

The Clean Air Act at 40: A Clear Track Record of Success

The Clean Air Act is a genuine American success story and one of the most effective tools in U.S. history for protecting public health. It has sharply reduced pollution from automobiles, industrial smokestacks, utility plants, and major sources of toxic chemicals and particulate matter since its passage in 1970. The law has saved tens of thousands of lives each year by reducing harmful pollutants that cause or contribute to asthma, emphysema, heart disease, and other potentially lethal respiratory ailments.

Despite continued gloom-and-doom forecasts by polluters and their corporate lobbyists, the Clean Air Act has consistently provided huge health, economic, and environmental benefits to our communities over the past four decades that far outweigh any small costs associated with controlling life-threatening toxic pollution.

MILLIONS OF LIVES SAVED

The first 20 years of the Clean Air Act programs from 1970 to 1990 resulted in the prevention of **more than 205,000 premature deaths** in the year 1990 alone.¹ The 1990 amendments have provided significant additional benefits—nearly **2 million lives** have been cumulatively saved from 1990 to 2010, according to NRDC’s analysis of data from the Environmental Protection Agency’s (EPA) recent report, “Benefits and Costs of the Clean Air Act from 1990 to 2020.”^{2,3}

MILLIONS OF HOSPITAL ADMISSIONS AND EMERGENCY ROOM VISITS AVOIDED

The 1970 to 1990 Clean Air Act programs prevented **209,000 hospital visits** in 1990.⁴ According to NRDC’s analysis of the EPA’s data, the 1990 Amendments prevented **an additional 896,000 hospital admissions** and **1,040,000 visits to the emergency room** between 1990 and 2010.^{5,6}

HUNDREDS OF THOUSANDS OF CASES OF POLLUTION-RELATED ILLNESSES AVOIDED

In 1990 alone, **18 million child respiratory illnesses**, **843,000 asthma attacks**, and **672,000 cases of chronic bronchitis**, in addition to **21,000 cases of heart disease**, and **22.6 million lost work days** were avoided as a result of the 1970 to 1990 Clean Air Act programs.⁷

Based on NRDC’s analysis of the EPA’s data, between 1990 and 2010, the 1990 amendments to the Act provided additional benefits, including the prevention of roughly:⁸

- **21.2 million asthma attacks;**
- **1.7 million cases of acute bronchitis;**
- **624,000 cases of chronic bronchitis;**
- **38.5 million cases of upper and lower respiratory symptoms;**
- **1.5 million heart attacks; and**
- **148 million lost work days.**⁹

For more information,
please contact:

Franz Matzner
(202) 289-2365
fmatzner@nrdc.org



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60 PERCENT LESS POLLUTION IN OUR AIR

Since 1970, the Act has significantly reduced air pollutants, including those that cause smog and particulate pollution, by 60 percent.¹⁰

TRILLIONS OF DOLLARS SAVED

Net direct monetized benefits of the Clean Air Act from 1970 to 1990 total **an overwhelming \$21.7 trillion** from lower mortality, fewer cases of chronic and acute illness, less frequent trips to the hospital, and lost work days.¹¹ The 1990 amendments are securing even more benefits—**\$1.24 trillion** in net direct monetized benefits in 2010 alone and **\$12 trillion** in monetized benefits from 1990 to 2020.^{12,13}

...ALL WHILE PROVIDING BENEFITS THAT FAR OUTWEIGH COSTS, GROWING OUR ECONOMY, AND ADDING AMERICAN JOBS

Total benefits of the Clean Air Act between 1970 and 2010 **exceeded total costs by as much as 40 to 1**.¹⁴

The Clean Air Act has achieved all these benefits over the last 40 years **while GDP has increased by 207 percent**.¹⁵

The Clean Air Act has played a significant role in growing a first-class environmental technology industry in the United States. Environmental firms, and small businesses in this industry generated **\$282 billion in revenues** and **\$40 billion in exports** and supported **1.6 million American jobs** in 2007.¹⁶

^{1,4,11} U.S. Environmental Protection Agency, *The Benefits and Cost of the Clean Air Act, 1970 to 1990*, October 1997, via http://www.epa.gov/oar/sect812/1970-1990/chptr1_7.pdf, (accessed 2/28/2011).

² In the EPA's March 2011 report *Benefits and Costs of the Clean Air Act from 1990 to 2020*, the agency provides PM 2.5 adult mortality, PM 2.5 infant mortality, and ozone mortality avoided in years 2000, 2010, and 2020. To estimate the cumulative life savings of the 1990 amendments from 1990 to 2010, NRDC assumed a roughly linear growth rate (based on the difference between the EPA's benefit estimates for years 2000 and 2010, divided by the number of years) to calculate and aggregate benefit estimates for each year from 1995—when the EPA's Acid Rain Program Phase 1 began to secure the first benefits under the amendments—through 2010.

^{3,6,9,13} U.S. Environmental Protection Agency, *The Benefits and Costs of the Clean Air Act from 1990 to 2020*, March 2011, via <http://www.epa.gov/oar/sect812/feb11/fullreport.pdf>, (accessed 3/1/2011).

^{5,8} Similar to the estimates for lives saved between 1990 and 2010, NRDC made the same linear assumption to calculate and aggregate benefit estimates for other metrics, including hospital admissions and emergency room visits, and cases of pollution-related illness, for each year from 1995 through 2010.

⁷ U.S. Environmental Protection Agency, *Highlights from the Clean Air Act 40th Anniversary Celebration*, September 14, 2010, via http://www.epa.gov/oar/caa/40th_highlights.html, (accessed 2/28/2011).

¹⁰ The White House Blog, *So What Does the Clean Air Act Do?*, February 9, 2011, via <http://www.whitehouse.gov/blog/2011/02/09/so-what-does-clean-air-act-do>, (accessed 2/27/2011).

¹² In the agency's March 2011 report *Benefits and Costs of the Clean Air Act from 1990 to 2020*, the EPA interpolated benefit estimates for each year between target years and then aggregated the annual estimates across the period from 1990 to 2020 to provide a present discounted value of \$12 trillion in total aggregate benefits from the 1990 amendments. Please note that this estimate does not represent net monetized benefits, as cost figures for the period are not available.

^{14,15,16} Administrator Lisa P. Jackson, Remarks on the 40th Anniversary of the Clean Air Act, As Prepared, September 14, 2010, via <http://yosemite.epa.gov/opa/admpress.nsf/12a744ff56dbff8585257590004750b6/7769a6b1f0a5bc9a8525779e005ade13!OpenDocument>, (accessed 2/27/2011).

