

Petition for Preserving Vehicle Choice, EMF Testing, Exposure Standards,
Car Research, and Consumer Guidance for All Electric Vehicles

To: Appropriate federal and state agencies

I know someone who has experienced severe and immediate uncomfortable sensations while sitting inside certain electric vehicles. The sensation became so difficult to tolerate that the person could not remain in the vehicle and had to get out within a few minutes, even after the vehicle was stopped.

Experiences like this deserve prompt scientific investigation asking for other volunteers to help with safety testing.

EVs place large batteries, high-current cables, inverters, motors, and power electronics directly beneath or close to passengers. These systems can generate magnetic fields inside the cabin, yet consumers receive no standardized information about the levels at the seats where adults and children may remain for hours.

Measurements taken around large PG&E electrical lines have shown readings around 5-6 milligauss (mG).

Measurements inside some EVs can be around 3 mG or higher depending on the vehicle, seating position, electrical system, and driving condition. Taxi, rideshare, delivery, and long-distance drivers may spend many hours inside a vehicle each day.

Vehicles felt uncomfortable and some readings are earlier and new versions of Tesla sedan.

The World Health Organization reports average residential power-frequency magnetic fields of about 1.1 mG in North America and has discussed epidemiological findings involving childhood leukemia at long-term average exposures above roughly 3-4 mG. ICNIRP is not a U.S. government regulatory agency. Its reference levels should not prevent U.S. and other State agencies from developing vehicle-specific research, disclosure, and precautionary standards.

California already uses no-cost and low-cost approaches to reduce EMF in some utility transmission planning. A similar precautionary approach should be considered for vehicles where adults and children may sit directly above high-current electrical systems.

Other types of vehicles like gasoline (old tech) should be allowed to operate. Taxi apps should have a way of giving these preferences to avoid sitting in these all-electric cars. Any pending cases of increasing availability and promoting all electric cars should carry information listed here, along with any future research conducted.

Promote other clean energy vehicles research.

Requested Actions

1. Establish a Mandatory EV Cabin EMF Standard NHTSA and federal health agencies should develop a vehicle-specific maximum exposure standard based on independent research. Testing should include continuous and time-weighted exposure, short peaks, acceleration, regenerative braking, highway and stop-and-go driving, charging, climate-control loads, maximum electrical load, and relevant frequency ranges.

Testing should cover every seating position and measure at the feet, legs, pelvis, chest, and head, with special attention to rear seats and child-seat locations.

2. Begin Independent Research Across All Age Groups

NIH, NIEHS, universities, and independent laboratories should promptly study infants and children, teenagers, adults, pregnant occupants, older adults, professional drivers, and people who report strong physical sensations inside EVs.

Studies should record field strength, frequency spectrum, seat position, duration, and vehicle operating state.

Occupational exposure for taxi, rideshare, delivery, and other drivers who may spend 8-10 or more hours per day in a vehicle should be studied separately.

3. Require an EMF Rating and Public Database

Every new EV and hybrid should display a standardized cabin EMF rating with other major vehicle information.

The label should show typical and maximum tested magnetic-field levels in mG and microtesla by seating area.

Federal agencies should maintain a public database showing vehicle, model year, seat location, average EMF, peak EMF, and frequency spectrum, using independent or government-certified testing. Agencies can also evaluate retesting after major battery, inverter, motor, high-voltage cable, drivetrain, or collision repairs.

4. Launch Joint Research on Other Vehicle Technologies

Federal and state agencies should establish a joint research program with universities, independent scientists, automakers, and other industry experts to develop other transportation technologies that also reduce environmental impact while improving the passenger environment.

5. Give Rideshare and Taxi Users a Non-EV Choice

Rideshare and taxi apps should identify the assigned vehicle as Gasoline, Hybrid, Plug-in Hybrid, or Battery Electric and provide a simple preference such as "Do not send an EV." Where

a non-EV vehicle is available, passengers should not have to repeatedly cancel rides to avoid an EV.

6. Preserve Consumer Choice While Research Continues

Federal and California policy should preserve reasonable access to conventional and other vehicle choices

while long-duration cabin exposure is studied and lower-exposure clean transportation technologies are developed.

Requested outcome: Measure EV cabin EMF, publish the results, study effects across age groups and occupational users, establish an appropriate vehicle-specific limit, launch joint government-academia-industry research on other vehicle technologies, require clear consumer disclosure, and preserve meaningful vehicle choice.