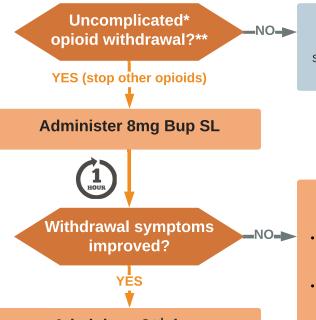


Buprenorphine (Bup) Hospital Quick Start

- Any prescriber can order Bup in the hospital, even without an x-waiver.
- · Bup is a high-affinity, partial agonist opioid that is safe and highly effective for treating opioid use disorder.
- If patient is stable on methadone or prefers methadone, recommend continuation of methadone as first-line treatment.



Administer 2nd dose

Inpatient: 8mg. Subsequent days, titrate from 16mg with additional 4-8mg prn cravings. ED: 8-24mg. Consider discharge with higher loading dose.

Maintenance Treatment 16 mg Bup SL/day

Titrate to suppress cravings; Usual total dose 16-32mg/day

Discharge

- Document Opioid Withdrawal and/or Opioid Use Disorder as a diagnosis.
- If no X-waiver: Use loading dose up to 32mg for long effect and give rapid follow up.
- If X-waiver: Check CURES (not required in Emergency Department if ≤7 day prescription), prescribe sufficient Bup/Nx until follow-up.

Overdose Education Naloxone Kit

Naloxone 4mg/0.1ml intranasal spray

Start Bup after withdrawal

Supportive meds prn, stop other opioids

No Improvement Differential Diagnosis:

- Withdrawal mimic: Influenza, DKA, sepsis, thyrotoxicosis, etc. Treat underlyling illness.
- Incompletely treated withdrawal: Occurs with lower starting doses; improves with more Bup.
- Bup side-effect: Nausea, headache, dysphoria. Continue Bup, treat symptoms with supportive medications.
- Precipitated withdrawal:

Too large a dose started too soon after opioid agonist.

Usually time limited, self resolving with supportive medications.

In complex or severe cases of precipitated withdrawal, OK to stop Bup and give short acting full agonists.

Buprenorphine Dosing

- Either Bup or Bup/Nx (buprenorphine/naloxone) films or tab sublingual (SL) are OK.
- If unable to take oral/SL, try Bup 0.3mg IV/IM.
- OK to start with lower initial dose: Bup 2-4mg SL.
- Total initial daily dose above 16mg may increase duration of action beyond 24 hrs.
- Bup SL onset 15 min, peak 1 hr, steady state 7 days
- May dose qday or if co-exisiting chronic pain split dosing TID/QID.

*Complicating Factors

- · Altered mental status, delirium, intoxication
- Severe acute pain, trauma or planned large surgeries
- Organ failure or other severe medical illness
- · Recent methadone use

**Diagnosing Opioid Withdrawal Subjective symptoms AND one objective sign

Subjective: Patient reports feeling "bad" due to withdrawal (nausea, stomach cramps, body aches, restlessness, hot and cold, stuffy nose)

Objective: [at least one] restlessness, sweating, rhinorrhea, dilated pupils, watery eyes, tachycardia, yawning, goose bumps, vomiting, diarrhea, tremor

Typical withdrawal onset:

- ≥ 12 hrs after short acting opioid
- ≥ 24 hrs after long acting opioid
- ≥ 48 hrs after methadone (can be >72 hrs)

If unsure, use COWS (clinical opioid withdrawal scale). Start if COWS ≥ 8 AND one objective sign.

If Completed Withdrawal:

Typically >72 hrs since last short-acting opioid, may be longer for methadone. Start Bup 4mg q4h prn cravings, usual dose 16-32mg/day. Subsequent days, OK to decrease frequency to qday

Opioid Analgesics

- Pause opioid pain relievers when starting Bup.
- OK to introduce opioid pain relievers after Bup is started for breakthrough pain. Do not use methadone with Bup.

Supportive Medications

 Can be used as needed while waiting for withdrawal or during induction process.

Pregnancy

- Bup monoproduct or Bup/Nx OK in pregnancy.
- Consider referencing buprenorphine in pregnancy guide.

The CA Bridge Program disseminates resources developed by an interdisciplinary team based on published evidence and medical expertise. These resources are not a substitute for clinical judgment or medical advice. Adherence to the guidance in these resources will not ensure successful patient treatments. Current best practices may change. Providers are responsible for assessing the care and needs of individual patients.

NOVEMBER 2019



Buprenorphine (Bup) Hospital Quick Start

AUTHORS

James Gasper Pharm D, Kristin Harter PharmD, Andrew Herring MD, David Kan MD, Sky Lee MD, Walter Ling MD, Josh Luftig PA, Aimee Moulin MD, Arianna Sampson PA, Hannah Snyder MD, Rebecca Trotzky-Sirr MD

REFERENCES

Ahmadi J, Jahromi MS, Ghahremani D, et al. Single high-dose buprenorphine for opioid craving during withdrawal. Trials. 2018;19:675

Ang-Lee K, Oreskovich MR, Saxon AJ, et al. Single dose of 24 milligrams of buprenorphine for heroin detoxification: an open-label study of 5 inpatients. *J Psychoactive Drugs*. 2006; 38(4):j505-12

Bhatraju EP, Grossman E, Tofighi B, et al. Public sector low threshold office-based buprenorphine treatment: outcomes at year 7. *Addict Sci Clin Pract*. 2017;12(1):7. Published 2017 Feb 28. doi:10.1186/s13722-017-0072-2

D'Onofrio G, O'Connor PG, Pantalon MV, et al. Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial. *JAMA*. 2015;313(16):1636–1644. doi:10.1001/jama.2015.3474

Greenwald MK, Comer SD, Fiellin DA. Buprenorphine maintenance and mu-opioid receptor availability in the treatment of opioid use disorder: implications for clinical use and policy. *Drug Alcohol Depend*. 2014;144:1–11. doi:10.1016/j.drugalcdep.2014.07.035

Herring AA, Perrone J, Nelson LS. Managing opioid withdrawal in the emergency department with buprenorphine. *Ann Emerg Med.* 2019;73(5):481-487

Hopper JA, Wu J, Martus W, et al. A randomized trial of one-day vs three-day buprenorphine inpatient detoxification protocols for heroin dependence. *J Opioid Manag.* 2005; 1(1):31-5

Kutz I, Reznik V. Rapid heroin detoxification using a single high dose of buprenorphine. J psychoactive Drugs. 2001;33(2):191-3

Jacobs P, Ang A, Hillhouse MP, et al. Treatment outcomes in opioid dependent patients with different buprenorphine/naloxone induction dosing patterns and trajectories. *Am J Addict*. 2015;24(7):667–675. doi:10.1111/ajad.12288

Jones HE, Johnson RE, Milio L. Post-cesarean pain management of patients maintained on methadone or buprenorphine. *Am J Addict*. 2006;15:258-9.

Liebschutz JM, Crooks D, Herman D, et al. Buprenorphine treatment for hospitalized, opioid-dependent patients: a randomized clinical trial. *JAMA Intern Med.* 2014;174(8):1369–1376. doi:10.1001/jamainternmed.2014.2556

Opioid Use and Opioid Use Disorder in Pregnancy. Committee opinion No. 711. American College of Obstetricians and Gynecologists. *Obstet Gynecol.* 2017; 130:e81-94.

Meyer M, Wagner K, Benvenuto A, Plante D, Howard D.Intrapartum and postpartum analgesia for women maintained on methadone during pregnancy. *Obstet Gynecol.* 2007;110:261–6.

Oreskovic MR, Saxon AJ, Ellis ML et al. A double-blind, double-dummy, randomized, prospective pilot study of the partial mu opiate agonist, buprenorphine, for acute detoxification from heroin. *Drug Alcohol Depend*. 2005;77(1):71-9.

Walsh SL, Eissenberg T. The clinical pharmacology of buprenorphine: extrapolating from the laboratory to the clinic. *Drug Alcohol Depend*. 2003;70(2 Suppl):S13-27

Walsh SL, Preston KL, Stitzer ML, et al. Clinical pharmacology of buprenorphine: ceiling effects at high doses. *Clin Pharmacol Ther*. 1994;55(5):569-80