

# What is age-related macular degeneration?



Age-related macular degeneration (ARMD) is a progressive eye condition that occurs when a part of the retina called the macula is damaged.

In its early stages, ARMD may not cause symptoms, while more advanced stages of the condition can cause distortion (where straight lines appear wavy), as well as blurring of central vision, which can affect reading, recognising faces, driving and identifying colours.

While ARMD can worsen with time, advancing from more early to advanced stages, **it never causes complete blindness**, because your peripheral (side) vision remains normal.

ARMD occurs most often in people aged over 50. However, other forms of degeneration of the macula can occur in younger people.

**There are two types of ARMD: dry and wet.** Dry ARMD – the most common type – results in a **gradual** loss of central vision, while wet ARMD leads to a **sudden** change of central vision. The condition can affect one or both eyes.

## What causes ARMD?

ARMD, generally occurs as a result of changes in the macula due to ageing.

Factors influencing the development of ARMD include:

- Age 50 years and above
- Family history of ARMD/genetics
- Smoking
- High blood pressure
- Heart disease
- High cholesterol levels
- Excess weight
- High saturated fat diet (found in foods like meat, butter and cheese)
- Lack of exercise
- UV exposure.

## What are the symptoms of ARMD?

If you have dry ARMD in its early stages, you will have no pain or discomfort and the condition may be detected in an eye exam before you even experience any symptoms.

Symptoms include:

- Difficulty seeing fine detail in the centre of your vision – the size of the affected central area may increase
- Blurred vision
- Dark spots or missing areas of vision
- Distorted vision (straight lines appearing wavy)
- Numbers and letters appearing jumbled
- Words disappearing when reading
- Difficulty discerning colours and shades of colours
- Poor adaptation to dark conditions from lighter environments
- Requiring more light to perform daily tasks
- Difficulty reading that is not improved with new glasses
- Impaired depth perception – an inability to properly judge distances which can make walking harder and lead to falls.

**Around 10 to 15 per cent of people with dry ARMD develop wet ARMD.** If you have been diagnosed with dry ARMD and experience any **sudden** change in vision, you should see your eye care professional **urgently** as early detection is crucial.

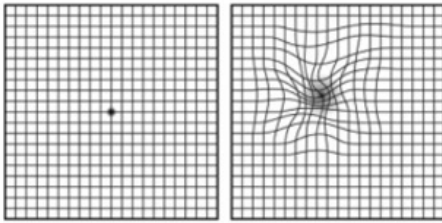
The earlier you seek treatment, the more likely you are to have a better outcome.



## How is ARMD diagnosed?

Everyone, particularly if you are aged 50 and over, should have regular eye examinations.

### The Amsler grid



Normal vision

Distorted vision

Your ophthalmologist will review your medical and family history and will conduct a variety of tests using photography or other imaging to examine your macula and detect early signs of ARMD. If you experience any of the symptoms listed overleaf, you should make an appointment with your ophthalmologist as soon as possible.

Your ophthalmologist may use the Amsler grid (see left) in your diagnostic consultation and may recommend you regularly self-monitor any changes in your vision by using it. You should contact your ophthalmologist immediately if you notice that lines, or parts of the grid look wavy, blurry or dim.

## How is ARMD treated?

### Wet ARMD

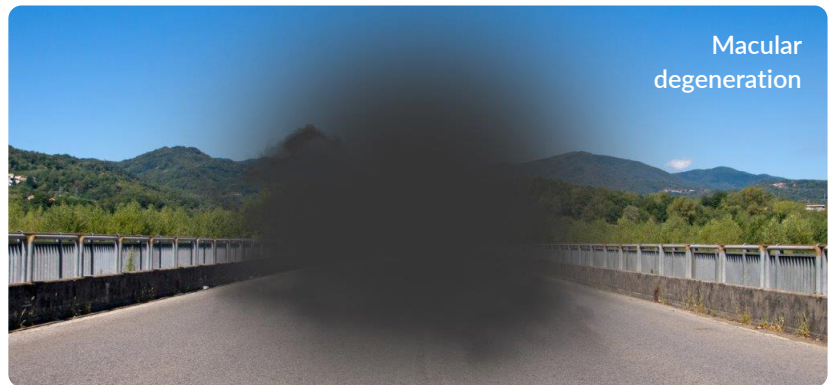
If detected early, wet ARMD can be treated, although not cured. The various treatments, which target the blood vessels that grow abnormally into the retina, include:

- **Injections of drugs** into your anaesthetised eye to stop growth of abnormal blood vessels
- **Photodynamic therapy** which is a combination of drug and laser treatment aimed at sealing leaky blood vessels
- **Laser treatment** which uses a light beam directed onto the retina to seal leaky blood vessels.

Your ophthalmologist will discuss which treatment options are most appropriate for you.

### Dry ARMD

Unfortunately, there are no medical treatments for dry ARMD. But **a healthy lifestyle is important** in reducing the risk



of macular degeneration and in slowing its progression.

Smoking is the main modifiable risk factor for ARMD. Research has shown that the risk of developing ARMD is at least double in smokers than in non-smokers.

Other healthy habits to develop and continue include:

- Maintaining a **healthy weight**
- Eating a **nutritious diet** that includes green leafy vegetables, yellow and orange fruit, fish and whole grains

- Maintaining **normal blood pressure** and controlling other medical conditions
- **Exercising regularly**
- **Wearing sunglasses and hats** outdoors
- **Wearing lenses** that block UV and blue light, and reduce glare
- Having **regular eye tests** to spot problems.

Some eye specialists recommend vitamin supplements to reduce the progression of dry ARMD. It is best to discuss this directly with your ophthalmologist.

**Need to know more?**

Please contact the Lions Eye Institute to make an appointment with one of our ophthalmologists. Phone: (08) 9381 0777; email: [carecentre@lei.org.au](mailto:carecentre@lei.org.au); or see our website: [lei.org.au](http://lei.org.au)