

PENNSYLVANIA EDITORIAL BOARD/OPINION PAGE BRIEFER:

**PENNSYLVANIA'S HEALTH STAKE IN STRONGER
EPA CARBON POLLUTION STANDARDS**

*Prepared by the Natural Resources Defense Council
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OVERVIEW

Pennsylvania has a significant interest in the pending action by the U.S. Environmental Protection Agency (EPA) to protect Americans from dangerous carbon pollution from new power plants – pollution that threatens the health of Pennsylvania residents and other Americans and also fuels some of the increasingly extreme weather in Pennsylvania and the rest of the U.S.

CARBON POLLUTION-RELATED CONSEQUENCES FOR PENNSYLVANIA

Air Pollution:

Rising temperatures increase ozone smog formation in many areas. Increasing levels of smog are associated with increased hospital admission rates and death for people with respiratory diseases such as asthma, and worsens the health of people suffering from cardiac or pulmonary disease.

- Cities like Philadelphia and Harrisburg experience now about 20 days per year over 90°F; by mid-century that number could more than double.
- By 2050, Philadelphia could see six extra days per summer that exceed EPA's air quality standards.

Prevalence and Cost of Asthma in Pennsylvania (as of April 2011):

- More than 1 million Pennsylvania residents — including 260,000 children -- suffer from asthma, with direct costs of treating Pennsylvania's worsening asthma epidemic already exceeding \$2.3 billion.
- Number of Pennsylvania adults with asthma: 890,000.
- Number of Pennsylvania children with asthma: 260,000.
- The five Pennsylvania counties with the most asthma cases today are: Philadelphia, Allegheny, Montgomery, Bucks, and Delaware.
- Pediatric emergency room visits in Pennsylvania due to asthma: 25,740.
- Pediatric hospital stays in Pennsylvania due to asthma: 4,160.
- Estimated direct cost of asthma in Pennsylvania: \$2.31 billion.

See http://www.noharm.org/lib/downloads/climate/asthma/PA_state_fact_sheet.pdf.

Heat-related disease and illness:

As temperatures increase, so do the number of deaths and illnesses occurring from heat stress, heatstroke, cardiovascular disease, and kidney disease. Heat waves cause the most harm among the elderly, young children, and in economically disadvantaged communities. City dwellers are also at risk because of elevated temperatures from the "urban heat island effect."

- In 2011, Pennsylvania experienced record-breaking heat in 19 counties and a total of 45 broken heat records.

Drinking water contamination and other severe rain and flood impacts:

More severe storms and floods can lead to drinking water contamination, community displacement, outbreaks of infectious disease, drowning and other injuries. Outbreaks of water-borne diarrheal diseases caused by parasites like Giardia and Cryptosporidium have been associated with heavy rainfall events and flooding, which are likely to become more frequent due to climate change.

- Precipitation could increase 5-12 percent over the next few decades and major heavy rainfalls could cost counties hundreds of millions of dollars per event.
- In 2011, Pennsylvania experienced record-breaking rainfall in 28 counties and a total of 57 broken rainfall records, and flooding and damage from the wettest September on record.
- Combined sewer overflows are a health risk for nearly 150 communities, including Philadelphia and Pittsburgh.
- Pennsylvania has been declared a disaster area 9 times since 2000, due to severe storms and flooding.

Infectious Disease:

Climate change will affect patterns of diseases such as dengue fever, West Nile virus, and Lyme disease. Increasing temperatures and rainfall have been associated with increased occurrence and transmission of insect-borne diseases like West Nile virus. Hotter temperatures can lead to more rapid development of dangerous pathogens within insect carriers and allow these diseases to expand their range into new, once cooler, regions. Approximately 173 million Americans in at least 28 states live in counties with mosquitoes that can carry dengue fever, a painful viral illness that’s increased globally 30-fold in the last 50 years.

- 23 cases of Dengue Fever were reported between 1995-2005, and 21 counties have a type of mosquito that can transmit the virus (as of 2005).
- 405 cases of West Nile virus were reported to Centers for Disease Control and Prevention (CDC) between 1999-2010.
- 51,266 cases of Lyme disease were reported to CDC between 1990-2008.

Drought:

Projected temperature increases in the summer will increase the likelihood of water shortages and drought, threatening the availability of water for drinking and irrigation. Droughts harm crops, diminishing food variety, nutritional content, and availability.

- About 42% Pennsylvania’s counties now face higher risks of water shortages by mid-century as the result of climate change.

For more information, see <http://www.nrdc.org/health/climatehealthfacts.asp> and <http://www.nrdc.org/health/climate/pa.asp>.

Carbon pollution sources:

Coal-fired power plants are Pennsylvania’s biggest industrial polluters.

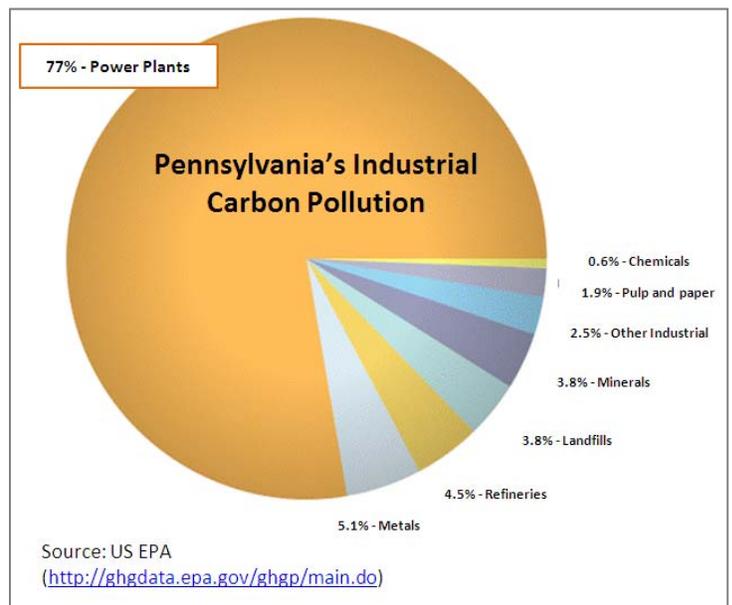
Standards to cut power plants’ carbon pollution will also help reduce their emissions of other dangerous pollutants, including the pollutants that produce dangerous fine particles (soot).

Here are the impacts to citizens of Pennsylvania from the fine particle (or soot) pollution from coal-fired power plants in the state:

- Total Mortality: 1,359
- Hospital Admissions: 1,016
- Heart Attacks: 2,298

See

http://www.catf.us/coal/problems/power_plants/existing/map.php?state=Pennsylvania.



BACKGROUND ON THE EPA STANDARDS

After years of delay, EPA is on the verge of issuing the first national limits on the carbon dioxide that will spew from the smokestacks of electric power plants to be built over the next decade. EPA is following the Clean Air Act – passed by Congress, of course – and *two* Supreme Court decisions.

There are currently no national limits on the life- threatening carbon pollution coming from stationary sources like power plants and factories. The Environmental Protection Agency (EPA) is attempting to safeguard our health by reducing this carbon pollution and lessening the impact of climate change. We can protect the health of our families and communities by supporting the EPA’s efforts to update the Clean Air Act to address more sources and types of the pollution that cause climate change and these associated health risks.

Poll after poll confirms that the American people count on EPA to protect them from dangerous carbon pollution, don’t trust polluters to police themselves, and don’t buy the House Republicans’ claims that EPA safeguards hurt jobs. (See [here](#), [here](#), [here](#), and [here](#).)

LEADING HEALTH GROUPS AND EXPERTS RECOGNIZE THE HEALTH IMPACTS

Over 120 health organizations including the American Academy of Pediatrics, American Lung Association, American Medical Association, American Nurses Association, American Public Health Association, American Thoracic Society and others are on record stating:

“Climate change is a serious public health issue. As temperatures rise, more Americans will be exposed to conditions that can result in illness and death due to respiratory illness, heat- and weather-related stress and disease carried by insects. These health issues are likely to have the greatest impact on our most vulnerable communities, including children, older adults, those with serious health conditions and the most economically disadvantaged.”

For more information see

<http://www.apha.org/about/news/pressreleases/2010/epa+group+letter+release.htm>.

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