



**Australian Government**  
**Australian Institute of  
Health and Welfare**

**AIHW**

# Eye health measures for Aboriginal and Torres Strait Islander people 2024

**in-brief**





# Eye health measures for Aboriginal and Torres Strait Islander people 2024

in-brief

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The AIHW is a corporate Commonwealth entity producing authoritative and accessible information and statistics to inform and support better policy and service delivery decisions, leading to better health and wellbeing.

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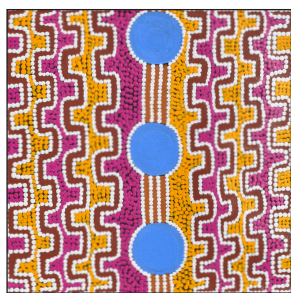
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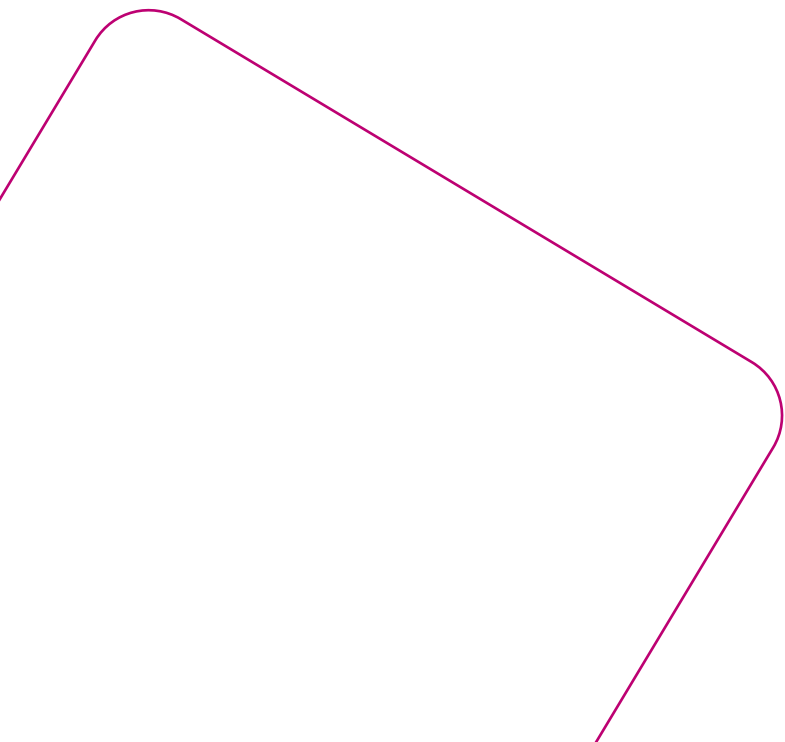
Cover art

*Ngurlu Jukurrpa* (Native Seed Dreaming) by Gloria Napangardi Gill.

Please note that there is the potential for minor revisions of data in this report.  
Please check the online version at [www.aihw.gov.au](http://www.aihw.gov.au) for any amendments.

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# Introduction

This in-brief summarises the findings from the *Eye health measures for Aboriginal and Torres Strait Islander people 2024* report and the accompanying web report.

These reports bring together the latest available data on the 22 eye health measures for Aboriginal and Torres Strait Islander (First Nations) people with ongoing data collections (see the following table: 'Eye health measures for Aboriginal and Torres Strait Islander people'). The data for these measures provide information on:

- the prevalence and causes of vision loss and blindness
- detection and screening of eye diseases and vision problems
- eye health treatment services
- the eye health workforce and outreach and other programs.

During the reporting years, there have been notable improvements in:

- trachoma prevalence in at-risk First Nations communities
- annual health assessments for First Nations people and health assessments for First Nations people with an initial eye examination
- eye examinations by an eye health professional
- rates of screening for diabetic retinopathy
- hospitalisations for cataract surgery
- the number and full-time equivalent (FTE) rates of optometrists
- occasions of service provided under the Visiting Optometrist Scheme and the Medical Outreach Indigenous Chronic Disease Program.

Waiting times for elective cataract surgery appear to have worsened as waiting times have increased.

The full report, web report and online tables are available at: <https://www.aihw.gov.au/reports/indigenous-australians/eye-health-measures-2024>.



## Population rates

Three types of population rates are used to present data in this report:

- *Crude rates*: the number of events divided by the total population. Crude rates are used to show differences within a population, such as the First Nations population. These rates can be misleading, however, when comparing populations with different age structures, such as First Nations people and non-Indigenous Australians. It is important to take these differences into account, particularly when looking at age related conditions, such as refractive error and cataracts.
- *Age-specific rates*: the number of events for a specified age group divided by the population in that age group. Age-specific rates allow populations with different age structures to be compared. These rates provide information on the measures of interest for different age groups but are difficult to summarise and present.
- *Age-standardised rates*: the crude rates for different groups, such as First Nations people and non-Indigenous Australians, applied to a standard population to produce a summary rate. Age-standardised rates control for the effects of age and provide a summary rate for each of the populations of interest. The resulting rates, however, are not the 'real' or reported rates that occur in the population.

Statistics presented in this release use the Australian Bureau of Statistics 2016 Census-based projection of the Aboriginal and Torres Strait Islander population. The 2021 Census-based population estimates and projections were released in mid-2024 and will be used in future editions of this report.



# Eye health measures for Aboriginal and Torres Strait Islander people

## Measures

### *Prevalence*

- 1.1 Prevalence of vision impairment and blindness
- 1.2 Main causes of vision impairment and blindness
- 1.3 Prevalence of trachoma and trichiasis

### *Diagnosis and screening services*

- 2.1 Annual health assessments
- 2.2 Eye examinations undertaken by an eye care professional
- 2.3 Target population screened for diabetic retinopathy
- 2.4 Trachoma and trichiasis screening coverage
- 2.5 Undiagnosed eye conditions
- 2.6 Eye health problems managed by GPs (discontinued)

### *Treatment services*

- 3.1 Hospitalisations for diseases of the eye
- 3.2 Hospitalisations for injuries to the eye
- 3.3 Hospitalisations for eye procedures
- 3.4 Cataract surgery rate
- 3.5 Cataract surgical coverage rate
- 3.6 Waiting times for elective cataract surgery
- 3.7 Target population treated for diabetic retinopathy
- 3.8 Trachoma and trichiasis treatment coverage
- 3.9 Treatment of refractive error
- 3.10 Spectacles dispensed under state schemes

### *Workforce and outreach services*

- 4.1 Number and rate of optometrists
- 4.2 Number and rate of ophthalmologists
- 4.3 Number and rate of allied ophthalmic personnel
- 4.4 Occasions of eye health services provided under outreach and other programs

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GPs = general practitioners.



# 1

## Eye health problems affect First Nations people

Eye diseases and vision problems are the most common long-term health conditions reported by First Nations people, with around one-third reporting long-term eye conditions. First Nations children have a lower incidence of poor vision than non-Indigenous Australian children, but First Nations people over the age of 40 have 3 times the rate of vision loss of non-Indigenous Australians.

Most of the blindness and vision impairment experienced by First Nations people is caused by conditions that are preventable or amenable to treatment – that is, vision loss due to refractive error, cataract and diabetic retinopathy. For example, use of glasses (spectacles) and cataract surgery are 2 relatively low-cost effective interventions for treating the main causes of vision loss (Foreman et al. 2016).

Monitoring the size and causes of vision impairment in the population over time can help governments and service providers to develop more effective eye health policies and programs.

The 2016 National Eye Health Survey is the main source of data on the prevalence of eye health problems among First Nations people.

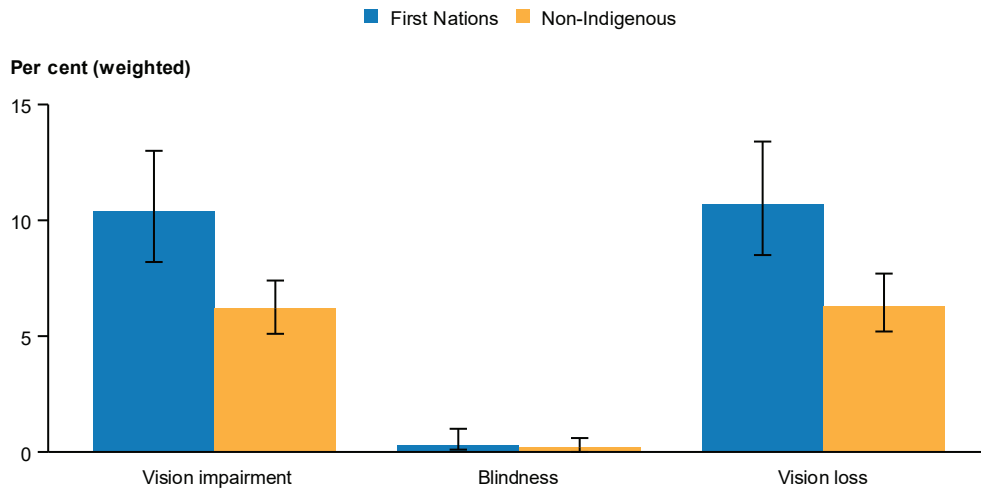
The survey used eye examinations to assess vision loss and blindness. The key results from this survey are presented in this section.

# Vision impairment and blindness

In 2016, an estimated 1 in 10 (10%) First Nations people aged 40 and over were visually impaired in both eyes and 1 in 330 (0.3%) were blind in both eyes.

First Nations people of this age were nearly 3 times as likely as non-Indigenous Australians aged 50 and over to suffer vision impairment or blindness.

## Vision loss (vision impairment and blindness), by Indigenous status, 2016



Notes:

1. Data are weighted to account for sampling rate in each remoteness stratum.
2. Error bars show 95% confidence intervals

Sources: Foreman et al. 2017; National Eye Health Survey data 2016; Taylor et al. 2010.

The 3 main causes of vision loss (vision impairment and blindness combined) for First Nations people aged 40 and over in 2016 were:

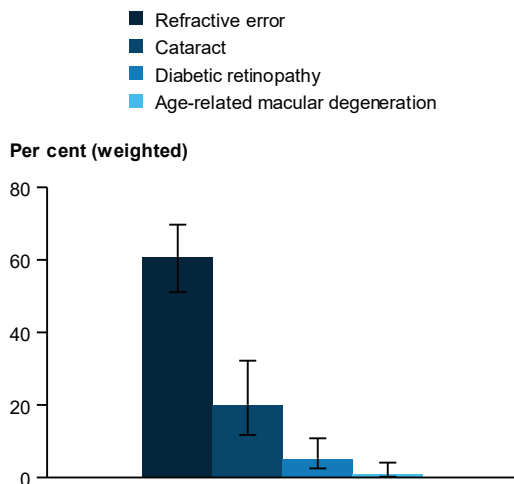
- refractive error (61%)
- cataract (20%)
- diabetic retinopathy (5.2%).

For non-Indigenous Australians, the main causes were:

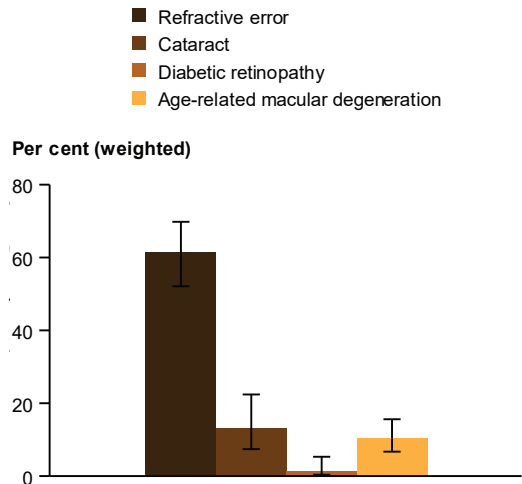
- refractive error (61%)
- cataract (13%)
- age-related macular degeneration (10%).

## Main causes of vision loss, by Indigenous status, 2016

a) First Nations people, by main cause



b) Non-Indigenous Australians, by main cause



Notes:

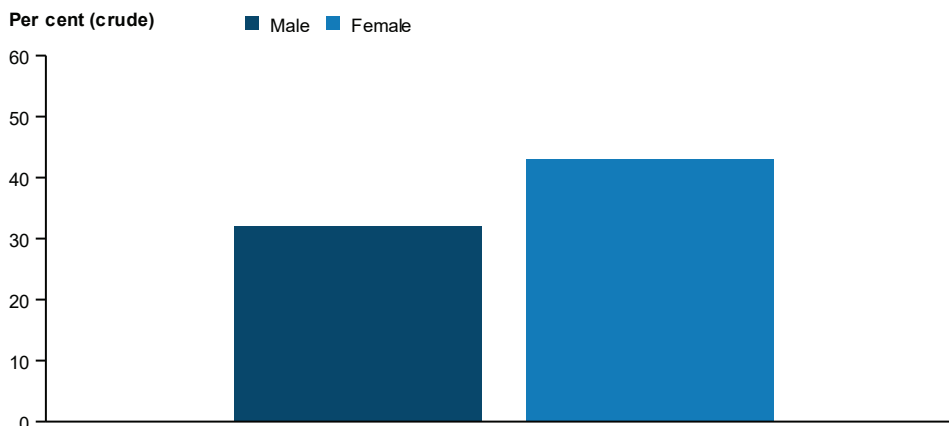
1. Data are weighted to account for sampling rate in each remoteness stratum.
2. Error bars show 95% confidence intervals.

Sources: AIHW analysis of Foreman et al. 2017 data; National Eye Health Survey data 2016.

## Self-reported eye or sight problems

In 2018–19, nearly 4 in 10 First Nations people (38%, or 307,300 people) reported long-term eye or sight problems. The prevalence of self-reported eye or sight problems was higher for First Nations females than First Nations males.

Proportion of First Nations people with self-reported eye/sight problems, by sex, 2018–19



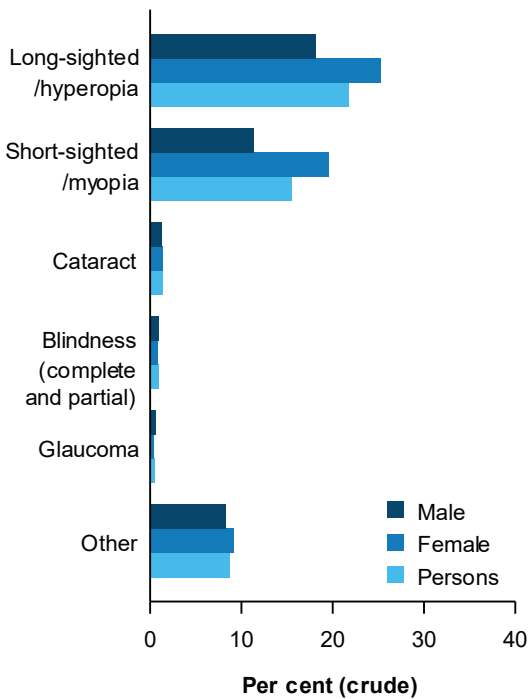
Source: AIHW analysis of ABS 2018–19 National Aboriginal and Torres Strait Islander Health Survey.

The main causes of sight problems reported by First Nations people were long-sightedness (22%), short-sightedness (16%), and cataract (1.4%).

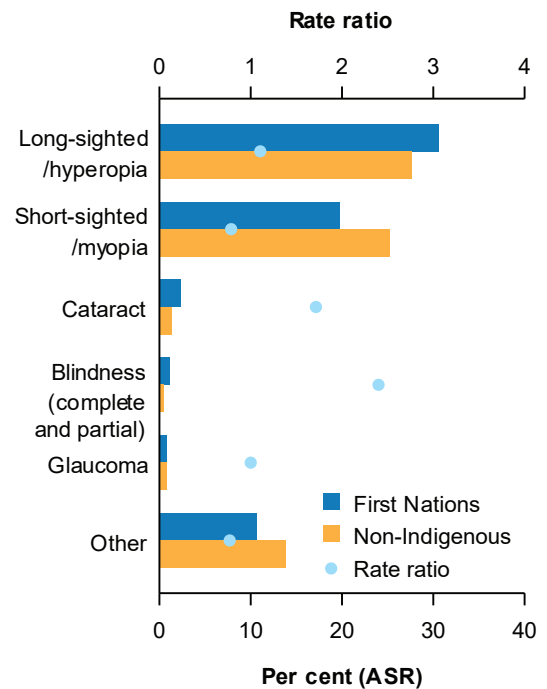
Adjusting for age, First Nations people were more likely than non-Indigenous Australians to report blindness (2.4 times as likely) or having a cataract (1.7 times as likely) as a cause of sight problems.

### Prevalence of eye/sight problems, by main cause, 2018–19

First Nations people, by sex



By Indigenous status



ASR = age-standardised rate.

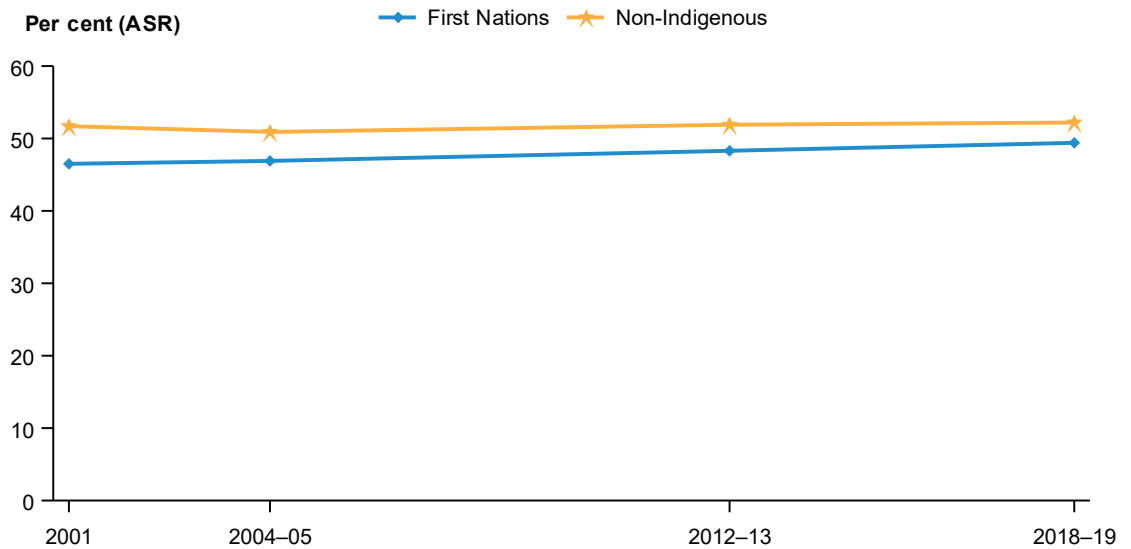
Note: The estimate for glaucoma for First Nations males, females and persons and the estimate for blindness for First Nations females have a relative standard error between 25% and 50% and should be used with caution. Multiple responses are allowed for these questions, so proportions may add to more than 100%.

Source: AIHW analysis of ABS 2018–19 National Aboriginal and Torres Strait Islander Health Survey and 2017–18 National Health Survey

Between 2001 and 2018–19, the age-standardised proportion of those with an eye or sight problem:

- increased from 47% to 49% for First Nations people
- remained stable for non-Indigenous Australians at around 52%

### Australians with self-reported eye/sight problems, by Indigenous status, 2001 to 2018–19



ASR = age-standardised rate.

Source: AIHW analysis of ABS 2018–19 National Aboriginal and Torres Strait Islander Health Survey.



# 2

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## Eye health diagnosis and screening

This section provides Medicare Benefits Schedule (MBS) data on health checks undertaken by general practitioners, eye examinations provided by eye care specialists (optometrists and ophthalmologists), and on screening for diabetic retinopathy.



## MBS items related to health assessments for First Nations people

Health assessments relate to MBS items 715 and 228 for health checks undertaken in the community, including health assessments provided via videoconference or teleconference (MBS items 92004, 92011, 92016, 92023).

Note that the MBS items 92016 and 92023 were removed from the MBS as of 1 July 2021.

## Voluntary Indigenous Identifier

The AIHW, in consultation with the Department of Health and Aged Care (DoHAC), has developed a scale-up methodology for estimating use of Medicare services by First Nations people (ABS 2011, 2012). The methodology compensates for the incompleteness of VII coverage by adjusting VII data based on its level of coverage compared with the total estimated First Nations population (Department of Health and Ageing 2012).

Before the current edition of this report the scale-up factors were calculated by the DoHAC. For this report they have been calculated by the AIHW; however, the estimates obtained are consistent with those produced by the DoHAC. The VII scale-up factors were applied to estimate MBS service use for the following measure and sub-measures:

- Eye examinations undertaken by an eye care professional
- Eye examinations among those treated for diabetes
- Treated for diabetic retinopathy among those screened for diabetic retinopathy
- Treated for diabetic retinopathy among those tested for diabetes.



## Health assessments for First Nations people

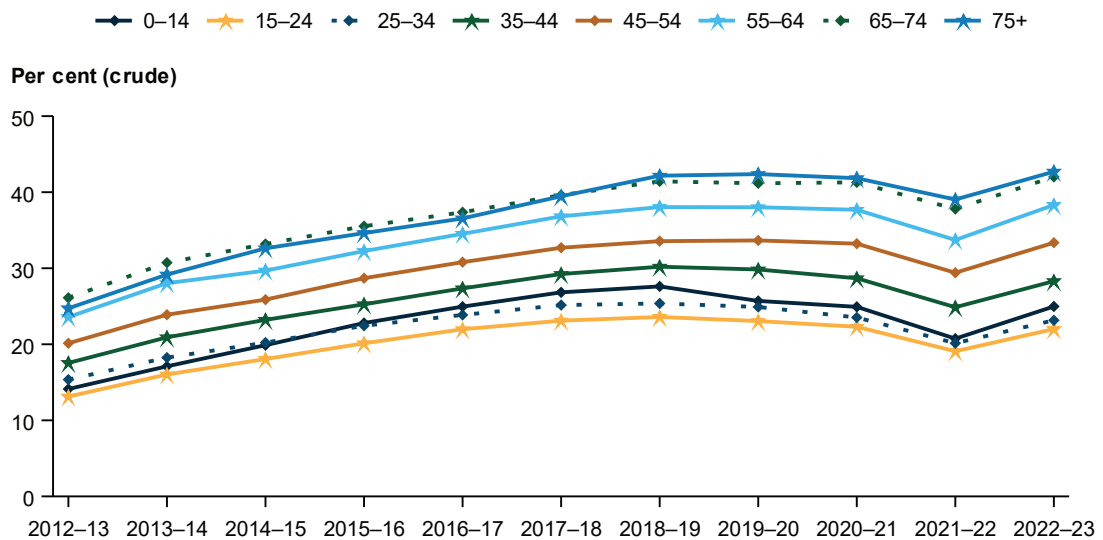
While eye health checks are meant to be a mandatory component of health assessments for First Nations people undertaken by general practitioners, these checks are not always conducted. Hence, specific data on the provision of eye health checks as part of health assessments are not available.

Over one-quarter (27% or 246,707) of First Nations people had a health assessment in 2022–23. This included about 2,600 (1%) health assessments provided via videoconference or teleconference.

Between 2012–13 and 2022–23, the age-standardised proportion of First Nations people who had a health assessment (including a telehealth assessment) grew from 18% in 2012–13 to 31% in 2018–19, it fell slightly over the next 3 years to 26% in 2021–22 before increasing to 29% in 2022–23.

The proportion of First Nations people who had a health assessment was highest in age groups 65 years and over and lowest in the age group 15 to 24 years.

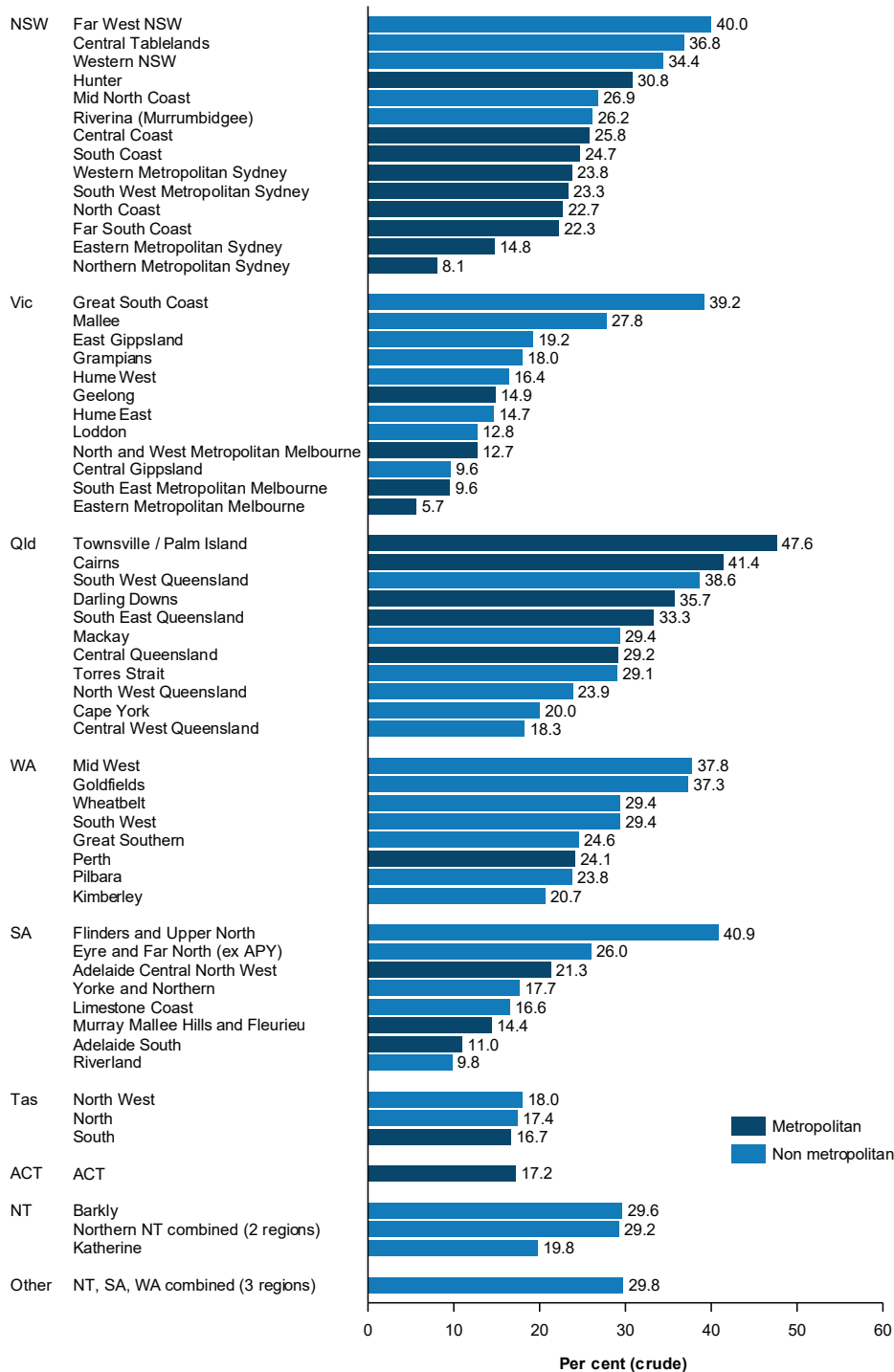
### MBS health assessments, First Nations people, by age group



Source: AIHW analysis of Medicare Benefits Schedule data.

The proportion of the First Nations population who had a health assessment varied across Australia: in 2022–23, the Roadmap region with the highest proportion was Townsville/Palm Island in Queensland (48%).

## MBS health assessments, First Nations people, by Roadmap region, 2022–23



APY = Anangu Pitjantjatjara Yankunytjatjara, NT, SA, WA combined includes Central Australia (NT), Ngaanyatjarra Lands (WA) and APY Lands (SA), Northern NT combined includes Greater Darwin and East Arnhem

Source: AIHW analysis of Medicare Benefits Schedule data.

# Health assessments for First Nations people and initial eye examination by an optometrist

To provide an indication of eye health follow-up services, this sub-measure presents the number of First Nations people who have a health assessment and an initial eye examination in a 12-month period. The sub-measure includes cases where the initial eye examination arises out of the health assessment as well as cases where it is independent of the assessment.

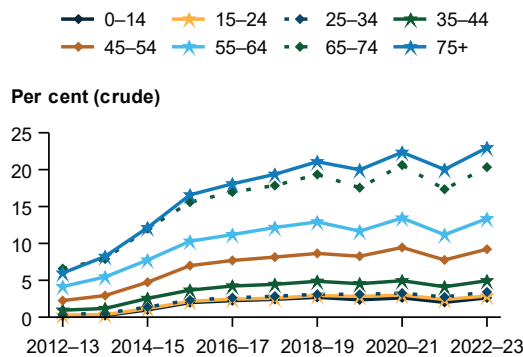
Just over 1 in 20 (5.5% or 49,995) First Nations people had a health assessment and an initial eye examination by an optometrist in 2022–23.

Between 2012–13 and 2022–23, the age-standardised proportion of First Nations people who had a health assessment (including a telehealth assessment) and an initial eye examination by an optometrist increased from around 2% in 2012–13 to around 7% in 2022–23.

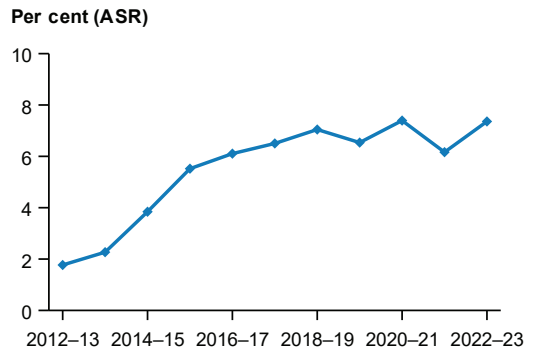
The proportion of First Nations people who had a health assessment and an initial eye examination by an optometrist was highest in the age group 75 years and over. The Roadmap regions with the highest proportions of First Nations people who had a health assessment and an initial examination by an optometrist were Western NSW (8.0%) and Townsville / Palm Island in Queensland (7.9%).

## MBS health assessments and initial eye examinations, First Nations people

### By age group



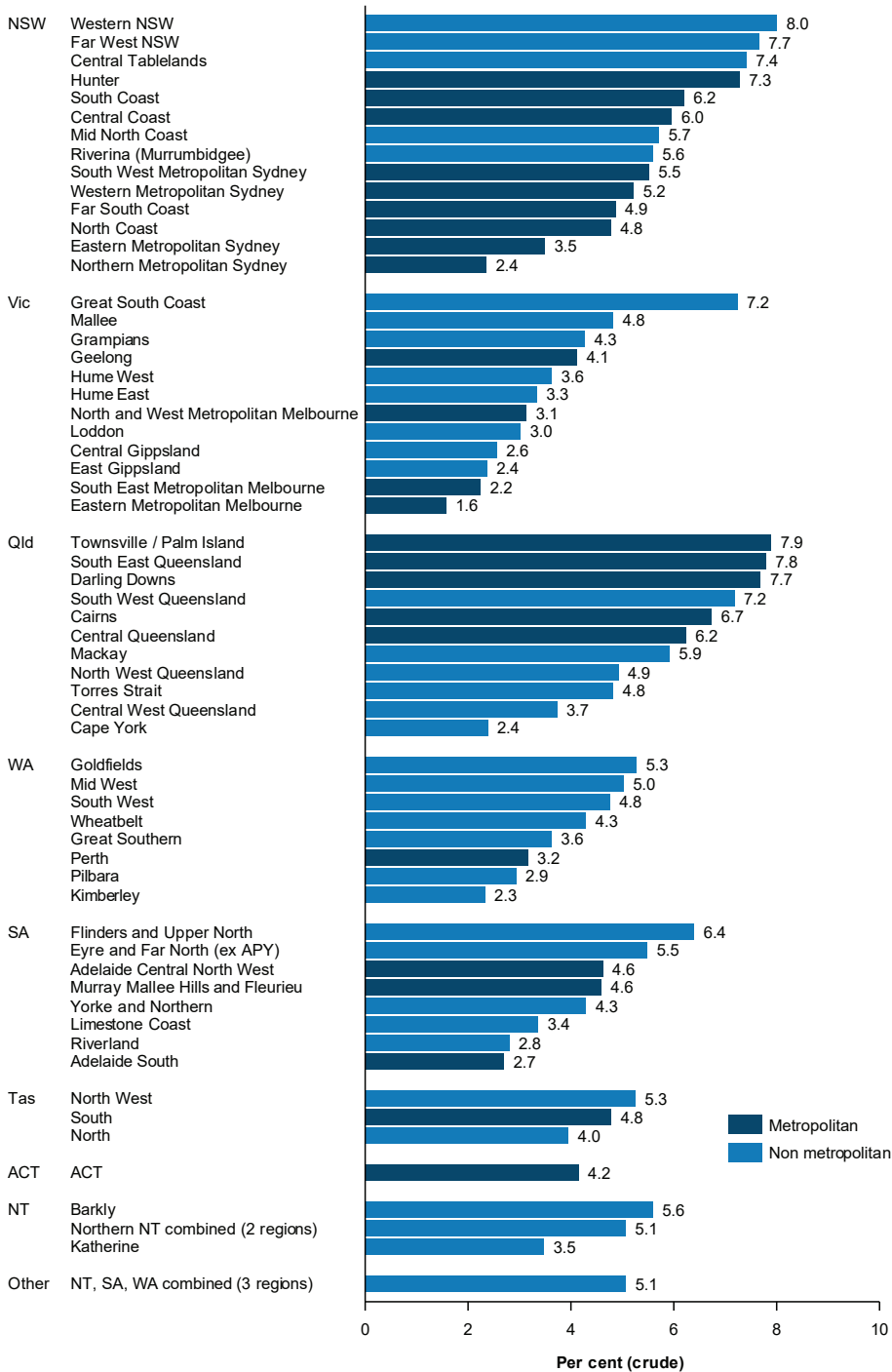
### Total (ASR)



ASR = age standardised rate.

Source: AIHW analysis of Medical Benefits Schedule data.

# MBS health assessments with initial eye examination, First Nations people, by Roadmap region, 2022–23



APY = Anangu Pitjantjatjara Yankunytjatjara, NT, SA, WA combined includes Central Australia (NT), Ngaanyatjarra Lands (WA) and APY Lands (SA), Northern NT combined includes Greater Darwin and East Arnhem.

Source: AIHW analysis of Medicare Benefits Schedule data

## Eye examinations

In 2022–23, around 126,898 (14%) First Nations people had had an initial eye examination by an optometrist or ophthalmologist in the previous 12 months.

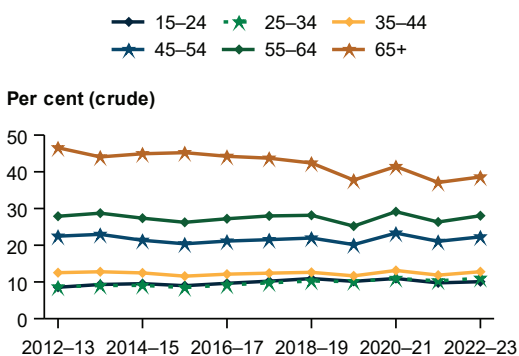
The proportion of First Nations people who had had an initial eye examination increased with age from around 10% of those aged 15–24 to around 39% of those aged 65 and over.

In the period from 2012–13 to 2022–23, the age-standardised proportion of the First Nations population who had an eye examination was stable, at around 18% to 20%.

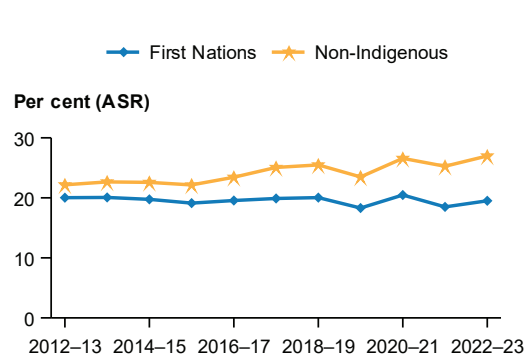
Over the same period, the age-standardised proportion for non-Indigenous Australians increased from 22% to 27%, indicating a widening of the gap.

### Eye examinations

First Nations people, by age group



By Indigenous status



ASR = age standardised rate.

Source: AIHW analysis of Medical Benefits Schedule data.

## Eye examinations among target population

Current guidelines recommend an annual eye examination for First Nations people with diabetes to screen for diabetic retinopathy – an eye condition that can cause vision impairment and blindness in people with diabetes.

The rate of eye examinations among those tested for diabetes was analysed to determine if people with diabetes were accessing retinopathy screening. First Nations people who had a diabetes test may not have been found to have diabetes, however, so this proxy measure may be an underestimate.

In 2022–23, among those who had a diabetes test in the previous 2 years, nearly 50%

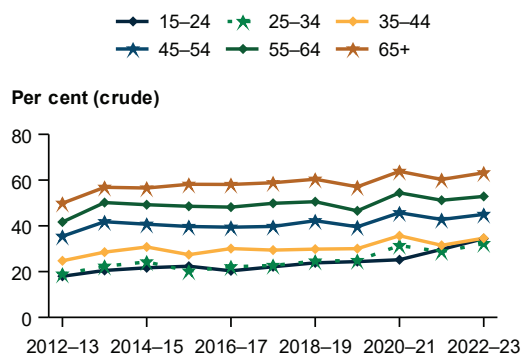
or 14,351 First Nations people also had an eye examination.

The proportion of First Nations people who had a diabetes test who also had an eye examination increased with age – from over 32% of those aged 15–34 to over 60% of those aged 65 and over.

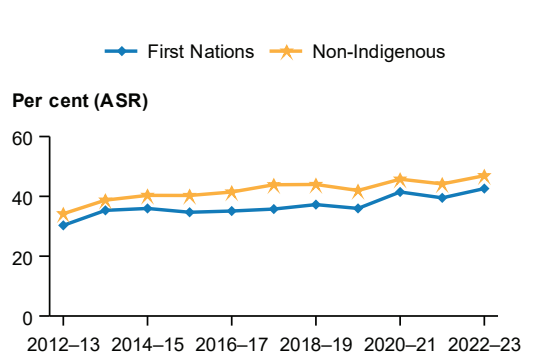
Between 2012–13 and 2022–23, the total age-standardised proportion of First Nations people tested for diabetes who had an eye examination increased from 30% to 43%; for non-Indigenous Australians, it rose from 34% to 47%.

## Population who had an eye examination among those tested for diabetes

**First Nations people, by age group**



**By Indigenous status**



ASR = age standardised rate.

Source: AIHW analysis of Medical Benefits Schedule data.



### Did you know?

In 2016, an estimated 387 million people worldwide were diagnosed with diabetes, which is predicted to increase to 592 million by 2035. Ninety-three million people are globally affected by diabetic retinopathy. The prevalence of diabetic retinopathy is 77.3% in type 1 diabetes patients and 25.1% in type 2 diabetes patients (Shukla and Tripathy 2022).

# 3

## Eye health treatment

Different eye problems require different treatments. For example, surgery is required to remove cataracts, while refractive error is treated by using visual aids, such as glasses and contact lenses.

This section includes data on hospitalisations for eye diseases and injuries, and for cataract surgery and the treatment of diabetic retinopathy. Information on subsidised glasses comes from state or territory government data

### Did you know?

A new World Health Organization (WHO) guide titled '[Eye care in health systems: guide for action](#)', which aims to help countries tackle the global eye care crisis was launched on 24 May 2022.

The guide, provides:

- an evidence-based framework to help countries assess their eye health services
- tools to support countries in achieving the WHO's global eye health targets (including, recommended national eye care indicators and planning tools for budgeting and human resources).

# Hospitalisations for diseases and injuries of the eye

In the 2-year period 2021–23, there were 13,329 (7.4 per 1,000 population) hospitalisations of First Nations people for eye diseases and 2,045 (1.1 per 1,000) for eye injuries.

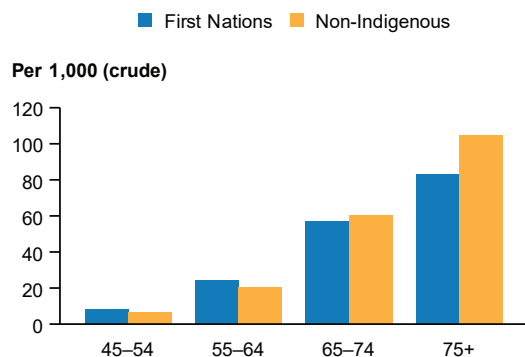
Hospitalisation rates for eye diseases increased with age, peaking at age 75 and over, while rates for eye injuries peaked in the middle years (ages 25–54).

Between 2015–16 and 2022–23, the age-standardised hospitalisation rate for diseases of the eye for First Nations people rose from 10.5 to 13.7 per 1,000 and rose slightly from 14.0 to 14.1 for non-Indigenous Australians.

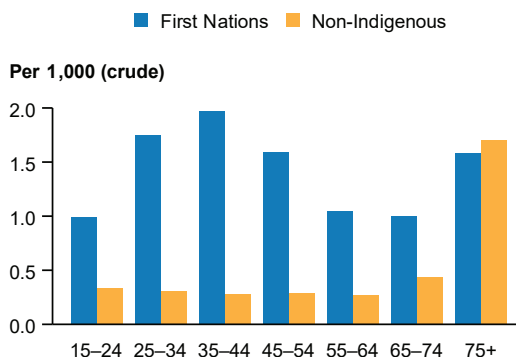
The age-standardised hospitalisation rate for injuries of the eye for First Nations people and for non-Indigenous Australians was fairly constant over the same period.

## Hospitalisations for diseases of the eye and injuries to the eye

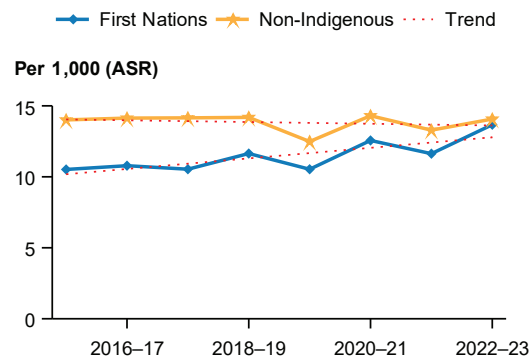
Eye diseases, by age group, 2021–23



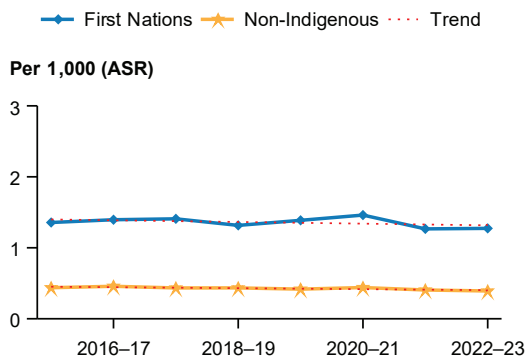
Eye injuries, by age group, 2021–23



Eye diseases, time trend, 2015–16 to 2022–23



Eye injuries, time trend, 2015–16 to 2022–23



ASR = age standardised rate.

Source: AIHW analysis of National Hospital Morbidity Database.



# Hospitalisations for eye procedures

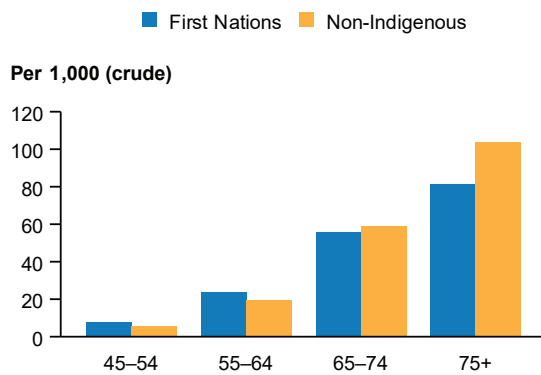
In the 2-year period 2021–23, there were 12,874 hospitalisations of First Nations people for eye procedures – a crude rate of 7.2 per 1,000 population.

The rate of hospitalisations for eye procedures for First Nations people and non-Indigenous Australians increased with age, peaking at age 75 and over.

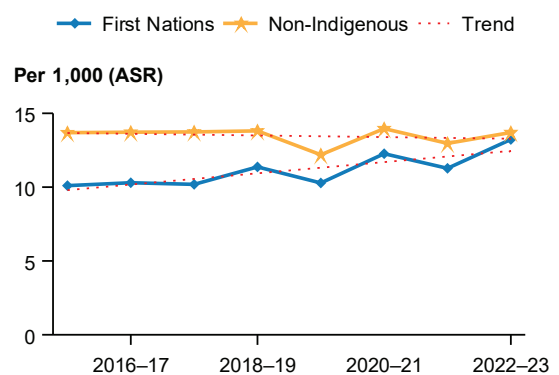
Between 2015–16 and 2022–23, the age-standardised hospitalisation rate for eye procedures for First Nations people rose from 10.1 to 13.2 per 1,000 while the rate for non-Indigenous Australians remained fairly constant at around 14. The trend line shows a slight rise in the age standardised hospitalisation rate for First Nations people over this period.

## Hospitalisations for eye procedures, by Indigenous status

By age group, 2021–23



Time trend, 2015–16 to 2022–23



ASR = age standardised rate.

Source: AIHW analysis of National Hospital Morbidity Database.



### Did you know?

According to a study of hospitalisation records in Sweden, low socioeconomic status is associated with increases in a number of age-related eye diseases – suggesting the importance of community-level factors in preventing hospitalisations for eye disease (Hamano et al. 2015).

## Cataract surgery

In 2021–23, there were 8,008 hospitalisations of First Nations people for cataract surgery. The number of hospitalisations over the 2 year period was below the estimated number of First Nations people needing cataract surgery (over 17,000).

Hospitalisation rates for cataract surgery for First Nations people were higher in regional Roadmap regions than in metropolitan areas.

In 2021–23, two Roadmap regions, Kimberley and Mid West in Western Australia, exceeded the estimated need for cataract surgery. The estimated need for cataract surgery provides a target for the provision of eye care services for First Nations people and facilitates the planning of services but is not a limit on the need for services. In these regions, the number of hospitalisations for cataract surgery exceeded the estimated number of hospitalisations needed. Both regions had hospitalisation rates greater than 10,500 per 1,000,000.

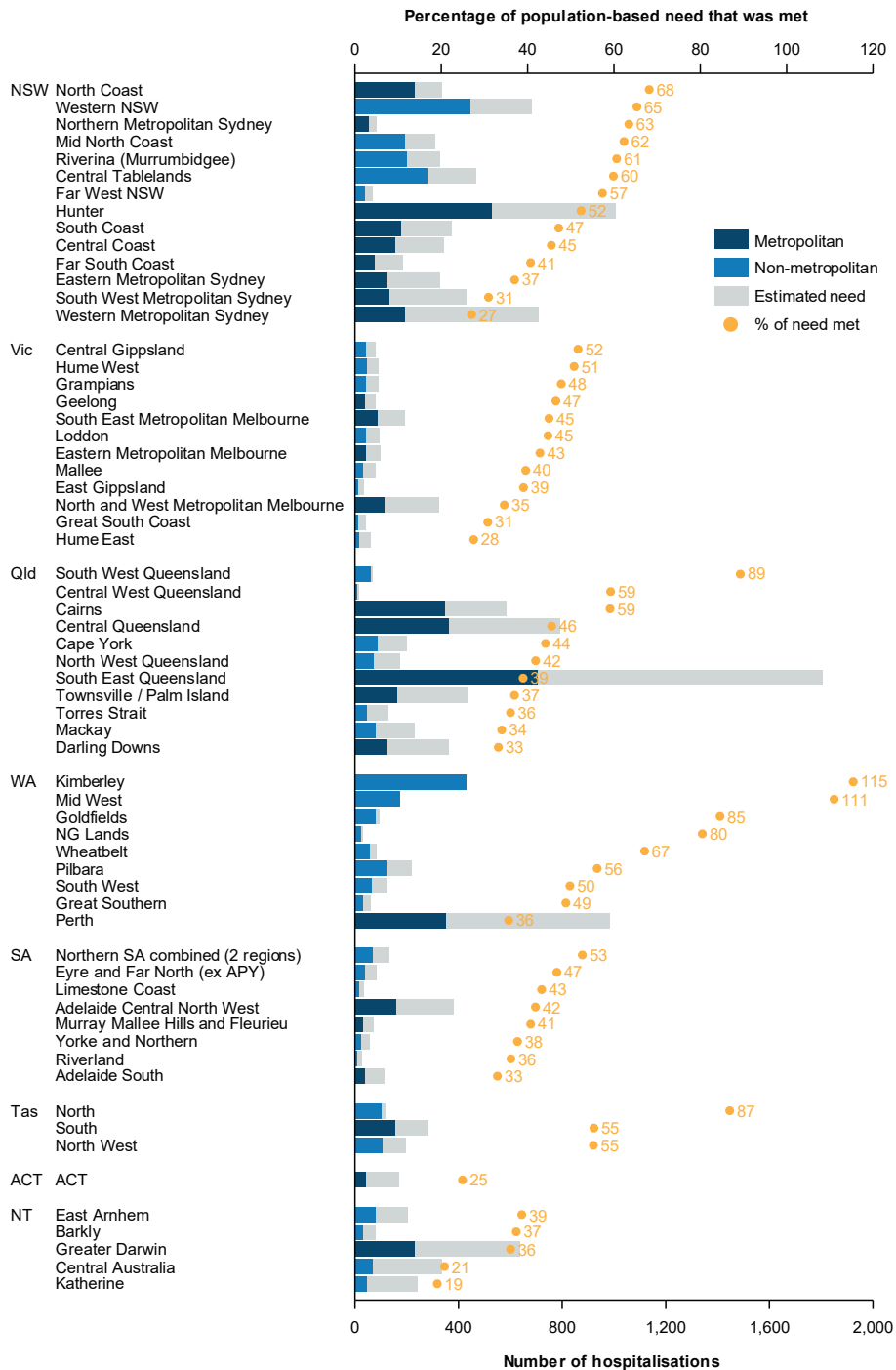


### Did you know?

It is estimated that the Australian public hospital system provides around 29% of cataract surgeries for non-Indigenous Australians (ACSQHC 2017) and 80% of cataract surgeries for First Nations people (Randall et al. 2014). Hence, delays or interruptions to the public health service provision disproportionately affect First Nations people with cataracts.

A likely contributing factor to this is the lower proportion of Indigenous adults having private health insurance (estimated at 20% compared with 57% of all Australian adults living in non-remote areas in 2012–13) (AIHW 2015).

# Hospitalisations and estimated need for cataract surgery, First Nations people, by Roadmap region, 2011–23



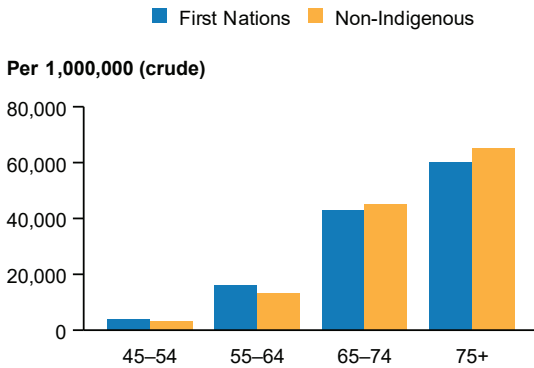
APY = Anangu Pitjantjatjara Yankunytjatjara, Northern SA combined (2 regions) = Anangu Pitjantjatjara Yankunytjatjara (APY) Lands and Flinders and Upper North.

Source: AIHW analysis of National Hospital Morbidity Database and of the calculator for the delivery and coordination of eye care services (Indigenous Eye Health Unit (IEHU) – see References).

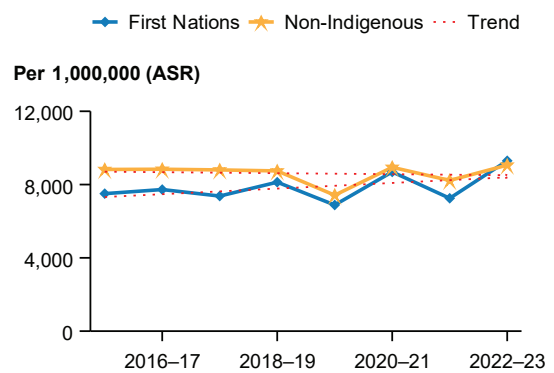
The gap in age-standardised cataract surgery rates between First Nations people and non-Indigenous Australians has narrowed over the last 10 years, mostly due to the rise in rates for First Nations people.

## Cataract surgery, by Indigenous status

By age group, 2021–23



Time trend, 2015–16 to 2022–23



ASR = age standardised rate.

Source: AIHW analysis of National Hospital Morbidity Database

Hospitalisation rates for First Nations people and non-Indigenous Australians for cataract surgery increased in all age groups from 2015–16 to 2018–19, they then fluctuated but increased overall between 2018–19 and 2022–23. In 2022–23, the rate of hospitalisations was higher for First Nations people aged 45–54 and 55–64 than for non-Indigenous Australians of the same age. However, at older ages, rates were similar for non-Indigenous Australians and First Nations people.

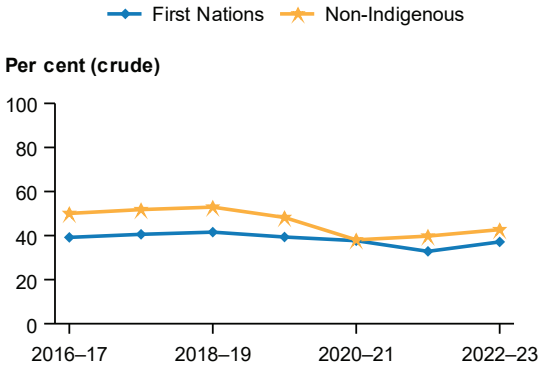
In 2022–23, First Nations people waited longer for cataract surgery (a median number of 159 days) than non-Indigenous Australians (118 days).

The proportion of First Nations people who waited more than 365 days for cataract surgery (11%) was slightly lower than the proportion of non-Indigenous Australians who waited this long (12%).

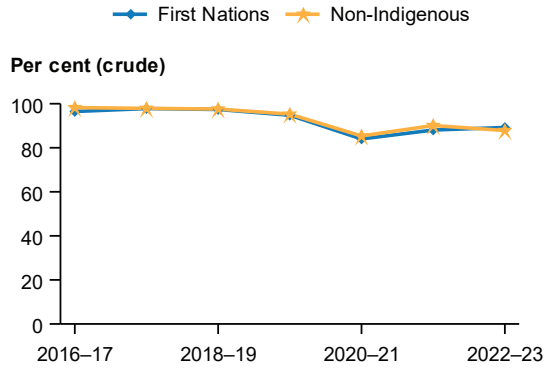
Between 2012–13 and 2022–23, the proportion of First Nations people who were treated within 90 days for elective cataract surgery fluctuated but remained relatively stable. The proportion of non-Indigenous Australians dropped over this period (from 50% to 43%). The proportion of First Nations people and non-Indigenous Australians treated within 365 days dropped over this period (from 93% to 89% and from 97% to 88%, respectively).

# Waiting times for elective cataract surgery

Time trend, treated within 90 days, 2016-17 to 2022-23



Time trend, treated within 365 days, 2016-17 to 2022-23



Source: AIHW analysis of National Hospital Morbidity Database

# Treatment for diabetic retinopathy

## Treated for diabetic retinopathy among those screened for diabetic retinopathy

In 2022–23, 511 First Nations people who were screened for diabetic retinopathy underwent treatment (representing 3.6% of those screened for diabetic retinopathy).

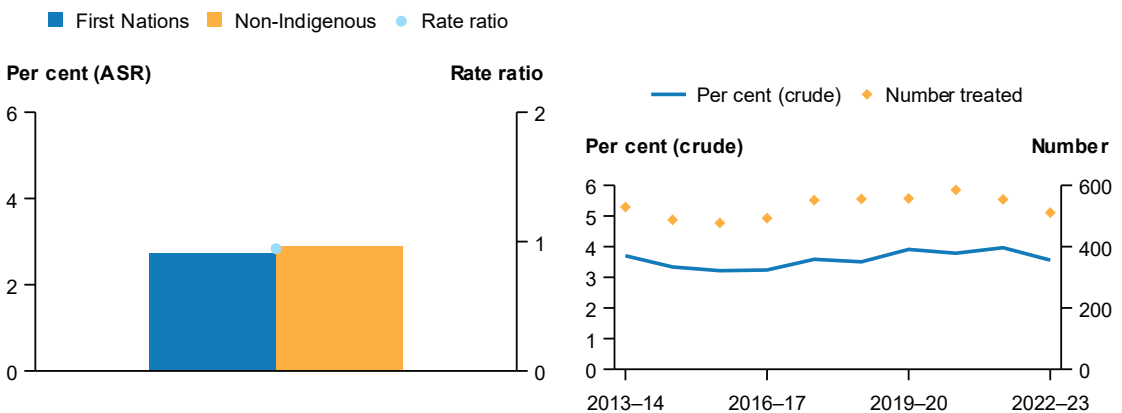
The rate ratio of the age-standardised proportion of First Nations people and non-Indigenous Australians who were treated was 0.9.

Between 2013–14 and 2022–23, the number of First Nations people who were screened for diabetic retinopathy underwent treatment fell from 529 in 2013–14 to 511 in 2022–23.

## Population treated for diabetic retinopathy among those screened for diabetic retinopathy

By Indigenous status, 2022–23

First Nations people, 2013–14 to 2022–23



ASR = age standardised rate.

Source: AIHW analysis of Medical Benefits Schedule (MBS) data.



### Did you know?

The timely treatment of diabetic retinopathy can prevent vision loss. Treatment generally involves injections into the eye or laser therapy. Recent development involving newer retinal diagnostics are proving beneficial in optimising both initiation and maintenance of therapy. Recent advances in novel pharmaceutical agents and ocular drug delivery methods show promise in better controlling the disease as well reducing the burden treatment (Mansour et al. 2020).

## Treated for diabetic retinopathy among those tested for diabetes

In 2022–23, 511 First Nations people who were screened for diabetes underwent treatment for diabetic retinopathy (representing 1.8% of those screened for diabetes).

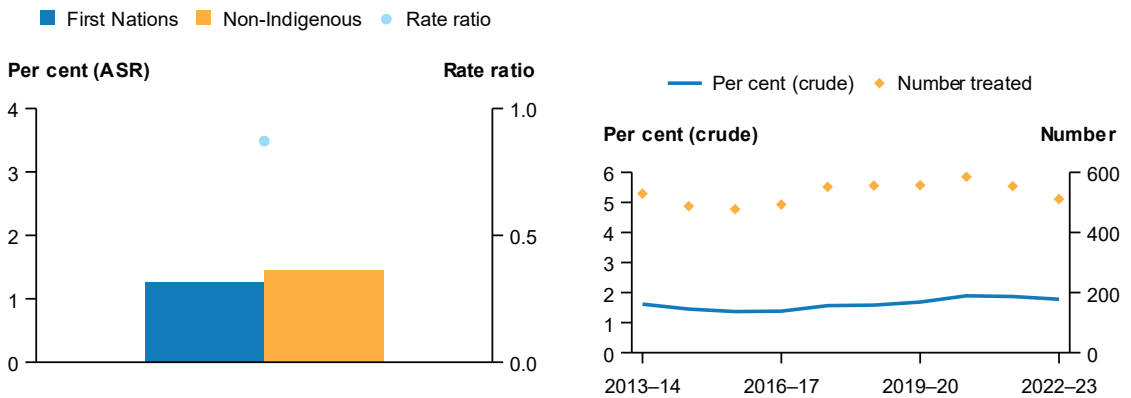
The rate ratio of the age-standardised proportion of First Nations people and non-Indigenous Australians who were treated was 0.9.

Between 2013–14 and 2022–23, the crude per cent of First Nations people who were screened for diabetes underwent treatment for diabetic retinopathy increased from 1.6% (529 from 32,785) in 2013–14 to 1.8 (511 from 28,762) in 2022–23.

## Population treated for diabetic retinopathy among those screened for diabetes

By Indigenous status, 2022–23

First Nations people, 2013–14 to 2022–23



ASR = age standardised rate.

Source: AIHW analysis of Medical Benefits Schedule (MBS) data.

## Subsidised spectacles

All states and territories have schemes that provide eye care and visual aids, including glasses, to eligible people at low or no cost. Only 4 states, however, could provide data on the number of spectacles dispensed to First Nations people.

In 2022–23, the number of spectacles dispensed to First Nations people under state schemes was:

- 10,611 in New South Wales (35 per 1,000)
- 7,199 in Queensland (28 per 1,000)
- 2,819 in Victoria (42 per 1,000)
- 1,292 in South Australia (27 per 1,000).

The number of spectacles dispensed in Victoria was closest to meeting the estimated number of First Nations people aged over 40 who needed them – with an estimated 65% having their needs met.



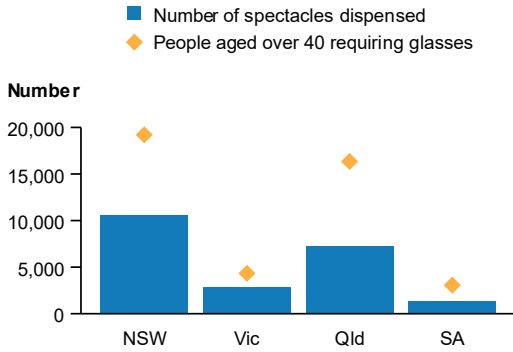
### Did you know?

The provision of spectacles is a low-cost measure that can alleviate refractive error, the main cause of vision loss for First Nations people.

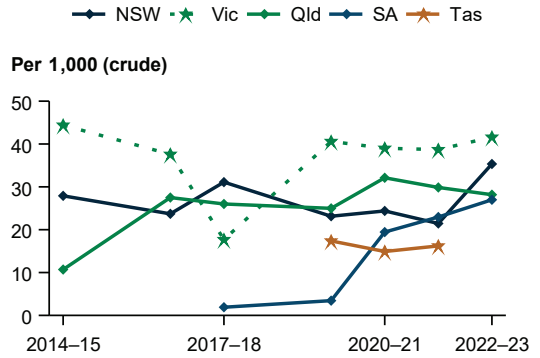


## State spectacles schemes, First Nations people

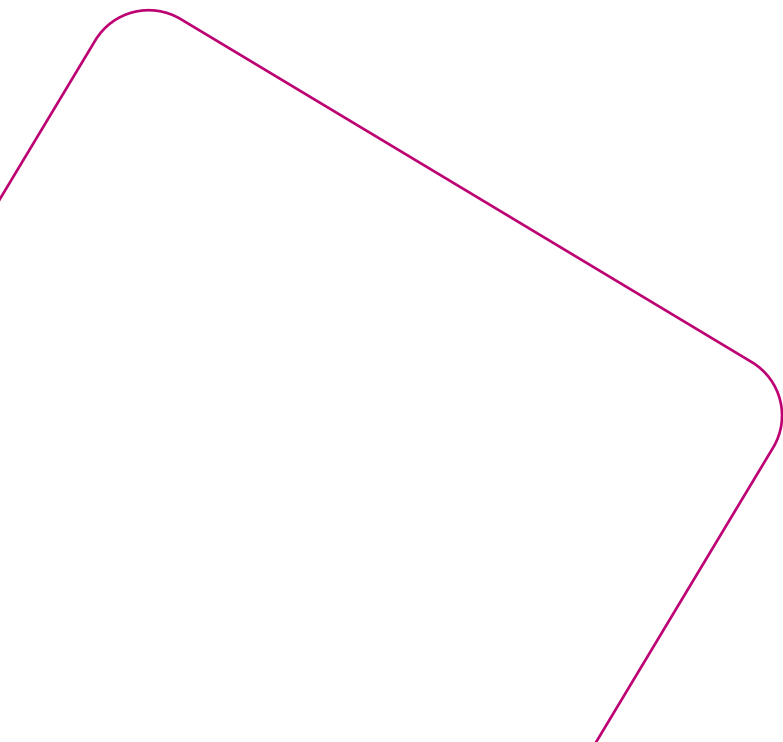
**Spectacles dispensed and estimated need by jurisdiction, 2022-23**



**Spectacles dispensed by jurisdiction, 2014-15 to 2022-23**



Sources: AIHW analysis of New South Wales Department of Family and Community Services data (unpublished), Australian College of Optometry Victorian data (unpublished), Queensland Health data (unpublished), South Australia Department of Human Services data (unpublished); Tasmanian Health Service data (unpublished); and the calculator for the delivery and coordination of eye care services (Indigenous Eye Health Unit (IEHU – see References)).



# 4

## Trachoma and trichiasis

Trachoma is an infectious disease of the eye caused by the bacteria *Chlamydia trachomatis*. Repeated infections can result in scarring, in-turned eyelashes (trichiasis) and blindness. Trachoma is a disease of poverty and is linked to poor living conditions, including inadequate housing, water and sanitation facilities to support hygiene practices. Australia has adopted the World Health Organization's package of interventions for trachoma control known as the SAFE strategy: Surgery to correct trichiasis, Antibiotics to treat chlamydial infection, Facial cleanliness to reduce transmission and prevent reinfection and Environmental improvements to increase access to water, sanitation and hygiene facilities (Kuper et al., 2003; Solomon et al., 2020).

Trachoma is not commonly found in high-income countries, but it has been endemic in some remote First Nations communities in Western Australia, South Australia, and the Northern Territory.

The Australian Government funds trachoma control, surveillance and reporting. National data on trachoma come from the Australian Trachoma Surveillance Reports from the Kirby Institute, UNSW Sydney.

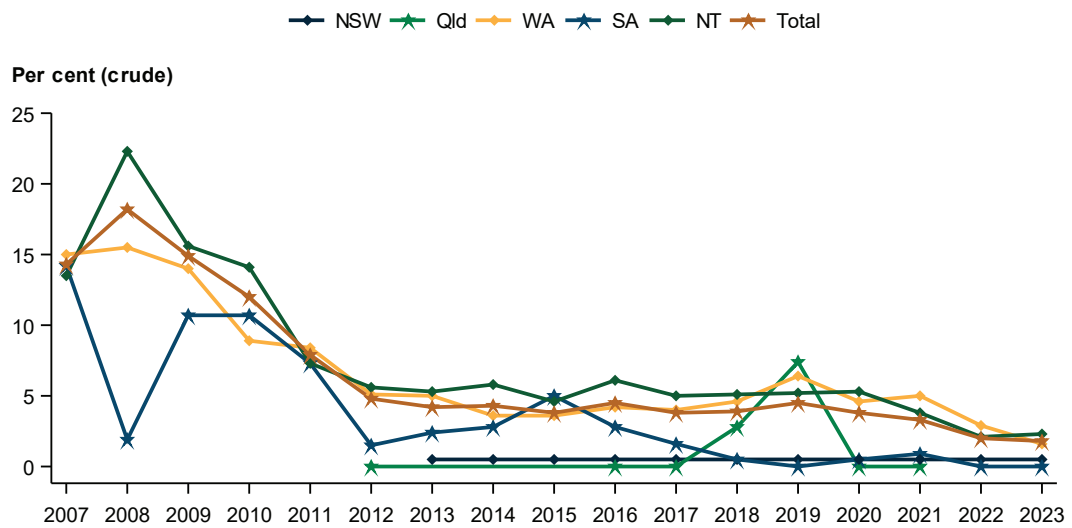


# Prevalence of trachoma

In 2023, trachoma screening was undertaken among children aged 5–9 years in 67 at-risk communities across Western Australia, South Australia, and the Northern Territory.

Overall, trachoma prevalence among children aged 5–9 years fell from 14% in 2007 to 1.8% in 2023.

## Overall trachoma prevalence among First Nations children aged 5–9 years in all current and former at-risk communities



Sources: Kirby Institute 2011, 2012, 2013, 2014, 2015, 2016, 2018, 2019a, 2019b, 2020, 2021, 2022, 2023, in press.

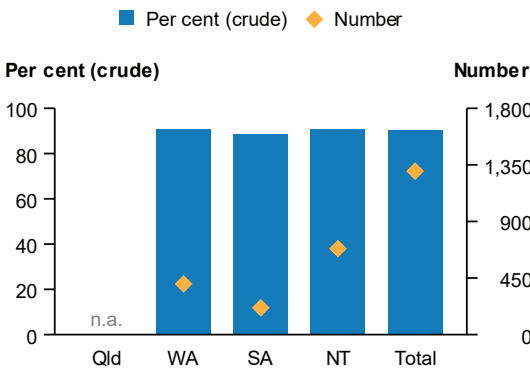
# Trachoma screening and treatment

In 2023, 1,300 First Nations children aged 5–9 years were screened for trachoma in 67 communities. There was 91% screening coverage for this group. The proportions of children aged 5–9 screened for trachoma in at-risk communities were 91% in Western Australia (403 children screened), 89% in South Australia (213 children screened) and 91% in the Northern Territory (684 children screened). In Queensland, screening for trachoma was not undertaken in 2023.

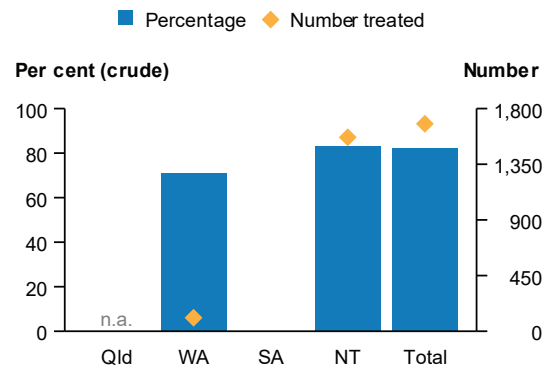
In 2023, in communities where active trachoma was identified, a total of 1,677 community members (active cases and household/community contacts) received treatment out of an estimated 2,044 who required treatment, a rate of 82%. The proportion of cases, household and community contacts who received required treatment was 71% in Western Australia (109 persons treated) and 83% in the Northern Territory (1,568 persons treated). No active trachoma cases were identified in South Australia.

## Trachoma screening and treatment in at-risk communities, by jurisdiction, 2023

**Trachoma screening coverage in at-risk communities screened, children aged 5-9 years**



**Community members treated in communities where active trachoma was identified**



Source: Kirby Institute in press.

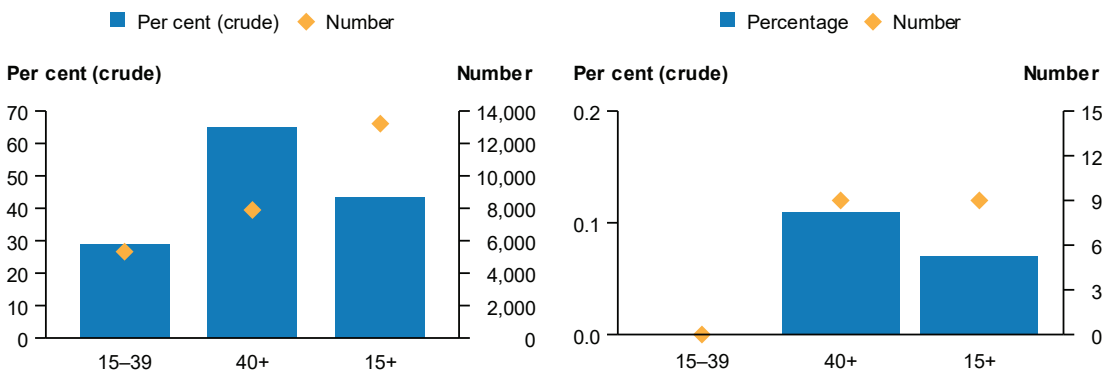
# Trachoma-related trichiasis

Screening for trichiasis is undertaken through a range of strategies, including during adult health assessments.

In 2023, trichiasis screening data was reported for 150 communities in trachoma endemic regions in 3 jurisdictions (Western Australia, South Australia, and the Northern Territory):

- 5,324 First Nations adults aged 15–39 years, and 7,895 First Nations adults aged 40 years and over, were screened for trichiasis.
- 9 cases of trichiasis were identified, a prevalence rate of 0.07% amongst screened persons.

## Trichiasis screening coverage and prevalence in at-risk communities, by age group, 2023



Source: Kirby Institute in press.

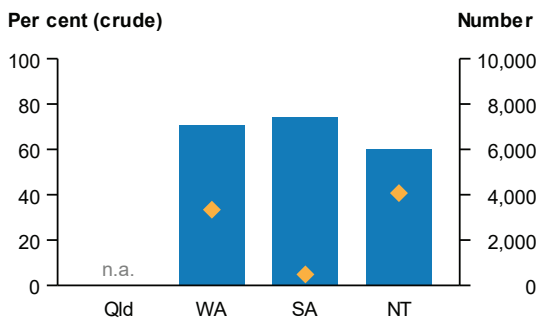
In 2023, the estimated proportion of First Nations people aged 40 years and over in trachoma endemic regions screened for trichiasis was 71% in Western Australia (3,339 persons screened), 74% in South Australia (485 persons screened) and 60% in the Northern Territory (4,071 persons screened). The estimated proportion of First Nations people aged 15 years and over in trachoma endemic regions screened was 30%, 59% and 50%, respectively.

Surgery to correct trichiasis was undertaken for seven persons aged 40 years and over in 2023. Four of the seven surgeries took place in Western Australia.

## Trichiasis screening and treatment coverage, First Nations people, aged 40 years and over, by jurisdiction, 2023

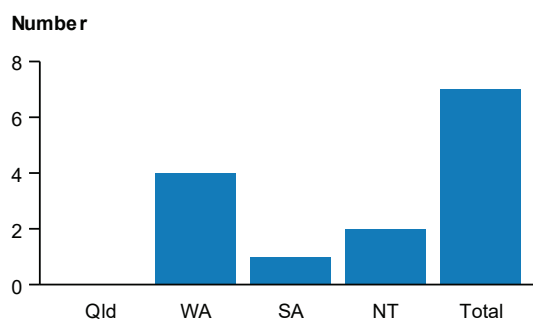
### Trichiasis screening

■ Per cent (crude) ◆ Number



### Trichiasis treatment

■ Had surgery in the last 12 months



Source: Kirby Institute in press.

# 5



## Eye health workforce

Optometrists and ophthalmologists Optometrists and ophthalmologists play an important role in the eye health of First Nations people.

Optometrists are eye care professionals who perform comprehensive eye examinations and vision tests to determine the presence of visual, ocular, and other abnormalities; ocular diseases; and systemic diseases with ocular manifestations. They also prescribe lenses, other optical aids, therapy and medication to correct and manage vision problems and eye diseases.

Ophthalmologists are medical eye specialists who provide diagnostic, treatment and preventive medical services related to diseases, injuries and deficiencies of the human eye and associated structures.

Data on the size and location of the eye health workforce can indicate the availability of specialised services in different regions. Annual data on the number of registered optometrists and ophthalmologists are available from the National Health Workforce Dataset.

### Full-time equivalent rate

The full-time equivalent rate (FTE) is a measure used to present data on the eye health workforce. This is calculated by dividing the total hours worked by employees in an occupation, by the standard hours worked.

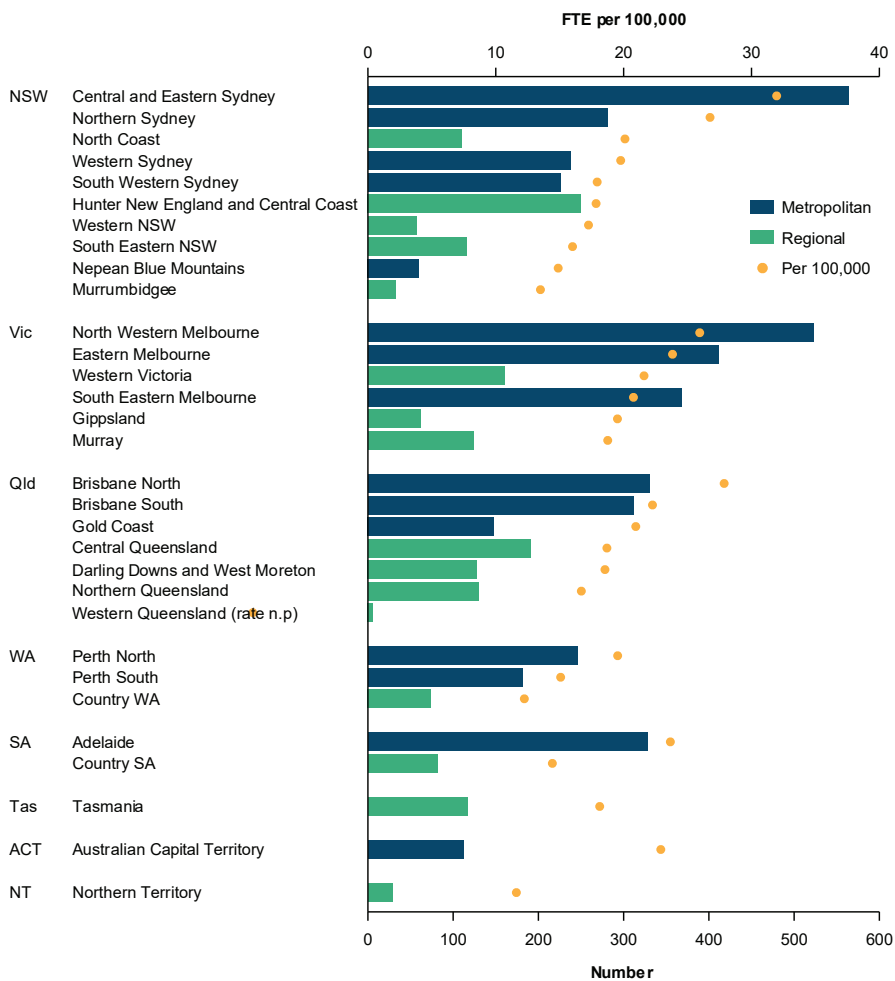


# Optometrists

In 2022, around 6,000 optometrists were employed in Australia (21 FTE per 100,000), an increase of 1,783 optometrists since 2013 (4,219 optometrists were employed in 2013).

The number and rate of optometrists were higher in metropolitan areas. The Central and Eastern Sydney primary health network had the highest rate of optometrists (564 and 32 FTE per 100,000).

## Optometrists, by Primary Health Network, 2022



Note: Rates have not been published (n.p.) where fewer than 10 people employed for any occupation was fewer than 10 people.

Source: AIHW analysis of National Health Workforce Dataset.



### Did you know?

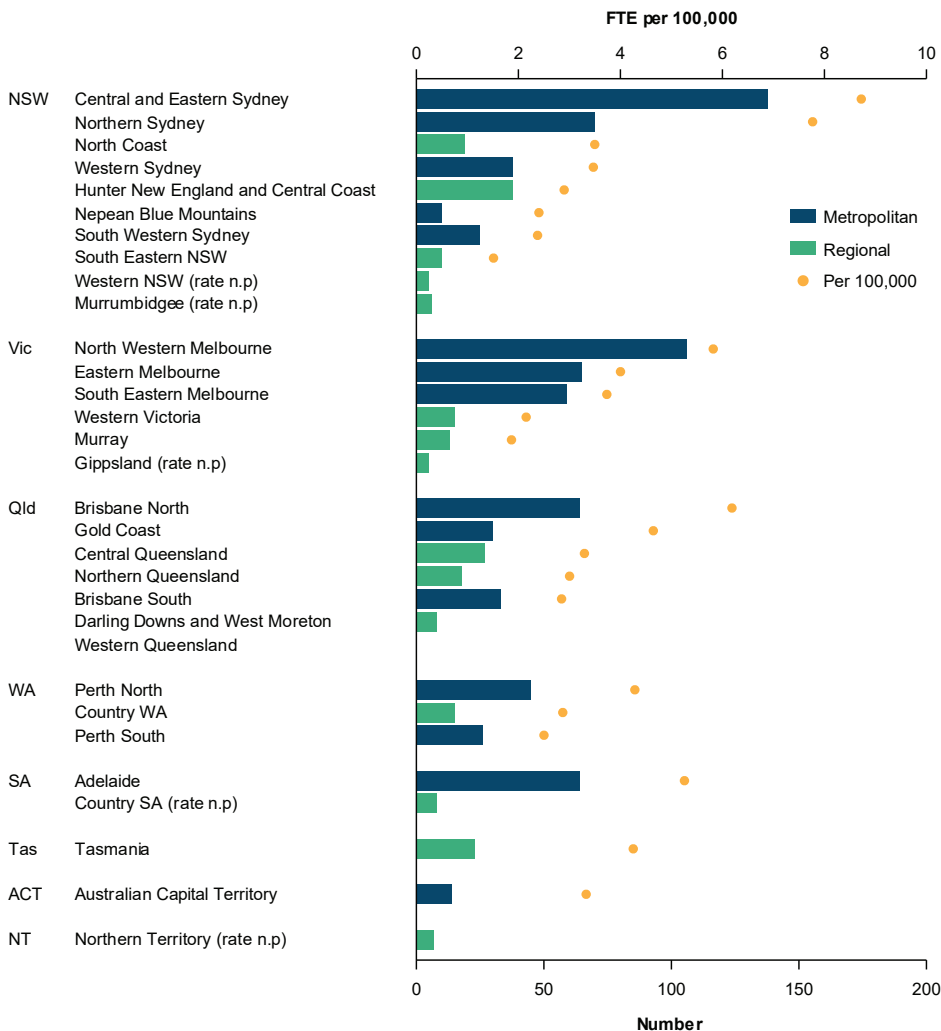
An optometrist is often the first port of call for any problems with eyes or vision. Being a primary health provider, they play a key role in providing accessible eye care to their communities.

# Ophthalmologists

The ophthalmologist workforce is smaller than the optometrist workforce with 1,004 ophthalmologists employed in Australia (3.9 FTE per 100,000) in 2023.

Ophthalmologists were primarily located in metropolitan areas, with the highest rate in the Central and Eastern Sydney Primary Health Network (138 and 8.7 FTE per 100,000).

## Ophthalmologists, by Primary Health Network, 2023



Note: Rates have not been published (n.p.) where fewer than 10 people employed for any occupation was fewer than 10 people.

Source: AIHW analysis of National Health Workforce Dataset.



### Did you know?

An ophthalmologist is a medical specialist, also known as an eye doctor or eye surgeon. Most people come across an ophthalmologist through referral for an eye disease or visual disorder.

# 6

## Eye health services provided under outreach and other programs

Australian Government outreach programs are designed to deal with the uneven distribution of the health workforce and to improve access to eye health services across Australia.

Three programs provide specialist eye health services, primarily in regional and remote areas of Australia:

- the Visiting Optometrists Scheme (VOS)
- the Rural Health Outreach Fund (RHOF)
- the Medical Outreach Indigenous Chronic Disease Program (MOICDP).

The Eye and Ear Surgical Support Services Program is also designed to expedite access to eye surgery for First Nations people who require it. In 2022–23, 45,043 occasions of service for First Nations patients were provided by eye health professionals under combined outreach services (VOS, RHOF and MOICDP).

## Services provided

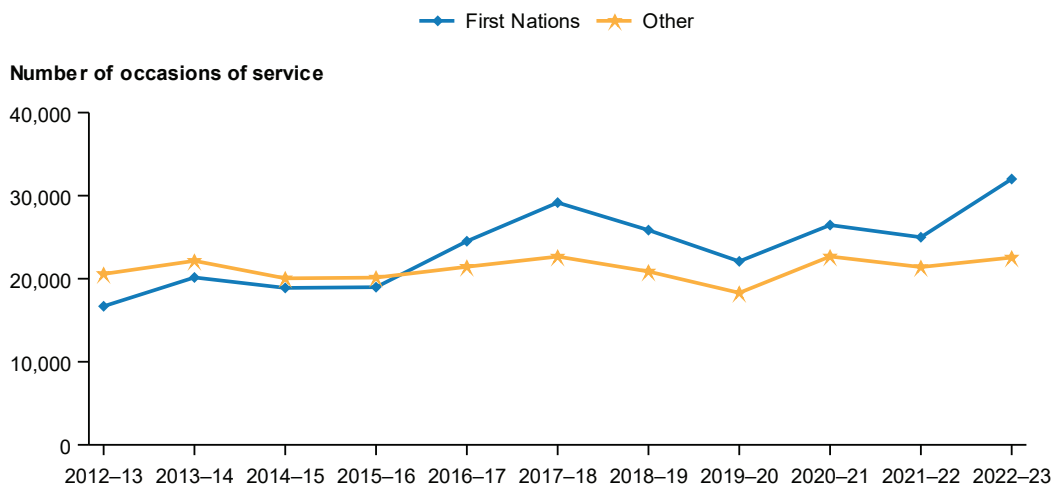
In 2022–23, the number of occasions of service for outreach programs delivered to First Nations patients was:

- 32,001 provided through the VOS
- 1,380 provided under the RHOF
- 11,662 provided under the MOICDP
- 737 First Nations patients were supported under the Eye and Ear Surgical Support Program.

VOS occasions of service for First Nations patients increased nearly 5-fold between 2009–10 and 2022–23, rising from 6,975 to 32,001.

Services provided to First Nations patients have exceeded those provided to other patients (that is, to non-Indigenous Australians and to people of unknown Indigenous status) since 2016–17.

### VOS occasions of service, by Indigenous status



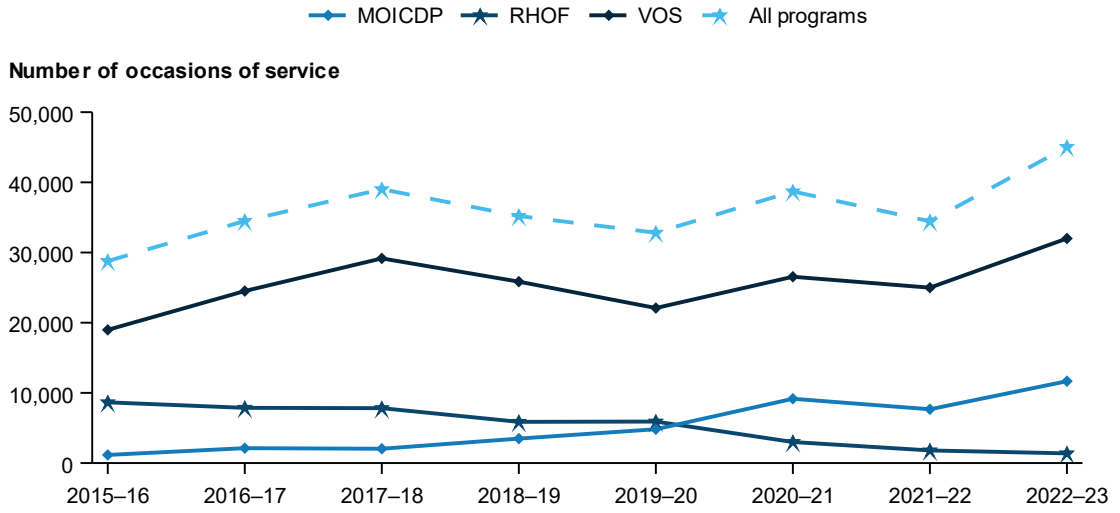
Source: AIHW analysis of Department of Health and Aged Care data (unpublished).



#### Did you know?

Eye health is one of the 4 main priorities of the Rural Health Outreach Fund – along with chronic disease management, maternity and paediatric health, and mental health.

# Outreach programs occasions of services



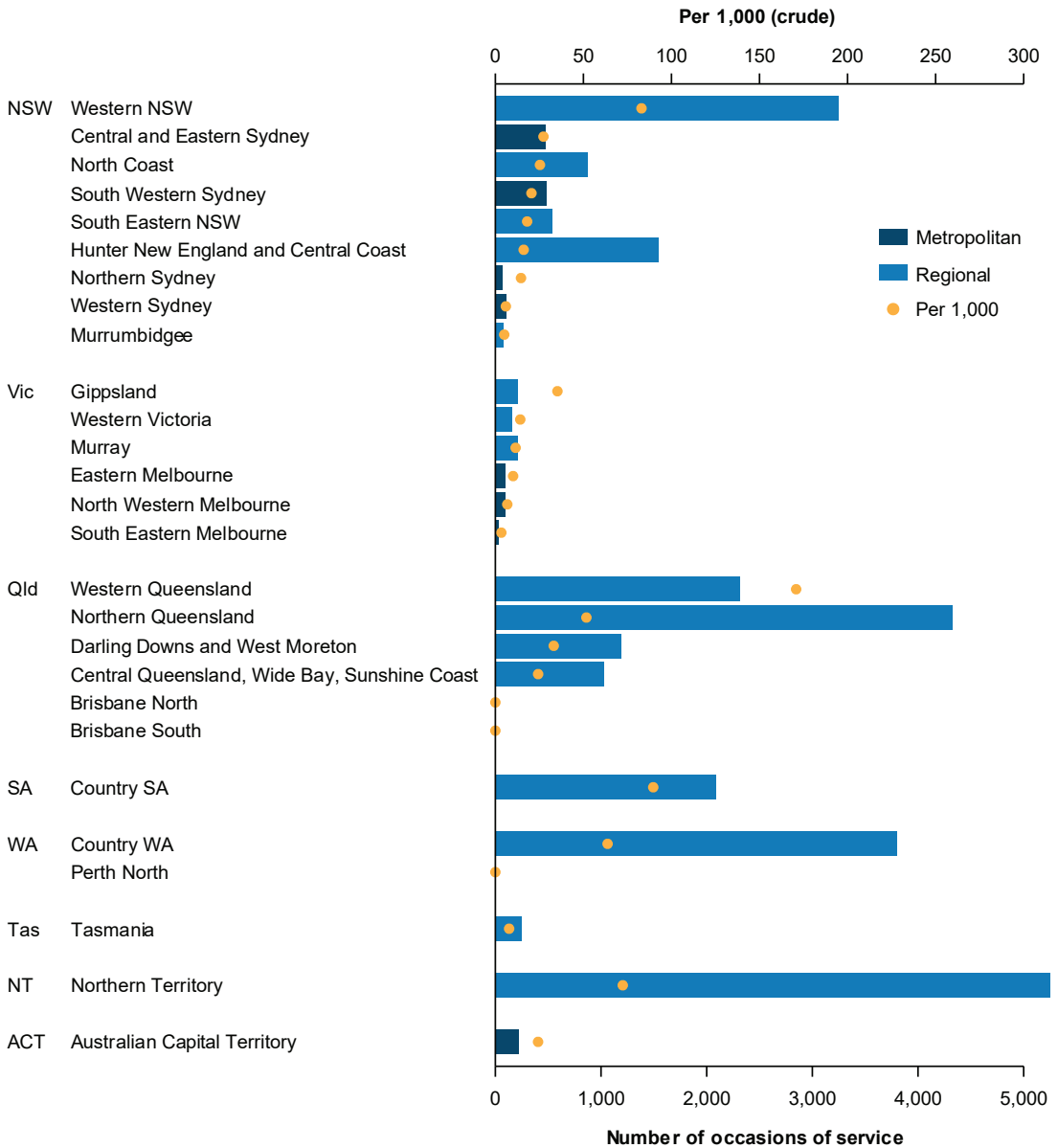
Source: AIHW analysis of Department of Health and Aged Care data (unpublished).

## Areas outreach services provided

Outreach services generally cover areas where there are low numbers of registered optometrists and ophthalmologists.

The highest number of occasions of service for VOS, for example, were provided in the Northern Territory and in Northern Queensland.

### VOS occasions of service, by Primary Health Network, 2022–23



Source: AIHW analysis of Department of Health and Aged Care data (unpublished).

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This report provides an overview of the latest Aboriginal and Torres Strait Islander people eye health data. It includes information on the prevalence of eye health conditions, diagnosis and treatment services, the eye health workforce and outreach services. Eye health measures for Aboriginal and Torres Strait Islander people 2024 is a companion to this report.

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