Smarter Transport Policies Could Save 1.9 Million Lives by 2040, New Global Study Finds

Posted on 20.May 2025

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Emission standards and electrification aren’t competing strategies—they’re complementary tools for a healthier world

A landmark study from the ICCT, George Washington University, and the University of Colorado Boulder shows that coordinated road transport policies—combining tighter emissions standards, faster EV adoption, cleaner electricity, and accelerated fleet turnover—could prevent up to 1.9 million premature deaths and 1.4 million childhood asthma cases by 2040. The data confirms that integrated, multi-lever approaches will deliver significantly greater public health outcomes than isolated policies. This article explores the implications for policy, industry strategy, and global health equity.

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Why This Study Matters

Transport policy debates often focus on technology, carbon targets, or vehicle lifecycle cost—but rarely do they quantify the direct human cost of inaction. That changes now.

A sweeping global study – led by the **International Council on Clean Transportation (ICCT)** in partnership with **George Washington University** and the **University of Colorado Boulder**—offers an unambiguous conclusion: **the way we regulate road vehicle emissions over the next 15 years will shape public health outcomes for generations to come.**

Key takeaway: **Combining policies is exponentially more effective than implementing them in isolation.** That means tight tailpipe emission standards *plus* a transition to electric vehicles *plus* clean grid power. Do it all—and do it fast—and we could avoid:

- **1.9 million premature deaths**
- **1.4 million new asthma cases in children**
- **310 deaths and 230 new asthma cases daily**, every day through 2040

> “Policy choices made today will have profound implications for public health outcomes through 2040 and beyond,” said Lingzhi Jin, lead author and researcher at ICCT.

The Policy Recipe: Integration, Not Substitution

The study modeled a wide range of scenarios across 180 countries and over 13,000 urban areas. Among its findings:

- **Road transport emissions in 2023 caused ~252,000 new asthma cases in children**, making up nearly 20% of all NO_2-linked pediatric asthma cases.
- Without intervention, health inequities will grow. Premature deaths and childhood asthma cases are projected to *double* in least-developed countries by 2040.
- Implementing **Euro 6/VI-equivalent standards alongside EV policies** avoids an additional **323,000 premature deaths** and **419,000 asthma cases in children**, compared to EV-only strategies.
- **Cleaning up the electricity grid** powering EVs adds a further **212,000 lives saved** and **98,000 fewer asthma cases in children**.

Let’s be clear: this is a **complementary equation**. Tight emission standards don’t slow the EV transition—they **accelerate** its health benefits, especially in mixed-fleet urban settings where internal combustion vehicles will remain in circulation for years.

Disproportionate Impact on the Young and the Vulnerable

The research offers sobering insights into who bears the greatest burden of transport-related pollution:

- Children under five, who represent only 25% of the young population, account for **50% of avoidable asthma cases**.
- Adults 65+ represent **just 20% of the population**, but **70% of the years of life lost** from road transport emissions.
- Urban areas—which house just one-third of the world’s children—account for **two-thirds** of preventable childhood asthma cases.

“Vehicle tailpipe pollution contributes to asthma in children and increases

> cardiovascular and respiratory risks in adults," noted Dr. Susan Anenberg of George Washington University. "We urgently need coordinated global action."

A Roadmap for Smarter Policy—and Cleaner Air

The implications for hybrid and plug-in hybrid strategies are especially relevant. In regions where full BEV uptake faces infrastructure, cost, or vocational constraints, hybrid and PHEV vehicles can serve as transitional tools – **but only if paired with aggressive emission standards** that mitigate the impact of combustion engines still on the road.

From the Hybrid Alliance perspective, this is a validation of our core thesis: **Technology neutrality must be married to policy ambition**. Emission standards, electrification, and grid decarbonization are not mutually exclusive – they're mutually reinforcing.

What Comes Next

This research arms policymakers with the evidence they need to act—and strips away any pretense that delay is harmless.

> "This isn't just an environmental issue – it's a public health imperative," said Sheila Watson of the FIA Foundation, a co-funder of the study. "We're talking about saving lives, protecting children, and ensuring cleaner air for communities worldwide."

As regional blocs like the EU and U.S. continue to refine their regulatory paths – whether through Euro 7, EPA Tier 4, or new zero-emission mandates—this study should serve as both a guidepost and a call to action.

Final Thoughts

Clean mobility is no longer just about the drivetrain. It’s about delivering measurable benefits for human health, especially for those most vulnerable to pollution. The data is clear. The technologies exist. The benefits are enormous. **What we need now is the political courage to integrate, not dilute, our approach.**

 Read the full ICCT press release here: https://theicct.org/policies-targeting-road-transport-emissions-could-save-1-9-million-lives-globally-by-2040-new-study-finds

 For collaboration inquiries, media contacts, or policy discussions, reach out to us at info@hybrid-alliance.org.