

SEOW Webinar Series Part 3: Contributing Factors of Substance Use in Maine



By Tim Diomedede, MPPM

October 2017



Paul R. LePage, Governor

Ricker Hamilton, Acting Commissioner

Agenda

- Purpose of the SEOW
- Presentation of Key Findings
- New and Updated Resources
- Questions/Discussion

SEOW What?

(Purpose of the State Epidemiological Outcomes Workgroup)

- Promote systematic, data-driven decision-making
- Guide effective and efficient use of *prevention* resources
- Identify, track, and detect emerging substances/trends
- Serve as a clearing house and facilitator
- Help secure funds and measure progress
- Opportunity for networking and collaboration

Contributing Factors

Examples:

- Social Access
- Retail Availability
- Pricing and Promotion
- Social/Community Norms
- Enforcement
- Perceptions of Harm
- Perceived Risk of Being Caught

Addressing these factors through Prevention work can have a positive impact on substance consumption and consequences in Maine.

Perception of harm: binge drinking

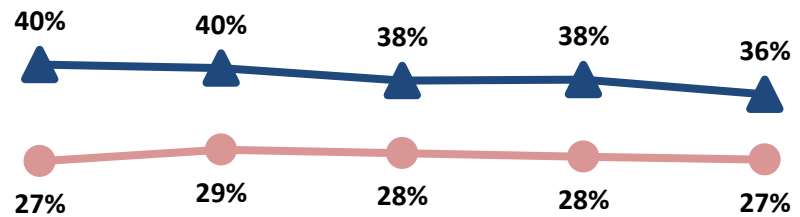
High school students perceiving harm from binge drinking weekly



Source: MIYHS

2009 2011 2013 2015

Adults perceiving great risk from binge drinking weekly, by age group



18-25 year olds

26+ year olds

Source: NSDUH

2009-10 2010-11 2011-12 2012-13 2013-14

Four 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. Only **about one in four young adults (18 to 25)** thought that binge drinking a few times a week was risky.

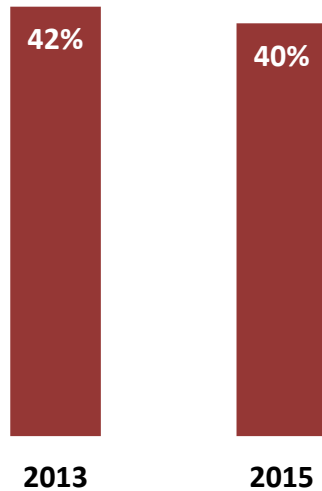
Perception of harm: binge drinking

*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.***

Source: MIYHS

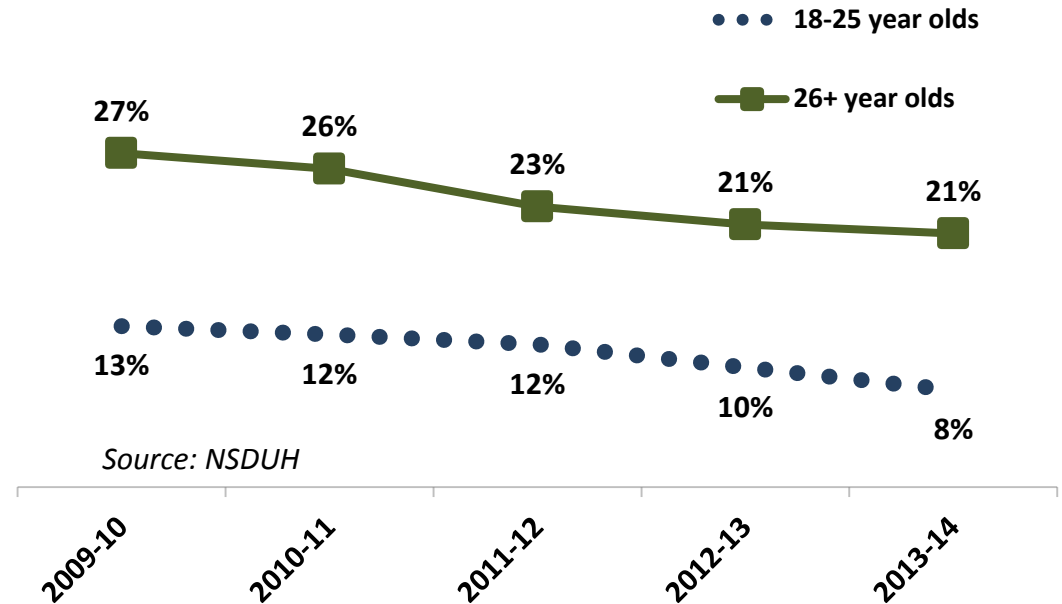
Perception of harm: marijuana

High school students perceiving risk from smoking marijuana once or twice a week



Source: MIYHS

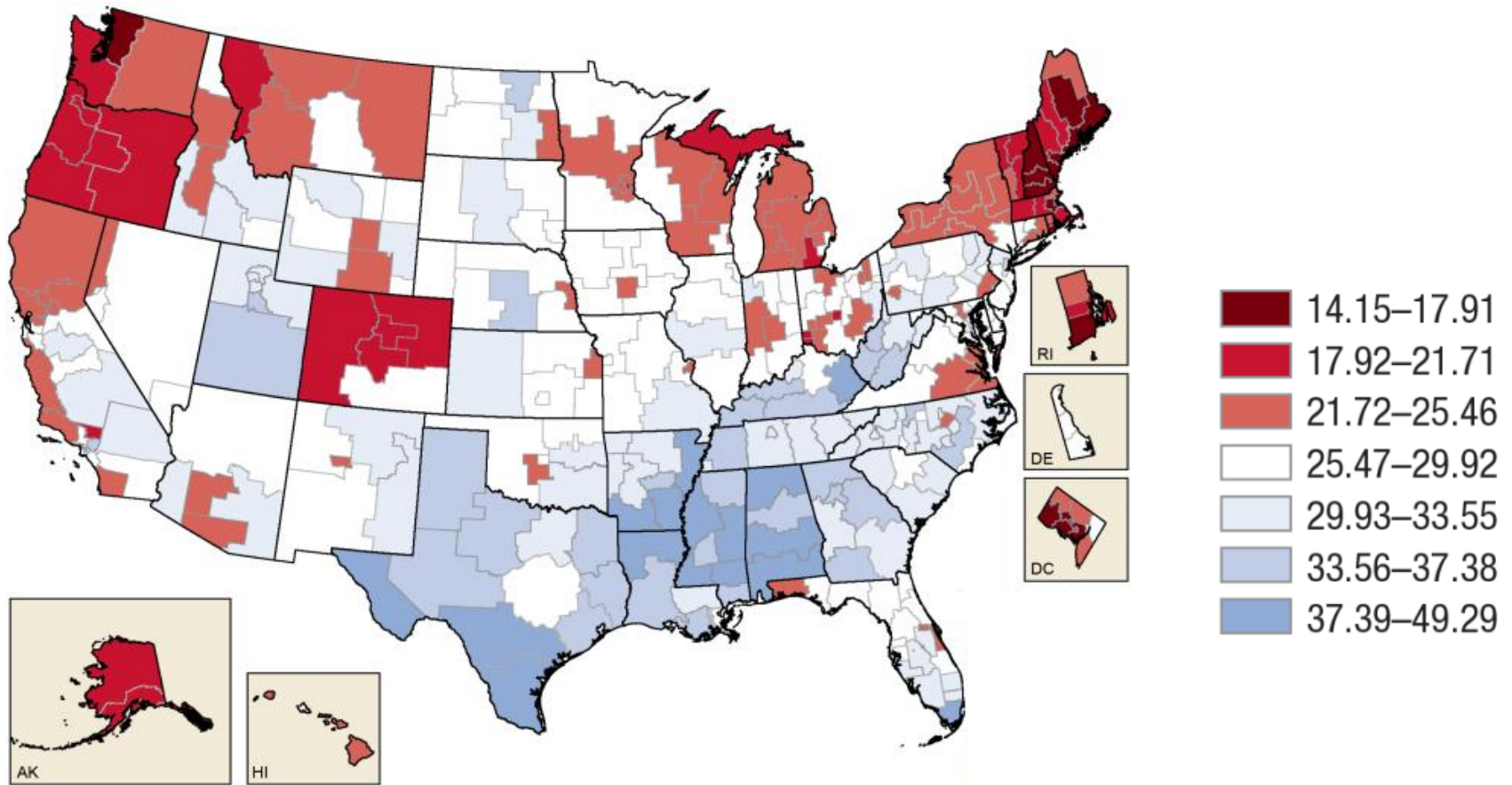
Adults perceiving risk from smoking marijuana at least once per month



Source: NSDUH

Two out of five high school students feel smoking marijuana once or twice a week was risky. 8% of 18 to 25 year olds felt smoking at least once a month was harmful. Perceptions of risk from marijuana use among adults have been decreasing in recent years.

Perceived great risk of harm from smoking marijuana once a month among people aged 12 or older, by substate region: 2012-14



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs), 2012 to 2014.

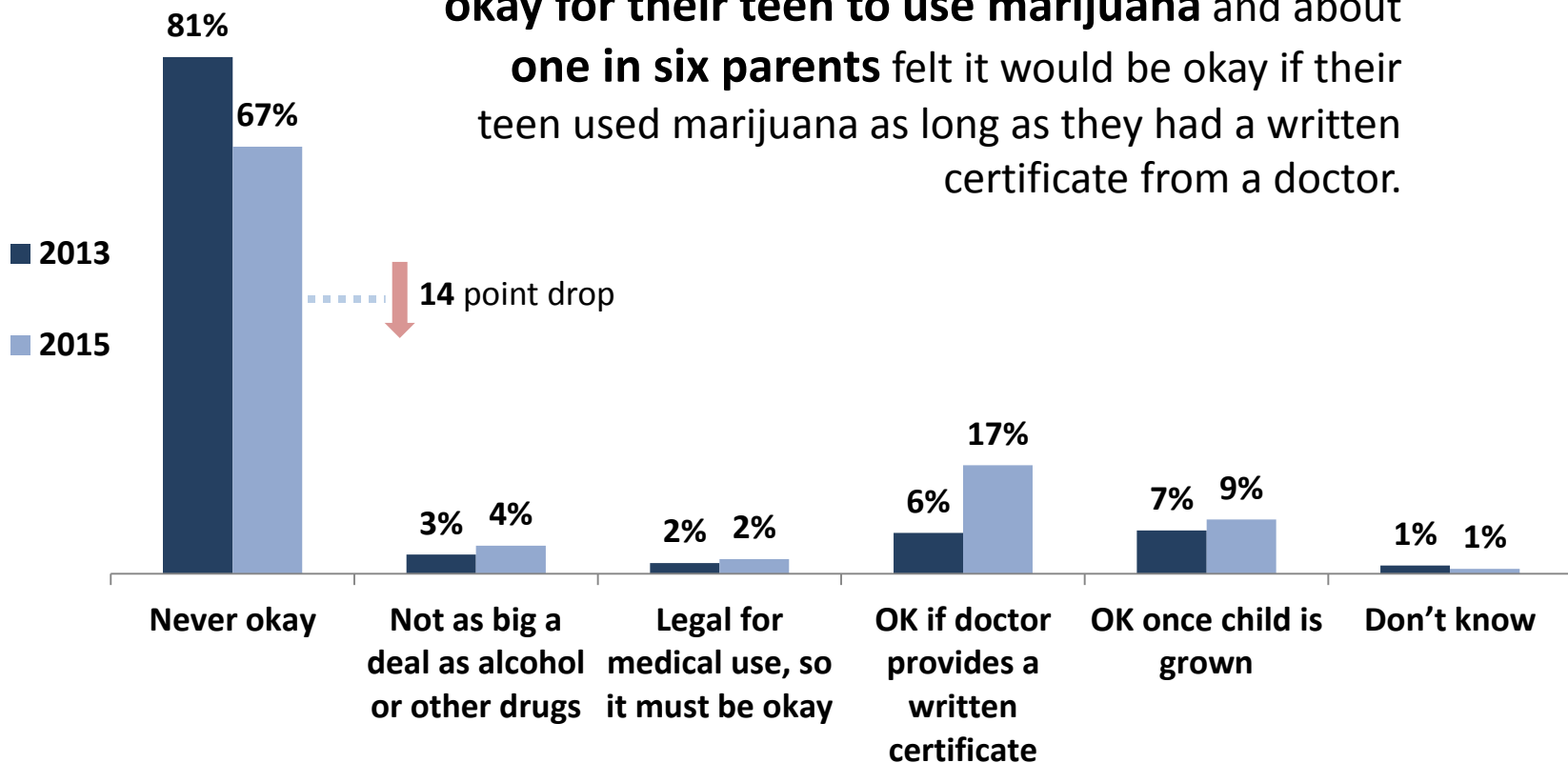
Perception of harm: marijuana

*In 2015, high school students **who do not believe there is risk in smoking marijuana regularly** are almost **8 times** as likely to smoke marijuana as their peers who do perceive risk of harm.*

Source: MIYHS

Parental attitudes regarding their teen using marijuana: 2013 and 2015

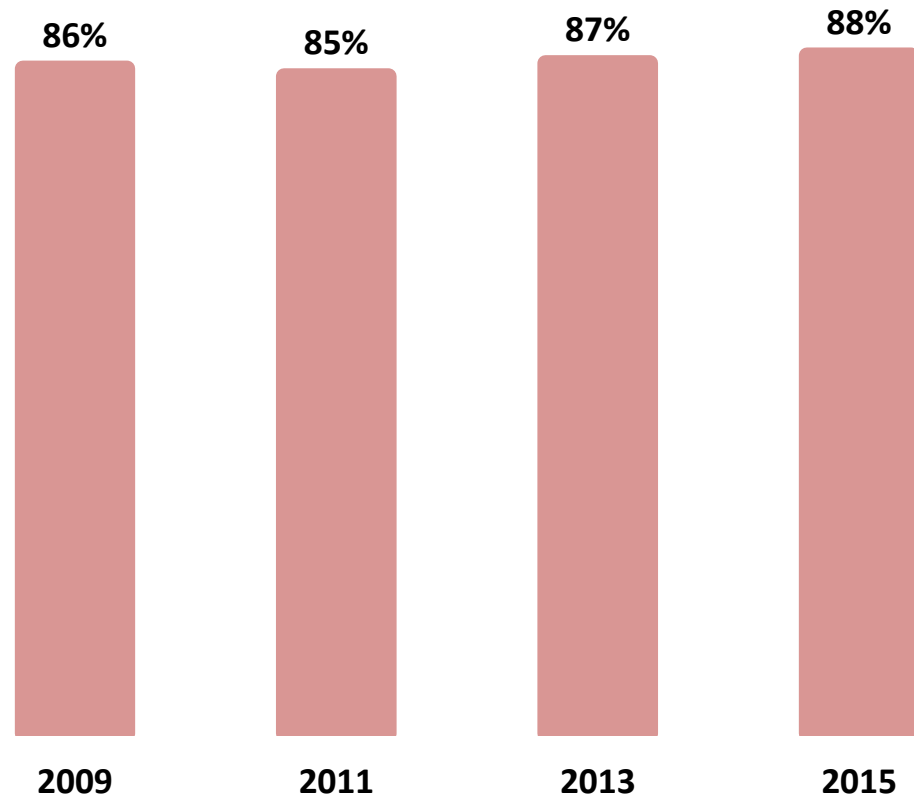
In 2015, **two in three parents** felt it was **never okay for their teen to use marijuana** and about **one in six parents** felt it would be okay if their teen used marijuana as long as they had a written certificate from a doctor.



Source: Parent Survey

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

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 more than one in ten high school students did not think their family had clear rules about drugs and alcohol.



Source: MIYHS

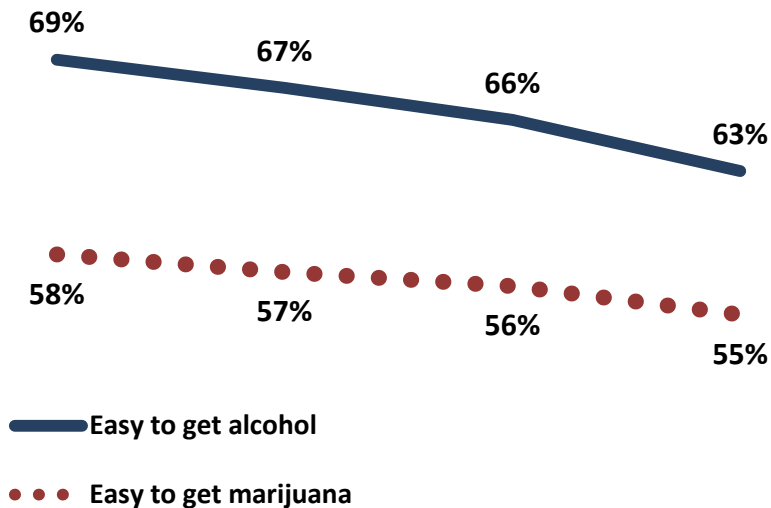
High school students who reported their family has clear rules about alcohol and drug use: 2009–2015

*In 2015, high school students **who did not believe their parents have clear rules about substance use** are **twice** as likely as to **drink alcohol** in the past month as compared to their peers who did have clear rules.*

Source: MIYHS

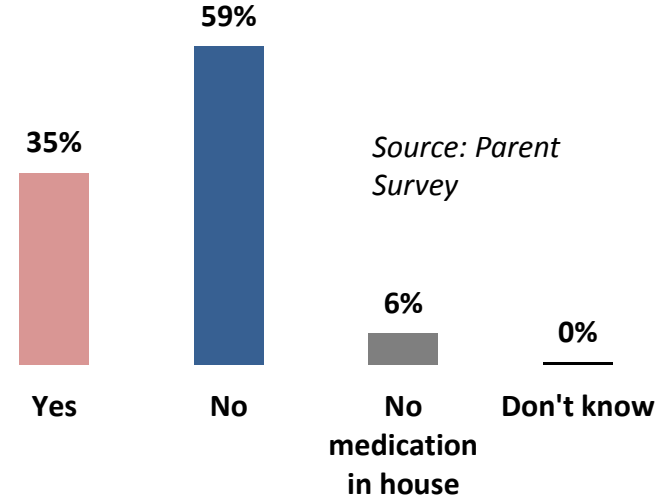
Perception of access/availability

Perception of access among high school:
alcohol and marijuana



Source: MIYHS

Parent perception of teen accessibility of
prescription drugs at home without
parental knowledge: 2015



Source: Parent Survey

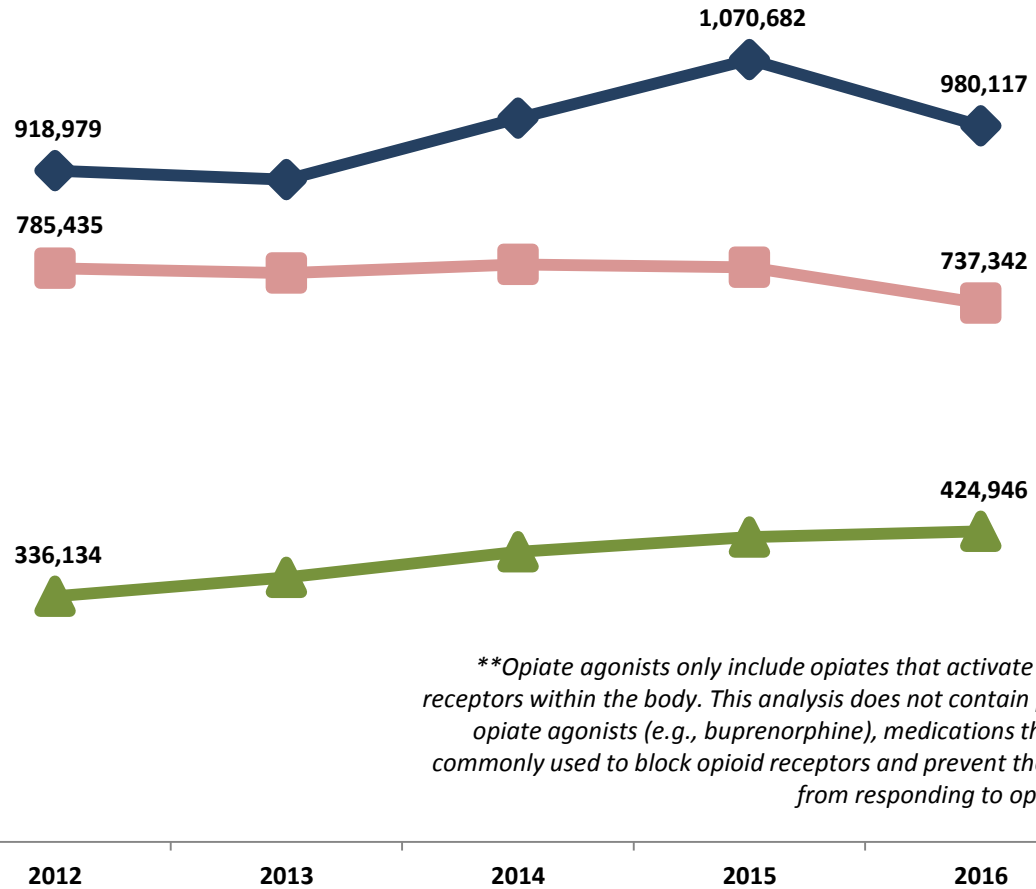
In 2015, **over half** of high school students **believed that alcohol as well as marijuana was easy to obtain**. Rates have steadily decreased over time. **More than a third (35%) of parents** felt that, at home, their teen could **access medications without permission**.

Number of prescriptions prescribed in Maine, by type: 2012–2016**

◆ Prescriptions for **opiate agonists** decreased by **8%** from 2015 to 2016

■ **Sedatives** remained relatively **stable**.

▲ Prescriptions filled for **stimulants** have **increased by 26%** since 2012.



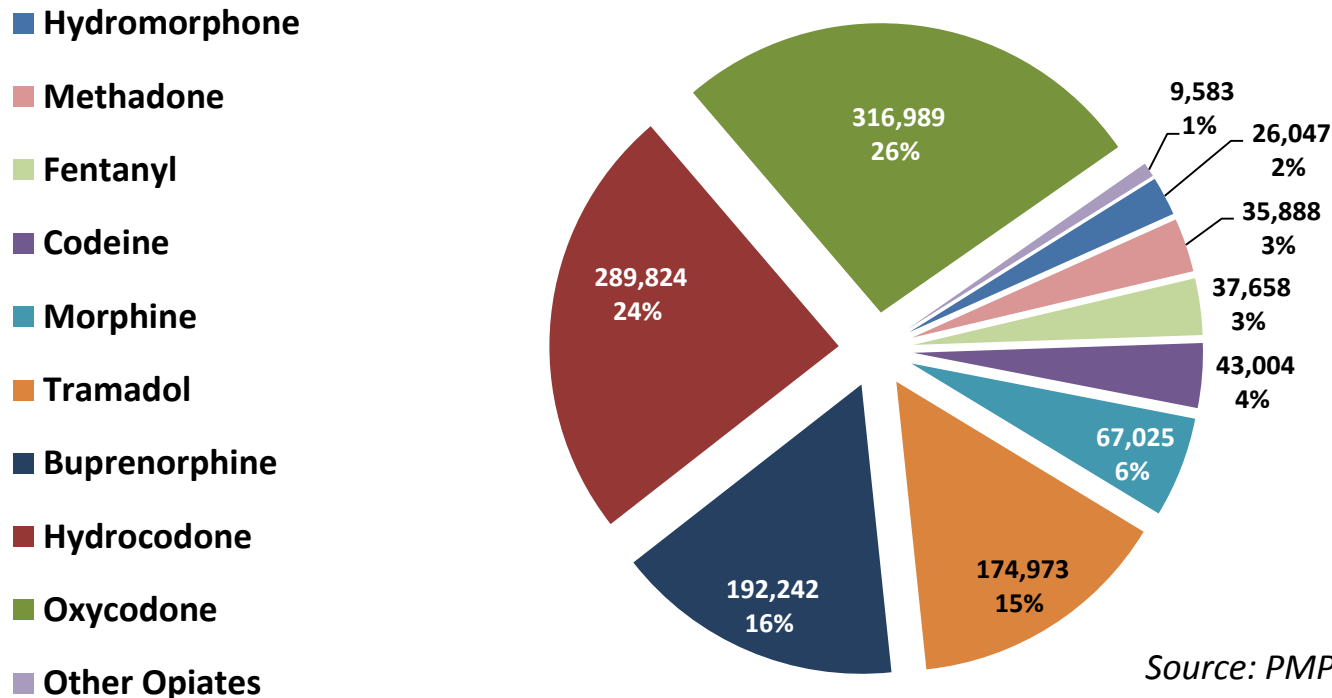
**Opiate agonists only include opiates that activate opioid receptors within the body. This analysis does not contain partial opiate agonists (e.g., buprenorphine), medications that are commonly used to block opioid receptors and prevent the body from responding to opiates.

Source: PMP

◆ Opiate Agonists* ■ Sedatives ▲ Stimulants

Percentage of opiate prescriptions prescribed in Maine, by primary active ingredient: 2016*

The primary active ingredient **oxycodone** was present in **26%** of all opiate prescriptions (agonists as well as partial agonists) prescribed in 2016; this was followed by **hydrocodone (24%)**, **buprenorphine (16%)**, and **tramadol (15%)**

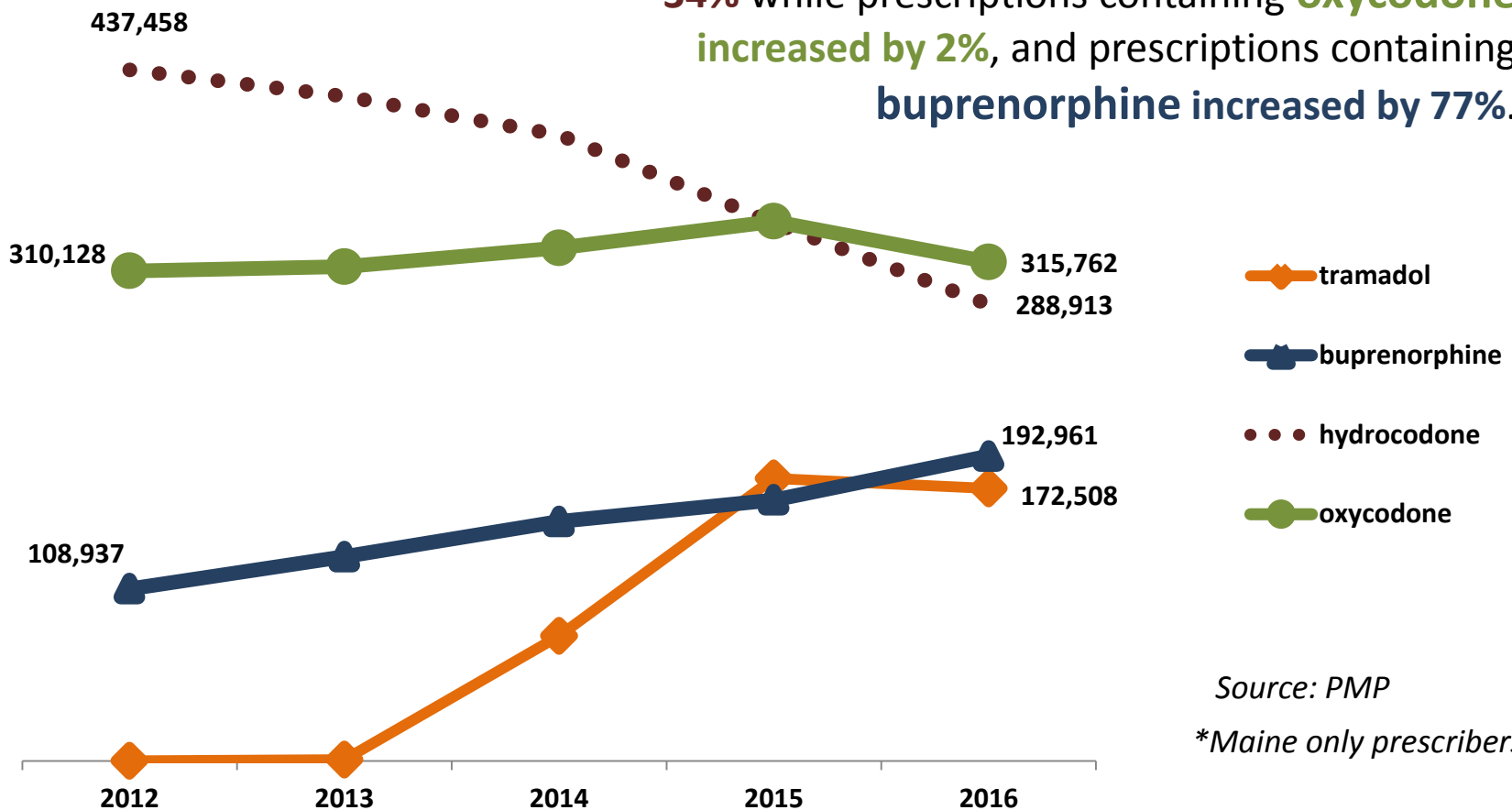


Source: PMP

*Maine only prescribers

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

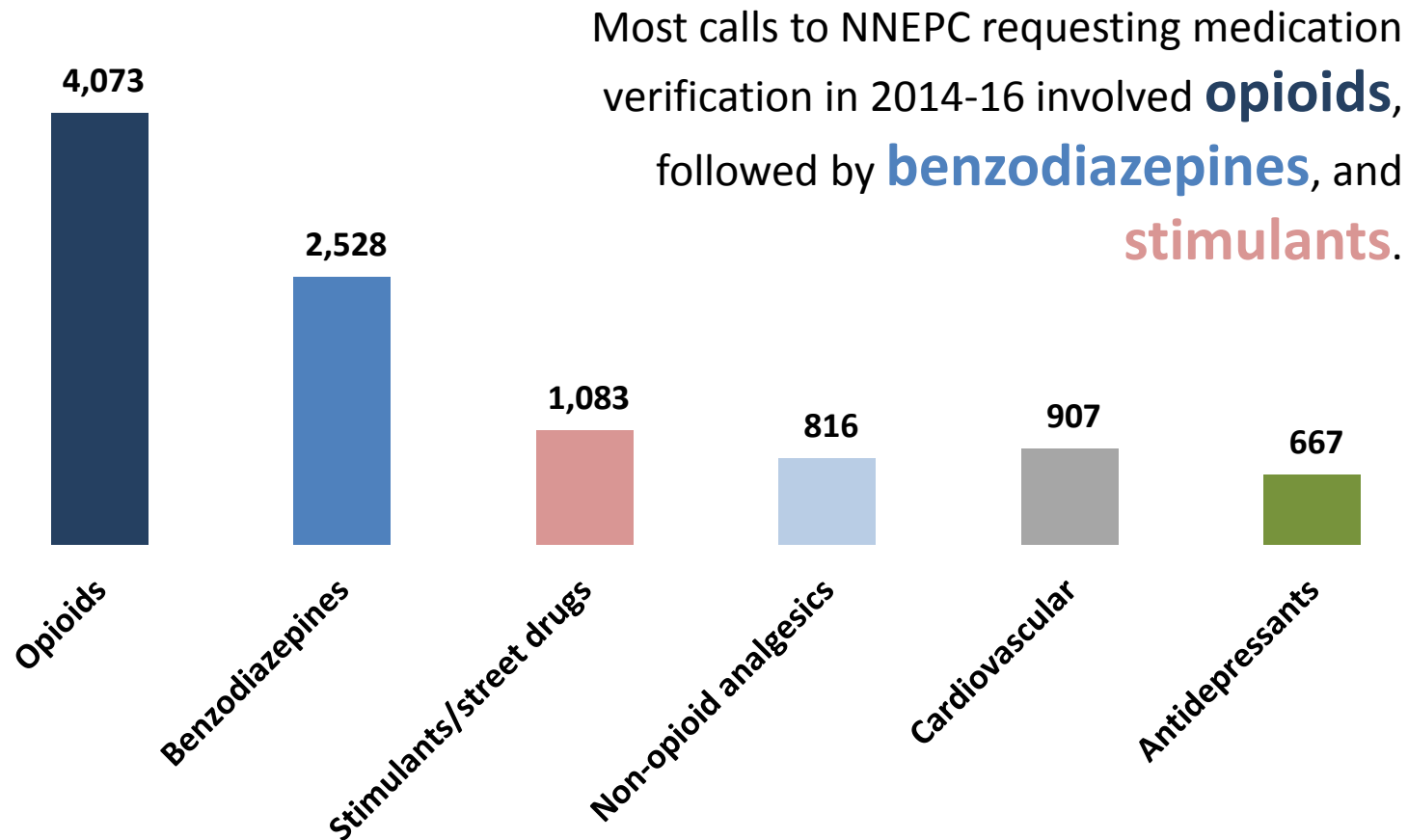
From 2012 to 2016, the number of opiate prescriptions prescribed containing **hydrocodone decreased by 34%** while prescriptions containing **oxycodone increased by 2%**, and prescriptions containing **buprenorphine increased by 77%**.



Source: PMP

*Maine only prescribers

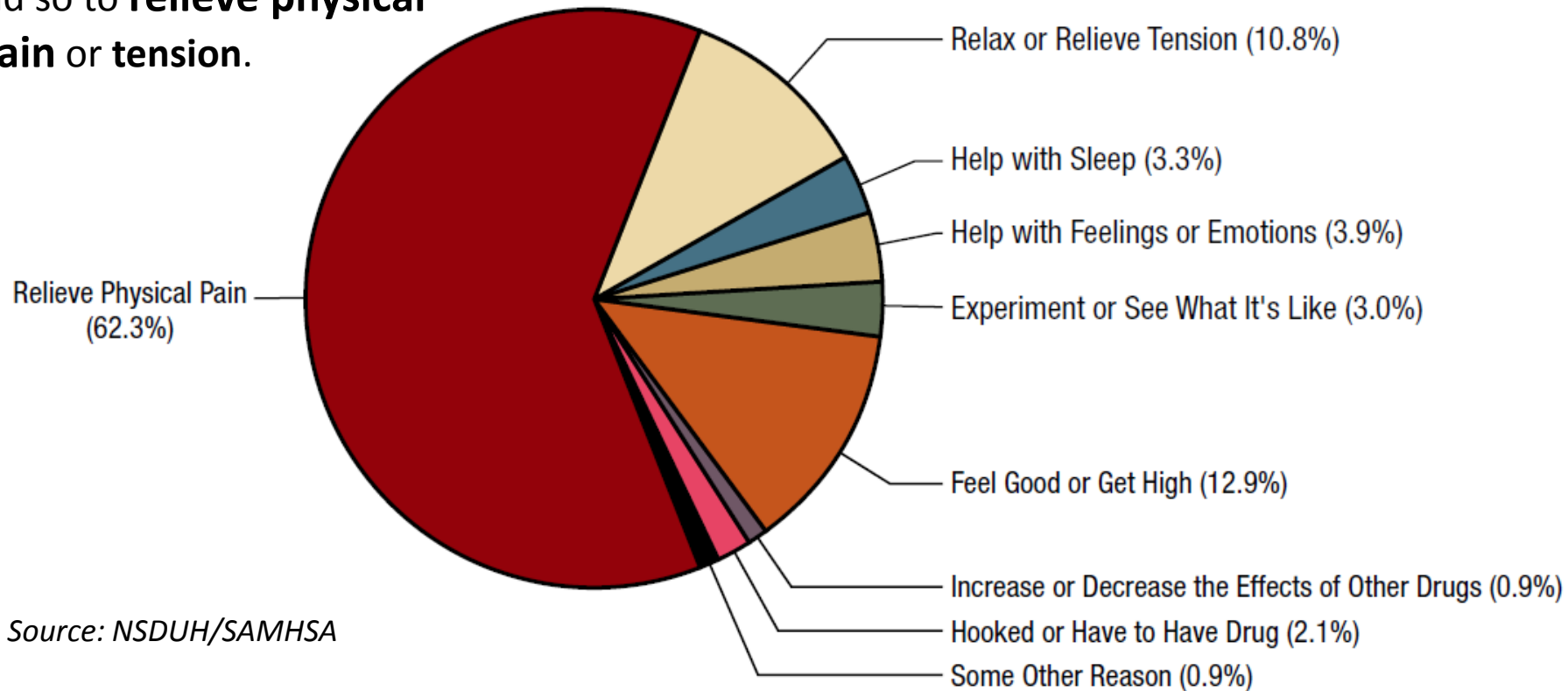
Substances most frequently requested for medication verification by non-law enforcement, by type: 2014–16



Source: NNEPC

Main reason for the most recent prescription pain reliever misuse among People 12 or Older who misused prescription pain relievers in the past year, United States: Percentages, 2016

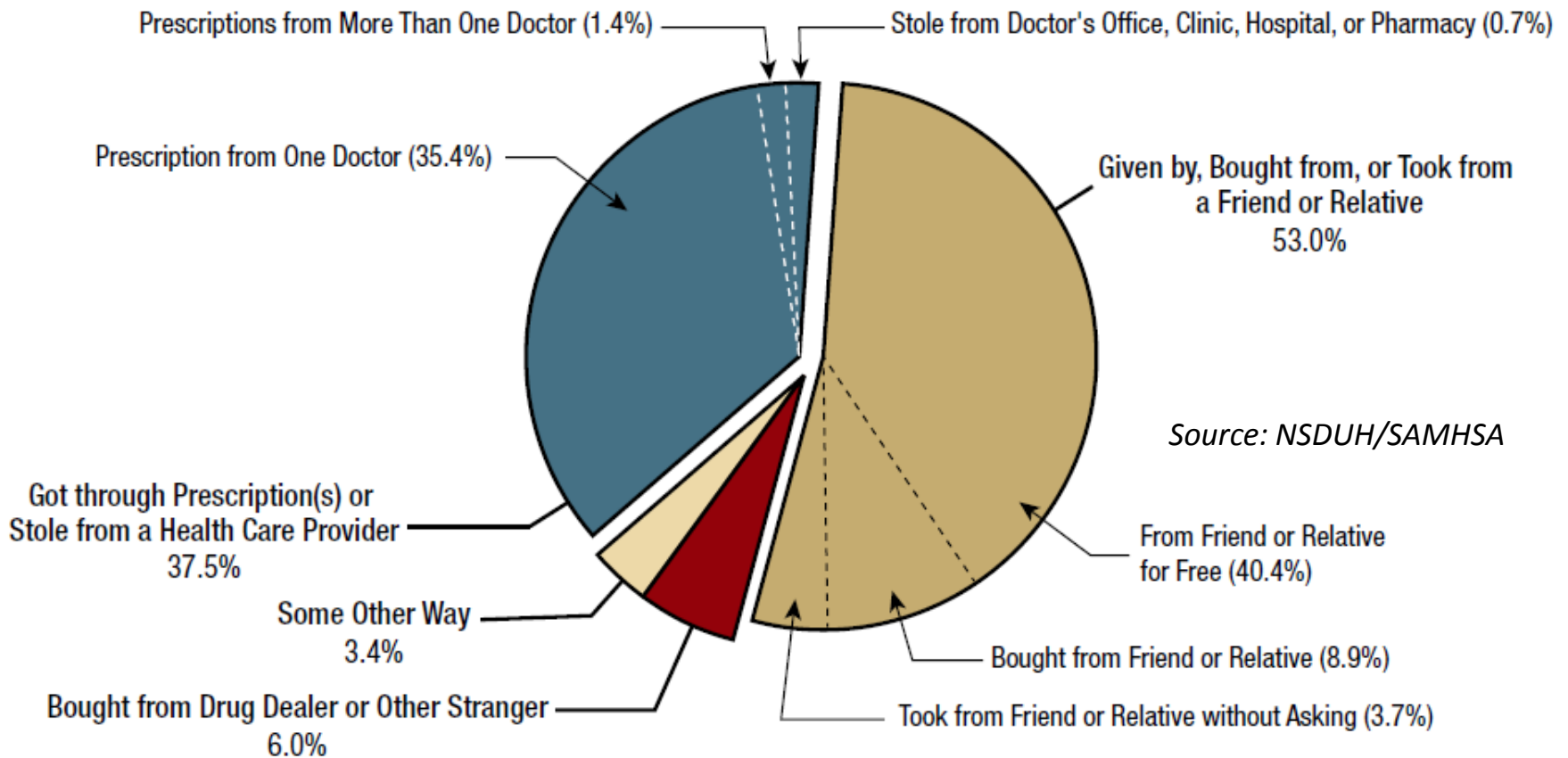
The majority (73%) of people who have ever **misused pain relievers** did so to **relieve physical pain** or **tension**.



Source: NSDUH/SAMHSA

11.5 Million People Aged 12 or Older Who Misused Prescription Pain Relievers in the Past Year

Source Where pain relievers were obtained for most recent misuse among people 12 or older who misused prescription pain relievers in the past year: Percentages, United States: 2016



Source: NSDUH/SAMHSA

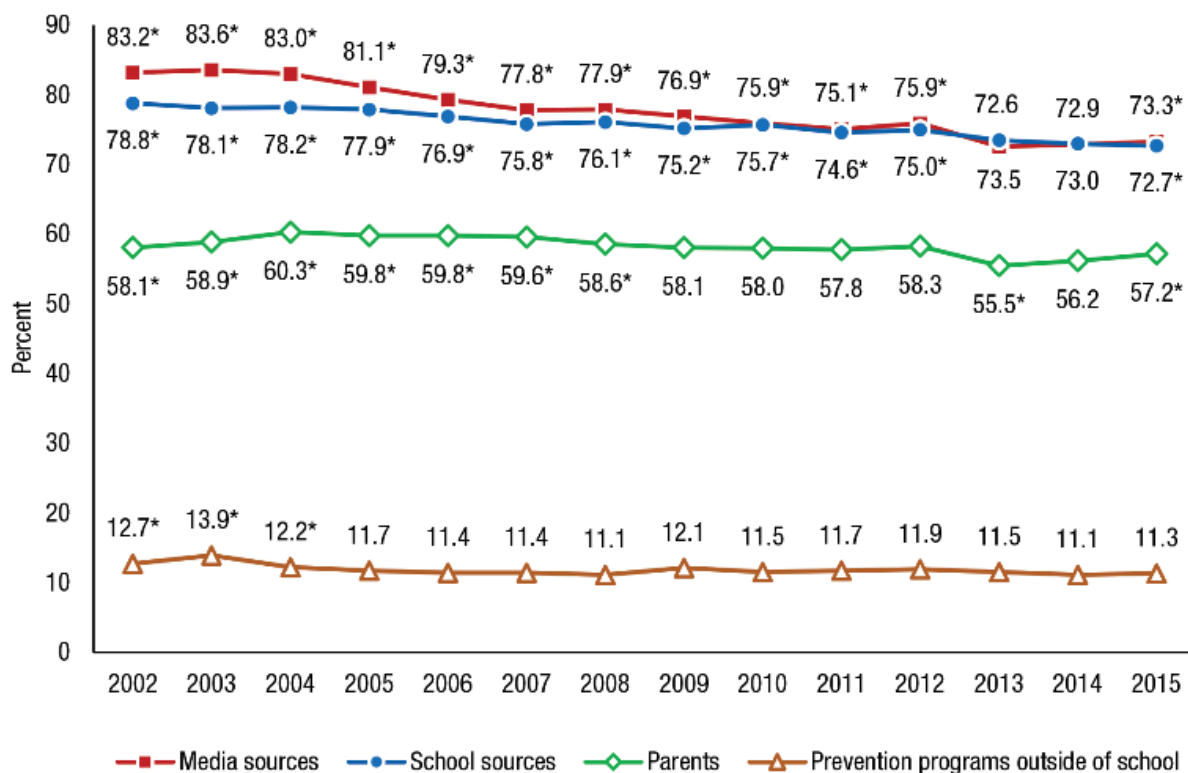
11.5 Million People Aged 12 or Older Who Misused Prescription Pain Relievers in the Past Year

Note: Respondents with unknown data for Source for Most Recent Misuse or who reported Some Other Way but did not specify a valid way were excluded.

Note: The percentages do not add to 100 percent due to rounding.

Trends in exposure to substance use prevention messages in the past year among adolescents aged 12 to 17, United States: 2002 to 2015

The percentage of adolescents who were **exposed to drug or alcohol use prevention messages** in the past year through media and school sources declined since 2002.

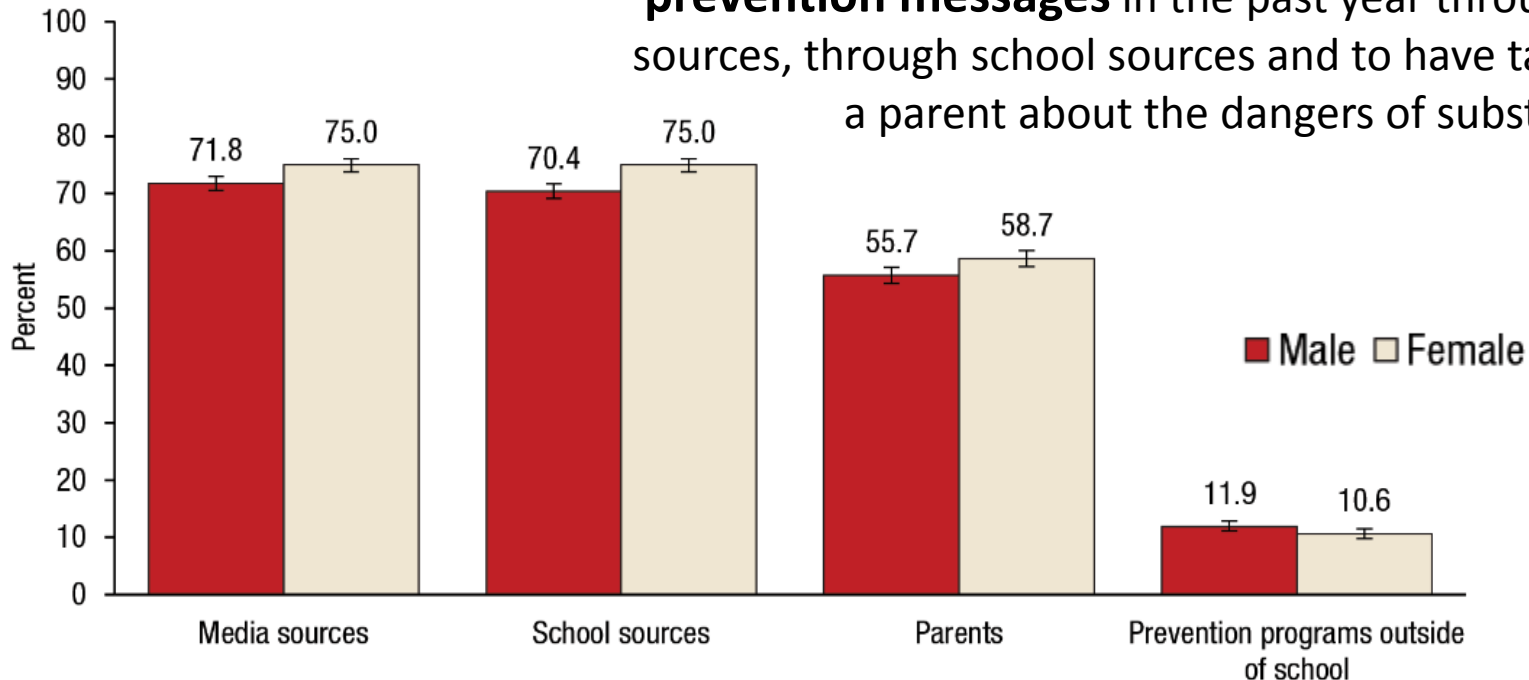


* Difference between this estimate and the 2015 estimate is statistically significant at the .05 level.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, NSDUH)

Exposure to substance use prevention messages in the past year among adolescents aged 12 to 17, by gender: 2015

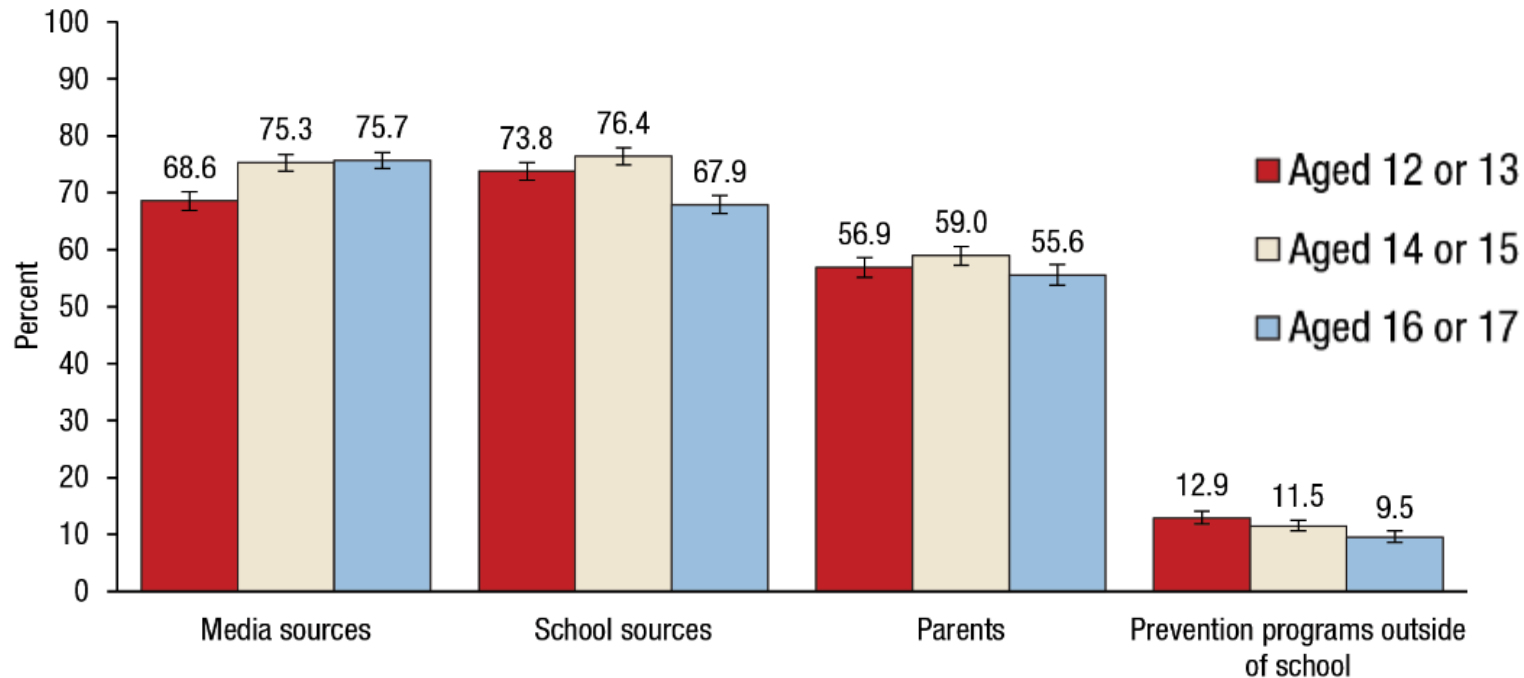
In 2015, **female adolescents were more likely** than male adolescents to have been **exposed to prevention messages** in the past year through media sources, through school sources and to have talked with a parent about the dangers of substance use.



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, NSDUH)

Exposure to substance use prevention messages in the past year among adolescents aged 12 to 17, by age group: 2015

Exposure to substance use prevention messages in school was highest among adolescents aged 14 to 15 (76.4%) and lowest among adolescents aged 16 to 17 (67.9%).



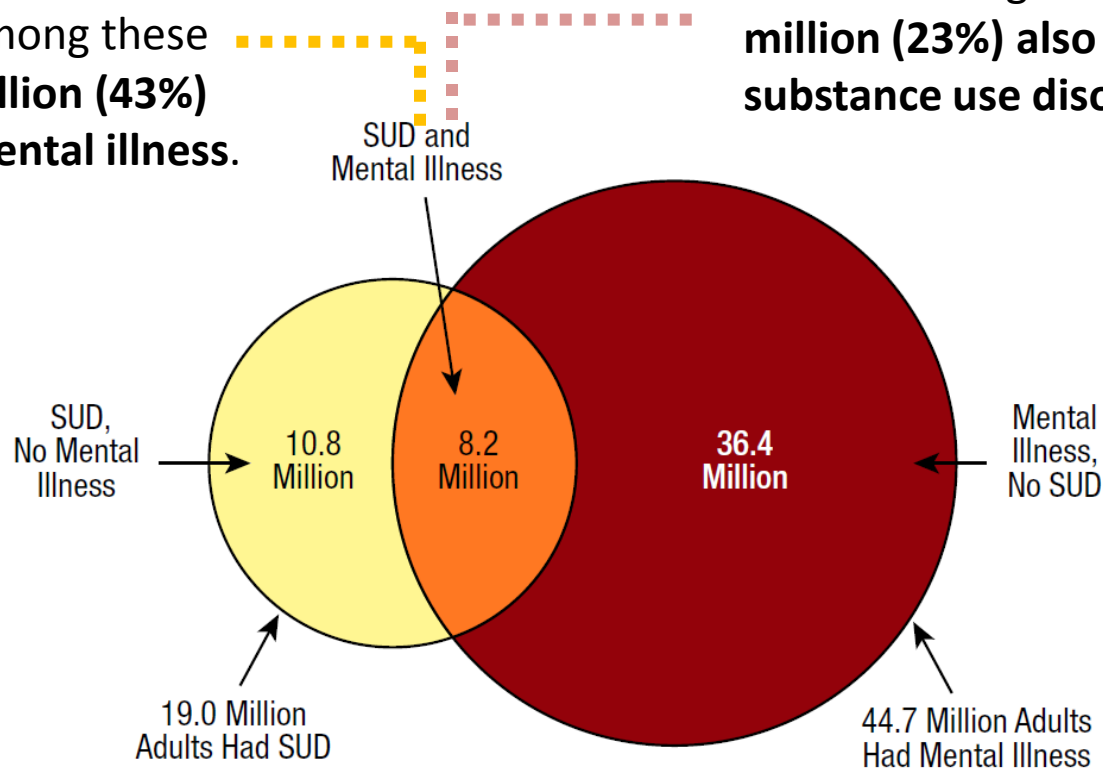
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, NSDUH)

Mental Health

Past year substance use disorder (SUD) and mental illness among adults 18 or older (numbers in millions), United States: 2016

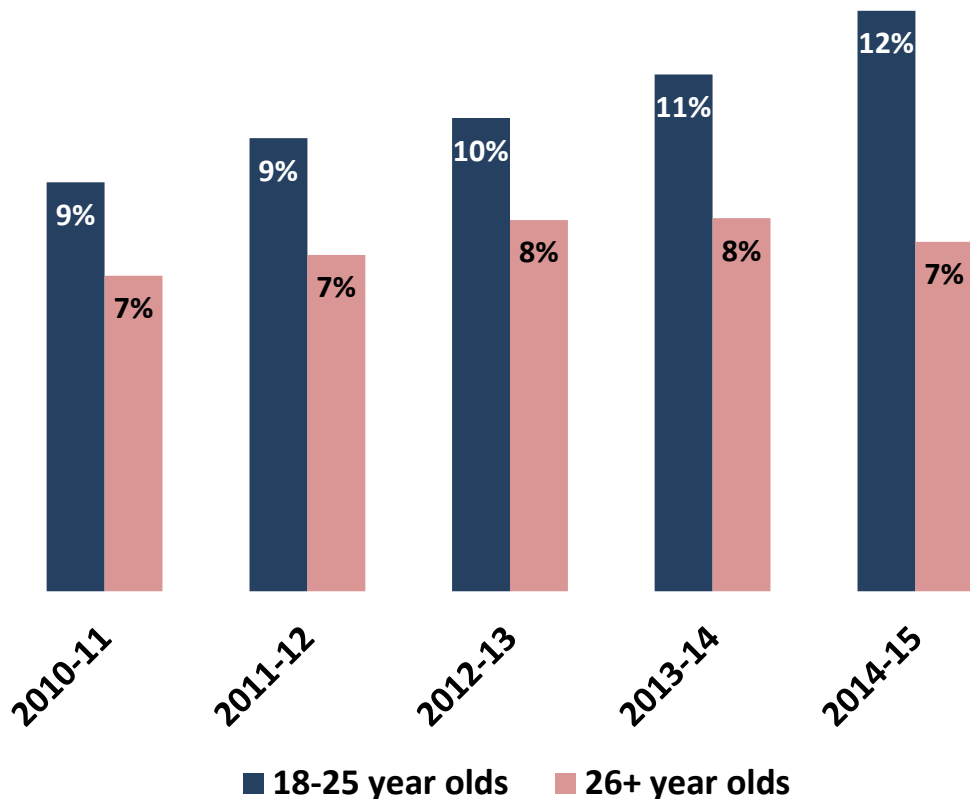
19 million adults had a past year **substance use disorder**. Among these adults **8.2 million (43%)** also had a mental illness.

44.7 million adults had a mental illness. Among these adults, **8.2 million (23%)** also had a substance use disorder.



Maine adults (age 18 and older) experiencing at least one major depressive episode* in past year, by age group: 2010–11 through 2014–15

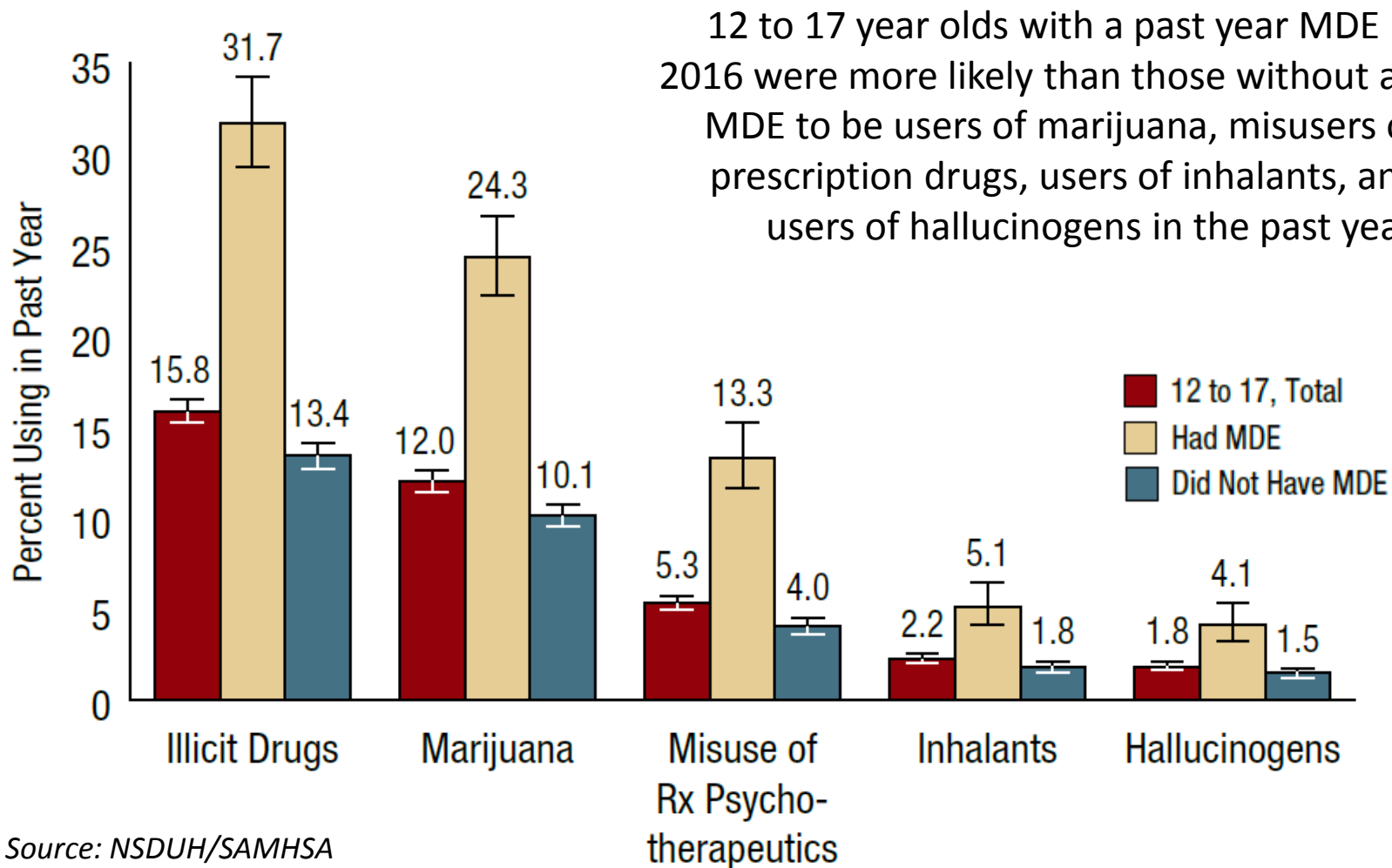
**Major depressive episode (MDE) is defined as in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), which specifies a period of at least two weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of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



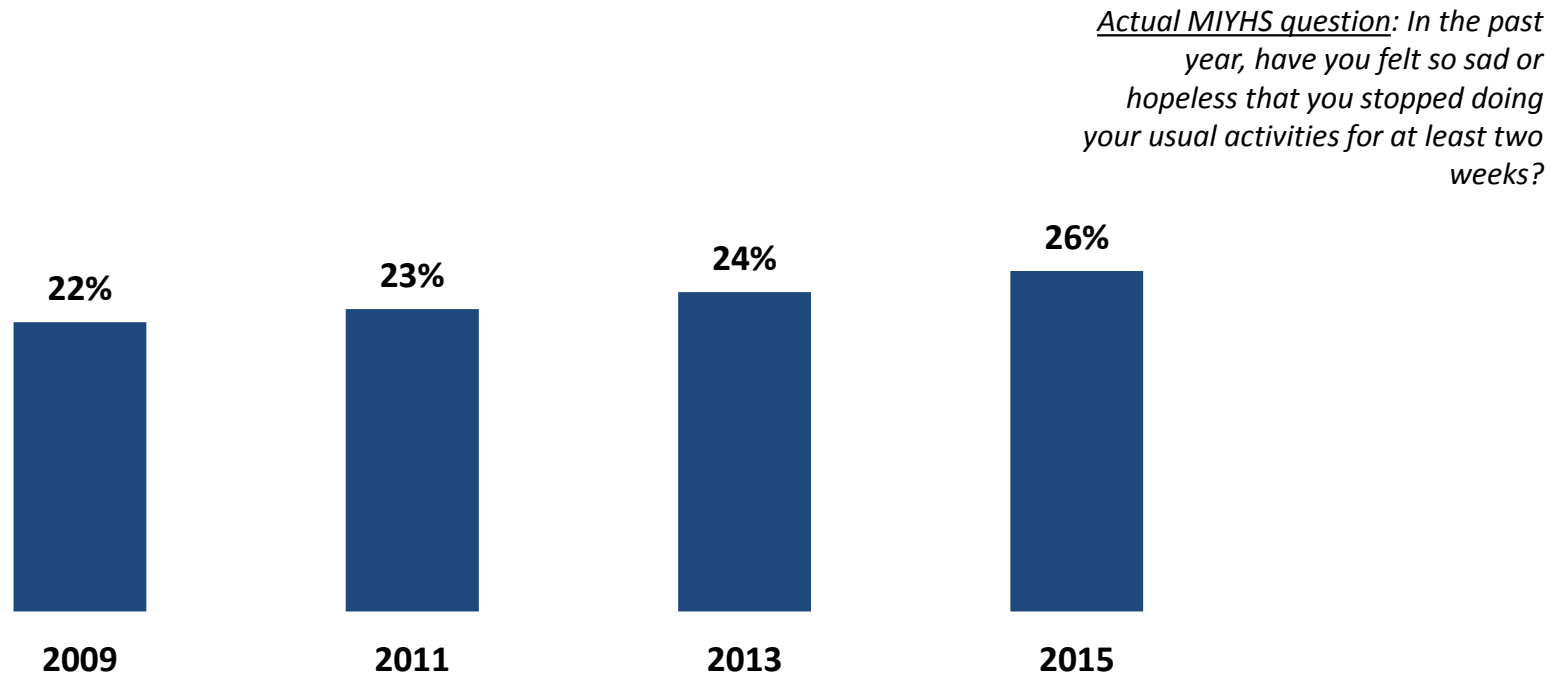
Major depressive episodes in Maine were more prevalent among young adults ages 18 to 25 (12%) compared to adults 26 and older (7%). Major depressive episode rates among 18 to 25 year olds have steadily increased since 2010-11.

Source: NSDUH

Past year illicit drug use among Youths 12 to 17, by past year major depressive episode (MDE) status Nationwide: 2016



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



Source: MIYHS

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.

High school students who reported feeling sad or hopeless in past year: 2015

Actual MIYHS question: In the past year, have you felt so sad or hopeless that you stopped doing your usual activities for at least two weeks?

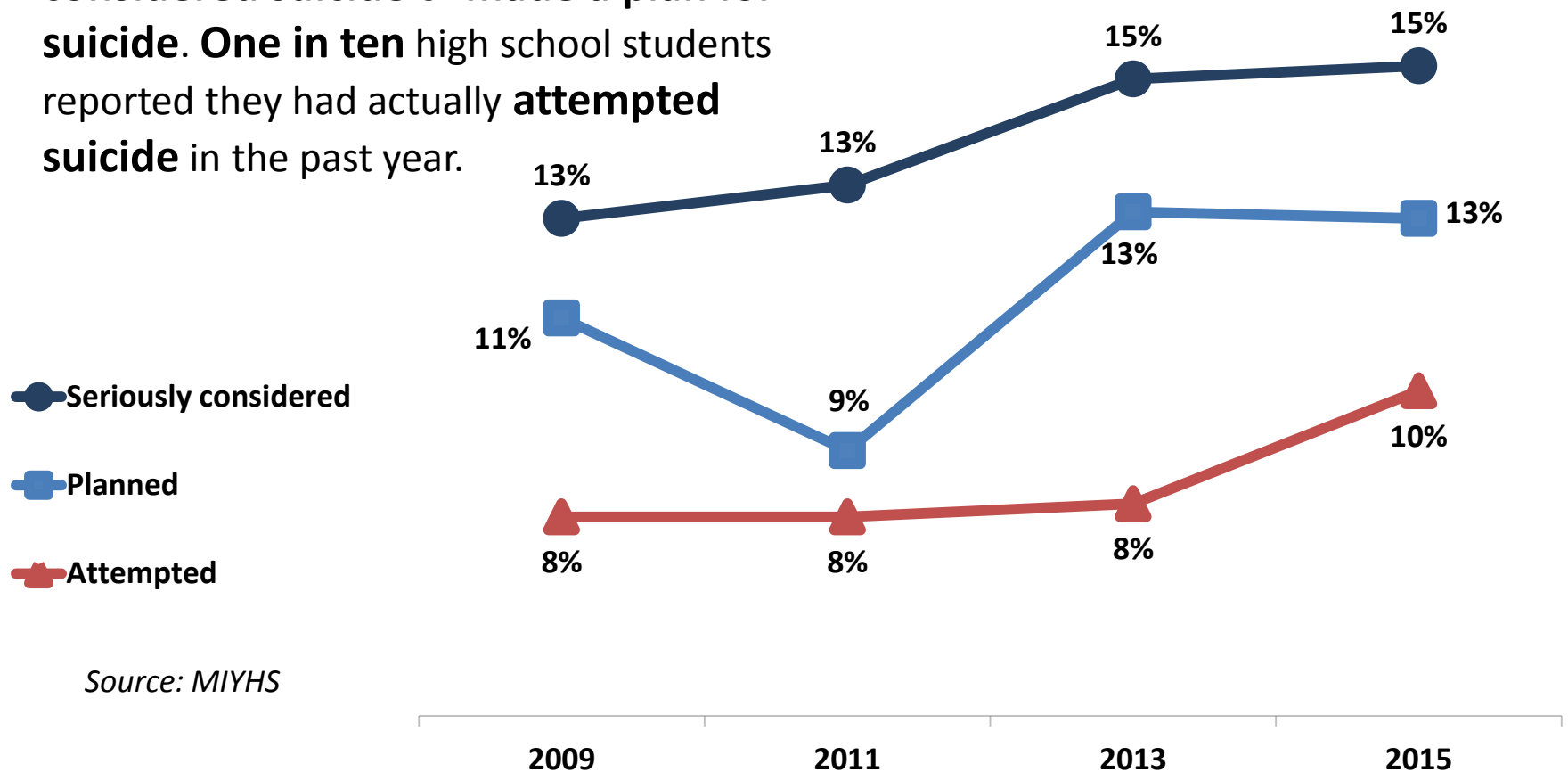
Students who reported **feeling hopeless or sad** for at least two weeks within the past twelve months were:

- **2x** as likely to have used marijuana or to have engaged in binge drinking in the past month, and
- **3x** three times as likely to have misused prescription drugs during the past month.

Source: MIYHS

High school students who considered, planned, or attempted suicide in past year: 2009–2015

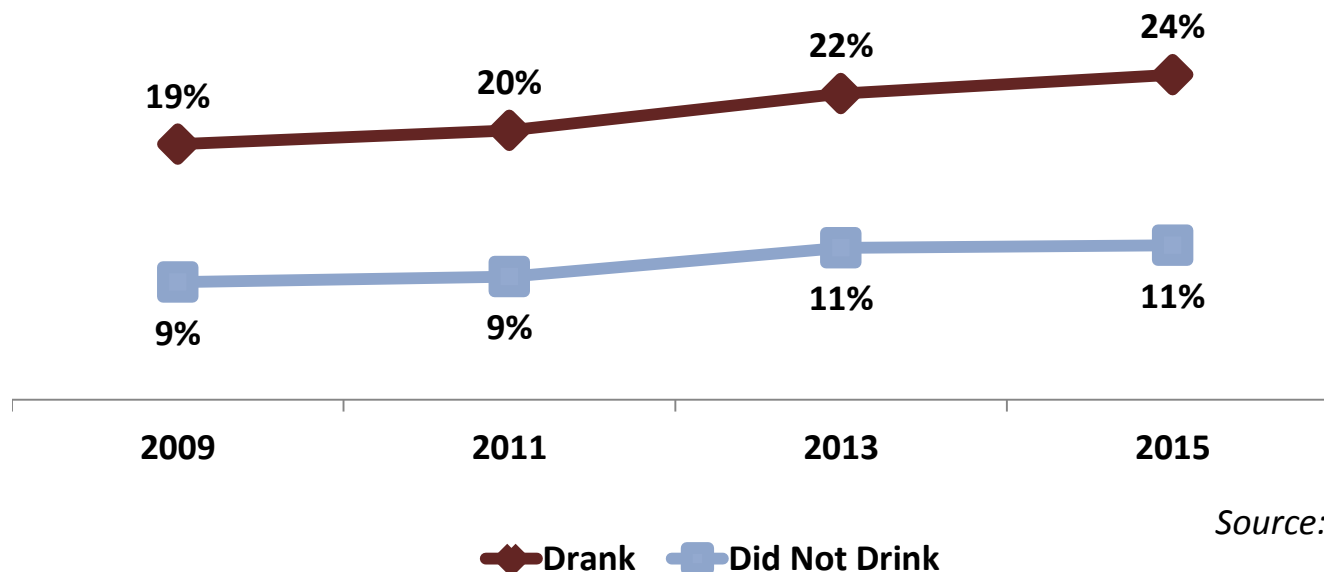
In 2015, about **one in seven** high school students in Maine had either seriously **considered suicide** or **made a plan for suicide**. **One in ten** high school students reported they had actually **attempted suicide** in the past year.



Source: MIYHS

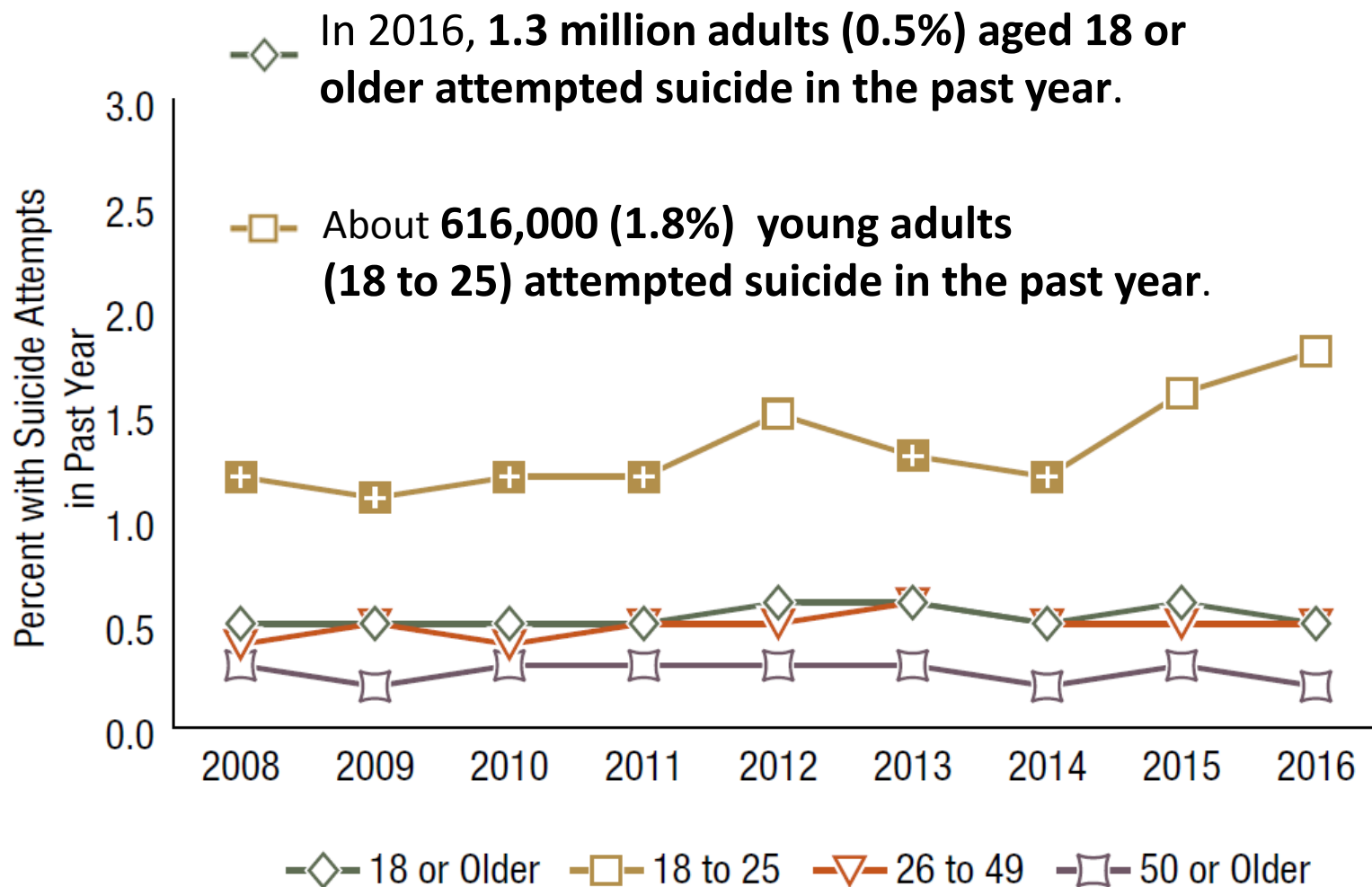
High school students reporting seriously considering suicide in the past year, by alcohol use in the past month: 2009–2015

In 2015, high school **students who drank** in the past month were **twice as likely** to have **seriously considered suicide** in the past year when compared to their peers who did drink.



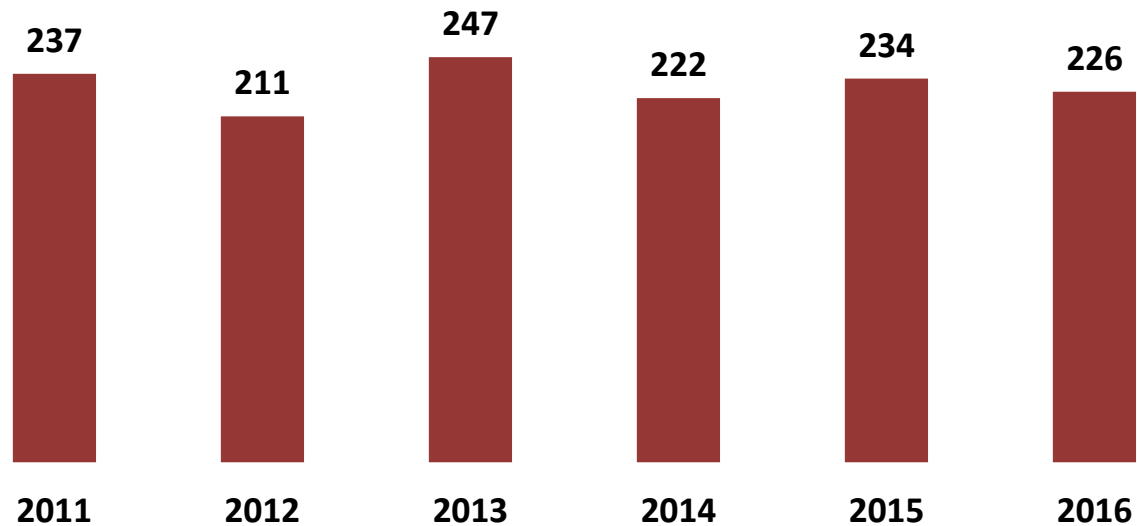
Source: MIYHS

Suicide attempts in the past year among adults 18 or older, by age group, United States: 2008-2016



Number of suicides in Maine: 2011-2016

In 2016, there were **226 Mainers committed suicide**. The number of suicides in Maine has remained relatively **stable** over the past several years.



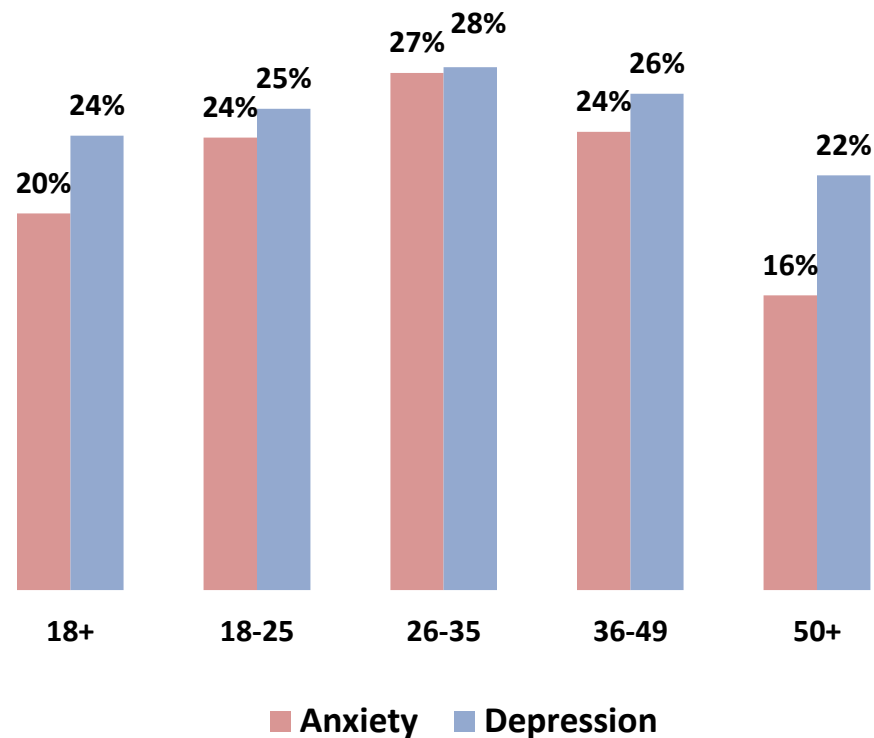
Source: DRVS

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

■ **One in four adults** in Maine reported having ever been **diagnosed with depression**

■ **One in five adults** reporting to have been **diagnosed with anxiety.**

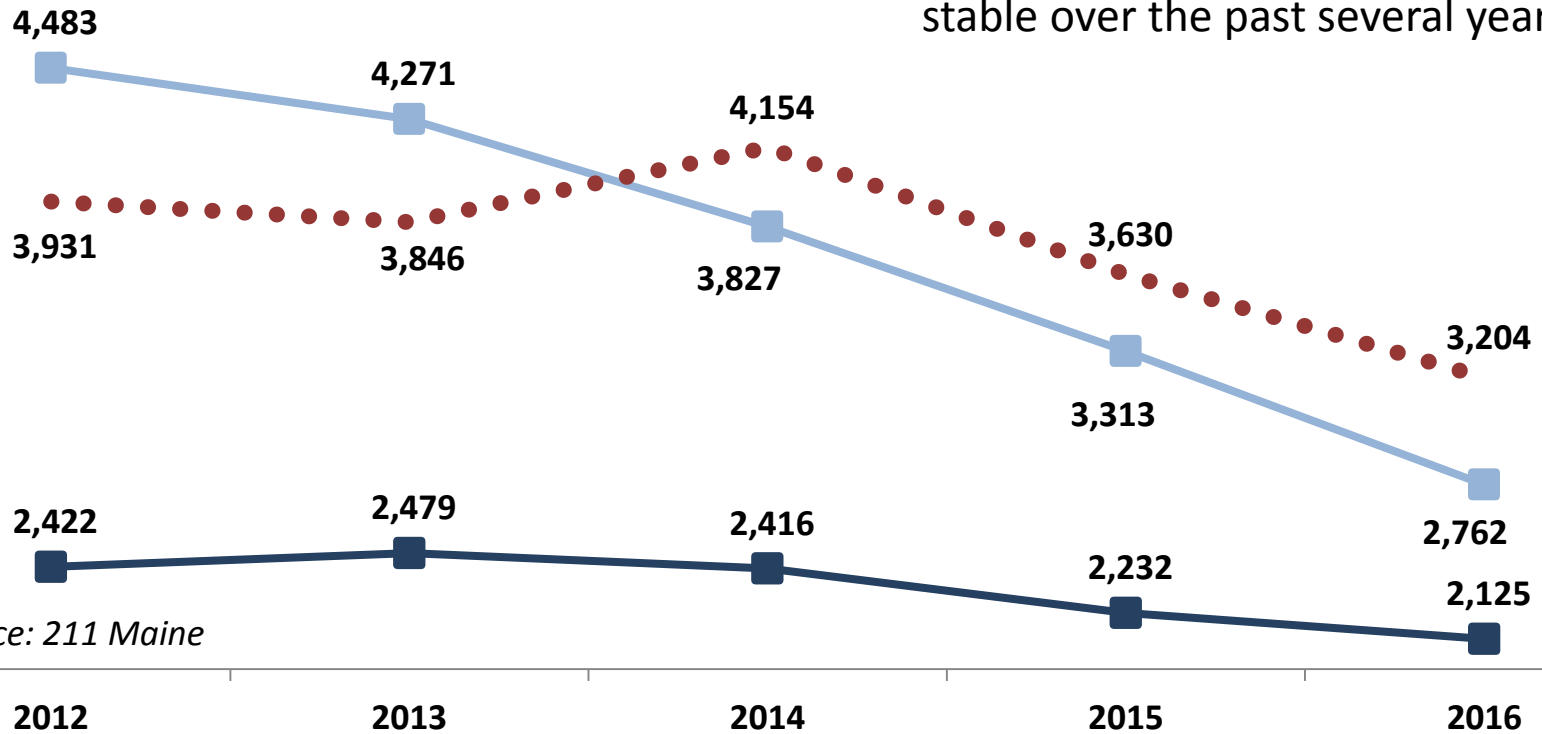
■ Adults ages **26 to 35** reported the **highest rates of both depression and anxiety.**



Number of 211 referral calls, by service type: 2012–2016

- Housing/Shelter
- Mental Health
- Substance Abuse

2-1-1 calls for mental health services have outnumbered housing/shelter calls since 2014. Mental health calls decreased by 23% from 2014 to 2016 while calls for substance abuse services have remained stable over the past several years.



Source: 211 Maine

Summary

- Most high school students perceive regular use of substances pose a risk of harm.
- Young adults (18 to 25) are least likely to perceive risks of harm from using alcohol and marijuana regularly.
- Perceptions of harm from marijuana use has been declining steadily among both youth and adults, reinforcing a more permissive attitude among parents and communities.
- Most Students think it is easy to obtain alcohol and marijuana.
- Discrepancy between parental perceptions of their child's behaviors and actual reports.

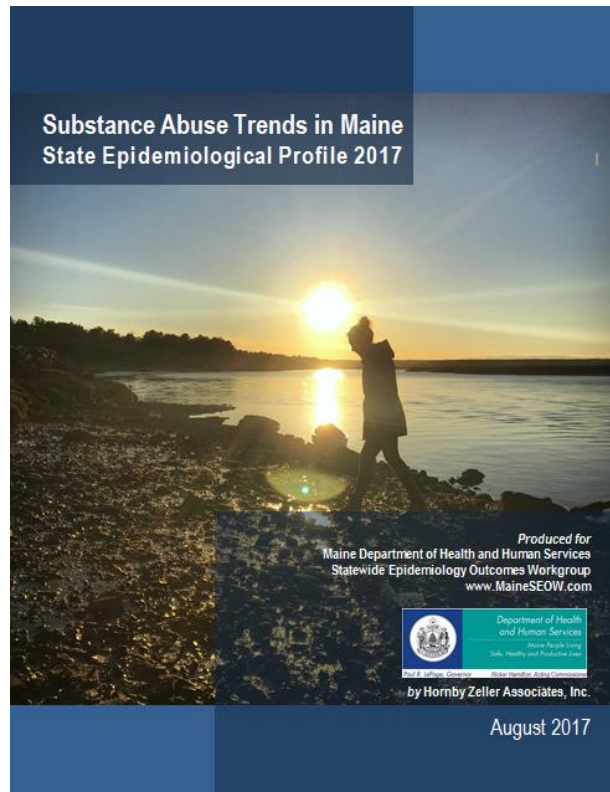
Summary

- The potential for diversion of prescription drugs remains a problem.
- Over a third of parents felt it would be possible for their teen to access prescription drugs at home without their knowledge.
- Supervision, defining rules, and conversations around drugs/alcohol between parents and youth can impact consumption rates.
- The relationship between substance use and mental health is well documented. It is important to understand how substance use and mental health interact with one another so that prevention and intervention efforts can better address the needs of both.

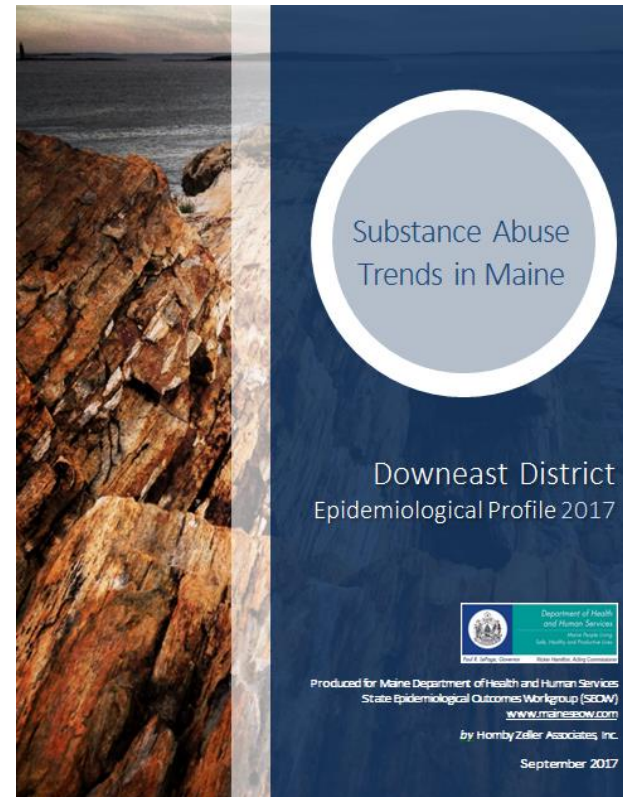
Additional Resources

2017 State and Community Profiles

State Profile



Community Profiles



Factsheets and reports can be found www.maine-seow.com within "additional resources"

Additional Resources: 2017 Factsheets

Contributing Factors

Consequences

SUBSTANCE ABUSE IN MAINE – CONTRIBUTING FACTORS

SEPTEMBER 2017

BY THE NUMBERS

Chart Area

In 2015, high school students who did not perceive risk of harm from binge drinking once or twice a week were 2x as likely to drink in the past month as high school students who do perceive risk of harm.¹

High school students who do not believe there is risk in smoking marijuana regularly are almost 8x as likely to smoke marijuana as their peers who do perceive risk of harm. Perception of harm related to marijuana use by both youth and adults has decreased steadily.^{2,3}

Easy access to alcohol at home is a major contributing factor to underage drinking. Half of the parents of middle and high school aged youth felt their children could access alcohol without their knowledge. This perception has increased since 2011.⁴

In 2017, Maine had a total of 3,839 active alcohol retail outlets; 39% were off-premise (e.g., convenience store) and 61% were on premise (e.g., restaurant, bar).

More than half of high school students believed that alcohol and marijuana were easy to obtain.⁵ More than a third of parents felt their teen could access prescription medications at home without permission.⁶

The potential for diversion of prescription drugs remains a concern. In 2016, 975,525 opiate agonist* prescriptions were filled in Maine; nearly one for each resident.⁷ In 2014-16, the majority of medication verification calls to the Poison Center involved opioids (4,073/year), benzodiazepines (2,528/year), and stimulants or street drugs (1,083/year).⁸

*Opiate agonists only include opiates that activate opioid receptors within the body and exclude opiate antagonists, medications that are used to prevent the body from responding to opiates

SPOTLIGHT ON: Prescribing Trends

There have been efforts in Maine and nationally to reduce the availability of prescription opiates through policies, prescribing practices, and education.

From 2015 to 2016, the number of prescriptions filled for opiate agonists⁹ decreased by eight percent while the number of prescriptions for sedatives dropped six percent and prescriptions for stimulants increased by two percent. Prescriptions filled for stimulants have increased by 26 percent since 2012.⁹

Among all opiate prescriptions filled in 2016, the primary active ingredient oxycodone was in 26 percent of opiate prescriptions, followed by hydrocodone (24%), buprenorphine (16%), and tramadol (15%). From 2012 to 2016, the number of prescriptions containing hydrocodone decreased by a third, buprenorphine increased by 77%, and oxycodone remained stable.⁹

Addressing these factors can have a positive impact on substance consumption and consequences in Maine.

In 2015, about 1 in 7 high school students in Maine had seriously considered suicide or made a plan for suicide. 1 in 10 reported they had actually attempted suicide in the past year.¹

Year	Seriously considered	Planned	Attempted
2009	13%	11%	8%
2011	13%	9%	8%
2013	15%	13%	8%
2015	15%	13%	10%

This fact sheet is a product of the Maine State Epidemiological Outcomes Workgroup (SEOW)
For more info, visit www.maine-seow.com

Footnotes:

- Maine Integrated Youth Health Survey
- National Survey on Drug Use and Health
- SAMHSA Parent Survey
- Liquor Licensing and Compliance
- Prescription Monitoring Program
- Northern New England Poison Center

Paul R. LePage, Governor
Rokar Hamilton, Acting Commissioner

SUBSTANCE ABUSE IN MAINE – CONSEQUENCES

SEPTEMBER 2017

BY THE NUMBERS

MDEA drug trafficking investigations involving heroin nearly doubled from 2014 to 2015, while those related to synthetic opiates decreased by a third. Investigations related to cocaine remained fairly stable.¹

MDEA methamphetamine manufacturing investigations more than doubled from 2014 to 2016. In 2016, 126 methamphetamine lab/dump sites were found by the MDEA, representing a 235 percent increase since 2012 (58 lab/dump sites).²

In 2016, there were 1,024 reports to Child Protective Services regarding drug-affected babies (substance-exposed infants); this accounts for 8% of five births in Maine.³ Fortunately, in recent years, the rate of drug-affected baby reports has begun to stabilize.⁴

From 2014 to 2016, the number of substance (accident) administrations given by EMS responders more than doubled.⁵ Rates are highest among males 26 to 34 years old.⁶

Drug/medication overdoses EMS responses most common among those between the ages of 26 and 35, as well as among those 18 to 25.⁶

In 2016, 16% of all fatal motor vehicle crashes involved alcohol/drugs.⁷

Marijuana-related school suspensions increased by 25% from 2014 (468) to 2016 (587). Suspensions involving all other illicit drugs observed a 72% increase from 2014 (128) to 2016 (220), while alcohol suspensions remained stable at 124 in 2016.⁸

SPOTLIGHT ON: Non-pharmaceutical Fentanyl!

The high number of fatal drug overdoses in Maine continues to be driven by non-pharmaceutical (illicit) manufacture and distribution of synthetic opiates similar to heroin or morphine, but 50 to 100 times more potent. 70% of often sold in zippered metal zippers or substituted for heroin in its lab/factory.⁹

In 2016, there were 3.76 overdose deaths due to drug use in Maine a 38 percent increase since 2015. The majority of overdose deaths were related to this drug; almost 2 in 5 involved heroin/morphine, and nearly a third involved non-pharmaceutical fentanyl.¹⁰

Adults aged 26-35 have the highest rate of death due to substance abuse or overdose during 2016. Followed closely by those aged 36-45. Substance abuse and overdose death rates for adults between the ages of 18 and 35 have seen a steady increase for the past several years.¹¹

As Maine and the Northeast confront the opiate/opioid epidemic, it's critical to monitor other emerging trends as well.

In 2016, over half of primary treatment admissions were related to opiates or alcohol. More than one-third were related to alcohol.¹²

This fact sheet is a product of the Maine State Epidemiological Outcomes Workgroup (SEOW)
For more info, visit www.maine-seow.com

Consumption

SUBSTANCE USE IN MAINE – CONSUMPTION

SEPTEMBER 2017

BY THE NUMBERS

The rate of binge drinking among Maine high school students has been decreasing in recent years, from 19% in 2009 to 12% in 2015.¹

About 1 in 3 18-25 year olds report binge drinking alcohol in the past month. Males 26-35 reported a similar rate of binge drinking.²

About 1 in 10 high school students report smoking cigarettes in the past month compared to 1 in 5 18 to 25 year olds.³

Tobacco use remains high among both ages 26-35, with nearly a third by current smokers.⁴ Tobacco use rates have decreased steadily among youth and young adults but remain high among older Mainers.⁵

Nearly 1 in 3 of young adults in Maine reports using marijuana in the past month.⁶

In 2015, 1 in 9 high school students used marijuana in the past month.⁷ While use by high school students is stable, adult use has been increasing over the past few years.⁸

Prescription Drug misuse has steadily decreased among high school students since 2009. In 2015, about 1 in 10 high school students reported misusing a prescription drug in their lifetime.⁹ Males between the ages of 18 and 35 continue to have the highest rates of prescription drug and pain reliever misuse.¹⁰

Overall, it is estimated that about 7,000 (4.2%) Mainers 12 and older reported using heroin in the past year. The highest rate of use was observed among 18 to 25 year olds (1.2%).¹¹

SPOTLIGHT ON: Initiation of Use

Youth who begin using substances at an early age are more likely to develop substance abuse and dependence later in life.¹²

Out of high school students who never drank alcohol, one in four had their first drink before age 15.¹³

Marijuana use rates among young adults in Maine as well as those 26 and older have been steadily increasing over the past several years.¹⁴ While these rates don't seem to have overall increased in the number of initiators, users of marijuana appear to be starting earlier. In 2014-15, an average of 6,000 Mainers aged 12-17 had their first marijuana use.¹⁵

Substance use is disproportionately higher among Mainers 18 to 35.

It's estimated that 61,000 Mainers have an alcohol use disorder (according to the DSM-IV criteria). Fortunately, young adults 18-25 who qualify as having an alcohol use disorder have decreased by a third since 2008.¹⁶

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Additional Resources: Data Dashboard

The screenshot displays the 'Maine SEOW Dashboard' website. At the top is a navigation menu with links for 'Maine SEOW Dashboard', 'Indicators', 'Data Sources', 'Additional Resources', 'How To', 'About', and 'Contact'. The main banner features the text 'SEOW Dashboard User Guide' with a 'Start Here' button and a hand cursor icon. Below the banner are three sections: 'Indicators' (with a bar chart icon), 'Data Sources' (with a globe icon), and 'Additional Resources' (with a lightbulb icon). Each section includes a brief description and a 'View' button.

Maine SEOW Dashboard Indicators Data Sources Additional Resources How To About Contact

SEOW Dashboard

User Guide

Start Here

Indicators

Sorted into a real-time search, find indicators by Source, Type, Substance, and Population.

View indicators »

Data Sources

Read through our sources to find in depth information about where our data comes from.

View data sources »

Additional Resources

Navigate through our collection of reports, infographs, and more.

View additional resources »

Contact

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Paul R. LePage, Governor

Department of Health
and Human Services

Maine People Living
Safe, Healthy and Productive Lives

Mary C. Mayhew, Commissioner