

# California Clean Cars Campaign

Global Warming Solutions for a Healthy California

[www.calcleancars.org](http://www.calcleancars.org)

American Lung Association  
of California

Bluewater Network

California League of  
Conservation Voters

California Public Interest  
Research Group

Center for Energy Efficiency  
and Renewable  
Technologies

Coalition for Clean Air

Environment California

Environmental Defense

Natural Resources  
Defense Council

Physicians for Social  
Responsibility

Planning and Conservation  
League

Sierra Club

Steven and Michele Kirsch  
Foundation

Union of Concerned  
Scientists

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## Global Warming Effects on Environmental Justice Communities

Global warming will affect everyone—rich and poor, urban and rural, in developed and developing countries. However, California's low-income communities and communities of color, which historically have higher exposure to environmental health risks than the general public, face pressing threats from global warming.

Environmental justice communities suffer from some of the state's worst air quality. Global warming is likely to aggravate local smog conditions, and increase heat- and pollution-related health problems. For instance, Imperial County ranks among the worst in the U.S. for ozone pollution. Nearly 80 percent of the county's 142,000 residents are people of color, primarily Hispanic. The county's poverty rate for children and adults is nearly double the state's rate.

Other potential global warming effects such as floods, droughts and fires and their effects on insurance—plus higher overall costs of living, will also disproportionately affect people who live in environmental justice communities.

## Global Warming Increases Smog and Endangers Health

When temperatures rise, so does air pollution. Inner-city residents, who are more likely to have pre-existing respiratory illnesses such as asthma or cardio-pulmonary problems, are more vulnerable to heat-induced smog. Scientists have long noted that smog aggravates asthma, but recently, University of Southern California researchers found evidence that ozone can cause asthma in young people.<sup>1</sup>

Additionally, research in California shows a direct correlation between environmental justice communities and hospitalizations for asthma. In one study, the age-adjusted hospitalization rate for African Americans in California was four times the rate for Hispanics, whites and Asians. Likewise, when researchers considered income irrespective of race, they found hospitalization rates 1.5 times higher for those living in areas with a median household income of less than \$35,000.<sup>2</sup>

## Heat Causes Inner City Suffering and Deaths

When summer heat waves hit, low-income people living in inner cities suffer the most, often because they have no air conditioning, and no means to escape the heat. Heat waves often cause a spike in heat-related deaths due to heat stress, heart attacks, stroke, and respiratory failure. But the mortality rates are higher in cities than in suburban and rural areas. A study of the 15-largest American cities found that global warming would increase heat-related deaths by at least 90 percent.<sup>3</sup> Another study estimates that in Los Angeles, which occasionally experiences very hot, dry weather, an expected 3°F warming could almost double heat-related deaths, from about 70 per year today to 125.<sup>4</sup>

<sup>1</sup> California Air Resources Board "Children's Health Study."  
<http://www.arb.ca.gov/research/chs/chs.htm>, January 31, 2002

<sup>2</sup> Fox, R.N., M. Thamer, B. Fadillioglu, and P. Gergen. 1998. "Race, income, urbanicity, and asthma hospitalization in California." *Chest* 113:1277-84.

<sup>3</sup> Kalkstein, Laurence S. 1992 "Impacts of Global Warming on Human Health: Heat Stress-Related Mortality." In *Global Climate Change: Implications, Challenges and Mitigation Measures*, Easton, Pa.: Pennsylvania Academy of Science.

<sup>4</sup> U.S. Global Change Research Program, Report of the California Regional Assessment Group, "The Potential Consequences of Climate Variability and Change for California," June 2002

## **Global Warming Hurts Farm Workers**

Agriculture contributes up to 7 percent of the state's total personal income and employs 1.13 million people.<sup>5</sup> Potential floods, droughts and fires caused by global warming could mean economic disaster for large and small farmers and California's low-income farm workers. Disruptions in water supply, shifts in climate zones, pest infestations, stress on livestock, and sea-level rise can have disastrous effects on the people whose livelihoods depend on farming.

## **Global Warming and Insurance**

The people who will be most affected by the increased heat and air pollution caused by global warming will also be those who have inadequate or no health insurance. People of color are twice as likely as whites to have no health insurance.<sup>6</sup>

Beyond heat and air pollution, global warming will increase the likelihood of flooding, drought and fires. While wealthy homeowners can move, and have insurance to cover their losses, low-income people, many of whom rent their homes, cannot always move and often do not have adequate insurance to cover flood or fire losses.

## **The Cost of Living in California Will Rise**

California is a very expensive place to live. Poor people already spend a higher proportion of their income on food and daily living expenses. Global warming will almost certainly cause prices to rise across the board, resulting in less discretionary spending and increasing daily living hardships for people in environmental justice communities.

For example, when agriculture is struggling, as it surely would under increased global warming, food prices go up. Insurance prices are likely to go up after disasters strike. Since global warming will affect health, it means more people will need and demand health services, and ultimately health care costs will rise. Rising temperatures will mean more people use air conditioning, resulting in higher demand for energy. And to meet the demand, power companies will need to buy electricity from other sources, or build new generating plants — all of which costs money and translates to higher energy rates for consumers.

## **Global Warming and Developing Countries**

Many Californians living in environmental justice communities have family, friends and ties to developing countries. The International Red Cross has found that developing countries are likely to bear greater burdens from global warming than wealthier developed nations, because their economies are largely based on weather-sensitive sectors, such as agriculture, and because they often lack adequate health infrastructure or necessary resources to adapt to or mitigate the severe impacts of global warming.<sup>7</sup>

## **Feeling the Heat**

Global warming will change life for everyone in California and beyond. But people who live in environmental justice communities will likely feel the heat first, because they are at higher risk environmentally, economically, socially and politically. That's why we need practical solutions that are being developed as part of California's regulations to reduce global warming pollution from motor vehicles.

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<sup>5</sup> Sheers, John, "The Estimated Costs of Climate Change in California," Center for Energy Efficiency and Renewable Technologies, July 2003.

<sup>6</sup> Lewers, D. Ted, "AMA: Uninsured Americans Constitute a National Health Crisis," [www.ama-assn.org](http://www.ama-assn.org)

<sup>7</sup> International Federation of Red Cross and Red Crescent Societies, at <http://www.ifrc.org/WHAT/disasters/dp/climate/>