HEARING LOSS PREVENTION

The human ear is a very complex organ. It resembles a “well tuned” machine. The tiny hair cells in the inner ear respond to vibrations (amplified by the ear drum and the bones in the middle ear) and send signals to the brain, alerting us to sounds.

The hair cells can be worn out by long periods of loud sounds (or short blasts of extremely loud sounds). If the hair cells are damaged, the sound cannot reach the brain and we cannot recognize the sounds. Hair cells will not regenerate; therefore, they cannot be reproduced or repaired.

Did you know noise is a common cause of hearing loss?

* + - * Noise induced hearing loss can slowly develop over time, or it can suddenly occur as a result of one loud, traumatic situation (fireworks, gun shot, explosion)
      * Hazardous noise is found everywhere (power tools, lawn mowers, jack hammer)
      * Noise induced hearing loss is preventable.

**You can prevent noise induced hearing loss…**

* Avoid prolonged exposure to I-pods, cell phones, ear phones, (sound bombardment is not good for the ear drum and middle ear bones)
* Avoid volume of radio that causes the car to vibrate (and the walls of my house)
* Avoid prolonged exposure to high volume at concerts.
* Avoid prolonged exposure to high volume machinery, fireworks, and airplanes.
* Avoid situations where you must raise your voice to speak with someone only 3 feet away.
* Avoid exposure to repeated noise:
  + Bulldozer 8 hrs at 85 db
  + Power tools 1 hr at 100db
  + Earphones volume (damage after 15 min/day) >5 volume, 110db
  + Thunderclap (near) damage immediate 120db
  + Gunshot (near) immediate damage 140 db
  + Use ear plugs, ear muffs, or both, when in high noise situation. Protect your ears.

Prevent loss/ protect your ears:

* + Use a hearing protector. Make sure the protectors are comfortable and effective.
  + Foam plugs: should be soft, springy. They must be tightly compressed, so they can expand after insertion. Pulling on the outer ear straightens the canal during insertion.
  + Pre-molded plugs should not be hard or sticky. Hold the stem and gently push the plug into the ear canal. Pulling on the ear may help with insertion.
  + Canal caps seal the ear canal at or near its rim.
  + Ear muffs require a good seal around the ear. Pads should be flexible, soft; adjust to a comfortable tension. Be sure hair, glasses, and jewelry don’t prevent them from sealing.
  + Custom molded plugs are made especially for your ear and are already shaped like your ear. Pulling on the outer ear during insertion may help.

If you suspect that your hearing or the hearing of a loved one may be at risk, please call your physician. Hearing is a precious gift that must be protected. Learn to prevent hearing loss due to noise that surrounds you.

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