







# Acoustic Therapeutics™

Improving Wellbeing By Healing Noise™

## HOSPITALS & LTC FACILITIES ARE NOISY

Buzzing machines, clanging carts, ringing phones, loud conversations, HVAC and medical equipment, footsteps, traffic, vending machines, slamming doors...the list is seemingly endless. **Noise is everywhere.** Healthcare Finance News stated in its December 2017 article *"Everybody's Top Complaint About Hospitals? Noise, According To HCAHPS Data"* that noise makes a night in the hospital **"exasperating."** As Susan E. Mazer, Ph.D., so aptly stated in her blog (March 15, 2013), "Today's noise is tomorrow's HCAHPS score."

- **"More than a nuisance, noise is a real health hazard."** — World Health Organization, Occupational and Community Noise, 2001
- **"Noise levels in hospitals and healthcare facilities have doubled since 1972."** — David M. Sykes, ANSI S12 Work Group 44, May 21, 2009
- **"Hospital administrators repeatedly rank noise reduction as their top priority."** — Wall Street Journal, June 10, 2013
- **"More than 60% of noise is avoidable."** — World Health Organization, Occupational and Community Noise, 2001

 <b>NOISE</b> Noise disrupts sleep, impedes healing, degrades job satisfaction, reduces productivity & carries substantial mental & physical risks.	 <b>EXPERIENCE</b> We're a specialty subsidiary of Auralex Acoustics, Inc., based in Indianapolis & a global leader in acoustical treatments & consulting services since 1977.	 <b>QUIET PAYS</b> Proper sound control improves patient-satisfaction ratings & staff retention, while increasing productivity & reducing errors.	 <b>HAPPY &amp; HEALTHY</b> Reducing noise in your facility leads to happier employees & improved patient outcomes for many years to come. Make a sound investment!
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## THE MORE THINGS CHANGE

In her 1859 book *Notes On Nursing*, Florence Nightingale stated that "unnecessary noise is the most cruel abuse of care that can be inflicted on either the sick or the well." These days, we have such a vast understanding of the physics of sound control, and so many more weapons at our disposal with which to fight noise, there is no need to put up with noise in your facility any longer.

## LET US HELP

We're **The Noise Doctors™**. Our proven, worldwide expertise in the science of acoustics enables Acoustic Therapeutics to engineer customized solutions, designed specifically for healthcare environments. With our acoustical panels, noise monitoring, consulting services and other tools, the noise in your facility can be significantly reduced, resulting in a safer and healthier environment for your patients, staff and visitors.

- **"Sound-absorbing materials...may be the most effective measure to reduce sound levels in a hospital setting."**  
— Rebecca Taylor-Ford, Kaiser Permanente, Santa Rosa, California, Effect of a Noise Reduction Program on a Medical-Surgical Unit, First Published May 1, 2008

## TYPICAL BENEFITS SEEN

Once our **Acoustical Treatment Plan™** is implemented in your facility, there will be a significant and measurable reduction in overall ambient and unnecessary noise. This can lead to:

- Greater control of care environments
- Increased efficiency in care-related tasks
- Reduction of stress and anxiety levels
- Reduction of staff errors, including clerical and caregiving
- Clearer communication among patients and staff
- Deeper satisfaction and loyalty from caregiving staff
- Increased privacy for discreet conversations
- Potentially better outcomes for more patients, and on a more consistent basis

## OUR SERVICE OFFERINGS

We offer multiple levels of consulting, as well as staff training, ongoing noise-level monitoring, localized noise-alert technology and subscription-based noise-level reporting to ensure effectiveness and compliance.

*continued* ➡

## PAY IT FORWARD

Acoustic Therapeutics, LLC, is

the healthcare division of **Auralex**

**Acoustics, Inc.**, a global leader in

professional acoustical treatments and

consulting since 1977. Throughout our

42-year history, we have fostered a

strong corporate culture of giving. With

several nonprofit enterprises launched

and managed as adjunct organizations,

our companies embrace the challenge of

helping improve the quality of life for both

humans and animals.



Our **Level One** package includes a walkthrough assessment of your affected areas, with our findings and recommended **Acoustical Treatment Plan** conveyed via a written report.

**Level Two** includes the above, but also the placement of HIPAA-compliant\* sound-level monitors for a period of one week, after which we use proprietary processes and software to analyze and interpret the reams of data, then submit our findings and recommended **Acoustical Treatment Plan** to you via a written report that will include all relevant data and measurements. \*Documentation discussing HIPAA compliance is available.

**Level Three** includes everything in Level Two, plus an in-person presentation for stakeholders about our findings and recommendations.

When we deliver a formal summary of our evaluation, our recommended **Acoustical Treatment Plan** will include a step-by-step solution proposal, complete with budget options and timeline.

We also offer optional staff training designed to increase awareness of the effects of noise on patients, staff and visitors, and to make staff members aware of how they each may be contributing to the overall noise load of the facility. This training is not mandatory, but is highly recommended to accompany the installation of acoustical treatments, as research has shown that staff training can reduce peak sound levels by up to **70%**. Once our **Acoustical Treatment Plan** is implemented and the staff properly trained, we can optionally reassess your noise levels and award (at Level One, Two or Three) **Acoustic Therapeutics SafeSound Certified™** status to your facility, which you'll then be authorized to display onsite, online and in marketing materials to differentiate your facility from those of your competitors.

Noise abatement efforts will positively impact your bottom line in multiple ways, including staff retention. An OxfordEconomics.com study showed that **over 50% of employees** feel that noise reduces their job satisfaction and productivity.

## THE SCOPE OF OUR ASSESSMENTS

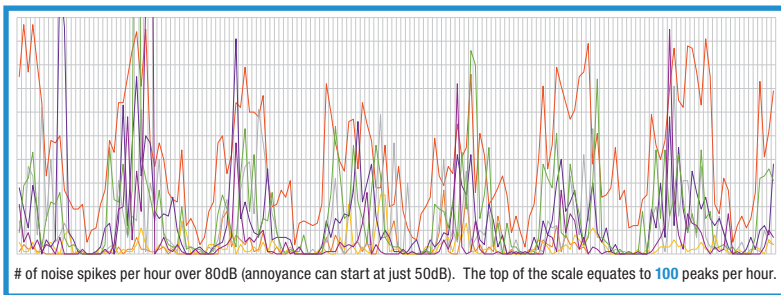
We assess high levels of ambient sound and what may be causing them. We assess sound-isolation issues that may be violating HIPAA regulations or, at the very least, causing operational and privacy concerns. We assess the physical construction of your facility and how this impacts your sonic environment. We look for mechanical and human sources of noise. We assess the physical layout for sonic pathways that may be encouraging noise to travel to where it shouldn't. The bottom line: If it causes noise or fails to provide sound isolation where containment is desired, we want to know about it so we can best advise you on the proper solution.

We will deliver a formal summary of our evaluation, including all relevant data and measurements, along with a specific, written plan which addresses your needs. This **Acoustical Treatment Plan** will include a step-by-step solution proposal, complete with budget options and timeline.



## OUR APPROACH

We have become known worldwide for our down-to-earth demeanor and our rational approach to what we call **Real-World Acoustics®**. We do not spend our clients' money needlessly, we do not waste anyone's time and we base our consulting guidance on a solid understanding of the physics of sound control. You'll enjoy dealing with us. You can trust in our expertise. And you can take our recommendations to the bank.



# of noise spikes per hour over 80dB (annoyance can start at just 50dB). The top of the scale equates to **100** peaks per hour.

## ARE HEALTHCARE FACILITIES REALLY THAT NOISY?

Sadly, yes. We have measured peak sound levels **4X** as loud as a lawnmower, **8X** as loud as a blender and garbage disposal, **16X** as loud as a vacuum cleaner and equally as loud as a **jackhammer**. We've measured peak sound levels an astounding **256X** as loud as the average nighttime sound level (30dB) recommended by the World Health Organization (WHO). The graph at the left is a compilation of measurements from a client's facility and illustrates that very loud, disturbing peaks of noise were occurring up to **365X per hour**. (We truncated the vertical axis of the graphic, but the data actually would extend nearly to the top of this page.)

## HOW NOISE AFFECTS US

Countless research studies have documented the negative physical and emotional effects of noise and have stated that, among other things, noise: interferes with our sleep, raises our blood pressure, increases our heart & respiration rates, causes and worsens dementia, suppresses our immune system, increases anxiety, increases cortisol, impedes learning and increases cognitive impairment (focus, performance, productivity). A recent Google search on "dementia"+"noise" yielded **10,600,000** hits. A search on "Alzheimer's"+"noise" yielded **8,090,000** hits. A search on "hospital"+"noise" yielded a staggering **83,300,000** hits. There is ever-growing awareness and widespread acknowledgment of the **negative effects of noise**.

## TOOLS OF THE TRADE

We have a vast array of acoustical intervention devices at our disposal — far more than we have room to list here. Some of our most popular items for acute and LTC facilities would include: **wall and ceiling treatments** that help control ambient noise (these can even be printed with artwork, corporate branding or your mission statement); **sound barrier materials** that block intrusive noise and improve privacy (these are useful during new construction and, in some cases, retrofit situations, and can even be installed under carpeting and other flooring); **sound-rated doors** (these are especially popular for conference rooms where patients, staff and business matters are discussed); **specialized sound-rated insulation** that helps block sound transmission to neighboring spaces; **construction materials** that improve sound isolation; materials and consulting service for controlling **HVAC noise**; installation services and more. One of our slogans is **Total Sound Control®**, which accurately describes both our approach and our ability to tackle virtually any sound-related issue you might be battling.



**We welcome an opportunity to help your organization with its noise issues. Please e-mail [president@acoustictherapeutics.com](mailto:president@acoustictherapeutics.com) or call 317-59-QUIET to get started!**