



# Q1 Occupational Hearing Health News & Research Roundup

*by Adam Dawson*

As hearing professionals, it's important to stay on top of the latest news and research so you can be informed about newly established practices, discoveries in the auditory system, new technologies for better hearing loss detection and hearing protection, and more! Here are some noteworthy studies and news stories related to occupational hearing health from Q1 2018:

## **Loud workplaces associated with heart disease – March 22, 2018**

Full article: <http://www.ehstoday.com/industrial-hygiene/cdc-loud-workplaces-associated-heart-disease>

The Center for Disease Control (CDC) has published a study linking high blood pressure and cholesterol to people exposed to loud noises at work. Researchers at CDC's National Institute for Occupational Safety and Health

(NIOSH) analyzed data from a 2014 National Health Interview Survey to estimate the prevalence of occupational noise exposure, hearing difficulty, and heart conditions within U.S. industries and occupations.

Additionally, they looked into the association between workplace noise exposure and heart disease. The results showed that, 12 percent of workers experienced difficulty hearing, 24 percent had high blood pressure and 28 percent had high cholesterol. Of these cases 58 percent, 14 percent, and 9 percent, can be attributed to noise exposure, according to researchers.

## **Hearing loss at work still a cause for concern – March 9, 2018**

Full article: [http://pwemag.co.uk/news/fullstory.php/aid/2921/Hearing\\_loss\\_at\\_work\\_-\\_still\\_a\\_cause\\_for\\_concern.html](http://pwemag.co.uk/news/fullstory.php/aid/2921/Hearing_loss_at_work_-_still_a_cause_for_concern.html)

With an estimated 20,000 workers suffering from work-related hearing problems, according to Health and Safety Executive (HSE), hearing loss in the workplace is still of great concern. Because there are no cross-industry standard practices to protect workers from noise, there is too much variance in how businesses approach hearing protection.

In an effort to improve practices, a UK-based infrastructure solutions business called the PX Group has adopted a new approach to hearing protection. This new approach involves placing double-ended microphones on the ear protection to measure outside sound and in-ear sound. Ultimately, the goal is to test the ear protector's ability to suppress harmful noise without distorting sound too heavily.

### **World Hearing Organization predicts 900m people could suffer hearing loss by 2050 – March 9, 2018**

Full article: <https://guardian.ng/features/health/who-predicts-900m-people-could-suffer-hearing-loss-by-2050/>

A jaw-dropping study released by the World Hearing Organization (WHO) forecasts that 900 million people worldwide could suffer from hearing loss by 2050. They attribute this number to a growing ageing population; the persistence of risks such as infections like measles, mumps, and rubella; the use of medicines that can harm hearing; and increased exposure to loud sounds through personal audio devices, and in entertainment venues and workplaces.

### **Study highlights prevalence of hearing loss among workers in agriculture, forestry, and fishing industries – February 21, 2018**

Full article: <https://www.cdc.gov/niosh/updates/upd-2-21-18.html>

A National Institute for Occupational Safety and Health study revealed that hearing loss among noise-exposed workers in the Agriculture, Forestry, Fishing and Hunting (AFFH) sector is 15 percent. Upon further examination of industries within the sector, researchers found that workers in some industries are more affected or at higher risk than others. The industries within the AFFH sector with the highest number of workers with hearing loss, or at elevated risk of hearing loss, include:

- Forest Nurseries and Gathering of Forest Products (36%) – Entails growing trees for reforestation or gathering barks, gums, fibers, etc. from trees
- Timber Tract Operations (22%) – entails harvesting standing trees to make timber
- Fishing (19%) – the study sample comprised of workers fishing for tuna, salmon, trout, etc.

17,299 hearing tests and audiograms from workers at 458 different companies were examined for this study. Certified technicians conducted hearing tests for workers exposed to noises greater than or equal to 85 dB.

### **UVA professor has invented a better earplug – February 9, 2018**

Full article: <https://news.virginia.edu/content/listen-uva-professor-has-invented-better-earplug>

University of Virginia physics professor Lou Bloomfield has invented an earplug made from a unique silicone rubber he developed. Called EarJellies, the plugs conform to the shape of an individual's ear canal and retain that shape, forming an effective seal for blocking out sounds. Unlike foam plugs, EarJellies give you more time to insert correctly and do not crimp.

Additionally, tests have shown that the types of sounds that often cause hearing damaged are sufficiently suppressed with this product. At the

same time, sound distortion is minimal, so workers can still hear what's going on around them.

### ***About the Author***

*Adam is the Digital Marketing Coordinator at e3 Diagnostics. His interest in hearing healthcare is driven by his passion for music because he feels everyone should be able to clearly listen to Pet Sounds at least once in their life. In his free time, he enjoys playing video games, digging through record stores for classic vinyl, shooting hoops, and writing stories.*