

# [***Switching to electric vehicles could prevent millions of illnesses in US children by 2050, report estimates***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:6BCN-VFJ1-DY7V-G00X-00000-00&context=1516831)

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**Body**

(CNN) &#8212; Hundreds of infants' lives would be saved and millions of children would breathe easier across the US if the nation's power grid depended on clean energy and more drivers made the switch to zero-emission vehicles, according to a new report from the American Lung Association.

"Air pollution and climate change are putting children at risk today," said report author [*Will Barrett*](https://www.lung.org/media/meet-our-experts/will-barrett), the association's senior director of advocacy for clean air. "The impacts of climate change continue to intensify, and that will just add to the risks that children in the United States face as they're growing up."

The report, published Wednesday, determined that children's lives could be made a lot healthier if all new car shoppers picked zero-emission options by 2035 and people bought only zero-emission medium- and heavy-duty vehicles like buses, ambulances and tractor-trailersby 2040, along with a switch of the nation's electric grid to clean and renewable energy by 2035.

Electric cars and trucks are better than gas-fueledvehicles because over the course of theirlifetime they emit fewer carbon emissions. EVs create 3,932 pounds of carbon equivalent per year, compared to 11,435 for gas powered vehicles, [*according to calculations*](https://afdc.energy.gov/vehicles/electric_emissions.html) from the US Department of Energy.

While battery-powered cars don't emit greenhouse gases from tailpipes, they aren't completely "zero-emission" even if that's their official label. There are still emissions created when the cars are built, when manufacturers create the cars' large batteries, and when they charge. Decarbonization of the electric grid is a [*key component*](https://energy.mit.edu/wp-content/uploads/2019/11/Insights-into-Future-Mobility.pdf) to cleaning up the air. Without a clean source of power like hydroelectric or solar, the benefit of having an electric car is much more limited.

This latest report estimates that by 2050, a switch to zero-emission vehicles and a decarbonized electric gridwould mean 2.79 million fewer pediatric asthma attacks, 147,000 fewer pediatric acute bronchitis cases, 2.67 million fewer cases ofpediatric upper respiratory symptoms and 1.87 million fewer cases of pediatric lower respiratory symptoms, and 508 infants' lives would be saved.

[*The research*](https://www.lung.org/getmedia/13248145-06f0-4e35-b79b-6dfacfd29a71/zeroing-in-on-healthy-air-report-2022.pdf) comes from [*a larger American Lung Association report*](https://www.cnn.com/2023/06/06/health/electric-vehicles-save-nearly-90-000-lives/index.html) that said a big push for zero-emission vehicles would create more than $1.2 trillion in health benefits for the US by 2050.

Traffic is one of the [*biggest sources*](https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions) of carbon pollution in the country and accounts for 28% of the nation's greenhouse gas emissions, according to US [*government data*](https://www.cbo.gov/publication/58861#:~:text=Transportation%20is%20the%20largest%20source,greenhouse%20gas%20emissions%20from%20transportation.), followed by electricity production at 25%.

Pollution is more dangerousfor children since their bodies are still developing and they have small lungs. They tend to take in more air than adults because their breathing is quicker, and as a result, their lungs and bodies are exposed to even more pollution. Kids also tend to spend more time outside -in potentially polluted air - than adults typically do, the new report said.

Pollution can harm a child's health even before birth. A pregnant person's exposure can cause a baby to be born early or with a [*low birth weight*](https://scholar.google.com/scholar_url?url=https://ehp.niehs.nih.gov/doi/pdf/10.1289/ehp.97105514&hl=en&sa=X&ei=lt3UZeuVC8COy9YPlbSLgAg&scisig=AFWwaeYVs2TiMr48fGmcuL45Iz0P&oi=scholarr), studies show.

[*Premature babies*](https://www.mayoclinic.org/diseases-conditions/premature-birth/symptoms-causes/syc-20376730) can have significant health problems at birth and throughout their lives. They are at higher rsk of breathing difficulties, heart problems, digestive issues, immune system challenges and cognitive issues.

Even if a child is born at full-term, [*exposure to pollution*](https://www.cnn.com/2023/04/19/health/state-of-the-air-2023/index.html) can lead to respiratory and heart problems; exposure has also been associated with a higher risk of depression, anxiety and even suicide, studies show, for both children and adults.

Globally, 8.8 million people die prematurely because of air pollution every year, [*studies estimate*](https://www.bmj.com/content/383/bmj-2023-077784).

A lot of children in the US are exposed to high levels of air pollution, according to the American Lung Association's [*2023 State of the Air*](https://www.lung.org/research/sota/key-findings#:~:text=The%20%E2%80%9CState%20of%20the%20Air,of%20ozone%20or%20particle%20pollution.) report. It says that more than 27.2 million kids live in counties that earned failing grades for air quality.

"Anything we can do in the area of reducing emissions from transportation is going to be beneficial to both climate change and to have air quality problems," said Dr. Daniel Horton, an assistant professor of Earth and Planetary Sciences at Northwestern.

Horton, who did not work on the new report, has published a number of papers showing that billions of dollars could be saved and hundreds of lives spared even if only some people shifted to electric vehicles.

One [*2023 study*](https://iopscience.iop.org/article/10.1088/2634-4505/acf60d) that simulated air quality levels on a neighborhood level showed that if just 30% of all vehicles in the Chicago region were replaced with electric versions, it would save more than 1,000 lives andmore than $10 billion a year because of fewer deaths related to pollution. Another study, focused on replacing 30% of heavy-duty vehicles like trucks and school buses in the Chicago region with electric versions, calculated that it would save more than 500 lives and about $5 billion per year in health benefits.

[*Communities of color*](https://www.epa.gov/sciencematters/study-finds-exposure-air-pollution-higher-people-color-regardless-region-or-income) tend to live in more polluted areas, regardless of income, and neighborhoods where there are high concentrations of people with limited incomes tend to be more polluted, studies show. That exposure to pollution exacerbates existing health disparities.

"When we investigate this question of what happens to people's health when we switch over to electric vehicles, we find that the majority of the benefits occur in disadvantaged communities. These disadvantaged communities are often people of color, predominantly black or Hispanic communities," Horton said. "And so we find not only is the adoption of electric vehicles good for climate change, good for air pollution, but also good for environmental justice."

Focusing on vehicles, in addition to green power, could make a big difference in pollution levels. Although there has been a sharp increase in the number of EVs on the road, according to [*government numbers,*](https://www.eia.gov/todayinenergy/detail.php?id=60422#:~:text=In%202021%2C%20the%20number%20of,to%20our%20Monthly%20Energy%20Review.) only a fraction of vehicles on the road are electric: a little more than 5% in 2022.

Public health advocates have pushed for more financial incentives to encourage people to buy EVs. And as more of them become available as used cars, Horton said, prices are dropping, and that should also help.

The American Lung Association'sBarrett said stronger federal policies are also needed to prompt a bigger change to cleaner energy. The Biden administration is expected to announce revamped tailpipe emissions standards for cars and trucks in March and regulations for power plant emissions in April.

"We do we feel like the pathway we set out for this transition to zero-emission technologies is underway, but we've got a long way to go, and there are some key things that we need to see happen to make that transition real," he said.

[*The Biden administration*](https://www.cnn.com/2024/02/18/politics/emissions-rules-ev-growth-biden-administration/index.html) has indicated that it may relax strict vehicle emissions rules it proposed last year to give carmakers more time to meet requirements to create more electric vehicles.

Electric vehicles have become a hot topic in election-year ***politics***. The [*United Auto Workers union*](https://crsreports.congress.gov/product/pdf/IN/IN12279), a key group either presidential candidate will need to win in November, has been sounding the alarm about how a shift to EVs could cost jobs and slash salaries for members. Republican candidate [*Donald Trump*](https://www.cnn.com/2023/09/28/business/cars-trump-uaw-electric-vehicles/index.html) has also [*incorrectly claimed*](https://www.factcheck.org/2023/10/trumps-misleading-claims-about-electric-vehicles-and-the-auto-industry/) that EVs are "bad ... for the environment."

The American Lung Association is encouraging the government to create the strongest possible pollution standards.

"We want to make sure that those policies are finalized quickly by the administration to really move the needle and bring pollution down from these very harmful sources," Barrett said.

CNN's Ella Nilsen and Nathaniel Meyersohn contributed to this report.

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