

WELCOME

Addiction Medicine ECHO Clinic



The session will begin promptly at 12 pm.



Please mute the audio on your device.



Sessions take place Thursday on the 2nd and 4th week of the month.



Please connect your camera.

Need technical assistance? Call [907.729.2622](tel:907.729.2622) or text your phone number into the chat.



ALASKA NATIVE
MEDICAL CENTER



ALASKA NATIVE
TRIBAL HEALTH
CONSORTIUM



Foundation for
Opioid Response Efforts

Recording

We will record the **didactic portion** of every session. After the session, the didactic portion of this clinic will be available on the ANTHC Addiction Medicine ECHO page.

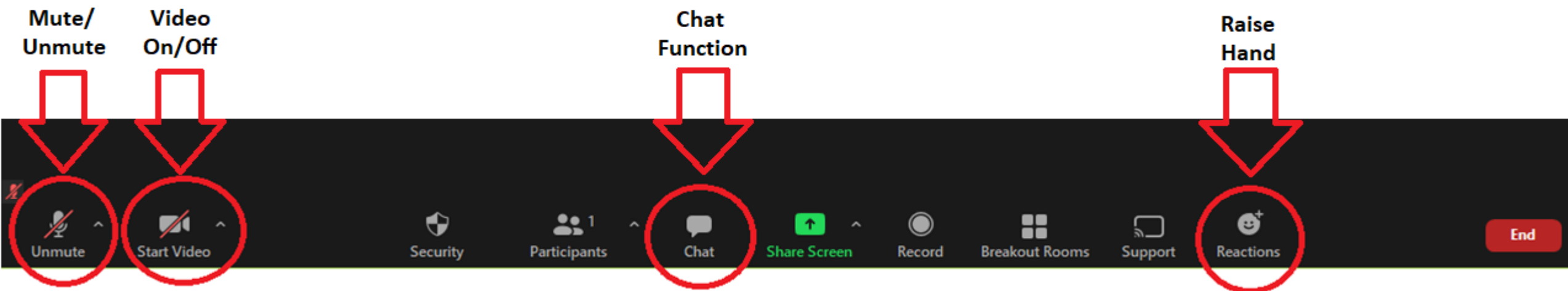
By participating in this clinic you are consenting to be recorded.

If you do not wish to be recorded, please email behavioralhealth@anthc.org at least one week prior to the ECHO Clinic you plan to attend.

Some Helpful Tips

- ▶ Please mute microphone when not speaking
- ▶ Use chat function
- ▶ Position webcam effectively
- ▶ Test both audio & video

Need technical assistance? Use the chat function or call 907.729.2622



ANTHC Clinical ECHO Series

Approved Provider Statements:



In support of improving patient care, Alaska Native Medical Center (ANMC) is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Contact Hours:

ANMC designates this activity for a maximum of 25 contact hours, including 12 total pharmacotherapeutics contact hours, commensurate with participation.

Financial Disclosures:

None of the presenters and planners for this educational activity have any relevant relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Approved for 1 CHAP CE

Conflict of Interest Disclosures:

None of the presenters and planners for this educational activity have any relevant relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Requirements for Successful Completion:

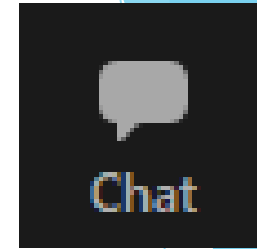
To receive CE credit be sure you are included in attendance record as directed by the facilitator/session moderator, and complete the course evaluation or post session survey via this link: <https://forms.gle/QhwCeGTf4zLNwpBX7>


For more information contact Jennifer Fielder at jfielder@anthc.org or (907) 729-1387


Introductions


Addiction Medicine ECHO

- Please introduce yourself in the chat :
 - Name
 - Location
 - Profession/Credentials
 - *Note:* The chat will be saved as our attendance record for continuing education credits.



 Chat

To: Everyone 



Name, Location, Credentials: Jane Doe, MD, ANTHC|

Low-threshold extended-release buprenorphine as a tool to increase treatment retention and reduce overdose risk for people who use stimulants and fentanyl

Addiction Medicine ECHO Sept 2022

Sarah Spencer DO, FASAM

NTC Clinic, Ninilchik, Alaska



Financial Disclosures

I have no financial conflicts of interest to disclose

I am currently employed by the Ninilchik Traditional Council

I work as an addiction treatment consultant for non-profit agencies including the Opioid Response Network and the Alaska Native Tribal Health Consortium

I am the volunteer medical director of Alaska's first rural SAP in Homer

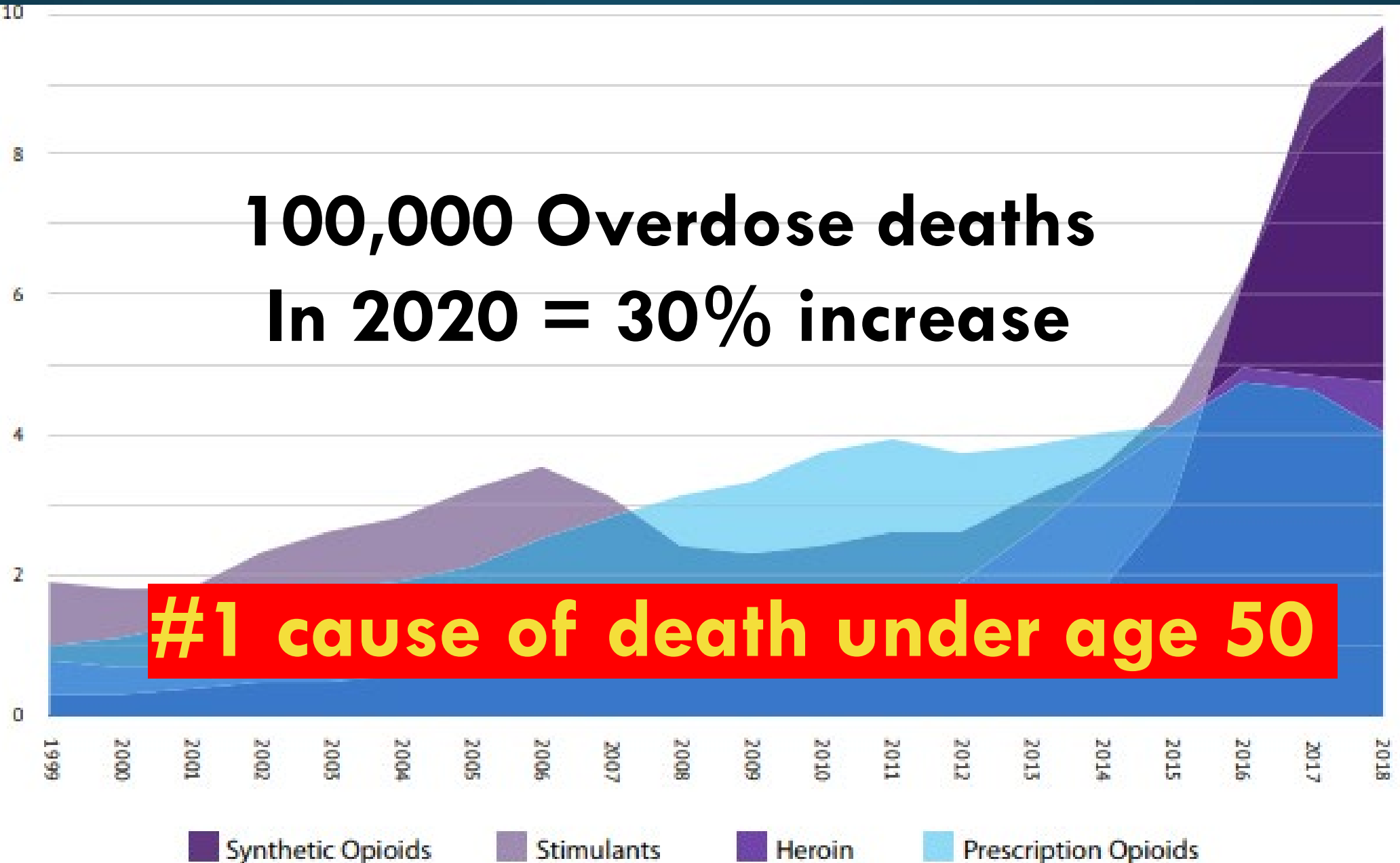


Learning Objectives

- Review the epidemiology of co-morbid stimulant and opioid use disorders and associated overdose risk
- Review the pharmacology of extended-release buprenorphine (XRBUP)
- Explore tactics to reduce barriers to care for accessing XRBUP
- Explore how low-threshold access to XRBUP may affect retention in treatment and OD risk in patients with co-morbid stimulant and opioid use disorders

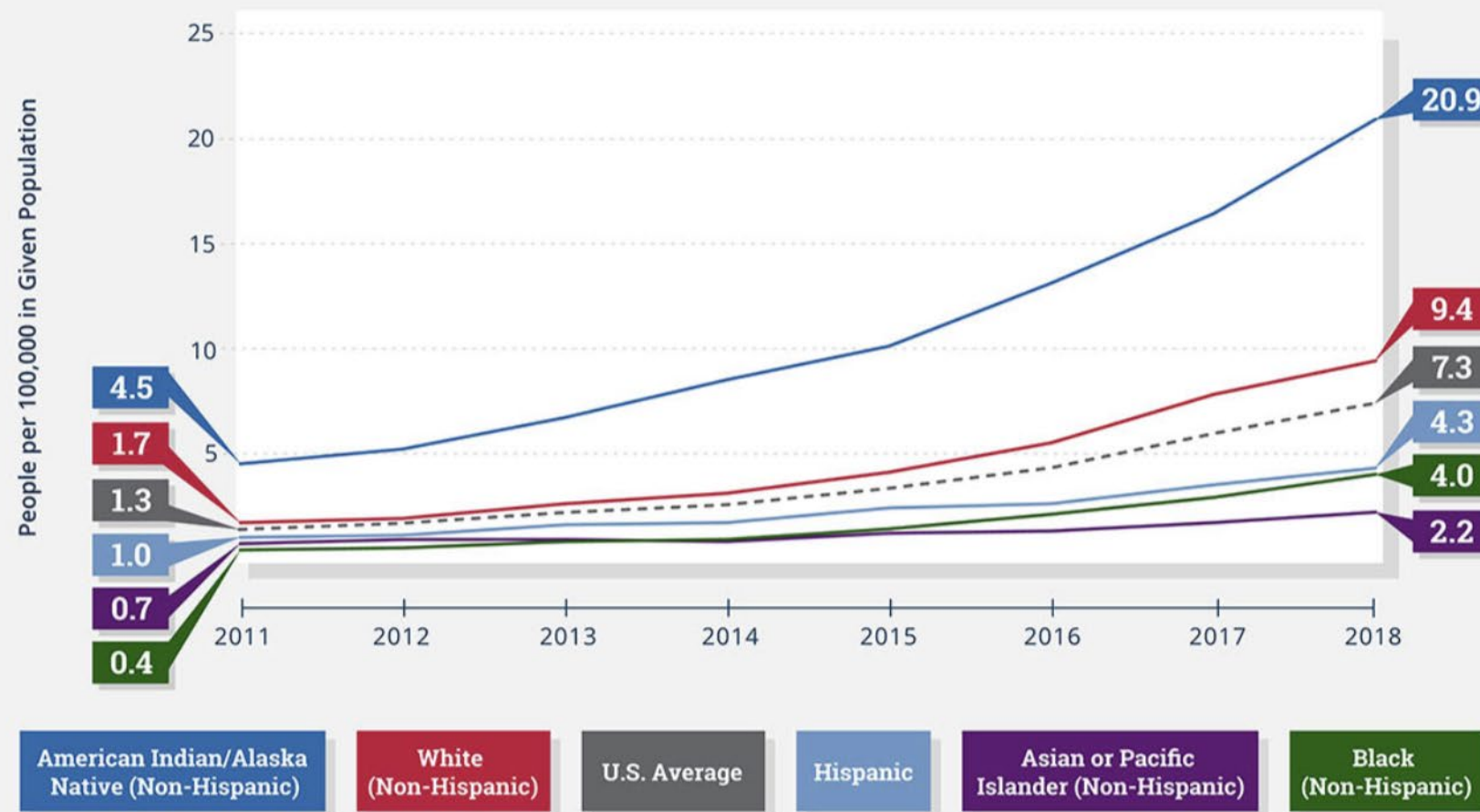
**100,000 Overdose deaths
In 2020 = 30% increase**

Death rate per 100,000 population



#1 cause of death under age 50

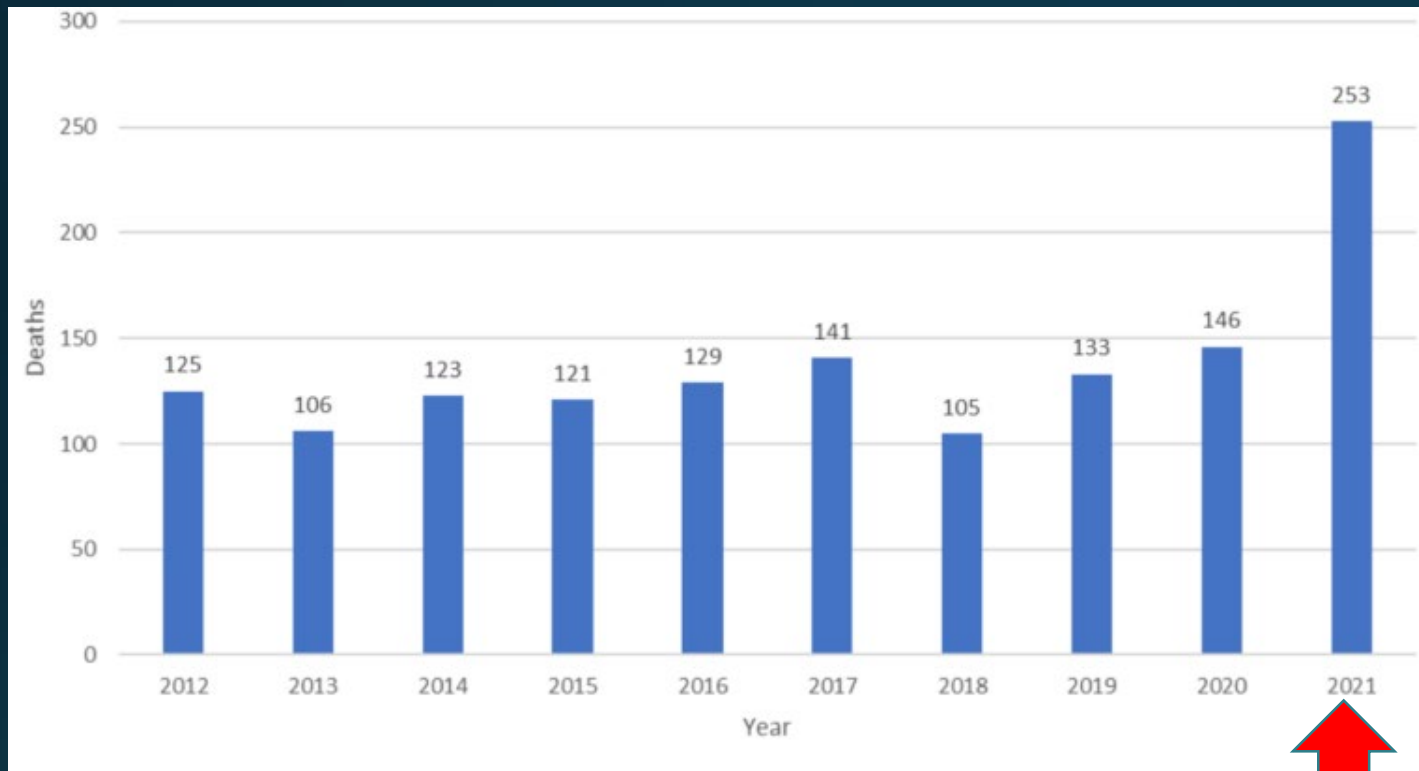
U.S. Overdose Deaths Involving Methamphetamine in People Ages 25 – 54*



*Recent national data show that most people who use methamphetamine are between 25 and 54 years old, so investigators limited analysis to this age group.

Alaskan Natives and American Indians have experienced the greatest increase in Methamphetamine overdoses

Overdose deaths in Alaska rose by 75% in 2021, highest increase nationwide



- Alaskan Natives
OD rate 77/110K
- White
OD rate 28/100K
- Meth OD up 150%
- Fentanyl OD up 150%

Illicit Fentanyl: DEA analysis has found counterfeit pills ranging from .02 to 5.1 milligrams (more than twice the lethal dose) of fentanyl per tablet (42% of seized pills contain at least 2mg)



DEA illustration of 2 milligrams of fentanyl, a lethal dose in most people



DEA

Use of stimulants with opioids has been increasing nationwide

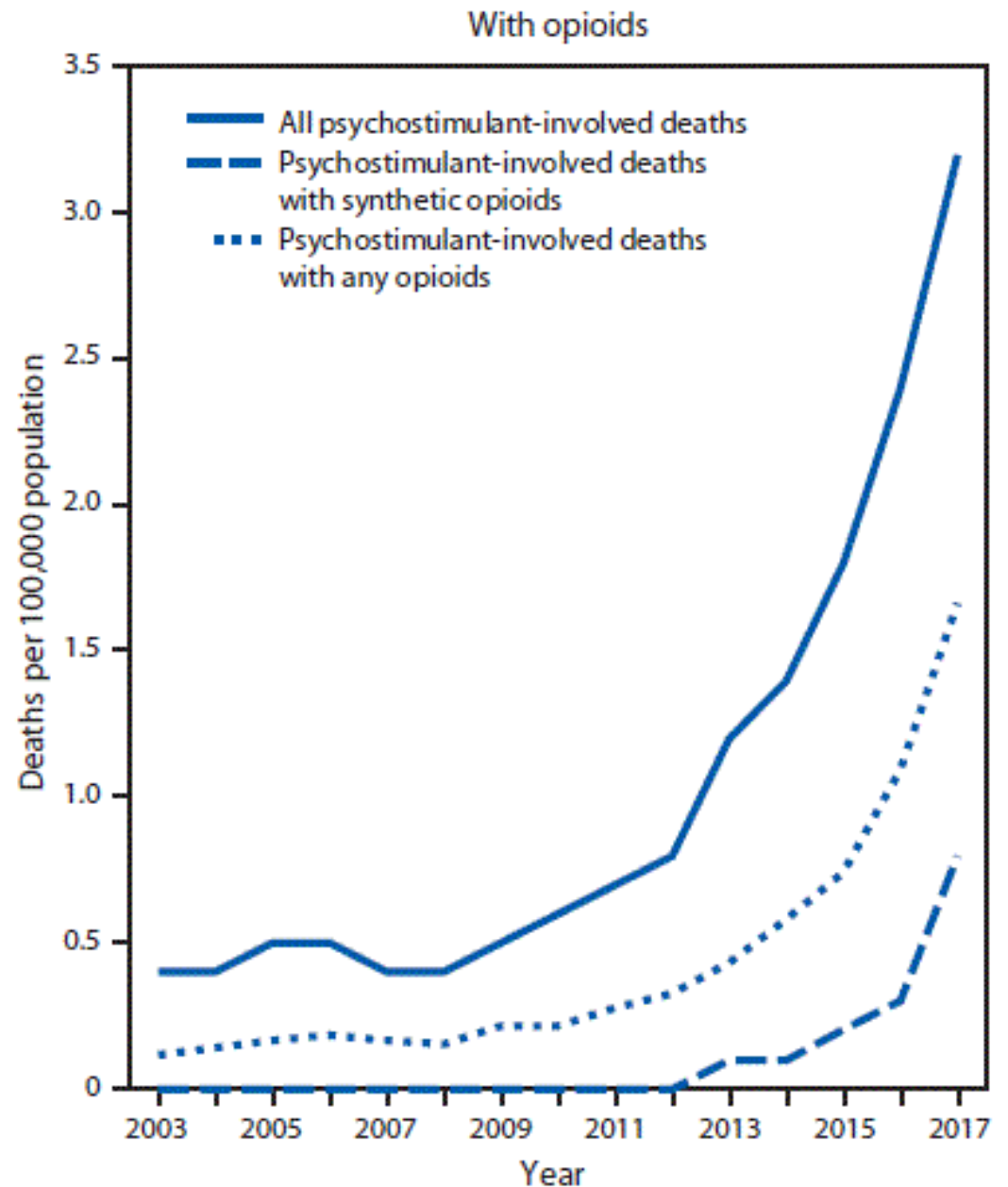
Has there been an increase in methamphetamine use in the population of people who use heroin?

"From 2015 to 2019, past month methamphetamine use increased from 9.0% to 44.0% within the population of people reporting past month heroin use."

Strickland J, Stoops W, Dunn K, Smith K, Havens J. The continued rise of methamphetamine use among people who use heroin in the United States. *Drug and Alcohol Dependence* 2021; 225.

**Roughly 1/2 of
methamphetamine
overdoses involve
opioids**

**Injecting meth with
opioids “goof-balling”
is 3X more likely to
result in overdose than
injecting opioids alone**



Source: National Vital Statistics System, Mortality File

How often is the fentanyl exposure unintentional?

Arguments for Intentional Exposure	Arguments for Unintentional Exposure
Co-use of stimulants and opioids is longstanding and common	Multiple case reports of people intending to use stimulants who died from fentanyl overdose
Stimulant-opioid decedents (prior to fentanyl) were demographically similar to opioid-only decedents	Fentanyl appears similar to various forms of methamphetamine and cocaine
People using fentanyl may use more stimulants due to potent sedating effects of fentanyl	Fentanyl rarely mixed with heroin in western US, so unintentional exposure may be more common among people who use non-opioid drugs
<i>Fentanyl was present in 5.9% of samples thought to be methamphetamine in Vancouver</i>	

Medical Record Evidence of Pre-Mortem Opioid Use Among Overdose Decedents in San Francisco

	Stimulant only (n=140)	Stimulant-fentanyl (n=220)	Fentanyl only (n=34)	Non-fentanyl opioids (n=112)	p-value
	%	%	%	%	
Clinical History of Opioid Use in 3 Years Preceding Death	48%	56%	65%	82%	<0.001

Much lower
than expected

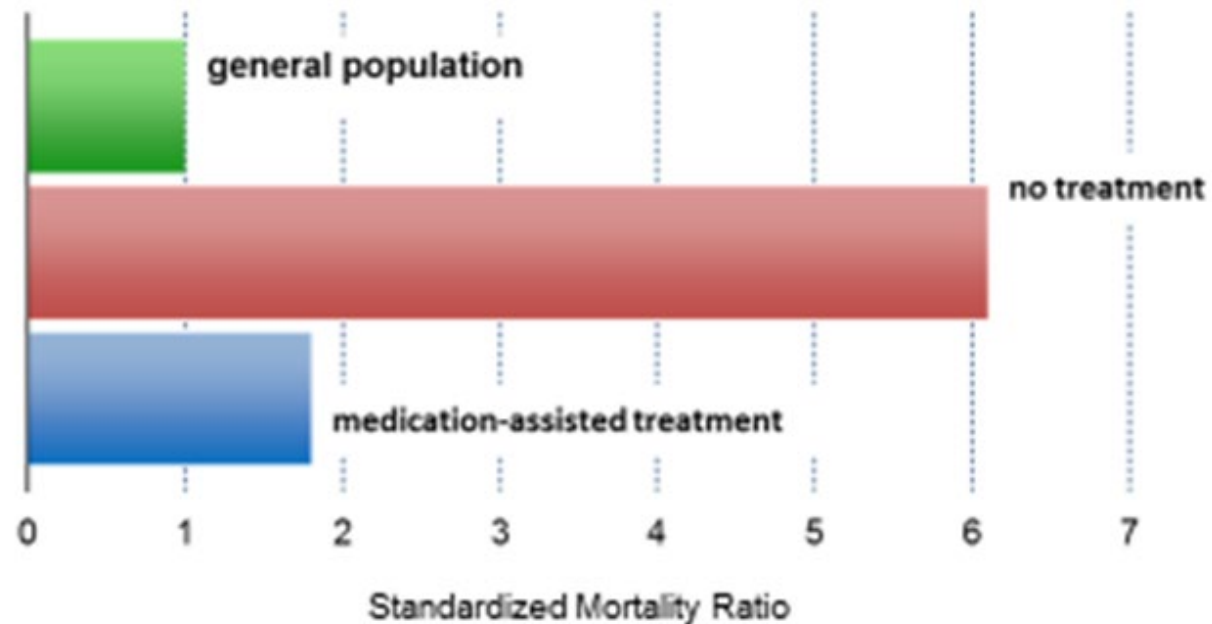
Why do people use stimulants with opioids?

- To prolong the effects of fentanyl
- To counteract the negative effects of opioids (reduce the chance of “nodding out”)
- To foster energy and enhance euphoria

<https://www.sciencedirect.com/science/article/abs/pii/S0955395922002079>

Benefits of MAT: Decreased Mortality

Death rates:



Overdose risk the first 2 weeks after leaving treatment is 10-30 times higher

MOUD can reduce death rates by 80%

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

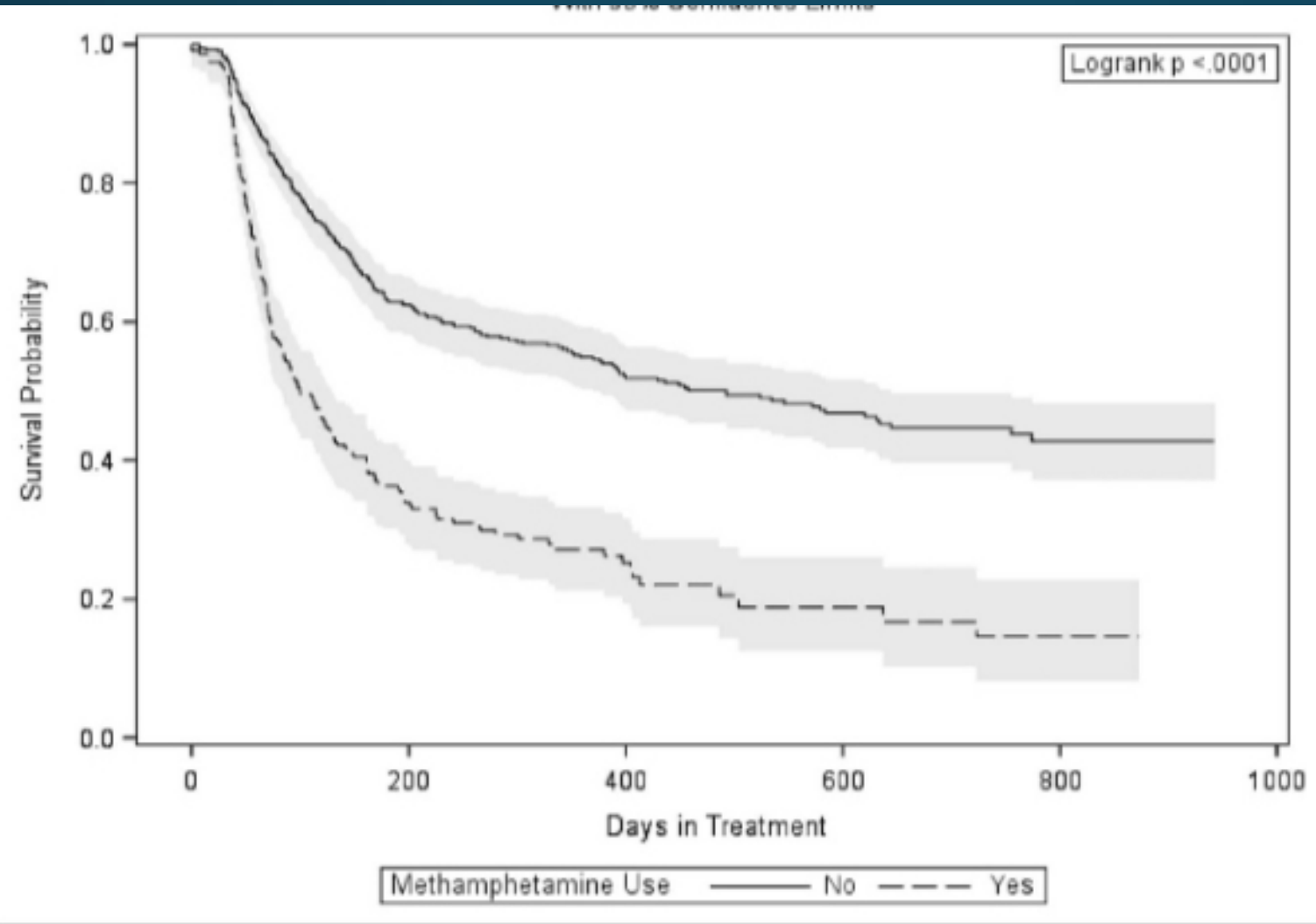


Fig. 1. Kaplan-Meier survival curves for methamphetamine users and non-users with 95% confidence bands ($n = 770$).

People who use meth may have poorer retention in MOUD programs

But those who stay in treatment may reduce their use

Low Threshold Care

A strategy to retain people
who use stimulants with
fentanyl in MOUD treatment

Harm Reduction Based Low Threshold Care

(all services are optional)

- Don't discharge patients for ongoing drug use
- Create patient centered care plans
- Flexible walk-in/same day appointments
- Co-located/tele-behavioral health
- Motivational interviewing
- Peer support and case management
- Treatment of co-morbid medical/MH issues
- Contingency Management

Other Medical Care for People Who Use Drugs



Screening for infections such as HIV, hepatitis B, hepatitis C, sexually-transmitted infections and tuberculosis (at least annually for most patients)



Vaccinations such as hepatitis A, hepatitis B, human papillomavirus, tetanus-diphtheria-pertussis, influenza and pneumococcus



Management of cardiac risk factors, particularly for people who use stimulants or tobacco, including blood pressure and lipid control, as well as smoking cessation



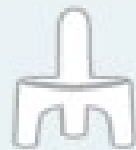
Treatment of other comorbid substance use disorders, including tobacco and alcohol use disorders



Treatment of comorbid psychiatric disorders



Education about safe injection practices and provision of clean injection equipment



Naloxone to reverse the effects of an opioid overdose



Pre- and post-exposure prophylaxis (PrEP and PEP) for HIV prevention

Advantages of Monthly Injectable Buprenorphine In Remote Native Alaskan Villages

No concern for diversion

Diversion concerns and stigma around sublingual buprenorphine can be a huge barrier to patient access as providers/clinic administrators are hesitant to offer this treatment

Monitoring medication compliance can be very difficult in remote locations

Not easy to access facilities for random medication counts and urinalysis

Reduces risk of withdrawal and relapse related to Rx interruption

Mail delivery in the bush can be frequently interrupted due to weather holds and other logistical concerns (reduced flights during COVID) that can result in Rx refills not arriving on time, leading to acute withdrawal which can trigger relapse and overdose

Flexible dosing q4-6 weeks, slow reduction in levels reduces withdrawal sx's

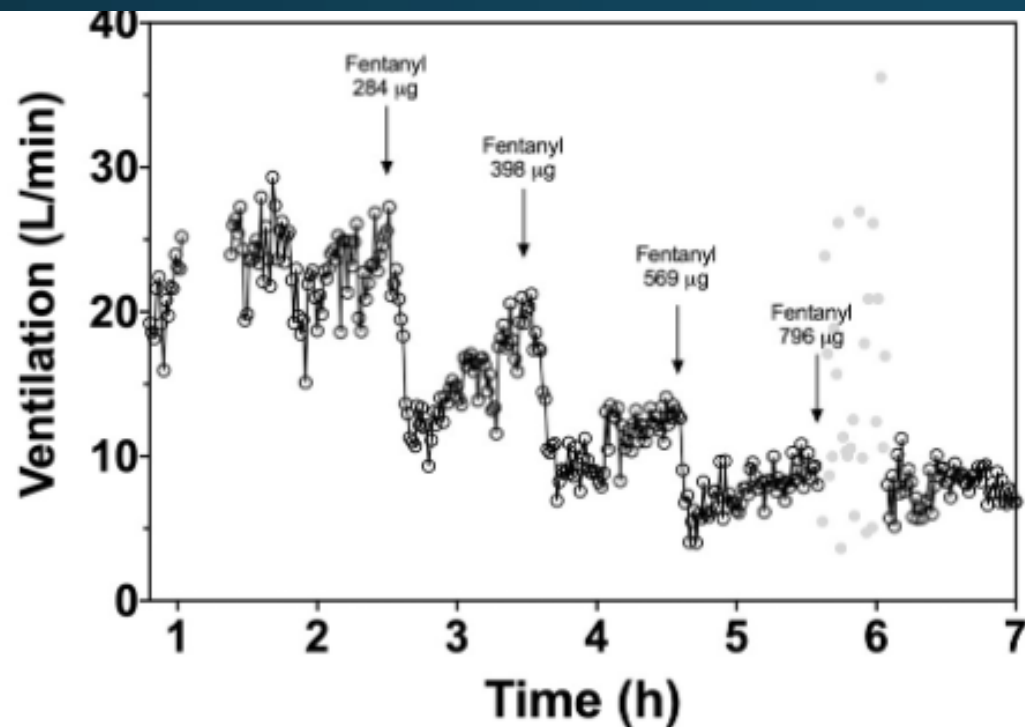
Excellent and long-lasting opioid blockade

Provides protection from overdose, even for patients with extended lack of clinic access such as those in fishing industry or who may become incarcerated, reducing risk of overdose in this remote population

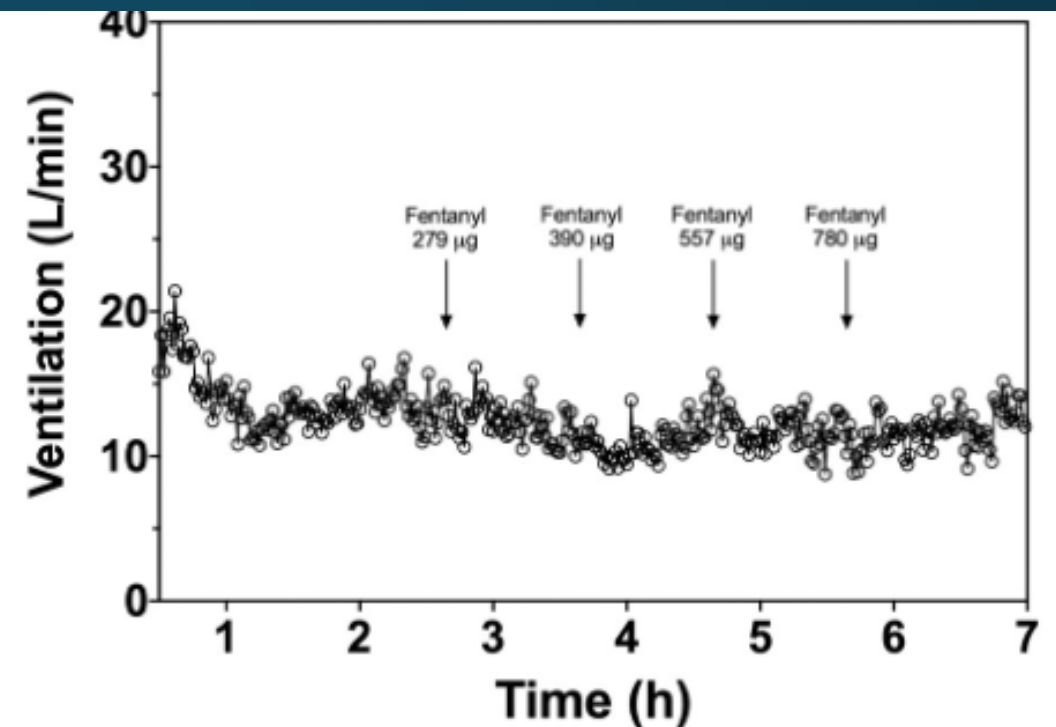
High Dose XR Buprenorphine blocks fentanyl induced respiratory depression

C. High-Dose Buprenorphine

S202, Placebo



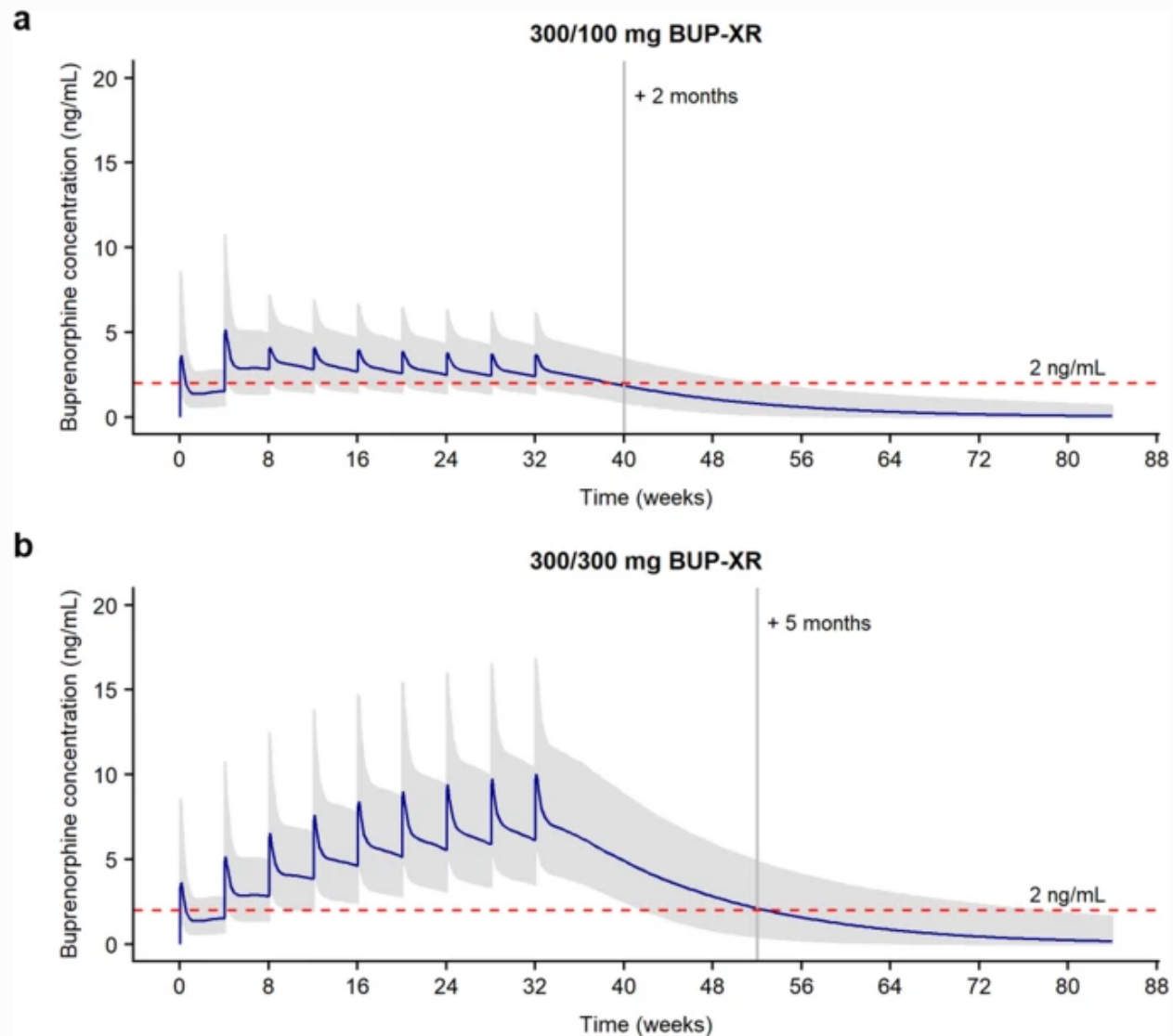
S202, Buprenorphine 5ng/ml



Blockade was lost under 2 ng/ml

Extended opioid blockade after medication cessation

Fig. 6



Predicted decrease in buprenorphine plasma concentrations for BUP-XR dosing regimens following treatment interruption. **a** 300/100-mg dosing regimen 2; **b** 300/300-mg dosing regimen. Blue solid lines: median of the simulated data; gray shaded areas: 90% prediction intervals of simulated data. A total of nine subcutaneous injections were simulated in 5000 subjects. The horizontal red dashed line indicates the 2-ng/mL minimum concentration required for opioid blockade, as established from

Patients stable on 100 mg will have blockade for 2 months (1 missed shot)

Patients stable on 300 mg will have blockade for 5 months (4 missed shots)



Low Threshold XR-BUP

- Given regardless of active drug/alcohol use
- No required drug testing
- Flexible schedule
- Walk-in appointments for injections
- Single day SL-BUP induction for tolerant patients
- Flexible dose
- SL supplementation available
- Available in pregnancy (2nd/3rd trimester)

Real patient testimonials regarding XR-BUP

"It works great! Anyone that says that it doesn't is full of s#!t!"

"I love that I just feel normal every day when I wake up."

"I was glad that I didn't feel any withdrawal symptoms when I went to jail."

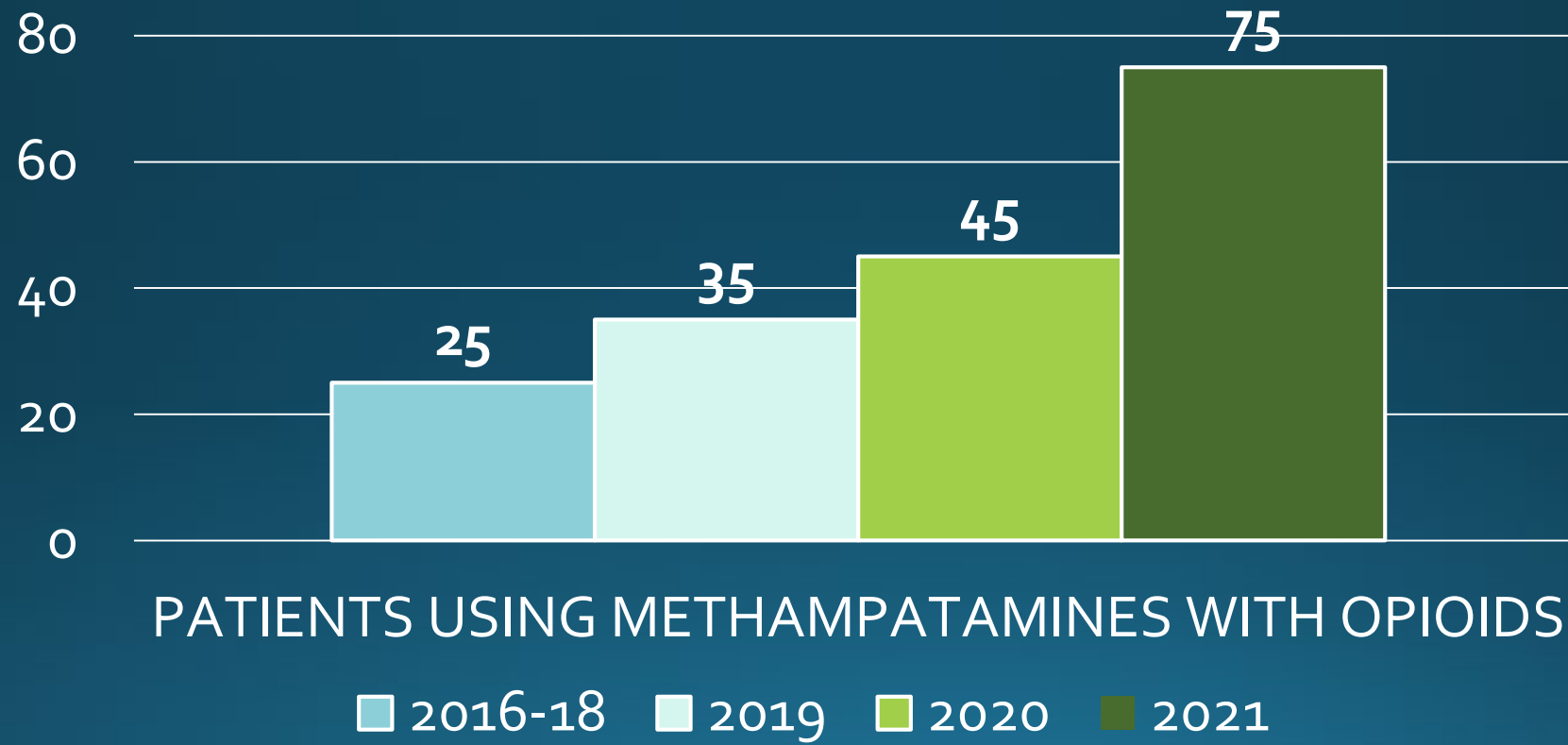
"I don't even think about heroin anymore."

"I tried using heroin and it [my opioid receptors] was totally blocked."

Methods

- Reviewed NTC prescriber PDMP records from Jan 2016-Jan 2022
- Identified patients admitted on or after May 2018 and before Aug 2021 who used Methamphetamines with Opioids (n=55)
- Compared retention in treatment (cumulative weeks of buprenorphine therapy)
 - SLBUP vs XRBUP 2018-2022 (at least 1 XRBUP shot)
 - SLBUP 2016-2018 vs SLBUP 2018-2022 (no change)

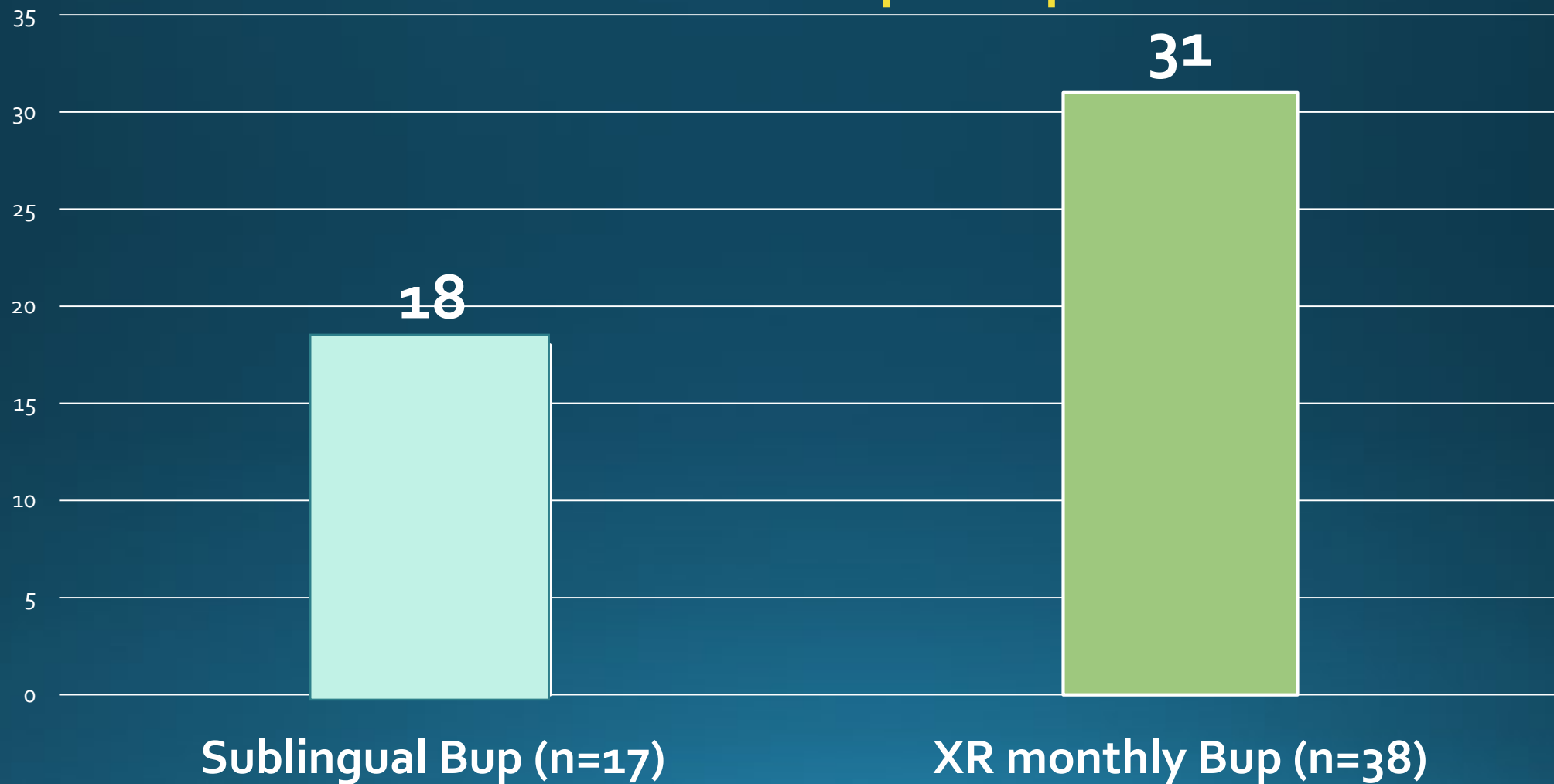
% PATIENTS USING METHAMPHETAMINES WITH OPIOIDS ON OBOT ADMISSION



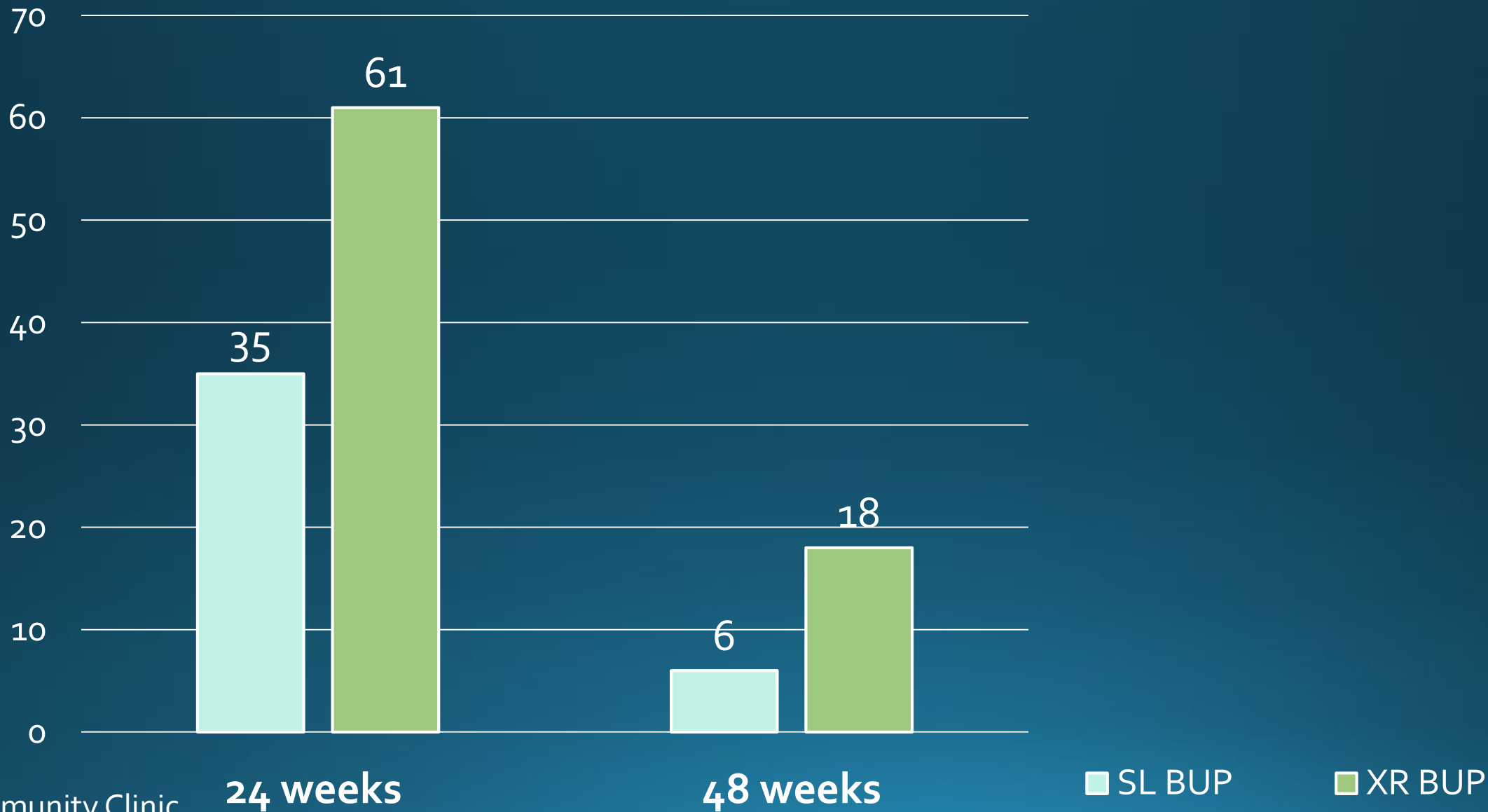
PATIENTS USING METHAMPATAMINES WITH OPIOIDS

2016-18 2019 2020 2021

Treatment Retention SL vs XR Buprenorphine Cumulative Weeks of Buprenorphine



% Patients with 24 and 48 week cumulative therapy on SL BUP vs XR BUP



Summary/Takeaways

- Patients who use methamphetamine with fentanyl are at an increased risk of overdose death, while also having multiple barriers to accessing and retaining on MOUD
- XRBUP has a high patient satisfaction rating and a unique pharmacology resulting in an excellent blockade of fentanyl induced respiratory depression that can extend beyond the cessation of medication which may reduce overdose risk.
- Harm reduction based low-threshold access to XRBUP may help patients stay on buprenorphine longer. OBOT programs should work to reduce barriers to access this medication.

Sarah Spencer DO, FASAM
Addiction Medicine Specialist
Ninilchik Traditional Council Community Clinic
Ninilchik, Alaska
907-299-7460
sarahspencerak@gmail.com

References

<https://www.sciencedirect.com/science/article/abs/pii/S0955395922002079>

[https://www.journalofsubstanceabusetreatment.com/article/S0740-5472\(19\)30250-8/fulltext](https://www.journalofsubstanceabusetreatment.com/article/S0740-5472(19)30250-8/fulltext)

<https://journals.plos.org/plosone/article/figure?id=10.1371/journal.pone.0256752.g004>

<https://link.springer.com/article/10.1007/s40262-020-00957-0>

Strickland, J. C., Stoops, W. W., Dunn, K. E., Smith, K. E., & Havens, J. R. (2021). The continued rise of methamphetamine use among people who use heroin in the united states. *Drug and Alcohol Dependence*, 225, 108750-108750. <https://doi.org/10.1016/j.drugalcdep.2021.108750>

Case Presentation

Project ECHO's goal is to protect patient privacy

- ▶ To help Project ECHO accomplish that goal, please only display or say information that doesn't identify a patient or that cannot be linked to a patient.
- ▶ **References:** For a complete list of protected information under HIPAA, please visit www.hipaa.com

Thank you for joining us today.
We appreciate your participation and hope
to see you at the **NEXT ECHO Session:**
October 27, 2022 from 12pm -1 PM

You will be receiving a follow up survey that we hope you will complete to help us improve. If you are requesting continuing education credits, you will be required to complete the survey to receive your CMEs.

