

125 million People living in U.S. communities that fail to meet health-based air standards

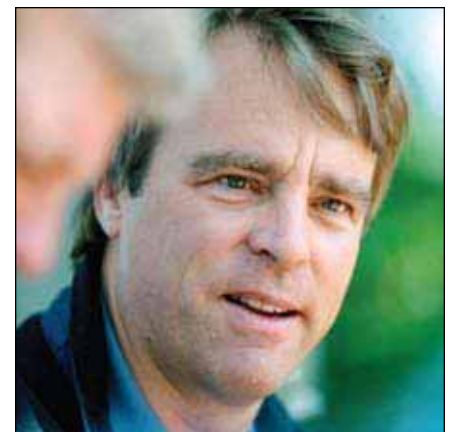
HEALTH



WHY WE WORK ON HEALTH

"Pollution and toxic chemicals take a heavy toll on public health, particularly with children. We're dedicated to cutting smokestack and tailpipe pollution by 80%."

Andy Darrell
VP Living Cities



“Environmental Defense Fund has played a pivotal role in highlighting the health risks of diesel pollution.”

John Kirkwood

Former president, American Lung Association

THE END OF THE LINE FOR DIRTY DIESEL ENGINES

A container ship the length of three football fields docks at the Port of Los Angeles, where it unloads sneakers, DVD players and a giant plume of black exhaust.

While cars have been subjected to tough pollution limits for more than 30 years, standards for diesel trucks, buses, ships and other diesel engines have lagged behind. A decade ago, Environmental Defense Fund set out to reduce the health threat caused by these under-regulated sources of pollution.

Oceangoing vessels, including cruise ships and container ships, are among the worst offenders, emitting huge amounts of diesel particulates and smog-forming emissions. Ships in the Los Angeles Basin alone pollute as

much as 11 million new cars. Small particles lodge deep in people’s lungs and have been linked to cancer and premature death.

In a major breakthrough, international standards adopted in 2008 will cut diesel pollution from new oceangoing vessels by 80 to 90%. We played a pivotal role, helping Congress pass legislation earlier in the year allowing the United States to join the international treaty requiring the cleanup.

Our attorney Janea Scott worked closely with EPA, other environmental and health advocates and state and port officials to bring the bill to the top of the pile in the Senate. Concerted outreach by EDF—including 9,400 messages from our Action

Network members—helped win bipartisan support for the legislation.

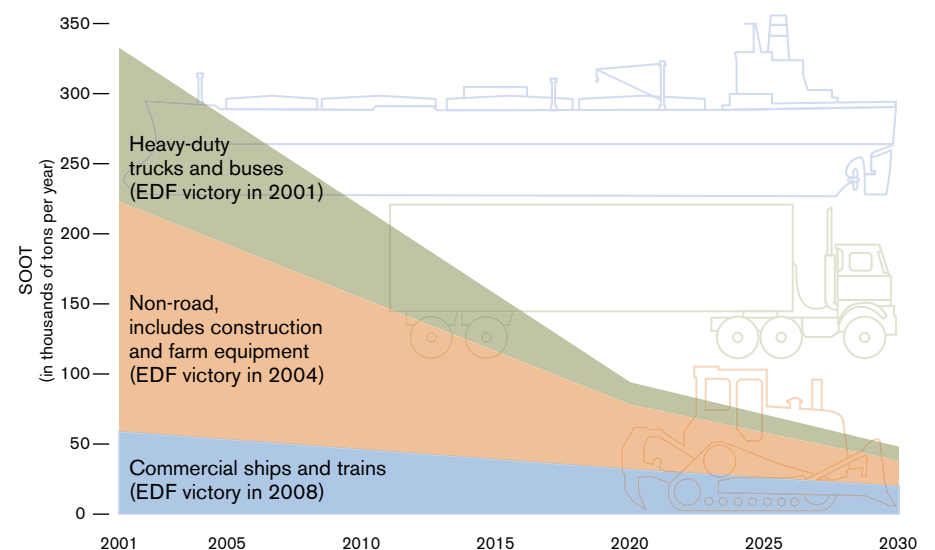
The victory complements new EPA rules, which we also helped win in 2008, that cut soot and smog-forming pollution from diesel barges, ferries and trains. Collectively, the standards will prevent tens of thousands of deaths and hospitalizations each year.

Back in 2000, Scott was often the lone environmentalist among indus-

try representatives on an EPA diesel advisory panel. But we found allies, demonstrated the health risks of diesel pollution, built support in industry and, when necessary, took EPA to court.

The result? A series of victories cutting pollution from more and more types of diesel equipment. Says Scott: “Our children should grow up in a world where diesel engines no longer churn out black plumes of smoke.”

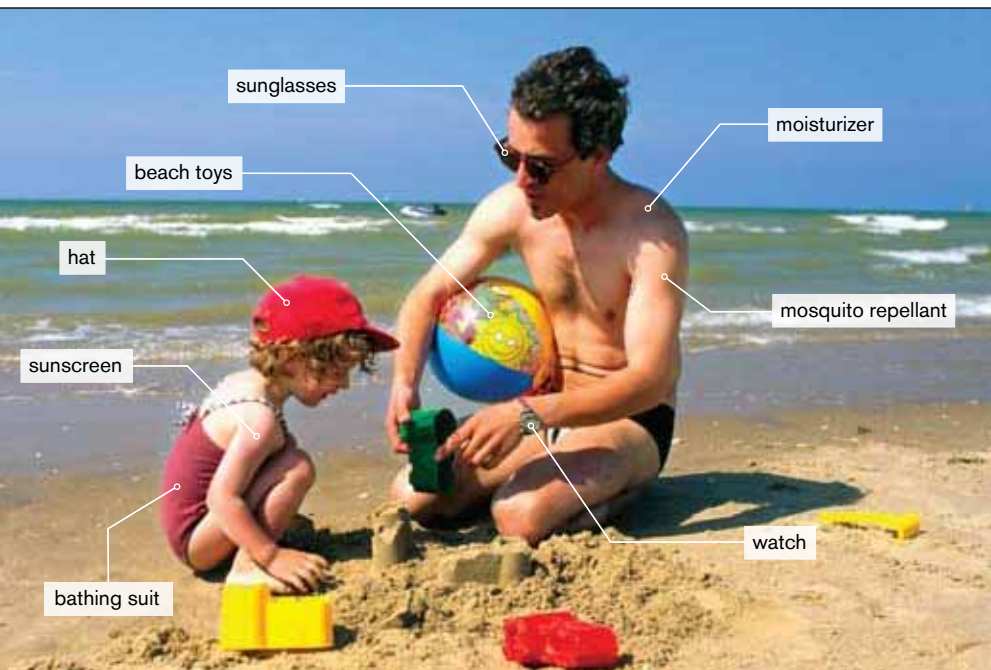
DRIVING DOWN DIESEL POLLUTION BY NEARLY 90%



“EDF brought established expertise to our effort to develop a comprehensive and flexible framework for nanotechnology.”

Terry L. Medley

Global director of corporate regulatory affairs, DuPont



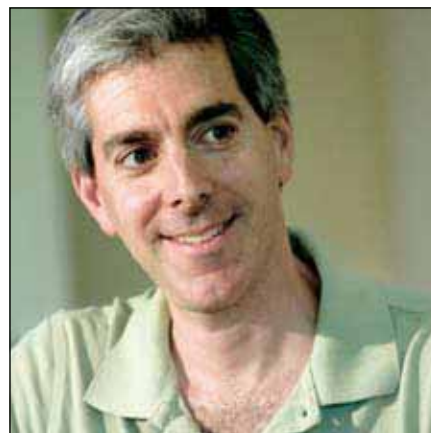
NANOTECHNOLOGY PRODUCTS ARE ALREADY HERE

More than 600 consumer items are known to contain nano materials.

PREVENTIVE MEDICINE

“Imagine being able to predict and avoid the catastrophic downside of modern ‘miracles’ like PCBs, asbestos and leaded gasoline. For nanotechnology, our work with leading companies gives us the chance to get out in front of a promising new technology and get it right the first time.”

John Balbus, M.D., M.P.H.
Chief health scientist



ENSURING NANOTECH'S SAFETY

Researchers in Edinburgh, Scotland, recently made a startling discovery. Certain microscopic “nanotubes” now used in a wide variety of consumer products may pose health risks similar to those caused by asbestos.

Touted as a revolution in everything from energy to medicine, the science of the ultra-small is generating new materials and uses at a furious pace, outstripping scientists’ understanding of the potential environmental and health risks. For example, a nanoscale substance might be absorbed far more readily into the skin or might pass from the bloodstream into the brain, which larger molecules cannot do.

To address the responsible development of nanomaterials, Environmental Defense Fund and DuPont teamed up in 2005 to develop a practical means to assess and reduce the risks. In 2007, we jointly released the Nano Risk Framework, a set of guidelines for companies that want to commercialize nanoscale materials safely.

Within months, our work has been translated into French, Spanish and Mandarin Chinese. GE, Lockheed Martin and Nanostellar, among oth-

ers, all are using it. According to GE, it offers “a ‘standard of care’ for the nanotechnology industry and beyond.” With major companies poised to adopt the framework, Lloyd’s of London is encouraging its members to see that it is used on all the nano projects they insure.

The precautions we have recommended come not a moment too soon. More than 600 consumer products—from golf balls to sunscreen—already use nanotechnology.

We’re working to improve government accountability of nanotech as well. After testimony by our biochemist Dr. Richard Denison, the U.S. House of Representatives passed a bill that would significantly increase federal oversight and ensure that the government conducts sufficient research into nano’s risks.

As Denison says, “This research is critical to develop new methods needed to understand how these novel materials interact with biological systems and the environment.”

▶ ONLINE: See more on nanotechnology at edf.org/nano08

630,000 U.S. newborns exposed each year to dangerous levels of mercury



Leading the way to cleaner hog farms

North Carolina's ten million hogs generate more waste than the entire human populations of New York, Los Angeles, Chicago and Houston. Waste lagoons and sprayfields can contaminate aquifers and have been linked to a host of health problems.

Culminating a decade of work by EDF and a coalition called Frontline Farmers, North Carolina became the first state to ban new hog lagoons and is implementing a cost-share program to help farmers switch to cleaner technology that converts waste into fertilizer. We serve on the committee evaluating alternatives.

"EDF brought pioneering common sense to the equation," says Chuck Stokes, a fifth-generation hog farmer. A transformed hog industry could serve as a model for improving large-scale livestock operations nationwide.



Court overturns weak rule on mercury pollution

When EPA announced a flawed policy for curbing mercury pollution, we teamed up with Earthjustice to file suit along with a coalition of doctors, advocacy organizations and states. We then exposed how EPA was strong-arming states into adopting weaker laws. In a major win for public health, a federal appeals court ruled in our favor.

The government's regulation would have established a cap-and-trade program for mercury pollution from power plants. We opposed cap and trade for mercury because trading could lead to toxic hot spots.

Mercury is a potent neurotoxin that builds up in the body and can harm children's developing brains.

To protect children's health, we worked with the state of Colorado to prove that cutting mercury emissions could be done affordably. Spurred by strong state standards like Colorado's, more than 90 power plants nationwide are installing advanced mercury controls that only recently critics claimed weren't commercially viable.

"States have taken the lead to protect their citizens," notes our deputy general counsel Vickie Patton. "Now EPA needs to follow the law and adopt national mercury standards that will protect every community in America."