
Disparities in Healthy Housing – Must They Be So Intractable?

Weatherization & Healthy Homes Conference
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Why Are We Concerned About Home Environmental Hazards?

- The home provides shelter and is critical to well being
- Homes, especially if poorly maintained, can be hazardous to residents
- Home health hazards cause and/or contribute to illnesses -- lead poisoning, asthma, allergies and injuries
- The physical home environment influences individual and group social environments

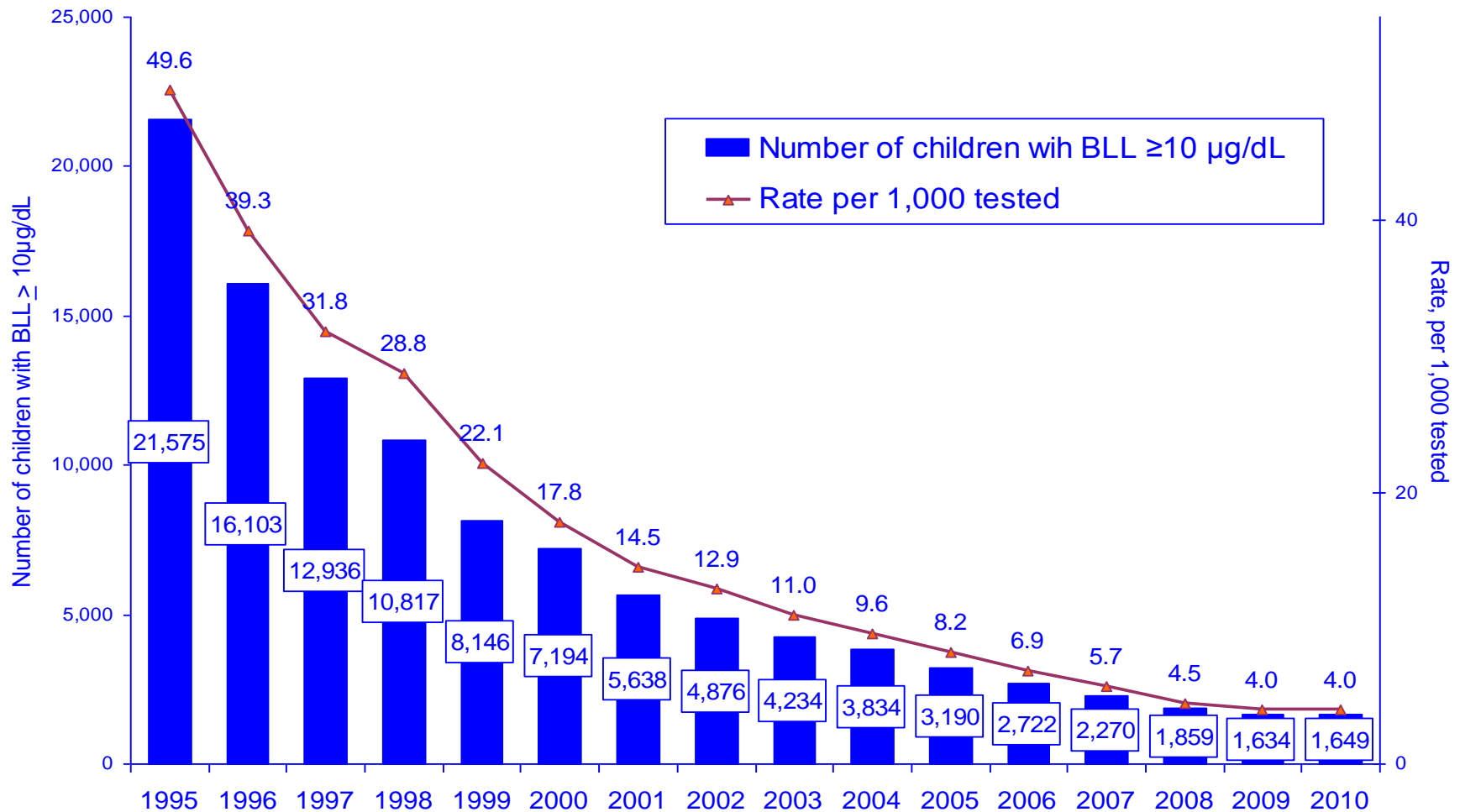
Housing Quality in New York City

- Some improvements, but disparities between higher and lower income neighborhoods, and individuals are large

Lead Poisoning: The Continued Challenge

- Two-thirds of NYC's housing units were built before 1960 when NYC banned lead paint
- Lead dust from paint continues to be the primary cause of lead poisoning in young children
- Blood lead levels previously thought to be safe are linked with learning and behavior problems in young children
 - 1,374 children with blood lead levels ≥ 10 $\mu\text{g}/\text{dL}$ in 2011
 - 10,659 children with blood lead levels ≥ 5 $\mu\text{g}/\text{dL}$ in 2011

.... But the Dramatic Success



Source: NYC Department of Health, Lead Poisoning Prevention Program: 2011

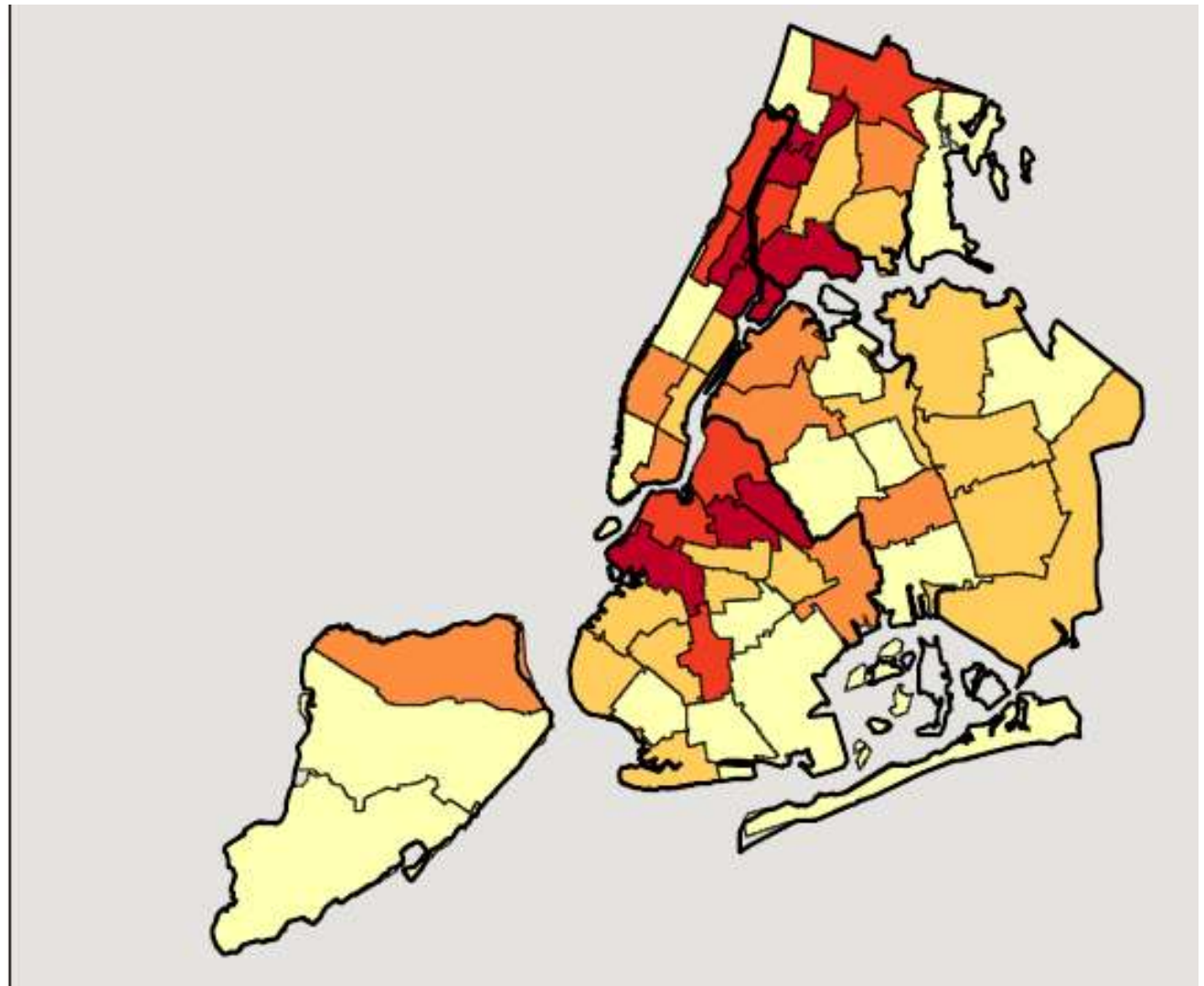
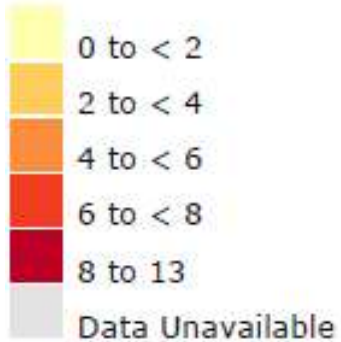
It's Never Just One Thing...



"I love your work."

Deteriorating or Dilapidated Buildings

Percent of Households

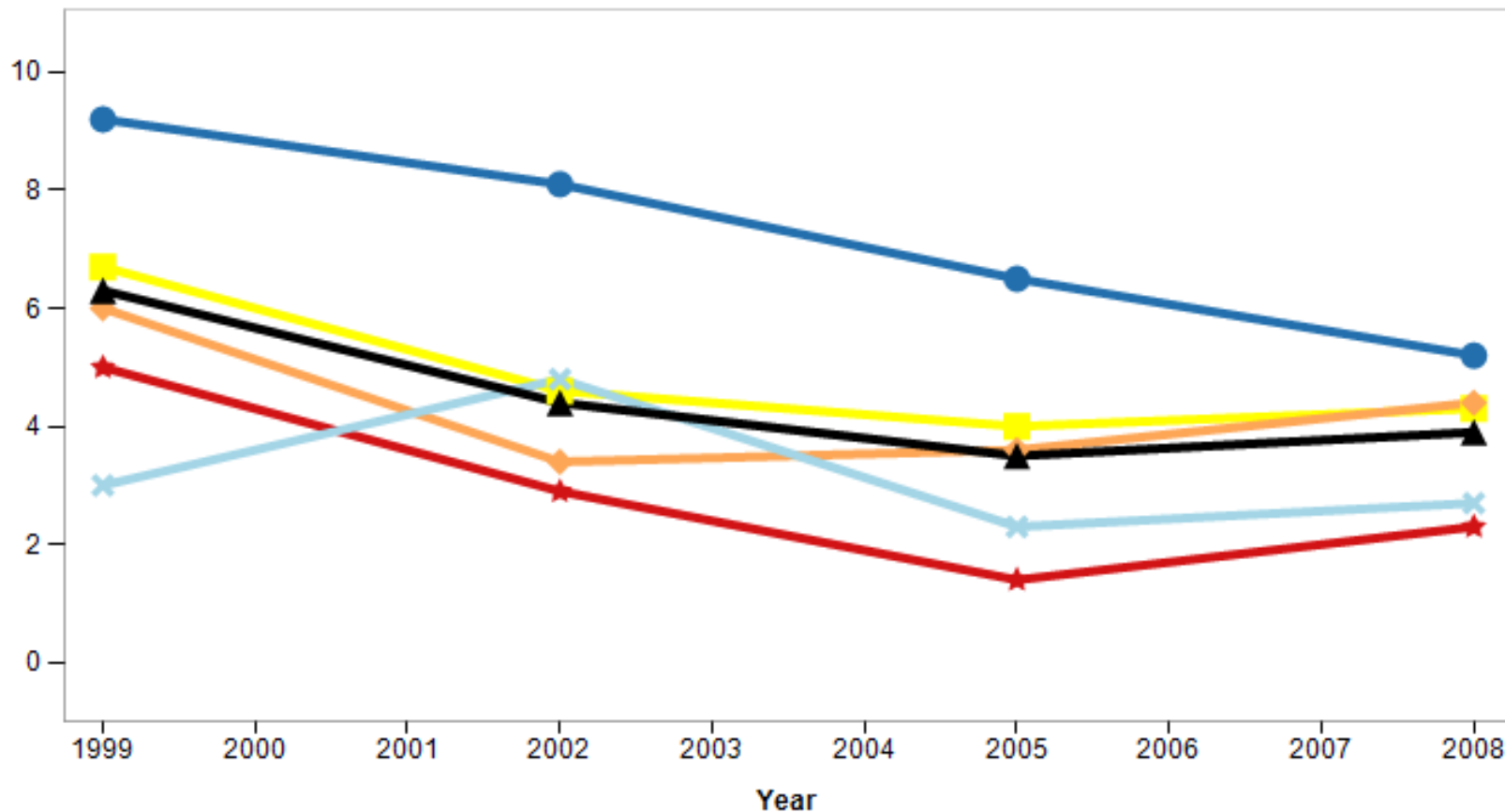


Source: NYC Housing & Vacancy Survey, 2008

Improvements in Dilapidation

Y axis: Percent of Households

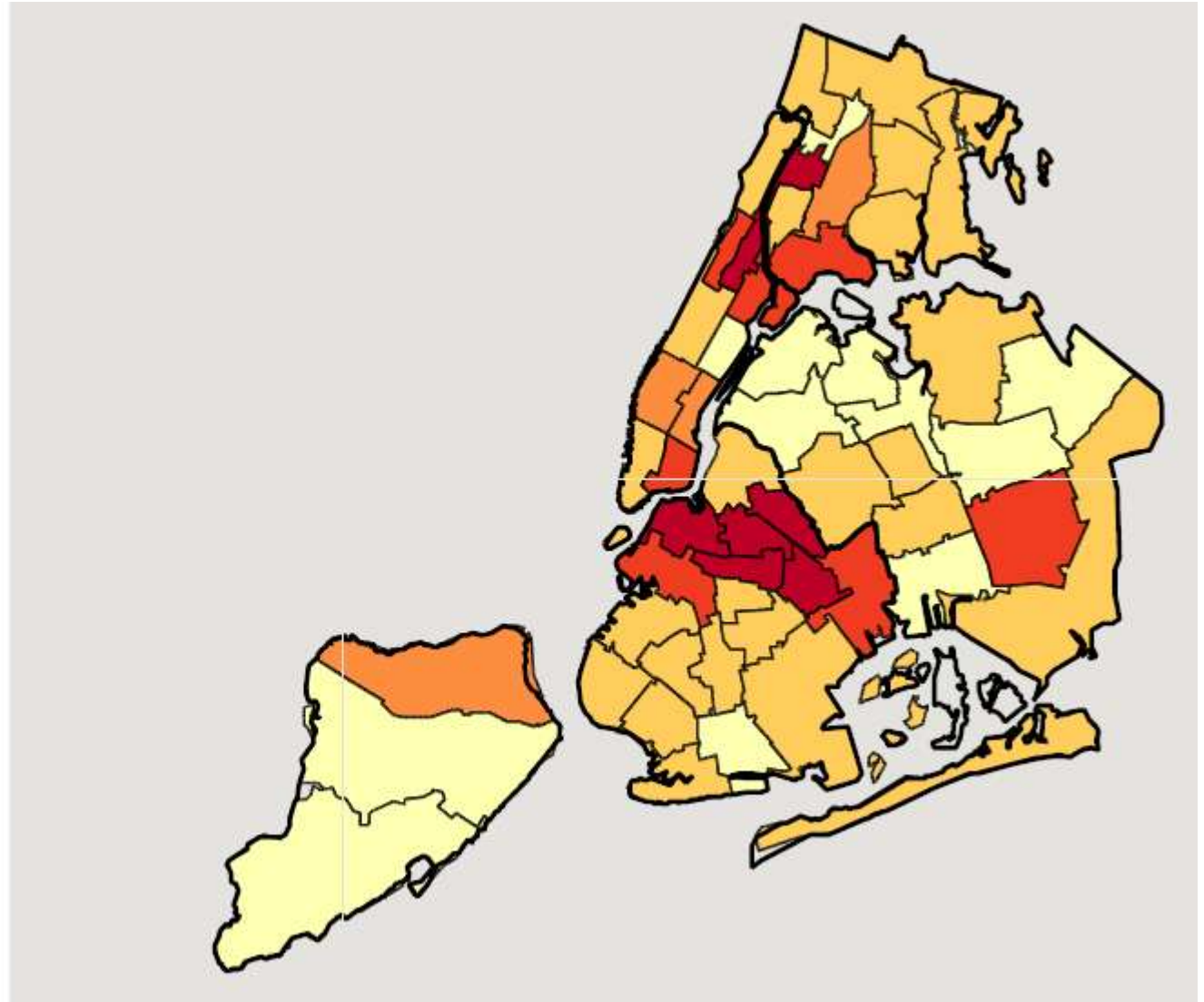
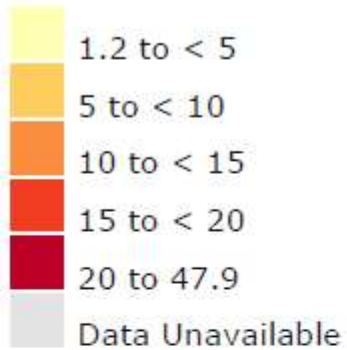
● Bronx ■ Brooklyn ◆ Manhattan ★ Queens × Staten Island ▲ New York City



Source: NYC Housing & Vacancy Survey, 2008

Boarded up Homes

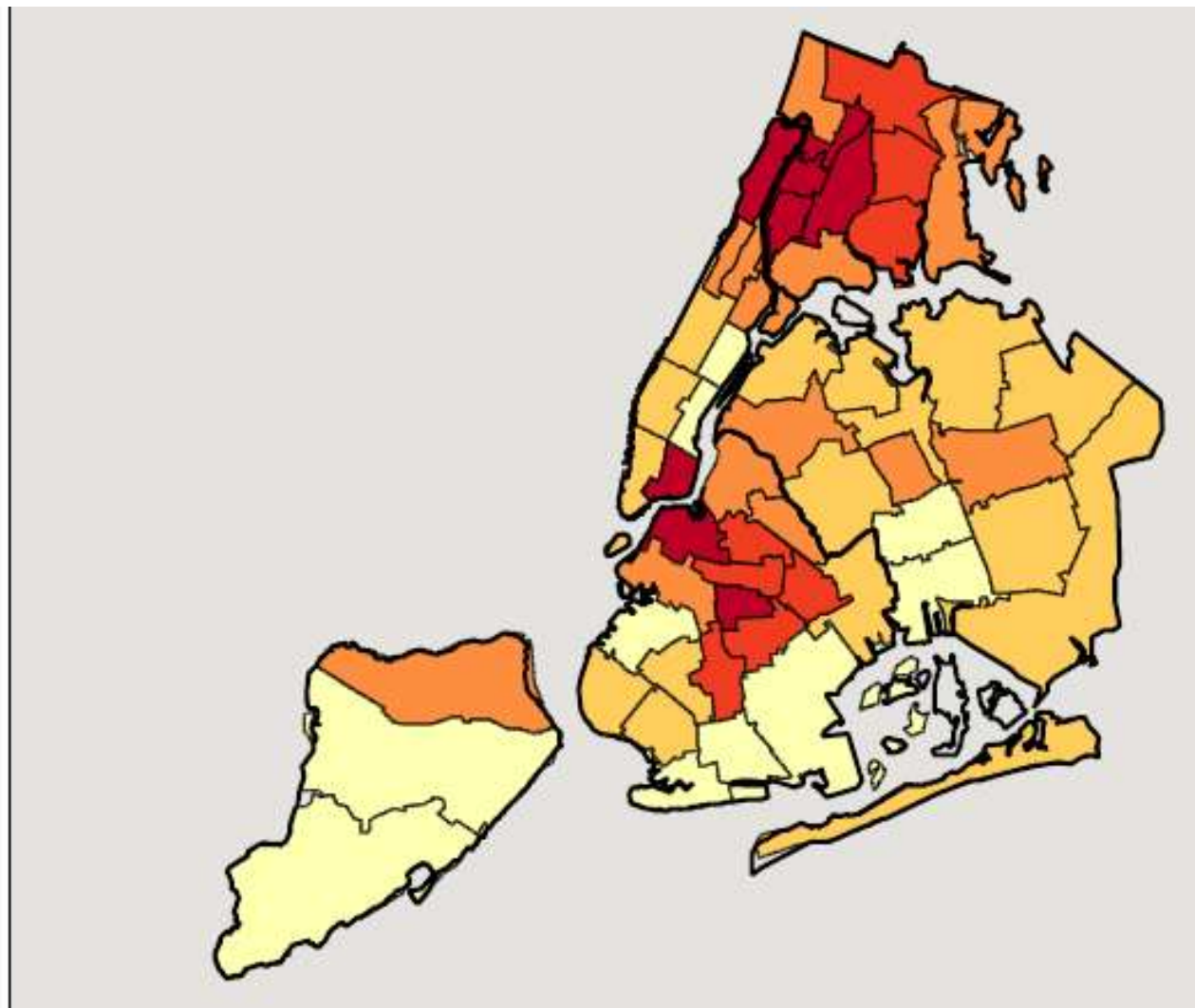
Percent of Households



Source: NYC Housing & Vacancy Survey, 2008

Leaks in the Home

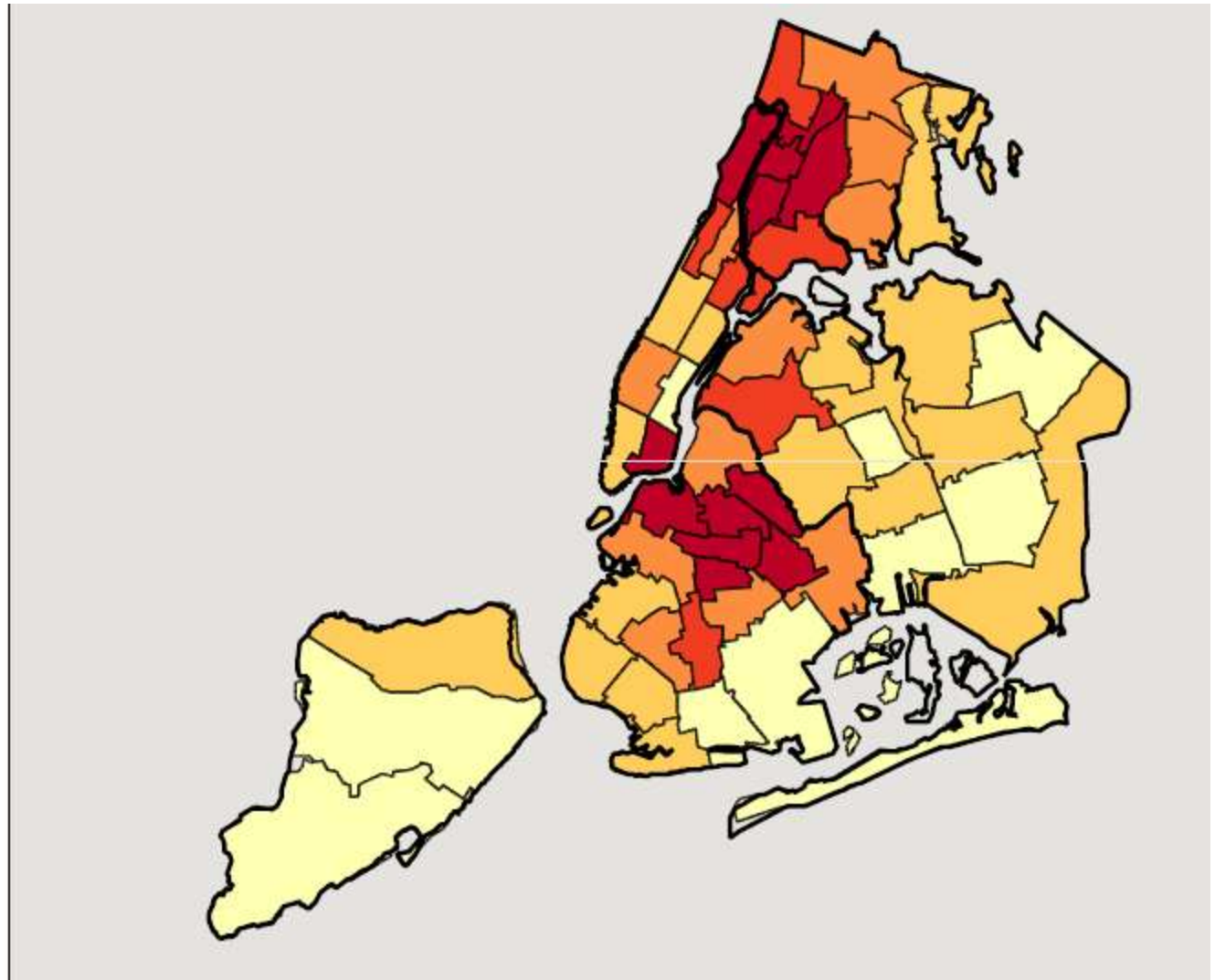
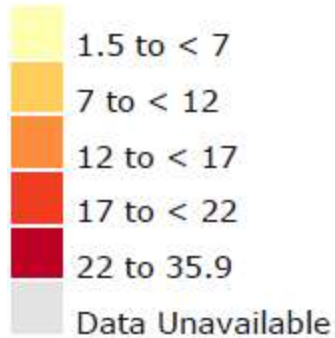
Percent of Households



Source: NYC Housing & Vacancy Survey, 2008

Households with Cracks or Holes

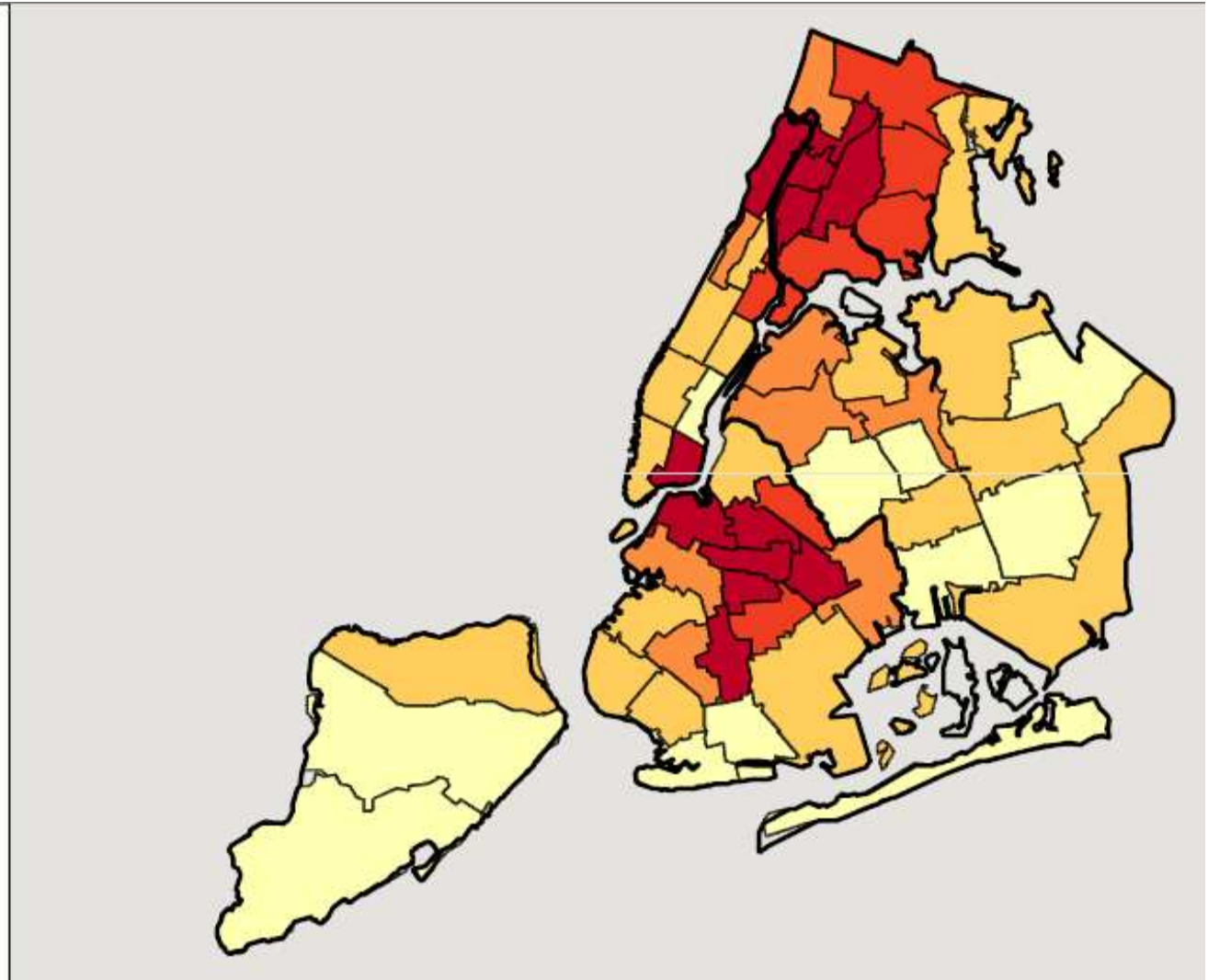
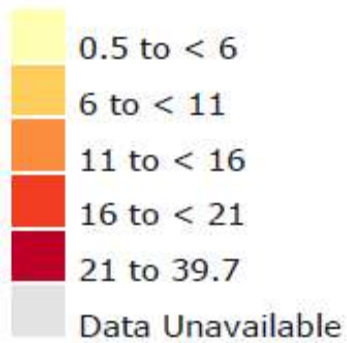
Percent of Households



Source: NYC Housing & Vacancy Survey, 2008

3 or More Maintenance Deficiencies

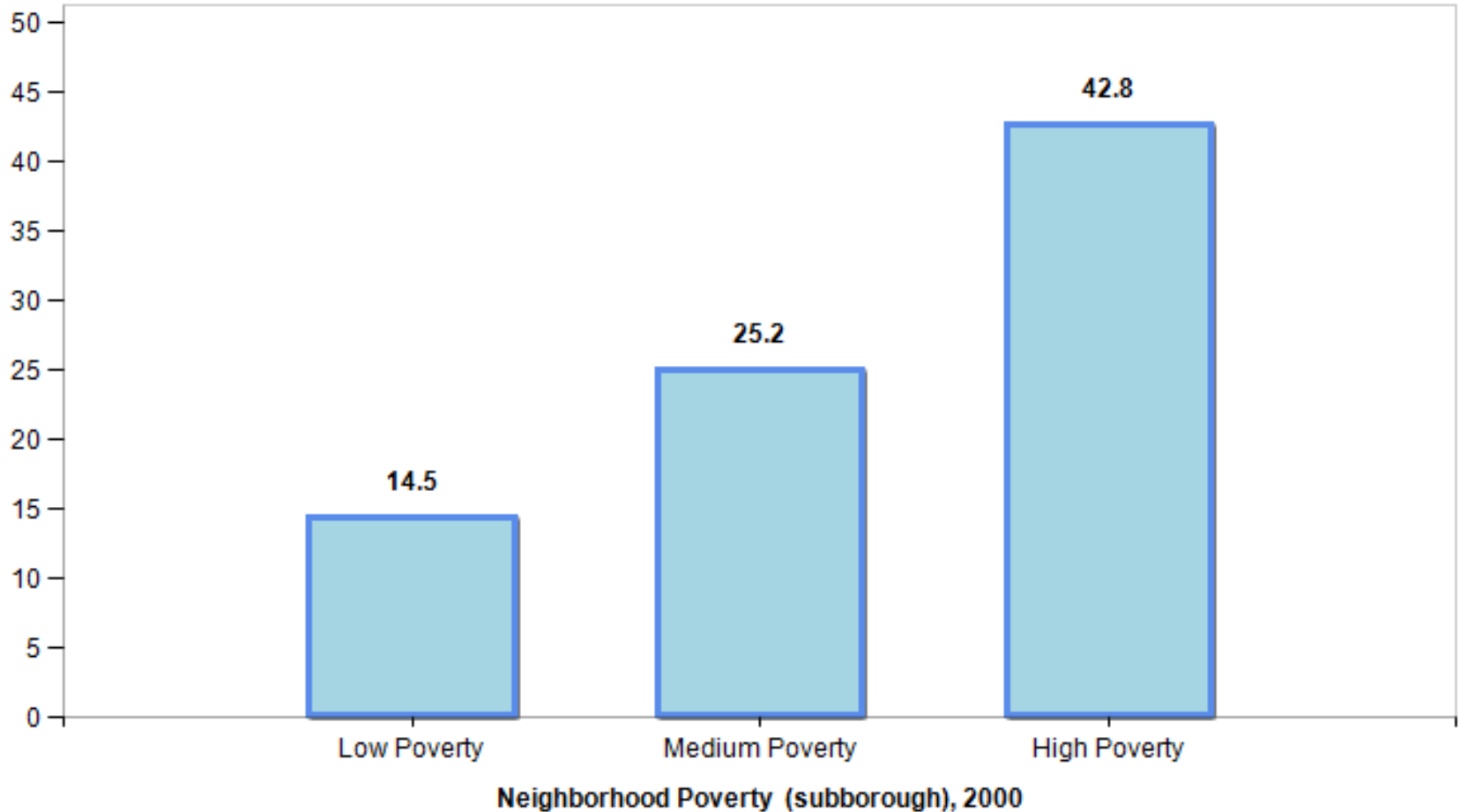
Percent of Households



Source: NYC Housing & Vacancy Survey, 2008

Daily Cockroaches are 3 Times More Prevalent in Lower Income Neighborhoods

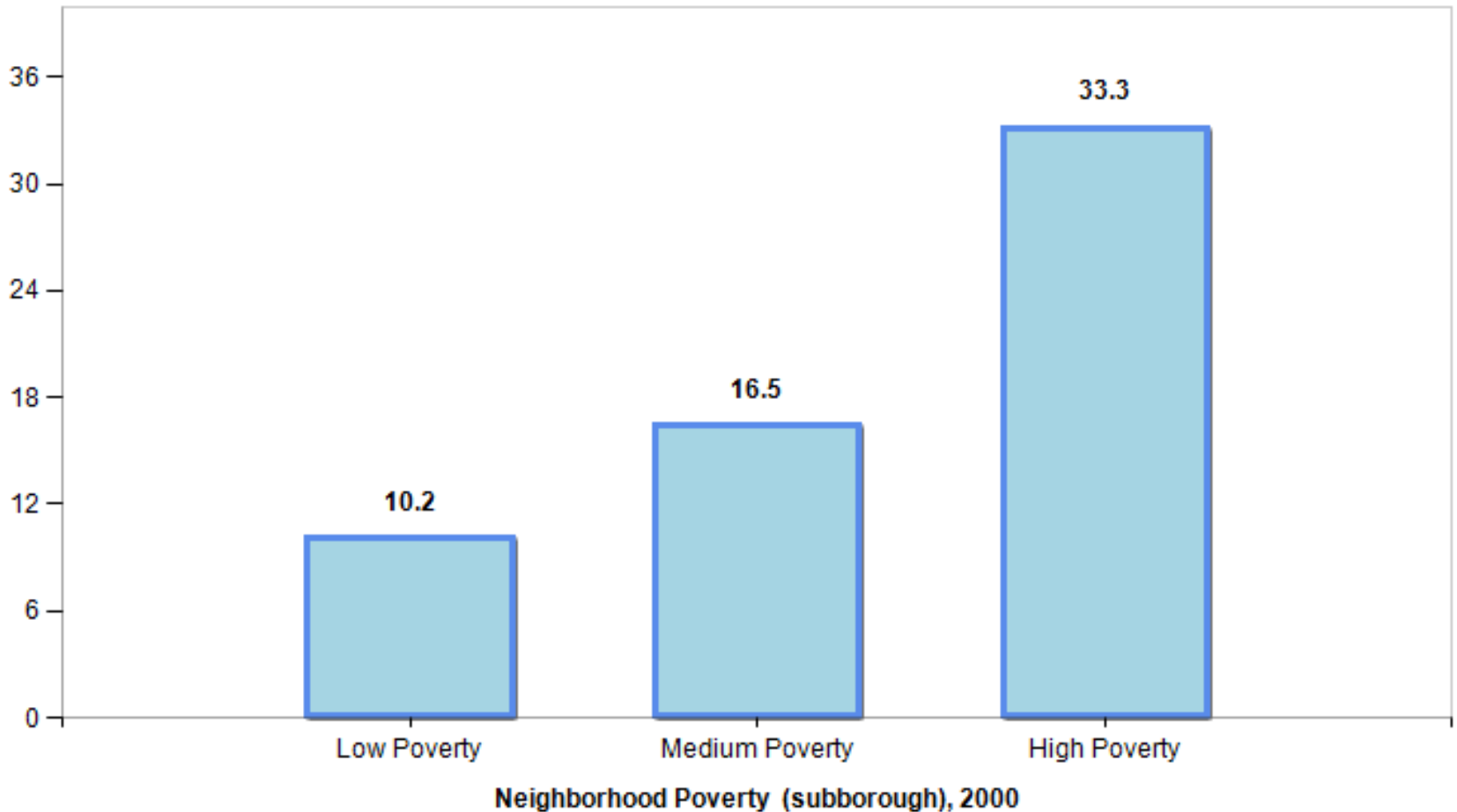
Y axis: Percent of Households (Median of Neighborhoods), 2008



Source: NYC Housing & Vacancy Survey, 2008

... As are Mice

Y axis: Percent of Households (Median of Neighborhoods), 2008

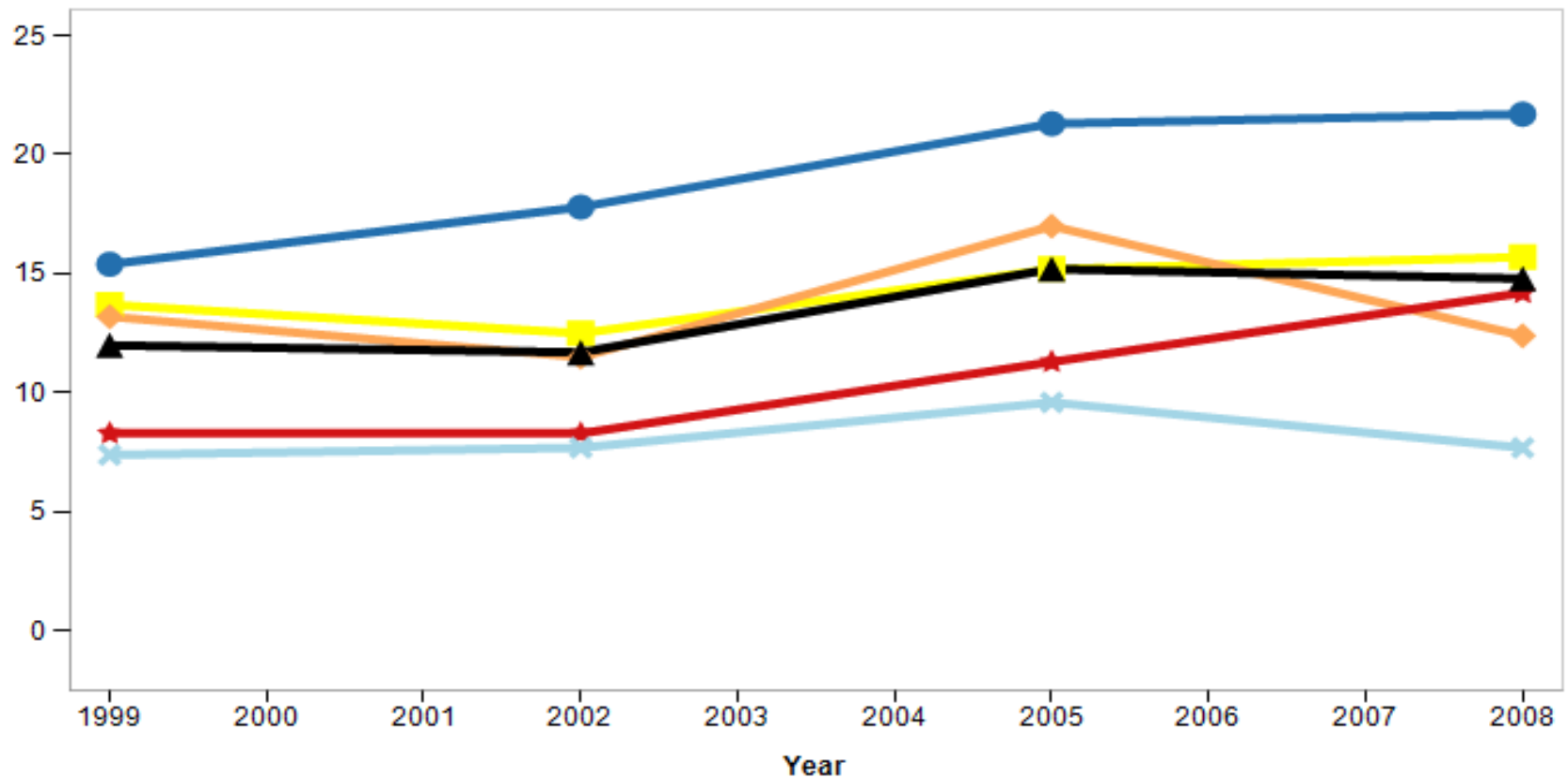


Source: NYC Housing & Vacancy Survey, 2008

Tenants Use of Supplemental Heat is Up

Y axis: Percent of Households

● Bronx ■ Brooklyn ◆ Manhattan ★ Queens ✕ Staten Island ▲ New York City



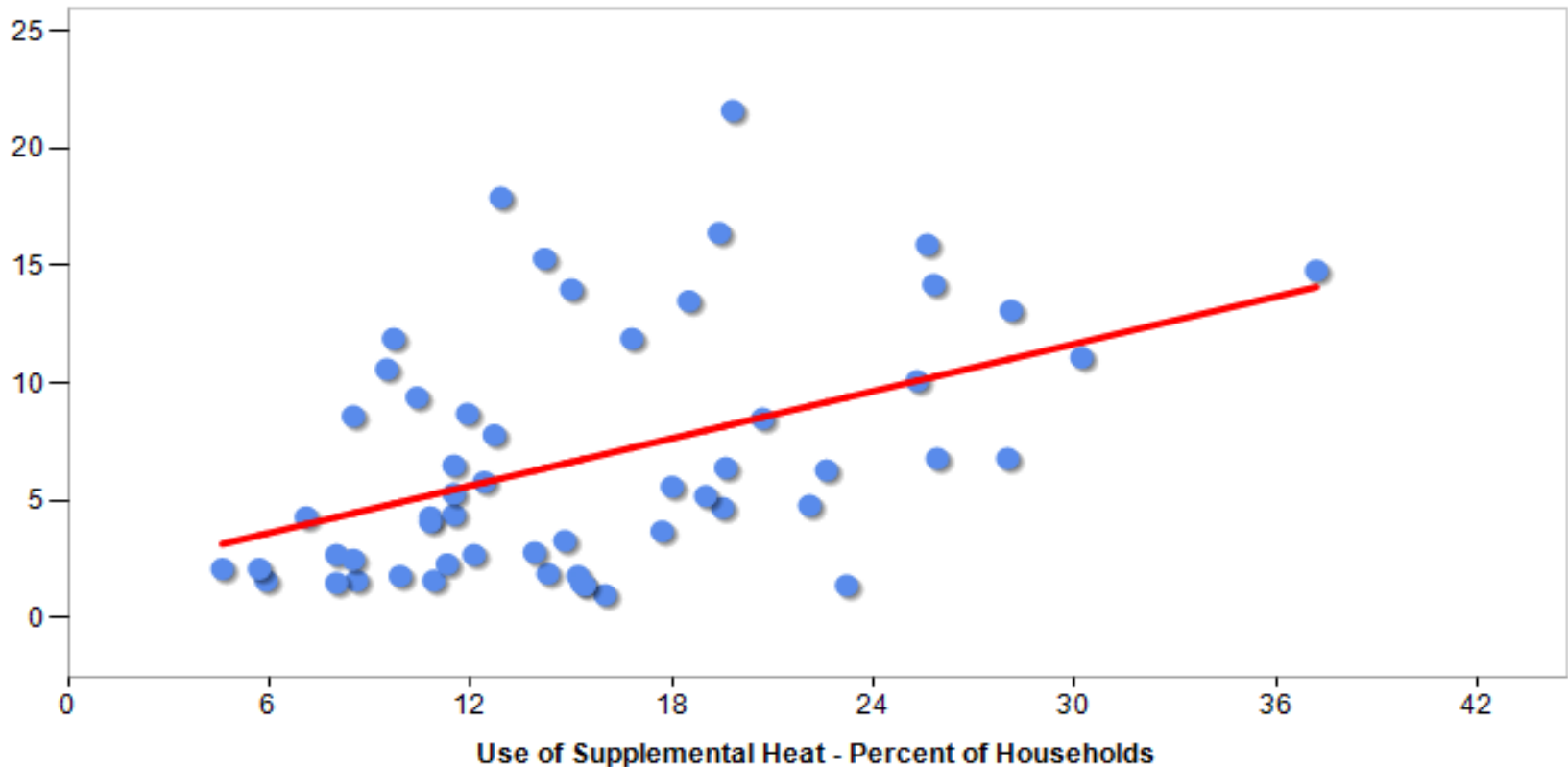
Source: NYC Housing & Vacancy Survey, 2008

Relying on Supplemental Heat is Associated with Greater Incidence of CO Elevations

— Regression line

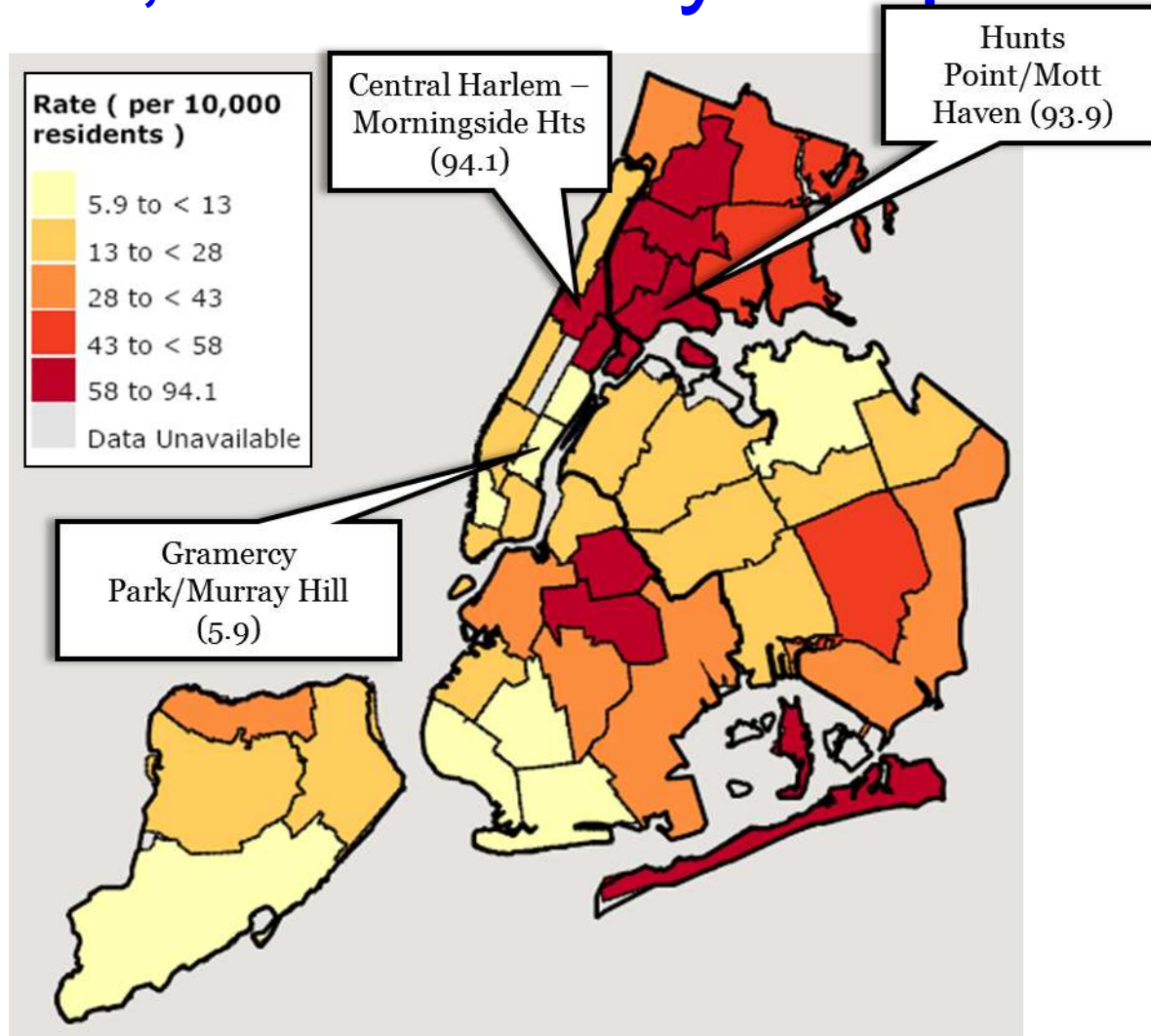
Slope: 0.34; 95% Confidence Limits: 0.15, 0.52; R-Squared Percent = 20%

Y axis: Carbon Monoxide Incidents - Rate (per 1,000 buildings)



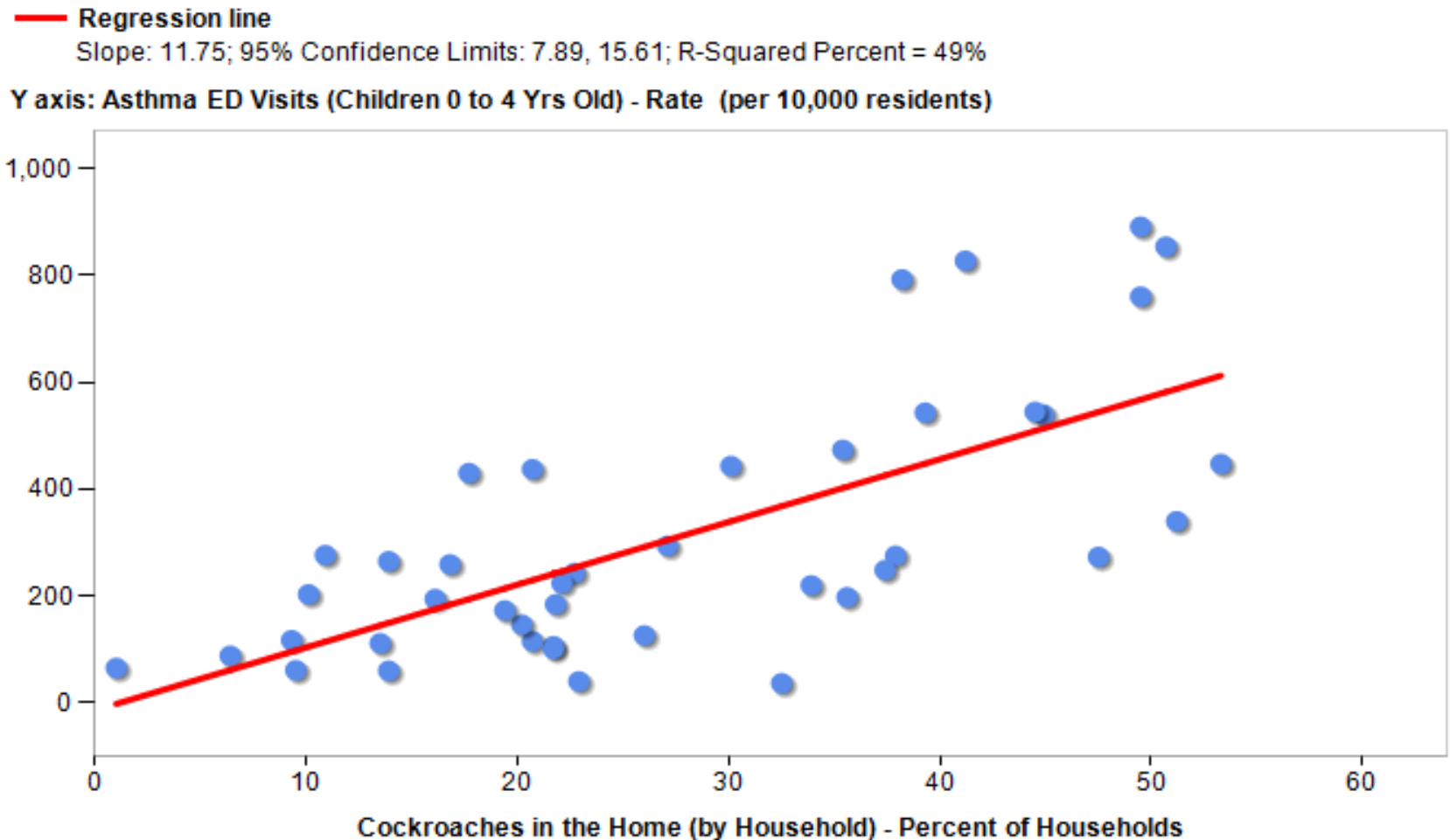
Source: NYC Housing & Vacancy Survey, 2008

Asthma; Still Widely Disparate



Asthma Hospitalizations (Children 5 to 14 years Old), By NYC Neighborhood, 2009; Source: NYC EPHT, 2009

Cockroaches Predict Asthma Emergency Visits



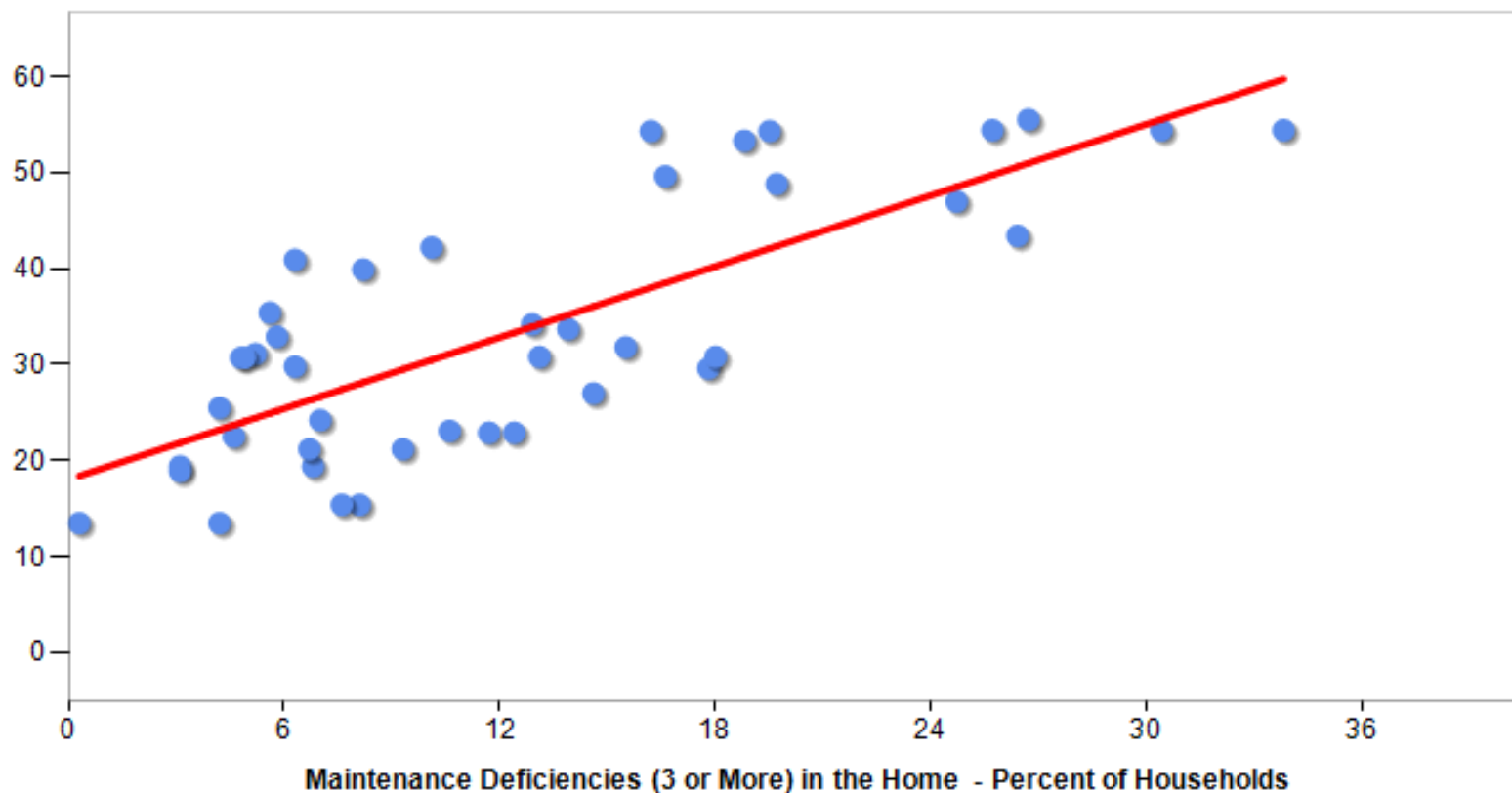
Source: NYC Housing & Vacancy Survey, 2008

Disrepair Leads to Unsafe Pesticide Use

— Regression line

Slope: 1.23; 95% Confidence Limits: 0.91, 1.56; R-Squared Percent = 60%

Y axis: Personal Use of Pesticide Sprays, Bombs, or Foggers - Percent of Households



Source: NYC Housing & Vacancy Survey, 2008

And Indiscriminate Pesticide Use Leads to Unsafe Exposures

These are not old issues....



Why Have We Been So Successful in Reducing Lead Poisoning?

- Local , federal, state regulations prohibiting use of lead in:
 - Residential paint
 - Gasoline
 - Canned goods and other consumer products
- Housing improvements, including window replacement
- Education and outreach
- Case identification drives intervention; early identification through screening

Unfortunate Features of Mold, Pest, and Disrepair

- More prevalent than peeling lead paint
- Limited reach of regulations and enforcement resources
- Affect children of all ages and adults
- Associated with chronic, rather than acute conditions
- Fragmented or marginal constituency
- Interventions don't necessarily last, and frequently recur



"The old pearly gates looked nice, but they were hell to maintain."

The Problems Restated

- Inadequate and inconsistent housing maintenance shifts costs to health care
 - Adversarial relationships among owners and tenants contribute to housing disrepair and impede solutions
 - Incentives are misaligned to promote ongoing maintenance and repair by both owners and tenants
 - An enforcement model is inadequate to address the extent, severity and disparity in the problems
-

Potential, Not Fully Realized

- Promoting safer, more effective pest control
 - Health Code (Article 151) mandating integrated pest control
 - Seeding safer pest management demonstration programs in lower income neighborhoods
- Mold Remediation
 - NYC's guidelines
 - Significant enforcement efforts
- HPD Enhanced Enforcement
- Medicaid Reimbursement Schemes for Home Repair
- Demonstration efforts not moving to scale

What Else is Needed

- Designing for ventilation, pest prevention and moisture control
- Leveraging and braiding categorical resources for broader purposes
 - Weatherization, pest control, general maintenance, home visitors
- Improved financial incentives for basic and continuous maintenance
- Capital funding for up-front higher costs
- Preventing over-leveraging of housing

What Else Can We Do?

- Continue work together as housing and tenant advocates, owner and landlord associations, public health, weatherization groups and environmental advocates
- Identify and measure our work against common goals, not just proximate objectives – making people healthier, making repairs last, reducing disparities in health and housing quality
- Collectively shop our ideas to government and private funders