Canadian Audiologist

The Official Publication of the Canadian Academy of Audiology

HEARING LOSS, NO, BUT….!

Published January 21st, 2016

Alberto Behar, PEng

Let’s talk about noise sources that do not cause hearing loss, but are highly annoying and do make some of us very angry.

Modern living surrounds us with all kinds of noise- sounds that we suffer with in silence and brush aside as a necessary evil of our civilization.

My question today: Do we have to just ignore this situation? Don’t expect me to say what to do. I am just raising the red flag and waiting for suggestions.

Here are three of the offenders.

1. Movie Advertisements and Trailers

You decided to go to the movies to have a nice 2 hours of enjoyment. You went through the aggravation of parking, lining up for your ticket, you managed to get a nice seat not too far, not too close to the screen and you are ready for the fun, popcorn and all. And suddenly, all hell breaks loose: you are suddenly exposed to two unwanted (though not unexpected) aggressions:

advertisement that you didn’t ask for and SOME 100 + dB sound. Both of them simultaneously!

This is equivalent to the movie house treating you as if your hearing loss is at least 45 dB HL at 500 Hz and > 65 dB HL at higher frequencies and is offering to compensate for your loss by blowing your ears away. Is it because of a supposed hearing loss, or just to make it impossible to whisper sweet nothings to your date? Or perhaps, it is to show you the power of their sound system, being able to deliver enough energy as to fry a pair of eggs for your morning breakfast? The answer is anybody’s guess, but the fact of life is that the price to pay for the movie includes this 10–15 minutes insult to your ears...

The question to ask is, will we buy fewer goods if the advertisements are conveyed at a lower volume? Is the desire of purchasing this exceptional car that can go so smoothly over those hair splitting turns in the mountain reduced because your ears are not hurting? Or the need for hearing protectors will induce you to buy the unique, revolutionary toothpaste recommended by the dentist?

So, what can be done to correct this situation and who should do it? The operator should just program a lower sound level for the advertisements as well as for the movie trailers and everyone will be much happier and our ears will be grateful!

2. RESTAURANTS

How about going to a restaurant with a friend to have good time, nice food, and even nicer conversation? Nice food, yes. Now, nice conversation that is something that depends on where you go.

Most restaurants in cities (and in many suburbs too) are extremely noisy, with sound levels exceeding 90 dBA. You have to really yell and have your mouth close to your friend’s ear to be able to talk to him.

There are several contributing factors for this unpleasant phenomenon. One is the ambient music, often pumped at high volume through relatively low-quality sound systems. Nobody cares about quality of the music, nor about the content since you cannot even hear it properly.

Then, there are the conversations, where in order to be heard, you (and everyone else) has to raise his voice, to almost yelling! From time to time the general cacophony is interrupted by a burst of laughter originating by a group of excited patrons attending a group get-together party. To increase the capacity of the restaurant, the tables are placed as tightly as possible, making moving between them a balancing act for waitresses and the public alike. As a result, there are more patrons, more conversations and higher noise levels.

The last important cause for the high noise level in restaurants is a long reverberation time due to the lack of sound absorbing elements. There are no ceilings with acoustic treatment or sound absorbing panels on the walls. Quite often, there are large highly reflecting surfaces such as windows, mirrors or plain, glass covered paintings. The sound energy is absorbed only by patrons and personnel.

It is an interesting experience to see in some small, non-pretentious places the existence of sound absorbing material covering the entire ceiling. The effect on sound level is startling from the reduction of the level itself to the increase of comfort and speech intelligibility!

If the solution is so easy, why it is not applied everywhere? We can think of two reasons: ignorance or cost saving (or both).

3. MOTORCYCLES

A very common experience: you are in your front yard; by your swimming pool, enjoying a good book; nice, sunny day, pleasant breeze. Quiet is everywhere, and suddenly a harsh noise makes you jump out of your seat and a rush of adrenaline starts the path to all kind of metabolic changes and disorders inside your body. You look around for the source of this disturbance and by the time you are up and looking, the source is gone. If you are close to the street, you may smell a whiff of gas. The culprit is gone in a second and again all is quiet.

It also happens on the highway. You are driving nicely, aware of who is around and not being prepared for anything out of the ordinary, when suddenly there is this thunder out of the blue sky and a motorcycle speeds up avoiding cars left and right and disappearing out of your site and your

hearing in no time.

So, big deal, just a motorcycle speeding away, his driver enjoying the feeling of omnipotence, of being the king of the universe, of not caring about anybody else!

Why are motorcycles noisy? Very simple: because their owners choose to replace the manufacturer's silencer with the so-called "after-market" silencers that reduce very little the noise or modify their spectrum so that they sound "powerful." Some users even leave the engine without any silencing device. Many years ago, Professor Fuchs in the Argentinean city of Cordoba conducted a survey of the motives behind the removing or modifying the silencer. The results were multiple, but the underlying motive was to make them visible! (Or shall we say "appear as important"?).

In summary, we are living in a noisy world (what's new?), but we shouldn't be, since many noise sources shouldn't be there in the first place. In the not too distant past, the highest exposure was at work. Today, that is not necessarily the case: workplace noise sources are increasingly been controlled and now recreational noise exposure is becoming predominant. Think of rock concerts, car races, and sport events, not to talk of one's own personal music listening devices!

Something to think about...