

- Wellbutrin®, Wellbutrin SR®, Wellbutrin XL®, Zyban®, Budeprion SR®, Budeprion XL®, Aplenzin™ and Buproban®
  - Bupropion hydrochloride tablets (immediate release): 75 mg, 100 mg
  - Bupropion hydrochloride tablets (sustained release): 100 mg, 150 mg, 200 mg
  - Bupropion hydrochloride tablets (extended release): 150 mg, 300 mg
  - Bupropion hydrobromide tablets (extended release): 174 mg, 348 mg, 522 mg

*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](http://nami.org).*



### What is bupropion and what does it treat?

Bupropion is an antidepressant medication that works in the brain. It is approved for the treatment of major depressive disorder (MDD), seasonal affective disorder (SAD), and to help people quit smoking (smoking cessation).

Major depression occurs when a person experiences several of the following symptoms concurrently, for at least two weeks: "low" or depressed mood (for example, sad, empty, tearful), decreased interest in most or all activities, changes in appetite (usually decreased), changes in sleep (usually poor sleep), loss of energy, feeling worthless/guilty/hopeless/helpless, psychomotor agitation or retardation (i.e., thoughts/movements speeding up or slowing down), difficulty concentrating, and thoughts of death (suicidal thinking).

SAD is a type of depression that occurs mainly during the autumn-winter season. Although the common term SAD is now referred to as Major Depression with Seasonal Pattern, this fact sheet will continue to use SAD as it is more commonly known.

Bupropion may also be helpful when prescribed "off-label" for bipolar disorder, attention deficit hyperactivity disorder (ADHD), and sexual dysfunction due to SSRI antidepressants. "Off-label" means that it hasn't been approved by the Food and Drug Administration for this condition. Your mental health provider should justify his or her thinking in recommending an "off-label" treatment. They should be clear about the limits of the research around that medication and if there are any other options.

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 bupropion?

After starting bupropion, symptoms gradually decrease over a period of weeks. In MDD and SAD, sleep and other physical symptoms may improve before there is noticeable improvement in mood or interest in activities. Once symptoms are under control, MDD usually requires long-term treatment to help prevent the return of depressive symptoms. If you are using bupropion for SAD or smoking cessation, the length of your treatment may be shorter. Only your healthcare provider can determine the length of bupropion treatment that is right for you.

Do not stop taking bupropion or change your dose without talking with your healthcare provider first.

Depression is also a part of bipolar illness. People with bipolar disorder who take antidepressants may be at risk for "switching" from depression into mania. Symptoms of mania include "high" or irritable mood, very high self-esteem, decreased need for sleep, pressure to keep talking, racing thoughts, being easily distracted, frequently involved in activities with a large risk for bad consequences (for example, excessive buying sprees).

## Are there specific concerns about bupropion and pregnancy?

If you are planning on becoming pregnant, notify your healthcare provider so that he/she can best manage your medications. People living with MDD who wish to become pregnant face important decisions, each with risks and benefits as they relate to how the illness, medications, and risks to the fetus may interact. This is a complex decision as untreated MDD has risks to the fetus as well as the mother. There are many dimensions to these choices, so be sure to confer with your doctor and caregivers.

Bupropion has also been evaluated for smoking cessation during pregnancy and is recommended only after other therapies have failed.

Regarding breast-feeding, caution is advised since bupropion does pass into breast milk.

## What should I discuss with my healthcare provider before taking bupropion?

- The most bothersome symptoms of your condition
- If you have thoughts of suicide
- 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, discuss them with your provider. Some side effects may pass with time, but others may require an adjustment in the medication.
- Any other psychiatric or medical problems you have, including a history of bipolar disorder
- All other medications you are currently taking and any medication allergies you have. This will help your prescriber assess for potential drug interactions.
- Other non-medication treatment you are receiving (such as psychotherapy (i.e., talk therapy) or substance abuse treatment). Your provider can explain how these different treatments work with the medication.
- If you are pregnant, plan to become pregnant, or are breast-feeding
- If you drink alcohol or use drugs

## How should I take bupropion?

Bupropion hydrochloride is available in 3 different forms: immediate release (IR), sustained release (SR), and extended release (XL).

Bupropion IR is usually taken 2 or 3 times per day with 4-6 hours between doses. The dose usually ranges from 100 mg twice daily to 150 mg three times daily, with the last dose taken mid-afternoon.

Bupropion SR is usually taken twice daily in the morning and mid-afternoon. The dose usually ranges from 100 mg twice daily up to 200 mg twice daily.

Bupropion XL is usually taken once daily in the morning. The dose ranges from 150 mg to 450 mg.

Bupropion hydrobromide (Aplenzin®) is usually taken once daily in the morning. The dose ranges from 174 mg to 522 mg.

While there are dose ranges for each form, your health care provider will determine the form and dose that is right for you based on your response.

The dose for SAD is bupropion XL 150 mg once daily in the morning. The dose may be increased to 300 mg once daily.

The dose for smoking cessation is bupropion SR 150 mg once daily for 3 days and then twice daily for 7 to 12 weeks.

You should not take more than one product that contains bupropion, including the products that are used to quit smoking. Do not take more than your prescribed dose since higher doses may increase your risk of having a seizure. Since quickly increasing the dose of bupropion can cause seizures in some people, your doctor will slowly increase your dose.

You can take bupropion on an empty stomach or with food. The SR and XL forms should be swallowed whole—not chewed, crushed, or broken—so that the medication can work correctly in your body and to reduce the risk of serious side effects. The tablet shell from the SR and XL forms may appear in your feces.

### What happens if I miss a dose of bupropion?

For bupropion IR or SR, if you miss a dose, take it as soon as you remember. Take the remaining doses for the day at evenly spaced times at least 4 hours apart. DO NOT take 2 doses at once. You should not take more than your prescribed dose and doing so may increase your risk of having a seizure.

For the XL form, do not take an extra tablet to make up for the dose you forgot. Wait and take your next dose at your regular time the next day.

### What should I avoid while taking bupropion?

Avoid drinking alcohol or using illegal drugs while you are taking bupropion because the beneficial effects of the medication may be decreased and the risk of seizures may be increased. If you are dependent on drugs or alcohol and would like to stop, consult your healthcare provider for help. Abruptly stopping these substances can result in a seizure, especially when taking bupropion.

### What happens if I overdose with bupropion?

If an overdose occurs, whether intentional or accidental, immediate medical attention may be necessary. Call your doctor or emergency medical service (911). You may also contact the poison control center (1-800-222-1222).

### What are the possible side effects of bupropion?

#### Common side effects

Side effects with bupropion are generally mild and often resolve over the first 1-2 weeks of treatment as you continue to take the medication. The most commonly reported side effects of bupropion are headache, weight loss, dry mouth, trouble sleeping, nausea, dizziness, constipation, fast heartbeat, and sore throat.

#### Rare/serious side effects

Less than 10% of patients will experience skin rash, sweating, ringing in the ears, shakiness, stomach pain, muscle pain, thought disturbances, anxiety or angle closure glaucoma (symptoms of angle closure glaucoma may include eye pain, changes in vision, swelling or redness in or around eye).

Unlike many antidepressants, bupropion does not commonly cause sexual side effects and may be selected as an alternative treatment when antidepressant-induced sexual side effects are problematic.

Sexual side effects include such problems as difficulty achieving orgasm or ejaculatory delay.

In general the risk of seizures due to bupropion is low. The risk of having a seizure increases with higher than recommended doses of bupropion, a history of seizures or head injury, tumor in the brain, severe liver disease, an eating disorder, alcohol or drug dependence, or taking other drugs that can also increase your risk of having a seizure.

There is a low risk of cardiovascular adverse events associated with stimulating agents, including bupropion. This risk increases if you have heart disease, high blood pressure, previous heart attack, or irregular heartbeat, or when used with transdermal nicotine replacement products. In these cases, a thorough cardiovascular evaluation is recommended before starting this medicine.

### Are there any risks for taking bupropion for long periods of time?

To date, there are no known problems associated with long term use of bupropion. It is a safe and effective medication when used as directed.

## What other medications may interact with bupropion?

Bupropion should not be taken with or within two weeks of taking monoamine oxidase inhibitors (MAOIs). These include phenelzine (Nardil®), tranycypromine (Parnate®), isocarboxazid (Marplan®), and selegiline (Emsam®).

There are several products with the active ingredient bupropion. Do not take more than one product that contains bupropion since this may increase your risk of having a seizure.

Certain medications may increase your risk of having a seizure when combined with bupropion. These include other antidepressants, antipsychotics, theophylline, isoniazid, tramadol, stimulants, steroids, hypoglycemic agents (including insulin), certain antibiotics (e.g., Cipro®), and abrupt discontinuation of benzodiazepines (e.g., Ativan®).

Notify your doctor and pharmacist if you are taking any of the following medications: phenytoin (Dilantin®), carbamazepine (Tegretol®, Equetro®), phenobarbital, cimetidine (Tagamet®), ritonavir (Norvir®), lopinavir (Kaletra™), nelfinavir (Viracept®), or efavirenz (Sustiva®). These medications can change the way your body reacts to bupropion.

Notify your doctor and pharmacist if you are taking any of the following medications: atomoxetine (Strattera®), codeine, tamoxifen, tetrabenazine, thioridazine (Mellaril®), tramadol (Ultram®), or a tricyclic antidepressant. Bupropion can change the way your body reacts to these medications.

## How long does it take for bupropion to work?

While depressed mood and lack of interest in activities may need up to 4-6 weeks to improve, disturbances in sleep, energy, or appetite may show some improvement within the first 1-2 weeks. Improvement in these physical symptoms can be an important early signal that the medication is working.

## Summary of Black Box Warnings

### Suicidal Thoughts or Actions in Children and Adults

Depression and certain other psychiatric disorders are themselves associated with increases in the risk of suicide. Patients with major depressive disorder (MDD), both adult and pediatric, may experience worsening of their depression and/or the emergence of suicidal ideation and behavior (suicidality) or unusual changes in behavior, whether or not they are taking antidepressant medications. This risk may persist until significant remission occurs.

In short-term studies, antidepressants increased the risk of suicidality in children, adolescents and young adults when compared to placebo. Short-term studies did not show an increase in the risk of suicidality with antidepressants compared to placebo in adults beyond age 24. Adults ages 65 and older taking antidepressants have a decreased risk of suicidality. Patients, their families and caregivers should be alert to the emergence of anxiety, restlessness, irritability, aggressiveness and insomnia. If these symptoms emerge, they should be reported to the patient's prescriber or healthcare professional. All patients being treated with antidepressants for any indication should watch for and notify their healthcare provider for worsening symptoms, suicidality and unusual changes in behavior, especially during the first few months of treatment.

**Important Disclosure:** This information is being provided as a community outreach effort of the College of Psychiatric and Neurologic 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 College of Psychiatric and Neurologic Pharmacists disclaims any and all liability alleged as a result of the information provided herein.