

# The Value of Environmental Health Services

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**1:30 p.m.**



# Welcome



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## NEHPC

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  - National Environmental Health Association
  - American Lung Association
  - Natural Resources Defense Council
  - Association of Public Health Laboratories
  - Association of State and Territorial Health Officials
  - National Association of County and City Health Officials
  - Children's Environmental Health Network

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# Moderator




## **Megan Latshaw, PhD**


Director  
Environmental Health  
Association of Public Health Laboratories  
NEHPC Member

Environmental public health  
program areas covered in the  
project include:


 Food Safety

 Water Quality

 Lead Exposure

 Mercury Exposure

 Climate Change

 Housing

 Special populations,  
including children and  
environmental justice  
communities

## Environmental Health Saves Lives, Saves Money and Saves the Future

This project builds on recommendations from a 2006<sup>1</sup> report that emphasized the need to explore the value of environmental health services. The Value of Environmental Health Services: Exploring the Evidence 2016 report summarizes the literature on economic evaluation of environmental health interventions. And it yielded a number of important findings.

A core part of public health, environmental health focuses on preventing disease and creating environments that support health.

### Key Findings

- **Every \$1 invested in lead paint hazard control gave a return of investment of \$17–\$221/household**, or a net savings of \$181–269 billion.
- Higher local health department spending on food safety and facility sanitation activities was linked to a **lower incidence of restaurant related foodborne illness** in Washington and a **lower incidence of facility inspection-related waterborne disease** in New York.
- Four major categories of chronic childhood conditions linked to the environment – **lead poisoning and methylmercury exposure, childhood cancer, developmental disabilities, and asthma** – cost the US **\$76.6 billion** in 2008.
- Mercury-related losses of cognitive function in children, and decreased economic productivity, resulted in diminished intelligence over a lifetime. The annual estimated **economic cost of births was \$8.7 billion**.
- Evidence suggests **urban development strategies and reduction of pollution exposure from roadways would significantly cut health care spending**, particularly in low-income neighborhoods.
- The cost of **running a heat-health warning system for Philadelphia was relatively small (\$210,000) compared with the benefits of saving lives (\$468 million)** from 1995–1998.
- **Every \$1 spent in CDC's National Asthma Control Program saved \$71 in asthma-related expenditures.**

<sup>1</sup> Harris et al (2006). Environmental health practitioners developing strategic partnerships and engaging public health policymakers.

When we heal the earth, we heal ourselves

- David Orr, Special Assistant to the President of Oberlin College  
on Sustainability and the Environment, Oberlin College

The project identified a number of challenges in valuing environmental health interventions:

- The benefits of environmental health interventions are hard to measure.
  - Estimating benefits requires an understanding of the causal relationship between the environmental exposure (e.g., pollutant) and health outcomes, which is often uncertain.
  - Health impacts can either be directly related to exposure (e.g., anemia from lead poisoning) or indirectly related to exposure (such as school attendance, work productivity).
- Environmental health interventions cannot be evaluated within the same framework as other public health interventions, which have a more narrowly defined scope and range of costs and benefits.
- Economic evaluations of environmental health interventions are highly uncertain, due to methodological difficulties, lack of reliable and consistent data and an inability to generalize findings.

### Conclusion

Despite significant findings, there is a critical lack of economic evaluation studies for the wide-ranging, complex discipline of environmental health. The country needs a framework for defining and evaluating environmental health interventions. This document/effort ought to help to clearly articulate the value of environmental health interventions, including reductions in health care costs and improvements in quality of life.

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