

Age-Related Macular Degeneration

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Age-related macular degeneration (AMD) is a leading cause of visual impairment and blindness for older Americans.

AMD affects nearly 1.8 million people in the U.S., according to the National Eye Institute (NEI). As the population ages, an explosion of new cases is expected. The NEI predicts that cases of this potentially devastating disease among Americans will increase to 2.95 million in 2020.



Age-related macular degeneration is caused by changes in the macula, which is located in the retina and on the inside back layer of the eye. The macula is responsible for sharp central vision, and healthy macula is essential for driving, reading and other tasks requiring straight-ahead focusing.

There are two types of AMD: dry and wet. The dry type, often associated with the aging process, is the most common, accounting for 85% of all cases. In dry AMD, macula tissue gradually becomes thin and stops functioning properly. Currently, there is no treatment available for dry AMD.

Wet AMD is less common but more serious. It can result from a progression of the dry form. In wet AMD, abnormal blood vessels begin to grow and leak fluid under the macula. This causes vision to become distorted. The condition can sometimes be treated with laser surgery or drug therapy to destroy the leaky blood vessels.

AMD is painless, and symptoms are not always apparent. They include:

- Blurry central vision. Objects may appear distorted.
- A dark or empty area in the center of vision.
- Straight lines appearing wavy or crooked.
- Gradual loss of clear color vision. Colors may appear as less intense.

These symptoms may also indicate a condition other than AMD. If you experience any of them, contact your eye doctor as soon as possible. He or she will perform a variety of tests to determine their cause.

The most important thing you can do to protect your eyes is to get regular comprehensive eye exams. If you have AMD, this will enable your doctor to detect and treat it in its earliest stage. While no treatment will restore vision that has already been lost, the earlier

AMD is detected, the more successful treatment can be. A healthy diet and exercise can be beneficial in maintaining healthy sight.

In addition to the 1.8 million in the U.S. affected by AMD, 7.3 million people are at risk for developing AMD and suffering from vision loss. Vision damage caused by macular degeneration cannot be undone. It is important to beware of “magic” therapies or treatments that are often unfounded and expensive; many potential treatments have not been proven effective.

If you have already lost part of your vision, low-vision aids can be prescribed to help make the most of your remaining vision. These include special telescopic and microscopic lenses, magnifying glasses and electronic magnifiers for close work.

New research is focusing on:

- The possibility of transplanting healthy cells to diseased retina.
- The use of some anti-inflammatory drugs to halt the progression of dry AMD to the more severe wet form.
- Ways of improving low-vision rehabilitation.

Proven risk factors:

- Smoking - Smokers are 2 times more likely to develop AMD than non smokers.
- Ultraviolet radiation – Always provide eyes with UV protection from the damaging rays of the sun.
- Family history – Scientists are currently evaluating families with history of macular degeneration to better understand the condition and its causes.

The following behaviors may help reduce the risk of developing AMD:

- Eat a diet rich in dark green leafy vegetables, fruit, and fish along with zinc and antioxidant vitamins.
- Control blood pressure and cholesterol levels.
- Maintain a healthy lifestyle including exercise regularly and not smoking.
- Wear sunglasses.

Sources: National Eye Institute, AMD Alliance, American Optometric Association, AMD.org

