



Illinois' Dirty Power Plants

Power Plants: The Number One Polluter

Today, the nation is facing a health crisis from power plant pollution. Every year power plants spew billions of tons of pollution into our air. Nationally, 50 percent of electricity comes from coal,¹ but coal-fired power plants are responsible for the lion's share of dangerous pollution from the electric power industry. Within the electric power industry, these plants generate:

- 97 percent of deadly fine particle soot and sulfur dioxide emissions;
- 92 percent of smog-forming nitrogen oxide emissions;
- 86 percent of emissions of carbon dioxide, the primary global warming pollutant; and
- Almost 100 percent of toxic mercury emissions.

Moreover, power plants are responsible for more than 68 percent of the total annual emissions of sulfur dioxide, the primary ingredient of deadly fine particle pollution, from all sources, including cars and trucks.²

Harming Your Health

Recent scientific studies by researchers affiliated with the American Cancer Society, the Harvard School of Public Health and other top universities and research institutions have made it possible for scientists working for the U.S. Environmental Protection Agency (EPA) to predict how many premature deaths, heart attacks, and other impacts are caused by power plant pollution.

Power plant pollution cuts short the lives of over a thousand Illinoisans each year

EPA's own consultants estimate that fine particle pollution from power plants shortens the lives of 1,356 Illinoisans each year. Fine particle pollution from power plants also cause 195,698 lost work days, 1,333 hospitalizations and 33,986 asthma attacks every year, 2,007 of which are so severe they require emergency room visits.³

Leads to lung cancer and heart attacks

A recent scientific study by researchers affiliated with the American Cancer Society found that people living in the most polluted cities have approximately a 12 percent increased risk of cardiopulmonary death over those living in the cleanest areas of the country. Similarly, for lung cancer, there is approximately a 16 percent increased risk for those living in the more polluted cities.⁴ Based on EPA data, each year, 156 lung cancer deaths and 2,361 heart attacks in Illinois are attributable to power plant pollution.⁵

Children at risk

Children are the most susceptible to the detrimental effects posed by power plant air pollution. In Illinois, 2,746,764 children live within 30 miles of a power plant, the area in which the greatest health impacts are felt.⁶ Additionally, researchers have found that infants in areas with high levels of particulate matter pollution face a 26 percent increased risk of Sudden Infant Death Syndrome and a 40 percent increased risk of respiratory death.⁷

Don't eat the fish

Power plants are responsible for 41 percent of the total mercury emitted by all known U.S. sources.⁸ Illinois has advised against consuming certain fish from ALL of its river and lakes (32,190 miles of river and 309,340 acres of lake) due to the risks of mercury contamination.⁹ Mercury is a toxic heavy metal, which, when ingested, can cause serious neurological damage, particularly to developing fetuses, infants, and children. Children can be exposed to mercury in the womb or through breast milk if their mothers ingest mercury tainted fish

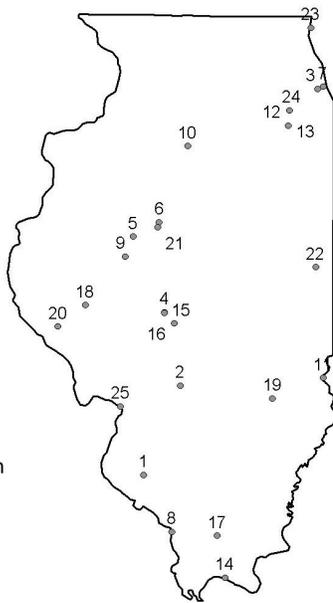
Prairie State Air Pollution

Chicago ranks as the second hardest hit city in the entire country for the impacts of power plant pollution. In addition, power plant mercury pollution has contaminated our fish, ozone smog is causing thousands of asthma attacks and global warming caused in part by carbon dioxide pollution from power plants, threatens our economy and our health. It's up to Illinois to lead the way in cleaning up power plants, here and around the country.

Location of Power Plants in Illinois

Illinois Plants

- 1 Baldwin
- 2 Coffeen
- 3 Crawford
- 4 Dallman
- 5 Duck Creek
- 6 ED Edwards
- 7 Fisk
- 8 Grand Tower
- 9 Havana
- 10 Hennepin
- 11 Hutsonville
- 12 Joliet 29
- 13 Joliet 9
- 14 Joppa Steam
- 15 Kincaid
- 16 Lakeside
- 17 Marion
- 18 Meredosia
- 19 Newton
- 20 Pearl Station
- 21 Powerton
- 22 Vermilion
- 23 Waukegan
- 24 Will County
- 25 Wood River



or by consuming contaminated fish themselves. The neurotoxic effects of mercury exposure are similar to the effects of lead toxicity in children and include delayed development and cognitive deficits, language difficulties, and problems with motor function, attention, and memory.¹⁰

Damaging Your Environment

Increased weather disasters

Man-made carbon dioxide emissions are the probable cause for the rise in the earth's temperature and the increase in weather-related catastrophes such as heat-related death, according to the National Academy of Sciences and the Intergovernmental Panel on Climate Change. Between July 12 and July 18, 1995, more than 700 people died of heat-related causes in the Chicago area.¹¹

Shrinking the Great Lakes

Rising temperatures could increase evaporation in the Great Lakes causing lake levels to drop buy almost two and half feet over the next 30 years.¹²

How to Clear The Air

For more than 30 years the oldest and dirtiest power plants have managed to avoid modern pollution controls. These plants, some of which were built as long ago as the 1940s and 1950s, are responsible for billions of tons of pollution each year. The EPA now estimates that more than half of the population of the United States – almost 160 million Americans – breathe and live in areas with unhealthy air. Fortunately, the technology exists to make these plants as clean as new plants. Cleaning up the oldest and dirtiest plants is the first step towards a cleaner and more responsible energy future for the United States. It's time to Clear the Air.

1. Electric Power Annual — 2002, DOE/EIA-0348(2002), December 2003. Table ES, page 6.
2. Emissions data from EPA: National Air Pollutant Emission Trends, 1990-1998, Appendix A: National Emissions (1970-1998) by Tier 3 Source Category and Pollutant <http://www.epa.gov/ttn/chieftrends/trends98/browse.html>;
3. Abt Associates, "Power Plant Emissions: Particulate Matter-Related Health Damages and the Benefits of Alternative Emission Reduction Scenarios" June 2004.
4. C. A. Pope, et. al., Lung Cancer, Cardiopulmonary Mortality and Long-Term Exposure to Fine Particulate Air Pollution. *Journal of the American Medical Association* Vol. 287, no 9. - March 6, 2002. www.jama.ama-assn.org/cgi/content/abstract/287/9/1132
5. See Abt Associates, supra, note 3.
6. Clean Air Task Force, Children At Risk, How Air Pollution from Power Plants Threatens the Health of America's Children, May 2002. www.cleartheair.org
7. Woodruff, T. Grillo, J. and Schoendorf, K. 1997. The relationship between selected causes of post-neonatal infant mortality and particulate air pollution in the United States. *Environmental Health Prospective*, vol. 105, p 608-612.
8. Mercury data comes from the EPA's Hazardous Air Pollutant database.
9. USPIRG Education Fund, June 2003. Fishing for Trouble, How Toxic Mercury Contaminates Our Waterways and Threatens Recreational Fishing. www.cleartheair.org
10. U.S. EPA, 1997b. Mercury Study Report to Congress, Volume VII: Characterization of Human and Wildlife Risks from Mercury Exposure in the United States and Toxicological Effects of Methylmercury, National Academy Press, Washington DC, 2000. Available at <http://www.nap.edu/books/0309071402/html/>.
11. Kiernan, Louise; Madigan, Charles M., The heat wave's victims: Joined in death. *Chicago Tribune*. Chicago, Ill.: Nov 26, 1995. pg. 11
12. Lofgren et al (2000) Impacts, Challenges and Opportunities in Preparing for a Changing Climate; Great Lakes water resources overview, Chapter 4, p. 29-42. US Global Change Research Group; Great Lakes Assessment group. University of Michigan.