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Australian Institute of  
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infocus

# Ear and hearing health of Aboriginal and Torres Strait Islander people 2024: children aged 0–14

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Middle ear infection is a common disease in young children. Repeated middle ear infections may lead to permanent hearing loss.

First Nations children, especially those living in remote areas, have high rates of severe, recurring and persistent middle ear infections and associated hearing loss (Edwards & Moffat 2014; Gunasekera H. et al. 2009; Kong & Coates 2009; Morris et al. 2007). Middle ear infections occur more often and at a younger age in First Nations people compared to other Australians (Jervis-Bardy, Sanchez & Carney 2014).

Middle ear infections are preventable and treatable.

## Identifying and treating ear and hearing problems can be challenging

Children can have a middle ear infection with no symptoms or obvious signs. To identify and manage chronic and recurring middle ear infections and prevent hearing loss, it is important for children to have regular hearing checks starting at a young age – along with ‘opportunistic’ hearing checks conducted when children visit a health service for any reason – and to be referred to relevant services (Abbott, Frede et al. 2023, AIHW 2021).

Navigating the complex hearing health system can be difficult for families. Patients may need to access multiple services for screening, diagnosis, treatment, and rehabilitation services. Patients may fall out at critical points along this care pathway if there are difficulties or delays accessing or receiving care.

For First Nations people, systemic barriers to accessing ear and hearing health services can make it more difficult to navigate an already complex health system. Access may be affected by limited availability and accessibility of culturally appropriate health services, a lack of continuity of care, or racism or discrimination from health care providers (AIHW 2024).

This In Focus report presents a selection of key findings from the report *Ear and hearing health of Aboriginal and Torres Strait Islander people, 2024*.



**3 in 10**

First Nations children  
aged 7–14 had  
measured hearing  
loss in 2018–19



**4 in 10**

First Nations children  
aged 7–14 living in  
remote areas had  
measured hearing  
loss in 2018–19



**Nearly 9 in 10**

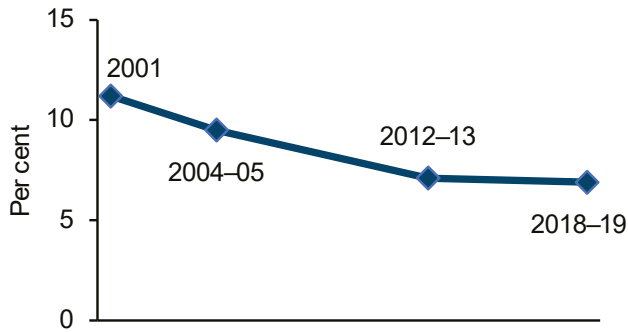
ear-related  
hospitalisations  
among First Nations  
children aged 0–14  
were middle-ear  
related, from June  
2021 to 2023

AIHW

## Reported ear and hearing problems

The proportion of **reported ear and hearing problems** among First Nations children aged 0–14 fell from 11% in 2001 to around 7% (19,100 children) in 2018–19.

### Reported ear and hearing problems, First Nations children aged 0–14



Sources: ABS NHS 2001, NATSIHS 2004–05, AATSIHS 2012–13 and NATSIHS 2018–19.

Information about reported ear and hearing problems underestimates the prevalence of these conditions.

## Measured hearing loss

In 2018–19, an estimated 29% of First Nations children aged 7–14 (42,200 children) had hearing loss, as measured by a voluntary online test.

Among the 29% of First Nations children aged 7–14 with measured hearing loss:

- 17% had hearing loss in one ear
- 13% had hearing loss in both ears, and of these children
  - 7% had mild hearing loss
  - 5% had moderate, severe or profound hearing loss.

## Newborn hearing screening



**Newborn hearing screening rates of First Nations babies are very high**

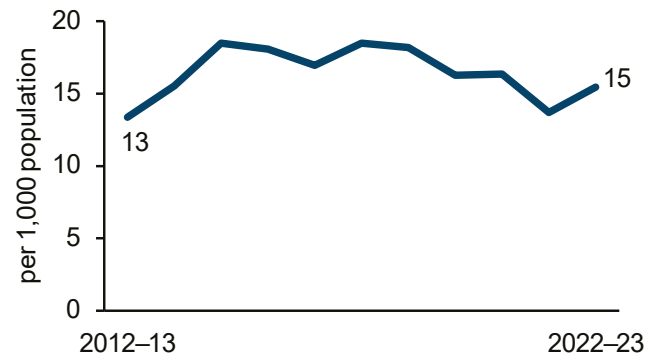
In 2022–23, **newborn hearing screening coverage** of First Nations babies, using combined data for the 6 states, was 94%. Newborn hearing screening proportions ranged from 89% of newborns in New South Wales to 100% in Tasmania.

## Audiology service use

Audiology services are needed to diagnose, treat and manage ear and hearing conditions.

**Audiology service use** among First Nations children aged 0–14 increased to a peak of around 18 per 1,000 population before the COVID-19 pandemic. In 2022–23, use of audiology services among First Nations children increased once more, to around 15 per 1,000 population.

### Audiology services for First Nations children aged 0–14



Sources: AIHW analysis of MBS data and ABS population estimates and projections (ABS 2011-to-2031).

## Hearing Assessment Program – Early Ears ear health checks

The Hearing Assessment Program – Early Ears (HAPEE) provides free **ear health checks and hearing tests** for First Nations children aged under 6 not yet attending full-time school.

- In 2022–23, around 5,300 ear health checks and hearing tests were provided through this program (81 per 1,000 population)
- Around 17% of the 4,800 First Nations children who had a HAPEE hearing test (900 children) had hearing loss.

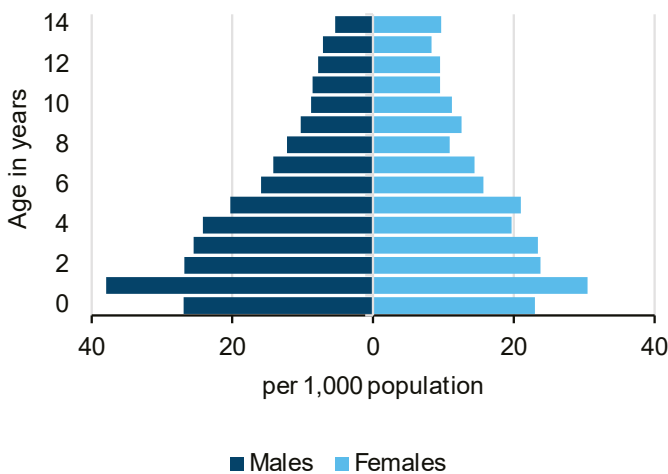
## Emergency department care

Hospital emergency departments attend to people who need urgent medical care.

The rate of ear or hearing related emergency department visits for First Nations children (July 2021 to June 2023) was:

- higher among those aged 1–4
- highest for one-year-olds.

## Ear or hearing related emergency department visits, First Nations children aged 0–14, Jul 2021–Jun 2023



Source: AIHW analysis of NNAPEDCD and ABS population estimates and projections (ABS 2011-to-2031).

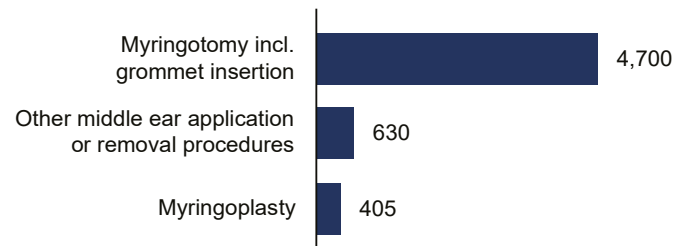
## Ear related hospital procedures

Around 6,800 First Nations children aged 0–14 had an **ear related hospital procedure** from July 2021 to June 2023.

The 3 most common were:

- 4,700 or 70% – *Myringotomy*, incision of the eardrum to drain fluid (may include inserting ear ventilation tubes or grommets)
- 630 or 9% – *Eardrum or middle ear application or removal procedures* including ear wax removal and removal of grommets
- 405 or 6% – *Myringoplasty*, repair of a hole in the eardrum that can be caused by repeated ear infections or from grommet insertion.

## Most common ear or hearing related hospital procedures, First Nations children aged 0–14, July 2021–Jun 2023

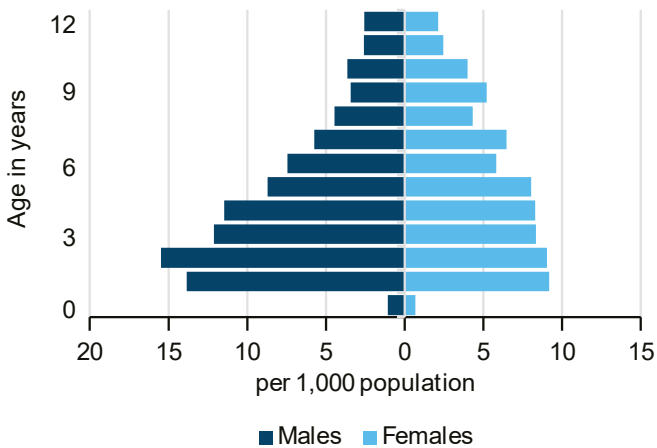


Source: AIHW analysis of NHMD and AIHW population modelling using ABS population estimates and projections.

## Middle ear related hospital procedures

Around 3,700 First Nations children had a **middle ear related hospital procedure** from July 2021 to June 2023.

### Middle ear related hospital procedures for First Nations children aged 0–14, Jul 2021–Jun 2023



Source: AIHW analysis of NHMD and ABS population estimates and projections (2011-to-2031).

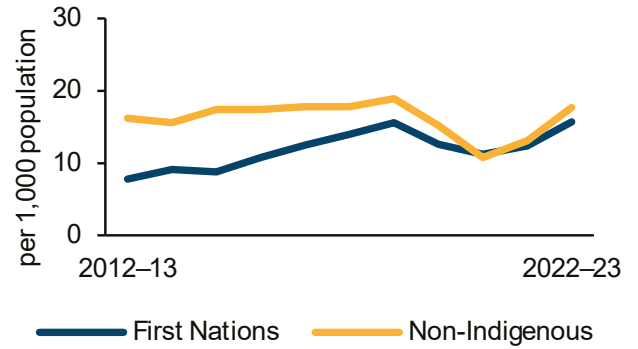
Middle ear procedure rates for First Nations children were:

- higher among those aged 1–4
- highest for 2-year-olds.

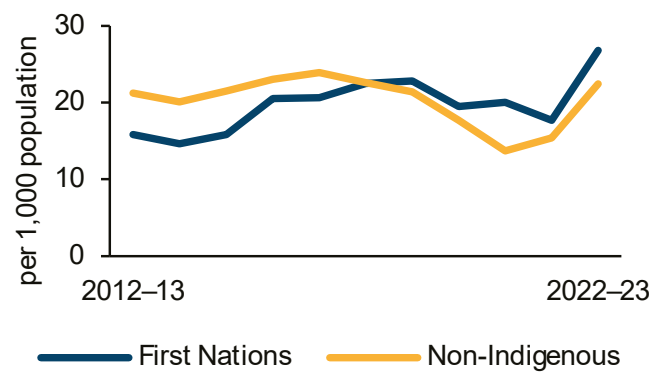
Among First Nations children aged from 1 to 6, middle ear procedure rates were higher for boys than girls. Being male is known to be a factor that increases the risk of having *otitis media* (see e.g. Schilder et al. 2016).

Rates of middle ear procedures for First Nations children in the 0–2 and 3–4 year age groups peaked in 2018–19. Following falls during the COVID-19 pandemic era, rates of middle ear procedures increased again for children in these age groups increased from 2021–22.

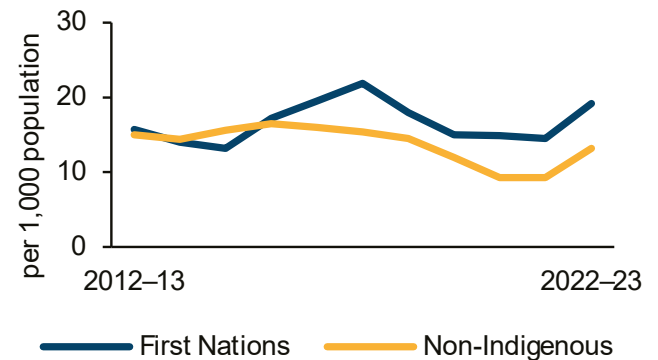
### Middle ear related hospital procedure rates for First Nations children aged 0–2



### Middle ear related hospital procedure rates for children aged 3–4



### Middle ear related hospital procedure rates for children aged 5–6



Source: AIHW analysis of NHMD and ABS population estimates and projections (ABS 2022, 2011-to-2031).

## Elective surgery waiting times

Information about how long it takes for patients to access health services they need is important for improving health services.

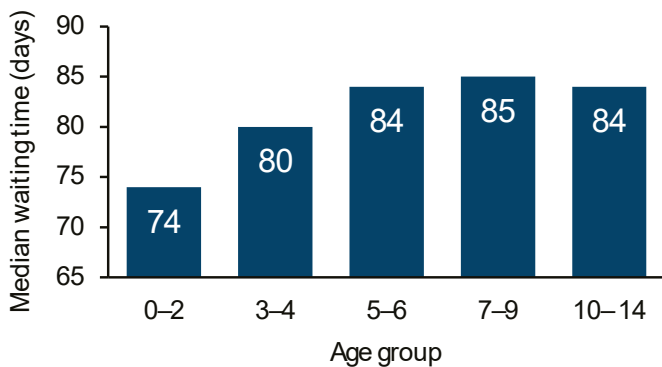
The patient pathway through the ear and hearing health system is often complex. Patients may need to access a range of different services, from screening to diagnosis, medical interventions such as surgical procedures, to rehabilitation services such as fitting of hearing aids, and allied health services like speech pathology.

There is a lack of information about how long patients wait from the start of this process to the point where they have access to the services they need.

Available information about waiting times refers only to the time between when a patient is placed on a waiting list for a medical procedure, to when they are admitted to hospital for that procedure.

From July 2021 to June 2023, the median waiting time for a myringotomy was shortest for the youngest children, at 74 days for those aged 0–2, and increased as children got older.

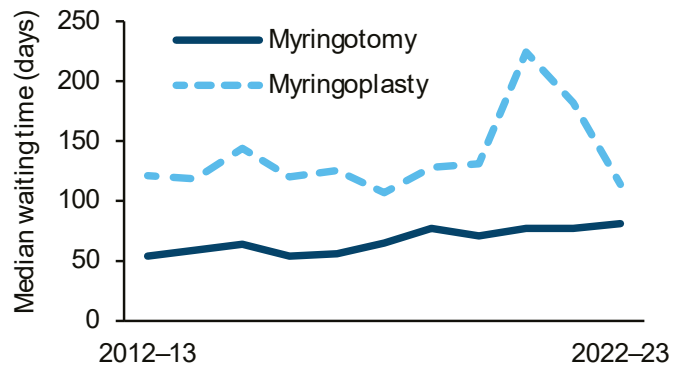
### First Nations children, median waiting time for elective myringotomy, public hospitals



Source: AIHW analysis of NHMD.


For First Nations people of all ages, waiting times for a myringotomy or myringoplasty increased over the decade to 2022–23.

## First Nations people, median waiting time for common ear procedures



Source: AIHW analysis of NHMD.

## Hearing aids and cochlear implants



**Early fitting of hearing aids or cochlear implants is related to better speech and language development**

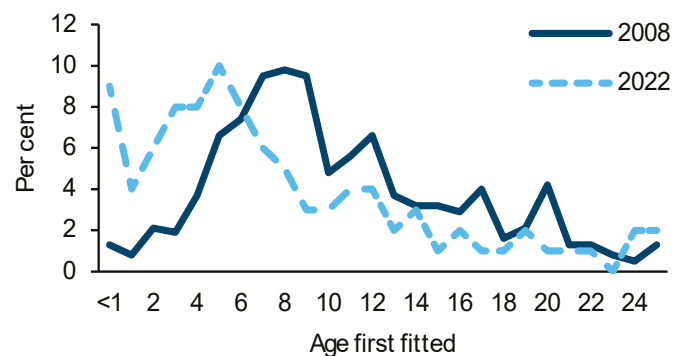
About 1,330 First Nations children aged 0–14 were clients of Hearing Australia, as at 30 June 2023. Of these:

- 1,270 had hearing aids (96%)
- 58 had a cochlear implant (4.4%).

In 2022, First Nations children with hearing devices first had their device fitted at a younger age, on average, than in 2008.

The peak age at which the hearing device was first fitted fell from 7–9 years in 2008 to 3–6 years in 2022.

### First Nations children and young people, age at first fitting of hearing device



Source: AIHW analysis of Hearing Australia data.

## More information

Ear and hearing health of Aboriginal and Torres Strait Islander people, 2024

Queensland's Deadly Ears Program—Indigenous children receiving services for ear disease and hearing loss

Hearing health outreach services for Aboriginal and Torres Strait Islander children in the Northern Territory: July 2012 to December 2022

Aboriginal and Torres Strait Islander Health Performance Framework: 1.15 Ear health

Regional Insights for Indigenous Communities: Ear health

## Abbreviations

AATSIHS	Australian Aboriginal and Torres Strait Islander Health Survey
ABS	Australian Bureau of Statistics
MBS	Medicare Benefits Schedule
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey
NHMD	National Hospital Morbidity Database
NHS	National Health Survey
NNAPEDCD	National Non-Admitted Patient Emergency Department Care Database

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