



New York City Environmental Justice Alliance

462 36th Street, 3F, Brooklyn, NY 11232 | [www.NYC-EJA.org](http://www.NYC-EJA.org)

On the ground – and at the table.

**FOR IMMEDIATE RELEASE**

June 12, 2024

## **Report: Unhealthy Air Pollution And Extreme Heat Concentrated In NYC Low-Income Communities of Color Require Urgent Policy Changes**

### **Air Pollution 18 to 49 Times More Severe Than Reported By Nearest Government Air Quality Monitors**

**New York, NY** – A new report released today by the [New York City Environmental Justice Alliance \(NYC-EJA\)](http://www.NYC-EJA.org) as New York’s summer heat and smog season is about to begin - and soon after Governor Hochul’s shocking decision to indefinitely postpone congestion pricing - reveals that air quality measurements at the very local level in environmental justice neighborhoods of the South Bronx, and Brooklyn showed levels of fine particulate matter (PM<sub>2.5</sub>) pollution up to 18x greater and 49x greater (for mobile and fixed measurements, respectively) than the nearest government-run monitors that report hourly values.

[\*\*\*Community Heat and Air Mapping Project for Environmental Justice: Heat-Related Risks, Air Pollution, and Social Vulnerability in New York City\*\*\*](#) (or CHAMP-EJ) - researched and released with support from the New York State Attorney General’s Office and in collaboration with community-based organizations El Puente, GOLES, The POINT CDC, UPROSE, We Stay/Nos Quedamos, and other research partners - highlights 2022 heat and air pollution research findings and includes policy recommendations - including congestion pricing - for the City and State to reduce air quality and heat vulnerability disparities in low income communities of color.

Researchers utilized dozens of low-cost, portable air quality monitors to measure hyperlocal air quality and characterize air pollution exposures at more refined spatial and temporal scales than is possible using existing City and State data. Researchers also utilized mobile heat monitors, mounted on bicycle handles, to measure hyperlocal heat conditions in order to better understand the impacts of the urban heat island effect in NYC environmental justice communities.

In New York City, PM<sub>2.5</sub> pollution alone is responsible for 2,000 premature deaths annually. A recent study by [Climate Central](#) estimated the Urban Heat Island Index (UHI) for cities across the United States and reported that NYC has the highest UHI Index in the country, with about 78% of the city’s population experiencing an Urban Heat Island Index of 8°F or greater. According to the NYC Department of Health

and Mental Hygiene's [2023 NYC Heat-Related Mortality Report](#), "each summer, an estimated 350 New Yorkers die prematurely because of hot weather in NYC" with Black New Yorkers 2x more likely to die from heat stress compared to White New Yorkers. Low-income communities and communities of color are disproportionately exposed to both extreme heat and PM<sub>2.5</sub> pollution due to historic discrimination in access to housing and racist land use planning that places polluting infrastructures and facilities in these neighborhoods. As a result, these environmental justice communities suffer from higher rates of respiratory illness, heart disease, stroke, lung cancer, negative birth outcomes, and other life-threatening conditions.

**Key findings from the CHAMP-EJ report include:**

- Traffic congestion continues to cause pollution spikes twice a day.
- Hyperlocal, minute-level measurements show PM<sub>2.5</sub> fine particulate matter (soot) concentrations up to 18x higher and 49x higher (for mobile and fixed measurements, respectively) than the nearest government-run monitors that report hourly values.
- Mobile air pollution averages during the sampling period for PM<sub>2.5</sub> in the Bronx and Brooklyn ranged from 8.9 to 11.4 µg/m<sup>3</sup> (micrograms per cubic meter) with the highest average PM<sub>2.5</sub> exposures in Hunts Point in the Bronx. While these measurements cannot be directly compared to a national standard, findings of PM<sub>2.5</sub> at such elevated levels suggest that NYC-EJA member communities may be breathing air that is unhealthy if they persist on a long-term basis.
- Neighborhoods with large areas of impervious surfaces (such as streets and parking lots) tend to retain excess heat, which spills into nearby residential areas.
- As vegetation cover decreases, temperature tends to increase.
- Areas with greater vegetation tend to cool more overnight, lowering risk of adverse health effects.

**Key recommendations from the CHAMP-EJ report include:**

- *Target* investments and interventions in areas of the city with an overlap of low vegetation, high heat vulnerability, and high historical disinvestment to increase the amount of vegetation and combat the urban heat island (UHI) effect.
- Adopt a multi-dimensional approach for heat mitigation that addresses both short- and long-term planning and policy approaches to social and physical infrastructure.
- Apply *targeted* renewable energy and battery storage investments and policy interventions to mitigate poor air quality caused by high-pollution hot spots.
- Adopt City and State policies to reduce pollution from the transportation sector in environmental justice communities - including congestion pricing.

"The New York City Environmental Justice Alliance and its dedicated member organizations have led the charge in the fight for environmental justice in many of our city's most vulnerable communities," said **New York Attorney General Letitia James**. "The Community Heat and Air Mapping Project for Environmental Justice not only centers the real environmental challenges faced by historically underserved communities in Brooklyn, the South Bronx, and the Lower East Side, but also empowers residents with the knowledge and data they need to drive significant change. I commend NYC-EJA and all participating organizations for their unwavering commitment to all our shared mission of creating a healthier and more sustainable New York."

“NYC-EJA has long been an advocate for environmental justice communities leading and speaking for themselves. CHAMP-EJ is a reflection of that. With this research we have further widened the opening for elected officials, government agencies, and other interested parties to see the leadership of environmental justice communities and the sensible, science-based policy recommendations we continue to uplift. We hope this report is used as a resource to further the interests of NYC’s most vulnerable residents.” -**Eddie Bautista, Executive Director, NYC Environmental Justice Alliance**

**About the New York City Environmental Justice Alliance:**

Founded in 1991, NYC-EJA is a non-profit, citywide membership network linking grassroots organizations from low-income communities of color in their struggle for environmental justice. We empower our member organizations to advocate for improved environmental conditions and against inequitable burdens through the coordination of campaigns designed to inform City and State policies. Through our efforts, our members coalesce around specific common issues that threaten the ability for low-income communities of color to thrive.

###

**Contact:**

Victoria Sanders - [victoria@nyc-eja.org](mailto:victoria@nyc-eja.org) / 347-866-6609;

Eunice Ko - [eunice@nyc-eja.org](mailto:eunice@nyc-eja.org);

Michael O'Loughlin - [oloughlin.michael@gmail.com](mailto:oloughlin.michael@gmail.com) / 917-957-9160

***Site visits and in-person interviews can be arranged. Please use the above contact info.***