

**Australian Senate  
Community Affairs Reference Committee  
Inquiry into Hearing Health in Australia**

*Submission from*

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Considering the importance of hearing health with regards to the effects to both the individual and the Australian community the general awareness of the possibility of significantly damaging hearing remains well below what is to be expected in a contemporary health conscious society. With this in mind I have addressed relevant points below headed in accordance with particular points of interest mentioned in the notification concerning the enquiry of 14<sup>th</sup> September, 2009.

*The extent, causes and costs of hearing impairment in Australia*

The extent, causes and costs of hearing impairment in Australia is well described in a report published by Access Economics (2006) where they estimated that financially hearing loss costs the Australian economy around \$11.75 billion in net terms or 1.4% of GDP (p 5). Wilson (2008) demonstrated that 37% of the adult population show evidence of noise damage in their pure tone audiograms. These figures reveal that there is a significant social and cost burden for the Australian population. This cause of hearing loss is completely preventable. Hearing loss is further exacerbated by the effects of an ageing population where the expectation of increased life-span and associated presbycusis (hearing loss with respect to age) is added to any prior hearing loss.

Hearing loss due to noise exposure is better referred to as noise injury as this nomenclature more appropriately conveys the sense that there is physical damage done to the mechanism of hearing (Williams: 2007). This exposure can arise from noise at work and also during non-work and leisure activities (Williams: 2008).

Physically as far as the hearing mechanism of the ear is concerned there is no difference between noise and sound. The difference between noise and sound being one of individual or group opinion the difference being conventionally accepted as noise is unwanted sound (Standards Australia: 2005). This lack of difference in effect is important as the concept of damaging noise at work has been discussed for many years while non-work and leisure noise has been ignored. The effect of leisure noise on hearing appears to becoming more significant over recent years (Williams: 2008).

The recent incidence of noise injury due to occupational noise exposure has apparently been slowly decreasing and beginning to level off after a sharp rise in hearing loss claims in the mid 1990s. The incidence figures for Australia come from the various workplace compensation authorities and are dominated by the largest source of incidence from WorkCover NSW. The decline in Australian incidence figures coincides with the introduction in late 1995 in NSW of a percentage loss of hearing threshold (6%) below which a compensation claim may not be lodged. Up until that time a claim could be made for a hearing loss of any magnitude provided it was work related. The introduction of such fences as there are now in most jurisdictions in effect hides the real incidence of hearing loss in the community. Better monitoring and recording of health statistics would allow clear incidence numbers to be available.

However, even without exact knowledge of the incidence of hearing impairment in Australia all estimates indicate that hearing loss and particularly that due to noise exposure affects many people in Australia and is entirely preventable.

### *The implications of hearing impairment for individuals and the community*

The implications of hearing impairment for the future of the Australian community has significant social and economic implication as the age profile of the population includes greater numbers of individuals living to an older age. Any physical or mental impairment in conjunction with old age has the potential to have a negative effect on the quality of life (Wilson: 1997). Hearing loss is no exception. The cost of a hearing loss is significant both socially and financially for the individual.

Socially a hearing loss without effective rehabilitation means an inability to effectively participate in community and workplace activities after the loss develops into a handicap. Most individuals do not like to acknowledge they suffer from hearing loss as it has implications on ageing and a certain feeling of 'incompetence' (Noble: 2009). This behaviour restricts activities and increases the isolation with respect to their peers, family, friends and interaction with society in general. At work an unacknowledged hearing loss coupled with inadequate rehabilitation may result in an individual not reaching their full workplace potential, a situation detrimental to both the workplace and the individual.

The prevention of any hearing impairment will have a significant effect in the lives of those individuals and the community.

### *The adequacy of current hearing health and research programs, including education and awareness programs*

A recent literature survey conducted by the National Acoustic Laboratories found that there are currently no large scale, on-going general hearing health education or awareness programs in Australia. There are many diverse workplace oriented programmes but in general these programmes tend to be short lived and not particularly successful (Verbeek et al: 2009), but in the main they are only directed toward the workplace and do not include non-work and/or leisure noise exposure.

While there have been several one-off school oriented educational programs designed to raise the awareness of the need for good hearing health (eg Burnley: 1993) these programs have usually been produced by members of consumer organisations with the intention of increasing individual and community awareness; however, none have been through a formal evaluation process to assess their efficacy. It is desirable that any program produced be well developed, effective, sustainable and cover whole of life noise exposure and not simply oriented toward the workplace.

The National Acoustic Laboratories is currently undertaking the development of appropriate awareness and education programmes tailored to fit into school curricula as part of on going health, science and social science education. Currently the outcomes include the development and testing of the program but not implementation on the larger scale.

### *Summary*

Whatever the total incidence and cost there is no doubt that hearing loss due to noise injury is a significant preventable health, economic and social problem in Australia.

The future hearing health of Australians is reliant on positive action by individuals and the community. In the same manner that early awareness is drawn to the future damaging effects of excessive UV-

radiation so exposure to potentially damaging noise must be highlighted with the consistent message of "Damage your hearing and ... It Won't Come Back".

## References

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