

Fletcher munson curve

[Science](#), [Anatomy](#)



This means that it requires less energy to hear kHz frequencies. Our ears are most sensitive to hearing 3. KHz as this is the resonance frequency of our ear canals. Range of frequencies we are sensitive to are between 1 kHz and 20 kHz (this is the frequency range that mobile phones play out). We hear low and high frequencies very poorly. The db reference curve is the most flat, meaning that most frequencies appear to be at the same level. This is why music sounds a lot better and more full when played loudly around this frequency. Summary

Equal Loudness Contours show the measure of sound pressure levels in relation to different frequencies. Our ears perceive different frequencies of sound to be louder or quieter than each other even when played at the same reference level of db. Hearing Damage Tinnitus (both temporary and permanent) Tinnitus is a term used to describe the case of being able to hear sounds that are within the person's body, rather than sounds from an outside source. It often causes a ringing in the ears, but other sounds that can be heard include humming, buzzing and whistling.

Tinnitus can either be caused by a build up of earwax, a mild ear infection, or also very commonly can be caused by damage to the inner ear from loud noises (usually high frequencies). Tinnitus can be prevented by best by avoiding exposure to loud noises completely, however this can prove difficult in a lot of scenarios. A more realistic approach to preventing tinnitus include reducing the time that you are exposed to loud noises, this can be done by either spending less time in noisy environments, or by taking regular breaks about every half hour for ten minutes or so.

Another way to reduce the risk of getting tinnitus is by ensuring that you stay hydrated, as this makes sure that the circulation for the blood in the inner ear is kept topped up'. You can also reduce the risk of getting tinnitus by reducing the Intensity of exposure. Either turning the volume down yourself can do this, or If you don't have control of the volume, then you can wear earplugs. Noise Induced Hearing loss (NIHL) is caused by either very loud noises for either a brief or prolonged time.

The loud sounds can damage sensitive structures in the inner ear and can result in struggling or being unable to hear certain frequencies, or just partially deafening your ear(s). NIHL can be prevented in the same ways as tinnitus and most other hearing problems. If you reduce the amount of time you are exposed to loud noises, or reduce the intensity of the noise by wearing ear protection, then you are reducing the risk of damaging your ears either temporarily or permanently.