Common environmental noise levels

How loud is too loud?

Continued exposure to noise above 85 dBA (adjusted decibels) over time will cause hearing loss. The volume (dBA) and the length of exposure to the sound will tell you how harmful the noise is. In general, the louder the noise, the less time required before hearing loss will occur.

According to the National Institute for Occupational Safety and Health, the maximum exposure time at 85 dBA is eight hours. At 110 dBA, the maximum exposure time is one minute and 29 seconds. If you must be exposed to noise, it is recommended that you limit the exposure time and/or wear hearing protection. A three dBA increase doubles the amount of noise, and halves the recommended amount of exposure time.

The following decibel levels of common noise sources are typical, but will vary. Noise levels above 140dBA can cause damage to hearing after just one exposure.

Points of Reference *measured in dBA or decibels

- 0 The softest sound a person can hear with normal hearing
- 10 normal breathing
- 20 whispering at 5 feet
- 30 soft whisper
- 50 rainfall
- 60 normal conversation
- 110 shouting in ear
- 120 thunder

| Home | Work | Recreation |
|---------------------------|----------------------------|-----------------------------|
| • 50 refrigerator | • 40 quiet office, library | • 40 quiet residential area |
| • 50 – 60 electric | • 50 large office | • 70 freeway traffic |
| toothbrush | • 65 – 95 power lawn | • 85 heavy traffic, noisy |
| • 50 – 75 washing machine | mower | restaurant |
| • 50 – 75 air conditioner | • 80 manual machine, tools | • 90 truck, shouted |

- 50 80 electric shaver
- 55 coffee percolator
- 55 70 dishwasher
- 60 sewing machine
- 60 85 vacuum cleaner
- 60 95 hair dryer
- 65 80 alarm clock
- 70 TV audio
- 70 80 coffee grinder
- 70 95 garbage disposal
- 75 85 flush toilet
- 80 pop-up toaster
- 80 doorbell
- 80 ringing telephone
- 80 whistling kettle
- 80 90 food mixer or processor
- 80 90 blender
- 80 95 garbage disposal
- 110 baby crying
- 110 squeaky toy held close to the ear
- 135 noisy squeeze toys

- 85 handsaw
- 90 tractor
- 90 115 subway
- 95 electric drill
- 100 factory machinery
- 100 woodworking class
- 105 snow blower
- 110 power saw
- 110 leafblower
- 120 chain saw, hammer on nail
- 120 pneumatic drills, heavy machine
- 120 jet plane (at ramp)
- 120 ambulance siren
- 125 chain saw
- 130 jackhammer, power drill
- 130 air raid
- 130 percussion section at symphony
- 140 airplane taking off
- 150 jet engine taking off
- 150 artillery fire at 500 feet
- 180 rocket launching from pad

- conversation
- 95 110 motorcycle
- 100 snowmobile
- 100 school dance, boom box
- 110 disco
- 110 busy video arcade
- 110 symphony concert
- 110 car horn
- 110 -120 rock concert
- 112 personal cassette player on high
- 117 football game (stadium)
- 120 band concert
- 125 auto stereo (factory installed)
- 130 stock car races
- 143 bicycle horn
- 150 firecracker
- 156 capgun
- 157 balloon pop
- 162 fireworks (at 3 feet)
- 163 rifle
- 166 handgun
- 170 shotgun