

HOW LOUD IS TOO LOUD? ARE YOUR OPERATIONAL NOISE LEVELS PUTTING EMPLOYEES AND CUSTOMERS AT RISK?

By Robert MacDonald



Loud noise is an occupational hazard in many construction, laboratories and manufacturing operations. Exposure to high levels of noise may not only impact hearing ability, but overall health as well.

Noise induced hearing loss is often permanent and can't be corrected with surgery or a hearing aid. According to one study, excessive occupational noise can also increase the likelihood of workers suffering serious heart disease by two to three times*.

It's crucial to manage noise levels to help protect employees.

Lower noise levels may increase customer engagement too. Many consumers are desiring a closer look at how their beer is brewed and bottled, how their vehicle is repaired, how their food is processed, etc. Volume-managed operations can use this interest as an opportunity to further interact with their customers to provide a highly competitive and personal customer experience.

How loud is too loud?

The Occupational Safety and Health Administration (OSHA) required permissible exposure limit (PEL) for noise exposure is 90 dBA for an 8-hour time-weighted average (TWA). The standard uses a 5-dBA exchange rate meaning when a noise level is increased by 5 dBA, the exposure time is cut in half.

In addition, OSHA requires employers to implement a Hearing Conservation Program (HCP) whenever workers' noise exposures equal or exceed an 8-hour TWA sound level of 85 dBA in general industry also known as the action level (AL), or when levels exceed 90 dBA in construction.

An HCP requires an employer to:

- Develop a noise-monitoring program
- Notify employees of hazardous noise levels
- Allow employees the ability to observe noise monitoring
- Maintain an audiometric testing program, including a baseline audiogram
- Provide hearing protectors
- Develop a training program
- Provide access to information and training materials
- Maintain accurate records

What are some things you can do to help decrease noise levels?

Even if you're not required to implement a HCP, keeping sound levels as low as possible is a must to help keep workers and customers safe. Here's a list of a few things you can do to combat rising dBAs on the jobsite or in the shop.

- Provide hearing protection
- Monitor noise levels
- Check in regularly with all employees exposed to high volumes
- Build or install sound barriers
- Buy quieter equipment
- Hold daily safety meetings to discuss and limit high noise levels

Sullair compressors are designed with worker and customer hearing safety in mind. Sullair T4F portable units operate at a sound level of 76 dBA or lower. Our stationary line has machines with sound levels as low as 48 dBA—quieter than rainfall!

Noise damage can't be cured or reversed, but it can be prevented. That's why it's critical to your employees, your customers and your bottom line to take the proper hearing protection steps.

Comparative Noise Levels	
dBA Rating	
40	Library
As low as 48	Sullair SRL Series
50	Rainfall
55	Coffee Percolator
60	Sewing Machine
As low as 65	Sullair DSP Series
As low as 66	Sullair S-energy, ShopTek Series
As low as 70	Sullair ES-6 S-energy Series
70	Freeway Traffic
As low as 76	Sullair T4F Portables
80	Doorbell
85	Noisy Restaurant
90	Tractor
100	Factory Machinery
110	Leaf Blower
120	Thunder
130	Jackhammer





^{*} Gan, W. et al., Exposure to Occupational Noise and Cardiovascular Disease in the United States: NHANES 1999-2004, Occup Environ Med doi: 10.1136/oem.2010.055269.

^{**} This post is for educational purposes only. Noise regulations may vary by region and change over time. Please consult the proper authorities when assessing noise limits and Hearing Conservation Programs.