

## Fact Sheet: The Road to Clean Air Study

Fall 2011

A recent study from the American Lung Association in California pinpoints the benefits in lives and dollars saved from tightening standards for new cars sold in California combined with an increase in cleaner fuels. The state is poised to adopt stronger clean car standards in early 2012.

### **Tough Vehicle Standards Result in Fewer Asthma Attacks, Heart Attacks, Premature Deaths**

California could reduce all major vehicle-related health impacts from air pollution by 70 percent by implementing strong new car standards combined with cleaner fuels. According to the report, strong standards, including smog and particle pollution controls, greenhouse gas emission standards, and an aggressive zero emission vehicle requirement, will annually avoid the following illnesses and deaths when fully implemented across the fleet:

- 400 - 420 premature deaths
- 8,075 - 8,440 asthma attacks and lower respiratory symptoms
- 181,000 - 190,000 acute and other respiratory symptoms
- 390 - 405 heart attacks
- 420 - 440 respiratory ER visits and cardio/respiratory hospitalizations
- 28,100 - 29,300 lost work days
- 8,800 - 9,500 missed school days
- \$7.2 - \$8.1 billion in healthcare, environmental and societal damages

*“90% of Californians live in areas with unhealthy air according to the American Lung Association State of the Air report,” said Jane Warner, President and CEO of the American Lung Association in California.*

### **State Now Drafting Vehicle Rules That Will Significantly Impact Human Health**



The state currently is drafting the Advanced Clean Car standards, which update and link several existing programs aimed at reducing pollution from vehicles, including the Low-Emission Vehicle program, the Zero-Emission Vehicle program and the greenhouse gas emission reduction program (often called Pavley standards), and will release the proposed standards in November, 2011. All three standards are critical to reduce the level of criteria pollutants and greenhouse gas emissions that new passenger vehicles sold in California will generate through model year 2025.

## American Lung Association in California Calls for Car of the Future

*“There are few needs as urgent as making sure the air we breathe in California isn’t making us sick and contributing to escalating healthcare costs,”* according to David T. Cooke, M.D., member of the Lung Association Board and Assistant Professor of Thoracic Surgery at the UC Davis Medical Center in Sacramento.

In order to reduce vehicle impacts on human health, the American Lung Association in California finds that the California Air Resources Board must adopt strong Advanced Clean Car Standards for the passenger vehicle fleet for 2017-2025 that will include the following requirements for new cars:

- Achieve 75 percent reduction in smog forming emissions and place stringent controls on particle pollution from vehicles
- Achieve, at minimum, an overall 45 percent (6 percent per year) reduction in greenhouse gas emissions from 2017-2025
- Achieve a new car fleet mix that includes 20 percent zero emission vehicles by 2025

### Tough Vehicle Standards Avoid Billions in Costs

California could avoid at least \$7.2 billion per year in health and other societal costs if the California fleet of vehicles is converted to the next generation of cleaner, more efficient vehicles by 2025 and cleaner fuels have become more available under the Low Carbon Fuel Standard. In fact, without any improvements the average car under current standards will cause more than \$4,700 in health, environmental and societal damages over its lifetime – the equivalent to \$1.19 in damage per gallon of gasoline, or about \$20 per fill-up.

### Data and Methodology

The American Lung Association in California commissioned a study to compare the emissions, public health and greenhouse gas benefits that will result from current vehicle emission standards (LEV II for smog-forming emissions and Pavley I for greenhouse gas emissions) to the benefits that can be achieved from the next generation of vehicle standards (LEV III, Pavley II), including strong zero emission vehicle (ZEV) requirements being considered this year. Vehicle emission reductions result from decreases in tailpipe, onboard and upstream emissions.

The American Lung Association in California contracted TIAX, LLC, an engineering consulting firm, to conduct a technical analysis comparing the benefits of moving from existing standards to possible future vehicle standards. This report incorporates the criteria standards into the fleet mixes, calculating the health benefits that result from the mix of emission standards and alternative technologies. For each component of this study, TIAX relied on numerous state and federal regulatory documents, technical models and input from the Lung Association. [www.lungusa.org/california-cleancars](http://www.lungusa.org/california-cleancars)



**The American Lung Association in California** saves lives and improves the health of Californians and their lungs. Through research, education and advocacy, we fight to reduce smoking, keep the air we breathe clean, prevent and treat lung diseases such as asthma and COPD, and eliminate lung cancer.