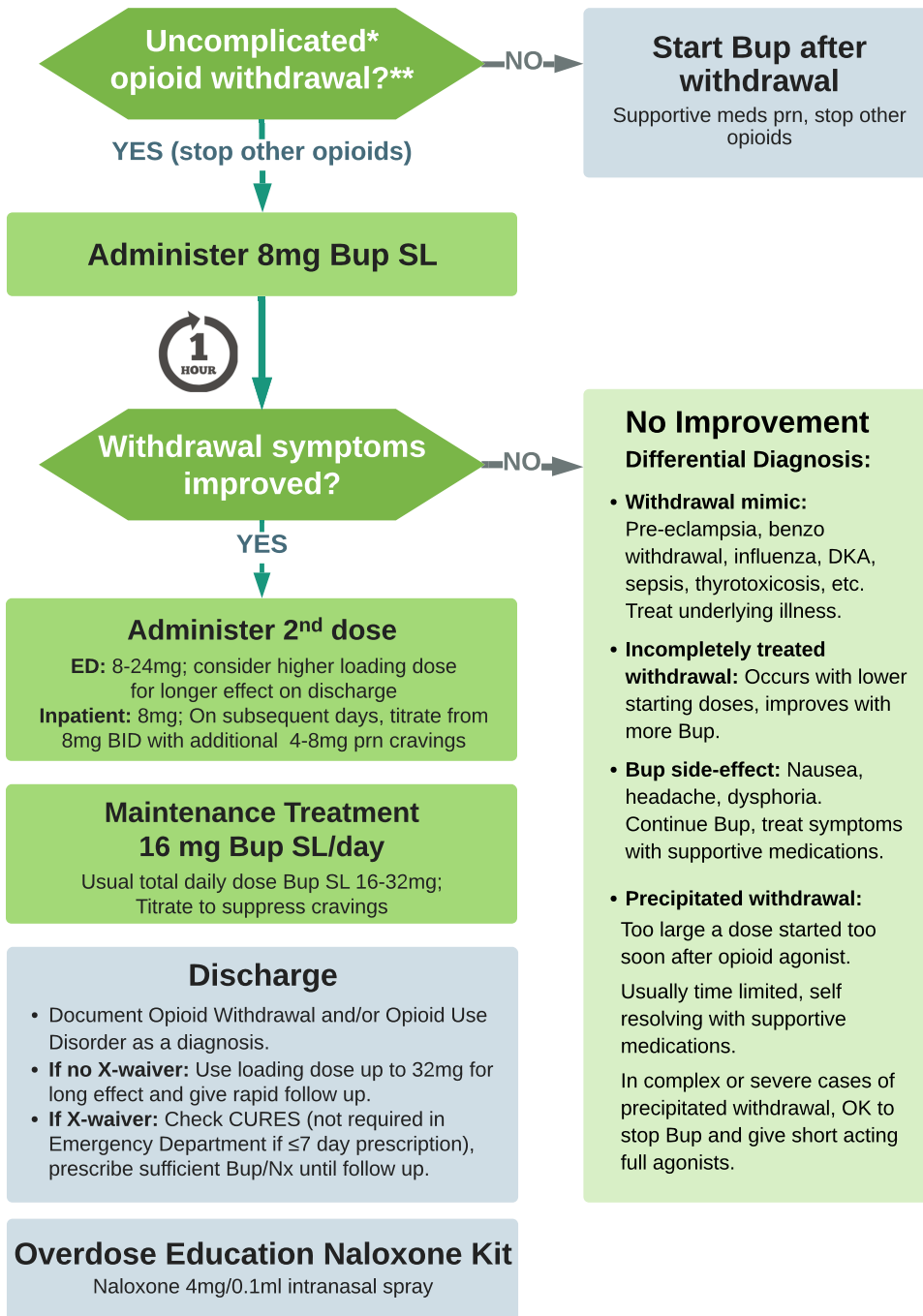


- Bup is a high-affinity partial agonist opioid that is **SAFE** in pregnancy and highly effective for treating opioid use disorder.
- **If patient is stable on methadone or prefers methadone**, recommend continuation of methadone as first-line treatment.
- **Fetal Monitoring** is not required to start Bup in a normal pregnancy regardless of gestational age.
- **Admission for observation is NOT required** at Bup starts.
- **Bup/Nx or Bup monoproduct** is OK in Pregnancy.
- **Split dosing** and an increase in total Bup dose is often necessary esp in later trimesters.



Peripartum

For planned C-Section and/or labor, or acute pain:

- Continue patient's normal Bup dose in combination with multimodal analgesia that may include regional anesthesia and opioids.
- Bup is safe for breastfeeding.
- Bup reduces NAS severity. Dose does not correlate to NAS severity.
- Postpartum Bup dose reduction should be gradual and per pt cravings.

Buprenorphine Dosing

- Any provider can order Bup in the ED or inpatient.
- If unable to take SL, try Bup 0.3mg IV/IM.
- Total initial daily dose above 16mg may increase duration of action beyond 24 hrs.
- Ok to start with lower initial dose: Bup 2-4mg SL

* Complicating Factors

- Severe acute pain or trauma
- Significant respiratory compromise, medically unstable (do not start Bup)
- Recent methadone

** Diagnosing Opioid Withdrawal

Subjective symptoms **AND** one objective sign

Subjective symptoms:

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

Objective signs [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, usual dosing frequency TID or QID

Symptomatic / Supportive Meds

Can be used to help treat withdrawal symptoms prn or during induction process (i.e. clonidine, acetaminophen, ondansetron, diphenhydramine, etc).

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.

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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
- 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.
- 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
- Glatstein MM, Garcia-Bournissen F, Finkelstein Y, Koren G. Methadone exposure during lactation. *Canadian Family Physician*. 2008;54(12):1689-1690. Women with opioid and other substance use disorders: A systemic review. *Prev Med*.2015;80:23-31.
- 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, Fischer G, Heil SH, et al. Maternal Opioid Treatment: Human Experimental Research (MOTHER) – Approach, Issues, and Lessons Learned. *Addiction (Abingdon, England)*. 2012;107(0 1):28-35. doi:10.1111/j.1360-0443.2012.04036.x.
- 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.
- Opioid Use and Opioid Use Disorder in Pregnancy. Committee opinion No. 711. American College of Obstetricians and Gynecologists. *Obstet Gynecol*. 2017; 130:e81-94.
- 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.
- Saia KA, Schiff D, Wachman EM, Mehta P, Vilkins A, Sia M, et al. Caring for Pregnant Women with Opioid Use Disorder in the USA: Expanding and Improving Treatment. *Curr Obstet Gynecol Rep*. 2016;1–7.
- 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
- Zedler BK, Mann AL, Kim MM, et al. Buprenorphine compared with methadone to treat pregnant women with opioid use disorder: a systematic review and meta-analysis of safety in the mother, fetus and child. *Addiction*. 2016;111(12):2115–2128. doi:10.1111/add.13462