



Geographic Atrophy (GA)

What is Geographic Atrophy?

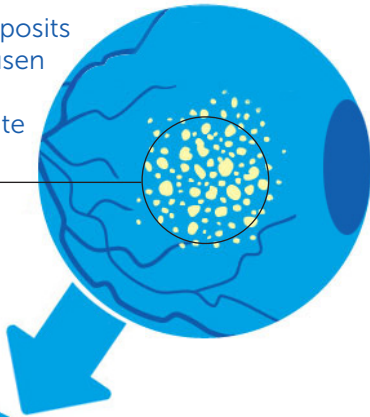
Geographic atrophy (GA) is an advanced and severe form of dry age-related macular degeneration. In GA, small clusters of cells degenerate and die (atrophy).

In retinal images, these regions of dead and dying cells resemble a map, hence the term geographic atrophy.

Age-related macular degeneration (AMD) is a disease that damages photoreceptors, light-sensing nerve cells in the retina, and is a leading cause of vision loss among older adults. Because it causes damage (or degeneration) to cells at the center of the eye called the macula, it blurs central, focused vision, making it harder to drive, read, cook, and recognize faces.

Stages of Age-Related Macular Degeneration

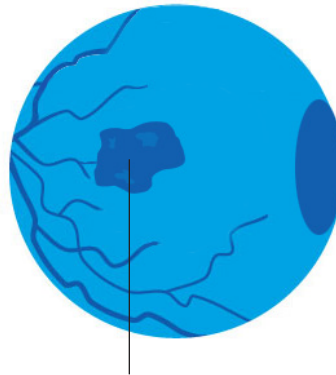
Yellow deposits called drusen form and accumulate under the retina.



Drusen leads to cell death, resulting in loss of clear, straight-ahead vision.

Early and Intermediate Stage (Dry AMD)

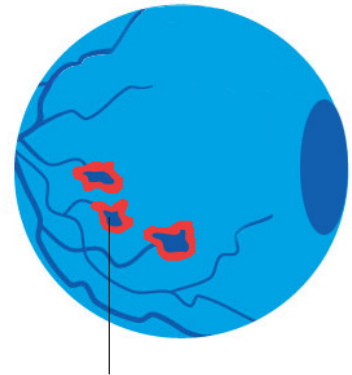
AMD develops slowly, but there are signs that retinal cells have been weakened by age and other factors. One sign may be drusen, fatty deposits in/near the retina. AREDS2 eye supplements may delay or prevent intermediate AMD from progressing to an advanced stage.



Patch of cell atrophy.

Advanced Stage (Dry AMD)

Advanced AMD can take the form of **geographic atrophy** in which small clusters of cells degenerate and die. This can lead to permanent vision loss.



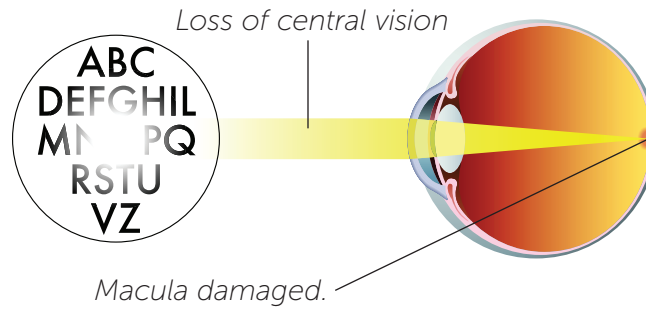
Leaky blood vessels in the macula can cause swelling, damage, or vision loss.

Advanced Stage (Wet AMD)

Advanced AMD can also take the form of wet AMD, where fragile, leaky blood vessels grow near the retina and damage cells. A growing number of treatments are available. Without treatment, wet AMD can cause vision loss.

Symptoms of Geographic Atrophy

- Difficulty reading in dim lighting situations
- Central vision loss
- Black spot in central vision
- Slower reading speed
- Glare



AMD blurs central vision.

Diagnosing Geographic Atrophy

GA is diagnosed during a dilated eye exam, when an ophthalmologist or another type of retinal specialist uses imaging technology to examine the back of the eye. In a dilated exam, GA appears as a patch of retina missing its dark pigment.



Living Well With Geographic Atrophy

Geographic atrophy can affect one or both eyes, and someone with geographic atrophy in one eye is more likely to develop it in the other.

To preserve remaining vision, it's important to protect eye health:

- If you are a smoker, stop right away
- Eat a healthy diet rich in antioxidants and omega-3 fatty acids, such as fish, whole grains, and dark leafy greens
- Exercise regularly
- Ask your eye doctor if the AREDS2 eye vitamin supplement formula would be beneficial
- Get regular, dilated eye exams and use an Amsler grid to monitor your vision. Visit brightfocus.org/amsler-grid to download one for free.



Treatments for Geographic Atrophy

The first treatments for geographic atrophy were approved in 2023. These treatments slow the progression of vision loss from GA by reducing the rate of geographic atrophy lesion growth with monthly injections. For more details, download our Macular Degeneration Treatments fact sheet at brightfocus.org/macular/treatments or call us to request a printed copy.

Disclaimer: The information provided is a public service of BrightFocus Foundation and is not intended to constitute medical advice. Please consult your physician for personalized medical advice; all medications and supplements should only be taken under medical supervision. BrightFocus Foundation does not endorse any medical product or therapy.

Resources

Information about GA

Visit brightfocus.org/GA

BrightFocus Macular Chats

Free, monthly discussions with leaders in vision research care that you can attend by phone or on your streaming device. To be notified about and register for upcoming chats, listen to past programs, or read the transcripts, visit brightfocus.org/chats.

AMD Community Circle

A free, monthly Zoom meeting for people with AMD to share tips, ask questions, and build community. Learn more at brightfocus.org/community-circle.

Clinical Trials: Your Questions Answered

Read the brochure online at brightfocus.org/trials, or request a hard copy by calling 1-855-345-6637.

Clinical Trials Finder

Find a clinical trial or research study near you. Visit brightfocus.org/clinicaltrials.