

Farmers' Markets — Bringing Fresh, Nutritious Food to the South Bronx



A Neighborhood Report from the
Bronx District Public Health Office

Key Findings

1. Most South Bronx food shoppers underestimate the recommended amount of fruits and vegetables that should be consumed daily as part of a healthy diet.
 - Fewer than one in seven people knows five or more servings of fruits and vegetables a day is recommended.¹
2. Fresh, affordable produce is difficult to find in the South Bronx.
 - Four in 10 respondents reported it is either difficult or impossible to find high quality, affordable produce in their neighborhoods.
3. South Bronx residents who shop at farmers' markets eat more fruits and vegetables than those who do not frequent farmers' markets.
4. South Bronx food shoppers' main concerns are quality, variety and cost.
 - Farmers' markets are rated more favorably than area supermarkets on these three variables.
5. Although food stamps are an important payment method at supermarkets, they are underutilized at farmers' markets.
 - Three in 10 people use EBT (electronic benefits transfer)/food stamps at supermarkets, compared with fewer than one in 10 at farmers' markets.
 - Almost two in 10 respondents pay for groceries at farmers' markets with Women, Infants, and Children's (WIC's) Farmers' Market Nutrition Program (FMNP) coupons.

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This Report

A diet consisting of at least five servings (2 to 3 cups)² of fruits and vegetables daily decreases the risk of heart disease, stroke, obesity, diabetes and certain cancers.^{2,3}

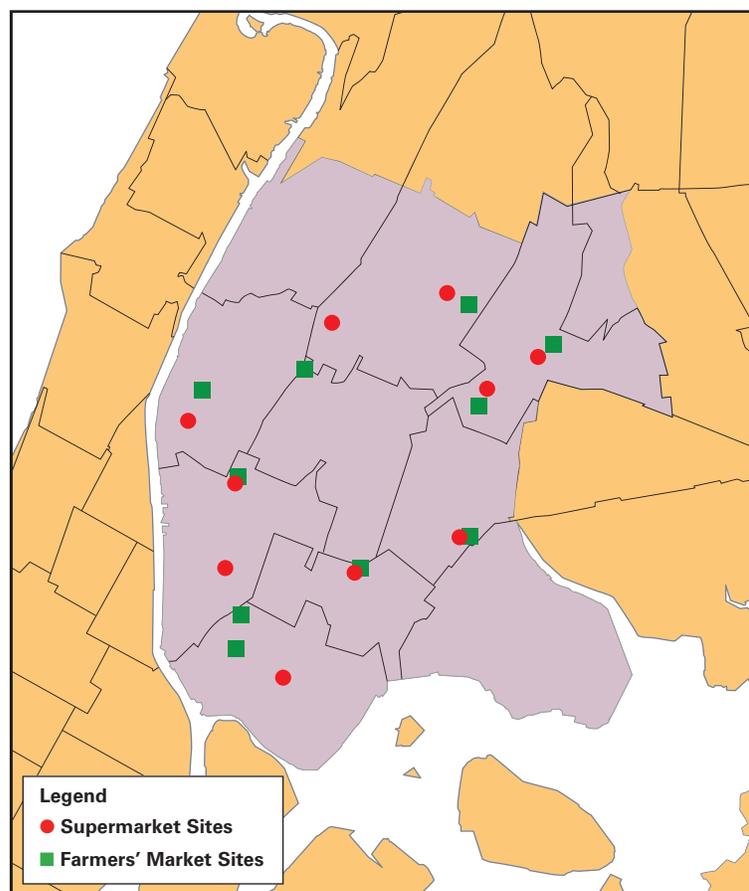
However, not all New Yorkers have the opportunity to eat healthfully. There is ample evidence that individuals living in economically disadvantaged areas in New York City and elsewhere have limited access to fresh, affordable produce.^{4,5} These communities are served by many bodegas and convenience stores that often do not have the capacity to sell fruits, vegetables, non-fat milk and other healthful items.

Unlike other low-income neighborhoods with limited access to fresh produce, the South Bronx has more than a dozen farmers' markets operating between the months of July and November. This report examines residents' knowledge and attitudes about diet and availability of healthy food, and the role that farmers' markets can play in helping South Bronx residents gain access to fresh, affordable produce.

Methods

From June through August of 2007, 421 South Bronx residents were interviewed by Bronx District Public Health Office (DPHO) staff at 11 local farmers' markets and 10 area supermarkets. Interviews were conducted in both English and Spanish, and lasted an average of 25 minutes. **Figure 1** depicts the survey locations.

Figure 1: Interview location sites



Sample demographic and health-related data from those surveyed in this study were compared to information from the 2000 Census and the NYC Community Health Surveys to determine whether this convenience sample was representative of all South Bronx residents over the age of 18 years (**Table 1**).

The study sample individuals and the South Bronx population were similar in terms of income, race/ethnicity, employment status, body mass index (BMI), and self-reported health status and diabetes diagnosis. Compared with the population of the South Bronx, the sample was older, better educated, and consisted of more women and people who reported high cholesterol, high blood pressure and having a personal doctor.

	Sample Population	South Bronx*
Gender		
Women	75.1%	56.0%
Men	24.9%	44.0%
Education		
Less than high school	40.3%	48.5%
High school graduate	29.1%	24.0%
Some college	19.5%	20.2%
College graduate	11.1%	7.2%
Employment status		
Employed	38.8%	37.9%
Not employed	61.2%	62.1%
Annual Household Income		
Less than \$10,000	30.8%	32.9%
Less than \$35,000	79.6%	72.5%
Race/Ethnicity		
Black/African-American	36.8%	38.5%
Hispanic	57.3%	62.6%
Age (years)		
25 – 44	38.9%	46.2%
45 – 64	42.8%	26.2%
65 or older	11.5%	10.2%
Health Indicators (self-reported)		
Diabetes	15.9%	14.2%**
High blood pressure	38.8%	30.1%**
High cholesterol	38.6%	24.7%†
Overweight/obese	69.8%	67.4%**
Fair/poor health	28.1%	32.2%**
Has a personal MD	86.5%	72.1%**

* Source: Unless otherwise noted, South Bronx data from 2000 United States Census⁶

** Source: 2006 New York City Department of Health Community Health Survey⁷

† Source: 2002 New York City Department of Health Community Health Survey

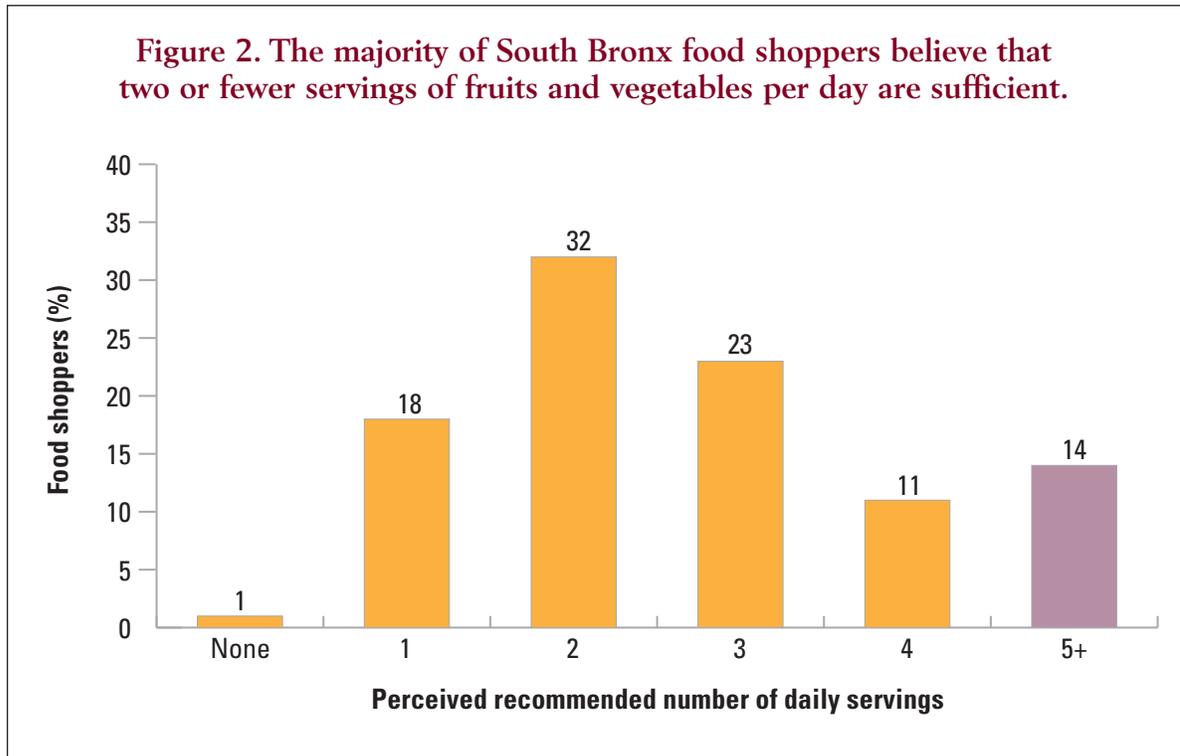
In a number of the analyses in this report, individuals who shop exclusively at supermarkets (n = 78) were compared with people who shop at both supermarkets and farmers' markets (n = 339). When comparing the two groups, data were adjusted for gender; receipt of Women, Infants, and Children (WIC) program benefits; race/ethnicity; age; education; and self-reported diet quality.

To ascertain how many servings of produce those surveyed consumed, responses to validated questions from the Center for Disease Control's Behavioral Risk Factor Surveillance System (BRFSS) were used (for more information, visit: www.cdc.gov/brfss/).

1. Most South Bronx food shoppers underestimate the recommended amount of fruits and vegetables that should be consumed daily as part of a healthy diet.

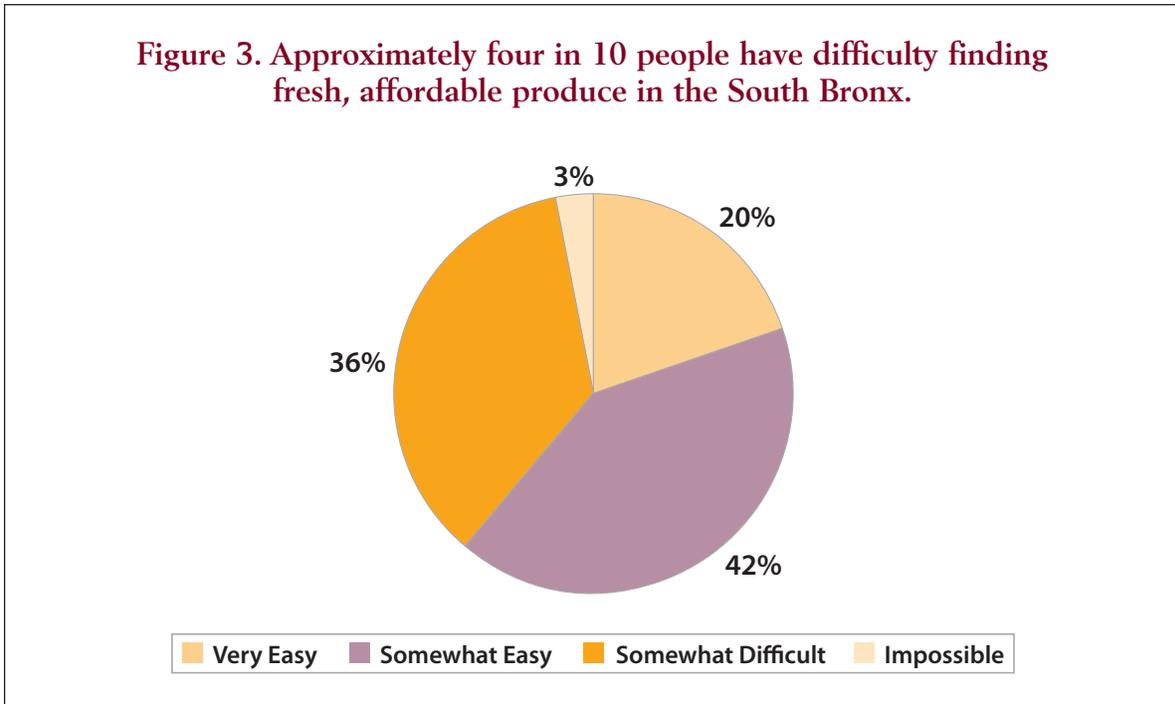
Fruits and vegetables are an important source of nutrients and fiber; a minimum of five servings (two to three cups) per day is recommended.

South Bronx residents underestimate the number of servings of fruits and vegetables recommended per day (**Figure 2**). More than half (51%) believe that two or fewer servings per day are sufficient, while only one in seven (14%) believes that eating five or more servings is desired. Also, Hispanic shoppers interviewed think that fewer servings are necessary, compared with white or black shoppers.



2. Fresh, affordable produce is difficult to find in the South Bronx.

Nearly four in 10 South Bronx residents surveyed said it is either “somewhat difficult” or “impossible” to find fresh, affordable fruits and vegetables in their neighborhood (**Figure 3**).



Produce availability varies by season, with more than seven in 10 shoppers (73%) reporting that fresh fruits and vegetables are easier to find during the summer when farmers’ markets operate.

South Bronx residents do not limit their produce shopping to one type of store or market. When asked about produce purchased during the summer:

- More than six in 10 of those interviewed at supermarkets (63%) said they also shop at farmers’ markets at least once during the summer months.
- About seven in 10 respondents (71%) cited supermarkets as their main source for produce; other sources cited included fruit stands (13%), specialty/ethnic stores (7%), farmers’ markets (5%) and bodegas (2%).

3. South Bronx residents who shop at farmers' markets eat more fruits and vegetables than those who do not frequent farmers' markets.

- People who shop at farmers' markets eat between three-quarters and one more serving of fruits and vegetables per day than people who only shop at supermarkets.
- WIC and Farmers' Market Nutrition Program (FMNP) recipients eat, on average, one more serving of fruits and vegetables per day than people who do not receive these benefits (see **Box** below).

Who eats more servings* of fruits and vegetables per day?

- People who shop at farmers' markets
- Recipients of WIC/FMNP benefits
- Older people
- People who report better eating habits

* Servings included fruit, green salad, potatoes (except fried), carrots and other vegetables. Fruit juices were excluded since they often contain a large amount of sugar and are a less healthful option than fresh fruit.

4. South Bronx food shoppers' main concerns are quality, variety and cost.

Respondents were asked to rate factors they might consider when purchasing fruits and vegetables.

- Quality emerged as the most important factor. More specifically, the vast majority of respondents indicated that the freshness (96%), taste (94%) and appearance (93%) of fruits and vegetables are all "very important."
- More than eight in 10 shoppers indicated that price (85%) and variety (84%) are "very important."
- A convenient location was cited as "very important" to almost eight in 10 shoppers (79%).

Focusing on the three criteria (quality, variety and cost) that shoppers value most, farmers' markets were rated more highly than supermarkets (**Figure 4**). More than nine in 10 respondents (92%) judged the produce at farmers' markets to be of "excellent" or "very good" quality, while about seven in 10 respondents (71%) rated the produce at supermarkets as "excellent" or "very good." Farmers' markets also rated higher than supermarkets on variety and price, while supermarkets rated higher than farmers' markets with respect to location and hours of operation.

Figure 4. Shoppers report that fruits and vegetables are of a higher quality at farmers' markets than at supermarkets.



How far are shoppers willing to travel for a perfectly ripe peach?

Despite the convenience of a supermarket close to home, more than three in 10 respondents reported that they often travel 10 or more blocks to a "preferred" supermarket or to a farmers' market. When respondents were asked to describe why a more distant supermarket is preferred, they answered in the following manner:

- 57% indicated that the quality is better
- 55% reported a better selection
- 48% reported lower prices
- 24% indicated a cleaner environment

5. Although food stamps are an important payment method at supermarkets, they are underutilized at farmers' markets.

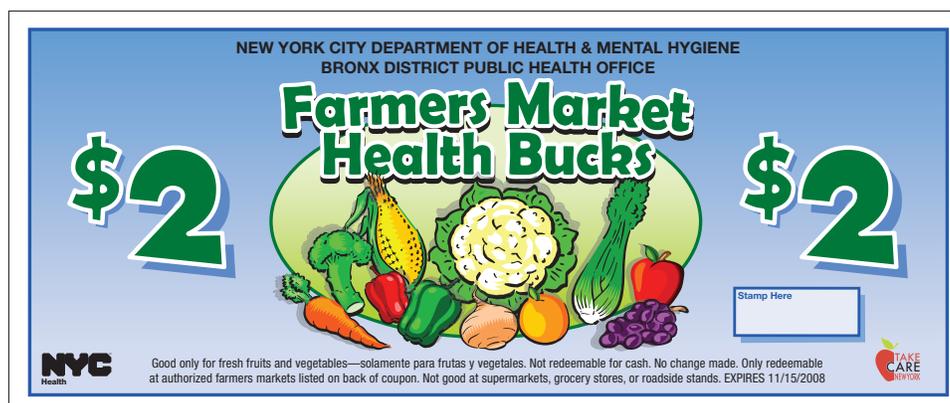
Shoppers buy groceries using a variety of payment methods. While cash is most often used, EBT (electronic benefit transfer)/food stamps can be used at both supermarkets and some farmers' markets. Supermarkets accept WIC coupons; at farmers' markets only, FMNP (Farmers' Market Nutrition Program), Senior FMNP and Health Bucks (\$2 coupons distributed widely by the DOHMH) can be redeemed for fruits and vegetables. **Table 2** shows all the methods of payment used by respondents.

Table 2. While most shoppers pay with cash, EBT is a common method of payment at supermarkets. FMNP coupons are often used at farmers' markets.

	Farmers' Market	Supermarket
Cash	68%	60%
WIC/FMNP Coupon*	17%	4%
EBT/Food Stamps	8%	27%
Debit Card	1%	6%
Credit Card	1%	4%
Personal Check	<1%	<1%
Senior FMNP Coupon	1%	n/a
Health Bucks	1%	n/a

* FMNP coupons are only redeemable at farmers' markets, but WIC coupons cannot be used at farmers' markets.

- While nearly three in 10 shoppers (27%) reported using EBT/food stamps at supermarkets, fewer than one in 10 (8%) use EBT at farmers' markets. Low usage at farmers' markets may be due to the fact that during the 2007 season, only half of South Bronx farmers' markets accepted EBT.
- At farmers' markets, almost two in 10 (18%) pay for produce with FMNP/Senior FMNP coupons. Given that 20% of the sample indicated they were WIC recipients, it is surprising that only 4% reported paying for supermarket groceries with WIC coupons.
- Of the 7,000 Health Bucks coupons distributed by the South Bronx DPHO in 2007, almost 70% were redeemed at farmers' markets. Despite the high redemption rate and the fact that 15% of survey respondents had heard of the program, only 1% of those surveyed had used one of the coupons at a farmers' market.



Health Bucks – \$2 coupons distributed by the District Public Health Offices – can be used to purchase fruits and vegetables at neighborhood farmers' markets.

Recommendations

To increase the variety and quality of produce available to South Bronx residents, community organizations, city agencies and community residents should:

Promote existing farmers' markets in the South Bronx.

- Almost half of those interviewed knew of farmers' markets because they had spotted them while "passing by," and an additional quarter were told about the markets at a WIC center.
- Promoting the markets in local newspapers and store windows, and via service providers, would increase awareness and likely result in more market shoppers.

Create more farmers' markets in locations where access to quality produce is limited.

- Farmers' markets should not be considered "boutique" markets; six in 10 people interviewed at South Bronx supermarkets also shop at farmers' markets.
- Even though people are willing to travel either to a farmers' market or to a preferred supermarket for higher quality food, they shouldn't have to do so. More farmers' markets would mean increased access to fresh, affordable food for more people.

Expand payment options at farmers' markets.

- During the 2007 season, only half of South Bronx farmers' markets accepted EBT. Expanding the EBT program to all markets would increase access to fresh fruits and vegetables for the 24% of Bronx households that receive food stamp benefits.⁸
- The Bronx District Public Health Office intends to expand its Health Bucks program, allowing more coupons to be distributed to South Bronx residents. Shoppers should be made aware of the fact that they are entitled to a Health Bucks coupon (worth \$2) for every \$5 of EBT spent.

Educate people of all ages at day care centers, schools, senior centers, community events, places of worship and at farmers' markets about the value of eating five daily servings of fruits and vegetables.

- Cooking demonstrations and tastings are a good way to introduce people to new foods.

References

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2. WHO Website: <http://www.who.int/dietphysicalactivity/publications/facts/fruit/en/> Accessed 11/18/2007
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5. Graham R, Kaufman L, Novoa Z, Karpati A. *Eating in, eating out, eating well: Access to healthy food in North and Central Brooklyn*. New York, NY: New York City Department of Health and Mental Hygiene, 2006.
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7. NYC DOHMH EpiQuery Website: <http://query1.health.nycnet/query/> Accessed 12/12/2007.
8. Data for Bronx County, 2006 American Community Survey.

South Bronx farmers' markets (open July – November)

La Familia Verde Farmers' Market (EBT)

East Tremont & LaFontaine Aves.
•Tuesday (8 am - 2 pm)

South Bronx CSA Farmers' Market (EBT)

Padres Plaza
139th St. (Between St. Anns & Cyprus)
•Wednesday (7 am - 8 pm)

Lincoln Hospital Greenmarket (EBT)

149th St., between Park & Morris
•Friday & Tuesday (8 am - 3 pm)

Boro Hall Greenmarket (EBT)

Grand Concourse & 161st St.
•Tuesday (8 am - 6 pm)

Poe Park Greenmarket (EBT)

Grand Concourse & 192nd St.
•Tuesday (8 am - 3 pm)

West Farmers' Market

Boston Road & East Tremont Ave.,
in Drew Gardens
•Wednesday (10 am - 3 pm)

Taqwa Community Farmers' Market (EBT)

90 W. 164th St. at Ogden Ave.
(Highbridge Garden)
•Saturday (9 am - 6 pm)

New York Botanical Gardens Farmers' Market

Mosholu Pkwy. at Kazimiroff Blvd., in garden
•Wednesday (10 am - 3 pm)

Hunts Point Farmers' Market

Southern & Bruckner Blvds. & East 163rd St.
•Wed. (8:30 am - 5 pm) (EBT)
•Sat. (8:30 am - 5 pm)

Learning Tree Farmers' Market

Barnes Ave, between Magenta & Bartholdi Sts.
•Wednesday (10 am - 2 pm)

MBD Community Park Farmers' Market

1710 Southern Blvd. & 173rd St.
•Friday (8 am - 4 pm)

Bissel Gardens Farmers' Market (EBT)

Baychester Ave. & East 241st St.
•Wednesday (10 am - 3 pm)
•Saturday (9 am - 1 pm)

Northeast Bronx Farmers' Market

Haffen Park, Hammersley & Wickham Aves.
•Saturday (8 am – 6 pm)

Harvest Home Sunday Farmers' Market

Grand Concourse & E. 161st St.
at Bronx Museum of Arts
•Sunday (8 am - 4 pm)

Harvest Home Mt. Eden Farmers' Market

Mt. Eden and Morris Aves.,
at Bronx Lebanon Hospital
•Thursday (8 am - 4 pm)

Harvest Home Forest Ave. Farmers' Market

Forest Ave. bet. Westchester Ave. & 156th St.
•Wednesday (8 am - 4 pm)

Harvest Home Morris Park Farmers' Market

1734 Williamsbridge Rd., at Morris Park Ave.
•Saturday (8 am - 4 pm)

Harvest Home Jacobi Hospital Farmers' Market

1400 Pelham Parkway at Eastchester Rd.
•Tuesday (8 am - 4 pm)

Harvest Home Coop City

Bartow Road
•Wednesday (9 am - 6 pm)

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New York City Department of Health and Mental Hygiene

June 2008

Resources

New York City Department of Health and Mental Hygiene

Health Bucks

http://www.nyc.gov/html/doh/html/cdp/cdp_pan_health_bucks.shtml

U.S. Department of Agriculture

Women, Infants, and Children Program

www.fns.usda.gov/wic/

Food Stamp Program

<http://www.fns.usda.gov/fsp/>

Farmers' Market Nutrition Program

www.fns.usda.gov/wic/FMNP/FMNPfaqs.htm

My Pyramid: Steps to a Healthier You

www.mypyramid.gov/

Neighborhood Reports

To help reduce health disparities and improve the health of all New Yorkers, the New York City Department of Health and Mental Hygiene established District Public Health Offices (DPHOs) in 2003. DPHOs target public health efforts and resources to New York City neighborhoods with the highest rates of illness and premature death: North and Central Brooklyn, the South Bronx, and East and Central Harlem.

This neighborhood report was prepared by the Bronx District Public Health Office. We hope this report fosters dialogue and collaboration among our many partners: other city agencies, community-based organizations, hospitals and clinics, businesses, elected officials, and most important, the New Yorkers who live and work in the South Bronx.

For more information on the District Public Health Offices, visit nyc.gov/health/dpho