10 years of MAKING LISTENING SAFE

FROM AROUND THE WORLD

a collection of abstracts

World Health Organization

ITU

Introduction

In 2015, the World Health Organization launched the **Make Listening Safe (MLS) initiative** in response to a growing global concern: more than one billion people, especially adolescents and young adults, were exposed to unsafe levels of recreational sound. Ten years on, MLS has become a key driver of global efforts to reduce preventable hearing loss and promote healthier listening behaviours.

The initiative envisions a world where people of all ages can enjoy recreational listening without risk to their hearing. Achieving this requires both informed individuals and supportive environments, so MLS focuses on changing listening behaviours at both the individual and system levels.

In collaboration with Member States, industry partners, civil society, youth groups, researchers, and technical experts worldwide, MLS pursues this mission through three core pillars:

1. Creation of evidence-based standards
Over the past decade, WHO has developed global standards that define what safe listening should look like in environments where high sound levels are common. These include:

- WHO–ITU Global standard for safe listening devices and systems (ITU-T H.870)
- WHO Global standard for safe listening venues and events
- WHO–ITU Global standard for safe listening video gameplay and esports (ITU-T H.872)

The first two standards have already seen wide adoption across their intended industries, while the newest addition is now poised to support future implementation in video gameplay and esports.

2. Increasing awareness
WHO develops and disseminates evidence-based materials to help communities understand risks and adopt safer listening habits. These include message libraries, media briefs, implementation guides such as mSafeListening, and communication materials such as posters, brochures, and infographics.

3. Investing in research
Ongoing research—conducted jointly with academic institutions, technical agencies, and global partners—helps track emerging trends, assess risks, identify effective interventions, and guide future standards and policy development.

A decade of shared progress

The tenth anniversary of MLS is an opportunity to recognise the collective effort that has enabled the initiative to grow. While WHO provides technical leadership, MLS has been shaped and expanded by hundreds of partners around the world: governments, educators, youth leaders, researchers, health professionals, civil society organisations, community groups, and the private sector. Their work has translated global standards into practice, built national campaigns, improved local listening environments, created new tools and curricula, and strengthened evidence for action.

The contributions showcased in this abstract book reflect the breadth and creativity of this global community. Each project demonstrates how diverse stakeholders have taken safe listening forward in ways that are meaningful for their contexts. As MLS enters its next decade, the initiative will continue to be driven by this shared commitment—advancing healthier listening behaviours and safer sound environments for generations to come.

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Earnormous: An educational VR game about the human ear

Institution
Multisensory Experience lab and Copenhagen Hearing and Balance center, Rigshospitalet.

Background
Understanding how the ear works can be challenging for learners, and traditional teaching methods often lack engagement. To address this, researchers at Aalborg University developed Earnormous, an immersive virtual reality (VR) game that promotes auditory health literacy through interactive and experiential learning.

Approach
Earnormous places players inside a stylized, explorable version of the human ear, allowing them to solve puzzles and complete challenges while learning about the outer, middle, and inner ear and how sound becomes neural signals. The game applies principles of game-based learning and multisensory design to enhance motivation and knowledge retention. Early testing with school-age participants demonstrated strong engagement and learning outcomes.

Impact
By helping young people understand how sound affects hearing, Earnormous fosters early awareness of hearing protection and healthy listening habits. The project also demonstrates how immersive digital tools can be used to deliver effective, age-appropriate hearing health education.

Country / Region
Denmark

Contributed by
Stefania Serafin and Lone Marianne Percy Smith
Multisensory Experience lab and Copenhagen Hearing and Balance center, Rigshospitalet.

Serendipity Arts Festival 2023

Institutions

Serendipity Arts Festival, Goa, India; with support from the University of Derby and the University of Nottingham, United Kingdom

Background

Large-scale music and arts festivals can expose audiences and staff to unsafe sound levels. The Serendipity Arts Festival 2023 in Goa, India, became the **first major international event** to implement WHO's Global Standard for Safe Listening Venues and Events, demonstrating that hearing health and audience experience can coexist successfully.

Approach

The festival's production team, guided by **Dr Adam Hill** and **Dr Ian Wiggins**, applied all six features of the Global Standard across twelve venues. This included continuous sound level monitoring, optimized audio systems, provision of hearing protection, designated quiet zones, staff training, and public education. Over **1,800 artists** performed during the nine-day event, reaching hundreds of thousands of attendees.

Impact

The initiative proved that large-scale compliance with WHO's Global Standard is achievable without compromising artistic quality. The festival improved awareness of safe listening among organizers and audiences and set a benchmark for hearing conservation in live cultural events globally.

Country / Region

India (with international collaboration)

Contributed by

Dr Adam Hill, University of Derby, United Kingdom
Dr Ian Wiggins, University of Nottingham, United Kingdom

Serendipity Arts Festival 2023
Serendipity Arts Festival, Goa, India; with support from the University of Derby and the University of Nottingham, United Kingdom

Public health strategies and evidence-based recommendations in Hungary for safe listening at events to prevent noise-induced hearing loss

Institutions

Semmelweis University, Budapest, Hungary; Hungarian Academy of Sciences; Budapest University of Technology and Economics; Cabinet Office of the Prime Minister, Hungary; University Hospital Regensburg, Germany

Background

Children attending public events are often exposed to unsafe sound levels that can endanger their hearing. To address this, a multidisciplinary team in Hungary collaborated with WHO to evaluate noise exposure at children's events and develop national recommendations for safe listening and hearing protection.

Approach

Sound levels were measured at 25 points across 13 children's events, while children's cochlear function was tested using otoacoustic emissions (OAE) before and after the events. Questionnaires were used to capture children's and parents' perceptions of sound and discomfort. Findings were analysed with input from educators, organizers, policymakers, and public health authorities to inform national strategy development.

Impact

The study revealed that 40% of venues were risky and 32% dangerous, with temporary hearing changes and discomfort reported by most participants. The evidence informed Hungary's first set of public health recommendations for safe listening at events, now under consideration for national legislation. The findings also raised awareness among families, educators, and policymakers.

Country / Region

Hungary

Contributed by

Anita Gáborján, Réka Garai, László Tamás, Klára Vicsi, László Gábor Lovászy, Tamás Hacki

Reference

Gáborján A, Koscsó G, Garai R, Tamás L, Vicsi K, Hacki T. Prevention of noise-induced hearing loss in children – evidence-informed recommendations for safe listening at events. International Journal of Audiology. 2025; 1–10. doi: 10.1080/14992027.2025.2467789

Healthy Ears, Limited Annoyance (HELA) Initiative

Institution

Electro-Acoustics Research Lab (EARLab), University of Derby, United Kingdom

Background

The Healthy Ears, Limited Annoyance (HELA) Initiative, launched in 2025, directly supports WHO's Global Standard for Safe Listening Venues and Events. It aims to embed safe listening principles across the international live event industry through education and research.

Approach

HELA operates through two complementary arms:

- HELA Certification – an online course launched in March 2025, developed with WHO guidance and supported by nearly 30 global organizations.
- HELA Research Co-op – launching in autumn 2025 under the Electro-Acoustics Research Lab (EARLab), this collaborative network of 40 international partners will drive research on safe listening, noise management, and emerging sound exposure issues in live events.

Impact

By coupling education and research under a shared funding and governance structure, HELA creates a sustainable, international framework for implementing WHO's safe listening principles across live events. The initiative supports staff and audience wellbeing, drives innovation in sound exposure monitoring and noise mitigation, and strengthens community relationships through responsible sound management. HELA demonstrates a scalable model for embedding hearing health and safe listening practices at the heart of the global entertainment industry.

Country / Region

United Kingdom (with global partnerships)

Contributed by

Dr Adam Hill
Associate Professor of Electroacoustics, University of Derby

Links

https://helainitiative.com/
Electro-Acoustics Research Lab (EARLab)

Game developer community outreach

Institution
GameSoundCon & Brian Schmidt Studios, United States

Background
Video games are one of the most common sources of recreational sound exposure, yet hearing health is rarely addressed within the game development community. Developers and sound designers play a crucial role in influencing how players experience audio and can help promote safe listening practices globally.

Approach
At the Game Developers Conference (GDC) 2024 in San Francisco, attended by over 30,000 developers, Brian Schmidt presented "Hearing Health in Video Games", introducing WHO's Make Listening Safe initiative and the current work in the area of safe listening for video gameplay and esports contexts. The topic was expanded at GameSoundCon 2024, where WHO's Dr Shelly Chadha gave opening remarks and Schmidt led a roundtable discussion on hearing health in games. Schmidt also delivered a keynote presentation, titled "Speakers at the Ears: How Immersive Audio Experiences Can Affect End-user Hearing Health" at the Audio Engineering Society (AES) Conference on Virtual and Augmented Reality 2024.

Impact
By engaging game developers, music composers, sound designers, and audio engineers, these outreach events introduced safe listening principles to a new and influential audience. The sessions encouraged developers to implement hearing-safe design features such as adaptive loudness settings, in-game warnings, and public education campaigns, extending the reach of WHO's safe listening guidance to millions of potential users.

Country / Region
United States (with international reach)

Contributed by
Brian Schmidt
President, Brian Schmidt Studios; Conference Chair, GameSoundCon

Dangerous Decibels® Brazil program: 10 years of promoting hearing health in Brazil

Institution

Brazilian Academy of Audiology (ABA); Dangerous Decibels® International

Background

The Dangerous Decibels® Brazil program was launched in 2015 through a partnership between the Brazilian Academy of Audiology and Dangerous Decibels® International. It aims to improve hearing health awareness and promote safe listening across Brazil through education, advocacy, and research.

Approach

The program trains educators and professionals through workshops validated in Brazilian Portuguese, with over 150 professionals trained across six sessions. Studies at the University of São Paulo and Universidade Tuiuti do Paraná confirmed improvements in knowledge and hearing protection behaviours. DDB activities include school-based learning, digital educational games, public campaigns such as World Hearing Day and International Noise Awareness Day, and publications including an e-book.

Impact

By combining professional training, school education, and national outreach, DDB has fostered long-term behavioural change and improved awareness of hearing protection in schools, workplaces, and communities. Its recognition by national professional bodies underscores its success in reducing preventable noise-induced hearing loss.

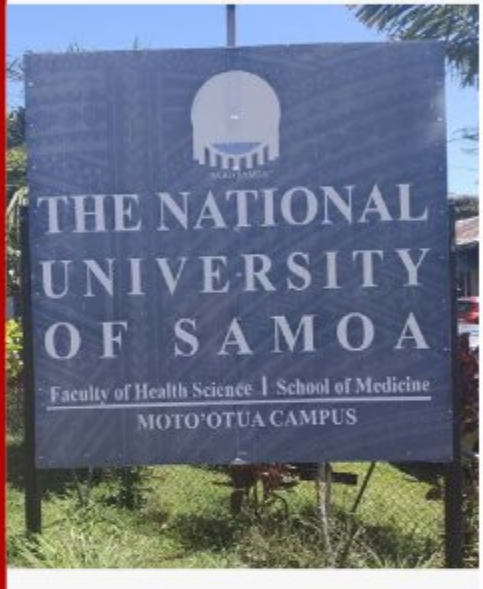
Country / Region

Brazil

Contributed by

Adriana Lacerda, Wanderleia Blasca, Lys Gondin, Renata Scharlat, Roberta Alvarenga, Carla Bahilo, Evelyn Albizu, Isabel Kuniyoshi, Andrea Cintra Lopes, Cilmara Levy, Thais Morata, David Welch, Deanna Meinke, William Martin

Youth Attitude to Noise Scale: Samoa



Institutions

ENT Clinic, Ministry of Health, Samoa; National University of Samoa; University of Queensland, Australia

Background

Recreational and environmental noise exposure is a growing concern in Samoa, where hearing health services are limited but evolving. Loud community events are a regular part of cultural life and can affect people of all ages. Understanding young people's attitudes toward noise is a critical step toward designing effective public health interventions to reduce preventable hearing loss.

Approach

The Youth Attitude to Noise Scale (YANS), a validated 19-item questionnaire, was formally translated into Samoan and administered bilingually (English/Samoan) to university students. The study was conducted by the ENT Clinic, Ministry of Health, in collaboration with the National University of Samoa and the University of Queensland. The YANS assessed students' attitudes toward recreational and environmental noise and their readiness to participate in future health promotion initiatives.

Impact

This research generated the first national data on youth attitudes to noise in Samoa, informing public health planning and policy development. Findings were presented to the Ministry of Health, prompting work on national noise health policies and awareness campaigns. Participants also received information about hearing risks and WHO's Make Listening Safe initiative.

Country / Region

Samoa (Pacific Islands)

Contributed by

Dr Annette Kaspar, PhD
International Development and Public Health Audiologist
ENT Clinic, TTM Hospital, Samoa; Honorary Senior Research Fellow, University of Queensland, Australia

Science Education and Auditory Health Literacy

A Critical Examination of UNESCO's 'Make Listening Safe' Initiative in Developing Nations

Institution

Department of Science Education, Umaru Musa Yar'adua University, Katsina, Nigeria

Background

Auditory health literacy remains limited in many developing nations, where low health awareness and underdeveloped science curricula hinder effective hearing loss prevention. This study reviews the Make Listening Safe (MLS) initiative's implementation across low- and middle-income countries (LMICs) and explores how integrating auditory health education into school science can improve outcomes.

Approach

Using an integrative literature review grounded in the Health Belief Model (HBM) and the Science for Health Literacy Framework (SHLF), the study analyses the Make Listening Safe initiative's policy scope, limitations, and incorporation into education systems in Nigeria, Kenya, and Ghana. Case studies illustrate both barriers and opportunities for embedding hearing health content into curricula through teacher training and interdisciplinary reforms.

Impact

By identifying systemic gaps and proposing practical strategies for curriculum integration, the study provides a framework for improving auditory health literacy in schools. This approach supports early education on safe listening and prevention of noise-induced hearing loss among youth in developing nations.

Country / Region

Nigeria, Kenya, Ghana

Contributed by

Abdulkadir Halliru
Department of Science Education, Umaru Musa Yar'adua University, Katsina, Nigeria

Animated presentation on hearing loss prevention

Institution
Hearing Organization, Västra Götaland, Sweden; University of Gothenburg

Background
Traditional scientific formats often fail to capture public interest in hearing loss prevention. Recognizing the need for more engaging communication, this project explored animation as a tool for sharing the Make Listening Safe message in ways that resonate with modern audiences, particularly youth and professionals.

Approach
An novel animated presentation on hearing loss prevention was first developed for the **2023 European Federation of Audiology Societies (EFAS)** conference in Croatia, replacing traditional slides with short, visually engaging storytelling. Following strong audience response, additional animated videos were created, including one shown at the **World Congress of Audiology (WCA)** in Paris in 2024. The animations combined concise educational messages with creative visuals to communicate the risks of noise exposure and promote preventive listening behaviours.

Impact
The animated format effectively captured attention and increased understanding of hearing loss prevention concepts and has since been used in a number of other presentations in Make Listening Safe initiative contexts. By transforming scientific information into accessible visual stories, this project made Make Listening Safe messages more relatable, helping to inspire behaviour change and wider awareness among diverse audiences.

Country / Region
Sweden

Contributed by
Andreas Thulin, Audiologist, M.Sc., Lecturer
Hearing Organization, Västra Götaland; University of Gothenburg

Hearing thresholds of Estonian youth

Institutions
Tallinn University, Estonia; Audiomed OÜ, Estonia; AS Medita Baltics, Estonia

Background
The number of young people with hearing loss is increasing worldwide, yet Estonia previously lacked nationwide data on youth hearing health. To address this gap, a large-scale study was conducted to evaluate hearing thresholds and listening habits among Estonian adolescents.

Approach
Between **2019 and 2024**, hearing thresholds of **946 ninth-grade students** from 17 schools were measured using pure-tone audiometry (1000–8000 Hz). Participants also completed a brief questionnaire about headphone use and listening habits. The project, funded by the non-profit organization **Audiere**, also included a short educational session on hearing risks and WHO's Make Listening Safe initiative.

Impact
The study revealed early signs of acoustic overexposure:

- Average thresholds increased by 6 dB HL at 6 kHz and 8 dB HL at 8 kHz.
- A significant rise at 3 kHz (the "Coles' notch") suggested emerging noise-induced hearing changes.
- Over one-third of students reported tinnitus and daily headphone use exceeding three hours.

These findings highlighted a concerning trend of reduced hearing sensitivity and the need for increased preventive education.
By generating Estonia's first national youth hearing dataset and sharing results publicly through journal Eesti Arst (Estonian Physician) and national TV and radio programs, the study raised awareness of hearing risks and encouraged safer listening among students, families, and educators.

Country / Region
Estonia

Contributed by
Avo-Rein Tereping; Sandra Vill

Noise-induced hearing loss among road traffic police personnel

Institution
Hospital for Children, Eye, ENT, and Rehabilitation Services, Bhaktapur, Nepal

Background
Traffic police personnel are frequently exposed to high noise levels from vehicles and horns, placing them at elevated risk of noise-induced hearing loss (NIHL). Despite this occupational hazard, few structured hearing screening programs exist in Nepal for this population.

Approach
On World Hearing Day 2022, 75 traffic police officers (54 males and 21 females) in Lalitpur underwent hearing screening in both ears using the HearTest mobile application. Screenings were performed in a quiet room at the Traffic Police Office by trained Community Ear Health Workers from Hospital for Children, Eye, ENT, and Rehabilitation Services. Participants also received information about noise exposure risks and hearing protection.

Impact
The screening identified hearing loss in 37.3% of participants (21 with mild and 7 with moderate hearing loss). The activity raised awareness of occupational noise hazards among police officers and demonstrated the feasibility of mobile-based hearing screening in community and workplace settings. The findings informed early prevention efforts and promoted safer listening behaviours among at-risk workers.

Country / Region
Nepal

Contributed by
Luna Mathema, Arun Adhikari, Prasanta Poudyal, Bijay Khatri
Hospital for Children, Eye, ENT, and Rehabilitation Services, Bhaktapur, Nepal

Online training program on hearing loss and prevention

Institution

Hearing Organization, Västra Götaland, Sweden; University of Gothenburg

Background

In Sweden, audiologists within regional hearing services have traditionally had limited involvement in public health education on hearing loss prevention. To address this gap, an online program was created to provide accurate, evidence-based information about hearing, hearing loss, and preventive practices for the general public.

Approach

Audiologists **A. Thulin**, **M. Malmberg**, and **K. Kähäri** designed a four-week online learning program featuring scientifically validated content delivered through text, images, videos, and interactive quizzes. The program was tested and refined through evaluation studies before being launched for **1.7 million residents** of Västra Götaland County. It aims to raise awareness, improve knowledge, and shape positive attitudes toward hearing protection and safe listening.

Impact

The program significantly improved participants' knowledge and attitudes toward noise exposure and hearing protection. By offering an accessible, trusted digital learning platform, it reached a broad population and encouraged safer listening behaviours across age groups.

Country / Region

Sweden

Contributed by

Andreas Thulin, Audiologist, M.Sc., Lecturer
Hearing Organization, Västra Götaland; University of Gothenburg

Musicians' hearing conservation:
A partnership model for preventive care in performing arts education

Institutions
University of Michigan School of Music, Theatre, and Dance (SMTD); Michigan Medicine Audiology; Wayne State University Communication Sciences and Disorders; United States

Background
Performing arts students are regularly exposed to potentially harmful sound levels, yet formalized hearing conservation programs are uncommon in university settings. Recognizing this gap, the University of Michigan's SMTD established a collaborative program to promote early hearing loss prevention and education.

Approach
The program provides pure tone hearing screening, personalized counseling, and non-custom musicians' earplugs. Educational content covers safe listening strategies, hearing protection, and auditory rest, and is delivered through in-person workshops and online resources. Developed in partnership with SMTD and Michigan Audiology, the program also trains audiology students enrolled at Wayne State University to deliver preventive care for music-related hearing risks.

Impact
The program has reached hundreds of performing arts students, faculty, and staff, improving access to hearing protection and awareness of exposure risks. Participants report greater confidence in managing listening safety, and the initiative has been shared through publications and professional conferences as a model for integrating hearing conservation into performing arts programs.

Country / Region
United States

Contributed by
Paola Savvidou DMA, Bruce Edwards AuD, Allie Heckman AuD, Mary Kassa AuD
University of Michigan – School of Music, Theatre, and Dance; Michigan Audiology; Wayne State University

Reference
Savvidou P, Edwards B, Heckman A et al. Musicians' Hearing Conservation: Establishing Preventive Measures at the Collegiate Level Through a Partnership Model. MTNA E-Journal, November 2021.

Musicians' hearing conservation
University of Michigan – School of Music, Theatre, and Dance (SMTD); Michigan Audiology; Wayne State University, Department of Audiology, United States

Promoting safe listening practices through integrated social media and community outreach

Institution

JOSH Foundation, Mumbai, India

Background

Unsafe listening habits are a major cause of preventable hearing loss. To support WHO's Make Listening Safe initiative, audiologist **Devangi Dalal** launched a sustained public awareness campaign to promote practical, everyday hearing protection behaviours across clinical and community settings.

Approach

The "**Make Listening Safe Practices**" campaign combined digital and in-person outreach. Social media platforms were used to share accessible hearing care messages - such as the **60/60 rule** (listening at no more than 60% volume for no longer than 60 minutes) and advice on earplug use in loud environments. To reinforce these messages, more than **2,000 printed handouts** were distributed through clinics, workshops, and community medical camps, ensuring reach across multiple age groups and backgrounds.

Impact

Feedback from participants showed increased awareness and adoption of safe listening behaviours. The combination of online and community engagement created a practical, low-cost model for public education that bridges awareness and action. This approach demonstrates how local, clinician-led initiatives can effectively advance WHO's Make Listening Safe goals through trusted, culturally relevant communication.

Country / Region

India

Contributed by

Devangi Dalal
Audiologist and Co-founder, JOSH Foundation, Mumbai, India


6 TIPS FOR
SAFER LISTENING ENTERTAINMENT
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Limit The Volume On Personal Listening Devices
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Use The 60/60 Rule
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Choose Headphones Over Earbuds Earphones
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Turn Down The Radio, The Stereo And Television
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Wear Earplugs Or Earmuffs
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Help your child hear speech at day with consistent amplification
LET'S JOIN HANDS TOGETHER
TO MAKE EVEN ENTERTAINMENT
LISTENING SAFE - SHARE MORE TIPS


STAY AWAY
FROM LOUD NOISES:
HAVE PLEASURE OF
HEARING BY MAINTAINING
DECIBELS:
60/60 RULE:


Hearing Hearts
LOUD SOUNDS
DAMAGE HEARING CAPACITY:
Make Listening Safe
Make
Listening Safe
A Regular Practice!
Devangi Dalal


SAFE LISTENING TIPS DURING TRAFFIC
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Hearing health and inclusive communication: Innovative awareness-raising program in Quebec schools

Institutions
Université de Montréal; Centre de services scolaire de Montréal (CSSDM); Audition Québec; Acouphènes Québec; Association du Québec pour enfants avec problèmes auditifs (AQEPA)

Background
Children and adolescents are increasingly exposed to harmful noise levels, yet hearing health is rarely addressed in school settings. This program was designed to promote hearing health and inclusive communication among students in Quebec through collaboration between educators, researchers, and organizations working for hearing health and the inclusion of deaf and hard-of-hearing people.

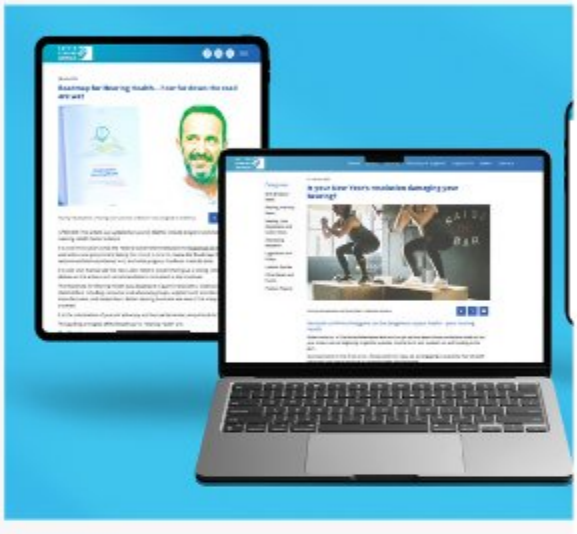
Approach
The project was co-developed with teachers and specialists and piloted with 200 students in elementary and high school. The program includes five modules on: (1) how hearing works; (2) awareness of sound environments; (3) noise and health; (4) safe listening habits; and (5) inclusive communication. Activities were adapted for age and learning needs, including students with hearing loss, and delivered by teachers through participatory workshops and classroom discussions.

Impact
The pilot showed high levels of student engagement and teacher satisfaction, with notable gains in hearing health knowledge and positive listening behaviours. The program established a replicable model for integrating hearing and communication health education into school curricula across Quebec.

Country / Region
Canada (Quebec)

Contributed by
Adriana Lacerda, Hadayat Bouzekouk, Eva Villeneuve, Amanda Karimi, Shabnam Arzani, Ronald Choquette, José Pouliot, Roxanne Duguay, Jean Larivée, Marie-Paule Ceuppens, Thomas Vaillant, Claire Moussel and Jeanne Choquette.

Empowering communities through education and advocacy for safe listening environments



Institutions

Better Hearing Australia (Brisbane); University of Queensland (partner)

Background

Preventable hearing loss remains a community health issue in Queensland. Public awareness of safe listening and inclusive practices varies, and many people with hearing loss require non-clinical support and advocacy to manage communication challenges and prevent further hearing damage.

Approach

Better Hearing Australia (Brisbane), an independent, not-for-profit organization supporting people with hearing loss since 1946, delivers non-clinical services and outreach that embed Make Listening Safe principles. Activities include support groups, peer mentoring, education programs, policy advocacy, and public awareness campaigns such as Men's Health Week and Tradies National Health Month.

The organization also publishes research-based articles on safe listening topics, such as the risks of excessive noise in gyms. BHA's initiatives advance the MLS goals by promoting behavioural change, educating the public, and advocating for systemic improvements to reduce preventable hearing loss.

Impact

BHA Brisbane reaches over **10,000 Queenslanders** annually through programs and outreach, normalising hearing protection, encouraging safer listening behaviours, and fostering more inclusive, sound-aware environments across the state.

Country / Region

Australia (Queensland)

Contributed by

Better Hearing Australia (Brisbane)

Honky tonk harmonies: Thematic analysis of hearing safety attitudes at live-music venues

Institutions

Vanderbilt University School of Medicine; Vanderbilt University Medical Center, Department of Otolaryngology–Head & Neck Surgery, Nashville, Tennessee, United States

Background

Hearing protection use remains uncommon among patrons of live-music venues, despite exposure to harmful sound levels. Nashville's Broadway Music Entertainment District provides an opportunity to explore listener attitudes and behaviours in a setting where music and nightlife are central to the local culture.

Approach

Researchers interviewed 72 attendees at Broadway venues, asking open-ended questions about personal hearing protection use, perceptions of others' behaviours, and motivators for safe listening. Responses were thematically coded using a seven-theme framework to identify patterns of apathy, knowledge gaps, and motivational factors influencing hearing protection habits.

Impact

The analysis revealed that most attendees underestimated the risks of noise exposure or viewed hearing protection as unnecessary or uncomfortable. Participants cited increased awareness, education, and free earplug access as strong motivators for safer behaviour.

These insights provide a foundation for WHO-aligned interventions, including venue-based awareness efforts, public education, and onsite hearing protection programs to foster a safe listening culture in live-music environments.

Country / Region

United States

Contributed by

Christopher Naranjo, Daniel R. Habib, Jennifer A. Kong, Aaron C. Moberly
Vanderbilt University School of Medicine; Vanderbilt University Medical Center

Honky tonk harmonies: Thematic analysis of hearing safety attitudes at live-music venues

Vanderbilt University School of Medicine; Vanderbilt University Medical Center, Department of Otolaryngology–Head & Neck Surgery, Nashville, Tennessee, United States

Community-driven safe listening movement in Latin America & Spain: CASACUSIA + Hipoacusico

Institutions
CASACUSIA (Argentina); Hipoacusico (Spain)

Background
Recreational noise exposure continues to rise, yet people with hearing loss are rarely included in prevention design. **CASACUSIA**, the first Latin American NGO created by and for people with hearing loss, and the digital platform **Hipoacusico** ("Deaf but not Dumb") transformed lived experience into collective advocacy for safe listening.

Approach
Between **2023 and 2025**, the two initiatives collaborated across Argentina and Spain to build a community-driven movement for hearing health:

- **Workshops**: Thirty-two in-person and virtual sessions across six cities gathered over **1,200 participants**, turning attendees into peer advocates for safe listening.
- **Landmark event**: A major co-design meeting brought together **311 people with hearing loss** to focus on acceptance, empowerment, and becoming voices for change.
- **Digital reach**: A year-round multimedia campaign on Instagram, TikTok, and the podcast Sordo, pero no mudo ("Deaf but not Dumb")—supported by **38 moderated WhatsApp groups (1,200 members)**—delivers weekly micro-content and fosters discussion on safe listening.

Impact
From 2023 to May 2025, CASACUSIA and Hipoacusico generated over **130 million video views** and **90,000 podcast plays in 55 countries**, keeping safe listening visible far beyond Argentina and Spain. Participant testimonies show greater self-acceptance and motivation to share preventive messages within families, schools, and workplaces. By combining first-person storytelling with digital engagement, the movement has broken stigma, mobilised communities, and advanced hearing loss prevention across the Spanish-speaking world.

Country / Region
Argentina and Spain (with outreach across Latin America)

Contributed by
Lucas Adlerstein, CASACUSIA and Hipoacusico

Community-driven safe listening movement in Latin America & Spain
CASACUSIA (Argentina); Hipoacusico (Spain)

Community-driven safe listening movement in Latin America & Spain
CASACUSIA (Argentina); Hipoacusico (Spain)

Safe Listening Week 2024: Seeding behaviour change through social marketing

Institutions

Deafness Forum Australia; National Centre for Farmer Health

Background

Traditional awareness campaigns about hearing health often fail to achieve meaningful behaviour change. To address this, **Deafness Forum Australia**, in partnership with the **National Centre for Farmer Health**, designed **Safe Listening Week 2024** to apply social marketing principles and drive real behavioural shifts toward safer listening.

Approach

The campaign was delivered as a dynamic, week-long **Facebook event**, grounded in social psychology and the **Theory of Planned Behaviour**. Using the **Problem–Agitate–Solve (PAS)** content framework, the campaign featured real stories, interactive posts, and emotionally engaging visuals to challenge social norms, reduce barriers, and inspire action. It also launched the **first safe listening fact sheets tailored for secondary students in agricultural communities**, a high-risk but often-overlooked group.

Impact

The campaign delivered **32 posts**, reaching **over 50,000 people** with an **engagement rate of 6.35%**, well above the industry average of 1–3.5%. It generated widespread interest, including media coverage, interviews, and cross-promotion by multiple organisations. The initiative planted a lasting "seed" for a national safe listening movement, demonstrating how strategic, evidence-based messaging can shift attitudes and promote sustained behaviour change.

Country / Region

Australia

Contributed by

Jane Lee, Director, Hearing Health
Deafness Forum Australia

Strengthening Hearing Health for Youth, Individuals with Disabilities, and Refugees in Kigoma, Tanzania: A DRST-Led Community Adaptation of the WHO Make Listening Safe framework

Institution

Disability Relief Services Tanzania (DRST), Kigoma Region, Tanzania

Background

Youth, persons with disabilities (PWDs), and refugees in Tanzania face increased risks of hearing loss due to limited awareness and environmental noise exposure. To address these challenges, **Disability Relief Services Tanzania (DRST)** implemented a community-driven adaptation of the WHO Make Listening Safe framework to promote hearing health equity in the Kasulu District and refugee camps of the Kigoma Region.

Approach

From 2022 to 2024, DRST established peer-led safe listening clubs, interactive workshops, and culturally adapted educational materials in sign language and large-print formats. The project engaged over **15,000 young people, including 1,100+ PWDs and refugees**, in partnership with schools, parents, and organizations such as UNICEF, IRC, UNFPA, and the UN Resident Coordinator (UNRC). Baseline and follow-up surveys, combined with participatory feedback, measured changes in knowledge and behavior.

Impact

More than 80% of participants reported improved understanding and safer listening habits, including reducing headphone volume and limiting exposure time. Several schools integrated safe listening into their curricula, and local authorities endorsed the approach as a model for inclusive hearing health promotion. The initiative demonstrates how global safe listening standards can be successfully localized in refugee-hosting and resource-limited settings.

Country/Region

Tanzania

Contributed by

Jeremiah Mutagoma
Disability Relief Services Tanzania (DRST)

Prevention of hearing loss among children in Nepal

Institution
Ear Care Nepal (ECN)

Background
Childhood hearing loss in Nepal is largely preventable but continues to affect learning, communication, and quality of life. **Ear Care Nepal (ECN)**—a voluntary organization—was established to prevent avoidable hearing loss in children through education, awareness, and collaboration with schools, communities, and government sectors.

Approach
ECN conducts school-based education sessions for children, parents, and teachers, and provides training for healthcare providers including **Female Community Health Volunteers (FCHVs)**, school nurses, and health assistants. The organization also engages government officials and media representatives through **World Hearing Day events**, awareness song launches, and animated videos. Educational materials are adapted from WHO resources and ECN's own locally developed tools.

Impact
To date, ECN has educated **165,039 children and parents** and **2,182 health workers** on ear and hearing health, focusing on safe listening messages for youth. Through collaborations with media, policymakers, and local stakeholders, ECN has strengthened community awareness and promoted hearing loss prevention across Nepal.

Country / Region
Nepal

Contributed by
Ear Care Nepal (ECN)

From parliament to global standards: Promoting safe listening and hearing health through advocacy and collaboration

Institutions

European Federation of Hard of Hearing People (EFHOH); European Association of Hearing Aid Professionals (AEA); European Hearing Instrument Manufacturers Association (EHIMA)

Background

Since 2013, the European Federation of Hard of Hearing People (EFHOH)—in collaboration with AEA and EHIMA—has worked to strengthen awareness of hearing health and safe listening across Europe. Annual World Hearing Day Lunch Debates, hosted by Members of the European Parliament, have provided a high-level platform for dialogue between the EU, WHO, and other stakeholders on hearing care policy and advocacy.

Approach

In 2015, in response to concerns that Personal Sound Amplification Products (PSAPs) were being mistaken for hearing aids and used unsafely, EFHOH requested AEA to evaluate their safety. The resulting study of 27 PSAPs found dangerously high sound output levels and a lack of volume-limiting features. The findings were presented to the WHO Make Listening Safe Workgroup and contributed directly to the development of ITU Recommendation H.871, which established global safety standards for PSAPs and sound amplification apps. The recommendation was later presented at the World Summit on the Information Society (WSIS) Forum and adopted by major manufacturers, including Apple in its AirPods Pro product line.

Impact

This advocacy effort helped establish the first international safety standards for PSAPs, directly influencing consumer protection and product design. EFHOH's sustained parliamentary and industry engagement continues to promote safe listening through awareness, regulation, and policy collaboration. Its President, Lidia Best, now serves as Co-Chair of the WHO Make Listening Safe Workstream, ensuring alignment between advocacy, standard-setting, and public health action.

Country / Region

Europe (with global impact)

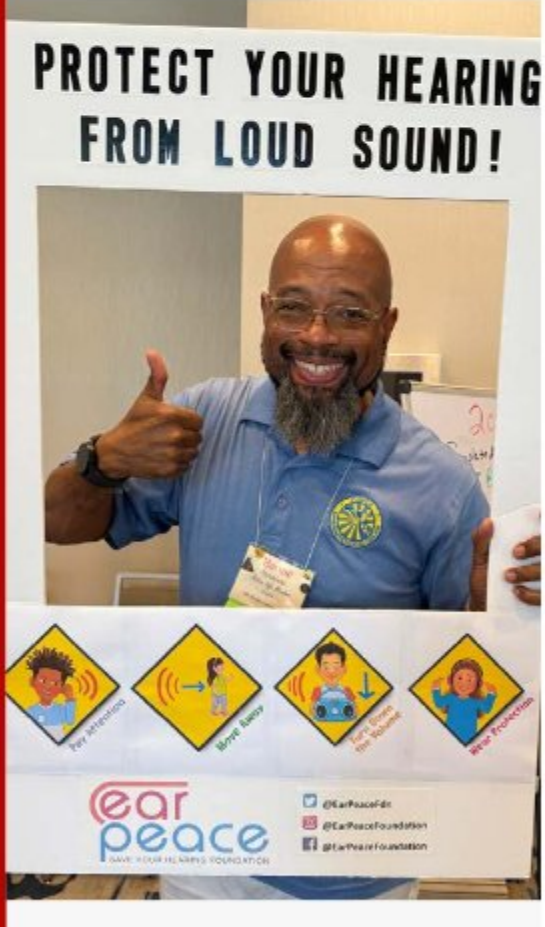
Contributed by

European Federation of Hard of Hearing People (EFHOH)

From parliament to global standards: Promoting safe listening and hearing health through advocacy and collaboration

European Federation of Hard of Hearing People (EFHOH); European Association of Hearing Aid Professionals (AEA); European Hearing Instrument Manufacturers Association (EHIMA)

Ear Peace Foundation: Empowering youth for a lifetime of hearing health



Institution

Ear Peace Save Your Hearing Foundation, Florida, United States

Background

Over the past decade, **Ear Peace Save Your Hearing Foundation**, an educational nonprofit, has led innovative programs to prevent noise-induced hearing loss (NIHL) among youth. Its mission aligns closely with WHO's Make Listening Safe program by promoting early, age-appropriate education and community awareness of hearing health.

Approach

The Foundation collaborates with schools, universities, educators, musicians, community organizations, and youth ambassadors to deliver free, evidence-based hearing health programming. Activities include:

- **Educator training workshops** offering STEAM-aligned curricula and classroom resources;
- **30-minute classroom video lessons** teaching NIHL prevention for students in grades 3–12 and adult learners;
- The **Protect-A-Band program**, educating young musicians on hearing conservation and providing access to discounted high-fidelity earplugs; and
- The 2024 launch of **HearO Saves the Day**!, a children's book for ages 4–8 that introduces hearing science and teachers four hearing protection strategies.

Impact

Through school-based instruction, community partnerships, and creative outreach, the Foundation has reached **thousands of students, educators, and musicians**. The initiatives have increased the use of hearing protection, integrated hearing health into classroom learning, and inspired a culture of youth-driven advocacy for lifelong safe listening.

Country / Region

United States

Contributed by

Sherilyn M. Adler, Ph.D, Ear Peace Save Your Hearing Foundation

Community-based audiology services in Eastern DRC: A decade of advancing safe listening at Ephphatha Center for the Deaf, Goma

Institution

Ephphatha Center for the Deaf, Goma, Democratic Republic of the Congo

Background

Eastern DRC faces widespread hearing health challenges due to limited services, conflict-related trauma, and fragile healthcare systems. Since 2010, the **Ephphatha Center for the Deaf** has pioneered community-based audiology services in Goma, improving access to ear and hearing care where no national hearing program exists.

Approach

The center provides hearing assessments, ear infection management, basic hearing aid fitting, and referral services —serving over **700 patients** in a decade. Public awareness is promoted through radio campaigns reaching more than **10,000 listeners**, focusing on ear health, safe listening, and prevention of noise-induced hearing loss, particularly among youth.

Impact

In a region where prolonged exposure to gunfire and explosions has caused war-related auditory trauma, the initiative has improved early detection, community awareness, and safe listening practices. Despite shortages of trained personnel and hearing devices, Ephphatha's locally adapted model demonstrates how resource-conscious, community-led approaches can strengthen hearing health and support WHO's Make Listening Safe goals in conflict-affected settings.

Country / Region

Democratic Republic of the Congo (Eastern Region)

Contributed by

Dr Babikene Rasi Samuel, MD, MPH
Ephphatha Center for the Deaf, Goma, DRC

Promoting safe listening through education and evidence-based interventions

Institution

The University of Auckland, New Zealand; Massey University, New Zealand

Background

Children aged 8–12 are increasingly exposed to unsafe sound levels through recreational activities and personal audio use. To promote sustainable hearing health, researchers evaluated the effectiveness of the Dangerous Decibels school-based programme in improving children's knowledge, attitudes, and behaviours related to safe listening.

Approach

The study applied the COM-B health promotion model (Capability, Opportunity, Motivation–Behaviour) and Cognitive Load Theory to assess how educational design influences learning and behaviour change. The research involved educators, school children, academics, and community partners. A new evaluation tool—the Dangerous Decibels Assessment (DDA)—was developed to measure both component-level and overall programme effectiveness.

Impact

Findings from this evaluation will strengthen safe listening education by identifying which learning approaches most effectively build children's capability and motivation to use hearing protection. The results provide evidence to refine programme delivery, inform education policy, and integrate hearing health into early learning curricula in line with WHO's Make Listening Safe goals.

Country / Region

New Zealand

Contributed by

Eranthi Liyanaduwa Kankanamge, Ravi Reddy, David Welch
The University of Auckland; Massey University

Advancing hearing health in low-resourced communities: HearMi Ghana

Institution
HearMi Ghana, Accra, Ghana

Background
Knowledge of ear and hearing health in Ghana remains limited, with widespread myths and misconceptions hindering early detection and treatment. Access to audiology and ENT services is also scarce, particularly in rural and underserved communities.

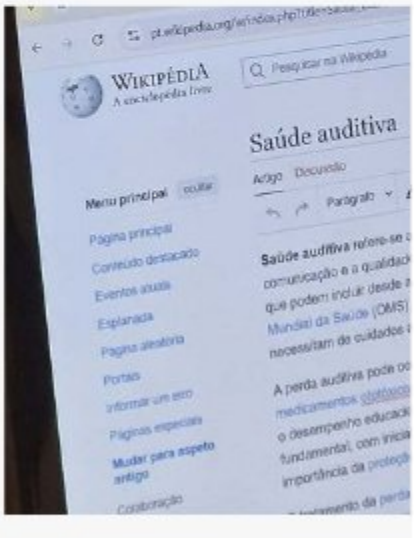
Approach
HearMi Ghana, a non-profit organization, has worked for over six years to advance hearing health through community-centered outreach. Activities include ear and hearing screenings, education programs in churches, mosques, markets, and community centers, as well as advocacy for stronger national awareness. Collaboration with local health facilities has supported early treatment and follow-up for ear-related conditions.

Impact
Community engagement and repeat outreach have improved understanding of ear and hearing care, encouraging more people to seek medical attention for ear problems and challenge harmful myths. HearMi's family- and community-based approach has laid a foundation for greater safe listening awareness, hearing loss prevention, and hearing health promotion across Ghana.

Country / Region
Ghana

Contributed by
William Hodzi
Founder and Lead Advocate, HearMi Ghana

Wikimedia global health promotion campaigns



Institutions

International Society of Audiology; University of São Paulo; Federal University of Santa Catarina; Make Listening Safe Workstream; Centro de Pesquisa Audiológicas, Wikimedia Brasil, and WikiProject Hearing; São Paulo Research Foundation (FAPESP)

Background

Reliable, accessible information is critical for global hearing health promotion. To advance the Make Listening Safe agenda, a coalition of researchers, students, and Wikimedia volunteers developed a digital strategy to expand multilingual education and evidence-based content on hearing health and safe listening practices.

Approach

From 2019 to 2024, global campaigns such as **Wiki4WorldHearingDay** and **Wiki4YearOfSound2020** mobilized more than **400 volunteer editors** to create and improve over **1,000 articles** across **Wikipedia**, **Wikidata**, **Wikiversity**, and **Wikimedia Commons**. Educational materials —including infographics, audiograms, and images—were made freely available to support public health education and AI research. The Safe listening Wikipedia article (available in **10 languages**) and related multimedia resources have been viewed more than **56,000 times**, contributing to nearly **189 million total article views**.

Impact

By creating open, multilingual, and machine-readable hearing health resources, this project made evidence-based safe listening information accessible worldwide. The campaigns strengthened digital hearing health literacy, provided training data for AI-driven health communication, and supported WHO's Make Listening Safe objectives through scalable, collaborative outreach.

Country / Region

Global

Contributed by

Thais Catalani Morata; Hector Gabriel Corrale de Matos, Fernanda Zucki, Katya Freire, Kátia de Freitas Alvarenga, Lilian Cássia Bórnia Jacob

Funding: São Paulo Research Foundation (FAPESP),

Measuring youth attitude towards noise among the Malaysian population

Institutions

Department of Audiology and Speech-Language Pathology, Kulliyyah of Allied Health Sciences, International Islamic University Malaysia, Kuantan, Pahang, Malaysia

Background

Understanding youth attitudes toward noise is critical for shaping hearing conservation strategies and safe listening education. This study aimed to evaluate Malaysian youth perspectives on noise exposure using the **Malay version of the Youth Attitude Towards Noise Scale (YANS-M)**—a validated adaptation of the original YANS tool.

Approach

A total of **114 Malaysian youth** from both audiology and non-audiology backgrounds completed the YANS-M. Analyses explored the influence of demographic and educational factors on attitudes toward noise. The study was conducted by a university-based research team comprising audiology academics and students.

Impact

Youth with an audiology background demonstrated more protective attitudes toward noise. Differences were also noted by gender and socioeconomic status, with females and participants from higher socioeconomic groups exhibiting safer listening behaviours. These findings highlight the importance of hearing health education and literacy in shaping young people's attitudes toward noise and inform future youth-focused prevention and outreach initiatives.

Country / Region

Malaysia

Contributed by

Sarah Rahmat, Siti Nor Shuhada Mohamad Radzi, Noraidah Ismail, Najihah Amir
Department of Audiology and Speech-Language Pathology, International Islamic University Malaysia

Expanding access to hearing care: Community initiatives

Institution

Department of Audiology and Speech-Language Pathology, Kulliyyah of Allied Health Sciences, International Islamic University Malaysia (IIUM)

Background

Access to hearing care remains limited in many rural and underserved communities in Malaysia. To address this gap, the Department of Audiology and Speech-Language Pathology at IIUM launched community-based outreach initiatives focused on hearing screening, awareness, and rehabilitation support.

Approach

Since 2019, IIUM has conducted mobile hearing screenings across Malaysia, including in Pahang and Sabah, and internationally in Cambodia, reaching over 3,000 individuals through more than 100 screening events. The program also runs school-based education sessions, public awareness talks, and radio broadcasts promoting early detection and safe listening habits.

Through the Special Hearing Aid Program (SHAP), over 170 hearing aids—valued at approximately RM760,000 (approximately $180,000 USD) —have been donated to those in need, with an estimated 38% referral rate for follow-up care.

Impact

These initiatives have expanded access to hearing healthcare, improved early identification of hearing loss, and increased public awareness of safe listening. By reaching remote and vulnerable populations, the program promotes equitable hearing care and directly supports WHO's Make Listening Safe goals for prevention and early intervention.

Country / Region

Malaysia and Cambodia

Contributed by

Sarah Rahmat, Muhammad Rizal Marsudin, Raihana Rosli, Nur Hamizah Othman, Nur Hafizah Sulaiman, Noor Afzarini Hasnita Ismail, Nurul Syarida Mohd Sakeri, Saiful Adli Jamaluddin, Noraidah Ismail, Ahmad Aidil Arafat Dzulkarnain, Nurlin Ali Hanafiah, Tengku Zulaila Hasma Tg Zam Zam, Nur 'Azzah Zakaria, Marina L. Alisaputri Lamri, Md. Iqbal Firdaus Jaimon

Department of Audiology and Speech-Language Pathology, International Islamic University Malaysia

Advancing safe listening advocacy in France

Institutions

Bruitparif – The Official Noise Observatory of Île-de-France; La Renaissance Sanitaire Foundation – La Musse Hearing Aid Audiologists Training Institute, Research Center, France

Background

For more than two decades, France has pursued progressive noise control policies and public awareness on safe listening. Audiologist and music journalist Jean-Louis Horvilleur has played a leading role in bridging the fields of audiology, public education, and music to strengthen national advocacy and align France's prevention policies with WHO's Make Listening Safe goals.

Approach

As Chairman of the Scientific Council of Bruitparif, Horvilleur contributed to the development of French Decree No. 2017-1244 (7 August 2017)—a landmark law on the prevention of risks related to noise and amplified sound exposure. He co-authored the decree's application guide, providing a model for other countries developing safe listening legislation.

Beyond policy work, he promotes safe listening through ongoing public education and outreach: lectures, university courses, media interviews, and annual campaigns on World Hearing Day, National Hearing Day (France), and Music Day (Fête de la Musique). His blog, https://blog.lesoreilles.com/, serves as a public resource for hearing health and sound awareness.

Impact

This long-term advocacy has helped integrate hearing health into national policy, professional training, and cultural life. The 2017 decree strengthened noise regulation in entertainment venues, while continuous outreach has improved public understanding of sound risks and prevention. Through education, legislation, and collaboration, France has become a model for evidence-based hearing conservation.

Country / Region

France

Contributed by

Jean-Louis Horvilleur
State-Certified Hearing Aid Audiologist; Educational Manager, La Renaissance Sanitaire Foundation – La Musse Hospital; Chairman, Scientific Council of Bruitparif; Director of Operations

Pioneering Philippine BPO hearing health advocacy

Institutions

ENT & Audiology News (platform); Independent initiative by Dr Joyce Rodvie Sagun, Philippines

Background

The Business Process Outsourcing (BPO) industry employs over **1.4 million Filipinos** and contributes more than **$29 billion** annually to the Philippine economy. Call centre employees are at risk of noise exposure and communication fatigue from prolonged headset use, yet awareness of occupational hearing health remains limited.

Approach

In **September 2024**, a feature article published in ENT & Audiology News marked the first international platform to highlight hearing health issues in the Philippine BPO sector. The article reviewed existing workplace practices—such as pre-employment hearing screening, use of noise-cancelling technology, and partnerships with healthcare providers—while calling for stronger, evidence-based hearing conservation programs. Key stakeholders included multinational BPO companies, the IT & Business Process Association of the Philippines (IBPAP), local healthcare providers, and industry employees.

Impact

The publication brought Philippine occupational hearing health into the global spotlight, positioning the country as a regional voice in workplace hearing conservation. It spurred collaboration among BPO operators and healthcare providers, leading to **onsite hearing screenings** and **employee education programs**. By aligning with WHO's Make Listening Safe framework, the initiative demonstrated how developing nations can influence global dialogue and action on safe listening in occupational settings.

Country / Region

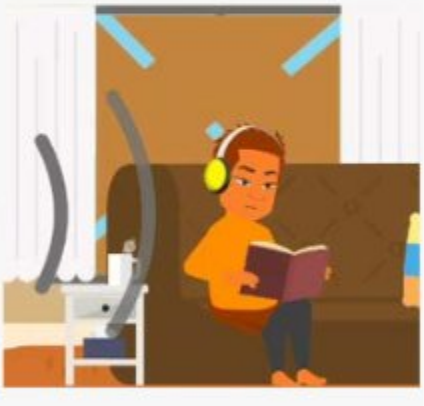
Philippines

Contributed by

Joyce Rodvie Sagun, MD, MClAud, MBA

Read the article here

Brainland: Creative videos for safe listening education



Institutions
Audicare; Katya Freire; Andreas Thulin

Background
Children and adolescents are among the most at-risk groups for hearing loss due to unsafe listening habits. Traditional educational methods often fail to engage this age group. The **Brainland** project was created to deliver hearing care education through storytelling, animation, and character-based learning.

Approach
Brainland is an animated video set in a vibrant, imaginative world where neurons flow like rivers. It follows **Jamie**, a teenager who learns about hearing health after meeting characters such as **Hearing Loss, Tinnitus, Hyperacusis**, and **Misophonia**—each representing common hearing conditions. The narrative blends humour and science to explain hearing concepts and promote safe listening. The video is the first in a planned series aimed at building awareness and influencing behaviour among young audiences.

Impact
Officially registered for **World Hearing Day 2025**, Brainland is designed to reach global audiences through digital platforms. By making hearing health information relatable and entertaining, the project fosters lasting awareness and prevention of hearing loss among youth and supports WHO's Make Listening Safe goals through creative communication.

Country / Region
Global (Brazil, Sweden collaboration)

Contributed by
Katya Freire, Audicare (Brazil); Andreas Thulin (Sweden)

Dangerous Decibels & World Hearing Day – Safe listening education for youth

Institutions

Audicare; Dangerous Decibels; St. Julian's School, Portugal

Background

Noise-induced hearing loss among youth is a growing global concern. To mark **World Hearing Day 2025**, a collaborative educational program was implemented to teach students about the risks of loud sound exposure and the importance of safe listening behaviours.

Approach

The initiative, led by **Audicare** and **Dangerous Decibels**, engaged **96 students** in grades 5–9 at **St. Julian's School** (Portugal) through three 50-minute sessions delivered by **Dr Katya Freire** and **Prof. William Martin**. Using the evidence-based Dangerous Decibels curriculum, sessions combined hands-on activities, demonstrations, and discussion structured around three key questions:

1. What are dangerous sounds?
2. What are the consequences of loud sound exposure?
3. How can we protect ourselves?
4. Students were also provided with free earplugs and trained in their correct use to reinforce safe listening habits.

Impact – how did this make listening safer?

The program significantly increased students' understanding of hearing risks and their motivation to protect their ears in everyday life. Its interactive, science-based design made the learning experience memorable and replicable, providing a strong model for future school-based interventions that build a culture of safe listening among youth.

Country / Region

Portugal

Contributed by

Dr Katya Freire (Audicare, Brazil) and Prof. William Martin (Dangerous Decibels, USA)

A success story – curbing the recreational noise levels at public places

Institution
Mandke Hearing Services, Pune, India

Background
Recreational noise and its social impact have long been recognised in India, yet effective regulation has been limited. During Maharashtra's ten-day Ganesh Festival, recreational noise levels have consistently exceeded permissible limits, affecting millions of residents in Pune and across the state.

Approach
Dr Kalyani N. Mandke filed an application with the National Green Tribunal (NGT) – Western Zone Bench requesting directives for noise control and monitoring during the Ganesh Festival. The NGT, established under the 2010 Act to safeguard environmental and public health, heard the case supported by years of noise-mapping data from the College of Engineering Pune. On 30 August 2024, the Tribunal issued a landmark order mandating real-time noise monitoring, daily public display of noise levels, and regulation of the number and wattage of loudspeakers used during the festival.

Impact
The NGT's ruling marked the first judicial directive in India aimed at controlling recreational noise through real-time public reporting and policy enforcement. It set a national precedent for integrating environmental and hearing health advocacy, protecting millions from harmful sound exposure during one of India's largest cultural celebrations.

Country / Region
India

Contributed by
Kalyani N. Mandke, PhD, AuD, CCC-A, ASHA Fellow, Audiologist
Mandke Hearing Services, Pune, India

The Week of Sound

Institutions

La Semaine du Son (The Week of Sound), NGO official partner of UNESCO; Institut Pasteur, Paris, France

Background

Since 2004, the NGO La Semaine du Son (The Week of Sound) has organized an annual global awareness event—the UNESCO Week of Sound—held each January (third week) in Paris and across 22 participating countries (at different moments of the year). The event promotes a holistic understanding of sound in society, with one dedicated day each year focused on hearing health and safe listening.

Approach

The Week of Sound convenes researchers, policymakers, economists and artists, and the public to explore the relationship between sound and health. In 2022, at the request of the NGO, Professor Paul Avan of the Institut Pasteur presented pioneering research on the dangers of over-compressed music, which manipulates gain to remove natural pauses in sound. His findings demonstrated that exposure to over-compressed music weakens natural auditory reflexes (stapedial reflexes) and increases the risk of hearing fatigue and damage.

Following these results, The Week of Sound initiated the development of a "sound quality against over-compression" label to encourage safer production practices in the music industry. An ongoing experimental study with interpreters investigates the auditory risks of over-compressed voices in videoconferencing, radio, and smartphones.

Impact

The Week of Sound has become a global movement linking science, policy, economics and culture to promote hearing health. By highlighting emerging risks it has advanced public understanding of how modern listening environments affect auditory wellbeing and inspired safer production and listening practices.

Country / Region

France (with international participation in 22 countries)

Contributed by

Christian Hugonnet, Founder and President, La Semaine du Son;
www.lasemaineduson.org

la semaine du son

unesco
La Semaine du Son

The Week of Sound
La Semaine du Son (The Week of Sound), NGO official partner of UNESCO; Institut Pasteur, Paris, France. Photo by Jean-José Wanègue.

EART Exhibition – Art as advocacy for safe listening (1st Edition: 2024, 2nd Edition: 2025)

Institutions
Audicare; Galeria d.Propósito; WSA

Background
Art can be a powerful medium for health advocacy. The EART Exhibition (Ear + Art) was established to promote hearing health, safe listening, and sustainability through creative expression, cultural engagement, and inclusion—particularly among youth and individuals with hearing loss.

Approach
The first edition (2024) in São Paulo brought together hearing-impaired individuals and professional artists to create artworks from recycled audiology materials such as hearing aids and batteries, combining awareness and environmental sustainability. The exhibition later became a permanent installation at WSA offices.
The second edition (2025) featured a live art performance by a hearing-impaired artist using video game player headphones, shared widely on social media and accompanied by a public roundtable with health professionals and influencers. This edition targeted young audiences, music lovers, and gamers, aligning with the World Hearing Day 2025 theme "Changing Mindsets: Empower Yourself."

Impact
EART has expanded public awareness of hearing health through accessible, culturally relevant formats. By blending creativity, inclusion, and education, it has engaged diverse audiences, inspired safe listening behaviours, and reinforced WHO's Make Listening Safe initiative expanding it beyond health to a cultural movement.

Country / Region
Brazil

Contributed by
Dr Katya Freire, Fábia Pace, Dr Gisele Munhoes, Vinicius Loschiavo, and collaborators

A simplified cochlear frequency selectivity measure: A new tool for early screening of music-induced hearing loss

Institution

Auditory Laboratory, Department of Physiology, University of Malaya, Malaysia

Background

Early detection of subtle hearing deficits caused by unsafe listening exposures is essential for preventing permanent hearing loss. Traditional screening tools often fail to identify early cochlear dysfunction linked to music- or noise-induced damage, particularly when audiograms remain within normal limits.

Approach

A simplified cochlear frequency selectivity (FS) test was developed to detect early auditory dysfunction based on threshold differences between tones masked by narrowband and notched noise. The test uses consumer-grade equipment and custom software, making it cost-effective and accessible. It was validated in both laboratory and self-administered community-based formats, across participants with normal hearing and mild-to-moderate sensorineural hearing loss (SNHL).

Impact

The FS test achieved around 90% sensitivity and specificity for detecting high-frequency SNHL at 4–8 kHz, outperforming standard digit-in-noise and questionnaire-based tools. Its portability and reliability support its use in large-scale community screening and early detection of music- and noise-induced hearing loss. By empowering users with accessible, evidence-based testing, the tool advances WHO's Make Listening Safe goals through prevention and early intervention.

Country / Region

Malaysia

Contributed by

Dr Kumar Seluakumaran
Auditory Laboratory, Department of Physiology, University of Malaya

Key references:
Wang X, Rasidi WNA, Seluakumaran K. Simplified frequency selectivity measure as a potential candidate for hearing screening: changes with masker level and test-retest reliability of self-administered testing. Int J Audiol. 2024 Nov 20:1-10.
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Rasidi WNA, Seluakumaran K, Jamaluddin SA. Simplified cochlear frequency selectivity measure for sensorineural hearing loss screening: comparison with digit triplet test (DTT) and shortened speech, spatial and qualities of hearing scale (SSQ) questionnaire. Eur Arch Otorhinolaryngol. 2023 Oct;280(10):4391-4400.

Listen for Life: A UK-led initiative transforming safe listening standards globally

Institution
Night Time Industries Association (NTIA), United Kingdom

Background
Unsafe listening in music venues remains a major cause of preventable hearing loss among staff, performers, and audiences. To address this, the Listen for Life initiative was created by the UK music and nightlife industry to establish and promote global standards for safe listening, aligned with WHO's Global Standard for Safe Listening Venues and Events.

Approach
Launched in 2025, Listen for Life builds collaboration across the music, hospitality, and public health sectors. Supported by UK Hospitality, PRS for Music, and the Institute of Licensing, it provides:

- Affordable access to high-fidelity hearing protection;
- Education and certification through the HELA online portal;
- Ambassador-led outreach and advocacy; and
- Innovative hearing assessment tools designed for proactive prevention.

The initiative was introduced to policymakers at the UK Houses of Parliament and officially launched at Ronnie Scott's Jazz Club on World Hearing Day 2025. International adoption is growing through partnerships with the International Nightlife Association and industry leaders in 19 countries.

Impact
Within its first month, more than 80 UK organizations, representing over 10,000 venues, including Ministry of Sound, Greater Manchester Combined Authority, DHP Family, and Universal Records, signed on. The initiative has unified policymakers, industry leaders, and global partners around actionable hearing protection standards, earning recognition from the International Nightlife Association for excellence in worker and audience health. Listen for Life demonstrates how national leadership can transform hearing conservation into a worldwide movement.

Country / Region
United Kingdom (with global reach)

Contributed by
Rob Shepheard
Night Time Industries Association (NTIA),
United Kingdom

Listen for Life: A UK-led initiative transforming safe listening standards globally
Night Time Industries Association (NTIA), United Kingdom

Listen for Life: A UK-led initiative transforming safe listening standards globally
Night Time Industries Association (NTIA), United Kingdom

Make Listening Safe Workstream LinkedIn Group, World Hearing Forum

Institution

Make Listening Safe LinkedIn Group (MLSL), World Hearing Forum

Background

The Make Listening Safe LinkedIn Group (MLSL) was created in September 2020 to provide a global platform supporting WHO's vision to "create a world where nobody's hearing is put in danger due to unsafe listening." The group promotes awareness, engagement, and collaboration among hearing health professionals, educators, policymakers, and advocates.

Approach

The MLSL group now connects 1,824 members worldwide, reaching more than 25,000 views annually. At least one post is shared weekly, reviewed to ensure accuracy and alignment with Make Listening Safe objectives. Posts highlight WHO and ITU activities, new global standards, and international events relevant to hearing health advocacy. Recent posts featured the WHO–ITU Global Standard for Safe Listening in Video Gameplay and Esports, the 78th World Health Assembly resolution on sensory impairments, and the UNESCO Week of Sound at the Cannes Film Festival.

Impact

The MLSL group has become a trusted online professional hub for accurate information and international networking on safe listening. By fostering regular communication on a widely used and popular platform, the group strengthens the visibility, reach, and global coordination of the Make Listening Safe initiative.

Country / Region

Global

Contributed by

Mark Laureyns, Devangi Dalal, and Aderinola Olopade
Make Listening Safe LinkedIn Group, World Hearing Forum

Join the Linkedin group here:
https://www.linkedin.com/groups/13903493/

Promoting safe listening habits among New Zealand youth

Institution

National Foundation for Deaf and Hard of Hearing (NFDHH), New Zealand

Background

Unsafe listening habits among adolescents contribute significantly to preventable hearing loss. To address this, the **National Foundation for Deaf and Hard of Hearing (NFDHH)** launched the **Hearing Screening and Education Programme** in **2019** to raise awareness among secondary school students about safe listening and the risks of noise-induced hearing loss.

Approach

Now in its **sixth year**, the programme partners with secondary schools, audiologists, and public health professionals nationwide. It provides **free hearing screenings** and Make Listening Safe education to **Year 9 students (aged 13–14 years)** and their families. The initiative targets unsafe listening behaviours, particularly exposure to loud music through personal devices and environmental noise.
To date, it has reached **85 secondary schools** across New Zealand and screened more than **12,000 students**.

Impact

In **2024**, **42%** of participating students reported unsafe listening habits and **23%** reported tinnitus symptoms, underscoring the need for early intervention. The programme has improved awareness of hearing risks, encouraged behavioural change, and identified undiagnosed hearing issues among teens. Through education and early detection, it continues to promote lifelong safe listening habits.

Country / Region

New Zealand

Contributed by

Natasha Gallardo, Chief Executive
National Foundation for Deaf and Hard of Hearing (NFDHH), New Zealand

The Make Listening Safe Workstream Advocacy group

Institution

Make Listening Safe Workstream Advocacy Group (MLSA), World Hearing Forum

Background

Established in 2019 under the WHO World Hearing Forum, the Make Listening Safe Workstream Advocacy Group (MLSA) promotes the vision of creating "a world where nobody's hearing is put in danger due to unsafe listening." The group raises awareness and strengthens global collaboration across professional and policy networks to embed Make Listening Safe principles into education, health, and industry practices.

Approach

The MLSA organizes Make Listening Safe sessions and presentations at major international congresses and publishes articles targeting stakeholders in audiology, music, engineering, and public policy. To date, the group has led over 30 sessions worldwide, including:

- World Congress of Audiology (Paris, 2024)
- Pan American Congress of Otorhinolaryngology (2020–2024)
- IFOS rehabilitation courses (Zimbabwe 2022, Costa Rica 2023, Vietnam 2024)
- HEAL Conference (Como, 2022)
- EFAS Congress (Croatia, 2023)
- AES Conference on Audio and Music-Induced Hearing Disorders (Copenhagen, 2024)
- Lunch Debates at the European Parliament for World Hearing Day (2019–2025)

Impact

Through consistent advocacy and professional engagement, the MLSA has built an international network linking researchers, hearing specialists, industry professionals, and policymakers around hearing safety. Its publications—including Standards for Safe Listening: Past, Present, and Future (Hearing Review, 2020)—and ongoing parliamentary advocacy have strengthened awareness, inspired national initiatives, and supported WHO's decade-long leadership in global safe listening.

Country / Region

Global

Contributed by

Amarilis Melendez, Lidia Best, and Mark Laureyns
Make Listening Safe Workstream Advocacy Group,
World Hearing Forum

Celebrating the 10th anniversary of the Make Listening Safe initiative

Institution

Make Listening Safe School Programs Group, World Hearing Forum

Background

The Make Listening Safe (MLS) School Programs Group was established in 2019 as a subgroup of the Make Listening Safe Workstream within the WHO World Hearing Forum. The group contributes to the global mission to "create a world where nobody's hearing is put in danger due to unsafe listening," with a focus on promoting hearing health education among school-aged children.

Approach

The group organizes Make Listening Safe sessions in schools, documents and evaluates existing educational programs on safe listening, and develops practical resources for teachers and students. In the near future, the group will promote and share the *WHO Smart hearing for children* to further extend its reach and educational impact.

Examples of school-based safe listening initiatives and related publications include:

- Young Ambassadors for Safe Listening (Spain) – school visits and peer-led education: Watch video
- Hearing Health Information in Malaysian Public Schools – Zakaria NA, Maamor N, Abdul Wahat NH. Int J Audiol. 2021;60(12):1009–1015. DOI:10.1080/14992027.2021.1896791
- Make Listening Safe "Listen Up" Rhyme Song (UK) – Watch video
- Dangerous Decibels Program (Global) – www.dangerousdecibels.org
- Primary-Level Teacher Training (The Netherlands) – Hearing Tower Program: Link
- Secondary-Level Teacher Training (Belgium) – HearLink Program: Link

Impact

By coordinating and promoting school-based initiatives worldwide, the group strengthens hearing health education and awareness among children, parents, and educators. Through collaboration, evaluation, and the sharing of tools and resources, it builds a unified platform for teaching safe listening behaviours and preventing early hearing loss.

Country / Region

Global

Contributed by:

Mark Laureyns on behalf of the Make Listening Safe School Programs Group, World Hearing Forum

Comparison of audiometric screening criteria for the identification of noise-induced hearing loss in children

Institution

MERF Institute of Speech and Hearing (P) Ltd in association with the Madras ENT Research Foundation

Background

Early noise-induced hearing loss (NIHL) in children is often missed during routine school screenings, partly because many protocols are not standardized or sensitive to high-frequency changes (3–6 kHz) with recovery at 8 kHz.

Approach

A retrospective analysis of **641** 5th- and 7th-grade students' audiograms—collected over two years from school and camp screenings—compared **Niskar et al. (2001)** with seven other published screening criteria to evaluate their performance in detecting early NIHL.

Impact

The study found that current school screening practices frequently overlook early high-frequency hearing loss and identified specific weaknesses such as infrequent testing, protocol variation, and limited focus on high-frequency ranges. By recommending more sensitive, standardized criteria, the study strengthens the evidence base for improved school screening programs.

Children today face additional hearing risks from recreational listening, including video gameplay and personal listening device use, making early detection and intervention through school-based hearing screening essential for long-term hearing health.

Contributed by

Assoc. Prof. Pachaiappan; Mrs. Cherukuri Ramya Sri; Prof. Ranjith Rajeshwaren; Mr. Victor Rexton L.

Performing Arts Medicine Clinic in Athens, Greece: Advancing safe listening through clinical practice, education, and research

Institution

Performing Arts Medicine Clinic, 1st University Department of Otolaryngology–Head and Neck Surgery, National and Kapodistrian University of Athens (NKUA), Greece

Background

Musicians and sound professionals are regularly exposed to high sound levels that can lead to hearing loss and related health issues. The Performing Arts Medicine Clinic in Athens was established to promote safe listening, hearing preservation, and early intervention through a combination of clinical care, education, and research.

Approach

Founded over a decade ago, the Clinic provides free specialized audiological assessment, early detection of hearing damage, and individualized auditory counselling for at-risk music professionals. It also serves as a teaching and research hub within NKUA's medical school, offering an elective course on hearing health in performing artists that integrates WHO's Make Listening Safe principles. Research activities include studies on biomarkers of music-induced hearing loss, hearing thresholds in musicians, and hearing health awareness in artistic communities.

Impact

The clinic has provided specialized care to over **350 musicians and sound engineers**, a key target group identified by the Make Listening Safe initiative, and has raised awareness through national outreach and educational programs, and trained future clinicians to promote hearing conservation in the arts. By combining evidence-based clinical practice with education and research, it stands as a model for safe listening aligned hearing care.

Country / Region

Greece

Contributed by

Dr Eleftheria Iliadou
Performing Arts Medicine Clinic, 1st University Department of Otolaryngology–Head and Neck Surgery, National and Kapodistrian University of Athens (NKUA), Greece

HELLENIC REPUBLIC
National and Kapodistrian University of Athens

ECO Chat Bot: Engaging youth in safe listening through AI technology

Institution

Universidade Estadual do Paraná (UNESPAR) – Brazil

Background

Over **1 billion young people** worldwide are at risk of hearing loss due to unsafe listening behaviours, primarily from personal audio device use and exposure to loud leisure environments. There is a growing need for innovative, accessible approaches that deliver hearing health education directly to youth through technology.

Approach

The **ECO Chat Bot** is an **AI-powered virtual assistant** designed to engage young people in interactive, confidential conversations about hearing health and safe listening. By asking users about their age, activities, and sound exposure, ECO provides personalized feedback and guidance on topics such as auditory anatomy, safe listening levels, headphone use, and hearing conservation.

Accessible online at **https://www.simoes.phd/** or via QR code, ECO uses youth-friendly language and mobile-first design to make preventive education widely available anytime, anywhere.

Impact

By delivering evidence-based information through conversational AI, ECO meets young people in digital spaces they already inhabit. It promotes informed decision-making, increases awareness of hearing risks, and encourages lifelong preventive behaviours. The initiative directly supports WHO's *Make Listening Safe* principles by combining technology, accessibility, and personalized education.

Country / Region

Global

Contributed by

Prof. Pierangela Nota Simões PhD
Universidade Estadual do Paraná (UNESPAR) – Brazil

Fermata: Hearing health education activities

Institution

Universidade Estadual do Paraná (UNESPAR) – Brazil

Background

Noise exposure among children and youth is an increasing concern globally. In response, the **Fermata Project** was developed as a university outreach initiative connecting higher education with local schools and communities to promote hearing health and safe listening.

Approach

Led by a multidisciplinary team of students and professionals in **audiology, music,** and **visual arts**, the project delivers creative educational sessions in schools across **Curitiba, Brazil**. Activities include creative adaptations of familiar songs from the Brazilian Children's Folk Songbook and interactive discussions that teach preschool and elementary students about hearing health, noise awareness, and safe listening practices. Teachers are also trained to integrate hearing health topics into everyday classroom activities.

Impact

To date, **around 1200 students** have participated in Fermata activities. The project has increased children's awareness, autonomy, and responsibility regarding their own hearing health, while empowering educators to prevent hearing loss and foster inclusive learning environments. By encouraging reflection on the value of sound and silence, *Fermata* promotes a culture of respect for auditory diversity and supports WHO's *Make Listening Safe* education goals.

Country / Region

Brazil

Contributed by

Profa. Dra. Pierangela Nota Simões
Giovani Nota Simões, Bachelor's student in Information Systems
Fermata Project Team
Universidade Estadual do Paraná (UNESPAR) – Brazil

Fermata: Hearing health education activities
Federal University of Paraná, Brazil

“Soundproof Laboratory” in schools

Institution

Federation AICE (Federación de Asociaciones de Implantados Cocleares de España), Spain

Background

Excessive noise exposure in educational settings can endanger hearing and hinder inclusion for students with hearing loss. Since **2015**, the **Federation AICE** has promoted hearing health education in Spanish schools through its Soundproof Laboratory project, aligned with WHO’s Make Listening Safe recommendations.

Approach

The program conducts interactive workshops for students from kindergarten to high school, led by people with **cochlear implants** and supported by speech therapists, teachers, and social integrators. Sessions combine participatory games and practical learning to help students identify harmful sounds, apply hearing protection, and promote inclusion of people with hearing disabilities.

Originally launched as **“Noise Talks: Let’s Improve Our Hearing Sensitivity” (2015–2018),** the initiative evolved into dynamic **“Soundproof Lab” workshops (2019–present).** To date, nearly **600 workshops** have reached more than **10,000 students nationwide**. Activities also include the Safe Listening Ambassadors campaign, digital and print awareness materials, and hearing checks using the **hearWHO app** among older students.

Impact

The project has built a decade-long movement of hearing awareness among children and youth, encouraging responsible listening, empathy, and inclusion. By combining peer-led education, technology, and creative advocacy, the Soundproof Laboratory strengthens hearing health literacy and contributes valuable data on youth hearing to WHO’s Make Listening Safe initiative.

Country / Region

Spain

Contributed by

Federation AICE (Federación de Asociaciones de Implantados Cocleares de España)

“Soundproof Laboratory” in schools
Federation AICE (Federación de Asociaciones de Implantados Cocleares de España), Spain

The evolution of the Dangerous Decibels programme in New Zealand

Institutions
Section of Audiology, University of Auckland; School of Health Sciences, Massey University, New Zealand

Background
Noise-induced hearing loss (NIHL) is entirely preventable, yet it remains one of the most common occupational and recreational health issues. The **Dangerous Decibels®** programme, originally developed in the United States, uses targeted education to change knowledge, attitudes, and behaviours around noise exposure and hearing protection.

Approach
The programme was introduced to New Zealand in **2011**, with educator training workshops held at the **University of Auckland**. It initially focused on children aged **8–12 years**, teaching safe listening behaviours through interactive classroom sessions. Since then, more than **100 schools** have participated, supported by hundreds of accredited educators including teachers, students, audiologists, and community partners.

In **2014**, the classroom programme was adapted for workplaces, reaching employees in **manufacturing, construction, transportation**, and the **Defence Force**. International collaborations have extended its impact to **Brazil, Fiji, and Malaysia**.

Impact
The programme has increased awareness and improved hearing protection behaviours among school children, workers, and communities in New Zealand and beyond. By equipping individuals with practical strategies to prevent hearing loss, **Dangerous Decibels®** advances WHO's Make Listening Safe goals and exemplifies how evidence-based education can create safer listening environments worldwide.

Country / Region
New Zealand (with international collaborations)

Contributed by

David Welch, Section of Audiology, University of Auckland;
Ravi Reddy, School of Health Sciences, Massey University

Noise-induced hearing loss awareness and headphone usage patterns among medical students

Institution
Kotelawala Defence University Hospital (KDU), Sri Lanka

Background
Noise-induced hearing loss (NIHL) is increasingly prevalent among young adults due to unsafe listening practices, particularly from prolonged headphone use. Understanding awareness and behaviours in this population is critical for developing effective prevention and education strategies.

Approach
A **descriptive cross-sectional survey** was conducted from **May to August 2024** among **196 medical students** (3rd–5th year) at University Hospital KDU. A **29-item validated questionnaire** assessed awareness, headphone usage patterns, and attitudes toward hearing protection. Data were analyzed using **SPSS**, with Chi-square tests for associations and Cronbach's alpha for reliability.

Impact
Only **39.2%** of participants correctly identified NIHL, **86.7%** were uncertain about high-volume risks, and nearly **60%** used headphones for over an hour daily. Those who had received NIHL education (12.8%) demonstrated significantly higher awareness and safer behaviours.

The findings highlight the urgent need for formal NIHL education in medical curricula, university noise guidelines, and broader awareness campaigns to support WHO's *Make Listening Safe* objectives.

Country / Region
Sri Lanka

Contributed by
R. De Alwis; Kotelawala Defence University Hospital

Reference:
Full text available at:
https://cjo.sljol.info/articles/10.4038/cjol.v14i1.5397

Safe Listening Initiative for Classical Musicians

Institutions

Lakeside School, Seattle, United States; Massachusetts Eye and Ear; Harvard Medical School, Boston, United States

Background

The Safe Listening Initiative for Classical Musicians aims to reduce hearing loss risk among young classical musicians through a two-part research and education initiative to raise awareness of noise-induced hearing dysfunction and to promote safe listening practices.

Approach

The Safe Listening Initiative for Classical Musicians was instigated by student researchers and classical musicians Khaos Kook and Kaitlyn Gia Lee, assisted by Sharon Kujawa, PhD and was designed to raise awareness and promote safe listening among young classical musicians.

The research phase includes hearing assessments, noise dosimetry, and questionnaires exploring hearing and exposure history, perceived dysfunction (e.g., tinnitus, loudness intolerance, speech-in-noise difficulty), and hearing protection awareness, attitudes and habits. The education phase translates research insights into workshops, interviews, and outreach at schools, conservatories, and orchestras **to teach classical musicians and others about noise-induced hearing loss and address safe listening practices**. Peer-led engagement, by young musicians themselves, enhances credibility and encourages positive listening behaviours.

Impact

By combining research insights with targeted education, the initiative addresses an under-recognized occupational health risk in classical music. It promotes regular hearing monitoring, responsible sound exposure management, and the normalization of hearing protection use in an industry traditionally resistant to such practices. This model aligns with WHO's *Make Listening Safe* principles by changing listening behaviours and attitudes within the performing arts.

Country / Region

United States

Contributed by

Sharon G. Kujawa, PhD
Massachusetts Eye and Ear; Harvard Medical School

Influence on hearing of noise levels at live concerts

Institutions
Université de Rennes; Université de Bretagne Occidentale

Background
Live concerts often expose audiences to sound levels exceeding safe limits, leading to temporary threshold shifts (TTS) – a short-term reduction in hearing sensitivity that may signal early cochlear damage, and, in some cases, permanent hearing loss or tinnitus. This study investigated the short-term auditory effects of concert noise exposure and factors influencing individual susceptibility.

Approach
Approved by the French national ethics committee in 2025, the field study recruited 73 volunteers attending three concerts at a mid-sized venue with a fixed sound system. Each participant underwent audiometric testing and tinnitus assessments before and after the shows. Individual sound exposure, alcohol consumption, and earplug use were also monitored.

Impact
The study found average audience exposure levels of 95 dB(A), with greater TTS observed between 2–4 kHz. Among participants, 29% wore earplugs, 22% experienced tinnitus after the event, and 32% showed a TTS of at least 10 dB at two or more frequencies. While auditory symptoms did not always correlate directly with exposure levels, results confirmed that **noise exposure greater than 100 dB(A) significantly increased auditory risk,** and that **earplug use significantly reduced auditory risk.**

These findings reinforce the importance of safe listening standards at live venues and directly support WHO's Global Standard for Safe Listening Venues and Events, contributing to the prevention of music-induced hearing loss in recreational settings.

Country / Region
France

Contributed by
Samuel Moulin, PhD (Cognitive Sciences and Psychoacoustics); MSc (Acoustics); Audiology and Hearing Aid Technologies, France
Prof. Mathieu Paquier (Université de Bretagne Occidentale)

The experiment was made in collaboration with Feichter Electronics, and conducted at La Carène Music Venue, France.

Early detection of video gameplay-related hearing loss in children

Institution
SEHA Clinics, Abu Dhabi, United Arab Emirates

Background
With increasing time spent on online video gameplay, children are being exposed to unsafe sound levels through prolonged headphone use. Continuous exposure—especially to high-intensity sounds in first-person shooter games—can lead to early high-frequency sensorineural hearing loss.

Approach
Periodic school-based hearing screenings were carried out using screening audiometers and headphones to test responses at 20 dB for 1 kHz, 2 kHz, and 4 kHz in each ear. Several children who failed the screening showed specifically absent 4 kHz responses. Follow-up audiologic evaluations confirmed acquired high-frequency sensorineural hearing loss, despite normal newborn screening results, linking the condition to excessive headphone volume during video gameplay.

Teachers, parents, and students were subsequently engaged through counselling and awareness sessions on safe listening practices. Community outreach was reinforced through a public education article in Khaleej Times: Abu Dhabi kids could be at risk of hearing loss due to headphone overuse.

Impact
The screenings identified early video gameplay-related hearing loss and increased public awareness of the risks of unsafe recreational listening. Parents, teachers, and children were educated about safe headphone use and volume limits. The initiative supports WHO's Make Listening Safe goals by combining early detection, community engagement, and prevention in school settings.

Country / Region
United Arab Emirates

Contributed by
Dr Snithin Sasheendran
Audiology Team Lead, SEHA Clinics, Abu Dhabi, UAE

Early detection of video gameplay-related hearing loss in children
SEHA Clinics, Abu Dhabi, United Arab Emirates

Make Listening Safe Campaign UK

Institutions

LimitEar Ltd; Make Listening Safe Campaign UK (MLSC UK)

Background

Following the WHO–ITU Joint Stakeholders' Consultation for Safe Listening Devices held in Geneva in 2015, LimitEar Ltd and its directors, Richard Glover and Stephen Wheatley, have actively supported the Make Listening Safe (MLS) initiative. In 2021, Stephen Wheatley became Chair of the Make Listening Safe Campaign UK (MLSC UK), with the goal of increasing awareness of avoidable hearing risks among people aged 10–40 years to 50% by 2030.

Approach

Supported by philanthropist Michael Chowen, a national awareness strategy was developed and implemented over 18 months with the help of a pro bono communications team. The campaign gained endorsements from around 50 organizations and individuals across the UK hearing health sector. The public launch took place on 1 November 2023, announced on Sky News and celebrated at the Sky Guild Esports Centre in London, hosted with support from Professor Stephen Dance (London South Bank University) and a grant from the UK Acoustics Network.

MLSC UK maintains an active social media presence, using creative digital outreach to engage young audiences. A new cartoon campaign featuring characters Hugh Watt and Frank—developed in collaboration with Dr Hani Armstrong and Mr Barnaby Wynter—communicates hearing safety messages in humorous, relatable ways.

Impact

The campaign has significantly increased public engagement with hearing health messaging in the UK, aligning national awareness efforts with WHO's global Make Listening Safe goals. By partnering with industry, academia, and creative professionals, MLSC UK is building a sustainable platform to promote safer listening behaviours and drive long-term cultural change around hearing protection.

Country / Region

United Kingdom

Contributed by

Stephen Wheatley,
Chair, Make Listening Safe Campaign UK

Integrating behavioural and communication approaches to support the WHO Make Listening Safe initiative

Institution

University of Lucerne, Switzerland (WHO Collaborating Centre for Rehabilitation in Global Health Systems), in collaboration with the WHO Ear and Hearing Care Programme

Background

Unsafe listening remains a leading cause of preventable hearing loss worldwide. To support the Make Listening Safe (MLS) initiative, researchers at the University of Lucerne conducted behavioural and communication studies to better understand why people engage in unsafe listening and how tailored communication can promote change.

Approach

A series of international surveys examined listening habits, risk perceptions, and communication preferences among young adults, venue-goers, and esports participants. Guided by the Health Belief Model and the Transtheoretical Model, the studies explored behavioural determinants such as perceived susceptibility, benefits, barriers, and readiness to change. Findings revealed widespread exposure to high sound levels and low adoption of preventive behaviours, underscoring the need for targeted, audience-specific communication strategies.

Impact

This research provides the behavioural and communication evidence base to strengthen WHO's Make Listening Safe framework. The findings have informed WHO's safe listening standards and guidance, highlighting the need to embed health communication strategies within MLS activities to enhance engagement, motivation, and sustainable behaviour change.

Country / Region

Switzerland (with international data collection)

Contributed by

Sara Rubinelli and Nicola Diviani
University of Lucerne, WHO Collaborating Centre for Rehabilitation in Global Health Systems

University of Jos Safe Hearing Programme

Institution

Department of Special Education and Rehabilitation Sciences, University of Jos, Nigeria

Background

The University of Jos Safe Hearing Programme promotes hearing conservation and public awareness through education, screening, and research. Housed within the Department of Special Education and Rehabilitation Sciences, the Audiology Unit has built a strong foundation in both training and community outreach, fostering a proactive culture of hearing health among students, staff, and the public.

Approach

The programme conducts regular hearing screening and exhibitions at university events, recreation programs, and occupational health campaigns. Since 2017, annual staff hearing screenings and awareness activities have been a recurring feature.
In December 2024, the University celebrated its first Disability Day, emphasizing hearing safety and personal responsibility for hearing protection. Students at postgraduate levels undertake clinical attachments in hospitals, providing real-world audiology experience and promoting early diagnosis and intervention.
Research activities include hearing conservation studies in technical schools and auditory training projects for speech discrimination. Educational efforts promote hearing protection strategies such as earplugs, silicone protectors, helmets, and the 85 dB “rule of thumb.”

Impact

Through education, practical training, and community screening, the programme has expanded awareness of hearing hazards, encouraged responsible listening behaviours, and improved access to early hearing care. It serves as a model for integrating hearing conservation education into university life while supporting WHO’s Make Listening Safe initiative through sustained advocacy and public engagement.

Country / Region

Nigeria

Contributed by

Isaiah Elemukan
Department of Special Education and Rehabilitation Sciences, University of Jos, Nigeria

Auditory Health at School Program

Institution
Federal University of Rio Grande do Sul (UFRGS), Brazil

Background
Hearing loss in childhood can affect learning, communication, and social participation. To address this, the Auditory Health at School Program was launched in 2016 to promote hearing health and prevent hearing loss among children and adolescents in public schools in Porto Alegre, Brazil.

Approach
Led by speech therapist Viviann Magalhães Silva Borges, in partnership with Dr Ana Paula Rigatti-Scherer and coordinated by Dr Pricila Sleifer, the program conducts weekly lectures throughout one month each year. These sessions engage students, teachers, families, and community members to raise awareness about noise exposure and everyday hearing protection.

Educational folders provide information on risks associated with school noise and personal listening devices, which are commonly used during recreational activities. Hearing assessments are also offered for students and teachers reporting hearing concerns.

Impact
The program increased awareness of the risks and consequences of hearing loss and encouraged earlier referral for assessment when hearing issues were suspected. By promoting behaviour change and safe listening habits in schools and at home, the initiative contributes to the WHO's Make Listening Safe goals for youth hearing health.

Country / Region
Brazil

Contributed by
Viviann Magalhães Silva Borges; Dr Ana Paula Rigatti-Scherer; Dr Pricila Sleifer
Federal University of Rio Grande do Sul (UFRGS), Brazil

Building Bridges: Driving digital futures through inclusive innovations in hearing preservation and task-sharing (HEART–ATLC)

Institutions

Milliconnections (MMCS); National Alliance on Integrated Care for Sensory Impairments (ATLC), Philippines

Background

Hearing loss remains a significant global health challenge, particularly in low- and middle-income countries where access to ear and hearing care is limited by high costs and centralized service models. Emerging digital and eHealth technologies now offer opportunities to decentralize hearing care through inclusive, community-based innovations.

Approach

The HEART Project (Hearing Preservation and Task-Sharing), launched in 2021 as part of the WHO Make Listening Safe Initiative, integrates digital platforms, mobile health tools, and onsite initiatives to improve access across the continuum of care—from awareness and screening to diagnosis, treatment, and rehabilitation.

Led by young advocate Bettina Claire Carpio, the project promotes education campaigns, youth engagement, and policy advocacy under the HEARING HOPE mobile app framework, which connects communities, healthcare providers, and policymakers. The initiative also fosters intergenerational collaboration and partnerships across academia, NGOs, hospitals, and government agencies.

Impact

By aligning innovation with WHO's Make Listening Safe pillars, the HEART–ATLC Project has created a sustainable, policy-level platform for action on hearing preservation. Its digital tools and cross-sector partnerships have expanded access to safe listening education and hearing care, demonstrating how inclusive innovation can bridge service gaps and strengthen community-led hearing health initiatives.

Country / Region

Philippines (with regional collaboration across Asia)

Contributed by

Loren Reyes, for Milliconnections (MMCS) and the National Alliance on Integrated Care for Sensory Impairments (ATLC)

Community sensitization on noise-induced hearing loss

Institution
Independent initiative by Moses Serwadda, Uganda

Background
Noise-induced hearing loss (NIHL) is an increasing concern in Uganda, particularly among young people and urban communities regularly exposed to loud recreational and environmental noise. Awareness of safe listening remains low, and first-hand experiences of hearing loss are rarely shared as part of prevention education.

Approach
Community sensitization sessions were organized in one university, two secondary schools, and two primary schools, as well as in local community halls. These sessions engaged youth groups, teachers, students, community leaders, and media representatives. Using personal testimonies and lived experiences, the sessions helped participants understand the causes and consequences of hearing loss, along with practical steps for prevention.

Educational materials from the WHO Make Listening Safe initiative were used to illustrate safe listening practices and promote behaviour change.

Impact
Participants gained knowledge of safe listening and committed to adopting healthier sound habits—such as moderating personal audio device use and reducing environmental noise. Local leaders pledged to champion hearing health awareness, and media coverage extended the campaign's reach through community storytelling and advocacy. The initiative amplified WHO's Make Listening Safe messages at the local level and inspired broader community action for hearing conservation.

Country / Region
Uganda

Contributed by
Moses Serwadda
African Federation of Hard of Hearing (AFHOH)

Community sensitization on noise-induced hearing loss

Independent initiative by Moses Serwadda, Uganda

Assessing knowledge, attitudes, and practices towards noise-induced hearing loss among quarry workers

Institutions

Department of Otorhinolaryngology–Head and Neck Surgery, Faculty of Medicine, Universiti Kebangsaan Malaysia (UKM); Department of Community Health, Faculty of Medicine, Universiti Kebangsaan Malaysia (UKM); Audiology Unit, Department of Medical Rehabilitation Services, Universiti Kebangsaan Malaysia (UKM); Hospital Canselor Tuanku Muhriz UKM, Kuala Lumpur, Malaysia

Background

Occupational noise exposure is a major cause of preventable hearing loss, particularly in industrial settings such as quarries where noise levels often exceed safe limits. Understanding workers' knowledge, attitudes, and practices (KAP) regarding noise-induced hearing loss (NIHL) is essential to design effective hearing conservation strategies.

Approach

A cross-sectional KAP survey was conducted among quarry workers in Malaysia to evaluate awareness, attitudes, and behaviours toward noise exposure and hearing protection. The questionnaire collected data on demographics, noise exposure history, understanding of NIHL, and the use of hearing protection devices (HPDs). Collaboration among ENT specialists, audiologists, occupational health experts, safety officers, and quarry management ensured comprehensive data collection and contextual relevance.

Impact

Preliminary findings indicate moderate awareness but low adherence to hearing protection practices. Education level and duration of employment were key factors influencing attitudes toward hearing safety. The study highlights the need for structured, ongoing hearing conservation programmes, educational workshops, and regular safety briefings. By focusing on a high-risk occupational group, this work advances WHO's Make Listening Safe goals through targeted prevention and behaviour change in the workplace.

Country / Region

Malaysia

Contributed by

Noor Dina Hashim; Rosnah Ismail; Wan Fazlina Wan Hashim; Farah Liyana Lokman; Fatimah Sazari; Wan Nabila Wan Mansor
Universiti Kebangsaan Malaysia (UKM) and Hospital Canselor Tuanku Muhriz UKM

Promoting safe listening through a national awareness campaign: World Hearing Day 2022, Malaysia

Institution

Centre for Ear, Hearing and Speech (Pusat HEARS), Audiology Program, Faculty of Health Sciences, Universiti Kebangsaan Malaysia (UKM)

Background

Public awareness of safe listening remains low, particularly among youth and adults exposed to recreational noise. To address this, the Centre for Ear, Hearing and Speech (Pusat HEARS) and the Audiology Program at Universiti Kebangsaan Malaysia (UKM) organized a nationwide campaign aligned with WHO's Make Listening Safe initiative to promote safe listening through education and advocacy.

Approach

Held from 5 February to 5 March 2022, the campaign carried the theme "Pelihara Pendengaran untuk Mendengar Sepanjang Hayat" ("To Hear for Life, Listen with Care"). Activities included a nationwide drawing contest for school children and a TikTok video competition to promote safe listening among youth and adults.

Daily infographics on noise-induced hearing loss (NIHL) and hearing protection were shared on social media. The campaign also featured a live interview on Selamat Pagi Malaysia (RTM1 national television) and an online webinar attended by 2,065 participants, showcasing expert talks and personal stories about NIHL. The initiative was supported by a USD 800 grant from the Coalition for Global Hearing Health.

Impact

The campaign reached over 2,200 individuals directly and many more through TV and social media. Post-webinar results showed improved knowledge and understanding of safe listening practices. By combining creative media, youth engagement, and expert advocacy, the campaign significantly advanced WHO's Make Listening Safe goals across Malaysia.

Country / Region

Malaysia

Contributed by

Wan Syafira Ishak; Rafidah Mazlan
Centre for Ear, Hearing and Speech (Pusat HEARS), Audiology Program, Faculty of Health Sciences, Universiti Kebangsaan Malaysia (UKM)

Bridging workforce gaps for safer listening: Insights from the Malaysia Audiology Workforce Survey

Institutions

International Islamic University Malaysia (IIUM); Universiti Kebangsaan Malaysia (UKM); Universiti Sains Malaysia (USM); Hospital Rehabilitasi Cheras; Hospital Kuala Lumpur; Hospital Melaka; Demant Malaysia Sdn. Bhd.

Background

A well-distributed and adequately trained audiology workforce is essential to advancing hearing health and promoting safe listening practices. The Malaysia Audiology Workforce Survey (MAWS) provides the first national profile of audiologists in Malaysia, offering data to inform policy, training, and service planning.

Approach

Led by the Malaysia Audiology Workforce Survey Technical Working Committee, MAWS was a collaborative effort involving universities, government hospitals, private sector partners, and professional bodies. The nationwide survey examined audiologists' demographics, education, employment, and expertise, revealing workforce imbalances and gaps in hearing conservation fields. Findings showed that only 1.5% of audiologists work in public health audiology and 18.4% in industrial audiology, with limited involvement in preventive and research-oriented roles.

Impact – how did this make listening safer?

By identifying workforce gaps and training needs, MAWS provides the foundation for national strategies to strengthen hearing conservation capacity. The findings support development of targeted postgraduate programs, enhanced professional certification, and equitable service distribution—all critical for advancing WHO's Make Listening Safe goals and ensuring sustainable, community-wide access to safe listening services.

Country / Region

Malaysia

Contributed by

Sarah Rahmat[1], Akmaliza Ali[2], Tan Han Guan[3], Wan Syafira Ishak[2], Nadiah Abd Aziz[2], Nurul Huda Bani[4], Siti Suriani Che Hussin[5], Nurul Syarida Mohd Sakeri[1], Wan Najibah Wan Mohamad[6], Faizzudin Mohamad[7]

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