

SEOW 2020 Webinar Series: Snapshots and Trends of Marijuana Use in Maine



By Tim Diomedede, MPPM

October 23rd, 2020



State Epidemiological Outcomes Workgroup www.MaineSEOW.com

Agenda

- **Introduce Maine SEOW**
 - Purpose and Objectives
 - Notes/disclaimers
- **Present Data Indicators**
 - Consumption (self-reported substance use)
 - Consequences (e.g., morbidity/mortality, crime)
 - Contributing Factors (e.g., availability, perceptions)
- **Questions**

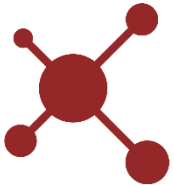
Purpose/Background



The State Epidemiological Outcomes Workgroup (SEOW) serves as a clearing house for substance use and mental health related data indicators. Established in 2005.



The SEOW was funded under the federal Substance Abuse and Mental Health Services Administration (SAMHSA) Partnership for Success grant, focused on the prevention of substance use among 12 to 25 year olds.



Next two years will be funded by a combination of funding streams under the Maine CDC

SEOW Objectives

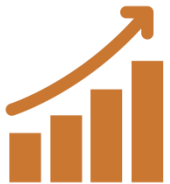
- Serve as a clearing house
- Promote systematic, data-driven decision-making
- Guide effective and efficient use of **prevention** resources
- Identify and track substance use trends
- Detect emerging substances/patterns
- Help secure funds and measure progress
- Provide an opportunity for networking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



Data Notes/Disclaimers



We promote the use of data indicators that have the reputation of being accurate, reliable, and timely.



We provide analyses of longer-term trends and perspectives that are vital for prevention planning and the assessment/evaluation process.



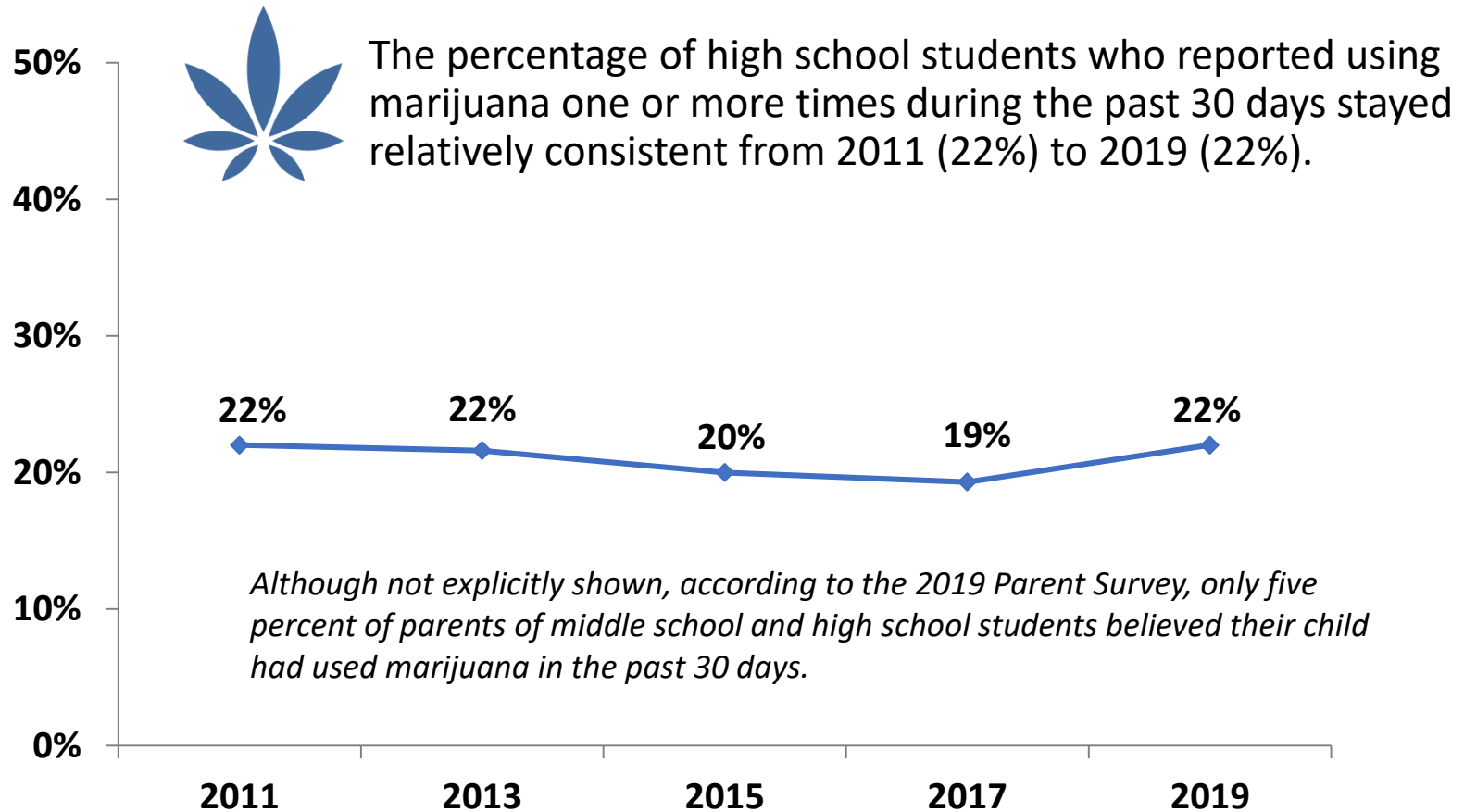
All data have limitations in terms of accuracy and reliability. SEOW encourages stakeholders to scan a multitude of indicators and information sources.

Consumption

(Surveillance Data)



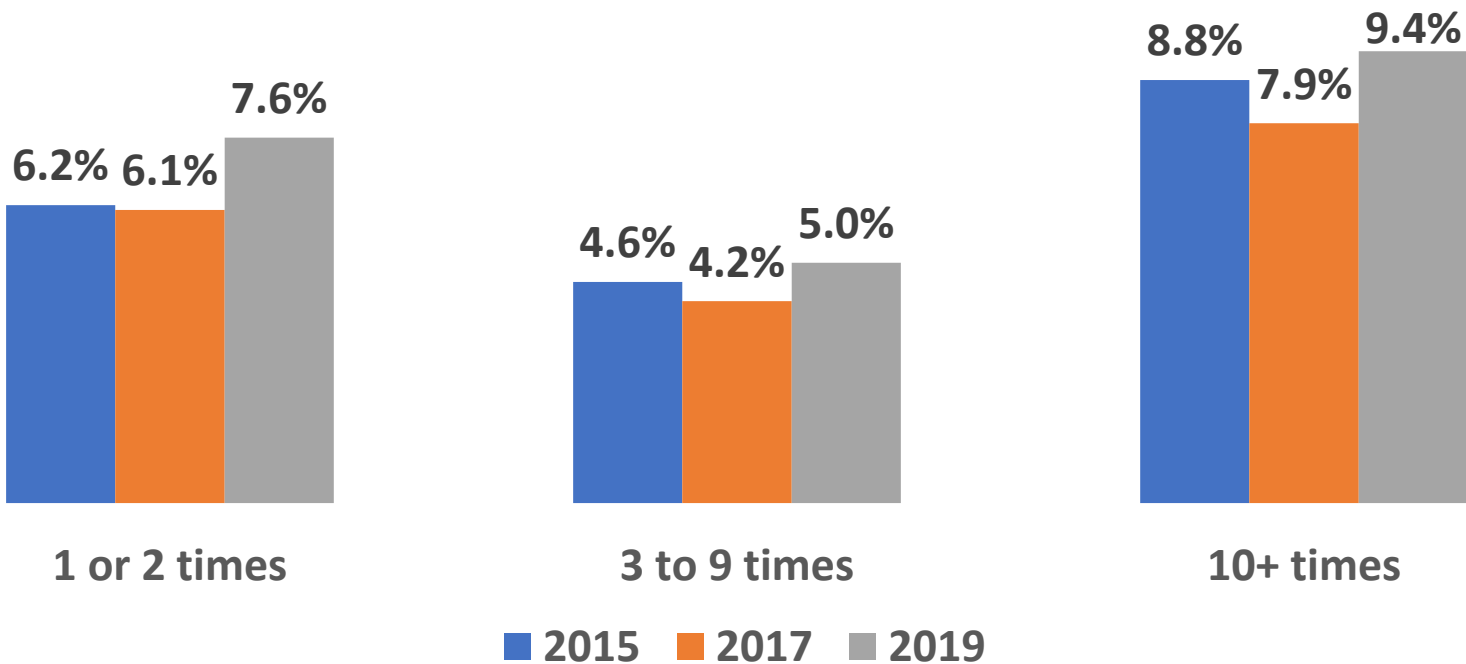
Maine high school students who have used marijuana at least once in the past 30 days: 2011-2019



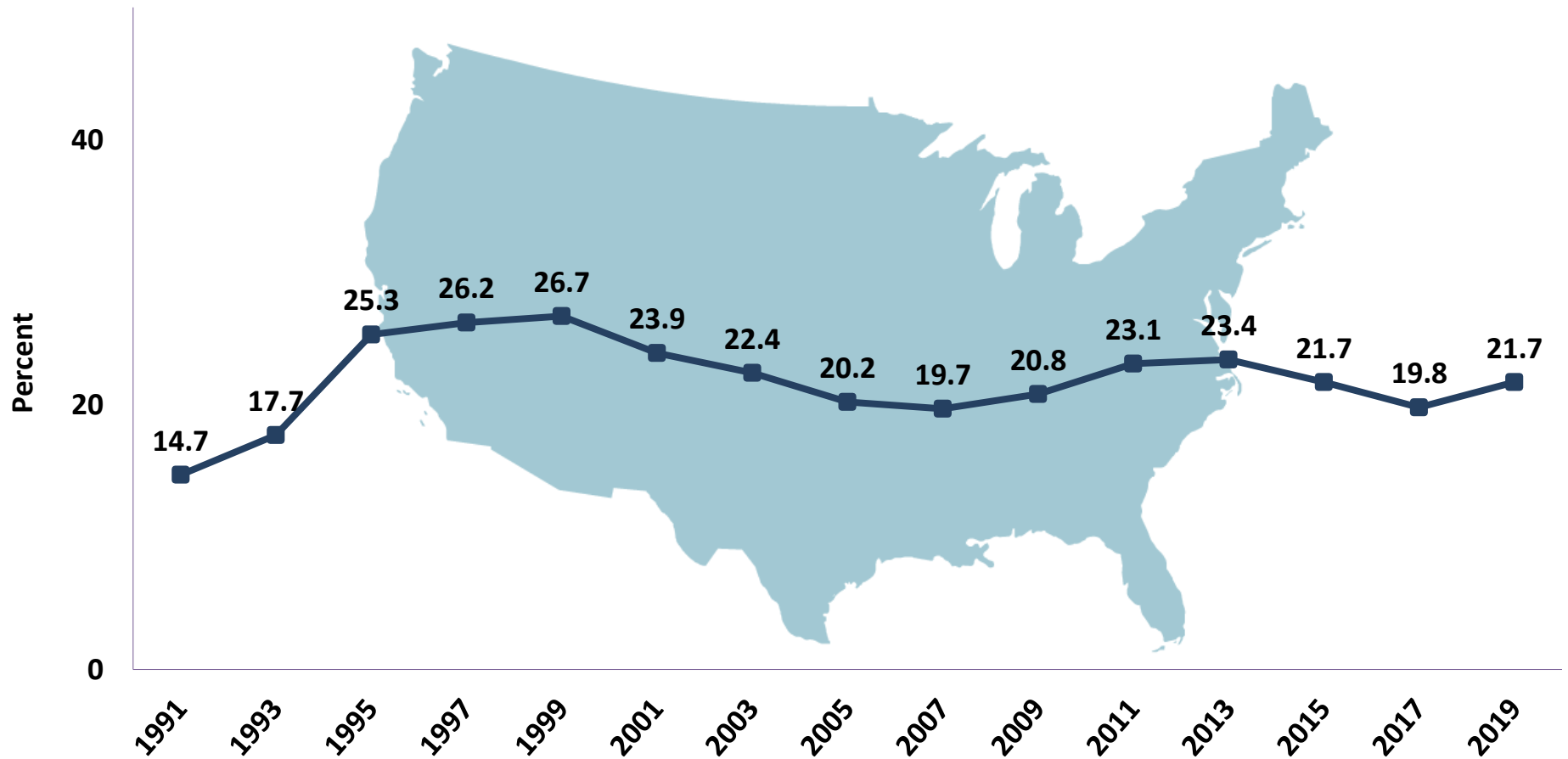
Past month Maine high school student marijuana use, by frequency: 2015-2019



7.6% of high school students reported using marijuana 1 or 2 times in the past month, 5% reported 3 to 9 times, and 9.4% said that they had used at least 10 times.



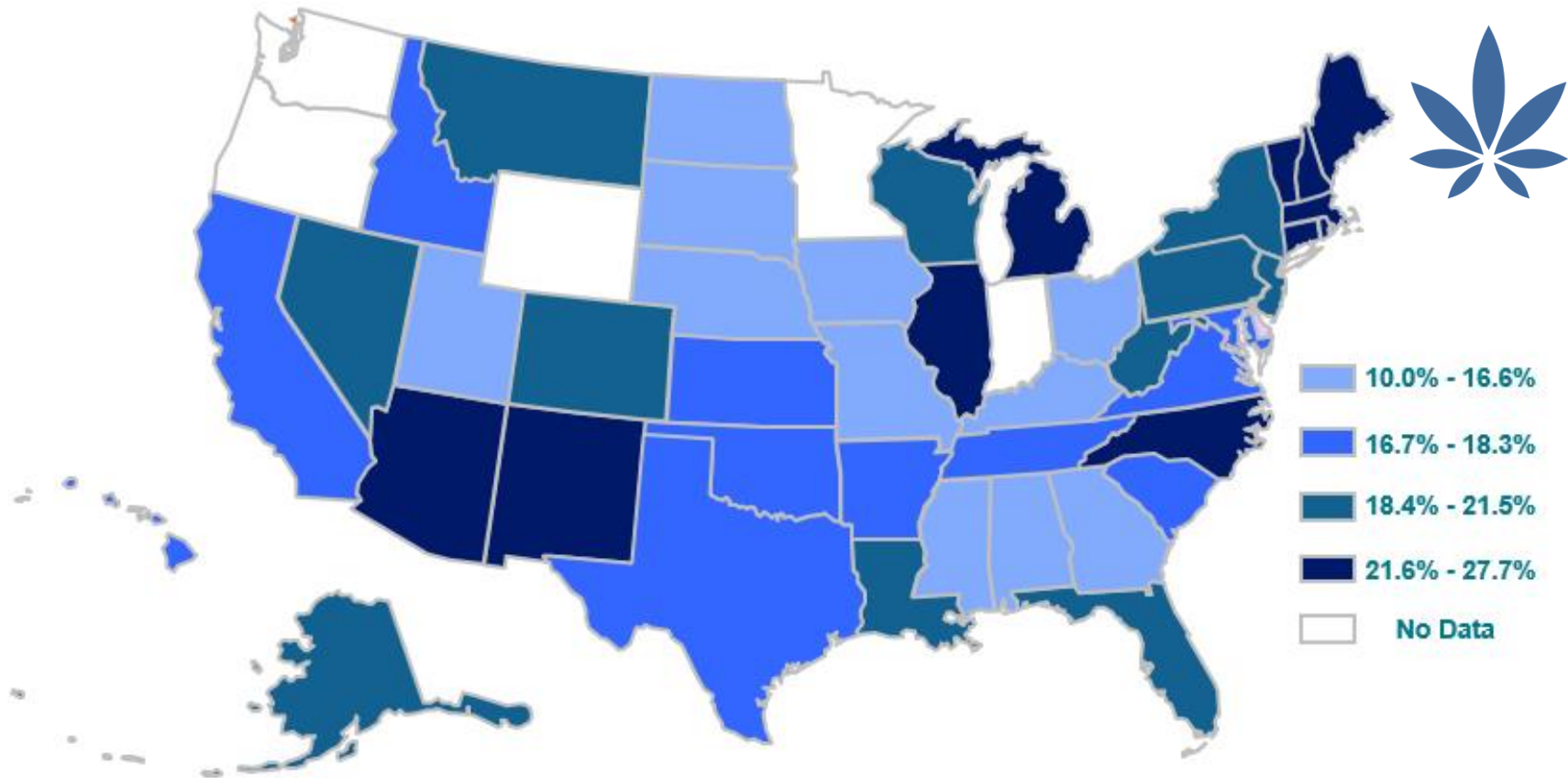
National percentage of high school students in the U.S. who used marijuana in the past 30 days, 1991-2019



Source: YRBS

Maine Department of Health and Human
Services

Percentage of high school students in the U.S. who used marijuana in the past 30 days, 1991-2019



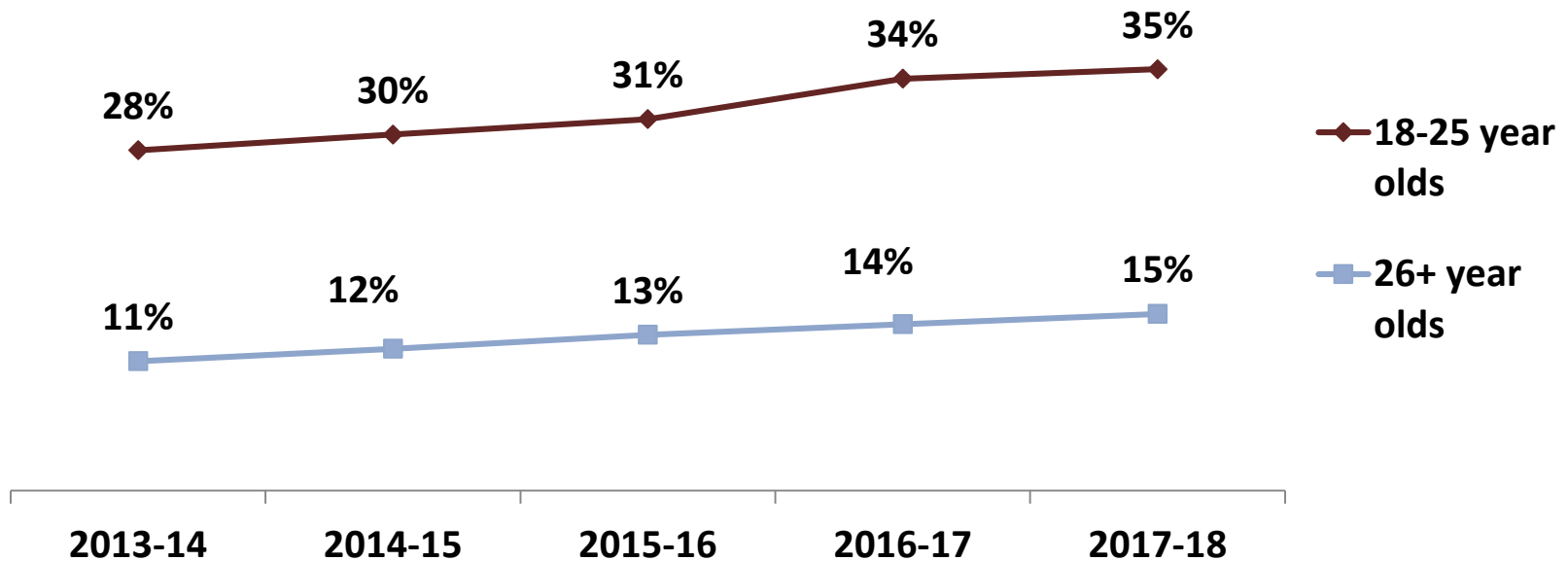
SOURCE: YRBS

Maine Department of Health and Human
Services

Maine adults reporting marijuana use in the past 30 days: 2013-14 to 2017-18



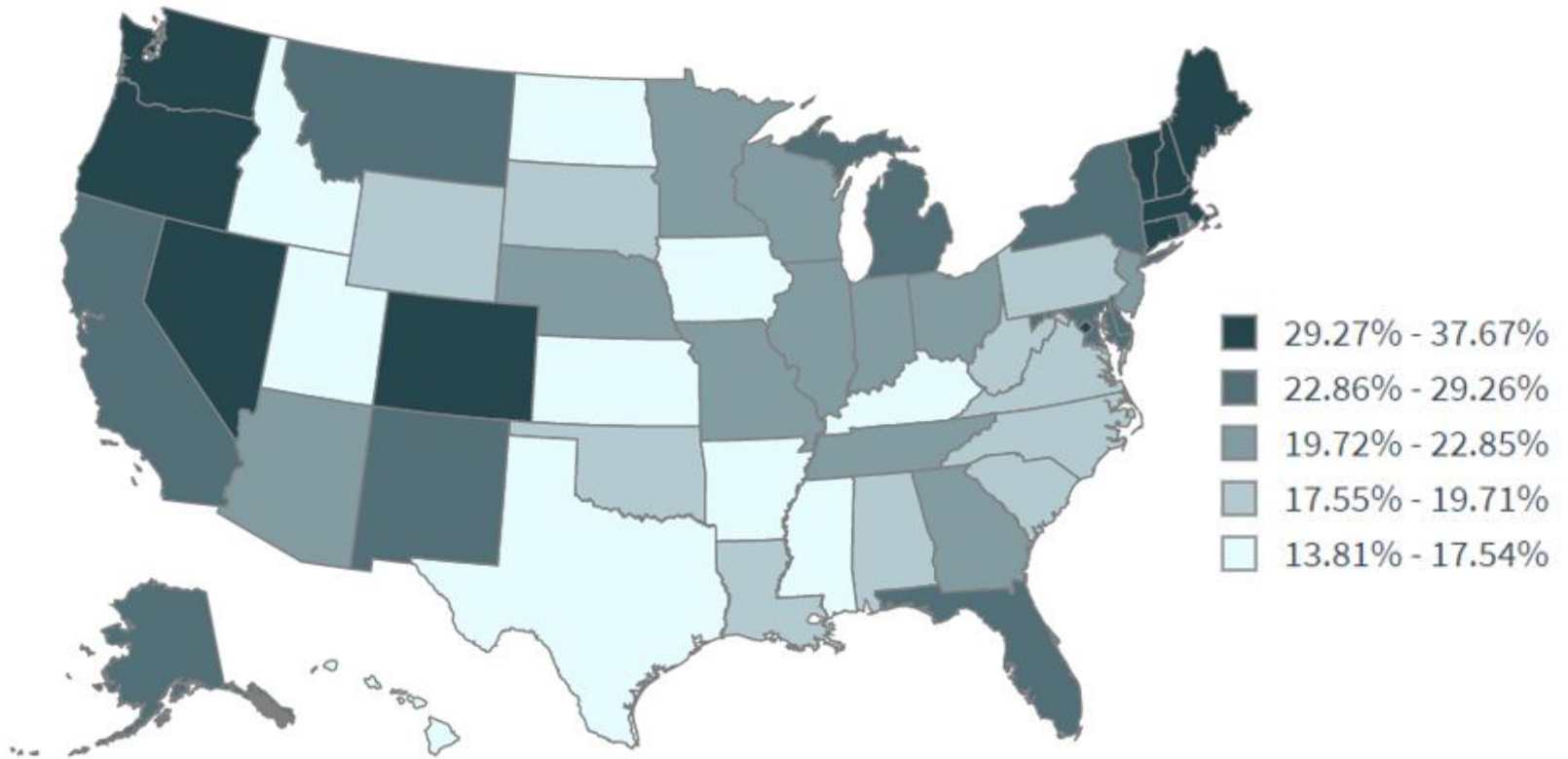
Over a third (35%) of Mainers ages 18 to 25 used marijuana in the past month in 2017-18, an increase of seven percentage points since 20113-14.



Source: NSDUH

Maine Department of Health and Human Services

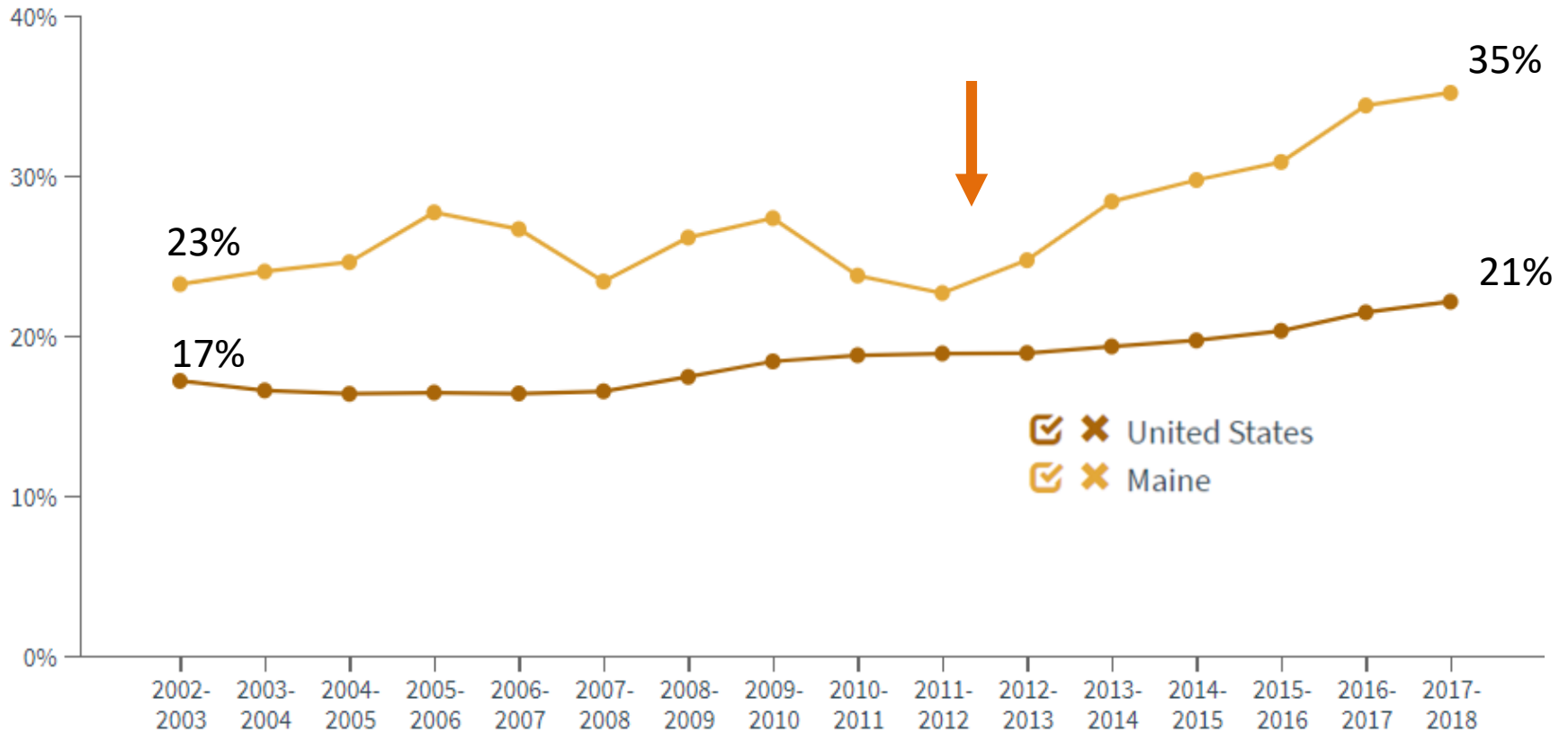
Marijuana use in the past month among 18 to 25-year-olds, by state: 2017-18



Marijuana is the most commonly used psychotropic drug in the United States, after alcohol. In 2018, more than 11.8 million young adults reported marijuana use in the past year. Its use is more prevalent among men than women.

Source: NSDUH

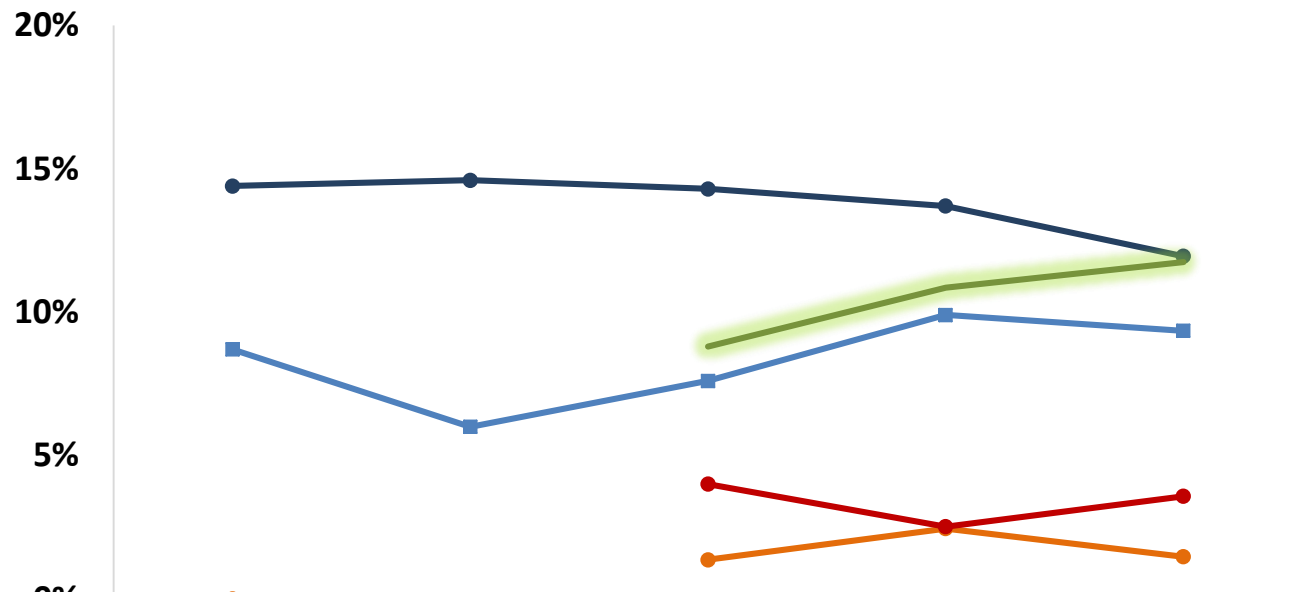
Past 30 day marijuana use among 18 to 25-year-olds, by geography: 2002-03 to 2017-18



Source: NSDUH

Women reporting substance use before or during pregnancy, by substance type: 2014–2018

In 2018, more than one in ten (12%) of women reported using cigarettes or marijuana while pregnant.

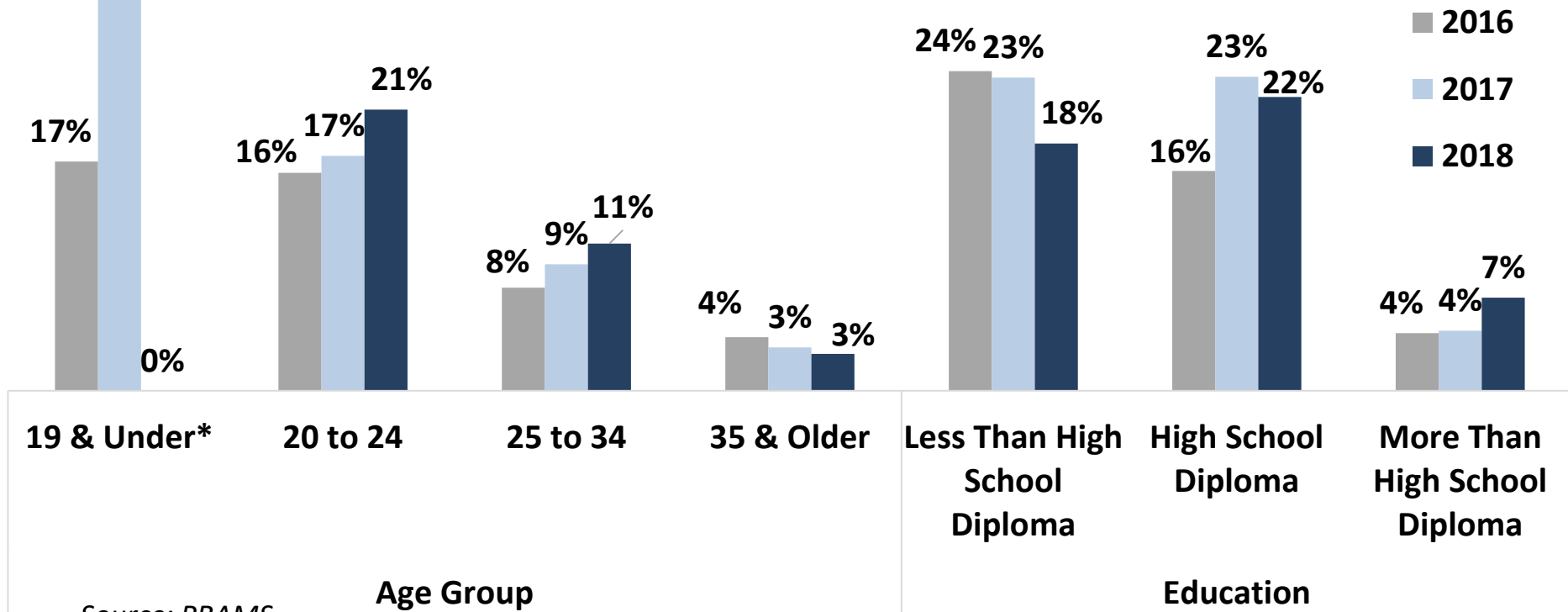


	2014	2015	2016	2017	2018
Alcohol last trimester	9%	6%	8%	10%	9%
Cigarettes last trimester	14%	15%	14%	14%	12%
E-Cigarettes last trimester	0%		1%	2%	1%
Prescription pain relievers 1 month before pregnancy			4%	3%	4%
Marijuana during pregnancy			9%	11%	12%

Women using marijuana during last trimester of pregnancy, by age and education: 2016 to 2018



Marijuana use during pregnancy is most prevalent among younger women and those who did not obtain higher than a high school education



Source: PRAMS

Nationwide past month marijuana use among women (15-44) by Pregnancy Status: 2016 to 2019



In 2019, there were 9.1 million (15%) women ages 15-44 in the U.S. that reported using marijuana in the past month; a 36% increase since 2016

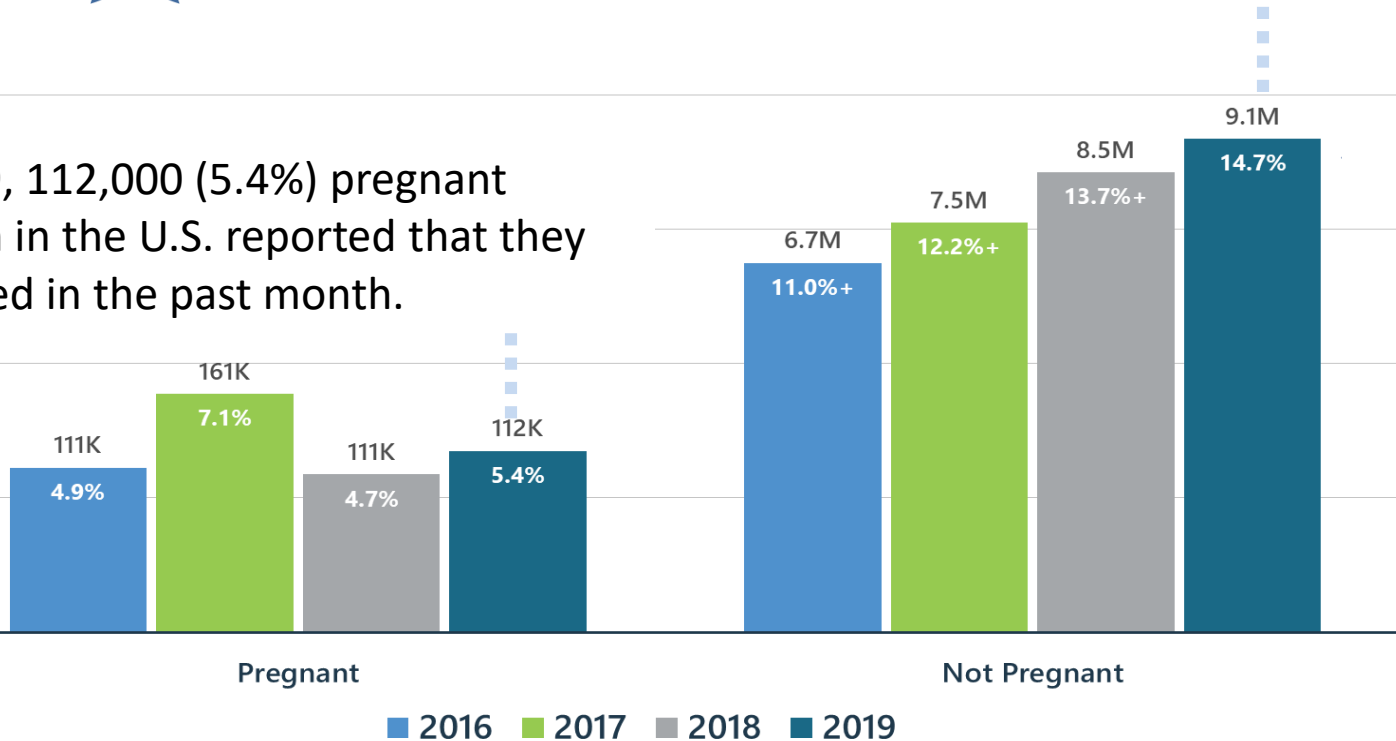
16%

In 2019, 112,000 (5.4%) pregnant women in the U.S. reported that they had used in the past month.

8%

4%

0%



+ Difference between this estimate and the 2019 estimate is statistically significant at the .05 level.

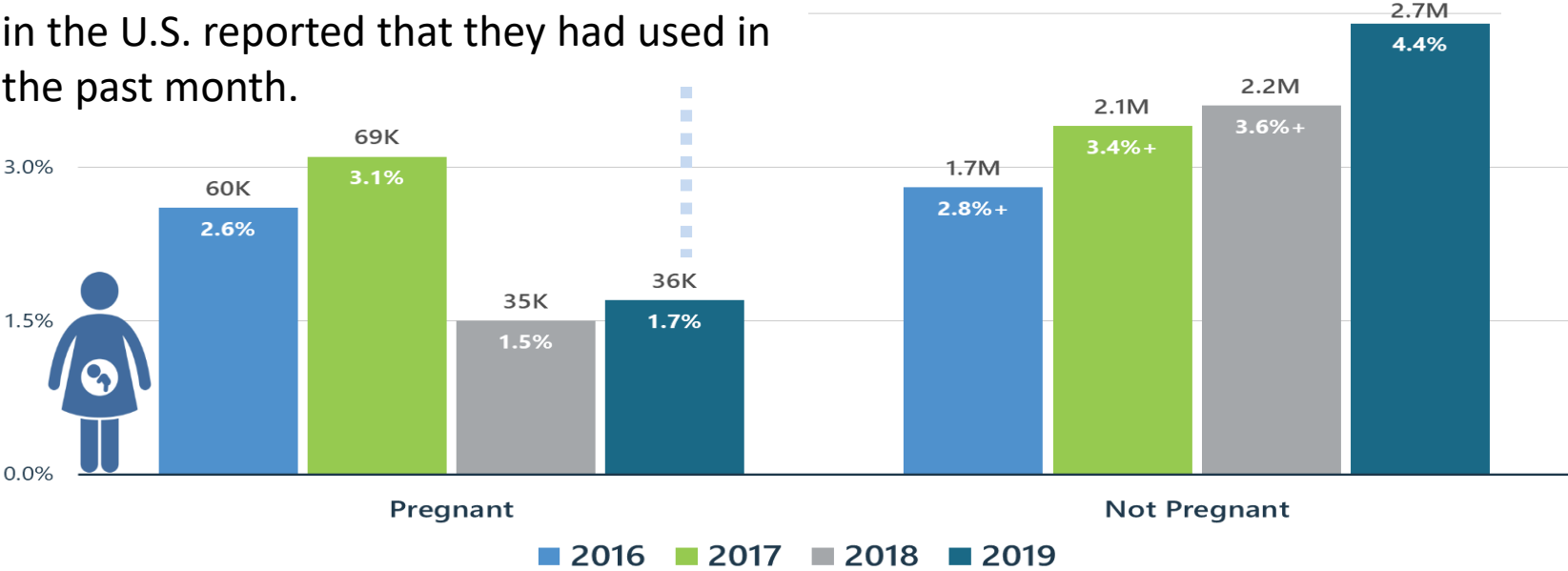
Source: NSDUH/SAMHSA

Nationwide daily or almost daily marijuana use among women by pregnancy status: 2016 to 2019



In 2019, there were 2.7 million (4.4%) women ages 15-44 in the U.S. that reported using marijuana in the past month; a 59% increase since 2016

In 2019, 36,000 (1.7%) pregnant women in the U.S. reported that they had used in the past month.



+ Difference between this estimate and the 2019 estimate is statistically significant at the .05 level.

Source: NSDUH/SAMHSA

Past Year Substance Use and Mental Health Issues among Pregnant Women Aged 15 to 44 by Marijuana Use Status

PAST YEAR, 2019 NSDUH, 15-44

Substance	No Past Year Marijuana Use		Any Past Year Marijuana Use	
	Number (Thousands)	Percentage	Number (Thousands)	Percentage
Cocaine	4+	0.3+	29	8.5
Crack	1	0.1	*	*
Heroin	1	0.1	*	*
Hallucinogens	2+	0.1+	28	8.3
LSD	*	*	17	5.2
PCP	*	*	0	0.1
Ecstasy	2	0.1	5	1.5
Inhalants	*	*	*	*
Methamphetamine	*	*	18	5.5
Misuse of Psychotherapeutics	48	2.7+	89	26.7
Pain Relievers	24	1.4+	60	17.9
Stimulants	6+	0.3+	38	11.5
Tranquilizers or Sedatives	20	1.2+	42	12.5
Tranquilizers	19	1.1+	42	12.5
Sedatives	1	0.1	*	*
Benzodiazepines	19	1.1+	40	12.1
Opioids	25	1.5+	60	17.9
Illicit Drugs Other than Marijuana	51+	2.9+	101	30.3
ALCOHOL (PAST MONTH)	105	6.1+	91	27.3
Binge Alcohol Use	54	3.1+	46	13.7
Heavy Alcohol Use	*	*	6	1.7
MENTAL HEALTH STATUS				
SUICIDAL BEHAVIORS				
Suicidal Thoughts	56	3.3+	45	14.0
Suicide Plans	11	0.7+	23	7.3
Suicide Attempts	13	0.8	17	5.4
Serious Mental Illness	55	3.2+	46	14.3
Major Depressive Episode (MDE)	111+	6.6	44	14.0
MDE with Severe Impairment	73+	4.3	24	7.6

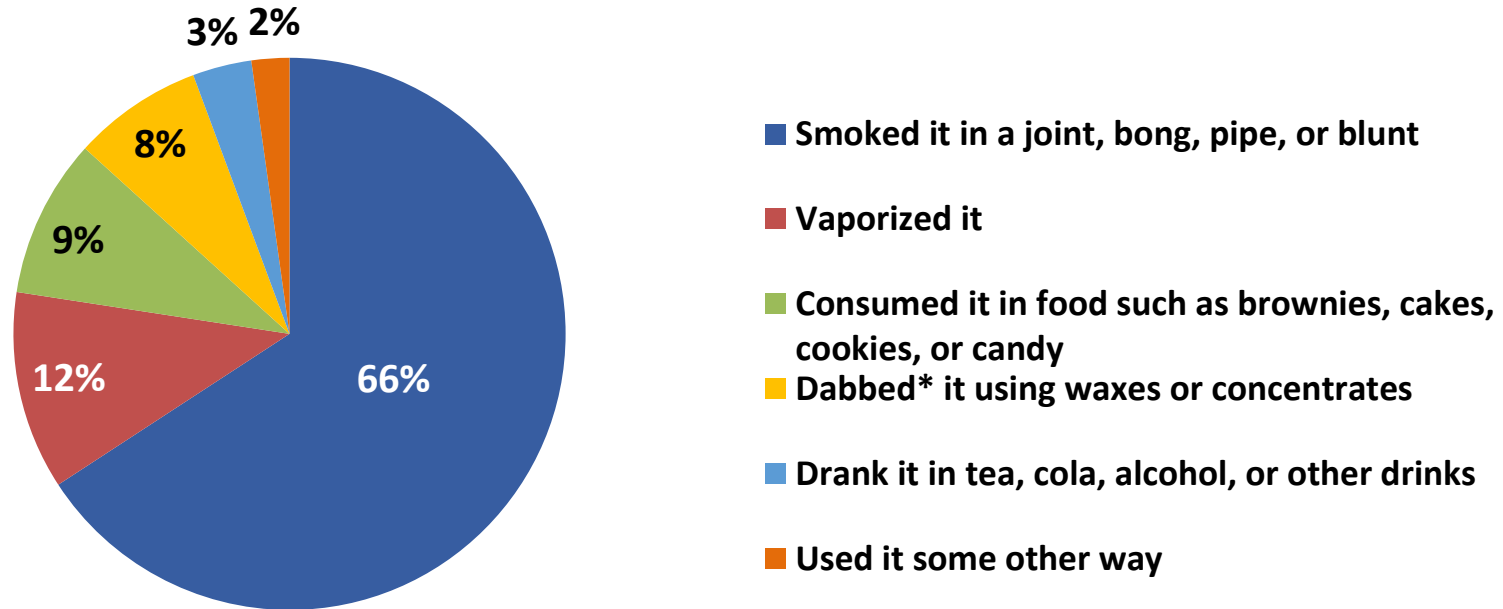
+ Difference between this estimate and the estimate for people with past year marijuana use is statistically significant at the .05 level.

* Estimate not shown due to low precision.

Those who reported any past year use of MJ were more likely to engage in other substance use and experience poor mental health.

Usual method of marijuana intake among high school students who reported using marijuana in the 30 days: 2019

In 2019, among high school students who reported using marijuana within the past month, two out of three (66%) reported that had most often smoked marijuana in either a joint, bong, or blunt



**Dabs are cannabis concentrates gaining notoriety for their significant amounts of tetrahydrocannabinol (THC) that are ultimately vaporized and inhaled for their effect.*

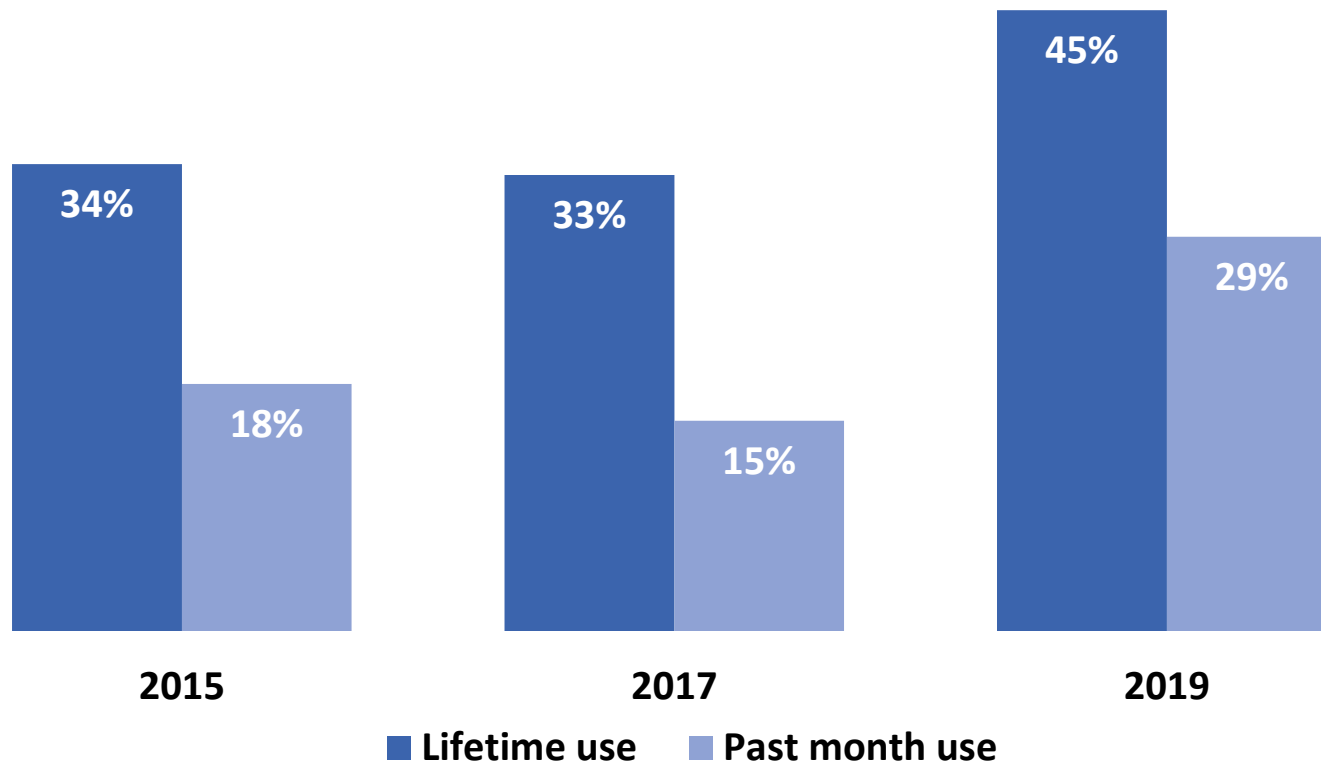
Note: The average THC content in confiscated marijuana samples has more than quadrupled since the early 1990's ([NIDA](#))

Source: MIYHS

High school students who used an electronic vapor product* in the past 30 days or lifetime: 2015–2019



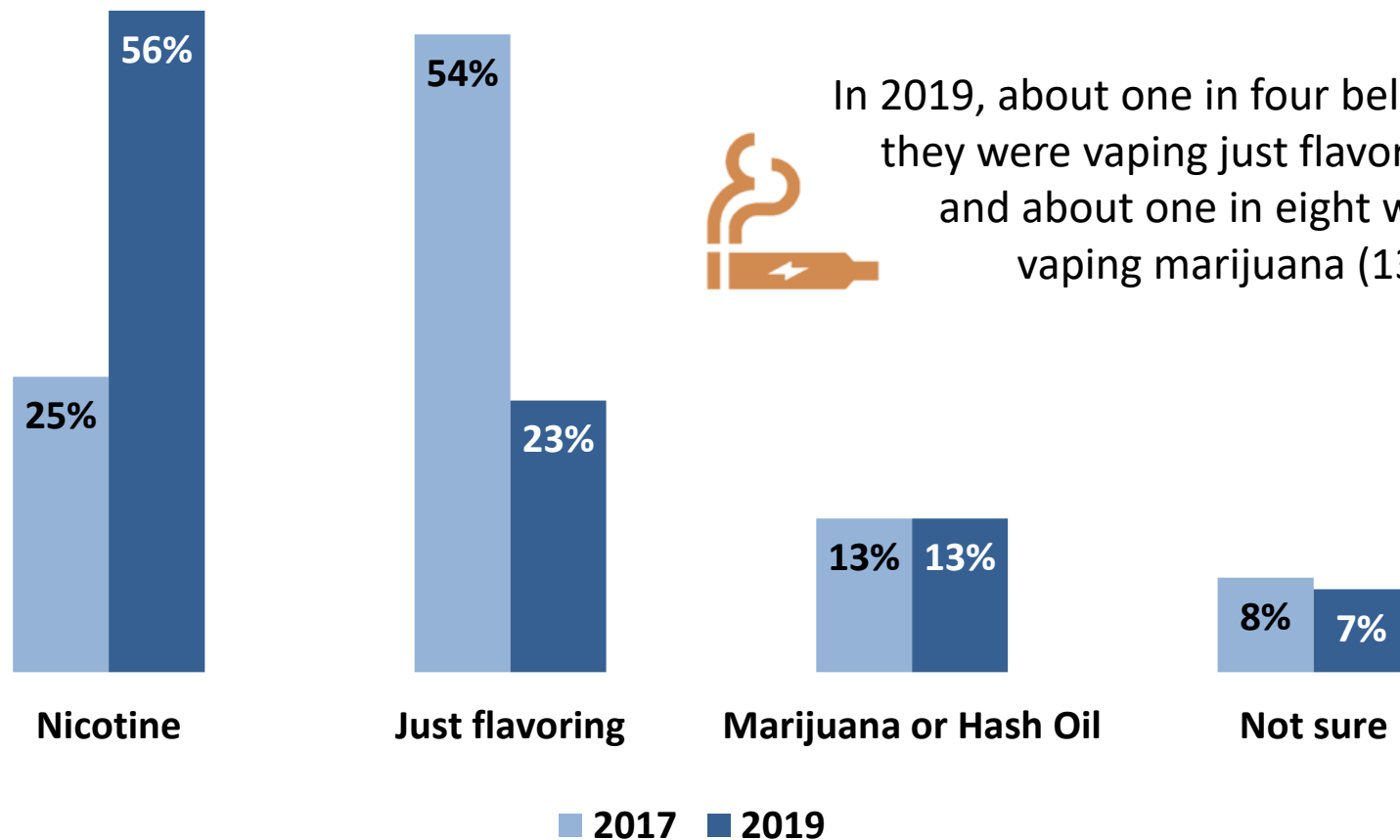
Nearly half of high school students reported having ever used an electronic vaping product in 2019.



Source: MIYHS

Maine Department of Health and Human Services

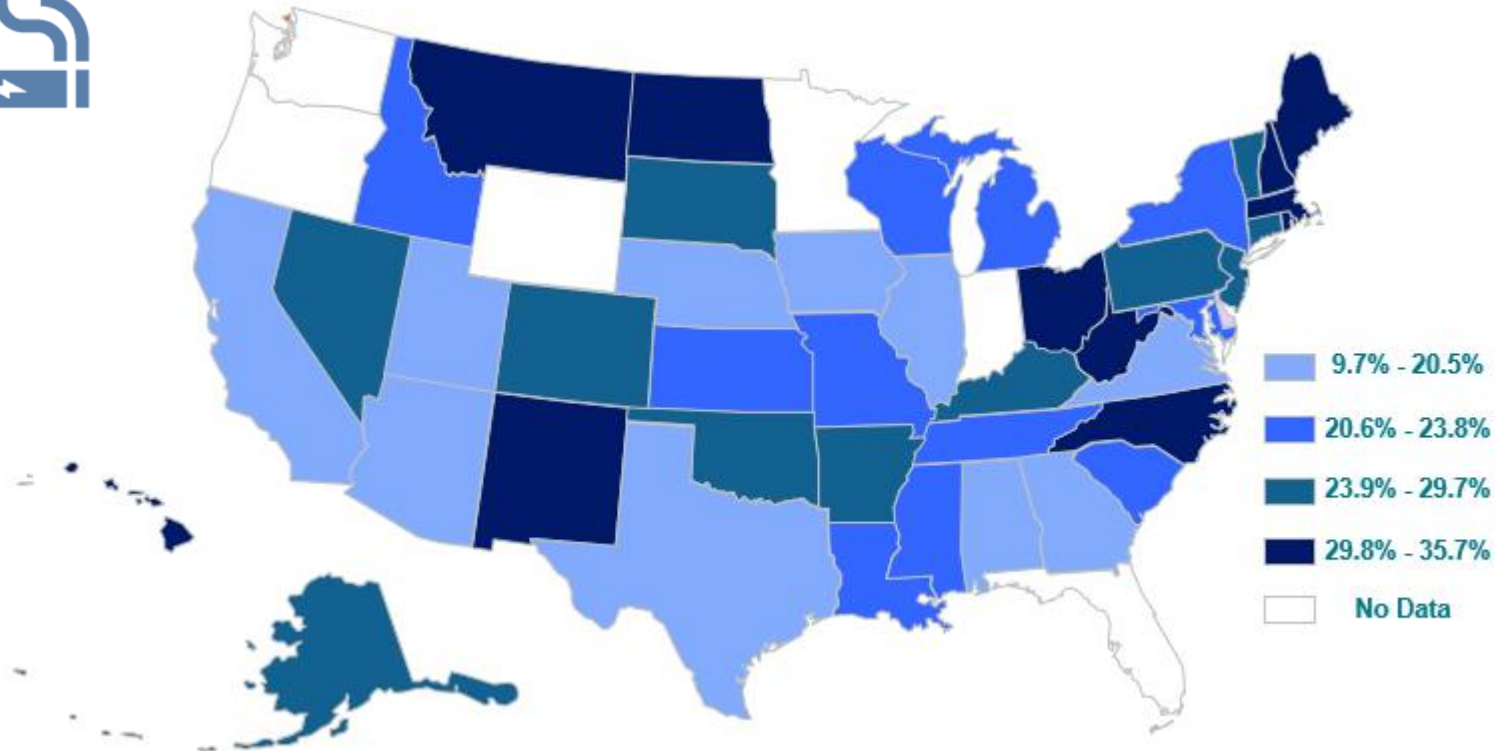
Type of vapor product used by high school students (among those who reported ever using): 2017 and 2019



Source: MIYHS

Maine Department of Health and Human Services

Percentage of High School Students Who Currently Used an Electronic Vapor Product*:2019



**Including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens [such as blu, NJOY, Vuse, MarkTen, Logic, Vapin Plus, eGo, and Halo]*

Source: YRBS

Maine Department of Health and Human
Services

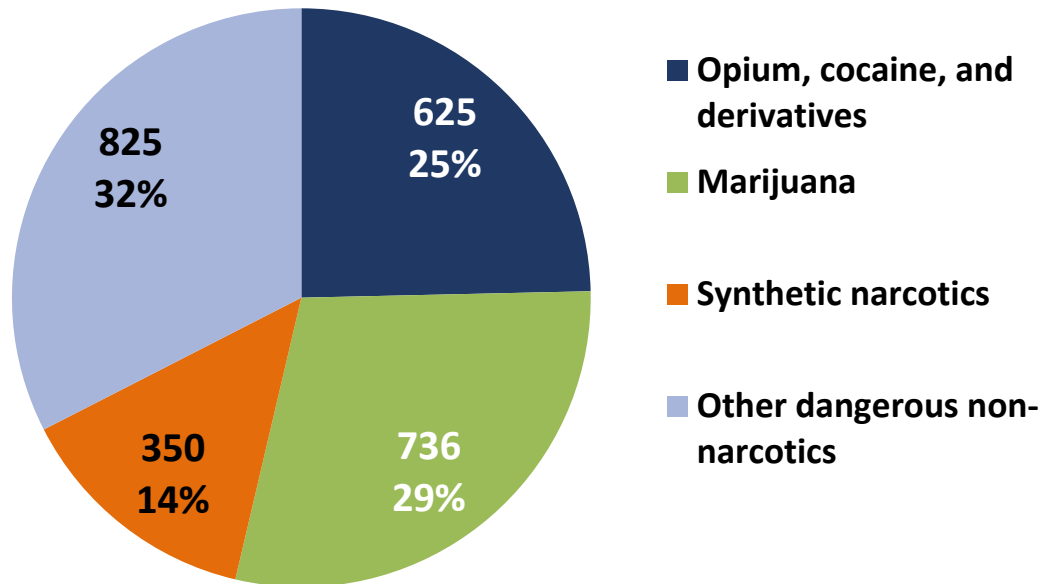
Consequences/Impact



Law enforcement drug arrests for possession by type: 2018



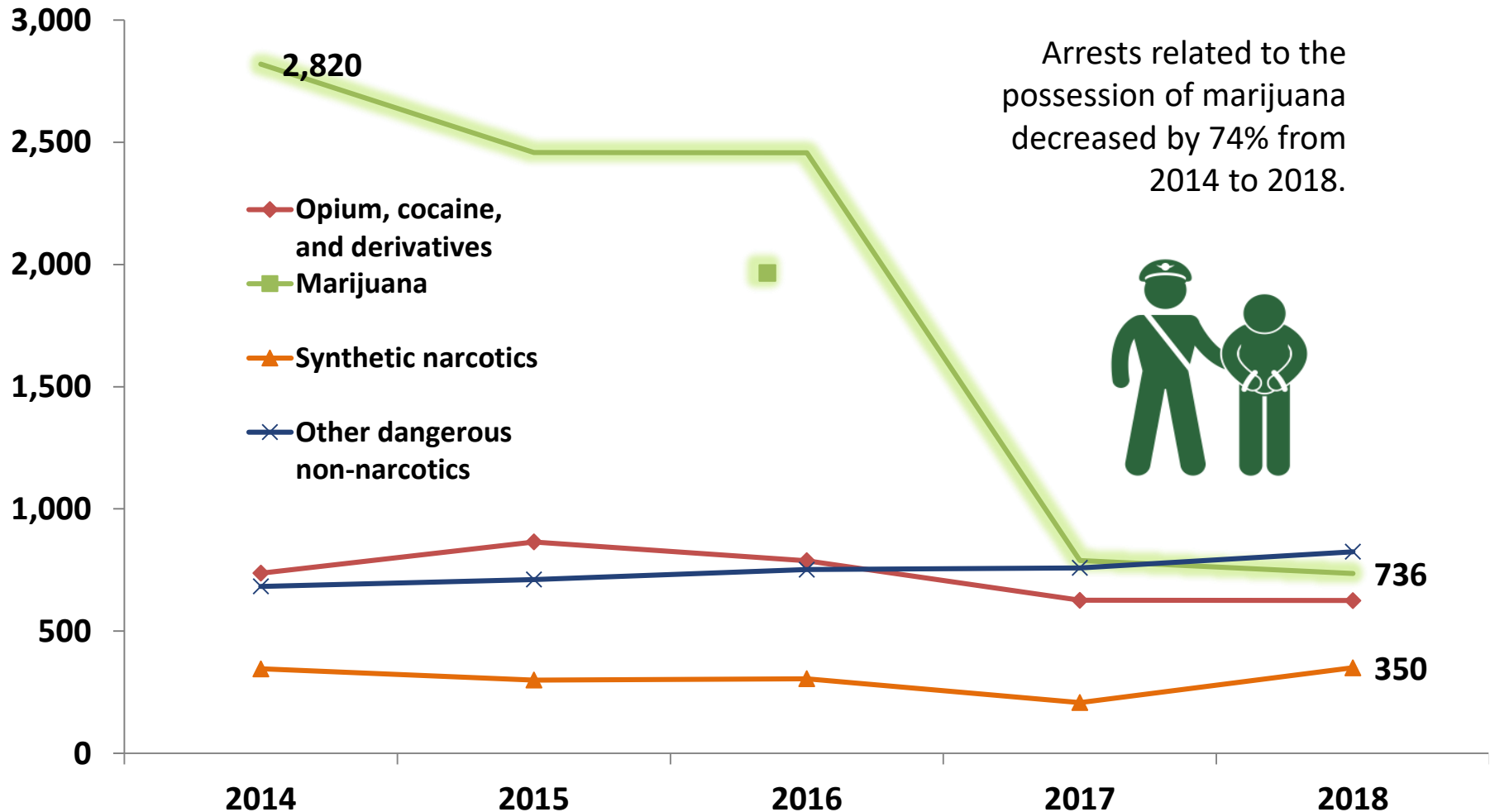
In 2018, a little less than one third of arrests for possession of drugs were related to marijuana.



Note: "Opium, cocaine, and derivatives" arrests mostly encompass heroin/morphine and cocaine/crack. "Synthetic narcotic" arrests refer mostly to prescription drug opiates. "Other dangerous non-narcotics" include but are not limited to benzodiazepines, steroids, stimulants, synthetic cannabis, bath salts, methamphetamine, hallucinogens, and barbiturates.

Source: DPS-UCR

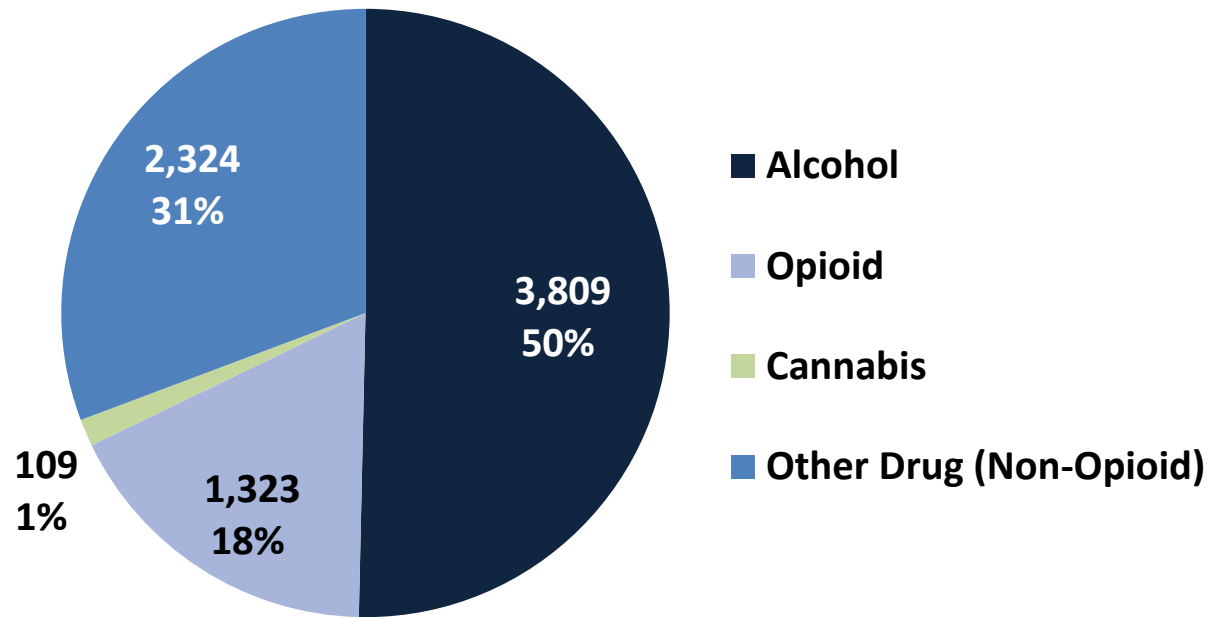
Drug offense arrests (all ages) for possession, by drug type: 2012–2016



Source: DPS/Uniform Crime Report

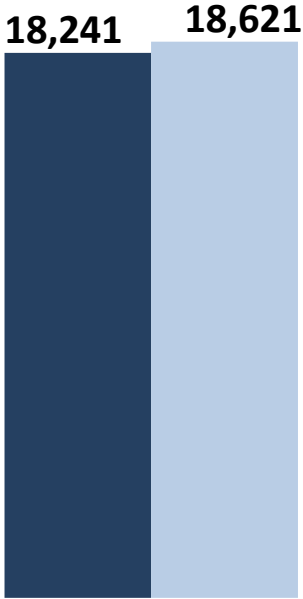
Maine Department of Health and Human Services

EMS substance use related responses, by substance: 2019



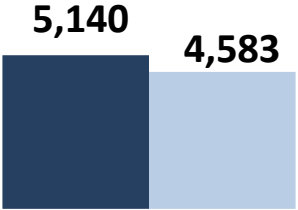
In 2019, based on primary impression, there were 109 (1%) EMS responses related to the overdose of cannabis in Maine

Number of ED visits related to substance use, by substance: 2018 and 2019

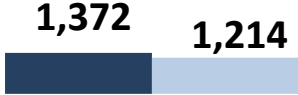


Alcohol

From 2018 to 2019, the number of marijuana-related ED visits decreased by 11 percent (from 5,140 to 4,583).



Marijuana

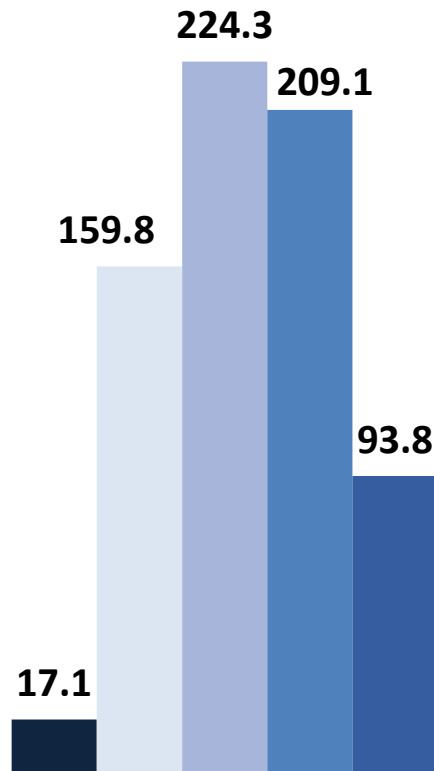


Opioid

■ 2018 ■ 2019

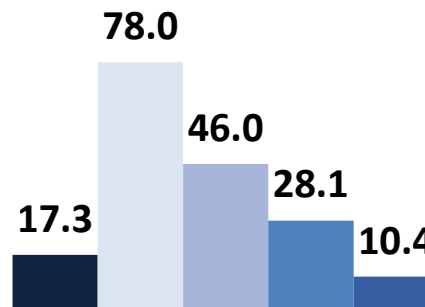
Source: Syndromic Surveillance System

ED visits related to substance use per 10,000 residents, by age and substance type: 2019

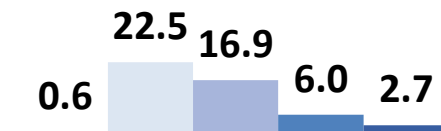


Alcohol

Marijuana-related ED overdose visits were disproportionately higher among younger adults ages 20 to 34 (78 per 10,000)



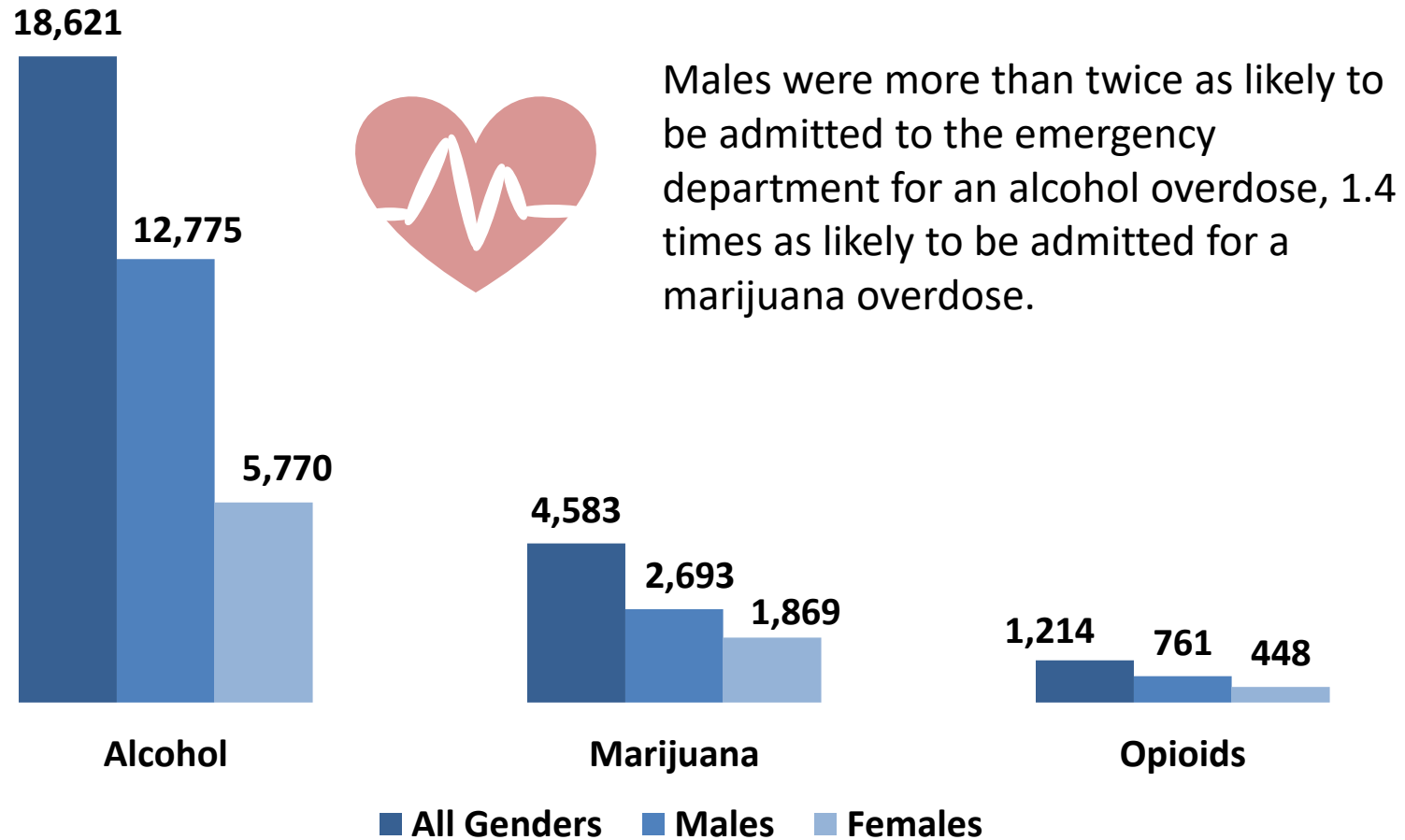
Marijuana



Opioid

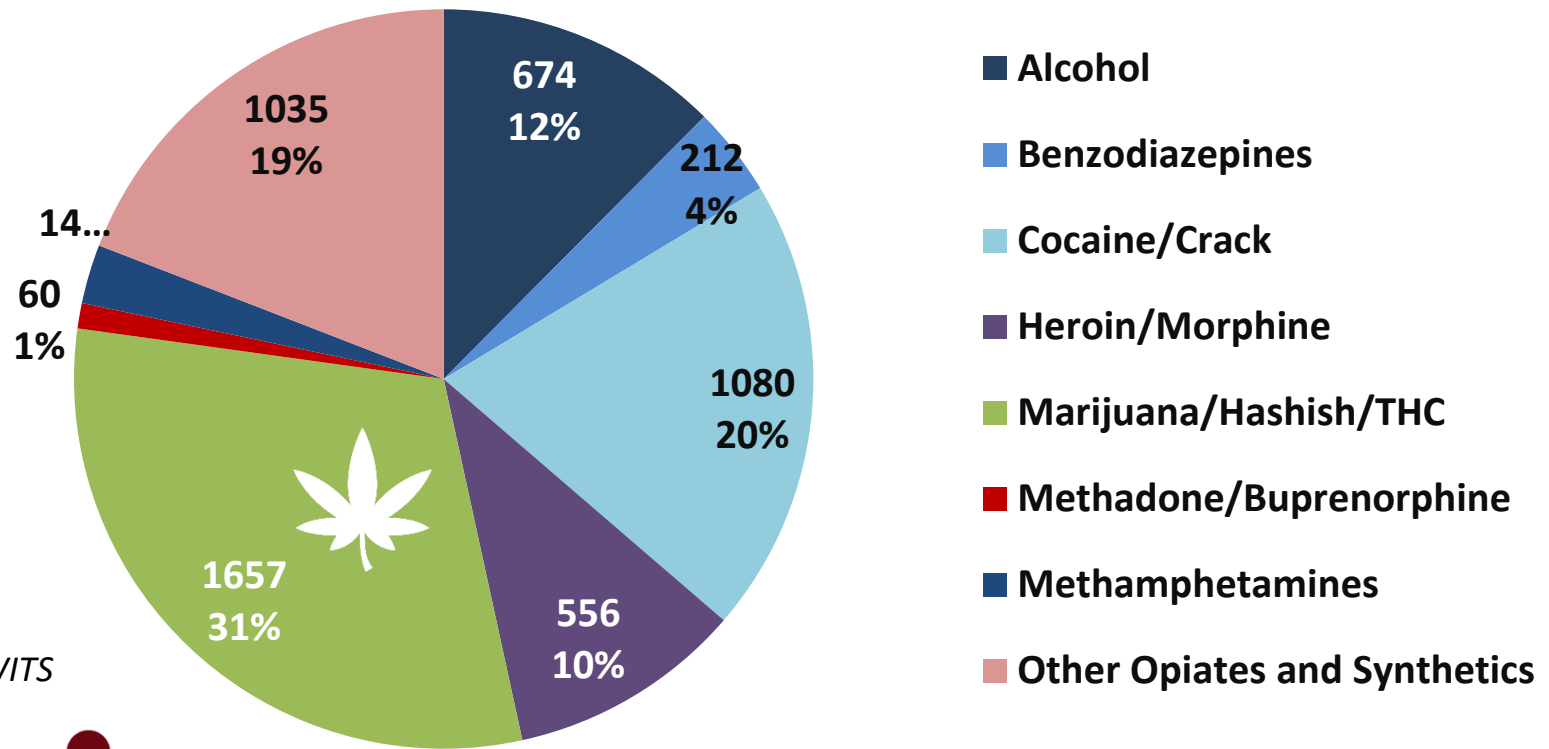
- 19 and Under
- 20 to 34
- 35 to 49
- 50 to 64
- 65+

Number of ED visits related to substance use, by gender and substance type: 2019



Source: Syndromic Surveillance System

Number and percentage of secondary treatment admissions, by substance type: 2018*



Source: WITS



Out of the admissions that listed a secondary substance, nearly one in three was related to marijuana

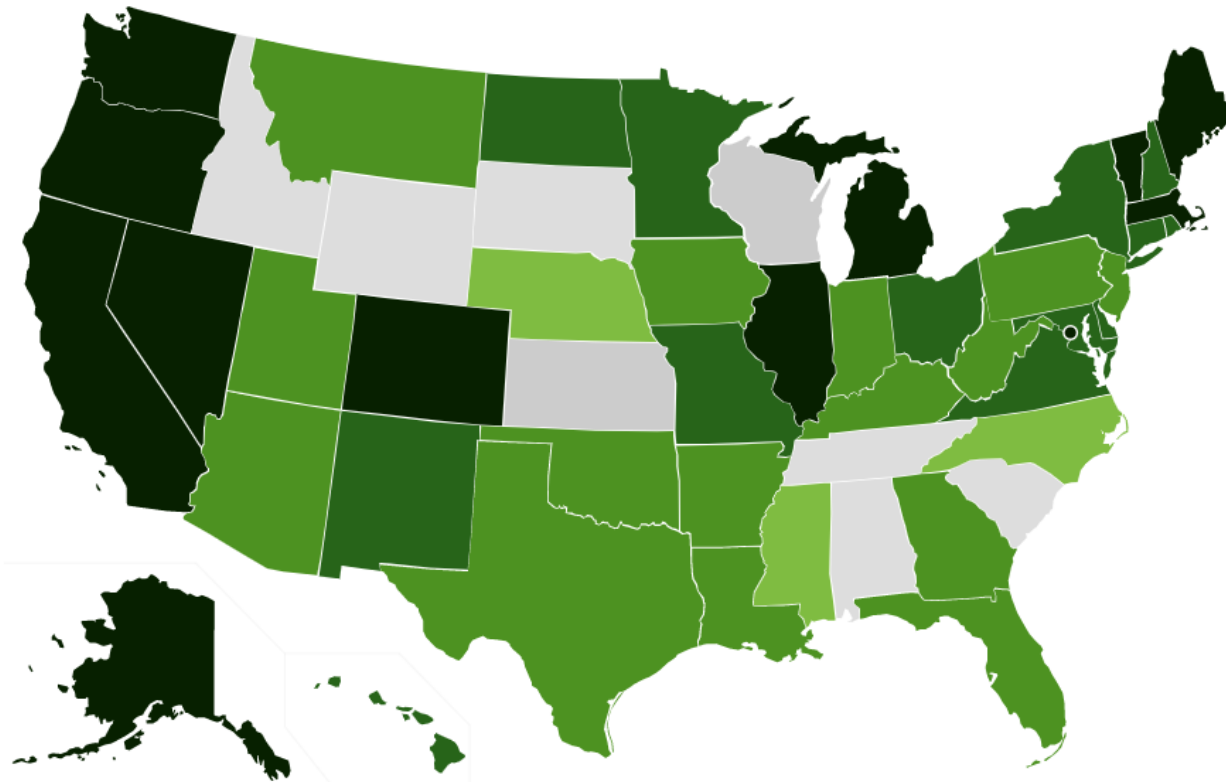
Contributing Factors

(e.g., Availability, Perceptions, Social Norms)



Marijuana policies, by state: 2020

Legalized Medical and Decriminalized Medical Decriminalized Fully illegal



Map source: <https://disa.com/map-of-marijuana-legality-by-state>

Maine Department of Health and Human Services

Marijuana Sales in Maine



Maine voters approved adult use, retail sale and taxation of marijuana in November 2016.



As of October 2020, active marijuana retail license holders were permitted to engage in sales to consumers ages 21 years & older.



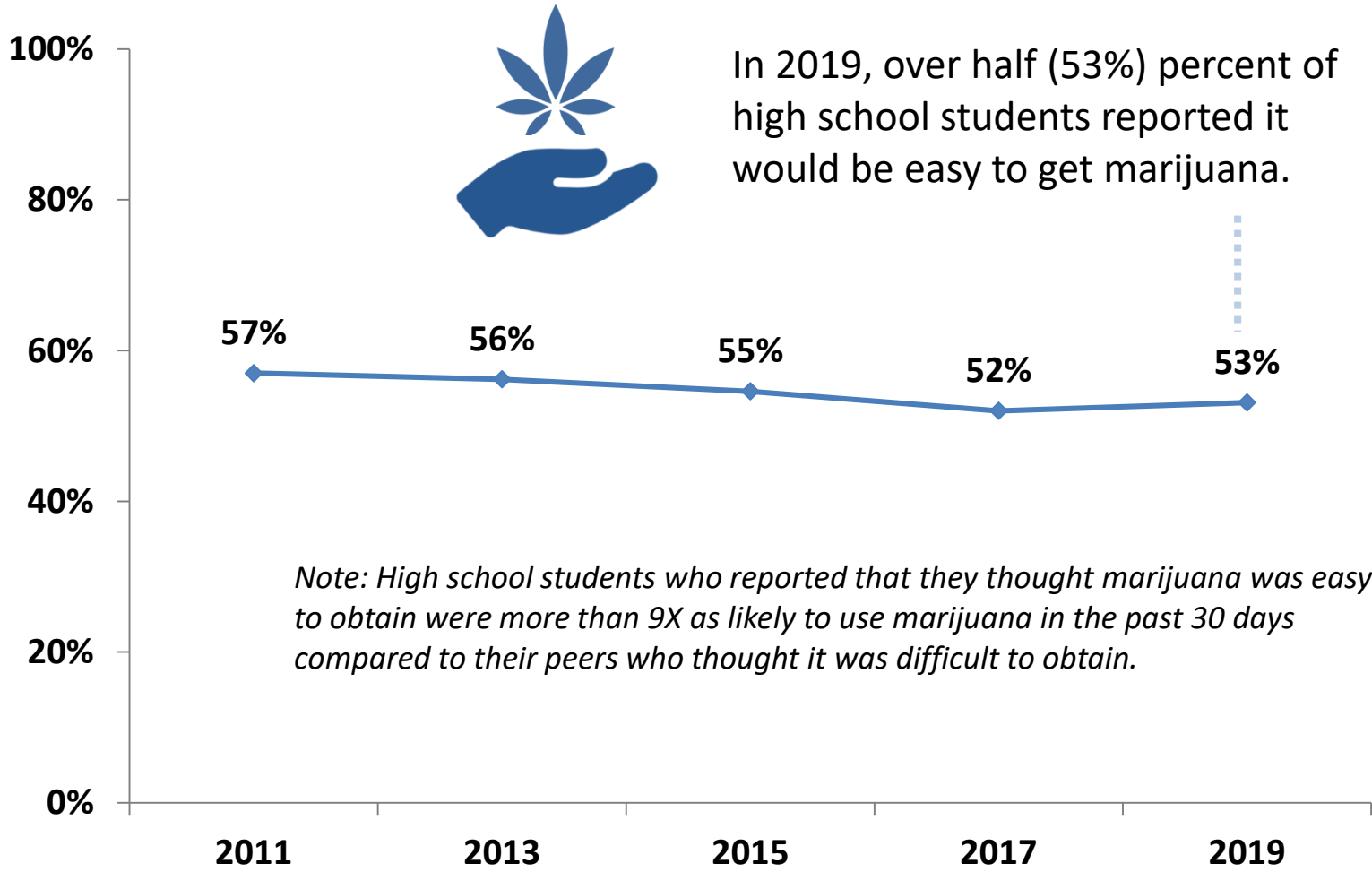
According to preliminary sales data, the opening long weekend (10/9/20 – 10/12/20) saw sales of adult use marijuana surpass a quarter of a million dollars.

- Total Sales: \$258,411.58
- Total Transactions: 6,430
- Total Sales Tax Collected: \$25,841.16

Note: These figures are preliminary in nature and subject to further revision. Actual sales tax returns from the month of October are not due to the State Tax Assessor until November 15.

Source: Office of Marijuana Policy

Maine high school students who reported it would be easy to get marijuana: 2011–2019

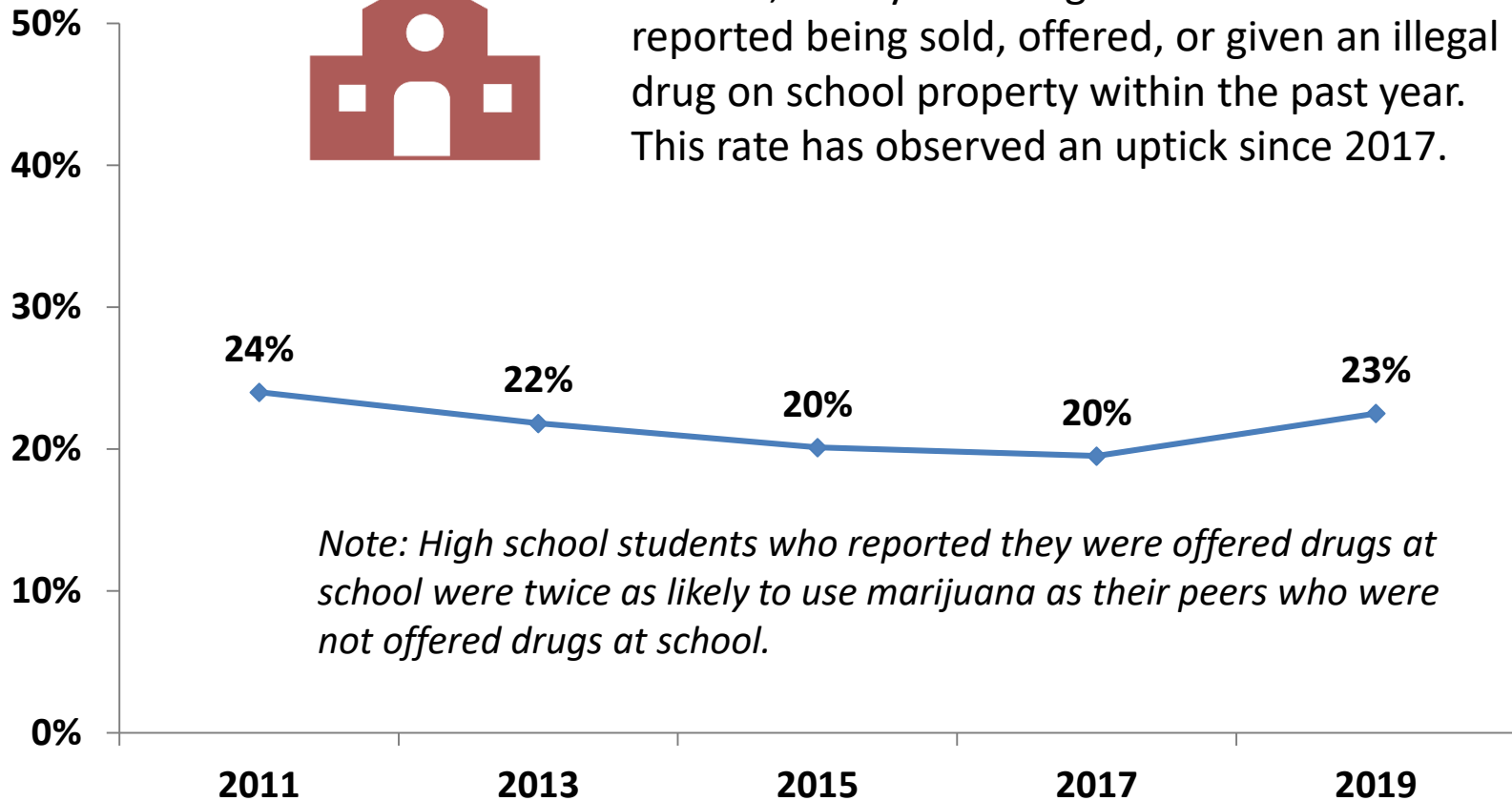


Source: MIYHS

High school students who were sold, offered, or given an illegal drug on school property in past year: 2011–2019



In 2019, nearly 1 in 4 high school students reported being sold, offered, or given an illegal drug on school property within the past year. This rate has observed an uptick since 2017.

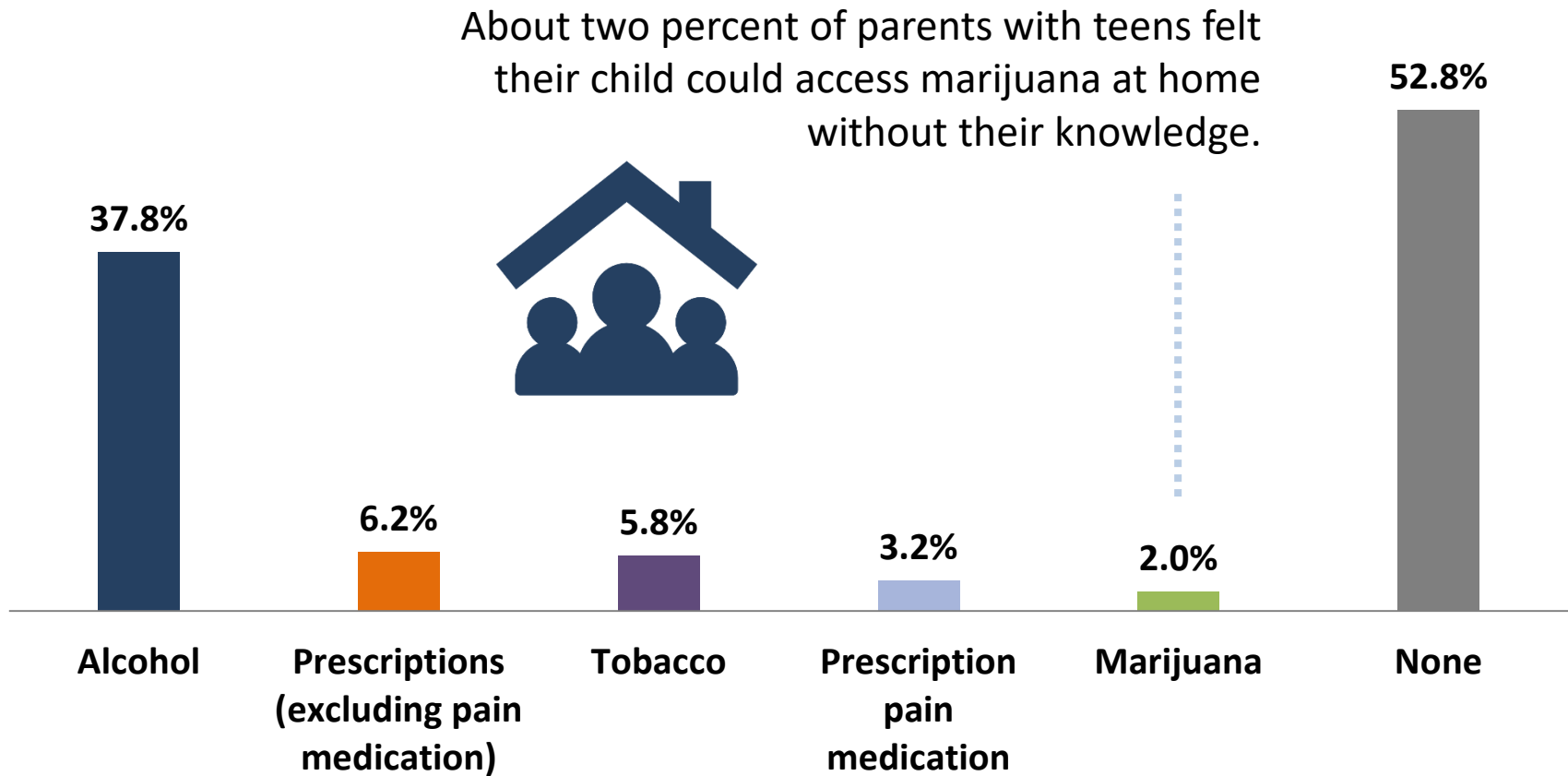


Note: High school students who reported they were offered drugs at school were twice as likely to use marijuana as their peers who were not offered drugs at school.

Source: MIYHS

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Substances thought to be accessible by teens without parents' knowledge in the home, by substance type: 2019

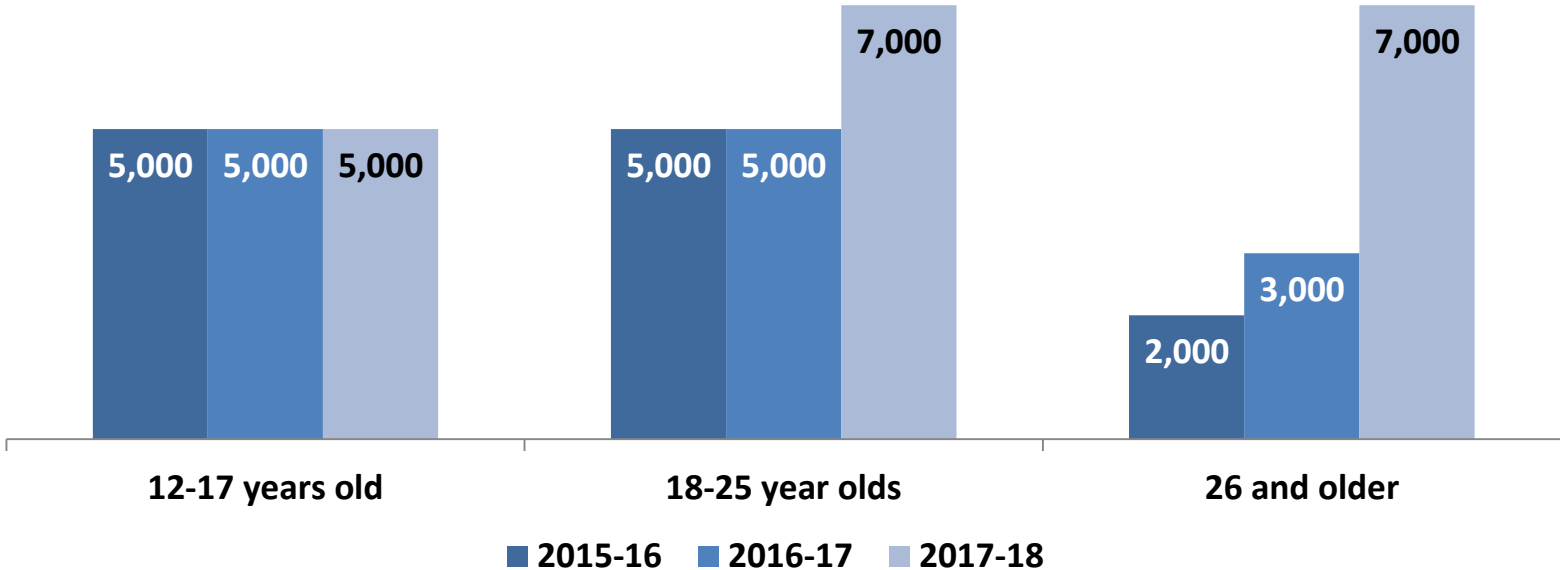


Source: Parent Survey

Average annual number of marijuana initiates, by age group: 2015–16 to 2017–18

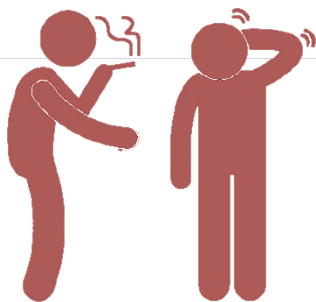


In 2017-18, an annual average 19,000 Mainers ages 12 & older used marijuana for the first time in their life; a 46% increase since 2016-17. The number of new marijuana users 26 & older more than doubled between 2016-17 to 2017-18.

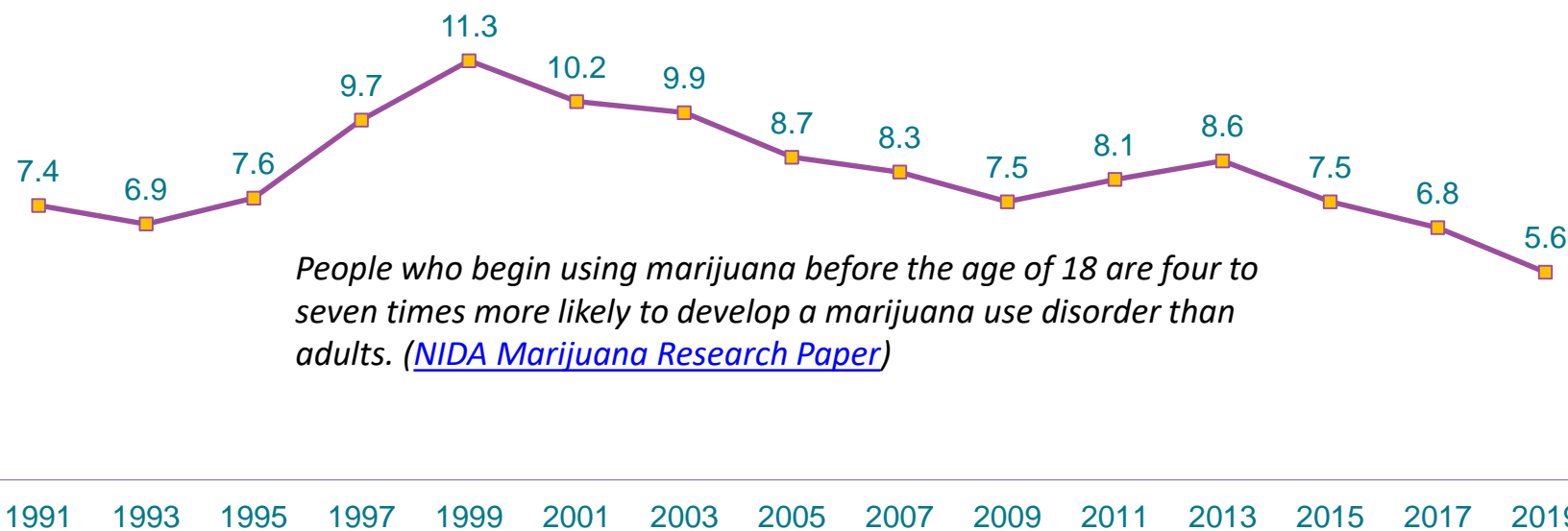


Source: NSDUH

Percentage of High School Students in the U.S. Who Tried Marijuana for the First Time Before Age 13 Years: 1991-2019*



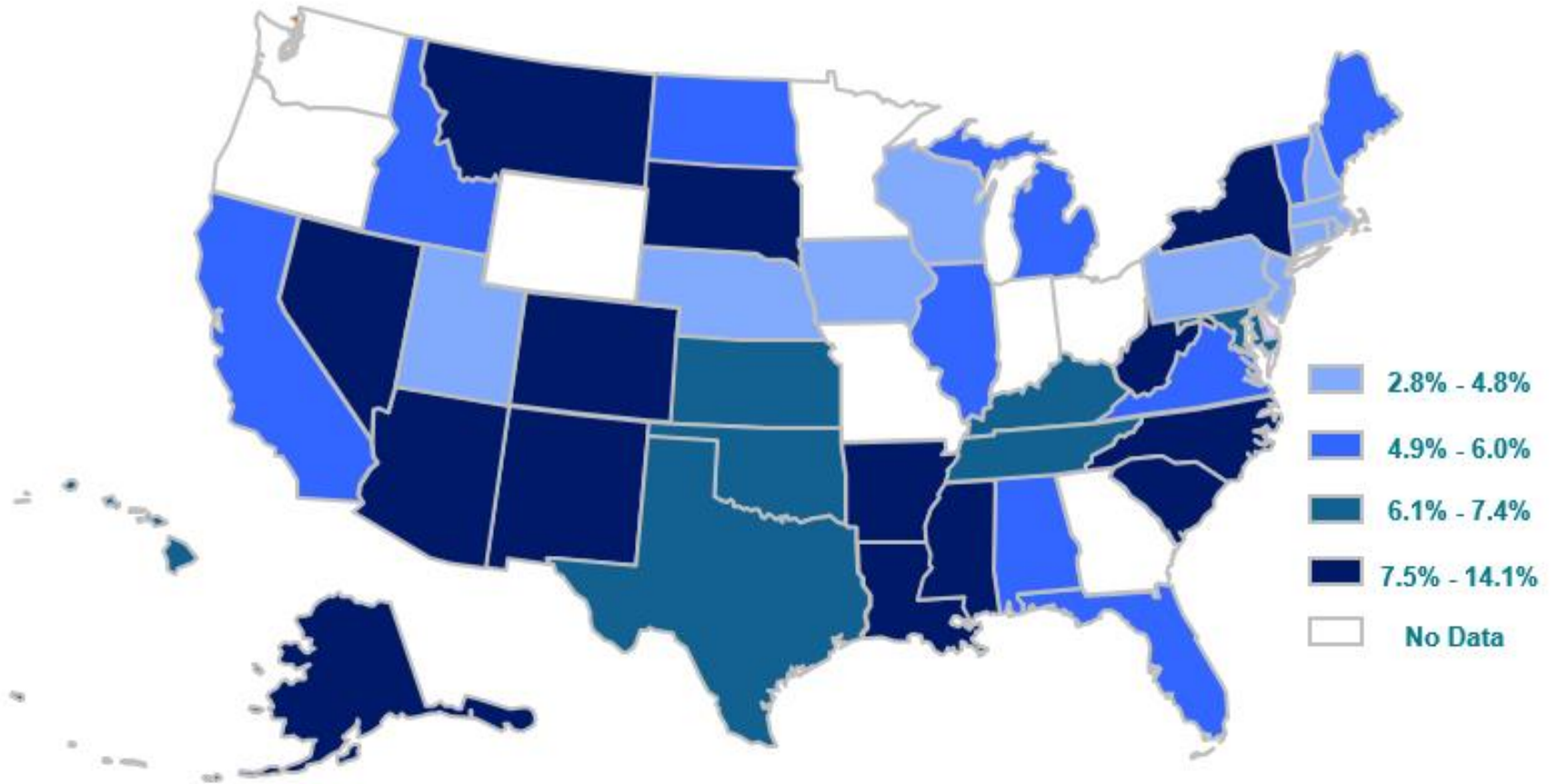
2019, about 6% of high school students in the U.S. tried marijuana before the age of 13; consistent with Maine.



People who begin using marijuana before the age of 18 are four to seven times more likely to develop a marijuana use disorder than adults. ([NIDA Marijuana Research Paper](#))

Source: YRBS

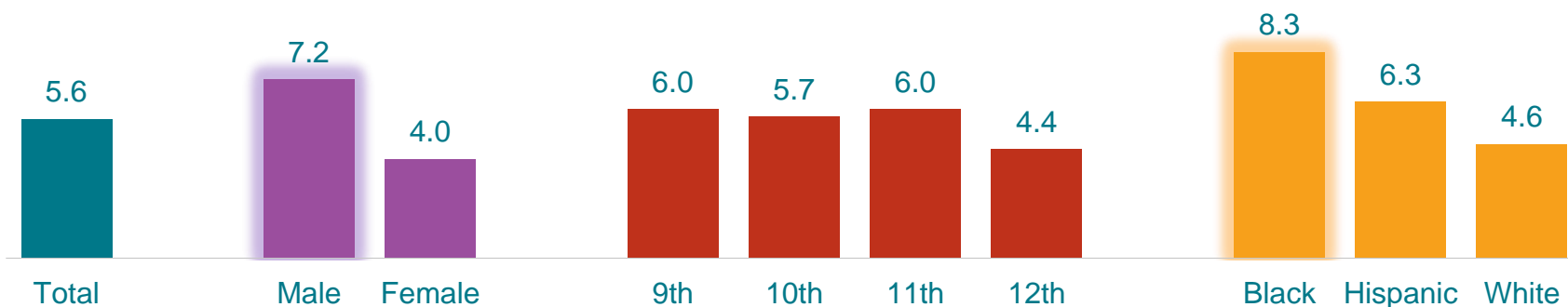
Percentage of High School Students Who Tried Marijuana for the First Time Before Age 13 Years: 2019



Source: YRBS

Maine Department of Health and Human
Services

Percentage of high school students who tried marijuana for the first time before age 13 Years, by gender,* Grade,* and Race/Ethnicity,*: 2019

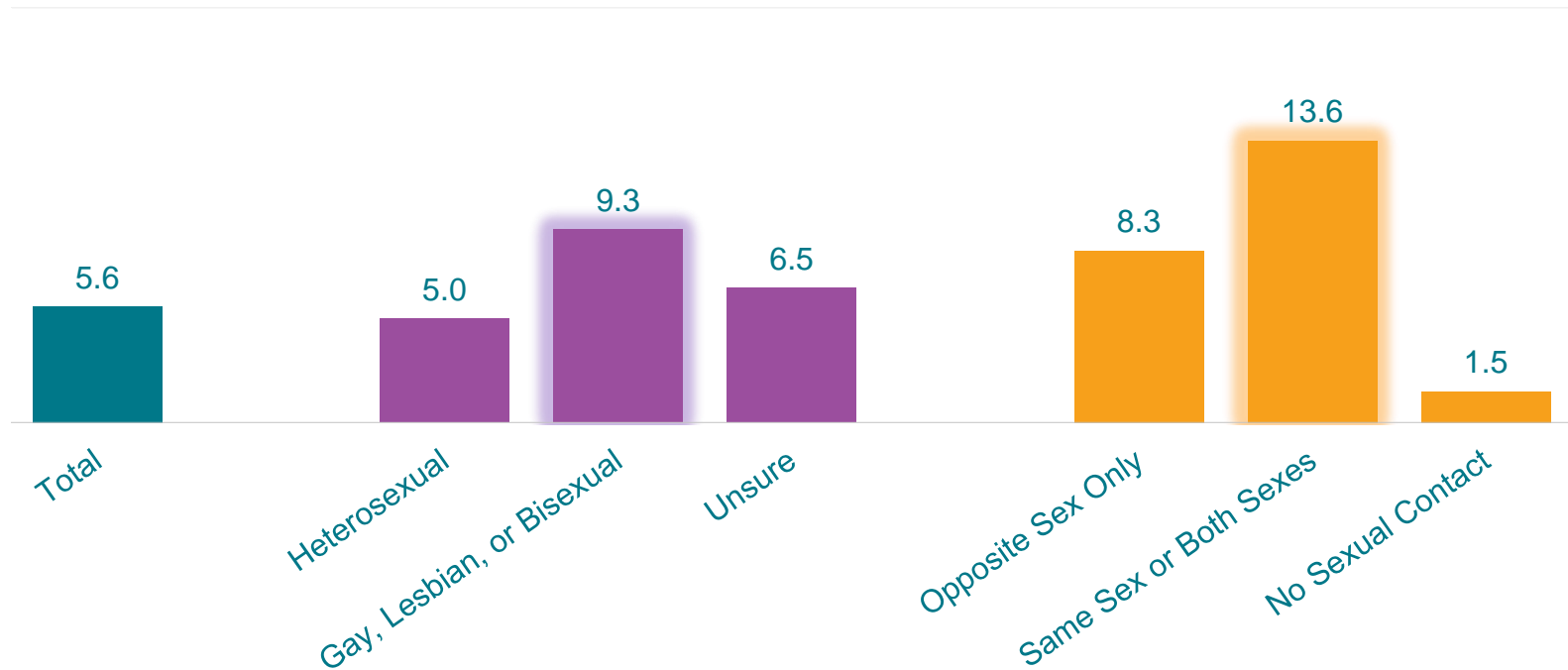


*M > F; 9th > 12th, 11th > 12th; B > H, B > W, H > W (Based on t-test analysis, $p < 0.05$.)
All Hispanic students are included in the Hispanic category. All other races are non-Hispanic.
This graph contains weighted results.

Source: YRBS

Maine Department of Health and Human
Services

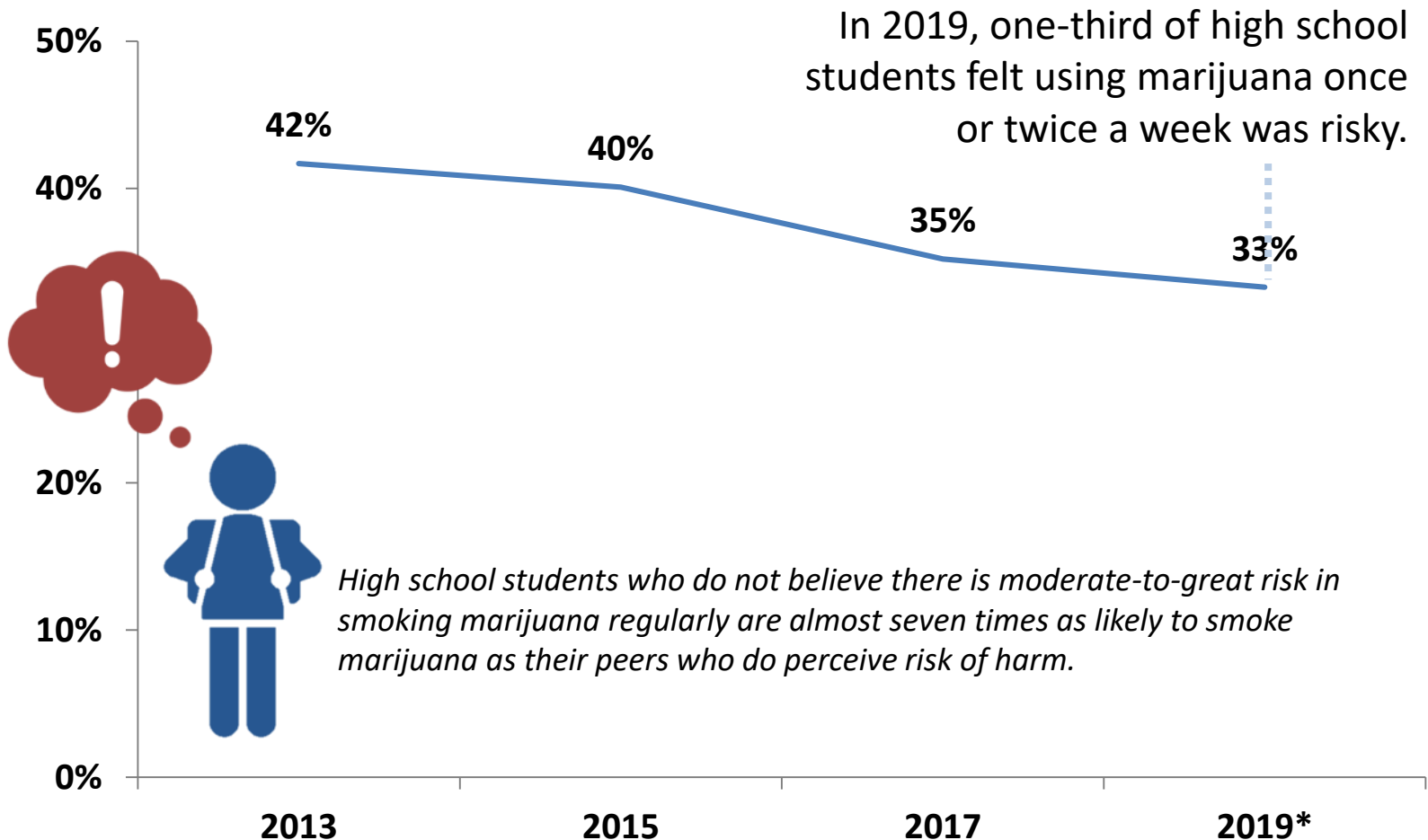
Percentage of High School Students Who Tried Marijuana for the First Time Before Age 13 Years, by Sexual Identity and Sex of Sexual Contacts, 2019



Source: YRBS

Maine Department of Health and Human
Services

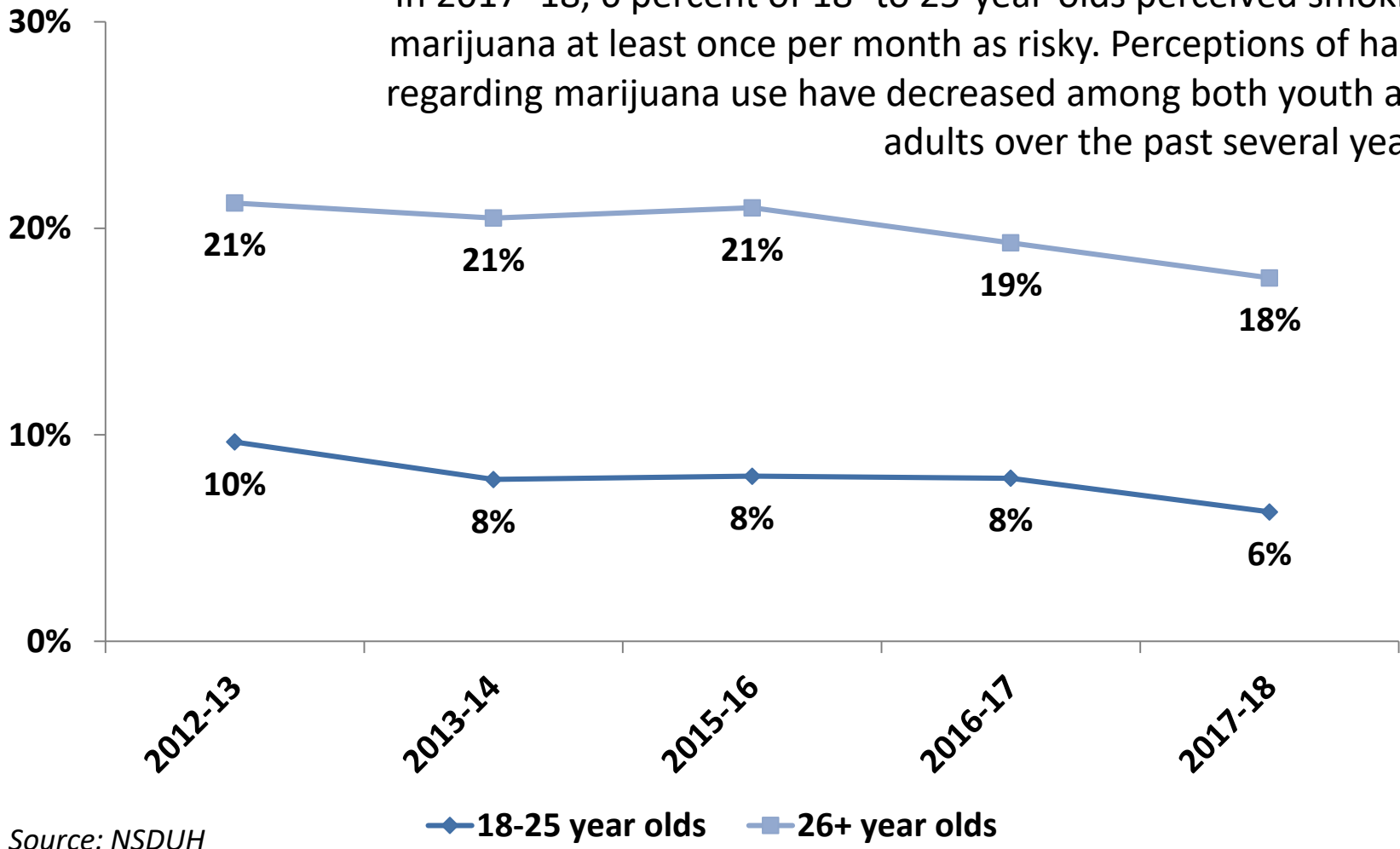
High school students perceiving moderate-to-great risk from using marijuana once or twice a week: 2013 and 2019*



Source: MIYHS

Adults (age 18 and older) perceiving great risk from smoking marijuana once per month, by age group: 2012–13 to 2017–18

In 2017–18, 6 percent of 18- to 25-year-olds perceived smoking marijuana at least once per month as risky. Perceptions of harm regarding marijuana use have decreased among both youth and adults over the past several years.

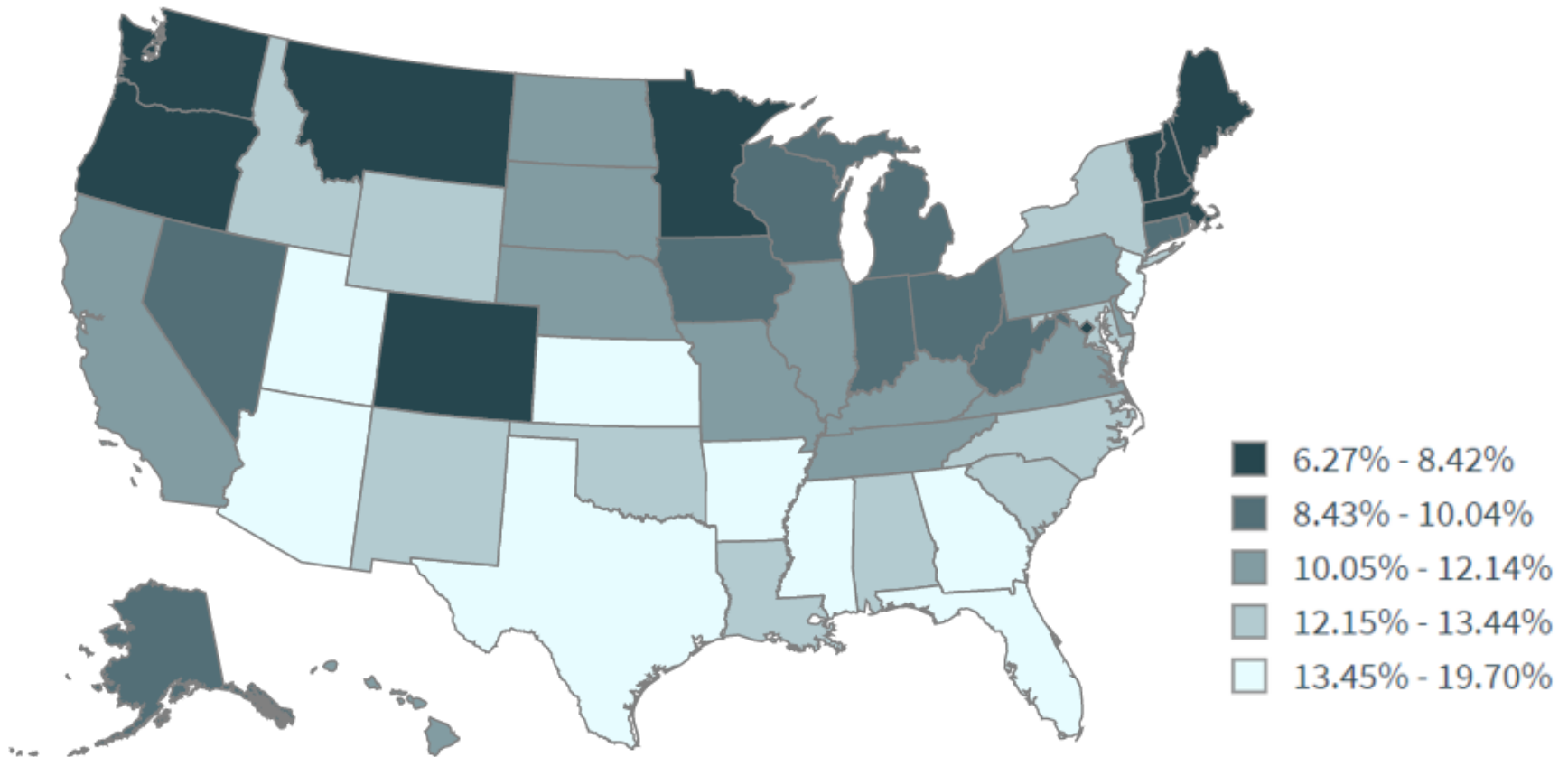


Source: NSDUH

◆ 18-25 year olds ■ 26+ year olds

Maine Department of Health and Human Services

Perceptions of great risk from smoking marijuana once a month among 18 to 25 year olds, by state: 2017-18

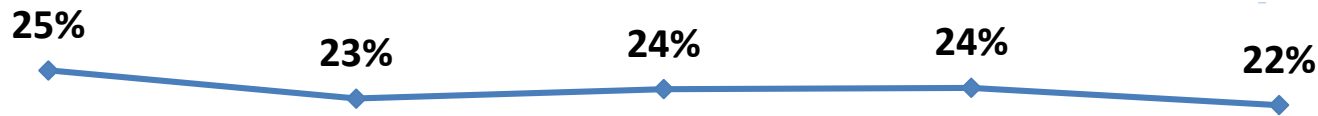


Source: NSDUH

Maine Department of Health and Human
Services

High school students reporting they would get caught by the police if they used marijuana in their neighborhood: 2011–2019

In 2019, about 1 in 5 (22%) high school students thought they would be caught by police in their neighborhood for using marijuana.



High school students who believed they would not be caught by the police (for smoking marijuana in their neighborhood) were almost 5X as likely to smoke marijuana as their peers.

2011

2013

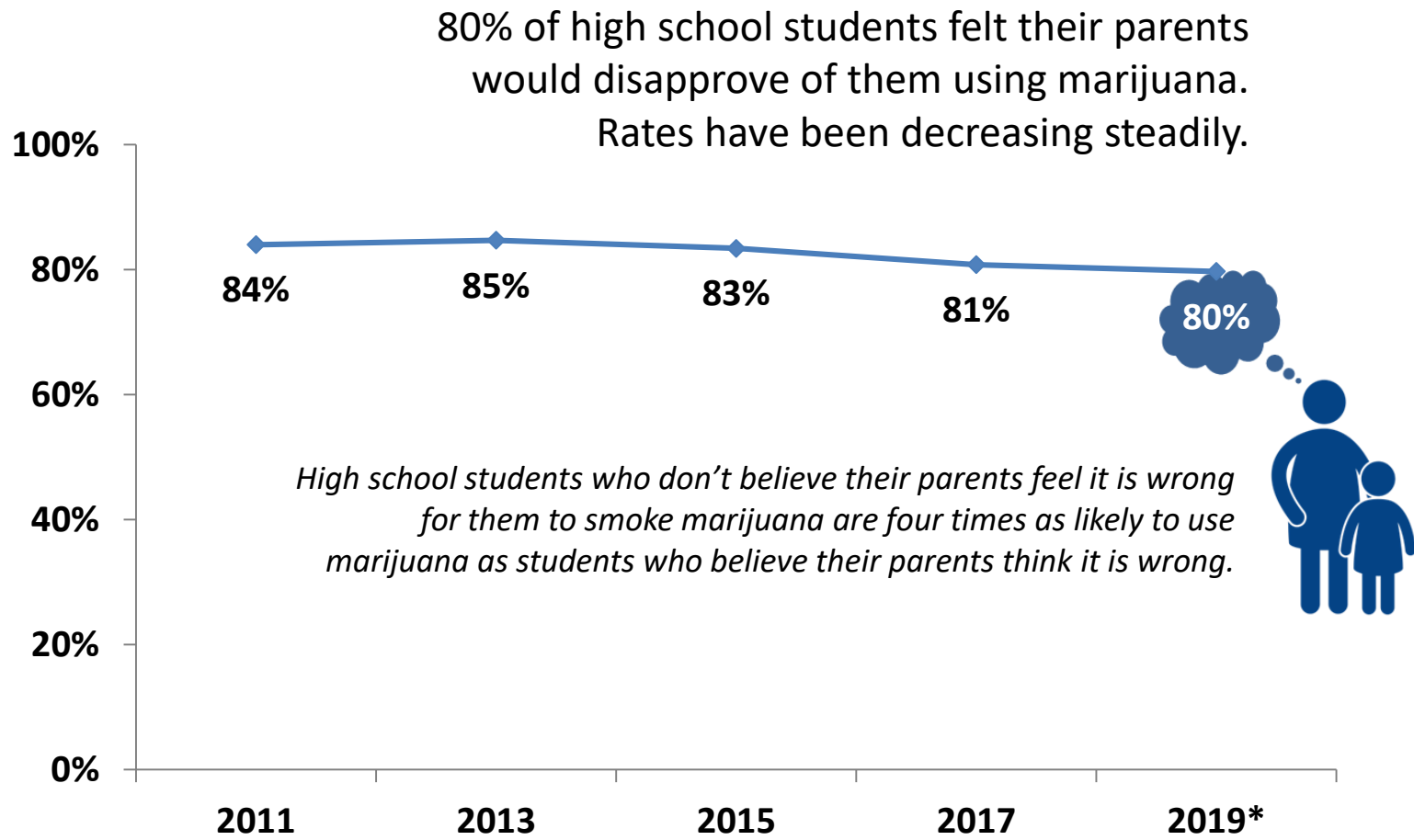
2015

2017

2019*

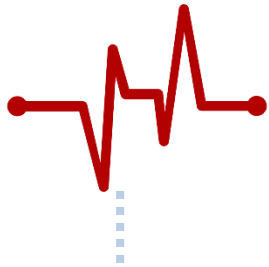
Source: MIYHS

High school students who reported that parents would think it was wrong to use marijuana: 2011–2019*



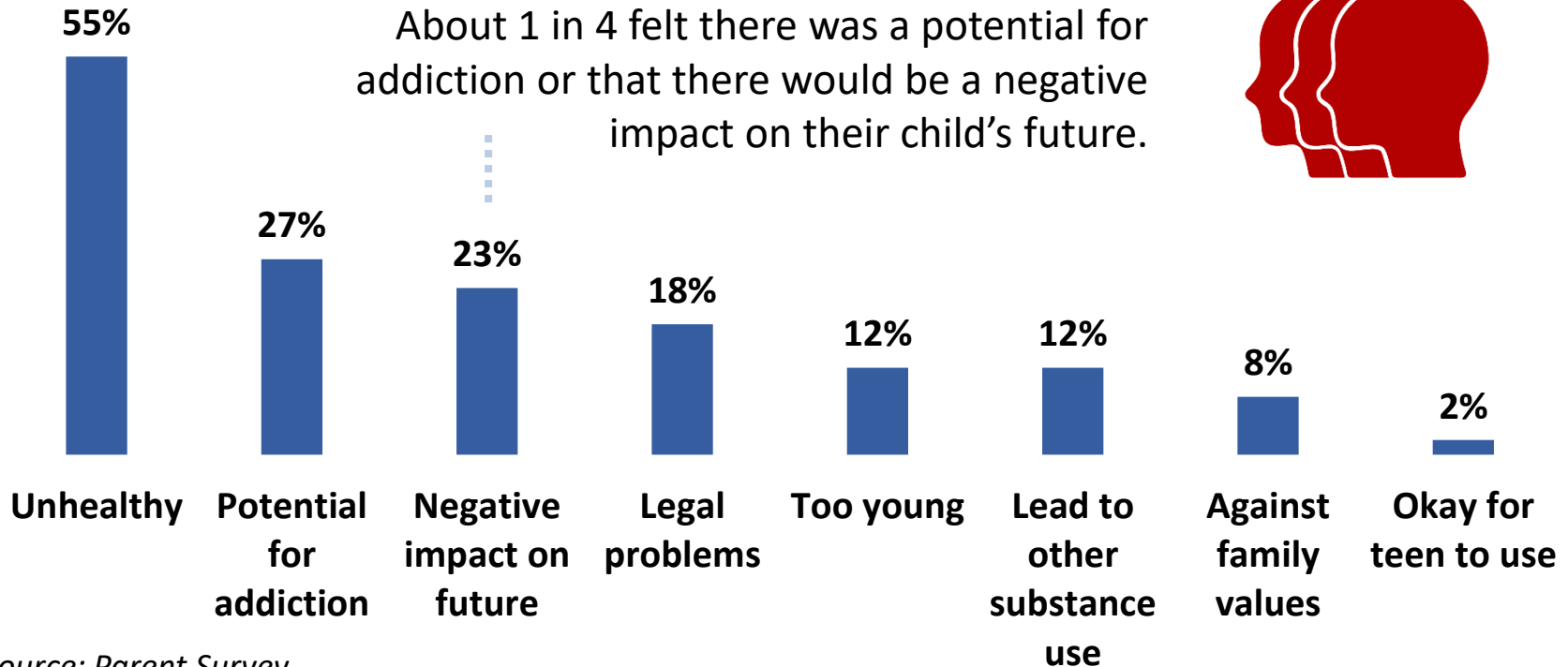
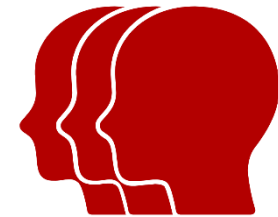
Source: MIYHS

Parent's top reasons for their teen not to use marijuana: 2019



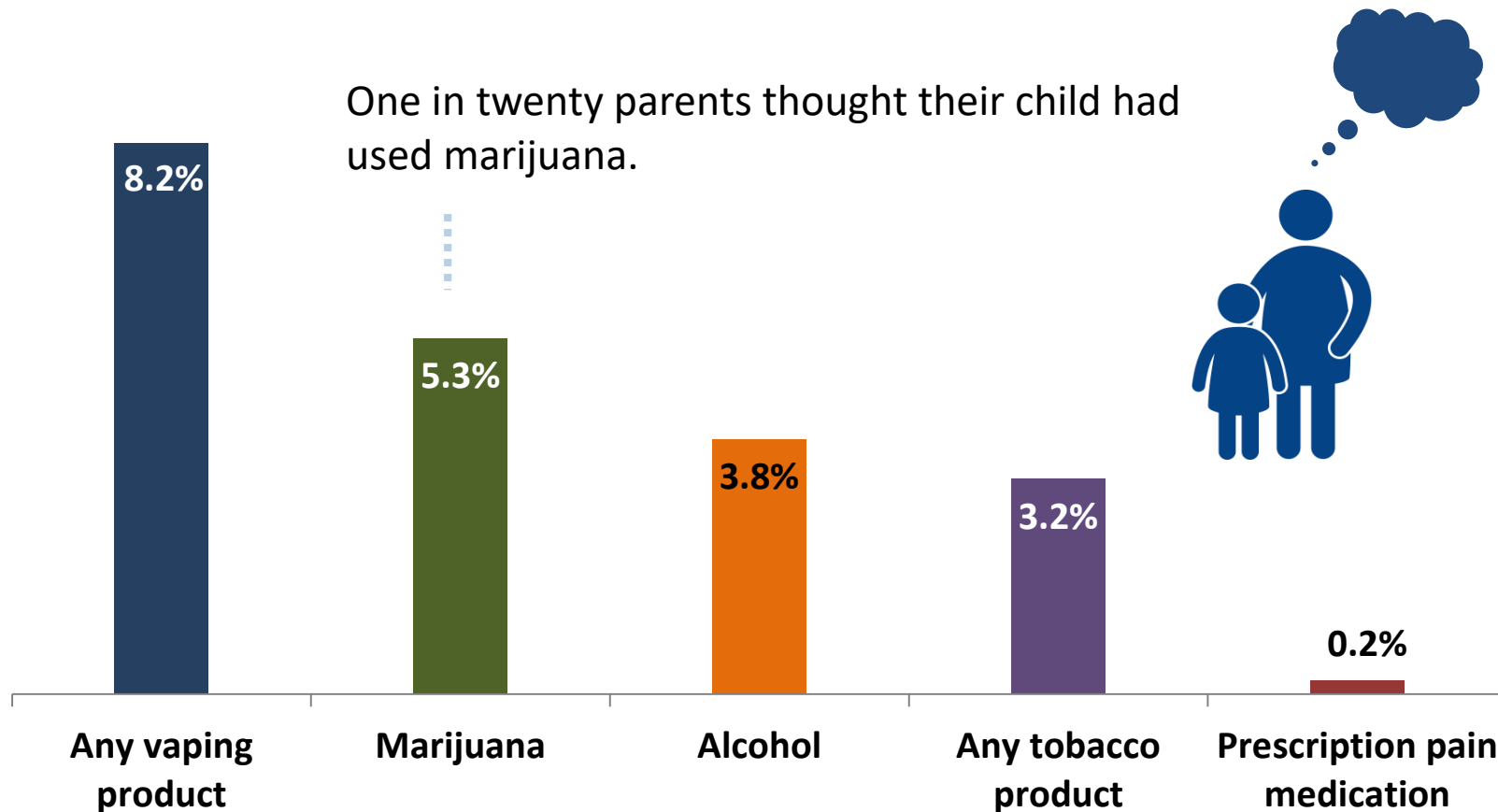
Over half of parents of 7th through 12th graders cited that their child should not use marijuana because it was unhealthy.

About 1 in 4 felt there was a potential for addiction or that there would be a negative impact on their child's future.



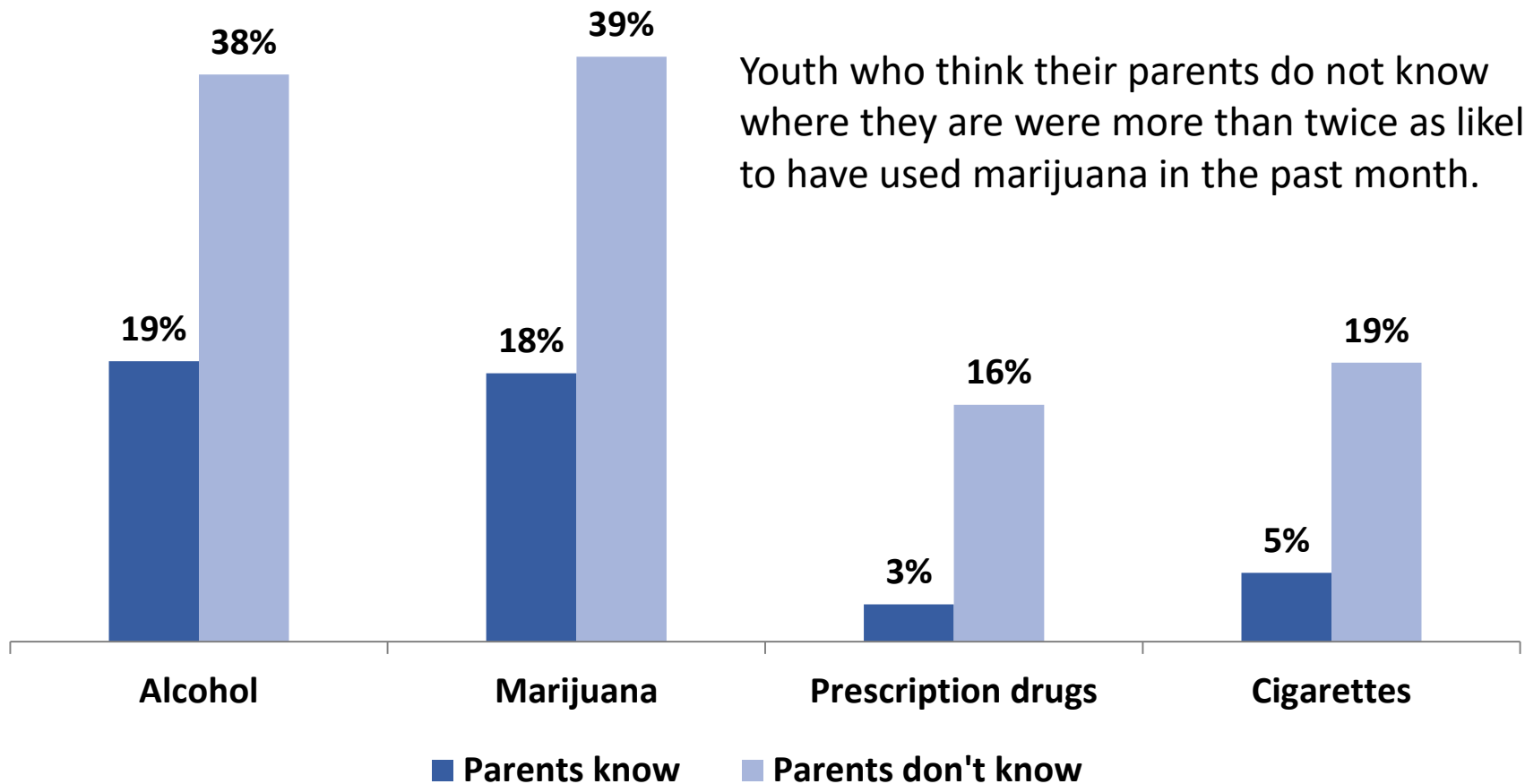
Source: Parent Survey

Parent's perception of child's substance use within the past 30 days, by substance type: 2019



Source: Parent Survey

Past-month high school substance use by whether or not their parents know where they are when not at home: 2019



Executive Summary

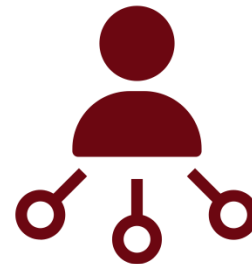
- One in five high school students have used marijuana in the past month
- Maine has some of the highest rates of marijuana use among young adults in the nation; rates have been steadily increasing among all adults in recent years.
 - There was a notable increase beginning in 2011-12
- In recent years, steady increase observed in MJ use among pregnant women
- Most students report smoking marijuana, but other routes of administration such as vaping, concentrates, and edibles are growing in popularity.
- Electronic vapor product use among youth has increased dramatically in recent years
 - One in three HS students reporting past month use
 - Maine and the Northeast have some the highest rates in the Nation
- Possession arrests for marijuana have decreased dramatically in the past few years
 - About 1 in 3 are related to the possession of marijuana
- In 2019, there were nearly 4,600 ED visits in Maine related to Cannabis
 - Disproportionately higher among younger adults and males
- About one third of substance use admissions in Maine cited marijuana as secondary reason for treatment

Executive Summary

- More Mainers are initiating marijuana use than ever before
 - Initiates 26 and older have doubled in recent years
- About 6% of Maine high school students reported trying MJ before age 13
 - Rates are higher among students who identified as LGBTQ, Black
- There remains a large discrepancy between parental perceptions of child's behavior and the actual behavior reported by youth.
- Majority of HS students feel that their parents and community would not approve of substance use.
- Perception of harm from marijuana use has been declining steadily among youth and adults.
 - Maine has some of the lowest rates of perception of harm from marijuana use in the nation.
- Changing policies, culture, and availability of marijuana are likely to continue to influence Mainers perceptions and usage.
- Availability and the potential for diversion to youth continue to be a concern; most teens still feel it is easy to get marijuana.
- Factors such as perception of harm, perception of accessibility, and regular family communication/monitoring have shown to have a significant impact in determining whether an individual will initiate or continues use.

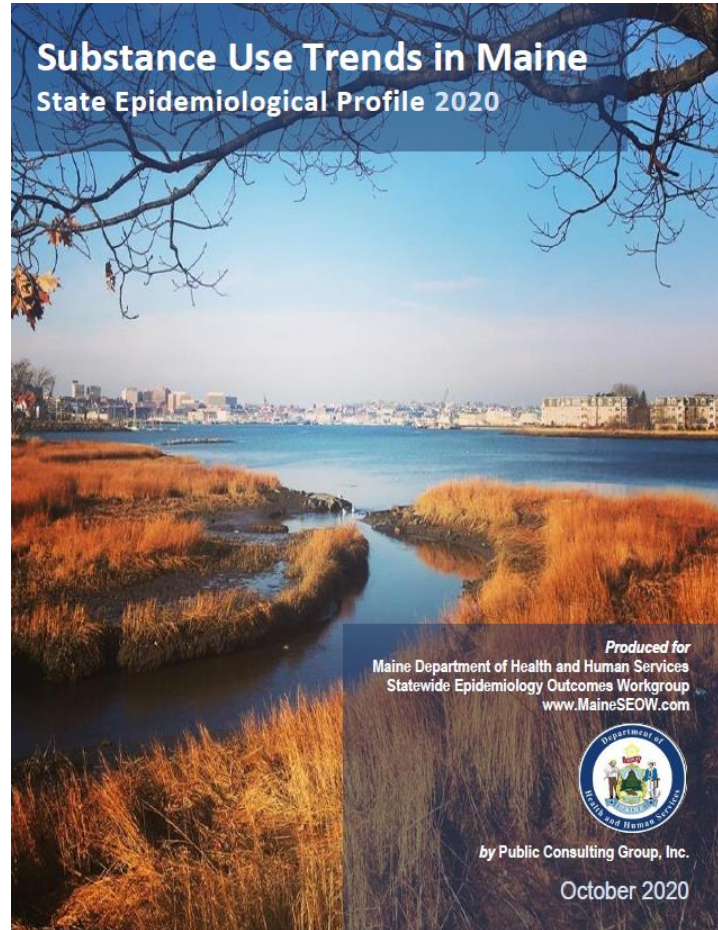
Appendix A (Data Sources)

- *Behavioral Risk Factor Surveillance System (BRFSS)*
- *Maine Department of Public Safety (DPS), Bureau of Highway Safety (BHS), Maine Department of Transportation (MDOT)*
- *Maine Department of Public Safety (DPS), Uniform Crime Reports (UCR)*
- *Maine Emergency Medical Services (EMS)*
- *Maine Integrated Youth Health Survey (MIYHS)*
- *Maine Office of the Chief Medical Examiner (OCME) Marcella Sorg, Margaret Chase Smith Policy Center at the University of Maine*
- *Maine CDC Syndromic Surveillance System/Rapid Health Information for Maine (RHIME)*
- *National Survey on Drug Use and Health (NSDUH)*
- *Office of Child and Family Services (OCFS), Maine Automated Child Welfare Information System (MACWIS)*
- *CDC Parent Survey (administered by Pan Atlantic)*
- *Web Interactive Treatment System (WITS)*
- *2-1-1 Maine*
- *Youth Risk Behavioral Surveillance System (YRBSS)*



**For more information including a source description and source contact information please visit www.maine-seow.com*

2020 SEOW State Profile



www.MaineSEOW.com

Quick Reference Guide

Marijuana Quick Reference Guide

Population	Source	Type	Indicator	Year(s)	Aroostook	Central	Cumber-land	Downeast	Midcoast	Penquis	Western	York	Maine	
7th-8th		Consumption	Past 30 day use of Marijuana	2017	4.5%	4.3%	2.7%	3.0%	3.9%	2.9%	5.2%	3.1%	3.6%	
				2019	3.8%	5.5%	2.9%	3.2%	4.7%	4.0%	5.3%	3.3%	4.1%	
9th-12	MIYHS	Consumption	Past 30 day use of Marijuana	2017	15%	19%	19%	19%	22%	17%	22%	18%	19%	
				2019	18%	21%	24%	21%	23%	18%	23%	22%	22%	
		Contributing Factor	Students who reported vaping marijuana or hash oil the last time they used an electronic vapor product (of those who had vaped).	2017	5.1%	11%	14%	16%	17%	11%	17%	10%	13%	13%
				2019	11%	10%	19%	11%	11%	9%	13%	13%	13%	
			Initiation of marijuana among students who reported ever using (% student who reported use before age 13)	2017	24%	22%	15%	14%	20%	22%	24%	17%	19%	
				2019	14%	20%	13%	15%	21%	17%	20%	15%	17%	
			Students who felt it would be easy to access marijuana	2017	47%	52%	51%	56%	56%	49%	55%	51%	52%	
				2019	50%	54%	52%	56%	55%	51%	56%	51%	53%	
			Students who reported smoking marijuana at least once or 2x a week would NOT harm them	2017	58%	64%	62%	68%	66%	65%	69%	65%	65%	
				2019	63%	67%	65%	70%	68%	65%	69%	67%	67%	
			Students who felt their friends would NOT think it was wrong for them to smoke marijuana	2017	44%	52%	55%	58%	57%	50%	57%	54%	54%	
				2019	51%	55%	56%	57%	59%	53%	59%	55%	56%	
			Students who felt their parents would think it was NOT wrong for them to smoke marijuana	2017	15%	20%	17%	21%	21%	17%	23%	19%	19%	
				2019	16%	23%	18%	23%	22%	18%	24%	19%	20%	
Students who felt it was NOT wrong for kids their age to smoke marijuana	2017	39%	45%	47%	48%	49%	44%	50%	47%	47%				
	2019	40%	49%	50%	50%	51%	45%	50%	49%	49%				
Students who felt a kid smoking in their neighborhood would NOT be caught by police	2017	78%	78%	74%	80%	79%	76%	78%	74%	76%				
	2019	76%	80%	77%	81%	81%	78%	78%	75%	78%				
Parents of 7th-8th	Parent Survey		Parents who felt their child using marijuana once or twice per week is a moderate or great risk	2019	55%	49%	50%	56%	49%	48%	53%	53%	52%	
18-25	BRFSS		Past 30 day use of Marijuana among 18 to 25	2017	10.8%	11.8%	11.5%	13.0%	12.0%	10.8%	11.9%	10.5%	11.7%	
				2018	Coming soon									
12 +	NSDUH	Consumption	Past 30 day use of Marijuana among 12+	2014-16	14.0%	14.7%	15.7%	15.3%	14.0%	16.2%	15.2%	13.4%	14.9%	
				2016-18	15.3%	16.8%	18.9%	14.2%	16.0%	16.9%	17.9%	16.1%	17.0%	
			Past year use of Marijuana among 12+	2014-16	17.6%	20.3%	21.6%	20.4%	19.9%	20.4%	21.0%	19.4%	20.4%	
			2016-18	19.8%	23.1%	27.2%	19.0%	23.0%	22.5%	24.3%	22.3%	23.5%		
Contributing Factor	Past year marijuana initiation rate (Used marijuana for the first time in the past year)	2014-16	1.7%	2.3%	2.8%	2.1%	2.5%	2.4%	2.4%	2.6%	2.5%			
		2016-18	2.4%	3.1%	3.7%	2.3%	2.6%	2.9%	3.3%	2.9%	3.0%			
All Ages	CDC Syndromic WITS	Consequences	ED visits related to a cannabis overdose per 10,000 residents	2018	39.0	58.5	23.9	28.9	29.6	48.7	66.7	8.4	37.1	
				2019	41.5	33.7	25.4	34.9	28.0	41.1	64.8	5.8	32.9	
	DPS-UCR		Number of Primary Treatment Admissions due to marijuana per 10,000 residents	2017	4.9	4.1	6.2	5.7	1.2	2.1	6.9	1.2	4.1	
				2018	1.3	3.9	4.6	4.1	1.4	3.3	5.4	0.6	3.3	
	Marijuana-related arrests for possessions per 10,000 residents	2016-17	8.7	14.4	8.2	8.7	10.8	16.2	8.8	17.4	11.8			
		2017-18	3.0	4.1	4.5	2.8	3.9	9.4	3.2	7.6	5.1			

[SEOW Quick Reference Guide updated 091520 .pdf](#)

Maine Department of Health and Human Services

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