

## PARTNERSHIP WITH THE HEALTH EFFECTS INSTITUTE



### Background

In 1980, the U.S. Environmental Protection Agency and the motor vehicle industry chartered the Health Effects Institute (HEI) to conduct independent and impartial science towards addressing urban air quality problems in the United States.

Continuing this partnership, EPA awarded HEI \$25 million in grant funding for 2015 – 2020 to provide innovative research towards improving air quality.

The 38-year, public-private partnership between EPA and HEI in Boston has produced research that improves the nation's air quality.

The partnership has continuously provided impartial science that is timely, targeted, and useful to address air quality problems.

Ongoing research will help advance scientific understanding on the newest challenges to protect air quality, including the impacts of climate change and air pollution mixtures in the atmosphere.

### Research Focus

EPA and HEI are developing the next generation of tools and scientific information to examine the combined effects of air pollution on human health and the relationship between air quality and climate change.

HEI's research is clustered within the following four themes:

- **Addressing Challenges of Multipollutant Science** - No one is exposed to only one pollutant at a time. HEI has been involved in research on the health effects of exposure to a mixture of pollutants (ozone, particles, air toxics, and others) under different scenarios, including exposure to low levels of pollutants.
- **Accountability and Transparency** – Assessing the health outcomes associated with air quality improvements is important in evaluating the success of HEI's research program. This research examines public health metrics affected by measures aimed at reducing exposure and by interventions aimed at improving air quality.
- **Emerging Fuels and Technologies** – New fuels (e.g., biodiesel, CNG) and technology (e.g., gasoline direct injections, electric and hybrid) are increasing fuel efficiency and reducing emissions. HEI is interested in understanding whether emissions from the use of new fuels and technologies have any public health impact.
- **Global Health Science** – Air quality and climate change are

international issues. This research allows HEI to take advantage of unique geographic, population, or technical opportunities and work with leading scientists from around the world to answer key science questions. HEI is working with the vehicle and energy markets in Asia and Latin America to encourage science-based decisions.

Cross Cutting Issues that are incorporated into each of the research themes are **Sensitive Populations** (e.g., older adults), **Innovation** (e.g., new methods and research questions), and **Validation** (e.g., reanalysis and toxicology).

### Learn more at:

[https://cfpub.epa.gov/ncer\\_abstracts/index.cfm/fuseaction/outlinks.center/center/255](https://cfpub.epa.gov/ncer_abstracts/index.cfm/fuseaction/outlinks.center/center/255)  
[www.epa.gov/air-research](http://www.epa.gov/air-research)

### CONTACT:

Terry Keating, EPA's Office of Research and Development, 202-564-1174, [keating.terry@epa.gov](mailto:keating.terry@epa.gov)

DECEMBER 2018