



What is vision loss and blindness?

Vision loss describes any reduction in the ability to see between being fully sighted and being blind. Blindness describes a total loss of sight (cannot see anything including light). Vision loss and blindness can occur at any age but it is most common in older people. Babies can be born with eye problems that cause vision loss and blindness,

What are the main risk factors for vision loss and blindness?

There are several risk factors associated with developing vision loss and blindness. Getting older is a major risk factor. Some risk factors are related to lifestyle and can be addressed to help prevent vision loss and blindness and keep eyes healthy. Eye problems associated with lifestyle are [1-5]:

- smoking cigarettes
- exposure to sunlight
- injuries
- alcohol
- · not eating enough healthy food.

Smoking cigarettes

Cigarettes contain many chemicals that are harmful to the body. When a person smokes they breathe in these chemicals which enter the blood stream and can damage the blood vessels that carry blood throughout the body. The blood vessels in the eye are very small and can be damaged easily by these chemicals, possible

affecting sight. Stopping smoking or better still not starting, is one of the easiest and best things a person can do to protect their vision [6]. (Visit CEITEC for more information about the effects of tobacco use on health http://www.ceitc.org.au/)

Exposure to sunlight

Eyes can be damaged by the sun's ultraviolet (UV) rays if they are exposed too often and for too long. In particular, damage from the sun can increase a person's likelihood of developing cataracts (cloudy cover over the eye). The best ways to prevent eye damage from the sun are to wear sunglasses and a widebrimmed hat. Children whose eyes are particularly sensitive to sun damage [7].

Injuries

Injuries to the eye (ocular trauma) are more common among Indigenous people than non-Indigenous people [8, 9]. Injuries to the eye are also a risk factor for developing cataract [10].

Alcohol

Drinking too much alcohol can cause damage to the optic nerve (the nerve that connects the eye to the brain), leading to vision loss. This condition is called optic neuropathy or optic atrophy [7].

Not eating enough healthy food (nutrition)

The eyes, like all other organs of the body, depend upon nutrients from food to maintain their health and proper function. Good nutrition helps our eyes repair wear and tear,

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protect against infection, function properly, and grow (in children). A healthy diet for optimal eye heath contains plenty of fresh fruits and vegetables, wholegrain bread and rice, dairy products, fish, eggs and nuts, and not very much salty and sugary food like fast food and soft drink. [1].

What are the main types of eye conditions among Indigenous people?

There are a number of problems that can affect the eye. The most common eye conditions for Indigenous people are [11]:

- · refractive error (eye focussing problems)
- cataracts (cloudy cover over the eye)
- · diabetic retinopathy (damage to the retina caused by diabetes)
- trachoma (an infectious eye disease).

What is known about vision loss and blindness among Indigenous children and adults?

The eye health of Indigenous people before non-Indigenous people came to Australia was probably very good; believed to be better than that of non-Indigenous people [1]. Indigenous children are less likely to have vision loss and blindness than other Australian children, however Indigenous adults are three times more likely to have low vision and six times more likely to be blind than non-Indigenous adults [11].

What is the impact of vision loss and blindness on individuals and families?

Vision loss and blindness can affect a person's ability to perform everyday activities such as reading, watching television, playing sports, driving and their ability to attend school or work [12]. It can also increase a person's risk of falls and injury [13]. It is important to maintain healthy eyes by addressing risk factors and by getting regular eye health check-ups. Even people with no eye problems should visit an eye health professional every two years.

References and further reading

- Burns J, Thomson N (2003) Eye health. In: Thomson N, ed. The health of Indigenous Australians. South Melbourne: Oxford University Press:273-289
- Durkin SR (2008) Eye health programs within remote Aboriginal communities in Australia: a review of the literature. Australian Health Review;32(4):664-676
- Thornton J, Edwards R, Mitchell P, Harrison RA, Buchan I, Kelly SP (2005) Smoking and age-related macular degeneration: a review of association. Eye;19(9):935–944
- O'Connor AR, Wilson CM, Fielder AR (2007) Ophthalmological problems associated with preterm birth. Liverpool, UK: Division of Orthoptics, University of Liverpool
- Weih LM, VanNewkirk MR, McCarty CA, Taylor HR (2000) Age-specific causes of bilateral impairment. (118) Melbourne: Centre for Eye Research Australia, University of Melbourne
- Kruger K, McMillan N, Russ P, Smallwood H (2007) Talkin' up good air: Australian Indigenous tobacco control resource kit. Melbourne: Centre for Excellence in Indigenous Tobacco Control
- Biotext (2008) Risk factors for eye disease and injury: literature review.
 (Final report) Canberra: National Health and Medical Research Council, Australia
- Australian Institute of Health and Welfare (2008) Eye health among Australian children. (AlHW Catalogue no. PHE 105) Canberra: Australian Institute of Health and Welfare
- Australian Institute of Health and Welfare (2009) Eye-related injuries in Australia. (AIHW Catalogue no. INJCAT 123) Canberra:
- Centre for Eye Research Australia (2008) Cataract. Melbourne: Centre for Eye Research Australia
- 11. Taylor HR, National Indigenous Eye Health Survey Team (2009) National Indigenous eye health survey: minum barreng (tracking eyes): summary report. Melbourne: Indigenous Eye Health Unit, The University of Melbourne
- 12. International Centre for Eyecare Education (2009) Eye health education resource kit: I see for culture. Sydney: Brien Holden Vision Institute, Public Health Division
- Disability Services Commission (2008) Disability Services Commission reconciliation action plan 2008-10. Perth: Disability Services Commission





The Australian Indigenous Health*InfoNet* is an innovative Internet resource that contributes to 'closing the gap' in health between Indigenous and other Australians by informing practice and policy in Indigenous health.

Two concepts underpin the Health*InfoNet*'s work. The first is evidence-informed decision-making, whereby practitioners and policy-makers have access to the best available research and other information. This concept is linked with that of translational research (TR), which involves making research and other information available in a form that has immediate, practical utility. Implementation of these two concepts involves synthesis, exchange and ethical application of knowledge through ongoing interaction with key stakeholders.

The Health*InfoNet*'s work in TR at a population-health level, in which it is at the forefront internationally, addresses the knowledge needs of a wide range of potential users, including policy-makers, health service providers, program managers, clinicians, Indigenous health workers, and other health professionals. The Health*InfoNet* also provides easy-to-read and summarised material for students and the general community.

The Health*InfoNet* encourages and supports informationsharing among practitioners, policy-makers and others working to improve Indigenous health – its free on line yarning places enable people across the country to share information, knowledge and experience. The Health*InfoNet* is funded mainly by the Australian Department of Health and Ageing. Its award-winning web resource (www. healthinfonet.ecu.edu.au) is free and available to everyone. **Director** Professor Neil Thomson

Address Australian Indigenous Health*InfoNet*

Edith Cowan University

2 Bradford Street

Mount Lawley, WA 6050

Telephone (08) 9370 6336

Facsimile (08) 9370 6022

Email healthinfonet@ecu.edu.au

Web www.healthinfonet.ecu.edu.au



FEATURED ARTWORK

Life before the drought

by Julie Weekes

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