



- **Buprenorphine**
 - Sublingual tablet (under the tongue): 2 mg, 8 mg
 - Injection solution: 0.3 mg/1 mL
 - Transdermal patch: 5 mcg/1 HR, 7.5 mcg/1 HR, 10 mcg/1 HR, 15 mcg/1 HR, 20 mcg/1 HR
- **Belbuca[®]**
 - Buccal film (inside the cheek): 75 mcg, 150 mcg, 300 mcg, 450 mcg, 600 mcg, 750 mcg, 900 mcg
- **Butrans[®]**
 - Weekly patch: 5 mcg/hr, 7.5 mcg/hr, 10 mcg/hr, 15 mcg/hr, 20 mcg/hr
- **Sublocade[®]**
 - Prefilled syringes (subcutaneous injection): 100 mg/0.5 mL, 300 mg/1.5 mL
- **Brixadi[®]**
 - Prefilled syringes (subcutaneous injection): 8 mg/0.16 mL, 16 mg/0.32 mL, 24 mg/0.48 mL, 32 mg/0.64 mL, 64 mg/0.18 mL, 96 mg/0.27 mL, 128 mg/0.36 mL

If you or someone you know is in crisis, please call 911 and/or the toll-free National Suicide Prevention Lifeline at 800-273-TALK (8255) to speak with a trained crisis counselor 24/7. A help line and other resources are also available through the National Alliance on Mental Illness at nami.org.



Medication Assisted Treatment (MAT)

Medication assisted treatment (MAT) is the use of medications in combination with counseling and behavioral therapies for the treatment of substance use disorders. A combination of medication and behavioral therapies is effective in the treatment of substance use disorders and can help some people to sustain recovery.

What is buprenorphine and what does it treat?

Buprenorphine (Sublocade[®] and Brixadi[®]) is a medication that works in the brain to treat opioid use disorder. Opioids include heroin and prescription pain relievers such as hydrocodone, oxycodone, morphine, and fentanyl. Certain formulations of buprenorphine (such as Belbuca[®] and Butrans[®]) are FDA approved to treat moderate to severe acute and chronic pain but not opioid use disorder.

Buprenorphine is known as a partial opioid agonist which means it partially works like an opioid and the effect is weaker than full agonists like heroin and methadone. It also has a “ceiling effect” so the opioid effects level off even with further dose increases which reduces the risk of misuse, dependency, and side effects. Buprenorphine lowers the effects of opioid withdrawal symptoms and cravings to use opioids without having full opioid potency or effects. This helps people who take the medication abstain from other opioids. It is important to combine buprenorphine treatment with counseling and other support.

Symptoms of opioid use disorder include:

- Being unable to quit using opioids despite problems with health and relationships.
- Needing more opioids to achieve the same effect.
- Going through withdrawal symptoms (sweating, shaking, nausea, vomiting, diarrhea, body aches, anxiety, irritability, runny nose) when unable to use opioids.
- Spending the majority of time using or finding a way to use opioids.
- Having a desire but an inability to decrease the amount of opioids used.
- Giving up enjoyable activities in order to use opioids.

This medication may be prescribed for other uses; ask your health care provider for more information.

All FDA warnings are at the end of this fact sheet. Please consult them before taking this medication.

What is the most important information I should know about buprenorphine?

Your health care provider will determine when buprenorphine should be started. If it is started too early after using other opioids, you could experience withdrawal symptoms, such as sweating, shaking, nausea, vomiting, diarrhea, body aches, anxiety, irritability, or runny nose.

Do not stop taking buprenorphine, even when you feel better. Only your health care provider can determine the length of treatment that is right for you. If buprenorphine is stopped abruptly, you may have withdrawal symptoms.

Missing doses of buprenorphine may increase your risk for relapse.

Respiratory depression (slowed breathing) and death can rarely happen when buprenorphine is taken as prescribed. This risk is increased when buprenorphine is injected into the body or when it is mixed with other depressants including benzodiazepine medications (such as lorazepam, diazepam, or alprazolam) and alcohol. Patients taking buprenorphine or their caregivers should seek immediate medical attention if they start to experience unusual dizziness or lightheadedness, extreme sleepiness, slowed or difficulty breathing, or unresponsiveness.

Do not inject (“shoot-up”) buprenorphine. This can cause uncomfortable withdrawal symptoms, respiratory depression (slowed breathing), or death in someone dependent on opioids.

There have been deaths reported in people who have never used opioids before after using low doses of buprenorphine.

Buprenorphine is not recommended in people with severe liver disease. Liver injury is rare. This can be monitored through blood tests. Alert your doctor immediately if you experience any yellowing of your skin and/or eyes, severe stomach pain, or severe nausea or vomiting.

Tell all of your providers and pharmacists that you are on buprenorphine. You should not take other medications with buprenorphine without talking to your provider.

Do not drive or operate heavy machinery until you know how you will respond to buprenorphine.

Store buprenorphine out of the reach and sight of children. Buprenorphine can cause serious respiratory depression (slowed breathing) and death in children.

Are there specific concerns about buprenorphine and pregnancy?

If you are planning on becoming pregnant, notify your health care provider to best manage your medications. People living with substance use disorders that wish to become pregnant face important decisions and challenges. Active substance use disorders during pregnancy put the fetus at great risk. It is important to discuss the risks and benefits of continued treatment with your doctor and caregivers.

Opioid use disorder in pregnancy is associated with adverse outcomes such as low birth weight, preterm birth, and fetal death. Receiving treatment for opioid use disorder during pregnancy lowers these risks.

The effects of buprenorphine on the fetus when used in pregnant women are unknown. Buprenorphine did not appear to cause structural abnormalities during animal studies. There was evidence of obstructed labor, fetal death, neonatal death, and developmental delays in animal studies. These results cannot be applied to humans. Buprenorphine did not show an increased risk of major structural abnormalities when studied in pregnant women. Opioid withdrawal symptoms may occur in newborn infants of women who were taking buprenorphine during pregnancy. There have been reports of poor feeding, diarrhea, irritability, tremor, trouble breathing, low heart rate, rigidity, and seizure in infants exposed to buprenorphine.

Methadone is better studied for pregnant women needing medication for opioid use disorder. Buprenorphine without naloxone is a reasonable alternative to methadone for pregnant women. Buprenorphine/naloxone should only be used in pregnancy if the benefits outweigh the risk to the fetus.

Regarding breastfeeding, caution is advised since buprenorphine does pass into breast milk. Small studies of buprenorphine use in breastfeeding women did not show adverse events in breastfed infants. When used for pain, the manufacturer does not recommend breastfeeding. When used for opioid use disorder, the manufacturer recommends caution be used. Nursing mothers who are taking buprenorphine should monitor their infants for signs of increased drowsiness or trouble breathing.

What should I discuss with my health care provider before taking buprenorphine?

- Symptoms of your condition that bother you the most
- If you have allergies to any medications
- If you have thoughts of suicide or harming yourself
- Medications you have taken in the past for your condition, whether they were effective or caused any adverse effects
- If you experience side effects from your medications. Some side effects may pass with time, but others may require changes in the medication.
- Any other psychiatric or medical problems you have, including a history of liver disease
- All other medications you are currently taking (including over the counter products, herbal and nutritional supplements) and any medication allergies you have
- Other non-medication treatments you are receiving, such as talk therapy or counseling. Your provider can explain how these different treatments work with the medication.
- If you are pregnant, plan to become pregnant, or are breastfeeding
- If you use illegal drugs or narcotics

How should I take buprenorphine?

The buprenorphine formulations that are used for opioid use disorder are the sublingual tablet or subcutaneous injection. Buprenorphine is available as a generic formulation. The combination product buprenorphine/naloxone (Suboxone[®]) is the preferred therapy over buprenorphine alone for opioid use disorder.

On the first day of buprenorphine treatment, a starting dose for the tablet of up to 8 mg per day is usually recommended. This starting dose should be carefully adjusted under the supervision of a certified health care provider to find the safest and most effective dose for you. The recommended daily maintenance dose of buprenorphine tablets is usually 16 mg taken once per day. Buprenorphine tablets should be dissolved under the tongue. Do not swallow. Keep the tablets in place under the tongue until completely dissolved. Do not eat or drink anything until the tablets are completely dissolved. If more than one tablet is needed to reach the prescribed dose, place all tablets in different places under the tongue at the same time. If this is not possible, see the detailed instructions on the medication guide that came with your prescription or ask your health care provider.

Buprenorphine subcutaneous injections (Sublocade[®] and Brixadi[®]) should only be prepared and administered by a health care provider. Sublocade[®] is administered monthly with a minimum of 26 days between doses. Brixadi[®] is administered either once weekly or once monthly. Patients should be initiated on transmucosal buprenorphine, followed by dose adjustment, for a minimum of 7 days before starting the subcutaneous injection.

Your provider or pharmacist can show you how to take buprenorphine. You can find detailed instructions on how to use buprenorphine tablets in the medication guide that comes with your prescription from the pharmacy.

Consider using a calendar, pillbox, alarm clock, or cell phone alert to help you remember to take your medication. You may also ask a family member or friend to remind you or check in with you to be sure you are taking your medication.

What happens if I miss a dose of buprenorphine?

If you miss a dose of oral buprenorphine, take it as soon as you remember unless it is closer to the time of your next dose. Do not double your next dose or take more than what is prescribed.

What should I avoid while taking buprenorphine?

Avoid drinking alcohol, using sedatives, or other opioid pain medications (such as codeine, hydrocodone, oxycodone, or morphine), or using illegal drugs while you are taking buprenorphine. They may increase adverse effects (e.g., sedation, overdose, death) of the medication. Keep in mind that some cough syrups may contain opioid pain medication. Discuss all medications with your doctor and pharmacist prior to taking buprenorphine.

What happens if I overdose with buprenorphine?

If an overdose occurs, call your doctor or 911. You may need urgent medical care. You may also contact the poison control center at 1-800-222-1222.

Zimhi® (naloxone) injection or Narcan® (naloxone) nasal spray is a medication that can be used to reverse overdose from opioids including buprenorphine. You should always call 911 after giving someone naloxone to treat an overdose. Ask your provider if naloxone is right for you.

What are the possible side effects of buprenorphine?

Common side effects

- Headache, nausea, vomiting, increased sweating, constipation, trouble sleeping (insomnia), pain, and swelling in the arms and legs (peripheral edema), increased liver enzymes
- Subcutaneous injection (Sublocade®): pain and itching at the injection site
- Signs and symptoms of withdrawal from opioids (such as shaking, stomach cramps, diarrhea, restlessness, irritability, anxiety, body aches, or runny nose)

Rare/serious side effects

- Orthostatic hypotension (low blood pressure when standing)
- Changes in liver function or liver failure
- Changes in adrenal gland function
- Sleep-related breathing disorders
- Allergic reactions
 - Avoid with known hypersensitivity (rashes, hives, itching) to buprenorphine or ingredients with it.
- Overdose and death
 - Signs of overdose include pinpoint pupils, sedation, low blood pressure, and respiratory depression (slowed breathing)
 - This risk is higher when buprenorphine is used IV or at the same time as sedatives (like benzodiazepines) or other depressants (like alcohol)

Are there any risks for taking buprenorphine for long periods of time?

Buprenorphine is a partial opioid agonist. Like other opioids, buprenorphine causes physical dependency when taken daily for a long period of time. This means that you may have withdrawal symptoms if buprenorphine is stopped abruptly. Withdrawal symptoms when stopping buprenorphine are usually not as severe as with other full opioids. Talk to your provider before stopping buprenorphine.

What other medications may interact with buprenorphine?

There have been reports of respiratory depression (slowed breathing) and death in patients taking buprenorphine with benzodiazepine medications such as alprazolam (Xanax®), clonazepam (Klonopin®), diazepam (Valium®), lorazepam (Ativan®), and temazepam (Restoril®). These medications should be taken exactly as prescribed. It is very dangerous to take buprenorphine with benzodiazepines if you do not have a prescription.

The following medications may increase the effects of buprenorphine

- Certain antibiotics such as clarithromycin (Biaxin®) and erythromycin (Ery-Tab®)
- Certain antidepressants such as fluoxetine (Prozac®), phenelzine (Nardil)
- Antifungals, such as fluconazole (Diflucan®), ketoconazole (Nizoral®), and itraconazole (Sporanox®)
- Certain HIV medications known as protease inhibitors: indinavir (Crixivan®), ritonavir (Norvir®), saquinavir (Fortovase®, Invirase®), and lopinavir/ritonavir (Kaletra®)

The following medications may decrease the effects of buprenorphine:

- Certain seizure medications such as phenobarbital, carbamazepine (Tegretol®), and phenytoin (Dilantin®)
- The antibiotic rifampin (Rifadin®)
- The opioid “blocker” naltrexone (Vivitrol®)

How long does it take for buprenorphine to work?

Buprenorphine will begin working shortly after taking one dose.

Summary of Black Box Warnings

This medication has an opiate drug in it. The FDA has found that the use of opiate drugs with benzodiazepine drugs or other sedating medications can result in serious adverse reactions including slowed or difficult breathing and death. Benzodiazepine drugs include drugs like alprazolam, clonazepam, and lorazepam. Benzodiazepine drugs are used to treat health problems like anxiety, trouble sleeping, or seizures. Patients taking opioids with benzodiazepines, other sedating medications, or alcohol, and caregivers of these patients, should seek immediate medical attention if they start to experience unusual dizziness or lightheadedness, extreme sleepiness, slowed or difficulty breathing, or unresponsiveness. Buprenorphine subcutaneous injections are only available through restricted programs (Sublocade REMS and Brixadi REMS). Buprenorphine subcutaneous injections should only be administered by a healthcare provider as serious harm or death could result if administered intravenously.

Important Disclosure: This information is being provided as a community outreach effort of the American Association of Psychiatric Pharmacists. This information is for educational and informational purposes only and is not medical advice. This information contains a summary of important points and is not an exhaustive review of information about the medication. Always seek the advice of a physician or other qualified medical professional with any questions you may have regarding medications or medical conditions. Never delay seeking professional medical advice or disregard medical professional advice as a result of any information provided herein. The American Association of Psychiatric Pharmacists disclaims any and all liability alleged as a result of the information provided herein.