

10 SCARY FACTS ABOUT MICHIGAN'S AIR

While ghastly and ghoulish Halloween costumes disappear after October 31st, the very real and very scary problems facing Michigan's air are not going anywhere. In honor of the scariest of holidays, Environment Michigan has compiled the ten most frightening facts about Michigan's air – and what you can do to make future Halloweens far less terrifying.

1. Mercury pollution emitted into our air from industrial sources has terrorized the Great Lakes. 31,961 square miles of the Great Lakes are now contaminated with mercury. Mercury poisoning can cause mental retardation, seizures, blindness, and even death.¹

2. Air pollution is horrifyingly expensive to families. The average asthma-related hospitalization costs about \$234.48 per visit.² There were 841 hospitalizations in Michigan last year due to coal-related asthma attacks alone³, for a total cost of about \$200,000 to those who suffered the attacks.

3. The Detroit Edison Power Plant in Monroe is ranked the 17th worst polluting power plant in the entire country for mercury.⁴

4. Michigan is one of the 25 smoggiest states in the US. In 2010, there were 14 days when the air was unhealthy to breathe due to smog pollution. Exposure to smog pollution damages lung tissue, decreases the ability to breathe, and exacerbates chronic diseases like asthma. These effects are especially harmful for children and the elderly.⁵

5. Michigan is the 6th most polluted state in the country in terms of nitrogen oxide pollution. 79,013 tons of these compounds were released into our air in 2009. Exposure to this type of air pollution damages leaves so that they fall off the plants too soon or become spotted or brown.⁶ So much for the fall colors we enjoy so much this time of year.

6. About 144,000 kids suffer from pediatric asthma in Michigan. Their chronic condition is worsened by polluted air, causing them to miss school and making it more difficult for them to play.⁷

7. 413,878 tons of sulfur dioxide were released into our air in 2008.⁸ This pollutant contributes to respiratory illness, the alteration of the body's natural defenses, and aggravation of existing cardiovascular disease. Sulfur dioxide also reacts with other atmospheric chemicals to form sulfuric acid. This causes highly corrosive acid rain.⁹

8. Air pollution in Michigan is heart-breaking—literally. Pollution from coal-fired power plants was responsible for 1,114 heart attacks and 329 additional hospitalizations for cardiac problems.¹⁰

9. Lead is a highly toxic metal found in coal, oil, and other fuels. It is also found in municipal solid waste and sewage sludge and is released to the atmosphere when these materials are incinerated. There are facilities in Allen Park, River Rouge, Detroit, Dearborn, Flint, Ypsilanti, Grand Rapids, Houghton Lake, and Belding which emit over one ton of lead per year each.¹¹

10. 62.5 million metric tons of greenhouse gases are released into our air in Michigan. This causes global warming, which fuels public health threats like heatstroke and the increased spread of infectious disease as well as extreme weather events such as flooding and droughts.¹²

Perhaps most terrifying of all: Big polluters want to undermine the Clean Air Act and weaken the Environmental Protection Agency's ability to protect our health.

Michigan's Senators, Carl Levin and Debbie Stabenow, must stand up for our health by making sure the EPA is allowed to do its job.

Environment Michigan is calling on Senators Levin and Stabenow to oppose these attacks on our air quality so we can be healthy for many Halloweens to come.

¹ Shelley Vinyard and Lauren Randall, Environment America Policy and Research Center, *Dirty Energy's Assault on Our Health: Mercury*, January 2011.

² Richard Stanford, Trent McLaughlin, and Lynn J. Okamoto, "The Cost of Asthma in the Emergency Department and Hospital," *The American Journal of Respiratory and Critical Care Medicine*, July 1999.

³ Clean Air Task Force, *Deaths and Disease from Power Plants* Downloaded from http://www.catf.us/coal/problems/power_plants/existing/map.php?state=Michigan, 13 October 2011.

⁴ Shelley Vinyard and Lauren Randall, Environment America Policy and Research Center, *Dirty Energy's Assault on Our Health: Mercury*, January 2011.

⁵ Courtney Abrams, Environment America Policy and Research Center, *Danger in the Air: Unhealthy Air Days in 2010 and 2011*, September 2011.

⁶ Lauren Randall, Environment America Policy and Research Center, *Dirty Energy's Assault on Our Health: Ozone Pollution*, March 2011.

⁷ American Lung Association, *State of the Air 2011*, Downloaded from <http://www.stateoftheair.org/2011/states/michigan/>, 13 October 2011.

⁸ United States Environmental Protection Agency, *The National Emissions Inventory*, Downloaded from <http://www.epa.gov/ttn/chieff/net/2008inventory.html>, 13 October 2011.

⁹ Michigan Department of Environmental Quality. *Michigan 2010 Air Quality Report* Downloaded from http://www.michigan.gov/documents/deq/deq-agd-aqe-2010-AIR-QUALITY-REPORT_362761_7.PDF, 13 October 2011.

¹⁰ Clean Air Task Force, *Deaths and Disease from Power Plants* Downloaded from http://www.catf.us/coal/problems/power_plants/existing/map.php?state=Michigan, 13 October 2011.

¹¹ Michigan Department of Environmental Quality. *Michigan 2010 Air Quality Report* Downloaded from http://www.michigan.gov/documents/deq/deq-agd-aqe-2010-AIR-QUALITY-REPORT_362761_7.PDF, 14 October 2011.

¹² The Center for Sustainable Systems at the University of Michigan for the Michigan Department of Environmental Quality, *Michigan Greenhouse Gas Inventory 1990-2002*, Downloaded from http://www.michigan.gov/documents/deq/MI_Greenhouse_Gas_Inv_1990_2002_Tables_277468_7.pdf 14 October 2011



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