



Global issue of hearing loss

Hearing loss affects 20% of the global population. For hearing aids to truly aid, some challenges must be tackled. The global supply of hearing aids is mainly controlled by manufacturers headquartered in high-income countries, whose current pricing strategies seem to overlook affordability.

Limited opportunities: WA Deaf community

There are only limited educational and vocational opportunities for Deaf people living on the west coast of Australia, the Disability Royal Commission has heard. There is also a lack of Auslan interpreting services and Deaf role models for Deaf children.

Teenager petitions parliament for captions

Hope is looking forward to the day she can be fully included, just like anyone else. "I'm sick of sitting around the TV on family movie nights and not knowing what is going on."

Listening to the Future — Is Prevention better than Cure?

"Hearing Australia is proud to support the **23rd Libby Harricks Memorial Oration** and collaborate with the Deafness Forum of Australia to help improve hearing health and make access to expert care easier so everyone can experience the joy of sound."

Premies at high risk for hearing loss

The high prevalence of hearing loss in preterm infants can be explained not only by the immaturity of the auditory system but also by additional risk factors, such as infection and constant background noise exposure in the birthing centre.

Currently **one in six** Australians suffer from some form of hearing loss. This may increase to one in four by 2050. *Access Economics 2006*

Deafness Forum Australia is a Voice for All. It is the peak body representing the views and interests of the [One in Six Australians](#) who live with hearing loss, have ear or balance disorders, people who also communicate using Australian Sign Language, and their families and supporters. Our mission is to make hearing health & wellbeing a national priority in Australia.

Amplifying the global issue of hearing loss



Hearing loss, which currently affects 20% of the global population, has risen from the 11th leading cause of years lived with disability in 2010 to the third in [2019](#).

A complex web of determining factors impacts hearing at different stages of life, including genetic characteristics, health conditions, living and working environment, and age-related degeneration. Many causes of hearing loss are preventable through public health measures. But it can become a chronic condition and worsen over time if not managed.

Many people with hearing loss do not actively seek hearing care for various reasons including limited awareness, high cost, and stigma. People with uncorrected hearing loss can experience difficulties with communication, mental health problems, social isolation, and a high unemployment rate.

In the [World Report on Hearing](#) published in 2021, WHO recommended a comprehensive set of interventions (H.E.A.R.I.N.G.) covering prevention, management, rehabilitation, and environmental factors. A [modelling study](#) published earlier this year in *The Lancet Global Health* used data from 172 countries to examine the cost-effectiveness of the interventions recommended by WHO. It estimates that 90% implementation of the core interventions will avert 130 million DALYs - ie, a monetary gain of \$1.3 trillion - in 10 years, corresponding to a return of \$15 for every \$1 invested. Hearing aids are one major component of this set of cost-effective interventions, serving as first-line clinical management.

Nonetheless, for hearing aids to truly aid, some challenges must be tackled. First and foremost, cost. The global supply of hearing aids is mainly controlled by manufacturers headquartered in high-income countries, whose current pricing strategies seem to overlook affordability in low-income and middle-income countries (LMICs). Therefore, to bring down the price of hearing aids, investments and infrastructural support should be directed to new manufacturers located in LMICs to develop safe and low-cost hearing aids with features that satisfy local needs. In addition, national universal health coverage plans should consider including hearing aids and other hearing care to reduce out-of-pocket payment.

Affordable devices remove the financial barrier, yet other factors influencing people's willingness to use hearing aids still stand in the way. A second challenge would be to mobilise people. Raising awareness of hearing loss and the harm of untreated hearing impairment is a key first step.

Providing clear labelling, trial use, and easy-return policies can further remove hesitation to use hearing aids. More importantly, we should strive to de-stigmatise hearing loss. Unless we change how societies view people wearing hearing aids and actively engage the community to support people with hearing loss, we can hardly improve the health inequities experienced by this population.

A final challenge lies in the shortage of qualified workforce in LMICs (and rural and remote parts of countries such as Australia) to deliver prevention, treatment, and rehabilitation for people with hearing loss. The long-term solution would be through health system strengthened with a focus on primary care. Primary care workers can play an important role in expanding access to hearing care by participating in screening, raising awareness, and delivering treatment such as fitting hearing aids. And their work is likely to be cost-effective.

Hearing loss, a pressing yet often invisible problem, requires more attention from global health researchers and a systematic effort that considers various needs of diverse groups with vulnerabilities across the life course. Access to hearing aids is one crucial link in this effort, together with public awareness, a supportive community, a competent workforce, and a hearing-safe living and working environment.

From [The Lancet Global Health](#) Article info: DOI: [https://doi.org/10.1016/S2214-109X\(22\)00390-4](https://doi.org/10.1016/S2214-109X(22)00390-4)



The next World Hearing Day will be observed on 3 March 2023 with the theme 'Ear and hearing care for all! Let's make it a reality.'

We will highlight the importance of integrating ear and hearing care within primary care, as an essential component of universal health coverage. The key messages in 2023 are:

- Ear and hearing problems are among the most common problems encountered in the community.
- Over 60% of these can be identified and addressed at the primary level of care.
- Integration of ear and hearing care into primary care services is possible through training and capacity building at this level. Such integration will benefit people and help countries move towards the goal of universal health coverage.

More information is available from the [World Health Organization](#).

Premature infants at high risk for hearing loss



From [Science Direct](#)

Prematurity is considered a risk factor for hearing loss, particularly if the gestational age is less than 32 weeks.

The high prevalence of hearing loss in preterm infants can be explained not only by the immaturity of the auditory system but also by the frequent coexistence of additional risk factors, such as infection and constant background noise exposure in the birthing centre.

Some studies have shown that preterm infants with a confirmed diagnosis of sensorineural hearing loss can have progressive improvement in the hearing threshold over months. But why only some preterm infants show improvement in the hearing threshold remains unclear.

Because of the expression of mesenchymal stem cells (cells found in bone marrow that are important for making and repairing skeletal tissues) and antioxidants, breast milk might play a protective role in the auditory system of preterm infants. These findings could have important implications for clinical practice.

In Australia, a universal neonatal hearing screening program covers 98% of all births. This facilitates early diagnosis, intervention, and management of hearing loss and identifies suspected hearing loss in around 250–300 infants per year. (Ching, TY, Oong & Wanrooy 2006; Ching, TYC et al. 2017).

The [Australasian Newborn Hearing Screening Committee](#) aims to foster the establishment, maintenance and evaluation of high-quality screening programs for the early detection of permanent childhood hearing impairment throughout Australia and New Zealand.

Hearing loss may also be identified later in childhood due to delayed acquisition of developmental milestones or changes in behaviour that are suggestive of hearing loss. Children with suspected hearing loss are referred by a specialist paediatrician for comprehensive evaluation by audiologists experienced in paediatric hearing assessment. If the child is confirmed to have hearing loss, they are referred to a specialist paediatrician or otolaryngologist.

'Not good enough': teenager petitions NZ Parliament for captions



By Olivia Shivas for [Stuff](#). Image: Hope Cotton hands over her petition with more than 2000 signatures to NZ Green Party MP Chlöe Swarbrick. ROBERT KITCHIN/Stuff

A New Zealand teenager has submitted [a petition to make captions mandatory on TV and media videos](#), saying the lack of accessible media is “not good enough”.

For Hope Cotton, who is Deaf, mandatory captions would mean she would be able to reach her potential. “We need this in order to be able to access education, important news and entertainment,” the 17-year-old said.

Growing up, communication was a barrier to making friends and being in large groups. And despite being very academic, Hope would fall behind on schoolwork during lockdowns because the video call functions didn’t have captions. She said other people’s assumptions about her and her deafness also caused barriers.

“People assume that if you wear hearing aids, your hearing is 100% perfect, but it’s not.”

She said some teachers would also have a go at her for not listening in class. “Because I can speak reasonably well, they just assume that I’m fine. But I’m not, I don’t understand what’s going on.”

“This is not good enough. Something needs to change,” Hope said. “Ideally, it would result in legislative change which I think is really important.”

Green Party spokesperson for disability issues Jan Logie said she absolutely supported mandatory captioning in the media and on television. “I think it’s part of creating an inclusive society and there’s a significant proportion of people who struggle with their hearing or who want to access their media without the sound on or who may have English as a second language, and it helps in all of those situations,” she said.

Hope is looking forward to the day she can be fully included, just like anyone else.

“I’m sick of sitting around the TV on family movie nights and not knowing what is going on.”

A Deafness Forum Australia event

Listening to the Future — Is Prevention better than Cure?



David McAlpine presents the 23rd Libby Harricks Memorial Oration on 11 October in Sydney.

David McAlpine is Distinguished Professor of Hearing, Language & The Brain, Dept of Linguistics, and Academic Director of Macquarie University Hearing, Faculty of Medicine, Health and Human Sciences at The Australian Hearing Hub, Macquarie University in Sydney Australia.

Trained as a neuroscientist, his leadership roles supporting the development of research into hearing and deafness and the translation of research into benefits for those with hearing problems informs his view that engaging with individuals and communities through all sorts of avenues - conversations, media, and the arts, is key to securing hearing health and positive listening futures for all.

Libby Harricks
Memorial Oration 



Since 1999, the Libby Harricks Memorial Oration series has featured the world's leading academics, researchers, policymakers, advocates, and commentators. It raises awareness of issues of hearing health, deafness, and ear and balance disorders.

The Oration series honours the memory of the first President of the Deafness Forum of Australia. For her work on behalf of hearing-impaired people, Libby Harricks was made a Member of the Order of Australia in 1990.

"Hearing Australia is proud to support the Libby Harricks Oration and collaborate with the Deafness Forum of Australia to help improve hearing health and make access to expert care easier so everyone can experience the joy of sound."



Join us for a cocktail function sponsored by Hearing Australia

You will also meet the chairs of Hearing Australia and Deafness Forum Australia.

- The Grace Hotel, 77 York St, Sydney
- Tuesday 11 October 2022
- Canapé and drinks from 6pm, presentations begin at 6.30pm to 8pm
- Free entry: numbers are strictly limited by the venue's safe-distancing policy

Take the link for [your free admission ticket](#)

David McAlpine's oration in 2022 is presented by Deafness Forum Australia, Audiology Australia and Hearing Australia. For three-quarters of a century, Hearing Australia has provided world-leading research and hearing services for the wellbeing of all Australians. The organisation cares for thousands of children, adults, Aboriginal and Torres Strait Islander peoples, pensioners and veterans every week in our cities, regional centres and some of the most remote parts of our nation.

Visit the [Orations web centre](#)

The exceptional Libby Harricks

As a young wife and mother, Libby developed a profound hearing loss. She quickly educated herself with skills to manage her own hearing difficulties and soon became committed to advocating for all hearing challenged people. Libby was the inaugural Chairperson of Deafness Forum of Australia. She was made a Member of the Order of Australia in 1990.



Footnote: Deafness Forum made the decision to hold the 2022 Libby Harricks Memorial Oration in place of a National Deafness Sector Summit. It became clear during planning that it would be difficult to attract citizen advocates from interstate to create a genuinely National Summit event in 2022.

Ruby was born before universal newborn hearing screening



"I love being able to hear and wouldn't have it any other way. I've always felt and believed that my disability doesn't define me, it's only a part of me, and has contributed to who I am today."

Ruby is the oldest of three, studying a diploma of photography and photo imaging. "One of my main hobbies is photography, it's one of my favourite things to do. I love the creativity and fun of it, the different ways I can use my lighting, perspective and focus on the smaller things in life."

Ruby was born before the universal newborn hearing screening was introduced in hospitals and was diagnosed with profound hearing loss at six months old.

"My parents went to multiple specialists and GPs and it was when Dr Dimity Dornan AO (founder of Hear For You) called that our lives changed forever. Dimity told them that it was possible for me to hear and to learn to listen and speak. My parents met with Dimity later and never turned back."

"Despite having bilateral cochlear implants, I still struggled at school. It was huge, doing six hours a day of non-stop listening, concentrating, socialising, and trying to ensure I didn't miss anything," said Ruby.

"The most important thing I did was to introduce myself to my teachers and explain my hearing loss, the challenges I go through and strategies to help me.

"Today I go to Hear and Say (Brisbane) every six months for a new program for my cochlear implants and every 12 months for assessments."

Ruby shares her advice to parents who have just found out their baby has a hearing loss.

"This new chapter is a tough and scary beginning but there are so many opportunities you can create for your child. They do have the ability to learn to listen and speak, go to their local school, make friends and be a kid," said Ruby. "They can be anyone they want to be."



Opportunities limited: WA Deaf community



There are only limited educational and vocational opportunities for Deaf people living on the west coast of Australia versus the east coast, the Disability Royal Commission has heard.

There is also a lack of Auslan interpreting services and Deaf role models for Deaf children.

At the Royal Commission's first targeted engagement with the Deaf community in Perth, about 15 people attended a workshop. Attendees included people who identify as Deaf and deafblind. The purpose was to let the Royal Commission know that their experiences are just as important as those of people living in the eastern parts of Australia. The face-to-face engagement made it easier for Deaf and deafblind people to engage with each other in the same room and share their experiences of violence, abuse, neglect and exploitation.

(Deafness Forum receives funding to promote the work of the Royal Commission.)

One of the world's youngest languages



Nicaraguan Sign Language is one of the world's youngest languages. Until the first Deaf school in 1977, the Nicaraguan Deaf community was isolated and without language. After the Sandinista Revolution in 1979, Nicaraguan Sign was spontaneously created by deaf children gathered together in schools run by East German teachers. From [British Deaf News](#).

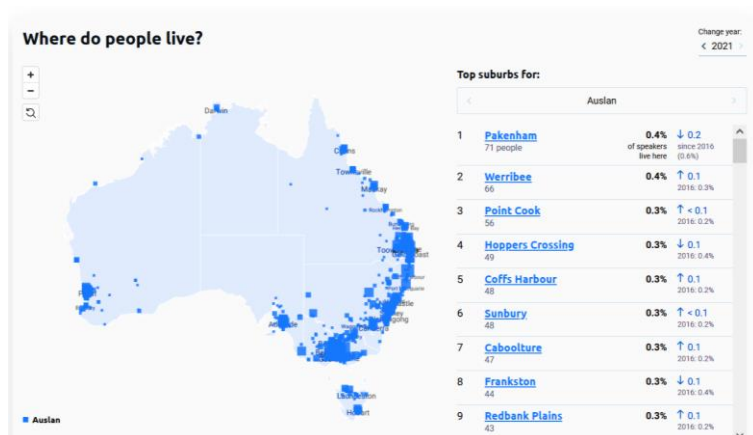
Snapshot of Auslan in Australia

The Australian Census report shows slightly more than 16,000 people use Auslan. The numbers include people for whom Auslan is their primary or only language, and also people who use Auslan to communicate with native Auslan users, such as children of Deaf adults.

A majority of Auslan users were living in Queensland, Victoria and New South Wales with around 4,000 in each state; under 2,000 living in South Australia and Western Australia; and between 100 and 400 people living in the Northern Territory, ACT and Tasmania.

What suburbs do people live in?

In the top ten suburbs, most people whose first language is Auslan live in and around Melbourne, with concentrations in Coffs Harbour NSW, and Caboolture and Redbank Plains in Queensland.

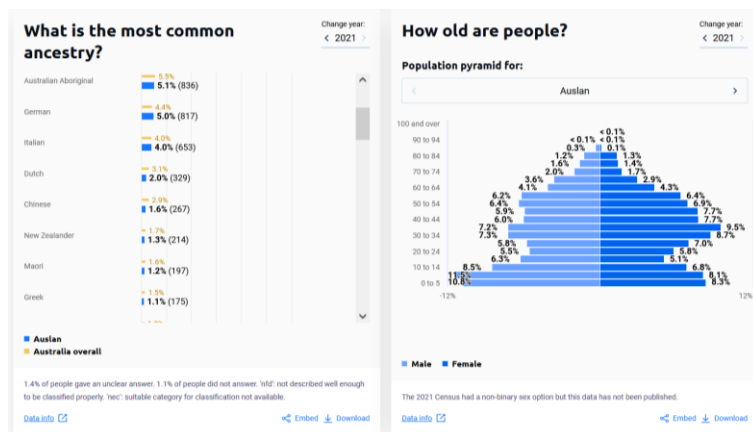


Most common ancestry

Australian and English are the main backgrounds – about 15% greater in comparison to the whole population. Then comes Scottish, Irish and Australian Aborigine.

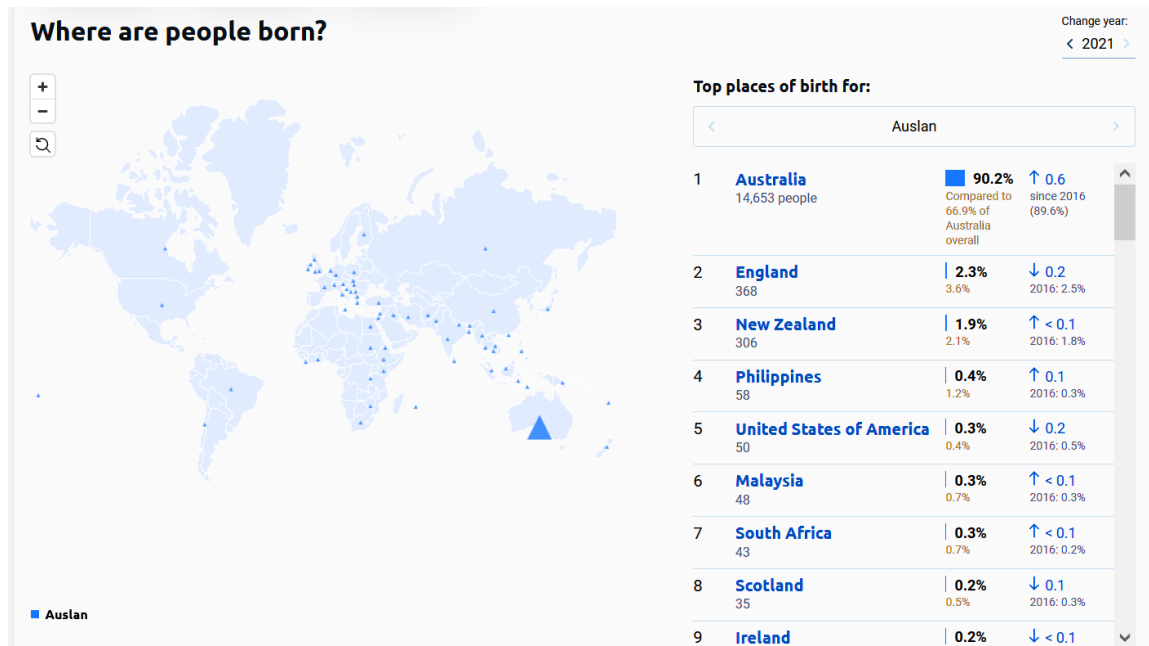
How old are they?

770 females and 755 males aged 0-4. 630 females and 594 males aged 10-14. 539 females and 388 males aged 20-24. 806 females and 442 males aged 30-34. 717 females and 442 males aged 40-44. 448 females and 639 males aged 50-54. 396 females and 290 males aged 60-64. 142 females and 159 males aged 70-74.



Birthplace

90% were born in Australia. The highest-ranking other countries of birth were England or New Zealand at around 2% each.

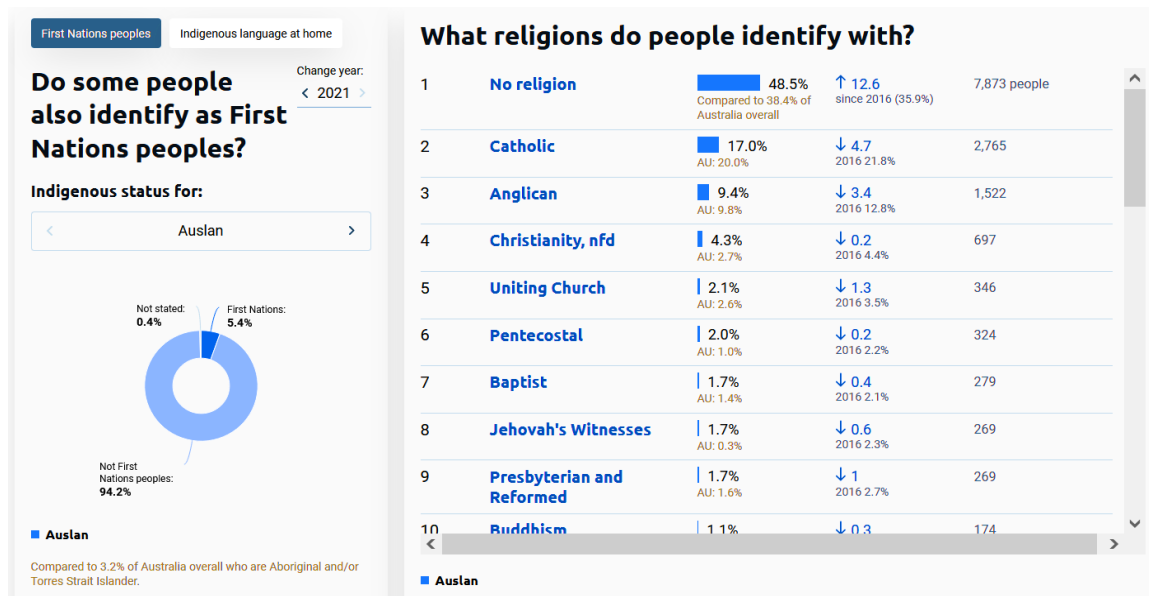


First Nations people

5% identify as First Nations people compared to 3% of Australia overall who are Aboriginal and/or Torres Strait Islander.

Religion

Nearly 50% say they have no religion. 17% Catholic and 10% Anglican, 1% for both Islam and Buddhism. Australian Aboriginal Traditional religions and Chinese religions were less than 0.1%.



From [SBS Australian Census Explorer](https://www.sbs.com.au/australian-census-explorer).

Australian government faces potential class action over NDIS age exclusion



By [Paul Karp](#) for [The Guardian](#). Photograph: Ellen Smith/The Guardian

The Australian government is facing a massive class action – predicted to be on the same scale as the Centrelink Robodebt debacle – for the exclusion of over 65s from the National Disability Insurance Scheme.

Proponents point to the average \$111,000 a year spent on an NDIS plan for seniors who qualified before age 64, as opposed to \$56,000 for the equivalent aged-care scheme, as a form of “pecuniary loss” suffered by those aged 65 and over.

Rick Mitry, the partner of Mitry lawyers, told Guardian Australia the firm had only begun advertising the proposed class action, with 70 or 80 people “keen – or some would say desperate – to join” the case it aims to launch by year’s end.

“If you have an accident at 64, you’re entitled [to the NDIS] but if the accident happens a few months later – you’re out.”

Peter Freckleton, a member of the Post Polio Victoria board, told Guardian Australia he applied for the NDIS two years ago, citing lifelong paralysis in both legs as a result of having contracted polio as an infant in the 1950s pandemic.

“I couldn’t walk unaided, I had to wear leg braces and crutches. There was no doubt about the disability ... The only thing they [NDIS] objected to was my age.”

Freckleton said aged-care payments were not “designed to deal with disability” – which can require big lump-sum costs like assistive technologies – forcing him to save payments over months to pay for a wheelchair.

“Those people need help as soon as possible. It’s just unconscionably cruel [they’re excluded]. It’s disability discrimination with age as the pretext. The real victims are people with permanent and severe disabilities.”

A spokesperson for the Department of Social Services said the NDIS is “one part of a broader system of disability support. People over the age of 65 are able to access support through the aged-care system.”

Engaging with people with disability



The Centre for Inclusive Design, ThinkPlace and People with Disability Australia are doing research commissioned by the Department of Social Services.

The aim is to create good practice guidelines for engaging with people with disability in an inclusive, respectful and appropriate way on relevant topics that matter to community. The guidelines will be used by government, non-government organisations and businesses.

They will be holding focus groups to understand what good looks like when the disability community participates in different types of engagements such as surveys, interviews and advisory groups.

The focus groups will be held online via Zoom.

- When: Various timeslots in October.
- Duration: 1 hour
- Participants receive \$50 gift card for their time and experience.

If you are interested, email gabriela.martin@cfid.org.au

Heads up on the future of One in Six

The One in Six newsletter is perhaps the only national newsletter of its kind that comes as a PDF file attached to an email. Its format has been unchanged for a decade. We would like to think that its editorial content has progressively improved over the years.

We will introduce an online version of One in Six, a format most organisations use for their newsletters. This will start in 2023 but let's not rule out a few test runs before then.

However, we will continue publishing this traditional form of the newsletter until you tell us that the new e-version lives up to your expectations.

It is your newsletter so please continue to share it with others and send us your feedback.

New research

Unilateral Meniere's disease appears more common on the left side than the right, suggesting that the disease process is not symmetrical. Meniere's disease also appears more common in females than males. It appears that there is a physiological asymmetry in the progression/cause of Meniere's disease. From [Taylor & Francis Online](#).

Is there benefit in cognition for older adults from the use of cochlear implants and hearing aids? This [Frontiers in Epidemiology](#) systematic review indicates cochlear implants or hearing aids in older adults are a promising strategy in the rehabilitation field, not only for hearing abilities but also for cognitive status improvement.



Other research (all the titles below are hyperlinked)

- Associations between sleep disorders and anxiety in patients with tinnitus
- Clinical Trial: Deep Brain Stimulation for Tinnitus
- Hearing Aids Mitigate Tinnitus, But Does It Matter if the Patient Receives Amplification in Accordance With Their Hearing Impairment or Not? A Meta-Analysis
- Listening effort in individuals with noise-induced hearing loss
- Managing Stigma Through Laughter: Disability Stigma & Humour as a Stigma Management Communication Strategy
- Non-auditory Effects of Noise in the Classroom on Teachers
- Organisations Building Awareness for Environmental Noise Control
- Psychological Acceptance in Adults with Hearing Loss - Psychometric Evaluation and Validation of the Hearing Acceptance Questionnaire
- Related factors to the coping style of patients with sudden sensorineural hearing loss
- Review of Technology and Infrastructure Needs in Delivery of Virtual Hearing Aid Services
- Sensitivity to Deaf Culture Among Otolaryngology and Audiology Trainees
- Sensorineural Hearing Loss Post-COVID-19 Infection: An Update
- Supporting the Social-Emotional Well-Being of Elementary School Students Who Are Deaf and Hard of Hearing: A Pilot Study



Sharks Can Hear for Miles

Images of bloody chum undulating through ocean currents has cinematic gory appeal but a shark needs to be in relatively short range (less than a kilometre) to pick it up. The rate at which the smell travels is dependent upon currents, so sensing the odiferous lure is relatively short range in comparison to estimates on how far a shark can hear potential prey.

A shark's 'inner ear' is a dual-purpose system called the acoustic-lateralis system. The configuration allows sharks to perceive sounds between 10Hz–800Hz that travel great distances through water. The lateral line runs just under the skin, flanking each side of the apex predator. The lateral lines allow detection of additional vibrations, further orienting sharks to their environments and clueing them toward potential prey. Additionally, sharks are capable of electroreception, the ability to detect electrical fields. Together, these amazing structures form an excellent internal global positioning system (GPS) in the murkiest of waters.

Sharks are most attracted to low-frequency, erratic thumping sounds that mimic prey in distress. In the *Discovery Channel's Bride of Jaws* (2015) documentary, researchers used an underwater speaker playing heavy metal music (low-frequency dominated music) to successfully lure great whites for filming purposes. The acoustic method is gaining popularity as it may be more effective at attracting sharks than the traditional chumming techniques, often reducing the time it takes for sharks to appear.

From [American Academy of Audiology](#)

Deafness Forum is a Registered Charity

Your contributions keep us working on your behalf. All donations of \$2 or more are tax deductible. To donate, [please take this link](#)

Know someone who deserves their own copy of One in Six?

Drop us a line to hello@deafnessforum.org.au

Items in Deafness Forum communications may include terminology or summarise views, standards or recommendations of third parties, which are assembled in good faith but do not necessarily reflect the considered views of Deafness Forum or indicate commitment to a particular course of action. Some content derived from sources may contain ableist and/or offensive terms, and some may not be accessible to all audiences. We make no representation or warranty about the accuracy, reliability, currency or completeness of any third-party information. Content may be edited for accessibility, style and length. We want to be newsworthy and interesting, and our aim is to be balanced and to represent views from throughout our community sector, but this might not be reflected in particular editions. Contact us to receive this publication in an alternative file type.