

The “sound” of hearing loss

Safety and health engineers at NASA have devised multimedia files that give listeners a chance to experience what hearing loss sounds like after years of occupational exposure to noise. The screen lets the listener know **what level of hearing loss is being demonstrated**, starting with no noise exposure, then five years of noise exposure and moving to the sound as heard by someone with 40 years of occupational noise exposure and the corresponding hearing loss.

These audio demonstrations illustrate both the need for and the benefits of workplace noise control efforts in a wide range of situations where understanding conversation is important. The files are intended as tools so that engineers, architects, contractors, workers, policymakers, and others can more accurately assess the true cost of communication interference due to occupational noise.

Here’s how to access the files:

NASA requests that the sound files be accessed through NASA’s website. Below are descriptions of the files and links to a page that house that audio or multimedia file.

Conversation in a noisy workplace

Progressive hearing loss is demonstrated. After listening to the conversation dulled by 40 years of noise exposure, the audio returns to the normal level with no hearing loss. The difference is startling.

Conversation in a busy restaurant

Progressive hearing loss is demonstrated. The conversation continues as hearing loss intensifies, ending with 40 years of hearing loss. The conversation returns to the normal level, demonstrating just how much is lost when hearing is damaged.

Listening to music with progressive hearing loss

Files are listed by type of music (country, rock, latin, rap, and more) and the listener hears the music as it is experienced through progressive noise exposure and hearing loss.

To download files:

1. **Click on the link** ANIMATED Auditory Demonstrations II: Challenges to Speech Communications and Music Listening.
2. You’ll come to a page on NASA’s Ear Lab. At the bottom of the page are two links, one for downloading to a Windows computer, the other for Mac. **Select the link that**

- matches your computer's operating system: Mac (Apple) or Windows (PC such as Dell, Acer, HP Compaq, etc.)**
3. You'll be prompted to "Run" or "Save" the file. **Click on "Run."**
 4. You'll be prompted to save the file. Select a file folder within your computer.
 5. **Wait for the file to download.** The files are large – more than 100 MBs, so it will take some time, depending on your Internet connection.
 6. When the file has downloaded, **click on the individual files to view the content and listen to the audio.** You'll see a screen and hear the conversations or music.

Here is the link to the file:

[ANIMATED Auditory Demonstrations II: Challenges to Speech Communication and Music Listening](#)

You'll have access to the multimedia files plus a PowerPoint presentation that has links to the multimedia files. You can modify that presentation to fit your needs but keep the embedded links to the files.

****IMPORTANT**** When you download the files, you are agreeing not to redistribute the file. So please send your friends who want to use this unique material the link to this page on eLCOSH so they can easily download and use these important examples of hearing loss.