

Environmental Justice and Electrification: Opportunities and Challenges

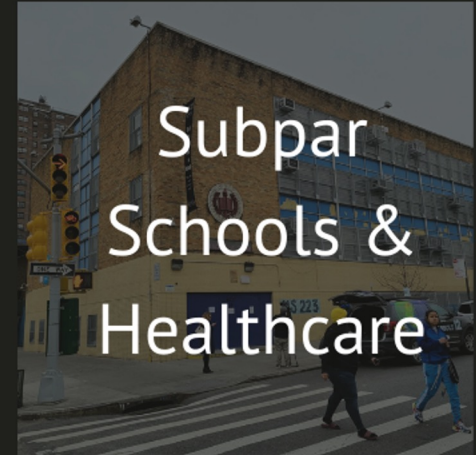
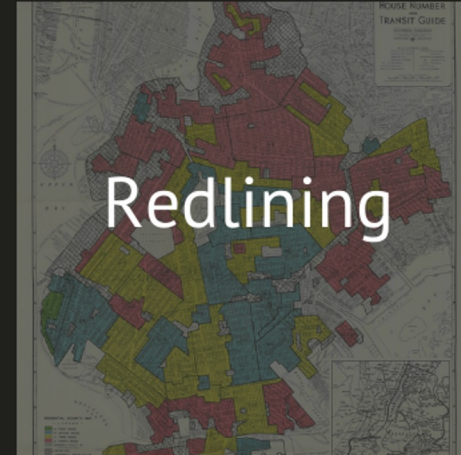


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STRUCTURAL RACISM

The totality of ways in which societies foster racial discrimination, via mutually reinforcing inequitable systems that in turn reinforce discriminatory beliefs, values, and distribution of resources - Bailey et al, *Lancet* 2017

Inequitable Systems



ENVIRONMENTAL RACISM KILLS

Black communities are impacted by disproportionate and cumulative exposure to contaminants in air, water, and soil which put them at higher risk of mortality and morbidity from a host of chronic disease.

- People of color are 61% more likely than white people to live in a county with a failing grade for at least one air pollutant
- According to HHS, in 2020, Black children had an asthma death rate 7.6x higher than white children
- Black, white, and Latinx households with similar incomes live in neighborhoods of dissimilar environmental quality



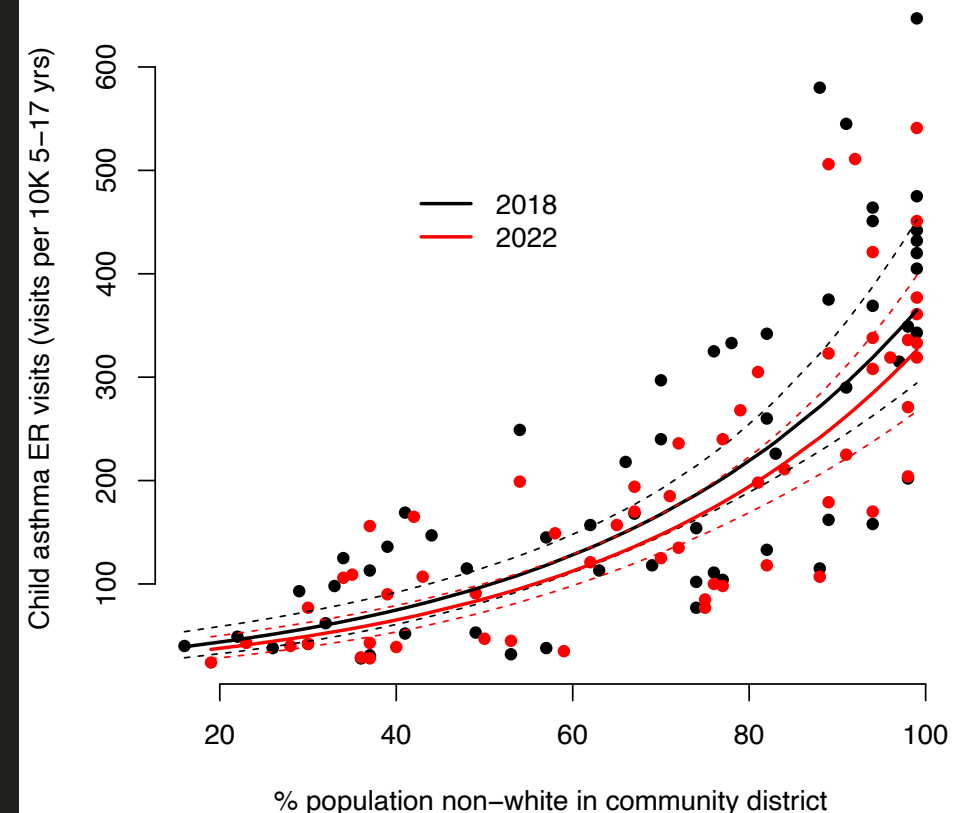
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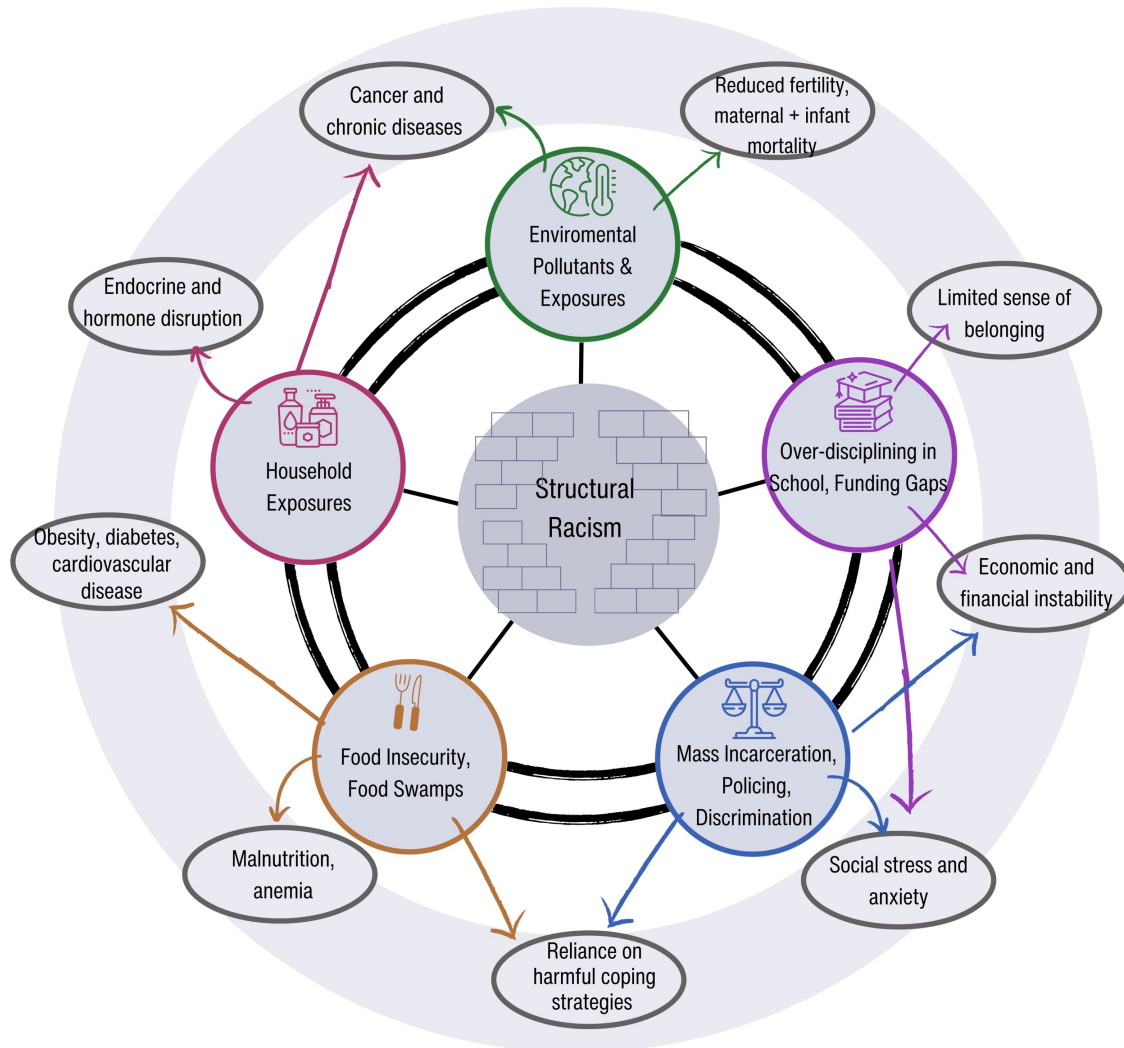
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Martinez et al. in prep

Communities of color have exponentially higher rates of childhood asthma in NYC



JUSTICE FRAMING

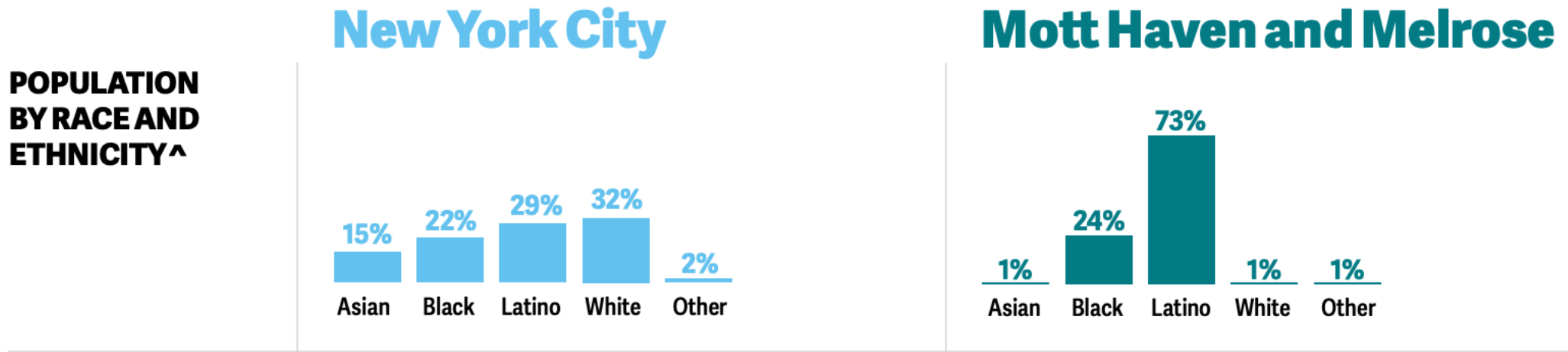


- Systems of structural racism include differentials in environmental exposures, household exposures, education, the criminal legal system, food systems, etc.
- These systems of **chemical and non-chemical exposures** combine to generate **cumulative impacts**
- Health disparities are an emergent (observable) property of these system

ENVIRONMENTAL JUSTICE & HOUSING

NYC Community Health Profiles show the health impacts of environmental and structural racism

In Mott Haven and Melrose 73% of the population is Hispanic/Latino and 24% is Black/African American – that is **97% of the population is Black and/or Latinx**



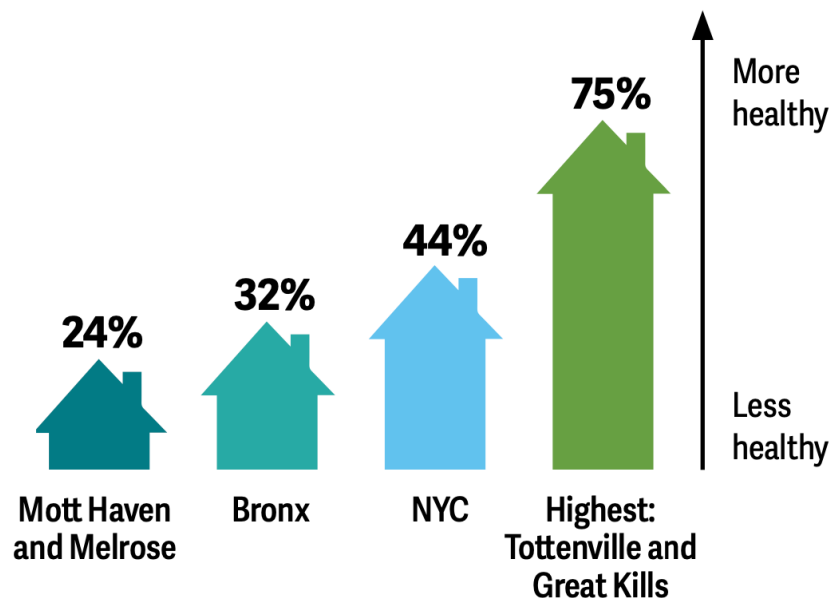
Figures from 2018 NYC Community Health Profiles

ENVIRONMENTAL JUSTICE & HOUSING

Structural racism impacts the living environment both outside and inside the home

HOMES WITHOUT MAINTENANCE DEFECTS

(percent of renter-occupied homes)

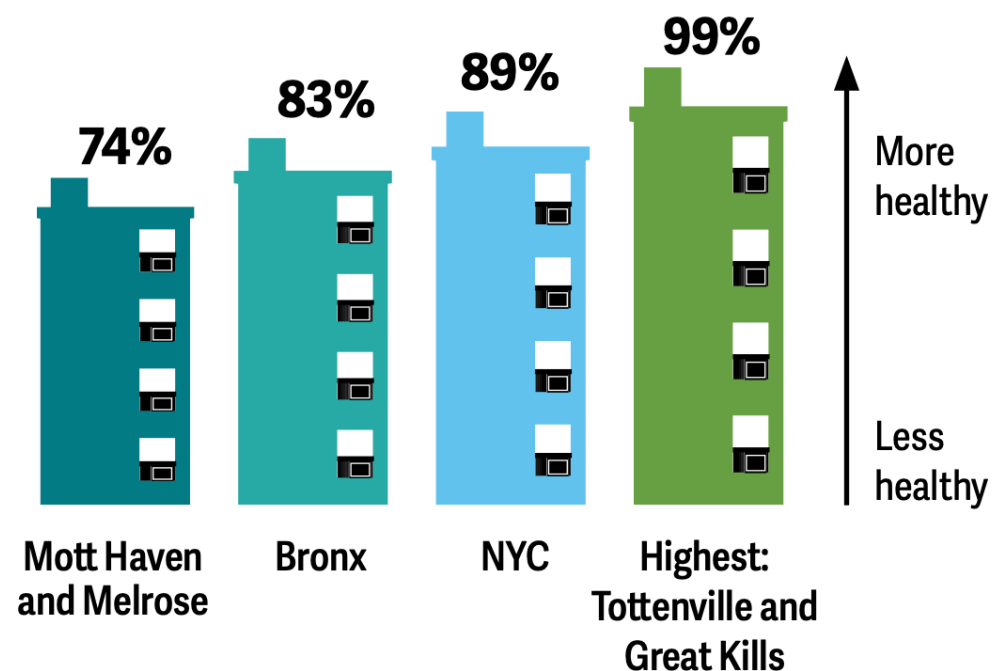


Note: Maintenance defects include water leaks, cracks and holes, inadequate heating, presence of mice or rats, toilet breakdowns or peeling paint.

Source: NYC Housing and Vacancy Survey, 2014

AIR CONDITIONING

(percent of households)



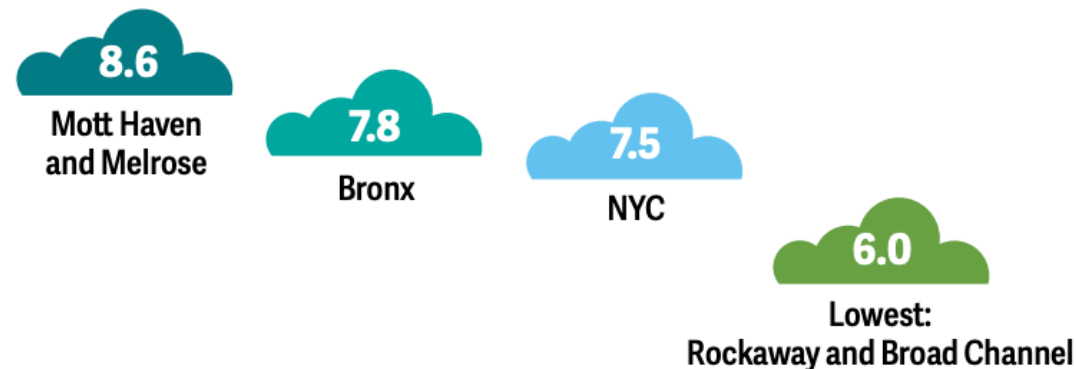
Source: NYC Housing and Vacancy Survey, 2014

ENVIRONMENTAL JUSTICE & HOUSING

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AIR POLLUTION

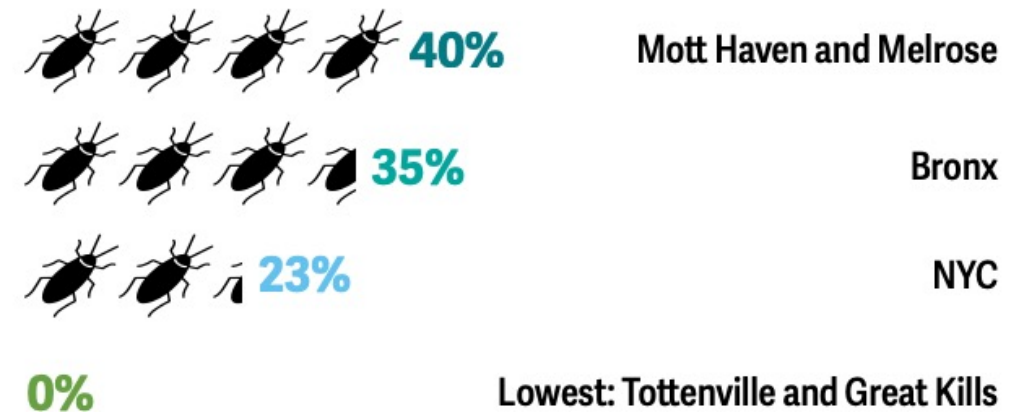
(micrograms of fine particulate matter per cubic meter)



Source: NYC DOHMH, Community Air Survey, 2016

HOMES REPORTING COCKROACHES

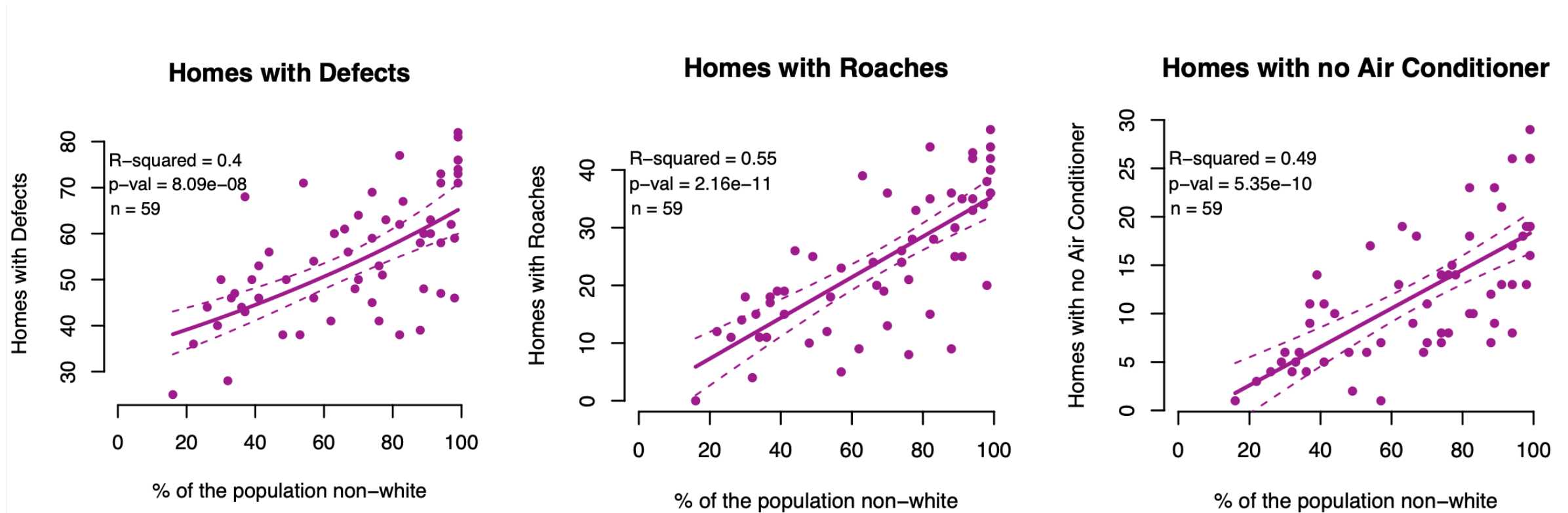
(percent of households)



Figures from 2018 NYC Community Health Profiles

ENVIRONMENTAL JUSTICE & HOUSING

Structural racism impacts the living environment both outside and inside the home



ENVIRONMENTAL JUSTICE & HOUSING

Housing, Lead Paint,
and Electrification in
New York City
Prepared in Partnership
with WE ACT for
Environmental Justice

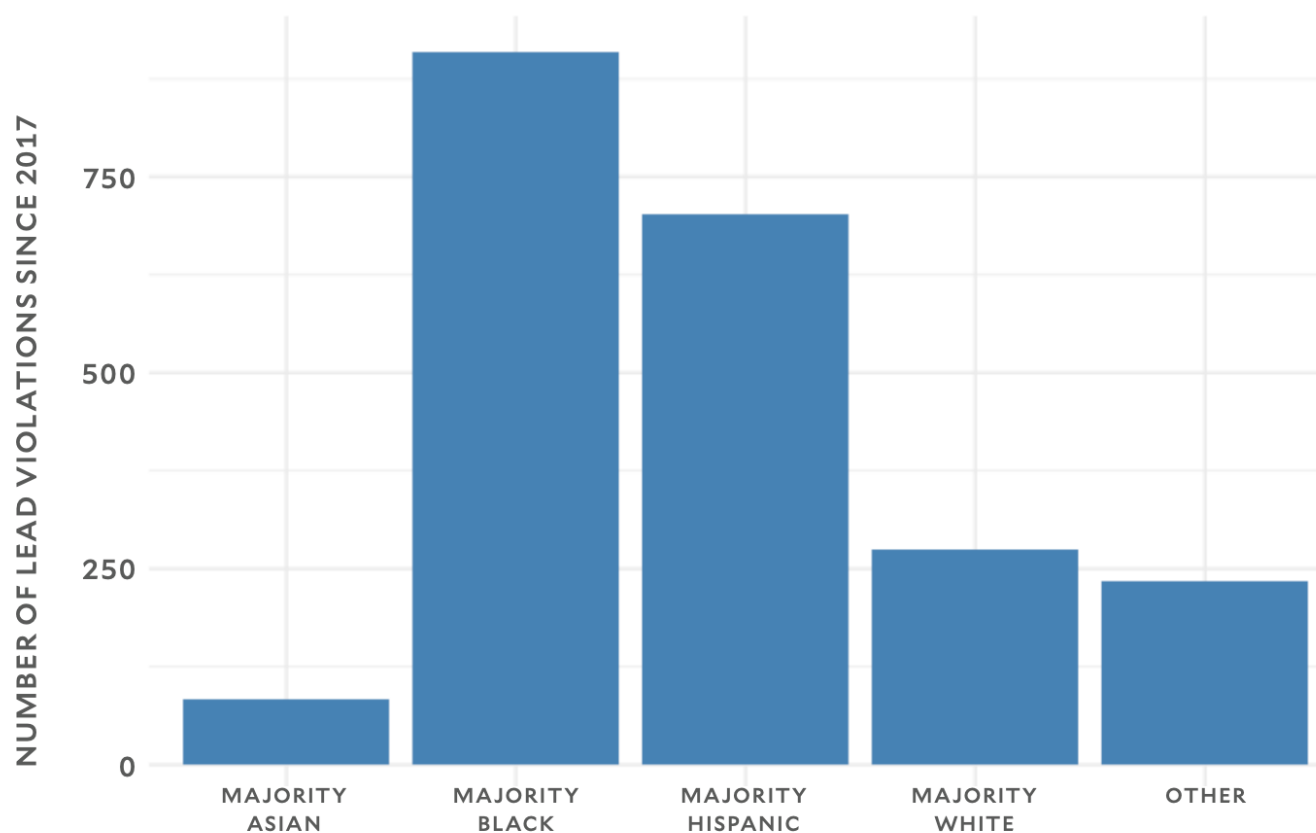
DECEMBER 2023

YALE CENTER ON
CLIMATE CHANGE
AND HEALTH

ENVIRONMENTAL JUSTICE & HOUSING

Figure 2. Number of Race and Lead Violations by ZIP Code, 2017-2022

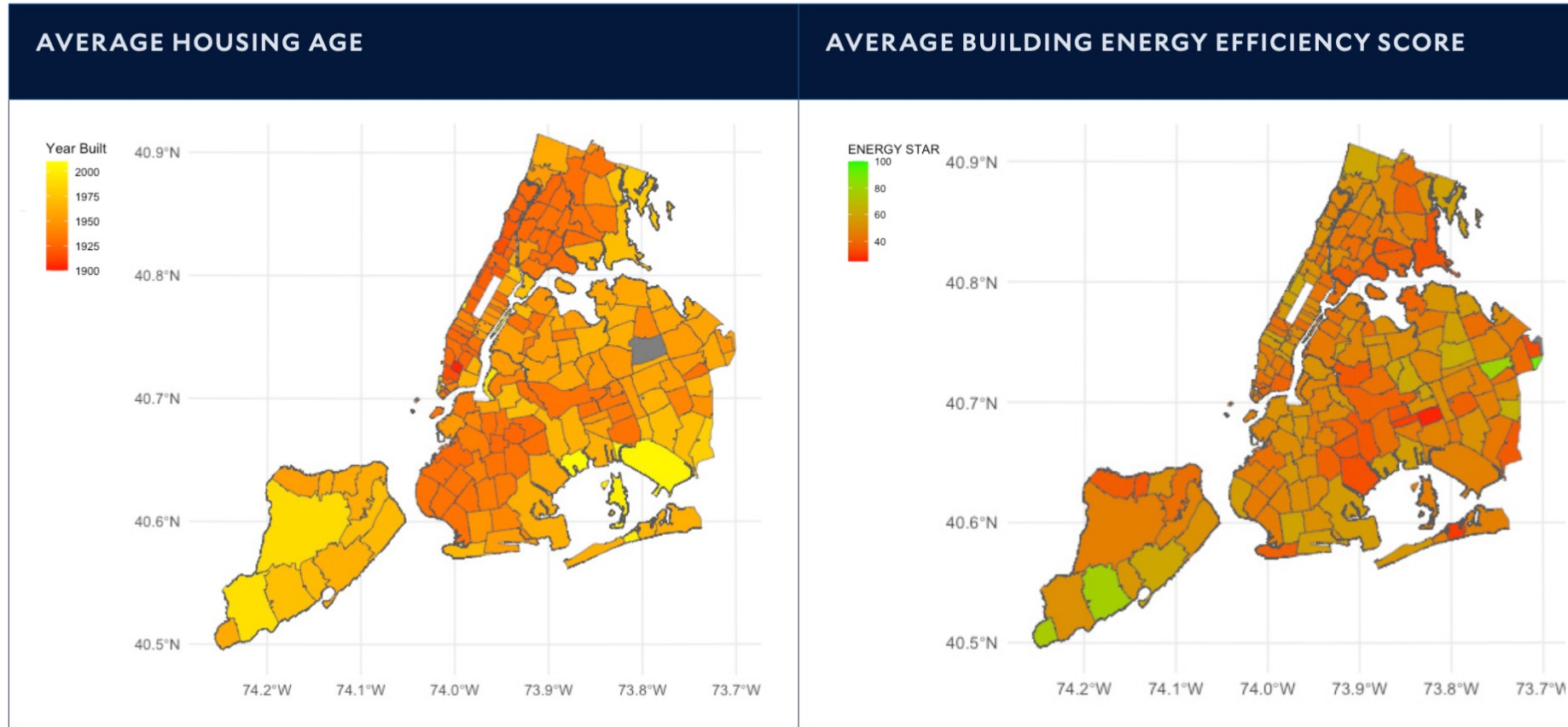
CORRELATION BETWEEN LEAD VIOLATIONS AND RACE (PER ZIP CODE)



Lead paint violations are highest in majority Black and Hispanic zip codes in NYC

ENVIRONMENTAL JUSTICE & HOUSING

Figure 1. Housing Age versus Building Energy Efficiency:



- Housing age serves as a proxy for lead paint risk
- Energy efficiency shows the need to weatherize & electrify

ENVIRONMENTAL JUSTICE & HOUSING



ADVOCACY

- Would like DOE & HUD to have Justice40 benefits to remediate hazards in the home as part of pre-weatherization
- Homes that fail DOE pre-weatherization inspection should be referred to other programs for remediation, such as HUD's Lead-Based Paint Hazard Control Grant program
- Federal and state coordination is needed to take the opportunity to remediate hazards as we weatherize and electrify cities



Weatherization Assistance Program

Weatherization Assistance Program

Weatherization services reduce the amount of energy, while minimizing costs to low-income families.

