



# Fact Sheets

*Emory Alzheimer's Disease Research Center*  
Wesley Woods Health Center, 1841 Clifton Rd., Atlanta, GA 30329  
Grady Neurology Clinic, 80 Jesse Hill Jr. Drive SE, Atlanta, GA 30303  
404-728-6950 <http://med.emory.edu/ADRC/>

## Mild Cognitive Impairment

### **What is Mild Cognitive Impairment?**

Mild Cognitive Impairment (MCI) is a condition that means there is clear evidence of cognitive problems, most often involving learning and remembering new information. However individuals can still perform normal day to day activities such as managing household, medication, and financial matters. Most people with MCI recognize their memory is not as good as it was at one time. As a result, they often express concern they may develop a dementia such as Alzheimer's Disease (AD) and want to take steps to preserve their memory.

The diagnosis of "mild cognitive impairment" means that an individual meets the following criteria:

- Short term memory problems and/or problems involving other cognitive (thinking) areas such as language and reasoning
- More cognitive difficulty than others of the same age and education
- Normal function in all other areas of daily living (e.g. paying bills, managing medications)

### **What is the difference between MCI and Alzheimers Disease (AD)?**

People with AD generally have:

- More severe problems with memory and other cognitive abilities
- Decline in daily functioning at home or work

### **How do I find out if I have MCI?**

People who are concerned about their memory loss or changes in other cognitive abilities should seek an evaluation. A comprehensive evaluation at a clinic specializing in memory loss or aging may yield the most conclusive results.

### **What does an evaluation for MCI include?**

Depending on what other tests have already been performed, the following are typically included in an evaluation:

- Complete medical history
- Neurological exam
- Laboratory tests
- Neuropsychological testing (paper and pencil tests of cognitive functioning)
- Brain scans (CT or MRI)
- Information from close family members

The goal of an evaluation is to identify treatable problems (such as B-12 deficiency, thyroid problems, depression, etc.) that could be causing the cognitive problems and to prevent further decline. A person with cognitive problems should be monitored at least annually for any changes.

### **Is MCI the early stage of AD?**

Researchers are trying to answer this question. Not all individuals with MCI will progress to AD. Estimates vary widely, ranging from 25% to 90% of individuals with MCI progressing to

dementia over 10 years. Obviously, more research is needed to learn to distinguish between the people with MCI who will develop AD and those who will not. The most accurate diagnosis, like those received from a clinic specializing in memory disorders or aging, help narrow this range of progression. Also, individuals who have more thinking areas impaired, and more functional difficulty in daily life tend to be more likely to progress. Importantly, researchers are dedicated to look for ways to stop the individual with MCI from going on to develop AD.

### **Is there treatment for MCI?**

**Medications:** Research that leads to delaying the onset of AD by even 5 years could reduce by 50% the number of people with AD by the year 2050. Ronald Petersen, M.D., Ph.D. of the Mayo Clinic, Allan Levey, M.D., Ph.D. Emory University School of Medicine, and other Alzheimer's Disease Center investigators reported in the June 9, 2005 issue of the New England Journal of Medicine findings from the Memory Impairment Study. Study participants with mild cognitive impairment who took donepezil (Aricept) were at reduced risk of progressing to Alzheimer's disease (AD) during the first year of the study. Although the benefits for the overall group did not persist, there was a much more significant effect for the subgroup of subjects with a genetic predisposition to develop AD, which lasted for the entire 3-year study period. These studies are important as they provide hope that future research may find even more effective ways to delay the onset of AD.

**Non-Medication Therapies:** There is promising evidence that non-medication interventions such as cognitive rehabilitation, regular exercise, and a healthy diet can provide some symptom relief in MCI or help slow down the

potential progression to dementia. Emory University researchers Melanie Greenaway, Ph.D. and Ben Hampstead, Ph.D. have demonstrated positive effects on memory from participating in memory strategy training for individuals with MCI.

Support and education are also often needed as people with MCI and their families come to terms with changing abilities and experience the grief associated with cognitive loss. Education and contact with community support may help lessen the anxiety and fear of the unknown.

### **Are research studies enrolling people with MCI?**

The Emory Alzheimer's Disease Research Center has a major research emphasis on learning more about normal age related memory loss, MCI and early Alzheimer's disease. There are several studies at Emory, that are currently enrolling people who have MCI. If you are interested in learning about these studies call 404-728-6950.