

Montgomery County Citizens for *Cleaner, Quieter, Safer* Lawn Care

As residents are forced to spend more of our time at home, the noise from Gas-Powered Leaf Blowers (GPLBs) is increasingly disruptive and harmful to our families' health and to our quality of life.

The District of Columbia and Village of Chevy Chase have already enacted measures to ban GPLBs and facilitate the shift by residents and landscape companies toward cleaner, quieter, and safer equipment.

Montgomery County should immediately phase out GPLBs to clean our air, protect the health of community members and workers, and reduce noise that disrupts our work and our lives.

Noise levels are harmful to the health of residents and especially lawn-care workers

- GPLBs produce noise levels ranging from 102–115 decibels (“dBs”) at the ear of the operator, which is higher than the recommended limit of 85 dBs that the US EPA and the National Institute for Occupational Safety and Health have established.¹
- This level of noise can damage hearing, interfere with sleep, and increase blood pressure, adrenaline, and heart rates.²⁻⁷
- GPLBs emit noise that travels farther and penetrates exterior walls of homes and businesses because of the harmful lower-frequency noise they generate,⁸ while battery-powered blowers are much less harmful.⁹

Gas-Powered Leaf Blowers emit large quantities of harmful air pollutants

- They generate chemicals and particulates that can be inhaled by equipment operators and nearby residents and contribute meaningfully to regional air pollution problems.¹⁰
- GPLBs emit significant quantities of ozone-forming chemicals, carbon monoxide, and other toxic air pollutants¹¹. They generate CO₂ at a rate 3 to 9 times higher than electric-powered blowers, contributing to climate change effects.
- For the best-selling commercial leaf blower, one hour of operation emits smog-forming pollution comparable to driving a 2016 Toyota Camry about 1,100 miles ¹² or approximately the distance from Washington DC to Miami, Florida.

These emissions can affect the health of residents and workers

- Pollution can cause, or contribute to, premature mortality, cardiovascular disease, asthma, chronic obstructive pulmonary disease, lung cancer, premature births, and other adverse health impacts.^{13,14}
- Even short-term exposure can be harmful—children, seniors, people with chronic illness, and landscape workers can be at greater risk.
- Battery-powered leaf blowers emit much lower quantities of air pollutants,⁹ and their emissions occur mostly at power plants rather than in our neighborhoods.

GPLBs disrupt our work & schooling, while harming wildlife and plants

- Noise disrupts our work, interferes with children's schooling,¹⁵ and lowers quality of life.
- Birds, frogs, and other creatures are forced to move away from noise,¹⁶ while plant life and pollinators are likely to be disrupted by their force and heat.

A Montgomery County phase-out of GPLBs will give us cleaner, quieter, and safer communities

- Both the District of Columbia and Chevy Chase Village (CCV) have enacted bans on GPLBs, effective January 1, 2022.
- The DC and CCV bans mean landscape companies working in those jurisdictions must switch to cleaner, quieter, and safer electric leaf blowers, helping to prepare for the change in [Montgomery County](#).

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1. United States Environmental Protection Agency (EPA). Noise and its effects on children. 2009; https://www.epa.gov/sites/production/files/2015-07/documents/ochp_noise_fs_rev1.pdf.
2. Basner M. Auditory and non-auditory effects of noise on health. *The Lancet*. 2014;383(9925):132-1332 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3988259/pdf/nihms562938.pdf>.
3. Fritschi L, Brown AL, Kim R, Schwela DH, Kephelopoulou S. *Burden of disease from environmental noise*. Bonn: World Health Organization;2011.
4. Goines L, Hagler L. Noise pollution: A modern plague. *Southern Medical Journal*. 2007;100(3):287-297 <https://pubmed.ncbi.nlm.nih.gov/?term=Noise+Pollution%3A+A+Modern+Plague>.
5. Hahad O, Prochaska JH, Daiber A, Munzel T. Environmental noise-induced effects on stress hormones, oxidative stress, and vascular dysfunction: Key factors in the relationship between cerebrocardiovascular and psychological disorders. *Oxid Med Cell Longev*. 2019;4623109:1-13 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6878772/>.
6. Münzel T, Schmidt FP, Steven S, Herzog J, Daiber A, Sørensen M. Environmental noise and the cardiovascular system. *Journal of the American College of Cardiology*. 2018;71(6):688-697 <https://pubmed.ncbi.nlm.nih.gov/29420965/>.
7. Stansfeld SA, Matheson MP. Noise pollution: Non-auditory effects on health. *Br Med Bull*. 2003;68:243-257 <https://pubmed.ncbi.nlm.nih.gov/14757721/>.
8. Walker E, Banks JL. Characteristics of lawn and garden equipment sound: A community pilot study. *J Environ Toxicol Stud* 2017 1(1) <https://pubmed.ncbi.nlm.nih.gov/31448365/>.
9. Pollock C, Sparks G, Banks JL. Lawn and garden equipment sound: A comparison of gas and battery equipment. *Journal of Environmental and Toxicological Studies*. 2018 <https://www.sciforschenonline.org/journals/environmental-toxicological-studies/article-data/JETS-2-118/JETS-2-118.pdf>.
10. Banks JL, McConnell R. *National emissions from lawn and garden equipment*. Undated.
11. New York State Department of Environmental Conservation. Leaf blowers. Undated; <https://www.dec.ny.gov/chemical/109428.html#:~:text=Emissions%20from%20gas%20powered%20leaf,the%20amounts%20are%20even%20greater>. Accessed Nov 29, 2020.
12. California Air Resources Board. Small engines in California. 2017; <https://ww2.arb.ca.gov/resources/fact-sheets/small-engines-california>.
13. Losacco C, Perillo A. Particulate matter air pollution and respiratory impact on humans and animals. *Environ Sci Pollut Res Int*. 2018;25(34):33901-33910 <https://pubmed.ncbi.nlm.nih.gov/30284710/>.
14. Manisalidis I, Stavropoulou E, Stavropoulos A, Bezirtzoglou E. Environmental and health impacts of air pollution: A review. *Front Public Health*. 2020;8(14) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7044178/>.
15. Fernandes RA, et al., . The effect of noise on attention and performance in reading and writing tasks. *Codas*. 2019;31(4):e20170241 <https://pubmed.ncbi.nlm.nih.gov/31483038/>.
16. Sanzaki M, Kdoya T, Francis CD. Direct and indirect effects of noise pollution alter biological communities in and near noise-exposed environments. *Proc Biol Sci*. 2020;287(1923):2020017 <https://pubmed.ncbi.nlm.nih.gov/31483038/>.