Bronx Community Health Dashboard: Smoking

Created: 6/12/2017
Last Updated: 3/2/2019

See last slide for more information about this project.
Daily smoking prevalence in the United States has declined since 1990 but remains a leading cause of ill health.

Despite major declines in smoking prevalence, smoking remains a top 3 cause of ill health in New York state.

Adult Smoking Status
The percent of current adult smokers has fallen across NYC since 2002

Data source: Community Health Survey, 2002-2016.
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 have never smoked in 2016 compared to 2002.

In the Bronx, men are much more likely to be current smokers than women.

Data source: Community Health Survey, 2016. Age results not age-adjusted. * Data points are statistically unstable.
In the Bronx, unemployed adults and those with less education are more likely to smoke

**Data source:** Community Health Survey, 2016.

* Data point is statistically unstable.
The percent of current smokers has declined across all groups, but is slightly higher among the non-Hispanic white population.

Data source: Community Health Survey, 2002-2016.
Non-Hispanic white 2010, 2012-2014 data should be interpreted with caution due to small numbers.
Smoking data for Asian group is statistically unstable.
3 of 10 community districts with highest percentages of current smokers are in the Bronx

Data source: NYC DOHMH, Community Health Survey, 2011-2013

Data is age-adjusted.
The primary driver of the declining adult smoking rates in the Bronx is heavy smoking, which has fallen 64% since 2002.

Data source: Community Health Survey, 2002-2016.
Data restricted to those that indicated they are current smokers.

- **Heavy smokers:** more than 10 cigarettes per day
- **Light smokers:** between 1 and 10 cigarettes per day
Quit attempts were consistent across all five boroughs between 2002 and 2013.

Data source: Community Health Survey, 2002-2015.
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

201 Mott Haven & Melrose
202 Hunts Point & Longwood
203 Morrisania & Crotona
204 Highbridge & Concourse
205 Fordham & University Heights
206 Belmont & East Tremont
207 Kingsbridge Heights & Bedford
208 Riverdale & Fieldston
209 Parkchester & Soundview
210 Throgs Neck & Co-op City
211 Morris Park & Bronxdale
212 Williamsbridge & Baychester

Note graph is depicted on log scale

Bronx 11
NYC 11

Data source: NYC Department of Consumer Affairs, 2014

Data source: NYC Community Health Profiles, 2015.
Data is age-adjusted.
Youth Smoking
The percent of current youth smokers across NYC has fallen since 2003 but remains highest in Staten Island and lowest in 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 male, older and Hispanic youth are more likely to smoke

---

**Bronx only**

Non-Hispanic white excluded due to small sample size.
Current smoker is defined as smoking at least one or more times in the previous 30 days.
Smoking in the Bronx used to be higher for female youth but is now marginally higher for males

Current smoker is defined as smoking at least one or more times in the previous 30 days.
Of Bronx youth reporting being current smokers, a declining percentage are daily smokers.

- **Current smoker** is defined as smoking at least one or more times in the previous 30 days.
- **Frequent smokers**: 20+ days in past 30 days, including daily.
- **Occasional smokers**: 1-19 days in past 30 days.


---

**Graph Details:**
- **Percent of Youth Current Smokers, Bronx**
- **Current occasional smokers**
- **Current frequent smokers**
- **Bronx current youth smokers**

- 2003: 10.2%
- 2005: 13.7%
- 2007: 3.5%
- 2009: 3.8%
- 2011: 3.0%
- 2013: 2.6%
- 2015: 0.6%
- 2017: 3.2%

Frequent smokers: 20+ days in past 30 days, including daily. Occasional smokers: 1-19 days in past 30 days.
Over one-third of Bronx youth smokers get cigarettes from stores

The percentage of youth who currently use e-cigarettes has increased since 2015, and is highest in Staten Island. E-cigarettes are also called e-cigs, vapes, e-hookahs, vape pens, electronic nicotine delivery systems and electronic vapor products.

Data source: Youth Risk Behavior Survey, 2015, 2017. Current user is defined as using at least one day in past 30 days.
In the Bronx, Hispanic youth are more likely to report using e-cigarettes


Data on other racial/ethnic groups is excluded due to small sample size.
Gender differences in e-cigarette use vary by race/ethnicity

Data on other racial/ethnic groups is excluded due to small sample size.
While e-cigarette use among Bronx youth has increased since 2015, a consistent percent are frequent users.


Percent of Youth who use E-cigarettes in Past 30 Days, Bronx

- Frequent user: 20+ days in past 30 days, including daily
- Occasional user: 1-19 days in past 30 days

14.2% of e-cigarette users are frequent users

Health Consequences of Tobacco Use
Lung Cancer
Lung cancer incidence is highest for males in all boroughs

Data is age-adjusted.
Bronx males have higher lung cancer incidence rates, though female rates have risen nearly 67% in the last 37 years.

The Bronx has the second highest rate of lung cancer mortality of all boroughs.

Data source: CDC WONDER Database, Underlying Cause of Death, 2000-2016.
Data is age-adjusted.
Lung cancer mortality rates in the Bronx are highest for males, those 85 years and older, and non-Hispanic populations.
Males in the Bronx consistently have higher lung cancer mortality rates than females, but rates have fallen 29%.

Data source: CDC WONDER Database, Underlying Cause of Death, 2000-2016.

Data is age-adjusted.
Racial and ethnic disparities in lung cancer mortality have fallen in the last 16 years

Data source: CDC WONDER Database, Underlying Cause of Death, 2000-2016. Data is age-adjusted.
Chronic Lower Respiratory Disease
Chronic obstructive pulmonary disease (COPD) is the largest contributor to chronic lower respiratory disease (CLRD) mortality in the Bronx.

Data source: CDC WONDER Database, Underlying Cause of Death, 2014-2016. Bronchitis sub-categories grouped due to unstable data.
The Bronx has the second highest CLRD mortality rate of all boroughs

Data source: CDC WONDER Database, Underlying Cause of Death, 2000-2016. Data is age-adjusted.
Men in the Bronx have higher rates of CLRD mortality, but rates have fallen 24%

Data source: CDC WONDER Database, Underlying Cause of Death, 2000-2016.
Data is age-adjusted.
In the Bronx, CLRD mortality rates are highest amongst males, those 85 years and older, and non-Hispanic white populations.

Data source: CDC WONDER Database, Underlying Cause of Death, 2016.
Age group data is not age-adjusted.
Racial and ethnic disparities in CLRD mortality have remained constant over the past 16 years.

Data source: CDC WONDER Database, Underlying Cause of Death, 2000-2016. Data is age-adjusted.
Cardiovascular Disease

Chronic Heart Disease includes:
• Ischaemic heart disease
• Hypertensive heart disease
• Stroke
Cardiovascular disease (CVD) mortality rates have declined across all five boroughs over the past 16 years.

Data source: CDC WONDER Database, Underlying Cause of Death, 2000-2016.

Data is age-adjusted.
In the Bronx, hypertensive disease is the largest contributor to CVD mortality

Data source: CDC WONDER Database, Underlying Cause of Death, 2000-2016.
Data is age-adjusted.

- Ischaemic Heart Disease: 65%
- Hypertensive Heart Disease: 24%
- Stroke: 11%
Males in the Bronx consistently have higher CVD mortality rates than females

Data source: CDC WONDER Database, Underlying Cause of Death, 2000-2016.
Data is age-adjusted.
CVD mortality rates are highest in the Bronx amongst males, those 85 years and older, and non-Hispanic white populations.
Racial and ethnic disparities in CVD mortality have fallen 45 points in the past 16 years

Data source: CDC WONDER Database, Underlying Cause of Death, 2000-2016.
Data is age-adjusted.
Diabetes

While many factors including weight status are associated with diabetes, there is a strong relationship between smoking and diabetes.

Sources: Pan et al., 2015; Willi et al., 2007
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, 2013. Data not comparable to NYC CHS data presented elsewhere.
Those 65 years and older, male, and Hispanic have the highest rates of diabetes in the Bronx

Data source: New York City Community Health Survey, 2016.
Age group data is not age-adjusted.
The diabetes mortality rate has fallen by 9 percentage points over the last 16 years in the Bronx.

Data source: CDC WONDER Database, Underlying Cause of Death, 2000-2016.
Males have a higher diabetes mortality rate and rates vary dramatically by age

Data source: CDC WONDER Database, Underlying Cause of Death, 2000-2016. Age-group data is not age-adjusted.
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 OCPHDept@montefiore.org
Sources

Links to Data Sources:

NYC Community Health Survey, https://a816-healthpsi.nyc.gov/epiquery/CHS/CHSXIndex.html
NYC Community Health Profiles, https://www1.nyc.gov/site/doh/data/data-publications/profiles.page#bx

Literature
