

Measuring Sound

[What is a Decibel? \(youtube.com\)](#)

Decibels - a measure of how loud a sound is. It measure amplitude.

Damage to the eardrum depends on 2 factors:

- 1) How loud the sound is
- 2) How long we are around the sound.

Sounds greater than 85 decibels can lead to damage.

(Take 8 hours of listening to the sound)

Sounds 140 decibels can cause instant damage.

Source	Decibels
Breathing	10
Gentle Rain	50
Traffic	70
Hair Dryer	90
Helicopter	100
Fireworks	140



<https://youtu.be/UgE2GIQwUCw> [Speed of Sound | Mechanical waves and sound | Physics | Khan Academy - YouTube](#)

<https://youtu.be/yF4cvbAYjwI> [Relative speed of sound in solids, liquids, and gases | Physics | Khan Academy - YouTube](#)