

THE ALZHEIMER'S PROJECT

ALZHEIMER'S DISEASE FAST FACTS

What Is It?

Alzheimer's disease (AD) is an irreversible, progressive brain disease that slowly destroys memory and other thinking skills, and eventually even the ability to carry out the simplest tasks. Ultimately, the person with AD dies, often years earlier than he/she would have otherwise. In most people with AD, symptoms first appear after age 60. The brains of people with AD have an abundance of two abnormal structures—amyloid plaques and neurofibrillary tangles. A third characteristic change is the loss of connections between nerve cells (neurons) in the brain.

Who Gets It?

Alzheimer's disease becomes more common as people get older. Today it affects more than 5 million Americans, according to estimates from the Alzheimer's Association. As the baby-boom generation reaches retirement, that number could soar to more than 11 million by 2040. One out of eight people age 65 or older has Alzheimer's. The number of people with the disease doubles for every 5-year age interval beyond age 65.

Who Is At Risk?

Age is the best established risk factor for Alzheimer's. The genetic make-up inherited from parents may also influence risk of developing the disease, and when. Other non-genetic, environmental or lifestyle factors might play a role in brain health and the development or prevention of Alzheimer's disease. Many of these can be controlled or mitigated, including physical activity, diet, control of chronic diseases, social engagement, and intellectual stimulation.

How Can People Find Out If They Have It?

People who are concerned about a serious memory problem should talk with their doctor. The doctor may be able to diagnose the problem or make a referral to a specialist in neurology or geriatric psychiatry. Health care professionals who specialize in Alzheimer's can recommend ways to manage the problem or suggest treatment or services that might help.

Can It Be Treated?

There is no cure for Alzheimer's disease, but current treatments focus on helping people maintain mental function, manage behavioral symptoms, and slow or delay symptoms. Four medications are approved by the U.S. Food and Drug Administration to treat AD. These drugs don't change the underlying disease process and may help only for a few months to a few years.

Behavioral symptoms may accompany memory problems and can include sleeplessness, agitation, wandering, anxiety, anger, and depression. Scientists are studying new treatments to manage them. Treating behavioral symptoms often makes people with AD more comfortable and makes their care easier for caregivers.

Who Else Is Affected?

There are nearly 10 million Americans providing 8.5 billion hours of unpaid care to people with Alzheimer's disease or other dementias – time valued at \$94 billion, according to the Alzheimer's Association. 70 percent of people with Alzheimer's live at home, cared for by family and friends. The largest group of family caregivers is spouses, followed by daughters, daughters-in-law, sons, siblings, and grandchildren. About three in five caregivers say their children aged 8 to 21 are involved in caring for a loved one with Alzheimer's disease, according to a 2008 Harris Interactive poll.

In addition to the families and friends, our society as a whole is affected. Today, the direct costs to Medicare and Medicaid for care of people with Alzheimer's and other dementias and the indirect costs to business for employees who are caring for Alzheimer's are estimated at more than \$148 billion annually.

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Can It Be Prevented?

No treatments or drugs have yet been proven to prevent or delay AD, but people can take some actions that are beneficial for healthy aging and that also might reduce the effect of possible risk factors for AD. You can exercise regularly, eat a healthy diet that is rich in fruits and vegetables, engage in social and intellectually stimulating activities, control type 2 diabetes, lower high blood pressure levels, lower high blood cholesterol levels, and maintain a healthy weight. These actions lower the risk of other diseases and help maintain and improve overall health and well being, but will not necessarily prevent or delay AD in any one person. Even if these actions were eventually proven effective, they might not offset a person's individual genetic and other risk factors enough to prevent the development of AD.

What's Being Done About It?

Thirty years ago, we knew very little about AD. Since then, scientific research – supported by the National Institute on Aging and other components of the National Institutes of Health, the Alzheimer's Association, and other organizations – has led to important advances in our knowledge about AD and to the development of promising new drugs and treatment strategies. Today, scientists are investigating many approaches to treat, prevent or cure Alzheimer's, with 91 drugs in clinical trials as of 2008 and more in the pipeline awaiting FDA approval to enter human testing.

How Can I Help?

Clinical trials to test new treatments and interventions are an essential part of AD research. At least 50,000 volunteers both with and without Alzheimer's are urgently needed to participate in more than 175 actively enrolling Alzheimer's disease trials and studies in the U.S. To reach that goal, at least half a million volunteers must be screened. To find out more, contact the National Institute on Aging's Alzheimer's Disease Education and Referral (ADEAR) Center at 1-800-438-4380 or at the website www.nia.nih.gov/alzheimers.

There are many ways to join the fight against Alzheimer's disease, such as participating in research, supporting people with the disease with donations of time, help, or money, and other activities. To find out more, you can contact the Alzheimer's Association, which invites the public to become "Alzheimer's Advocates," at 1-800-272-3900 or at the website www.alz.org.

Need More Information?

Visit our collaborators' websites to learn more:

- National Institute on Aging, National Institutes of Health: www.nia.nih.gov
- Alzheimer's Association: www.alz.org

Sources: Alzheimer's Association, National Institute on Aging, National Institutes of Health