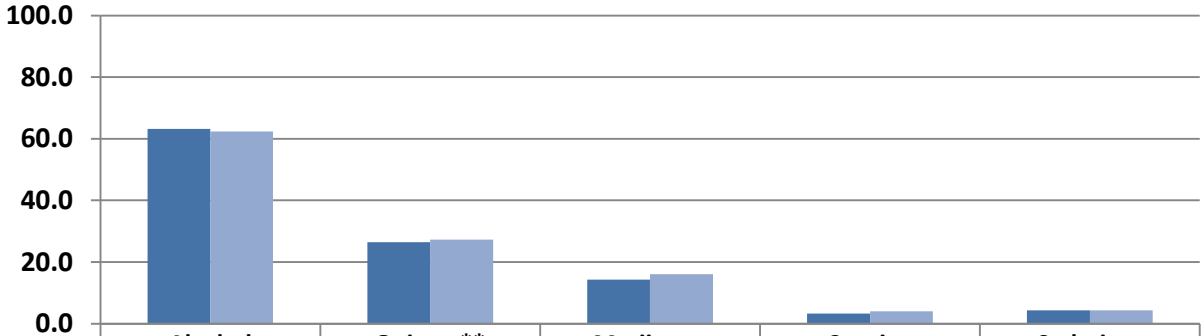
Operationalized as: $\left(\frac{\#\ of\ inpatient\ hospitalizations}{population}\right) \times 10{,}000$

Why Indicator is Important: Hospital admissions related to substance use are an indication of injury sustained through substance use and the impact it has on the healthcare system.

Data Source(s): MHDO, 2010 and 2011.

Summary: The majority of inpatient hospital admissions related to substance use are due to alcohol, followed by opiates, marijuana, sedatives, and cocaine.

Figure 33. Inpatient hospital admissions (per 10,000 people) related to substance use: 2010-2011*



	Alcohol	Opiates**	Marijuana	Cocaine	Sedatives
2010	63.2	26.4	14.3	3.3	4.3
2011	62.3	27.2	16.1	4.0	4.4

Source: MHDO, 2010-2011
**Visits may involve multiple substances*
***Includes prescription narcotics, methadone, and heroin.*

- In 2011, there were 62.3 inpatient hospital admissions per 10,000 people related to alcohol, followed by opiates** (27.2 admissions per 10,000 people), marijuana (16.1 admissions per 100,000 people), sedatives (4.4 admissions per 10,000 people), and cocaine (4 admissions per 10,000 people). Rates remained relatively unchanged from 2010 to 2011.

Indicator Description: OUTPATIENT HOSPITAL VISITS RELATED TO SUBSTANCE USE. This indicator shows the number of outpatient hospital admissions (per 10,000 people) where alcohol, opiates, or other drugs was recorded as the primary diagnosis for which services were received. "Outpatient" refers to patients who receive treatment at a hospital or clinic but are not admitted overnight. The substance for which treatment was received was identified through hospital codes (ICD-9 codes) and includes those related to alcohol psychoactive substances (303-305). The rate per 10,000 allows us to see frequency with which an occurrence shows up within a population over time, as well as make relative comparisons between small and large population areas.

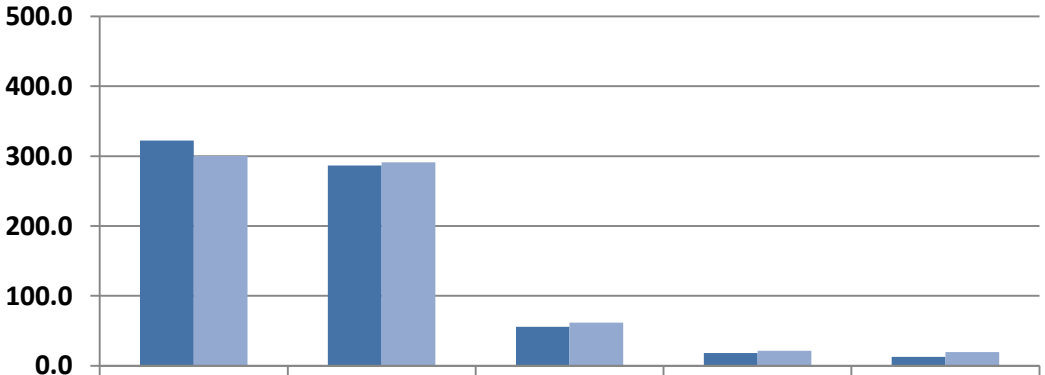
Operationalized as: $\left(\frac{\#\ of\ outpatient\ hospitalizations}{population}\right) \times 10{,}000$

Why Indicator is Important: Outpatient hospital visits related to substance use are an indication of injury sustained through substance use and the impact it has on the healthcare system.

Data Source(s): MHDO, 2010 and 2011

Summary: In 2010 and 2011, most outpatient hospital admissions related to substance use were due to opiates and alcohol, followed by marijuana, cocaine, and sedatives.

Figure 34. Outpatient hospital admissions (per 10,000 people) related to substance use (2010-2011)*



	Opiates**	Alcohol	Marijuana	Cocaine	Sedative
2010	322.4	286.5	55.6	18.5	12.7
2011	300.4	291.1	61.8	21.3	19.7

Source: MHDO, 2010-2011
**Visits may involve multiple substances*
***Includes prescription narcotics, methadone, and heroin.*

- In 2011, there were 300.4 inpatient hospital admissions per 10,000 people related to opiates**, followed closely by alcohol (291.1 admissions per 10,000 people), marijuana (61.8 admissions per 100,000 people), cocaine (21.3 admissions per 10,000 people), and sedatives (19.7 admissions per 10,000 people). Rates remained relatively stable from 2010 to 2011.

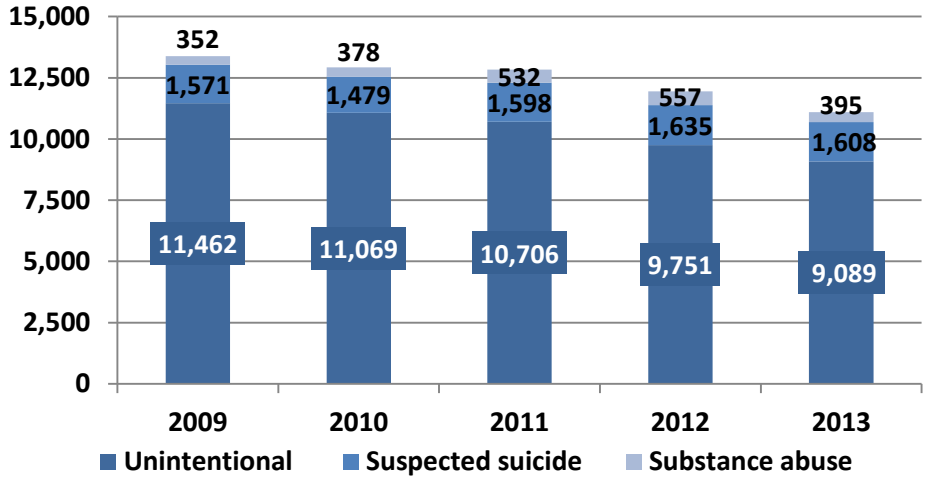
Indicator Description: POISONING CASES DOCUMENTED BY THE POISON CENTER. This measure reflects the number of calls to the Northern New England Poison Center in which the Center determined that a poisoning occurred. These calls are for the state of Maine only. The Center reports poisonings in three categories: unintentional, meaning those that are accidental; suspected substance abuse cases, meaning cases where the Center believes the intent is for an individual to get high; and suspected suicides, meaning staff at the Center determine that the individual attempted suicide. The categories reflect the caller's self-report and are not considered clinical or medical diagnoses.

Why Indicator is Important: The exposure to and ingestion of damaging substances can have many physiologic side effects. Poisonings can be influenced by programs to prevent substance abuse, accidental poisoning, suicide and fatal interaction among medications.

Data Source(s): NNEPC, 2009-2013

Summary: Both the number and proportion of total poisonings reported to NNEPC related to substance abuse have increased since 2009. In 2013, almost one in seven poisonings were suspected suicide.

Figure 35. Poisonings reported to Northern New England Poison Center, by intent: 2009-2013



Source: NNEPC, 2009-2013

- The majority of calls to the Northern New England Poison Center between 2009 and 2013 in which a poisoning occurred were related to unintentional poisonings. It appears that the number of poisonings related to substance abuse have decreased by almost 30 percent from 2012 (557) to 2013 (395). About four percent of all poisoning calls received in 2013 were related to substance abuse, up from two percent in 2009.

- In 2013, 15 percent of poisoning cases involved suspected suicide, up from 11 percent in 2009. The number of suspected suicide cases has remained relatively stable since 2009.

Overdoses and Related Deaths

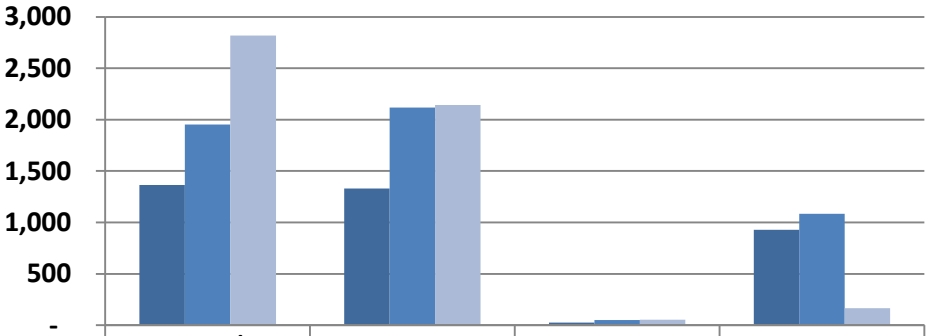
Indicator Description: OVERDOSES. This indicator shows the number of persons receiving help from Emergency Medical Services (EMS) related to an overdose from 2011 thru 2012.

Why Indicator is Important: Overdosing on a substance can cause serious physical harm resulting in hospitalization and even death. Responding to overdoses also uses valuable EMS resources.

Data Source(s): Emergency Medical Services, 2011-2013

Summary: Alcohol and drugs or medications account for most overdoses to which Emergency Medical Services responded in 2013 and over half of overdose responses were related to drugs or medications. The number and proportion of responses due to drugs or medications overdose have been increasing steadily since 2011, while those related to alcohol have remained stable.

Figure 36. Number of overdoses, by type: 2011-2013

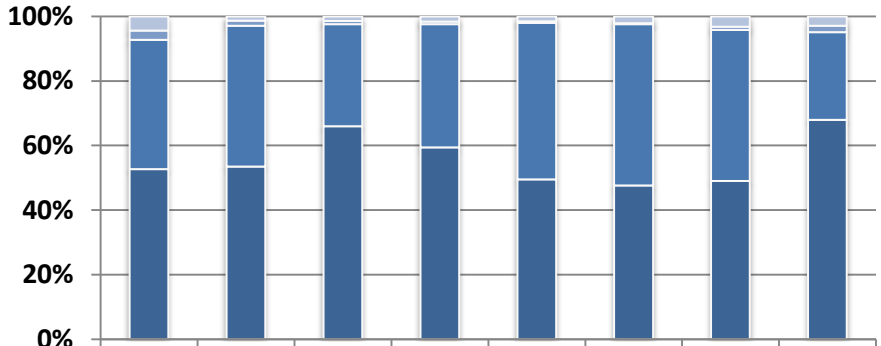


	Drug / Medication	Alcohol	Inhalant	Other
2011	1,364	1,331	27	929
2012	1,953	2,118	51	1,084
2013	2,819	2,144	54	165

Source: Emergency Medical Services, 2011-2013

- In 2013, Emergency Medical Services helped 5,182 individuals experiencing an overdose, a substantial increase since 2011 (3,651). The majority of overdose responses during 2013 were related to drugs or medications. In 2013, drug or medication related overdose responses accounted for 55 percent of total overdose responses, up from 2011(37%).
- Overdose responses related to alcohol did not vary much from 2012 (2,118) to 2013 (2,144). In 2013, responses related to alcohol accounted for about 40 percent of total overdose responses; this proportion has remained relatively stable since 2011.

Figure 37. Distribution of overdose responses, by age and type: 2013



	< 18	18 - 25	26 - 35	36 - 45	46 - 55	56 - 65	66 - 75	> 75
Other	4%	1%	1%	2%	2%	2%	3%	3%
Inhalant	3%	2%	1%	1%	0%	0%	1%	2%
Alcohol	40%	44%	32%	38%	48%	50%	47%	27%
Drug/Medication	53%	54%	66%	59%	50%	48%	49%	68%

Drug/Medication Alcohol Inhalant Other

Source: Emergency Medical Services, 2013

- In 2013, Mainers older than 75 were most likely to receive overdose services related to drugs or medications at 68 percent, followed by those 26 to 35 years old (66%). In terms of alcohol-related overdoses, 56 to 65 years old were most likely at 50 percent, followed by those between the ages of 46 and 55 (48%).

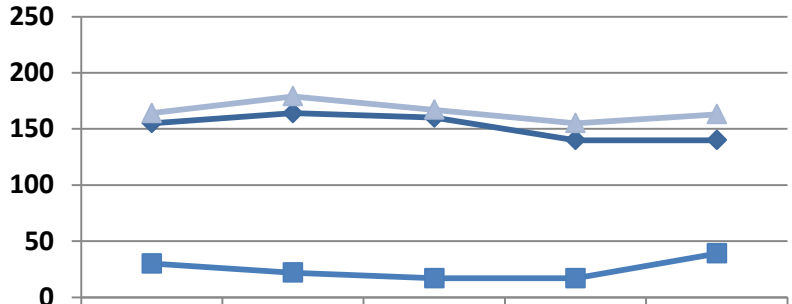
Indicator Description: DEATHS DUE TO OVERDOSE. This measure reflects the number of deaths where the cause of death was directly related to the consumption of one or more substances. This excludes deaths where a substance may have been ingested prior to engaging in a behavior that resulted in death (e.g., drunk driving) or where lifetime substance use and abuse may have impacted health (e.g., cirrhosis). Pharmaceuticals are drugs used in medical treatment; illicit drugs are those illegally produced and sold outside of medical channels. Data from 2012 are "estimated" because in some cases the cause of death has not been finalized.

Why Indicator is Important: One of the most extreme consequences of alcohol and drug abuse is overdose death, where the substance(s) played a direct role in an individual's death. These are seen as potentially preventable deaths.

Data Source(s): Office of Chief Medical Examiner, 2000-2012[6]

Summary: In 2012, there were 163 overdose deaths due to substance use in Maine. The vast majority of overdose deaths were related to pharmaceutical drugs. A dramatic increase in the number of illicit drug related overdose deaths was observed from 2011 to 2012.

Figure 38. Number of deaths caused by pharmaceuticals and/or illicit drugs: 2008-2012*



	2008	2009	2010	2011	2012
Pharmaceutical	155	164	160	140	140
Illicit	30	22	17	17	39
All	164	179	167	155	163

Source: Office of the Chief Medical Examiner, 2008-2012
**Deaths involving pharmaceuticals and illicit drugs are not mutually exclusive.*

- The overall number of overdose deaths increased from 155 in 2011 to 163 in 2012, although this is still lower than previous years. In 2012, 140 overdose deaths (86%) were related to pharmaceutical drugs. The number of overdose deaths related to illicit drugs saw a dramatic increase from 2011 (17) to 2012 (39); this represented a 170 percent increase.

[6] Sorg, Marcella H. Margaret Chase Smith Policy Center, University of Maine.

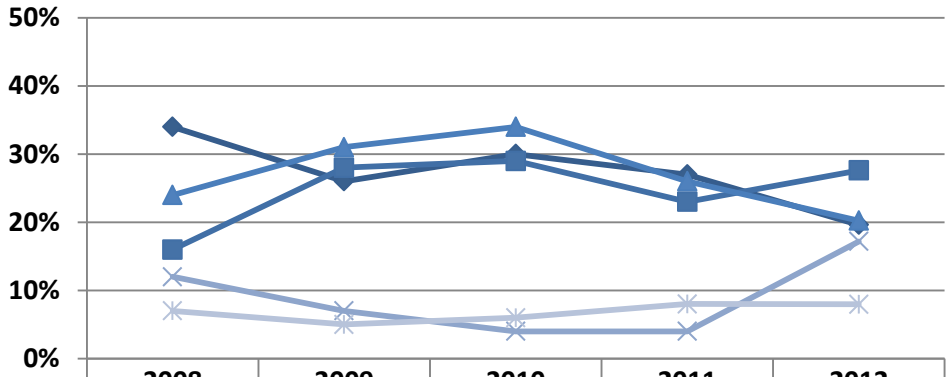
Indicator Description: **DRUG OVERDOSE DEATHS ASSOCIATED WITH SPECIFIC DRUG TYPES.** When a death is investigated, the Medical Examiner determines what substances contributed to the individual's death. This measure examines the percent of drug deaths associated with certain types of substances. Note that more than one substance can be determined as contributing to death. Data from 2012 are "estimated" because in some cases the cause of death has not been finalized.

Why Indicator is Important: In addition to the fact that some substances are used in greater numbers than others, some substances are more lethal than others.

Data Source(s): Office of Chief Medical Examiner, 2008-2012[7]

Summary: In 2012, overdose deaths most likely involved oxycodone, benzodiazepines and methadone. While overdose deaths involving methadone have been decreasing, those related to heroin increased sharply from 2011 to 2012.

Figure 39. Percent of drug deaths involving specific drug types: 2008-2012*



	2008	2009	2010	2011	2012
Methadone	34%	26%	30%	27%	20%
Oxycodone	16%	28%	29%	23%	28%
Benzodiazepines	24%	31%	34%	26%	20%
Heroin/morphine**	12%	7%	4%	4%	17%
Cocaine	7%	5%	6%	8%	8%

Source: Office of the Chief Medical Examiner, 2008-2012
**Some deaths may be caused by more than one key drug.*
***Deaths caused by known pharmaceutical morphine removed from total.*

- In 2012, most drug overdose deaths involved oxycodone (28%), benzodiazepines (20%) and methadone (20%); those involving methadone appear to be declining over time. Conversely, as a proportion of all overdose deaths, those involving heroin increased sharply from four percent in 2011 to 17 percent in 2012.

[7] Sorg, Marcella H. Margaret Chase Smith Policy Center, University of Maine.

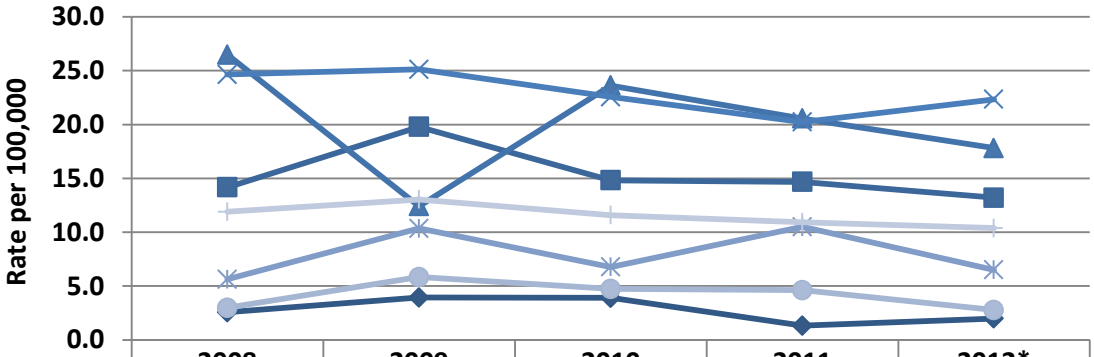
Indicator Description: **RATE OF DEATHS DUE TO SUBSTANCE ABUSE.** This measure estimates the rate of deaths due to substance abuse or overdose per 100,000 people. The rate per 100,000 allows us to see the frequency with which an occurrence shows up within a population over time.

Why Indicator is Important: Drug-induced deaths are influenced by programs to prevent substance abuse, accidental poisoning, suicide and fatal interaction among medications.

Data Source(s): ODRVS, 2008-2012*

Summary: Adults between the ages of 35 to 54 had the highest rate of death due to substance abuse or overdose during 2012.

Figure 40. Substance abuse and overdose deaths, per 100,000, by age group: 2008-2012*



	2008	2009	2010	2011	2012*
12-20	2.6	3.9	3.9	1.3	2.0
21-29	14.2	19.8	14.8	14.7	13.2
30-34	26.5	12.4	23.6	20.6	17.8
35-54	24.6	25.1	22.6	20.2	22.3
55-64	5.6	10.4	6.8	10.5	6.5
65+	3.0	5.8	4.7	4.6	2.8
All ages	11.9	13.0	11.6	10.9	10.4

Source: ODRVS, 2008-2012
**2012 results are preliminary*

- At 22.3 deaths per 100,000, people between the ages of 35 to 54 had the highest rate of death due to substance abuse or overdose during 2012. The second highest rate was among people between the ages of 30 to 34 years old at 17.8 per 100,000.
- Since 2008, the highest rates of substance abuse and overdose deaths per 100,000 have been among adults between the ages of 21 and 54.
- It is worth mentioning that the substance abuse and overdose death rate among 30 to 34 year olds declined from 26.5 per 100,000 in 2008 to 17.8 per 100,000 in 2012.

Morbidity and Mortality

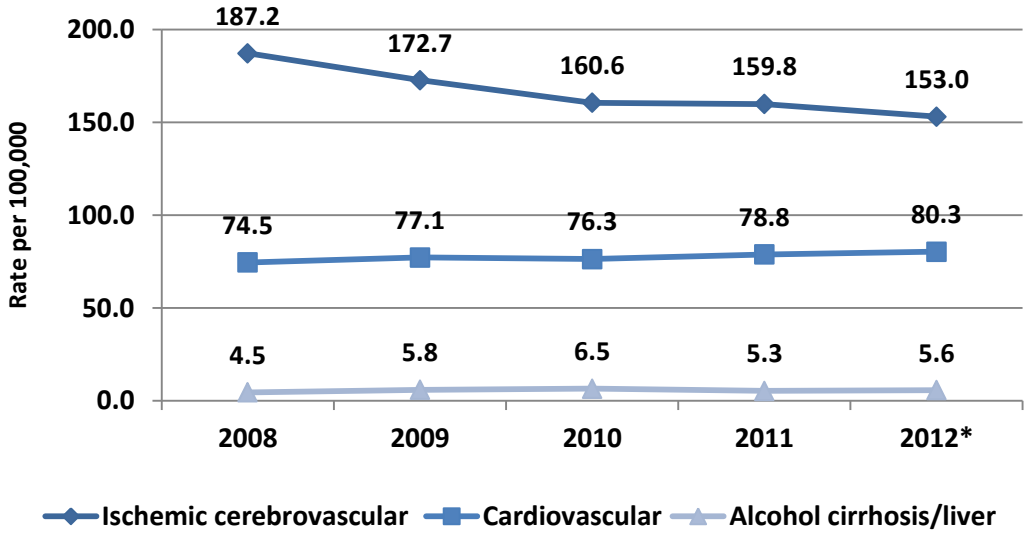
Indicator Description: RATES OF DEATH FROM CHRONIC CONDITIONS ASSOCIATED WITH SUBSTANCE USE. Every death in Maine has a recorded cause. This indicator examines the rate of chronic diseases commonly associated with substance use, including ischemic cerebrovascular diseases (commonly known as stroke), cardiovascular diseases, and alcohol-related liver diseases. In this case, a rate per 100,000 of the state population is used to compare the prevalence across certain populations.

Why Indicator is Important: Prolonged and lifelong use of substances, including tobacco and alcohol, can often result in chronic health problems later in life. As a consequence of substance abuse, these health-related deaths are considered potentially preventable.

Data Source(s): ODRVS, 2008-2012*

Summary: Ischemic cerebrovascular (stroke) diseases were more prevalent among Mainers in 2012 than cardiovascular diseases and alcoholic cirrhosis. Cirrhosis and liver disease related to alcohol were three times more likely among men than women.

Figure 41. Deaths from chronic diseases related to substance use, per 100,000 of the population: 2008-2012*

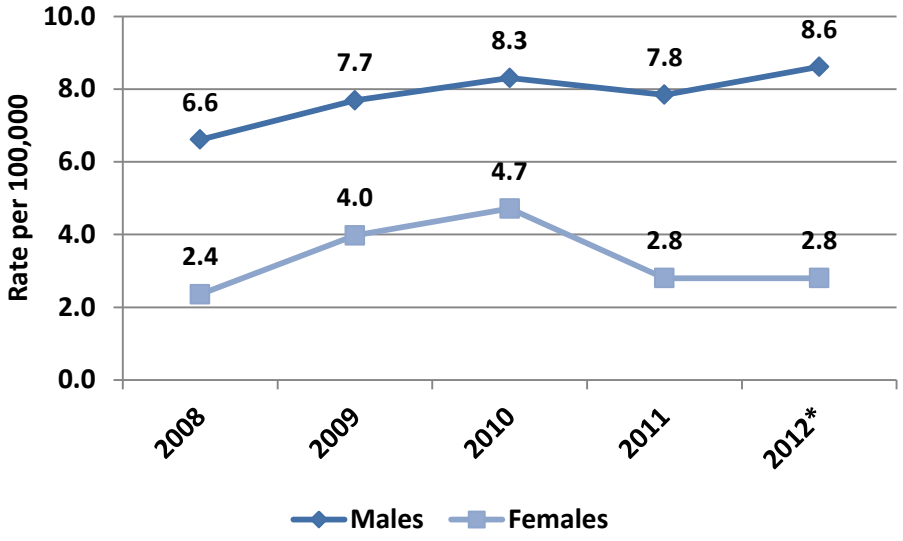


Source: ODRVS, 2008-2012
**2012 results are preliminary*

- At 153 deaths per 100,000, ischemic cerebrovascular diseases were more prevalent among Mainers in 2012 than cardiovascular diseases (80.3) and alcoholic cirrhosis (5.6).
- Rates of death from ischemic cerebrovascular disease have been declining steadily since 2008, from 187.2 deaths per 100,000 to 153 deaths per 100,000 in 2012. Conversely, cardiovascular related death rates have gradually increased from 74.5 deaths per 100,000 in 2008 to 80.3 deaths per 100,000 in 2012.

- Although not pictured, deaths from cerebrovascular and cardiovascular diseases afflict the older population (those 60 and older) at higher rates, whereas alcoholic cirrhosis/liver disease has a higher rate of incidence among adults between the ages of 35 and 64.

Figure 42. Deaths from alcoholic cirrhosis and liver disease per 100,000 of the population, by gender: 2008-2012*



Source: ODRVS, 2008-2012
**2012 results are preliminary*

- In 2012, deaths related to alcoholic cirrhosis and liver diseases were much more likely among men (8.6 deaths per 100,000) than women (2.8 deaths per 100,000). Rates among men have increased steadily since 2008 (6.6 deaths per 100,000).

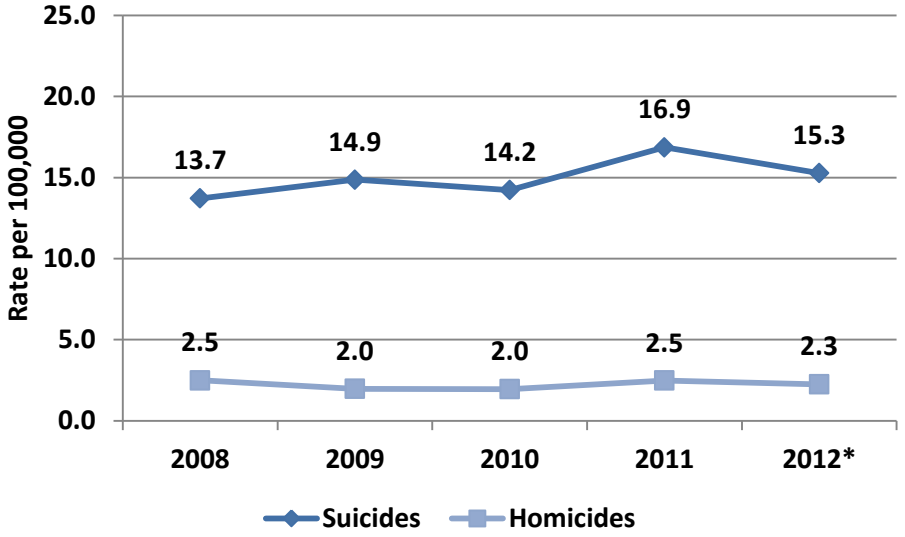
Indicator Description: RATE OF VIOLENT DEATHS. Every death in Maine has a recorded cause. This indicator examines deaths that were the result of violence, i.e., those classified as a suicide or homicide. In this case, a rate per 100,000 of the state population is used to compare the prevalence across certain populations.

Why Indicator is Important: Although not the leading cause of death, substance use and abuse is often a factor in homicides and suicides. For example, the federal Substance Abuse and Mental Health Services Administration (SAMHSA) has estimated that about 47 percent of homicides and 23 percent of suicides are attributable to alcohol nationally.

Data Source(s): ODRVS, 2008-2012*

Summary: Suicides are more prevalent than homicides. Rates of suicides have gradually increased since 2008 while homicide rates have remained stable. Suicides are more than four times as likely among men and most prevalent among middle aged adults. Homicides are almost three times as likely among men; rates are highest among younger adults between the ages of 21 and 34.

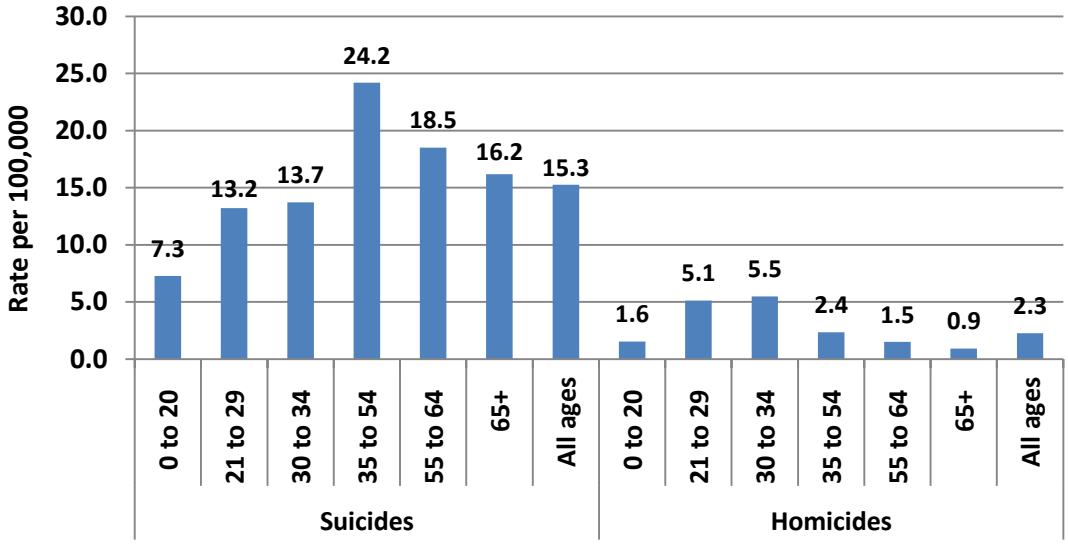
Figure 43. Deaths from suicide or homicide per 100,000 of the population: 2008-2012*



*Source: ODRVS, 2008-2012**
**2012 results are preliminary*

- The rate of suicide deaths in Maine increased from 14.9 per 100,000 in 2008 to 15.3 per 100,000 in 2012. The overall rate of homicide deaths in Maine has remained steady, decreasing slightly from 2.6 per 100,000 in 2008 to 2.3 per 100,000 in 2012.

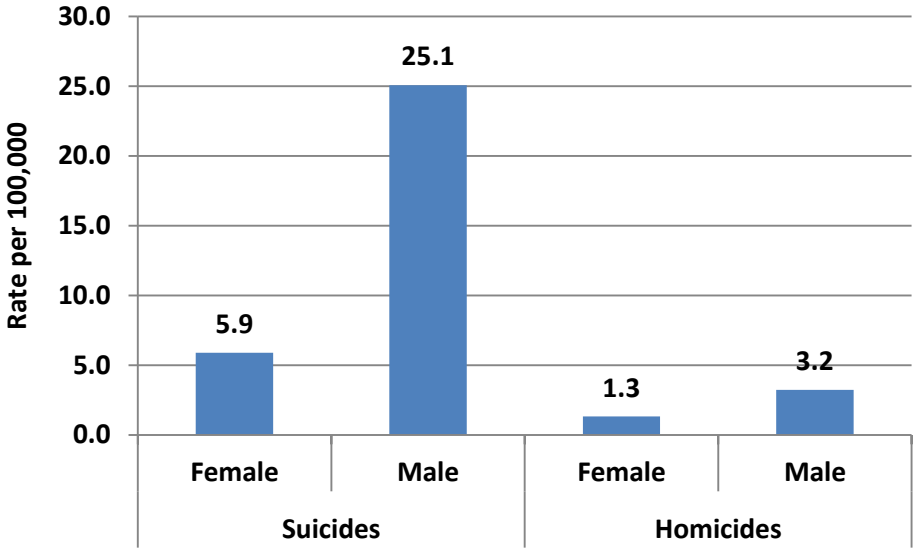
Figure 44. Deaths from suicide or homicide per 100,000 of the population, by age groups: 2012*



Source: ODRVS, 2012
**2012 results are primary*

- In 2012, deaths from suicide were most prevalent among the 35 to 54 year old population at a rate of 19.6 per 100,000, followed by 55 to 64 year olds at 18.5 per 100,000. As for homicides, 30 to 34 year olds held the highest rate at 5.5 per 100,000, followed closely by 21 to 29 year olds at 5.1 per 100,000.

Figure 45. Deaths from suicide or homicide per 100,000 of the population, by gender: 2012*



Source: ODRVS, 2010
**2012 results are preliminary*

- Suicide deaths were much more common among men in 2012 (25.1 per 100,000), compared to women (5.9 per 100,000).
- Although the homicide rate is much lower, the rate for men was more than double the homicide rate for women in 2012 at 3.5 per 100,000 and 1.3 per 100,000 respectively. Although not shown here, these rates have been relatively consistent between 2008 and 2012.

Factors Contributing to Substance Use and Abuse

A body of substance abuse prevention research has identified certain groups of factors that "cause" or have an impact on substance use and the consequences related to use. That is, they appear to influence the occurrence and magnitude of substance use and its related consequences. Generically, these causal factors (also known as contributing factors) are categorized into groups which include:

- Social Access (e.g., getting drugs and alcohol from friends or family)
- Retail Availability (e.g., retailer not carding properly)
- Pricing & Promotion (e.g., two-for-one specials, industry sponsorships or signage)
- Social/Community Norms (e.g., parental/community attitudes and beliefs)
- Enforcement (e.g., lack of compliance checks)
- Perceptions of Harm (e.g., individuals' belief that using a substance is harmful)
- Perceived Risk of Being Caught (e.g., individuals' belief that s/he will be caught by parents or police)[8, 9]

Substance abuse prevention in Maine is undertaken with the assumption that making changes to these factors at the community level will result in changing behaviors around substance use and related problems. It is through positively impacting these factors that Maine can achieve population-level changes in substance consumption and consequences.

Although most high school students seem to perceive that regular use of substances pose a risk of harm and that their parents and community think it is wrong, few think they will be caught by the police and most think it is easy to obtain alcohol and marijuana. Among adults, young adults are least likely to perceive risks of harm from using alcohol and marijuana regularly. In recent years, perceptions of harm from marijuana use has been declining steadily among youth and adults, reinforcing a more permissive attitude among parents and communities.

[8] *A General Causal Model to Guide Alcohol, Tobacco and Illicit Drug Prevention: Assessing the Research Evidence.* Multi-State Technical Assistance Workshop. Washington, DC. March 16, 2006.
[9] Bonnie, R. J. (Ed.). (2004). *Reducing underage drinking: A collective responsibility*. National Academies Press.

Availability and Accessibility

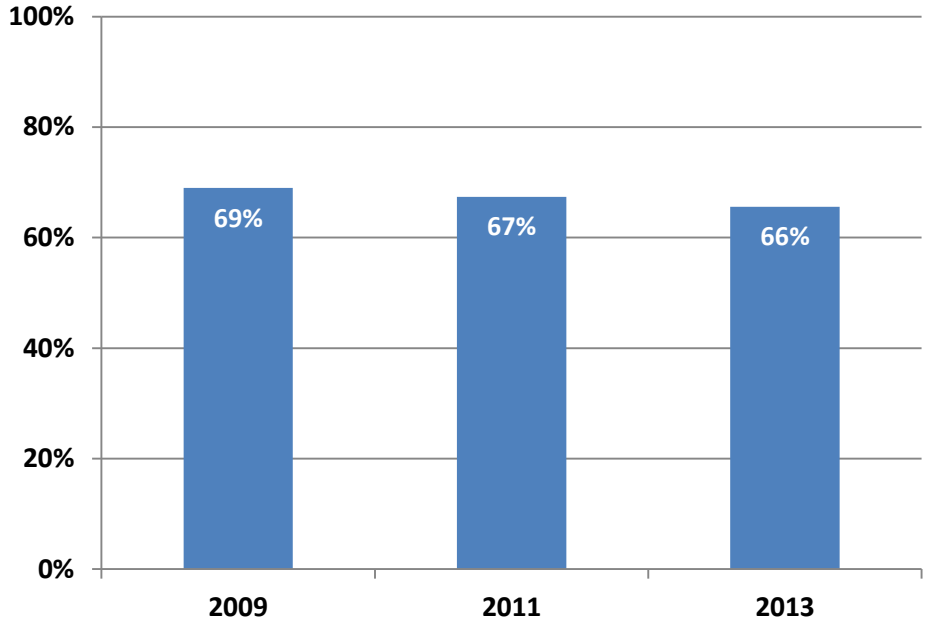
Indicator Description: EASE OF OBTAINING ALCOHOL BY UNDERAGE YOUTH. This indicator reflects the percentage of high school students (grades 9 to 12) who reported that it would be easy or very easy for them to get alcohol if they wanted some.

Why Indicator is Important: In 2013, students who reported that they thought alcohol was easy to obtain were three times as likely to report consuming alcohol within the past month compared to students who did not think it was easy to obtain.

Data Source(s): MIYHS, 2009-2013

Summary: Overall, about two out of three high school students think it would be easy to obtain alcohol; this represents a slight decrease since 2009.

Figure 46. Percent of high school students who reported it would be easy to get alcohol: 2009 and 2013



Source: MIYHS, 2009-2013

- In 2013, two out of three high school students (or 66%) reported it would be easy to get alcohol, compared to 69 percent in 2009, a decrease of three percentage points.

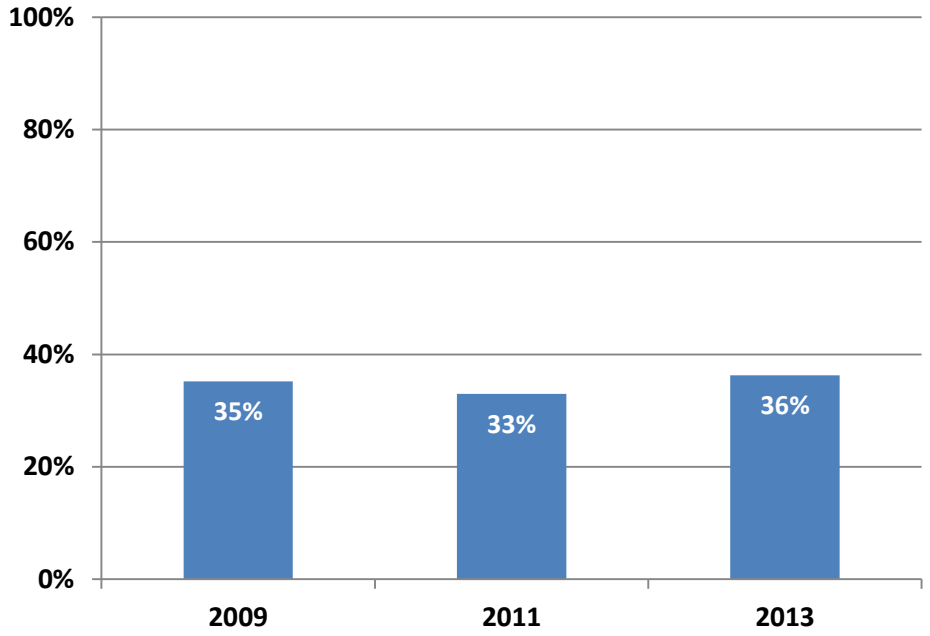
Indicator Description: **UNDERAGE YOUTH RECEIVING ALCOHOL FROM OTHERS.** Among high school students who drank within the past 30 days, this measure reflects the percentage reporting that they usually obtain the alcohol they drink from someone giving it to them.

Why Indicator is Important: Easy social access to alcohol is a major contributing factor to underage drinking. Students who report that alcohol is easy to get are three times as likely to drink as their peers who report it is not easy.

Data Source(s): MIYHS 2009-2013

Summary: Social access appears to be a primary way that underage youth obtain alcohol.

Figure 47. Percent of high school students who obtained alcohol by someone giving it to them, among those who drank in past month: 2009-2013



Source: MIYHS 2009-2013

- In 2013, more than one in three (36%) high school students who consumed alcohol in the past month reported that someone gave them the alcohol they consumed. This has increased from 33 percent in 2011.

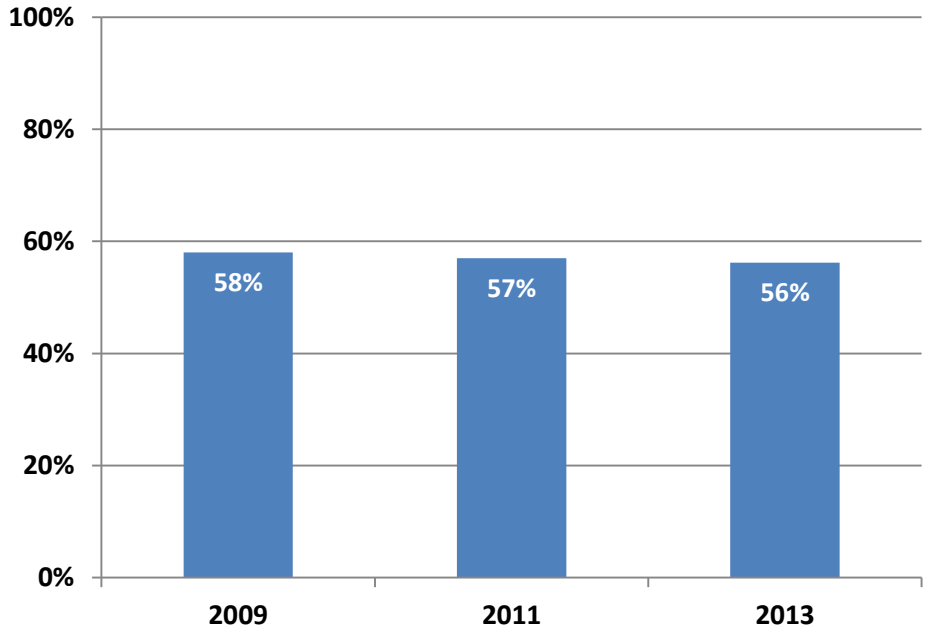
Indicator Description: **EASE OF OBTAINING MARIJUANA BY YOUTH.** This indicator shows the percentage of high school students reporting it would be easy or very easy to obtain marijuana if they wanted it.

Why Indicator is Important: In 2013, students who reported that they thought marijuana was easy to obtain were nearly eight times as likely to use marijuana in the past 30 days compared to their peers who thought it was difficult to obtain.

Data Source(s): MIYHS, 2009-2013

Summary: In 2013, over half of high school students believed that marijuana is easy to obtain. This has decreased slightly from 2009.

Figure 48. Percent of high school students who reported it would be easy to get marijuana: 2009-2013



Source: MIYHS, 2009-2013

- In 2013, well over half (56%) of high school students felt it would be easy to get marijuana; this was a slight decrease from 2009 (58%).

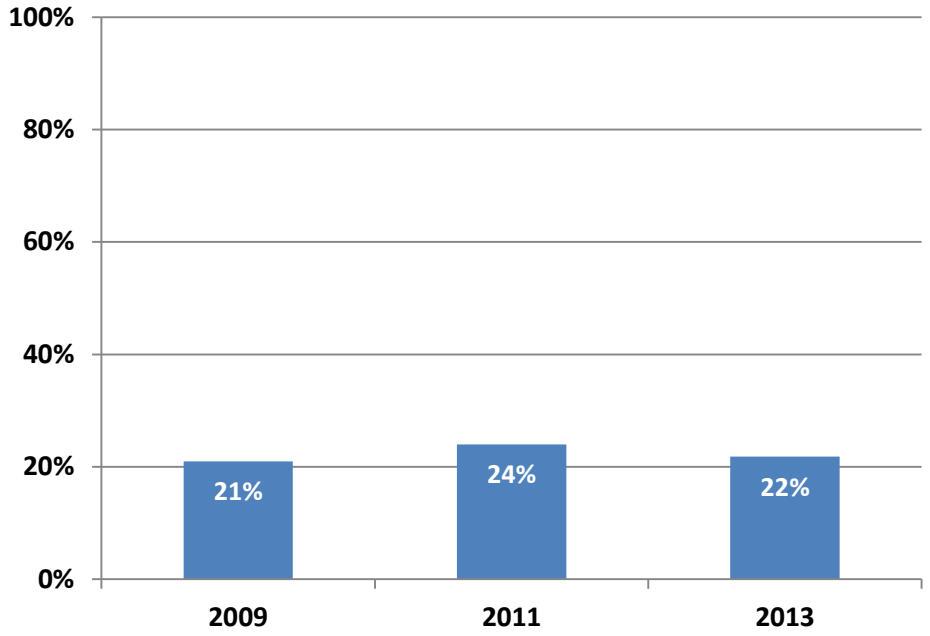
Indicator Description: ILLEGAL DRUGS ON SCHOOL PROPERTY. This measures the percentage of high school students reporting they were sold, offered or given an illegal drug on school property during the past year.

Why Indicator is Important: In 2013, students who reported they were offered drugs at school were 2.5 times as likely to use marijuana as their peers who were not offered drugs at school.

Data Source(s): MIYHS, 2009-2013

Summary: More than one in five high school students were sold, offered or given an illegal drug on school property; this rate decreased slightly from 2011.

Figure 49. Percent of high school students who were sold, offered, or given an illegal drug on school property in past year: 2009-2013



Source: MIYHS, 2009-2013

- The percentage of high school students who were sold, offered or given an illegal drug on school property during the previous year decreased from 24 percent in 2011 to 22 percent in 2013.

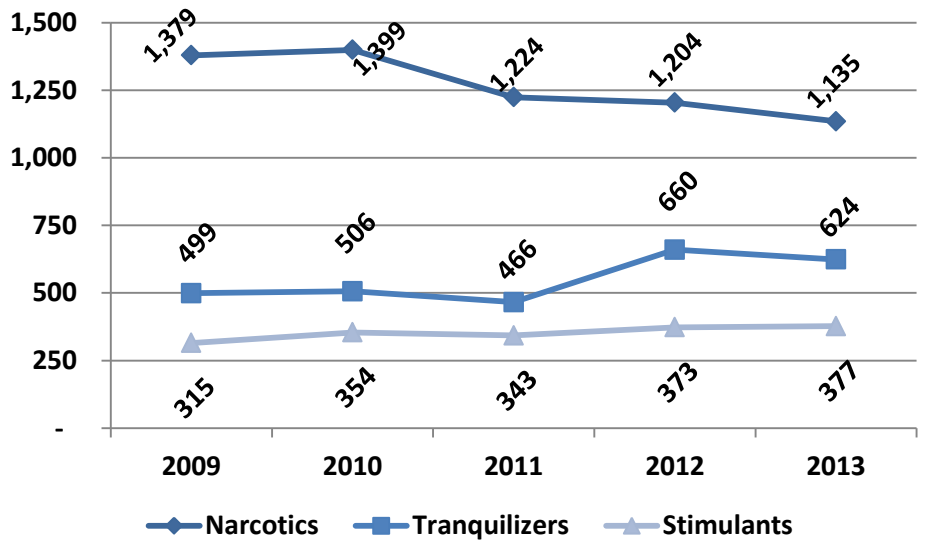
Indicator Description: NUMBER OF SCHEDULE II PRESCRIPTIONS AND PILLS PER CAPITA. These indicators reflect the number of narcotic, tranquilizer, and stimulant prescriptions filled as well as the pill counts per capita for each drug type. This includes only prescription drugs that are classified "Schedule II" drugs, meaning those with a high potential for abuse. It is important to note that the number of prescriptions and pill counts per capita do not indicate the size/dosage of the pills. All pharmacies in Maine report to the Prescription Monitoring Program.

Why Indicator is Important: The number of prescriptions filled and pill counts per capita indicate the volume of prescription drugs potentially available in the community for diversion (e.g., gift, sale, or theft). A higher level of availability contributes to misuse by individuals without a prescription.

Data Source(s): PMP, 2009-2013

Summary: Overall, the number of schedule II prescriptions filled involving narcotics, tranquilizers, and stimulants have decreased from 2009 to 2013; this was driven greatly by the decrease in prescriptions for narcotics. Narcotics have accounted for the most prescriptions filled as well as pills per capita in Maine over the past several years. Narcotic pills per capita have been steadily decreasing, while stimulant pills per capita appear to be rising.

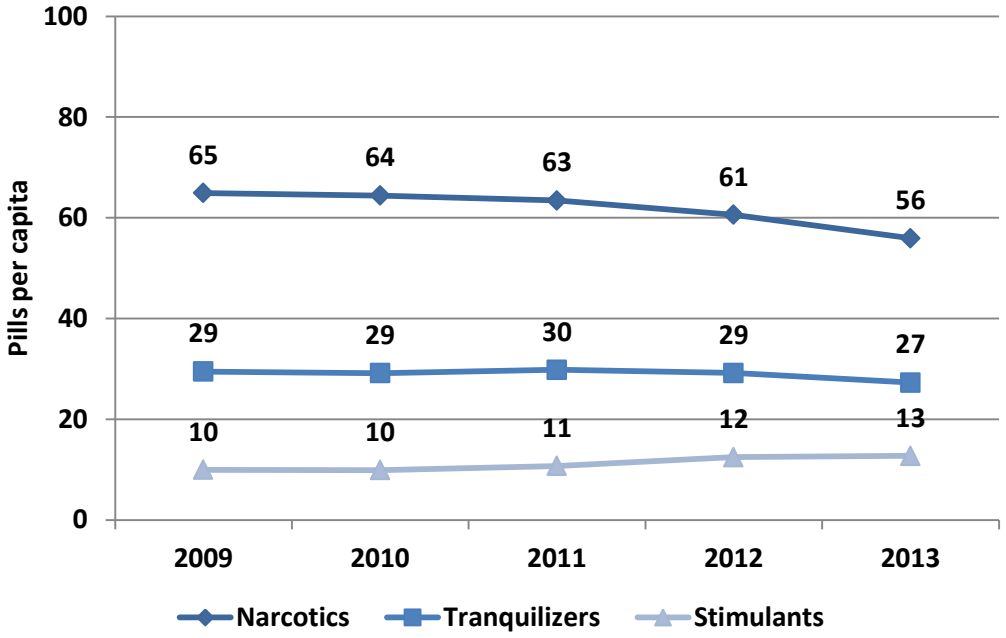
Figure 50. Number of prescriptions filled in Maine (thousands), by type: 2009-2013



Source: PMP, 2009-2013

- The number of prescriptions filled for narcotics, tranquilizers, and stimulants has decreased from 2,237,111 in 2012 to 2,135,972 in 2013. Narcotics accounted for most schedule II prescriptions filled in Maine since 2009. In 2013, 1,135,450 prescriptions were filled for narcotics; this was followed by tranquilizers (623,517) and, at a lower number, stimulants (377,005).

Figure 51. Number of pills per capita in Maine, by type: 2009-2013



Source: PMP, 2009-2013

- Narcotics have accounted for most pills per capita filled in Maine between the years of 2009 to 2013. The number of pills per capita for narcotics has steadily decreased from 65 per person in 2009 to 56 per person in 2013. Pill counts per capita for tranquilizers have remained relatively stable over this same period (about 29 pills per person), while stimulants have gradually risen over time (from 10 pills per person in 2009 to 13 pills per person in 2013).

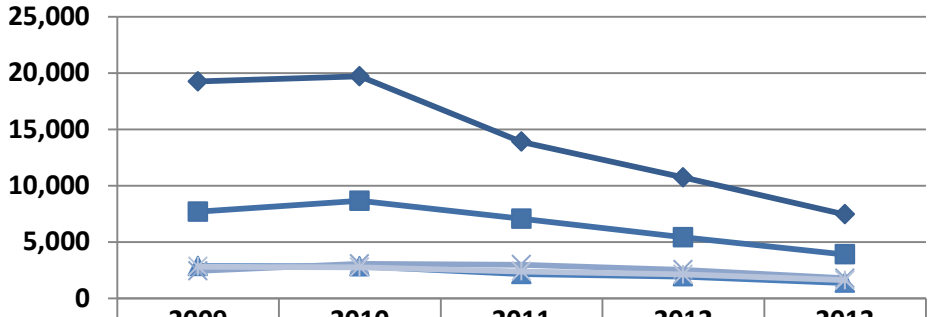
Indicator Description: SUBSTANCES REQUESTED FOR VERIFICATION. This indicator shows the number of requests by non-law enforcement for medication verification through the Northern New England Poison Center. A person may call the NNEPC for many reasons, one being to help identify a medication or substance which another person has consumed or that has been found. The calls reflected in this indicator have been characterized by NNEPC as likely related to substance abuse, although NNEPC staffs do not make a formal or clinical assessment.

Why Indicator is Important: The increased volume of medication verification calls suggests a greater availability of those drugs in the community. This measure also suggests that there is a higher awareness among the community and parents for potential misuse of prescription pills which is prompting calls.

Data Source(s): NNEPC, 2009-2013

Summary: Most calls to NNEPC requesting substance verification involved opioids, followed by benzodiazepines. The numbers of requests for verification for opioids and benzodiazepines have decreased substantially since 2010.

Figure 52. Substances most frequently requested for medication verification by non-law enforcement, by type: 2009-2013



	2009	2010	2011	2012	2013
Opioids	19,249	19,699	13,899	10,720	7,451
Benzodiazepines	7,686	8,654	7,062	5,409	3,901
Non-opioid analgesics	2,866	2,838	2,151	1,941	1,366
Antidepressants	2,427	3,054	2,981	2,530	1,775
Stimulants/street drugs	2,811	2,767	2,385	2,124	1,611

Source: NNEPC, 2009-2013

- In 2013, the Northern New England Poison Center received 7,451 calls requesting verification for substances that were identified as opioids. This is nearly twice the number of verification calls related to benzodiazepines, which was the second most requested drug type at 3,901. The volume of calls for both these substances has decreased steadily since 2010. Although not shown, requests verifying opioids decreased by 62 percent from 2010 to 2013, while requests verifying benzodiazepines fell by 55 percent during the same period.

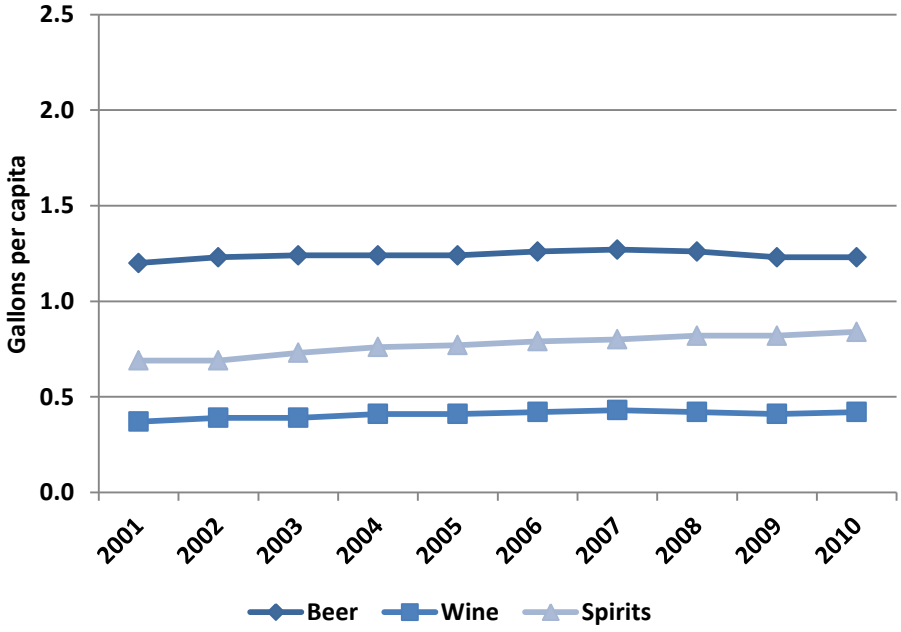
Indicator Description: **ANNUAL GALLONS OF ETHANOL SOLD PER CAPITA.** This indicator captures the total sales of ethanol in beer, wine, and spirits per year, estimated in gallons of ethanol, per capita. Measuring ethanol takes into account the range of alcohol content per volume.

Why Indicator is Important: A higher quantity of alcohol and alcoholic beverages available in the community presents greater opportunity for use, abuse, and dependence. Per capita consumption of absolute alcohol has been used historically as an indicator of overall drinking within a state and has been shown to be correlated with many types of alcohol problems.

Data Source(s): AEDS, 2001-2010

Summary: Most alcohol in Maine is sold as beer, followed by spirits and then wine. This has not changed since 2001.

Figure 53. Gallons of ethanol sold per capita, by type: 2001-2010



Source: AEDS, 2001-2010

- Since 2001, gallons of beer purchased per capita have increased somewhat, from 1.2 in 2001 to 1.23 in 2010. Gallons of spirits and wine purchased per capita have also increased slightly over the same timeframe. Spirits increased from 0.68 to 0.84, while gallons of wine purchased per capita increased from 0.34 to 0.42.

Perceived Harm

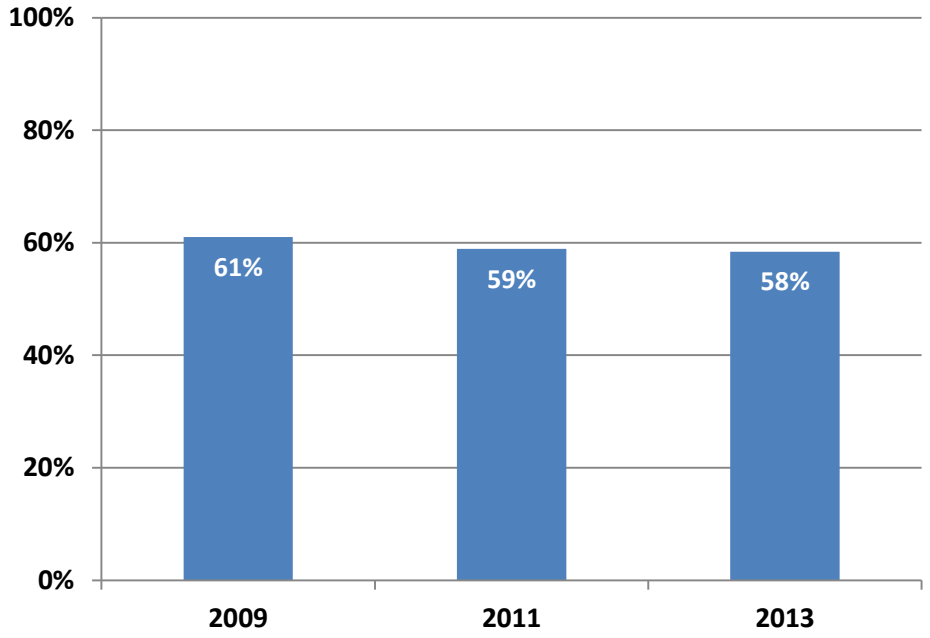
Indicator Description: PERCEIVED RISK FROM REGULAR ALCOHOL USE. This indicator reflects the percentage of high school students who report that there is moderate to great risk of harm from drinking one or two alcoholic beverages every day.

Why Indicator is Important: High school students who do not perceive regular alcohol use (one to two drinks per day) as risky were almost twice as likely to drink in the past month than students who did perceive harm.

Data Source(s): MIYHS, 2009-2013

Summary: Although most high school students think there is moderate to great risk of harm from drinking alcohol regularly, almost two out of five students in 2013 did not think regular use was risky. Perception of harm from regular alcohol use decreased slightly from 2009 to 2013.

Figure 54. Percent of high school students perceiving moderate to great risk from drinking 1-2 drinks every day: 2009-2013



Source: MIYHS, 2009-2013

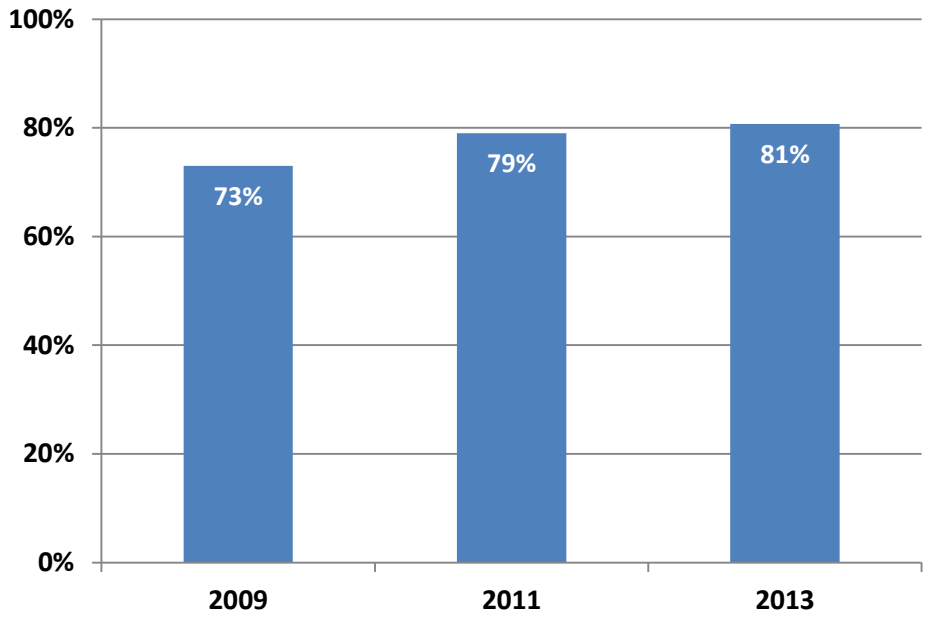
- The proportion of high students who reported that people risk harming themselves if they drink one or two drinks every day has decreased by three percentage points from 2009 (61%) to 2013 (58%).

Indicator Description: PERCEIVED RISK FROM BINGE DRINKING. This indicator reflects the percentage of individuals (high school students and adults) who perceive that there is moderate to great risk from drinking five or more drinks in a row once or twice per week.

Why Indicator is Important: High school students who do not perceive a moderate to great risk of harm from binge drinking once or twice a week are more than twice as likely to drink in the past month as high school students who do perceive risk of harm. Perceptions around the risks of binge drinking are related to high-risk alcohol use among adults as well.

Summary: The perception of risk of harm from binge drinking among high school students has increased significantly from 2009 to 2013. While perceptions that binge drinking a few times a week posed a moderate to great risk of harm has increased, seven out of ten young adults thought that binge drinking a few times a week was not risky.

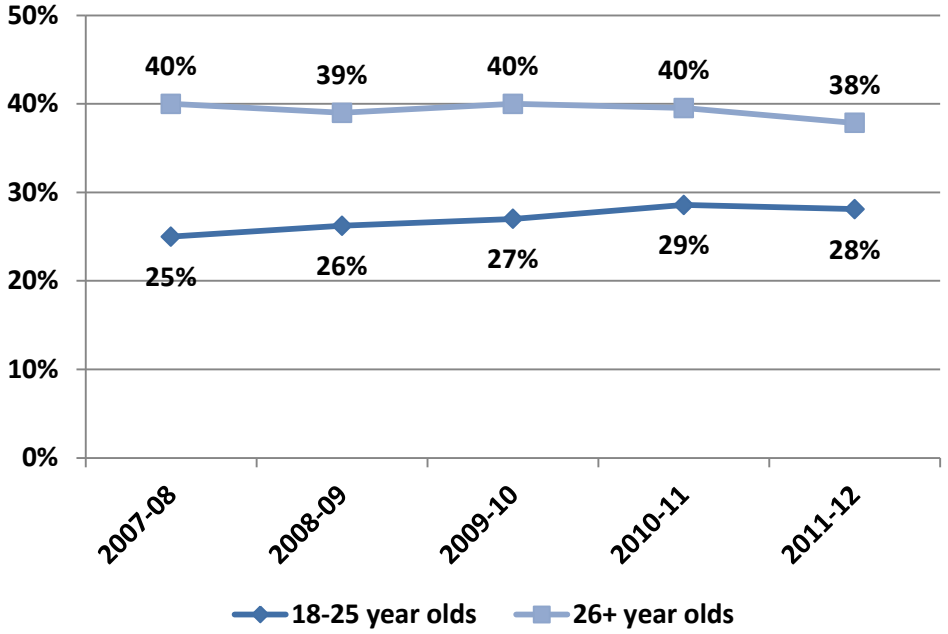
Figure 55. Percent of high school students perceiving moderate to great risk from drinking five or more drinks once or twice per week: 2009-2013



Source: MIYHS, 2009-2013

- In 2013, eight out of ten (81%) of high school students reported that people risk harming themselves if they consume five or more alcoholic drinks in a row once or twice a week. This represents a substantial increase since 2009 from 73 percent.

Figure 56. Maine residents (age 18 and older) perceiving great risk from drinking five or more drinks once or twice per week, by age group: 2007-08 through 2011-12



Source: NSDUH 2007-08 to 2011-12

- In 2011-12, 38 percent of Mainers ages 26 and older reported that drinking five or more drinks once or twice per week posed some risk of harm. Young adults ages 18 to 25 were much less likely to perceive a great risk of harm from drinking five or more drinks once or twice a week, at 28 percent in 2011-12. These trends have remained generally stable since 2007-08.

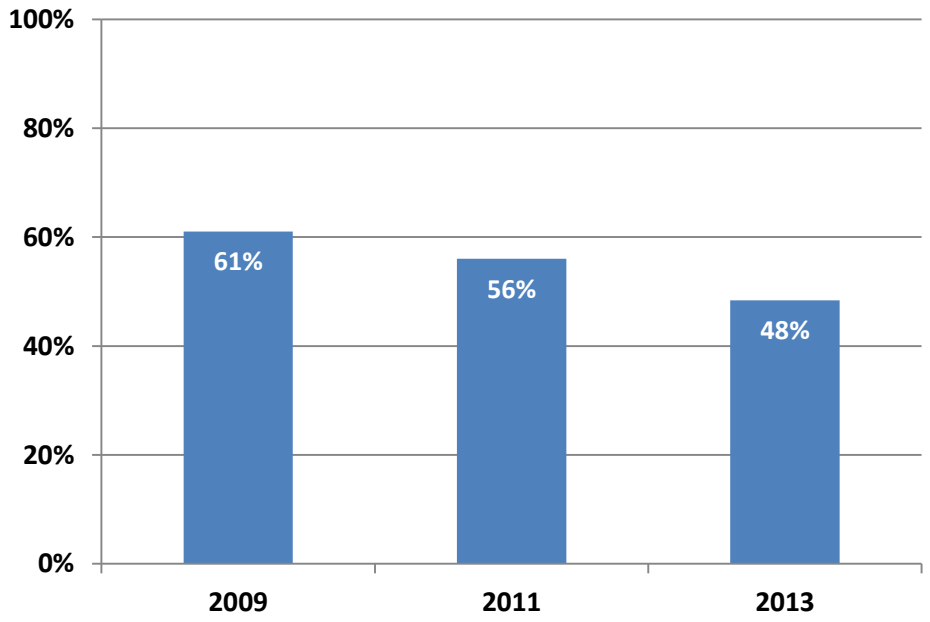
Indicator Description: PERCEIVED RISK OF REGULAR MARIJUANA USE. This measure demonstrates the percentage of individuals (high school students and adults) who perceive a moderate to great risk of harm from smoking marijuana regularly.

Why Indicator is Important: High school students who do not believe there is moderate to great risk in smoking marijuana regularly are almost eight times as likely to smoke marijuana as their peers who do perceive risk of harm. A similar relationship exists between adult perceptions and consumption.

Data Source(s): MIYHS, 2009-2013; NSDUH, 2007-08 to 2011-12

Summary: Perception of risk of harm from regular marijuana use has decreased dramatically from 2009 to 2013 among high school students. In 2013, over half of students felt smoking marijuana on a regular basis was not risky. Rates of perception of risk from regular marijuana use have been declining steadily among adults as well. In 2011-12, nearly nine in ten 18 to 25 year olds did not perceive smoking marijuana at least once per month as risky.

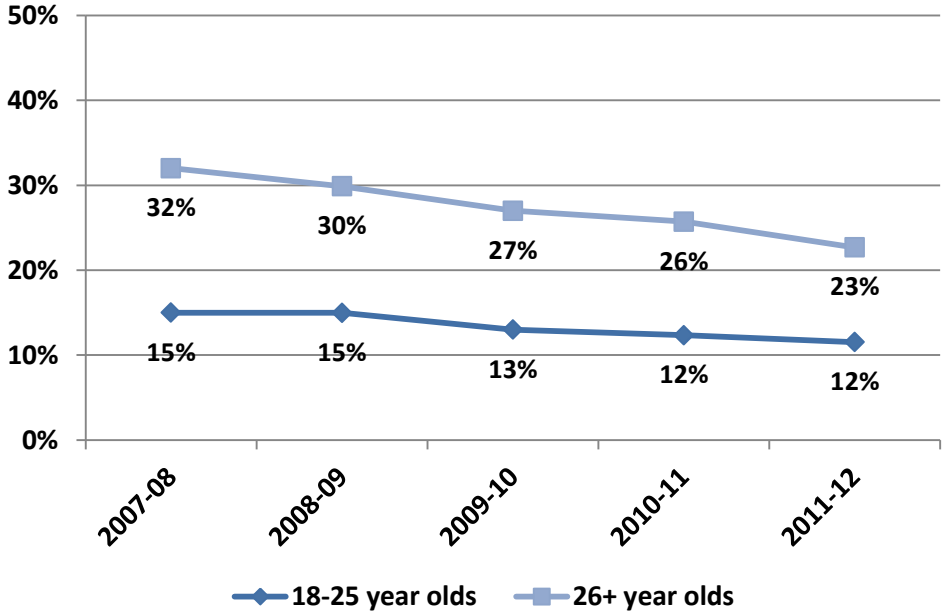
Figure 57. Percent of high school students perceiving moderate to great risk from smoking marijuana regularly: 2009-2013



Source: MIYHS, 2009-2013

- The proportion of high school students who perceived a moderate to great risk of harm from smoking marijuana regularly decreased by 13 percentage points from 2009 (61%) to 2013 (48%). Conversely, this means that in 2013, 52 percent felt that there was little to no risk of harm involved.

Figure 58. Maine residents (age 18 and older) perceiving great risk from smoking marijuana once per month: 2007-08 through 2011-12



Source: NSDUH, 2007-08 to 2011-12

- In the 2011-12 period, young adults between the ages of 18 to 25 year old were unlikely to view a great risk from smoking marijuana once per month (12%), a decrease of three percentage points since 2008-09 (15%). Among Mainers who were 26 years old or older, perceptions of risk have decreased by nine percentage points since 2007-08, from 32 percent to 23 percent.

Perceived Enforcement

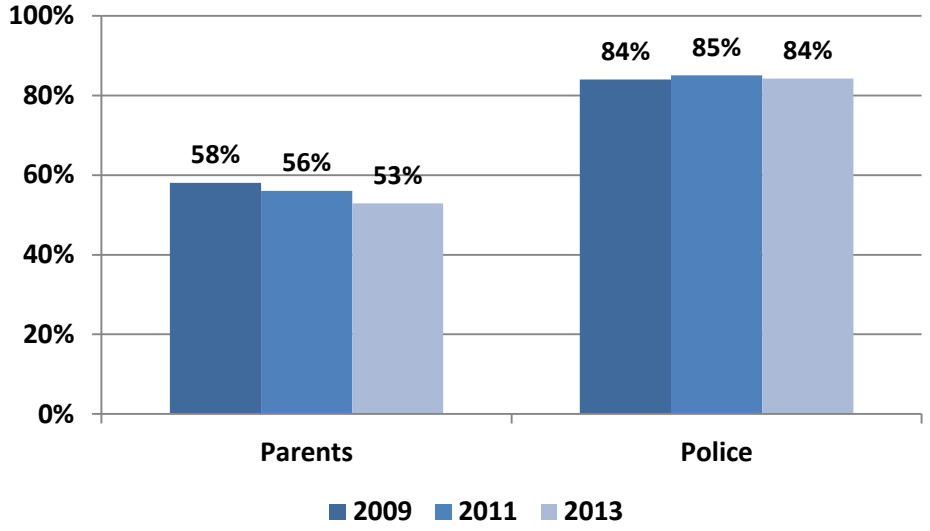
Indicator Description: YOUTH PERCEIVED RISK OF BEING CAUGHT FOR DRINKING ALCOHOL. The indicator shows the percentage of high school students perceiving they would be caught by their parents and by police if they drank alcohol.

Why Indicator is Important: High school students who believe they will be caught by their parents are one-fifth as likely to drink in the past month as compared to students who do not think they will be caught. Students who believe that they would be caught by the police are half as likely to drink alcohol in the past month as those who do not think they would be caught.

Data Source(s): MIYHS, 2009-2013

Summary: High school students think they are more likely to be caught by their parents for drinking alcohol than by the police. Perceptions of not getting caught by parents steadily decreased from 2009 to 2013.

Figure 59. Percent of high school students reporting they would not be caught by parents or the police if they drank: 2009-2013



Source: MIYHS, 2009-2013

- In 2013, 53 percent of students reported that they did not think they would be caught by their parents for drinking alcohol, a decrease of five percentage points since 2009. The rate of students who reported that kids in the community would not be caught by the police if they drank alcohol has remained stable since 2009 (84%).

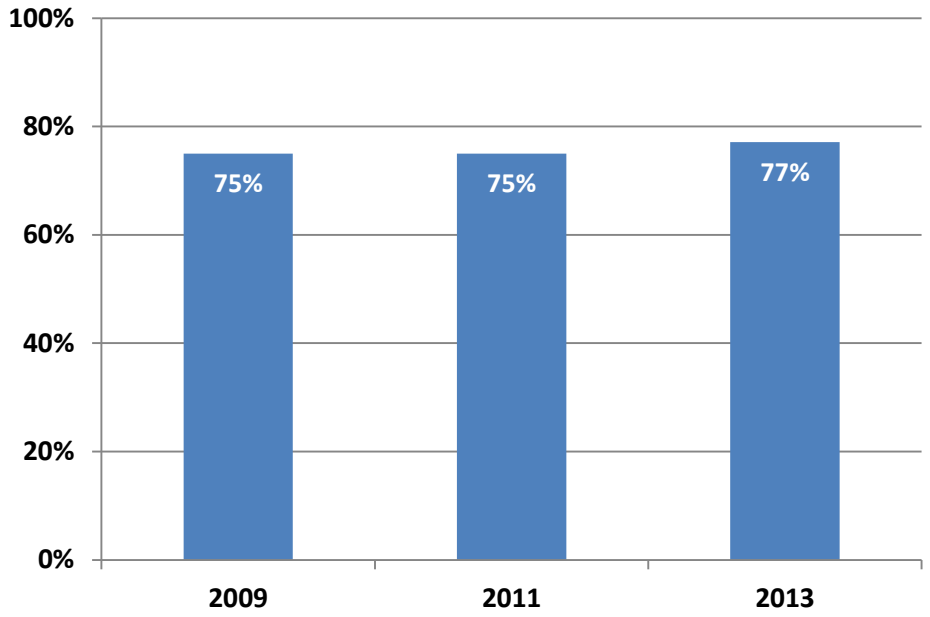
Indicator Description: **YOUTH PERCEIVED RISK OF BEING CAUGHT FOR SMOKING MARIJUANA.** This indicator presents the percentage of high school students perceiving they would be caught by police if they smoked marijuana.

Why Indicator is Important: High school students who believe they would be caught by the police are less than half as likely to smoke marijuana as their peers.

Data Source(s): MIYHS, 2009-2013

Summary: The majority of high school students do not think they will be caught by police for smoking marijuana. Less than one in four students felt kids in their community would be caught by the police for smoking marijuana.

Figure 60. Percent of high school students reporting they would not get caught by the police if they smoked marijuana: 2009-2013



Source: MIYHS, 2009-2013

- In 2013, 77 percent of high school students felt kids in the community would not be caught by police for smoking marijuana; this represents an increase of two percentage points since 2011 (75%). Conversely, this means that in 2013, 23 percent of students felt they would be caught.

Community and Cultural Norms

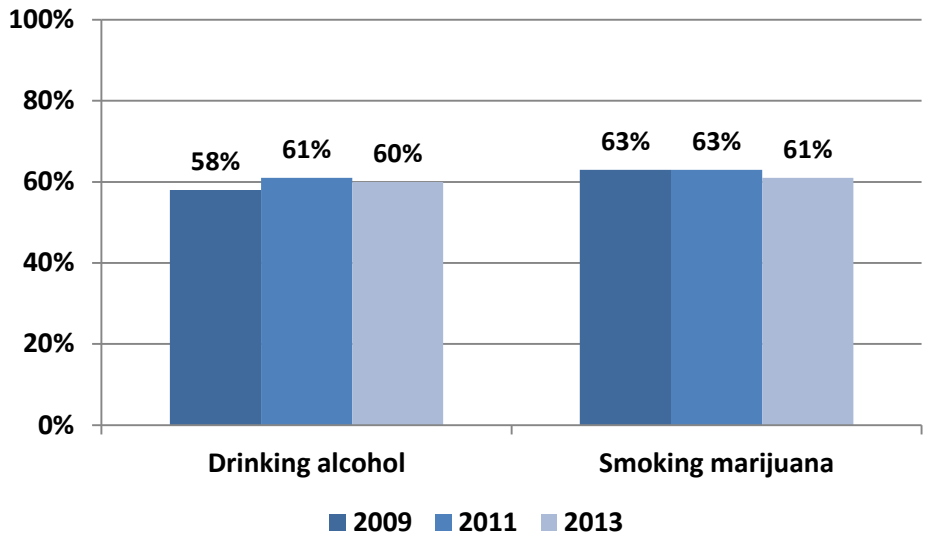
Indicator Description: YOUTH PERCEPTION OF PEER ATTITUDES TOWARD SUBSTANCE USE. This measure reflects the percentage of high school students perceiving that they would be seen as cool if they began drinking alcohol or smoking marijuana.

Why Indicator is Important: High school students who believe they would be seen as cool are more likely to engage in drinking and marijuana use than their peers.

Data Source(s): MIYHS, 2009-2013

Summary: In 2013, six out of ten high school students thought they would be seen as at least a little "cool" if drank alcohol or smoked marijuana. Rates have remained relatively stable since 2009.

Figure 61. Percent of high school students who reported they would be seen as "cool" for drinking alcohol or smoking marijuana: 2009-2013



Source: MIYHS, 2009-2013

- The proportion of high school students who believed that their peers would see them as at least a little "cool" if the drank alcohol increased slightly from 58 percent in 2009 to 60 percent in 2013, while students who perceived they would be seen as at least a little "cool" if they smoked marijuana decreased slightly from 2009 (63%) to 2013 (61%).

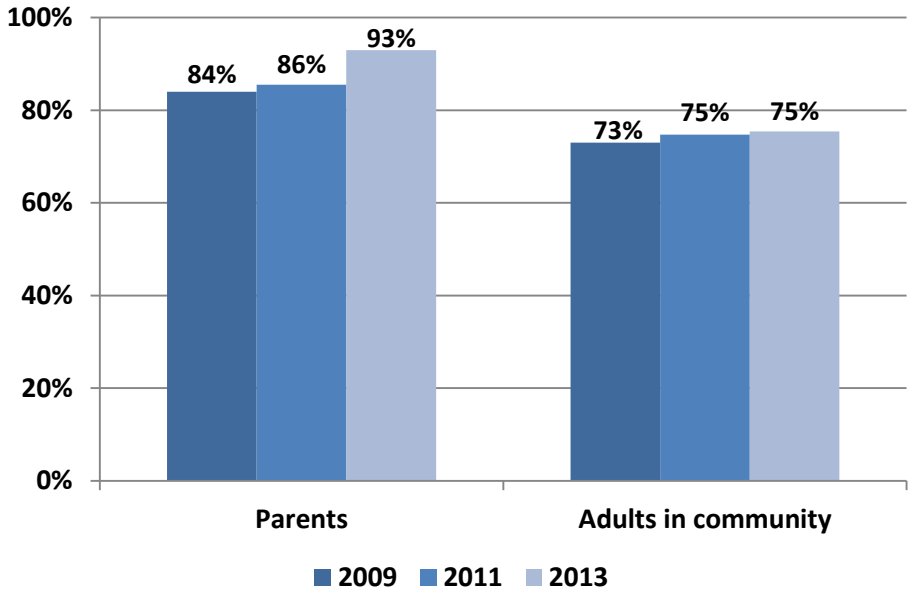
Indicator Description: YOUTH PERCEPTION OF ADULT ATTITUDES TOWARD ALCOHOL USE. This indicator depicts the percentage of high school students who thought that their parents feel it would be wrong for them to drink regularly. It also examines the proportion who reported that adults in their community think it would be wrong for kids their age to consume alcohol.

Why Indicator is Important: High school students who do not believe their parents feel it would be wrong for them to drink are 2.5 times as likely to drink as their peers who do feel their parents would think it was wrong.

Data Source(s): MIYHS, 2009-2013

Summary: High school students generally believe that their parents and adults in their community think it would be wrong for them to drink alcohol. The perception of disapproval increased in both parents and adults in community from 2009 to 2013.

Figure 62. Percent of high school students who reported perceiving that their parents and adults in their community think student alcohol use is wrong: 2009-2013*



Source: MIYHS, 2009-2013
**From 2011 to 2013 the wording of question changed from "drink regularly" to "1 to 2 drinks nearly every day."*

- The proportion of high school students who thought their parents felt it would be wrong for them to drink regularly increased from 83 percent in 2009 to 93 percent in 2013.
- The rate of students who reported that adults in their community think it is wrong for youth to use alcohol increased slightly from 73 percent in 2009 to 75 percent in 2013.

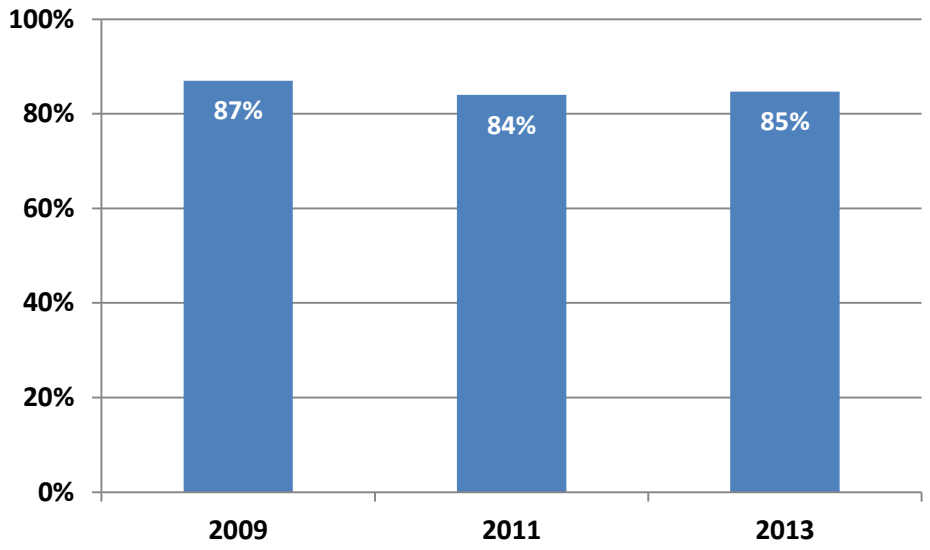
Indicator Description: YOUTH PERCEPTION OF PARENTAL ATTITUDES TOWARD MARIJUANA USE. This indicator shows the percentage of high school students who reported that their parents feel it would be wrong for them to smoke marijuana.

Why Indicator is Important: High school students who believe their parents feel it is wrong for them to smoke marijuana are one fourth as likely to use marijuana as students who do not believe their parents would think it is wrong.

Data Source(s): MIYHS, 2009-2013

Summary: Although high school students generally believe that their parents think it would be wrong for them to smoke marijuana, perceptions of disapproval decreased slightly from 2009 to 2013.

Figure 63. Percent of high school students who reported that parents would think it was wrong to use marijuana: 2009-2013



Source: MIYHS, 2009-2013

- The proportion of high school students who reported their parents feel it would be wrong for them to smoke marijuana decreased slightly from 87 percent in 2009 to 85 percent in 2013. Conversely, this means that 15 percent of students believed their parents would not feel that it wrong for their child to smoke marijuana.

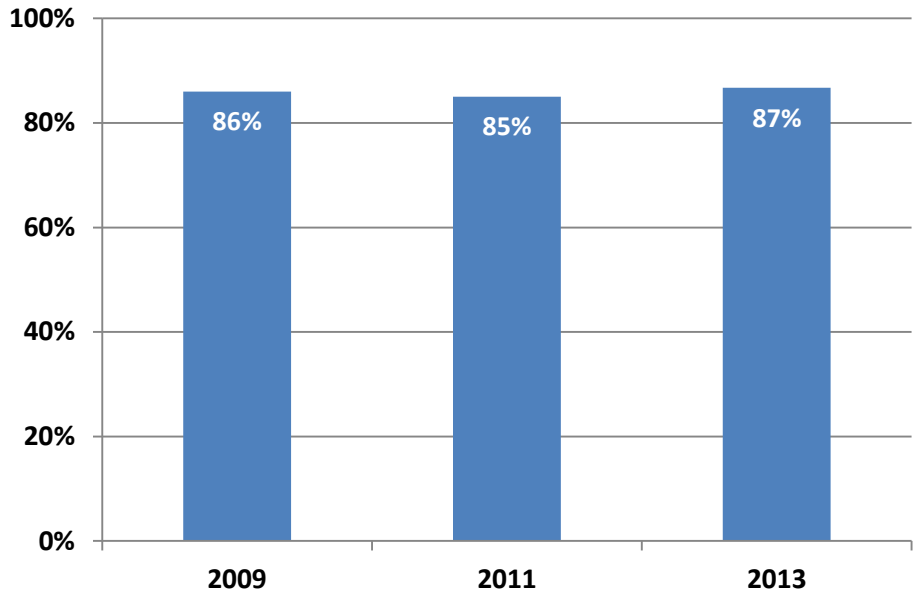
Indicator Description: **YOUTH PERCEPTION OF FAMILY RULES TOWARD SUBSTANCE USE.** This indicator reflects the percentage of high school students who reported that their family has clear rules about substance use.

Why Indicator is Important: High school students who believe their parents have clear rules about substance use are half as likely as their peers to drink alcohol.

Data Source(s): MIYHS, 2009-2013

Summary: Almost nine in ten high school students in Maine report that their family has clear rules around alcohol and drug use.

Figure 64. Percent of high school students who reported their family has clear rules about alcohol and drug use: 2009-2013



Source: MIYHS, 2009-2013

- High school students who agreed their family has clear rules about alcohol and drug use increased slightly from 86 percent in 2009 to 87 percent in 2013.

Mental Health, Suicide and Co-occurring Disorders

The relationship between substance use and mental health has been well documented. There are great efforts underway at the federal Substance Abuse Mental Health Services Administration (SAMHSA) and throughout Maine to better integrate mental health promotion and substance abuse prevention. At the individual level, it is important to know if one exists because the symptoms of each can affect the other; that is, a person who is depressed may abuse alcohol in an effort to feel better. At the community level, it is important to understand how the prevalence of one interacts with the other so that prevention and intervention efforts can better address the needs of both. The data indicators included below represent multiple mental health indicators that can be routinely monitored in relation to substance abuse in hopes that this will lead to better prevention and intervention.

About one in five adults in Maine reported having ever been diagnosed with anxiety, while one in four reported having been diagnosed with depression. Rates of anxiety and depression tend to be higher among adults age 46 and younger. It appears that young adults (18 to 25 years old) are more likely to report experiencing at least one major depressive disorder within the past year (one in ten). As noted in the consequence section of this report, suicide rates have been increasing in the past several years, especially among younger adults and men in general.

Higher rates of mental illness and substance among particular age groups have likely contributed to the increase rates in suicide and suicide ideation. As for youth, one quarter reported feeling sad or hopeless for at least two weeks in the past year and about one in seven had seriously considered or planned suicide in 2013.

Mental illness is also prevalent among Mainers who needed treatment for substance use with over half of all substance abuse treatment admissions in 2013 involving a mental health disorder and nearly one-third receiving outpatient mental health services in the past year.

Mental Illness, Depression and Anxiety

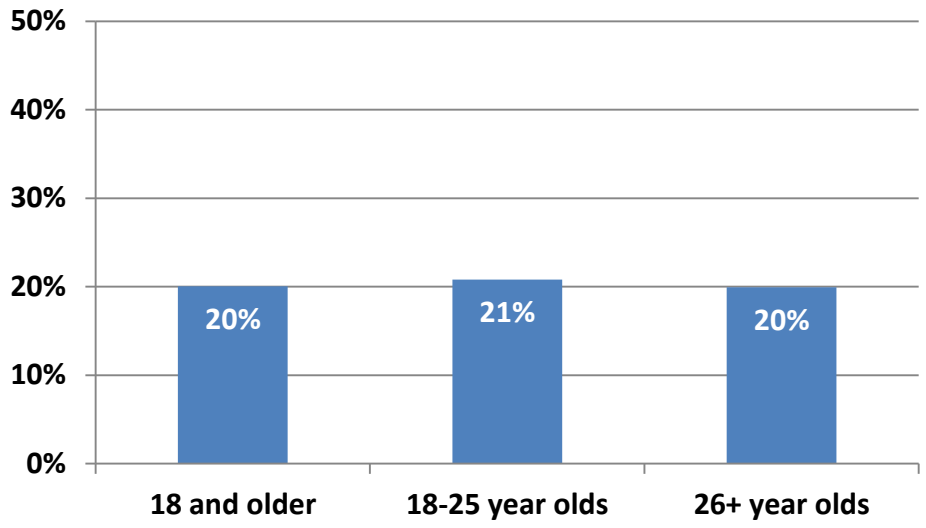
Indicator Description: MENTAL ILLNESS AND DEPRESSIVE EPISODES AMONG ADULTS. This indicator reflects the percentage of Maine residents age 18 and older reporting experiencing mental illness in the past year or having experienced at least one major depressive episode.[10]

Why Indicator is Important: Experiencing psychological distress in the past year is associated with higher rates of substance abuse.

Data Source(s): NSDUH, 2011-12

Summary: One in five adults in Maine report experiencing any mental illness in the past year. Major depressive episodes are most prevalent among 18 to 25 year olds with about one in ten experiencing at least one episode within the past year.

Figure 65. Percent of Maine residents (age 18 and older) experiencing any mental illness in past year, by age group: 2011-12

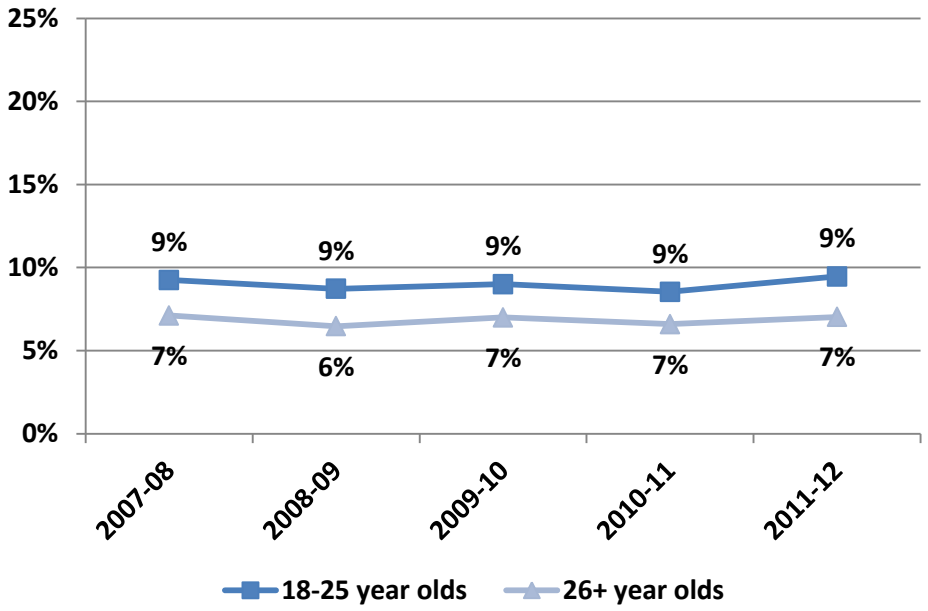


Source: NSDUH, 2011-12

- In 2011-12, 20 percent of adults age 18 and over reported experiencing any mental illness in the past year; rates did not vary much among age groups.

[10] Any mental illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV). Major depressive episode is defined as a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms.

Figure 66. Percent of Maine residents (age 18 and older) years old experiencing at least one major depressive[11] episode in past year, by age group: 2007-08 through 2011-12



Source: NSDUH, 2007-08 to 2011-12

- In 2011-12, major depressive episodes were more prevalent among young adults ages 18 to 25 (9%) compared to adults 26 and older (7%); rates have remained relatively unchanged since 2007-08.

[11] Major depressive episode (MDE) is defined as in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms.

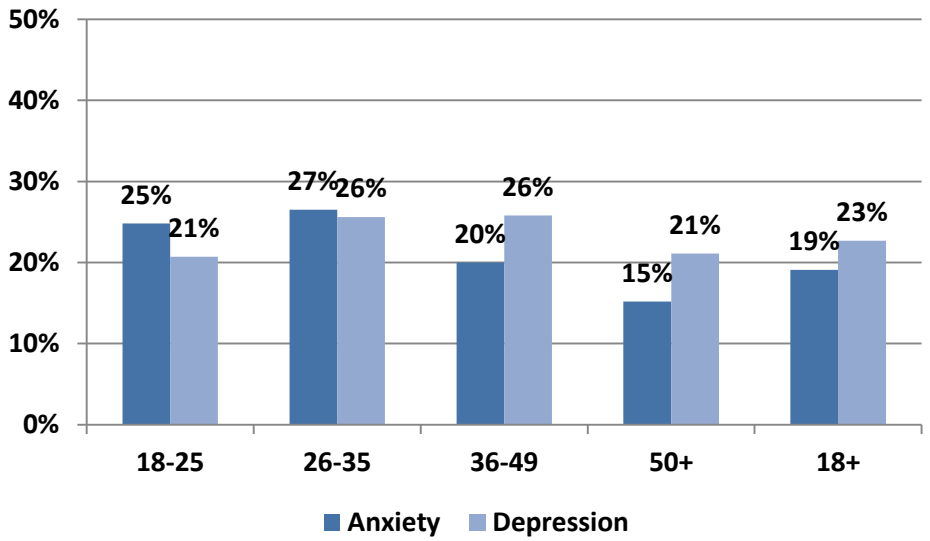
Indicator Description: DIAGNOSIS OF ANXIETY AND DEPRESSION AMONG ADULTS. This indicator examines the percentage of Maine residents age 18 and older who have been told they have a depression or anxiety disorder.

Why Indicator is Important: The link between mental health and substance abuse is well documented. Experiencing anxiety or depression in the past year is associated with higher rates of substance abuse.

Data Source(s): BRFSS, 2012

Summary: One in four adults in Maine reported having ever been diagnosed with depression compared to one in five reporting to have been diagnosed with anxiety. Adults ages 18 to 35 reported the highest rates of anxiety, while those between 26 and 46 had the highest rates of depression.

Figure 67. Percent of adults who have been told they have a depression or anxiety disorder by age group: 2012



Source: BRFSS 2012

- In 2012, 23 percent of adults in Maine reported having ever been diagnosed with depression, while 19 percent reported having ever been diagnosed with anxiety. Adults ages 26 to 49 reported the highest rates of depression (26%) while those ages 26 to 35 had the highest rates of anxiety (27%).

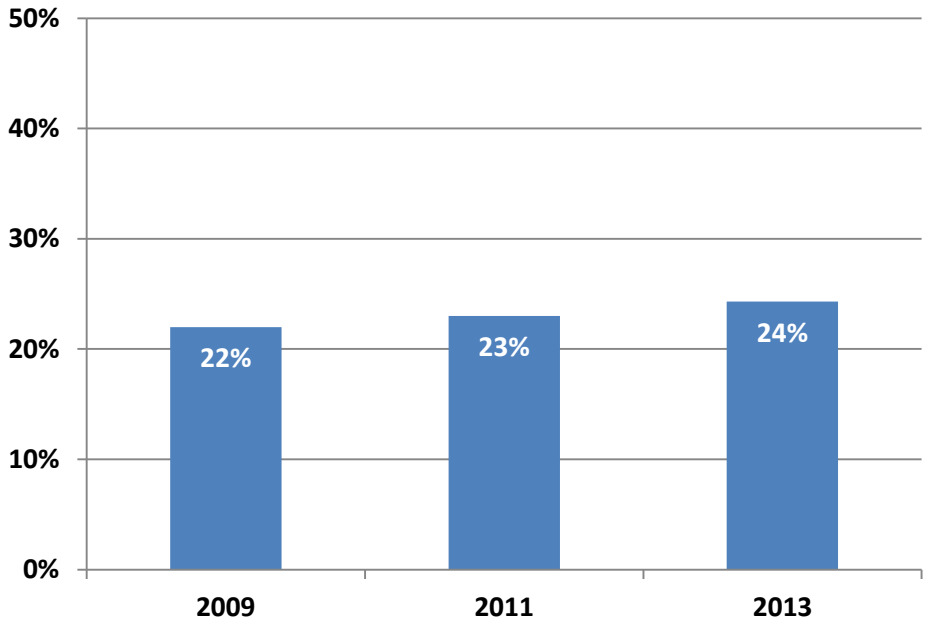
Indicator Description: DEPRESSION AMONG YOUTH. This indicator measures the percentage of high school students reporting they felt sad or hopeless almost every day for two weeks in a row during the past year.

Why Indicator is Important: Experiencing depression in the past year is associated with higher rates of substance abuse. According to the 2013 MIYHS, students who reported feeling hopeless or sad for at least two weeks within the past twelve months were almost twice as likely to have used marijuana or to have engaged in binge drinking in the past 30 days, and three times as likely to have misused prescription drugs during the past 30 days. Among youth, depression is also associated with problems with relationships and academic achievement.

Data Source(s): MIYHS 2009-2013

Summary: Almost a quarter of high school students reported feeling sad or helpless during the past year.

Figure 68. Percent of high school students who reported feeling sad or hopeless in past year: 2009-2013



Source: MIYHS 2009-2013

- The proportion of high school students who reported feeling so sad or helpless during the past year that they stopped doing some usual activities increased slightly, from 22 percent in 2009 to 24 percent in 2013.

Suicide and Suicidal Ideation

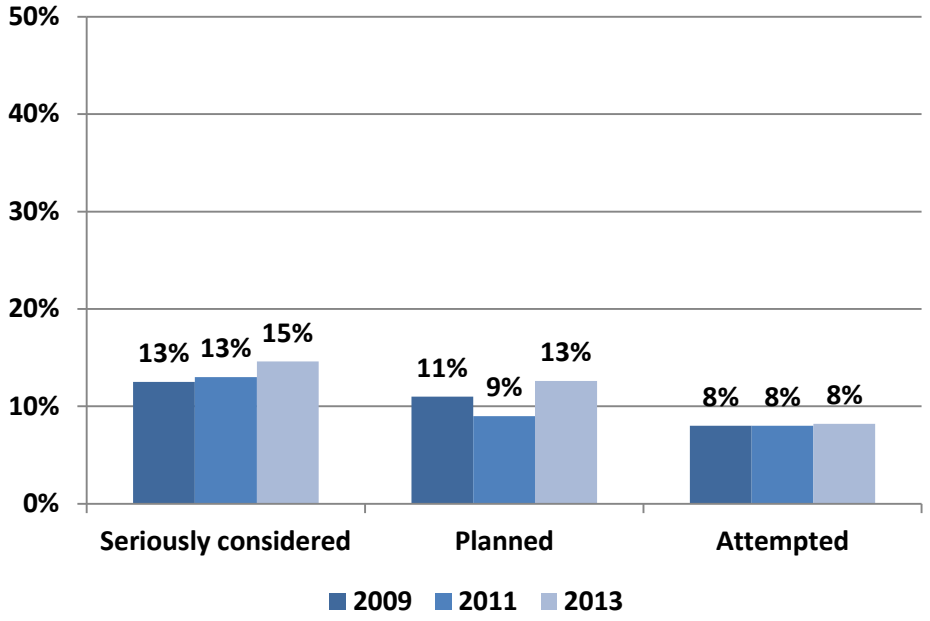
Indicator Description: SUICIDAL IDEATION AMONG YOUTH. This measure examines the percentage of high school students who reported that they seriously considered attempting suicide, made a plan about how they would attempt suicide, or attempted to commit suicide during the past year.

Why Indicator is Important: Suicide is the most extreme consequence of major depressive disorders. Abuse of alcohol or other drugs may increase emotional problems leading to suicidal ideation and suicidal behavior.

Data Source(s): MIYHS 2009-2013

Summary: The proportion of students who reported seriously considering or planning suicide increased from 2011 to 2013. About one in seven high school students in Maine had either seriously considered suicide or made a plan for suicide.

Figure 69. Percent of high school students who considered, planned, or attempted suicide in past year: 2009-2013



Source: MIYHS 2009-2013

- In 2012, 15 percent of high school students reported that they seriously considered suicide; this was an increase of two percentage points since 2011. The rate of students who reported planning a suicide increased by four percentage points, from nine percent in 2011 to 13 percent in 2013. The rate of high school students who reported that they had actually attempted suicide has remained stable at eight percent.

Mental Health and Substance Abuse Co-Occurrence

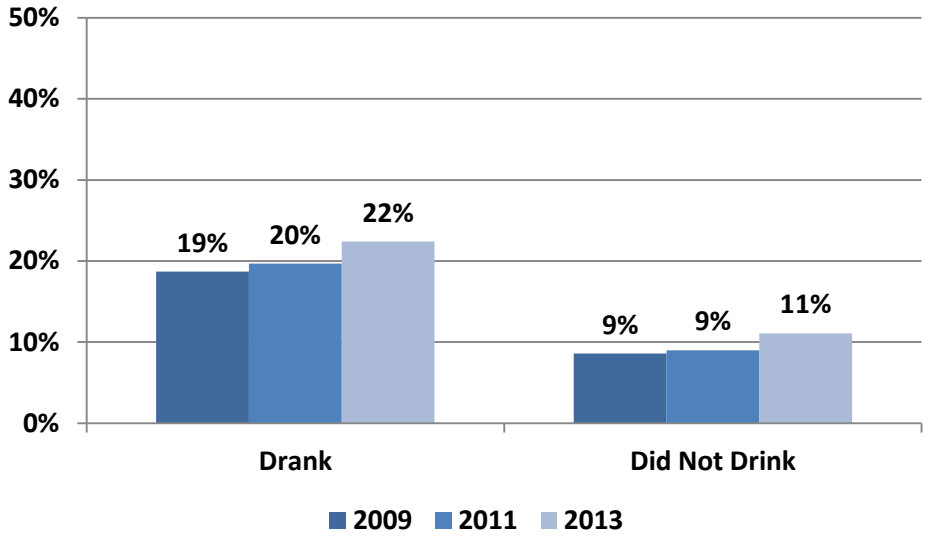
Indicator Description: CO-OCCURRING SUBSTANCE USE AND SUICIDAL BEHAVIOR AMONG YOUTH. This indicator explores the relationship between alcohol use within the past 30 days and suicidal behavior. It reflects the likelihood of high school students to report that they planned or attempted suicide during the past year by whether they reported consuming alcohol in the past month.

Why Indicator is Important: The link between mental health and substance abuse is well documented. Alcohol is a depressant and its use by depressed individuals may increase suicidal behavior.

Data Source(s): MIYHS, 2009-2013

Summary: Since 2009, students have been about twice as likely to have considered suicide seriously if they had consumed alcohol within the past 30 days.

Figure 70. Percent of students reporting seriously considering suicide in the past year, by alcohol use in the past month: 2009-2013



Source: MIYHS 2009-2013

- In 2013, among students who drank alcohol within the past 30 days, 22 percent reported they had seriously considered suicide within the past year; among students who did not drink alcohol in the previous 30 days, 11 percent had seriously considered suicide.

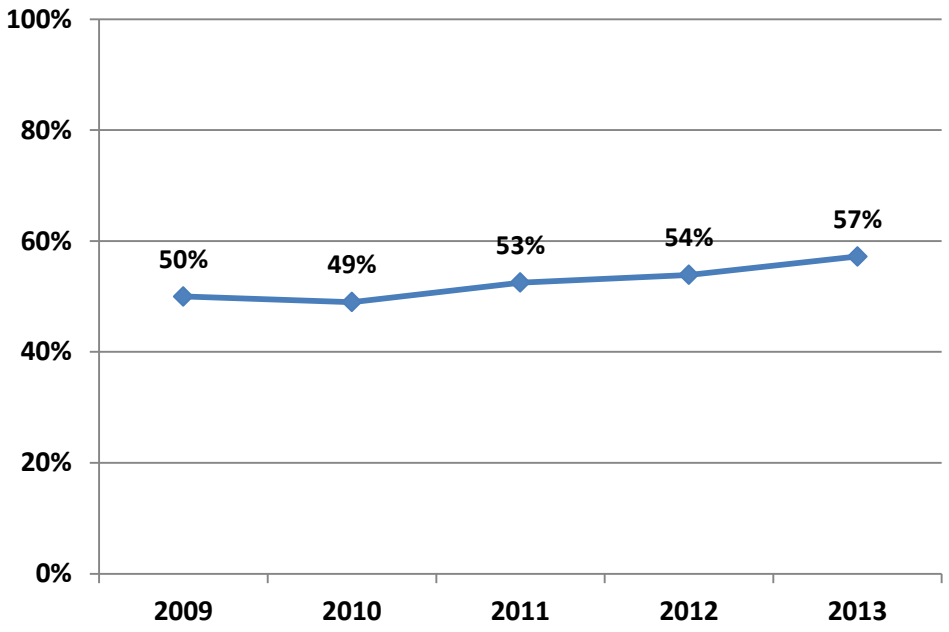
Indicator Description: CO-OCCURRING MENTAL HEALTH AND SUBSTANCE ABUSE TREATMENT. This indicator reflects the proportion of treatment admissions for substance abuse where the individual has a mental health diagnosis or has previously received mental health services.

Why Indicator is Important: The link between mental health and substance abuse is well documented. In terms of treatment, it is important to know if one exists since the symptoms of each can affect the other.

Data Source(s): TDS, 2009-2013

Summary: In 2013, over half of all substance abuse treatment admissions also involved a mental health disorder; this rate has been increasing steadily over the past several years. Nearly one-third had received outpatient mental health services in the past year.

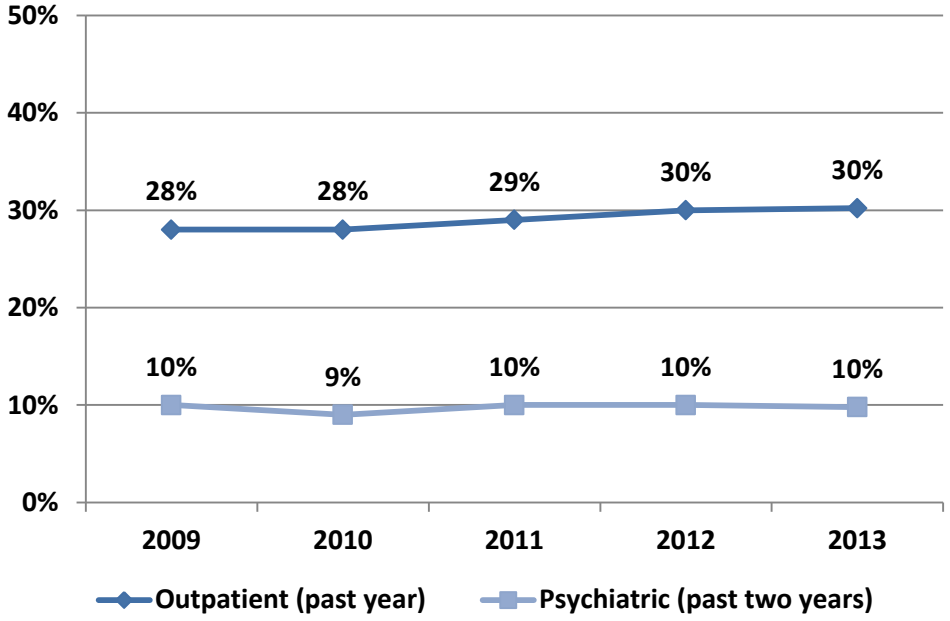
Figure 71. Percent of total treatment admissions with reported mental health disorders: 2009-2013



Source: TDS, 2009-2013

- In 2013, 57 percent of all substance abuse treatment admissions also had a diagnosed mental health disorder; this rate has increased by seven percentage points since 2009. It is worth noting, beginning in 2007 Maine engaged in an initiative to better diagnose and treat individuals with co-occurring substance abuse and mental health disorders.

Figure 72. Percent of total treatment admissions where individuals received previous mental health services, by type: 2009-2013



Source: TDS, 2009-2013

- In 2013, 30 percent of all substance abuse treatment admissions had received outpatient mental health services in the past year, a slight increase from 28 percent in 2009.
- Ten percent of substance abuse treatment admissions in 2013 reported a psychiatric admission (meaning hospitalization due to mental health) within the past two years. This has remained stable since 2009.

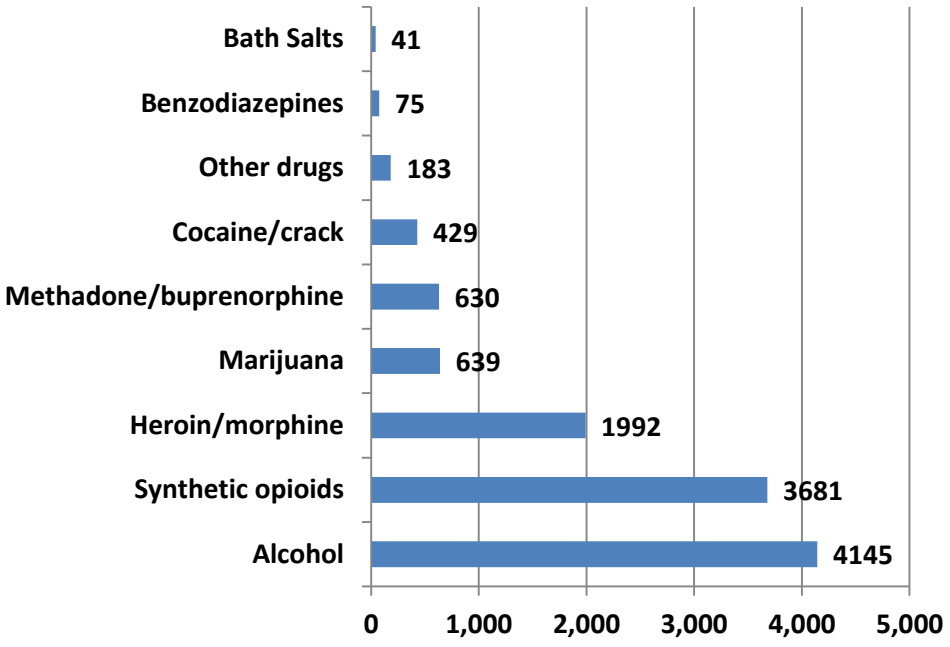
Treatment Admissions for Substance Abuse

Treatment related to substance abuse is measured in two forms: substance abuse treatment program admissions and general hospital admissions related to substance abuse problems. The latter were presented in the earlier section around consequences. This section primarily presents admissions to substance abuse treatment programs which can be voluntary or court-ordered. All agencies that provide substance abuse treatment services through a contract with SAMHS or Maine Care, or that are licensed to provide those services in Maine, are required to submit information about their clients to the state.

Substance abuse treatment admissions are an indicator of how many people *receive treatment* for a substance abuse problem. Treatment admission data should not be used as an indicator of the magnitude of the problems related to substance abuse within Maine. Rather, treatment admissions should be seen a major consequence stemming from substance use and one that requires many resources. Information regarding treatment admissions also provides useful information about the patterns of substance use among various populations.

The overall number of Mainers seeking treatment has been declining since 2011, from 12,740 to 11,815 in 2013. Mainers continued to seek out treatment for abuse involving a wide array of substances besides alcohol; in 2013 there were 4,145 admissions for alcohol as the primary substance. This was followed by synthetic opioids (3,681) and heroin (1,992).

Figure 73. Primary treatment admissions by substance: 2013



Source: TDS, 2013

Need for Treatment

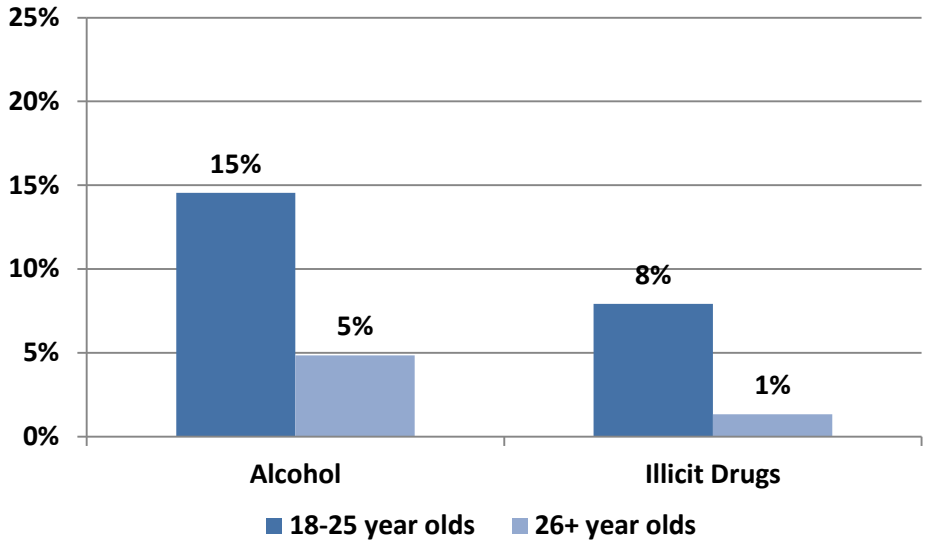
Indicator Description: NEEDING BUT NOT RECEIVING TREATMENT. This indicator refers to respondents classified as needing treatment for alcohol and illicit drugs[12], but not receiving treatment for an alcohol problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers). This indicator reflects survey data, not an analysis of treatment admission data.

Why Indicator is Important: While it is important to track actual admissions for substance abuse it is also important to estimate the proportion of residents that potentially need treatment and are not receiving it.

Data Source(s): NSDUH, 2011-12

Summary: In 2011-12, about one in seven 18 to 25 year olds needed but did not receive treatment for alcohol; nearly one in ten needed but did not receive treatment for illicit drug use. Young adults were three times as likely to be perceived as needing but not receiving treatment for alcohol compared to those who were 26 and older.

Figure 74. Needing but not receiving treatment, by age: 2011-12



Source: NSDUH, 2011-12

- In 2011-12, 15 percent of 18 to 25 year olds and five percent of Mainers ages 26 and older were identified as needing but not receiving treatment for alcohol. During the same period, eight percent of 18 to 25 year olds reported needing but not receiving treatment for illicit drugs, compared to only one percent of those 26 and older.

[12] Illicit Drugs include marijuana/hashish, cocaine (including crack), inhalants, hallucinogens, heroin, or prescription-type psychotherapeutics used non-medically.

Alcohol

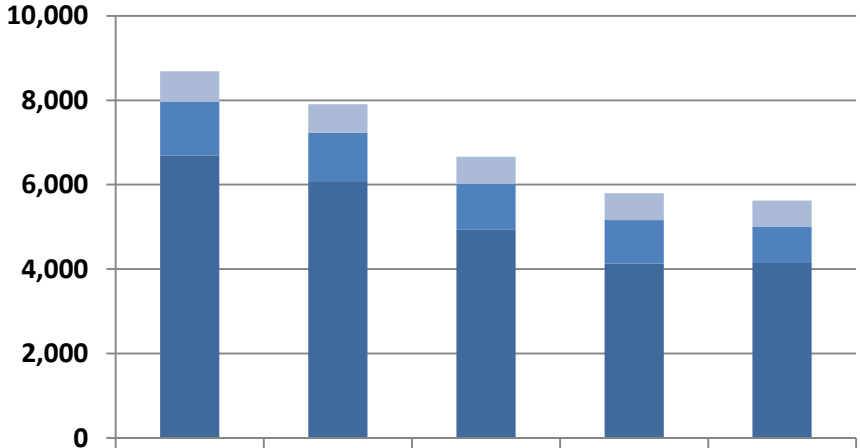
Indicator Description: TREATMENT ADMISSIONS RELATED TO ALCOHOL. This measure reflects substance abuse treatment admissions in which alcohol was listed as the primary, secondary, or tertiary substance for which treatment was sought. The analysis excludes admissions for shelter/detoxification services.

Why Indicator is Important: The number of substance abuse treatment admissions is bound by both the need and the capacity for treatment. Therefore, treatment admissions data do not provide a good indication of substance use, abuse or dependence. They do, however, provide an indication of service usage and the impact of substance use on the behavioral healthcare system.

Data Source(s): TDS, 2009-2013

Summary: Alcohol continues to be the most frequent substance for which Mainers seek treatment, although the number of treatment admissions for alcohol has decreased since 2009. The proportion in which alcohol accounts for primary admissions has been gradually decreasing since 2009.

Figure 75. Number of treatment admissions where alcohol was the primary, secondary, or tertiary substance: 2009-2013

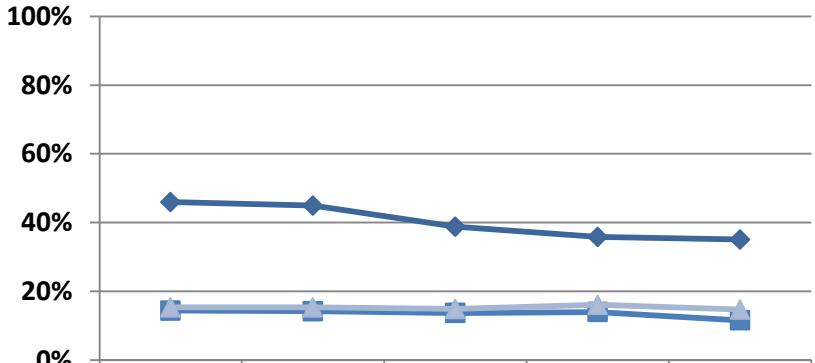


	2009	2010	2011	2012	2013
Tertiary	724	672	645	632	609
Secondary	1,271	1,168	1,077	1,029	868
Primary	6,689	6,063	4,939	4,135	4,145

Source: TDS, 2009-2013

- Overall, the number of treatment admissions for alcohol has steadily decreased since 2009. In 2013, there were 4,145 primary admissions, 868 secondary admissions, and 609 tertiary admissions for which treatment was sought.

Figure 76. Percent of treatment admissions where alcohol was the primary, secondary, or tertiary substance: 2009-2013



	2009	2010	2011	2012	2013
Primary	46%	45%	39%	36%	35%
Secondary	14%	14%	14%	14%	12%
Tertiary	15%	15%	15%	16%	15%

Source: TDS, 2009-2013

- In 2013, 35 percent of all primary treatment admissions involved alcohol, a decrease from 46 percent in 2009. As a proportion of secondary or tertiary substances, alcohol admissions have remained relatively stable over that time period.

Synthetic Opioids

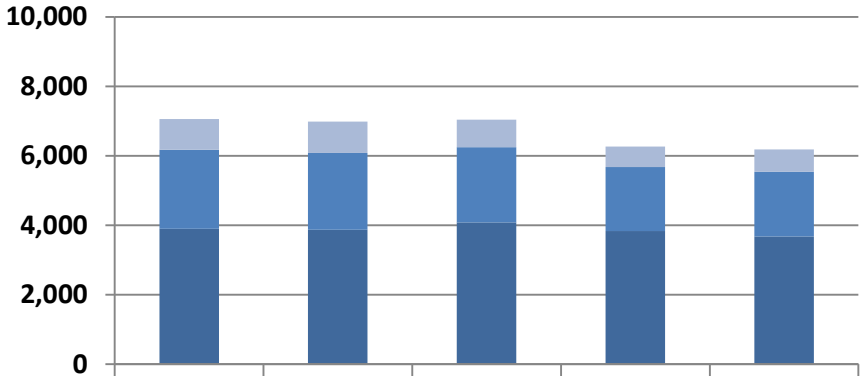
Indicator Description: TREATMENT ADMISSIONS RELATED TO SYNTHETIC OPIOIDS. This measure reflects substance abuse treatment admissions in which synthetic opioids are listed as the primary, secondary, or tertiary substance for which treatment is sought. This excludes methadone, buprenorphine, heroin, morphine or opium. This analysis also excludes admissions for shelter/detoxification services.

Why Indicator is Important: The number of substance abuse treatment admissions is bound by both the need and the capacity for treatment. Therefore, treatment admission data do not provide a good indication of substance use, abuse or dependence. They do, however, provide an indication of service usage and the impact of substance use on the behavioral healthcare system.

Data Source(s): TDS, 2009-2013

Summary: Nearly one in three of all primary and one in four of all secondary admissions are related to synthetic opiates. The number of primary treatment admissions involving synthetic opiates has remained stable since 2012.

Figure 77. Number of treatment admissions where synthetic opioids were the primary, secondary, or tertiary substance: 2009-2013

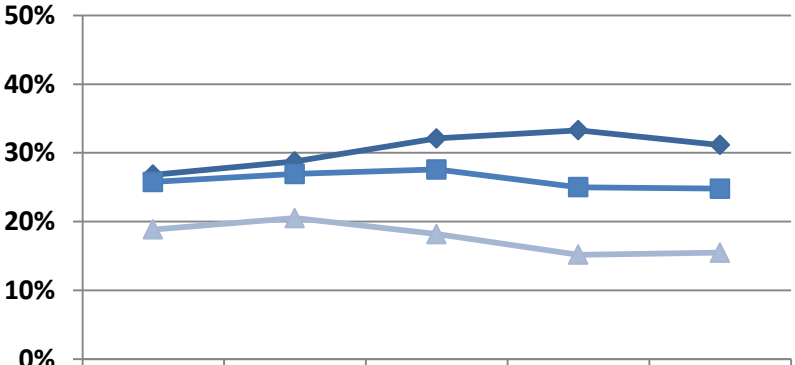


	2009	2010	2011	2012	2013
Tertiary	890	899	790	596	642
Secondary	2,269	2,207	2,163	1,837	1,860
Primary	3,902	3,876	4,085	3,838	3,681

Source: TDS, 2009-2013

- In 2012, there were 3,681 primary treatment admissions involving synthetic opiates. The overall number of treatment admissions related to synthetic opiates appears to have decreased somewhat since 2009.

Figure 78. Percent of total treatment admissions where synthetic opioids were the primary, secondary, or tertiary substance: 2009-2013



	2009	2010	2011	2012	2013
Primary	27%	29%	32%	33%	31%
Secondary	26%	27%	28%	25%	25%
Tertiary	19%	21%	18%	15%	16%

Source: TDS, 2009-2013

- In 2013, synthetic opiates were the primary substance for which treatment was sought in 31 percent of all treatment admissions; they were listed as the secondary substance in 25 percent of admissions that listed a second substance. After steadily increasing from 2009 (27%) to 2012 (33%), the proportion of primary treatment admissions due to synthetic opiates decreased by two percentage points in 2013.

Marijuana

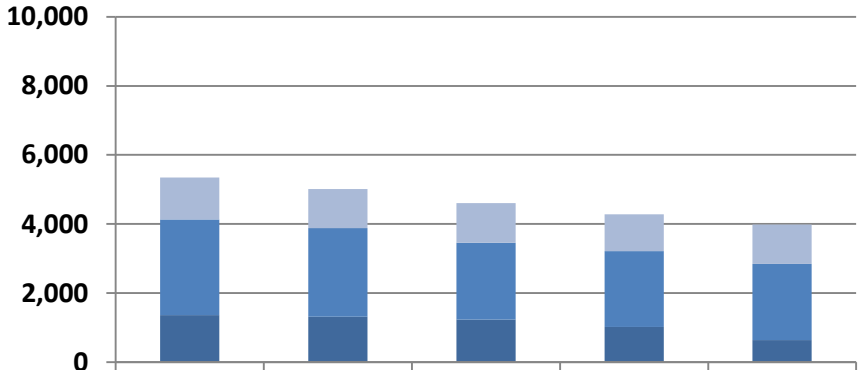
Indicator Description: TREATMENT ADMISSIONS RELATED TO MARIJUANA. This measure reflects substance abuse treatment admissions in which marijuana is listed as the primary, secondary, or tertiary substance for which treatment is sought. This analysis excludes admissions for shelter/detoxification services.

Why Indicator is Important: The number of substance abuse treatment admissions is bound by both the need and the capacity for treatment. Therefore, treatment admissions data do not provide a good indication of substance use, abuse or dependence. They do, however, provide an indication of service usage and the impact of substance use on the behavioral healthcare system.

Data Source(s): TDS, 2009-2013

Summary: Marijuana tends to be listed as a secondary or tertiary substance for which treatment is sought. About one in four secondary admissions is related to marijuana. Overall, treatment admissions for marijuana have been decreasing since 2009.

Figure 79. Number of treatment admissions where marijuana was the primary, secondary, or tertiary substance: 2009-2013

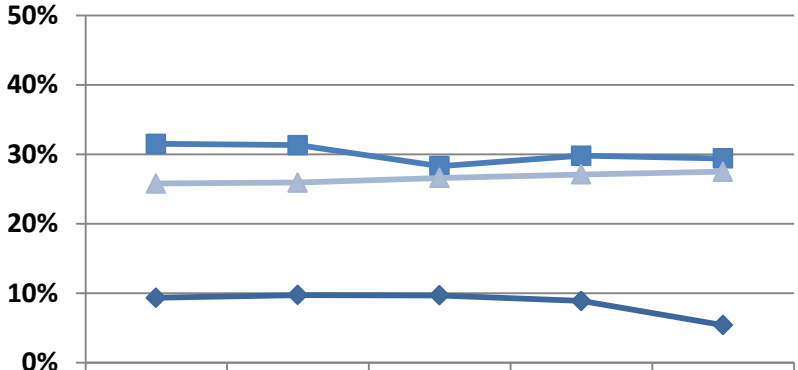


	2009	2010	2011	2012	2013
Tertiary	1,216	1,136	1,154	1,065	1,138
Secondary	2,774	2,567	2,221	2,190	2,211
Primary	1,361	1,314	1,233	1,024	639

Source: TDS, 2009-2013

- In 2013, marijuana was listed as a secondary substance in more treatment admissions than as a primary substance (2,211 compared to 639). This pattern has remained relatively consistent since 2009. The total number of treatment admissions (primary, secondary, and tertiary combined) for marijuana has decreased steadily from 5,351 in 2009 to 3,988 in 2013.

Figure 80. Percent of total treatment admissions where marijuana was the primary, secondary, or tertiary substance: 2009-2013



	2009	2010	2011	2012	2013
Primary	9%	10%	10%	9%	5%
Secondary	32%	31%	28%	30%	29%
Tertiary	26%	26%	27%	27%	28%

Source: TDS, 2009-2013

- In 2013, marijuana accounted for a small proportion of primary treatment admissions (5%), but accounted for 29 percent of secondary admissions. Marijuana also accounted for more than one-quarter (27%) of tertiary admissions in 2013. The proportion of primary admissions related to marijuana decreased significantly from 2012 (9%) to 2013 (5%) while secondary and tertiary rates have remained relatively stable since 2009.

Heroin/Morphine

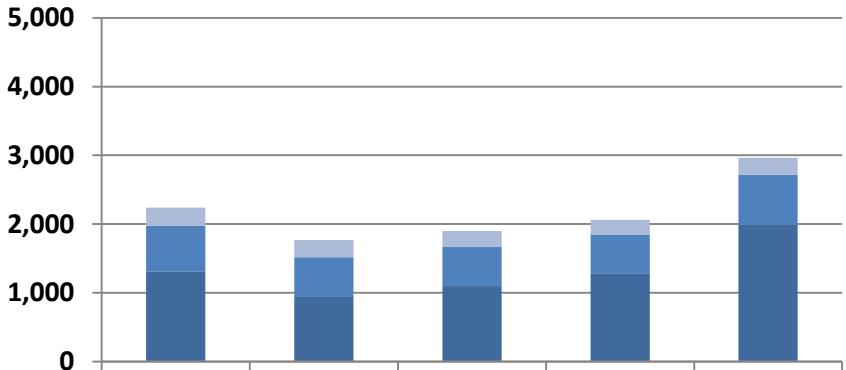
Indicator Description: TREATMENT ADMISSIONS RELATED TO HEROIN/MORPHINE. This measure reflects substance abuse treatment admissions in which heroin or morphine is listed as the primary, secondary, or tertiary substance for which treatment is sought. This analysis excludes admissions for shelter/detoxification services.

Why Indicator is Important: The number of substance abuse treatment admissions is bound by both the need and the capacity for treatment. Therefore, treatment admissions data do not provide a good indication of substance use, abuse or dependence. They do, however, provide an indication of service usage and the impact of substance use on the behavioral healthcare system.

Data Source(s): TDS, 2009-2013

Summary: Total treatment admissions for heroin or morphine have been steadily increasing since 2010. About one in six primary admissions and one in ten secondary admissions were due to heroin or morphine in 2013.

Figure 81. Number of treatment admissions where heroin or morphine were the primary, secondary, or tertiary substance: 2009-2013

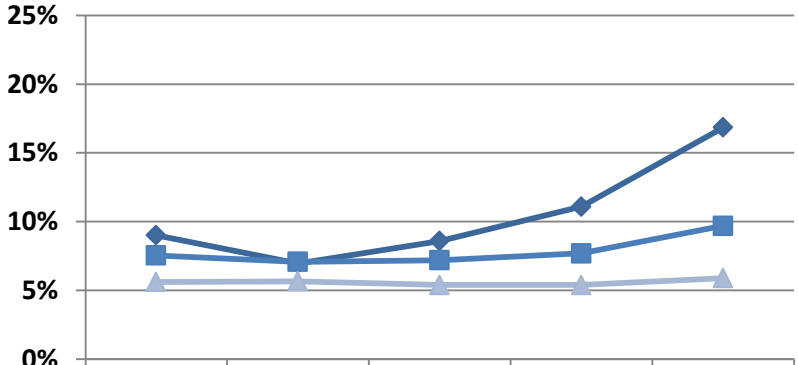


	2009	2010	2011	2012	2013
Tertiary	265	248	232	211	245
Secondary	664	580	568	566	728
Primary	1,311	940	1,099	1,284	1,992

Source: TDS, 2009-2013

- In 2013, there were 1,992 admissions in which heroin or morphine were the primary substance for which treatment was sought; they were listed as a secondary substance in 728 cases. The total number of admissions related to heroin/morphine has steadily increasing since 2010 at a rate of 68 percent.

Figure 82. Percent of total treatment admissions where heroin/morphine was the primary, secondary, or tertiary substance: 2009-2013



	2009	2010	2011	2012	2013
Primary	9%	7%	9%	11%	17%
Secondary	8%	7%	7%	8%	10%
Tertiary	6%	6%	5%	5%	6%

Source: TDS, 2009-2013

- Heroin was listed as the primary substance in 17 percent of all treatment admissions in 2013, representing a substantial increase of 10 percentage points since 2010. Secondary admissions for heroin have also seen a rise, from 7 percent in 2010 to 10 percent in 2013.

Cocaine/Crack

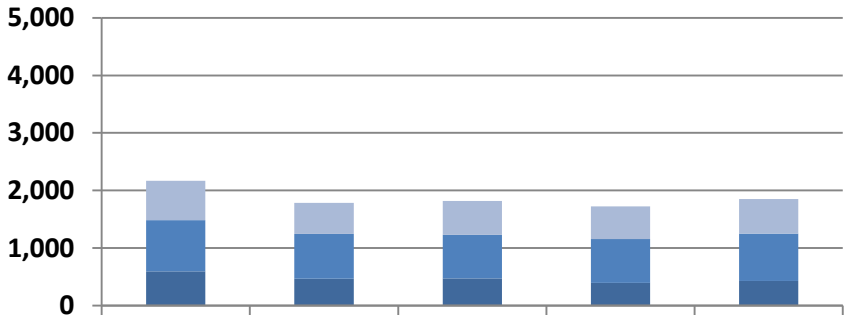
Indicator Description: TREATMENT ADMISSIONS RELATED TO CRACK/COCAINE. This measure reflects substance abuse treatment admissions in which cocaine or crack is listed as the primary, secondary, or tertiary substance for which treatment is sought. This analysis excludes admissions for shelter/detoxification services.

Why Indicator is Important: The number of substance abuse treatment admissions is bound by both the need and the capacity for treatment. Therefore, treatment admissions data do not provide a good indication of substance use, abuse or dependence. They do, however, provide an indication of service usage and the impact of substance use on the behavioral healthcare system.

Data Source(s): TDS, 2009-2013

Summary: The numbers as well as proportions of primary, secondary, and tertiary admissions in which treatment for crack or cocaine was sought have remained stable since 2010. About one in ten secondary and one in seven tertiary admissions were related to crack or cocaine.

Figure 83. Number of treatment admissions where cocaine/crack was the primary, secondary, or tertiary substance: 2009-2013

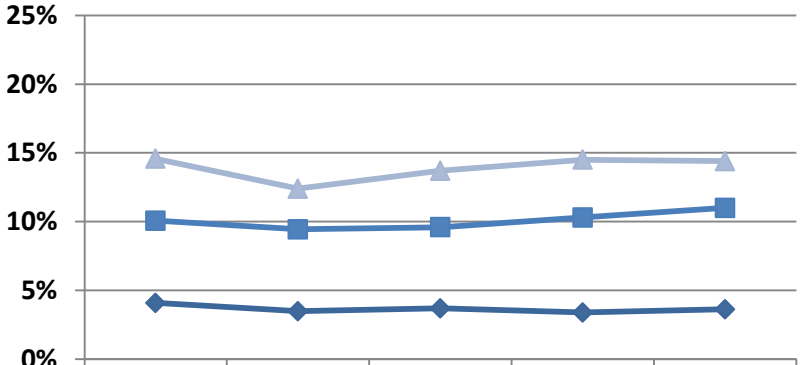


	2009	2010	2011	2012	2013
Tertiary	687	543	594	568	596
Secondary	887	774	752	760	825
Primary	596	470	475	397	429

Source: TDS, 2009-2013

- In 2013, cocaine or crack were listed as the primary substance for which treatment was sought in 429 admissions, although they were more likely to be listed as a secondary (825) substance. The total number of treatment admissions for cocaine or crack (primary, secondary, and tertiary combined) has remained relatively stable from 2010 (1,787) to 2013 (1,850).

Figure 84. Percent of total treatment admissions where cocaine/crack was the primary, secondary, or tertiary substance: 2009-2013



	2009	2010	2011	2012	2013
Primary	4%	3%	4%	3%	4%
Secondary	10%	9%	10%	10%	11%
Tertiary	15%	12%	14%	15%	14%

Source: TDS, 2009-2013

- In 2013, cocaine or crack were most likely listed as a tertiary substance for which treatment was sought (14%), followed by secondary (11%), and primary (4%). Rates have remained relatively stable since 2009.

Methadone

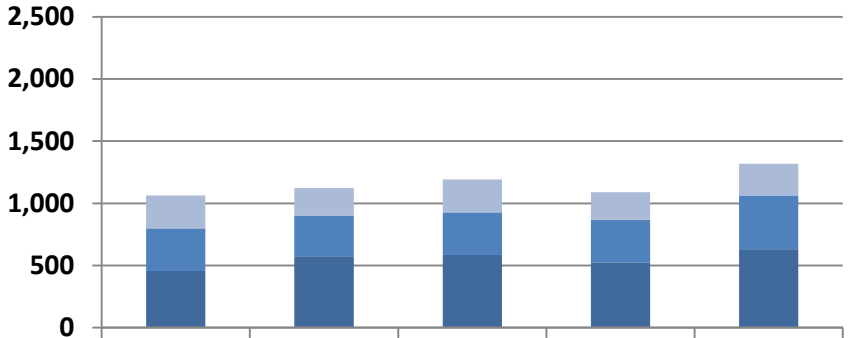
Indicator Description: TREATMENT ADMISSIONS RELATED TO METHADONE. This measure reflects substance abuse treatment admissions in which methadone is listed as the primary, secondary, or tertiary substance for which treatment is sought. This analysis excludes admissions for shelter/detoxification services.

Why Indicator is Important: The number of substance abuse treatment admissions is bound by both the need and the capacity for treatment. Therefore, treatment admissions data do not provide a good indication of substance use, abuse or dependence. They do, however, provide an indication of service usage and the impact of substance use on the behavioral healthcare system.

Data Source(s): TDS, 2009-2013

Summary: Overall, the number of treatment admissions related to methadone has increased gradually since 2009. About one in twenty (5%) of primary, secondary, and tertiary treatment admissions are due to methadone.

Figure 85. Number of treatment admissions where methadone was the primary, secondary, or tertiary substance: 2009-2013

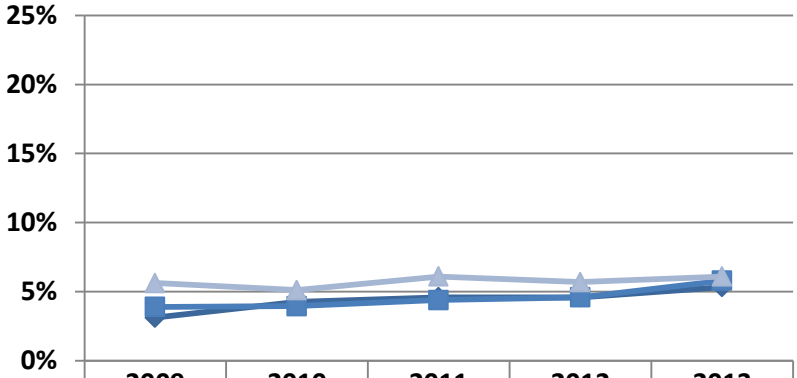


	2009	2010	2011	2012	2013
Tertiary	265	224	266	222	254
Secondary	343	324	341	341	434
Primary	455	575	585	526	630

Source: TDS, 2009-2013

- The total number of admissions involving methadone has increased from 1,063 in 2009 to 1,318 in 2013. In 2013, there were 630 admissions in which methadone was listed as the primary substance for which treatment was sought, 434 admissions in which it was listed as a secondary substance, and 254 admissions in which it was listed as a tertiary substance.

Figure 86. Percent of total treatment admissions where methadone was the primary, secondary, or tertiary substance: 2009-2013



	2009	2010	2011	2012	2013
Primary	3.1%	4.3%	4.6%	4.6%	5.3%
Secondary	3.9%	4.0%	4.4%	4.6%	5.8%
Tertiary	5.6%	5.1%	6.1%	5.7%	6.1%

Source: TDS, 2009-2013

- In 2013, methadone accounted for 5.3 percent of primary admissions, 5.8 percent of secondary admissions, and 6.1 percent of tertiary admissions. Rates have remained relatively stable since 2010.

Benzodiazepines

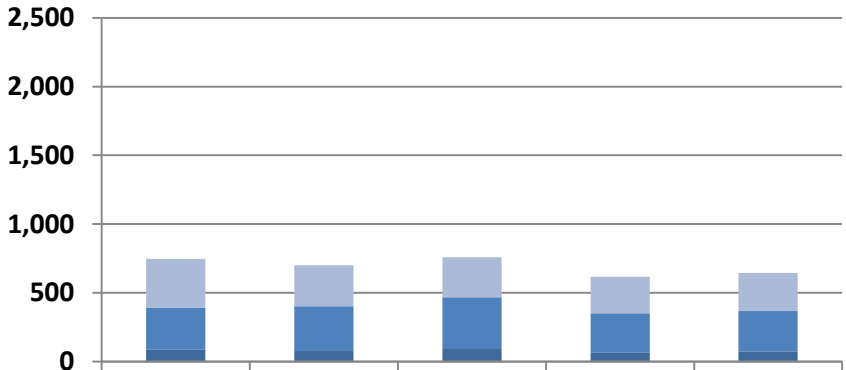
Indicator Description: TREATMENT ADMISSIONS RELATED TO BENZODIAZEPINES. This measure reflects substance abuse treatment admissions in which benzodiazepines are listed as the primary, secondary, or tertiary substance for which treatment is sought. Benzodiazepines are psychoactive drugs used to treat anxiety, insomnia, agitation, seizures, muscle spasms and alcohol withdrawal. This analysis excludes admissions for shelter/detoxification services.

Why Indicator is Important: The number of substance abuse treatment admissions is bound by both the need and the capacity for treatment. Therefore, treatment admissions data do not provide a good indication of substance use, abuse or dependence. They do, however, provide an indication of service usage and the impact of substance use on the behavioral healthcare system.

Data Source(s): TDS, 2009-2013

Summary: Both the number and proportion of total treatment admissions involving benzodiazepines have remained relatively stable since 2009.

Figure 87. Number of treatment admissions where benzodiazepines were the primary, secondary, or tertiary substance: 2009-2013

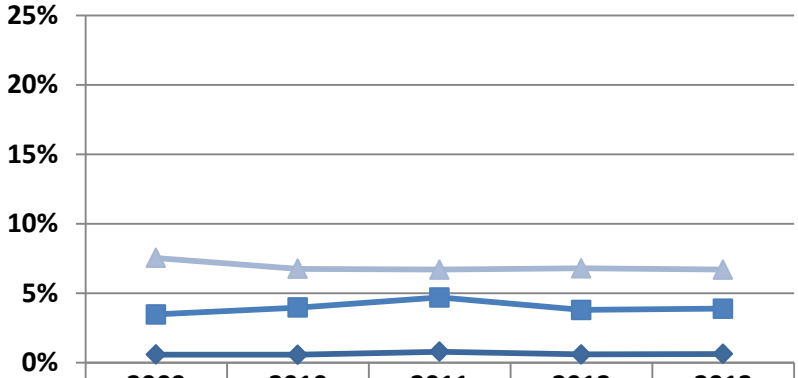


	2009	2010	2011	2012	2013
Tertiary	356	296	292	267	275
Secondary	306	326	370	283	294
Primary	86	78	98	68	75

Source: TDS, 2009-2013

- The total number of benzodiazepine related admissions increased slightly from 2012 (618) to 2013 (644). In 2013, there were 75 primary admissions, 294 secondary admissions, and 275 tertiary admissions related to the benzodiazepines. Overall, treatment admissions for benzodiazepines have remained fairly stable since 2009.

Figure 88. Percent of total treatment admissions where benzodiazepines was the primary, secondary, or tertiary substance: 2009-2013



	2009	2010	2011	2012	2013
Primary	0.6%	0.6%	0.8%	0.6%	0.6%
Secondary	3.5%	4.0%	4.7%	3.8%	3.9%
Tertiary	7.6%	6.8%	6.7%	6.8%	6.7%

Source: TDS, 2009-2013

- As a proportion of total primary, secondary and tertiary admissions, benzodiazepines have remained relatively stable since 2009.

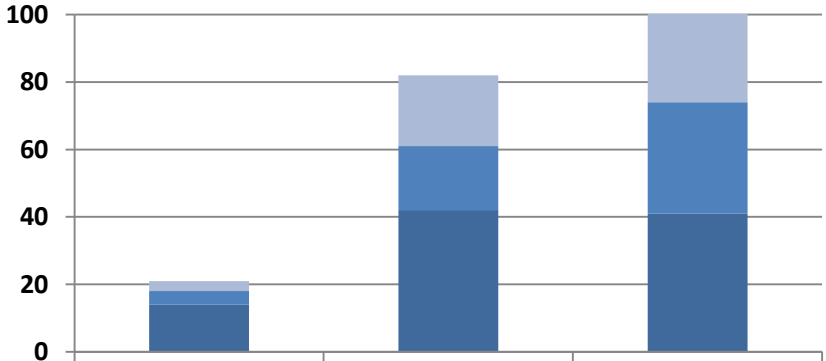
Indicator Description: TREATMENT ADMISSIONS RELATED TO BATH SALTS. This measure reflects substance abuse treatment admissions in which bath salts are listed as the primary, secondary, or tertiary substance for which treatment is sought. Bath salts are synthetic substances that act in the brain like powerful stimulant drugs. Often marketed as "not for human consumption" to avoid legal prosecution, "bath salts" and the chemicals used to create them are now illegal to sell or possess in the United States. Bath salts emerged as a substance of concern in 2010 and have been tracked in the TDS system since 2011.

Why Indicator is Important: The number of substance abuse treatment admissions is bound by both the need and the capacity for treatment. Therefore, treatment admissions data do not provide a good indication of substance use, abuse or dependence. They do, however, provide an indication of service usage and the impact of substance use on the behavioral healthcare system.

Data Source(s): TDS, 2011-2013

Summary: There were 107 total treatment admissions related to bath salts in 2013; this was five times as many admissions as there were in 2011.

Figure 89. Percent of total treatment admissions where bath salts were the primary, secondary, or tertiary substance: 2011-2012



	2011	2012	2013
Tertiary	3	21	33
Secondary	4	19	33
Primary	14	42	41

Source: TDS, 2011-2012

- In 2013, there were 41 treatment admissions primarily related to bath salts, 33 secondary admissions and 33 tertiary admissions. The total admissions related to bath salts increased dramatically from 2011 (21) to 2013 (107).

Conclusion

Alcohol is 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 past month rates of any alcohol use and binge drinking. While consumption rates are down, most teens still feel it is easy to get alcohol.

Among adults, 18 to 25 year olds as well as those 26 to 35 are the most likely to binge drink and to drink heavily. Perceptions of harm regarding alcohol among these groups continues to be a challenge. These age groups also have the highest rates of motor vehicle crashes and crash fatalities. Nearly one in four fatal motor vehicle crashes in 2013 were related to alcohol.

Prescription drugs continue to represent a serious public health concern for Maine. In 2013, more than one in ten high school students reported misusing prescription drugs in their lifetime. Fortunately, the rates for lifetime as well as past month misuse of prescription drugs among students decreased from 2009 to 2013. Among adults, Mainers bewteen the ages of 18 and 35 continue to have the highest rates of prescription drug and pain reliever misuse .

Prescription drug misuse also continues to have a large impact on treatment, hospitalizations, and crime in Maine. In 2011, most outpatient hospital admissions related to substance use were due to opiates. In addition, the vast majority of overdose deaths were related to pharmaceutical drugs and most drug offense arrests by Maine DEA involved pharmaceutical narcotics. Furthermore, nearly one in three of all primary and one in four of all secondary admissions are due to synthetic opiates.

In terms of illicit drugs, the most commonly used illegal drug in Maine is marijuana. More than one in five high school students reported using marijuana within the past month; similar rates are seen within the young adult (18 to 25) population. Perception of harm from marijuana use has been declining steadily among youth and adults, reinforced by a more permissive attitude among parents and communities. Over half of all high school students think that regular use of marijuana is not risky. Students who do not believe there is moderate to great risk in smoking marijuana regularly are almost eight times as likely to smoke marijuana. In recent years, heroin use and the consequences thereof have been on the rise. Rates in treatment admissions due to heroin among pregnant women have increased significantly. In addition, arrests related to heroin have also increased with one in five DEA drug offenses involving heroin in 2013.

The relationship between substance use and mental health has been well documented. About one fifth of adults in Maine report having ever been diagnosed with depression and one fourth diagnosed with anxiety. Rates of anxiety and depression tend to be higher among adults 46 and younger.

As for youth, one quarter reported feeling sad or hopeless for at least two weeks in the past year and about one in seven had seriously considered or planned suicide in 2013. Suicide rates

in Maine have been increasing in the past several years, especially among younger adults and men in general. Over half of all substance abuse treatment admissions in 2013 also involved a mental health disorder. These mental health indicators should continue to be monitored in terms of the relationship they have with substance use and abuse.