

Smoking and vision

THE FACTS

- Smoking directly accelerates cataract development and age-related macular degeneration, the leading causes of severe visual impairment and blindness.
- Smoking may impair your night vision, which may reduce driving safety at night.
- Many chronic ocular diseases appear to be associated with smoking.
- The dangerous effects of smoking are transmitted through the placenta and children of smoking mothers are prone to develop strabismus (inward turn of the eye).
- Smokers are 82 per cent more likely than non smokers to suffer from dry eye and even former smokers have a 22 per cent higher incidence of dry eye than non-smokers.



Components present in tobacco smoke have been shown to increase the risk of eye irritation. These chemicals bring about tearing and mild conjunctival redness. Smoke also stimulates nerve endings, causing stinging, burning or prickling sensations.

Smoking and the eye

To generate the energy needed for the eye to function properly, a continuous flow of oxygen and nutrients must be present. Smoking reduces the blood supply that is critical to the eyes by narrowing the blood vessels while thickening the blood.



What is in a cigarette?

Tobacco smoke is composed of as many as 4,000 active compounds, most of them toxic on acute or long-term exposure. More than 60 of these chemicals are carcinogens, with the toxic compounds causing severe pathologic disturbances in different organs, including the eye.

Environment tobacco smoke (ETS)

Cigarette smoking is highly irritating to the conjunctiva, the film covering the white of the eye, and affects the eyes of non-smokers by passive exposure to second hand smoke. Eye Irritation is the most common complaint due to environmental tobacco smoke, followed by cough, nose irritation and headache.

Smoking and visual health

Smoking is related to poor health. In Australia, more pre-ventable deaths are due to smoking than to any other cause yet the effects of smoking on vision are often overlooked.



Smoking and AMD

The most common causes of smoking-related blindness are both the wet and dry forms of age-related macular degeneration (AMD). AMD is a major cause of irreversible vision loss in the western world, particularly in the elderly. It is thought that smoking doubles the risk of late AMD. Both current smoking and a history of smoking are associated with a higher risk of AMD. Once a smoker quits the habit, the risk of late AMD remains increased until 20 years after the person has stopped smoking.





Smoking and cataracts

Cataracts are a clouding of the lens inside the eye. Everyone will develop cataracts if they live long enough. There is a link between smoking and an increased risk of cataract development. Age is the main cause of cataracts but smokers develop cataracts earlier and more severely.

Smoking and glaucoma

Glaucoma is a degenerative disease of the optic nerve, typically caused by a disturbance of the blood supply to the optic nerve. It is sometimes described as the sneak-thief of sight because many people are unaware they have it. There may be some association between smoking and glaucoma. Glaucoma can be treated by medication, surgery and monitoring. Early detection is vital, as once sight is lost, it can never be regained.

Smoking and other eye diseases

Graves' ophthalmopathy (thyroid eye disease) results in protrusion of the eyes. In severe cases it can cause dry eye due to exposure, and difficulties or pain on eye movement, as well as double vision. The cause of Graves' ophthalmopathy is unknown but smoking has been implicated as one of the factors capable of inducing Graves' disease in a genetically predisposed person.



Smoking and strabismus in children

Strabismus is turning of the eye or eyes. It is a common problem for children and requires intervention through spectacles, patching, exercises or a combination of these or, in some cases, surgery. Smoking during pregnancy is associated with an increased risk of strabismus in children.



Smoking and contact lenses

Complications of contact lens wear and smoking are not well studied but the consequences are serious. The front of the eye, the cornea, is a delicate environment. Small pieces of dust or lint on the lens can compromise the surface of the cornea, increasing the risk of eye infection, in particular, contact lens – related micro-bial keratitis.

Smoking has been identified as a significant factor for contact lens – related microbial keratitis and inflamed corneas. Because smoking is associated with dry eye and this impairs the immune system, increased contact lens difficulties are more common.



Ask your optometrist for these related brochures

- Age-related maculopathy
- Conjunctivitis

**For information about vision and eye care
visit www.optometrists.asn.au**