

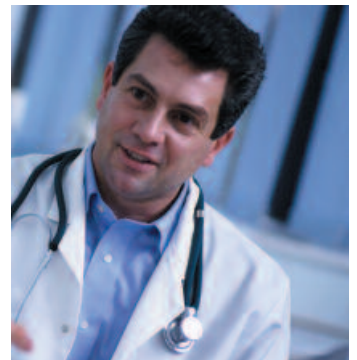
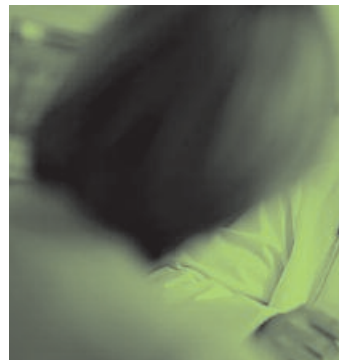
# Consumer Reports BEST BUY DRUGS™

PROVEN • EFFECTIVE • AFFORDABLE



## Antidepressants

Comparing Effectiveness, Safety, Side Effects, and Price



## Our Recommendations

Costs for commonly prescribed antidepressants vary from \$32 to more than \$200 per month. This report shows how you can save \$100 a month (\$1,200 a year) or more if you have to take an antidepressant.

Antidepressants can relieve the symptoms of depression, but they can also have serious side effects. You may not need to take one. A thumbnail guide:

- If you are feeling “down” or “blue” – for example, in the wake of a stressful life event such as the death of a loved one, divorce or job loss – you may have *mild* depression. That’s especially likely if you are still able to work and function and have no history of depression. Your symptoms may resolve on their own, aided by family support, professional counseling, or psychotherapy – and without the need of an antidepressant.
- If you are not functioning well, and your symptoms (see page 6) have lasted three weeks or longer, you are more likely to be a candidate for taking an antidepressant. That is especially true if there is no apparent reason for you to be in the doldrums or if you have had repeated episodes of depression.

Use the information in this report to enhance your understanding of whether an antidepressant might be right for you, and if so, which one. Then talk to your doctor or a mental health professional. Bear in mind that individual needs vary and people respond to antidepressants quite differently. Some people have to try two or three before one works.

Your doctor may not be aware of price differences between medicines, and be cautious if he or she offers you a free sample of an antidepressant that’s the only one on hand in the office. It may not be the right drug for you.

Taking effectiveness, safety, side effects, and cost into account, we have chosen three *Consumer Reports Best Buy Drugs* as options to consider for depression:

- **Generic fluoxetine** at a dose of 10mg or 20mg once a day at a cost of \$32 to \$37 per month.
- **Generic citalopram** at a dose of 20mg or 40mg once a day at a cost of \$50 to \$52 per month.
- **Generic bupropion** at a dose of 75mg to 100mg taken three times a day at a cost of \$60 to \$71 per month.

These medicines are substantially less expensive than most other antidepressants and are as effective as any of them. If you have drug coverage, talk with your doctor about finding the antidepressant that has the lowest out-of-pocket cost under your insurance plan.

Other important considerations:

- Talk with your doctor about starting with a low dose to minimize side effects. If the drug doesn't help within 8 to 12 weeks, talk with your doctor about a higher dose or switching to another antidepressant.
- Tell your doctor about other mood, emotional or mental symptoms, such as anxiety or panic attacks. These are important in deciding which antidepressant is right for you.
- If you have taken an antidepressant before and it worked, you may want to stick with that one, or its generic equivalent.
- Tell your doctor whether the differences in side effects among the antidepressants are important to you. (See page 10.)
- If you have frequent thoughts about suicide in the first few weeks of taking an antidepressant, contact your doctor or therapist to discuss this.

# Welcome

This report on prescription drugs to treat depression is part of a Consumers Union and *Consumer Reports* project to help you find safe, effective medicines that give you the most value for your health care dollar. To learn more about the project and other drugs we've evaluated, go to [www.CRBestBuyDrugs.org](http://www.CRBestBuyDrugs.org).

We focus on the most commonly prescribed antidepressants – now taken by millions of Americans every day to treat depression and other mood and emotional disorders. The first of these so-called “second-generation antidepressants” (bupropion, Wellbutrin) became available in 1985. Prozac, approved in 1987, made them famous. Ten are now available. (Note: one antidepressant, nefazodone (Serzone), was recently discontinued due to safety concerns. The generic version of this drug is still available. You should talk to your doctor if you are taking nefazodone.) The 10 are:

Generic Name	Brand Name(s)
Bupropion	Wellbutrin, Wellbutrin SR, Budeprion SR, Wellbutrin XL
Citalopram	Celexa
Duloxetine	Cymbalta
Escitalopram	Lexapro
Fluoxetine	Prozac, Prozac Weekly, Sarafem
Fluvoxamine	Luvox
Mirtazapine	Remeron
Paroxetine	Paxil, Paxil CR, Pexeva
Sertraline	Zoloft
Venlafaxine	Effexor, Effexor XR

These medicines were a significant advance over drugs used to treat depression up to 1985 for one chief reason: they caused fewer serious side effects. Notably, however, they are no more effective than the older medicines, many of which are still available and used with success in some circumstances. And the newer drugs still cause side effects at a fairly high rate.

Six of the 10 medicines listed above – bupropion, citalopram, fluoxetine, fluvoxamine, mirtazapine, and paroxetine – are now available as generic drugs in some dosage forms. Several of these medicines may become less expensive in the next year.

Many of the second generation antidepressants have been approved for the treatment of other mental illnesses besides depression – such as anxiety, obsessive-compulsive and panic disorder, social phobia, and post-traumatic stress disorder. In this report, we focus only on their use in the treatment of depression in adults, for which most antidepressant prescriptions are written. If you have one of these other disorders, talk with your doctor about drug or other treatments that may be helpful.

Other treatments for depression are available, most notably psychotherapy or professional counseling and electroconvulsive therapy. In addition, some people with severe depression are hospitalized to undergo intensive treatment. This report does not evaluate those treatments or compare them with the use of outpatient antidepressants. Table 2 on page 7 presents descriptions of and treatment options for different forms of depression.

One in six Americans will experience an episode of major depression in their lifetime. In any given year, about 6% of the U.S. population – some 19 million people in 2005 – will have a depressive illness that warrants treatment. Studies indicate that today only about 30% to 40% of people with major depression get adequate treatment.

This report is based on a comprehensive expert analysis of the medical evidence on antidepressants. There's more information on page 20 and at [www.CRBESTBUYDRUGS.org](http://www.CRBESTBUYDRUGS.org) on how we conducted our evaluation.

*This report was updated in July 2005.*



## What Are Antidepressants and Who Needs Them?

Antidepressants work primarily by affecting chemicals in the brain called neurotransmitters. The most important of these are serotonin, norepinephrine, and dopamine.

There are several different types of antidepressants among the 10 drugs listed on page 4. The main group of second-generation antidepressants is called the “selective serotonin reuptake inhibitors,” or SSRIs for short. As implied, they appear to affect mainly serotonin levels in the brain. This group includes citalopram (Celexa), escitalopram (Lexapro), fluoxetine (Prozac), fluvoxamine (Luvox), paroxetine (Paxil) and sertraline (Zoloft).

The other antidepressants work in various ways by affecting brain levels of one, two or possibly even

all three neurotransmitters. Knowing this can help you understand why your doctor may prescribe another antidepressant for you if the first one doesn't work. Our brain chemistry appears to be just as variable as our appearance and personalities.

Being sad, blue, or unhappy at times is a normal part of life. But being seriously down or depressed for a prolonged period – more than three weeks or so – is not at all normal and may be helped by professional attention. Depression is not simply unhappiness. Indeed, prolonged depression is an illness like any other – no different than an infection, cancer, or heart disease. Its symptoms are distinct (see Table 1) and can be triggered by adverse life events or arise for no apparent reason; either way, it's just as painful and the biological changes in the body and brain are the same.

Depression can be recurrent, chronic, and run in families (as a result of genetic inheritance). And no matter what the cause, if left untreated it can be deadly. People with untreated depression are at much greater risk of premature death, not only from suicide, but also from a host of other illnesses.

The difficulty comes in determining the difference between a normal slump, even one that may last a while, and serious depression. Two boxes on this page and the next may help you determine which category you are in. Table 1 lists the symptoms of depression. Table 2 presents a brief guide to different kinds and levels of depression and treatment options.

The bottom line is this:

- If you have some of the symptoms in Table 1 but they are not particularly severe, and you are functioning okay in life, you may have mild depression. Likewise, if your “blues” seem to be triggered by a specific event, trauma, or transition in your life (see Table 2) and you have no history of depression, you also may have a mild “situational” depression. In both cases, you should seek help if you need it but think twice before taking an antidepressant. Experts believe that too many people whose temporary depression can resolve on its own in a few weeks are prescribed an antidepressant.

**Table 1. The Symptoms of Depression**

*People experience depression differently. But generally, if you have five or more of the following symptoms persistently for three weeks or longer, you may have serious or so-called major depression that could warrant treatment with medication. That is especially likely if you have a history of depression, there has been no triggering event or trauma in your life, such as a death in the family, job loss, divorce or marital problems.*

Feelings of unhappiness, hopelessness, pessimism

Feelings of low self-esteem, worthlessness, guilt

Loss of interest or pleasure in hobbies, work and activities you usually enjoy, including sex

Decreased energy, fatigue, feeling “slowed down”

Insomnia, early morning awakening, or oversleeping

Difficulty concentrating, remembering, making decisions

Appetite changes – eating significantly less or more

Irritability, restlessness, hostility

Feeling anxious; low tolerance for stress

Recurring thoughts of death or suicide; suicide attempts

Unexplained physical symptoms or pains – such as headache, chronic indigestive or pain – that do not respond to treatment

- If you have five or more of the symptoms in Table 1, if they are moderate to severe and/or have lasted for three weeks or longer – and if you are decidedly not functioning well in life – you are likely a candidate for taking an antidepressant. This is true even if your depression was triggered by a life event or trauma, and is especially true if you have had previous episodes of depression. Millions of people who have such symptoms are not getting the treatment they need. See a doctor or therapist to find a treatment that will help you.
- If you have had several of the symptoms in Table 1 at a low-grade level for months, see a doctor

or therapist. You may want to try psychotherapy or counseling first, especially if your symptoms may be linked to a definable stressor, such as marital discord, an unhappy work situation or the illness of a loved one. If that doesn't help, consider an antidepressant.

Some studies show, and many experts believe, that antidepressants often work best in combination with psychotherapy lasting at least several months. But antidepressants on their own play an important role in our society. That's because not everyone has access to, can afford, or accepts the benefits of psychotherapy.

**Table 2. Types and Levels of Depression**

Level	Symptoms/Comments	Treatment Options
"Normal" sadness	<ul style="list-style-type: none"> <li>■ Feeling blue or down, usually not more than once or twice a month.</li> <li>■ No significant disruption in normal life or ability to work.</li> <li>■ More likely if tired or stressed.</li> <li>■ Any of the symptoms in Table 1 (except thoughts of suicide) may be present, but usually not for longer than a couple of days.</li> </ul>	<ul style="list-style-type: none"> <li>■ Treatment not usually needed. Generally goes away on its own.</li> <li>■ Support from family and friends and social activity can help alleviate symptoms.</li> </ul>
"Situational" or "reactive" sadness, grief or depression	<ul style="list-style-type: none"> <li>■ In response to a life event, change, transition or stressor, such as divorce, job loss, a move, marital discord or the death of a loved one.</li> <li>■ Any of the symptoms in Table 1 can be present, including thoughts of suicide.</li> <li>■ May affect people who have no history of depression.</li> <li>■ Can also be triggered by a medical problem – particularly open-heart surgery, stroke, cancer, heart attack, Parkinson's disease or hormonal disorders.</li> <li>■ Certain medicines can also trigger, including beta blockers.</li> </ul>	<ul style="list-style-type: none"> <li>■ None if symptoms ease or decline.</li> <li>■ Counseling, psychotherapy.</li> <li>■ Family and social support and contact.</li> <li>■ Sleep aid if needed for short periods.</li> <li>■ Antidepressants, but only if symptoms persist or interfere with normal life for at least three weeks.</li> </ul>

**Table 2. Types and Levels of Depression** *(continued)*

Level	Symptoms/Comments	Treatment Options
Mild or low-grade depression, also called dysthymia or chronic depression	<ul style="list-style-type: none"> <li>■ Presence of some of the symptoms in Table 1 but at a low level. Symptoms may change or shift over time.</li> <li>■ Still able to work and function but rarely feel happy or satisfied.</li> <li>■ Reduced pleasure in life, vulnerable to stress.</li> <li>■ May be chronic or long-term, lasting months.</li> <li>■ Prone to major depression.</li> </ul>	<ul style="list-style-type: none"> <li>■ Counseling or psychotherapy. May take time to feel better.</li> <li>■ Family and social support and contact also help.</li> <li>■ Antidepressants if symptoms worsen, if ability to function declines, or if psychotherapy alone fails to relieve symptoms.</li> </ul>
Major Depression	<ul style="list-style-type: none"> <li>■ Presence or worsening of five or more of the symptoms in Table 1 for three weeks or longer.</li> <li>■ Symptoms moderate to severe.</li> <li>■ Disruption in normal life, ability to work, function and engage in normal social contact and activities.</li> <li>■ May be recurrent, with history of past depressions.</li> <li>■ May require ongoing treatment even after acute episode subsides.</li> <li>■ May require hospitalization or a brief respite in an in-patient clinic.</li> </ul>	<ul style="list-style-type: none"> <li>■ Can try counseling and psychotherapy first, without antidepressants. Some people respond but evidence is mixed on success. Improvement can take time. Can be costly if insurance coverage lacking.</li> <li>■ Antidepressants alone produce good but variable response; a third of people get little relief. Most drugs take four to six weeks to take effect.</li> <li>■ Some people respond better to combination of psychotherapy and antidepressants. But evidence mixed on the advantage.</li> <li>■ Electroconvulsive therapy an option if drugs fail to provide any relief and symptoms are severe and chronic, or for people who cannot take antidepressants. Used sparingly these days.</li> </ul>
Bipolar Depression	<ul style="list-style-type: none"> <li>■ A distinct illness from "unipolar" depression where person is only depressed. Includes "manic" phases characterized by excessive elation and exuberance, racing thoughts, increased talking, high energy, grandiose notions, decreased need for sleep and inappropriate social behavior. These cycle with depression phases, characterized by presence of symptoms in Table 1.</li> <li>■ Can run in families.</li> <li>■ Requires long-term medical management.</li> <li>■ May require hospitalization.</li> </ul>	<ul style="list-style-type: none"> <li>■ Drug treatment required and can be complex. Multiple medicines used, including those to primarily control manic phases and those to treat the depressive phase. Antidepressants used. Careful monitoring required.</li> <li>■ Mood stabilizer drugs, such as lithium, divalproex and lamotrigine, may be used on a long-term basis to prevent episodes and "smooth out" mood swings.</li> <li>■ Periodic counseling recommended to supplement drug management.</li> </ul>

## Choosing an Antidepressant – Our *Best Buy* Picks

Second-generation antidepressants have been proven to help relieve the symptoms of depression in 55% to 70% percent of people who take them. None has been shown to be any more effective in relieving symptoms or bringing about a full recovery than any other when taken in comparable doses.

But antidepressants differ significantly in the side effects they cause and their costs. (See Table 5 on page 13.)

The vast majority of people who take an antidepressant (90%) experience at least one side effect. Most tolerate the mild side effects without much difficulty. But a sizable minority of people – up to 20% in some studies and 30% in some surveys – find the side effects so intolerable that they stop taking the medicine.

Table 3 lists antidepressant side effects. Those related to one's sex life are many people's chief concern, but are not dangerous. Pharmaceutical company information and some studies indicate that 5% to 15% of people who take an antidepressant can expect to experience a decline in interest in sex or difficulty reaching erection or orgasm. But other, longer-term studies and some surveys, including one of the largest conducted by Consumers Union and published in the October 2004 issue of *Consumer Reports*, indicate a much higher (40% to 50%) incidence of sexual side effects associated with some antidepressants.

Increases in agitation, anxiety, and thoughts of suicide are more worrisome. These are relatively rare and are most likely to occur in the first month or two of taking an antidepressant. If you have such symptoms, you should contact your doctor immediately.

Talk with your doctor about the difference between antidepressants in terms of side effects. This may well affect your choice. Table 4, on the next page, presents a summary of the evidence on the effectiveness of antidepressants and the rate at which people stopped taking each antidepressant due to its side effects. The table also contains comments on some of the strengths and weaknesses of each drug.

**Table 3. Side Effects**

*Relatively Minor.*

*Usually go away in time or are short-lived.*

- Headache
- Nausea
- Diarrhea
- Dizziness
- Sweating
- Tremor
- Dry Mouth

*Not so minor. Can be annoying or dangerous.*

*If they persist, you may need to switch drugs.*

- Nervousness and agitation
- Feeling of panic or dread
- Increased thoughts of suicide
- Insomnia
- Drowsiness or confusion
- Loss of libido, difficulty achieving erections, inability to reach orgasm
- Weight gain

When you talk with a doctor about the antidepressant and dose that is right for you, discuss:

- The scope and severity of your symptoms, especially any thoughts of suicide. Be specific and detailed.
- Any prior use of and response to an antidepressant or drug to treat anxiety or other psychiatric illness.
- Other treatments you may want or plan to pursue, such as psychotherapy or counseling or herbal supplements.
- Side effects and a dose that may reduce the risk of them.
- Side effects you would really like to avoid or fear.
- The rate at which people stop taking the various antidepressants, as listed in Table 4.

**Table 4. Effectiveness and Tolerability of Antidepressants**

Generic Name	Brand Name	Response to Treatment <sup>1</sup>	Discontinuation Because of Side Effects <sup>2</sup>	Comments/Special Notes <sup>3</sup>
Bupropion	Wellbutrin	55-70%	6-8%	<ul style="list-style-type: none"> <li>■ Lowest rate of sexual side effects</li> <li>■ Elevated risk of seizures at high doses</li> <li>■ Less used in people with combined anxiety and depression</li> </ul>
Citalopram	Celexa	55-70%	5-9%	None
Duloxetine	Cymbalta	55-70%	3-13%	None
Escitalopram	Lexapro	55-70%	3-10%	None
Fluoxetine	Prozac, Sarafem	55-70%	7-14%	<ul style="list-style-type: none"> <li>■ Proven and may be safest in children and teens<sup>4</sup></li> </ul>
Fluvoxamine	Luvox	55-70%	N/A	<ul style="list-style-type: none"> <li>■ Not FDA approved for treatment of depression; used "off label" for this illness</li> <li>■ Higher rate of side effects and drug interactions compared to several other SSRIs in one key study<sup>5</sup></li> </ul>
Mirtazapine	Remeron	55-70%	10-17%	<ul style="list-style-type: none"> <li>■ Faster onset of action</li> <li>■ Higher risk of weight gain</li> </ul>
Paroxetine	Paxil	55-70%	7-16%	<ul style="list-style-type: none"> <li>■ Higher risk of sexual side effects compared to some other antidepressants<sup>6</sup></li> <li>■ Higher risk of sweating</li> </ul>
Sertraline	Zoloft	55-70%	7-14%	<ul style="list-style-type: none"> <li>■ Higher rate of diarrhea</li> </ul>
Venlafaxine	Effexor	55-70%	9-16%	<ul style="list-style-type: none"> <li>■ Substantially higher rate of nausea and vomiting</li> <li>■ Higher rate of blood pressure problems<sup>7</sup></li> </ul>

Note: Figures in this table are based on clinical studies. The October 2004 issue of *Consumer Reports* magazine contains an article that presents data on the effectiveness and side effects of antidepressants as experienced by 1,664 users of the drugs.

(1) Response defined as at least 50% reduction in depression symptoms on behavioral and emotion rating scales.

(2) Numbers are the lower and upper quarter percentile of discontinuation rates from studies.

(3) Based on multiple studies and combined analysis of studies. Statements made in reference to all other drugs listed except where noted.

(4) Fluoxetine (Prozac) is the only drug approved by the FDA for treatment of depression in children and teens.

(5) The other SSRIs were fluoxetine (Prozac), paroxetine (Paxil), and sertraline (Zoloft).

(6) Higher than fluoxetine (Prozac), sertraline (Zoloft), fluvoxamine (Luvox) in controlled trials. Highest rate of sexual side effects (53%) in *Consumer Reports* survey of 1,664 people when compared to bupropion (Wellbutrin) (21%); fluoxetine (Prozac) (41%); citalopram (Celexa) (45%); sertraline (46%); and venlafaxine (Effexor) (51%).

(7) Health authorities in Great Britain recently recommended that people with high blood pressure and heart disease not take venlafaxine. The FDA is currently reviewing this evidence.

- The importance to you of how quickly the drug yields a response versus the risk of side effects
- Cost (See Table 5 on pages 13-15.)
- Your insurance coverage (if you have it) and which drugs may be “preferred” under that plan, for which you may pay less out of pocket

Taking the evidence on effectiveness, safety, side effects, and cost into account, we have chosen three *Consumer Reports Best Buy Drugs* as initial options to consider in the treatment of depression:

- **Generic fluoxetine** capsules or tablets at a dose of 10mg or 20mg taken once a day, at a cost of \$32 to \$37 per month
- **Generic citalopram** tablets at a dose of 20mg or 40mg taken once a day at a cost of \$50 to \$52 per month
- **Generic bupropion** tablets at a dose of 75mg or 100mg taken three times a day at a cost of \$60 to \$71 per month

These medicines are substantially less expensive than other antidepressants we evaluate in this report, and they are as effective and safe as any of them for initial treatment. They are also affordable options if you need to try another antidepressant because the first one your doctor prescribed did not help or caused unacceptable side effects.

All three are generic drugs. There is no reason to take the brand-name version of any of these medicines. There are other generics available at comparable cost to our three *Best Buy Drugs*. (See Table 5.) Our choice of the three was based on the strength of the evidence for effectiveness, the risk of side effects, the risk and inconvenience of having to discontinue the drug, and other unique factors as identified in Table 4.

Several antidepressants discussed in this report are approved to treat people who are diagnosed with a combination of anxiety and depression. *Our Best Buy* picks are for people whose diagnosis is depression only (though some mild anxiety symptoms may be present). Talk with your doctor about the best medicine if he or she identifies you as having a combined depression/anxiety illness.

Be aware that there is a widely accepted practice in prescribing antidepressants. Doctors will – and should – try the lowest dose possible as initial treatment. They will then monitor your response – chiefly, how you feel, how you are functioning, and your symptoms – and any side effects. It’s rare for antidepressants to have any immediate effect. Most people do not feel any different for several weeks, and a response can take as long as six weeks.

Response is also quite subjective; that is, some people are pleased with any improvement at all while others are not satisfied until they feel a substantial reduction in their symptoms.

If you do not respond to the first drug tried – and about 30% to 40% of people don’t – your doctor can (a) increase the dose of that drug or (b) switch you to another one. Typically, they will increase the dose first except if you have had bad side effects. They can then switch you to a comparable or perhaps slightly higher dose of another antidepressant. It’s not uncommon to try as many as three or even four antidepressants before you find one that works. By that time, your symptoms may be waning anyway.

Once you and your doctor find an antidepressant that works for you, your doctor may increase the dose to see if you experience more improvement without side effects.

Venlafaxine (Effexor) is more often used as a “second-line” drug in people who have not responded to other antidepressants, particularly those in the subclass known as selective serotonin reuptake inhibitors or SSRIs. If your doctor advises this drug, you should know that health authorities in Great Britain recently recommended that venlafaxine not be given to people with heart disease or high blood pressure. The U.S. Food and Drug Administration is currently evaluating the studies that led to this recommendation.

Given these events, we advise against venlafaxine as initial therapy until the FDA has fully evaluated the evidence. In addition, we recommend that people with high blood pressure and heart disease avoid the medicine. If you are taking venlafaxine, you should talk with your doctor.

Duloxetine (Cymbalta) is the newest antidepressant and chemically similar to venlafaxine. While no studies to date have found a higher risk of elevated blood pressure with duloxetine, experience with the drug is limited.

## Special Cautions

When taking any antidepressant, you should not:

- Take more of the medicine than specified without telling your doctor. This raises your risk of side effects – and most notably could trigger agitation or distressing anxiety.
- Stop taking an antidepressant on your own without consulting your doctor. Sudden withdrawal can cause uncomfortable and even dangerous symptoms if you have been taking the drug for awhile. These include agitation, nervousness, anxiety, tremors, irritability, insomnia, dizziness, and nausea.

## Antidepressant Use in Children and Teens

The FDA now requires drug makers to put warnings on labels for all second-generation antidepressants indicating an increased risk of suicidal thinking in children and teens. This action followed from studies showing double the risk of suicidal thoughts in children and teens who took the drugs compared with dummy pills. Such thoughts were rare, occurring in about 4% of children and teens, and there were no actual suicides in the studies the agency reviewed.

The studies were too small to compare the risk between drugs, so the agency decided to require that all antidepressants have the warning labels and that ads and promotions for the drugs cite the risk.

Of course, depression itself puts people at much higher risk for suicide, including teens, especially if they do not get proper treatment. The agency now requires a warning of this association for adults as well, and advises people taking antidepressants and their doctors to be alert to increases in suicidal thinking. Contact your doctor or therapist right away if this happens to you.

The agency further advises that children and teens prescribed an antidepressant be monitored by a doctor or mental health professional much more closely – weekly during the first four weeks of treatment – than was the norm prior to findings establishing this alarming link.

To date, only fluoxetine (Prozac) has been fully tested and proven effective in children and teens.

Parents of a suspected depressed child or teen should seek the help of a doctor or mental health professional. We advise the following:

- Confirm the diagnosis. Depression can be harder to detect in kids and teens.
- Be especially alert to any signs of suicidal thinking or actions
- Consider psychotherapy or counseling
- Don't hesitate to try an antidepressant (fluoxetine to start) if a doctor advises it, especially if other treatments have not helped.
- Use antidepressants with caution; learn about their risks and side effects in kids and teens.

## Pill Splitting

You may be able to save money by splitting your antidepressant pills or tablets. As you can see from Table 5, some antidepressants cost more at higher doses, but usually not twice as much. And higher doses of some antidepressants cost about the same as the lower dose. Thus, you can save money if you are prescribed pills at double the dose your doctor recommends and then split them.

Many antidepressant pills can be safely split. But you should talk with your doctor before you do this. Some people find splitting pills to be confusing or cumbersome.

If you and your doctor agree that you can safely split your pills, you should use a pill splitter to make certain that the two halves are the same size and provide you with the correct dose. These devices cost \$5 to \$10 and are widely available.

**Table 5. Antidepressant Cost Comparison**

	Generic Name and Dose	Brand Name <sup>1</sup>	Drug is a Generic	Frequency of Use per Day	Average Monthly Cost <sup>2</sup>
	Bupropion 75mg tablet	Wellbutrin	No	Three	\$148
<b>CR BEST BUY</b>	<b>Bupropion 75mg tablet</b>	Generic	Yes	Three	\$60
	Bupropion 100mg sustained release tablet	Wellbutrin SR	No	Two	\$154
	Bupropion 100mg sustained release tablet	Budeprion SR	No	Two	\$105
	Bupropion 100mg sustained release tablet	Generic	Yes	Two	\$86
	Bupropion 100mg tablet	Wellbutrin	No	Three	\$194
<b>CR BEST BUY</b>	<b>Bupropion 100mg tablet</b>	Generic	Yes	Three	\$71
	Bupropion 150mg sustained release tablet	Wellbutrin XL	No	Two	\$223
	Bupropion 150mg sustained release tablet	Wellbutrin SR	No	Two	\$157
	Bupropion 150mg sustained release tablet	Budeprion SR	No	Two	\$114
	Bupropion 150mg sustained release tablet	Generic	Yes	Two	\$96
	Bupropion 300mg sustained release tablet	Wellbutrin XL	No	One	\$144
	Citalopram 20mg tablet	Celexa	No	One	\$94
<b>CR BEST BUY</b>	<b>Citalopram 20mg tablet</b>	Generic	Yes	One	\$50
	Citalopram 40mg tablet	Celexa	No	One	\$98
<b>CR BEST BUY</b>	<b>Citalopram 40mg tablet</b>	Generic	Yes	One	\$52
	Duloxetine 20mg enteric coated capsule	Cymbalta	No	Two	\$237
	Duloxetine 30mg enteric coated capsule	Cymbalta	No	Two	\$269
	Duloxetine 60mg enteric coated capsule	Cymbalta	No	One	\$129
	Escitalopram 5mg tablet	Lexapro	No	One	\$87
	Escitalopram 10mg tablet	Lexapro	No	One	\$86
	Escitalopram 20mg tablet	Lexapro	No	One	\$91
	Fluoxetine 10mg capsule	Prozac	No	One	\$140
<b>CR BEST BUY</b>	<b>Fluoxetine 10mg capsule</b>	Generic	Yes	One	\$35
	Fluoxetine 10mg tablet	Prozac	No	One	\$143
	Fluoxetine 10mg capsule	Sarafem	No	One	\$147

**Table 5. Antidepressant Cost Comparison** *(continued)*

	Generic Name and Dose	Brand Name <sup>1</sup>	Drug is a Generic	Frequency of Use per Day	Average Monthly Cost <sup>2</sup>
<b>CR BEST BUY</b>	<b>Fluoxetine 10mg tablet</b>	Generic	Yes	One	\$35
	Fluoxetine 20mg capsule	Sarafem	No	One	\$150
	Fluoxetine 20mg capsule	Prozac	No	One	\$138
<b>CR BEST BUY</b>	<b>Fluoxetine 20mg capsule</b>	Generic	Yes	One	\$32
<b>CR BEST BUY</b>	<b>Fluoxetine 20mg tablet</b>	Generic	Yes	One	\$37
	Fluoxetine 40mg capsule	Prozac	No	One	\$293
	Fluoxetine 40mg capsule	Generic	Yes	One	\$86
	Fluoxetine 90mg enteric coated capsule	Prozac Weekly	No	One a week	\$126
	Fluvoxamine 50mg tablet	Generic	Yes	One	\$67
	Fluvoxamine 100mg tablet	Generic	Yes	Two	\$114
	Mirtazapine 15mg tablet	Remeron	No	One	\$109
	Mirtazapine 15mg tablet	Generic	Yes	One	\$56
	Mirtazapine 15mg sublingual tablet	Remeron	No	One	\$99
	Mirtazapine 15mg sublingual tablet	Generic	Yes	One	\$81
	Mirtazapine 30mg tablet	Remeron	No	One	\$113
	Mirtazapine 30mg tablet	Generic	Yes	One	\$57
	Mirtazapine 30mg sublingual tablet	Remeron	No	One	\$99
	Mirtazapine 30mg sublingual tablet	Generic	Yes	One	\$82
	Mirtazapine 45mg tablet	Remeron	No	One	\$118
	Mirtazapine 45mg sublingual tablet	Remeron	No	One	\$106
	Mirtazapine 45mg sublingual tablet	Generic	Yes	One	\$96
	Mirtazapine 45mg tablet	Generic	Yes	One	\$61
	Paroxetine 10mg tablet	Paxil	No	One	\$102
	Paroxetine 10mg tablet	Pexeva	No	One	\$77
	Paroxetine 10mg tablet	Generic	Yes	One	\$66
	Paroxetine 20mg tablet	Paxil	No	One	\$105

**Table 5. Antidepressant Cost Comparison (continued)**

Generic Name and Dose	Brand Name <sup>1</sup>	Drug is a Generic	Frequency of Use per Day	Average Monthly Cost <sup>2</sup>
Paroxetine 20mg tablet	Pexeva	No	One	\$80
Paroxetine 20mg tablet	Generic	Yes	One	\$67
Paroxetine 30mg tablet	Paxil	No	One	\$108
Paroxetine 30mg tablet	Pexeva	No	One	\$83
Paroxetine 30mg tablet	Generic	Yes	One	\$72
Paroxetine 40mg tablet	Paxil	No	One	\$116
Paroxetine 40mg tablet	Pexeva	No	One	\$86
Paroxetine 40mg tablet	Generic	Yes	One	\$74
Paroxetine 12.5mg sustained release tablet	Paxil CR	No	One	\$103
Paroxetine 25mg sustained release tablet	Paxil CR	No	One	\$106
Paroxetine 37.5mg sustained release tablet	Paxil CR	No	One	\$111
Sertraline 25mg tablet	Zoloft	No	One	\$100
Sertraline 50mg tablet	Zoloft	No	One	\$98
Sertraline 100mg tablet	Zoloft	No	One	\$98
Venlafaxine 37.5mg sustained release capsule	Effexor XR	No	One	\$111
Venlafaxine 25mg tablet	Effexor	No	Two	\$136
Venlafaxine 37.5mg tablet	Effexor	No	Two	\$138
Venlafaxine 75mg sustained release capsule	Effexor XR	No	One	\$121
Venlafaxine 50mg tablet	Effexor	No	Two	\$143
Venlafaxine 75mg tablet	Effexor	No	Two	\$146
Venlafaxine 150mg sustained release capsule	Effexor XR	No	One	\$131
Venlafaxine 100mg tablet	Effexor	No	Two	\$155

(1) "Generic" indicates that this drug is sold as a generic, as also indicated in column three.

(2) Prices reflect nationwide retail averages for May 2005, rounded to the nearest dollar; data provided by NDC Health, a healthcare information company.

## The Evidence

*This section presents more detailed information on the effectiveness and safety of antidepressants.*

This report is based on an analysis of the scientific evidence on second-generation antidepressants. Overall, 1,841 studies and research articles dealing with antidepressant use were identified and screened. All were published between 1980 and January 2004. From these, the analysis focused on 107 studies that included 85 controlled clinical trials, 10 studies that performed a cross-cutting analysis of multiple other studies, eight observational studies, and four studies of other design. An additional 44 articles were reviewed for background information pertinent to antidepressant chemistry, biology and clinical use.

### How Effective Are Antidepressants?

Antidepressants are moderately effective medicines, with a wide variety of response. Their effectiveness and benefits are assessed based on three criteria:

- Response to treatment, with at least a 50% improvement in depressive symptoms on a rating scale indicating a “positive” response
- Full recovery, or complete elimination of symptoms
- Speed of response
- Quality of life

On average, 55% to 70% of people who take an antidepressant can expect to experience at least a 50% improvement or decrease in their symptoms. This is measured using a rigorous rating scale, but is still highly subjective. Response is quite variable as is the length of treatment required. Some people respond within a few weeks and experience an almost complete elimination of their symptoms within a few months. Others may get only about a 50% improvement even after months of taking an antidepressant. Roughly 30% to 45% percent of people fail to respond to treatment with an antidepressant.



Also, of those who do respond, some can gradually stop taking their medicine six months or so after they improve while others must take an antidepressant for long periods to keep symptoms at bay or prevent a relapse.

The antidepressants discussed in this report do not differ overall in the response they yield, though, as discussed, people respond to drugs differently. And no evidence indicates that any antidepressant is more effective than another in comparable doses. Larger doses of each of them can improve the chances of response, but not always, and larger doses increase (sometimes sharply) the risk of side effects.

More extensive studies have been conducted on some antidepressants than others. Unfortunately, not all of the antidepressants have been directly compared to others in terms of either effectiveness or safety.

In addition, most studies of antidepressants are short term, lasting only six to 12 weeks. Such a time frame does not allow for an assessment of long-term response. The few longer-term studies that have been done show a highly variable success rate in achieving “full recovery” in particular. They indicate that between 30% and 60% of people fully recover from depression after taking an antidepressant alone. Here as well, no antidepressant has an edge over any other. Only one study to date has pitted two antidepressants head-to-head as long-term maintenance treatment. In this four year trial, there was no difference in the reoccurrence of depression in people taking sertraline (Zoloft) versus those taking fluvoxamine (Luvox).

Studies show clearly that the so-called second-generation antidepressants that are the subject of this report are as effective as and safer than older depression medicines – known as the tricyclic antidepressants and the monoamine oxidase inhibitors or MAOIs.

Although marketing campaigns often tout the benefits of antidepressants for people who suffer from both depression and anxiety, or other symptoms, there are few studies comparing drugs head to head in this regard. Several studies show that bupropion (Wellbutrin) is less effective than other second-generation antidepressants for anxiety symptoms.

Among other drugs, however, studies do not show a clear-cut advantage of one antidepressant over another in such people.

Some antidepressants act faster than others. In particular, mirtazapine (Remeron) shows a faster onset of action in multiple studies compared to some SSRIs (Paxil, Prozac, Zoloft). The makers of venlafaxin (Effexor) claim a similar fast onset but the evidence is less clear than for Remeron. In the case of Remeron, a faster onset of response means a noticeable improvement of symptoms one to two weeks earlier than with the compared drugs. Unfortunately, this advantage of Remeron is sometimes offset by an increased weight gain that many patients find disturbing.

### How Safe Are Antidepressants?

By and large, the evidence indicates that antidepressants should be taken with caution, with full awareness of the risks, and close attention to side effects. That said, they have been taken safely by millions of people for 20 years.

As discussed earlier, the vast majority of people (up to 90%) who take an antidepressant will have at least one side effect. Most of these are minor. Nausea, headache, diarrhea, fatigue, dizziness, sweating, sexual side effects, tremor, dry mouth, and weight changes are the most common. Sometimes these side effects are very severe and it may be necessary to discontinue the medication and try another.

The antidepressants differ in the side effects they cause, and this can be a basis for choosing one over another, or weighing the risks against the benefits. As presented in Table 4, bupropion (Wellbutrin) has a lower rate of sexual side effects, venlafaxine (Effexor) leads more often to nausea and vomiting, and an increase in blood pressure, sertraline (Zoloft) to diarrhea, and mirtazapine (Remeron) to weight gain. High doses, and especially overdoses, of bupropion, have been linked with seizures; although rare, most doctors don't prescribe this drug to people who have a history of seizures.

All antidepressants can cause serious side effects, too, as discussed on page 9. The most serious of these are agitation, panic, anxiety, confusion, and suicidal

thinking. (For most people, antidepressants reduce suicidal thinking. But for a small percentage of people, they may increase it.) These symptoms can also occur – in fact they are more likely to occur – if you stop taking an antidepressant suddenly, a condition called “discontinuation syndrome.”

Antidepressants can also cause very rare but potentially life-threatening side effects. These include seizures, liver damage, or dangerously low blood-sodium levels. If you have ever experienced any of these conditions before or feel you may have an increased risk, tell your doctor before he or she prescribes an antidepressant for you.

### Drug-Drug Interactions

Antidepressants can interact with other medicines or dietary supplements in ways that can be dangerous. Some drugs should *never* be used in combination with second-generation antidepressants. These include:

- Older antidepressant medications known as MAOIs, such as selegiline (Eldepryl), isocarboxazid (Marplan), phenelzine (Nardil), and tranylcypromine (Parnate).

- Certain psychiatric drugs such as thioridazine (Mellaril) and pimozide (Orap).

In some cases, your doctor may recommend that you take a specific antidepressant because of evidence that it is less likely to interact with another medicine you are taking. The main drugs to be concerned about are:

- Blood thinners, such as warfarin (Coumadin)
- Seizure medications, such as carbamazepine (Tegretol) or phenytoin (Dilantin)
- Psychiatric medications, such as lithium (Eskalith or Lithobid), haloperidol (Haldol), or risperidone (Risperdal)
- Anti-anxiety medications, such as alprazolam (Xanax), diazepam (Valium), or lorazepam (Ativan)
- Certain antibiotics such as ciprofloxacin (Cipro), or erythromycin or antifungal medicines such as ketoconazole (Nizoral)

If you are taking other medicines along with an antidepressant, you should tell your doctor.

It would be wise to limit or eliminate your use of alcohol while taking an antidepressant. First, alcohol is a depressant (after the initial “high”) and it can worsen depression. Second, alcohol can affect you much more strongly when you are taking an antidepressant. Third, heavy alcohol use can damage your liver so that an antidepressant drug becomes toxic.

### Age, Race, and Gender Differences

People older than 65 and various ethnic groups have been under-represented in most studies of antidepressants. Still, the existing evidence does not indicate that any antidepressant is more or less effective in older patients, people of any particular race, gender, or in patients who have other diseases. Recent studies, however, have raised caution about the safety and effectiveness of antidepressants in children and adolescents, as discussed on page 12.



## Talking with Your Doctor

It's important for you to know that the information we present here is not meant to substitute for a doctor's judgment. But we hope it will help your doctor and you arrive at a decision about which antidepressant and dose is best for you, and which gives you the most value for your health care dollar.

Bear in mind that many people are reluctant to discuss the cost of medicines with their doctor and that studies show doctors do not routinely take price into account when prescribing medicines. Unless you bring it up, your doctors may assume that cost is not a factor for you.

Many people (including physicians) believe that newer drugs are better. While that's a natural assumption to make, it's not true. Studies consistently show that many older medicines are as good as, and in some cases better than, newer medicines. Think of them as "tried and true," particularly when it comes to their safety record. Newer drugs have not yet met the test of time, and unexpected problems can and do crop up once they hit the market.

Of course, some newer prescription drugs are indeed more effective and safer. Talk with your doctor about the pluses and minuses of newer versus older medicines, including generic drugs.

Prescription medicines go "generic" when a company's patents on a drug lapse, usually after about 12 to 15 years. At that point, other companies can make and sell the drug.

Generics are much less expensive than newer brand name medicines, but they are not lesser quality drugs. Indeed, most generics remain useful medicines even many years after first being marketed. That is why today about 47% of all prescriptions in the U.S. are for generics.

Another important issue to talk with your doctor about is keeping a record of the drugs you are taking. There are several reasons for this:

- First, if you see several doctors, each may not be aware of medicines the others have prescribed.
- Second, since people differ in their response to medications, it is very common for doctors today to prescribe several medicines before finding one that works well or best.
- Third, many people take several prescription medications, nonprescription drugs and dietary supplements at the same time. These can interact in ways that can either reduce the benefit you get from the drug, or be dangerous.
- And fourth, the names of prescription drugs – both generic and brand – are often hard to pronounce and remember.

For all these reasons, it's important to keep a written list of all the drugs and supplements you are taking, and to periodically review this list with your doctors.

Always be sure, too, that you understand the dose of the medicine being prescribed for you and how many pills you are expected to take each day. Your doctor should tell you this information. When you fill a prescription at the pharmacy, or if you get it by mail, you may want to check to see that the dose and the number of pills per day on the pill bottle match the amounts that your doctor told you.

## How We Picked the *Best Buy* Antidepressants

Our evaluation is based on an independent scientific review of the evidence on the effectiveness, safety and adverse effects of antidepressants. A team of physicians and researchers at the Oregon Health & Science University Evidence-based Practice Center conducted the analysis as part of the Drug Effectiveness Review Project, or DERP. DERP is a first-of-its-kind 12-state initiative to evaluate the comparative effectiveness and safety of hundreds of prescription drugs.

A synopsis of DERP's analysis of the antidepressants forms the basis for this report. A consultant to *Consumer Reports Best Buy Drugs* is also a member of the Oregon-based research team, which has no financial interest in any pharmaceutical company or product.

The full DERP review of antidepressants is available at <http://www.ohsu.edu/drugeffectiveness/reports/final.cfm> (Warning: it is a long and technical document written for physicians and experts.)

The drug costs we site were obtained from a health-care information company that tracks the sales of

prescription drugs in the U.S. Prices for a drug can vary quite widely, even within a single city or town. All the prices in this report are national averages based on sales of prescription drugs in retail outlets. They reflect the cash price paid for a month's supply of each drug in November 2004.

Consumers Union and *Consumer Reports* selected the *Best Buy Drugs* using the following criteria. The drugs (and doses) had to:

- Be in the top tier of effectiveness among the ten antidepressants
- Have a safety record similar to or better than other antidepressants
- Have an average price for a 30-day supply that was significantly lower than the most costly antidepressant meeting the first two criteria

The *Consumers Reports Best Buy Drugs* methodology is described in more detail in the methods section at [www.CRBestBuyDrugs.org](http://www.CRBestBuyDrugs.org).

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*Consumer Reports Best Buy Drugs* is a public education project administered by Consumers Union. Two outside sources of generous funding made the project possible. They are a major grant from the Engelberg Foundation, a private philanthropy, and a supporting grant from the National Library of Medicine, part of the National Institutes of Health. A more detailed explanation of the project is available at [www.CRBestBuyDrugs.org](http://www.CRBestBuyDrugs.org).

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Note: The October 2004 issue of *Consumer Reports* magazine contains an article on antidepressants. The article presents the results of a survey of people who use the medicines.

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