A HISTORY OF HEAVY POLLUTION

For decades, residents from the City of Detroit and nearby downriver neighborhoods have been impacted by a number of heavy industrial operations in their communities. The Michigan Department of Community Health has deemed this area the “Epicenter of Asthma Burden,” due to the health consequences these local families face.

The American Lung Association reported in 2014 that Wayne County has the highest number of pediatric asthma cases in Michigan, coupled with the highest state population living in poverty. This environmental justice issue is one of many nationwide that prompted former President Bill Clinton to sign an executive order more than 20 years ago calling on the federal government to address the disproportionate burden of industrial pollution on low-income neighborhoods, communities of color and tribal areas. Despite the order, regulatory agencies have not accounted for the cumulative health impacts of emissions on these communities.

A REPEAT OFFENDER: SULFUR DIOXIDE

The Environmental Protection Agency (EPA) has designated a sizeable portion of Wayne County as failing to meet the federal air quality standard for sulfur dioxide.

One big polluter, DTE Energy, is responsible for at least 85 percent of all sulfur dioxide emissions in Wayne County. The top sources of this harmful pollution are DTE’s River Rouge plant, Trenton Channel plant and EES Coke at U.S. Steel. The NAACP has labeled DTE as one of the worst environmental justice offenders in the country for its impact on low-income communities.

Exposure to sulfur dioxide in even very short time periods—such as five minutes—can have significant impacts to human health, including causing aggravation of asthma and other respiratory illnesses. Sulfur dioxide exposure can also aggravate existing heart disease, leading to increased hospitalizations and premature deaths. Asthmatics, children and the elderly are especially at risk from such pollution.

THE TIME TO ACT

The Michigan Department of Environmental Quality (MDEQ) has an opportunity to address this health and environmental justice crisis. MDEQ is required to submit to the EPA a plan to reduce sulfur dioxide emissions for the part of Wayne County that is failing federal air quality standards.

DEATH AND DISEASE FROM POWER PLANTS IN WAYNE COUNTY

In 2014, the Clean Air Task Force examined the deaths and other adverse health effects and costs attributable to the fine particle air pollution resulting from power plant emissions in Wayne County.

Deaths: 70
Heart Attacks: 110
Asthma Attacks: 1,400

Hospital Admissions: 47
Chronic Bronchitis: 43
Asthma ER Visits: 98
As part of its plan, MDEQ has the authority to hold DTE responsible for its major contribution to health impacts by requiring the utility to prevent its emissions from exceeding health standards. DTE can reduce its emissions by installing best-performing pollution controls or by phasing out the use of coal, which is the source of these dangerous pollutants.

According to a 2014 Public Policy Poll, more than three-in-five DTE customers say they support replacing the state’s coal-burning power plants with renewable energy sources. The same majority of DTE customers also say they are concerned about asthma attacks and other potential health problems from soot, smog and other pollution from coal-burning power plants, according to the poll.1

On a regular school day, a smokestack from a nearby polluter hovers over Salinas Elementary School in Wayne County. The county has the highest number of pediatric asthma cases in the state. Air pollution from industrial sources near Michigan public schools jeopardizes children’s health and academic success, according to a 2011 study from University of Michigan researchers.2

BY THE NUMBERS

- Detroit’s zip codes had **three to six** times higher admission than the state as a whole, according to a recent study of asthma hospitalization in Wayne County.3
- **Eighteen** percent of students have physician-diagnosed asthma, and an estimated additional **7-10** percent of students have undiagnosed asthma.4
- School nurses handled **three to five** life-threatening asthma episodes per month during the 2003-2004 academic year.

ENDNOTE

2 Paul Mohai, Byoung-Suk Kweon, Sangyun Lee and Kerry Ard. “Air Pollution Around Schools Is Linked To Poorer Student Health And Academic Performance.” Health Affairs. May 2011. [http://content.healthaffairs.org/content/30/5/852.full](http://content.healthaffairs.org/content/30/5/852.full)
3 [http://www.michigan.gov/mdch/0,1607,7-132-2945_5104-13055--,00.html](http://www.michigan.gov/mdch/0,1607,7-132-2945_5104-13055--,00.html)
4 Detroit Public Schools school nurse monthly reports