

MBAA Safety Toolbox Talk



Hearing Conservation—How Do I Accomplish It?

Noise is just about impossible to engineer out of the brewing process without finding softer glass.

A Hearing Conservation Program

- The purpose of this program is to protect your employees' hearing.
- First: you must measure/map out your facility's noise levels.

How do you do this? By obtaining the services of an industrial hygienist. This can be accomplished by using the OSHA Consultation Program, your worker compensation carrier, or a private industrial hygienist. (Plan on a full day—they will need a minimum of 6+ hours of monitoring to obtain significant results):

- Use the National Institute of Safety & Health's (NIOSH) Noise Measuring App to get a preview of sound levels.
- Testing should be done wherever the noise is loud enough to make communication difficult. Generally this means in bottling, by noisy machinery, at the centrifuge, in the boiler house, and wherever the noise is above or approaching 85 dB.
- The dBA, which is the A-weighted scale, is the number OSHA enforces. dBC more closely reflects human hearing and can be different.

If the brewery is over 85 dBA in any work area then you are required to establish a Hearing Conservation Program (Note: this does not have to be written—but you must be able to prove you are performing the following: conducting noise level surveys every three years, requiring mandatory hearing protection, offering at least two different types of hearing protection, conducting employee hearing tests and training annually, fitting employees with adequate hearing protection, and informing employees

about noise levels and their hearing tests' results).

This program requires you to obtain a baseline hearing test within the first 6 months of exposure to 85 dBA+, which can be compared to each subsequent year to get an early warning of insufficient protection and problems. (Note: you are allowed to use a Hearing Testing Van, as long as you use it on an annual basis, for the baseline testing.)

Hearing Tests

To obtain an accurate test, you need 14 hours of quiet before the test—very little noise and use hearing protection until the test is taken.

Understand that you are not taking the same test as other people—it is your hearing being tested. Only respond when you hear the tone—they are looking for multiple responses at the same dB level.

What do the test results mean, how do you understand them, and how do you possibly explain them to employees?

Once receiving test results, you need to rely on the audiologist's explanation of the results (Note: you have 21 days to give employees a copy).

- If there is an average loss of 10 dB in the same ear, between the baseline and the current test at 2,000 Hz, 3,000 Hz, and 4,000 Hz, there has been a Standard Threshold Shift (STS). This is an early warning that something is not working right for the employee. Check the type of hearing protection they use. Are they using it properly, do they have an excessive wax build-up, and/or are there any hobbies they might have (guns, music, etc.) that could indicate a need for medical follow-up?

- If an employee has suffered an STS, they may be retested within 30 days and use the retest as their annual result. When the above three frequencies have an average difference of 25 dB from the baseline and persistent, the audiologist may change the baseline. In both cases, if the retest confirms the STS, the 10 and 25 dB average is an OSHA Recordable. If it does not confirm the STS then it is not recordable on the OSHA 300. If you choose to not retest and next year the audiologist indicates to remove the recordable, you may line-it-out.

What is Annual Training?

Annual training should:

- Help the employee understand noise
- Help the employee understand how to ensure an accurate hearing test
- Explain the different hearing protection options available—their shortcomings, Noise Reduction Range (NRR), and how to wear them properly
- Not be a repeat of the previous year's training

EAR, 3M, Howard Leight, and Peltor provide free training programs that can be obtained online—use them.

LEARN MORE!

To learn more about Noise go to websites:

<https://www.osha.gov/SLTC/noisehearingconservation/index.html>

<https://search.cdc.gov/search/?query=Noise&sitelimit=&utf8=%E2%9C%93&affiliate=cdc-main>

FOR MORE INFORMATION ON BREWERY SAFETY, PLEASE VISIT THE MBAA BREWERY SAFETY WEBSITE AT:

<http://www.mbaa.com/brewresources/brewsafety>