

## Smoking fact box

One in six adults in the UK smoke.

Cigarettes contain 4,000 chemicals including tar, arsenic and ammonia.

Tobacco chemicals damage blood vessels inside the eye and interferes with tear production and the health of the cornea.

Fear of blindness is as compelling a motivation to quit smoking as fear of lung cancer, heart disease, and stroke.

## Acknowledgements

1. Perceptions of blindness related to smoking: a hospital-based cross-sectional study, G Bidwell et al.
2. BMA Tobacco Control Resource Centre
3. Tayside University NHS Trust
4. National Institute for Clinical Excellence
5. Satici A, Bitiren M, Ozardali I, et al. Acta Ophthalmology Scand 2003;81:583-7
6. Erb C et al. Clinical Experimental Ophthalmology vol. 237, no.: 377-80

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# Smoking and eye health



**The link between smoking & sight loss is as strong as the link between smoking & lung cancer.**

Yet, worryingly, awareness of the link between smoking and sight loss, amongst Britain's 7.4 million smokers, is low (9.7%) compared to lung cancer (92.2%) and heart disease (87.7%).<sup>1</sup>

Toxic chemicals in tobacco smoke can damage the delicate surface and the internal structure of the eye.

This can lead to an increased risk of many eye conditions including age-related macular degeneration (AMD);

nuclear cataracts; thyroid eye disease; dry eye and poor colour vision.

Smoking is a key risk factor for both 'wet' and 'dry' AMD. AMD is the UK's leading cause of blindness.

Any amount of smoking, even light, occasional or second-hand can affect your eye health and increase your chances of suffering a sight-threatening eye disease.

### **Double or quit** <sup>2-3</sup>

Smokers are up to four times more likely to suffer AMD than non-smokers and are likely to suffer the condition earlier than non-smokers.

The average age for a non-smoker to develop AMD is 74.4 years.

This is five years later than smokers whose average age is 69.2 years.

Smokers are also likely to experience a more rapid progression of AMD and poorer treatment outcomes.

Smoking increases your risk of developing cataracts as tobacco toxins cause oxidative damage to the lens proteins.

The risk of nuclear cataracts (those that form in the centre 'nucleus' of the lens) is three times greater in smokers.

### **Sore, gritty eyes** <sup>4-5</sup>

Smoking increases your risk of thyroid eye disease – sore, gritty eyes – by up to eight times.

Thyroid eye disease affects more than 400,000 people in the UK.

The conjunctiva – the clear membrane that covers the sclera (the white part of the eye) and lines the inside of the eyelids – is sensitive to airborne chemicals, fumes, and irritative gases that originate in tobacco smoke.

This can lead to a reddening of the conjunctiva, excessive tearing and general discomfort.

Smoking cigarettes has also been found to increase the risk of dry eye syndrome and can exacerbate existing eye conditions.

### **Colour vision**

Smokers who consume more than 20 cigarettes per day may suffer colour vision defects.<sup>6</sup>