

# Health and Housing in New York City

NYC Housing Conditions, Health Problems, and Data Resources

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# **What I Will Cover Today:**

- **Housing Quality Indicators**
- **Housing-related Health Outcomes**
- **Relationship between Housing and Health**
- **Data Sources on Housing and Health Indicators**

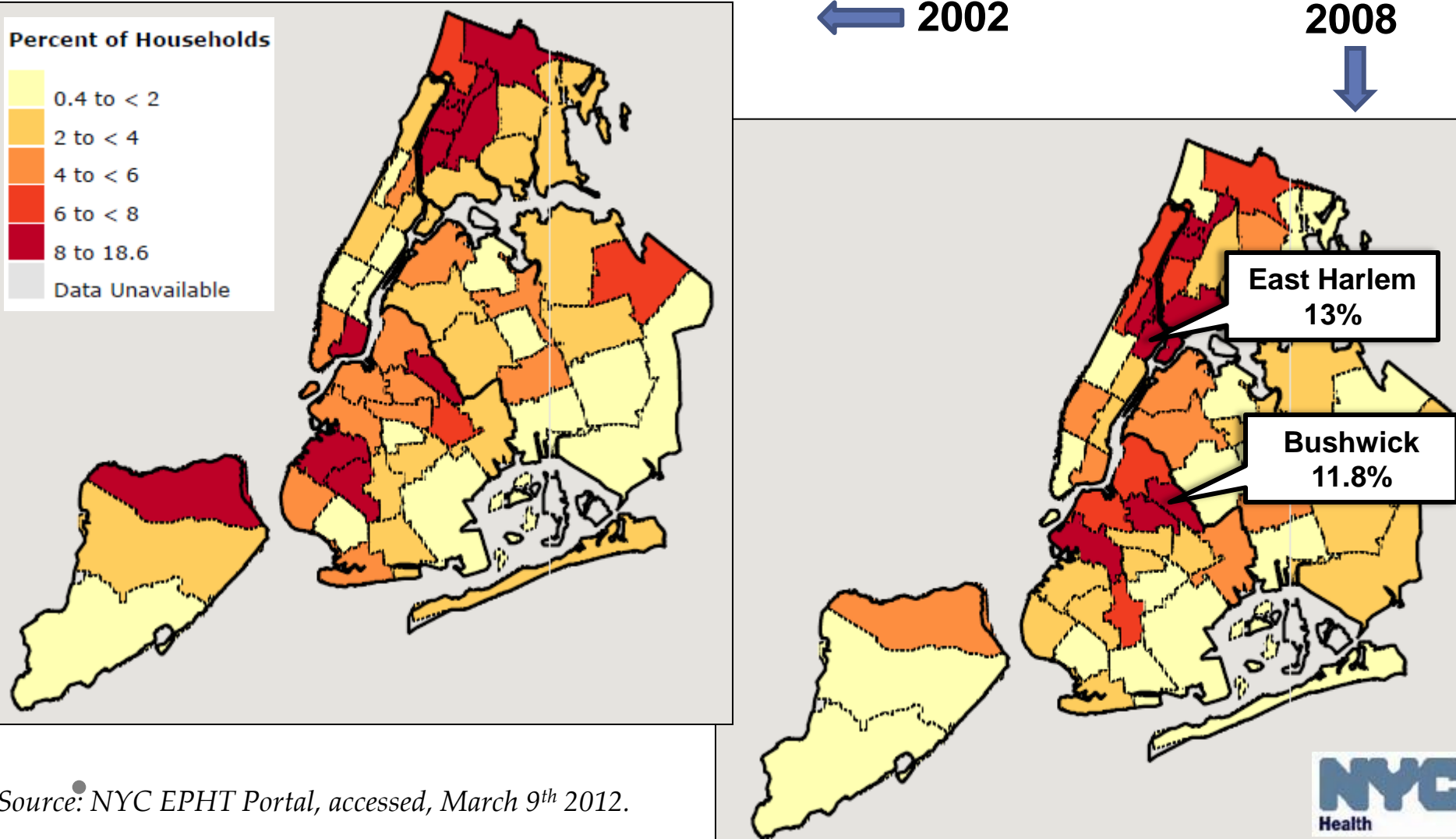
# Housing Quality and Health

- Inadequate and unhealthy housing contributes to chronic (e.g. asthma) and infectious diseases as well as to injuries and poisoning (e.g. lead poisoning)
- Here we define housing as inadequate and unhealthy if it has characteristics that may negatively affect health of its occupants, e.g.:
  - Dilapidated housing
  - Cracks and holes
  - Evidence of leaks
  - Maintenance deficiencies
  - Built pre-1950s
  - Evidence of cockroaches, mice or rats
  - Presence of second hand smoke

# Housing Quality Indicators

# Severity of Problems Vary by Neighborhood: Some Improvements, Some Deterioration, and Pockets of Persistence

## Housing Quality Indicator: Percentage of Dilapidated Buildings in the Neighborhood



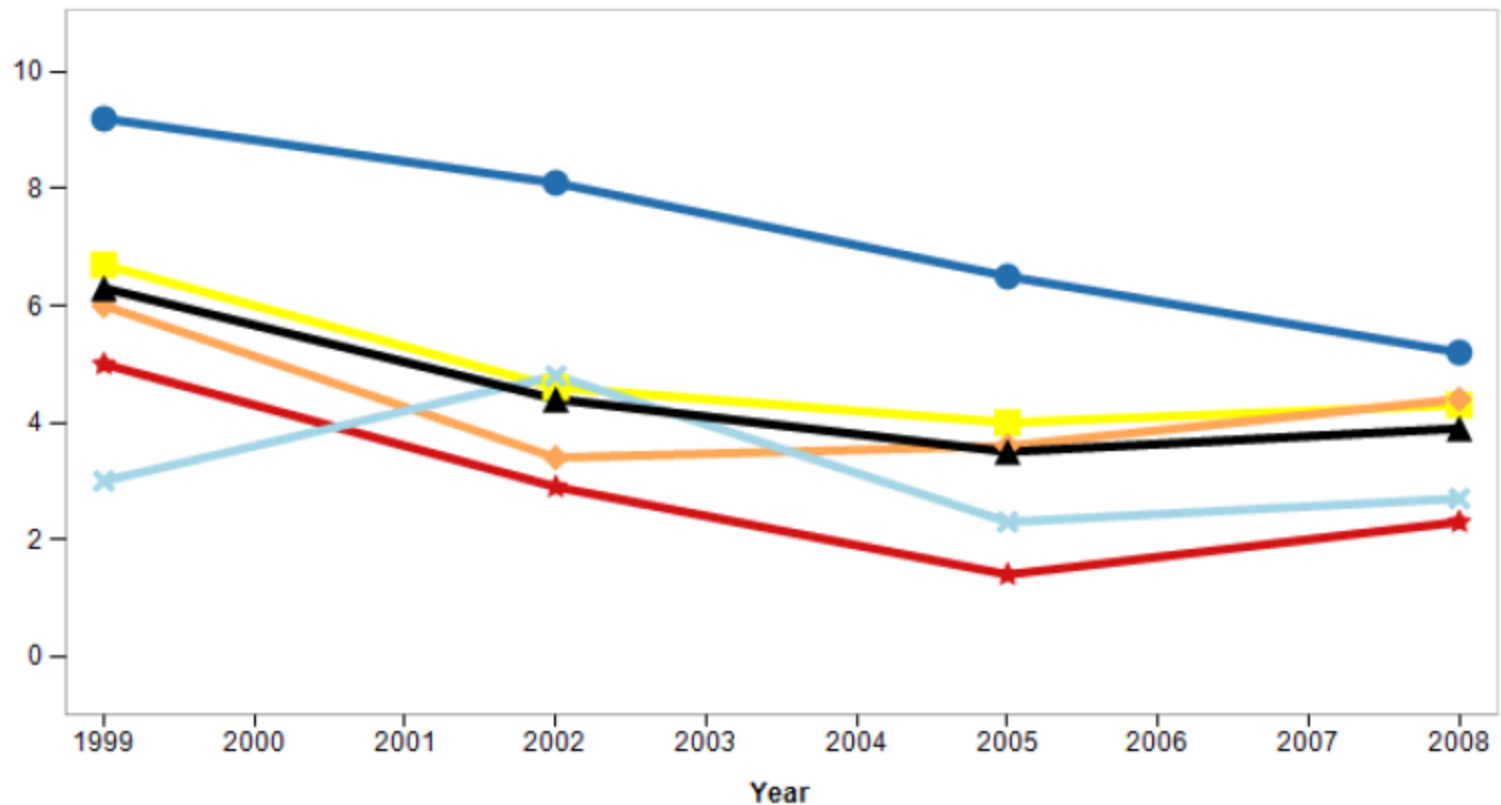
Source: NYC EPHT Portal, accessed, March 9<sup>th</sup> 2012.

# Change Over Time?

## Housing Quality Indicator: Percentage of Dilapidated Buildings by Borough by Year

Y axis: Percent of Households

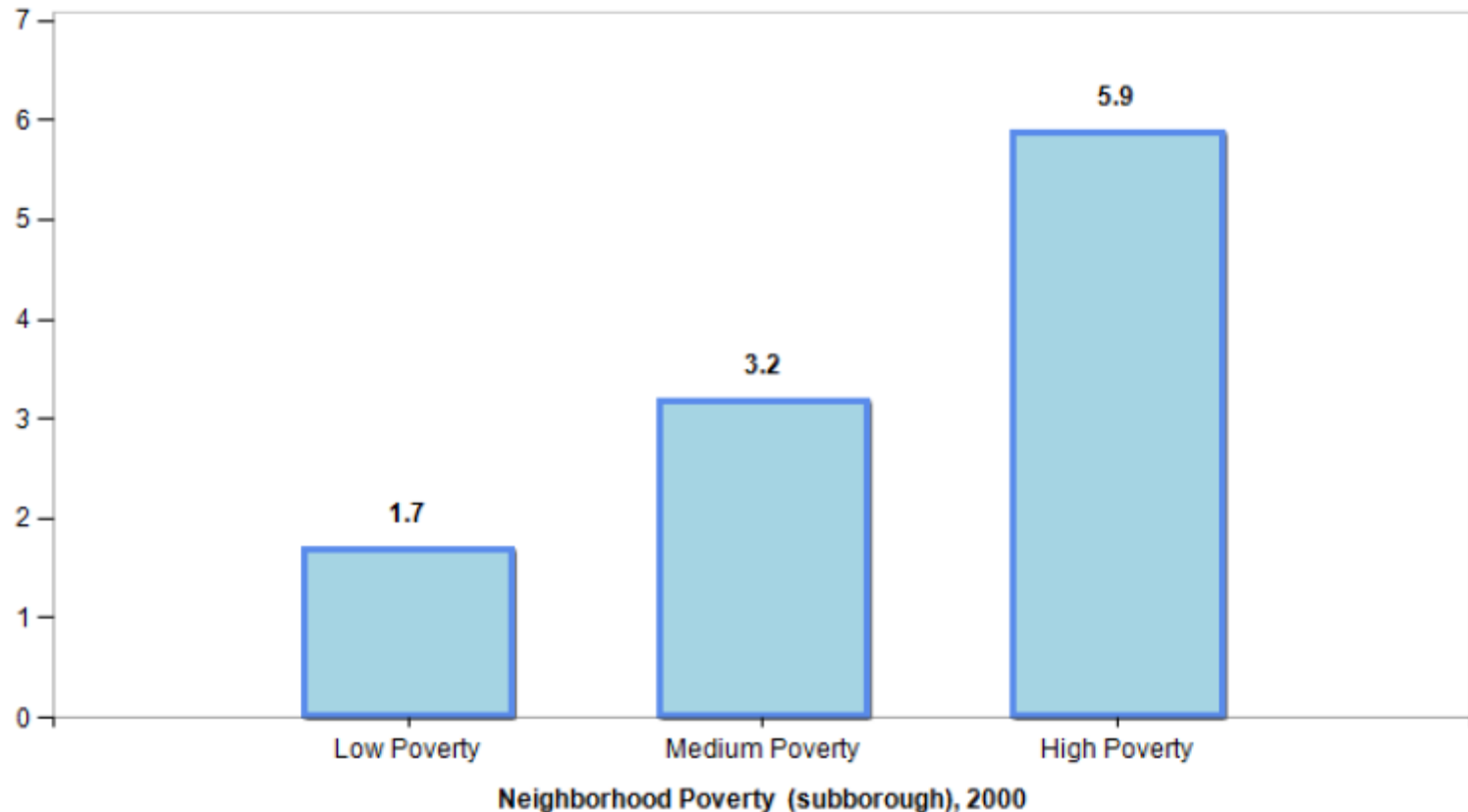
● Bronx   ■ Brooklyn   ◆ Manhattan   ★ Queens   ✕ Staten Island   ▲ New York City



# Disparities: High Poverty vs. Low Poverty Neighborhoods

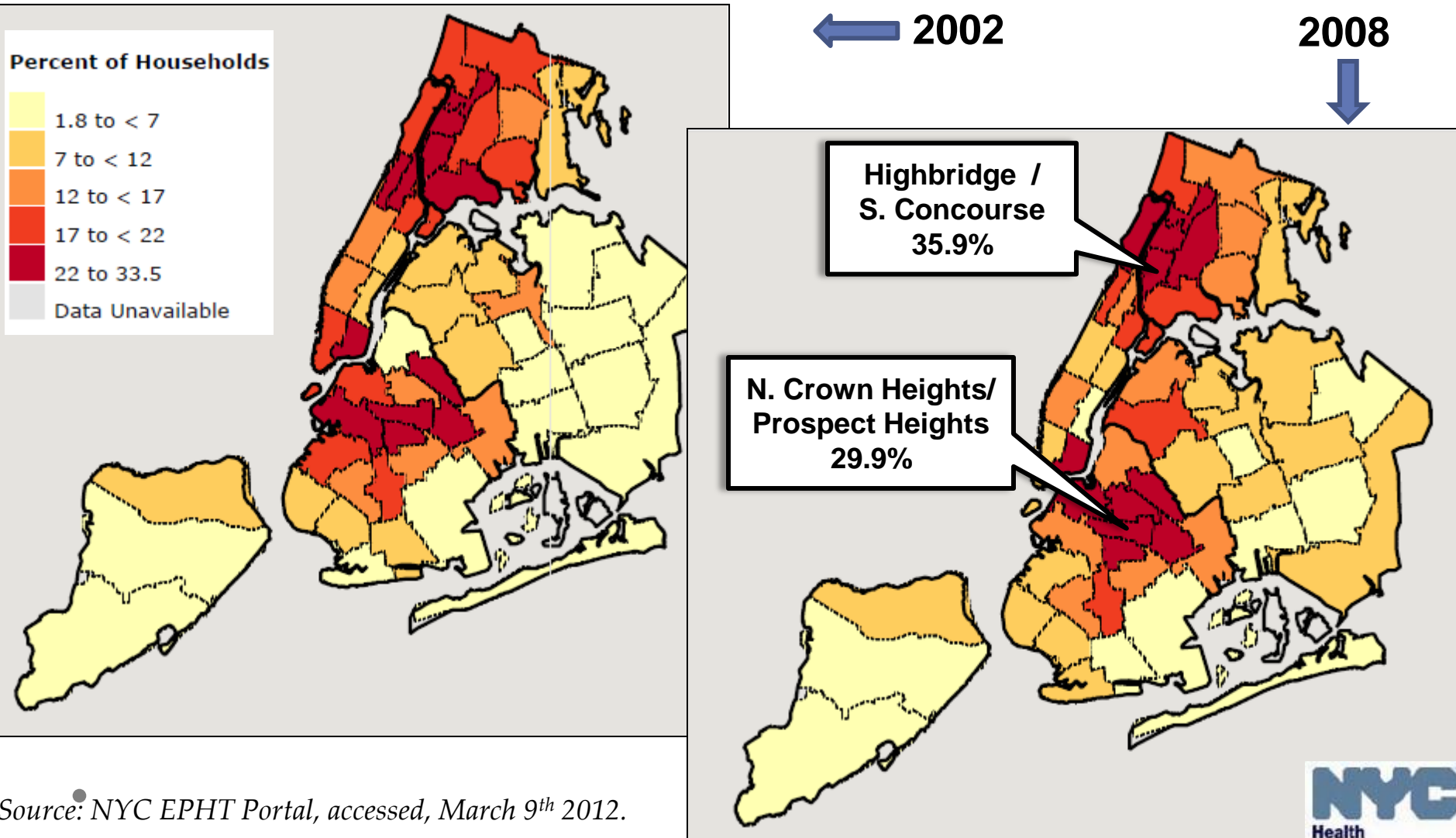
## Housing Quality Indicator: Percentage of Dilapidated Buildings by Neighborhood Poverty, 2008

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



# Severity of Problems Vary by Neighborhood: Some Improvements, Some Deterioration, and Pockets of Persistence

## Housing Quality Indicator: Percentage of Housing with Cracks and Holes



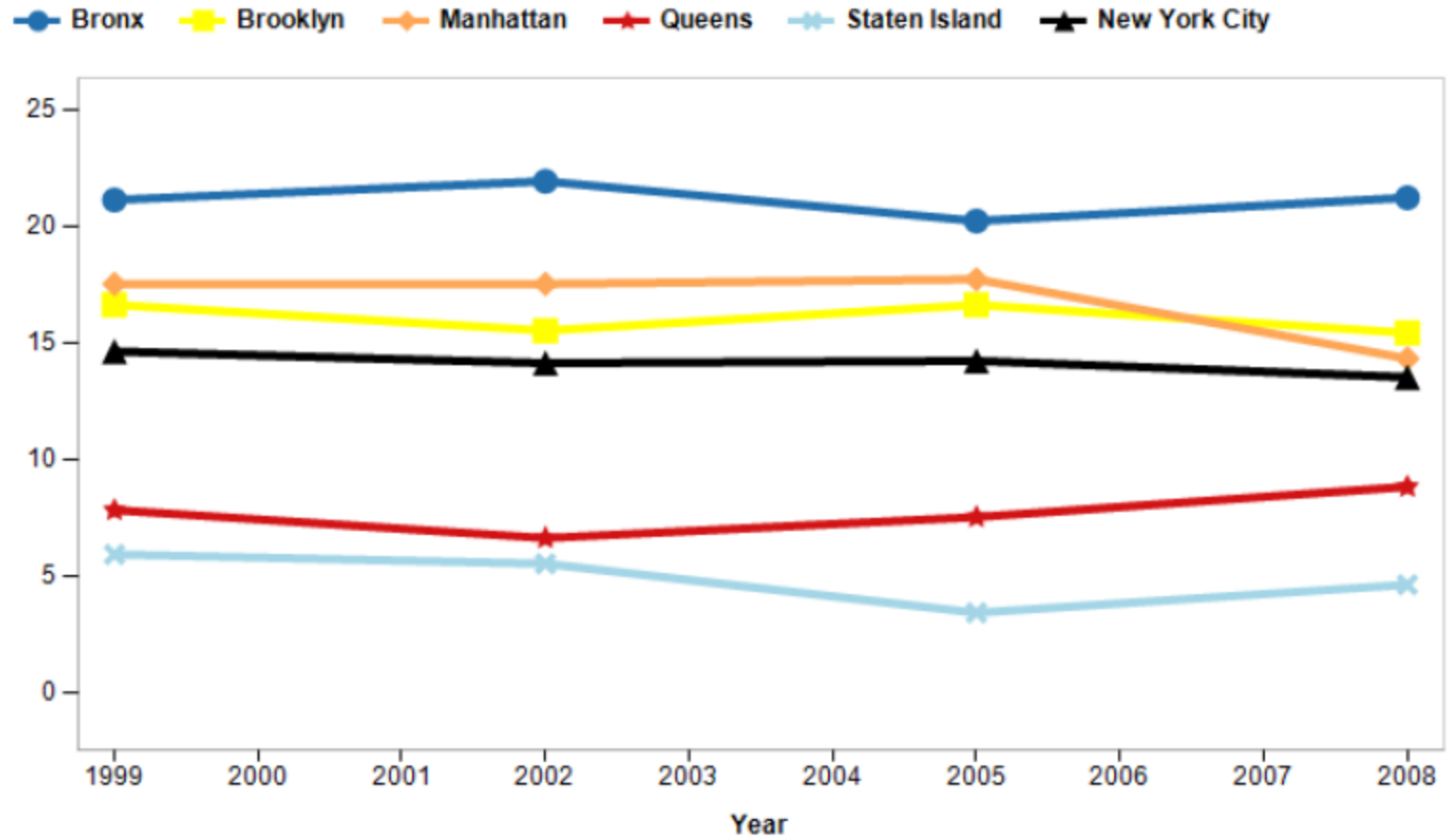
Source: NYC EPHT Portal, accessed, March 9<sup>th</sup> 2012.



# Change Over Time?

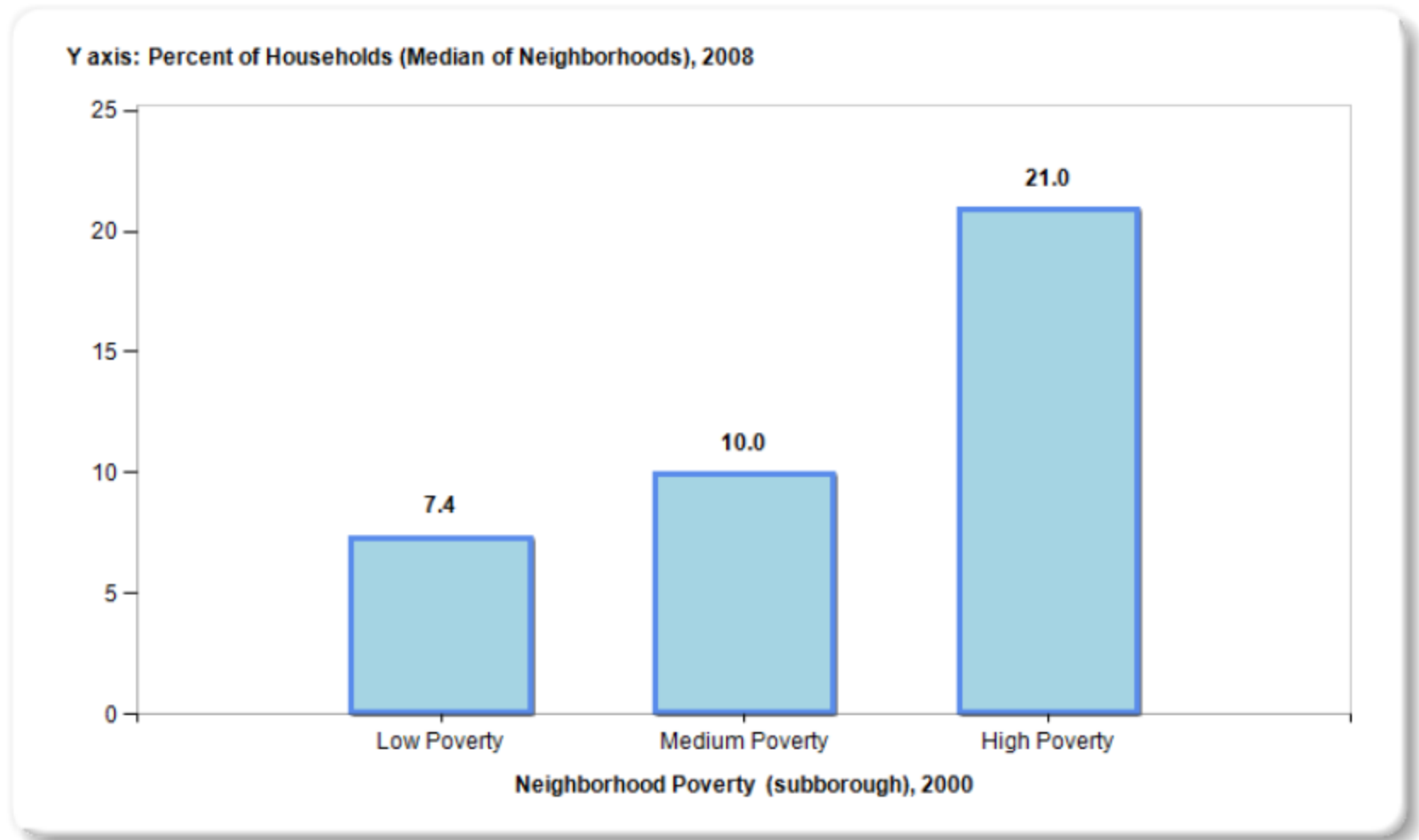
## Housing Quality Indicator: Percentage of Housing with Cracks and Holes by Borough by Year

Y axis: Percent of Households



# Disparities: High Poverty vs. Low Poverty Neighborhoods

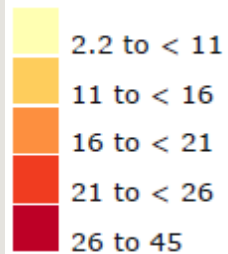
## Housing Quality Indicator: Percentage of Housing with Cracks and Holes by neighborhood Poverty, 2008



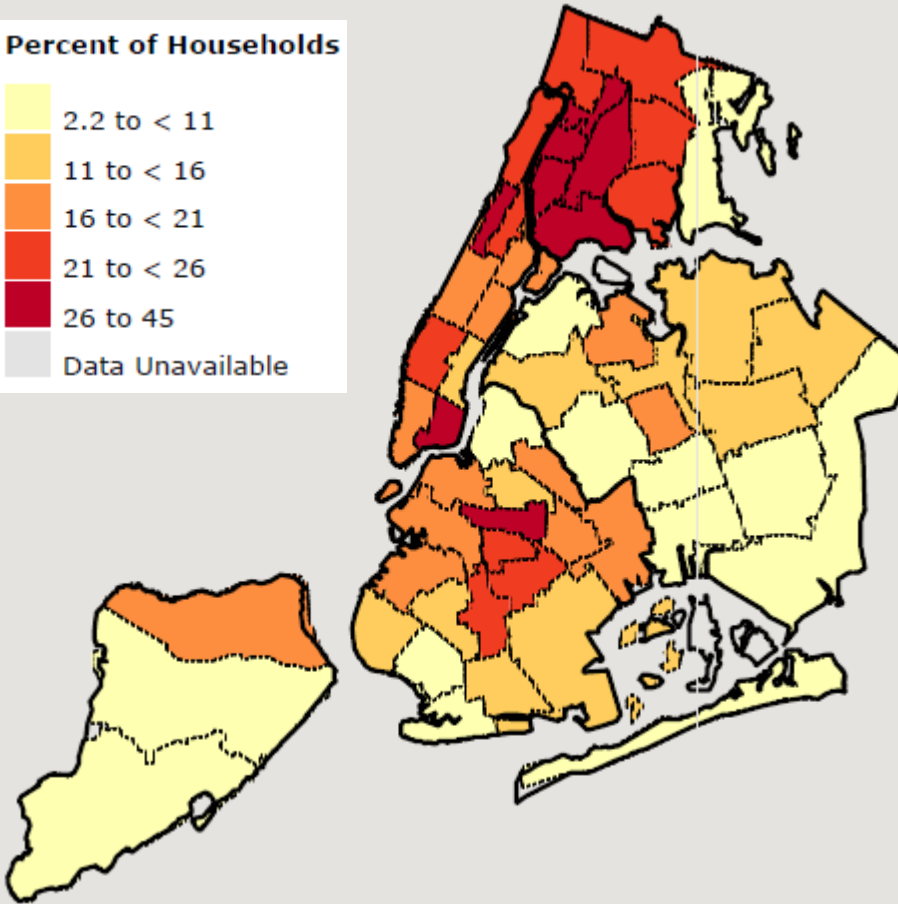
# Severity of Problems Vary by Neighborhood: Some Improvements, Some Deterioration, and Pockets of Persistence

## Housing Quality Indicator: Percentage of Households with Leaks from Outside the Unit

### Percent of Households



Data Unavailable

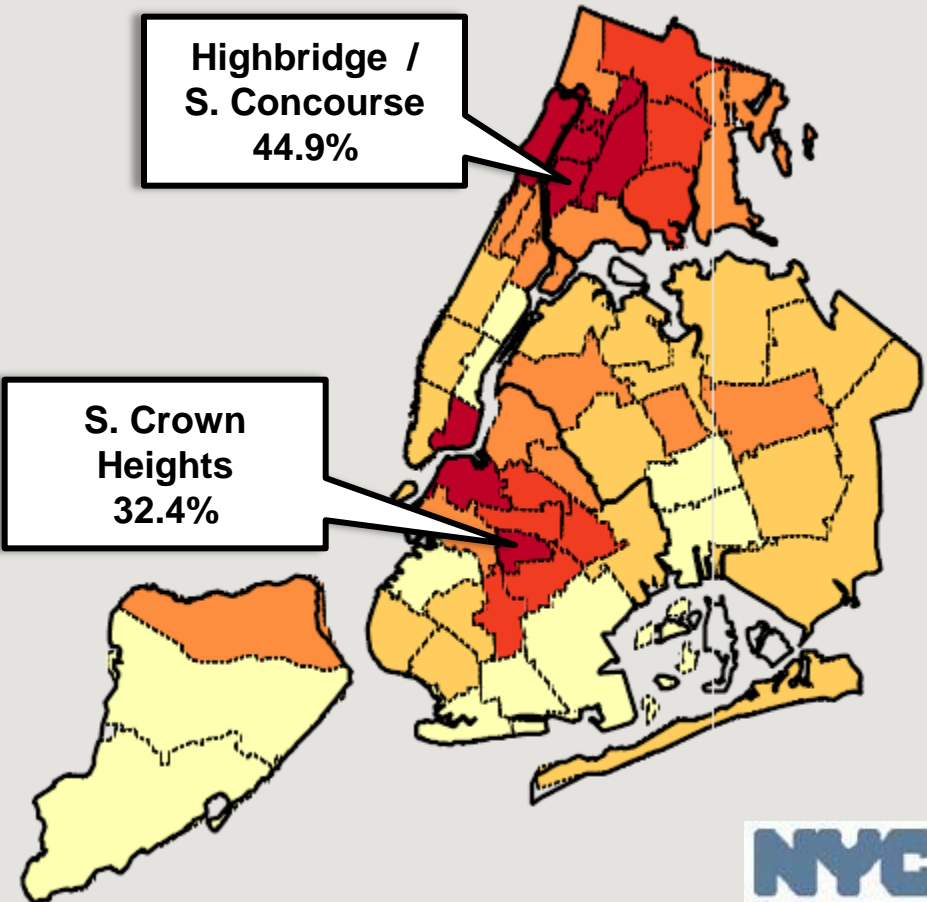


← 2002

2008 ↓

Highbridge /  
S. Concourse  
44.9%

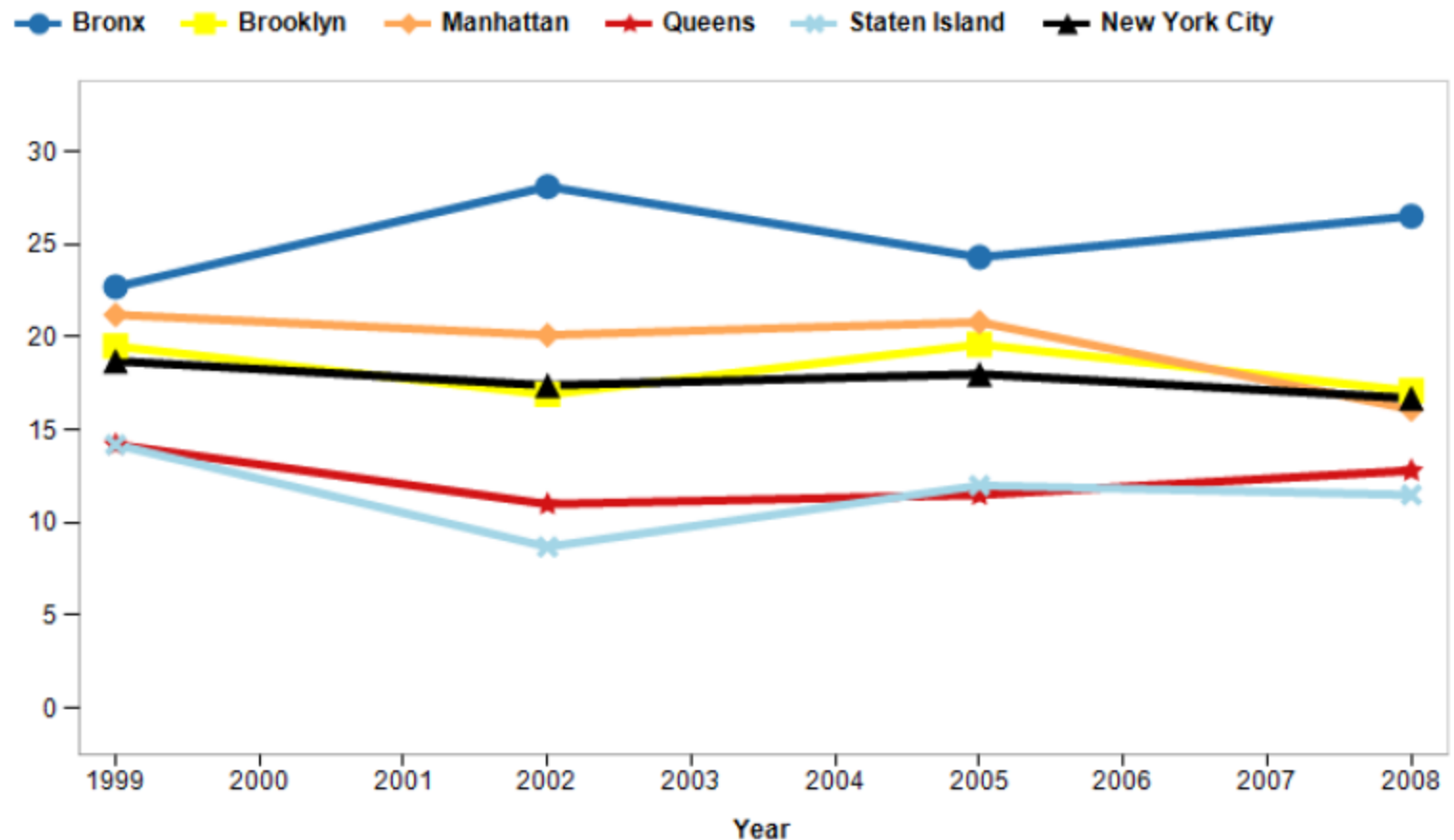
S. Crown  
Heights  
32.4%



# Change Over Time?

## Housing Quality Indicator: Percentage of Households with Leaks from Outside the Unit By Borough by Year

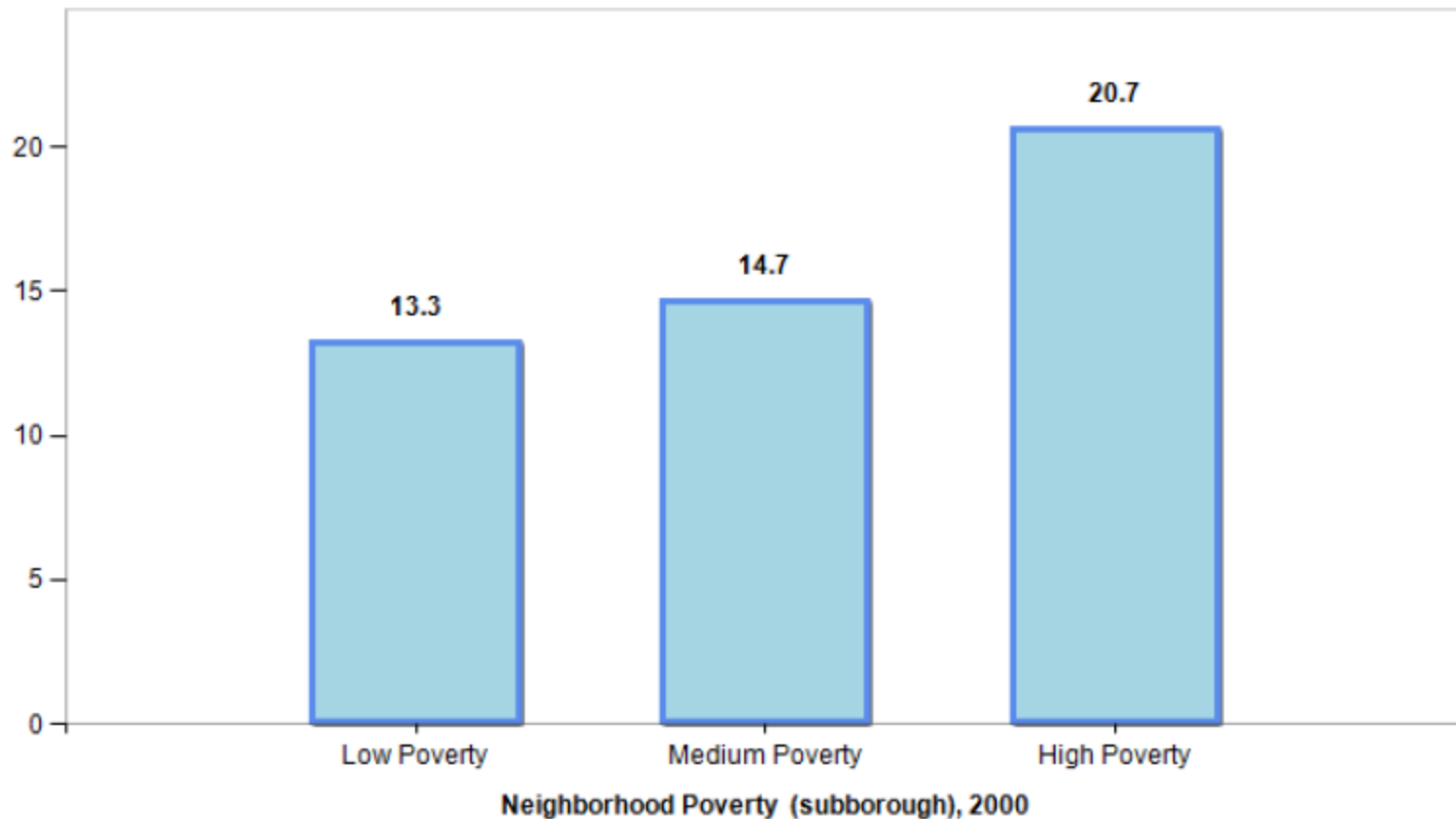
Y axis: Percent of Households



# Disparities: High Poverty vs. Low Poverty Neighborhoods

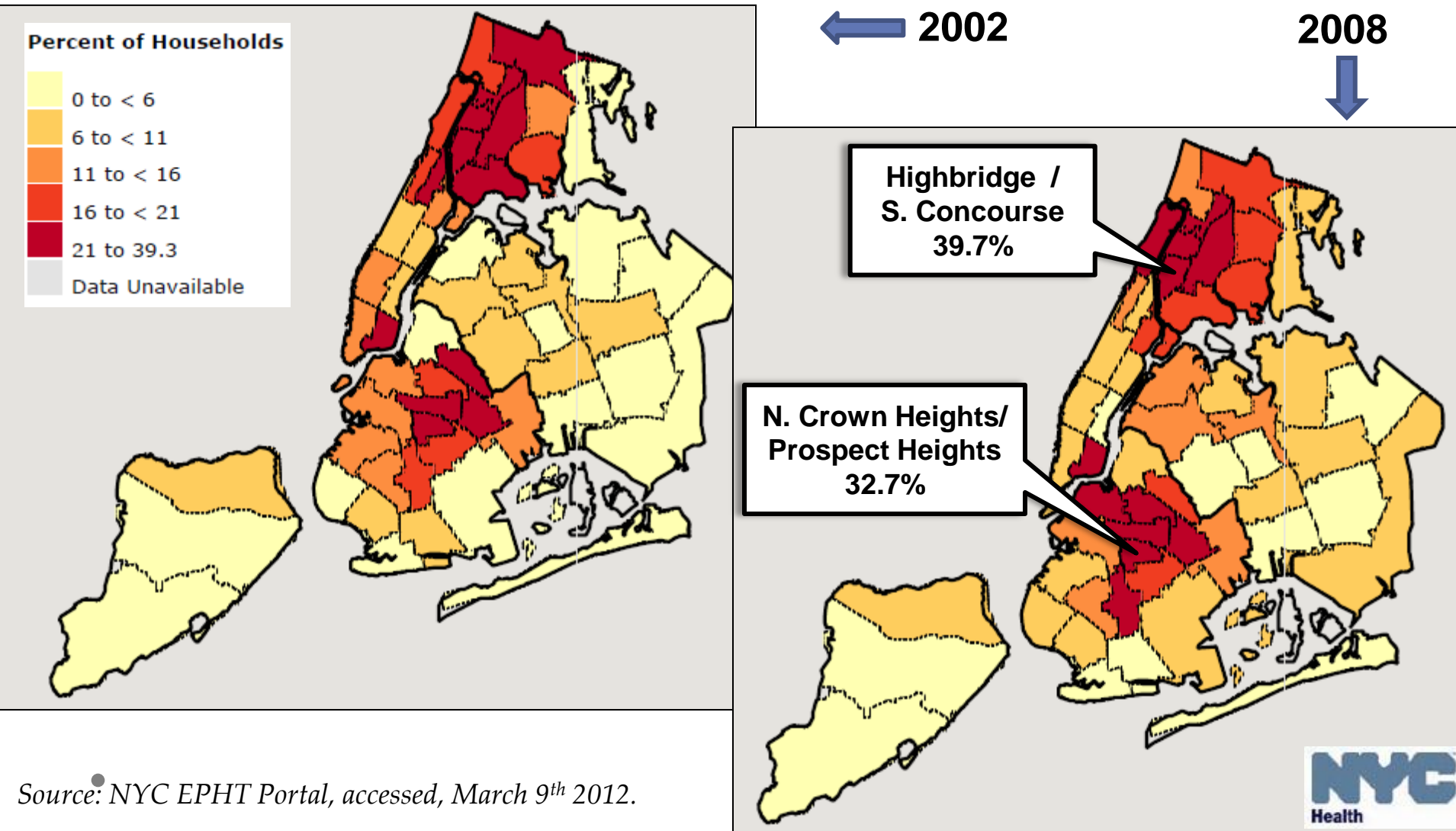
## Housing Quality Indicator: Percentage of Households with Leaks from Outside the Unit By Neighborhood Poverty, 2008

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



# Severity of Problems Vary by Neighborhood: Some Improvements, Some Deterioration, and Pockets of Persistence

**Housing Quality Indicator:**  
**Percentage of Households with 3 or More Maintenance Deficiencies**

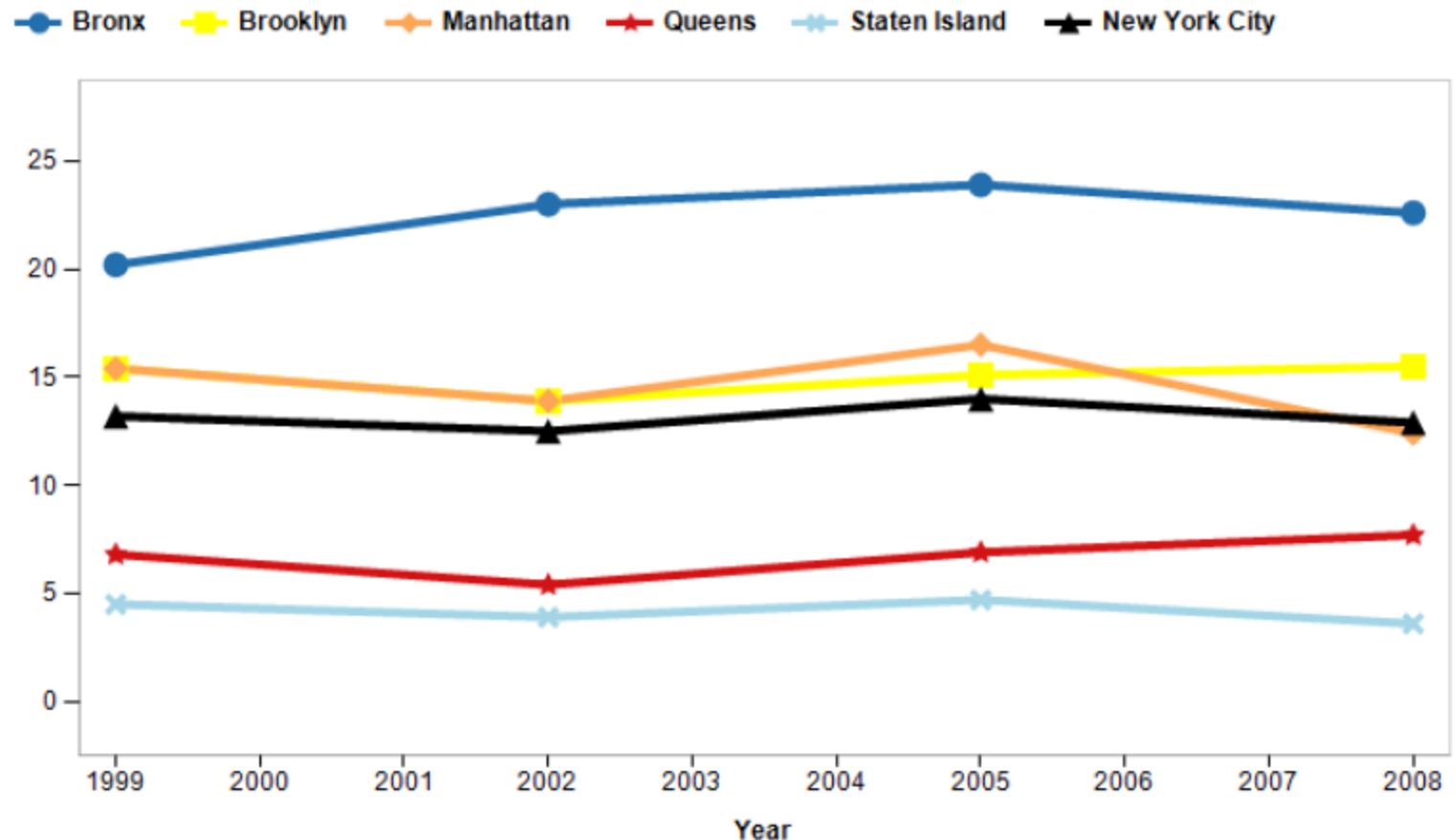


Source: NYC EPHT Portal, accessed, March 9<sup>th</sup> 2012.

# Change Over Time?

## Housing Quality Indicator: Percentage of Households with 3 or More Maintenance Deficiencies By Borough by Year

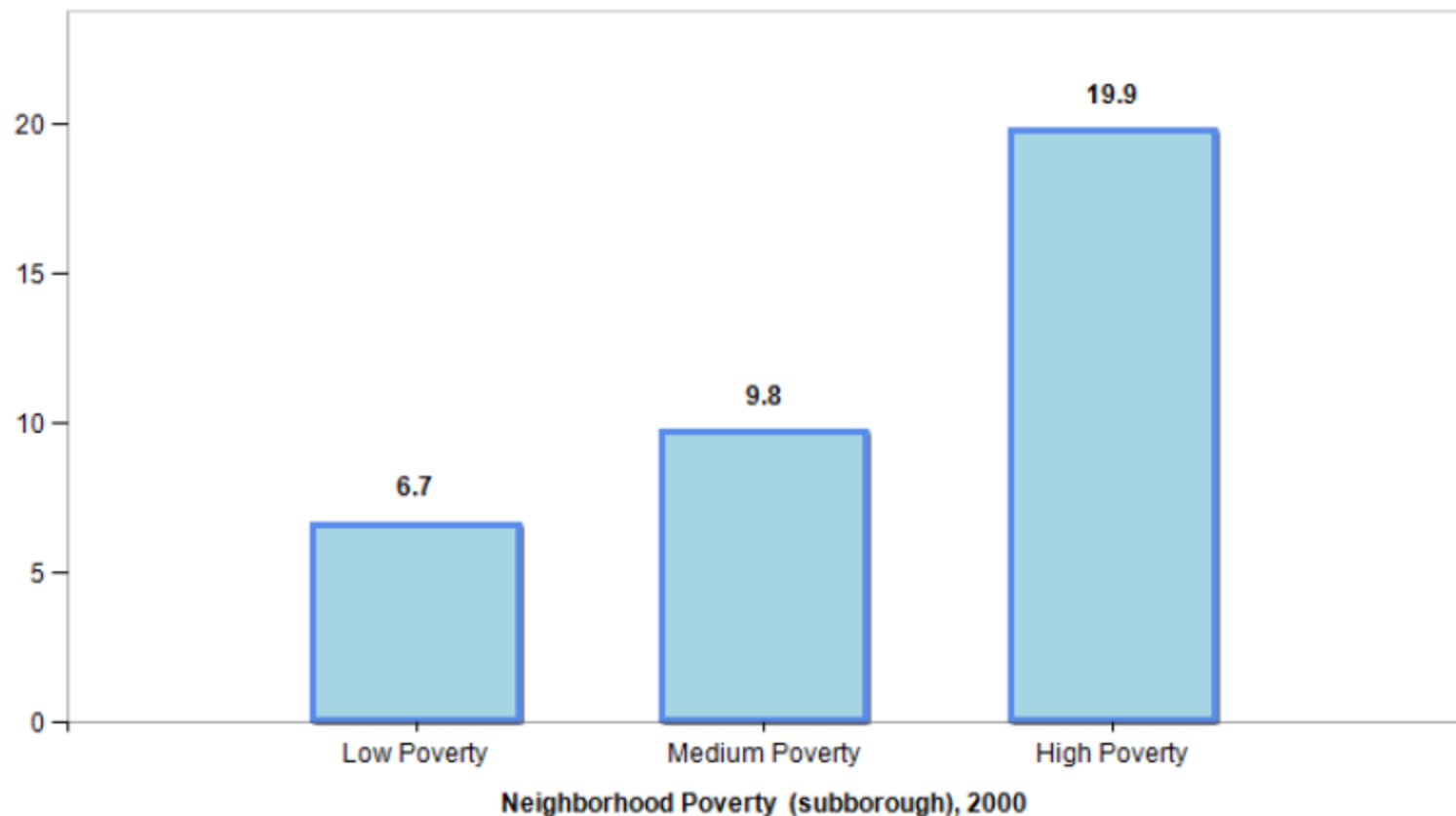
Y axis: Percent of Households



# Disparities: High Poverty vs. Low Poverty Neighborhoods

## Housing Quality Indicator: Percentage of Households with 3 or More Maintenance Deficiencies By Neighborhood Poverty, 2008

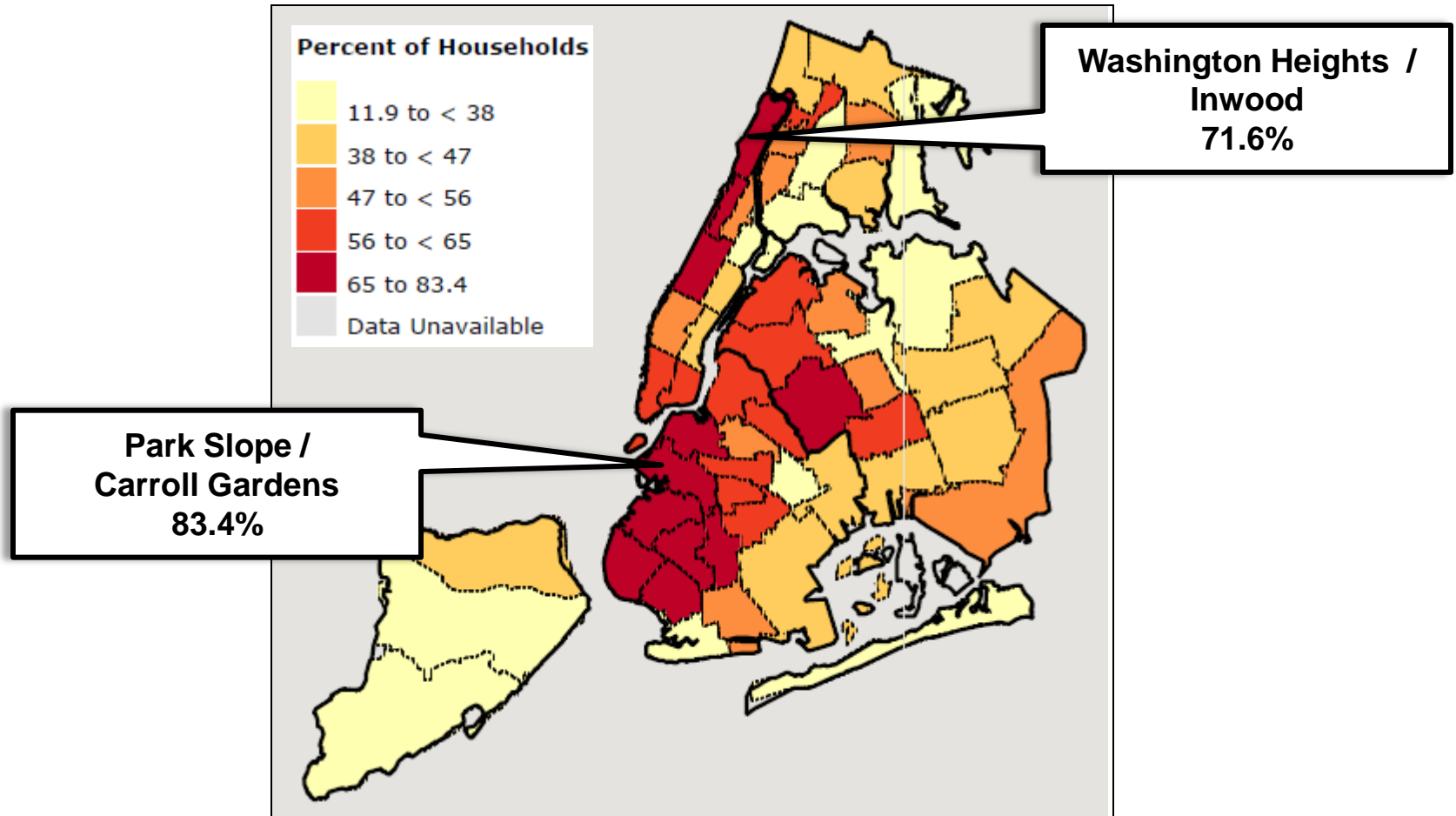
Y axis: Percent of Households (Median of Neighborhoods), 2008





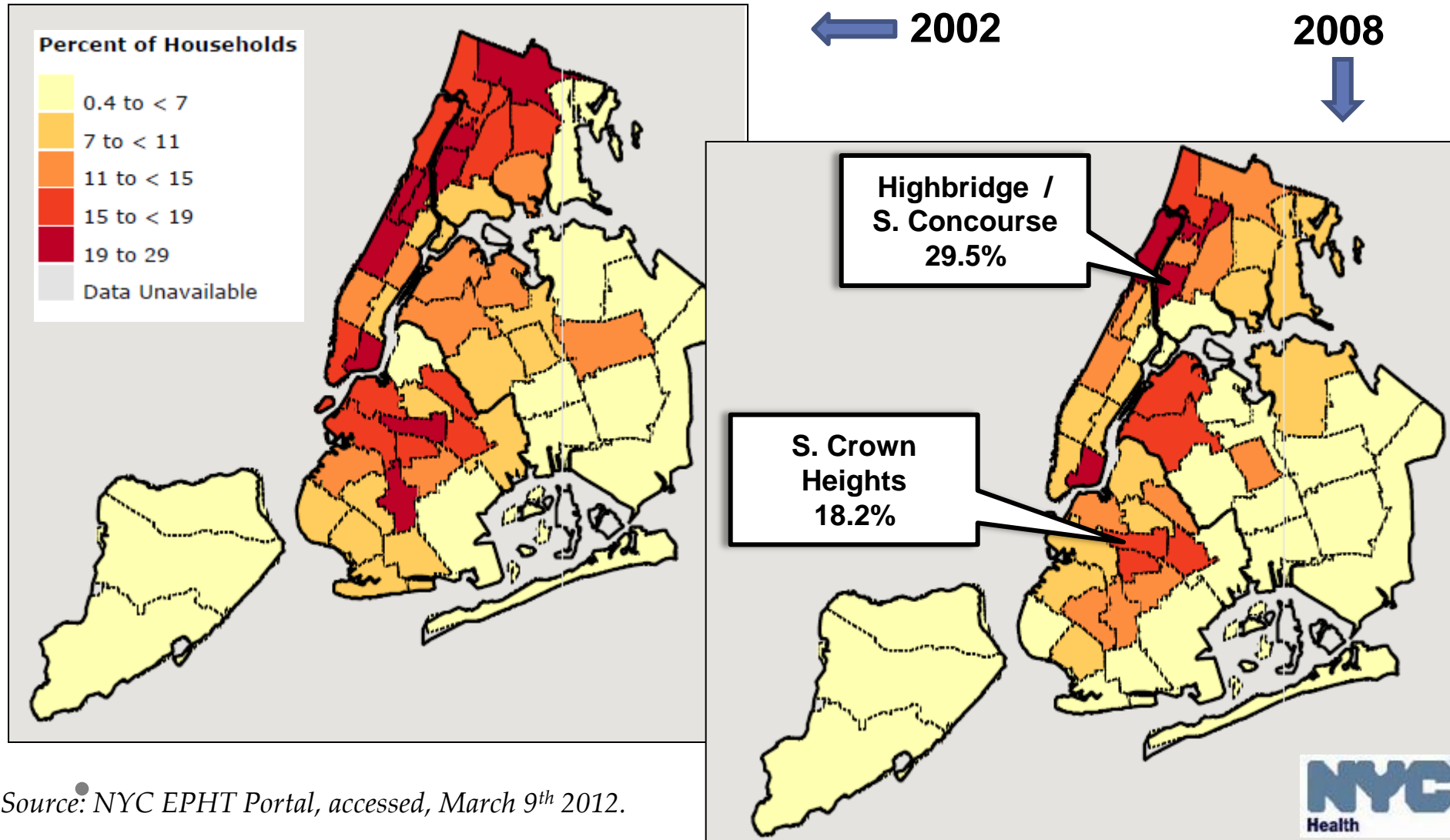
# Severity of Problems Vary by Neighborhood

## Housing Quality Indicator: Percentage of Pre-1950 Housing, 2000



# Severity of Problems Vary by Neighborhood: Some Improvements, Some Deterioration, and Pockets of Persistence

## Housing Quality Indicator: Percentage of Households with Peeling Paint in Pre 1960 Building



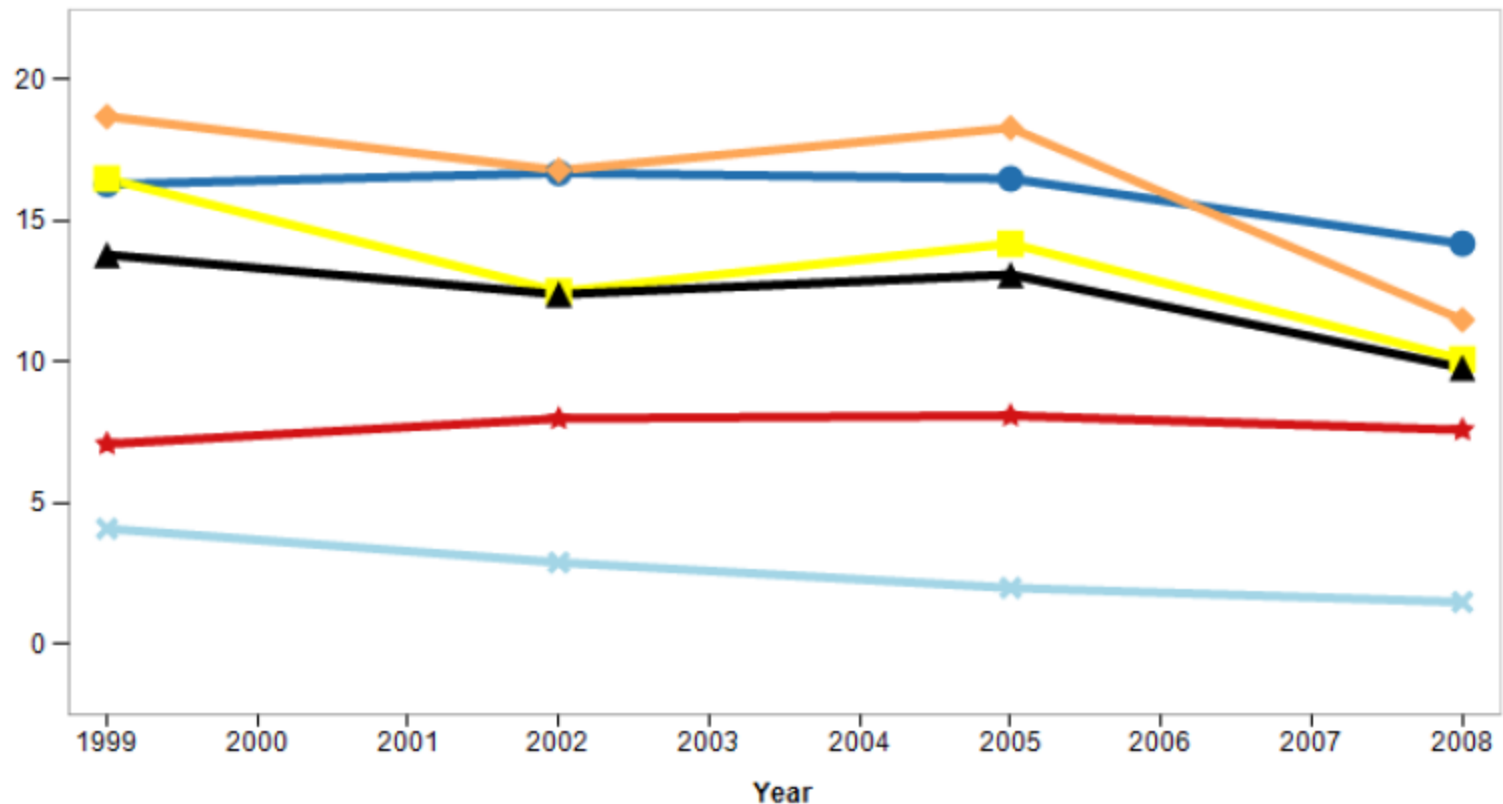
Source: NYC EPHT Portal, accessed, March 9<sup>th</sup> 2012.

# Change Over Time?

## Housing Quality Indicator: Percentage of Households with Peeling Paint in Pre 1960 Building By Borough by Year

Y axis: Percent of Households

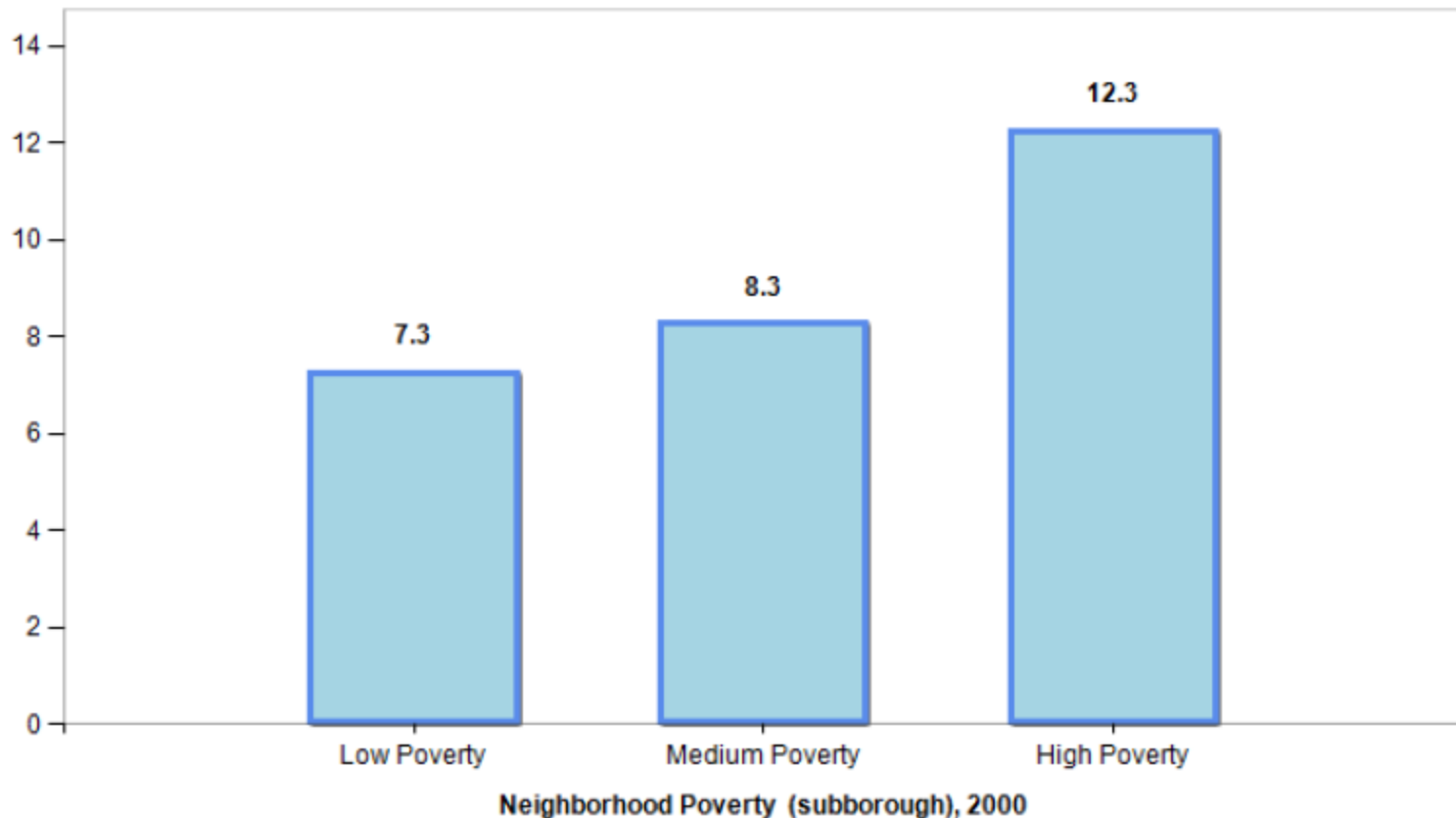
● Bronx    ■ Brooklyn    ◆ Manhattan    ★ Queens    × Staten Island    ▲ New York City



# Disparities: High Poverty vs. Low Poverty Neighborhoods

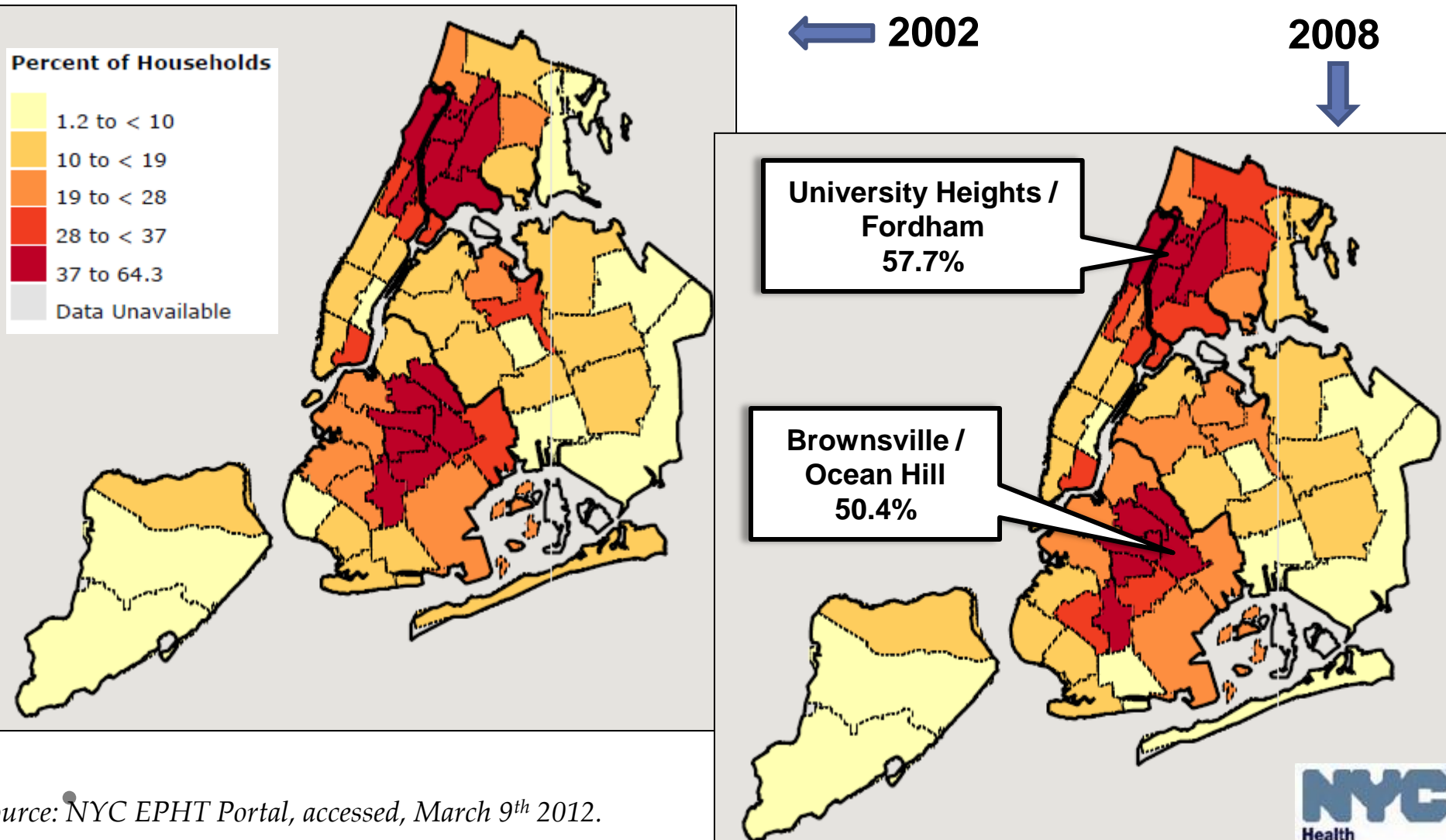
## Housing Quality Indicator: Percentage of Households with Peeling Paint in Pre 1960 Building By neighborhood Poverty, 2008

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



# Severity of Problems Vary by Neighborhood: Some Improvements, Some Deterioration, and Pockets of Persistence

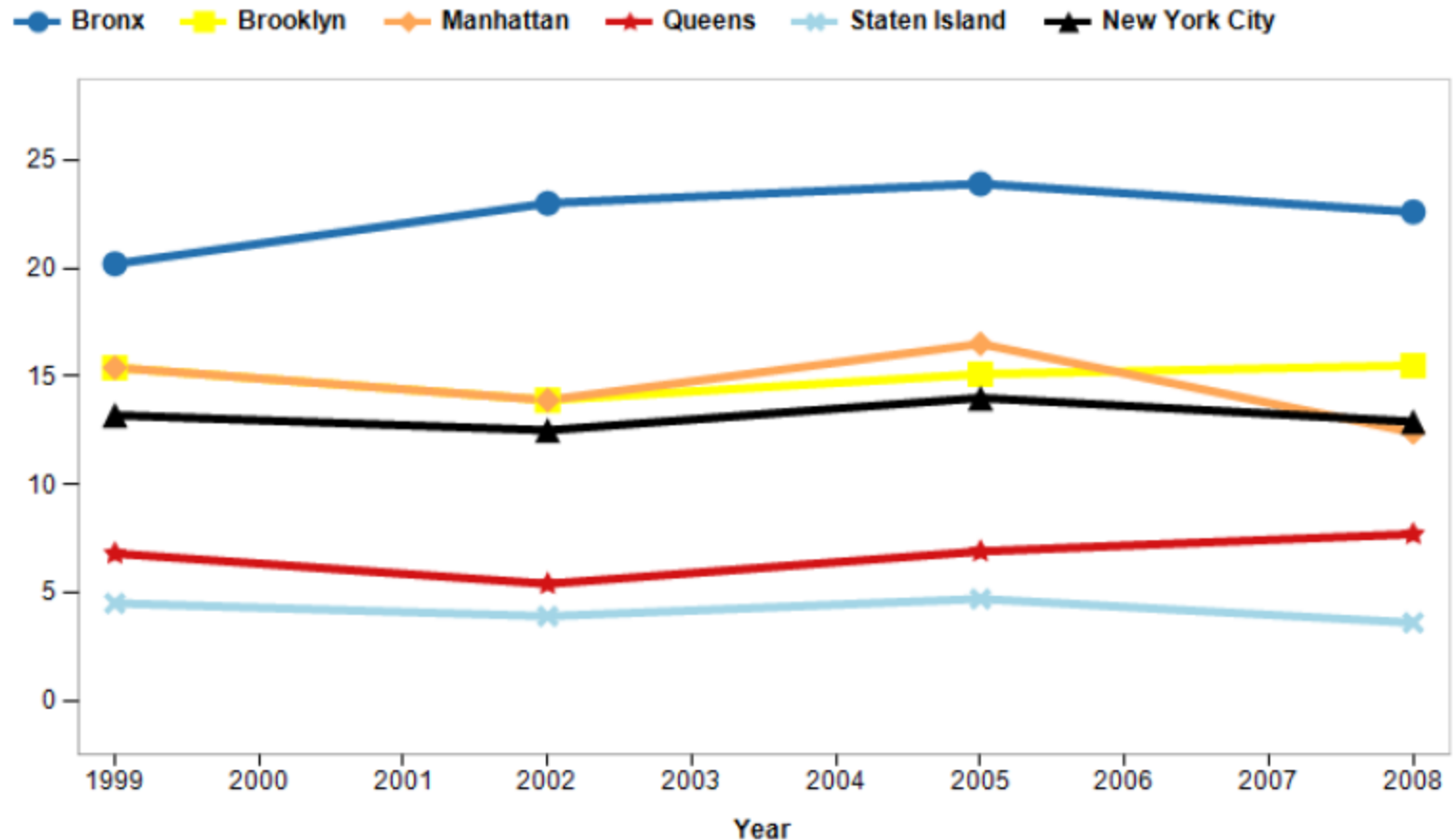
## Housing Quality Indicator: Percentage of Households Reporting Mice or Rats in their Building



# Change Over Time?

## Housing Quality Indicator: Percentage of Households Reporting Mice or Rats in their Building By Borough by Year

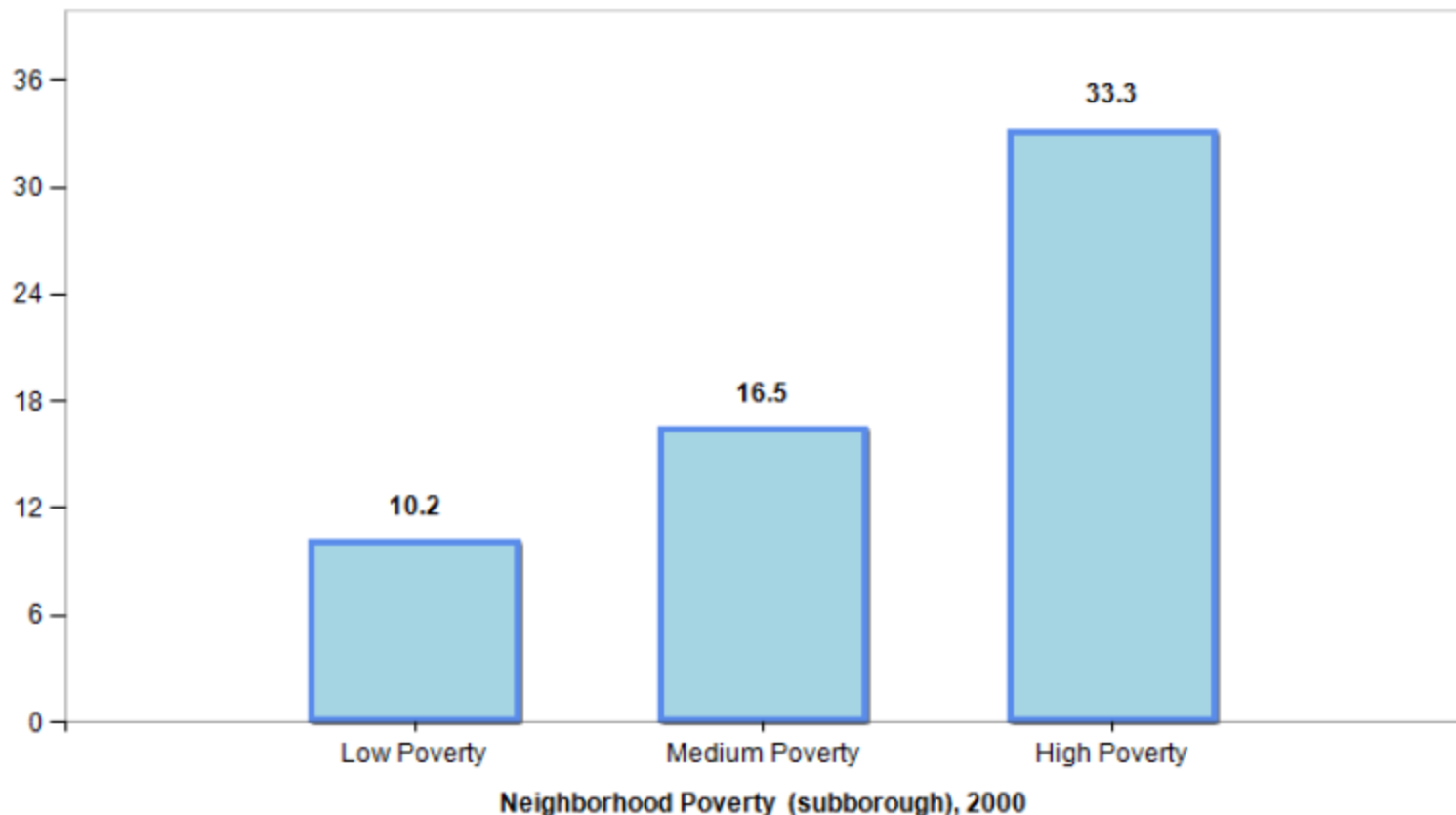
Y axis: Percent of Households



# Disparities: High Poverty vs. Low Poverty Neighborhoods

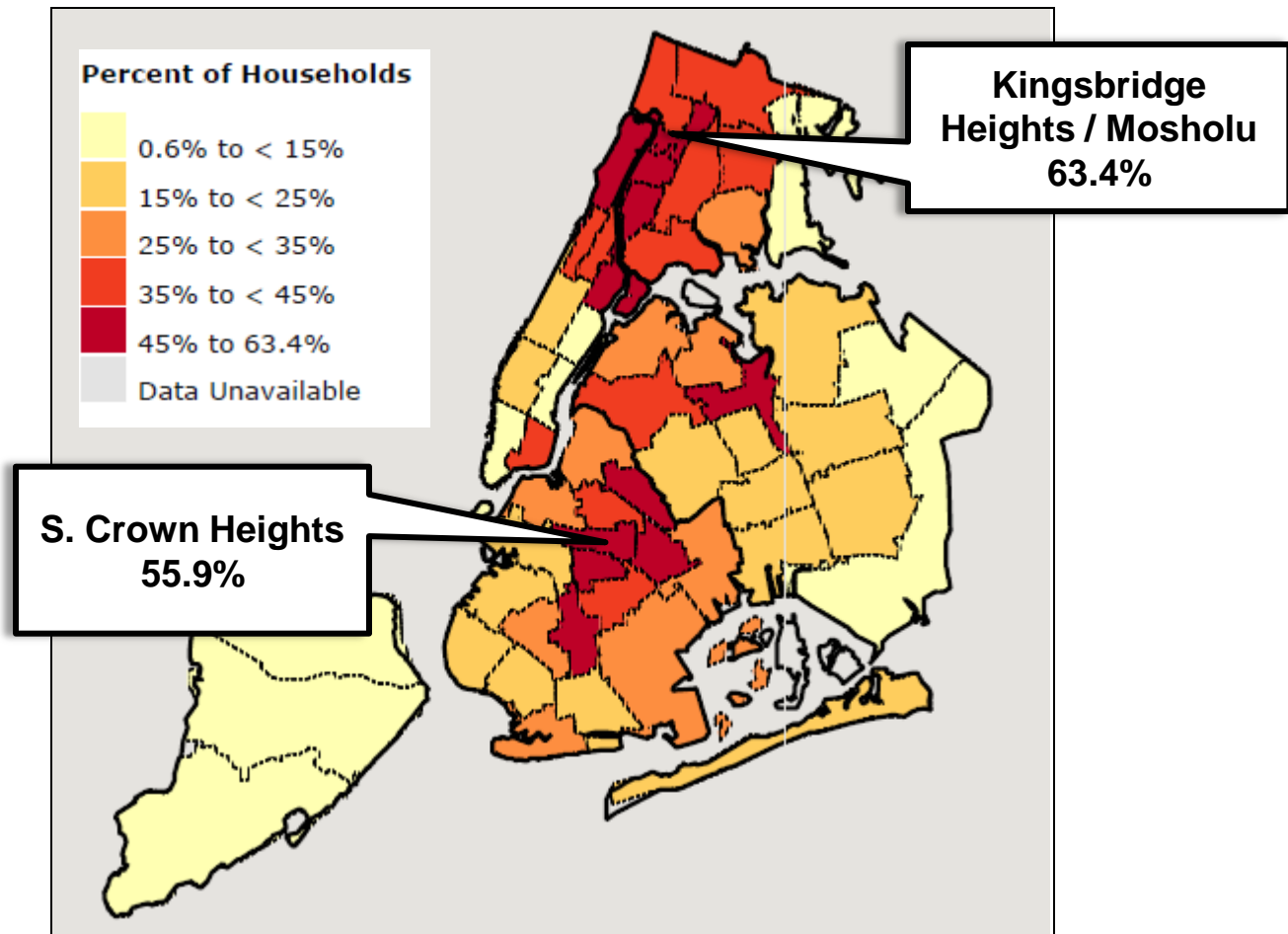
## Housing Quality Indicator: Percentage of Households Reporting Mice or Rats in their Building By neighborhood Poverty, 2008

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



# Severity of Problems Vary by Neighborhood

## Housing Quality Indicator: Percentage of Households Reporting Seeing Cockroaches Daily, 2008

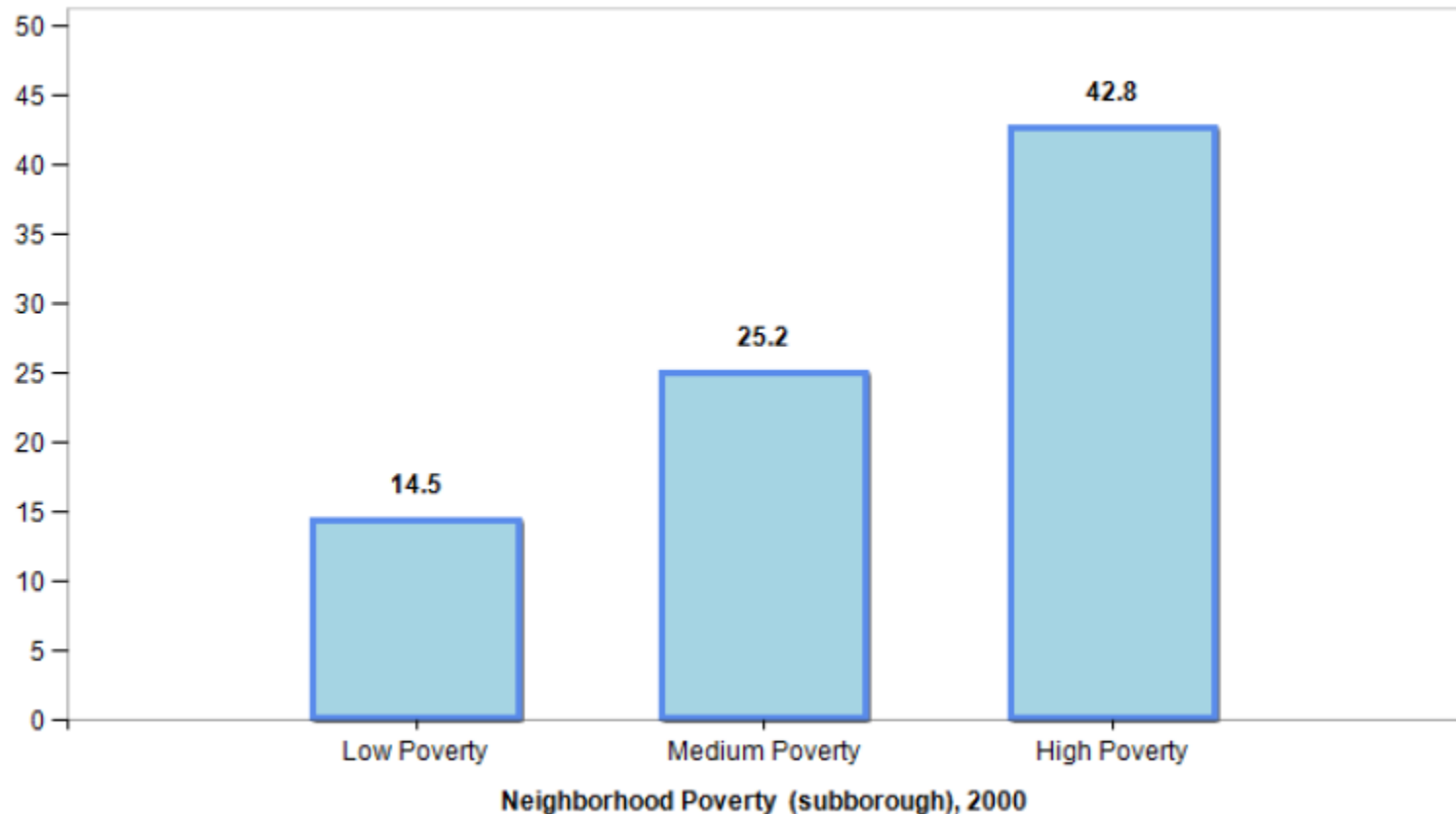




# Disparities: High Poverty vs. Low Poverty Neighborhoods

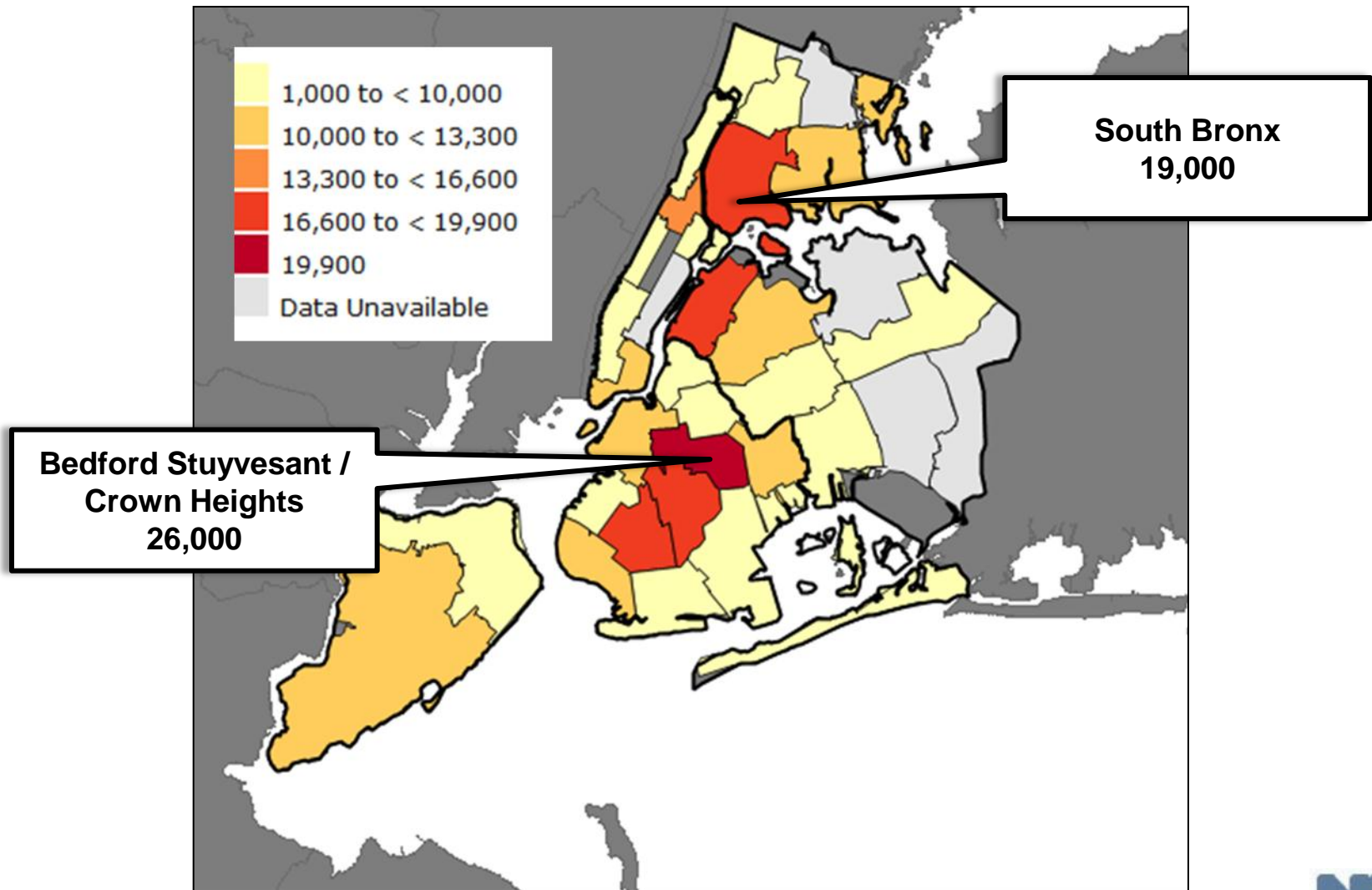
## Housing Quality Indicator: Percentage of Households Reporting Seeing Cockroaches Daily by Neighborhood Poverty, 2008

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



# Severity of Problems Vary by Neighborhood

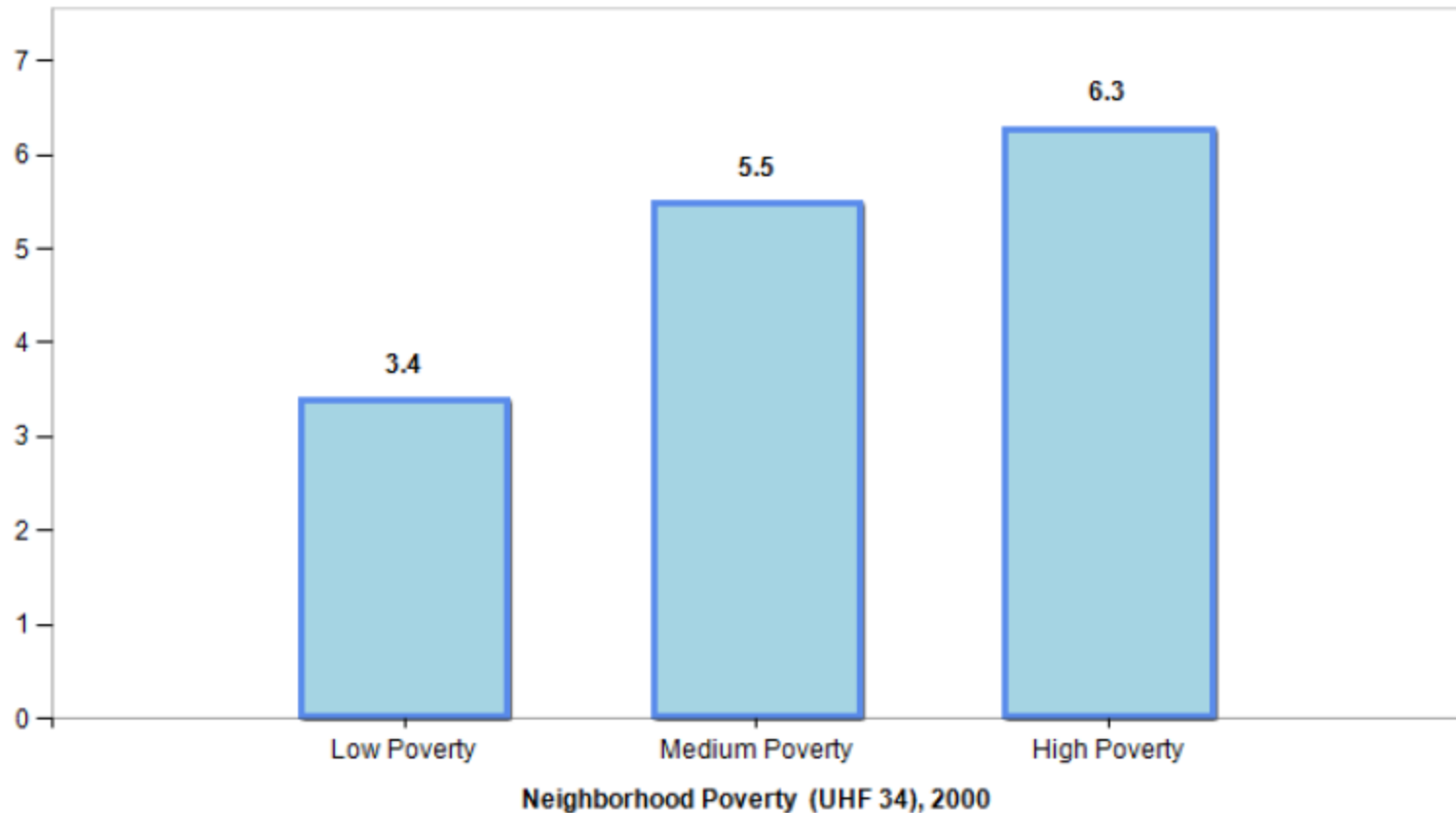
**Housing Quality Indicator:  
Number of Adults around Secondhand Smoke at Home (UHF34), 2009**



# Disparities: High Poverty vs. Low Poverty Neighborhoods

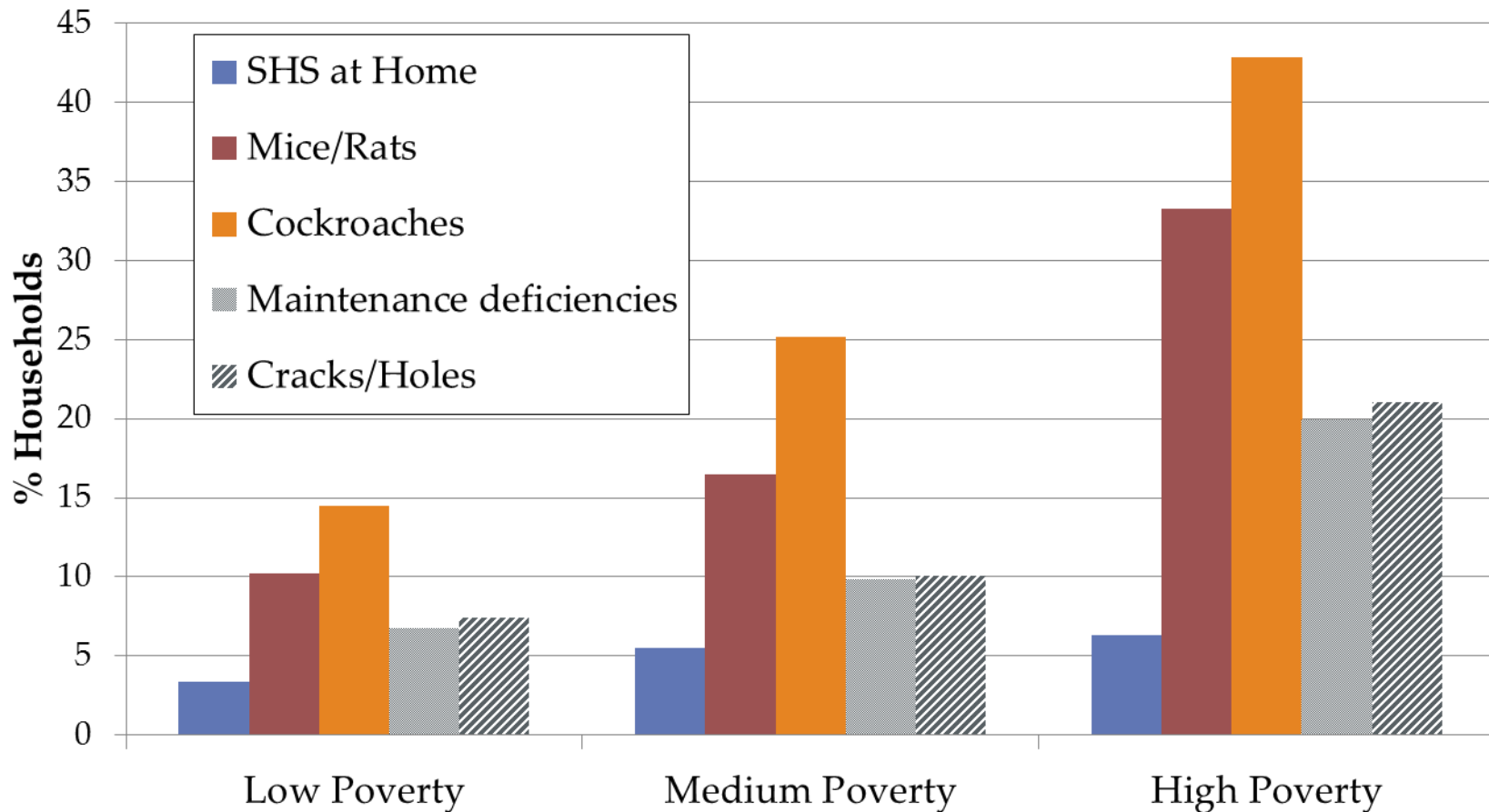
## Housing Quality Indicator: Number of Adults around Secondhand Smoke at Home by Neighborhood Poverty, 2009

Y axis: Percent (Median of Neighborhoods), 2009



# Severity of Problems Vary by Neighborhood

## Housing Quality Indicators Vary by Neighborhood Poverty



Neighborhoods are ranked according to the % of people whose annual income falls below twice the FPL

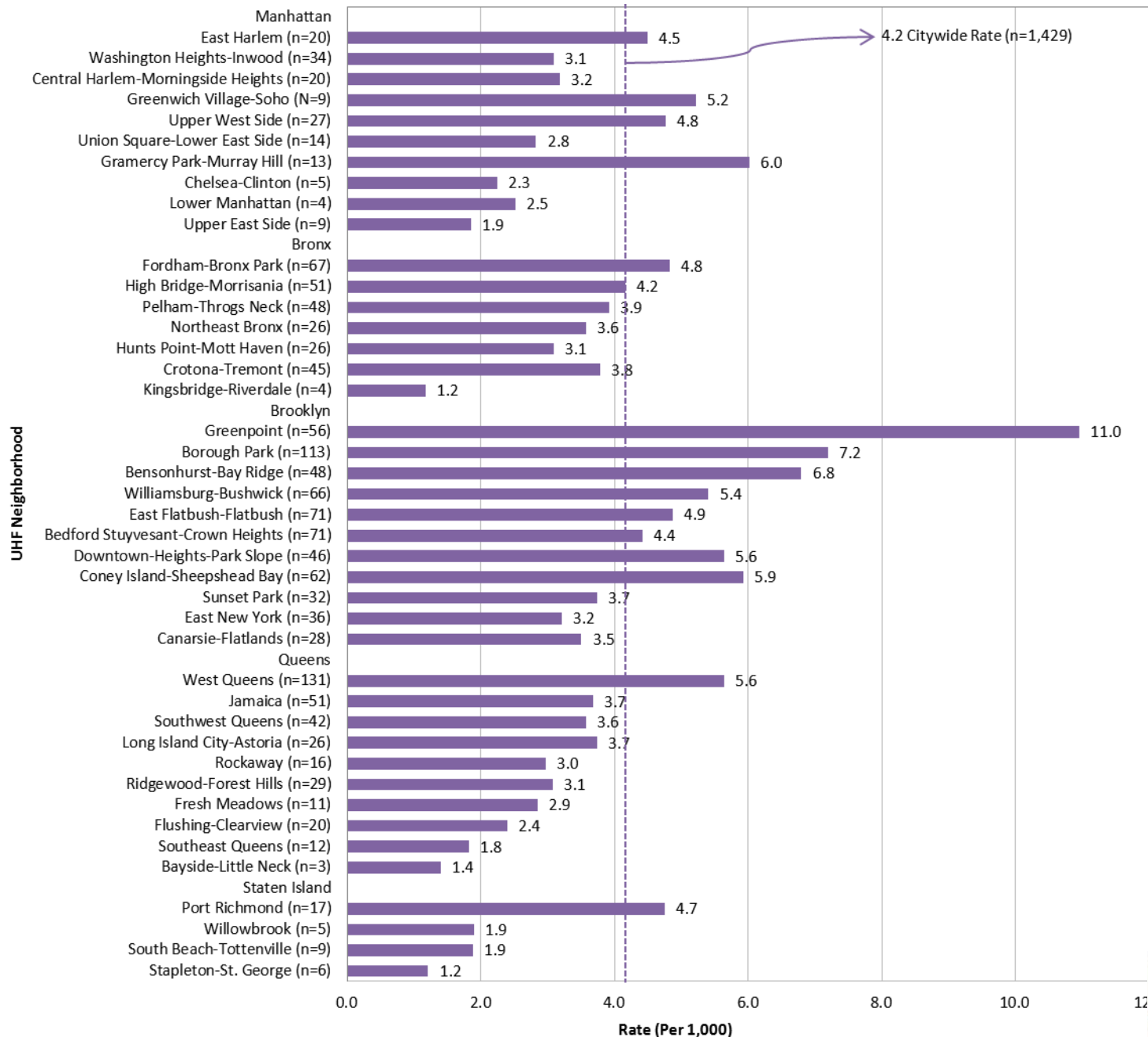
Source: CHS, 2009; NYC Housing and Vacancy Survey (HVS), 2008

# **Housing-Related Health Outcomes**

**Lead Poisoning, Asthma, Injuries**

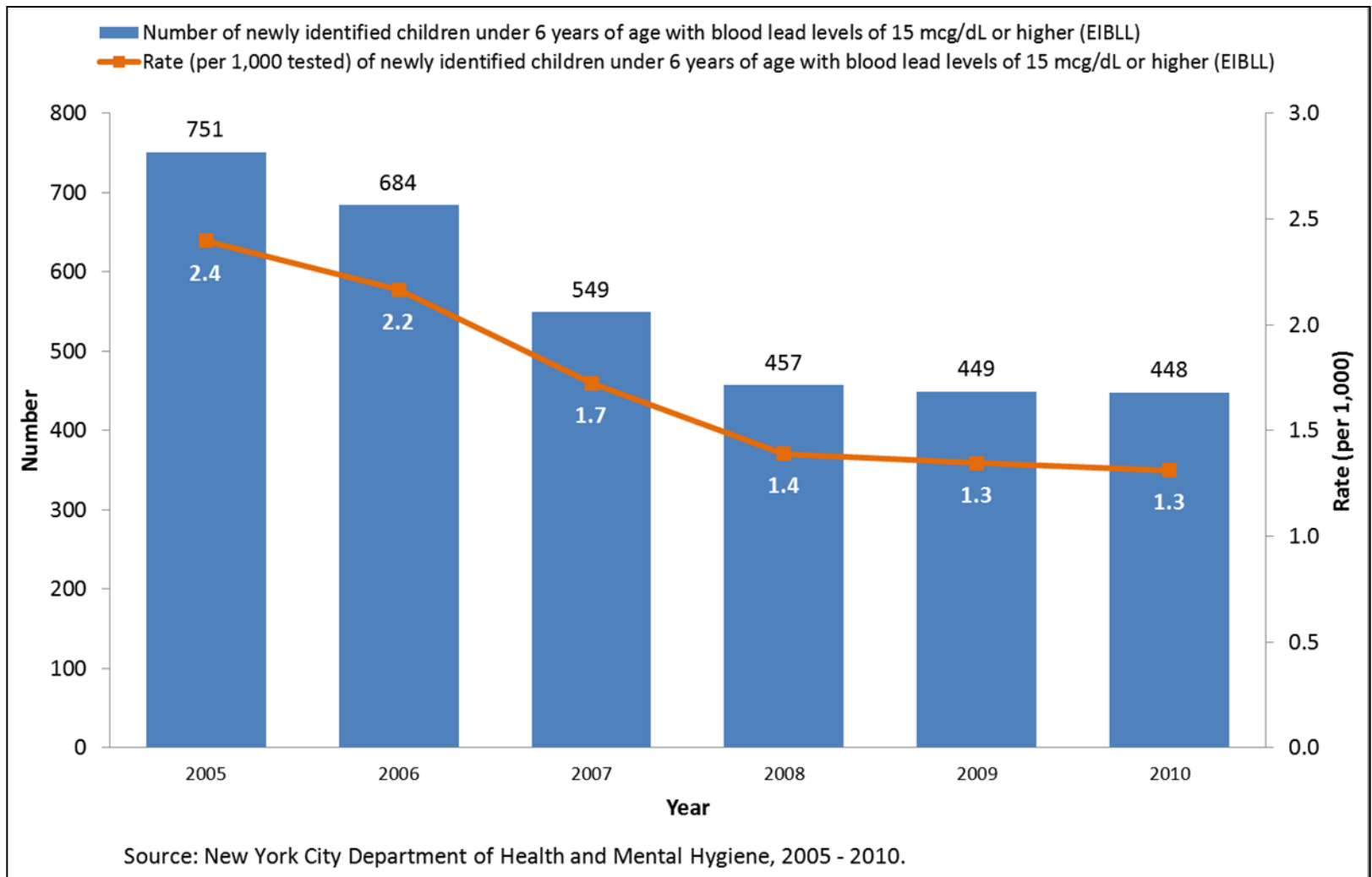
# Health Outcomes Vary by Neighborhood

Health Outcome: Lead Poisoning, Children Younger Than 6 Year of Age, 2010



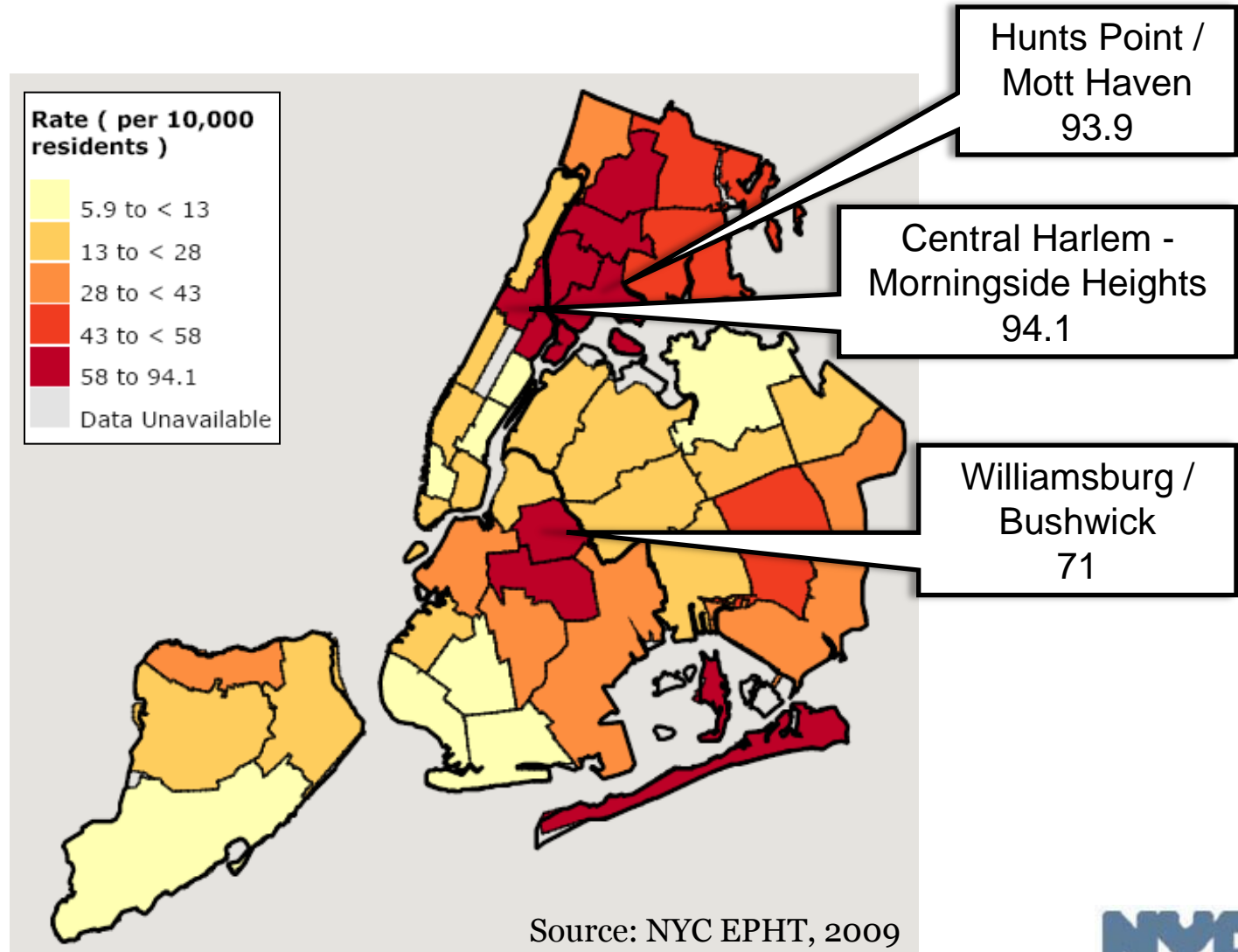
# Change Over Time?

## Health Outcome: Lead Poisoning, Children Younger Than 6 Year of Age, New York City, 2005-2010



# Health Outcomes Vary by Neighborhood

## Health Outcome: Asthma Hospitalization Rates for Children 5 to 14 Years of Age, 2009

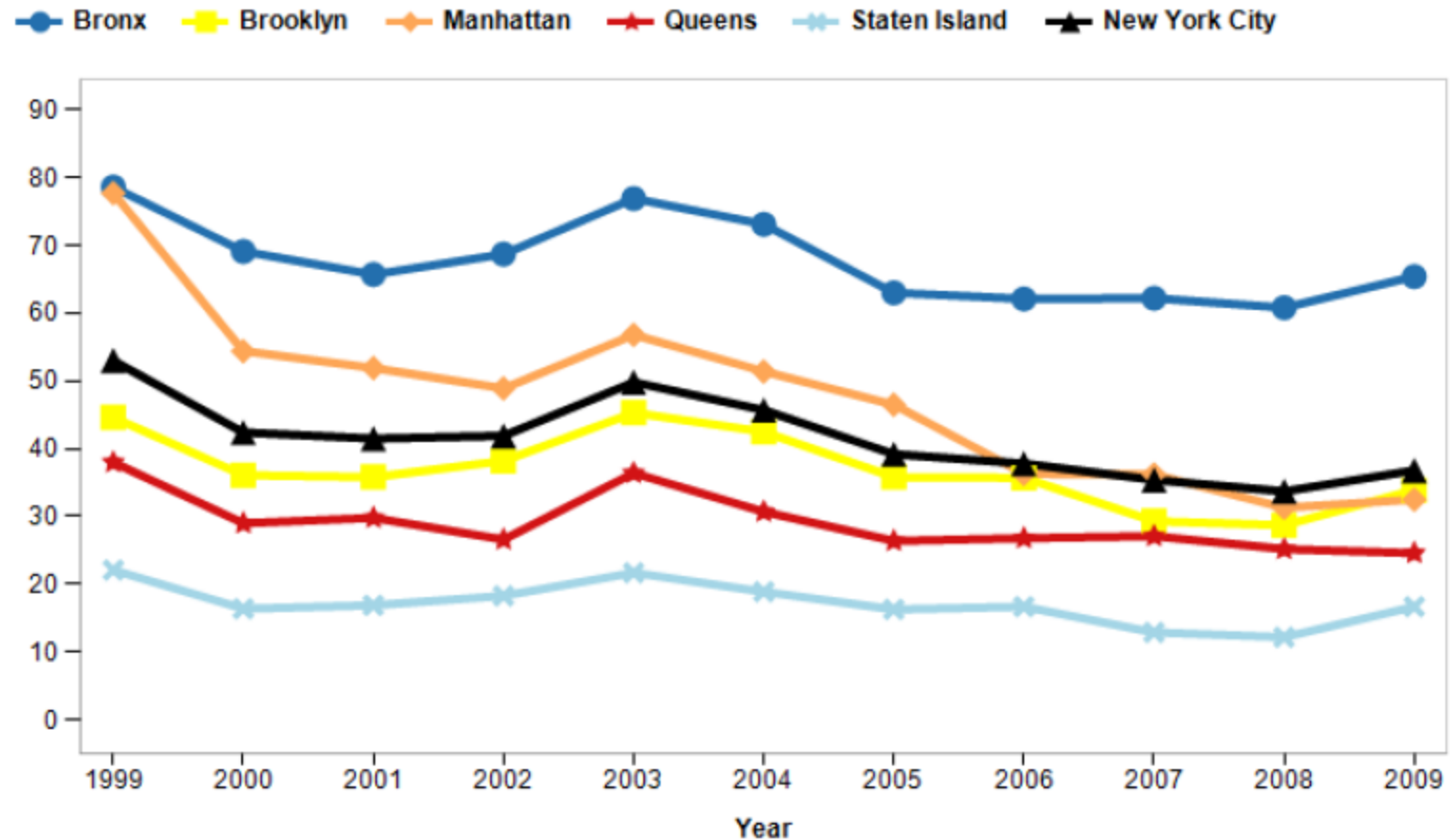




# Change Over Time?

## Health Outcome: Asthma Hospitalization Rates for Children 5 to 14 by Borough and Year

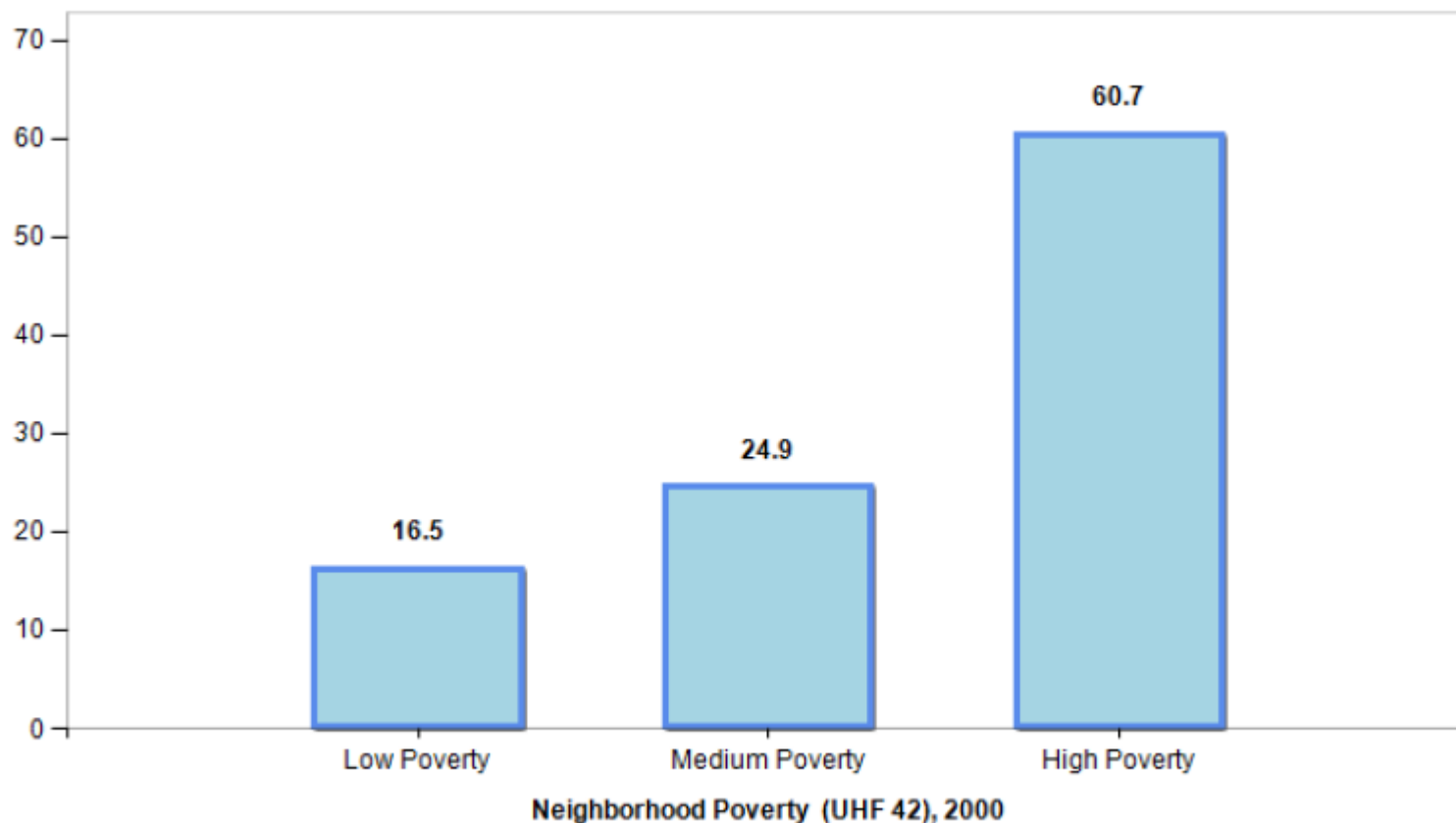
Y axis: Rate (per 10,000 residents)



# Disparities: High Poverty vs. Low Poverty Neighborhoods

## Health Outcome: Asthma Hospitalization Rates for Children 5 to 14 by Neighborhood Poverty, 2009

Y axis: Rate (per 10,000 residents) (Median of Neighborhoods), 2009



# Health Outcomes Vary by Neighborhood

**Health Outcome:**  
**Number of Unintentional Injuries at Home**  
**Children 1 to 12 Years of Age, 2001-2007; n=147**

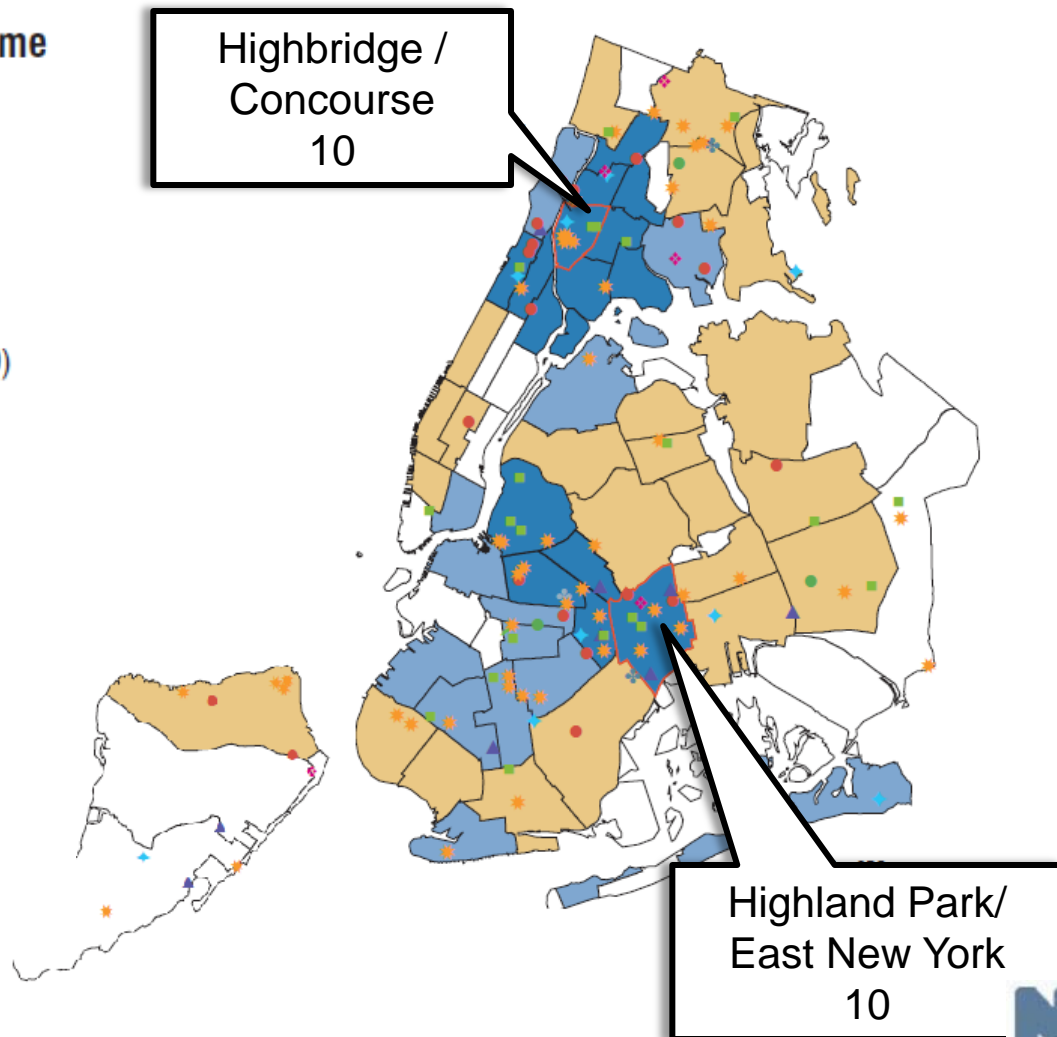
## Type of Injury in the Home

- ★ Fire/scald burn\*\* (75)
- Asphyxia (22)
- Fall from height (20)
- ◆ Drowning (9)
- ▲ Struck by falling object (9)
- ◆ Poisoning (5)
- ✿ Wound\*\*\* (3)
- Other (3)

## Percent Below Poverty

by Community District

- Low
- Medium
- High
- Highest

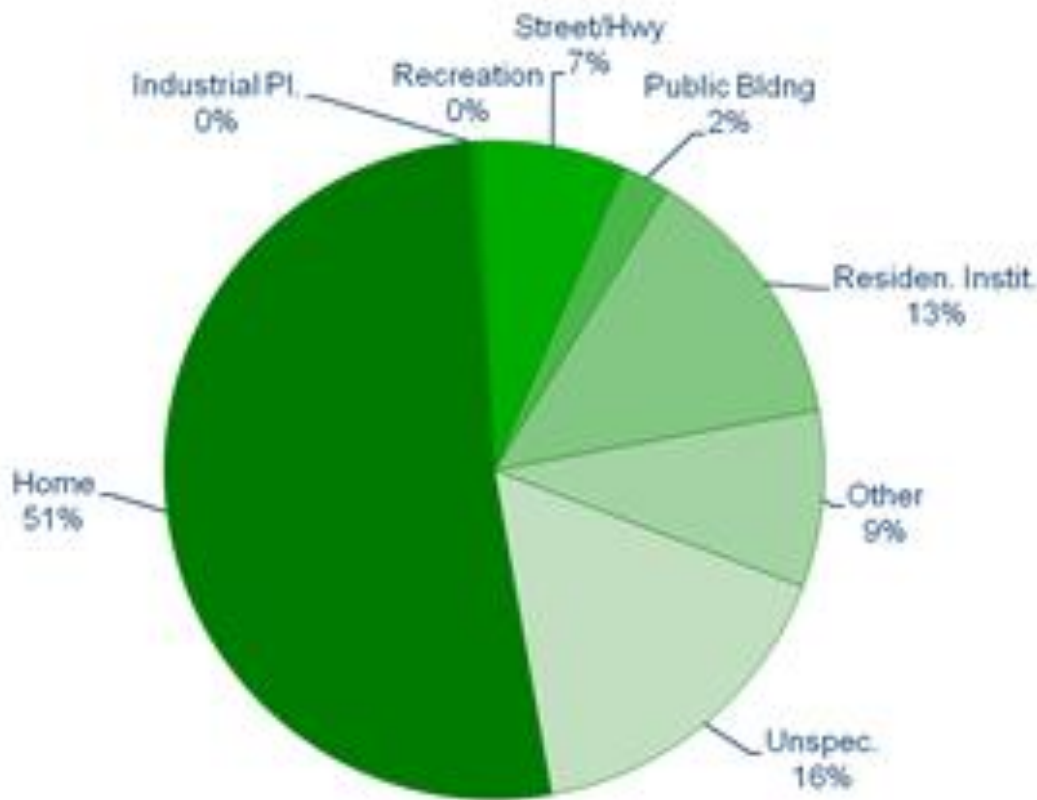


Source: NYC DOHMH, Injury Surveillance and Prevention Program.

# Safe and Healthy Home is Important for Health of Adults as Well

## Health Outcome:

**Location of Falls for Older Adults Hospitalized for Falls  
Adults 65 Years of Age Or Older, New York City, 2002-2006 (n~80,000)**

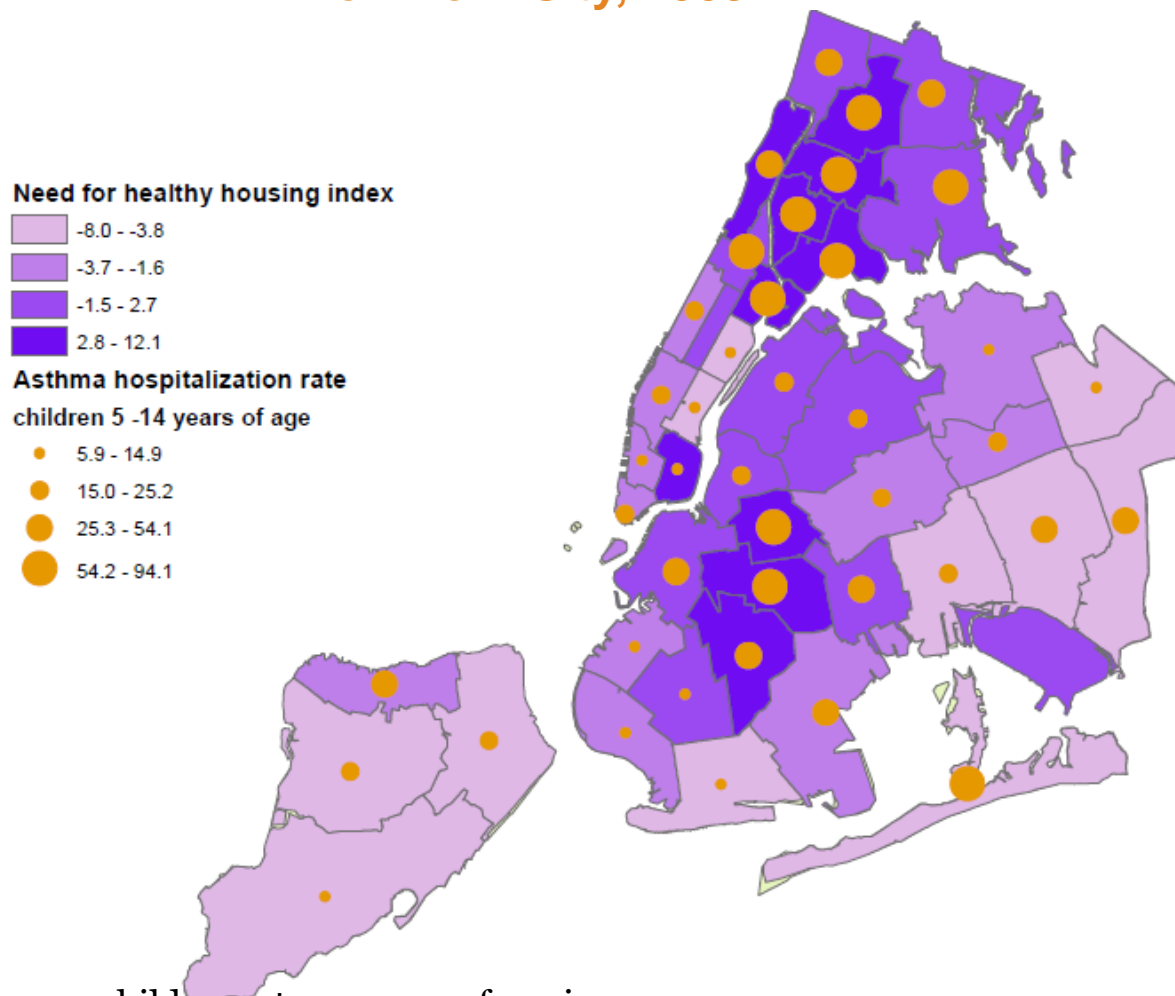


Source: NYC DOHMH, Injury Surveillance and Prevention Program.

**Bringing it all together:**  
**Relationship between Housing Quality and Health**

# Index of Need for Healthy Housing and Health Outcomes

## Health Outcome: Asthma Rates Among Children 5 to 14 years of Age, New York City, 2009

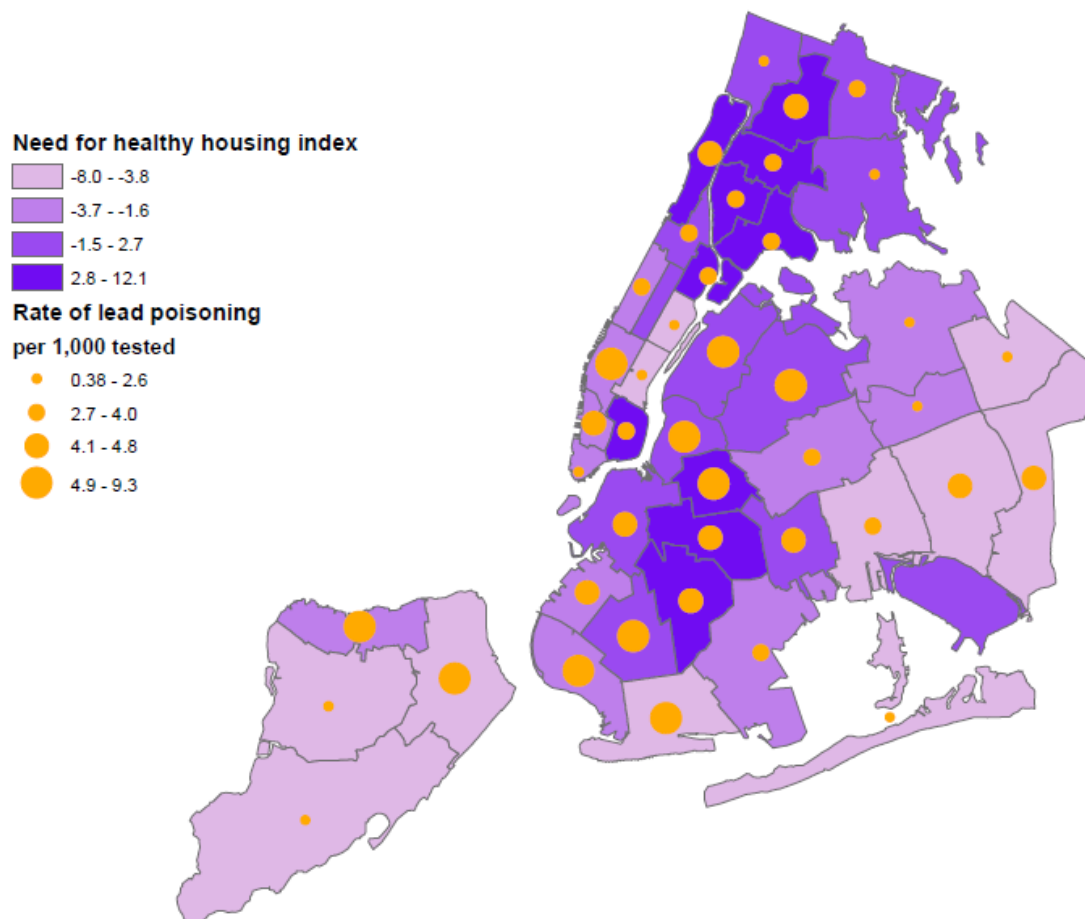


Rates of asthma among children 5 to 14 years of age in 2009,  
superimposed on the Index of Need for Healthy Housing.

Source: NYC DOHMH, Lead Poisoning Prevention Program; NYC DOHMH EPHT Portal

# Index of Need for Healthy Housing and Health Outcomes

## Health Outcome: Lead Poisoning Among Children Younger than 6 Years of Age New York City, 2008



Rates of children younger than 6 years of age newly identified with blood lead levels 10 mcg/dL or higher , superimposed on the Index of Need for Healthy Housing.

Source: NYC DOHMH, Lead Poisoning Prevention Program; NYC DOHMH EPHT Portal

## Data Sources



# Data Sources Used in This Presentation:

- **Environmental Public Health Tracking Portal available at [nyc.gov/health/tracking](https://nyc.gov/health/tracking):**

## Topics:

- Neighborhood, housing, water quality
- Outdoor air
- Health outcomes and human exposures
- Pests and pesticides

## Functionalities:

- Generate neighborhood-specific reports
- Summarize and map data
- Chart trends over time
- View health disparities by neighborhood
- Linkages - health and environment

# Data Sources Used in This Presentation:

- **Environmental Public Health Tracking Portal (cont.):**

Data Sources include on the portal:

- New York City Housing and Vacancy Survey
- New York City Community Health Survey
- Statewide Planning and Research Cooperative System (SPARCS)



- **NYC DOHMH Surveillance Systems:**

Lead Poisoning Prevention Program

Injury Surveillance and Prevention Program