

A background image of a waterfall cascading down rocks, with water splashing and creating mist. The image is partially obscured by the text on the left.

# Frequently Asked Questions About **Hearing Loss**

## **WHAT TYPES AND CAUSES OF HEARING LOSS ARE THERE?**

Many terms are used for hearing loss. The most frequently used terms are hard of hearing and late deafened.

Hard of hearing describes a person with a mild to profound hearing loss. The person usually uses hearing aids to allow them to use their residual hearing to communicate with others and may or may not use other assistive listening devices such as an FM system. Other devices they may find helpful are speech reading, CART, or note-takers (for students).

A late deafened person identifies with the hearing society. They may have lost their hearing gradually or suddenly, and are unable to understand speech without visual aids such as speech-reading, sign language, or CART (Computer Aided Real-time Transcription). The loss of hearing is after speech and language (post-lingual) have been developed and usually after 13 years of age. The individual will use speech when communicating with others.

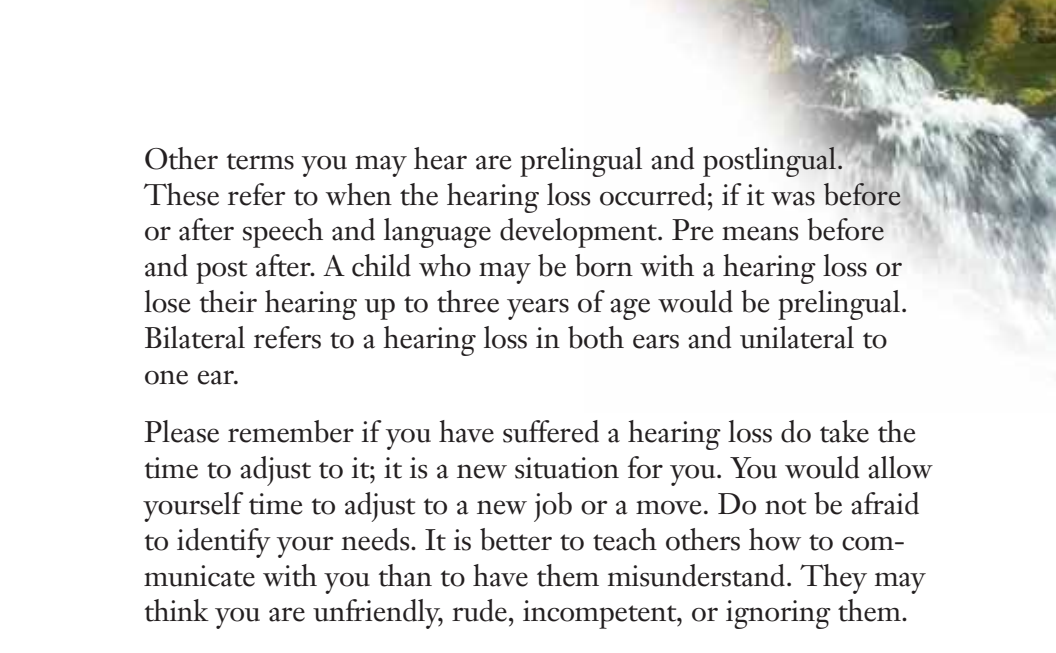
Hearing loss can be conductive, sensorineural, mixed, or central. A conductive hearing loss occurs in the outer and/or middle ear. It may be caused by ear wax blockage, a punctured eardrum, heredity, birth defects, or an ear infection. This type of hearing loss may be treated by medicine or surgery. Sensorineural hearing loss is caused by damage to the inner ear (cochlear). It is also called nerve damage and is irreversible. Hearing aid use is the

most common mode of treatment. Cochlear implants are helpful for this type hearing loss but only if it is a severe or profound loss. The damage to the inner ear can be as a result of aging, viral and bacterial infections such as chicken pox or a flu, heredity, medication, loud noise, tumours, fluid backup, and trauma caused by a head injury. A combination of conductive and sensorineural hearing loss is called mixed hearing loss. Central hearing loss occurs when there is nerve damage in the brain or the brain pathways.

The amount of hearing loss is defined as a mild, moderate, severe or profound loss and is identified by the decibel (dB) loss. A mild loss is 25 - 40 dB, moderate 41 - 55 dB, moderate severe 56 - 70 dB, severe 71 - 90 dB, and profound 91+ dB. An individual with a mild hearing loss has difficulty hearing soft sounds and a far-away speaker; a moderate loss can lead to misunderstanding of conversational speech if the speaker is more than 5 feet away or the speaker is close but in a noisy environment such as a public area or classroom. For someone with a moderate severe loss the speaker must be loud to be understood and any group discussion will be hard to understand and a severe loss the speaker should be no further than one foot away. With a profound loss may result in absolute silence or only loud sounds may be heard, such as a chain saw or jet. At this level of loss the person is very dependent on visual clues and even vibrations.

Many people have a hard time understanding hearing loss because sometimes the person will hear sounds. An example would be a phone ringing. - if the person is 2 - 3 feet away they hear the phone ring but not if they are 10 feet away or if there is a sudden or constant loud noise. This can be interpreted that the person is ignoring the sound when in fact they did not hear it. A person health can also affect what they hear. If you are congested due to a sinus cold or flu you will hear less, this can increase the level of hearing loss temporarily.





Other terms you may hear are prelingual and postlingual. These refer to when the hearing loss occurred; if it was before or after speech and language development. Pre means before and post after. A child who may be born with a hearing loss or lose their hearing up to three years of age would be prelingual. Bilateral refers to a hearing loss in both ears and unilateral to one ear.

Please remember if you have suffered a hearing loss do take the time to adjust to it; it is a new situation for you. You would allow yourself time to adjust to a new job or a move. Do not be afraid to identify your needs. It is better to teach others how to communicate with you than to have them misunderstand. They may think you are unfriendly, rude, incompetent, or ignoring them.

## **HOW COMMON IS HEARING LOSS?**

One out of ten Canadians has a hearing loss including 6 out of 1000 children. Of these six, nine out of ten are born to hearing parents. It is a hidden disability that has many causes and each hearing loss is unique to the individual. Unfortunately, society can not treat them all the same because people will rarely (if ever) have the same type, level, and range of hearing loss including their coping skills and age of loss.

## **SOME COMMON PROBLEMS WITH A HEARING AID**

If your hearing aids whistle you may want to go to your audiologist or hearing aid reactionary to obtain new ear moulds. They may no longer fit correctly or are breaking down due to age. You may not hear the sounds but others around you will.

If noises are distorted you may need adjustments to your hearing aid. This may or may not be done by your audiologist depending on the cause and type of hearing aid you have.

If you have a problem with your ears being itchy or feel hot consult your audiologist or hearing aid dispenser. They may have a cream that will help you with this problem.

It is critical you keep your hearing aids dry. Please contact your local audiologist or hearing aid reactionary for a compartment you can store your hearing aids in overnight that contains a substance to remove moisture.

Other items that are useful are battery testers, stethoscopes to allow others to check your hearing aids and to see if they are working correctly, air blowers, and syringes for cleaning your ear mould(s).

## **WHAT IS LIP-READING OR SPEECHREADING?**

Some people can read lips but this does not allow them to “hear” all the time. Most people need to be trained how to read sounds on the lips and it is difficult task. Very few people learn lip-reading on their own. A common myth is if you have a hearing loss you automatically can read lips. Many sounds look the same on the lips and a lot of guess work is needed to identify the sound or word said. If a person is standing with a light behind them and their face is in shadow their lips cannot be seen. Many other things interfere as well - moustaches and beard, hand gestures, turning away from the speaker or looking down, and chewing gum or food while talking are some examples.

## **WHAT IS AN AUDIOGRAM?**

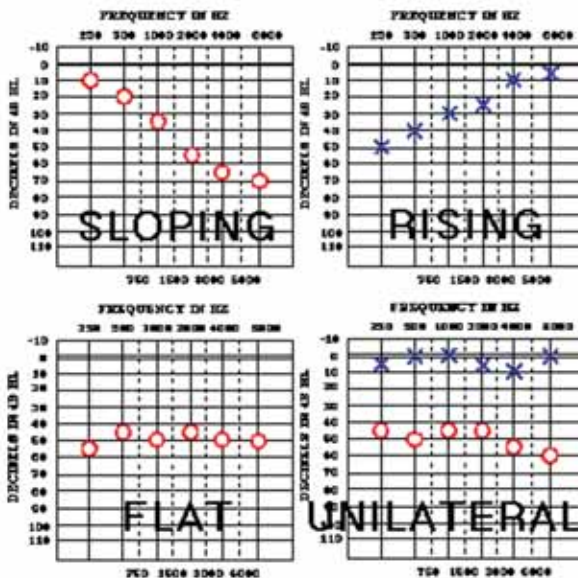
Every individual has a unique hearing loss which can be seen in their audiogram. An audiogram is the graphed sound test which is done in a sound booth. The frequency (low and high pitches) is plotted across the top and bottom and the decibel (noise) levels along the left and right sides. The later also refers to the



range of normal levels and mild to profound loss. The low frequencies are the deeper sounds such as a man's voice and the d and g sounds and the high frequencies would be more comparable to a woman's voice, bird songs, and f, s, th, sh sounds. Some individuals have a loss at low frequencies and other at a higher frequency or it can vary throughout the audiogram. Hearing loss is not only loudness of sound but clarity; understanding the sound you hear. Most often loss will start in the higher frequency and soft sounds.

An x or square mark is for the left ear. It may also be marked in blue ink. The right ear is marked with an o or a triangle and sometimes in red ink. Other marks you may see on an audiogram are < > or [ ]. These are used when sound detected in the inner ear is being measured by bone vibrations (the skull). This allows the audiologist to bypass sound conducted by air and heard by the outer and middle ear.

Example of Audiogram below:



## HOW DOES A HEARING AID HELP?

A hearing aid amplifies sound but does not correct the sound that is muffled or you have difficulty understanding. If you can hear the sound at a louder decibel it will allow you to distinguish the sound. Your audiologist/hearing aid reactionary will help fit you with the best model for your type of hearing loss. There is an adjustment period which your audiologist/hearing aid reactionary will also be of invaluable help. Do not be discouraged if it seems to take a long time adjusting to your hearing aid(s). If you have a hearing loss in both ears and it is recommended you purchase one for each ear do consider it.

Depending on the type of hearing aid you use will determine the type of ear mold you have. There are behind the ear, in the ear, in the canal, and completely in the canal models of hearing aids. Some hearing aids are the ear mold and others such as a behind the ear model have separate ear moulds. Depending on your style you can get ear moulds and the hearing aid covers in various colours - red, purple, blue, green, variegated colours - it is totally up to you. There is even jewellery available for behind the ear models. This may lead to interesting conversations and certainly no one can ignore you hearing loss. What an excellent way to allow you to teach others how to make it easier to converse with you!

## WHAT IS AN ASSISTIVE LISTENING DEVICE AND WHAT KINDS ARE AVAILABLE?

Assistive Listening Devices (ALDs) assist persons with a hearing loss in their daily lives. There are a number of devices. There are systems that can be used with special receivers and/or hearing aids. Some commonly used systems are:

- **Frequency Modulation (FM) Systems:** An assistive listening device (ALD) that functions as a mini-radio station on a





broadcast frequency that brings a speaker's voice directly into the user's headset

- **Infrared (IF) Systems:** Similar to the FM System, but instead of radio frequency, IR uses invisible light to transmit sounds, requiring an unobstructed path between the source and the receiver, or
- **Audio Loop (AL) Systems:** An audio (induction) loop is a wire loop (or thin loop pad) attached to an amplifier. It creates a magnetic field that broadcasts sound, in pure, undistorted form, directly to people who are within the loop and have a hearing aid containing a telecoil. The T-switch on the hearing aid turns this feature on.
- **FMs and RearWindow Captioning (RWC)** are also used in movie theatres. Contact your local theatres and places of worship to inquire if they have any of these systems in place.

**Devices for Residential Use:** ALDs can also be used to amplify sounds from televisions, radios, stereos, etc. FM systems can be individual or for use with a number of people. With the individual systems the receivers are hooked up to the persons hearing aids and the transmitter hooked up to a microphone which may be placed on a table in a small group setting or worn by the speaker such as a teacher. This particular system may be corded or cordless. They may also have headphones for individuals with a mild hearing loss. There are also free field systems which have speakers placed in strategic locations in a room to allow for use without hearing aids or headphones. Please speak to your audiologist for the system best suited for you.

**Telephone Devices** are available to assist telephone communication such as a hearing aid with a T-switch (which emits an electromagnetic field making it compatible to some telephones) and a variety of assistive listening devices, volume amplifiers, ringer amplifiers, call display and TTY's. A TTY or TTY compatible device allows users to communicate over a telephone line, using

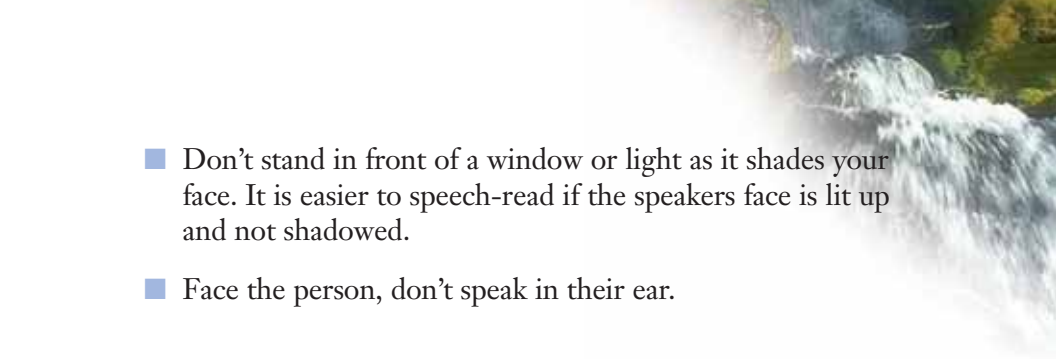
text. A special telephone operator assists with communication with hearing people.

**Signalling or Alerting Devices** are available to indicate the telephone, doorbell, alarm clock, smoke alarm, and other loud sounds in the home or office by changing the auditory signal to visual or vibratory signals. Vibrating pagers, cell phones and even watches are also available. Please contact your audiologist for availability.

## TIPS FOR COMMUNICATING WITH A PERSON WHO HAS A HEARING LOSS

- Do speak clearly. Speak in a normal conversation volume and enunciate clearly and without exaggeration.
- Pace your speech and pauses normally. It is difficult to follow rapid or slow speech.
- Do not shout, speak slowly, or emphasize your mouth movements. This makes it harder to understand what is being said. Shouting actually distorts sound and is annoying. No one likes to be shouted at.
- Rephrase what was said. This may present more or better clues to understand what is being said.
- Spell names and use word to help identify a letter. Example: B as in Bob and P as in Peter.
- Use body language, your expression give many clues whether the message was exciting, angry, boring, and even loving.
- Use eye contact or a light touch to get their attention before speaking.
- If possible have a conversation in a quieter environment. Background noise is very hard to filter out.



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- Don't stand in front of a window or light as it shades your face. It is easier to speech-read if the speaker's face is lit up and not shadowed.
  - Face the person, don't speak in their ear.

## WHAT IS TINNITUS?

Tinnitus is a ringing or buzzing in the ears according to the Oxford Dictionary. This is in the absence of external sounds that could account for the sounds heard. This condition may be intermittent or constant, have one or more tones, and vary in volume. It does not always include hearing loss and it is not a disease. If you have “ringing in your ears” please consult your family doctor or talk to your audiologist.

## WHAT IS A COCHLEAR IMPLANT?

A cochlear implant is an electronic prosthesis that stimulates the auditory nerve to allow the sounds to be heard. The candidate must go through a testing process to see if they would benefit from this surgery. Usually the person has a severe or profound hearing loss and may or may not benefit from hearing aids.

For further information please visit: [www.chha.ca](http://www.chha.ca) or contact our local CHHA Branch at:

*\* We wish to thank the CHHA-Edmonton Branch and Scott Nero their Web Designer for permission to publish a re-written version of their web publication: “Frequently Asked Questions”.*