**How loud is too loud?**

**Audiology Awareness Month | October 2023**

**Hearing Health**

**Fact vs. Myth**

**Myth:** Everyday loud activities do not affect your hearing.

**Fact:** Many sounds can cause noise-induced hearing loss, including concerts, hairdryers, fireworks, alarms, and more.

**What can you do to protect your hearing?**

Wear hearing protection when in loud environments.

**Are all types of hearing protection created equal?**

No. Hearing protection is specifically designed for various loud environments. For example, over the ear headphones/earmuffs can be used by industrial workers such as aviation workers or landscape workers.

**Types of hearing protection**

- **Earmuffs/headphones** - Designed to fit most people. Work by blocking out a designed level of noise.

- **Expandable foam earplugs** - Designed to fit most people. Work by rolling foam between fingers to make them small enough to insert into canal. Foam then expands and creates a seal that blocks out sound.

- **Filtered Earplugs** - Universal fit. Designed to lower the volume/intensity of sound while preserving the sound quality as much as possible. Ideal for loud music events such as concerts, bars, clubs, etc.

- **Custom Filtered Earplugs** - Similar to filtered earplugs, however they are made out of custom molds taken from each ear. More comfortable and can provide more protection.

**Available to order at the Callier Center.**
Hearing Health Continued

How is noise measured?
Noise is measured in decibels (dB). Decibels can be adjusted/weighted differently depending on how and why its being measured. For noise exposure, the most common unit of measurement is in dBA.

How does noise exposure affect hearing?
Noise exposure is a combination of both how loud an environment is and how long you’re exposed to the noise.

How can I detect if I’m in too loud of an environment?
Some smart watches like apple watches will alert you when you’re in a loud environment. There is also an app made by NIOSH (NIOSH slm app) that uses your phones microphone to detect how loud an environment is. A good rule of thumb is if you’re having difficulty hearing the person next to you because of noise, chances are the environment may be too loud.

How long can I be in a noisy environment?
The chart below gives examples of loudness levels and how long you can be in that environment before hearing damage may occur.

FYI - Most concerts/clubs/bars are easily 90 dBA or above.

![Exposure Level per NIOSH REL](image)

<table>
<thead>
<tr>
<th>Noise Level (dBA)</th>
<th>Time Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>82</td>
<td>16 Hours</td>
</tr>
<tr>
<td>85</td>
<td>8 Hours</td>
</tr>
<tr>
<td>88</td>
<td>4 Hours</td>
</tr>
<tr>
<td>91</td>
<td>2 Hours</td>
</tr>
<tr>
<td>94</td>
<td>1 Hour</td>
</tr>
<tr>
<td>97</td>
<td>30 Minutes</td>
</tr>
<tr>
<td>100</td>
<td>15 Minutes</td>
</tr>
</tbody>
</table>

Resources

Choose the hearing protection that’s right for you | niosh | cdc. (2023, April 18). https://www.cdc.gov/niosh/topics/noise/choose.html