

No One Dies a Preventable Death

The Role of EMS in Rural Addiction Care

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Bridging emergency care and community health to create an integrated system that improves health and equity.



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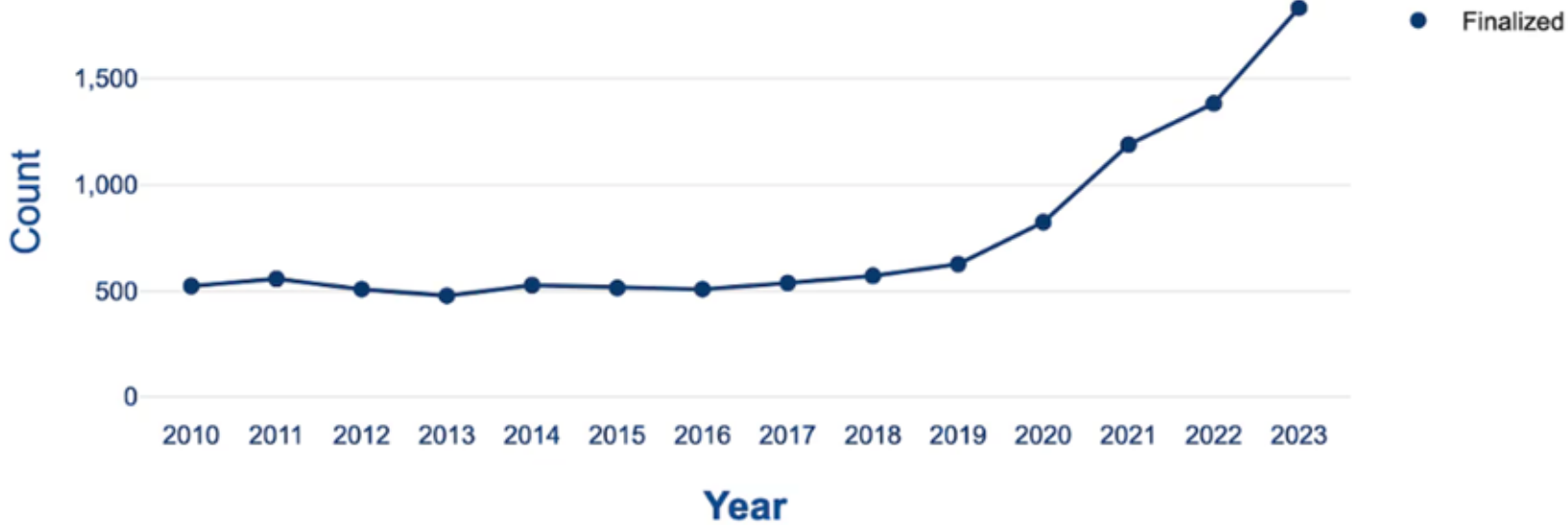
NO ONE DIES A PREVENTABLE DEATH

Oregon overdose deaths grew 33% in 2023, health data shows

Published: Dec. 12, 2024, 4:28 p.m.

Annual Overdose Deaths

Drug Type: All Overdose



Rural Areas Continue to be Vulnerable



A photograph of Riley McCornell and his dog, Blue, hangs on the wall of his family's home in Kootenai on Dec. 15, 2025. McCornell died from a fentanyl overdose at age 20 on June 14, 2025. Hunter D'Arcazio/Flathead Beacon

HEALTHCARE

Overdoses Rise in Flathead County, Stretching Local Resources and Leaving Families Reeling

With a record high of overdose-related EMS calls in Flathead County in 2025, grieving family members and recovering addicts cope with loss while drug enforcement officers and treatment experts seek to bring awareness to the valley's growing opioid crisis

BY ZOE BUHRMASTER

JANUARY 5, 2026



Home from boot camp, Army recruit from Oregon dies of fentanyl OD

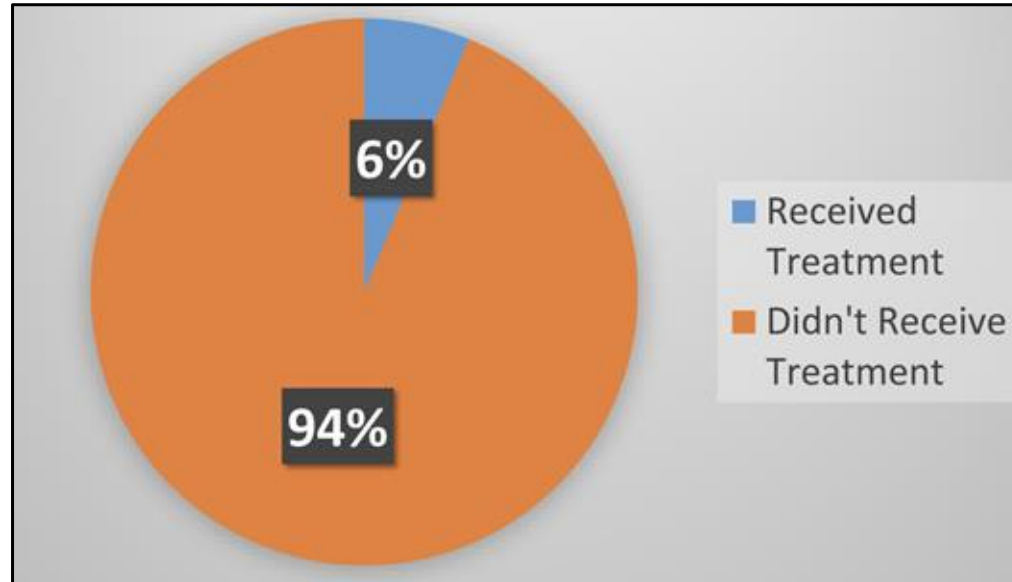
Updated: Jan. 23, 2025, 10:17 p.m. | Published: Jan. 23, 2025, 7:00 a.m.



Inspired by an uncle, Tyson Richardson joined the Army and had dreams of serving as a cavalry scout to specialize in reconnaissance and gathering information about enemy positions, weapons and activity. "He wanted to serve his country, to be part of something greater than himself," said Clifford Richardson, his father. Courtesy of Family

About 46 million Americans, or 15% of the population, have a substance use disorder (SUD).

Receipt of *Any* Substance Use Treatment Among People with a Past Year SUD

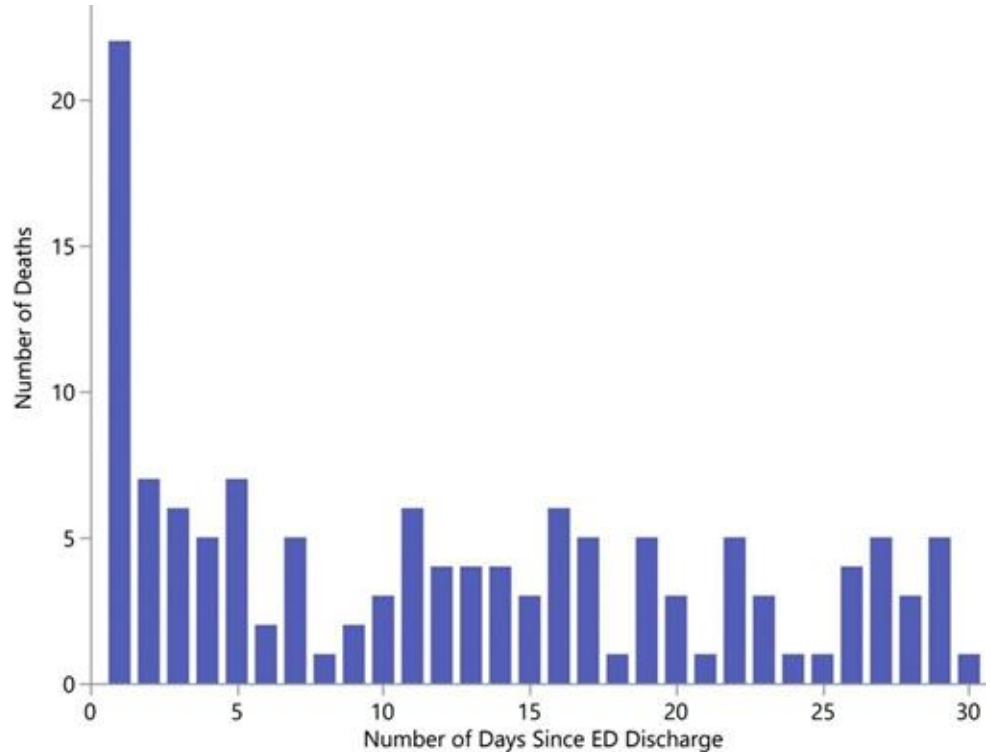


Why is this an EMS problem?

OUD is an Emergency

Significant increased mortality risk post-ED discharge

- 20% of patients who died did so in the first month
- **22% of those who died in the first month died within the first 2 days**



A healthcare worker, likely a nurse or doctor, is shown in a hospital setting. She is wearing teal scrubs and a stethoscope. She is talking on a white corded telephone and holding a clipboard with a red pen. The background shows other hospital staff and a busy clinical environment.

30%

of people who die due to overdose have had at least 1 interaction with EMS in the year preceding their death.

Non transport rates for overdose survivors have increased by

44%

Medications for Opioid Use Disorder (MOUD)

Methadone

Full mu (opioid) receptor agonist



Oral (often solution)

Buprenorphine ± Naloxone

Partial mu receptor agonist



**Sublingual (tab, film),
IV, IM, subcutaneous
injection, transdermal patch**

Naltrexone

Mu receptor antagonist (blocker)



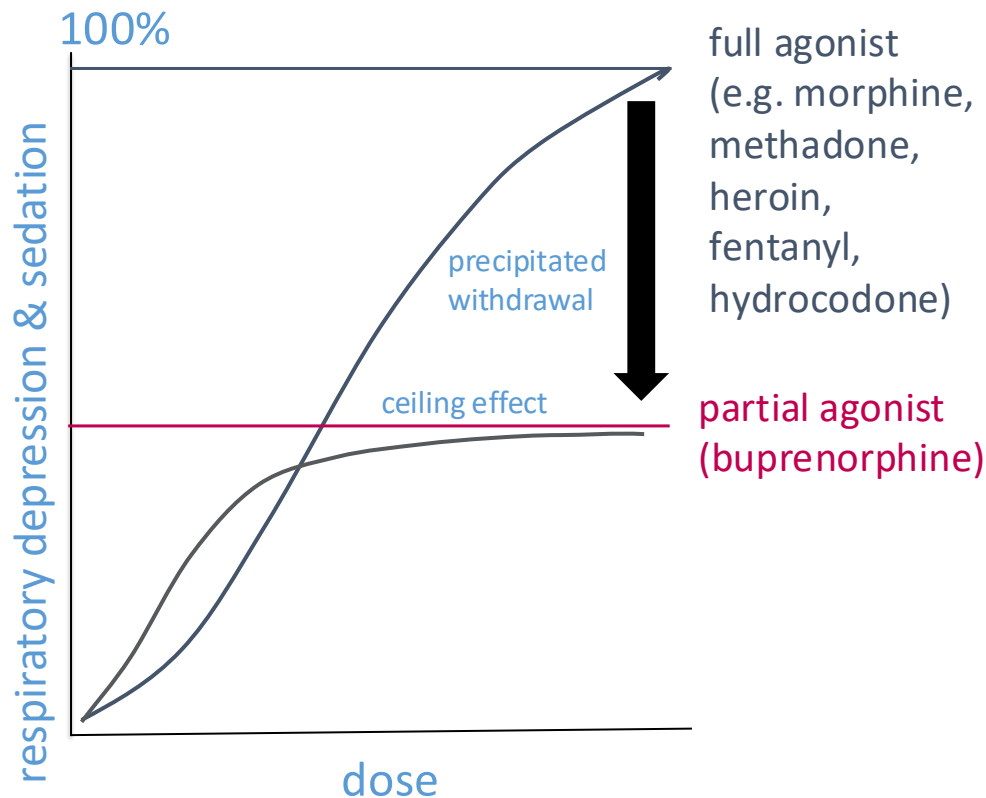
Intramuscular injection (extended release) or Oral

Ex: "Vivitrol," "ReVia"

Buprenorphine

Buprenorphine:

- Safely and effectively treats withdrawal, craving, & overdose
- Partial agonist
 - Ceiling effect:
 - Respiratory depression
 - Sedation
 - No ceiling effect:
 - Analgesia
- High affinity
 - Blocks other opioids
 - Displaces other opioids
- Long acting
 - Half-life ~ 24-36 Hours



Appropriate Dosing

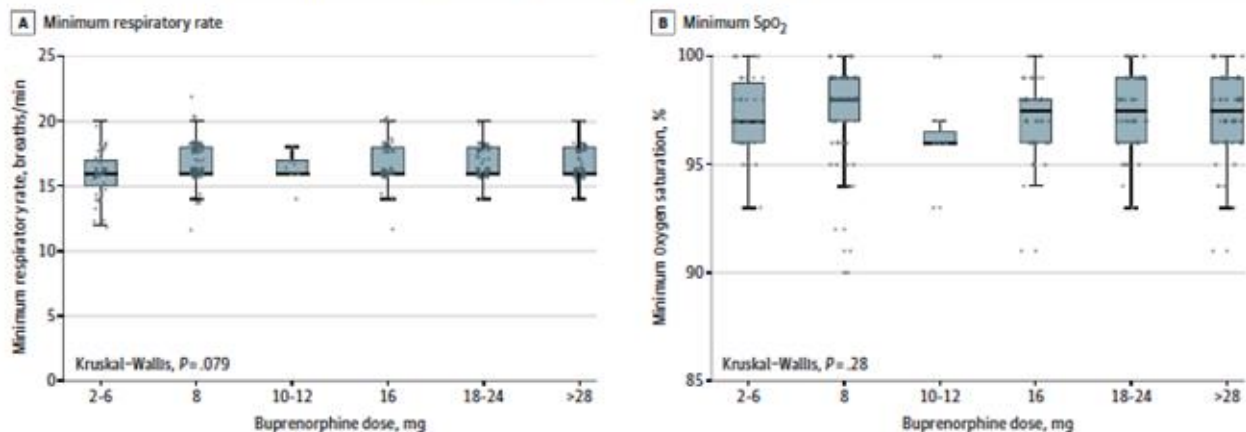


Original Investigation | Substance Use and Addiction

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

Andrew A. Herring, MD, Aidan A. Vosooghi, MS, Joshua Luftig, PA, Erik S. Anderson, MD, Xiwen Zhao, MS, James D'Onofrio, PhD, Kathryn F. Hawk, MD, MHS, Ryan P. McCormack, MD, MS, Andrew Saxon, MD, Gal D'Onofrio, MD, MS

Figure 2. Minimum Respiratory Rate and Oxygen Saturation (SpO₂) Following Initial Dose by Buprenorphine Dose



Boxes correspond to 25th and 75th percentiles, with lines in boxes denoting medians. Dots denote outliers. Error bars denote 95% CIs. Kruskal-Wallis test compares distributions of respiratory rate and oxygen saturation across buprenorphine dose categories.

Common Misconceptions



“Patients should be referred to counseling before starting treatment.”

“Starting someone on buprenorphine is just trading one addiction for another.”

“Starting bup in the ED takes too long.”

“Other patients take higher priority.”

Buprenorphine reduces all-cause mortality by more than 50% over 5 years

Santo et al., 2021

One-year mortality after a non-fatal overdose is similar to STEMI.

Weiner et al., 2019

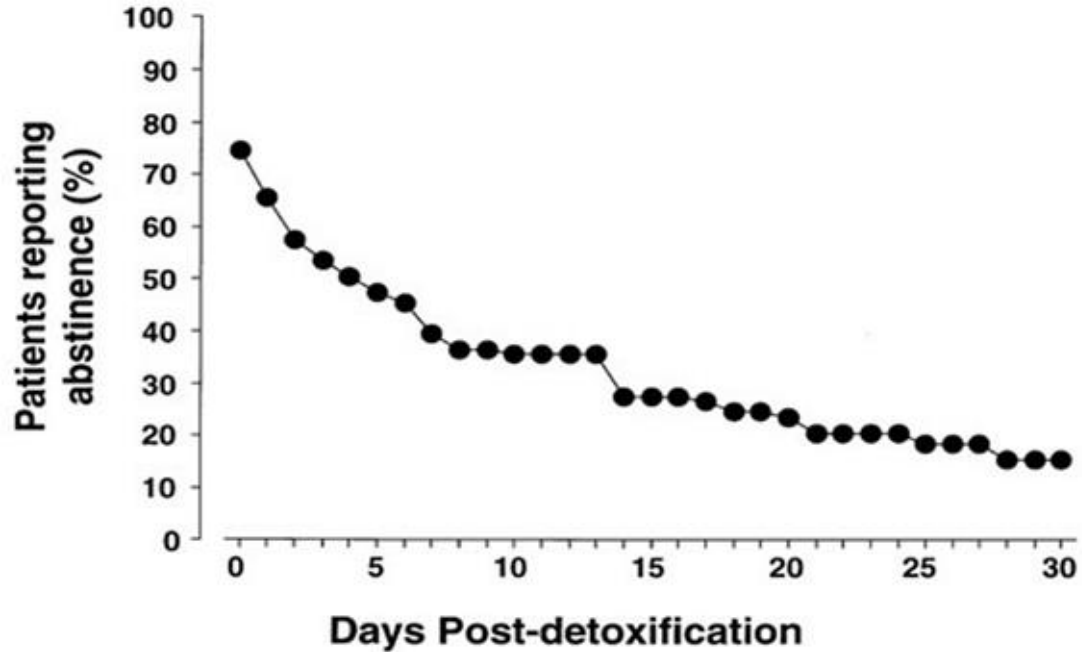
Starting patients on buprenorphine decreases readmissions and minimizes ED utilization.

Gryczynski et al., 2021

Prompt buprenorphine initiation increases the likelihood of patients being in treatment in 30 days.

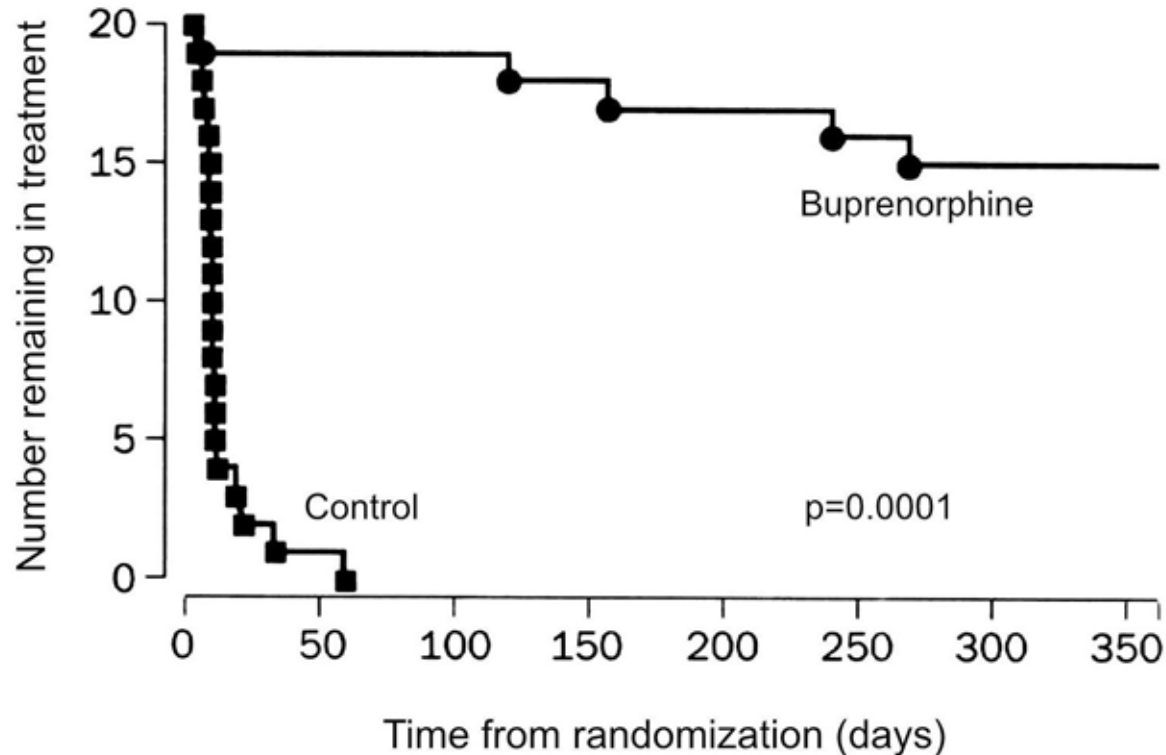
D'Onofrio et al., 2015

Detoxification Doesn't Last



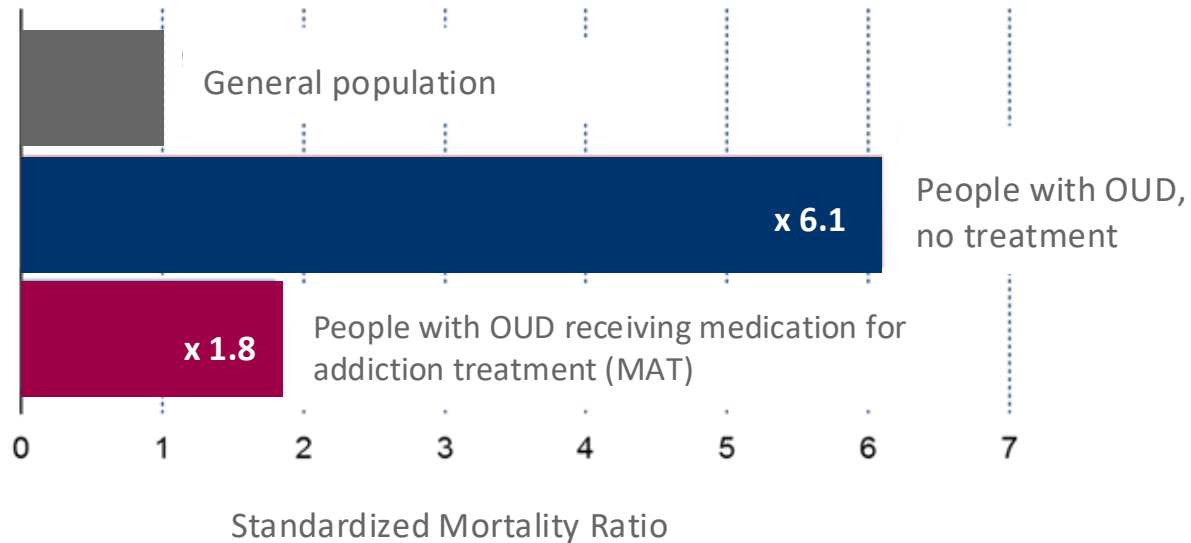
Chutuape, M et al. One-, three-, and six-month outcomes after brief inpatient opioid detoxification. *The American Journal of Drug and Alcohol Abuse*. Vol 27:1, 2001.

Buprenorphine Improves Retention



Buprenorphine Saves Lives

Mortality Risk Compared to the General Population



Emergency Medical Services: Buprenorphine (Bup) Field Start Protocol



This treatment protocol can be used for patients experiencing opioid withdrawal symptoms and for patients recently administered naloxone.

Assess opioid withdrawal signs and symptoms.

Opioid Withdrawal Signs & Symptoms: Patient must present with ≥ 2 objective signs to be considered for bup treatment.

Objective Signs	Subjective Symptoms
<ul style="list-style-type: none">• Yawning• Rhinorrhea or lacrimation• Dilated pupils• Tachycardia	<ul style="list-style-type: none">• Nausea• Stomach/abdominal cramps• Body aches• Achy bones/joints
<ul style="list-style-type: none">• Diaphoresis• Restlessness and/or agitation• Vomiting, diarrhea• Piloerection	<ul style="list-style-type: none">• Restlessness• Hot and cold• Nasal congestion

Assess for exclusion criteria.

Exclusion Criteria: Patient is not a candidate for buprenorphine treatment if any of the following are present.

- No opioid withdrawal signs or symptoms
- Under 16 years of age
- Any methadone use within last 10 days
- Severe medical illness (sepsis, respiratory distress, etc.)
- Altered mental status and unable to give consent or comprehend potential risks and benefits for any reason

Are any exclusion criteria present?

NO

Check for COWS Score ≥ 8
(Clinical Opioid Withdrawal Scale)



NO

Not eligible for bup field start.

YES

Offer patient bup and counseling on treatment options.

Consider MD Base contact for complex cases/additional support.

PATIENT AGREES TO TREATMENT

Administer Buprenorphine.

1. Administer buprenorphine 16 mg SL.
2. Reassess after 10 minutes.

IF SYMPTOMS WORSEN OR PERSIST

Re-dose with bup 8 mg SL.

Total maximum bup dose not to exceed 24 mg SL.

PATIENT DENIES TREATMENT

1. Provide medication for addiction treatment (MAT) brochure.
2. Provide naloxone.
3. Offer transport to Bridge hospital.

IF SYMPTOMS IMPROVE

1. Verify patient contact information for hospital follow up, two phone numbers recommended.
2. Provide naloxone and MAT brochure.
3. Repeat and document second COWS.
4. Recommend transport to Bridge hospital.
5. If patient declines transport, inform them that a navigator may initiate contact for further support.

EMS Bridge Field Protocol:

- Follow the arrows, like ACLS
- 1300 paramedics across California use this protocol
- Currently 1/3 of all Californians live in an area where EMS has been trained to provide field bup



Steps 1 & 2

Assess opioid withdrawal signs and symptoms.

Opioid Withdrawal Signs & Symptoms: Patient must present with ≥ 2 objective signs to be considered for bup treatment.

Objective Signs

- Yawning
- Rhinorrhea or lacrimation
- Dilated pupils
- Tachycardia
- Diaphoresis
- Restlessness and/or agitation
- Vomiting, diarrhea
- Piloerection

Subjective Symptoms

- Nausea
- Stomach/abdominal cramps
- Body aches
- Achy bones/joints
- Restlessness
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- Altered mental status and unable to give consent or comprehend potential risks and benefits for any reason

Are any exclusion criteria present?

NO

YES

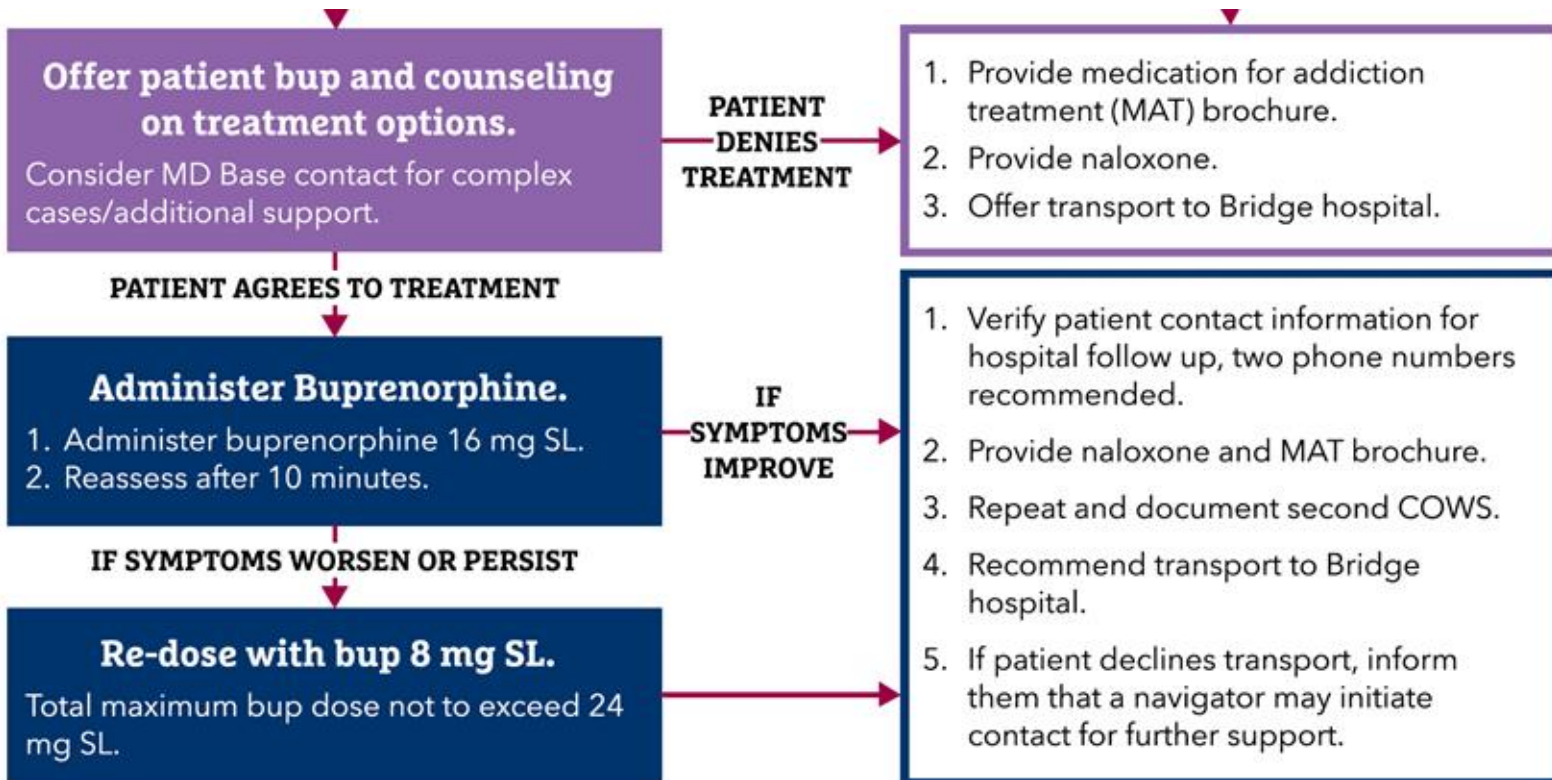
Check for COWS Score ≥ 8
(Clinical Opioid Withdrawal Scale)



NO

Not eligible for bup field start.

Steps 3 & 4



Number Needed to Treat (NNT)

Aspirin in STEMI	42 to save a life
Warfarin in Afib	25 to prevent a stroke
Steroids in COPD	10 to prevent tx failure
Defibrillation in Cardiac Arrest	2.5 to save a life
Buprenorphine in Opioid Use Disorder	2 to retain in treatment



Successful Implementation in the EMS Setting



Emergency medical services/original research

Impact of Administering Buprenorphine to Overdose Survivors Using Emergency Medical Services

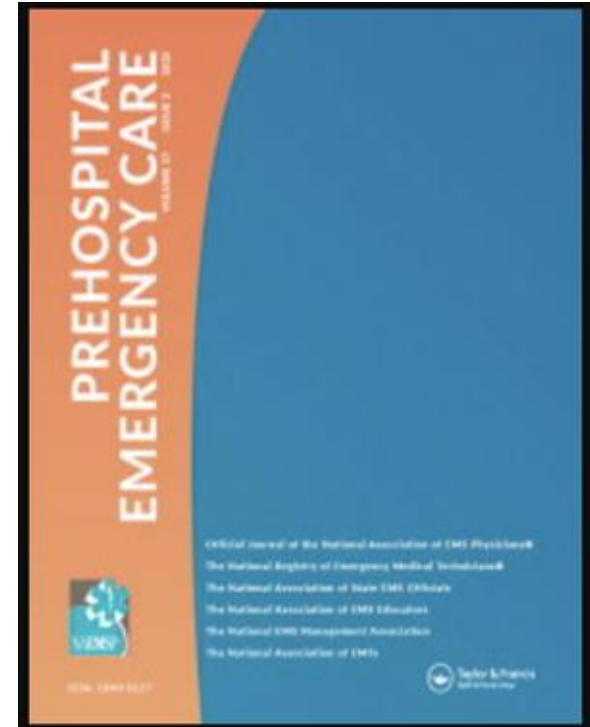
Key Findings:

- “Patients who received buprenorphine had a 12-fold increase in being engaged in treatment at 30 days”
- No precipitated withdrawal
- Decrease in Clinical Opioid Withdrawal Scale (COWS) from 9.3 to 2.2
- Increased scene time of 6 minutes

EMS Bridge Buprenorphine Study

Bridge Buprenorphine Pilot:

- Treated abstinence withdrawal and naloxone precipitated withdrawal
- Precipitated withdrawal rate <1%
- 25% of patients retained in treatment at 30 days
- CA policy change: buprenorphine no longer requires calling medical direction as of 2023



Oregon

Salem REPORTER

Local News That Matters

COMMUNITY FIRE HEALTH CARE

New program will help people recover from opioid withdrawal, connect with treatment

MADELEINE MOORE · MARCH 3, 2025



Folk ambulances parked outside of Salem Hospital in early December, 2022 (ABBEY MCDONALD/Salem Reporter)

EMS Roadmap

LAUNCHING EMS BUPRENORPHINE:

A Roadmap for Oregon EMS Agencies

October 2025



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BRIDGE
Treatment. Equity. Connection.

Table of Contents

Overview	1
Scope	1
Target Audience	1
How to Use the Roadmap	1
Importance of Planning	2
Oregon Landscape	2
Assistance	2
Why EMS-Administered Buprenorphine?	3
Public Health Emergency	3
Access to Care	3
EMS as First Point of Contact	3
Proven Effectiveness	4
Addressing Stigma	4
Amplifying Immediate Impact	5
EMS Buprenorphine Roadmap	6
PHASE 2 Implementation	9
PHASE 3 Post-Implementation	10
Problem Solving	12
Integrating Community Interventions	13
Ensuring Effectiveness and Sustainability	13
Acknowledgments	14
Appendix A: Definitions	15
Appendix B: Resources	17

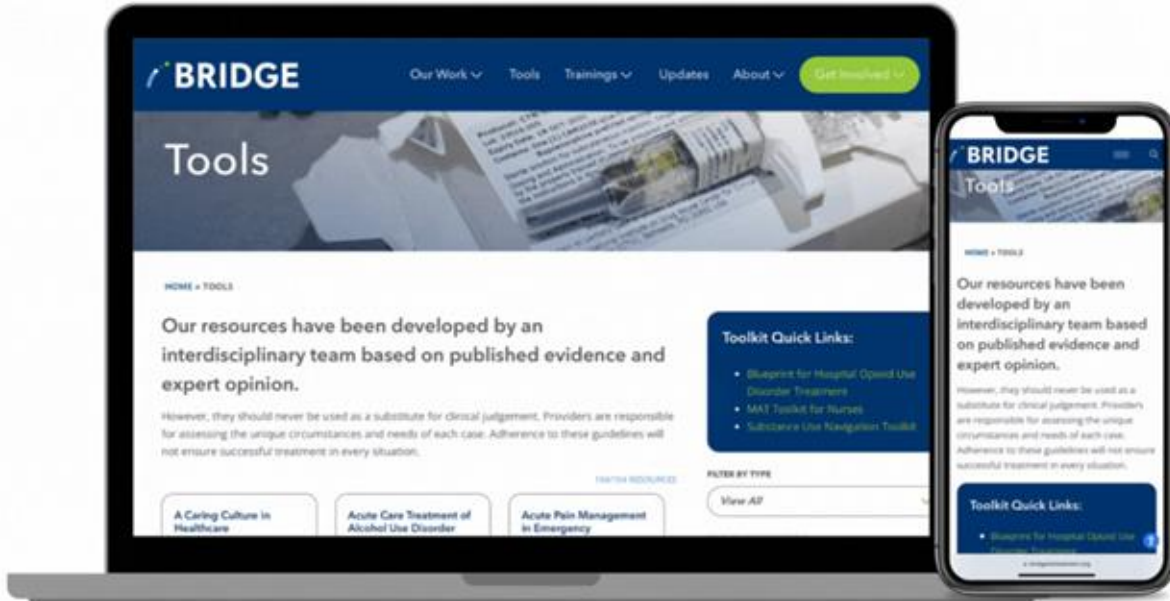
EMT based bup: protocols and training in development

Status of King County WA program?

Summary

1. OUD is an emergency and EMS has a crucial part to play in reducing overdose deaths.
2. There is evidence that prehospital bup initiation increases retention in treatment for at least 30 days, which has the potential to save lives and reduce overdose call volume.
3. With proper training, increased scene time is minimal, bup is cheap to stock and safe to give, and the benefits of EMS MOUD outweigh the risks and challenges of administration

Resources



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