

Noise Laws, Studies, & Terms

The way noise is regulated, studied, and managed is always changing. You don't have to be an acoustic expert to keep those changes from disrupting your projects. Here are the top 2025 highlights to keep you informed.

Regulatory Updates

Changes in Federal Regulation

In January 2025, an executive order removed the nationwide regulations that were used to enforce the National Environmental Policy Act (NEPA). Federal agencies have until February 2026 to develop their own NEPA procedures, including how they address noise pollution. What does that mean for you? It could spell confusion around inconsistent requirements.

Crack Down on Data Centers

As Al use rises, the race for more data centers continues. But they're noisy, and people are catching on. 2025 will bring more local regulations that restrict the size, zoning requirements, and noise pollution of data centers.

Canada Catches Up

Canada continues to define its noise pollution regulations. The latest update includes specific noise exposure limits. It also requires you to implement engineering controls, such as sound barriers, before turning to personal hearing protection as a solution.



Studies to Watch

Recent studies continue to link noise pollution to physical and mental health issues, highlighting the need for scientifically-proven mitigation strategies.

The Impact of Noise Pollution

Direct Consequences	Hearing Loss Tinnitus Hyperacusis	Elevated Blood Pressure Increased Heart Rate	Increased Cortisol Autonomic Nervous System Activation	Sleep Disruption
Indirect Consequences	Increased Risk of Dementia Reduced Quality of Life	Hypertension Heart Disease Stroke Risk Premature Mortality	Metabolic Dysfunction Increased Susceptibility to Illness Diabetes Risk	Hormonal Imbalance Chronic Fatigue Depression & Anxiety

Sources: World Health Organization. (2024, August 4). How much does environmental noise affect our health? Center for Progressive Reform. (2024, January 31). New Report: Addressing Noise Pollution.

Definitions to Know

Here are a few key terms used when talking about noise assessment and mitigation.

Sound Transmission Class (STC): A rating that indicates how well a material blocks sound. Noise Reduction Coefficient (NRC): A rating that indicates how well a material absorbs sound. Hertz (Hz): The unit used to measure the frequency of sound. Decibels (dB): The unit used to measure the intensity or loudness of sound. A-weighted decibels (dB-A): A measurement of sound that's adjusted to reflect the sensitivity of human hearing.

C-weighted decibels (dB-C): A measurement of sound that's adjusted to capture low-frequency sounds.

Continuing Education Resources

- Institute of Noise Control Engineering (INCE-USA)
- Council for Accreditation in Occupational Hearing Conservation (CAOHC) Noise Measurement
- Continuum Education, Noise Control Courses for Architects

Questions? Let's Talk

Hung up on a regulation, definition, or situation? Our team has the regulatory, acoustic, and mitigation expertise to get your project back on track. Reach out at <u>environmental-noise-control.com/contact</u>