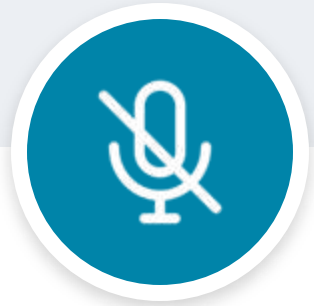


Welcome!



Mute

Minimize Interruptions

Please make sure to mute yourself when you aren't speaking.



Chat

Go Ahead, Speak Up!

Use the Zoom chat to ask questions and participate in activities.



Naming

Add Your Organization

Represent your team and add your organization's name to your name.



Tech Issues

Here to Help

Chat Host privately if are having issues and need tech assistance.

While we wait, please rename yourself.



Addiction Treatment Starts Here Prescriber Forum Session #1

October 6, 2021 | 12pm–1pm (PST)



+



Today's Presenter



Joe Sepulveda, MD, FAPA, FASAM

Chief of Psychiatry

Medical Director, Substance Use Disorder Services

Family Health Centers of San Diego

CCI ATSH Prescribers Forum

Medication for Treating Opioid Use Disorder Buprenorphine 101

Joe Sepulveda, M.D., FAPA, FASAM

Chief of Psychiatry, Family Health Centers of San Diego (FHCS)

Medical Director, Substance Use Disorder Services

Medication-Assisted Treatment (MAT) Program

Psychiatric Nurse Practitioner Program

Voluntary Assistant Clinical Professor, UCSD Health Sciences—Dept. of Psychiatry

Diplomate of the American Board of Psychiatry and Neurology

Diplomate of the American Board of Preventive Medicine—Addiction Medicine

Fellow of the American Psychiatric Association

Fellow of the American Society of Addiction Medicine

Agenda

- Introduction to Buprenorphine
- Diversion and the evidence
- Practice guidelines and current consensus
- Buprenorphine inductions
- Fentanyl
- Precipitated withdrawal
- Buprenorphine induction for Methadone and non-opioid dependent patients
- Tiers of care
- Buprenorphine dose adjustments
- Buprenorphine monitoring
- Duration of treatment, tapering and discontinuation
- Comprehensive care

Buprenorphine

- Three sublingual formulations
 - Buprenorphine/Naloxone, SL STRIPS
 - Least divertible
 - Buprenorphine/Naloxone, SL TABLETS
 - Less divertible
 - Buprenorphine, SL TABLETS
 - Divertible

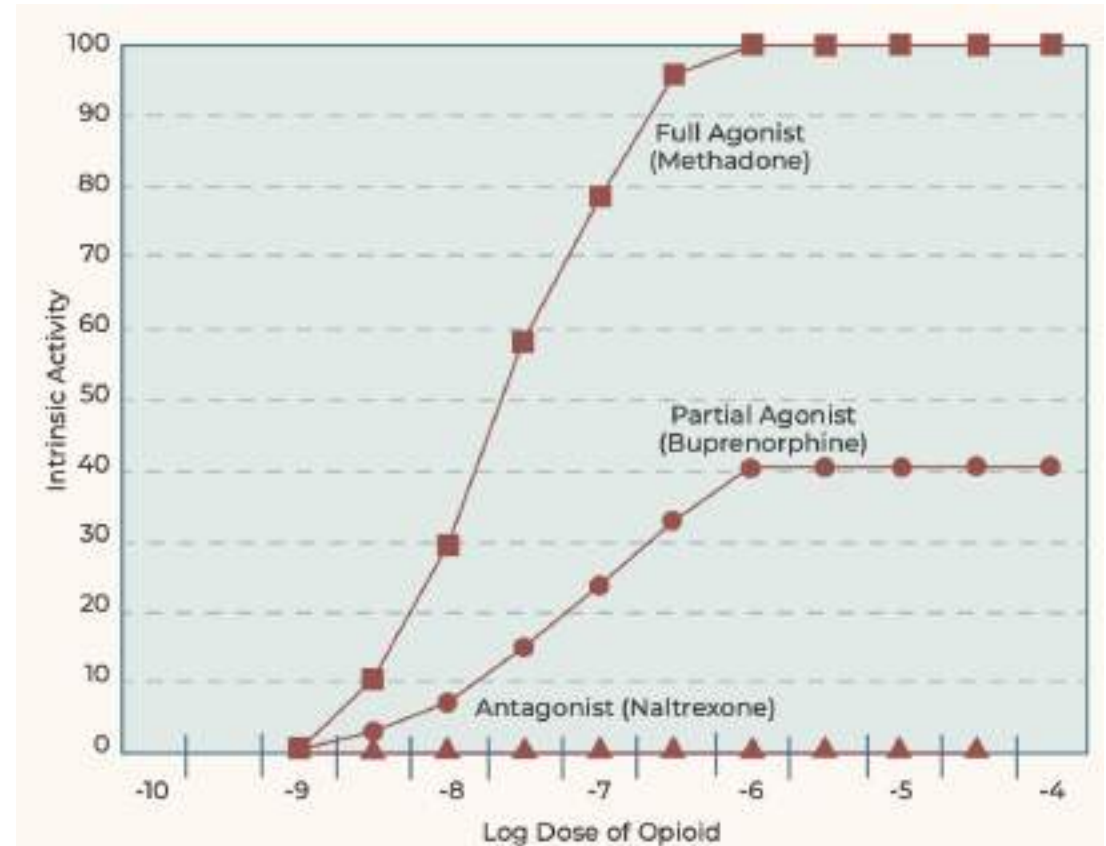


Buprenorphine formulations

PRODUCT NAME/ ACTIVE INGREDIENT	ROUTE OF ADMINISTRATION/ FORM	AVAILABLE STRENGTHS
Generic combination product ^{236,237} <ul style="list-style-type: none">• Buprenorphine hydrochloride• Naloxone hydrochloride	Sublingual tablet, film	2 mg/0.5 mg 4 mg/1 mg 8 mg/2 mg 12 mg/3 mg
Generic monoproduct ^{238,239} <ul style="list-style-type: none">• Buprenorphine hydrochloride	Sublingual tablet	2 mg 8 mg
Suboxone ^{240,241} <ul style="list-style-type: none">• Buprenorphine hydrochloride• Naloxone hydrochloride	Sublingual film	2 mg/0.5 mg 4 mg/1 mg 8 mg/2 mg 12 mg/3 mg

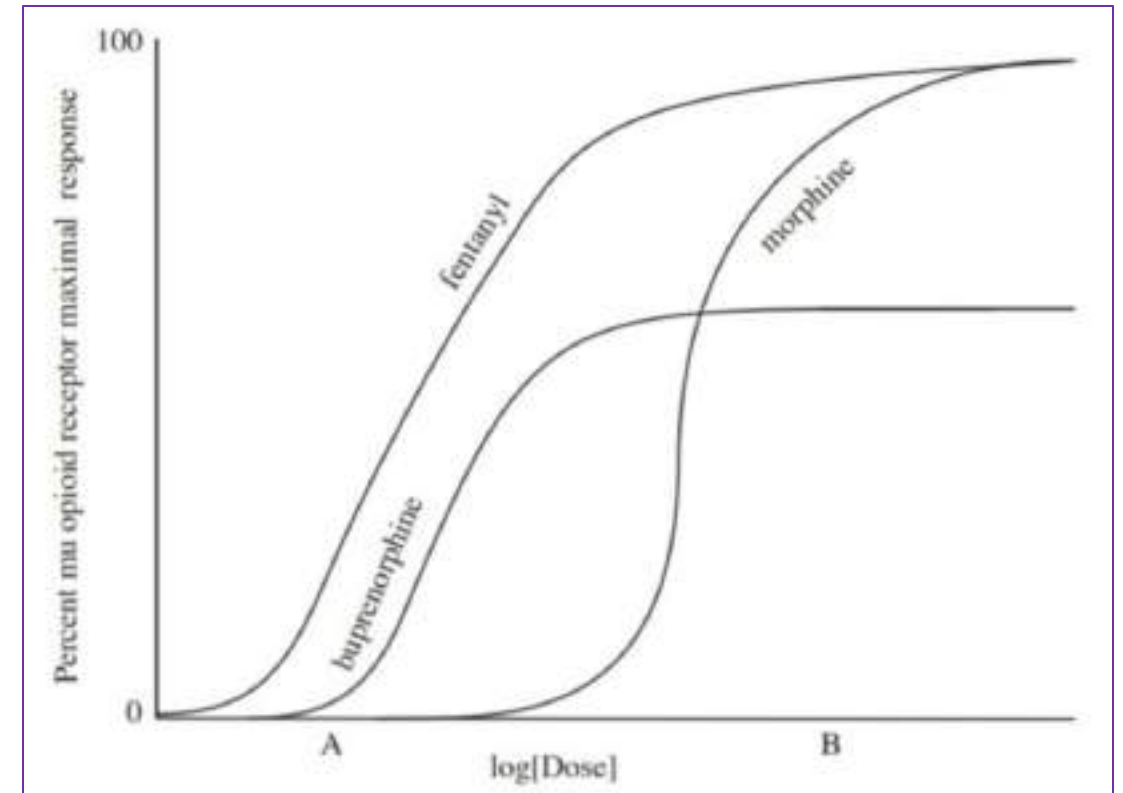
Intrinsic activities of OUD medications

- Methadone
 - Full agonist properties
 - Full agonist side effects
- Buprenorphine
 - Partial Agonist
 - Ceiling effect = safety compared to full agonist opioids
- Naltrexone
 - Antagonist



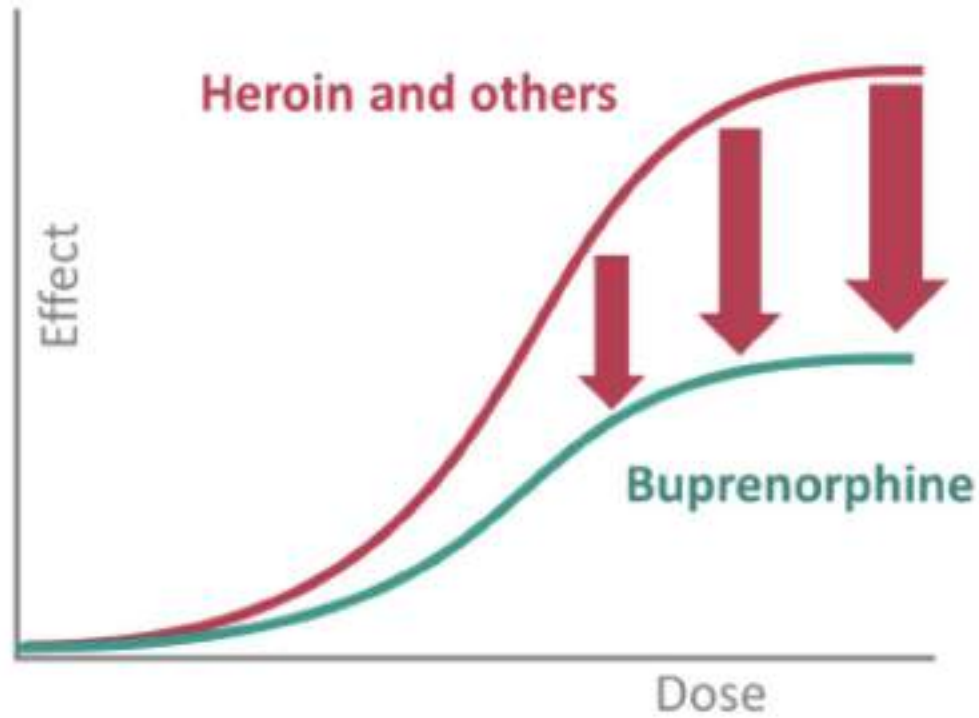
Intrinsic activities of Buprenorphine

- Low efficacy agonist
 - Max effect produced by buprenorphine will be less than that produced by a full (or high efficacy) mu opioid receptor agonist
- High potency
 - Does not significantly increase with doses within the clinical range.
- Slow dissociation from mu opioid receptor
 - Long duration of action allows for daily dosing
- High affinity at mu opioid receptor
 - 1.7x hydromorphone, 5.4x morphine, 6.2x fentanyl, 120x oxycodone



Why withdrawal is needed prior to induction

Buprenorphine is introduced



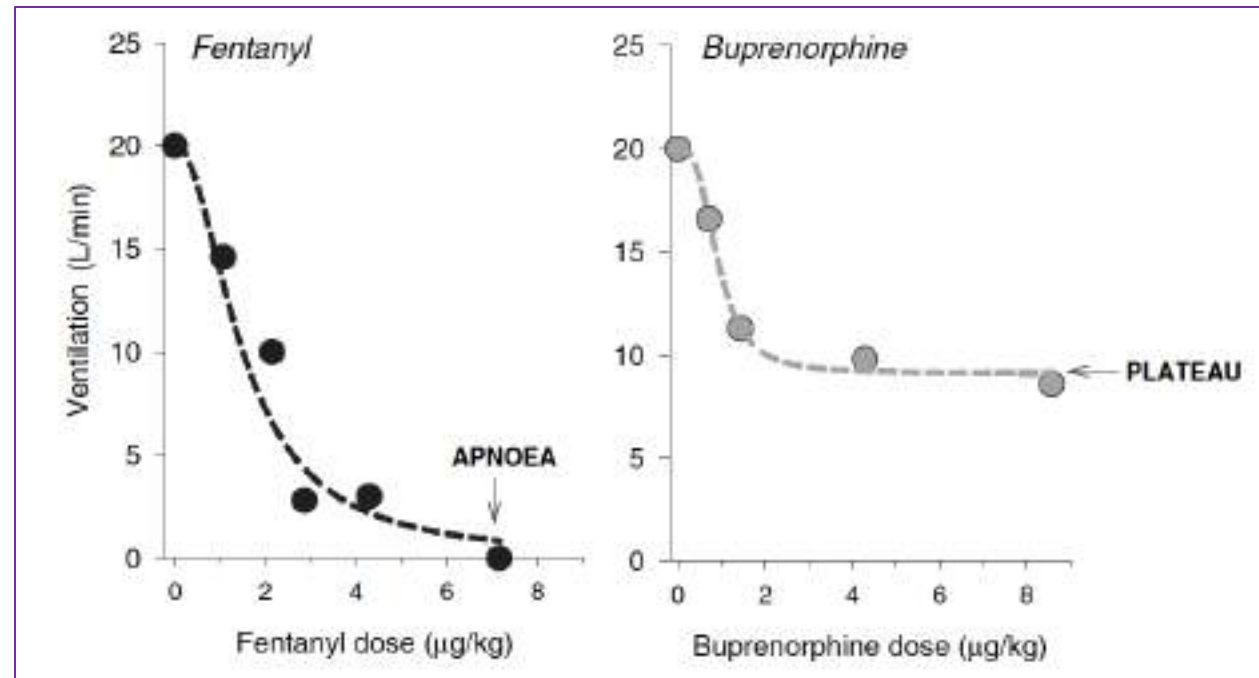
Partial activation

- Experienced as withdrawal
- Antagonist effect

Slide credit: Jim Walsh, MD

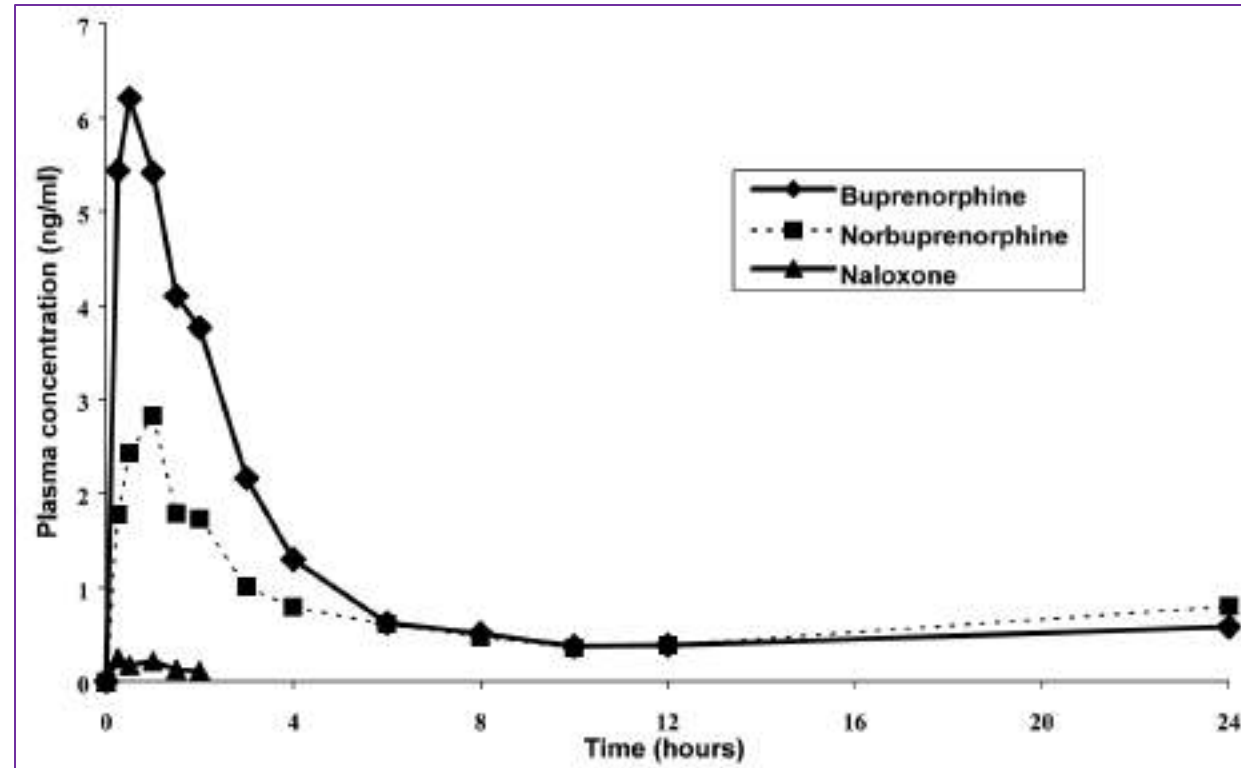
Buprenorphine (Suboxone) is safe in opioid dependent patients

- Fentanyl
 - Dose-dependent reduction of minute ventilation with respiratory instability
- Buprenorphine
 - Dose-dependent reduction of minute ventilation, **HOWEVER:**
 - Plateau in respiratory depression at $\geq 3 \mu\text{g}/\text{kg}$
 - No respiratory instability, periodic breathing or apnea occurred, even at the highest dose tested (600 μg in a 70 kg volunteer)



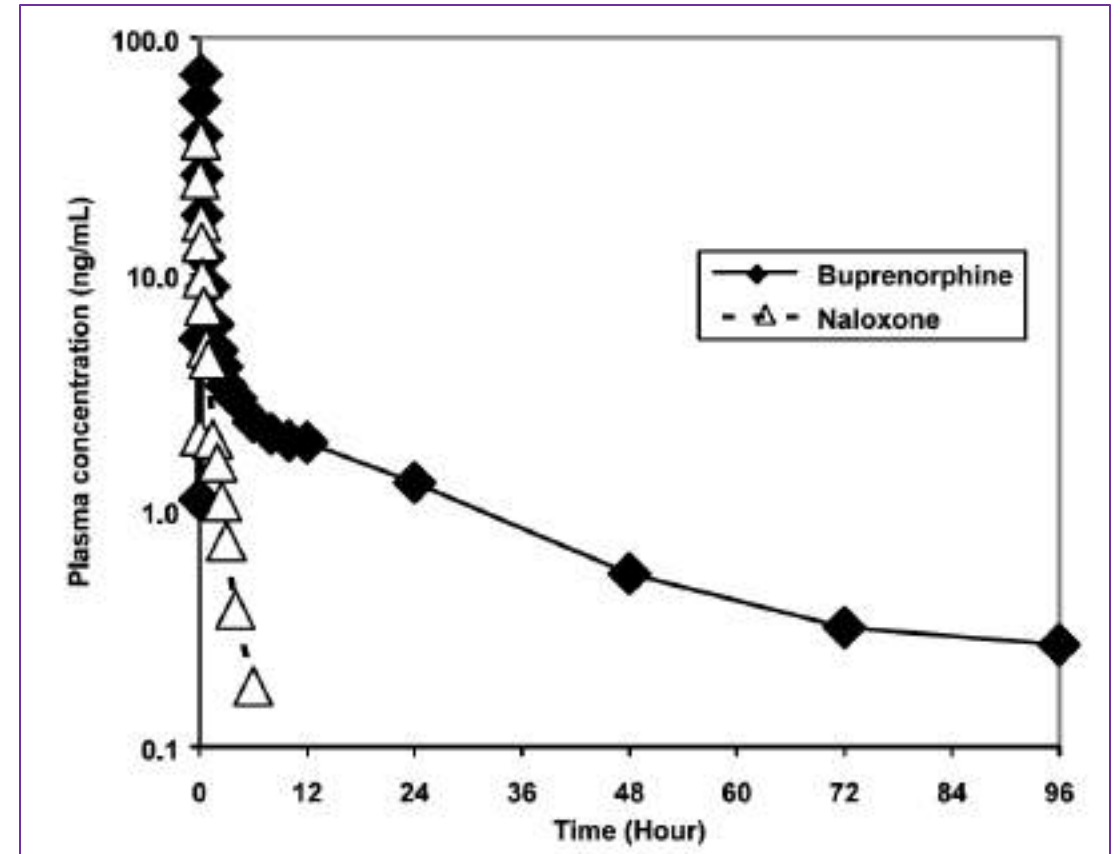
Combination Buprenorphine/Naloxone absorption

- When Bup/Nal is used sublingual
 - Buprenorphine
 - Rapidly absorbed
 - Peaks within 1 hour
 - Norbuprenorphine
 - Max concentration
 - Peaks within 1 hour
 - Naloxone
 - Concentration absorbed miniscule, lacks clinical effect. Fell below level of detection (0.05 ng/ml) within 3 hours



Combination Buprenorphine/Naloxone & diversion

- When Bup/Nal is injected
 - Both Buprenorphine and Naloxone plasma concentrations rapidly rise
 - Naloxone component is intended to
 - Precipitate withdrawal
 - Block the euphoric/analgesic effects of buprenorphine in opioid-dependent individuals
 - Discourages further diversion



Buprenorphine Diversion and the Evidence

- Most frequent reasons for this:
 - Barriers to access
 - Unmet need for OUD treatment persist
 - Prevent withdrawal
 - Maintain abstinence
 - Self wean off drugs
 - Most would prefer using prescribed Buprenorphine if available
- When diversion occurs, the vast majority use it for its therapeutic purpose

Understanding the use of diverted buprenorphine

Theodore J. Cicero^a, Matthew S. Ellis^a, Howard D. Chilcoat^{b,c,*}

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^b Indivior, Inc., Richmond, VA, United States

^c Department of Mental Health, Johns Hopkins Bloomberg School of Mental Health, Baltimore, MD, United States

PREVALENCE AND CORRELATES OF STREET-OBTAINED BUPRENORPHINE USE AMONG CURRENT AND FORMER INJECTORS IN BALTIMORE, MARYLAND

Becky L. Genberg, PhD, MPH^a, Mirinda Gillespie, MPH^a, Charles R. Schuster, PhD^b, Christel Ellyn Johanson, PhD^b, Jacquie Astemborski, MHS^a, Gregory D. Kirk, MD, PhD, MPH^a, David Vlahov, PhD^c, and Shruti H. Mehta, PhD, MPH^a

^a Johns Hopkins Bloomberg School of Public Health, Department of Epidemiology, 615 N. Wolfe Street, Baltimore, Maryland 21205 USA

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^c New York Academy of Medicine, Center for Urban Epidemiologic Studies, 1216 Fifth Avenue, New York, New York 10029 USA

Buprenorphine Diversion

- Does NOT mean automatic discharge
- Things a clinician can do:
 - Consider shorter prescription time spans
 - Consider frequent follow-ups
 - Check buprenorphine levels
 - Open communication with the patient is critical
 - May consider long-acting injectable buprenorphine for certain cases

Understanding the use of diverted buprenorphine

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Practice based guidelines & current consensus for treating OUD



Annals of Internal Medicine SPECIAL ARTICLE

The Next Stage of Buprenorphine Care for Opioid Use Disorder

Stephen A. Martin, MD, EdM; Lisa M. Chiodo, PhD; Jordon D. Bosse, MS, RN; and Amanda Wilson, MD

Buprenorphine has been used internationally for the treatment of opioid use disorder (OUD) since the 1990s and has been available in the United States for more than a decade. Initial practice recommendations were intentionally conservative, were based on expert opinion, and were influenced by methadone regulations. Since 2003, the American crisis of OUD has dramatically worsened, and much related empirical research has been undertaken. The findings in several important areas conflict with initial clinical practice that is still prevalent. This article reviews research findings in the following 7 areas: location of buprenorphine induction, combining buprenorphine with a benzodiazepine, relapse during buprenorphine treatment, requirements for counseling, uses of drug testing, use of other substances during buprenorphine treatment, and duration of buprenorphine treatment. For each area, evidence for needed updates and modifications in practice is provided. These modifications will facilitate more successful, evidence-based treatment and care for patients with OUD.

Ann Intern Med. doi:10.7326/M18-1652 Annals.org
For author affiliations, see end of text.
This article was published at Annals.org on 23 October 2018.

Current consensus for treating OUD

Table. Buprenorphine Care: Previous Approaches Compared With New Findings and Recommendations

Previous Approach	New Findings and Recommendations
A medical setting is needed for induction.	Home induction is also safe and effective (6).
Benzodiazepine and buprenorphine coprescription is toxic.	Buprenorphine should not be withheld from patients taking benzodiazepines (5).
Relapse indicates that the patient is unfit for buprenorphine-based treatment.	Relapse indicates the need for additional support and resources rather than cessation of buprenorphine treatment (43).
Counseling or participation in a 12-step program is mandatory.	Behavioral treatments and support are provided as desired by the patient (6).
Drug testing is a tool to discharge patients from buprenorphine treatment or compel more intensive settings.	Drug testing is a tool to better support recovery and address relapse (56).
Use of other substances is a sign of treatment failure and grounds for dismissal from buprenorphine treatment.	Buprenorphine treatment does not directly affect other substance use, and such use should be addressed in this context (43).
Buprenorphine is a short-term treatment, prescribed with tapered dosages or for weeks to months.	Buprenorphine is prescribed as long as it continues to benefit the patient (6).

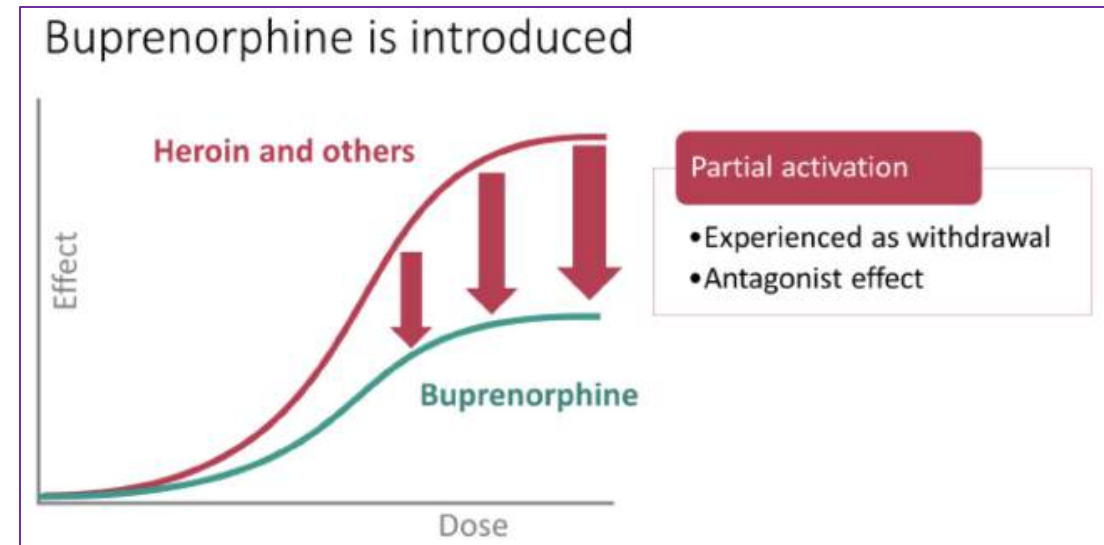
Buprenorphine Inductions

- Different schools of thought
 - Slower dosing inductions
 - Rapid inductions
 - Lower dose titration inductions
 - High dose titration inductions
 - Micro dosing
 - In office induction
 - Home inductions (Recommended)



Opioid withdrawal prior to bup induction is Key!

- Duration of time till withdrawal
 - Short acting (Ex. Heroin, Fentanyl): >12 hr
 - Long acting (Ex. Oxycodone): ~24 hr
 - Methadone maintenance: ≥48-72 hr
- Severity of withdrawal
 - Mild withdrawal (COWS 5-12)
 - **Moderate withdrawal (COWS 13-24)**
 - Severe withdrawal (COWS>25)



Clinical Opioid Withdrawal Scale (COWS)

- Most often used scale
 - In clinical setting
 - 11-items measured
- Originally designed as research tool
- Many subjective sections
- Scoring may vary between evaluators
- Moderate withdrawal or greater is Key
 - Score ≥ 13

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

COWS Clinical Opiate Withdrawal Scale

Rating 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 3 Pulse rate 121-140 4 Pulse rate greater than 140	GI Upset over last 12 hour 0 No GI symptoms 1 Stomach cramps 2 Nausea or loose stool 3 Vomiting or diarrhea 4 Multiple episodes of diarrhea or vomiting
Sweating: over past 1/2 hour not accounted for by room temperature or patient activity 0 No report of chills or flushing 1 Subjective report of chills or flushing 2 Flushed or observable moisture on face 3 Beads of sweat on brow or face 4 Sweat streaming off face	Tremor: observation of outstretched hands 0 No tremor 1 Tremor can be felt, but not observed 2 Slight tremor observable 4 Gross tremor or muscle twitching
Restlessness: Observation during assessment 0 Able to sit still 1 Reports difficulty sitting still, but is able to do so 3 Frequent shifting or excessive movements of legs/arms 5 Unable to sit still for more than a few seconds	Yawning: Observation during assessment 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 pinnaed or normal size for room light 1 Pupils possibly larger than normal for room light 2 Pupils moderately dilated 4 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 is irritable or anxious that participation in the assessment is difficult
Bone or joint aches: If patient was having pain previously, only the additional component attributed to opiate withdrawal is scored 0 Not present 1 Mild diffuse discomfort 2 Patient reports an aches/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 hair standing up on arms 4 Prominent piloerection
Runny nose or tearing: Not accounted for by cold symptoms or allergies 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 Initial of person completing Assessment: _____

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

Subjective Opiate Withdrawal Scale (SOWS)

- Can be patient self-administered
- 16 symptom intensity questionnaire
 - Grades opiate withdrawal symptoms
 - Scale from 0 (not at all) – 4 (extremely)
- Takes less than 10min to complete

Subjective Opiate Withdrawal Scale (SOWS)

Instructions: We want to know how you're feeling. In the column below today's date and time, use the scale to write in a number from 0-4 about how you feel about each symptom right now.

Scale: 0 = not at all 1 = a little 2 = moderately 3 = quite a bit 4 = extremely

DATE					
TIME					
	SYMPTOM	SCORE	SCORE	SCORE	SCORE
1	I feel anxious				
2	I feel like yawning				
3	I am perspiring				
4	My eyes are tearing				
5	My nose is running				
6	I have goosebumps				
7	I am shaking				
8	I have hot flushes				
9	I have cold flushes				
10	My bones and muscles ache				
11	I feel restless				
12	I feel nauseous				
13	I feel like vomiting				
14	My muscles twitch				
15	I have stomach cramps				
16	I feel like using now				
	TOTAL				

Mild Withdrawal = score of 1 – 10
Moderate withdrawal = 11 – 20
Severe withdrawal = 21 – 30

Home induction handouts—NYU

NYU School of Medicine Division of General Internal Medicine

Buprenorphine - Beginning Treatment

Day One: Before taking a buprenorphine tablet you want to feel lousy from your withdrawal symptoms. Very lousy. It should be at least 12 hours since you used heroin or pain pills (oxycodone, vicodin, etc.) and at least 24 hours since you used methadone.

Wait it out as long as you can. The worse you feel when you begin the medication, the better it will make you feel and the more satisfied you will be with the whole experience.

You should have a least 3 of the following feelings:

- twitching, tremors or shaking
- joint and bone aches
- bad chills or sweating
- anxious or irritable
- goose bumps
- watery, itchy, or stinging eyes
- runny nose, sneezing, or itchy throat
- stomach cramps, nausea, vomiting, or diarrhea

First Dose: 4 mg of Buprenorphine (Bup) under the tongue.

This is one half of an 8 mg tablet or two 2 mg tablets:

8 mg cut in 2 = 4mg

2 mg + 2 mg = 4mg



Put the tablet (one half tablet of 8mg tabs, or two tablets if 2mg tabs) under your tongue. Keep it there. **If you swallow Bup tablets they will not work**, the medicine is best absorbed through the thin skin on the bottom of your tongue.

It takes 20-45 minutes for the medication to be absorbed and have an effect. Feel better? Good, the medicine is working. Still feel lousy after 45 minutes? Don't worry, you just need more medication.

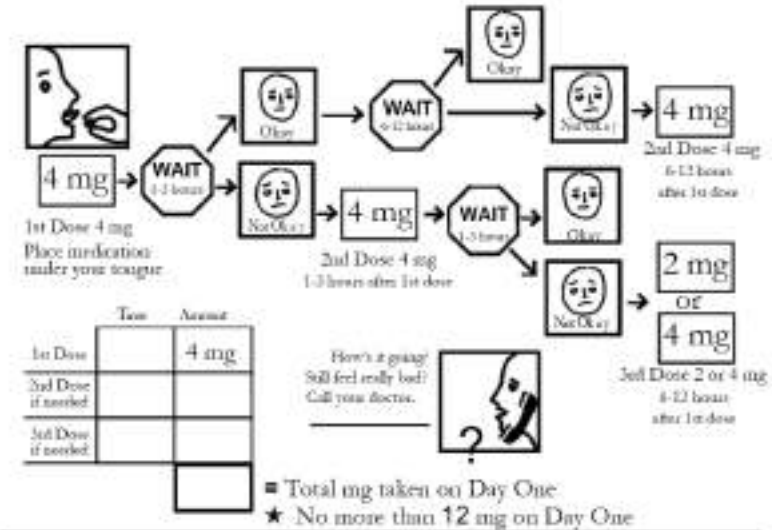
At 1-3 hours (60-180 minutes) after your first dose, see how you feel. If you feel fine after the first 4 mg, don't take any more, this may be all you need. If you have withdrawal feelings, take another 4 mg dose under your tongue.

Later in the day (6-12 hours after the first dose), see how you feel again. If you feel fine, don't take any more. If you have withdrawal feelings, take another 2 or 4 mg dose under your tongue.

Do not take more than 12 mg of Bup on the first day.

Most people feel better after the 4-12 mg on the first day. Still feel really bad, like a bad withdrawal? Call your doctor right away. You can call or page my team during the day if you are having difficulty.

Day One Summary: 4 mg under your tongue, wait 1-3 hours. If still feel sick, take 4 mg again. Wait 1-3 hours. If still sick, take 2-4 mg again. Do not take more than 12 mg on Day 1.



Day Two: The right dose depends on how you felt on Day One

If the total on Day One was 4 mg	If you took 4 mg total on Day 1 and feel fine the next morning, then take 4 mg again on Day 2. This will be your new daily dose. If you took 4 mg total on Day 1 and feel some withdrawal the next morning, then try starting with 8 mg on the morning of Day 2. Later in the day on Day 2, see how you feel. If you feel fine, there is no need to take more. If you still feel withdrawal, you can try taking another 4 mg dose.
If the total on Day One was 8 mg	If you took 8 mg total on Day 1 and feel fine the next morning, then take 8 mg again on Day 2. This will be your new daily dose. If you took 8 mg total on Day 1 and feel some withdrawal the next morning, then try starting with 12 mg on the morning of Day 2. Later in the day on Day 2, see how you feel. If you feel fine, there is no need to take more. If you still feel withdrawal, you can try taking another 4 mg dose.
If the total on Day One was 12 mg	If you took 12 mg total on Day 1 and feel fine the next morning, then take 12 mg again on Day 2. This will be your new daily dose. If you took 12 mg total on Day 1 and feel some withdrawal the next morning, then try starting with 16 mg on the morning of Day 2.

British Columbia Ministry of Health

Day 1 Starting Suboxone® (buprenorphine/naloxone) Page 1

Are you in withdrawal? Before starting Suboxone® (buprenorphine/naloxone) you need to be in withdrawal (dope-sick). Use the SOWS withdrawal scale on the back page to determine how bad your withdrawal is. Wait until your withdrawal score is 17 or more to begin.

- Do not take with alcohol or sedatives.
- Do not take more than 12 mg total on Day 1.
- Do not inject. You will be dope-sick if you inject.

My doctor/health practitioner and I agree on this treatment plan.

Contact Information

Family Name: _____

Provider Name: _____

Provider Number: _____

1st Dose Take your 1st dose

- Keep medication under your tongue until fully dissolved (this can take up to 10 min) or it will not work. Do not chew or swallow.
- Do not eat, drink, or swallow while it is dissolving.
- Contact your provider to let them know you took your 1st dose.

My dose:
 _____ mg
 = _____ tablets
 Time: _____

It usually takes 30-45 min for the medication to start to work. Wait 1-2 hours before your 2nd dose.

If you feel a lot worse → Contact your provider if your symptoms feel a LOT WORSE. This happens when you start before you are in enough withdrawal and is called "precipitated" withdrawal. Talk to your provider about managing symptoms and next steps.

2nd Dose 1-2 hours after 1st dose

How do you feel?

Still feeling withdrawal (dope-sick) symptoms → Take a 2nd dose (keep a red tongue until fully dissolved).

Better → Check in with yourself later.

My dose:
 _____ mg
 = _____ tablets
 Time: _____

3rd Dose 1-2 hours after 2nd dose or later in evening

How do you feel?

Still feeling withdrawal (dope-sick) symptoms → Take a 3rd dose (keep under tongue until fully dissolved).

Better → Check in with yourself later, you may not need another dose.

My dose:
 _____ mg
 = _____ tablets
 Time: _____

How many doses did you take today?

	1 st Dose	2 nd Dose	3 rd Dose	Total
Amount	mg	mg	mg	mg

Most people feel much better by the end of the first day. Contact your provider if you are still feeling bad with withdrawal or feel like using and have taken the daily max of 12 mg.

The total for Day 1 is your starting dose for Day 2. Whether you started treatment at home or in the clinic, most providers will ask you to start Day 2 with a clinic visit. Take this sheet with you to your next appointment.

Next appointment info: Date: _____ Time: _____ Location: _____

Additional Information for Starting Suboxone® (buprenorphine/naloxone) Page 2

Knowing when to start

Suboxone® (also known by generic name buprenorphine/naloxone) helps you manage opioid withdrawal symptoms and cravings.

You need to be in withdrawal (dope-sick) to start or your symptoms will get a lot worse - the more in withdrawal you are the better.

You know your symptoms. Wait until you are in moderate to severe withdrawal (dope-sick) before you begin. You can use the SOWS scale (below) to help you see if you are in enough withdrawal to start. You can also check your SOWS score throughout the day. You should feel better and see your SOWS withdrawal scores decrease throughout the day. If your SOWS withdrawal score increases and your symptoms get worse, contact your provider.

Subjective Opioid Withdrawal Scale (SOWS)

Please score each of the statements according to how you feel right now on a scale of 1 to 4. Add up all your scores to get your total SOWS withdrawal score.

Symptom	Score				
	1	2	3	4	5
I feel anxious					
I feel like yawning					
I am perspiring					
My eyes are teary					
My nose is running					
I have goosebumps					
I am shaking					
I have hot flashes					
I have cold flashes					
My bones and muscles ache					
I feel restless					
I feel nauseous					
I feel like vomiting					
My muscles twitch					
I have stomach cramps					
I feel like using now					

My SOWS score (total score)

If your SOWS withdrawal score is 17 or more → You are ready to start, follow the instructions on page 1.
 If your SOWS withdrawal score is less than 17 → Check your score again in 1-3 hours.

Handout 1, 1st ed. © 2019 Royal BC.ca (2019)

Notes:

This handout is based on the BC Guidelines Opioid Use Disorder - Diagnosis and Management in Primary Care available at BC Guidelines.ca

High dose buprenorphine induction in ED

- N = 579 ED visits
- High dose buprenorphine (≤ 32 mg)
 - Study used COWS ≥ 8 , initiate an initial buprenorphine dose (4-8 mg)
 - Assess in 30-45min
 - COWS ≥ 8 , dose 4-8 mg increments or given full 24mg at once
- “...in ill or intoxicated patients with reduced respiratory reserve, the sedation and respiratory depression of buprenorphine can be clinically important”

Original Investigation | Substance Use and Addiction

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

Andrew A. Herring, MD; Aidan A. Vasooghi, MS; Joshua Luftig, PA; Erik S. Anderson, MD; Xueen Zhao, MS; James Dzura, PhD; Kathryn F. Hawk, MD, MHS; Ryan P. McCormack, MD, MS; Andrew Saxon, MD; Gail D'Onofrio, MD, MS

High dose buprenorphine induction in ED

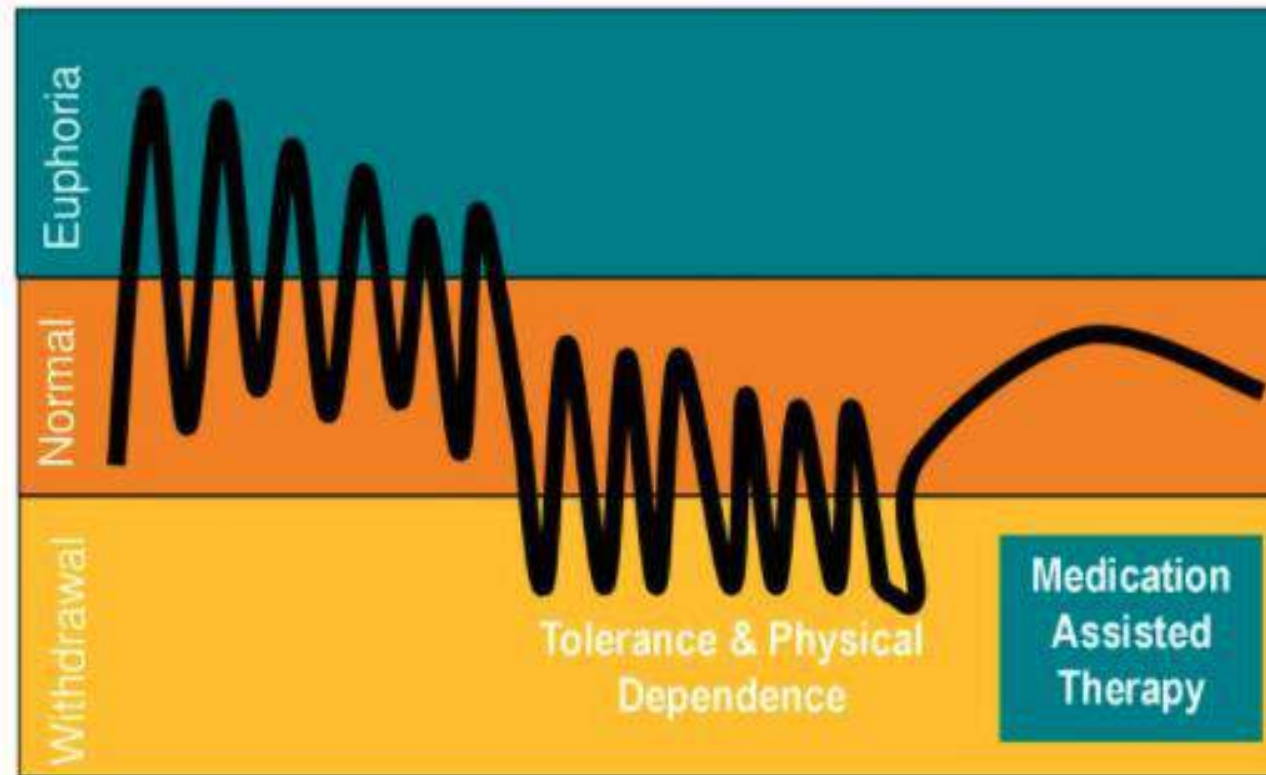
- No decreased respiratory rate at highest dose group of ≥ 28 mg
- 5 cases of precipitated withdrawal (event rate, 0.8%) among 579 visits with buprenorphine administration—>**RARE event**
- **Additional buprenorphine**—for a total of 28mg—**successfully treated the precipitated withdrawal** and all DC in stable or improved condition
- No serious adverse events in ED or 24hr after DC
- None admitted for treatment of buprenorphine precipitated withdrawal
- Median ED length of stay 2 hours, treated in low-acuity setting



FHCSD High Dose Bup Induction Protocol

- Initiated since start of COVID
- Patient instructions
 - Moderate withdrawal (COWS \geq 13) at minimum prior to induction
 - Running nose, tears in eyes
 - Beginning of stomach cramps
 - Educate patient!
 - You will feel better once you initiate suboxone!
- Induction Protocol
 - Day #1 (total 24 mg on day #1)
 - Take Bup/Nal 8mg SL strip
 - Wait 30-45min
 - Take Bup/Nal 8mg, two SL strips (16 mg)
 - Day #2 onward
 - Take Bup/Nal 8mg, two SL strips daily (16 mg/day)
 - Follow-up with patient 1 week after induction

Buprenorphine dosing goal



Acute Use

Chronic Use

Alford, Boston
University, 2012

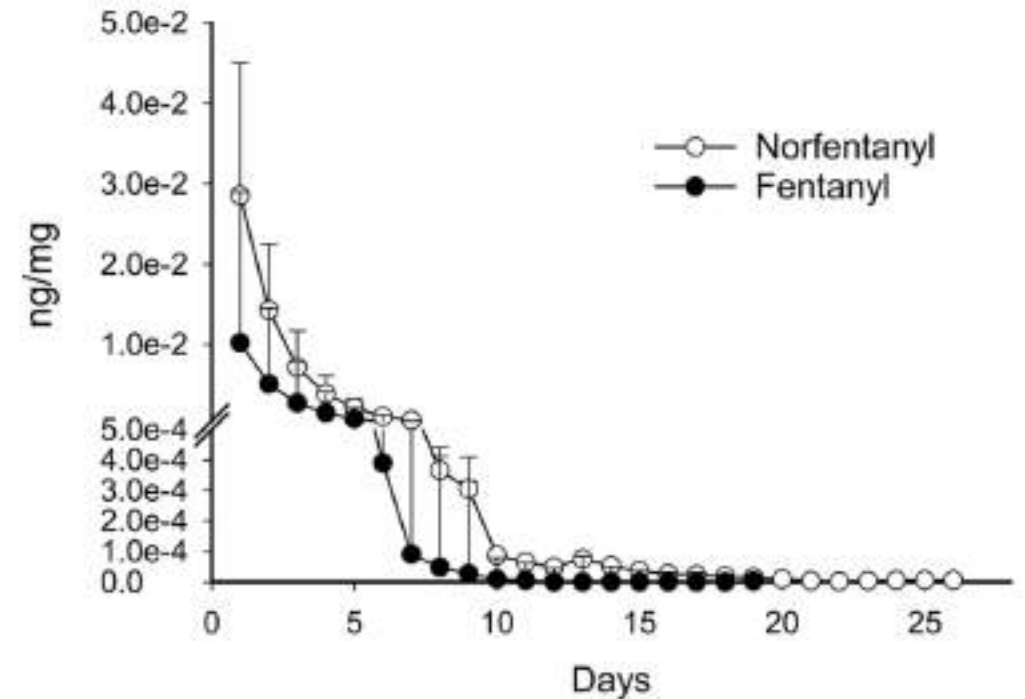
Fentanyl

- Is highly lipophilic
- Regular use can allow fentanyl to be sequestered in adipocytes and other tissue
- Fentanyl is primarily excreted as Norfentanyl
- This study showed
 - Mean (SD) between last positive and first negative fentanyl and norfentanyl screen was 7.3 (4.9) & 13.3 (6.9) respectively
 - Men and women did not differ
 - One Pt tested positive for fentanyl for 19 days and norfentanyl for 26 days from last use
 - Left treatment without testing negative for norfentanyl

Protracted renal clearance of fentanyl in persons with opioid use disorder

Andrew S. Huhn^{a,b,c}, J. Gregory Hobelmann^{a,b}, George A. Oyler^c, Eric C. Strain^d

Fentanyl and Norfentanyl Elimination



Precipitated Withdrawal

- Symptoms are similar to opioid withdrawal
- Avoid by ensuring adequate withdrawal prior to induction
 - Fentanyl may require higher COWS score
- If precipitated withdrawal occurs
 - Dose escalation (*recommended*) vs. stopping induction
 - Comfort meds... but prioritize optimizing buprenorphine dose



assess

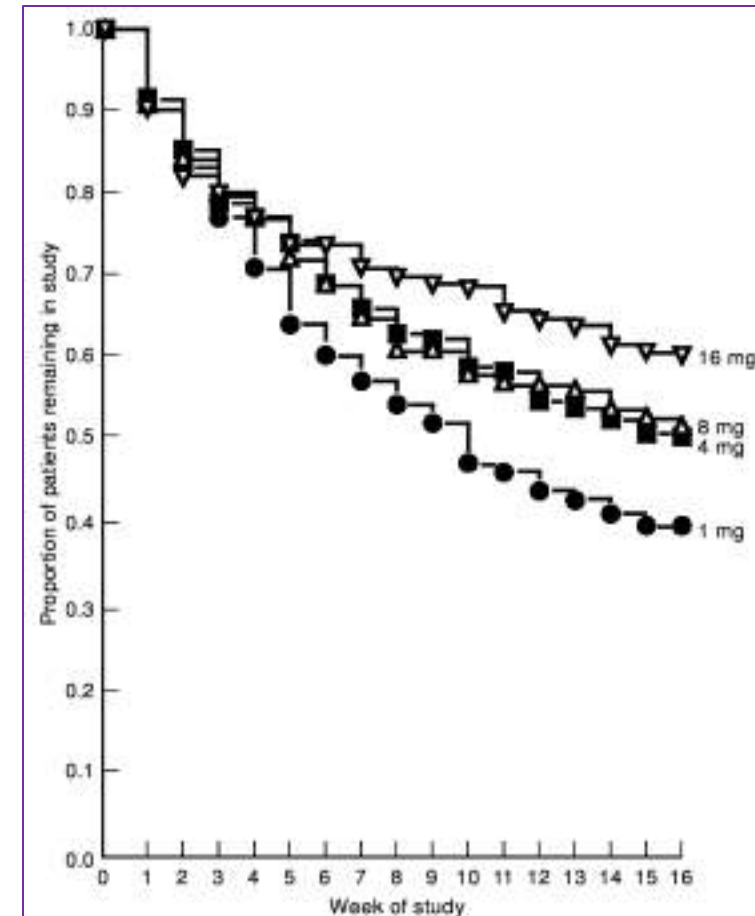


FHCSD Methadone to Bup induction Protocol

- Methadone 30mg for minimum of one week prior to buprenorphine induction
- Moderate withdrawal at minimum prior to induction (COWS ≥ 13)
 - The more severe the withdrawal the smoother the induction
- May consider providing comfort meds
 - E.g., Clonidine, Loperamide, Zofran, etc.
 - **Key**-> treat OUD withdrawal sx's with Bup increase till MDD=24mg! Then use comfort meds.
- Induction Protocol
 - Day #1 (total MDD=24 mg on day #1)
 - Bup (Subutex) 2mg SL tabs q15-30min until withdrawal sx's controlled
 - Day #2 onward
 - Switch to Bup/Nal (Suboxone)
 - 8mg, two SL strips (total 16mg) daily
 - Follow up with patient 1 week after induction

FHCSD non-opioid dependent Bup induction Protocol

- Start low and titrate to effect
- Day #1
 - Dose 2mg
 - Wait 1.5-2 hours between each 2mg dose
 - Continue dosing 2mg till OUD sx's (e.g. cravings) controlled or till MDD=8mg
- Follow up with patient 1 week after induction
 - Continue dosing 2-4mg, as clinically indicated, at weekly intervals



FHCSD Tiers of Care

- Transitioning through tiers
 - 4 weekly urine tox screens negative for opioids and benzo's
 - 4 bi-weekly urine tox screens negative for opioids and benzo's
 - 3 monthly urine tox screens negative for opioids and benzo's
 - Bi-monthly MAT f/u visits
- ❖ A positive opioid/benzo screen moves patients back to weekly f/u visits
- ❖ Benzo tapers provided while prescribing Buprenorphine. Referral to MH for anxiety Tx



Buprenorphine dosing adjustments after induction

- Dose increase typically occurs in 2mg to 4mg increments
- It will take 5 to 7 days to reach new steady-state plasma concentrations after a dose increase
- Cravings can be a conditioned response. e.g., people & places
- Psychosocial stressors
 - MDD, anxiety, chaotic home, financial difficulties, trauma, housing instability...



Buprenorphine dosing adjustments after induction

- Fine Tuning
 - 2 mg dose increase or decrease
 - Consider waiting 2 weeks before initiating another dose change
- Aggressive Action
 - 4 mg dose Increase
 - Rarely will you need to lower this aggressively
 - More common during induction/stabilization phase



Fine Tuning



Treat the patient and dose accordingly

- The primary aim of pharmacotherapy—using agonist such as Bup or Methadone, or antagonist such as Naltrexone—is to promote abstinence, not suppress opioid withdrawal discomfort.
- Threshold for suppressing opioid withdrawal symptoms is lower than for opioid blockade efficacy
- GOAL: use sufficiently high dose to achieve opioid blockade
- i.e. attenuate the reinforcing, subjective and physiological effects of abused opioids

Buprenorphine maintenance and *mu*-opioid receptor availability in the treatment of opioid use disorder: implications for clinical use and policy

Mark K. Greenwald^{a,*}, Sandra D. Comer^b, and David A. Fiellin^c

Buprenorphine and substance monitoring

- Urine toxicology screens
 - Natural occurring opioids
 - Synthetic opioids
 - Fentanyl
 - 6-acetylmorphine
 - Methamphetamines, Stimulants, Cocaine, Cannabis, Benzodiazepines, Barbiturates, PCP, Alcohol, etc.
- Buprenorphine/Norbuprenorphine
- CURES reports

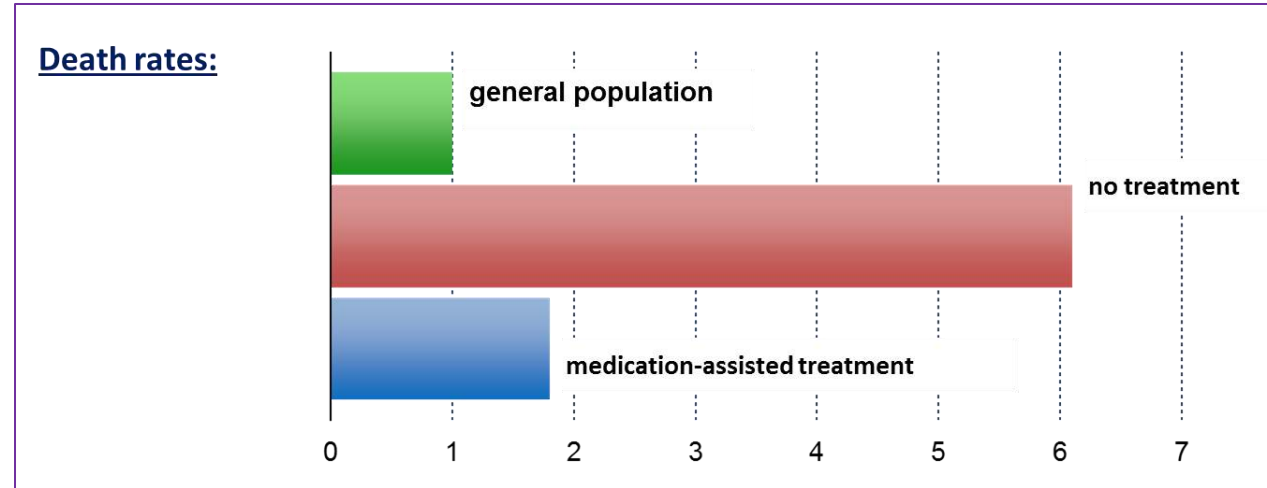
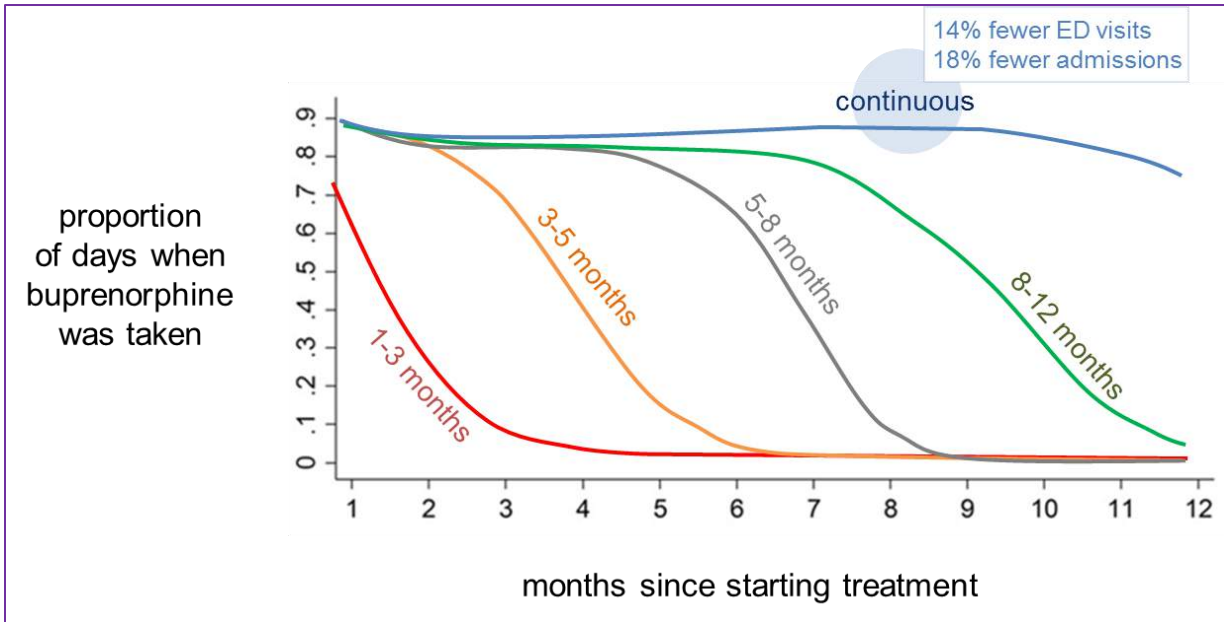


How long should I be on Buprenorphine?

- “patients should take buprenorphine as long as they benefit from it and wish to continue it.”

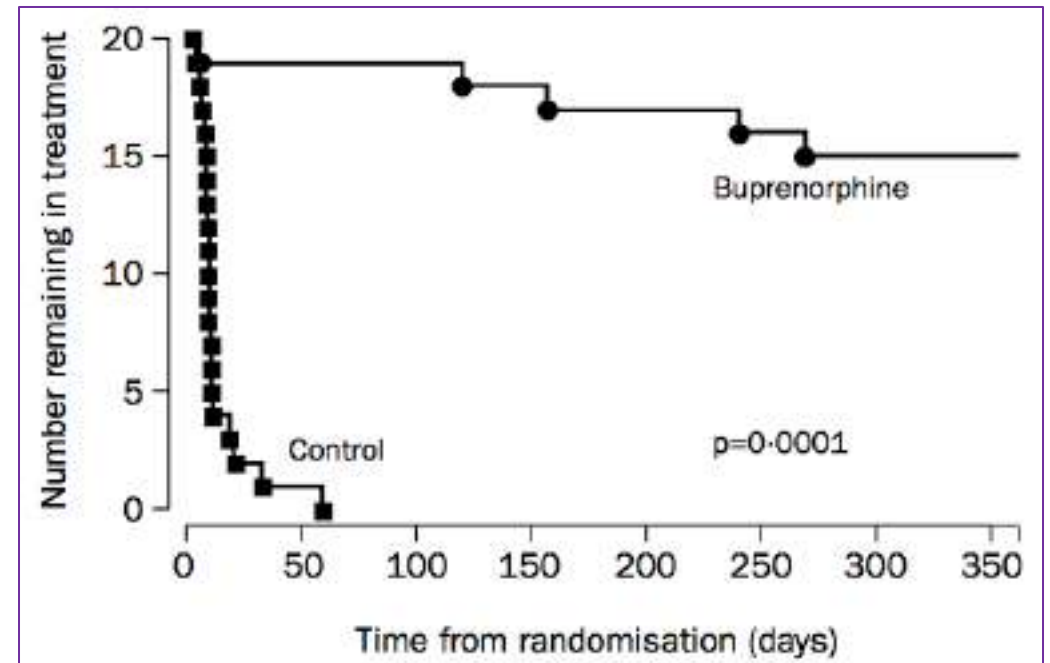


How long should someone be on Buprenorphine?



Key principles to tapering and DC Buprenorphine

- Tapering and DC is **NOT** recommended
- There should be no pressure to taper off buprenorphine if it is working
- To optimize success
 - > 1 year of abstinence
 - Lowest possible dose for maintenance
 - Slow taper (months)
 - Increase support
 - Always keep the door open if fall out of treatment



Slide content credit (with edits): Christopher Suelzer, M.D

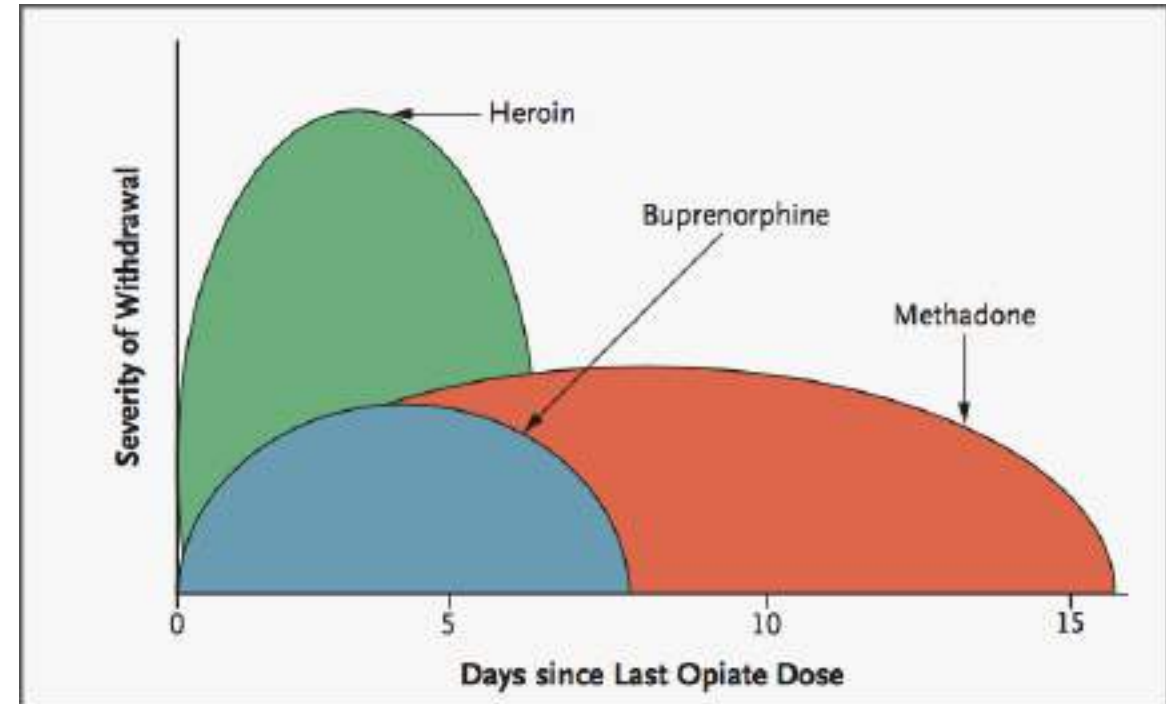
Buprenorphine tapering and the real world

- “I always say that it is best for the patient to be under my care than not under my care and lost to follow-up” —David Kan, M.D., DFASAM
- Patients, for a variety of reasons, may ask to be tapered off buprenorphine
- Education is key! But working with the patient and honoring their wishes is critical to building the patient doctor relationship and long-term care!
- If patients insist on tapering, titrate slowly!!!
 - Recommend tapering 2mg at a time and no faster than every 2 weeks (**longer is better**)
 - Many will decide to remain on buprenorphine at a certain point during the taper
 - Do NOT recommend tapering 4mg or more at a time. ONLY do this if the patient insist taper is too slow and risk losing the patient



Discontinuing Buprenorphine and the aftermath

- Buprenorphine DC → withdrawal and sequela
 - Withdrawal severity is less than Heroin
 - Duration is less than Methadone
 - But can last 1 month or longer
 - Initial 72hrs → physical sx's
 - After 1 week → physical sx's improve, general aches and pains cont. with insomnia and mood swings
 - After 2 weeks → depression increases
 - After 1 month → psychological symptoms of depression and cravings continue, and relapse likelihood is highest.



Don't forget to provide comprehensive care

- OUD patients require comprehensive care!
 - Physical health issues
 - Pain conditions
 - Co-morbid substance use
 - Mental Health
 - Psychosocial issues
- Patient education
 - Narcan, safe storage, Bup SL proper administration, etc.
- Laboratory workup recommended
 - CBC
 - CMP
 - Hepatitis A, B & C
 - Pregnancy test
 - STD/HIV screen
 - Urine toxicology, comprehensive

The California Substance Use Line: A resource for health care providers

Free, confidential, on-demand, 24/7 teleconsultation on substance use evaluation & management for any health care provider in California

Evidence-based, person-centered guidance on topics such as:

- Assessment & treatment of opioid, stimulant, and other use disorders
 - Medications for substance use disorder treatment (e.g., buprenorphine)
 - Withdrawal management
 - Opioid safety and harm reduction
 - Special circumstances (e.g., co-occurring pain, polysubstance use, pregnancy)
- Staffed by **experienced physicians** and **pharmacists** from the California Poison Control System & National Clinician Consultation Center
 - For more information, please call or visit our [website](#) | Please send program-related inquiries to David Monticalvo, Project Manager (David.Monticalvo@ucsf.edu)

ANY
QUESTIONS?



I Coming Up – Session #2

November 3, 12-1pm PT

Topic: Case reviews on OUD prescribing

In advance, submit 1 challenging case you'd like to discuss. Dr. Sepulveda will select several cases to review during the call and discuss as a group.

Email your case to meaghan@careinnovations.org by October 25th.

For registration information, go here:

<https://www.careinnovations.org/events/atsh-peer-forums-registration/#prescriber>

Any questions? Email meaghan@careinnovations.org



I Poll

1. On a scale of 1-5, please select the number that best represents your experience with today's session.



- 5 - Strongly Agree
- 4 - Agree
- 3 - Neutral
- 2 - Disagree
- 1 - Strongly Disagree

2. Please select the number that best represents your response to the statement: Today's session was a valuable use of my time.



- 5 - Strongly Agree
- 4 - Agree
- 3 - Neutral
- 2 - Disagree
- 1 - Strongly Disagree

3. I can apply learnings from today's webinar to my MAT work.



- 5 - Strongly Agree
- 4 - Agree
- 3 - Neutral
- 2 - Disagree
- 1 - Strongly Disagree



THE

END