

# AIR QUALITY INEQUITY IN DC

Taking a **social justice** look at air quality and residential patterns in the District



# HOW DID WE GET HERE?



## RESIDENTIAL SEGREGATION IN WASHINGTON, DC



### WHAT IS REDLINING?

In the 1930s, the federal government marked African American neighborhoods as 'hazardous' to discourage investment in those communities. Federal housing policies subsidized construction, loans, and housing for white residents while at the same time institutionalizing barriers for African Americans to purchase homes.

For decades, people living in redlined areas were denied access to federally-backed mortgages and other credit. These neighborhoods were designated cheap land that city planners could use for industrial development. The result was a concentration of African American residents close to highways and industrial zones with little to no green space, forcing them to breathe pollutants. This has devastating effects on people's physical, mental, and spiritual well being.

### WHY DOES THIS MATTER?

Racist housing policies have produced a segregated city where many African American residents are deprived of equal access to education, employment, income, wealth, housing, and health care. Their proximity to air pollution sources also renders them more vulnerable to associated public health threats.

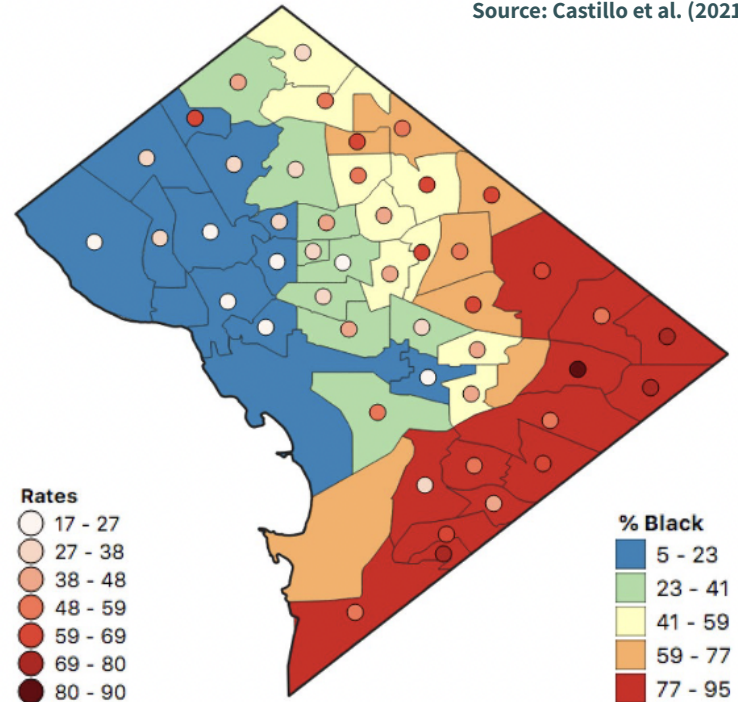
**Racial justice and environmental justice are deeply intertwined.**

# WHAT IS ENVIRONMENTAL RACISM?



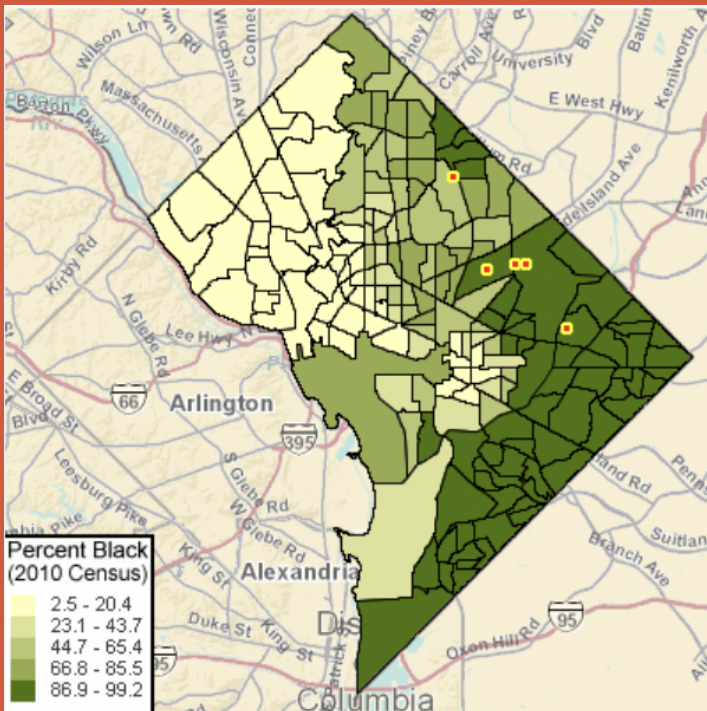
Environmental racism refers to how communities of color and low-income neighborhoods are **unequally burdened** with hazards like toxic waste, garbage dumps, industrial facilities, highways, and other sources of pollution that **decrease residents' quality of life.**

Source: Castillo et al. (2021)



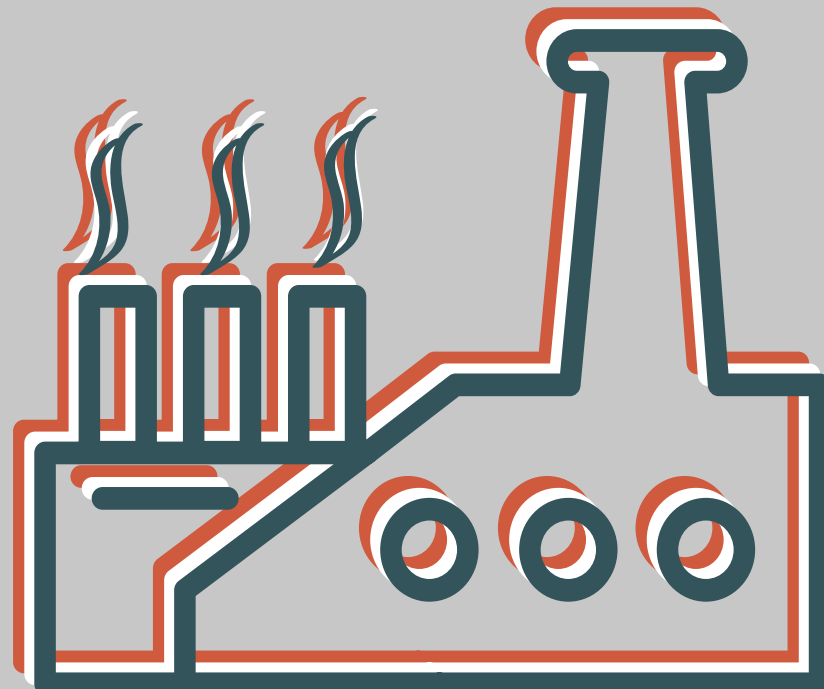
A map of DC showing the percentage of Black residents in each neighborhood cluster with dots representing the rate of deaths attributable to air pollution per 100,000 residents

## DC Trash Transfer Stations



Trash Transfer Stations from East to West include Fort Totten, Federal IPC, Rodgers Brothers, WMI Northeast, and Benning Road

Source: Energy Justice Network



# HEALTH AND AIR POLLUTION EXPOSURE



Though air pollution levels have improved significantly since the 1970 Clean Air Act and its 1990 Amendments, neighborhoods in Southeast DC do not benefit as much as neighborhoods in Northwest DC.

A 2021 Study published in the GeoHealth journal examined health risks from air pollution across DC, providing data about the relationship between pollutants in the air and residents' health risks.

They concluded that uneven air pollution levels in DC contribute to health disparities across neighborhoods.

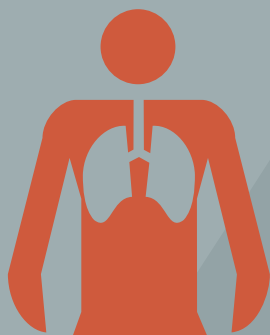
Baseline disease rates are 5 times higher in Southeast DC than Northwest DC for...

- Chronic Obstructive Pulmonary Disease
- Lung Cancer
- Stroke

... 9 times higher for

- All Cause Mortality
- Heart Disease

... and over 30 times higher for asthma-related emergency room visits.



**African American children are more vulnerable to air pollution than children of other races/ethnicities.**

**Life expectancy differs by 21 years between Woodley Park in Northwest DC and St. Elizabeth in Southeast DC.**

**Air pollution-related health risks are highest for neighborhoods with a larger proportion of people of color, particularly Wards 7 and 8.**

# We know that...



Communities in Southeast DC, specifically in Wards 7 and 8, face more air quality burdens and air pollution-related health risks than their Northwest neighbors on top of lower access to medical care, food, and green space.

## SO WHAT CAN WE DO?

### DEMAND



that policymakers...

- listen and respond to Ward 7 and 8 residents
- minimize residents' exposure to pollution
- take meaningful action towards air quality equity



Example: fund the replacement of gas appliances with electric appliances to reduce indoor pollutants

### EDUCATE



your community about ...

- the impact of residential segregation and environmental racism
- where schools, senior centers, roads, and polluting industries are built



Example: compare the number of highways in Northwest DC to Southeast DC and think about the effect of those patterns

### ADVOCATE for...



- increased investment in disfavored communities
- systemic changes toward environmental justice

**IDENTIFY** barriers to air quality equity and **EXPLORE** ways to dismantle them



Example: identify traffic patterns that place an unequal pollution burden on communities East of the Anacostia River and contact transportation planners about changing them

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