



ALASKA NATIVE
TRIBAL HEALTH
CONSORTIUM

Session 2:

Easy Buprenorphine Prescribing for Everyone, presented by Sarah Spencer, DO

Advanced Buprenorphine Prescribing, presented by Sarah Spencer, DO

These presentations were part of the one-day Fairbanks Syndemic Clinical Training: Addressing the Syndemic of Substance Use Disorders and Related Disease States held on April 9 and April 10, 2025.



ANTHC Syndemic Conference
Fairbanks, AK April 2025
Sarah Spencer, DO, FASAM

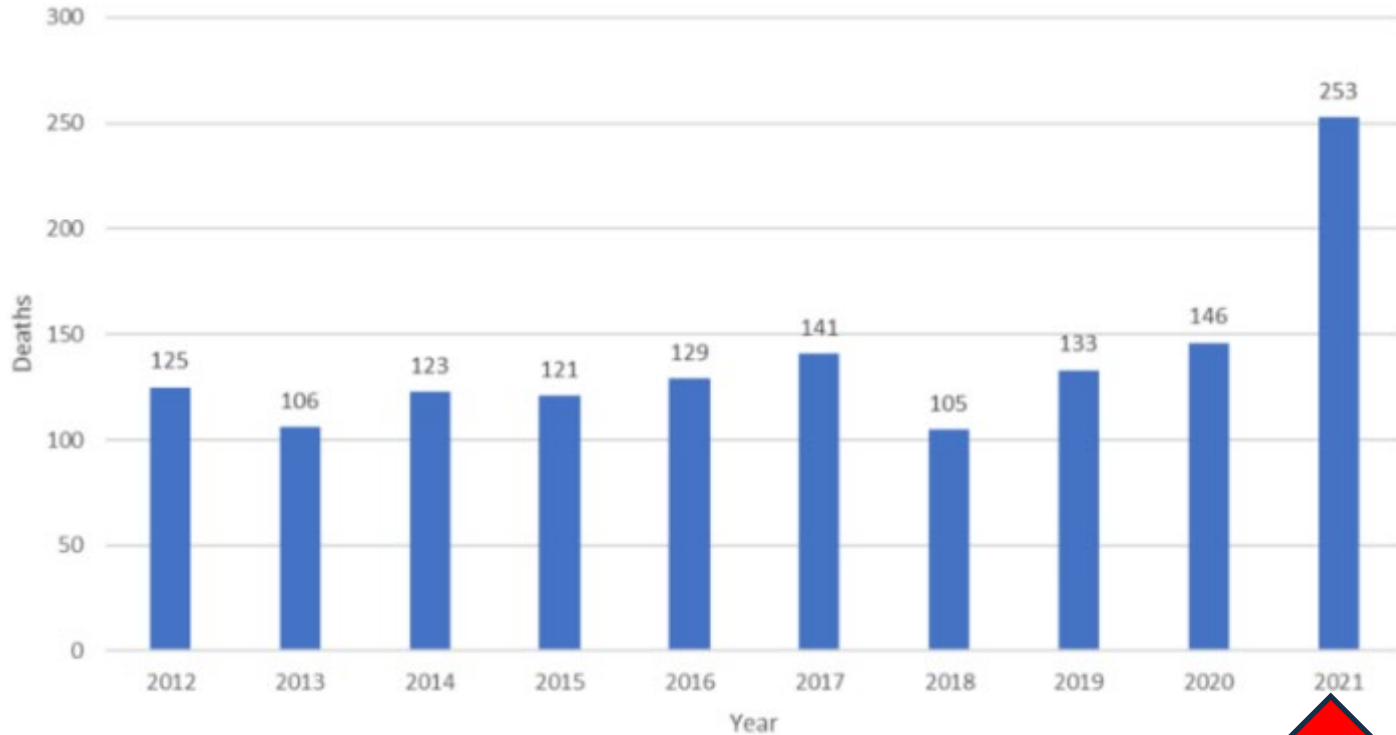
Easy Buprenorphine Prescribing for Everyone



Financial Disclosures

- I have no financial conflicts of interest to disclose
- I am currently employed by the Ninilchik Traditional Council
- I work as a treatment consultant for the Opioid Response Network in Alaska, ANTHC, as well as for other non-profit agencies.

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



2023 up 35%

- **Alaskan Natives**
OD rate 77/110K

- **White**
OD rate 28/100K

- **Meth OD up 150%**

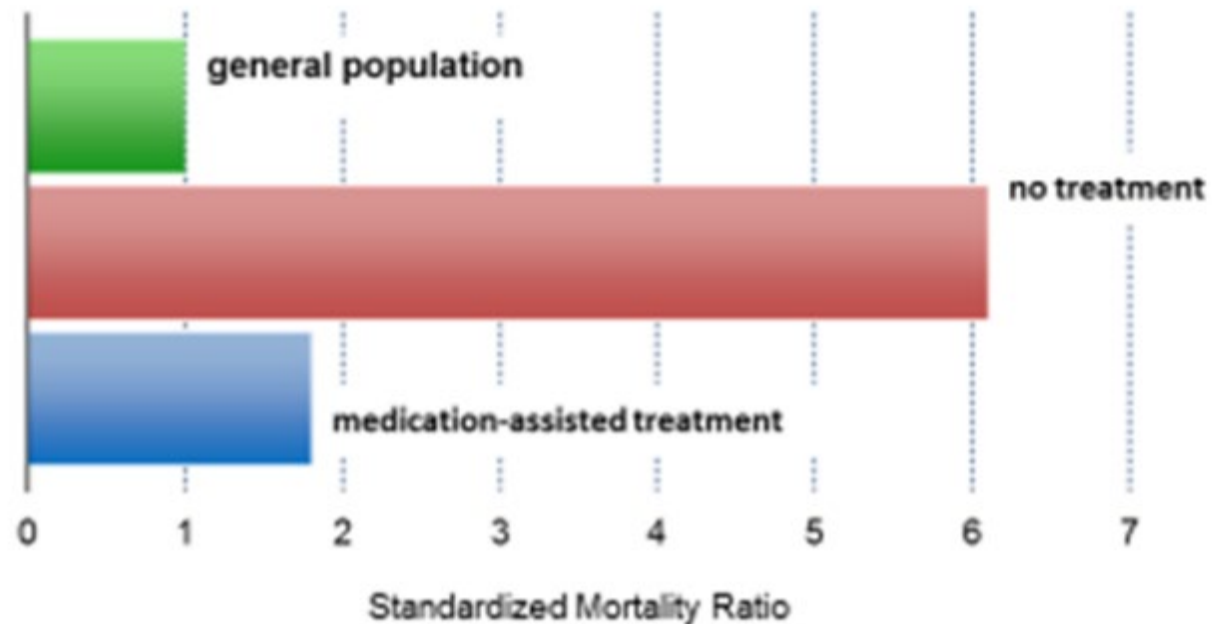
- **Fentanyl OD up 150%**



Benefits of MAT: Decreased Mortality

Death rates:

Increased
overdose risk
after leaving
treatment



MOUD can reduce death rates by >60%

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

“Detox” is not a treatment for OUD

Treating opioid disorder without meds more harmful than no treatment at all

Non-medication-based treatments for opioid use disorder may be more harmful than no treatment at all, a new Yale study finds.

When the researchers calculated the risk of fatal overdose death for each treatment, they found that, compared with no treatment at all, methadone and buprenorphine reduced the risk of death...

“However, non-medication-based treatments increased the risk of death compared to no treatment by over 77%,”

Reframing the perception of buprenorphine prescribing

OLD

A high-risk medication
requiring specialized
training and integrated
behavioral health to
prescribe



NEW

A very safe lifesaving
medication that is the gold
standard treatment for a
deadly disease, that all
providers should be
comfortable prescribing

This is why the X-waiver was eliminated



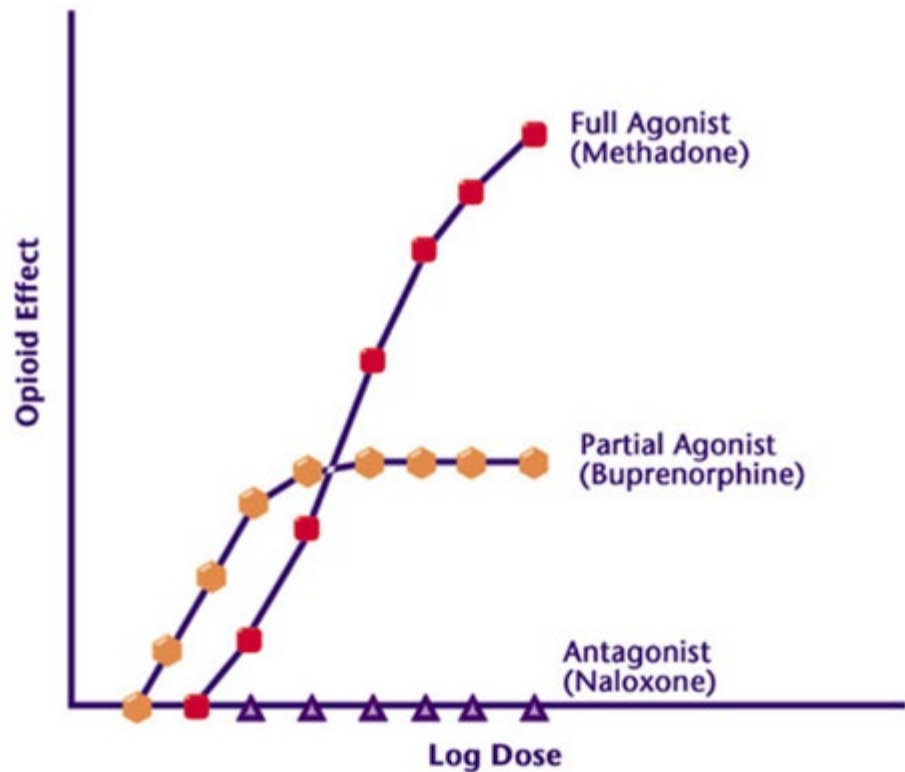
The Waiver is Gone!!!

- All prescribers authorized to Rx Schedule 3 can prescribe buprenorphine for OUD or pain
 - No limits on dose or formulation of BUP
 - No limits on numbers of patients
 - No requirement to refer for counseling
 - No educational requirements
- 8-hour waiver course meets the
DEA MATE act requirements

**NO EXCUSE NOT TO PRESCRIBE
THIS LIFESAVING MEDICATION!**

Every day of BUP treatment is helpful

- All providers should be comfortable in the basics of MOUD
- Lack of follow-up arrangements are not a contraindication to prescribing BUP
 - Warm handoff always preferred when possible
- Always provide SLBUP Rx on discharge (minimum 1 week) or administer XRBUP before discharge
- Every day that a patient takes BUP reduces their risk of overdose
- **Not prescribing MOUD is NOT following standard of care guidelines and results in worse outcomes!!!**

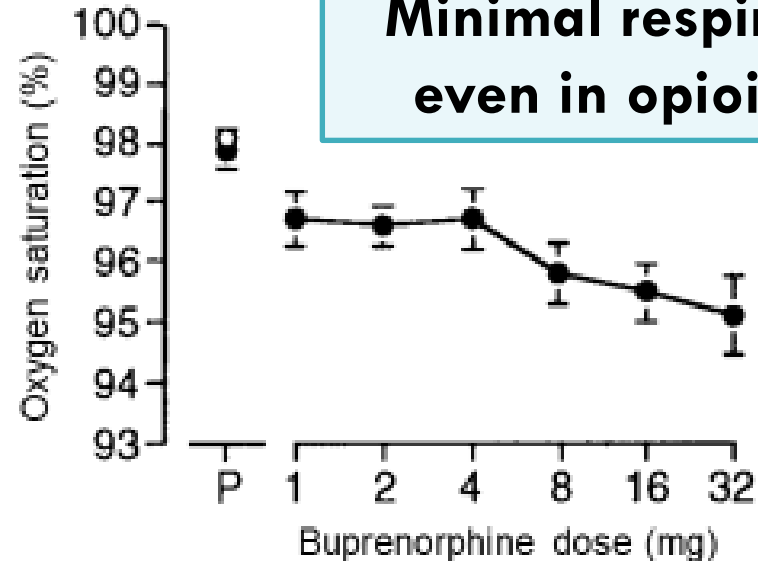
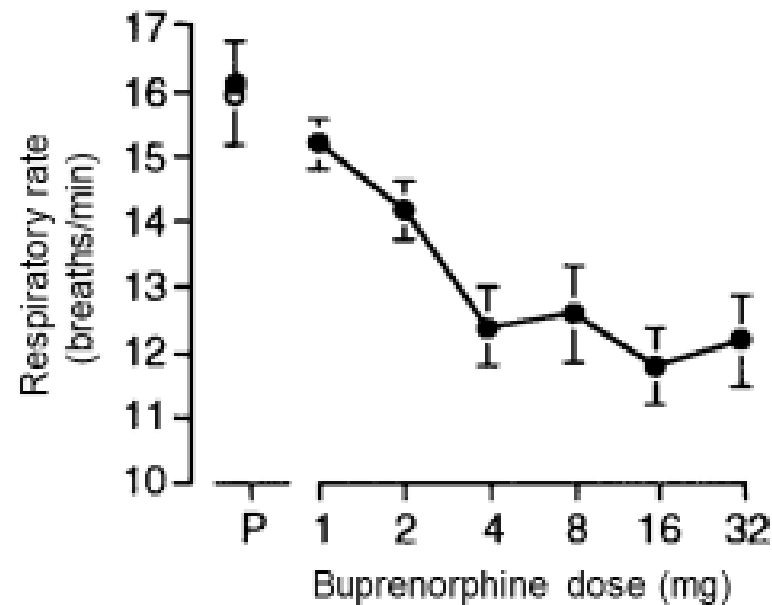


Properties of Buprenorphine, a μ -Opioid Partial Agonist

- Ceiling effect on respiratory depression
- High affinity for μ -opioid receptor
- Slowly dissociates from μ -opioid receptors
- Ameliorates withdrawal once underway
- Can precipitate withdrawal if given in temporal proximity to full agonist opioids

Buprenorphine Dosing: Safety

- Cognitive and psychomotor effects appear to be negligible



**Minimal respiratory depression
even in opioid naïve patients**

- Nearly all fatal poisonings involve multiple substances

FORMULATIONS OF BUPRENORPHINE



Brixadi
Weekly/monthly SQ
injection, various doses



Mono-SL Product

Buprenorphine SL tab
(2 & 8mg) (Subutex)



Buprenorphine/naloxone
SL/buccal films (Generic/brand,
many strengths)

Combo-SL Products

**Long-Acting
Injectables**

Buprenorphine/naloxone
SL tabs (generic/brand)

Sublocade
Monthly Buprenorphine SQ depot injection



IV Buprenorphine



(Transdermal and Buccal Buprenorphine products used for Chronic Pain (Butrans/ Belbuca) are general considered too low dose and not legal to treat OUD)

Naloxone is included in SL buprenorphine as an **Abuse Deterrent**

Is has minimal absorption **and no clinical effect** when used as directed sublingually (it does NOT alter the effectiveness of the medication, cause precipitated withdrawal or block opioids)

It only has action if the product is misused
(IV/snorted/smoked can trigger PW or partially block BUP effect)

Prescribing this combination product may reduce misuse risk
3-6-fold compared to plain buprenorphine products (limited data)

Intolerable side effects to combo product may be an indication to switch to mono product or XRBUP (Nausea/HA 1 hr after dose)

<https://www.frontiersin.org/articles/10.3389/fpsy.2020.549272/full>

Formulations of Buprenorphine

NOT allowed for OUD/WD outpatient

- Butrans (transdermal, pain only)
- Belbucca (buccal, pain only)
- IV BUP
- It is illegal to use any other opioid agonist to treat opioid withdrawal in the outpatient setting (including methadone and tramadol)
- ALL forms of BUP and ALL opioid agonists may be used in the inpatient/ED setting to treat withdrawal

Initial Assessment

- A patient history: medical and psychiatric history
- Social History:
 - Substance use history: type, route, quantity, treatment hx
 - Family and psychosocial supports, children, living situation, employment, transportation, legal issues
- Access the patient's prescription drug history through the state's Prescription Drug Monitoring Program (PDMP) to detect unreported use of other medications, such as sedative-hypnotics or alcohol, that may interact adversely with the treatment medications.

Initial Assessment

- A physical examination that focuses on physical findings related to addiction and its complications. (heart murmur, track marks, skin infections) **Deferred for telemed**
- Laboratory testing (Optional)
 - Urine drug screen
 - Pregnancy test
 - Hepatitis B and C (Hep panel), HIV, RPR, CMP, CBC

Providers should not delay treatment initiation while awaiting lab results

Important Points to Review With the Patient

- Understand that discontinuing buprenorphine increases risk of overdose death upon return to illicit opioid use.
- Know that use of alcohol or benzodiazepines with buprenorphine increases the risk of overdose and death (but is NOT a contraindication to BUP).
- Offer contraception and inform providers if they become pregnant, to provide extra support.
- Tell providers if they are having a procedure or injury that may require pain medication.

Buprenorphine

What You Need to Know

September 2020



What is buprenorphine?

- Buprenorphine - or bup - is medicine for people who have chronic pain or addiction to opioids (heroin or pain pills). Many people know it by brand names like Suboxone® and Subutex®.
- Buprenorphine helps get rid of cravings and withdrawal, without making you feel high.
- People have less overdoses when they take buprenorphine.
It is a safe medicine that has been used for 30 years.
- It is not substituting one drug for another—it is a daily medicine that you may need to stay healthy.
- Often buprenorphine and naloxone are taken together in 1 pill. Naloxone is the same as Narcan®, but if you take the medicine under the tongue the naloxone doesn't go in your body and can't make you sick. Naloxone is only there to make sure that people don't crush the pill and inject it—if you do that, the naloxone does go into your body and does make you sick.

Is buprenorphine right for me?

- If you are currently taking methadone, talk to your medical team before switching.
- Before taking the first dose of buprenorphine, most people need to feel some withdrawal. That is important because if you take it while other opioids are in your system, you can get very sick.
- **Talk to your medical team to see if buprenorphine is a good medicine for you.** There are many good choices for treatment, only you and your team know what is best for you.

What is it like to take buprenorphine?

- Many people say that their cravings and withdrawal go away, they feel “clear in the head,” and their chronic pain gets better.
- Every morning you put a pill or a film strip under your tongue and let it dissolve—don't swallow it.
- People need to take it every day in most cases, and do feel sick if they stop taking it suddenly.
- Usually there are no side effects, but some people have headaches, stomach upset, or trouble sleeping.
- Many people keep taking it for years, or forever. If you want to stop taking it that is ok, but talk to your medical team first.
- The chance of an overdose on buprenorphine is very low, but if mixed with other drugs or alcohol overdose is possible.
- Some people take buprenorphine as a once a month shot under the skin of the belly. This is a great option if taking a medicine every day is hard for you.

How do I get buprenorphine?

- **You can go to any of the places below to get started.** You may need to visit more than once before getting the first dose. In some clinics (like methadone clinics), you may come in every day to pick up your buprenorphine dose.
- Instead of going to a methadone clinic, you can get the medicine from a **primary care doctor**. At first you may need daily visits, but many people can soon switch to weekly or monthly visits.
- Some **telemedicine groups** offer prescriptions over the internet/phone instead of in a doctor's office, so you need a phone and internet to use those services.

<https://bridgetotreatment.org/resource/buprenorphine-what-you-need-to-know/>

Lower
dose
BUP is
NOT
better

ASAM 2020 guidelines recommends minimum 16 mg/day for those in early recovery

Doses 16 mg+ have superior retention in treatment and abstinence (evidence that 24-32mg/day is superior)

Fentanyl blockade requires minimum 16mg/day (higher is better)

Review

> J Addict Med. 2023 Sep-Oct;17(5):509-516. doi: 10.1097/ADM.0000000000001189.

Epub 2023 Jun 16.

Evidence on Buprenorphine Dose Limits: A Review

Lucinda A Grande ¹, Dave Cundiff, Mark K Greenwald, MaryAnne Murray, Tricia E Wright,



“Conclusions: In light of established research and profound harms from fentanyl, the Food and Drug Administration's current recommendations on target dose and dose limit are outdated and causing harm. **An update to the buprenorphine package label with recommended dosing up to 32 mg/d and elimination of the 16 mg/d target dose would improve treatment effectiveness and save lives.”**

Dosing Frequency

Buprenorphine has a slow dissociation rate from the mu opioid receptor, which gives rise to its prolonged suppression of opioid withdrawal and blockade of exogenous opioids (24-48 hours).

- Once daily dosing for control of drug cravings and withdrawal
- Most patient prefer BID-TID
- Relatively short analgesic duration(6 hours)
- QID dosing for pain control

Dosing instructions

- Wet mouth first, avoid smoking before dose
- Dissolve under tongue for 15-20 mins (tabs or films)
- No talking, eating, drinking, smoking
- Spit out excess saliva (swallowing can increase nausea)
- Rinse and spit after finished (reduce dental exposure)
- Peak effect in 1-2 hours



Common BUP Side Effects

- Nausea
 - Headache
 - Sweating
 - Oversedation/dizziness
 - Constipation (chronic)
 - Urinary Retention
-
- Edema (XRBUP rare)

Precipitated Withdrawal

- Precipitated withdrawal can occur due to replacement of full opioid receptor agonist (heroin, fentanyl, or methadone) with a partial agonist that binds with a higher affinity (Buprenorphine).
- Typically occurs 30-60 mins after first SLBUP dose
- Rapid onset of severe opiate withdrawal symptoms
- Like Naloxone precipitated withdrawal but lasts longer
- Avoid by ensuring adequate withdrawal before first dose (COWS > 12; Fentanyl may require higher COWS score) or by using microdosing or high dose start.

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



Illicitly-manufactured fentanyl

- Though prior pharmacokinetic studies of fentanyl report half lives ranging from 1.5-7 hours, these studies generally relied on brief periods of drug administration.
- Fentanyl is highly lipophilic, allowing it to be sequestered in adipocytes in chronic users, similar to THC.

Some evidence suggests fentanyl withdrawal...

- ☀ Starts sooner, lasts longer, is more severe (survey of 114 pts)¹³
- ☀ Is more likely to lead to precipitated withdrawal with bup
 - ☀ OR 5.2 for precipitated withdrawal with bup (v. methadone) within 24 hrs of fentanyl use (multi-center survey of 1679 pts)¹⁴
 - ☀ Precipitated withdrawal with bup despite extended (24-48 hrs) periods of abstinence and high COWS (4 pt case series)¹⁵
- ☀ Is harder to relieve with bup:
 - ☀ “24 mg not uncommonly necessary to manage withdrawal”¹⁶
 - ☀ Only 38% reported bup “completely alleviated” fentanyl withdrawal¹⁴

Increasing reports of buprenorphine precipitated withdrawal merit caution

Most people in withdrawal can start bup without issue

In populations with 25-76% fentanyl use, 0-3% precipitated withdrawal (EMS, multi center NIDA, single site ED, multi site CA Bridge)



Varshneya NB, Thakrar AP, Hobelmann JG, Dunn KE, Huhn AS. Evidence of Buprenorphine-precipitated Withdrawal in Persons Who Use Fentanyl. *J Addict Med*. 2021 Nov 23. doi: 10.1097/ADM.0000000000000922. Epub ahead of print. PMID: 34816821.

D'Onofrio et. al, unpublished abstract

Hern et al, unpublished data

ZSFG, unpublished data

Lesaint, unpublished data

D'Onofrio G, Fiellin D. Emergency Department-Initiated buprenorphine and VALIDaTION Network Trial (ED-INNOVATION) (NIH HEAL Initiative). Presented at: Second Annual NIH HEAL Initiative Investigator Meetings May 17, 2021; Virtual Meeting

Ask about previous experience with BUP

- Helpful for cravings? What dose worked best?
- Initiation well tolerated:
 - Proceed with standard initiation
- Experienced Precipitated withdrawal:
 - How long did they wait?
 - What dose did they take?
 - Did they succeed with initiation?
 - Consider high dose or low dose overlapping start
 - Consider pre-medication with ondansetron 4-8 mg and clonidine 0.2 mg

Determine Withdrawal

Objective withdrawal signs help establish physical dependence

Start when
COWS > 12

The risk with initiating buprenorphine too soon is that buprenorphine has a very high affinity for the mu receptor and will displace any other opioid on the receptor, thereby causing precipitated opioid withdrawal.

COWS Wesson & Ling, J Psychoactive Drugs. 2003 Apr-Jun;35(2):253-9. Clinical Opiate Withdrawal Scale

Resting Pulse Rate: _____ beats/minute <i>Measured after patient is sitting or lying for one minute</i> 0 Pulse rate 80 or below 1 Pulse rate 81-100 2 Pulse rate 101-120 4 Pulse rate greater than 120	GI Upset: <i>over last 1/2 hour</i> 0 No GI symptoms 1 Stomach cramps 2 Nausea or loose stool 3 Vomiting or diarrhea 5 Multiple episodes of diarrhea or vomiting
Sweating: <i>over past 1/2 hour not accounted for by room temperature or patient activity</i> 0 No report of chills or flushing 1 Subjective report of chills or flushing 2 Flushed or observable moistness on face 3 Beads of sweat on brow or face 4 Sweat streaming off face	Tremor: <i>observation of outstretched hands</i> 0 No tremor 1 Tremor can be felt, but not observed 2 Slight tremor observable 4 Gross tremor or muscle twitching
Restlessness: <i>Observation during assessment</i> 0 Able to sit still 1 Reports difficulty sitting still, but is able to do so 3 Frequent shifting or extraneous movements of legs/arms 5 Unable to sit still for more than a few seconds	Yawning: <i>Observation during assessment</i> 0 No yawning 1 Yawning once or twice during assessment 2 Yawning three or more times during assessment 4 Yawning several times/minute
Pupil size 0 Pupils pinched or normal size for room light 1 Pupils possibly larger than normal for room light 2 Pupils moderately dilated 5 Pupils so dilated that only the rim of the iris is visible	Anxiety or irritability 0 None 1 Patient reports increasing irritability or anxiousness 2 Patient obviously irritable/anxious 4 Patient so irritable or anxious that participation in the assessment is difficult
Bone or Joint aches: <i>If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored</i> 0 Not present 1 Mild diffuse discomfort 2 Patient reports severe diffuse aching of joints/muscles 4 Patient is rubbing joints or muscles and is unable to sit still because of discomfort	Gooseflesh skin 0 Skin is smooth 3 Piloerection of skin can be felt or hairs standing up on arms 5 Prominent piloerection
Runny nose or tearing: <i>Not accounted for by cold symptoms or allergies</i> 0 Not present 1 Nasal stuffiness or unusually moist eyes 2 Nose running or tearing 4 Nose constantly running or tears streaming down cheeks	Total Score _____ The total score is the sum of all 11 items Initials of person completing Assessment: _____

Score: 5-12 mild; 13-24 moderate; 25-36 moderately severe; more than 36 = severe withdrawal

At home withdrawal assessment

- Wait 12-24 hours after last opioid use
- Wait until you have at least 3-4 WD sxs
 - Rhinorrhea, sweating, tearing, N/V/D, abd cramping, myalgias, goosebumps, restlessness, yawning, anxiety

Wait until you can't wait anymore!

Common Rx at First Visit

- Buprenorphine/naloxone 8/2 mg tab or film, TID prn dispense #21
- LAIB (Sublocade 300 mg SQ monthly in clinic, Brixadi 128 mg SQ monthly in clinic, Rxs sent to specialty pharmacy)
- Ondansetron 4-8 mg ODT SL tid prn, disp #12
- Clonidine 0.1 mg, 1-2 tid prn restlessness and sweating, disp #20
- Naloxone nasal spray kit (refill X3)
- Consider: Trazodone 100 mg qhs for insomnia, Tizanidine 4mg qid for spasms, ibuprofen 800 tid for pain, Imodium 2 qid for diarrhea, hydroxyzine 50 mg tid for anxiety

- Wait until in moderate WD
- Start with 8-16 mg SL (2-4 mg in patients with low levels of tolerance)
- Repeat 4-16 mg every 1-2 hours as needed up to 24-32 mg day 1



Buprenorphine Self-Start

Guidance for patients starting buprenorphine outside of hospitals or clinics

- 1 Plan to take a day off and have a place to rest.
- 2 Stop using and wait until you feel very sick from withdrawals (at least 12 hours is best, if using fentanyl it may take a few days).
- 3 Dose one or two 8mg tablets or strips UNDER your tongue (total dose of 8-16mg).
- 4 Repeat dose (another 8mg-16mg) in an hour to feel well.
- 5 The next day, take 16-32mg (2-4 tablets or films) at one time.

If you have started bup before:

- If it went well, that's great! Just do that again.
- If it was difficult, talk with your care team to figure out what happened and find ways to make it better this time. You may need a different dosing plan than what is listed here.

If you have never started bup before:

- Gather your support team and if possible take a "day off."
- You are going to want space to rest. Don't drive.
- Using cocaine, meth, alcohol or pills makes starting bup harder, and mixing in alcohol or benzos can be dangerous.



Place dose under your tongue (sublingual).

If you have a light habit: (For example, 5 "Norco 10's" a day)

- Consider a low dose: start with 4mg and stop at 8mg total.
- **WARNING:** Withdrawal will continue if you don't take enough bup.

If you have a heavy habit: (For example, injecting 2g heroin a day or smoking 1g fentanyl a day)

- Consider a high dose: start with a first dose of 16mg.
- For most people, the effects of bup max out at around 24-32mg.
- **WARNING:** Too much bup can make you feel sick and sleepy.

Not going well? Have questions? Contact your Navigator for help!



Simple Home Start Instructions

<https://bridgetotreatment.org/resource/rapid-guidance-for-patients-starting-buprenorphine-outside-of-hospitals-or-clinics/>

If you experience precipitated withdrawal:

- Immediately take 16 mg of Buprenorphine (2 strips or tablets) dissolve under tongue for 20 mins. You may repeat 8-16 mg of buprenorphine again in 1-2 hours if needed (40+ mg OK)
- Ondansetron 4-8 mg dissolve under tongue for nausea
- Clonidine 0.1 mg 1-2 tabs every 4 hours for restlessness and sweating

Comfort meds as needed: tizanidine, hydroxyzine, trazodone, NSAIDS, gabapentin, *ketamine/benzodiazepines/hydromorphone (inpatient)*



ASAM Clinical Considerations: Buprenorphine Treatment of Opioid Use Disorder for Individuals Using High-potency Synthetic Opioids

Weimer, Melissa B. DO, MCR, DFASAM; Herring, Andrew A. MD; Kawasaki, Sarah S. MD, FASAM; Meyer, Marjorie MD; Kleykamp, Bethea A. PhD; Ramsey, Kelly S. MD, MPH, MA, FACP, DFASAM

Author Information 

Journal of Addiction Medicine 17(6):p 632-639, 11/12 2023. | DOI: 10.1097/ADM.0000000000001202 

1. What specific clinical situations favor use of low or high-dose buprenorphine initiation strategies?
2. What strategies can address patient discomfort, including precipitated opioid withdrawal, if it occurs during buprenorphine initiation?
3. After buprenorphine initiation, what range of buprenorphine dosing and/or dosing strategies can be considered during stabilization and long-term treatment?
4. What are indications for injectable extended-release buprenorphine for OUD treatment compared with sublingual formulations?
5. How do other novel drug components affect buprenorphine initiation and stabilization?
6. What are OUD treatment alternatives after repeated unsuccessful attempts at buprenorphine treatment?

Advantages of Monthly Injectable Buprenorphine In Remote Native 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

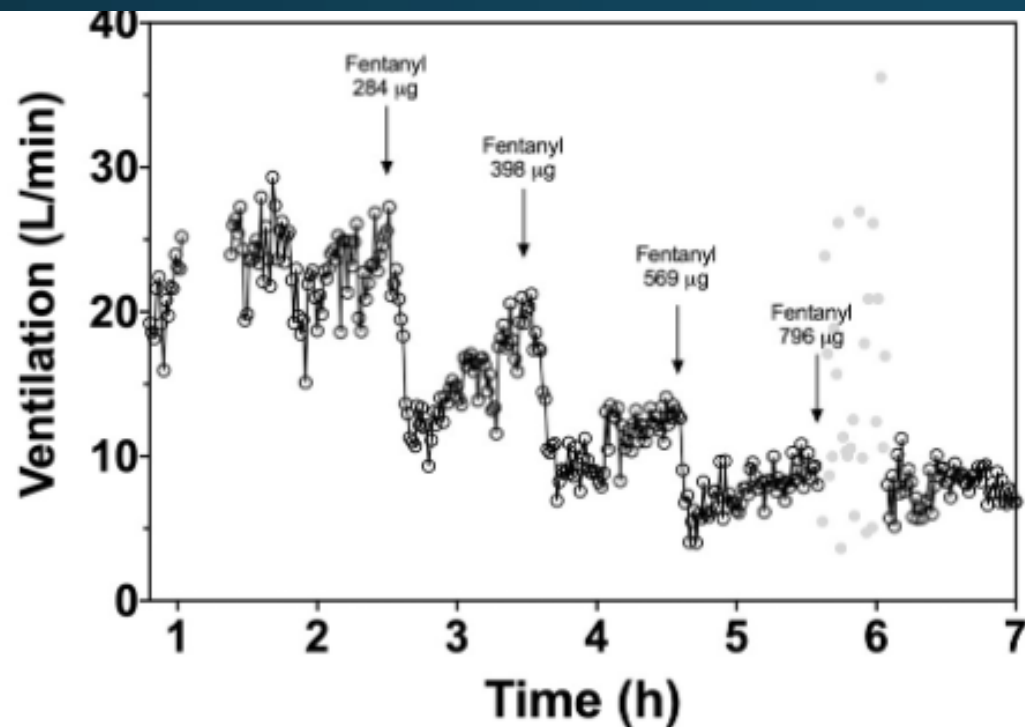
The RECOVER™ study found that 75 percent of patients who had received 12 once-monthly doses of SUBLOCADE in a Phase 3 clinical trial were abstinent from illicit opioids for a year after the study ended

At 12 months 88% of patients reported medication satisfaction

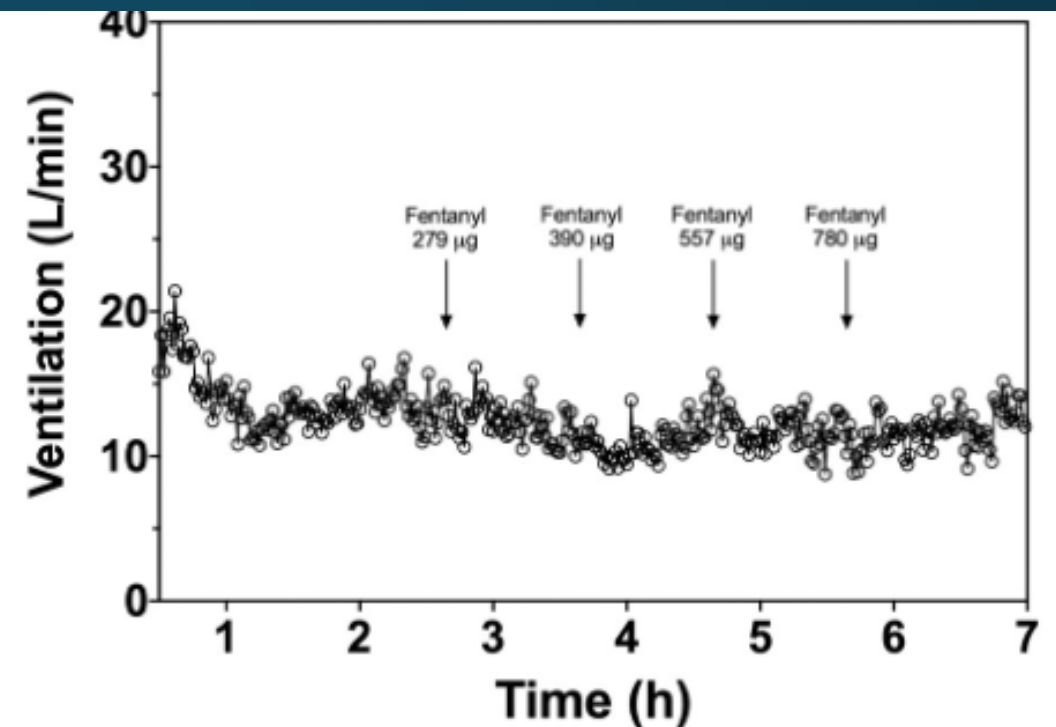
High Dose XR Buprenorphine blocks fentanyl induced respiratory depression

C. High-Dose Buprenorphine

S202, Placebo



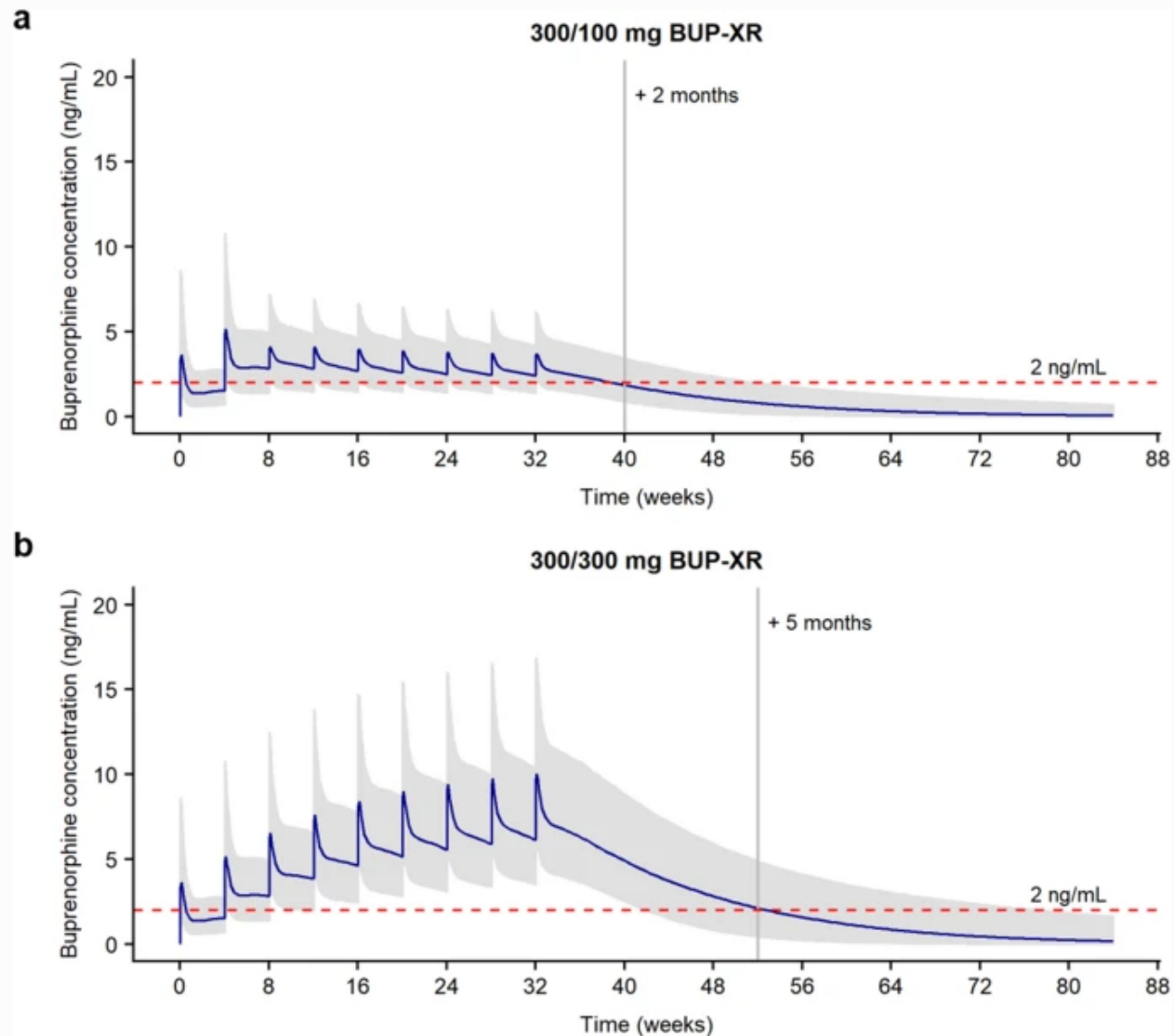
S202, Buprenorphine 5ng/ml



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)

UDS +for 1-2 years

Maintenance therapy

- Check PDMP regularly to ensure prescriptions are filled, and to check other prescriptions.
- Consider drug testing (UDT) and consider confirmatory testing for unexpected results. *UDT can facilitate open communication to change behavior but is not an evidence-based practice and may be a barrier for some patients.*
- Ask about how patient is taking their meds
- Discuss cravings and what triggers them
- Discuss side effect management
- Adjust dose as needed to control cravings
- Address co-morbid disorders
- Initial weekly visits until use extinguished, then q2wk, monthly for long term stable patients



**3 years on MOUD have 2/3 less return to use
5 years on MOUD have 1/2 the return to use rate**

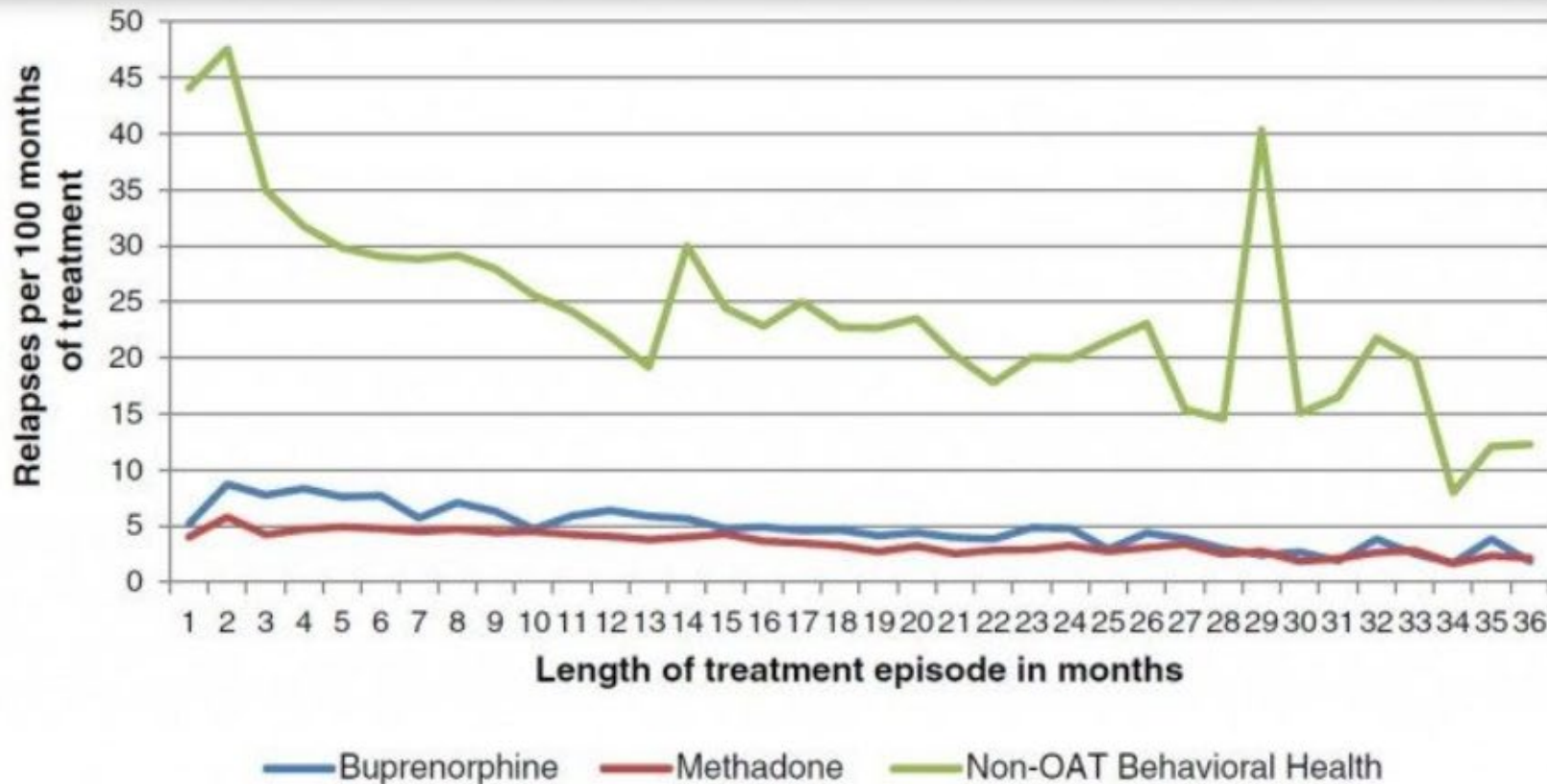


Fig. 1. Relapses during treatment among MassHealth members who received treatment for opioid addiction between 2003 and 2010¹. ¹ N = 18,866 episodes of buprenorphine treatment, 24,309 episodes of methadone treatment and 31,220 episodes of non-OAT behavioral health treatment in month 1. 33% of buprenorphine episodes, 52% of methadone episodes, and 12% of non-OAT treatment episodes lasted 12 months or more. 13% of buprenorphine treatment episodes, 27% of methadone episodes, and 1% of non-OAT treatment episodes lasted 24 months or longer.

When to Consider Taper?

- Patient Insists (for the right reasons)
- Relapse free for a year
- Stable housing, job, family life
- No major stressors (legal, financial)
- Stable Mental Health
- Actively engaged in strong recovery network

TAPER SHOULD ALWAYS BE PATIENT INITIATED

We work to counsel patient AGAINST discontinuation:

- During Pregnancy/postpartum
- During high stress times
- During surgery/hospitalization
- Due pressure from family/friends
- Because they “don’t need it anymore”



Advanced Buprenorphine Prescribing

ANTHC Fairbanks Syndemic Conference

April 2025

Sarah Spencer DO, FASAM

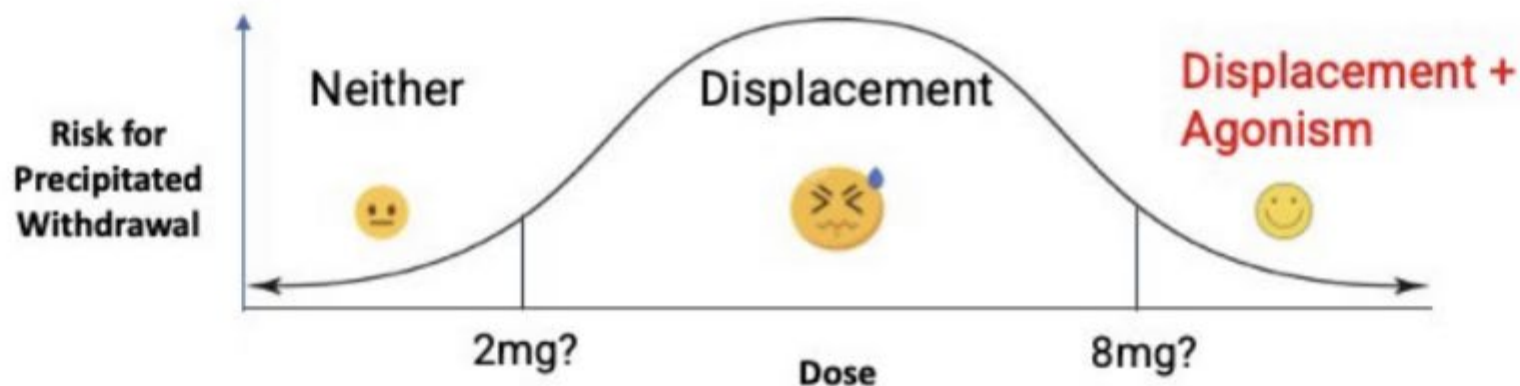
Learning Objectives

- ✧ Identify patients who might benefit from low-dose overlapping start
- ✧ Explore the utility of buprenorphine initiation in the ED and hospital
- ✧ Troubleshoot problems in early LIAB treatment

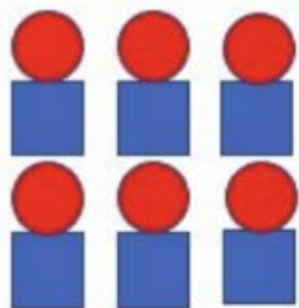


Low Dose Overlapping Buprenorphine Initiation (AKA Micro-dosing)

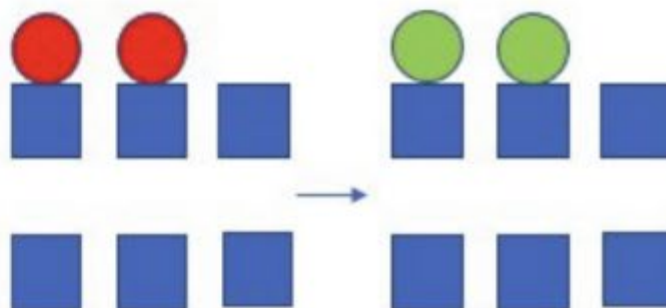
Buprenorphine Micro- and Macrodosing Induction Using a Bell-Shaped Curve Framework



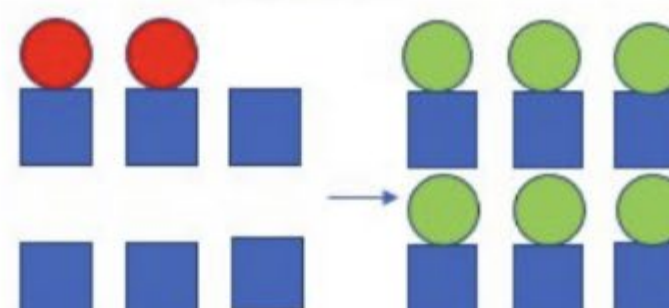
Neither



Displacement



Displacement + Agonism



Herring AA, et al. *Am J Emerg Med*. 2019 Dec;37(12):2259-62.
Huhn AS, et al. *Drug Alcohol Depend*. 2020 Jul 2;214:108147.



MEDICATION-ASSISTED TREATMENT
CENTERS OF EXCELLENCE

 = mu-opioid receptor  = fentanyl  = buprenorphine

When to consider Micro-dosing?

Transitioning from methadone
to buprenorphine

Chronic fentanyl use


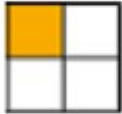


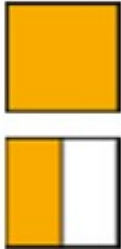

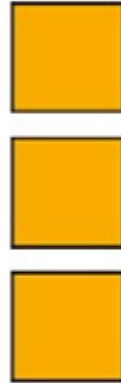
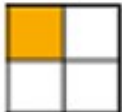





Patient with severe acute pain
and OUD

Previous failed attempts at
induction due to PW

Basics of Micro-dosing Buprenorphine Induction

- Allow patients to continue the full opioid agonist as starting small doses of buprenorphine
- Start with very small doses of SL buprenorphine (0.5mg) to gradually displace full opioid agonist
- Gradually increase amount of buprenorphine patients receive
- Continue full opioid agonist during induction period
- Stop full agonist as tolerated after buprenorphine maintenance dose achieved (16+ mg)
- Limited evidence, mostly case series reports, commonplace on addiction medicine services

Continue to use full agonist (fentanyl, hydromorphone or methadone) on days 1-6

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Buprenorphine dose	0.5mg (1/4 strip) daily	0.5mg (1/4 strip) twice daily	1mg (1/2 strip) twice daily	2mg (1 strip) twice daily	3mg (1 1/2 strips) twice daily	4mg (2 strips) twice daily	6mg (3 strips) twice daily
Morning dose							
Night dose							

Day 8+ take 16-32 mg SLBUP daily

Stop using the full agonist on day 7-8 (fentanyl, methadone or hydromorphone)

Can give XRBUP (Sublocade/Brixadi) once tolerating 8 mg SLBUP or anytime if leaving AMA or for PW treatment

3-day Sublingual Cross Taper Start

Prescribe 2 mg buprenorphine films #6, 8 mg buprenorphine films #4 for 3 day supply)⁴

- Day 1: 0.5 mg (1/4 of 2mg strip) SL buprenorphine q3 hours (4 mg total daily dose), continue full opioid agonists
- Day 2: 1 mg (1/2 of 2 mg strip) SL buprenorphine q3 hours (8 mg total daily dose), continue full opioid agonists
- Day 3: 8-16 mg (1-2 8 mg strips) SL buprenorphine once daily and 4 mg SL q6h prn withdrawal (max 32 mg total daily dose), wean or stop full opioid agonists



<https://bridgetotreatment.org/resource/starting-buprenorphine-with-microdosing-and-cross-tapering/>

7-day Sublingual Cross Taper Start

Prescribe 2 mg buprenorphine SL strips # 15, 8 mg buprenorphine SL strips #4 for 7 day supply

- Day 1: 0.5 mg (1/4 of 2 mg strip) buprenorphine SL daily (0.5 mg total daily dose), continue full opioid agonist
- Day 2: 0.5 mg (1/4 of 2 mg strip) buprenorphine SL BID (1 mg total daily dose), continue full opioid agonist
- Day 3: 1 mg (1/2 of 2 mg strip) buprenorphine SL BID (2 mg total daily dose), continue full opioid agonist
- Day 4: 2 mg buprenorphine SL BID (4 mg total daily dose), continue full opioid agonist
- Day 5: 3 mg (1+1/2 of 2 mg strip) buprenorphine SL BID (6 mg total daily dose), continue full opioid agonist
- Day 6: 4 mg (2 of 2 mg strip) buprenorphine SL BID (8 mg total daily dose), continue full opioid agonist
- Day 7: 6 mg (3 of 2 mg strip) buprenorphine SL BID (12 mg total daily dose), continue full opioid agonist
- Day 8: 16 mg (2 of 8 mg strip) buprenorphine qday and 4mg (1/2 of 8 mg strip) q6h prn withdrawal (max 32 mg

1-Day Micro-Macro Start

Administer (2) 20 mcg patch, prescribe buprenorphine 8 mg SL film/tablet as needed

- **Place 2 x 20 mcg transdermal buprenorphine patch**
(do not need to wait for withdrawal)
- If patches are not available:
 - Stop full opioids
 - Do not wait for withdrawal
 - Start very low dose of buprenorphine
 - 0.5 mg (1/4 of 2mg strip) SL buprenorphine q3 hours (4 mg total daily dose)
 - OR
 - Swallow 2mg SL buprenorphine q3 hours (6 mg total daily dose)
- **Wait** until the development of moderate to severe withdrawal. Patients should report feeling sick from withdrawals. (COWS 8 or $\geq 7/10$ severity rating by patient)
 - 6-12 hours typically but can be much longer depending on the person and the drugs they have been consuming.
 - Some patients may wait 24-72 hours
 - Patient should stay abstinent and keep microdosing--keep the patches on or keep swallowing the 2mg tablets q3 hours (6 mg total daily dose) until they feel sick from withdrawal

Once withdrawal has become intolerable, **take 16mg SL bup** in one dose.

Adjunctive meds for breakthrough withdrawal symptoms

- Clonidine 0.1mg PO q8 hours PRN opioid withdrawal symptoms not controlled one hour after 2nd dose of buprenorphine. Hold for SBP<90, HR<60
- Acetaminophen 650mg PO every 4 hours PRN headache, musculoskeletal pain
- Ondansetron 4mg PO every 6 hours PRN nausea/vomiting
- Trazodone 100mg PO QHS PRN insomnia
- Lorazepam 1mg PO every 4 hours PRN severe anxiety/agitation (up to 10mg/day)
- Gabapentin 600mg PO TID PRN moderate anxiety/restlessness

Buprenorphine in the ED

Hospitalization is a high-risk touchpoint

MA statewide study: Residents hospitalized with injection-related infection in 2014 *had 54-fold increased risk of fatal opioid overdose* compared to general population

OR statewide study: Among adults with OUD hospitalized between April 2015-Dec 2017, *8% died within 12 months of discharge*

- Mortality similar to acute myocardial infarction (5-9%)

**Mortality rate after 1st Heart attack
is about 8% at one year**

**We would never send a patient home without a statin,
which reduces mortality by 25%**

**Mortality rates after first overdose
are 8% at one year**

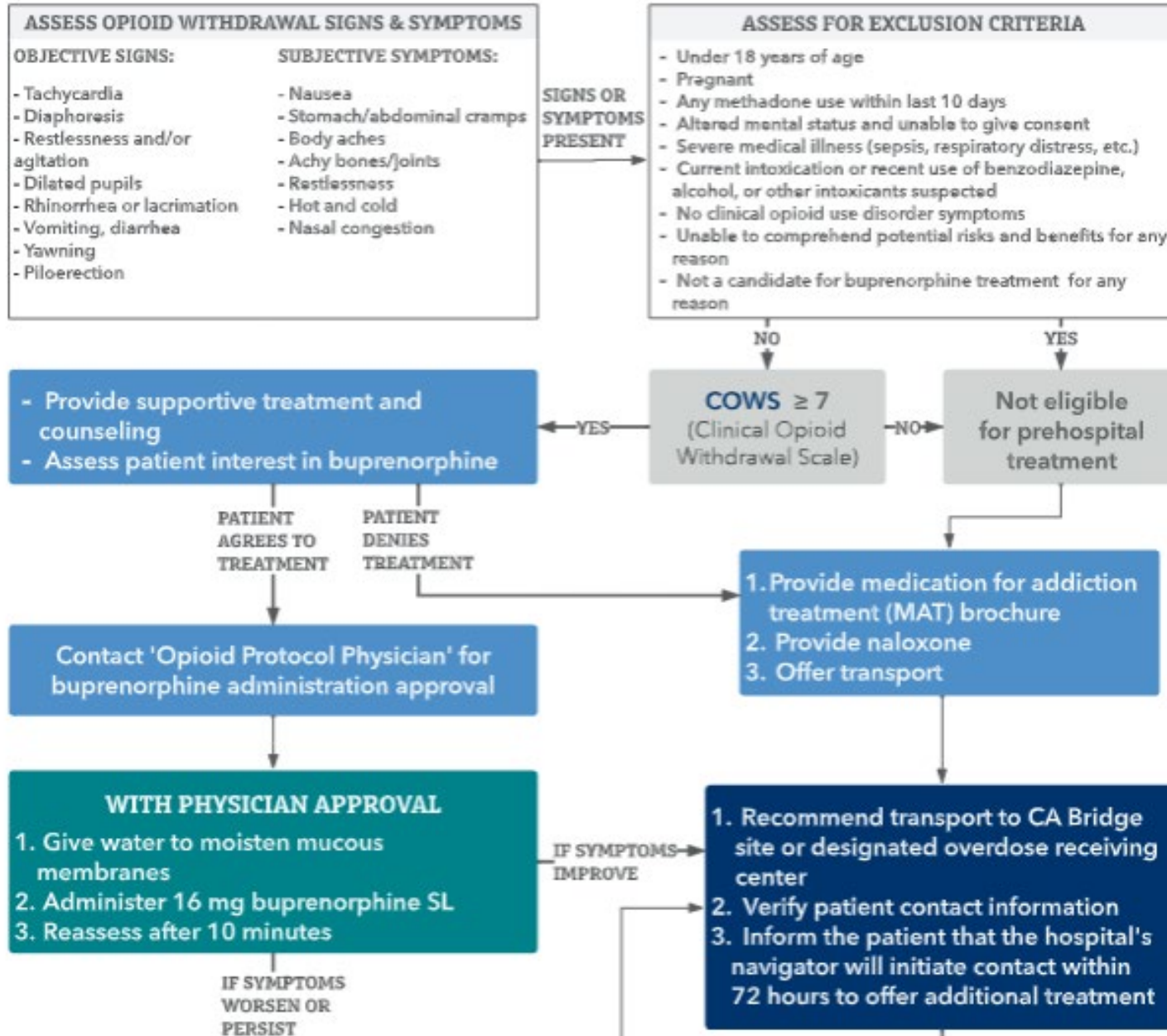
**However, patients are routinely sent home without MOUD,
which reduces one year mortality by >60%**

Why initiate MOUD via EMS?

- Buprenorphine is an incredibly safe medication
- Quickly control WD symptoms
- Opioid blockade to protect against repeat overdose X 48hrs
- Increased retention in treatment
- >10 states already doing this

Emergency Medical Services

Opioid Withdrawal: Adult Medical Treatment Guidelines



EMS Opioid Withdrawal Protocol for Pre-hospital Buprenorphine

- Pending in Alaska
- Useful in long transports

<https://bridgetotreatment.org/resource/emergency-medical-services-opioid-withdrawal-treatment-guidelines/>

Consensus Recommendations on the Treatment of Opioid Use Disorder in the Emergency Department

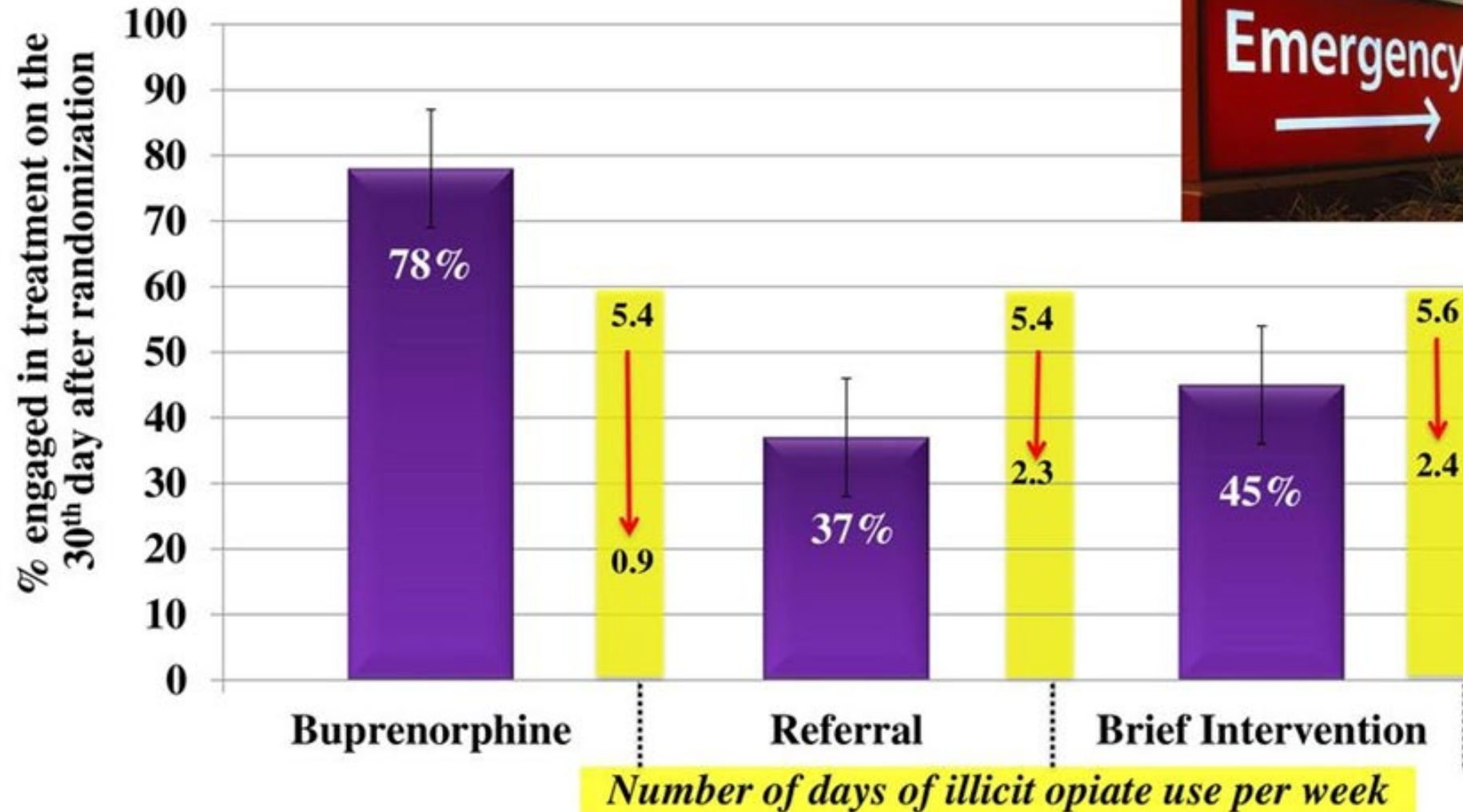


Kathryn Hawk, MD, MHS*; Jason Hoppe, DO; Eric Ketcham, MD; Alexis LaPietra, DO; Aimee Moulin, MD; Lewis Nelson, MD; Evan Schwarz, MD; Sam Shahid, MBBS, MPH; Donald Stader, MD; Michael P. Wilson, MD; Gail D'Onofrio, MD, MS

Based on literature review, clinical experience, and expert consensus, the group recommends that emergency physicians offer to initiate opioid use disorder treatment with buprenorphine in appropriate patients and provide direct linkage to ongoing treatment for patients with untreated opioid use disorder.

ED-initiated Buprenorphine Increased Engagement In Addiction Treatment, Reduced Self-reported Illicit Opioid Use, & Decreased Use Of Inpatient Addiction Treatment Services

D'Onofrio JAMA. 2015.



Buprenorphine administration in the ED reduces cost, return to the ED and admission rates!

Average Length of Stay 2.4 hrs!



Evaluation of the use of buprenorphine for opioid withdrawal in an emergency department.

Berg ML, et al. Drug Alcohol Depend. 2007.

who received buprenorphine were less likely to return to the same ED within 30 days for a drug-related visit (8%) compared to those who received symptomatic treatment (17%) ($p < 0.05$).

July 15, 2021

High-Dose Buprenorphine Induction in the Emergency Department for Treatment of Opioid Use Disorder

Andrew A. Herring, MD^{1,2}; Aidan A. Vosooghi, MS^{1,3}; Joshua Luftig, PA¹; [et al](#)

[» Author Affiliations](#) | [Article Information](#)

JAMA Netw Open. 2021;4(7):e2117128. doi:10.1001/jamanetworkopen.2021.17128

ADDICTION

SSA SOCIETY FOR THE STUDY OF ADDICTION

Research Report

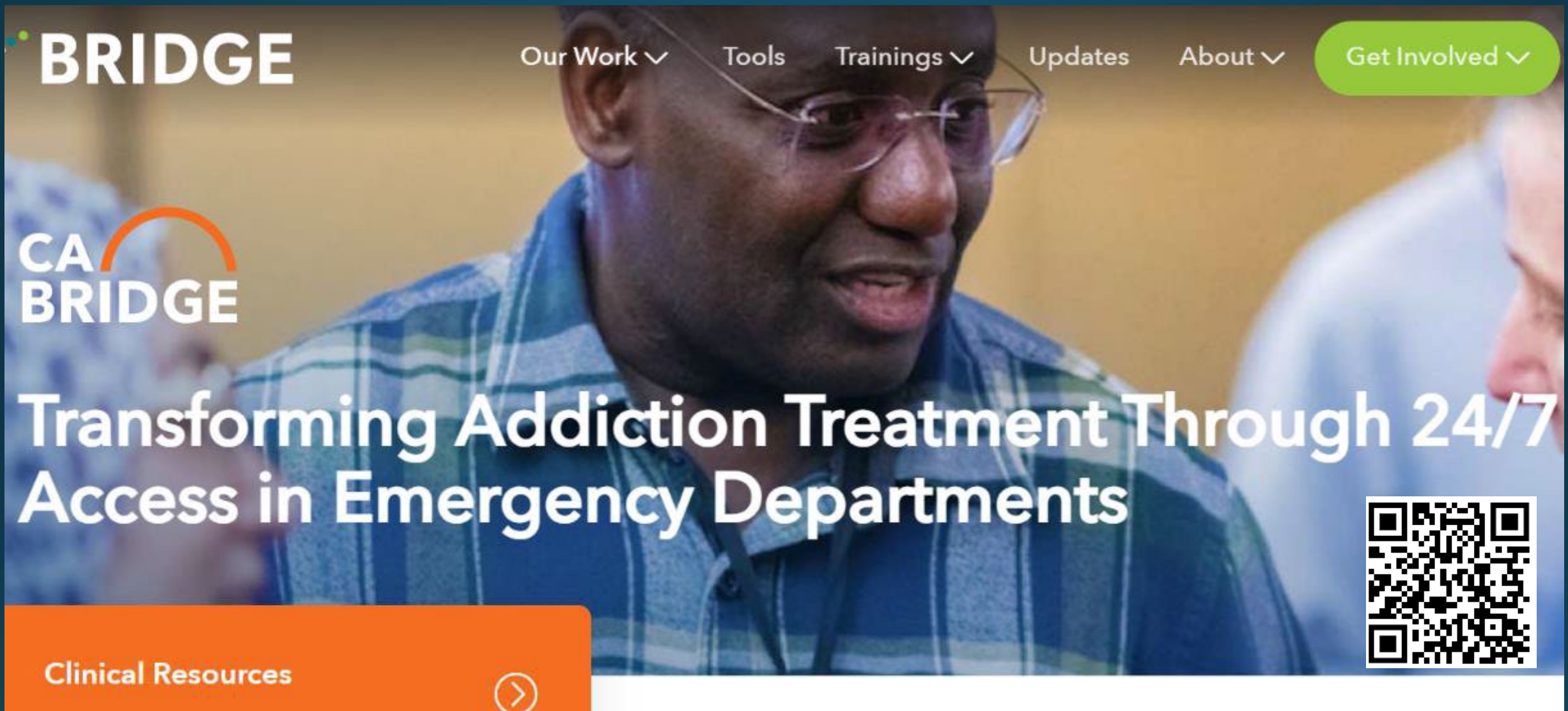

Cost-effectiveness of emergency department-initiated treatment for opioid dependence

Susan H. Busch , David A. Fiellin, Marek C. Chawarski ... [See all authors](#) >


First published: 16 August 2017

<https://doi.org/10.1111/add.13900>


Treatment with buprenorphine was the most cost-effective treatment option with a mean cost of \$1,752. The mean cost of a brief intervention alone was \$1,805 and the mean cost for a referral alone was \$1,977. The ED-initiated buprenorphine group was nearly twice as likely to enroll in addiction treatment and used illicit opioids for fewer days during the 30 days after their ED visits. This group also used fewer illicit opioids over the study period.




Our Work ▾ Tools Trainings ▾ Updates About ▾ [Get Involved ▾](#)

CA  BRIDGE

Transforming Addiction Treatment Through 24/7 Access in Emergency Departments



Clinical Resources 

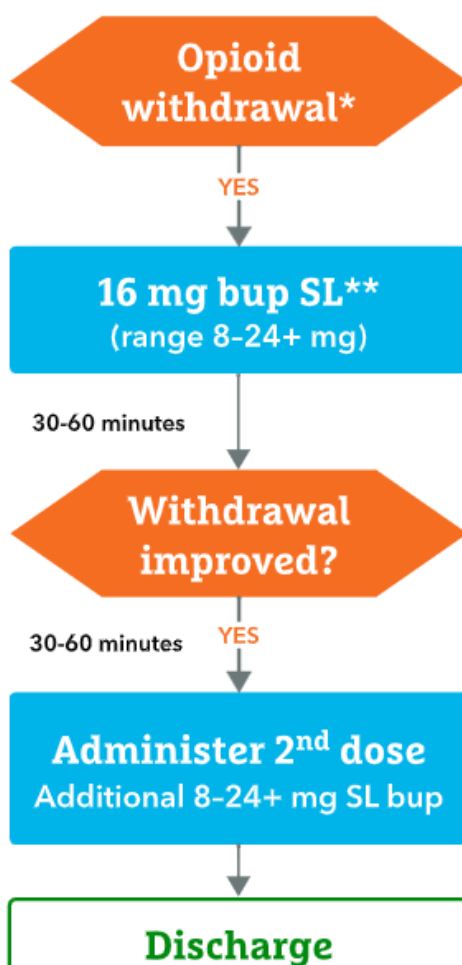
An AMAZING free online resource with free protocols and training materials to start utilizing buprenorphine in your hospital ED

<https://bridgetotreatment.org/addiction-treatment/ca-bridge/>



Emergency Department Buprenorphine (Bup) Quick Start

Connect with your patient: Accurate diagnosis and treatment requires trust, collaboration, and shared decision making.



Rx self-directed start:

- Wait for severe withdrawal then start with 8-24+ mg SL.
- Rx per "Discharge" box below.

If no improvement or worse, consider:

Worsening withdrawal (common): Occurs with lower starting doses and heavy tolerance; improves with more bup (additional 8-16 mg SL).

Other substance intoxication or withdrawal: Continue bup and manage additional syndromes.

Bup side-effects: e.g., nausea or headache. Continue bup and treat side-effects with supportive medications.

Medical illness: Continue bup and manage underlying condition.

If sudden & significant worsening, consider precipitated withdrawal (rare): See box below.

*Diagnosis Tips for Opioid Withdrawal:

1. Look for at least two clear objective signs not attributable to something else: large pupils, yawning, runny nose & tearing, sweating, vomiting, diarrhea, gooseflesh/piloerection, tachycardia.
2. Confirm with the patient that they feel 'bad' withdrawal and they feel ready to start bup. If they feel their withdrawal is mild, it is likely too soon.
3. As needed, consider using the COWS (clinical opioid withdrawal scale). Start if COWS ≥ 8 with ≥ 2 objective signs.
4. Withdrawal sufficient to start bup typically occurs 24-36 hrs after decreased/stopped use, but can vary from 6-72 hrs. Methadone withdrawal commonly takes longer.

**Bup Dosing Tips:

1. Respect patient preference. Shared decision making, flexibility, and collaboration are essential.
2. Heavy dependence/tolerance (e.g., fentanyl) may need higher doses of bup.
3. Low dependence/tolerance may do well with lower doses of bup.
4. Starting bup may be delayed or modified if there complicating factors:
 - Altered mental status, delirium, intoxication
 - Severe acute pain, trauma, or planned surgery
 - Severe medical illness
 - Long-term methadone maintenance

Treatment of buprenorphine precipitated withdrawal

Patient Home Start Instructions



Buprenorphine Self-Start

Guidance for patients starting buprenorphine outside of hospitals or clinics

- 1 Plan to take a day off and have a place to rest.
- 2 Stop using and wait until you feel very sick from withdrawals (at least 12 hours is best, if using fentanyl it may take a few days).
- 3 Dose one or two 8mg tablets or strips **UNDER** your tongue (total dose of 8-16mg).
- 4 Repeat dose (another 8mg-16mg) in an hour to feel well.
- 5 The next day, take 16-32mg (2-4 tablets or films) at one time.

If you have started bup before:

- If it went well, that's great! Just do that again.
- If it was difficult, talk with your care team to figure out what happened and find ways to make it better this time. You may need a different dosing plan than what is listed here.

If you have never started bup before:

- Gather your support team and if possible take a "day off."
- You are going to want space to rest. Don't drive.
- Using cocaine, meth, alcohol or pills makes starting bup harder, and mixing in alcohol or benzos can be dangerous.



Place dose under your tongue (sublingual).

If you have a light habit: (For example, 5 "Norco 10's" a day)

- Consider a low dose: start with 4mg and stop at 8mg total.
- **WARNING:** Withdrawal will continue if you don't take enough bup.

If you have a heavy habit: (For example, injecting 2g heroin a day or smoking 1g fentanyl a day)

- Consider a high dose: start with a first dose of 16mg.
- For most people, the effects of bup max out at around 24-32mg.
- **WARNING:** Too much bup can make you feel sick and sleepy.

Not going well? Have questions? Contact your Navigator for help!

When discharging
patients not in
active withdrawal
yet

Always give at
least 1 week of
SLBUP Rx

<https://bridgetotreatment.org/resource/rapid-guidance-for-patients-starting-buprenorphine-outside-of-hospitals-or-clinics/>

Precipitated withdrawal

- Bup 16mg SL -AND- PO benzodiazepine x1
- Repeat bup until mydriasis resolves
- If withdrawal persists, ketamine 0.3mg/kg IV slow push every 30 minutes until calm and light sedation. Hold for excessive sedation or dissociative symptoms

**Enhanced Care Practice: Precipitated Withdrawal
90-Minute Emergency Room Bundle**



1. Carroll GG, Wasserman DD, Shah AA, et al. Buprenorphine Field Initiation of ReScue Treatment by Emergency Medical Services (Bupe FIRST EMS): A Case Series. *Prehospital Emerg Care Off J Natl Assoc EMS Physicians Natl Assoc State EMS Dir.* 2021;25(2):289-293. doi:10.1080/10903127.2020.1747579
2. Herring AA, Schultz CW, Yang E, Greenwald MK. Rapid induction onto sublingual buprenorphine after opioid overdose and successful linkage to treatment for opioid use disorder. *Am J Emerg Med.* 2019;37(12):2259-2262. doi:10.1016/j.ajem.2019.05.053
3. Herring AA. Postoverdose Initiation of Buprenorphine After Naloxone-Precipitated Withdrawal Is Encouraged as a Standard Practice in the California Bridge Network of Hospitals. *Ann Emerg Med.* 2020;75(4):552-553. doi:10.1016/j.annemergmed.2019.12.015

If no improvement or worse consider:

Undertreated withdrawal: Occur 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.

If sudden/significant worsening, consider precipitated withdrawal
See box below.

Buprenorphine Precipitated Withdrawal: Treatment approach by phase

Early

1. Act quickly
2. Calm & confident
3. Benzo
4. High-dose Bup (16mg)

Clonidine
Pramipexole
Gabapentinoid

Acute

1. Monitored bed
2. Bup to 64mg SL
3. Ketamine 20 IV q 30
4. Fentanyl 200mcg Q 10 min

Residual

1. Pramipexole 0.5mg
 2. Clonidine 0.3mg
 3. Benzo (loraz 1mg IV)
 4. Pregabalin 100-300mg po
- Olanzapine 10mg IM

goal

XRBUP



Management of opioid use disorder and associated conditions among hospitalized adults: A Consensus Statement from the Society of Hospital Medicine

Susan L Calcaterra ¹, Marlene Martin ², Richard Bottner ³, Honora Englander ⁴, Zoe Weinstein ⁵,

- Assess hospitalized patients with unhealthy opioid use for OUD
- Use shared decision making to initiate medications for OUD
- Offer buprenorphine or methadone as first line agents to treat opioid withdrawal and OUD
- Assess and treat pain in the setting of OUD
- Continue buprenorphine or methadone during hospitalization, including in the setting of acute pain and the perioperative period
- Link patients to a buprenorphine prescriber or an opioid treatment program when they want to continue buprenorphine or methadone following hospital discharge

3 Basic Acute Pain Management Options:

1. Divide buprenorphine dose every 6 hours, **INCREASE DOSE UP TO 32+ MG/DAY** (no known ceiling for analgesic effect, can be given on top of long-acting injectable buprenorphine), add adjunctive meds but do not use additional opioids (minor pain/day surgery)
2. Continue buprenorphine maintenance therapy (If desired at **lower dose 8-12mg**) utilize multimodal analgesia and administer high-dose, potent, short-acting opioid analgesics (hydromorphone or fentanyl), titrate to effect. (mod-severe pain/inpatient surgery),
3. **Discontinue buprenorphine** maintenance therapy and use opioid analgesics (major surgery). Convert back to buprenorphine therapy when acute pain no longer requires opioid analgesics.

Patient directed only, NOT recommended.

“Given the increased mortality rate immediately after discontinuing buprenorphine-naloxone, we strongly recommend continuing buprenorphine-naloxone preoperatively to ensure overall patient stability and prevent relapse from stopping and restarting the medication.”

The perioperative patient on buprenorphine: a systematic review of perioperative management strategies and patient outcomes, Can J Anesthesia, February 2019, Volume 66, Issue 2, pp 201–217

Labor and Delivery

- **Epidurals!**
- **Full Opioid Agonists are still OK!**
Hydromorphone 2-3 times usual dose
- **Don't give extra Bup during labor to treat acute pain**
- **OK to increase Bup dose post delivery**
- **Don't give nalbuphine, butorphanol (precipitated w/d)**
- **Schedule NSAIDS/acetaminophen**
- **Buprenorphine and methadone are safe in breastfeeding**

Opioids + MOUD

- **4-12% Mu receptor availability** at 24mg daily dose of buprenorphine
- Hydromorphone serum level of 4ng/ml is associated with lowest level of good pain control
- How Much?
 - Swedish post-Cesarean Protocol: Hydromorphone oral 4-6mg q4h + 4-8mg q4h prn pain
 - 2-3x typical dosing
 - No longer than non-opioid tolerant patients


Develop a standing order set for patients with OUD leaving AMA

- Administer a high dose of buprenorphine (24-32mg)
(If possible, administer XRBUP injection)
- Give at least 1 week Rx for outpatient buprenorphine
- A referral to outpatient MOUD provider with warm handoff/ peer support



Low Threshold XR-BUP/LIAB

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



XRBUP/LAIB

Brixadi vs Sublocade

- Does not require refrigeration
- Can be given at alternate sites once stable
- No palpable lump
- Weekly and monthly formulations with various strengths
- Labeled dosing for opioid/BUP naïve patients
- Weekly form likely preferred in pregnancy
- Highest dose monthly 128mg is = 200 mg Sublocade average serum drug levels
- Monthly formulation has shorter half life than Sublocade
- Same REMS/ordering procedure, similar cost (\$100 less)

Overview of LAIB products

	Monthly injection (RBP-6000: Sublocade®)	Weekly and monthly injection (CAM2038: Buvidal®/Brixadi®)	SL tab (Suboxone®)										
FDA Indication	Moderate-severe OUD, tolerating SL bup at 8-24 mg/day for ≥7 days. Counseling & psychological support should be part of tx plan.	Moderate-severe OUD after a single SL dose or already on bup. Counseling & psychological support should be part of tx plan.	Maintenance tx of opioid dependence. Counseing, etc.										
C _{avg} bup at steady state (ng/mL)	100 mg: 2.87 300 mg: 6.32	<table><tr><th>Weekly</th><th>Monthly</th></tr><tr><td>8mg: -</td><td>64 mg: 2.0</td></tr><tr><td>16 mg: 2.1</td><td>96 mg: 2.9</td></tr><tr><td>24 mg: 2.9</td><td>128 mg: 3.9</td></tr><tr><td>32 mg: 4.2</td><td></td></tr></table>	Weekly	Monthly	8mg: -	64 mg: 2.0	16 mg: 2.1	96 mg: 2.9	24 mg: 2.9	128 mg: 3.9	32 mg: 4.2		8/2 & 8 mg: 1.19 24 mg: 2.91
Weekly	Monthly												
8mg: -	64 mg: 2.0												
16 mg: 2.1	96 mg: 2.9												
24 mg: 2.9	128 mg: 3.9												
32 mg: 4.2													
C _{max} bup after single dose (ng/mL)	100 mg injection: 1.54 300 mg injection: 5.37	<table><tr><th>Weekly</th><th>Monthly</th></tr><tr><td>16 mg: 3.08</td><td>64 mg: 3.81</td></tr><tr><td>24 mg: 3.64</td><td>96 mg: 5.47</td></tr><tr><td>32 mg: 5.27</td><td>128 mg: 6.59</td></tr></table>	Weekly	Monthly	16 mg: 3.08	64 mg: 3.81	24 mg: 3.64	96 mg: 5.47	32 mg: 5.27	128 mg: 6.59	8/2 & 8 mg: 3.00 Generic 16/4 mg: 4.70		
Weekly	Monthly												
16 mg: 3.08	64 mg: 3.81												
24 mg: 3.64	96 mg: 5.47												
32 mg: 5.27	128 mg: 6.59												
Time to peak	~24 hours	<table><tr><th>Weekly</th><th>Monthly</th></tr><tr><td>Within 24 hrs</td><td>Within 6-10 hrs</td></tr></table>	Weekly	Monthly	Within 24 hrs	Within 6-10 hrs							
Weekly	Monthly												
Within 24 hrs	Within 6-10 hrs												
Terminal half-life	43-60 days	<table><tr><th>Weekly</th><th>Monthly</th></tr><tr><td>3-5 days</td><td>19-26 days</td></tr></table>	Weekly	Monthly	3-5 days	19-26 days	24-42 hrs						
Weekly	Monthly												
3-5 days	19-26 days												
Solvent	N-methyl-2-pyrrolidone (NMP): 278 and 833 mg NMP	<table><tr><th>Weekly: Ethanol</th><th>Monthly: NMP</th></tr><tr><td>16-61 mgs*</td><td>57-115 mg</td></tr></table>	Weekly: Ethanol	Monthly: NMP	16-61 mgs*	57-115 mg	-						
Weekly: Ethanol	Monthly: NMP												
16-61 mgs*	57-115 mg												

Sublocade OK to continue 300 mg empirically

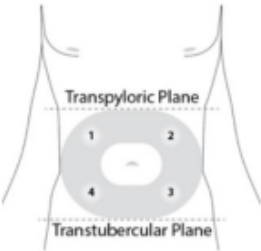
Only advantage of 100 mg shot is smaller bump, less side effects
Can give part of a shot (ex 200mg/dose is approx)

Brixadi weekly 8 mg can be given every 2-3 days the first week X3 doses to titrate up pts with low/no tolerance

NEVER give 4 mg test dose of SLBUP
(Very high risk of PW)

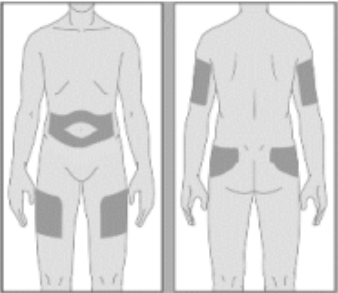
Subcutaneous Monthly RBP-6000

***Injection Transition Doses for Patients whose Disease Symptoms are Controlled (FDA label)**

	BUP-Sublingual Transition Doses	RBP-6000 Injection #1	RBP-6000 Injection #2	Maintenance Dose	
	8-18 mg/day*	300 mg (1.5 mL)	100 mg (0.5 mL)	100 mg	-No < q 26 days, delays up to 2 wks not expected to have neg effect -If on 100 mg and traveling & will miss – consider 300 mg for 2 months
	20-24 mg/day*	300 mg	300 mg	100 mg	
	If new- after 7-day lead of ≥8 mg daily:	300 mg	300 mg	100 mg	

Subcutaneous Weekly and Monthly CAM2038

BUP-SL dose and approximate equivalent weekly and monthly BUP-XR dose

	BUP-Sublingual	CAM2038 weekly (rotate sites)	CAM2038 monthly
	≤6 mg	8 mg (0.16 mL)	--
	8-10 mg	16 mg (0.32 mL)	64 mg (0.18 mL)
	12-16 mg	24 mg (0.48 mL)	96 mg (0.27 mL)
	18-24 mg	32 mg (0.64 mL)	128 mg (0.36 mL)
	If new to bup	Use arms only after 4 weekly doses. Can initiate on day 1 after a 4 mg SL dose, then 16 mg same day with option of additional 8 mg if needed	-

Pharmacokinetic parameters	SUBUTEX daily stabilization		SUBLOCADE		
	12 mg (steady-state)	24 mg (steady-state)	300 mg# (1 st injection)	100 mg* (steady-state)	300 mg* (steady-state)
Mean					
$C_{avg,ss}$ (ng/mL)	1.71	2.91	2.19	3.21	6.54
$C_{max,ss}$ (ng/mL)	5.35	8.27	5.37	4.88	10.12
$C_{min,ss}$ (ng/mL)	0.81	1.54	1.25	2.48	5.01

During the first month of XRBUP, the serum drug levels drop to levels that may not be therapeutic for some patients, thus supplemental sublingual dosing is indicated in patients who experience craving or withdrawal in early treatment

Switching Patients Stable on SLBUP to LIAB/XRBUP

- Inquire on motivations (convenience, taper)
- Counsel on risk of anxiety related to loss of control of dosing med
- Opioid withdrawal mimics many other conditions (runny nose, sweating, anxiety, insomnia, myalgias)
- High BUP levels can cause sweating, may be intermittent
- Offer BH counseling prior to transition to prepare for and manage anxiety related to loss of ritual and control
- Plan desired approach (stop SLBUP cold turkey or overlap with taper of SLBUP)
- Consider giving second Sublocade dose 1 week after first, especially if dose is $\geq 24\text{mg/day}$
- Medication levels peak in 24 hrs, then slowly decline.
- Consider offering SLBUP the last 2 weeks of the month, decreasing daily dose each month
- Consider checking serum Bup levels to clarify symptom correlations with objective levels

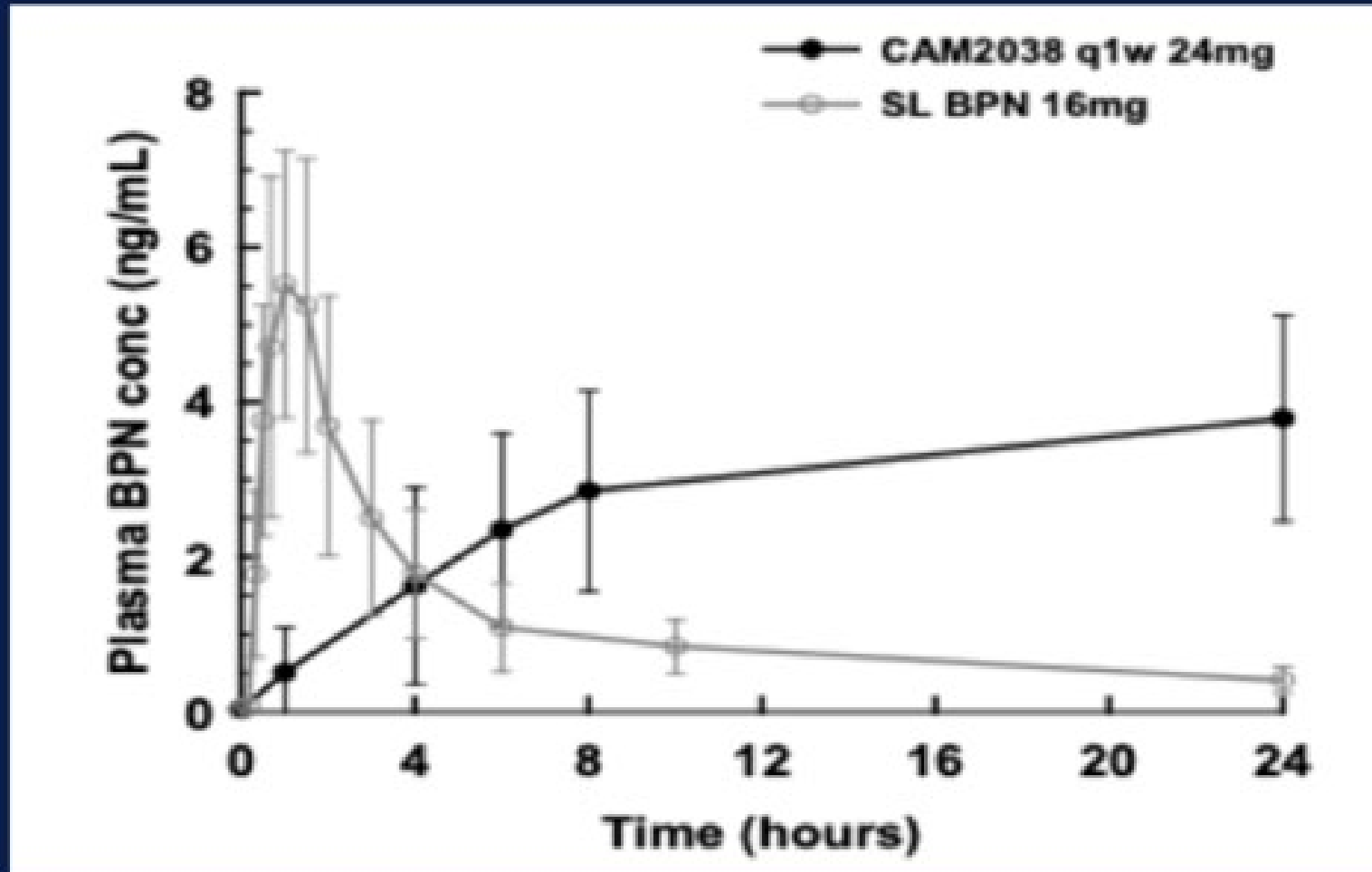
Using Extended Release Buprenorphine Injection to Discontinue Sublingual Buprenorphine: A Case Series

Alexis D Ritvo ¹, Susan L Calcaterra, Jonathan I Ritvo

Abstract

Buprenorphine is highly effective for the treatment of opioid use disorder and is increasingly being used in the treatment of chronic pain. For various reasons, patients on buprenorphine may request discontinuation of this medication. Tapering off buprenorphine can be challenging due to intolerable withdrawal symptoms, including nausea, malaise, anxiety, and dysphoria. A single dose of extended-release buprenorphine may facilitate discontinuation of buprenorphine by mitigating prolonged, debilitating opioid withdrawal symptoms. We report on three cases of successful transition from low dose sublingual buprenorphine to a single injection of 100 mg extended-release buprenorphine to opioid cessation in patients who had previously been unable to taper fully off buprenorphine. This novel use of extended-release buprenorphine provides a viable alternative to fully transition patients off buprenorphine when they are medically and emotionally ready.

ED-Initiated Buprenorphine VALIDATION Network Trial ED INNOVATION



XR BUP given in ED
1200 patients
9 cases of PW
(0.76%)
Did NOT give SL BUP
prior to shot

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2802898>

Pharmacokinetics of XR- & SL-Buprenorphine

Updated Sublocade Prescribing Info 3/2005

SUBLOCADE must be injected into the **subcutaneous tissue of the abdomen, thigh, buttock, or back of the upper arm**. (SUBLOCADE PI 2.1)

~~Patients should receive an initial dose (e.g. 4 mg) of transmucosal buprenorphine and be observed for one hour to confirm tolerability before administering the first injection of SUBLOCADE.~~ The recommended starting dose of SUBLOCADE is 300 mg. Monitor patients in a healthcare setting after injection with SUBLOCADE to assess for symptoms of worsening withdrawal or sedation. Patients' symptoms should be stable or improving prior to release from the healthcare setting. On induction day, up to an additional 8 mg of transmucosal buprenorphine could be administered to manage withdrawal symptoms. (SUBLOCADE PI 2.3)
(Never give 4 mg test dose prior, give as much SLBUP as needed the first 24 hours to treat PW)

The recommended dose for the second injection is 300 mg. **The second injection may be administered as early as 1 week and up to 1 month after the initial injection**, based on patient need. (SUBLOCADE PI 2.3)

Black Bag Exemption

Question: Can a physician transport controlled substances and administer at the patient's home residence (the so-called "black bag exception")? Answer: Yes, with a limit. **DEA will permit a physician who is registered with DEA to dispense controlled substances at a particular location in a state to travel to other unregistered locations in the same state to dispense controlled substances on an "as-needed and random basis,"** so long as the physician does not maintain a principal place of professional practice at any of those unregistered locations. If a physician intends to dispense controlled substances from a particular location several times a week or month, he must first file a separate registration for the location.

NTC Mobile Rural MOUD



Mobile MOUD Clinic

- Saves patients 50-120 miles round trip travel
- MOUD injections
- Harm Reduction supplies
- Comfort Medication Samples
- Rapid Testing
- Outreach
- Medical visits for Treatment of addiction and comorbid conditions



Who Uses Mobile Services?

- No gas/car/license (carpool)
- House arrest
- Parents without childcare
- Living with other PWUD
- People needing harm reduction and wound care supplies
- People working 9-5 jobs



Buprenorphine for Chronic Pain

CDC 2022 Opioid Guidelines

Under Recommendation #5

“Emerging evidence suggests that patients for whom risks of continued high-dose opioid use outweigh benefits but who are unable to taper and who do not meet criteria for opioid use disorder might benefit from transition to buprenorphine. Buprenorphine is a partial agonist opioid that can treat pain and opioid use disorder and has other properties that might be helpful, including less respiratory depression and overdose risk than other opioids”

VA 2022 Guidelines



For patients receiving daily opioids for the treatment of chronic pain, **we suggest the use of buprenorphine instead of full agonist opioids** due to lower risk of overdose and misuse.

Which patients on COT may benefit from transition to BUP?

- Patients who find that protracted opioid withdrawal symptoms are unbearable when attempting an opioid taper
- Patients at high risk for opioid/sedative related morbidity or mortality on their current therapy
- Patients with opioid induced hyperalgesia??? Or other current opioid induced symptoms (depression, cognitive impairment, somnolence)
- Patients with opioid use disorder

Insurance will usually cover SLBUP for Pain with PA indicating medical necessity

Example: Patient with multiple comorbidities on high dose chronic opioids, needing to change/taper for safety concerns (at risk for respiratory suppression) or side effects, but unable to tolerate opioid taper, buprenorphine can reduce overdose risk.

(ASAM 2020 guidelines and HHS Guide for Clinicians on the Appropriate Dosage Reduction or Discontinuation of Long-Term Opioid Analgesics 2019)

Calculating Buprenorphine dose

- There is no verified MME or conversion factor for buprenorphine
 - (some sources online suggest 1 mg SLBUP= 20-30MME, not linear)
- Dosing/therapeutic effect is not linear
- If insurance covers transdermal/buccal, and patient on less than 50-100 MME then start there and follow manufacturers instructions
- If insurance does not cover FDA approved forms or patient on >100-150 MME then start with 2 mg films that can be quartered, **prescribe only 1-2 days and be ready to rapidly escalate dosage** as high as needed to achieve therapeutic effect (5 days to achieve steady state), insurance will rarely cover more than 24 mg/day

Amazing FREE algorithms, order sets, patient education materials!



BRIDGE

[Our Work](#) ▾[Resources](#)[Trainings](#) ▾[Upcoming](#)

<https://bridgetotreatment.org/tools/resources/>

Billing for the Community Health Worker Benefit

SITE EXAMPLE: Example site billing system for Community Health Worker (CHW) benefit



Blueprint for Hospital Opioid Use Disorder Treatment

TOOLKIT: Implementation guide for hospital-based opioid use disorder treatment programs



Bridge Clinics

REPORT: Overview of providing low-barrier MAT at an in-hospital clinic



Buprenorphine: What You Need to Know

PATIENT MATERIALS: Information for patients about buprenorphine and what to anticipate upon starting (also available in Spanish, Tagalog, Vietnamese, and traditional and simplified Chinese)

Buprenorphine and Pharmacy Frequently Asked Questions

FAQ: Pharmacy related questions on buprenorphine, prescribing, substance use navigators and prescription insurance questions

Buprenorphine Emergency Department Quick Start

PROTOCOL: Clinical guide for the treatment of acute withdrawal and opioid use disorder utilizing buprenorphine for ED-based starts



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