

Macular Degeneration



What is macular degeneration?

Age-related macular degeneration (ARMD) is a disease associated with aging and with ultraviolet light oxidation of retinal tissues. ARMD affects a patient's central vision and can have a negative impact on activities such as reading, recognizing faces, and driving. It is among the leading causes of blindness in the United States.

What is the macula?

The macula is located on the inside of the eye, and is the most sensitive part of the retina. When a person is reading or recognizing a face, they are using their macula to see those things. Because it is the most sensitive part of the retina, it is affected by even minute changes to its anatomy.

What are the two forms of ARMD?

- **Dry macular degeneration** – Occurs when retinal cells break down. This kills off the light sensitive cells of the macula which can lead to scarring and blurred/distorted vision. Drusen, which are the name for waste products that collect at the macula, are an early sign of the disease. Dry ARMD is much more common than wet ARMD with 85% of ARMD patients having the dry form.
- **Wet macular degeneration** – Occurs when blood vessels begin to grow in the macula, leading to accumulation of fluid and distortion of the retina. It can impact vision severely and quickly, especially if there is a break in the abnormal blood vessels that have grown as a result of the disease.

What are the risk factors for ARMD?

Smoking, race, obesity, family history, and gender all play a role in determining who is predisposed to have ARMD. Smokers get earlier and more severe forms of the disease. Caucasians, because they lack significant pigment at the back of the eye, are more susceptible to the disease, especially in those people with a family history. Women seem to be at greater risk than men.

How is ARMD diagnosed?

The disease is diagnosed at a comprehensive eye and vision examination. A combination of visual acuity (reading a letter chart) and ophthalmoscopy (examination of the back of the eye) are used to determine the health of the macula. Dilated eye examinations give our optometrists the best views of your retinas, and are essential to your eye care if you are at risk for developing ARMD.

How is ARMD treated?

The wet form may be treated with various surgeries including laser surgeries to reduce the formation of new blood vessels. Injections into the eyes is the current standard of care for many wet ARMD patients. These injections are done in an effort to prevent new blood vessel growth. Dry ARMD is typically treated with high-dose antioxidants and protection from ultraviolet light.

How can I prevent macular degeneration?

According to the American Optometric Association, "researchers have linked eye-friendly nutrients such as lutein/zeaxanthin, vitamin C, vitamin E, and zinc to reducing the risk of certain eye diseases, including macular degeneration." These nutrients can largely be obtained from green leafy vegetables and colorful fruits. Use of nutritional supplements was shown by the Age-Related Eye Disease Study (AREDS) to help those people with moderate ARMD, though it did not show a definitive benefit for preventing the disease. Sun protection throughout all stages of life can prevent the oxidation of tissues at the macula. Because most exposure to sunlight occurs early in life, we will often recommend ultraviolet-blocking contact lenses for our younger patients. Sunglasses can be worn at all ages to prevent ultraviolet exposure. Living at altitude in Brighton, Westminster, Thornton, Lafayette, and Boulder means that we have considerably more ultraviolet light present than those cities at sea level. Proper sun protection should be worn at all times when outdoors.

At Vista Eye Care, in Thornton, Colorado, our eye doctors recommend yearly comprehensive eye exams for patients of all ages. By knowing the risk factors for macular degeneration, you can take action to prevent the disease from affecting your own vision. Identifying the early signs, and knowing how you can prevent ARMD is important to your eye health. We believe strongly in preventative eye care and will help keep you and your family educated on how to effectively care for your eyes.

Please call our office today at (303) 450-2020 to schedule your annual comprehensive eye exam to check for signs of macular degeneration and to determine your risk for this disease,

