

Decibel Trivia

Decibel (Loudness) Comparison Chart

[Are You at Risk?](#)
[About Hearing Loss](#)
[Hearing Loss Survey](#)
[Hearing Risk FAQ](#)
[About Tinnitus](#)
[Sound Check](#)
[Decibel Trivia](#)
[Say What?](#)
[Hearing Loss What Is It?](#)
[Hearing Advice --
Crabby](#)

Environmental Noise

weakest sound heard	0 dB
normal conversation at 3-5 ft	60-70 dB
dial tone of telephone	80 dB
city traffic inside car	85 dB
1983 OSHA monitoring requirements begin	90 dB
train whistle at 500 ft.	90 dB
subway train at 200 ft.	95 dB
regular sustained exposure may cause permanent damage	90-95 dB
power mower	107 dB
power saw	110 dB
Pain begins	125 dB
pneumatic riveter at 4 ft.	125 dB
jet engine at 100 ft.	140 dB
loudest sound that can occur	194 dB

Musical Noise

normal piano practice	60-70 dB
fortissimo singer 3 ft. away	70 dB
chamber music in small auditorium	75-85 dB
regular sustained exposure may cause permanent damage	90-95 dB
piano fortissimo	92-95 dB

MSHA Exposure Levels
 "Action level" - 8 hour
 time weighted average
 sound level of 85dB

* see - MSHA Regulation
 for monitoring



H.E.A.R. THIS
s CD benefiting
H.E.A.R.
available NOW

chat
us upJoin our
email list

violin	84-103 dB
cello	82-92 dB
oboe	90-94 dB
flute	85-111 dB
piccolo	95-112 dB
clarinet	92-103 dB
french horn	90-106 dB
trombone	85-114 dB
timpani & bass drum rolls	106 dB
average Walkman on 5/10 setting	94 dB
symphonic music peak	120-137 dB
amplified rock music at 4-6 ft.	120 dB
rock music peak	150 dB

NOTES:

- The brass section playing fortissimo can drown out practically the whole orchestra.
- One-third of the total power of a 75-piece orchestra comes from the bass drum.
- High frequency sounds of 2-4,000 Hz are the most damaging. The uppermost octave of the piccolo is 2,048-4,096 Hz.
- Aging causes gradual hearing loss, mostly in the high frequencies.
- Speech reception is not seriously impaired until there is about 30 dB loss; by that time severe damage may have occurred.
- Hypertension and various psychological difficulties can be related to noise exposure.
- The incidence of hearing loss in classical musicians has been estimated at 4-43%, in rock musicians 13-30%.

Statistics for the Decibel (Loudness) Comparison Chart were taken from a study by Marshall Chasin , M.Sc., Aud(C), FAAA, Centre for Human Performance & Health, Ontario, Canada. There were some conflicting readings and, in many cases, authors did not specify at what distance the readings were taken or what the musician was actually playing. In general, when there were several readings, the higher one was chosen.

