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

## A deafblind child in Africa

A child with deafblindness in Africa usually lives like an outcast. Stigmatisation and labelling is common in many families where disability is still conceived as a misfortune. When the couple realises that they have a disabled child, mothers are typically abandoned to raise the children on their own.

## The other ways high noise levels impact student and teacher health

Teacher vocal fatigue and absenteeism is an indirect effect of classroom noise. While some is attributable simply to the amount of talking teachers do during the school day, high noise levels exacerbate this problem because of the need to project one's voice over the noise, not just occasionally to get students' attention, but on an ongoing basis throughout the day.

## Supportive Deaf community

When parents choose to get their child a cochlear implant, they are no doubt making the best choices they can with the information and understanding they have about growing up and living in a world where most people can hear. But too often they miss out on key support for themselves, and for their kids, from the Deaf community.

## A.I. opens a new world of possibilities in Hearing

We've entered a new age of computing in which machines use AI to become smarter based on the data they're trained on. For hearing technology, this opens a new world of possibilities.

Deafness Forum Australia is a Voice for All. It is the peak body representing the views and interests of the 4 million 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.

# Non-auditory effects of noise in the classroom

By Pam Millett, PhD for [Canadian Audiologist](#)



The detrimental effects of noise on speech perception for a number of different populations (e.g., students with hearing loss, English Language Learners, students with learning challenges, etc.) have been well documented. However, we should not forget the other ways in which high noise levels may impact student and teacher health, and well-being at school.

The number of studies on the non-auditory effects of noise continues to grow. While there is a small literature on the effects of environmental noise on classroom teachers, most classroom noise consists of speech, so non-auditory effects of noise may look different for classrooms than for other settings.

A second difference is that much of this research has come as a by-product of reducing the impact of the noise (i.e., the implementation of sound field system, or classroom audio distribution systems), where anecdotal comments after the installation of these systems has highlighted problems of which people were previously unaware.

Of course, research on sound field systems investigates the effects of improving the classroom listening environment by improving signal to noise ratio, rather than investigating the effects of reducing classroom noise. However, we can still find clues there.

Issues which have been extensively studied in other research on the non-auditory effects of noise (such as annoyance, blood pressure changes, health problems and stress) have received almost no attention for classroom teachers. This may be related to the fact that classroom noise is “relatively” low in comparison to, for example, construction noise, or to the fact that any annoyance factor may be minimised since the noise source is primarily student voices. In fact, in one study the authors noted that “Noise disturbance attributed to traffic noise and ventilation and machinery in the schools...received very low disturbance ratings from most of the respondents” and found that student talking was the most prevalent and most annoying type of noise. This study indicated that

approximately 82% of the teachers reported being exposed to disturbing noise for at least ¼ of the workday, and that annoyance reports regarding noise were highly correlated with reverberation times in classrooms.

Teacher vocal fatigue and absenteeism can be considered an indirect effect of classroom noise, but they are important nonetheless. Research on teacher absenteeism due to vocal problems suggests that vocal problems may be the most common reason for teacher absenteeism. The societal cost of voice problems in teachers alone may be of the order of about \$2.5 billion annually in the US.



While some of the vocal problems in teachers are attributable simply to the amount of talking they do during the school day, high noise levels exacerbate this problem because of the need to project one's voice over the noise, not just occasionally to get students' attention, but on an ongoing basis throughout the day.

Vocal effort is related to individual factors such as fatigue, but also to environmental factors such as listener-speaker distance and background noise. Several studies have theorised that physical education teachers and kindergarten teachers are at highest risk because they teach in the highest noise levels and therefore have more vocal strain.

Unsurprisingly, research has noted that voice power levels are related to room size and reverberation time, such that the same vocal effort will result in lower voice power levels and poorer speech intelligibility in a highly reverberant room (such as a gym) than in a smaller, less reverberant classroom.

What is more surprising to me is the very meagre body of research on the effects of simply improving the acoustical environment of the classroom so that teachers do not have to strain their voices. A 2002 study of teachers and students from both elementary school and college/university classrooms, noted that without amplification, 70% of teachers reported throat discomfort prior to trial of sound field amplification. This decreased to 27% after sound field installation.

The COVID-19 pandemic has offered us an interesting perspective on this approach of addressing vocal problems by improving the acoustical environment. A systematic review of the effects of masks on vocal production during the pandemic reported that masks result in results in increased vocal effort, vocal fatigue, discomfort, and perceived voice problems. However, there has been a *decrease* in reported vocal problems among teachers during the pandemic with remote learning, which is theorised to be due to decreased background noise levels.



## Parents of deaf children often miss out on key support from the Deaf community

By Pamela Conley, Associate Professor, National Technical Institute for the Deaf USA. From [The Conversation](#).  
Image by Lauren A. Little/MediaNews Group/Reading Eagle via Getty Images

When parents choose to get their child a cochlear implant, they are no doubt making the best choices they can with the information and understanding they have about growing up and living in a world where most people can hear. But too often they miss out on key support for themselves, and for their kids, from the Deaf community, which I am a part of – as the deaf mother of a deaf son – and which I study professionally.

Over decades, even centuries, the Deaf community has been ignored, and even repressed, by mainstream hearing society. As far back as the 19th century, educators of deaf people have tended to believe that speaking and listening are critical to functioning in the broader society. As a result, they have discouraged children from learning to sign, even though research shows that if kids can communicate effectively without speaking, they'll be more interested in learning speech.

Deaf children who are taught to speak often struggle with language delays through childhood and into adulthood. Teaching them to sign, however, can help them fully express their thoughts, feelings and ideas, and find acceptance and connection with others with similar experiences. I believe these children deserve to be taught to sign, to celebrate their deaf identity.

As parents make their decisions about how best to support their deaf and hard-of-hearing children, they will definitely encounter a large number of medical experts, speech therapists and other professionals who want to help their kids function in a world that places a lot of emphasis on hearing. But they should know there is another community available, too, standing ready to help their deaf and hard-of-hearing kids, with or without cochlear implants, gain deeper understanding of themselves and more fully develop their limitless human potential.

In my personal and professional experience, the Deaf community is made up of people who are well equipped to support the mental, emotional and social health of deaf and hard-of-hearing children and their families. They participate fully in society, holding a wide range of jobs unhindered by the limits on their hearing. And they have come to understand the role of deafness in their own identities and lives. The [HeART of Deaf Culture](#) website offers a selection of creative works that present profound insight for Deaf identity affirmation.

# How Artificial Intelligence is opening up a new world of possibilities in Hearing

By [Achin Bhowmik](#) for [Forbes Innovation](#)



Image by Getty

Artificial intelligence (AI) is the new electricity. This is how Stanford University colleague Andrew Ng describes the wide adoption and deep impact we're seeing with AI. AI is transforming the way people are living their lives. It's opening up doors that were previously in the realms of imagination. You've used AI in face and voice recognition and heard of it in self-driving cars and autonomous robots. Although these applications are fascinating to see, I believe one of the most intriguing uses of AI is in harnessing it to enhance and augment human sensory perception and communication. Our eyes, ears, skin, nose and tongue are all sensors that interact with our brain, helping us develop a model of the world we're in and how we experience it. The idea of using technology to augment these processes to enhance our perceptual capabilities is no longer science fiction.

When I left a Silicon Valley-based tech giant and joined the hearing industry, hearing aids were a lot different than they are today. Now, we've entered a new age of computing in which machines use AI to become smarter based on the data they're trained on. Like a child learns based on experiences, these devices are able to make decisions on their own by analysing and classifying the surrounding environment based on machine learning techniques. When it comes to hearing technology, this has opened up a new world of possibilities.

People with normal hearing have the natural ability to adjust and adapt to difficult listening situations. The ears and brain work together to help you hear and understand the most important sounds, such as a friend speaking in a noisy coffee shop. This automatic biological process is taken for granted until someone begins suffering from hearing loss. When it stops working, hearing becomes a difficult task. Today, AI is starting to make hearing effortless again.

# The plight of being a deafblind child in Africa: My personal experience

[Simate Simate](#) for [Mail&Guardian](#): Africa's best read



There are few statistics on deafblindness and specialised services to support the functioning of deafblind people is poor in Africa. (Photo by Oleksandr Rupeta/NurPhoto via Getty Images)

Many people do not know that there is a disability called [deafblindness](#). It is a unique and dual sensory disability that arises from a combined loss of the sense of hearing and the sense of vision. It restricts the ability to access visual and auditory information, communicate and to move and locate objects in one's environment. As a result, people with deafblindness lead isolated lives and little is known about them, especially in Africa.

A child with deafblindness in Africa usually lives like an outcast. To begin with, limited child health care services means that parents do not usually notice that their child has a combined sight and hearing loss. Many times, only one impairment, usually the visual impairment, tends to be apparent. If they happen to detect both impairments, it is usually at a much later stage and by this time the child will have suffered the consequences of their misconception about their disability.

Stigmatisation and labelling is common in many families where disability is still conceived as a misfortune. When the couple realises that they have a disabled child, mothers are typically abandoned to raise the children on their own. This is a serious problem in several countries where there is no social protection and the mother has no established source of income.

Unlike most fellow children with deafblindness, I was lucky enough to have an educated, working and caring father who supported me in my education. By the time he died, when I was doing my

junior secondary school, he had built a foundation for my upbringing. My disability nevertheless haunted him. I would hear my parents whisper their helplessness and despair when I lost a great deal of my hearing and sight at the age of 10 and 15 respectively. It was a miracle to them that I continued to pass at school despite my deteriorating senses of sight and hearing. They concentrated on enhancing my ability, rather than limiting me because of my disability.

Severe congenital deafblindness is usually mistaken for mental disorder or hyperactivity because of a deafblind child's inability to perform visual and auditory tasks performed by their peers. Mind you, this is Africa where there are still several [myths](#) about disability and its causes. This includes the belief that disability is caused by witchcraft and is a source of abomination to the family. Such myths usually make a family withdraw their child from the public eye when they discover that their child has deafblindness, a strange and perplexing disability.

Extreme home confinement of deafblind children isolates them from peers and deprives them of information and communication. This is how I developed the habit of talking and smiling to myself even when there are people around me. It is embarrassing when people around you discover that you are in your own world and communicating with imaginary friends. This behaviour can be addressed by actively involving deafblind children in outdoor activities that promote self and community identification of deafblind people. Outdoor activities also build peer relationships, stimulate intellectual development and promote health through physical exercises. Similarly, home confinement of deafblind children with the view of protecting them from harm and peer abuse can result in overprotection.

I have a difficulty in accessing visual and auditory information because I have post-lingual acquired deafblindness. But, for children with severe congenital deafblindness, communication — especially with their mothers and caregivers is a serious problem. Such children may communicate through body movements, gestures, facial expressions, vocalisation or use of objects. But the caregiver may not comprehend what the child's behaviour means. Few professionals working with children specialise in communicating with deafblind children and adults in Africa.

Deafblind children are unlikely to learn activities for daily living as a result of communication problems with their caregivers as well as restricted physical mobility. Thus, activities such as eating, dressing, bathing and toilet skills are difficult for deafblind children. This exposes them to high risk of abuse because of their inability to detect, resist and communicate or report abuse as a result of their dual impairment.

Deafblind people who depend on their sense of touch to access information and communicate are the most excluded and under-researched groups in society. The attainment of the sustainable development goals will remain an illusion for deafblind people in many countries especially in Africa if they continue to be invisible and excluded from policy and social services.



Author [Simate Simate](#) is a Zambian living with deafblindness. He is a disability rights advocate, national coordinator of the Deafblind Zambia Programme and the secretary of the Africa Federation of the Deafblind. Simate holds master's degrees in arts, international human rights law and pedagogical sciences. He is also a Canon Collins PhD scholar in education policy.

# Mission to prevent avoidable hearing loss

Hearing Australia works in partnership with Aboriginal and Torres Strait Islander peoples to empower and support good hearing health outcomes through its outreach programs like the Hearing Assessment Early Ears program (HAPEE) and PLUM and HATS tools.

The organisation collaborated with Aboriginal artist Davinder Hart to create a unique design that reflects the importance of celebrating sound and storytelling. Davinder is an Aboriginal artist with family roots in Bibbulmun & Katanning in the south west region of the Noongar people in WA.



The design is titled The Spirit of Sound and the story behind the painting is that the three circles represent Music, Dance and Mother Earth.

“Sound is so important to myself and to Indigenous people”, says Davinder, “Hearing the sounds of the didge, clap sticks and the thump of feet dancing in time and feeling it vibrate through the ground, it transcends the physical and evokes a feeling deep down in my soul of belonging. It is an echo of my ancestors flowing through time and telling the stories of my people. Sound is a way of sharing and passing down knowledge from generation to generation to ensure the survival of a culture deeply connected to the earth. This is why it’s so important that our people take care of their hearing health throughout their lifetime” Davinder says, “I encourage everyone to care for and value their hearing and to reach out if you need help so you can celebrate the joy of sound and stay connected to your loved ones and what matters most.”



The board of Deafness Forum Australia met in Adelaide at the weekend (4, 5 June).

It was the first in-person meeting held since the start of the health pandemic.

Directors come from many parts of Australia and some joined remotely to finalise the goals, workplan and finances for the next financial year. Read about them [here](#)

In the photo from left, special guest Barry MacKinnon, President Deafness Council Western Australia; Steve Williamson Deafness Forum CEO; board members - Dwin Tucker (on screen), Rhonda Locke (via phone – not pictured), Michelle Courts, Jeff Johnson and chair David Brady. Raelene Walker could not attend the meeting.

## Vice-Regal patronage continues

Better Hearing Australia has welcomed [Her Excellency the Honourable Dr Jeannette Young PSM Governor of Queensland](#) as Patron of the organisation.

This continues a tradition of vice-regal patronage by the Queensland Governor for [BHA Brisbane](#).

Her Excellency was sworn in as the 27th Governor of Queensland in 2021 after a six-year role as the state's Chief Health Officer. During this time Dr Young had responsibility for leading the State's preventative health and public health agendas, including response to public health emergencies.



# Hear & Beyond

If there's one thing I'm good at, it's living with hearing loss, writes Gael Hannan.

Not perfect, but pretty darn good. I know what to expect. I use technology. I tell people about my hearing loss and what I need from them so we can understand each other. I can quickly transform a poor listening environment into one that works. I don't bluff (as much as I used to). And I carry no shame about my hearing loss, because there's nothing shameful about it!

But it took *decades* to get to this point. My friend and fellow advocate Shari Eberts is *also* good at living well with hearing loss. (It didn't take her as long as me because I'm older and started earlier.)

Most of what Shari and I learned on our individual hearing loss journeys did not come from our hearing care professionals, who were brilliant at hearing aids but not always good at painting the Big Picture of hearing loss. There was no operating manual or guidebook to help us along the way.

So, we wrote one. *Hear & Beyond: Live Skillfully with Hearing Loss* is the book we could have used years ago on our journey.

## What is The Hearing Loss Journey?

To some, the term is just a nice way of saying, *I don't hear well, and I guess that's the way it's always going to be.*

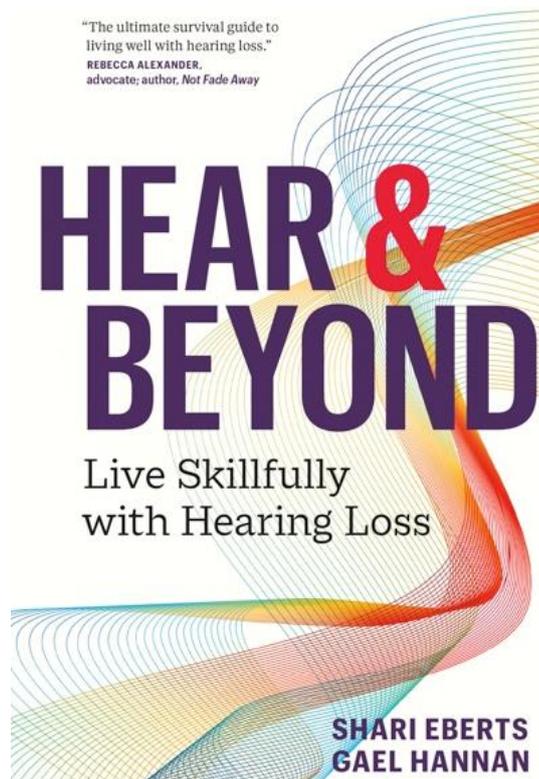
There's more to it than that – it's about *how* we navigate our life with hearing challenges. It's about how we communicate with other people. We can take charge of the journey by *purposefully* using a variety of communication strategies.

## Why Another Hearing Loss Book?

While there are many wonderful inspirational memoirs about life with hearing loss, we saw a gap on the bookshelf: the roadmap that can only be written by people who understand, deep in their bones, the emotional and practical impact of hearing loss, even a mild one, on our lives. If you don't know where you're going, it's pretty hard to get there.

And we didn't make this stuff up! We weave our stories throughout *Hear & Beyond* not only because we like to talk about ourselves, but because our life experiences are *typical* of the hearing loss journey. Our work is grounded in the personal experiences of thousands of other people like us and corroborated by hearing science, tremendous advances in technology, and modern hearing care principles such as person-centred care.

It's the ultimate survival guide for every person with hearing loss, their communication partners and the professional who serve them. The book is currently available in Australia in e-book form (i.e., Amazon Australia) and will be available wherever books are sold in Australia on July 26.



Australian Government Department of Health

# Flu vaccine fact sheet

## Why should you get the influenza (flu) vaccine?

- Flu is a highly contagious viral infection that causes serious illness in some people.
- This year we are expecting lots of flu cases in the community. ○ We may be more vulnerable to influenza because we haven't been exposed to this virus much over the past two years. That means our bodies aren't as used to the virus as they usually are.
- Vaccination against the flu is the best way to protect you and those around you from the flu.

**The influenza vaccine is recommended for all individuals aged 6 months and over.**

## Are there any side effects from the flu vaccine?

- You may experience some side effects after you get the flu vaccine.
- These side effects are usually minor and last only a day or two.
- Possible side effects include pain and swelling where the shot was given, fever, aches and tiredness (more information on side effects to vaccination is available on the [Department of Health's website](#)).

## When should I get the flu vaccine?

- The flu season varies according to where in Australia you are, but there are typically a lot of cases from June to September.
- It is recommended that people receive a flu shot each year. New flu vaccines are produced each year to protect against the most common forms of the flu virus that season.
- It's best for most people to get their flu vaccination as soon as they can (if they haven't already had the 2022 flu vaccination).
- It is never too late to vaccinate as influenza can circulate in the community all year round.

## Where can I go to get the flu vaccine?

You can book a vaccine appointment at a range of settings. These include:

- your local GP
- pharmacies
- local immunisation clinics
- community health centres
- Aboriginal Medical Services.

You can use the [Health Service Finder](#) to find a GP clinic or pharmacy near you – you should check with the provider before making a booking to confirm they have the flu vaccine available.

Your state or territory health department may have other options to support you to get vaccinated if you need further support finding a service.

# Children who attend schools with more traffic noise show slower cognitive development

A new study conducted at schools in Barcelona suggests that road traffic noise at schools has a detrimental effect on the development of working memory and attention in primary-school students.

Researchers at the Barcelona Institute for Global Health focused on two abilities that develop rapidly during preadolescence and are essential for learning: attention and working memory. Attention includes processes such as selectively attending to specific stimuli or focusing on a specific task for a prolonged period of time. Working memory is the system that allows us to hold information in the mind and manipulate it over a short period of time. When we need to continuously process information stored in the working memory, we use what is known as complex working memory.

On completion of the yearlong study period, the findings showed that the progression of working memory, complex working memory and attention was slower in students attending schools with higher levels of traffic noise. By way of example, a 5 dB increase in outdoor noise levels resulted in working memory development that was 11.4% slower than average and complex working memory development that was 23.5% slower than average.

The study adds to the body of evidence on the effects of transport on children's cognitive development, which to date have been observed at schools exposed to aircraft noise as well as at schools exposed to traffic-related air pollution. The researchers underscored the need for further studies on road traffic noise to determine whether these initial findings can be extrapolated to other cities and settings. From [Science Daily](#)

## Deafblind West Australia

The [Deafblind Connect](#) drop in hub has had some interesting sessions lately. Here's a report:

We have had Reflexology, how to use the accessibility features of your iPhone, registering for the 11th National Deafblind Conference being held in Fremantle, how to use the COVID-19 Service WA APP, a fabulous session on mosaics and a guest speaker from WA Scam Net about how to protect yourself from scammers. Coming up we will be having a session from an audiologist, on Wednesday 6 July we will have an important session about the Disability Royal Commission, we will be creating face sculptures as art, and we are planning several sessions on self defence.

DBWA Connect is every second Wednesday from 12:30 to 4 at The Rise Main Hall 28 Eighth Avenue Maylands.



# 'Deaf Shame to Deaf Same': Art exhibit aims to destigmatise hearing loss

Allison Bamford for [CTV News Regina](#)



Students from Winston Knoll's DHH program helped create the dioramas at the centre of the exhibit. (Allison Bamford/CTV News Regina)

A new art exhibit at the George Bothwell Library (Saskatchewan in Canada) is hoping to examine and remove the feeling of shame associated with people who are deaf and hard of hearing.

Students in Winston Knoll's Deaf and Hard of Hearing (DHH) program helped create the art installation "Deaf Shame to Deaf Same." Different dioramas illustrate the students' collective experiences with isolation, bullying, humiliation and challenges with communication and acceptance due to their hearing loss. The stories are based on personal narratives from the students.

"I've often felt a lot of shame because in my past it was quite traumatic, going to school and even at home," said Grade 11 student Amna Warda Wahid. "A lot of people would bully me because I was deaf."

Warda Wahid said she used to identify as a hearing person before she entered the DHH program. Her experience is quite common among DHH students, according to Michelle Grodecki, certified teacher for the deaf.

"Many times students say, 'I can't do it, I'm stupid,'" Grodecki said. "But it's not that they're stupid, they just don't have the access."

Through the DHH program supports and interpreter, she said she can now understand the lessons. Grodecki said hearing loss needs to be normalised in society and in the classroom. If that happens, she said, bilingual education and supports of all modalities will be widely accepted. For now, she said the goal of the art exhibit has been achieved, and her students have accepted themselves and their identity.

"For each of our students to stand in front of an audience and proudly say, 'I am hard of hearing. I am deaf. I wear my hearing aids. I have my confidence back,' I would confidently say we've achieved our goal," Grodecki said.



Friends, it's the time of year when you can **make a donation** to a charity and claim it back when you do your tax return.

Would you please consider making a tax-deductible donation to Deafness Forum Australia before 30 June?

Our mission is to improve the quality of life for people who are deaf, have a hearing loss or a chronic ear disorder. Our goal is to make Hearing Health a national priority.

Your donation will also help us to continue providing the national One in Six newsletter.

You can [donate here](#).

If you would prefer to make a donation to a local support group in your state or territory, please get in touch with us via [hello@deafnessforum.org.au](mailto:hello@deafnessforum.org.au) and we can connect you to one of our consumer representative organisation members listed [here](#).



**Read Our Lips Australia** has been created by experienced lipreading instructors and guides users through online modules at their own pace to identify key mouth movements.

Identifying and understanding lip movements is a skill that can be improved with regular practice, time and patience.

Visit [www.readourlips.com.au](http://www.readourlips.com.au)

Created by Deafness Forum Australia, it was made possible by a grant from the Australian Government [Department of Social Services](#).

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

Drop us a line to [hello@deafnessforum.org.au](mailto:hello@deafnessforum.org.au)

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