

# Hearing Loss in Adults

Information for Glencoe members to consider.

by Dr. Carrie Scarff, PhD Audiologist

Recent research from multiple longitudinal aging studies shows that there is a higher than previously expected prevalence of hearing loss in Canada.

Did you know that approximately 18% of the adult population suffers from hearing loss and 47% of people over 60 have a mild hearing loss in at least one ear (2015)?

Even though these numbers are high, what's more surprising, perhaps, is that 75% of individuals with hearing loss do nothing about it. One of the reasons is that hearing loss in adults is often gradual and individuals don't realize how much trouble they're having. It is often friends and family or caregivers who bring it to our attention that we're starting to have hearing difficulties. Other factors have included stigma around the issue of hearing loss and hearing aids. On average, it takes between seven and 10 years for someone to realize they have some hearing loss before they take steps to address it, as many who have hearing loss are in denial. Finally, many people are concerned about the potential financial cost of getting help, should they require hearing aids. Fortunately for Canadians' hearing health, all of this is changing. Older adults, active seniors and health-conscious patients are more concerned about living their lives to the fullest in work, recreation and with their families, and are excited to use

the advanced technologies available to help them hear better. All patients, including seniors, are embracing technology more quickly than ever before.

Why do something about your hearing loss? We know from research that if the auditory portion of the brain is left under-stimulated for a significant period (approximately four and a half years), as is the case with untreated hearing loss, there is evidence that the gray matter atrophies significantly. Therefore, even if we provide the proper sounds to the individual, after a certain point in time, this will no longer help because there are fewer cells to receive the auditory input correctly (Lin et al., 2014, John Hopkins Medical Centre). Very recent research published in the Lancet in July 2017 reports that hearing loss in middle age is one of the nine key risk factors for dementia, further supporting the need to treat hearing loss if it is present.

Fortunately, it's not all bad news. Recently published research on 3,600 seniors over a 25-year period showed that individuals who wore hearing aids, if required, had reduced cognitive decline as compared to individuals who did not wear hearing aids when they had hearing loss (Journal of the Geriatric Society of America, October 2015). This supports the premise that overall brain health is protected by hearing devices if required. Testing was done on the MMSE which evaluated executive function, memory and vocabulary among other factors of cognitive skills (Amieva et al., 2015).

The most common type of hearing loss in adults, called 'sensorineural' hearing loss, is due to the natural wear and tear of hair cells in the inner ear from aging. These cells deteriorate over time and cannot be repaired. The most effective type of rehabilitative treatment for this 'sensorineural' hearing loss is hearing aids. Hearing aids can be very effective, although it's important to understand that they're only able to improve the sound being delivered to the ear. The brain is always required to interpret the sounds. Therefore, some people have more difficulty than others adapting to hearing aids and hearing effectively with them. The sooner the brain is actively involved again (in interpreting sound via hearing devices), the better the outcome. Additionally, there are some situations that are more challenging for hearing aids to function, including very noisy backgrounds where speech is present.

Although hearing aids for permanent hearing loss are an important part of the hearing loss treatment process, they are only one part. If you or your loved one has hearing loss, try to learn as much as you can about it. Current resources are available at [www.audiologyinnovations.ca](http://www.audiologyinnovations.ca). There are simple techniques that can help you hear better in different environments. They include watching what people say (known as lip-reading or speechreading), asking your communication partner to get your attention before they speak to you, getting closer to the sound source and reducing surrounding distracting noises from the TV or radio for example. There is exciting new technology that works through Bluetooth that are very capable at getting sound sent from the sound source of interest (like your TV or iPad, or spouse across the room for example) directly to your ears.

Did you know that all individuals over age 30, even those with normal hearing, have more difficulty hearing in a noisy situation? That's because our brain has more difficulty filtering out background noise after age 30. There's a well-researched training program to improve listening skills if you have a) hearing loss, or, b) difficulties listening while there's background noise. The LACE (Listening and Communication Enhancement) program focuses on training the auditory part of your brain to recognize the initial part of words more quickly. Research from Northwestern University shows that there is a quicker electrical response in the brain to auditory stimuli after completing this program. A simple and effective test is also available to determine how severe your listening in noise impairment is (if you suffer one). The test can tell you whether this program would be helpful to you.

## Some common signs and symptoms of hearing loss:

- More difficulty hearing women's and children's voices
- Turning up the TV louder than friends or family
- Difficulty hearing in a noisy place
- Withdrawing from social activities where it is difficult to hear
- Hearing people speaking but not understanding what they say
- Asking people to repeat themselves frequently
- Feeling that people mumble all the time
- Frequent ringing or buzzing in the ears
- Talking loudly or always talking over others

If you or someone you care about experiences two or more of these symptoms frequently, or if you are 60+ and have never had one, the research supports having a hearing test.

If a family member has hearing loss, read the information under "for family members" at [audiologyinnovations.ca](http://audiologyinnovations.ca). You'll learn more about hearing loss and discover tips for communicating effectively with the hearing-impaired. There's also a "hearing loss simulator" to find out what it's like to listen to the world with hearing impairment.

Finally, there's a free online hearing screening test that can be used with headphones or earbuds available at [www.audiologyinnovations.ca/escreener](http://www.audiologyinnovations.ca/escreener) to get a quick idea of your own hearing levels. Remember, if you experience hearing loss, don't delay

in seeking help. There are multiple reasons to receive treatment, including brain health, improved relationships with friends and family and being able to experience the activities you enjoy without missing out on what's being said. There are numerous hearing devices available to help you at pricing for every budget, as well as government and non-profit programs geared to different income levels. ●

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