



UNDERSTANDING HEARING LOSS

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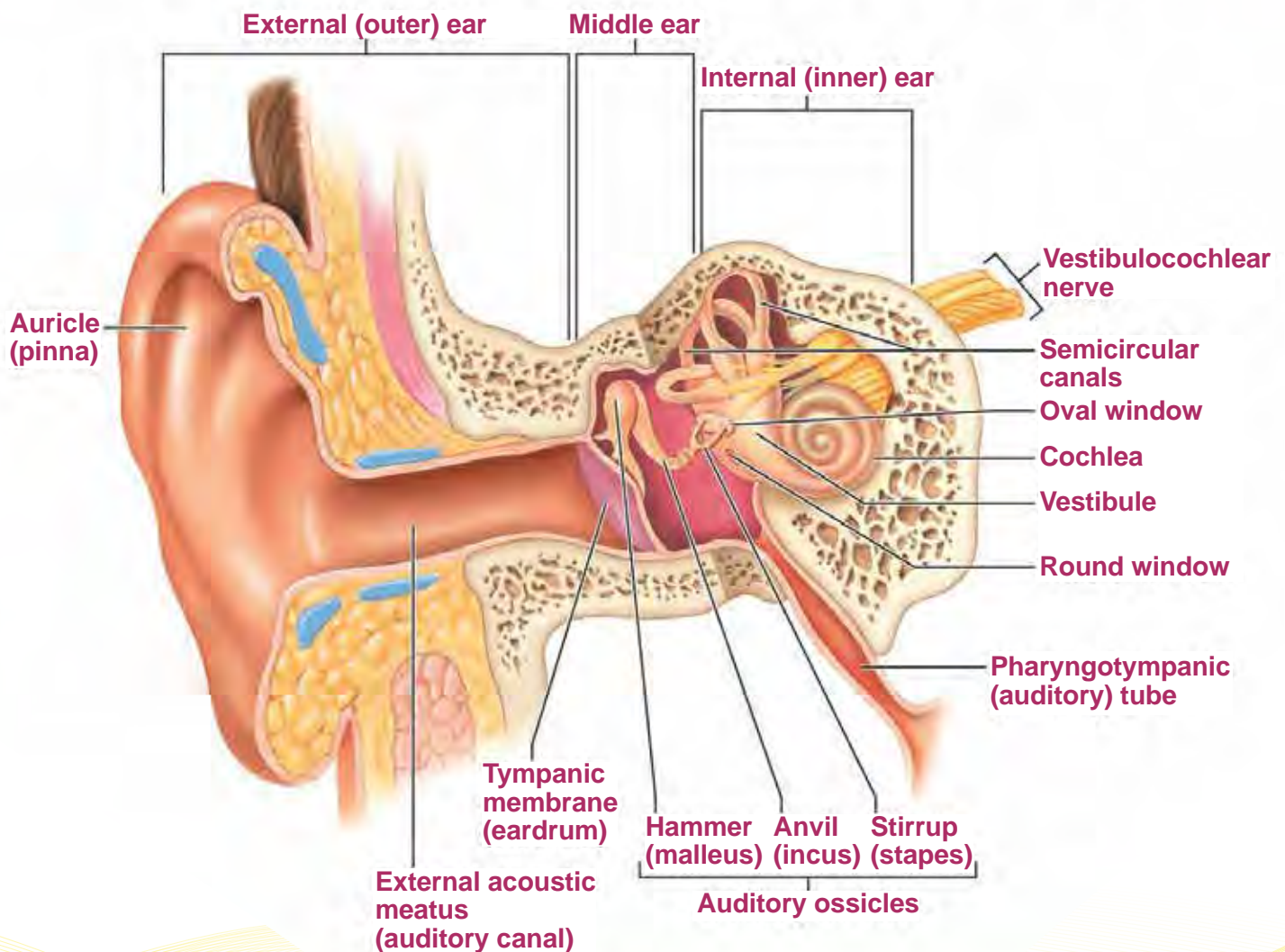
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Hearing loss is a serious problem that affects over three million Canadians, particularly seniors. It is the third most prevalent health condition affecting older Canadians, with one in three persons 65 and older being affected. The incidence of hearing impairment increases with each decade of life. While hearing loss can occur at any stage of life and there are many different causes of hearing loss, the most common causes are aging and noise exposure.

A brief summary of how the ear works will help us understand hearing loss. Basically, our ear takes sound waves and changes them into messages that the brain understands as speech. We have

three parts to our ear (see diagram). The outer ear consists of the pinna and ear canal, which funnels sound waves toward the middle ear. The middle ear is an air-filled space and consists of the eardrum and three tiny bones: the hammer, anvil and stapes. When sound waves strike the eardrum, the eardrum and the tiny ear bones vibrate and transmit these vibrations to the inner ear.

The inner ear (or cochlea) is a snail-shaped organ filled with fluid. When vibrations strike the inner ear, the fluid in the cochlea is set into motion. Microscopic hair cells in the inner ear generate nerve impulses which are carried from the cochlea to the brain via the auditory nerve.



With aging, gradual deterioration of the hair cells in the inner ear causes permanent hearing loss. Presbycusis is the medical term for this condition. Some symptoms of presbycusis are:

- You may hear but not always understand what a person is saying.
- You may mishear and confuse words, particularly consonants, (e.g. deaf/debt/depth).
- You may notice that you hear better face-to-face in a quiet place, but not when the person is in another room, or not looking at you.
- You may feel the need to turn up the volume of the TV and radio.
- You may have a great deal of difficulty hearing when there is background noise, or in a reverberant room (such as a large hall or a gym)

Inner-ear hearing loss is referred to as sensorineural hearing loss and with this type of loss there is a loss of speech clarity and also volume. While hearing aids and technology help a great deal, they cannot restore hearing to normal.

If you are noticing difficulty hearing, it is advisable to see your doctor and also arrange for a hearing test, or audiogram, without delay. You must also consult with an ear, nose and throat doctor (ENT). Prompt intervention is extremely important because hearing loss has many negative impacts on the person and their communication partners. Communication breakdowns and misunderstandings can cause strain and frustration in interpersonal relationships. People who develop hearing loss may experience negative personality changes. For example, they may become withdrawn, negative, sad or angry. There can be depression and social isolation as people stop activities they once enjoyed because they do not hear well. Untreated hearing loss in seniors has been associated with health risks such as dementia and a greater risk of falling.

On a positive note, there are more solutions and help available for people with hearing loss than ever before. Hearing aids and assistive technology have improved dramatically in the past decade. Medicare may cover the cost of one hearing aid. There is also equipment available, some covered by Medicare, to help with hearing on the phone, TV, etc. Alerting systems will inform you if there is a fire, a phone ringing, or someone at the door. There are even trained hearing ear dogs. Hearing aid accessories and room sound systems improve hearing in small and large groups. There is no perfect solution but there is a great deal of information, assistance, and technology available.

The steps to take to obtain this help are as follows:

- Discuss your hearing difficulties with your doctor, who will refer you to an ear, nose and throat specialist (ENT).
- The ENT doctor deals with the medical aspects of hearing loss and will refer you to an audiologist to assess your hearing.
- If you require a hearing aid, a hearing aid acoustician is the next professional you will consult.
- Rehabilitation centres, such as the LETHBRIDGE-LAYTON-MACKAY Rehabilitation Centre, have technical aid services and can assist you with other helpful technology.
- At each step of the way, it is important to ask questions and become as informed as possible about your hearing loss and what can be done about it. It is also important to keep copies of your documents, particularly your audiogram.
- For more information on available services, please consult <https://hearhear.org/other-resources/>

Rehabilitation centres and organizations like HEAR QUEBEC offer information, programs and services to improve quality of life and optimize communication skills. For example, speechreading and communication strategy training sessions offer invaluable help and give hard of hearing people an opportunity to share solutions, information and challenges with each other.