

# Richmond University Medical Center

An Affiliate of the Mount Sinai Health Network

## 2016 Community Health Needs Assessment & Community Service Plan



Candor. Insight. Results.

## Table of Contents

<b>Executive Summary</b>	<b>2</b>
About Richmond University Medical Center	
Mission Statement	
Public Health Assessment Methodology	
Identified Priority Needs	
Board Approval and Public Dissemination	
<b>Richmond University Medical Center's Service Area</b>	<b>5</b>
Staten Island at a Glance	
Demographic Analysis of Staten Island	
<b>Public Participation – Our Community's Input</b>	<b>10</b>
New York City Department of Health Community Consultations	
Key Informant Survey Findings	
<b>Assessment of Public Health Priorities</b>	<b>14</b>
Key Public Health Findings for Identified Priorities	
Priorities Not Addressed by RUMC	
<b>Three Year Plan for Community Health Improvement</b>	<b>21</b>
<b>Evaluation of Impact from the 2013 Community Health Improvement Plan</b>	<b>26</b>
<b>Financial Aid Program</b>	<b>33</b>
<b>Changes Impacting Community Health/Provision of Charity Care/ Access to Services</b>	<b>34</b>
<b>Dissemination of the Report to the Public</b>	<b>34</b>
<b>Research Results</b>	<b>35</b>
Public Health Secondary Data Analysis	
Key Informant Survey Results	
<b>Appendix A: Public Health Secondary Data References</b>	<b>76</b>
<b>Appendix B: Key Informants</b>	<b>78</b>

# Richmond University Medical Center 2016 CHNA Executive Summary

## About Richmond University Medical Center

Richmond University Medical Center (RUMC), an affiliate of The Mount Sinai Hospital and the Icahn School of Medicine, is a 470+ bed healthcare facility and teaching institution serving Staten Island borough residents as a leader in the areas of acute, medical and surgical care, including emergency care, surgery, minimally invasive laparoscopic and robotic surgery, gastroenterology, cardiology, pediatrics, podiatry, endocrinology, urology, oncology, orthopedics, neonatal intensive care and maternal health. Our strong commitment to quality care related to population health is demonstrated through The Joint Commission's certification in heart failure and perinatal service. RUMC is also one of only 12 hospitals in New York State to receive prestigious international recognition as a "Baby Friendly" birth facility.

Richmond University Medical Center is a Level 1 Adult and Level II Pediatric Trauma Center, accredited by the American College of Surgeons. RUMC is also a designated Stroke Center, receiving top national recognition from the American Heart Association/American Stroke Association. The state-of-the art Cardiac Catheterization Lab has PCI capabilities for elective and emergent procedures in angioplasty. RUMC maintains a Wound Care/Hyperbaric Center and a Sleep Disorder Center on-site at its main campus. The hospital also offers behavioral health services, encompassing both inpatient and outpatient services for children, adolescents and adults. RUMC is the only borough facility that offers designated psychiatric emergency services, mobile crisis intervention, and inpatient psychiatric services for adolescents.

With over 2,500 employees, RUMC is one of the largest employers on Staten Island. Its main campus is located at 355 Bard Avenue, Staten Island, New York 10310 with locations throughout the Staten Island community.

At RUMC, we are always looking to engage the community to improve care. Our commitment to Staten Island residents extends beyond providing quality clinical care:

- > We're part of the fabric of Staten Island – *past, present and future*
- > We treat patients and loved ones like family – *because they are*
- > We care about the health and wellness of Staten Islanders – *because our loved ones matter to us*
- > We're investing and planning ahead – *to answer the future health care needs of the community*
- > We're accountable to everyone we serve – *Staten Island patients, loved ones, physicians, nurses and staff*

## Mission Statement

The Medical Center is a not-for-profit health care provider serving the ethnically diverse community of Staten Island and its neighbors. We provide premier quality patient care through a full spectrum of emergent, acute, primary, behavioral health and educational services. We do this in an environment that promotes the highest satisfaction among patients, families, physicians and staff.

## Public Health Assessment Methodology

### Research Methodology

RUMC conducted a Community Health Needs Assessment (CHNA) between June and November 2016 to guide community health improvement efforts across our primary service area, Staten Island. The 2016 CHNA builds upon our 2013 CHNA and was conducted in a timeline consistent with the requirements set forth by the Affordable Care Act for non-profit hospitals and the New York State Department of Health Community Service Plan initiative. The purpose of the assessment was to gather information about local health needs and health behaviors. We examined a variety of household and health statistics to create a full picture of the health and social determinants across Staten Island. The findings help ensure that our initiatives, activities and partnerships meet the needs of our communities.

Quantitative and qualitative methods, representing both primary and secondary research, were used to illustrate and compare health trends and disparities across Staten Island. Primary research methods sought to solicit input from key community stakeholders representing the broad interests of the community, including experts in public health and individuals representing medically underserved, low-income, and minority populations. Secondary research methods sought to identify community health needs and trends across geographic areas and populations.

The following research was conducted to determine community health needs:

- > A review of public health and demographic data portraying the health and socioeconomic status of the community. A comprehensive review of public health data, including references, is included in Research Results and Appendix A.
- > A Key Informant Survey with 30 community representatives was used to solicit feedback on community health priorities, underserved populations, and partnership opportunities. Key informant results and a list of participating individuals are included in Research Results and Appendix B.

### Leadership

The 2016 CHNA was overseen by a Steering Committee of representatives from RUMC and the New York City Department of Health and Mental Hygiene, with input from community representatives and partners:

- > *Joseph Saporito, Senior Vice President and Chief Financial Officer, RUMC*
- > *Pietro Carpenito, MD, Executive Vice President, RUMC*
- > *Richard Salhany, Senior Vice President Strategic Planning & Medical Operations, RUMC*
- > *Rosemarie Stazzone, Chief Nursing Officer and Chief Operating Officer, RUMC*
- > *William (Bill) Smith, Director of Public Relations, RUMC*
- > *Lorraine Scanni, Community Outreach Specialist, RUMC*
- > *Asia Young, Hospital Community Benefits Coordinator, New York City Department of Health and Mental Hygiene*

### **Research Partner**

Richmond University Medical Center's research partner, Baker Tilly, assisted in all phases of the CHNA including project management, quantitative and qualitative data collection, report writing, and development of the Implementation Strategy. Baker Tilly's expertise ensured the validity of the research and assisted in developing a long-term action plan to address the highest health needs across Staten Island.

### **Identified Priority Needs**

RUMC leadership reviewed findings from the CHNA research, including public health and socioeconomic measures and input received from key informants, to determine the highest priorities across Staten Island and to focus community health improvement efforts. Based on the 2016 CHNA research findings and existing services, resources, and areas of expertise, RUMC selected the following priorities to address during the next three year cycle. The priorities are aligned with the New York State Prevention Agenda and Take Care New York 2020.

- > Prevent Chronic Diseases
- > Promote Mental Health and Prevent Substance Abuse

The rationale and criteria used to select these priorities included:

- > Prevalence of disease and number of community members impacted
- > Rate of disease in comparison to local and national benchmarks
- > Health disparities among racial and ethnic minorities
- > Existing programs, resources, and expertise to address the issue
- > Input from representatives of underserved populations
- > Alignment with concurrent public health and social service organization initiatives

### **Board Approval and Public Dissemination**

The Community Health Needs Assessment and Community Service Plan Final Report and Community Health Improvement Plan were reviewed and adopted by the RUMC Board on December 16, 2016. A copy of the Final Report and annual updates is posted on the hospital's website, <http://rumcsi.org/Main/About.aspx>. RUMC will also have printed copies for distribution and a public inspection copy available at the hospital at all times.

For more information regarding the Community Health Needs Assessment or to submit comments or feedback, contact William Smith, Director of Public Relations ([wsmith@rumcsi.org](mailto:wsmith@rumcsi.org)).

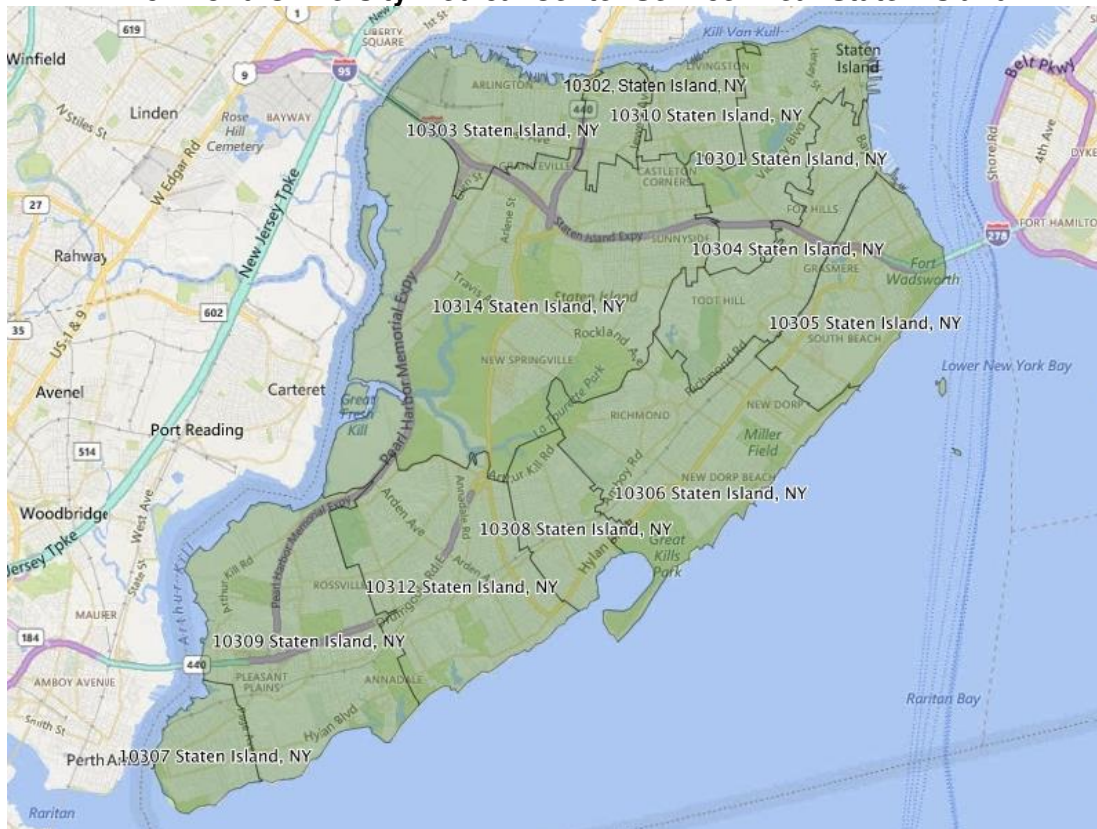


## Richmond University Medical Center's Service Area

### Staten Island at a Glance

Richmond University Medical Center primarily serves Staten Island, New York, one of five boroughs comprising New York City. Staten Island's 2016 population of 474,638 represents an increase of 1.3% from the 2010 Census.

**Richmond University Medical Center Service Area: Staten Island**



The specific zip codes in RUMC's primary service area are as follows:

- |         |         |
|---------|---------|
| > 10301 | > 10307 |
| > 10302 | > 10308 |
| > 10303 | > 10309 |
| > 10304 | > 10310 |
| > 10305 | > 10312 |
| > 10306 | > 10314 |

## Demographic Analysis of Staten Island

The following section outlines key demographic indicators related to the social determinants of health within Staten Island. Social determinants of health are factors within the environment in which people live, work, and play that can affect health and quality of life, and are often the root cause of health disparity. Healthy People 2020 defines a health disparity as “a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage.” All reported demographic data are provided by © 2016 The Nielsen Company.

### Population Overview

Staten Island has a comparable racial and ethnic makeup to the nation with 28.5% of residents identifying with a race other than White and 18% of residents identifying as Hispanic or Latino. Staten Island is less racially and ethnically diverse compared to New York City overall. The borough's median age is older than city and national medians.

**2016 Population Overview**

	Staten Island	New York City	United States
White	71.5%	43.0%	70.7%
Black or African American	10.9%	24.7%	5.4%
Asian	7.9%	13.9%	12.8%
Hispanic or Latino (of any race)	18.4%	29.2%	17.8%
Median Age	39.6	36.7	38.0

Source: The Nielsen Company, 2016

### Language Spoken at Home

Staten Island residents are less likely to speak English as their primary language when compared to the nation, but more likely when compared to New York City. The borough's most common languages, other than English, are Indo-European (12.3%) and Spanish (10.5%).

Residents in zip codes 10305 and 10303 are the least likely to speak English as their primary language (51.9% and 58.2% respectively). Indo-European languages are the second most common languages in zip code 10305, while Spanish is the second most common language in zip code 10303.

**2016 Primarily English Speaking Population**

Staten Island	New York City	United States
70.0%	51.3%	79.0%

### Financial and Occupation Demographics

Staten Island residents are just as likely as residents across the nation to own their home, despite a median home value that exceeds the national median by approximately \$270,000. A similar percentage of home owners within the borough may be influenced by a higher median household income.

**2016 Population by Household Occupancy**

	Staten Island	New York City	United States
Renter-occupied	36.0%	69.3%	35.0%
Owner-occupied	64.0%	30.7%	65.0%
Median home value	\$462,230	\$531,088	\$192,432

Staten Island's median household income is higher than NYC and the nation. However, Black/ African American and Hispanic/Latino residents have a lower median income than Asian and White residents. The disparity is greatest among Blacks/African Americans; the population has a median household income that is approximately \$30,000 less than Whites.

**2016 Population by Median Household Income**

	Staten Island	New York City	United States
White	\$77,930	\$68,640	\$59,638
Black or African American	\$48,057	\$43,468	\$37,021
Asian	\$74,365	\$58,747	\$75,041
Hispanic or Latino (of any race)	\$59,328	\$37,297	\$44,209
<b>Total Population</b>	<b>\$71,706</b>	<b>\$54,837</b>	<b>\$55,551</b>

Unemployment measures the percentage of the eligible workforce (residents age 16 years or over) who are actively seeking work, but have not obtained employment. Unemployment in Staten Island is lower than New York City and the nation.

**2016 Unemployed Population**

Staten Island	New York City	United States
4.4%	6.4%	5.6%



## Education Demographics

Education is the largest predictor of poverty and one of the most effective means of reducing inequalities. Staten Island has an equitable percentage of residents with a bachelor's degree or higher compared to New York City and the nation. Residents with less than a bachelor's degree are more likely to be high school graduates or have attained some college or an associate's degree. The percentage of Staten Island residents with less than a high school diploma is lower than the nation and New York City by 2.3 points and 8.5 points respectively.

**2016 Overall Population (25 Years of Over) by Educational Attainment**

	Staten Island	New York City	United States
Less than a high school diploma	11.3%	19.8%	13.6%
High school graduate	32.3%	24.4%	27.9%
Some college or associate's degree	26.1%	20.6%	29.2%
Bachelor's degree or higher	30.3%	35.2%	29.4%

Hispanic/Latino residents have notably lower educational attainment compared to the overall borough population. The percentage of Hispanic/Latino residents with less than a high school diploma is nearly double the percentage among the overall population. However, disparities among this population are less when compared to New York City and the nation.

**2016 Hispanic/Latino Population Educational Attainment**

	Staten Island	New York City	United States
Less than a high school diploma	21.7%	35.1%	35.6%
High school graduate	33.4%	27.4%	27.0%
Some college or associate's degree	27.5%	21.5%	23.4%
Bachelor's degree or higher	17.3%	16.1%	13.9%

\*Educational attainment is not available for Blacks/African Americans or other racial groups

## Poverty

Staten Island families and families with children are less likely to live in poverty compared to New York City and the nation. However, disparities exist with twice as many families living in poverty in zip code 10310 compared to the borough overall.

**2016 Overall Population by Poverty Status**

	Staten Island	New York City	United States
Families in poverty	9.8%	17.6%	11.7%
Families with children in poverty	7.1%	12.6%	8.9%

### Social Determinants of Health by Zip Code

Social determinants impact health for all individuals within a community; populations most at risk for health disparities are highlighted below by zip code to allow RUMC to focus its health improvement efforts where it can have the greatest impact. Zip codes are presented in descending order by “Families in Poverty.” North Shore zip codes have the poorest social determinants of health and are listed first in the table.

**Social Determinant of Health Indicators by Zip Code**

	Black/ African American	Hispanic/ Latino	Primarily English Speaking	Families in Poverty	Families w/ Children in Poverty	Single Female Households w/ Children	Unemploy- ment	Less than HS Diploma
Zip Code 10310	23.7%	33.1%	72.2%	19.7%	16.6%	16.5%	7.7%	12.5%
Zip Code 10303	38.0%	38.7%	58.2%	18.9%	15.0%	21.0%	4.9%	16.6%
Zip Code 10304	28.9%	25.3%	64.3%	17.5%	13.7%	18.1%	5.0%	17.9%
Zip Code 10302	20.7%	45.9%	60.4%	17.4%	13.6%	13.7%	5.0%	16.8%
Zip Code 10301	24.5%	26.1%	69.3%	15.6%	11.5%	15.3%	4.8%	14.1%
Zip Code 10305	4.9%	18.0%	51.9%	8.7%	6.0%	8.6%	4.3%	14.0%
Zip Code 10314	4.8%	14.3%	69.3%	7.2%	4.8%	6.6%	3.7%	9.3%
Zip Code 10309	2.5%	7.9%	80.2%	7.2%	3.5%	6.3%	3.0%	8.0%
Zip Code 10306	2.2%	12.5%	70.9%	6.1%	4.0%	7.0%	4.5%	9.0%
Zip Code 10312	1.1%	8.5%	80.2%	5.6%	3.6%	5.3%	4.5%	7.9%
Zip Code 10307	0.6%	8.7%	86.4%	5.2%	4.7%	6.8%	3.4%	8.0%
Zip Code 10308	0.6%	8.5%	80.1%	4.0%	2.7%	5.8%	4.1%	8.1%
<b>Staten Island</b>	<b>10.9%</b>	<b>18.4%</b>	<b>70.0%</b>	<b>9.8%</b>	<b>7.1%</b>	<b>9.7%</b>	<b>4.4%</b>	<b>11.3%</b>

#### Color Coding Guide

More than 2% points higher than Staten Island  
Exception: English Speaking cells are more than 2% points lower than Staten Island

## Public Participation – Our Community’s Input

Community input was a significant aspect of the Community Health Needs Assessment. RUMC collaborated with the New York City Department of Health and Mental Hygiene to obtain community member input. The Health Department held Community Consultations in neighborhoods across the City, including Staten Island, between October 2015 and March 2016. They spoke with more than 800 New Yorkers about Take Care New York 2020 (TCNY 2020) goals and local priorities for change. Take Care New York 2020 is the city’s plan to improve resident health and address health disparity. The input received at the Community Consultations will help RUMC collaborate with the Health Department and the community to plan for action.

To augment the Community Consultations, an online Key Informant Survey was conducted in August 2016 to solicit input from community leaders representing the broad interests of the community, including experts in public health and individuals representing medically underserved, low-income, and minority populations. Key informants were asked a series of questions about their perceptions of health needs in the community, health drivers, barriers to care, quality and responsiveness of health providers, and recommendations for community health improvement.

### New York City Department of Health Community Consultations

At each Community Consultation hosted by the Health Department, participants were asked to rank the indicators outlined in the TCNY 2020 plan according to order of importance for the local community, where the #1 rank represents the most important indicator. Additionally, participants were engaged in discussions about the health goals of the local community and local assets that can help achieve those goals.

Community Consultations were conducted at the following Staten Island locations:

- > Mariners Harbor: Mariners Harbor Library: Monday, November 30, 2015
- > St. George: St. George’s Library Center: Tuesday, February 9, 2016
- > New Dorp: New Dorp Library: Thursday, February 25, 2016

The top health priorities in Staten Island (in rank order), according to participating community members, are:

- > Obesity
- > Air Quality
- > Smoking
- > Unmet Mental Health Need
- > Drug Overdose Deaths

## Key Informant Survey Findings

Thirty individuals, representing diverse organizations and populations, participated in the Key Informant Survey. The following section highlights key findings from the survey. Comprehensive results are included in the Research Results section, and a list of organizations represented by key informants is included in Appendix B.

### Top Staten Island Populations Served by Key Informants

Population	Percent of Key Informants	Number of Key Informants
Families	70.4%	19
Children/Youth	66.7%	18
Disabled	66.7%	18
Seniors/Elderly	66.7%	18
Men	51.9%	14
Women	51.9%	14
Low income/Poor	48.1%	13
LGBTQ community	40.7%	11
Black/African American	37.0%	10

Key informants identified substance abuse and mental health among the top health concerns in Staten Island, followed by access to health care. Informants recognized access to health care as a cross-cutting issue affecting health in the community, but emphasized its impact on behavioral health, stating that there is a lack of services to adequately address the rising need.

Other top health concerns primarily addressed chronic condition prevalence among residents, including diabetes, lung disease, cancer, and heart disease. Key informants identified the top contributing factors to these and other conditions as social determinants of health, education/awareness regarding health, and poor diet/lack of physical activity.

### Top Health Conditions Affecting Residents

Ranking	Condition	Percent of Key Informants	Number of Key Informants
1	Substance Abuse	17.8%	16
2	Mental Health	13.3%	12
3	Access to Health Care	11.1%	10
4	Diabetes	8.9%	8
5	Alzheimer's Disease/Dementia	7.8%	7
6	Asthma/COPD/Respiratory Disease	7.8%	7
7	Cancer	7.8%	7
8	Heart Disease	7.8%	7

### Top Contributing Factors to Conditions Affecting Residents

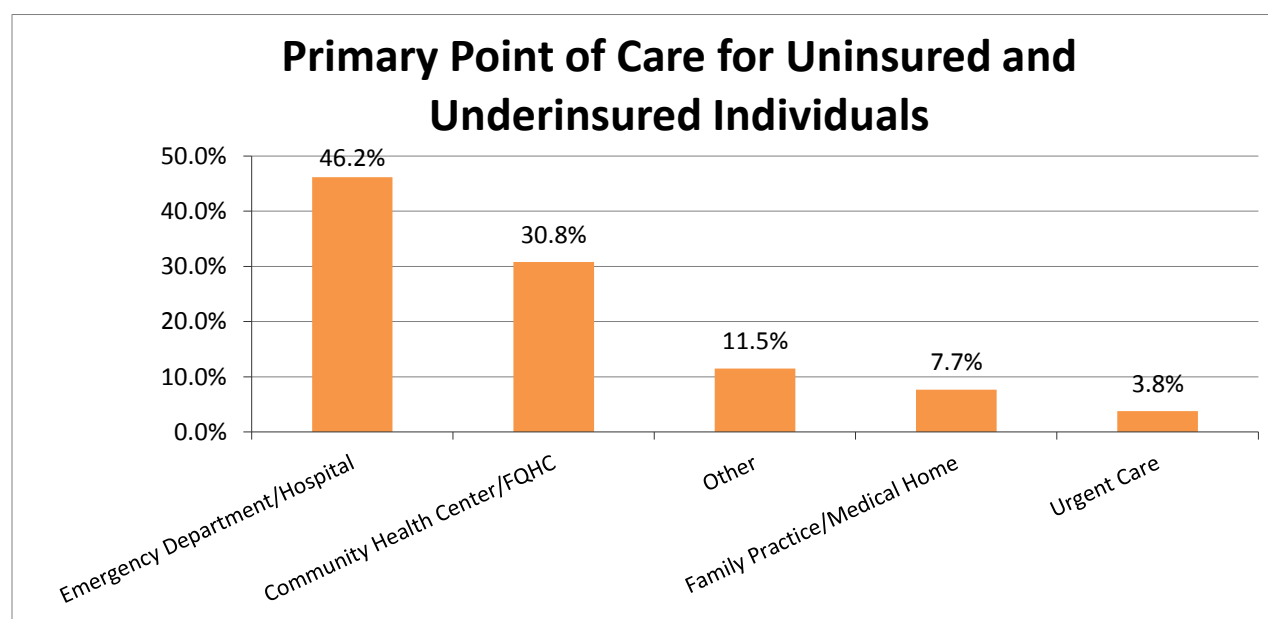
Ranking	Contributing Factor	Percent of Key Informants	Number of Key Informants
1	Drug/Alcohol abuse	18.8%	15
2	Social determinants of health	15.0%	12
3	Education/Awareness regarding health	11.3%	9
4	Other	11.3%	9
5	Poor diet/Lack of physical activity	10.0%	8

Social determinants of health are considered key contributors to the health of Staten Island residents. Key informants were asked to rate a list of social determinants of health in the region on a scale of 1 (very poor) to 5 (excellent). The majority of key informants rated the factors as “poor” or “average,” a rating between 2 and 3.

### Average Social Determinant of Health Rating on a Scale of 1 (Very Poor) to 5 (Excellent)

Social Determinant of Health	Average Rating
Education	2.83
Health and Health Care	2.78
Social and Community Context	2.76
Economic Stability	2.72
Neighborhood and Built Environment	2.58

Access to primary and specialty health care was further assessed to gather perception on barriers and service delivery needs within Staten Island. In regard to primary care, 50% of key informants reported that services are available within 20 minutes of residents; 83% reported that they are available within 30 minutes. However, for uninsured and underinsured individuals, the hospital emergency department continues to be the primary point of care:





Specialty services were perceived to be less accessible to residents; 39% of informants stated that residents travel more than 30 minutes for care. The finding correlates with public health data that found the 2014 specialty provider rate in Staten Island (182.9 per 100,000) is nearly 100 points lower than the rate for all of NYC (279.2 per 100,000).

Key Informants recommended the following resources to promote access to both primary and specialty care in the region:

- > A joint NYC Health Department and hospital facility
- > Availability of medical appointments (primary and urgent) for uninsured individuals
- > Behavioral health services
- > Care management services
- > Home health care options and hours of availability
- > Medical transportation services for individuals residing in underserved areas (e.g. Richmond Terrace, Port Richmond, and Mariner's Harbor)
- > Sensitivity and cultural awareness training among health care professionals

Key informants recognized the role that local and regional health providers have in optimizing the health of residents. They made the following recommendations to providers to impact the health of Staten Island:

- > Collaborate with community partners to address pressing health needs and provide relevant services
- > Employ medical professionals that reflect the community and implement sensitivity and cultural awareness training among employees
- > Expand medical services across Staten Island to improve access to care
- > Implement community-wide, person-centered, integrated care for health and social support services
- > Provide a mobile medical unit that brings health care to residents in lower socio-economic neighborhoods
- > Provide peer support services at mental health facilities

Key informants are committed to improving health across Staten Island. They are aware of the most pressing health needs within the community and are dedicated to addressing health disparities. Informants recognize the need to address health collectively and are eager to collaborate as partners in ongoing community health improvement initiatives.

## Assessment of Public Health Priorities

RUMC leadership reviewed findings from the CHNA research, including public health and socioeconomic measures and input received from key informants, to determine the highest priorities across Staten Island and focus community health improvement efforts. Based on the 2016 CHNA research findings and existing services, resources, and areas of expertise, RUMC selected the following priorities to address during the next three year cycle. The priorities are aligned with the New York State Prevention Agenda and Take Care New York 2020.

- > Prevent Chronic Diseases
- > Promote Mental Health and Prevent Substance Abuse

The rationale and criteria used to select these priorities included:

- > Prevalence of disease and number of community members impacted
- > Rate of disease in comparison to local and national benchmarks
- > Health disparities among racial and ethnic minorities
- > Existing programs, resources, and expertise to address the issue
- > Input from representatives of underserved populations
- > Alignment with concurrent public health and social service organization initiatives

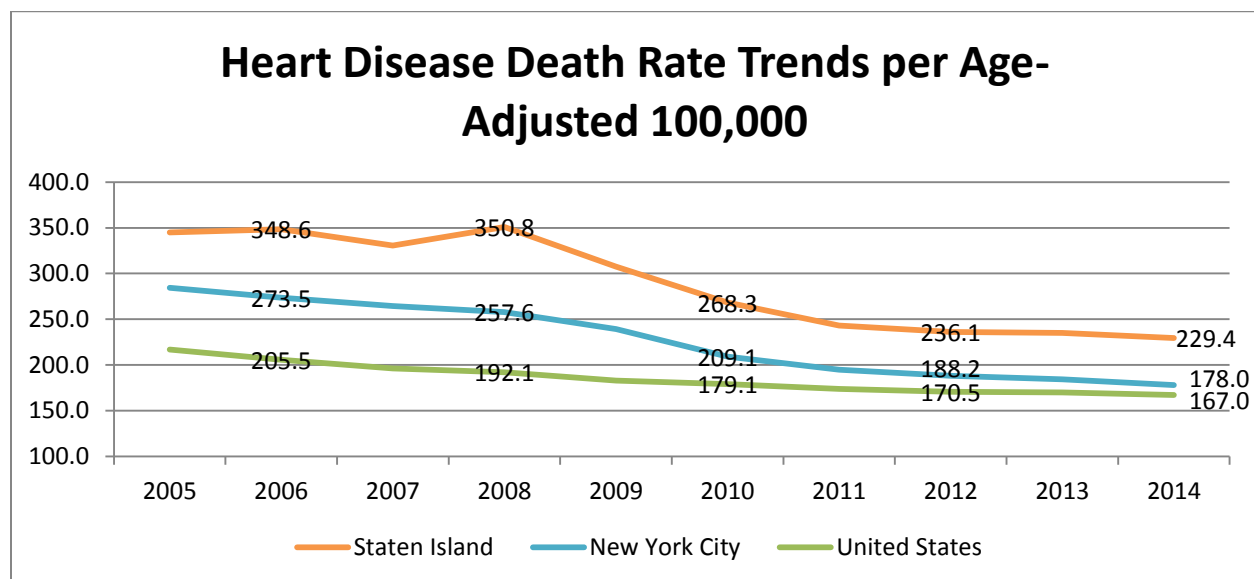
### Key Public Health Findings for Identified Priorities

#### Prevent Chronic Disease

Chronic disease rates are increasing across the nation and are the leading causes of death and disability. The following charts illustrate health trends for chronic conditions that are among the top causes of death in Staten Island: heart disease, cancer, chronic lower respiratory disease, and diabetes.

#### Heart Disease

The Staten Island heart disease death rate is the highest of the NYC boroughs, and exceeds the national rate by 62 points. However, the death rate is declining, falling 115 points from 2005.



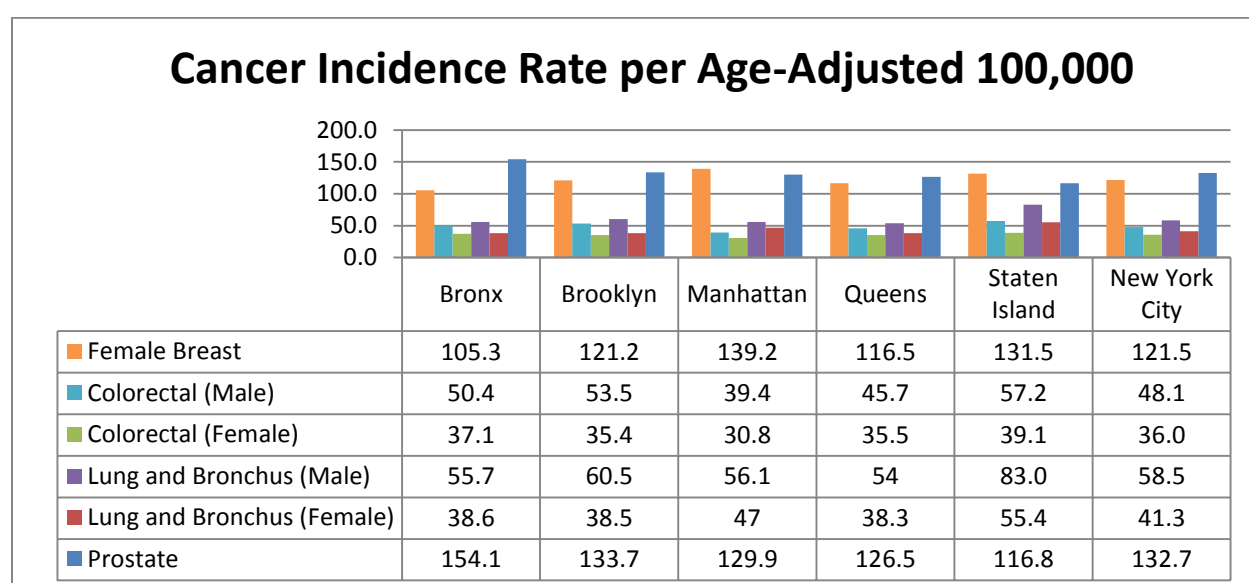
Source: New York City Department of Health and Mental Hygiene, 2005-2014 & Centers for Disease Control and Prevention, 2005-2014

Heart Disease is often a result of high blood pressure and high cholesterol. More than 25% of Staten Island adults report having high blood pressure and/or high cholesterol, a similar percentage to NYC overall.

### Cancer

Staten Island has higher cancer incidence and death rates compared to all of NYC. Incidence rates have remained stable over the past decade. Death rates are declining among both men and women, but at a faster rate among women (decrease of 29 points between 2004 and 2013).

Among the four most commonly diagnosed cancers (female breast, colorectal, lung, and prostate), Staten Island incidence rates exceed NYC for all cancer types, except prostate. Staten Island death rates exceed NYC for all cancer types, except female breast. Staten Island lung cancer incidence and death rates are the highest in comparison to NYC.



Source: New York State Department of Health, 2013

### Chronic Lower Respiratory Disease

Chronic lower respiratory disease (CLRD) encompasses diseases like chronic obstructive pulmonary disorder, emphysema, and asthma. Staten Island has the highest rate of CLRD death among NYC boroughs; the rate increased 6 points from 2008 to 2014. Staten Island also has the highest percentage of adults with a current asthma diagnosis.

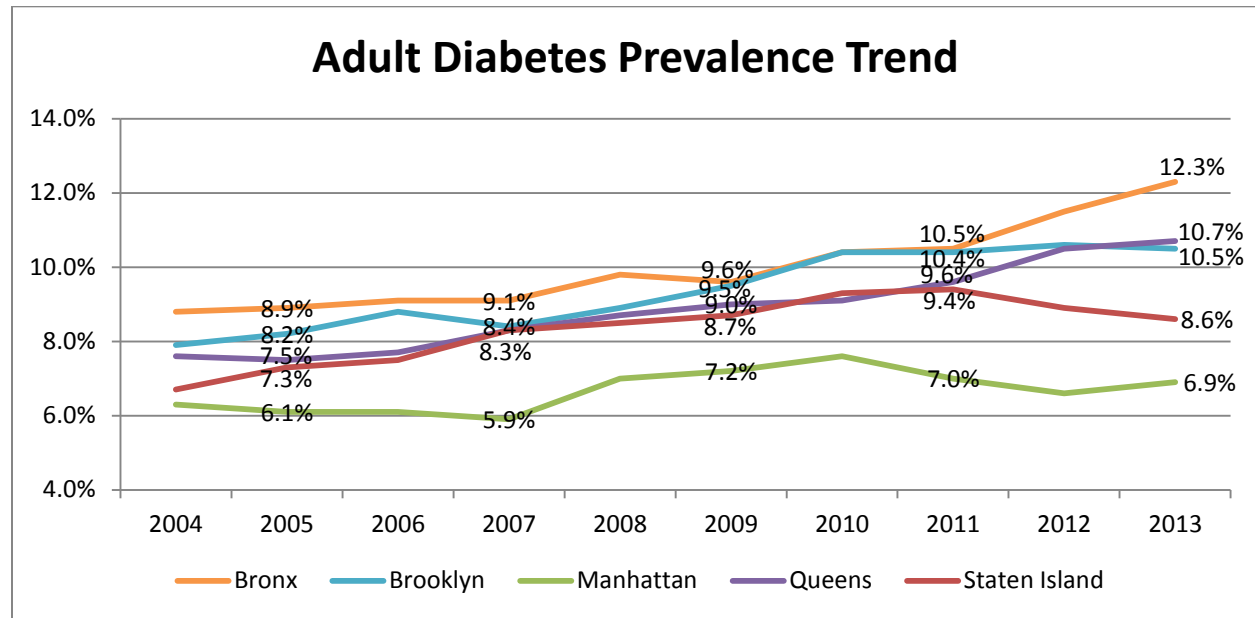
#### **Asthma Prevalence and CLRD Death Rate**

	Adult Asthma Diagnosis (Current)	CLRD Death Rate per Age-Adjusted 100,000
Bronx	4.7%	23.3
Brooklyn	3.0%	17.7
Manhattan	4.1%	18.7
Queens	3.2%	16.7
Staten Island	5.0%	28.0
New York City	3.7%	20.0

Source: New York City Department of Health and Mental Hygiene, 2013 & 2014

## Diabetes

Staten Island has the second lowest prevalence of adult diabetes among NYC boroughs. Prevalence increased 3 points between 2004 and 2011, but has since decreased. The Staten Island age-adjusted diabetes death rate is also among the lowest in NYC. However, the death rate among Blacks/African Americans (28.8 per 100,000) is 1.5 times higher than the rate among Whites (19 per 100,000).



Source: Centers for Disease Control and Prevention, 2004-2013

\*A change in methods occurred in 2011 that may affect the validity of comparisons to past years

## Health Risk Factors

Chronic diseases are often preventable through reduced health risk behaviors like smoking, increased physical activity and good nutrition, and early detection. Staten Island continues to have the highest adult smoking rate among NYC boroughs, and exceeds the Healthy People 2020 goal for smoking (12%) by nearly 5 points. Higher smoking rates among adults may contribute to higher rates of lung cancer and CLRD incidence and death.

The percentage of Staten Island high school students who report smoking cigarettes on one or more of the past 30 days is the highest of the five boroughs and exceeds the NYC average by nearly 4 points. Approximately 9% of current youth smokers are heavy smokers (smoked more than 10 cigarettes per day on the days they smoked).

The percentage of obese adults and children is a national epidemic. In Staten Island, the percentage of obese adults is nearly 5 points higher than the city average and increased nearly 2 points from 2010. Staten Island high school students are less likely to be overweight or obese compared to their peers across NYC, but they are more likely to perceive that they are either slightly or very overweight.

**Chronic Disease Risk Factors**

	Current Smokers		Obesity	
	Adults	Youth	Adults	Youth
Bronx	16.2%	7.0%	30.3%	13.4%
Brooklyn	14.1%	6.8%	26.5%	10.5%
Manhattan	12.7%	7.7%	17.6%	13.2%
Queens	12.6%	10.2%	29.2%	11.2%
Staten Island	16.6%	11.8%	24.0%	11.3%
New York City	13.9%	8.2%	24.7%	11.8%

Source: New York City Department of Health and Mental Hygiene, 2013 & 2014

Staten Island adults are just as likely or more likely to receive screenings for chronic conditions. In particular, approximately 90% to 95% of Staten Island adults meet recommended screening guidelines for blood pressure and cholesterol. Approximately 86% of Staten Island Medicare enrollees with diabetes received a hemoglobin A1c (hA1c) test in the past year

**Chronic Disease Screenings**

	Blood Pressure (Past 2 Years)	Cholesterol (Past 5 Years)	Colorectal Cancer (Past 10 Years; 50 years or over)	Mammogram (Past 2 Years; 40 years or over)	hA1c Test (Past Year)
Staten Island	94.7%	89.8%	69.4%	72.5%	85.9%
New York City	94.6%	88.9%	69.9%	74.9%	NA
United States	NA	NA	NA	NA	85.4%

Source: New York City Department of Health and Mental Hygiene, 2014 & Dartmouth Atlas of Care, 2013

**Access to Care**

Access to primary care services can improve chronic disease prevention and management efforts. Access to care is impacted by a number of factors including health insurance coverage and provider availability. The percentage of uninsured Staten Island residents declined 2 points from 2013 (8.7%) to 2014 (6.6%), and is lower when compared to NYC overall (11.4%). However, residents of North Shore zip codes have higher uninsured rates (8.8% to 13.5%).

Staten Island has fewer physicians (primary care and specialty) when compared to NYC and the state overall. Approximately 13% of the population in Staten Island resides in a health professional shortage area (HPSA), defined as having a shortage of primary care, dental, or mental health professionals; the North Shore region is primarily affected.

**Provider Rates per 100,000**

	Staten Island		New York City 2014	New York State 2014
	2013	2014		
Primary Care Physicians	102.2	112.6	138.7	124.1
Specialists (includes psychiatrists)	167.0	182.9	279.2	237.4

Source: Center for Health Workforce Studies, 2014 & Staten Island PPS CNA Report, 2013



## Promote Mental Health and Prevent Substance Abuse

### Substance Abuse

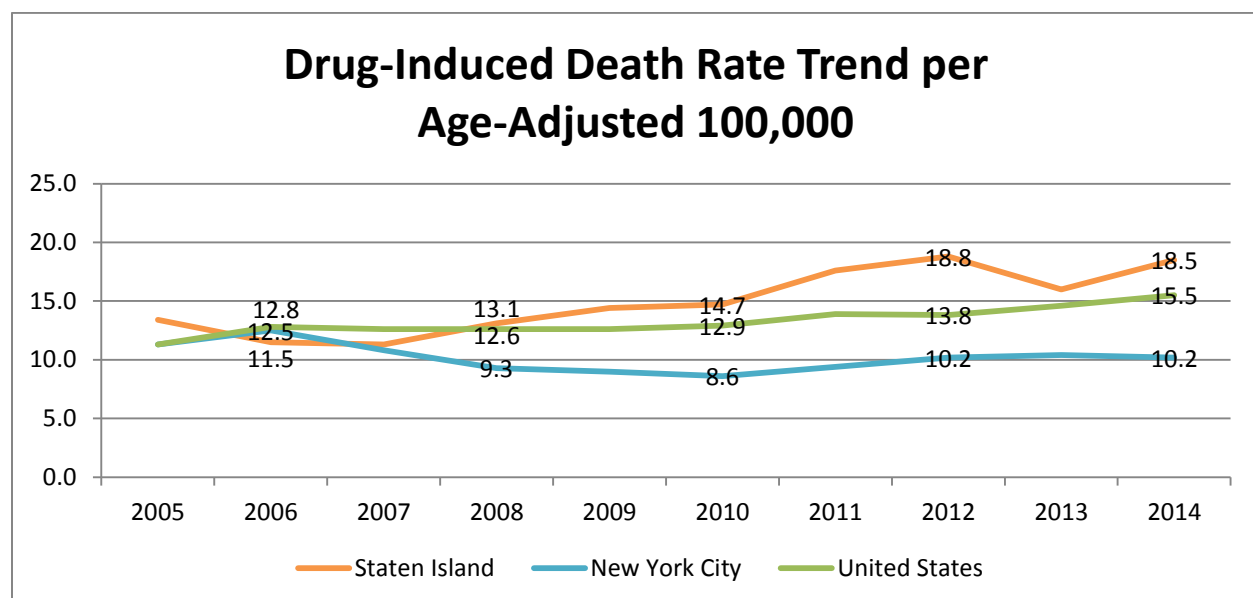
Staten Island residents are primarily affected by substance abuse issues than mental health issues; however, there is a strong connection between the two conditions. Both adults and youth in Staten Island are more likely to abuse alcohol. Staten Island has the highest percentage of driving deaths due to alcohol impairment among all NYC boroughs, and high school students are the most likely to report consuming alcohol and binge drinking. Approximately 29% of Staten Island high school students report drinking within the past 30 days, 4 points higher than the city average.

### Mental Health Measures (Adults and High School Students)

	Driving Deaths due to Alcohol Impairment	Alcohol Consumption in Past Month (HS Students)	Binge Drinking in Past Month (HS Students)
Bronx	13.0%	25.8%	13.6%
Brooklyn	14.0%	24.5%	8.9%
Manhattan	9.6%	27.3%	10.1%
Queens	15.9%	21.0%	10.3%
Staten Island	19.5%	28.5%	14.2%
New York City	NA	24.7%	10.8%

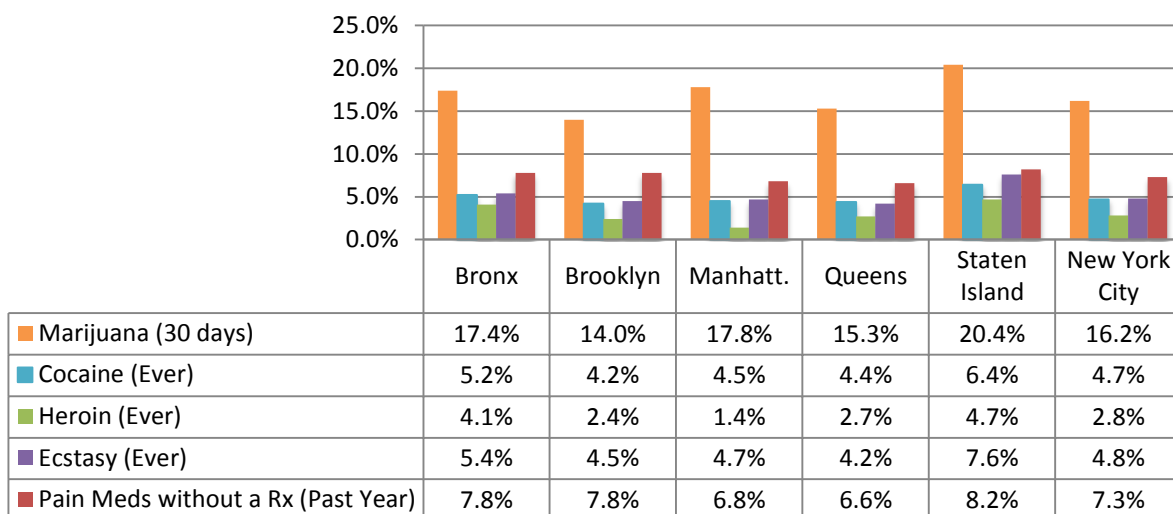
Source: Fatality Analysis Reporting System, 2010-2014; New York City Department of Health and Mental Hygiene, 2013

The drug-induced death rate in Staten Island is the highest of all NYC boroughs and exceeds the national rate. The rate has been on the rise since 2007, increasing 7 points. Among high school students, Staten Island has the highest rates of substance abuse for all reported drugs (marijuana, cocaine, heroin, ecstasy, and pain medication).



Source: Centers for Disease Control and Prevention, 2005-2014

### Substance Abuse among High School Students



Source: New York City Department of Health and Mental Hygiene, 2013

### Mental Health

Staten Island adults report a lower 30-day average of poor mental health days when compared to other NYC boroughs and the nation and are less likely to have been diagnosed with depression. The Staten Island suicide and mental and behavioral disorders death rates are also lower than both NYC and national rates and meet Healthy People 2020 goals (as applicable).

However, in a 2013 survey among high school students, more than 25% of Staten Island students reported feeling so sad or hopeless almost every day for two weeks or more, that they stopped doing their usual activities; approximately 9% of students attempted suicide one or more times during the past year. The percentages are on par with NYC overall, but noteworthy.

### Mental Health Measures (Adults and High School Students)

	Poor Mental Health Days (Adults)	Diagnosed Depression (Adults)	Felt Sad or Hopeless (HS Students)	Attempted Suicide (HS Students)
Bronx	4.3	14.9%	26.2%	9.4%
Brooklyn	3.9	13.4%	25.5%	7.4%
Manhattan	3.5	17.7%	29.2%	6.6%
Queens	3.7	11.1%	29.1%	9.1%
Staten Island	3.5	12.3%	26.6%	8.8%
New York City	NA	13.7%	27.4%	8.1%
United States	3.7	NA	NA	NA

Source: Centers for Disease Control and Prevention, 2014; New York City Department of Health and Mental Hygiene, 2013 & 2014

### Access to Care

Lack of behavioral health services within Staten Island was identified by key informants as a key barrier to receiving timely and appropriate care. Behavioral health provider rates in Staten Island increased from 2013 to 2014, but remain notably lower compared to NYC and the state. In particular, provider rates for psychologists and mental health counselors are 100 to 300 points lower than NYC rates.

**Provider Rates per 100,000**

	Staten Island		New York City 2014	New York State 2014
	2013	2014		
General Psychiatrists	24.3	27.4	49.3	36.0
Mental Health Counselors	15.3	16.1	346.2	360.4
Social Workers	181.5	186.6	488.3	449.2
Psychologists	23.2	24.9	125.6	122.9

Source: Center for Health Workforce Studies, 2014 & Staten Island PPS CNA Report, 2013

### **Priorities Not Addressed by RUMC**

RUMC leadership recognizes that the hospital can have the greatest impact on the community by focusing health improvement efforts on the most pressing needs identified from the CHNA research. The hospital will leverage existing services, resources, and areas of expertise to address the following priorities during the next three year cycle:

- > Prevent Chronic Diseases
- > Promote Mental Health and Prevent Substance Abuse

RUMC will continue existing efforts and will lend support to other lead organizations, but will not develop a specific focus for the following New York State Prevention Agenda priorities:

- > Promote a Healthy and Safe Environment
- > Promote Healthy Women, Infants, and Children
- > Prevent Sexually Transmitted Diseases, Vaccine-Preventable Diseases and Healthcare-Associated Infections

## Three Year Plan for Community Health Improvement

Richmond University Medical Center developed a Community Health Improvement Plan (CHIP) to guide community benefit activities across Staten Island. RUMC will continue to align community benefit activities, focused on improving the health of the entire Staten Island community, with population health management strategies designed to measure and improve health outcomes for patients. The integration of community and patient health improvement strategies allows RUMC to maximize resources and implement a plan that captures measurable outcomes. The CHIP builds upon previous health improvement activities, and when possible, aligns with the New York State Prevention Agenda and Take Care New York 2020.

### Prevention Agenda Priority: Prevent Chronic Diseases

**Focus Area #1:** Increase access to high quality chronic disease preventive care and management in both clinical and community settings.

**Goal #1:** Increase screening rates for cardiovascular disease, diabetes and breast, cervical and colorectal cancers, especially among disparate populations.

#### Objectives:

- > Increase availability of primary care providers in the service area and emphasis on population health management through the medical home.
- > Increase the percentage of adults 18 years or older who have had a test for high blood sugar or diabetes within the last three years.
- > Increase the percentage of adults aged 50-75 years who receive a colorectal cancer screening based on the most recent guidelines.
- > Increase the percentage of women aged 21-65 years with an income less than \$25,000 who receive a cervical cancer screening, based on the most recent guidelines.
- > Increase the percentage of women aged 50-74 years with an income less than \$25,000 who receive breast cancer screening, based on the most recent clinical guidelines.

#### Implementation Plan:

- > Continue as a partner in the New York State Department of Health Cancer Services Program, offering free breast, cervical, and colorectal screenings to individuals who are uninsured or underinsured.
- > Continue to offer the Breast Health Patient Navigation Initiative, providing free mammography education and screenings and supporting women who have abnormal mammography findings and barriers to accessing appropriate care (transportation, childcare, inability to pay, etc.). The initiative guides, educates, and supports women through screening and diagnosis by providing services that address identified barriers.
- > Foster collaboration among community-based organizations and clinicians to identify underserved populations and implement programs to improve education and access for preventative services.
  - Continue to host an annual event to coincide with National Colorectal Cancer Awareness Month, to increase awareness of colorectal cancer risk factors and prevention techniques and provide free screenings.

- Continue to partner with El Centro in Port Richmond to provide free cervical cancer screenings to uninsured, underserved women, and explore the potential to partner with other organizations to provide additional screenings.
- Partner with clinicians to host free monthly education programs regarding various health issues, including cancer, diabetes, and heart disease.
- > Use media and health communications to build public awareness and demand for preventative services.
  - Continue to utilize Electronic Health Records and the Patient Portal to remind patients of preventive and follow-up care services.
  - Participate in community health and outreach events hosted by Staten Island partner organizations and businesses to promote free screenings and education.
  - Partner with the Staten Island Performing Provider System to develop a public campaign to promote utilization of preventive care services.

Goal #2: Promote evidence-based care to manage chronic diseases.

Objectives:

- > Increase the percentage of adults with diabetes whose condition is under control.
- > Reduce 30-day readmission rates within the Medicaid population by 25%.
- > Reduce the proportion of patients who use the Emergency Department as their medical home ("Superutilizers") by 25%.

Implementation Plan:

Richmond University Medical Center is a partner in the Staten Island Performing Provider System (SI PPS) Diabetes Management Project. The goal of the project is to ensure that clinical practices in the community and ambulatory care settings use evidence-based strategies to improve management of diabetes and link patients to self-management programs. The target implementation date is March 2018, at which point protocols for disease management will be developed and all clinical staff will be trained in the program. The project will utilize care coordination teams including the use of diabetes educators, nursing staff, behavioral health providers, pharmacy, and community health workers to address health literacy issues, and patient self-efficacy and confidence in self-management. The project will also utilize hot-spotting strategies, in concert with Health Homes, to implement programs such as the Stanford Model for chronic diseases in high-risk neighborhoods. Currently, RUMC provides Medicaid patient data to the SI PPS to track project milestones and patients due for preventative services.

Richmond University Medical Center, in collaboration with ArchCare Services, launched a Care Transition Services program on October 10, 2016. The Care Transitions project looks to reduce 30-day readmission rates within the Medicaid population by actively engaging with patients during their hospitalization, developing a transition plan of care that provides education, counseling, and monitoring with expertise coordination of care through planned home visits by Registered Nurses, as well as follow-up telephone calls provided by Health Coaches. Transitional Care Services provides care management services to patients for a period of 30 days. If the patient requires additional services at the end of the 30 days, with the patient's consent, they are referred to community care management agencies for continued assistance.



Richmond University Medical Center, in collaboration with the SI PPS, is implementing the Medicaid Accelerated Exchange program to identify Superutilizers of ED services and connect them with more appropriate and supportive services. Analysis of the first cohort in this program showed that 75% of patients were no longer considered Superutilizers. The list of Superutilizers is updated every month based on the current criteria of eight or more ED visits during the past six months. Patients are considered for inclusion in the program regardless of their diagnosis; however, many patients have complex chronic health issues.

In addition to the robust endocrine services already offered by RUMC, RUMC is implementing a bariatric program, to include board certified bariatric surgeons and bariatric surgery interventions. Bariatric surgery is an evidence-based procedure that has been proven effective in improving population health with regard to obesity and diabetes.

**Focus Area #2:** Reduce illness, disability, and death related to tobacco use and secondhand smoke.

Goal #1: Promote tobacco use cessation, especially among low SES populations and those with poor mental health.

Objectives:

- > Decrease the prevalence of cigarette smoking by adults ages 18 years or older.
- > Increase the number of unique callers to the NYS Smokers' Quitline.

Implementation Plan:

- > Continue to offer a Tobacco Cessation Program twice a year for adults ages 18 years or older. The 6-week program is led by a Lung Nurse Navigator. Participants are provided information, individual counseling, and coping mechanisms in order to better fight their addiction. The Lung Nurse Navigator maintains constant contact with participants, offering them support and assistance whenever the need arises.
- > Use health communication to increase the impact and utilization of the NYS Smokers' Quitline, especially among disparate populations.
  - o Continue to use Electronic Medical Records to prompt providers to complete the 5 A's for smoking cessation intervention: Ask, Assess, Advise, Assist, Arrange, and automatic referral to the NYS Smokers' Quitline.

## **Prevention Agenda Priority: Promote Mental Health and Prevent Substance Abuse**

**Focus Area #1:** Prevent substance abuse and other mental emotional behavioral disorders.

Goal #1: Prevent underage drinking, non-medical use of prescription drugs by youth.

Objectives:

- > Reduce the percentage of youth in grades 9-12 reporting the use of alcohol on at least one day of the last 30 days to 32% by 2020.

- > Reduce the percentage of youth in grades 9-12 reporting the use of opiates (ever) to 8% by 2020.

Implementation Plan:

Richmond University Medical Center will continue to serve on the Board of Advisors for the Staten Island Partnership for Community Wellness and support their initiative, Tackling Youth Substance Abuse (TYSA). The TYSA Initiative is a cross-sector coalition aimed at driving major improvements in youth substance abuse on Staten Island. Common goals shared by the initiative are to reduce the percentage of youth reporting alcohol use in the past 30 days and opiates ever by 2020. As a partner in the initiative, RUMC will support activities to:

- > Advocate for systems-level change at the local, state, and federal level
- > Collect and share data that drives initiatives
- > Connect the community with needed resources using the Staten Island Drug and Alcohol Treatment Resource Guide and RUMC behavioral health resources
- > Educate the community on substance abuse
- > Strengthen provider and patient education to address prescription drug misuse and reduce accidental overdose

Richmond University Medical Center will continue to serve on the TYSA Continuum of Care work group. The work group is dedicated to ensuring that youth receive appropriate screening, referral, treatment, and recovery services.

**Focus Area #2: Strengthen infrastructure across systems**

Goal #1: Support collaboration among leaders, professionals and community members working in MEB health promotion, substance abuse and other MEB disorders and chronic disease prevention, treatment and recovery.

Objectives:

- > Identify and strengthen opportunities for implementing MEB health promotion and MEB disorder prevention with individuals.
- > Support efforts to integrate MEB disorder screening and treatment into primary care.

Implementation Plan:

Richmond University Medical Center will continue to serve on the Steering Committee of the Staten Island PPS Behavioral Health Infrastructure Project (BHIP). The goal of BHIP is to help strengthen mental health and substance abuse infrastructure across systems. As a partner organization, RUMC will continue to:

- > Adopt and support the BHIP vision: By 2020, Staten Island will have a high quality integrated health care system that supports optimal physical and emotional well-being.
- > Contribute to the strategic planning process and participate in decision-making for BHIP
- > Champion BHIP broadly in the Staten Island community

- > Be a community leader amongst RUMC's represented sector
- > Align RUMC's actions to the goals, indicators, and strategies of BHIP where possible
- > Promote the effective use of data for continuous improvement
- > Commit to yearlong membership and dedicate 4 hours per month on average to BHIP
- > Participate in at least 1 subcommittee
- > Participate in the regularly scheduled meetings and community events
- > Participate in sustaining the coalition's capacity, involvement and energy.

The Peer Counselor Warm Handoff program at RUMC launched in November 2016, and will be a 6-month pilot program. The program will look to connect substance use disorder patients that visit the ED with timely and appropriate withdrawal management, care coordination, and other treatment services. Goals of the program are to 1) Provide a 24/7 single access number for ED personnel to connect with community treatment providers and refer patients in need of ambulatory withdrawal management; 2) Establish a searchable online provider database to ensure community-based treatment providers are available to respond to referrals, particularly outside business hours; and 3) Ensure licensed/certified substance abuse clinical peer counselors and certified recovery peer advocates are placed in the ED to better engage clients.

The Silberstein Outpatient Chemical Dependence Program exists to rehabilitate individuals suffering from co-occurring substance use and mental health disorders. Silberstein provides in-house services offering support to clients and the community. Up to 35 weekly group therapy sessions are held at the clinic, while Alcoholics Anonymous (AA) meetings are hosted daily and are open to the public. Silberstein also collaborates with other agencies serving individuals in need of substance abuse treatment to improve services. Partner agencies include Treatment Alternatives to Street Crime (TSAC), drug treatment court, Administration for Children Services (ACS), and local and state rehab, detox and residential facilities.

Silberstein is involved in an initiative with the District Attorney and TYSA to redevelop 24/7 Recovery Centers on the North and South Shore of the Island. These centers will be equipped with clinical staff to assess individual treatment needs and provide linkages to treatment, allowing the center to serve as a haven for people until they are connected to a treatment facility, while also reducing psychiatric and emergency room visits. The Centers will accept referrals from the community and professionals if the treatment need is immediate. The project is in its infant stages and aims to have fully staffed and sustainable facilities by 2018.

Clients of the Silberstein clinic are trained to detect and prevent an opioid overdose through the use of Naloxone (Narcan). The nasal spray medication can be administered to an overdosing user during an overdose event to block the effects of opioids and resuscitate the patient. Kits are distributed at Silberstein and clientele are educated on administration of the antidote. Silberstein's medical staff is working with Dr. Ginny Mantello of the Borough Presidents Office to expand Narcan training beyond Silberstein's Outpatient program. The goal is to have Narcan available in the ED for overdose patients and their families, so that no one leaves the ED without Narcan training and a kit.

## Evaluation of Impact from the 2013 Community Health Improvement Plan

In 2013, RUMC completed a community health needs assessment and developed a supporting three year implementation plan to address identified New York State Prevention Agenda priorities. Priorities included chronic disease, a healthy and safe environment, women, infants, and children, mental health and substance abuse, and communicable diseases and healthcare associated infections. RUMC initiated the following strategies to address each priority area.

### Prevention Agenda Priority: Prevent Chronic Disease

#### 2013 Goals:

- > Increase access to high-quality chronic disease preventive care and management in clinical and community settings.
- > Reduce illness, disability, and death related to tobacco use and secondhand smoke exposure.
- > Reduce obesity in adults and children.

#### Community Impact

Richmond University Medical Center implemented the following programs and activities to address chronic disease prevention needs related to risk factors, early identification, and care management:

##### Cancer Screenings

Richmond University Medical Center participates in the New York State Department of Health Cancer Services Program offering free breast, cervical, and colorectal screenings to individuals who either do not have health insurance or have health insurance that does not cover the cost of screenings. All New York State residents meeting income and age requirements are eligible for services. Since 2013, over 300 screenings have been performed. Individuals with positive screenings receive follow-up consultation from the Cancer Services Program Coordinator.

Richmond University Medical Center launched the Breast Health Patient Navigation Initiative in April of 2010. The primary aims of the initiative are to educate women regarding the importance of mammography and support women who have abnormal mammography findings and barriers to accessing appropriate care. These barriers include transportation to and from appointments, childcare, inability to pay for care or high co-pay, culture, language, anxiety or fear of diagnosis. The goal is to guide, educate, and support women through screening and diagnosis by providing services that address the identified barriers.

Addition cancer screening and education opportunities provided by RUMC include:

1. To coincide with National Colorectal Cancer Awareness Month, RUMC hosted an annual prevention event that was free and open to the public. Represented at this event were the American Cancer Society, local food markets distributing “colon-friendly foods,” and endocrinology health providers providing education and awareness. The event was attended by approximately 50 community members. Qualifying participants received free Fecal Immunochemical Tests and were offered examination and follow-up.

2. As part of the annual "Back to the Beach" community event on the Midland Beach Boardwalk, RUMC provided free skin cancer screenings and sunscreen, targeting underserved, uninsured populations. Participants requiring follow-up consultation were tended to by the screening physician.
3. On June 23rd 2016, RUMC hosted a cervical cancer screening event at El Centro in Port Richmond, targeting uninsured women who were afraid to complete a cervical cancer screening due to lack of legal immigration status and/or cost. Participating women were screened and examined by physicians, and provided follow-up services as necessary.
4. To coincide with Ovarian Cancer Awareness Month, RUMC hosted a day of community outreach on September 21, 2016 in the main hospital lobby. Approximately 150 people attended the event and received information to increase their awareness of ovarian cancer risk factors, prevention, and screening.

#### Obesity and Chronic Disease Prevention

Richmond University Medical Center hosts free quarterly seminars on healthy eating and creating a fitness routine to avoid obesity and associated chronic diseases. Dr. Philip E. Otterbeck, Chief of Endocrinology at RUMC, spearheads this initiative. The seminars are widely attended with an average of 100 participants. The locations of the seminars are varied, with a focus on the underserved population.

Since 2013, RUMC has also hosted a free monthly education program titled, "Meet the Nurses." The program, hosted in the hospital auditorium, allows community members to hear directly from doctors and nurses about various healthcare issues, including cancer, heart disease, diabetes, organ donation, and alcohol abuse. Richmond University Medical Center is active in the community, participating in annual health events, including Staten Island Economic Development Corporation Health and Wellness Expo, Staten Island Economic Development Corporation Business Conference, Richmond County Fair, National Night Out Against Crime, and numerous events hosted by Historic Richmondtown. Richmond University Medical Center also participates in local NYPD outreach events and senior-specific events. At these events, RUMC offers free screenings and education.

#### Provider Access

Richmond University Medical Center is committed to increasing the provider rates of primary care physicians and specialists on Staten Island as a result of the statistics reported on page 17 of this report. As part of the Delivery System Reform Incentive Payment (DSRIP) Program, two sites have been implemented focusing on primary care services. At these sites, clinical protocols are utilized as well as an EMR to guide the physician during each visit to record the prevention services received (Ex. Colon screening, tobacco cessation, vaccines, etc.). In addition, as a result of the alarming cancer statistics, the medical center has expanded their sub-specialists, most recently hiring a full-time thoracic surgeon and gastroenterologist.



Richmond Quality ACO

Richmond Quality, LLC Accountable Care Organization (ACO): RUMC is the founder of the Richmond Quality ACO. The ACO consists of over 21 primary care physicians who oversee the care of 7,000+ patients in the community covered by Medicare. This alliance of physicians works together to improve population health for covered lives with the implementation of standardized preventative care, on-going health screenings, and routine wellness exams. The current national trend is to have the primary care physician be the major gatekeeper when it comes to the care of the patient.

Tobacco Use

Richmond University Medical Center offers a twice-a-year Tobacco Cessation Program. The 6-week program, led by a Lung Nurse Navigator, is funded by a Grant provided by the New York City Council. Participants are provided information, individual counseling, and coping mechanisms in order to better fight their addiction. Fifteen people participated in the Winter 2015 and Spring 2016 sessions; all participants were successful in quitting smoking at the end of the program. The Lung Nurse Navigator maintains constant contact with participants, offering them support and assistance whenever the need arises. As of today, three participants are regular or intermittent smokers.

Staten Island Performing Provider System

Richmond University Medical Center is a co-leader of the SI PPS, an alliance focused on improving the quality of care and overall health for Staten Island's Medicaid and uninsured populations. The SI PPS initiated the Medicaid Accelerated Exchange (MAX) program to improve outcomes among ED Superutilizers.

The MAX program captures the highest utilizers of the RUMC ED. The initial cohort was 110 patients, with the list criteria being 3 or more inpatient visits or 6 or more ED visits over a 2-year span with a diagnosis of Diabetes and Behavioral Health. A new list was run, shortening the time to the past 6 months. Analysis showed that 75 percent of Superutilizers from the old list naturally dropped off and were no longer Superutilizers. The list has been updated on a monthly basis, to assure RUMC has the most recent Superutilizers' list. The current cohort of 171 patients has a criteria of 8 or more ED visits over the past 6 months (2/10/2016 - 8/10/2016), and any diagnosis.

**Prevention Agenda Priority: Promote a Healthy and Safe Environment**

**2013 Goal:** Reduce violence by targeting prevention programs, particularly to highest risk populations.

**Community Impact**

Richmond University Medical Center's trauma services involve the detailed assessment and care of injured patients. Richmond University Medical Center is a New York State Level 1 Trauma Center, the highest designation given for Trauma Centers. We have Attending Trauma physicians present on site 24/7/365 to care for injured patients.

The trauma registry is an essential component of RUMC's trauma program. Among other things, the trauma registry measures traumatic injury trends in the community. The data is utilized to identify needed injury prevention and outreach education opportunities, and enables RUMC to take additional steps toward enhancing safety measures for the communities we serve.

Richmond University Medical Center, one of the regions educational hubs, provides many outreach opportunities throughout the community, including teddy bear clinics to local day care centers, pediatric centers, the Staten Island Children's Museum and schools; stranger danger and helmet safety programs; distracted/drunk driving programs to high school and college students, and anti-violence programs. In addition, a child passenger safety technician conducts monthly car seat checks in collaboration with the Department of Transportation for new or expecting parents.

A Matter of Balance Train the Trainer class is offered by RUMC's master trainers to individuals caring for older adults in Staten Island and throughout the Metropolitan New York area. This evidence-based fall prevention program addresses fear of falling and explores attitudes about falls that can be self-defeating and limiting. Exercises focusing on balance and strength training are taught to help older adults follow their personal plans to carry out fall prevention strategies.

The Trauma Nursing Core Course designed by the Emergency Nurses Association, is offered monthly to nurses at RUMC and other healthcare organizations. The Course provides an opportunity to learn the most current evidenced-based treatment and best practices for optimum care. It combines interactive learning with scenario-based assessments to give nurses a comprehensive learning experience about care of the traumatically injured patient.

Richmond University Medical Center is also a partner in a multisector violence prevention program, Cure Violence, CEASEFIRE. The program works individually with patients who are victims of violence and brings together an interdisciplinary team of local organizations, whose goals is to interrupt and thereby reduce incidents of gun violence on the North Shore of Staten Island. The program has been operational since January 2014. Statistics were gathered starting in March 2014. In 2014, 27 victims were reached. The highly engaged, community partners of this intervention coordinate events, conduct educational activities, fund the intervention, allow/sponsor access to the site or population and assist with advocacy.

Richmond University Medical Center was re-accredited in 2016 as a designated SAFE (Sexual Assault Forensic Examiner) Center of Excellence, as part of the hospital's Violence Against Women Program. The goal of the program is to enhance the availability of services to sexual assault victims, and improve the treatment of sexual assault victims by promoting an effective coordinated community response between medical, law enforcement, prosecutors and sexual assault victim service agencies.

Features of the program include forensic exams, crisis intervention, short term counseling, advocacy, referrals, and follow-up medical care to victims of sexual assault who present at the hospital's Emergency Department. RUMC has a team of forensically trained medical professionals who work closely with Safe Horizons, rape victim advocates who are on-call 24/7

to hospitals in Staten Island. Trained registered nurses support sexual assault victims following incidents by providing short term counseling and advocacy. Culturally and linguistically competent services are available to all victims who seek services. RUMC works closely with the Community Rape Victim Advocacy Program, the Child Advocacy Center, the Staten Island Sexual Assistance Task Force, the NYC Alliance Against Sexual Assault, and the Special Victims Unit law enforcement team to provide services and support to survivors.

## **Prevention Agenda Priority: Promote Healthy Women, Infants, and Children**

### **2013 Goals:**

- > Reduce premature births in New York State.
- > Increase the proportion of NYS babies who are breastfed.
- > Increase utilization of preventive health care services among women of reproductive ages.

### **Community Impact**

Richmond University Medical Center provides structured, comprehensive breastfeeding education and professional lactation counseling and support during pregnancy, in the hospital and at home. In addition, the hospital has implemented the Centering Program for prenatal patients, offering group support and empowering techniques, and is working with the NYS Partnership for Patients to implement the NYS Perinatal Quality Collaboration Obstetrical Quality Improvement Project.

Richmond University Medical Center, in partnership with Babies R Us, hosts a bi-annual Baby Expo. The Baby Expo is free and open to the public. It is attended by RUMC OB/GYN staff and Department of Transportation representatives who engage with new moms and moms-to-be on a variety of topics, including infant and toddler nutrition, child safety, and car seat installation. A lactation consultant is available to guide and promote breast feeding. The Baby Expo is attended by 500 to 1000 people each year.

## **Prevention Agenda Priority: Promote Mental Health and Prevent Substance Abuse**

### **2013 Goals:**

- > Promote mental, emotional, and behavioral well-being in communities.
- > Prevent substance abuse and other mental emotional behavioral disorders.

### **Community Impact**

Richmond University Medical Center is represented on the Steering Committee of the Staten Island PPS Behavioral Health Infrastructure Project (BHIP) and the Board of Advisors for the Staten Island Partnership for Community Wellness (SPICW). The two organizations work collaboratively to promote behavioral health and improve health care services across Staten Island.

The goal of BHIP is to help strengthen mental health and substance abuse infrastructure across systems. As a partner organization, RUMC committed to adopting and supporting the BHIP vision: By 2020, Staten Island will have a high quality integrated health care system that supports optimal physical and emotional well-being.

Staten Island Partnership for Community Wellness (SPICW) is a membership organization of individuals and community organizations from the public, private, and non-profit sectors established to promote wellness and to improve the health of the Staten Island community through collaboration and a multidisciplinary approach. A key initiative of SIPCW is the Tackling Youth Substance Abuse (TYSA) Initiative. The Tackling Youth Substance Abuse Initiative is a cross-sector coalition aimed at decreasing the use of alcohol and prescription drugs and promoting overall healthy choices among youth. Actions taken by the TYSA initiative include:

- > Educating the community on substance abuse issues (Parent Workshops, Community Forums, Media Campaigns)
- > Collecting and sharing data and personal stories (Focus Groups, Surveys, Testimonials)
- > Training professionals (Pharmacists, Physicians, Youth Service Providers, Beverage Servers, Business Owners)
- > Providing opportunities for youth and community ownership of issue (Youth Council, Workgroups, Townhall Meetings)
- > Connecting community with needed resources (Fact Sheets, Web Resources, Parent Toolkit, Treatment Resource Guide)
- > Advocating for systems-level change at the local, state, and federal level (Treatment Services, Prescription Monitoring Programs).

### **Prevention Agenda Priority: Prevent HIV, STDs, Vaccine Preventable Diseases, and Healthcare Associated Infections**

**2013 Goal:** Prevent HIV and STDs.

#### **Community Impact**

In 2013, RUMC reactivated a previously closed ambulatory clinic for HIV-positive patients. Over the past 3 years, clinic staff have worked with the New York State Department of Health (NYSDOH) to reach the Governor's goal of ending the HIV epidemic by 2020, and with RUMC Administrators and Executive Staff to extend services at RUMC. The clinic has doubled the number of patients who are served and is engaged in testing, linking patients to care, and ensuring quality of care. The clinic has worked and collaborated on the following initiatives:

- > NYSDOH New York Knows, the nation's largest HIV testing and prevention initiative
- > Improved HIV testing in partnership with NYSDOH HIV Specialists and ED staff
- > Expanded HIV testing in the community in partnership with local pharmacies
- > HIV patient navigation services (e.g. health insurance, housing assistance, emotional management) in partnership with Community Health Action of Staten Island, Project

Hospitality for Case Management and Care Coordination, and RUMC mental health services

- > Educational opportunities for patients, including handouts in ED and Ambulatory Clinic settings and training on HIV care
- > Data sharing for HIV care and quality metrics in partnership with NYSDOH New York Knows, eHIVQUAL, The AIDS Institute, Lower New York Consortium for Families, and Improving Healthcare for the Common Good (IPRO)
- > Partnership with local pharmacies in the provision of HIV and Hepatitis C medications for co-infected and mono-infected patients

Richmond University Medical Center, in conjunction with Walgreens Pharmacy, also hosts a bi-annual free HIV screening and prevention counseling event at area pharmacies. The events are open to the public and promoted via social media and promotional flyers, targeting underserved, uninsured populations. Results are provided by trained counselors.

## Financial Aid Program

In keeping with its charitable purposes, and to improve the community's access to care, RUMC provides healthcare services to all individuals in a non-discriminatory way, regardless of race, color, creed, or ethnicity. RUMC continues to provide reduced-fee or free care in accordance with public law 2807(K) (9-A). Total charity care provided in fiscal years 2014 and 2015 was nearly \$10 million.

Although not required by this law, RUMC does extend this policy to individuals who may not be qualified based on the guidelines of its financial assistance policy, but do demonstrate an inability to pay all of their medical expenses. As part of best-practice care, RUMC is in communication with local community-based consumer advocate organizations to be certain that they are aware of the provisions of our financial aid policy. RUMC's patient access department has received summary data of the law and the hospital's requirements. Assistance continues to be offered by RUMC's financial screening staff and medical application office to those individuals not eligible for Medicaid, as well as financial screening staff located in the emergency department.

RUMC posts the hospital's charity care policy summary and financial assistance contact information in many different languages (as determined by RUMC's annual language needs assessment) in locations such as the emergency department, intake, registration and admission areas. Patients are provided a summary of the policy and financial assistance contact information as part of the intake process and financial screening process. Patient bills include a statement on financial assistance. Every patient seen in the financial office has a discussion on the availability of government benefits such as Medicaid and at the same time qualifications on the hospital's financial assistance program.

RUMC has an interdisciplinary team that interacts with financial assistance counselors such as social workers and case managers to identify and assist eligible patients. Staff training on financial assistance is done annually through an in-service program that includes a review of how to qualify patients for Medicaid and other government programs. All third parties that work for RUMC in the collection of fees are required to follow the hospital's policies regarding patient notification about the availability of financial assistance.



## **Changes Impacting Community Health/Provision of Charity Care/Access to Services**

Richmond University Medical Center has not experienced any changes to its operation or financial situation that would impact the care of the community, financial assistance, and/or access to health care. The hospital has maintaining its commitment to the care of the community, while improving services to meet growing needs. The provision of financial assistance will continue to be offered to patients in keeping with RUMC's charitable purposes.

## **Dissemination of the Report to the Public**

Richmond University Medical Center intends to disseminate the Community Health Needs Assessment and Community Service Plan, which includes the implementation strategy, directly to all individuals and organizations that participated in the Key Informant Survey, and organizations will be asked to make the assessment available to its client list in a manner of their choosing. In addition, the CSP will be sent electronically to local, state, and federal elected officials.

Richmond University Medical Center will make the document available on its website, <http://rumcsi.org/Main/About.aspx>, with postings to its social media outlets as well. RUMC will also have the document printed for distribution and have a public inspection copy available at the hospital at all times.

# Richmond University Medical Center 2016 CHNA

## Research Results: Public Health Secondary Data Analysis

### Background

Publicly reported health statistics were collected and analyzed to identify health trends and disparities across Staten Island. The following analysis uses data compiled by secondary sources such as the New York City Department of Health and the Centers for Disease Control and Prevention. A full listing of public health data sources is included in Appendix A.

Staten Island public health data is compared to other New York City (NYC) boroughs, national averages, and Healthy People 2020 (HP 2020) goals, where applicable. New York City and national averages represent comparable year(s) of data to Staten Island statistics, unless otherwise noted. Healthy People 2020 goals are national goals created by the U.S. Department of Health and Human Services to set a benchmark for all communities to strive towards. Healthy People goals are updated every ten years and progress is tracked throughout the decade.

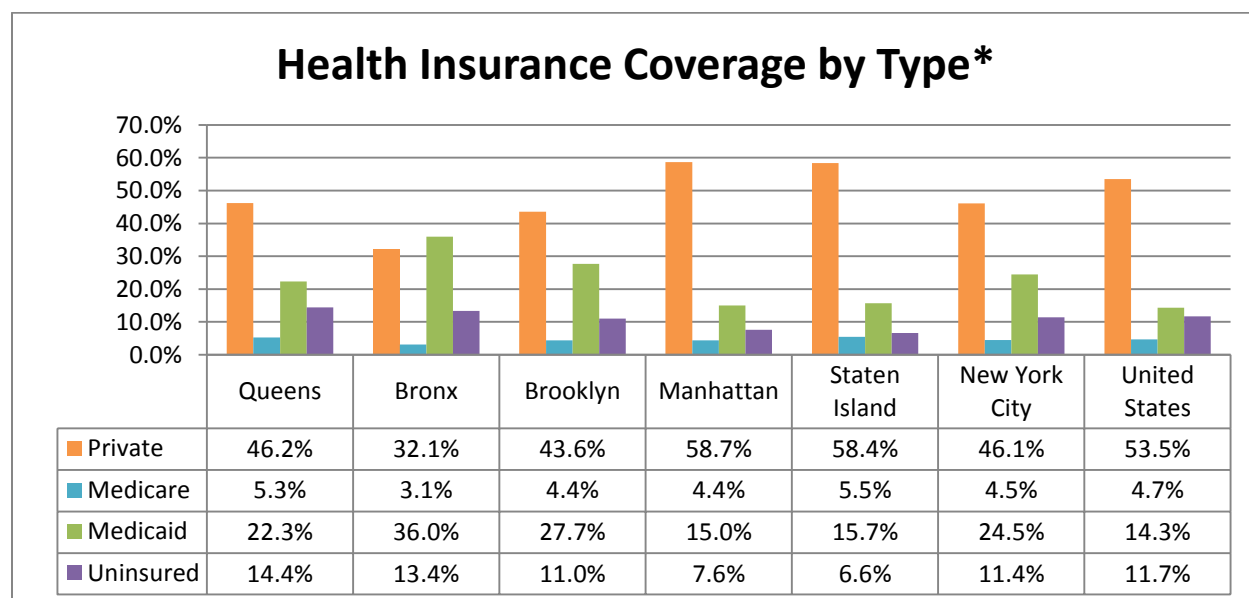
### Access to Health Services

#### Health Insurance Coverage

According to the 2016 County Health Rankings, Staten Island ranks 16<sup>th</sup> out of the 62 counties in New York for clinical care. The ranking is based on a number of indicators, including health insurance coverage and provider access.

Staten Island residents are less likely to be uninsured compared to other NYC boroughs and the nation

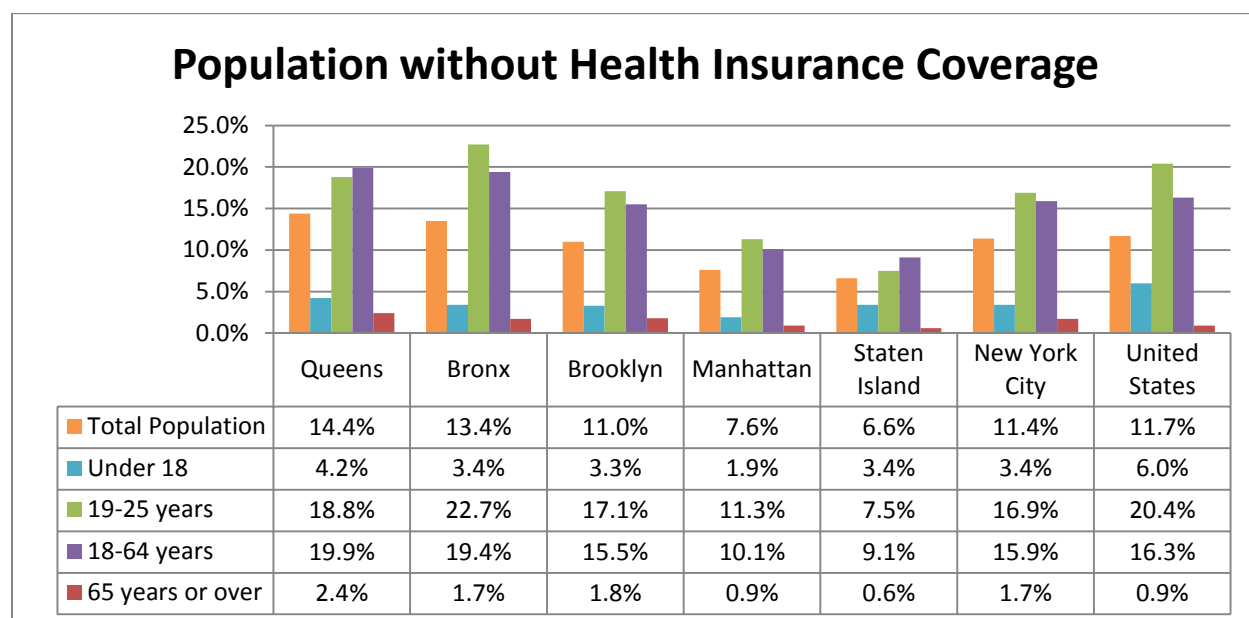
The percentage of uninsured Staten Island residents declined 2 points from 2013 (8.7%) to 2014 (6.6%). The uninsured population is lower when compared to other NYC boroughs and the nation, but does not meet the Healthy People 2020 goal to have 100% of residents insured.



Source: American Community Survey, 2014

\*Boroughs are presented in descending order by uninsured status

The Staten Island uninsured rate is highest among adults 18 to 64 years (9.1%). Across NYC and the nation, the uninsured rate is highest among young adults 19 to 25 years.



Source: United States Census Bureau American Community Survey, 2014

The following Staten Island zip codes have an uninsured rate that is more than 2 points higher than the overall borough rate (6.6%). All zip codes are located within the North Shore. Uninsured rates are based on 2010 to 2014 averages.

All North Shore zip codes have a higher uninsured rate than Staten Island overall

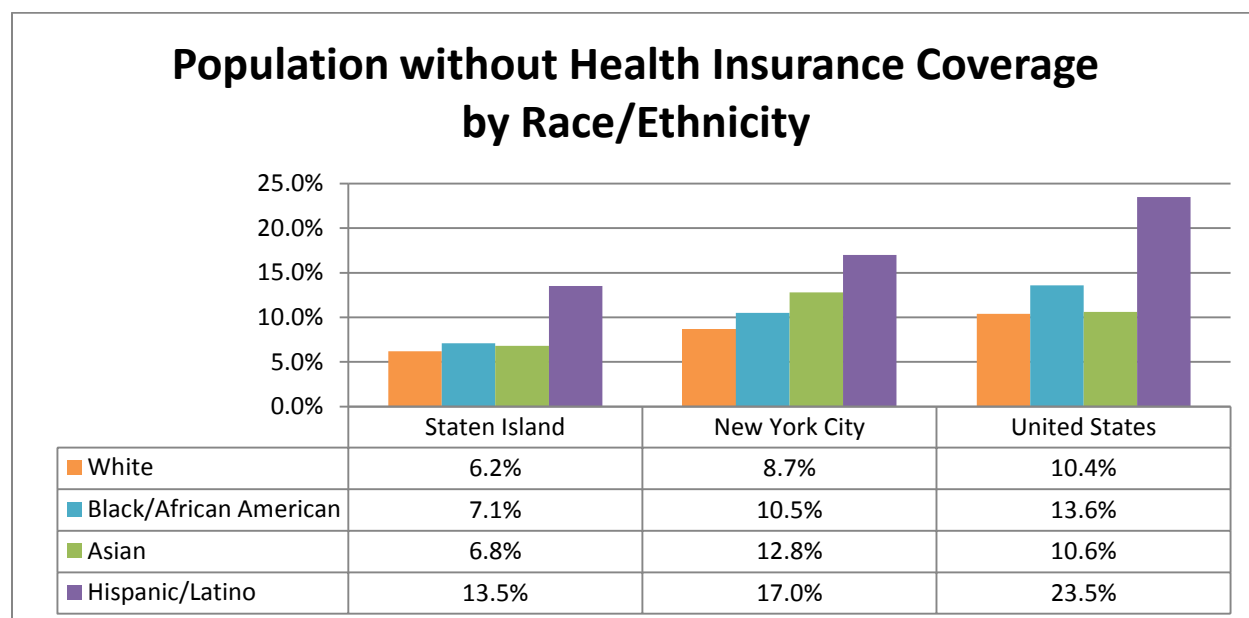
#### Uninsured Rates for Zip Codes Exceeding Staten Island Overall by at Least 2 Points

Zip Code	Uninsured Rate	Number of People Affected
10302, Staten Island	13.5%	2,433
10304, Staten Island	12.6%	5,146
10310, Staten Island	11.2%	2,777
10303, Staten Island	11.1%	2,688
10301, Staten Island	9.6%	3,721
10305, Staten Island	8.8%	3,609

Source: United States Census Bureau American Community Survey, 2010-2014

Hispanic/Latino residents in Staten Island are more likely to be uninsured when compared to other racial/ethnic groups. Staten Island differs from NYC and the nation with a similar percentage of uninsured Black/African American and White residents.

Hispanic/Latino residents have the highest uninsured rates among all racial/ethnic groups



Source: United States Census Bureau American Community Survey, 2014

### Provider Access

An estimated 12.5% of the population in Staten Island resides in a health professional shortage area (HPSA), defined as having a shortage of primary care, dental, or mental health professionals. The North Shore region is primarily affected; 17 census tracts stretching from Howland Hook to West Brighton are HPSAs for mental health (all residents) and primary care (Medicaid eligible residents). Fifteen census tracts in the northeastern portion of the borough, comprising primarily St. George and Tompkinsville, are HPSAs for primary care (all residents) and dental care (Medicaid eligible residents).

12.5% of Staten Island residents, primarily in the North Shore, reside in a HPSA

Medically Underserved Areas (MUAs) are areas determined by the U.S. Department of Health and Human Services Health Resources and Services Administration as having too few primary care providers, high infant mortality, high poverty, or a high elderly population. Five census tracts within Mariners Harbor, stretching east to west from Holland Avenue to Morningstar Road and south to Forest Avenue are MUAs.

Data from the Center for Health Workforce Studies for 2014 found that Staten Island has a lower rate of inpatient hospital beds compared to NYC and the state, and the rate decreased from 2013. Staten Island also has fewer physicians (primary care and specialists), despite increases in provider rates. The borough has higher rates of advanced practice providers (e.g. physician assistants (PA) and nurse practitioners (NP) and registered nurses.

Staten Island rates for inpatient beds and physicians remain lower than NYC and state comparisons

Staten Island behavioral health provider rates are lower than NYC and state comparisons

Behavioral health provider rates in Staten Island increased from 2013 to 2014, but remain notably lower compared to NYC and the state. In particular, the mental health counselor rate per 100,000 is 330 points lower than the NYC rate, and the psychologist rate is 101 points lower than the NYC rate.

### Provider Rates per 100,000\*

	Staten Island		New York City 2014	New York State 2014
	2013	2014		
Bed Availability				
Inpatient Hospital Beds	264.2	259.6	303.8	288.0
Nursing Home Beds	652.5	660.2	533.6	591.2
Providers				
Physicians	269.2	296.1	419.4	362.9
Primary Care Physicians (includes Peds and OB/GYN)	102.2	112.6	138.7	124.1
Specialists (includes psychiatrists)	167.0	182.9	279.2	237.4
General Psychiatrists	24.3	27.4	49.3	36.0
Dentists	76.7	78.6	48.6	70.4
Physician Assistants	71.3	77.8	60.0	56.1
Nurse Practitioners	63.8	70.7	11.7**	24.3**
Registered Nurses	1,360.7	1,426.5	797.6	1,039.0
Mental Health Counselors	15.3	16.1	346.2	360.4
Social Workers	181.5	186.6	488.3	449.2
Psychologists	23.2	24.9	125.6	122.9
Physical Therapists	105.3	110.5	63.1	84.0
Occupational Therapists	42.3	47.0	34.2	45.3
Pharmacists	122.2	127.7	71.2	90.6
Dieticians/Nutritionists	19.1	18.9	43.3	43.7

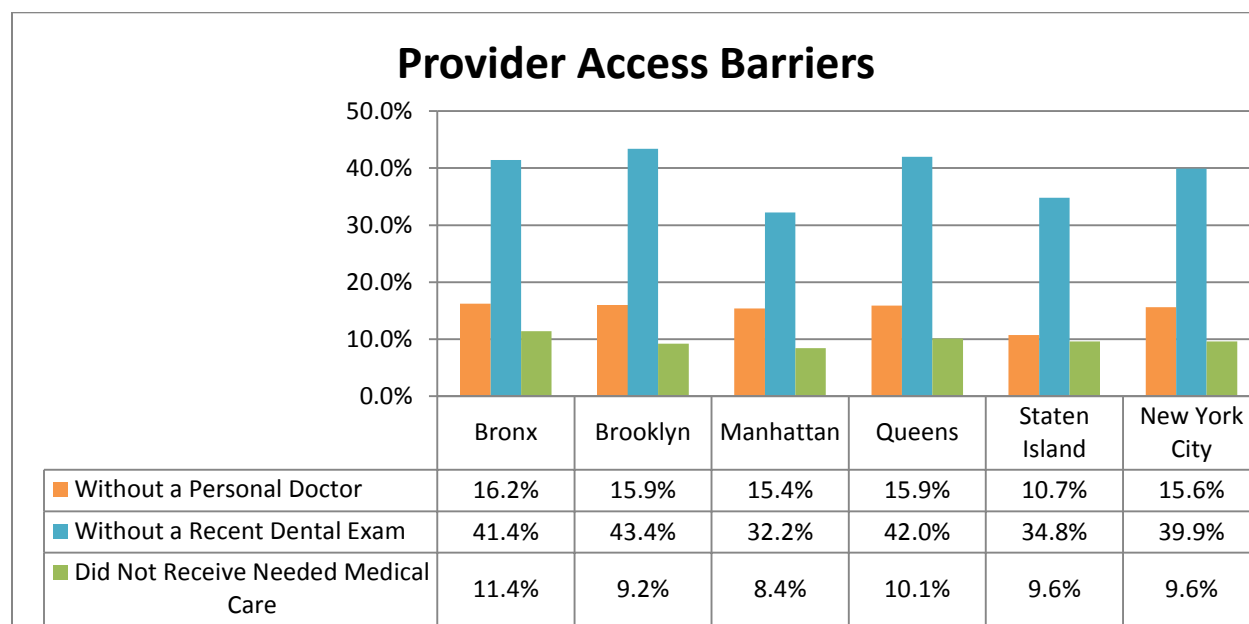
Source: Center for Health Workforce Studies, 2014 & Staten Island PPS CNA Report, 2013

\*Staten Island rates highlighted in green are higher than both NYC and state comparisons; rates highlighted in red are lower than both NYC and state comparisons

\*\*Includes Midwives

Despite having a lower primary care provider rate, fewer adults in Staten Island are without a personal doctor, and the percentage declined 2 points from 2012 (12.7%) to 2014 (10.7%).

Staten Island adults are also among the least likely to have gone more than a year without a dental exam and are on par with NYC for the percentage of adults who did not receive needed medical care within the past year.



Source: New York City Department of Health and Mental Hygiene, 2014

\*All indicators represent the adult (18 years or over) population

### Transportation

A Community Needs Assessment conducted by the Staten Island Performing Provider System (PPS) in December 2014 identified a lack of mass transit as a major barrier to accessing health services within the borough. The assessment stated, “Staten Island is the only NYC borough without a MTA subway line (only limited light rail service is available). Patients access care primarily via car and public bus, with most of the bus stops located in the North Shore and Mid-Island areas following major routes. Although patients remain in the borough for care, transportation to and from healthcare providers is as a real issue for Staten Island. Lack of ambulettes available to Medicaid populations, limited mass transit, and low car ownership among vulnerable populations are issues present in the community.”

### Overall Health Status

According to the 2016 County Health Rankings, Staten Island ranks 26th out of the 62 counties in New York for health outcomes. Health outcomes are measured in relation to length of life (premature death) and quality of life.

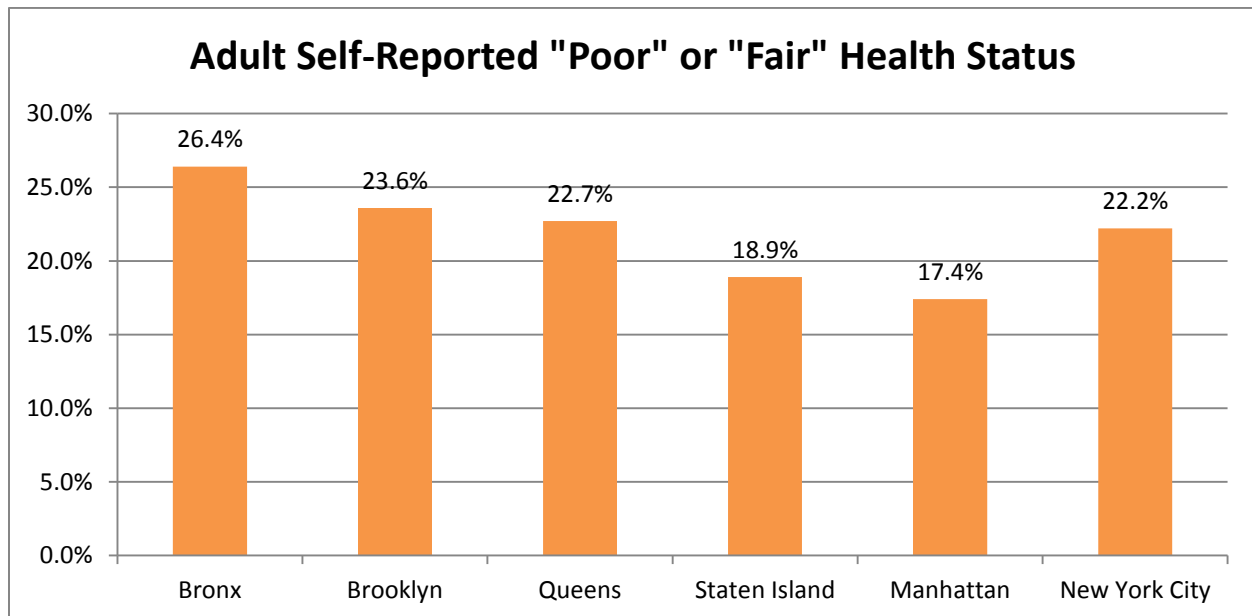
The premature death rate measures the years of potential life lost before age 65. Staten Island has an equitable age-adjusted premature death rate (184 per 100,000) compared to NYC (186 per 100,000). However, the premature death rate among Blacks/African Americans in Staten



Island (297 per 100,000) is 1.5 times the rate among Whites (189.4 per 100,000). In comparison to Black/African Americans in other boroughs, the death rate is second only to Manhattan.

The percentage of Staten Island adults who self-report having “poor” or “fair” health (18.9%) is lower when compared to NYC (22.2%). In comparison to other NYC boroughs, Manhattan is the only borough to have a lower percentage (17.4%).

The premature death rate among Blacks/African Americans in Staten Island is 1.5 times the rate among Whites, and the second highest of all NYC boroughs



Source: New York City Department of Health and Mental Hygiene, 2014

## Health Behaviors

Individual health behaviors, including smoking, obesity, and physical inactivity have been shown to contribute to or reduce the chance of disease. The prevalence of these health behaviors is provided below, compared to NYC, the nation, and Healthy People 2020 goals.

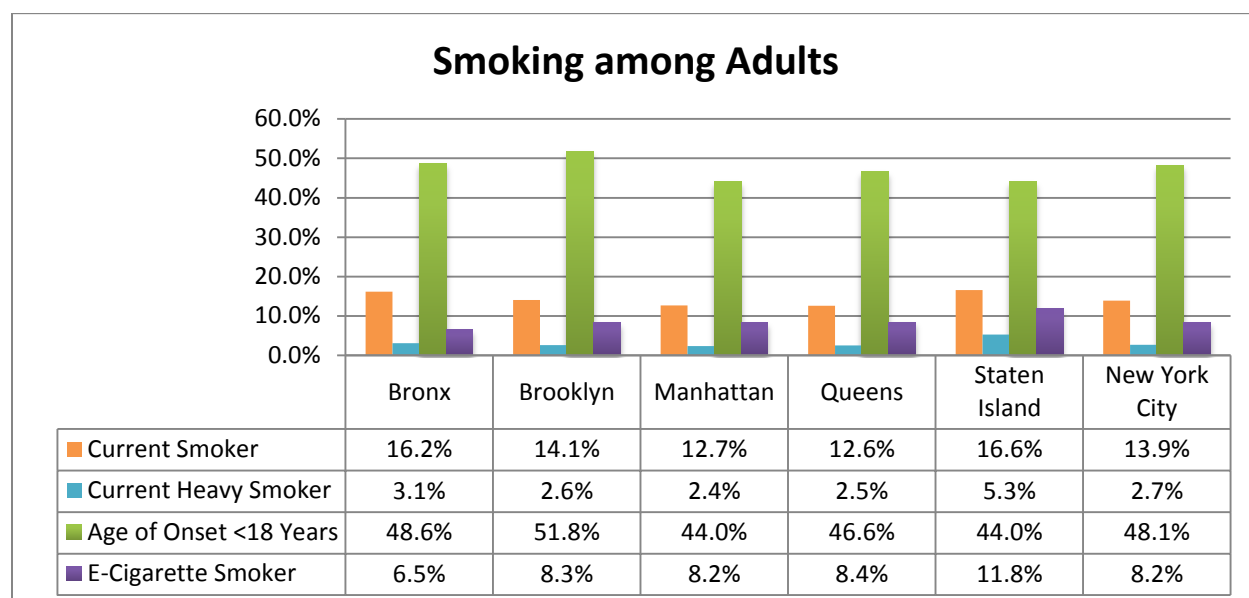
### Smoking

Staten Island adults continue to be the most likely among all NYC boroughs to smoke cigarettes. The percentage of adult smokers (16.6%) exceeds the Healthy People 2020 goal (12%) by nearly 5 points and remained consistent from the Staten Island PPS assessment conducted in 2012 (16.5%). The rate of heavy daily smoking among adults (5.3%) is double the NYC rate. Staten Island adults also have the highest rate of e-cigarette use (11.8%), exceeding NYC by 3 points.

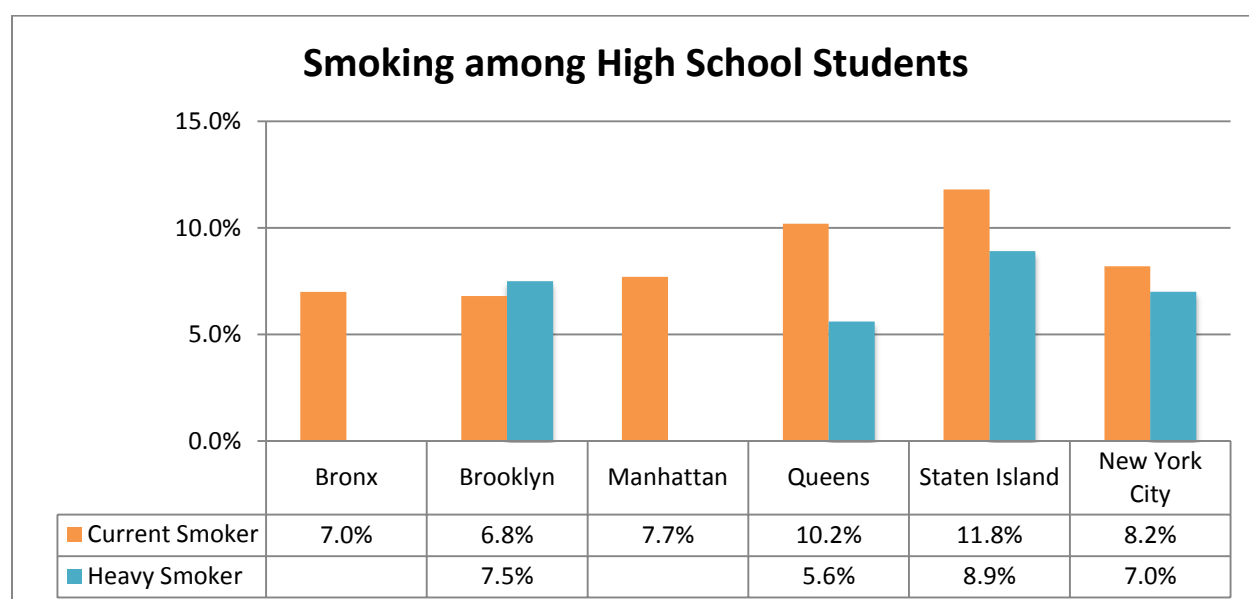
Staten Island has the highest rate of adult and youth smokers, including heavy smokers, of all NYC boroughs

Among youth, 11.8% of high school students in Staten Island report smoking cigarettes on one or more of the past 30 days. The percentage is the highest of the five boroughs, exceeds the NYC average by nearly 4 points, and remained stable from the last report in 2011 (12%).

Approximately 9% of current youth smokers are heavy smokers (smoked more than 10 cigarettes per day on the days they smoked).



Source: New York City Department of Health and Mental Hygiene, 2014



Source: New York City Department of Health and Mental Hygiene, 2013

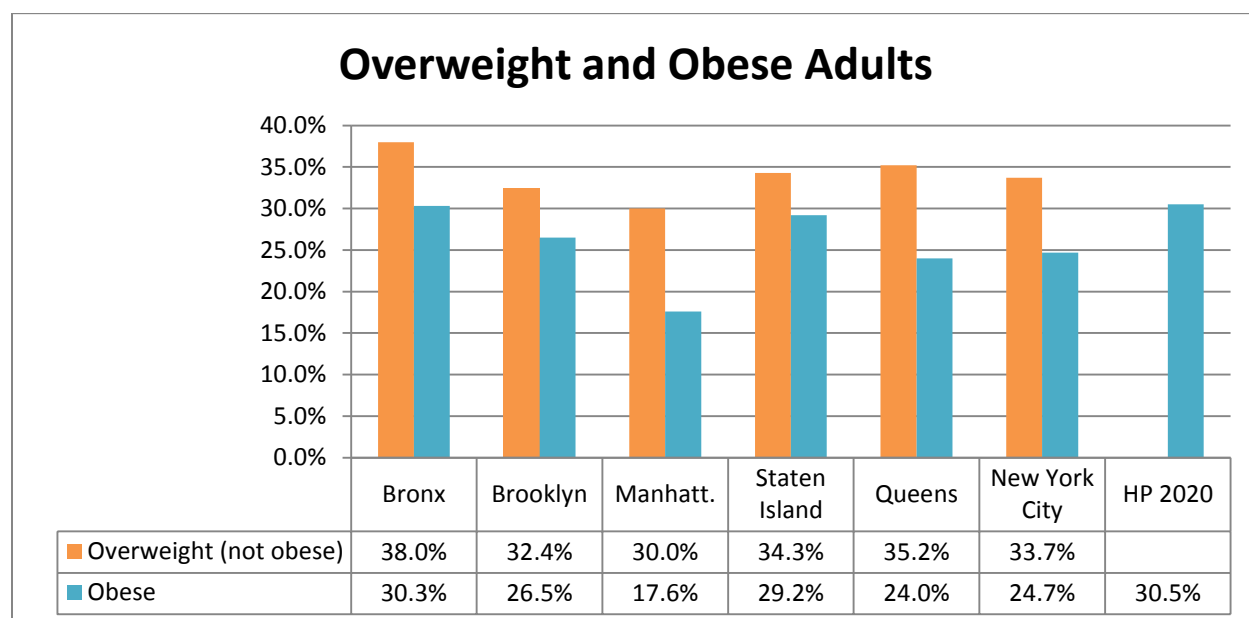
\*Heavy smoker data is not reported for the Bronx or Manhattan

## Obesity

The percentage of obese adults and children is a national epidemic. In Staten Island, the percentage of overweight or obese adults is higher than NYC overall. The obesity percentage is the second highest among the five boroughs, nearly 5 points higher than the city average,

The percentage of obese Staten Island adults is the second highest of the five NYC boroughs and increased nearly 2 points from 2010

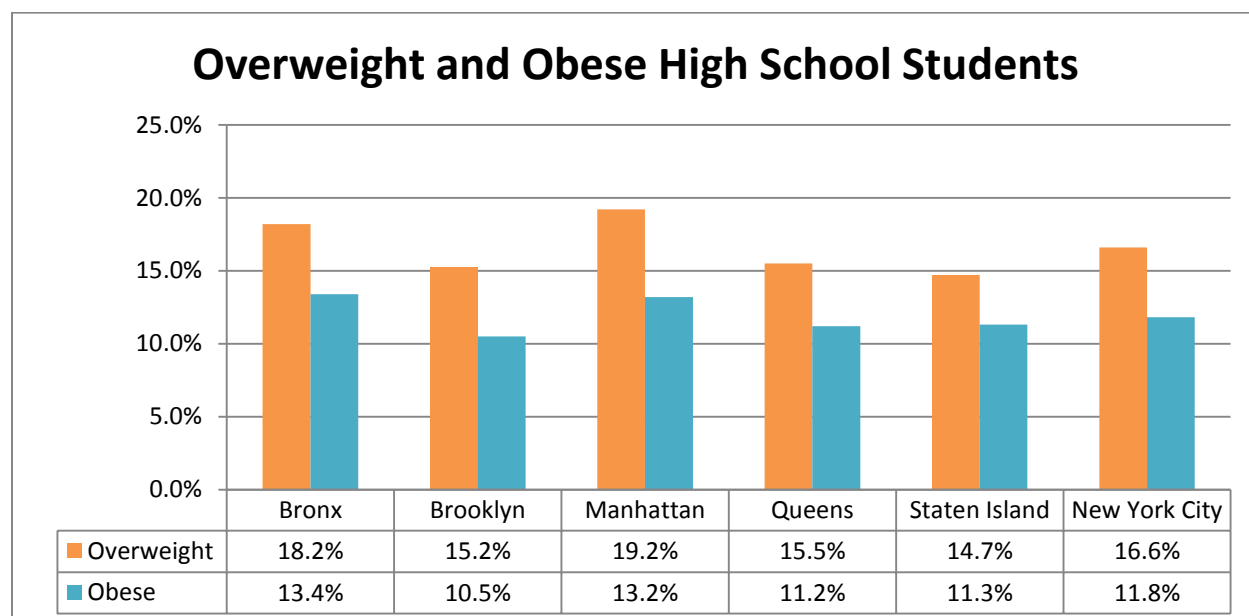
and increased almost 2 points from 2010. Adults age 45 to 64 years are the most likely to be obese (39.7%).



Source: New York City Department of Health and Mental Hygiene, 2014 & Healthy People 2020

Staten Island high school students are less likely to be overweight or obese (26%) compared to their peers across NYC (28.4%). However, more students perceive that that are either slightly or very overweight (31.6%).

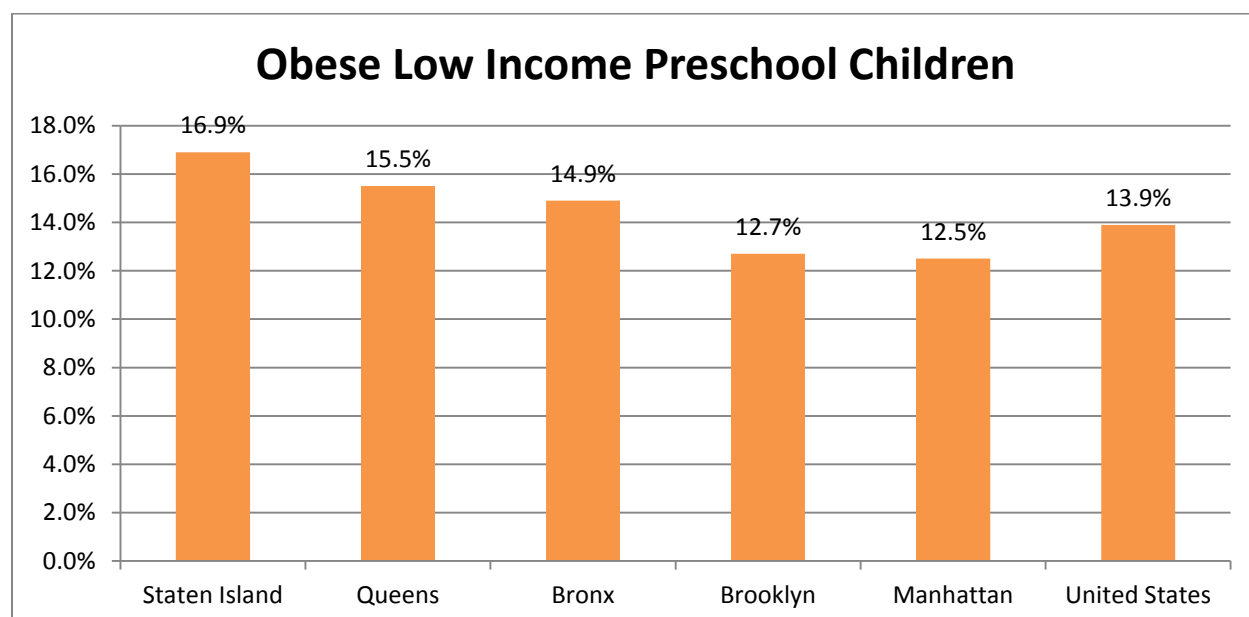
Staten Island students are less likely to be overweight compared to their peers across NYC, but more likely to perceive that they are overweight



Source: New York City Department of Health and Mental Hygiene, 2013

The percentage of obese low-income preschool children in Staten Island is the highest of the five boroughs and exceeds the nation by 3 points. The children represented by this indicator are ages 2 to 4 years and participate in federally funded health and nutrition programs.

Staten Island has the highest rate of obesity among low-income preschool children in NYC



Source: United States Department of Agriculture, 2009-2011

\*Data is not reported for NYC

### Access to Healthy Food and Recreation

Obesity is affected by access to nutritious food and exercise opportunities. Food insecurity, defined as being without a consistent source of sufficient and affordable nutritious food, is a measure of food access. In Staten Island, 10.3% of all residents and 18.6% of children are food insecure. Both percentages are lower than other NYC boroughs and the nation.

18.6% of children in Staten Island are food insecure compared to 20.9% nationally

### Percentage of Food Insecure Residents

	All Residents	Children
Brooklyn	20.0%	24.6%
Bronx	18.7%	25.6%
Manhattan	15.1%	19.0%
Queens	13.1%	19.5%
Staten Island	10.3%	18.6%
United States	15.4%	20.9%

Source: Feeding America, 2014

Another measure of food access is the number of fast food restaurants versus grocery stores in the area. Staten Island has a lower rate of fast food restaurants compared to NYC, but the lowest rate of grocery stores, indicating residents have lower access to fresh and healthy foods.

### Healthy Food Access and Environment

	Fast Food Restaurants per 100,000	Grocery Stores per 100,000
Bronx	66.6	87.1
Brooklyn	78.3	96.0
Manhattan	161.6	85.9
Queens	84.3	70.2
Staten Island	64.4	48.9
New York City	93.3	82.8
United States	72.7	21.2

Source: United States Census, 2013

According to the 2016 County Health Rankings, 98.5% of residents in Staten Island have access to physical activity venues (parks, gyms, YMCAs, pools, etc.). The percentage is consistent with other boroughs and higher when compared to the nation (84%). However, 29% of adults do not meet the federal recommendation to engage in 150 minutes of moderate activity per week. The percentage is favorable when compared to all other boroughs, except Manhattan, but comprises more than one-quarter of the population.

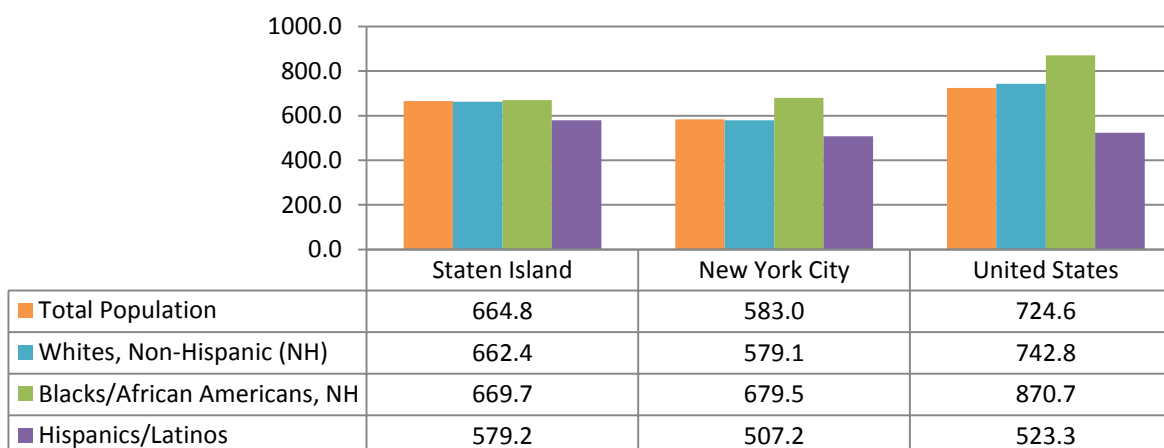
29% of Staten Island adults are physically inactive

### Mortality

Staten Island continues to have a higher rate of death compared to other NYC boroughs. The borough's 2014 all cause age-adjusted death rate is second only to the Bronx. However, the death rate is approximately 60 points lower than the nation and declining. An assessment conducted by the Staten Island PPS reported that the death rate was 15 points higher in 2011 compared to 2014.

Staten Island continues to have a higher rate of death in comparison to other NYC boroughs, but it is declining

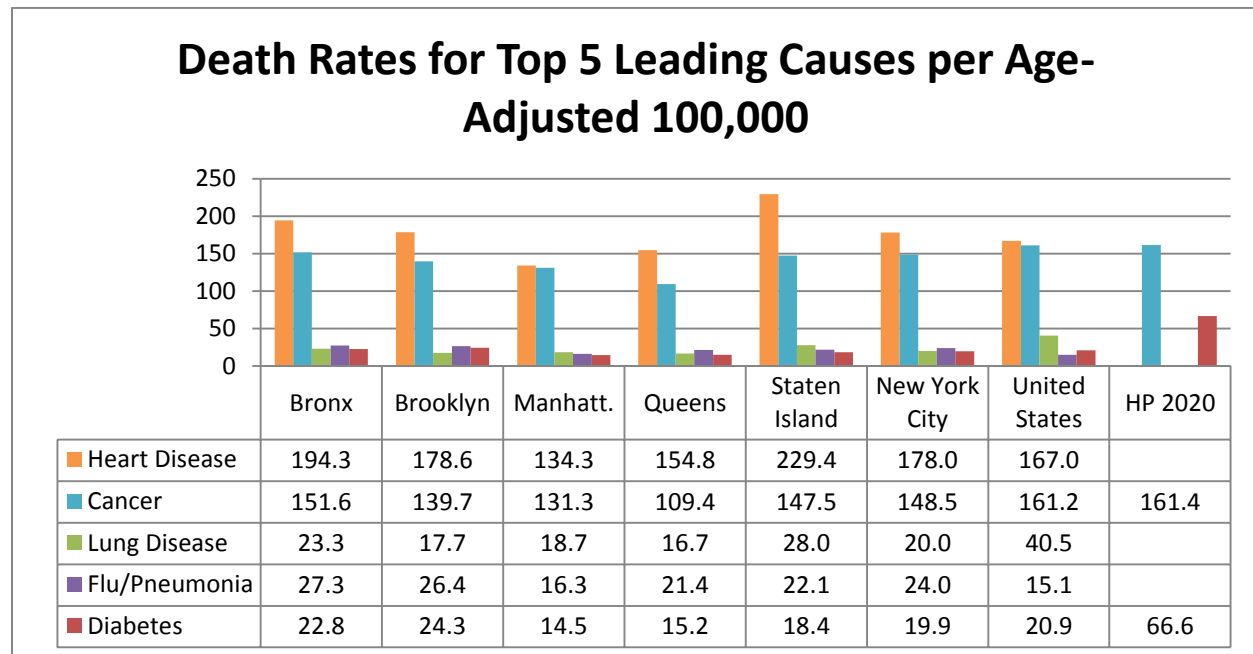
### All Cause Death Rate by Race/Ethnicity per Age-Adjusted 100,000



Source: Centers for Disease Control and Prevention, 2014

The top five causes of death in Staten Island, in rank order, are heart disease, cancer, chronic lower respiratory disease (lung disease), flu/pneumonia, and diabetes. Staten Island has the highest rates of heart disease and lung disease death in NYC, and the second highest rate of cancer death. Death rates for flu/pneumonia and diabetes are comparable to NYC rates.

The following graph depicts 2014 death rates for the top five causes of death in Staten Island. Throughout the remainder of the report, year-over-year trending data is often provided to show areas of improvement and opportunity.



Source: New York City Department of Health and Mental Hygiene, 2014; Centers for Disease Control and Prevention, 2014; Healthy People 2020

## Chronic Diseases

Chronic disease rates are increasing across the nation and are the leading causes of death and disability. Chronic diseases are often preventable through reduced health risk behaviors like smoking and alcohol use, increased physical activity and good nutrition, and early detection of risk factors and disease.

### Heart Disease and Stroke

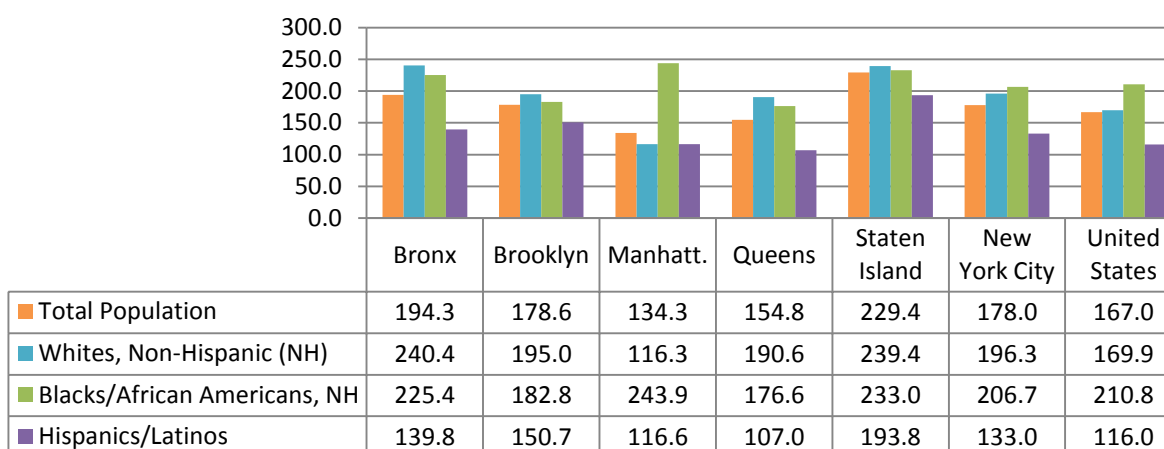
Heart disease is the leading cause of death in the nation.

The heart disease death rate in Staten Island is the highest of the NYC boroughs, and exceeds the national rate by 62 points. However, the death rate is declining, falling 115 points from 2005. Racial disparities in heart disease death exist primarily in Manhattan; death rates among Blacks/African Americans and Whites in Staten Island are equitable.

The Staten Island heart disease death rate is declining, but still exceeds the national rate by 62 points

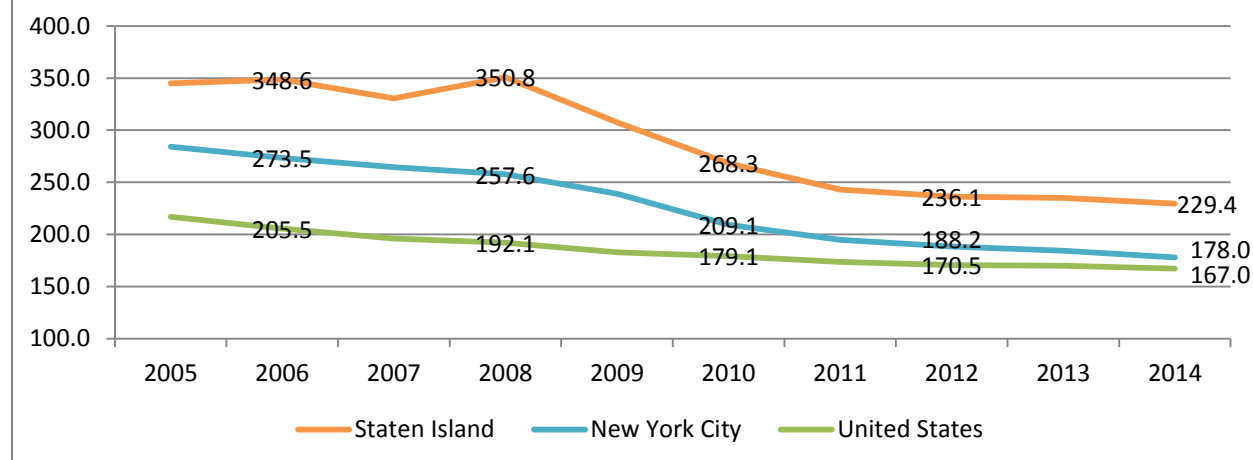


## Heart Disease Death Rate by Race/Ethnicity per Age-Adjusted 100,000



Source: New York City Department of Health and Mental Hygiene, 2014 & Centers for Disease Control and Prevention, 2014

## Heart Disease Death Rate Trends per Age-Adjusted 100,000

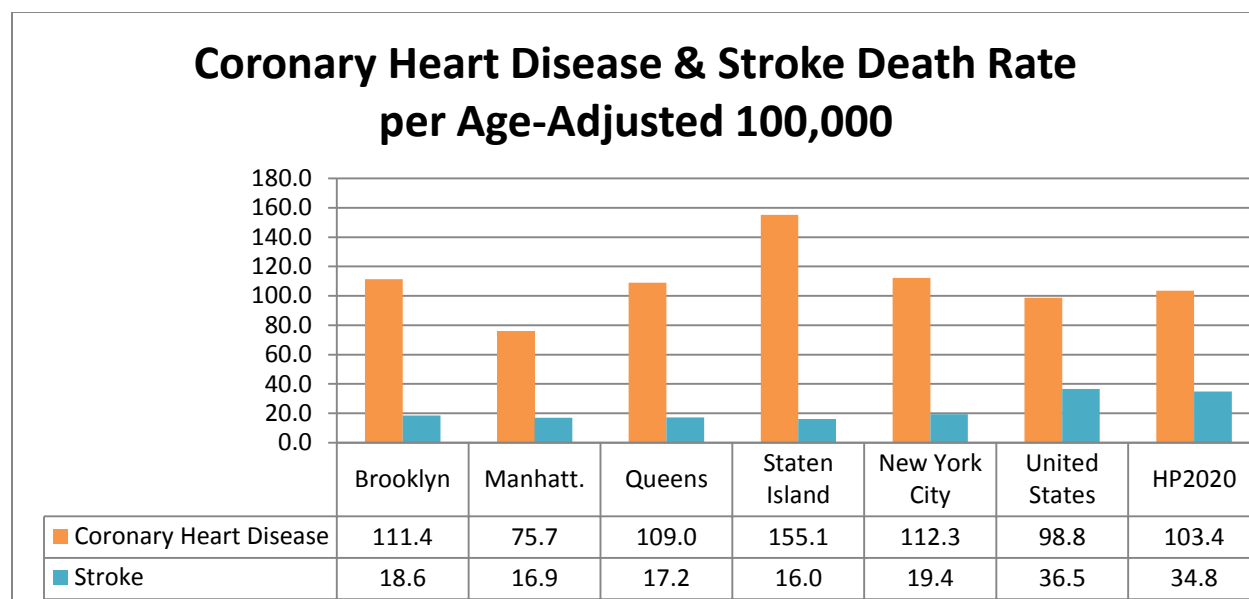


Source: New York City Department of Health and Mental Hygiene, 2005-2014 & Centers for Disease Control and Prevention, 2005-2014

Coronary heart disease is a form of heart disease characterized by the buildup of plaque inside the coronary arteries. Staten Island has the highest rate of coronary heart disease death in NYC, exceeding the city rate by 43 points. Staten Island also exceeds the Healthy People 2020 goal by 52 points.

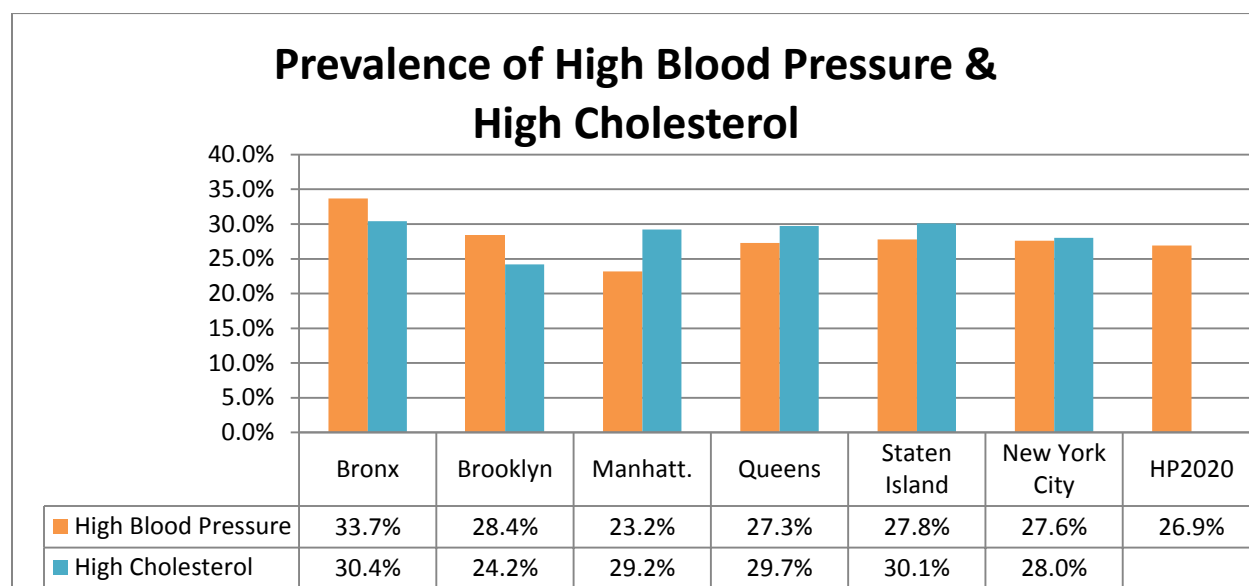
The Staten Island coronary heart disease death rate is higher than the HP 2020 goal by 52 points; the stroke death rate meets the HP 2020 goal

Several types of heart disease, including coronary heart disease, are risk factors for stroke. The stroke death rate in Staten Island is the lowest of the NYC boroughs and meets the Healthy People 2020 goal.



Source: New York City Department of Health and Mental Hygiene, 2014; Centers for Disease Control and Prevention, 2014; Healthy People 2020

Heart Disease is often a result of high blood pressure and high cholesterol, which can result from poor diet and exercise habits. Nearly one-third of Staten Island adults have high blood pressure and/or high cholesterol, a similar percentage to NYC overall. Approximately 95% of Staten Island adults meet recommended screening guidelines for blood pressure (every two years) and 90% meet screening guidelines for cholesterol (every five years).

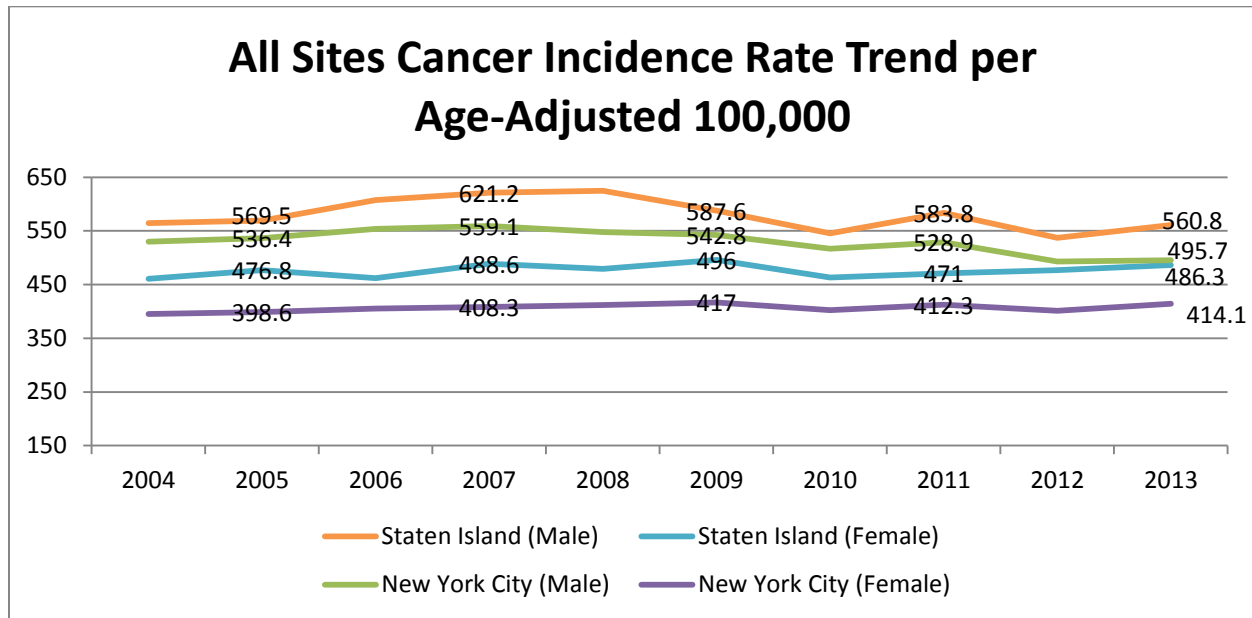


Source: New York City Department of Health and Mental Hygiene, 2014 & Healthy People 2020

## Cancer

Cancer is the second leading cause of death in the nation behind heart disease. Staten Island male and female all site cancer incidence rates exceed NYC comparisons by 65 points and 72 points respectively. Incidence rates have remained consistent over the past decade.

The Staten Island all sites cancer incidence rate exceeds NYC by 65 (males) to 72 (females) points



Source: New York State Department of Health, 2004-2013

Cancer screenings are essential for early diagnosis and preventing cancer death. Colorectal cancer screenings are recommended for adults age 50 years or over. Staten Island adults are just as likely to receive colorectal cancer screenings as adult across NYC.

Mammograms are recommended to detect breast cancer. Staten Island women are slightly less likely to receive mammograms compared to women across NYC.

### Cancer Screenings

	Colorectal Cancer Screening in Past 10 Years (50 years or over)	Mammogram in Past Two Years (40 years or over)
Bronx	71.9%	74.8%
Brooklyn	67.0%	77.3%
Manhattan	76.0%	74.4%
Queens	68.4%	73.7%
Staten Island	69.4%	72.5%
New York City	69.9%	74.9%

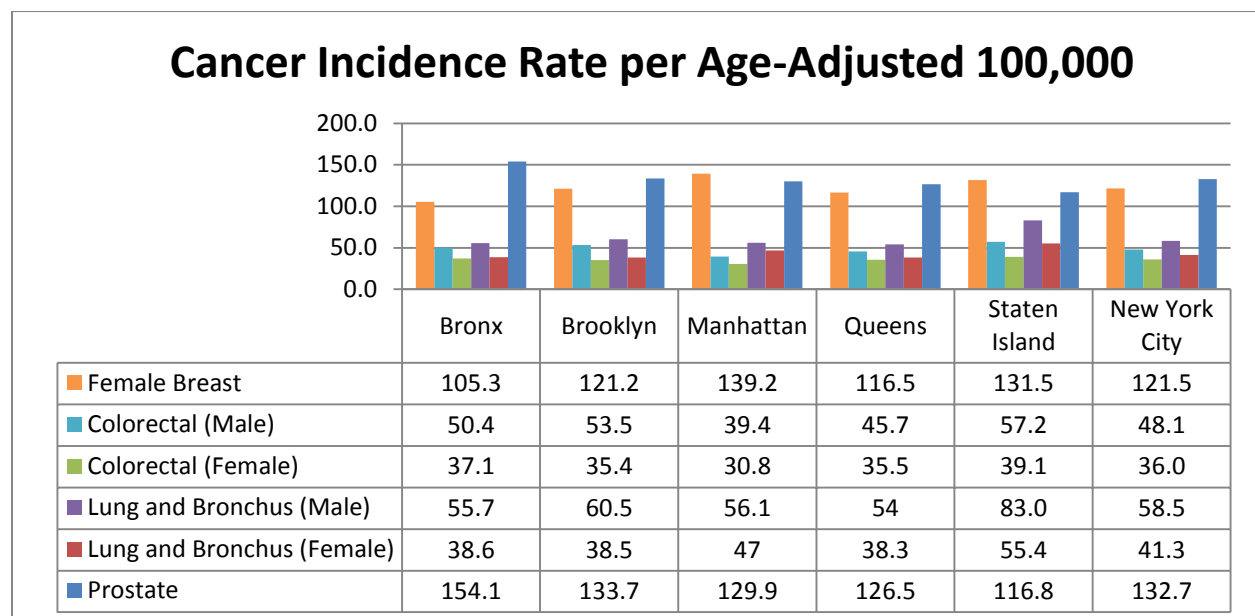
Source: New York City Department of Health and Mental Hygiene, 2014

Presented below are the incidence rates for the most commonly diagnosed cancers: breast (female), colorectal, lung, and prostate (male). Staten Island incidence rates exceed NYC for all cancer types, except prostate cancer. Lung cancer incidence rates are the highest in comparison to NYC. Staten Island male and female lung cancer incidence rates exceed NYC comparisons by 25 points and 14 points respectively.

Staten Island cancer incidence rates are higher than NYC rates for all cancer types, except prostate

The Staten Island female breast cancer incidence rate exceeds the NYC rate by 10 points. Higher incidence rates can be linked to increased screenings; however, Staten Island women have a slightly lower mammogram screening rate compared to NYC.

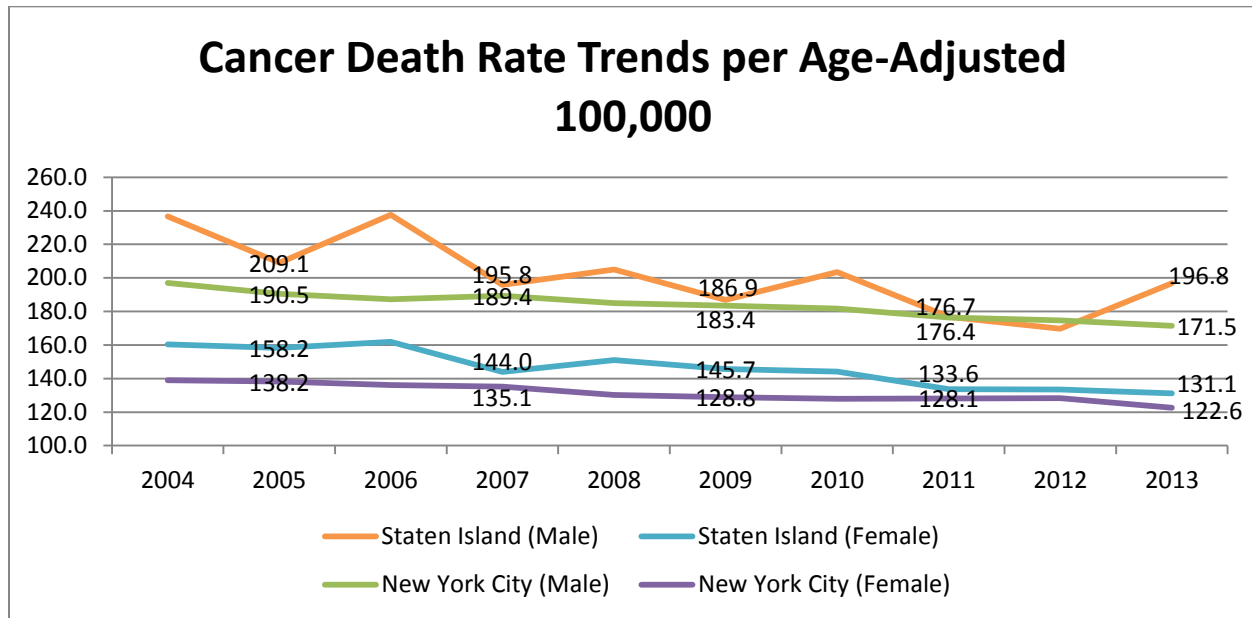
Staten Island lung cancer incidence rates are the highest in comparison to NYC



Source: New York State Department of Health, 2013

Age-adjusted cancer death rates for the same reporting period as cancer incidence (2008 to 2012) are measured below. Staten Island has higher cancer death rates compared to NYC. The male cancer death rate is declining, but increased between 2012 and 2013 to exceed NYC by 25 points. The female death rate decreased 29 points between 2004 and 2013, but still exceeds NYC by 9 points.

The Staten Island male cancer death rate exceeds the NYC rate by 25 points



Source: New York State Department of Health, 2004-2013

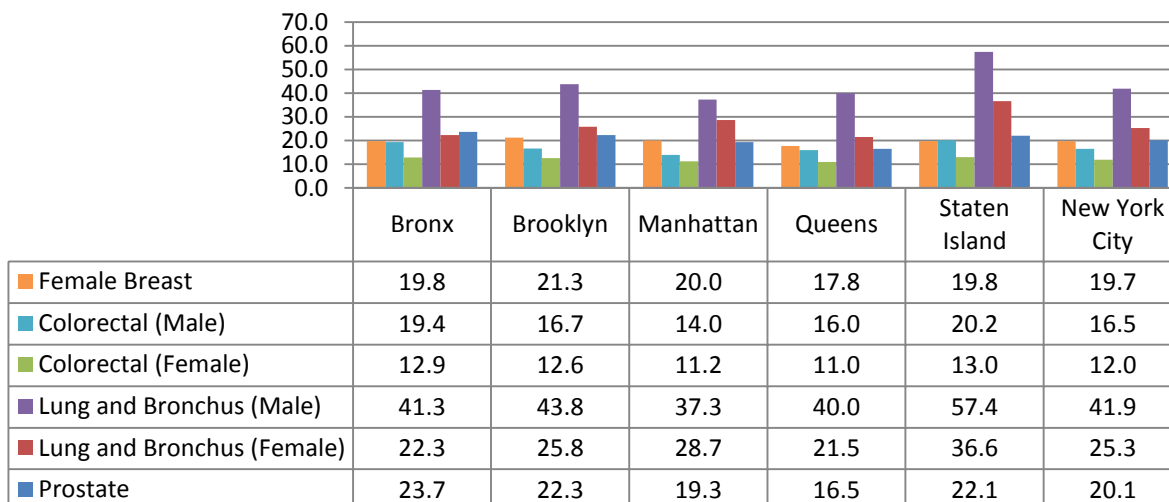
Presented below are the death rates for the most commonly diagnosed cancers. Death rates for all reported cancer types, except female breast, are higher in Staten Island than NYC. The female breast cancer death rate meets the Healthy People 2020 goal (20.7 per 100,000).

Staten Island cancer death rates are higher than NYC rates for all cancer types, except female breast. Death rates are highest for lung cancer.

Cancer death rates among Staten Island males and females are highest for lung cancer. Staten Island male and female lung cancer death rates exceed NYC comparisons by 16 points and 11 points respectively.

Smoking cigarettes contributes to lung cancer incidence and death rates. Staten Island has the highest percentage of adult smokers (16.6%) among NYC boroughs and exceeds the Healthy People 2020 goal by nearly 5 points.

## Cancer Death Rate per Age-Adjusted 100,000



Source: New York State Department of Health, 2013

### Chronic Lower Respiratory Disease

Chronic lower respiratory disease (CLRD) is the third most common cause of death in the nation. It encompasses diseases like chronic obstructive pulmonary disorder (COPD), emphysema, and asthma.

Staten Island has the highest prevalence of adult asthma and the highest rate of CLRD death among NYC boroughs

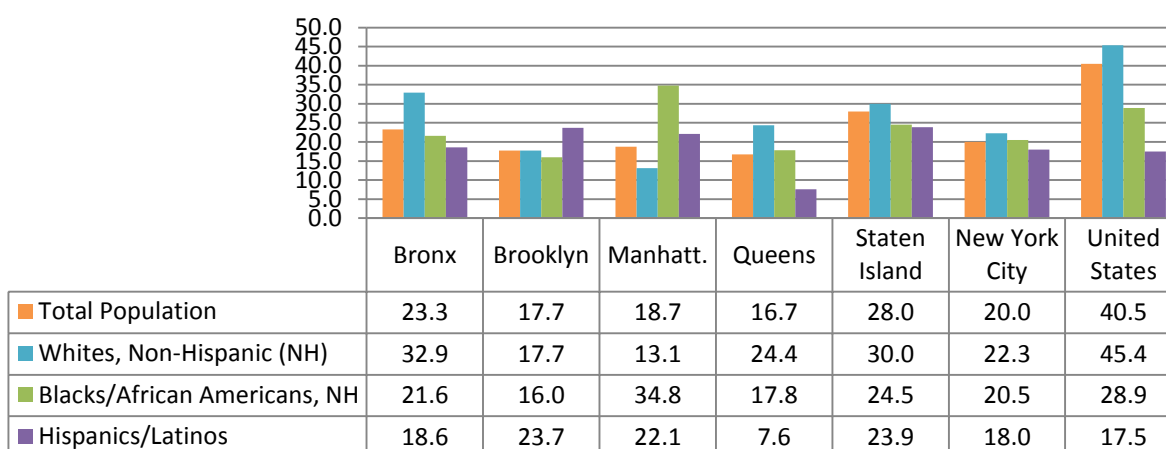
Staten Island has the highest percentage of adults with a current asthma diagnosis and the highest rate of CLRD death among NYC boroughs. The CLRD death rate has been increasing since 2008 and is highest among Whites. Asthma prevalence among high school students in Staten Island is lower when compared to NYC.

### Asthma Prevalence

	Adult Asthma Diagnosis (Current)	High School Student Asthma Diagnosis (Ever)
Bronx	4.7%	29.9%
Brooklyn	3.0%	23.8%
Manhattan	4.1%	28.8%
Queens	3.2%	21.7%
Staten Island	5.0%	23.6%
New York City	3.7%	25.4%

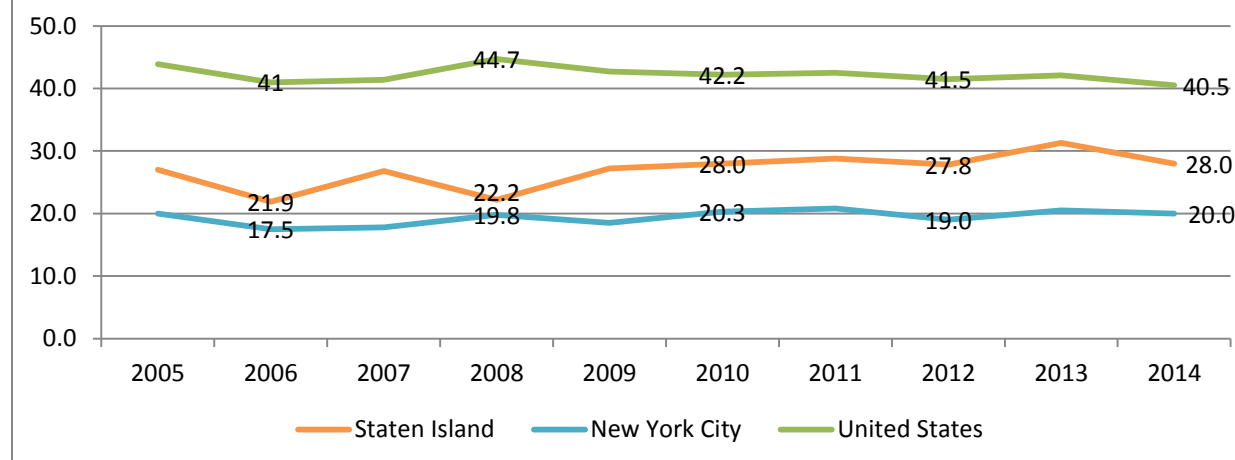
Source: New York City Department of Health and Mental Hygiene, 2013 & 2014

## CLRD Death Rate by Race/Ethnicity per Age-Adjusted 100,000



Source: New York City Department of Health and Mental Hygiene, 2014 & Centers for Disease Control and Prevention, 2014

## CLRD Death Rate Trends per Age-Adjusted 100,000



Source: New York City Department of Health and Mental Hygiene, 2005-2014 & Centers for Disease Control and Prevention, 2005-2014

### Diabetes

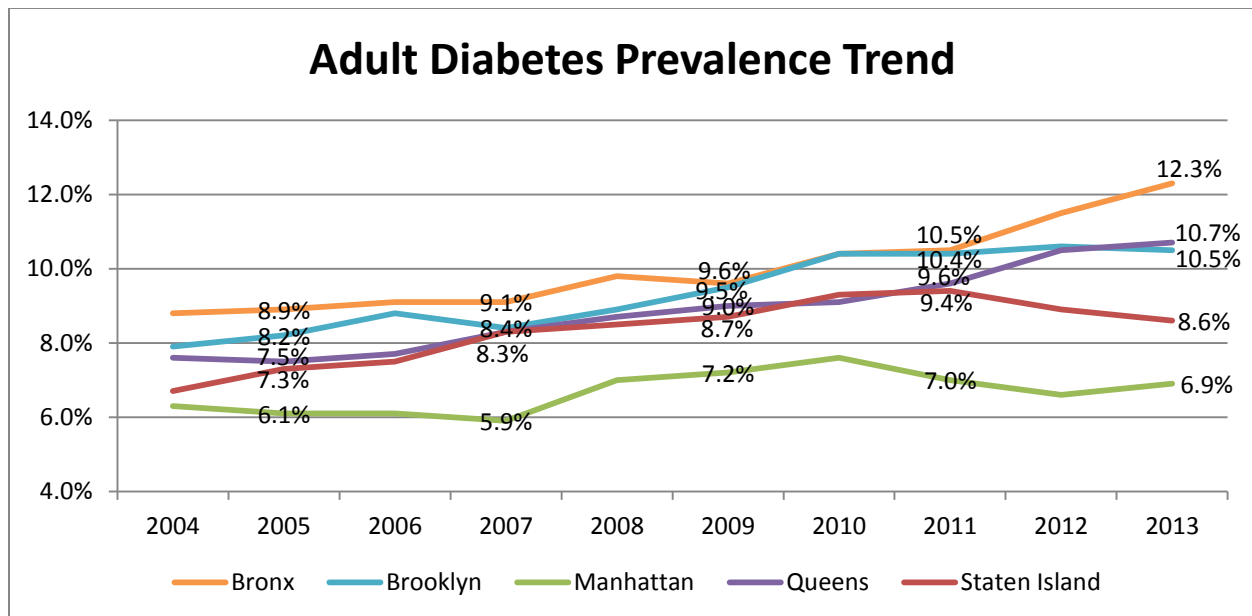
Diabetes is caused either by the body's inability to produce insulin or effectively use the insulin that is produced. Diabetes can cause a number of serious complications, but Type II diabetes, the most common form, is largely preventable through diet and exercise.

Staten Island has the second lowest prevalence of adult diabetes among NYC boroughs. Diabetes prevalence in

Staten Island has the second lowest prevalence of adult diabetes among NYC boroughs



Staten Island increased 3 points between 2004 and 2011, but decreased 2 points between 2011 and 2013. Prevalence in all other NYC boroughs, except Manhattan, has consistently been on the rise.



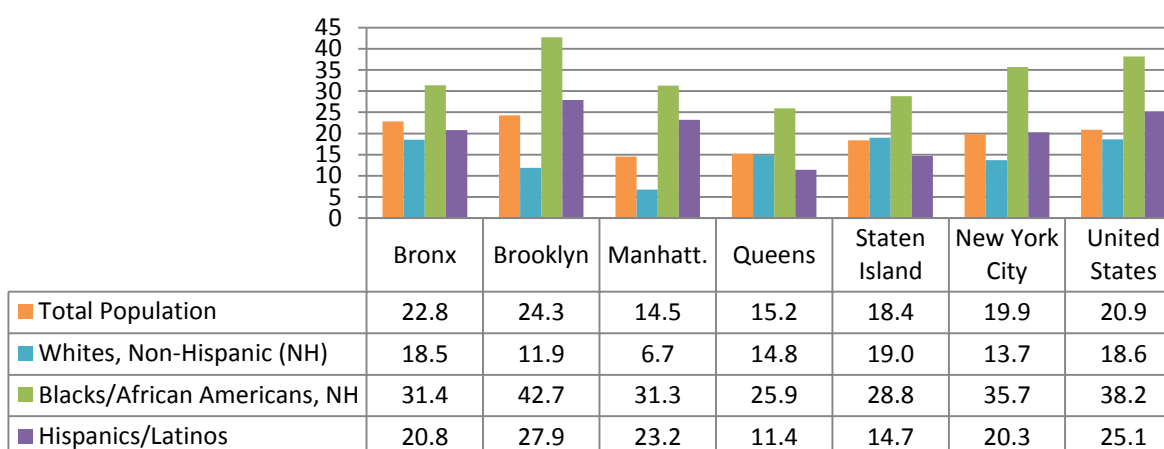
Source: Centers for Disease Control and Prevention, 2004-2013

\*A change in methods occurred in 2011 that may affect the validity of comparisons to past years

The Staten Island diabetes death rate is lower than NYC and the nation, but affects Blacks/African Americans at a rate that is 1.5 times higher than the rate among Whites. The death rate increased sharply between 2007 and 2009, but has since declined.

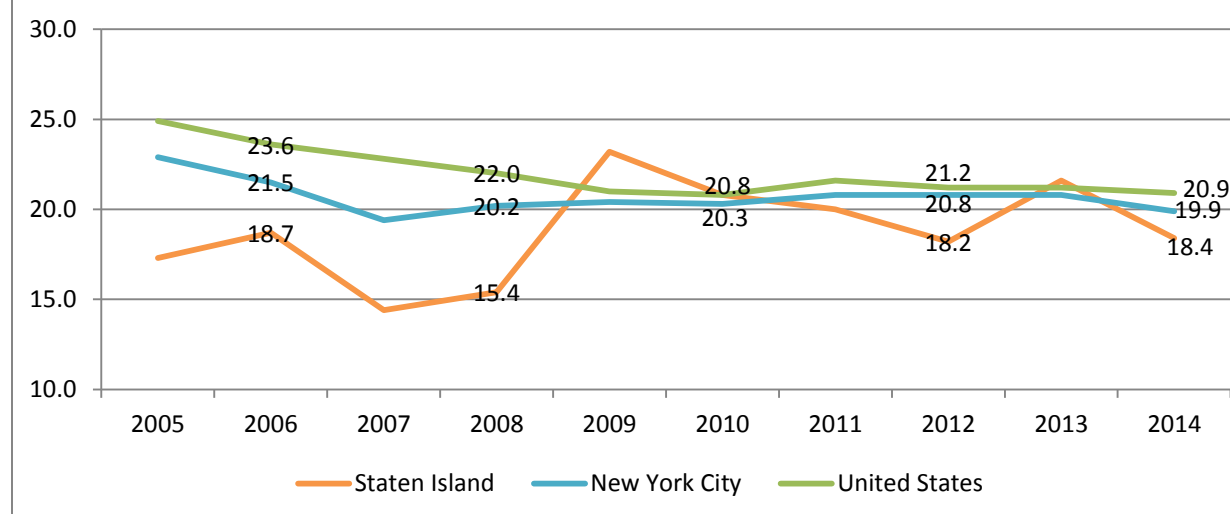
The Staten Island diabetes death rate is 1.5 times higher among Blacks/African Americans than Whites

## Diabetes Death Rates by Race/Ethnicity per Age-Adjusted 100,000



Source: New York City Department of Health and Mental Hygiene, 2014 & Centers for Disease Control and Prevention, 2014

## Diabetes Death Trend per Age-Adjusted 100,000



Source: New York City Department of Health and Mental Hygiene, 2005-2014 & Centers for Disease Control and Prevention, 2005-2014

Diabetics should receive a hemoglobin A1c (hA1c) test, a blood test measuring blood sugar levels, annually from a health professional. According to the 2016 County Health Rankings, the percentage of Staten Island Medicare enrollees with diabetes who received a hA1c test in the past year (85.9%) is equivalent to the state and the nation (85.7% and 85.4% respectively).

## Senior Health

Seniors face a number of challenges related to health and well-being as they age. They are more prone to chronic disease, social isolation, and disability. The following table notes the prevalence of chronic conditions among Medicare Beneficiaries 65 years or over.

**Chronic Conditions among Medicare Beneficiaries 65 Years or Over**

	Bronx	Brooklyn	Manhattan	Queens	Staten Island	United States
Alzheimer's Disease	17.6%	18.5%	12.5%	15.6%	11.0%	11.5%
Arthritis	31.6%	39.9%	31.9%	32.9%	32.7%	30.7%
Asthma	7.8%	6.7%	5.6%	5.7%	4.3%	4.5%
Cancer	9.1%	9.0%	10.4%	9.5%	10.4%	8.9%
COPD	9.5%	10.8%	7.9%	9.3%	9.6%	11.0%
Depression	13.8%	14.4%	13.6%	11.9%	11.9%	13.6%
Diabetes	40.7%	47.4%	27.7%	41.9%	40.0%	27.1%
Heart Failure	21.2%	27.9%	14.1%	20.1%	16.9%	14.6%
High Cholesterol	44.8%	55.4%	43.7%	54.1%	56.7%	47.9%
Hypertension	62.4%	66.9%	49.3%	62.2%	61.0%	58.4%
Ischemic Heart Disease	33.9%	47.6%	31.8%	40.0%	37.5%	29.3%
Stroke	5.0%	4.9%	3.9%	4.6%	4.1%	4.0%

Source: Centers for Medicare & Medicaid Services, 2014

Medicare Beneficiaries 65 years or over in NYC generally have a higher prevalence of chronic conditions when compared to the nation. In Staten Island, the prevalence of the following conditions is higher:

- > Arthritis
- > Cancer
- > Diabetes
- > Heart Failure
- > High Cholesterol
- > Hypertension
- > Ischemic Heart Disease

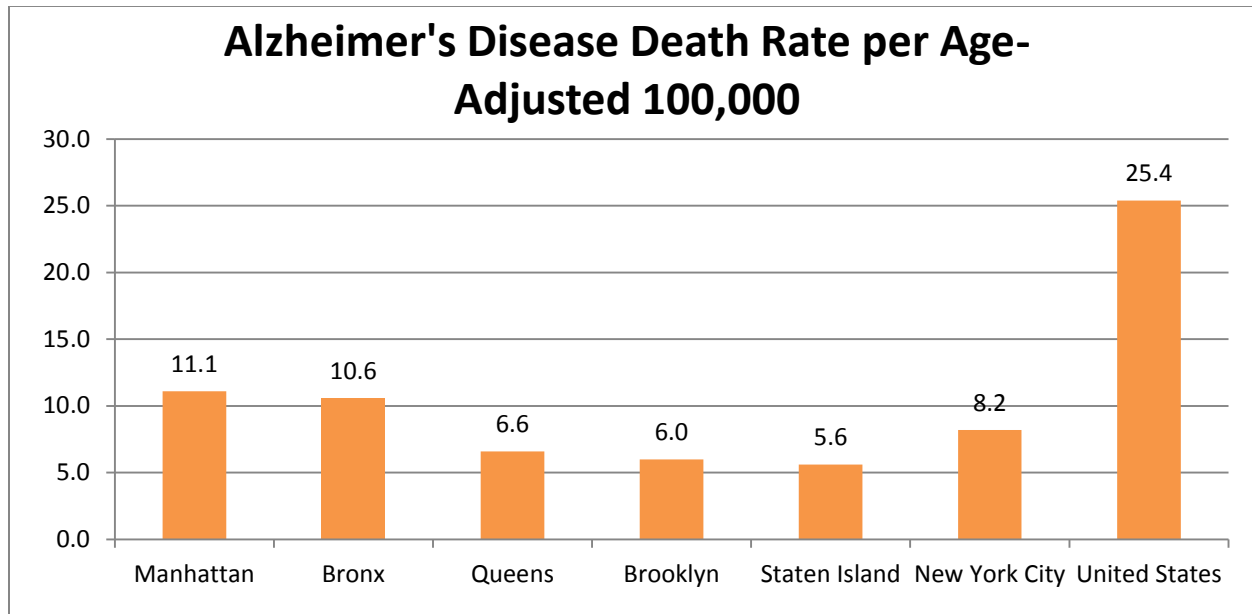
The rate of diabetes among Staten Island Medicare Beneficiaries 65 years or over is 13 points higher than the national rate

In comparison to other NYC boroughs, Staten Island has the lowest prevalence rates for Alzheimer's disease, asthma, and depression, but the highest rates for cancer and high cholesterol.

### Alzheimer's Disease

According to the National Institute on Aging, "Although one does not die of Alzheimer's disease, during the course of the disease, the body's defense mechanisms ultimately weaken, increasing susceptibility to catastrophic infection and other causes of death related to frailty."

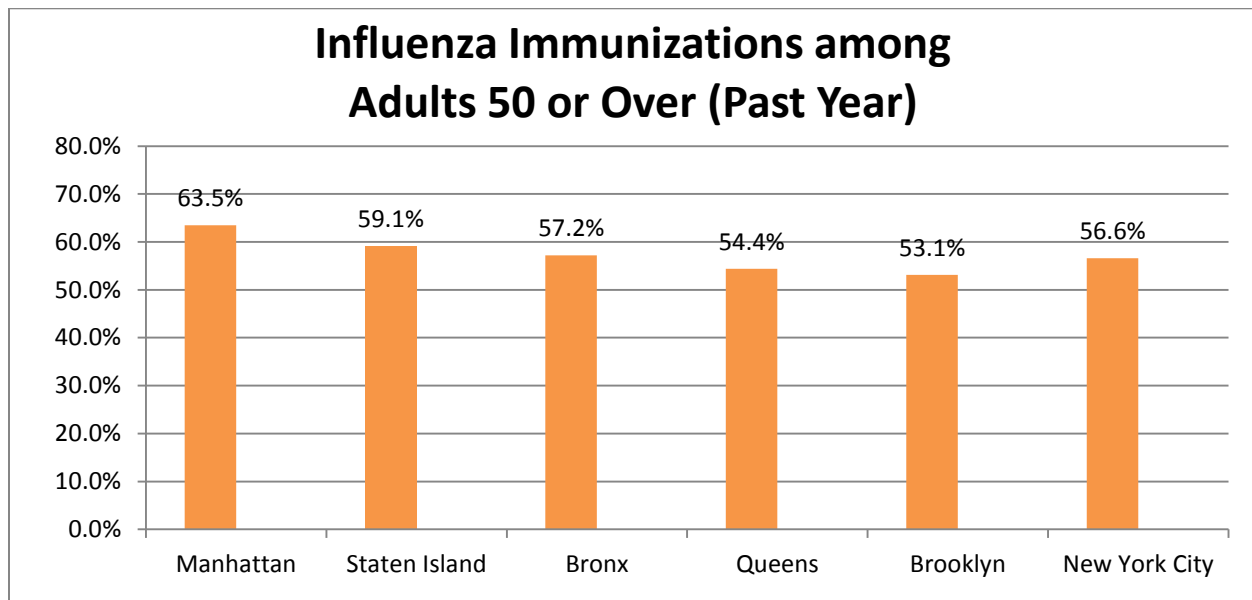
A lower percentage of Staten Island Medicare Beneficiaries age 65 years or over have Alzheimer's disease (11%) when compared to other NYC boroughs and the nation. The age-adjusted death rate due to Alzheimer's disease is also lower in Staten Island.



Source: New York City Department of Health and Mental Hygiene, 2014 & Centers for Disease Control and Prevention, 2014

#### Immunizations

The Advisory Committee on Immunization Practices recommends all individuals age six months or older receive the flu vaccine. However, the vaccine is a priority for older adults. Staten Island adults 50 years or over have the second highest rate of flu vaccination among NYC boroughs.



Source: New York City Department of Health and Mental Hygiene, 2014

## Prevention Quality Indicators

According to the New York State Department of Health, "The Prevention Quality Indicators (PQIs) are a set of measures developed by the federal Agency for Healthcare Research and Quality (AHRQ) for use in assessing the quality of outpatient care for "ambulatory care sensitive conditions" (ACSCs). ACSCs are conditions for which good outpatient care can potentially prevent the need for hospitalization, or for which early intervention can prevent complications or more severe disease."

The following table depicts 12 PQIs pertaining to adults, in descending order by rate difference (observed rate of admission – expected rate of admission). Staten Island has higher observed rates of admission for all PQIs, except bacterial pneumonia, short-term complications of diabetes, angina without procedures, and lower extremity amputation among diabetics.

Staten Island has higher observed rates of admission for 8 out of 12 PQIs

**Staten Island Hospital Inpatient Prevention Quality Indicators for Adult Discharges**

	Observed Rate per 100,000	Expected Rate per 100,000	Rate Difference* (Observed - Expected)
COPD or Asthma in Older Adults	583.2	444.1	139.1
Long-Term Complications of Diabetes	167.4	109.5	57.9
Hypertension	87.8	48.7	39.1
Asthma in Younger Adults	94.5	57.8	36.7
Urinary Tract Infection	142.0	132.2	9.8
Heart Failure	284.0	275.4	8.6
Uncontrolled Diabetes	22.4	14.7	7.7
Dehydration	109.7	104.8	4.9
Angina without Procedure	11.2	14.5	-3.3
Short-Term Complications of Diabetes	52.0	56.3	-4.3
Lower Extremity Amputation among Patients with Diabetes	8.8	13.9	-5.1
Bacterial Pneumonia	124.2	181	-56.8

Source: New York State Department of Health, 2014

\*Cells highlighted in red represent PQIs with a higher observed versus expected rate of admission

North Shore zip codes 10301, 10303, 10304, 10305, and 10314 have higher observed rates of admission for eight or more PQIs. All North Shore zip codes have higher observed rates for long-term complications of diabetes, hypertension, and asthma in younger adults.

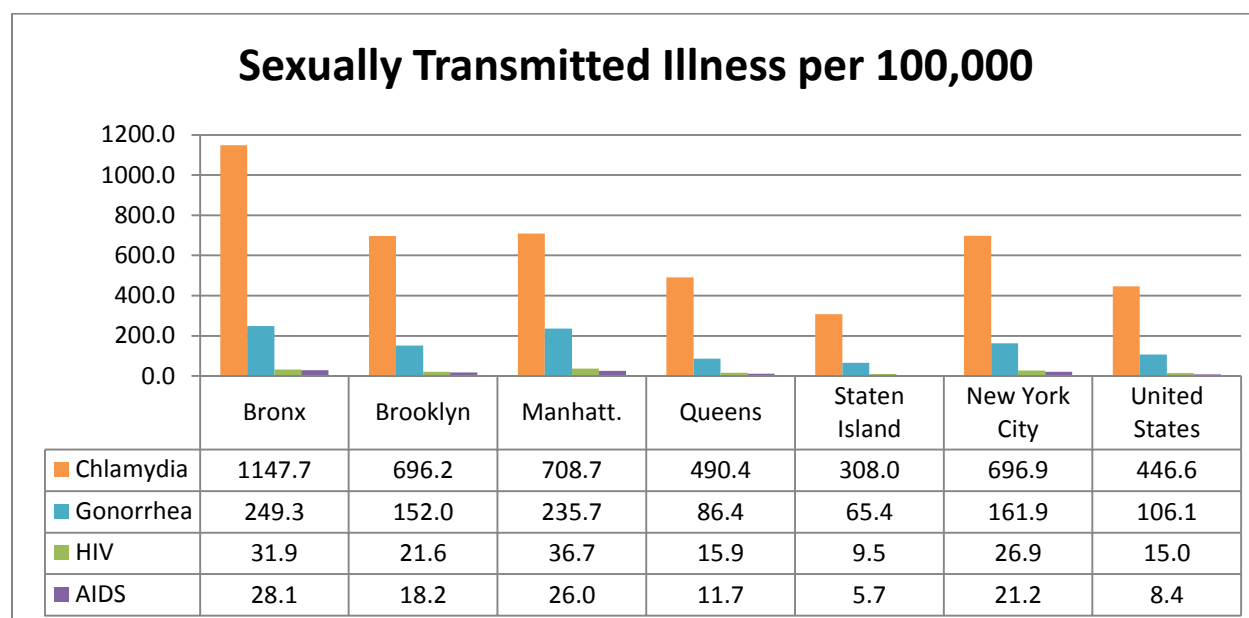
**Staten Island Hospital Inpatient Prevention Quality Indicators for Adult Discharges  
by Zip Code (Observed Rate per 100,000)**

	Long-Term Complications of Diabetes		Hypertension		Asthma in Younger Adults	
	Observed Rate per 100,000	Expected Rate per 100,000	Observed Rate per 100,000	Expected Rate per 100,000	Observed Rate per 100,000	Expected Rate per 100,000
Zip Code 10301	236.3	140.6	77.9	63.1	129.7	73.0
Zip Code 10302	254.8	151.7	77.0	61.9	145.5	72.8
Zip Code 10303	164.3	155.8	174.8	56.9	196.7	82.1
Zip Code 10304	199.9	130.4	94.1	50.9	139.8	74.4
Zip Code 10305	151.7	104.8	105.1	60.4	74.7	53.9
Zip Code 10310	243.2	135.7	70.7	51.5	109.1	74.4
Zip Code 10314	147.4	103.5	77.9	63.1	55.1	52.3

Source: New York State Department of Health, 2014

### Sexually Transmitted Illnesses

Staten Island has lower incidence rates for all reported sexually transmitted illnesses compared to NYC and the nation. In comparison to NYC, Staten Island incidence rates are less than half of city averages. Current incidence rates represent declines in chlamydia, gonorrhea, and AIDS. The rate of HIV has remained variable.

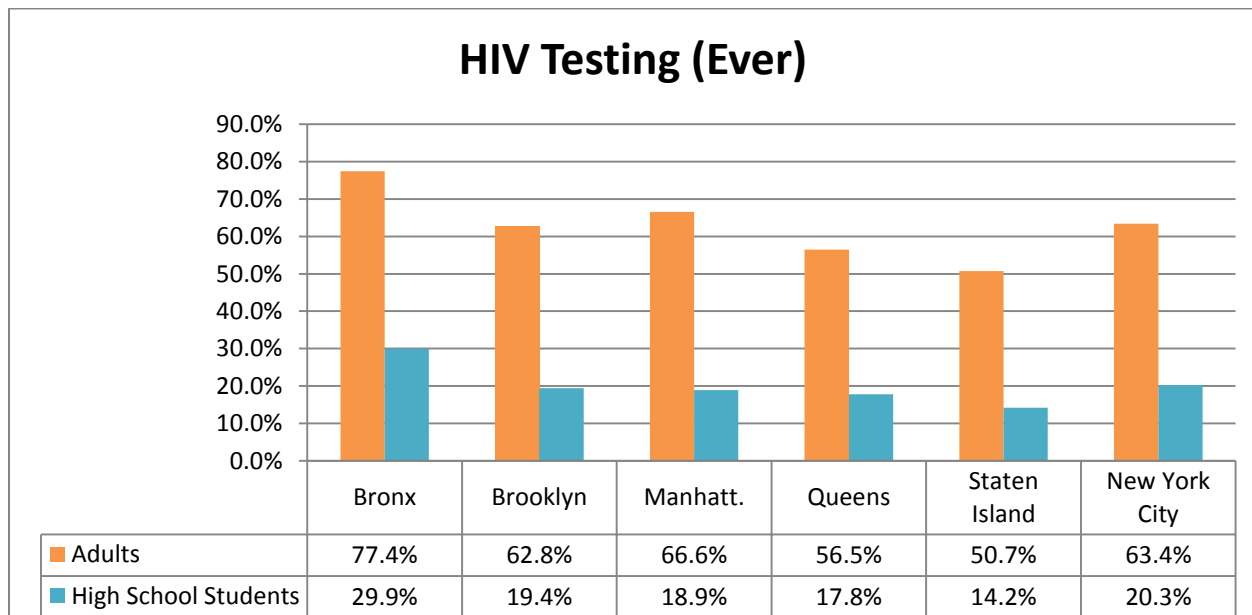


Source: New York City Department of Health and Mental Hygiene, 2013 & Centers for Disease Control and Prevention, 2013

Staten Island adults and high school students are less likely to receive HIV testing when compared to all of NYC. A lack of testing can indicate undiagnosed conditions within the community or a lack of demand for testing as a result of safe practices.

Staten Island high school students are the least likely among all NYC boroughs to have ever had sex or to currently be sexually active

Among high school students, Staten Island students are the least likely among the NYC boroughs to have ever had sex (26.6%) and among the least likely to be currently sexually active (18.9%). However, they are also the least likely to have used a condom during their last sexual intercourse (65.3%).



Source: New York City Department of Health and Mental Hygiene, 2013 & 2014

## Behavioral Health

### Mental Health

The average number of poor mental health days among adults over a 30-day period is lower in Staten Island (3.5) when compared to other boroughs and the nation (3.7). In addition, fewer adults in Staten Island have been told by a health professional that they have depression (12.3%) when compared to all of NYC (13.7%).

More than one-quarter of Staten Island high school students felt so sad or hopeless almost every day for two weeks or more, that they stopped doing their usual activities; approximately 9% of students attempted suicide one or more times during the past year. The percentages are on par with NYC overall.

9% of Staten Island high school students attempted suicide one or more times during the past year



**Mental Health Measures (Adults and High School Students)**

	Poor Mental Health Days (Adults)	Diagnosed Depression (Adults)	Felt Sad or Hopeless (HS Students)	Attempted Suicide (HS Students)
Bronx	4.3	14.9%	26.2%	9.4%
Brooklyn	3.9	13.4%	25.5%	7.4%
Manhattan	3.5	17.7%	29.2%	6.6%
Queens	3.7	11.1%	29.1%	9.1%
Staten Island	3.5	12.3%	26.6%	8.8%
New York City	NA	13.7%	27.4%	8.1%
United States	3.7	NA	NA	NA

Source: Centers for Disease Control and Prevention, 2014; New York City Department of Health and Mental Hygiene, 2013 & 2014

The suicide death rate in Staten Island (5.7 per 100,000) is lower than NYC and the nation and meets the Healthy People 2020 goal (10.2 per 100,000). The rate has been variable over the past decade, fluctuating between 3.7 per 100,000 and 7.1 per 100,000, but has remained lower than the Healthy People 2020 goal.

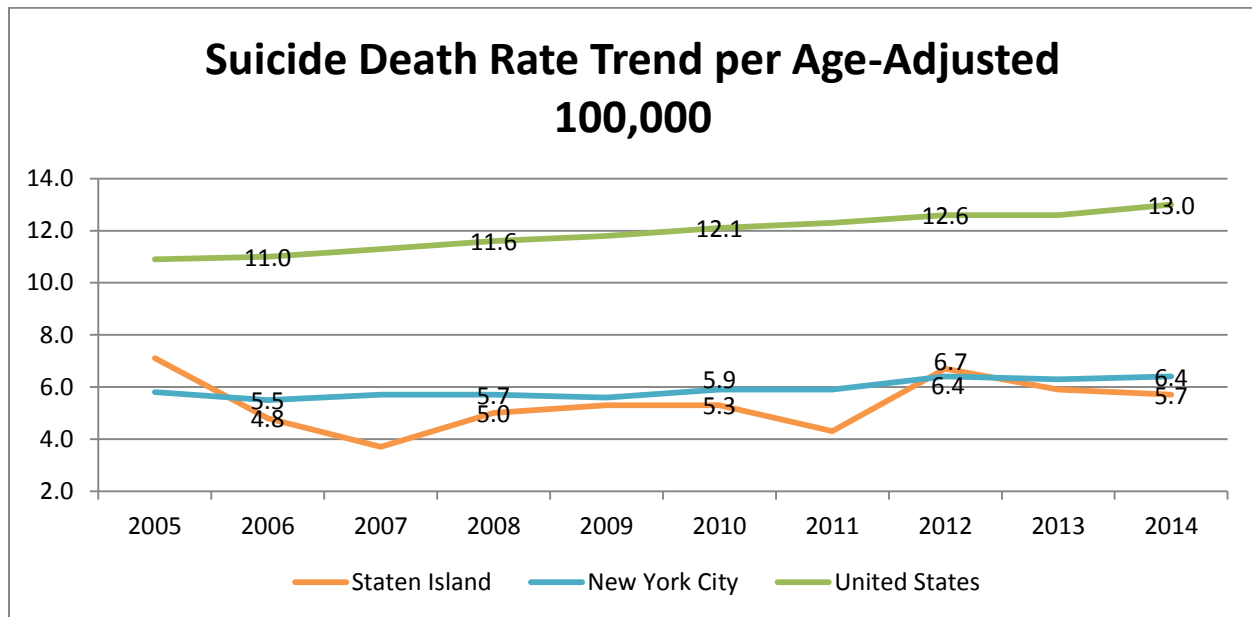
The Staten Island suicide death rate is lower than NYC and the nation and meets the HP 2020 goal

The mental and behavioral disorders death rate is also lower in Staten Island compared to NYC and the nation; however, it increased slightly since 2008.

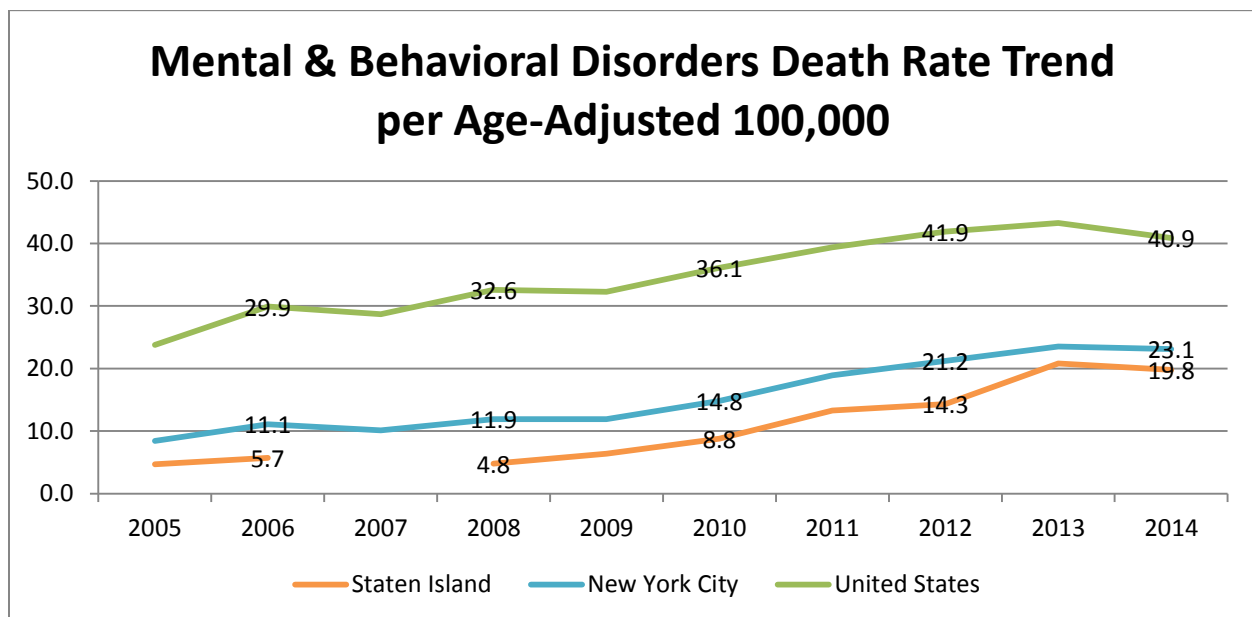
**Mental Health Mortality**

	Suicide per Age-Adjusted 100,000	Mental & Behavioral Disorders Death per Age-Adjusted 100,000
Bronx	4.6	31.7
Brooklyn	4.6	21.6
Manhattan	7.6	27.2
Queens	5.8	17.7
Staten Island	5.7	19.8
New York City	6.4	23.1
United States	13.0	40.9
Healthy People 2020	10.2	NA

Source: New York City Department of Health and Mental Hygiene, 2014; Centers for Disease Control and Prevention, 2014; Healthy People 2020



Source: New York City Department of Health and Mental Hygiene, 2005-2014 & Centers for Disease Control and Prevention, 2005-2014



Source: Centers for Disease Control and Prevention, 2005-2014

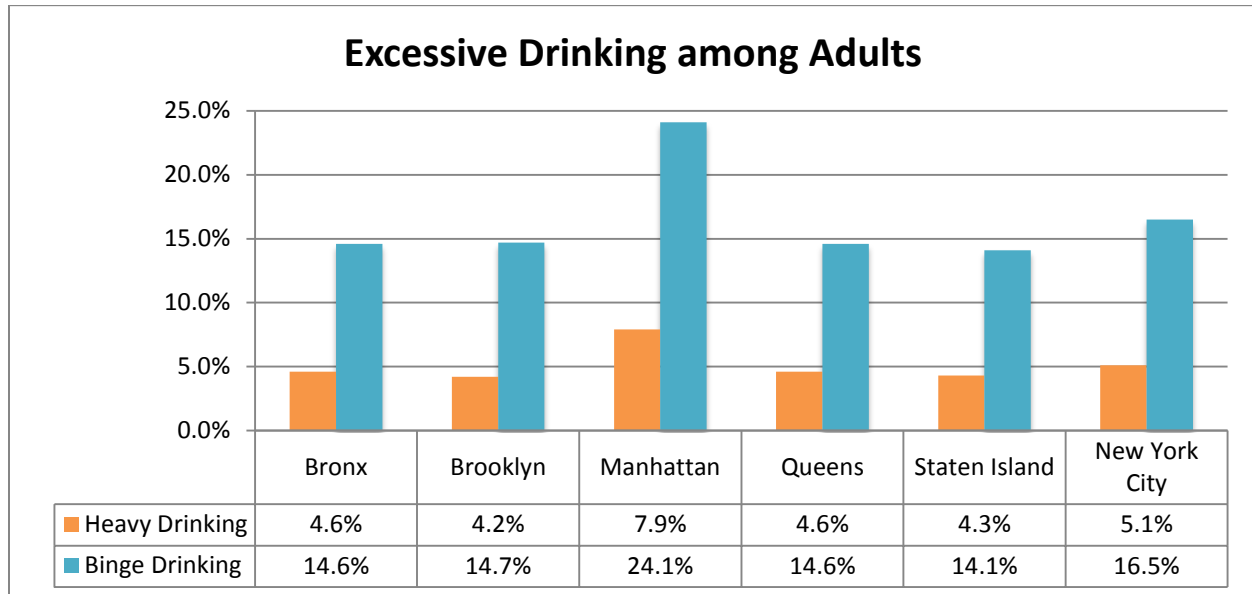
\*2007 data for Staten Island is unreliable due to a low death count and therefore not reported

## Substance Abuse

Staten Island has the highest percentage of driving deaths due to alcohol impairment (19.5%) among all NYC boroughs. However, Staten Island adults are less likely to report that they drink excessively. Excessive drinking includes heavy drinking (two or more drinks per day for men and one or more drinks per day for women).

Staten Island has the highest rate of driving deaths due to DUI, but adults are less likely to report they drink excessively

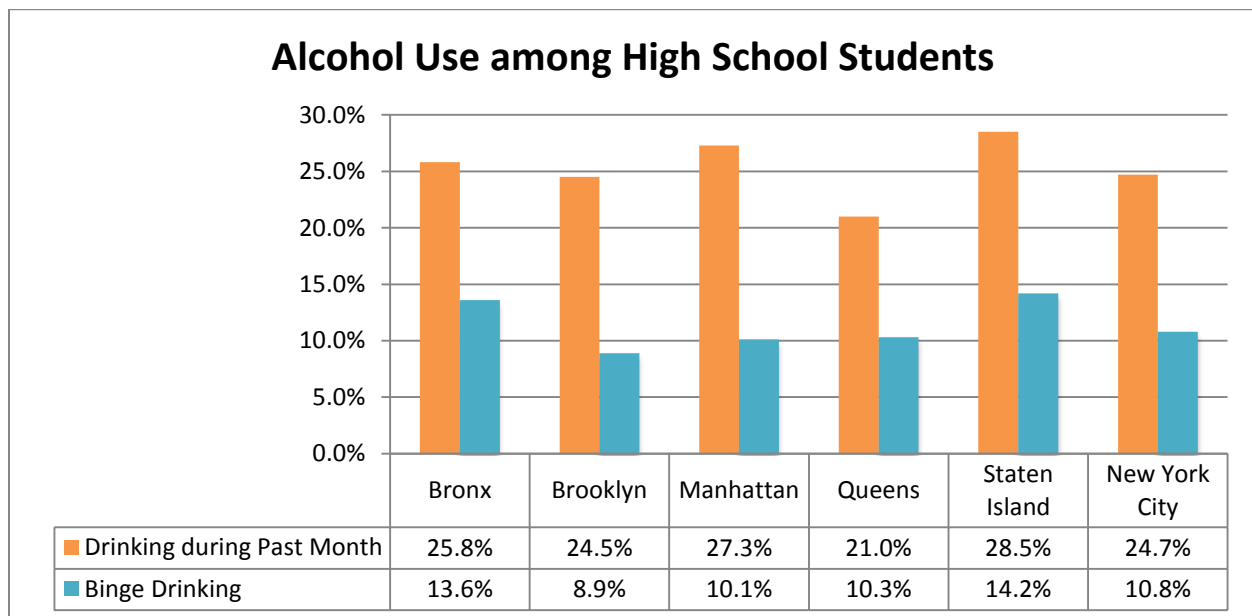
women) and binge drinking (five or more drinks on one occasion for men and four or more drinks on one occasion for women).



Source: New York City Department of Health and Mental Hygiene, 2014

Among youth, 28.5% of high school students in Staten Island report consuming alcohol within the past 30 days. The percentage is the highest of the five boroughs and exceeds the NYC average by nearly 4 points. Approximately 14% of youth report binge drinking (five or more drinks in a row) in the past 30 days, also the highest of the NYC boroughs.

Staten Island high school students are the most likely to report alcohol consumption and binge drinking



Source: New York City Department of Health and Mental Hygiene, 2013

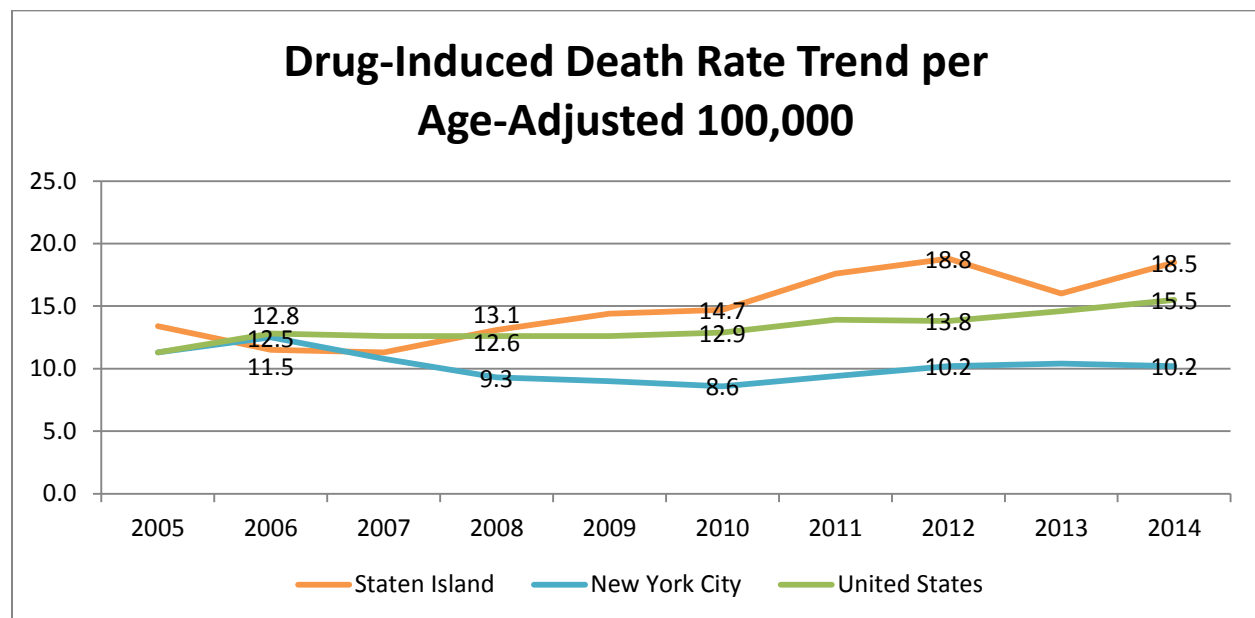
The drug-induced death rate in Staten Island is the highest of all NYC boroughs and exceeds the nation. The rate has been on the rise since 2007, increasing 7 points. All other NYC boroughs experienced slight increases between 2010 and 2014; Manhattan experienced the greatest increase (2.5 points).

The Staten Island drug-induced death rate is the highest of the NYC boroughs and exceeds the nation

### Substance Abuse Mortality

	Drug- Induced Death Rate per Age-Adjusted 100,000
Bronx	14.7
Brooklyn	9.6
Manhattan	10.9
Queens	6.5
Staten Island	18.5
New York City	10.2
United States	15.5

Source: Centers for Disease Control and Prevention, 2014

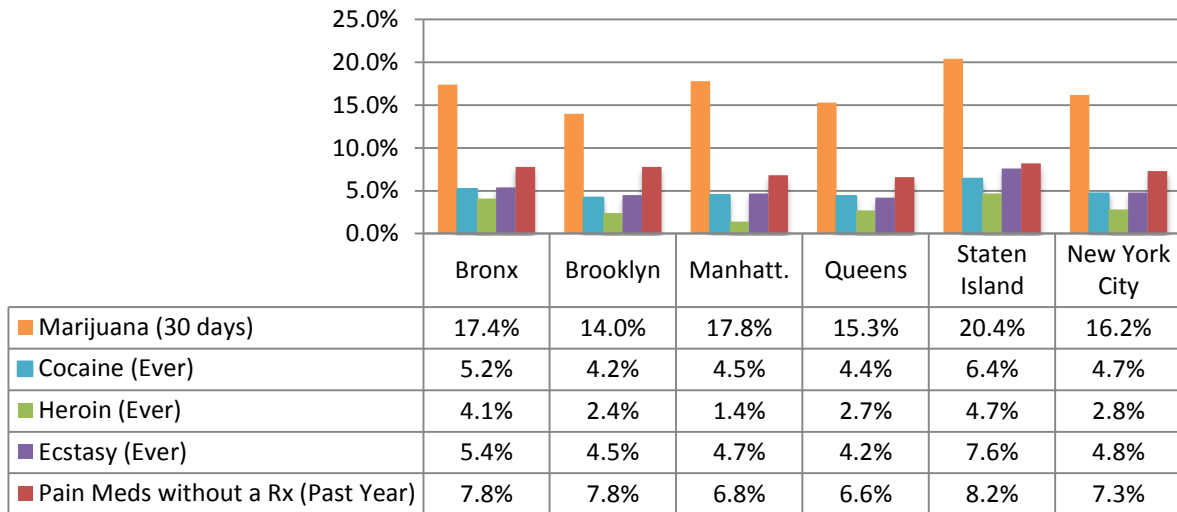


Source: Centers for Disease Control and Prevention, 2005-2014

Staten Island high school students have the highest rates of substance abuse for all reported drugs. Approximately one-fifth of all students have used marijuana in the past 30 days; 8.2% of students have abused prescription pain meds in the past year.

Staten Island high school students have the highest rates of substance abuse for all reported drugs

## Substance Abuse among High School Students



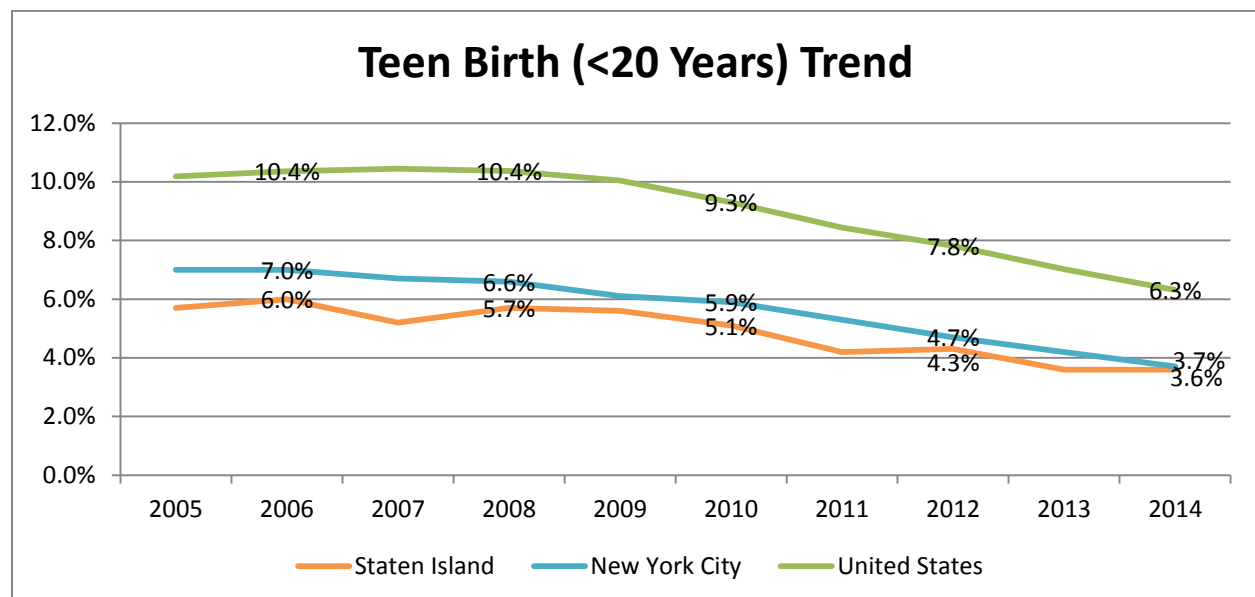
Source: New York City Department of Health and Mental Hygiene, 2013

## Maternal and Child Health

Approximately 5,300 births occurred in Staten Island in 2014. The corresponding birth rate (11.1 per 1,000) was lower than the birth rate across NYC (14.4 per 1,000). The majority of births were to White, Non-Hispanic mothers (54.5%); 11.6% were to Black/African American mothers and 24.8% were to Hispanic mothers.

Teen births in Staten Island are declining, falling 2 points since 2005. The current percentage of teen births in Staten Island (3.6%) is on par with NYC and lower than the nation.

The percentage of births to teens decreased 2 points from 2005



Source: New York City Department of Health and Mental Hygiene, 2005-2014 & Centers for Disease Control and Prevention, 2005-2014

According to Healthy People 2020, “The well-being of mothers, infants, and children determines the health of the next generation and can help predict future public health challenges for families, communities, and the medical care system.” A number of indicators contribute to healthy mothers and children, including prenatal care, low birth weight, preterm births, and breastfeeding.

Prenatal care should begin during the first trimester of pregnancy. The percentage of Staten Island mothers receiving first trimester care is the highest of the NYC boroughs and meets the Healthy People 2020 goal. The percentage is on the rise, increasing 8 points between 2006 and 2014. Less than 0.3% of Staten Island mothers did not receive prenatal care in 2014.

Low birth weight is defined as a birth weight of less than 5 pounds, 8 ounces. It is often a result of premature birth, fetal growth restrictions, or birth defects. Staten Island has fewer low birth weight babies than NYC and the nation and meets the Healthy People 2020 goal. The percentage has remained variable over the past 10 years, fluctuating between 7.4% and 8.7%.

Preterm births are births that occur earlier than the 37th week of pregnancy. Staten Island has one of the highest preterm birth percentages among the NYC boroughs, but meets the Healthy People 2020 goal. The percentage decreased between 2006 and 2007, and has remained stable since then.

Staten Island has positive birth outcomes for all indicators except breastfeeding; only 28.3% of mothers exclusively breastfeed

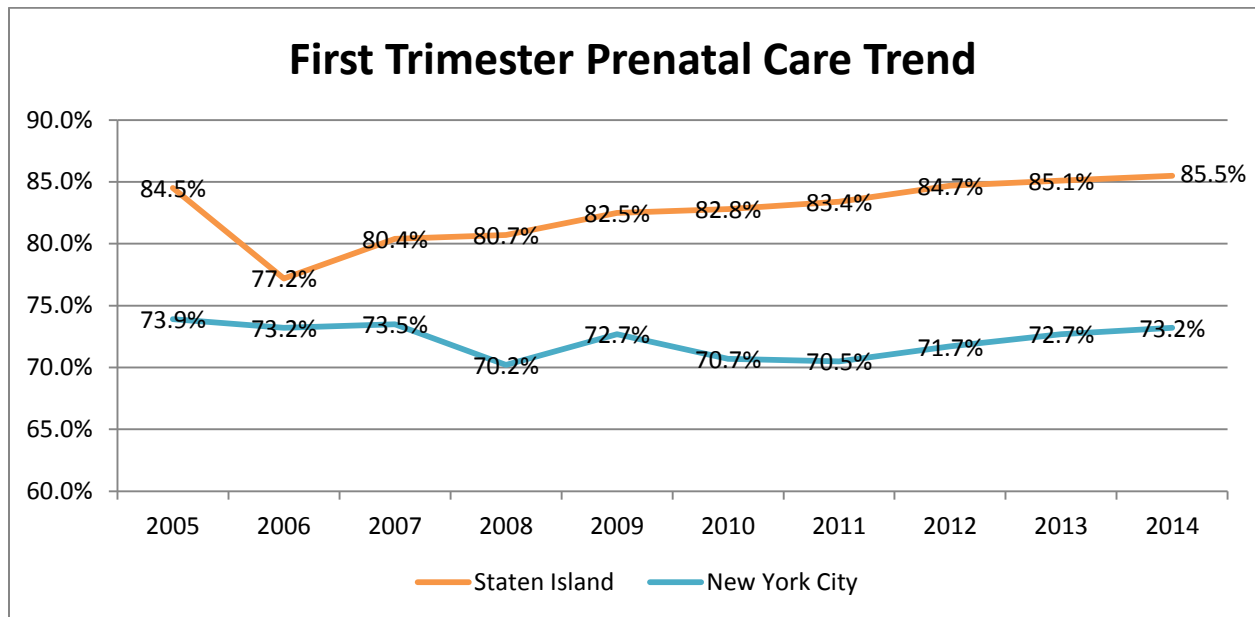
The proportion of infants who are exclusively breastfed includes feeding practices through the first five days of life. Staten Island mothers are the least likely to exclusively breastfeed (28.8%) among the NYC boroughs; the percentage is 6 points lower than NYC overall.

Across New York City, Black/African American and Hispanic/Latina women have worse maternal and child health outcomes than White women. Black/African American women experience the greatest disparity.

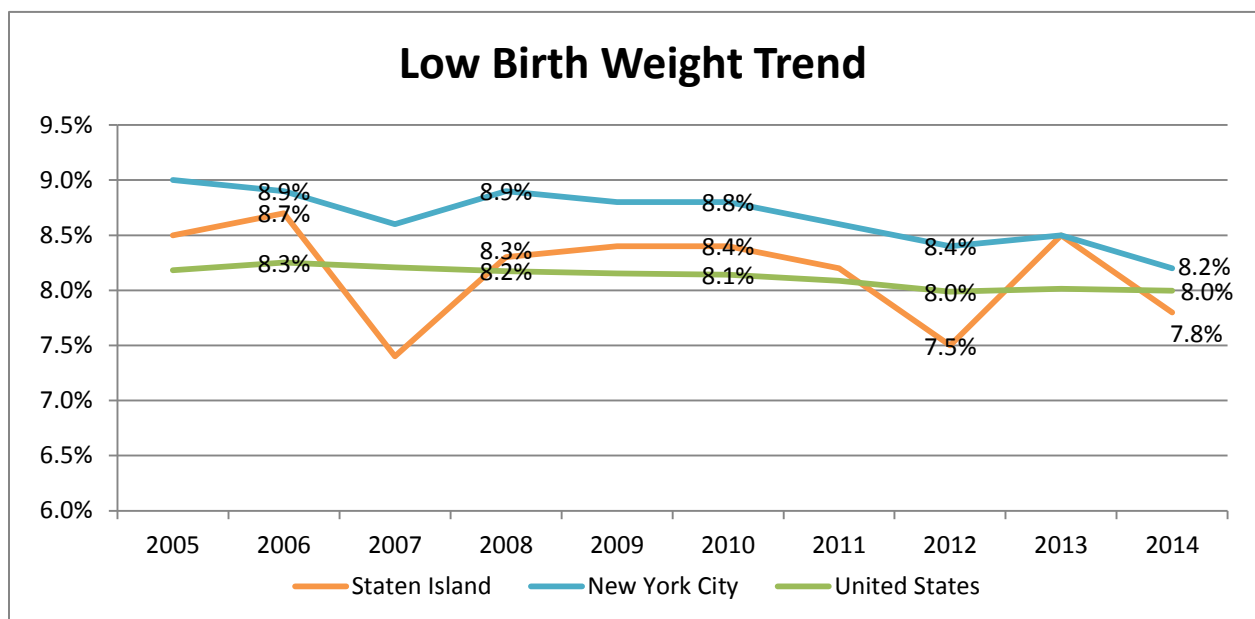
**Maternal & Child Health Measures**

	First Trimester Prenatal Care	Low Birth Weight	Preterm Birth	Exclusively Breastfed
Bronx	55.4%	9.3%	9.7%	29.2%
Brooklyn	75.8%	7.4%	8.4%	33.5%
Manhattan	77.3%	8.3%	8.6%	42.5%
Queens	73.1%	7.8%	8.0%	32.6%
Staten Island	85.5%	7.8%	9.7%	28.8%
New York City	73.2%	8.2%	8.8%	34.4%
White, NH	83.1%	6.6%	7.2%	44.3%
Black/AA, NH	62.3%	11.6%	12.0%	30.9%
Hispanic/Latina	67.7%	7.8%	9.0%	28.3%
United States	NA	8.0%	11.3%	NA
Healthy People 2020	77.9%	7.8%	11.4%	NA

Source: New York City Department of Health and Mental Hygiene, 2014; Centers for Disease Control and Prevention, 2014; Healthy People 2020

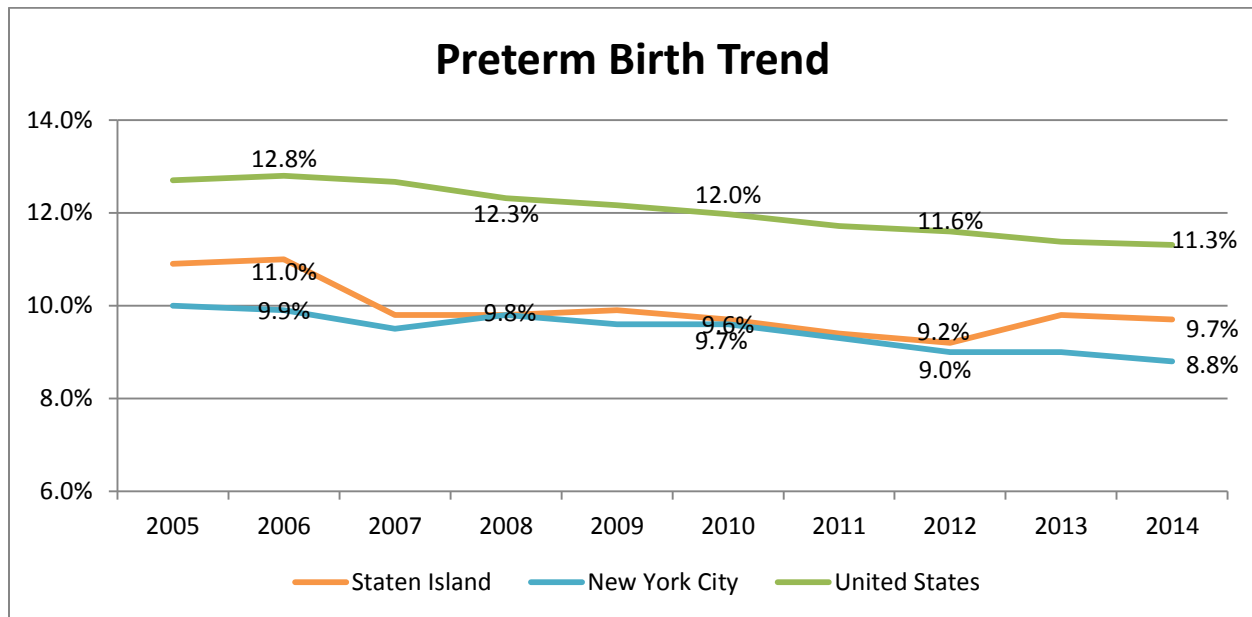


Source: New York City Department of Health and Mental Hygiene, 2005-2014

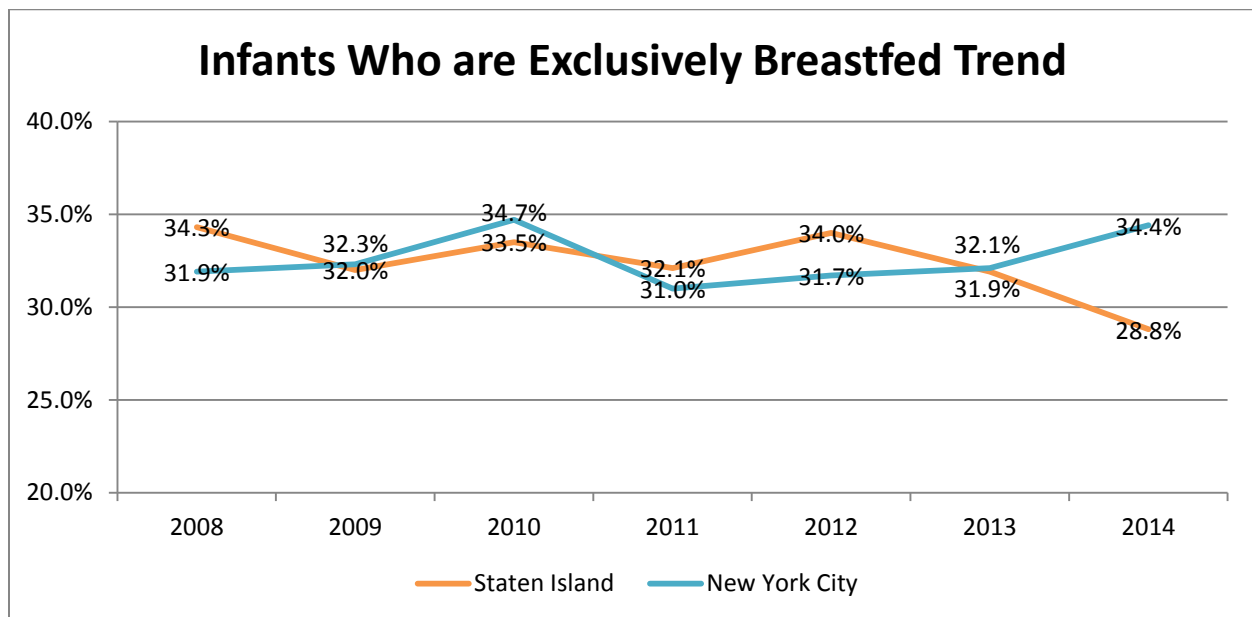


Source: New York City Department of Health and Mental Hygiene, 2005-2014 & Centers for Disease Control and Prevention, 2005-2014





Source: New York City Department of Health and Mental Hygiene, 2005-2014 & Centers for Disease Control and Prevention, 2005-2014



Source: New York City Department of Health and Mental Hygiene, 2008-2014

\*Data is not reported prior to 2008

The Staten Island infant death rate per 1,000 live births is lower than NYC and the nation and meets the Healthy People 2020 goal. The rate has been variable over the past decade, but has remained lower than the Healthy People 2020 goal for all years, except 2006. Thirty-seven infant deaths occurred in 2006.

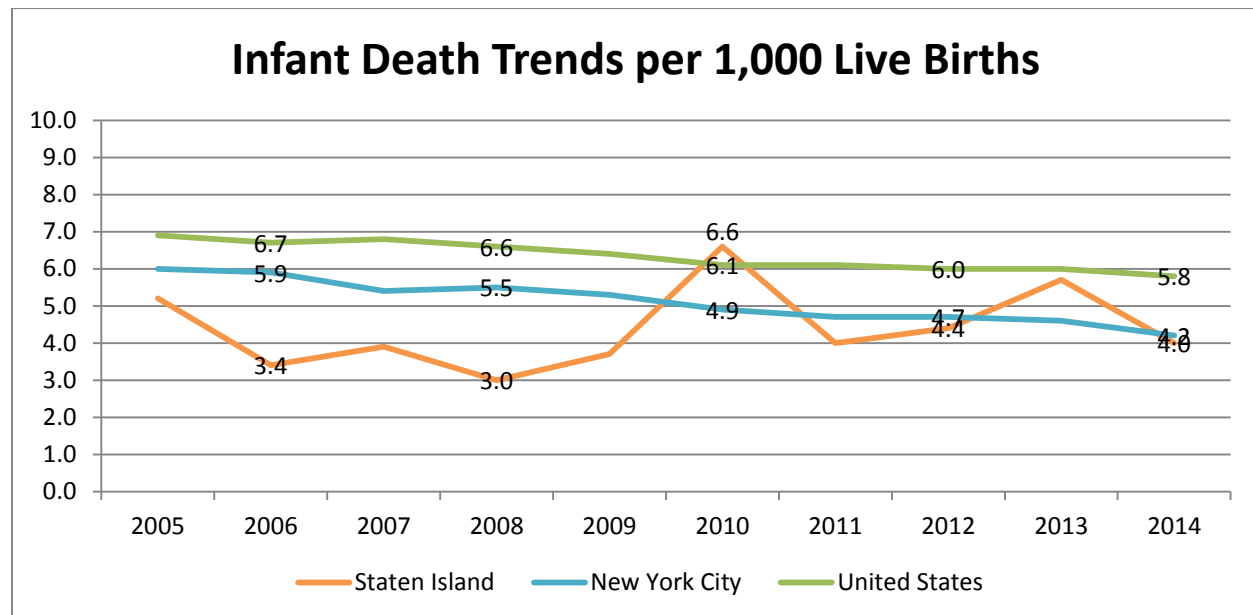
The Staten Island infant death rate meets the HP 2020 goal

Across NYC, the infant death rate is highest among Puerto Ricans (7.6 per 1,000) and Blacks/African Americans (7.5 per 1,000), and lowest among Whites and Asian/Pacific Islanders (2.6 per 1,000).

### Infant Mortality

	Infant Death Rate per 1,000 Live Births
Bronx	4.7
Brooklyn	3.9
Manhattan	3.4
Queens	3.9
Staten Island	4.0
New York City	4.2
United States	5.8
Healthy People 2020	6.0

Source: New York City Department of Health and Mental Hygiene, 2014; Centers for Disease Control and Prevention, 2014; Healthy People 2020



Source: New York City Department of Health and Mental Hygiene, 2005-2014 & Centers for Disease Control and Prevention, 2005-2014

## Richmond University Medical Center 2016 CHNA Research Results: Key Informant Survey Results

### Background

A Key Informant Survey was conducted with 30 community representatives to solicit information about health needs and disparities across Staten Island. Key informants were asked a series of questions about their perceptions of health needs in the community, health drivers, barriers to care, quality and responsiveness of health providers, and recommendations for community health improvement.

Key informants serve diverse populations across Staten Island, as illustrated in the tables below. A list of organizations represented by the key informants, and their respective role/title, is included in Appendix B.

**Staten Island Zip Code Served by Key Informants**

	Percent of Key Informants	Number of Key Informants
<b>North Shore Zip Codes:</b> 10301, 10302, 10302, 10304, 10305, 10310, 10314	100.0%	30
<b>Mid-Island Zip Codes:</b> 10306, 10308	73.3%	22
<b>South Shore Zip Codes:</b> 10307, 10309, 10312	70.0%	21

Families, children/youth, disabled, and seniors/elderly are the most commonly served populations by key informants. “Other” populations include individuals with behavioral health concerns, veterans, victims of domestic violence, and individuals in need of housing.

**Staten Island Populations Served by Key Informants**

Population	Percent of Key Informants	Number of Key Informants
Families	70.4%	19
Children/Youth	66.7%	18
Disabled	66.7%	18
Seniors/Elderly	66.7%	18
Men	51.9%	14
Women	51.9%	14
Low income/Poor	48.1%	13
LGBTQ community	40.7%	11
Black/African American	37.0%	10
Hispanic/Latino	33.3%	9
Other	33.3%	9
Immigrant/Refugee	29.6%	8
Asian/Pacific Islander	25.9%	7
Homeless	25.9%	7
Uninsured/Underinsured	25.9%	7
American Indian/Alaska Native	18.5%	5

## Survey Findings

### Top Health Concerns

The following tables show the rank order of health conditions and contributing factors affecting residents, as indicated by key informants.

**Top Health Conditions Affecting Residents**

Ranking	Condition	Percent of Key Informants	Number of Key Informants
1	Substance Abuse	17.8%	16
2	Mental Health	13.3%	12
3	Access to Health Care	11.1%	10
4	Diabetes	8.9%	8
5	Alzheimer's Disease/Dementia	7.8%	7
6	Asthma/COPD/Respiratory Disease	7.8%	7
7	Cancer	7.8%	7
8	Heart Disease	7.8%	7
9	Overweight/Obesity	5.6%	5
10	Other	3.3%	3
11	Children's Health	2.2%	2
12	Disability	2.2%	2
13	HIV/AIDS	1.1%	1
14	Immunization	1.1%	1
15	Prenatal Care/Mother & Infant Health	1.1%	1
16	Tobacco Use	1.1%	1

**Top Contributing Factors to Conditions Affecting Residents**

Ranking	Contributing Factor	Percent of Key Informants	Number of Key Informants
1	Drug/Alcohol Abuse	18.8%	15
2	Social determinants (poverty, education level, etc.)	15.0%	12
3	Education/Awareness regarding health	11.3%	9
4	Other	11.3%	9
5	Poor diet/Lack of physical activity	10.0%	8
6	Inability to afford care	7.5%	6
7	Stress (work, family, school, etc.)	6.3%	5
8	Lack of preventative care/screenings	5.0%	4
9	Environmental quality	3.8%	3
10	Lack of health insurance	3.8%	3
11	Crime/Violence/Community Blight	2.5%	2
12	Lack of health providers available	2.5%	2
13	Lack of transportation to access health services	2.5%	2

Substance abuse and mental health were identified by key informants as being the top health concerns in Staten Island. Informants stated that there is a lack of behavioral health services within the community to adequately address the rising need. One informant identified a lack of services particularly among children stating, “There are limited mental health and substance abuse services for children, especially for those who are covered by their parents Commercial Insurance. As a result, children go without the help they need. Schools need more clinical and support resources to engage and treat children within the school setting.” Another informant stated that the area lacks the latest treatment options, person-centered care, and peer support systems.

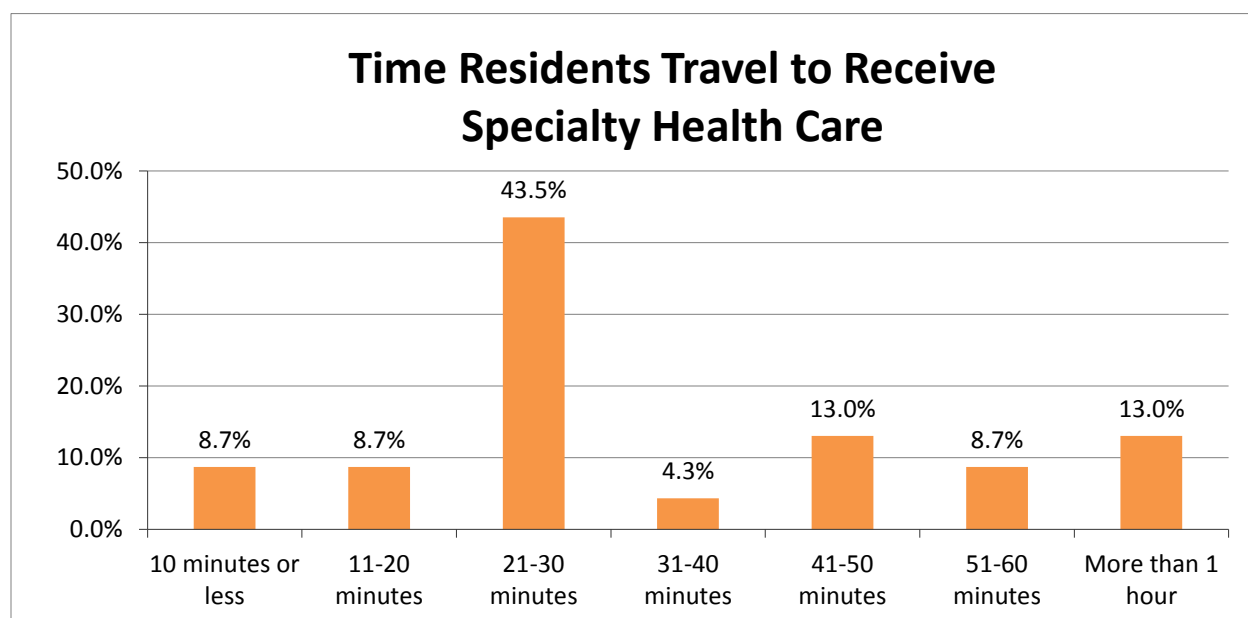
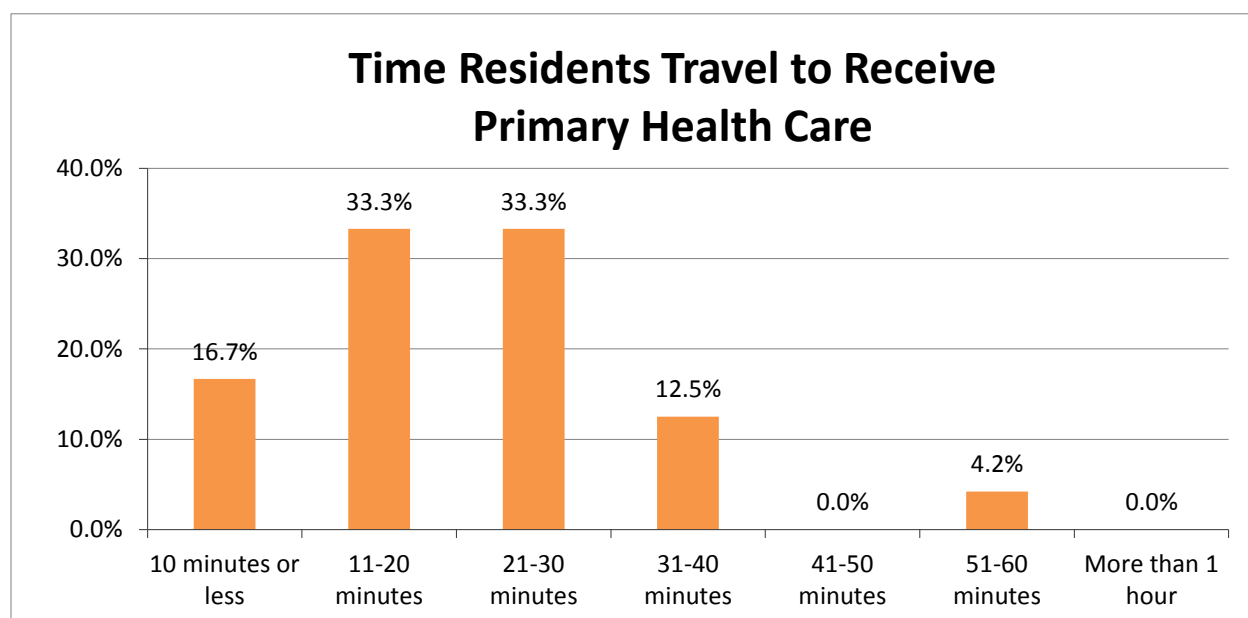
Access to health care was also identified as a top health concern in the community. Contributing factors to access barriers, as identified by key informants, included lack of coordination of health services among providers and lack of cultural sensitivity for at-risk and vulnerable populations. One informant stated, “Staten Island primary care providers need more sensitivity to low income, minority and immigrant populations.”

Key informants identified older adults as an at-risk population within the community for accessing health and social services. One informant stated that lack of health insurance among adults 60 to 64 years and mobility issues prevent older adults from receiving care and preventative screenings. Another informant stated that older adults are prone to social isolation, but at-risk individuals are difficult to identify and connect with services (e.g. meals, entitlement counseling, transportation, etc.).

“Other” health conditions cited by key informants included subacute conditions and health needs among the LGBTQ community. One informant stated, “Health Care needs to be safe and welcoming to LGBTQ people and the providers need to understand LGBTQ people in order to treat them.” The informant stated that discrimination and isolation contribute to the LGBTQ community as an underserved population.

### **Health Care Access**

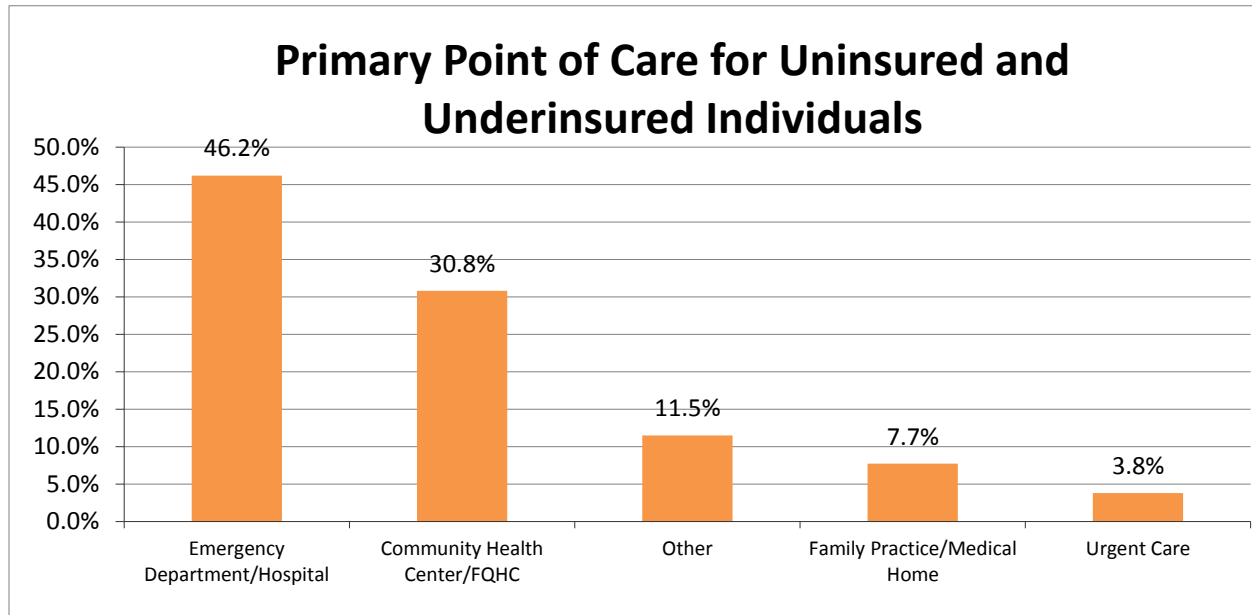
Travel time to primary and specialty care providers was assessed to gather perception on access to care within Staten Island. Travel time to primary care is perceived to be less than travel time to specialty care. Fifty percent of key informants reported that primary care is available within 20 minutes of residents; less than 17% stated it is more than 30 minutes away. In contrast, approximately 17% of informants stated that specialty care is available within 20 minutes of residents, and 39% stated it is more than 30 minutes away.



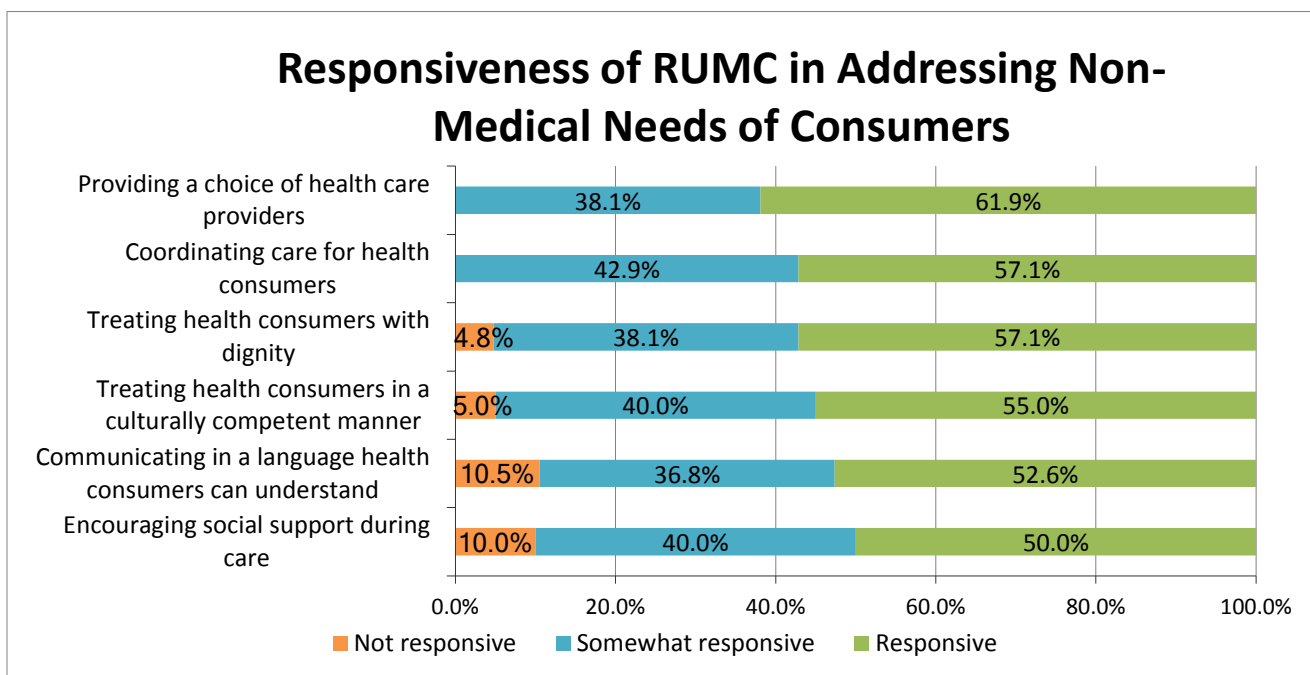
Key informants who reported that specialty care is more than 30 minutes away from residents were asked to identify the services that are not available within the community. Cancer treatment and cardiology services were identified by two informants; all other services were identified once:

- > Behavioral Health
- > Radiology
- > Diabetes
- > Rehabilitation
- > Nephrology
- > Surgery
- > Neurology
- > Urology
- > Ophthalmology

Key informants reported that the emergency department/hospital is the primary point of care for uninsured and underinsured individuals, followed by community health centers/federally qualified health centers (FQHCs). Informants who identified “other” locations were unsure of where this population seeks care.



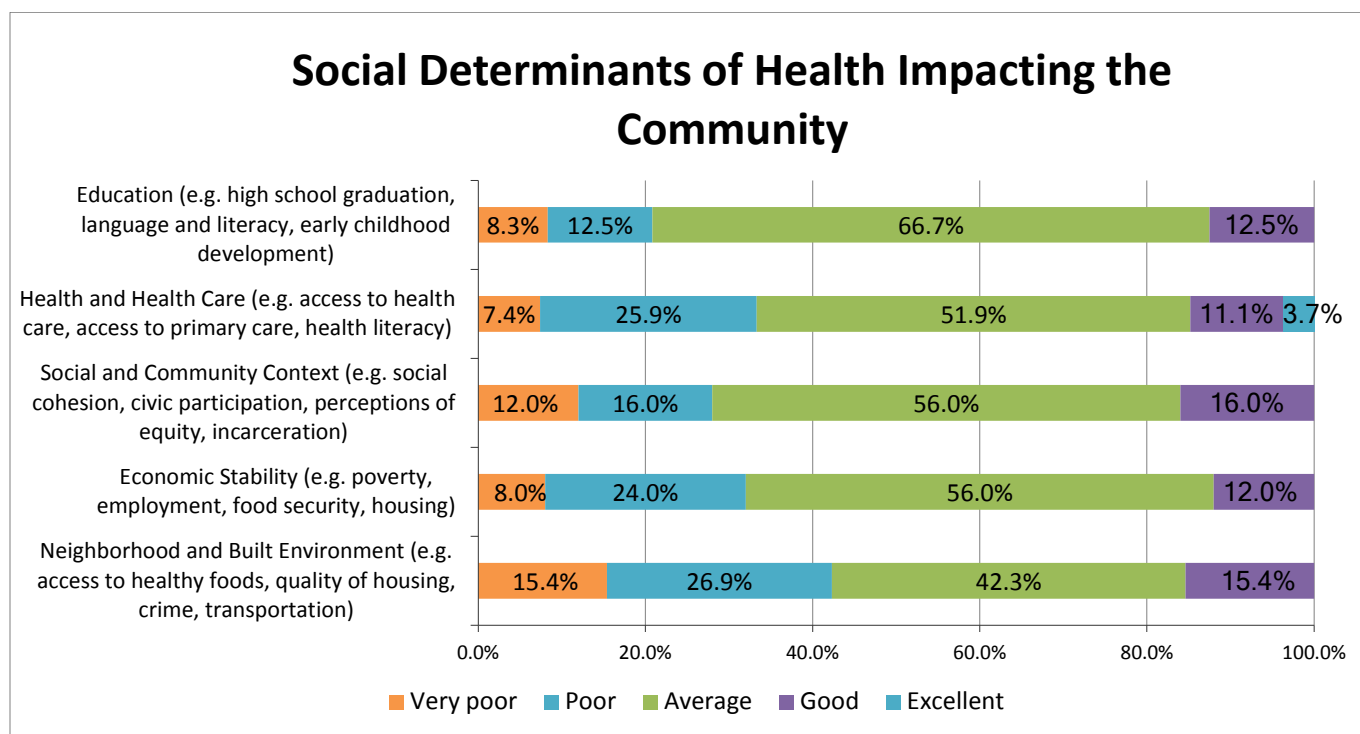
Respondents were asked about RUMC’s responsiveness to the non-medical needs of consumers. Key informants stated that RUMC is most responsive to “Providing a choice of health care providers” and “Coordinating care for health consumers.” Richmond University Medical Center is least responsive to “Encouraging social support during care.”





## Social Determinants of Health

Key informants were asked to rate social determinants of health in the region on a scale of 1 (very poor) to 5 (excellent). The majority of key informants rated the factors as “poor” or “average.” Education and health/health care were rated the highest with an average rating of 2.83 and 2.78 respectively. Neighborhood and built environment was rated the lowest with an average rating of 2.58; 42% of informants stated it is “very poor” or “poor.”



## Community Assets and Barriers

Key informants were asked to share open-ended feedback regarding health-related assets and barriers in the community and their recommendations for helping residents optimize their health.

Informants were first asked to provide examples of programs/initiatives/partnerships that have been successful in helping residents in the community optimize their health. Informants referenced a number of community initiatives, including:

- > Early childhood mental health services at Head Start locations
- > Senior services (Access-a-Ride, Community Agency for Senior Citizens, Meals on Wheels, Med Van, Staten Island Cares)
- > Medicaid Waiver Program
- > Pride Center of Staten Island
- > Staten Island Behavioral Network
- > Staten Island Delivery System Reform Incentive Payment (DSRIP) Project
- > Staten Island hospital relationships
- > Staten Island Mental Health Society
- > Staten Island Partnership for Community Wellness

- > Tackling Youth Substance Abuse (TYSA)
- > Tobacco cessation initiatives
- > YMCA (cancer survivors LiveStrong program, diabetes prevention program, etc.)

Key Informants were then asked what resources are needed in the community to promote health in the region. Informants overwhelmingly identified the need for resources to improve access to health care for residents, including the following:

- > A joint NYC Health Department and hospital facility
- > Availability of medical appointments (primary and urgent) for uninsured individuals
- > Behavioral health services
- > Care management services
- > Home health care options and hours of availability
- > Medical transportation services for individuals residing in underserved areas (e.g. Richmond Terrace, Port Richmond, and Mariner's Harbor)
- > Sensitivity and cultural awareness training among health care professionals

Key informants identified the need for resources to improve the overall health status of Staten Island residents. They recommended community-based education that addresses both healthy lifestyles and health services awareness. They also recommended creating more opportunities within the community that encourage healthy eating and active living.

Key informants were then asked what local and regional health care providers could do better to optimize the health of residents in the community. Informants made the following recommendations:

- > Collaborate with community partners to address pressing health needs and provide relevant services
- > Employ medical professionals that reflect the community and implement sensitivity and cultural awareness training among employees
- > Expand medical services across Staten Island to improve access to care
- > Implement community-wide, person-centered, integrated care for health and social support services
- > Provide a mobile medical unit that brings health care to residents in lower socio-economic neighborhoods
- > Provide peer support services at mental health facilities

Key informants expressed their commitment to improving health across Staten Island. They are aware of the most pressing health needs within the community and are dedicated to addressing health disparities. Informants recognize the need to address health collectively and are eager to collaborate as partners in ongoing community health improvement initiatives.

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## Appendix B: Key Informants

A key informant survey was conducted with 30 community representatives. The organizations represented by key informants, and their respective role/title, included:

Key Informant Organization	Key Informant Title/Role
Bridge Back to Life Center	Provider Relations Representative/DSRIP Coordinator
Carl's house/Carl Vincent Bini Memorial Fund	volunteer
Carmel Richmond Healthcare and Rehabilitation Center	Assistant Administrator
Clove Lakes Health Care and Rehabilitation Center, Inc.	ADMINISTRATOR
Community Agency for Senior Citizens, Inc.	President/CEO
Community Health Center of Richmond	Medical Director
El Centro del Inmigrante	CBO
Jewish Community Center of Staten Island	Executive Director
Meals on Wheels of Staten Island	President and CEO
National Alliance on Mental Illness (NAMI) NYC Staten Island	Executive Director
Northfield Bank Foundation	Executive Director
NY1 News	Executive Editor
Office of Council Member Steven Matteo	Chief of Staff
Office of Senator Lanza	24th Senate District
Pride Center of Staten Island	Executive Director
Representative Dan Donovan	District Director/Communications Director
Richmond Center for Rehabilitation	Administrator
Senator Diane J Savino	Senator 23rd District
Silver Lake Specialized Care Center	Administrator
Stapleton Union American Methodist Episcopal Church	Reverend/Pastor
Staten Island Borough President's Office	Borough President
Staten Island Center for Independent Living, Inc.	Executive Director
Staten Island Economic Development Corporation	Membership and Events Manager
Staten Island Mental Health Society, Inc.	President/CEO
Staten Island Partnership for Community Wellness	Director of Government & Community Partnerships
St. George Civic Association	Vice President
The Staten Island Foundation	Executive Director
VNA of Staten Island	COO/CFO
Verrazano Nursing Home	Administrator
Young Men's Christian Association	Executive Director