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Alert is a monthly update on transportation and air quality planning activities in the Delaware Valley.



Air Quality and Health

Health Impacts from Improving Air Quality Predominately Attributed to Reductions in Fine Particle Pollution

A recent article published in the *Annals of the American Thoracic Society* noted that major sicknesses and deaths attributable to poor air quality have dropped significantly over the past decade. The research, however, found that the improvements to public health were almost entirely attributable to lower fine particle pollution or PM_{2.5} levels. The researchers found that serious illness and death rates attributed to ground-level ozone pollution remain largely unchanged over the same time period. Ozone levels have been falling but not at the pace of PM_{2.5} pollution.

The report's findings are based on the American Thoracic Society's (ATS) recommendations for PM_{2.5} (11 micrograms per cubic meter for annual concentrations and 25 micrograms per cubic meter for short-term concentrations) and Ozone (O₃) (60 parts per billion), which are more protective than those adopted by the US Environmental Protection Agency.

Using air quality data from more than 500 counties with PM_{2.5} data and more than 700 counties with O₃ data, the researchers estimated the annual health impacts from air pollution from 2008-17. In 2017, the most recent year that pollution data is available, the number of excess deaths from air pollution were:

- 7,140 excess deaths from both pollutants combined, down from 12,600 excess deaths in 2010;
- 3,260 excess deaths from PM_{2.5}, down from 8,330 excess deaths in 2010;
- 3,880 excess deaths from O₃, down from 4,270 excess deaths in 2010.

Based on the levels of the two pollutants, the researchers also quantified serious illnesses (morbidity) and missed school and work days (impacted days). In 2017, the most recent year that pollution data is available, PM_{2.5} pollution above recommended levels was estimated to cause an additional 5,600 morbidity and 2,804,000 impacted days. That same year, O₃ pollution above recommended levels was estimated to cause 10,080 morbidity and 11,600,000 impacted days.

The latest report found that in addition to the lack of consistent improvement in the health impacts associated with O₃, the rate of improvement for PM_{2.5} pollution has also started to level off. Without further efforts at the



Save the Date

**Monday
July 29, 2019**

**Public Meeting: FY2020 NJ
TIP and Conformity Finding
6:00 pm – 8:00 pm**

*Location of Meeting:
Mercer County
Administration Building
Room 211
640 South Broad Street
Trenton, NJ*

**Tuesday
July 30, 2019**

**Public Meeting: Conformity
Finding for DVRPC Long-
Range Plan and PA and NJ
TIPs
2:00 pm – 4:00 pm**

*Location of Meeting:
DVRPC Conference Center
8th Floor
6th and Race Streets
Philadelphia, PA*

federal and local levels to reduce the two air pollutants, it is likely that the health impacts from air pollution could increase over time as populations grow, according to the authors.

The report also highlighted other challenges to reducing deaths and illness due to air pollution.

"The proposed roll back of several Clean Air Act regulations and the proposed roll back of the greenhouse gas standard for automobiles will make it hard for communities to maintain their air quality, and even harder for cities with poor air quality to clean up," said report co-author Gary Ewart.

The authors also noted that the effects of wildfires contributing to pollution levels above EPA regulatory levels were excluded from the study, but their increasing frequency and severity may limit the improvements in health that cities and counties can achieve by reducing other air pollution sources.

To read the report "*Trends in Excess Morbidity and Mortality Associated with Air Pollution above ATS-Recommended Standards, 2008 to 2017*," please visit: <https://www.atsjournals.org>



Air Quality News

Five States Sue EPA Over Enforcement of Clean Air Act's "Good Neighbor Policy"

In January, 2019, New Jersey, Delaware, New York City, environmental groups, and four other states filed suit in federal court to prevent the US Environmental Protection Agency (EPA) from reversing a 2015 EPA rule that found air pollution rules in 24 states failed to "sufficiently and collectively" reduce emissions and threatened air quality in downwind states in the Mid-Atlantic and Northeast U.S. The states initiating the lawsuit have some of the country's strictest clean air regulations but still struggle to meet the National Ambient Air Quality Standards (NAAQS) due to pollutants that flow into the region from upwind states.

In 2015, the EPA ruled that certain upwind states, including Pennsylvania, had insufficient regulations on nitrogen oxide (NO_x) emissions from power plants and that the resulting air pollution was interfering with downwind states' ability to meet the 2008 and 2015 ground-level ozone standards. The EPA rule directed those states to rectify the situation under the Clean Air Act's "good neighbor policy", which mandates that the EPA work to ensure that pollution from certain states doesn't make air quality worse in downwind states or interfere with those states ability to meet the NAAQS.

Under the current administration, the EPA has ruled that existing regulations on power plant emissions are sufficient to reduce pollutants and allow states to meet the ozone standard by 2023 as provisions of the Cross State Air Pollution Rule begin to be implemented.

The plaintiff states maintain that the EPA has used flawed science in its decision to reverse the stricter rules on power plants in an attempt to repeal environmental protections and benefit energy producers, including those operating aging coal-fired power plants.

States along the I-95 Corridor from Washington, DC through Connecticut have had portions of their states designated as non-attainment areas for the 2015 ozone standard. Maryland, Delaware, New Jersey, New York, and Connecticut all maintain that enforcement of the Clean Air Act's good neighbor policy is essential to helping these states attain that standard.

For more information about the case of *State of New York, State of Connecticut, State of Delaware, State of Maryland, Commonwealth of Massachusetts, State of New Jersey, and City of New York, Petitioners, v. United States Environmental Protection Agency*. Please visit: <https://ag.ny.gov>.



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