

# Eye health measures for Aboriginal and Torres Strait Islander people 2022: interactive data

Web report | Last updated: 16 Mar 2023 | Topic: [First Nations people](#)

## About

This report is part of a series of annual reports that update the Indigenous eye health measures. The measures cover the prevalence of eye health conditions, diagnosis and treatment services, the eye health workforce and outreach services. Subject to data availability, the report examines differences between Indigenous and non-Indigenous Australians, as well as differences by factors such as age, sex, remoteness, jurisdiction and lower level geographies. The report provides an evidence base for monitoring changes in Indigenous eye health over time, access to and use of eye health services, and for identifying gaps in service delivery.

Cat. no: IHW 267

- [Maps](#)
- [Data](#)

### Findings from this report:

- [The age-standardised cataract surgery rate for Indigenous Australians fell by 15% from 2018-19 to 2019-20](#)
- [Around 42% of Indigenous Australians who had a diabetes test had also had an eye examination in 2019-20](#)
- [The prevalence of active trachoma in children aged 5-9 in at-risk communities fell from 15% in 2009 to 3.3% in 2021](#)
- [Eye health measures for Aboriginal and Torres Strait Islander people 2022 - In brief](#)

## Summary

Vision loss has a profound impact on a person's quality of life and ability to perform everyday activities, for example, by limiting opportunities for physical mobility, work, education and social engagement (Razavi et al. 2018). Eye diseases and vision problems are the most common long-term health conditions reported by Aboriginal and Torres Strait Islander Australians, with over one-third of Indigenous Australians self-reporting eye or sight problems (ABS 2018-19).

This report presents data for both Indigenous and non-Indigenous Australians for a range of eye health measures across prevalence, diagnosis and screening, treatment services and workforce and outreach programs. Data are presented over time, by age and sex, by state and territory, remoteness areas and lower level geographies.

### Prevalence

- Trachoma is a highly infectious disease of the eye. Repeated trachoma infections can result in scarring, in-turned eyelashes (trichiasis) and blindness. The overall prevalence of active trachoma among children aged 5-9 in at-risk communities fell from 15% in 2009 to 3.3% in 2021.

### Diagnosis and screening

- Between 2010-11 and 2020-21, the proportion of Indigenous Australians who had an eye health check as part of a health assessment increased from 11% to 29% (based on age-standardised rates).
- In 2019-20, 12% of Indigenous Australians (around 104,300) had an eye examination by an optometrist or ophthalmologist.
- Diabetic retinopathy is a complication of diabetes which can result in vision loss if not detected and treated early. Among Indigenous Australians who had a diabetes test, the age-standardised proportion who were screened for diabetic retinopathy rose from an estimated 27% in 2005-06 to 36% in 2019-20.

### Treatment

- In 2019-20, the age-standardised cataract surgery rate for Indigenous Australians was about 6,884 hospitalisations per 1,000,000 population—an increase of 3% since 2012-13.
- In 2021, the overall treatment coverage of active trachoma cases in at-risk communities was 71%—that is, 1,666 community members identified as having trachoma received treatment. This included children with active trachoma, along with their household contacts and other community members.
- In 2020-21, 18,373 spectacles were dispensed to Indigenous Australians under state spectacle schemes by New South Wales, Victoria, Queensland, South Australia and Tasmania (the states and territories able to provide data). Of these, Victoria (2,454 spectacles, 39 per 1,000 population) came closest to meeting the estimated number of spectacles needed (4,024)—61% of the population-based need met.

### Workforce and outreach

- The number of occasions of service provided under the Visiting Optometrists Scheme—which provides specialist eye health services to Indigenous Australians in mainly regional and remote areas—have fluctuated, but overall services more than tripled between 2010-11 (around 8,300 occasions of service) and 2020-21 (around 26,459 occasions of service).

### Comparison with non-Indigenous Australians

- Between 2005-06 to 2018-19, the total age-standardised proportion of Indigenous Australians who were screened for diabetic retinopathy among those tested for diabetes increased from 27% to 37% before decreasing to 36% in 2019-20, while for non-Indigenous Australians it rose from 31% to 45% before declining to 43%.
- In 2019-20, age-standardised hospitalisation rates for Indigenous Australians for cataract surgery (6,884 per 1,000,000) were lower than for non-Indigenous Australians (7,413 per 1,000,000).



## Prevalence

### Prevalence - what is the extent of eye health problems

Information on the prevalence of eye health conditions among Indigenous Australians is important for monitoring the magnitude and causes of vision loss at the population level, and how these change over time. This information can assist in the development of more effective eye health policies and programs.

#### **Measure 1.1.1**

Prevalence of vision impairment and blindness

#### **Measure 1.1.2**

Population who self-reported eye or sight problems

#### **Measure 1.2.1**

Main causes of vision impairment and blindness

#### **Measure 1.2.2**

Self-reported eye or sight problems

#### **Measure 1.3.1**

Children and adults in at-risk communities with trachoma

#### **Measure 1.3.2**

Children and adults in at-risk communities with trichiasis

## Prevalence

**Measure 1.1.1:** The proportion of Indigenous Australians with vision impairment and blindness (vision loss).

Most of the vision loss experienced by Indigenous Australians is potentially preventable. Measures of the prevalence of vision impairment and blindness are important for monitoring changes in eye health over time and identifying the need for services.

### Figure 1.1.1: Prevalence of vision impairment and blindness

There are 5 separate charts for this measure showing the estimated percentage of patients with vision loss and confidence intervals for these estimates, by Indigenous status and other various characteristics. The data is presented as a combined scatter plot for the point estimate and Gant chart representing the confidence interval.

#### Blindness by Indigenous status, 2016

This chart shows weighted point estimates and confidence intervals for blindness in 2016 for Indigenous and non-Indigenous Australians. It shows that rates of blindness were higher for Indigenous Australians (0.3%) than for non-Indigenous Australians (0.2%).

#### Vision impairment by Indigenous status, 2016

This chart shows weighted point estimates and confidence intervals for vision impairment in 2016 for Indigenous and non-Indigenous Australians. It shows that rates of vision impairment were higher for Indigenous Australians (10.4%) than for non-Indigenous Australians (6.2%).

#### Vision loss by Indigenous status, 2016

This chart shows weighted point estimates and confidence intervals for vision loss in 2016 for Indigenous and non-Indigenous Australians. It shows that rates of vision loss were higher for Indigenous Australians (10.7%) than for non-Indigenous Australians (6.3%).

#### Vision loss by Indigenous status and age, 2016

This chart shows weighted point estimates and confidence intervals of the prevalence of vision loss in 2016 for Indigenous and non-Indigenous Australians, by age group. It shows that the prevalence of vision impairment for both Indigenous and non-Indigenous survey participants increased markedly with age. For Indigenous Australians, the prevalence of vision impairment was 7.2% among those aged 40-49 years, compared with 56% among those aged 80 and over. Indigenous rates were higher than non-Indigenous rates for all age groups, particularly for the oldest age groups.

#### Vision loss by Indigenous status and sex, 2016

This chart shows weighted point estimates and confidence intervals of the prevalence of vision loss for Indigenous and non-Indigenous Australians in 2016, by sex. The chart shows that there was no significant difference between Indigenous males and female in the rates of vision impairment.

#### Vision loss by Indigenous status and region, 2016

This chart shows weighted point estimates and confidence intervals of the prevalence of vision loss in 2016 for Indigenous and non-Indigenous Australians, by remoteness of geographic location. The chart shows that the age-standardised prevalence of vision loss for Indigenous Australians in *Outer regional* and *Very remote* areas was significantly higher than in *Major cities*.

1 in 10 Indigenous Australians aged 40 or over suffer from vision loss

Select view:

Current

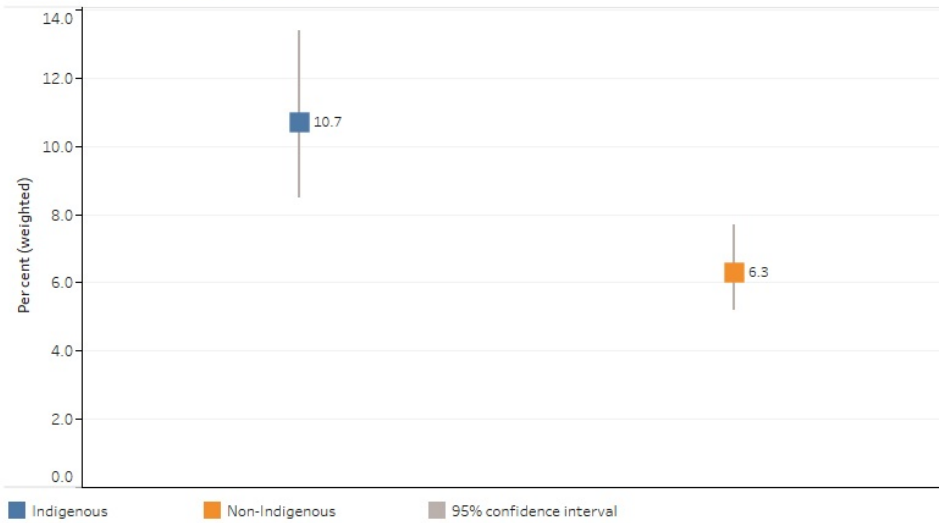
Population groups

Remoteness

Choose type of vision loss:

Vision loss

#### Vision loss by Indigenous status, 2016



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- Based on 2016 NEHS (National Eye Health Survey) results, Indigenous Australians experienced more vision impairment, blindness and vision loss than non-Indigenous Australians.
- The prevalence of vision loss increases markedly with age. For Indigenous Australians, the prevalence of vision loss was 7% among those aged 40-49, compared with 56% among those aged 80 to 89.
- There was no significant difference between Indigenous males and females in the rates of vision loss.
- The age-standardised prevalence of vision loss for Indigenous Australians in *Outer regional* and *Very remote* areas was significantly higher than for non-Indigenous Australians

# Prevalence

## Measure 1.1.2 The proportion of Indigenous Australians who reported eye or vision problems

Most of the vision loss experienced by Indigenous Australians is potentially preventable. Measures of the prevalence of vision impairment and blindness are important for monitoring changes in eye health over time and identifying the need for services.

### Figure 1.1.2: Self-reported eye or sight problems

Figures for measure 1.1.2 presents 5 separate charts showing self-reported eye and sight problems for Indigenous and non-Indigenous Australians by various characteristics.

#### Self-reported eye/sight problems among Indigenous Australians by sex, 2018-19

This vertical bar chart compares the proportion of Indigenous Australians who reported an eye or sight problem in 2018-19, by sex. The chart shows that a higher proportion of Indigenous females reported an eye or sight problem (43%), than males (32%).

#### Self-reported eye/sight problems by Indigenous status, 2001 to 2018-19

This line graph shows time trend data for the period 2001 to 2018-19 for Indigenous and non-Indigenous Australians reporting eye and sight problems. The chart shows that, since 2001, the age-standardised proportion of Indigenous Australians who reported an eye or sight problem increased from 47% to 49% in 2018-19, whereas for non-Indigenous Australians it remained stable around 52%.

#### Self-reported eye/sight problems among Indigenous Australians by age, 2018-19

This vertical bar chart compares the proportion of Indigenous Australians who reported an eye or sight problem in 2018-19, by age. The chart shows that the prevalence of self-reported eye or sight problems was highest for Indigenous Australians aged 55 and over (around 94%), compared with 10% for those aged 0-14.

#### Self-reported eye/sight problems among Indigenous Australians by region, 2018-19

This vertical bar chart compares the proportion of Indigenous Australians who reported an eye or sight problem in 2018-19, by remoteness of geographic location. The chart shows that Indigenous Australians in *Major cities* (42%) and *Inner regional* areas (39%) had a higher prevalence of self-reported eye or sight problems, compared with those in *Remote* areas (34%) and *Very remote* areas (27%).

#### Self-reported eye/sight problems among Indigenous Australians by jurisdiction, 2018-19

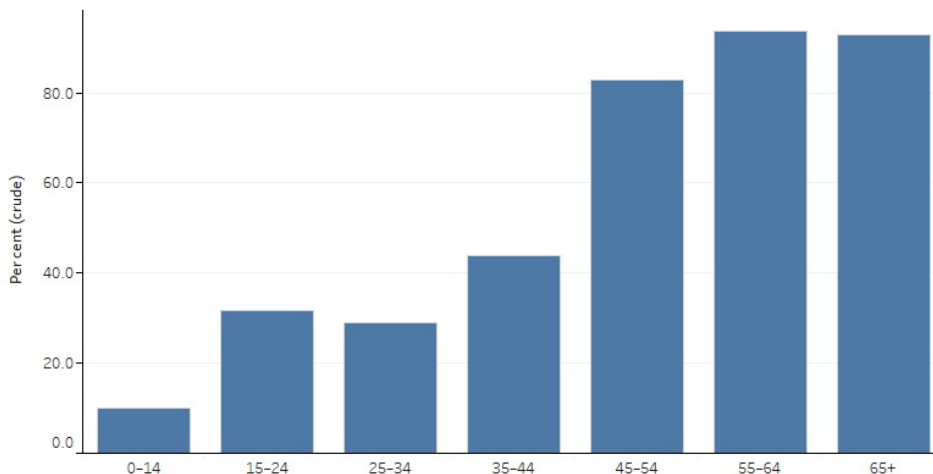
This vertical bar chart compares the proportion of Indigenous Australians who reported an eye or sight problem in 2018-19, by state and territory. The chart shows that the percentage self-reporting eye or sight problems was highest in South Australia (49%) and lowest in the Northern Territory (29%).

**1 in 3** Indigenous Australians reported they had an eye or sight problem

Select view:	Population groups	Remoteness
	Jurisdiction	Time trend

Choose population group:  
Age

#### Indigenous Australians by age, 2016



- In 2018-19, nearly 4 in 10 Aboriginal and Torres Strait Islander Australians (38%, or 307,300 people) reported long-term eye or sight problems.
  - In 2018-19, the prevalence of self-reported eye or sight problems was higher for Indigenous females than Indigenous males.
  - In 2018-19, the proportion of Indigenous Australians who self-reported eye or sight problems decreased as remoteness increased, from 42% in *Major cities* to 27% in *Very remote* areas.
  - Since 2001, the age-standardised proportion of Indigenous Australians who had an eye or sight problem increased from 47% to 49% in 2018-19, whereas for non-Indigenous Australians it remained stable at around 52% across this period.
- 



## Prevalence

**Measure 1.2.1:** The main causes of vision impairment and blindness (vision loss) for Aboriginal and Torres Strait Islander Australians, as a proportion of those with vision loss

Most of the vision loss experienced by Indigenous Australians is potentially preventable. Measures of the prevalence of vision impairment and blindness are important for monitoring changes in eye health over time and identifying the need for services.

### Figure 1.2.1: Main causes of vision impairment and blindness

Figures for measure 1.2.1 presents 4 separate charts showing the main causes of vision loss for Indigenous and non-Indigenous Australians by a variety of characteristics.

#### Main causes of vision loss for Indigenous Australians, 2016

This chart shows weighted point estimates and confidence intervals for the main causes of vision loss among Indigenous participants in the 2016 National Eye Health Survey. The data is presented as a combined scatter plot for the point estimate and Gant chart representing the confidence intervals. The top 3 causes of vision loss were refractive error (61%), cataract (20%) and diabetic retinopathy (5.2%).

#### Main causes of vision loss for non-Indigenous Australians, 2016

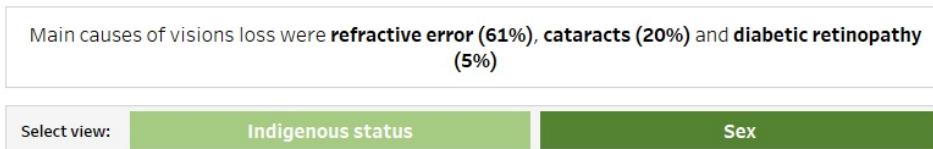
This chart shows weighted point estimates and confidence intervals for the main causes of vision loss among non-Indigenous participants in the 2016 National Eye Health Survey. The data is presented as a combined scatter plot for the point estimate and Gant chart representing the confidence intervals. The top 3 causes of vision loss were refractive error (61%), cataract (13%) and age-related macular degeneration (10%).

#### Main causes of vision loss for Indigenous Australians by sex, 2016

This stacked vertical bar chart compares the proportion of Indigenous participants with different causes of vision loss in 2016, by sex. The chart shows that the main causes of vision loss for Indigenous males and females were similar, though a higher proportion of Indigenous males had refractive error as a main cause and a higher proportion of Indigenous females had cataracts as a main cause.

#### Main causes of vision loss for non-Indigenous Australians by sex, 2016

This stacked vertical bar chart compares the proportion of non-Indigenous participants with different causes of vision loss in 2016, by sex. The chart shows that the pattern of causes for males and females was similar for non-Indigenous Australians. Age-related macular degeneration was the third most common cause for non-Indigenous Australians but this was not the case for Indigenous Australians.



Choose Indigenous status:  
 Non-Indigenous

#### Non-Indigenous Australians by sex, 2016





- Results of the 2016 National eye health survey (NEHS) showed that the 3 main causes of vision loss for Indigenous Australians aged 40 and over were refractive error (61%), cataract (20%) and diabetic retinopathy (5.2%).
  - In 2016, a higher proportion of Indigenous and non-Indigenous males had refractive error than Indigenous and non-Indigenous females.
- 



## Prevalence

**Measure 1.2.2:** The main causes of eye or sight problems for Indigenous and non-Indigenous Australians, as a proportion of those with eye or sight problems.

Data for this measure are self-reported and have not necessarily been diagnosed by a health professional. They do not include eye conditions that respondents are unaware that they have.

### Figure 1.2.2: Self-reported causes of eye or sight problems

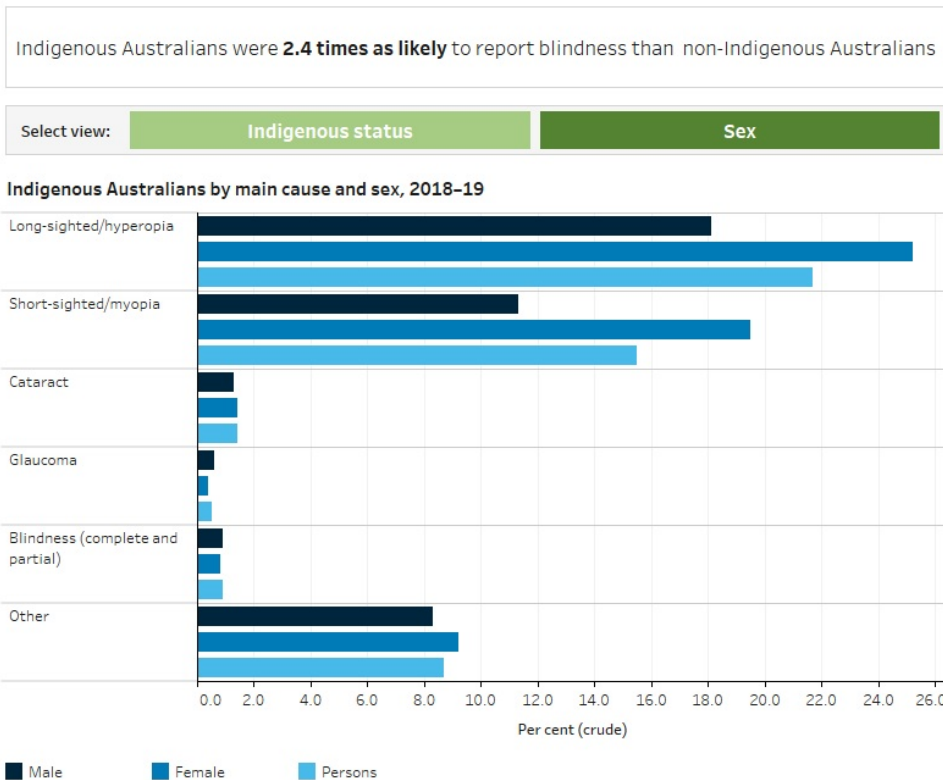
Figures for measure 1.2.2 presents 2 separate charts showing the main causes of vision loss by a variety of characteristics.

#### Prevalence of eye/sight problems amongst Indigenous Australians by main cause and sex, 2018-19

This grouped horizontal bar chart compares the main causes of sight problems for Indigenous Australians in 2018-19, by sex. The chart shows that the top 3 causes of sight problems reported by Indigenous Australians were long sightedness (22%), short sightedness (16%) and cataract (1.4%). The prevalence of long-sightedness was higher for Indigenous females than Indigenous males (25% and 18%, respectively).

#### Prevalence of eye/sight problems by Indigenous status and main cause, 2018-19

This grouped horizontal bar chart compares the main causes of sight problems in 2018-19, by Indigenous status. The chart shows that Indigenous Australians were over twice as likely as non-Indigenous Australians to report blindness, and almost twice as likely to report having a cataract as causes of sight problems, based on age-standardised rates.



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2018-19, the main causes of sight problems reported by Aboriginal and Torres Strait Islander Australians were long-sightedness (31%), short-sightedness (20%), and cataract (2.4%).
- The prevalence of long-sightedness and short-sightedness was higher for Indigenous females (25% and 20%, respectively) than for Indigenous males (18% and 11%, respectively).
- Adjusting for age, Indigenous Australians 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

**Measure 1.3.1:** The estimated number, and proportion of Indigenous children in at-risk communities with active trachoma

Trachoma is an infectious disease of the eye. Repeated trachoma infections can result in scarring, in-turned eye-lashes (trichiasis) and blindness if left untreated. Trachoma is found in some remote areas of Australia. Prevalence data are important for assessing the effectiveness of trachoma control activities.

**Figure 1.3.1: Prevalence of trachoma**

Figures for measure 1.3.1 presents 2 separate charts showing the prevalence of active trachoma in at-risk Indigenous communities, by various characteristics.

## Prevalence of active trachoma in at-risk communities for children aged 5-9 by jurisdiction, 2021

This vertical bar chart compares the proportion of Indigenous children aged 5-9 with active trachoma, by state and territory. The chart shows that, in 2021, the proportion of children aged 5-9 in the screened communities who had active trachoma was 14% in Western Australia (67 children), 6% in the Northern Territory (55 children) and in Queensland no children were found with active trachoma.

## Prevalence of active trachoma in at-risk communities for children aged 5-9 by jurisdiction, 2009 to 2021

This line graph presents changes in the proportion of Indigenous children aged 5-9 with active trachoma from 2009 to 2021 for five jurisdictions and all states combined. The chart shows that, between 2009 and 2021, the estimated prevalence of active trachoma in children aged 5-9 in all at-risk communities fell from 15% to 3.3%.



- From 2009 to 2021, the estimated prevalence of active trachoma in children aged 5-9 screened in all at-risk communities fell from 15% to 3.3%. The estimated prevalence has been below 5% since 2012.
- In 2021, the proportion of children aged 5-9 with active trachoma in screened communities was 14% in Western Australian (67 children), 6% in the Northern Territory (55 children) and 1.9% in South Australia (7 children). In Queensland, no children were found with active trachoma.

## Prevalence

**Measure 1.3.2:** The estimated number, and proportion of Indigenous adults in at-risk communities with trichiasis

Repeated trachoma infections can result in scarring and in-turned eye lashes, trichiasis. Early detection and treatment of trichiasis can prevent blindness.

**Figure 1.3.2: Prevalence of trichiasis**

Figures for measure 1.3.2 presents 3 separate charts showing the prevalence of trichiasis in at-risk Indigenous communities, for Indigenous Australians by various characteristics.

### Prevalence of trichiasis in communities that screened by age, 2021

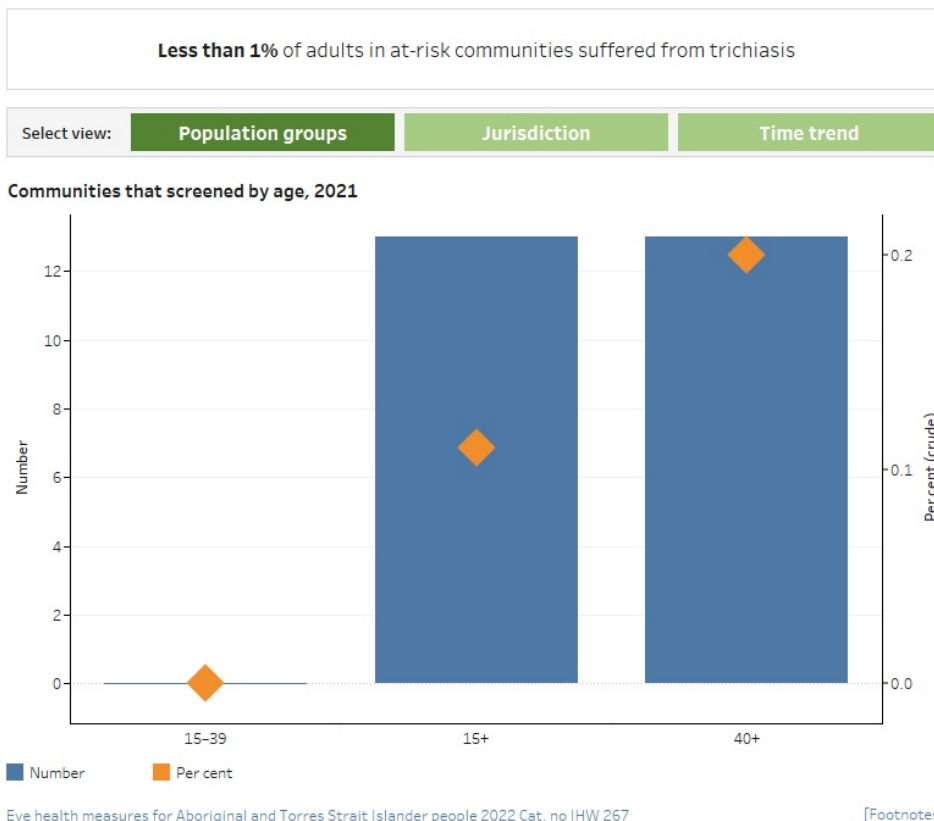
This dual axis combined vertical bar chart and scatter plot compares the percentage and number of Indigenous Australians with trichiasis in at-risk Indigenous communities, in two broad age groups, and for all Australians aged 15 and over in 2021. The chart shows that there were 13 Indigenous Australians aged 40 and over with trichiasis, a prevalence rate of 0.2%. There were no Australians aged 15-39 with trichiasis in these communities.

### Prevalence of trichiasis in communities that screened among those aged 40 and over, 2011 to 2021

This dual axis combined line graph and scatter plot shows the percentage and number of Indigenous adults aged 40 and over with trichiasis, from 2011 to 2021. The chart shows that, from 2011 to 2021, the percentage of Indigenous Australians aged 40 and over with trichiasis fell from 1.6% to 0.2%.

### Prevalence of trichiasis in communities that screened among those aged 40 and over, by jurisdiction, 2021

This dual axis combined vertical bar chart and scatter plot compares the number and percentage of Indigenous adults aged 40 and over with trichiasis, for 3 jurisdictions in 2021. The chart shows that the prevalence of trichiasis in Indigenous Australians aged over 40 was highest in Western Australia and South Australia (both 0.2%). Queensland had no cases of trichiasis.



- The proportion of Indigenous Australians aged 40 and over with trichiasis fell from 1.6% in 2011 to 0.2% in 2021.
- Among the 4 jurisdictions that undertook screening in 2021, the prevalence of trichiasis in Indigenous Australians was 0.21% in the Northern Territory, 0.20% in South Australia and 0.15% in Western Australia. In Queensland, no adults aged 40 and over who were screened were found to have trichiasis.



## Diagnosis and screening

Screening plays an important preventative role in eye health as early detection and treatment of eye problems, such as diabetic retinopathy and cataract, can prevent vision impairment and blindness. These measures provide information on eye health diagnosis and screening services to assist in the monitoring of the adequacy of services provided to Indigenous people.

### **Measure 2.1.1**

Indigenous Australians who had an Indigenous health assessment

### **Measure 2.1.2**

Indigenous Australians who had an Indigenous health assessment who also had an initial eye examination by an optometrist

### **Measure 2.2**

Eye examinations by an eye care professional

### **Measure 2.3.1**

Eye examinations among those tested for diabetes (MBS data)

### **Measure 2.3.2**

Screening for diabetic retinopathy among those with self-reported diabetes (survey data)

### **Measure 2.3.3**

Screening for diabetic retinopathy with a retinal camera (MBS data)

### **Measure 2.4.1**

Trachoma screening coverage

### **Measure 2.4.2**

Trichiasis screening coverage

### **Measure 2.5**

Undiagnosed eye conditions

## Diagnosis and screening

**Measure 2.1.1** The number of Indigenous Australians who had an Indigenous health assessment (MBS item 715 or 228) including a health assessment provided via videoconference or teleconference (MBS item 92004, 92011, 92016, 92023), proportion of the population and age-standardised rates

Where a person had both an in-person health check and a telehealth check in a year, one health check was selected at random for inclusion in the analysis.

All Aboriginal and Torres Strait Islander Australians, regardless of age, are eligible for an Indigenous-specific health assessment which includes an eye health check.

### Figure 2.1.1: Annual health assessments

There are 6 separate charts for this measure, showing MBS health assessments, for Indigenous Australians by various characteristics.

#### Number and proportion of Indigenous Australians that had an MBS health assessment, 2019-20 and 2020-21

This dual axis combined vertical bar chart and scatter plot displays the number and proportion of MBS health assessments in 2019-20 and 2020-21. The chart shows that 28% of Indigenous Australians (or 236,609 people) had Indigenous-specific MBS health assessments in 2020-21. This is a decline of 2,228 assessments from 2019-20.

#### Proportion of the Indigenous population that had an MBS health assessment by region, 2020-21

This vertical bar chart compares the proportion of MBS health assessments in 2020-21, by remoteness category of geographic location. The chart shows that the proportion of MBS 715 health assessments was the same in *Outer regional* and *Remote* areas (33%). The proportion was lowest in *Major cities* (24%).

#### Proportion of the Indigenous population that had an MBS health assessment by jurisdiction, 2020-21

This vertical bar chart compares the proportion of MBS health assessments in 2020-21, by state and territory. The chart shows that the proportion of MBS health assessments was highest in Queensland (34%) and the Northern Territory (32%) and was lowest in Tasmania and Victoria (16% and 14%, respectively).

#### Proportion of the Indigenous population that had an MBS health assessment by age and sex, 2020-21

This grouped vertical bar chart compares the proportion of MBS item 715 health assessments in 2020-21, by age and sex. The chart shows that the number and proportion of MBS health assessments were very similar for Indigenous males and females aged 0-14— 27% and 25%, respectively. For all other age groups, health assessments for Indigenous females outnumbered those for Indigenous males.

#### Proportion of the Indigenous population that had an MBS health assessment by PHN, 2020-21 (bar chart)

This horizontal bar chart shows the proportion of MBS health assessments in 2020-21, by PHN. The chart shows that the PHNs with the lowest proportion of health assessments were Northern Sydney (5.2%) and South Eastern Melbourne (7.1%), while those with the highest rates were Western NSW and Brisbane North (both 36%).

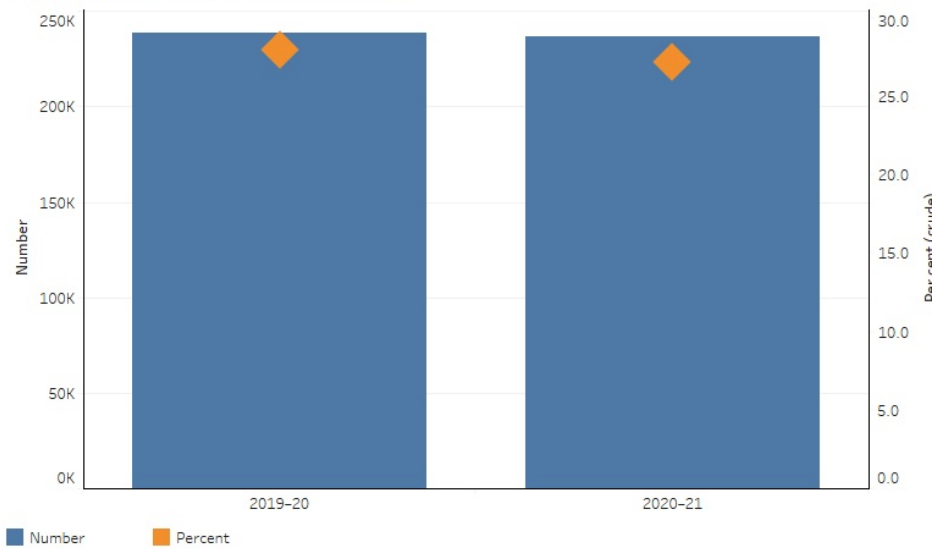
#### Proportion of the Indigenous population that had an MBS health assessment by age, 2010-11 to 2020-21

This line graph shows changes in the proportion of MBS health assessments, from 2010-11 to 2020-21, by age group. The chart shows that, between 2010-11 and 2020-21, the age-standardised proportion of MBS health assessments increased over time. This increase occurred across all age groups, but was highest for those aged 65-74 and 75 and over (from around 18% to around 39% for both groups).

**236,609 (27%)** Indigenous Australians had an Indigenous specific health assessment.

Select view:	Current	Remoteness	Jurisdiction
	Population groups	Geography	Time trend

**Indigenous Australians, 2019–20 and 2020–21**



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2020-21, just under one-third (236,609 or 27%) of Indigenous Australians had an Indigenous-specific health assessment. This included over 11,000 health assessments provided via videoconference or teleconference (see *Indigenous health checks and follow ups*, supplementary tables).
- The age-standardised proportion of Indigenous Australians who had a health assessment increased from around 9% in 2010-11 to 28% for the under 15 age group and 23% for the 15-24 age group in 2018-19, before declining to 26% and 22% for both age groups, respectively, in 2020-21. For those aged 65 and over the proportion rose from 18% in 2010-11 to around 37% in 2017-18, before plateauing at around 39% from 2018-19 to 2020-21.
- In 2020-21, the number and proportion of Indigenous males aged 0-14 who had a health assessment was slightly higher than the number and proportion of females—38,838 (27%) and 34,241 (25%), respectively. For all other age groups, health assessments for Indigenous females outnumbered those for Indigenous males.

## Diagnosis and screening

**Measure 2.1.2:** The number of Indigenous Australians who had an Indigenous health assessment (MBS item 715 or 228) including a health assessment provided via videoconference or teleconference (MBS item 92004, 92011, 92016, 92023), and who also had an initial eye examination by an optometrist.

### Figure 2.1.2: Annual health assessments and initial eye examination by an optometrist

There are 7 separate charts for this measure, showing MBS health assessments and eye examinations, for Indigenous Australians by various characteristics.

#### Number and proportion of Indigenous Australians that had an Indigenous health assessment and an eye check by an optometrist, 2019-20 and 2020-21

This dual axis combined vertical bar chart and scatter plot displays the number and proportion of MBS health assessments in 2019-20 and 2020-21. The chart shows that 5.5% of Indigenous Australians (or 47,492 people) had an Indigenous-specific MBS health assessment and an eye check by an optometrist in 2020-21. This is an increase of 6,252 assessments and eye checks from 2019-20.

#### Proportion of Indigenous Australians that had an Indigenous health assessment and an eye check by an optometrist by remoteness, 2020-21

This vertical bar chart compares the proportion of MBS health assessments and eye examinations in 2020-21, by remoteness category of geographic location. The chart shows that the proportion of MBS 715 health assessments and eye examinations was highest in *Outer regional* areas (6.3%). The proportion was lowest in *Very remote* areas (3.9%).

#### Proportion of Indigenous Australians that had an Indigenous health assessment and an eye check by an optometrist by jurisdiction, 2020-21

This vertical bar chart compares the proportion of MBS health assessments and eye examinations in 2020-21, by state and territory. The chart shows that the proportion of MBS health assessments and eye examinations was highest in Queensland (6.9%) and New South Wales (5.8%) and was lowest in Western Australia (3.4%), Victoria and the Australian Capital Territory (both 3.5%).

#### Proportion of Indigenous Australians that had an Indigenous health assessment and an eye check by an optometrist by age and sex, 2020-21-Indigenous population (denominator)

This grouped vertical bar chart compares the proportion of MBS health assessments and eye examinations in 2020-21, by age and sex. The chart shows that the number and proportion of MBS health assessments and eye examinations were very similar for Indigenous males and females aged 0-14— 2.6% and 2.8%, respectively. For all other age groups, health assessments and eye examinations for Indigenous females outnumbered those for Indigenous males.

#### Proportion of Indigenous Australians that had an Indigenous health assessment and an eye check by an optometrist by age and sex, 2020-21-number of health assessments (denominator)

This grouped vertical bar chart compares the proportion of MBS health assessments and eye examinations in 2020-21, by age and sex. The chart shows that the proportion of MBS health assessments and eye examinations for Indigenous females outnumbered those for Indigenous males for all age groups except for those aged 75 and over where the proportion of assessments and eye examinations for Indigenous males outnumbered those for Indigenous females (55% and 52%, respectively).

#### Proportion of Indigenous Australians that had an Indigenous health assessment and an eye check by an optometrist by Primary Health Network (PHN), 2020-21

This horizontal bar chart shows the proportion of MBS health assessments and eye examinations in 2020-21, by PHN. The chart shows that the PHNs with the lowest proportion of health assessments were Eastern Melbourne (1.8%) and Perth North (3.3%), while those with the highest rates were Brisbane North (both 8.8%) and Brisbane South (8.1%).

#### Proportion of Indigenous Australians that had an Indigenous health assessment and an eye check by an optometrist by age 2010-11 to 2020-21

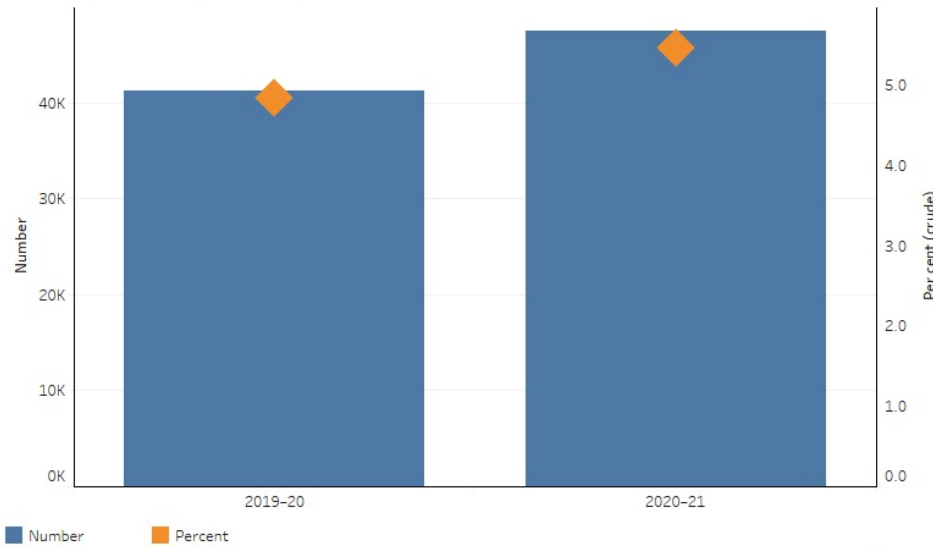
This line graph shows changes in the proportion of MBS health assessments and eye examinations, from 2010-11 to 2020-21, by age group. The chart shows that, between 2010-11 and 2020-21, the age-standardised proportion of MBS health assessments and eye examinations increased over time. This increase occurred across all age groups but was highest for those aged 65-74 and 75 and over (from around 3.8% to around 20% for both groups).



**47,492** Indigenous Australians had an Indigenous specific health assessment and an eye check.

Select view:	Current	Remoteness	Jurisdiction
	Population groups	Geography	Time trend

**Indigenous Australians, 2019-20 and 2020-21**



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2020-21, over one in twenty (47,492 or 5.5%) of Indigenous Australians had an Indigenous-specific health assessment and an initial eye examination by an optometrist.
- The age-standardised proportion of Indigenous Australians who had a health assessment and an initial eye examination by an optometrist increased from around 1% in 2010-11 to over 7% in 2018-19 before declining slightly in for the under 15 age group and 27% for the 15-54 age group in 2018-19, before declining slightly in 2019-20 (6.5%) and increasing in 2020-21(7.3%)
- In 2020-21, health assessments for Indigenous females outnumbered those for Indigenous males across all age groups, especially for age group 45-54 and 65-74.

## Diagnosis and screening

**Measure 2.2:** The number of Indigenous Australians who had an eye examination by an optometrist or ophthalmologist in the last 12 months, proportion of the population.

Eye care professionals play an important role in screening for eye and vision problems by conducting basic eye examinations. Current data provides an incomplete picture of the extent of Indigenous eye health services. For example, data do not capture many of the ophthalmological services—such as eye examinations undertaken by salaried ophthalmologists in public hospitals.

### Figure 2.2: Eye examinations by an eye care professional

There are 6 separate charts for this measure showing the proportion of the population that had an eye examination by an eye care professional in the preceding 12 months, for Indigenous and non-Indigenous Australians by various characteristics.

#### Number and proportion of Indigenous Australians that had an eye examination by an eye care professional, by profession type, 2019-20

This dual axis combined vertical bar chart and scatter plot displays the number and proportion of Indigenous Australians, in 2019-20, that had had an eye examination by ophthalmologists and optometrists in the preceding 12 months. The chart shows that in 2019-20 there were around 133 Indigenous Australians who had an eye examination undertaken by an ophthalmologist in the preceding 12 months (0.0% of the population) and around 104,176 who had an eye examination undertaken by an optometrist (12% of the population).

#### Proportion of the population that had an eye exam by an eye care professional, in the last 12 months, 2007-08 to 2019-20

This line graph shows the proportion of the population, from 2007-08 to 2019-20, that had had an eye examination by an eye care professional in the preceding 12 months, by Indigenous status. The chart shows that, between 2007-08 and 2019-20, the total age-standardised proportion of the Indigenous population that had had an eye examination increased from around 14% to 17%, while the proportion for non-Indigenous Australians increased from around 19% to 24%.

#### Proportion of the population that had an eye exam by an eye care professional in the last 12 months, by region, 2019-20

This vertical bar chart compares the proportion of the Indigenous population, in 2019-20, that had an eye examination by an eye care professional in the preceding 12 months by remoteness category of geographic location. The chart shows that the proportion of Indigenous Australians who had had an eye examination in the preceding 12 months was similar in *Major cities* and *Inner regional* areas (both 14%) and then decreased as remoteness increased.

#### Proportion of the population that had an eye exam by an eye care professional in the last 12 months, by jurisdiction, 2019-20

This vertical bar chart compares the proportion of the Indigenous population, in 2019-20, that had an eye examination by an eye care professional in the preceding 12 months, by state and territory. The chart shows that the proportion of Indigenous Australians who had had an eye examination was lowest in the Northern Territory and Western Australia (both 8.3%) followed by the South Australia (12.0%) and was highest in the Australian Capital Territory and Tasmania (both around 15%).

#### Proportion of Indigenous Australians that had an eye exam by an eye care professional in the last 12 months, by age, 2007-08 to 2019-20

This line graph shows the proportion of the Indigenous population, from 2010-11 to 2019-20, that had an eye examination by an eye care professional in the preceding 12 months, by age group. The chart shows that, from 2010-11 to 2018-19, the crude (age specific) proportion of the Indigenous population that had an eye examination increased for all age groups before plateauing or declining slightly from 2018-19 to 2019-20. The increase was greatest for those in the 65 and over age group which increased from 28% to 35% before declining to 31% over this period.

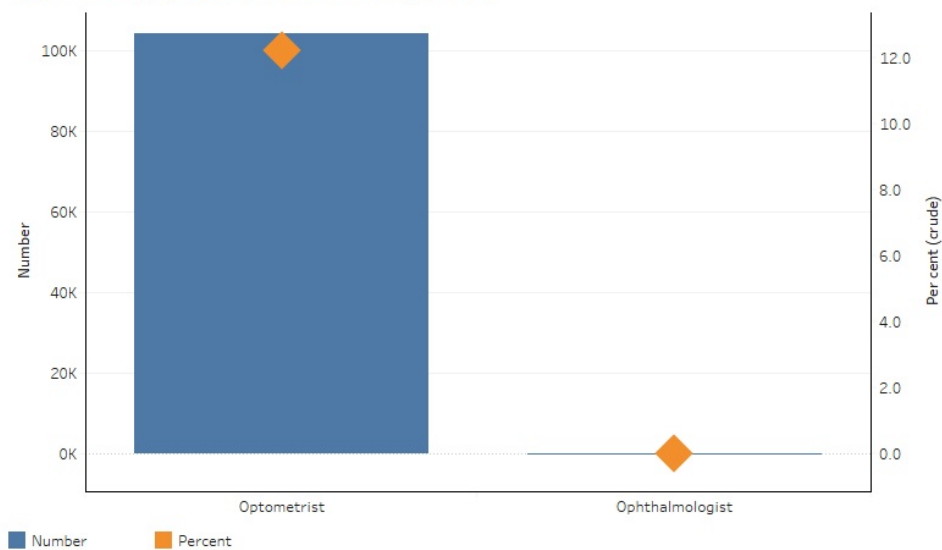
#### Proportion of non-Indigenous Australians that had an eye exam by an eye care professional in the last 12 months, by age, 2007-08 to 2019-20

This line graph shows the proportion of the non-Indigenous population, from 2010-11 to 2019-20, that had an eye examination by an eye care professional in the preceding 12 months, by age group. The chart shows that, from 2010-11 to 2019-20, the crude proportion of the non-Indigenous population that had an eye examination increased for all age groups before plateauing or declining slightly from 2018-19 to 2019-20. The increase was greatest for those in the 65 and over age group which increased from 32% to 49% before declining to 45% over this period.

**104,309** Indigenous Australians had an eye examination by an eye care professional.

Select view:	<b>Current</b>	Remoteness
	Jurisdiction	Time trend

By profession type, for Indigenous Australians, 2019-20



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2019-20, there were around 104,300 Indigenous Australians who had had an eye examination undertaken by an optometrist or ophthalmologist in the preceding 12 months—12% of the population. This was less than the estimated number of eye examinations needed for Indigenous Australians each year (145,469) (IEHU 2017).
- In 2019-20, the proportion of Indigenous Australians who had had an eye examination was lowest in Western Australia and the Northern Territory (8.2%) followed by South Australia (12.0%) and was highest in Tasmania (15%).
- Age-specific rates of eye examinations by an optometrist or ophthalmologist increased between 2009-10 and 2017-18 for Indigenous Australians, before declining between 2017-18 and 2019-20, across all age groups. In those aged 65 and over rates increased from 26.6% to 35% before declining to 31% over this period. Rates for non-Indigenous Australians aged 65 and over increased from 32% to 48% before declining to 45% over the same period.
- Between 2007-08 and 2019-20, the total age-standardised proportion of the Indigenous population that had had an eye examination increased from 14% to 17%, while the proportion for non-Indigenous Australians increased from 19% to 24%.

## Diagnosis and screening

**Measure 2.3.1:** The number of Indigenous Australians who had an eye examination in the 12-month period who had also had a diabetes test in the 12-month period or in the year before, as a proportion of those who had a diabetes test (MBS data). Indigenous Australians who had a diabetes test may not have been found to have diabetes.

Current guidelines recommend a diabetic eye examination annually for Indigenous Australians with diabetes, and at least every two years for non-Indigenous Australians with diabetes.

### Figure 2.3.1: Eye examinations among those tested for diabetes (MBS data)

There are 6 separate charts for this measure showing the proportion of those who had a diabetes test who had an eye examination by an optometrist or ophthalmologist, for Indigenous and non-Indigenous Australians by age and over time.

#### Number and proportion of Indigenous Australians who had a diabetes test who also had an eye examination by profession type, 2019-20

This dual axis vertical bar chart and scatter plot displays the number and proportion of Indigenous Australians screened for diabetes who had had an eye examination by an optometrist, ophthalmologist or GP. The chart shows that in 2019-20, an estimated 40% had an eye examination by an optometrist, 3.1% by an ophthalmologist and 1.4% by a GP.

#### Proportion of Indigenous Australians who had a diabetes test who also had an eye exam by region, 2019-20

This vertical bar chart shows the proportion of Indigenous Australians screened for diabetes who had an eye examination in 2019-20, by remoteness. While the proportion is highest in *Inner regional areas* (47%), in general it decreases with remoteness—with the lowest rate in *Very remote areas* (29%).

#### Proportion of Indigenous Australians who had a diabetes test who also had an eye exam by jurisdiction, 2019-20

This vertical bar chart shows the proportion of Indigenous Australians screened for diabetes who had an eye examination in 2019-20, by jurisdiction. The jurisdictions with the highest proportions were Victoria and Tasmania (48% and 46%, respectively), and the lowest was the Northern Territory (29%).

#### Proportion of Australians who had a diabetes test who also had an eye exam, by Indigenous status, 2005-06 to 2019-20

This line graph shows the age standardised proportion of those screened for diabetes who had an eye examination between 2005-06 and 2019-20, by Indigenous status. The chart shows that the estimated proportion of Indigenous Australians with diabetes who had an eye examination increased from 26.9% in 2005-06 to 37.3% in 2018-19 before declining to 35.5% in 2019-20.

#### Proportion of Indigenous Australians who had a diabetes test who also had an eye exam by age, 2005-06 to 2019-20

This line graph shows the proportion of Indigenous Australians screened for diabetes who had an eye examination from 2005-06 to 2019-20, by age group. The chart shows that the proportion has risen across all years from 2005-06 to 2018-19 before declining for the older age groups (35-44, 45-54, 55-64 and 65 and over) in 2019-20.

#### Proportion of non-Indigenous Australians who had a diabetes test who also had an eye exam by age, 2005-06 to 2019-20

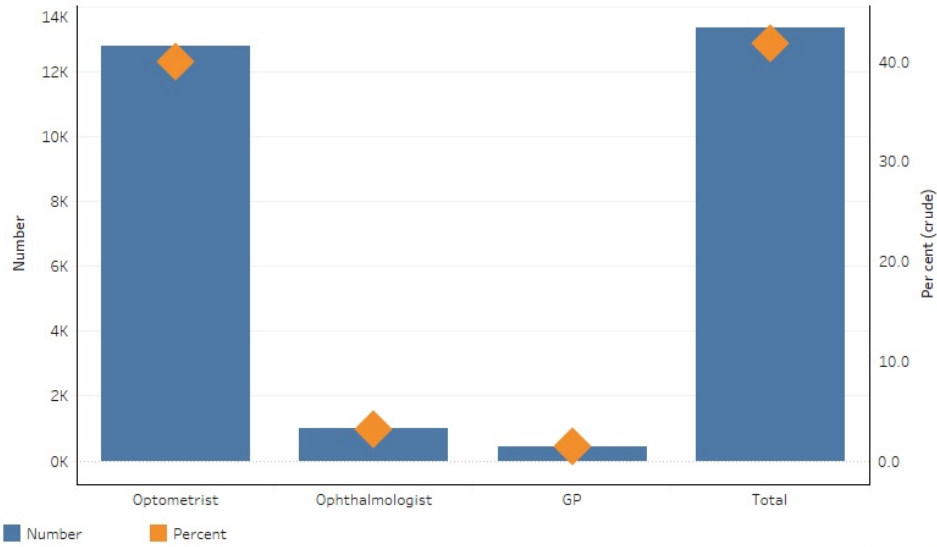
This line graph shows the proportion of non-Indigenous Australians screened for diabetes who had an eye examination from 2005-06 to 2019-20, by age group. The chart shows that the proportion has risen over time, with proportions rising with age across all years from 2005-06 to 2018-19 before declining for all age groups from 2018-19 to 2019-20.

**13,358 (42% crude)** Indigenous Australians who had an eye examination among those tested for diabetes.

Select view:

<b>Current</b>	Remoteness
Jurisdiction	Time trend

By profession type, for Indigenous Australians, 2019–20



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- An estimated 32,000 Indigenous people had had a diabetes test in the previous year, and 13,358 (42%) also had an eye examination at least once in 2019-20.
- In 2019-20, the proportion of Indigenous Australians who had an eye examination was highest in Victoria (48%), and lowest in the Northern Territory (29%).
- Between 2009-10 and 2018-19, the total age-standardised proportion of Indigenous Australians tested for diabetes who had an eye examination increased from 29% to 36% before decreasing to 34% in 2019–20, while for non-Indigenous Australians it rose from 35% to 44% before decreasing to 42%.



## Diagnosis and screening

**Measure 2.3.2:** The number of Indigenous Australians screened for diabetic retinopathy in the 12-month period who had also had a diabetes test in the 12-month period or in the year before, as a proportion of those who had a diabetes test (survey data).

Current guidelines recommend a diabetic eye examination annually for Indigenous Australians with diabetes, and at least every two years for non-Indigenous Australians with diabetes.

- In 2016, just over half (53%) of Indigenous participants in the eye health survey aged 40 and over with self-reported diabetes had had a diabetic eye examination in the preceding 12 months, the period recommended in the NHMRC guidelines.
  - The proportion of Indigenous participants in the NEHS with self-reported diabetes who had had a diabetic eye examination in the preceding 12 months varied by remoteness, with participants in Very remote areas having the lowest rate (35%).
-

## Diagnosis and screening

**Measure 2.3.3:** The number of Indigenous Australians who were screened for diabetic retinopathy with a retinal camera, in the 12-month period (MBS data).

**Figure 2.3.3: Screening for diabetic retinopathy with a retinal camera (MBS data)**

There are 4 separate charts for this measure showing the number and rate of those screened for diabetic retinopathy with a retinal camera.

### Number and rate per 1,000 of Indigenous Australians who were screened for diabetic retinopathy with a retinal camera by sex, 2020-21

This dual axis combined vertical bar chart and scatter plot shows the number and rate of Indigenous Australians who were screened for diabetic retinopathy with a retinal camera in 2020-21, by sex. The rate of visual acuity tests was higher for Indigenous females than Indigenous males (1.7 per 1,000 and 1.4 per 1,000, respectively).

### Number and rate per 1,000 of Indigenous Australians who were screened for diabetic retinopathy with a retinal camera by region, 2020-21

This dual axis vertical bar chart and scatter plot shows the number and rate of Indigenous Australians diagnosed with diabetes who were screened for diabetic retinopathy with a retinal camera in 2020-21, by region. The rate was highest in *Remote* areas, 3.7 per 1,000 population and lowest in *Major cities*, 0.8 per 1,000 population.

### Number and rate per 1,000 of Indigenous Australians who were screened for diabetic retinopathy with a retinal camera by jurisdiction, 2020-21

This dual axis combined vertical bar chart and scatter plot shows the number and rate of Indigenous Australians diagnosed with diabetes who were screened for diabetic retinopathy with a retinal camera in 2020-21, by jurisdiction. The rate was highest in Western Australia, 8.9 per 1,000 population and lowest in New South Wales, 0.8 per 1,000 population.

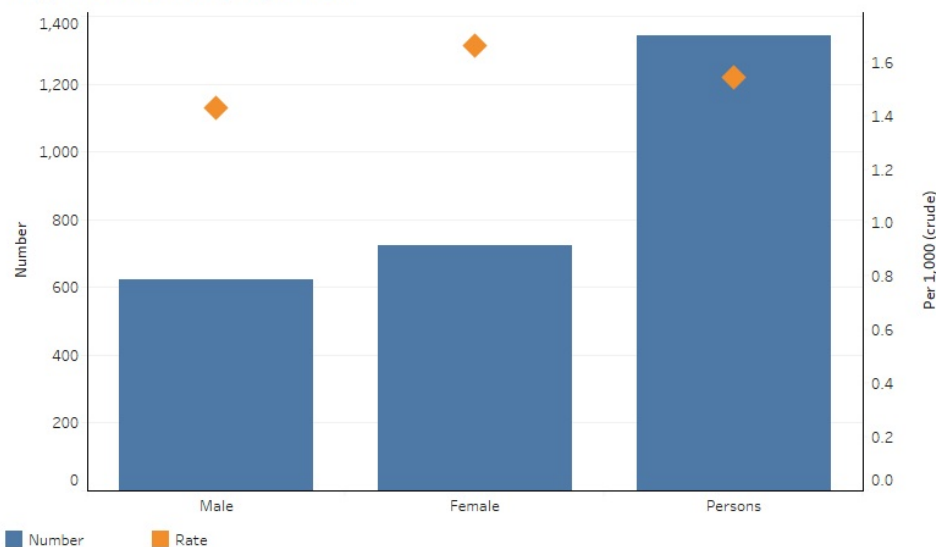
### Number of Indigenous Australians who were screened for diabetic retinopathy with a retinal camera by age, 2016-17 to 2020-21

This line graph shows the number of Indigenous Australians who were diagnosed with diabetes who were screened for diabetic retinopathy with a retinal camera from 2016-17 to 2020-21, by age group. The number of eye examinations is highest for those aged 45-59 years across all years and has also risen most steeply for this group, rising from 173 in 2016-17 to 684 in 2018-19, before declining to 539 in 2020-21.

**1,344** Indigenous Australians screened for diabetic retinopathy with a retinal camera.

Select view:	<b>Current</b>	Remoteness
	Jurisdiction	Time trend

#### Indigenous Australians by sex, 2020-21



- In 2020-21, an estimated 1,344 (1.5 per 1,000 Indigenous population) Indigenous Australians were screened for diabetic retinopathy with a retinal camera.

- In 2019-20 and 2020-21, the rate of screening tests for diabetic retinopathy with a retinal camera for Indigenous Australians was lowest in *Major cities* and *Inner regional* areas (0.8 and 0.6 per 1,000, respectively) and highest in *Remote* areas (3.7 and 4.4, respectively).
- 





## Diagnosis and screening

**Measure 2.4.1:** The estimated number, and proportion of Indigenous children in at-risk communities screened for trachoma.

**Figure 2.4.1: Trachoma screening coverage**

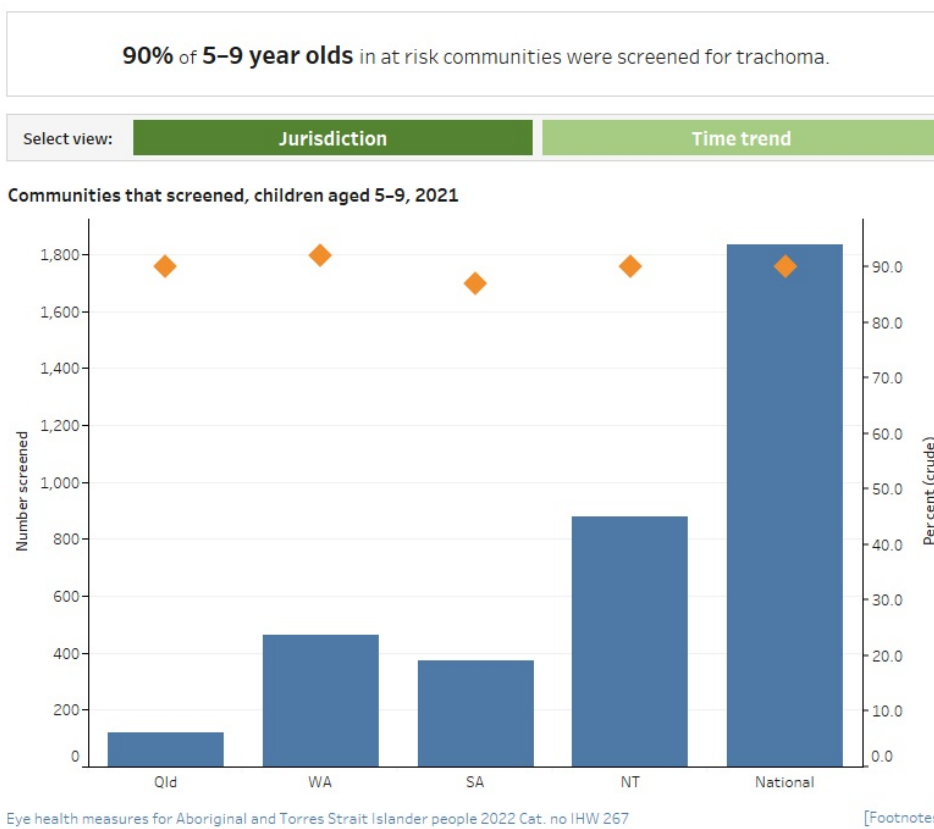
There are 2 separate charts for this measure showing trachoma screening coverage in Indigenous communities, by various characteristics.

### Trachoma screening coverage in communities that screened, children aged 5-9, by jurisdiction 2021

This dual axis combined vertical bar and scatter plot presents the number and percent of children aged 5-9 years screened in Indigenous communities, in 2021, by jurisdiction. The rate was highest in Western Australia (92%) and lowest in Queensland and the Northern Territory (both 90%).

### Trachoma screening coverage in communities that screened, children aged 5-9, 2012 to 2021

This line graph presents trachoma screening coverage for children aged 5-9 years in Indigenous communities, by jurisdiction, from 2012 to 2021. The chart shows that, nationally between 2012 and 2021, the proportion of children aged 5-9 years who were screened for trachoma in at-risk communities rose from 70% in 2012 to 90% in 2021.



- In 2021, in the 82 at-risk communities in 4 jurisdictions (Queensland, Western Australia, South Australia and the Northern Territory) that undertook screening, there were a total of 1,833 children aged 5-9 screened for trachoma, a rate of 90%.
- Between 2012 and 2021, the proportion of children aged 5-9 screened for trachoma in at-risk communities rose from 70% in 2012 to 92% in 2016. The proportion screened dropped slightly in 2017 to 83% then rose again to 90% in 2021.

## Diagnosis and screening

**Measure 2.4.2:** The estimated number, and proportion of Indigenous adults screened for trichiasis.

**Figure 2.4.2: Trichiasis screening coverage**

There are 3 separate charts for this measure showing trichiasis screening coverage in Indigenous communities, by various characteristics.

### Trichiasis screening coverage in communities that screened, by age, 2021

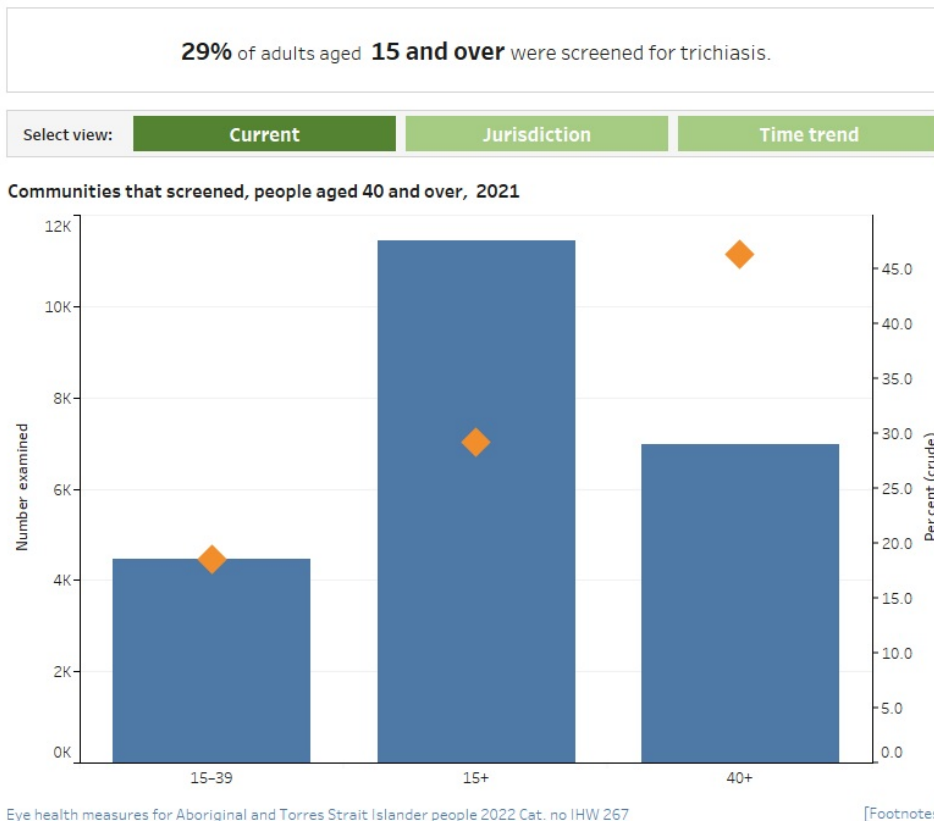
This dual axis combined vertical bar chart and scatter plot presents number and percent screened for trichiasis in Indigenous communities, in 2021, by age group. The chart shows that 4,467 Indigenous Australians aged 15-39 (a rate of 19%) and 6,968 Indigenous adults aged 40 and over (a rate of 46%) were screened for trichiasis in at-risk communities.

### Trichiasis screening coverage in communities that screened, Australians aged 40 and over, by jurisdiction, 2021

This dual axis combined vertical bar chart and scatter plot presents the number and proportion screened for trichiasis in Indigenous communities in Queensland, Western Australia, South Australia and the Northern Territory in 2021, for adults aged 40 and over. The proportion screened was highest in Western Australia, (2,671 adults, a rate of 91%) while the number screened was highest in the Northern Territory (3,748 a rate of 39%) The number and rate screened was lowest in Queensland (18 adults, a rate of 6.4%).

### Trichiasis screening coverage in communities that screened, Australians aged 40 and over, 2011 to 2021

This dual axis combined line graph scatter plot presents the number and proportion screened for trichiasis in Indigenous communities, in 2011 to 2021. The chart shows that the proportion of Indigenous adults aged 40 and over screened for trichiasis rose from 1,179 (9%) in 2011 to 8,270 (24%) in 2017 before dropping to 6,968 (46%) in 2021, in Western Australia, South Australia and the Northern Territory, the jurisdictions that undertook screening.



- In 2021, 4,467 Indigenous Australians aged 15-39 (19%) and 6,968 Indigenous adults aged 40 and over (46%) were screened for trichiasis in at-risk communities.
- In 2021, the proportion of Indigenous adults aged 40 and over screened for trichiasis was highest in Western Australia (2,671 adults, a rate of 91%) and lowest in Queensland (18 adults, a rate of 6.4%).
- In jurisdictions that undertook screening, the proportion of Indigenous adults aged 40 and over screened for trichiasis rose from 1,179 (9%) in 2011 to 6,968 (46%) in 2021. The number of Indigenous adults aged 40 and over screened for trichiasis was highest in 2020 (8,607, 45%), while the proportion was highest in 2021 (6,968, 46%).



## Diagnosis and screening

**Measure 2.5:** The number of Indigenous Australians with vision impairment or blindness attributed to 1 of 5 main causes (refractive error, cataract, diabetic retinopathy, age-related macular degeneration and glaucoma) who had not had their condition diagnosed, as a proportion of those with vision impairment or blindness attributed to 1 of the 5 main causes.

**Figure 2.5: Undiagnosed eye conditions**

There are 2 separate charts for this measure showing diagnosis rates for the top 3 eye diseases and for refractive error for Indigenous and non-Indigenous Australians.

### Eye conditions, Indigenous Australians, by whether diagnosed, 2016

This stacked vertical bar chart compares the number of Indigenous Australians participating in the National Eye Health Survey in 2016 who had diagnosed and undiagnosed eye conditions. The chart shows that:

- 55% of Indigenous participants tested had undiagnosed refractive error
- 69% of Indigenous participants tested had undiagnosed cataract
- 36% of Indigenous participants tested had undiagnosed diabetic retinopathy.

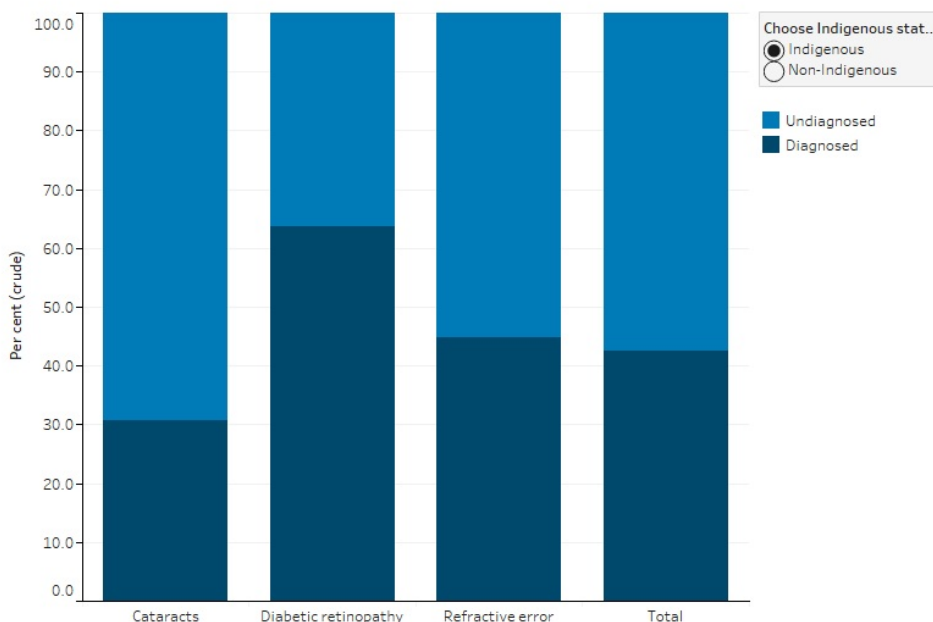
### Eye conditions, non-Indigenous Australians, by whether diagnosed, 2016

This stacked vertical bar chart compares the number of non-Indigenous Australians participating in the National Eye Health Survey in 2016 who had diagnosed and undiagnosed eye conditions. The chart shows that:

- 64% of non-Indigenous participants tested had undiagnosed refractive error
- 36% of non-Indigenous participants tested had undiagnosed cataract.

**57%** of Indigenous Australians had an eye condition **not previously diagnosed**.

Indigenous Australians by diagnosis status, 2016



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2016, around 57% of Indigenous participants in the 2016 NEHS had vision impairment or blindness attributed to 1 of 5 main causes (refractive error, cataract, diabetic retinopathy, age-related macular degeneration and glaucoma), and had not previously had their condition diagnosed.
- The rates varied by condition, with the highest rate being for undiagnosed cataract:
  - 64 of 116 (55%) Indigenous participants tested had undiagnosed refractive error
  - 27 of 39 (69%) Indigenous participants tested had undiagnosed cataract
  - 4 of 11 (36%) Indigenous participants tested had undiagnosed diabetic retinopathy.





## Treatment

According to the 2016 National Eye Health Survey, refractive error, cataract and diabetic retinopathy are the leading causes of vision loss among Aboriginal and Torres Strait Islander Australians. Information on Indigenous Australians' hospitalisations for cataract surgery, treatment for diabetic retinopathy and provision of spectacles (a low cost effective treatment for refractive error), for example, reflect the prevalence of particular conditions in the population as well as the use of health services. Reporting the use of eye health treatment services allows for ongoing monitoring and for identification of particular services, regions or groups within the Indigenous population, where access to and use of services could be improved.

### **Measure 3.1**

Hospitalisations for diseases of the eye

### **Measure 3.2**

Hospitalisations for injuries to the eye

### **Measure 3.3**

Hospitalisations for eye procedures

### **Measure 3.4**

Hospitalisations with a procedure for cataract surgery

### **Measure 3.5.1**

Population who have had cataract surgery, as a proportion of the population who requires it (NEHS)

### **Measure 3.5.2**

Population who have had cataract surgery, as a proportion of the population who requires it (WHO definition)

### **Measure 3.6.1**

Median and 90th percentile waiting times

### **Measure 3.6.2**

Proportion of patients treated within 90 days, and within 365 days

### **Measure 3.7.1**

Population treated for diabetic retinopathy as a proportion of those screened

### **Measure 3.7.2**

Population treated for diabetic retinopathy as a proportion of those screened for diabetes

### **Measures 3.8.1 and 3.8.2**

Community members who were treated in communities where active trachoma was identified and trichiasis treatment coverage

### **Measure 3.9**

Treatment of refractive error

### **Measure 3.10**

Spectacles dispensed under state schemes

## Impact of COVID-19 on hospitalisations

---

© Australian Institute of Health and Welfare 2023



## Treatment

**Measure 3.1:** The number of hospitalisations for diseases of the eye, per 1,000 Indigenous Australians.

Hospitalisations reflect both the occurrence in the population of eye conditions which are serious enough to require hospitalisation, as well as access to and use of hospitals services.

### Figure 3.1: Hospitalisations for diseases of the eye

There are 8 separate charts for this measure showing hospitalisation rates for diseases of the eye, for Indigenous and non-Indigenous Australians, by various characteristics.

#### Hospitalisations for Indigenous Australians for diseases of the eye, by principal diagnosis, 2018-20

This horizontal bar chart compares the hospitalisation rate for Indigenous Australians for diseases of the eye, in 2018-20, by principal diagnosis. The chart shows that the most common principal diagnosis for hospitalisations for diseases of the eye was disorders of the lens (3.5 per 1,000). The rate of hospitalisations for disorders of the choroid & retina was 0.9 per 1,000. Disorders of conjunctiva and disorders of eyelid, lacrimal system & orbit were both 0.4 per 1,000.

#### Hospitalisations for diseases of the eye, by Indigenous status and region, 2018-20

This vertical bar chart compares age standardised rates of hospitalisation for diseases of the eye in 2018-20, by Indigenous status and remoteness category of geographic location. The chart shows that hospitalisation rates were highest for Indigenous Australians in *Remote and very remote* areas (combined) (13 per 1,000) and lowest in *Major cities* (10.2 per 1,000).

#### Hospitalisations for diseases of the eye, by Indigenous status and jurisdiction, 2018-20

This vertical bar chart compares age standardised rates of hospitalisation for diseases of the eye in 2018-20, by Indigenous status and by state and territory. The chart shows that hospitalisation rates for Indigenous Australians for diseases of the eye were lowest in the Australian Capital Territory (4.5 per 1,000) and Tasmania (6.4 per 1,000) and were highest in Queensland and Western Australia (both around 13 per 1,000) followed by the Northern Territory (12 per 1,000).

#### Hospitalisations for Indigenous Australians for diseases of the eye, by age and sex 2018-20

This vertical bar chart compares hospitalisation rates for diseases of the eye in 2018-20, by age and sex. The chart shows that hospitalisation rates rose with age for males and females. Hospitalisation rates were similar for males and females for all age groups up to 75 and over. For those aged 75 and over, rates were higher for Indigenous males (80 per 1,000) than Indigenous females (68 per 1,000).

#### Hospitalisations for Indigenous Australians for diseases of the eye, by PHN, 2018-20 (bar chart)

This horizontal bar chart compares the hospitalisation rate for diseases of the eye for Indigenous Australians in 2018-20, by PHN, grouped by state. The chart shows that the PHNs with the lowest hospitalisation rates for Indigenous Australians for diseases of the eye were the Australian Capital Territory and Western Sydney (NSW) (both 1.9 per 1,000). The PHNs with the highest hospitalisation rates for Indigenous Australians were Western Queensland (Qld) and Country WA (WA) (9.1 and 8.5 per 1,000, respectively).

#### Hospitalisations for diseases of the eye, Indigenous persons by age, 2012-13 to 2019-20

This line graph shows Indigenous hospitalisation rates for diseases of the eye, in 2012-13 to 2019-20, by age group. In general, the rates rose over time across all age groups until 2018-19 before declining from 2018-19 to 2019-20. Hospitalisations also rose with age. Among those aged 45-54, the rate rose from 5.4 per 1,000 in 2012-13 to 7.2 per 1,000 in 2018-19 before declining to 6.4 per 1,000 in 2019-20. Among those aged 75 and over, the rate rose from 56 per 1,000 in 2012-13 to 77 per 1,000 in 2018-19 before declining to 69 per 1,000 in 2019-20.

#### Hospitalisations for diseases of the eye, non-Indigenous persons by age, 2012-13 to 2019-20

This line graph shows non-Indigenous hospitalisation rates for diseases of the eye, in 2012-13 to 2019-20, by age group. In general, the rates rose over time across all age groups until 2018-19 before declining from 2018-19 to 2019-20. Hospitalisations also rose with age. Among those aged 45-54, the rate rose from 5.5 per 1,000 in 2012-13 to 6.2 per 1,000 in 2018-19 before declining to 5.5 per 1,000 in 2019-20. Among those aged 75 and over, the rate rose from 100 per 1,000 in 2012-13 to 111 per 1,000 in 2018-19 before declining to 97 per 1,000 in 2019-20.

#### Hospitalisations for diseases of the eye, by Indigenous status, 2012-13 to 2019-20

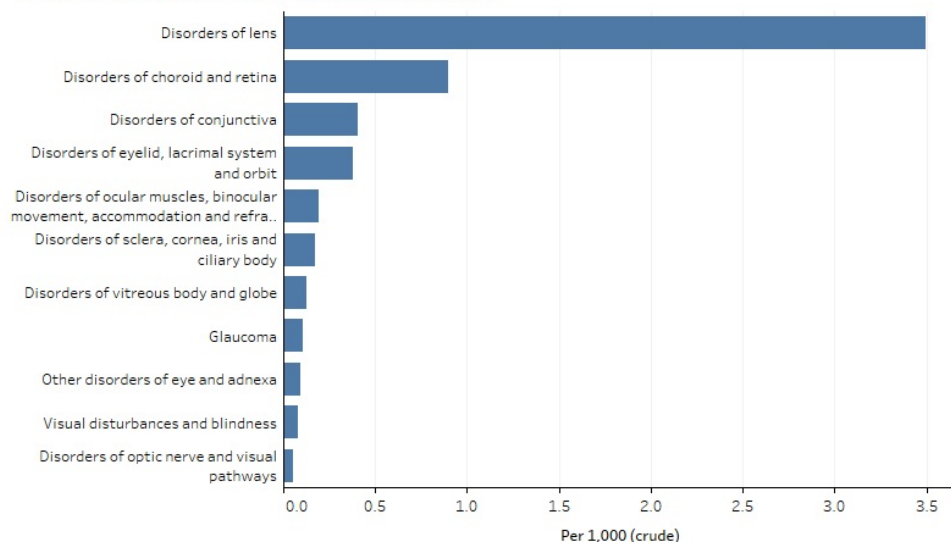


This line graph shows hospitalisation rates for diseases of the eye, from 2012-13 to 2019-20, by Indigenous status. The chart shows that, in this period, the age standardised hospitalisation rate for Indigenous Australians for diseases of the eye increased, from 9.3 to 11 per 1,000. Over the same period, the rate for non-Indigenous Australians increased from 13 to around 14 per 1,000 from 2015-15 to 2018-19 before declining to 13 per 1,000 again in 2019-20. The trend lines show there has been an increase in hospitalisation rates for eye diseases for Indigenous and non-Indigenous Australians over this time.

**10,141 hospitalisations** for diseases of the eye (crude rate of 6.0 per 1,000 population)

Select view:	<b>Current</b>	Remoteness	Jurisdiction
	Population groups	Geography	Time trend

#### Indigenous Australians by principal diagnosis, 2018-20



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In the two-year period 2018-20, there were around 10,100 hospitalisations for Indigenous Australians for diseases of the eye—a crude rate of 6.0 per 1,000 population.
- In 2018-20, for Indigenous Australians, the most common principal diagnosis for hospitalisations for diseases of the eye was disorders of the lens (5,910 hospitalisations or 3.5 per 1,000).
- Age-specific hospitalisation rates were higher among Indigenous Australians than non-Indigenous Australians in 2019-20 for those aged 45 to 54 (6.4 and 5.5 per 1,000, respectively) and 55 to 64 (19.7 and 18.1 per 1,000, respectively).
- Between 2012-13 and 2019-20, the age-standardised hospitalisation rate for diseases of the eye for Indigenous Australians increased from 9.3 to 10.5 per 1,000, while the rate for non-Indigenous Australians decreased from 13.0 to 12.5 per 1,000.

## Treatment

**Measure 3.2:** The number of hospitalisations for injuries to the eye, per 1,000 Indigenous population.

Hospitalisations reflect both the occurrence in the population of eye conditions which are serious enough to require hospitalisation, as well as access to and use of hospitals services.

### Figure 3.2: Hospitalisations for eye injuries

There are 8 separate charts for this measure showing hospitalisation rates for injuries to the eye, for Indigenous and non-Indigenous Australians, by various characteristics.

#### Hospitalisations for Indigenous Australians for injuries to the eye, by type of injury, 2018-20

This horizontal bar chart compares the hospitalisation rate for Indigenous Australians for injuries of the eye, in 2018-20, by type of injury. The chart shows that the most common type of injuries were open wounds of the eyelid and periorbital fracture (both 0.4 per 1,000) followed by superficial injuries of eyelid and periorbital area (0.2 per 1,000) and contusion of eyeball and orbital tissues (0.1 per 1,000).

#### Hospitalisations for injuries to the eye, by Indigenous status and region, 2018-20

This grouped vertical bar chart compares hospitalisation rates for injuries to the eye in 2018-20, by remoteness category and Indigenous status. The chart shows that age-standardised hospitalisation rates were higher for Indigenous Australians in all regions. Indigenous injury rates were highest in *Remote and very remote* areas combined (2.9 per 1,000) and lowest in *Major cities* (0.8 per 1,000).

#### Hospitalisations for injuries to the eye, by Indigenous status and jurisdiction, 2018-20

This grouped vertical bar chart compares hospitalisation rates for injuries to the eye in 2018-20, by jurisdiction and Indigenous status. The chart shows that age-standardised hospitalisation rates were higher for Indigenous Australians in all jurisdictions. Indigenous injury rates were highest in Northern Territory (3.7 per 1,000) and lowest in Victoria/Tasmania (0.6 per 1,000).

#### Hospitalisations for Indigenous Australians for injuries to the eye, by age and sex 2018-20

This grouped vertical bar chart compares hospitalisation rates for injuries to the eye in 2018-20, by age and sex. The chart shows that hospitalisation rates for males was higher in all age groups except 25-34 and 75 and over.

#### Hospitalisations for Indigenous Australians for injuries to the eye, by PHN, 2018-20 (bar chart)

This horizontal bar chart compares the hospitalisation rate for injuries to the eye for Indigenous Australians in 2018-20, by PHN, grouped by state. The chart shows that the PHNs with the lowest publishable hospitalisation rates for Indigenous Australians for injuries to the eye were Tasmania, Nepean Blue Mountains and Hunter New England and Central Coast (all under 0.5 per 1,000). The PHNs with the highest hospitalisation rates for Indigenous Australians were the Northern Territory and Western Queensland (both over 3 per 1,000).

#### Hospitalisations for injuries to the eye, Indigenous persons by age, 2011-12 to 2019-20

This line graph shows Indigenous hospitalisation rates for injuries to the eye in 2012-13 to 2019-20, by age group. In general, rates remained fairly constant over time across all age groups except 45-54 where rates rose slightly. Hospitalisations were highest amongst the 25-34 and 35-44 age groupings.

#### Hospitalisations for injuries to the eye, non-Indigenous persons by age, 2011-12 to 2019-20

This line graph shows non-Indigenous hospitalisation rates for injuries to the eye in 2012-13 to 2019-20, by age group. Rates remained fairly constant over time across for all age groups except 65-74 and 75+ where rates rose slightly. Hospitalisations also rose with age. Among those aged 75+ hospitalisations are much higher than any other age groups. In 2019-20 the rate for those age 75+ was 1.8 compared to 0.5 for the next highest age group (65-74).

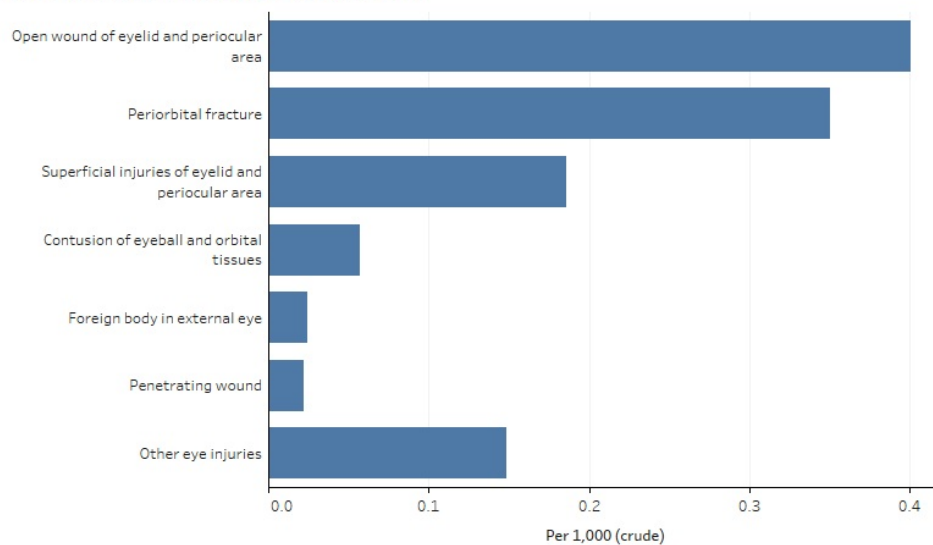
#### Hospitalisations for injuries to the eye, by Indigenous status, 2010-11 to 2019-20

This line graph shows hospitalisation rates for injuries to the eye, from 2010-11 to 2019-20, by Indigenous status. The chart shows that, in this period, the age standardised hospitalisation rate for Indigenous Australians for injuries to the eye increased, from 1.2 to 1.4 per 1,000. Over the same period, the rate for non-Indigenous Australians stayed generally constant at 0.4 per 1,000. The trend lines show there has been a slight increase in hospitalisation rates for eye injuries for Indigenous and non-Indigenous Australians over this time.

2,009 hospitalisations for injuries to the eye (1.2 per 1,000 population)

Select view:	Current	Remoteness	Jurisdiction
	Population groups	Geography	Time trend

#### Indigenous Australians by type of injury, 2018-20



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In the two-year period from 2018-20, there were around 2,000 hospitalisations of Indigenous Australians for injuries to the eye—1.2 per 1,000 population.
- In 2018-20, for Indigenous Australians, the most common principal diagnosis for hospitalisations for injury to the eye was an open wound of eyelid and periocular area (0.4 per 1,000).
- In 2019-20, the age-specific hospitalisation rate for Indigenous Australians aged 35-44 (2.3 per 1,000) was more than 7 times the rate for non-Indigenous Australians of the same age (0.3 per 1,000).
- Between 2012-13 and 2019-20, the age-standardised hospitalisation rate for eye injuries for Indigenous Australians and non-Indigenous Australians was fairly constant.

## Treatment

**Measure 3.3:** The number of hospital separations with a procedure on the eye and adnexa, per 1,000 Indigenous population.

Hospitalisations reflect both the occurrence in the population of eye conditions which are serious enough to require hospitalisation, as well as access to and use of hospitals services.

### Figure 3.3: Hospitalisations for eye procedures

There are 8 separate charts for this measure showing hospitalisation rates for eye procedures, for Indigenous and non-Indigenous Australians, by various characteristics.

#### Hospitalisations for Indigenous Australians for eye procedures by procedure type, 2018-20

This horizontal bar chart compares the hospitalisation rate for Indigenous Australians for eye procedures, in 2018-20, by procedure type. The chart shows that the most common procedure was lens procedures (3.3 per 1,000) followed by retinal procedures (1.3 per 1,000).

#### Hospitalisations for eye procedures, by Indigenous status and region, 2017-19

This grouped vertical bar chart compares age standardised hospitalisation rates for eye procedures in 2018-20, by remoteness category and Indigenous status. The chart shows that hospitalisation rates for Indigenous Australians were lower than for non-Indigenous Australians in *Major cities* (11 and 14 per 1,000 respectively) and *Inner and outer regional* areas (12 and 13 per 1,000 respectively) but higher in *Remote and very remote* areas (15 and 12 per 1,000 respectively).

#### Hospitalisations for eye procedures, by Indigenous status and jurisdiction, 2018-20

This grouped vertical bar chart compares age standardised hospitalisation rates for eye procedures in 2018-20, by jurisdiction and Indigenous status. The chart shows that hospitalisation rates for Indigenous Australians were lower than for non-Indigenous in all jurisdictions except the Northern Territory.

#### Hospitalisations for Indigenous Australians for eye procedures, by age and sex 2018-20

This vertical bar chart compares hospitalisation rates for eye procedures in 2018-20, by age and sex. The chart shows that hospitalisation rates rose with age for males and females. Hospitalisation rates were similar for males and females in all age groups up to 75 and over. For those aged 75 and over rates were higher for Indigenous males (79 per 1,000) than Indigenous females (70 per 1,000).

#### Hospitalisations for Indigenous Australians for eye procedures, by PHN, 2018-20 (barchart)

This horizontal bar chart compares the hospitalisation rate for eye procedures for Indigenous Australians in 2018-20, by PHN, grouped by state. The chart shows that the PHNs with the lowest hospitalisation rates for Indigenous Australians for eye procedures were Western Sydney, the Australian Capital Territory and Nepean Blue Mountains (NSW) (all equal to or less than 2.5 per 1,000). The PHNs with the highest hospitalisation rates for Indigenous Australians were Western Queensland (Qld) and Country WA (WA) (both over 8.5 per 1,000).

#### Hospitalisations for eye procedures, Indigenous persons by age, 2012-13 to 2019-20

This line graph shows, Indigenous hospitalisation rates for eye procedures, in 2012-13 to 2019-20, by age group. In general, the rates rose over time across all age groups from 2012-13 to 2018-19 before falling from 2018-19 to 2019-20. Hospitalisations also rose with age. Among those aged 45-54, the rate rose from 5.1 per 1,000 in 2012-13 to 7.2 per 1,000 in 2018-19 before declining to 6.2 in 2019-20. Among those aged 75 and over, the rate rose from 55 per 1,000 in 2012-13 to 77 per 1,000 in 2018-19 before declining to 68 per 1,000 in 2019-20.

#### Hospitalisations for eye procedures, non-Indigenous persons by age, 2012-13 to 2019-20

This line graph shows, non-Indigenous hospitalisation rates for eye procedures, in 2012-13 to 2019-20, by age group. In general, the rates rose over time across all age groups from 2012-13 to 2018-19 before falling from 2018-19 to 2019-20. Hospitalisations also rose with age. Among those aged 45-54, the rate rose from 5.1 per 1,000 in 2012-13 to 5.6 per 1,000 in 2018-19 before falling to 5.1 in 2019-20. Among those aged 75 and over, the rate rose from 100 per 1,000 in 2012-13 to 110 per 1,000 in 2018-19 before falling to 96 per 1,000 in 2019-20.

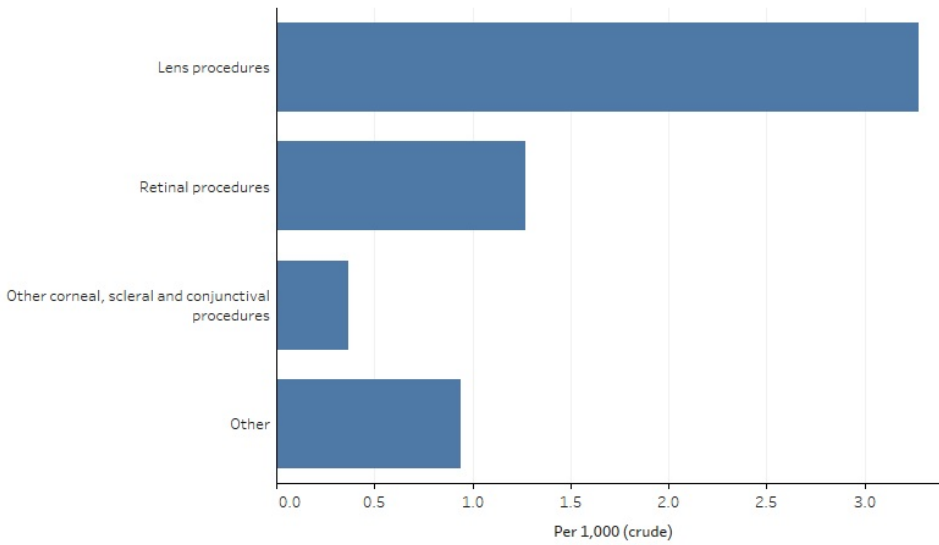
#### Hospitalisations for eye procedures, by Indigenous status, 2012-13 to 2019-20

This line graph shows hospitalisation rates for eye procedures, from 2012-13 to 2019-20, by Indigenous status. The chart shows that, in this period, the age standardised hospitalisation rate for Indigenous Australians for eye procedures increased, from 5.1 in 2012-13 to 7.2 per 1,000 in 2018-19 before falling to 6.2 in 2019-20. Over the same period, the rate for non-Indigenous Australians increased from 5.1 to 5.6 before falling to 5.1. The trend lines show there has been a slight increase in hospitalisation rates for eye procedures for Indigenous and non-Indigenous Australians over this time.

9,899 hospitalisations for procedures of the eye (5.9 per 1,000 population)

Select view:	Current	Remoteness	Jurisdiction
	Population groups	Geography	Time trend

#### Indigenous Australians by type of procedure , 2018-20



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In the two-year period 2018-20, there were around 9,900 hospitalisations of Indigenous people for eye procedures—a crude rate of 5.9 per 1,000 population.
- In 2018-20, for Indigenous Australians, the most common hospitalisations for an eye procedure were lens procedures (3.3 per 1,000) followed by retinal procedures (1.3 per 1,000).
- Between 2012-13 and 2019-20, the age-standardised hospitalisation rate for eye procedures for Indigenous Australians increased from 9.1 to 11.4 in 2018-19 before dropping to 10.3 per 1,000 in 2019-20, while the rate for non-Indigenous Australians increased from 12.8 to 13.8 in 2018-19 before dropping to 12.2 per 1,000 in 2019-20.

## Treatment

**Measure 3.4:** The number of hospital separations with a procedure for cataract surgery, per 1,000,000 Indigenous population.

Hospitalisations reflect both the occurrence in the population of eye conditions which are serious enough to require hospitalisation, as well as access to and use of hospitals services. The cataract surgery rate is calculated per million to align with international standards.

### Figure 3.4: Cataract surgery rate

There are 8 separate charts for this measure showing hospitalisation rates for cataract surgery, for Indigenous and non-Indigenous Australians, by various characteristics.

#### Hospitalisations for Indigenous Australians for cataract surgery, 2016-18 and 2018-20

This dual axis combined vertical bar chart and scatter plot compares hospitalisation rates for cataract surgery in 2016-18 and 2018-20. The chart shows that in 2016-18, the number of hospitalisations for cataract surgery was 5,460 (3,355 per 1,000,000) and in 2018-20 the number of hospitalisations was 6,150 (3,636 per 1,000,000 population).

#### Hospitalisations for cataract surgery, by Indigenous status and region, 2018-20

This grouped vertical bar chart compares age standardised hospitalisation rates for cataract surgery in 2018-20, by remoteness category and Indigenous status. The chart shows that hospitalisation rates for Indigenous Australians were lower than for non-Indigenous Australians in *Major cities* (6,670 and 7,901 per 1,000,000, respectively) and *Inner and outer regional areas* combined (7,648 and 8,461 per 1,000,000, respectively) but higher in *Remote and very remote* areas combined (8,232 and 7,079 per 1,000,000 respectively).

#### Hospitalisations for cataract surgery, by Indigenous status and jurisdiction, 2018-20

This grouped vertical bar chart compares age standardised hospitalisation rates for cataract surgery in 2018-20, by jurisdiction and Indigenous status. The chart shows that hospitalisation rates for Indigenous Australians were lower than for non-Indigenous in all jurisdictions except South Australia.

#### Hospitalisations for Indigenous Australians for cataract surgery, by age and sex, 2018-20

This grouped vertical bar chart compares hospitalisation rates for cataract surgery for Indigenous Australians in 2018-20, by age and sex. The chart shows that hospitalisation rates rose with age for both males and females. Hospitalisation rates were similar for males and females in younger age groups. However, for those aged 55-64 and 65-74 rates were higher for Indigenous females (14,611 and 42,268 per 1,000,000, respectively) than Indigenous males (13,324 and 39,152 per 1,000,000, respectively). For those aged 75 and over rates were higher for Indigenous males (60,631 per 1,000,000) than Indigenous females (48,131 per 1,000,000).

#### Hospitalisations for Indigenous Australians for cataract surgery, by PHN, 2018-20 (bar chart)

This horizontal bar chart compares the hospitalisation rate for cataract surgery for Indigenous Australians in 2018-20, by PHN, grouped by state. The chart shows that the PHNs with the lowest hospitalisation rates for Indigenous Australians for cataract surgery were Western Sydney, the Australian Capital Territory and Nepean Blue Mountains (NSW) (all under 1,700 per 1,000,000). The PHNs with the highest hospitalisation rates for Indigenous Australians were Western Queensland (Qld), Murrumbidgee (NSW) and Hunter New England and Central Coast (NSW) (all over 4,700 per 1,000,000).

#### Hospitalisations for Indigenous Australians for cataract surgery, by age, 2012-13 to 2019-20

This line graph shows, Indigenous hospitalisation rates for cataract surgery, from 2012-13 to 2019-20, by age. In general, the rates rose over time across all age groups from 2012-13 to 2018-19 before falling from 2018-19 to 2019-20. Among those aged 65-74, the crude rate rose from 34,547 per 1,000,000 in 2012-13 to 42,762 per 1,000,000 in 2018-19 before declining to 38,883 per 1,000,000 in 2019-20. Among those aged 75 and over, the rate rose from 46,468 per 1,000,000 in 2012-13 to 58,877 per 1,000,000 in 2018-19 before declining to 48,026 per 1,000,000 in 2019-20.

#### Hospitalisations for non-Indigenous Australians for cataract surgery, by age, 2012-13 to 2018-20

This line graph shows, non-Indigenous hospitalisation rates for cataract surgery, from 2012-13 to 2018-20, by age. In general, rates rose over time across all age groups except those aged 75 and over, from 2012-13 to 2018-19 before falling from 2018-19 to 2019-20. Among those aged 65-74, the crude rate rose from 41,119 per 1,000,000 in 2012-13 to 46,926 per 1,000,000 in 2018-19 before declining to 40,004 per 1,000,000 in 2019-20. Among those aged 75 and over, the rate declined from 67,598 per 1,000,000 in 2012-13 to 55,420 per 1,000,000 in 2019-20.

#### Hospitalisations for cataract surgery, by Indigenous status, 2012-13 to 2019-20

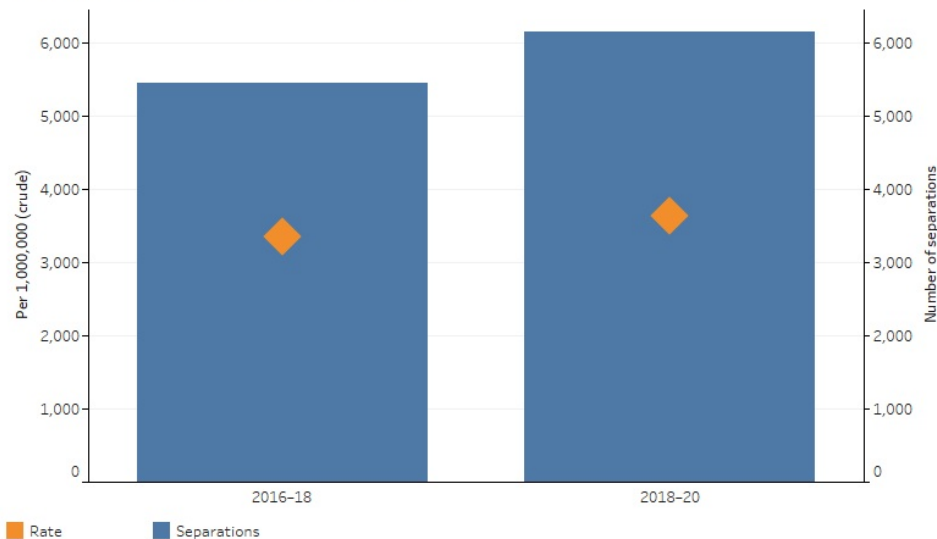
This line graph shows, age-standardised hospitalisation rates for cataract surgery, from 2012-13 to 2019-20, by Indigenous status. Rates increased for Indigenous Australians from 6,681 per 1,000,000 in 2012-13 to 8,130 per 1,000,000 in 2018-19 before declining to 6,884 in 2019-20. Rates did not change as much for non-Indigenous Australians over this period: from 8,493 per 1,000,000 to 8,737 per 1,000,000 before

declining to 7,413 per 1,000,000. The trend line shows there has been a slight increase in the age-standardised hospitalisation rate for Indigenous Australians over this time

**6,150 hospitalisations** for cataract surgery (3,636 per 1,000,000 population)

Select view:	<b>Current</b>	Remoteness	Jurisdiction
	Population groups	Geography	Time trend

Indigenous Australians, 2016-18 and 2018-20



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In the two-year period from 2018-20, there were around 6,200 hospitalisations for Indigenous Australians for cataract surgery—a rate of 3,636 per 1,000,000 population. The number of hospitalisations over the two-year period 2018-20 was below the estimated annual number of Indigenous people needing cataract surgery (14,656).
- In 2019-20, the age-specific rate of hospitalisations was higher for Indigenous Australians aged 45-54 and 55-64 than for non-Indigenous Australians of the same age. However, at older ages, age-specific rates were higher for non-Indigenous Australians than Indigenous Australians.
- Between 2012-13 and 2018-19, the age-standardised rate for cataract surgery for Indigenous Australians increased from 6,681 to 8,130 and then dropped to 6,884 per 1,000,000 in 2019-20, while the rate for non-Indigenous Australians increased from 8,493 to 8,737 in 2018-19 and then dropped to 7,413 per 1,000,000 in 2019-20.

## Treatment

**Measure 3.5.1:** The cataract surgical coverage rate, expressed as the number of Indigenous Australians who have had cataract surgery, as a proportion of those who have had cataract surgery plus those who have vision loss (visual acuity worse than 6/12) and cataracts in 1 or both eyes (National Eye Health Survey definition).

The coverage rate captures those with the condition who have and have not had cataract surgery.

**Figure 3.5.1: Cataract surgical coverage rate (NEHS)**

There are 4 separate charts showing cataract surgery coverage and confidence intervals, by various characteristics. The data is presented as a scatter plot for the point estimate and Gant chart representing the confidence interval.

### Cataracts surgery coverage rate by Indigenous status, 2016

This combined scatter plot and Gant chart compares cataract surgery coverage, by Indigenous status. The chart shows that, in 2016, the cataract surgical coverage rate for Indigenous participants in the 2016 NEHS was 59%. This was significantly lower than the rate for non-Indigenous participants (89%).

### Cataracts surgery coverage rate by Indigenous status and age, 2016

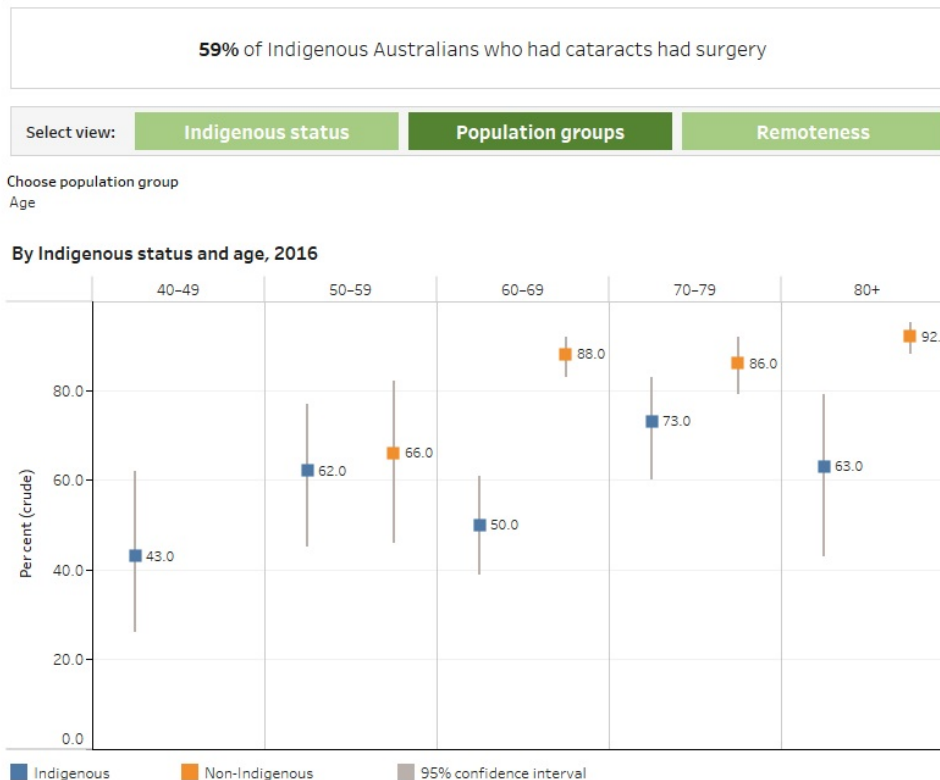
This combined scatter plot and Gant chart compares cataract surgery coverage in 2016, by Indigenous status and by age group. The chart shows that cataract surgical coverage rates for Indigenous participants did not differ significantly by age group. Excluding those aged 40–49 (where there was no data), non-Indigenous cataract surgery coverage was higher than that for Indigenous Australians across all age groups.

### Cataracts surgery coverage rate by Indigenous status and sex, 2016

This combined scatter plot and Gant chart compares cataract surgery coverage in 2016, by Indigenous status and by sex. Among Indigenous Australians, the rate was higher among males than females (69% and 52%)—however there was no sex related difference among non-Indigenous Australians (88% for both).

### Cataracts surgery coverage rate by Indigenous status and region, 2016

This combined scatter plot and Gant chart compares cataract surgery coverage in 2016, by Indigenous status and by remoteness. The chart shows that cataract surgical coverage rates for Indigenous participants did not differ significantly by remoteness (due to large confidence intervals). Non-Indigenous cataract surgery coverage was higher than that for Indigenous Australians in each remoteness category.



- In 2016, the NEHS cataract surgical coverage rate for Indigenous Australians was 59%. This was significantly lower than the rate for non-Indigenous Australians (89%).



- In 2016, the estimated cataract surgical coverage rate for Indigenous Australians was lowest for those aged 40-49 (43%) and highest for those aged 70-79 (73%). The surgical coverage rate for non-Indigenous Australians was significantly higher than for Indigenous Australians, for those aged 60-69 and for those aged 80 or over.
- 





## Treatment

**Measure 3.5.2:** The cataract surgical coverage rate, expressed as the number of Indigenous Australians who have had cataract surgery, as a proportion of those who have had cataract surgery plus those with vision loss (visual acuity worse than 6/18) and cataracts in both eyes (World Health Organisation definition).

The coverage rate captures those with the condition who have and have not had cataract surgery.

In 2016, the cataract surgical coverage rate for Indigenous Australians was 93% (CI 75%-98%). This was lower than the estimated rate for non-Indigenous Australians of 99% (CI 97%-100%), although not statistically significant.

---

## Treatment

**Measure 3.6.1:** The median waiting time (or the number of days within which 50% of patients who completed their wait were admitted for cataract surgery) and the 90th percentile waiting time (or the number of days within which 90% of patients who completed their wait were admitted for cataract surgery).

The waiting times measures provide an indicator of access to cataract surgery for those on waiting lists managed by public hospitals.

### Figure 3.6.1: Waiting times for elective cataract surgery (percentile)

There are 3 separate visualisations for this measure showing data by region, jurisdiction and year. The region and jurisdiction visualisations contain two grouped vertical bar charts stacked vertically, one for waiting time at the 50<sup>th</sup> percentile and the other at the 90<sup>th</sup> percentile. The time trend visualisation contains two line graphs stacked on top of each other.

#### Waiting times for elective cataract surgery by Indigenous status and region, 2018-20

This bar chart shows the days waited at the 50th percentile for elective cataract surgery, in 2018-20, by Indigenous status and region. The chart shows that the median waiting time, or time waited before 50% of Indigenous patients were admitted for cataract surgery, was higher for Indigenous Australians across all regions with the exception of *Outer regional* areas where the wait times for Indigenous Australians was slightly less than that for non-Indigenous Australians (123 and 124 days, respectively).

This bar chart shows the days waited at the 90th percentile for elective cataract surgery in 2018-20, by Indigenous status and region. The chart shows the time waited before 90% of Indigenous patients were admitted for cataract surgery, was longer for Indigenous Australians in across all regions with the exception of *Outer regional* areas where the wait times for Indigenous Australians was slightly less than that for non-Indigenous Australians (346 and 349 days, respectively).

#### Waiting times for elective cataract surgery by Indigenous status and jurisdiction, 2018-20

This bar chart shows the days waited at the 50th percentile for elective cataract surgery, in 2018-20, by Indigenous status and jurisdiction. The chart shows that the median waiting time, or time waited before 50% of Indigenous patients were admitted for cataract surgery, was lower for Indigenous Australians in NSW and SA and higher in all other jurisdictions.

This bar chart also shows the days waited at the 90th percentile for elective cataract surgery in 2018-20, by Indigenous status and jurisdiction. The chart shows the time waited before 90% of patients were admitted for cataract surgery, was shorter for non-Indigenous Australians in all jurisdictions except Victoria and the NT.

#### Waiting times for elective cataract surgery by Indigenous status, 2012-13 to 2019-20

This line graph shows the days waited at the 50th percentile for elective cataract surgery, from 2012-13 to 2019-20, by Indigenous status. The chart shows that the median waiting time, or time waited before 50% of Indigenous patients were admitted for cataract surgery, was consistently longer than that for non-Indigenous Australians (in 2019-20 this was 130 days and 95 days, respectively).

This line graph also shows the days waited at the 90th percentile for elective cataract surgery, from 2012-13 to 2019-20, by Indigenous status. The chart shows the time waited before 90% of Indigenous patients were admitted for cataract surgery, was consistently longer than that for non-Indigenous Australians (in 2019-20 this was 354 days and 351 days, respectively).

Median waiting time of **130 days** for Indigenous Australians

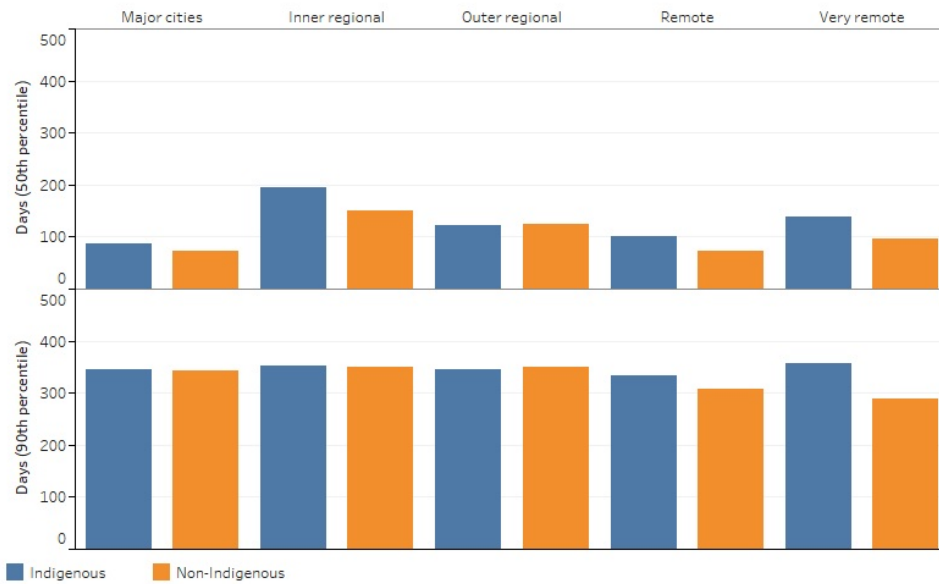
Select view:

Remoteness

Jurisdiction

Time trend

By Indigenous status and remoteness, 2018–20



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2019-20 the median waiting time for elective cataract surgery for Indigenous Australians was longer than that for non-Indigenous Australians (130 days and 95 days, respectively).
- In 2019-20 the time waited before 90% of Indigenous Australians were admitted for cataract surgery was similar to the time waited by for non-Indigenous Australians (354 days and 351 days, respectively).
- From 2012-13 to 2019-20, the median waiting time for elective cataract surgery for Indigenous Australians rose from 140 days to 152 days (in 2015-16), and then dropped to 130 days in 2019-20. Over the same period, the median waiting time for non-Indigenous Australians rose from 88 days to 93 days (in 2015-16), dropped and then rose again in 2019-20 to 95 days.
- From 2012-13 to 2019-20, the number of days waited at the 90th percentile was similar for Indigenous and non-Indigenous Australians and remained relatively stable for both groups.



## Treatment

**Measure 3.6.2:** The proportion of patients who completed their wait who had cataract surgery within 90 days and within 365 days. To make it easier to interpret, the figure shows the proportion who waited more than 365 days for cataract surgery.

The waiting times measures provide an indicator of access to cataract surgery for those on waiting lists managed by public hospitals.

**Figure 3.6.2: Waiting times for elective cataract surgery (days)**

There are 3 separate visualisations for this measure showing data by region, jurisdiction and year. The jurisdiction and region time trends contain two grouped vertical bar charts stacked vertically, one for those waiting more than 90 days and the other for those waiting more than 365 days. The time trend visualisation is a line chart by indigenous status for percentage of patients waiting more than 365 days.

### Waiting times (days) for elective cataract surgery by Indigenous status and region, 2018-20

This bar chart shows the percentage of patients treated within 90 days for elective cataract surgery, in 2018-20, by Indigenous status and region. The chart shows that in all regions the percentage of Indigenous patients treated within 90 days was lower than non-Indigenous.

This bar chart also shows the percentage of patients waiting more than 365 days for elective cataract surgery in 2018-20, by Indigenous status and region. The chart shows that in all regions except *Very remote* areas a smaller percentage of Indigenous than non-Indigenous Australians waited longer than 365 days.

### Waiting times (days) for elective cataract surgery by Indigenous status and jurisdiction, 2018-20

This bar chart shows the percentage of patients waiting more than 90 days for elective cataract surgery, in 2018-20, by Indigenous status and jurisdiction. The chart shows that in NSW, Qld and SA a slightly higher percentage of Indigenous patients were treated within 90 days.

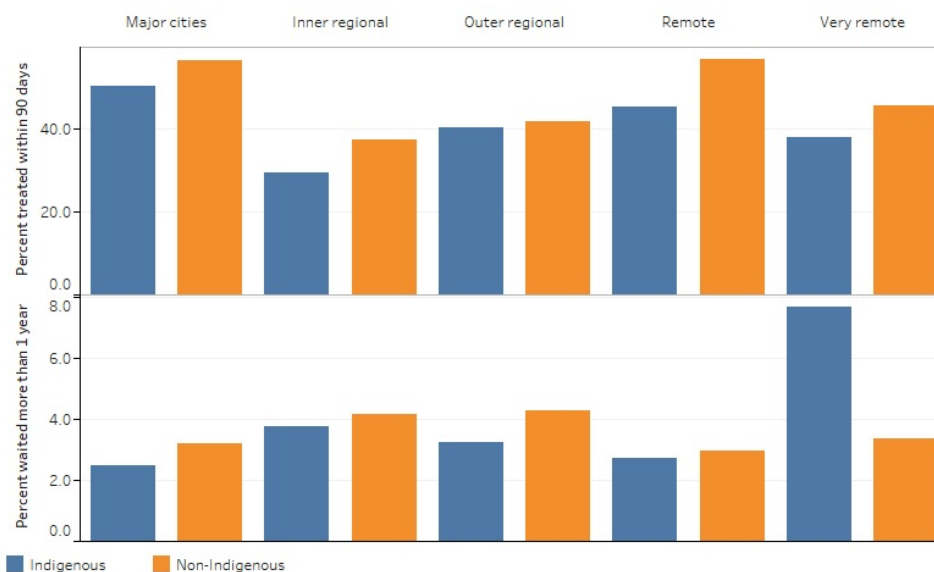
This bar chart also shows the percentage of patients waiting more than 365 days for elective cataract surgery in 2018-20, by Indigenous status and jurisdiction. The chart shows in Vic, WA and the NT a larger percentage of Indigenous than non-Indigenous Australians waited longer than 365 days.

### Waiting times (treated within 365 days) for elective cataract surgery by Indigenous status, 2012-13 to 2019-20

This line chart shows the percentage of patients waiting more than 365 days for elective cataract surgery, from 2012-13 to 2019-20, by Indigenous status. The chart shows that while there has always been more Indigenous Australians that were not treated within 365 days the gap has narrowed significantly. In 2012-13, the percent was 6.6 for Indigenous and 3.2 for non-Indigenous. In 2019-20, 5.3% of Indigenous Australians and 4.9% of non-Indigenous Australians waited more than one year for cataract surgery.



#### By Indigenous status and remoteness, 2018-20



- In 2019-20, the proportion of Indigenous Australians who had elective cataract surgery and were treated within 90 days was lower than the proportion of non-Indigenous Australians who were treated within this time (39% and 48%, respectively).
  - In 2019-20, the proportion of Indigenous Australians treated within 365 days for cataract surgery was similar to the proportion of non-Indigenous Australians who were treated within this time (94.8% and 95.3%, respectively).
  - Between 2012-13 and 2019-20, the proportion of both Indigenous and non-Indigenous Australians who were treated within 90 days and within 365 days for elective cataract surgery remained relatively stable.
- 



## Treatment

**Measure 3.7.1:** The diabetic retinopathy treatment rate, expressed as the number of Indigenous Australians who had a retinal laser procedure or an intra-vitreous injection who had also had a diabetes test as a proportion of those screened for diabetic retinopathy. Indigenous Australians who were screened for diabetic retinopathy may not have been found to have diabetic retinopathy. For this reason the rate of those treated for diabetic retinopathy may be an underestimate.

The timely treatment of diabetic retinopathy can prevent vision loss. Treatment generally involves injections into the eye or laser therapy.

### Figure 3.7.1: Treated for diabetic retinopathy among those screened for diabetic retinopathy

There are 5 separate charts for this measure by various characteristics.

#### Age standardised proportion of Indigenous Australians screened for diabetic retinopathy treated for diabetic retinopathy by Indigenous status, 2019–20

This vertical bar chart compares the age-standardised proportion of the population screened for diabetic retinopathy who received treatment in 2019–20, by Indigenous status. The age-standardised proportion was 2.6% for Indigenous Australians and 2.9% for non-Indigenous Australians.

#### Proportion of Indigenous Australians screened for diabetic retinopathy treated for diabetic retinopathy by region, 2019–20

This dual axis combined vertical bar chart and scatter plot displays the proportion and number of Indigenous Australians screened who were treated for diabetic retinopathy in 2019–20, by remoteness area. Point markers display the proportion treated in each remoteness area. The proportion is highest in *Major cities* and *Outer regional* areas (both 4.2%), and lowest in *Very remote* areas (2.0%).

#### Proportion of Indigenous Australians screened for diabetic retinopathy treated for diabetic retinopathy by jurisdiction, 2019–20

This dual axis combined vertical bar chart and scatter plot displays the proportion and number of Indigenous Australians screened who were treated for diabetic retinopathy in 2019–20, by jurisdiction. Point markers display the proportion treated in each jurisdiction. The highest number treated is in New South Wales (239), but the highest proportion treated is in the Australian Capital Territory (5.8%). The lowest number treated was in South Australia (16), but the lowest proportion treated was in the Northern Territory (0.8%).

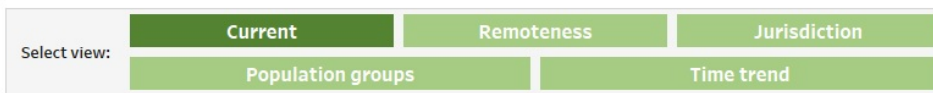
#### Proportion of Indigenous Australians screened for diabetic retinopathy treated for diabetic retinopathy by age and sex, 2019–20

The grouped vertical bar chart displays the proportion of Indigenous Australians screened who were treated for diabetic retinopathy in 2019–20 by age group and by sex. The rate increases with age for females. For males the rate fell in the oldest age group (65+).

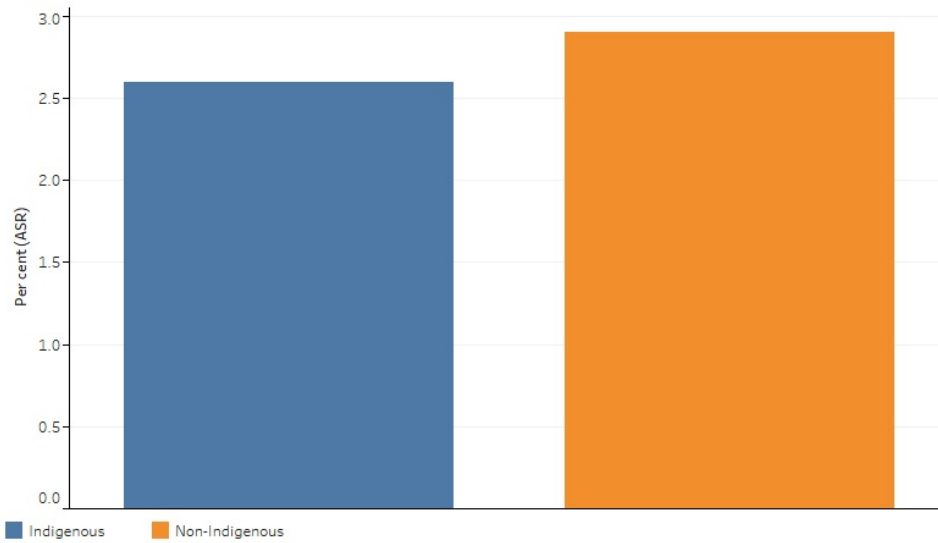
#### Proportion of Indigenous Australians screened for diabetic retinopathy treated for diabetic retinopathy, 2010–11 to 2019–20

This dual axis combined line chart and scatter graph shows the proportion of Indigenous Australians screened who were treated for diabetic retinopathy, from 2010–11 to 2019–20. Point markers display the percentage treated, while the line displays the number treated in each time period. The proportion increased from 3.5% in 2010–11 to 3.8% in 2019–20, as did the number receiving treatment going from 351 to 506.

3.8% of Indigenous Australians screened for diabetic retinopathy were treated for diabetic retinopathy



#### By Indigenous status, 2019-20



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2019-20, there were 506 Indigenous Australians screened for diabetic retinopathy who underwent treatment. This was 3.8% of those screened for diabetic retinopathy.
- In 2019-20, the age-standardised proportion treated was similar for Indigenous and non-Indigenous Australians (2.6% and 2.9%, respectively).
- Between 2010-11 and 2019-20, the number of Indigenous Australians screened for diabetic retinopathy who underwent treatment increased from 351 in 2010-11 to 506 in 2019-20. The proportion who underwent treatment declined from 3.5% in 2010-11 to 3.2% in 2014-15, 2015-16 and 2016-17 before rising slightly to 3.8% in 2019-20.



## Treatment

**Measure 3.7.2:** The diabetic retinopathy treatment rate, expressed as the number of Indigenous Australians who had a retinal laser procedure or an intra-vitreous injection who had also had a diabetes test as a proportion of those who had a diabetes test. Indigenous Australians who had a diabetes test may not have been found to have diabetes. For this reason the rate of those treated for diabetic retinopathy may be an underestimate.

The timely treatment of diabetic retinopathy can prevent vision loss. Treatment generally involves injections into the eye or laser therapy.

### Figure 3.7.2: Treated for diabetic retinopathy among those tested for diabetes

There are 5 separate charts for this measure by various characteristics.

#### Age standardised proportion of Indigenous Australians screened for diabetic retinopathy treated for diabetic retinopathy by Indigenous status, 2019–20

This vertical bar chart compares the age-standardised proportion of the population screened for diabetic retinopathy who received treatment in 2019–20, by Indigenous status. The age-standardised proportion was 1.1% for Indigenous Australians and 1.3% for non-Indigenous Australians.

#### Proportion of Indigenous Australians screened for diabetic retinopathy treated for diabetic retinopathy by region, 2019–20

This dual axis combined vertical bar chart and scatter plot displays the proportion and number of Indigenous Australians screened who were treated for diabetic retinopathy in 2019–20, by remoteness status. Point markers display the proportion treated in each remoteness area. The proportion is highest in *Major cities* (1.9%) and *Inner regional* and *Outer regional* areas (both 1.8%), and lowest in *Very remote* areas (0.6%).

#### Proportion of Indigenous Australians screened for diabetic retinopathy treated for diabetic retinopathy by jurisdiction, 2019–20

This dual axis combined vertical bar chart and scatter plot displays the proportion and number of Indigenous Australians screened who were treated for diabetic retinopathy in 2019–20, by jurisdiction. Point markers display the proportion treated in each jurisdiction. The highest number treated is in New South Wales (239), but the highest proportion is in the Australian Capital Territory (2.2%). The lowest number treated was in South Australia (16), but the lowest proportion was in the Northern Territory (0.2%).

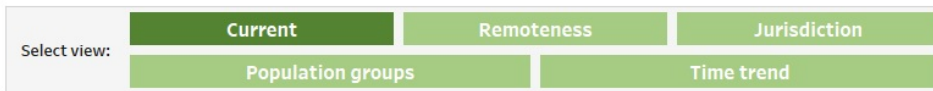
#### Proportion of Indigenous Australians screened for diabetic retinopathy treated for diabetic retinopathy, by age and sex, 2019–20

The grouped vertical bar chart displays the proportion of Indigenous Australians screened who were treated for diabetic retinopathy in 2019–20 by age group and by sex. The rate increases with age for males and females across all age groups. The rate for males is higher in all age groups except 65+ years.

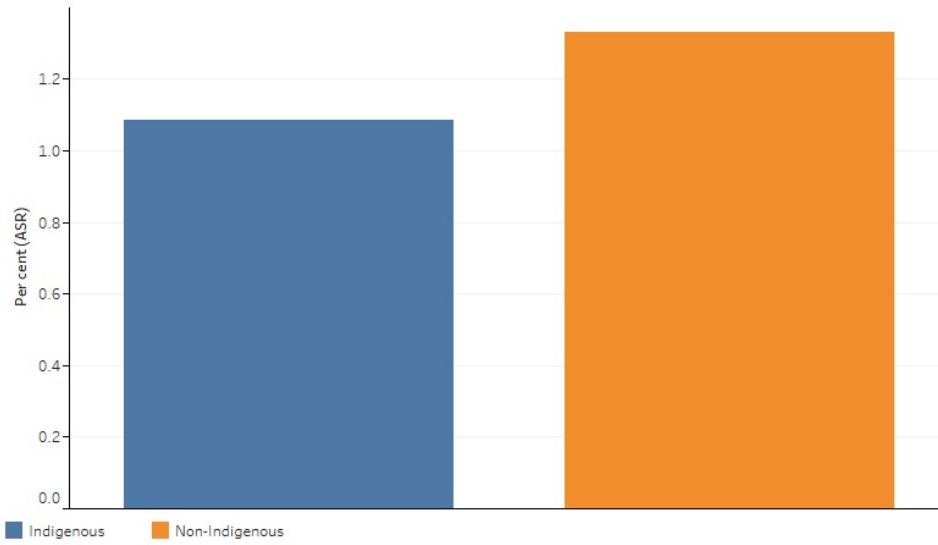
#### Proportion of Indigenous Australians screened for diabetic retinopathy treated for diabetic retinopathy 2010–11 to 2019–20

This dual axis combined line chart and scatter graph shows the proportion of Indigenous Australians screened who were treated for diabetic retinopathy, from 2010–11 to 2019–20. Point markers display the percentage treated, while the line displays the number treated in each time period. The proportion increased from 1.3% in 2010–11 to 1.6% in 2019–20, as did the number receiving treatment going from 351 to 506.

1.6% of Indigenous Australians screened for diabetes were treated for diabetic retinopathy



By Indigenous status, 2019-20



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2019-20, there were 506 Aboriginal and Torres Strait Islander Australians screened for diabetes who underwent treatment. This was 1.6% of those screened for diabetes. The age-standardised proportion of those treated was lower for Indigenous (1.1%) than for non-Indigenous Australians (1.3%).
- Between 2010-11 and 2019-20, the estimated proportion of Indigenous Australians screened for diabetes who underwent treatment rose from 1.3% in 2010-11 to 1.6% in 2019-20. The number screened increased from 26,713 to 32,000 over this same time-period.

## Treatment

Measures 3.8.1 and 3.8.2: The estimated number, and proportion of:

- Community members who were treated in communities where active trachoma was identified
- Indigenous adults with trichiasis who were treated.

The screening and treatment frequency for trachoma in at-risk communities is based on the trachoma prevalence rate. Treatment for trichiasis is important for preventing vision loss.

### Figure 3.8.1 and 3.8.2: Trachoma and trichiasis treatment coverage

There are 3 separate charts for this measure by various characteristics.

#### Community members where active trachoma was identified who were treated by age, 2021

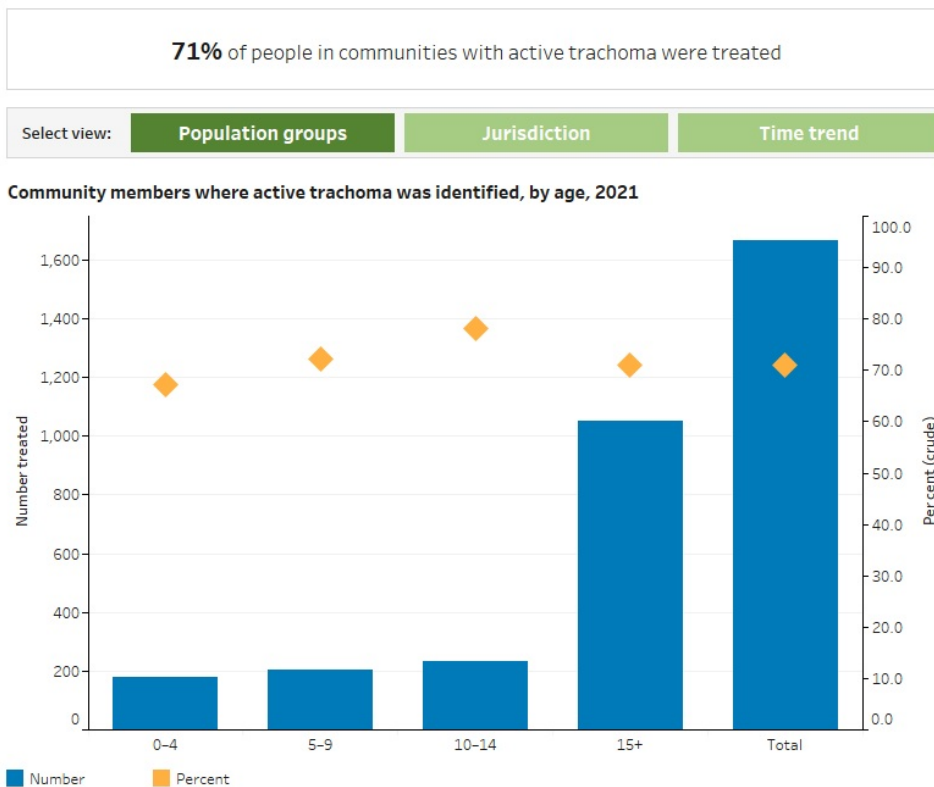
This dual axis combined vertical bar chart and scatter plot displays the number and percentage of active trachoma cases treated in 2021, by age. The chart shows that a total of 1,666 Indigenous Australians with active trachoma received treatment for the condition, a rate of 71%. This included 177 children aged 0-4 (67%), 204 aged 5-9 (72%) and 234 aged 10-14 (78%) and 1,051 Indigenous young Australians and adults aged 15 years and over (71%).

#### Community members where active trachoma was identified who were treated by jurisdiction, 2021

This dual axis combined vertical bar chart and scatter plot displays the percentage and number of active trachoma cases treated in 2021, by jurisdiction. The chart shows that the proportion of Indigenous Australians with active trachoma who received treatment was 71% in Western Australia (602 people), 84% in South Australia (42 people), and 71% in the Northern Territory (628 people). In Queensland there were no cases with active trachoma.

#### Community members where active trachoma was identified who were treated 2011 to 2021

This dual axis combined line chart and scatter plot shows the percentage and number of active trachoma cases treated between 2011 and 2021. The chart shows that, in this period, the proportion of Indigenous Australians with active trachoma who received treatment rose from 65%, peaking at 90% in 2014 and declining to 71% in 2021. The number of Indigenous Australians requiring treatment for trachoma rose from 6,175, peaking at 11,448 in 2016 and declining to 1,666 in 2021.



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2021, in communities where active trachoma was identified, a total of 1,666 community members received treatment, a rate of 71%. This included 177 children aged 0-4 (67%), 204 aged 5-9 (72%), 234 aged 10-14 (78%) and 1,051 (71%) community members aged 15 and over.

- Between 2011 and 2021, in communities where active trachoma was identified, the proportion of community members who received treatment rose from 65% in 2011 to 90% in 2014. The proportion who received treatment has generally declined over time since then, to 71% in 2021.
  - In 2021, in the 4 jurisdictions with at-risk communities, 8 of the 13 (62%) Indigenous adults aged 40 and over with trichiasis had surgery in the past 12 months. Four of the 8 surgeries took place in Western Australia.
  - Between 2012 and 2021, the number of Indigenous adults aged 40 and over who had surgery for trichiasis rose from 16 adults in 2012 to 31 in 2013. The number of surgeries has generally declined over time since then, to 8 in 2021.
- 



## Treatment

**Measure 3.9:** The number of Indigenous Australians who had spectacle or contact lens correction for refractive error, as a proportion of those who had refractive error (whether or not they had spectacle or contact lens correction).

Treatment of refractive error through the provision of spectacles is a low cost, effective intervention.

### Figure 3.9: Treatment of refractive error

There are 4 separate charts showing the estimated percentage of patients treated and confidence intervals, by Indigenous status and other various characteristics. The data is presented as a combined scatter plot for the point estimate and Gant chart representing the confidence interval.

#### Treatment of refractive error by Indigenous status and age, 2016

This combined scatter plot and Gant chart compares the treatment of refractive error, by age group and by Indigenous status. For Indigenous Australians, the proportion does not change significantly between age groups (due to large confidence intervals), and is between 76% and 86%. For non-Indigenous Australians, no information is available for those aged 40–49, but for those aged 50 and above, the proportion treated is between 91% and 95%.

#### Treatment of refractive error by Indigenous status and sex, 2016

This combined scatter plot and Gant chart compares the treatment of refractive error, by sex and by Indigenous status. For Indigenous Australians, the proportion does not change significantly between sexes (both 82%), but among non-Indigenous Australians the proportion is slightly higher for females (94% compared with 93%).

#### Treatment of refractive error by Indigenous status and time since last exam, 2016

This combined scatter plot and Gant chart compares the treatment of refractive error, by time since last eye exam and Indigenous status. For Indigenous Australians, 85% of those who had had an eye examination in the past year were treated for refractive error. For non-Indigenous Australians, 96% of those who had had an eye examination in the past year were treated for refractive error.

#### Treatment of refractive error by Indigenous status and region, 2016

This combined scatter plot and Gant chart compares the treatment of refractive error, by remoteness and Indigenous status. For Indigenous Australians, the proportion is highest in *Inner regional* and *Remote* areas (both 88%), and lowest in *Outer regional* areas (70%). Among non-Indigenous Australians the proportion is highest in *Remote* areas (97%) and lowest in *Outer regional* and *Very remote* areas (both 92%).



- In 2016, treatment rates for refractive error were higher for non-Indigenous than Indigenous Australians, at 94% and 82%, respectively.

- In 2016, treatment rates for refractive error for Indigenous Australians in *Outer regional* (70%) and *Very remote* (75%) areas were significantly lower than in *Major cities* (87%), the reference region.
  - The treatment rate for non-Indigenous Australians was significantly higher than for Indigenous Australians in *Inner regional*, *Outer regional* and *Very remote* areas.
- 



## Treatment

**Measure 3.10:** The number of spectacles dispensed to Indigenous people under state subsidised spectacles programs, per 1,000 population.

All jurisdictions have subsidised spectacle schemes but only 4 jurisdictions—New South Wales, Victoria, Queensland and South Australia—could provide data on Indigenous Australians for this measure. The eligibility criteria and entitlements provided by the state schemes vary across jurisdictions.

### Figure 3.10: Spectacles dispensed under state schemes

This chart presents 5 separate charts showing state spectacles schemes, by various characteristics.

#### Rate per 1,000 population of spectacles dispensed by jurisdiction, 2020-21

This vertical bar chart compares the rate per 1,000 population of spectacles dispensed in 2020–21 by jurisdiction. The chart shows that Indigenous Australians received glasses under the Victorian state scheme at a rate of 38.9 per 1,000 population. In New South Wales the rate was 24.4 per 1,000 population, in Queensland it was 32.1 per 1,000 population, in South Australia the rate was 19.4 per 1,000 and in Tasmania it was 14.9 per 1,000.

#### Rate per 1,000 population of spectacles dispensed by age, Vic 2020-21

This vertical bar chart shows the rate per 1,000 of spectacles dispensed to Indigenous Australians in Victoria in 2020-21, by age group. The chart shows that the rate of Indigenous clients receiving glasses under the spectacles program increased with age. The rate was highest among those aged 61 years and over (79 per 1,000) followed by those aged 51-60 years (28 per 1,000).

#### Rate per 1,000 population of spectacles dispensed by age, Qld 2020-21

This vertical bar chart compares the rate per 1,000 population of spectacles dispensed to Indigenous Australians in 2020-21, by age group, in Queensland. The chart shows that the rate of Indigenous clients receiving glasses under the spectacles program increased with age. The rate was highest among those aged 65 years and over (179 per 1,000) followed by those aged 50-64 years (98 per 1,000).

#### Rate per 1,000 population of spectacles dispensed by age, SA 2020-21

This vertical bar chart shows the rate per 1,000 of spectacles dispensed to Indigenous Australians in South Australia in 2020-21, by age group. The chart shows that the rate of Indigenous clients receiving glasses under the spectacles program increased with age. The rate was highest among those aged 65 years and over (79.1 per 1,000) followed by those aged 45-64 years (51.5 per 1,000).

#### Rate per 1,000 population of spectacles dispensed by age, Tas 2020-21

This vertical bar chart shows the rate per 1,000 of spectacles dispensed to Indigenous Australians in Tasmania in 2020-21, by age group. The chart shows that the rate of Indigenous clients receiving glasses under the spectacles program increased with age. The rate was highest among those aged 65 years and over (69.9 per 1,000) followed by those aged 45-64 years (32.6 per 1,000).

#### Rate per 1,000 population of spectacles dispensed by age and sex, NSW, 2020-21

This grouped vertical bar chart compares the rate per 1,000 population of spectacles dispensed to Indigenous Australians in 2020-21, by age and by sex, in New South Wales. The chart shows that, in New South Wales in this period, in all age groups, higher rates of Indigenous females than males received glasses under the spectacles program. The rates of Indigenous clients who received glasses were highest for males and females aged 65 years and over.

#### Number of spectacles dispensed and need by jurisdiction, 2020-21

This stacked vertical bar chart compares the number of spectacles dispensed in 2020-21 and the number of Indigenous Australians over 40 requiring glasses in 2020-21, by jurisdiction. The chart shows that 6,912 Indigenous Australians received glasses under the New South Wales state scheme, however, it was estimated that over 18,135 Indigenous Australians over 40 required glasses each year in New South Wales. In Queensland 7,679 adults received glasses under the state scheme, however it was estimated that 15,293 Indigenous Australians over 40 required glasses each year in Queensland. In Victoria 2,454 spectacles were dispensed under the state scheme with an estimated 4,024 requiring glasses. In South Australia 879 spectacles were dispensed under the state scheme with an estimated 2,891 requiring glasses. In Tasmania 449 spectacles were dispensed under the state scheme with estimated 1,926 requiring glasses.

## Number of spectacles dispensed closest to **estimated need** in **Victoria**

Select view:

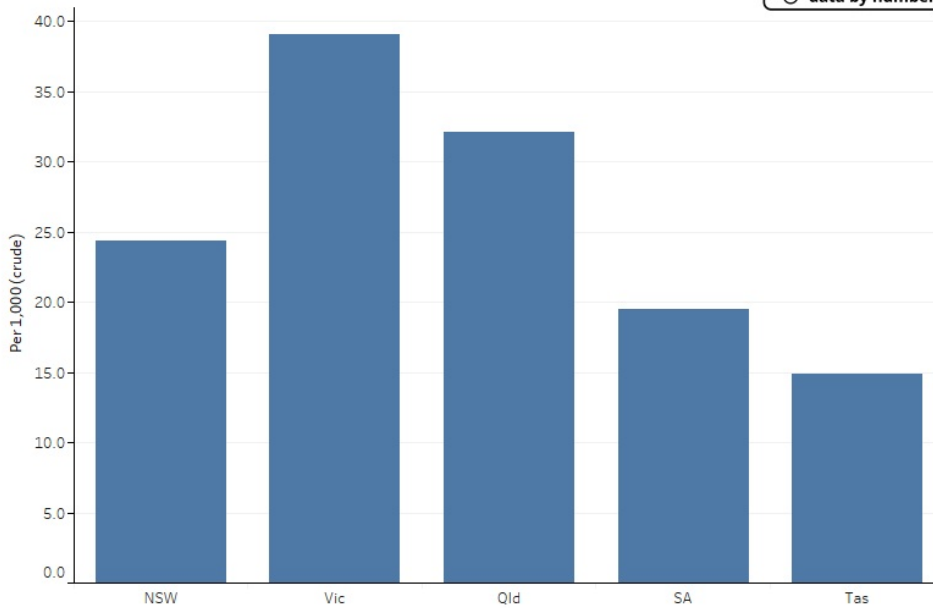
Current

Population groups

Jurisdiction

### Indigenous Australians by jurisdiction, 2020–21

 Switch to data by number



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2020-21, there were around 6,912 spectacles provided to Indigenous Australians in the New South Wales scheme (24 per 1,000), 7,679 provided under the Queensland scheme (32 per 1,000), 2,454 provided under the Victorian scheme (39 per 1,000), 879 provided under the South Australian scheme (19 per 1,000) and 449 provided under the Tasmanian scheme (15 per 1,000).
- Comparison of the number of spectacles dispensed with the estimated need for those aged over 40 showed that Victoria was closest to meeting the estimated number of glasses needed for Indigenous people aged over 40 (2,454 dispensed compared with 4,024 needed).
- In the other jurisdictions the estimated number needed was considerably greater than the number dispensed – 18,135 needed compared with 6,912 dispensed in New South Wales; 15,293 needed compared with 7,679 dispensed in Queensland; 2,891 needed compared with 879 dispensed in South Australia and 1,926 needed compared with 449 dispensed in Tasmania.



## Treatment

Early 2020 saw the emergence of a global pandemic of the novel coronavirus disease, COVID-19.

In response to the COVID-19 pandemic, all non-urgent elective surgery was temporarily suspended from 25 March 2020 in both public and private hospitals. This resulted in a large decrease in elective eye procedures in April 2020. Emergency eye procedures were largely unaffected during this period.

### Figure: Impact of COVID-19 on hospitalisations

This chart presents 13 separate charts showing the impact of COVID-19, by various characteristics.

In response to the COVID-19 pandemic, all non-urgent elective surgery was temporarily suspended from 25 March 2020 in both public and private hospitals. This resulted in a large decrease in elective eye procedures in April 2020. Emergency eye procedures were largely unaffected during this period.

### Monthly separations, cataracts procedures by remoteness, 2019-20

This line graph compares the number of monthly hospital separations for cataracts procedures for Indigenous Australians in 2019-20, by region. Hospitalisations in all regions (*Major cities, Inner and outer regional* combined and *Remote and very remote* combined) fell sharply for Indigenous Australians in April 2020 as almost all hospitalisations for cataract surgery are elective. However, some of this decrease is attributable to seasonal effects associated with Easter public holidays.

### Monthly separations, eye diseases by remoteness, 2019-20

This line graph compares the number of monthly hospital separations for eye diseases for Indigenous Australians in 2019-20, by region. Hospitalisations in all regions (*Major cities, Inner and outer regional* combined and *Remote and very remote* combined) fell sharply for Indigenous Australians in April 2020 as almost all hospitalisations for eye diseases are elective. However, some of this decrease is attributable to seasonal effects associated with Easter public holidays.

### Monthly separations, eye injuries by remoteness, 2019-20

This line graph compares the number of monthly hospital separations for eye diseases for Indigenous Australians in 2019-20, by region. In April 2020, hospitalisations for eye injuries declined less than hospitalisations for elective procedures such as cataracts, in all regions, as most of these are emergency procedures.

### Monthly separations, eye procedures by remoteness, 2019-20

This line graph compares the number of monthly hospital separations for eye procedures for Indigenous Australians in 2019-20, by region. Hospitalisations in all regions (*Major cities, Inner and outer regional* combined and *Remote and very remote* combined) fell sharply for Indigenous Australians in April 2020 as almost all hospitalisations for eye procedures are elective. However, some of this decrease is attributable to seasonal effects associated with Easter public holidays.

### Monthly separations, cataracts procedures, 2015-16 to 2019-20

This line graph compares the number of monthly hospital separations for cataracts procedures for Indigenous Australians for 2015-16 to 2019-20. As almost all hospitalisations for cataract surgery are elective, hospitalisations for Indigenous Australians for cataract surgery for 2019-20 showed the largest monthly percentage point decrease in April seen in the last 10 years. However, some of this decrease is attributable to seasonal effects associated with Easter public holidays.

### Monthly separations, eye diseases, 2015-16 to 2019-20

This line graph compares the number of monthly hospital separations for eye diseases for Indigenous Australians for 2015-16 to 2019-20. As almost all hospitalisations for eye diseases are elective, hospitalisations for Indigenous Australians for eye diseases for 2019-20 showed the largest monthly percentage point decrease in April seen in the last 10 years. However, some of this decrease is attributable to seasonal effects associated with Easter public holidays.

### Monthly separations, eye procedures, 2015-16 to 2019-20

This line graph compares the number of monthly hospital separations for eye procedures for Indigenous Australians for 2015-16 to 2019-20. As almost all hospitalisations for eye procedures are elective, hospitalisations for Indigenous Australians for eye procedures for 2019-20 showed the largest monthly percentage point decrease in April seen in the last 10 years. However, some of this decrease is attributable to seasonal effects associated with Easter public holidays.

### Monthly separations, eye injuries, 2015-16 to 2019-20

This line graph compares the number of monthly hospital separations for eye injuries for Indigenous Australians for 2015-16 to 2019-20. In April, hospitalisations for eye injuries did not show declines beyond those seen in the previous 10 years in April. This is probably because most surgeries for eye injuries are emergency procedures.

## Monthly separations, cataracts procedures by urgency of admission, 2019-20

This line graph compares the number of monthly hospital separations for elective and emergency cataract procedures for Indigenous Australians for 2019-20. Hospitalisations for Indigenous Australians for emergency cataract procedures did not decline in April, however, elective cataract procedures showed a steep decline in April.

## Monthly separations, eye diseases by urgency of admission, 2019-20

This line graph compares the number of monthly hospital separations for elective and emergency eye disease procedures for Indigenous Australians for 2019-20. Hospitalisations for Indigenous Australians for emergency eye disease procedures did not decline in April, however, elective eye disease procedures showed a steep decline in April.

## Monthly separations, eye injuries by urgency of admission, 2019-20

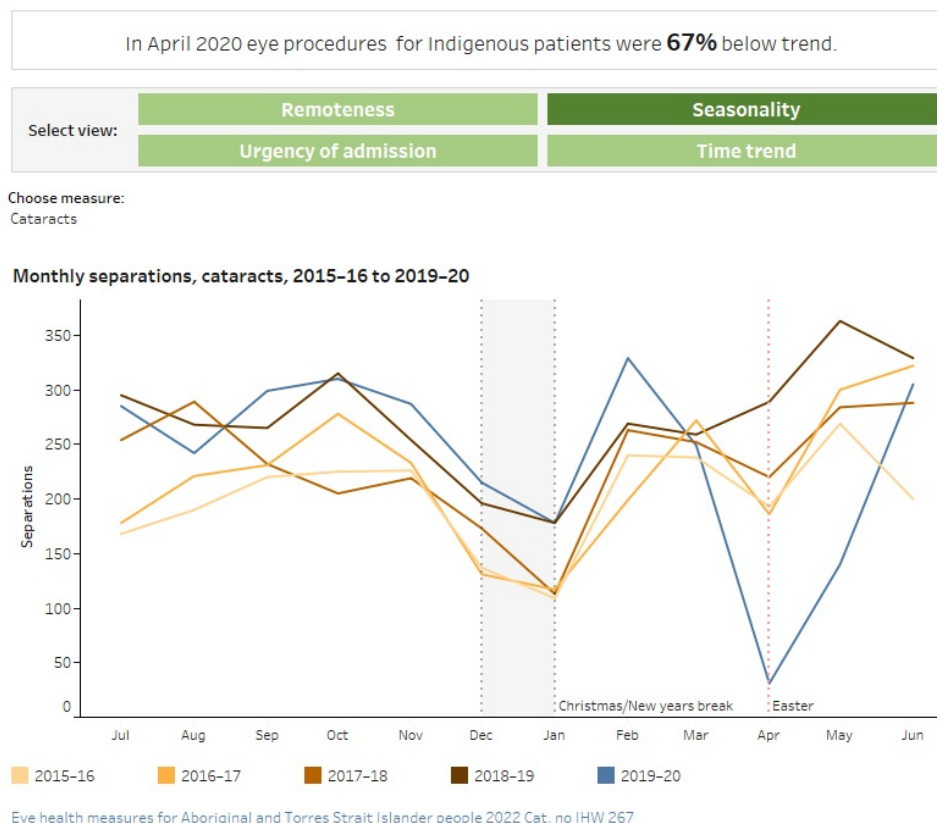
This line graph compares the number of monthly hospital separations for elective and emergency eye injury procedures for Indigenous Australians for 2019-20. Hospitalisations for Indigenous Australians for emergency eye injury procedures did not decline in April, however, elective eye injury procedures did decline in April, although the decline was not as great as that for elective procedures such as cataracts.

## Monthly separations, eye procedures by urgency of admission, 2019-20

This line graph compares the number of monthly hospital separations for elective and emergency eye procedures for Indigenous Australians for 2019-20. Hospitalisations for Indigenous Australians for emergency eye procedures did not decline in April, however, elective eye procedures showed a steep decline in April.

## 10 year monthly time series, July 2010 to June 2020

These 4 line graphs compare the number of monthly hospital separations and trends in hospital separations for cataracts, eye diseases, eye procedures and injuries for Indigenous Australians from July 2010 to June 2020. The monthly separations show a steep decline in April 2020 for cataracts, eye diseases, and eye procedures but no decline in injuries separations. The trend lines show there has been an increase in hospitalisation rates for cataracts, eye diseases and eye procedures for Indigenous Australians over this time. There is no clear trend in hospitalisation rates for injuries over this time.



- As almost all hospitalisations for eye procedures are elective, total hospitalisations for Indigenous Australians fell by 67 percentage points below the 10 year trend in April 2020. This was the largest monthly percentage point decrease in ten years. However, some of this decrease is attributable to seasonal effects associated with Easter public holidays. Hospitalisations for cataract surgery and eye disease were similarly affected as most of these are elective procedures
- In April 2020, hospitalisations for eye injuries declined less than hospitalisations for elective procedures such as cataracts, as most of these are emergency procedures.



---

## Workforce and outreach

The size and location of the eye health workforce gives a broad indication of access to specialist and allied eye health services. Outreach services funded by the Australian government aim to improve access to services for people living in rural, regional and remote areas where these services are not readily available.

### **Measure 4.1**

The number and full time equivalent rate (FTE) of optometrists

### **Measure 4.2**

The number and full time equivalent rate (FTE) of ophthalmologists

### **Measure 4.3**

The number and full time equivalent rate (FTE) of allied ophthalmic personnel

### **Measure 4.4.1**

Occasions of service under the Visiting Optometrists Scheme

### **Measure 4.4.2**

Occasions of service with eye health professionals under the Rural Health Outreach Fund

### **Measure 4.4.3**

Occasions of service with eye health professionals under the Medical Outreach Indigenous Chronic Diseases Program

### **Measure 4.4.4**

Occasions of service with eye health professionals under all the outreach programs combined

### **Measure 4.4.5**

Occasions of service with eye health professionals under the Eye and Ear Surgical Support Program

## Workforce and outreach

**Measure 4.1:** The number of employed optometrists, full-time equivalent (FTE) per 100,000 Australian population.

The size and location of the eye health workforce provides a broad indication of access to eye health services. FTE is a measure calculated by dividing an estimate of the total hours worked by employees in an occupation in a week by an estimate of the standard hours worked for optometrists (38 hours per week). The number of FTE is then compared with the size of relevant population to get the FTE per 100,000 population.

### Figure 4.1: Number and rate of optometrists

There are 4 separate charts for this measure showing the number and rate of full-time equivalent (FTE) optometrist per 100,000 population, by various characteristics.

#### Number and FTE per 100,000 persons, optometrists, primary health network, 2020 (bar chart)

This dual axis combined horizontal bar chart and scatter plot presents the number and FTE rate of optometrists in 2020, by PHN. PHNs have been grouped by state and are ranked from highest to lowest FTE rate within each state grouping. In NSW the PHN with the highest rate of employed optometrists was Central and Eastern Sydney (28 FTE per 100,000). Nepean Blue Mountains had the lowest rate in NSW (13 FTE per 100,000). In Victoria the PHN with the highest rate of employed optometrists was Western Victoria (21 FTE per 100,000). South Eastern Melbourne had the lowest at 16 FTE per 100,000.

#### Number and FTE per 100,000 persons, optometrists by region, 2020

This dual axis combined vertical bar chart and scatter plot presents the number and FTE rate of optometrists in 2020, by remoteness. The chart shows that *Major cities* had the highest number (4,267) and rate (20 FTE per 100,000) of employed optometrists. This was followed by *Inner regional* areas (859, or 18 FTE per 100,000) and *Outer regional* areas (276, or 13 FTE per 100,000). The numbers and rates of optometrists were lowest in *Remote* and *Very remote* areas.

#### Number and FTE per 100,000 persons, optometrists, by jurisdiction, 2020

This dual axis combined vertical bar chart and scatter plot presents the number and FTE rate of optometrists in 2020, by jurisdiction. The chart shows that the Northern Territory had the lowest number (33, or 13 FTE per 100,000) of employed optometrists. New South Wales had the highest number (1,823) and rate (20 FTE per 100,000) of employed optometrists.

#### Number and FTE per 100,000 persons, optometrists, 2013 to 2020

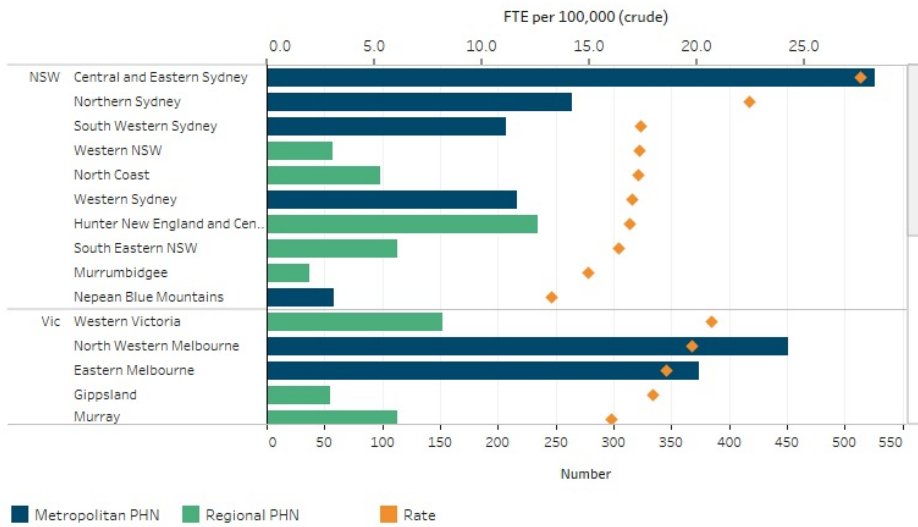
This dual axis combined vertical bar chart and scatter plot presents the number and FTE rate of optometrists, from 2013 to 2020. The chart shows that, between 2013 and 2020, the number and rate of optometrists has increased. In 2013 there were 4,219 employed optometrists (17 FTE per 100,000) and, by 2020, this had increased to 5,437 (19 FTE per 100,000).

5,437 employed optometrists (18.6 FTE per 100,000).

Select view: **Geography** Remoteness  
Jurisdiction Time trend

By Primary Health Network (PHN), 2020

View maps



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2020, *Major cities* had the highest number (4,267) and rate (20 FTE per 100,000) of employed optometrists. This was followed by *Inner regional* areas (859, or 18 FTE per 100,000) and *Outer regional* areas (276, or 13 FTE per 100,000). The numbers and rates of optometrists were lowest in *Remote* and *Very remote* areas.

## Workforce and outreach

**Measure 4.2:** The number of employed ophthalmologists, full-time equivalent (FTE) per 100,000 Australian population.

The size and location of the eye health workforce provides a broad indication of access to eye health services. FTE is a measure calculated by dividing an estimate of the total hours worked by employees in an occupation in a week by an estimate of the standard hours worked for ophthalmologists (40 hours per week). The number of FTE is then compared with the size of relevant population to get the FTE per 100,000 population.

### Figure 4.2: Number and rate of ophthalmologists

There are 4 separate charts for this measure showing the number and rate of full-time equivalent (FTE) ophthalmologist per 100,000 population, by various characteristics.

#### Number and FTE per 100,000 persons, ophthalmologists, primary health network, 2020 (bar chart)

This dual axis combined horizontal bar chart and scatter plot presents the number and FTE rate of ophthalmologists in 2020, by PHN. PHNs have been grouped by state and are ranked from highest to lowest FTE rate within each state grouping. Rates for PHNs with fewer than 10 ophthalmologists have not been published. In NSW the PHN with the highest rate of employed ophthalmologists was Central and Eastern Sydney (8.0 FTE per 100,000). South Eastern NSW has the lowest publishable rate (1.7 FTE per 100,000). In Victoria the PHN with the highest rate of employed ophthalmologists was North Western Melbourne (4.7 FTE per 100,000). Murray has the lowest publishable rate at 1.3 FTE per 100,000.

#### Number and FTE per 100,000 persons, ophthalmologists by region, 2020

This dual axis combined vertical bar chart and scatter plot presents the number and FTE rate of ophthalmologists in 2020, by remoteness. The chart shows that *Major cities* had the highest number (821) and rate (4.3 FTE per 100,000) of employed ophthalmologists. This was followed by *Inner regional* areas (125, or 2.8 FTE per 100,000) and *Outer regional* areas (28, or 1.6 FTE per 100,000). The numbers and rates of ophthalmologists were lowest in *Remote* and *Very remote* areas.

#### Number and FTE per 100,000 persons, ophthalmologists, by jurisdiction, 2020

This dual axis combined vertical bar chart and scatter plot presents the number and FTE rate of ophthalmologists in 2020, by jurisdiction. The chart shows that the Northern Territory had the lowest number (6, rate not published) of employed ophthalmologists. New South Wales had the highest number (364) and rate (4.4 FTE per 100,000) of employed ophthalmologists.

#### Number and FTE per 100,000 persons, ophthalmologists, 2012 to 2020

This dual axis combined vertical bar chart and scatter plot presents the number and FTE rate of ophthalmologists, from 2012 to 2020. The chart shows that, between 2012 and 2020, the number and rate of ophthalmologists has increased. In 2012 there were 836 employed ophthalmologists (3.9 FTE per 100,000) and, by 2020, this had increased to 977 (3.7 FTE per 100,000).

977 employed ophthalmologists (3.7 FTE per 100,000).

Select view: **Geography** Remoteness  
Jurisdiction Time trend

By Primary Health Network (PHN), 2020

View maps



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2020, there were around 977 ophthalmologists employed in Australia (3.7 FTE per 100,000).
- Between 2012 and 2020, the number of ophthalmologists increased slightly, while the rate remained fairly constant.
- In 2020, *Major cities* had the highest number (821) and rate (4.3 FTE per 100,000) of employed ophthalmologists, followed by *Inner regional areas* (125, 2.8 FTE per 100,000) and *Outer regional areas* (28, or 1.6 FTE per 100,000).



## Workforce and outreach

**Measure 4.3:** The number and rate of allied ophthalmic personnel, full-time equivalent (FTE), per 100,000 Australian population.

The size and location of the eye health workforce provides a broad indication of access to eye health services.

**Figure 4.3: Number and rate of allied ophthalmic personnel**

There are 4 separate charts for this measure showing the number and rate of full-time equivalent (FTE) allied ophthalmic personnel per 100,000 population, by various characteristics.

### Number and rate of allied ophthalmic personnel, by profession, 2021

This dual axis horizontal bar chart and scatter plot presents the number and FTE rate of allied ophthalmic personnel in 2021, by profession. The chart shows that the biggest category of allied ophthalmic personnel in Australia was optical dispensers. In 2021, there were around 6,133 optical dispensers (14.4 FTE per 100,000), 1,055 orthoptists (3.1 FTE per 100,000) and 401 optical mechanics (1.3 FTE per 100,000) in Australia.

### Number and rate of allied ophthalmic personnel, by profession and region, 2016

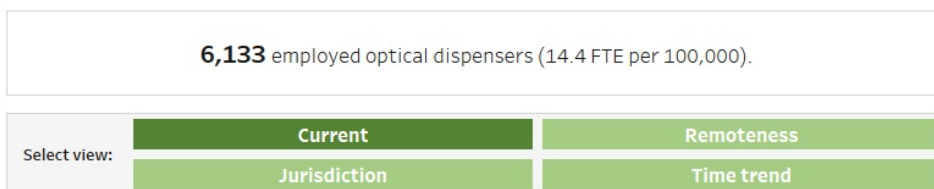
This dual axis combined grouped vertical bar chart and scatter plot presents the number and FTE rate of optical dispensers and 'other' allied ophthalmic personnel in 2016, by remoteness. The chart shows that *Major cities* had the highest number (3,609) and rate (16 FTE per 100,000) of optical dispensers and other allied ophthalmic personnel (1,134, or 5.6 FTE per 100,000). This was followed by *Inner regional* areas with 919 optical dispensers (17 FTE per 100,000) and 138 other allied ophthalmic personnel (2.5 FTE per 100,000). There were insufficient numbers of optical dispensers and other allied ophthalmic personnel in *Remote* and *Very remote* areas to calculate rates.

### Number and rate of allied ophthalmic personnel, by profession and jurisdiction, 2021

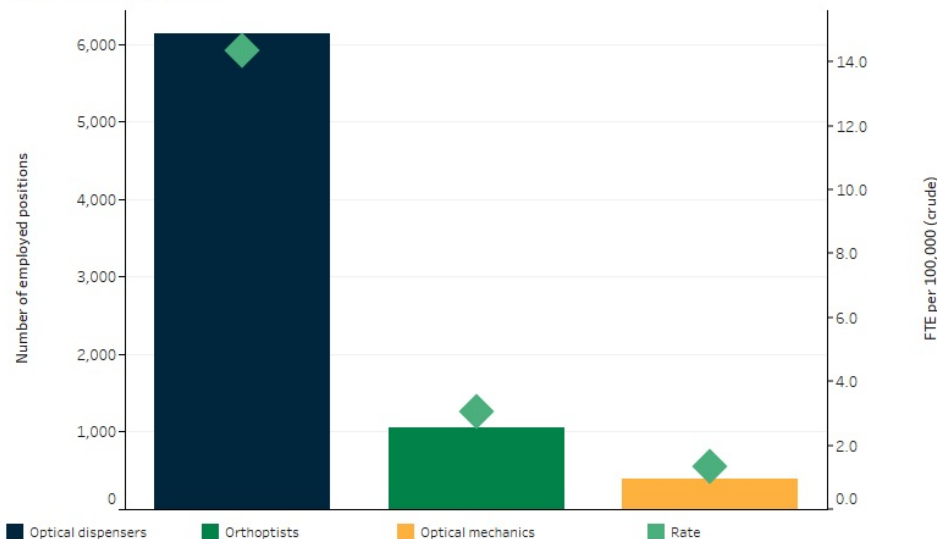
This dual axis combined grouped vertical bar chart and scatter plot presents the number and FTE rate of optical dispensers and 'other' allied ophthalmic personnel in 2021, by state and territory. The chart shows that New South Wales had the highest number (1,776) and rate (12 FTE per 100,000) of optical dispensers and other allied ophthalmic personnel (607 or 5.6 FTE per 100,000). This was followed by Victoria with 1,530 (14 FTE per 100,000) optical dispensers and 531 other allied ophthalmic personnel (6.2 FTE per 100,000).

### Number and rate of allied ophthalmic personnel, 2016 and 2021

This dual axis combined grouped vertical bar chart and scatter plot presents the number and FTE rate of optical dispensers and 'other' allied ophthalmic personnel in 2016 and 2021. In 2016 there were 4,859 optical dispensers (15.1 FTE per 100,000) and in 2021 that number was 6,133 (14 FTE per 100,000).



#### By profession type, 2021





- The biggest category of allied ophthalmic personnel in Australia is optical dispensers. In 2021, there were around 6,133 optical dispensers (14 FTE per 100,000), 401 optical mechanics (1.3 FTE per 100,000) and 1,055 orthoptists (3.1 FTE per 100,000) in Australia.
  - From 2016 to 2021, the FTE rate of all allied ophthalmic personnel remained relatively constant, from 15 to 14 FTE per 1,000 for optical dispensers, and from 4.5 to 4.4 FTE per 1,000 for optical mechanics and orthoptists combined.
- 



## Workforce and outreach

**Measure 4.4.1:** The number of occasions of service for Indigenous Australians with eye health professionals, per 1,000 population, under the Visiting Optometrists Scheme (VOS).

Outreach programs are designed to address the uneven distribution of the health workforce and to improve access to eye health services across Australia.

### Figure 4.4.1: Occasions of eye health services - Visiting Optometrists Scheme (VOS)

There are 5 separate charts for this measure showing the number and rate per 1,000 population for VOS occasions of service, by various characteristics.

#### VOS occasions of service, Indigenous Australians by PHN, 2020-21 (barchart)

This dual axis combined horizontal bar chart and scatter plot presents the number and rate of VOS occasions of service per 1,000 population, by PHN. PHNs have been grouped by state and are ranked from highest to lowest rate within each state grouping. In NSW the PHN with the highest rate of occasions of service per 1,000 was Western NSW (68 per 1,000). Western Sydney has the lowest rate (3.0 FTE per 1,000).

In Victoria the PHN with the highest rate of occasions of service per 1,000 was Gippsland (34.5 FTE per 1,000). North Western Melbourne has the lowest rate at 5.2 FTE per 1,000.

#### VOS occasions of service, Indigenous Australians, by region, 2020-21

This vertical bar chart shows the number of VOS occasions per 1,000 population for Indigenous Australians in 2020-21. *Very remote* regions have the highest rate (120.9 per 1,000) and *Major cities* have the lowest rate (9.9).

#### VOS occasions of service, by Indigenous status and jurisdiction, 2020-21

This grouped vertical bar chart compares the number of VOS occasions of service in 2020-21, by Indigenous status and jurisdiction. The chart shows that the number of Indigenous occasions of service under the VOS was lowest in Tasmania (170), followed by Victoria (998), while the highest number was seen in Queensland (8,227) followed by the NSW/ACT (6,358).

#### VOS occasions of service, time trend, 2009-10 to 2020-21

This multiple line graph shows the number of occasions of service under the VOS in 2009-10 to 2020-21, by Indigenous status. The chart shows that, in 2009-10, there were 6,975 occasions of service for Indigenous patients under the VOS. This increased to 29,161 in 2017-18 and has since dipped to 26,459 in 2020-21.

#### VOS occasions of service, Indigenous Australians by jurisdiction, 2019-20

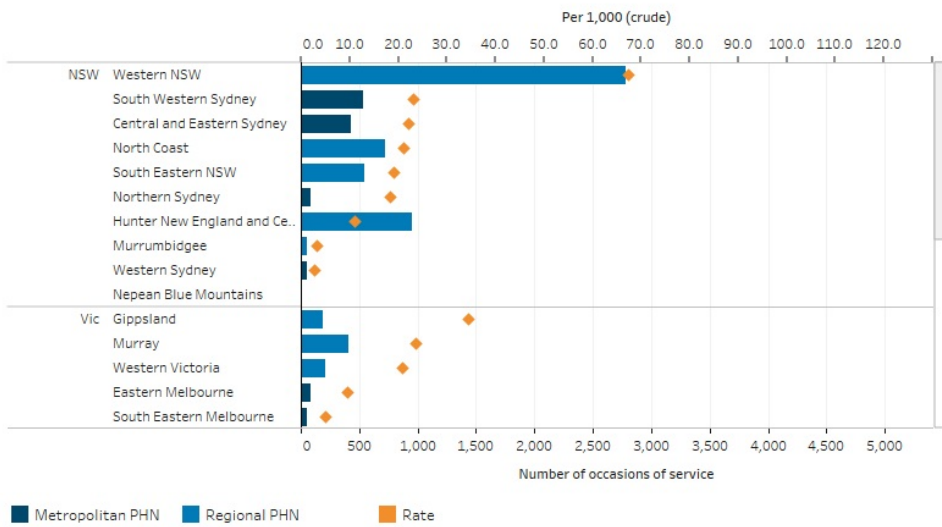
This vertical bar chart compares the rate of VOS occasions of service per 1,000 Indigenous Australians in 2019-20, by state and territory. The chart shows that the rate of Indigenous occasions of service was highest in the Northern Territory (56 per 1,000) followed by Western Australia (38 per 1,000).

26,459 VOS occasions of service to Indigenous Australians.

Select view: **Geography** Remoteness  
Jurisdiction Time trend

Indigenous Australians, by Primary Health Network (PHN), 2020-21

View maps



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2020-21, there were 26,459 occasions of service for Indigenous patients and 22,676 for other patients under the VOS.
- In 2020-21, the rate of Indigenous occasions of service was highest in the Northern Territory (66 per 1,000), followed by Western Australia (37 per 1,000).
- In 2009-10, there were around 6,975 occasions of service for Indigenous patients under the VOS. This increased to 29,161 in 2017-18 before declining to 26,459 in 2020-21. In 2020-21 Indigenous Australians had around 3,800 more VOS occasions of service than other Australian patients.

## Workforce and outreach

**Measure 4.4.2:** The number of occasions of service for Indigenous Australians with eye health professionals, per 1,000 population, under the Rural Health Outreach Fund (RHOF).

Outreach programs are designed to address the uneven distribution of the health workforce and to improve access to eye health services across Australia. RHOF services are provided in Inner regional, Outer regional, Remote and Very remote areas only.

**Figure 4.4.2: Occasions of eye health services - Rural Health Outreach Fund (RHOF)**

There are 5 separate charts for this measure including one map showing the number and rate per 1,000 population for RHOF occasions of service, by various characteristics.

### RHOF occasions of service, Indigenous Australians by PHN, 2020-21 (bar chart)

This dual access horizontal bar and scatter plot presents the number and rate of RHOF occasions of service per 1,000 population, by PHN. PHNs are ordered from highest to lowest number of occasions of service. The PHN with the highest number of occasions of service was Country WA (1,214) and lowest was Gippsland (Victoria) with 5.

### RHOF occasions of eye health services for Indigenous patients, by region, 2020-21

This vertical bar chart presents the number of RHOF occasions of service in 2020-21, by remoteness. The chart shows that the number of Indigenous occasions of service under the RHOF was highest in *Remote* areas (828) and lowest in *Very remote* areas (656). The rate of occasions of service per 1,000 Indigenous Australians was highest in *Remote* areas (15 per 1,000) followed by *Very remote* areas (7 per 1,000), and was lowest in *Inner regional* areas (3.5 per 1,000).

### RHOF occasions of eye health services for Indigenous patients, by jurisdiction, 2020-21

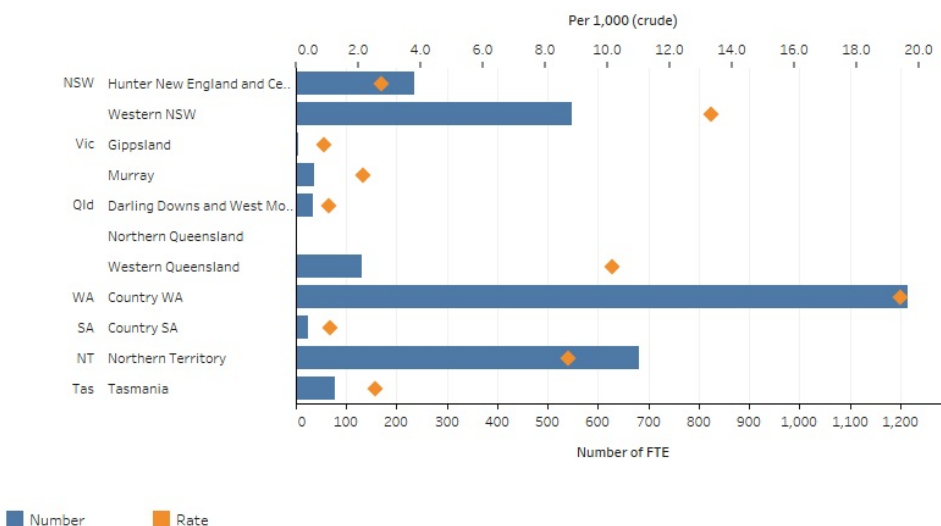
This vertical bar chart presents the number and rate of RHOF occasions of service in 2020-21, by jurisdiction. The chart shows that the number of Indigenous eye health occasions of service under the RHOF was highest in the Western Australia (1,214, or 19 per 1,000) followed by NSW (785, or 5 per 1,000).

### RHOF occasions of eye health services for Indigenous patients, time trend, 2011-12 to 2020-21

This line graph shows trends in the number of occasions of service for Indigenous Australians under the RHOF from 2011-12 to 2020-21. The chart shows that, in 2011-12, there were 4,977 Indigenous occasions of service under the RHOF. This number increased to reach 8,652 in 2015-16, and then decreased to 5,870 in 2018-19. In 2020-21 there were 2,996 occasions of service.



### Indigenous Australians, by Primary Health Network (PHN), 2020-21



- In 2020-21, a total of 2,996 occasions of eye health services for Indigenous patients were provided under the RHOF.

- In 2020-21, the rate of Indigenous eye health occasions of service under the RHOF was highest in Western Australia (19 per 1,000), followed by the Northern Territory (9 per 1,000).
- 

© Australian Institute of Health and Welfare 2023



## Workforce and outreach

**Measure 4.4.3:** The number of occasions of service for Indigenous Australians with eye health professionals, per 1,000 population, under the Medical Outreach Indigenous Chronic Disease Program (MOICDP).

Outreach programs are designed to address the uneven distribution of the health workforce and to improve access to eye health services across Australia.

### Figure 4.4.3: Occasions of eye health services - Medical Outreach Indigenous Chronic Disease Program (MOICDP)

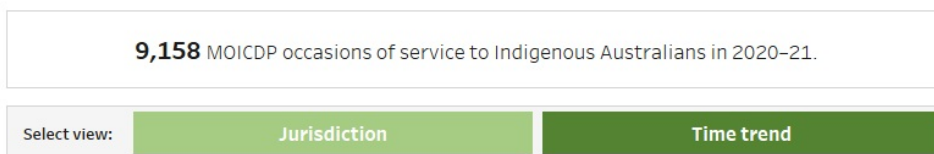
There are 2 charts for this measure showing the number and rate per 1,000 population for MOICDP occasions of service, by various characteristics.

#### Occasions of service - Medical Outreach Indigenous Chronic Disease Program (MOICDP) 2020-21 (jurisdiction)

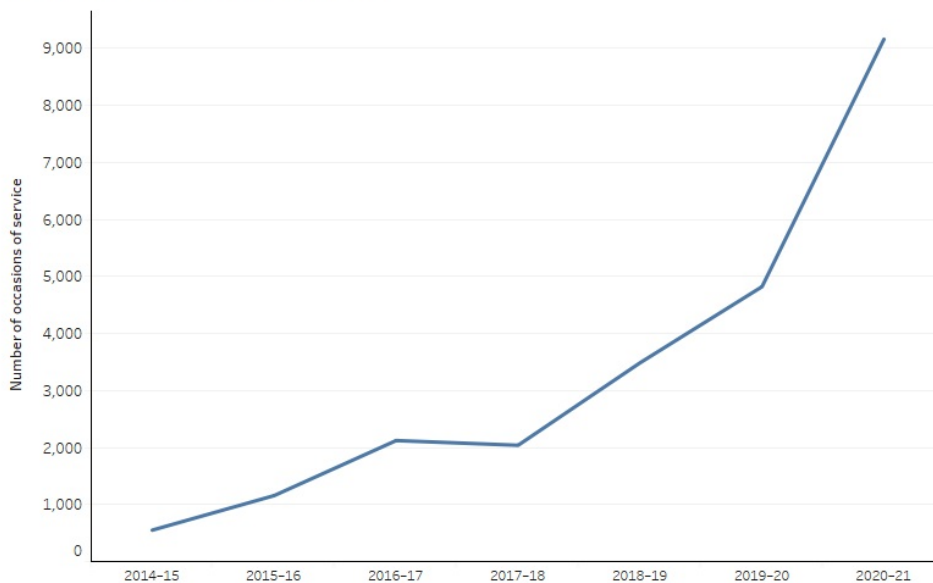
This dual axis combined vertical bar chart scatter plot presents the number and rate of MOICDP occasions of service in 2020-21, by jurisdiction. The chart shows that the highest number of Indigenous occasions of service provided by an eye health professional under the MOICDP was in NSW (3,673 or 127 per 1,000). The lowest rate was in Tasmania (83, or 27 per 1,000).

#### Occasions of service - Medical Outreach Indigenous Chronic Disease Program (MOICDP) 2014-15 to 2020-21 (Time trend)

This line graph shows trends in the number of occasions of service for Indigenous Australians under the MOICDP from 2014-15 to 2020-21. The chart shows that, in 2014-15, there were 550 Indigenous occasions of service provided by eye health professionals under the MOICDP. This number increased to 9,158 patients in 2020-21.



Indigenous Australians, 2014-15 to 2020-21



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2020-21, a total of 9,158 occasions of service for Indigenous patients were provided by eye health professionals under the MOICDP.
- Services were provided to Indigenous patients in 7 jurisdictions.
- The highest rate of Indigenous occasions of service provided by an eye health professional under the MOICDP was in Western Australia (275 per 10,000), followed by New South Whales (127 per 10,000).

## Workforce and outreach

**Measure 4.4.4:** The number of occasions of service for Indigenous Australians with eye health professionals, per 1,000 population, under all the outreach programs combined.

Outreach programs are designed to address the uneven distribution of the health workforce and to improve access to eye health services across Australia.

**Figure 4.4.4: Occasions of eye health services - Combined outreach programs**

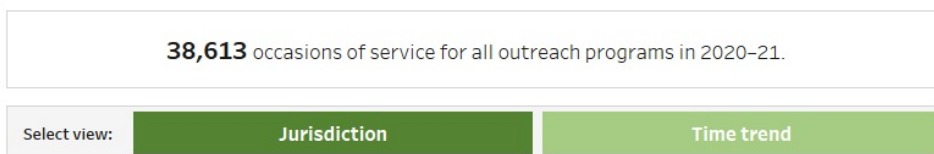
There are 2 charts for this measure showing the number occasions of service for all outreach services, by various characteristics.

### Occasions of service - Combined outreach services 2020-21 (jurisdiction)

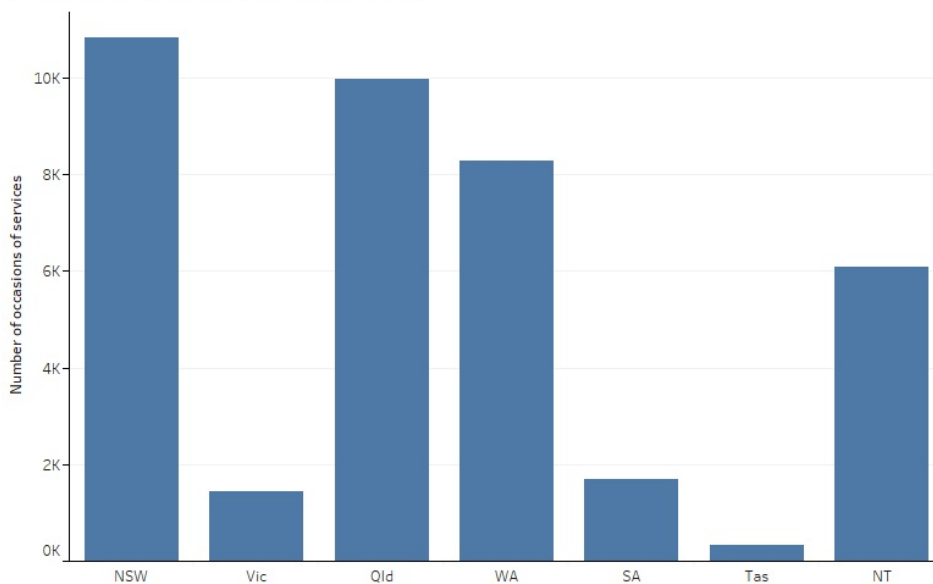
This vertical bar chart presents the number of occasions of service for all outreach programs combined, by jurisdiction. The chart shows that the highest number of occasions of service provided by an eye health professional was in NSW (10,816) and the lowest number was in Tasmania (331).

### Occasions of service - Combined outreach services 2014-15 to 2020-21 (Time trend)

This line chart shows trends in the number of occasions of service for Indigenous Australians in all outreach programs from 2014-15 to 2020-21. Lines are presented for each of the 3 outreach program types (VOS, RHOF and MOICDP) and a line for total number of occasions of service for all outreach combined is also presented. In 2014-15 there were 27,269 occasions of service for all outreach programs. This peaked in 2017-18 at 39,020 and has since declined to 38,613 in 2020-21.



**Indigenous Australians by jurisdiction, 2020-21**



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]

- In 2020-21 a total of 38,613 occasions of service for Indigenous patients were provided by eye health professionals under all the outreach programs combined. This was an increase on the 27,269 services provided in 2014-15.

## Workforce and outreach

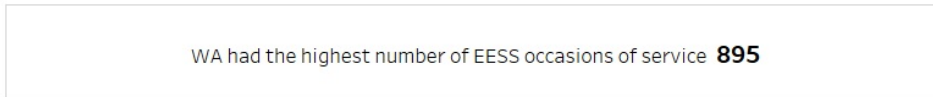
**Measure 4.4.5:** The number of occasions of service for Indigenous Australians with eye health professionals, per 1,000 population, under the Eye and Ear Surgical Support Program (EESS).

### Figure 4.4.5: Eye and Ear Surgical Support Program (EESS)

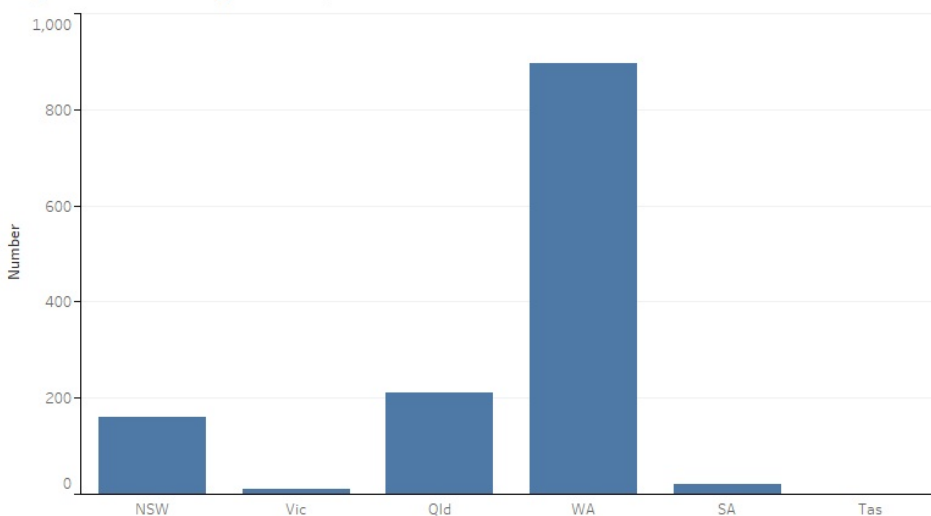
A single chart by jurisdiction is presented for this measure.

#### Eye and Ear Surgical Support Program (EESS) occasions of service, 2020-21.

This vertical bar chart presents the number of occasions of service for EESS programs, by jurisdiction. The chart shows that the highest number of occasions of service provided by an eye health professional was in WA (895) and the lowest number was in Victoria (9).



Indigenous Australians by jurisdiction, 2020-21



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

- In 2020-21 a total of 1,296 occasions of service for Indigenous patients were provided by eye health professionals under the Eye and Ear Surgical Support Program (EESS).
- In 2020-21, the highest number of Indigenous occasions of service provided by an eye health professional under the EESS was in Western Australia (895) followed by Queensland (211).



## Glossary

**Aboriginal and Torres Strait Islander:** People who identified themselves, or were identified by another household member, as being of Aboriginal and/or Torres Strait Islander origin. See also Indigenous.

**admitted patient:** A patient who undergoes a hospital's admission process to receive treatment and/or care. This treatment and/or care can occur in hospital and/or in the person's home (for hospital-in-the-home patients). METEOR identifier: 268957.

**age-standardisation:** A set of statistical techniques used to remove, as far as possible, the effects of differences in age when comparing 2 or more populations.

**Australian Refined Diagnosis Related Groups (AR-DRGs):** An Australian system of diagnosis related groups (DRGs). DRGs provide a clinically meaningful way of relating the number and type of patients treated in a hospital (that is, its casemix) to the resources required by the hospital. Each AR-DRG represents a class of patients with similar clinical conditions requiring similar hospital services.

**cataract:** A mostly degenerative condition in which the lens of the eye clouds over, obstructing the passage of light to the retina and causing vision impairment and, potentially, blindness.

**blindness:** presenting visual acuity of  $<6/60$  in the better eye.

**diabetic retinopathy:** A complication of diabetes and refers to damage to the blood vessels in the retina which can result in blindness, so early diagnosis is important. At any stage of severity, it can be associated with diabetic macular edema, a swelling of the macular area of the retina, that impacts on vision.

**hospitalisation (separation):** An episode of care for an **admitted patient**; that can be a total hospital stay (from admission to discharge, transfer or death), or a portion of a hospital stay beginning or ending in a change of care type (for example, from acute care to palliative care).

**Indigenous:** Used interchangeably with **Aboriginal and Torres Strait Islander** in this report.

**non-Indigenous:** People who indicated they are not of Aboriginal and/or Torres Strait Islander origin. Compare with **other Australians**.

**other Australians:** Includes people who did not identify as being of Aboriginal and/or Torres Strait Islander origin, and people for whom information on their Indigenous status was not available. Compare with **non-Indigenous**.

**principal diagnosis:** The diagnosis established, after study, to be chiefly responsible for occasioning an episode of **admitted patient** care, an episode of residential care or an attendance at the health-care establishment. METEOR identifier: 514273.

**procedure:** A clinical intervention that is surgical in nature, carries a procedural risk, carries an anaesthetic risk, requires specialised training and/or requires special facilities or equipment available only in an acute care setting. METEOR identifier: 514040.

**rate difference:** The literal, or absolute, gap between 2 population rates; for this report, it was calculated as the rate for Indigenous Australians minus the rate for non-Indigenous Australians.

**rate ratio:** The relative difference between populations taking scale into account; for this report, it was calculated as the rate for Indigenous Australians divided by the rate for non-Indigenous Australians, and is interpreted as follows:

- a rate ratio of 1 indicates there is no difference between the rates
- a ratio less than 1 indicates the rate is lower in the Indigenous population
- a ratio greater than 1 indicates the rate is higher in the Indigenous population.

**refractive error:** Problems with the focusing of light and occurs when the shape of the eye prevents light from focusing directly on the retina. It causes long- or short sightedness.

**separation:** See **hospitalisation**.

**vision loss:** Vision impairment plus blindness.

**trachoma:** An infectious disease of the eye caused by *Chlamydia trachomatis*. Repeated trachoma infections can result in scarring, in-turned eyelashes (trichiasis) and blindness.

**trichiasis:** In-turned or in-grown eyelashes often caused by repeated eye infections (such as **trachoma**). Severe cases can result in scarring and vision loss.

**vision impairment:** Presenting distance visual acuity of  $<6/12$  in the better eye.

---

## Maps

Maps for Health assessments and hospitalisations for eye health treatment and workforce and outreach services by various geographies. For detailed information about the measures for these maps see Health Assessments (Prevalence, Measure 2.1), Eye disease (Treatment, Measure 3.1), Eye injuries (Treatment, Measure 3.2), Eye procedures (Treatment, Measure 3.3), Cataract Surgery (Treatment, Measure 3.4), Optometrists (Workforce and Outreach, Measure 4.1), Ophthalmologists (Workforce and Outreach, Measure 4.2) and VOS (Workforce and Outreach, Measure 4.4.1).

### Figure: Maps by various geographies Screening and diagnosis

#### PHN

##### 2.1.1 Proportion of the Indigenous population that had an MBS health assessment by PHN, 2020-21 (map)

This map of Australia compares the proportion of MBS Indigenous health assessments in 2020-21, by PHN. The proportions for each PHN are grouped into 5 categories, ranging from proportions of  $\leq 10.9$  in the lowest category to proportions  $\leq 36.3$  in the highest category.

##### 2.1.2 Proportion of Indigenous Australians that had an Indigenous health assessment and an eye check by an optometrist by PHN, 2020-21 (map)

This map of Australia compares the proportion of Indigenous Australians that had an Indigenous-specific MBS health assessment and an eye check by an optometrist in 2020-21, by PHN. The proportions for each PHN are grouped into 5 categories, ranging from proportions of  $\leq 2.9$  in the lowest category to proportions  $\leq 8.9\%$  in the highest category.

#### SA3

##### 2.1.1 Proportion of the Indigenous population that had an MBS health assessment by SA3, 2020-21 (map)

This map of Australia compares the proportion of MBS Indigenous health assessments in 2020-21, by SA3. The proportions for each PHN are grouped into 5 categories, ranging from proportions of  $\leq 9.6$  in the lowest category to proportions  $\leq 53.7$  in the highest category.

#### Roadmap region

##### 2.1.1 Proportion of the Indigenous population that had an MBS health assessment by roadmap region, 2020-21 (map)

This map of Australia compares the proportion of MBS health assessments in 2020-21, by roadmap regions. The proportions for each roadmap region are grouped into 5 categories, ranging from proportions of  $\leq 11.7$  in the lowest category to proportions  $\leq 46.7$  in the highest category. The roadmap regions with the highest proportion of MBS health assessments were Townsville/Palm Island (47%) and South West Queensland (44%) while those with the lowest rates were Northern Metropolitan Sydney (5.9%) and Eastern Metropolitan Melbourne (4.5%).

##### 2.1.2 Proportion of Indigenous Australians that had an Indigenous health assessment and an eye check by an optometrist by Roadmap region, 2020-21 (map)

This map of Australia compares the proportion of Indigenous Australians that had an Indigenous-specific MBS health assessment and an eye check by an optometrist in 2020-21, by Roadmap region. The proportions for each roadmap region are grouped into 5 categories, ranging from proportions of  $\leq 2.9$  in the lowest category to proportions  $\leq 9.3$  in the highest category. The roadmap regions with the highest proportion of MBS health assessments were Great South Coast (Vic) (9.2%) and Townsville/Palm Island (Qld) (8.1%) while those with the lowest rates were Eastern Metropolitan Melbourne (1.5%) and Northern Metropolitan Sydney (1.8%).

## Treatment

#### PHN

##### Eye Diseases

##### Hospitalisations for Indigenous Australians for diseases of the eye, by PHN, 2018-20 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for diseases of the eye, in 2018-20 by PHN. The rates for each PHN are grouped into 5 categories, ranging from  $\leq 3.1$  (per 1,000 population) in the lowest category to  $\leq 9.1$  (per 1,000 population) in the highest category.

##### Eye Injuries

##### Hospitalisations for Indigenous Australians for injuries to the eye, by PHN, 2018-20 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for diseases of the eye, in 2018-20 by PHN. The rates for each PHN are grouped into 5 categories, ranging from  $\leq 0.7$  (per 1,000 population) in the lowest category to  $\leq 3.5$  (per 1,000 population) in the highest category.

## Eye procedures

### Hospitalisations for Indigenous Australians for eye procedures, by PHN, 2017-19 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for eye procedures, in 2017-19 by PHN. The rates for each PHN are grouped into 5 categories, ranging from  $\leq 3.0$  (per 1,000 population) in the lowest category to  $\leq 8.8$  (per 1,000 population) in the highest category.

## Cataracts

### Hospitalisations for Indigenous Australians for cataract surgery, by PHN, 2018-20 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for cataract surgery, in 2018-20 by PHN. The rates for each PHN are grouped into 5 categories, ranging from  $\leq 1,902$  (per 1,000,000 population) in the lowest category to  $\leq 6,462$  (per 1,000,000 population) in the highest category.

## SA3

## Eye Diseases

### Hospitalisations for Indigenous Australians for diseases of the eye, by SA3, 2018-120 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for diseases of the eye, in 2018-20 by SA3. The rates for each SA3 are grouped into 5 categories, ranging from  $\leq 4.2$  (per 1,000 population) in the lowest category to  $\leq 49.8$  (per 1,000 population) in the highest category. The map shows that the SA3s with the lowest publishable hospitalisation rates for Indigenous Australians for diseases of the eye were West Coast, Richmond-Windsor and Mundaring (all under 1.6 per 1,000). The SA3s with the highest hospitalisation rates for Indigenous Australians Loddon-Elmore, Burnside and Norwood-Payneham-St Peters (all over 25 per 1,000).

## Eye Injuries

### Hospitalisations for Indigenous Australians for injuries to the eye, by SA3, 2018-20 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for diseases of the eye, in 2018-20 by SA3. The rates for each SA3 are grouped into 5 categories, ranging from  $\leq 0.7$  (per 1,000 population) in the lowest category to  $\leq 9.8$  (per 1,000 population) in the highest category. The map shows that the SA3s with the lowest publishable hospitalisation rates for Indigenous Australians for diseases of the eye were Wyong and Penrith (NSW) (both 0.3 per 1,000). The SA3s with the highest hospitalisation rates for Indigenous Australians were Darwin City and Barkly (NT) (9.8 and 6.2 per 1,000, respectively).

## Eye procedures

### Hospitalisations for Indigenous Australians for eye procedures, by SA3, 2018-20 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for eye procedures, in 2018-20 by SA3. The rates for each SA3 are grouped into 5 categories, ranging from  $\leq 4.8$  (per 1,000 population) in the lowest category to  $\leq 52.2$  (per 1,000 population) in the highest category. The map shows that the SA3s with the lowest publishable hospitalisation rates for Indigenous Australians for eye procedures were West Coast (WA), Tuggeranong (ACT) and Wollondilly (NSW) (all less than 1.5 per 1,000). The SA3s with the highest hospitalisation rates for Indigenous Australians were, Loddon-Elmore, Burnside and Norwood-Payneham-St Peters (all over 25 per 1,000).

## Cataracts

### Hospitalisations for Indigenous Australians for cataract surgery, by SA3, 2018-20 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for cataract surgery, in 2018-20 by SA3. The rates for each SA3 are grouped into 5 categories, ranging from  $\leq 2,802$  (per 1,000,000 population) in the lowest category to  $\leq 40,316$  (per 1,000,000 population) in the highest category. The map shows that the SA3s with the lowest publishable hospitalisation rates for Indigenous Australians for cataract surgery were Mount Druitt (NSW) and Penrith (NSW) (both less than 800 per 1,000,000). The SA3s with the highest hospitalisation rates for Indigenous Australians were Loddon-Elmore, Burnside and Norwood-Payneham-St Peters, (over 20,000 per 1,000,000).

## Roadmap region

## Eye Diseases

### Hospitalisations for Indigenous Australians for diseases of the eye, by roadmap region, 2018-20 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for diseases of the eye, in 2018-20 by roadmap region. The rates for each roadmap region are grouped into 5 categories, ranging from  $\leq 4.1$  (per 1,000 population) in the lowest category to  $\leq 12.9$  (per 1,000 population) in the highest category. The map shows that the roadmap regions with the lowest publishable hospitalisation rates for Indigenous Australians for diseases of the eye were the ACT, Western Metropolitan Sydney and North West (all under 2.5 per 1,000). The roadmap regions with the highest hospitalisation rates for Indigenous Australians were Pilbara, East Gippsland and South West Queensland (all over 10 per 1,000).

## Eye Injuries

### Hospitalisations for Indigenous Australians for injuries to the eye, by roadmap region, 2018-20 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for diseases of the eye, in 2018-20 by roadmap region. The rates for each roadmap region are grouped into 5 categories, ranging from  $\leq 1.1$  (per 1,000 population) in the lowest category to  $\leq 6.3$  (per 1,000 population) in the highest category. The map shows that the roadmap regions with the lowest publishable hospitalisation rates for Indigenous Australians for diseases of the eye were Central Coast (NSW) North West and South (both in Tas) (equal to or under 0.3 per 1,000). The roadmap regions with the highest hospitalisation rates for Indigenous Australians were Barkly and Central Australia (NT) (6.3 and 4.6 per 1,000, respectively).

## Eye procedures

### Hospitalisations for Indigenous Australians for eye procedures, by roadmap region, 2018-20 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for eye procedures, in 2018-20 by roadmap region. The rates for each roadmap region are grouped into 5 categories, ranging from  $\leq 4.1$  (per 1,000 population) in the lowest category to  $\leq 12.9$  (per 1,000 population) in the highest category. The map shows that the roadmap regions with the lowest publishable hospitalisation rates for Indigenous Australians for eye procedures were Western Metropolitan Sydney, the ACT and Limestone Coast (all under 2.5 per 1,000). The roadmap regions with the highest hospitalisation rates for Indigenous Australians were Pilbara, Mid West and South West Queensland (all above 9.6 per 1,000).

## Cataracts

### Hospitalisations for Indigenous Australians for cataract surgery, by roadmap region, 2018-20 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for cataract surgery, in 2018-20 by roadmap region. The rates for each roadmap region are grouped into 5 categories, ranging from  $\leq 1,851$  (per 1,000,000 population) in the lowest category to  $\leq 6,911$  (per 1,000,000 population) in the highest category. The map shows that the roadmap regions with the lowest publishable hospitalisation rates for Indigenous Australians for cataract surgery were North West (Tas) Western Metropolitan Sydney, Northern Metropolitan Sydney and the Australian Capital Territory (all under 1,500 per 1,000,000). The roadmap regions with the highest hospitalisation rates for Indigenous Australians were South West Queensland, Central Tablelands (NSW) and North West Queensland (all over 6,500 per 1,000,000).

## IREG

### Eye Diseases

#### Hospitalisations for Indigenous Australians for diseases of the eye, by Indigenous region (IREG), 2018-20 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for diseases of the eye, in 2018-20 by Indigenous region (IREG). The rates for each IREG are grouped into 5 categories, ranging from  $\leq 3.2$  (per 1,000 population) in the lowest category to  $\leq 13.1$  (per 1,000 population) in the highest category. The map shows that the IREGs with the lowest publishable hospitalisation rates for Indigenous Australians for diseases of the eye were the ACT, Port Lincoln-Ceduna and Sydney-Wollongong (all under 3.5 per 1,000). The IREGs with the highest hospitalisation rates for Indigenous Australians were South Hedland, West Kimberley and Apatula (all over 9 per 1,000).

### Eye Injuries

#### Hospitalisations for Indigenous Australians for injuries to the eye, by Indigenous region (IREG), 2018-20 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for diseases of the eye, in 2018-20 by Indigenous region (IREG). The rates for each IREG are grouped into 5 categories, ranging from  $\leq 1.1$  (per 1,000 population) in the lowest category to  $\leq 6.2$  (per 1,000 population) in the highest category. The map shows that the IREG with the lowest publishable hospitalisation rates for Indigenous Australians for diseases of the eye was Tasmania (0.3 per 1,000). The IREGs with the highest hospitalisation rates for Indigenous Australians were Tenant Creek (6.2 per 1,000) and Alice Springs and Apatula (NT) (both 4.6 per 1,000).

## Eye procedures

### Hospitalisations for Indigenous Australians for eye procedures, by Indigenous region (IREG), 2018-20 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for eye procedures, in 2018-20 by Indigenous region (IREG). The rates for each IREG are grouped into 5 categories, ranging from  $\leq 3.8$  (per 1,000 population) in the lowest category to  $\leq 13.1$  (per 1,000 population) in the highest category. The map shows that the IREGs with the lowest publishable hospitalisation rates for Indigenous Australians for eye procedures were the ACT and Port Lincoln-Ceduna (both under 3.0 per 1,000). The IREGs with the highest hospitalisation rates for Indigenous Australians were South Hedland (WA) and Geraldton (WA) (both over 9.5 per 1,000).

## Cataracts

### Hospitalisations for Indigenous Australians for cataract surgery, by Indigenous region (IREG), 2017-19 (map)

This map of Australia compares the hospitalisation rates for Indigenous Australians for cataract surgery, in 2017-19 by Indigenous region (IREG). The rates for each IREG are grouped into 5 categories, ranging from  $\leq 2,161$  (per 1,000,000 population) in the lowest category to  $\leq 6,420$  (per 1,000,000 population) in the highest category. The map shows that the IREGs with the lowest hospitalisation rates for Indigenous Australians for cataract surgery were the Australian Capital Territory and Sydney-Wollongong (under 2,050 per 1,000,000). The IREGs with the highest hospitalisation rates for Indigenous Australians were Mount Isa (Qld) and North-Eastern NSW (both over 6,300 per 1,000,000).

## Workforce

## PHN

### Optometrists

#### FTE per 100,000 persons, optometrists by primary health network (PHN), 2020 (map)

This map of Australia shows the FTE rate of optometrists in 2020, by PHN. The rates for each PHN are grouped into 5 categories, ranging from  $\leq 11.0$  in the lowest category to  $\leq 27.7$  in the highest category. FTE rates were lowest in Country WA. Rates were highest in metropolitan areas: Central and Eastern Sydney (NSW) and Brisbane North (Qld).

### Ophthalmologists

#### FTE per 100,000 persons, ophthalmologists by primary health network (PHN), 2020 (map)

This map of Australia shows the FTE rate of ophthalmologists in 2020, by PHN. The rates for each PHN are grouped into 5 categories, ranging from  $\leq 2.8$  in the lowest category to  $\leq 8.0$  in the highest category. FTE publishable rates were lowest in Murray (Vic & NSW) and South Eastern NSW. Rates were highest in metropolitan areas: Central and Eastern Sydney (NSW), and Northern Sydney (NSW).

## VOS

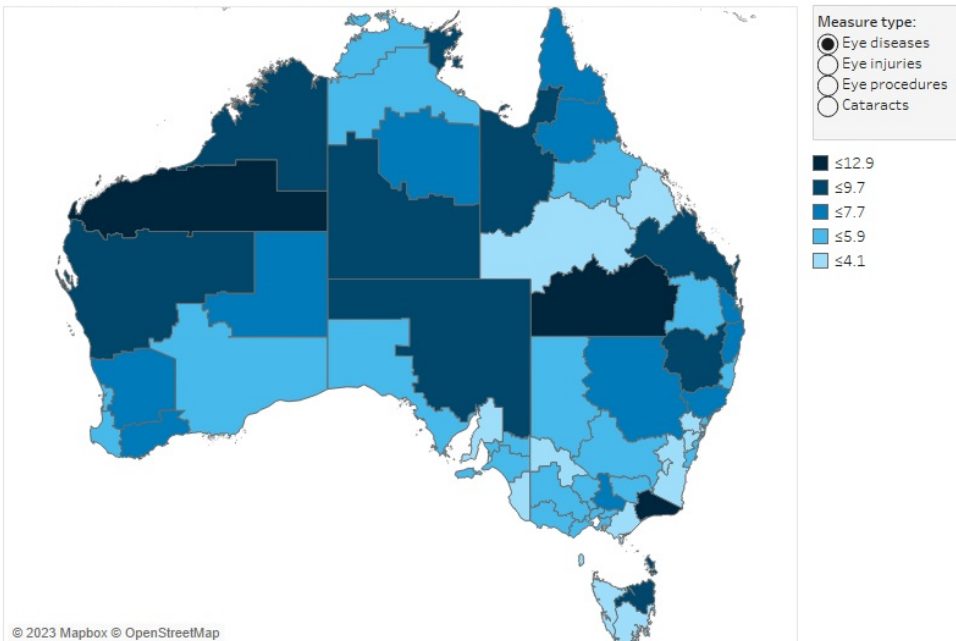
#### VOS occasions of service, Indigenous Australians by PHN, 2019-20 (map)

This map of Australia shows VOS occasions of service per 1,000 population, by PHN. The rates for each PHN are grouped into 5 categories, ranging from  $\leq 11.1$  in the lowest category to  $\leq 119.0$  in the highest category. Rates were lowest in Western Sydney (NSW) and Perth North (WA). Rates were highest in regional areas: Western Qld and Western NSW.

### Measure 3.1 Hospitalisations for diseases of the eye (crude rate per 1,000)

Map Data:	Screening and diagnosis	Treatment	Workforce	
Geography:	PHN	SA 3	Roadmap region	IREG

#### Hospitalisations for Indigenous Australians for eye diseases by roadmap region, 2018-20



Eye health measures for Aboriginal and Torres Strait Islander people 2022 Cat. no IHW 267

[Footnotes]



# Data

---





---

## Report editions

### This release

Eye health measures for Aboriginal and Torres Strait Islander people 2022: interactive data | 16 Mar 2023

---

### Previous releases

- Indigenous eye health measures 2021 |  
**Web report** | 01 Sep 2021
- Indigenous eye health measures 2020 |  
**Publication** | 05 Nov 2020
- Indigenous eye health measures 2018 |  
**Web report** | 06 Aug 2019
- Indigenous eye health measures 2017 |  
**Web report** | 26 Apr 2018
- Indigenous eye health measures 2016 |  
**Publication** | 30 May 2017





## Related material

Resources

Related topics

- [Eye health](#)
- 

