

“Portable Music and how long can I wear my mp3 player?”

Since the early 1980s with the advent of the Sony Walkman, music listening became portable. The 1990s saw the introduction of the CD with portable “Discman” players, and in the last 25 years, mp3 files have become the mainstay of streamed or stored music. And since the early 1980s, earphones have undergone a change from an over-the-ear earphone pad to insert earphones and earbuds, some wireless, and other’s being wired.

There is nothing inherently wrong with using earphones- one will always adjust the music to a comfortable listening level- and the ear does not know whether the sound is coming from 20 mm away or 20 meters- the volume control will always be set to a comfortable setting.

In all cases, the music is now portable and can be listened to in quiet rooms, or noisy streets. It is this feature of “portability” that poses a potential threat.

Try this experiment for yourself- set the volume control to a comfortable listening level in a quiet room, and then walk outside where it is noisier. One will turn up the volume control. In both cases, the sound is equally loud- after all, its comfortable, but while listening at a higher volume setting, the sound level is higher. The choice of higher sound levels in noisier environments can exceed the ear’s safety limit, and the music can be at a potentially high enough level to create a permanent music-induced hearing loss.

It turns out that prolonged exposure to 85 decibels (dB) of sound will eventually cause a permanent hearing loss, but its amazing how quiet 85 dB of music is. A telephone dial tone is 85 dB; flushing the toilet (with your head in the bowl) is also 85 dB. Sound does not need to be considered loud, before it is damaging.

But the ear is an amazing structure. Research shows that 85 dB for 40 hours per week is identical to 88 dB for only 20 hours, 91 dB for only 10 hours, and so on. One can be exposed to 100 dB as long as its less than 1-2 hours a week. So, go ahead and attend a rock concert on Friday night; just don’t mow your lawn on Saturday. Actually, because most rock concerts are over 100 dB and last more than 2 hours, you should be wearing musicians’ ear protection which will lessen the sound but still allow it to sound like music.

So how long can I safely wear my mp3 player?

A good rule of thumb is called the “80/90 rule.” This is the brain child of audiologist, Dr. Brian Fligor. Simply stated, the maximum volume and time that you should be listening to an mp3 player is 80% volume for 90 minutes a day. Exceeding this combination of sound level and exposure time may be problematic to your hearing. If your favourite song comes on, turn up the volume, but then turn it down again once it is finished. Moderation is the key.