

Adult-Supervised Drinking During Adolescence Increases Risk for Alcohol Misuse

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I have no financial conflict of interest to declare.



Topics...

1. **Basic information about teen alcohol and drug use**
 - How common is it?
 - When does it start?
 - What are some possible effects?
2. **What is adult-supervised drinking?**
 - Why is it a bad idea?

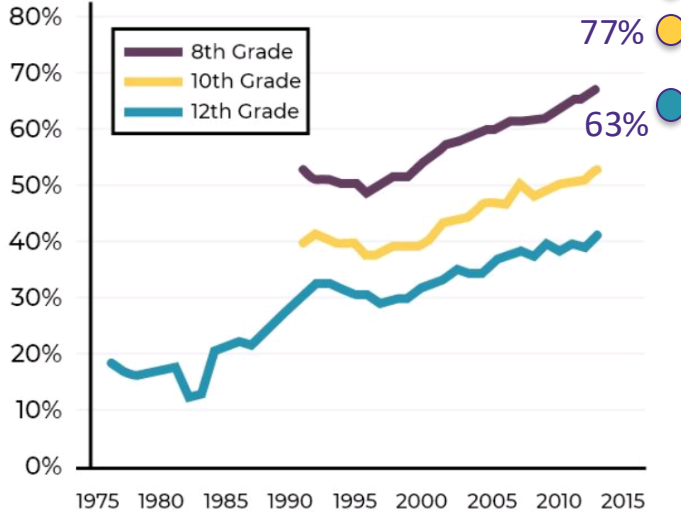
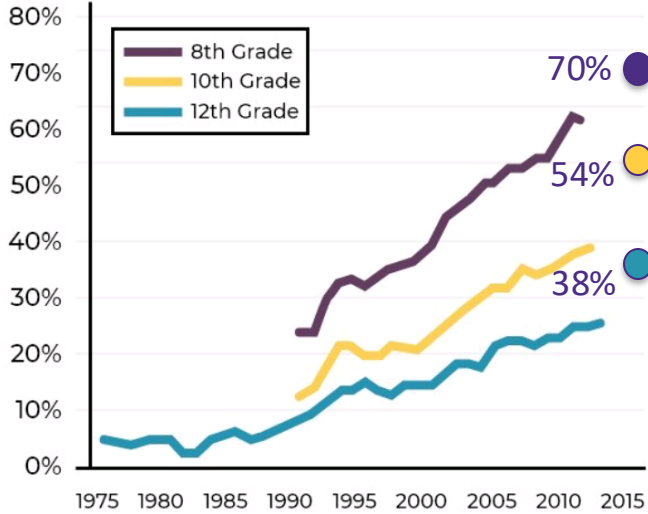


Teen alcohol and drug use – how common is it?



2023

2023



LIFETIME NO USE

PAST MONTH NO USE

No Use of Alcohol, Cigarettes, Marijuana and Other Illicit Drugs: Grades 8, 10, 12

Monitoring the Future data; Levy, S., Campbell, M. C., Shea, C. L., & DuPont, R. L. (2018). Trends in abstaining from substance use in adolescents: 1975-2014. Pediatrics, 142(2), e20173498.

Slide by: Caroline DuPont, MD, Nancy Pasquale, Corinne She



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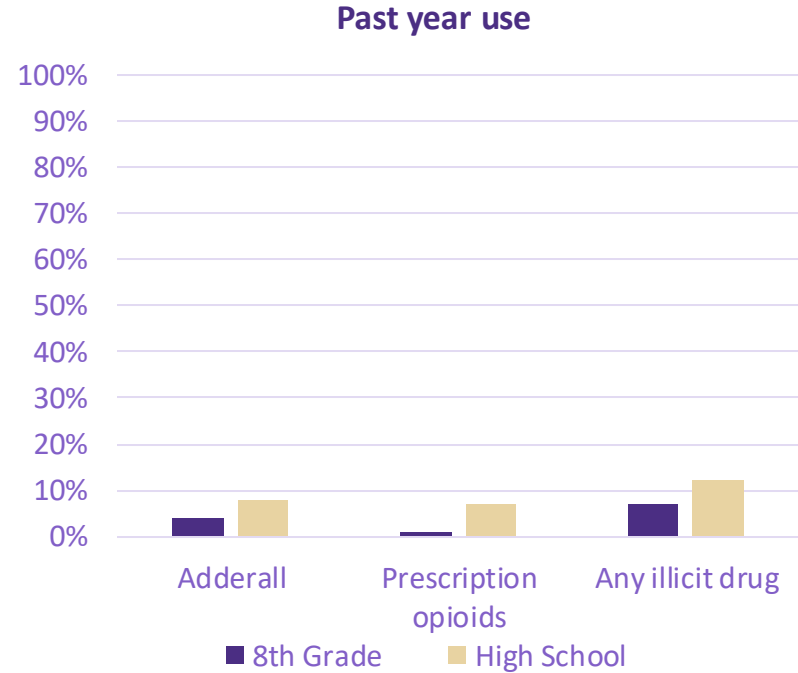
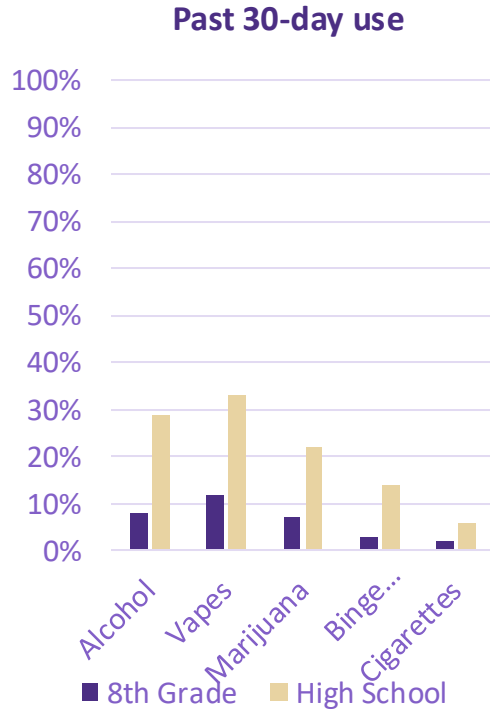


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Most teens don't use drugs or alcohol



What are kids most likely to use?



- 8th Grade data from: Miech, R. A., Schulenberg, J. E., Johnston, L. D., Bachman, J. G., O'Malley, P. M., & Patrick, M. E. (December 19, 2019). "National Adolescent Drug Trends in 2019: Findings Released" Monitoring the Future: Ann Arbor, MI. <http://www.monitoringthefuture.org>
- High School data from the 2019 Youth Risk Behavior Surveillance System results: <https://hccdc.cdc.gov/youthonline/App/Default.aspx>
- 2019 College data from: Schulenberg, J. E., Johnston, L. D., O'Malley, P. M., Bachman, J. G., Miech, R. A. & Patrick, M. E. (2020). Monitoring the Future national survey results on drug use, 1975–2019: Volume II, College students and adults ages 19–60. Ann Arbor: Institute for Social Research, The University of Michigan.

When do kids typically start using alcohol and drugs?

Drug	Average Age at First Use	Early Onset Age
Alcohol	17	10
Marijuana	16-17	14
Cigarettes	17	10
Vapes	16	10
Hard Drugs	17-18+	16
Prescription Opioids	17	15

Average age of initiation data from: Alcover, K.C., Thompson, C.L.. (2020) Patterns of mean age at drug use initiation among adolescents and emerging adults, 2004-2017. JAMA: Pediatrics, 174(7):725-727. doi:10.1001/jamapediatrics.2019.6235



Some possible effects of teen alcohol and drug use



They need to learn how to use alcohol responsibly before they go to college

Vaping is safer than smoking

What harm can 1 or 2 drinks do?

At least they are only smoking weed and not using *dangerous* drugs

There's no history of addiction in our family so I'm not worried

I know they are going to use, so I'd rather have them use at home

It's just a little beer

Marijuana is legal so it can't be that bad



Three reasons to care about teen substance use



Brain Development



Mental Health



Addiction



Brain development isn't complete until the mid 20's

- > Teen brains are more sensitive to alcohol and drugs than adult brains
 - Exposure to substances can physically “prime” the brain
 - Alcohol and drugs can change brain chemistry



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Alcohol and the teen brain:

More use = more problems



Reward sensitivity

Impulsivity

Delayed brain maturation

Learning

Attention

Memory

Reading & verbal skills

Decision making

[Pharmacol Biochem Behav](#). Author manuscript; available in PMC 2020 May 1.

Published in final edited form as:

[Pharmacol Biochem Behav](#). 2020 May; 192: 172906.

Published online 2020 Mar 13. doi: [10.1016/j.pbb.2020.172906](#)

Effect of alcohol use on the adolescent brain and behavior

Briana Lees,¹ Lindsay R. Meredith,² Anna E. Kirkland,³ Brittany E. Bryant,⁴ and Lindsay M. Sowell⁴

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PMCID: PMC7183385

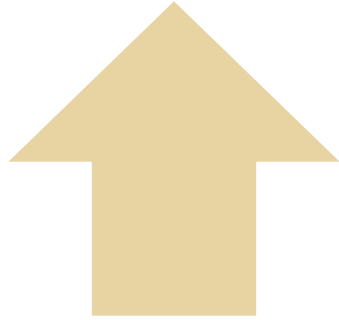
NIHMSID: NIHMS1578284

PMID: 32179028

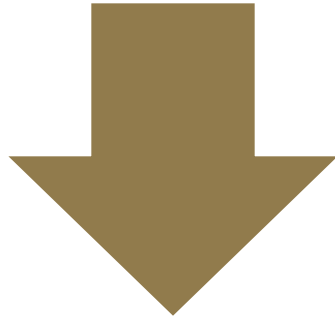


Marijuana and the teen brain:

Early, long-term, or heavy use



Delayed brain
maturation



Learning
Memory
Attention



Current Opinion in Psychology

Volume 38, April 2021, Pages 38-48



A review investigating the relationship between
cannabis use and adolescent cognitive functioning

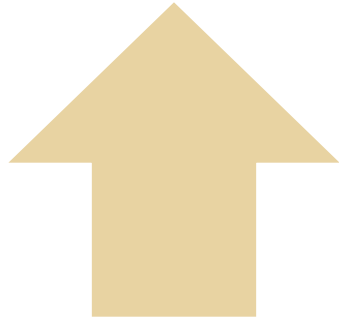
Elena Cyrus ¹OR, Makella S Coudray ², Sandra Kiplagat ², Yandra Mariano ², Ines Noel ³, Jerome T Galea ⁴, Dexter Hadley ⁵, Jessy G Dévieux ⁶, Eric Wagner ⁷

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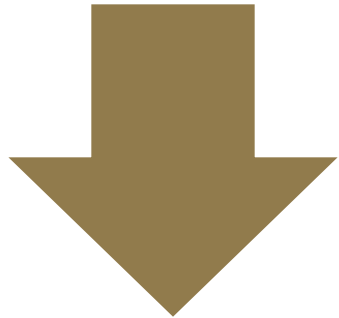


Nicotine and the teen brain:

More use = more problems



Reward sensitivity
Impulsivity
Structural changes



Learning
Attention



Brain Research Bulletin
Volume 156, March 2020, Pages 105-117

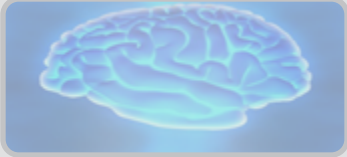


Adolescent drug exposure: A review of evidence for the development of persistent changes in brain function

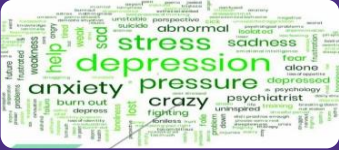
Hamed Salmanzadeh ^{*, C}, S. Mohammad Ahmadi-Soleimani [†], Narges Pachenari ^{*}, Maryam Azadi ^{*}, Robert F. Halliwell [‡], Tiziana Rubino [‡], Hossein Aszji ^{*, A, ‡}



Three reasons to care about teen substance use



Brain Development



Mental Health



Addiction



Substance use and teen mental health:

More use = more problems

Alcohol



Depression

Marijuana



Depression

Suicidal
behavior

Psychotic
symptoms

Nicotine



Depression

Anxiety



Current Opinion in Psychology

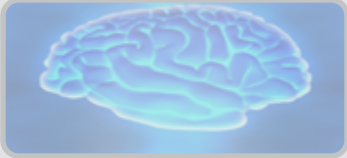
Volume 38, April 2021, Pages 11-18



Youth marijuana use: a review of causes and consequences

Lawrence M Scheier^{1, 2}*, Kenneth W Griffin³

Three reasons to care about teen substance use



Brain Development



Mental Health



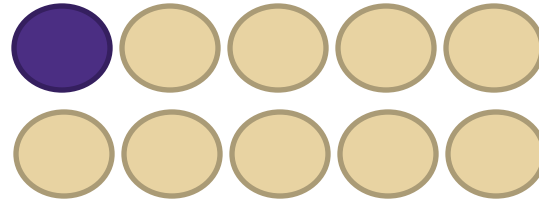
Addiction



Addiction starts in adolescence



80% of adults being treated for alcohol addiction started drinking as teens



90% of adults with an illicit drug use disorder used alcohol, cigarettes, or marijuana before age 18

PEDIATRICS

American Academy of Pediatrics

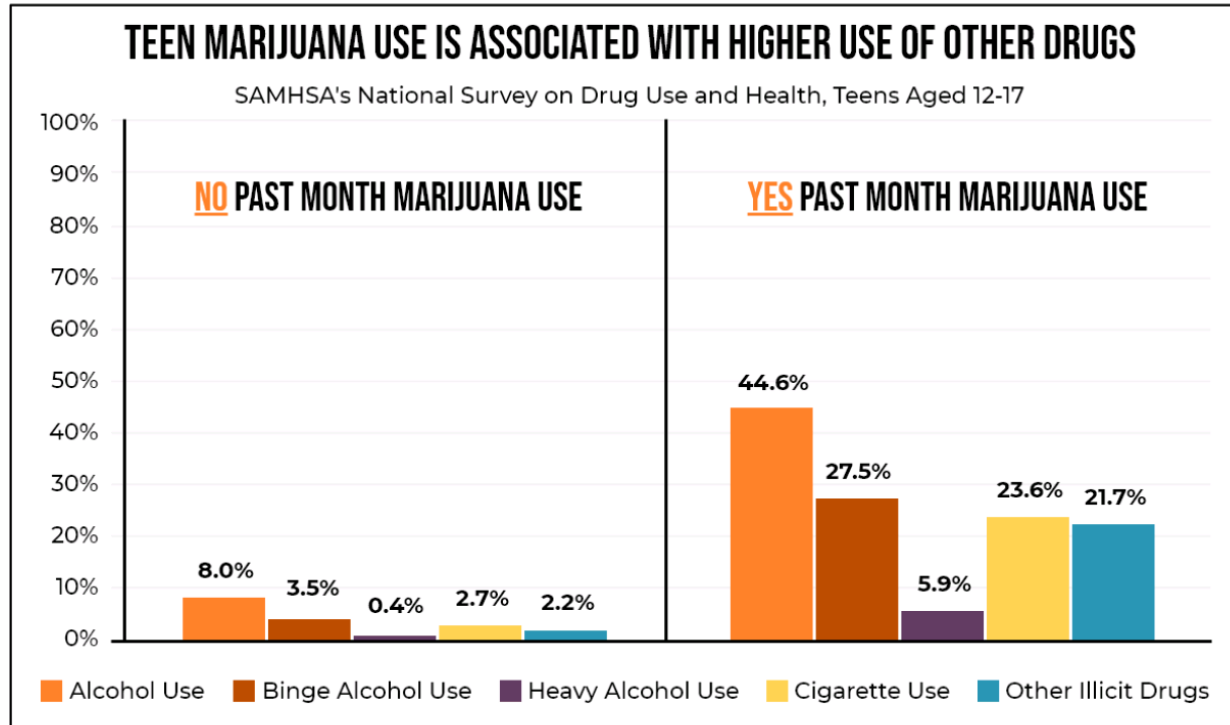
Pediatrics, 2019 Mar; 143(3): e20183654.
Published online 2019 Mar 1. doi: 10.1542/peds.2018.3654

PMCID: PMC6398366
PMID: 30783021

Alcohol Use Disorder: A Pediatric-Onset Condition Needing Early Detection and Intervention

Scott E. Hasland, MD, MPH, MS,^{1,3} John R. Knight, MD,^{1,2} and Sion K. Harris, PhD, CPH^{1,2}

For teens, all substance use is related



DuPont, R. L., Han, B., Shea, C. L., & Madras, B. K. (2018). Drug use among youth: national survey data support a common liability of all drug use. *Preventive Medicine*, 113, 68-73.

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What is adult-supervised drinking?

- > **Allowing drinks or sips**
 - On holidays or special occasions
 - With dinner
- > **Allowing drinks or sips at parties where adults are present**
 - Caregivers' own parties
 - Teen parties



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Teaching drinking at home: Is it a good idea?

International Youth Development Study

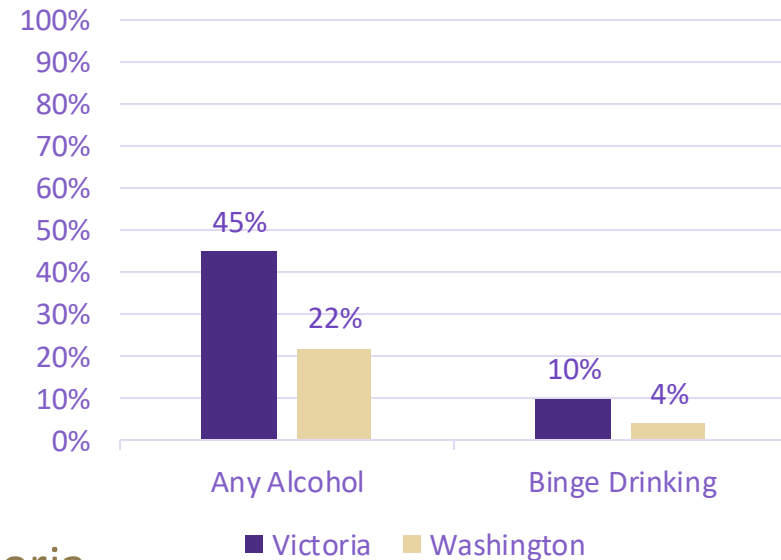
~2,000 kids from Washington and Victoria

Victoria uses a harm minimization approach to teen alcohol use

- Acknowledge that drinking will happen and remove harms that go with it
- Teach responsible drinking at home

Rates of teen drinking are much higher in Victoria

Alcohol Use by Age 13



Adult-supervised drinking in 8th grade predicts alcohol misuse in 9th grade


The more often kids drank with adult supervision in 8th Grade, the more often they

- drank alcohol in general in 9th Grade
- had negative alcohol-related consequences in 9th Grade
 - > Unable to stop drinking, fights, school problems, arguments with family, injury, getting sick/passing out, sex they later regretted, blackouts

Influence of Family Factors and Supervised Alcohol Use on Adolescent Alcohol Use and Harms: Similarities Between Youth in Different Alcohol Policy Contexts

Journal of Studies on Alcohol and Drugs, 72(3), 418–428 (2011).

Barbara J. McMorris, Ph.D.†, Richard F. Catalano, Ph.D.†, Min Jung Kim, Ph.D.†, John W. Toumbourou, Ph.D.†, and Sheryl A. Hemphill, Ph.D.†

Article Tools 



Adult supervised drinking in adolescence predicts alcohol misuse through age 30

Kids who drank with adult supervision in 8th and 9th Grade

- reported higher levels of alcohol consumption and alcohol use disorder symptoms from age 25 to age 30
- were 56% more likely to drive while impaired by alcohol in adulthood
- were 62% more likely to ride with an alcohol-impaired driver

W

Key Takeaways

Teen alcohol and drug use is not inevitable – most kids don't use them

Just wait - delay use until age 21



Thank you

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