Bronx Community Health Dashboard: Smoking

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See last slide for more information about this project.
Daily smoking prevalence in the United States has declined since 1990 but rose to the leading risk factor for mortality amongst both sexes and all ages in 2015.

Despite increasing in rank, smoking mortality rates in the United States have fallen 13.85%.

Data source: Global Burden of Disease Tobacco Viz, 2015
Data is age-adjusted.
Smoking Status
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, 2002-2015. Analysis by Montefiore OCPH. Staten Island 2010 data is likely an underestimate of the true prevalence of smoking due to random sampling variation.
Fewer Bronx adults are current smokers and more Bronx adults report having never smoked in 2015, compared to 2002

Data source: Community Health Survey, 2002, 2015. Analysis by Montefiore OCPH.
Data is age-adjusted.
Among Bronx adults there is a trend towards current smokers starting later in life, suggesting that tobacco prevention among youth is paying off.

Reported Age When Respondent Began Regularly Smoking (%)

- 12 years and under: 10.7% (2005), 8.9% (2015)
- 13-17 years: 47.5% (2005), 44.7% (2015)
- 18-20 years: 23.3% (2005), 27.1% (2015)
- 21 years and over: 18.5% (2005), 19.2% (2015)

The Bronx has the third highest percent of current smokers of all New York City

Data source: Community Health Survey, 2015. Analysis by Montefiore OCPH.
Age results not age-adjusted.
In the Bronx, the unemployed, least educated, and most impoverished individuals are most likely to smoke.
Racial and ethnic disparities in current smokers have grown by 0.7 points in the previous 15 years.

Data source: Community Health Survey, 2002-2015. Analysis by Montefiore OCPH. Non-Hispanic white 2010, 2012-2014 data should be interpreted with caution. All Bronx Asian smoking data unstable.
3 of 10 community districts with highest percentages of current smokers are in the Bronx.

Data source: NYC Community Health Profiles.
The primary driver of the declining adult smoking rates in the Bronx is heavy smoking, which has fallen 3 fold since 2002.

Data source: Community Health Survey, 2002-2015. Analysis by Montefiore OCPH. Data restricted to those that indicated they are current smokers.
Bronx residents are increasingly purchasing cigarettes in New York City stores

Data source: Community Health Survey, 2002-2015. Analysis by Montefiore OCPH. Results restricted to current smokers whose most recent cigarette smoked was from a carton, pack or single/loosie.
Quit Attempts were consistent across all five boroughs between 2002 and 2013.

Quit attempts defined as an attempt to quit smoking for 24 hours or longer during the past year.

Data source: Community Health Survey, 2002-2015. Analysis by Montefiore OCPH. Data not collected after 2013.
3 of 10 community districts with highest tobacco retailer rates are in the Bronx

Tobacco Retailers
Rate per 10,000 population

- 6 - 8
- 9 - 10
- 11 - 13
- 14 - 62
- Unpopulated areas

Data source: NYC Department of Consumer Affairs, 2014

Source: NYC Department of Consumer Affairs, 2014

Note graph is depicted on log scale

Highest: Midtown

3 of 10 community districts with highest tobacco retailer rates are in the Bronx
Youth Smoking
The percent of current youth smokers across New York City has fallen since 2003 but remains highest for Staten Island and lowest for the Bronx.

Current smoker is defined as smoking at least one or more times in the previous 30 days.

Fewer youth are currently smoking in the Bronx, but those that do smoke are primarily male, non-Hispanic white, and 18 years or older.

Youth smoking in the Bronx used to be higher for female youth but now is higher amongst male youth.

Data source: Youth Risk Behavior Survey, 2003-2015. Analysis by Montefiore OCPH. Current smoker is defined as smoking at least one or more times in the previous 30 days.
Despite a decrease in the percentage of Bronx youth reporting being current smokers, an increasing percentage of youth that smoke are heavy smokers.

Heavy smokers: more than 10 cigarettes a day

Data is age-adjusted. Heavy Smoker results restricted to students who smoked in the past 30 days.
Youth in the Bronx are less likely to get their cigarettes from someone else in 2015 and more likely to get them by other means.

Data source: Youth Risk Behavior Survey, 2003, 2015. Analysis by Montefiore OCPH. Data is age-adjusted. Results restricted to students who smoked in the past 30 days.
Health
Consequences of Tobacco Use
Lung Cancer
Lung Cancer rates are highest for males in all boroughs, Bronx males have the second highest lung cancer incidence rate

Data source: New York State Cancer Registry, 2009-2013. Analysis by Montefiore OCPH. Data is age-adjusted.
Bronx males have higher lung cancer incidence rates, though Bronx female lung cancer rates have risen nearly 16 points in the last 37 years.

The Bronx have the second highest rate of lung cancer mortality of all New York City boroughs.

Data source: Underlying Cause of Death, 2000-2015. Analysis by Montefiore OCPH. Data is age-adjusted.
Males in the Bronx consistently have higher lung cancer mortality rates than females, but rates have fallen 22 points.
Lung cancer mortality rates are highest in the Bronx amongst males, those 75 years and older, and in non-Hispanic white populations.

Data source: Underlying Cause of Death, 2015. Analysis by Montefiore OCPH. Age grouped data is not age-adjusted.
Racial and ethnic disparities in lung cancer mortality have fallen 10 points in the previous 15 years

Data source: Underlying Cause of Death, 2000-2015. Analysis by Montefiore OCPH. Data is age-adjusted.
Chronic Lower Respiratory Disease
Chronic obstructive pulmonary disease (COPD) is the largest contributor to chronic lower respiratory disease mortality in the Bronx.

The Bronx now has the highest chronic lower respiratory related mortality rates of all NYC boroughs

Data source: Underlying Cause of Death, 2000-2015. Analysis by Montefiore OCPH. Data is age-adjusted.
Men in the Bronx have higher rates of chronic lower respiratory disease related mortality

Data source: Underlying Cause of Death, 2000-2015. Analysis by Montefiore OCPH. Data is age-adjusted.
Chronic lower respiratory disease mortality rates are highest in the Bronx amongst males, those 75 years and older, and in non-Hispanic white populations.

Data source: Underlying Cause of Death, 2015. Analysis by Montefiore OCPH. Age group data is not age-adjusted.
Racial and ethnic disparities in chronic lower respiratory disease mortality have fallen nearly 4 points in the previous 15 years.

Data source: Underlying Cause of Death, 2000-2015. Analysis by Montefiore OCPH. Data is age-adjusted.
6 of 10 community districts with highest avoidable child asthma hospitalization rates are in the Bronx

Data source: NYC Community Health Profiles.

Child Asthma Hospitalizations
Rate per 10,000 children ages 5-14
6 - 13
14 - 24
25 - 54
55 - 112
Unpopulated areas
Interpret with caution due to small number of events

Source: New York State Department of Health, Statewide Planning and Research Cooperative System, 2012-2013
6 of 10 community districts with highest asthma hospitalization rates are in the Bronx

Avoidable Asthma Hospitalizations
Rate per 100,000 adults

- 46 - 118
- 119 - 218
- 219 - 389
- 390 - 786
- Unpopulated areas

Source: New York State Department of Health: Statewide Planning and Research Cooperative System, 2012

Data source: NYC Community Health Profiles.
Cardiovascular Disease

Chronic Heart Disease Includes:
- Stroke/Cerebrovascular disease
- Heart attack/myocardial infarction
Cardiovascular Disease Mortality Rates are highest in the Bronx compared to all other New York City boroughs

Data source: Underlying Cause of Death, 2000-2015. Analysis by Montefiore OCPH.
Data is age-adjusted.
Males in the Bronx consistently have higher chronic heart disease mortality rates than females

Data source: Underlying Cause of Death, 2000-2015. Analysis by Montefiore OCPH. Data is age-adjusted.
Chronic heart disease mortality rates are highest in the Bronx amongst males, those 75 years and older, and in non-Hispanic black populations.

Data source: Underlying Cause of Death, 2015. Analysis by Montefiore OCPH. Age grouped data is not age-adjusted.
Racial and ethnic disparities in chronic heart disease mortality have fallen 6.6 points in the previous 15 years

Data source: Underlying Cause of Death, 2000-2015. Analysis by Montefiore OCPH.
Data is age-adjusted.
Diabetes
The Bronx has a higher prevalence of diabetes than all other NYC boroughs and peer counties

Data source: United States Diabetes Surveillance System, Division of Diabetes Translation, CDC. Data not comparable to NYC CHS data presented elsewhere.
Those 65 years and older, Females, and Hispanics have highest rates of diabetes in the Bronx in 2015

Data source: New York City Community Health Survey, 2002-2015. Analysis by Montefiore OCPH.
Diabetes Mortality Rate has fallen by 10 percentage points over the last 15 years in the Bronx

Data source: Underlying Cause of Death, 1999-2015. Analysis by Montefiore OCPH.
Males have a higher diabetes mortality rate, adjusting for age in the Bronx

Bronx Diabetes Mortality Rates from 2007-2015 for Females are divergent from national trends

Data source: Underlying Cause of Death, 1999-2015. Analysis by Montefiore OCPH.
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 Colin Rehm, PhD, Manager of Research & Evaluation (crehm@montefiore.org).