

...continued from page

were going up, with machines and construction crews making an awful racket. "That's a pretty annoying sound," Mr. Kagge said.

At the High Line's West 30th Street and 10th Avenue exit, the decibel level reached peak cacophony. It was the heart of the Hudson Yards development project, right near a traffic-clogged entrance to the Lincoln Tunnel. Car horns, jackhammers, rivet guns, workmen yelling, New Yorkers speed-walking to get somewhere — maybe the noisiest spot in the Western world. "This is pretty crazy," Mr. Kagge yelled. He quickened his pace, and farther uptown, when he entered Central Park, he stopped, smiled and said, "For the first time today, you can hear the wind."

UPPER EAST SIDE HUSH

Mr. Kagge has experienced profound moments in nature. He told a story, one he tells in the book, about a sailing trip he took across the south Pacific Ocean, in 1986. He was on watch on deck, alone, after midnight, when he heard "a sound that seemed like a long, deep breath," to the west of the boat. It was a surfacing whale, unseen but heard and felt in the darkness. "It made such a deep impression on me," Mr. Kagge said. Before going to the Frick, he wanted to stop by the Explorers Club, which is housed in a six-story mansion on East 70th Street. He was invited by its members to join after his headline-grabbing adventures — he has also skied to the North Pole and climbed Mount Everest, the so-called Third Pole — but rarely has a chance to visit.

The club was empty of members at midday, and Mr. Kagge made his way upstairs, to a dark wood-panelled old room. There were no other people inside. There were no sounds of cars whirring by outside. There were no sounds at all. "But it's not fair," Mr. Kagge said, laughing. "It's inside a private club." The Frick, with its paintings by Rembrandt and other old masters, offered Mr. Kagge and the public a different kind of silence: the hushed reverence of museum-goers.

After this there was a break: lunch at a crowded French bistro, and a trip to Dover Street Market, to get his daughters Supreme gear. No expectations there. When Mr. Kagge resumed the search for silence, he wanted to try a location in the boroughs outside Manhattan. A spot was suggested: Louis Valentino, Jr. Park and Pier, a little green space tucked along the waterfront in the Red Hook section Brooklyn. By the time Mr. Kagge got there, the news had broke that earlier that afternoon, a man had driven a truck through a crowd of people on a bike path in Lower Manhattan. Helicopters were hovering overhead in the distance. A police boat raced across the choppy water. The world seemed suddenly, scarily noisy.

And yet, at sunset, in the early evening chill, the park was deeply peaceful. Going out to the end of the pier, Mr. Kagge said, "If you walk 20 or 30 minutes in the city, you'll find a quiet place." A young man and woman were also on the pier talking in affectionate whispers. Mr. Kagge was silent for a long time, watching the sun set over the water. "It's easy to think silence is about turning your back on the world," he said. "For me, it's the opposite. It's opening up to the world, respecting more and loving life."

https://www.nytimes.com/2017/11/11/style/in-search-of-silence.html?_r=0

More Silence Less Noise: When environmental noise disturbs your living

Authored by Dr. Peter Kruse MD

If you prefer silence over noise and value silence as an important part of your life, then perhaps this book is written for you. Noise from traffic, construction, machinery etc. is becoming a bigger burden every day for millions of citizens around the world. The World Health Organization has clearly identified significant health risks linked to this growing environmental noise. The levels of noise are far above the established international guidelines and directives. In the EU alone, more than 10,000 premature deaths are being linked to environmental noise. Also diseases such as hyper-tension, stroke, sleeping disorders and learning disabilities can potentially be caused by noise. Governments, politicians and many institutions are doing a lot to minimize environmental noise. But in spite of the good intentions and hard work, environmental noise is becoming an increasing burden to us all, day by day. Action is needed now. Peter Kruse, MD, PhD has provided an overview of the benefits of silence and the negative impact of environmental noise in a simple way. Dr. Kruse shares his experience and takes a deeper look at the science that links noise to health issues and potential death. Educational background will be able to live together in a society where silence is prioritized over noise. Dr. Kruse is convinced that there is a need to act against environmental noise now and that it will have to happen through a coordinated effort pushed by us - the citizens - with the strong support by governments, judiciary system, and international institutions.

More Silence Less Noise at: www.facebook.com/More-Silence-Less-Noise-961475810622876

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Impact of Noise on Health: The Divide between Policy and Science

by Arline L. Bronzaft - Professor Emerita, City University of New York, New York, USA, published: May 12, 2017

Abstract

In her chapter "Sources of Noise" in *Noise and Health*, Annette Zaner [1] writes that sounds have been environmental pollutants for thousands of years, citing examples of stories of loud music in the Old Testament and noisy delivery wagons in ancient times. The Industrial Revolution and urbanization in more recent times raised the decibel levels in our communities, especially with the growth in transportation on the roads, on the rails and in the air, as well as the growth of noise polluting products. The proliferation of boom cars, cell phones and wind turbines during the past twenty years has made our world even noisier. Studies have been carried out that have demonstrated the potential impact of these noises on our mental and physical health, and there have been some efforts to lessen some of the intrusive sounds, e.g. aircraft and road traffic noise, but there is still too little attention paid to the deleterious effects of noise. While noise complaints top the list of complaints in major cities worldwide and noise even threatens the natural sound systems of our planet, there is no movement globally to address the noise pollutant. The following paper will examine the research linking noise to health effects, question why governments have not seriously attempted to lower noise levels and suggest ways to lessen the din. Doing so will not only be beneficial to our health and well-being but it would also be wise economically.

Excerpts

With the loss of the Office of Noise Abatement and Control (ONAC) these past thirty plus years, citizens in the U.S., especially those exposed to aircraft noise, have had no federal agency to advocate lessening the noise in their communities.

Today in 2017 the most vocal spokespersons for abating noise belong to these groups across the country who have been adversely impacted by intrusive noises, especially those living near airports.

Yet, the literature supporting the adverse effects of noise on mental and physical health has grown in the last fifteen years, underscoring the need to move ahead with federal noise legislation.

I now conclude that there is an abundance of evidence linking noise to adverse mental and health impacts.

Furthermore, I would argue that cost to abate noise is not the overriding issue that many claim it is in that the cost in not alleviating the noise may be higher. We often do not factor in medical and educational costs in deciding what to do about noise sources. When we speak of the costs of lessening aircraft noise, do we consider the medical costs of older individuals who are being admitted to cardiovascular units because of the impacts of overhead aircraft? When we speak of costs to lessen noises within schools, are we factoring in educational costs of children who have fallen behind in reading because of noisy classrooms?

Yet, will the outcry from citizens concerned about the deleterious effects of noise on health convince governments to pass policies to address noise pollution? Will public officials recognize that sound data already exist to justify passing and enforcing such policies? I will urge public officials to heed former Surgeon General William H. Stewart's quote noted earlier. "Must we wait until we prove every link in the chain of causation? I stand firmly with Surgeon General Burney's statement of 10 years ago. In protecting health absolute proof comes late. To wait for it is to invite disaster or to prolong suffering unnecessarily."

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A note from John Morse

I just ordered two copies of this 100-page book, **Guide to Modified Exhaustsystems**; a badly-needed resource that should be shared with local government officials, police, vehicle inspectors, DMVs, and anyone who cannot sleep at night, concentrate, etc. because of excess/unneeded/blatantly loud noise.

The book is authored by Noise Free America, which badly needs and is very, very strongly deserving of critical support - for the sake of peace and quiet in our clangorous, clamour-filled lives ... not just vehicle noise, but also wind chimes, infernal back-up beepers, bus beepers, appliance beepers, medical alarms that are causing "alarm fatigue," etc. etc. etc. ad nauseam !!!

Related video: <https://youtu.be/yvH0krMJ3Ek> (this video was recorded in a workshop where original factory mufflers are deliberately modified to make unnecessary, illegal noise)

How City Noise is Slowly Killing You

Loud street noise is now considered the number-two threat to public health, after air pollution. Now the question becomes, how much are you willing to pay for the luxury of silence?

By Andrea Bartz

When Kasia Galazka, a 31-year-old marketing writer in Atlanta, hears a car horn, she feels like she's been elec-trocuted. "It's like my nerves are permanently doused in kerosene, and any loud noise is like throwing a match," she says. "I don't talk about it often, because I feel like people would think I'm exaggerating or complaining." But it turns out Galazka's not overly sensitive or strangely wired—she just might notice the consequences of unexpected sounds more readily than most.

In reality, unwanted auditory stimuli is like health kryptonite; results from the Environmental Burden of Disease project, presented at the latest World Health Organization Ministerial Conference, declared noise pollution the number-two threat to public health, after air pollution. And the problem, directly related to anxiety, is getting worse—right as nationwide anxiety levels have spiked, largely thanks to the political climate. Cancer, heart disease, obesity and myriad other conditions can be exacerbated by stress. If you're not down with that, it's not the best time to be living in a city.

To really understand how noise causes harm, we have to look to our ancestors, who evolved in harsh yet quiet environments. "Loud noise correlated with high-stress events that could damage tissue: thunder, animal roars, screams, or war cries," says Bart Kosko, Ph.D., a professor of electrical engineering at the University of Southern California and the author of *Noise*. So, in response to rare but loud threats, we evolved to spurt out adrenaline, cortisol, and other stress hormones—chemicals that jacked up our bodies so we could fight or flee. A constant gush of stress hormones actually restructures the brain, contributing to tumour development, heart disease, respiratory disorders, and more. And of course, our hormonal endocrine systems haven't had time to learn that car stereos aren't out to get us. "Today," Kosko says, "we regularly get similar stress-hormone surges from car alarms, ringing phones, police sirens, leaf blowers, jack hammers, and amplified voices."

The research backing him up is abundant. A Greek study released last month showed that for each 10-decibel increase in night time aircraft noise, the risk of developing hypertension significantly increased. WHO has published data linking environmental noise with cognitive impairment, disturbed sleep, tinnitus, and cardiovascular disease; in Germany alone, traffic noise causes about 1,629 heart attacks each year, one study found. "Even if you don't have health problems yet, you'll have diminished quality of life [from noise pollution]," says Arline L. Bronzaft, Ph.D., an environmental psychologist who's studied the topic for more than three decades. And it's not a select few dealing with too-loud background dins: About 40 percent of the EU's population is exposed to street traffic noise at levels exceeding 55 decibels, while anything over 30 can disturb sleep or learning. In New York City, traffic noise in Midtown hovers between 70 and 85 decibels, while in Los Angeles, restaurants consistently clock in between 80 and 90 decibels. (In spring, the Bureau of Transportation Statistics released a noise map of the entire country, which you can check out here: <https://maps.bts.dot.gov/arcgis/apps/webappviewer/index.html?id=a303ff5924c9474790464cc0e9d5c9fb>).

There's evidence it's worse for women, too. "Women are more field-dependent, meaning they take in the whole picture, while men are more focused on what they're doing, so they don't notice what's in the periphery," Bronzaft says, adding that on average, more men have hearing loss from working with loud tools or machinery—so they simply can't hear the dog barking its head off next door. It makes sense, then, that men might have an easier time tuning out background noise, while women can't help but notice any hubbub. Bronzaft heads up Grow NYC's Noise Abatement Committee, "so people call me with noise complaints, and if you'd ask if I hear from more women than men, the answer is yes," she says.

But here's what's crazy: Even if you think you've adapted to noise—say, you barely notice the train rumbling by your home these days—you're mistaken. One study in the *Journal of Applied Psychology*, for example, found that clerical workers in a noisy room were less motivated to complete cognitive tasks and had elevated stress hormone levels, compared to those in a quiet room—but they didn't feel particularly stressed. "Adaptation is always at a cost," Bronzaft says. "By dealing with the sounds of the city, you're using up energy, which is costly to your body." Galazka knows this first hand: All her jobs have been in an open office, "and the moment I hear speaker-phone or people playing music without headphones, I immediately get upset, because I can just picture my energy dwindling—kind of like in fighting games like *Street Fighter* where you have a life bar," she says. The experience of forcing that freak-out down is especially depleting, Bronzaft adds. You might be snapping at co-workers or tearing up about the coffee machine being out of order, all because your system has just been beat to hell by your noisy commute.

And even our parents didn't have it this bad. Cell phones are largely to blame, Kosko says: "Your cell-phone conversa-

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tion is a signal to you, but it's noise to those around you." That's because a talker in a crowd—e.g., the dude at the table next to you at a packed Starbucks—locks in dialogue with someone who's not present. "This imposes a type of sonic nuisance on those nearby," he explains. "It gets worse when several people talk on cell phones: Each speaker must speak louder to maintain the same signal-to-noise ratio as the level of crosstalk noise grows. This leads to the type of upward ratchet of noise that we often hear in crowded restaurants."

Street noise is getting louder, too, in large part because nobody's doing anything to stop it. An NYC audit released last month showed that noise complaints more than doubled in the last five years; thank increased construction, the removal of "NO HONKING" signs in 2013 (transportation officials called them "visual clutter"), too few DEP inspectors to look into potential violations, and less attention paid to train and bus maintenance, which leads to squealing, grinding equipment, Bronzaft says. And when making over the EPA's website, the current administration downgraded noise pollution to a subset of air pollution (diminishing the federal control of noise even further), with remarkably few resources or links to information for visitors. "The divide between research and policy is what's upsetting to me," Bronzaft says. "Noise is harmful to health, it's harmful to children's learning, and it diminishes quality of life—the evidence is strong. What we haven't done is ameliorate it, even though we know how to. Do you really think it's rocket science to lessen the noise in our lives?"

Without our government dampening the day-to-day hubbub, some people have turned to pricey, private firms that offer much-needed quiet. Sensory-deprivation tanks, embraced by the New Age movement in the '70s and '80s, are seeing a resurgence stateside; even the New England Patriots have the pods installed in their locker room. Big-ticket "digital detox" packages, free from the beeps and rings of modern gadgets, are proliferating across luxury resorts, from Cape Cod's Chatham Bars Inn to Playa Del Carmen's Grand Velas Riviera Maya; at the W Maldives, for example, an escape to Gaathfushi deserted island starts at \$1,500 per person for a half-day visit. And in Uganda's remote Bwindi Impenetrable National Park, a swath of jungle far from any metropolitan din, lodge directors were surprised to find that some guests treasure the hushed noise level almost as much as the safari experience (it's one of the only places in the world where visitors can come within feet of wild gorillas). "We've had many clients comment on how the peacefulness and general atmosphere of the area helped their medical conditions," says Barry Gotch, managing director of Mahogany Springs Lodge. "High blood pressure, palpitations, and other conditions apparently disappear during their trip." While he never expected return visitors (seeing the gorillas is, after all, a once-in-a-lifetime experience), about one in twenty guests come back for the peace and quiet, he says.

And these noise detoxes aren't all hype. "I recommend noise fasts and often take them myself in the mountains or desert," Kosko says. "There's an immediate drop in stress and a fresh sense of wellbeing—perhaps as we return to our old hunter-gatherer equilibrium with the quiet environment." The deep quiet also spurs creativity and helps him work through problems. "Alas, it always ends badly with the commute back to the noisy city," he adds; much like the end of Dry January or a healthy-eating "cleanse," no quick fix can outweigh your daily norm. "While vacations serve to relax us from the day to day stresses," Bronzaft says, "living in noisy cities adversely affects our quality of life, and in the long run, we need to lessen the din in our environments."

There's even a sought-after accreditation now for consumers interested in buying quiet, high-quality appliances and tools. Since its debut in 2012, Quiet Mark, an international program associated with the UK Noise Abatement Society, has worked with more than 70 brands, including Electrolux, Bosch, Dyson, Interface, Logitech, and Samsung, to prioritize noise reduction in their designs. "People immediately took to the idea of a clear mark of approval for quiet products of all types," says Poppy Szkiler, Quiet Mark's founder. "Given the choice, we've found that consumers will automatically opt for a quieter product if performance is unaffected." (Szkiler is also an executive producer of *In Pursuit of Silence*, a documentary on our relationship with silence and noise that made its US theatrical debut on June 23.)

Even if a kitchen renovation (or gadget-free five-star escape) isn't in your future, we can all take steps to protect ourselves from noise pollution's stress-y effects. If you're moving, finding a quiet home is key, Bronzaft says: "Come and see it in the evening. Sit still and really listen. Check for double-paned windows and noisy neighbours." In your existing home, hang muffling drapes. And be careful with headphones and earbuds. "Injecting sonic energy directly into the ear canal can cause irreversible hearing loss," Kosko warns. If you're using tunes to drown out the sounds of your open office, keep the volume low. At night, consider a white-noise machine or fan to mask noise.

And of course, as a denizen of the earth, you can benevolently not make your neighbours' lives miserable: Turn the TV and stereo down, especially at night, and avoid blabbing into your phone while others are trapped around you (we're looking at you, obnoxious Uber Pool car-sharer). Step into your stilettos at the door so they aren't clicking against your downstairs neighbours' ceiling, and don't ever be that headphoneless person cranking up her phone's volume on the subway, in an airport, or at the gym.

For Galazka, white noise and earplugs helped her focus and catch some sleep, but ultimately, moving from New York

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The squeaky SkyTrain wheels should get some grease

Re: TransLink launching study as complaints get louder, Oct. 6.

The rapid transit vehicles negotiating the tight curves in the Canada Line tunnel beneath Queen Elizabeth Park produce loud squealing sounds that are very painful to this transit rider's ears. Also on the elevated line leaving the Grandview Cut on a sharp curve approaching the Gilmore Station, transit vehicles generate loud squealing sounds to disturb nearby residents. Rather than conducting a study, TransLink should install rail flange lubricators at the problematic locations. The lubricators apply a film of grease to the gauge side of the rail flange to eliminate the friction with the flange of the wheel that produces the squealing sound. Residents who are disturbed by noise from SkyTrain operations should get a copy of the Canada Mortgage and Housing Corporation's publication, Road and Rail Noise: Effects on Housing. This guidebook has information on how to assess the noise impact and how to mitigate the noise with structural and landscaping modifications.

Derek Wilson, P.Eng. (ret.), Port Moody, letter to the editor, The Vancouver Sun, Oct. 14, 2017

NY hospitals testing 'ambient' ambulance sirens

By EMS1 Staff, Nov. 13, 2017

Supervisor Bob Levy said the hospitals are trying the two-toned, European sirens in an attempt to alleviate noise complaints

NEW YORK — Hospitals in New York are testing new ambulance sirens in an effort to alleviate noise complaints. Moneyish reported that the Mount Sinai Health System is using more ambient, two-toned European sirens on their fleet of ambulances to see if they are easier on the ears of the public, according to EMS Supervisor Bob Levy. "We respond to 65,000 calls a year, and then 40,000 of those calls involve patients that need to be transported back to the hospital, so we're roughly running the siren on 100,000 trips a year. We're bound to upset somebody," Levy said. "But the sirens are important because they alert people that an ambulance is coming. We have to get there, we have to get there safely, treat the patient and possibly bring the patient back to the hospital safely." Levy said the two-tone sirens are just as loud, but not as shrill. "The traditional siren that you hear [in the U.S.] is called the wail, where it goes up and down, almost like an ocean wave. It's very piercing, which is why it is the default on most sirens," he said. "The European alternating high-low tone seems to be more melodic to the ear, and it's gotten a lot of positive response. And it's also getting people's attention better because it sounds so unique." Levy added that although the existing sirens can be annoying, responders still need to alert drivers they are coming through. "We're trying to find a happy medium where we can assure the safety of the patients we transfer, and our staff, without driving everybody crazy."

Musical training sharpens and bonds ears and tongue to hear speech better

Abstract

The idea that musical training improves speech perception in challenging listening environments is appealing and of clinical importance, yet the mechanisms of any such musician advantage are not well specified. Here, using functional magnetic resonance imaging (fMRI), we found that musicians outperformed nonmusicians in identifying syllables at varying signal-to-noise ratios (SNRs), which was associated with stronger activation of the left inferior frontal and right auditory regions in musicians compared with nonmusicians. Moreover, musicians showed greater specificity of phoneme representations in bilateral auditory and speech motor regions (e.g., premotor cortex) at higher SNRs and in the left speech motor regions at lower SNRs, as determined by multivoxel pattern analysis. Musical training also enhanced the intrahemispheric and interhemispheric functional connectivity between auditory and speech motor regions. Our findings suggest that improved speech in noise perception in musicians relies on stronger recruitment of, finer phonological representations in, and stronger functional connectivity between auditory and frontal speech motor cortices in both hemispheres, regions involved in bottom-up spectrotemporal analyses and top-down articulatory prediction and sensorimotor integration, respectively.

<http://www.pnas.org/content/114/51/13579.abstract?sid=d5a3c6c3-8a3a-47b6-baa1-1d570c00a258>

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City to a quiet part of Atlanta let her finally find peace and quiet. "I learned that you don't have to live in misery," she says. "I finally left the city for various reasons, but one of them was definitely the noise level. I realized I couldn't change how I'm wired, and coming to terms with leaving a dream city was really difficult for me. And honestly, I miss it all the time. But the city and its mess of glorious noise will always be there, and I take comfort in that, too."

<http://www.harpersbazaar.com/culture/features/a10295155/noise-detox/>