Cochlear Foundation: Policy advocacy and action for Global Hearing Health

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We help people hear and be heard.

We **empower** people to connect with others and live a full life.

We **transform** the way people understand and treat hearing loss.

We **innovate** and bring to market a range of implantable hearing solutions that deliver a lifetime of hearing outcomes.
Mission ‘help people hear and be heard’
Our Mission is local and global – people of all ages, all backgrounds, all societies, rich and poor.

Shared values & partnerships
All sector partnerships – professionals, advocacy organizations, governments, NGO’s, foundations - agree on activities and work together.

Cochlear support for hearing care professional development
Strategic support to improve access to hearing care e.g. a global shortage of hearing health professionals must be addressed world-wide.
Global burden of hearing loss is a motivator

- **466 million** adults and children have a disabling hearing loss.
  - Around half in South Asia and E Asia regions

- **432 million (93%)** are adults
- **34 million (7%)** are children
- **242 million males, 190 million females**
- One third of persons **65+** are affected by disabling hearing loss


Disabling hearing loss refers to hearing loss greater than 40 dB in the better hearing ear in adults (15 years or older) and greater than 30 dB in the better hearing ear in children (0 to 14 years).
## Prevalence of disabling hearing loss across the world

<table>
<thead>
<tr>
<th>Selected Regions</th>
<th>*DHL All ages</th>
<th>Both sexes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>millions</td>
<td>prevalence (%)</td>
</tr>
<tr>
<td>High-income</td>
<td>46.02</td>
<td>4.57</td>
</tr>
<tr>
<td>Central/Eastern Europe and Central Asia</td>
<td>34.57</td>
<td>8.36</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>49.66</td>
<td>4.55</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>16.55</td>
<td>3.17</td>
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<tr>
<td>South Asia</td>
<td>131.67</td>
<td>7.37</td>
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<tr>
<td>Asia Pacific</td>
<td>47.04</td>
<td>6.90</td>
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<tr>
<td>Latin America and Caribbean</td>
<td>40.19</td>
<td>6.18</td>
</tr>
<tr>
<td>East Asia</td>
<td>100.76</td>
<td>6.85</td>
</tr>
<tr>
<td>World</td>
<td>466.46</td>
<td>6.12</td>
</tr>
</tbody>
</table>

Prevalence of disabling hearing loss, in millions and as percentage of population.
Projected number of people with hearing loss in different world regions until 2050

The map shows the current and projected number of people with hearing loss in different regions. Projections show that the number of people with disabling hearing loss will increase in all regions.
Low to middle income countries (LIMCs)

- WHO data - approximately **7.5 million children** below 5 years have disabling (≥30 dBHL) hearing impairment. The majority (at least 80%) reside in LMICs.

- Annually, around 6% of 1,000 live births have sensorineural hearing loss in the first month of life in LMICs compared with 2% in high-income countries.

- In the absence of newborn screening, the age of detection is usually over 24 months - late for optimal outcomes, even with best therapeutic intervention.

- Reasons for low rate of detection in LIMC’s = lack of resources, lack of training, lack of risk based screening, poor screening environment.

Sources: WHO FACT SHEET 2018 and Olusanya B. Screening for neonatal deafness in resource-poor countries: challenges and solutions: Dovepress Open Access 2015
Ageing Population single biggest driver

World population

- Now – 7.5 billion
- 2050 – 10 billion and;
  - Number of people over 65 will double
  - Number of people over 80 will triple

Source: United Nations population data 2017
Hearing loss can no longer be ignored as a health priority. We know it affects a third of older people. Evidence reveals it will significantly impact individuals, health systems and society as people live longer.
World Health Assembly resolution 70.13, provides public health policy framework for ear care

The World Health Assembly resolution calls on every country to;

“Improve access to affordable, high-quality assistive hearing technologies and products, including hearing aids, cochlear implants and other assistive devices, as part of universal health coverage”

Plus – have programs for screening of babies, children and adults

Plus – have a ‘national action plan’ to prevent hearing loss and help those who have a hearing loss

Plus – have a campaign to raise awareness of importance of hearing

May ‘17: resolution agreed by 195 countries including Vietnam
The WHA resolution 70.13 urges all countries to implement screening programs for early identification of ear diseases and hearing loss in babies and young children.

According the WHO, more than 60% of hearing loss in children could be prevented.

This figure is higher in low- and middle-income countries (75%).

Countries with limited health resources face most challenges - government mandates, trained health workers, guidance & resources are key.

Numbers affected are highest in South E Asia, therefore most benefits gained here.

Newborn screening and benefits

- The consequences of untreated or late-treated infant hearing loss are deficits of language, social, emotional and diminished education development.
- Research demonstrates that children with hearing loss identified earlier and who receive early intervention have better outcomes than those with later detection and treatment.
- Recent large-scale, population based, longitudinal studies provide evidence for the positive long-term effects of universal NIHS programs for language and academic development of children and adolescents.
- The Australian Longitudinal Outcomes of Children with Hearing Impairment (LOCHI) study, Teresa Ching [31,32] demonstrated that...

✓ The earlier treatment with hearing aids or cochlear implants was started, the better the speech and development outcomes.

Source: International Journal of Newborn Screening 2019 Katrin Neumann, Shelly Chadha, George Tavartkiladze, Xingkuan Bu, Karl White
Does UNHS and early intervention improve outcomes? Yes!

Earlier fitting accounts for significant improvement in language outcomes at 5 years of age.

Earlier hearing aid fitting **and** earlier cochlear implantation significantly improve outcomes in the longer term.

At 5 years of age, average language scores for children fitted or implanted at 6 months of age were **significantly higher** than children implanted at 24 months.
The brain is developing, do not miss the train!

A baby's brain grows 80% in the first 18 months.

Source: http://www.talkwithmebaby.org/learn_the_skills
Policy advocacy priorities for Cochlear

✓ **Awareness**: of hearing loss as a major public health problem
✓ **Screening and early intervention**: newborn, children and adults
✓ **Children**: referral pathways to support early intervention, and bi-laterals
✓ **Adults**: all things access - awareness is low world-wide
✓ **Government resources**: for implantation, rehabilitation and speech therapy
✓ **Recognition of the evidence**: clinical and cost effectiveness of CI and implantable technologies and the way in which lives are transformed

PLUS

✓ **Support for WHO work program and WHA resolution 70.13**
Hear now. And always