

# Health Benefits Analysis

Improving Our Environment. Protecting Our Health.



Abt is a recognized leader in the analysis of health benefits associated with reducing air pollution. Our **specially designed methods** and **cutting-edge tools** are both widely known and used—helping clients estimate the benefits of improving air quality and researchers evaluate strategies and regulations to reduce air pollutants.



## Our Health Benefits Analysis Capabilities

- Evaluating human health benefits from air pollution reductions using the Abt-designed Environmental Benefits Mapping and Analysis Program (BenMAP), Co-Benefits Risk Assessment (COBRA) model, and AirCounts™ as well as conducting customized analyses.
- Assessing health benefits in vulnerable populations to reveal environmental justice implications.
- Developing cost-of-illness estimates to value chronic and acute diseases associated with air pollution.

## Making Our Tools Work for You

We help our clients get the most utility out of Abt's BenMAP, COBRA and AirCounts™ by:

- Maintaining databases and resolving technical issues.
- Conducting training workshops.
- Conducting customized analyses such as configuring BenMAP for international users.
- Enhancing the tools with new features such as climate change impact analysis in BenMAP.

## Selected Projects

### Estimated Ozone-Related Health Impacts of Climate Change

Using BenMAP, Abt assessed ozone-related human health impacts of climate change under various climate change and population projection scenarios. Our work was published in the November 2012 issue of *Environmental Health Perspectives*.

### Conducted a Distributional Benefit Analysis of a National Air Quality Rule

Abt explored various methods of evaluating distribution of the baseline health risks from air pollution and the benefits of a federal air pollution regulation among different racial and ethnic groups. Our work was published in the August 2011 issue of *International Journal of Environmental Research and Public Health*.

### Examined the Health Benefits of the Sustainable Urban Transport Corridor Project in Bangladesh

Abt examined and monetized public health benefits from air pollution reduction generated by alternative transport sector options in Greater Dhaka, Bangladesh. The results of our analysis were used by the Asian Development Bank to evaluate project options.

### Applied BenMAP Using Data from China

For EPA, Abt developed the *BenMAP Quick Start Guide* to assist persons who are unfamiliar with BenMAP. This included step-by-step explanations for benefits assessments, using sample data from China. The guide was published on EPA's website (<http://www.epa.gov/air/benmap/docs.html>) and used in EPA's BenMAP training workshops in China.

### Conducted a Health Benefit Analysis for Storm Water Regulations

Using BenMAP, Abt estimated the health benefits due to air pollutant removal by additional vegetation as a result of the proposed storm water regulations in the United States.

## Calculated the Health Benefits Associated with Chesapeake Bay Restoration

Using COBRA, Abt estimated the potential health benefits resulting from improved air quality associated with the Chesapeake Bay restoration in 2025. We focused on fine particulate matter (PM<sub>2.5</sub>) reduction as a result of decreased ammonia emissions in the Chesapeake Bay area.

## Estimated the Benefits of Reducing Hazardous Air Pollutants

For EPA, Abt prepared white papers and case studies which discussed and demonstrated a variety of dose-response methods useful for evaluating the non-cancerous health risks associated with air toxins.

## More Services from Abt

- Economic and Regulatory Analyses
- Human Health Risk Assessments
- Climate Change Impact Analysis, Mitigation and Adaptation
- Environmental Modeling
- Emission Inventory Analysis
- Communication and Outreach
- Public Comment/Response Support

## Selected Clients

- U.S. Environmental Protection Agency
- Asian Development Bank
- U.S. Department of Justice
- California Air Resources Board
- Minnesota Pollution Control Agency
- Washington State Department of Ecology
- Massachusetts Institute of Technology
- U.S. Forest Service

Government officials and academicians from India, Mexico, China, Korea, and the Philippines are also among our clients.

## Key Facts about Abt Associates

Founded	1965
Employees	2,500+ full-time
Locations	Bethesda, MD Cambridge, MA Durham, NC Atlanta, GA Boulder, CO Baton Rouge, LA Chicago, IL New York, NY Washington, DC Canberra, AU Brisbane, AU International offices in Africa, Asia, Europe, Latin America and the Middle East
Highest Degree	Bachelors degree: 29% Masters degree: 36% Ph.D., M.D.: 15%

## Contact

For more information on Abt Associates and our work in health benefit analyses, contact:

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**Abt Associates** is a mission-driven, global leader in research and program implementation in the fields of health, social and environmental policy, and international development. Known for its rigorous approach to solving complex challenges, Abt Associates is regularly ranked as one of the top 20 global research firms and one of the top 40 international development innovators. The company has multiple offices in the U.S. and program offices in more than 40 countries.

