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Leaf Blower Noise and Pollution in Lincoln

In the past few years, the semi-rural charm, tranquility, and environment of the Town of Lincoln have been degraded by the widespread and chronic use of leaf blowers. There's no escaping the **high-pitched, whining drone** of the leaf blower – the noise carries up to a mile, penetrates walls and closed windows, and distracts and annoys entire neighborhoods.

What's worse, leaf blowers are gross polluters! Their **smoky** engines burn a dirty oil-gas mixture, emitting far more ozone-forming vapors (CO, NOx, hydrocarbons) than automobiles. The high velocity airjets of leaf blowers (150–280 miles/hour) easily kick up and disperse dusty clouds of hazardous Particulate Matter (PM).

PM contains substances such as **dried animal fecal matter, pollens, mold, fungi, pesticides, herbicides, diesel soot, brake dust, rubber tire particles, and dangerous carcinogens**. Smoke and dust particles created when using leaf blowers are not simply a nuisance, they are **harmful to our health**. Fine particles suspended in the air are inhaled and deposited in the airways, **reaching deep into the lungs**, where they may accumulate or be absorbed into the underlying tissues.

Young children, pregnant women, the elderly, those physically active, and anyone with pulmonary or cardiovascular disease are at much greater risk when breathing leaf blower-caused PM. The EPA's landmark study on PM firmly establishes the link between PM and increased risk of **asthma, heart attack, infection, and hospitalizations**.

Did you know...?

- 30 minutes of leaf blower operation pollutes as much as 3,900 miles in a 6,200 lbs Ford Raptor truck!
- Each blower creates 2–4 lbs of PM per hour, including fine PM which can remain in the air for a week or more and is most harmful to health.
- Small children are especially vulnerable to respiratory effects like asthma and the harmful effects of noise.
- Noise pollution is associated with serious health problems including high blood pressure, headaches, and mental health effects, and diminished quality of life.



THE EPA SAYS:

Short-term exposure to 2.5-micron particulates can **cause** cardiovascular problems like **congestive heart failure and mortality**.

The EPA's use of the term "**causal**" conveys the strongest possible connection between exposure and outcome.

Leaf Blowers blast these fine, ground-based particles up into your neighborhood's air, where they can be inhaled for days!

Read the full report : http://www.epa.gov/ncea/pdfs/partmatt/Dec2009/PM_ISA_full.pdf

Quiet Lincoln is a group of Lincoln residents concerned with the impact of excessive and inappropriate use of leaf blowers and other outdoor powered equipment on the health of our citizens and our environment. Our aims are to educate residents about the medical and scientific evidence on leaf blower noise and pollution, and work collaboratively with stakeholders to promote quieter, green alternatives, and uphold Lincoln's strong environmental and community values.



HERE'S WHAT THE EXPERTS SAY

American Lung Association – State of the Air 2012

- Short-term exposure to particle pollution can kill...these are deaths that would not have occurred if the air were cleaner.
- Particle pollution diminishes lung function, causes greater use of asthma medications and increased rates of school absenteeism, emergency room visits and hospital admissions.
- Use hand-powered or electric lawn care equipment rather than gasoline-powered.

American Heart Association Scientific Statement 2010

- The overall evidence is consistent with a causal relationship between PM2.5 (fine particulate matter) exposure and cardiovascular morbidity and mortality.

California Air Resources Board and US Environmental Protection Agency

- Avoid using leaf blowers and other dust-producing equipment.

Children's Environmental Health Center (NYC)

- Leaf blowers pose multiple hazards to human health. Children are the most susceptible members of our population.

US Environmental Protection Agency

- Noise degrades our quality of life by impairing social interaction, reducing work accuracy, and by creating stressful levels of frustration and aggravation.
- Volatile organic compounds, released from gas -powered yard equipment ,can form ground-level ozone and cause breathing difficulties especially for the young, elderly, or those with existing respiratory problems such as asthma.

World Health Organization

- There is overwhelming evidence that exposure to environmental noise has adverse effects on the health of the population.

Our Children are at Greater Risk from Air Pollution

- Children receive proportionately higher doses of air pollutants than adults, because they breath more air relative to their body weight and lung surface area.
- Children spend more time outdoors, often during midday, when pollutant levels are generally highest. They're also three times more active than adults while outdoors, significantly increasing their oxygen demand through higher breathing rates.
- Children spend more time near the ground, and are exposed more to pollutants emitted close to the ground, such as leaf blower exhaust and PM. They tend to breath more through the mouth rather than the nose, thus bypassing one level of the body's filtration defense.



Hundreds of Communities are Taking Action!

Actions You Can Take Today!

- If you employ a gardener, **insist on use of sweepers, rakes and broom, or leaf mulching.** Many will do this willingly.
- Use **quiet, green alternatives.** Find them on our web page (in development) at greeninglincoln.org/quietlincoln
- **Contact us at quietlincoln@gmail.com** with questions and suggestions.
- **Speak to others** about the pollution caused by leaf blowers.

Hold Your Breath! What's in That Dust?

- Brake lining dust and tire particles
- Lead, carbon, cadmium, chromium
- Pesticides and Herbicides
- Animal Fecal Matter
- Molds, Spores, Fungi, Pollen
- Carbon monoxide, Nitrogen oxides, hydrocarbons
- Diesel soot
- Tranquility-shattering Noise!