



BRIEF ANALYSIS

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Breathe Easy on Air Quality

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Most of what Americans “know” about air pollution is false. Polls show most Americans believe air pollution: 1) has been steady or rising during the last few decades, 2) will worsen in the future and 3) is a serious threat to people’s health. Yet, as a recent NCPA study by air researcher Joel Schwartz shows, air pollution across the United States has been declining for decades — and was declining even before passage of the 1970 Clean Air Act.

Schwartz argues that most information Americans receive on air pollution comes from environmentalists and regulators who have incentives to paint a false picture: their budgets, power and prestige last only as long as there is a “crisis” to be solved.

The Truth about Air Pollution. Air quality in America’s cities is better than it has been in more than a century, with levels of air pollutants declining substantially from 1980 to 2005. As the figure shows:

- Peak 8-hour ozone levels declined 20 percent, and days per year exceeding the 8-hour ozone standard fell 79 percent.
- Fine particulate matter declined 40 percent.
- Nitrogen dioxide levels decreased 37 percent and sulfur dioxide dropped 63 percent.
- Carbon monoxide concentrations fell 74 percent and lead dropped 96 percent.

What makes these air quality improvements so extraordinary is that they occurred during a period of increasing motor vehicle use, energy production and economic growth. Between 1980 and 2005:

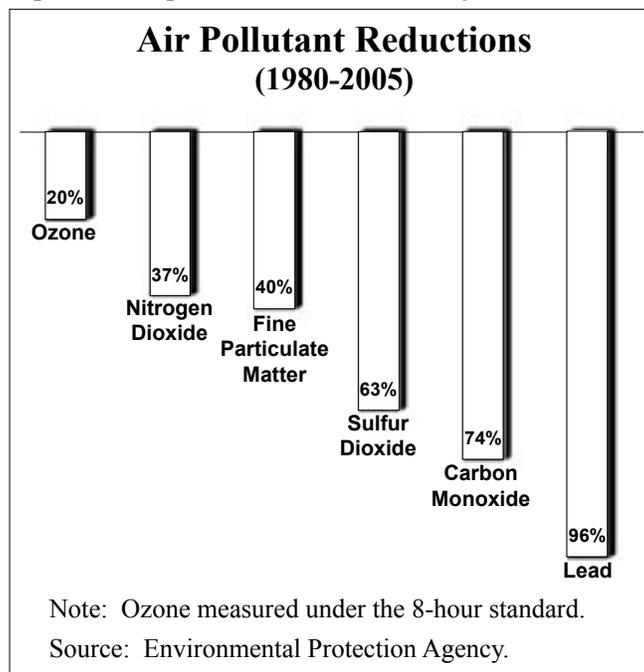
- Miles driven each year nearly doubled (93 percent).
- Tons of coal burned for electricity production increased about 61 percent.

- Dollar value of goods and services (gross domestic product) more than doubled.

Air pollution of all kinds sharply declined because of cleaner motor vehicles, power plants, factories, home appliances and consumer products.

Air Pollution Is Not the Cause of Asthma. Asthma is an especially prominent, growing health problem that has been wrongly linked to air pollution:

- The incidence of asthma rose 75 percent from 1980 to 1996, and nearly doubled for children; however, air pollution cannot be the cause, since it declined at the same time asthma prevalence increased.
- Emergency room visits and hospitalizations for asthma are lowest during July and August, when ozone levels are highest.



Studies show no consistent link between asthma and levels of exposure to air pollution. A government-sponsored study of California children found that higher ozone was associated with a greater risk of developing asthma for the 8 percent of children who played three or more team sports, but higher ozone was also associated with a 30 percent *lower* risk of asthma among all children in the study. Even for the 8 percent of children who were very active, the study showed current ozone levels are lower than those associated with asthma.

International data also show air pollution is not causing asthma. Asthma rates are

highest in wealthy Western countries with relatively low air pollution levels, while developing countries with awful air pollution have low asthma rates. Before 1991, for example, the former East Germany had high air pollution levels and low asthma prevalence. But after reunification, East Germans adopted Western lifestyles, incomes increased and air pollution declined — but the incidence of asthma rose to levels comparable to West Germany.

BRIEF ANALYSIS

No. 577

Page 2

Researchers have proffered a number of hypotheses to account for the rise in asthma, none of which is linked to air pollution — from increased exposure to roach castings in urban areas to the effect on the immune system of squeaky-clean suburban homes and the increase in obesity.

Ignoring Evidence, Hying Fear. Despite the mounting evidence that current air pollution levels do not cause asthma, regulators and environmentalists continue to perpetuate this myth. For example:

- In November 2001, the Sierra Club wrote that “smog is out of control in almost all of our major cities” — after two years of the lowest recorded levels of ozone and fine particulates nationwide.
- In 2002, the Public Interest Research Group published *Darkening Skies*, which claimed the level of fine particulates was increasing — near the end of the fourth consecutive record-setting year of low levels.

Omission of contrary evidence on air pollution and health is common in environmental policy activism. The March 2006 meeting of the California Air Resources Board (CARB) touted a Los Angeles regional study that reported a strong positive link between fine particulates and mortality. However, CARB ignored another California study which concluded fine particulates had no effect on mortality.

Additionally, a CARB staff report supporting a tougher state ozone standard didn't mention a CARB-funded study that found *higher* ozone in California's Central Valley was associated with a statistically significant *decrease* in serious health effects, such as hospital admissions. Contrary findings undermine the case for tougher standards.

The science is also misrepresented on the American Lung Association's Web site. It includes an area called Medical Journal Watch, which summarizes hundreds of air pollution health studies, but it omits studies and portions of studies that do not report any harm from air pollution.

The Toxic Truth about the Clean Air Act. Current, historically low air pollution levels neither cause asthma in particular nor pose a risk to the public's health in general. So why are environmental groups scaring the public with false claims? And why is the U.S. Environmental Protection Agency (EPA) imposing more stringent, arguably unnecessary air quality standards? The answer is the incentives faced by government bureaucrats.

The EPA's Clean Air Act powers have no negative feedbacks that would stop bureaucratic expansion. Rather, all the feedbacks are positive. EPA and state regulators depend on having a serious and urgent problem to solve. Regulators also fund much of the health research intended to justify the “need” for more regulation. They decide what questions are asked, which scientists are funded to answer them, and how the results are portrayed in official reports. Regulators also funnel millions of dollars a year to environmental groups who foment public fear of air pollution and lobby for increasing regulators' powers.

Since the EPA decides when its own job is finished, it is not surprising that it has never declared the air safe and continues to tighten standards. The EPA is like a company that gets to decide how much of its product customers must buy.

Conclusion. None of the discussion above would matter if air pollution could be reduced for free. But reducing air pollution is costly. Attaining current federal ozone and fine particulate standards will cost tens to hundreds of billions of dollars per year. EPA recently adopted a tougher fine particulate standard and plans to tighten the ozone standard later this year. People will ultimately pay these costs through higher prices, lower wages and fewer choices.

Air quality regulations should be narrowly tailored to solve real problems, rather than used to expand and perpetuate the power of government bureaucracies and environmental activists. The first step to achieving this goal is more realistic public information about air pollution levels, trends and, especially, health risks in general and asthma in particular.

Current air pollution levels are not the cause of high asthma rates. Thus, focusing regulatory efforts on tightening air pollution standards to combat asthma diverts research resources away from understanding the real causes of asthma and developing possible cures. In addition, the higher costs of goods and services due to ineffectual regulations reduces people's discretionary income, preventing them from spending more on healthier foods, exercise and medical care — much more effective ways to improve health and welfare than stricter air quality rules.

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