

# A!ert

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



## Air Quality Partnership

May Kicks-Off the Beginning of Greater Philadelphia's Poor Air Quality Season.

Each year on May 1, the US Environmental Protection Agency (EPA), Pennsylvania and New Jersey Departments of Environmental Protection (DEPs), and DVRPC's Air Quality Partnership begin providing daily ground-level ozone forecasts to the public.

Late spring through summer (May through September) is generally when the Greater Philadelphia region experiences the poorest air quality of the year. The region's leading air pollutant is ground-level ozone, also known as smog, which requires the energy from summertime sunlight to "bake" pollutants from sources like cars, trucks, and power plants into smog.

The purpose of the air quality forecasts is two-fold: 1) to alert people that ground-level ozone can pose a significant public health risk, especially for people who suffer from respiratory problems, and 2) to encourage the public to take individual actions to help reduce the emissions that contribute to air pollution on days when poor air quality is predicted.

Poor air quality affects everyone, but some people are particularly sensitive to air pollutants, including people who are active outdoors, and people with respiratory diseases such as asthma. When air quality is predicted to be unhealthy for sensitive groups (Code Orange or worse on the Air Quality Index), EPA and the States will announce an air quality alert for the affected areas. EPA and the Center for Disease Control recommend that people in these areas limit strenuous outdoor activity.

On these days, the public and businesses are also encouraged to take actions that will help reduce air pollution and protect the public health. If enough people take actions - such as using public transportation or carpooling, using less electricity by turning air conditioning to a higher temperature setting, and avoiding using small gasoline-powered engines, - pollutant levels can be lowered to more healthy levels across the region.

Free air quality alerts are available through DVRPC's Air Quality Partnership website ([www.AirQualityPartnership.org](http://www.AirQualityPartnership.org)) or the EPA's [www.EnviroFlash.info](http://www.EnviroFlash.info) website. Individuals and organizations can sign up for this free email or text message service simply by providing an email address and zip code.

Recipients can expect between 10 and 25 alert days per summer. Fine particle pollution (PM<sub>2.5</sub>) forecasts are also available all year, although the region experiences just a few wintertime PM<sub>2.5</sub> episodes each year.

For more information about the Air Quality Partnership or air quality forecasts, please email Sean Greene, Manager of Air Quality Programs at [sgreene@dvrpc.org](mailto:sgreene@dvrpc.org).



## Save the Date

**Tuesday  
May 1, 2018**

**New Jersey Competitive  
CMAQ Funding Program  
Opens**

*For more information, please  
visit: [www.dvrpc.org/cmaq](http://www.dvrpc.org/cmaq)*

**Thursday  
May 24, 2018**

**Public Meeting: FY2019 PA  
TIP and Conformity Finding  
4:00 pm – 6:00 pm**

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



## Air Quality and Health

### Fine Particle Pollution May Increase Respiratory Infections in Children

A recent article published in the *American Journal of Respiratory and Critical Care Medicine* reported that air pollution, even of short duration, increases the number of lower respiratory infections in young children. Acute respiratory infection of the lungs and airways, usually caused by viruses, are a leading cause of illness and death in young children. The researchers tracked 146,397 people, 77 percent of them children younger than 2, who had infections treated in hospitals and clinics along the Wasatch Front region in Utah.

The Wasatch Front is approximately 80 miles long and 10-20 miles wide, bordered on both sides by mountains. It consists primarily of suburbs, but also includes the cities of Salt Lake City, Ogden and Provo, Utah. This study was performed in a location where the average daily PM<sub>2.5</sub> level is lower than places like Los Angeles and New York. Due to the topography of the region, though, air pollution may become trapped in the high mountain valleys of the Wasatch Front—especially during temperature inversions, which typically occur in the winter months. When PM<sub>2.5</sub> becomes trapped in the valleys, this often leads to sharp increases in PM<sub>2.5</sub> to levels considered to be unhealthy (>35 micrograms per cubic meter, the health-based standard).

The researchers found a corresponding increase in healthcare visits due to respiratory infections beginning in the second week after an increase in PM<sub>2.5</sub> levels. Visits peaked in the third week after the PM<sub>2.5</sub> increase. The scientists calculate that each short-term increase of 10 micrograms per cubic meter in PM<sub>2.5</sub> is associated with a 15 to 23 percent increase in serious respiratory infections.

In theorizing about the connection between PM<sub>2.5</sub> and lower respiratory infections, lead researcher Dr. Benjamin Horne said: “The air pollution itself may make the human body more susceptible to infection or may impair the body’s ability to fight off the infectious agents. It may be that PM<sub>2.5</sub> causes damage to the airway so that a virus can successfully cause an infection or that PM<sub>2.5</sub> impairs the immune response so that the body mounts a less effective response in fighting off the infection”.

Sources of PM<sub>2.5</sub> pollution include transportation sources, power generation, as well as gas stations and dry cleaners. Conserving energy, avoiding vehicle idling, and supporting policies to replace fleets of aging diesel vehicles that deliver consumer goods are all effective strategies to reduce PM<sub>2.5</sub> pollution.

For more information the Intermountain Medical Center’s research on the health impacts of PM<sub>2.5</sub> exposure, please visit: <https://intermountainhealthcare.org>.



## Air Quality Information

### US EPA Announce Latest Round of Clean Diesel Funding

On April 24, the US Environmental Protection Agency (EPA) announced the availability of approximately \$40 million in grant funding for the implementation of projects aimed at reducing emissions from the nation's existing fleet of older diesel engines. Under this competition, between 20 and 80 grants are anticipated to be awarded to eligible applicants.

Eligible applicants include regional, state, local, or tribal agencies, or port authorities with jurisdiction over transportation or air quality. Nonprofit organizations may apply if they meet certain criteria.

Examples of vehicles eligible for funding include buses, medium or heavy duty trucks, marine engines, locomotives, energy production, construction vehicles, and cargo handling equipment.

Projects must implement EPA or California Air Resource Board verified retrofit technologies, idle-reduction technologies, or aerodynamic technologies and low rolling resistance tires. Early diesel replacement and repower projects are also eligible for funding.

For more information on the most recent Diesel Emissions Reduction Act funding round, please visit: [www.epa.gov/cleandiesel/clean-diesel-national-grants](http://www.epa.gov/cleandiesel/clean-diesel-national-grants).



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