# SafeX

# **Headphones in the Workplace**

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More and more employees in the workplace are requesting to wear headphones in the workplace. Bluetooth-enabled earbuds and AirPods® have become a staple in many people's lives, providing connections, entertainment, and music to us as we work. However, there are dangers with the use of these devices on the job, and some distributors have made claims of safety that are not accurate.

## "OSHA Approved"

Some of you may have noticed your Personal Protective Equipment (PPE) suppliers advertising "OSHA Approved" earbuds, or maybe you have an employee who has approached you claiming their earbuds or AirPods® are noise cancelling and OSHA approved. **OSHA does not register, certify, approve, or otherwise endorse commercial or private sector entities, products, or services.** Any such claims by a manufacturer would be misleading. ANSI is the accepted testing agency for PPE, and any products that would provide adequate noise reduction (NRR: Noise reduction rating) would have to go through testing to meet the ANSI/ASA S12.6-2016 requirements and declare their NRR. That rating needs to be sufficient for the employees' exposures in the workplace.

#### **Noise Cancellation**

The two most common types of noise cancellation technology available on the market are PNC (passive noise cancelling) and ANC (active noise cancelling). PNC headphones typically provide soundproofing by enclosing or filling the ear with materials which deadens the loud noise around the employee. (See earmuffs or foam style ear plugs) This allows the employee to communicate but reduces the overall noise exposure.

ANC headphones like those marketed by audio manufacturers typically block ambient sound by using active noise control with a low frequency, and soundproofing for higher frequency. This is of course assuming both pieces of equipment fit well for the person's head/ear.

### **Noise Exposure**

Noise continues to be one of the most uncontrolled hazards in the workplace across many industries. In manufacturing, warehouses, and construction, thousands of people a day are exposed to noise levels above the action level of 85 dBA calculated as an 8-hour TWA (time weighted average for an 8-hour shift) set by OSHA. OSHA requires employers to implement a hearing conservation program where employees noise exposure is at or above 85 dBA averaged over 8 working hours. The purpose of these conservation programs is to prevent the initial and ongoing hearing loss that occurs for



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workers. This becomes difficult to manage when employees are using self-contained audio devices which may be set to levels above the PEL for their own enjoyment. OSHA does not give employers a 'pass' for 'self-inflicted' hearing loss that takes place during work activities because the employee had their hearing protection turned up too loud.

# **How Do We Adapt**

We're going to work through our hierarchy of controls. For those who are unfamiliar, the hierarchy of controls is a method of identifying and implementing protections for workers in the workplace.

Ideally, we will be able to eliminate or substitute the hazard and reduce or eliminate the employees' exposure. However, that is not always possible. So we move to engineering controls, utilizing quieter tools, equipment and



materials wherever possible. When employees are still exposed to noise at or above the 85 dBA time weighted average, you need to implement administrative controls (hearing conservation program, work rotation schedules etc.) and issue **approved PPE**. No company is required to allow headphones in the workplace. You can absolutely state no inter or over ear audio devices are permitted on your worksite, hands down, no exceptions. But if you **are** going to allow them, you need to have a plan.

Company representatives and management need to identify **acceptable** sources of hearing protection that are Bluetooth or audio enabled, and document those in the hearing conservation program. This may require you to reexamine your program and make additions or changes to what is already in place. Companies are by no means required to provide these items to employees, but it would allow them to purchase their own while remaining within the guidelines of the company's safety policy. It also requires additional work for the EHS team to manage the employees' use and make sure they're staying within the limits of exposure. Completing a thorough Job hazard analysis identifies which tasks can permit the use of headphones and which are considered unsafe.

https://www.osha.gov/laws-regs/standardinterpretations/2023-03-06

https://www.cdc.gov/niosh/noise/about/index.html

https://www.cdc.gov/niosh/noise/prevent/index.html