



## Frequently Asked Questions Noise in the Entertainment Industry

### **1. How do I know if I'm exposed to too much noise?**

The hazard to your ears is based on the loudness of the noise plus how long you're exposed. The louder the noise, the shorter the period of time it takes to be harmful. The 'yardstick' in WorkSafeBC's Occupational Health & Safety Regulation (Part 7) is 85 decibels (dBA) for 8 hours, or the equivalent, on a daily basis. With every increase in noise levels of 3 decibels, the time it takes to become hazardous is cut in half. So, 85 dBA for 8 hours is the equivalent of 88 dBA for 4 hours, or 91 dBA for 2 hours, or 94 dBA for 1 hour, and so on.

Basically, if you have to raise your voice to talk to people, it's probably over 85 decibels.

If you have to shout to talk to people, it's probably over 90 decibels. Eight hours in 85 decibels is hazardous, but only 2 ½ hours at 90 dBA will give you the same dose of noise.

### **2. Which music venues have the loudest noise levels?**

No question, live bands performing indoors in places like B.C. Place, The Commodore, or the Centre for Performing Arts. Noise levels can reach 115 dBA easily. You'll reach the equivalent of 85 dBA for 8 hours in about 25 seconds of exposure.

Second loudest are nightclubs with recorded music, which routinely reaches 96-98 dBA. You'll reach the equivalent of 85 dBA for 8 hours in about 20 minutes of exposure.

Least noisy are the 'neighborhood pubs', which tend to have quieter recorded music (88-90 dBA) and live bands play only 1 or 2 nights a week, with lots of breaks in their sets.

Surprisingly loud are high school dances, which can reach 105 dBA! At that level, the 85 dBA for 8 hours exposure criterion is exceeded in 5 minutes of exposure.

### **3. How noisy is part-time work?**

It's true that the less time you're exposed to noise, the less risk you will have. Most people who work in the entertainment industry don't work a 40 hour week. But look at question #1 (above)—only 2.5 hours at 90 dBA will give you a whole day's dose of noise.

If you only work one 5 hour shift at 90 dBA a week, then your ears are safe.

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#### **3. How noisy is part-time work? (continued)**

Work two 5 hour shifts at 90 dBA in a week, and you're almost up to a full week's noise exposure. Add a third shift of 90 dBA, and you've got more than a week's noise exposure—and in only 15 hours of work (3 shifts of 5 hours each).

If you work 30 hours a week at 90 dBA, you're exposed to the equivalent of almost 3 weeks' worth of noise—that's a big risk to your hearing.

#### **4. If I wear hearing protection, how can I do my job?**

There are a couple of products designed for people with 'high listening demands', like you. They are the AO (American Optical) "Hi-Fi" earplug and the custom molded "Musicians' Earplug". The custom molded one comes in a wide variety of colours, including many skin tones, so they are almost invisible when you wear them—especially if your hair covers your ears. They protect you from noise while letting in enough other sounds to do your work. These products are used by professional musicians and their technical crews all the time.

#### **5. Aren't personal music devices (PMD), like MP3s, more hazardous than any hospitality venues I might work in?**

WorkSafeBC has looked at hearing levels of very young workers (under 19 years of age) as of 1988 and as of 2007. The research shows no differences in hearing levels over the past 20 years, meaning, there's no evidence yet that personal music devices are harmful to hearing. Some other research has also shown that the noise levels at the ears of PMD wearers are much lower than 85 decibels. Especially with well fitting ear tips, the volume needed to reach desired listening levels is lower than when listening to music through external speakers.