

For More Information on Depression

Visit the National Library of Medicine's MedlinePlus <http://medlineplus.gov>
En Español <http://medlineplus.gov/spanish>

For information on clinical trials
<http://www.nimh.nih.gov/health/trials/index.shtml>

National Library of Medicine clinical trials database
<http://www.clinicaltrials.gov>

Information from NIMH is available in multiple formats. You can browse online, download documents in PDF, and order materials through the mail. Check the NIMH website at <http://www.nimh.nih.gov> for the latest information on this topic and to order publications. If you do not have Internet access please contact the NIMH Information Resource Center at the numbers listed below.

National Institute of Mental Health

Science Writing, Press & Dissemination Branch
6001 Executive Boulevard
Room 8184, MSC 9663
Bethesda, MD 20892-9663
Phone: 301-443-4513 or
1-866-615-NIMH (6464) toll-free
TTY: 301-443-8431 or
1-866-415-8051 toll-free
FAX: 301-443-4279
E-mail: nimhinfo@nih.gov
Website: <http://www.nimh.nih.gov>

For More Information on Heart Disease

National Heart, Lung, and Blood Institute (NHLBI)

Health Information Center
Attention: Website
P.O. Box 30105
Bethesda, MD 20824-0105
Phone: 301-592-8573
TTY: 240-629-3255
E-mail: nhlbiinfo@nhlbi.nih.gov
Website: <http://www.nhlbi.nih.gov>

Citations

1. Kessler RC, Chiu WT, Demler O, Merikangas KR, Walters EE. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry*. 2005 Jun; 62(6):617–27.
2. Nemeroff CB, Musselman DL, Evans DL. Depression and cardiac disease. *Depression and Anxiety*. 1998; 8(Suppl 1):71–9.
3. Frasure-Smith N, Lesperance F, Talajic M. Depression and 18-month prognosis after myocardial infarction. *Circulation*. 1995 Feb 15; 91(4):999–1005.
4. Vieweg WV, Julius DA, Fernandez A, Wulsin LR, Mohanty PK, Beatty-Brooks M, Hasnain M, Pandurangi AK. Treatment of depression in patients with coronary heart disease. *American Journal of Medicine*. 2006 Jul; 119(7):567–73.
5. U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000. http://www.healthypeople.gov/Document/html/uih/uih_4.htm#physactiv. Accessed on March 26, 2009.
6. The Centers for Disease Control. Physical activity for everyone: physical activity and health. <http://cdc.gov/physicalactivity/everyone/health/index.html>. Accessed on March 26, 2009.
7. Blumenthal JA, Babyak MA, Moore KA, Craighead WE, Herman S, Khatri P, Waugh R, Napolitano MA, Forman LM, Appelbaum M, Doraiswamy PM, Krishnan KR. Effects of exercise training on older patients with major depression. *Archives of Internal Medicine*. 1999 Oct 25; 159(19):2349–56.

Reprints

This publication is in the public domain and may be reproduced or copied without permission from NIMH. We encourage you to reproduce it and use it in your efforts to improve public health. Citation of the National Institute of Mental Health as a source is appreciated. However, using government materials inappropriately can raise legal or ethical concerns, so we ask you to use these guidelines:

- NIMH does not endorse or recommend any commercial products, processes, or services, and our publications may not be used for advertising or endorsement purposes.
- NIMH does not provide specific medical advice or treatment recommendations or referrals; our materials may not be used in a manner that has the appearance of such information.
- NIMH requests that non-Federal organizations not alter our publications in ways that will jeopardize the integrity and “brand” when using the publication.
- Addition of non-Federal Government logos and website links may not have the appearance of NIMH endorsement of any specific commercial products or services or medical treatments or services.

If you have questions regarding these guidelines and use of NIMH publications, please contact the NIMH Information Resource Center at 1-866-615-6464 or e-mail at nimhinfo@nih.gov.



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health
National Institute of Mental Health
NIH Publication No. 11–5004
Revised 2011

Depression and Heart Disease



Depression not only affects your brain and behavior—it affects your entire body.

Depression has been linked with other health problems, including heart disease. Dealing with more than one health problem at a time can be difficult, so proper treatment is important.



What is depression?

Major depressive disorder, or depression, is a serious mental illness. Depression interferes with your daily life and routine and reduces your quality of life. About 6.7 percent of U.S. adults ages 18 and older have depression.¹

Signs and Symptoms of Depression

- Ongoing sad, anxious, or empty feelings
- Feeling hopeless
- Feeling guilty, worthless, or helpless
- Feeling irritable or restless
- Loss of interest in activities or hobbies once enjoyable, including sex
- Feeling tired all the time
- Difficulty concentrating, remembering details, or making decisions
- Difficulty falling asleep or staying asleep, a condition called insomnia, or sleeping all the time
- Overeating or loss of appetite
- Thoughts of death and suicide or suicide attempts
- Ongoing aches and pains, headaches, cramps, or digestive problems that do not ease with treatment.

For more information, see the NIMH booklet on Depression at <http://www.nimh.nih.gov/health/publications/depression/index.shtml>.

What is heart disease?

Heart disease refers to a number of illnesses that affect your heart and nearby blood vessels. Your heart is a muscle that pumps blood through your body. Like any muscle, your heart needs a constant supply of oxygen and nutrients, which it gets from blood pumped from the lungs and other parts of the body. Blood vessels carry this oxygen- and nutrient-rich blood to the heart.

If not enough blood reaches your heart, you may feel a pain in your chest called angina. You may also feel angina pain in the

left arm and shoulder, neck, or jaw. You may not always feel angina when your heart is not getting enough blood.

A heart attack occurs when the blood supply to your heart is cut off completely. If blood flow isn't quickly restored, the part of your heart that does not receive oxygen begins to die. While some heart muscle may be permanently damaged, quick treatment can limit the harm and save your life.

How are depression and heart disease linked?

People with heart disease are more likely to suffer from depression than otherwise healthy people. Angina and heart attacks are closely linked with depression. Researchers are unsure exactly why this occurs. They do know that some symptoms of depression may reduce your overall physical and mental health, increasing your risk for heart disease or making symptoms of heart disease worse.² Fatigue or feelings of worthlessness may cause you to ignore your medication plan and avoid treatment for heart disease. Having depression increases your risk of death after a heart attack.³

How is depression treated in people who have heart disease?

Depression is diagnosed and treated by a health care provider. Treating depression can help you manage heart disease and improve your overall health. Recovery from depression takes time but treatments are effective.

At present, the most common treatments for depression include:

- Cognitive behavioral therapy (CBT), a type of psychotherapy, or talk therapy, that helps people change negative thinking styles and behaviors that may contribute to their depression
- Selective serotonin reuptake inhibitor (SSRI), a type of antidepressant medication that includes citalopram (Celexa), sertraline (Zoloft), and fluoxetine (Prozac)
- Serotonin and norepinephrine reuptake inhibitor (SNRI), a type of antidepressant medication similar to SSRI that includes venlafaxine (Effexor) and duloxetine (Cymbalta).

While currently available depression treatments are generally well tolerated and safe, talk with your health care provider about side effects, possible drug interactions, and other treatment options. For the latest information on medications, visit the U.S. Food and Drug Administration website at <http://www.fda.gov>. Not everyone responds to treatment the same way. Medications can take several weeks to work, may need to be combined with ongoing talk therapy, or may need to be changed or adjusted to minimize side effects and achieve the best results.

Treating your depression may make it easier for you to follow a long-term heart disease treatment plan and make the lifestyle changes required to manage your heart disease, including⁴:

- Eating healthy foods
- Exercising regularly
- Drinking less alcohol, or none at all
- Quitting smoking.

Some people may also need to take heart medications or have surgery to treat heart disease.

Regular exercise not only protects you against heart disease,⁵ it may also help reduce depression.⁶ One study found that an exercise training program was as effective as an SSRI in improving the symptoms of depression among older adults diagnosed with the disease.⁷ Your health care provider can recommend safe exercises and activities suitable for you.

More information about depression treatments can be found on the NIMH website at <http://www.nimh.nih.gov/health/publications/depression/how-is-depression-detected-and-treated.shtml>. If you think you are depressed or know someone who is, don't lose hope. Seek help for depression.

