

Fact Sheet

How loud is too loud?

Whether the noise is from a factory or from loud music, the effects on the ear are similar. There are some subtle differences between the effects of loud noise and loud music but most can be explained in terms of the loud-soft-loud nature of music whereas factory noise tends to be more constant in its loudness. Permanent hearing loss can occur for prolonged exposures over 85 dB - this is read as 85 “decibels”. A level of 85 dB is similar to the loudness of a dial tone on a telephone. In other words, a potentially damaging loudness of noise or music may not sound all that loud. However, it is not only the loudness (measured in dB) but also the duration – the longer one is exposed the greater is the damage. And there is a relationship called the “exchange rate”. We are essentially “exchanging” the loudness for the duration of listening. We can be exposed to 85 dBA for 40 hours each week and this is identical to 88 dBA for only 20 hours, 91 dBA for only 10 hours, and so on. We may not listen to our favourite music for 40 hours each week, but we may listen to it for 4 or 5 hours, and if the level is only 94 dBA, this could be potentially damaging to our hearing.

Here is a chart of some commonplace sounds, along with the maximum number of hours each day that we can be exposed to them.

Loudness	Maximum hours Each Day	Some examples
85 dB	8 hours	Busy city traffic, noisy restaurant, handsaw, dial tone
88 dB	4 hours	Blender, tractor
91 dB	2 hours	Hair Dryer
94 dB	1 hour	Electric Drill
97 dB	30 min	Garbage Disposal, Motorcycle
100 dB	15 min	School Dance, Factory Machinery, Boom Box
103 dB	7.5 min	Snow Blower
106 dB	Less than 4 min	Rock Concert
115 dB	Less than 30 seconds	MP3 player at peak volume

Courtesy of www.dangerdecibels.org

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What Can I do to Protect My Ears?

Moderation is good idea - have a five-minute rest period for every hour of listening. While five minutes may not seem like a long time, it has tremendous recovery benefits for your ears. If your favourite song comes on, turn up the volume; remember to turn it down when the song is finished.

For your ipod, the 120/60 rule is a good rule of thumb- 120 minutes each day at 60% of the volume. More than that and you may risk damaging your hearing.

Noise Cancelling Headphones or noise-reducing ear protectors are another option that help block out the noise, so the volume does not need to be raised as loud, especially when out jogging or on the subway. Remember its not whether you think the music is loud; it's the actual volume control level on the MP3 player.

