Age-related Macular Degeneration
What is Age-related Macular Degeneration?

The macula is near the centre of the retina and is responsible for the sharp, straight ahead vision used for reading, driving and recognising faces.

Age-related Macular Degeneration (AMD) is the name given to a group of degenerative diseases of the retina that cause progressive loss of central vision, leaving the peripheral or side vision intact. There are two types of AMD, dry and wet.

In dry AMD, waste products from the retina build up in the support cells that underlie the retina. The retinal support cells are overwhelmed by these waste products and die. This can lead to patches of ‘missing’ retina.

Dry AMD is a slow form of the disease causing gradual loss of central vision. It is also the most common type of AMD, making up approximately 90 per cent of all AMD cases.

Wet AMD is associated with sudden vision loss and is caused by abnormal blood vessels growing into the retina. These rapidly growing blood vessels are fragile and allow fluid and blood to leak into the retina, leading to scarring and vision loss.

Vision changes associated with the wet form are often sudden and severe. Some patients who have dry AMD can later develop the more aggressive ‘wet’ form.

How common is it?

Macular Degeneration affects one in seven Australians over the age of 50 and the incidence increases with age. It is therefore commonly referred to as Age-related Macular Degeneration.

It is important to remember that inherited forms of the disease can also affect young people.
How does AMD affect vision?

Some of the symptoms of AMD include:
- Dark patches or empty spaces appear in the centre of your vision
- Distortion, where straight lines may appear wavy or bent
- Difficulty in reading or any other activity which requires fine vision
- Distinguishing faces becomes a problem

If you 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.

Who is at risk of AMD?

AMD is hereditary, and there is an increased chance of developing the disease if a family history is present. Environmental risk factors include smoking and poor diet. Studies have shown that those who smoke are three times more likely to develop AMD and smokers may develop the disease 10 years before non-smokers.

How can I reduce my risk of AMD?

You cannot change your family or your age, however, it is important to stop smoking and enjoy a balanced diet including fish, nuts, fresh fruit and vegetables.

Amsler Grid

The Amsler grid is an important management tool used to detect changes in your central vision. These changes may include wavy or bent lines and dark or missing patches. The Amsler grid should not be relied upon for diagnosis, and is not a substitute for regular eye examinations, but if you notice changes on the Amsler grid you should notify your eye care professional as soon as possible.

For your free copy of the Amsler grid, call the RSB on 1800 675 554 or email mail@rsb.org.au.

Vision affected by Age-related Macular Degeneration

Normal vision
What treatments are available for AMD?

There is no cure for AMD, although there are treatments that aim to keep you with the best vision for as long as possible, and in some cases may potentially improve vision.

There are currently no treatments available to reverse the effects of dry AMD. However, studies have shown that vitamins A, C and E, minerals such as zinc, and antioxidants may slow its progression. Consult your doctor before taking any supplements as they may interfere with other medications you are on.

There are a number of proven treatments available for wet AMD. These treatments target the blood vessels that grow abnormally into the retina. The blood vessels are prompted to grow by a protein called Vascular Endothelial Growth Factor (VEGF). Anti-VEGF drugs need to be injected into the eye cavity where it spreads to the retina and blocks the growth of abnormal blood vessels. This reduces swelling and bleeding in the retina so that vision loss is stabilised and in some cases improved. The injections are performed by an ophthalmologist and are often required on a regular ongoing basis.

As well as the injection of Anti-VEGF drugs, other treatments include photodynamic therapy and laser ablation. All of these treatments can be discussed with your eye health professional.

If you are over 50 years or if you have a family history of AMD you should ask your eye care professional to check your eyes for early signs of AMD.

Rehabilitation services are available for people with AMD who need further assistance with their vision. Visit www.rsb.org.au for further information or call 1800 675 554. For donations please call 1800 644 577.