June 1, 2020

To Whom It May Concern:

NY Chapter 2 (Long Island) of the American Academy of Pediatrics strongly supports legislation which would prohibit the use of gas-powered leaf blowers from May 1 to September 30. Gasoline leaf blowers (GLBs) pose many unnecessary health risks and environmental hazards.

The use of GLBs for landscape maintenance is exposing children, workers, and all of us in New York to high levels of exhaust pollutants, other toxins, and unsafe noise levels. Today there are excellent commercial grade battery blowers that are comparable in efficacy and efficiency to gas ones. Therefore, there is no reason for GLB use, particularly during the late spring and summer months when there are few leaves, people are spending more time outdoors, and the creation of ground level ozone by GLB emissions becomes a serious health hazard. Many municipalities in New York and elsewhere have already restricted or banned GLBs without any resultant problems or increased costs.

Gas leaf blowers are primarily primitive 2-stroke engines which have no emission controls, are inefficient at burning of fuel, and are highly polluting. Growing evidence implicates the 2-stroke engine in increased risk of early death, heart attack, stroke, congestive heart failure, asthma, chronic obstructive lung disease, cancer, and other serious health conditions. Children, seniors, workers, and those with chronic illness are at greatest risk. Some nations and municipalities are eliminating 2-stroke engines based on these facts and the health care costs associated with their use.

- **Pollution from GLBs Increases the Risk of Complications and Death from the Coronavirus.**

  A recent Harvard study linked pollution from tiny particulates (also called PM 2.5) to a higher risk of complications and death from COVID-19. A one-microgram increase in concentration with these particles is associated with an 8% increase in risk of death from COVID-19. **A single commercial GLB emits tens of millions of micrograms of fine particulates per hour at ground level.** The particles may stay suspended in the air for a week or longer, so they present a risk to anyone in the vicinity. Pollution from PM 2.5 is also linked to other serious health problems, including heart attacks, worsening of asthma, and other heart and lung problems.
GLBs are a major source of localized close-proximity pollutants that make it unsafe for all of us to be outdoors while workers are using these machines. Exhaust pollutants released or churned up by the blowers include volatile organic compounds (VOCs): benzene; 1,3 butadiene; acetaldehyde; and formaldehyde. These are HAPS (Hazardous Air Pollutants), defined by the US EPA as pollutants that cause, or may cause cancer, or other serious health effects. Also released are nitrogen oxides, carbon monoxide, particulate matter, and carbon dioxide, which are considered “Criteria Pollutants” (harmful to public health and the environment). Even low-level exposures have been associated with respiratory and central nervous system effects. GLB pollutants such as hydrocarbon vapors, nitrogen oxides, and carbon monoxide react in the presence of heat and sunlight to form ground-level ozone, the major component of smog, and a known respiratory irritant and risk factor for cardiovascular disease.

Fine particulate matter (under 2.5 microns, which is easily assimilated in the lungs) has been linked to all-cause early death, myocardial infarctions, anxiety, strokes, congestive heart failure, and respiratory disease – including asthma attacks - and can increase the severity of chronic lung disease in the elderly. Two-stroke engines account for the vast majority of fine particulate pollution in landscape maintenance. Particulate matter may contain animal fecal matter, fertilizers, pesticides, herbicides, allergens (fungal spores and pollen), diesel soot, brake dust, rubber tire particles, and/or heavy metals or other toxins (e.g. arsenic, chromium, lead, mercury). This matter remains suspended in the air for hours or even days.

Noise from older leaf blowers ranges from 95-115 decibels at the ear of the operator. (Some newer ones are slightly quieter.) These levels are orders of magnitude (decibels are on a logarithmic scale) beyond those deemed safe by OSHA, EPA, WHO, and NIOSH for workers and the public. Noise is more than just an annoyance; exposure to constant or high levels of noise can cause countless adverse health effects. These include stress-related illnesses, high blood pressure, speech interference, hearing loss, sleep disruption, and lost productivity. The EPA states that “noise degrades quality of life by impairing communication and social interaction; reducing the accuracy of work, particularly complex tasks; and creating stressful levels of frustration and aggravation that last even when the noise has ceased.”

Landscape Workers are particularly at risk for health problems from GLBs, including from COVID-19. They frequently work in teams (including simultaneously using multiple blowers, in violation of industry guidelines) that are unable to maintain safe distance, and often do not wear masks, eye, or hearing protection. They are exposed to extremely high levels of pollutants. As many of them are from minority communities, they already have an increased risk of severe COVID infection and mortality and may not have health insurance.

The American Academy of Pediatrics, NY Chapter 2, asks that you take action against gas-powered leaf blowers for the sake of our children’s health and that of all the residents and workers in NYS.

Thank you.

Sincerely,

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President, NYS AAP - Chapter 2