



Breathing Easier in California

California’s pioneering clean energy and climate law (AB 32) is advancing a strong economy and healthy environment – proof that a thriving, low-carbon economy is good for California. AB 32 encompasses the state’s collective efforts to reduce carbon pollution and transition to a clean, efficient economy. Since its adoption nearly a decade ago, public health organizations and medical professionals, who see firsthand the devastating health consequences of air pollution and oil dependence, have supported AB 32 as a key strategy for cleaning our air and improving health in vulnerable communities. Air pollution can lead to stroke, heart disease, lung cancer and both chronic and acute respiratory diseases, including asthma.

“AB 32 is cutting pollution and really cleaning up the air we breathe.”

Dr. David Tom Cooke,
American Lung Association in California, Lung Surgeon, Sacramento

Pollution is down and the lungs of children are improving

- Clean air standards are paying off with **measurable improvements in children’s health.**
- Air pollution has long been linked to smaller lung capacity and compromised breathing in children. New research has found that the steep decline in air pollution in CA in recent years has led to more robust lung development in school-aged kids – **the percentage of children with significantly impaired lung function has been cut in half.**ⁱ
- This measured improvement in the lung function of children ages 11 – 15 is critical to their long-term success, and is evidence that **regulations limiting pollution produce verifiable health benefits.**ⁱⁱ

AB 32 is already helping to improve air quality. Reduced emissions in recent years have seen **the amount of cancer-causing toxins in the Los Angeles basin air fall 65% since 2005.**

The Low Carbon Fuel Standard and California’s AB 32/cap and trade program saves lives and billions of dollars

- American Lung Association in California research has demonstrated that the Low Carbon Fuel Standard and cap and trade programs’ implementation will save more than \$23 billion in societal damages, **including \$8.3 billion in respiratory health impacts by 2025.** More importantly, it will save hundreds of lives and prevent heart and lung illnesses by removing thousands of tons of toxic particles out of our air.
- By 2025, the Low Carbon Fuel Standard and cap and trade programs will prevent:
 - 600 heart attacks
 - 880 premature deaths
 - 38,000 asthma attacks and respiratory symptoms
 - Nearly 75,000 lost work daysⁱⁱⁱ

“Clean air reduces asthma, lung disease and lung cancer.”

Dr. Angela Wang, President, California Thoracic Society

The health impacts from pollution are not distributed equally

- More than **7,000 Californians die prematurely** from air pollution each year.
- **5 million Californians are suffering from asthma,** including 1 million kids.
- **Children living in polluted areas experience slowed lung development.**
- A growing body of evidence links air pollution and vehicle exhaust to low birth weight and impaired fetal brain development that can have lasting health and cognitive impacts.^{iv}

Medical professionals point to climate change as one of the most serious public health challenges of our day.

“Dirty air affects all of us, but our children, the elderly, low-income and communities of color and those living with lung disease face the greatest burdens from air pollution and climate change.”

Dr. Darin Latimore,
Past President, American College of Physicians, California Services Chapter, UC Physician, Sacramento

We've made progress, but California continues to lead the nation with most polluted cities

- **California is home to 6 of the 10 dirtiest cities in the nation.**^v
- Millions of Californians live in these polluted communities – 77% of the population lives in counties with failing grades according to the ALA's 2014 State of the Air report.^{vi}
- Approximately 40% of Californians live close enough to major roadways to experience higher health risks caused by traffic pollution.^{vii}
- **California's current dependence on petroleum fuels generates nearly half of our climate pollution, 80% of smog-forming NO_x emissions and 95% of cancer causing diesel particulates.**^{viii}

Climate Investments for CA

- 2014-15 = \$832 million
- 2015-16 = \$1.7 billion+
- Min. 25% to disadvantaged communities

Cap and trade proceeds are collected from the state's largest emitters and made available for **projects designed to benefit all Californians** including:

- Community planning focused on sustainability.
- Low-carbon transit operations that allow people to get to work without relying on personal vehicles, like more frequent bus service.
- Cleaner vehicle and fuel options for all communities.
- Affordable housing in communities disproportionately impacted by pollution.

Air pollutants cause billions in health and economic damages and contribute to public health burdens like respiratory and cardiac illnesses, hospitalizations and deaths. By reducing these pollutants, AB 32 is supporting healthier children, creating cleaner air and building a promising future.

California Delivers is supported by the following public health organizations and professionals:

American Academy of Pediatrics – CA Chapter 2
American Cancer Society Cancer Action Network
American Lung Association in California
John R. Balmes, MD & Professor, UCSF
Bruce Bekkar, MD
Breathe California
Praveen Buddiga, MD FAAAAI, Baz Allergy, Asthma & Sinus Centers
California Academy of Family Physicians
California Black Health Network
California Medical Association
California Pan Ethnic Health Network
CA Public Health Association – North

Center for Climate Change & Health
Donna Carr, MD
Bensen Chen, MD
Climate 911
David Tom Cooke, MD
Ralph DiLibero, MD
Don H. Gaede, MD
Geoffrey Gaggero, DPM
Health Care Without Harm
Richard J. Jackson, MD MPH
Darin Latimore, MD
Los Angeles County Medical Assoc.
Maternal and Child Health Access
Alberto Mendoza, Executive Director (ret.), Pasadena AIDS Svc Center

Raymond Richard Neutra, MD, DrPH
Sonal R. Patel, MD
David Pepper, MD
Physicians for Social Responsibility – LA
Physicians for Social Responsibility – SF
Public Health Institute
Regional Asthma Management & Prevention (RAMPA)
Sunil Saini, M.D.
San Francisco Asthma Task Force
San Francisco Medical Society
Sonoma County Asthma Coalition
St. John's Wellness & Family Center
Angela Wang, MD

For a complete list of California Delivers supporters, go [here](#)

ⁱ “Cleaner air is linked to stronger lungs in Southern California children”, Tony Barboza, LA Times, March 4, 2014, <http://www.latimes.com/local/lanow/la-me-clean-air-lungs-children-20150304-story.html#page=1>

ⁱⁱ “Children's lung health improves as air pollution is reduced, study shows”, Jan Hoffman, The New York Times, March 4, 2015. http://well.blogs.nytimes.com/2015/03/04/childrens-lung-health-improves-as-air-pollution-is-reduced-study-says/?_r=0

ⁱⁱⁱ http://www.edf.org/sites/default/files/content/dcf_fact_sheet_may_21_2014_final2.pdf

^{iv} 62. Bell ML, Ebisu K, Belanger K. Ambient Air Pollution and low birth weight in Connecticut and Massachusetts. Environ Health Perspect. 2007; 115: 118-24; Ritz B, Wilhelm M, Zhao Y. Air pollution and infant death in southern California, 1989-2000. Pediatrics. 2006; 118: 493-502; Woodruff TJ, Parker JD, Schoendorf KC. Fine particulate matter (PM 2.5) air pollution and selected causes of postneonatal infant mortality in California. Environ Health Perspect. 2006; 114: 785-790. “Air pollution takes a double toll on babies' brains”, Geoffrey Mohan, March 25, 2015, LA Times, April 29, 2014.

<http://www.latimes.com/science/sciencenow/la-sci-sn-air-pollution-baby-brains-20150324-story.html>

^v “January countdown: Fuel policy good for health – and wallet”, Tim O'Connor and Bonnie Homes-Gen, Capital Weekly, May 27, 2014, <http://capitolweekly.net/january-countdown-fuel-policy-good-health-wallet/>

^{vi} American Lung Association. State of the Air, www.stateoftheair.org, “L.A., Central Valley have worst air quality, American Lung Assn. says”, Tony Barboza, LA Times, April 29, 2014, <http://www.latimes.com/science/la-me-0430-air-pollution-20140430-story.html>

^{vii} Rowangould, G. (2013). A Census of the United States Near-Roadway Population: Public Health and Environmental Justice Considerations. Transportation Research Part D: Transport and Environment. 25: 59-67.

^{viii} California Air Resources Board, LCFS ISOR. P.ES-1