



Healing Hands
Health Center



Protecting your Ears

The Dangers of Loud Noises and how to Prevent Damage

Range of Sounds

- ▶ Our ears can hear a wide range of sounds from very quite sounds to very loud sounds.
- ▶ The unit of measurement for the loudness of a sound is the decibel (Db)
 - ▶ The more loud a sound is, the higher the Db level
- ▶ Examples
 - ▶ Breathing: 10 Db
 - ▶ Whisper: 30 Db
 - ▶ Garbage disposal: 80 Db
 - ▶ Lawn Mower: 90 Db
 - ▶ Chain Saw: 120 Db
 - ▶ .22 Caliber Rifle: 140 Db



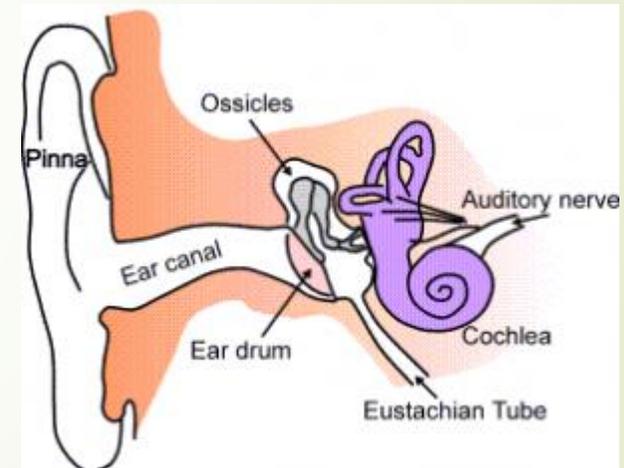
The Dangers of Loud Noises

- ▶ Listening to loud noises for prolonged periods of time may permanently damage your ears
 - ▶ Even listening to very loud noises for a short period may damage your ears
- ▶ This is called Noise-Induced Hearing Loss
 - ▶ (NIHL)



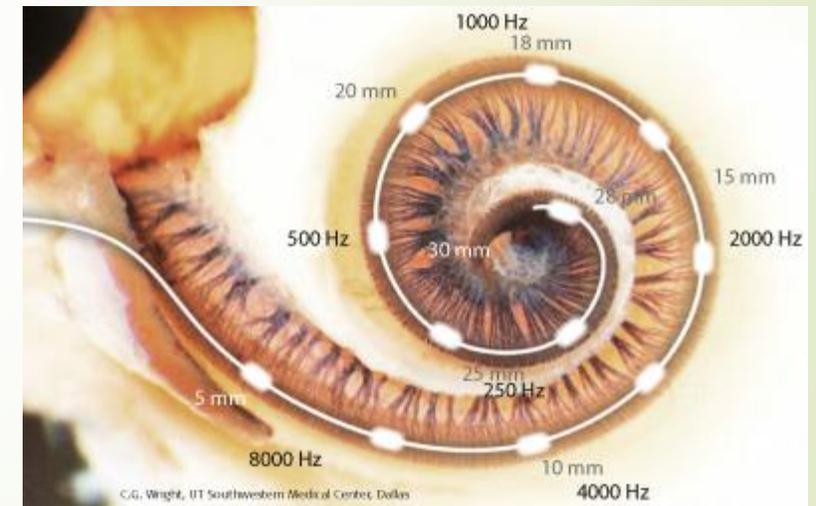
How the Ear Works

- ▶ Sound enters your ear canal and causes your ear drum to vibrate
- ▶ The vibrating ear drum causes very small bones in your ear called ossicles to tap your cochlea like a drum instrument
- ▶ Small hair-like cells in the cochlea detect these vibrations
- ▶ These detected vibrations are transmitted to the brain and we detect sound



How do Loud Noises Damage the Ear?

- ▶ There are different ways loud noises can damage the ear.
 - ▶ The ear drum could become ruptured
 - ▶ The Ossicles (small bones) may break
 - ▶ The hair-like cells in the Cochlea may become damaged
 - ▶ This is the most common
 - ▶ Listening to loud noises too often can damage and kill the hair cells
 - ▶ And they do not grow back



Noise-Induced Hearing Loss is Preventable

- ▶ Taking measures to reduce your exposure to loud noises is key!
- ▶ Things you can do:
 - ▶ Wearing Ear Protection!
 - ▶ When using outdoor equipment wear earplugs or earmuffs
 - ▶ Turn down the music!
 - ▶ We all like to listen to music loud sometimes, but too often can have permanent effects

