



Noise levels and human response

Source	Decibel (dB) level	Effect
Jet engine (close by)	140	Ear pain, risk of irreversible injury
Air gun, aircraft take-off	130	Ear starts hurting. Risk of injury
Ambulance siren, disco	120	Body feels sound vibrations.
Power saw, jackhammer	110	Risk of permanent damage with more than one minute of daily exposure
Portable stereo at full volume, garbage truck, snowmobile	100	Risk of damage if more than 15 minutes of exposure without protection
Subway, motorbike, lawn mower, personal watercraft	90	Very uncomfortable and stressful
Diesel truck engine, many factories	85	Danger of long-term damage to hearing (8 hours of exposure per day), fatigue
City traffic	80	Inconvenient, makes conversation hard. For children: may affect learning.
Vacuum cleaner, hairdryer, car interior	70	Inconvenient, interferes with telephone conversation.
Normal conversation	60	Comfortable
Quiet office, air conditioner	50	Comfortable
Refrigerator	40	Gentle
Hushed conversation	30	Very gentle
Normal breathing	10	Barely audible
	0	Silence

20 dB more \approx 100 times louder

30 dB more \approx 1,000 times louder

The above table lists common sounds and their decibel levels, along with the potential effects on hearing.

Did you know that...

- A noisy work environment is very tiring. A disco is a very noisy environment.
- 400,000 workers in Québec experience deafness caused by exposure to noise on the job.
- Deafness alone accounts for more than 40% of all occupational disease claims.
- Frequent and daily exposure to noise levels higher than 85 dBA for 8 hours can damage hearing. The effect of noise is cumulative and insidious, just like exposure to mercury, lead, and insecticides.
- Some noisy toys can be hazardous to a child's hearing.
- Children perceive sounds louder than adults because their ear canals are smaller.
- The ambient noise in one of every five daycares exceeds the standards published by the Commission de la santé et de la sécurité du travail (CSST), which is set at 90 dBA (per 8-hour period); ideally, a maximum of 75 dBA is recommended.
- Setting the volume of your CD or MP3 player at mid-level is smarter; it means less risk of damaging your hearing.
- Exposure to noise causes blood pressure to rise.

Tips

- The best way to reduce noise is to control it at the source. For example:
 - repair defective appliances;
 - check the specifications of household appliances: stove fan, dishwasher, air conditioner, etc.
- Set a good example: lower your voice!
- Make sure your work environment complies with standards.



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