



Key messages



Eye and vision problems are **the most common long-term health conditions**

experienced by Aboriginal and Torres Strait Islander people^[1].



The leading causes of bilateral vision impairment (when vision impairment occurs in both eyes) among Aboriginal and Torres Strait Islander adults are uncorrected refractive error, cataract and diabetic eye disease. However, about **90% of vision impairment and blindness from these causes is preventable or treatable**^[2].



Across the country, Aboriginal and Torres Strait Islander people and communities,

health professionals, program developers, policy makers and researchers are **working together to improve eye health**^[3].

How common is vision loss and blindness?



Aboriginal and Torres Strait Islander **children**, especially those living in remote areas, **often have better vision** than non-Indigenous children^[4]. Eye and sight problems increase with age^[1].



Bilateral vision impairment and blindness are 3 times more common among Aboriginal and Torres Strait Islander adults than among non-Indigenous adults^[2].



It is estimated that over **18,000** Aboriginal and Torres Strait Islander adults over the age of 40 are **living with vision impairment or blindness**^[2].



Among Aboriginal and Torres Strait Islander people who have answered questions about their eye health in national surveys, **one third (33%) have reported eye and vision problems**^[1].

Among Aboriginal and Torres Strait Islander adults (40 years or older) who had their **eyes examined in a national survey** in 2016^[2]:



11% had **bilateral vision impairment**



0.3% had **bilateral blindness** (based on 5 identified cases)



bilateral vision impairment was **most common in outer regional areas**



bilateral vision impairment was about **twice as high** among adults **in outer regional areas and very remote areas** than among adults in other areas.

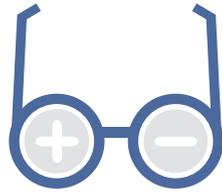


What are the main eye problems causing vision loss and blindness?

The main eye problems causing vision loss and blindness among Aboriginal and Torres Strait Islander people are **refractive error, cataracts and diabetic retinopathy**^[2]. In addition, **trachoma** is an eye infection that, in Australia, is generally only experienced by Aboriginal and Torres Strait Islander children in remote communities^[5]. All of these eye problems are preventable or treatable.

Refractive error

Refractive error (RE) is a common eye problem that causes **long or short sightedness and difficulties changing focus**^[2]. It is generally corrected by wearing glasses.



It is estimated that **7%** of Aboriginal and Torres Strait Islander adults have **bilateral vision impairment due to uncorrected RE**^[6].

Among Aboriginal and Torres Strait Islander adults with bilateral vision impairment it is estimated that^[2]:



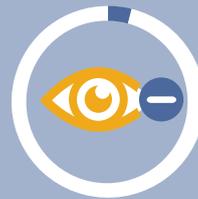
almost **two-thirds (63%)** is due to **uncorrected RE**, making it the main cause of bilateral vision impairment



the **average age of those with uncorrected RE is almost 10 years younger** than non-Indigenous adults with the same condition.

Cataracts

A cataract is a **cloudy area that can form on the lens of the eye** and interfere with vision^[2]. People are more likely to develop cataracts as they age^[7].



It is estimated that **4%** of Aboriginal and Torres Strait Islander adults have **bilateral or unilateral vision impairment due to cataracts**^[7].

Among Aboriginal and Torres Strait Islander adults with bilateral vision impairment it is estimated that^[2]:



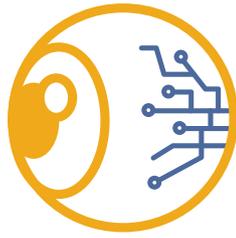
one-fifth (20%) is due to **cataracts**, making this eye problem the second leading cause of bilateral vision impairment



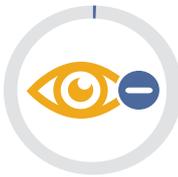
the **average age of those with cataracts is almost 10 years younger** than non-Indigenous adults with the same condition.

Diabetic retinopathy

Diabetes is common among Aboriginal and Torres Strait Islander people^[8] and increases the risk of vision loss^[9]. **Diabetic retinopathy (DR) is the main cause of vision loss from diabetes^[10]**. It is a complication resulting from damage to blood vessels at the back of the eye which, if left untreated, can lead to blindness^[2]. The longer people live with diabetes the more likely they are to develop DR^[10].



Among Aboriginal and Torres Strait Islander adults, it is estimated that:



0.6% have **bilateral vision impairment due to DR^[2]**



however, among those who report having diabetes, **40% have some form of DR** and **10% have vision threatening DR^[10]**.

Among Aboriginal and Torres Strait Islander adults with bilateral vision impairment it is estimated that^[2]:



5% is due to DR, making it the third leading cause of bilateral vision impairment



the **average age of those with DR is almost 15 years younger** than among non-Indigenous adults with the same condition.

Eye injury

Although not a main cause of vision loss, eye injury is **2-3 times more common among Aboriginal and Torres Strait Islander adults** (0.7%) than among non-Indigenous adults (0.3%)^[11]. It is most likely to occur among men and among adults living in very remote areas.



Trachoma and trichiasis

Trachoma is an infection that results in scarring of the eye^[5]. Trichiasis is caused by trachoma – it refers to the inward growth of eyelashes and leads to blindness. Trachoma and trichiasis are associated with poor environmental conditions. **Australia is the only developed country to still have trachoma** and it occurs almost exclusively among Aboriginal children living in remote communities.



Trachoma among Aboriginal children^[5]:



is found in some 'at-risk' **remote communities in WA, SA and the NT**



is **less common now than in the past**, but high levels are still found in some regions



affects **4% of those aged between 5-9 years** and living in communities that were screened for trachoma.

Aboriginal adults with trichiasis are believed to live in all states and territories^[5]. Trichiasis has been found to affect **0.3% of screened adults aged 15 years and older** that live in 'at-risk' communities in WA, SA and the NT.

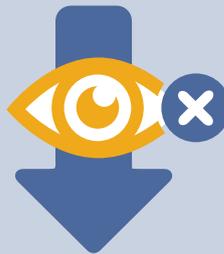


Summary

There is some **good news** about the eye health of Aboriginal and Torres Strait Islander people. Evidence from national surveys suggests that^[2, 4]:



vision impairment and blindness among children, particularly those in remote areas, is **less common** than among non-Indigenous children



blindness among adults may have **decreased**.

However, despite signs of progress, Aboriginal and Torres Strait Islander adults^[2]:



are still **three times more likely to experience vision impairment and blindness** than non-Indigenous adults.



experience **vision impairment at a younger age** than non-Indigenous Australians.

It is important that **data continue to be collected** and that the evidence-base for eye health continues to be developed. This is essential for **measuring progress, guiding the design of policy and programs, and informing the work that is being done** with Aboriginal and Torres Strait Islander people and communities to improve eye health^[3, 12].

Further information

- [Australian trachoma surveillance report 2017](#) (The Kirby Institute, 2018)
- [Indigenous eye health measures 2017](#) (Australian Institute of Health and Welfare, 2018)
- [National Indigenous eye health survey: minum barreng \(tracking eyes\): full report](#) (Taylor, H. R., & National Indigenous Eye Health Survey Team, 2009)
- [The National Eye Health Survey 2016 report](#) (Foreman, J. et. al., 2016)
- [Review of eye health among Aboriginal and Torres Strait Islander people](#) (Razavi, H., Burrow, S., Trzesinski, A., 2018)

These key facts have been developed by the Australian Indigenous HealthInfoNet and The Fred Hollows Foundation. This and other multimedia resources are available on the HealthInfoNet's Eye Health webpage: healthinfonet.ecu.edu.au/eye-health.

References

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2. Foreman, J., Keel, S., Xie, J., van Wijngaarden, P., Crowston, J., Taylor, H. R., & Dirani, M. (2016). *The National Eye Health Survey 2016 report*. Melbourne: Vision 2020 Australia.
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7. Keel, S., McGuinness, M. B., Foreman, J., Taylor, H. R., & Dirani, M. (2019). *The prevalence of visually significant cataract in the Australian National Eye Health Survey*. *Eye*.
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10. Keel, S., Xie, J., Foreman, J., van Wijngaarden, P., Taylor, H. R., & Dirani, M. (2017). *The prevalence of diabetic retinopathy in Australian adults with self-reported diabetes: The National Eye Health Survey*. *Ophthalmology*, 124(7), 977-984.
11. Keel, S., Xie, J., Foreman, J., Taylor, H. R., & Dirani, M. (2017). *The prevalence of vision loss due to ocular trauma in the Australian National Eye Health Survey*. *Injury*, 48(11), 2466-2469.
12. Vision 2020 Australia. (2017). *Closing the Gap in eye health and vision care by 2020*. Melbourne: Vision 2020 Australia.

