



# **ECHO IDAHO:** **Opioids, Pain & Substance Use Disorders**

## **Emergency Treatment with Buprenorphine**

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# Learning Objectives

- Understand the basics of buprenorphine pharmacology
- Understand the basics of buprenorphine induction in the ED setting for patients with OUD
- Understand risks of induction and how to treat precipitated withdrawal

# Review

- Person-first language.
- Addiction vs physical dependence.
- Addiction is a treatable chronic medical disease.
- It involves complex interactions between neurobiology, genetics, environment, and life experience.
- It is defined as a “chronic, relapsing disorder characterized by compulsive drug-seeking and use despite adverse consequences”.
- Prevention and treatment approached are about as successful as methods for other chronic diseases.

# Words are Important

## Words to Use

Person with a substance use disorder

Person with alcohol use disorder

Substance use disorder

Drug misuse, harmful use

Substance use

Not actively using

Testing positive for substance use

Actively using

Testing positive for substance use

Person in recovery, person in long-term recovery

## Words to Avoid

Addict/drug abuser

Alcoholic

Drug problem, drug habit

Drug abuse

Substance abuse

Clean

A clean drug screen

Dirty

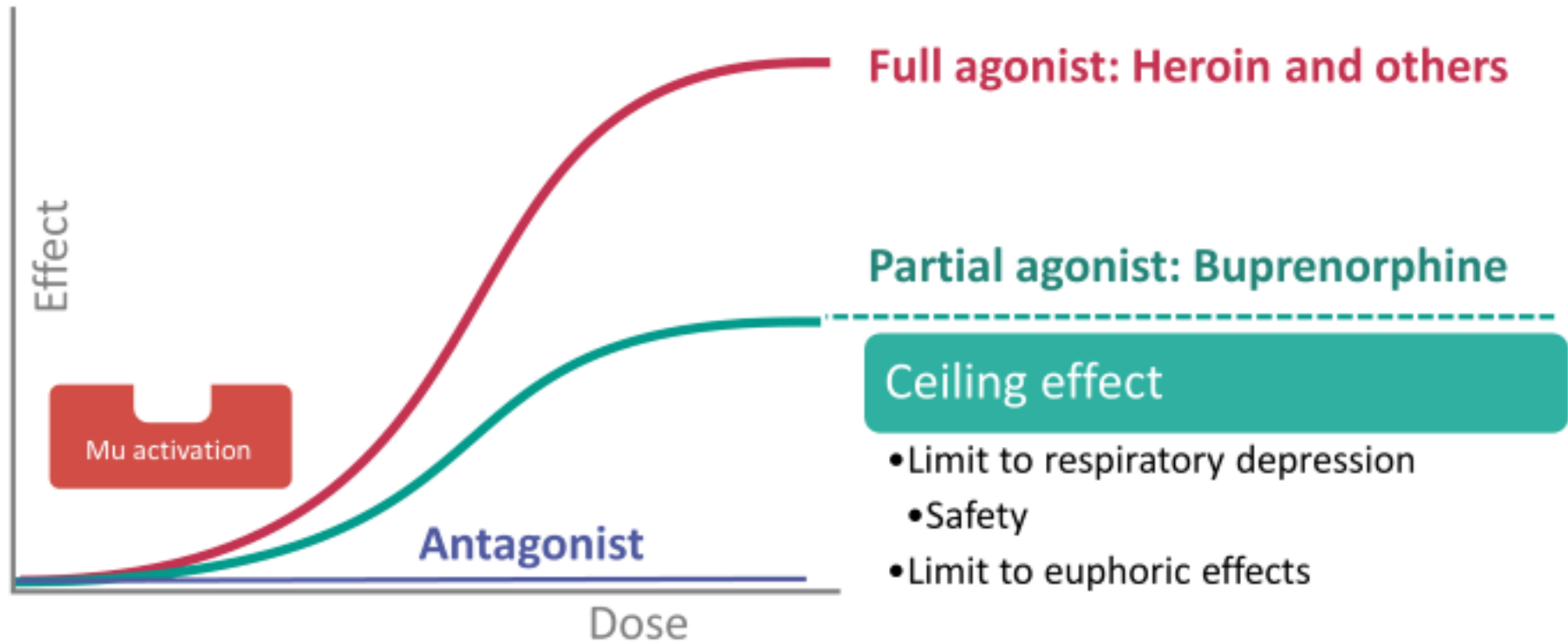
A dirty drug screen

Former/reformed addict/alcoholic

# Background of Buprenorphine

- FDA approved in 2002 for opioid use disorder
- popularity has expanded due to its availability through office based practice for OUD
- mechanism: high affinity Mu opioid receptor partial agonist and full Kappa opioid receptor antagonist
- buprenorphine has a long duration of action as once it binds the Mu opioid receptor, it has very slow dissociation compared to other opioids

# Buprenorphine MOA



Lutfy, K., & Cowan, A. (2004). Buprenorphine: a unique drug with complex pharmacology. *Current neuropharmacology*, 2(4), 395-402.

# Background of Buprenorphine

- Formulations FDA approved for OUD:
- suboxone: sublingual buprenorphine that contains naloxone component
- subutex: sublingual buprenorphine without naloxone component
- long acting injectable formulations: sublocade, brixadi

# Emergency Department Induction

- If patient has signs and symptoms of withdrawal, typically a COWS score of 8 or higher, administer 8-16mg of SL buprenorphine. Monitor for 30-60 minutes and if they have improvement in their withdrawal symptoms, wait another 30-60 minutes and give additional 8-16mg SL buprenorphine
- if symptoms worsen after initial SL buprenorphine dose, likely precipitated withdrawal and should immediately give another 16mg of SL buprenorphine
- if patient still in withdrawal, can give additional dosing up to 32mg total if not yet met. Consider adjunctive treatment for withdrawal such as clonidine, pregablin, olanzapine or ketamine



# Emergency Department Induction

- Patient generally can be safely discharged with 2 weeks supply of 16-32mg SL buprenorphine per day
- Important to arrange follow up for continuation of buprenorphine after this to prevent return to use and lower risk of overdose

# Barriers to standard of care

- American College of Emergency Physicians released a consensus in 2021 that recommended ED provider offer buprenorphine for OUD in the emergency department
- Barriers such as X waiver previously required for buprenorphine prescribing have been removed
- Despite this, majority of ED providers in the United States to do not perform buprenorphine induction for OUD

# Barriers to standard of care

- Reasons for this:
  - perceived to be time consuming
  - Fear of over-sedation
  - Fear of precipitated withdrawal
  - Lack of understanding of buprenorphine
  - Concern of ED bounceback visits

# Key Points

- Buprenorphine is a safe treatment option in the ED for both treatment of opioid withdrawal and opioid use disorder
- Generally a high dose induction is favored in the ED setting due to availability of monitoring resources allowing for the rapid achievement of stable buprenorphine dose for OUD
- Barriers exist to widespread use in emergency departments and it is our responsibility to advocate for its use and our patients

# References

- Pubmed
- NCBI
- Uptodate
- Bridge To Treatment
- JAMA Network