

Environmental Noise Reading Room

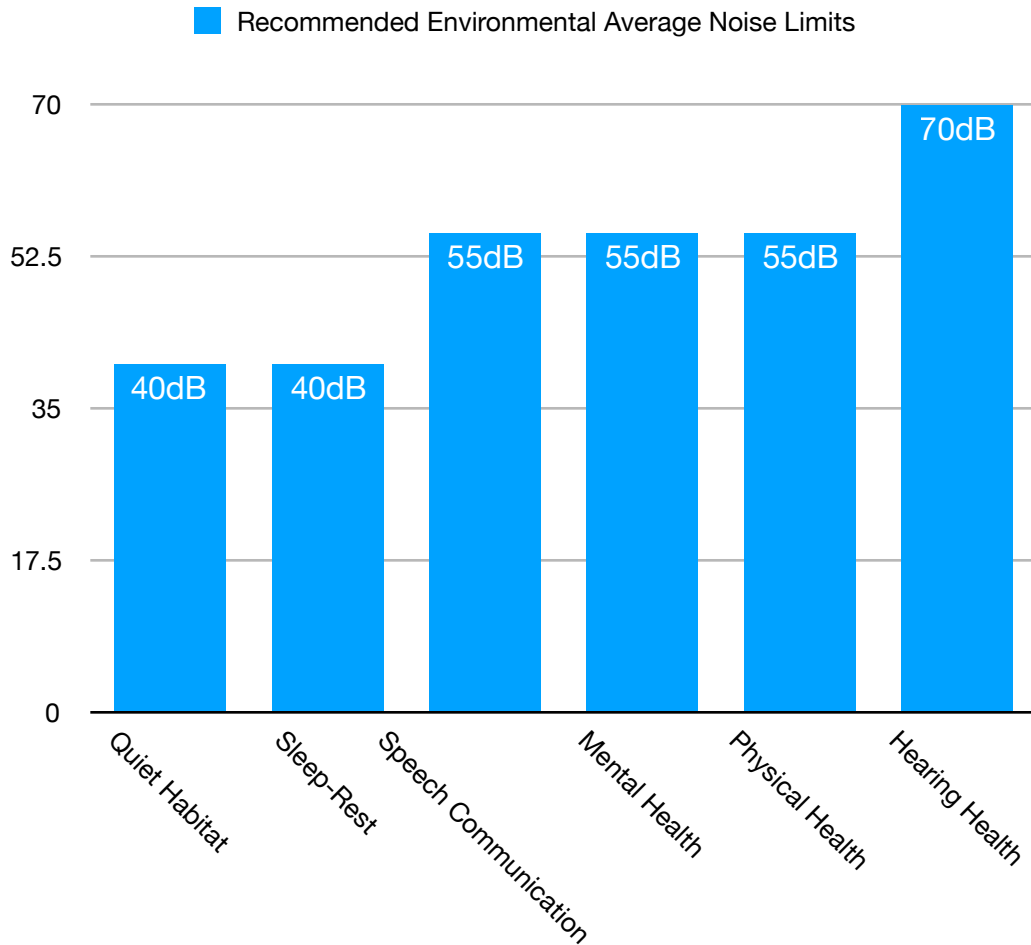
1974 - 2019

compiled by Jan L. Mayes

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World Health Organization Noise Limits



Environmental Noise Guidelines (World Health Organization, 2018)

Night Noise Guidelines (World Health Organization, 2009)

Guidelines for Community Noise (World Health Organization, 1999)

Also Note: Information on levels of environmental noise requisite to protect public health and welfare with an adequate margin of safety (EPA, 1974)

<https://www.epa.gov/nscep>

World Health Organization Resources

Health Equity Policy Tool: World Health Organization (2019)

<http://www.euro.who.int/en/media-centre/events/events/2019/06/healthy,-prosperous-lives-for-all-in-the-european-region-high-level-conference-on-health-equity/publications/health-equity-policy-tool.-a-framework-to-track-policies-for-increasing-health-equity-in-the-who-european-region-working-document-2019>

Children & Noise (World Health Organization)

<https://www.who.int/ceh/capacity/noise.pdf>

Global costs of unaddressed hearing loss and cost-effectiveness of interventions: a WHO report (2017)

<https://apps.who.int/iris/handle/10665/254659>

Urban green spaces: a brief for action (2017)

Fact Sheet 6: Reducing noise to promote health. Tuning down urban soundscapes to promote health and well-being (2017)

http://www.euro.who.int/_data/assets/pdf_file/0015/341133/Fact-Sheet-6-Reducing-Noise-to-Promote-Health.pdf

Burden of disease from environmental noise. Quantification of healthy life years lost in Europe WHO/Europe (2011)

https://www.who.int/quantifying_ehimpacts/publications/e94888/en/

Noise History

EPA History: Noise & the Noise Control Act

<https://www.epa.gov/history/epa-history-noise-and-noise-control-act>

<https://www.epa.gov/laws-regulations/summary-noise-control-act>

History of noise: 6th century BCE - 2002

<https://mikegoldsmith.weebly.com/history-of-noise.html>

Comparison of occupational noise legislation in the Americas: An overview and analysis (2014).

<http://www.noiseandhealth.org/article.asp?>

issn=1463-1741;year=2014;volume=16;issue=72;spage=306;epage=319;aulast=Arena
s

Environmental Noise

Unequal exposure and unequal impacts: social vulnerability to air pollution, noise and extreme temperatures in Europe (2019)

<https://www.eea.europa.eu/publications/unequal-exposure-and-unequal-impacts/>

Related articles:

<https://www.eea.europa.eu/articles/how-do-environmental-hazards-affect-vulnerable-groups-in-europe>

<https://www.eea.europa.eu/highlights/protect-vulnerable-citizens>

Noise Country Fact Sheets (2018)

<https://www.eea.europa.eu/themes/human/noise/noise-fact-sheets/noise-fact-sheets-1>

EU countries, Comparing Environmental Noise Directive 5 year noise data cycle from 2002, 2009, and 2017. Broken down by sources, health impact, life years lost, etc.

Healthy Environments for Healthier People (2018)

<http://www.euro.who.int/en/health-topics/environment-and-health/noise/publications/2018/healthy-environments-for-healthier-people-2018>

London UK Environment Strategy (2018)

<https://www.london.gov.uk/what-we-do/environment/london-environment-strategy>

Pocket Guide to Soundwalking (2018)

http://www.antonellaradicchi.it/wp-content/uploads/2018/06/Radicchi_2017_A-Pocket-Guide.pdf

How Loud is Too Loud? Health Impacts of Environmental Noise in Toronto (2017, April).

<https://www.toronto.ca/legdocs/mmis/2017/hl/bgrd/backgroundfile-104525.pdf>

Environmental Noise Study in the City of Toronto (2017).

<https://www.toronto.ca/wp-content/uploads/2017/11/8f4d-tph-Environmental-Noise-Study-2017.pdf>

Citizens as smart, active sensors for a quiet and just city. The case of the “open source soundscapes” approach to identify, assess and plan “everyday quiet areas” in cities (2017)

<https://www.degruyter.com/downloadpdf/j/noise.2017.4.issue-1/noise-2017-0008/noise-2017-0008.pdf>

UNESCO: The Importance of Sound in Today’s World: Promoting Best Practices (2017)

<https://unesdoc.unesco.org/ark:/48223/pf0000259172.locale=fr>

Quiet areas in Europe: The environment unaffected by noise pollution (2016, June 16)

<https://www.eea.europa.eu/publications/quiet-areas-in-europe>

Climate change, impacts and vulnerability in Europe (2016)

<https://www.eea.europa.eu/publications/climate-change-impacts-and-vulnerability-2016>

Coping with noise: Consensus paper on the effects of noise in the world (2015)

<http://corporate.amplifon.com/consensus-paper-coping-with-noise>

Noise in Europe (2014)

<https://www.eea.europa.eu/publications/noise-in-europe-2014>

Environmental Noise Pollution in the United States: Developing an Effective Public Health Strategy (2014)

<https://ehp.niehs.nih.gov/doi/full/10.1289/ehp.1307272>

UK National Noise Attitude Survey (2012)

<http://randd.defra.gov.uk/Default.aspx?Module=More&Location=None&ProjectID=18288>

Noise in Figures: European Noise Risk Observatory Report (2005)

<https://osha.europa.eu/en/tools-and-publications/publications/reports/6905723>

Children's Health & the Environment: Public Health Issues and Challenges for Risk Assessment (2004)

https://cfpub.epa.gov/ncer_abstracts/index.cfm/fuseaction/display.files/fileID/13546

Communication & Disability Access

Satisfying Hunger, Thirst, and Acoustic Comfort in Restaurants, Diners, and Bars... Is This an Oxymoron? - Kenneth P. Roy. (Acoustics Today, 2019, Summer)

<https://acousticstoday.org/satisfying-hunger-thirst-and-acoustic-comfort-in-restaurants-diners-and-bars-is-this-an-oxymoron-kenneth-p-roy/>

Disability rights aspects of ambient noise for people with auditory disorders under the Americans with Disabilities Act (2017)

<https://asa.scitation.org/doi/abs/10.1121/2.0000657>

Cognitive, Mental & Physical Health

Simon Fraser University: Noise in the City Panel (2019, Feb. 28)

<https://www.youtube.com/watch?v=Vc0t6k07S-8&feature=youtu.be>

Biological mechanisms related to cardiovascular and metabolic effects by environmental noise (2018)

<http://www.euro.who.int/en/health-topics/environment-and-health/noise/publications/2018/biological-mechanisms-related-to-cardiovascular-and-metabolic-effects-by-environmental-noise>

The Munich Airport noise study: effects of chronic aircraft noise on children's perception and cognition (2000).

<http://www.conforg.fr/internoise2000/cdrom/data/articles/000676.pdf>

Cardiovascular and Behavioural Effects of Community Noise on Schoolchildren (1981)

https://www.jstor.org/stable/27850610?seq=1#page_scan_tab_contents

The Effect of Elevated Train Noise on Reading Ability (1975)

<https://journals.sagepub.com/doi/10.1177/001391657500700406>

Hearing Health

Children who say hand dryers ‘hurt my ears’ are correct: A real world study examining the loudness of automated hand dryers in public places (2019, June 17)

Keegan, N.L. (2019, June 17). Children who say hand dryers ‘hurt my ears’ are correct: A real-world study examining the loudness of automated hand dryers in public places. Paediatrics & Child Health. <https://doi.org/10.1093/pch/pxz046>

Canadian Hearing Society: Position Paper on Noise Pollution

<https://www.chs.ca/position-paper-noise-pollution>

WHO-ITU consultation on the Make Listening Safe initiative: Meeting Report (2018, Feb 7-8)

<https://www.who.int/deafness/make-listening-safe/Report-of-theWHO-ITU-consultation-on-the-Make-Listening-Safe-initiative-February-2018.pdf?ua=1>

The Real Cost of Adult Hearing Loss (2014)

<https://www.earfoundation.org.uk/research/adult-strategy-reports/the-real-cost-of-adult-hearing-loss-2014>

Occupational noise: Assessing the burden of disease from work-related hearing impairment at national and local levels (2004)

https://www.who.int/quantifying_ehimpacts/publications/9241591927/en/

Criteria for a recommended standard: Occupational noise exposure revised criteria (1998)

<https://www.cdc.gov/niosh/nioshtic-2/20000050.html>

Low Frequency Noise

The Loudest Places You Can't Hear (2019, May 9)

https://fivethirtyeight.com/features/the-loudest-places-you-cant-hear/?utm_source=pocket-newtab

Impacts of Low Frequency Noise Exposure on Well-Being: A Case-Study From Portugal (2018)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6122264/>

Subjective perception of wind turbine noise - The stereo approach. (2017)

<https://asa.scitation.org/doi/abs/10.1121/2.0000653>

The test signal, being inaudible, was presented as a pilot double blind provocation case control study to 9 test subjects who have been identified as being sensitized to wind turbine noise and low frequency pulsating industrial noise. All test subjects could detect the operation of the inaudible test signal. The use of a stereo manikin to investigate detected inaudible “hotspots” is discussed.

The Influence of Low-Frequency Noise Pollution on the Quality of Life and Place in Sustainable Cities: A Case Study from Northern Portugal (2015)

<https://www.mdpi.com/2071-1050/7/10/13920>

Low Frequency Noise from Transportation Sources: Proceedings of 20th International Congress on Acoustics (2010)

https://www.acoustics.asn.au/conference_proceedings/ICA2010/cdrom-ICA2010/papers/p987.pdf

Transportation Noise

Electric cars: New vehicles to emit noise to aid safety. (2019, June 30)

<https://www.bbc.com/news/business-48815968>

Note: Audible vehicle alert systems signalling vehicle in vicinity will significantly increase community noise levels, impacting vulnerable populations when using public sidewalks or parking lots and in quiet zones like outside schools and hospitals. There is no reason pedestrians need to hear vehicles for safety. Deaf people can't and they stay as safe as other pedestrians. Quiet optical collision detection tech more than adequate on top of existing noise from tires against road, exhaust or stereo system, or other vehicle noise.

Class action lawsuit to fight Montreal airport noise pollution gets go-ahead (2018)

<https://www.cbc.ca/news/canada/montreal/class-action-airplane-noise-1.4614458>

If you have an update on this lawsuit, please contact author@janlmayes.com

Guillaume Dutilleux. Anthropogenic outdoor sound and wildlife: it's not just bioacoustics!. Acoustics 2012, Apr 2012, Nantes, France. hal-00810795

Focuses on terrestrial noise sources (mainly roads) although aerial noise sources noted. Suggests greater reduction in noise levels from reducing vehicle speed than reducing overall traffic volume on existing roadways. Low noise pavements important for mitigation even if used alone.

<https://hal.archives-ouvertes.fr/file/index/docid/810795/filename/hal-00810795.pdf>

Species at Risk

Marine Mammal Noise Exposure Criteria: Updated Scientific Recommendations for Residual Hearing Effects (2019, March 11).

https://www.aquaticmammalsjournal.org/index.php?option=com_content&view=article&id=1886:marine-mammal-noise-exposure-criteria-updated-scientific-recommendations-for-residual-hearing-effects&catid=174&Itemid=326

The Arctic: Anthropogenic Noise, Shipping, Impact on Marine Mammals, & Future Management (2018)

https://repository.library.noaa.gov/view/noaa/20070/noaa_20070_DS1.pdf

Potential impacts of shipping noise on marine mammals in the western Canadian Arctic (2017)

<https://www.sciencedirect.com/science/article/pii/S0025326X17307622>

Noise Control

Innovations in Noise Reduction, Research Report (2019)

[https://www.researchandmarkets.com/reports/4773526/innovations-in-noise-reduction?
utm_source=GNDIY&utm_medium=PressRelease&utm_code=68mg8z&utm_campaign
=1262181+-+Innovations+in+Noise+Reduction,
+2019+Research+Report&utm_exec=chdo54prd](https://www.researchandmarkets.com/reports/4773526/innovations-in-noise-reduction?utm_source=GNDIY&utm_medium=PressRelease&utm_code=68mg8z&utm_campaign=1262181+-+Innovations+in+Noise+Reduction,+2019+Research+Report&utm_exec=chdo54prd)

Noise Control Manual: City of Vancouver

<https://vancouver.ca/files/cov/noise-control-manual.pdf>

Noise Control for Nightclubs, Restaurants, Bars, and Cafes Product and Services Guidance Sheet (NYC)

https://www1.nyc.gov/html/dep/pdf/noise_control_guide_comm.pdf

Acoustics in restaurants (Ceilings & Interior Systems Construction Association)

<http://www.cisca.org/files/public/Acoustics%20in%20Restaurants%20Final.pdf>

Good neighbour guide for bars, restaurants, and entertainment industry (City of Toronto, 2017)

<https://www.toronto.ca/wp-content/uploads/2017/11/99dc-Good-Neighbour-Guide-for-Bars-Restaurants-and-Entertainment-Venues.pdf>

Low Frequency Noise: Identification & Mitigation

<https://www.noisesolutions.com/low-frequency-noise-identification-and-mitigation/>

Note: easy to understand explanation of Low Frequency Noise impact on health

Fighting Noise Pollution: A Public Health Strategy (2014)

Note consumer product suggestions; The EPA's limit for protecting against all health effects of noise is a 24-hour average 55 dBA, weighted with a penalty for nighttime

exposures to account for the special impact of disrupted sleep.² In 1981 the EPA estimated about 3% of the U.S. population could be exposed to noise levels high enough to increase the risk of hypertension.² [In 2014 estimated >75% exposed to unhealthy noise pollution.]

<https://ehp.niehs.nih.gov/doi/10.1289/ehp.122-A58>

Alliance for Biking & Walking: Open Streets Guide (2010)

<https://nacto.org/references/alliance-for-biking-and-walking-and-street-plans/>

Good practice guide on noise exposure and potential health effects (2010)

<https://www.eea.europa.eu/publications/good-practice-guide-on-noise>

Neighbourhood Noise Policies and Practice for Local Authorities – a Management Guide (DEFRA, 2006)

<https://khub.net/.../>

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Environmental Noise Directive (2002)

http://ec.europa.eu/environment/noise/directive_en.htm

<https://rod.eionet.europa.eu/instruments/585>