

Prevention of Hearing Loss: It is NEVER too Late

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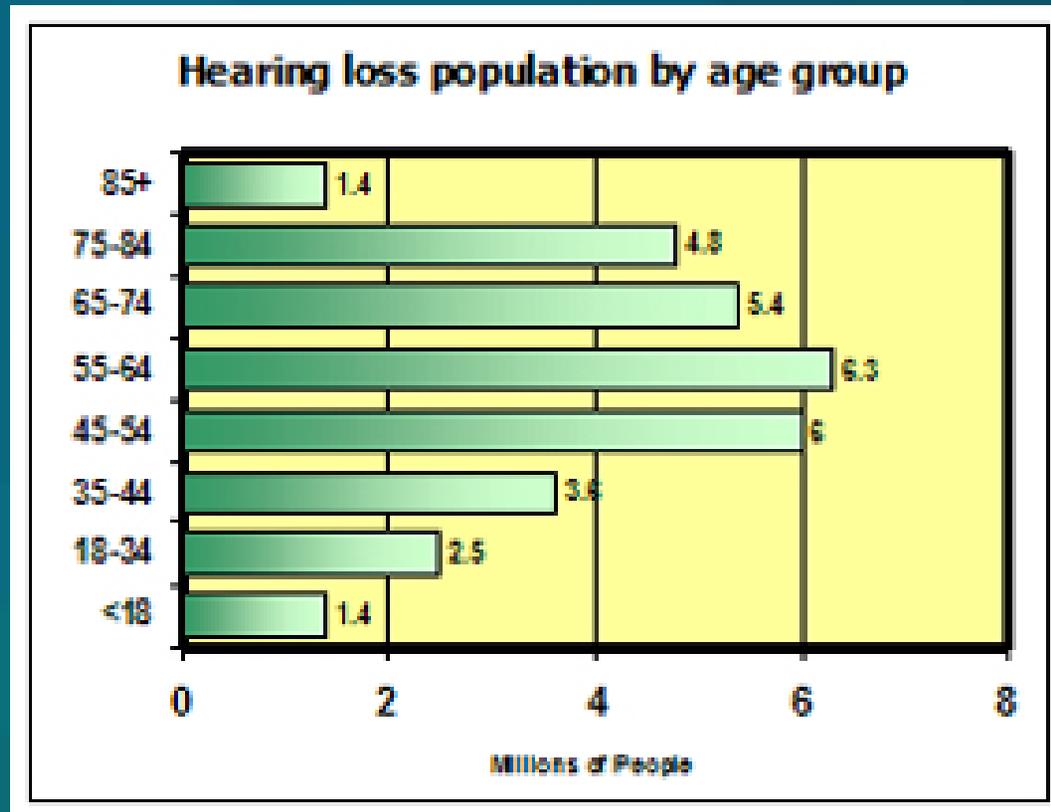
Hearing Loss: Prevalence

**About 31.5 million in the US
report hearing difficulties**



**This is about around 10%
of the U.S. population.**

Hearing Loss: Who is affected?



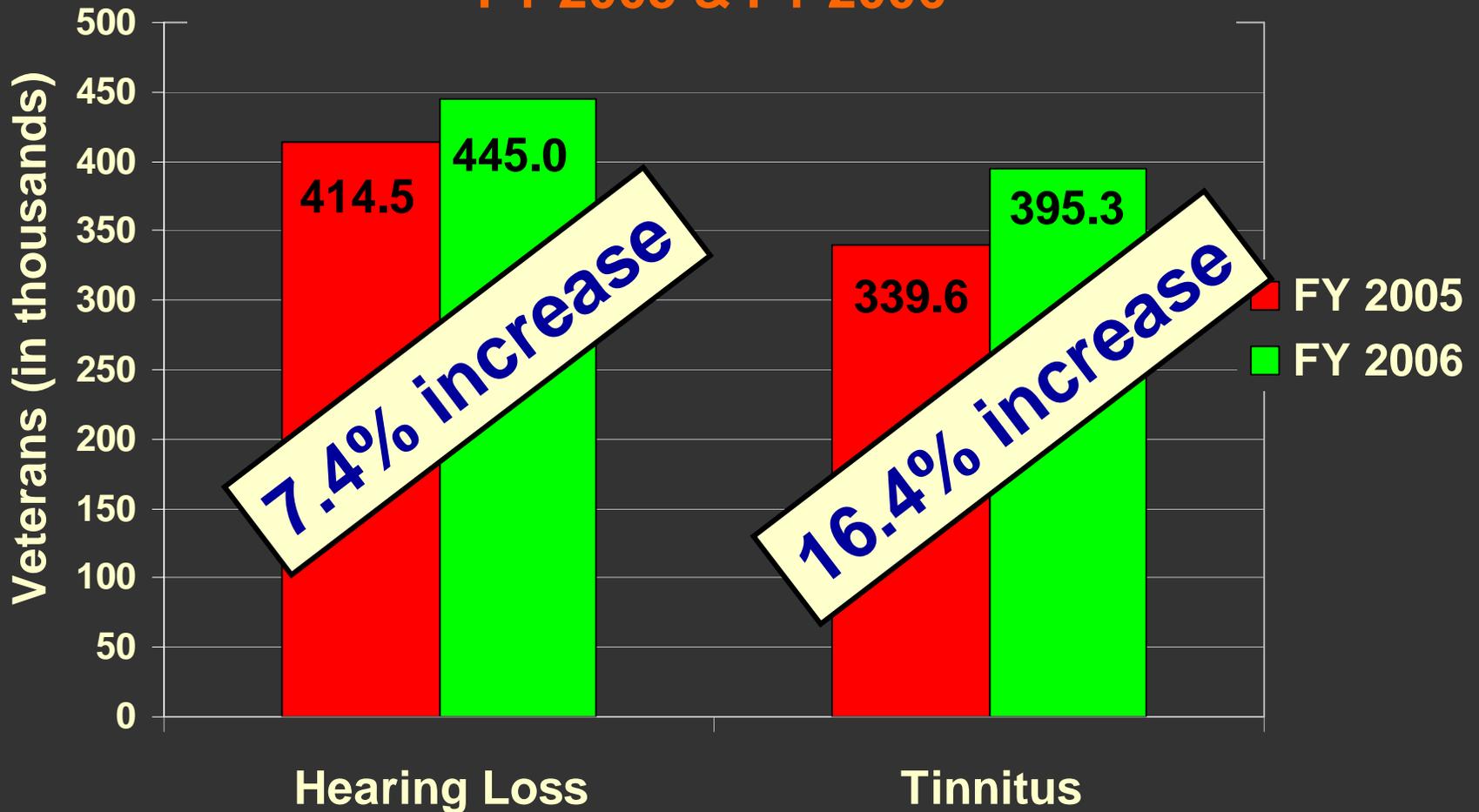
More details:

- About 3/1000 infants are born with serious to profound hearing loss
- At least 1.4 million children (18 or younger)
- 1/14 (7%) Generation Xers (ages 29-40)
- 1/6 (16%) baby boomers (ages 41-59)
- 3/10 (33%) people over age 60
- 6/10 (60%) people over age 80

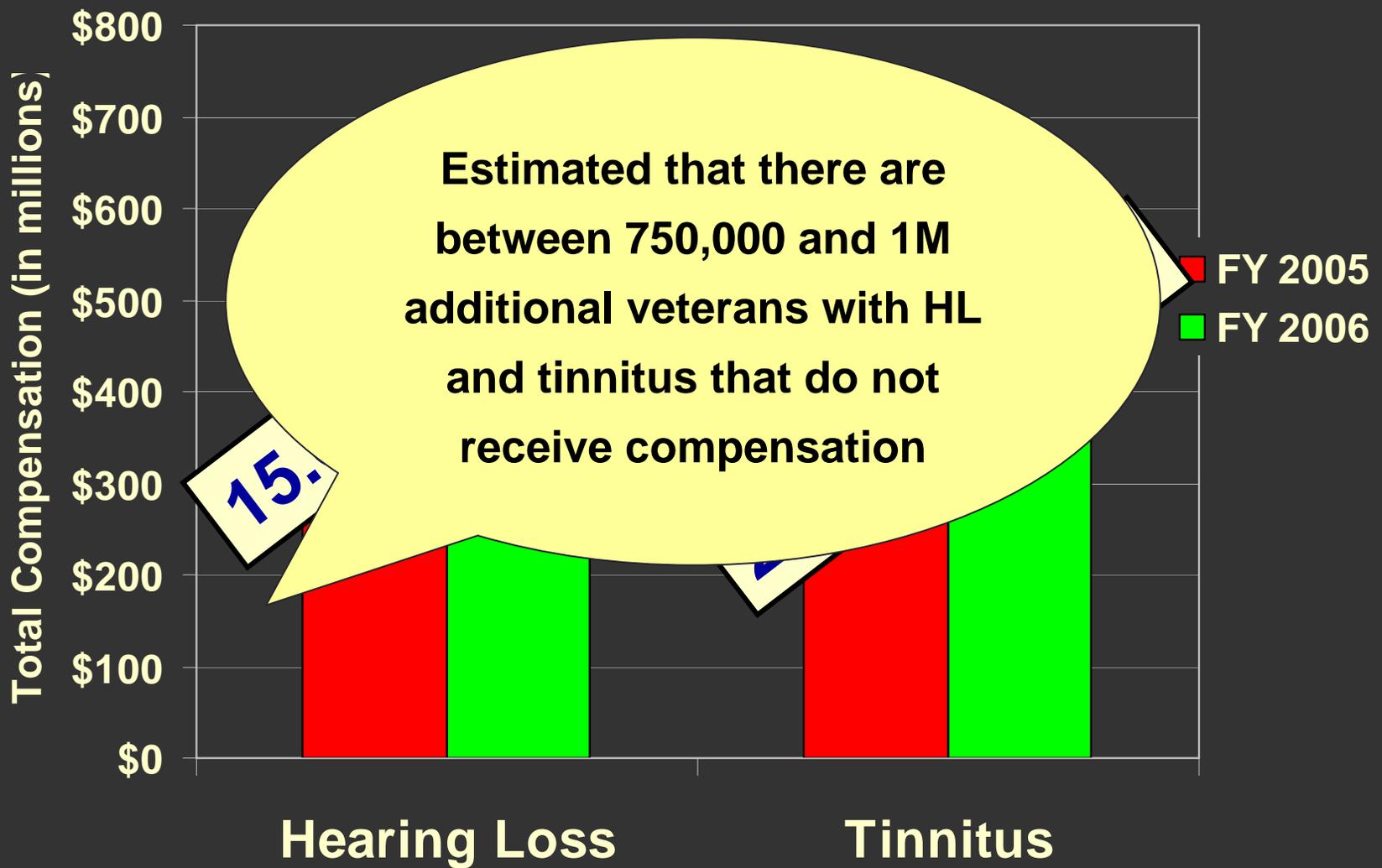
Hearing Loss and Veterans



Number of Veterans Service-Connected for Hearing Loss & Tinnitus: FY 2005 & FY 2006

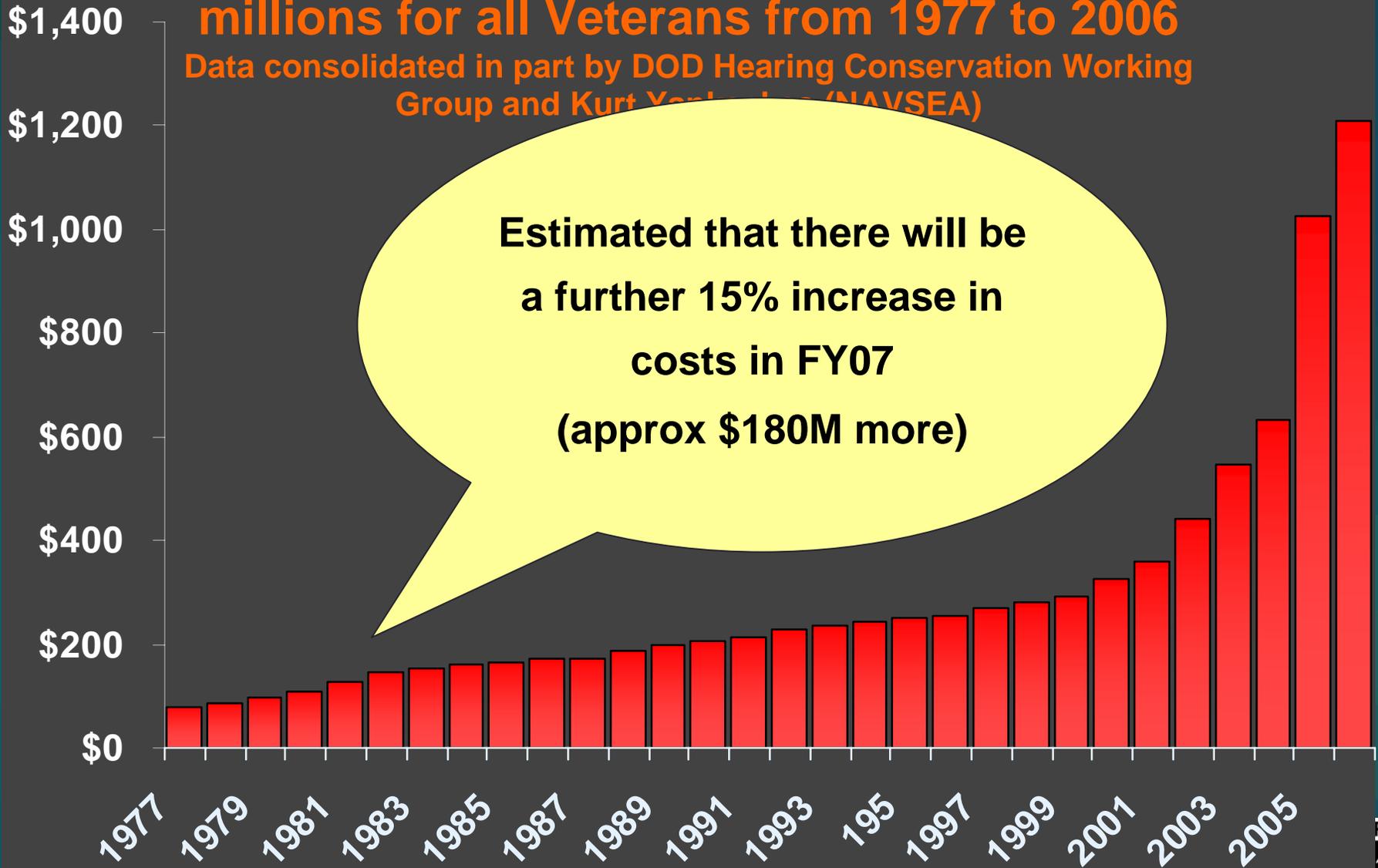


Total Compensation for Hearing Loss and Tinnitus: FY 2005 & FY 2006



Compensation for Auditory Disability in millions for all Veterans from 1977 to 2006

Data consolidated in part by DOD Hearing Conservation Working Group and Kurt Yarbrough (NAVSEA)



Noise-Induced Hearing Loss

- About 22 million in US have damage to their hearing from excessively loud sounds
- Noise/loud sound is probably is the most common cause of sensorineural hearing loss

It is 100% preventable

How we hear

Video

Noise Damage

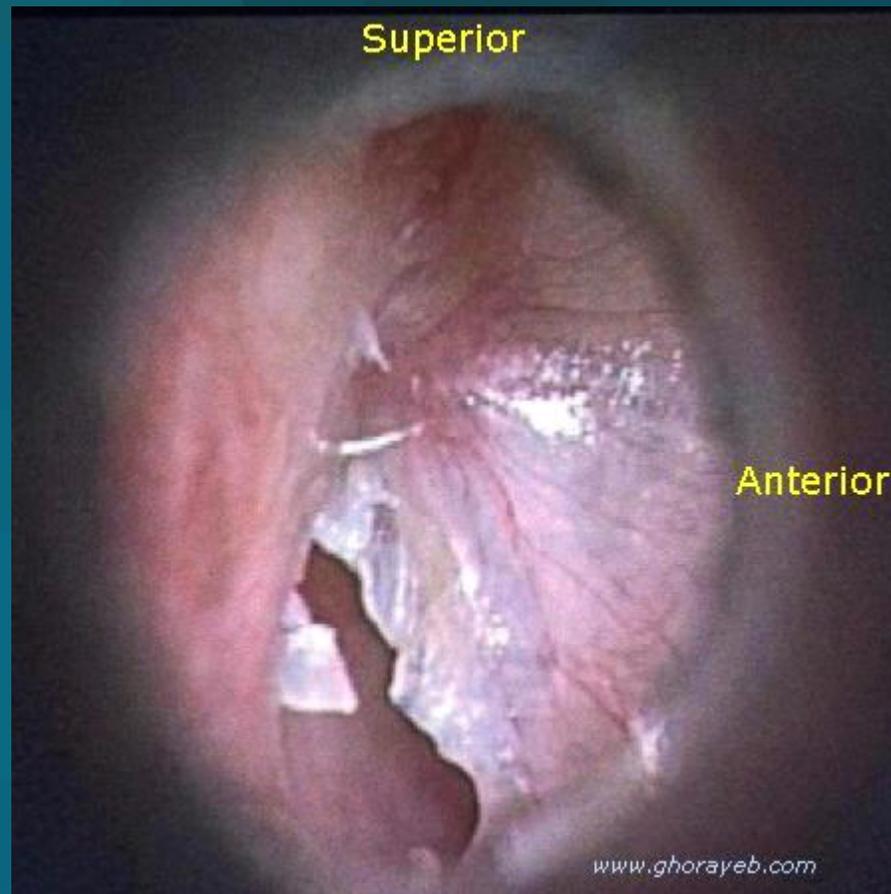
Sudden extremely loud sounds

Moderately loud sounds over time

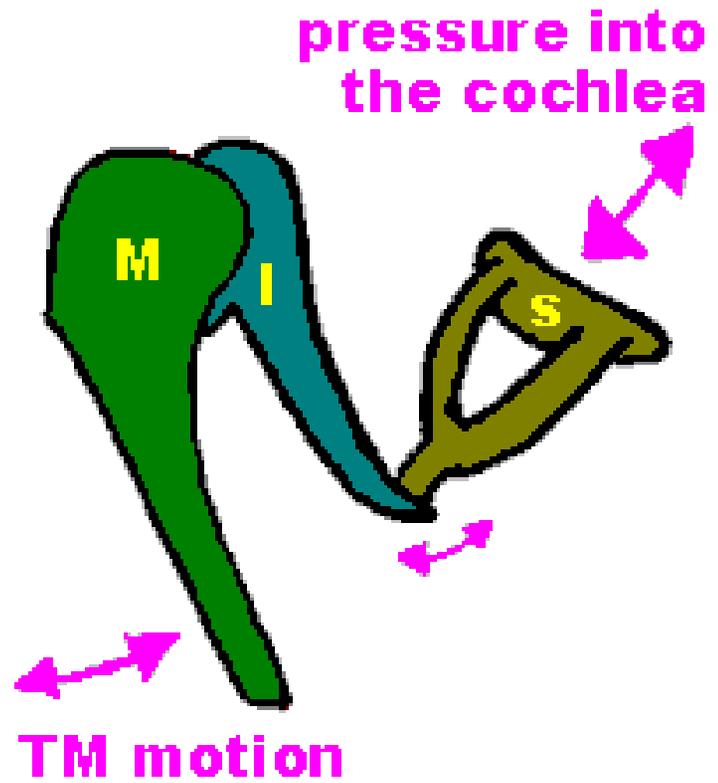
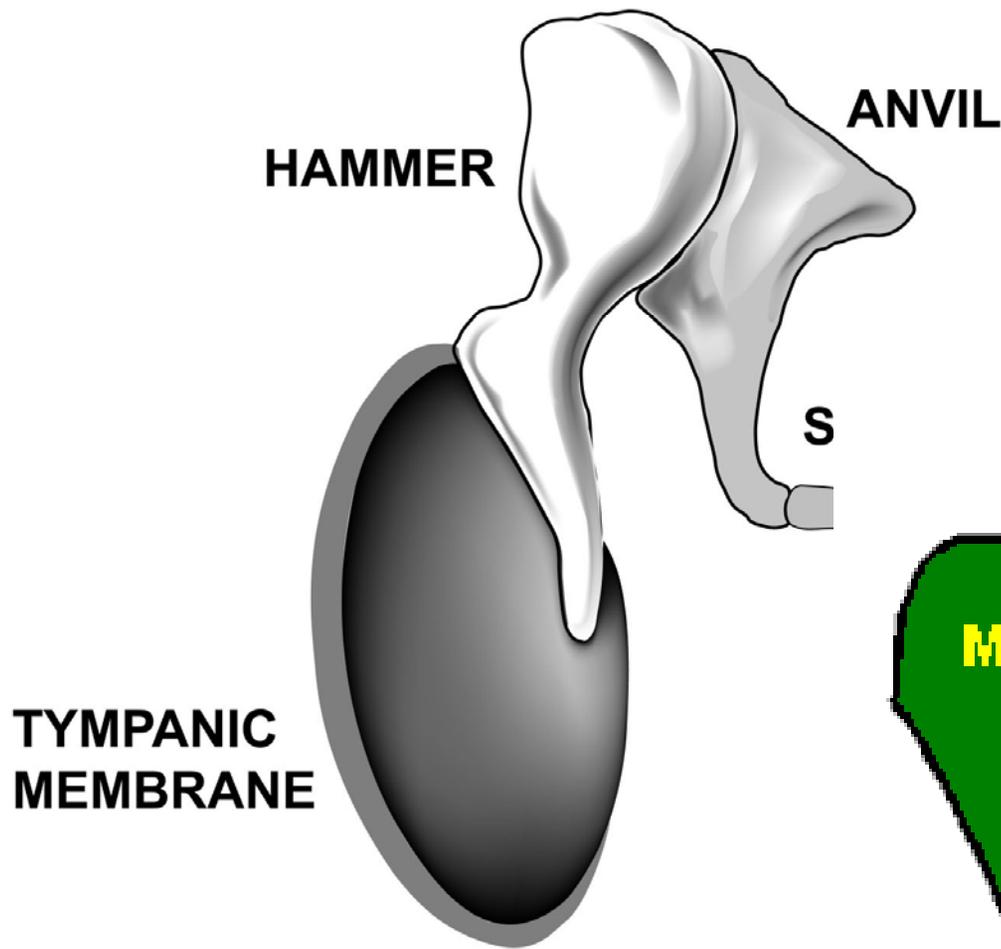
Sudden loud sounds (impulse noise)



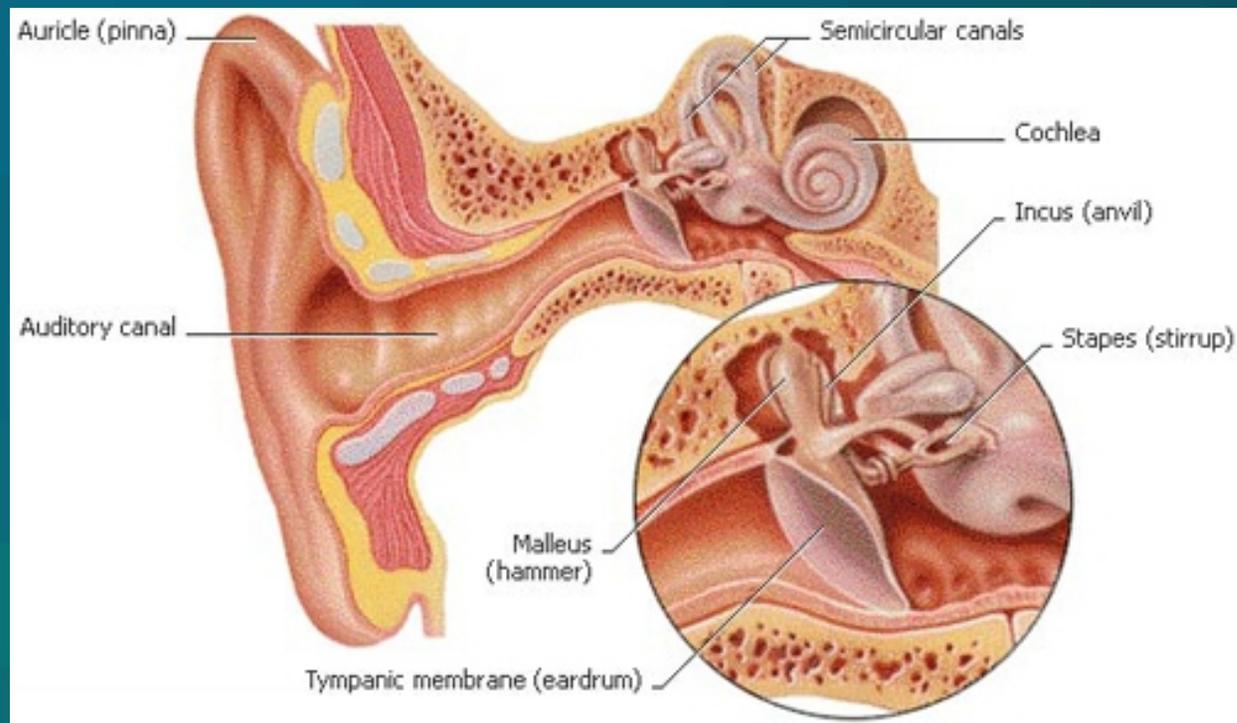
Healthy eardrum



Damaged eardrum

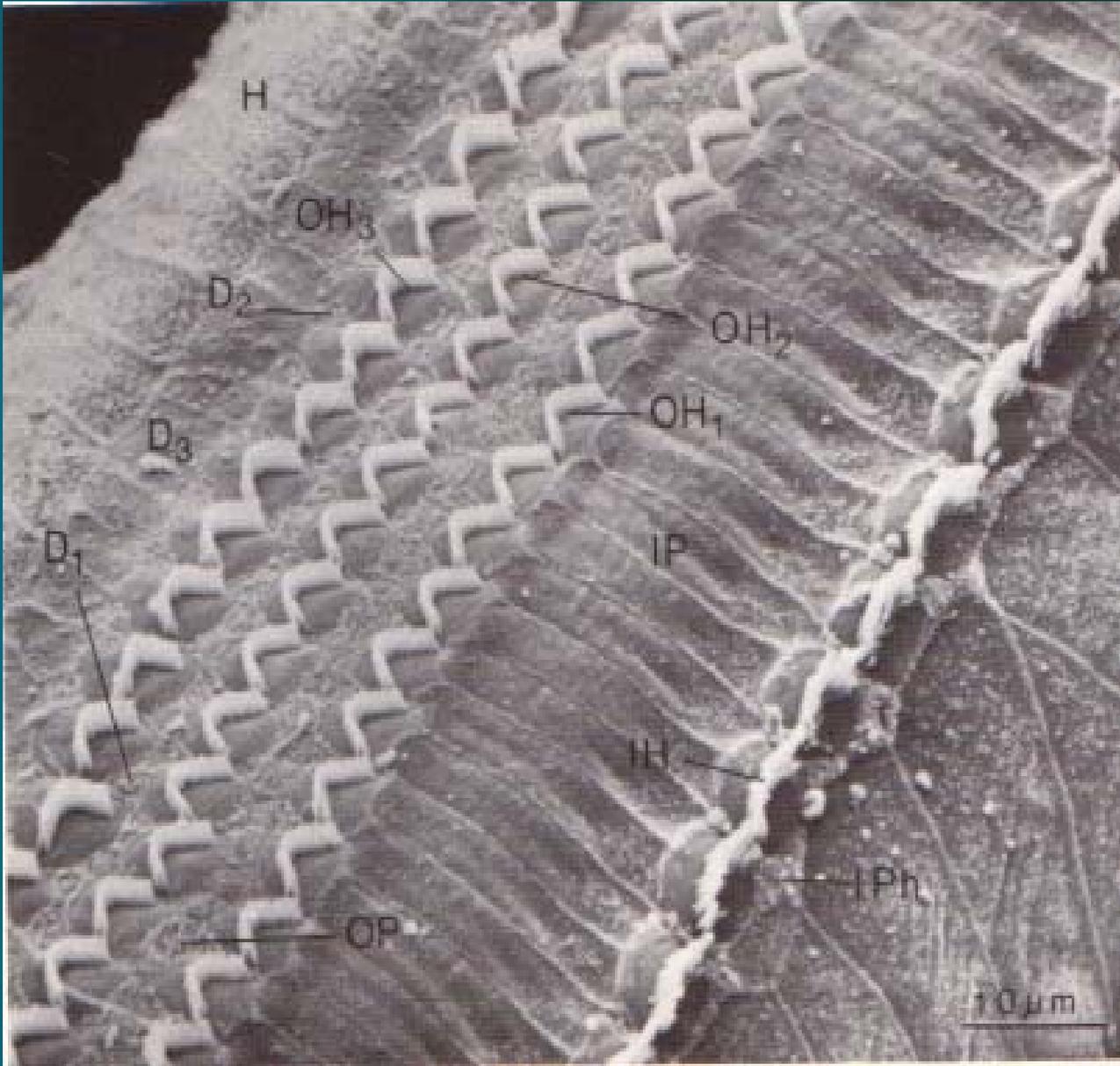


Cochlear Damage

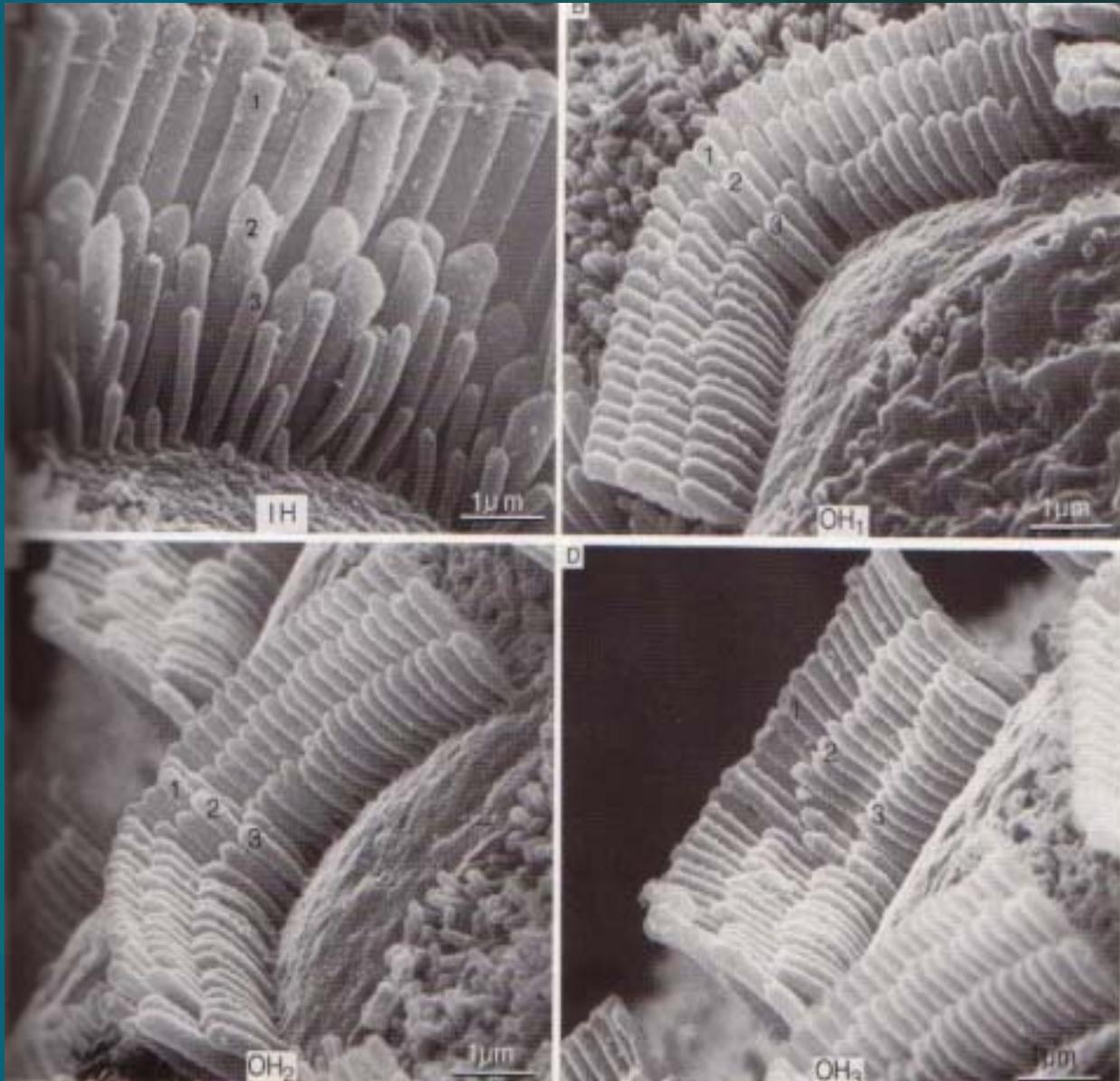


Cochlear Damage

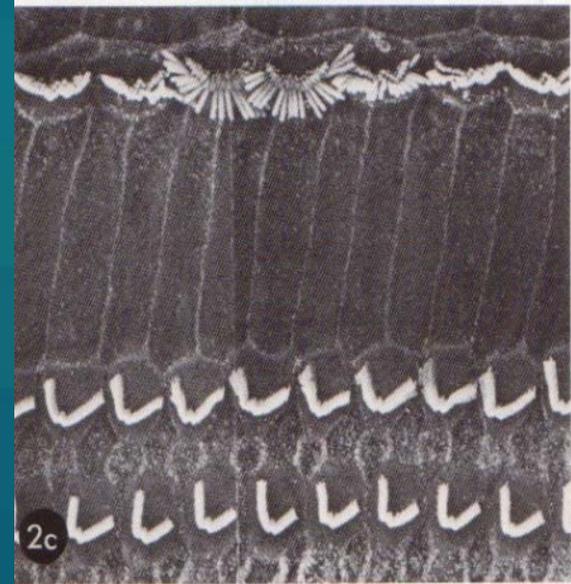
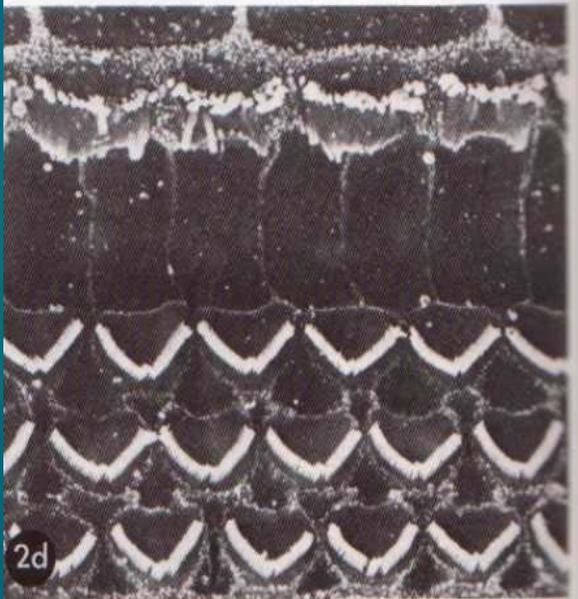
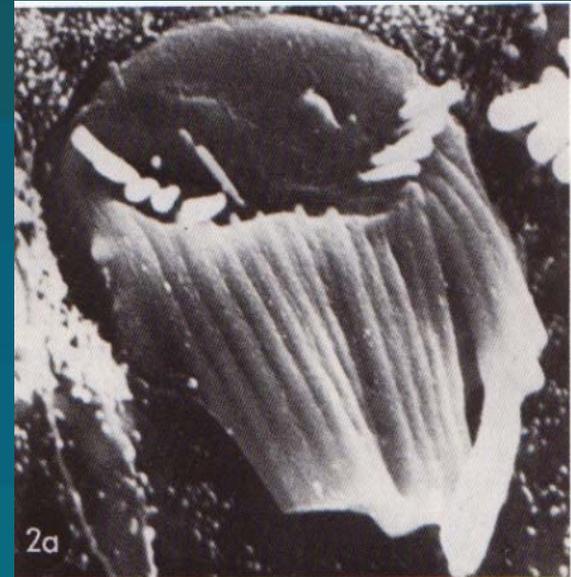
Video

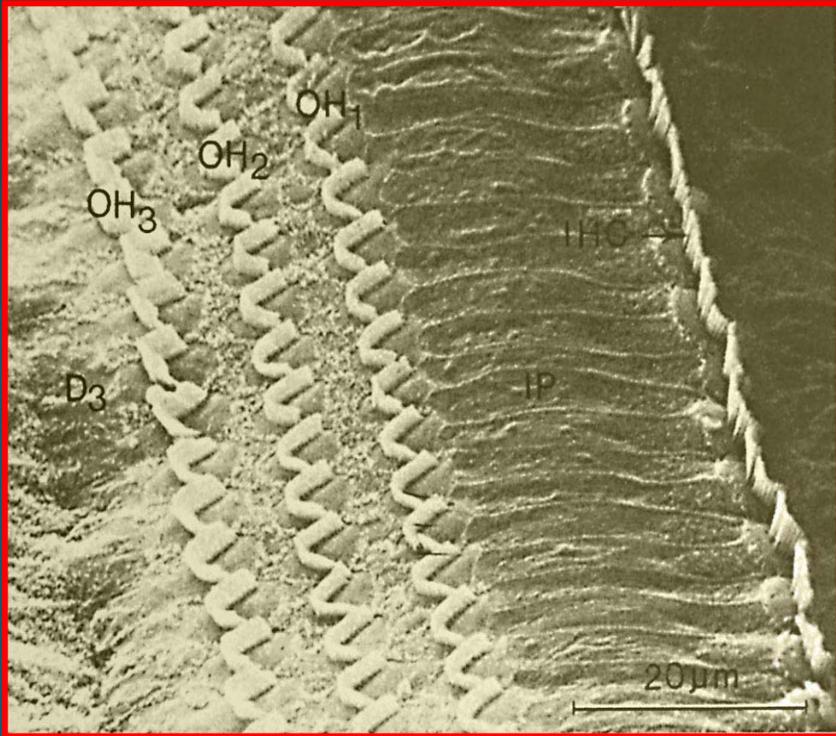


Stereocilia

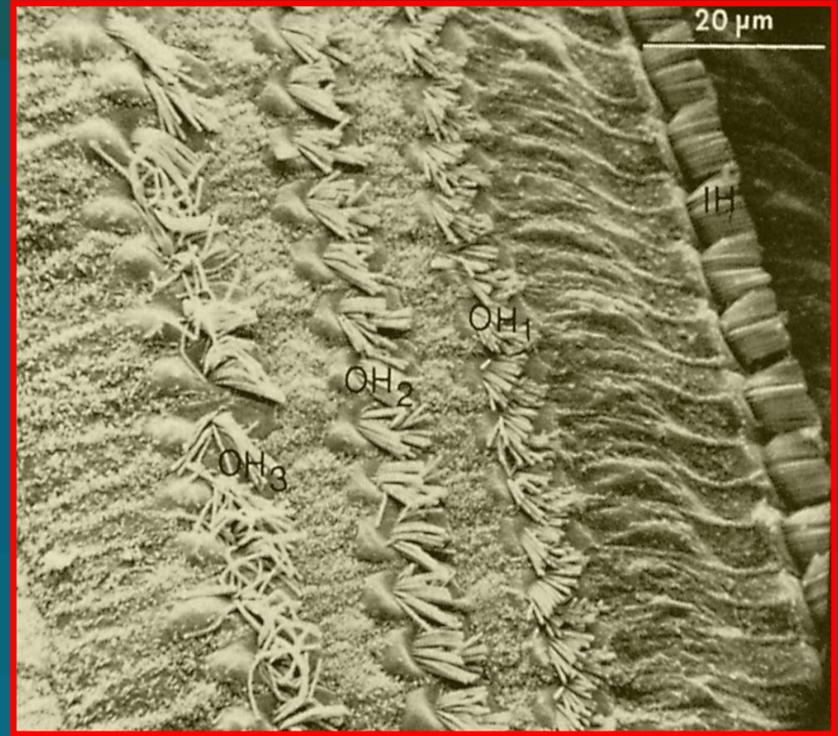


stereocilia after excessive noise exposure



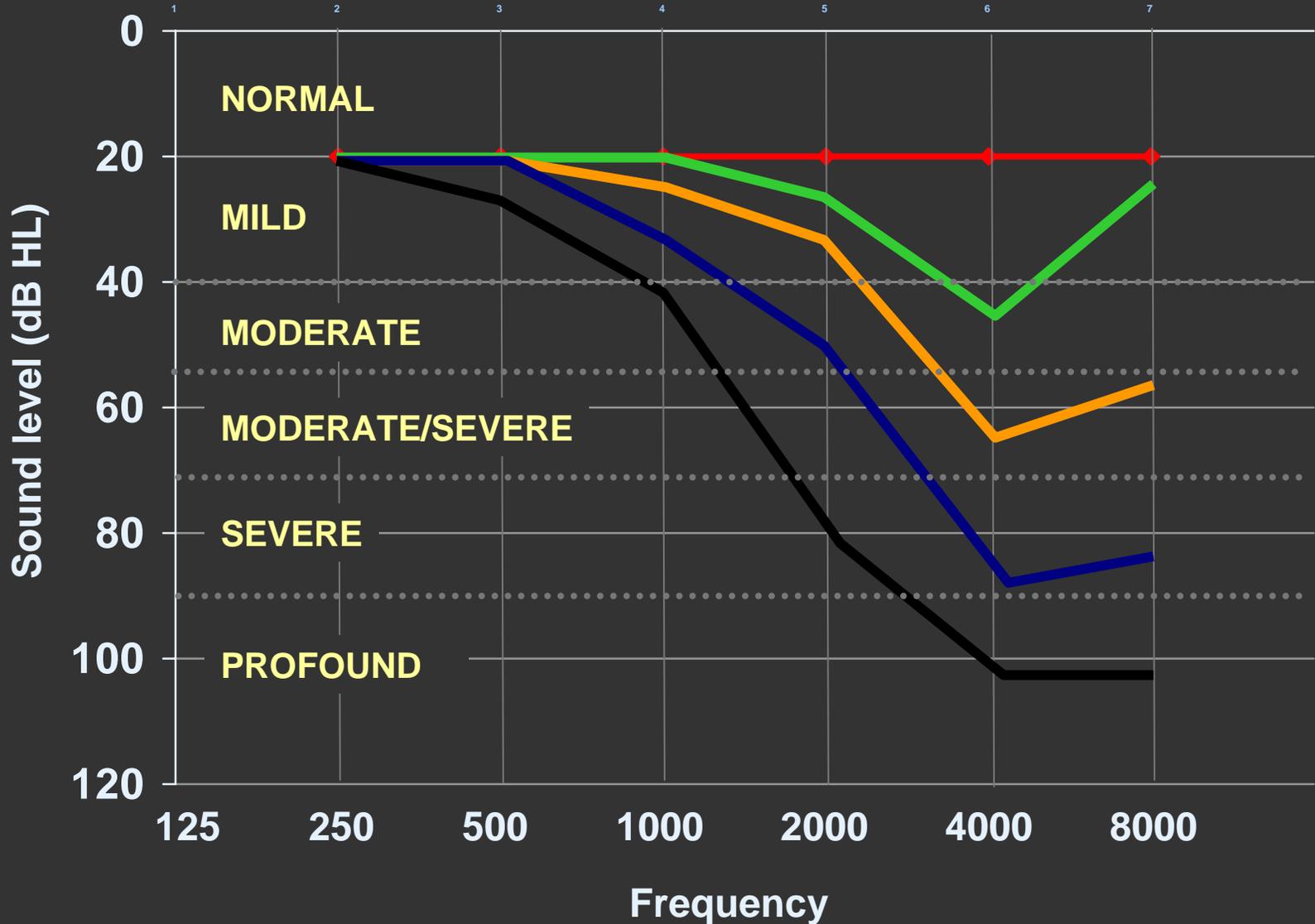


Before



**After
Noise Exposure**

How does an audiologist know you have noise induced hearing loss?

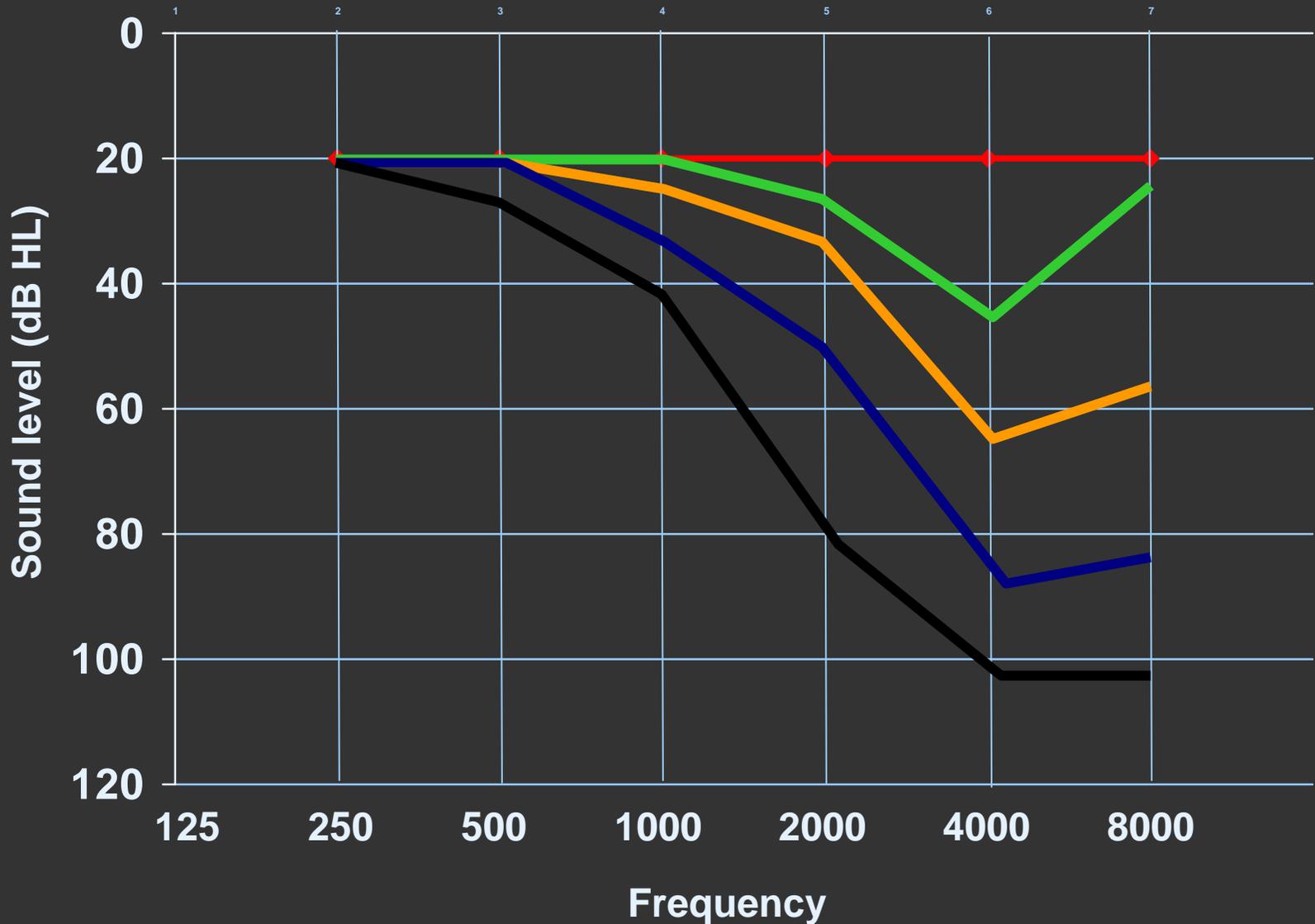


I can hear just fine so why worry?

- Initially damage may not be noticeable
- Hair cells do not heal
- Damage accumulates

Ears with past noise exposure show greater effects of auditory aging

My ears are already damaged so why worry?



Signs a sound is too loud

- Ringing in your ears afterwards
(tinnitus)
- Dulled hearing
(temporary threshold shift)
- In time a temporary loss will
become **PERMANANT**

Consequences of Hearing Loss

Video

When should I use hearing protection?

- **video**