The Brooklyn Hospital Center

Community Health Needs Assessment & Community Service Plan for Kings County (Brooklyn)

December 2022

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Executive Summary

About The Brooklyn Hospital Center

The Brooklyn Hospital Center (TBHC) is the oldest hospital in Brooklyn and an independent community hospital. Since 1845, TBHC has provided outstanding health services, education, and research to our Brooklyn community. Today, TBHC is licensed for 464 beds and provides a full range of primary, specialty, and tertiary healthcare services with a team of multi-disciplined healthcare providers. As Brooklyn's first hospital, TBHC is proud to be a part of an incredibly diverse borough and is committed to *Keeping Brooklyn Healthy*.

Located in the heart of downtown Brooklyn, TBHC is a not-for-profit corporation that serves upwards of 300,000 annual visits. TBHC is committed to understanding and addressing the most pressing health and wellness concerns for Brooklyn residents. Every three years, TBHC conducts a Community Health Needs Assessment (CHNA) in partnership with community agencies and creates a corresponding Community Service Plan (CSP) to address the health priorities identified by the CHNA. The 2022 CHNA builds upon previous assessments and will continue to guide our community benefit and community health improvement efforts.

CHNA and CSP Leadership

The 2022 CHNA was overseen by a Steering Committee of representatives from TBHC with guidance from the TBHC Community Advisory Board. TBHC contracted Community Research Consulting, a public health consultant to assist in all phases of the CHNA, including project management, data collection and analysis, and report writing.

TBHC CHNA Planning Committee
Sheila Anane, Senior Director of Ambulatory Quality and Services
Siungan (Kathy) Cheng, Administrative Director, Cardiology
Madelyn McNamara, Director, PATH Center
Sakibeh Mustafa, Community Liaison
Egondu Onuoha, Vice President, Real Estate and Special Program
Lenny H Singletary III, Senior Vice President, External Affairs, Strategy & Marketing

Community Research Consulting
Colleen Milligan, MBA
Catherine Birdsey, MPH, CHES
Genay Jackson, MPH

Methodology

The 2022 CHNA included quantitative and qualitative research methods to determine health trends and disparities affecting Brooklyn residents. Through a comprehensive view of statistical health indicators and community stakeholder feedback, a profile of priority areas that align with the New York State Prevention Agenda was determined. The findings will guide healthcare services and health improvement efforts, as well as serve as a community resource for grant making, advocacy, and to support the many programs provided by health and social service partners.

The following research methods were used to determine community health needs:

- Statistical analysis of health and socioeconomic indicators; a full listing of data references is included in Appendix A
- Electronic survey of key stakeholders, including health and social service providers, community and public health experts, civic and religious leaders, and policy makers and elected officials; a list of key stakeholders and their respective organizations is included in Appendix B
- Systemwide conversations to align TBHC population health management strategy with the 2022-2024 CHNA priorities and CSP

Community Engagement

Community engagement was an integral part of the 2022 CHNA. In assessing community health needs, input was solicited and received from persons who represent the broad interests of the community, as well as underserved, low-income, and minority populations. These individuals provided wide perspectives on health trends, expertise about existing community resources available to meet those needs, and insights into service delivery gaps that contribute to health disparities and inequities.

TBHC is dedicated to reaching beyond the hospital's walls to our neighbors and community partners so that we can provide preventive screenings and important information directly to our community and, in turn, hear from them about their healthcare needs. In working with places of worship, senior citizen centers, schools, elected officials, local police precincts, cultural and community institutions, community boards, and our very own Community Advisory Board, among others, TBHC is dedicated to *Keeping Brooklyn Healthy*. Our goal is to create community-based, community-focused, and community-driven programs that will be sustainable and impactful and will serve to improve the health of our families through promotion and education of healthy lifestyles.

One of the ways that TBHC keeps connected to the community is through our Community Advisory Board (CAB). The CAB is a diverse group of individuals with strong ties to the community we serve. Each advisor has a keen understanding of how our hospital works. This knowledge enables us to tailor our programs and services so that TBHC targets the healthcare needs of residents in our neighborhoods. TBHC's CAB members are committed to:

- Assist in assessing and identifying the health needs of the community.
- Offer guidance in identifying local strengths, weaknesses, opportunities, and potential threats to THBC.
- Cultivate and maintain relationships with community leaders, community-based organizations, and civic groups to strengthen the hospital's link to the community.
- Assist hospital administration in its community outreach efforts.
- Organize community forums of mutual interest to TBHC and the community.
- Monitor TBHC's patient satisfaction process to ensure that issues are addressed and resolved appropriately.
- Communicate how our community views TBHC.

Identified Health Priorities and Evidence-Based Strategies

To work towards health equity, it is imperative to prioritize resources toward the most pressing and cross-cutting health needs within the community. Priorities were determined by the TBHC CHNA Planning Committee, among other hospital and CAB members, taking into consideration research findings and community stakeholder feedback.

Based on CHNA findings and taking into account the health system's expertise and resources, TBHC will focus efforts on the following New York State Prevention Agenda priorities as part of its 2022-2024 CSP:

- **Prevent Chronic Diseases**
  - Focus Area: Preventive care and management of diabetes and heart disease
- **Prevent Communicable Diseases**
  - Focus Area: Human Immunodeficiency Virus (HIV) and Hepatitis C Virus (HCV)
- **Promote Well-Being and Prevent Mental and Substance Use Disorders**
  - Focus Area: Promote well-being and resilience

Strategies to address the Prevention Agenda priorities will target health and socioeconomic disparities affecting residents of TBHC's primary service area in northeast Brooklyn, primarily zip codes 11206 and 11212. Residents of these zip codes experience disproportionately higher poverty and lower educational attainment, among other socioeconomic barriers. The Brownsville neighborhood, located in zip code 11212, has the lowest life expectancy in NYC.

Health and socioeconomic disparities in zip codes 11206 and 11212 are largely rooted in racial and ethnic inequities affecting Black/African American and Latinx residents who comprise the majority of the population. Across Brooklyn, the median household income for Black/African American and Latinx residents is at least $30,000 less than the median household income for whites, and one-quarter of Latinx residents live in poverty. The premature death rate is nearly 50% higher for Latinx and nearly double for Black/African Americans when compared to the death rate for whites.

The TBHC 2022-2024 CSP prioritizes evidence-based strategies to address disparities and promote optimal health outcomes. TBHC is a leader in providing chronic disease treatment, particularly for congestive heart failure (CHF) and diabetes. The hospital uses a multi-faceted and team-based approach for CHF and diabetes treatment. CHF treatment programs include a designated heart failure clinic and educational programs and protocols for both residents and providers. The CHF programs are aligned with quality measures outlined by the American Heart Association and American College of Cardiology Foundation. The programs aim to decrease readmissions, particularly for Medicaid patients who comprise more than half of TBHC patients. TBHC partners with Healthfirst, the region's largest managed Medicaid provider, to monitor patient health outcomes.

TBHC's team-based approach to diabetes management brings together endocrinology, primary care, nutrition, and pharmacy, among others, to provide comprehensive, integrated care. TBHC promotes protocols to increase patient medication adherence, improve access to diabetes screenings, and improve diabetes control.

TBHC is a Designated AIDS Center by the New York State Department of Health and operates the PATH Center, which stands for Programs for AIDS Treatment and Health (PATH). The PATH Center collaborates extensively with community-based organizations to improve outcomes for patients. These collaborations include a partnership with the Council on Adoptable Children to provide high-intensity case management for high-risk patients and grant-funded free HIV rapid testing supported by Health Resources & Services Administration (HRSA) Ryan White HIV/AIDS Program Part C.

The PATH Center uses a warm handoff approach to address the health and social needs of patients, as well as a referral program within the ED for patients who present for repeat HIV testing or sexually transmitted infections (STI) treatment. Measures to monitor the impact of the PATH Center include the number of patients living with HIV who achieve viral load suppression and have at least two HIV medical visits per year (retention in care), and the number of patients connected with ancillary services, including behavioral health treatment.

Mental health needs are a growing concern for the Brooklyn community, and a recognized priority by both hospital and community members. While TBHC is not a specialty provider of mental health services, it is committed to being a part of the solution for promoting mental well-being and resilience among Brooklyn residents. The hospital recently introduced telepsychiatry to improve access to mental health services. TBHC is also actively pursuing community partnerships to better address the increase in pediatric and adolescent mental health concerns stemming from COVID-19 pandemic-related factors.

In addition to deploying evidence-based strategies to address disparities and identified priority areas, the 2022-2024 CSP reflects TBHC's ongoing commitment to provide free or low-cost health promotion services. These services include community-based education on diverse health topics and screening and referral services, targeting at-risk or underserved communities.

Board Approval

The 2022 CHNA and CSP were conducted in a timeline to comply with both New York State Department of Health and federal IRS Tax Code 501(r) requirements to conduct an assessment every three years and develop a corresponding health improvement plan. The research findings will be used to guide community benefit and population health initiatives for TBHC and to engage local partners to collectively address identified health needs.

TBHC is committed to advancing initiatives and community collaboration to support the New York State Prevention Agenda priorities identified through the CHNA. The 2022 CHNA and CSP report were presented to the TBHC Board of Directors and approved in December 2022.

Following the Board's approval, the CHNA and CSP report was made available to the public via the TBHC website at https://www.tbh.org/community-outreach/community-health-planning/the-need-for-caring.

Community Health Assessment

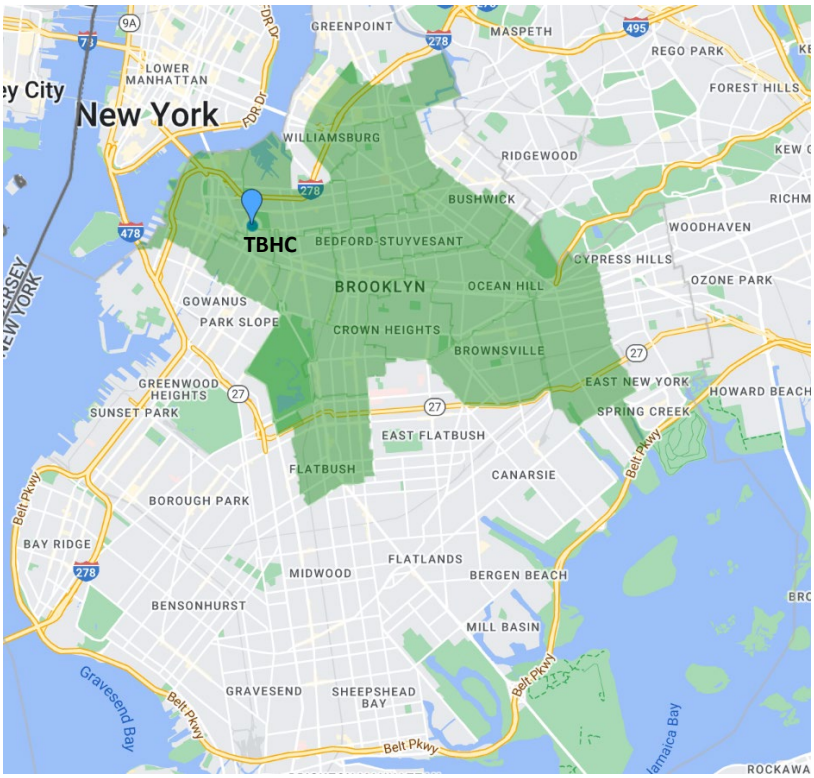
The Brooklyn Hospital Center Service Area Description

TBHC is located in the heart of downtown Brooklyn, one of the five boroughs comprising New York City (NYC). Downtown Brooklyn is the borough's central business district, as well as its civic, cultural, transit, and employment hub. With more than 12,000 residential units, 20 million square-feet of occupied offices, 11 higher education institutions, and new retail and entertainment destinations, the area has been transformed into a 24/7 community. Downtown Brooklyn has become an urban center for the information technology, arts, and entertainment industries.

Brooklyn is a uniquely diverse community, benefiting from a rich variety of residents and cultures. More than 60% of the borough's population identifies as non-white and nearly 45% speak a primary language other than English. Numerous neighborhoods have become home to LGBTQIA communities, and in 2020, the borough hosted the largest transgender-rights demonstration in LGBTQIA history, the Brooklyn Liberation March. As of 2014, there were 914 religious organizations in Brooklyn.

Brooklyn is NYC's most populous borough with more than 2.7 million residents in 2020. TBHC serves nearly one million Brooklyn residents, primarily within the north and central portions of the borough.

The Brooklyn Hospital Center Primary Service Area



Summary of CHNA Findings

Brooklyn had a total population of 2,736,074 as of the 2020 Census, reflecting higher 10-year growth (+9.2%) than NYC (+7.7%) and the nation (+7.4%). Brooklyn is a majority-minority community, and consistent with the nation, population growth occurred exclusively among people of color. The multiracial population more than doubled from 2010 to 2020. Nearly 45% of Brooklyn residents speak a primary language other than English.

The multiracial population residing in Brooklyn more than doubled from 2010 to 2020

The TBHC primary service area is among the most racially and ethnically diverse in Brooklyn. In zip codes comprising the eastern portion of the service area, more than 60% of residents identify as non-white. Black/African Americans and Latinx comprise the majority population in these communities.

Brooklyn is home to an overall younger population, but it is aging

Brooklyn residents are younger than residents across NYC and the nation, reflecting a higher proportion of youth under age 18 and millennials aged 25-34. However, consistent with citywide and national trends, Brooklyn is aging. Approximately 14% of Brooklyn residents are aged 65 over, an increase from 12.2% five years ago.

As reported by the CDC, half of every person's health profile is determined by a combination of socioeconomic factors and physical environment, also known as social determinants of health (SDoH). Social determinants of health comprise economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context.

Viewed as a whole, Brooklyn is a thriving community with an abundance of social and environmental amenities and economic and educational opportunities that attract new residents and families annually. These positive community factors are reflected in an overall high average life expectancy of 80.3 years. However, this Brooklyn experience is not shared by all residents. While large portions of the community benefit from a high quality of life, whole neighborhoods and populations experience notable disparities that often point toward underlying social inequities and systemic issues of racism.

Social inequities and systemic issues of racism contribute to health disparities for people of color

Data across virtually all measures of well-being consistently demonstrate disparities among residents of northeast Brooklyn and people of color. In northeast Brooklyn zip codes 11212 and 11206, one-third of all residents and as many as half of children live in poverty. Residents of these neighborhoods are less likely to receive preventive healthcare and experience poorer health outcomes. Comparing well-being indicators with population statistics demonstrates adverse impact on people of color, who comprise the majority population in these communities. Across Brooklyn, median household income for Black/African Americans and Latinx is $30,000+ less than median income for whites. Other SDoH indicators demonstrate similar disparities.

Life expectancy is a key metric of well-being and potential inequities. In Brownsville, the neighborhood represented by zip code 11212, average life expectancy is 76 years, the lowest average in all of NYC and nearly 9 years less than Borough Park (highest average in Brooklyn). Across Brooklyn, the premature death rate is nearly twice as high for Black/African Americans and 50% higher for Latinx than whites.

Health disparities among people of color are further evidenced in disproportionate death due to preventable and manageable conditions like diabetes and heart disease. For example, across Brooklyn, the diabetes death rate is more than triple for Black/African Americans and more than double for Latinx than whites. Black/African American and Latinx residents have a higher rate of death than their peers citywide, while white residents have a similar rate of death as their peers.

Average life expectancy in Brownsville is nearly 9 years less than in Borough Park

Birth outcomes also reflect health and social inequities. While Brooklyn overall reports better birth outcomes than NYC and the nation, residents of northeast Brooklyn, including Brownsville and East New York, experience prenatal care access barriers, poorer birth outcomes, and the highest infant death rate in the borough. Across NYC, the infant death rate is more than twice as high for Black/African Americans than other racial or ethnic groups.

26% of Brooklyn children were food insecure in 2020, a nearly 6-point increase from 2019

The COVID-19 pandemic exacerbated socioeconomic risk factors and highlighted health inequities. In 2020, 12.6% of Brooklyn residents were unemployed and 26% of children were food insecure. People of color disproportionately experienced socioeconomic hardship, as well as negative health outcomes. In Brooklyn in July 2022, the COVID death rate for Latinx and Black/African Americans was nearly 40% higher than the rate for whites.

Key Stakeholder Survey responses reinforced the need to address SDoH to improve health outcomes. When asked to identify the top five most pressing concerns affecting the people their organization serves, more than half of key stakeholders selected economic stability (e.g., employment, cost of living). Other top identified concerns were ability to afford healthcare and racial/ethnic disparities or inequities.

The majority of Brooklyn is a HPSA for primary care; adults are less likely to receive preventive care

Access to healthcare was among the top identified needed community resources by key stakeholders. The majority of Brooklyn is a Health Professional Shortage Area (HPSA) for primary care, and the borough has the lowest proportion of adults receiving routine preventive care in NYC. Brooklyn also has fewer dental providers, and 60% or fewer of adults in the northeast portion of the borough have had recent dental care compared to 73% or more of adults in downtown Brooklyn. Compounding access barriers is health insurance status. More than one-third of Brooklyn residents are Medicaid insured, a plan that has historically been less accepted by providers due to lower reimbursement rates.

Stakeholders provided the following recommendations to improve access to care:

- *"Assist families who have no health insurance and those who are unable to afford pharmacy and specialist co-payment."*
- *"Continue to provide accessible care and rapid service to individuals who are seeking help. The more red tape, the more likely they will walk away unserved."*
- *"Easily accessible and affordable healthcare providers with attention paid to the aging population."*
- *"Offer quality and affordable healthcare option. Expand services to accept healthcare plans other than the major and popular plans."*

The Brooklyn population is younger overall but aging, and older adult health needs are a growing concern. Approximately 21% of older adults live in poverty, a higher proportion than NYC and the nation, and an increasing number of older adults are living alone. Among older adult Medicare beneficiaries, 77% have two or more chronic conditions and 30% have six or more chronic conditions, the highest proportion of any NYC borough. The most common chronic conditions among this population are hypertension (67%), high cholesterol (57%), and diabetes (47.5%). The proportion of older adult Medicare beneficiaries with diabetes is nearly double the national average.

The proportion of Brooklyn older adult Medicare beneficiaries with diabetes is nearly double the national average

Brooklyn has historically reported more positive behavioral health outcomes, including fewer adults and youth with poor mental health, a historically low suicide death rate, and fewer overdose-related deaths. However, across the nation, the COVID-19 pandemic experience sparked or amplified behavioral health problems. From 2019 to 2020, the number of accidental overdose deaths among Brooklyn residents increased 42.8%, from 311 to 444. When viewed by race and ethnicity, accidental overdose deaths increased 65.7% for Black/African Americans, 41.5% for whites, and 16% for Latinx.

Feedback from both community representatives and TBHC leaders suggests that mental health concerns have also increased, particularly for youth. Historical trends suggest that these concerns are more likely to affect students of color and other populations placed at risk. Prior to the pandemic, in 2019, nearly 11% of Black/African American students reported an attempted suicide compared to 3% of Asian students and 8-9% of white or Latinx students.

The pandemic exacerbated behavioral health concerns, particularly for youth

Other health concerns identified for Brooklyn include affordable housing and sexually transmitted infections. The median home value in Brooklyn is more than triple the national median and exceeds the citywide median by nearly $100,000. Approximately 46% of Brooklyn homeowners and 53% of renters are housing cost burdened, a higher proportion than NYC and the nation overall. It is worth noting that the proportion of housing cost burdened households, as well as the number of individuals experiencing homelessness, decreased from the last CHNA, although this data may not reflect the more recent housing crisis in 2022.

HIV and AIDS diagnoses have declined but are more prevalent in Brooklyn than other NYC boroughs

Consistent with 2019 CHNA findings, Brooklyn has a higher prevalence of STIs, including the highest incidence of HIV and highest number of individuals diagnosed with AIDS among NYC boroughs. However, HIV diagnoses have consistently declined from 1,572 in 2001 to 411 in 2020. Chlamydia and gonorrhea incidence also declined from 2019 to 2020, likely due in part to pandemic-related factors. When viewed by neighborhood, rates of STI infection in 2020 continued to be higher in Bedford Stuyvesant-Crown Heights, East New York, and Williamsburg – Bushwick.

A full summary of statistical data findings for Brooklyn follows.

Service Area Population Statistics

Demographics

Since 2010, NYC overall saw a similar increase in population (+7.7%) as the nation (+7.4%). Population growth in Brooklyn was higher at +9.2%, reflecting total population gain of 231,374 people.

2020 Total Population

	Total Population	Percent Change Since 2010
Brooklyn	2,736,074	+9.2%
New York City	8,804,190	+7.7%
United States	331,449,281	+7.4%

Source: US Census Bureau, Decennial Census

Consistent with the nation and NYC overall, population growth in Brooklyn occurred exclusively among people of color. The largest population growth was seen among multiracial individuals, followed by American Indian/Alaska Natives. Population growth among American Indian/Alaska Natives was nearly double the national growth rate. Contrary to national trends, the Black/African American population declined across NYC and Brooklyn from 2010 to 2020.

When viewed at the zip code-level, population diversity is concentrated in the area immediately surrounding TBHC, with more than 50% of residents identifying as non-white. Within these zip codes, approximately 20-60% of individuals identify as Black/African American and 1 in 10 identify as Latinx.

2020 Population by Race and Ethnicity

	American Indian/ Alaska Native	Asian	Black/ African American	Native Hawaiian / Pacific Islander	White	Other Race*	Two or More Races	Latinx origin (any race)
Brooklyn	2.0%	48.4%	30.9%	7.2%	37.6%	11.0%	9.5%	18.9%
New York City	1.0%	15.7%	22.1%	0.1%	34.1%	17.0%	10.1%	28.3%
United States	1.1%	6.0%	12.4%	0.2%	61.6%	8.4%	10.2%	18.7%

Source: US Census Bureau, Decennial Census

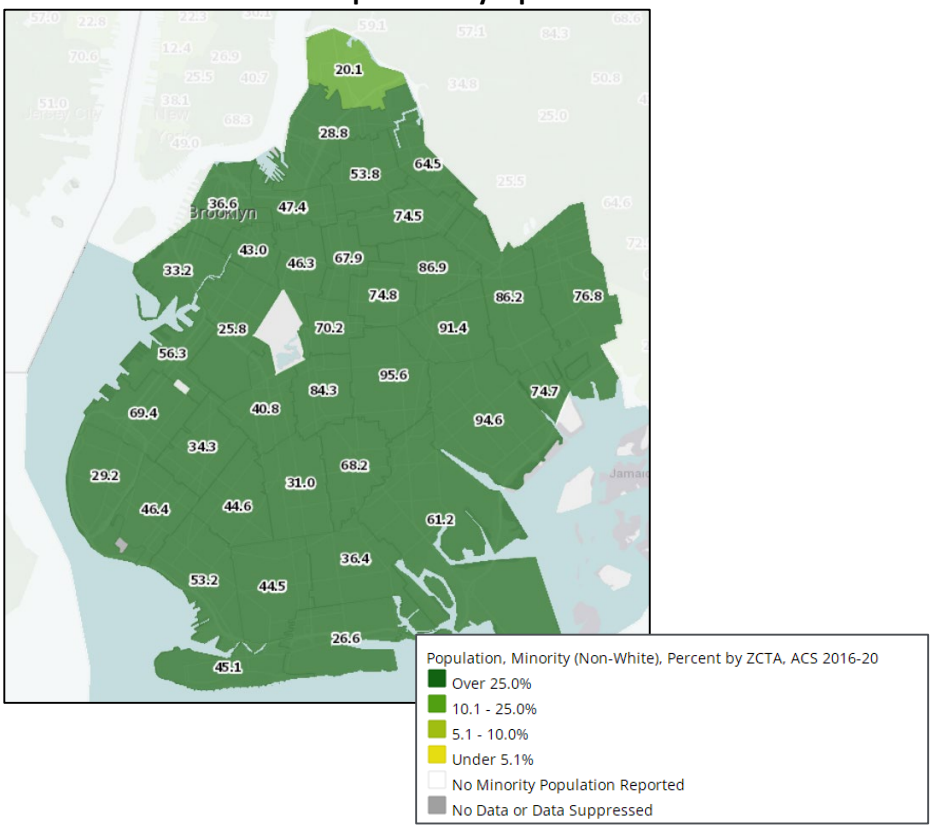
*Other Race has historically captured ethno-racially mixed individuals, as well as Latinx individuals who do not consider ethnicity as separate or distinct from race.

Population Change among Racial and Ethnic Groups, 2010 to 2020

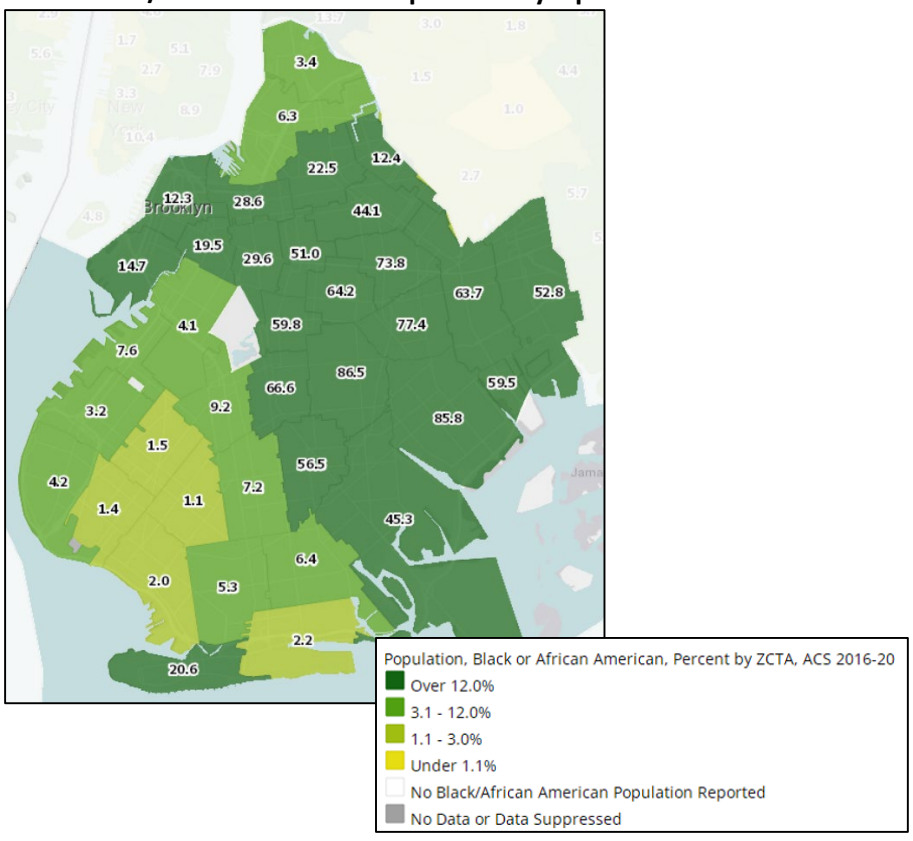
	American Indian / Alaska Native	Asian	Black/ African American	Native Hawaiian / Pacific Islander	White	Other Race	Two or More Races	Latinx origin (any race)
Brooklyn	+52.3%	+42.5%	-10.2%	+19.6%	-4.0%	+37.8%	+211.0%	+4.1%
New York City	+49.9%	+33.4%	-6.9%	+33.6%	-16.6%	+40.7%	+172.2%	+6.6%
United States	+27.1%	+35.5%	+5.6%	+27.8%	-8.6%	+46.1%	+275.7%	+23.0%

Source: US Census Bureau, Decennial Census

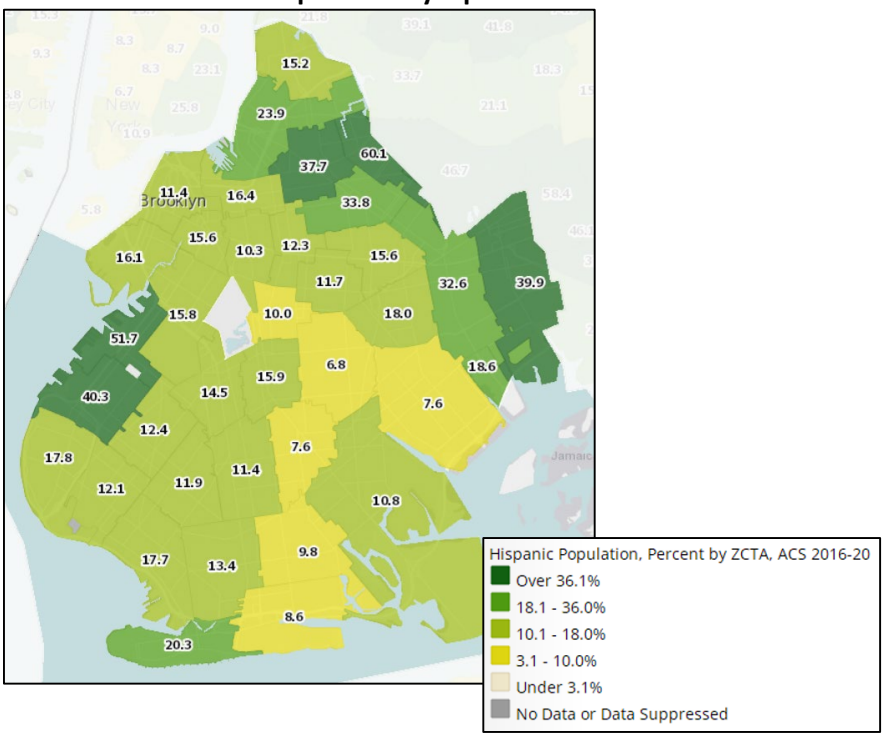
2016-2020 Non-White Population by Zip Code



2016-2020 Black/African American Population by Zip Code



2016-2020 Latinx Population by Zip Code



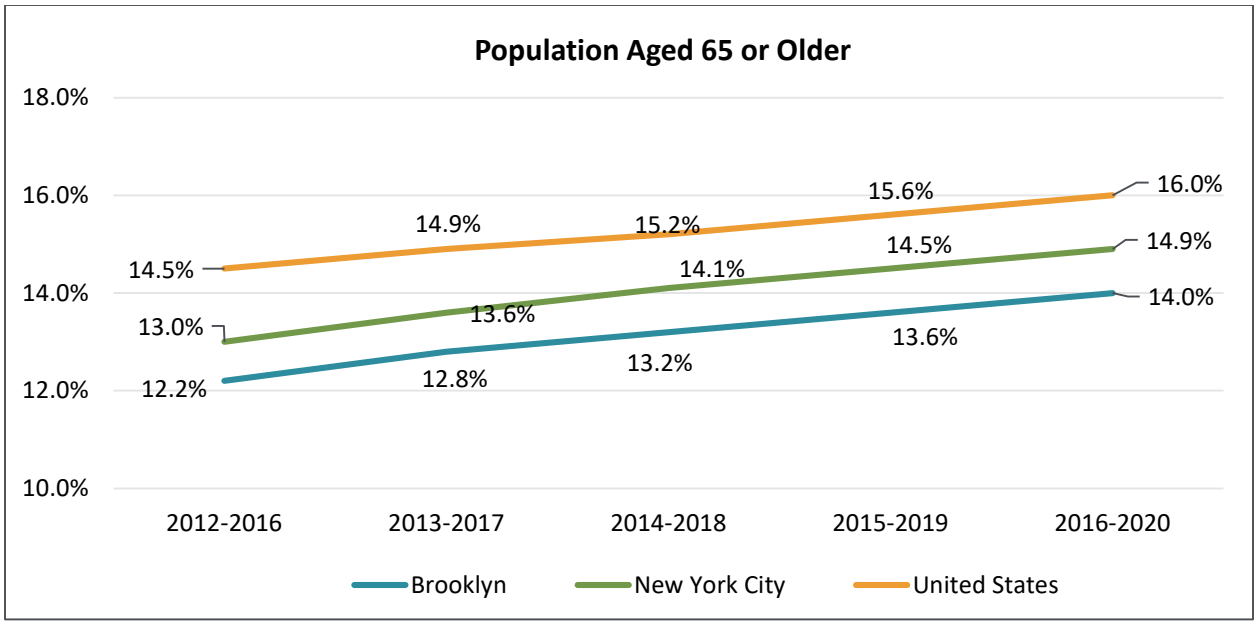
Health needs change as individuals age. Therefore, the age distribution of a community impacts its social and healthcare needs. **The age distribution and median age of Brooklyn is younger than NYC and the nation overall, largely due to a higher proportion of youth under age 18 and millennials aged 25-34.**

While Brooklyn overall represents a younger population, consistent with NYC and the nation, it is aging. The adult population aged 65 or older increased annually over the past five years. Nationally, among older adults aged 65 or older, the 65-74 age category is the fastest growing demographic, largely due to the aging of the baby boomer generation. This finding suggests health needs and support services for older adults will likely continue to grow in coming years.

2016-2020 Population by Age

	Gen Z/ Gen C	Gen Z	Millennial	Millennial/ Gen X	Gen X	Boomers	Boomers/ Silent	Median Age
	Under 18 years	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	
Brooklyn	22.8%	8.1%	18.4%	13.9%	11.7%	11.1%	14.0%	35.4
New York City	20.7%	8.5%	17.8%	13.6%	12.5%	11.9%	14.9%	36.9
United States	22.4%	9.3%	13.9%	12.6%	12.7%	12.9%	16.0%	38.2

Source: US Census Bureau, American Community Survey



Source: US Census Bureau, American Community Survey

Brooklyn and NYC overall are home to proportionately more immigrants than the nation. Approximately 64% of Brooklyn residents were born in the US compared to a national average of 86.5%. Consistent with this finding, more residents across Brooklyn and NYC speak a primary language other than English.

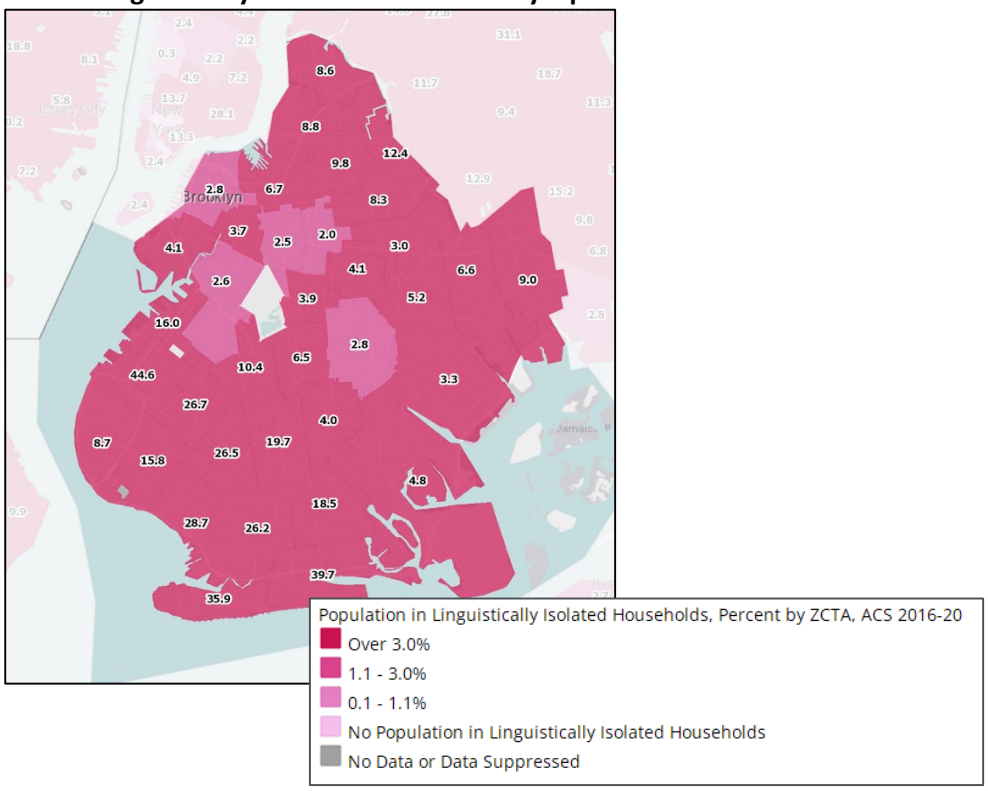
Linguistically isolated households are defined as persons who cannot speak English at least 'very well' or who do not live in a household where an adult speaks English 'very well'. Approximately 20% or more of households in the southern portion of Brooklyn are considered linguistically isolated. **Within the TBHC primary service area, linguistically isolated households are primarily located in the northern portions, with approximately 1 in 10 households affected.**

2016-2020 Nativity and Citizenship Status

	US citizen, born in the US	US citizen, born in Puerto Rico or US Island Areas	US citizen, born abroad of American parent(s)	US citizen by naturalization	Not a US citizen	Speak Primary Language Other Than English
Brooklyn	64.4%	1.6%	1.6%	21.9%	13.7%	44.5%
New York City	63.6%	2.2%	1.5%	21.0%	15.4%	48.0%
United States	86.5%	0.6%	0.9%	6.9%	6.6%	21.5%

Source: US Census Bureau, American Community Survey

2016-2020 Linguistically Isolated Households by Zip Code



Poverty

Consistent with the nation and NYC, **poverty declined in Brooklyn since the 2019 CHNA, although residents overall continue to have lower incomes and higher poverty when compared to city and national averages.** Notably, more than 1 in 4 children and 1 in 5 older adults in Brooklyn live in poverty.

Wealth is not equally distributed across Brooklyn. Residents of the eastern portion of TBHC's primary service area are two to three times more likely to live in poverty than residents of neighboring communities. **More than 28% of all people and approximately half of children residing in zip codes 11205, 11206, and 11237 live in poverty. These findings reflect, in part, economic inequities among people of color.** Approximately half of more of residents in these zip codes identify as non-white, with higher representation of Black/African American and/or Latinx residents. The median household income for Black/African American and Latinx residents of Brooklyn is more than $30,000 less than the median household income for whites, and one-quarter of Latinx residents live in poverty.

Note, income and poverty data reflect aggregated findings for 2016-2020 and may not demonstrate economic hardship experienced by individuals and families during the pandemic. Unemployment data for 2020 provide insight into the economic impact of the pandemic.

By the end of 2020, average unemployment for the US was approximately double what it was at the beginning of the year. Brooklyn and NYC overall saw a larger increase in unemployment than the nation, with more than 1 in 10 residents citywide unemployed in 2020. **While national unemployment has since declined, falling below pre-pandemic levels, unemployment in Brooklyn and NYC remains higher than pre-pandemic levels.**

Economic Indicators

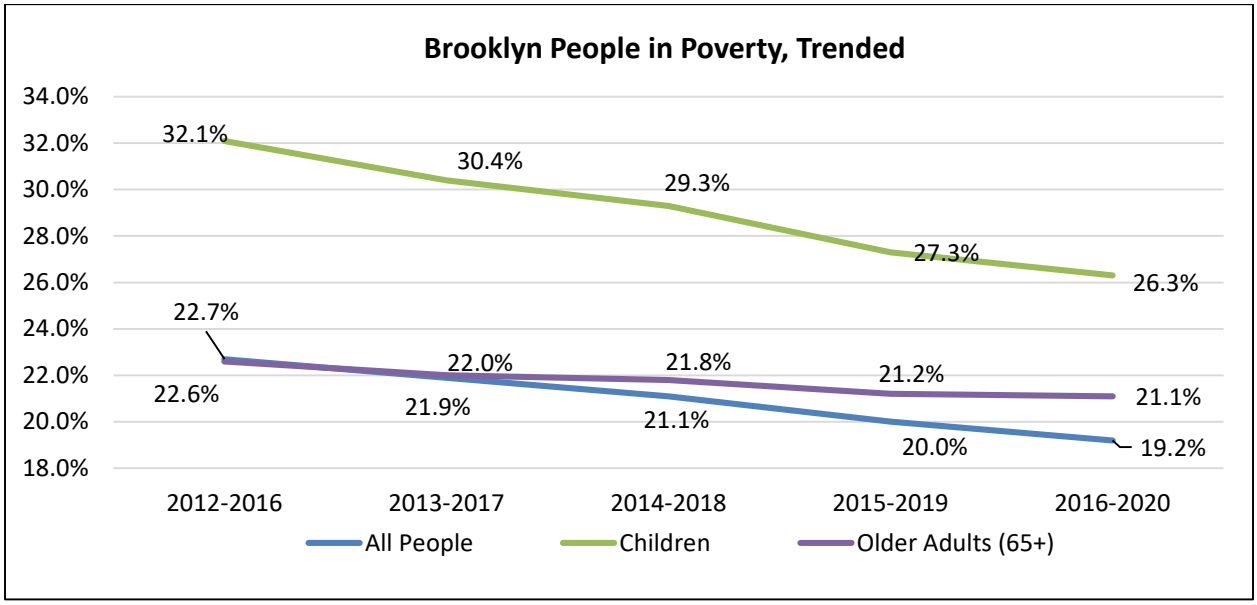
	Brooklyn	New York City	United States
Income and Poverty (2016-2020)			
Median household income	$63, 973	$67,046	$64,994
People in poverty	19.2%	17.3%	12.8%
Children in poverty	26.3%	23.8%	17.5%
Older adults (65+) in poverty	21.1%	18.1%	9.3%
Unemployment			
January 2020	3.9%	3.7%	4.0%
2020 average	12.6%	12.4%	8.1%
May 2022	5.8%	6.1%	3.6%

Source: US Census Bureau, American Community Survey & US Bureau of Labor Statistics

2016-2020 Income and Poverty among Prominent Racial and Ethnic Groups

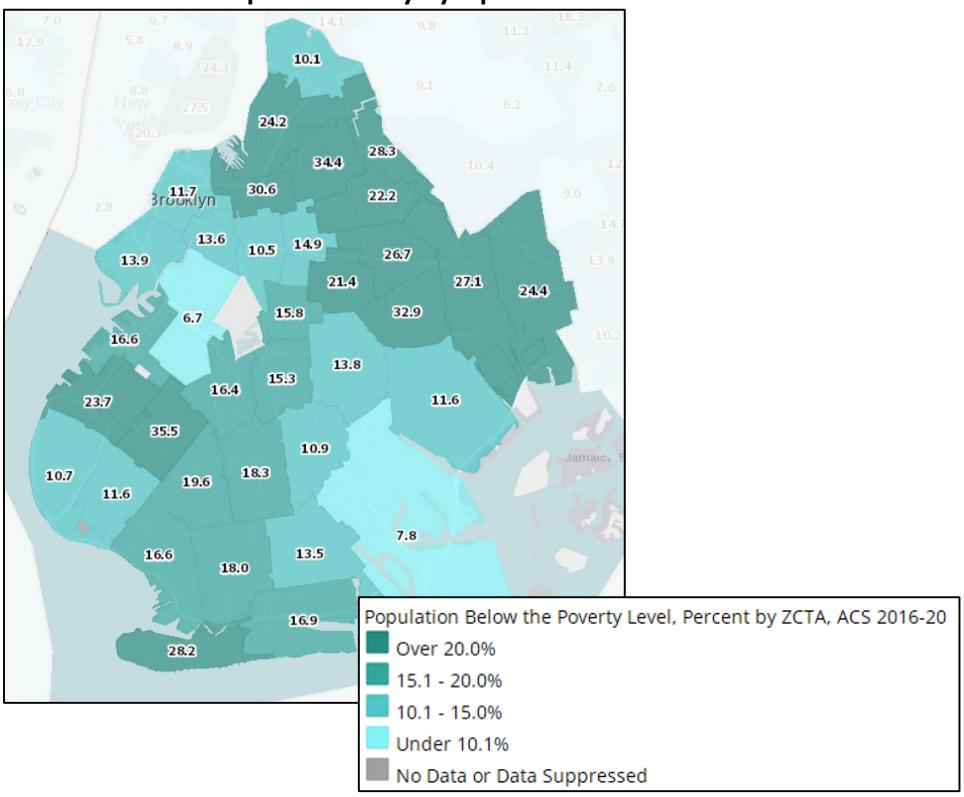
		Asian	Black/ African American	White	Two or More Races	Latinx origin (any race)
Brooklyn	Median Household Income	$69,502	$51,388	$81,451	$66,598	$47,642
	Living in Poverty	18.8%	18.6%	17.4%	17.6%	25.6%
New York City	Median Household Income	$72,181	$51,171	$87,508	$63,440	$46,896
	Living in Poverty	15.7%	20.5%	13.0%	17.6%	23.5%
United States	Median Household Income	$91,775	$43,674	$68,943	$61,870	$54,632
	Living in Poverty	10.6%	22.1%	10.6%	15.1%	18.3%

Source: US Census Bureau, American Community Survey

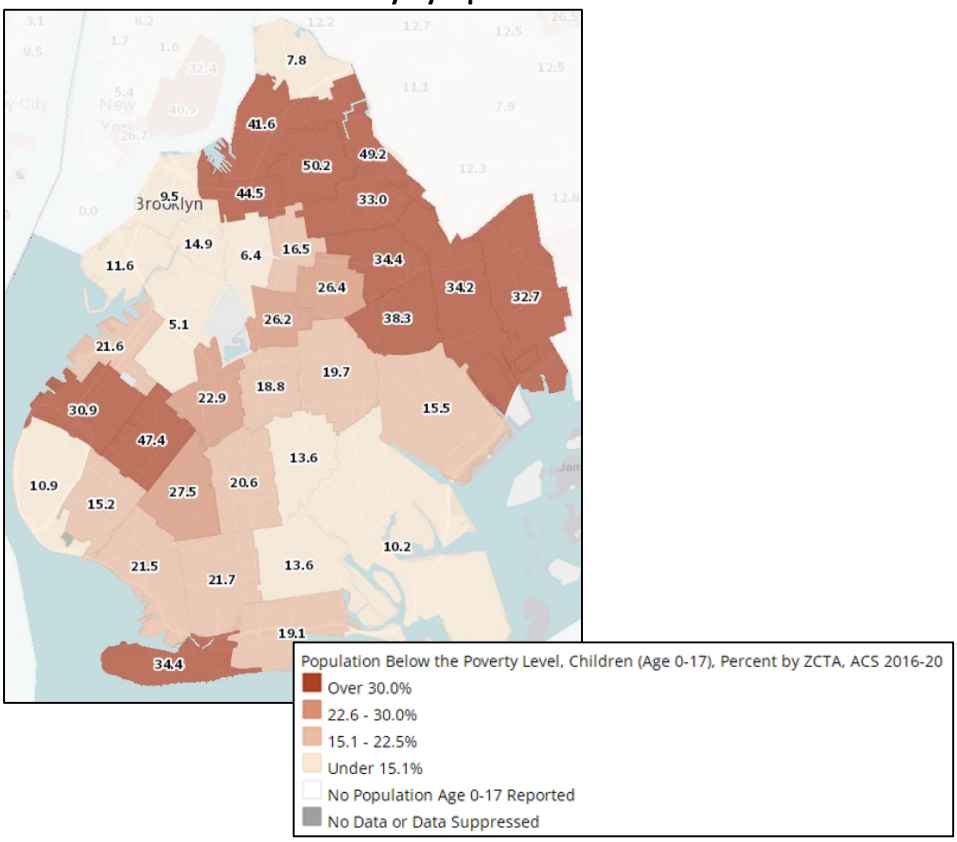


Source: US Census Bureau, American Community Survey

2016-2020 People in Poverty by Zip Code



2016-2020 Children in Poverty by Zip Code



Food Insecurity

Food insecurity is defined as not having reliable access to a sufficient amount of nutritious, affordable food. Food insecurity is associated with lower household income and poverty, as well as poorer overall health status. Similar to unemployment rates, COVID-19 had a profound impact on food insecurity, particularly among children. Nationally, food insecurity in the beginning months of the pandemic was projected to increase to 13.9% for adults and 19.9% for children.

Brooklyn has historically had higher food insecurity rates among residents and children than the nation overall. **More than 1 in 4 children in Brooklyn were estimated to be food insecure in 2020, a more than six-point increase from 2019.**

Food Insecurity

	Brooklyn	United States
All Residents		
2020	15.5%	13.9%
2019	13.5%	10.9%
Children		
2020	26.0%	19.9%
2019	19.7%	14.6%

Source: Feeding America

Education

Educational attainment is one of the strongest predictors of longevity and economic stability. Education trends among Brooklyn residents generally mirror NYC overall, reflecting both lower educational attainment (not completing high school) and higher educational attainment (bachelor's degree or higher) when compared to the nation.

Consistent with national trends, Brooklyn residents identifying as Black/African American and/or Latinx are less likely to attain higher education compared to other racial and ethnic groups, a finding that reflects historic structural barriers and unequal education opportunities.

2016-2020 Population (Age 25 or older) by Educational Attainment

	Less than high school diploma	High school graduate (includes GED)	Some college or associate's degree	Bachelor's degree	Graduate or professional degree
Brooklyn	16.8%	25.2%	19.2%	23.3%	15.6%
New York City	17.2%	23.6%	20.0%	22.6%	16.5%
United States	11.5%	26.7%	28.9%	20.2%	12.7%

Source: US Census Bureau, American Community Survey

2016-2020 Population (Age 25 or older) with a Bachelor's Degree or Higher by Prominent Racial and Ethnic Group

	Asian	Black/African American	White	Two or More Races	Latinx origin (any race)
Brooklyn	36.0%	25.2%	53.6%	46.4%	21.0%
New York City	43.5%	25.2%	53.1%	36.2%	19.7%
United States	55.0%	22.6%	34.4%	29.7%	17.6%

Source: US Census Bureau, American Community Survey

Housing

Housing is the largest single expense for most households and should represent no more than 30% of a household's monthly income. **The median home value in Brooklyn is more than triple the national median and exceeds the citywide median by nearly $100,000.** Approximately 46% of Brooklyn homeowners are considered housing cost burdened, although the proportion decreased from the 2019 CHNA finding of 50.6%.

Consistent with higher housing costs, Brooklyn residents are less likely to own their home when compared to citywide and national averages. Renters in Brooklyn are also more likely to experience housing cost burden, although the proportion declined from the 2019 CHNA finding of 55.2%.

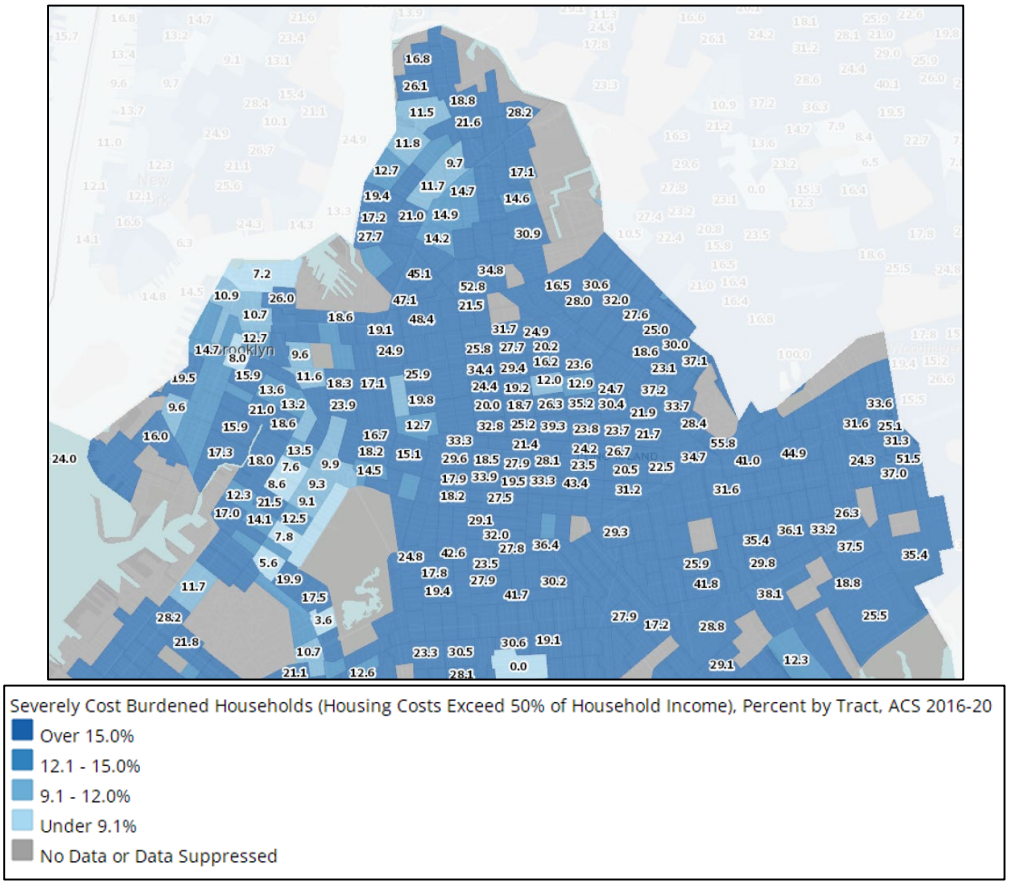
2016-2020 Housing Indicators

	Owners			Renters		
	Occupied Units	Median Home Value	Cost-Burdened*	Occupied Units	Median Rent	Cost-Burdened*
Brooklyn	30.3%	$734,800	46.2%	69.7%	$1,483	52.7%
New York City	32.8%	$635,200	42.6%	67.2%	$1,489	52.1%
United States	64.4%	$229,800	27.4%	35.6%	$1,096	49.1%

Source: US Census Bureau, American Community Survey
*Defined as spending 30% or more of household income on rent or mortgage expenses.

Severe housing cost burden is defined as spending 50% or more of household income on rent or mortgage expenses. **Severe housing cost burden is prevalent across Brooklyn, affecting more than 15% of households in nearly all reported census tracts.** The following map depicts the percentage of severely cost burdened households for the area in and around TBHC's primary service area. Of note, as many as half of households in select census tracts comprising zip codes 11205, 11206, and 11237 experience severe housing cost burden.

2016-2020 Severely Cost Burdened Households by Census Tract in Northern Brooklyn



New York City has older housing stock than the nation, with more than 80% of housing units built before 1980. Brooklyn has older housing stock than the city overall, although the borough has seen more recent development with a slightly higher proportion of units built after 2009.

2016-2020 Housing by Year Built

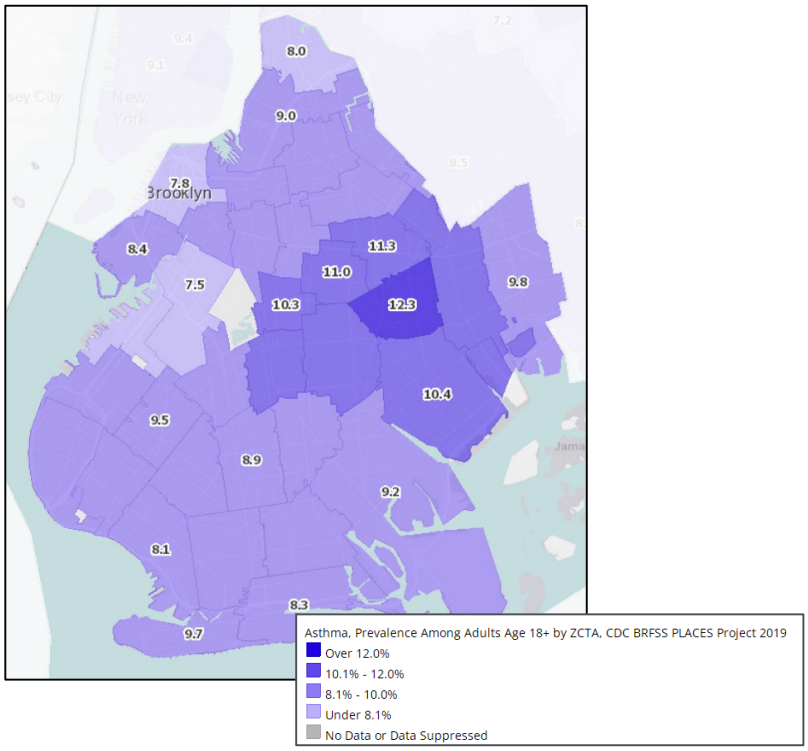
	Before 1980	1980-1999	2000-2009	2010-2013	2014 or Later
Brooklyn	84.5%	6.2%	5.3%	1.9%	2.1%
New York City	82.4%	8.7%	5.5%	1.8%	1.7%
United States	52.9%	27.3%	13.6%	2.7%	3.5%

Source: US Census Bureau, American Community Survey

Quality housing has a direct impact on health. Unhealthy housing puts residents at risk of health issues including lead poisoning, asthma, injury, and other chronic diseases. Housing built before 1979 may contain lead paint and other hazardous materials like asbestos.

Brooklyn overall has a similar prevalence of adult asthma (8.8%) as the nation (8.9%), although prevalence is higher in the eastern portion of the borough. This finding should be explored for potential social determinants of health connections, including elevated poverty and substandard housing.

2019 Adult Asthma Prevalence by Zip Code



Asthma is the most common chronic condition among children, and a leading cause of school absenteeism and hospitalization. Consistent with adult asthma trends, **Brooklyn children overall have a similar prevalence of asthma as the nation, although prevalence is higher for Black/African American and Latinx children**. This disparity reflects housing-related inequities, including older and substandard conditions, among other social determinants of health barriers.

2019 High School Students Ever Diagnosed with Asthma

	Brooklyn	New York City	United States
Total	21.4%	24.6%	21.8%
Asian	15.3%	17.9%	22.6%
Black/African American	24.3%	27.8%	29.2%
White	14.9%	16.8%	19.8%
Latinx origin (any race)	25.3%	28.6%	21.0%

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

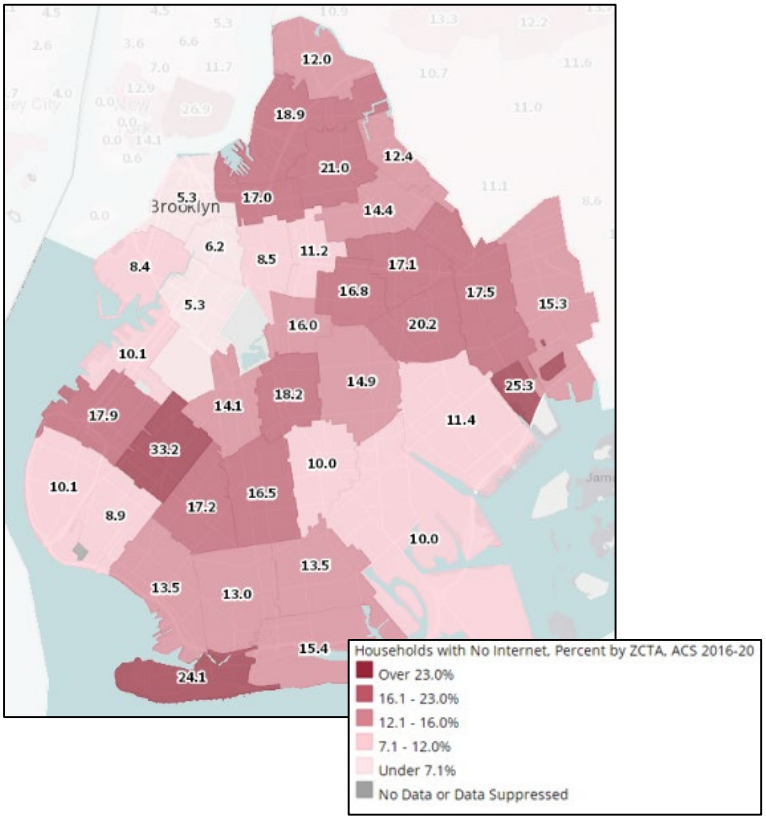
Related to housing concerns is access to computers and internet service. During COVID, we were able to use technology to bring services to people in their homes, but we need to bridge the wide digital divide within our communities to effectively reach all residents. Brooklyn overall has slightly lower digital access as NYC and the nation. In portions of TBHC's northern and eastern primary service area, approximately 1 in 5 households do not have internet access. This disparity is consistent with other existing social determinants of health barriers.

2016-2020 Households by Digital Access

	With Computer Access			With Internet Access	
	Computer Device	Desktop / Laptop	Smartphone	Internet Subscription	Broadband Internet
Brooklyn	89.4%	77.0%	82.9%	83.2%	83.0%
New York City	90.8%	77.0%	84.3%	84.4%	84.2%
United States	91.9%	78.3%	83.7%	85.5%	85.2%

Source: US Census Bureau, American Community Survey

2016-2020 Households with No Internet by Zip Code

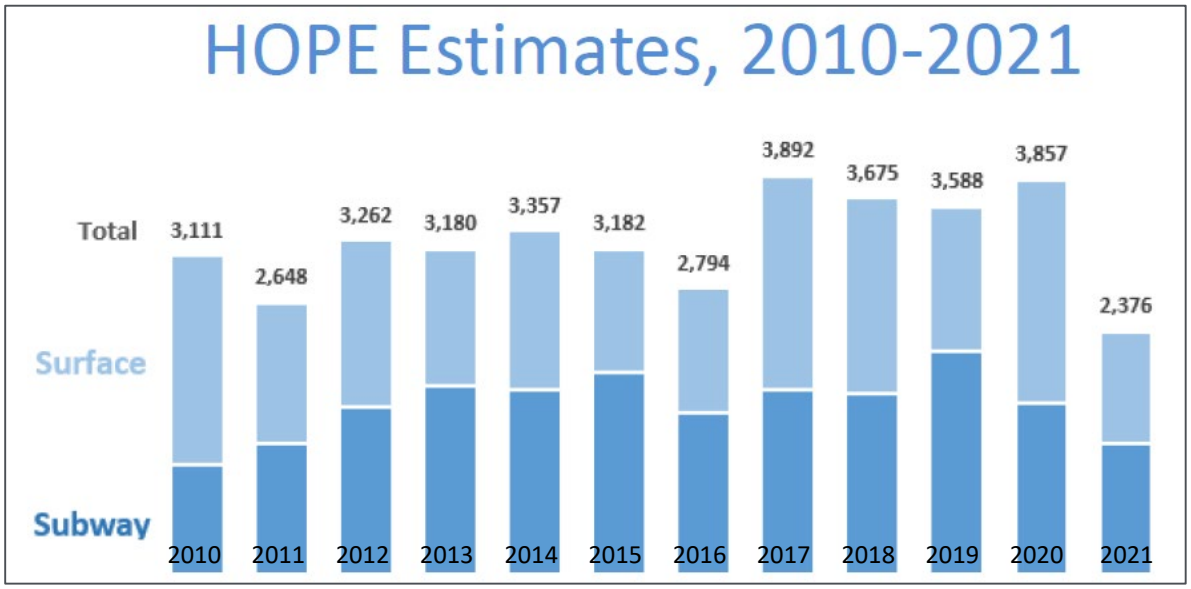


Homelessness

Every January, thousands of volunteers across the five NYC boroughs participate in an annual Homeless Outreach Population Estimate (HOPE). Over a single night, volunteers canvass streets, subway stations, parks, and other public spaces across the city to identify individuals living unsheltered. HOPE is required by the U.S. Department of Housing and Urban Development (HUD) to receive funding. Using a consistent sampling methodology since 2005, HOPE remains one of the most methodologically rigorous efforts nationwide to estimate the number of individuals experiencing street homelessness.

Due to COVID-19 health and safety concerns, canvassing in 2021 was led by outreach providers and city services staff over the course of four nights (versus volunteers on one night). Canvassing took place earlier in the evening and did not employ decoys, as in past years, to measure the accuracy of the count.

The HOPE survey, conducted on January 26, 2021, identified an estimated 2,376 unsheltered individuals across NYC, a 38% decrease compared to January 2020. **Homelessness estimates decreased for all five boroughs, including a 71% decrease in Brooklyn from 400 individuals in 2020 to 117 individuals in 2021.**

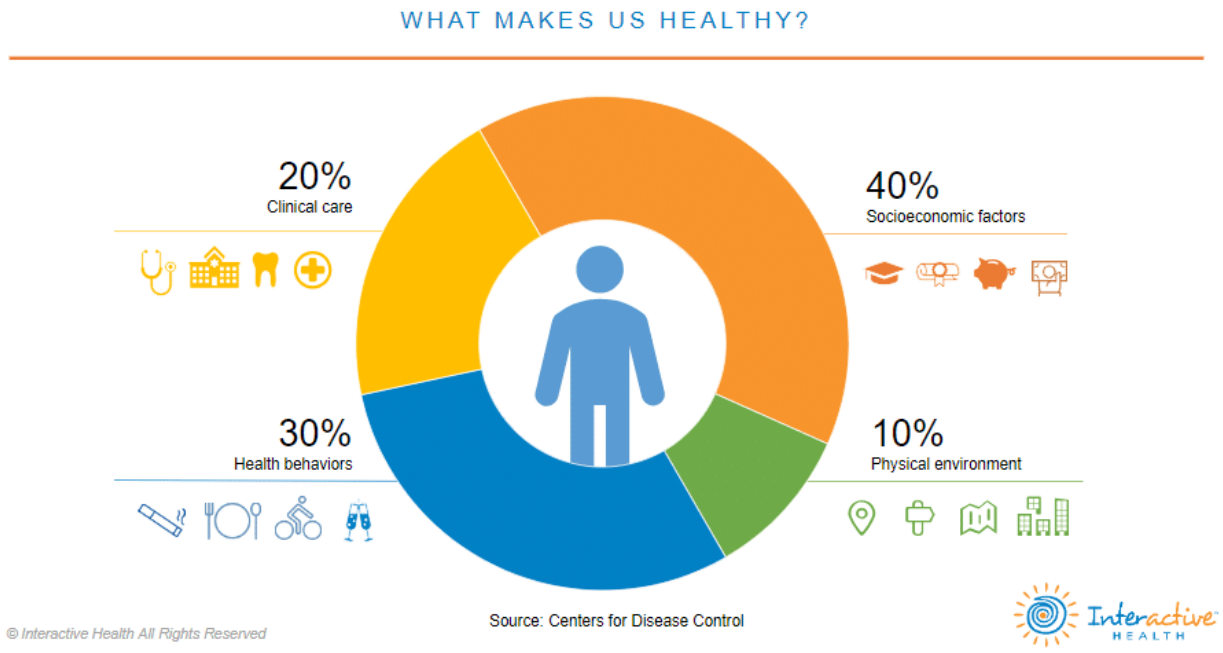


Source: New York City Department of Homeless Services

Social Determinants of Health: The connection between our communities and our health

Social determinants of health (SDoH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health risks and outcomes. Healthy People 2030, the CDC's national benchmark for health, recognizes SDoH as central to its framework, naming "social and physical environments that promote good health for all" as one of the four overarching goals for the decade. Healthy People 2030 outlines five key areas of SDoH: economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context.

The mix of ingredients that influence each person's overall health profile include individual behaviors, clinical care, environmental factors, and social circumstance. While health improvement efforts have historically targeted health behaviors and clinical care, public health agencies, including the US Centers for Disease Control and Prevention (CDC), widely hold that at least **50% of a person's health profile is determined by SDoH.**



Addressing SDoH is a primary approach to achieving *health equity.* Health equity encompasses a wide range of social, economic, and health measures but can be simply defined as "a fair opportunity for every person to be as healthy as possible." In order to achieve health equity, we need to look beyond the healthcare system to dismantle systematic inequities born through racism and discrimination like power and wealth distribution, education attainment, job opportunities, housing, and safe environments, to build a healthier community for all people now and in the future.

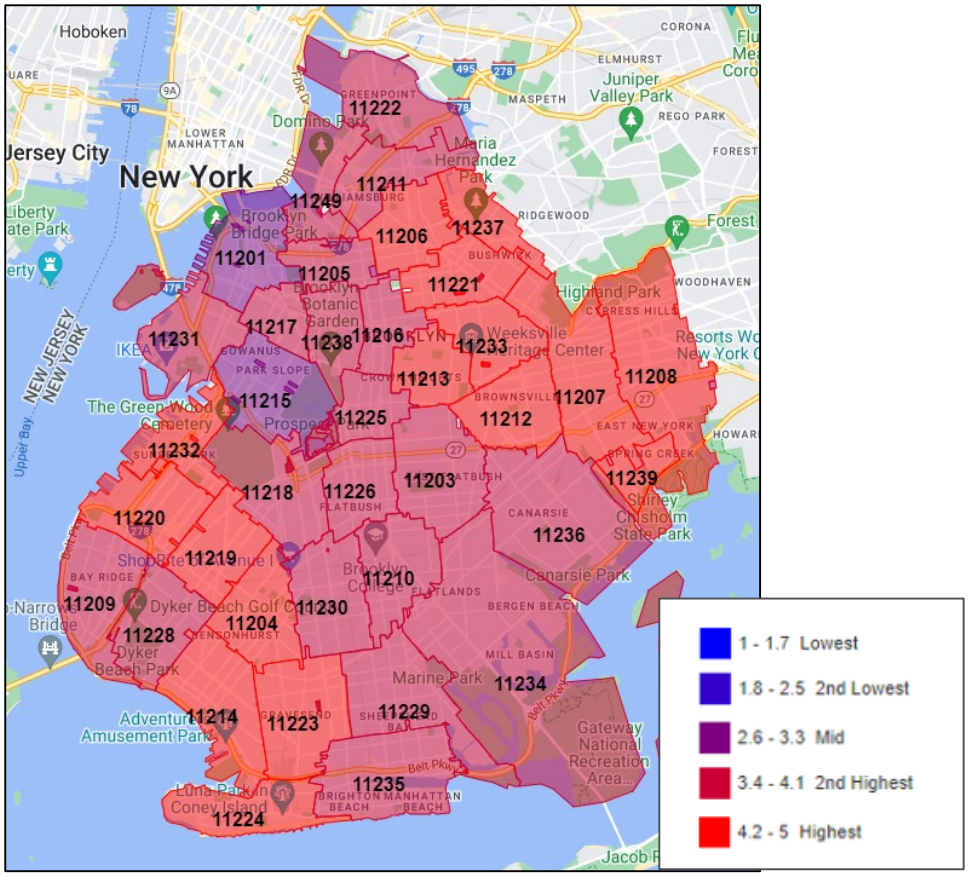
A host of indexes are available to illustrate the potential for health disparities and inequities at the community-level based on SDoH. A description of each index is provided below followed by data visualizations of each tool that show how well Brooklyn communities fare compared to state and national benchmarks.

Tools for Identifying Disparity

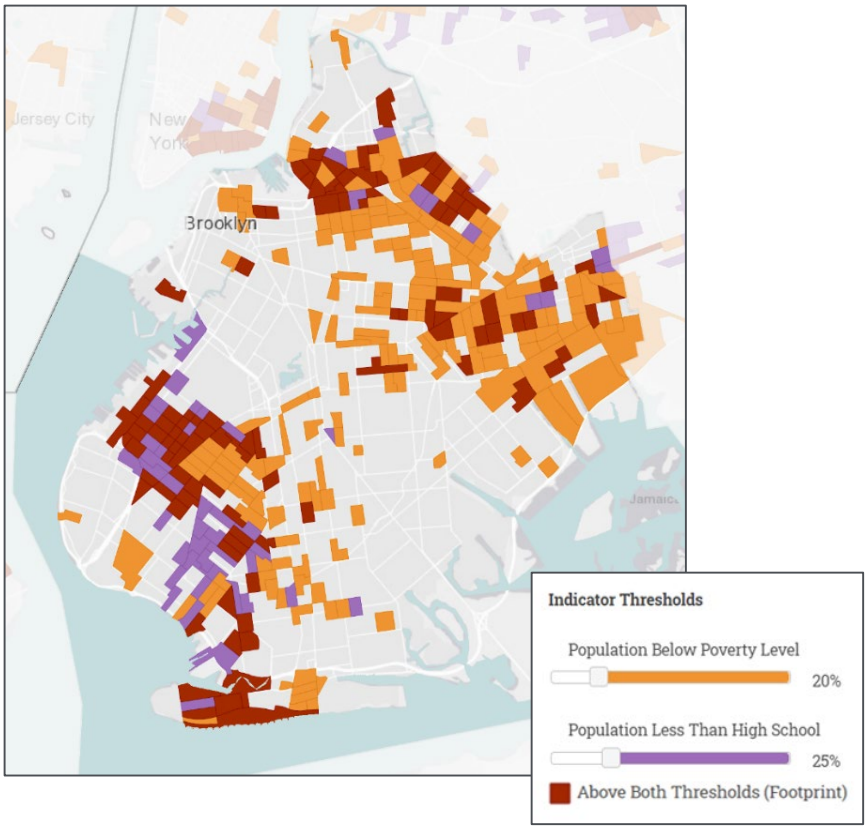
The following data visualizations illustrate the potential for health disparities and inequities at the community-level based on SDoH barriers. A description of each data visualization tool is provided below:

- **Community Need Index (CNI)**: The CNI is a zip code-based index of community socioeconomic need calculated nationwide. The CNI scores zip codes on a scale of 1.0 to 5.0, with 1.0 indicating a zip code with the least need and 5.0 indicating a zip code with the most need compared to the US national average of 3.0. The CNI weights, indexes, and scores zip codes by socioeconomic barriers, including income, culture, education, insurance, and housing.
- **Vulnerable Population Footprint**: The Vulnerable Population Footprint identifies areas where high concentrations of people living in poverty and people living without a high school diploma overlap. Areas are reported by census tract. Census tracts are statistical subdivisions of a county that have roughly 4,000 inhabitants.
- **Racial Disparities and Disproportionality Index (RDDI):** The RDDI was developed by the Corporation for Supportive Housing (CSH) to measure whether a racial and/or ethnic group's representation in a particular public system is proportionate to their representation in the overall population. The index can be viewed as the likelihood of one group experiencing an event, compared to the likelihood of another group experiencing that same event.

Community Need Index for Brooklyn



Vulnerable Population Footprint for Brooklyn



Brooklyn has an average CNI score of 4.0, indicating higher community socioeconomic need. The CNI score for the TBHC primary service area is slightly higher at 4.2 and similar to the 2019 CHNA reported score of 4.3. Consistent with existing socioeconomic barriers, zip codes with higher CNI scores are concentrated in the eastern portion of the service area. **Zip codes 11206 and 11212 have the highest CNI scores of 4.8, and the score for zip code 11212 increased from the 2019 CHNA. Zip code 11212 is the primary zip code for the Brownsville neighborhood**, an area that has historically experienced socioeconomic disparity and related health disparities, including the lowest life expectancy in NYC.

As depicted by Vulnerable Population Footprint findings, socioeconomic need within zip codes 11206 and 11212 is largely due to disparities in poverty and/or education. In zip code 11206, these disparities are most evident in the northwest portion of the zip code, where as many as half of residents live in poverty and more than one-third have not completed high school. In zip code 11212, these disparities are most evident in the eastern portion of the zip code, where as many as two-third of residents live in poverty and nearly half have not completed high school.

Comparing health indicators with population statistics demonstrates the adverse impact of social determinants on populations that historically and continually experience inequities. The areas with the highest CNI scores have among the most diverse populations in Brooklyn. As the proportion of white residents increases, the CNI score generally decreases. In this way we can begin to see how inequities perpetuate persistent disparities in health and social outcomes.

2016-2020 Social Determinants of Health by TBHC Primary Service Area Zip Code
Red = Higher CNI Score from the 2019 CHNA

ZIP Code	Population in Poverty	Children in Poverty	Primary Language Other Than English	Less than High School Diploma	Without Health Insurance	2022 CHNA CNI Score	2019 CHNA CNI Score
11212	32.9%	38.3%	21.5%	21.9%	6.6%	4.8	4.6
11206	34.4%	50.2%	55.7%	25.6%	6.2%	4.8	4.8
11207	27.1%	34.2%	31.7%	20.3%	6.4%	4.6	4.6
11233	26.7%	34.3%	20.7%	16.7%	7.3%	4.6	4.6
11221	22.2%	33.0%	36.3%	17.4%	8.6%	4.6	4.6
11213	21.4%	26.4%	24.2%	18.2%	7.9%	4.2	4.6
11216	14.9%	16.5%	18.5%	10.7%	6.5%	4.0	4.2
11211	24.2%	41.6%	53.2%	16.0%	5.1%	4.0	4.0
11205	30.6%	44.5%	41.6%	15.9%	3.5%	4.0	4.4
11226	15.3%	18.8%	34.8%	13.8%	10.3%	3.8	4.0
11225	15.8%	26.2%	27.4%	11.9%	7.0%	3.6	4.0
11217	13.6%	14.9%	26.8%	8.7%	2.8%	3.6	3.4
11238	10.5%	6.4%	19.2%	9.5%	9.9%	3.4	3.2
11201	11.7%	9.5%	24.0%	4.3%	2.8%	3.0	3.4
New York City	17.3%	23.8%	48.0%	17.2%	7.0%	NA	NA
United States	12.8%	17.5%	21.5%	11.5%	8.7%	NA	NA

Source: US Census Bureau, American Community Survey

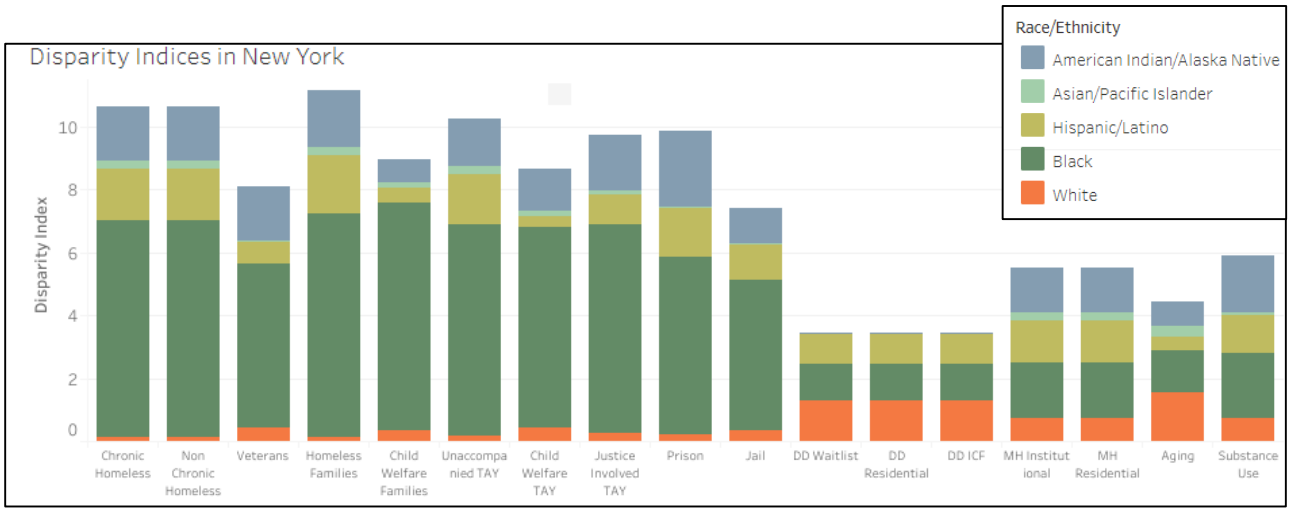
2016-2020 Population (Pop.) by Prominent Racial and Ethnic Groups within TBHC Primary Service Area Zip Codes

ZIP Code	Total Pop.	Asian	Black/ African American	White	Two or More Races	Latinx origin (any race)
11212	74,037	0.9%	77.4%	8.6%	6.3%	18.0%
11206	87,599	6.4%	22.5%	46.2%	6.1%	37.6%
11207	90,867	1.5%	63.7%	13.8%	5.1%	32.6%
11233	79,796	2.3%	73.8%	13.1%	3.1%	15.6%
11221	85,582	4.1%	44.1%	25.5%	6.9%	33.8%
11213	67,382	2.1%	64.2%	25.2%	3.2%	11.7%
11216	59,567	4.9%	51.0%	32.1%	7.6%	12.3%
11211	104,561	6.4%	6.3%	71.2%	5.5%	23.9%
11205	47,866	6.2%	28.6%	52.6%	5.3%	16.4%
11226	96,332	2.9%	66.6%	15.7%	3.8%	15.9%
11225	56,072	2.6%	59.8%	29.8%	2.9%	10.0%
11217	42,461	9.2%	19.5%	57.0%	8.9%	15.6%
11238	55,102	6.0%	29.6%	53.7%	7.6%	10.3%
11201	64,798	13.3%	12.3%	63.4%	7.4%	11.3%
New York City	8,379,552	14.3%	23.8%	41.3%	5.6%	28.9%
United States	326,569,308	5.6%	12.6%	70.4%	5.2%	18.2%

Source: US Census Bureau, American Community Survey

The RDDI measures whether a racial group's representation in a particular public system is proportionate to their representation in the overall population. Public systems include homelessness, veterans, prison/justice systems, child welfare, developmental disabilities, mental health institutions, aging population, and substance use. An index of 1 signifies equal representation; an index below 1 signifies underrepresentation and an index above 1 signifies overrepresentation in a system.

Across New York State, Black/African Americans have the highest RDDI (6.89) of any other population group, indicating overrepresentation in public systems. Black/African Americans are most often overrepresented among individuals experiencing homelessness, veterans, child services, and in prison and justice systems. This finding is consistent with systemic issues of racism within the nation's systems that lead to social inequities and disproportionate incarceration and sentencing among people of color.



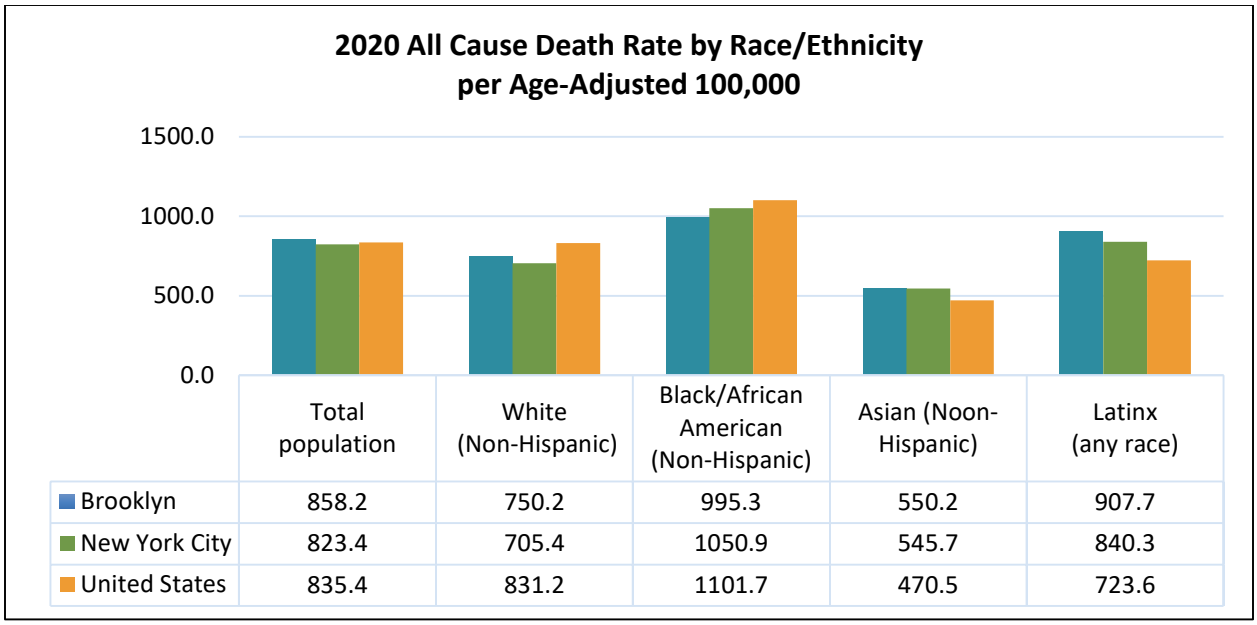
Source: Corporation for Supportive Housing
*TAY: Transition-age youth; DD: Developmental Disability; MH: Mental Health

Life expectancy and premature death are other measures of the impact of social determinants of health. Brooklyn overall reports high average life expectancy and a low rate of premature death before age 75. However, **across Brooklyn, the premature death rate is nearly twice as high for Black/African Americans than whites and nearly 50% higher for Latinx.** This disparity is also reflected in the all-cause death rate for 2020, which shows disproportionate death among Black/African Americans relative to other population groups.

2018-2020 Average Life Expectancy and Years of Potential Life Lost by Race and Ethnicity

	Average Life Expectancy	Premature Death: Years of Potential Life Lost Before Age 75 per 100,000 Population				
		Overall	Asian	Black/African American	White	Latinx origin (any race)
Brooklyn	80.3	5,952	3,163	8,070	4,296	6,152
New York State	80.7	5,839	2,993	8,936	5,599	5,546

Source: National Vital Statistics System



	Total population	White (Non-Hispanic)	Black/African American (Non-Hispanic)	Asian (Noon-Hispanic)	Latinx (any race)
Brooklyn	858.2	750.2	995.3	550.2	907.7
New York City	823.4	705.4	1050.9	545.7	840.3
United States	835.4	831.2	1101.7	470.5	723.6

Source: Centers for Disease Control and Prevention

Life expectancy also varies widely by Brooklyn neighborhood, generally aligning with socioeconomic trends and racial inequities. For example, **Brownsville (primary zip code 11212) has the lowest life expectancy at birth in all of NYC, estimated at 76 years.**

2010-2019 Life Expectancy by Brooklyn Neighborhood

Neighborhood	Life Expectancy at Birth
Borough Park	84.9
Bensonhurst	84.7
Bay Ridge	84.2
Sunset Park	84.1
Sheepshead Bay	84.0
Williamsburg, Greenpoint	83.1
Fort Greene, Brooklyn Heights	83.0
Park slope	82.9
East Flatbush	82.8
Flatbush, Midwood	82.7
Crown Heights South	82.3
Canarsie	82.1
Bushwick	81.8
Crown Heights North	80.9
Coney Island	80.7
Bedford Stuyvesant	79.2
East New York	79.2
Brownsville	76.0

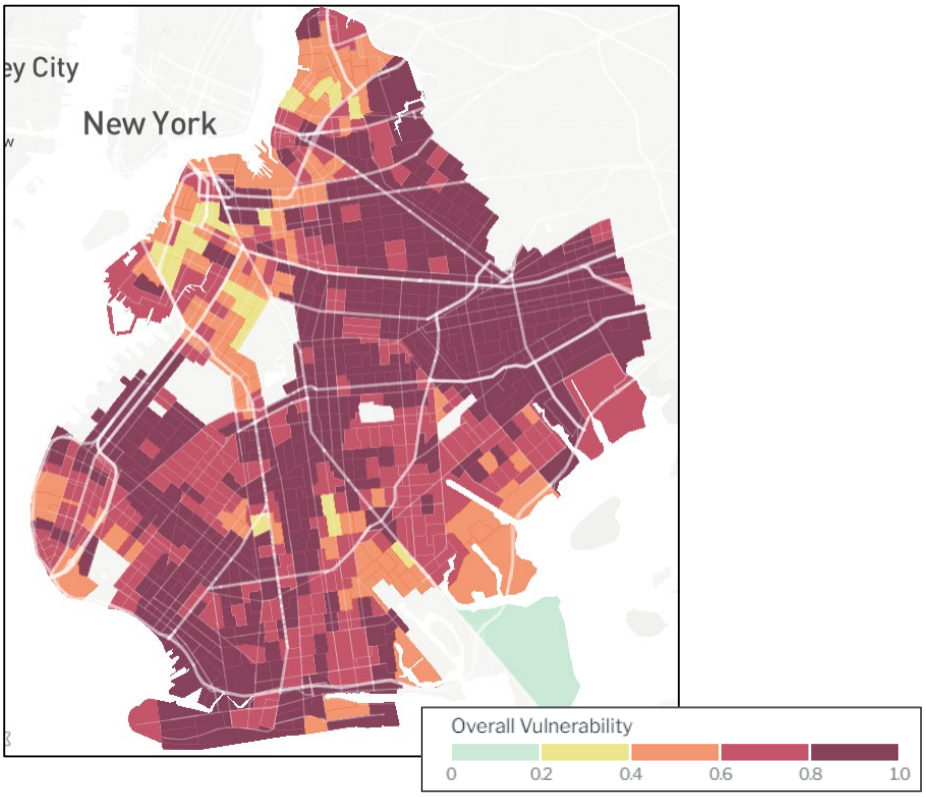
Source: New York City Department of Health and Mental Hygiene

COVID-19 Impact on Communities

COVID-19 is the name of the disease caused by the SARS-CoV-2 virus. "CO" stands for corona, "VI" for virus, and "D" for disease. The number "19" refers to the year 2019 when the first case of COVID-19 was identified. COVID-19 has not impacted all people equally. Rather, certain structural issues—population density, low income, crowded workplaces, etc.—contribute to higher levels of spread and worse outcomes from COVID-19 in select communities. Surgo Ventures developed the Community Vulnerability Index to measure how well any community in the US could respond to the health, economic, and social consequences of COVID-19 without intentional response and additional support.

Using this scale, **Brooklyn has "High" vulnerability compared to other parts of the US.** Among the factors impacting this score are population density, disparities experienced by people of color, financial insecurity, and health system challenges (e.g., bed availability, access to pharmacies, etc.).

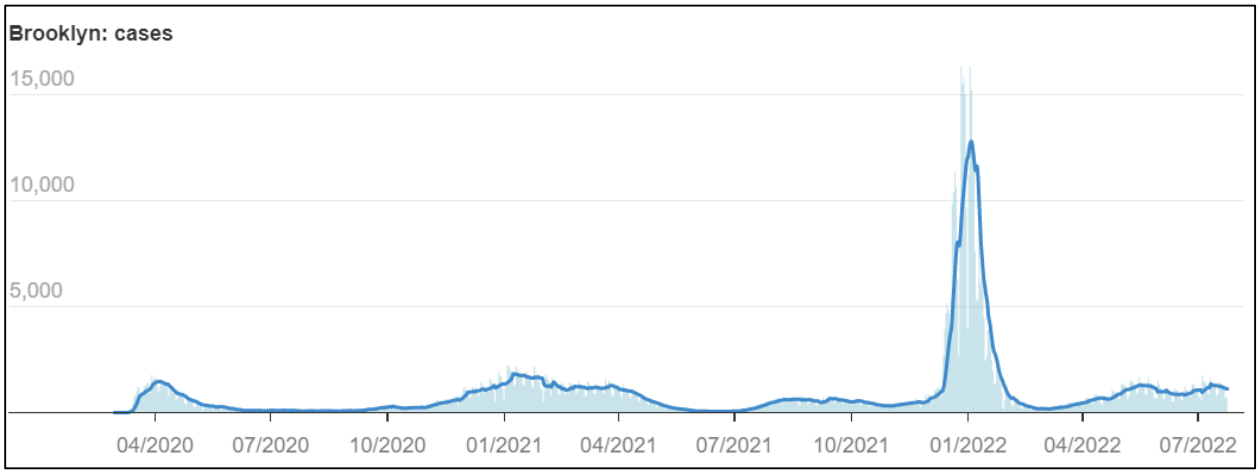
COVID-19 Community Vulnerability Index



As of July 27, 2022, Brooklyn reported a confirmed COVID-19 case rate of 31,699 per 100,000 residents, the second lowest case rate among NYC boroughs. Brooklyn also had the second lowest hospitalization rate in the city. Consistent with NYC and the nation overall, case counts peaked in December 2021 and January 2022 as a result of the more infectious Omicron variant.

While Brooklyn had lower COVID-19 case and hospitalization rates relative to other NYC boroughs, it had a higher death rate. This finding may reflect multiple factors, including more severe disease incidence, delayed care and treatment, racial and ethnic disparities, and/or lower vaccination. Brooklyn had the lowest proportion of residents fully vaccinated for COVID-19 as of July 2022.

Brooklyn COVID-19 Cases Through July 2022



Source: New York City Department of Health and Mental Hygiene

COVID-19 Cases, Hospitalizations, and Deaths per 100,000 by NYC Borough

	Confirmed Cases	Hospitalizations	Deaths	Fully Vaccinated
Brooklyn	31,699	2,058	512	72%
Bronx	32,362	2,608	554	75%
Manhattan	30,496	1,558	343	84%
Queens	33,220	2,139	537	86%
Staten Island	40,250	2,109	504	75%

Source: New York City Department of Health and Mental Hygiene, July 27, 2022

COVID-19 has disproportionately impacted people of color, including higher infection rates, hospitalizations, and deaths. **In Brooklyn, the hospitalization rate among Black/African American and Latinx residents was more than 30% higher than the rate among whites, and the death rate was nearly 40% higher. These disparities persisted despite higher vaccination rates than whites.**

Brooklyn COVID-19 Hospitalization, Vaccination, and Deaths per 100,000 by Race and Ethnicity

	Cases	Hospitalizations	Deaths	Fully Vaccinated
Asian/Pacific Islander	24,746	1,074	299	99%
Black/African American	20,598	2,127	516	60%
White	24,032	1,550	391	55%
Hispanic/Latinx	28,058	2,076	533	71%

Source: New York City Department of Health and Mental Hygiene, July 27, 2022

Consistent with existing social determinants of health barriers and disparities experienced by people of color, COVID-19 hospitalizations and deaths within the TBHC service area were highest for residents of

zip code 11212. Other service area zip codes with disproportionately high hospitalization and death rates reflect similar disparities.

COVID-19 Hospitalization, Vaccination, and Deaths by TBHC Primary Service Area Zip Code (In descending order by death rate)

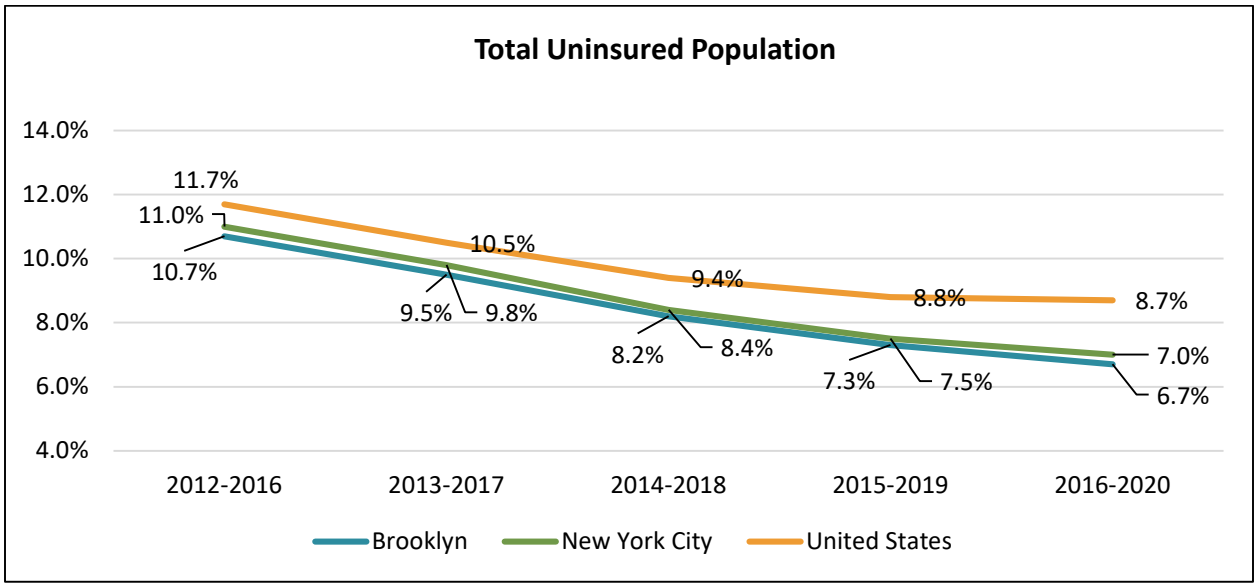
ZIP Code	Cases per 100,000	Total Deaths per 100,000	Fully Vaccinated (all ages)	Community Need Index Score
11212	33,674	733	76%	4.8
11226	28,045	602	78%	3.8
11213	30,984	591	63%	4.2
11207	32,127	562	72%	4.6
11225	25,738	487	72%	3.6
11233	27,966	483	62%	4.6
11221	30,442	436	75%	4.6
11238	29,175	415	88%	3.4
11217	29,011	414	79%	3.6
11206	31,299	405	62%	4.8
11201	29,226	360	92%	3.0
11216	30,072	347	75%	4.0
11211	32,090	273	59%	4.0
11205	28,141	256	59%	4.0
Brooklyn	31,699	512	72%	NA
New York City	32,487	492	79%	NA

Source: New York City Department of Health and Mental Hygiene, July 27, 2022

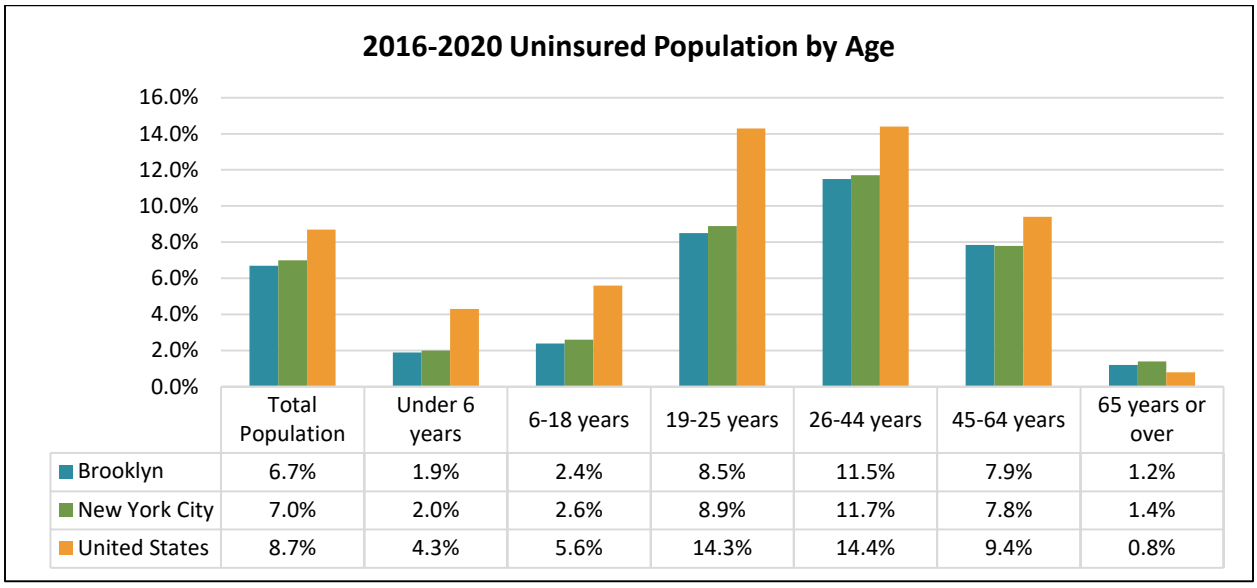
Access to Healthcare

Brooklyn continues to have a lower percentage of uninsured residents than NYC and the nation and meets the HP2030 goal of 92.1% insured residents. This finding is generally consistent across reported age groups. When considered by race and ethnicity, Brooklyn has similar uninsured percentages as NYC, reflecting significant disparities for select populations. Nearly 16% of individuals identifying with an "other" race and 11.5% of Latinx individuals are uninsured compared to 6.7% of the total population.

Among insured Brooklyn residents, 36.5% are Medicaid insured compared to 33% citywide and 20% nationally. The proportion of Medicaid insured residents is consistent with 2019 CHNA findings.

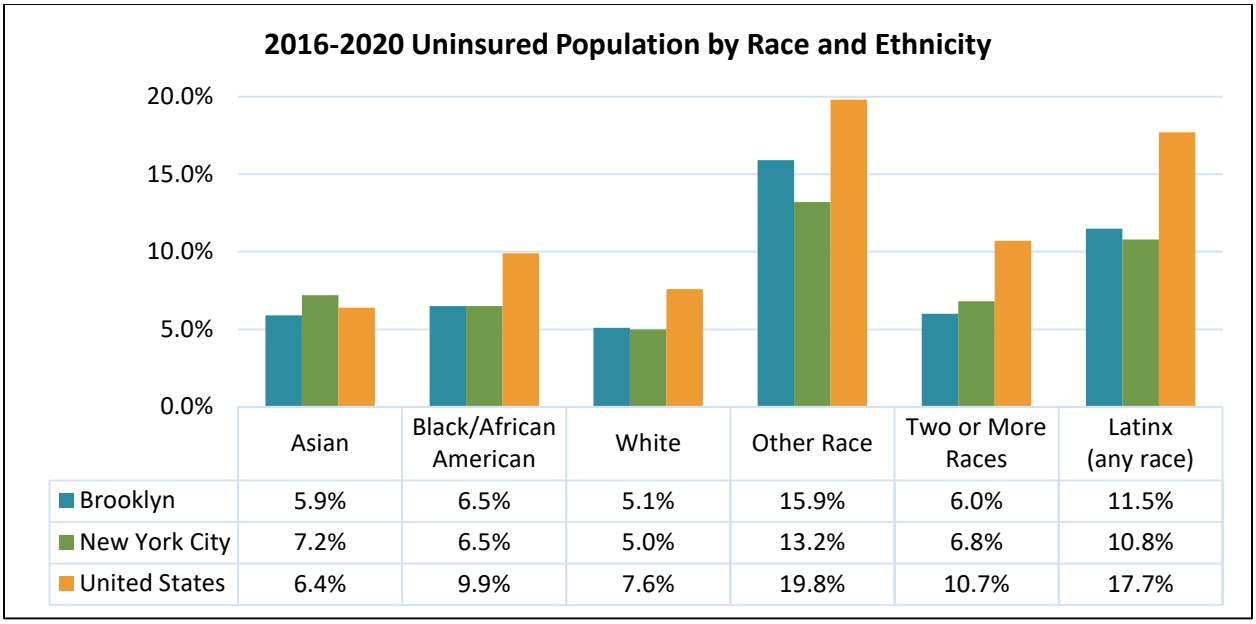


Source: US Census Bureau, American Community Survey



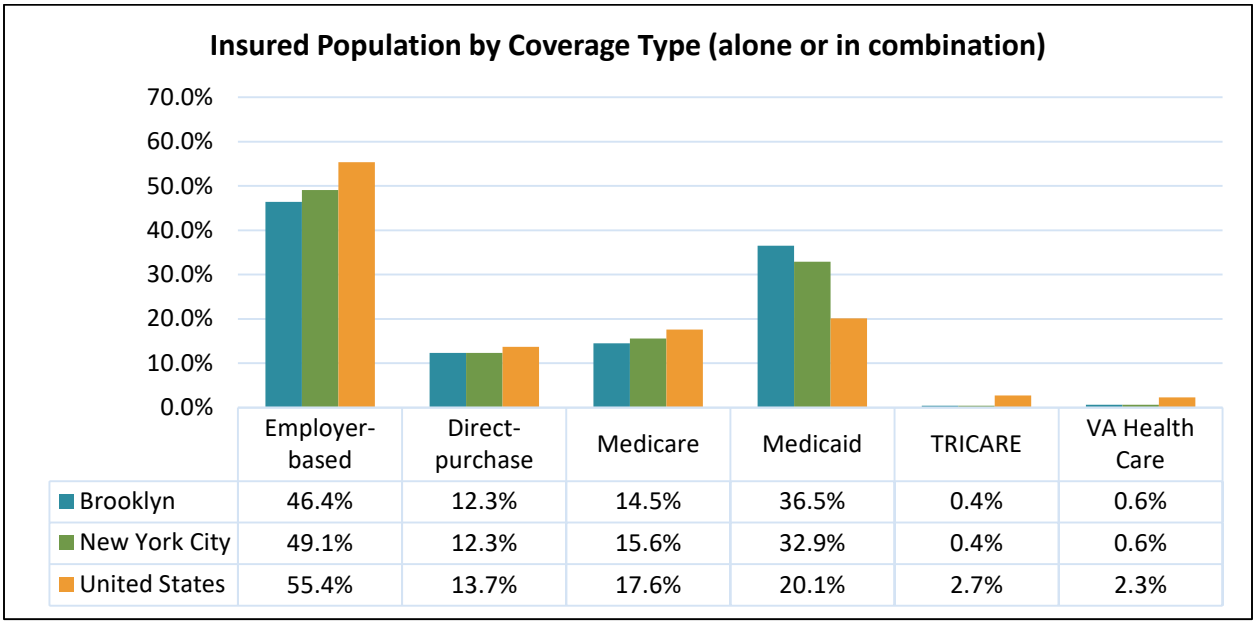
	Total Population	Under 6 years	6-18 years	19-25 years	26-44 years	45-64 years	65 years or over
Brooklyn	6.7%	1.9%	2.4%	8.5%	11.5%	7.9%	1.2%
New York City	7.0%	2.0%	2.6%	8.9%	11.7%	7.8%	1.4%
United States	8.7%	4.3%	5.6%	14.3%	14.4%	9.4%	0.8%

Source: US Census Bureau, American Community Survey



	Asian	Black/African American	White	Other Race	Two or More Races	Latinx (any race)
Brooklyn	5.9%	6.5%	5.1%	15.9%	6.0%	11.5%
New York City	7.2%	6.5%	5.0%	13.2%	6.8%	10.8%
United States	6.4%	9.9%	7.6%	19.8%	10.7%	17.7%

Source: US Census Bureau, American Community Survey



	Employer-based	Direct-purchase	Medicare	Medicaid	TRICARE	VA Health Care
Brooklyn	46.4%	12.3%	14.5%	36.5%	0.4%	0.6%
New York City	49.1%	12.3%	15.6%	32.9%	0.4%	0.6%
United States	55.4%	13.7%	17.6%	20.1%	2.7%	2.3%

Source: US Census Bureau, American Community Survey

Availability of healthcare providers impacts access to care and health outcomes. Brooklyn has fewer primary care providers than the state or nation, as indicated by the rate of primary care physicians per 100,000 population, and the lowest proportion of adults receiving routine preventive care among NYC boroughs. The majority of Brooklyn is a Health Professional Shortage Area for primary care.

Brooklyn also has fewer dentists and fewer than two-thirds of adults receiving recent dental care. W**hen viewed at the zip code-level, disparities in dental care access are stark with 60% or fewer of adults in**

the northeast portion of the borough receiving recent dental care compared to 73% or more of adults in downtown Brooklyn. Much of the eastern and southern portions of the borough are dental HPSAs.

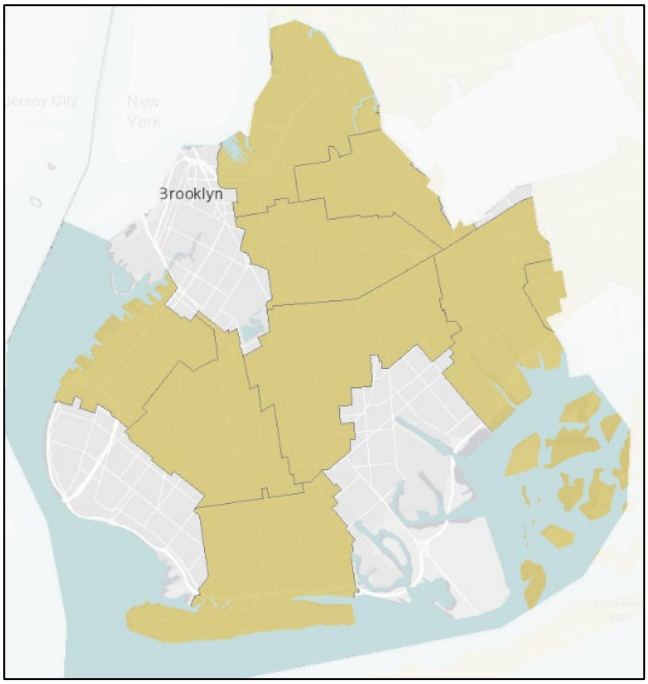
COVID-19 had a significant impact on access to care. Individuals nationwide delayed preventive and maintenance care due to fear of contracting COVID-19 in a healthcare setting, among other concerns. Nationally, the percentage of adults receiving a routine physical checkup declined from 77.6% in 2019 to 76% in 2020. **Across New York State, the percentage of adults receiving routine care declined from 79.6% in 2019 to 78.5% in 2020.** Note: county-level data for 2020 are not yet available.

Primary and Dental Provider Rates and Adult Healthcare Access

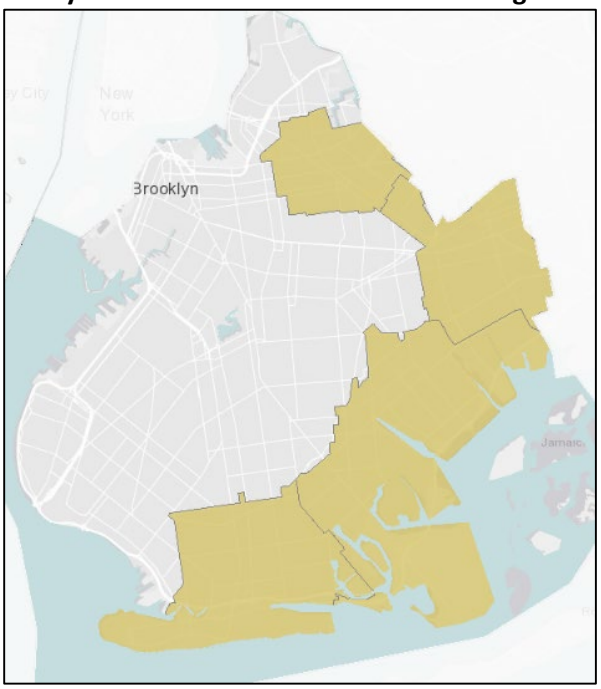
	Primary Care		Dental Care	
	Physicians per 100,000 Population (2019)	Routine Checkup within Past Year (2019)*	Dentists per 100,000 Population (2020)	Dental Visit within Past Year (2018)*
Brooklyn	70.3	77.8%	66.0	64.3%
Bronx	63.2	79.7%	53.0	56.8%
Manhattan	138.5	79.6%	184.4	72.0%
Queens	65.7	80.1%	75.8	61.9%
Staten Island	96.4	80.1%	66.7	67.5%
New York State	84.7	79.6%	83.9	69.7%
United States	75.7	77.6%	71.4	66.2%

Source: Health Resources and Services Administration & Centers for Disease Control and Prevention, PLACES & BRFSS
*Data are reported as age-adjusted percentages.

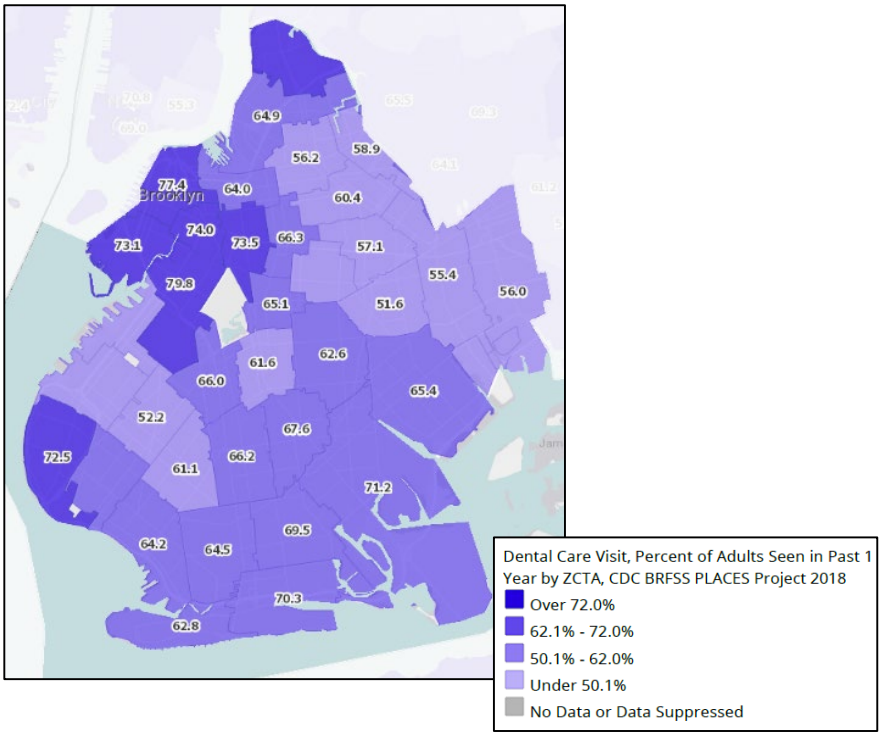
Brooklyn Primary Care Health Professional Shortage Areas



Brooklyn Dental Health Professional Shortage Areas



2018 Adults with an Annual Dental Visit by Zip Code



Health Risk Factors and Chronic Disease

The following report sections explore health risk factors and chronic disease, and their connection to underlying social determinants of health. Social determinants of health not only lead to poorer health outcomes and the onset of disease, but they are also likely to impede disease management and treatment efforts, further exacerbating poorer health outcomes.

Brooklyn residents generally experience similar health risk factors, such as smoking and physical inactivity, as their peers citywide but higher prevalence and/or mortality due to chronic disease. This finding largely reflects existing socioeconomic and access to care barriers among individuals who historically and continually experience inequities.

Age-Adjusted Adult Risk factors

	2019 No Leisure-Time Physical Activity in Past 30 Days[1]	2020 Current Smokers[2]
Brooklyn	29.7%	11.2%
Bronx	39.1%	13.7%
Manhattan	22.1%	8.1%
Queens	32.2%	9.6%
Staten Island	30.4%	19.9%
New York City	NA	10.9%
United States	25.6%	NA

Source: Centers for Disease Control and Prevention[1] & New York City Department of Health and Mental Hygiene[2]

Obesity and Diabetes

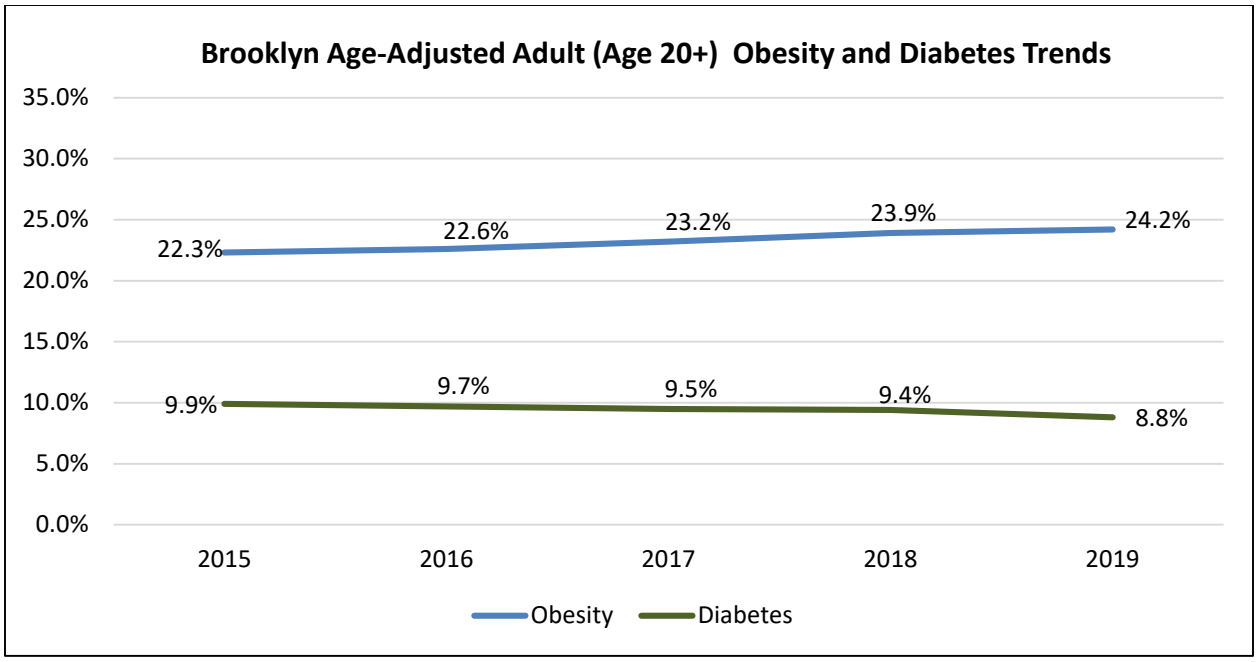
The proportion of Brooklyn adults with obesity has increased but remains lower than the nation and most NYC boroughs. Diabetes prevalence is also lower among Brooklyn adults and has declined in recent years, although the death rate remains higher than NYC and national benchmarks. Diabetes death rate disparities disproportionately affect Black/African Americans and Latinx. **In Brooklyn, the diabetes death rate is more than triple for Black/African Americans than whites and more than double for Latinx. It is worth noting that Black/African American and Latinx residents have a higher rate of death than their peers citywide, while white residents have a similar rate of death as their peers.**

The diabetes death rate increased nearly five points in Brooklyn from 2019 to 2020, a finding that is consistent with NYC and national trends. This finding is likely due in part to the pandemic and related healthcare access barriers.

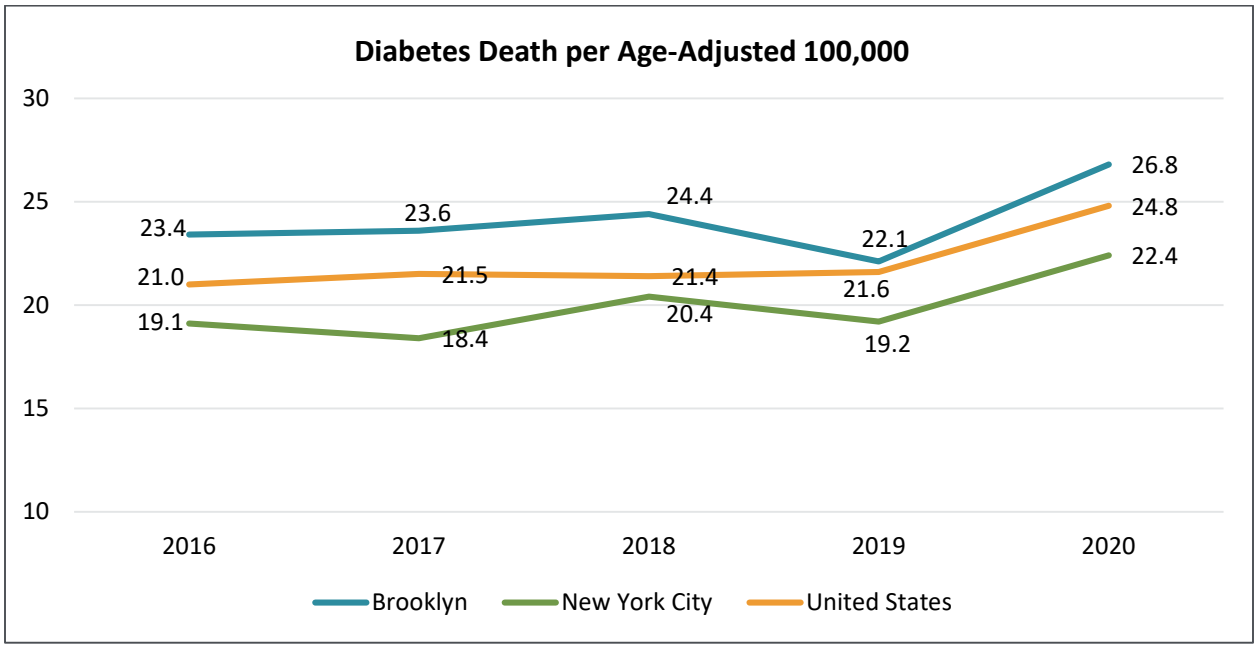
2019 Age-Adjusted Adult (Age 20+) Obesity and Diabetes Prevalence

	Obesity	Diabetes
Brooklyn	24.2%	8.8%
Bronx	29.8%	12.0%
Manhattan	18.9%	6.5%
Queens	24.6%	11.2%
Staten Island	29.1%	9.7%
United States	32.1%	9.4%

Source: Centers for Disease Control and Prevention



Source: Centers for Disease Control and Prevention



Source: Centers for Disease Control and Prevention

2020 Diabetes Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	Total Population	Asian, Non-Hispanic	Black/African American, Non-Hispanic	White, Non-Hispanic	Latinx (any race)
Brooklyn	26.8	13.8	45.8	12.6	28.7
Bronx	29.8	NA	36.2	18.1	29.3
Manhattan	14.8	12.0	32.0	6.7	20.0
Queens	18.8	17.4	33.8	13.6	14.3
Staten Island	25.8	NA	65.9	21.3	29.4
New York City	22.4	15.6	39.9	12.5	23.3
United States	24.8	19.4	46.8	21.1	30.9

Source: Centers for Disease Control and Prevention

Heart Disease

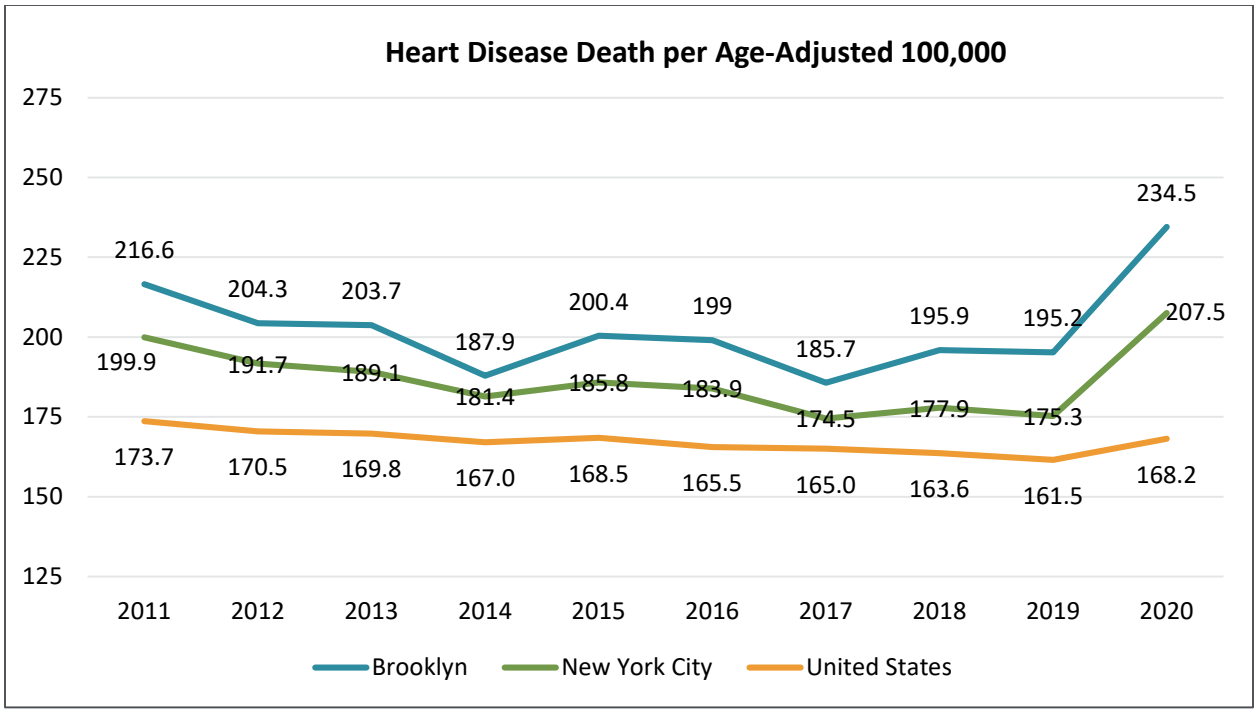
Heart disease is the leading cause of death nationally. High blood pressure and cholesterol are two of the primary causes of heart disease and can be preventable. **Brooklyn adults have a lower prevalence of high blood pressure and high cholesterol than the nation, but consistent with diabetes trends, a higher rate of death due to heart disease.** Also consistent with diabetes trends, the heart disease death rate increased in 2020, a finding that is likely due in part to pandemic-related factors.

Across the nation, the heart disease death rate is higher for Black/African Americans than other racial or ethnic groups. This trend is consistent across NYC and Brooklyn.

2019 Age-Adjusted Adult Heart Disease Risk Factors

	Adults with High Blood Pressure	Adults with High Cholesterol
Brooklyn	28.4%	26.5%
Bronx	32.7%	29.7%
Manhattan	24.5%	29.2%
Queens	27.1%	29.3%
Staten Island	27.0%	27.1%
United States	29.6%	28.7%

Source: Centers for Disease Control and Prevention



Source: Centers for Disease Control and Prevention

2020 Heart Disease Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	Total Population	Asian, Non-Hispanic	Black/African American, Non-Hispanic	White, Non-Hispanic	Latinx (any race)
Brooklyn	234.5	141.3	265.3	228.0	198.4
Bronx	235.3	150.7	286.1	257.9	179.5
Manhattan	149.1	106.6	278.0	119.2	144.2
Queens	202.4	128.3	270.0	230.6	150.2
Staten Island	245.4	141.4	320.5	242.0	184.3
New York City	207.5	129.0	273.1	200.9	167.3
United States	168.2	90.1	228.6	170.1	122.7

Source: Centers for Disease Control and Prevention

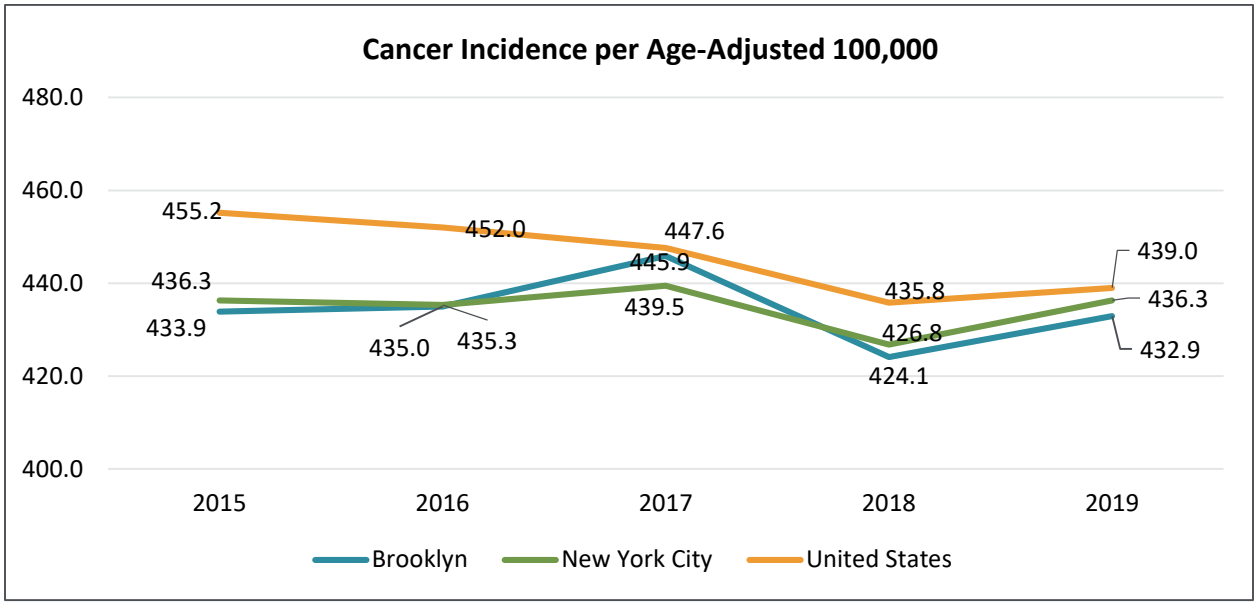
Cancer

Cancer is the second leading cause of death nationally. Brooklyn has lower cancer incidence and death rates than NYC and the nation, and the death rate declined in recent years. **The borough meets the Healthy People 2030 goal for cancer related deaths: 122.7 per 100,000.**

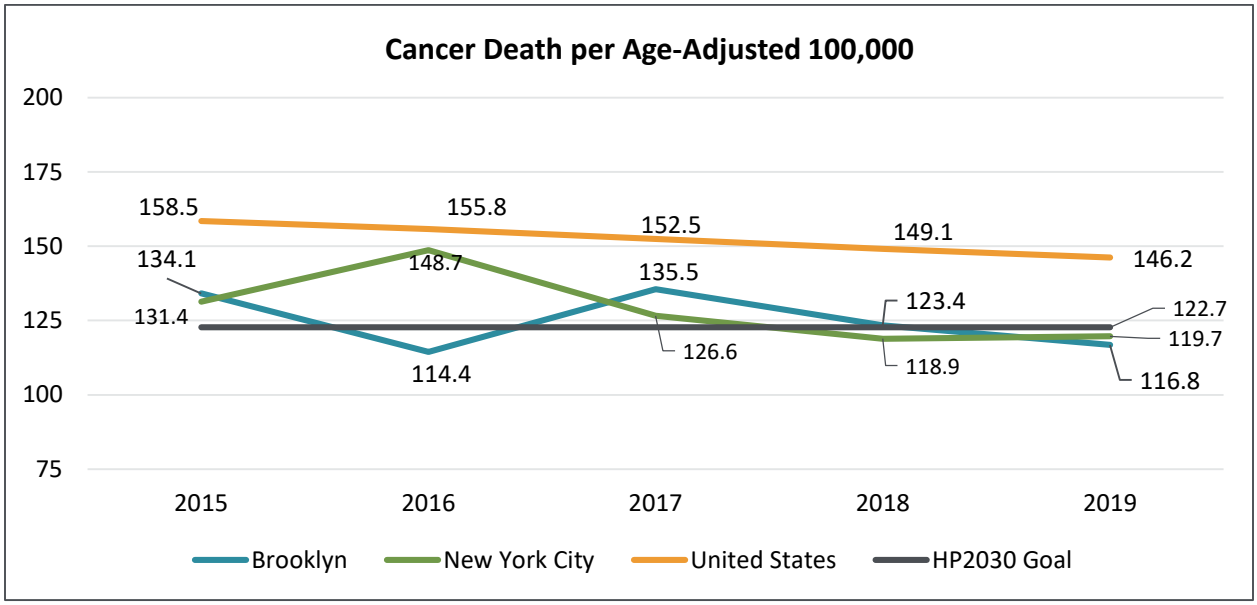
Nationally, there is a nearly 80-point difference in cancer death rates across racial and ethnic groups, with lower reported death among Asians and Latinx and higher reported death among Black/African Americans. While Brooklyn and NYC also report lower death rates among Asians and Latinx, they differ from the nation with more similar death rates among Black/African Americans and whites.

Analysis of the four most common cancer types (female breast, colorectal, lung, and prostate) illuminates the following cancer-related trends for Brooklyn:

- Brooklyn has lower female breast and prostate cancer incidence rates than NYC, but slightly higher death rates, potentially indicating later detection and access to treatment
- Consistent with lower overall smoking rates, Brooklyn has lower lung cancer incidence and death rates and nearly meets the Healthy People 2030 goal for lung cancer-related death
- Colorectal cancer incidence and death rates trends are generally consistent with NYC overall



Source: New York State Department of Health & Centers for Disease Control and Prevention

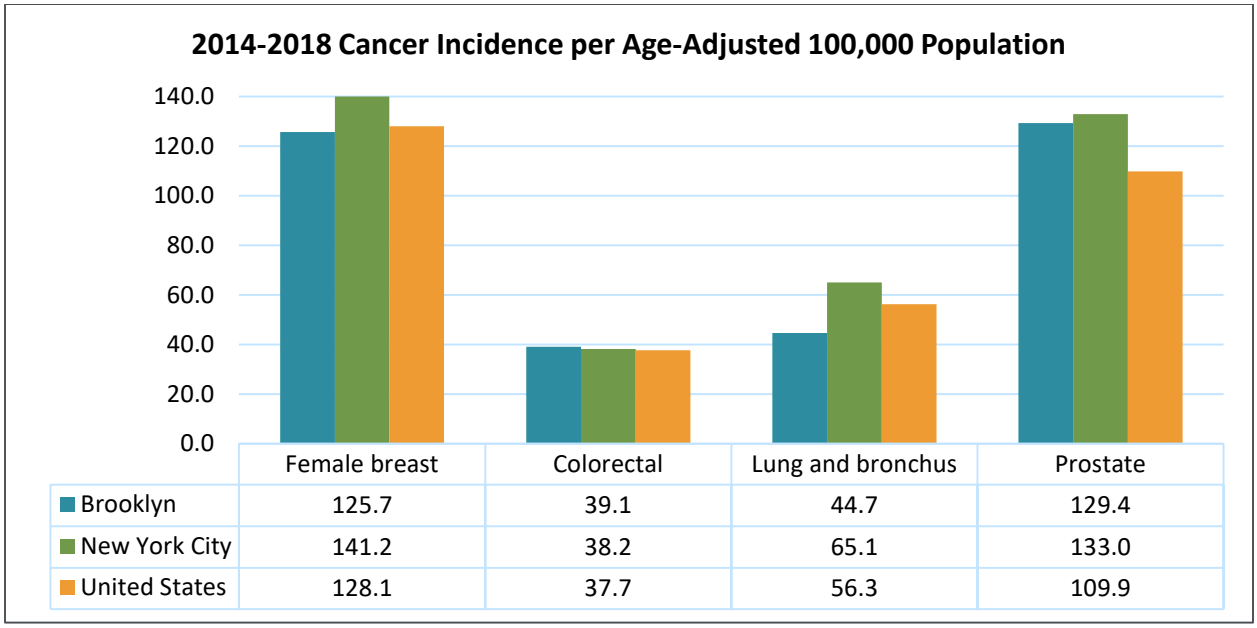


Source: New York State Department of Health & Centers for Disease Control and Prevention

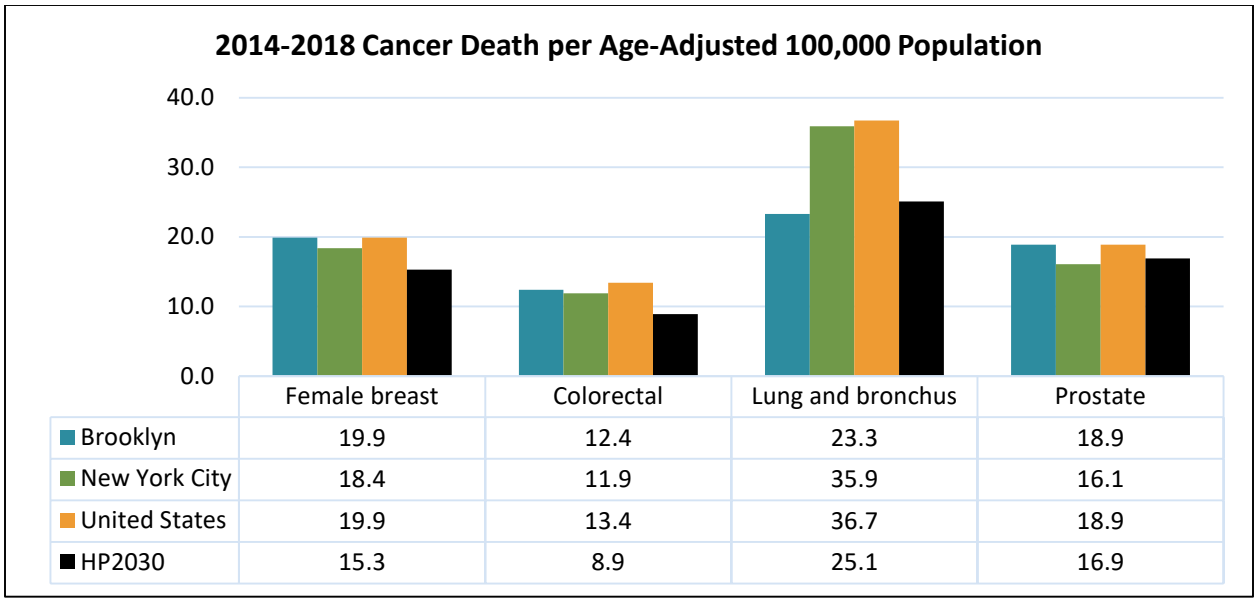
2015-2019 Age-Adjusted Cancer Incidence and Death per 100,000 Population by Race and Ethnicity

	Brooklyn	Bronx	Manhattan	Queens	Staten Island	New York City	United States
Cancer Incidence							
Total Population	442.8	439.4	449.0	425.0	528.9	443.9	449.4
Asian	394.7	NA	357.4	358.9	NA	363.6	292.6
Black/African American	422.7	426.0	461.6	420.7	NA	429.6	443.9
White	451.3	439.6	455.1	433.1	551.0	452.2	451.9
Latinx origin (any race)	361.1	385.8	349.4	338.1	NA	361.6	352.6
Cancer Death							
Total Population	124.7	153.4	135.1	113.0	142.2	128.9	152.4
Asian	100.6	NA	107.9	85.3	NA	92.5	95.7
Black/African American	129.9	129.2	156.7	122.8	NA	131.8	173.5
White	121.0	170.8	129.1	116.5	145.5	130.4	153.4
Latinx origin (any race)	112.4	124.4	112.0	86.0	NA	108.6	110.0

Source: New York State Department of Health & Centers for Disease Control and Prevention



Source: New York State Department of Health & Centers for Disease Control and Prevention

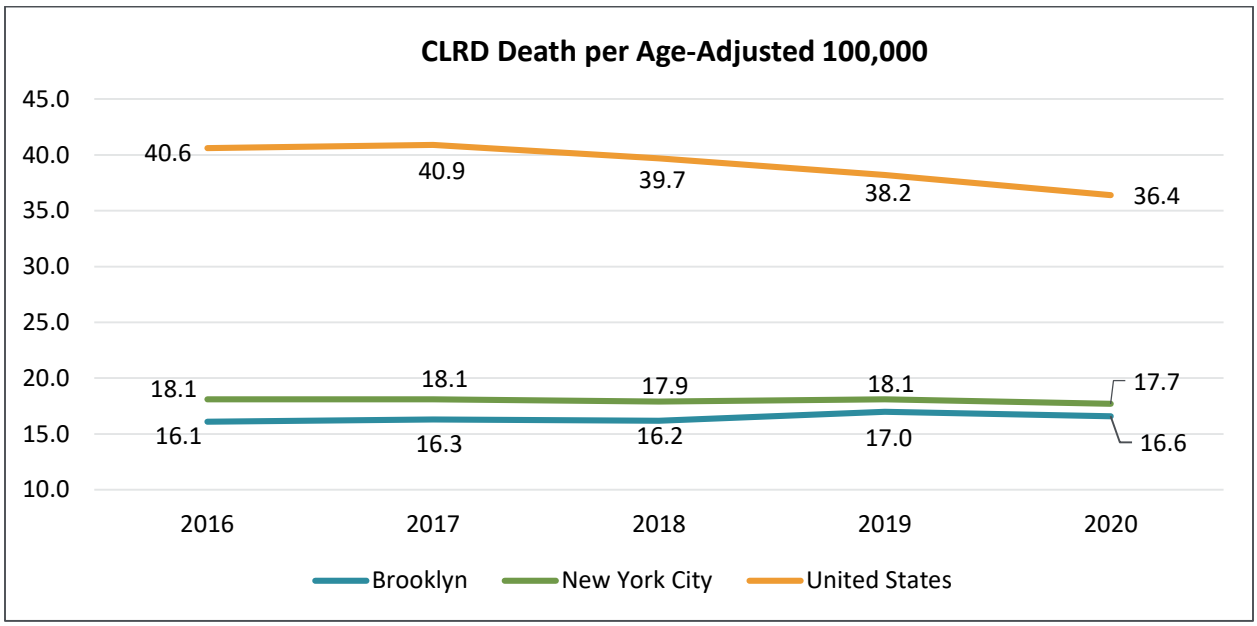


	Female breast	Colorectal	Lung and bronchus	Prostate
Brooklyn	19.9	12.4	23.3	18.9
New York City	18.4	11.9	35.9	16.1
United States	19.9	13.4	36.7	18.9
HP2030	15.3	8.9	25.1	16.9

Source: New York State Department of Health & Centers for Disease Control and Prevention

Respiratory Disease

Chronic lower respiratory disease (CLRD) includes several chronic conditions of the respiratory tract, including asthma and chronic obstructive pulmonary disease (COPD). Brooklyn has historically lower death rates due to CLRD than NYC and the nation, a finding that is consistent with lower tobacco use and overall similar or lower prevalence of respiratory disease. Contrary to national trends, CLRD death rates in NYC and Brooklyn are higher for Black/African Americans than whites.



Source: Centers for Disease Control and Prevention

2020 CLRD Death Rate per Age-Adjusted 100,000 by Race and Ethnicity

	Total Population	Asian, Non-Hispanic	Black/African American, Non-Hispanic	White, Non-Hispanic	Latinx (any race)
Brooklyn	16.6	9.3	18.5	16.4	16.7
Bronx	27.7	NA	28.1	31.7	23.2
Manhattan	15.1	13.9	21.6	12.4	15.0
Queens	14.1	7.4	15.2	19.6	8.0
Staten Island	23.8	NA	NA	27.3	NA
New York City	17.7	9.1	20.1	18.3	15.9
United States	36.4	10.6	30.2	41.2	15.9

Source: Centers for Disease Control and Prevention

Aging Population

While Brooklyn overall represents a younger population, it is aging, and older adults are generally less healthy than their peers citywide and nationally. Among older adult Medicare beneficiaries, 76.9% have two or more chronic conditions, a slight increase from the 2019 CHNA finding of 76.2%. **Approximately 30% of Brooklyn older adult Medicare beneficiaries have six or more chronic conditions, the highest proportion of any NYC borough.** Brooklyn older adults are also more likely to experience disability, including walking, independent living, and/or cognitive. Without appropriate support services, disabilities can impede disease management efforts and further exacerbate poorer health outcomes

2018 Chronic Condition Comorbidities among Medicare Beneficiaries 65 Years or Older

	Brooklyn	Bronx	Manhattan	Queens	Staten Island	United States
0 to 1 condition	23.1%	28.8%	34.8%	26.2%	24.0%	29.7%
2 to 3 conditions	22.5%	24.6%	28.7%	26.4%	27.9%	29.4%
4 to 5 conditions	24.3%	22.7%	20.4%	24.5%	26.6%	22.8%
6 or more conditions	30.1%	24.0%	16.1%	23.0%	21.6%	18.2%

Source: Centers for Medicare & Medicaid Services

2016-2020 Older Adult Population by Disability Status

	Brooklyn	Bronx	Manhattan	Queens	Staten Island	United States
Total population	10.0%	15.7%	10.3%	9.7%	9.9%	12.7%
65 years or older	36.6%	43.2%	31.7%	31.7%	29.0%	34.0%
Ambulatory	28.3%	32.8%	23.4%	23.1%	20.7%	21.5%
Hearing	9.0%	9.9%	8.9%	9.3%	9.0%	14.1%
Independent living	20.5%	22.3%	15.9%	16.9%	15.3%	14.0%
Cognitive	10.2%	13.2%	8.7%	8.8%	6.5%	8.4%
Vision	6.6%	11.6%	6.6%	5.7%	5.3%	6.2%

Source: US Census Bureau, American Community Survey

Older adult healthcare utilization and costs increase significantly with a higher number of reported chronic diseases. Tracking these indicators helps plan allocation of resources to best anticipate and serve need in the community. Healthcare utilization and cost metrics vary widely across NYC boroughs. **In Brooklyn, older adult Medicare beneficiaries generally have fewer ED visits and lower per capita spending than other NYC boroughs and the nation, potentially indicating better disease management among this population despite overall higher prevalence.**

2018 Per Capita Standardized Spending* for Medicare Beneficiaries Aged 65 Years or Older

	Brooklyn	Bronx	Manhattan	Queens	Staten Island	United States
0 to 1 condition	$1,467	$1,185	$2,278	$1,521	$1,602	$1,944
2 to 3 conditions	$5,074	$5,115	$6,520	$5,341	$5,300	$5,502
4 to 5 conditions	$9,063	$9,940	$11,788	$9,821	$9,147	$10,509
6 or more conditions	$26,604	$31,278	$30,927	$28,045	$27,833	$29,045

Source: Centers for Medicare & Medicaid Services

*Standardized spending takes into account payment factors that are unrelated to the care provided (e.g. geographic variation in Medicare payment amounts).

2018 ED Visits per 1,000 Medicare Beneficiaries Aged 65 Years or Older

	Brooklyn	Bronx	Manhattan	Queens	Staten Island	United States
0 to 1 condition	93.5	105.6	115.9	84.9	90.4	122.6
2 to 3 conditions	243.9	307.7	304.5	237.4	230.4	318.4
4 to 5 conditions	423.9	573.4	588.2	452.2	427.5	621.1
6 or more conditions	1,195.2	1,580.3	1,587.0	1,349.2	1,446.0	1,719.1

Source: Centers for Medicare & Medicaid Services

Nationally, the most common chronic conditions among older adult Medicare beneficiaries, in order of prevalence, are hypertension, high cholesterol, and arthritis. Brooklyn differs from the nation with diabetes ranked as the third most prevalent condition among beneficiaries. **Nearly 48% of Brooklyn older adult Medicare beneficiaries have diabetes compared to 27% nationally.**

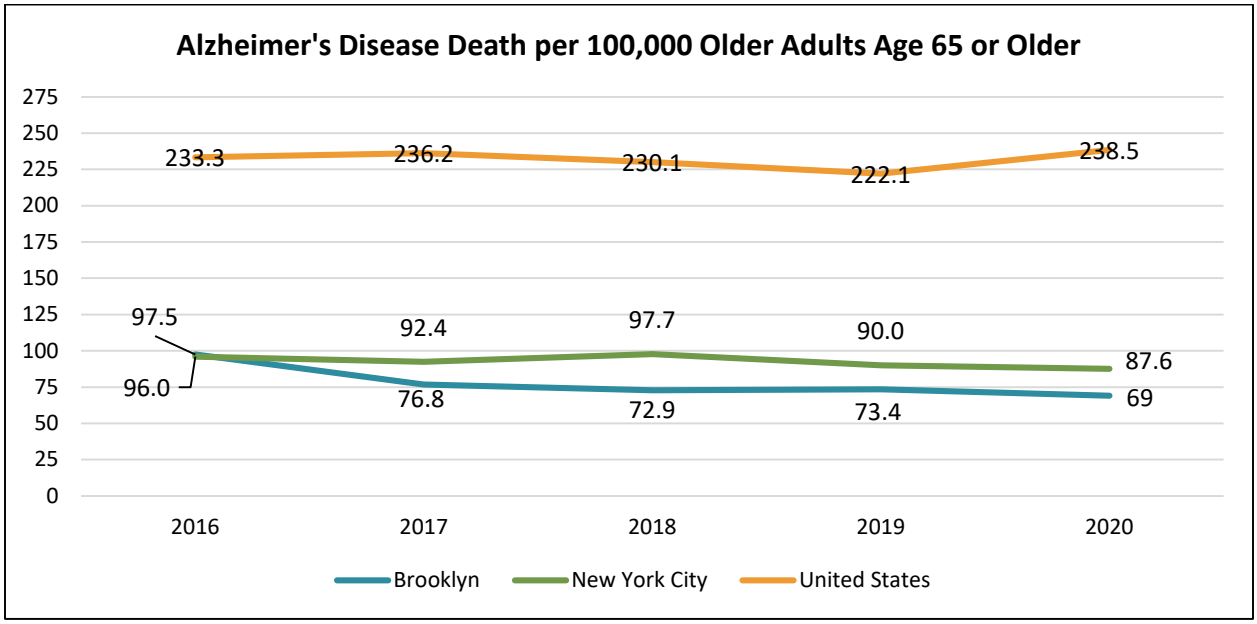
Brooklyn older adult Medicare beneficiaries have a higher prevalence of all reported chronic conditions, except COPD, when compared to the nation. In addition to diabetes, other disparities of note include a markedly higher prevalence of heart disease, including ischemic heart disease (42.5%) and heart failure (24.3%).

Alzheimer's disease is a leading cause of death nationally and the most common cause of dementia. Brooklyn has a higher prevalence of Alzheimer's disease among older adults than the nation, but a historically lower and declining death rate.

2018 Chronic Condition Prevalence among Medicare Beneficiaries Age 65 Years or Older

	Brooklyn	Bronx	Manhattan	Queens	Staten Island	United States
Alzheimer's Disease	19.7%	17.8%	13.3%	16.3%	12.7%	11.9%
Arthritis	40.2%	32.4%	34.9%	35.0%	35.6%	34.6%
Asthma	5.9%	7.7%	5.2%	5.7%	4.7%	4.5%
Cancer	9.6%	9.2%	10.9%	9.9%	10.9%	9.3%
Chronic Kidney Disease	28.5%	28.8%	19.0%	25.0%	26.2%	24.9%
COPD	10.9%	10.4%	8.0%	10.1%	11.4%	11.4%
Depression	16.5%	15.7%	15.4%	13.6%	12.6%	16.0%
Diabetes	47.5%	41.5%	25.4%	40.2%	43.8%	27.1%
Heart Failure	24.3%	18.9%	12.5%	17.0%	16.2%	14.6%
High Cholesterol	57.0%	45.2%	43.3%	55.0%	58.8%	50.5%
Hypertension	66.9%	62.6%	47.8%	62.7%	63.1%	59.8%
Ischemic Heart Disease	42.5%	30.2%	29.0%	34.8%	34.9%	28.6%
Stroke	5.5%	5.3%	3.9%	5.2%	4.1%	3.9%

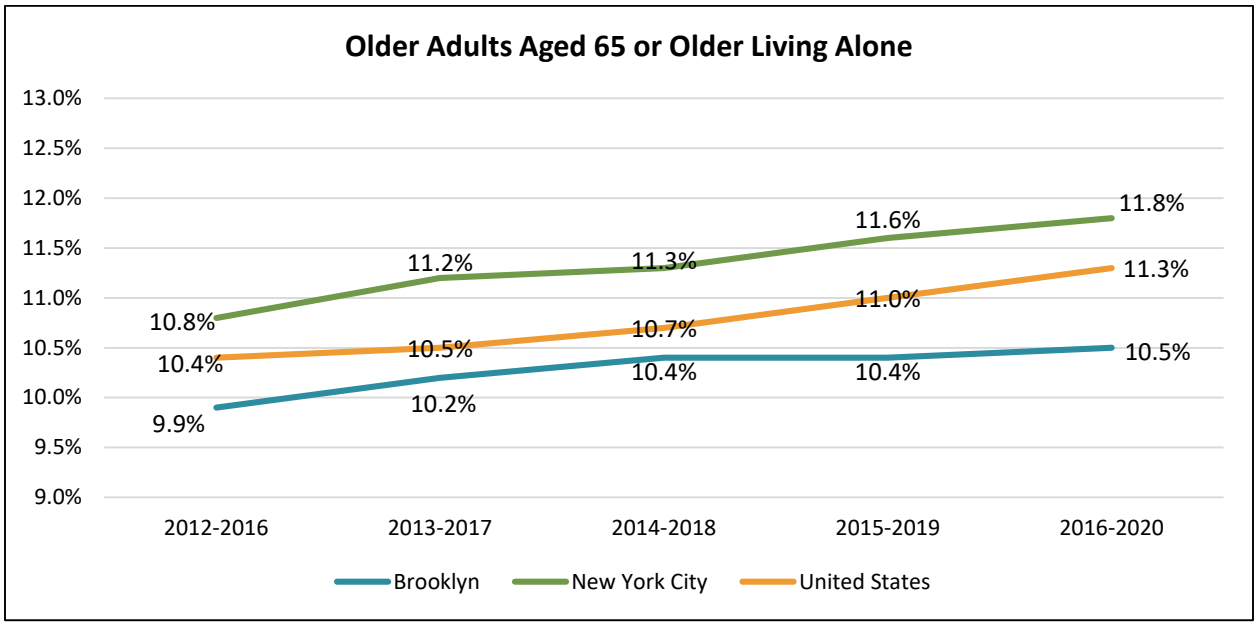
Source: Centers for Medicare & Medicaid Services



Source: Centers for Disease Control and Prevention

In older adults, chronic illness often leads to diminished quality of life and increased social isolation. Social isolation may also impede effective chronic illness management and accelerate the negative impact of chronic diseases. One indicator of social isolation among older adults is the percentage of adults age 65 years or older who live alone. **Consistent with NYC and the nation, the**

proportion of Brooklyn older adults living alone increased, although Brooklyn older adults are less likely to live alone when compared to their peers elsewhere.



Source: US Census Bureau, American Community Survey

Behavioral Health and Substance Use Disorder

Brooklyn overall has similar access to mental health providers as the nation, as indicated by the rate of providers per 100,000 population. In comparison to the 2019 CHNA, the rate of mental health providers increased from 198 to 254 per 100,000. While provider availability has improved for Brooklyn, the central and northeast portions of the borough are Health Professional Shortage Areas.

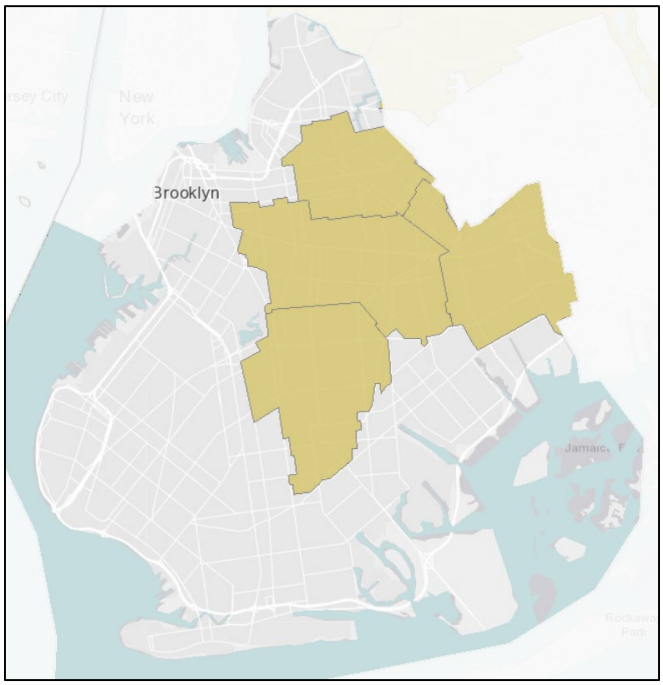
Note: The mental health provider rate includes psychiatrists, psychologists, licensed clinical social workers, counselors, and mental health providers that treat alcohol and other drug abuse, among others. It does not account for potential shortages in specific provider types.

2021 Mental Health Providers per 100,000 Population

	Provider Rate
Brooklyn	254.0
Bronx	231.2
Manhattan	962.7
Queens	185.0
Staten Island	249.7
United States	284.3

Source: Centers for Medicare and Medicaid Services

Brooklyn Mental Health Professional Shortage Areas



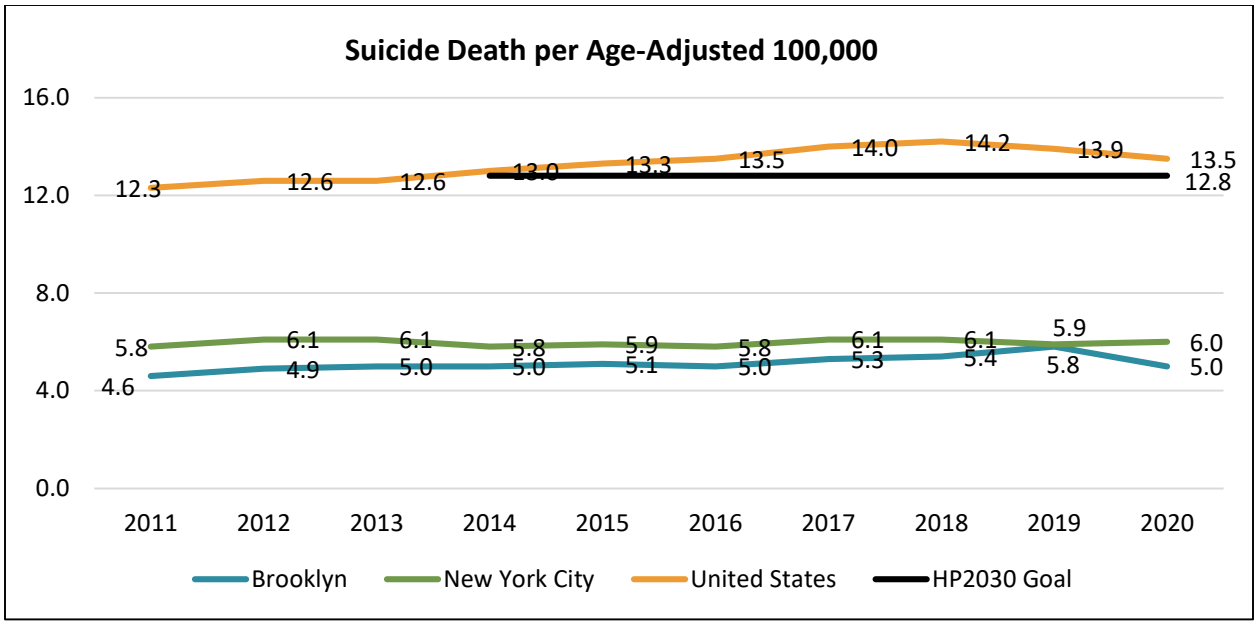
Fewer Brooklyn adults have been diagnosed with depression when compared to the nation, although the proportion encompasses nearly 1 in 5 adults. Additionally, 13.1% of Brooklyn adults report experiencing frequent mental distress, a similar proportion as the nation overall. Frequent mental distress is defined as having poor mental health on 14 or more days during a 30-day period.

Frequent mental distress and depression are risk factors for suicide. Suicide deaths steadily increased across the US over most of the past decade, excluding declines in 2019 and 2020. **New York City, including Brooklyn, has historically seen fewer suicide deaths than the nation** overall, and the rate of deaths has been generally stable over the past decade.

2019 Age-Adjusted Adult Mental Health Indicators

	Diagnosed Depression	Frequent Mental Distress
Brooklyn	15.1%	13.1%
Bronx	16.0%	15.3%
Manhattan	18.3%	11.9%
Queens	13.3%	12.1%
Staten Island	15.8%	13.4%
United States	18.9%	13.9%

Source: Centers for Disease Control and Prevention



Source: Centers for Disease Control and Prevention

2020 Brooklyn Suicide Deaths, Demographic Characteristics

	Suicide Deaths	Age-Adjusted Rate per 100,000
Gender		
Female	34	2.5
Male	95	7.8
Age*		
15-24	21	7.5
25-34	20	4.3
35-44	23	6.4
45-54	16	NA
55-64	26	9.2
65+	22	5.8
Race and Ethnicity		
Asian, Non-Hispanic	16	NA
Black/African American, Non-Hispanic	25	3.3
White, Non-Hispanic	61	6.6
Latinx origin (any race)	24	4.9

Source: Centers for Disease Control and Prevention
*Rates are not age-adjusted.

Substance use disorder affects a person's brain and behaviors and leads to an inability to control the use of substances which include alcohol, marijuana, and opioids, among others. Alcohol is the most prevalent addictive substance used among adults.

Across Brooklyn, nearly 18% of adults report binge drinking, a similar proportion as the nation overall. Consistent with other NYC boroughs, Brooklyn has fewer alcohol-impaired driving deaths than the nation, potentially due to a heavier reliance on public transportation services.

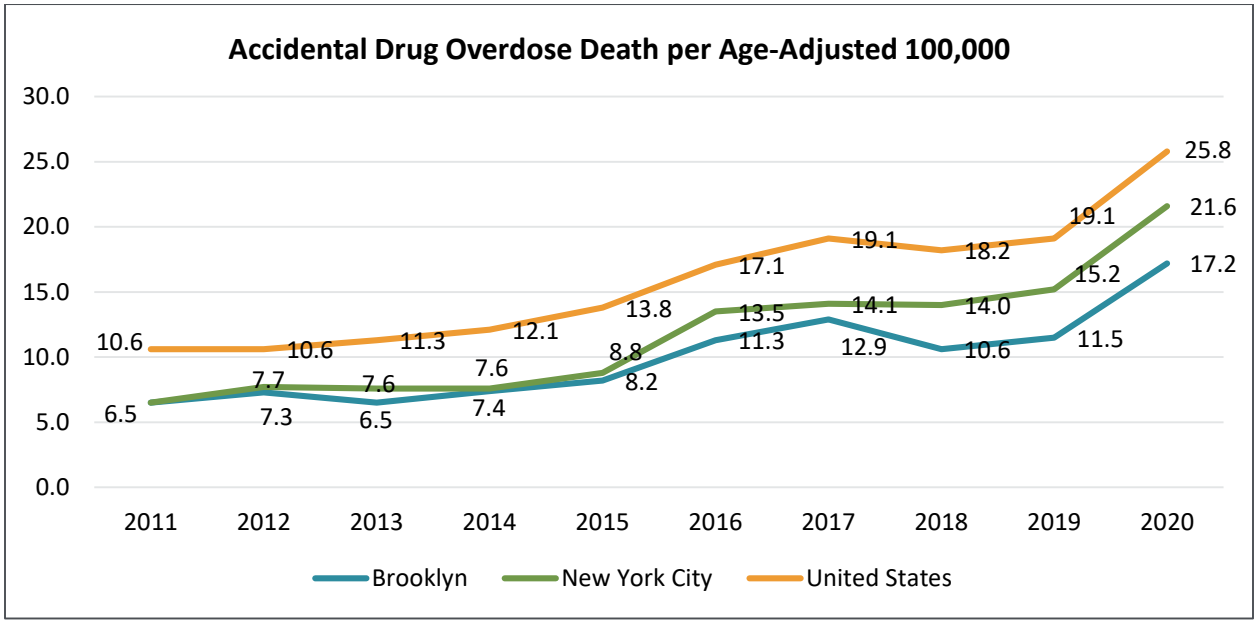
2019 Alcohol Use Disorder Indicators

	Binge Drinking	Percent of Driving Deaths due to Driving Under the Influence (DUI)
Brooklyn	17.6%	11.1%
Bronx	16.9%	13.0%
Manhattan	21.5%	9.5%
Queens	15.2%	16.7%
Staten Island	16.7%	13.5%
United States	17.9%	27.0%

Source: Centers for Disease Control and Prevention

Provisional data released by the CDC predicts that 2020 and 2021 brought the highest number of overdose deaths ever in the US. **According to the NYC Department of Health and Mental Hygiene, there were a total of 596 confirmed overdose deaths in the first quarter (Q1) of 2021, a 31% increase from Q1 2020 and 73% increase from Q1 2019.** Consistent with the nation, the majority of deaths (80%) across NYC involved opioids and synthetic opioids, such as fentanyl. Synthetic opioids are laboratory produced and can have far greater potency, increasing the risk for overdose and death.

Brooklyn has historically had fewer accidental overdose deaths than NYC and the nation, although the death rate has increased, most notably in 2020. **From 2019 to 2020, the number of accidental overdose deaths occurring in Brooklyn increased 42.8%, from 311 to 444.** When viewed by race and ethnicity, from 2019 to 2020, the number of accidental overdose deaths increased 65.7% for Black/African Americans (99 to 164), 41.5% for whites (106 to 150), and 16% for Latinx (87 to 101).



Source: Centers for Disease Control and Prevention

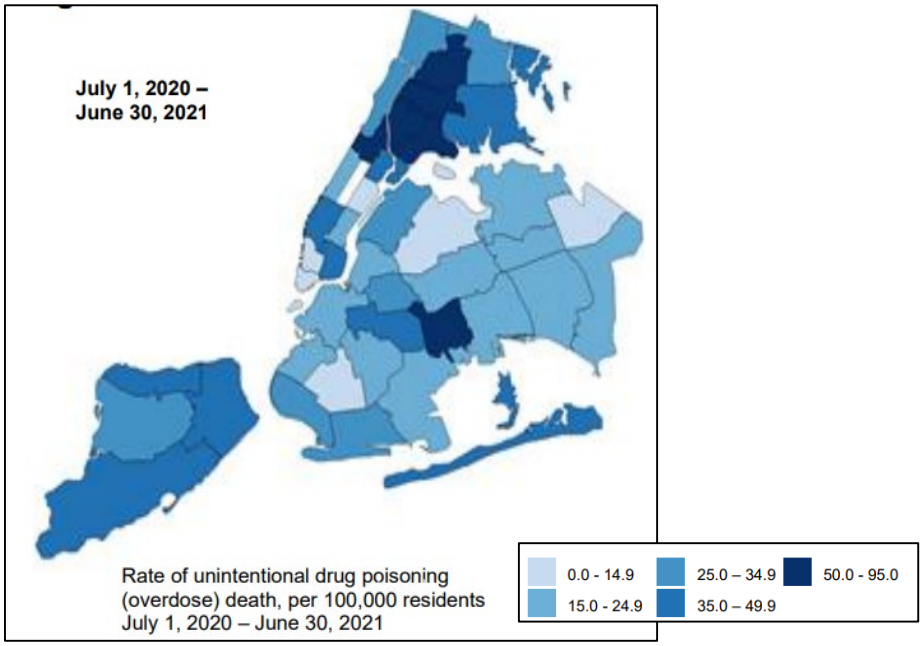
2020 Brooklyn Accidental Overdose Deaths, Demographic Characteristics

	Accidental Overdose Deaths	Age-Adjusted Rate per 100,000
Gender		
Female	90	6.5
Male	354	29.3
Age*		
15-24	21	7.5
25-34	73	15.7
35-44	88	24.7
45-54	121	41.7
55-64	107	38.0
65+	34	9.0
Race and Ethnicity		
Asian, Non-Hispanic	10	NA
Black/African American, Non-Hispanic	164	19.5
White, Non-Hispanic	150	15.7
Latinx origin (any race)	101	21.9

Source: Centers for Disease Control and Prevention
*Rates are not age-adjusted.

Brooklyn had 272 confirmed overdose deaths in the first half of 2021. **While the borough comprises 31% of the total NYC population, it accounted for 45% of confirmed overdose deaths in the first half of 2021.** The Brownsville and East New York neighborhoods in Brooklyn have historically experienced more drug-related deaths and had one of the highest death rates in NYC, as shown in the map below.

Accidental Drug Overdose Deaths by NYC Borough



Source: New York City Department of Health and Mental Hygiene

Youth Health

Overweight and Obesity

Childhood obesity is a persistent and significant threat to the long-term health of today's youth. The CDC reports that children who have obesity are more likely to have high blood pressure and high cholesterol; glucose intolerance, insulin resistance and type 2 diabetes; breathing problems like asthma and sleep apnea; joint and musculoskeletal problems; and psychological and social problems, such as anxiety, depression, low self-esteem, and bullying; among other concerns.

Consistent with NYC overall, **fewer Brooklyn high school students have obesity when compared to the nation, although the proportion has increased since 2013**. Within Brooklyn, the populations placed most at-risk for youth obesity are males and students of color.

High School Students with Obesity

	2013	2015	2017	2019
Brooklyn	10.5%	11.8%	13.0%	13.8%
New York City	11.8%	12.4%	13.5%	13.8%
United States	13.7%	13.9%	14.8%	15.5%

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

2019 High School Students with Obesity

	Brooklyn	United States
Gender		
Female	12.7%	11.9%
Male	14.8%	18.9%
Race and Ethnicity		
Asian	5.1%	6.5%
Black/African American	17.9%	21.1%
White	6.5%	13.1%
Latinx origin (any race)	17.1%	19.2%

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

Behavioral Health and Substance Use Disorder

Nearly 1 in 10 Brooklyn high school students reported an attempted suicide in 2019, a similar proportion as NYC and the nation overall. When viewed by student demographics, the population placed most at risk for attempted suicide was Black/African Americans**. Nearly 11% of Black/African American students reported an attempted suicide compared to 3% of Asian students and 8-9% of white or Latinx students.**

Suicide attempts among students may be due in part to increased feelings of sadness or hopelessness. From 2013 to 2019, the percentage of high school students who reported feeling consistently sad or hopeless increased from 27.4% to 35.9% across NYC, and from 25.5% to 35.8% in Brooklyn.

High School Students Reporting an Attempted Suicide

	2013	2015	2017	2019
Brooklyn	7.4%	7.1%	11.3%	8.9%
New York City	8.1%	8.3%	11.0%	9.2%
United States	8.0%	8.6%	7.4%	8.9%

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

2019 High School Students Reporting an Attempted Suicide

	Brooklyn	United States
Gender		
Female	8.6%	11.0%
Male	8.2%	6.6%
Race and Ethnicity		
Asian	2.9%	7.7%
Black/African American	10.7%	11.8%
White	7.8%	7.9%
Latinx origin (any race)	8.8%	8.9%

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

Brooklyn has historically had a lower prevalence of both adult and youth tobacco use. The proportion of Brooklyn high school students using traditional cigarettes declined nearly 5 percentage points from 2013 to 2019 and is lower than citywide and national averages. **Contrary to national trends, e-cigarette use also declined among Brooklyn students.** When viewed by student demographics, white students are more likely to report e-cigarette use, estimated at 23%.

High School Students Reporting Current (within past 30 days) Cigarette Use

	2013	2015	2017	2019
Brooklyn	6.8%	5.9%	4.4%	2.3%
New York City	8.2%	5.8%	5.0%	3.3%
United States	15.7%	10.8%	8.8%	6.0%

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

High School Students Reporting Current (within past 30 days) E-Cigarette Use

	2015	2017	2019
Brooklyn	16.2%	15.4%	15.2%
New York City	15.9%	17.3%	15.2%
United States	24.1%	13.2%	32.7%

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

2019 High School Students Reporting Current (within past 30 days) E-Cigarette Use

	Brooklyn	United States
Gender		
Female	14.9%	33.5%
Male	15.1%	32.0%
Race and Ethnicity		
Asian	7.7%	13.0%
Black/African American	10.7%	19.7%
White	23.0%	38.3%
Latinx origin (any race)	19.9%	31.2%

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

New York City high school students overall are less likely to use substances than their peers nationwide, and the proportion has been generally stable or declined in recent years. **Brooklyn differs from citywide trends with a slightly higher proportion of students using substances like alcohol and marijuana, and a consistently increasing proportion of students using marijuana.**

High School Students Reporting Current (within past 30 days) Marijuana Use

	2013	2015	2017	2019
Brooklyn	14.0%	14.1%	15.7%	18.6%
New York City	16.2%	15.9%	16.2%	17.7%
United States	23.4%	21.7%	19.8%	21.7%

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

High School Students Reporting Current (within past 30 days) Alcohol Use

	2013	2015	2017	2019
Brooklyn	24.5%	17.7%	16.1%	21.7%
New York City	24.7%	20.9%	17.9%	20.8%
United States	34.9%	32.8%	29.8%	29.1%

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

2019 High School Students Reporting Current (within past 30 days) Marijuana Use

	Brooklyn	United States
Gender		
Female	17.5%	20.8%
Male	19.2%	22.5%
Race and Ethnicity		
Asian	6.3%	8.5%
Black/African American	22.7%	21.7%
White	15.6%	22.1%
Latinx origin (any race)	21.5%	22.4%

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

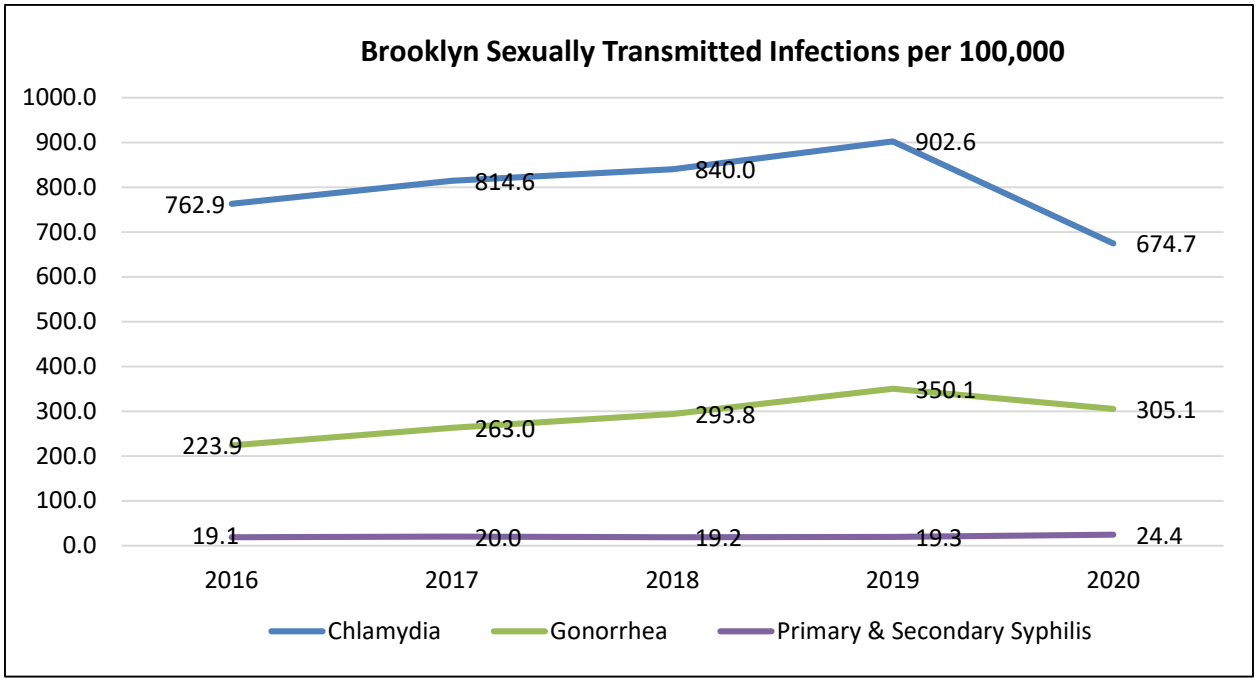
Sexually Transmitted Infections (STIs)

Consistent with 2019 CHNA findings, Brooklyn has a higher prevalence of STIs than the nation overall, closely mirroring NYC trends. **The rate of chlamydia and gonorrhea increased through 2019, but declined in 2020, likely due in part to pandemic-related factors.** When viewed by neighborhood, rates of STI infection in 2020 continued to be higher in Bedford Stuyvesant- Crown Heights, East New York, and Williamsburg – Bushwick.

2020 Sexually Transmitted Infection Rates per 100,000

	Chlamydia	Gonorrhea	Primary & Secondary Syphilis
Brooklyn	674.4	305.1	24.4
Bronx	1015.2	422.2	32.6
Manhattan	763.5	423.4	46.5
Queens	494.0	174.4	16.1
Staten Island	304.1	126.4	7.8
New York City	673.2	299.9	26.7
United States	481.3	206.5	12.7

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



Source: Centers for Disease Control and Prevention

2020 Brooklyn Sexually Transmitted Infection by Neighborhood

	Chlamydia	Gonorrhea	Primary & Secondary Syphilis
Bedford Stuyvesant- Crown Heights	1,197.70	629.5	149.6
East New York	1,150.10	501.9	117.1
Williamsburg - Bushwick	1,023.60	578.1	131.6
East Flatbush -Flatbush	920.9	395.2	84.5
Canarsie - Flatlands	752.9	262.6	37.4
Greenpoint	521.5	276	73.6
Downtown - Brooklyn Heights-Park Slope	480.1	249	45.9
Sunset Park	465.1	94	21.8
Coney Island - Sheepshead Bay	262.9	97.8	18.7
Bensonhurst - Bay Ridge	195.9	55.7	15.6
Borough Park	194.8	61.9	18.5

Source: New York City Department of Health and Mental Hygiene

HIV diagnoses have declined citywide. **From 2001 to 2020, the number of diagnoses in Brooklyn also declined from 1,572 to 411, although the borough had the highest number of diagnoses in 2020.** Brooklyn also had the highest number of individuals diagnosed with AIDS and the third highest number of people living with HIV (PLWH) in 2020.

HIV/AIDS Diagnoses and Deaths Occurring in 2020 and People Living with HIV as of Dec. 31, 2020 (Counts)

	HIV Diagnoses			AIDS Diagnoses	PLWH	Deaths
	Total	Without AIDS	With AIDS Diagnosis			
Brooklyn	411	316	95	248	30,642	512
Bronx	307	260	47	245	31,230	665
Manhattan	282	230	52	201	32,790	372
Queens	276	22	56	126	18,888	223
Staten Island	25	21	4	15	2,547	50

Source: New York City Department of Health and Mental Hygiene

HIV/AIDS Diagnoses and Deaths Occurring in 2020 and People Living with HIV as of Dec. 31, 2020 (Percent of Citywide Total)

	HIV Diagnoses			AIDS Diagnoses	PLWH	Deaths
	Total	Without AIDS	With AIDS Diagnosis			
Brooklyn	29.4%	28.0%	35.4%	27.0%	23.7%	26.5%
Bronx	22.0%	23.0%	17.5%	26.7%	24.2%	34.4%
Manhattan	20.2%	20.4%	19.4%	21.9%	25.4%	19.2%
Queens	19.8%	19.5%	20.9%	13.7%	14.6%	11.5%
Staten Island	1.8%	1.9%	1.5%	1.6%	2.0%	2.6%

Source: New York City Department of Health and Mental Hygiene

Maternal and Infant Health

Consistent with the nation, the NYC birth rate declined gradually over the past 10 years. Brooklyn also saw a declining birth rate but has a higher rate of birth than the city overall. In 2019, the citywide birth rate was highest among Asians and Pacific Islanders, followed by whites.

2019 Births and Birth Rate per 1,000 Population

	Total Live Births	Birth Rate per 1,000
Brooklyn	36,512	14.3
Bronx	17,747	12.5
Manhattan	16,122	10.0
Queens	23,363	10.3
Staten Island	5,174	10.9
New York City	110,442	13.2
United States	3,747,540	11.4

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

2019 Birth Rate per 1,000 Population by Race and Ethnicity

	Asian/Pacific Islander, Non-Hispanic	Black/African American, Non-Hispanic	White, Non-Hispanic	Latinx (any race)
New York City	15.2	11.0	14.6	12.5
United States	13.0	13.4	9.8	14.6

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

Brooklyn overall reports better birth outcomes than NYC and the nation, including fewer teen births, more pregnant people receiving early prenatal care, and fewer low birth weight or preterm births.

While Brooklyn overall experiences positive birth outcomes, these outcomes are not shared equally across communities. East New York, Brownsville, and Crown Heights South have an infant death rate that is approximately 2-3 points higher than the citywide death rate. In East New York and Brownsville, this finding is consistent with prenatal care access barriers and higher proportions of low birth weight and preterm births. All three communities also span areas experiencing more socioeconomic disparity, including previously identified zip codes 11212 and 11207. Across NYC, communities experiencing high levels of poverty have worse birth outcomes than other communities. These outcomes have generally remained unchanged or with only marginal improvement over the past decade.

Nationally, Black/African Americans experience poorer birth outcomes than other racial or ethnic groups. Notably, infant and maternal death rates are more than twice as high for Black/African Americans as whites. Disparities in infant and maternal mortality are measures of structural inequities that are at play well before a mother gets pregnant or gives birth. Therefore, upstream strategies that address the root causes of inequities can have far reaching impact on these indicators.

2019 Maternal and Infant Health Indicators

	Teen (15-19) Birth Rate per 1,000	Late or No Prenatal Care	Low Birth Weight Births	Preterm Births	Exclusive Breast Feeding*
Brooklyn	12.4	5.3%	7.7%	8.5%	42.5%
Bronx	18.5	13.1%	10.2%	10.4%	28.2%
Manhattan	7.9	5.2%	7.5%	8.4%	61.9%
Queens	9.1	7.9%	8.9%	9.1%	43.0%
Staten Island	8.0	2.0%	7.4%	9.5%	32.0%
New York City	11.8	6.8%	8.5%	9.2%	43.4%
United States	16.7	6.4%	8.3%	10.2%	NA
Asian, Non-Hispanic	2.7	5.0%	8.7%	8.7%	NA
Black/African American, Non-Hispanic	25.8	9.6%	14.2%	14.4%	NA
White, Non-Hispanic	11.4	4.5%	6.9%	9.3%	NA
Latinx (any origin)	25.3	8.2%	7.6%	10.0%	NA
HP2030 Goal	NA	NA	NA	9.4%	NA

Source: New York City Department of Health and Mental Hygiene & Centers for Disease Control and Prevention
*During the first five days of life.

2019 Brooklyn Maternal and Infant Health Indicators by Neighborhood
(In descending order by infant death rate)

	Late or No Prenatal Care	Low Birth Weight Births	Preterm Births	Infant Death per 1,000 Live Births
East New York	8.2%	11.7%	12.2%	7.5%
Brownsville	11.3%	12.0%	12.7%	7.3%
Crown Heights South	7.3%	7.6%	7.4%	6.1%
East Flatbush	12.3%	11.8%	13.7%	5.6%
Canarsie	8.8%	10.5%	11.7%	5.1%
Bedford Stuyvesant	5.9%	8.1%	8.5%	4.2%
Coney Island	9.2%	8.2%	10.4%	4.1%
Sheepshead Bay	6.1%	7.0%	8.3%	3.7%
Crown Heights North	4.6%	7.8%	8.1%	3.6%
Flatbush, Midwood	6.1%	8.0%	9.3%	3.2%
Bushwick	8.8%	7.3%	9.6%	2.7%
Bensonhurst	4.5%	6.8%	7.6%	2.6%
Sunset Park	2.1%	5.2%	7.1%	2.5%
Borough Park	1.6%	5.6%	6.3%	2.1%
Parkslope	2.0%	6.5%	6.9%	2.1%
Williamsburg, Greenpoint	2.7%	6.0%	5.7%	1.9%
Fort Greene, Brooklyn Heights	2.5%	6.1%	6.3%	1.9%
Bay Ridge	3.4%	8.0%	9.1%	1.8%

Source: New York City Department of Health and Mental Hygiene

2019 New York City Maternal and Infant Health Indicators by Neighborhood Poverty

	Low (<10%)	Medium (10-<20%)	High (20-<30%)	Very High (≥30%)
Birth rate per 1,000	10.0	11.1	12.3	15.6
Late or no prenatal care	4.4%	7.1%	7.8%	9.3%
Low birth weight births	7.6%	8.3%	8.5%	9.2%
Preterm births	8.4%	8.9%	9.2%	9.6%
Exclusive breast feeding	56.2%	44.3%	36.6%	32.0%
Infant death per 1,000 live births	2.8	3.4	3.5	5.5

Source: New York City Department of Health and Mental Hygiene

Across NYC, the infant death rate declined 14.3% since 2010. However, **consistent with the nation, the death rate is more than twice as high for Black/African Americans as other racial or ethnic groups.** Similar disparities are seen in the maternal death rate. Across NYC in 2019, there were a total of 21 maternal deaths; six of these deaths occurred in Brooklyn.

2019 Infant Deaths per 1,000 Live Births

	Infant Deaths per 1,000 Live Births
New York City	4.2
Asian, Non-Hispanic	NA
Black/African American, Non-Hispanic	8.6
White, Non-Hispanic	2.6
Latinx (any origin)	3.9
United States	5.6
Asian, Non-Hispanic	3.4
Black/African American, Non-Hispanic	10.6
White, Non-Hispanic	4.5
Latinx (any origin)	5.0
HP2030 Goal	5.0

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

2019 Maternal Deaths per 100,000 Live Births

	Total Death Rate	Black/African American Death Rate	White Death Rate	Latinx Death Rate
United States	20.1	42.0	17.6	12.6
HP2030 Goal	15.7	--	--	--

Source: Centers for Disease Control and Prevention

Research findings from secondary data analysis were compared to qualitative research findings to compare perceptions to statistical data, identify root causes, and contextualize data trends and contributing factors for identified health needs.

Key Stakeholder Survey Results

Background

An online Key Stakeholder Survey was conducted with community representatives to solicit information about perceived health priorities, perspectives on emerging health trends, including COVID-19, and recommendations to advance community health and well-being strategies. Representatives included healthcare and social service providers; public health experts; civic and faith-based organizations; policy makers and elected officials; and others representing diverse community populations.

A total of 17 individuals responded to the survey. A list of the represented community organizations and the participants' respective titles is included in Appendix B. Key stakeholder's names are withheld for confidentiality.

Key stakeholders were asked to identify any specific geographies or populations that their organization serves, as applicable. More than half of stakeholders served all of Brooklyn and/or all populations. Other stakeholders served diverse neighborhoods and populations across Brooklyn, as depicted in the tables below.

Primary Geographies Served by Key Stakeholder Survey Participants

	Number of Participants	Percent of Total
All of Brooklyn	10	58.8%
Fort Greene and Brooklyn Heights	6	35.3%
Other*	5	29.4%
Bedford-Stuyvesant	3	17.7%
Brownsville	3	17.7%
Bushwick	2	11.8%
Crown Heights and Prospect Heights	2	11.8%
East New York and Starrett City	2	11.8%
South Crown Heights and Lefferts Garden	2	11.8%
East Flatbush	1	5.9%
Greenpoint and Williamsburg	1	5.9%
Park Slope and Carroll Gardens	1	5.9%

*Other responses: Clinton Hill (2), Downtown Brooklyn, Metropolitan Area, Spring Creek.

Primary Populations Served by Key Stakeholder Survey Participants

	Number of Participants	Percent of Total
No specific focus-serve all populations	12	70.6%
African American/Black	5	29.4%
Older adults/Seniors	5	29.4%
Adolescents (age 12-18)	4	23.5%
Young adults (age 19-24)	4	23.5%
People or families with low income or in poverty	4	23.5%
Hispanic/Latinx	3	17.7%
Children (age 0-11)	3	17.7%
People with disabilities	3	17.7%
People who are uninsured or underinsured	3	17.7%
Faith-based Community	3	17.7%
Asian/South Asian	2	11.8%
New Americans/Immigrants/Refugees	2	11.8%
Pregnant or postpartum people	2	11.8%
Other*	1	5.9%
LGBTQ+ community	1	5.9%
People or families experiencing homelessness	1	5.9%
Undocumented citizens	1	5.9%

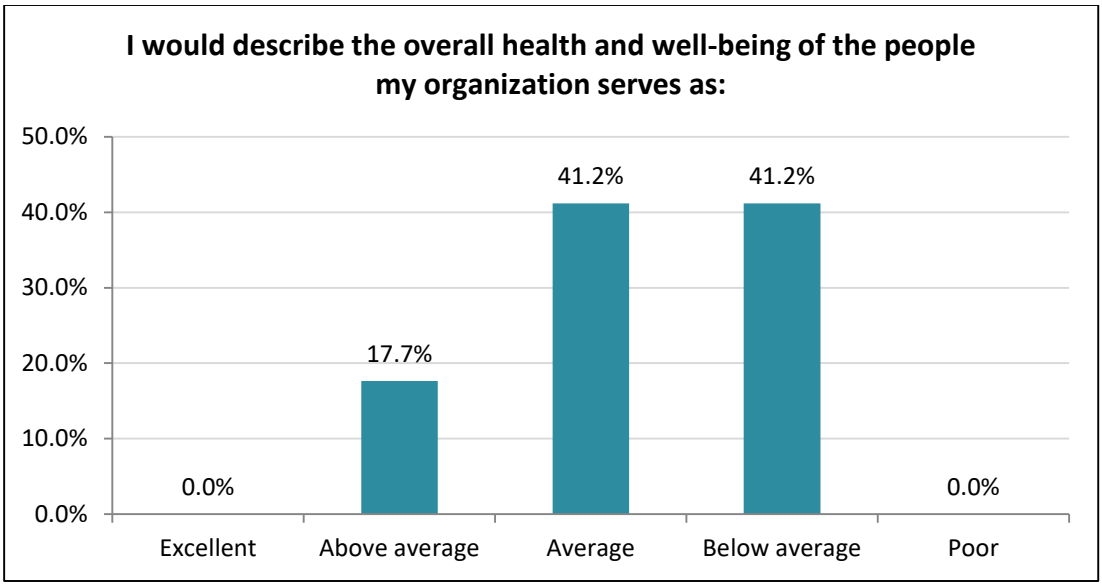
*Other responses: Previously incarcerated men.

Survey Findings

Health and Quality of Life

Thinking about the people their organization serves, key stakeholders were asked to describe the overall health and well-being of individuals and the most pressing concerns affecting them. Key stakeholders selected up to five concerns, choosing from a wide-ranging list of concerns. An option to "write in" any issue not included on the list was provided.

More than 80% of stakeholders described the overall health and well-being of the people their organization serves as "average" or "below average," indicating widespread perceptions of opportunity for health improvement. When asked to identify the top five most pressing concerns affecting the people their organization serves, more than half of key stakeholders selected economic stability (employment, poverty, cost of living). Other top identified concerns were ability to afford healthcare and racial/ethnic disparities or inequities. These findings support upstream, preventive initiatives to address the root causes of health disparities.



What are the most pressing concerns among people that your organization serves? Top Key Stakeholder Selections.

	Selected as a Top 5 Concern		Selected as #1 Concern	
	Number of Participants	Percent of Total	Number of Participants	Percent of Total
Economic stability (employment, poverty, cost of living)	9	56.3%	3	18.8%
Ability to afford healthcare	7	43.8%	4	25.0%
Racial/Ethnic disparities/inequities	6	37.5%	0	0.0%
Diabetes	5	31.3%	2	12.5%
Heart disease and stroke	4	25.0%	1	6.3%
Birth disparities (infant/maternal death, prenatal care access)	4	25.0%	0	0.0%
Availability of healthy food options	3	18.8%	1	6.3%
Mental health conditions	3	18.8%	1	6.3%
Cancers	3	18.8%	0	0.0%
Community crime	3	18.8%	0	0.0%
Housing (affordable, quality)	3	18.8%	0	0.0%
Overweight/Obesity	3	18.8%	0	0.0%
Violence	3	18.8%	0	0.0%

In a follow-up question, key stakeholders were asked to provide open-ended feedback on what the community needs to do differently to address the most pressing concerns they identified. Consistent themes included the need for more accessible and affordable healthcare for underserved individuals, and community partnerships and outreach to share health resources and collectively address health needs. Verbatim comments by stakeholders are included below.

- *"Add mental and behavioral health and wellness to the services offered."*
- *"Assist families who have no health insurance and those who are unable to afford pharmacy and specialist co-payment."*
- *"Continue to provide accessible care and rapid service to individuals who are seeking help. The more red tape, the more likely they will walk away unserved."*
- *"Create meaningful partnerships with organizations whose goals and mission is to assist people with those challenges."*
- *"Easily accessible and affordable healthcare providers with attention paid to the aging population."*
- *"Health Equity, Reduce racism."*
- *"Improve population health."*
- *"Keep trying to make healthcare as accessible and affordable as possible."*
- *"More educational programs for the community."*
- *"More information regarding human concerns."*
- *"Offer quality and affordable healthcare option. Expand services to accept healthcare plans other than the major and popular plans."*
- *"Outreach. Visit the community centers of NYCHA Developments. Talk to people in the community. Set up health screenings throughout the community. Not just Borough Hall."*
- *"Provide equitable access to community resources regardless of economic status."*
- *"Public Outreach and Engagement."*

Social Determinants of Health

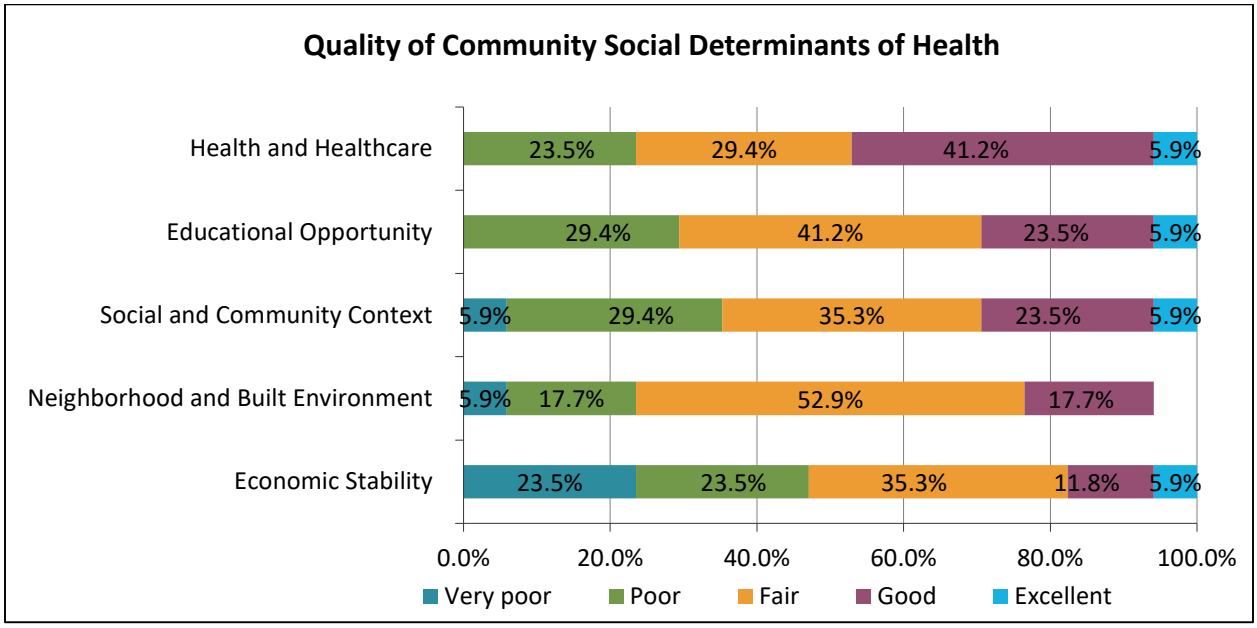
Key stakeholders were asked to rate the quality of the social determinants of health (SDoH) within the community their organization serves, focusing on the five key domains identified by Healthy People 2030: economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context. Ratings were provided using a scale of (1) "very poor" to (5) "excellent."

The mean score for each SDoH domain is listed in the table below in rank order, followed by a graph showing the scoring frequency. Health and healthcare was seen as the strongest community SDoH with 47% of stakeholders rating it as "good" or "excellent." Economic stability was seen as the weakest SDoH, with 47% rating it as "poor" or "very poor."

Nearly half (n=8) of stakeholders stated that their organization currently screens the people their organization serves for the needs related to SDoH.

Ranking of Social Determinants of Health in Descending Order by Mean Score

	Mean Score
Health and Healthcare (Consider access to healthcare, access to primary care, health literacy)	3.29
Educational Opportunity (Consider high school graduation, enrollment in higher education, language and literacy, early childhood education and development)	3.06
Social and Community Context (Consider social cohesion, civic participation, perceptions of discrimination and equity, incarceration/institutionalization)	2.94
Neighborhood and Built Environment (Consider access to healthy foods, quality of housing, crime and violence, environmental conditions, transportation)	2.88
Economic Stability (Consider poverty, employment, food security, housing stability)	2.53



Key stakeholders were invited to provide open-ended feedback on SDoH within the community and examples of how they impact resident health. Verbatim comments are included below.

- *"Access to nutritious food and affordability of housing affects families in the community in various ways. The senior community members are often forced out of housing due to the frequent increase in rent and their inability to maneuver through the various resources that may be available.*

  Unemployment and income disparity leads to instability and disfunction in the family and directly affect the children/youth who are then forced to cope with not having a stable environment to call home."

- *"Community does not participate or engage adequately to create a cohesive and meaningful response to what is important."*
- *"Illiteracy is at high levels in the communities mentioned. In addition, our youth are experiencing depression, mental illness, and high level of violence which correlates with high absences from school."*
- *"Not enough school equipment and resources."*
- *"Same issues regarding racism and discrimination."*
- *"The area is gentrified however, there are areas of extreme poverty especially with NYCHA housing."*
- *"This area is mixed, many of its neighborhoods would be rated poor or very poor, while others could be rated good or higher. Gentrification is a big factor affecting many of these neighborhoods."*

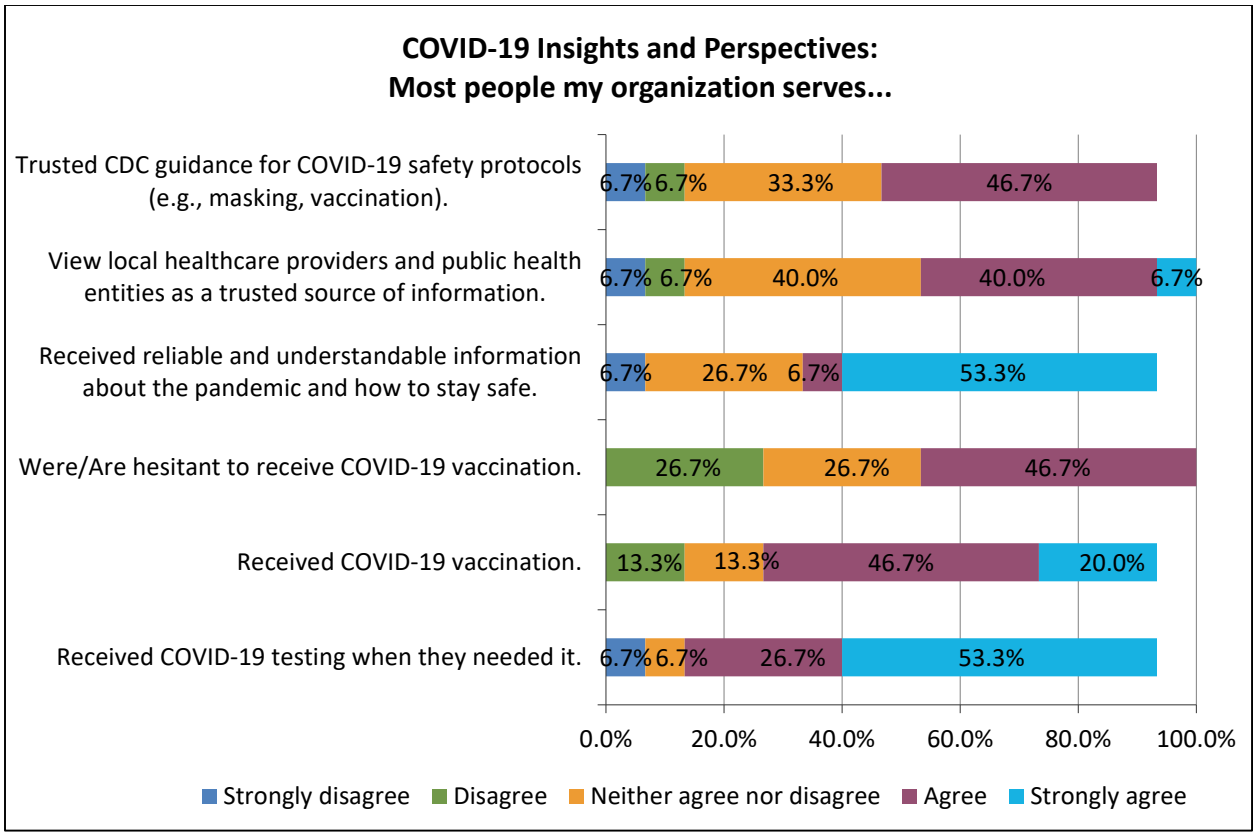
COVID-19 Insights and Perspectives

COVID-19 had a significant impact on key stakeholder organizations. Approximately 60% "agreed" or "strongly agreed" that more people needed their organization's services since the pandemic.

Thinking about the people their organization serves, key stakeholders were asked to rate their level of agreement with a variety of statements about COVID-19, including availability of testing, vaccination, and reliable information; susceptibility to misinformation; and likeliness to follow recommended safety protocols. Their responses are shown in the graph below.

Approximately 80% of key stakeholders "agreed" or "strongly agreed" that the people their organization serves received COVID-19 testing when they needed it. A similarly high proportion of stakeholders (66.7%) "agreed" or "strongly agreed" that the people their organization serves received COVID-19 vaccination, although nearly half of stakeholders "agreed" that individuals were/are hesitant to receive vaccination.

Vaccine hesitancy may be due in part to perceived lack of trust in public health and healthcare entities. Less than half of stakeholders "agreed" or "strongly agreed" that the people their organization serves trusted CDC guidance and/or local providers as sources for COVID-19 information. Friends/Family and religious/faith leaders were among the top perceived trusted sources of information.



What were the most trusted sources of information about COVID-19 among the people your organization serves? Top Key Stakeholder Selections.

	Selected as a Top 3 Source		Selected as #1 Source	
	Number of Participants	Percent of Total	Number of Participants	Percent of Total
Friends/Family	3	21.4%	8	57.1%
Religious/Faith leaders	1	7.1%	7	50.0%
Local news source/media	3	21.4%	4	28.6%
The Brooklyn Hospital Center	2	14.3%	4	28.6%
Local or state health departments	1	7.1%	4	28.6%

Key stakeholders were asked to share recommendations for how communication about COVID-19 could have been improved for the populations their organization serves. Consistent recommendations addressed the need to conduct more "on the ground," community-based communication efforts in partnership with local leaders. Verbatim comments by stakeholders are included below.

- *"24-hour vaccinations at secure healthcare facilities.*
- *"A very good job was done. Even more partnering with community institutions would have been optimal, if possible."*

- *"Base communication more on science of COVID-19."*
- *"Medical Doctors could have held open forums like NYU and Mount Sinai for residents to attend. They have no clue on what vitamins they can take, how to build their own immune systems and how to eat healthy."*
- *"More on the ground information sharing."*
- *"More use of social media and text messages."*
- *"Offer best practices for reducing misinformation, disseminating accurate health information and promoting prevention and control recommendations. Public trust is damaged when health authorities are perceived to have inappropriately downplayed the true risk posed by a dangerous pathogen or, alternatively, to have caused undue panic by overstating a potential threat."*
- *"Using the leaders in the community to distribute information."*
- *"We could have brought in additional outside professionals to address our population."*
- *"We had an amazing covid response coordinator who kept everyone up-to-date on policy changes."*

Community Resources to Impact Health

Key stakeholders were asked to identify resources or services that are needed within the community to improve health and quality of life for residents. Stakeholders rank ordered up to three free-form responses with #1 as the top missing resource or service. The following table summarizes the top identified needs by category and number of mentions by participants.

Responses by stakeholders were varied and included healthcare access, health education, state and federal funding and reimbursement for healthcare, healthy food programs, housing support, and financial assistance. A few key stakeholders also identified community engagement and support opportunities, including free community meeting space that is convenient to public transportation, grant money to support the administrative burden of social service agencies, buy-in from spiritual leaders and community-based organizations, and money for capital improvements.

What resources or services are needed within the communities your organization serves to improve health and quality of life for residents? Top Key Stakeholder Mentions.

Community Resources or Services	Number of Mentions as #1 Need	Total Number of Mentions
Healthcare access (e.g., health insurance, medical home, affordable options)	3	6
Health education and screenings (e.g., healthy food, lifestyle, diabetes and blood pressure screening)	2	4
Government funding/reimbursement for healthcare	2	3
Healthy food options/programs	1	3
Housing (e.g., affordable housing, supportive housing)	1	3
Individual financial assistance	1	2

Key stakeholders were asked to share how they communicate with their clients, including the tools they use and the most effective methods. Stakeholders use varied communication tools, with the most common tools including phone, email, print mailings, and community representatives or champions. The most effective communication tools were generally seen as phone, text message, email, and/or community representatives or champions.

Ways Stakeholders Communicate with Clients

	Stakeholders Who Use This Tool		Stakeholders Who "Agree" or "Strongly Agree" the Tool is Effective	
	Number of Participants	Percent of Total	Number of Participants	Percent of Total
Phone	14	100%	12	92.3%
Email	12	80.0%	10	83.3%
Print mailings	12	80.0%	7	58.3%
Community representatives or champions	12	75.0%	8	80.0%
Text message	10	71.4%	11	91.7%
Social media	10	66.7%	6	60.0%
Online forum or portal	8	57.1%	3	30.0%
Podcasts	3	20.0%	0	0.0%

In a follow-up question, stakeholders were asked to provide insight on how their organization is effectively communicating with clients or how communication within the community can be improved. Common themes included building trust with community members and continuing to engage them as part of the Community Advisory Board. Tailored communication to seniors is needed to overcome technology barriers.

- *"Building trust is the greatest challenge. Building trust takes (1) time, (2) consistency of messages and messengers, and (3) credible communicators."*
- *"Continue to use the opportunities offered by having an engaged Community Advisory Board."*
- *"For the elderly, communication may have to be door to door. They are not on social media or the Computer."*
- *"More positive media coverage of the good things being done by The Brooklyn Hospital Center and encouragement of Federal, State and Local Officials to support us."*
- *"One on one."*
- *"Our organization effectively communicates with our population via email, social media and online forums. We need to better address older adults who do not participate via these forums."*
- *"Using health fairs and communication thru religious organizations. Have a community advisory board."*

Lastly, key stakeholders were asked how community organizations, including TBHC, can better serve diverse communities (e.g., Black, indigenous, people of color, LGBTQ+) to achieve health and social

equity. Recommendations included advocating for and investing in these communities, creating consistent opportunities to engage with residents, and continuing to hire individuals who reflect the community and/or advance equity, among others. Verbatim comments are included below.

- *"By investing in its people and infrastructure."*
- *"Community events, monthly meetings with the resident association President and residents and partnerships."*
- *"Continuing to grow knowledge of the specific communities and specific ways health and social inequities affect them and incorporating this knowledge in decision-making about healthcare policies and programs."*
- *"During non-peak times, offer space for group meetings that allow groups like AllKings to get vulnerable, difficult-to-connect clients to gather, build trust, and learn about how to turn their life and health around."*
- *"Employing more providers who speak the language of the communities and who look like them."*
- *"Find out from those communities (focus groups in person and/or virtually) what they need and what is the most receptive way to communicate with them?"*
- *"Have developed a new reimbursement model based on a global revenue budget and measurable improvements in the community's heath."*
- *"Just be part of the community."*
- *"Meet the community member where they are. Adjust the way business is done to accommodate the community members on their individual level of need, and work on building trust."*
- *"One of the great advantages TBHC has is a diverse workforce and bod of providers. This allows concordance between patients and their providers, which improves outcomes."*
- *"Organizations have to better market themselves to this population. Show us that you offer and provide quality services."*
- *"Present great health topics of information in an interesting manner. Hire qualified healthcare professionals who work on a moral, human, ethical and compassionate scale. Modernize with upgraded state of the art equipment and facilities."*
- *"The community has to buy into the agenda. Commercials, resource health events, screenings, utilize Churches on Saturdays and Sundays, schools by speaking with the PTA. The message of being healthy has to get out. Use every resource like you're running an electoral campaign."*
- *"We need to return to the sense of family that used to be the benchmark of The Brooklyn Hospital, where the administrators and medical staff knew and recognized the local residents."*
- *"Work more closely with other organizations within the community, i.e. churches, schools."*

Community Assets to Address Identified Health Priorities

Community assets and resources, including organizations, people, policies, and physical spaces, elevate quality of life for residents. Identifying the assets that exist in Brooklyn is an important component of the CHNA, both to mobilize and employ resources to address identified health issues, as well as to address existing gaps in services.

The following section highlights available assets and resources within Brooklyn Community District 2. Brooklyn Community District 2 is one of 59 geographically exclusive, independent City agencies that serve as the most local form of representative government in NYC. Brooklyn Community District 2 covers most of TBHC's primary service area, including Downtown Brooklyn, Boerum Hill, Brooklyn Heights, Clinton Hill, DUMBO, Fort Greene, Fulton Ferry, Navy Yard, and Vinegar Hill.

The organizations listed below provide multiple, early and special education, senior, women and family, and youth services. Note: The list is not intended to be a comprehensive assessment of all services available to Brooklyn residents and may not capture the many critical programs and initiatives offered by agencies across the borough.

Multi-Service Providers

Arab-American Family Support Center 150 Court Street, 3rd Floor, Brooklyn NY 11201 Phone: 718-643-8000 Email: info@aafscny.org	**Helen Keller Services for the Blind** 57 Willoughby Street, Brooklyn NY 11201 Phone: 718-522-2122 Email: info@helenkeller.org
Brooklyn Community Services 285 Schemerhorn Street, Brooklyn NY 11217 Phone: 718-310-5600	**ICL (formerly the Institute for Community Living)** 125 Broad Street, New York NY 10004 Phone: 212-385-3030 Email: info@iclinc.net
Catholic Charities Brooklyn and Queens 191 Joralemon Street, Brooklyn NY 11201 Phone: 718-722-6000	**Partnership for the Homeless** 305 Seventh Avenue, 14th Floor, New York NY 10001 Phone: 212-645-3444 Email: info@pfth.org
Families United for Racial and Economic Equality 388 Atlantic Avenue, 2nd Floor, Brooklyn NY 11217 Phone: 718-852-2960 Email: info@furee.org	**Services for the Underserved** 463 7th Avenue, 17th Floor, New York NY 10018 Phone: 212-633-6900 Email: info@sus.org
Fifth Avenue Committee 621 DeGraw Street, Brooklyn NY 11217 Phone: 718-237-2017 Email: fac@fifthave.com	**VOCAL-NY** 80-A Fourth Avenue, Brooklyn NY 11217 Phone: 718-802-9540 Email: info@vocal-ny.org
HeartShare Human Services of New York 12 Metrotech Center, 29th Floor, Brooklyn NY 11201 Phone: 718-422-4200 Email: info@heartshare.org	

Early and Special Education

Alonzo A. Daughtry Memorial Day Care Center 565 Baltic Street, Brooklyn NY 11217 Phone: 718-596-1993 Email: info@daughtrydaycare.org	**Mary McDowell Friends School** 20 Bergen Street, Brooklyn NY 11201 Phone: 718-625-3939
Child Development Support Corp. 352-358 Classon Ave, Brooklyn NY 11238 Phone: 718-398-2050 Email: info@cdscnyc.org	**The Sterling School** 299 Pacific Street, Brooklyn NY 11201 Phone: 718-625-3502 Email: sterlingschool@msn.com
Brooklyn Autism Center 57 Willoughby Street, 3rd Floor, Brooklyn NY 11201 Phone: 718-554-1027 Email: info@brooklynautismcenter.org	**Young Minds Child Care Center** 972 Fulton Street, Brooklyn NY 11238 Phone: 718-622-8622
League Education & Treatment Center 483 Clermont Avenue, Brooklyn NY 11238 Phone: 718-643-5300 Email: info@leaguecenter.org	

Health

The Brooklyn Hospital Center* 121 DeKalb Avenue, Brooklyn NY 11201 Phone: 718-250-8000 *Additional services listed below	Lafayette Child Health Clinic 434 DeKalb Avenue, Brooklyn NY 11205 Phone: 718-638-8258
Cumberland Diagnostic and Treatment Center 100 North Portland Avenue, Brooklyn NY 11205 Phone: 718-260-7500	**START Treatment & Recovery Center** 22 Chapel Street, Brooklyn, NY 11201 Phone: 718-260-2900 Email: info@startny.org

Senior Centers and Services

Cobble Hill Health Center 380 Henry Street, Brooklyn NY 11201 Phone: 718-855-6789	**RAICES Times Plaza Neighborhood Senior Center** 460 Atlantic Avenue, Brooklyn NY 11217 Phone: 718-694-0895
Farragut Senior Center 228 York Street, Brooklyn NY 11201 Phone: 718-422-1069	**St. Charles Jubilee Senior Center** 55 Pierrepont Street, Brooklyn NY 11201 Phone: 718-855-0326
Grace Agard Haywood Senior Center 966 Fulton Street, Brooklyn NY 11238 Phone: 718-638-6910	**Willoughby Neighborhood Senior Center** 105 North Portland Avenue, Brooklyn NY 11205 Phone: 718-875-1011
Heights and Hill Community Council 57 Willoughby Street, 4th Floor, Brooklyn NY 11201 Phone: 718-596-8789 Email: info@heightsandhills.org	**Wyckoff Garden Neighborhood Senior Center** 280 Wyckoff Street, Brooklyn NY 11217 Phone: 718-237-1802

Women and Families

Center for Anti-Violence Education 327 7th Street, Brooklyn NY 11215 Phone: 718-788-1775	**Safe Horizon** 50 Court Street, 9th Floor, Brooklyn NY 11201 Phone: 718-624-2350 Email: help@safehorizon.org
Brooklyn Family Justice Center 350 Jay Street, 16th Floor, Brooklyn NY 11201 Phone: 718-250-5111	**La Leche League Fort Greene + Clinton Hill** Phone: 718-643-9219
Planned Parenthood of New York City **Joan Malin Brooklyn Health Center** 44 Court Street, 6th Floor, Brooklyn NY 11201 Phone: 212-965-7000	**Brooklyn Perinatel Network** 259 Bristol Street, Suite 242, Brooklyn NY 11212 Phone: 718-643-8258

Youth Services

Children of Promise, NYC 54 MacDonough Street, Brooklyn NY 11216 Phone: 718-483-9290 Email: info@cpnyc.org	Madison Square Boys & Girls Club **Navy Yard Clubhouse** 240 Nassau Street, Brooklyn NY 11201 Phone: 718-625-4295

The Brooklyn Hospital Center Clinical Services

The Brooklyn Hospital Center provides the finest primary and subspecialty medical care to the community, including the following available services to address the identified CHNA priorities.

Priority: Prevent Chronic Disease (preventive care and management, diabetes and heart disease)

- The Brooklyn Heart Center
- Division of Endocrinology
- Myrtle Avenue Dialysis (new)
- Neighborhood Family Health Centers (accept Medicare, Medicaid, most insurances; provide financial assistance)
- Smoking Cessation
- Women, Infants and Children (WIC) Program Centers

Priority: Prevent Communicable Diseases (HIV and HCV)

- Program for AIDS Treatment and Health (PATH) Center: Free HIV counseling and testing, HIV prevention services (PrEP/PEP), Hepatitis C co-infection clinic, Medical case management, Family program, Nutritional guidance, Pharmacy consultation, OB/GYN services, Mental health services, Dental care, Social work, Community education and outreach, Retention and reengagement programs, Support groups, Peer support services, Consumer advisory board

Priority: Promote Well-Being and Resilience

- Telepsychiatry: Provide virtual psychiatry visits to patients with anxiety and/or depression
- The Brooklyn Adolescent Center: Full spectrum of adolescent pediatric services and specialties, including mental health and substance use support
- The Child Life Program: Addressing the unique emotional and developmental needs of pediatric patients and their families during medical procedures and exams by preparing children and providing coping strategies

Evaluation of Impact from 2019 Community Service Plan

In 2019, TBHC completed a CHNA and developed a supporting three-year Community Service Plan (CSP) for health improvement. The CSP outlined strategies for measurable impact on identified priority health needs, including Prevent Chronic Diseases and Prevent Communicable Diseases. The priority needs aligned with the top needs of Brooklyn residents and the New York State Prevention Agenda.

Within six months of the release of the 2019 Implementation Plan, the COVID-19 pandemic shifted the priorities of our community and TBHC adapted our work to respond to the emergent needs of residents. The following sections outline our work to impact the 2019 CHNA priority health areas and respond to COVID-19 in our communities.

Priority: Prevent Chronic Diseases

During 2020, many patients declined or delayed preventative cancer screenings due to COVID-19 concerns. TBHC initiated the following efforts to identify and treat cancers earlier, while reducing cancer deaths:

- Completed outreach activities for breast, cervical, and colorectal cancer screenings to the community
- Provided breast, cervical, and colorectal cancer screenings to uninsured and underinsured persons throughout Brooklyn, facilitated by the Brooklyn Cancer Services Program. Exceeded state goal for comprehensive cancer screening for women 50 years and older. Coordinated with The Brooklyn Cancer Services Program to provide mammograms on a mobile van for patients not able to travel for screening.
    - Percent of women 50 and older with Comprehensive (Breast, Cervical, and Colorectal) Cancer Screening:
        - 2021 and 2022 New York State Department of Health Goal – 50%
        - 2021 Brooklyn Cancer Services Program – 73%
        - January to November 2022 Brooklyn Cancer Services Program – 69%
- Recruited cancer specialists to TBHC to improve access and outcomes, including:
    - One GI provider to provide diagnostic, treatment, and screening programs for colon cancer
    - One gynecologist to treat various GYN cancers
- Screening rates for eligible patients who received primary care at TBHC show the following outcomes:

Cancer screening	January – December 2021	January – October 2022
Breast	76%	81%
Cervical	67%	69%

TBHC continues to be a leader in providing cardiovascular care, including congestive heart failure (CHF). CHF treatment programs include a designated heart failure clinic and educational programs and protocols for both residents and providers. The CHF programs are aligned with quality measures outlined by the American Heart Association and American College of Cardiology Foundation. The programs aim to decrease readmissions, particularly for Medicaid patients who comprise more than half of TBHC patients. Since the 2019 CHNA, TBHC continued percutaneous cardiac interventions (PCI) for local residents, allowing faster access and better outcomes delivered close to home.

Diabetes care and management was a 2019 CHNA identified priority area. TBHC implemented several programs and protocols to improve diabetes management, including:

- Establishment of a multi-disciplinary team approach, including endocrinology, primary care, nutrition, pharmacy, and outreach support, in partnership with Mount Sinai Hospital. The approach emphasizes patient goals, addressing barriers to goal attainment, and updated patient medication regimens to improve diabetes outcomes.
    - Patients who received diabetes care management from July 2020 to October 2022 had an average improvement in A1c of -1.8%. Improving A1c by 1% has been observed to reduce risk of death by 19%; risk or heart attack and stroke; and global health care costs.
- Recruited a nutritionist to improve access and outcomes.
- Provided online education opportunities for nutrition and diabetes management.
- Rates for eligible patients with diabetes who received primary care at TBHC show the following outcomes:

Diabetes Management	January – December 2021	January – October 2022
A1c Less than 9 (Good control)	83%	87%
Eye Exam	69%	73%
Nephropathy Testing	93%	84%

Access to quality preventive and specialty care services is needed to prevent and manage chronic conditions. TBHC implemented several care access initiatives, outlined below.

Virtual Visits
In 2020, the COVID-19 pandemic impacted the way patients received care. To adapt to emerging clinical precautions and patient care needs, TBHC completed visits via telephone and video. 39,778 visits were completed from March 2020 to November 2022. While some patients prefer to have in-person office visits, the ability to provide virtual visits will be continued to support patients who may not be able to come in person and to avoid delays in care.

Psychiatric Services
Medical providers increasingly have shared insights in seeing more patients that have anxiety or depression with onset or exacerbation due to the COVID-19 pandemic. Referring patients to external organizations with long wait times or limited insurance options posed a challenge to addressing

behavioral health needs. In 2022, TBHC added a psychiatric nurse practitioner to support patients with anxiety and/or depression. This service is completed virtually, where the psychiatric nurse practitioner meets with patients via video or telephone. Patients who do not have a device to participate in the visit remotely can come to TBHC and be set-up to meet with the provider virtually. Providing virtual psychiatric care is appealing to patients as it reduces perceptions of stigma in seeking psychiatric support.

WIC Centers

TBHC is the largest provider of the Women, Infants and Children (WIC) Program in Brooklyn, with seven locations throughout the borough. The sites provide nutrition education, breastfeeding, benefits for nutritious food, and healthcare services to pregnant and breastfeeding women as well as infants and children up to age 5. Current monthly enrollment in the TBHC WIC program is between 20,000 to 23,700 from 2018 to 2022.

Community Prevention, Education and Screening Programs

From January 2019 to November 2022, TBHC participated in more than 382 events and activities to improve the health and wellness of community members. Virtual events were incorporated as part of community outreach and partnerships starting in 2020. Health promotion programs encompassed broad health topics, as outlined below, and often aligned with National Health Observances, i.e., American Heart Month (February), Colorectal Cancer Awareness Month (March), Men's Health Month (June), American Diabetes Month (November), and World AIDS Day (December).

Health Fairs and Screenings	Health Lectures/Education	Kids Health
• Ambulance Services • Asthma • AIDS/HIV testing • Blood pressure • BMI and Obesity • Cholesterol • Dental care • Glucose • Hearing • Nutrition Education • Podiatry • Vascular health	• Colon cancer • COVID-19 and vaccines • Death and grieving • Diabetes • Heart disease prevention • HIV prevention • Hospice care • Lunch and Learn sessions • Lung Cancer • Medication management • Men's health: prostate cancer • Orthopedics/Sports Medicine • Pain management • Sexual health/contraceptives • Smoking cessation • Stress management • Stroke • Weight loss- bariatric surgery • Women health: OB/GYN, mammograms, breast health • Wound care	• Asthma • Breastfeeding • Dental care • General health • Nutrition • Vaccines/Immunization • WIC participation

TBHC provided free screenings to more than 2,920 community members. These screenings included, but were not limited to blood pressure, cholesterol and glucose. Many of these programs were offered in collaboration with community groups and neighbors, including the following:

- Adult Learning Center
- Arab America Association
- Arab American Family Support Center
- Assemblyman
- Atlantic Terminal Family and Friends
- Barclay Center
- Beacon Community and Family Life Center
- Bed-Sty Alive
- Boys and Girls Club
- Brooklyn Academy of Music (BAM)
- Brooklyn Adult Learning Center
- Brooklyn Borough President's Office
- Brooklyn Center for Independence of the Disabled
- Brooklyn Community Services
- Brooklyn Libraries
- Brooklyn Perinatal Network, Inc.
- Brooklyn STEAM Center
- CAMBA
- Caribbean Women's Health Association
- Chase Morgan
- Churches i.e. Bedford Central Presbyterian Church, Emmanuel Baptist Church, St. Nicholas Cathedral Church
- Colleges & Schools i.e. Al-Noor School, Khalil Gibran International Academy School, Medgar Ever College, St. Francis College, St. Joseph's College
- Community Centers
- Community Boards 2, 3, 9, and 16
- Con Edison
- Community of People Organization (COPO)
- Daycare Centers
- Department of Parks and Recreation
- Downtown Brooklyn Partnership
- Fire Department of New York (FDNY)
- First Atlantic Terminal Housing Corporation
- Flatbush Learning Center
- Fort Greene Park Conservancy
- Ingersoll Houses
- Moroccan American House Association
- Mosques i.e. Masjid Al-Ihsan, Masjid Al- Taqwa
- Myrtle Avenue Brooklyn Partnership
- National Association of Negro Business and Professional Women's Club
- National Night Out - 88 Precinct
- New Directions Alcoholism and Substance Abuse Treatment Program
- NYC Administration for Children's Services
- NYC Department of Education
- NYC Department of Probation
- NYC Employees Retirement System
- NYC Housing Authority (NYCHA)
- NYC Mayor's Office
- Office of NYC Council Majority Leader
- Police Athletic League
- Police Precincts
- Refugee and Immigrant Center for Education and Legal Services (RAICES)
- Seniors Centers
- Sisters of Brooklyn New York Muslim Youth Center
- Shelters
- Sonny Archer Law Enforcement Scholarship Foundation
- Sororities and Fraternities
- Street fairs
- Success Community Garden
- The Brooklyn Plaza Medical Center
- U.S. District Court (District Attorney office)
- YMCAs

Priority: Prevent Communicable Diseases

The PATH Center at TBHC continues to meet the needs of HIV-positive and at-risk Brooklyn residents, serving a largely BIPOC and LGBTQIA population. Since becoming a NYS Department of Health Designated AIDS Center in 1998, TBHC has created a reputation in the Brooklyn/NYC community for providing high-quality, non-judgmental, trauma-informed healthcare services to individuals living with or at-risk of HIV/AIDS. Through core medical services, medical case management, nutrition, linkage to care, and HIV testing and referrals, we assist patients in achieving positive health outcomes that include viral suppression, retention, and HIV prevention.

- TBHC has not seen any HIV positive births in 10 years.
    - The PATH Center meets on a monthly basis with members of the OB-GYN department to discuss all pregnant HIV positive patients to ensure cross-departmental collaboration.
- PATH Center provides HIV care and treatment to over 1,100 patients annually:
    - In 2021, 85% of HIV+ patients had a suppressed viral load (<200 copies/mL). Our goal for 2022 and beyond is 90%.
    - In 2021, our goal for retention in care (at least 2 medical visits per year with one occurring in the first 6 months and one in the second 6 months) was 80% and we achieved 92%; our goal for 2022 and beyond is 85%.
    - All patients receive mental health, substance use, and nutrition screenings with referrals for additional services/treatment as needed.
    - All patients receive health education/risk reduction and treatment adherence counseling to support treatment adherence, retention, and HIV prevention.
- We continue to provide free HIV rapid testing to increase HIV testing and diagnosis among target groups and facilitate swift linkage to care and treatment among those who test positive.
- TBHC partners with the Council on Adoptable Children (COAC) to provide high-intensity case management services to high-needs patients. These services include accompaniment to medical and social services, reminder calls and scheduling, modified daily observed therapy and ongoing care coordination with PATH staff.
- TBHC continued the PrEP (pre-exposure prophylaxis) program with the goal of engaging at least 50 patients each year. The PATH Center partners with the Emergency Department to connect PEP patients to follow-up care and screens all at-risk patients for PrEP. We provide PrEP education and outreach throughout TBHC and the Brooklyn community via community presentations, tabling, HIV testing, and networking. We aim to expand our work with the Emergency Department by increasing referrals for PrEP-eligible patients to the PATH Center in 2023.

2022-2024 Community Service Plan

Prioritization Process and Identified Priorities

To work towards health equity, it is imperative to prioritize resources toward the most pressing and cross-cutting health needs within the community. In assessing and prioritizing community health needs, TBHC conducted an electronic survey of key stakeholders to solicit and receive input from persons who represent the broad interests of the community, as well as underserved, low-income, and minority populations. These individuals provided wide perspectives on health trends, expertise about existing community resources available to meet those needs, and insights into service delivery gaps that contribute to health disparities and inequities.

TBHC engaged in conversation with its Community Advisory Board to better align the CSP with existing and planned community initiatives. Additionally, TBHC engaged with internal clinical leaders to create alignment with system population health management strategies.

The 2022 CHNA continued to support Prevent Chronic Diseases and Prevent Communicable Diseases as significant needs for Brooklyn residents. These needs are consistent with those identified as part of the 2019 CHNA. The CHNA also identified Promote Well-Being and Prevent Mental and Substance Use Disorders as a need for residents. While not a leading provider of mental and substance use disorder services, TBHC is committed to partnering with community residents and agencies to address these areas. The 2022 CHNA identified needs are aligned with the New York State Prevention Agenda.

TBHC 2022-2024 Community Service Plan Priority Areas

- **Prevent Chronic Diseases**
  - Focus Area: Preventive care and management of diabetes and heart disease
- **Prevent Communicable Diseases**
  - Focus Area: Human Immunodeficiency Virus (HIV) and Hepatitis C Virus (HCV)
- **Promote Well-Being and Prevent Mental and Substance Use Disorders**
  - Focus Area: Promote well-being and resilience

TBHC 2022-2024 Community Service Plan

The 2022-2024 CSP builds upon previous health improvement activities, while advancing new opportunities that recognize emerging health challenges and a focus on health equity. The following is a summary of TBHC's 2022-2024 CSP, outlining goals, objectives, strategies, and process measures for addressing the identified priority areas.

Priority Area: Prevent Chronic Diseases
Focus Area: Preventive Care and Management

Goal: Increase early detection of diabetes and prediabetes.
Objectives:

- Increase the percentage of adults who had a test for high blood sugar or diabetes within the past three years.
- Increase the percentage of adult Medicaid members who had a test for high blood sugar or diabetes within the past three years.

Intervention Strategies	Process Measures
Implement policies and practices to test for prediabetes and risk for future diabetes in adults with obesity or overweight and one or more additional risk factors.	• Number of at-risk patients screened for diabetes or prediabetes • Number of patients identified with undiagnosed diabetes or prediabetes and referred for follow-up care
Partner with community agencies to provide education and screenings, targeting populations placed at risk.	• Number of community events and participants • Number of newly diagnosed participants and disease stage • Percent of diagnosed participants receiving follow-up care

Goal: Promote the use of evidence-based care to manage chronic diseases, including cardiovascular disease and diabetes, and reduce disparities in prevalence and death rates.
Objectives:

- Decrease the percentage of adult patients with diabetes whose most recent HbA1c level indicated poor control: All adults, all Medicaid members, Black/Latinx Medicaid members.
- Decrease the percentage of adult patients with cardiovascular disease whose most recent assessment indicated poor control: All adults, all Medicaid members, Black/Latinx Medicaid members.
- Increase participation in TBHC-operated WIC programs from 23,000 (2019) and 24,500 (2022), with 42% of members enrolled in the first trimester.

Intervention Strategies	Process Measures
Promote a team-based approach (including endocrinology, primary care, nutrition, and pharmacy) for diabetes care and management.	• Number of patients receiving regular care and recommended screenings (e.g., eye care, nephropathy) • Number of patients with reported better control of their condition based on HbA1c levels • Tracking and monitoring outcomes across populations, responding to disparities

Intervention Strategies	Process Measures
Provide evidence-based self-management interventions for individuals with diabetes and/or congestive heart failure, including educational classes, nutrition assistance, and other support.	• Number of interventions and participants • Number of patients with reported better control of their condition • Change in knowledge and/or disease management among participants • Tracking and monitoring outcomes across populations, responding to disparities
Promote evidence-based medical management for heart attacks with a dedicated Chest Pain Center to improve early assessment, diagnosis, and treatment.	• Receipt of Chest Pain Center accreditation from The American College of Cardiology • Hospital readmission rate for patients with heart attacks • Reduction in length of stay
Provide multidisciplinary care addressing the health, social, and spiritual needs of older adults, including long-term planning, caregiver support, and house calls.	• Hospital utilization (readmissions, ED visits) for patients • Patient perceived functional ability/independence
In the community-setting, improve self-management of chronic conditions by addressing SDoH.	• Number of patients screened for SDoH needs • Number of patients referred for and receiving services • Number of community events completed that support SDoH
Provide nutrition education, breastfeeding support, and nutritious foods to improve healthy lifestyles and nutritional intake among at-risk women, infants, and children.	• Number of WIC participants who received benefits • Changes in health outcomes among participants, 2025 targets: 1. 92% breastfeeding initiation rates (infants only) 2. 98% fruit and vegetable (Farmers Market Nutrition Program) issuance 3. 17% breastfeeding at 6 months 4. 39% of postpartum women are overweight 5. 3% of infants (not breastfeeding) are low birth weight 6. 1% of infants (breastfeeding) are low birth weight 7. 9% pregnant women enrolled in WIC at 3rd trimester
Engage the Community Advisory Board to adopt organizational practices that advance equity (e.g., culture competence of providers, diverse staff recruitment, patient experience).	• Opportunities for leadership, staff, and providers to participate in trainings • Opportunities for qualitative input from patients, staff, providers, and community stakeholders • Recruitment and hiring practices that reflect the community
Expand telehealth and other technology-based healthcare services to improve access to care.	• Number of telehealth services and utilization • Community partnerships to promote digital equity (internet and device access, digital literacy)

Priority Area: Prevent Communicable Diseases
Focus Area: Human Immunodeficiency Virus (HIV)

Goal: Decrease HIV morbidity and increase viral suppression among individuals living with HIV.
Objectives:

- Increase the percentage of patients living with diagnosed HIV who receive care with suppressed viral load, with a focus on disparities among Medicaid, Black, and Latinx members.
- Increase the number of Medicaid patients with HIV who receive supportive, wraparound health and social services.
- Ensure HIV testing, viral load monitoring, and HIV treatment for 100% of pregnant HIV-positive patients.
- Increase the number of Emergency Department patients seen for HIV testing who are referred for Pre-Exposure Prophylaxis (PrEP) services.

Intervention Strategies	Process Measures
Link and retain persons newly diagnosed with HIV and/or struggling with treatment adherence to care, to maximize viral suppression.	• Number of patients with 2+ HIV medical visits per year • Number of patients achieving viral load suppression • Tracking and monitoring outcomes across populations, responding to disparities
Facilitate supportive, wraparound services for Medicaid patients living with HIV (e.g., mental health and substance use disorder treatment, nutrition services, screenings).	• Number of patients receiving case management services • Number of patients screened for additional health and social service needs • Number of patients referred for and receiving services • Number of patients achieving viral load suppression
Coordinate care services for pregnant HIV-positive people to prevent mother-to-child transmission and improve the mother's health.	• Number of HIV-positive pregnant people receiving prenatal HIV testing and appropriate medication • Number of HIV-positive pregnant persons followed by PATH OB rounds • Maintaining zero HIV-positive births • Referrals for WIC services as applicable
Facilitate access to PrEP for high-risk persons to keep them HIV-negative.	• Number of patients clinically assessed and prescribed PrEP, by patient demographic factors, to ensure equal access
Provide an Emergency Department warm handoff program to refer patients seen for repeat HIV testing or STI treatment for PrEP services.	• Proportion of identified patients referred to PrEP services • Number of referred patients seen for PrEP services • Number of patients diagnosed with HIV and connected to treatment services
Partner with community agencies to provide education and outreach that promotes HIV prevention and screening, targeting populations placed at risk.	• Number of community events and participants • Change in knowledge and/or awareness among participants

Focus Area: Hepatitis C Virus (HCV)

Goal: Increase the number of people treated for HCV.
Objectives:

- Increase the number of patients tested for HCV and connected with appropriate treatment services.

Intervention Strategies	Process Measures
Provide HCV testing as part of routine care for HIV-positive and PrEP patients.	• Number of patients tested for HCV • Proportion of HCV-positive patients referred for and receiving follow-up care
Partner with community agencies to provide education and outreach that promotes HCV prevention and screening, targeting populations placed at risk.	• Number of community events and participants • Number of screenings • Change in knowledge and/or awareness among participants

Priority Area: Promote Well-Being and Prevent Mental and Substance Use Disorders
Focus Area: Promote Well-Being and Resilience

Goal: Strengthen opportunities to build well-being and resilience across the lifespan.
Objectives:

- Improve access to mental health services.
- Support access to mental wellness services within the community.

Intervention Strategies	Process Measures
Provide grant-funded telepsychiatry services.	• Utilization of telepsychiatry services by patient demographics • Average wait time for services • Patient satisfaction and experience feedback • New partnerships with other telepsychiatry services
Grow resilient communities through engagement, activation/mobilization, and celebration.	• Partnerships, resource sharing with Brooklyn Community Board 2 and Resident Associations • New partnerships with underserved communities and/or populations placed at risk (e.g., older adults, Neighborhood Health Action Centers) • Number of community events and participants
Work with community partners to support community mental health education and mental wellness programs (e.g., walking programs, yoga, physical activity).	• Number of community events and participants • Change in knowledge and/or self-perceived mental well-being

Community and Partner Engagement

TBHC is dedicated to reaching beyond the hospital's walls to our neighbors and community partners so that we can provide needed services directly to our community and, in turn, hear from them about their healthcare needs. TBHC is an active partner with places of worship, senior citizen centers, schools, elected officials, local police precincts, cultural and community institutions, community boards, and our very own Community Advisory Board, among others. Our goal is to create community-based, community-focused, and community-driven programs that will be sustainable and impactful and will serve to improve the health of our families through promotion and education of healthy lifestyles.

One of the ways that TBHC keeps connected to the community is through our Community Advisory Board (CAB). The CAB is a diverse group of individuals with strong ties to the community we serve. Each advisor has a keen understanding of how our hospital works. This knowledge enables us to tailor our programs and services so that TBHC targets the healthcare needs of residents in our neighborhoods.

The TBHC CHNA Planning Committee, in partnership with the CAB, will meet regularly to review CSP process measures and maintain an active workplan, as provided by the New York State Department of Health. The workplan is submitted annually and describes the actions TBHC has taken to address the identified priority areas.

TBHC thanks our community partners for their commitment to the health and well-being of Brooklyn residents and welcomes the opportunity to continue to strengthen our community together.

CHNA and CSP Dissemination Plan

TBHC intends to electronically disseminate the full CHNA and CSP to all individuals and organizations that participated in the Key Stakeholder Survey. The CHNA and CSP will also be sent electronically to the TBHC CAB, among other partners.

TBHC made the CHNA and CSP available on its website, and posted their release on social media outlets. TBHC will maintain a printed copy of the CHNA and CSP at the hospital at all times for public inspection upon request.

Appendix A: Public Health Secondary Data References

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Appendix B: Key Stakeholder Survey Participants

- AllKings, Wisdom Circle Chair
- Child Development Support Corporation, Executive Director
- Drako, Vice President
- Emmanuel Baptist Church, Director of Volunteer Services
- Ingersoll Resident Association Inc, President
- Kings County District Attorney, Senior Associate Director
- KPMG, Partner
- New York City Health and Hospitals Corporation, Contact Tracer
- Not Applicable, Not Applicable
- NYC Metropolitan WIC Association, Board Member
- The Brooklyn Hospital Center, President & CEO
- The Brooklyn Hospital Center, Trustee
- The Brooklyn Hospital Center, Trustee
- The Brooklyn Hospital Center Community Advisory Board, Secretary
- The Brooklyn Hospital Center Community Advisory Board, Vice Chair
- The Brooklyn Hospital Center Community Advisory Board, Board member
- University Towers Apartment Corporation, President