

Bad Vibes

Taking a Chance?



Can loud music make you deaf?

Yes! And music doesn't have to be loud enough to hurt your ears for it to cause damage. Any kind of loud noise can cause temporary or permanent hearing loss.

Sound is too loud if people standing less than a metre away have to shout to be heard. If you wear headphones the volume is too loud if the person next to you can also hear the music.

The damage done to your ears depends on:

- how loud the sound is
- how long you are exposed to the sound

In general, the louder the sound, the less time before hearing damage will occur. Table 1 shows this.

Table 1: What level of noise can damage your hearing?

Noise level in decibels (dB)	Can damage hearing after...
140	Immediate damage - this is the threshold level for pain
130	3.75 minutes a day
120	7.5 minutes a day
110	30 minutes a day
105	1 hour a day
100	2 hours a day
90	8 hours a day
< 90	No damage

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Taking a Chance?

If it doesn't hurt how can it be dangerous?

Very loud noises make your ears hurt as soon as you hear them. They are above the **threshold** level for pain damage. Noises this loud damage your ears immediately. Other loud noises may not damage your ears straight away. But over time your inner ear will be injured.

Temporary hearing loss can happen after you've been exposed to loud noise for only 15 minutes. If you have temporary hearing loss you won't be able to hear as well as you normally can. You may have **tinnitus** (say: tin-eye-tuss), which is ringing in the ears. Your ears can also feel 'full'. You may experience temporary hearing loss after going to a concert or nightclub. These symptoms usually go away. But with repeated exposure to loud noise, the hearing loss will become **permanent!** So are you taking a chance with your hearing?

Table 2: Activity noise levels

Activity	Noise level (dB)
Using a pneumatic drill	100
Using a lawn mower	90
Watching jets taking off 0.5km away	100
Using an electric shaver	85
Looking after a screaming child	90
Going to a heavy rock concert	110-130
Going to a night club	110
Driving a speed boat	110



Keywords

decibels
permanent
temporary
threshold
tinnitus

Questions

1. Sound volume is measured in dB. What does dB stand for?
2. Most people don't have equipment to measure noise level. What rule can you use to judge if a sound is loud enough to damage your hearing?
3. What is meant by the threshold noise level?
4. What two main factors determine whether a noise can damage your hearing?
5. How can you judge if your personal stereo is putting your hearing at risk?
6. List three activities that could damage your hearing after only 30 minutes.
7. Would you wear ear defenders or earplugs to a concert? Give a reason for your choice.