

Much Too Loud

BY RICHARD EINHORN

My friend Scott Wilkinson writes about professional sound technology for a living. Recently, a famous rock band began a four-nights-a-week concert series in Las Vegas that boasts the absolute latest and greatest sound equipment for

their shows. So off Scott went to experience it for himself and review the show.



The band's concerts take place in a large auditorium outfitted with 38 surround speakers, 22 overhead speakers and 24 subwoofers—speakers that reproduce bass sounds. This amazing audio system lets the band's technicians not only amplify but also place the band's sound all around

the audience with incredible precision. Scott found the overall sound “excellent—very clean and clear...”

But there was a serious problem.

While the sound quality was wonderful, it was also, Scott wrote, “brutally loud”—so loud that he couldn't tolerate it for more than a minute and quickly got out his ear plugs. Measuring the volume with a highly accurate smartphone app, Scott found that the sound level was so high that “according to the CDC (Centers for Disease Control and Prevention), it can cause permanent hearing damage in as little as five to 15 minutes.” Even if the ringing in their ears subsides a few days later, published research shows that many of the people who attend concerts like these are likely to require hearing technology earlier than those who weren't exposed to such high sound levels. And their hearing problems are likely to advance faster.

The band that Scott reviewed performs four shows a week in their 5,200-seat theater. Since most of the audience members for large rock shows usually don't wear hearing protection, nearly 21,000 people a week are being placed at risk of serious hearing loss later in life. This is just one venue, among many, that regularly delivers music at literally deafening sound levels. In fact, the hearing tests of between

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10 to 40 million Americans “suggest hearing loss in one or both ears from exposure to loud noise,” according to the HLAA webpage on noise-induced hearing loss.

And music concerts are hardly the only culprit. In sports arenas, fan noise—say, during a hockey goal—has reached levels above 120 decibels. That's louder than the takeoff of a jet plane!

Speaking both as a professional musician and a hearing health advocate, these sound levels are appalling. Their practical effect is to create a massive increase in the population of Americans with hearing loss, especially among older adults who were exposed to loud sound when young. While we welcome, of course, anyone with music or noise-induced hearing loss to HLAA—where they'll find a wealth of information and meet some wonderful people—this isn't, by any stretch of the imagination, how we wish to add to our ranks.

So, what should we do? All of us should wear hearing protection when we attend loud concerts or sports events in large stadiums. Yes, even if you already have a hearing loss, exposure to loud sound can make it even worse. The good news is that it's possible to buy reasonably priced musician ear plugs that attenuate the volume but don't affect the overall balance of the sound.

And if you do go to loud events, bring extra ear plugs for your normal-hearing family or friends. Explain to them the serious dangers of modern sound levels at concerts and live sports events—and that even a single exposure to loud sound creates permanent, hidden damage. It's simply a matter of hearing health. **HL**

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