

HIV in the Bronx, 2021

Bronx Community Board 8
Health, Hospitals, and Social Services Committee
Wednesday, January 18, 2023, 7-8pm

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Bureau of Hepatitis, HIV, and Sexually Transmitted Infections
Envisioning a New York City without transmission or illness related to viral hepatitis, HIV, and sexually transmitted infections.

PLAN FOR TODAY

- **How Surveillance Works**
 - What are its data sources?
 - How do we maintain patient confidentiality?
 - How do we use the data?
- **A few Bronx “Vital Statistics”**
- **Bronx HIV data 2021**

How Surveillance Works—Mandated Laboratory Reporting

- **The NYC Health Department maintains a registry of all patients diagnosed and reported with HIV and AIDS in NYC. NY State Law requires the reporting of all new diagnoses and HIV-related laboratory tests. The registry contains >270,000 cases and >10m laboratory reports. Our first case...**
- **Our principal data sources are laboratories and provider reports.**
- **Laboratories must report results of:**
 - All positive HIV diagnostic test algorithms
 - All viral load tests, qualitative and quantitative, detectable and undetectable
 - All CD4 tests
 - All nucleotide sequences obtained during genetic resistance testing
- **We receive >800,000 laboratory test results per year**
 - We match the report to our registry. If the new test matches to an existing case, it is added to the person's record
 - If no match, sent out for investigation to confirm fact and date of diagnosis and collect demographic data and transmission risk

Provider Reporting and Registry Matches

- **Health Care Providers must report their new diagnoses**
 - **A New York State “Provider Report Form”** must be submitted within 7 days of initial diagnosis
 - A PRF must also be submitted for a new HIV-related illness in a previously reported person
 - The PRF is **due within 24 hours if the case is an Acute HIV Infection**
 - Why so fast? People diagnosed in the acute stage are usually highly viremic (i.e., their Viral Load is high) and therefore at risk of transmitting to others
 - Only ~50% of people with AHI are symptomatic, i.e., feel sick
 - Those without symptoms might unknowingly infect another person
 - Opportunity to start that patient immediately on ART and reduce the viral set point
- **Other sources of case reports:**
 - “Active surveillance” at hospitals and large clinic systems
 - Active surveillance for perinatal exposures (pregnancy in HIV+ mother)
 - Matches with local and federal vital registries
 - Matches with disease registries such as TB, STI, and Communicable Disease

- **Confidentiality and Data Security**
 - New York State Public Health Law Article 21 protects the privacy of HIV-related information
 - Stipulates when and to whom HIV-related information can be disclosed
 - Is one of the strictest privacy laws in nation
- **Our data are maintained in a physically and electronically secure environment, with**
 - Multi-factor authentication required for access
 - Access limited to surveillance staff with a specific “need to know,” i.e., persons directly working on case reports and statistics

How are Surveillance Data Used?

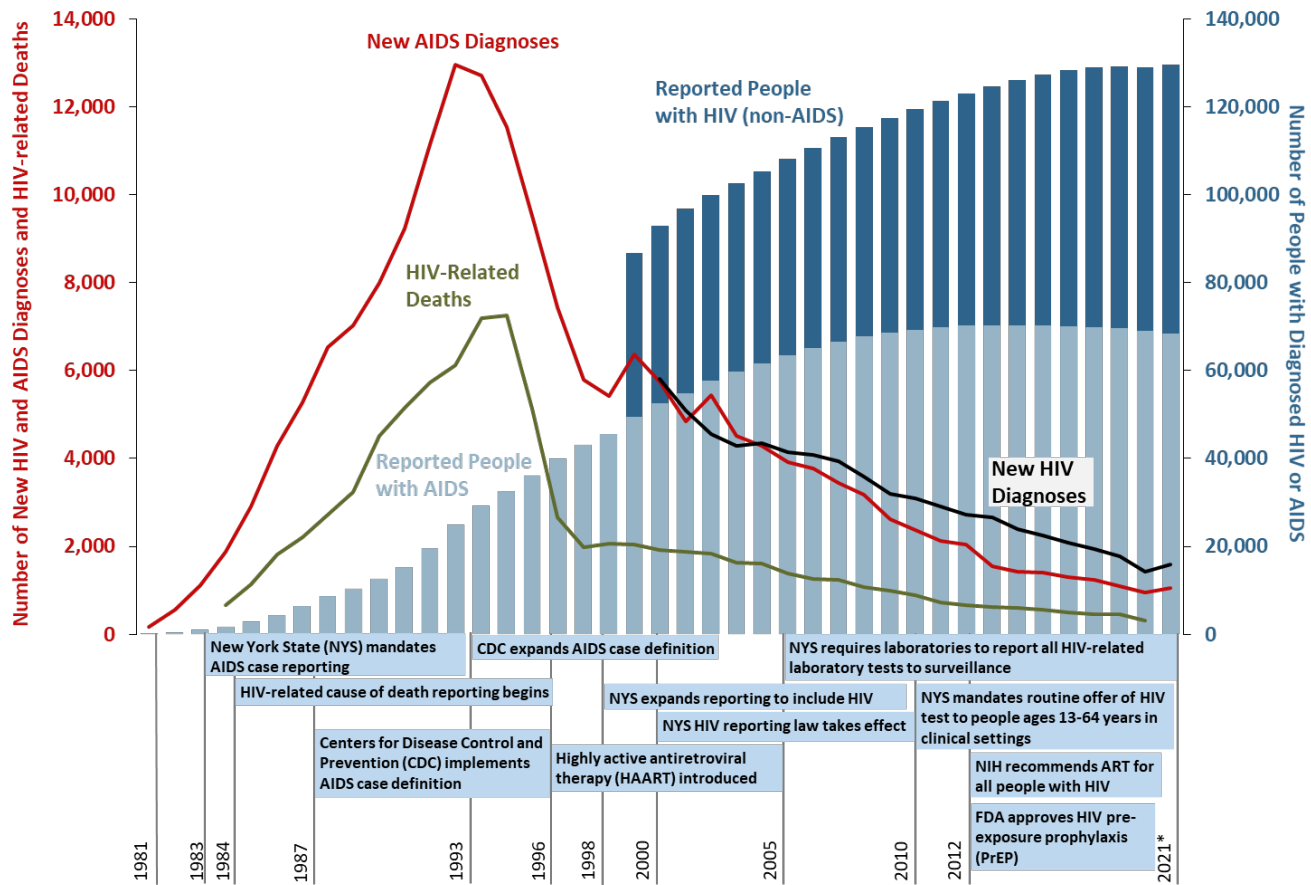
- **Resource allocation – our local programs:**
 - Our prevention, care and treatment, training and policy programs use surveillance data to direct services where they are most needed, and to evaluate public health practice. Is it working to reduce new infections, improve access to care, improve viral suppression?
- **Resource allocation – federal dollars for NYC**
 - Federal funding for HIV treatment and care, including the AIDS Drug Assistance Program, is *completely formulaic* based on the total number of diagnoses and PWHA in a jurisdiction.
 - Thus, it is critical for us to **count every case**.

Limitations of Surveillance Data—a few caveats

- **Surveillance is great:**
 - It is population-based – it's not a sample, it's everyone!
 - The variable definitions are transparent and standardized across the nation
 - The data are quantitative or quantifiable
 - The data are readily reproducible
- **The data provide us with reliable information on the numbers and characteristics of those most affected by HIV**
 - They show us trends over time, and they show the dramatic disparities in diagnoses, engagement in care, and outcomes such as viral suppression
 - They don't tell us why, they just point us in the direction of the questions we need to ask and the narratives we need to listen to

BRONX -- SOME “VITAL STATISTICS”

- The Bronx is the poorest county in NY State and one of the poorest in the nation (poorest are in South Dakota, Kentucky and W Virginia)
 - Median income \$27,611 (NYS 71,117; US 57,652)
- 31% of the Bronx is <FPL (NYS 17.3%, US 12.8)
- Population is 36% Black, 30% white, 3% Asian, 54% Hispanic/Latino of any race
- Bronx has the largest N of Puerto Rican-born or descended persons in the US and one of the highest proportions of those born in the Dominican Republic
- 44% of Bronx residents speak Spanish at home



FDA=Food and Drug Administration; NIH=National Institutes of Health.


*Data on 2021 deaths are incomplete.

Source: N.Y.C. DEP'T OF HEALTH & MENTAL HYGIENE, 2021 HIV SURVEILLANCE ANNUAL REPORT (Nov. 2022), available at <https://www1.nyc.gov/site/doh/data/data-sets/hiv-aids-surveillance-and-epidemiology-reports.page>.

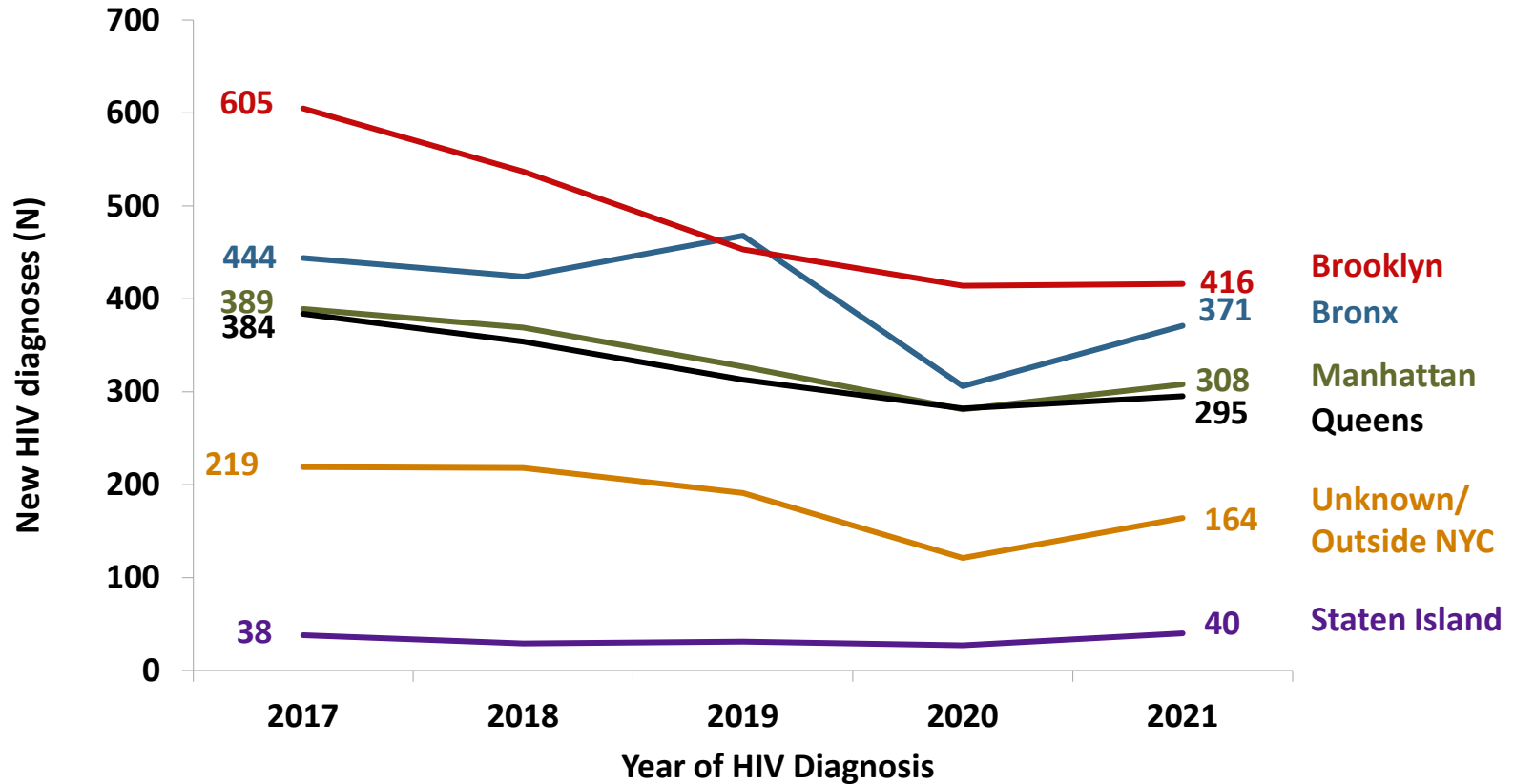
HIV IN THE BRONX, 2021

BASIC STATISTICS

- **371 new HIV diagnoses**
 - 26% of all HIV diagnoses in NYC
 - Includes 70 HIV diagnoses concurrent with an AIDS diagnosis (19% -- about same as citywide)
 - 23% women, 4% transgender (citywide 18% women and 0.3% transgender)
- **296 new AIDS diagnoses (28% of new AIDS in city)**
- **623 deaths among people with HIV**
 - 29% of citywide deaths to people with HIV are Bronx residents
 - Bronx rate is 12.1 deaths per 1,000 people with HIV (city rate is 10/1,000 PWHA)

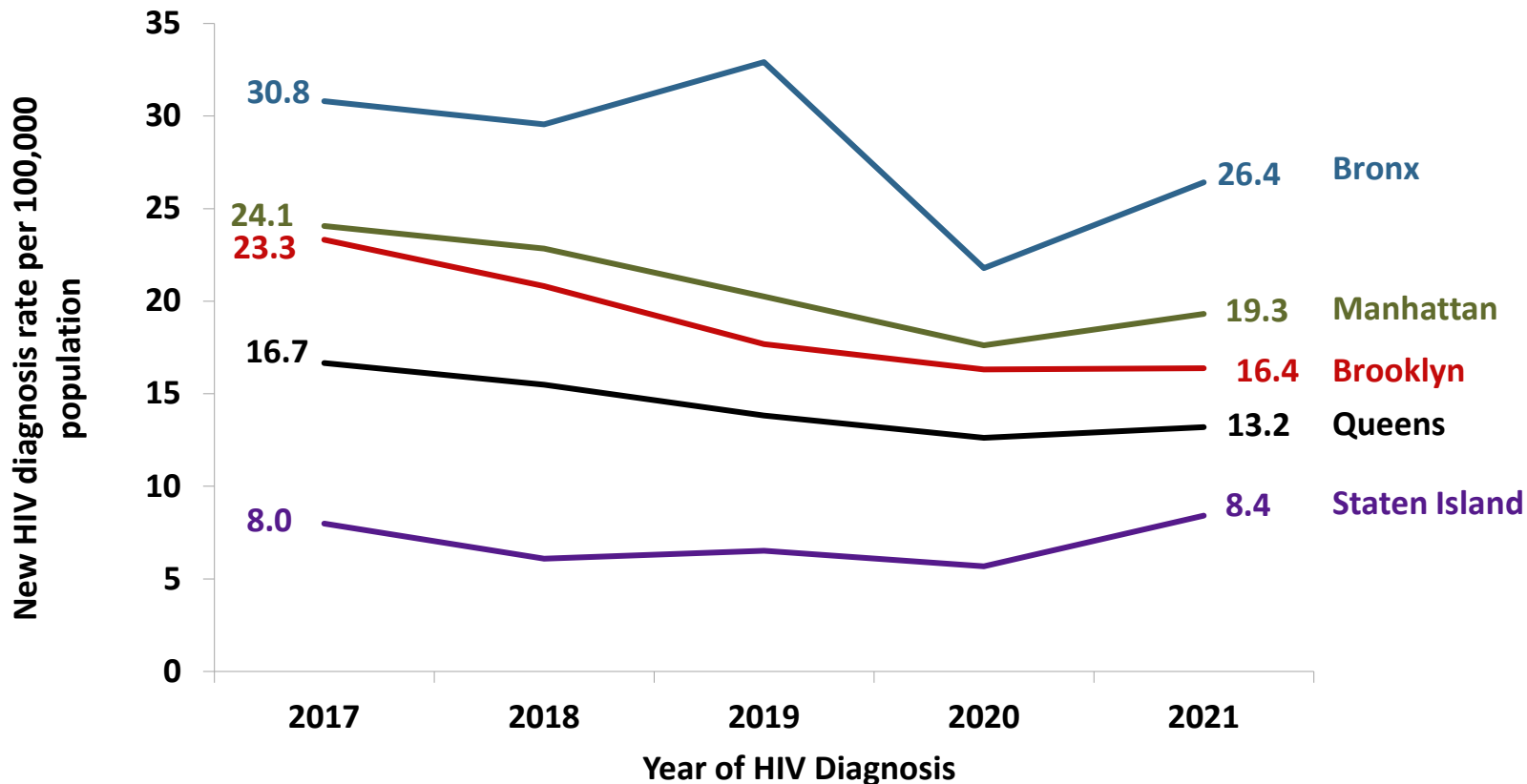
 ¹Death rate is age-adjusted to the NYC Census 2010 population. Death data for 2021 are incomplete. As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

NUMBER OF NEW HIV DIAGNOSES BY BOROUGH IN NYC, 2017-2021



In NYC, the number of new HIV diagnoses decreased or remained stable in all boroughs between 2017 and 2021. The Bronx and Brooklyn had the highest number of new diagnoses in this time period, and the Bronx saw a dip and a rebound from 2020 to 2021, as did the city overall.

RATES OF NEW HIV DIAGNOSES BY BOROUGH IN NYC, 2017-2021



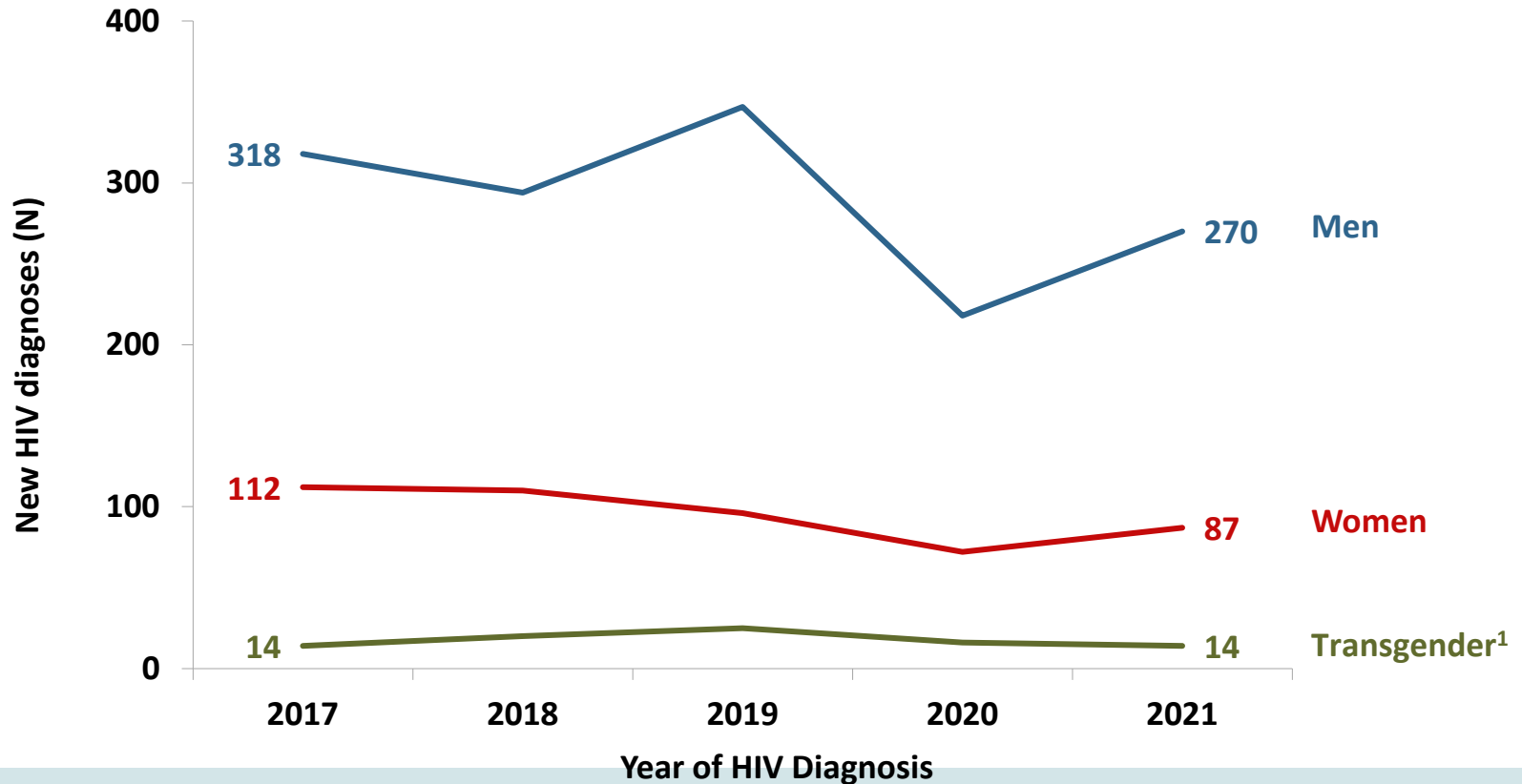
Between 2017 and 2021, the rate of new HIV diagnoses decreased in almost all boroughs but Staten Island. The Bronx had the highest diagnosis rates in all 5 years during this time period.

New diagnoses in people residing outside of NYC or with an unknown borough of residence (N = 164 in 2021) are not shown.

Rates calculated using Health Department 2020 population estimates, modified from U.S. Census Bureau intercensal population estimates, updated October 2021.

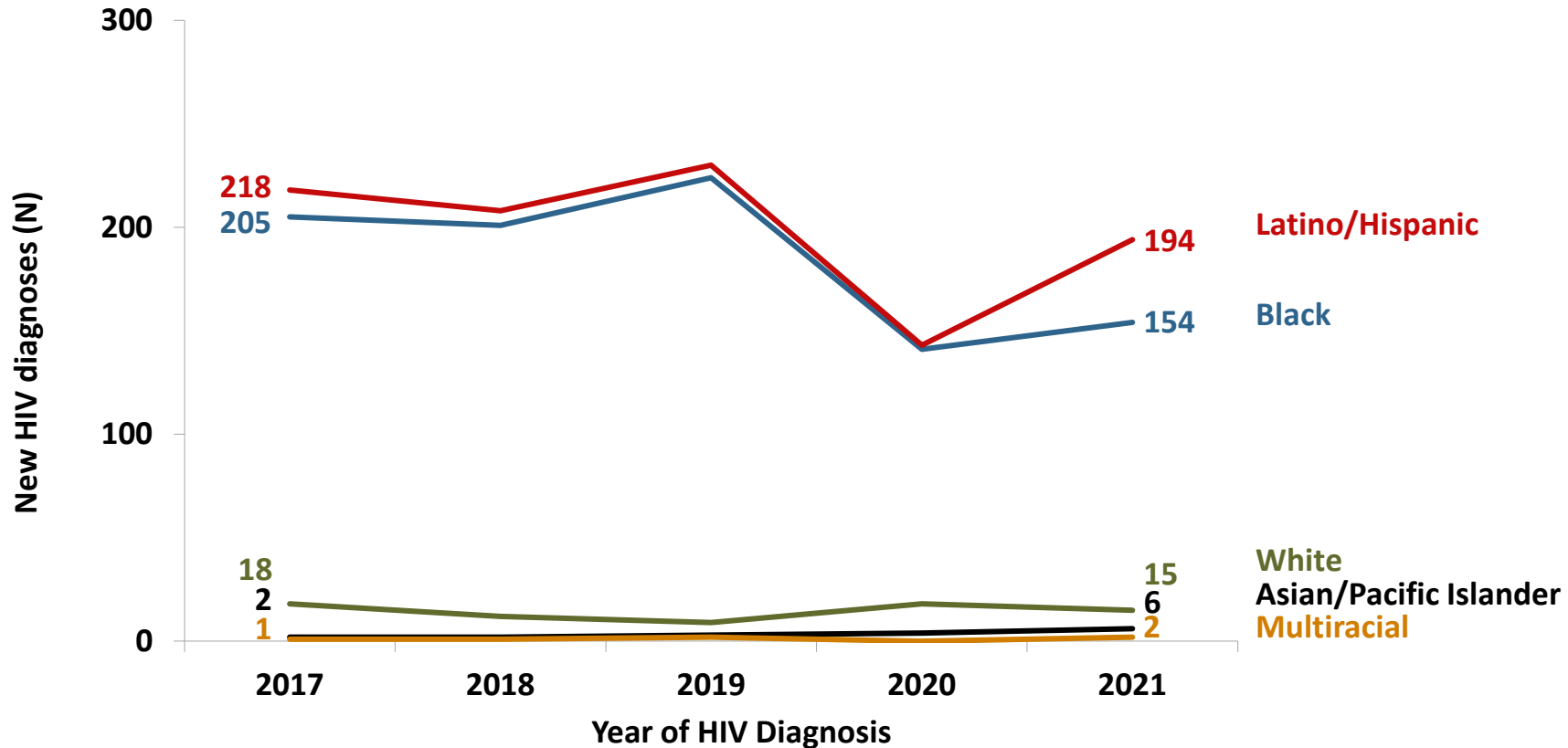
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

NUMBER OF NEW HIV DIAGNOSES BY GENDER IN THE BRONX, 2017-2021



Between 2017 and 2021 in the Bronx, the number of new HIV diagnoses decreased among men (-15%) and women (-22%), while remaining stable among transgender people. Women represented 23% of new diagnoses, transgender people 4%. Compare this with citywide, where women represent 18% and transgender 0.3%

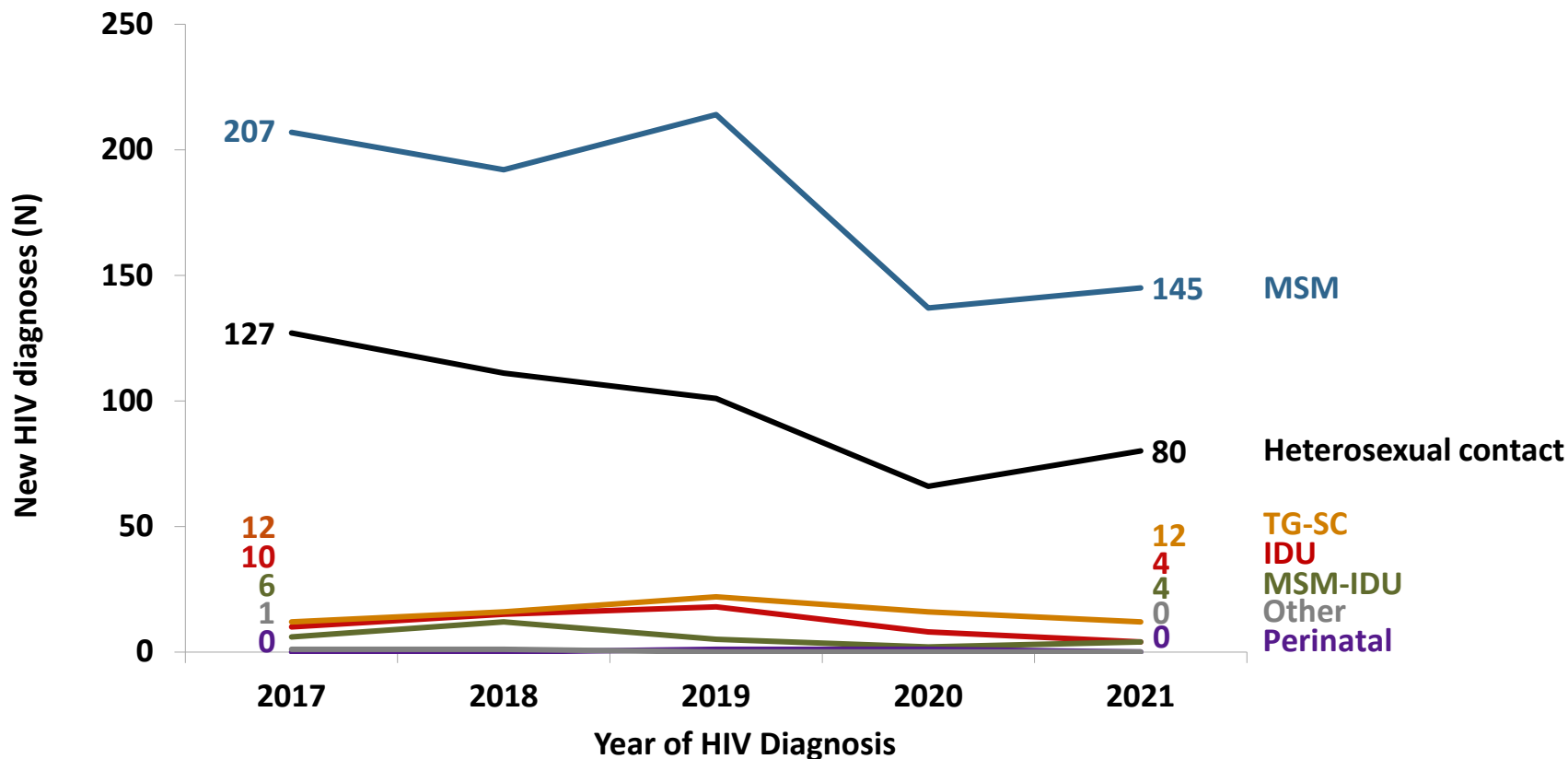
NUMBER OF NEW HIV DIAGNOSES BY RACE/ETHNICITY IN THE BRONX, 2017-2021



Between 2017 and 2021, HIV diagnoses decreased among Black (11%) and Latino/Hispanic people (23%) while remaining relatively flat among other groups. Black and Latino/Hispanic people accounted for the majority of new Bronx diagnoses, as they do for the majority of Bronx residents.

New HIV diagnoses among Native American people (N=0 in 2017-2021) are not displayed.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

NUMBER OF NEW HIV DIAGNOSES BY TRANSMISSION CATEGORY IN THE BRONX, 2017-2021



Between 2017 and 2021, the number of new HIV diagnoses decreased 30% among men who have sex with men and 37% among people with heterosexual contact and remained relatively stable among all other transmission categories.

MSM=men who have sex with men; IDU=history of injection drug use; TG-SC=transgender people with sexual contact.

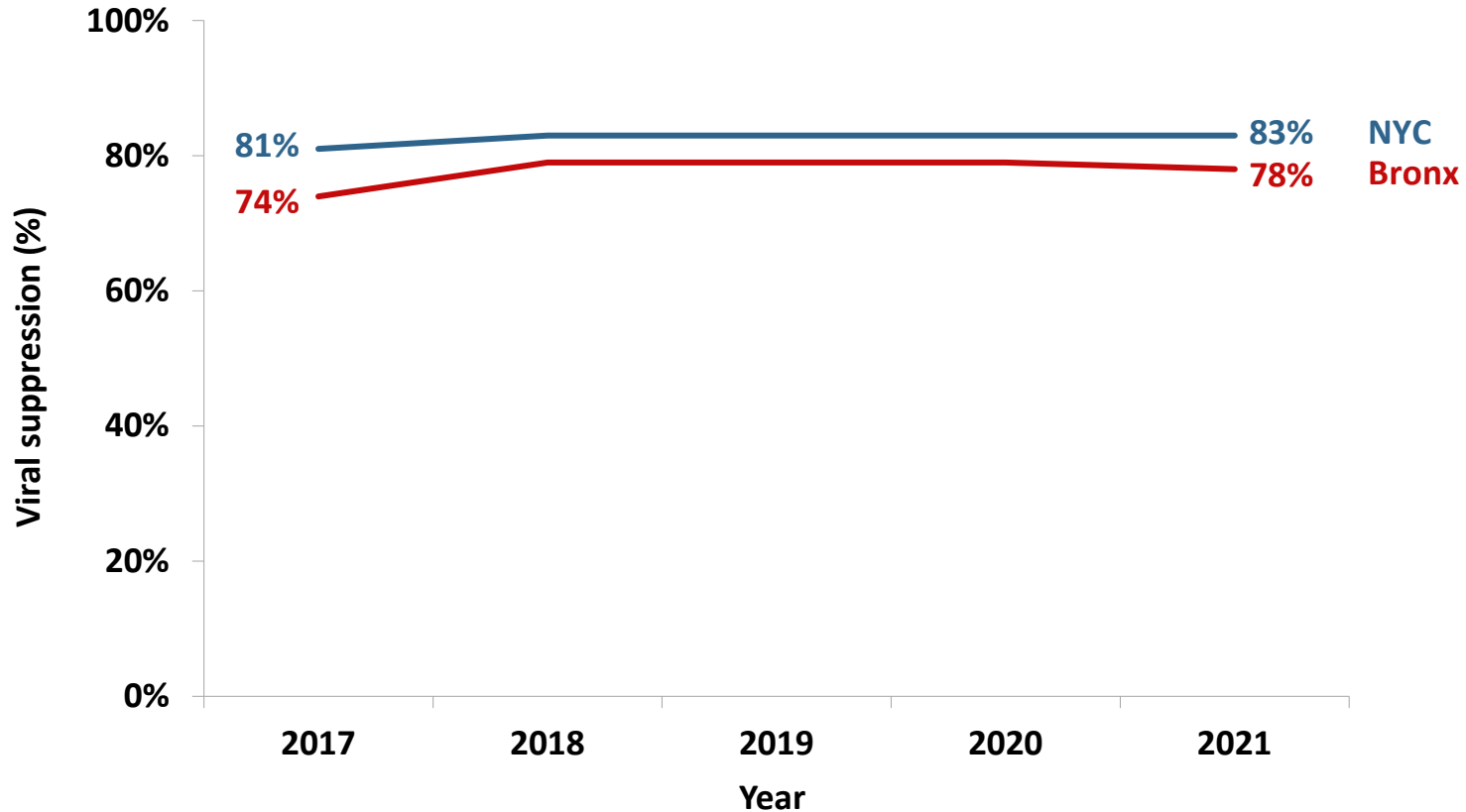
People with unknown transmission category are not displayed. In the Bronx, there were 126 people newly diagnosed with HIV with an unknown risk category in 2021.

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.



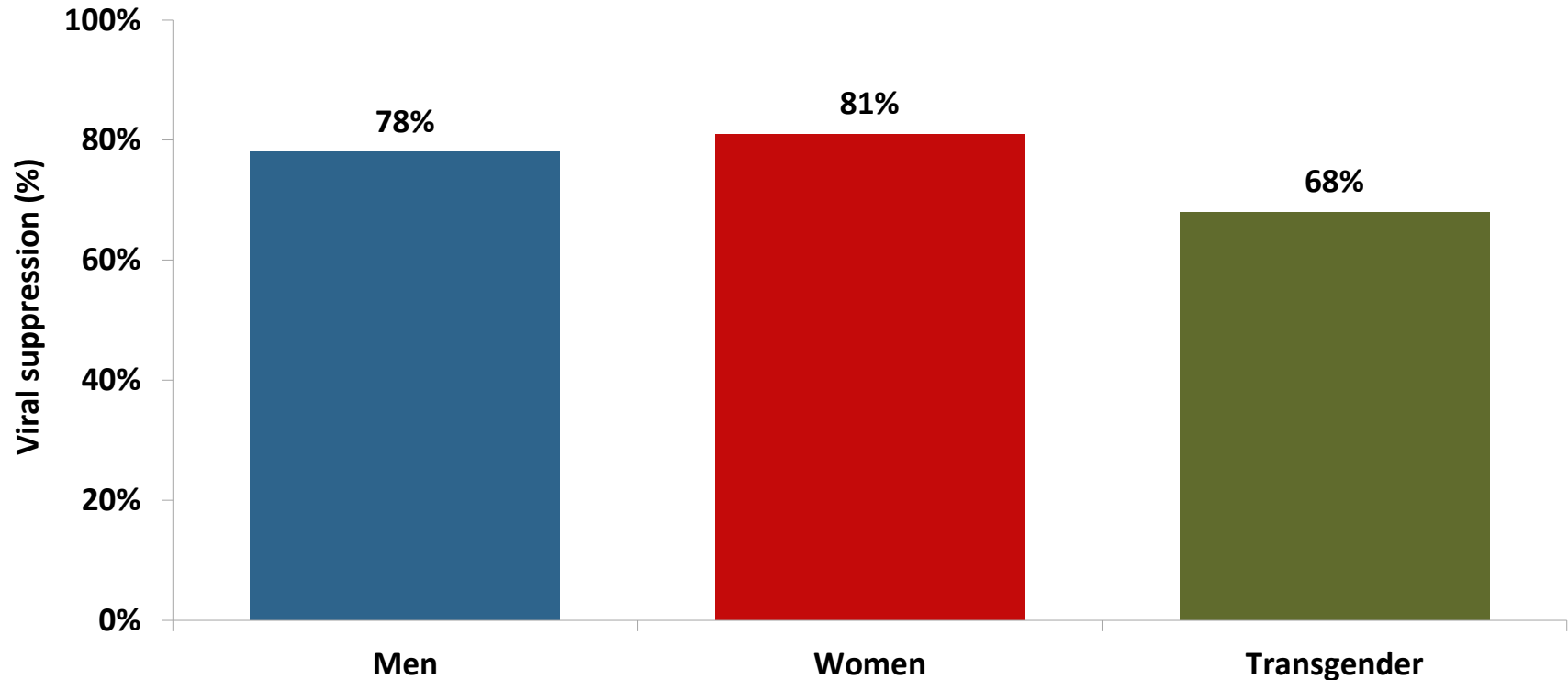
CARE OUTCOMES AMONG PEOPLE LIVING WITH HIV (PLWH) IN THE BRONX

VIRAL SUPPRESSION AMONG DIAGNOSED PLWH IN NYC AND THE BRONX, 2017-2021



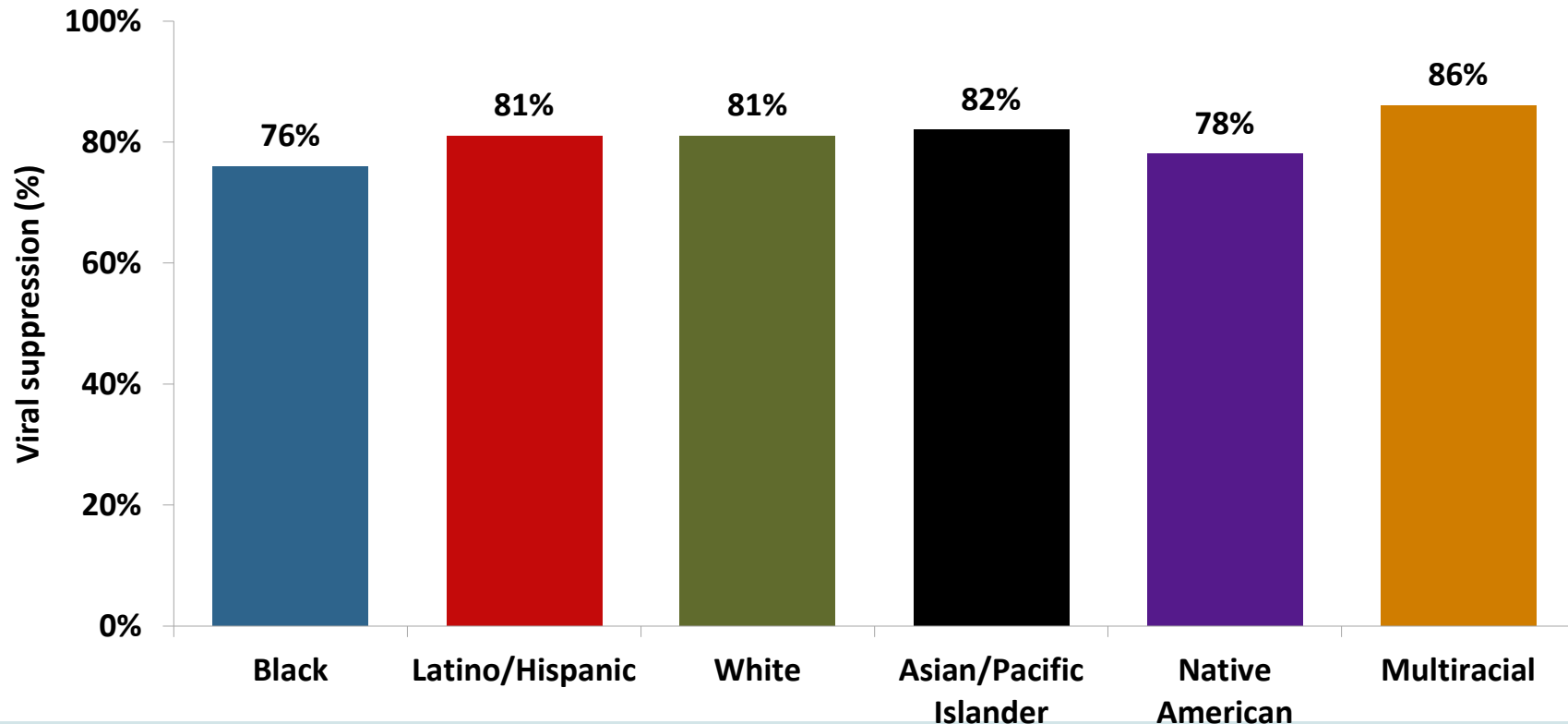
Between 2017 and 2021, viral suppression among all diagnosed people living with HIV (PLWH) in the Bronx increased 5% but remained lower than in NYC overall.

VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY GENDER IN THE BRONX, 2021



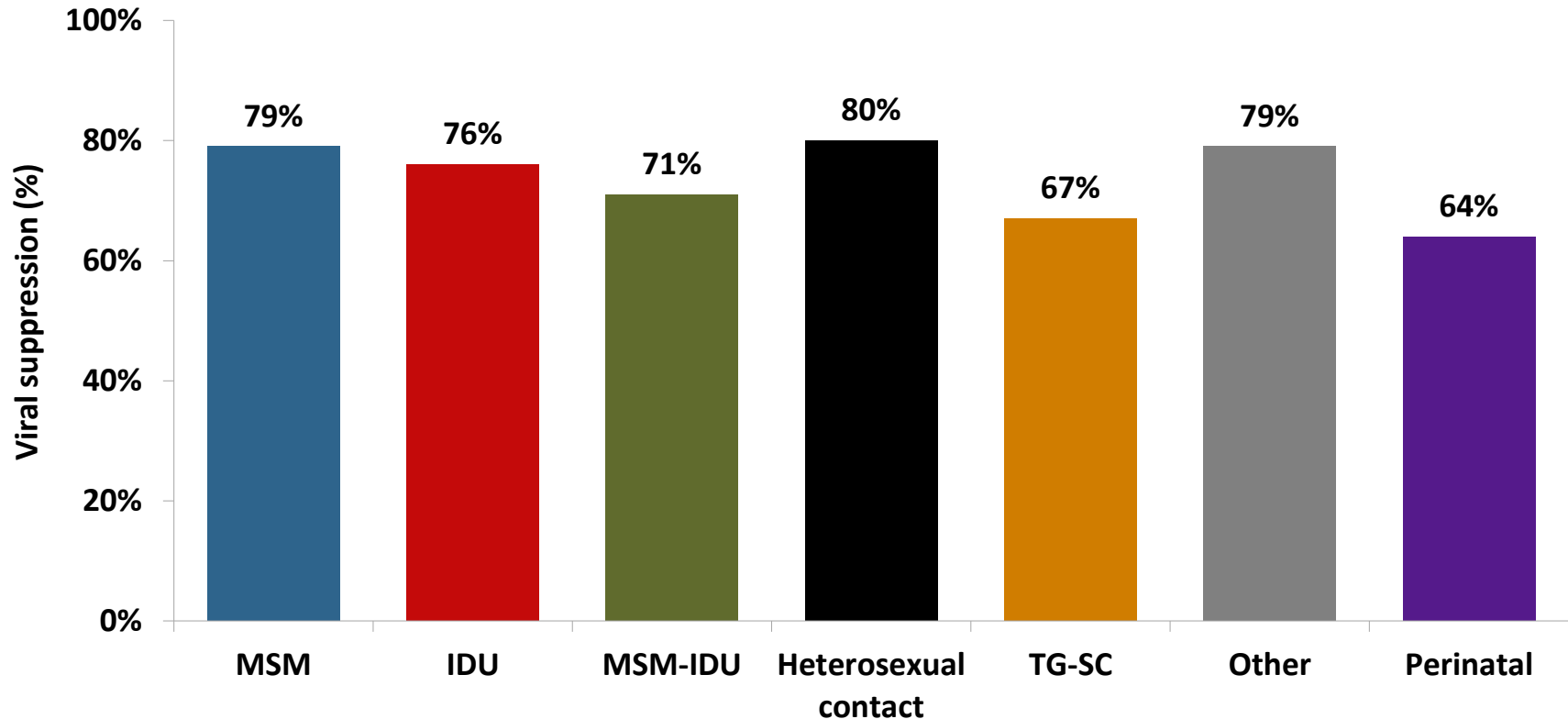
Among diagnosed people living with HIV (PLWH) in the Bronx, a smaller proportion of transgender people were virally suppressed compared to men and women. Bronx women did best on viral suppression

VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY RACE/ETHNICITY IN THE BRONX, 2021



Among diagnosed people living with HIV (PLWH) in the Bronx, Multiracial people had the highest proportion virally suppressed by race/ethnicity. As you saw from the “Bronx Vital Statistics” slide, multiracial identification is common in the Bronx, with almost half of Bronx residents identifying as Hispanic/Latino regardless of race.

VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY TRANSMISSION CATEGORY IN THE BRONX, 2021



Among diagnosed people living with HIV (PLWH) in the Bronx, people with perinatal transmission had the lowest proportion virally suppressed. We also see this citywide.

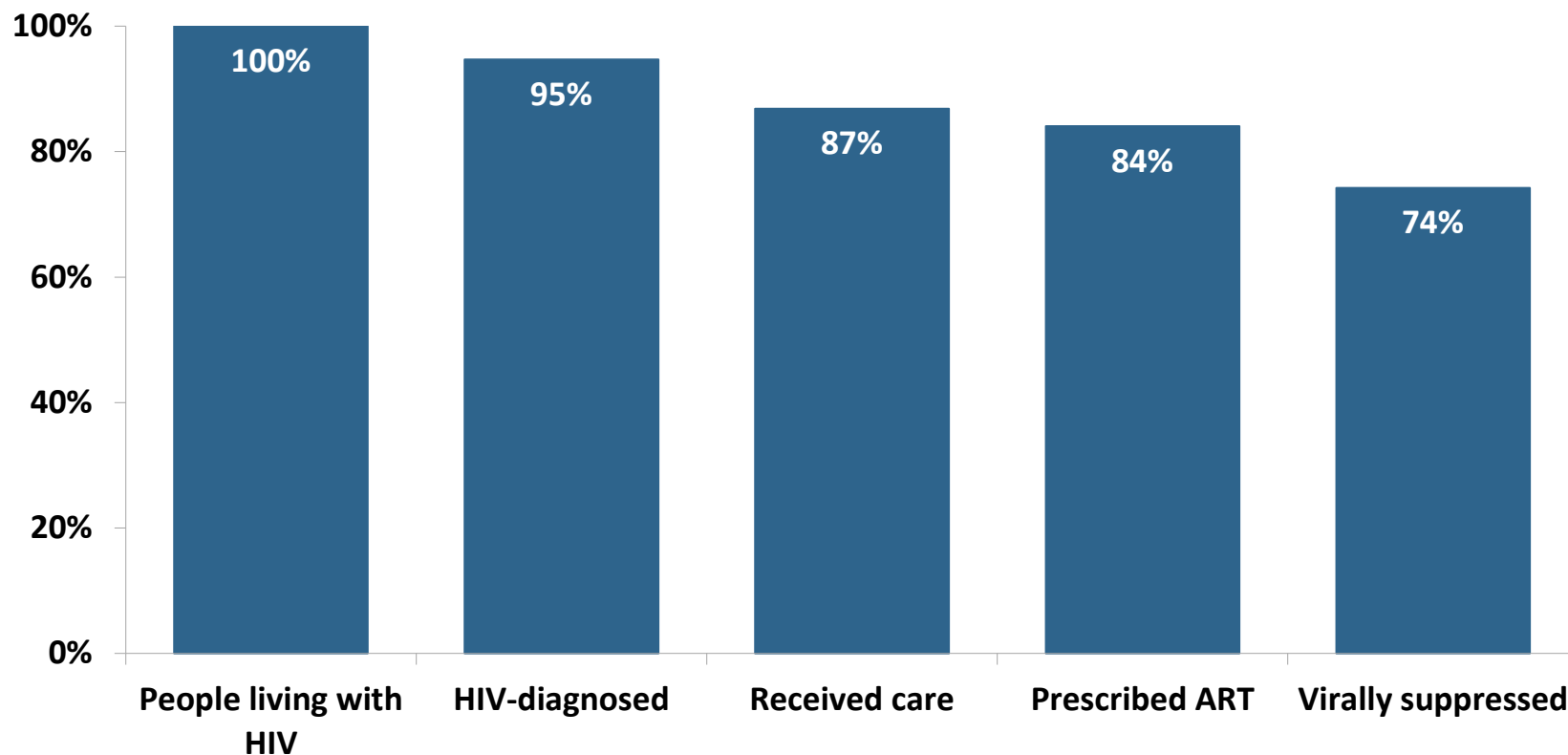
MSM=men who have sex with men; IDU=history of injection drug use; TG-SC=transgender people with sexual contact.

People with HIV with unknown transmission category are not displayed.

Viral suppression is defined as the last HIV viral load in the calendar year <200 copies/mL.

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

PROPORTION OF PLWH IN THE BRONX ENGAGED IN SELECTED STAGES OF THE HIV CARE CONTINUUM, 2021



Of approximately 24,800 people living with HIV (PLWH) in the Bronx in 2021, 74% had a suppressed viral load. Citywide, the proportion is 79%

HIV IN THE BRONX

SUMMARY

- There are continued declines in new HIV diagnoses overall
 - Disparities exist in the number and rate of new HIV diagnoses by borough
 - Within the Bronx there are sustained differences in new HIV diagnoses between subpopulations. Men, Latino/Hispanic people, Black people, people aged 20-39 years, and men who have sex with men experienced higher numbers of new HIV diagnoses
- Viral suppression among people living with HIV in the Bronx increased, but remains lower than that for New York City overall – not so good
 - Within the Bronx there are continued differences in viral suppression between subpopulations living with HIV. Transgender people, Black people, Native American people, people aged 13-39 years, people with perinatal transmission risk, and transgender people with sexual contact experienced lower levels of viral suppression



WHERE TO FIND OUR DATA

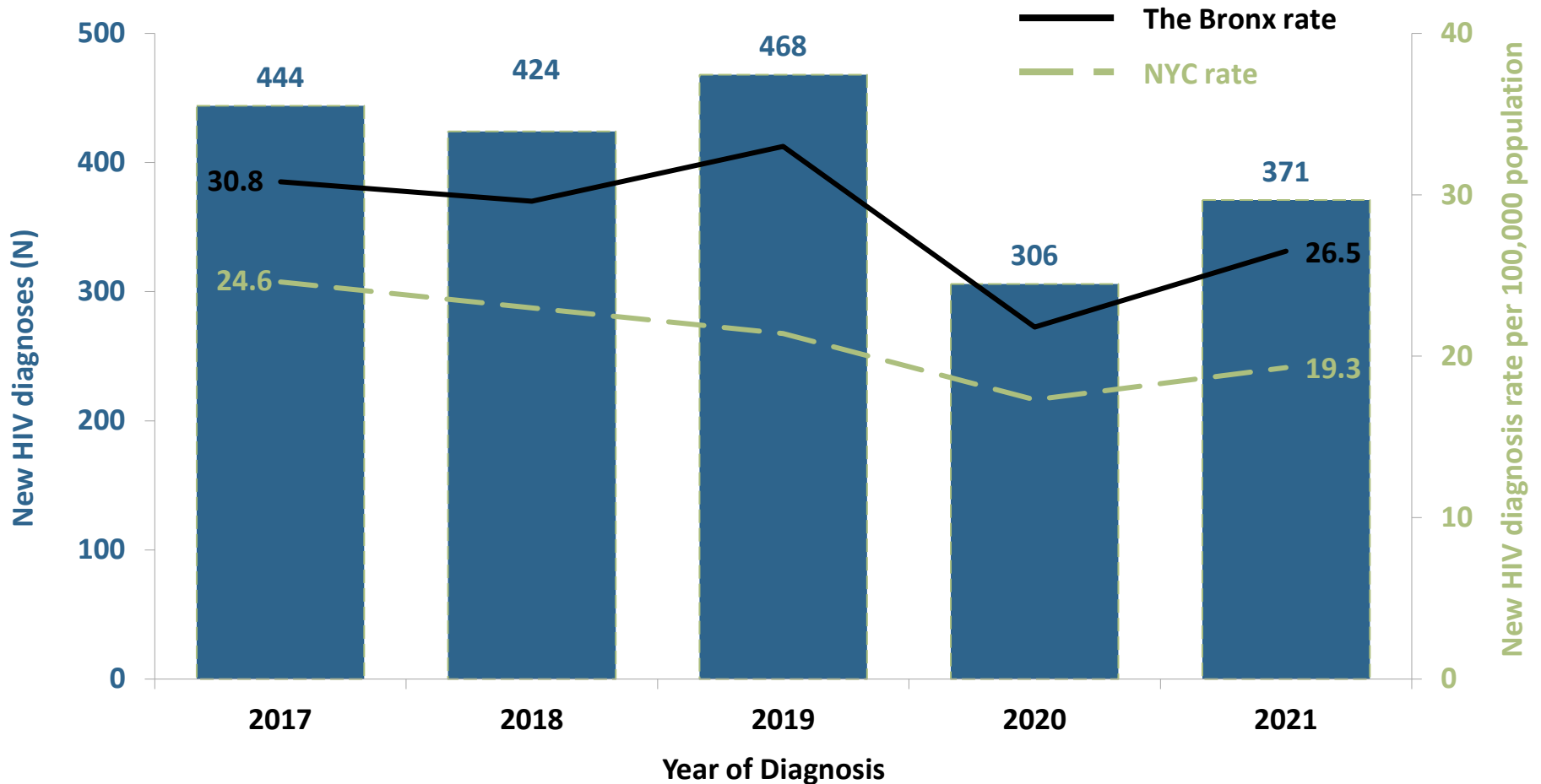
WHERE TO FIND OUR DATA

- **Our program publishes annual surveillance reports, slide sets, and statistics tables:**
 - Annual reports: <http://www1.nyc.gov/site/doh/data/data-sets/hiv-aids-surveillance-and-epidemiology-reports.page>
 - Slide sets: <http://www1.nyc.gov/site/doh/data/data-sets/epi-surveillance-slide-sets.page>
 - Statistics tables: <http://www1.nyc.gov/site/doh/data/data-sets/hiv-aids-annual-surveillance-statistics.page>
- **Other resources:**
 - HIV Care Status Reports (CSR) system: <https://www1.nyc.gov/site/doh/health/health-topics/aids-hiv-care-status-reports-system.page>
 - HIV Care Continuum Dashboards (CCDs): <http://www1.nyc.gov/site/doh/health/health-topics/care-continuum-dashboard.page>
- **For surveillance data requests, email:** HIVReport@health.nyc.gov
 - Please allow a minimum of two weeks for requests to be completed

An aerial photograph of New York City, showing a dense urban landscape with numerous skyscrapers and buildings. The image is overlaid with a semi-transparent blue and purple gradient. The text "THANK YOU" is centered in the middle of the image.

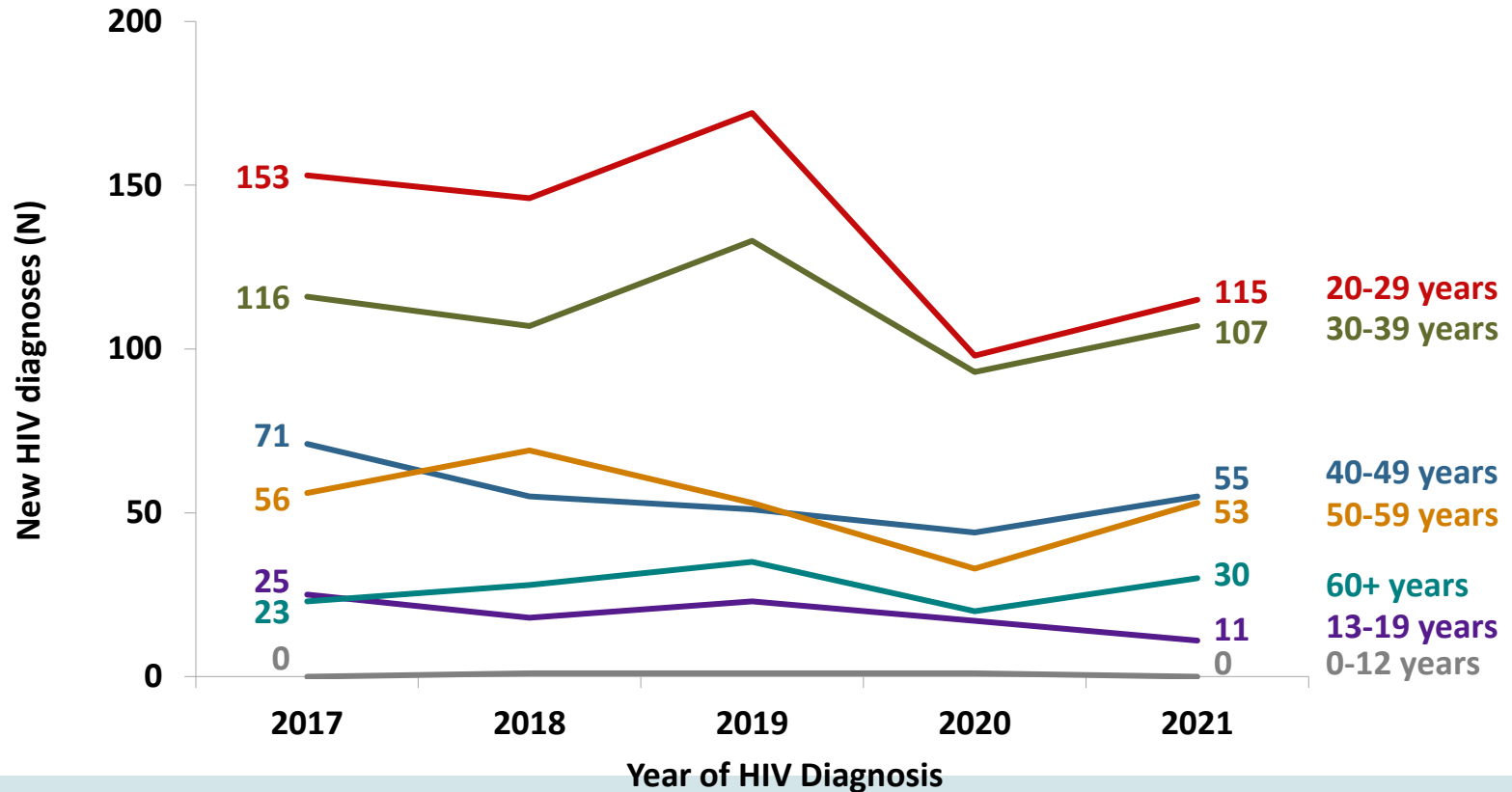
THANK YOU

NEW HIV DIAGNOSES IN THE BRONX, 2017-2021



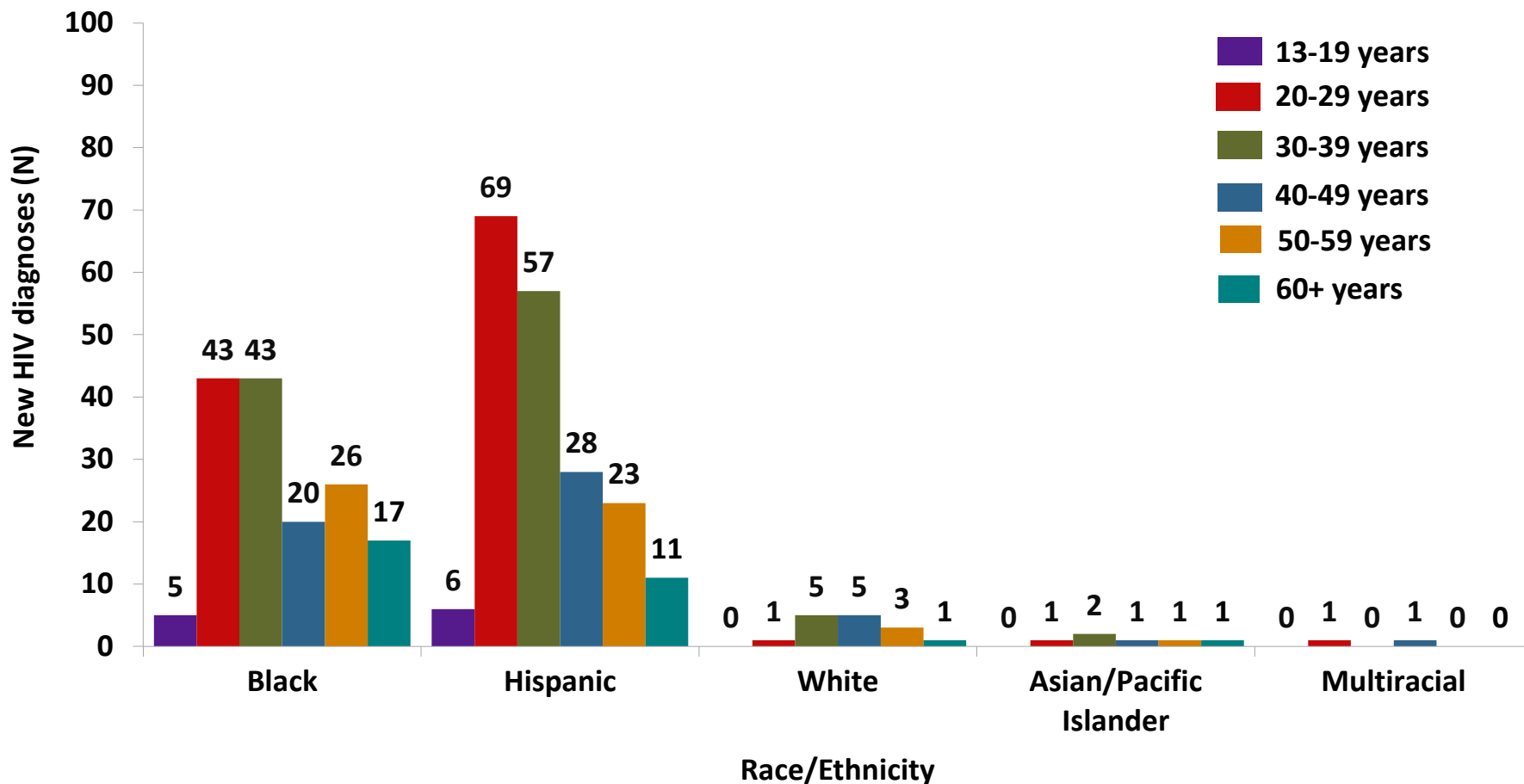
The number and rate of new HIV diagnoses decreased in the Bronx between 2017 and 2021. The HIV diagnosis rate was higher in the Bronx than in NYC overall.

NUMBER OF NEW HIV DIAGNOSES BY AGE IN THE BRONX, 2017-2021



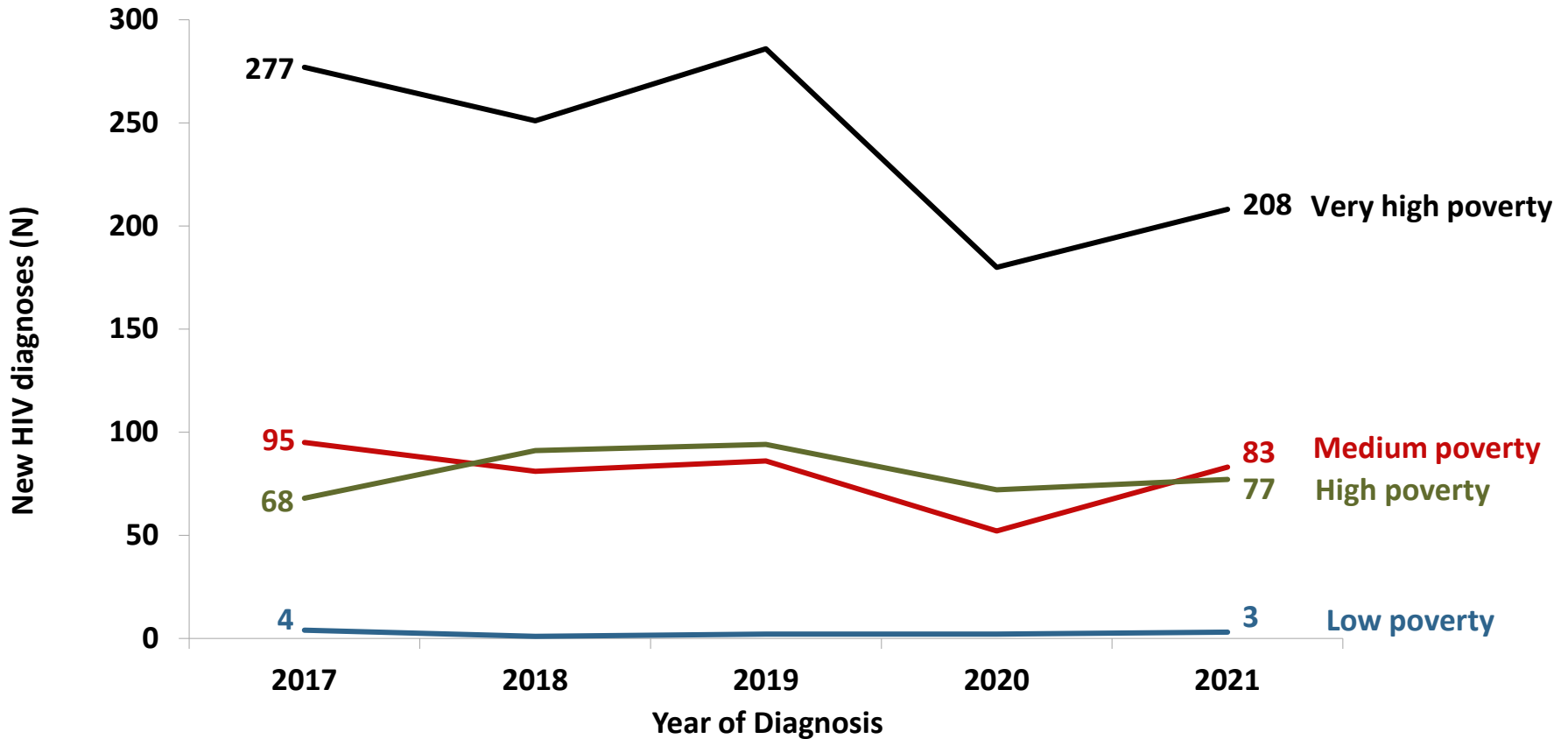
Between 2017 and 2021, people aged 20 to 39 years had the highest numbers of new HIV diagnoses in the Bronx. All but teens showed dips in 2020 and rebounds in 2021. The age group data for the Bronx mirror those for the city overall, with the highest N of new diagnoses among 20-39 year-olds.

NUMBER OF NEW HIV DIAGNOSES BY RACE/ETHNICITY AND AGE IN THE BRONX, 2021



Black and Latino/Hispanic people aged 20 to 39 years accounted for the largest proportions of new HIV diagnoses in the Bronx in 2021.

NUMBER OF NEW HIV DIAGNOSES BY AREA-BASED POVERTY LEVEL IN THE BRONX, 2017-2021



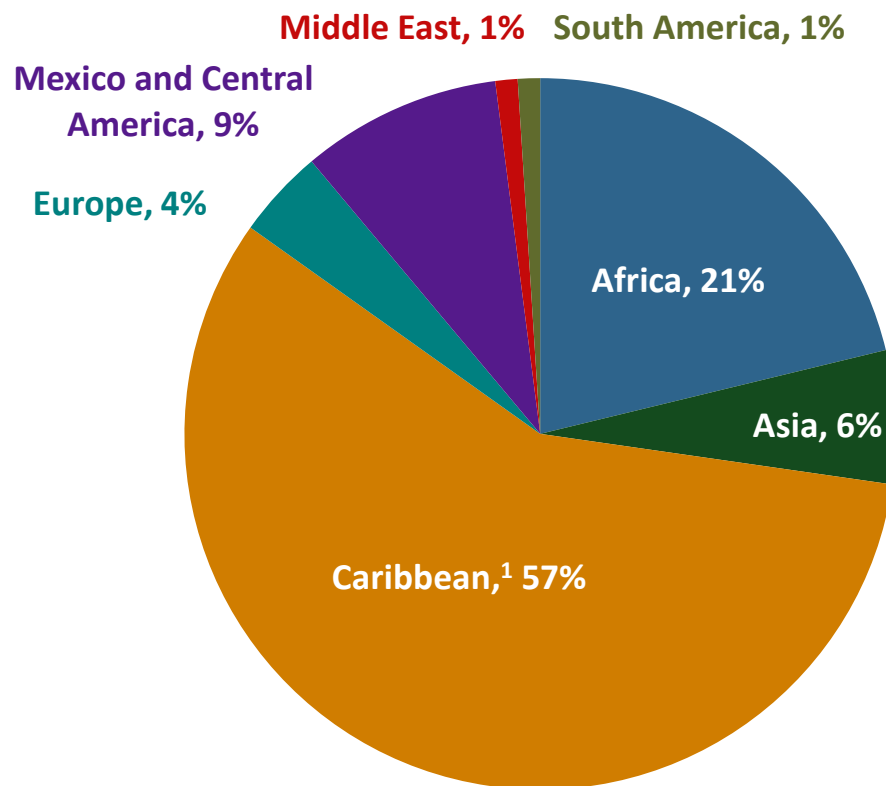
Between 2017 and 2021, the number of new HIV diagnoses was highest in neighborhoods with very high poverty in the Bronx.

¹Area-based poverty level is determined by the proportion of residents living below the federal poverty level (FPL) in the NYC ZIP code of residence at diagnosis. Low poverty=<10% below FPL; Medium poverty=10 to <20% below FPL; High poverty=20 to <30% below FPL; Very high poverty= \geq 30% below FPL.

New diagnoses with an unknown area-based poverty category not shown (N=0 for 2021).

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

New HIV Diagnoses among Bronx Residents who were Born Outside of the US, 2021

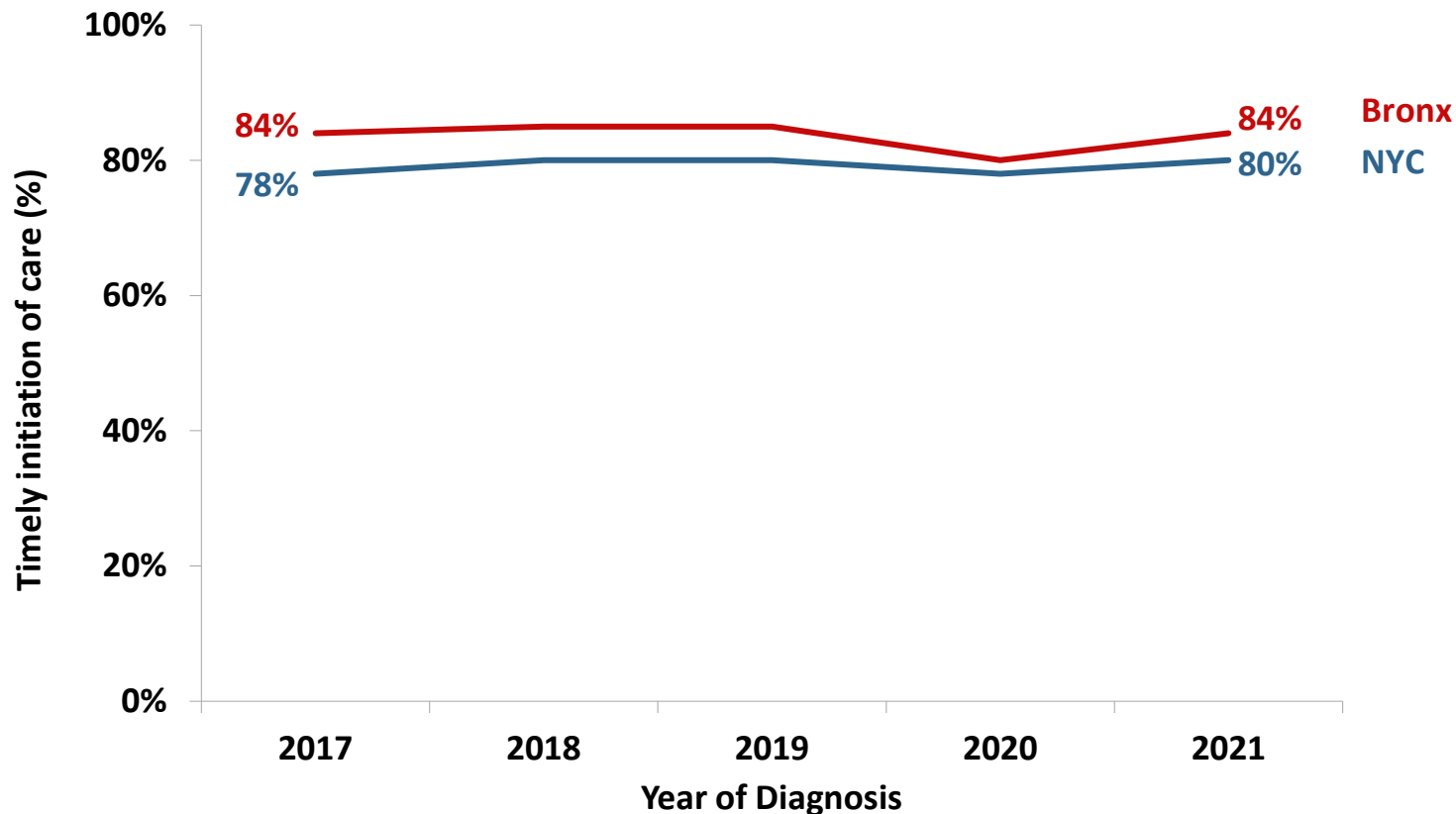


18% (67) of Bronx residents newly diagnosed with HIV were born outside the US, over half in the Caribbean. The Bronx has a higher proportion of Caribbean-born PWHA than does the city overall.

An aerial photograph of New York City, showing the dense urban landscape and the Manhattan skyline. The image is overlaid with a semi-transparent teal color. The text is centered in the middle of the image.

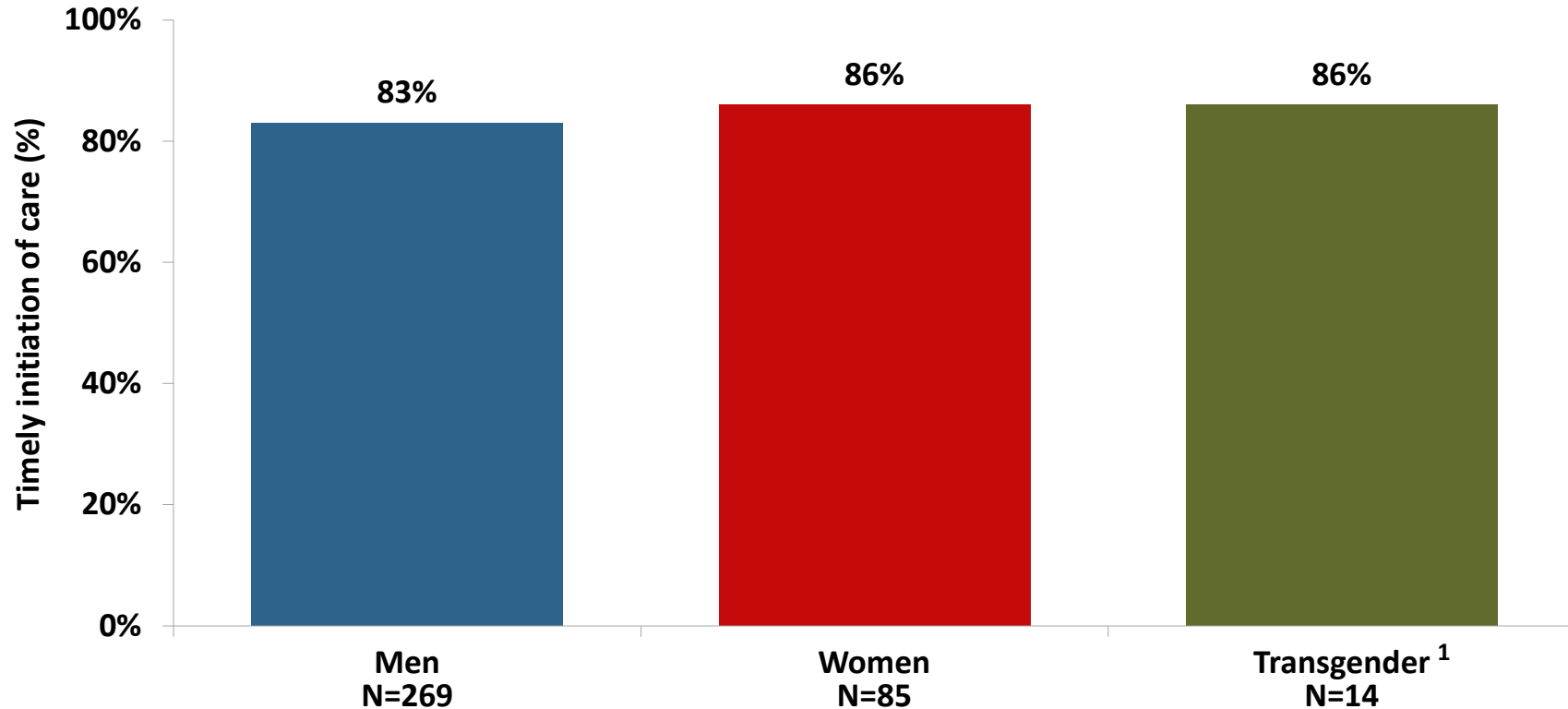
CARE OUTCOMES AMONG PEOPLE NEWLY DIAGNOSED WITH HIV IN THE BRONX

TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV IN NYC AND THE BRONX, 2017-2021



Between 2017 and 2021, timely initiation of care (within 30 days of diagnosis) among people newly diagnosed in the Bronx was stable and *higher than NYC overall*.

TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY GENDER IN THE BRONX, 2021



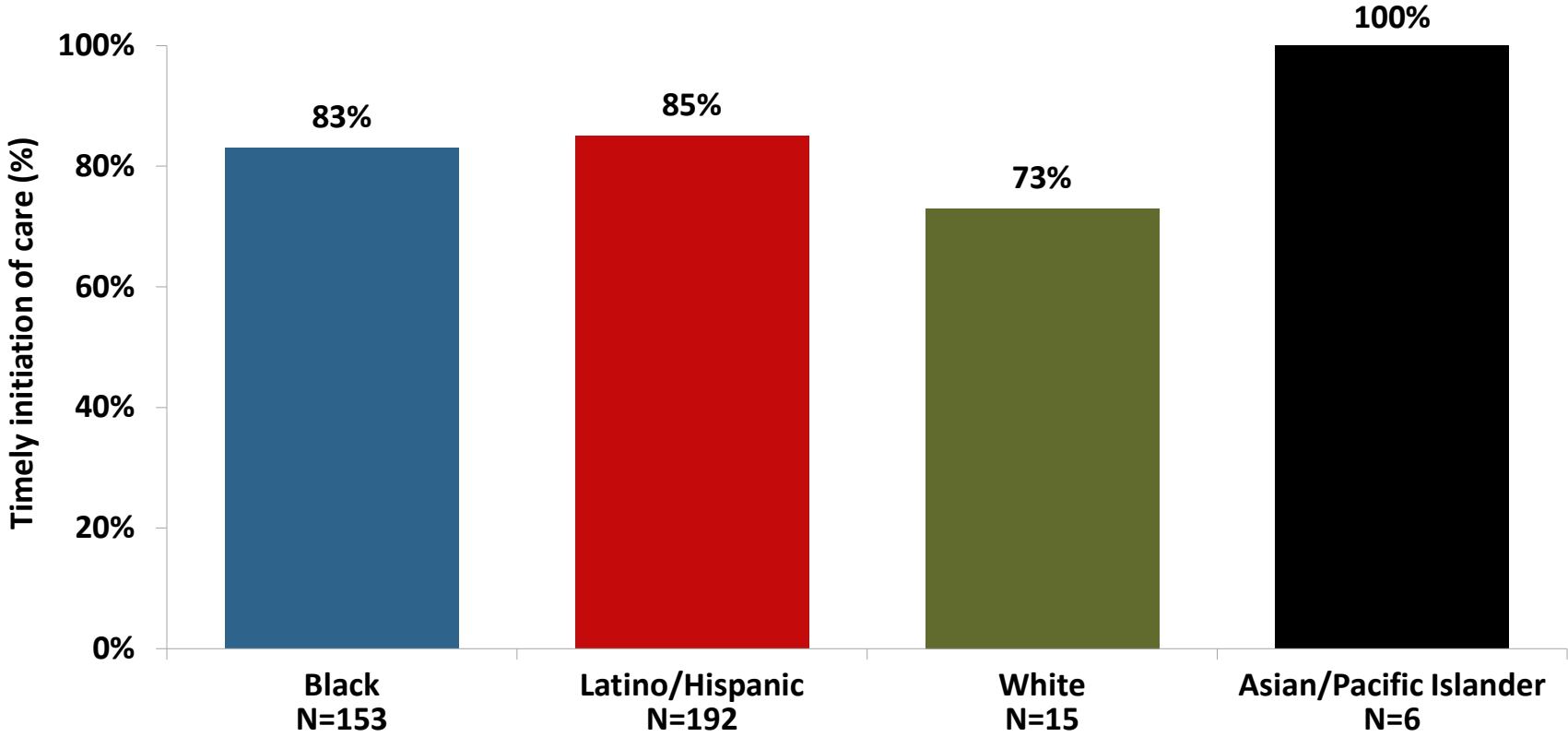
Among people newly diagnosed with HIV in the Bronx in 2021, the proportion of people linked to care within 30 days of diagnosis was similar by gender.

Timely initiation of care is defined as first CD4, viral load, or genotype drawn within 30 days of HIV diagnosis. People diagnosed at death have been excluded.

¹In 2021 in the Bronx, there were 14 new diagnoses among transgender women, and zero new diagnoses among transgender men.

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY RACE/ETHNICITY IN THE BRONX, 2021

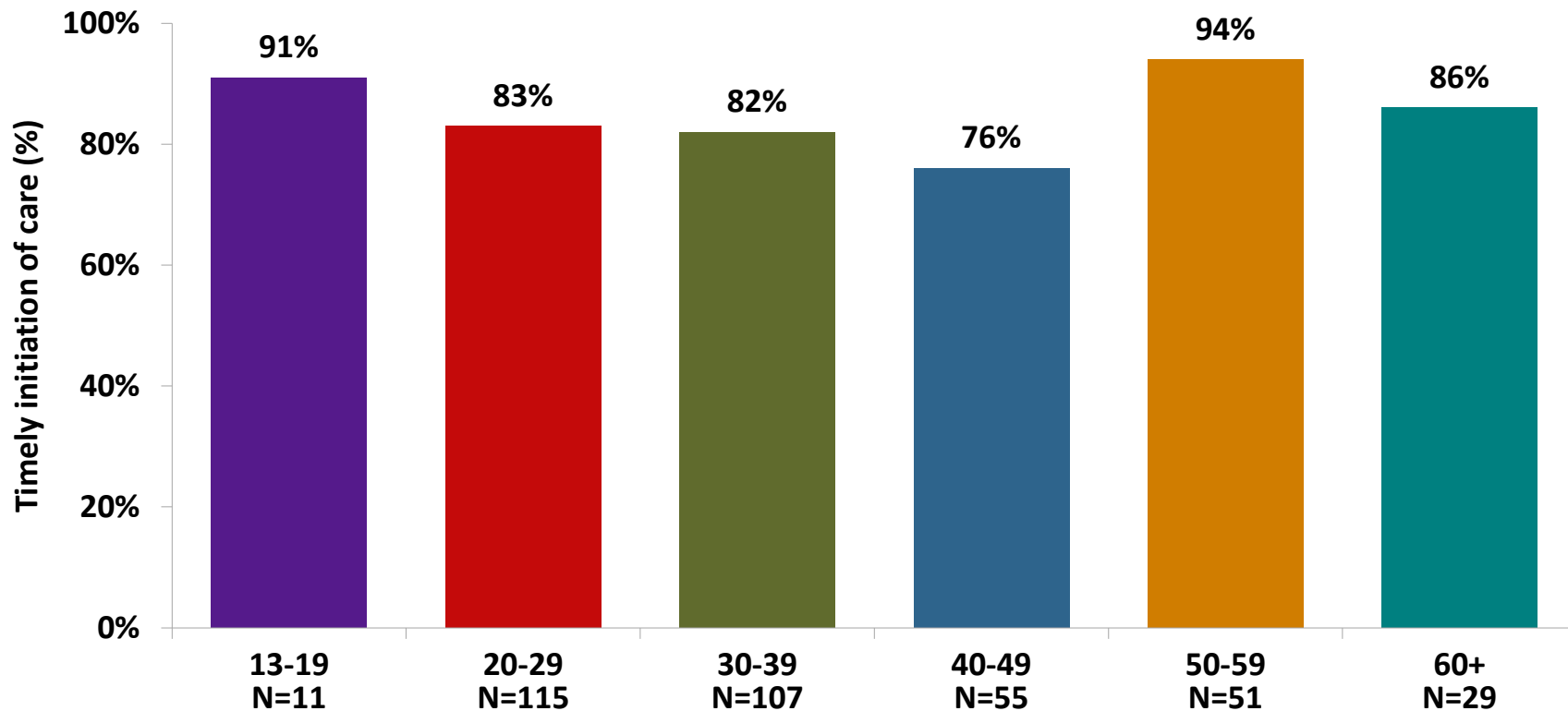


Among people newly diagnosed with HIV in the Bronx in 2021, White people had the lowest proportions linked to care within 30 days of diagnosis.



Timely initiation of care is defined as first CD4, viral load, or genotype drawn within 30 days of HIV diagnosis. People diagnosed at death have been excluded. New diagnoses among Multiracial people (N=2) and Native American people (N=0) are not displayed (N=0). As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY AGE IN THE BRONX, 2021



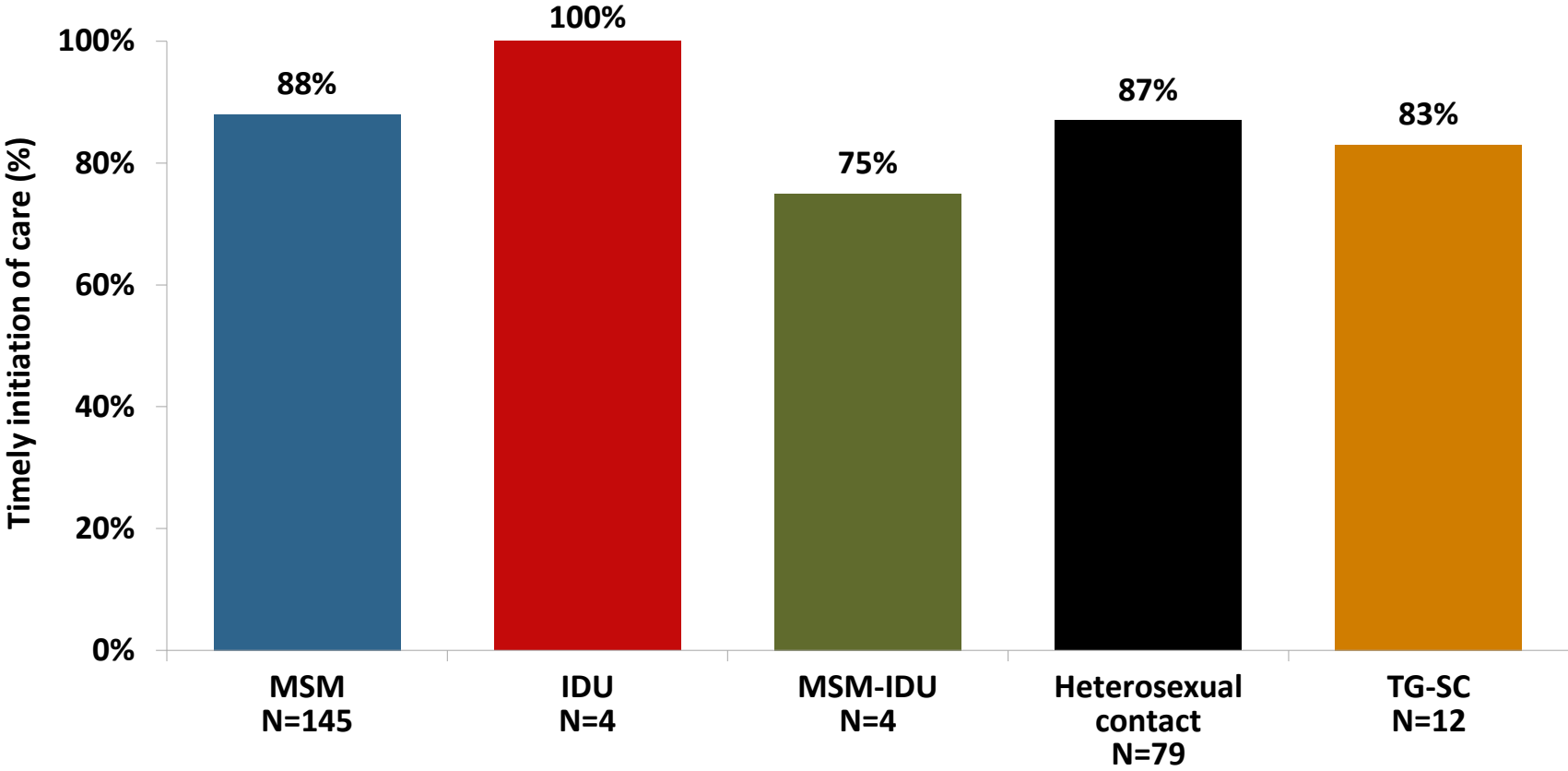
Among people newly diagnosed with HIV in the Bronx in 2021, people aged 40 to 49 years had the lowest proportion linked to care within 30 days of diagnosis.

Timely initiation of care is defined as first CD4, viral load, or genotype drawn within 30 days of HIV diagnosis. People diagnosed at death have been excluded.

New diagnoses among people aged 0-12 years are not displayed (N=0).

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY TRANSMISSION CATEGORY IN THE BRONX, 2021

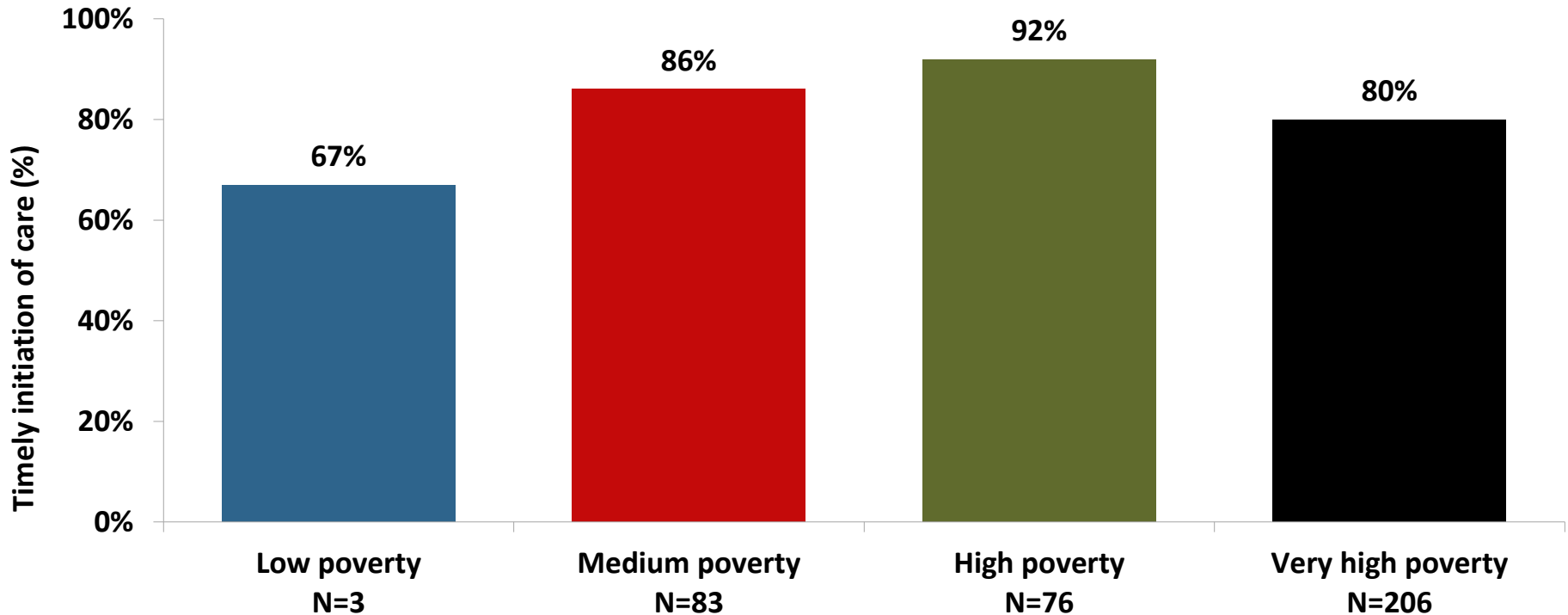


Among people newly diagnosed with HIV in the Bronx in 2021, men who have sex with men and who have a history of injection drug use had the lowest proportion linked to care within 30 days of diagnosis.

MSM=men who have sex with men; IDU=history of injection drug use; TG-SC=transgender people with sexual contact. Timely initiation of care is defined as first CD4, viral load, or genotype drawn within 30 days of HIV diagnosis. People diagnosed at death have been excluded. New diagnoses with perinatal (N=0), other (N=0), or unknown (N=124) transmission category are not displayed. As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.



TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY AREA-BASED POVERTY IN THE BRONX, 2021



Among people newly diagnosed with HIV in the Bronx in 2021, those living in high-poverty areas had the highest proportion linked to care within 30 days of diagnosis.

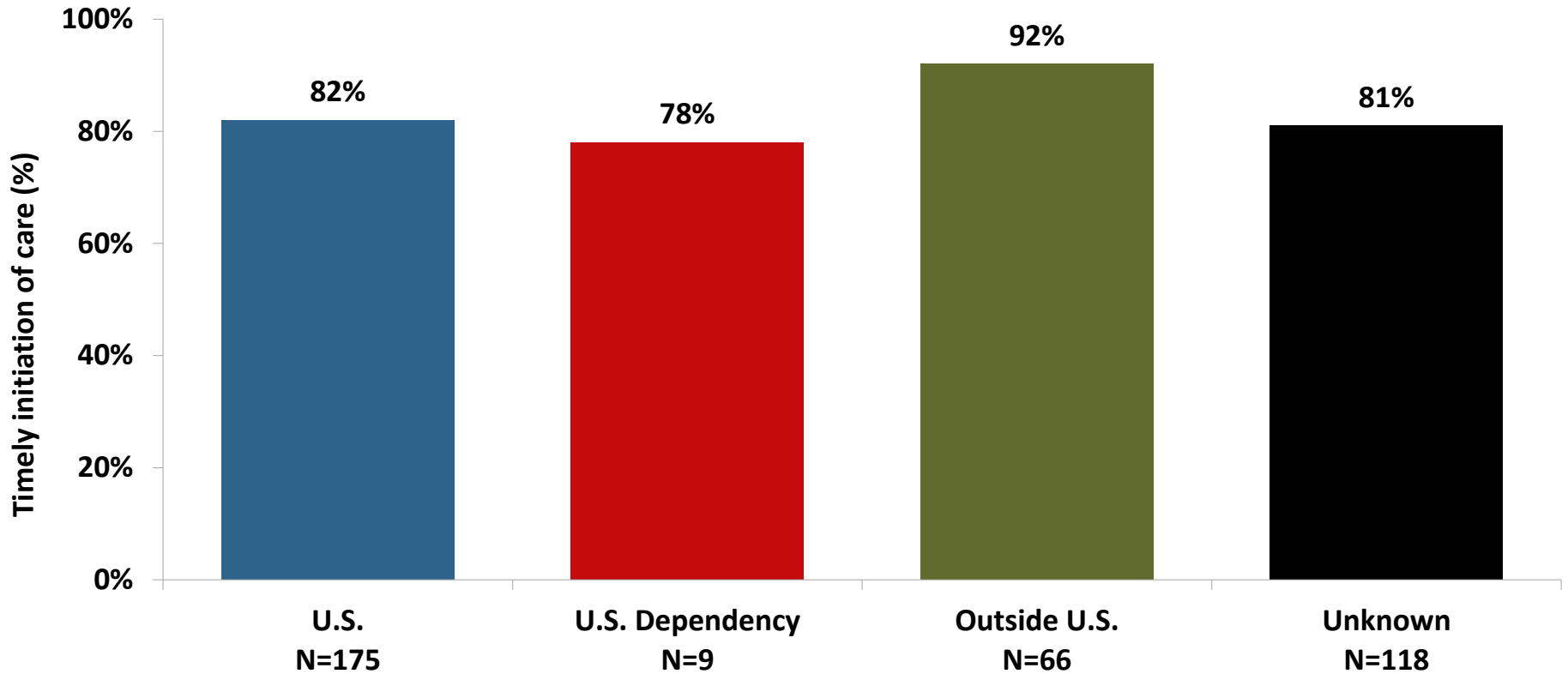
¹Area-based poverty level is determined by the proportion of residents living below the federal poverty level (FPL) in the NYC ZIP code of residence at diagnosis. Low poverty=<10% below FPL; Medium poverty=10 to <20% below FPL; High poverty=20 to <30% below FPL; Very high poverty= \geq 30% below FPL.

Timely initiation of care is defined as first CD4, viral load, or genotype drawn within 30 days of HIV diagnosis. People diagnosed at death have been excluded.

New diagnoses with an unknown area-based poverty category are not displayed (N=0).

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

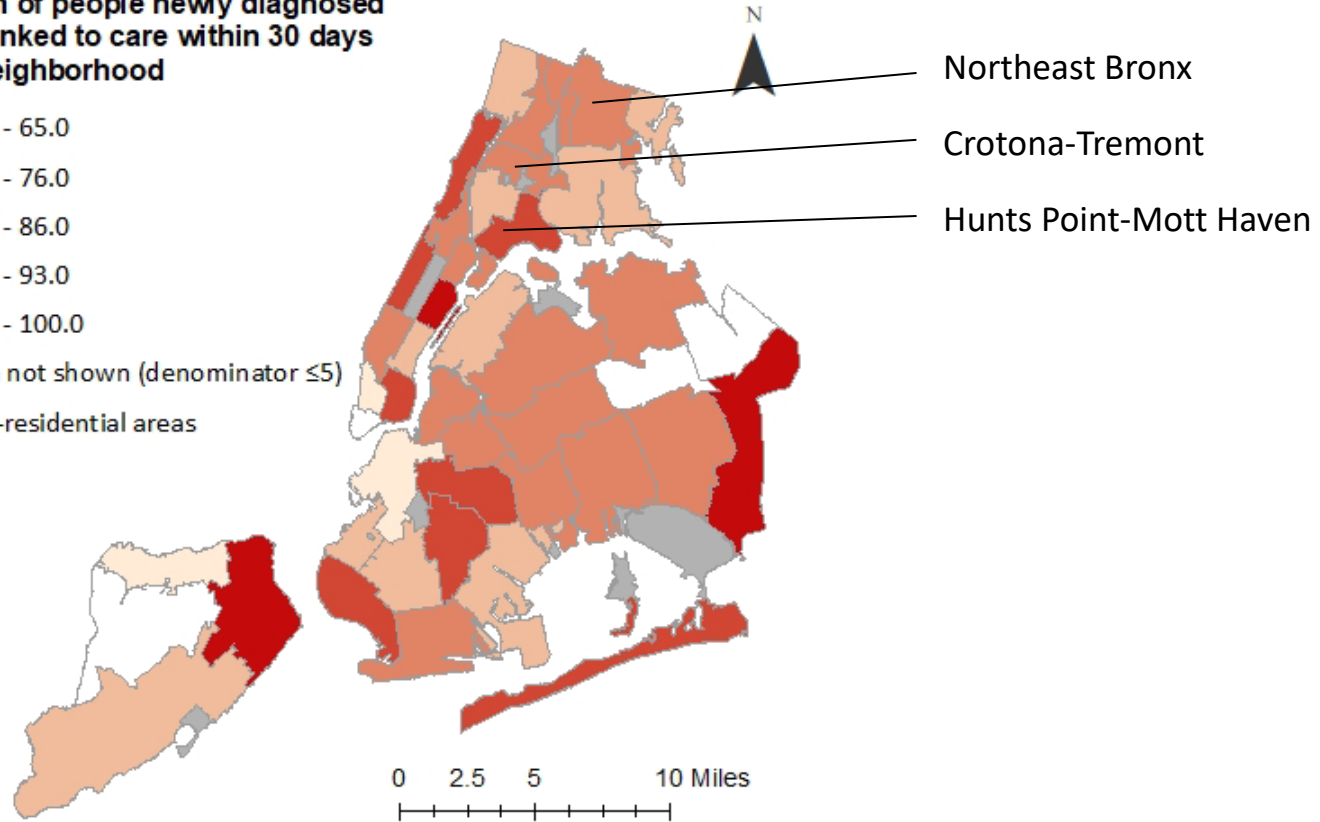
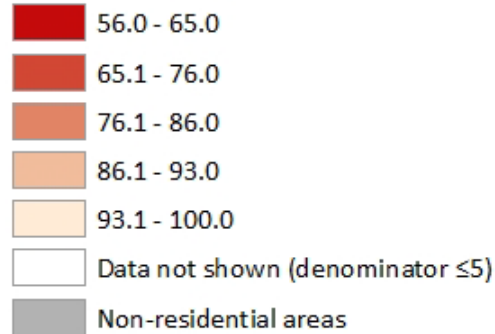
TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY REGION OF BIRTH IN THE BRONX, 2021



Among people newly diagnosed with HIV in the Bronx in 2021, people who were born outside of the U.S. had the highest proportion linked to care within 30 days of diagnosis.

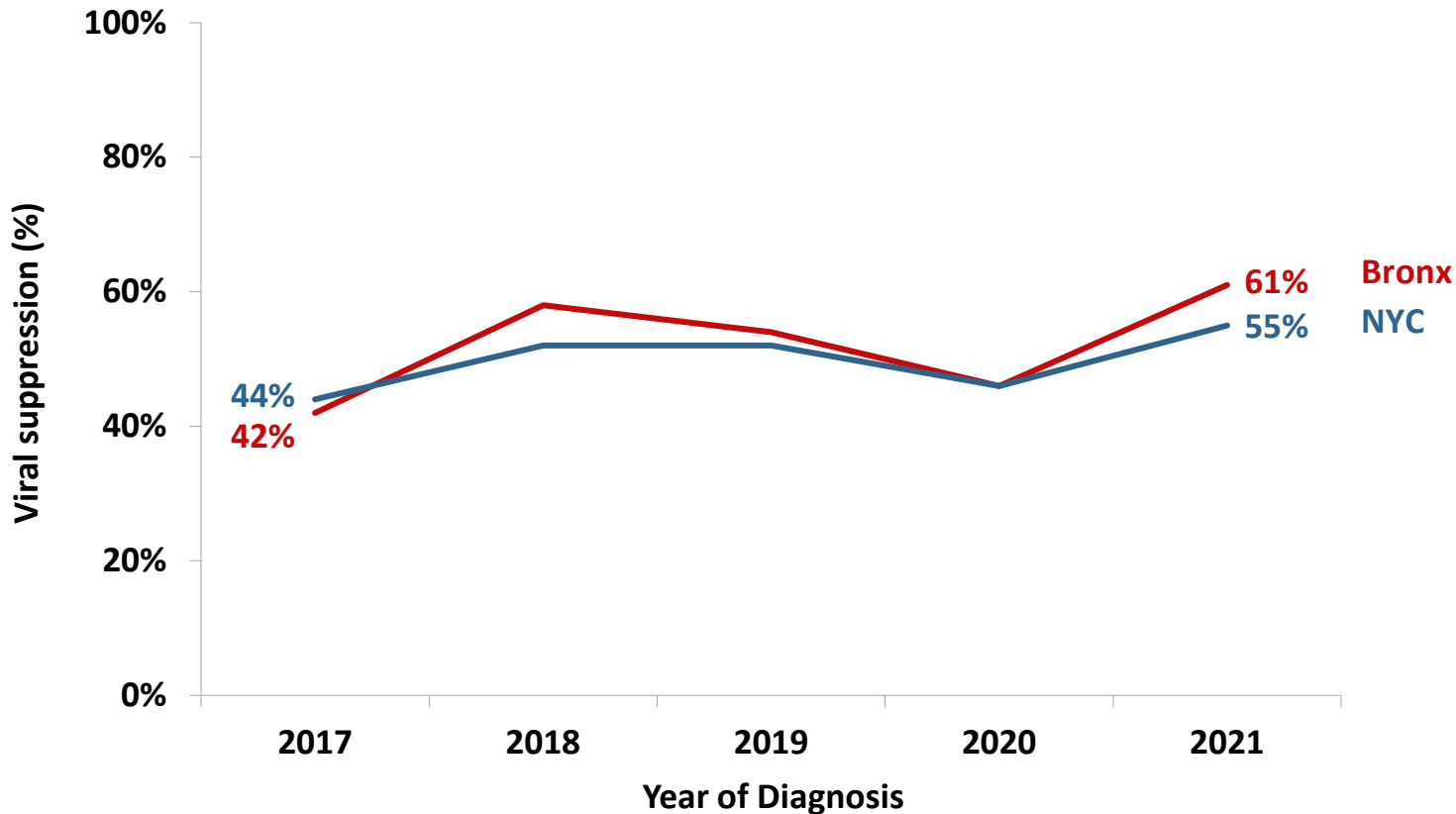
TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY UHF NEIGHBORHOOD IN NYC, 2021

Proportion of people newly diagnosed with HIV linked to care within 30 days by UHF neighborhood



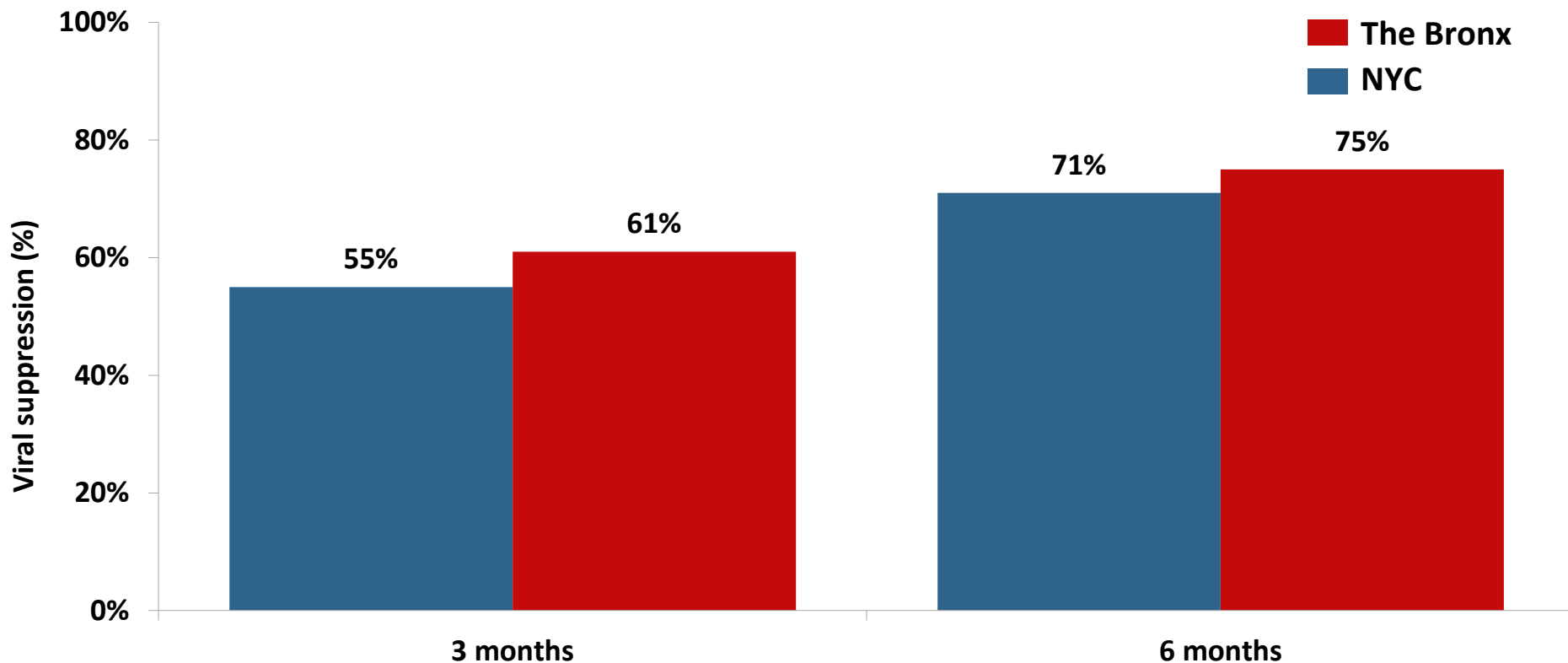
The Bronx neighborhoods with the lowest proportions of people timely linked to care in 2021 were Hunts Point-Mott Haven (73%), Crotona-Tremont (79%), and Northeast Bronx (85%).

VIRAL SUPPRESSION WITHIN 3 MONTHS AMONG PEOPLE NEWLY DIAGNOSED WITH HIV IN NYC AND THE BRONX, 2017-2021



Between 2017 and 2021, viral suppression within 3 months of diagnosis increased 38% in the Bronx and 31% in NYC overall. Again, newly diagnosed Bronx residents did better than the city overall.

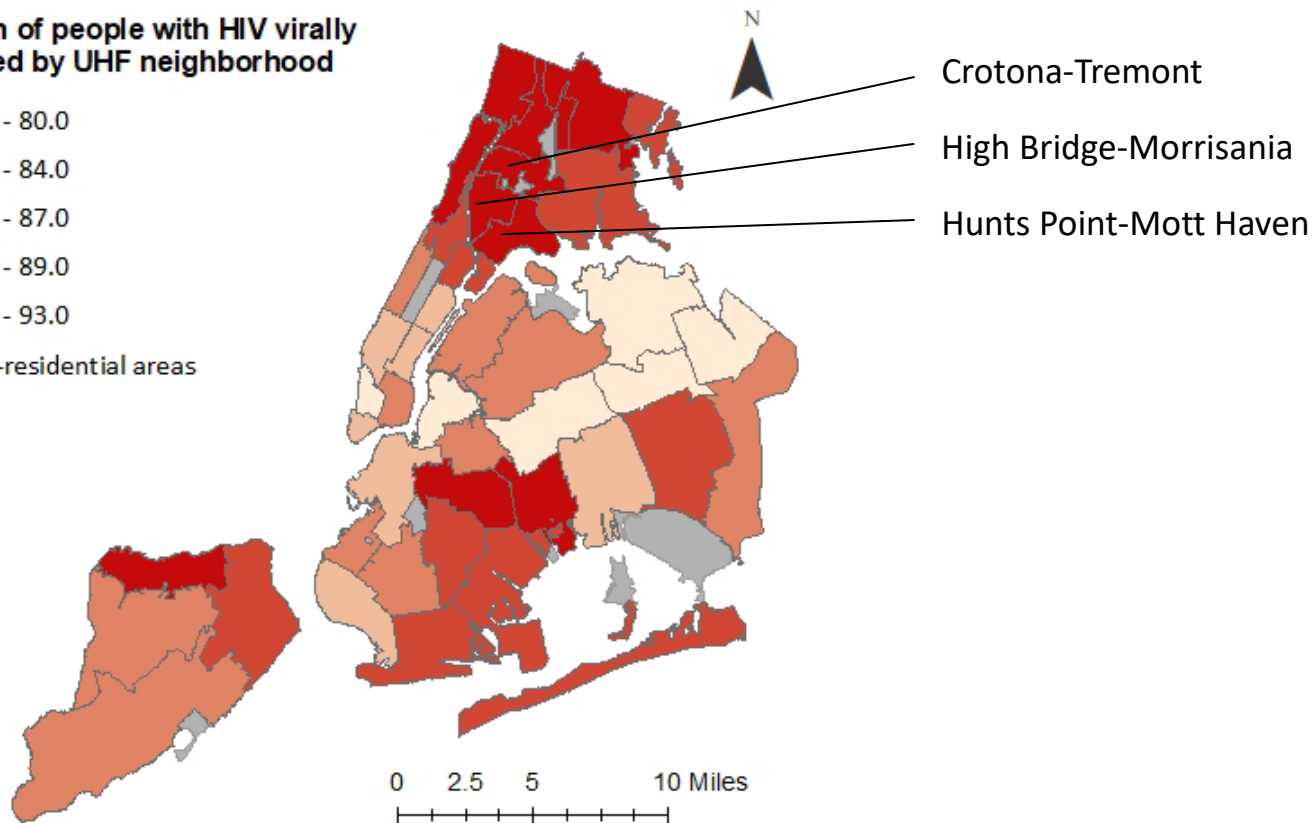
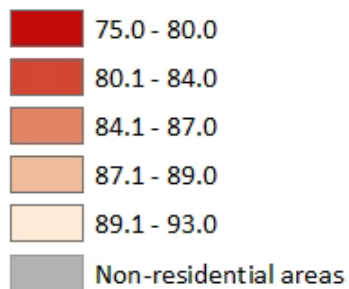
VIRAL SUPPRESSION WITHIN 3 AND 6 MONTHS OF NEW HIV DIAGNOSIS IN NYC AND THE BRONX, 2021



Among people newly diagnosed with HIV in 2021, a higher proportion of residents in the Bronx achieved viral suppression within 3 months and 6 months of diagnosis compared with NYC overall.

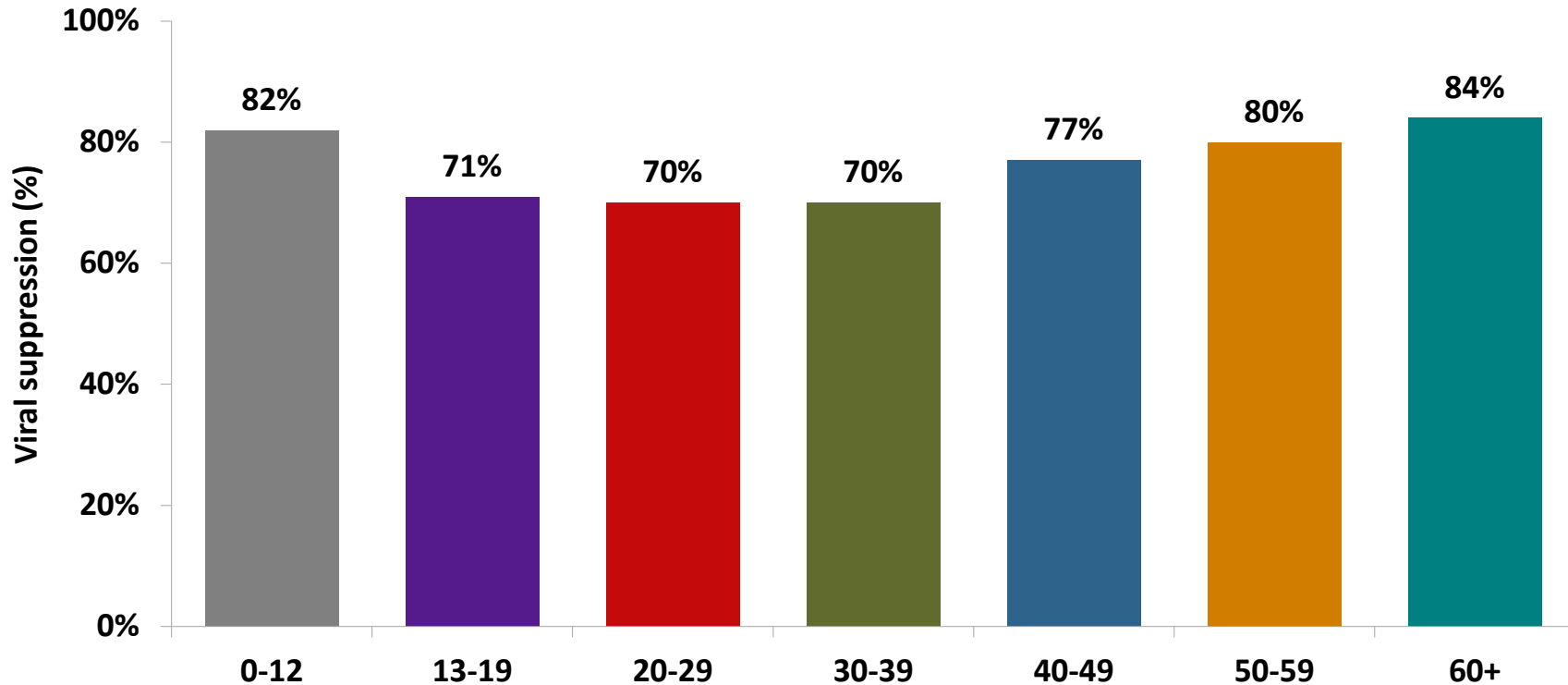
VIRAL SUPPRESSION BY UHF NEIGHBORHOOD IN NYC, 2021

Proportion of people with HIV virally suppressed by UHF neighborhood



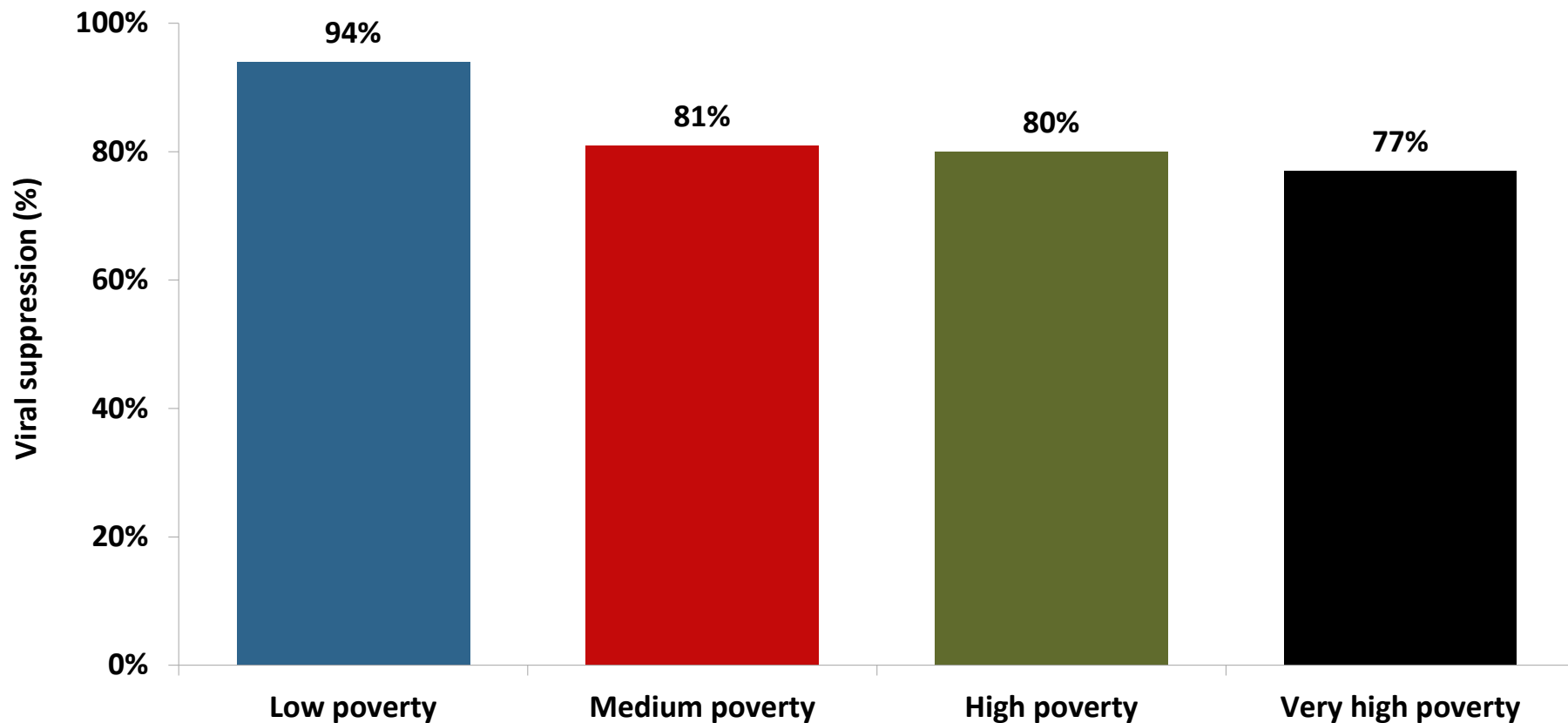
The Bronx neighborhoods with the lowest proportion of virally suppressed people living with HIV (PLWH) in 2021 were Hunts Point-Mott Haven (75%), Crotona-Tremont (76%), and High Bridge-Morrisania (77%).

VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY AGE IN THE BRONX, 2021



Among diagnosed people living with HIV (PLWH) in the Bronx, people aged 13 to 39 years had the lowest proportions virally suppressed by age group. This is also seen citywide.

VIRAL SUPPRESSION AMONG DIAGNOSED PWH BY AREA-BASED POVERTY LEVEL IN THE BRONX, 2021



Among diagnosed people with HIV (PWH) in the Bronx, people living in low-poverty areas had the highest proportion virally suppressed.

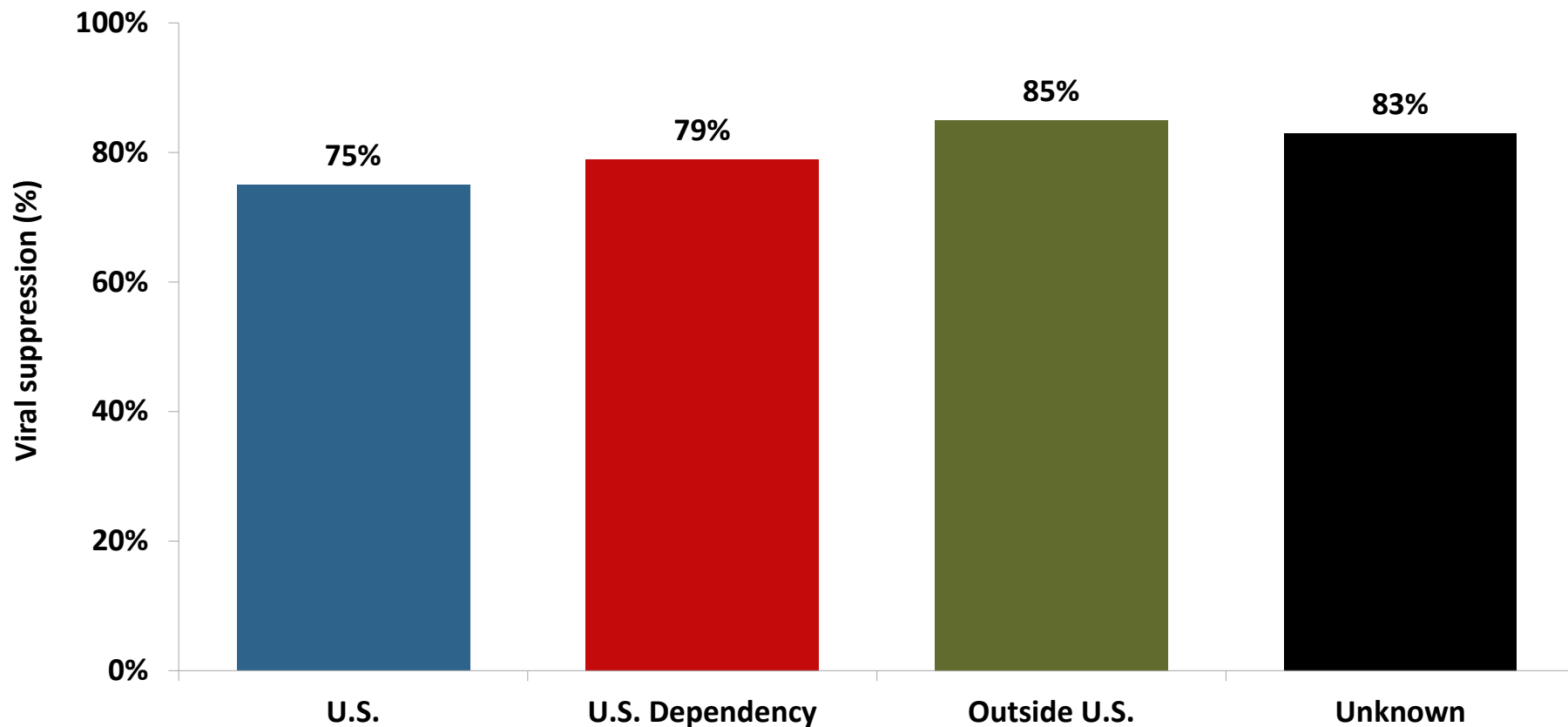
¹Area-based poverty level is determined by the proportion of residents living below the federal poverty level (FPL) in the NYC ZIP code of residence at diagnosis. Low poverty=<10% below FPL; Medium poverty=10 to <20% below FPL; High poverty=20 to <30% below FPL; Very high poverty= \geq 30% below FPL.

PWH without area-based poverty information not displayed.

Viral suppression is defined as the last HIV viral load in the calendar year <200 copies/mL.

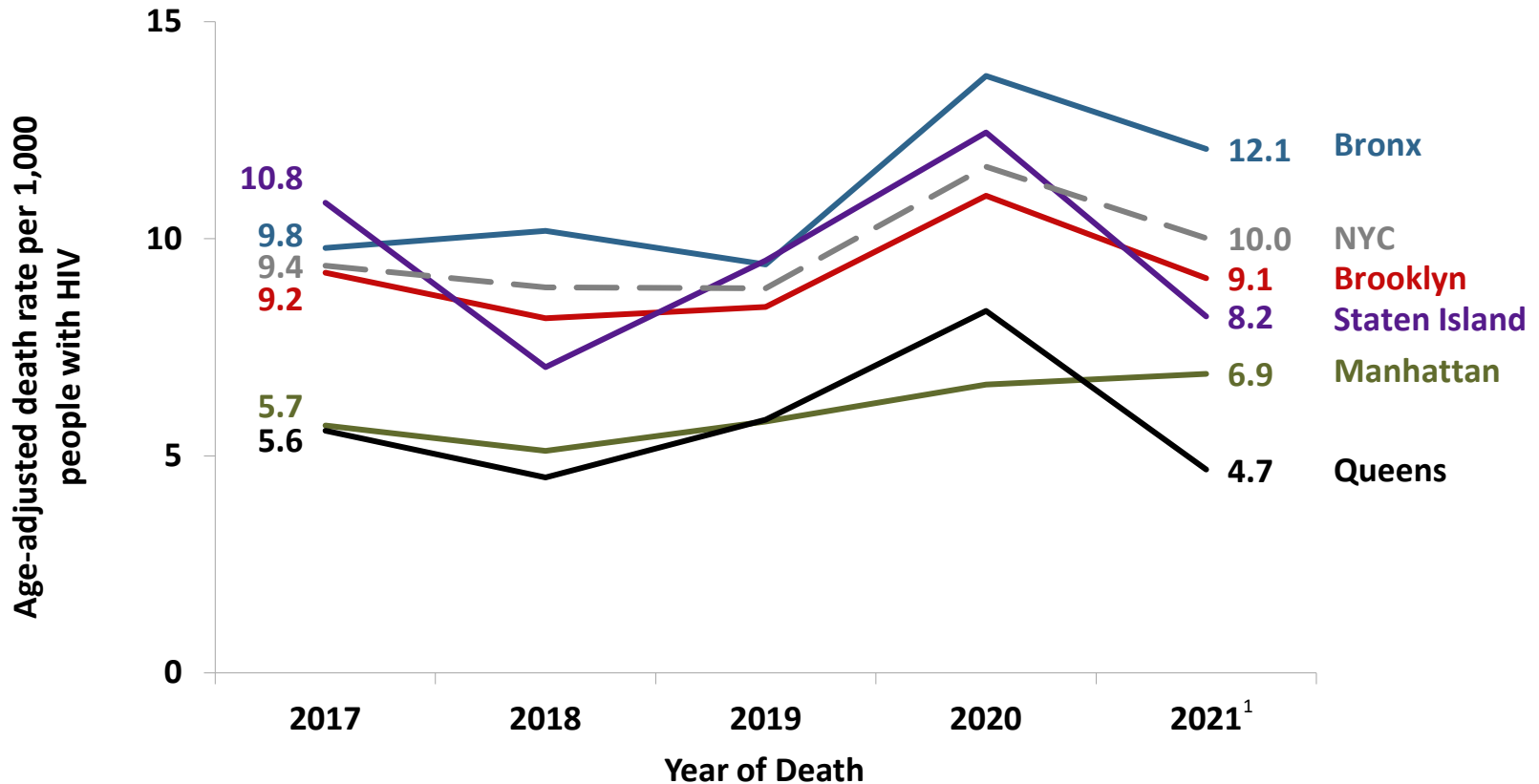
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

VIRAL SUPPRESSION AMONG DIAGNOSED PWH BY REGION OF BIRTH IN THE BRONX, 2021



Among diagnosed people with HIV (PWH) in the Bronx, people born outside of the U.S. had a higher proportion virally suppressed.

AGE-ADJUSTED DEATH RATES AMONG PEOPLE WITH HIV IN NYC OVERALL AND BY BOROUGH, 2017-2021



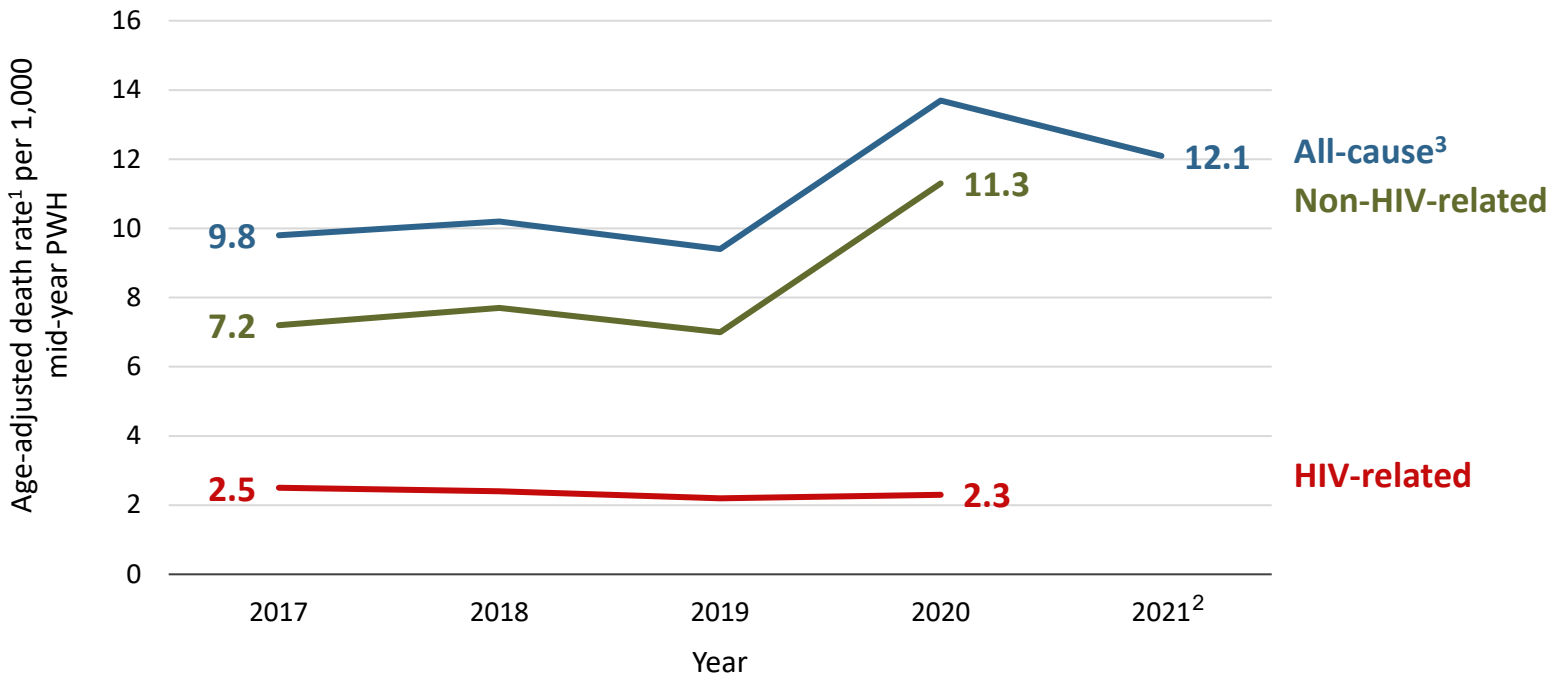
Between 2017 and 2021, the age-adjusted death rate among people with HIV in the Bronx was highest in 2020, and the Bronx also had the highest age-adjusted death rate citywide in 2021. We saw earlier that 29% of deaths to PWHAs were in Bronx residents

Age-adjusted to the NYC Census 2010 population.

¹The overall rate includes people with unknown cause of death. Death data for 2021 are incomplete.

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

Age-Adjusted Death Rates¹ Among People with HIV by HIV-Related and Non-HIV-Related Cause of Death in the Bronx, 2017-2021²



PWH=People with HIV.

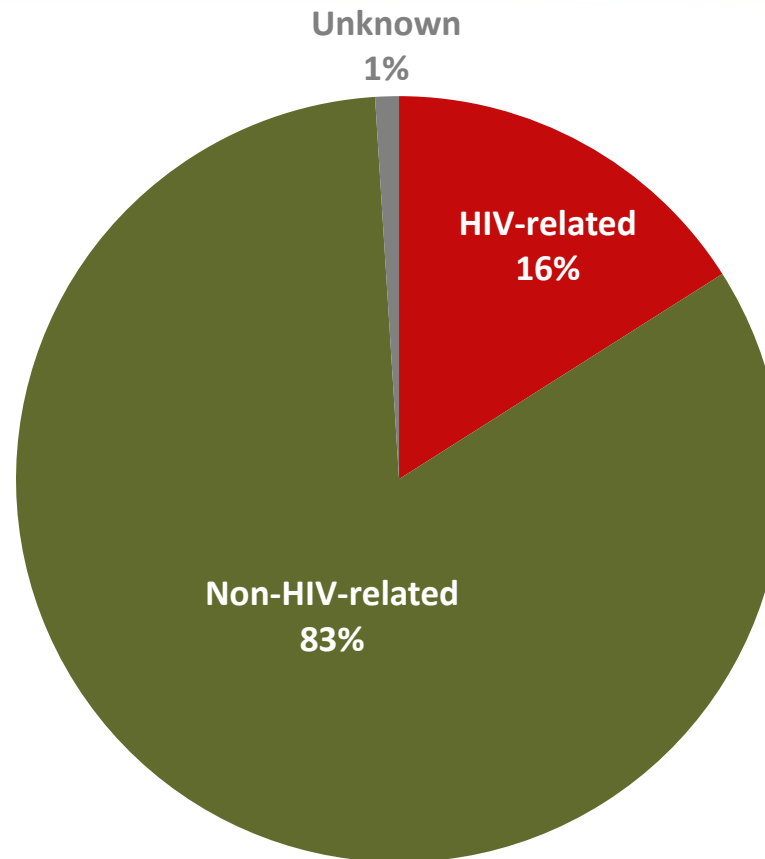
¹Death rates age-adjusted to the NYC Census 2010 population. People newly diagnosed at death were excluded from the numerator.

²Death data for 2021 are incomplete; cause of death data not yet available for 2021.

³The overall rate includes people with unknown cause of death.

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

CAUSE OF DEATH AMONG PEOPLE WITH HIV IN THE BRONX, 2020¹



In 2020, 83% of deaths among people with HIV in the Bronx were due to non-HIV-related cause. Among these, the top causes were COVID-19 (22%), cardiovascular diseases (20%), and non-HIV-related cancers (15%).

¹Cause of death data are not yet available for 2021.

²ICD codes B20-B24 were used to denote HIV-related deaths. For technical notes on cause of death by the NYC DOHMH's Office of Vital Statistics see:

<https://www1.nyc.gov/assets/doh/downloads/pdf/vs/2014sum.pdf>.

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

APPENDIX:

DEFINITIONS AND STATISTICAL NOTES

Definitions:

- **HIV diagnoses** include diagnoses of HIV and HIV concurrent with AIDS (AIDS diagnosed within 31 days of HIV), unless otherwise specified.
- **New HIV diagnoses** include individuals diagnosed in NYC during the reporting period and reported in NYC.
- **Death rates** refer to deaths from all causes, unless otherwise specified.
- **People with HIV (PWH)** refers to people with HIV during the reporting period.
- HIV surveillance collects information about individuals' current **gender identity**, when available. This report displays the following gender categories: men, women and transgender people. People whose current gender identity differs from their sex assigned at birth are considered transgender. Classifying transgender people in surveillance requires accurate collection of both sex assigned at birth and current gender identity. Sex and gender information are collected from people's self-reports, their diagnosing providers or medical chart reviews. This information may or may not reflect self-identification. Transgender identity has been collected routinely since 2005 for newly reported cases. Reported numbers of HIV diagnoses among transgender people and transgender people with HIV are likely to be underestimates. For more information, see the "HIV Among People Identified as Transgender in New York City, 2021" surveillance slide set available at nyc.gov/assets/doh/downloads/pdf/dires/hiv-in-transgender-persons.pdf. NYC HIV surveillance collects information on other gender identity categories, including "Non-binary/Gender non-conforming." In this report, data for these individuals at the time of publication are displayed by sex assigned at birth.

APPENDIX:

DEFINITIONS AND STATISTICAL NOTES

Definitions (continued):

- **Transmission category** includes people with known or identified transmission category, except when an unknown category is presented. Transmission category information is collected from people's self-report, their diagnosing provider, or medical chart review. "Heterosexual contact" includes people who had heterosexual sex with a person they know to have HIV, a person who has injected drugs or a person who has received blood products. For women only, it also includes history of sex work, multiple sex partners, sexually transmitted infection, crack/cocaine use, sex with a bisexual man, probable heterosexual transmission as noted in a medical chart, or sex with a man and negative history of injection drug use. "Transgender people with sexual contact" includes people identified as transgender who have reported sexual contact and have a negative history of injection drug use. "Other" includes people who received treatment for hemophilia, people who received a transfusion or transplant, people with other health care-associated transmission and children with non-perinatal transmission category.

Statistical notes:

- United Hospital Fund (UHF) boundaries in maps were updated for data released in 2010 and onward. Non-residential zones are indicated, and Rikers Island is classified with West Queens.

APPENDIX:

TECHNICAL NOTES: NYC HIV CARE CONTINUUM

- **People with HIV** is calculated as the number of HIV-diagnosed divided by the estimated proportion of people with HIV who had been diagnosed, based on a CD4 depletion model.
 - Source: NYC HIV Surveillance Registry. Method: Song R, et al. Using CD4 Data to Estimate HIV Incidence, Prevalence, and Percent of Undiagnosed Infections in the United States. *J Acquir Immune Defic Syndr*. 2017 Jan 1;74(1):3-9.
- **HIV-diagnosed** is calculated as the number of people with HIV retained in care plus the estimated number of people with HIV who were out of care, based on a statistical weighting method. This estimated number aims to account for migration out of NYC, and therefore is different from the total number of people diagnosed and reported with HIV in NYC.
 - Source: NYC HIV Surveillance Registry. Method: Xia Q, et al. Proportions of Patients With HIV Retained in Care and Virally Suppressed in New York City and the United States. *JAIDS* 2015;68(3):351-358.
- **Received care** is defined as people with HIV with ≥ 1 viral load or CD4 count or CD4 percent drawn in the calendar year and reported to NYC HIV surveillance.
 - Source: NYC HIV Surveillance Registry.
- **Prescribed ART** is calculated as the number of people with HIV retained in care multiplied by the estimated proportion of people with HIV prescribed ART in the previous 12 months, based on the proportion of NYC Medical Monitoring Project participants whose medical record included documentation of ART prescription.
 - Source: NYC HIV Surveillance Registry and NYC Medical Monitoring Project, 2021.
- **Virally suppressed** is calculated as people with HIV in care with a most recent viral load measurement in the calendar year of < 200 copies/mL, plus the estimated number of out-of-care people with HIV in the calendar year with a viral load of < 200 copies/mL, based on a statistical weighting method.
 - Source: NYC HIV Surveillance Registry. Method: Xia Q, et al. Proportions of Patients With HIV Retained in Care and Virally Suppressed in New York City and the United States. *JAIDS* 2015;68(3):351-358.