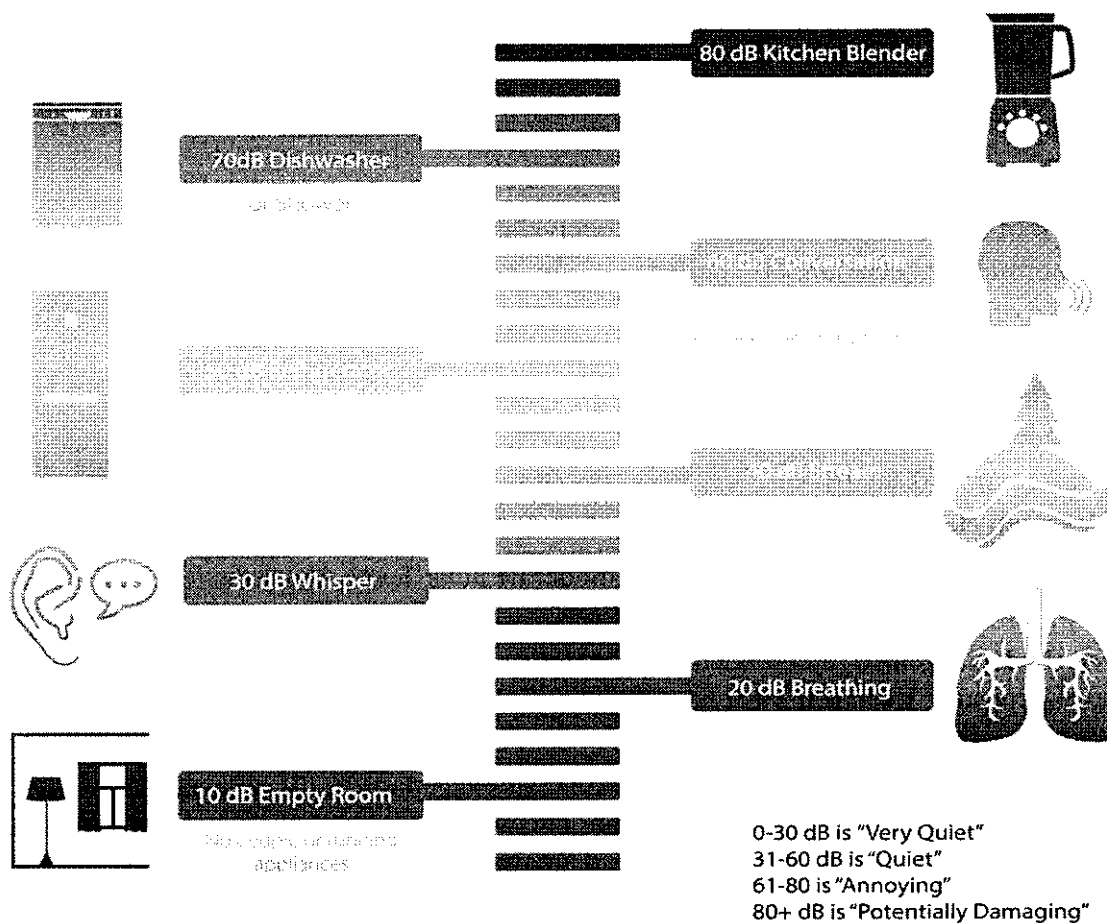


## Sound Levels and their Effects

Decibels is the measurement unit used for the intensity of sound. Humans can hear decibel levels starting from 0 dB and 120-140 dB is the sound threshold of pain.

70 dB is in the middle of this decibel range. It is equivalent to the sound level of a regular washing machine. It is also equivalent to the noise level in an office environment or inside a car driving at 60 mph.



70 dB noise is not considered harmful to human hearing. However, extended exposure to levels above 55-60 dB can be considered disturbing or become annoying.

For public or general environments, the Environmental Protection Agency considers that exposure to 70 decibels over a period of 24 hours is a level that can prevent measurable hearing loss over a lifetime. Therefore, 70 dB is the maximum level of noise you should be exposed to during a normal day.

This maximum level of 70 dB is considered for a 24-hour average. If you are exposed to levels above 70 dB you will need to balance out that exposure with a sufficient period of quiet to prevent hearing damage or hearing loss.

For comparison, the generally accepted exposure to noise in work environments is limited to 85 dB over a period of 8 hours/day.

What 70 dB sounds like will also depend on where you are standing compared to the sound source. The closer you are to the sound source, the louder the noise level will be. When the washing machine or dishwasher is close to your ear, you will perceive the sound louder. Move 1 or 2 meters away from it and it will become quieter. However, this does not mean that the sound generated by the washing machine or dishwasher changes. It's still at 70 dB. The only thing changing is your perception of that sound.

Exposure time is another important aspect. While you may not be annoyed by how loud 70 dB is if you are exposed to it for a few minutes, extended or repeated exposure can become disturbing. It can affect your concentration, raise blood pressure levels, and cause a number of adverse health effects.

### **Common Sources**

Here is a list of sound sources that are 70 dB equivalent (on average):

- A normal conversation: 60-70 dB
- Open office noise: 65-75 dB
- An alarm clock: 70-80 dB
- Washing machine: 70 dB
- Dishwasher: 70 dB
- Restaurant: 70-80 dB
- Vacuum cleaner: 60-80 dB

70 decibels is not considered too loud. It is a moderate noise level, under the level of 85 dB that is considered damaging to human hearing.

However, 70 decibels also represents the upper limit of the EPA recommended 24-hour average noise level exposure. Even if it's not considered a dangerous level, prolonged exposure to noise levels above 70 dB can still lead to hearing damage or hearing loss.

If you happen to become exposed to peak noise levels exceeding 70 dB for a shorter period, balance that exposure out with some quiet time. This way, you can give your ears a chance to recover from the loud noise exposure and avoid any temporary or permanent damage.

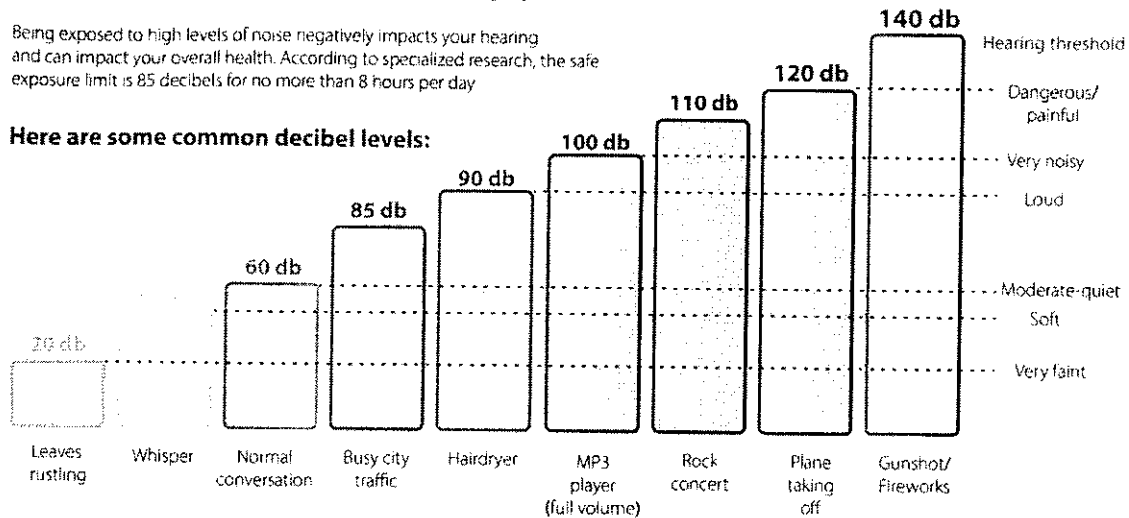
### **What Decibel Level Is Dangerous?**

Sound levels exceeding 85 dB are considered dangerous and potentially damaging to human hearing. However, it all depends on the duration of the exposure.

## How loud is too loud?

Being exposed to high levels of noise negatively impacts your hearing and can impact your overall health. According to specialized research, the safe exposure limit is 85 decibels for no more than 8 hours per day.

Here are some common decibel levels:



Noise levels above 80-85 decibels over an 8-hour period is the generally accepted limit from which employers have to provide hearing protection to workers. These limits are regulated by law for work environments with high noise levels.

However, for public environments, no dangerous noise limits are defined. The recommended maximum level in any general setting is 70 dB over a 24-hour period.

### Consequences of Exposure to Dangerous Decibel Levels

Being exposed to loud noise can affect the nerve endings in our inner ear and damage them. In turn, this can cause temporary or permanent hearing damage. If the exposure to loud noise continues, the result is permanent hearing loss.

Unfortunately, once it is lost, hearing cannot be restored. That's why it's vital that you monitor noise levels and avoid unnecessary dangerous exposure.