

Smoking Puts your Eyes at Risk

Experts warn of links between smoking and eye health



THE COLLEGE
OF OPTOMETRISTS

While most of us are well aware that smoking is linked to conditions such as lung and heart disease, many of us are less familiar with the link between smoking and eye disease.

Tobacco smoke is composed of as many as 4,000 active compounds - most of them toxic - and potentially damaging to the eye. Research has revealed that UK smokers are **twice as likely** as non-smokers to develop Age Related Macular Degeneration, the leading cause of severe and irreversible blindness in the western world, and smoking can cause or exacerbate several eye disorders, in many cases leading to blindness. With an estimated 22% of the UK's adult population smoking, the implications are significant.

The College of Optometrists want to highlight the lack of awareness around the link between smoking and sight loss. "There are many thousands of smokers who have no idea that the habit can rob you of your sight," said Dr Rob Hogan, President of the College of Optometrists. Dr Hogan adds; "The key message here is prevention. There are a number of steps everyone can take right now to limit the onset of many eye conditions, but one of the most important things you can do is to stop smoking. Quitting now can halt the damage to the eyes, depending on the severity and type of disease, which is a huge incentive for all smokers. Of course it is also important to visit to your local optometrist regularly, around every two years, whether you're a smoker or not."

The key eye conditions influenced by smoking are:

Age-Related Macular Degeneration (AMD)

Age-related macular degeneration (AMD) is the leading cause of vision loss in the Western world. It occurs when the delicate cells of the macula - the small, central part of the retina responsible for the centre of our field of vision - become damaged and stop working. In the early stages of AMD, central vision may be blurred or distorted and things may look an unusual size or shape. This may happen quickly or develop over several months, although if only one eye is affected it may not be noticed. The macula enables people to see fine detail so those with the advanced condition will often notice a blank patch or dark spot in the centre of their sight. This makes everyday activities like reading, driving, writing, watching television and recognising faces very difficult.

Crucially, smoking is the major preventable risk factor for AMD. Evidence from large studies has shown that smoking more than doubles the risk of developing AMD, that smokers are more likely to suffer from all types of AMD, and to experience relapses after treatment. AMD costs the economy £4.9 billion every year. An estimated 53,900 UK residents over 69 may have AMD attributable to smoking, of whom 17,800 are blind. There are two different types of AMD, "wet" and "dry." Although "wet" AMD can sometimes be treated at the moment there are no medical treatments for dry AMD.

To prevent, or limit your chances of getting AMD there are several steps you can take:

- **Stop smoking**
- **Visit an optometrist regularly or as advised by your optometrist.** Optometrists are the eye health specialists on the high street, trained to provide eye care and spot potential problems such as AMD. Your optometrist can refer you on for specialist treatment and assist with the ongoing management of a number of conditions.
- **Wearing sunglasses and wide-brimmed hats in bright sunlight** will help to protect your eye health generally from the impact of harmful UV rays. Buy good quality sunglasses with a CE Mark, this means they conform to European standards.
- **Eat healthily** - a poor diet with a high level of fats and low level of vitamins can make AMD worse, avoid junk food, and make sure you are eating the right vitamins and minerals. Research suggests that diets rich in

carotenoids found in leafy green vegetables, such as raw carrot, broccoli and raw spinach can reduce the risk of AMD.

- **Be aware of any distortion in your vision** - you can do this by covering one eye at a time and checking that you see straight lines as straight - for example a door or window frame. If you notice any distortion, do consult your optometrist.

Cataracts

A cataract is a clouding of part of the eye called the lens. Vision becomes blurred or dim because light cannot pass through the clouded lens to the back of the eye. Left untreated this may lead to loss of vision, the most effective treatment is a simple operation to remove the lens with the cataract.

Cataracts can develop as part of the normal ageing process. No one knows for sure what causes them, studies have linked poor smoking, sunlight and poor diet with the development of cataract:

- **Stop smoking!** Smokers are three times more likely to develop the most common cause of cataract, nuclear cataracts. A smoker's risk of cataract increases with the amount smoked, with the condition more serious in heavy smokers than in light smokers.
- Studies have also linked excessive exposure to sunlight to cataract development. **Wear good quality sunglasses** with a CE mark and wide-brimmed hats in bright sunlight.
- Poor diet has also been linked to cataract development. A **healthy, balanced diet**, rich in fresh fruit and green leafy vegetables is important for your general and eye health.

1. Kelly et al, Smoking and age-related macular degeneration: a review of association. Eye journal, 2005, 19 935 - 944

2. Simon P Kelly, Judith Thornton, Georgios Lyratzopoulos, Richard Edwards and Paul Mitchell, Smoking and blindness, Strong evidence for the link, but public awareness lags. BMJ. 2004 March 6; 328(7439): 537-538.

3. Kelly, S et al. Smoking and cataract: a review of causal association. Journal of Cataract & Refractive Surgery