

Leaf blowers in DC — a fact sheet

Many landscape maintenance service providers in our area continue to use two-stroke gas-powered leaf blowers that the rest of the world is increasingly moving away from. These leaf blowers generate toxic, carcinogenic air pollution around our neighborhoods, schools, and public spaces, and noise that far exceeds health and safety standards. These practices come with high costs for our health, environment, and enjoyment of the benefits of living in our city.

Toxic pollution - Two-stroke engines, unlike increasingly cleaner car engines, burn an oil-gas mixture that generates high levels of ozone-forming chemicals. These engines also disperse fine particulate matter (“PM2.5”). These chemicals and PM2.5s are inhaled by equipment operators and passers-by. An authoritative, independent laboratory study compared emissions from a 2012 Fiat 500 against those of, among other things, an Echo two-cycle gas-powered leaf blower. The Echo generated more than 93 times the output of non-methane hydrocarbons and more than 33 times the output of carbon monoxide as the Fiat. [1]

Harmful health impacts - Ozone and PM2.5s are well known causes of, or contributors to, early death, cardiovascular disease, asthma, chronic obstructive pulmonary disease, lung cancer, premature births, and other serious health conditions. Even short-term exposure can be harmful. [2-8] Workers, children, seniors, and people with chronic illness are at greatest risk.

Damaging noise - According to reports from federal agencies, noise from leaf blowers ranges from 102–115 decibels (“dBs”) at the ear of the operator. These same federal agencies have declared noise levels above 85 dBs to be harmful. [9-10] Because dBs are measured on a logarithmic scale, a difference on the order of 17 or more dBs represents a huge change in the amount of noise and in the potential damage to a person’s hearing. [11] Health effects from noise alone can include heart disease. A recent study estimates that more than 100 million Americans are at risk for noise-related health problems, with over 145 million at potential risk of hypertension due to noise, and even more at an increased risk of heart attack. [12-13] In addition, chronic high noise levels decrease biodiversity. [14]

Air-borne contaminants - The high-velocity air jets from gas-powered leaf blowers (150-280 mph, comparable to the strongest hurricanes) disturb topsoil and disperse spores, fungi, pollen, chemical residues from insecticide, rodenticide, herbicide, and fungicide treatments, microbes, other potential allergens, and particles of animal feces into the ambient air, putting workers and passers-by at risk.

Sustainable alternatives - Cleaner and quieter electric and battery-powered leaf blowers are increasingly available and are being used already by some local landscaping companies and homeowners, with effective results and at competitive pricing. The federal requirement to include ethanol in gasoline tends to accelerate the deterioration of the two-stroke gas-powered leaf blower engines. Legislation to phase out the use of gas-powered leaf blowers and that will provide an adequate number of years for their owners, users, and retailers to amortize their inventory of such equipment and to transition to a 21st-century technology will be introduced in the D.C. City Council soon. We ask for your support.

References

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