

Florida's garden equipment helps it lead the nation in this type of pollution

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Florida leads the nation in emissions of at least two pollutants from gas-powered lawn equipment, according to the federal government's latest National Emissions Inventory.

In 2020, [equipment](#) like lawnmowers and leaf blowers emitted 2,116 tons of "fine particulates" in Florida—that amount is equivalent to the pollution left behind by 22,709,915 cars over the course of a year.

What are fine particulates?

The U.S. Environmental Protection Agency website said [particulate matter](#) "contains microscopic solids or liquid droplets that are so small that they can be inhaled and cause serious health problems."

The Centers for Disease Control and Prevention said on its website that smaller, or "fine," particles, "are more dangerous because they can get into the deep parts of your lungs—or even into your blood."

Tony Dutzick is with the nonprofit organization Frontier Group, which analyzed the lawn equipment data from the EPA.

He said fine particulates can contribute to [premature deaths](#), and health problems ranging from cancer to reproductive ailments and even to mental health problems.

"So, for Florida and for every place around the country, seeing that lawn and garden equipment is producing a significant amount of this pollutant is something that we really need to pay attention to," Dutzick said.

"Most people look at a large car and a small leaf blower and think, one of these is more polluting than the other and it's usually not the one that you're thinking of."

It's the small leaf blower. And the reason for that, he said, is we've actually made great progress in reducing pollution from vehicles.

What are nitrogen oxides?

Florida was not only the top emitter of fine particulates in 2020, but also of [nitrogen oxides](#), which contribute to smog, or ground-level ozone.

It's formed by a chemical reaction between compounds that have a high vapor pressure and low water solubility and oxides of nitrogen in the presence of sunlight.

The EPA said on its website that "ozone concentrations can reach unhealthful levels when the weather is hot and sunny with little or no wind."

Exposure to it can lead to respiratory issues for people.

"Florida is a state where people are engaging in four-season lawn and garden care because of the climate. And as a result of that, you're going to be using this equipment more often," said Dutzick.

Palm Beach County ranked 4th in the nation for fine particulate pollutants, Broward and Miami-Dade counties were in the top 15, and Hillsborough was 25th.

Going electric

But Dutzick said the good news is, there's been a dramatic increase in the availability and the affordability of electric garden equipment.

And some communities across the country are actually creating incentives to purchase those options.

"There's a larger conversation that's happening around the country about

what is the future of lawn equipment," he said.

"We hope that this report and this analysis contributes to that conversation by reminding the public and reminding public officials that the stakes here are pretty significant."

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