



### **Introduction**

Thanks for your questions and comments about The Refuge Church's choices on sound volume levels during our church services. We do hope this document can explain our decisions and help answer your questions. We want you to be assured that we make the safety of our church, both present and future, one of the highest priorities in our decisions. We take any questions about the safety of our volume levels extremely serious and are continuously evaluating what will serve our congregation most effectively in the long run.

### **Standards of Safety**

We are thankful that the US government has done much research in the area of hearing safety. The government's Occupational Safety and Health Administration (OSHA) has researched and published its recommended sound levels for employees. You can find their chart of safe sound levels at this web address:

[https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=STANDARDS&p\\_id=9735](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9735)

To summarize what is said, the following sound levels are permissible given the lengths of time indicated:

15 minutes per day = 115 dBA  
30 minutes per day = 110 dBA  
1 hour per day = 105 dBA  
1.5 hours per day = 102 dBA  
2 hours per day = 100 dBA  
3 hours per day = 97 dBA

The table goes further, but we will stop there since it is very rare that the church will ever have more than one hour of music in a particular service, let alone more than three hours.

### **Applying These Standards To The Refuge Church**

In order to adhere to these standards at The Refuge, we use a decibel meter to measure the volume levels. That meter resides at the main sound board and is consistently monitored to make sure that we are not exceeding our desired levels. For most services, we target a sound level of 85dB - 95dB for worship and 70dB - 85dB for speaking. Only occasionally will we go beyond that level, sometimes reaching as high as 105dB for a frequency spike only lasting a couple seconds.

**Let's take a few examples in order to work this out in real life:**

**A Regular Attender:**

A regular attender will normally experience about 30 minutes of live music on a Sunday morning. Let's round up to one hour to be safe. That person can listen to music at 105 dB without concern for hearing damage. The highest level of 95 dB is well below that threshold.

**An iServe Team Member:** (Possibly Attending Both Services)

An iServe member, or any other person who attends both services in the auditorium, will experience about 70 minutes of music on that Sunday morning. Let's round up to 1.5 hours to be safe. That person can listen to music at 102 dB without concern for hearing damage. Again, the 95 dB is well below that threshold.

**A Student Attending Vertical Services:**

The occasional times we go past 95dB typically happen in the services aimed at the younger generation of the church. A person attending Vertical will experience about 20-30 minutes of music. Let's round that up to one hour again. They can listen at 105 dB without any hearing damage. And once again, even the highest levels of 100dB are well below the threshold of danger.

**Safety, Comfort, and Preference**

Finally, we must acknowledge that even within the range of safe sound volume, different people will have different preferences. Scientific findings will not necessarily make it easier for people to enjoy sound levels that are higher than they desire. The Audio Engineers and Worship Arts Director are responsible to ensure that the sound levels do not exceed safety standards. However, within those guidelines, the Executive Pastors oversee the standards of the services at The Refuge. We are also aware that some people have hearing problems that may cause a level of physical discomfort due to certain sounds or the overall volume. If this is your experience, please know that we are very sorry for the discomfort. The discomfort does not necessarily mean that your hearing is being damaged. You may want to have your hearing checked by a professional audiologist to learn if there is anything you can do to reduce the discomfort. We also want to make you aware that we offer earplugs at the doors of the Auditorium if you feel like you need extra hearing protection. They are individually packaged for your safety and convenience. You may also choose to listen to the band outside the doors of the Auditorium, or in the commons area, as the service is shown on all of the TV's.

**In Conclusion**

Thanks again for your comments and questions about our sound levels. We appreciate your courage to bring your thoughts to our attention, and we hope that your concerns have been addressed here. If you have any more questions at all, please feel free to contact the Worship Arts Director or an Executive Pastor.