

# Ear and hearing care

The global situation  
and WHO actions to  
address it



World Health  
Organization



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and WHO actions to  
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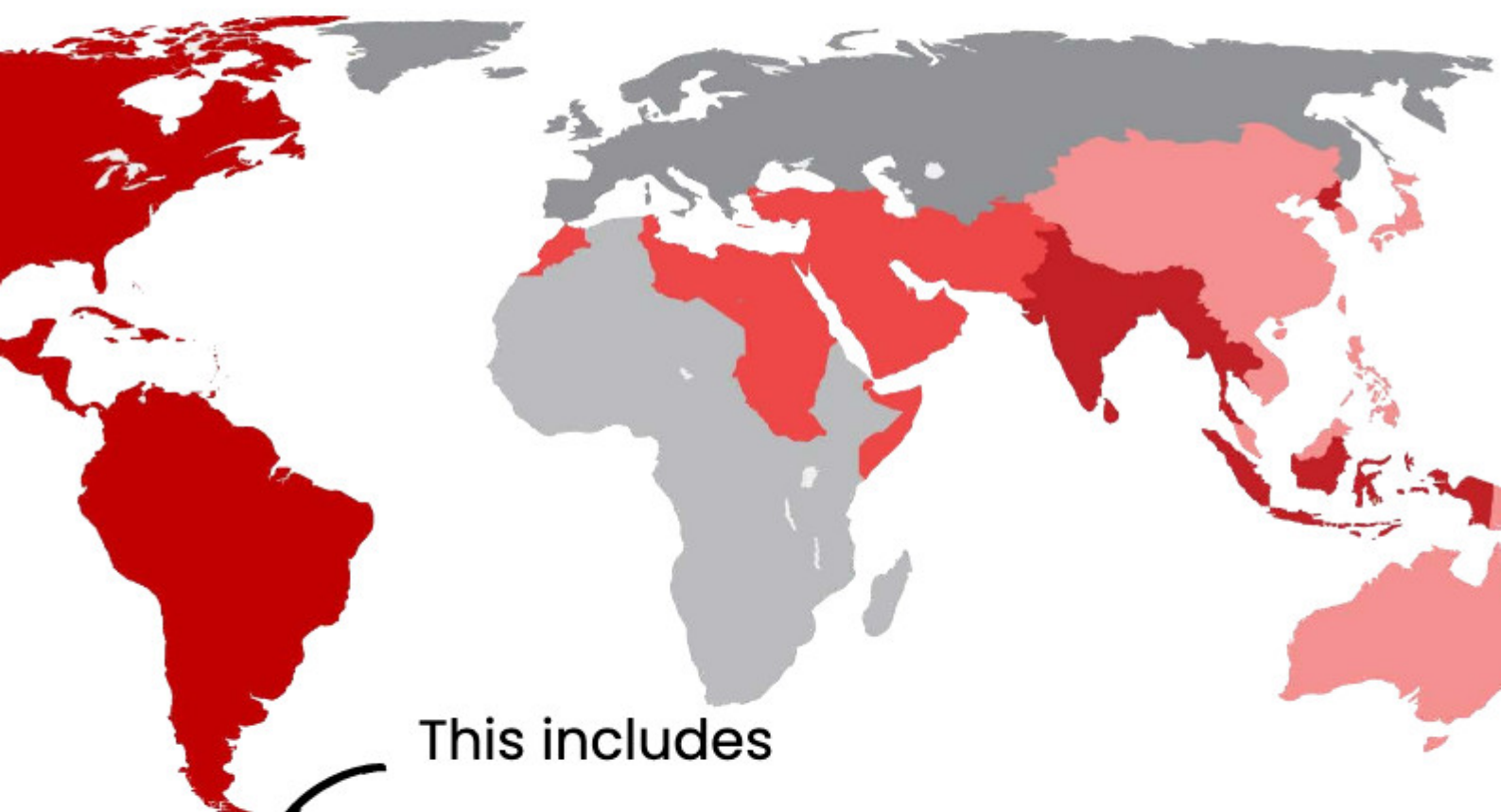


TODAY...

# 1.5 BILLION PEOPLE

LIVE WITH **HEARING LOSS**

THAT'S NEARLY **20%** OF THE  
**GLOBAL POPULATION!**



This includes



## >430 MILLION PEOPLE

WITH **DISABLING HEARING  
LOSS\***

\*Disabling hearing loss refers to hearing loss moderate or higher grade in the better hearing ear.



# UNEQUAL DISTRIBUTION

The prevalence of hearing loss is **unevenly** distributed across the world...

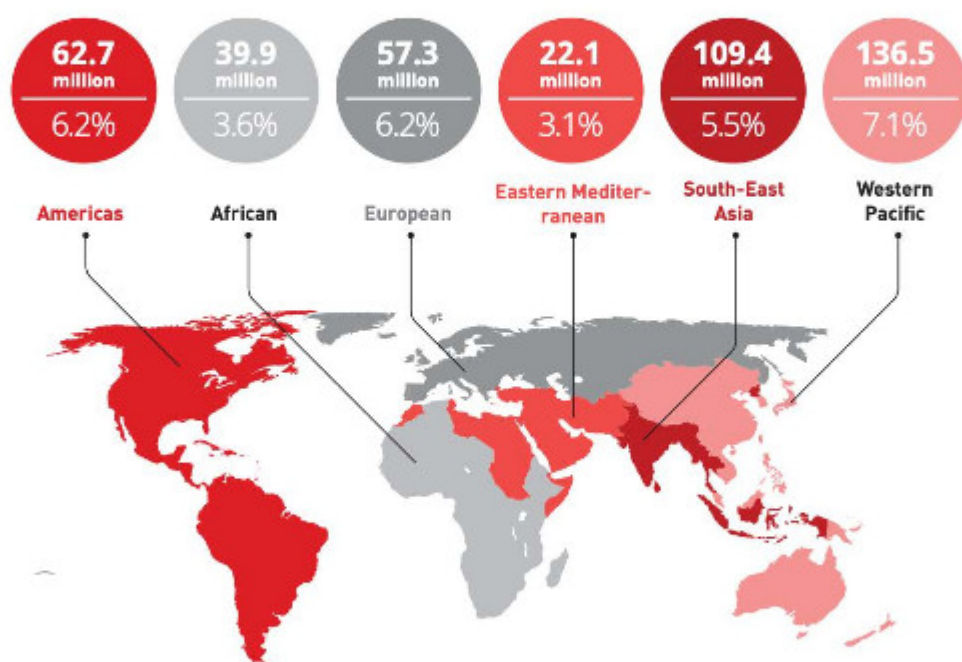


# 80%

**OF PEOPLE WITH DISABLING  
HEARING LOSS**

live in **low-** and **middle-income countries** where human resources and services to address this are commonly lacking.

**The prevalence of hearing loss varies greatly across World Bank income groups worldwide, from 3.3% in low-income countries, to 7.5% in high-income countries.**



**Prevalence of disabling hearing loss across WHO regions**





**PROJECTIONS SHOW THAT UNLESS  
ACTION IS TAKEN BY 2050**



**2.5 BILLION**

**will be affected by hearing loss**







Photo: Ron Brouillette, Tanzania



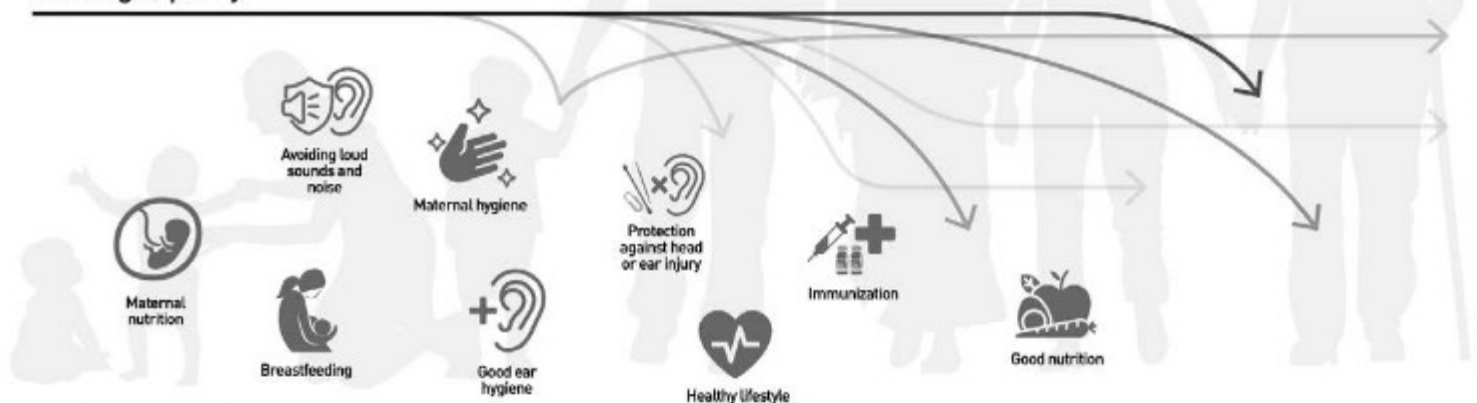
# WHAT CAUSES HEARING LOSS?

Different factors, many of which are preventable, affect hearing capacity across the life course

## Causative factors

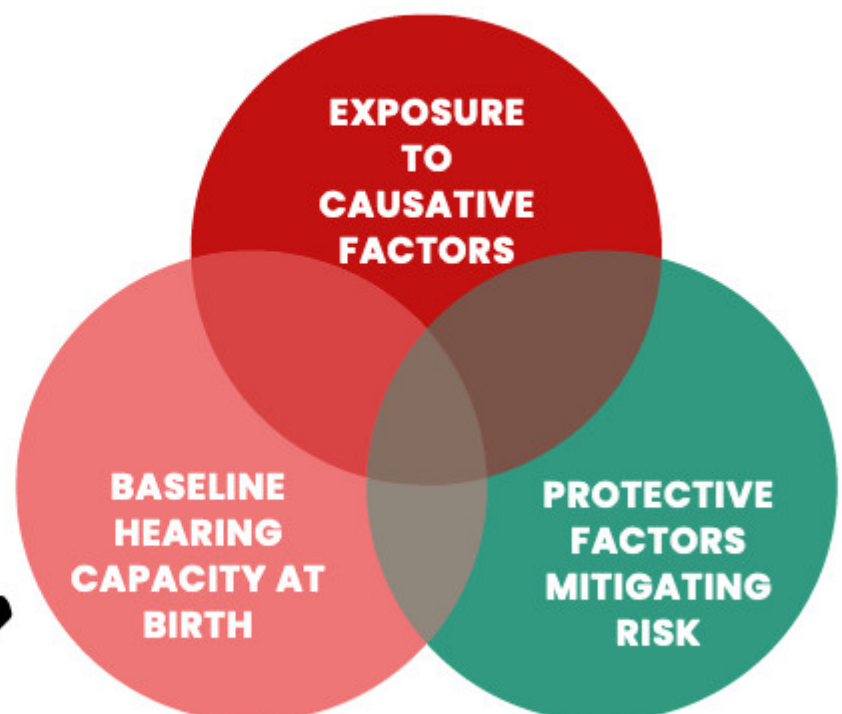


## Hearing capacity



## Protective factors

The occurrence, nature, severity, and progression of hearing loss depends on the interplay between

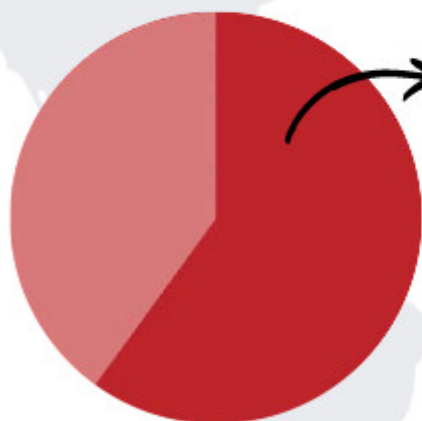


LET'S EXPLORE SOME KEY CAUSES...



# CHILDHOOD HEARING LOSS

**34 million children**  
have disabling hearing loss



**60%**

of hearing loss in children  
under 15 years of age is

**PREVENTABLE**

These preventable causes include:



**Intrauterine Infections:** such as rubella or cytomegalovirus infection during pregnancy.



**Ear Infections:** commonly presenting with recurrent or persistent ear discharge.



**Ototoxic Medicines** e.g. certain antibiotics like gentamicin, anti-malarial drugs like Quinine, certain anti-cancer medicines.



**Birth asphyxia or hypoxia:** Lack of adequate oxygenation at birth.



**Injuries to the head/ear:** can cause a hearing loss depending on location and severity of injury.



**Low birth weight** of below 1,500 g due to premature birth or maternal undernutrition.



**Loud sounds** e.g. listening to loud music through headphones/earphones or in places such as discos; exposure to loud explosions or fireworks.



**Wax or a foreign body** Excessive amount of wax can accumulate and may cause hearing loss.



# EAR INFECTIONS: OTITIS MEDIA

- One of the most common causes of hearing loss.
- Suppurative and non-suppurative Otitis Media (OM) conditions cause **inflammation of the middle ear**.

OM is a **major concern** due to its high **incidence**, especially in children under 5 years.

*DID YOU KNOW?*

**Annually, acute OM affects over 700 million people, mostly children under 5 years old.**

Untreated suppurative otitis media can, in some cases, cause **life-threatening complications**.

**Each year, 21,000 people die due to OM complications:**

- Meningitis
- Brain abscess
- Mastoiditis

Good ear care can **prevent otitis media**. **Early identification and treatment (medical or surgical)** are crucial to avoid or reverse hearing loss and avoid complications.

Photo: Piet Van Hasselt, CBM



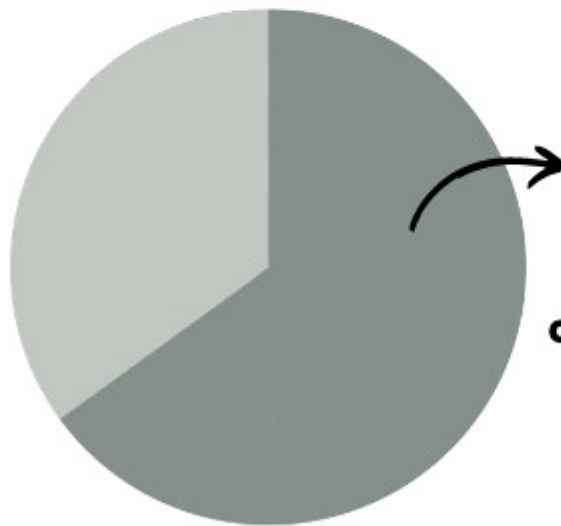




# AGE - RELATED HEARING LOSS

also known as **presbycusis**

This involves age-related degenerative changes to the inner ear structure, causing progressive bilateral hearing loss.

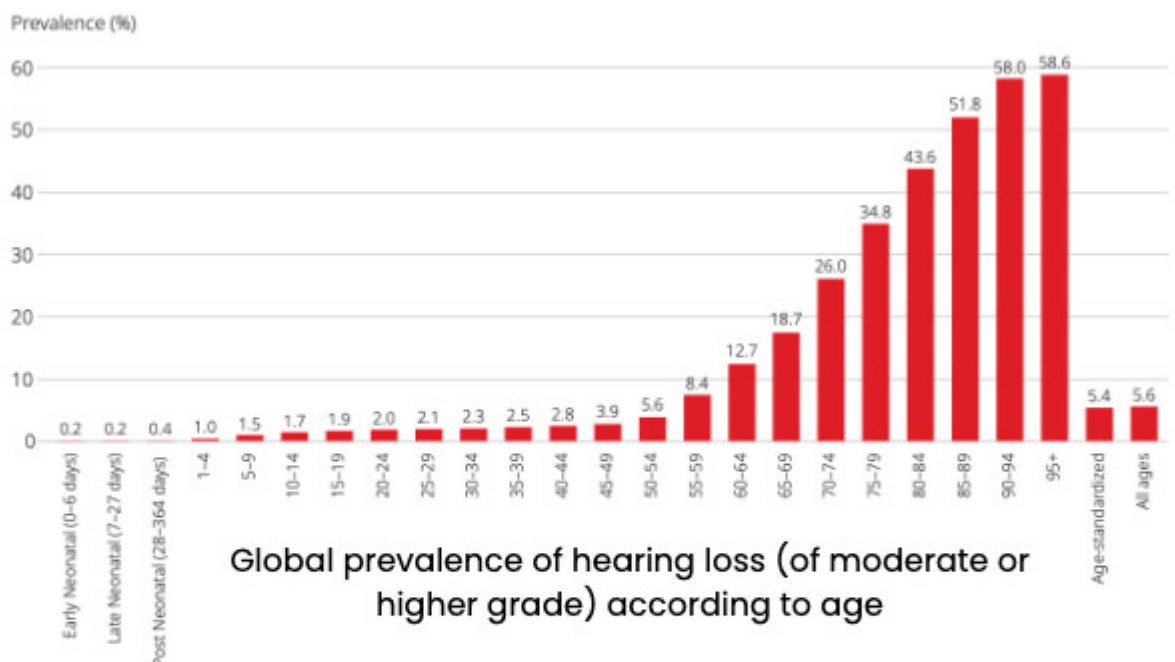


# 65%

of adults **above 60 years of age** experience **hearing loss**.

**25%** have disabling hearing loss

Across all WHO regions, the **prevalence of hearing loss increases exponentially with age**.



Global prevalence of hearing loss (of moderate or higher grade) according to age

Difficulties in communication due to hearing loss, especially in older adults, can significantly impact **quality of life**, and lead to **social isolation, loneliness**, and **early onset of dementia**.



# NOISE-INDUCED



# HEARING LOSS

Over **1 Billion**  
young people

are **at risk** of permanent **hearing loss** due to exposure to unsafe levels of sound in **leisure activities**



*Make Listening Safe*

personal  
audio devices



gaming



loud venues  
e.g. nightclubs



Noise - induced hearing  
loss is completely

**PREVENTABLE**

Loud sounds are also encountered in:

## Occupational Settings

This is a concern in all countries.

In the United States of America,  
more than **30 million workers**  
are exposed to hazardous noise

## Environmental Factors

Includes noise from:

- traffic
- home appliances
- industrial activity/construction

## Loud sounds cause irreversible damage

Prolonged or regular exposure to loud sounds puts children and adults at risk not only of hearing loss, but other noise-induced health problems, such as insomnia and cardiovascular illnesses.



## Maximum sound allowance

sound intensity

**80dB**

for

duration

**40 HOURS  
PER WEEK**



# WHY SHOULD YOU CARE?

The prevalence of hearing loss is rising. Unaddressed hearing loss has adverse impacts on all areas of life, including:



## SPEECH AND LANGUAGE

**Delayed speech and language development.** This hinders learning and communication.



## COGNITION

**Delayed cognitive development** in children. Hearing loss is also the largest potentially modifiable **risk factor for age-related dementia.**



## SOCIAL ISOLATION & MENTAL HEALTH

**Social withdrawal** or feelings like **embarrassment.** This leads to **social isolation.** Hearing loss is associated with higher rates of depression.



## EDUCATION

**Reduced school performance,** greater risk of **dropping out of school** and **lower likelihood of applying for higher education.**



## ECONOMY

Hearing loss affects the social and economic development of countries. **Financial costs** arise from **exclusion from communication, education, and employment.**

## PUBLIC HEALTH IMPACT



Each year, nearly **\$1 trillion** are lost due to unaddressed hearing loss

HEALTH  
● 313.6

EDUCATION  
● 26.8

PRODUCTIVITY  
● 182.4



INTANGIBLE  
● 456.5

Illustration of the combined direct, indirect and intangible costs of unaddressed moderate or higher degrees of hearing loss (in billion dollars)



## CASE STUDY

Patrick is a young man from a remote area of Uganda. Born deaf and with no schools for deaf children in his area, he spent most of his childhood without knowledge of sign language and thus without any communication. Most of Patrick's day was spent alone in his hut, isolated from the world. What impact do you think this could have on his mental health, integration into society, and education?

Sign language has had an important positive impact on the life of Patrick. When he was 15 years old, it was organised for Patrick to undertake his first sign language class. These classes transformed Patrick's life. Imagine what would have happened if this was not organized?

[Source: BBC Channel 4, Unreported World]



# HOW CAN WE TACKLE HEARING LOSS?

## PREVENTION

Many causes of hearing loss are preventable through public health measures, including:

- Immunization;
- Effective antenatal and prenatal care;
- Avoiding the use of ototoxic medicines, unless prescribed by a qualified physician and properly monitored;
- Healthy ear and hearing care habits;
- Effective treatment for both acute and chronic ear conditions;
- Reducing exposure (both occupational and recreational) to loud sounds and noise.

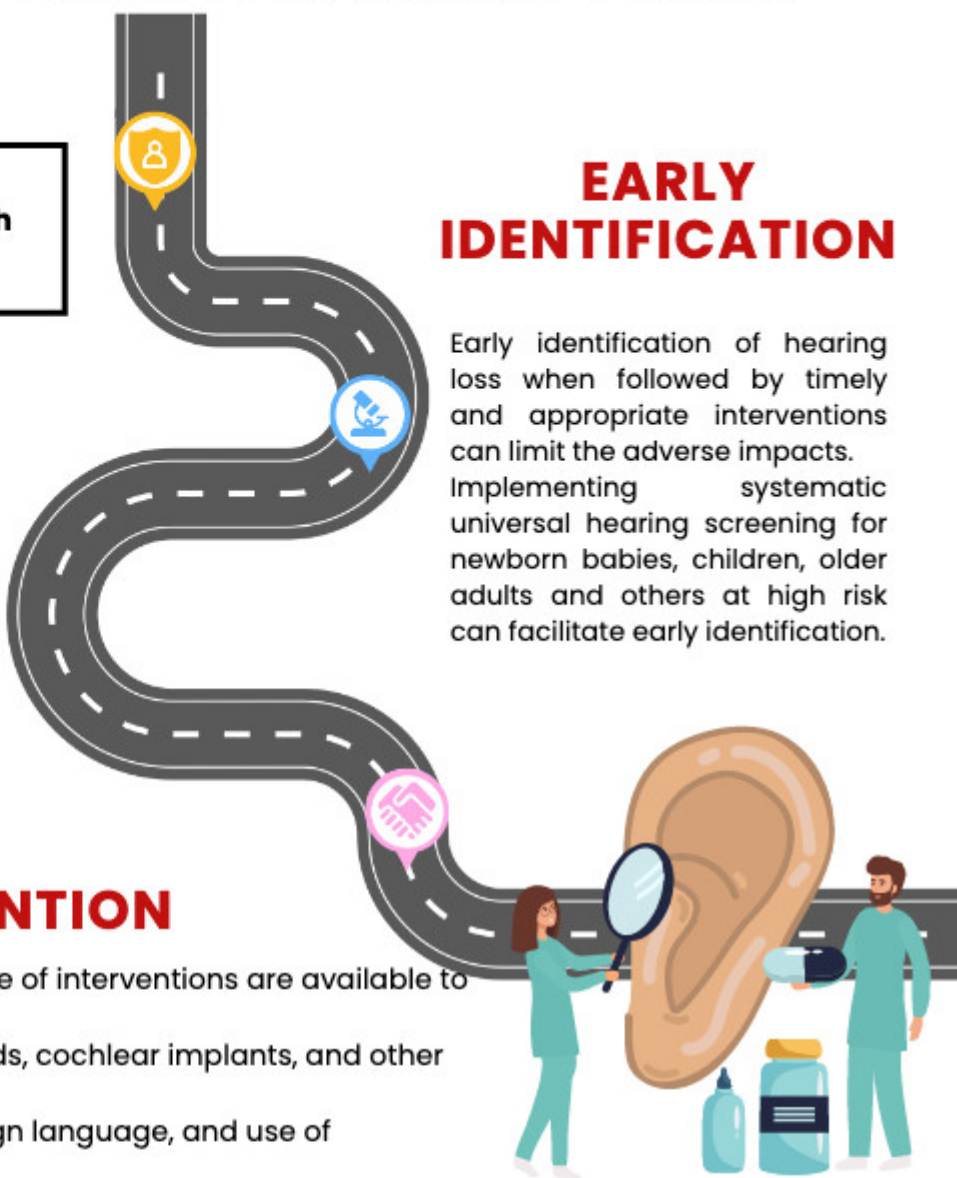
## EARLY IDENTIFICATION

Early identification of hearing loss when followed by timely and appropriate interventions can limit the adverse impacts. Implementing systematic universal hearing screening for newborn babies, children, older adults and others at high risk can facilitate early identification.

## EARLY INTERVENTION

Once hearing loss has occurred, a range of interventions are available to maximize functioning and inclusion:

- Hearing devices, such as hearing aids, cochlear implants, and other assistive technologies;
- Development of lip-reading skills, sign language, and use of captioning.



## CASE STUDY

One night while Paolo (name changed) was sleeping in his mother's arms, his father picked up a brass bell and shook it continuously. Paolo did not budge. That's when his parents' knew something was not right. The next week a specialist at the children's hospital diagnosed Paolo's severe-to-profound bilateral hearing loss.

Paolo was enrolled in a programme where he is learning to listen and speak. He received his first pair of hearing aids; and started walking: all by the time he was 10 months old. The curious little boy loved to listen and spent hours with his big sister, colouring and talking. Paolo was integrated into mainstream school and graduated as an honour student. He is now in his third year of a mechanical engineering programme. Paolo is an inspiration to all who have met him and he is proud to say that he continues to overcome any challenge set before him.

[Source: Anita Bernstein, M.Sc., LSLs, Canada]



# INEQUALITIES PERSIST: AN UNMET NEED



## KEY CHALLENGES MUST BE ADDRESSED

P

**olicies** for ear and hearing care are lacking in most countries

**eople** i.e. human resources including specialists and trained non-specialists are unavailable and unequally distributed

**erceptions** related to ear and hearing problem are often inaccurate and result from a stigmatizing mindset

**roducts and services** for ear and hearing care remain inaccessible and are not integrated within the health care systems





# THE ROLE OF WHO

**“To work with Member States and collaborators to make ear and hearing care accessible for all, as part of universal health coverage and through integration into primary health care”**

1. Maintain a **global database** to identify and share the size and impact of the problem.
2. Guide, assist, and **support Member States** to develop suitable programmes for ear and hearing care, integrated into the primary health care system of the country.
3. Provide evidence-based **technical resources/tools** and **guidance** for integrating ear and hearing care, and training health workforce
4. Develop and disseminate **guidelines** to address the major **preventable causes of hearing loss**.
5. **Raise awareness** about hearing loss and its causes, including prevention, identification, and management.



**Access all WHO resources**



**SCAN HERE**

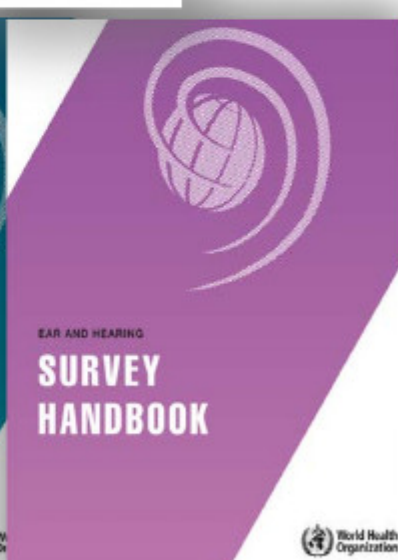
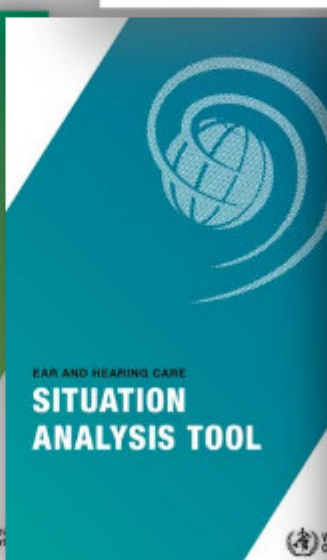
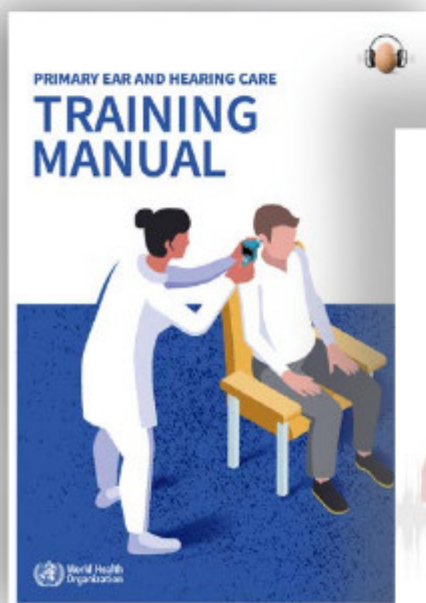




# TECHNICAL RESOURCES

for the planning, integration and monitoring, of  
ear and hearing care

**CHECK OUT THE LATEST DATA &  
EVIDENCE – BASED GUIDANCE ON  
THE PROVISION OF EHC**



# hearWHO app

Check your  
hearing!



Download the app



**the hearWHO app is a free WHO application, based on validated digits-in-noise technology.**

**Available in**  
**Chinese**  
**Dutch**  
**English**  
**Russian**  
**Spanish**  
**on iOS and Android**  
**platforms**

Also available as **hearWHOpro** for use by health workers to check the hearing of people in the community.

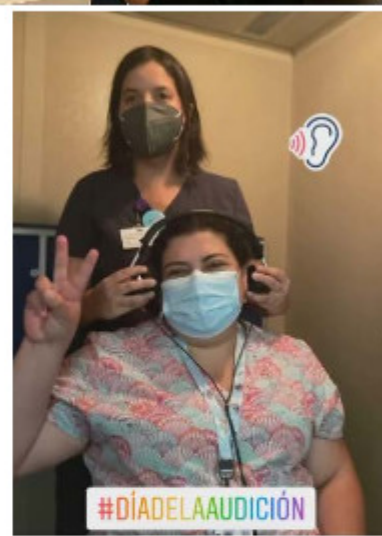
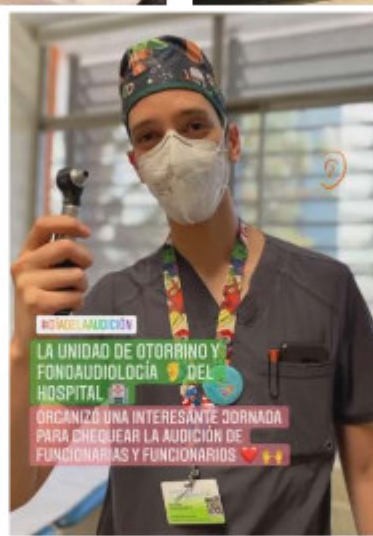
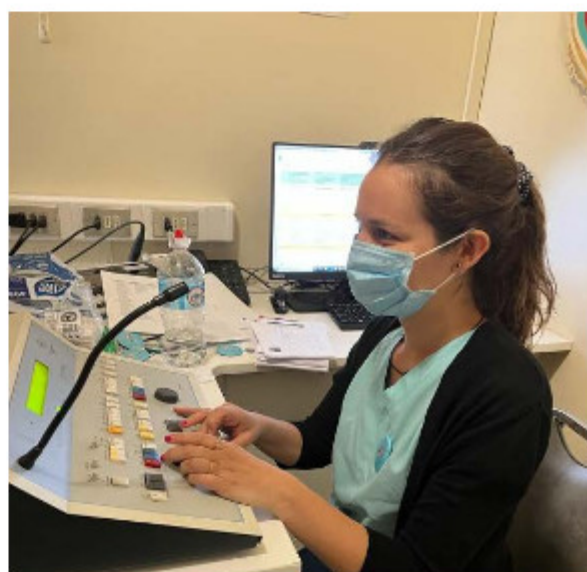


# WORLD HEARING DAY

## 3 MARCH

Each year, WHO develops a theme and evidence-based **advocacy materials** to share with collaborators across the world.

AIM: To raise awareness on **hearing loss** and **promote ear and hearing care** across the world.



Advocacy and awareness materials are translated into multiple languages and used to raise awareness on the subject by organizing activities and events.

Scan to learn more.





# MAKE LISTENING SAFE



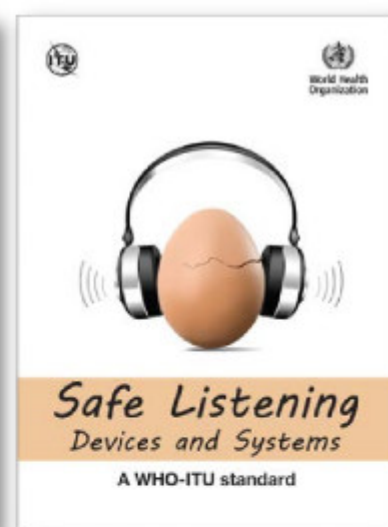
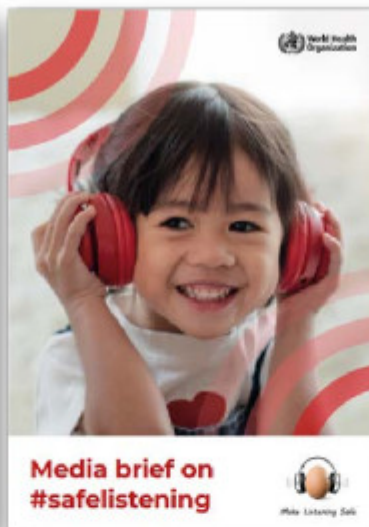
*Make Listening Safe*

The “Make listening safe” initiative aims to **prevent noise - induced hearing loss**.

Its goal is to realize a world where people of all ages can enjoy recreational listening without risk to their hearing through:

- Creating evidence-based standards.
- Raising awareness.
- Investing in research.

## SAFE LISTENING STANDARDS & AWARENESS RESOURCES



Access awareness resources: infographics, flyers, videos, social media materials & details of global standards.

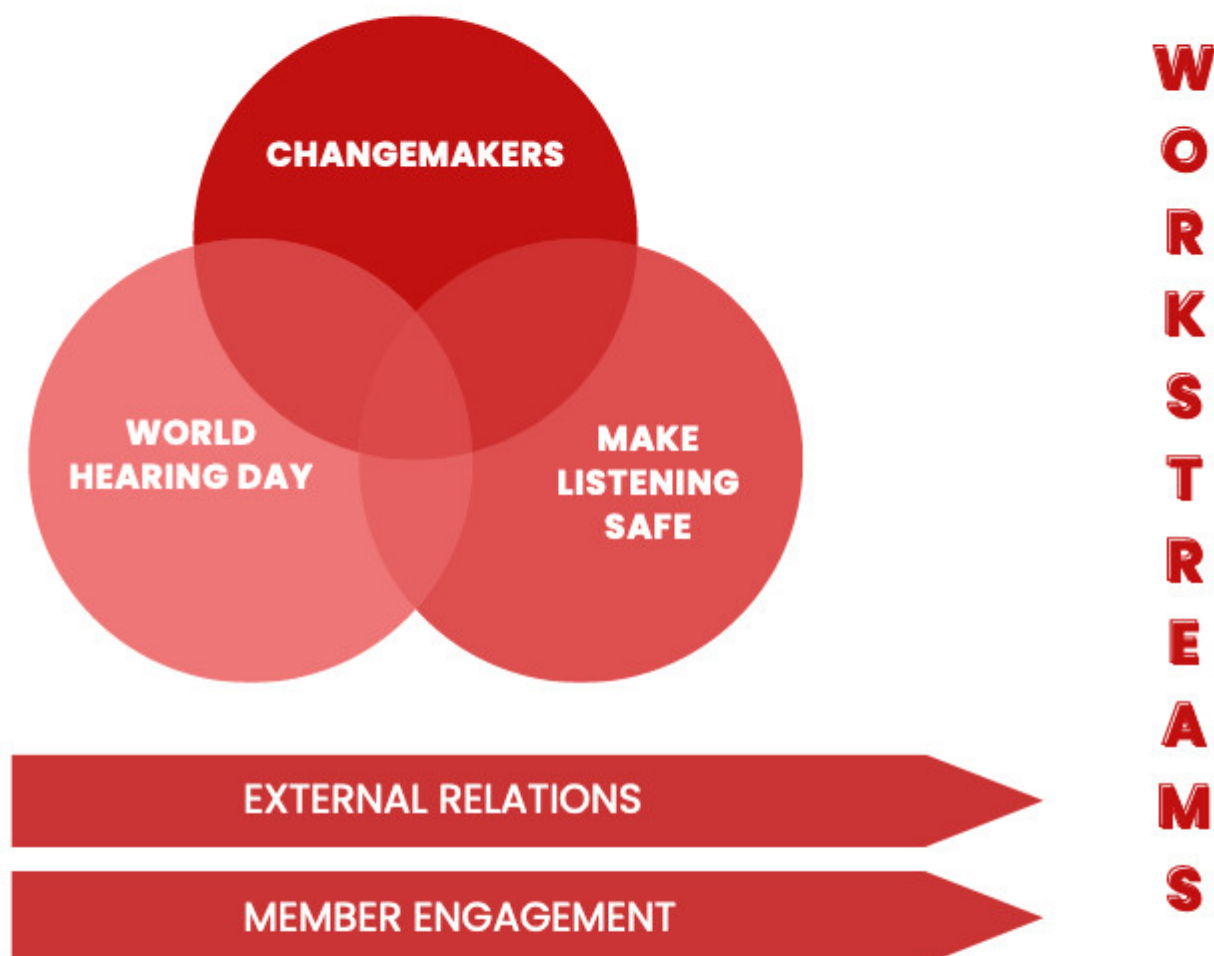
Visit: <https://www.who.int/activities/making-listening-safe>





# WORLD HEARING DAY

**A WHO-hosted global network of stakeholders  
advocating for prioritization of ear and hearing care**



## WHO CAN JOIN?

Governmental and nongovernmental organizations; including disabled people's organizations/user groups, charitable/service organizations, professional societies, parent groups, regional fora, private sector entities including international business associations, philanthropic foundations and academic institutions can apply for membership of the Forum.

Find out more:

<https://www.who.int/activities/promoting-world-hearing-forum>



**SCAN HERE**



**The Forum envisions  
a world in which no person experiences  
hearing loss due to preventable causes  
and those with hearing loss can achieve  
their full potential through early  
identification and appropriate  
management of their condition.**



