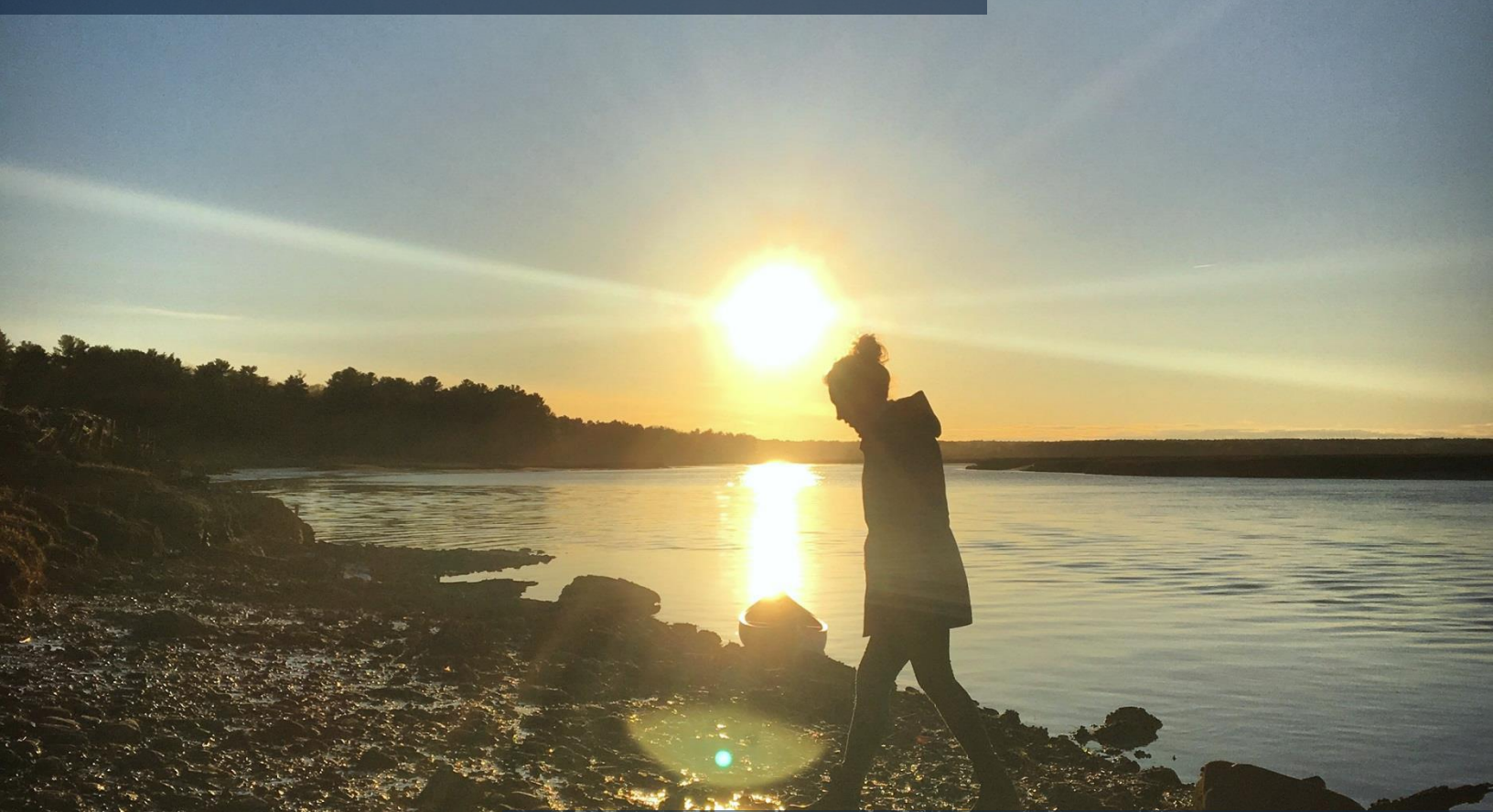


# Substance Abuse Trends in Maine State Epidemiological Profile 2017



*Produced for*  
Maine Department of Health and Human Services  
Statewide Epidemiology Outcomes Workgroup  
[www.MaineSEOW.com](http://www.MaineSEOW.com)



Department of Health  
and Human Services

*Maine People Living  
Safe, Healthy and Productive Lives*

Paul R. LePage, Governor

Ricker Hamilton, Acting Commissioner

by Hornby Zeller Associates, Inc.

August 2017

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# Substance Abuse Trends in Maine State Epidemiological Profile 2017



THIS REPORT IS PRODUCED FOR  
THE MAINE DEPARTMENT OF HEALTH AND HUMAN SERVICES  
STATE EPIDEMIOLOGICAL OUTCOMES WORKGROUP (SEOW)  
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## Executive Summary

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This report takes into account the objectives of the Maine Department of Health and Human Services (DHHS): 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; it also monitors the progress being made to address these priorities. This report includes data available through December 2016. Key findings of this report are highlighted below.

### Consumption of Substances

- The proportion of high school students in Maine who reported consuming any alcohol in the past month has been decreasing steadily since 2009.
- The proportion of high school students who reported binge drinking within the past month has been decreasing steadily since 2009.
- In 2013–15, among underage adults (18 to 20), two in five reported any alcohol use in the past month, one in four had engaged in binge drinking at least once within the past month, and nearly one in ten qualified as at risk from heavy drinking. Rates have remained relatively stable.
- In 2014–15, 18 to 25 year olds appeared to be more at risk from heavy alcohol use, with about one in ten reporting that they consumed at least one alcoholic drink per day in the past 30 days. Rates do not vary widely among age groups and have remained relatively stable since 2012–13.
- The highest binge drinking rates continue to be observed among the 18 to 25 year old population, closely followed by 26 to 35 year olds with about one in three reporting binge drinking within the past month. Rates among all adult age groups have remained relatively stable.
- In 2014–15, 61,000 (5%) Mainers 12 and older qualified as having an alcohol use disorder. A little over one in ten (12%) eighteen to 25 year olds had an alcohol disorder in 2014–15; this is a thirty percent decrease since 2008–09.
- The use of tobacco products by high school students has been decreasing steadily since 2009. In 2015, about one in ten students had reported having smoked a cigarette within the past 30 days. In addition, about one in three high school students reported having ever used an electronic vapor product and one in five reported having done so in the past month.
- During 2014–15, one in five Mainers 18 and older reported being current cigarette smokers. Adults between the ages of 26 and 35 were the most likely to smoke

cigarettes, with almost three in ten being current smokers. Rates of cigarette use among young adults appear to be steadily decreasing for the past several years.

- In 2015, more than one out of ten high school students reported misusing a prescription drug in their lifetime. Rates for lifetime as well as past-month misuse of prescription drugs decreased steadily from 2009 to 2015.
- 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. Seven percent of 18 to 25 year olds reported having misused pain relievers in the past year although this has been decreasing over time.
- During 2013–15, the highest rates of lifetime prescription drug misuse were observed among adults between the ages of 18 and 25; nearly one in ten (9%) reported misusing prescription drugs within their lifetime. In recent years, rates have remained stable.
- In 2015, one in five high school students reported using marijuana within the past month. The highest rates of marijuana use are found among young adults ages 18 to 25. Marijuana use rates among adult Mainers have been steadily increasing over the past several years.
- In 2014–15, there was an annual average of 12,000 Mainers who used marijuana for the first time in their life. Six thousand initiates were between 12 and 17 and 5,000 were between 18 and 25. A notable increase was observed among 12 to 17 year old initiates from 2013–14 to 2014–15, leaving them more prone to addiction during their lifetime, statistically speaking.
- In 2013–14, seven percent of 18 to 25 year olds, three percent of youth 12 to 17, and two percent of those 26 and older reported having used illicit drugs other than marijuana in the past year. Rates among 18 to 25 year olds have declined slightly since 2011-12.
- Among adults, 18 to 25 reported higher rates of cocaine use in the past year than adults 26 and older and observed a slight increase from 2013–14 (5%) to 2014–15 (6%).
- In 2015, eight percent of high school students reported ever using inhalants, five percent reported ever using cocaine, and three percent reported ever using heroin. Lifetime rates have been steadily decreasing for the past several years.
- In 2014–15, .58% of Mainers 12 and older (approximately 7,000 residents) self-reported that they had used heroin within the past year. Eighteen to 25 year olds reported a rate of 1.21%.
- In 2012–14, nearly one in five pregnant women reported smoking cigarettes in their last trimester, and about one in ten reported consuming any alcohol. Rates of cigarette use during the last trimester of pregnancy were highest among women 24 and younger (nearly one-quarter) while rates of alcohol consumption were highest among women 35 and older.

## Consequences Resulting from Substance Use and Abuse

- In 2016, there were 1,024 reports to Child Protective Services regarding infants born exposed to substances (drug affected babies). Since 2013, the number of drug affected baby reports have begun to stabilize. In 2016, eight percent of the live births in Maine had substance exposed reports.
- The majority of adult arrests related to alcohol came from OUIs rather than from violations of liquor laws, whereas alcohol-related arrests among minors under 21 show the opposite pattern. In 2015, more than nine out of ten juvenile arrests involving alcohol were for violations of liquor laws, whereas three out of four alcohol-related adult arrests involved operating under the influence (OUI). Juvenile (under 18) liquor law violations have decreased by more than a third from 2011 to 2015 while adult OUI arrests have remained relatively stable. Twenty one to 29 year olds continue to have the highest number of annual OUIs.
- In 2015, nearly eight out of ten drug-related offenses were for possession rather than sale and manufacturing. From 2012 to 2015, adult arrests related to drugs have increased by ten percent, while juvenile arrests generally declined. In 2015, nearly six out of ten drug offense arrests for possession were for marijuana. Arrests for possession related to opium, cocaine and derivatives increased by 85 percent from 2012 to 2015. In addition, three out of four drug arrests were male.
- In 2016, the majority of MDEA trafficking investigations involved heroin and have nearly doubled since 2014. Trafficking investigations related to other opiates have decreased steadily over the past several years while those relating to cocaine have remained stable. In addition, MDEA manufacture investigations related to methamphetamine more than doubled from 2014 to 2016 while methamphetamine labs found by the MDEA more than doubled from 2015 to 2016.
- In 2016, there were five reported pharmacy robberies in Maine compared to a high of 56 in 2012. Pharmacy robberies have steadily been decreasing for the past several years.
- While the overall number of alcohol/drug-related motor vehicle crashes has increased by 12 percent from 2012 to 2016, the proportion of alcohol and or drug-related motor vehicle crashes has remained relatively stable at four percent.
- Nearly one in three of all motor vehicle crashes resulting in fatalities involved alcohol and/or drugs.
- In 2015, nearly one in three (29%) fatal motor vehicle crashes involved alcohol.
- In 2013–15, the rates of alcohol/drug-related motor vehicle crash fatalities were highest among 16 to 20 year olds, followed by 21 to 24 year olds. In recent periods, higher rates of alcohol/drug related fatalities have shifted from the age group of 21 to 24 year olds to those between the ages of 16 and 20.



- Responses related to drugs and/or alcohol have been gradually increasing for the past several years. From 2013 to 2016, drug/medication overdoses increased by twenty percent. Mainer between 26 and 35 observed an increase of 57 percent in overdose responses related to drugs/medication from 2013 to 2016. In recent years, there has been an uptick of alcohol related overdose responses among Mainers 55 and older.
- From 2014 to 2016, the number of naloxone administrations given by EMS responders more than doubled. Rates are disproportionately highest among males 26 to 34 years old.
- In 2016, there were a total of 376 overdose deaths due to substance use in Maine, representing a 38 percent increase since 2015. In 2016, nearly nine out ten overdose deaths were related to illicit drugs.
- In 2016, four out of five overdose deaths involved an opiate or opioid. Non-pharmaceutical fentanyl was present in over half of the drug related overdose deaths, one third involved heroin/morphine, and nearly one third were related to benzodiazepines. In addition, cocaine was found in one out of seven drug overdose deaths. Furthermore, overdose deaths related to non-pharmaceutical fentanyl have nearly doubled each year since 2013.
- Adults between the ages of 26 and 35 had the highest rate of deaths due to substance abuse or overdose during 2016, followed closely by 36 to 49 year olds. Substance abuse and overdose death rates among age groups between 18 and 35 have been steadily increasing for the past several years.
- In 2016, cardiovascular diseases and alcoholic cirrhosis were more prevalent among Mainers than Ischemic cerebrovascular (stroke) diseases. Deaths related to alcoholic cirrhosis were nearly twice as likely among men as women. Rates have remained relatively stable over the past several years.
- In Maine, suicide rates are nearly nine times higher than homicide rates; rates have remained stable over the past several years. Suicides are more than four times as likely among men compared to women, and most prevalent among adults 36 and 49. Deaths due to homicide are almost twice as likely among men; rates are highest among younger adults between the ages of 26 to 35.

### **Factors Contributing to Substance Use and Abuse**

- Overall, nearly two out of three high school students think it would be easy to obtain alcohol. This rate has steadily decreased from 2009 (69%) to 2015 (63%).
- In 2015, students who reported that they thought alcohol was easy to obtain were nearly four times as likely to report consuming alcohol within the past month compared to students who did not think it was easy to obtain.

- Social access appears to be a primary way that underage youth obtain alcohol. Of those students who obtained alcohol, two out of five reported that someone had given it to them and the proportion of those who were given alcohol has been growing steadily.
- Among parents of middle and high school youth, half felt it was possible for their children to access alcohol they had purchased without their knowledge. This has increased steadily since 2011.
- More than a third (35%) of parents felt that, at home, their child would be able to access prescription medications that were not prescribed to the child, without permission.
- In 2015, over half of high school students believed that marijuana is easy to obtain. This rate has decreased slightly from 2009.
- In 2015, students who reported that they thought marijuana was easy to obtain were nearly nine times as likely to use marijuana in the past 30 days compared to their peers who thought it was difficult to obtain.
- In 2015, one in five high school students were sold, offered or given an illegal drug on school property; this rate has steadily decreased since 2011.
- In 2015, students who reported they were offered drugs at school were twice as likely to use marijuana as their peers who were not offered drugs at school.
- From 2015 to 2016, the number of prescriptions prescribed for opiate agonists (excluding partial agonists such as buprenorphine) decreased by eight percent while the number of prescriptions for sedatives decreased by six percent, and prescriptions prescribed for stimulants increased by two percent. Prescriptions for stimulants have increased by 26 percent since 2012. In 2016, half of the all opiate prescriptions prescribed (agonists as well as partial agonists) prescribed contained the primary active ingredients of either oxycodone or hydrocodone. From 2012 to 2016, prescriptions prescribed containing buprenorphine increased by 77 percent.
- Most calls to NNEPC requesting medication verification in 2014–16 involved opioids, followed by benzodiazepines and stimulants.
- Although most high school students think there is moderate to great risk of harm from drinking alcohol regularly, two out of five students in 2015 did not think regular use was risky. Perception of harm has remained relatively stable from 2009 to 2015.
- In 2015, high school students who did not perceive a moderate to great risk of harm from binge drinking once or twice a week were twice as likely to drink in the past month as high school students who did perceive risk of harm.
- Two out of five high school students think binge drinking once or twice a week is harmful. Perception of harm from binge drinking remains much lower among adults. More than seven out of ten young adults (18 to 25) thought that binge drinking a few times a week was NOT risky.

- 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.
- In 2015, only two out of five high school students felt smoking marijuana once or twice a week was risky. In 2013–14, less than one in ten people between 18 and 25 perceived smoking marijuana at least once per month as risky. Perceptions of harm regarding marijuana use have been decreasing among both youth and adults over the past several years.
- In 2015, high school students who believed they would not be caught by their parents were more than four times as likely to drink in the past month, compared to students who did think they would be caught. In addition, students who believed that they would not be caught by the police were three times as likely to drink alcohol in the past month as those who did think they would be caught.
- In 2015, half of high school students thought they would be caught by their parents for drinking alcohol while only about one in five felt they would be caught by the police. Perceptions of getting caught by parents have steadily increased over the past several years, while perceptions of getting caught by the police have remained relatively stable.
- In 2015, about one in four high school students thought they would be caught by police for smoking marijuana. This means that the majority of high school students were not worried about being caught by the police for smoking marijuana.
- High school students who believe they would be caught by the police were nearly five times as likely to smoke marijuana as their peers.
- In 2015, about one in seven high school students thought they would be seen as “cool” if they drank alcohol or smoked marijuana. Rates have remained relatively stable over the past several years.
- High school students largely believe that their parents and adults in their community think it would be wrong for them to drink alcohol. The perception of disapproval remained stable in both parents and adults in the community from 2013 to 2015.
- According to the 2015 Maine Integrated Youth Health Survey, high school students who did not believe their parents would feel it would be wrong for them to drink were more than twice as likely to drink alcohol in the past month as their peers who did think their parents would perceive it as wrong.
- 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 2013 to 2015. In 2015, about one in six high school students thought their parents would feel it would be okay to use marijuana.
- High school students who do not believe their parents feel it is wrong for them to smoke marijuana are 4.5 times as likely to use marijuana as students who do believe their parents would think it is wrong.



- In 2015, two in three parents felt it was never okay for their teen to use marijuana, a substantial decrease since 2013. In 2015, about one in six parents felt it would be okay if their teen used marijuana as long as they had a written certificate from a doctor; this was almost three times greater than in 2013.
- In 2015, almost nine in ten high school students in Maine report that their family has clear rules around alcohol and drug use. In contrast, this means that about one in ten high school students did not think their family had clear rules about drugs and alcohol.
- High school students who believe their parents have clear rules about substance use are half as likely as their peers to drink alcohol.
- About one in four parents of high school students felt that their child had ever consumed alcohol. Only three percent of parents thought their youth had used within the past 30 days.

### **Mental Health, Suicide and Co-occurring Disorders**

- Nearly one in five adults in Maine reported experiencing any mental illness in the past year while five percent reported experiencing serious mental illness in the past year. Almost one in four 18 to 25 year olds experienced any mental illness in the past year. Major depressive episodes were most prevalent among 18 to 25 year olds with more than one in ten experiencing at least one episode within the past year.
- In 2014–15, nearly 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 26 to 35 reported the highest rates of both depression and anxiety.
- In 2015, more than one in four high school students reported feeling sad or helpless for at least two weeks in the past year. Rates have been steadily increasing for the past several years.
- In 2015, about one in seven high school students in Maine had either seriously considered suicide or made a plan for suicide. One in ten high school students reported they had actually attempted suicide in the past year.
- In 2015, nearly one in four high school students who had consumed alcohol in the past month also had serious thoughts of suicide within the past year; this was almost double the rate compared to students who did not drink.
- In 2016, over half (51%) of all substance abuse treatment admissions also involved a mental health disorder.
- In 2016, 2-1-1 Maine referral calls related to mental health services and housing/shelter calls have decreased in recent years while calls related to substance use as well as gambling have remained relatively stable.

## Treatment Admissions for Substance Abuse

- In 2013–14, young adults 18 to 25 were the most likely age group to need but not receive treatment for drugs or alcohol. About one in eight 18 to 25 year olds needed but did not receive treatment for alcohol use and nearly one in ten needed but did not receive treatment for illicit drug use.
- A little more than one in three substance use treatment admissions listed alcohol as the primary reason for treatment in 2016, followed by heroin/morphine, and other opiates/synthetics. 2016, over half (58%) of the primary admissions were related to opioids or opiates. Primary admission rates related to heroin/morphine have steadily increased since 2012, and have surpassed synthetic opiates as the second most common substance.
- Out of the admissions that listed a secondary substance, nearly one in three was related to marijuana and about one in four was related to synthetic opiates. Rates related to synthetic opiates have steadily decreased while rates involving heroin/morphine have progressively increased.

## Introduction

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### Overview of Maine

The state of Maine had an estimated population of 1,331,479 people in 2016. Maine is considered an “aging” state, with 19 percent of the population being 65 years old and older, a higher proportion than the overall US population (15%). On the other hand, 19 percent of the state’s population is under the age of 18 years old, a lower proportion than the average for the United States (23%). According to the 2015 U.S. Census estimate, 95 percent of Maine’s population is White, non-Hispanic, followed by 1.6 percent who are Hispanic, 1.4 percent who are Black, 1.2 percent who are Asian, and 0.6 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; their numbers are likely underreported on the census. In Washington County, 5.2 percent of the population reports being Native American. Androscoggin and Cumberland are the most diverse counties, each home to communities made up of people from many ethnic backgrounds and national origins; this is due in large part to refugee resettlement programs located within these counties.

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 2016, this greatly varies by county. The most densely populated counties were Cumberland with 347.3 people per square mile and Androscoggin with 229.1 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 \$51,494 for the period of 2011–15, lower than the United States median income of \$53,889. 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 \$60,051, Cumberland has the highest median household income and is one of only three Maine counties where the median income is higher than the state median income (the others are Sagadahoc at \$53,298 and York at \$57,348). At the other end of this range, Aroostook County has the lowest median income at \$36,923 a year. Piscataquis County has a median income of \$37,495, 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 to identify substance abuse patterns in defined geographical areas, examine substance abuse trends, detect emerging substance use, and provide information for policy development and program planning. It also highlights all the prevention priorities such as underage drinking, high-risk drinking among 18–25 year olds, misuse of prescription drugs among 12–25 year olds, marijuana use in 12–25 year olds, and slowing the spread of methamphetamine abuse; it also monitors the progress being made to address these priorities.

This report includes data available through December 2016 and when possible updates the July 2016 report (which included data through December 2015). 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. For additional data and resources please visit the Maine State Epidemiological Outcomes Workgroup (SEOW) data dashboard at [www.MaineSEOW.com](http://www.MaineSEOW.com).

## 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

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This report includes data that were 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 2016.

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 2013-14, 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. The most recent data available are from 2015. Due to methodological changes in weighting and sampling, data prior to 2011 cannot be trended with more current data. In some instances, multiple years of data are combined in efforts to produce more reliable estimates. **Contact:** Melissa Damren, Maine BRFSS Coordinator; [melissa.damren@maine.gov](mailto: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 the 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:** For FARS data, contact Lauren Stewart, Highway Safety Director; [lauren.v.stewart@maine.gov](mailto:lauren.v.stewart@maine.gov); (207) 626-3841. For all other crash data, contact Duane Brunell, Safety Performance Analysis Manager; [duane.brunell@maine.gov](mailto: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 2015. 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](http://www.maine.gov/dps/cim/crime_in_maine/cim.htm)

For UCR statistical purposes, “arrests” also include those persons cited or summonsed for criminal acts in lieu of actual physical custody. These forms categorize the arrests by offense classification (both Part I and Part II crimes), and by age, sex and race. The same individual may be arrested several times over a period of time; each separate arrest is counted. A person may be arrested on several charges at one time; only one arrest is counted and is listed under the most serious charge. For UCR purposes, a juvenile is counted as “arrested” when the circumstances are such that if he or she were an adult, an arrest would result; in fact, there may not have been a formal charge.

***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](mailto: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:** Timothy Nangle, Maine Emergency Medical Services; [timothy.e.nangle@maine.gov](mailto:timothy.e.nangle@maine.gov); (207) 626-3860.

***Maine Integrated Youth Health Survey (MIYHS).*** The MIYHS is a statewide survey administered biennially since 2009 through a collaborative partnership between Maine Department of Health and Human Services and Maine Department of Education. Its purpose is to quantify the health-related behaviors and attitudes of 5th through 12th graders by direct student survey. 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 2015. **Contact:** Reid Plimpton, Center for Disease Control and Prevention [reid.plimpton@maine.gov](mailto:reid.plimpton@maine.gov); (207) 287-5084

***Maine Office of the Chief Medical Examiner.*** The Maine Office of the Chief Medical Examiner investigates all deaths associated with drug overdose. Analysis of these cases is currently funded by the Office of Attorney General. The death data are reported on an annual basis after cases are finalized, and released through the Attorney General's Office. Drug categories reported to SEOW include methadone, cocaine, benzodiazepines, oxycodone, fentanyl, and

heroin/morphine. **Contact:** Dr. Marcella Sorg, Director, Rural Drug & Alcohol Research Program, Margaret Chase Smith Policy Center, University of Maine [mhsorg@maine.edu](mailto:mhsorg@maine.edu).

***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 2014–15.

Older data are included for trending and comparative purposes. In 2015, a number of changes were made to the NSDUH questionnaire and data collection procedures resulting in the establishment of a new baseline for a number of measures. Therefore, estimates for several measures included in prior reports are not available. For details, see Section A of the “2014–2015 NSDUH: Guide to State Tables and Summary of Small Area Estimation Methodology” at <http://www.samhsa.gov/data/>.

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: <http://www.samhsa.gov/data/population-data-nsduh/reports>.

***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. Data available from the poison center are reported on a continual daily basis and are included through December 2015. These data are only reflective of cases in which the Poison Center was contacted. **Contact:** Colin Smith, Northern New England Poison Center; [SMITHC12@mmc.org](mailto:SMITHC12@mmc.org); (207) 662-7085.

**Office of Child and Family Services (OCFS), Maine Automated Child Welfare Information System (MACWIS).** The Office of Child and Family Services (OCFS) supports Maine's children and their families by providing Children's Behavioral Health, Child Welfare, Early Childhood, and Preventive services. The Maine Child Welfare Information System (MACWIS) serves as the single repository for all Maine child welfare information to assist Office of Child and Family Services (OCFS) workers in the recording, tracking, and processing of child welfare functions. MACWIS is the single repository for all electronic child welfare information. It actively manages 985,686 identified persons and 32,653 resources in the system; **Contact:** Lori Geiger, Information Service Manager; [lori.geiger@maine.gov](mailto:lori.geiger@maine.gov); (207)-624-7911.

**Office of Data, Research and Vital Statistics (DRVS).** DRVS is a program within the Maine CDC. The death certificates are the source documents for the data on the vital events in Maine. The data include Maine resident deaths in which the death certificate included any mention that alcohol or drug use may have had a role. Data include unintentional, self-inflicted, assault and undetermined intent deaths. **Contact:** Patricia Lech, Office of Data, Research and Vital Statistics; [patricia.lech@maine.gov](mailto:patricia.lech@maine.gov); (207) 287-5806.

**Parent Survey.** In 2006, the Maine Office of Substance Abuse and Mental Health Services (SAMHS) and Ethos Marketing and Design commissioned Pan Atlantic Research, a Maine-based marketing research and consulting firm, to conduct a baseline quantitative market research with parents of teenagers throughout the state on a range of issues related to underage drinking. The 2006 research was a component of a broader project being conducted by the Ethos team in preparation for a parent social marketing campaign, the objective of which was to reduce teenage drinking in the State of Maine through improved parenting techniques and enhanced parental involvement. Pan Atlantic Research has subsequently conducted benchmarking research on this project for SAMHS in 2007, 2008, 2009, 2011, 2013, and 2015. The 2008 research was designed to be more directly comparable to the 2009 (and future) Maine Integrated Youth Health Surveys (MIYHS). Also since 2008, the sample has been stratified on a statewide basis according to Maine's eight public health districts (150 surveys per PHD). Additionally, the sample composition since 2008 includes parents of 7th to 12th graders (200 per grade–1,200 total). **Contact:** Marisa Paraschak, Senior Research Analyst, Pan Atlantic Research; [mdolan@panatlanticsmsgroup.com](mailto:mdolan@panatlanticsmsgroup.com); (207) 871-8622 ext.101.

**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](mailto: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 opiates, sedatives, and stimulants. 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 prescribed between 2012 and 2016. **Contact:** Office of Substance Abuse and Mental Health Services; [SAMHS.PMP@maine.gov](mailto:SAMHS.PMP@maine.gov); (207) 287-2595.

**Web Infrastructure for Treatment Services (WITS).** WITS does not capture data from all treatment facilities or services provided in Maine and therefore is not a complete representation of ALL substance use treatment services provided in Maine. WITS is the State system that all licensed substance abuse treatment agencies are required by licensing rule to submit all substance abuse treatment services rendered into. However there are many organizations and private practitioners such as primary care practitioners and independent substance use licensed counselors who are not mandated to enter data in to the system. 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. It is important to note that the WITS system is not static; therefore 2016 numbers may be artificially low. Drug categories included in this report are alcohol, marijuana, cocaine, heroin, synthetic opiates, methadone/buprenorphine and benzodiazepines. **Contact:** Office of Substance Abuse and Mental Health Services; [SAMHS.PMP@maine.gov](mailto:SAMHS.PMP@maine.gov); (207) 287-2595.

**2-1-1 Maine.** 2-1-1 Maine is a free, confidential resource for individuals to connect to thousands of health and human services in Maine. 2-1-1 Maine maintains a statewide directory of resources including services for substance abuse, mental health, gambling addiction, housing, childcare and more. Individuals can contact 2-1-1 Maine and access needed information and referrals by calling 2-1-1 and speaking with a trained specialist in Maine, by texting their zip code to 898-211 and communicating with a Maine-based specialist, or by visiting [www.211maine.org](http://www.211maine.org). 2-1-1 Maine's Contact Center operates 24 hours a day, seven days a week, 365 days a year. 2-1-1 Maine is a collaborative effort of the Maine Department of Health and Human Services, the United Ways of Maine, and The Opportunity Alliance as the Contact Center partner. **Contact:** [info@211maine.org](mailto:info@211maine.org); Dial 2-1-1 or 1-866-811-5695; Text your zip code to 898-211.

## Consumption of Substances

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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, risky alcohol use such as binge drinking remains a concern among adults 18 to 35, with nearly one in three reporting such behavior in the past month. Fortunately, it appears that alcohol use, including binge drinking, among Maine's high school students is declining. Furthermore, young adults (18 to 25) who qualify as having an alcohol use disorder have decreased by a third since 2008–09, however Maine residents 18 to 25 were the most likely age group to have an alcohol use disorder in 2014–15 with an estimate of 12 percent.

After alcohol, cigarettes, marijuana and prescription drugs are the next most commonly used drugs in Maine. With the exception of cigarettes, the young adult population ranks highest in their rate of use of these substances among adults in Maine. Marijuana use rates among young adult Mainers as well as those 26 and older have been steadily increasing over the past several years. While there doesn't seem to be an overall increase in the number of initiates, users of marijuana appear to be starting earlier. In terms of tobacco use, nearly one in three Mainers ages 26 to 35 reported smoking cigarettes within the past month compared to one in four adults between 36 and 49; rates of tobacco use have progressively declined among youth and young adults in Maine, but remain somewhat stagnant among more mature age groups. In addition, tobacco use among pregnant women continues to be a concern; nearly one five reporting cigarette use in their last their last trimester.

During 2013–15, the highest rates of lifetime prescription drug misuse were observed among adults between the ages of 18 and 25; nearly one in ten (9%) reported misusing prescription drugs within their lifetime. In recent years, rates of prescription drug misuse have remained stable. Furthermore, based on surveillance data, illicit drug rates (*e.g.*, heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically) have been declining among Maine's youth and young adults for the past several years. According to NSDUH, in 2014–15, .58% of Mainers 12 and older reported that they had used heroin in the past year compared to .62% of those 18 and older; it is estimated that about 7,000 residents 12 and older reported using heroin in the past year. The highest rate of use was observed among 18 to 25 year olds (1.21%).

## Alcohol

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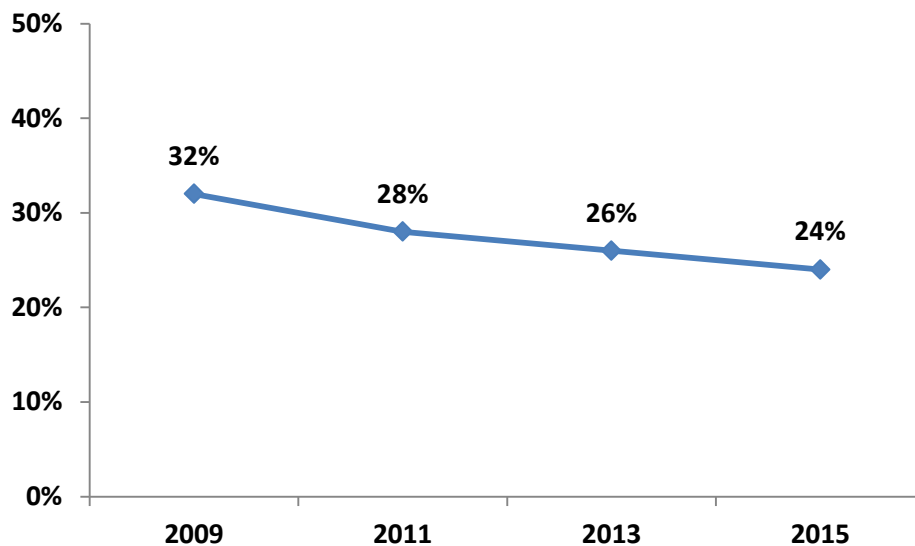
**Indicator Description: CURRENT ALCOHOL USE AMONG YOUTH.** This measure shows the percentage of high school students who reported having had one or more alcoholic drinks on one or more days within the past month.

**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, 2009–2015

**Summary:** The proportion of high school students in Maine who reported consuming any alcohol in the past month has been decreasing steadily since 2009.

**Figure 1. High school students reporting alcohol use in the past month: 2009–2015**



*Source: MIYHS, 2009–2015*

- The percentage of high school students consuming alcohol in the past month fell from 32 percent in 2009 to 24 percent in 2015.
- Although not shown, 27 percent of high school students who have ever consumed alcohol reported having their first drink of alcohol before the age of 13.



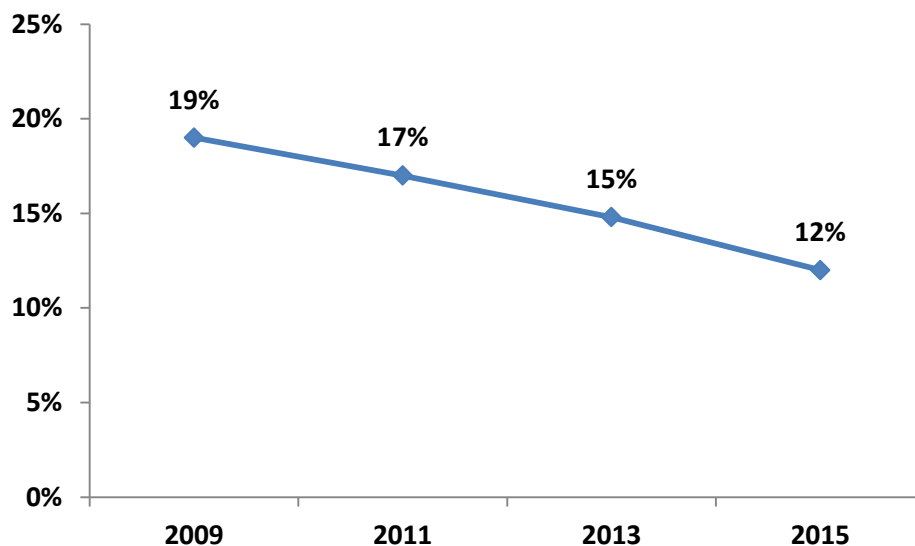
**Indicator Description: CURRENT HIGH-RISK ALCOHOL USE AMONG YOUTH.** This indicator presents the percentage of youth who reported having had five or more alcoholic drinks in a row in the past two weeks and on at least one day within the past month.

**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, 2009–2015.

**Summary:** The proportion of high school students who reported binge drinking within the past month has been decreasing steadily since 2009.

**Figure 2. High school students who had five or more drinks in a row at least once in the past month: 2009–2015**



*Source: MIYHS, 2009–2015*

- 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 decreased from 19 percent in 2009 to 12 percent in 2015. Although not shown, this decrease accounts for a 37 percent reduction from 2009 to 2015.

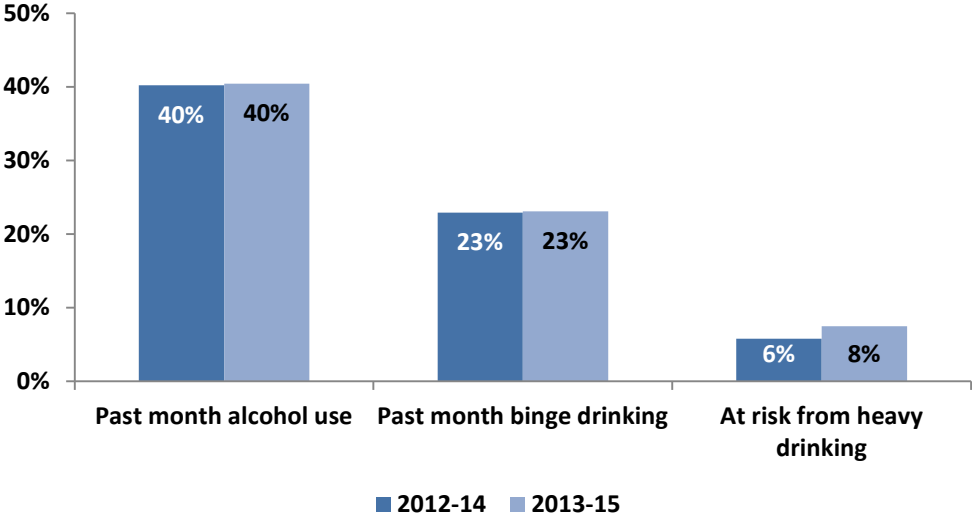
**Indicator Description: CURRENT ALCOHOL USE AMONG UNDERAGE ADULTS.** This indicator portrays the alcohol use patterns among adults between the ages of 18 and 20. Specifically, this indicator reflects the percentage of 18 to 20 year olds who reported consuming any alcohol in the past month, those consuming five or more alcoholic drinks in a row on at least one day within the past month, and those who qualify as at risk from heavy drinking, defined as more than two drinks per day (14 per week) for a man or more than one drink per day for a woman (seven per week).

**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. Drinking alcohol can also have negative health effects and lead to such consequences as alcohol-related motor vehicle crashes and increased injuries.

**Data Source(s):** BRFSS, 2012-14 thru 2013–15

**Summary:** In 2013–15, among underage adults (18 to 20), two in five reported any alcohol use in the past month, one in four had engaged in binge drinking at least once within the past month, and nearly one in ten qualified as at risk from heavy drinking. Rates have remained relatively stable.

**Figure 3. Adults ages 18 to 20 reporting drinking in past 30 days by type of drinking: 2012–14 thru 2013–15**



Source: BRFSS, 2012-14 thru 2013–15

- During the 2013–15 period, among Mainers between the ages of 18 and 20, 40 percent reported consuming any alcohol in the past 30 days, 23 percent reported binge drinking,

and eight percent were at risk from heavy alcohol use.<sup>1</sup> Alcohol consumption patterns among 18 to 20 year olds have remained relatively stable since 2012-14.

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<sup>1</sup> Heavy drinking is defined as more than two drinks per day for a man or more than one drink per day for a woman; heavy drinking increases a person's risk for alcohol-related health and social consequences.

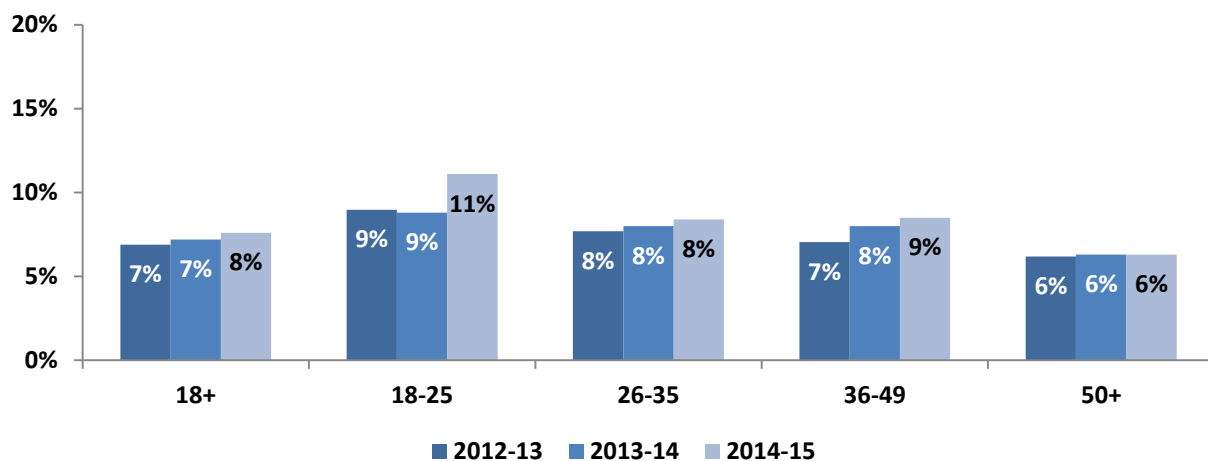
**Indicator Description: AT RISK FROM HEAVY ALCOHOL USE.** This indicator examines the percentage of Maine residents who are at risk of suffering consequences from heavy drinking in the past month. At risk from heavy drinking is defined as more than two drinks per day (14 per week) for a man or more than one drink per day for a woman (seven per week).

**Why Indicator is Important:** People who consume alcohol frequently 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.<sup>2</sup>

**Data Source(s):** BRFSS, 2012–13 to 2014–15

**Summary:** In 2014–15, 18 to 25 year olds appeared to be more at risk from heavy alcohol use, with about one in ten reporting that they consumed at least one alcoholic drink per day in the past 30 days. Rates do not vary widely among age groups and have remained relatively stable since 2012–13.

**Figure 4. Adults at risk from heavy alcohol use in past 30 days, by age group: 2012–13 thru 2014–15**



Source: BRFSS, 2012–13 to 2014–15

- During the period 2014–15, eight percent of adults 18 and over reported having consumed alcohol on a daily basis, putting them at risk from heavy alcohol use. From 2012-13 to 2014–15, rates among 18 to 25 year olds as well as 36 to 49 year olds increased slightly. Among adults, rates have remained relatively stable across all age groups.

<sup>2</sup> 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 8/8/2017.

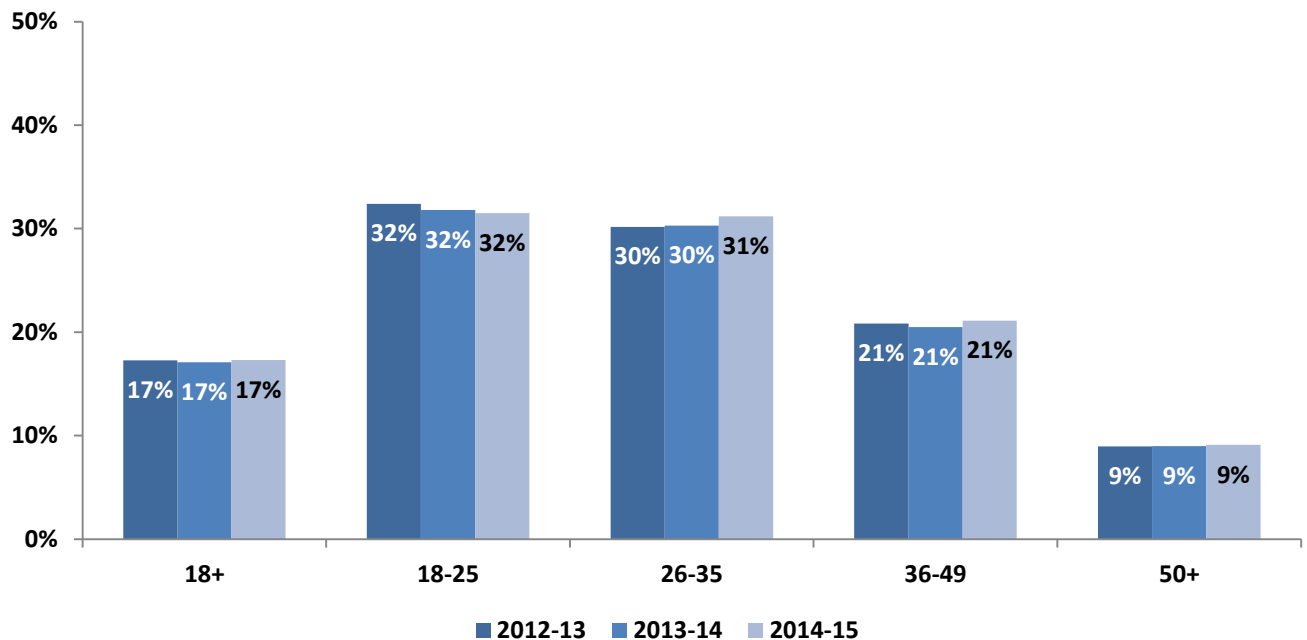
**Indicator Description: CURRENT HIGH-RISK ALCOHOL USE AMONG ADULTS.** This indicator reflects the percentage of adults who reported consuming five or more alcoholic drinks in a row on at least one day within the past month.<sup>3</sup>

**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, 2012–13 to 2014–15

**Summary:** The highest binge drinking rates continue to be observed among the 18 to 25 year old population, closely followed by 26 to 35 year olds with about one in three reporting binge drinking within the past month. Rates among all adult age groups have remained relatively stable.

**Figure 5. Adults reporting binge drinking in past 30 days, by age group: 2012–13 to 2014–15**



Source: BRFSS, 2011–12 and 2013–14

<sup>3</sup> 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.

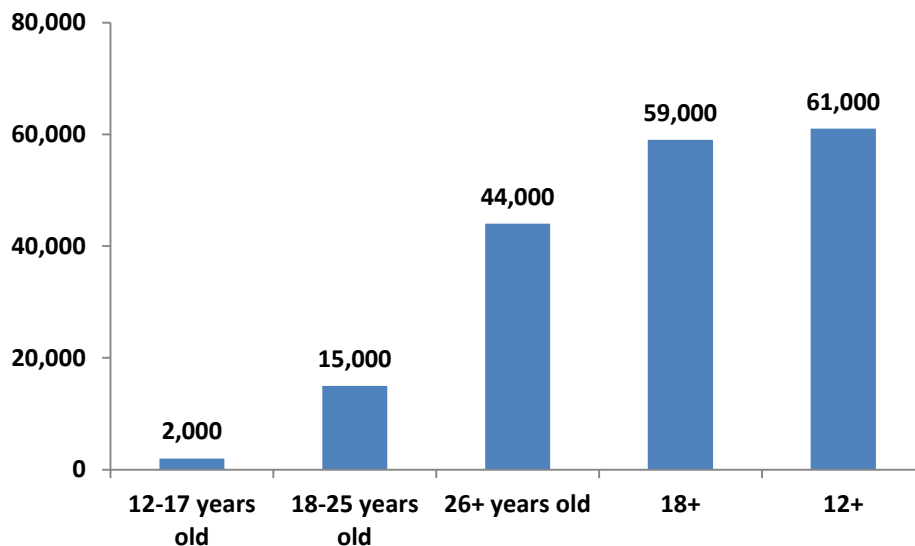
**Indicator Description: ALCOHOL USE DISORDER.** Alcohol Use Disorder is defined as meeting criteria for alcohol dependence or abuse. Dependence or abuse is based on definitions found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

**Why Indicator is Important:** Alcohol dependence and abuse increase 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):** NSDUH, 2008-09 to 2014-15

**Summary:** In 2014-15, 61,000 (5%) Mainers 12 and older qualified as having an alcohol use disorder. A little over one in ten (12%) eighteen to 25 year olds had an alcohol disorder in 2014–15; this is a thirty percent decrease since 2008–09.

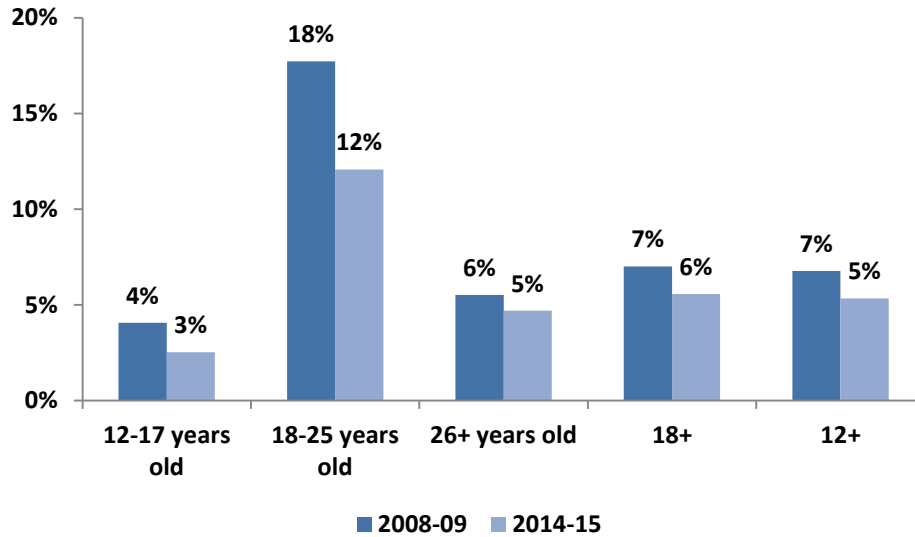
**Figure 6. Alcohol use disorder in the past year, by age (estimated in thousands): 2014–15**



Source: NSDUH, 2014–15

- According to NSDUH estimates, during 2014–15, 61,000 Maine residents 12 and older qualified as having a alcohol use disorder within the past year; this was followed by 59,000 residents 18 and over, 44,000 residents 26 and older, 15,000 residents 18 to 25, and 2,000 residents between 12 and 17.

**Figure 7. Alcohol use disorder in the past year, by age:  
2008-09 to 2014-15**



*Source: NSDUH, 2008-09 to 2014-15*

- During the period of 2014-15, five percent of Mainers between 12 and 17 years old qualified as having an alcohol use disorder; this was a decrease of two percentage points from 2008-09 (7%). Maine residents 18 to 25 were the most likely age group to have an alcohol use disorder in 2014-15 with an estimate of 12 percent. Eighteen to 25 year olds observed a decrease of about 30 percent since 2008-09 (18%).

## Tobacco

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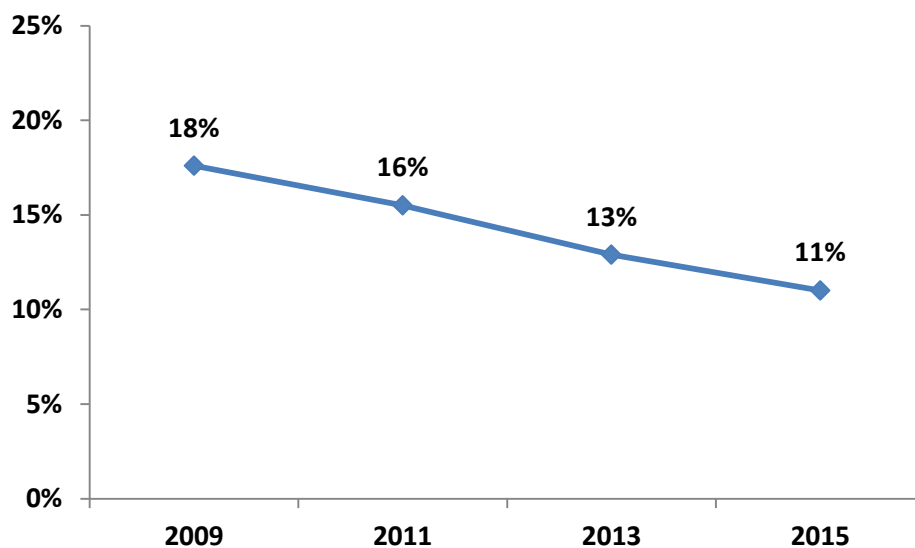
**Indicator Description: CURRENT TOBACCO USE AMONG YOUTH.** This indicator illustrates the percentage of youth who reported using cigarettes, cigars, smokeless tobacco, and vapor products (*e.g.*, electronic cigarettes, vaporizers).

**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. In addition, there is a growing amount of research that suggests electronic vapor products may not be a safe alternative to traditional tobacco products and can contribute to respiratory problems.

**Data Source(s):** MIYHS, 2009–2015

**Summary:** The use of tobacco products by high school students has been decreasing steadily since 2009. In 2015, about one in ten students had reported having smoked a cigarette within the past 30 days. In addition, about one in three high school students reported having ever used an electronic vapor product and one in five reported having done so in the past month.

**Figure 8. High school students who smoked at least one cigarette during past month: 2009–2015**



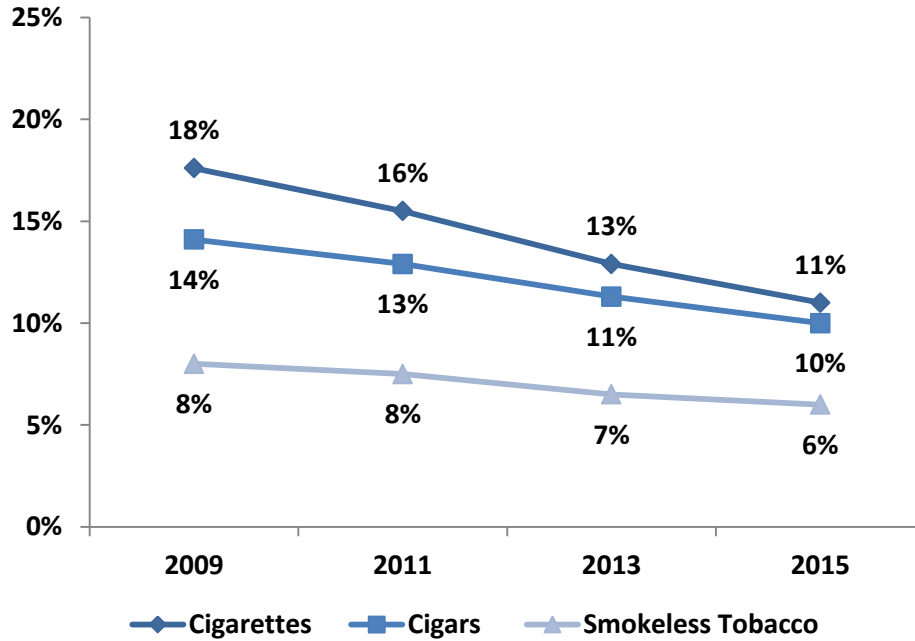
*Source: MIYHS, 2009–2015*

- The proportion of high school students who reported having smoked any cigarettes on at least one day during the past 30 days decreased by seven percentage points, from 18 percent in 2009 to 11 percent in 2015.
- Although not pictured, among students who reported current cigarette use in 2015, 14 percent reported smoking more than 10 cigarettes per day. In addition, among students



who have ever smoked an entire cigarette, 28 percent reported having done so before age 13.

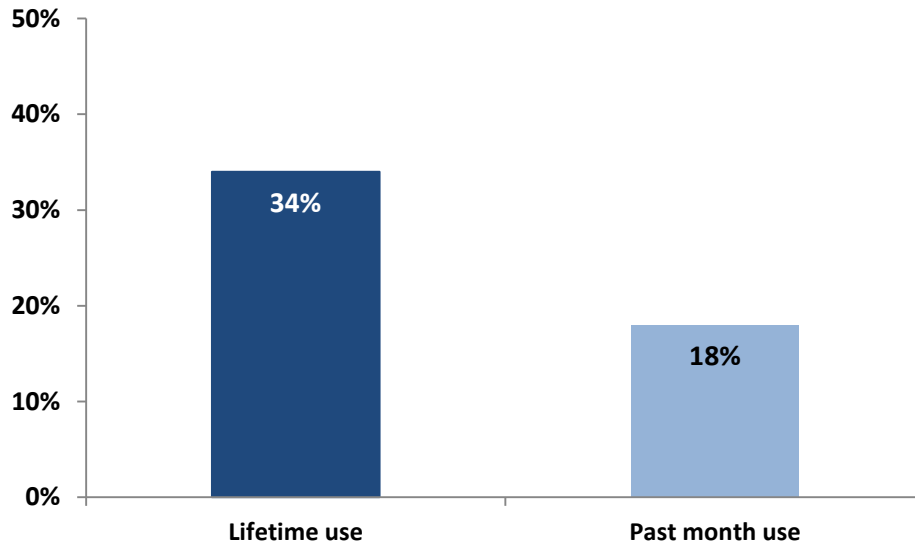
**Figure 9. High school students who used tobacco during past month, by tobacco type: 2009–2015**



Source: MIYHS, 2009–2015

- In 2015, cigarettes continued to be the preferred form of tobacco for high school students during the previous 30 days (11%), followed closely by cigars (10%), and then smokeless tobacco (6%). The rate of tobacco use has steadily decreased between 2009 and 2015. Smokeless tobacco use has decreased at a slower pace as compared to cigarettes and cigars.

**Figure 10. High school students who used an electronic vapor product\* in the past 30 days or lifetime: 2015**



Source: MIYHS, 2015

*\*Electronic vapor products refer to devices used to vaporize active ingredients of plant material, commonly tobacco, cannabis, or herbs for the purpose of inhalation.*

- In 2015, 34 percent of Maine high school students reported having ever used an electronic vapor product while 18 percent reported having used an electronic vapor product within the past month. Calendar year 2015 was the first time this question was included within the Maine Integrated Youth Health Survey, therefore trend data are not available.

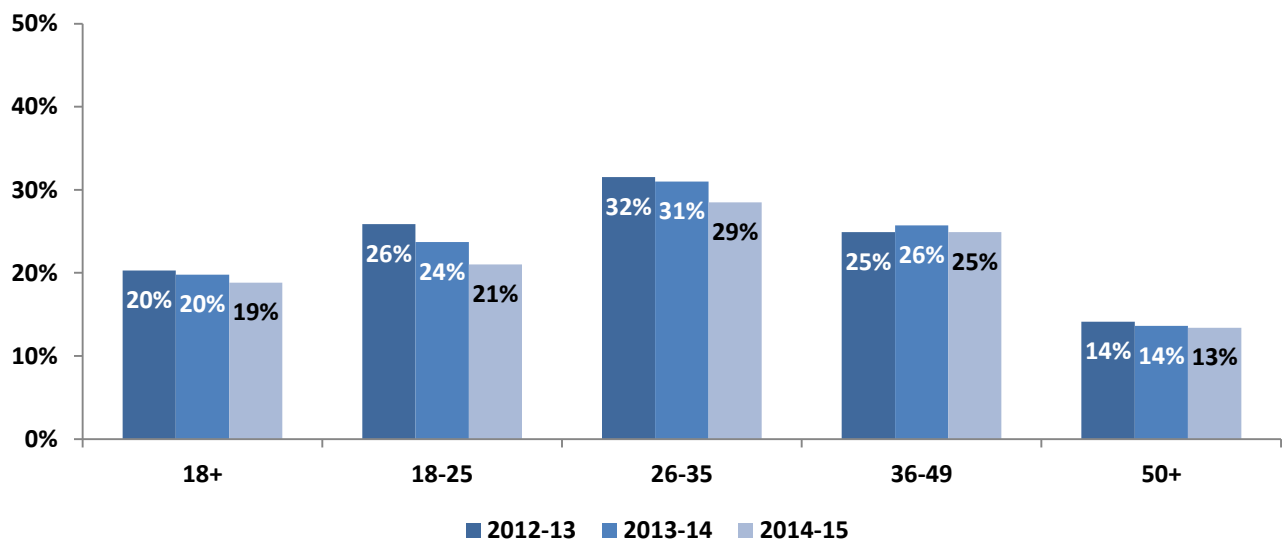
**Indicator Description: CIGARETTE USE AMONG ADULTS.** This indicator depicts cigarette use among adults who reported smoking at least 100 cigarettes in their lifetime and currently smoke cigarettes either every day or every couple of days.

**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, and low birth weight babies.

**Data Source(s):** BRFSS, 2012–13 to 2014–15

**Summary:** During 2014-15, one in five Mainers 18 and older reported being current cigarette smokers. Adults between the ages of 26 and 35 were the most likely to smoke cigarettes, with almost three in ten being current smokers. Rates of cigarette use among young adults appear to be steadily decreasing for the past several years.

**Figure 11. Past month cigarette use among adults, by age group: 2012–13 to 2014–15**



Source: BRFSS, 2012–13 to 2014–15

- During 2014-15, 19 percent of Maine adults reported being current cigarette smokers. Mainers ages 26 to 35 reported the highest rate of cigarette use at 29 percent, followed by 36 to 49 year olds at 25 percent, and 18 to 25 year olds at 21 percent. Rates among young adults (18 to 25) have been steadily decreasing while older age groups have remained relatively stable.

## Prescription Drugs

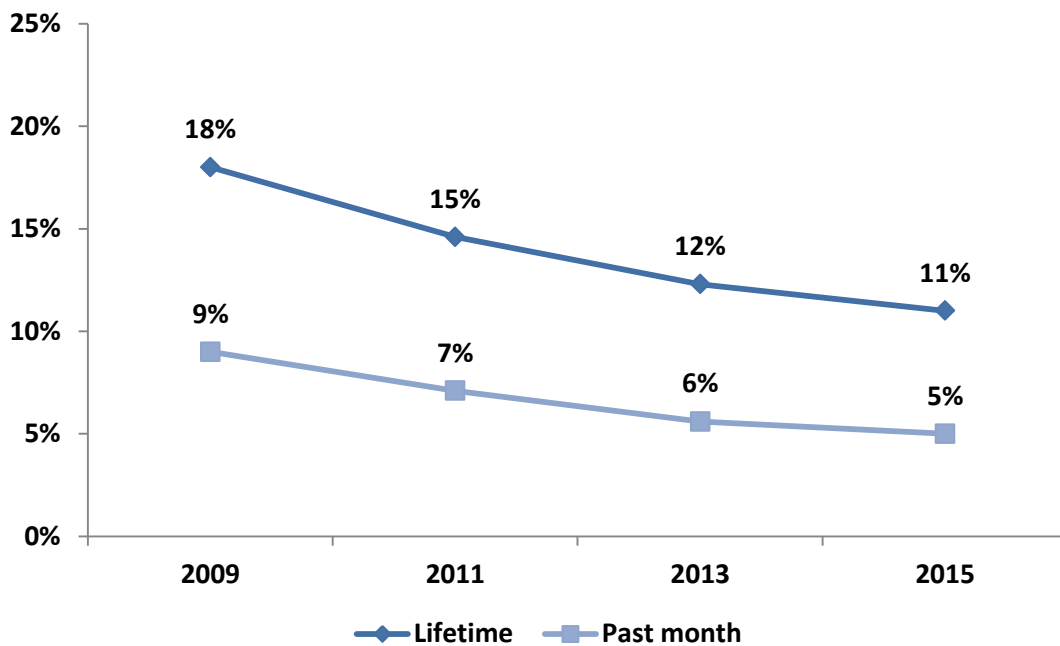
**Indicator Description: MISUSE OF PRESCRIPTION DRUGS AMONG YOUTH.** This indicator presents the percentage of youth who reported using prescription drugs that were not prescribed to them by a doctor. The indicator examines both current use (*i.e.*, within the past month) and lifetime use (*i.e.*, ever).

**Why Indicator is Important:** Abuse of prescription drugs may lead to consequences such as unintentional poisonings or overdose, automobile crashes, addiction, and increased crime.

**Data Source(s):** MIYHS, 2009–2015.

**Summary:** In 2015, more than one out of ten high school students reported misusing a prescription drug in their lifetime. Rates for lifetime as well as past-month misuse of prescription drugs decreased steadily from 2009 to 2015.

**Figure 12. High school students reporting misuse of prescription drugs in their lifetime and in the past month: 2009–2015**



Source: MIYHS, 2009–2015

- From 2009 to 2015, the proportion of high school students who reported having, at least once in their lifetime, taken a prescription drug that had not been prescribed to them by a doctor decreased from 18 percent to 11 percent. The proportion of students who reported having done so within the past month fell from nine percent in 2009 to five percent in 2015.

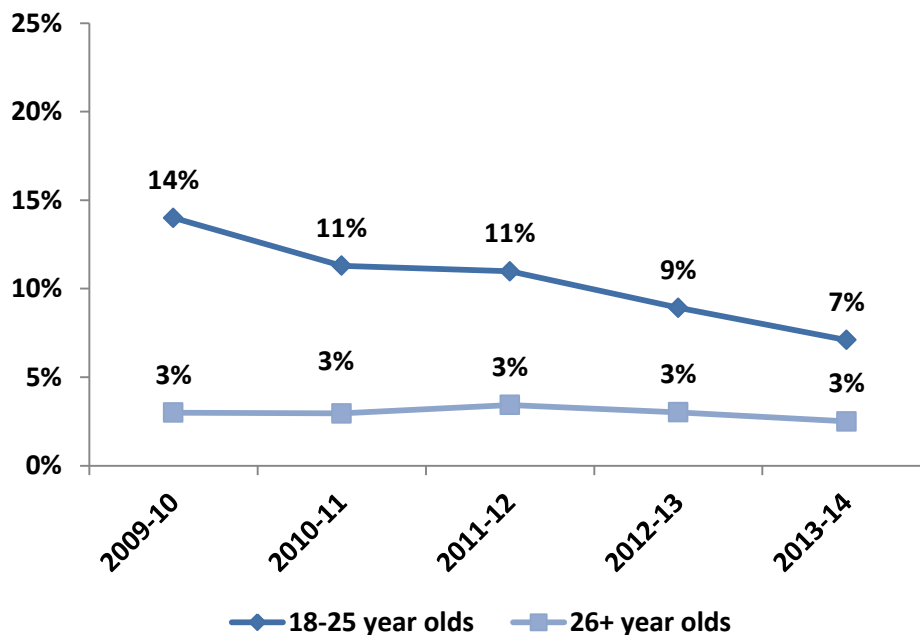
**Indicator Description: NONMEDICAL USE OF PAIN RELIEVERS AMONG ADULTS.** This indicator reflects the percentage of adults who reported using prescription pain relievers, specifically, for reasons other than their intended purpose.

**Why Indicator is Important:** Abuse of prescription drugs may lead to consequences such as unintentional poisonings, overdose, dependence and increased crime.

**Data Source(s):** NSDUH, 2009–10 to 2013–14

**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. Seven percent of 18 to 25 year olds reported having misused pain relievers in the past year although this has been decreasing over time.

**Figure 13. Non-medical use of pain relievers among adults in the past year, by age group: 2009–10 through 2013–14**



Source: NSDUH, 2009–10 to 2013–14

- Among Mainers 18 to 25 years old, seven percent reported non-medical use of pain relievers in the past year during state fiscal year 2013–14, a decrease of four percentage points since 2011–12. Use among those ages 26 and older was consistent at three percent across all years shown.

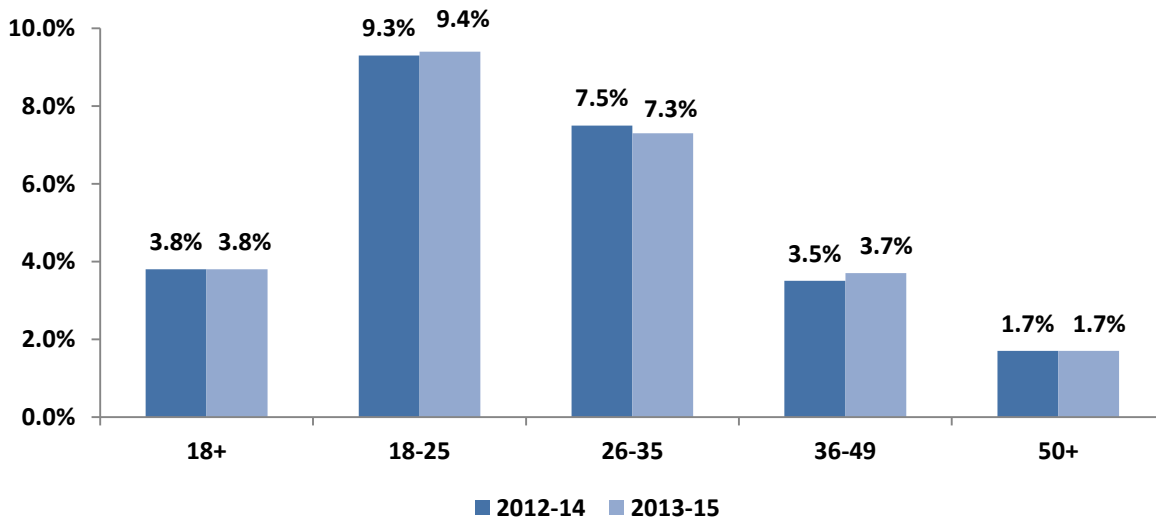
**Indicator Description: MISUSE OF PRESCRIPTION DRUGS AMONG ADULTS.** This measure reflects the percentage of adults in Maine who reported using prescription drugs not prescribed to them by a doctor, or using them in a way other than the one prescribed, at least once in their lifetime.

**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, 2012–14 to 2013–15

**Summary:** During 2013–15, the highest rates of lifetime prescription drug misuse were observed among adults between the ages of 18 and 25; nearly one in ten (9%) reported misusing prescription drugs within their lifetime. In recent years, rates have remained stable.

**Figure 14. Misuse of prescription drugs among adults in their lifetime, by age group: 2012–14 and 2013–15**



*Source: BRFSS, 2012–14 and 2013–15*

- During the 2013–15 period, about four percent of adults 18 and older in Maine reported having misused prescription drugs during their lifetime. The highest rate of misuse was among adults 18 to 25 years old (8%), followed by 26 to 35 year olds (7%), 36 to 49 year olds (4%), and Mainers 50 and older (2%). Rates among age groups have remained relatively unchanged from 2012–14 to 2013–15.

## Marijuana

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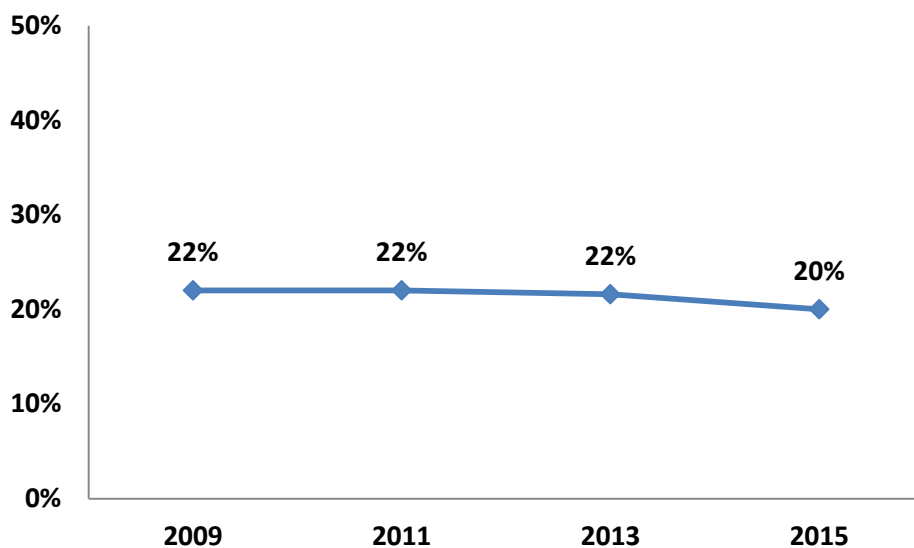
**Indicator Description: CURRENT MARIJUANA USE.** This measure shows the percentage of Mainers who reported using marijuana in the past month. This is presented for high school students and across the lifespan (*i.e.*, among Mainers over the age of 12).

**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.<sup>4</sup>

**Data Source(s):** MIYHS 2009–2015; NSDUH, 2009–10 to 2013–14; BRFSS, 2011–13 and 2012–14

**Summary:** In 2015, one in five high school students reported using marijuana within the past month. The highest rates of marijuana use are found among young adults ages 18 to 25. Marijuana use rates among adult Mainers have been steadily increasing over the past several years.

**Figure 15. High school students who have used marijuana at least once in the past month: 2009–2015**



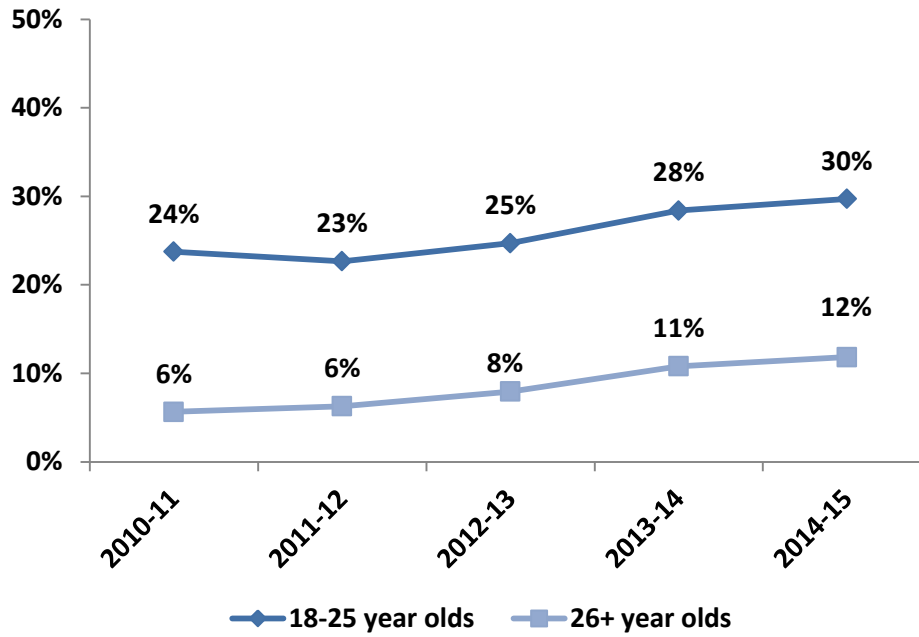
Source: MIYHS, 2009–2015

- The percentage of high school students who used marijuana one or more times during the previous 30 days decreased slightly from 2013 (22%) to 2015 (20%).
- Although not pictured, in 2015, among high school students who had ever used marijuana, 19 percent did so before the age of 13.

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<sup>4</sup> 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 16. Adults reporting marijuana use in past month, by age group: 2010–11 through 2014–15**

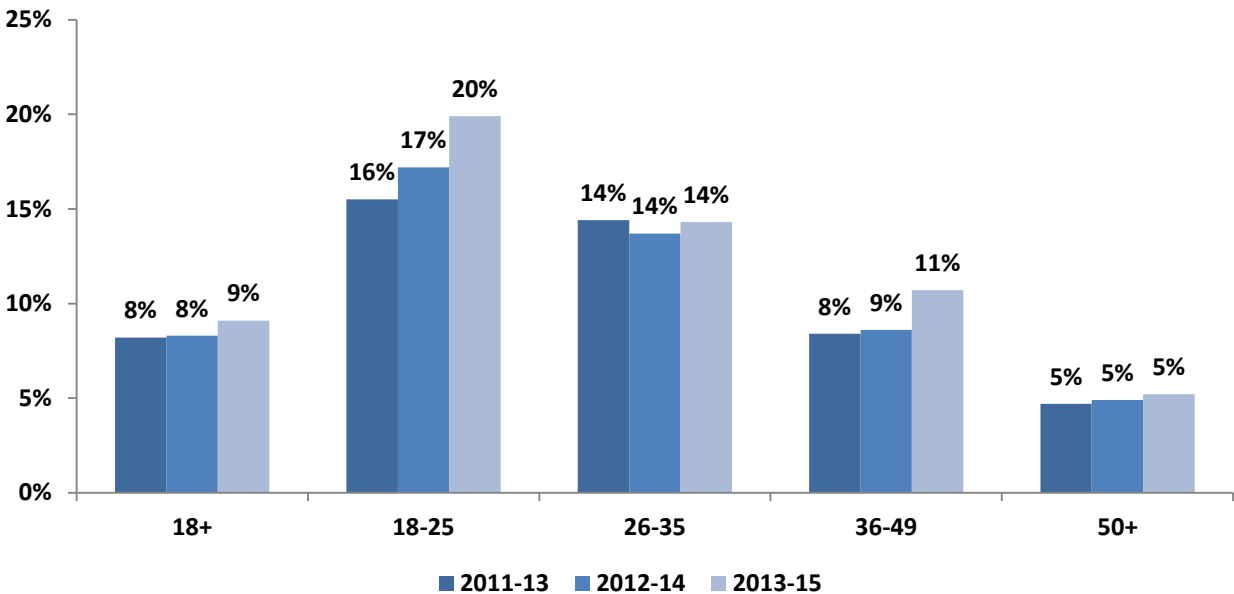


Source: NSDUH, 2010–11 to 2014–15

- According to NSDUH, thirty percent of Maine residents between the ages of 18 and 25 used marijuana in the past month in 2014–15, an increase of seven percentage points since 2011–12. Marijuana use rates among those 26 and older increased by six percentage points from six percent in 2011–12 to 12 percent in 2014–15.



**Figure 17. Adults reporting marijuana use in past month, by age group: 2012–14 to 2013–15**



Source: BRFSS, 2011–13 to 2013–15

- According to the 2013–15 BRFSS, nine 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 (19%), followed by 26 to 35 year olds (14%), 36 to 49 year olds (11%), and Mainers 50 and older (5%). From 2011–13 to 2013–15, 18 to 25 year olds observed a steady increase of three percentage points. In addition 36 to 49 year olds observed an increase of two percentage points from 2012–14 to 2013–15.

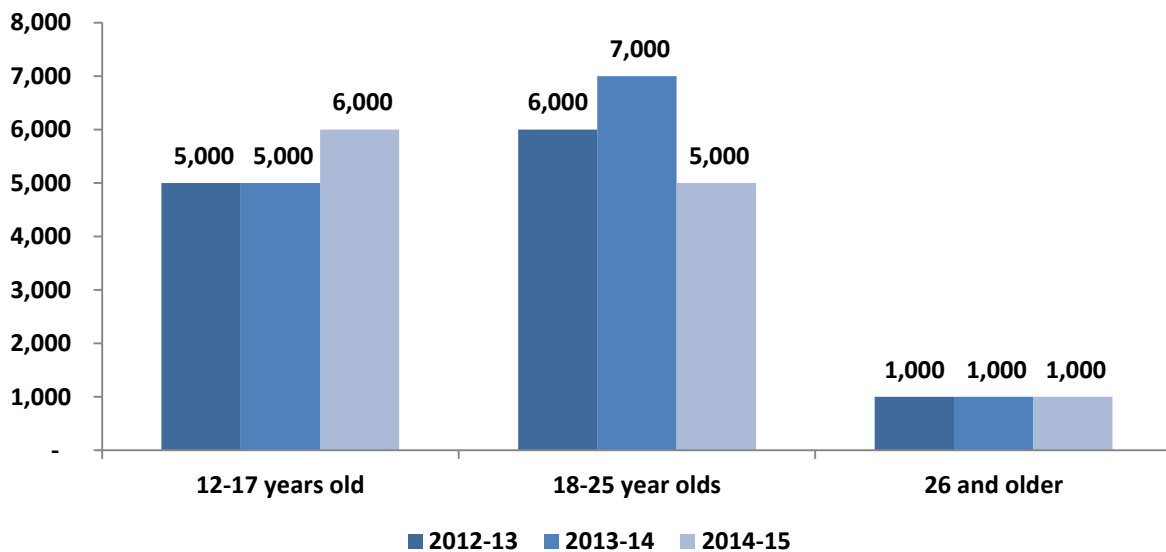
**Indicator Description: INITIATION OF MARIJUANA.** This measure shows the average number of Mainers that used marijuana for the first time in their life. Average annual number of marijuana initiates =  $X_1 \div 2$ , where  $X_1$  is the number of marijuana initiates in the past 24 months.

**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.<sup>5</sup>

**Data Source(s):** NSDUH, 2012–13 to 2014–15

**Summary:** In 2014–15, there was an annual average of 12,000 Mainers who used marijuana for the first time in their life. Six thousand initiates were between 12 and 17 and 5,000 were between 18 and 25. A notable increase was observed among 12 to 17 initiates from 2013–14 to 2014–15.

**Figure 18. Average annual number of marijuana initiates, by age group: 2012-13 to 2014-15**



Source: NSDUH, 2012–13 to 2014–15

- During 2014–15, there was an annual average of 6,000 marijuana initiates between the ages of 12 and 17; this was followed by 5,000 among 18 to 25 year olds and 1,000 Mainers 26 and older. From 2013–14 to 2014–15, the average annual number of initiates between 18 and 25 decreased by 2,000 while those 12 to 17 increased by 1,000.

<sup>5</sup> 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.

## Other Illegal Drugs

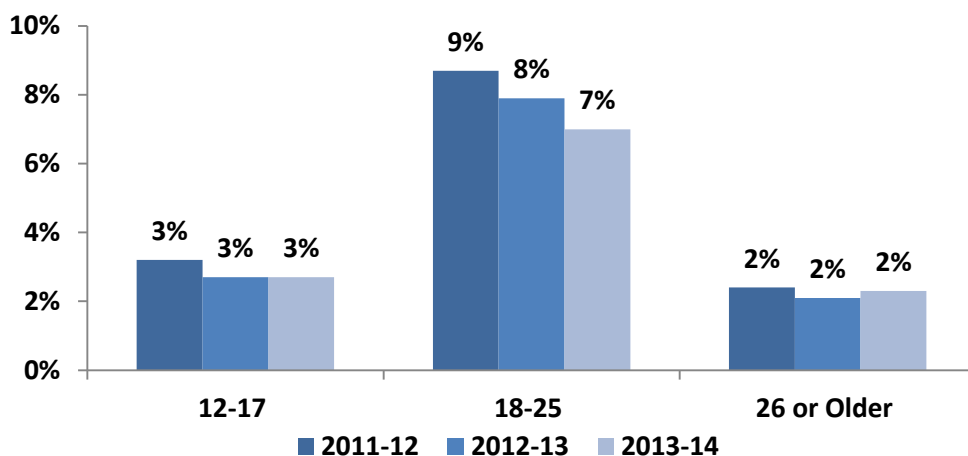
**Indicator Description: ILLICIT DRUG USE (OTHER THAN MARIJUANA).** This indicator reflects the percentage of individuals who used illicit drugs (other than marijuana) within the past month. Illicit drugs other than marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically.

**Why Indicator is Important:** Use of illicit drugs can cause 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):** NSDUH, 2011–12 to 2013–14

**Summary:** In 2013–14, seven percent of 18 to 25 year olds, three percent of youth 12 to 17, and two percent of those 26 and older reported having used illicit drugs other than marijuana in the past year. Rates among 18 to 25 year olds have declined slightly since 2011–12.

**Figure 19. Illicit drug use (other than marijuana)\* in past year, by age group: 2011–12 thru 2013–14**



Source: NSDUH, 2009–10 to 2013–14

\*Illicit drugs other than marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically.

- In 2013–14, seven percent of young adults between 18 and 25 years old reported having used illicit drugs other than marijuana use in the past year, compared to three percent among youth ages 12 to 17, and two percent among those 26 and older. Rates among 18 to 25 year olds have decreased slightly since 2011-12 while rates among youth and Mainers 26 and older have remained relatively unchanged.

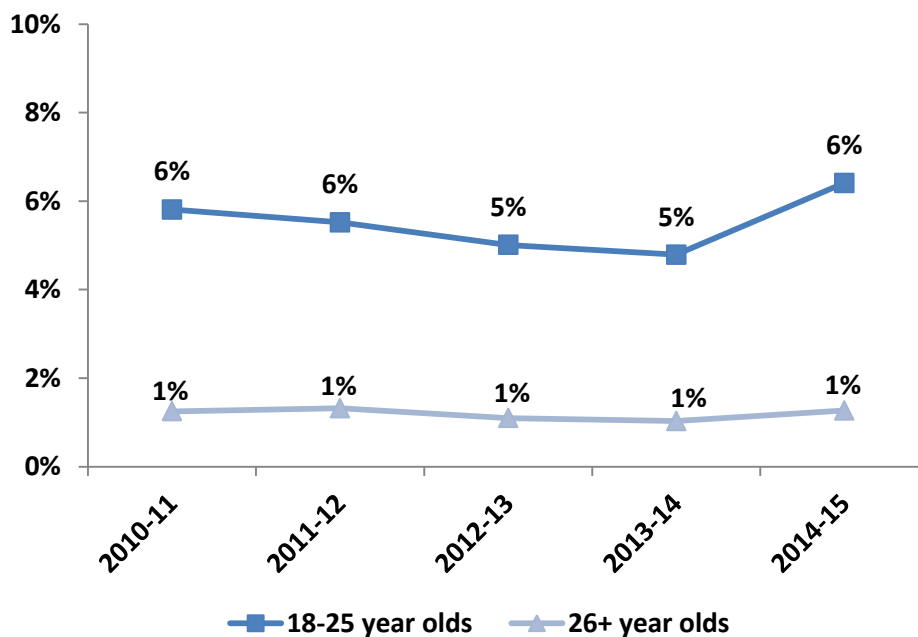
**Indicator Description: COCAINE USE AMONG ADULTS.** This indicator illustrates the percentage of Maine residents who used cocaine. For adults, the measure reflects rates of use within the past year.

**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, 2010–11 to 2014–15; MIYHS, 2009–2015

**Summary:** Among adults, 18 to 25 reported higher rates of cocaine use in the past year than adults 26 and older and observed a slight increase from 2013–14 (5%) to 2014-15 (6%).

**Figure 20. Adults reporting cocaine use in past year, by age group: 2010–11 to 2014–15**



Source: NSDUH, 2010–1 to 2014–15

- In 2014–15, six percent of young adults ages 18 to 25 reported cocaine use in the past year, compared to just one percent among those 26 and older. Rates among 18 to 25 year olds increased slightly over the past few years while rates among individuals 26 and older have remained relatively unchanged.

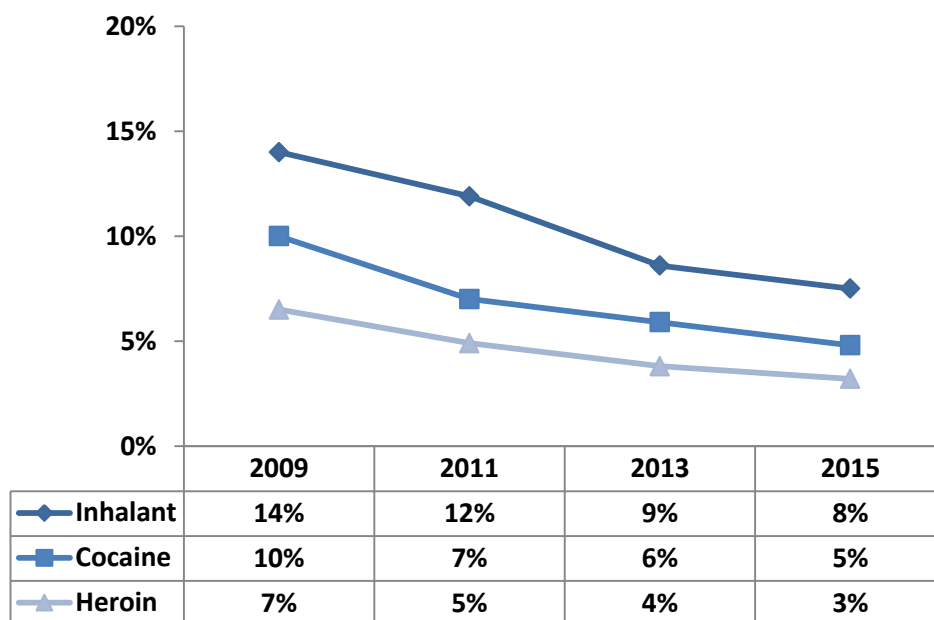
**Indicator Description: INHALANT, COCAINE/CRACK, AND HEROIN USE AMONG YOUTH.** This indicator depicts the percentage of high school students who reported having used inhalants, cocaine/crack, or heroin in their lifetime. Inhalants include substances such as glue, aerosol spray cans, paints or sprays.

**Why Indicator is Important:** Use of drugs such as inhalants, cocaine/crack, and heroin can cause 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, 2009–2015

**Summary:** In 2015, eight percent of high school students reported ever using inhalants, five percent reported ever using cocaine, and three percent reported ever using heroin. Lifetime rates have been steadily decreasing for the past several years.

**Figure 21. High school students reporting inhalant, cocaine/crack, or heroin use in their lifetime 2009–2015**



Source: MIYHS, 2009–2015

- In 2015, eight percent of Maine high school students reported having ever used inhalants; this was followed by cocaine (5%), and heroin (3%). From 2009 to 2015, the lifetime rate of inhalant use declined by six percentage points while the lifetime rate of cocaine/crack use decreased by five percentage points, and the lifetime rate of heroin decreased by four percentage points.

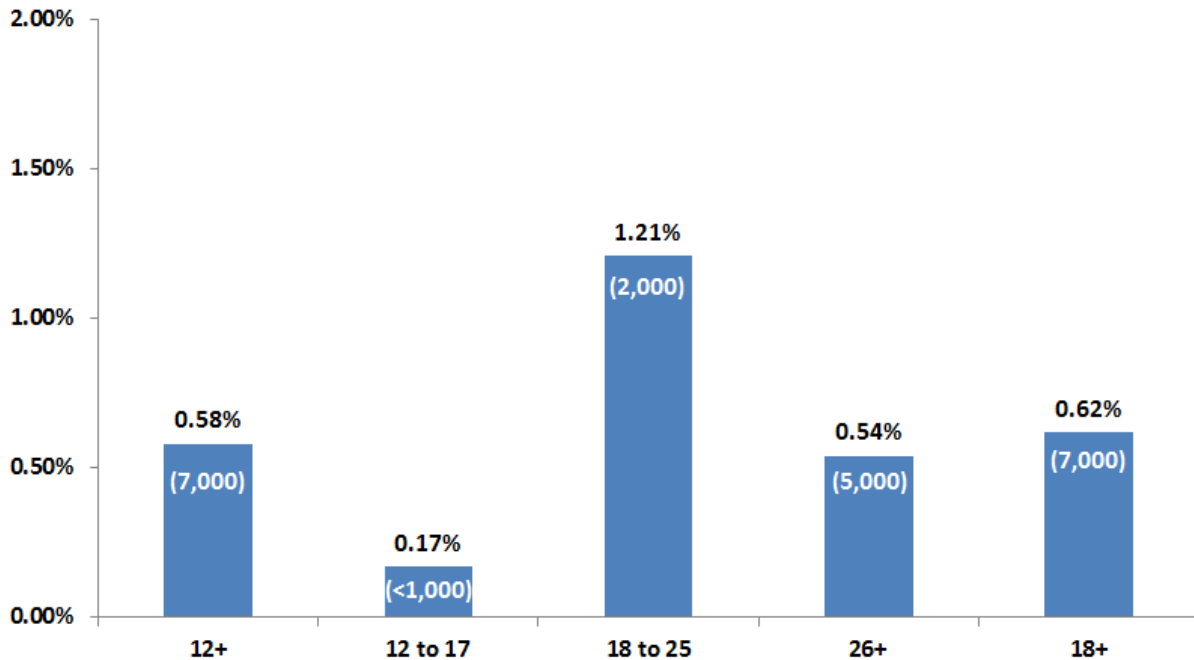
**Indicator Description: HEROIN USE AMONG YOUTH AND ADULTS.** This indicator depicts the percentage and approximate number of Mainers who reported heroin in the past 12 months.

**Why Indicator is Important:** Use of drugs such as heroin can cause impaired brain function and damage to the nervous system and other organs. Even occasional use may cause heart attack, suffocation, or death. Long term effects from heroin use can include but are not limited to irreversible damage to the liver or kidneys and risk of contracting communicable diseases.

**Data Source(s):** NSDUH, 2014–15

**Summary:** In 2014–15, .58% of Mainers 12 and older (approximately 7,000 residents) self-reported that they had used heroin within the past year. Eighteen to 25 year olds reported a rate of 1.21%.

**Figure 22. Heroin use in the past year, by age group (percentage and approximate number in thousands): 2014–15**



Source: NSDUH, 2014–15

- According to NSDUH, in 2014–15, .58% of Mainers 12 and older reported that they had used heroin in the past year compared to .62% of those 18 and older. Overall, it was estimated that about 7,000 residents 12 and older reported using heroin in the past year. The highest rate of use was observed among 18 to 25 year olds (1.21%); this was followed by residents 26 and older (.54%), and 12 to 17 year olds (.17%). Trending data is unavailable at this time.

## Substance Use and Pregnancy

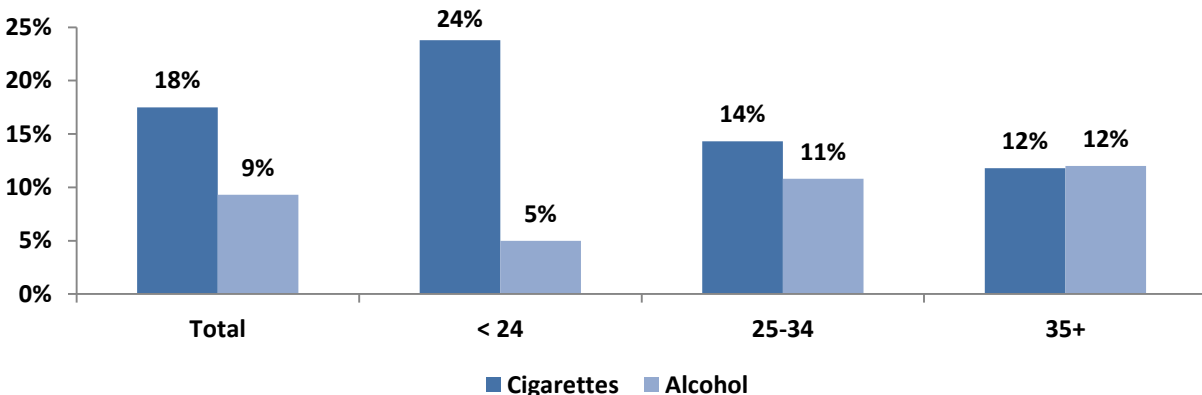
**Indicator Description: ALCOHOL AND CIGARETTE USE DURING THE LAST TRIMESTER.** This indicator reflects the percentage of mothers who reported smoking cigarettes or drinking any alcohol during the last three months of pregnancy.

**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 U.S. 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, 2012–14

**Summary:** In 2012–14, nearly one in five pregnant women reported smoking cigarettes in their last trimester, and about one in ten reported consuming any alcohol. Rates of cigarette use during the last trimester of pregnancy were highest among women 24 and younger (nearly one-quarter) while rates of alcohol consumption were highest among women 35 and older.

**Figure 23. Women reporting alcohol or cigarette use during last trimester of pregnancy, by age: 2012–14**



*Source: PRAMS, 2012–14*

- Eighteen percent of women reported smoking cigarettes during the last three months of pregnancy in 2012–14 compared to nine percent reporting having consumed any alcohol during their last trimester. Rates of cigarette use were highest among pregnant women 24 and younger (24%) and lowest among those 35 and older (12%). Conversely, rates of alcohol use were highest among pregnant women 35 and older (12%) and lowest among those 24 and younger (5%).

## Consequences Resulting from Substance Use and Abuse

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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.

Risky alcohol use continues to have a detrimental effect on the health and safety of Mainers, particularly among youth and young adults. Alcohol/drug-related crash fatalities are a major consequence of alcohol consumption. About one in three fatal motor vehicle crashes in 2016 involved alcohol/drugs. From 2012 to 2016, the total number of motor vehicle crashes has increased by 17 percent, while crashes involving impaired drivers increased by 12 percent. Twenty-five to 34 year olds experienced a 37 percent increase involving impaired driving crashes from 2015 to 2016. Additionally, 16 to 20 year olds observed a 25 percent increase in impaired crashes from 2013 to 2016. In recent years, there has been an uptick of alcohol-related overdose responses among Mainers 55 and older. Fortunately, liquor law violations among youth in Maine have been steadily decreasing over the past several years.

As for drug possession arrests, those related to opium, cocaine and derivatives increased by 85 percent from 2012 to 2015 while arrests for the possession of marijuana decreased by thirteen percent from 2014 to 2015. In 2015, nearly six out of ten drug offense arrests for possession were for marijuana. It is anticipated that the shifting landscape of Maine laws and regulations regarding the medicinal and recreation use of marijuana will continue to have a significant impact on drug possession arrests in Maine.

In recent years, consequences arising from synthetic opiates (*e.g.*, prescription narcotics) have declined as those related to opioids (*e.g.*, heroin, non-pharmaceutical fentanyl) have risen steadily. The shift to more potent and volatile opioids has had a profound impact on overdoses, crime, and health in Maine. Maine Drug Enforcement Agency trafficking investigations related to heroin have nearly doubled from 2014 to 2016. Overall, from 2013 to 2016, drug/medication overdose responses increased by 22 percent; this was primarily driven by Mainers 26 to 35.

Mainers under the age of 18 experienced a 20 percent decrease in EMS drug overdose responses from 2013 to 2016. Both the number of naloxone (Narcan) doses administered by EMS responders as well as the number of unique individuals receiving administrations increased substantially from 2012 to 2016. The highest rates of naloxone administrations given by EMS responders in 2016 were observed among 25 to 34 year olds. In 2016, nearly nine out of ten overdose deaths were related to illicit drugs and overdose deaths related to non-pharmaceutical fentanyl have nearly doubled each year since 2013. Illicit drug related deaths more than quadrupled from 2013 to 2015. In addition, the number of deaths related to heroin



or morphine nearly doubled from 2014 to 2015; the same is true for fentanyl. More specifically, in 2016, four out of five overdose deaths involved an opiate or opioid.

Substance use during pregnancy can cause a host of short-term and long-term developmental delays to the fetus and child. In 2016, over 1,000 live births in Maine had reports stating the infant had been exposed and/or affected by substances; this accounted for about eight percent of the live births in Maine. The number of reports to Child Protective Services regarding infants born affected by substance abuse or infants affected by prenatal exposure to substances has increased by 31 percent from 2012 to 2016. Furthermore, eight out of ten pregnant women in treatment for substance use listed an opioid/opiate as the primary reason for needing help.

Additionally, the number of MDEA manufacture investigations as well as the number of lab incidents related to methamphetamine more than doubled from 2014 to 2016. As Maine and the Northeast grapple with the opiate/opioid epidemic, it is crucial to monitor other emerging drugs as well. Drugs such as methamphetamine, cocaine, and other potentially addictive and dangerous prescription drugs (*e.g.*, benzodiazepines, stimulants) have had a progressively grave impact in Maine.

## Substance Exposed/Drug Affected Babies

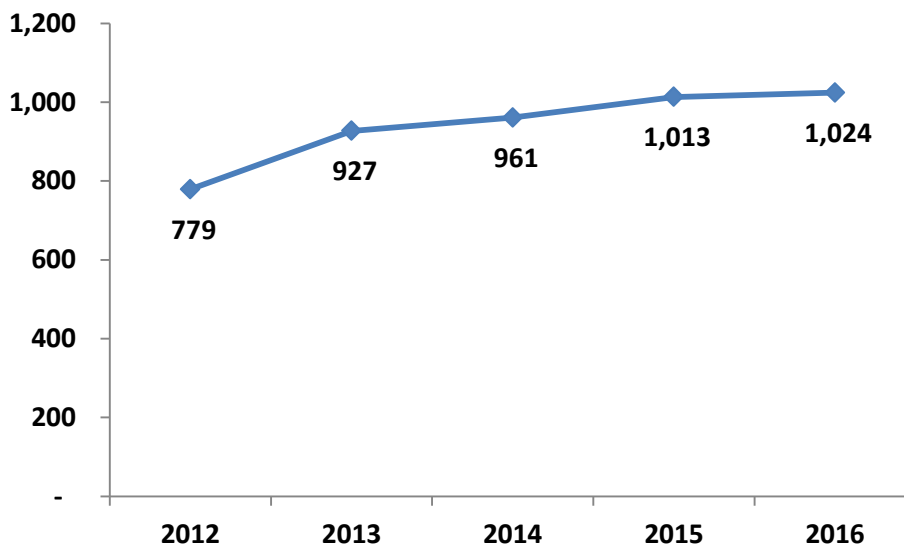
**Indicator Description: BABIES BORN EXPOSED/AFFECTED TO SUBSTANCES.** This indicator reflects the number of infants born in Maine where a healthcare provider reported to the Office of Child and Family Services (OCFS) that there was reasonable cause to suspect the baby may be either affected by illegal substance abuse, demonstrating withdrawal symptoms resulting from prenatal drug exposure (illicit or prescribed), or have fetal alcohol spectrum disorders. This measure potentially excludes instances where the infant was exposed to substances and did not show withdrawal symptoms after birth, instances where the birth of an infant affected by substances was not reported to OCFS, and any other instances in which there were discrepancies between reporters when interpreting the law.<sup>6</sup>

**Why Indicator is Important:** Prenatal exposure to alcohol, tobacco, and illicit drugs has the potential to cause a wide spectrum of physical, emotional, and developmental problems for these infants. The harm caused to the child can be significant and long-lasting, especially if the exposure is not detected and the effects are not treated as soon as possible.

**Data Source(s):** OCFS/MACWIS, 2012–2016

**Summary:** In 2016, there were 1,024 reports to Child Protective Services regarding infants born exposed to substances (drug affected babies). Since 2013, the number of drug affected baby reports have begun to stabilize. In 2016, eight percent of the live births in Maine had substance exposed reports.

**Figure 24. Number of drug affected (substance-exposed) baby reports: 2012–2016**

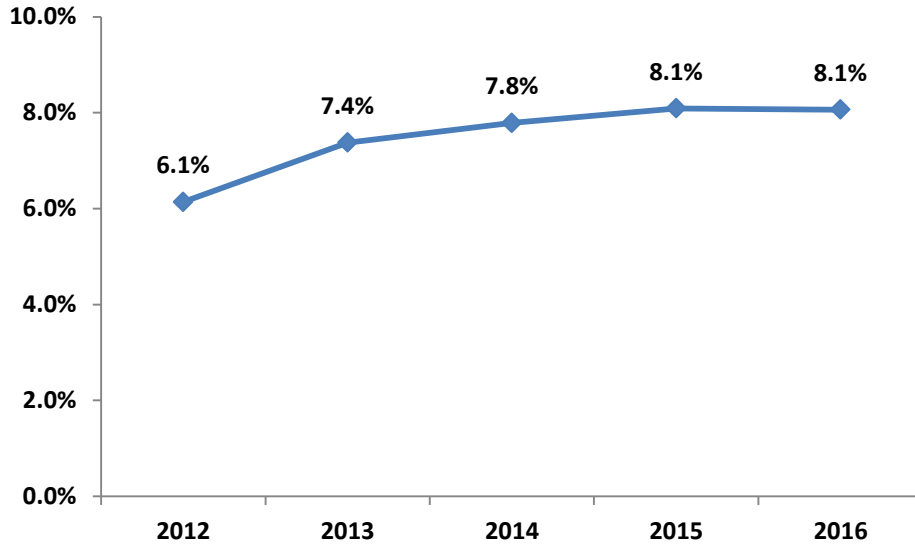


<sup>6</sup> Title 22, §4011-A; notification of prenatal exposure to drugs or having fetal alcohol spectrum disorders.

Source: OCFS/MACWIS, 2012–2016

- The number of reports to Child Protective Services regarding infants born affected by substance abuse or babies affected by prenatal exposure to substances increased from 2013 (927) to 2016 (1,024). This represents a 10 percent increase from 2013 to 2016.

**Figure 25. Proportion of live births with drug affected (substance exposed) reports: 2012–2016**



Source: OCFS/MACWIS, 2012–2016

- In 2016, eight percent of live births in Maine had reports stating the infant had been exposed and/or affected by substances; this represents an increase of two percentage points from 2012 to 2016.

## Criminal Justice Involvement

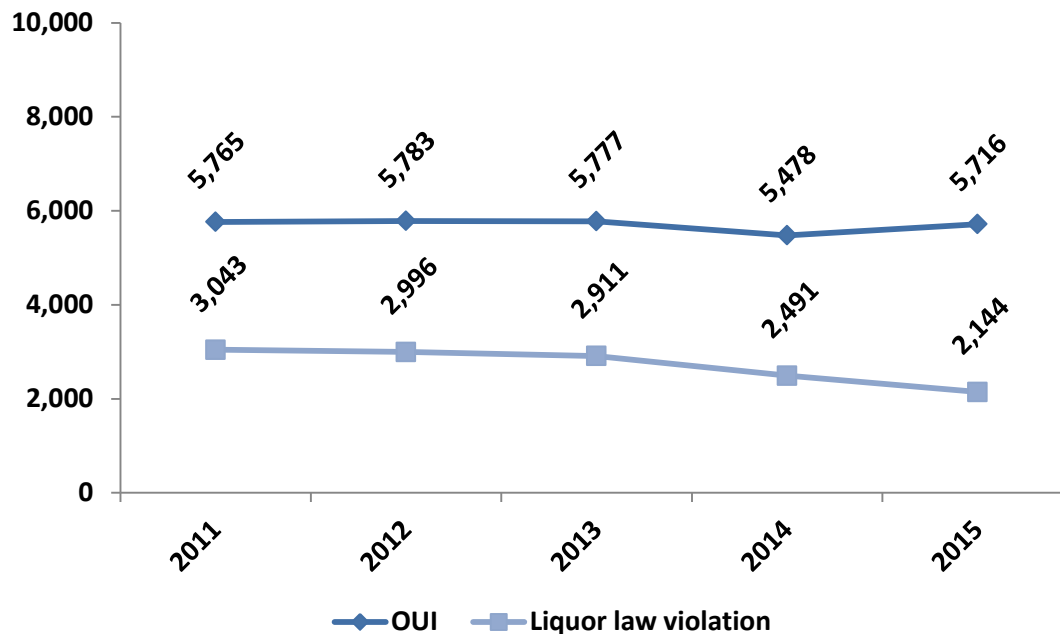
**Indicator Description: ARRESTS RELATED TO ALCOHOL.** This indicator reflects arrests related to alcohol and includes Operating Under the Influence (OUI) and liquor law violations. The data includes those who were released without having been formally charged.

**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.

**Data Source(s):** DPS-UCR, 2011–2015

**Summary:** The majority of adult arrests related to alcohol came from OUIs than from violations of liquor laws, whereas alcohol-related arrests among minors under 21 show the opposite pattern. In 2015, more than nine out of ten juvenile arrests involving alcohol were for violations of liquor laws whereas three out of four alcohol-related adult arrests involved operating under the influence (OUI). Juvenile (under 18) liquor law violations have decreased by more than a third from 2011 to 2015 while adult OUI arrests have remained relatively stable. Twenty one to 29 year olds continue to have the highest number of annual OUIs.

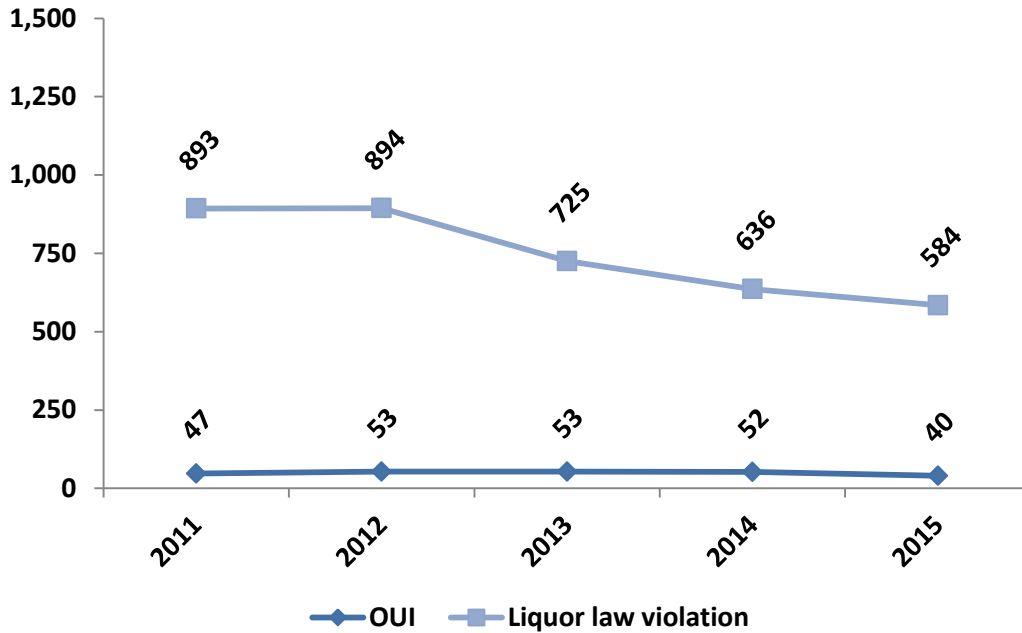
**Figure 26. Adult arrests (18+ years old) related to alcohol, by arrest type: 2011–2015**



Source: DPS-UCR, 2011–2015

- In 2015, there were 5,716 adult arrests for OUIs compared to 2,144 arrests for breaking liquor laws. The number of adult OUI arrests has remained relatively unchanged since 2011, while the number of adult liquor violations decreased by 30 percent.

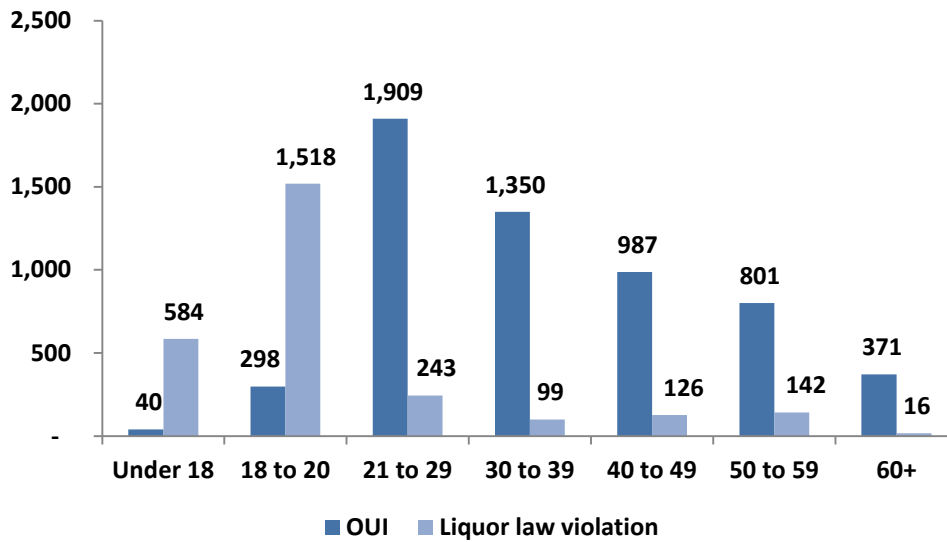
**Figure 27. Juvenile arrests (<18 years old) related to alcohol, by arrest type: 2011–2015**



Source: DPS-UCR, 2011–2015

- 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 2015, there were 584 juvenile arrests for breaking liquor laws and 40 for OUI arrests. Juvenile liquor law violations have decreased by 35 percent since 2010, whereas juvenile OUI arrests decreased by 24 percent since 2013.

**Figure 28. Arrests related to alcohol, by age group: 2015**



*Source: DPS-UCR, 2015*

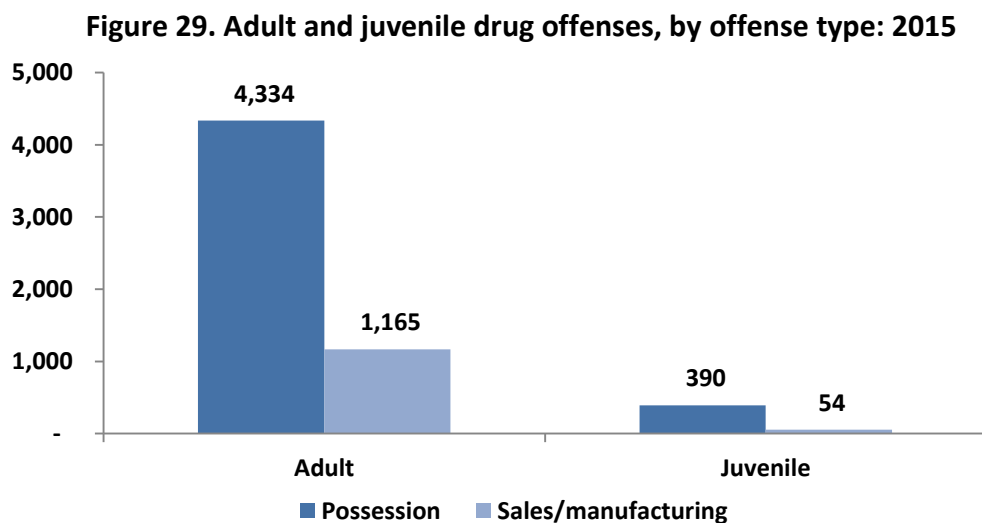
- As previously noted, the number of arrests related to OUI and liquor law violations differs among adults and juveniles. This pattern remains when comparing the number of arrests among those of legal drinking age to those who are under 21. In 2015, there were 584 liquor law violations for people under 18 and 1,518 for people between the ages of 18 to 20. This is compared to 243 liquor law violations for those between the ages of 21 and 29, and even fewer among older age groups.
- The opposite can be seen in OUI violations. In 2015, there were 40 arrests for those under the age of 18 and 298 for 18 to 20 year olds, compared to 1,909 OUIs for those between the ages of 21 and 29 (more than any other age group). The number of OUIs generally decreases across adulthood.

**Indicator Description: ARRESTS RELATED TO DRUGS.** This indicator reflects the number of arrests made by Maine law enforcement agencies 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, 2011–2015

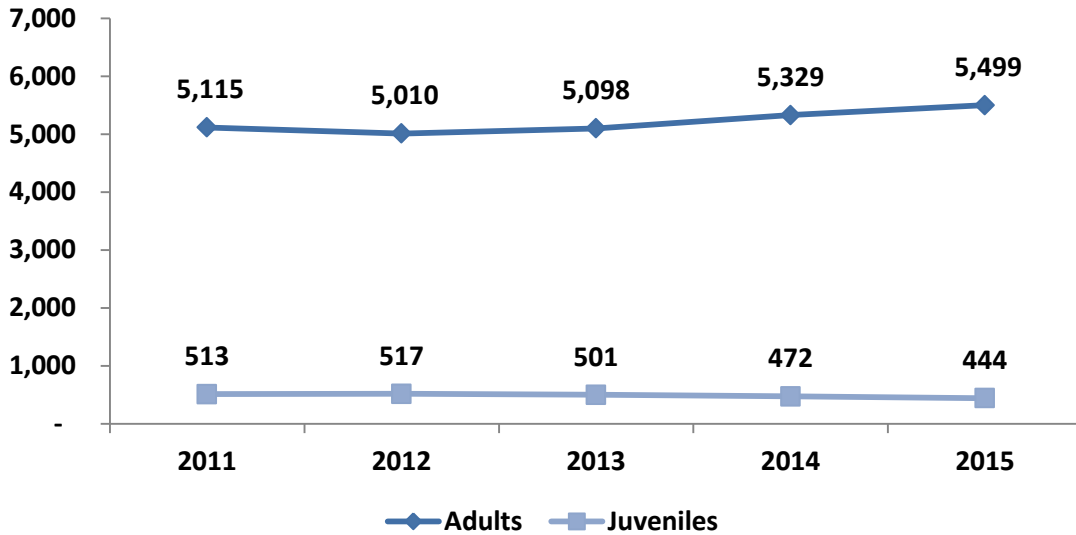
**Summary:** In 2015, nearly eight out of ten drug-related offenses were for possession rather than sale and manufacturing. From 2012 to 2015, adult arrests related to drugs have increased by ten percent, while juvenile arrests generally declined. In 2015, nearly six out of ten drug offense arrests for possession were for marijuana. Arrests for possession related to opium, cocaine and derivatives increased by 85 percent from 2012 to 2015. Lastly, although not explicitly shown, three out of four drug arrests (possession and sales/manufacturing) were male.



*Source: DPS-UCR, 2015*

- Most drug offenses in 2015 for both adults and juveniles were for possession (4,334 for adults, 390 for juveniles) rather than sales/manufacturing (1,165 for adults and 54 for juveniles). Most juvenile drug arrests involved possession violations (88%), while 12 percent were for sale/manufacturing. Similarly, nearly 80 percent of all adult drug arrests involved possession violations, while 21.2% were for sale or manufacturing of drugs.
- Although not shown, of the 5,943 total drug arrests; 4,339 were male and 1,604 were female. This means that approximately three out of four (73%) arrests related to drugs were among males.

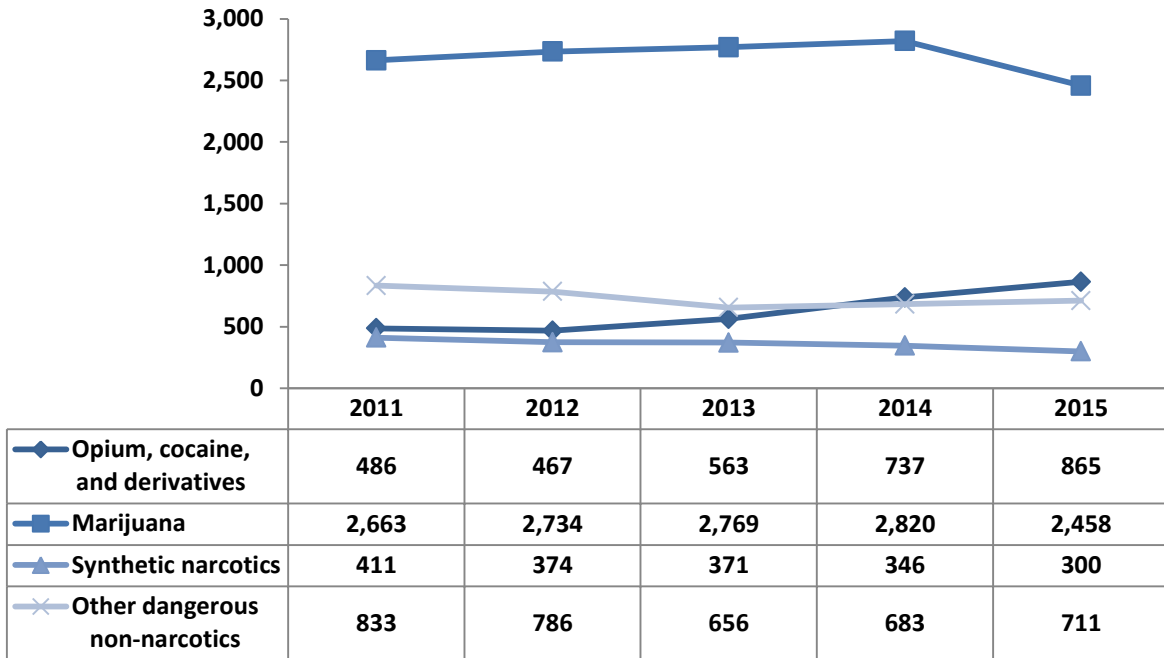
**Figure 30. Total drug offense arrests, by age group: 2011–2015**



Source: DPS-UCR, 2011–2015

- The number of drug arrests among adults has increased by ten percent from 5,010 in 2012 to 5,499 in 2015 while the number of juvenile arrests decreased by fourteen percent from 517 in 2012 to 444 in 2015.

**Figure 31. Local law enforcement drug offense arrests (all ages) for possession, by drug type: 2011–2015**



Source: DPS-UCR, 2011–2015



- In 2015, the majority of drug offense arrests were for possession, specifically for marijuana (2,458), followed by opium/cocaine derivatives (*e.g.*, morphine, heroin, codeine) at 865, other dangerous non-narcotics (*e.g.*, barbiturates, Benzedrine) at 711, and synthetic narcotics (*e.g.*, Demerol, methadone) at 300. Although not explicitly shown, of arrests related to the possession of drugs; 57 percent were related to marijuana, followed by opium/cocaine, and derivatives (20%), other dangerous non-narcotics (16%), and synthetic narcotics (7%).
- Notably, arrests for possession related to opium, cocaine and derivatives increased by 85 percent from 467 in 2012 to 865 in 2015. In addition, arrests for possession of marijuana decreased by thirteen percent from 2,820 in 2014 to 2,458 in 2015.

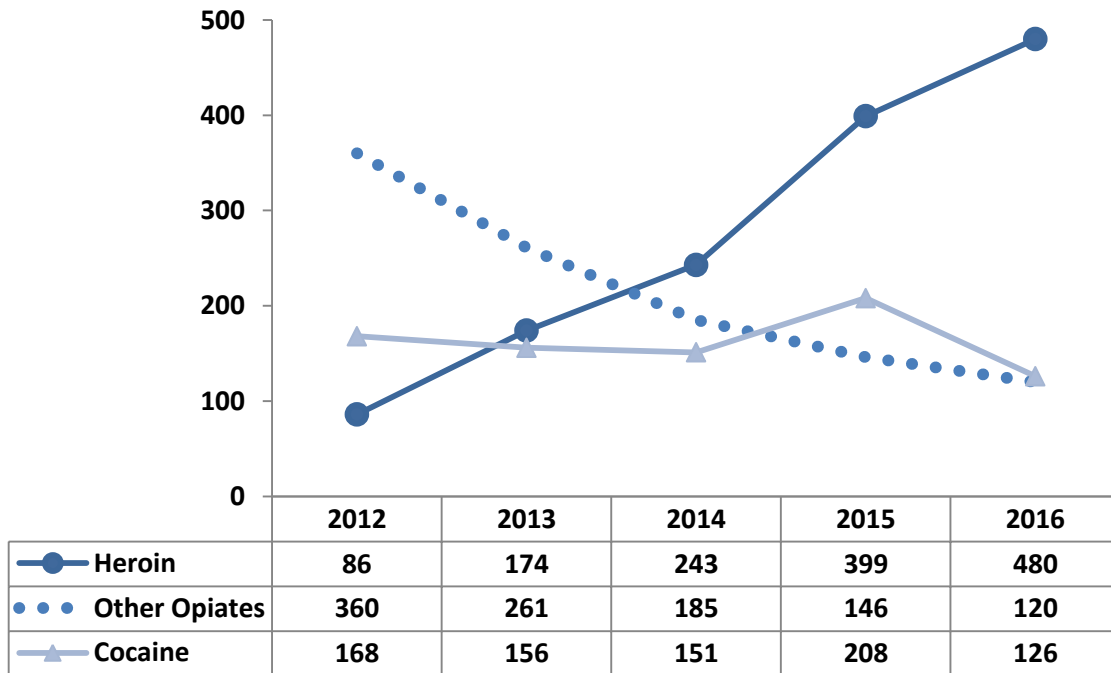
**Indicator Description: DRUG ENFORCEMENT AGENCY DRUG TRAFFICKING AND MANUFACTURING INVESTIGATIONS.** This indicator reflects trafficking investigations made by the Maine’s Drug Enforcement Agency (MDEA), by drug type. The MDEA through its regional multi-jurisdictional task forces is the lead state agency in confronting drug trafficking crime.

**Why Indicator is Important:** Drug investigation counts 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 investigations are expected to increase with increased enforcement regardless of whether criminal behavior changes.

**Data Source(s):** MDEA-UCR, 2012–2016

**Summary:** In 2016, the majority of MDEA trafficking investigations involved heroin and have nearly doubled since 2014. Trafficking investigations related to other opiates have decreased steadily over the past several years while those relating to cocaine have remained stable. In addition, MDEA manufacture investigations related to methamphetamine more than doubled from 2014 to 2016 while methamphetamine labs found by the MDEA more than doubled from 2015 to 2016.

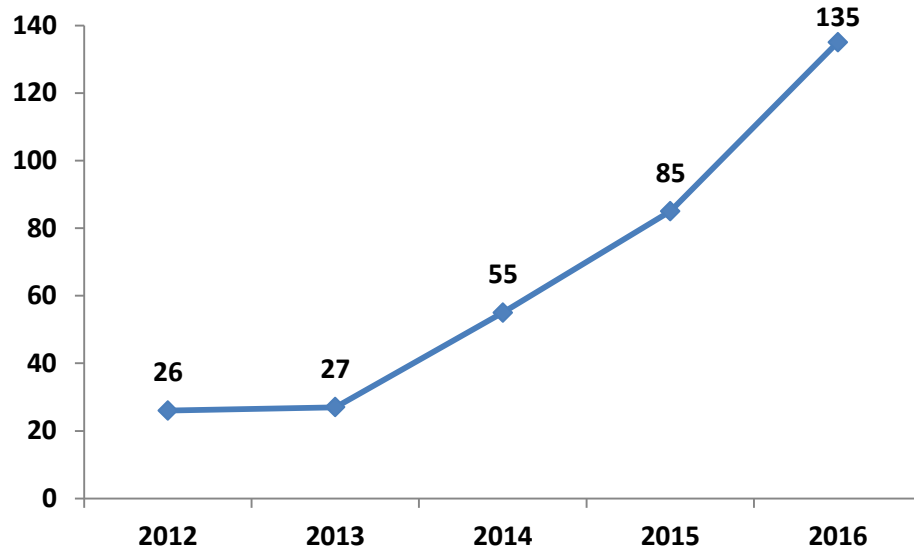
**Figure 32. MDEA drug trafficking investigations, by drug type: 2012–2016**



Source: MDEA, 2012–2016

- In 2016, there were 480 Maine DEA trafficking investigations related to heroin, followed by cocaine (126), and other opiates (120). Trafficking investigations related to heroin have increased by 20 percent since 2015 and 460 percent since 2012. In contrast, investigations related to other opiates have decreased by 18 percent from 2015 to 2016 and 67 percent since 2012. Also worth noting: trafficking investigations related to cocaine decreased by 39 percent from 2015 to 2016.

**Figure 33. MDEA methamphetamine manufacturing investigations: 2012–2016**



Source: MDEA, 2012–2016

- MDEA investigations related to the manufacturing of methamphetamine increased by 59 percent from 2015 (85 investigations) to 2016 (135 investigations).
- Although not shown, there were 126 methamphetamine labs/dumpsites found by the MDEA in 2016, representing a 125 percent increase since 2015 (56 labs/dumpsites).

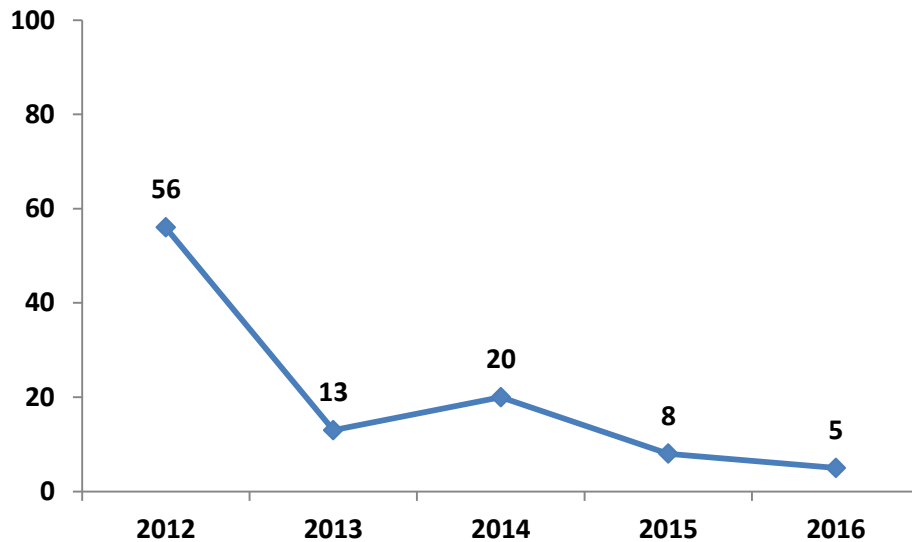
**Indicator Description: PHARMACY ROBBERIES.** This indicator reflects the number of pharmacy robberies in the state of Maine as tracked by the Maine Drug Enforcement Agency (MDEA).

**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, 2012–2016

**Summary:** In 2016, there were five reported pharmacy robberies in Maine compared to a high of 56 in 2012. Pharmacy robberies have steadily been decreasing for the past several years.

**Figure 34. Number of pharmacy robberies in Maine:  
2012–2016**



*Source: MDEA, 2012–2016*

- In 2016, there were five pharmacy robberies in Maine, representing a 91 percent decrease since 2012 (56 robberies).

## Motor Vehicle Crashes Involving Alcohol/Drugs

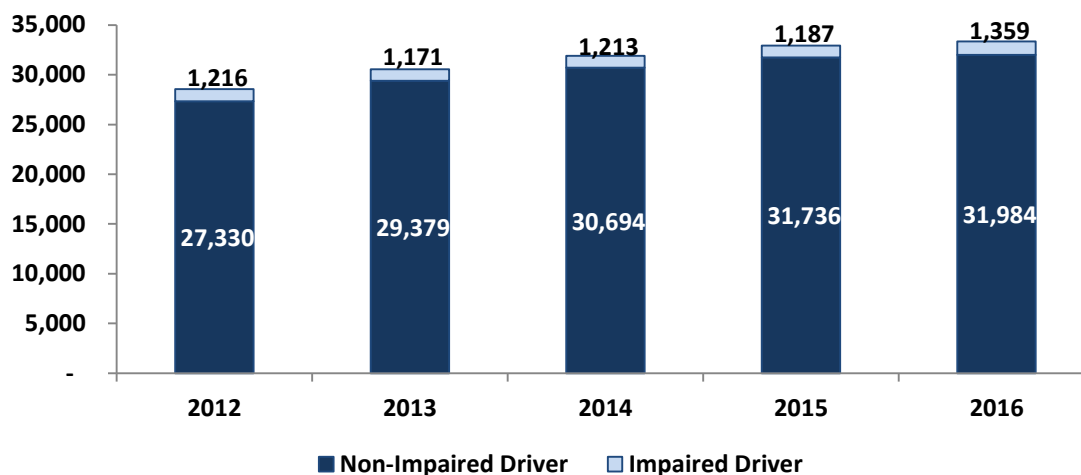
**Indicator Description: MOTOR VEHICLE CRASHES INVOLVING ALCOHOL AND/OR DRUGS.** This indicator shows the number of motor vehicle crashes in which alcohol was a factor, meaning at least one driver had consumed medication, drugs, or alcohol.

**Why Indicator is Important:** Motor vehicle crashes are the second leading cause of traumatic brain injury, with 29 percent of traumatic brain injuries occurring from motor vehicle crashes.<sup>7</sup>

**Data Source(s):** MDOT, BHS, 2012–2016

**Summary:** While the overall number of alcohol/drug-related motor vehicle crashes has increased by 12 percent from 2012 to 2016, the proportion of alcohol and or drug related motor vehicle crashes has remained relatively stable at four percent.

**Figure 35. Number of motor vehicle crashes, by whether they involved impaired drivers: 2012–2016**



Source: MDOT, BHS, 2012–2016

- The total number of motor vehicle crashes has increased by 17 percent from 2012 (28,546) to 2016 (33,343) while crashes involving impaired drivers increased by 12 percent from 2012 (1,216) to 2016 (1,359). The proportion of crashes related to alcohol and/or drugs has remained relatively stable at around four percent.

<sup>7</sup> 2006 Maine Injury Report, Maine Center for Disease Control, Injury Prevention Program. Retrieved on 7/15/2016 from <http://www.maine.gov/dhhs/mecdc/population-health/inj/documents/final08year3maine2006injuryreport.pdf>

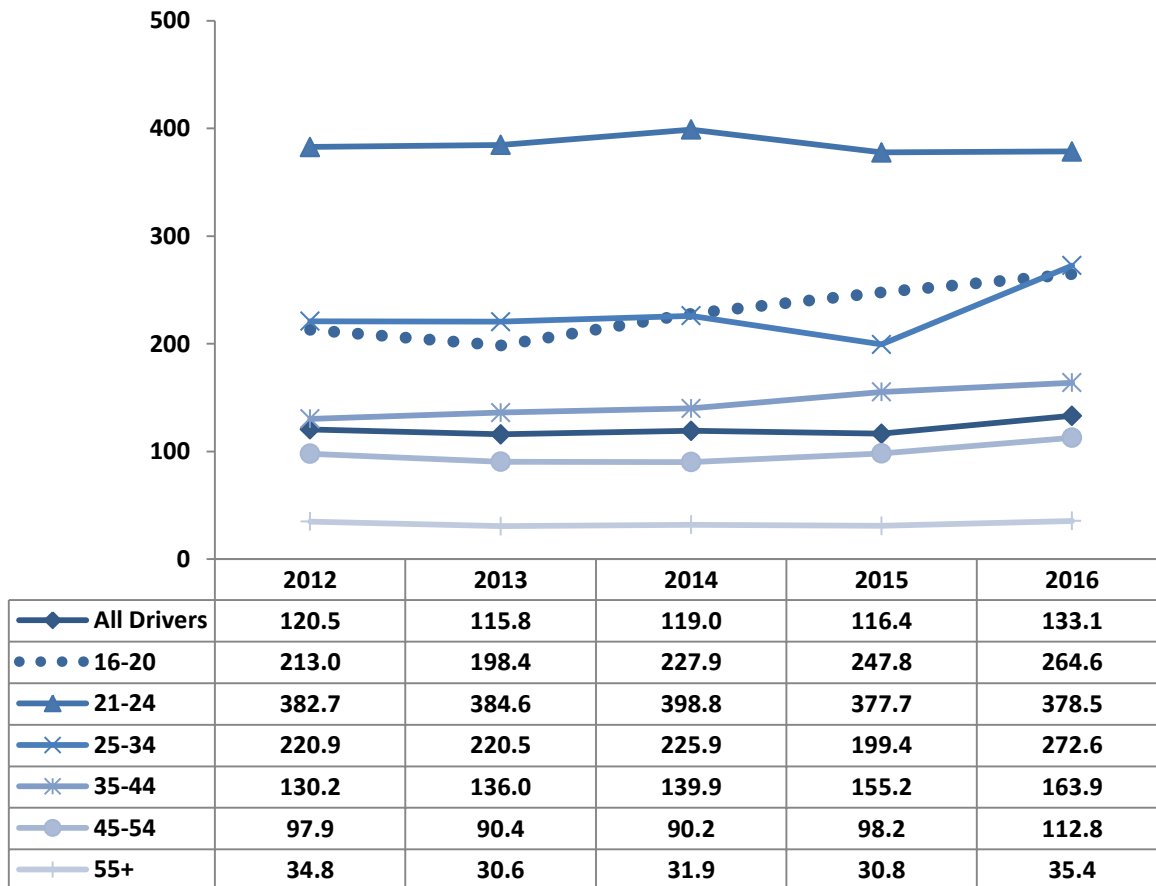
**Indicator Description: ALCOHOL/DRUG RELATED MOTOR VEHICLE CRASH RATE.** This indicator presents the number of motor vehicle crashes involving alcohol (drivers with a blood alcohol content of .08 or greater), relative to the licensed population. The rate per 100,000 allows us to see frequency with which 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:** Nearly one in four of all motor vehicle crashes resulting in fatalities involved alcohol and/or drugs.

**Data Source(s):** MDOT, BHS, 2012–2016

**Summary:** In 2016, drivers between the ages of 21 and 24 had the highest alcohol/drug-related crash rates, followed by drivers between the ages of 25 to 34. In recent years, 25 to 34 year olds as well as 16 to 20 year olds have observed increased rates involving impaired driving crashes.

**Figure 36. Alcohol/drug-related motor vehicle crash rate per 100,000 licensees, by age group: 2012–2016**



Source: MDOT, BHS, 2012–2016

- Maine drivers ages 21 to 24 had the highest alcohol-related crash rate in 2016 (378.5 per 100,000 licensees); rates among this age group have remained relatively stable for the past several years. In 2016, the second highest rates of alcohol/drug-related motor vehicle crashes were observed among drivers between the ages of 25 to 34 (272.6 per 100,000 licensees), followed closely by drivers ages 16 to 20 (264.6 per 100,000 licensees). Both the 16 to 20 year olds as well as the 25 to 34 year olds observed increased impaired crash rates within the past few years.
- Although not explicitly shown, impaired driving crashes increased overall by 14 percent from 2015 (1,187) to 2016 (1,359). Twenty-five to 34 year olds experienced a 37 percent increase involving impaired driving crashes from 2015 (308) to 2016 (422). Additionally, 16 to 20 year olds observed a 25 percent increase in impaired crashes from 2013 (100) to 2016 (125).

**Indicator Description: NUMBER OF FATAL MOTOR VEHICLE CRASHES INVOLVING ALCOHOL/DRUGS.**

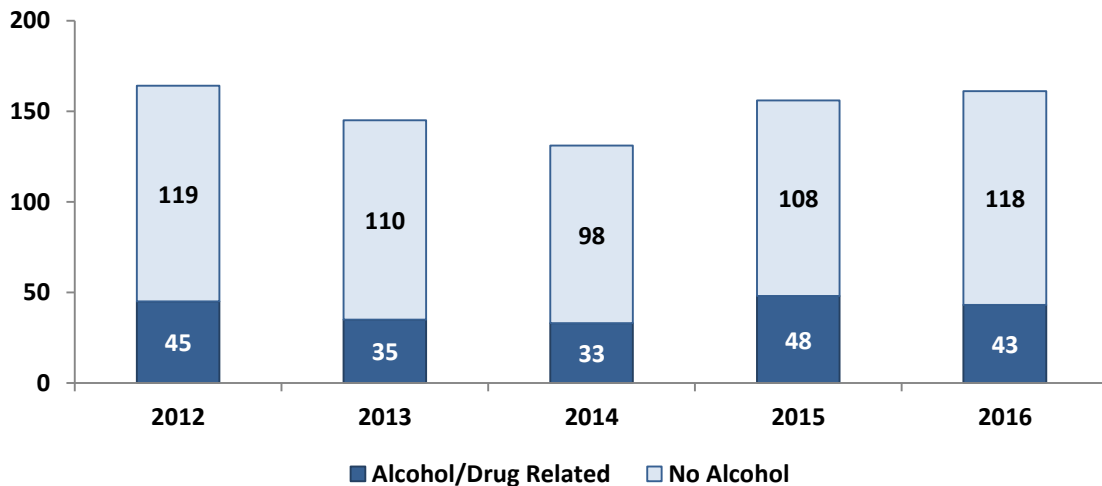
This indicator presents the number of fatal motor vehicle crashes where alcohol was a factor in the crash. This means that at least one driver had a blood alcohol content (BAC) of .08 or greater. This indicator includes total fatalities of anyone (e.g., pedestrian, passenger) involved in the crash. It is important to note that small fluctuations from year to year do not indicate overall trends.

**Why Indicator is Important:** Alcohol/drug related crash fatalities are a major consequence of alcohol consumption. Although alcohol/drugs were involved in only four percent of all crashes, about one in four fatal motor vehicle crashes in 2016 involved alcohol/drugs.

**Data Source(s):** MDOT, BHS, 2012–2016

**Summary:** In 2016, more than one in four (27%) fatal motor vehicle crashes involved alcohol and/or drugs.

**Figure 37. Number of fatal motor vehicle crashes, by whether they involved alcohol and/or drugs: 2012–2016**



Source: MDOT, BHS, 2012–2016

- Although alcohol was involved in about four percent of the motor vehicle crashes overall, it involved 27 percent of the fatal crashes in 2016 (43 out of 161 total fatal crashes). This proportion decreased by four percentage points from 2015 to 2016 (from 31%).



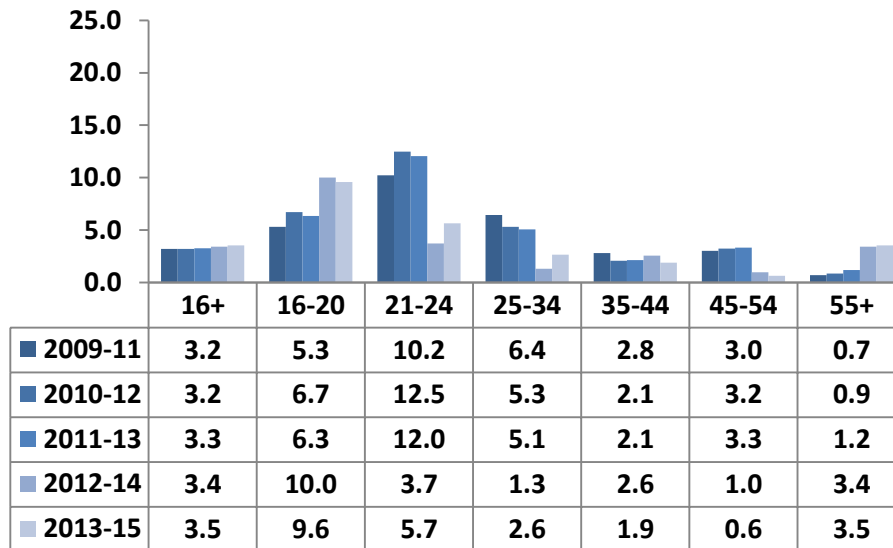
**Indicator Description: ALCOHOL/DRUG RELATED MOTOR VEHICLE CRASH FATALITY RATE.** This indicator presents the number of fatalities resulting from motor vehicle crash fatalities that involved alcohol (drivers with a blood alcohol content of .08 or greater) and/or drugs, relative to the licensed population. 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.

**Why Indicator is Important:** Nearly one in four of all motor vehicle crashes resulting in fatalities involve alcohol and/or drugs.

Data Source(s): MDOT/BHS, 2009–11 to 2013–15

**Summary:** In 2013-15, the rates of alcohol/drug-related motor vehicle crash fatalities were highest among 16 to 20 year olds, followed by 21 to 24 year olds. In recent periods, higher rates of alcohol/drug related fatalities have shifted from the age group of 21 to 24 year olds to those between the ages of 16 and 20.

**Figure 38. Alcohol/drug related motor vehicle crash fatality rate per 100,000 licensees, by age: 2009–11 to 2013–15**



Source: MDOT, 2009–11 to 2013–15

- In 2013–15, the highest rate of fatalities from alcohol/drug-related motor vehicle crashes was among drivers ages 16 to 20 (9.6 per 100,000 licensees). Rates among this age group have notably increased since 2009–11 (5.3 per 100,000 licensees).
- The second highest rate in 2012–14 was among 21 to 24 year olds with 5.7 alcohol/drug-related motor vehicle fatalities per 100,00 licensees, representing a substantial decrease from 2009–11 (10.2 per 100,00 licensees).

## Overdoses and Related Deaths

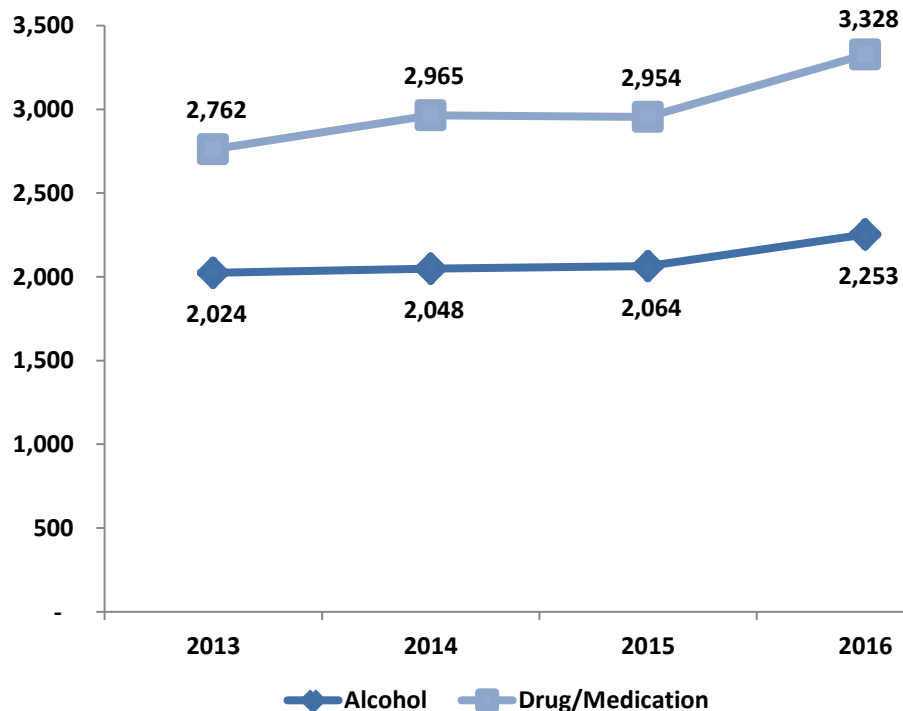
**Indicator Description: EMS OVERDOSES.** This indicator shows the number of persons receiving help from Emergency Medical Services (EMS) related to an overdose from 2012 to 2015.

**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. Naloxone, also known as Narcan, is a medication administered to counter the effects of an overdose due to opioids.

**Data Source(s):** Emergency Medical Services, 2013–2016

**Summary:** Responses related to drugs and/or alcohol have been gradually increasing for the past several years. From 2013 to 2016, drug/medication overdoses increased by twenty percent. Mainer between 26 and 35 observed an increase of 57 percent in overdose responses related to drugs/medication from 2013 to 2016. In recent years, there has been an uptick of alcohol related overdose responses among Mainers 55 and older.

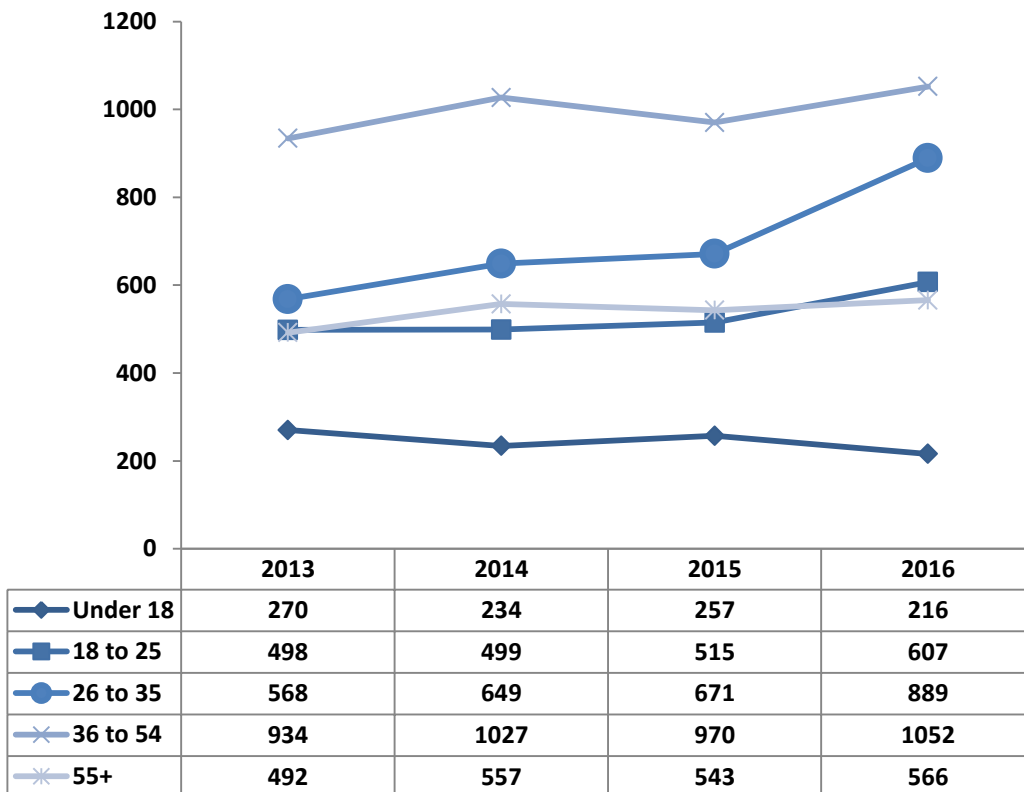
**Figure 39. Number of overdose EMS responses, by type: 2013–2016**



Source: EMS, 2013–2016

- In 2016, Emergency Medical Services responded to 3,328 individuals experiencing a drug/medication overdose; this represents a twenty percent increase since 2013 (2,762). An eleven percent increase was evidenced in EMS overdose responses related to alcohol between 2013 (2,024) and 2016 (2,253).

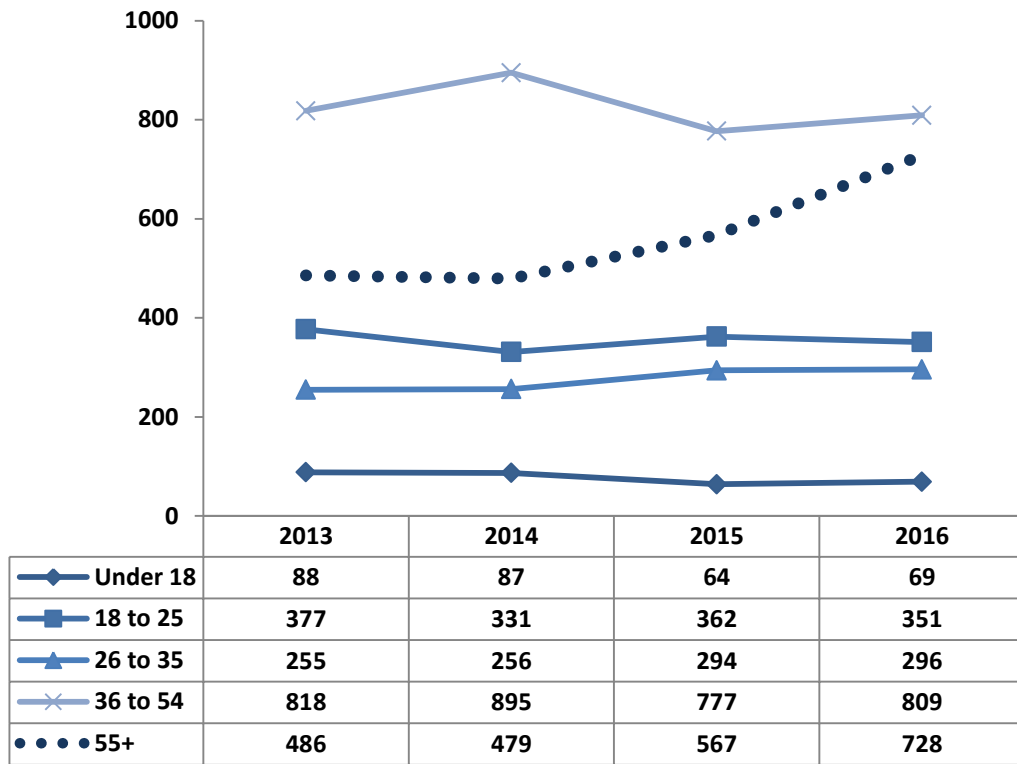
**Figure 40. Number of overdose EMS responses related to drugs or medication, by age group: 2013–2016**



Source: EMS, 2013–2016

- In 2016, there were 1,052 drug/medication EMS overdose responses among Mainers 36 to 54 years of age, followed by 26 to 34 year olds (889), 18 to 25 year olds (607), and those 55 and older (566).
- Overall, from 2013 to 2016, drug/medication overdose responses increased by 22 percent; this was led by Mainers 26 to 35 observing an increase of 57 percent, followed by 18 to 25 year olds (22%), and those 55 and older (15%). Mainers under the age of 18 experienced a 20 percent decrease from 2013 to 2016.

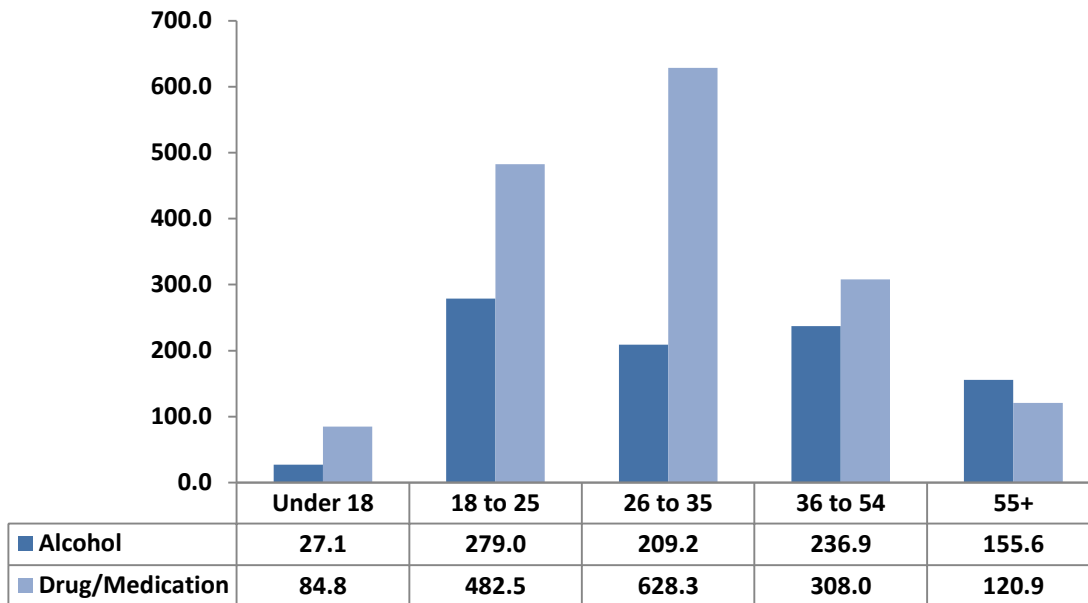
**Figure 41. Number of overdose EMS responses related to alcohol, by age group: 2013–2016**



Source: EMS, 2013–2016

- In 2016, the majority of EMS responses related to an overdose involving alcohol were among Mainers between the ages of 36 and 54 (809), this was followed by those 55 and older (728), 18 to 25 year olds (351), 26 to 35 year olds (296), and those under age of 18 (69). Alcohol related overdose responses among Mainers 55 and older increased by 52 percent from 2014 (479) to 2016 (728).

**Figure 42. EMS overdose response rate (per 100,000 residents), by age and overdose type: 2016**



Source: EMS, 2016

- In 2016, the highest rate of EMS responses due to medication and/or drug overdoses occurred among Mainers 26 to 35 years old (628.3 per 100,000) followed by 18 to 25 year olds (482.5 per 100,000).
- As for EMS overdose responses related to alcohol, although 36 to 54 year olds made up the greatest proportion, rates based on population were actually highest among 18 to 25 year olds (279 per 100,000), followed by 36 to 54 year olds (236.9 per 100,000).

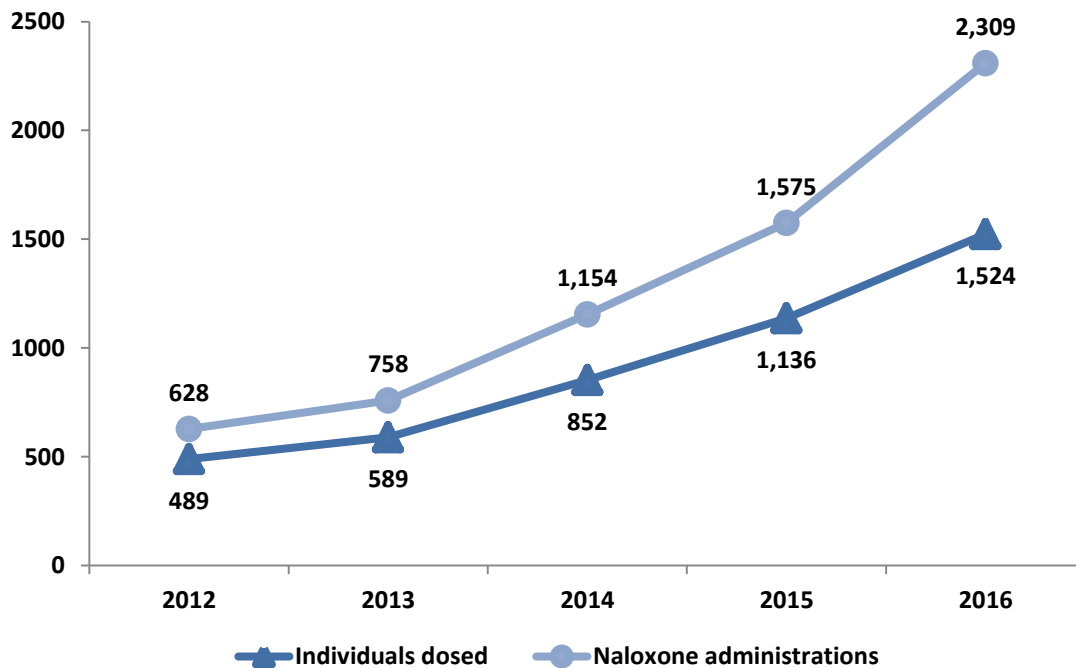
**Indicator Description: NALOXONE ADMINISTRATIONS.** This indicator shows the number of naloxone administrations and the number of individuals receiving doses from Emergency Medical Services (EMS) related to an opioid overdose. Naloxone is a medication administered to patients who have experienced an overdose related to an opioid (e.g., prescription painkillers, heroin, or morphine).

**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. Furthermore, this indicator provides a sense of the prevalence of all opioid overdoses including those that did not result in death.

**Data Source(s):** Emergency Medical Services, 2012–2016

**Summary:** From 2014 to 2016, the number of naloxone administrations given by EMS responders more than doubled. Rates are disproportionately highest among males 26 to 34 years old.

**Figure 43. Number of EMS naloxone\* administrations and individuals dosed\*\*:** 2012–2016



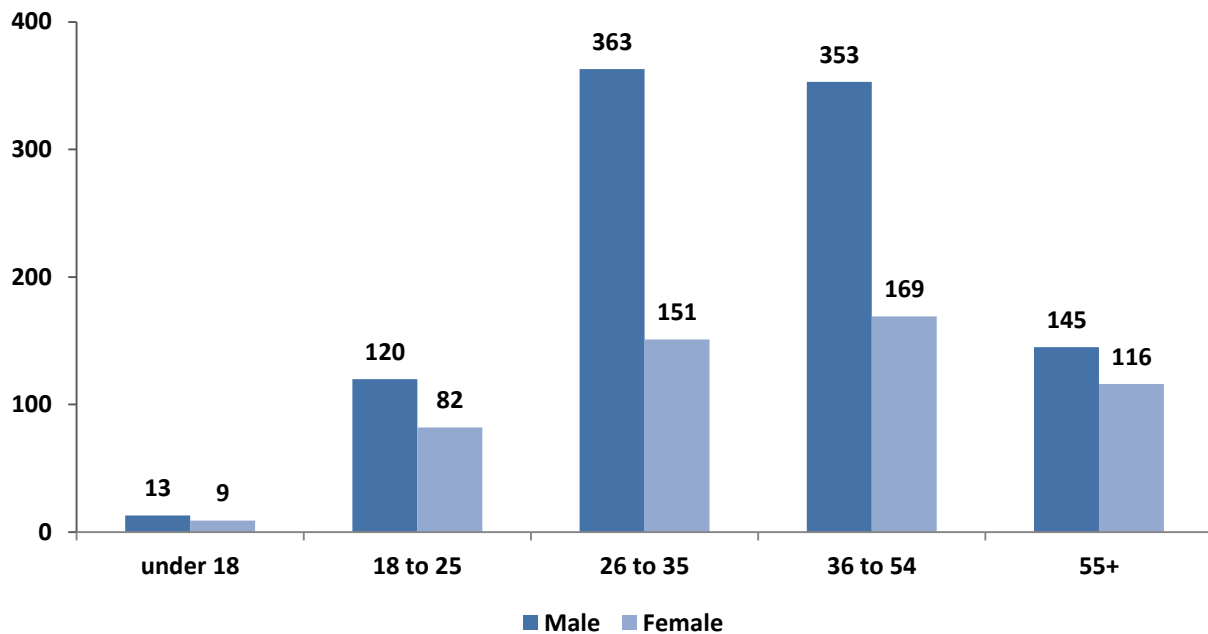
Source: EMS, 2012–2016

\*Naloxone, also known as Narcan, is a medication administered to counter the effects of an overdose due to opioids.

\*\*Some individuals may have received multiple administrations/doses of naloxone.

- In 2016, there were a total of 2,309 naloxone administrations given by emergency medical responders to 1,524 unique individuals. Both the number of naloxone doses administered by EMS responders as well as the number of unique individuals receiving administrations increased substantially from 2012 to 2016. From 2012 to 2016, the number of naloxone administrations increased by 268 percent, while the number of individuals receiving naloxone from EMS responders increased by 213 percent.

**Figure 44. Individuals receiving EMS naloxone administrations, by gender and age: 2016**

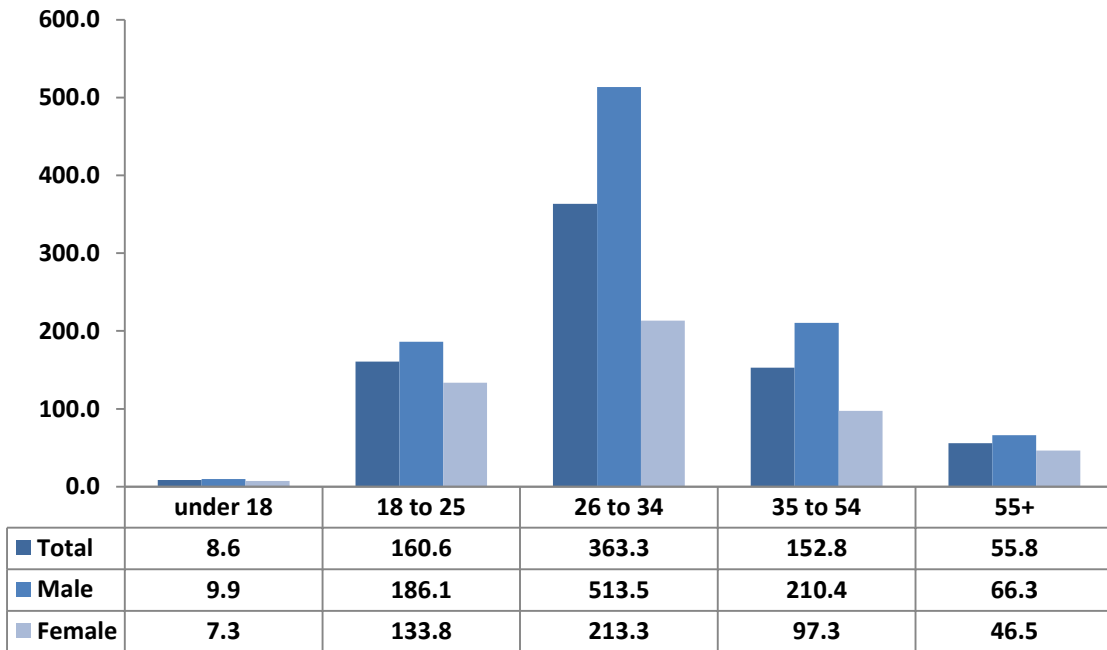


Source: EMS, 2016

\*Naloxone is a medication administered to counter the effects of an overdose due to opioids.

- In 2016, out of 1,521 individuals (with known ages) receiving naloxone administrations from EMS responders, 994 (65%) were male and 527 (35%) were female. In 2016, most EMS responder naloxone administrations were given to males 26 to 35 years of age (363) and males ages 36 to 54 (353). Among females, doses were most commonly administered to those between the ages of 36 and 54 (169) and individuals 26 to 35 (151).

**Figure 45. EMS Naloxone\* administrations rate (per 100,000 residents), by gender and age: 2016**



Source: EMS, 2016

\*Naloxone, also known as Narcan, is a medication administered to counter the effects of an overdose due to opioids.

- In 2016, the highest rates of individuals receiving naloxone administrations given by EMS responders were observed among the 25 to 34 year old population. In total, the 25 to 34 year old population had a rate of 363.3 naloxone administrations per 100,000, of which males observed disproportionately high rates compared to females (513.5 per 100,000 compared to 213.3 per 100,000).



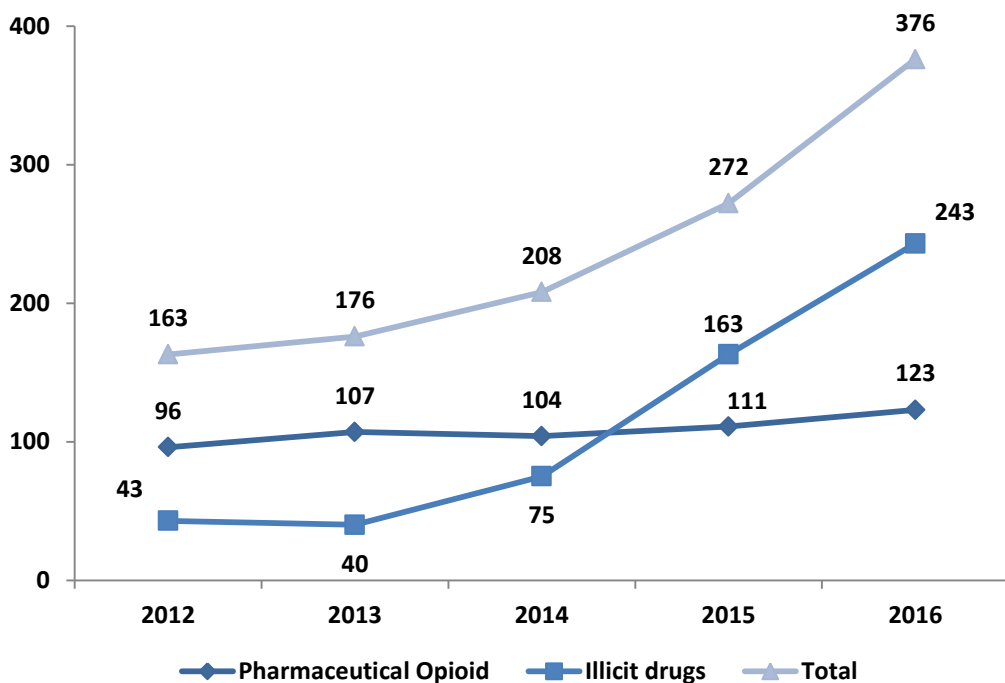
**Indicator Description: DEATHS DUE TO OVERDOSE.** This measure reflects the number of deaths where the cause of death was directly related to the consumption of one or more substances. This excludes deaths where a substance may have been ingested prior to engaging in a behavior that resulted in death (e.g., drunk driving) or where lifetime substance use and abuse may have impacted health (e.g., cirrhosis). Pharmaceutical opioids are drugs used in medical treatment; illicit drugs are those illegally produced and sold outside of medical channels. This analysis includes Maine decedents as well as non-residents that died from an overdose while in Maine.

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

**Data Source(s):** Office of Chief Medical Examiner/Marcella Sorg<sup>8</sup>, 2012–2016

**Summary:** In 2016, there were a total of 376 overdose deaths due to substance use in Maine, representing a 38 percent increase since 2015. In 2016, nearly nine out ten overdose deaths were related to illicit drugs.

**Figure 46. Number of deaths\* caused by pharmaceuticals and/or illicit drugs: 2012–2016**



Source: Marcella Sorg/Office of the Chief Medical Examiner, 2012–2016

\*Deaths involving pharmaceuticals and illicit drugs are not mutually exclusive.

<sup>8</sup> Sorg, Marcella H. Margaret Chase Smith Policy Center, University of Maine.

- The overall number of overdose deaths increased from 272 in 2015 to 376 in 2016; representing a 38 percent increase. In 2016, 123 overdose deaths (33%) were related to pharmaceutical opioids while 243 overdose deaths (88%) were related to illicit drugs. The number of overdose deaths related to illicit drugs saw a 500 percent increase from 2013 (40) to 2016 (243) while those related to pharmaceutical opioids have remained relatively stable.

**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 overdose deaths associated with certain types of substances. Note that more than one substance can be determined as contributing to death.

**Why Indicator is Important:** One of the most extreme consequences of alcohol and drug abuse is overdose death, where the substance(s) play a direct role in an individual's death. These are seen as potentially preventable deaths. In addition, some substances are more lethal than others.

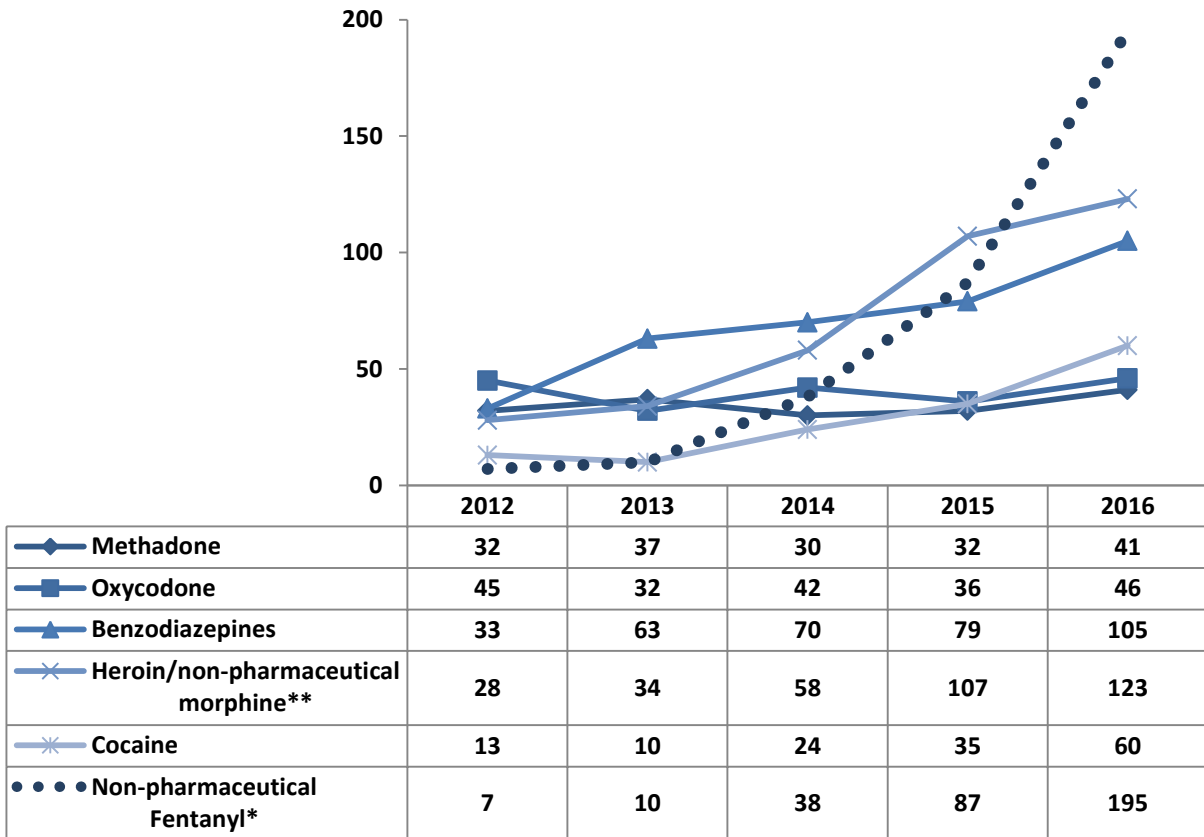
**Data Source(s):** Office of Chief Medical Examiner/Marcella Sorg,<sup>9</sup> 2012–2016

**Summary:** In 2016, four out of five overdose deaths involved an opiate or opioid. Non-pharmaceutical fentanyl was present in over half of the drug related overdose deaths, one third involved heroin/morphine, and nearly one third were related to benzodiazepines. In addition, cocaine was found in one out of seven drug overdose deaths. Furthermore, overdose deaths related to non-pharmaceutical fentanyl have nearly doubled each year since 2013.

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<sup>9</sup> Sorg, Marcella H. Margaret Chase Smith Policy Center, University of Maine.

**Figure 47. Number of drug deaths involving specific drug types†: 2012–2016**



Source: Marcella Sorg/OCME, 2012–2016

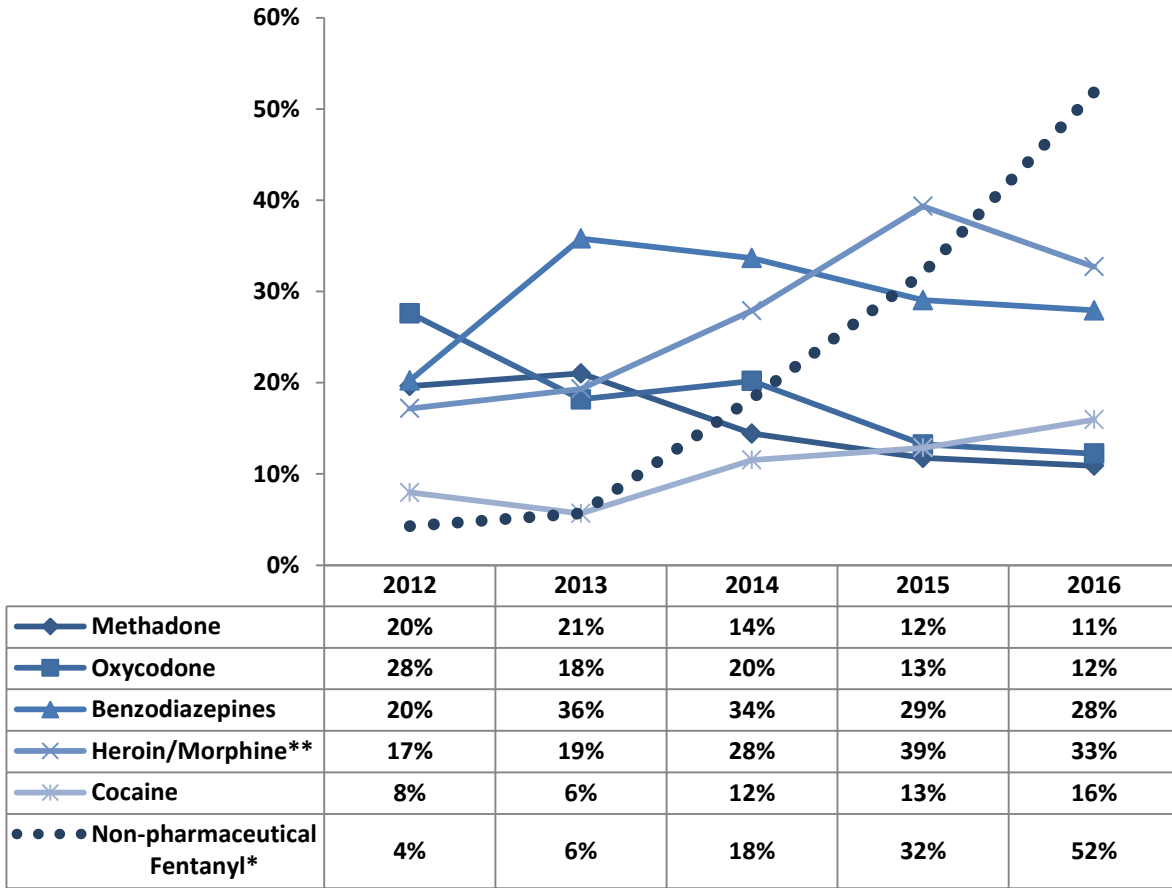
†Some deaths may be caused by more than one key drug.

\*\*Deaths caused by known pharmaceutical morphine removed from total.

\*include acetyl fentanyl but excludes pharmaceutical fentanyl (e.g., fentanyl patches).

- Although not explicitly shown, opiates/opioids were involved with 84 percent of the drug related deaths in 2016. All drugs included in the chart above observed increases in overdose deaths from 2015 to 2016. In 2016, heroin/morphine contributed to 123 overdose deaths, representing a 15 percent increase since 2015.
- In 2016, Non-pharmaceutical fentanyl was a factor in 195 overdose deaths compared to 87 overdose deaths in 2015, representing a 124 percent increase. Non-pharmaceutical deaths have nearly doubled each for the past four years. According to an analysis conducted by Dr. Sorg from the Margaret Chase Smith Policy Center, non-pharmaceutical fentanyl is being sold on the streets as white powder sometimes pressed into pill form.
- Benzodiazepines were involved in 105 overdose deaths in 2016; this was a 33 percent increase from 2015 (79). Furthermore, cocaine related overdose deaths observed a 71 percent increase from 2015 (35) to 2016 (60).

**Figure 48. Percent of drug deaths involving specific drug types†: 2012–2016**



Source: OCME/Dr. Marcella Sorg, 2012-2016

†Some deaths may be caused by more than one key drug.

\*\*Deaths caused by known pharmaceutical morphine removed from total.

\* include acetyl fentanyl but excludes pharmaceutical fentanyl (e.g., fentanyl patches).

- In 2016, over half (52%) of drug related overdose deaths involved non-pharmaceutical fentanyl; this was followed by heroin/non-pharmaceutical (33%), benzodiazepines (28%), and cocaine (16%). In recent years, the proportions of prescription drug related overdose deaths (e.g., oxycodone, benzodiazepines, etc.) have decreased.
- According to an analysis conducted by Dr. Sorg from the Margaret Chase Smith Policy Center, benzodiazepines have been involved as a co-intoxicant in about a third of drug deaths since 2009, usually when the primary cause of death is an opiate. Although not shown here, benzodiazepines are often mentioned as a secondary problem for people admitted for opiate addiction treatment.

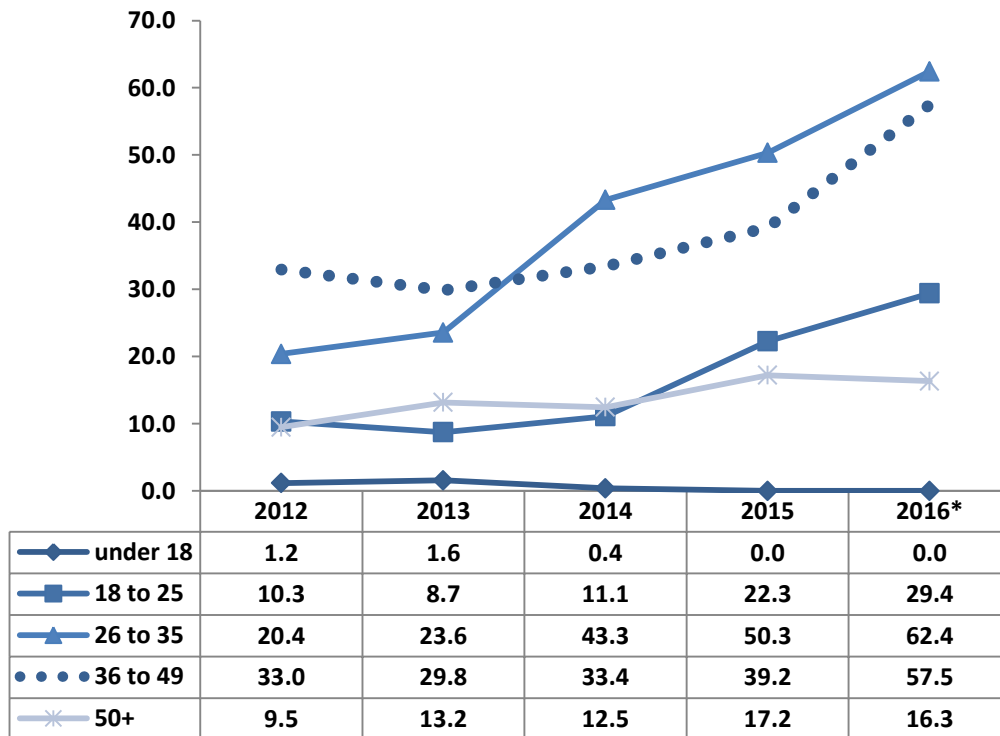
**Indicator Description: RATE OF DEATHS DUE TO SUBSTANCE ABUSE.** This measure estimates the rate of deaths due to substance abuse or overdose per 100,000 people. Unlike deaths data based on the medical examiner data; this analysis is based on death certificate data and therefore only captures deaths of Maine residents. 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):** DRVS, 2012–2016\*

**Summary:** Adults between the ages of 26 and 35 had the highest rate of deaths due to substance abuse or overdose during 2016, followed closely by 36 to 49 year olds. Substance abuse and overdose death rates among age groups between 18 and 35 have been steadily increasing for the past several years.

**Figure 49. Substance abuse and overdose deaths, per 100,000, by age group: 2012–2016\***



Source: DRVS, 2012–2016\*

\*2016 results are preliminary

- At 62.4 deaths per 100,000, people between the ages of 26 to 35 had the highest rate of deaths due to substance abuse or overdose during 2016. The second highest rate was among people between the ages of 36 to 49 years old at 57.5 per 100,000.

- From 2015 to 2016, death due to substance use or overdose increased by 47 percent among 36 to 49 year olds, 32 percent among 18 to 25 year olds, and 24 percent among 26 to 35 year olds.

## Morbidity and Mortality

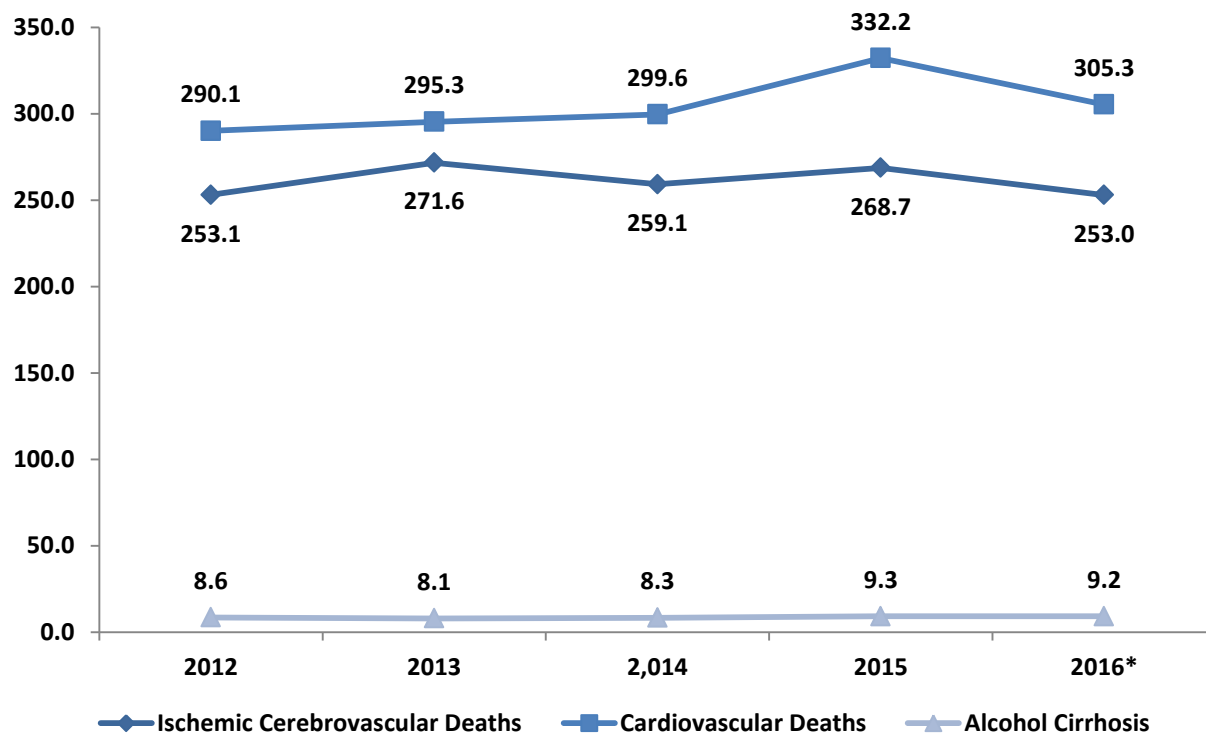
**Indicator Description: RATES OF DEATH FROM CHRONIC CONDITIONS ASSOCIATED WITH SUBSTANCE USE.** Every death in Maine has a recorded cause. This indicator examines the rate of chronic diseases commonly associated with substance use, including ischemic cerebrovascular diseases (commonly known as stroke), cardiovascular diseases, and alcohol-related liver diseases. The rates show all cases where the disease/condition was identified as a factor in the death (either in primary cause or contributing cause). 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):** DRVS, 2012–2016\*

**Summary:** In 2016, cardiovascular diseases and alcoholic cirrhosis were more prevalent among Mainers than Ischemic cerebrovascular (stroke) diseases. Deaths related to alcoholic cirrhosis were nearly twice as likely among men as women. Rates have remained relatively stable over the past several years.

**Figure 50. Deaths from chronic diseases related to substance use, per 100,000 of the population: 2012–2016\***



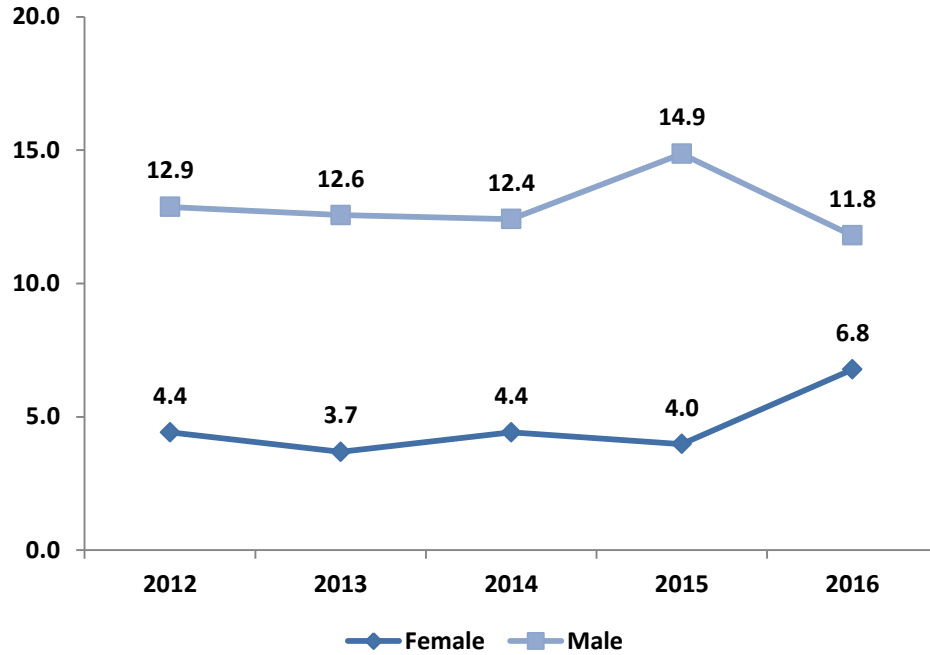
Source: DRVS, 2012–2016

\*2016 results are preliminary



- At 305.3 deaths per 100,000, cardiovascular diseases were more prevalent among Mainers in 2016 than ischemic cerebrovascular diseases (253) and alcoholic cirrhosis (9.2). Rates of death from ischemic cerebrovascular disease, cardiovascular disease, and alcoholic cirrhosis have remained relatively stable for the past several years.

**Figure 51. Deaths from alcoholic cirrhosis and liver disease per 100,000 of the population, by gender: 2012–2016\***



Source: DRVS, 2012–2016\*

\*2016 results are preliminary

- In 2016, deaths related to alcoholic cirrhosis and liver diseases were nearly twice as likely among men (11.8 deaths per 100,000) than women (6.8 deaths per 100,000). Notably, the rate of deaths related to alcoholic cirrhosis among women increased by nearly 70 percent from 2015 to 2016.

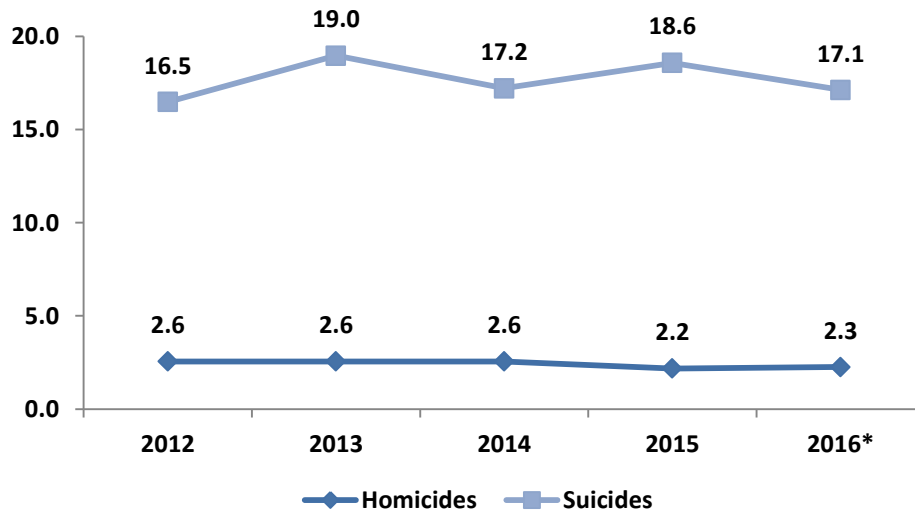
**Indicator Description: RATE OF VIOLENT DEATHS.** Every death in Maine has a recorded cause. This indicator examines deaths that were the result of violence, *i.e.*, those classified as a suicide or homicide. In this case, a rate per 100,000 of the state population is used to compare the prevalence 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):** DRVS, 2012–2016\*

**Summary:** In Maine, suicide rates are nearly nine times higher than homicide rates; rates have remained stable over the past several years. Suicides are more than four times as likely among men compared to women, and most prevalent among adults 36 and 49. Deaths due to homicide are almost twice as likely among men; rates are highest among younger adults between the ages of 26 to 35.

**Figure 52. Deaths from suicide or homicide per 100,000 of the population: 2012–2016\***

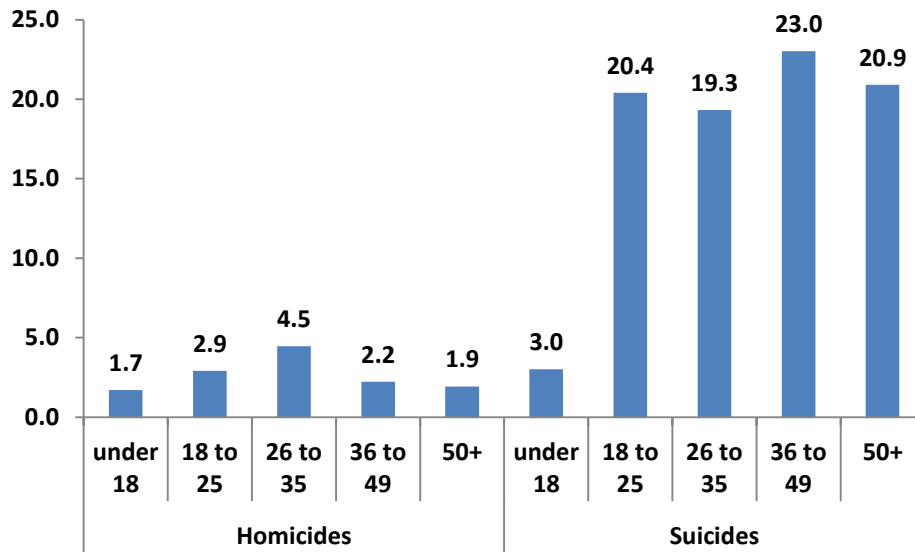


Source: DRVS, 2012–2016\*

\*2016 results are preliminary

- In 2016, there were 17.1 suicides per 100,000 Mainers compare to 2.3 homicides per 100,000 residents. Rates for both suicides as well as homicides have remained relatively stable for the past several years.

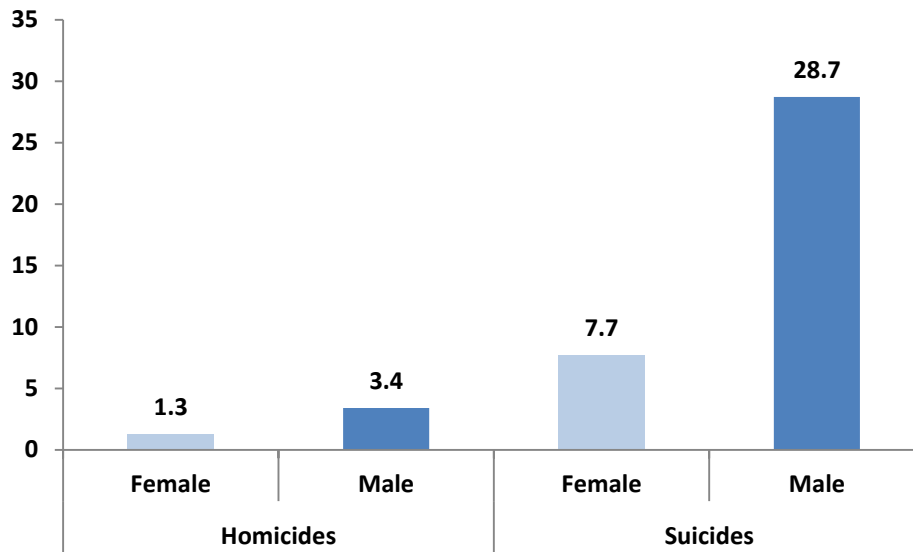
**Figure 53. Deaths from suicide or homicide per 100,000 of the population, by age groups: 2014–16**



Source: DRVS, 2014–16

- In 2014-16, deaths from suicide were most prevalent among the 36 to 49 year old population at a rate of 23 per 100,000, followed Mainers 50 and older (20.9 per 100,000), 18 to 25 year olds (20.1 per 100,000), and 26 to 35 year olds (19.3 per 100,000).
- As for homicides, 26 to 35 year olds held the highest rate at 4.5 per 100,000, followed by 18 to 25 year olds (2.9 per 100,000), 36 to 49 year olds (2.2 per 100,000), and Mainers 50 and older (1.9 per 100,000).

**Figure 54. Deaths from suicide or homicide per 100,000 of the population, by gender: 2014–16**



Source: DRVS, 2014–16

- Suicide deaths were much more common among men in 2014–16 (28.7 per 100,000), compared to women (7.7 per 100,000).
- Although the homicide rate is much lower than suicide, the rate for men was more than double the homicide rate for women in 2014-16 at 3.4 per 100,000 and 1.3 per 100,000 respectively.

## Factors Contributing to Substance Use and Abuse

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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, over-prescribing/dispensing, outlet density);
- Pricing and 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, lack of enforcing policies, laws);
- Perceptions of Harm (*e.g.*, individuals’ belief that using a substance is harmful); and
- Perceived Risk of Being Caught (*e.g.*, individuals’ belief that s/he will be caught by parents or police).<sup>10,11</sup>

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 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 the least likely to perceive risks of harm from using alcohol and marijuana regularly. However, in 2015, eight out of ten (81%) 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. Rates have remained relatively stable since 2011.

In recent years, perceptions of harm from marijuana use has been declining steadily among both youth and adults, reinforcing a more permissive attitude among parents and communities. For example, in 2015, two-thirds of parents felt that marijuana use by their child or teenager was “never ok.” This represents a decline of 14 percentage points since 2013 and was largely due to a sizeable increase in the percentage of parents who felt that marijuana use, if permitted by a doctor, would be okay. High school students who agreed their family has clear rules about alcohol and drug use increased slightly from 85 percent in 2011 to 88 percent in 2015. Parental

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<sup>10</sup> *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.

<sup>11</sup> Bonnie, R. J. (Ed.). (2004). *Reducing underage drinking: A collective responsibility.* National Academies Press.

perceptions regarding alcohol use have declined since 2011, with about one in four parents of high school students felt that their child had ever consumed alcohol.

While perception of harm regarding the misuse of prescription drugs has increased among youth and adults, there is still concern over availability and the potential for diversion. In 2016, there were nearly one million opiate agonist prescriptions prescribe in Maine; almost one for every resident. Half of the opiate prescriptions prescribed contained the primary active ingredients of either oxycodone or hydrocodone. As prescriptions for pain relief have begun to stabilize and/or decrease, medicated assisted treatment prescriptions have increased. From 2012 to 2016, prescriptions containing the active ingredient buprenorphine increased by 77 percent. Although prescriptions for opiate agonists have begun to decline, prescriptions for stimulants have risen by 25 percent since 2012. Reinforcing this concern for increased availability and ease of access; the majority of calls to the Northern New England Poison Center requesting substance verification involved opioids, followed by benzodiazepines, and stimulants. Finally, over a third of parents felt it would be possible for their teen to access prescription drugs at home without their knowledge.

## Availability and Accessibility

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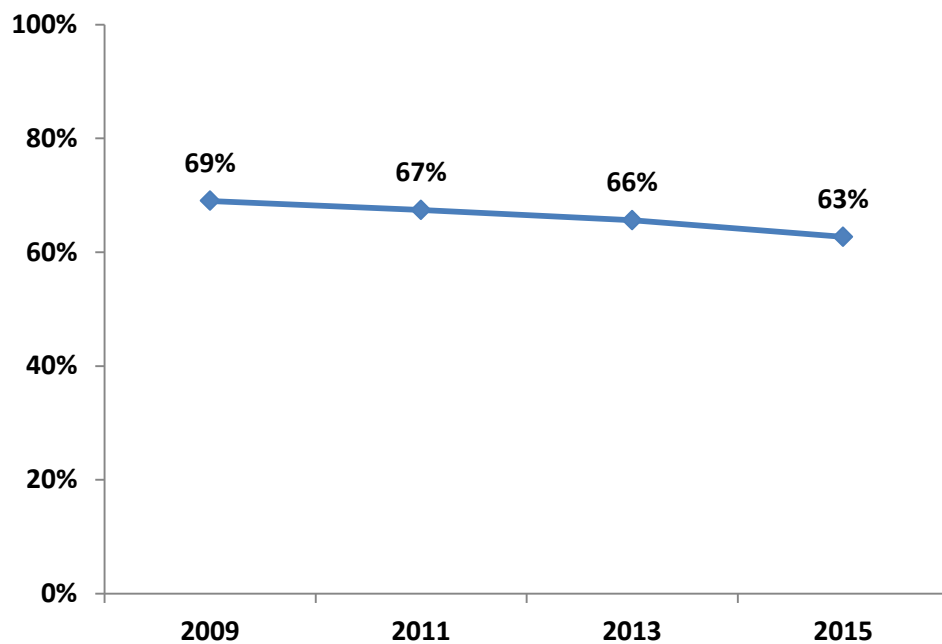
**Indicator Description: EASE OF OBTAINING ALCOHOL BY UNDERAGE YOUTH.** This indicator reflects the percentage of high school students (grades 9 to 12) who reported that it would be easy or very easy for them to get alcohol if they wanted some.

**Why Indicator is Important:** In 2015, students who reported that they thought alcohol was easy to obtain were nearly four 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, 2009–2015

**Summary:** Overall, nearly two out of three high school students think it would be easy to obtain alcohol. This rate has steadily decreased from 2009 (69%) to 2015 (63%).

**Figure 55. High school students who reported it would be easy to get alcohol: 2009–2015**



Source: MIYHS, 2009–2013

- In 2015, 63 percent of students felt it would be easy for them to obtain alcohol. This rate has decreased by six percentage points since 2009 (69%).

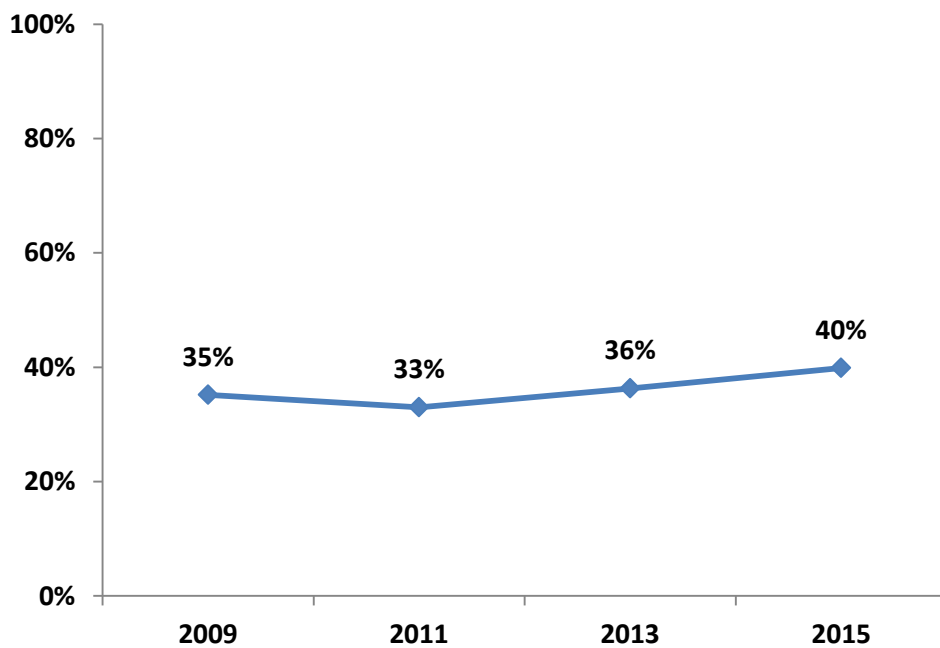
**Indicator Description: UNDERAGE YOUTH RECEIVING ALCOHOL FROM OTHERS.** Among high school students who drank within the past 30 days, this measure reflects the percentage reporting that they usually obtain the alcohol they drink from someone giving it to them.

**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 nearly four times as likely to drink as their peers who report it is not easy.

**Data Source(s):** MIYHS 2009–2015

**Summary:** Social access appears to be a primary way that underage youth obtain alcohol. Of those students who obtained alcohol, two out of five reported that someone had given it to them and the proportion of those who were given alcohol has been growing steadily.

**Figure 56. High school students who obtained alcohol by someone giving it to them, among those who drank in past month: 2009–2015**



*Source: MIYHS 2009–2015*

- In 2013, two out of five (40%) 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.



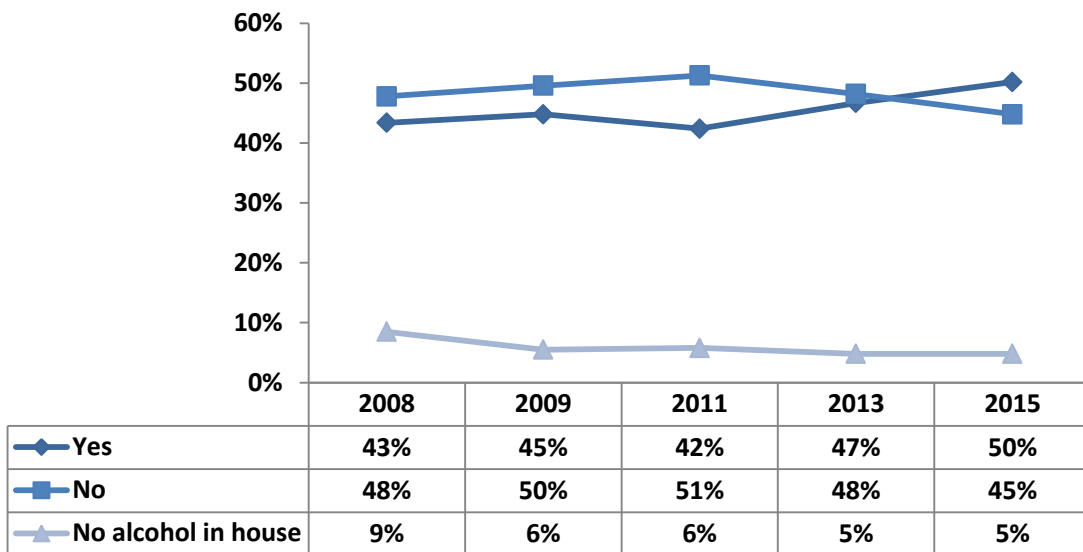
**Indicator Description: PARENT PERCEPTION OF ACCESSIBILITY OF ALCOHOL AT HOME.** This indicator measures the percentage of parents reporting that their teen would be able to access alcohol they had purchased without their knowledge. This data comes from the Maine Parent Survey administered by Pan Atlantic for the Maine Office of Substance of Abuse and Mental Health Services.

**Why Indicator is Important:** Easy access to alcohol at home is a major contributing factor to underage drinking.

**Data Source(s):** Parent Survey 2008–2015

**Summary:** Among parents of middle and high school youth, half felt it was possible for their children to access alcohol they had purchased without their knowledge. This has increased steadily since 2011.

**Figure 57. Parent perceptions of accessibility of parent-purchased alcohol without parental knowledge: 2008–2015**



Source: Parent Survey 2008–2015

- The percentage of parents reporting that their child would be able to access alcohol purchased by the parent without their parents' knowledge has increased since 2011, from 42 percent to 50 percent in 2015. About one in 20 parents reported they did not have alcohol in their home.

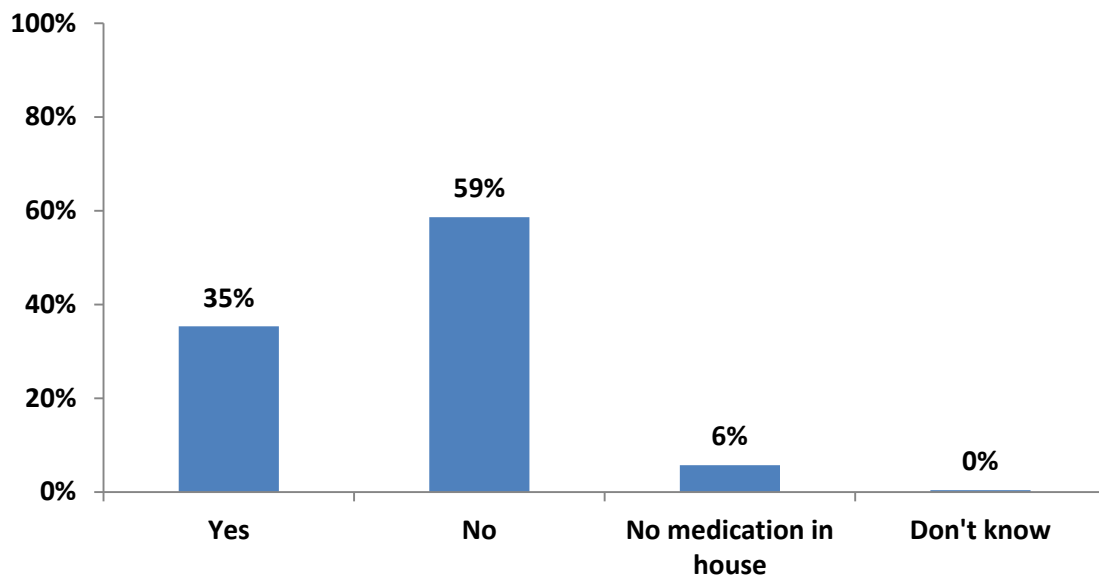
**Indicator Description: PARENT PERCEPTION OF ACCESSIBILITY OF RX DRUGS AT HOME.** This indicator measures the percentage of parents reporting that their teen would be able to access prescription medication (not prescribed to their child) without their knowledge. This data comes from the Maine Parent Survey administered by Pan Atlantic for the Maine Office of Substance of Abuse and Mental Health Services.

**Why Indicator is Important:** Easy access to prescription drugs at home is a major contributing factor to prescription drug misuse.

**Data Source(s):** Parent Survey 2008–2015

**Summary:** More than a third (35%) of parents felt that, at home, their child would be able to access prescription medications that were not prescribed to the child, without permission.

**Figure 58. Parent perception of teen accessibility of prescription drugs at home without parental knowledge: 2015**



*Source: Parent Survey 2015*

- About a third (35%) of parents reported that, at home, their teen would be able to access prescription medications without their knowledge. About six percent of parents surveyed reported that there was no prescription medication in their home.
- Although not shown, parents with a four year degree were more likely to report that their teen could access medication (42%), followed by parents with household incomes of \$100,000 or more (41%), and parents 45 and older (40%).

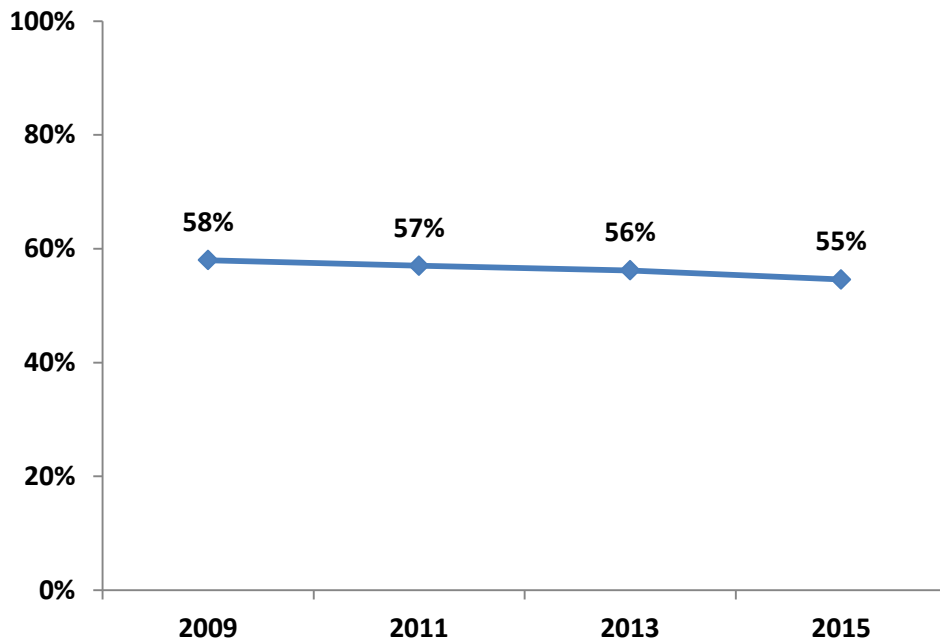
**Indicator Description: EASE OF OBTAINING MARIJUANA BY YOUTH.** This indicator shows the percentage of high school students reporting it would be easy or very easy to obtain marijuana if they wanted it.

**Why Indicator is Important:** In 2015, students who reported that they thought marijuana was easy to obtain were nearly nine 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, 2009–2015

**Summary:** In 2015, over half of high school students believed that marijuana is easy to obtain. This rate has decreased slightly from 2009.

**Figure 59. High school students who reported it would be easy to get marijuana: 2009–2015**



*Source: MIYHS, 2009–2015*

- In 2015, 55 percent of high school students felt it would be easy to get marijuana; this was a decrease of three percentage points since 2009 (58%).

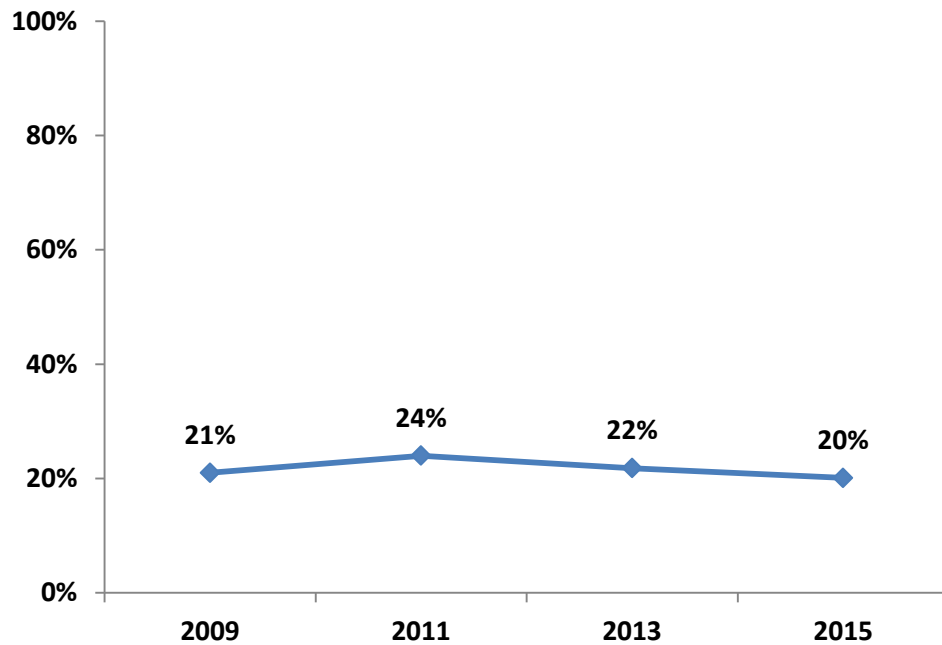
**Indicator Description: ILLEGAL DRUGS ON SCHOOL PROPERTY.** This measures the percentage of high school students reporting they were sold, offered or given an illegal drug on school property during the past year.

**Why Indicator is Important:** In 2015, students who reported they were offered drugs at school were twice as likely to use marijuana as their peers who were not offered drugs at school.

**Data Source(s):** MIYHS, 2009–2015

**Summary:** In 2015, one in five high school students were sold, offered or given an illegal drug on school property; this rate has steadily decreased since 2011.

**Figure 60. High school students who were sold, offered, or given an illegal drug on school property in past year: 2009–2015**



*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 20 percent in 2015.

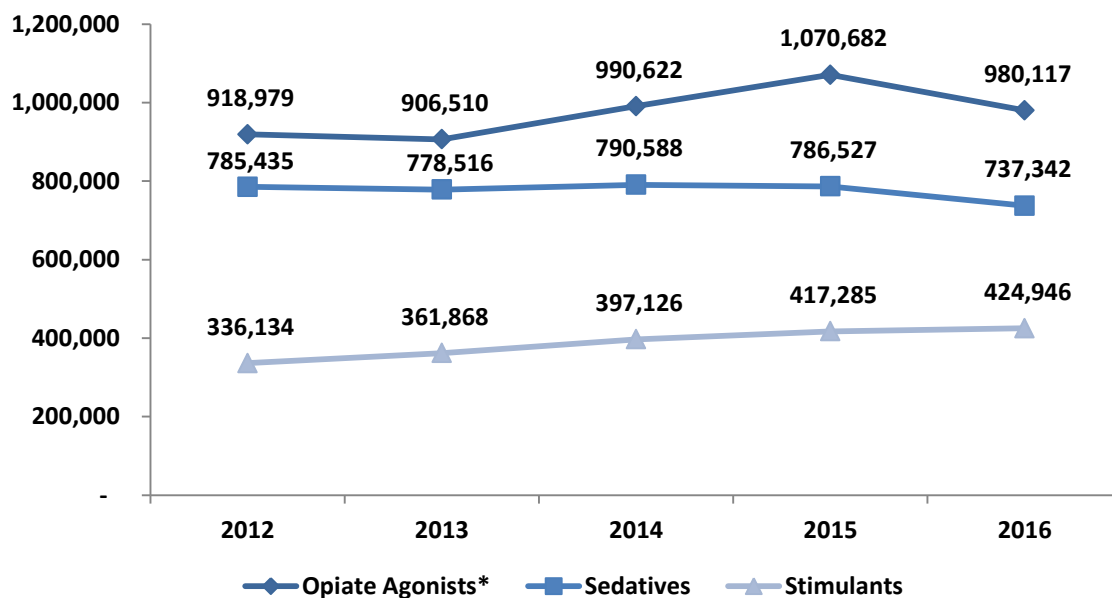
**Indicator Description: NUMBER OF PRESCRIPTIONS PRESCRIBED.** These indicators reflect the number of opiate, sedative, and stimulant prescriptions prescribed in Maine as collected by the Maine Prescription Monitoring Program.

**Why Indicator is Important:** The number of prescriptions prescribed 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, 2012–2016

**Summary:** From 2015 to 2016, the number of prescriptions prescribed for opiate agonists (excluding partial agonists such as buprenorphine) decreased by eight percent while the number of prescriptions for sedatives decreased by six percent, and prescriptions prescribed for stimulants increased by two percent. Prescriptions for stimulants have increased by 26 percent since 2012. In 2016, half of the all opiate prescriptions (agonists as well as partial agonists) prescribed contained the primary active ingredients of either oxycodone or hydrocodone. From 2012 to 2016, prescriptions prescribed containing buprenorphine increased by 77 percent.

**Figure 61. Number of prescriptions prescribed in Maine, by type: 2012–2016\*\***

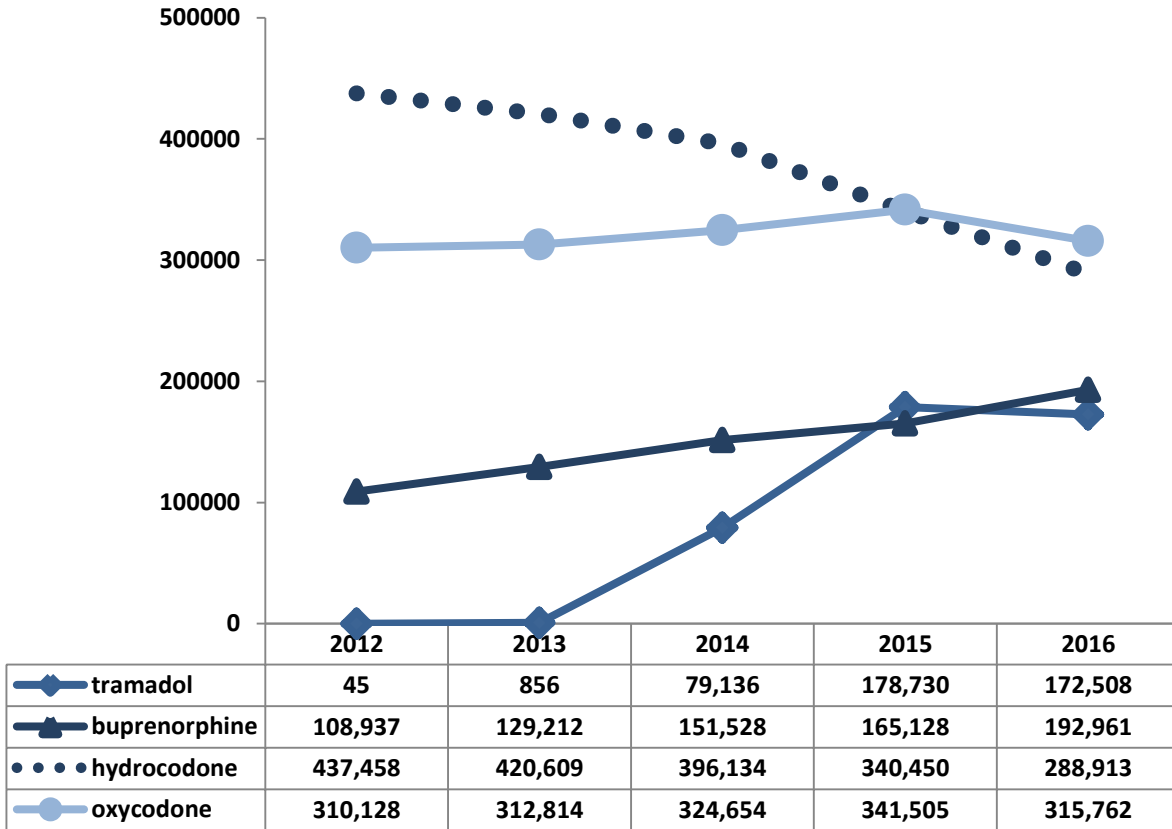


Source: PMP, 2012–2016

\*Opiate agonists only include opiates that activate opioid receptors within the body. This analysis above does not contain partial opiate agonists (e.g., buprenorphine), medications that are commonly used to block opioid receptors and prevent the body from responding to opiates.

\*\*The increase observed from 2013 to 2015 in opiate agonists prescribed was partially due to the inclusion of the previously unscheduled drug Tramadol (as of 8/18/2014) as well as the inclusion of data submitted via the Veterans Administration (as of 10/31/2014).

**Figure 62. Number of opiate prescriptions prescribed in Maine, by primary active ingredient: 2012–2016\***



Source: PMP, 2012–2016

\* The increase observed in 2014 and 2015 in number of opiates prescribed was due in part to the inclusion of the previously unscheduled drug Tramadol (as of 8/18/2014) as well as the inclusion of data submitted via the Veterans Administration (as of 10/31/2014).

- Among all opiate prescriptions (opiate agonists as well as partial agonists) prescribed, the majority contained the primary active ingredient of oxycodone (315,762), followed by hydrocodone (288,913), buprenorphine (192,961), and tramadol (172,508). Although not explicitly shown, the primary active ingredient oxycodone was present in 27 percent of opiate prescriptions prescribed in 2016; this was followed by hydrocodone (24%), buprenorphine (16%), and tramadol (14%).
- From 2012 to 2016, the number of opiate prescriptions prescribed containing hydrocodone decreased by 34% while prescriptions containing oxycodone increased by two percent, and prescriptions containing buprenorphine increased by 77 percent.

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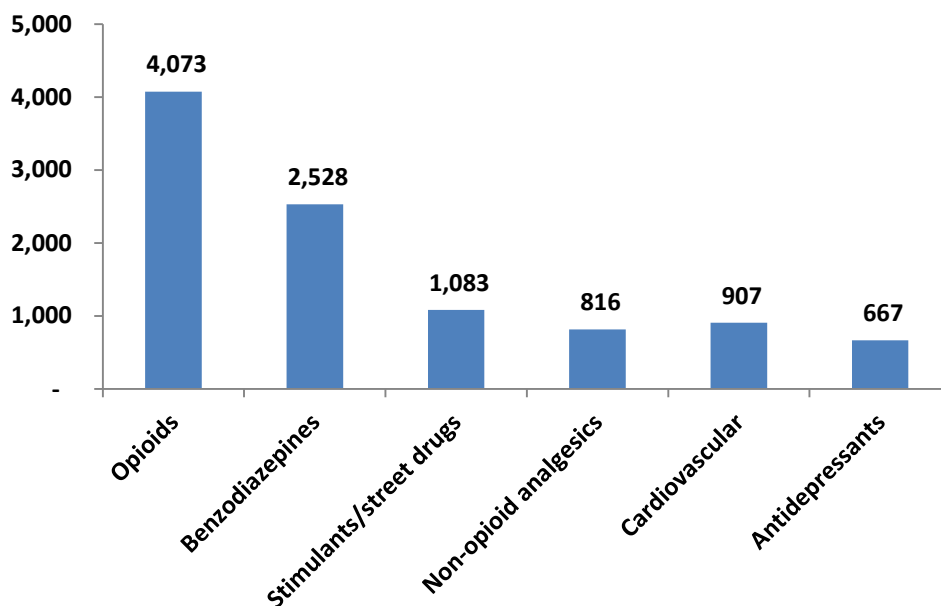
**Indicator Description: SUBSTANCES REQUESTED FOR VERIFICATION.** This indicator shows the number of requests by non-law enforcement for medication verification through the Northern New England Poison Center (NNEPC). A person may call the NNEPC for many reasons, one being to help identify a medication 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 staff do not make a formal or clinical assessment.

**Why Indicator is Important:** The volume of medication verification calls suggests the degree of 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, 2014–16

**Summary:** Most calls to NNEPC requesting medication verification in 2014-16 involved opioids, followed by benzodiazepines, and stimulants.

**Figure 63. Substances most frequently requested for medication verification by non-law enforcement, by type: 2014–16**



*Source: NNEPC, 2014–16*

- During the three year period 2014-16, the Poison Center received an average of 4,073 calls per year requesting verification for substances that were identified as opioids, followed by benzodiazepines (2,528), and stimulant/street drugs (1,083). Although not shown, the volume of calls for these substances has decreased steadily since 2010; this can partly be attributed to callers transitioning to online research which has not been tracked.



## Perceived Harm

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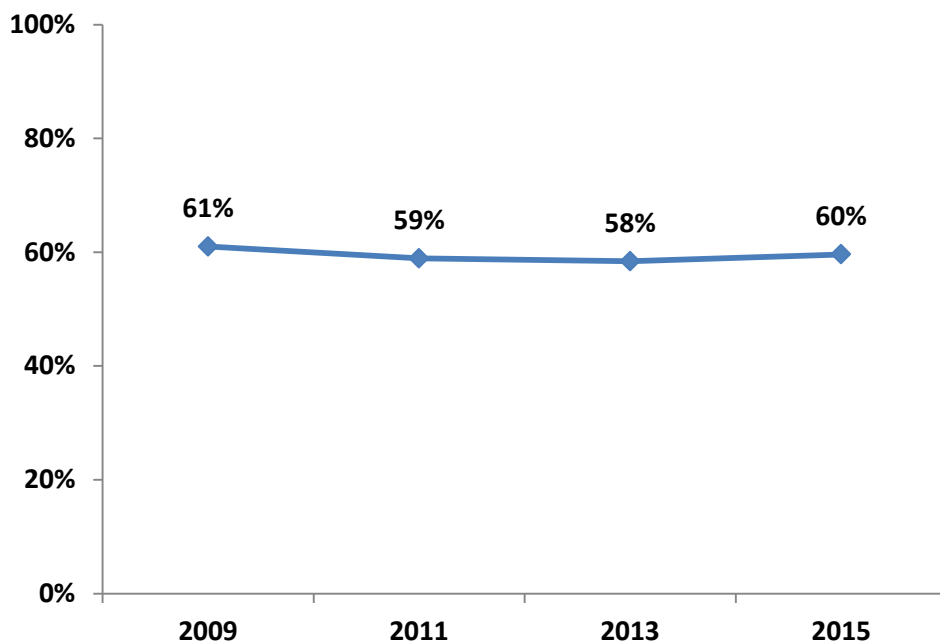
**Indicator Description: PERCEIVED RISK FROM REGULAR ALCOHOL USE.** This indicator reflects the percentage of high school students who report that there is moderate to great risk of harm from drinking one or two alcoholic beverages every day.

**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, 2009–2015

**Summary:** Although most high school students think there is moderate to great risk of harm from drinking alcohol regularly, two out of five students in 2015 did not think regular use was risky. Perception of harm has remained relatively stable from 2009 to 2015.

**Figure 64. High school students perceiving moderate to great risk from drinking 1–2 drinks every day: 2009–2015**



*Source: MIYHS, 2009–2015*

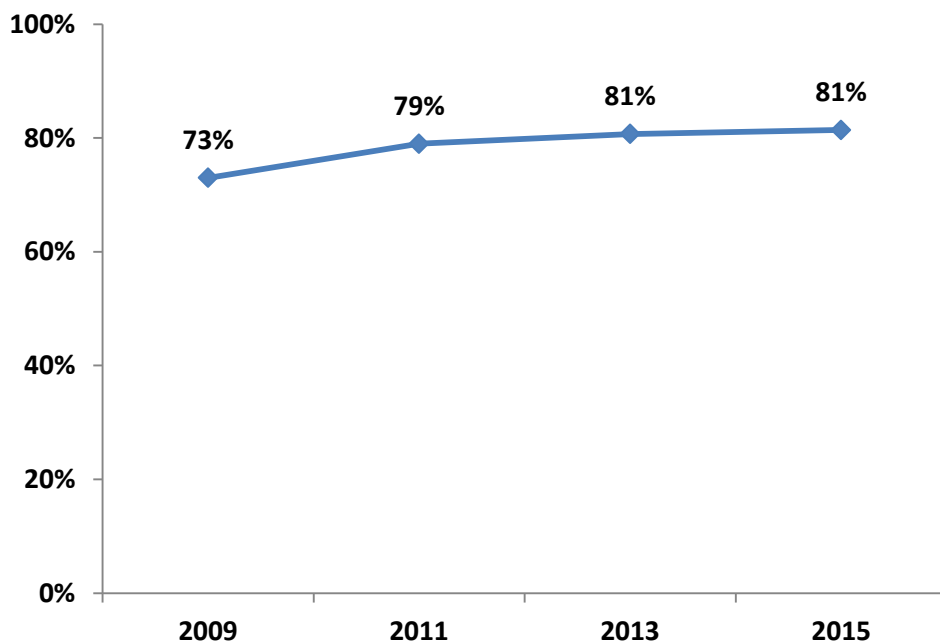
- The proportion of high school students who reported that people risk harming themselves if they drink one or two drinks every day has increased by two percentage points from 2013 (58%) to 2015 (60%).

**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:** In 2015, high school students who did not perceive a moderate to great risk of harm from binge drinking once or twice a week were 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:** Two out of five high school students think binge drinking once or twice a week is harmful. Perception of harm from binge drinking remains much lower among adults. More than seven out of ten young adults (18 to 25) thought that binge drinking a few times a week was NOT risky.

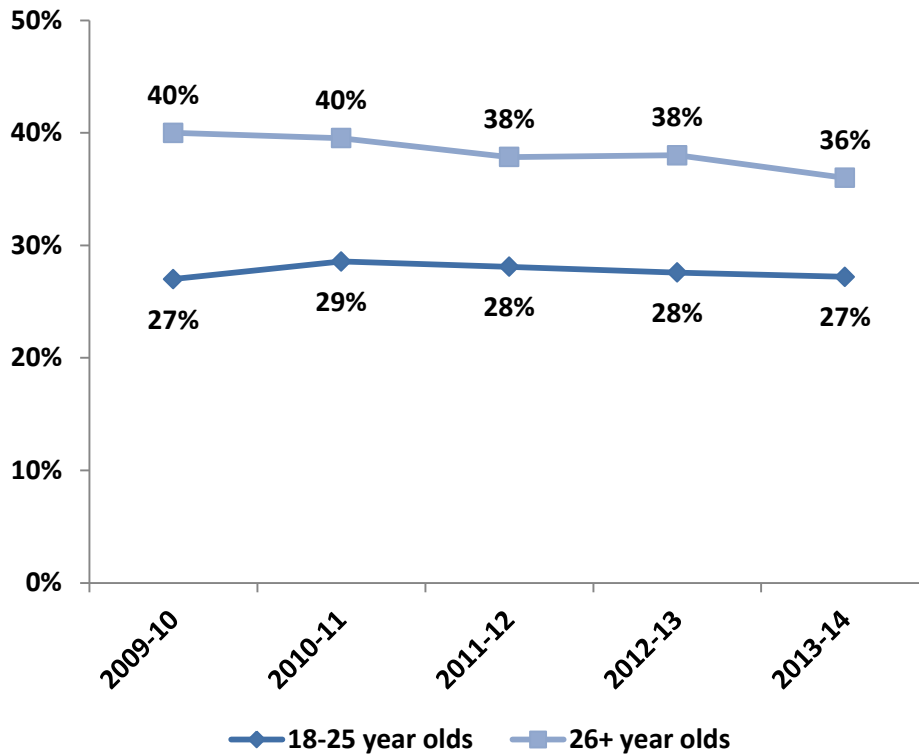
**Figure 65. High school students perceiving moderate to great risk from drinking five or more drinks once or twice per week: 2009–2015**



Source: MIYHS, 2009–2015

- In 2015, eight out of ten (81%) 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. Rates have remained relatively stable since 2011.

**Figure 66. Adults (18 and over) perceiving great risk from drinking five or more drinks once or twice per week, by age group: 2009–10 through 2013–14**



Source: NSDUH 2009–10 to 2013–14

- In 2013-14, 36 percent of Mainers ages 26 and older reported that drinking five or more drinks once or twice per week posed some risk of harm; this represents a decrease of four percentage points since 2010–11. 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 with a rate of 27 percent in 2013–14.

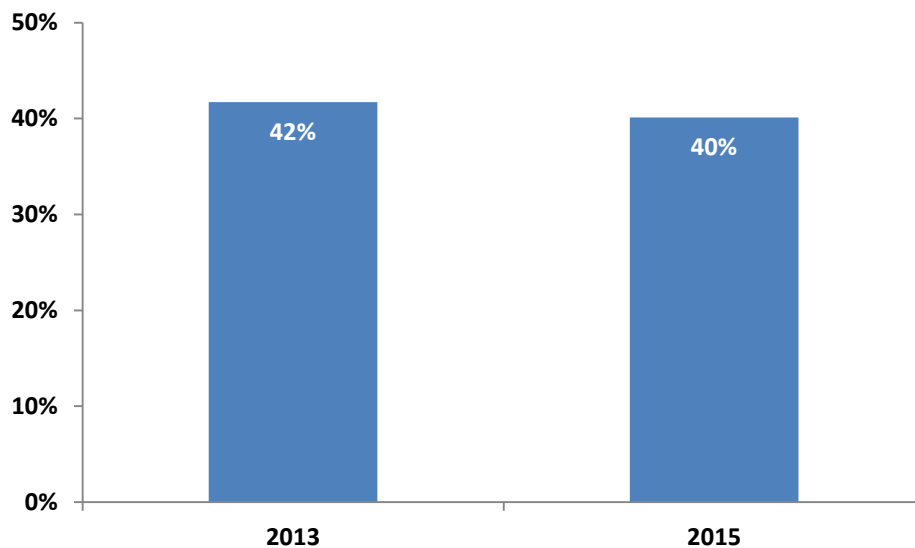
**Indicator Description: PERCEIVED RISK OF REGULAR MARIJUANA USE.** This measure demonstrates the percentage of individuals (high school students and adults) who perceive a moderate to great risk of harm from smoking marijuana regularly.

**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, 2013 and 2015; NSDUH, 2009–10 to 2013–14

**Summary:** In 2015, only two out of five high school students felt smoking marijuana once or twice a week was risky. In 2013–14, less than one in ten between 18 and 25 year olds perceived smoking marijuana at least once per month as risky. Perceptions of harm regarding marijuana use have been decreasing among both youth and adults over the past several years.

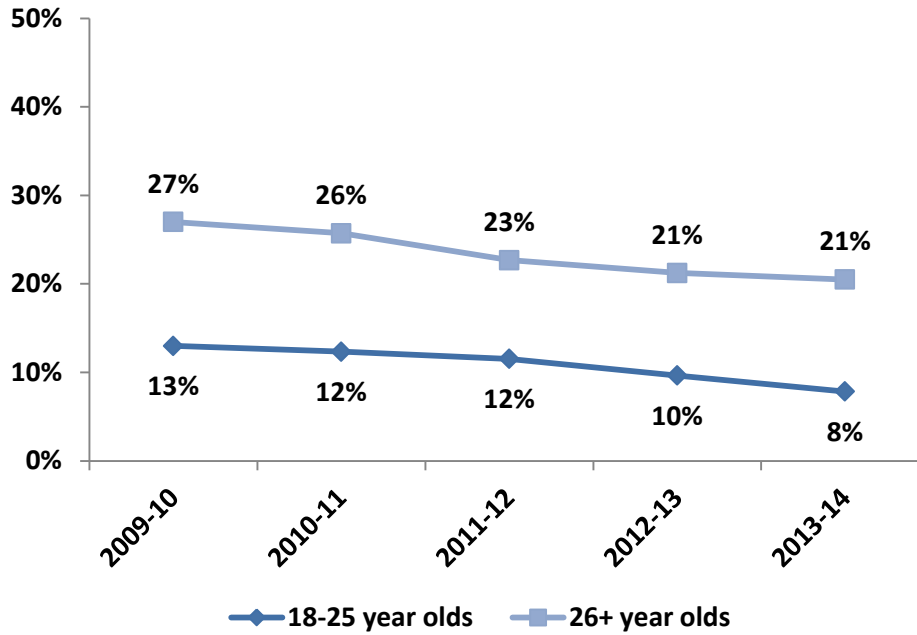
**Figure 67. High school students perceiving moderate to great risk from smoking marijuana once or twice a week: 2013 and 2015**



*Source: MIYHS, 2013 and 2015*

- From 2013 to 2015, the proportion of high school students who perceived a moderate to great risk of harm from smoking marijuana once or twice a week remained relatively stable around 40 percent. This means that in 2015, 60 percent of high school students felt that there was little to no risk of harm involved.

**Figure 68. Adults (age 18 and older) perceiving great risk from smoking marijuana once per month: 2009–10 through 2013–14**



Source: NSDUH, 2009–10 to 2013–14

- During the 2013–14 period, young adults between the ages of 18 to 25 years old were unlikely to view a great risk from smoking marijuana once per month (8%), a decrease of five percentage points since 2009–10 (13%). Among Mainers who were 26 years old or older, perceptions of risk have decreased by six percentage points since 2009–10, from 27 percent to 21 percent.

## Perceived Enforcement

### Indicator Description: YOUTH PERCEIVED RISK OF BEING CAUGHT FOR DRINKING ALCOHOL.

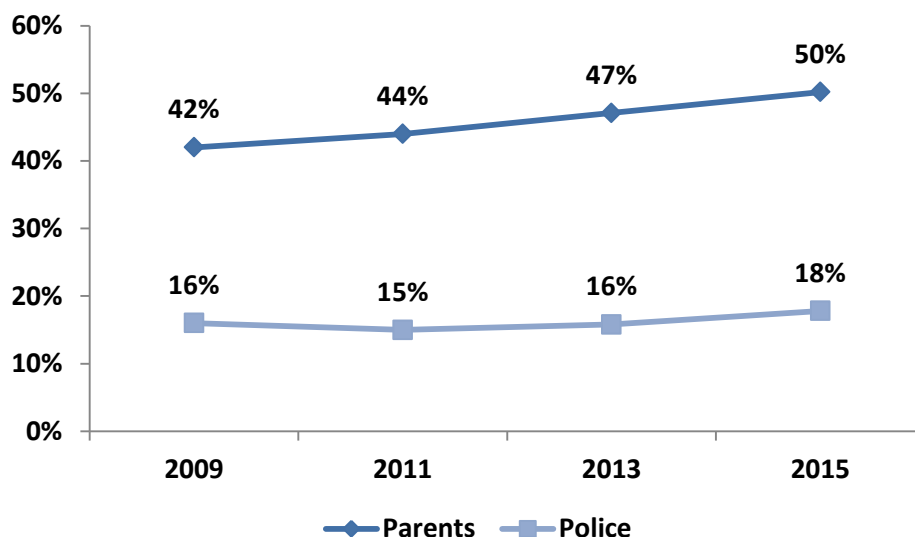
The indicator shows the percentage of high school students perceiving they would be caught by their parents and by police if they drank alcohol.

**Why Indicator is Important:** In 2015, high school students who believed they would not be caught by their parents were more than four times as likely to drink in the past month as compared to students who did think they would be caught. In addition, students who believe that they would not be caught by the police were three times as likely to drink alcohol in the past month as those who did think they would be caught.

**Data Source(s):** MIYHS, 2009–2015

**Summary:** In 2015, half of high school students thought they would be caught by their parents for drinking alcohol while only about one in five felt they would be caught by the police. Perceptions of getting caught by parents have steadily increased over the past several years while perceptions of getting caught by the police have remained relatively stable.

**Figure 69. High school students reporting they would be caught by parents or the police if they drank: 2009–2015**



Source: MIYHS, 2009–2015

- In 2015, 50 percent of students reported that they would be caught by their parents for drinking alcohol, an increase of eight percentage points since 2009. The rate of students who reported that kids in the community would be caught by the police remained relatively stable over the past several years.

**Indicator Description: YOUTH PERCEIVED RISK OF BEING CAUGHT FOR SMOKING MARIJUANA.**

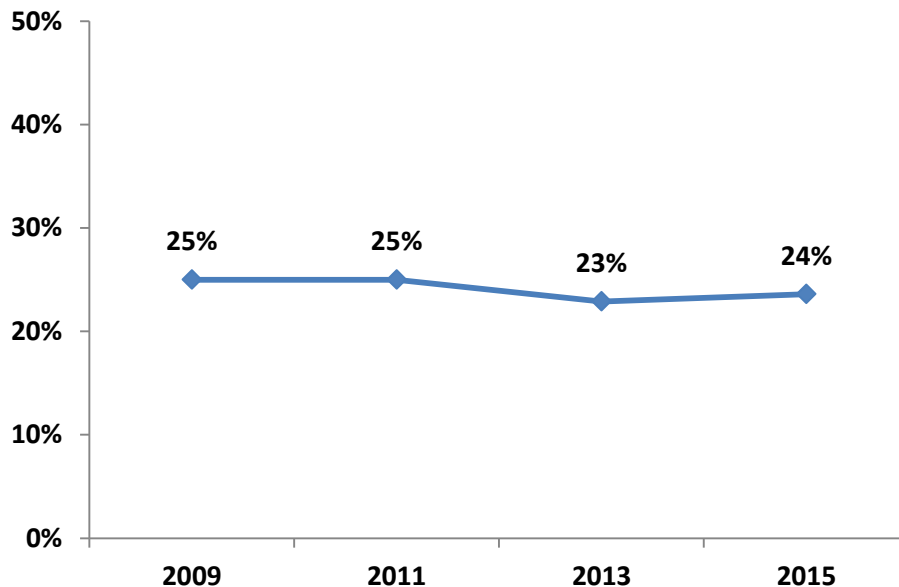
This indicator presents the percentage of high school students perceiving they would be caught by police if they smoked marijuana.

**Why Indicator is Important:** High school students who believe they would be caught by the police were nearly five times as likely to smoke marijuana as their peers.

**Data Source(s):** MIYHS, 2009–2015

**Summary:** In 2015, about one in four high school students thought they would be caught by police for smoking marijuana. This means that the majority of high school students were not worried about being caught by the police for smoking marijuana.

**Figure 70. High school students reporting they would get caught by the police if they smoked marijuana: 2009–2015**



Source: MIYHS, 2009–2013

- In 2015, 24 percent of high school students felt kids in their community would be caught by police for smoking marijuana; rates have remained relatively stable since 2009 (25%). Conversely, this means that in 2015, three out of four students felt they would not be caught by the police for smoking marijuana in their neighborhood.

## Community and Cultural Norms

### Indicator Description: YOUTH PERCEPTION OF PEER ATTITUDES TOWARD SUBSTANCE USE.

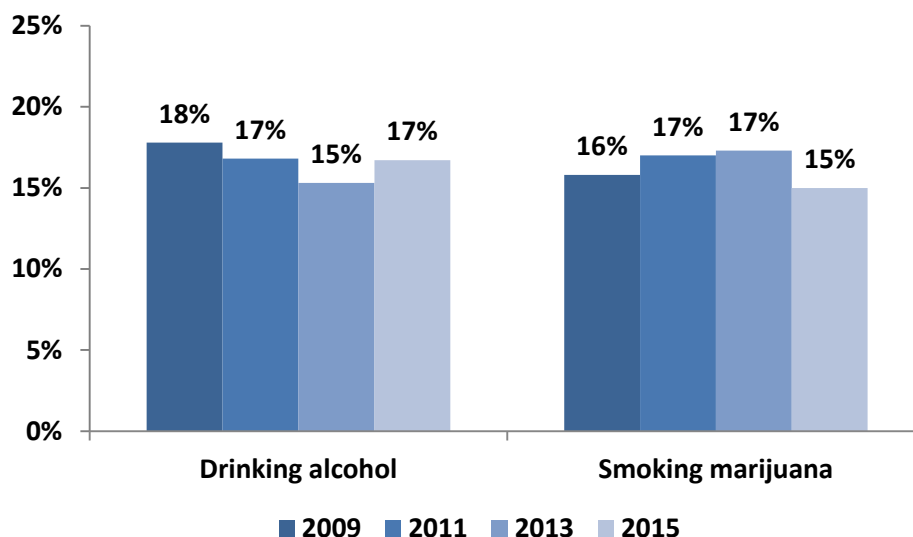
This measure reflects the percentage of high school students perceiving that there would be a “pretty good chance” or a “very good chance” they would be seen as cool if they began drinking alcohol or smoking marijuana.

**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.

**Data Source(s):** MIYHS, 2009–2015

**Summary:** In 2015, about one in seven high school students thought they would be seen as “cool” if they drank alcohol or smoked marijuana. Rates have remained relatively stable over the past several years.

**Figure 71. High school students who reported they would be seen as “cool” for drinking alcohol or smoking marijuana: 2009–2015**



Source: MIYHS, 2009–2015

- The proportion of high school students who believed that there was a “pretty good chance” or “very good chance” that their peers would see them as “cool” if they drank alcohol increased slightly from 15 percent in 2013 to 17 percent in 2015 after decreasing from 2009 to 2013. Students who perceived they would be seen as “cool” if they smoked marijuana decreased slightly from 2013 (17%) to 2015 (15%) after increasing from 2009 to 2013. In general, rates have remained relatively stable over the past several years.



**Indicator Description: YOUTH PERCEPTION OF ADULT ATTITUDES TOWARD ALCOHOL USE.**

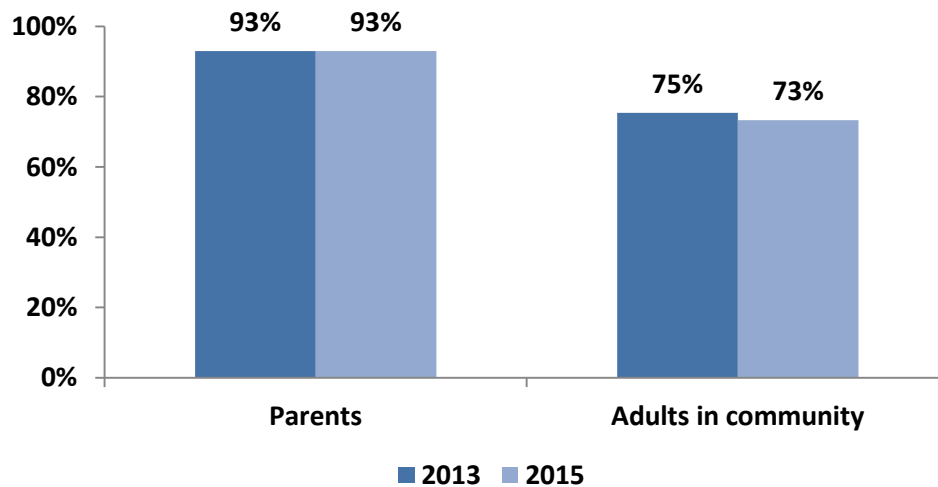
This indicator depicts the percentage of high school students who thought that their parents feel it would be wrong for them to drink regularly. It also examines the proportion who reported that adults in their community think it would be wrong for kids their age to consume alcohol.

**Why Indicator is Important:** According the 2015 Maine Integrated Youth Health Survey, high school students who did not believe their parents would feel it would be wrong for them to drink were more than twice as likely to drink alcohol in the past month as their peers who did think their parents would perceive it as wrong.

**Data Source(s):** MIYHS, 2009–2015

**Summary:** High school students largely believe that their parents and adults in their community think it would be wrong for them to drink alcohol. The perception of disapproval remained stable in both parents and adults in the community from 2013 to 2015.

**Figure 72. High school students who reported perceiving that their parents and adults in their community think student alcohol use is wrong: 2009–2015\***



*Source: MIYHS, 2013 and 2015*

- The proportion of high school students who thought their parents felt it would be wrong for them to drink one to two drinks per day remained unchanged from 2013 to 2015 at 93 percent.
- Seventy-three percent of students reported that adults in their community think it is wrong for youth to use alcohol.

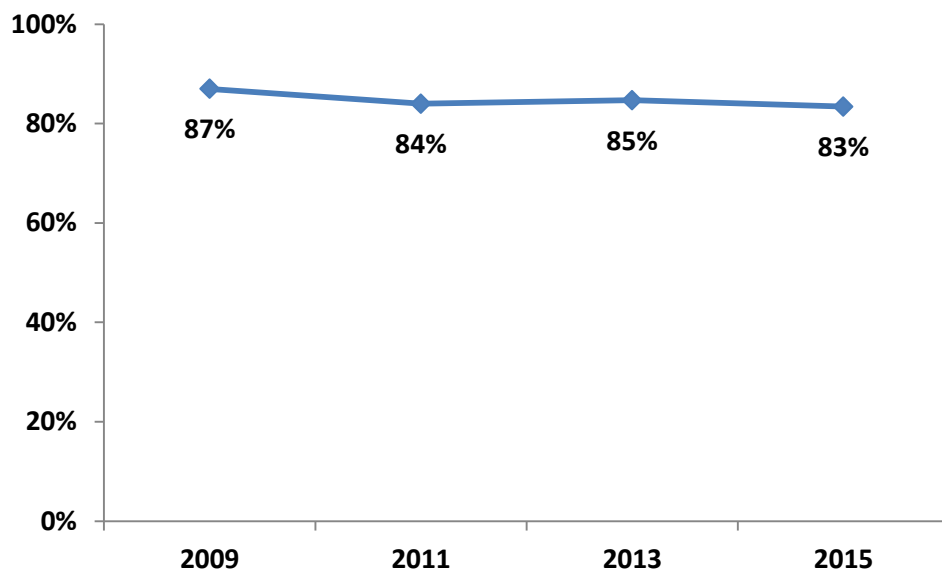
**Indicator Description: YOUTH PERCEPTION OF PARENTAL ATTITUDES TOWARD MARIJUANA USE.** This indicator shows the percentage of high school students who reported that their parents feel it would be wrong for them to smoke marijuana.

**Why Indicator is Important:** High school students who don't believe their parents feel it is wrong for them to smoke marijuana are 4.5 times as likely to use marijuana as students who do believe their parents would think it is wrong.

**Data Source(s):** MIYHS, 2009–2015

**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 2013 to 2015.

**Figure 73. High school students who reported that parents would think it was wrong to use marijuana: 2009–2015**



*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 83 percent in 2015. This indicates that in 2015, 17 percent of students believed their parents would not feel that it is wrong for their child to smoke marijuana.

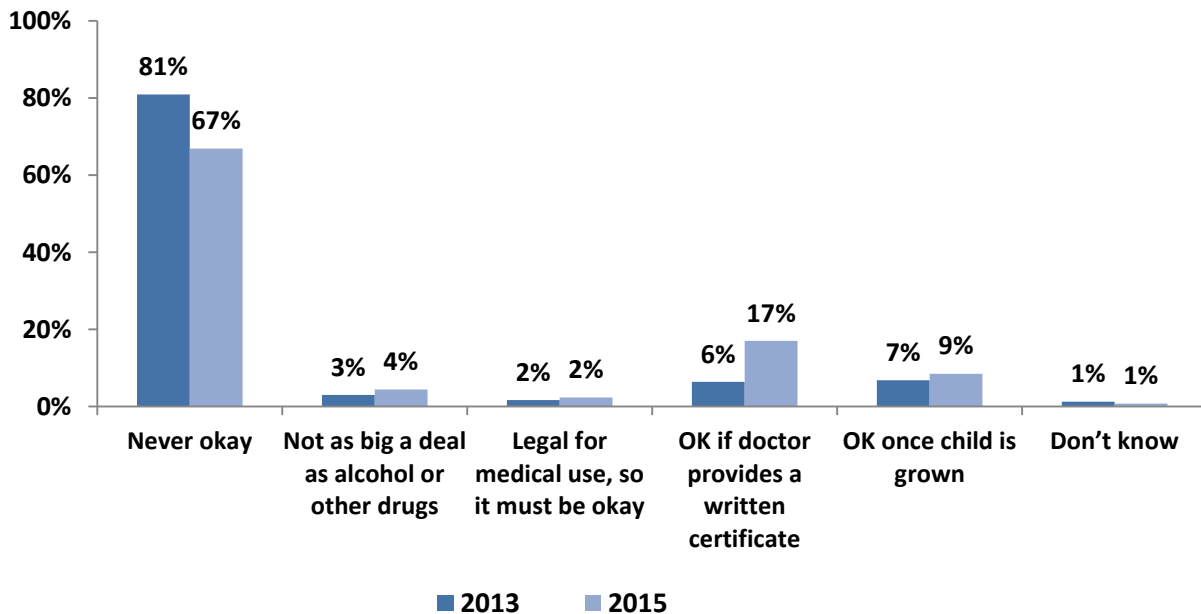
**Indicator Description: PARENTAL ATTITUDES REGARDING MARIJUANA USE.** This indicator reflects how parents felt about their teen using marijuana. Maine parents of teenagers (7<sup>th</sup> thru 12<sup>th</sup> graders) were asked to select the response that best described their attitude about marijuana use by their child. Response options were mutually exclusive. This data comes from the Maine Parent Survey administered by Pan Atlantic for the Maine Office of Substance of Abuse and Mental Health Services.

**Why Indicator is Important:** Parental perceptions and permissive attitudes towards substance use can have a major effect in their child’s decision to use. As Maine observes changes in regulations and policies regarding marijuana use; cultural norms and beliefs around use are occurring as well.

**Data Source(s):** Parent Survey, 2013 and 2015

**Summary:** In 2015, two in three parents felt it was never okay for their teen to use marijuana, a substantial decrease since 2013. In 2015, about one in six parents felt it would be okay if their teen used marijuana as long as they had a written certificate from a doctor; this was almost three times greater than in 2013.

**Figure 74. Parental attitudes regarding their teen using marijuana: 2013 and 2015**



Source: Parent Survey, 2013 and 2015

- In 2015, two-thirds of parents (67%) felt that marijuana use by their child or teenager was “never ok.” This represents a decline of 14 percentage points since 2013 and was largely due to a sizeable increase in the percentage of parents who felt that marijuana use, if permitted by a doctor, would be okay.
- From 2013 to 2015, the percentage of parents who felt marijuana use was okay if a doctor provided a written certificate to their child to use increased to 17 percent, an increase of 11 percentage points. About one in ten parents felt that it would be okay for their child to use marijuana once their child was an adult.

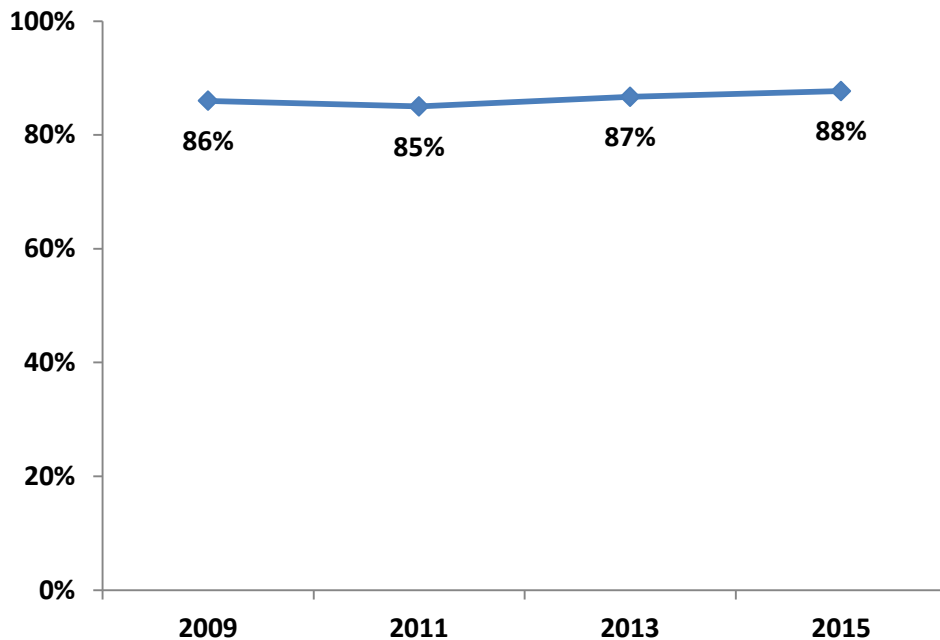
**Indicator Description: YOUTH PERCEPTION OF FAMILY RULES TOWARD SUBSTANCE USE.** This indicator reflects the percentage of high school students who reported that their family has clear rules about substance use.

**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, 2009–2015

**Summary:** In 2015, almost nine in ten high school students in Maine report that their family has clear rules around alcohol and drug use. About one in ten high school students did not think their family had clear rules about drugs and alcohol use and were therefore at higher risk for underage alcohol use than their peers.

**Figure 75. High school students who reported their family has clear rules about alcohol and drug use: 2009–2015**



*Source: MIYHS, 2009–2015*

- High school students who agreed their family has clear rules about alcohol and drug use increased slightly from 85 percent in 2011 to 88 percent in 2015. However that leaves 12 percent of high school students who did not feel their family had clear rules regarding drugs and alcohol, placing them at higher risk of substance use.

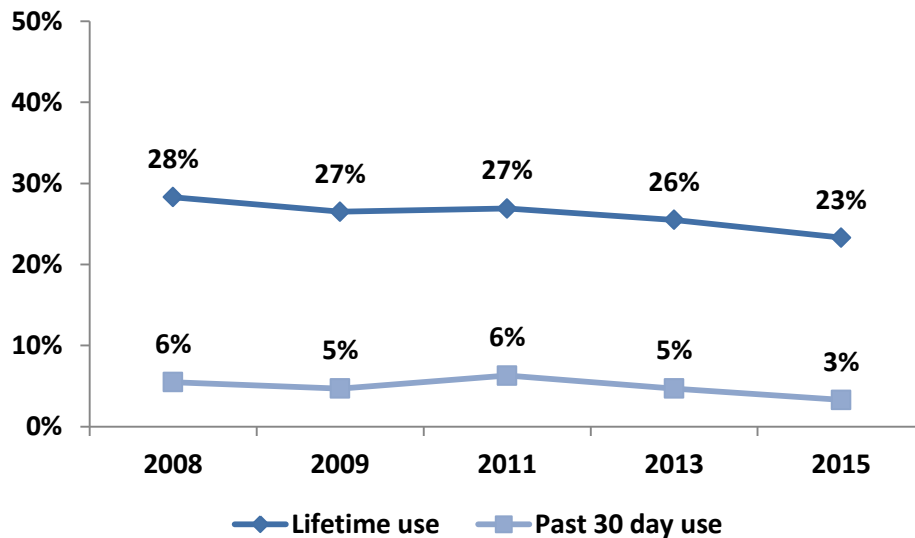
**Indicator Description: PARENT PERCEPTION OF YOUTH ALCOHOL USE.** This indicator reflects the percentage of parents of 9<sup>th</sup> through 12<sup>th</sup> graders who perceived that their child has ever consumed alcohol (more than a few sips) or used alcohol within the past 30 days.

**Why Indicator is Important:** Parental perceptions of child behaviors compared to the actual behaviors reported by youth often differ from one another. This disconnect can be challenging to reconcile, especially when confronting youth substance use and parental monitoring.

**Data Source(s):** Parent Survey, 2008–2015

**Summary:** About one in four parents of high school students felt that their child had ever consumed alcohol. Only three percent of parents thought their youth had used within the past 30 days.

**Figure 76. Parent’s (of high school students) perception of youth alcohol use: 2009–2015**



Source: Parent Survey, 2008–2015

- In 2015, 23 percent of parents of high school students thought that their child had ever consumed alcohol (more than a few sips); and only three percent of parents thought their child had consumed alcohol in the past thirty days. Parental perceptions regarding alcohol use have declined since 2011.
- According to the 2015 Maine Integrated Youth Health Survey (see figure 1), 51 percent of high school students reported having ever consumed alcohol, and 24 percent reported having used alcohol within the past 30 days.

## **Mental Health, Suicide and Co-occurring Disorders**

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The relationship between substance use and mental health has been well documented. There are great efforts underway 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 ages 26 to 35. 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). Rates of depression among young Mainers have been increasing in recent years, with more than a quarter of high school students reporting feeling so sad or helpless for at least two weeks in the past year that they stopped doing their usual activities. Tragically, about one in seven high school students in Maine had made a plan for suicide and one in ten reported they had actually attempted suicide in the past year. In 2016, 2-1-1 Maine referral calls related to mental health services and housing/shelter calls have decreased in recent years, while calls related to substance use as well as gambling have remained relatively stable.

Comorbidity of substance use and mental illness is a common phenomenon in Maine. In 2015, students who reported they had consumed alcohol within the past 30 days were more than twice as likely to report they had considered suicide seriously in the past year. Nearly one in four high school students who had consumed alcohol in the past month also had serious thoughts of suicide within the past year. Mental illness is also prevalent among Mainers who needed treatment for substance use. In 2016, over half (51%) of all substance abuse treatment admissions also involved a mental health disorder.

## Mental Illness, Depression and Anxiety

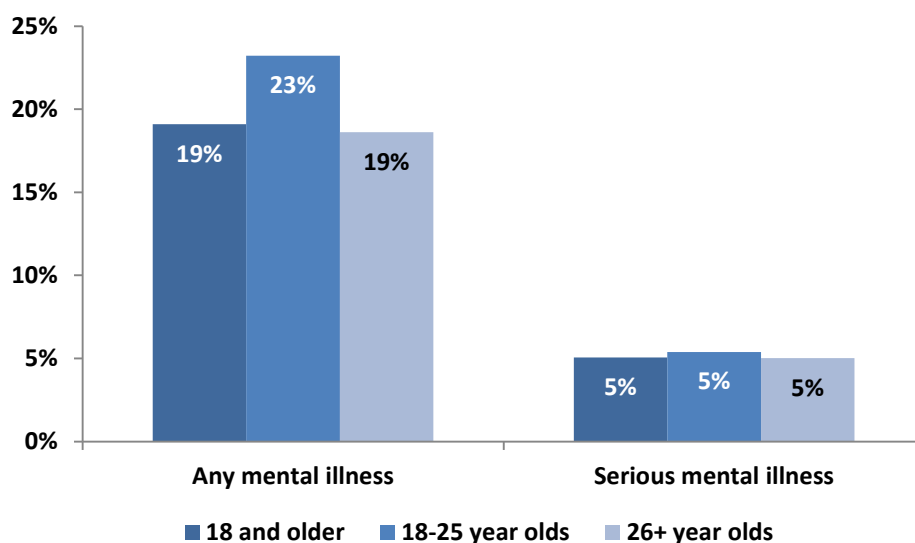
**Indicator Description: MENTAL ILLNESS AND DEPRESSIVE EPISODES AMONG ADULTS.** This indicator reflects the percentage of Maine residents age 18 and older reporting experiencing any mental illness, serious mental illness or having experienced at least one major depressive episode.<sup>12</sup>

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

**Data Source(s):** NSDUH, 2014–15

**Summary:** Nearly one in five adults in Maine reported experiencing any mental illness in the past year while five percent reported experiencing serious mental illness over the same time frame. Almost one in four 18 to 25 year olds experienced any mental illness in the past year. Major depressive episodes were most prevalent among 18 to 25 year olds with more than one in ten experiencing at least one episode within the past year.

**Figure 77. Adults (age 18 and older) experiencing any mental illness or serious mental illness in past year, by age group: 2014–15**



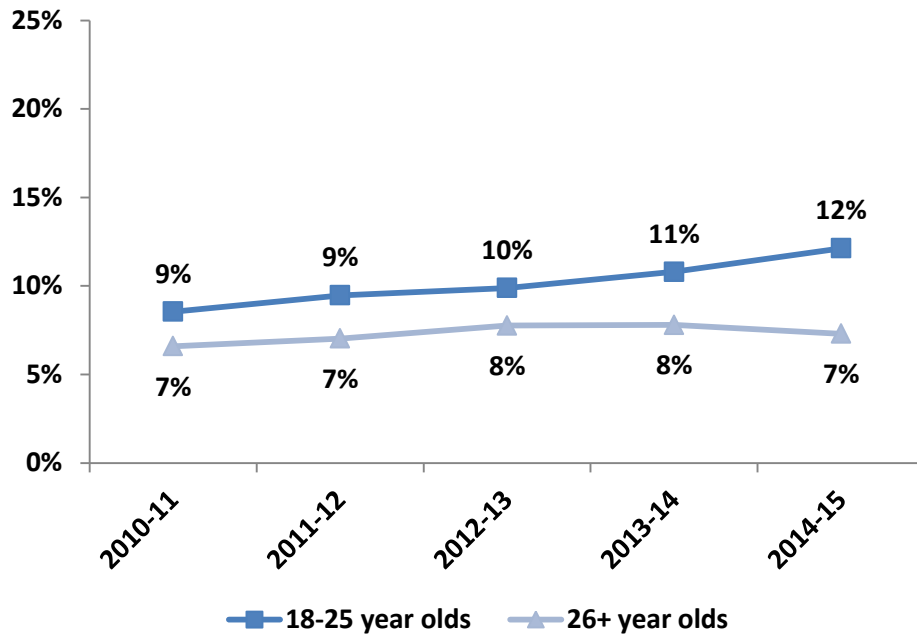
Source: NSDUH, 2014–15

<sup>12</sup> Any mental illness is 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). Serious mental illness is a diagnosable mental, behavioral, or emotional disorder, other than a developmental or substance use disorder, that met the DSM-IV criteria and resulted in serious functional impairment. Major depressive episode is defined as a period of at least two 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.



- In 2014-15, 19 percent of adults ages 18 and over reported experiencing any mental illness in the past year; rates were highest among 18 to 25 year olds (23%). Five percent of adults in Maine reported experiencing serious mental illness in the past year; rates did not vary across age groups.

**Figure 78. Adults (age 18 and older) experiencing at least one major depressive<sup>13</sup> episode in past year, by age group: 2010–11 through 2014–15**



Source: NSDUH, 2010–11 to 2014–15

- In 2014–15, major depressive episodes were more prevalent among young adults ages 18 to 25 (12%) compared to adults 26 and older (7%). Major depressive episode rates among 18 to 25 year olds have been gradually increasing since 2010–11 (9%).

<sup>13</sup> 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 two 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.

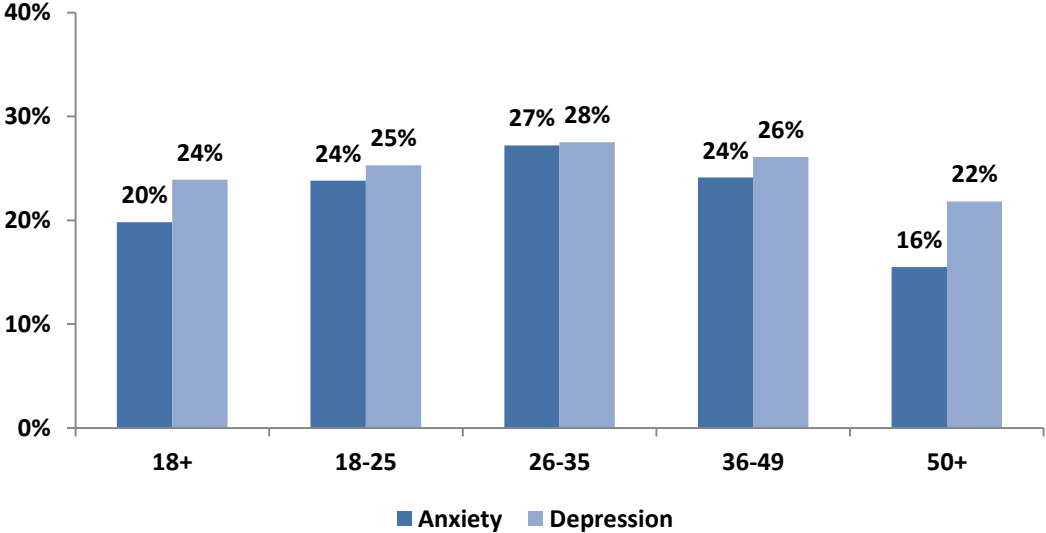
**Indicator Description: DIAGNOSIS OF ANXIETY AND DEPRESSION AMONG ADULTS.** This indicator examines the percentage of Maine residents age 18 and older who have been told they have a depression or anxiety disorder.

**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, 2014–15

**Summary:** In 2014–15, nearly 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 26 to 35 reported the highest rates of both depression and anxiety.

**Figure 79. Adults who have been told they have a depression or anxiety disorder by age group: 2014–15**



Source: BRFSS 2014–15

- In 2014–15, 24 percent of adults in Maine reported having ever been diagnosed with depression, while 20 percent reported having ever been diagnosed with anxiety. Adults ages 26 to 35 reported the highest rates of depression (28%) as well as anxiety (27%).

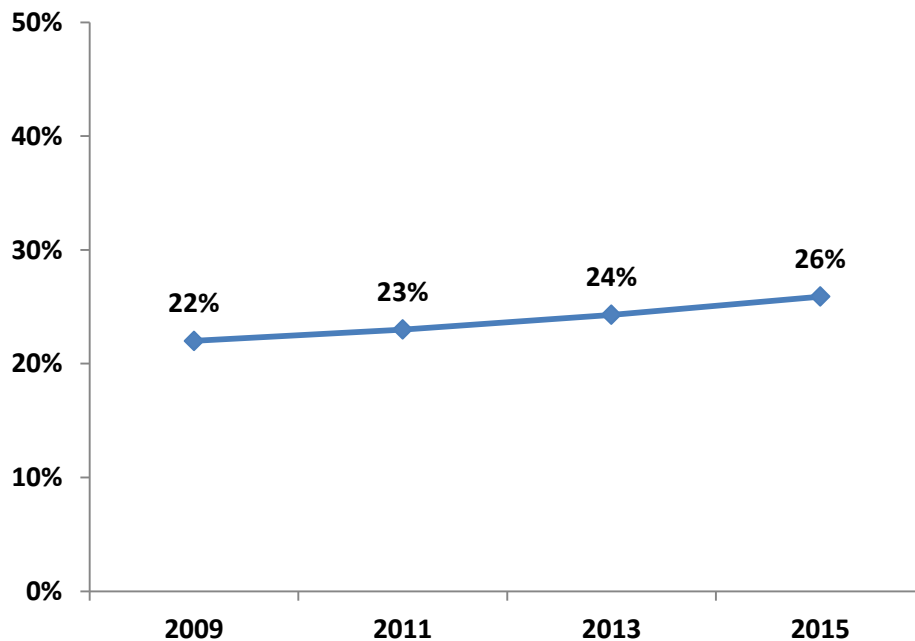
**Indicator Description: DEPRESSION AMONG YOUTH.** This indicator measures the percentage of high school students reporting they felt sad or hopeless almost every day for two weeks in a row during the past year.

**Why Indicator is Important:** Experiencing depression in the past year is associated with higher rates of substance abuse. According to the 2015 Maine Integrated Youth Health Survey, 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 2009–2015

**Summary:** In 2015, more than one in four high school students reported feeling sad or helpless for at least two weeks in the past year. Rates have been steadily increasing for the past several years.

**Figure 80. High school students who reported feeling sad or hopeless in past year: 2009–2015**



*Source: MIYHS 2009–2015*

- The proportion of high school students who reported feeling sad or helpless during the past year that they stopped doing some usual activities has increased steadily over the past several years, from 22 percent in 2009 to 26 percent in 2015.

## Suicidal Ideation

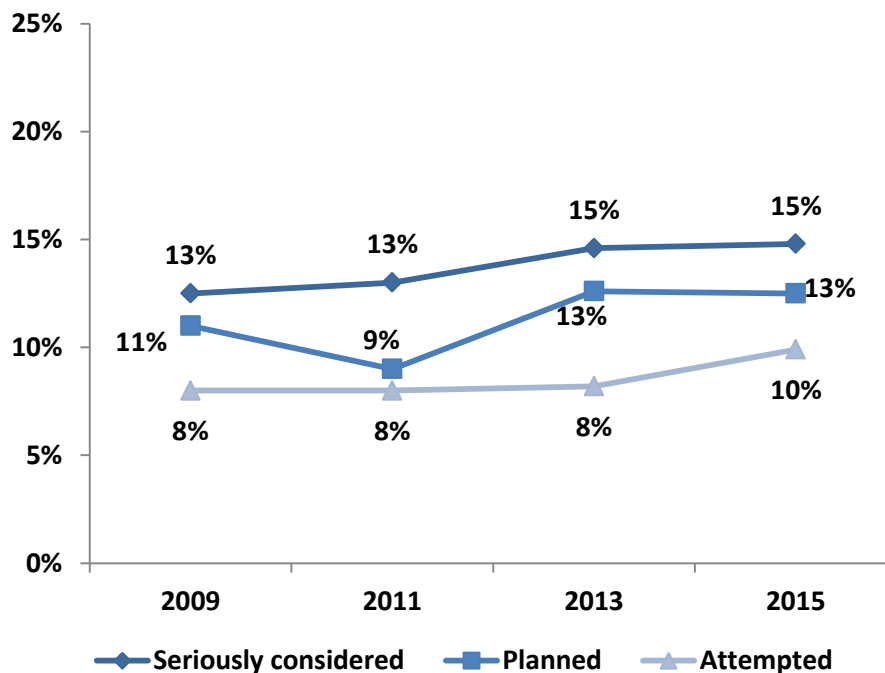
**Indicator Description: SUICIDAL IDEATION AMONG YOUTH.** This measure examines the percentage of high school students who reported that they seriously considered attempting suicide, made a plan about how they would attempt suicide, or attempted to commit suicide during the past year.

**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 2009–2015

**Summary:** In 2015, about one in seven high school students in Maine had either seriously considered suicide or made a plan for suicide. One in ten high school students reported they had actually attempted suicide in the past year.

**Figure 81. High school students who considered, planned, or attempted suicide in past year: 2009–2013**



Source: MIYHS 2009–2015

- In 2015, 15 percent of high school students reported that they seriously considered suicide; this rate has remained unchanged since 2013. The rate of students who reported planning a suicide also remained stable from 2013 to 2015 at 13 percent. However, the rate of high school students who reported that they had actually attempted suicide increased by two percentage points from 2013 (8%) to 2015 (10%).

## Mental Health and Substance Abuse Co-Occurrence

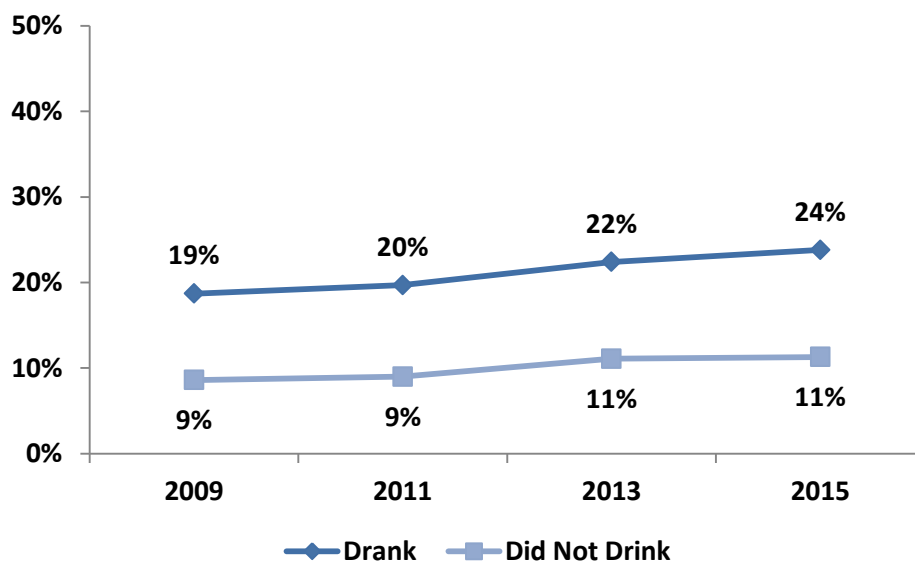
**Indicator Description: CO-OCCURRING SUBSTANCE USE AND SUICIDAL BEHAVIOR AMONG YOUTH.** This indicator explores the relationship between alcohol use within the past 30 days and suicidal behavior. It reflects the likelihood of high school students to report that they planned or attempted suicide during 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, 2009–2015

**Summary:** In 2015, nearly one in four high school students who had consumed alcohol in the past month also had serious thoughts of suicide within the past year; this was almost double the rate compared to students who did not drink.

**Figure 82. High school students reporting seriously considering suicide in the past year, by alcohol use in the past month: 2009–2015**



Source: MIYHS 2009–2013

- In 2015, among students who drank alcohol within the past 30 days, 24 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**

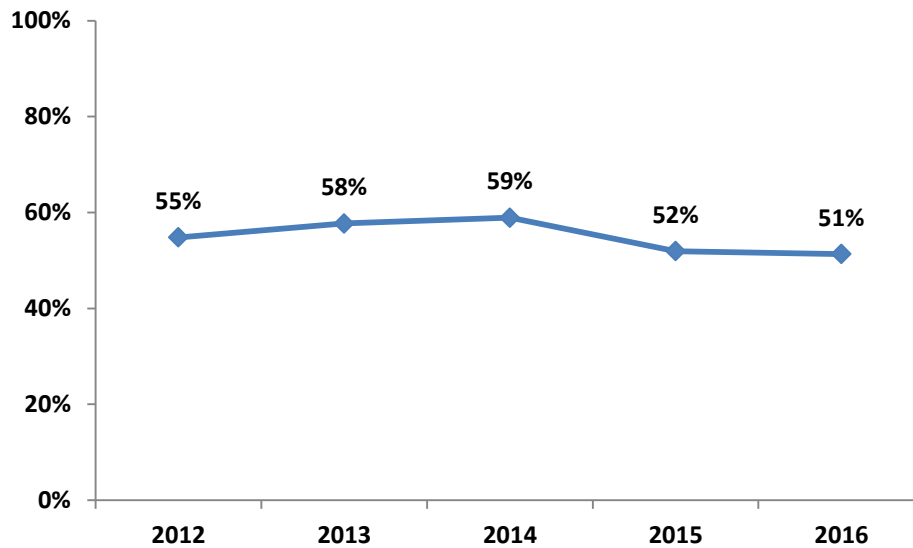
**TREATMENT.** This indicator reflects the proportion of treatment admissions for substance abuse where the individual has a mental health diagnosis or has previously received mental health services. The following analysis excludes admissions for shelter/detoxification services as well as those who were identified as co-affected or codependents (e.g., spouse, child, sibling) of the client who was receiving treatment. In addition, the following data analysis includes duplicate admissions, meaning that a unique individual/client could have been counted multiple times if they were admitted during the year on more than one occasion.

**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):** WITS, 2012–2016

**Summary:** In 2016, over half (51%) of all substance abuse treatment admissions also involved a mental health disorder.

**Figure 83. Percent of total treatment admissions with reported mental health disorders: 2012–2016**



Source: WITS, 2012–2016

\*WITS system is not static; therefore 2016 rates may be different than true values. Data were retrieved 6/8/2017

- In 2016, 51 percent of all substance abuse treatment admissions also had a diagnosed mental health disorder, representing a decrease of eight percentage points from 2014.

**Indicator Description: INFORMATION CALLS FOR MENTAL HEALTH AND HUMAN SERVICES.**

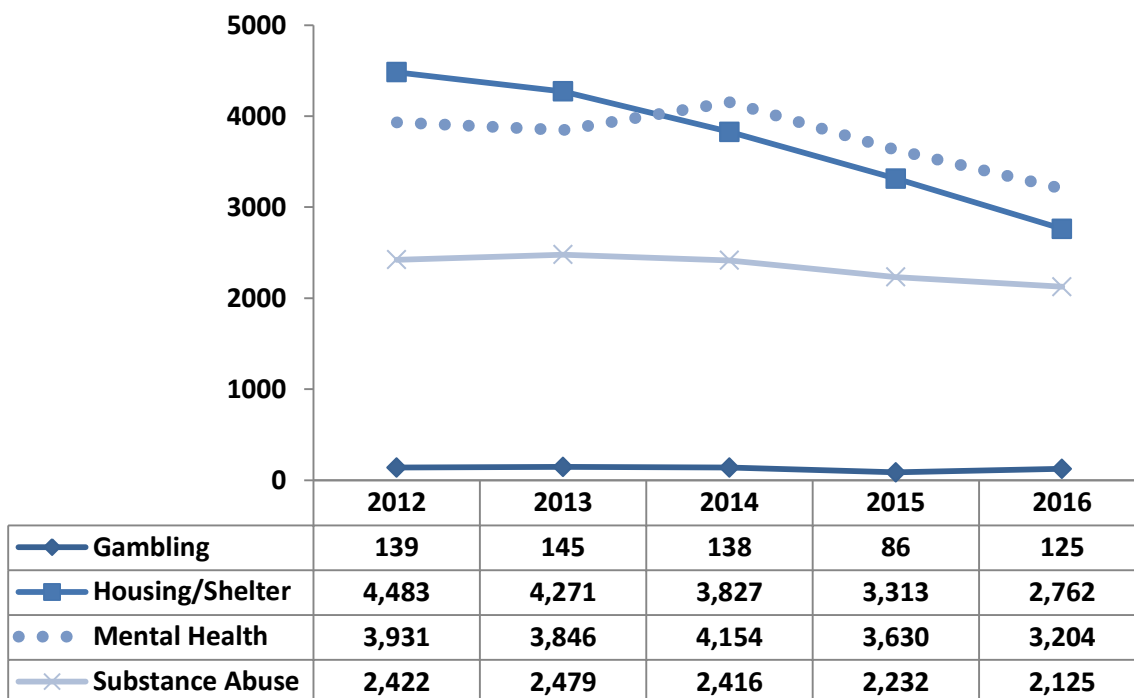
2-1-1 Maine is a telephone and internet service that provides information and referrals to health and human services. This indicator reflects the number of calls received by 2-1-1 Maine by the type of service requested.

**Why Indicator is Important:** The data collected from each call provides valuable information serving as a barometer of health and human service needs in the state.

**Data Source(s):** 2-1-1 Maine, 2012–2016

**Summary:** 2-1-1 Maine referral calls related to mental health services and housing/shelter calls have decreased in recent years while calls related to substance use as well as gambling have remained relatively stable.

**Figure 84. Number of 2-1-1 Maine referral calls, by service type: 2012–2016**



Source: 2-1-1 Maine, 2012–2016

- In 2016, there were 3,204 calls to 2-1-1 Maine relating to mental health services, followed by calls for housing/shelter (2,762), substance abuse (2,125), and problem gambling (125). Although 2-1-1 Maine referral calls for mental health services decreased by 23 percent and housing/shelter decreased by 27 percent from 2014 to 2016, calls for substance abuse services have remained relatively stable over the past several years.

## Treatment for Substance Abuse

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## Primary Treatment Admissions

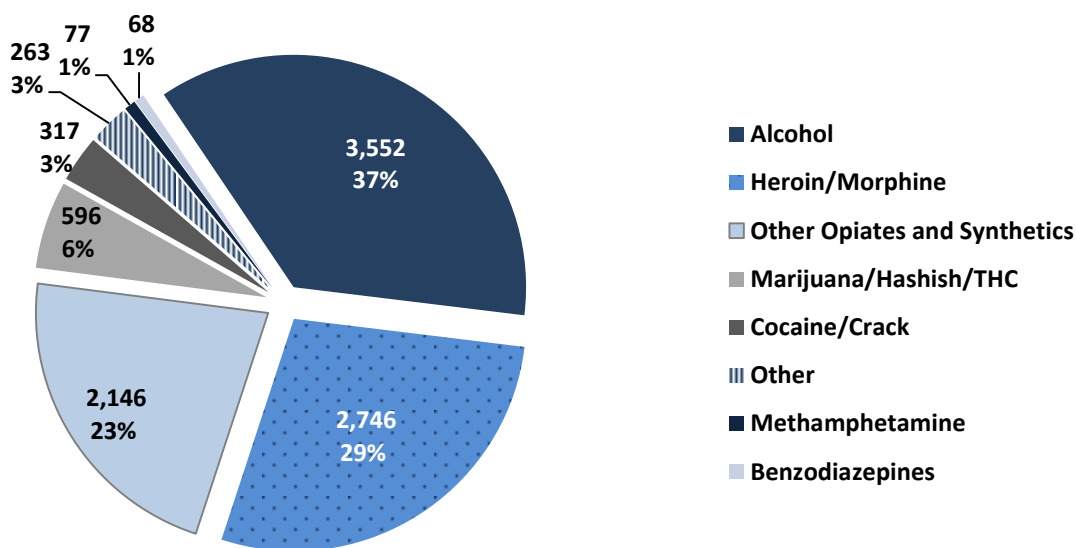
**Indicator Description: PRIMARY TREATMENT ADMISSIONS BY SUBSTANCE.** This indicator reflects substance abuse treatment admissions in which a substance was listed as the primary reason for admission. The following analysis excludes admissions for shelter/detoxification services as well as those who were identified as co-affected or codependents (e.g., spouse, child, sibling) of the client who was receiving treatment. The following data include duplicate admissions, meaning that a unique individual/client could be counted multiple times if they were admitted more than once during the year.

**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):** WITS, 2012–2016

**Summary:** A little more than one in three substance use treatment admissions listed alcohol as the primary reason for treatment in 2016, followed by heroin/morphine, and other opiates/synthetics. 2016, over half (58%) of the primary admissions were related to opioids or opiates. Primary admission rates related to heroin/morphine have steadily increased since 2012, and have surpassed synthetic opiates as the second most common substance.

**Figure 85. Number and percentage of primary treatment admissions, by substance type: 2016\***

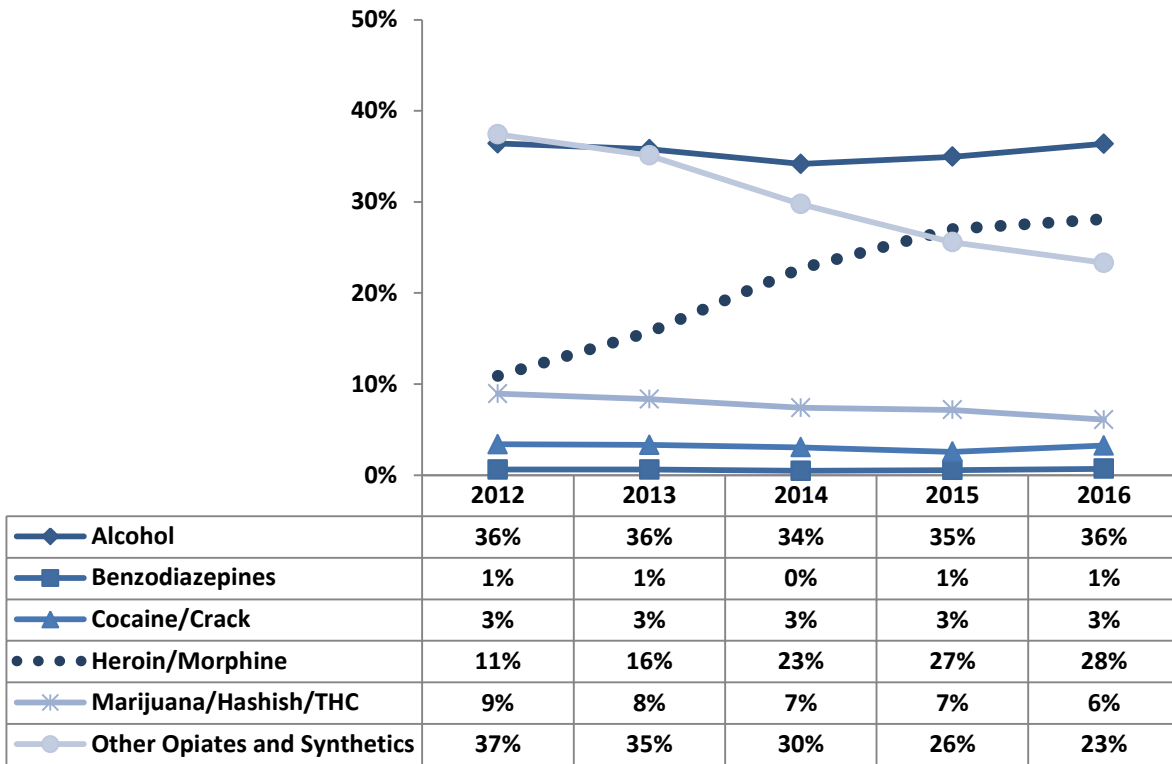


Source: WITS, 2016

\*WITS system is not static; therefore 2016 numbers may be lower than true counts. Data were retrieved 6/8/2017

- In 2016 there were a total of 9,765 primary admissions. Of those admissions, 3,552 (37%) were related to alcohol, followed by heroin/morphine (2,746, 29%), other opiates and synthetics (2,146, 23%), marijuana/hashish/THC (596, 6%), and cocaine/crack (317, 3%).

**Figure 86. Percent of primary treatment admissions, by substance type: 2012–2016**



Source: WITS, 2012–2016

- The proportion of primary admissions related to heroin/morphine has increased by 17 percentage points from 2012 (11%) to 2016 (28%). During the same time frame, primary admissions related to synthetic opiates decreased by 14 percentage points, from 32 percent in 2012 to 23 percent in 2016. Although not explicitly shown, in 2016, over half (58%) of the primary admissions were related to opioids or opiates;
- Primary admission rates involving other substances, including alcohol, marijuana, cocaine/crack, and benzodiazepines have held relatively steady for the past several years.

## Secondary Treatment Admissions

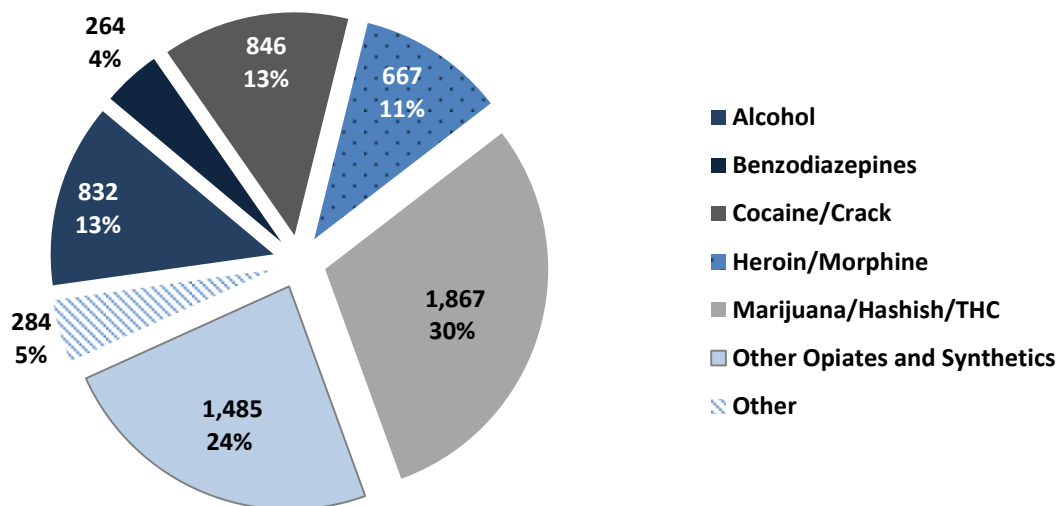
**Indicator Description: SECONDARY TREATMENT ADMISSIONS BY SUBSTANCE.** This indicator reflects substance abuse treatment admissions in which a substance was listed as the secondary reason for admission. Not every admission includes a secondary reason or substance. The following analysis excludes admissions for shelter/detoxification services as well as those who were identified as co-affected or codependents (e.g., spouse, child, sibling) of the client who was receiving treatment. The following data include duplicate admissions, meaning that a unique individual/client could be counted multiple times if they were admitted more than once during the year.

**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):** WITS, 2012–2016

**Summary:** Out of the admissions that listed a secondary substance, nearly one in three was related to marijuana and about one in four was related to synthetic opiates. Rates related to synthetic opiates have steadily decreased while rates involving heroin/morphine have progressively increased.

**Figure 87. Number and percentage of secondary treatment admissions, by substance type: 2016\***

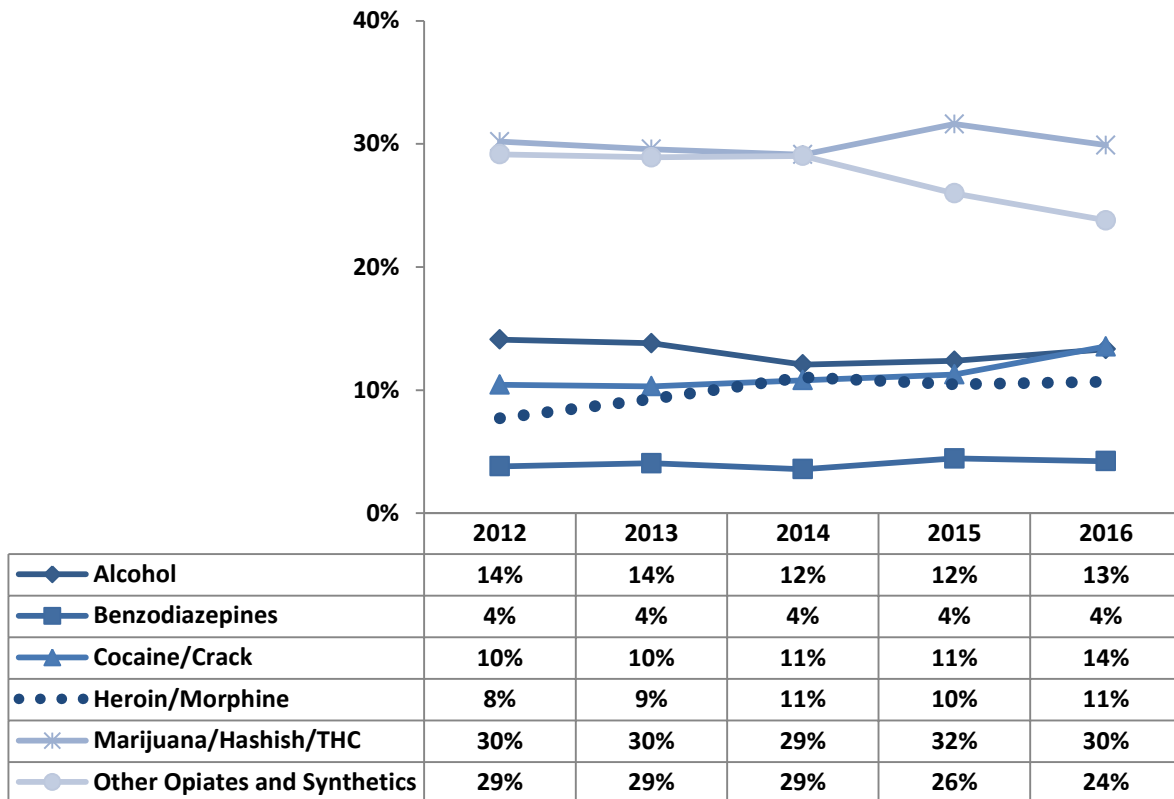


Source: WITS, 2016

\*WITS system is not static; therefore 2016 numbers may be lower than true counts. Data was retrieved 6/20/2017

- In 2016, there were a total of 6,245 admissions that listed a secondary substance/reason for treatment. Of those secondary admissions, 1,867 (30%) were related to marijuana/hashish/THC, followed by synthetic opiates (1,485, 24%), alcohol (832, 13%), cocaine/crack (846, 13%), and heroin/morphine (667, 11%).

**Figure 88. Percent of secondary treatment admissions, by substance: 2012–2016**



Source: WITS, 2012–2016

- From 2012 to 2016 marijuana/hashish/THC has held the highest proportion of admissions where a secondary substance was listed. As synthetic opiates as a secondary reason for admission have steadily declined, admissions related to heroin/morphine have gradually increased. The rate of secondary admissions for cocaine/crack observed a slight increase from 2015 (11%) to 2016 (14%) while secondary admissions for benzodiazepines and alcohol remained relatively stable.

## Pregnant Treatment Admissions

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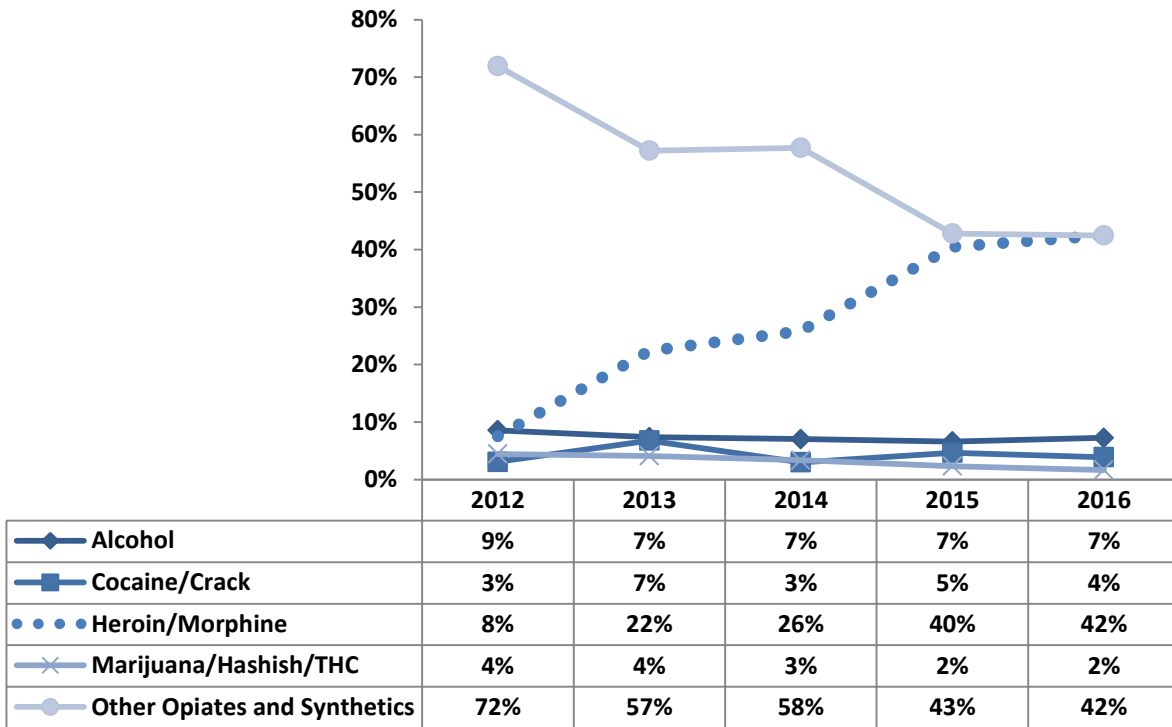
**Indicator Description: SUBSTANCE ABUSE TREATMENT ADMISSIONS WHILE PREGNANT.** This indicator explores the primary substances for which pregnant women sought treatment. The following analysis excludes admissions for shelter/detoxification services as well as those who were identified as co-affected or codependents (*e.g.*, spouse, child, sibling) of the client who was receiving treatment. In addition, the following data analysis includes duplicate admissions, meaning that a unique individual/client could have been counted multiple times if they were admitted during the year on more than one occasion.

**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 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):** WITS, 2012–2016

**Summary:** In 2016, more than eight out of ten pregnant substance abuse treatment admissions were related to opioids/opiates. In recent years, the percentage of pregnant treatment admissions primarily due to other synthetic opioids (includes buprenorphine as well as methadone) has steadily declined while the proportion related to heroin has substantially increased.

**Figure 89. Pregnant treatment admissions, by primary substance: 2012–2016**



Source: WITS, 2012–2016

\*WITS system is not static and is continually updated; therefore 2016 rates may be different than actual values. Data were retrieved 6/20/2017

- Forty-two percent of pregnant woman were seeking treatment for heroin/morphine, followed by other synthetic opiates (42%), and alcohol (7%), as the primary reason. Though not explicitly shown, 84 percent of these admissions were related to either opioids or synthetic opiates.
- The proportion of pregnant women who were admitted for treatment primarily due to other synthetic opiates has been declining since 2012, from 72 percent to 42 percent. Over the same period, the proportion of pregnant women admitted for heroin increased by 34 percentage points; from eight percent in 2012 to 42 percent in 2016.

## Conclusion

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Alcohol remains the substance most often used by Mainers across the lifespan and the substance for which most seek treatment. Great progress has been made towards reducing the rate of alcohol use among Maine's youth, as evidenced by the most recent data trends that show an overall decline in both past-month rates of any alcohol use and binge drinking. Additionally, young adults who qualify as having an alcohol use disorder have decreased by a third since 2009. While consumption rates are down, most teens still feel it is easy to access alcohol. Moreover, there continues to be a large discrepancy between parental perceptions of their child's behaviors compared to the actual behaviors reported by youth. This disconnect continues to be a challenge, especially concerning confronting youth substance use and parental monitoring.

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, with nearly one third reporting such behavior in the past month. Perceptions of harm regarding alcohol among these groups continues to be a challenge. These age groups also have the highest rates of alcohol/drug-related motor vehicle crashes and crash fatalities. In 2016, nearly one in four fatal motor vehicle crashes were related to alcohol and/or drugs. Prevention professionals must continue to monitor this population and adapt strategies that intentionally target young adults.

Pharmaceutical and illicit opioids continue to represent a serious public health concern for Maine. In 2015, 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 steadily has decreased from 2009 to 2015. Among adults, Mainers between the ages of 18 and 35 continue to have the highest rates of prescription drug misuse. In 2014-15, 0.6% of Mainers 12 and older (approximately 7,000 residents) self-reported that they had used heroin within the past year while 18 to 25 year olds reported a rate of 1.21%. Furthermore, based on surveillance data, illicit drug rates (*e.g.*, heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically) have been declining among Maine's youth and young adults for the past several years.

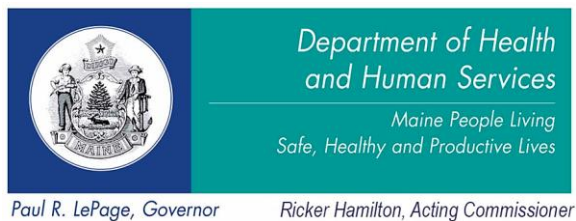
Opioid misuse continues to have a large impact on treatment, hospitalizations, and crime in Maine. In recent years, Maine has observed a steady increase in the number of overdose ambulance responses related to drugs and/or medication. In conjunction with the influx in overdose responses, Emergency Medical Services have experienced an increase both in the number of the overall naloxone/Narcan doses administered as well as the number of unique individuals receiving administrations. According to data from Maine's Office of the Chief Medical Examiner, nearly four out of five overdose deaths were related to illicit drugs in 2016. Illicit drug related deaths more than quadrupled from 2013 to 2015. More specifically, overdose deaths related to non-pharmaceutical fentanyl have nearly doubled each year since 2013. Fortunately, the number of reports to Child Protective Services regarding infants born affected by substance abuse or infants affected by prenatal exposure to substances have begun to stabilize.

Perception of harm regarding the misuse of prescription drugs has increased among youth and adults, yet there is still concern over availability and ease of access. Even as policies and prescribing practices have begun to limit the supply of opiate agonists, there is still an average of nearly one opiate prescription per resident each year. According to 2-1-1 Maine, the majority of calls related to medication verification are related to opioids, followed by benzodiazepines, and stimulants; this aligns with the Prescription Monitoring Program statistics. While reducing the supply of opiate prescriptions is integral to the prevention work in Maine, this approach is best coupled with education efforts aimed at increasing the awareness of the dangers of misuse as well as safe storage and disposal of unused medications.

As Maine and the Northeast confront the opiate/opioid epidemic, it is crucial to monitor other emerging trends as well. Drugs such as methamphetamine, cocaine, and other potentially addictive and dangerous prescription drugs have had a progressively negative effect in Maine. Maine Drug Enforcement Agency (MDEA) investigations related to the manufacturing of methamphetamine increased by nearly 60 percent from 2015 to 2016 while the number of methamphetamine labs found more than doubled. In addition, sedatives (*e.g.*, benzodiazepines) are the second most commonly prescribed schedule II-IV medication in Maine, the second most commonly verified medication in calls to the poison center, and were present in nearly one third of drug related overdose deaths. Furthermore, prescriptions filled for stimulants have increased by 26 percent since 2012.

Finally, Maine must remain aware of the relationship between mental health and substance use. In 2016, over half (51%) of all substance abuse treatment admissions also involved a mental health disorder. Depression and higher rates of substance use are strongly associated. According to the 2015 Maine Integrated Youth Health Survey, 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. Mental illness is also prevalent among Mainers who needed treatment for substance use with over half of all substance abuse treatment admissions also involved a mental health disorder. Moreover, 2-1-1 Maine referral calls related to Mainers seeking mental health services continue to outnumber calls regarding housing and shelter. It is essential that we continue to study how substance use and mental health interact with one another so that prevention and intervention efforts can better address the needs of both.





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