Depression is a serious condition that negatively affects how a person thinks, feels, and behaves. In contrast to normal sadness, clinical depression is persistent, and significantly interferes with functioning. Clinical depression cannot be "willed away" or "shaken off", two common misconceptions about the condition that often contribute to people not seeking treatment. Without treatment, symptoms can last for weeks, months, or years; and if untreated or inadequately treated, depression can lead to significant impairment, other health-related issues, and in some cases, suicide.

The three most common mood disorders are: major depressive disorder, dysthymic disorder, and bipolar disorder (formerly known as manic-depressive illness). However, each varies by type, severity, and persistence of symptoms.

Major depression is characterized by several symptoms that interfere with the ability to work, study, sleep, eat, and enjoy once-pleasurable activities. It is marked by a sad mood, loss of interest or pleasure in activities that were once enjoyed, change in appetite or weight, difficulty sleeping or oversleeping, physical slowing or agitation, energy loss, feelings of worthlessness or inappropriate guilt, difficulty thinking or concentrating, and recurrent thoughts of death or suicide.

Dysthymia, although not as severe as major depression, involves long-term, chronic symptoms that, while not disabling, result in decreased functioning and quality of life. People with dysthymia are at increased risk of experiencing a major depressive episode at some time in their lives.

Bipolar disorder, formerly known as manic-depressive illness, is another type of mood disorder. Those with bipolar disorder experience extreme mood swings that include severe highs (mania) and/or lows (depression). Sometimes the mood switches are dramatic and rapid, but most often they are gradual. When in the depressed cycle, an individual can have any or all of the symptoms of a depressive disorder. When in the manic cycle, the individual may be overactive, over-talkative, have a great deal of energy and exhibit socially unacceptable behavior. Mania, left untreated, may progress to psychosis.

Other mood disorders include: Seasonal Affective Disorder (SAD) — depression that follows seasonal changes; Postpartum Depression — hormonal changes after childbirth and additional stresses, such as sleep deprivation, may disable some women genetically predisposed to this disorder; and Adjustment Disorders with depressed mood — emotional symptoms that occur after a particularly stressful event.

Who Gets It
Depression is a common illness that can strike anyone at any age. It is estimated that clinical depression affects 17 million to 20 million Americans each year. It affects nearly one in 10 adults each year, striking women at twice the rate of men. Depression can occur at any time, but usually first appears during the late teens to mid-20s. Seniors may also develop depression, known as late-onset depression, and may be at particular risk of not seeking treatment or being diagnosed.

Symptoms/Diagnosis
The diagnosis of a major depressive disorder requires that an individual experience for two consecutive weeks at least five of the symptoms listed below. At least one of the five symptoms must be either (1) depressed mood or (2) loss of interest or pleasure.

- Depressed mood most of the day, nearly every day
- Markedly diminished interest or pleasure in activities most of the day, nearly every day
- Changes in appetite that result in weight losses or gains unrelated to dieting
- Changes in sleeping patterns
- Loss of energy or increased fatigue
- Restlessness or irritability
- Feelings of anxiety
- Feelings of worthlessness, helplessness, or hopelessness
- Inappropriate guilt
- Difficulty thinking, concentrating, or making decisions
- Increased use of alcohol or drug use
- Thoughts of death or suicide or attempts at suicide.

A physician will also verify that the individual’s symptoms are causing significant distress or impairment in social and occupational functioning, and will attempt to rule out that either substance abuse or the loss of a loved one is not the source of the depressive symptoms.
What Causes It
There is no single cause of depression, however those with a family history are at a higher risk of suffering from it. Experts also believe depression can be caused by one or a combination of factors including biochemistry, such as imbalances in neurotransmitters; environment, such as continuous exposure to neglect, abuse, and stressful life events; medications of certain types; personality, such as those who tend to be self-critical, overly dependent, or have low self-esteem; chronic medical conditions, such as cancer or diabetes; and diet deficiencies, such as folic acid and vitamin B-12.

How it Affects the Brain
Many things can trigger debilitating depression, including a chemical change that affects how the brain functions. A healthy brain is like a huge messaging system that controls everything from heartbeat, to smell and sight, to emotions. The brain is made up of billions of nerve cells called neurons, which use brain chemicals, known as neurotransmitters, to send and receive messages from the rest of the body. These neurotransmitters, in varying amounts, are responsible for emotional states. When chemical messages between brain cells are delivered incorrectly, communication is disrupted and depression may occur. Treatments such as drugs or psychotherapy are designed to aid in raising the levels of specific neurotransmitters, or by improving the neurons' ability to process signals.

Treatments and Side Effects
The most common and effective treatments for clinical depression are antidepressant medications and psychotherapy. Antidepressants correct the chemical imbalances; while psychotherapy helps an individual cope with ongoing problems and specific issues that may contribute to depression. Antidepressants include the selective serotonin reuptake inhibitors (SSRI's), the tricyclics and tetracyclics, stimulants, lithium, and other mood stabilizers. The two most often-used forms of psychotherapy are cognitive behavioral therapy (CBT) and interpersonal therapy (IPT). A combination of medication and psychotherapy is currently the most effective treatment for severe depression, while medication alone is effective for mild to moderate cases.

Selection of medication is based on the severity of the depression and side effects. SSRI’s are typically the first-line treatment because they have fewer serious side effects. Tricyclic antidepressants are often prescribed to treat moderate to severe depression, while tetracyclics, which have severe side effects, are rarely used unless other options have failed. If someone is severely depressed, stimulants may be prescribed initially since antidepressants are slow to work. Lithium and mood stabilizers are used primarily to treat bipolar disorder.

Electroconvulsive Therapy (ECT) is another treatment that may be used for treatment-resistant depression or when psychosis (e.g., hallucinations, delusional thinking) or suicidality is present. ECT is generally safe and highly effective for severe depressive episodes. Long-lasting memory problems, although a concern in the past, have been significantly reduced with modern ECT techniques.

Other alternative treatments for depression are currently being tested and have shown some initial promise. Repetitive Transcranial Magnetic Stimulation (rTMS) is a noninvasive treatment which delivers magnetic pulses over the frontal regions of the brain for a few minutes a day, during a several-week period. The treatment appears to affect different biochemical and neuronal areas of the brain and has been shown to be effective in some people with treatment-resistant depression. TMS is expected to be approved as a treatment for depression by the FDA in 2007. Magnetic Seizure Therapy (MST) uses high intensity repetitive rTMS to induce focal seizures in specific regions of the brain, with patients under anesthesia as in ECT. The goal of MST is to focus the induced seizures in the parts of the brain believed to affect antidepressant response, while limiting side effects.

Deep Brain Stimulation (DBS) is a technique which stimulates an area of the brain called Brodmann area 25, and effectively modulates the metabolic overactivity which occurs in treatment-resistant depression. This treatment is in the early stages of research but appears to show great promise. Vagus Nerve Stimulation (VNS) is an invasive medical procedure that has had some success in treatment-resistant depression. It was approved for use with depression by the FDA in 2005. VNS employs an implanted device that sends electrical pulses to the left vagus nerve in the neck; however, it has not been determined how the treatment leads to improvement.

Reccurring episodes of depression are common in the majority of people who have one episode, but continuing treatment for at least six months greatly reduces the risk of a rapid relapse. If someone has had three or more previous episodes of depression, long-term treatment with antidepressants is often recommended.

Once identified, more than 80 percent of people with depression respond well to some form of treatment.

For more information about the latest advances in the diagnosis and treatment of depression and other serious brain disorders by NARSAD researchers visit us at www.narsad.org