

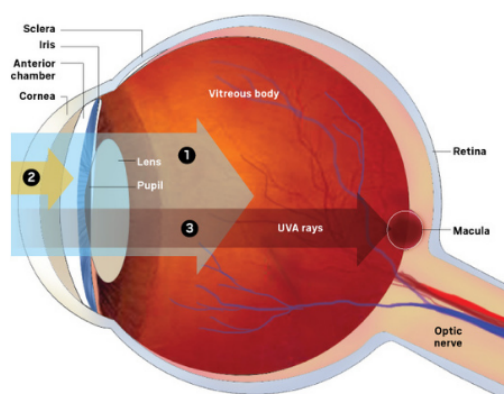
ULTRA ACCESS August Newsletter

How prolonged exposure to sunlight can damage ones eyes.

August is here, and the summer is in full swing.

Its (hopefully) nice and hot, and we hope that you are all enjoying the sunshine - which is also good for peoples mental health, and incidentally we published an article about this back in January.

But this is usually the time of year where **the sun can do more than cause a healthy tan** (if suitably protected with adequate sun cream)... **it can REALLY damage ones eyes.**



The Human eye is a complex organ (yes, its actually categorised as an organ).

It is one of the five sensory organs, and is responsible for ones vision.

Within the eye are special cells that detect both light and colour, focusing and transmitting this visual data / information back to the brain.

Its also an organ with one of the fastest healing times in the human body, due to how important (through many hundreds of thousands of years of evolution) the eyes actually are for our very survival, with some experts saying that the **Cornea** (the outer "skin" / surface of the eye) is fastest healing part of the entire body...

But, this doesn't mean that everything that damages ones eyes can indeed heal back fully.

Irreparable damage can be caused to the eyes if exposed to extreme sunlight, for prolonged periods.

There are 3 main types of light rays that could cause damage to the eye (**shown in the above pictographic**):

1. **Visual Light** - which can cause discomfort and temporary impaired vision by staring either directly into, or receiving glare from a reflective surface.
2. **UVB Rays** - affect the outer surface of the eye; the Cornea in particular, and exposure to this ultra violet light can destroy the outer cells, causing the otherwise rapid healing factor to be significantly reduced, as well as actually burning the eyes surface.
3. **UVA Rays** - travel through the eyes lens (the focusing part of the eye) back towards the retina, which in turn converts this light into electrical signals and trasfers this data to the brain for processing, so that we can see. **But, it can also cause permanent blindness if too many UVA rays pass into the back of the eye.**

Sunglasses can help reduce this risk significantly by protecting the eyes from harmful UV rays and reducing glare by dimming light that enters them.

And the different colours / tints of the lenses can further reduce glare by blocking a lot of the UV light we in-take through our **Pupils**.

In Part B, we will give a guide to which kinds of sunglass colours or "tints" do what, and why...

