

A group of five diverse young people (three women and two men) are sitting around a table, smiling and talking. The image is overlaid with a semi-transparent green filter. The text is centered over the image.

New Data on Vaping and Teen Drug Use

What Teachers Need to Know

Today's Agenda

1

Overview and Introductions

2

Monitoring the Future

3

*National Drug and Alcohol Facts
Week*

4

From Data to Practice with PDS

5

Panelist Q&A

In Partnership



**National Institute
on Drug Abuse**
The Science of Drug Abuse & Addiction



**PRESCRIPTION
DRUG SAFETY
NETWORK**



Panelists



Dr. Emily Einstein

Washington, DC
Branch Chief | NIDA



Brian Marquis

Washington, DC
Public Liaison Officer | NIDA

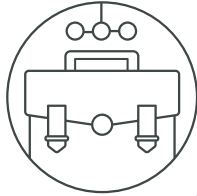


Lauren Pingul

Romeoville, IL
Senior Implementation Manager |
EVERFI

Whole Child Lessons, No Cost to Educators

**Career
Readiness**



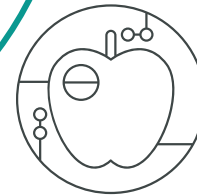
**Social and
Emotional
Learning**



**Financial
Capability**



**Health and
Wellness**

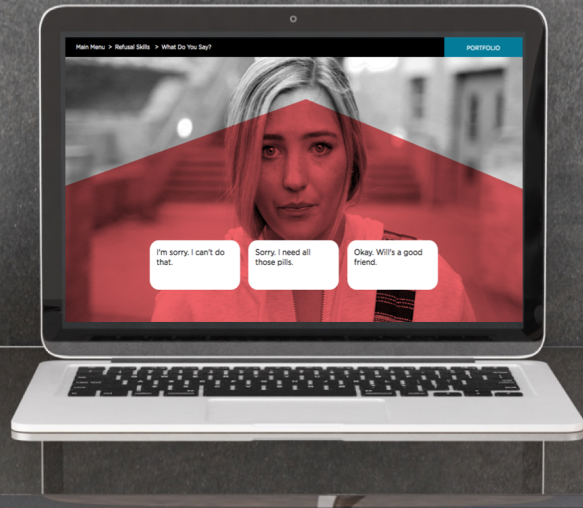


Prescription Drug Safety

Suggested Grade Level: 9th -12th

Total Lessons: 6 lessons, 10-15 minutes each

Aligns with NHES



At-a-Glance

Prescription Drug Safety is an innovative digital course that arms high school students with the knowledge and tools to make healthy, informed decisions when it comes to prescription medications.

Through interactive scenarios and self-guided activities, students learn the facts about drugs, how to properly use and dispose of them, and how to step in when faced with a situation involving misuse.

Course Highlights

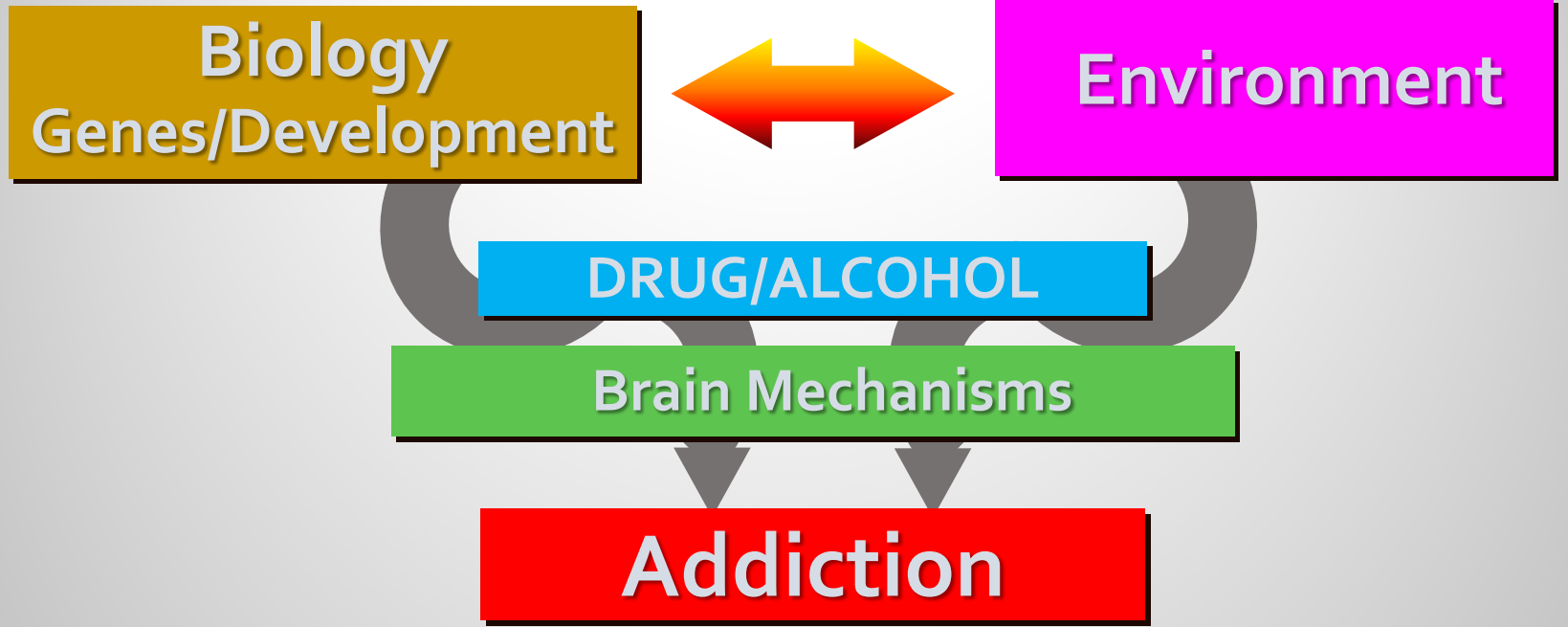
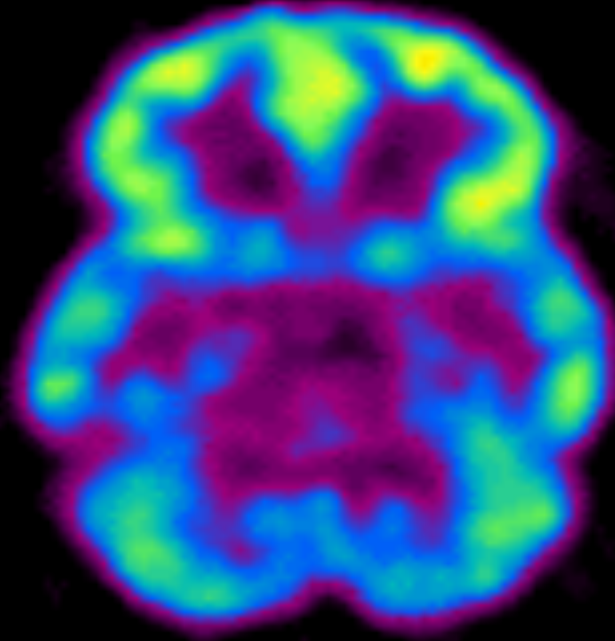
- Evidence-based, universal, public health approach to learning
- Interactive, true-to-life scenarios that reinforce key learning objectives

Course Topics

- Opioids, stimulants, and depressants
- The science of addiction
- Misuse refusal skills
- Supporting others

Access Now:
everfi.com/newteacher

New Data on Vaping and Teen Drug Use: What Teachers Need to Know



Emily B. Einstein, P.h.D.

Chief, Science Policy Branch
National Institute on Drug Abuse



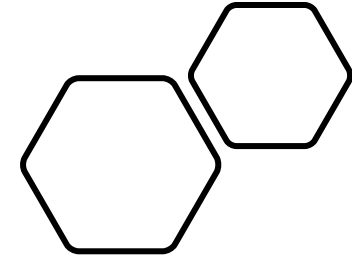


TEEN DRUG USE

MONITORING THE FUTURE 2019

Monitoring the Future is an annual survey of 8th, 10th, and 12th graders conducted by researchers at the Institute for Social Research at the University of Michigan, Ann Arbor, under a grant from the National Institute on Drug Abuse, part of the National Institutes of Health. Since 1975, the survey has measured how teens report their drug, alcohol, and cigarette use and related attitudes in 12th graders nationwide; 8th and 10th graders were added to the survey in 1991.

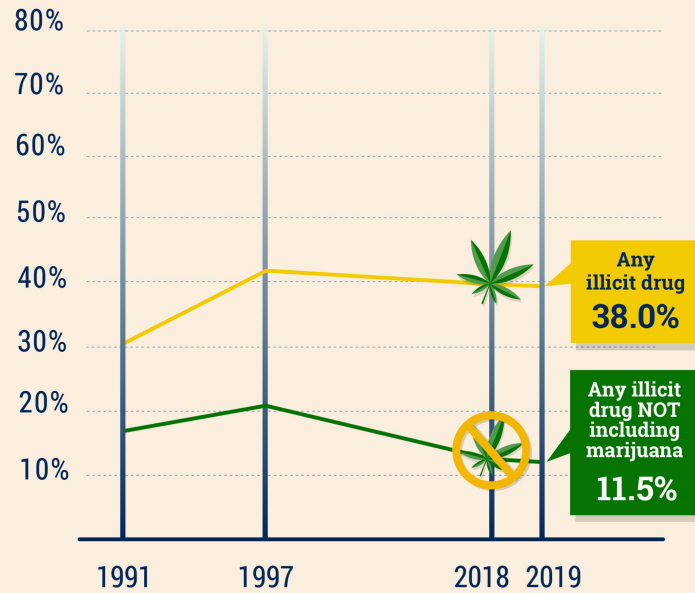
42,531 STUDENTS FROM 396 PUBLIC AND
PRIVATE SCHOOLS PARTICIPATED IN THE 2019 SURVEY.



ILLCIT DRUG USE

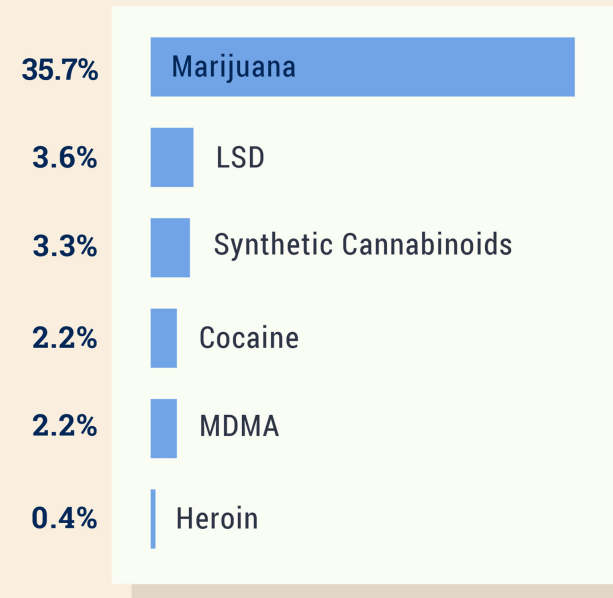
ILLCIT DRUG USE STEADY

Past year use among 12th graders



PAST YEAR ILLCIT DRUG USE

Past year use among 12th graders

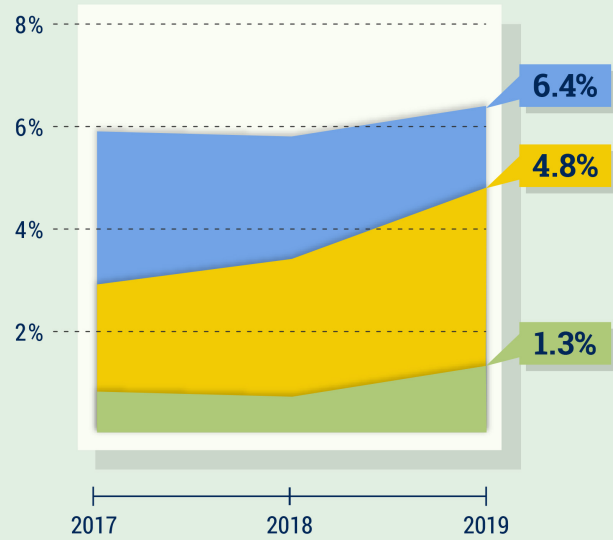


DRUGABUSE.GOV

DAILY MARIJUANA USE IN LOWER GRADES INCREASES BUT PAST YEAR MARIJUANA USE STEADY

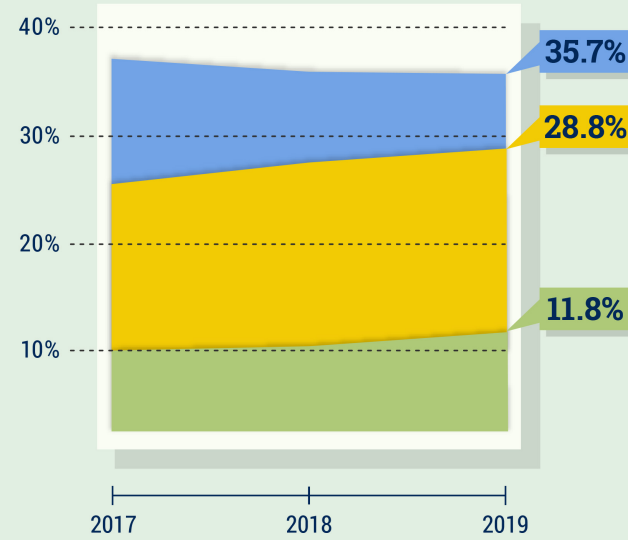
DAILY MARIJUANA USE

sees significant increase among 8th and 10th graders since 2018



PAST YEAR MARIJUANA USE

gap closing between older grades

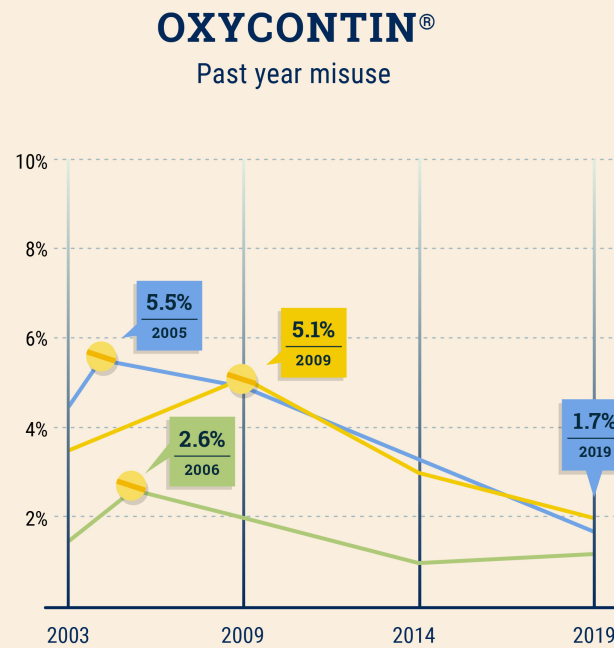
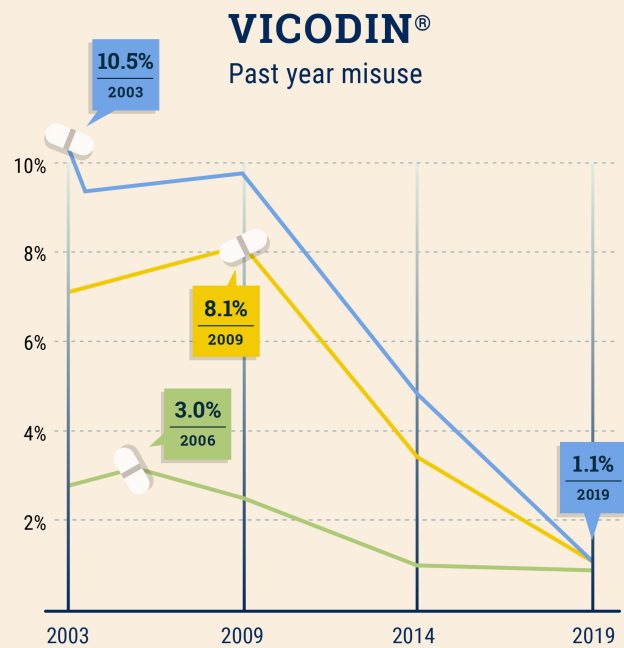


8th graders 10th graders 12th graders



DRUGABUSE.GOV

PRESCRIPTION DRUG MISUSE CONTINUES DECLINE FROM PEAK YEARS



8th graders

10th graders

12th graders

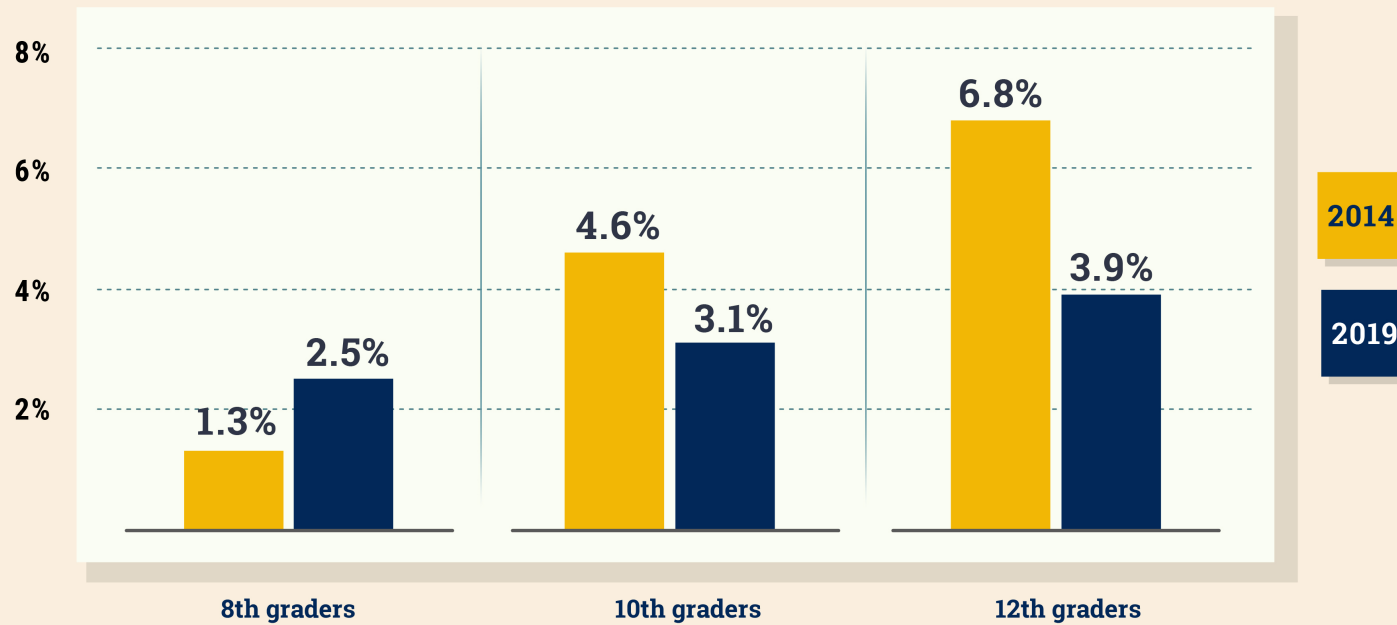


DRUGABUSE.GOV

PRESCRIPTION DRUG MISUSE CONTINUES DECLINE FROM PEAK YEARS

ADDERALL® MISUSE SEES SIGNIFICANT CHANGES IN PAST 5 YEARS

a decrease in 10th and 12th grades, but an increase in 8th grade

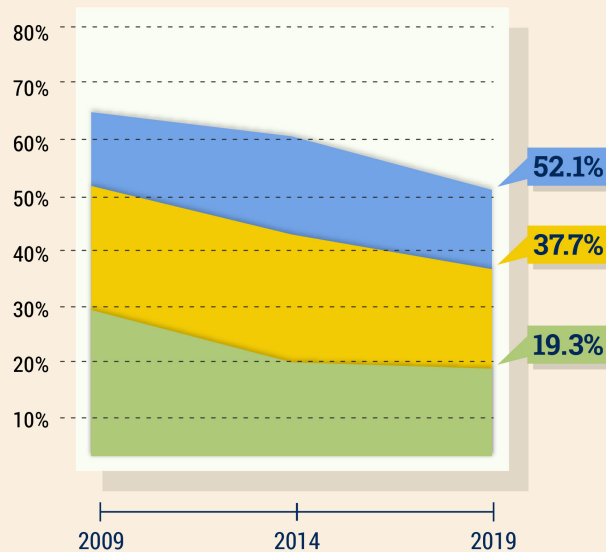


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ALCOHOL USE CONTINUES ITS DECLINE

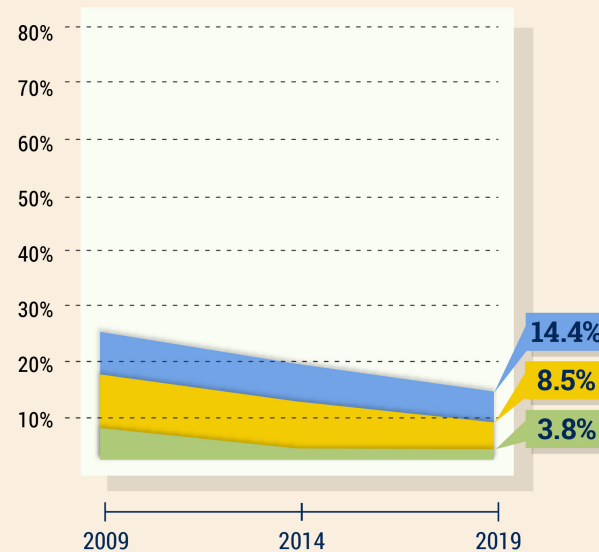
PAST YEAR ALCOHOL USE

Significant long-term decrease in all grades



BINGE DRINKING*

Significant long-term decrease in all grades



8th graders
10th graders
12th graders

*5 or more drinks in a row in the past two weeks

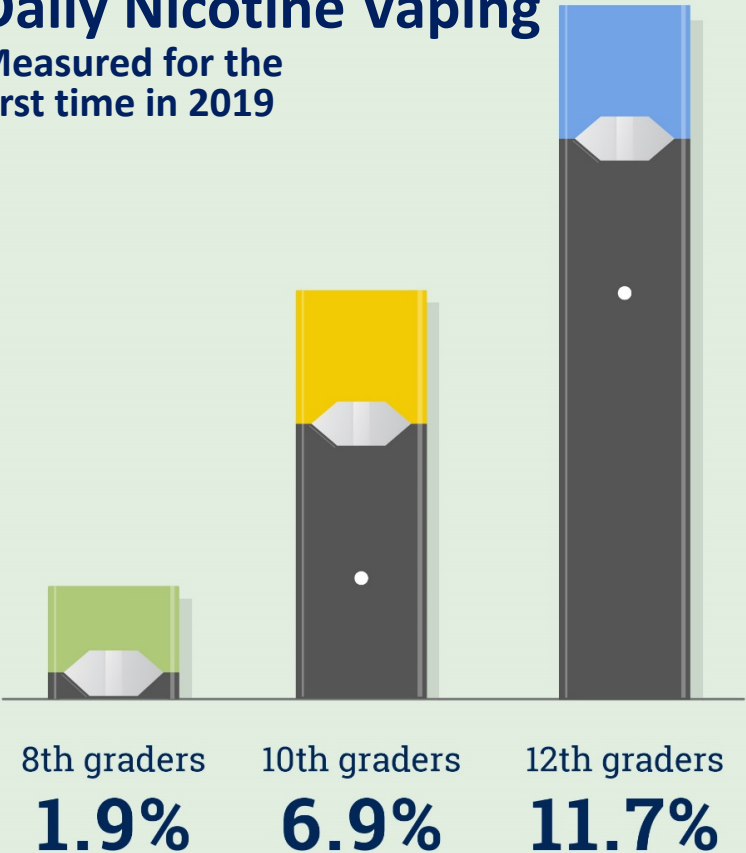


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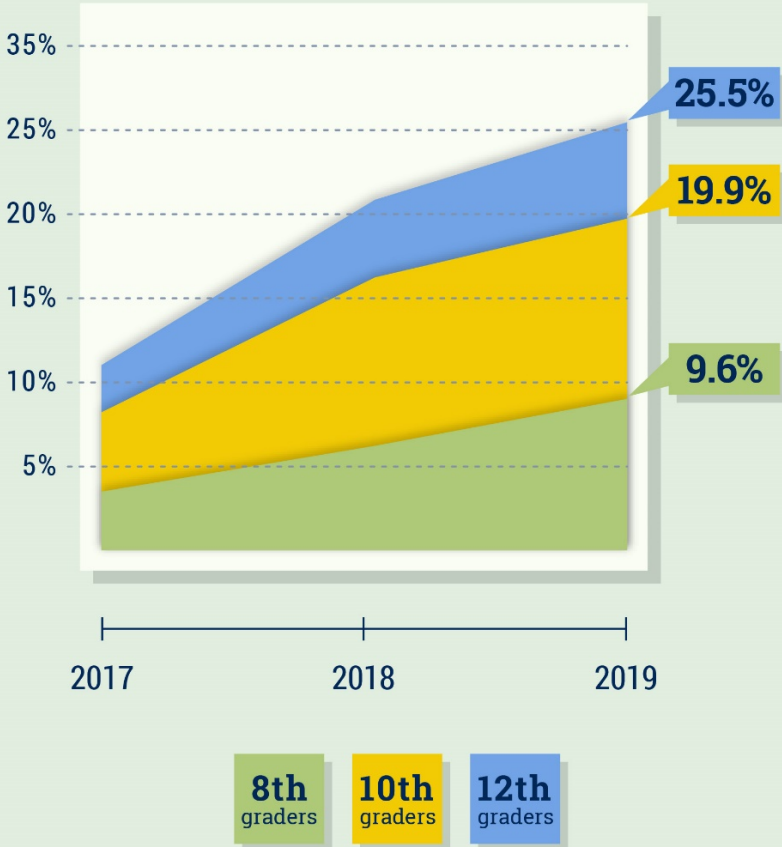
Teen Nicotine Vaping Climbs Significantly

Daily Nicotine Vaping

Measured for the first time in 2019



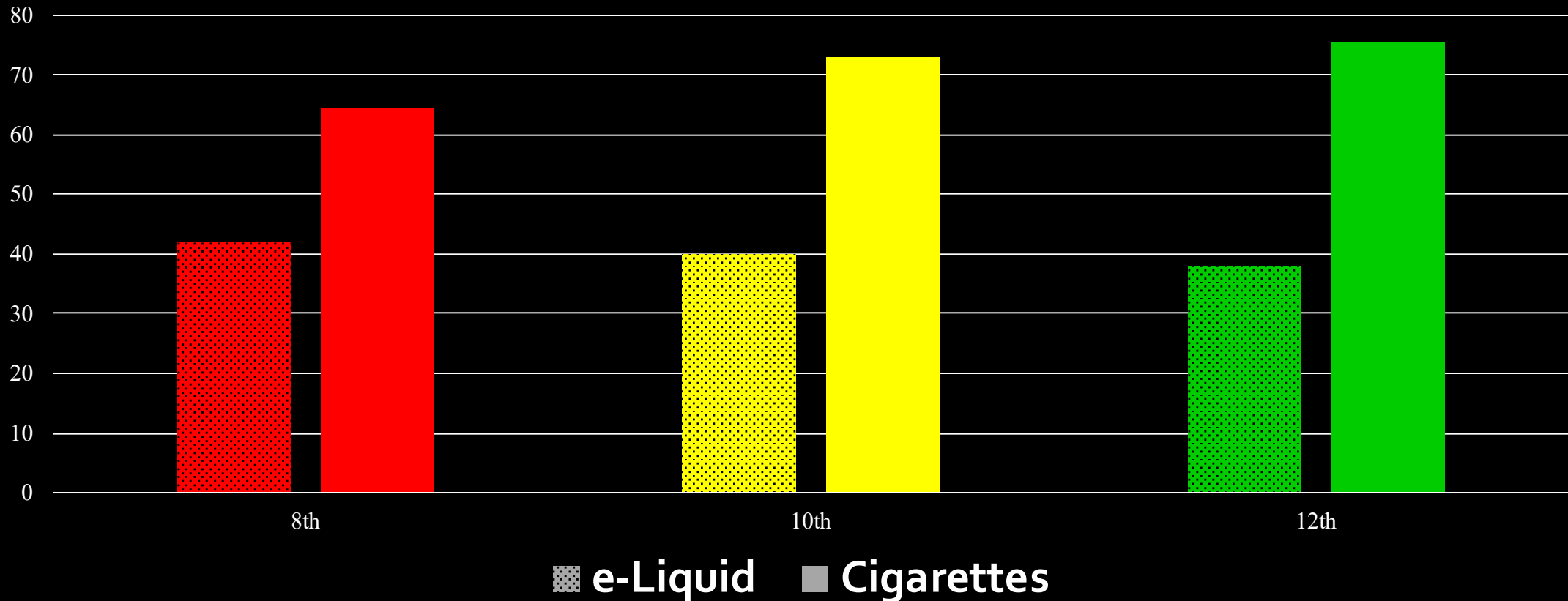
Past Month Nicotine Vaping



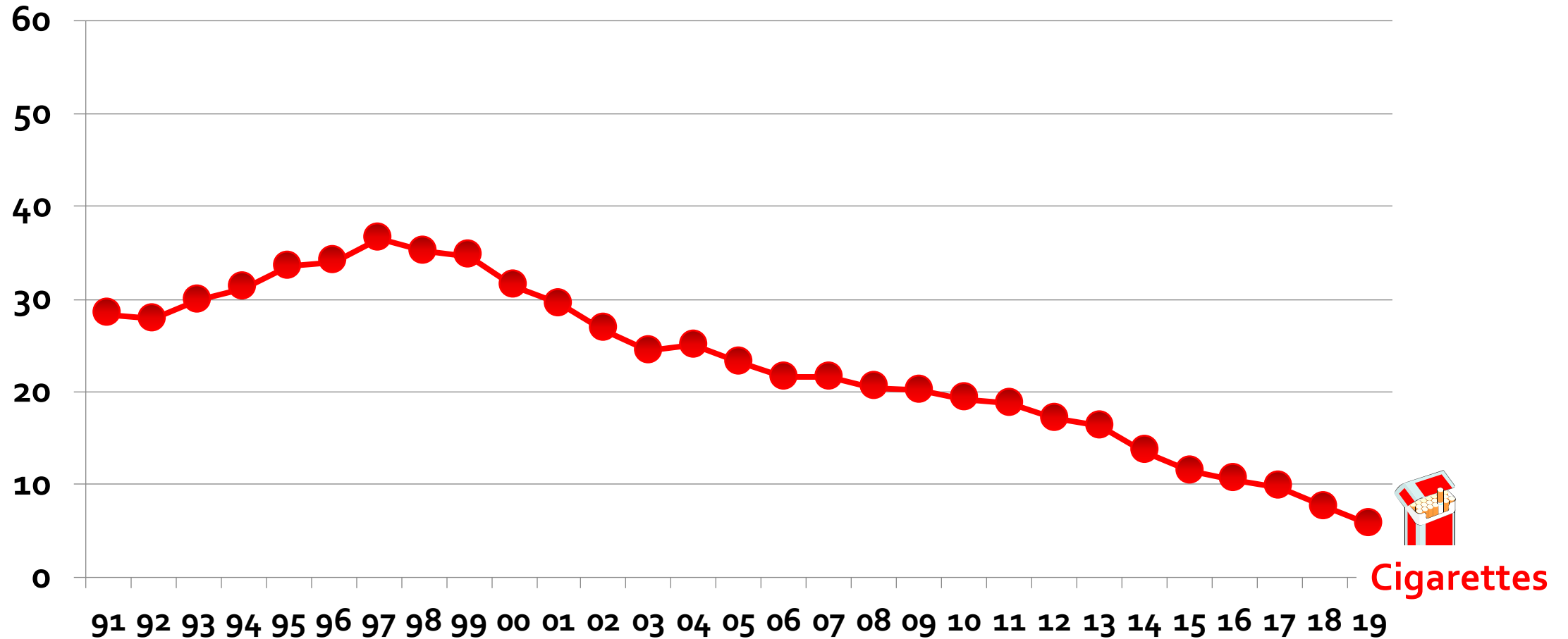
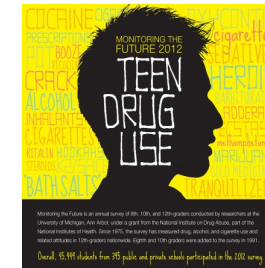
Past month nicotine vaping Equates to:

- 1 in 10–8th graders
- 1 in 5–10th graders
- 1 in 4–12th graders

Percent Perceiving Great Risk of: *Vaping e-liquid with Nicotine Regularly, and Smoking 1+ Packs of Cigarettes Daily, 2019*

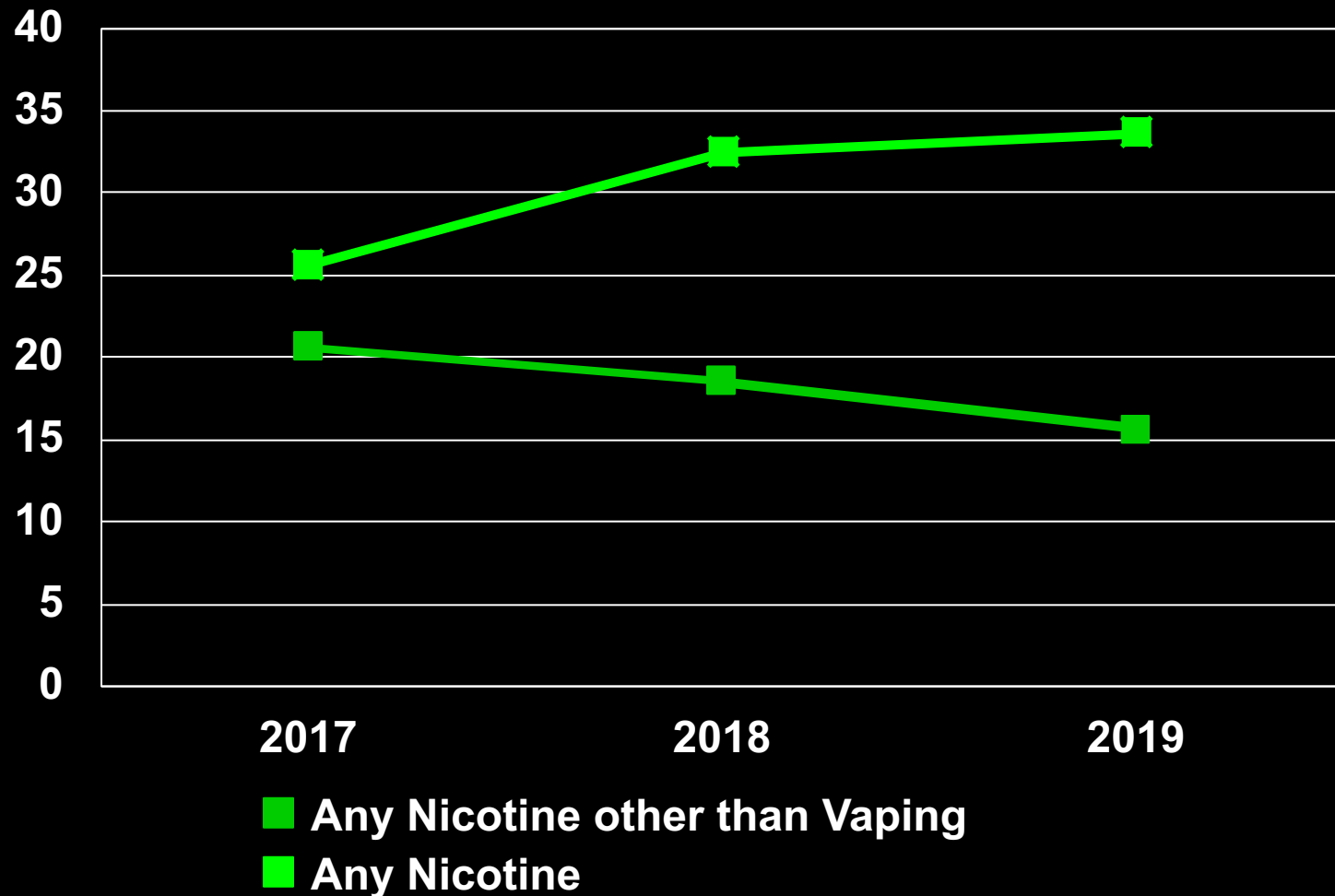


Percentage of U.S. 12th Grade Students Reporting Past Month Use of Cigarettes



University of Michigan, 2019 Monitoring the Future Study.

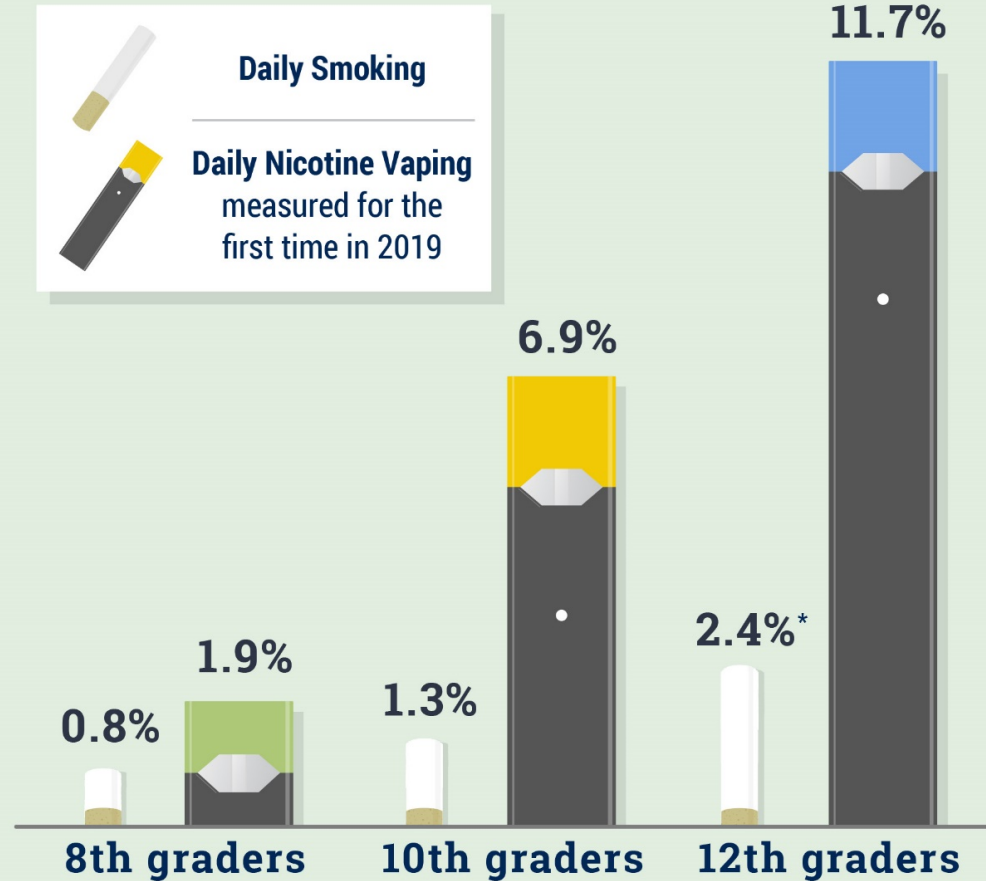
Percent of 12th Grade Students Reporting Past Month Use of: Any Nicotine Other Than Vaping and Any Nicotine



SOURCE: University of Michigan, 2019 Monitoring the Future Study

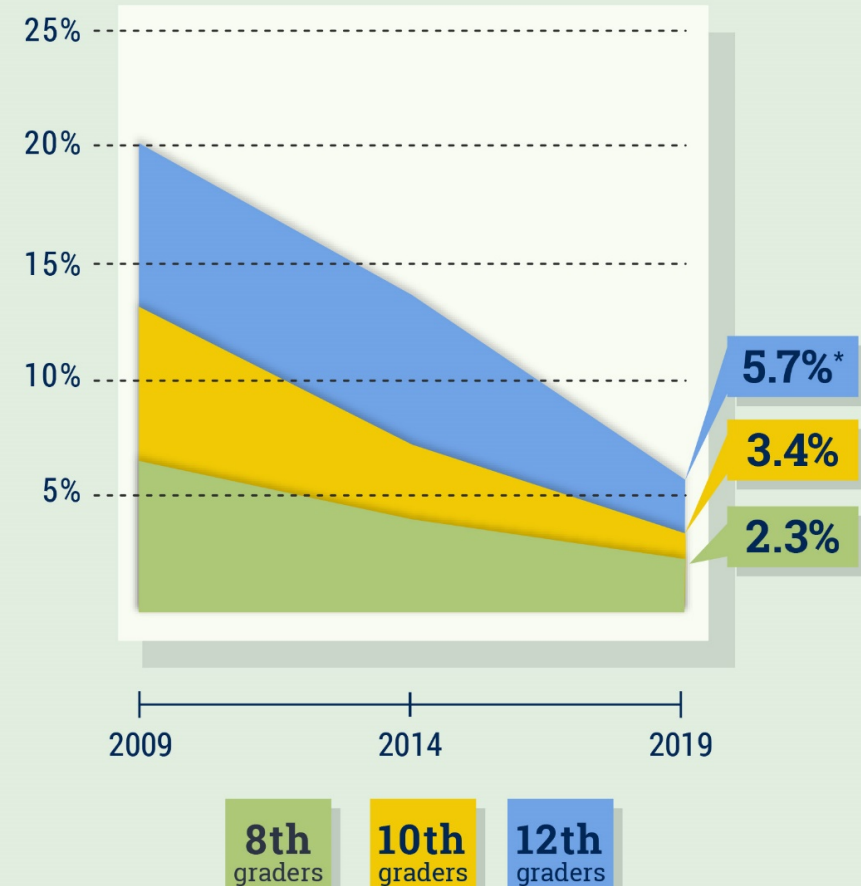
Tobacco and Nicotine: Vaping Threatens Progress

NICOTINE – DAILY USE



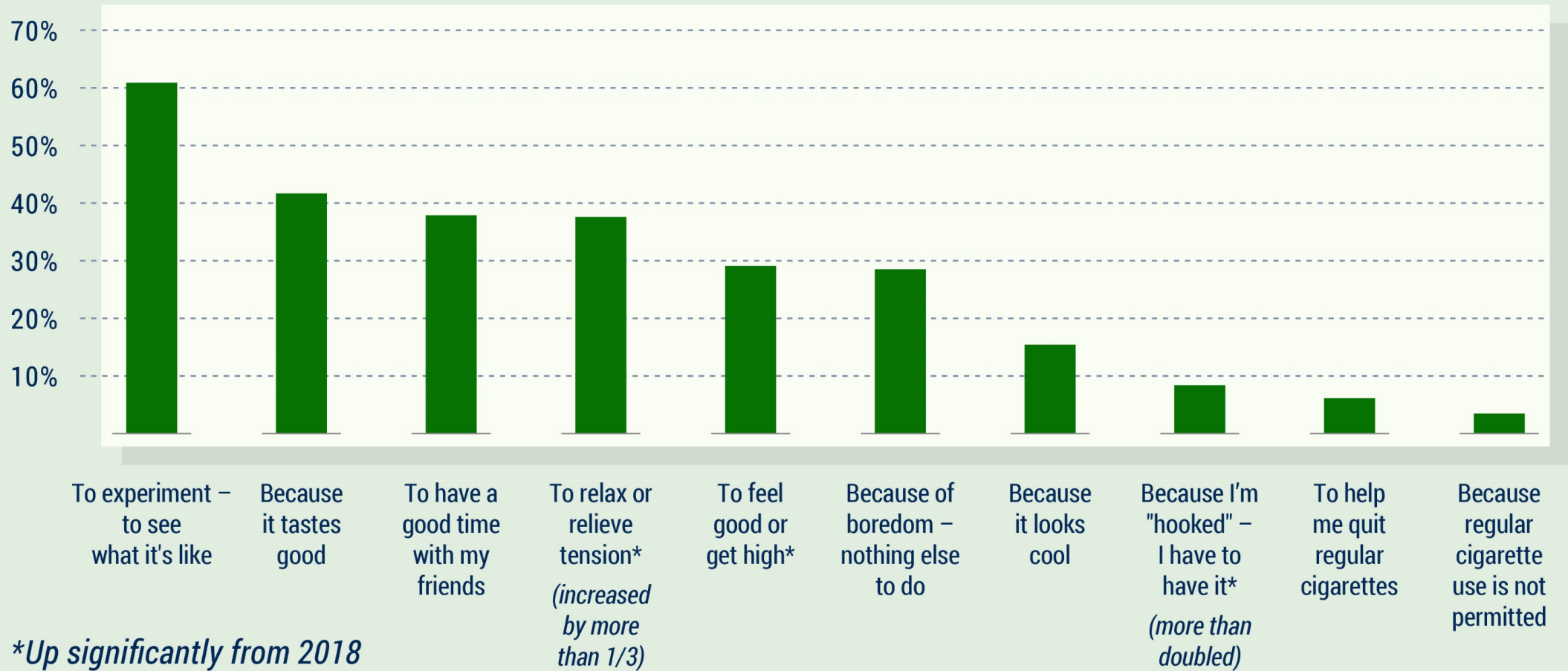
*Significant decline from 2018 (3.6%)

CIGARETTE SMOKING (PAST MONTH) DECLINES OVER PAST TEN YEARS



*Significant decline from 2018 (7.6%)

Teens Report Reasons for Vaping



Key Issue

Safer \neq Safe

Health Effects of the Nicotine Molecule

- ⊙ Addiction
- ⊙ Priming of brain response to rewarding properties of other drugs
- ⊙ Acute toxicity, with poisoning fatality possible when ingested
- ⊙ Adverse birth outcomes, when exposed prenatally
- ⊙ In experimental systems, affects:
 - *Brain development (with prenatal or adolescent exposure)*
 - *Carcinogenic mechanisms*
 - *Immune function*
 - *Insulin release*
 - *Lung development when exposed prenatally*
- ⊙ May have therapeutic potential—BUT is only current approved by FDA for nicotine replacement (*i.e. patch, gum, lozenge, spray*)

E-Cigarette Use may *Lead to Combustible Cigs*

In a prospective study of 14 year old students, *E-Cigarette use predicted onset* of—

- Any Combustible Tobacco Product: 2.75 times more likely (AOR-adjusted odds ratio)
- Smoking Cigarettes 1.73 AOR

Leventhal, et al. *JAMA* 2015;314(7):700-707.

In a prospective study of 12-15 year olds, *E-Cigarette use predicting onset* 2 years later of—

- Ever Using Cigarettes: 4.09 times more likely (AOR)
- Currently Smoking Cigarettes: 2.75 times more likely (AOR)

Berry, et al. *JAMA Network Open* 2019;2(2):e187794

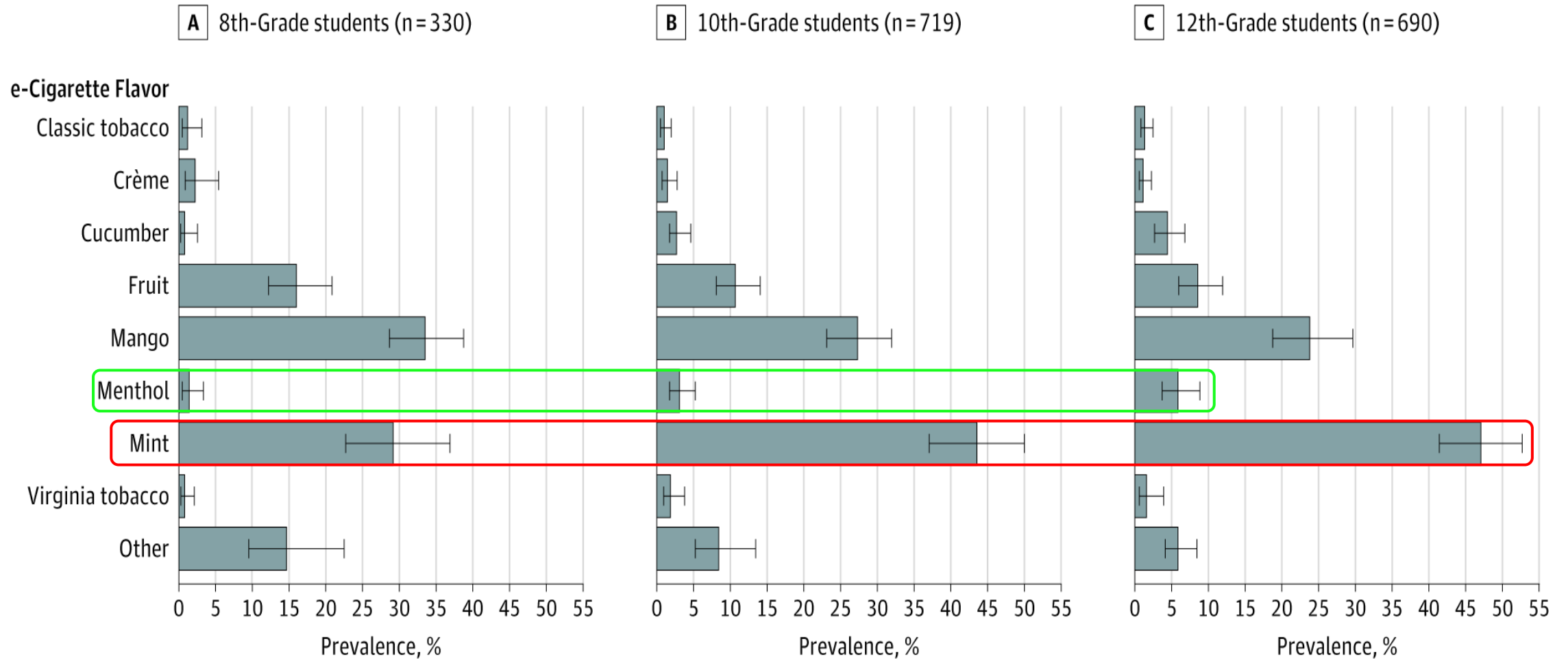
Flavorings Matter

2012-2013 U.S. study of 12-17 year olds (n=13,561), *first tobacco product was flavored* among users:

- Cigarettes 50%
- Smokeless 69%
- E-Cigarettes 81%

Ambrose, et al. JAMA, 26 October 2015

Flavors of e-Cigarettes Used by Youths in the U.S. 2019



Flavor Used Most Often Among US Youths, Past 30-Day JUUL e-Cigarette Users. Weighted prevalence estimates of forced-choice responses to “Which JUUL flavor do you use most often?” The “other” category did not specify any flavor and could represent various flavors compatible with the JUUL device made by manufacturers other than JUUL Labs. Error bars indicate 95% CIs.

JUUL LABS STOPS THE SALE OF MINT JUULPODS IN THE UNITED STATES

COMPANY NEWS | YOUTH PREVENTION
NOVEMBER 7, 2019

In light of the studies released this week relating to the 2019 National Youth Tobacco Survey and Monitoring the Future survey, JUUL Labs' CEO K.C. Crosthwaite announced that the company will immediately stop accepting orders from our retail partners for our Mint JUULpods in the U.S. and cease the sale of Mint JUULpods in the U.S. through our ecommerce site (JUUL.com).

[IA Guidance Documents](#) / [Enforcement Priorities for Electronic Nicotine Delivery System \(ENDS\) and Other Deemed Products on the Market Without Premarket Authorization](#)

GUIDANCE DOCUMENT

Enforcement Priorities for Electronic Nicotine Delivery System (ENDS) and Other Deemed Products on the Market Without Premarket Authorization

Guidance for Industry

JANUARY 2020

[Download the Final Guidance Document](#)

[Read the Federal Register Notice](#)

Final

FDA Finalizes Enforcement Policy on Unauthorized Flavored Cartridge-Based E-Cigarettes That Appeal to Children, Including Fruit and Mint

Companies that do not cease manufacture, distribution and sale of unauthorized flavored cartridge-based e-cigarettes (other than tobacco or menthol) within 30 days risk FDA enforcement actions

Amid the epidemic levels of youth use of e-cigarettes and the popularity of certain products among children, the U.S. Food and Drug Administration (FDA) today [issued a policy prioritizing enforcement](#) against certain unauthorized flavored e-cigarette products that appeal to kids, including fruit and mint flavors. Under this policy, companies that do not cease manufacture, distribution and sale of unauthorized flavored cartridge-based e-cigarettes (other than tobacco or menthol) within 30 days risk FDA enforcement actions.

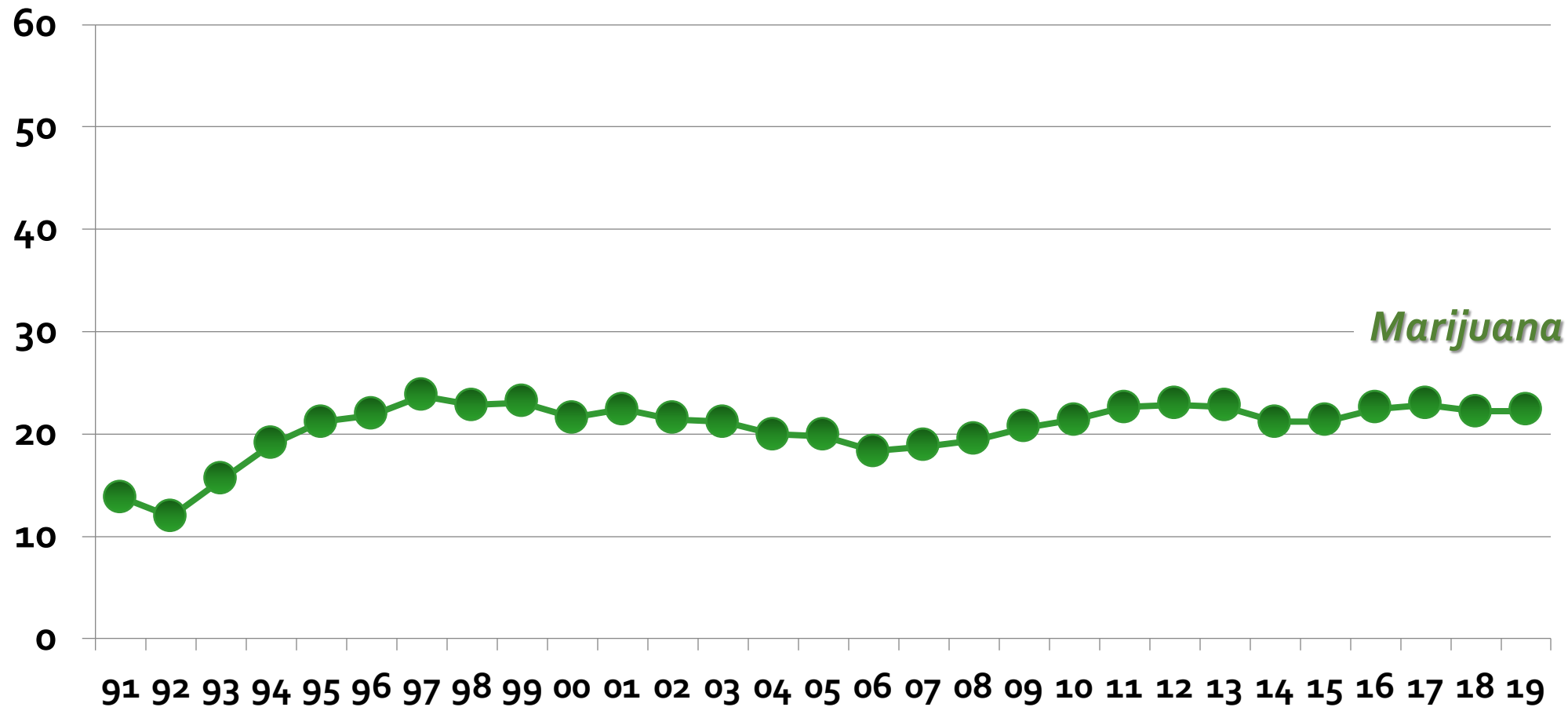
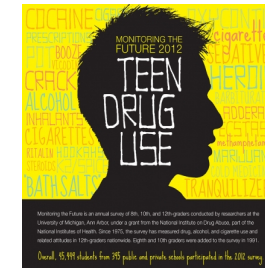
“The United States has never seen an epidemic of substance use arise as quickly as our current epidemic of youth use of e-cigarettes. HHS is taking a comprehensive, aggressive approach to enforcing the law passed by Congress, under which no e-cigarettes are currently on the market legally,” said HHS Secretary Alex Azar. “By prioritizing enforcement against the products that are most widely used by children, our action today seeks to strike the right public health balance by maintaining e-cigarettes as a potential off-ramp for adults using combustible tobacco while ensuring these products don’t provide an on-ramp to nicotine addiction for our youth. We will not stand idly by as this crisis among America’s youth grows and evolves, and we will continue monitoring the situation and take further actions as necessary.”

CURRENT LANDSCAPE OF FLAVORED E-CIGARETTE SUPPLY



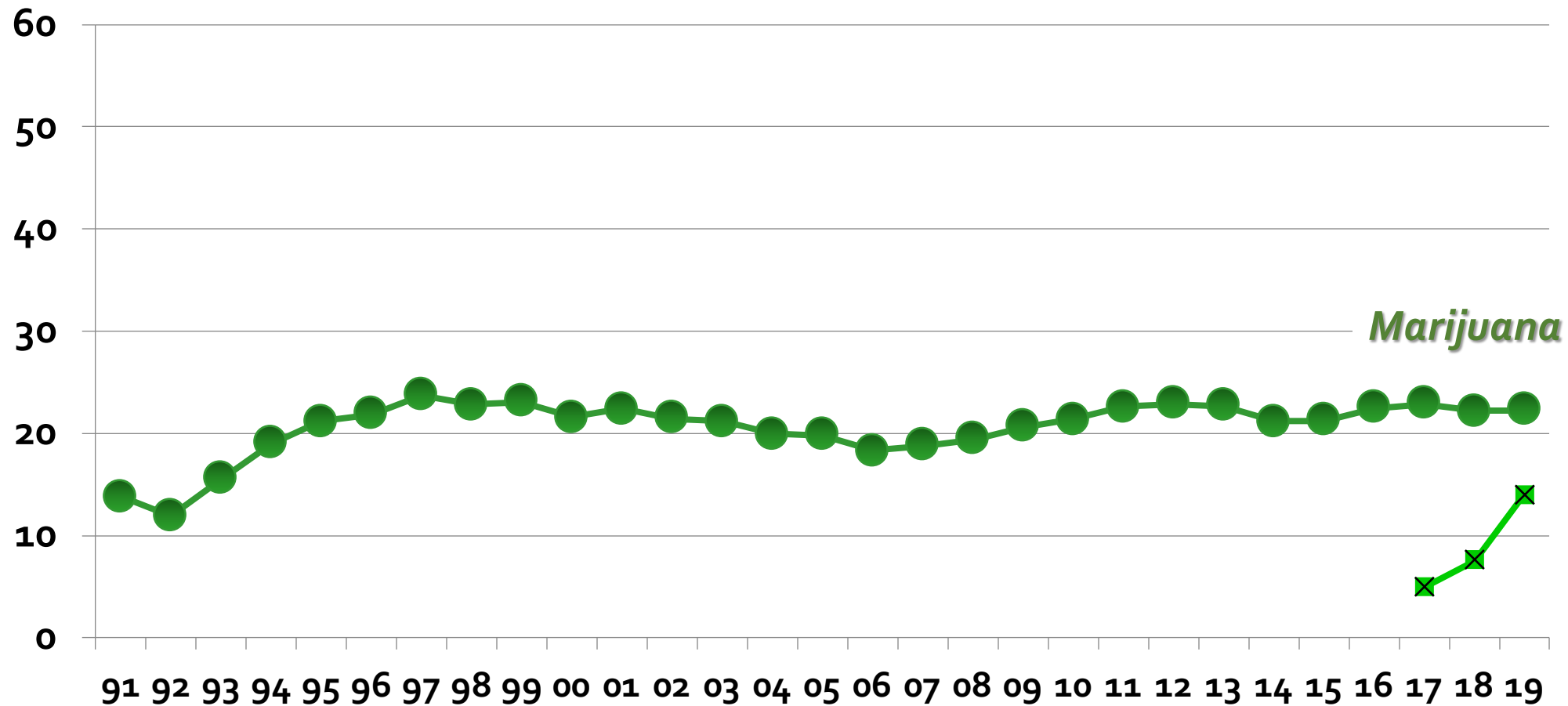
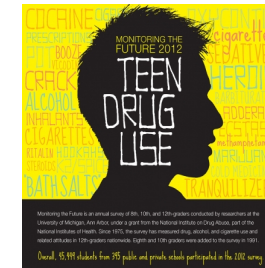
- On January 2, 2020 FDA determined that all cartridge-based flavored e-cigarette products should be removed from the market within 30 days
- So far, disposable products are exempt.

Percentage of U.S. 12th Grade Students Reporting Past Month Use of *Marijuana*



University of Michigan, 2019 Monitoring the Future Study.

Percentage of U.S. 12th Grade Students Reporting Past Month Use of *Marijuana* and *Marijuana Vaping*



University of Michigan, 2019 Monitoring the Future Study.

Teen Marijuana Vaping Climbs Significantly

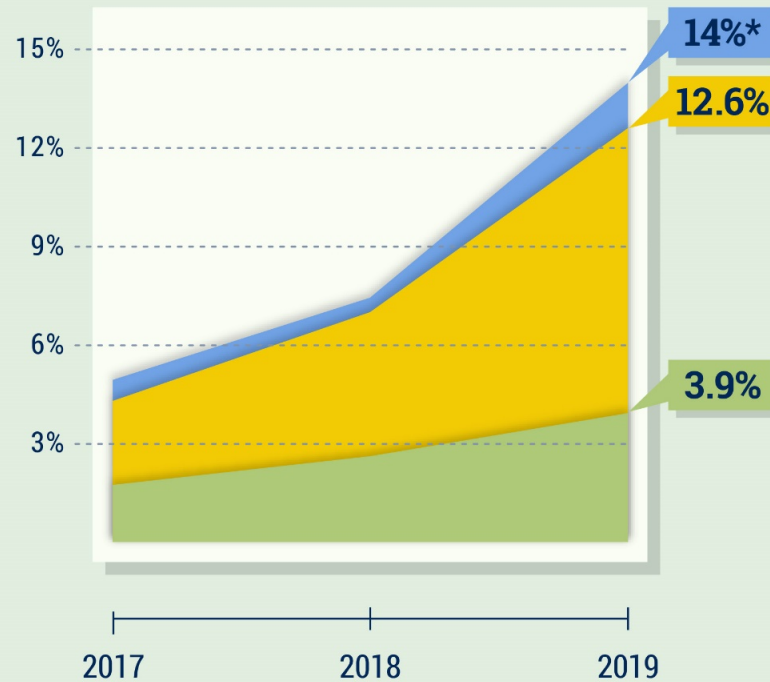
Daily Marijuana Vaping

Measured for the first time in 2019



8th graders **0.8%**
10th graders **3.0%**
12th graders **3.5%**

Past Month Marijuana Vaping



8th graders
10th graders
12th graders


The 2018-2019 increase is the second largest 1-year jump ever tracked for any substance in the 45-year survey.

2019 Monitoring the Future Survey
Miech, et al. JAMA. Dec 17, 2019.

Summary:

- Most drug categories continue to show declining or stable use among 8th, 10th, and 12th graders
- Vaping prevalence has shown alarming increases in the past two years, which demands *urgent action*.

National Institutes of Health DrugAbuse.gov Contact Us Get Email Updates

 **National Institute on Drug Abuse for Teens**
Advancing Addiction Science

[Teens](#) | [Teachers](#) | [Parents](#) | [Drugs & Health Blog](#) | [National Drug & Alcohol Facts Week®](#) 🔍

[Teachers](#) / [Lesson Plans](#) / Analyzing Drug-Use Data from Monitoring the Future

Lesson Plans

Analyzing Drug-Use Data from Monitoring the Future

PRINT 🖨️

Created by:
The National Institute on Drug Abuse See All Lessons

[t](#) [f](#) [🐦](#) [🖨️](#) [+](#)

Lesson Plan for Grades 7-12:

<https://teens.drugabuse.gov/teachers/lessonplans/analyzing-drug-use-data-monitoring-future>

BECOME A SMOKEFREE TEEN

Today is a great day to quit.

Tools & Tips

Learn about different tools to help you quit and how to use them.



SmokefreeTXT



quitSTART App



Speak to an Expert



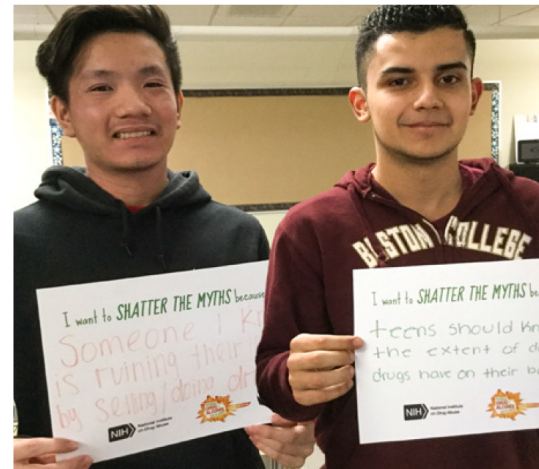
DipfreeTXT



SmokefreeUS on Instagram



Shatter the Myths About Drug and Alcohol Use Among Youth in Your Community with National Drug and Alcohol Facts Week® (NDAFW)



**Presented by Brian Marquis, Public Liaison Officer
National Institute on Drug Abuse (NIDA)**



Five Steps to Hosting an NDAFW Event



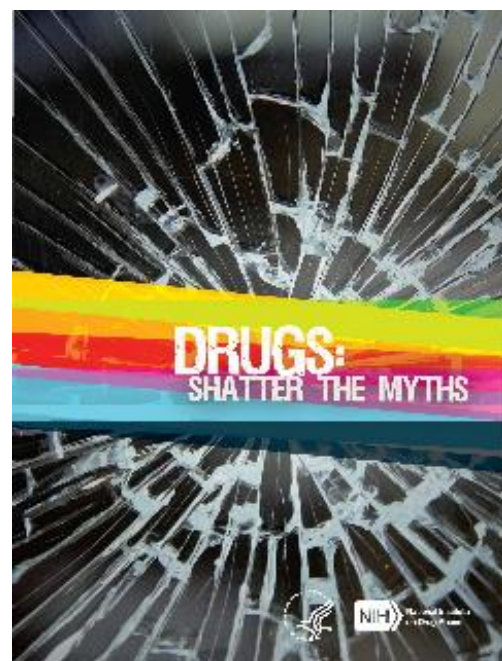
1. **Form** your planning team.
2. **Plan** your NDAFW event.
3. **Register** your event.
4. **Secure** the science.
5. **Promote** your event!

Learn more at
teens.drugabuse.gov/NDAFW
and join us March 30 – April 5.

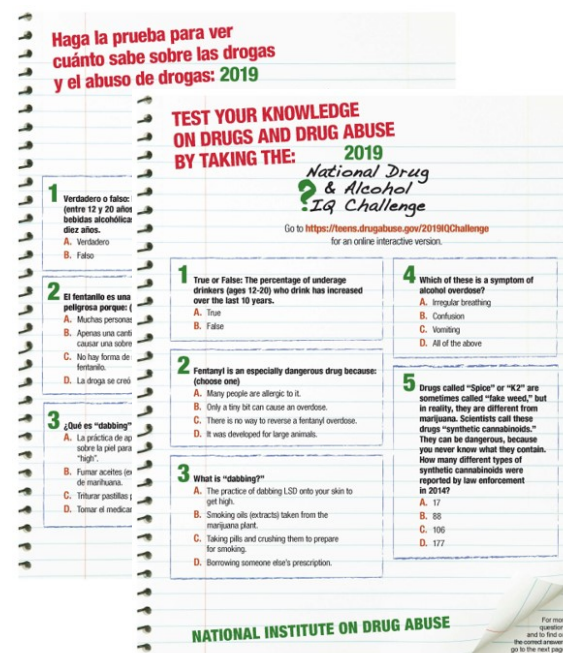




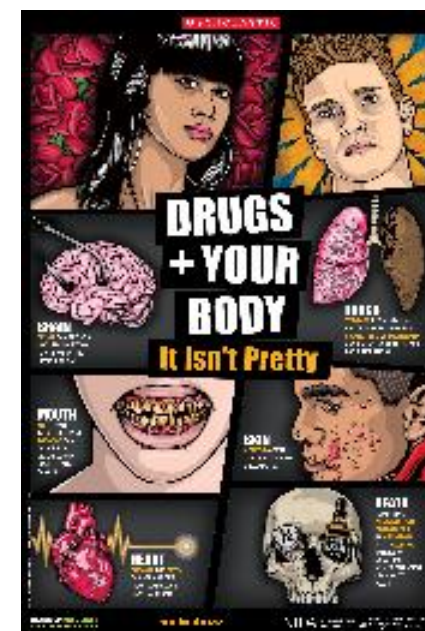
Free Print Resources from NIDA



Drugs: Shatter the Myths booklets



National Drug & Alcohol IQ Challenge activity



Drugs + Your Body: It Isn't Pretty posters



Mind Matters series

Order today at teens.drugabuse.gov/order by March 16.



Use NIDA's Planning Toolkits and Online Resources

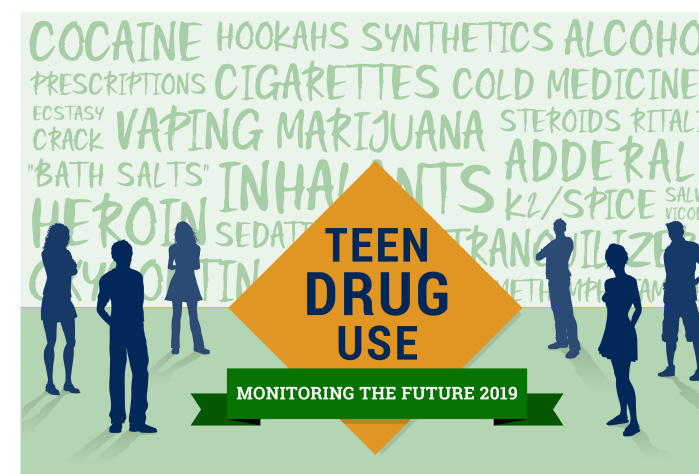
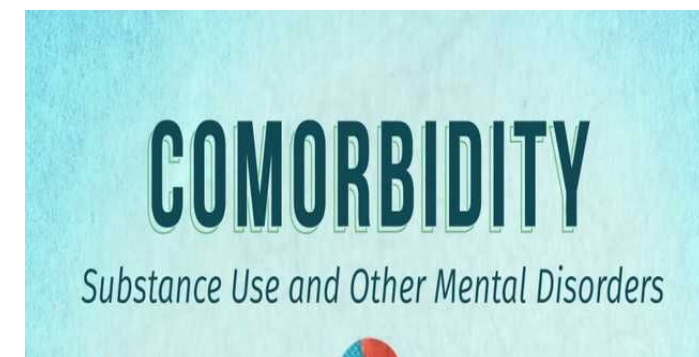


Toolkits for specific topics include:

- Tobacco, e-cigarettes, and vaping
- Opioids and other prescription drugs
- Alcohol
- Marijuana
- Comorbidities

Toolkits include:

- Activity ideas and games
- Infographics, blog posts, and multimedia resources
- The latest youth substance use data from the annual Monitoring the Future survey





Tools for Educators

- More than 100 lessons and activities
- Many developed in partnership with Scholastic
- Search by:
 - Drug type
 - Grade level
 - Classroom subject
- New lesson plan on analyzing drug-use data from Monitoring the Future

Find lesson plans and activities at teens.drugabuse.gov/teachers/lessonplans.

The Real Risks of Marijuana

In some states it is legal for adults to use marijuana—but this drug still poses serious dangers for teens.




TEACHER'S GUIDE

A Dangerous Mix

Learn why it's not safe to take medications with other substances.



TEACHER'S GUIDE



Be a Science Fact-Checker

Learn how to evaluate science-based claims in the media.

TEACHER'S GUIDE



Make It Interactive

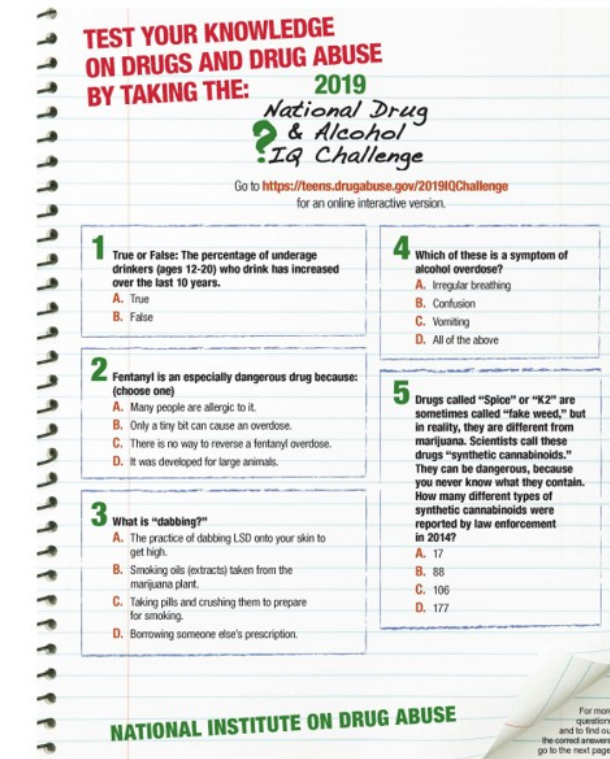
National Drug & Alcohol Facts Week
teens.drugabuse.gov

N	D	A	F	W
Vaping		Drugs and Health Blog	Bath Salts	MDMA (Ecstasy/Molly)
Marijuana	LSD	Addiction Treatment	Alcohol	Hookah
Shatter The Myths	Overdose	FREE SPACE	Prescription Stimulants	
Methamphetamine		Inhalants	Spice	Recovery
Powdered Caffeine	Naloxone	Medical Marijuana	Nicotine	Heroin

Play BINGO to reinforce vocabulary.



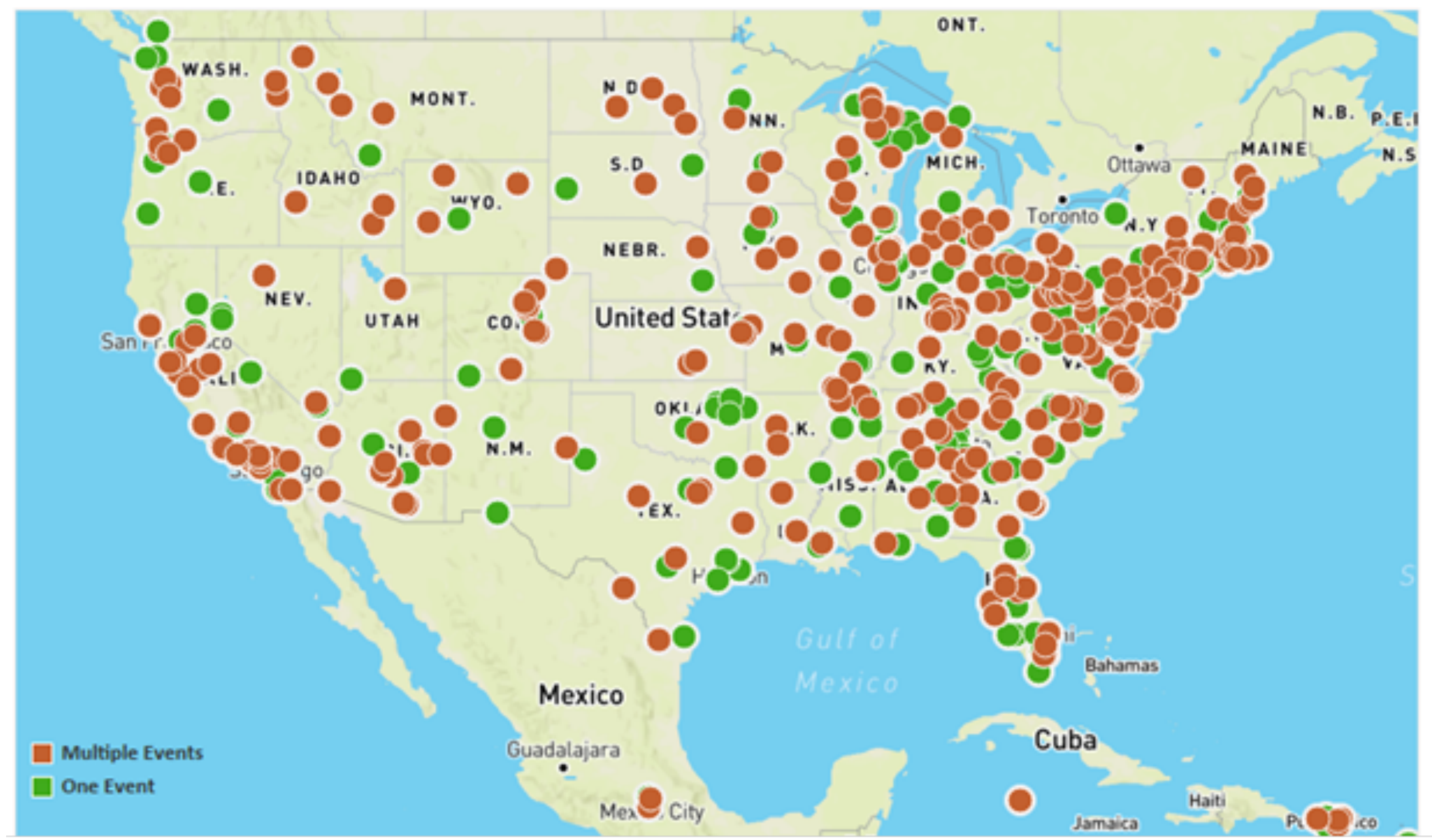
Play this *Jeopardy*-style game.



Use the National Drug & Alcohol IQ Challenge as a quiz or trivia game.



Get Your Event on the Map!



Almost 2,000 Events Worldwide



NIDA Is Here to Help



NIDA is at your service! We can:

- Help you generate ideas, register for, and plan your event.
- Connect you with a scientist.
- Provide the materials you might need.

Email Brian Marquis at drugfacts@nida.nih.gov.

Mark your calendar for **March 30 to April 5, 2020.**

Visit teens.drugabuse.gov/register.

Follow NIDA on social media and use **#NDAFW** in your posts!



Newsletter

Sign up to receive *National Drug & Alcohol Facts Week*® updates.

SIGN UP NOW

10
YEARS OF

ADVANCING
ADDICTION
SCIENCE



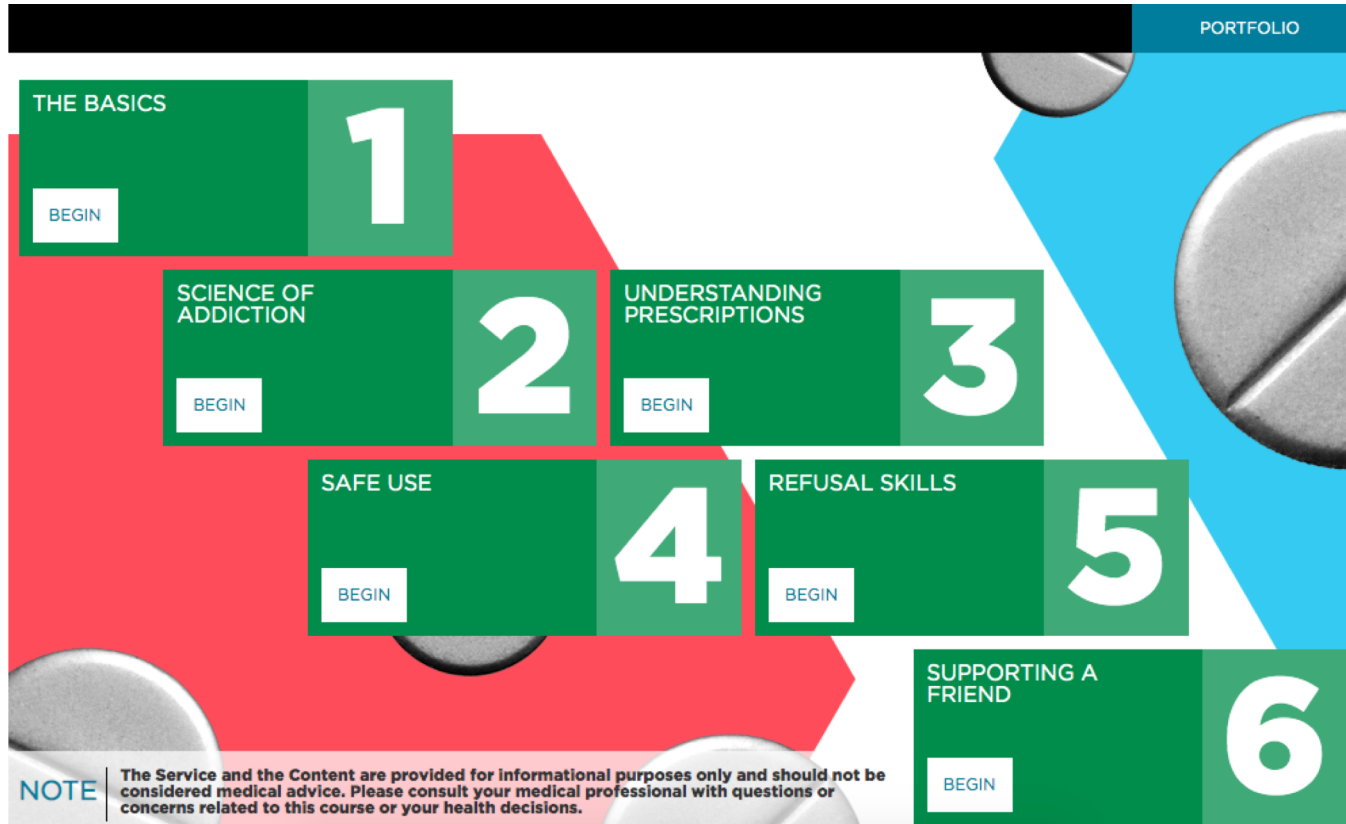
Taking Lessons to Practice: *Implementing Prevention Lessons*

Kimberley Timpf and Lauren Pingul

Implementation Strategies



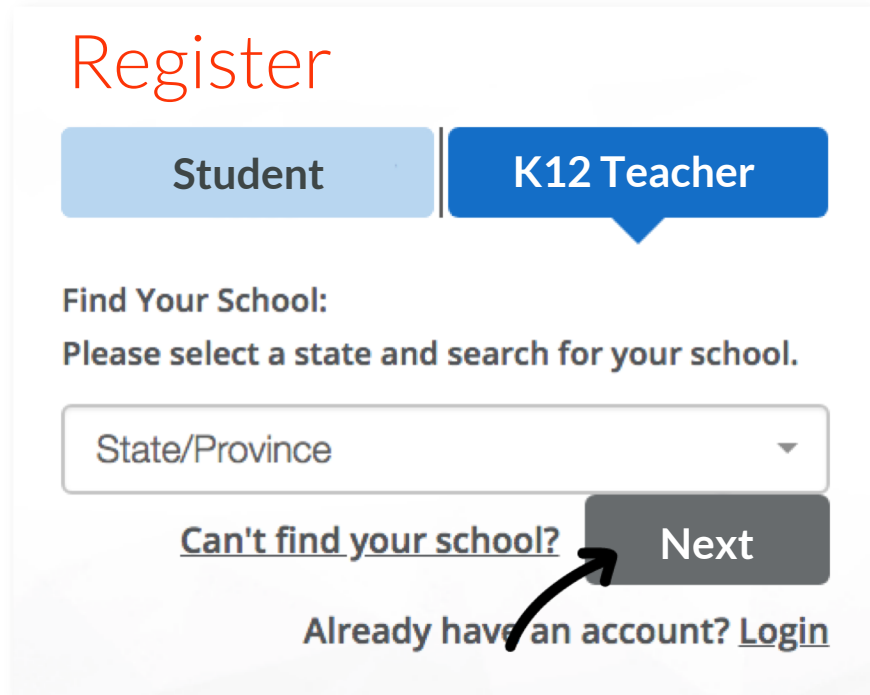
Prescription Drug Safety



Register

everfi.com/newteacher

- ▶ Find Your State
- ▶ Enter Your School



The screenshot shows the registration interface for K12 Teachers. At the top, the word "Register" is written in orange. Below it are two buttons: "Student" (light blue) and "K12 Teacher" (dark blue). The "K12 Teacher" button is highlighted with a white speech bubble. Underneath, the text "Find Your School:" is followed by the instruction "Please select a state and search for your school." A dropdown menu is present with "State/Province" and a downward arrow. Below the dropdown, there is a link "Can't find your school?" and a dark grey button labeled "Next". A black arrow points from the "Next" button to the "Can't find your school?" link. At the bottom, the text "Already have an account? Login" is visible.

Next Steps

Learn

Visit everfi.com/PDS to review Rx drug safety lessons.

Visit everfi.com/k12-courses to review all offerings.

Get Started

Register for an account at www.everfi.com/newteacher

Plan your [NDAFW lessons](#)

Share

Share with colleagues

Share about your class on social media - tag @EVERFIK12 and/or use [#EVERFIempowers](#)