SUD and Adolescents:

How to Screen, Treat, and Save Lives in the Era of Fentanyl

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Harbor-UCLA
FAMILY MEDICINE

Disclosure Statement

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Learning Objectives

1. Screen Adolescents for substance use disorders (SUD) in the "Era of Fentanyl"
2. Treat SUD with pharmacology of medications addiction treatment (MAT)
3. Engage adolescents in harm reduction strategies
4. Review other substances of abuse among adolescent
5. Prevention strategies for SUD

Patient X

“You don't go to the margins to make a difference. You go to the margins so that the folks at the margins make you different.”
Father Greg Boyle

“You don't go to the margins to make a difference. You go to the margins so that the folks at the margins make you different.”

Father Greg Boyle

Substance Use Disorder

TREATMENT

Less than 10% patients

with SUD

receive treatment

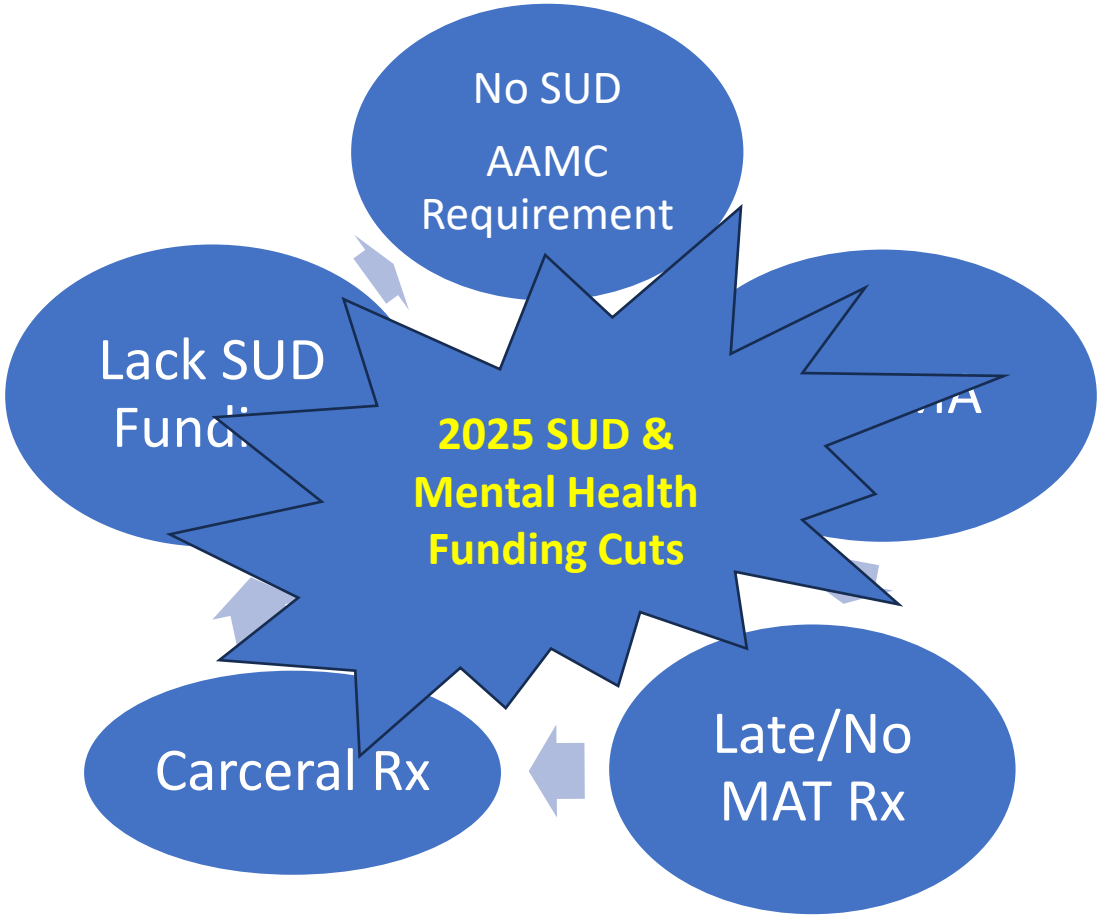
Most referrals to treatment from **Criminal Justice System (44%)**

versus

Health Care Providers (5.7%)

CASA Columbia analysis of *The Treatment Episode Data Set (TEDS),* 2009
Foundation Opioid Response Efforts (FORE) 2020

Lethal Education and Treatment Gaps

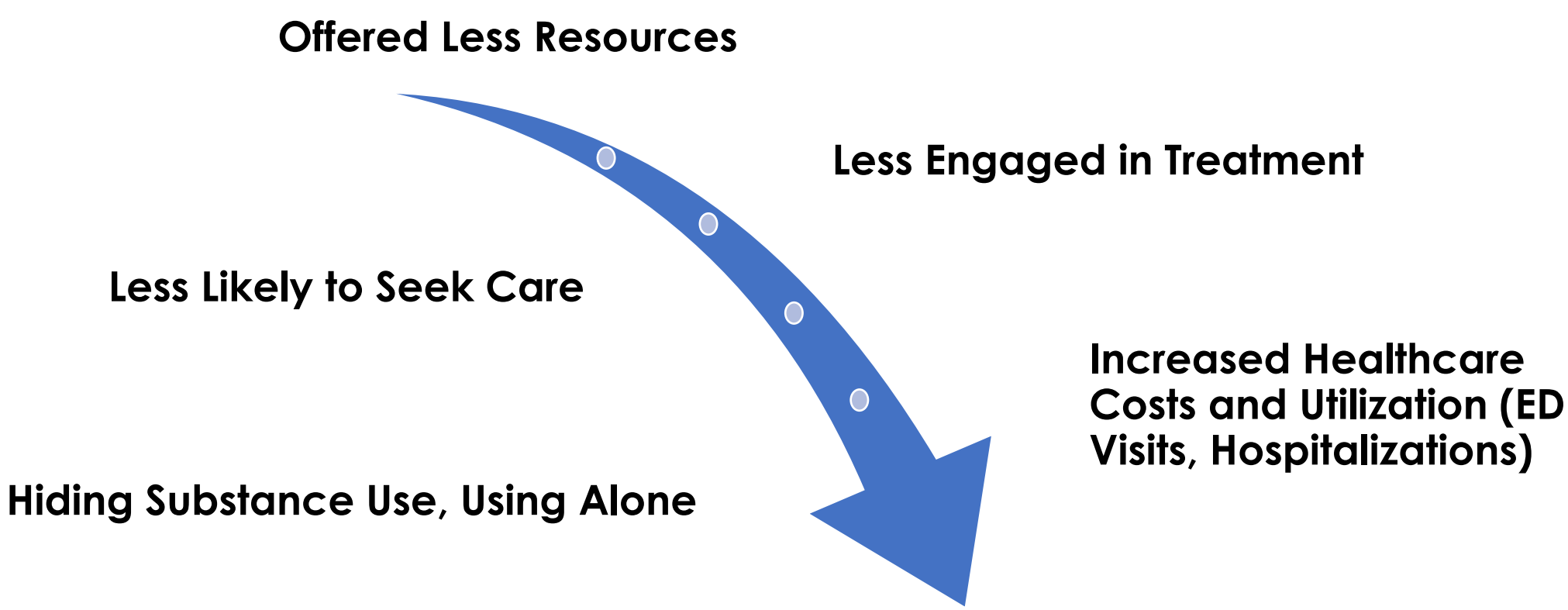


Stigma in Healthcare

- Studies show that healthcare professionals harbor negative attitudes towards patients with substance use disorders
  - "Addiction is a choice"
  - Assume lack of motivation
  - Tendency to blame the individual
  - Resistance to medication model of addiction: "replacing one drug for another"

J Addiction Behavior Therapy Rehabilitation, 2013
Shatterproof Addiction, Stigma Index, October 2021

The Deadly Effects of Stigma



More Likely to Overdose

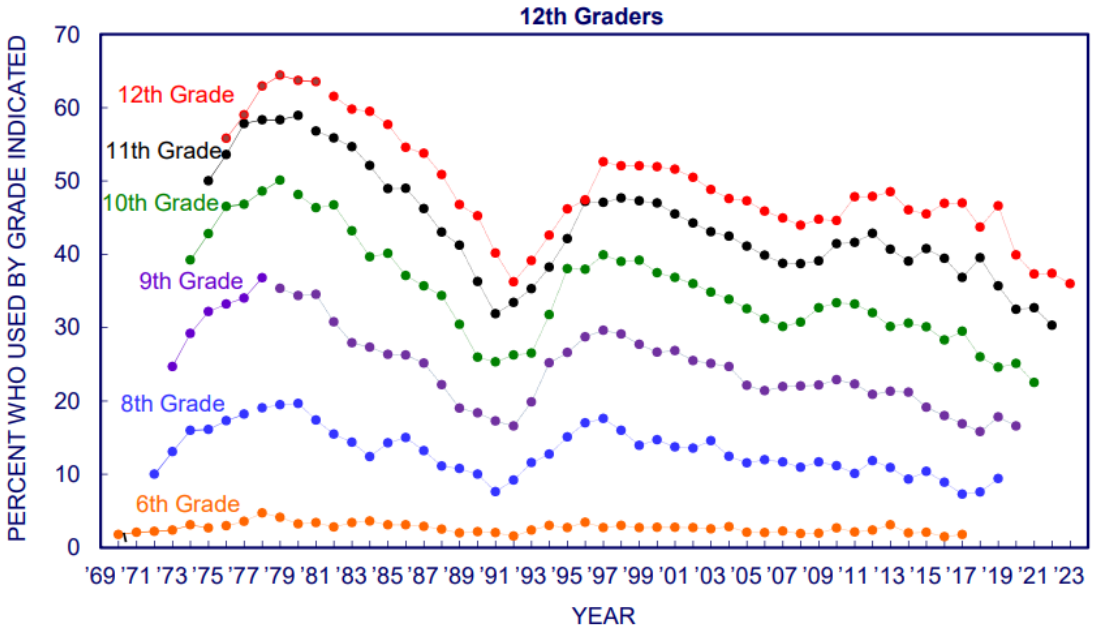
Monitoring the Future: A Continuing Study of American Youth

On April 4, 2025, as a sponsor of this project, NIH requested that the following language be added to this website: This repository is under review for potential modification in compliance with Administration directives.

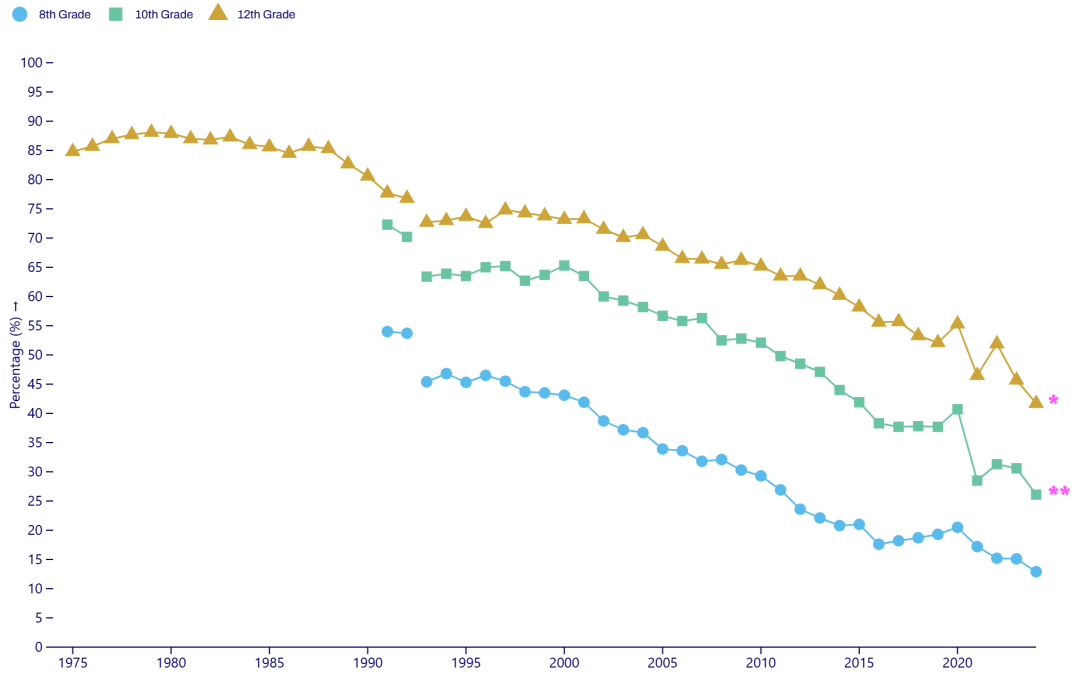
Version Date: Oct 01, 2024 | Cite this study | Share this page

Any Illicit Drug

Trends in Lifetime Prevalence for Earlier Grade Levels* based on Retrospective Reports from 12th Graders

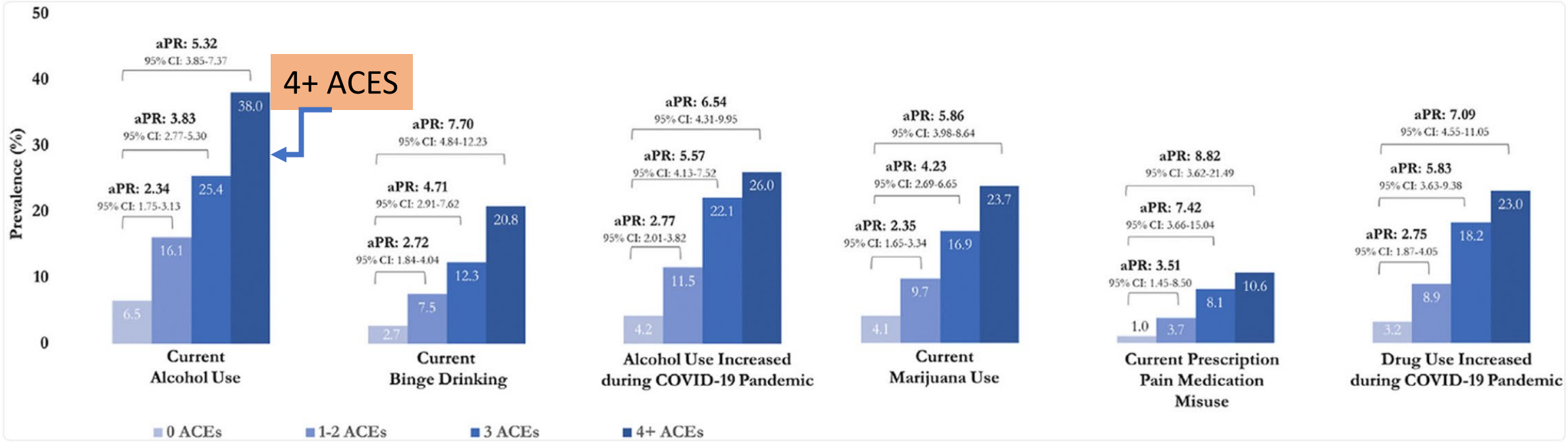


ALCOHOL: Trends in 12 Month Prevalence of Use in 8th, 10th, and 12th Grade



Adolescents: SUD on The Rise for High ACEs

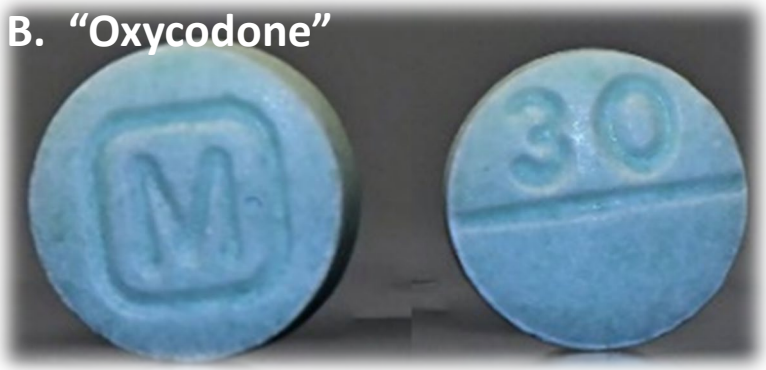
Figure 1. Prevalence of substance use and adjusted associations among U.S. adolescents exposed to cumulative adverse childhood experiences (ACEs) during the COVID-19 pandemic, Adolescent Behavior and Experiences Survey, January–June 2021.



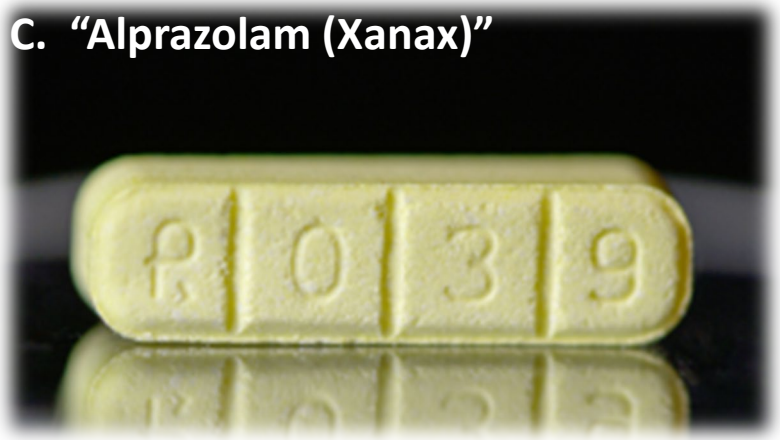
Which substance accounts for the majority of overdose deaths among adolescents?

A. Fentanyl

B. "Oxycodone"



C. "Alprazolam (Xanax)"



The short answer is A. Must assume that any med bought off the streets has fentanyl.
B. and C. are counterfeit prescription meds

HEALTH

NPR Exclusive: U.S. overdose deaths plummet, saving thousands of lives

SEPTEMBER 18, 2024 · 5:00 AM ET

HEARD ON MORNING EDITION

Brian Mann

Los Angeles Times

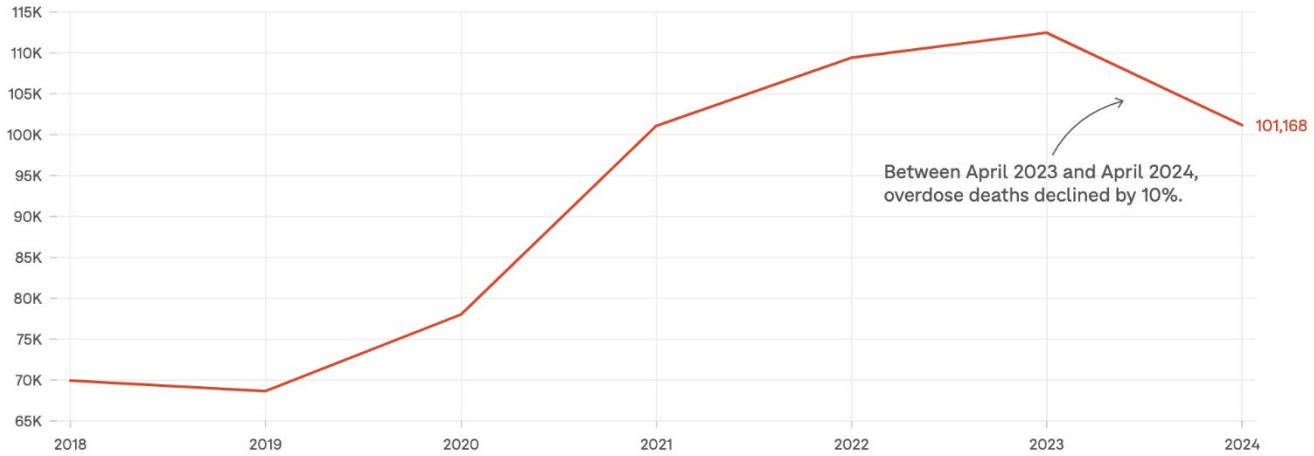
CALIFORNIA

‘Now is not the time’: Trump cuts to L.A. overdose prevention efforts alarm experts

Paramedics with Los Angeles Fire Station No. 11 tend to a man they revived from an overdose in Los Angeles’

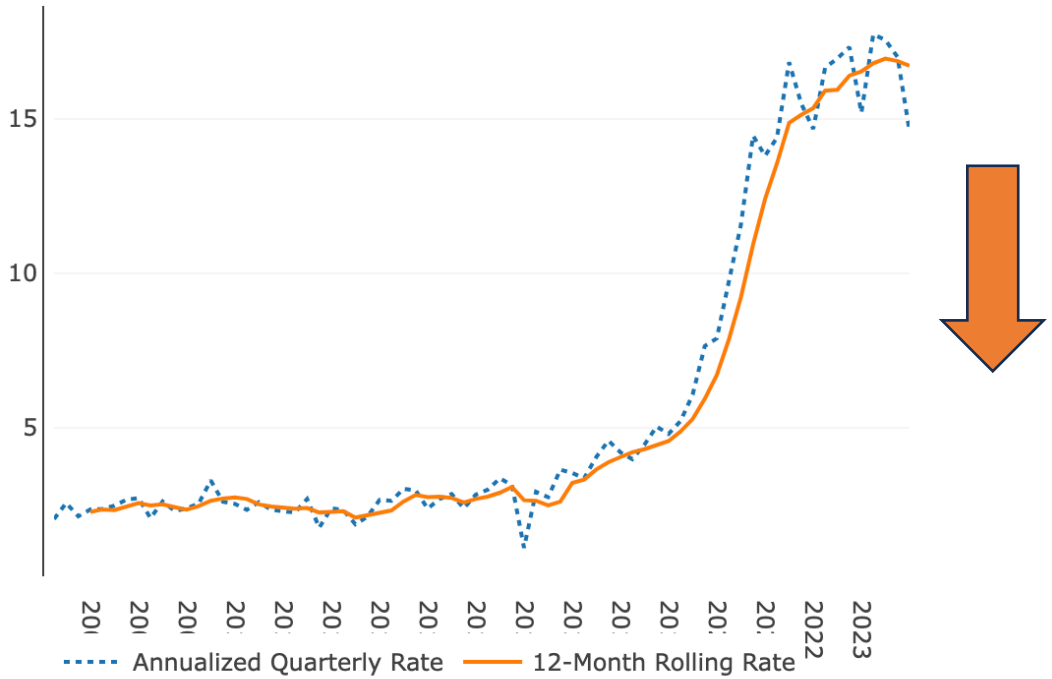
U.S. overdose deaths fell for the first time since 2020

Deaths for the 12 months ending in April of each year



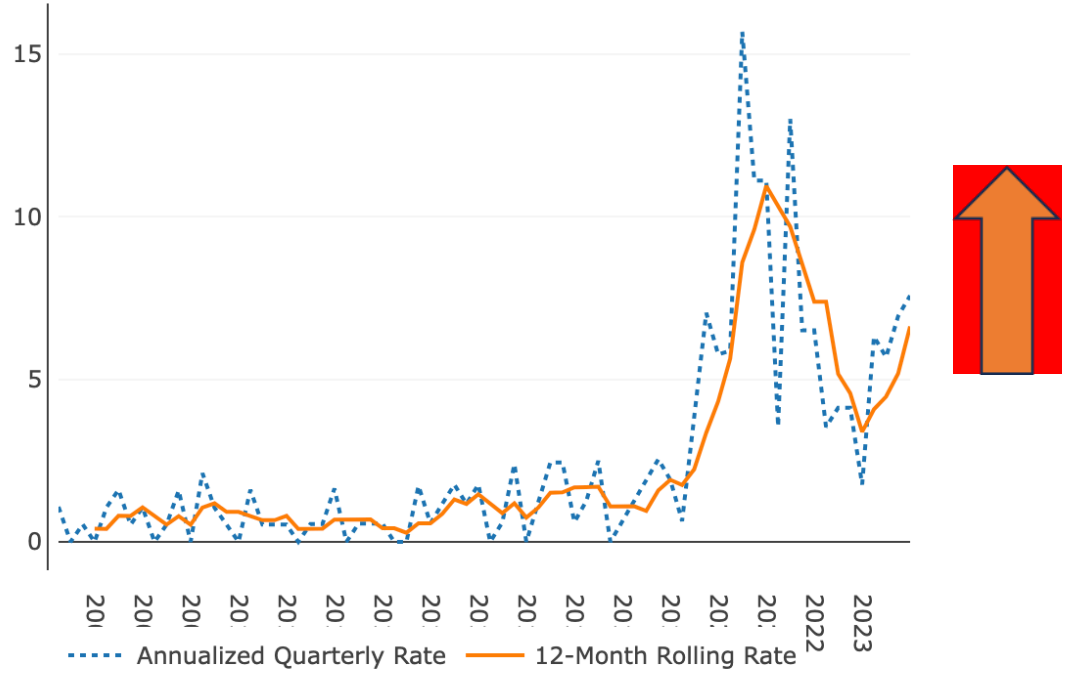
Any Opioid-Related Overdose Deaths - Los Angeles County Total Population

Age-Adjusted Rate per 100,000 Residents - **2023 data are preliminary**



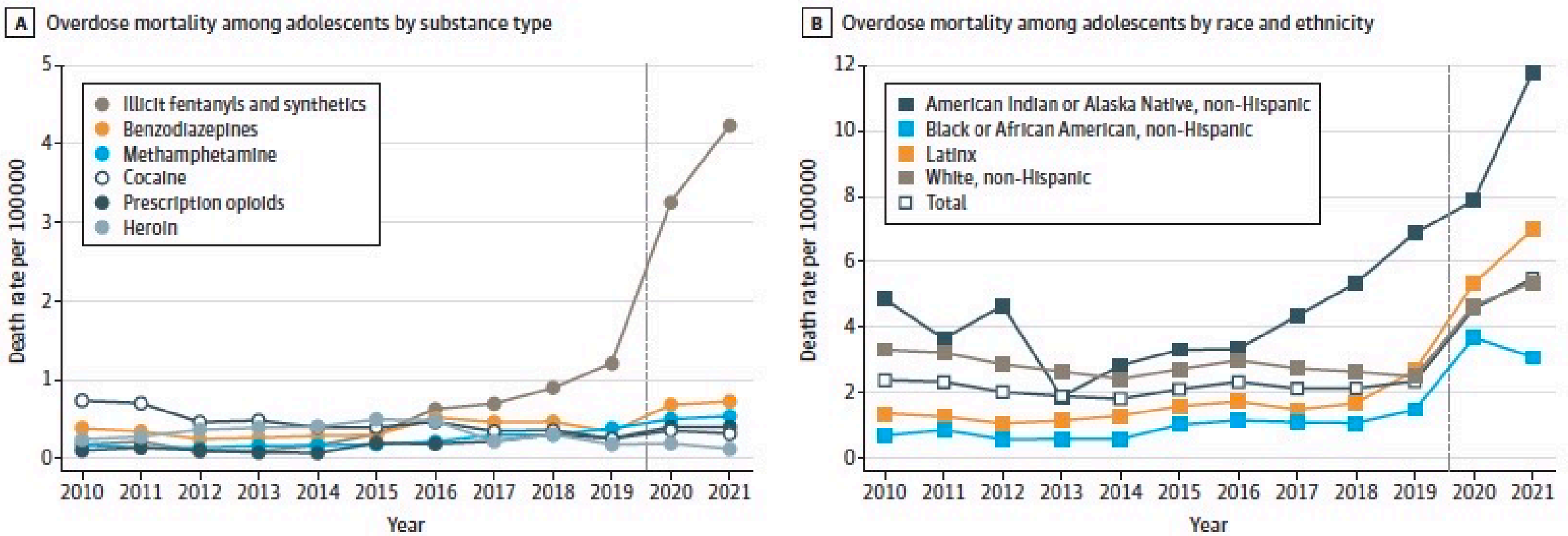
Any Opioid-Related Overdose Deaths - Los Angeles County 15 to 19 yr olds

Crude Rate per 100,000 Residents - **2023 data are preliminary**



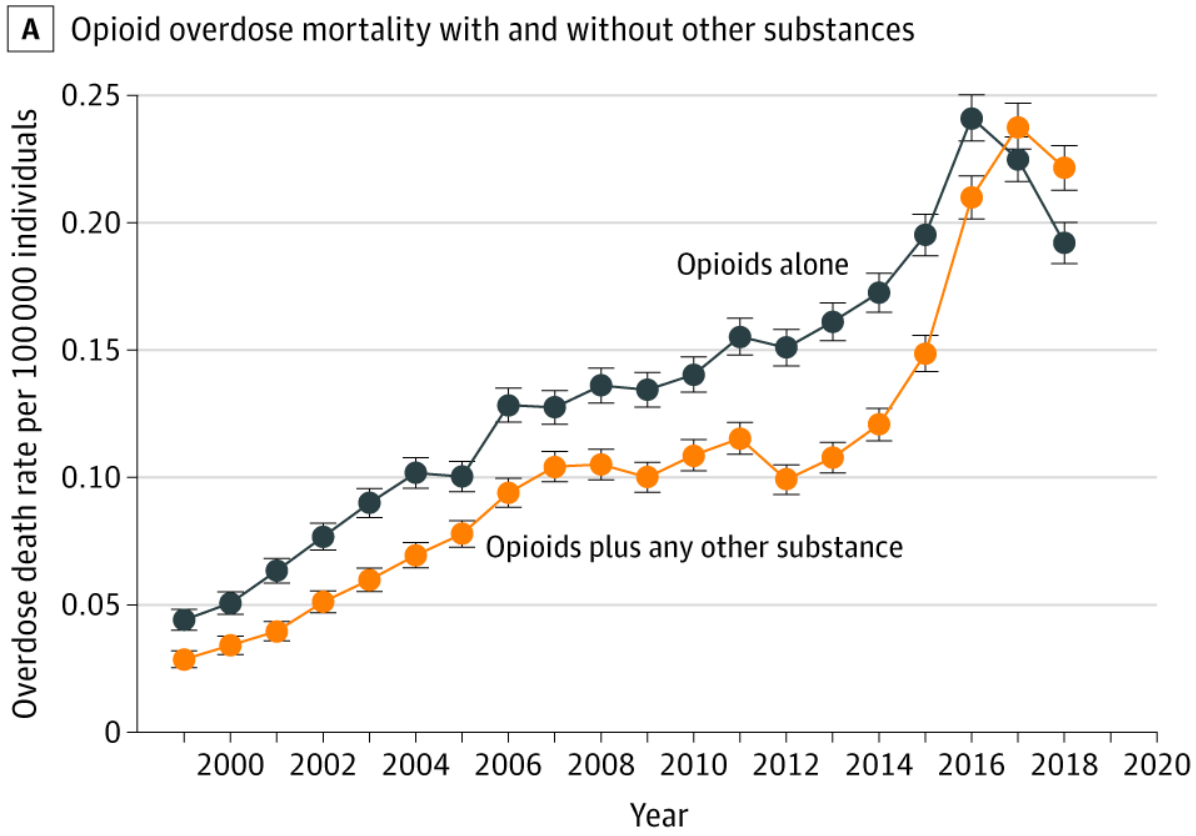
Overdose deaths significantly increasing among adolescents: 370% since 2017

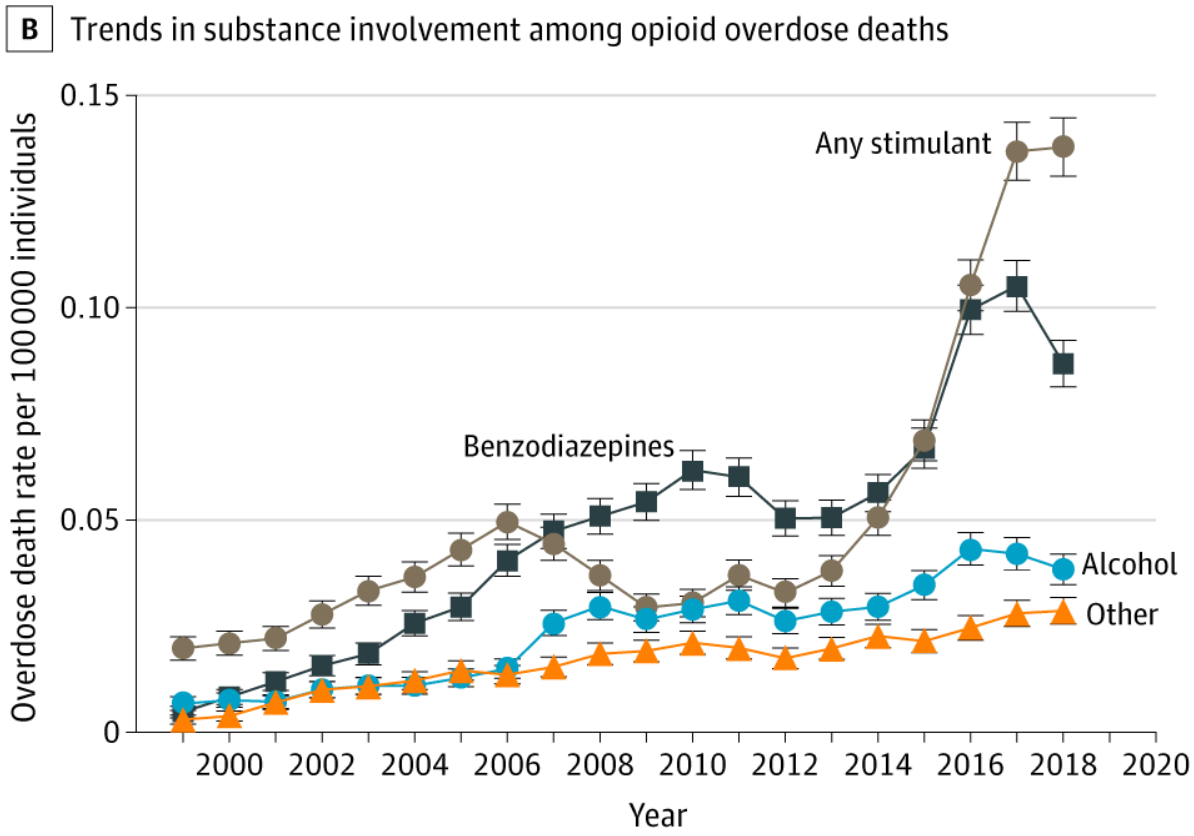
Figure. Adolescent Overdose Deaths, 2010-2021



Friedman J et al. JAMA, 2022

Stimulant-involved deaths increasing among youth





Lim et al., 2020 *JAMA Pediatr.*

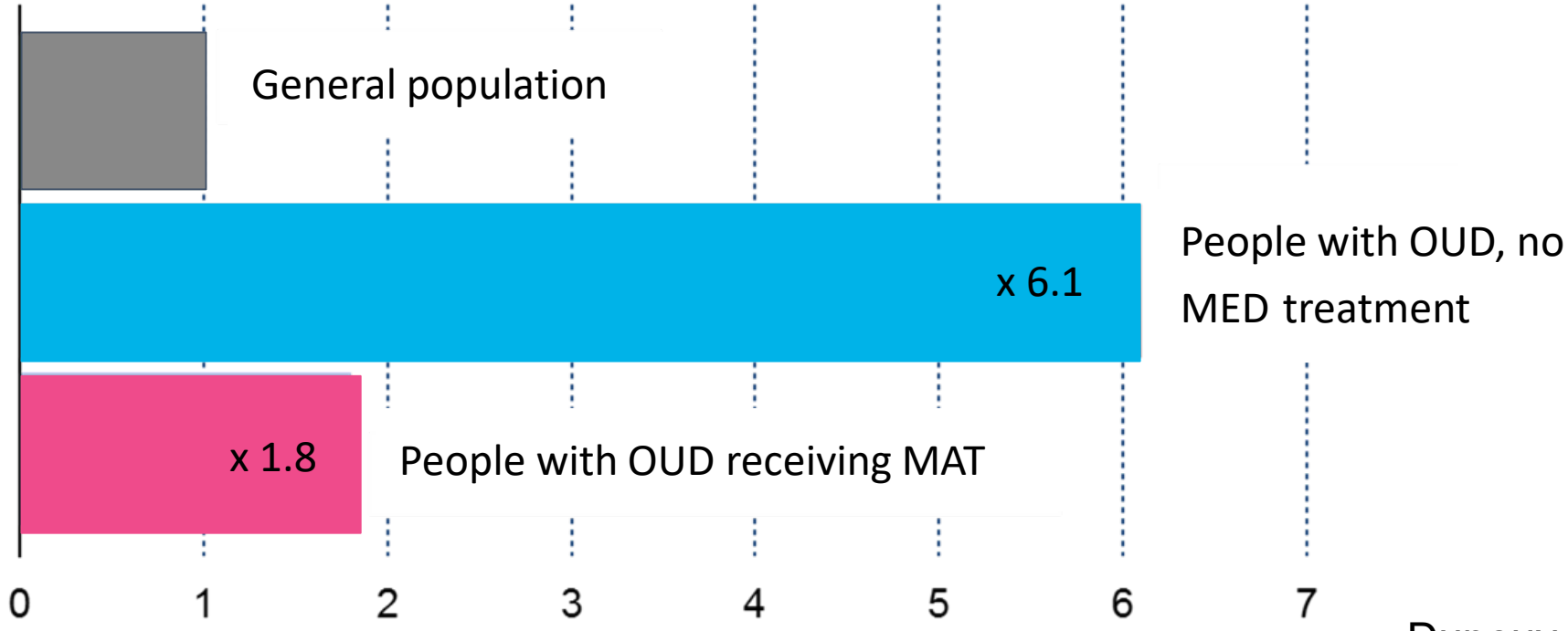
Slide courtesy of The Immersion Training in Addiction Medicine Program

True or False?

Medication Addiction Treatment (MAT) decreases mortality from OUD by half

MOUD (Bup) Saves Lives

5-year Mortality Risk Compared to the General Population



Dupouy et al., 2017
Evans et al., 2015
Sordo et al., 2017

True or False?

<5%

About ~~25~~% of adolescents with OUD receive treatment.

True or False?

White adolescents are **42% and 17%** more likely than Black and Hispanic patients to receive MAT for OUD.

Overdoses Increasing with Dirth of MAT

Fentanyl predominates overdoses, national peak?

Adolescent overdose deaths are still rising locally

MAT Saves Lives

Few adolescents receive treatment, especially if Black, Latinx

Overview of Substance Use in Adolescents

ASAM Definition of Addiction

"Addiction is a **treatable, chronic medical disease** involving complex interactions among brain circuits, genetics, the environment, and an individual's life experiences.

Prevention efforts and treatment approaches for addiction are generally as successful as those for other chronic diseases."

"Addiction is a **treatable, chronic medical disease…**"

Table 3. Multivariate Logistic Regression Results: Adult (Ages 35-50 Years) Prescription Drug Use, Misuse, and Substance Use Disorder Symptoms Adjusting for Covariates[a] (continued)

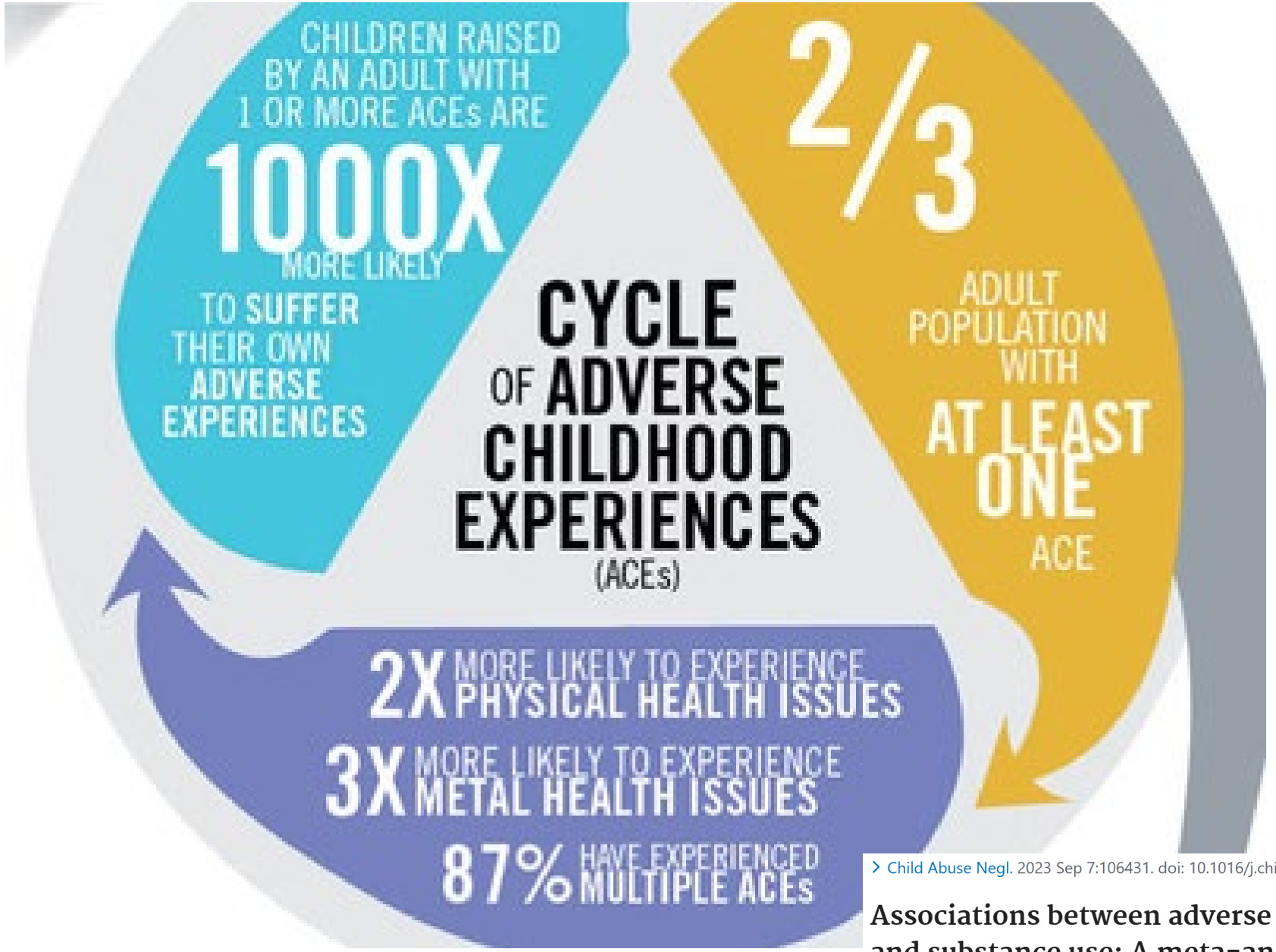
	AOR (95% CI)		
Variable	Prescription drug use	Past-year PDM	≥2 AUD symptoms
SUD	Prescription drug use	Past-year PDM	≥2 SUD symptoms
Participants, No.	2867	2866	2867
SUD at age 18 y, symptoms			
No symptoms	1 [Reference]	1 [Reference]	1 [Reference]
1	1.10 (0.71-1.70)	1.01 (.671-1.52)	1.24 (0.93-1.67)
2-3	1.24 (0.94-1.65)	1.31 (.959-1.80)	1.89 (1.51-2.38)
4-5	1.56 (1.06-2.32)	2.08 (1.41-3.06)	2.16 (1.63-2.87)
≥6	1.55 (1.11-2.16)	1.97 (1.39-2.80)	2.62 (2.00-3.43)
Age, y			
35	1 [Reference]	1 [Reference]	1 [Reference]
40	1.20 (0.98-1.47)	1.18 (.945-1.48)	0.73 (0.66-0.81)
45	1.52 (1.24-1.85)	1.53 (1.24-1.90)	0.71 (0.63-0.79)
50	1.77 (1.45-2.17)	1.57 (1.23-2.01)	0.59 (0.51-0.67)
SUD at age 18[a]			
Linear trend (SUD)	1.06 (1.02-1.10)	1.09 (1.05-1.13)	1.12 (1.09-1.16)
Linear trend (age)	1.21 (1.14-1.29)	1.17 (1.09-1.26)	0.85 (0.81-0.89)

- **SUD symptoms <18yo** were significantly associated with prescription drug misuse and AUD in adults
- Most adults using prescribed opioids, sedatives, or tranquilizers had **multiple SUD symptoms during adolescence**

…Of Pediatric Onset

Risk Factor for Substance Use (Disorder)

Family History:	• 50-70% more likely to develop a substance use disorder
Environment:	• Growing up in a household where there is substance use
Mental health conditions:	• Depression or anxiety, PTSD, ADHD, Bipolar, Schizophrenia
Trauma:	• Abuse or neglect → substances used to cope with the emotional pain.
Peer pressure:	• Being around people who use substances
Availability of substances:	• Living in an area where substances are easily available

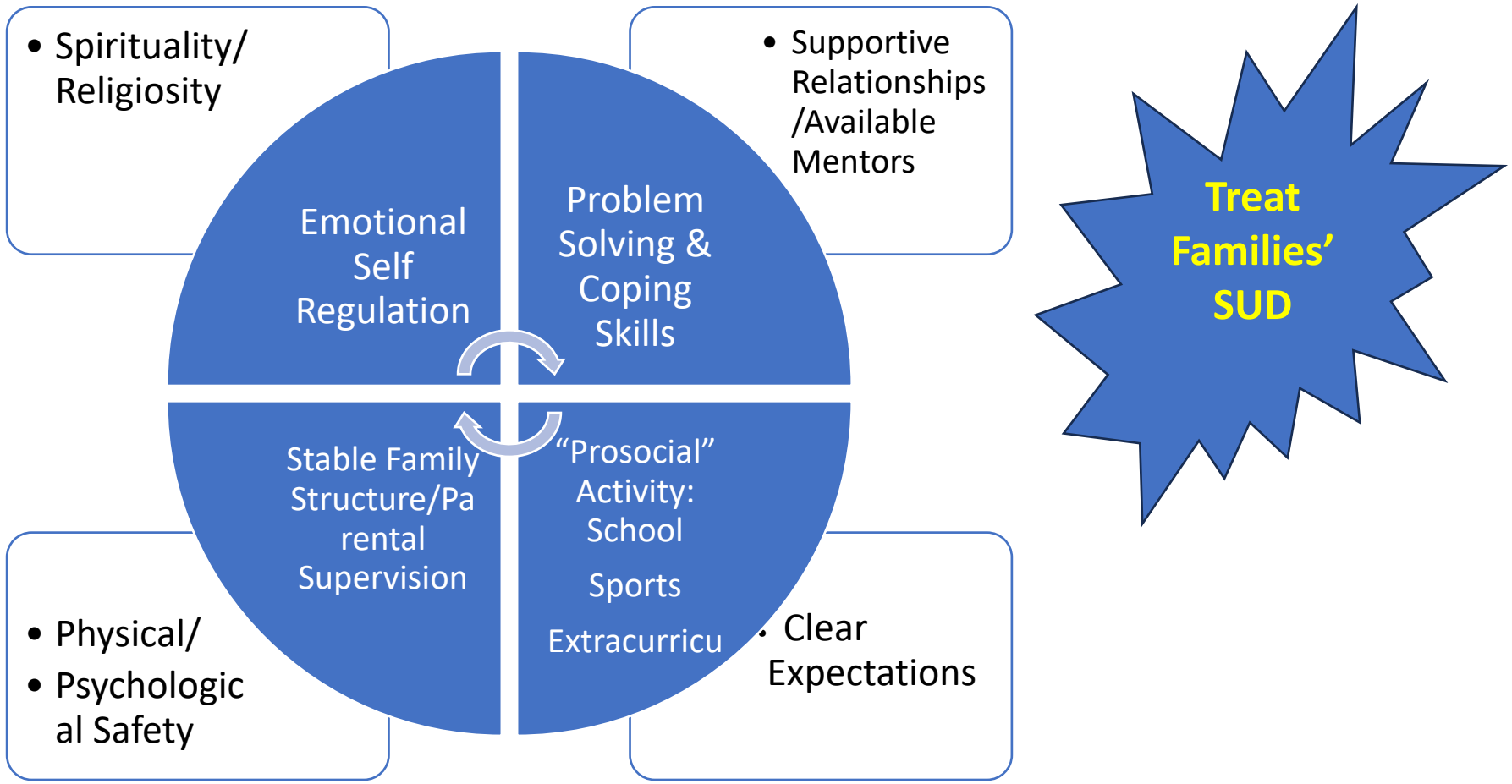


Child Abuse Negl. 2023 Sep 7:106431. doi: 10.1016/j.chiabu.2023.106431. Online ahead of print.

Associations between adverse childhood experiences and substance use: A meta-analysis

Jenney Zhu [1], Nicole Racine [2], Chloe Devereux [3], David C Hodgins [3], Sheri Madigan [4]

Protective Factors for Substance Use (Disorder)

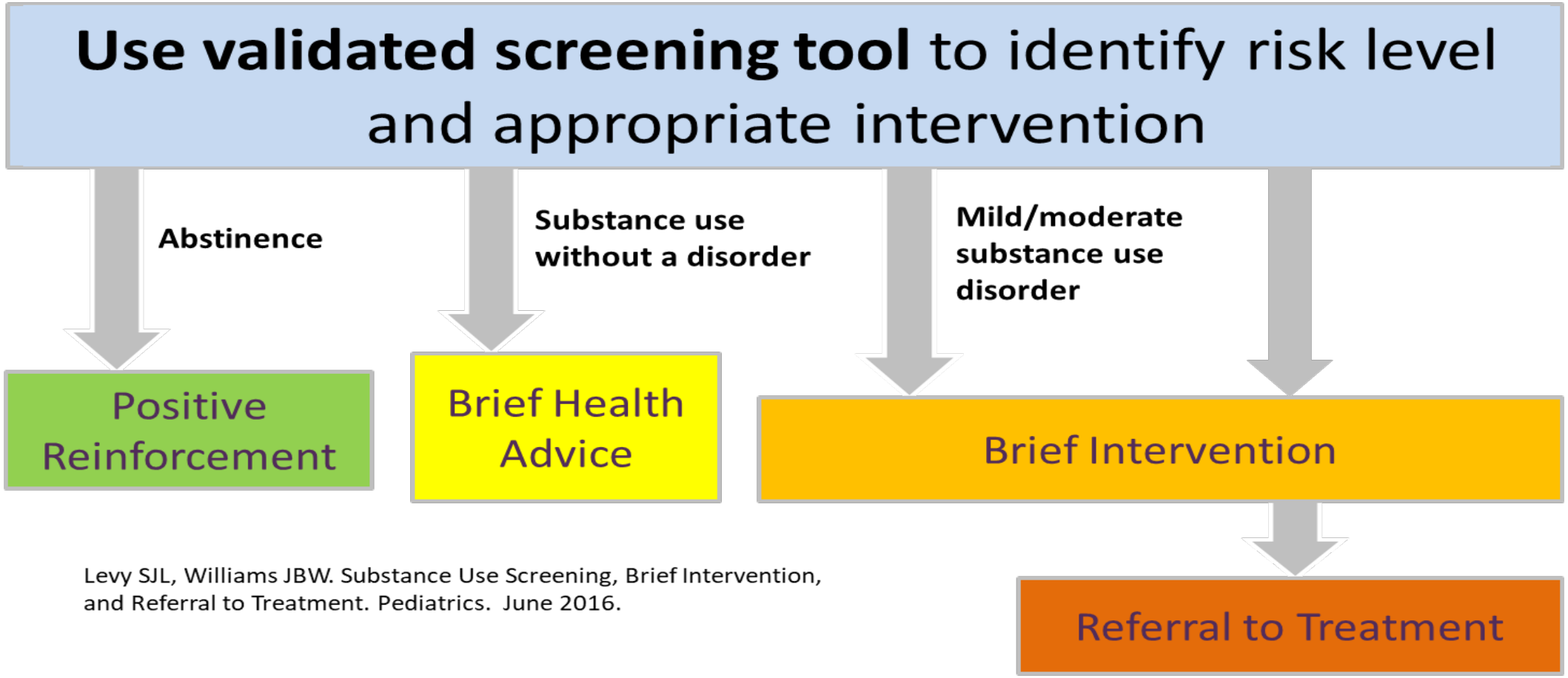


Adolescent SUD Screening

Considerations: Adolescent Care

- Discuss confidentiality and clarify limits
  - Consider who has access to patient's chart
- Risk taking is developmentally appropriate
- Concern that identity defined by substance use or recovery
- Treat co-occurring mental health disorders
- Family involvement is key

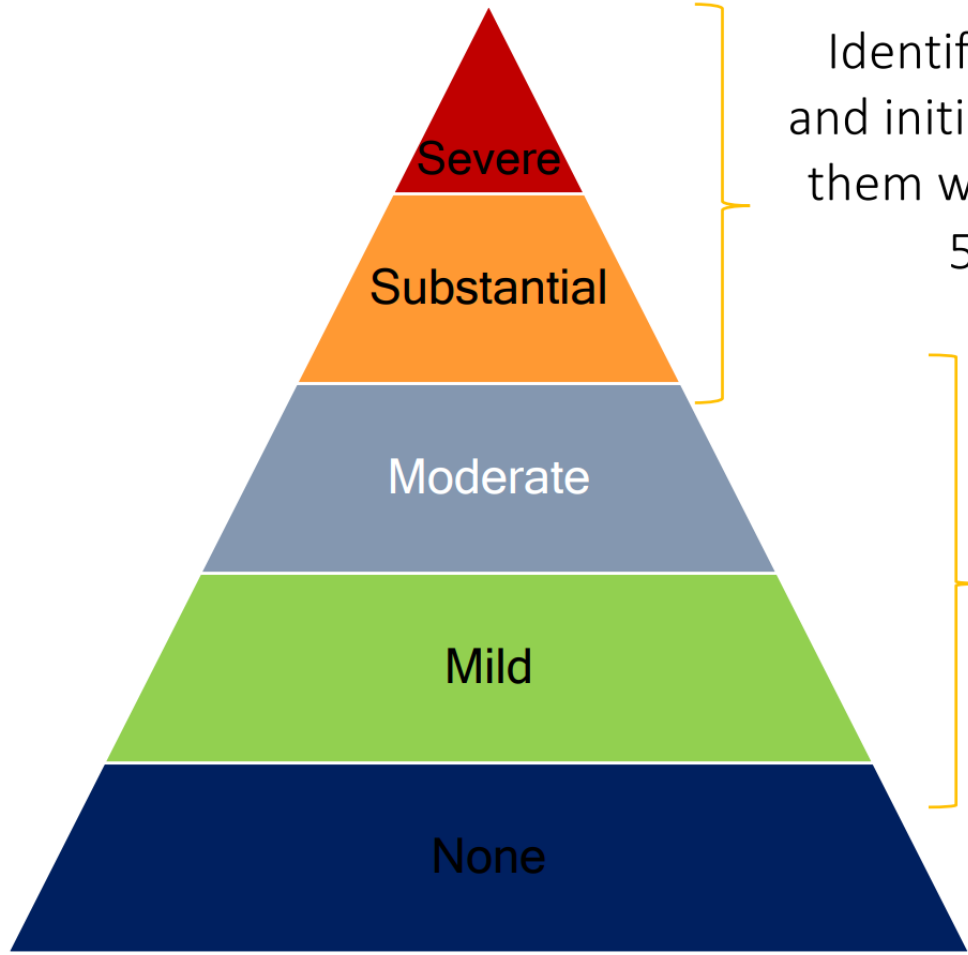
Screening, Brief Intervention and Referral to Treatment (SBIRT)



Levy SJL, Williams JBW. Substance Use Screening, Brief Intervention, and Referral to Treatment. Pediatrics. June 2016.

Slide courtesy of The Immersion Training in Addiction Medicine Program

What SBIRT Can Accomplish



Identify adolescents with SUD and initiate treatment and/or link them with specialty care (about 5% of adolescents)

Educate adolescents who are using substances, motivate behavior change.

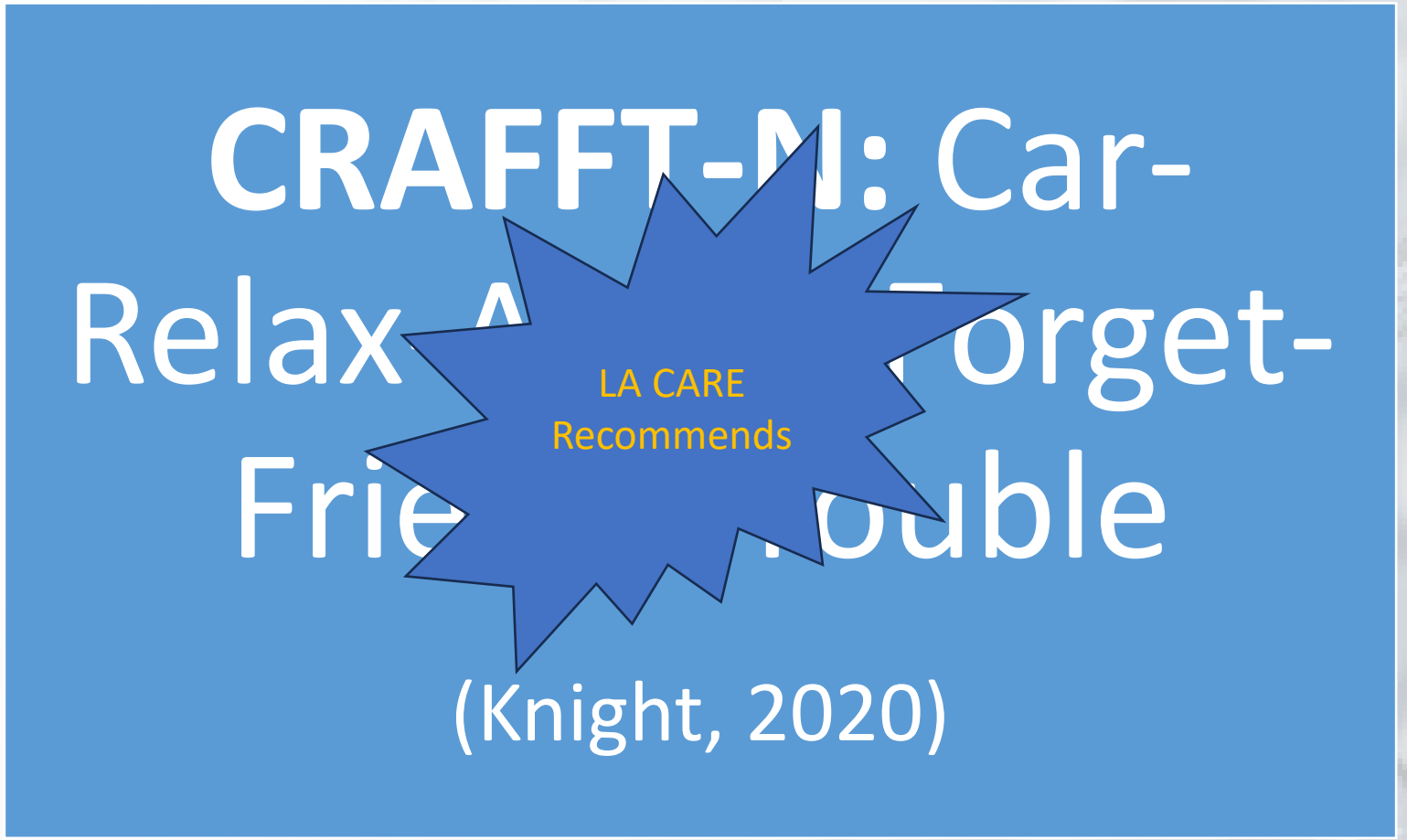
Validated Screening Tools

S2BI: Screening to Brief Intervention (Levy, 2014)

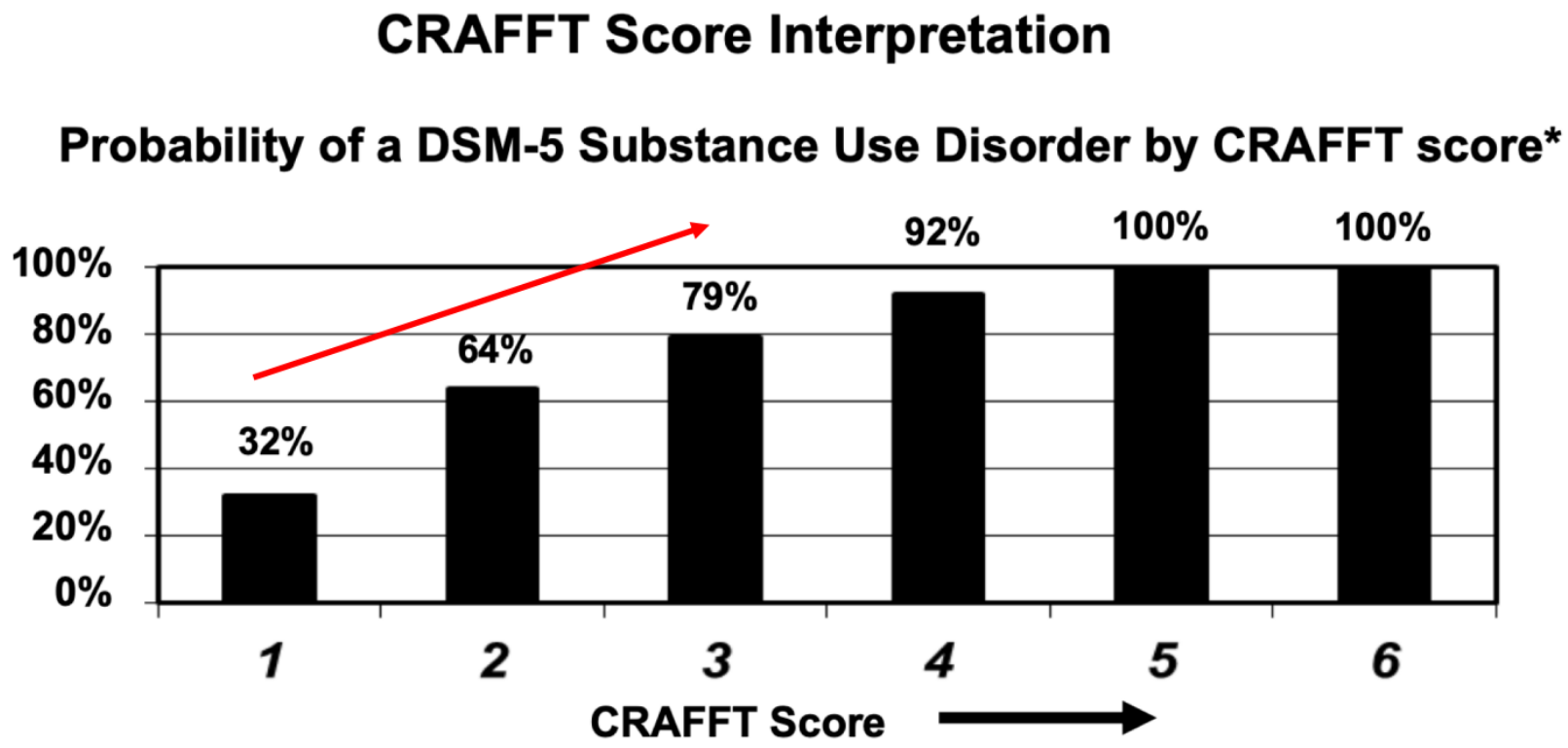
CRAFFT: Car-Relax-Alone-Forget-Friend-Trouble (Knight, 2002)

S2BI: Screening to Brief Intervention Algorithm

Adolescent Validated SUD Screening Tool



Interpreting Results:



SUD Screening: CRAFFT 2.1 + N

The CRAFFT Questionnaire (version 2.1)

To be completed by patient

Please answer all questions **honestly**; your answers will be kept **confidential**.

During the PAST 12 MONTHS, on how many days did you:

1.	Drink more than a few sips of beer, wine, or any drink containing **alcohol**? Put "0" if none.	# of days
2.	Use any **marijuana** (weed, oil, or hash, by smoking, vaping, or in food) or "**synthetic marijuana**" (like "K2," "Spice") or "vaping" **THC oil**? Put "0" if none.	# of days
3.	Use **anything else to get high** (like other illegal drugs, prescription or over-the-counter medications, and things that you sniff, huff, or vape)? Put "0" if none.	# of days

READ THESE INSTRUCTIONS BEFORE CONTINUING:

- **If you put "0" in ALL of the boxes above, ANSWER QUESTION 4, THEN STOP.**
- **If you put "1" or higher in ANY of the boxes above, ANSWER QUESTIONS 4-9.**

		No	Yes
4.	Have you ever ridden in a **CAR** driven by someone (including yourself) who was "high" or had been using alcohol or drugs?	☐	☐
5.	Do you ever use alcohol or drugs to **RELAX**, feel better about yourself, or fit in?	☐	☐
6.	Do you ever use alcohol or drugs while you are by yourself, or **ALONE**?	☐	☐
7.	Do you ever **FORGET** things you did while using alcohol or drugs?	☐	☐
8.	Do your **FAMILY** or **FRIENDS** ever tell you that you should cut down on your drinking or drug use?	☐	☐
9.	Have you ever gotten into **TROUBLE** while you were using alcohol or drugs?	☐	☐

* Concerning:
> Or = 2 YES

The following questions ask about your use of any **vaping devices containing nicotine and/or flavors**, or use of any **tobacco products***. Circle your answer for each question.

		Circle one	
1.	Have you ever tried to quit using, but couldn't?	Yes	No
2.	Do you vape or use tobacco now because it is really hard to quit?	Yes	No
3.	Have you ever felt like you were addicted to vaping or tobacco?	Yes	No
4.	Do you ever have strong cravings to vape or use tobacco?	Yes	No
5.	Have you ever felt like you really needed to vape or use tobacco?	Yes	No
6.	Is it hard to keep from vaping or using tobacco in places where you are not supposed to, like school?	Yes	No
7.	When you haven't vaped or used tobacco in a while (or when you tried to stop using)…		
	a. did you find it hard to concentrate because you couldn't vape or use tobacco?	Yes	No
	b. did you feel more irritable because you couldn't vape or use tobacco?	Yes	No
	c. did you feel a strong need or urge to vape or use tobacco?	Yes	No
	d. did you feel nervous, restless, or anxious because you couldn't vape or use tobacco?	Yes	No

* Concerning:
> Or = 1 YES

CRAFFT 2.1 + N Score Interpretation

Score/Risk Level	Intervention	Examples – Use Motivational Interviewing (MI)
No to first 4 Qs **Low**	Positive reinforcement & open communication:	• You're making good choices by avoiding use and those who use. • If you're curious about using, let's talk to ensure your safety, and align with your goals.
1 **Moderate**	Brief Intervention: • Discuss specifics—frequency, duration, when, how, with whom, and positive & negative effects. • Explore motivation for use & educate on risks. • Offer harm reduction tools (naloxone, test strips) & Never Use Alone (877) 696-1996. • Consider prescribing MAT	• What do you enjoy about [x]? • How does [x] make you feel or think? • What are some down sides of using [x]? • Tell me what you've heard about fentanyl. • What are things that trigger you to use [x]? • How do you manage having cravings to use [x]? • What things make you want to avoid using [x]?
≥ 2 **HIGH RISK of having SUD** **SUD dx is 64-100% likely**	Confirm SUD diagnosis and, as indicated: • Prescribe MAT to decrease cravings, withdrawal, and overdose risks for dangerous or binging use. • Explain that this approach supports their survival and goal achievement. • Include wellness & harm reduction supplies. • Discuss reproductive health concerns.	• Provisional Start: Even if don't want to start now, I will still prescribe MAT. Pick it up and keep it as a back-up for cravings when you can't get X. • Medication is safe, effective, and reduces cravings to use, withdrawal symptoms and can prevent an overdose. • What are your goals with using? Do you want to reduce, quit, or not change your use patterns? • Plan together, align realistic goal & 3 steps.

Adolescent Interviewing Techniques

- Open Ended Questions, Encourage Questions
- Start with neutral topics
- Respect privacy/confidentiality
- Avoid lecturing and being judgmental
- Be aware of nonverbal cues, tone
- Utilize active listening
- Approach with honest, straightforward, and clear explanations
- “Close the loop”, Affirm Goals/Harm Reduction

How do we ask about substance use?

- **General Well-Being and Daily Life:**
  - "How have you been taking care of yourself?
  - "What do you like to do when you're feeling stressed or overwhelmed?"
  - "What kinds of things make you feel stressed, and how do you usually cope with stress?"

- **Discussing Coping and Relaxation:**"
  - When you're feeling down or anxious, what kinds of things help you relax? Do you ever find that substances like alcohol or drugs come into play?"

- **Linking Stress or Coping Mechanisms:**
  - "You mentioned feeling stressed lately. Some people find it hard to cope and may turn to things like alcohol, smoking, or other substances. Is that something you've tried or thought about?"

How do we ask about substance use?

- **Open-Ended and Non-Judgmental:**
  - "Can you tell me about your experiences with alcohol or drugs?"
  - "What was happening in your life when you first started using [specific substance]?"
  - "Are there certain situations or feelings that make you more likely to use?"
  - "Can you share how using [substance] affects your day-to-day life?"
  - "Do you ever use [substance] alone, or is it always with friends?"
  - "Are there any concerns you have about your use of [substance]?"

Encouraging Reflection and Self-Assessment:

- "What do you like or dislike about using [substance]?"
- "How do you feel when you don't use [substance]?"
- "Have you experienced any negative effects from using [substance]?"
- "How do you think your use of [substance] affects your relationships with friends and family?"
- "What do you think would happen if you stopped using [substance]?"

Normalizing and Creating a Safe Space:

- "A lot of people your age try different substances. I'm here to listen and not judge."
- "It's okay to be honest here. My goal is to understand and help, not to get you in trouble."

What to avoid when discussing substances:

- **Questions That Assume or Presume:**
  - "You've been using because your friends make you, right?"
  - "I bet you only use it because you're trying to look cool."
  - "You started using because of problems at home, didn't you?"

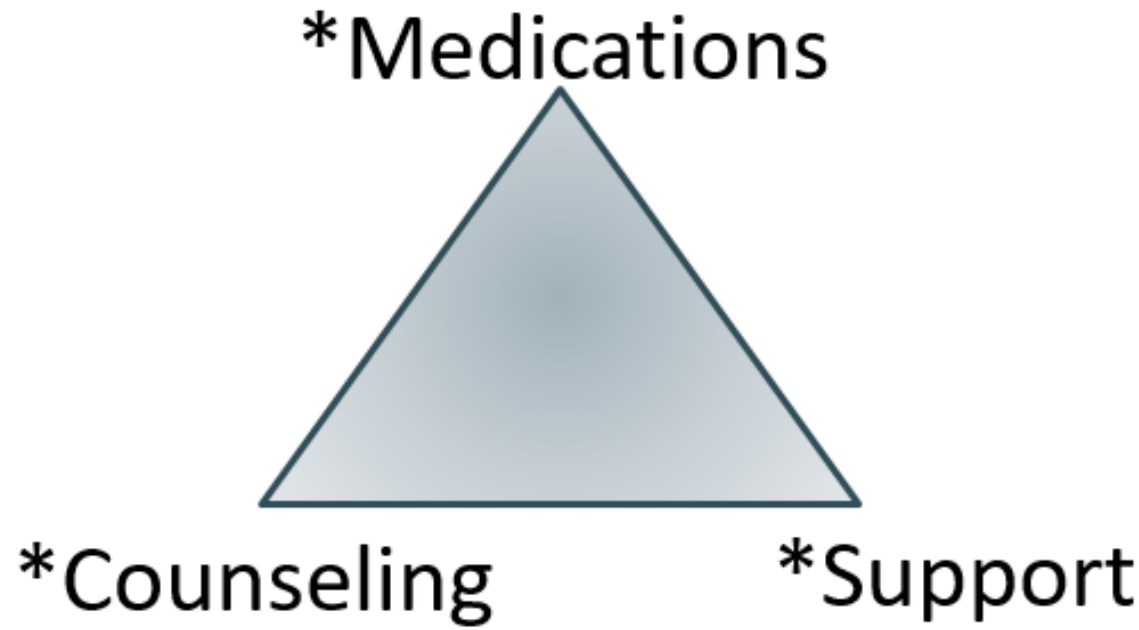
- **Questions That Imply Blame or Shame:**
  - "Don't you care about what this is doing to your family?"
  - "What's wrong with you that you feel the need to use [substance]?"
  - "Why can't you just stop?"
  - "Are you trying to mess up your life?"

- **Closed-Ended Questions That Limit Disclosure:**
  - "You're not using drugs, are you?" (This may discourage honesty due to the leading nature of the question.)
  - "You're just using it occasionally, right?"
  - "You haven't tried anything else, have you?"

- **Judgmental or Accusatory:**
  - "Why are you using drugs? Don't you know that it's bad for you?"
  - "Do you realize how stupid it is to be drinking or using [substance]?"
  - "You're not one of those drug addicts, right?"
  - "Why would you ever want to use something like that?"
  - "Aren't you worried that this will ruin your future?"

SUD Treatment

Components of Addiction Treatment



*When appropriate

Source: https://www.samhsa.gov/treatment

Consent & Confidentiality: CA Family Code 6929

- For "Drug- or Alcohol-related problem," **12-17 yrs** may consent to:
  - Intake, Evaluation, Work-up, **Counseling**
  - Application for services
  - Development of treatment *plan….**what about the MEDS?***

  - **Medical and hospital care**
    - Naloxone - universally OK
    - Buprenorphine for 16+ (<16 needs guardian/parent)
    - *NOT* methadone
    - Not other psychotropic medication (i.e MAT for AUD, Tobacco)

MAT Consent Considerations

- ***Pregnancy related care: Age >12, Yes to PNC, Other tx?***
- ***Emancipated*** self-sufficiency based on age (15yrs+), living apart from parents, & managing their own finances, regardless of income source.
- *When in doubt, treat pain & suffering now*, use resources to help you.
- Start life saving treatment for deadly condition

Opiate Use: Use Disorder (OUD)?

Use, High Risk Use, Use Disorder?

Recall that addiction is a clinical syndrome presenting as…

- Loss of **C**ontrol
- **C**ompulsive use
- **C**ontinued use despite harm
- **C**ONSEQUENCES

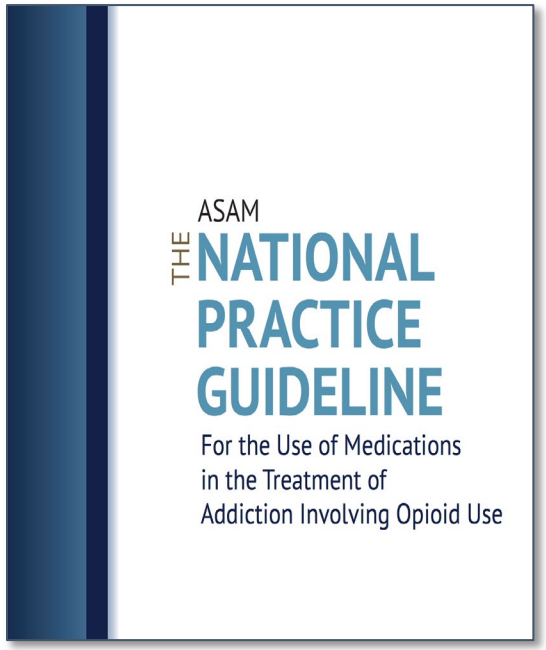
} **Worrisome Medication Taking Behaviors**

Savage SR et al. *J Pain Symptom Manage* 2003

- **Addiction** is a **chronic relapsing brain disorder**
- **Physical Dependence** is a **physiologic adaptation**

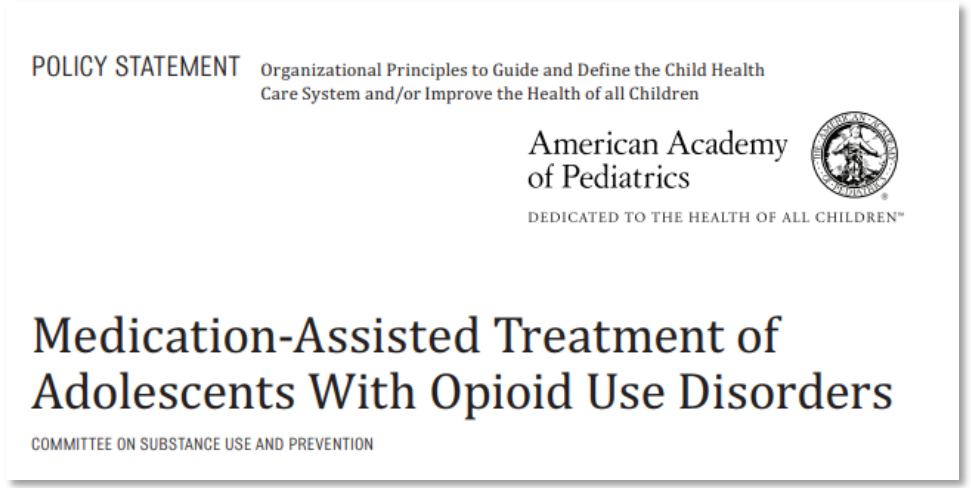
Slide courtesy of The Immersion Training in Addiction Medicine Program

When is Pharmacotherapy Indicated?



American Society of Addition Medicine (2015): Clinicians should consider treating adolescents using the full range of treatment options, including pharmacotherapy

American Academy of Pediatrics (2016): Encourage pediatricians to consider offering medication treatment or discuss referrals to other providers for this service


POLICY STATEMENT Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

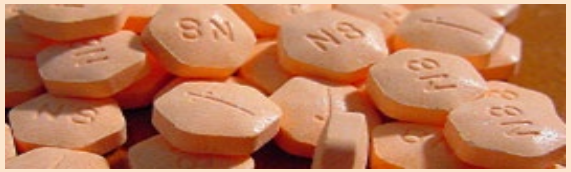
Medication-Assisted Treatment of Adolescents With Opioid Use Disorders

COMMITTEE ON SUBSTANCE USE AND PREVENTION

Committee on Substance Use and Prevention Medication-assisted treatment of adolescents with opioid use disorders. (2016) *Pediatrics.*
Kampman K & Jarvis M. (2015) *Journal of Addiction Medicine*.

Slide courtesy of The Immersion Training in Addiction Medicine Program

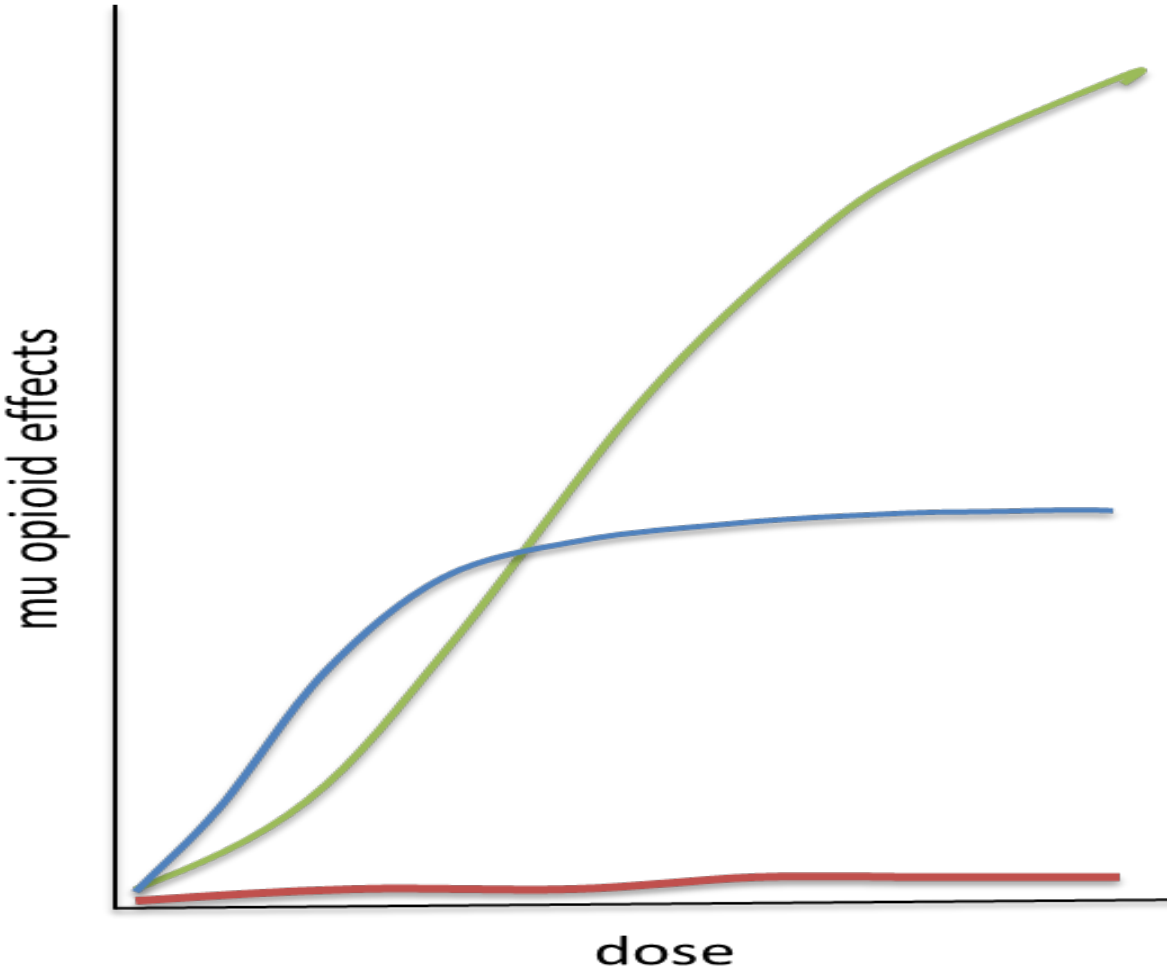
Medications for Opioid Use Disorder

Methadone	Buprenorphine ± Naloxone	Naltrexone
Full mu (opioid) receptor agonist	**Partial mu receptor agonist**	**Mu receptor antagonist (blocker)**
	 	
Oral (often solution)	**Sublingual (tab, film), IV, IM, subcutaneous injection, transdermal patch**	**Intramuscular injection (extended release) or oral Ex: "Vivitrol," "ReVia"**

Dispensed at designated clinics

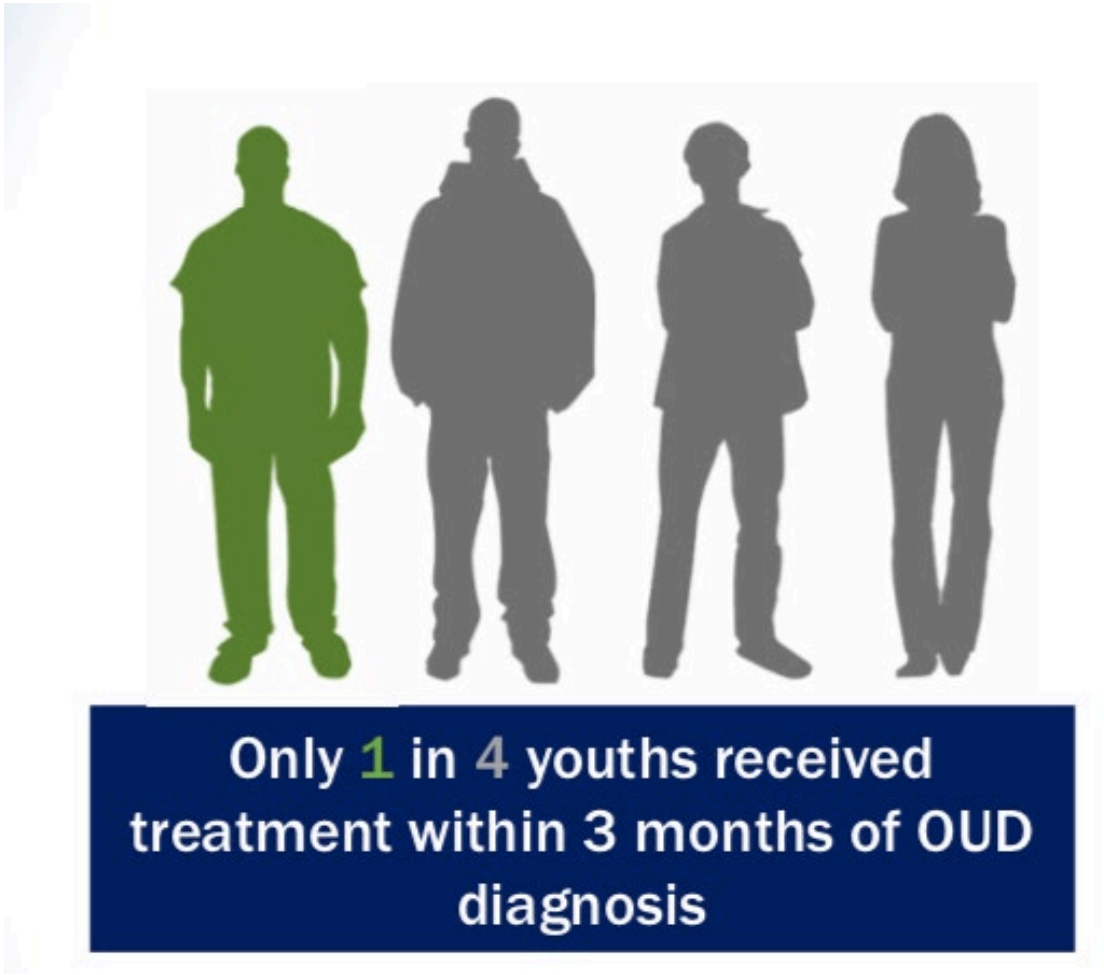
Option once abstinent

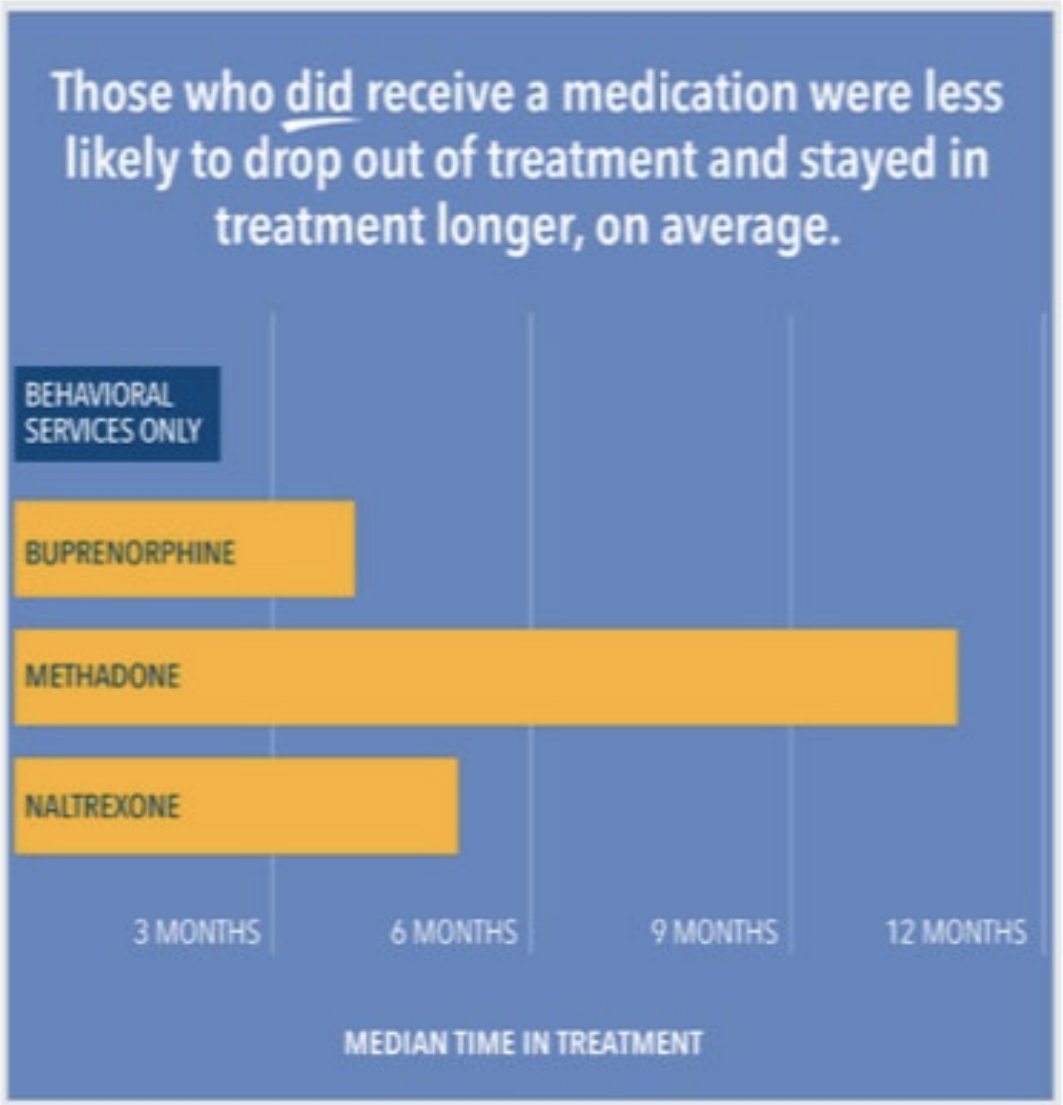
OUD Medications Mechanisms of Action



Full agonists	Methadone, oxycodone, fentanyl
Partial agonists	Buprenorphine
Antagonists	Naltrexone and Naloxone (Narcan)

EARLY Interventions: Lack of Timely Medication for Adolescents



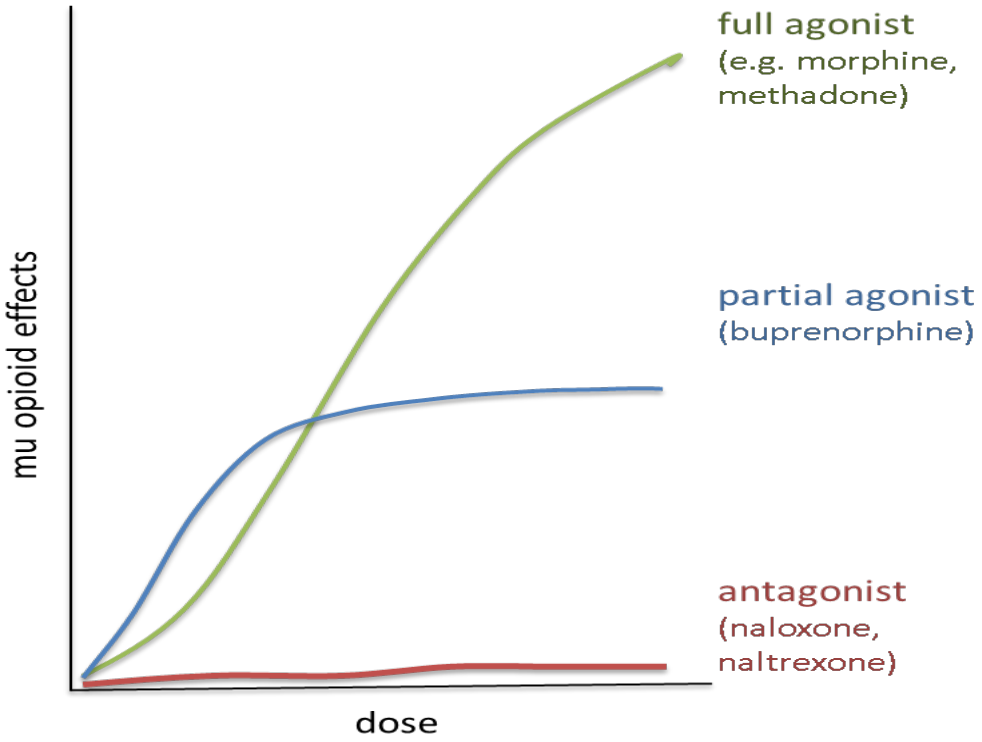


Hadland et al. (2018) *JAMA Pediatr.*
https://www.eurekalert.org/pub_releases/2018-09/bmc-bsa091018.php

Slide courtesy of The Immersion Training in Addiction Medicine Program

What's Special about Buprenorphine?

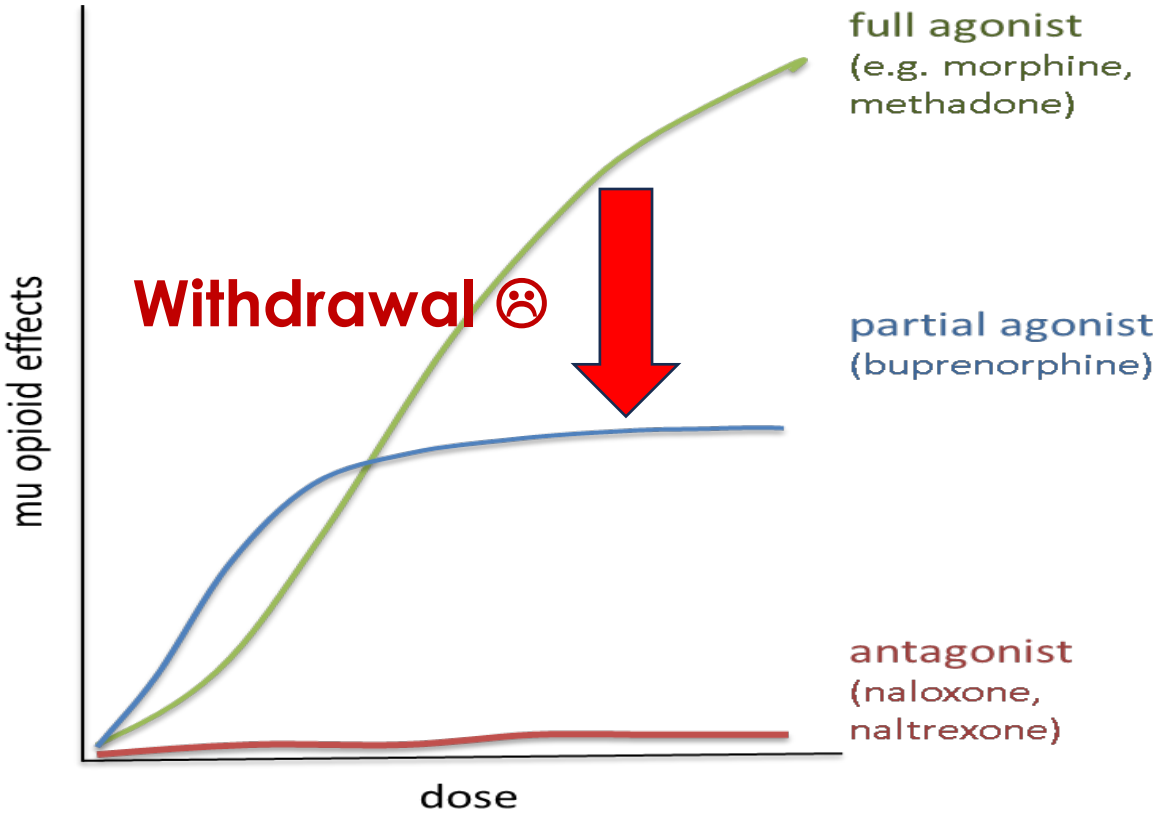
- **Partial agonist** at mu opioid receptor, antagonist at kappa receptor (**antidepressant**)
- **Ceiling Effect:** Minimal respiratory suppression with plateau effect in adults and **no respiratory arrest** when used as prescribed
- **High affinity** to and slow dissociation from receptors
  - Can receive other opioids while on bup
- **Long-acting:** Half-life 24-36 hours



SAMHSA, 2018
Orman & Keating, 2009

What's "Tricky" about Buprenorphine?

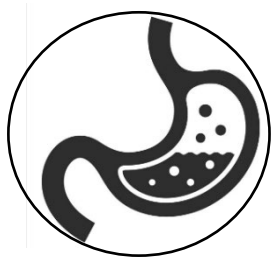
- Blocks and displaces other opioids
- Can precipitate withdrawal
- Most start protocols require patient in withdrawal



SAMHSA, 2018
Orman & Keating, 2009

Signs of Opioid Withdrawal?

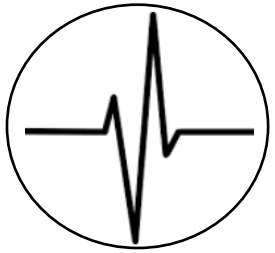
GI Upset
0-5



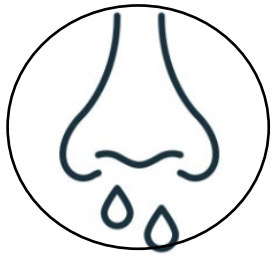
Muscle Aches
0-4

Tremors
0-4

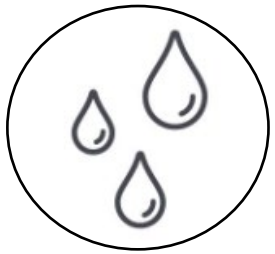
Pulse
0-4



Goosebumps
0-5



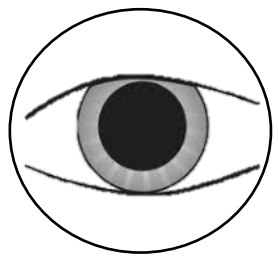
Tears & Runny Nose
0-4



Sweating
0-4

Anxiety
0-4

Restlessness
0-5

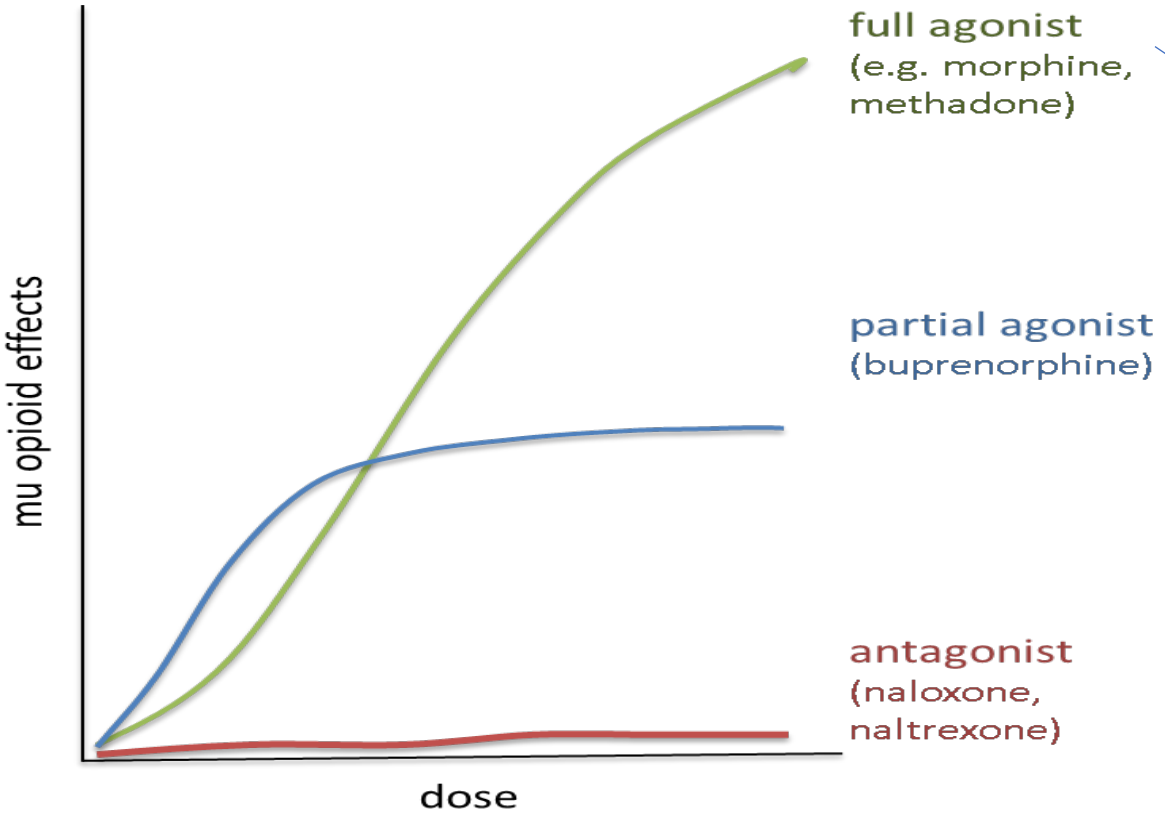


Yawning
0-4

Pupil Size
0-5

Clinical Opiate Withdrawal Scale (COWS): score 5-12 mild, 13-24 mod, 25-36 mod severe, 36-48 severe

Pharmacology of Starting Buprenorphine



Natural progression to withdrawal
COWS score increases

Suboxone given

Partial agonism
Relief of symptoms

"Comfort Meds" for Opioid Withdrawal Are Essential!

Anxiety	Gabapentin 300-600mg TID OR hydroxyzine 50mg q6h
Insomnia	Trazodone 50mg QHS, Melatonin
Nausea/Vomiting	Ondansetron q4h (check QTC)
Diarrhea	Loperamide 4mg
Myalgias	Tylenol 500mg q6h Cyclobenzaprine 5-10mg OR Tizanidine 2-4mg TID

Starting Buprenorphine:
Many Different Approaches

"Standard:" Gradual, often used for short-acting opioids	*"Macro:" Rapid, often used for fentanyl*
• Wait for withdrawal • (COWS >8)	• Wait for withdrawal (COWS >8)
• Give 2-4mg q2h x6 • 12mg day 1	• Give 8-16mg and re-evaluate in 1 hour
• 16mg on day 2	• 16-32mg per day

Starting Bup Outpatient?

- Shared decision-making: **START ASAP**, Inpatient can help?
- Set expectations. Provide guidance and **encouragement**
- **Arrange close follow-up, use 24/7 MAT MD supports**
- **No lab tests are necessary**
- Comfort meds are essential
- Risks/benefits: **Safer than overdose from fentanyl**

Bridge to Treatment: Great Resources

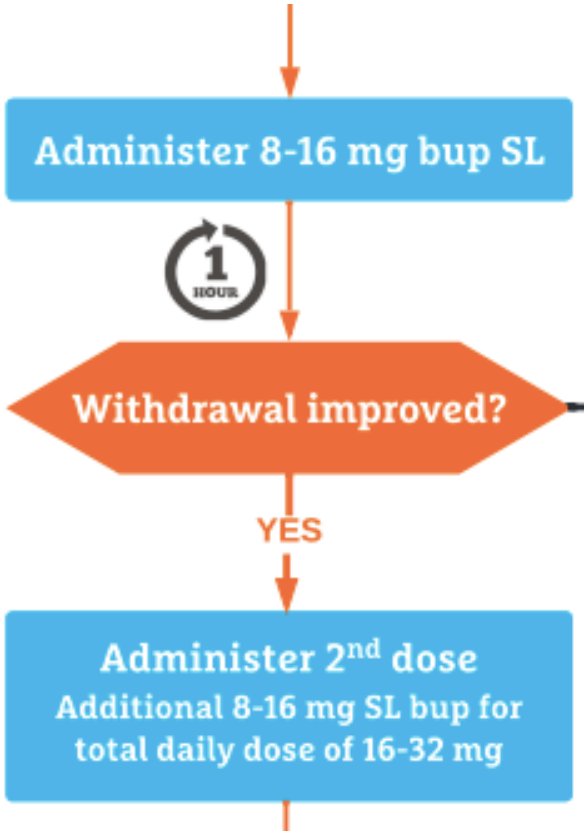
We encourage shared decision making with patient for dosing.

*** Opioid Withdrawal:**

At least one clear objective sign (prefer ≥ 2): Tachycardia, mydriasis, yawning, rhinorrhea, vomiting, diarrhea, piloerection. **Ask the patient if they are in bad withdrawal** and if they feel ready to start bup. If they feel their withdrawal is mild, it is too soon.

If unsure, use COWS (clinical opioid withdrawal scale). Start if COWS ≥ 8 AND objective signs.

Typical withdrawal onset >12 hours after last short acting opioid use (excluding fentanyl); variable after last use of fentanyl or methadone (may be >72 hours).



If no improvement or worse consider:

Undertreated withdrawal: Occurs with lower starting doses and heavy tolerance; improves with more bup (add'l 8-16 mg SL).

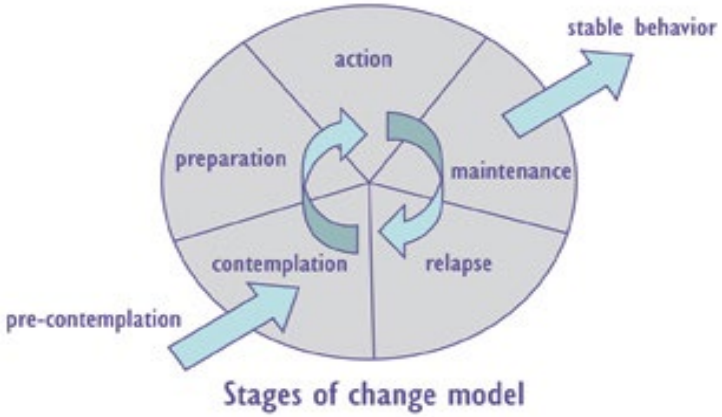
Other substance intoxication or withdrawal: Stimulant intoxication, alcohol/benzo/xylazine/GHB withdrawal. Continue bup; manage additional syndromes.

Bup side-effects: Nausea, headache, dysphoria. Continue bup, treat side-effects with supportive medications.

Other medical/psychiatric illness: Anxiety, sepsis, influenza, DKA, thyrotoxicosis, etc. Continue bup, manage underlying condition.

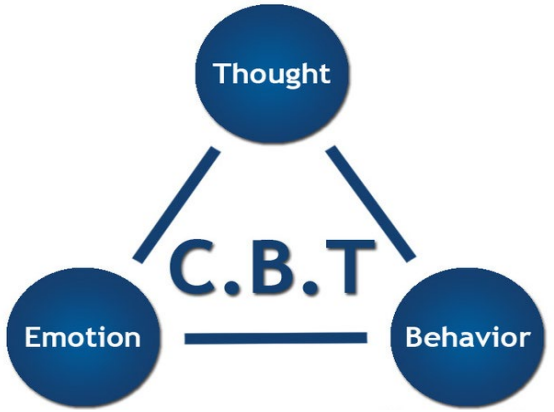
Behavioral Approaches for Adolescents with SUD

Motivational Interviewing

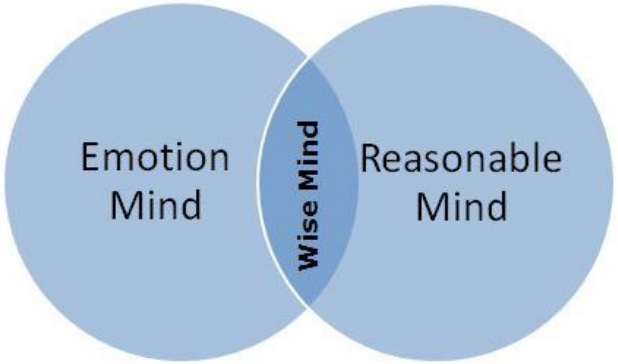


Stages of change model

Cognitive Behavioral Therapy



Dialectical Behavior Therapy



Contingency Management

Slide courtesy of The Immersion Training in Addiction Medicine Program

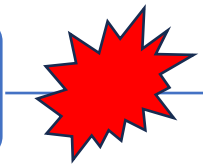
Contingency Management

Incentive-based programs can improve patient outcomes on retention & substance use behaviors when implemented with a community treatment program

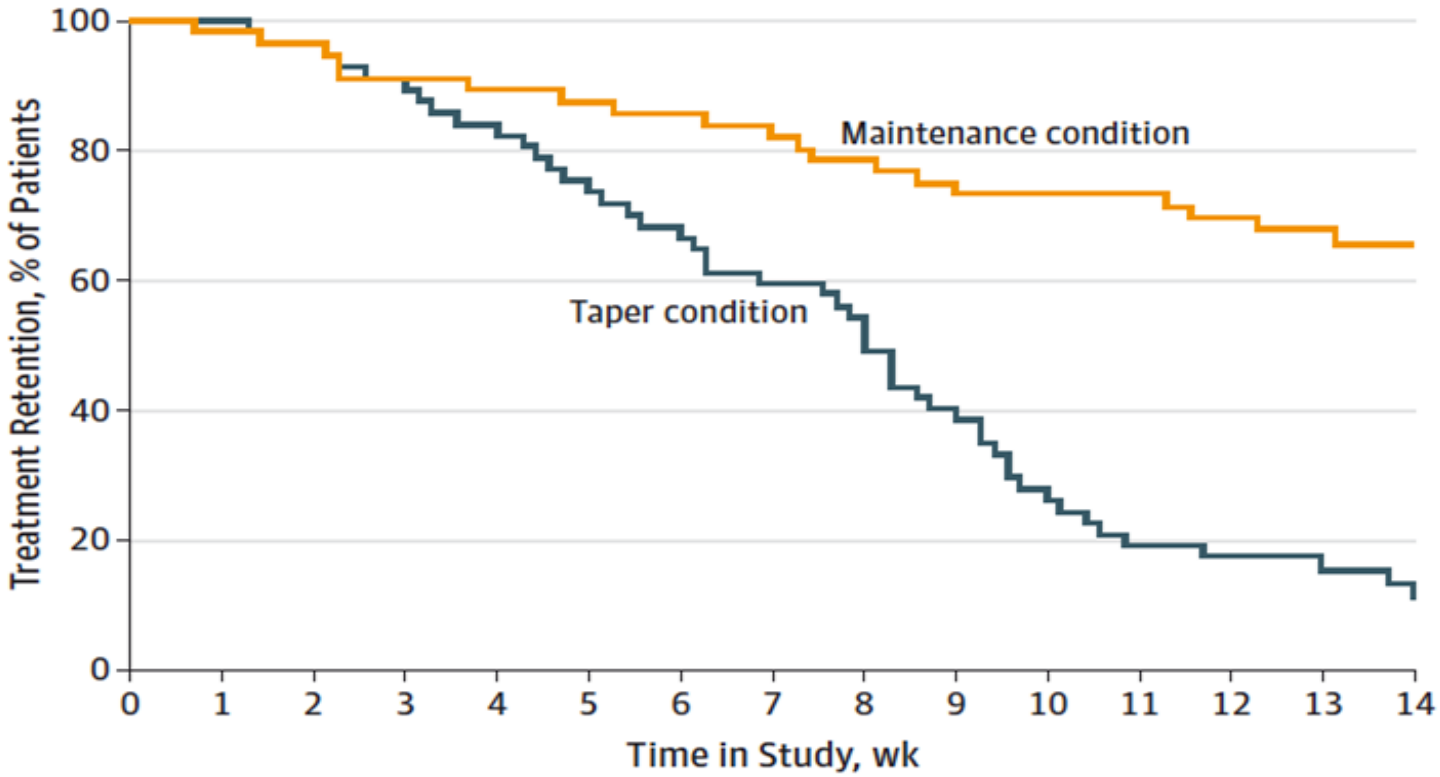
Behavior → **Consequence**

Family Based Therapies

- Risk Reduction Family Therapy
- Multidimensional Family Therapy
- Brief Strategic Family Therapy
- Functional Family Therapy



Bup Taper = Relapse; MOUD = Recovery



Mean buprenorphine dosage, mg/d															
Maintenance condition	14.9	15.1	15.2	15.3	15.3	16.0	15.9	16.2	16.2	16.6	16.8	16.2	16.1	15.8	14.6
Taper condition	15.6	15.6	15.4	15.3	14.2	9.7	5.7	3.1	0.6	0.2	0	0	0	0	0

Fiellin DA, et al. Primary care-based buprenorphine taper vs. maintenance therapy for prescription opioid dependence: a randomized clinical trial. JAMA Intern Med. 2014 Dec;174(12):1947-54. PMID: 25330017.

Increased Bup Access = Decrease ODs

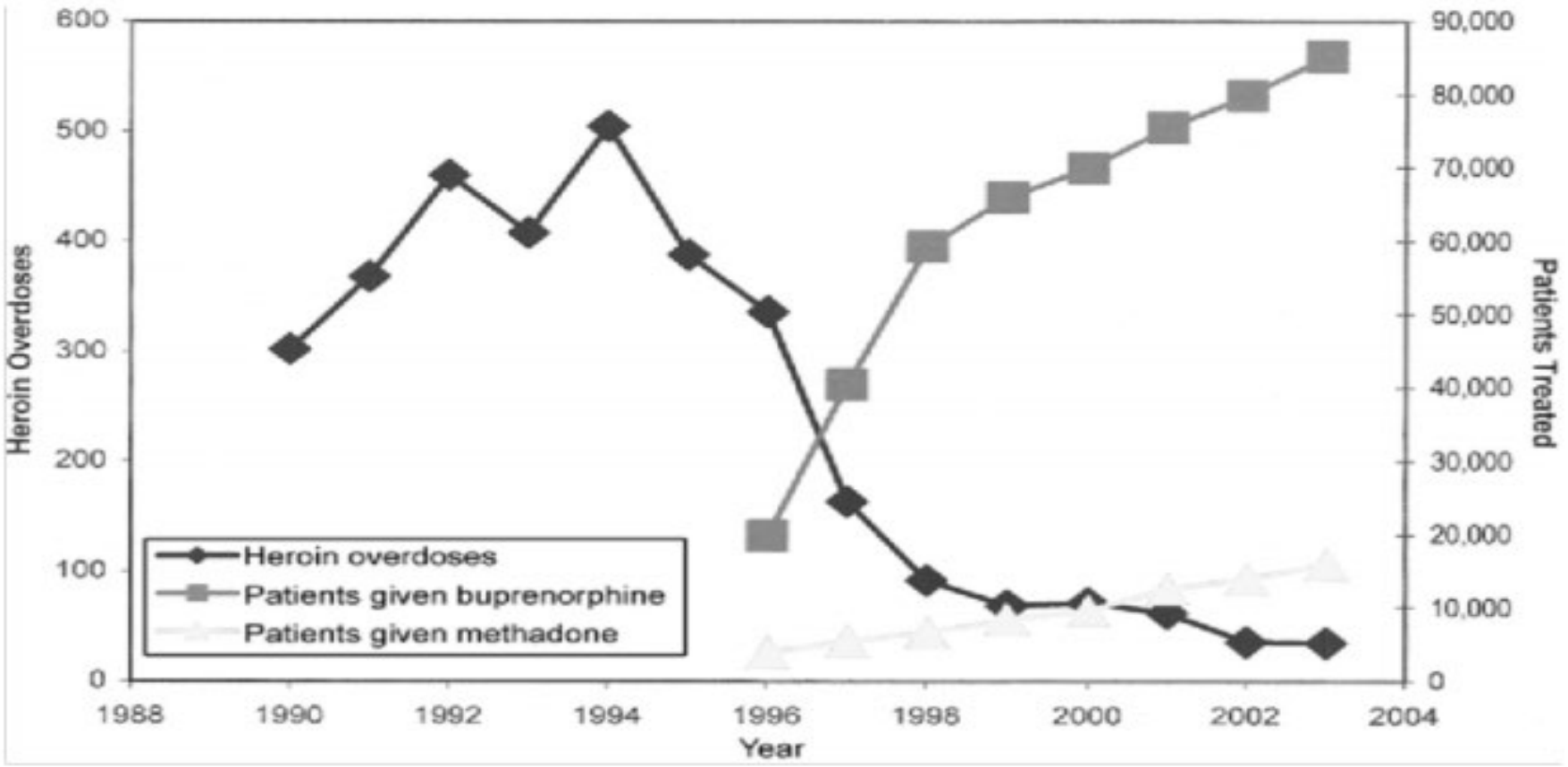


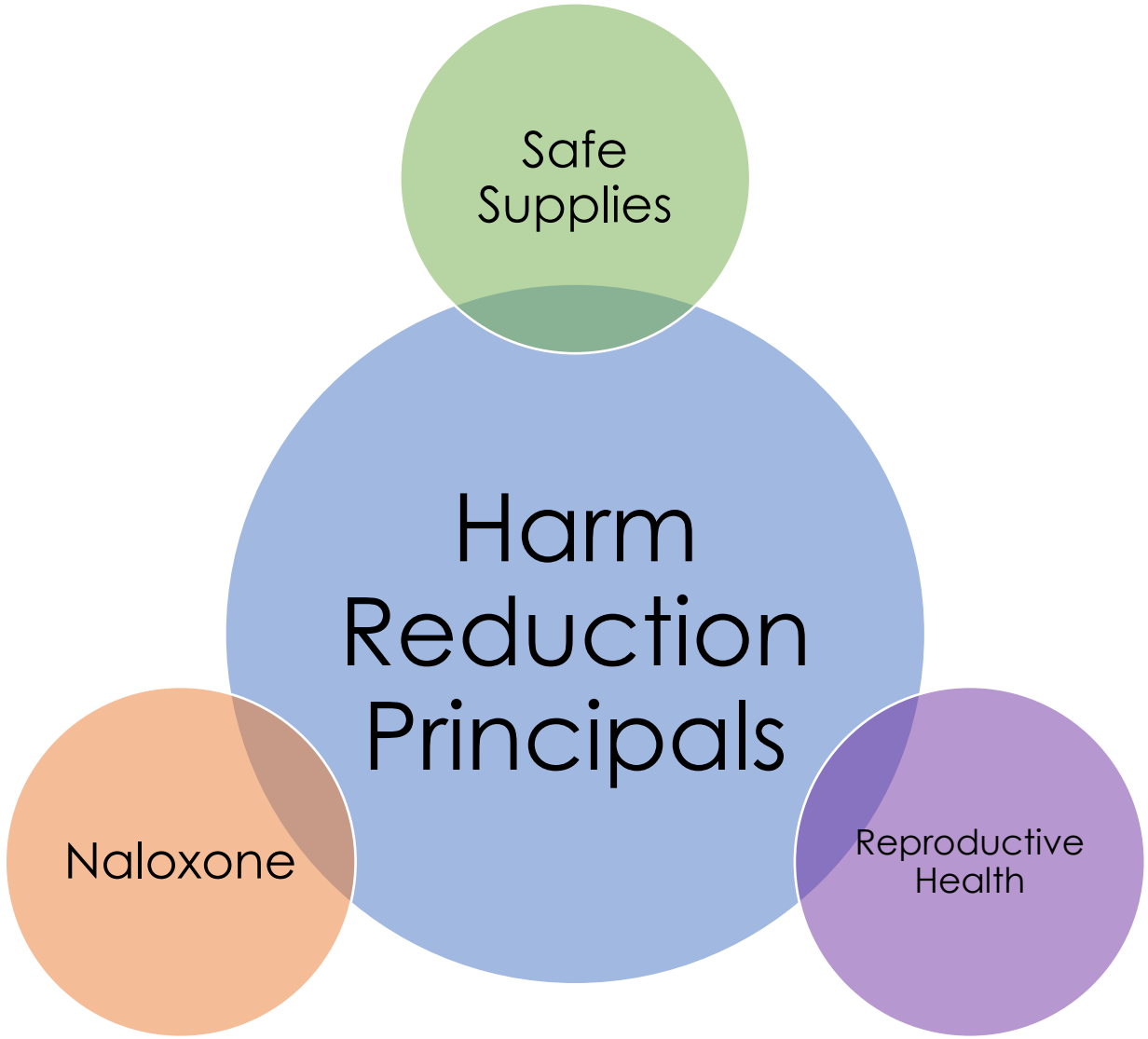
Figure 2. From: Carrieri, Maria Patrizia, et al. "Buprenorphine use: the international experience." Clinical Infectious Diseases 43.Supplement 4 (2006): S197-S215.

Auriacombe M, Fatséas M, Dubernet J, Daulouède JP, Tignol J. French field experience with buprenorphine. *Am J Addict*. 2004; 13:S17-S28. doi: 10.1080/10550490490440780.

Engaging Adolescents in Harm Reduction

NATIONAL HARM REDUCTION COALITION

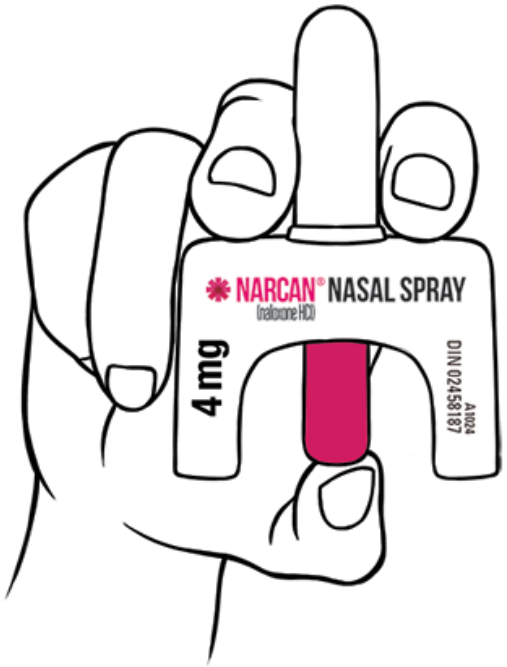
Harm reduction is a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use. Harm Reduction is also a movement for social justice built on a belief in, and respect for, the rights of people who use drugs.



DECREASE:

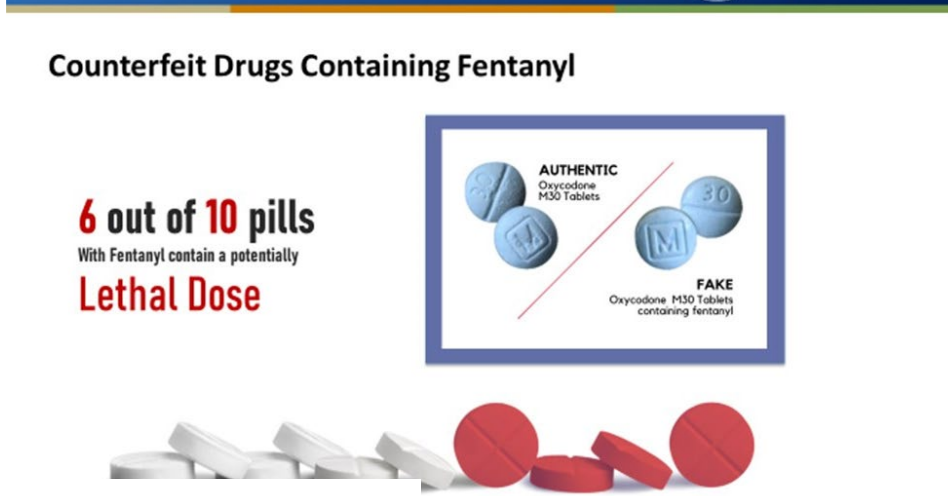
Overdose Deaths
Transmission of HIV, Hepatitis B and C
Skin Infections
Endocarditis
Pregnancy

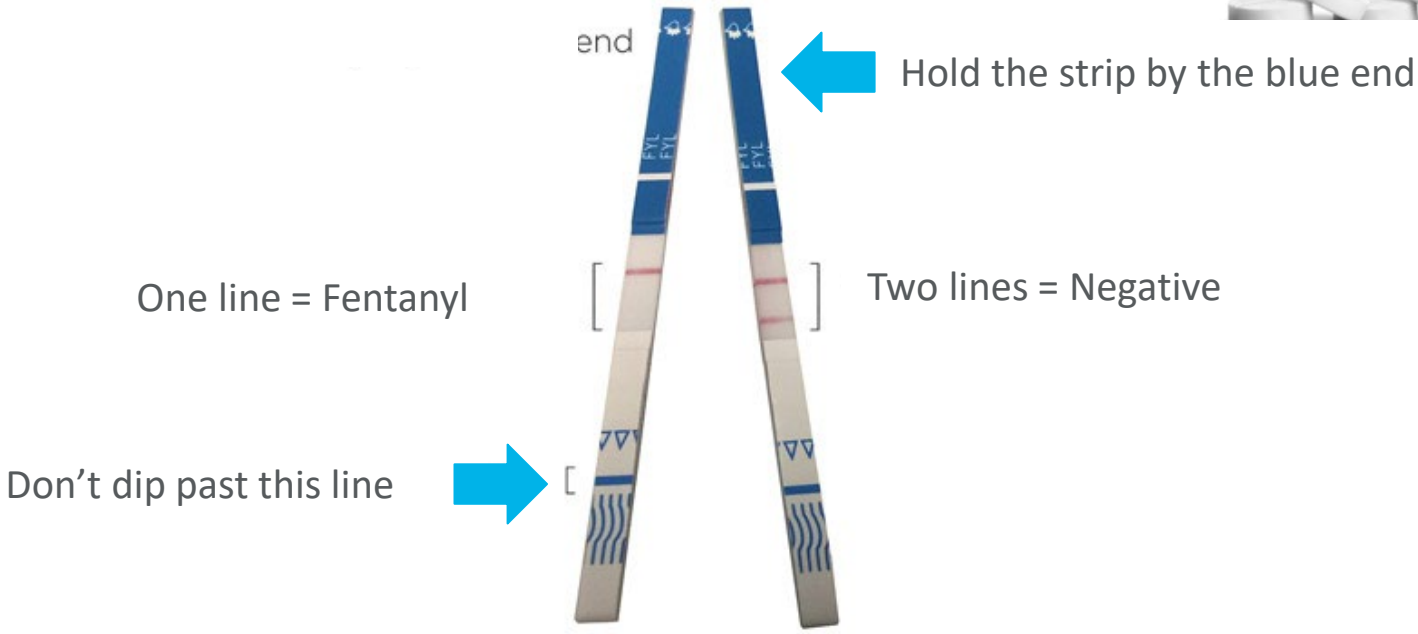
Naloxone (Narcan):
What patients should know



- Reverses opioid overdose
- Never use alone: Use Narcan on others, not on yourself
- One-time use only
- Continue giving doses if needed
- Always call 911 and go to hospital

Know what's in the supply:
Fentanyl Test Strips



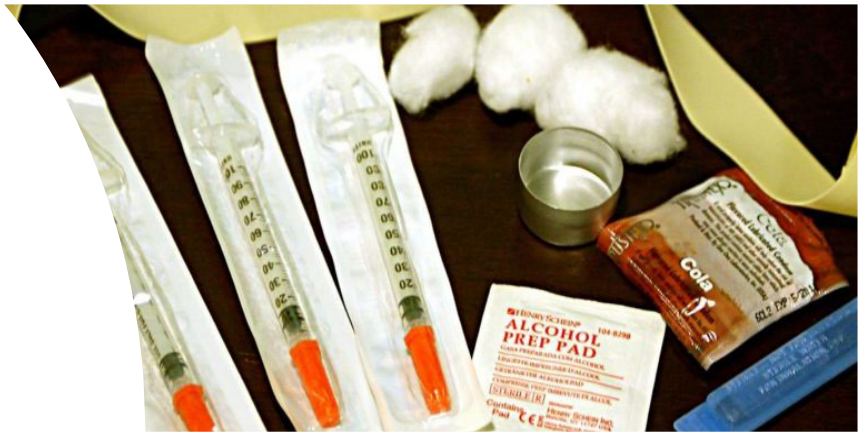


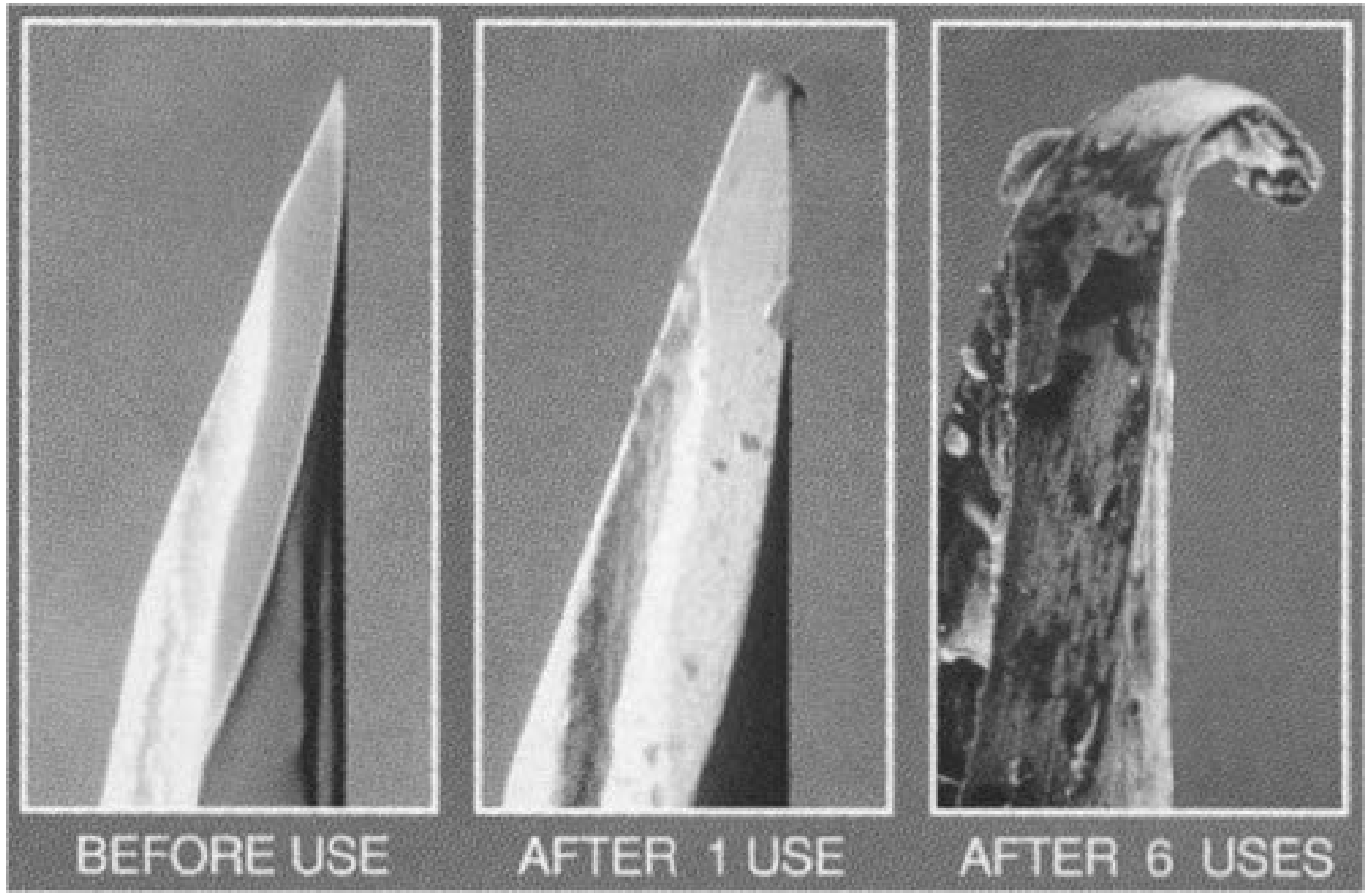
- ***Help identify unintentional fentanyl in drugs***
- ***MUST BE dissolved to test!*** ***(Pills <u>cannot</u> have been tested.)***

Safe Supplies

Safe Syringe Programs(SSP):

Patients are FIVE times more likely to enter treatment and nearly THREE times more likely to reduce or discontinue IVDU





https://www.cdc.gov/ssp/syringe-services-programs-factsheet.html

Reproductive Health

Safety

- Screen for **abuse/violence** and plan for safety, if necessary

Birth control method

- LARCs, OCPs, Depo-Provera
- Minimum, condoms and/or Plan B

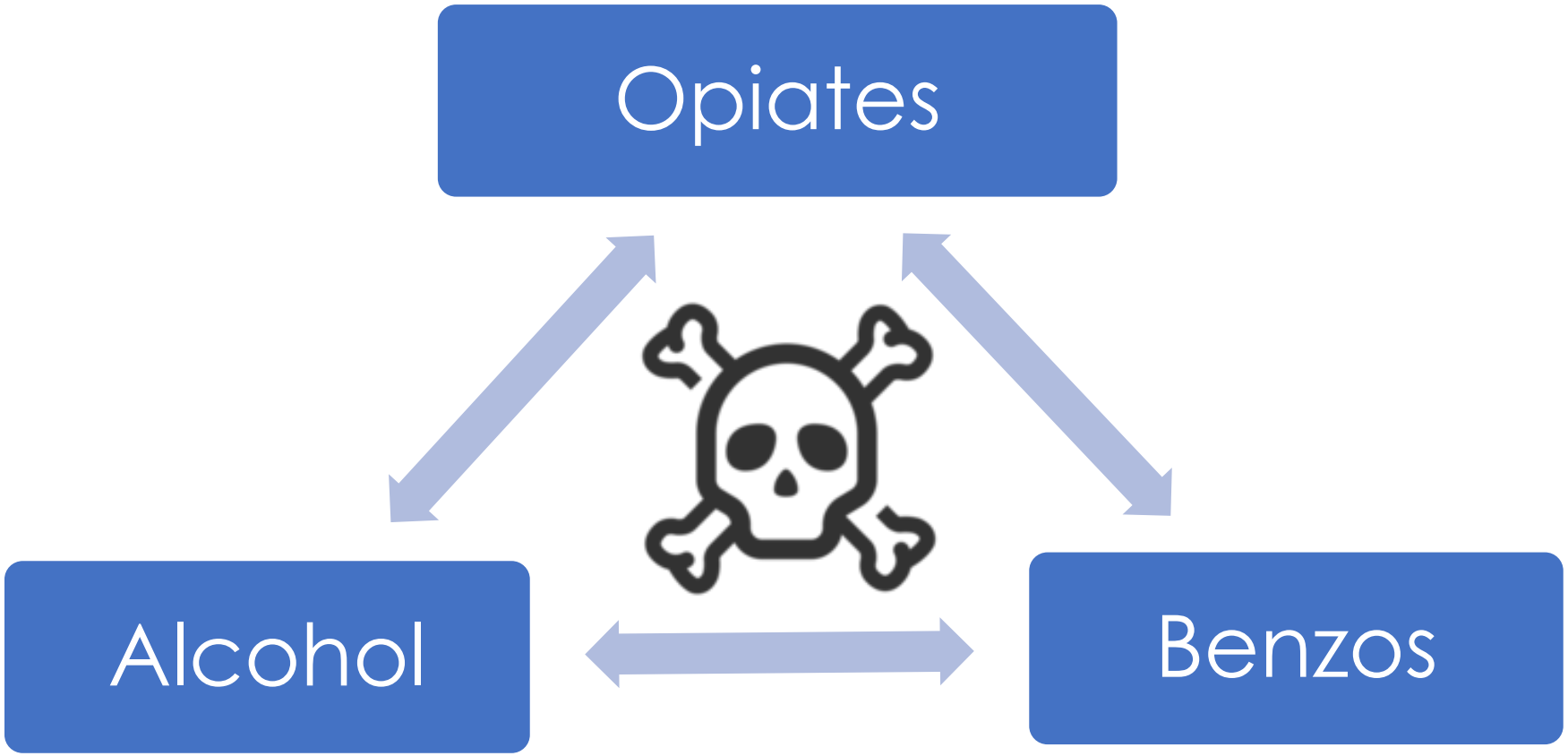
Screening

- STIs: HIV, GC/CT, syphilis, hep B/C
- Pregnancy

Consider PrEP and/or PEP

- PrEP: Daily oral (Truvada or Descovy) or injectable
- PEP: Taken within 72 hours of exposure

Overdose Triad

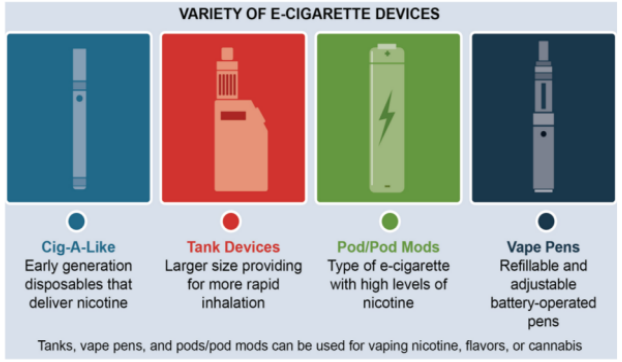


Other Substances of Abuse

Vaping/Nicotine

E-cigarettes & vaping

- Products used to deliver nicotine, cannabis (THC, CBD), flavorings, chemicals, and other substances. Devices may be referred to as
  - E-cigs
  - Vapes
  - Vape pens, dab pens, and dab rigs
  - Tanks
  - Mods
  - Pod-Mods



- Electronic nicotine delivery systems (ENDS) Use of e-cigarette, or vaping, products is sometimes referred to as “vaping” or “juuling.”
- E-cigarette, or vaping, products used for dabbing are sometimes called “dab” pens.

Offer Tx for Vaping/Nicotine

- Nicotine Patch
- Nicontine Gum/Lozenge
- Buproprion (Wellbutrin) SR up to 300mg/day or XL 150mgDay
- Varenicline(Chantix) >17 year old

Why We V

- THC increasi
  potent, espe
  vaping
  - Cannabis hy
  - Worsening
    anxiety/psyc

Can Help

MAT:
ntin or N-
steine
underlying
insomnia

Marijuana Treatment

Cannabis Use Disorder: Treatment

- **The mainstay of CUD treatment is psychosocial/behavioral**

- Evidence across adolescents and adults supports
  - Motivational Interviewing (MI)
  - Cognitive-Behavioral Therapy (CBT)
  - Family Interventions
- Effect sizes are generally small to modest, and long-term abstinence rates are low
- Contingency management (CM) can be used to reinforce abstinence and improve outcomes

Cannabis Use Disorder: Pharmacotherapy

Human Laboratory Controlled Trials		Pilot Controlled Trials		Fully Powered Controlled Trials	
Discouraging	Encouraging	Discouraging	Encouraging	Negative/Null	Positive
Bupropion SR (N=10) (Haney et al., 2001)	Rimonabant (N=63, 36) (Huestis et al., 2001; Huestis et al., 2007)	Divalproex (N=25) (Levin et al., 2004)	Buspirone (N=50) (McRae-Clark et al., 2009)	Dronabinol (N=156) (Levin et al., 2011)	N-acetylcysteine (N=116 **adolescents**) (Gray et al., 2012)
Nefazodone (N=7) (Haney et al., 2003)	Dronabinol (N=7, 8) (Haney et al., 2004; Budney et al., 2007)	Bupropion SR (N=106, 22) (Carpenter et al., 2009; Penetar et al., 2012)	Gabapentin (N=50) (Mason et al., 2012)	Venlafaxine XR (N=103) (Levin et al., 2013)	Nabiximols (N=128) (Lintzeris et al., 2019)
Divalproex (N=7) (Haney et al., 2004)	Lofexidine+ Dronabinol (N=8) (Haney et al., 2008)	Nefazodone (N=106) (Carpenter et al., 2009)	Oxytocin (N=16) (Sherman et al., 2017)	Buspirone (N=175) McRae-Clark et al., 2016)	
Baclofen (N=10) (Haney et al., 2010)	Zolpidem CR (N=20) (Vandrey et al., 2011)	Atomoxetine (N=78) (McRae-Clark et al., 2010)	Nabiximols (N=9, 40) (Trigo et al., 2016, 2018)	Lofexidine+ Dronabinol (N=122) (Levin et al., 2016)	
Mirtazapine (N=11) (Haney et al., 2010)	Nabilone (N=11) (Haney et al., 2013)	Escitalopram (N=52) (Weinstein et al., 2014)	PF-04457845 (FAAH inhibitor) (N=70) (D'Souza, 2019)	N-acetylcysteine (N=302) (Gray et al., 2017)	
Naltrexone (N=14, 31, 29) (Wachtel & de Wit, 2000; Haney et al., 2003; Cooper & Haney, 2010)	Nabiximols (N=51) (Allsop et al., 2014)	Lithium (N=41) (Johnston et al., 2014)			
Quetiapine (N=14) (Cooper et al., 2013)	Naltrexone (N=51) (Haney et al., 2015)	Vilazodone (N=76) (McRae-Clark et al., 2016)			
Cannabidiol (N=31) (Haney et al., 2016)	Zolpidem+Nabilone (N=11) (Herrmann et al., 2016)	Topiramate (N=66 **adolescents**) (Miranda et al., 2016)			
Tiagabine (N=12) (Wesley et al., 2018)	Guanfacine (N=15) (Haney et al., 2019)	Nabilone (N=18) (Hill et al., 2017)			

Cannabis Use Disorder: Pharmacotherapy

Recommendations: Cannabis Use Disorder

- N-Acetyl Cysteine is NOT on DHS formulary ☹ (working on this)
  - Start at 600 mg PO Qhs x 1 day→ 600 mg PO BID x 2 days → 1200 mg PO BID
- Consider:
  - Gabapentin 100 mg PO TID to start and titrate up to 300-600 mg PO TID
  - Buspar 10 mg PO BID to start and increase up to 30 BID
  - If insomnia is the most concerning symptom:
    - Consider Benadryl 25-50 mg PO Qhs
    - Guanfacine 1-2 mg PO Qhs (this can also be helpful for ADHD/impulsivity)

***** Please be mindful that Gabapentin can be abused and has street value**

Decrease ETOH Healthcare Costs

Can MAT for AUD decrease admissions?

51% Decrease AUD Readmission

AUD

Treatment Inequities

12% Population has AUD:
5.4% AUD patients Received MAT

LESS if: Medicaid or Latinx –
Male 1.8%, Female 3.2%

Acevedo A, et al, Disparities in Alcohol Treatment Use at the Intersection of Race, Ethnicity, Gender, and Insurance. Subst Use Addctn J. 2024 Sep 29

Alcohol Use: Low Barrier MAT

Alcohol Use Disorder: Naltrexone

NNT=8

- Prescription: 25 mg PO Qday x 3 days, then 50 mg PO Qday (until 380 mg IM Qmonth)
- MOA: antagonist at the Mu opioid receptor
- Contraindication: Opioid use, pregnancy cat C, liver failure
- Side effects: GI upset (nausea/vomiting), sedation.
- Labs: Get AST/ALT at baseline (do not Rx if 5x upper limit). Get labs Q6 months for the first year.

Naltrexone (Vivitrol/Revia)

NNT= 20 for abstinence

NNT= 9 return to heavy drinking

Alcohol Use: Low Barrier MAT

Alcohol Use Disorder: Gabapentin

- Prescription: 100 mg PO TID to start and titrate up to 300-600 mg PO TID
- MOA: Binds to voltage-gated calcium channels, which seems to inhibit the release of excitatory neurotransmitters
- Contraindication: Myasthenia gravis, myoclonus
- Side effects: fatigue, sedation.
- Labs: Baseline creatinine levels before and during the treatment

Benzos (Aka "Bars")

Why We Worry

- All Illicits: Likely fentanyl
- Respiratory depression: especially with alcohol and opiates
- High Risk Dependency
- **Withdrawal can be fatal (like for alcohol)**

How We Can Help

- Educate on risk of illicit fentanyl
- May need taper?
- **Oxcarbazepine as off-label MAT for cravings?**
- Address anxiety, insomnia with non-benzo!

Inhalants (Nitrous Oxide)

Why We Worry

- Irreversible peripheral neuropathy and CNS damage
- Cardiac arrest
- Lung damage

How We Can Help

- No MAT options…
- Educate on side effects
- Assess for ACES
- Early high acuity SUD programs…

Protective Factors for SUD Substance Use (Disorder)

Emotional Self Regulation

- Spirituality/Religiosity

Problem Solving & Coping Skills

- Supportive Relationships/Available Mentors

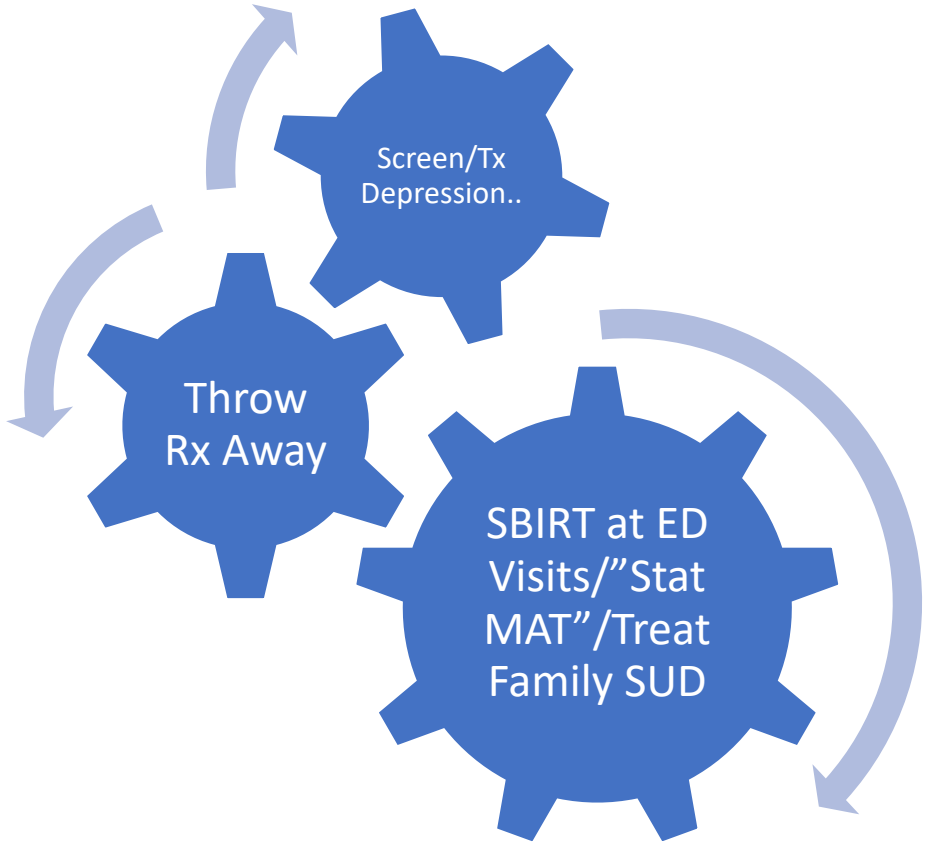
“Prosocial” Activity: School, Sports, Extracurricular

- Clear Expectations

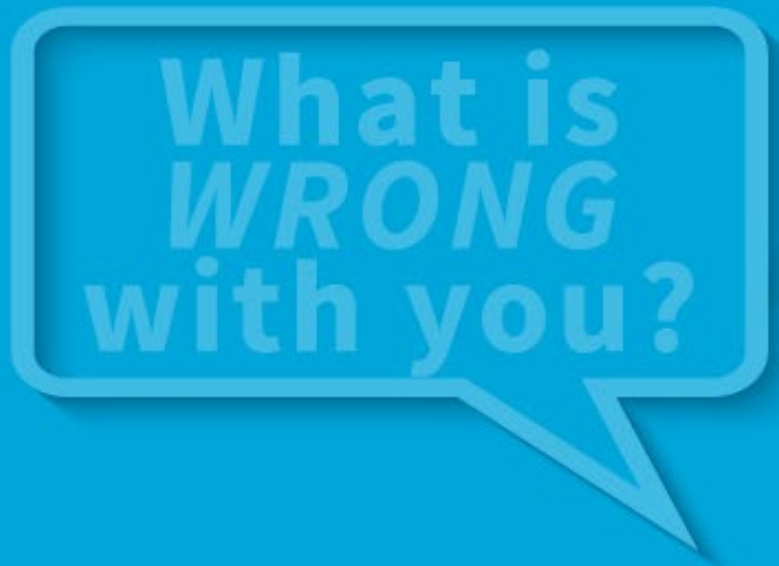
Stable Family Structure/Parental Supervision

- Physical/Psychological Safety

Prevention/"Intervention"



Trauma-informed care shifts the focus from:



to

Learn more at chcs.org/traumainformed

CHCS Center for Health Care Strategies

“Don’t ask why the addiction,
ask why the pain …
addiction is a normal response to trauma”

Gabor Mate, MD

Community Resources for Patients

LosAngelesMAT.org

Substance Abuse Service Hotline 24/7 (SASH):

844-804-7500

Never Use Alone:
877-696-1996

SUBSTANCE ABUSE SERVICE HELPLINE

1.844.804.7500

- Toll-free, **available 24/7, year-round**
- Interpretation available, including TTY

1. **Anyone** can call the SASH (adults, youth 12+), but for referrals, the person needing treatment must also be present

2. Professional staff (clinician or counselor) conduct a screening and helps to connect the caller to a treatment provider that meets their needs.

3. An appointment can be scheduled with the provider while both the person and the SASH operator are on the line.

← Close Filter

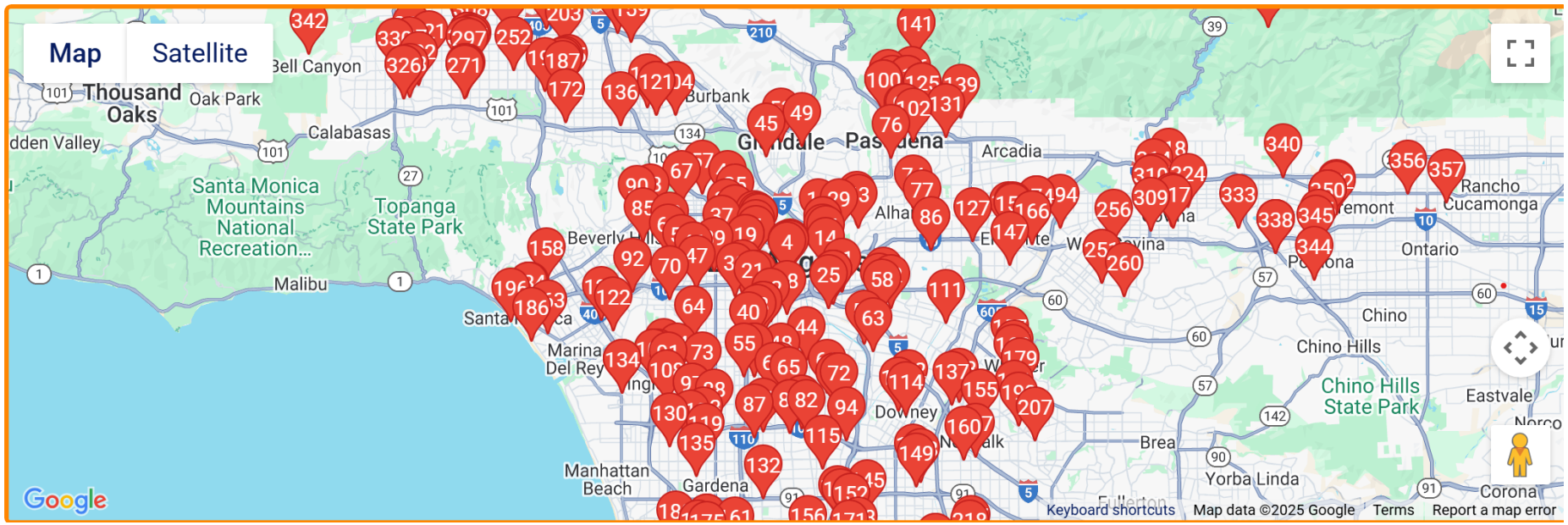
SERVICE & BED AVAILABILITY TOOL (SBAT)

Treatment Works and Recovery is Possible!

Find Available Substance Use Services Near You

If you want to speak to someone directly to access services, call the Substance Abuse Service Helpline (SASH) at **1-844-804-7500 (TTY: 711)**

Search by agency name - or - Search by address Select Range Search

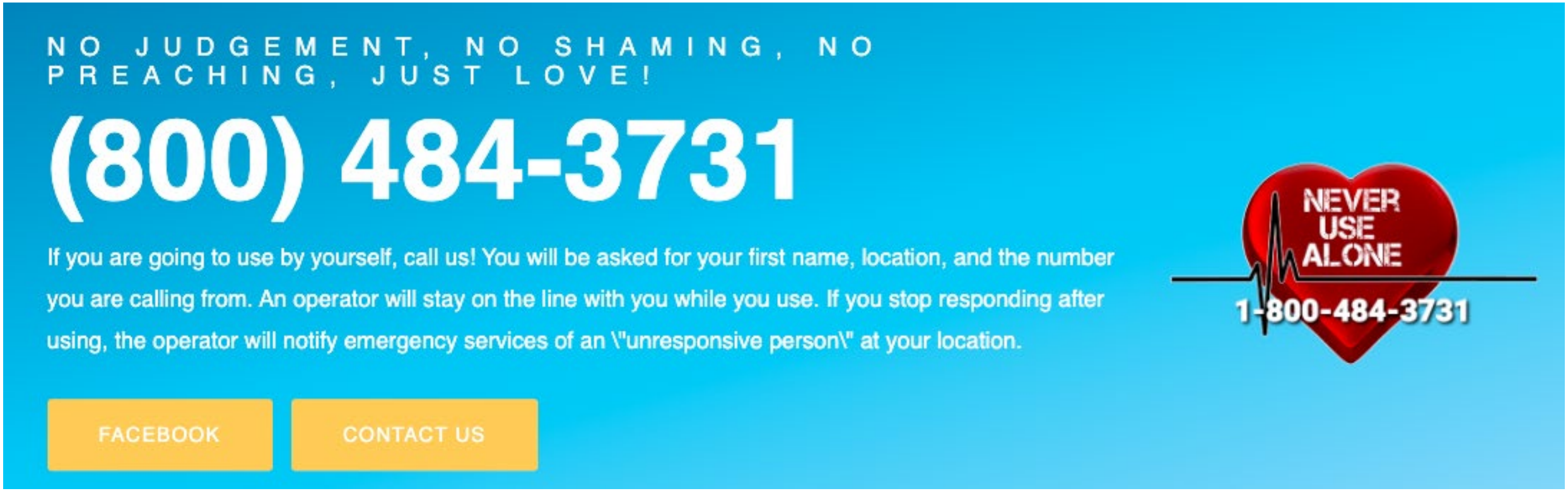


Crisis Options: PMRT over 911…

PSYCHIATRIC MOBILE RESPONSE TEAMS (PMRT)

PMRT provides non-law enforcement-based mobile crisis response for clients experiencing a psychiatric emergency in the community. PMRT consists of LACDMH clinicians designated to perform evaluations for involuntary detention of individuals determined to be at risk of harming themselves or others, or who are unable to provide food, clothing, or shelter for themselves. PMRT enables successful triage of each situation involving mentally ill, violent or high-risk individuals. PMRT provides caring,

Wellness: Never Use Alone



www.neverusealone.com

CalHOPE

HOPE LIVES HERE

Current Services » | CalHOPE Connect | Red Line | Student Support | Together for Wellness | CalHOPE Schools

Digital mental health support for youth, young adults, and families

A groundbreaking new program providing free, safe, and confidential mental health support for young people and families across the state with two easy-to-use mobile apps:

The Warm Line is a 24/7 peer-run crisis warm line offering free, confidential emotional support to Californians.

Reach out to us by call, text, or live chat.

English (833) 317-HOPE (4673)

Spanish (833) 642-7696

Live Chat

CalHOPE Schools

A no cost initiative of HOPE for California Schools

Go to Programs

About the Programs

Resources for Providers

DHS CCL Expected Practices

MAT Inpatient Consults:

0990

UCLA Number

89232

DHS After-Hours Hotline:

213-288-9090

Inpatient Rehab:

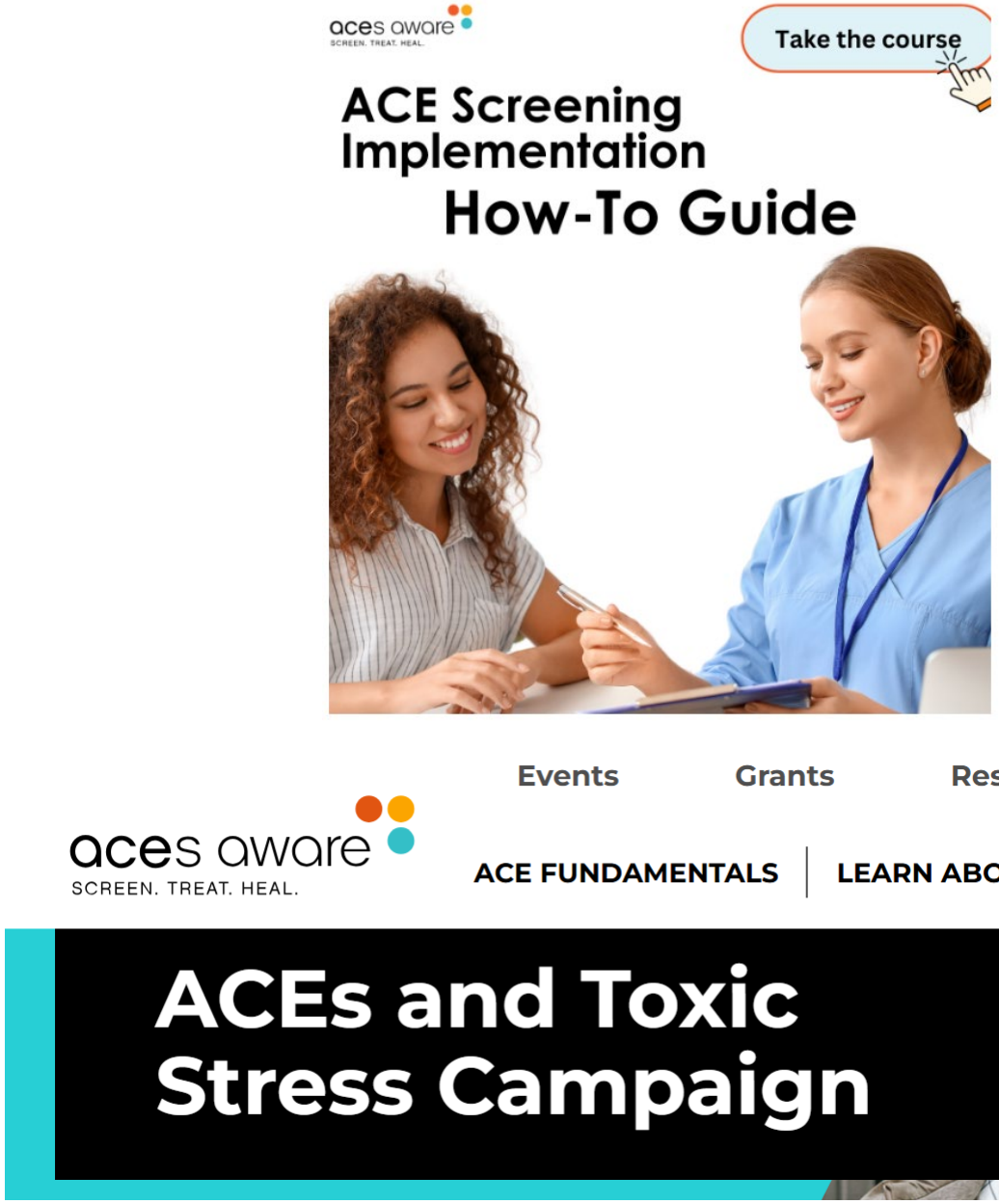
Place SW consult for SUD

Bridge to Treatment:

https://bridgetotreatment.org/

Motivational Interviewing

https://buckeyerecoverynetwork.com/motivational-interviewing/



Trauma-Informed Care

Understanding and caring for patients affected by toxic stress

cafp@familydocs.org (415) 345-8667

Addiction & Substance Use Disorder

CAFP supports family physicians through programs in education, outreach and treatment for patients with substance use disorder.

Education Voices Of OUD Stigma Podcast SUD Programs Resources

Teens & Opioids: Parents Make a Difference

Share this brochure with parents in your practice. It presents concrete steps that parents can take to encourage a safe environment. The most important message: Talk with Your Teen.

DOWNLOAD BROCURE

Narcan, Safe Syringe Supplies, Condoms…

Accessing Naloxone, Drug Testing & Test Strips

Naloxone is a Food and Drug Administration (FDA) approved medication that reverses an opioid overdose. It acts as an opioid receptor antagonist – meaning that it binds to opioid receptors and reverses and blocks the effects of other opioids. In the event of an opioid overdose, naloxone can quickly restore breathing to an individual whose breathing has slowed or stopped.

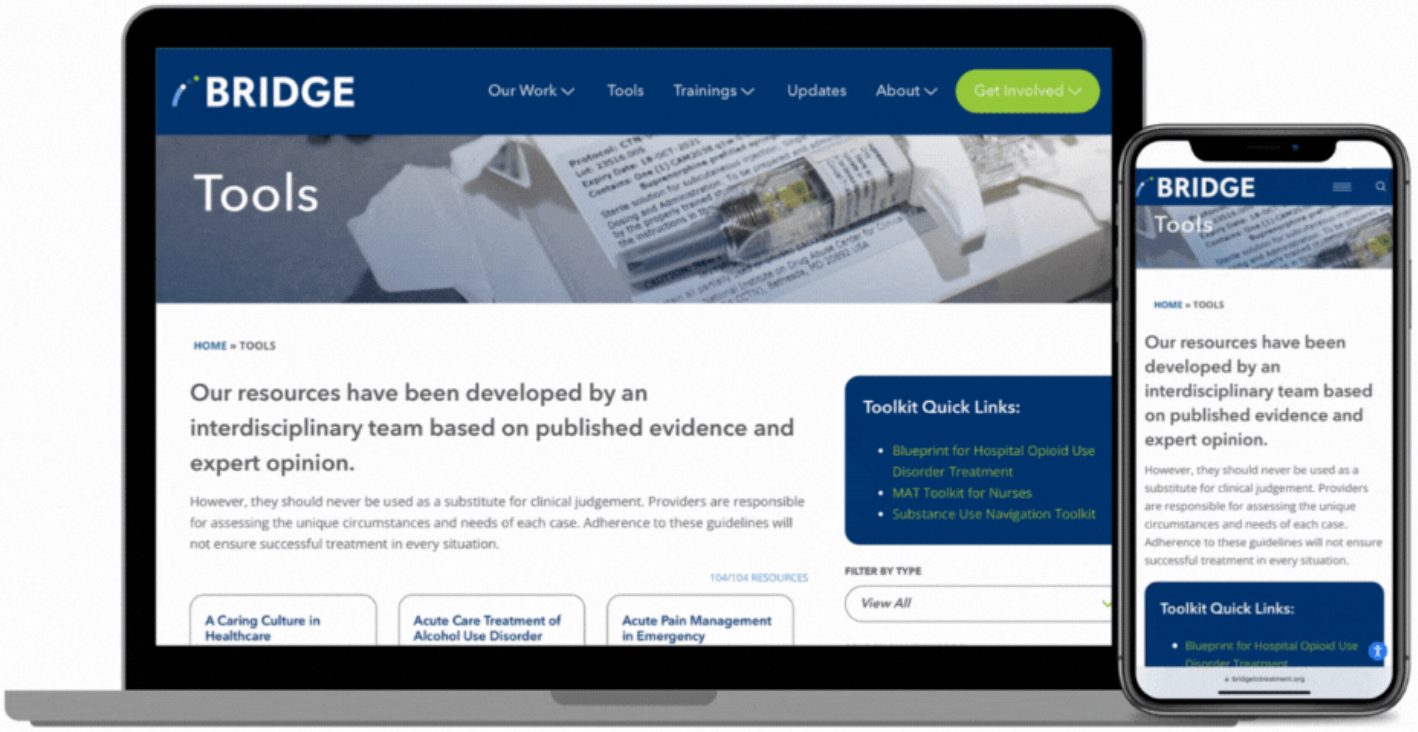
Access Naloxone from a Pharmacy
Naloxone is available to people with Medi-Cal and Medicare with a prescription from their doctor or can be supplied by participating pharmacies without a prescription. Additionally, many private insurances also cover the cost of naloxone, for more information call your insurance provider.

- Naloxone Access Options in California
- NEXT Distro California

Pharmacy Locations that Furnish Naloxone without a clinician's prescription.

eaviles@dhs.lacounty.gov
http://publichealth.lacounty.gov/sapc/public/harm-reduction/

Clinic Care Resources



Continuing education with:

CA Bridge Academy

https://cabridge.academy.reliaslearning.com/

SUD/MAT Resources – Please Consider Using

Grayken Center for Addiction
Training & Technical Assistance
Boston Medical Center

LOGIN | CREATE

A Resource for Healthcare and Social Services Pr

Home | DEA MATE Act | MAT Mobile App | Training | Request TTA | Project ECHO® | Resources | News | Ab

MAT Quick Start

GET IT ON Google Play | Download on the App Store

Welcome to the desktop version of the BMC MAT Quick Start app! We've developed this guidance to help inform clinicians on the use of medications for op clinical algorithms walk you through each step of the clinical decisi care for patients. This app is not a substitute for individualized clie

BMC MAT Quick Start 17+
Addiction Treatment Tools
Boston Medical Center Corporation
Designed for iPad

★★★★★ 5.0 • 24 Ratings

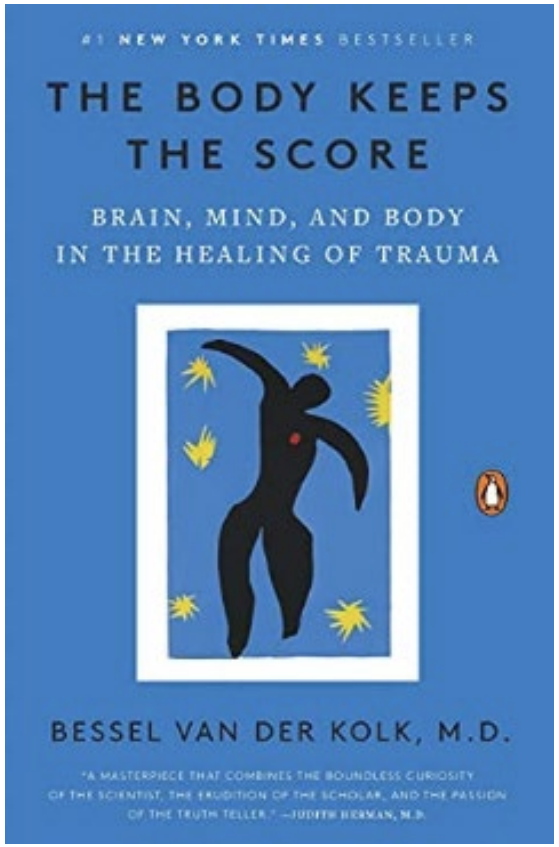
Free

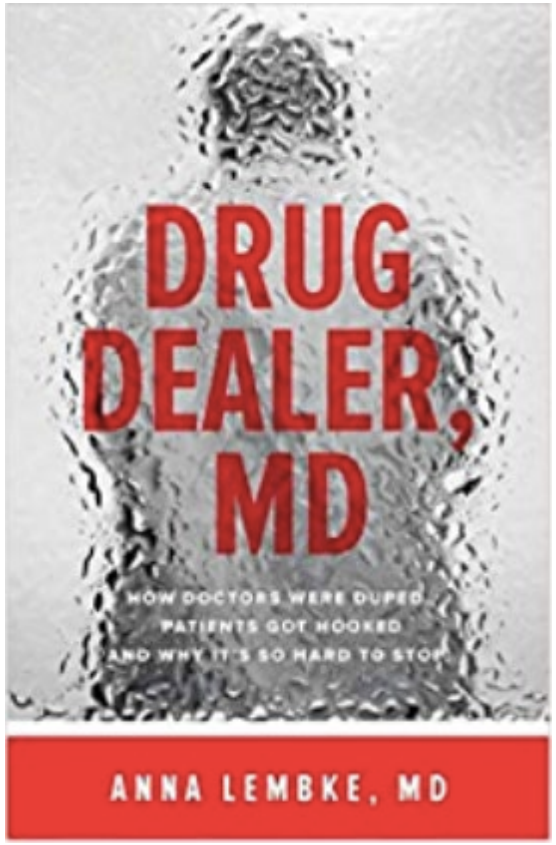
California Society of Addiction Medicine Annual Conference – 2025

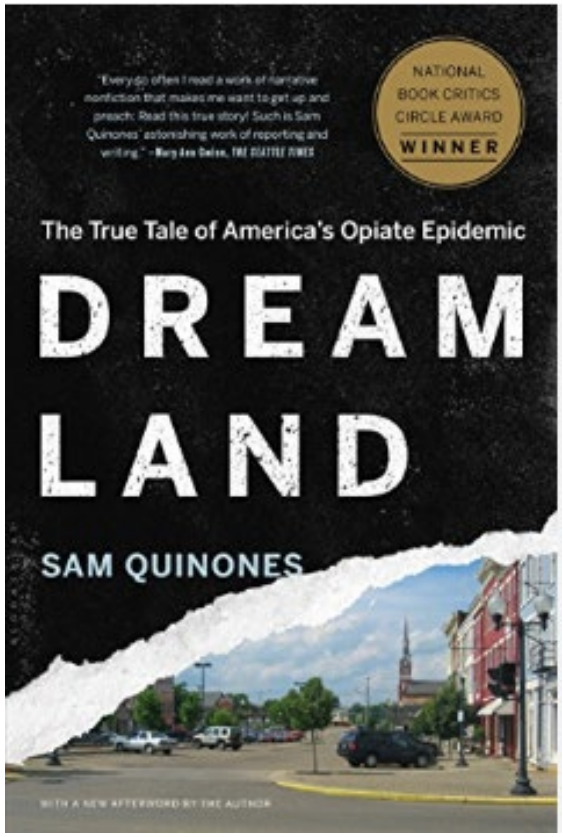
Street to Symposium, Clinic to Capitol

ASAM American Society of Addiction Medicine

PCSS Medications for Opioid Use Disorders — Providers Clinical Support System





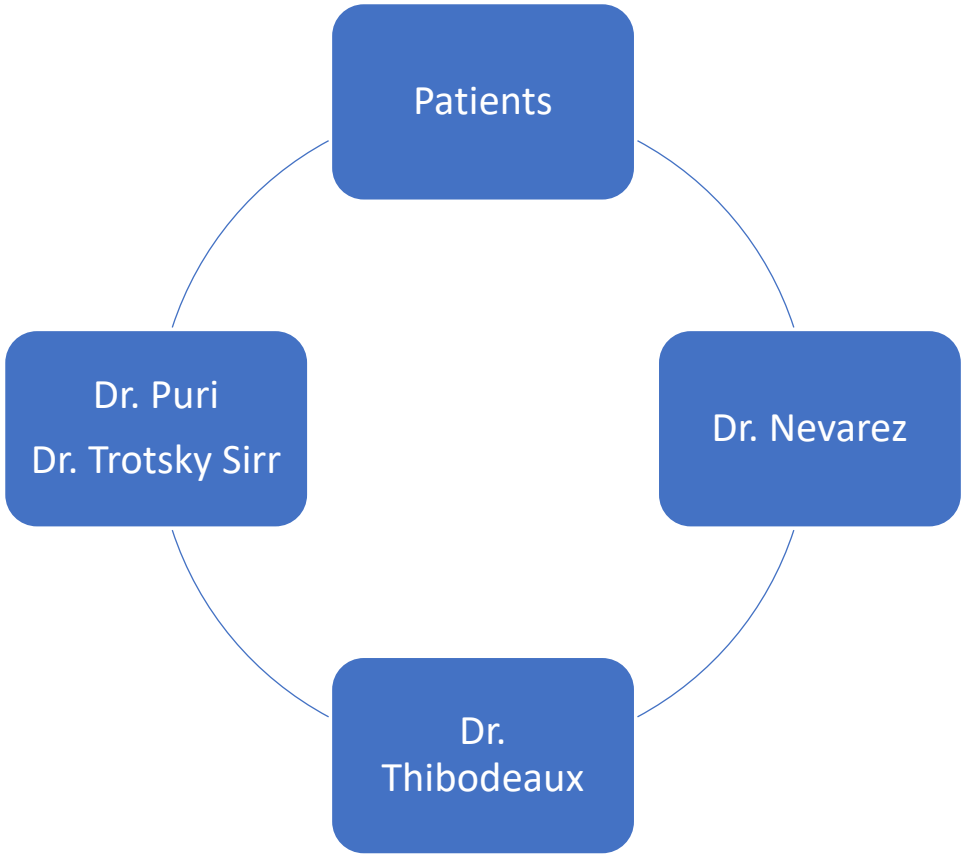


SCOPE of Pain
Safer/Competent Opioid Prescribing Education

Addiction is a TREATABLE disease of pediatric onset….
IF they receive timely interventions and MAT!


GET IN TROUBLE
GOOD TROUBLE
NECESSARY TROUBLE
John Lewis

Gratitude



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Summary of MOUD (Medications OUD)

Medication	Effect on Mu Receptor	Forms	Overdose Treatment?	Opiate Cessation	Other Uses
Naloxone *(Narcan)*	Antagonist	Intranasal IM	YES		
Naltrexone	Antagonist	PO IM		YES (only if already abstinent)	Treatment of AUD
Buprenorphine *(Subutex)* Buprenorphine-Naloxone *(Suboxone)*	Partial Agonist	Sublingual (tab/films) SubQ		YES	Analgesia
Methadone	Full Agonist (long half-life)	PO		YES	Analgesia