

What the pediatrician needs to know about drug use in 2025

Sarah Bagley, MD, MSc

Associate Professor of Medicine and Pediatrics


Associate Program Director, Grayken Fellowship in Addiction Medicine

Director, Youth Advocacy and Research Collaborative

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Language Matters: “Hard to reach”



I am not hard to reach, people just generally don't know how to reach me

2

Identity Formation

“They don't want their life to continue to be defined by their substance use, including if that means being defined by not using substances... I think the conversation isn't just about ...people won't die ... It's like people will be present for their lives again.”



Schoenberger SF et al. J Gen Intern Med. 2022

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Use ≠ Substance Use Disorder

More teens report using substances than have a SUD

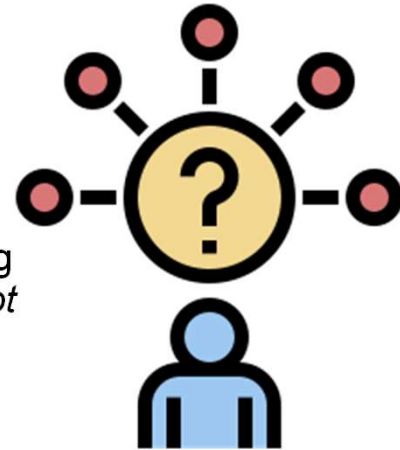


Any exposure to alcohol or drugs carries potential for harm, but also share knowledge on minimizing harm

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Engagement: Behaviors Make Sense

- Initiate conversations with curiosity
- Understanding motivations can help guide next steps
- Substance use can relieve distressing symptoms- our job is to help make *not* using substances more appealing



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Words matter

Terminology regarding persons		
Person with a substance use disorder Person who uses [insert specific substance: opioid, cocaine, alcohol, etc]	Substance/drug abuser, addict, junkie, druggie, stoner, alcoholic, drunk (and other colloquial substance-specific terms) Drug user, heroin user, drinker, crackhead, pothead, drug-seeking (and other colloquial substance-specific terms)	Uses person-first language, as individuals are not defined solely by their substance use. If unsure of whether the individual has a diagnosed disorder, then the description of "a person who uses [insert specific substance]" is most appropriate.
Person who injects drugs (PWID)	Injection drug user	
Treatment was not effective Patient in need of more support/higher level of treatment	Patient who failed treatment Noncompliant, nonadherent	Referring to the treatment not meeting the needs of the patient or the patient needing a higher level of treatment, rather than the patient failing.
Person with multiple recurrences Person with multiple treatment admissions	Frequent flyer Recidivist	Less stigmatizing way to denote someone with recurrence of substance use disorder, rather than referencing it as a criminal offense or a relapse, which is associated with the connotation of more blame.
Infant/baby with neonatal withdrawal syndrome Infant/baby born substance-exposed Infant/baby with physiologic dependence/withdrawal	Addicted baby Born addicted Drug endangered Neonatal abstinence syndrome baby or NAS baby Crack baby	Substance use disorders, characterized by repeated use despite harmful consequences, cannot be diagnosed in an infant; an infant can develop physiologic dependence to a substance such as opioids, for which the medical term is neonatal opioid withdrawal syndrome or neonatal withdrawal.
Concerned loved one	Enabler	Less stigmatizing way to describe a loved one who supports someone with a substance use disorder and at times may protect them from the negative consequences of their substance use.

Alinsky R et al. Pediatrics. 2022

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Words matter

TABLE 1 Recommended Terminology Regarding Substance Use

Say This:	Not This:	Here's Why:
Terminology regarding substance use Substance use disorder; insert specific substance: opioid, cocaine, alcohol, etc) use disorder Addiction	Drug abuse/dependence Substance abuse/dependence	The diagnostic terms "substance abuse" and "substance dependence" described in the DSM-IV have been combined in the DSM-5 into "substance use disorder." "Abuse" and "dependence" should only be used in specific reference to DSM-IV or earlier criteria or when using ICD-10 nomenclature, which still use the term "dependence;" "addiction" may also be used in conjunction with a severe substance use disorder.
Substance use Hazardous substance use Unhealthy substance use Problematic substance use	Substance abuse Drug habit Vice	Substance use exists on a continuum; not all of which constitutes a diagnosable substance use disorder; therefore, these terms describe substance use that risks health consequences or is in excess of current safe use guidelines, without necessarily referencing or meeting criteria for a substance use disorder. It is more precise in describing health hazard than simply "misuse." Of note, any substance use in adolescents is considered unhealthy.
Nonmedical prescription opioid use Nonmedical prescription drug use Nonmedical prescription medication use	Prescription opioid abuse Prescription drug abuse	Refers to using opioids or other prescription drugs in a way other than as prescribed or by a person to whom they were not prescribed.
Intoxicated or in withdrawal	Strung out, tweaking, high, drunk (and other colloquial substance-specific terms)	Uses medically accurate language to describe the state of intoxication or withdrawal from a substance.
Using	Getting high	Less stigmatizing way to describe the act of using a substance to reach intoxication.
Drinking	Getting drunk	



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DSM-V Diagnosis of Substance Use Disorder

A. Impaired control:

1. Taking more or for longer than intended
2. Not being able to cut down or stop (repeated failed attempts)
3. Spending a lot of time obtaining, using, or recovering from use
4. Craving for substance

B. Social impairment:

5. Role failure (interference with home, work, or school obligations)
6. Kept using despite relationship problems caused or exacerbated by use
7. Important activities given up or reduced because of substance use

C. Risky use:

8. Recurrent use in hazardous situations
9. Kept using despite physical or psychological problems

D. Pharmacologic dependence:

10. Tolerance to effects of the substance*
11. Withdrawal symptoms when not using or using less*

* Persons who are prescribed medications such as opioids may exhibit these two criteria, but would not necessarily be considered to have a substance use disorder

Mild = 2-3 criteria, Moderate = 4-5 criteria, Severe = 6 or more criteria

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Learning Objectives

1. Describe the changing epidemiology of youth substance use
2. Discuss 2 practical strategies to address commonly used substances

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**Describe the changing epidemiology of youth
substance use**

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Reasons for drug use have not really changed

- Mental health
- Peers
- Novelty
- Impulsivity

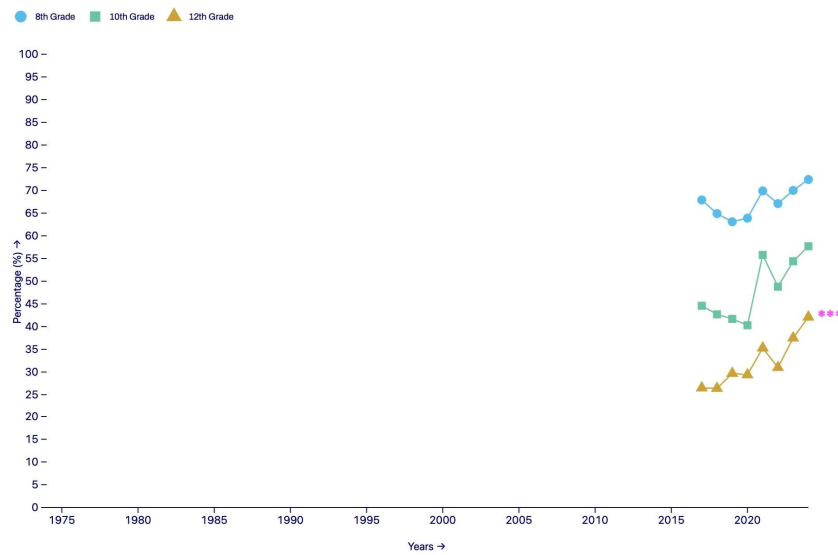
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Drug use has significantly changed

- Drug supply
- Route of administration
- Access to drugs

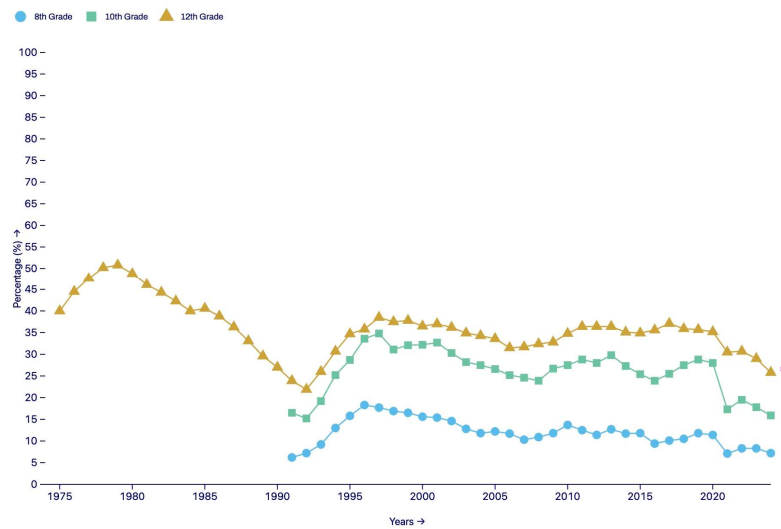
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ABSTAINERS: Trends in Lifetime Prevalence of Use in 8th, 10th, and 12th Grade

Miech, R. A., Johnston, L. D., Patrick, M. E., & O'Malley, P. M. (2025). Monitoring the Future national survey results on drug use, 1975–2024: Overview and detailed results for secondary school students. Monitoring the Future Monograph Series. Ann Arbor, MI: Institute for Social Research, University of Michigan. Available at <https://monitoringthefuture.org/results/annual-reports/>

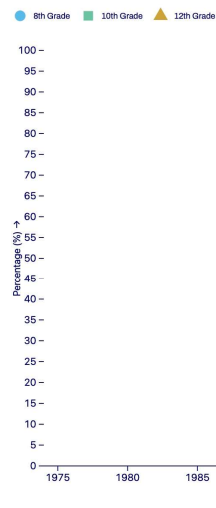
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MARIJUANA (CANNABIS): Trends in 12 Month Prevalence of Use in 8th, 10th, and 12th Grade

Miech, R. A., Johnston, L. D., Patrick, M. E., & O'Malley, P. M. (2025). Monitoring the Future national survey results on drug use, 1975–2024: Overview and detailed results for secondary school students. Monitoring the Future Monograph Series. Ann Arbor, MI: Institute for Social Research, University of Michigan. Available at <https://monitoringthefuture.org/results/annual-reports/>

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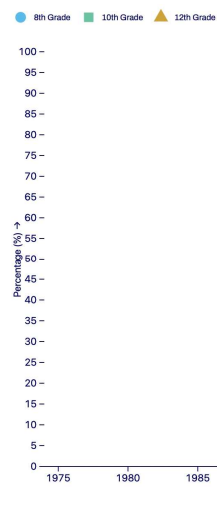
VAPING MARIJUANA (CANNABIS): Trends in 12 Month Prevalence of Use in 8th, 10th, and 12th Grade



Miech, R. A., Johnston, L. D., Patrick, M. E., & O'Malley, P. M. (2025). Monitoring the Future national survey results on drug use, 1975–2024: Overview and detailed results for secondary school students. Monitoring the Future Monograph Series. Ann Arbor, MI: Institute for Social Research, University of Michigan. Available at <https://monitoringthefuture.org/results/annual-reports/>

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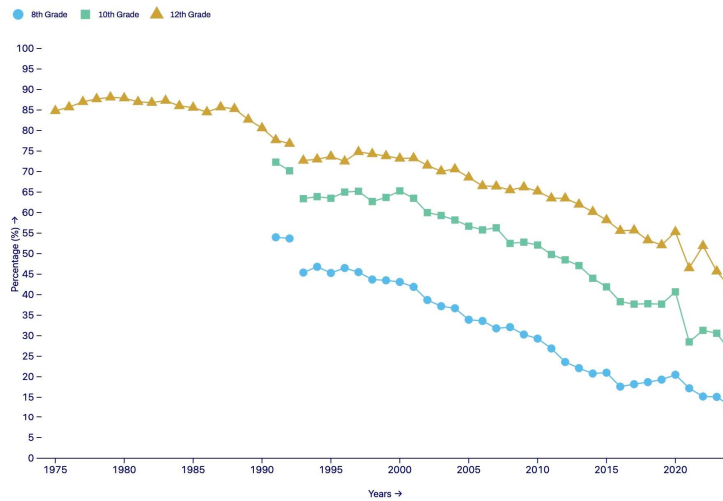
VAPING NICOTINE (E-CIGARETTES): Trends in 12 Month Prevalence of Use in 8th, 10th, and 12th Grade



Miech, R. A., Johnston, L. D., Patrick, M. E., & O'Malley, P. M. (2025). Monitoring the Future national survey results on drug use, 1975–2024: Overview and detailed results for secondary school students. Monitoring the Future Monograph Series. Ann Arbor, MI: Institute for Social Research, University of Michigan. Available at <https://monitoringthefuture.org/results/annual-reports/>

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ALCOHOL: Trends in 12 Month Prevalence of Use in 8th, 10th, and 12th Grade

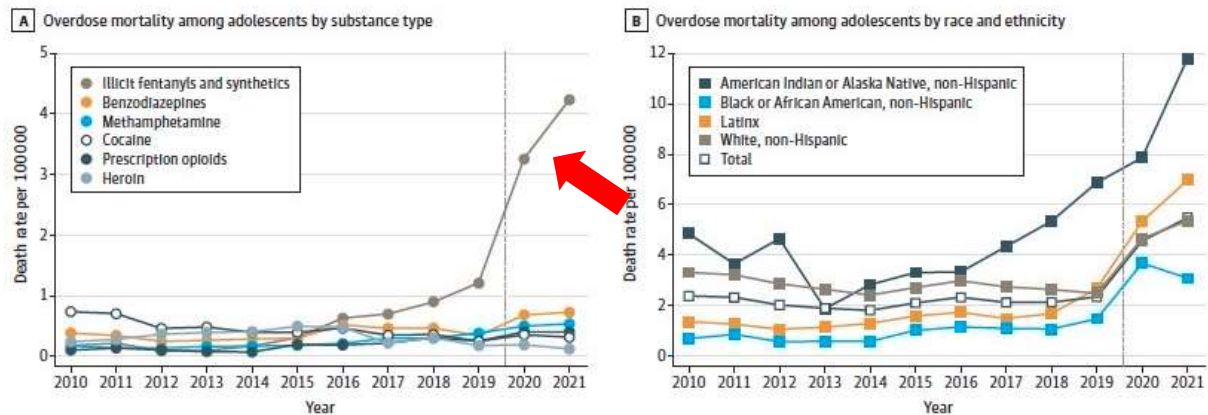


Miech, R. A., Johnston, L. D., Patrick, M. E., & O'Malley, P. M. (2025). Monitoring the Future national survey results on drug use, 1975–2024: Overview and detailed results for secondary school students. Monitoring the Future Monograph Series. Ann Arbor, MI: Institute for Social Research, University of Michigan. Available at <https://monitoringthefuture.org/results/annual-reports/>

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Overdose deaths significantly increasing among adolescents

Figure. Adolescent Overdose Deaths, 2010-2021



Friedman J et al. (2022). JAMA.

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Screening

Screening Tools for Adolescent Substance Use

NIDA Launches Two Brief Online Validated Adolescent Substance Use Screening Tools

NIDA has launched [two brief online screening tools](#) that providers can use to assess for substance use disorder (SUD) risk among adolescents 12-17 years old. With the American Academy of Pediatrics recommending universal screening in pediatric primary care settings, these tools help providers quickly and easily introduce brief, evidence-based screenings into their clinical practices.

Two Screening Options: Providers can select the tool that makes sense for their clinical practice.



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Brief Interventions

- Most youth who use substances do not have a substance use disorder
- BUT, any kind of substance use can be risky
- Brief interventions can be a helpful tool for clinicians to address use

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What Is Brief Intervention for Alcohol or Drug Use?

- A short, structured conversation focused on a youth's alcohol or drug use
- In primary care settings, Bls can range from 5 to 30 minutes
- Usually based on motivational interviewing principals

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Goals of Brief Intervention



- Not treatment for substance use disorders.
- Intended to engage those who are hesitant/ambivalent or not ready to change.
- Increase perception of potential risks associated with substance use.
- Encourage change by helping individual recognize personal relevance and reasons for change.
- Planting seeds!

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Key Features

- Feedback
- Responsibility
- Advice
- Menu of alternatives
- Empathy
- Self-efficacy



Source: Miller W, Sanchez V. Motivating young adults for treatment and lifestyle change. In: Howard G, ed. Issues in alcohol use and misuse by young adults. Notre Dame, IN: University of Notre Dame; 1993

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One approach: Brief Negotiated Interview

Step 1: Engagement

Step 2: Pros and Cons

Step 3: Feedback

Step 4: Readiness Ruler

Step 5: Negotiate Action Plan

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Step 1: Engagement

- Express gratitude for agreeing to have the conversation
- Ask open ended questions to understand more about the context of how drug or alcohol use may fit into their life

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Step 2: Pros and Cons

- What do you like about using alcohol? What do you like less?
- Can use answers from the screening tool to help guide the conversation
- Reflexive listening can be really helpful in this step
- Summarize what you have heard and check with the youth that your interpretation is accurate

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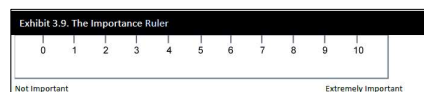
Step 3: Feedback

- Ask permission to offer thoughts about your perspective
- This is the opportunity to share potential risks of alcohol or drug use
- Important to leave space for youth to respond to what you have said

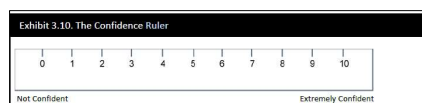
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Step 4: Readiness to Change

- Importance Ruler
 - Scale of 1 to 10: “How important is it for you to *[name the change in the target behavior, such as cutting back on drinking]*?”



- Confidence Ruler
 - On a scale of 0 to 10, how confident are you that you could change *[name the target behavior, like stop drinking]* if you decided to?”



- What would help move from a *[fill in the number on the scale]* to a *[choose a slightly higher number on the scale]*?”

Source: Chapter 4—From Precontemplation to Contemplation: Building Readiness. [Enhancing Motivation for Change in Substance Use Disorder Treatment, Updated 2019, Treatment Improvement Protocol \(TIP\) Series, No. 35](#). Center for Substance Abuse Treatment. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 2019.

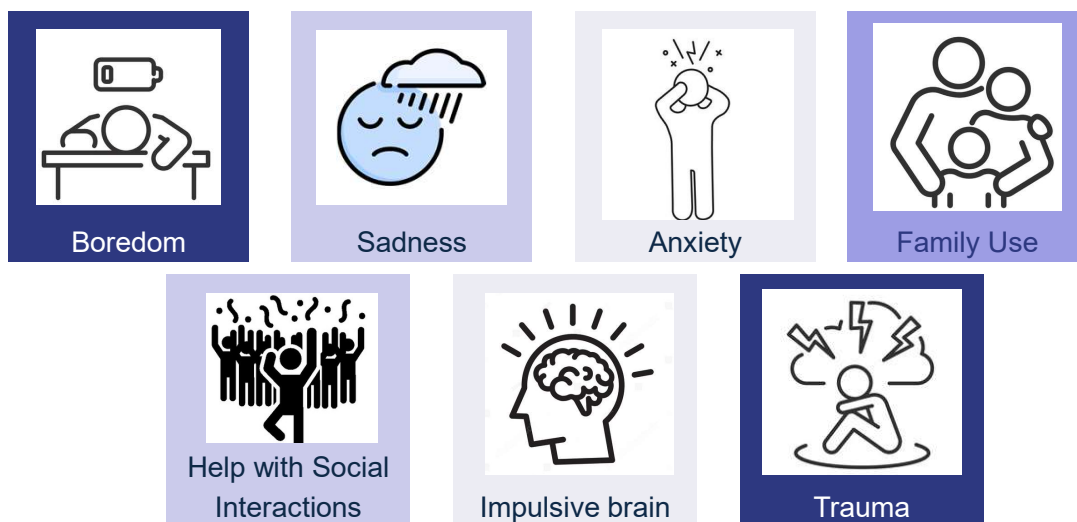
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Step 5: Negotiate a Change Plan

- “Just Right” goals – collaboratively create manageable, concrete goals that are attainable
- Consider obstacles to these goals and how the obstacles will be addressed.
- Think about people who can provide support in attaining these goals.

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Taking a comprehensive history: Ask why



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Taking a comprehensive history: Ask what



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Taking a comprehensive history: Ask what



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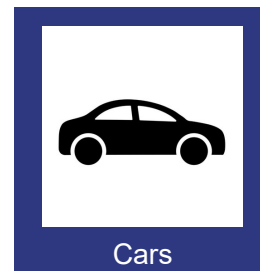
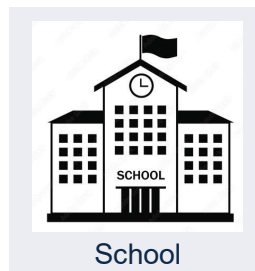
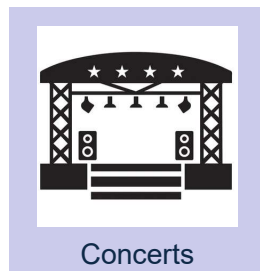
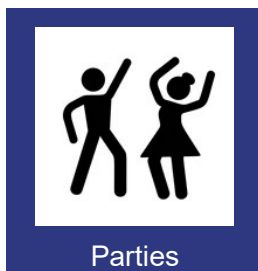
Taking a comprehensive history: Ask what



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Taking a comprehensive history: Ask where

Where youth use



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Treatment in primary care!!

- Often if even if referral is indicated, might not be places to send patients
- Or patients don't want to go
- Or parents don't agree that their kid has a SUD

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Pharmacotherapy

- Limited FDA approved options to treat substance use disorder in youth
- Buprenorphine to treat opioid use disorder approved for 16 years and older
- Medications are used off label to treat nicotine use disorder, alcohol use disorder, cannabis use disorder, and stimulant use disorder

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Medications for Cannabis Use Disorder

Medication	Medication & Dose	Use Notes
N-acetylcysteine “NAC”*	<ul style="list-style-type: none"> 600mg QD x3d > 600mg BID x3d > 1200mg BID 	<ul style="list-style-type: none"> Available as an OTC supplement Decreased use in adolescents, no evidence of efficacy in adults Not FDA approved for CUD
Topiramate*	<ul style="list-style-type: none"> 25mg/day increased by 25mg weekly to 200mg/day 	<ul style="list-style-type: none"> Reduced cannabis use in adolescents High rate of adverse effects → treatment discontinuation Side effects: neurocognitive slowing, memory difficulties, weight loss, & poor appetite

Medications with * indicate off-label use but present evidence to be clinically effective

Gray et al. (2012). *American Journal of Psychiatry*
Gray et al. (2017). *Drug Alcohol Depend.*
Bahji et al. (2021). *Intern J of Drug Policy.*



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Evidence

- NAC
 - RCT of 116 youth randomized to NAC 1200 mg BID *versus* placebo
 - Well tolerated and significant reduction in cannabis positive urine drug screens
- Topiramate
 - RCT of youth randomized to topiramate + MET *versus* placebo + MET
 - Significant reduction in grams of cannabis use a day but VERY high drop out rate

Gray et al, A J of Psychiatry 2012
Miranda R et al, *Addict Bio*, 2018



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Psychosocial Treatments

- Contingency management – positive rewards for desired behaviors
- Cognitive Behavioral Treatment- focuses on changing thinking and behavior patterns
- Motivational Enhancement Therapy – person centered approach using ones own motivation for behavior change
- Adolescent Community Reinforcement Approach

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Role of contingency management

- 220 youth were randomized to 4 weeks of abstinence-based CM (CB-Abst; n=126) or monitoring (CB-Mon; n=94).
- Participants completed self-report and provided biochemical measures of cannabis exposure at baseline, end-of-intervention, and 4-week follow-up.
- Decreased cannabis use persisted after trial ending

Cooke M, Drug and Alcohol Dep, 2024

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Medications for Nicotine Use Disorder

Medication	Medication & Dose	Use Notes
Nicotine Replacement (NRT)	<ul style="list-style-type: none"> Patch: 7mg, 14mg, 21mg daily Lozenge/Gum: 2-4mg as needed 	<ul style="list-style-type: none"> Side effects: insomnia, nightmares Improved abstinence during treatment
Varenicline	<ul style="list-style-type: none"> 0.5mg daily x3d > 0.5mg 2x/day x3d > 1mg 2x/day 	<ul style="list-style-type: none"> Partial agonist at ACh nicotinic receptor Contraindicated: patients <17y (relative), seizures Side effects: nausea, insomnia, odd dreams, headaches
Bupropion	<ul style="list-style-type: none"> 150mg daily x3d > 150mg 2x/day 	<ul style="list-style-type: none"> Antidepressant; unclear mechanism for smoking cessation Greater abstinence days & abstinence duration Good option for patients with depression Contraindicated: seizures, eating disorder

Dawson et al. (2016). *J Am Acad Child Adolesc Psychiatry*.

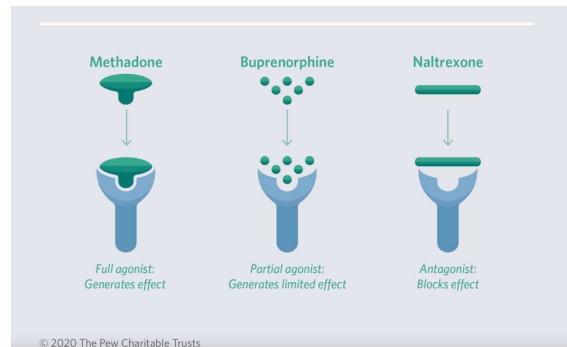
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Evidence

- Evidence is limited for NRT in adolescent patients
- Bupropion (nicotine receptor antagonist and NE and DA reuptake inhibitor)
 - Couple of RCTS that show benefit for abstinence among youth
- Varenicline (partial nicotinic acetylcholine receptor agonist)
 - Evidence is mixed

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How medications work



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Medications for Opioid Use Disorder

Medication	Medication & Dose	Access/Use Notes
Buprenorphine	<ul style="list-style-type: none"> Daily pill or film Monthly injectable Subdermal implant +/- Naltrexone 	<ul style="list-style-type: none"> NO X WAIVER REQUIREMENT NOW FDA approved for AYA ≥ 16 years old (sublocade efficacy not proven for <17 years old) Safe in pregnancy with or without Naloxone
Methadone	<ul style="list-style-type: none"> Daily medication Pill, liquid, wafer form 	<ul style="list-style-type: none"> Limited access for youth Requires DAILY visits to clinic Safe in pregnancy; may increase or split dose
Naltrexone	<ul style="list-style-type: none"> Daily pill Monthly injectable 	<ul style="list-style-type: none"> FDA-approved for AYA ≥ 18 years old

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Medications for Alcohol Use Disorder

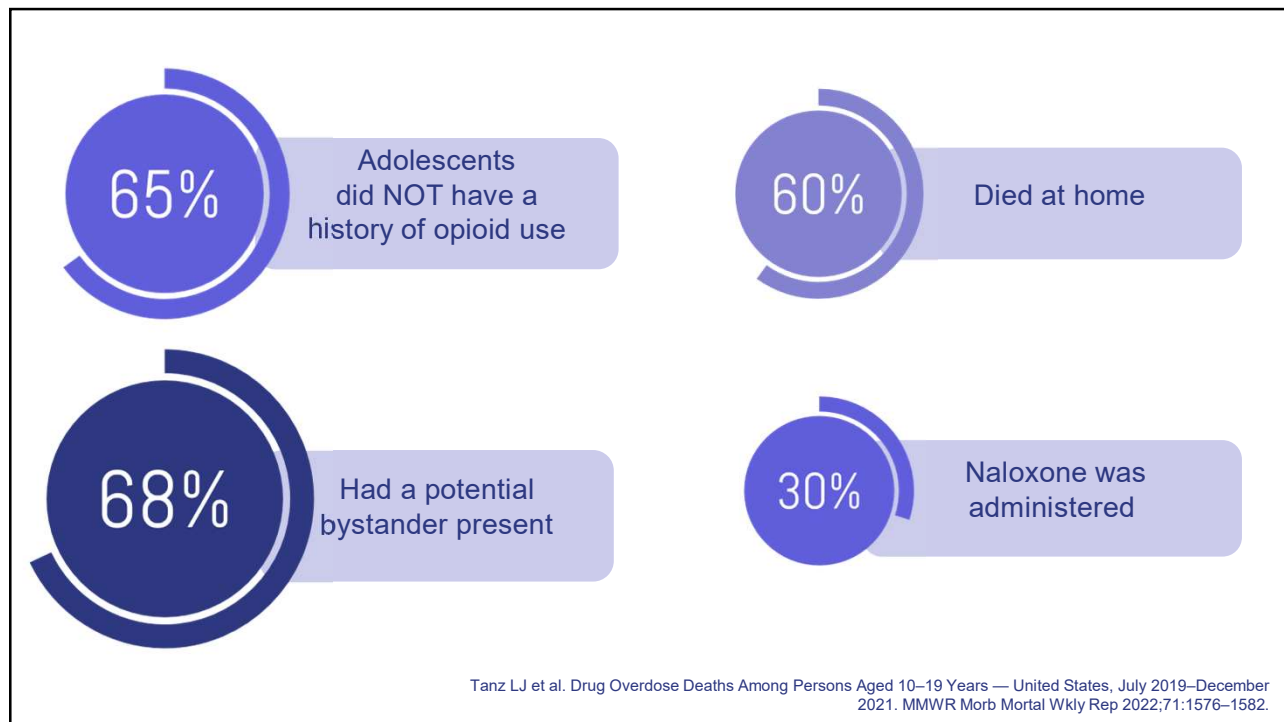
Medication	Dose	Use / Notes
Naltrexone	Pill: 50mg daily Injection: 380mg IM monthly	<ul style="list-style-type: none"> • Decreases reward effects of alcohol • Associated with decreased alcohol use, heavy drinking, cravings • Contraindications: on opioid therapy, liver dysfunction • Safe in pregnancy
Acamprosate	Pill: 666mg three times daily	<ul style="list-style-type: none"> • Effects glutamatergic neurotransmission • Associated with decreased risk relapse • Contraindications: renal dysfunction • Category C – possibly teratogenic

Kranzler HR & Soyka M. JAMA 2018.

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Provide overdose prevention guidance

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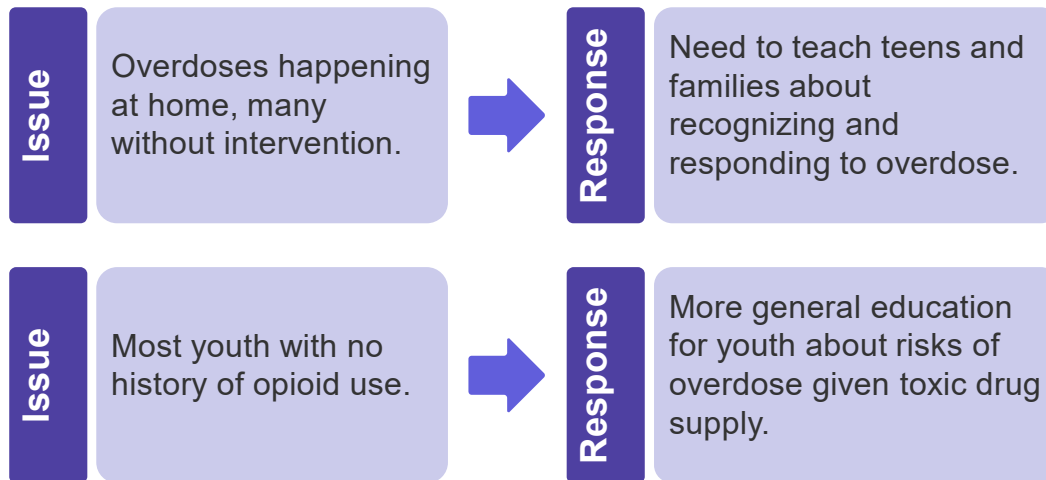


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Opportunities for a better response



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How to talk to teens and families about overdose risk?

- Normalize the conversation, “I like to talk to all families how the drug supply has changed, is it ok for me to share some information with you?”
- Start by finding out what they know about overdose risk
- Can frame as anticipatory guidance and information that they can also share with their friends

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Decrease risk of overuse & overdose

Providers can emphasize abstinence as the safest approach while still advising:

Pacing use:
“Start low and go slow”

Transition from
higher- to
lower-potency
products

Considering
timing of use

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AMERICAN ACADEMY OF PEDIATRICS
SUBSTANCE USE TREATMENT ECHO

Want to learn more about substance use treatment and how to support adolescents and their families?

This learning collaborative aims to equip pediatricians and other healthcare professionals with the knowledge and skills around screening, referral pathways, and treatment options to address substance use concerns in adolescents.

Topics Covered:

- Screening
- Harm Reduction
- Trauma Informed Care
- Treatment options for
 - Vaping & Nicotine
 - Alcohol & Cannabis
 - Opioids & Stimulants
 - Polysubstance Use

1:00 PM – 2:00 PM CT
MARCH 24, 2025
APRIL 7, 2025
APRIL 21, 2025
MAY 5, 2025
MAY 19, 2025
JUNE 2, 2025
JUNE 16, 2025

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Questions?
 Contact Oyin.Oloniniyi@aap.org

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling a cumulative amount of \$1,200,000 to date with nearly \$600,000 funded by HRSA grants. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS or the U.S. Government.

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