

Major Depression

What is major depression?

Major depression is a serious medical illness affecting 9.9 million American adults, or approximately 5 percent of the adult population in a given year. Unlike normal emotional experiences of sadness, loss, or passing mood states, major depression is persistent and can significantly interfere with an individual's thoughts, behavior, mood, activity, and physical health. Major depression is the leading cause of disability in the U.S. and many other developed countries.

Nearly twice as many women (6.7 million) as men (3.2 million) suffer from major depressive disorder each year. Major depression can occur at any age including childhood, the teenage years and adulthood. All ethnic, racial and socioeconomic groups suffer from depression. More than half of those who experience a first episode of depression will have at least one other episode in their lives. Some individuals may have several episodes in the course of a year. If untreated, episodes commonly last anywhere from six months to a year. Left untreated, depression can lead to suicide.

Major depression, also known as clinical depression or unipolar depression, is only one type of depressive disorder. Other depressive disorders include dysthymia (chronic less severe depression) and bipolar disorder (manic depression). People who have bipolar disorder experience both depression and mania. Mania involves abnormally and persistently elevated mood or irritability, elevated self-esteem, and excessive energy, thoughts, and talking.

What are the symptoms of major depression?

The onset of the first episode of major depression may not be obvious if it is gradual or mild. The symptoms of major depression characteristically represent a significant change from how a person functioned before the illness. The symptoms of depression include:

- profoundly sad or irritable mood
- pronounced changes in sleep, appetite, and energy
- difficulty thinking, concentrating, and remembering
- physical slowing or agitation
- lack of interest in or pleasure from activities that were once enjoyed

- feelings of guilt, worthlessness, hopelessness, and emptiness
- recurrent thoughts of death or suicide
- persistent physical symptoms that do not respond to treatment, such as headaches, digestive disorders, and chronic pain

When several symptoms of depression occur, last longer than two weeks, and interfere with ordinary functioning professional treatment is needed.

What are the causes of major depression?

There is no one single cause of major depression. Psychological, biological, and environmental factors may all contribute to its development. Whatever the specific causes of depression, scientific research has firmly established that major depression is a biological brain disorder.

Norepinephrine, serotonin, and dopamine are three neurotransmitters (chemical messengers that transmit electrical signals between brain cells) thought to be involved with major depression. Scientists believe that if there is a chemical imbalance in these neurotransmitters, then clinical states of depression result. Antidepressant medications work by increasing the availability of neurotransmitters or by changing the sensitivity of the receptors for these chemical messengers.

Scientists have also found evidence of a genetic predisposition to major depression. There is an increased risk for developing depression when there is a family history of the illness. Not everyone with a genetic predisposition develops depression, but some people probably have a biological make-up that leaves them particularly vulnerable to developing depression. Life events, such as the death of a loved one, a major loss or change, chronic stress, and alcohol and drug abuse, may trigger episodes of depression. Some illnesses and some medications may also trigger depressive episodes. It is also important to note that many depressive episodes occur spontaneously and are not triggered by a life crisis, physical illness, or other risks.

How is major depression treated?

Although major depression can be a devastating illness, it is highly treatable. Between 80 and 90 percent of those suffering from serious depression can be effectively treated and return to their normal daily activities and feelings. Many types of treatment are available, and the type chosen depends on the individual and the severity and patterns of his or her illness. There are three basic types of treatment for depression: medications, psychotherapy, and electroconvulsive therapy (ECT). They may be used singly or in combination.

- Medication. The first antidepressant medications were introduced in the 1950s. Research has shown that imbalances in neurotransmitters like serotonin, dopamine, and norepinephrine can be corrected with antidepressants. Four groups of antidepressant medications are most often prescribed for depression:
 - Tricyclic antidepressants (TCAs) - still widely used for severe depression. TCAs elevate mood and activate behavior, but it often takes three to four weeks for an individual to respond. These medications include amitriptyline (Amitril, Elavil), desipramine (Norpramine), doxepine (Sinequan), imipramine (Antipress, Imavate, Tofranil), nortriptyline (Aventyl, Pamelor), and protriptyline (Vivactyl).
 - Monoamine oxidase inhibitors (MAOIs) - are often effective in individuals who do not respond to other medications or who have "atypical" depressions with marked anxiety, excessive sleeping, irritability, hypochondria, or phobic characteristics. These medications include phenelzine (Nardil) and tranylcypromine sulfate (Parnate).
 - Selective serotonin reuptake inhibitors (SSRIs) - act specifically on the neurotransmitter serotonin. In general SSRIs cause fewer side effects than TCAs and MAOIs. These medications include fluoxetine (Prozac), sertraline (Zoloft), and paroxetine (Paxil).
 - Serotonin and norepinephrine reuptake inhibitors (SNRIs) - useful as first-line treatments in people taking an antidepressant for the first time and for people who have not responded to other medications. In general SNRIs cause fewer side effects than TCAs and MAOIs. These medications include Venlafaxine (Effexor)
 - Bupropion (Wellbutrin) - newer antidepressant medication classified as a dopamine reuptake blocking compound. It acts on the neurotransmitters dopamine and norepinephrine. In general bupropion causes fewer side effects than TCAs and MAOIs.
 - Consumers and their families must be cautious during the early stages of treatment when energy levels and the ability to take action return before mood improves. At this time - when decisions are easier to make, but depression is still severe - the risk of suicide may temporarily increase.

- Psychotherapy - There are several types of psychotherapy that have been shown to be effective for depression including cognitive-behavioral therapy (CBT) and interpersonal therapy (IPT). Research has shown that mild to moderate depression can often be treated successfully with either therapy alone. However, severe depression appears more likely to respond to a combination of psychotherapy and medication.
 - Cognitive-behavioral therapy (CBT) - helps to change the negative thinking and behavior associated with depression while teaching people how to unlearn the behavioral patterns that contribute to their illness.
 - Interpersonal therapy (IPT) - focuses on improving disturbed personal relationships that may worsen a person's depression.
- Electroconvulsive therapy (ECT). ECT is a highly effective treatment for severe depressive episodes. In situations where medication, psychotherapy, and a combination of the two prove ineffective, or work too slowly to relieve severe symptoms such as psychosis or thoughts of suicide, ECT may be considered.

What are the side effects of the medications used to treat depression?

All medications have side effects. Different medications produce different side effects, and people differ in the amount and severity of side effects they experience. About 50 percent of people who take antidepressant medications have some side effects during the first weeks of treatment, but these problems are usually temporary and mild. Side effects that are particularly bothersome can often be treated by changing the dose of the medication, switching to a different medication, or treating the side effect directly with an additional medication.

- Tricyclic antidepressants (TCAs) cause side effects that include dry mouth, constipation, bladder problems, sexual problems, blurred vision, dizziness, drowsiness, skin rash, and weight gain or loss.
- Monoamine oxidase inhibitors (MAOIs). Individuals taking MAOIs may have to be careful about eating certain smoked, fermented, or pickled foods, drinking certain beverages, or taking some medications because they can cause severe high blood pressure in combination with the medication. A range of other, less serious side effects occur including weight gain, constipation, dry mouth, dizziness, headache, drowsiness, insomnia, and sexual side effects (problems with arousal or satisfaction).

- SSRIs, and SNRIs tend to have fewer and different side effects, such as nausea, nervousness, insomnia, diarrhea, rash, agitation, or sexual side effects (problems with arousal or satisfaction).
- Bupropion generally causes fewer common side effects than TCAs and MAOIs. Its side effects include restlessness, insomnia, headache or a worsening of preexisting migraine conditions, tremor, dry mouth, agitation, confusion, rapid heartbeat, dizziness, nausea, constipation, menstrual complaints, and rash. Bupropion (Wellbutrin) was temporarily removed from the market after its initial release due to the occurrence of seizures in some patients. However, further investigation showed that seizures were primarily associated with high doses (above the current maximum recommended dose of 450 mg/day), a history of seizures or brain trauma, an eating disorder, excessive alcohol use, or taking other drugs that can also increase the risk for seizures. With new warnings and lower recommended doses, the chance of having seizures has been greatly reduced.

Reviewed by Rex Cowdry, M.D. NAMI medical director, May 2001