

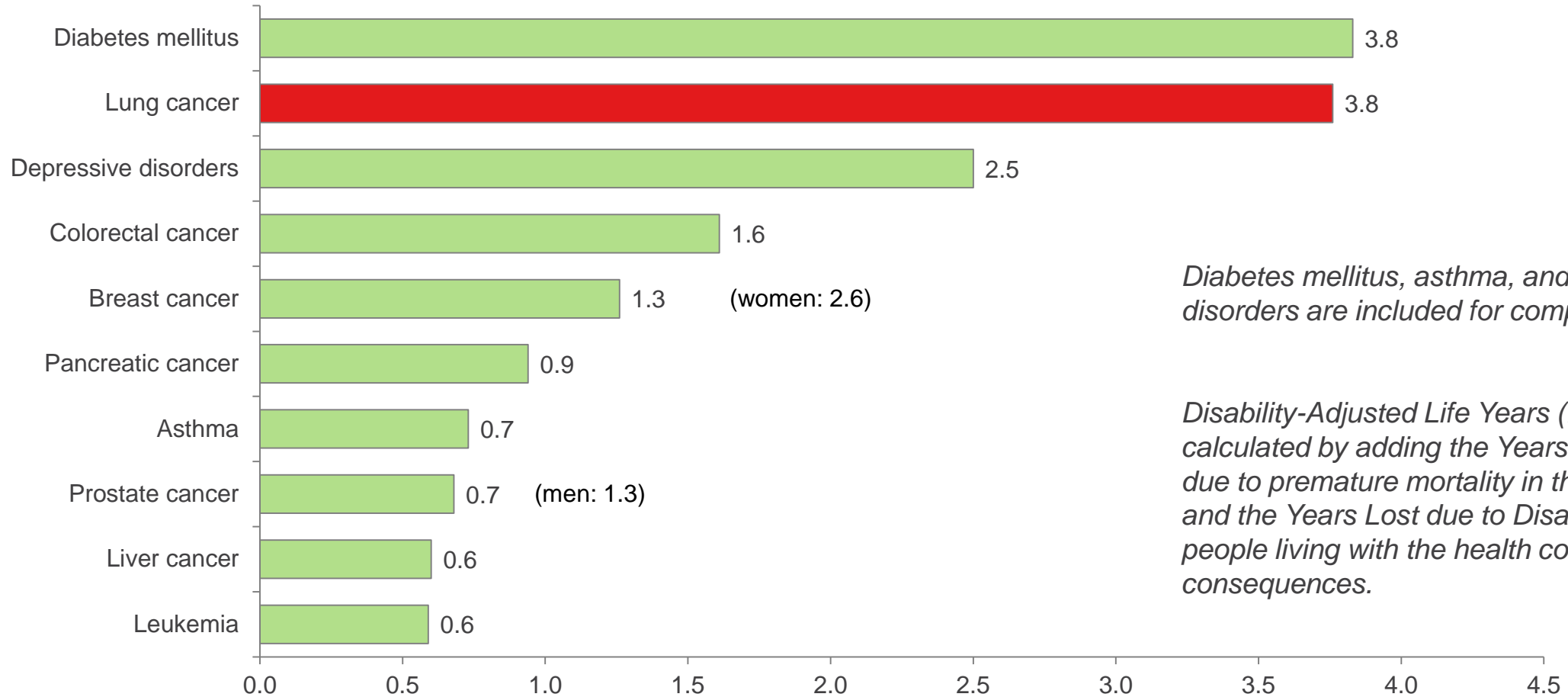
# Bronx Community Health Dashboard: *Lung Cancer*

Last Updated: 9/24/2019

See last [slide](#) for more information about this project.

# Lung cancer is the leading cause of disability among cancers in the US

Percent of Total DALYs

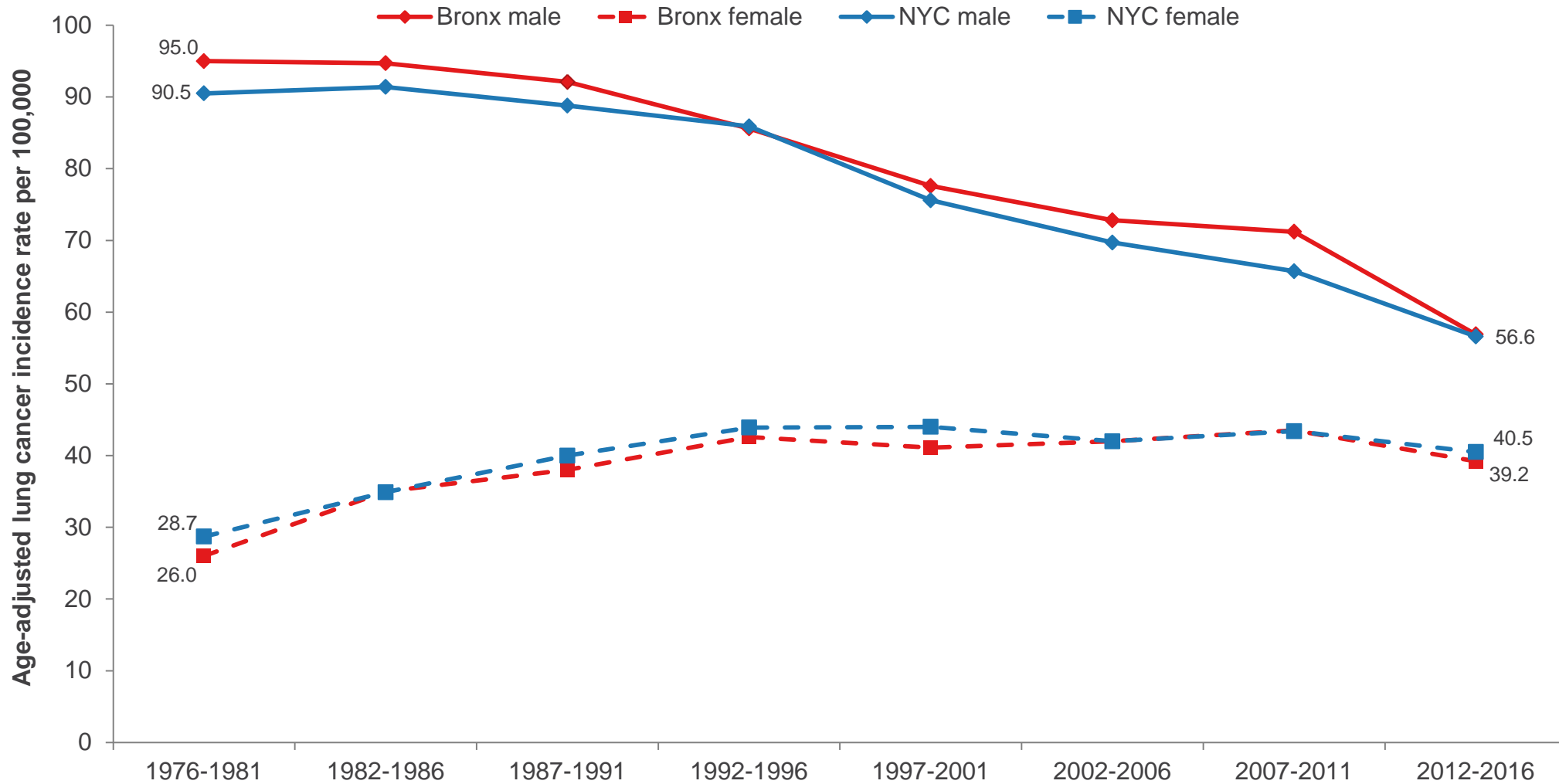


*Diabetes mellitus, asthma, and depressive disorders are included for comparison.*

*Disability-Adjusted Life Years (DALYs) are calculated by adding the Years of Life Lost due to premature mortality in the population and the Years Lost due to Disability for people living with the health condition or its consequences.*

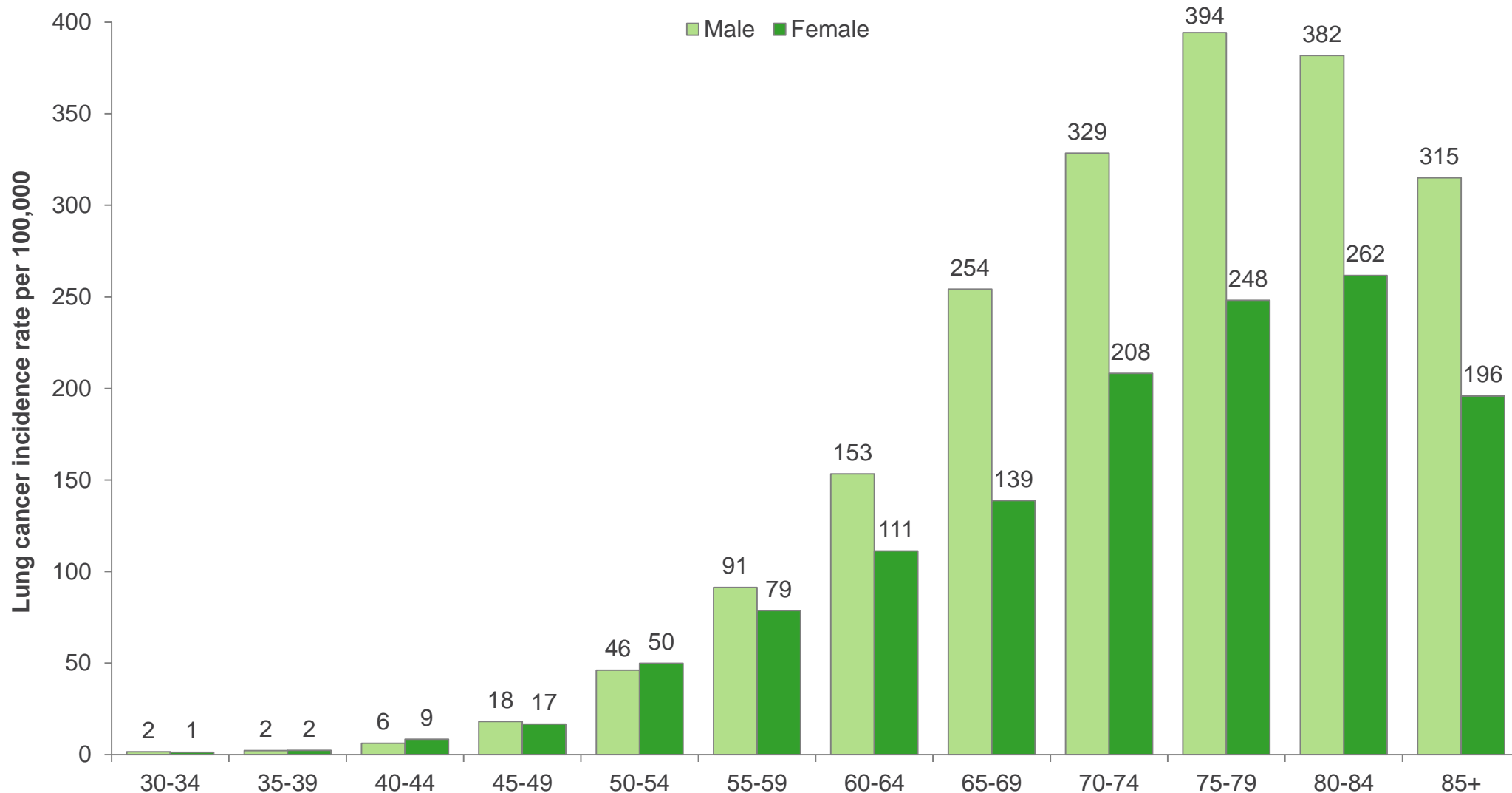
# Lung cancer incidence

# Lung cancer rates have decreased among men, but increased slightly among women in both the Bronx and NYC



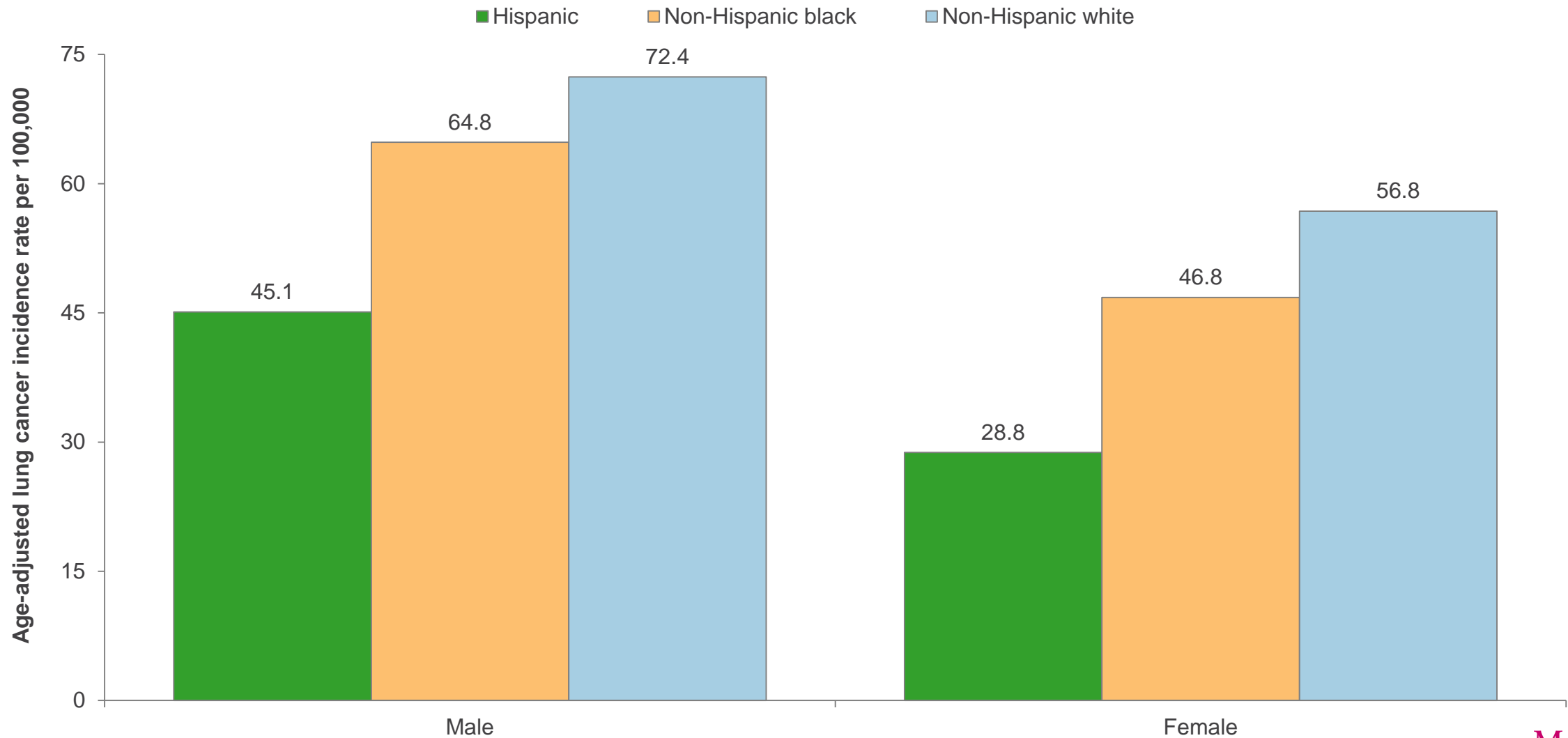
<sup>4</sup> Data source: New York State Cancer Registry, 1976-2016.

# In the Bronx, the lung cancer rate is highest among 75-84 year old men

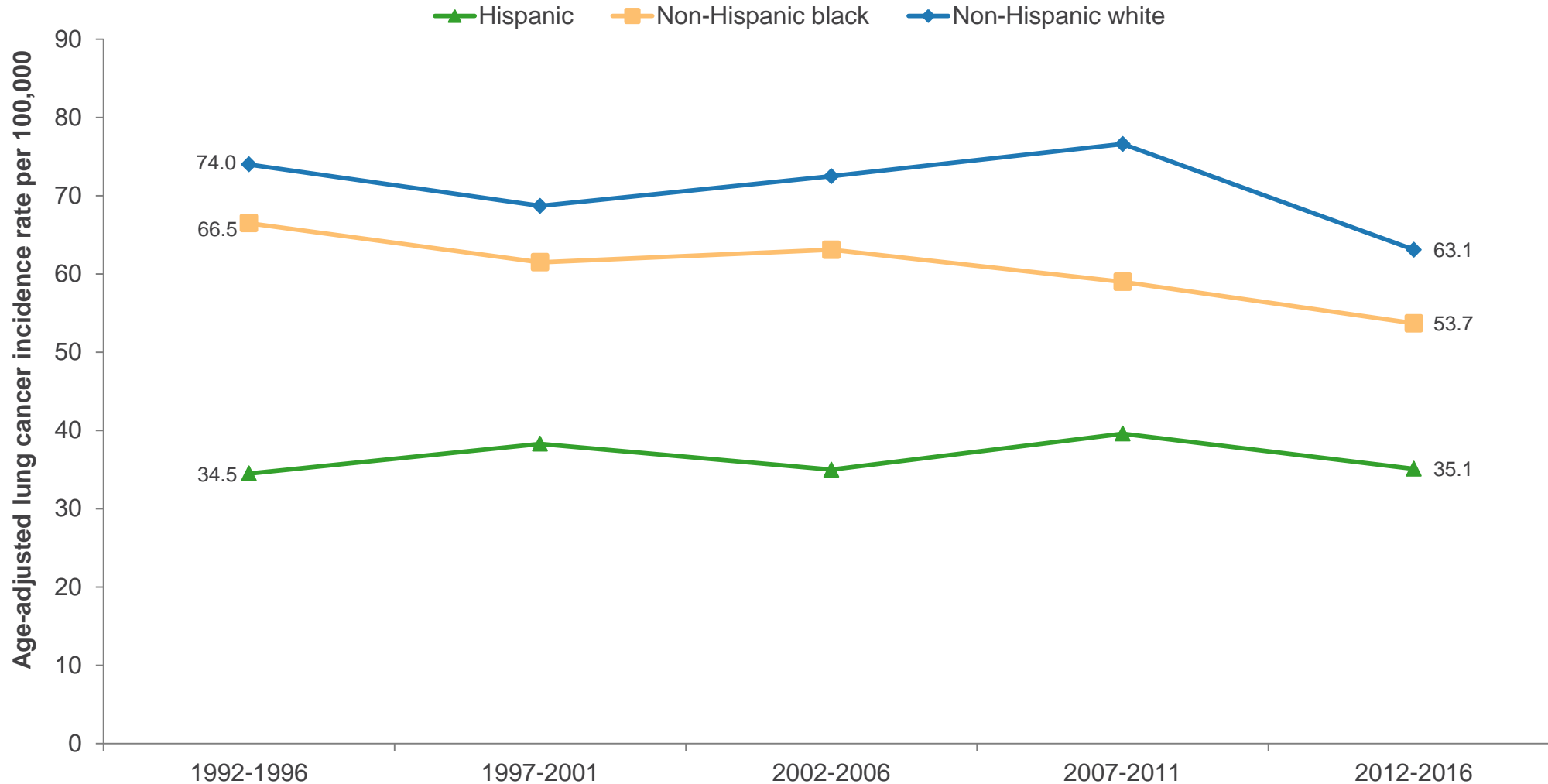


<sup>5</sup> Data source: New York State Cancer Registry, 2012-2016.

# In the Bronx, the lung cancer rate is highest among those who are non-Hispanic white and men

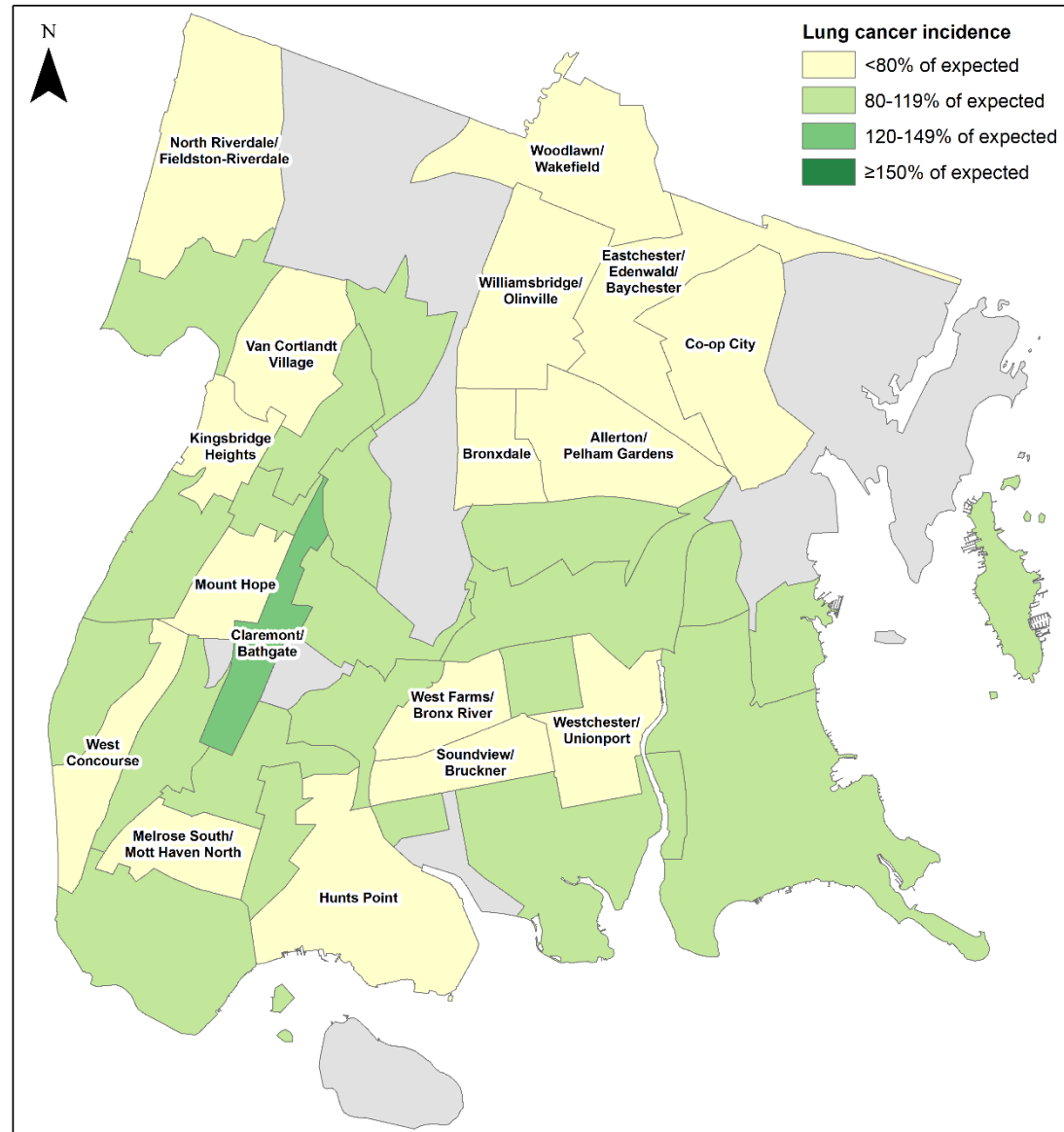


# In the Bronx, lung cancer rates remain stable for all race/ethnicity groups, but are highest among the non-Hispanic white population



7 Data source: New York State Cancer Registry, 1992-2016.  
Rates are age-adjusted to the 2000 US Std million (19 age groups) standard.

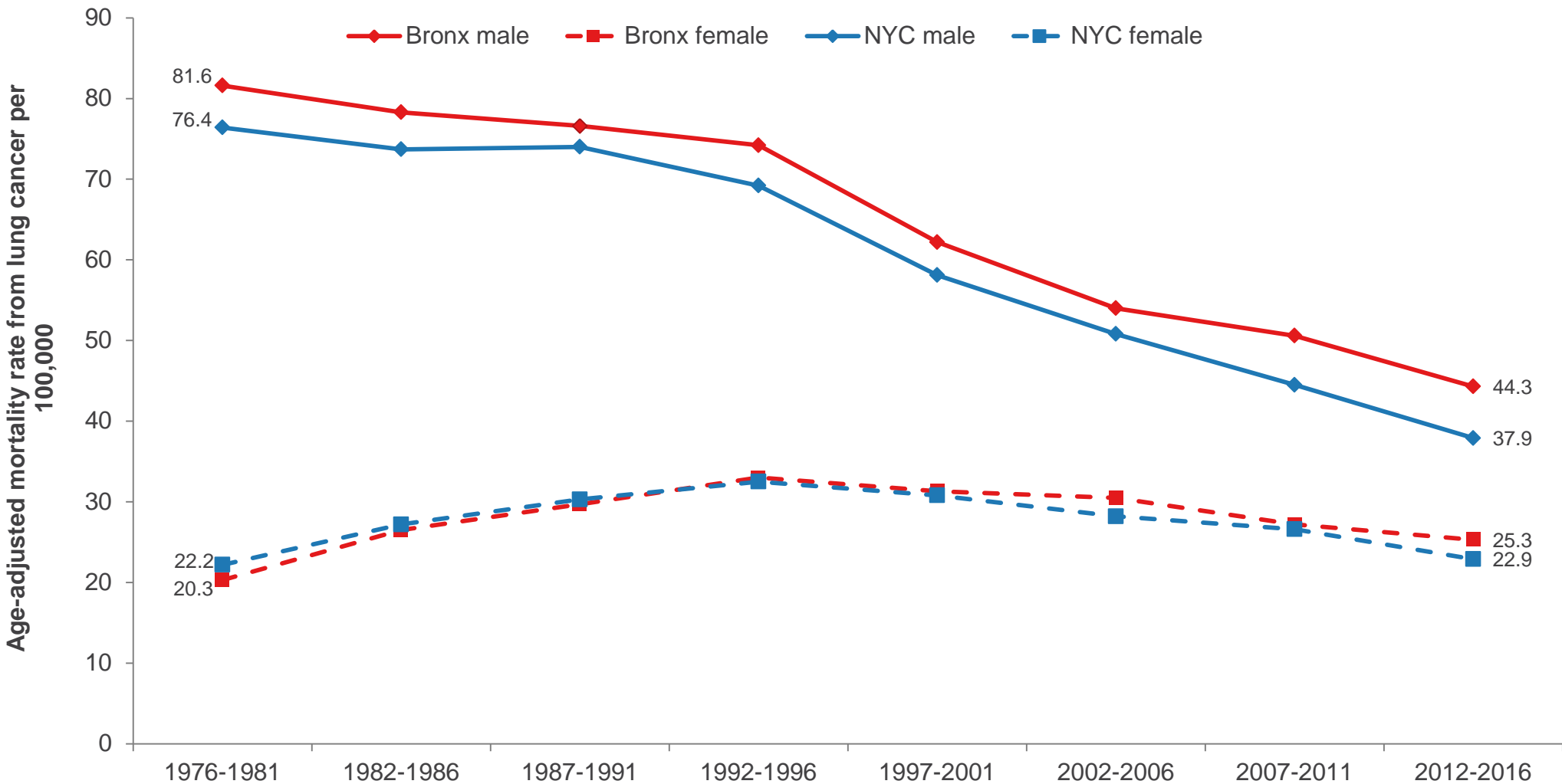
# The incidence of lung cancer is below expected in most of the Bronx





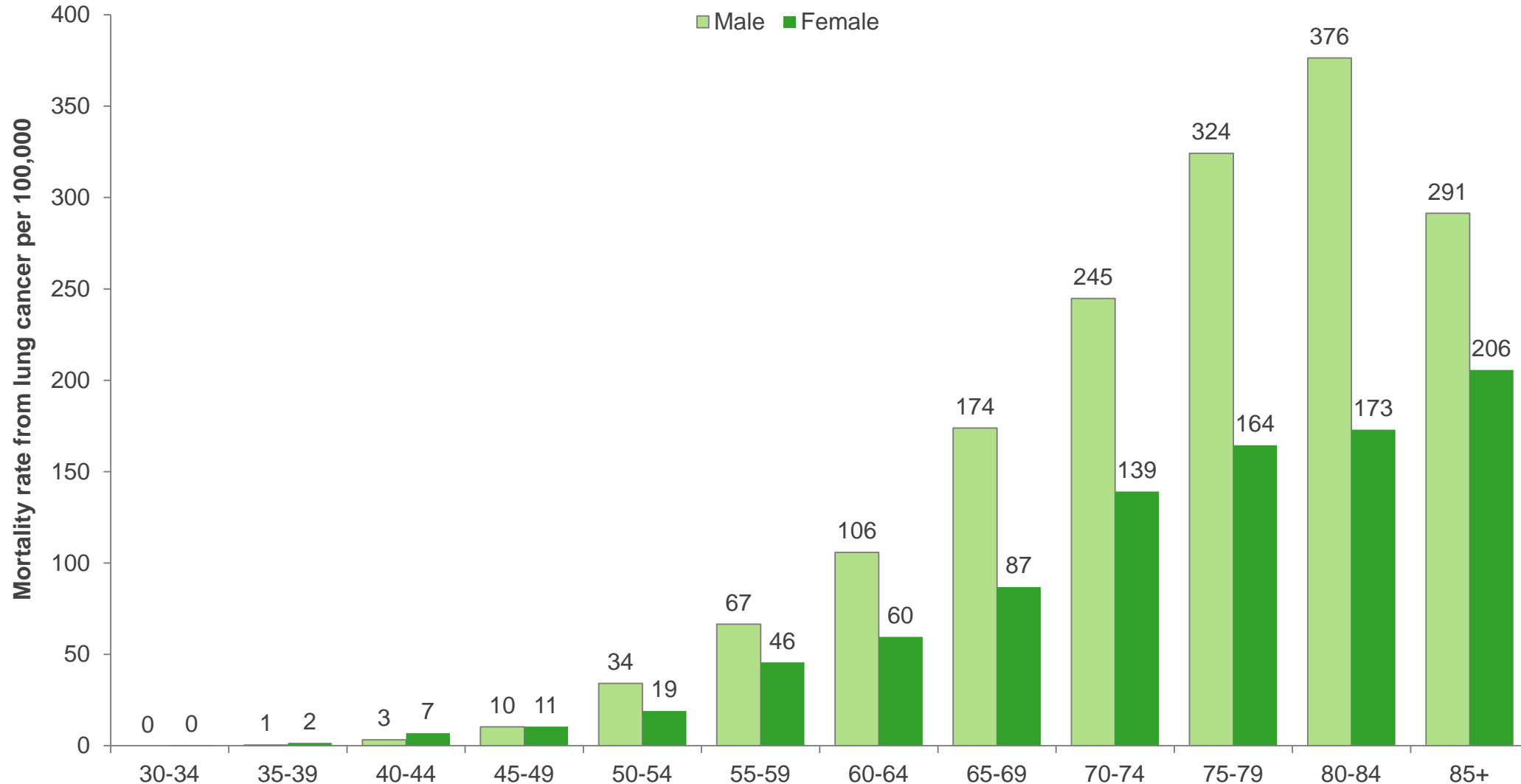
# Mortality from lung cancer

# Mortality rates from lung cancer have decreased among men but increased slightly among women in both the Bronx and NYC



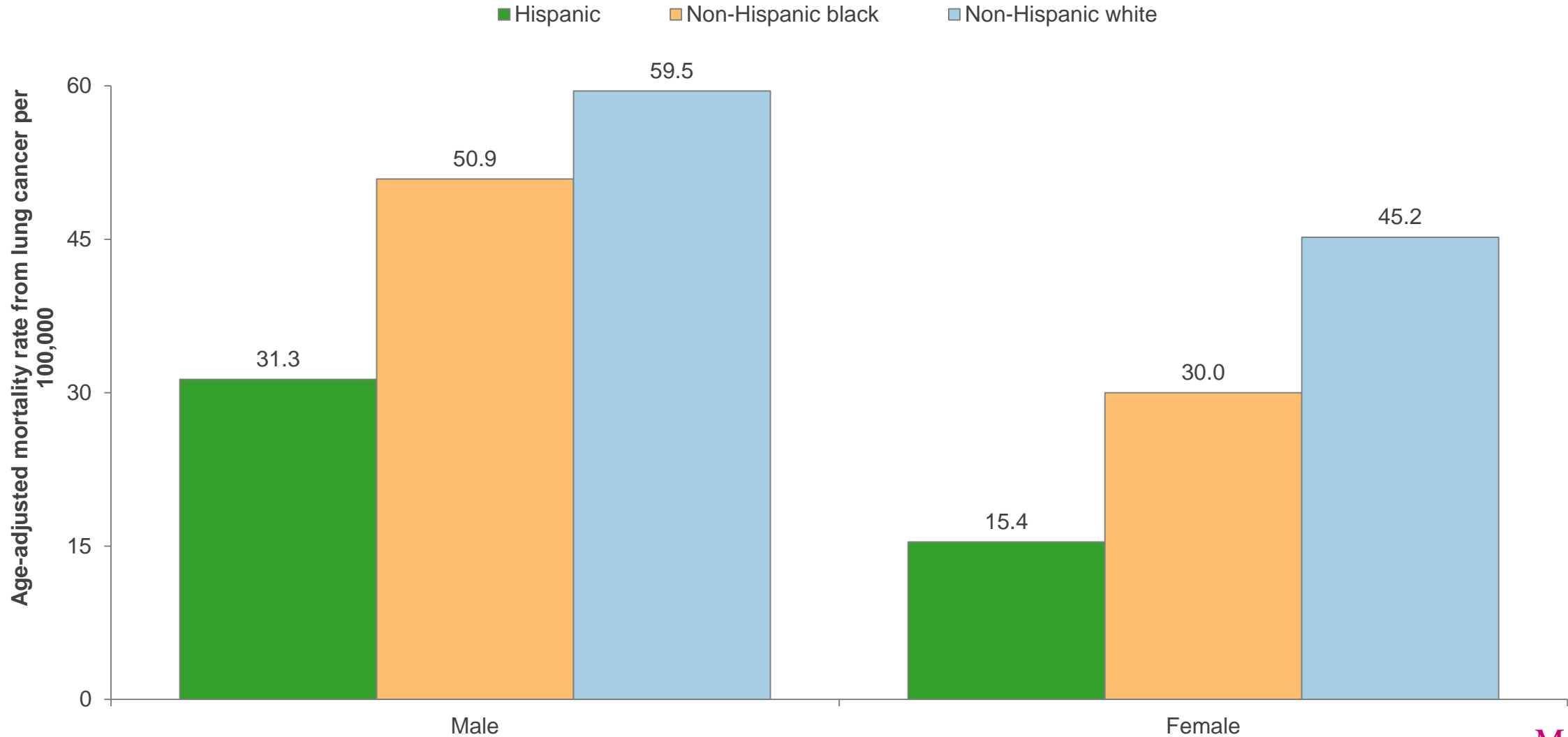
<sup>10</sup> Data source: New York State Cancer Registry, 1976-2016.

# In the Bronx, the mortality rate from lung cancer is highest among 80-84 year old men



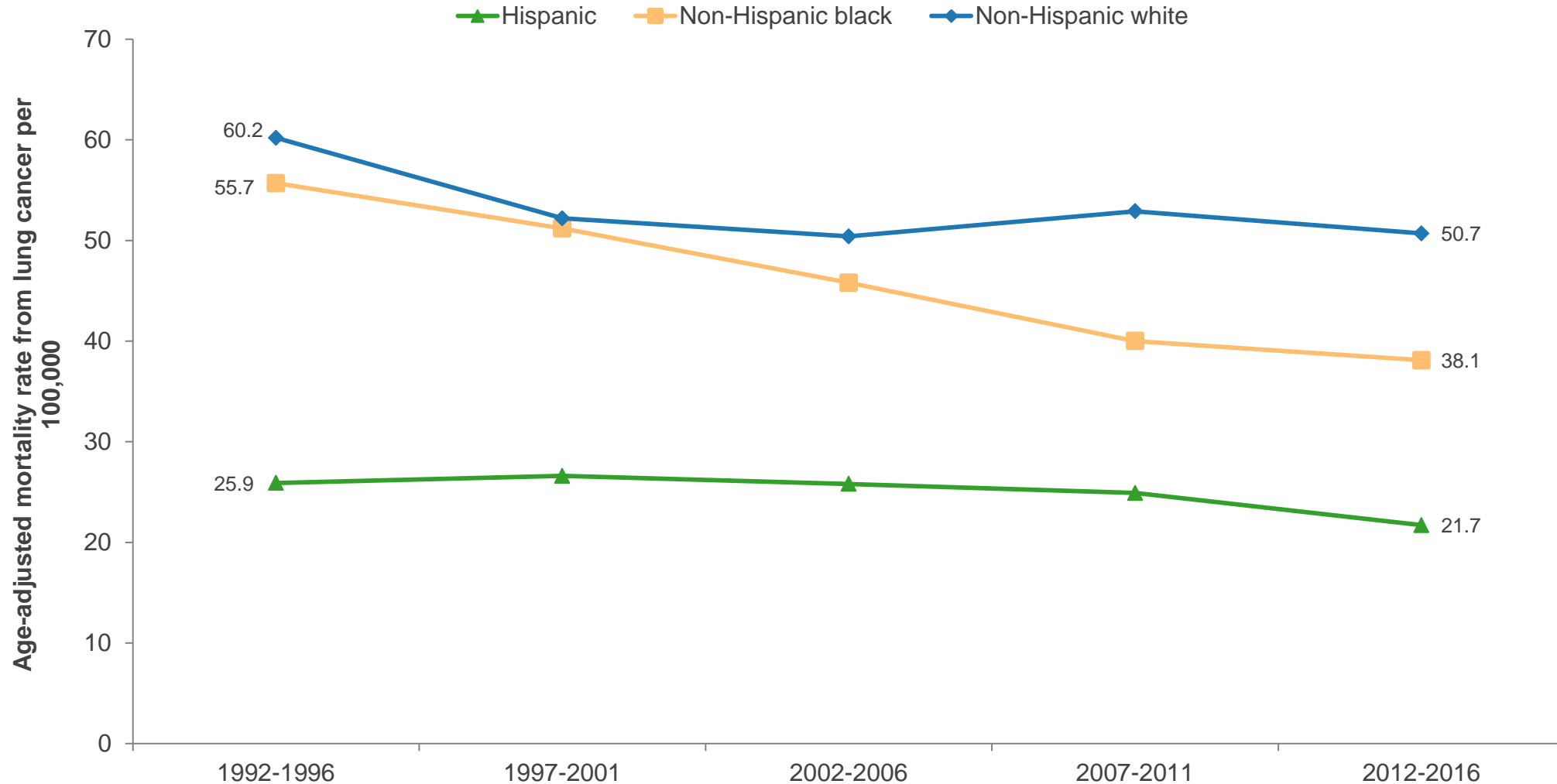
<sup>11</sup> Data source: New York State Cancer Registry, 2012-2016.

# In the Bronx, the mortality rate from lung cancer is highest among those who are non-Hispanic white and men



<sup>12</sup> Data source: New York State Cancer Registry, 2012-2016.

# In the Bronx, mortality rates from lung cancer have declined among all race/ethnicity groups, but is still highest for the non-Hispanic white population



13 Data source: New York State Cancer Registry, 1992-2016.  
Rates are age-adjusted to the 2000 US Std million (19 age groups) standard.

# Risk factors & protective factors

# Risk factors for which there is strong evidence of an association with lung cancer and data available for the Bronx

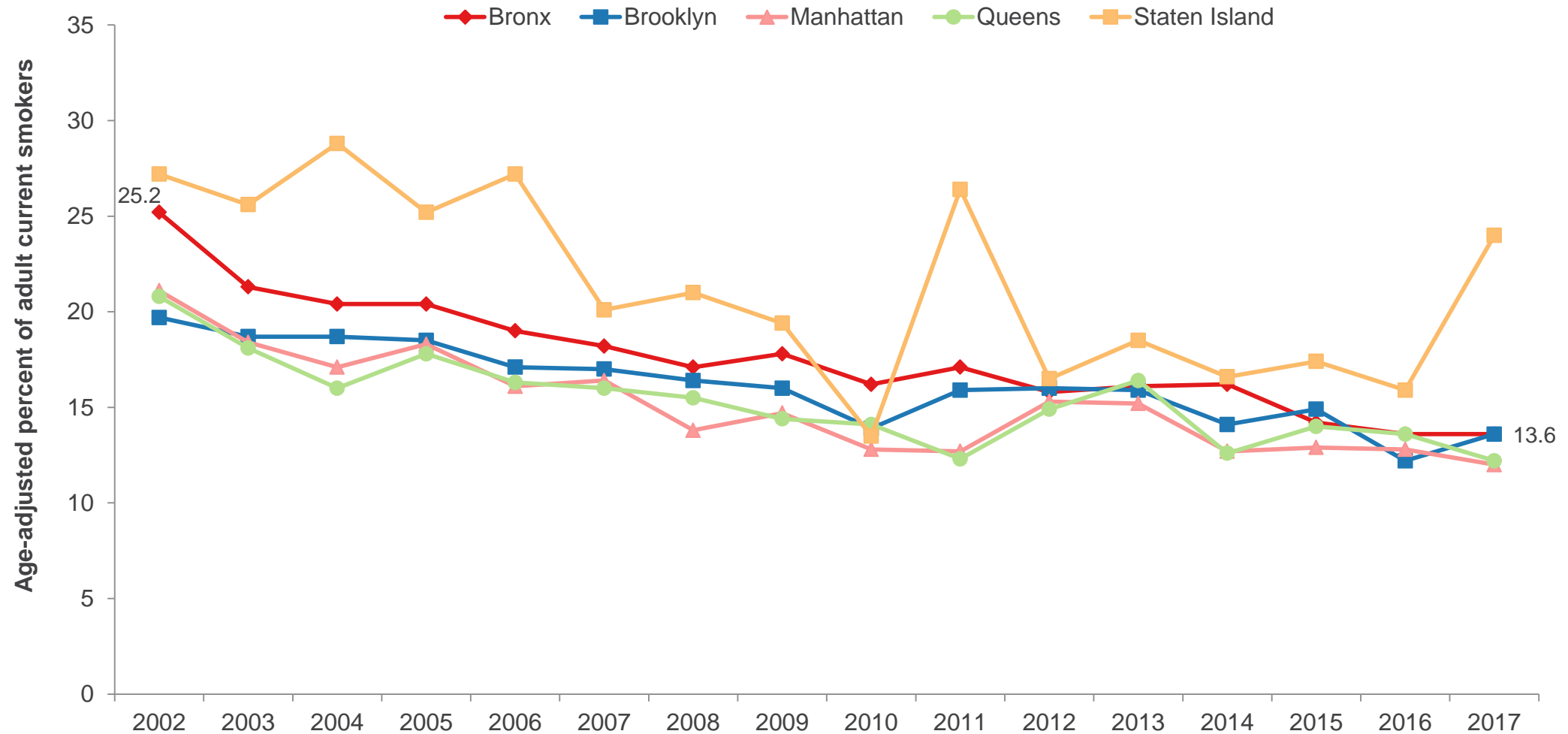
## Increases risk

- Smoking
- Ambient particulate matter (outdoor air pollution)

## Decreases risk

- Fruit consumption

# The percent of current adult smokers across New York City has fallen since 2002, but remains highest for Staten Island



Data source: Community Health Survey, 2002-2017.

Staten Island 2010 data is likely an underestimate and 2011/2017 is likely an overestimate of the true prevalence of smoking due to random sampling variation.



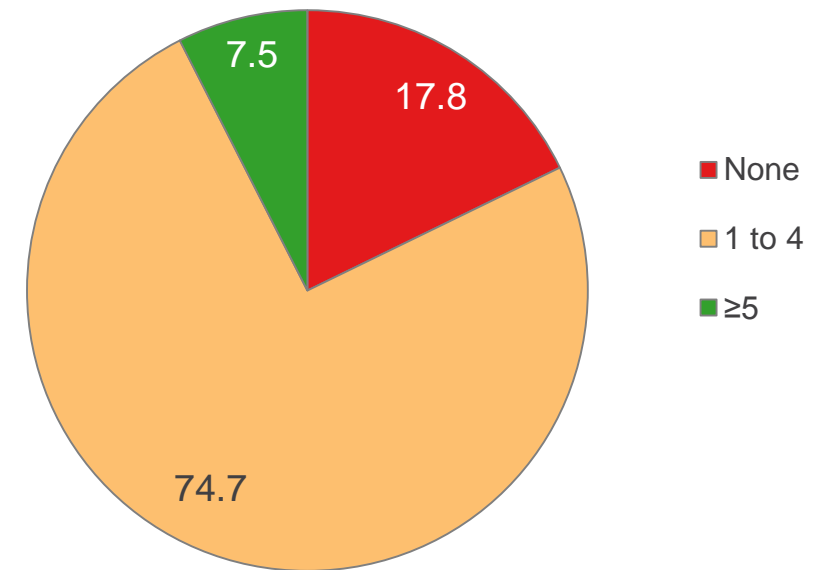
# The Bronx has the lowest percentage of adults that report eating 5 or more servings of fruit and/or vegetables in a day



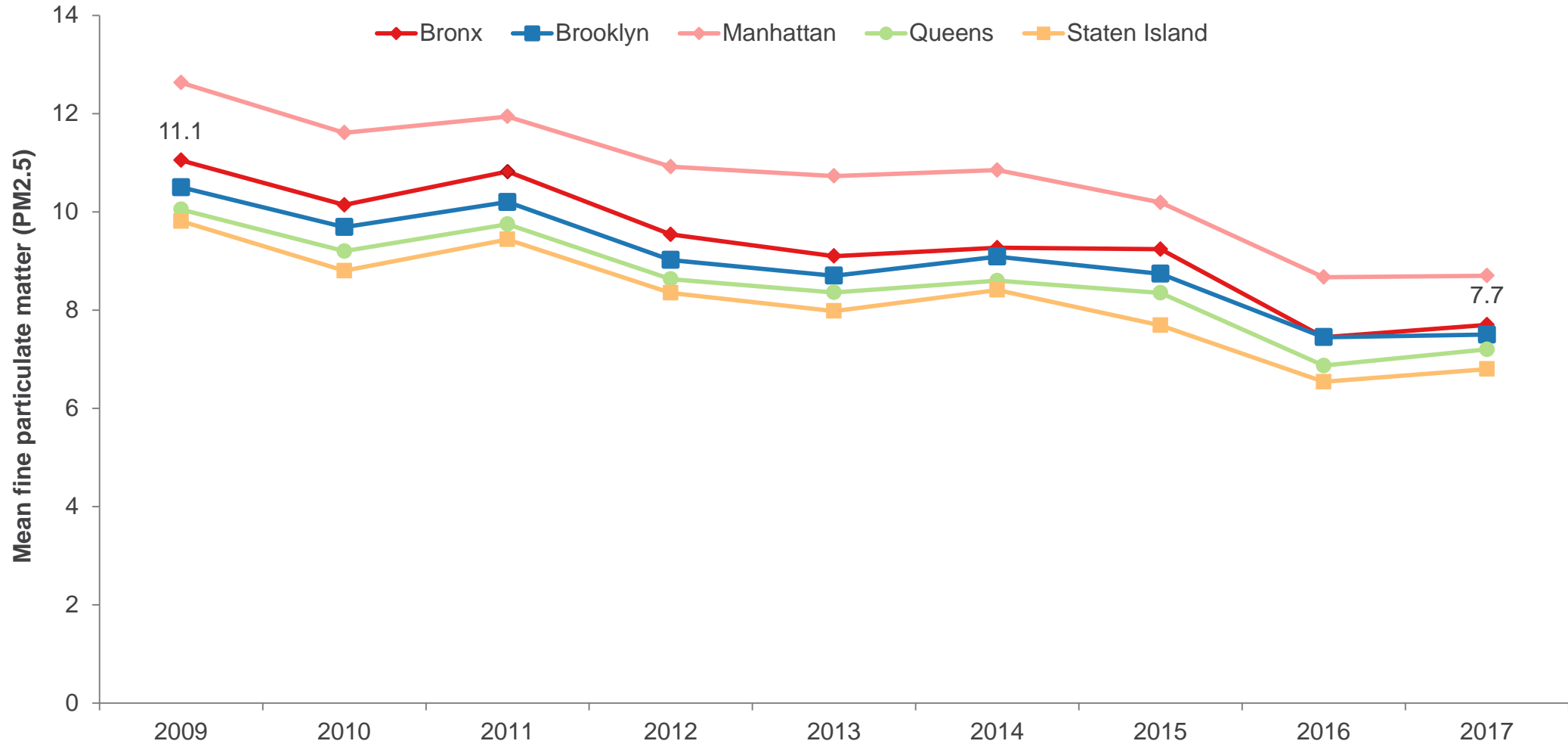
How many total servings of fruit and/or vegetables did you eat yesterday?

A serving equals one medium apple, a handful of broccoli, or a cup of carrots.

*Distribution of Fruit & Vegetable Consumption in the Bronx (2016)*



# Fine particulate concentrations are, on average, second highest in the Bronx, but have improved throughout NYC



Data source: New York City Community Air Survey, data from New York City Department of Health & Mental Hygiene Environment & Health Data Portal, 2017

# Potential risk factors for which there is strong evidence of an association with lung cancer, but no data available for the Bronx because it is difficult to ask about them in a survey

## Increases risk

- Industrial chemicals, such as aluminum, arsenic, and asbestos
- Radon\*
- Arsenic in drinking water
- Beta-carotene supplements

## Decreases risk

- Foods containing carotenoids

\* Though not included in the 2007 Second Expert Report, indoor radon has more recently become established as a leading risk factor of lung cancer among nonsmokers.

Source: Noh J, Sohn J, Cho J, et al. Residential radon and environmental burden of disease among Non-smokers. *Ann Occup Environ Med* 2016;28:12.

# About the Community Health Dashboard Project

- The goal of the project is to provide Bronx-specific data on risk factors and health outcomes with an emphasis on presenting data on trends, socio-demographic differences (e.g., by age, sex, race/ethnicity, etc.) and sub-county/neighborhood level data
- Data will be periodically updated as new data becomes available.
- Produced by Montefiore's Office of Community & Population Health using publicly-available data sources
- For more information please contact us at [OCPHDept@montefiore.org](mailto:OCPHDept@montefiore.org)