



Transportation & Smog (Ozone Pollution) in Maryland

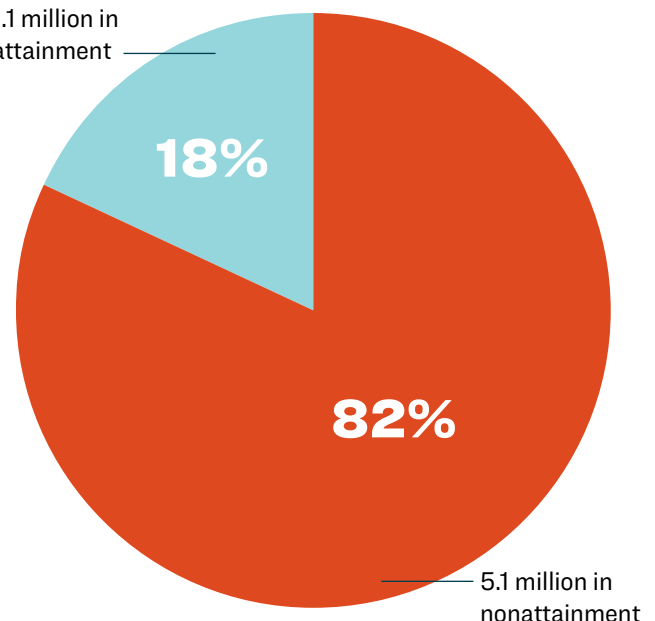
Smog pollution, otherwise known as ozone, is a major public health issue in Maryland.

- Approximately 5.1 million Marylanders live in areas with unsafe levels of smog.
- Pollution from vehicle tailpipes and industry mix with sunlight to form smog, making the summer months the worst for air quality in cities.
- Smog can cause chronic respiratory illnesses resulting in asthma attacks, bronchitis, and premature death.
- Smog's health impacts are not evenly distributed across Marylanders – smog pollution disproportionately impacts communities of color in Maryland. Maryland Department of Health (MDE) data shows that emergency room visits for asthma among Black children in Maryland are roughly five times the rate for white children.

88 percent of asthma-related hospitalizations for children and 87 percent of ER visits in Baltimore City were for Black children in 2019. Asthma levels are directly tied to Maryland's smog levels: MDE's advice is to "[c]heck the air quality so that you can avoid exposure to ozone, particulate matter, and other asthma triggers during bad air quality days."

5.1 Million Marylanders Live With Smog Levels That Violate Minimum Federal Air Quality Standards

1.1 million in attainment



5.1 million in nonattainment

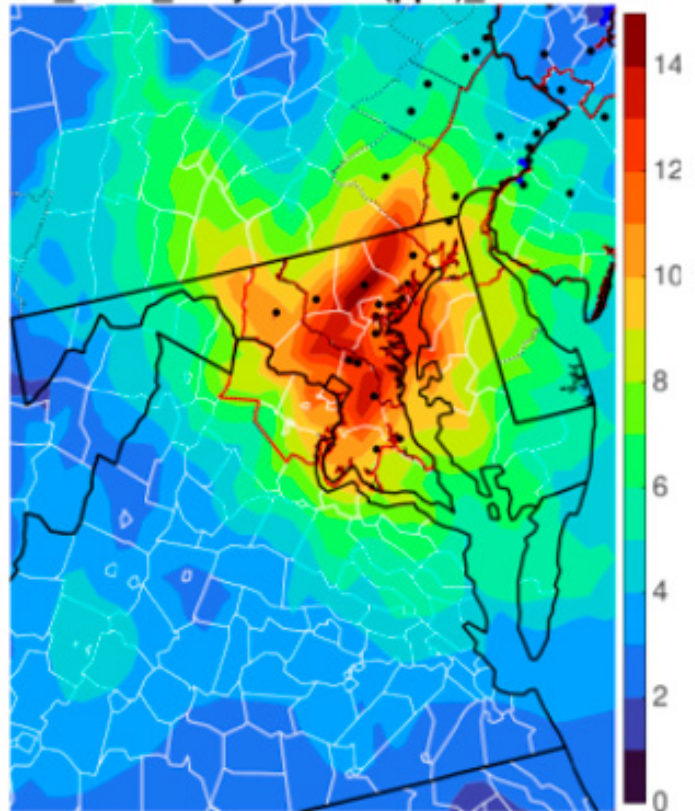
Thankfully, Maryland can do something about its smog problem by reducing pollution from its cars and trucks.

[Recent ozone modeling by Sonoma Technology](#), commissioned by the Sierra Club, confirms the massive contribution of on-road vehicles to ozone pollution in Maryland.

Ozone pollution in Maryland is traceable in significant part to emissions of nitrogen oxides (NOx), which are released by the combustion of gasoline and diesel fuel in vehicles. Almost half of Maryland’s total NOx emissions—approximately 41.3 percent—are attributable to pollution from vehicles on Maryland’s roads.

On high smog days, such as in the summer, pollution from cars and trucks alone can bring smog levels in Maryland to 15.9 percent of their allowable healthy limits, leaving total smog more likely to exceed safe levels. Even though there are far fewer large trucks and buses than smaller passenger vehicles, these vehicles are so much dirtier that their pollution actually contributes a greater share of ozone. This smog is concentrated around Maryland’s cities and its urban environmental justice communities, as seen in the map generated by Sonoma Technology reflecting smog levels for the year 2016.

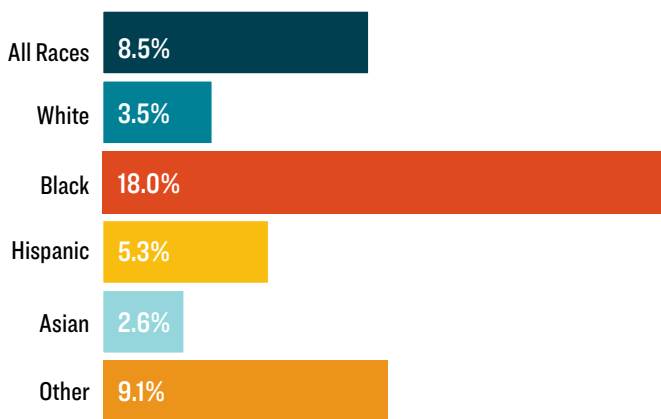
O3_Total_Maryland O3 (ppb) 2016



- County lines
- State lines
- 2008 and 2015 O3 non-attainment areas
- AQS Monitors
- EJ Zip Codes

Rates of emergency department visits for asthma for children aged 2-17 years (2019)

(source: HSCRC)



What Can Maryland Do?

The state is moving forward with adopting various vehicle pollution standards – including the Advanced Clean Cars (ACC) II rule and Advanced Clean Trucks (ACT)

rule — this year. Sierra Club and its partners are supporting the MDE’s process to finalize the rules this year and swiftly implement them. Advocates are also encouraging MDE to swiftly adopt the Heavy-Duty NOx Omnibus (HDO) rule to reduce pollution from trucks. Adoption of these rules is a critical step toward meeting Governor Moore’s goals of reducing pollution in Maryland’s overburdened environmental justice communities and achieving Maryland’s climate commitments, which require statewide emission reductions of 60 percent below 2006 levels by 2031.

Adopting clean vehicle regulations is critical to addressing Maryland’s long-standing air quality attainment challenges and putting the state in a position to potentially redesignate the Baltimore area to attainment if recent improvements in air quality persist.

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