

October 24, 2019

Presented by the Upper
Nyack Green Committee

Upper Nyack Village Leaf Blower Proposal



Did You Know?

- **Gas-powered leaf blowers** typically operate at 95-115 decibels. Anything over 85 decibels can damage your hearing.
- This noise travels long distances and penetrates windows due to a strong low-frequency content.
- Noise is “unwanted or disturbing sound” that interferes with normal activities such as sleeping, conversation, or disrupts or diminishes one’s **quality of life**.
- Persistent and escalating sources of noise can have major consequences, primarily to one’s overall **health**.



Noise Pollution and Health



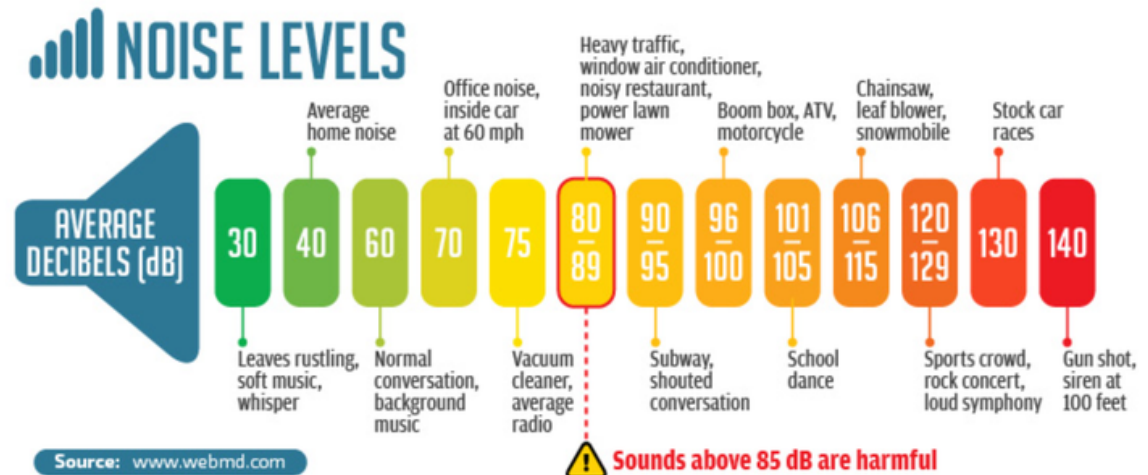
- Hearing Loss
- Tinnitus
- Immune system suppression
- Stress
- Sleep Disturbance
- Impaired Childhood Development
- Reduced Productivity
- Reduced Quality of Life

MOST
AFFECTED
POPULATIONS

The effects of excessive noise are particularly acute for:

- **Children**
- **Seniors**
- People with **hearing disorders** (i.e. tinnitus), **neurological conditions** (i.e. autism), and **sensory deficit disorders**
- **Landscape workers**

(US Bureau of Labor Statistics, 2016; US Center for Disease Control)

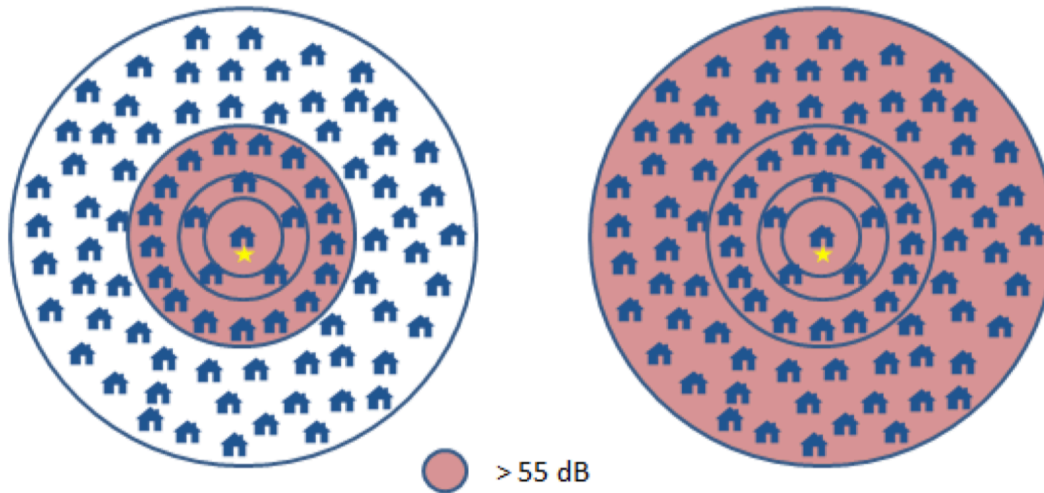


3LB Urban Neighborhood Impact:

!3-91 homes affected by >55 dB noise

Echo PB760
65 dB at 50 feet

Redmax EBZ8500
Stihl BR700x
77 and 75 dB at 50 feet



Neighborhood Diameter = 800 feet

NEIGHBORHOOD IMPACT

- The quietest gas leaf blower affects 23 homes.
- The more powerful gas leaf blowers affect all 91 homes.

Health Effects



- Leaf blowers kick up dust from the ground. This coarse particulate matter contains soil particles, fertilizer, mold, pollen, ticks, and even feces! 💩
- Children are the most susceptible members of our population to these hazards. They breathe more air per pound of body weight per day than adults.



Leaf Blower Emissions are Dirtier than Trucks

- Leaf blowers emit large amounts of pollutants, including carbon monoxide, nitrous oxides, and hydrocarbons.
- Operating a leaf blower for just **one hour** is equivalent to driving from Nyack to Memphis. That's over 1,100 miles!



Pollutes our groundwater

- Approximately 4oz (average) of fuel is spilled every time a gas tank is filled on a piece of lawn equipment.
- In the US, this adds up to 17 million gallons of spilled petroleum per year that eventually finds it's way into our ground water.



What can we do?

- Enable local laws to control when leaf blowers can be used (seasonal and time of week & day) and limit noise levels.
- Switch from gasoline-powered yard equipment to quieter electric-powered.
- Encourage landscape companies to use electric and manual tools.
- Homeowners and landscaping companies can be encouraged to mulch their leaves instead of blowing them.
(<http://www.leleny.org/>)



Leaf
blower
laws
already
exist

NEW YORK

- Rye
- Hastings-on-Hudson
- Irvington
- New Rochelle
- Pelham
- Larchmont
- Yonkers
- Croton-on-Hudson
- Sleepy Hollow
- Mamaroneck
- Ardsley
- Dobbs Ferry
- Ossining
- White Plains
- Tuckahoe
- Tarrytown
- Scarsdale

- Bedford
- Greenburgh
- Buchanan

NEW JERSEY

- Princeton
- Montclair

CONNECTICUT

- Greenwich
- Ridgefield

MASSACHUSETTS

- Arlington
- Brookline
- Cambridge
- Newton
- Lincoln

Examples:
Rye and
Hastings

Rye (2008):

“No person shall operate within the City of Rye any gasoline or electric leaf blower between May 1 and September 30 every year”

Hastings-on-Hudson (2008):

“The use of leaf blowers [are prohibited], except between October 15 and May 15, and then only from 9:00 a.m. until 5:00 p.m.”

Common Features of Leaf Blower Laws



Seasonal use restrictions



Time-of-day and/or day-of-week restrictions



Exceptions for emergency response and public safety



Exceptions for schools, hospitals



Decibel limits

Examples of Existing Leaf Blower Laws

Leaf Blower laws of other nearby municipalities and this presentation are provided in pdf format on USB thumb drives for each of the Trustees of Upper Nyack.

- Rye, NY
- Hastings-on-Hudson, NY
- Bedford, NY
- Dobbs Ferry, NY
- Irvington, NY
- Ossining, NY
- Southhampton, NY
- Tarrytown, NY
- White Plains, NY



Thank you for your consideration.



Upper Nyack Green Committee

What is in our Federal laws?

42 U.S.C. Title 42 - THE PUBLIC HEALTH AND WELFARE CHAPTER 85 -SUBCHAPTER IV - NOISE POLLUTION

- Inadequately controlled noise presents a growing danger to the health and welfare of the Nation's population, particularly in urban areas.
- The major sources of noise include transportation vehicles and equipment, machinery, appliances, and other products in commerce.
- While primary responsibility for control of noise rests with State and local governments, **Federal action is essential to deal with major noise sources in commerce control of which require national uniformity of treatment.**
- **The Congress declares that it is the policy of the United States to promote an environment for all Americans free from noise that jeopardizes their health or welfare.**

What our research shows

Noise Pollution and Health Articles

- **Leaf Blowers and Noise Impact on Children:** Mt Sinai Hospital, 2010
- Noise: American Speech/Language/Hearing Associations, 2011
- Noise Pollution and Childcare: Children's Environmental Health Network, 2009
- Environmental Noise Pollution and Public Health in the United States, Environmental Health Perspectives, 2014
- Noise/Induced Hearing Loss: National Institute on Deafness and Other Communication Disorders, 2008
- Noise Pollution Overview: US EPA, 2012
- **Noise and Its effects on Children: US EPA, 2009**
- Children and Noise (Training Manual): World Health Organization
- Burden of Disease from Environmental Noise: World Health Organization, 2011
- **Children's Health and Environmental Noise: World Health Organization, 2004**
- Community Noise Guidelines: World Health Organization, 1999

Emissions Pollution and Health Articles

- British Medical Journal: Short Term exposure to air pollution and stroke: systematic review and meta-analysis - February 2015
- British Medical Journal: The relation between past exposure to fine particulate air pollution and prevalent anxiety: observational cohort study - March 2015
- Edmunds.com Emissions Comparison Tests - 2011
- **Leaf Blower Emissions are Dirtier than Trucks - 2011**
- California EPA 2000 **Leaf Blowers** and Health Report
- Emissions Inventory for Texas Region July 2013
- Hazardous Air Pollutants from Lawn and Other Equipment, US EPA/ERG - 2002
- Particulate Emissions from **Leaf Blowers**, San Joaquin Valley Air Pollution Control District - 2006
- Emissions from Gas-Powered **Leaf Blowers** in the Chicago-Metro Area, - 2008
- **Leaf Blower** and Lawn Equipment Emissions US EPA, - 2011
- Lawn Equipment Contribution to Non-Road Emissions, US EPA - 2012
- Carbon Emissions from 2-Stroke Engines - 2008
- Emissions from new and older 2-Stroke Engines - 2007

Air Pollution and Health Articles

- Resolution on Gas-Powered **Leaf Blowers** passed by the Massachusetts Medical Society - April 2017
- Stop Raking Your Leaves!: The Washington Post
- World Health Organization: Air Pollution and Cancer Study
- **Leaf Blowers** and Air Pollution: Impact on Children (Children's Environmental Health Center): Mt Sinai Hospital, 2010
- Air Pollution and Heart Disease: American Heart Association Scientific Statement, 2010
- 10 Tips to Protect from Unhealthy Air: American Lung Association
- Air Pollutant Health Effects: US EPA 2008
- Air Pollution and Cancer Report: World Health Organization, IARC 2013 Press Release
- Air Pollution and Heart Disease: American Heart Association Scientific Statement, 2004
- Air Pollution, Climate and Heart Disease: Circulation 2013
- Assessment of Health Effects of Particulate Matter: US EPA 2012
- Asthma and Outdoor Air Pollution: US EPA
- Children and Risk from Air Pollution: Natural Resource Defense Council, 2004
- Facts - Air Pollution and Cardiovascular Disease: American Heart Association
- Health Effects of Lawn Equipment: US EPA, 2011
- Heart disease, Stroke and Outdoor Air Pollution: US EPA / American College Cardiology / American Heart Association
- Integrated Science Assessment for Particulate Matter: US EPA, 2009
- Integrated Science Assessment - Ozone: US EPA, 2013
- Ozone and Your Health: US EPA
- Particle Pollution and Your Health: US EPA
- Sick of Soot: American Lung Association, 2011
- State of the Air Report 2013: American Lung Association

