

Support the 85/3 Occupational Noise Exposure Project

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We have been working at hearing conservation since . . . well, since the first Nixon administration. The Walsh-Healy Public Contracts Act of 1969 was the first federal attempt to manage noise exposure in the workplace. Since then, we have been through iterations of regulations, from the Noise Control Act of 1972 to the Hearing Conservation Amendment (HCA) of 1981-1983 to the always-pending EPA revision of the hearing protector labeling rule. Through this process, one thing has remained the same – people continue to lose hearing on the job.

Figure 1 shows the trend in hearing losses qualifying as recordable events on OSHA Form 300 as a function of total workplace illnesses, starting in 2004 (when hearing loss was given a separate recording location) and through 2010 (the most recent year for which stats are available). While the overall trend appears positive (fewer people getting sick and damaged in the workplace), a few things come to mind.

The overall size of the workforce and number of people working in noise has been significantly affected by the Great Recession (or economic downturn; the choice of terminology is up to you). Through this process, however, hearing loss has remained consistent at between 10% and 12% of total workplace illnesses. More importantly, since 2004, over 163,000 U.S. workers have received permanent, irreversible, disabling hearing loss from noise exposure on the job.

Do we understand noise? Yes, absolutely. Do we understand hearing? Better than we used to, that's for sure. Our misunderstanding appears to be in how to prevent hearing loss on this job.

There are likely a variety of reasons behind this phenomenon. Is our training hitting people where they live? Are we motivating people to care about and take care of their ears, or are we handing out the pamphlet and checking the box? Are hearing protectors doing the job of keeping people safe from noise? Are we doing all we can to make sure the right hearing protectors are being properly used by the right people at the right time?

Or could part of the issue be as simple as this: Are we simply allowing too much

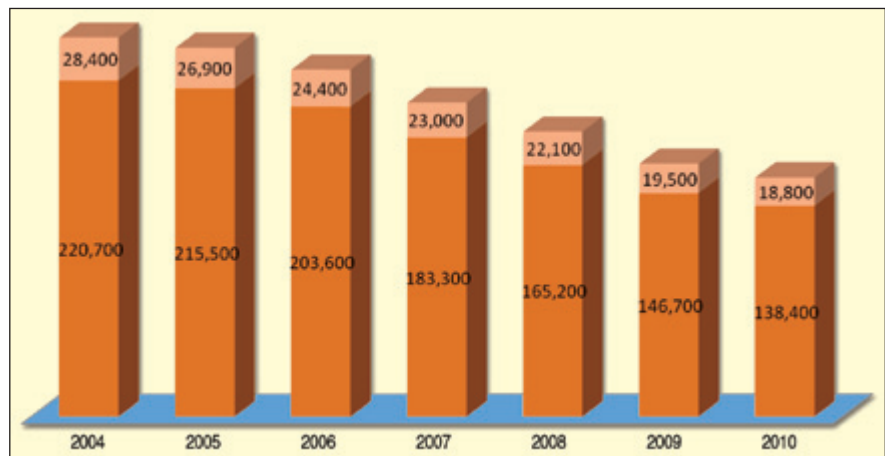


Figure 1. Hearing loss recordability trends show more than 163,000 hearing losses since 2004. These numbers are from OSHA Form 300 that tracks hearing losses that qualify as recordable events.

noise exposure in the workplace? We are still living with noise exposure standards that are in part more than 40 years old. The 90-dB TWA limit in that old Walsh-Healy Act remains the basis for the HCA. We are allowed by law to expose workers for eight hours at 90 dB TWA with no hearing protection. Sure, the other requirements of the HCA like hearing testing and training kick in at 85 dB TWA (time-weighted average), but the law allows 90 dB TWA.

In addition, we use a 5-dB exchange or trading rate to calculate the allowable time of exposure; if we allow 8 hours at 90 dB, we allow 4 hours. Again, protection is not required at 95 dB and 2 hours at 100 dB. If you've ever had the experience of working in an environment of 100 dB for any amount of time, you'll understand my concern that this is actually allowed under current law.


There is no penalty for taking a more conservative approach. In fact, many employers already surpass these exposure criteria in their internal policy and standards. It's time to recognize these pioneers and applaud them for their protective attitude to hearing. That's the rationale behind the 85/3 project.

The expert panel for the Safe in Sound (SiS) Award (co-sponsored by NIOSH and the National Hearing Conservation Association) to identify and recognize outstanding an innovative hearing loss prevention programs noted that one of the common

aspects the award-winning programs was that nearly all of them have adopted an exposure criteria more stringent than that required under law. Typically, the folks running these wonderful programs have adopted an exposure limit of 85 dB and an exchange rate of 3 dB. This approach means that instead of the 2 hours allowable at 100 dB mentioned above, the exposure limit for 2 hours is a much more livable 91 dB.

This proactive, conservative approach deserves recognition, and people considering a safer approach to noise exposure should realize that they are not alone. To that end, a website has been established where companies and organizations can sign up voluntarily to tell the world that they believe in hearing loss prevention.

I encourage you to give this approach serious consideration, and for those of you who have already adopted the 85/3 standard to join in publicizing your commitment to hearing loss prevention. Let the world know you care and are taking a stand by e-mailing a letter, signed by an authorized person and on your company letterhead, to 853@safein-sound.us. Questions about the campaign can be forwarded to the same address.

Drawing a line can make a difference – support of the 85/3 project can help save the hearing of the US workforce. 

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