

HIV IN BROOKLYN, NEW YORK CITY, 2021



HIV Epidemiology Program

New York City Department of Health and Mental Hygiene



Published November 2022

<https://www1.nyc.gov/site/doh/data/data-sets/epi-surveillance-slide-sets.page>

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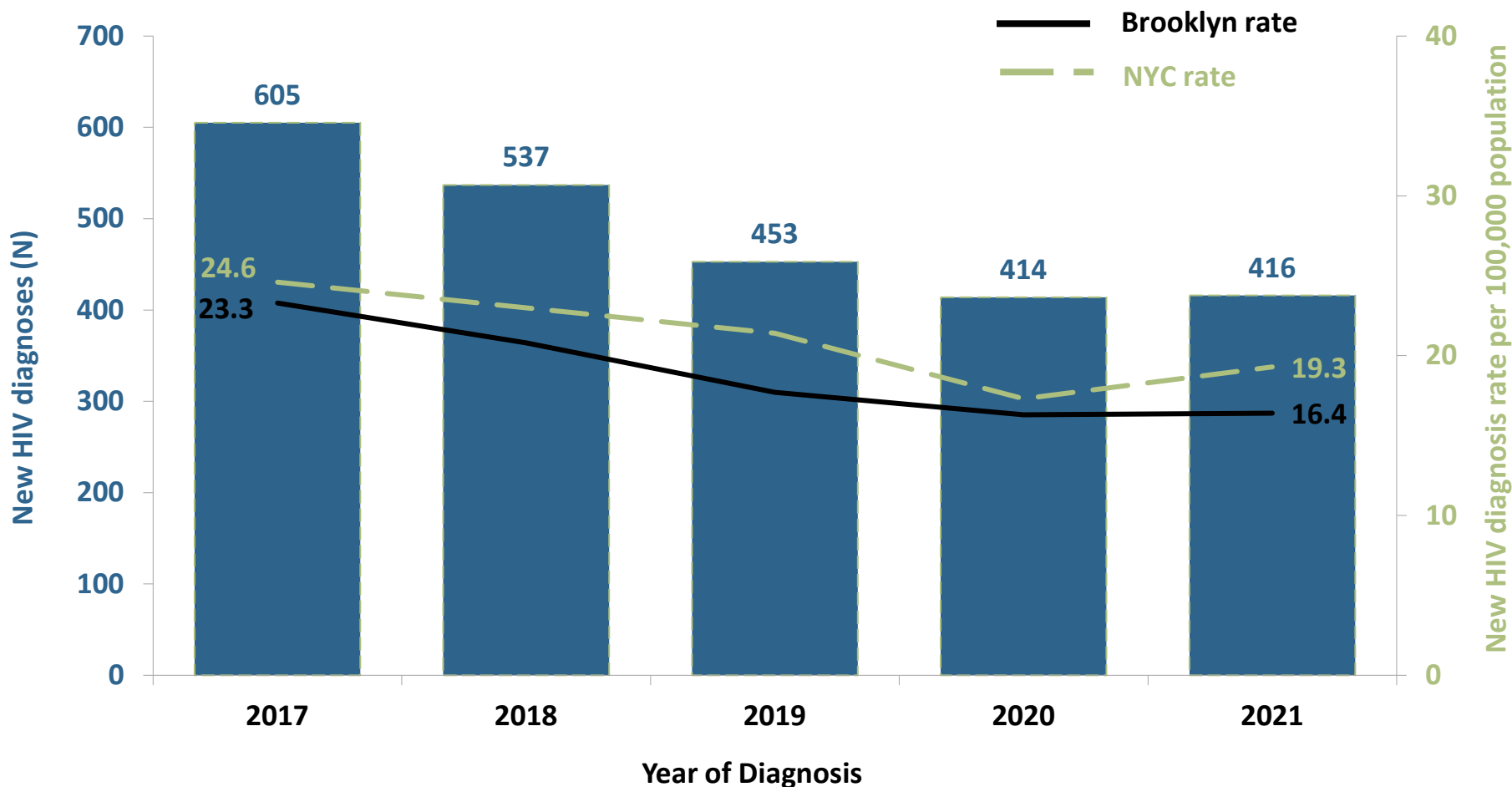
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HIV IN BROOKLYN, 2021

BASIC STATISTICS

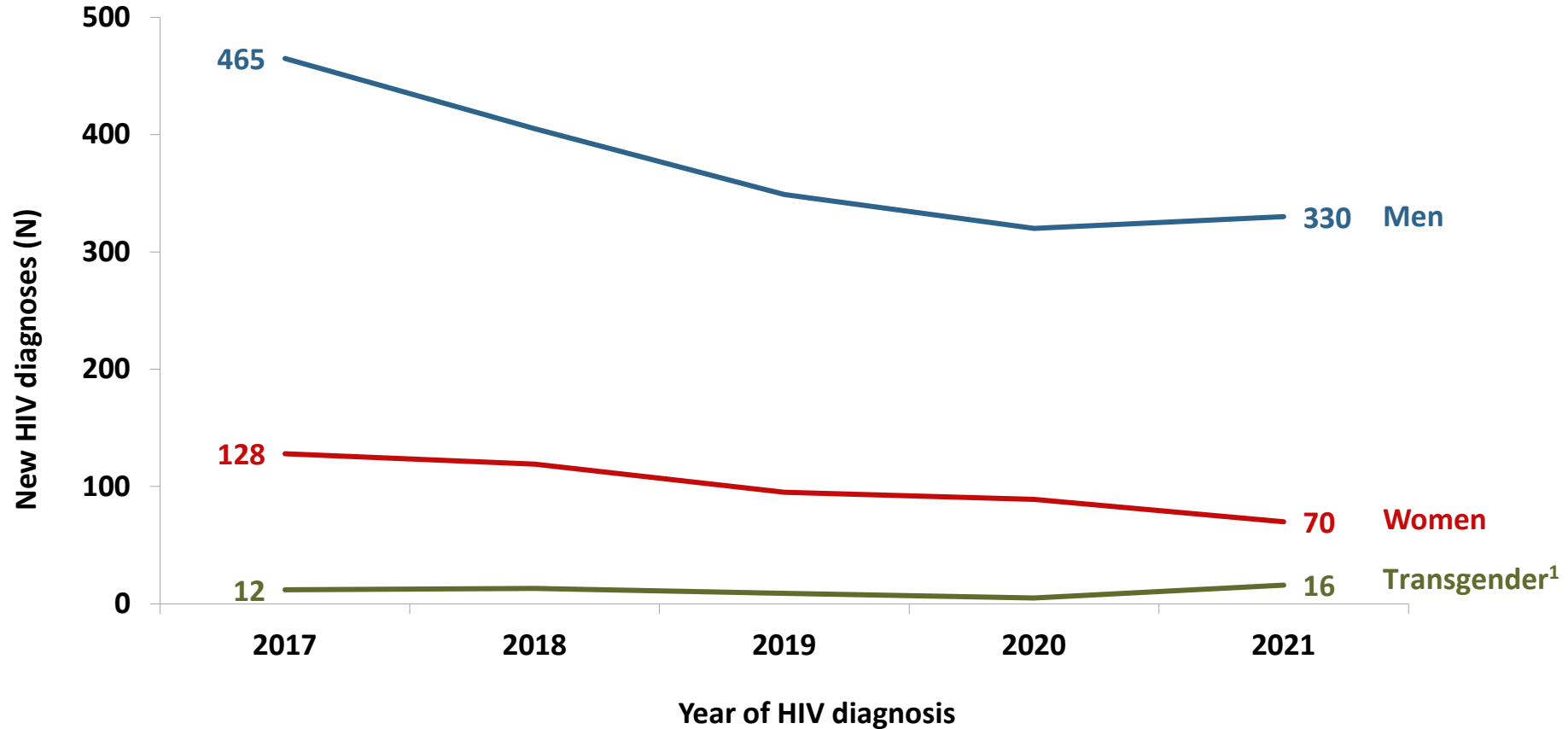
- **31% of all New Yorkers live in Brooklyn**
- **416 new HIV diagnoses**
 - 29% of all HIV diagnoses in NYC
 - Includes 86 HIV diagnoses concurrent with an AIDS diagnosis (21%)
- **246 new AIDS diagnoses**
- **445 deaths among people with HIV**
 - 9.1 deaths per 1,000 people with HIV¹

NEW HIV DIAGNOSES IN BROOKLYN, 2017-2021



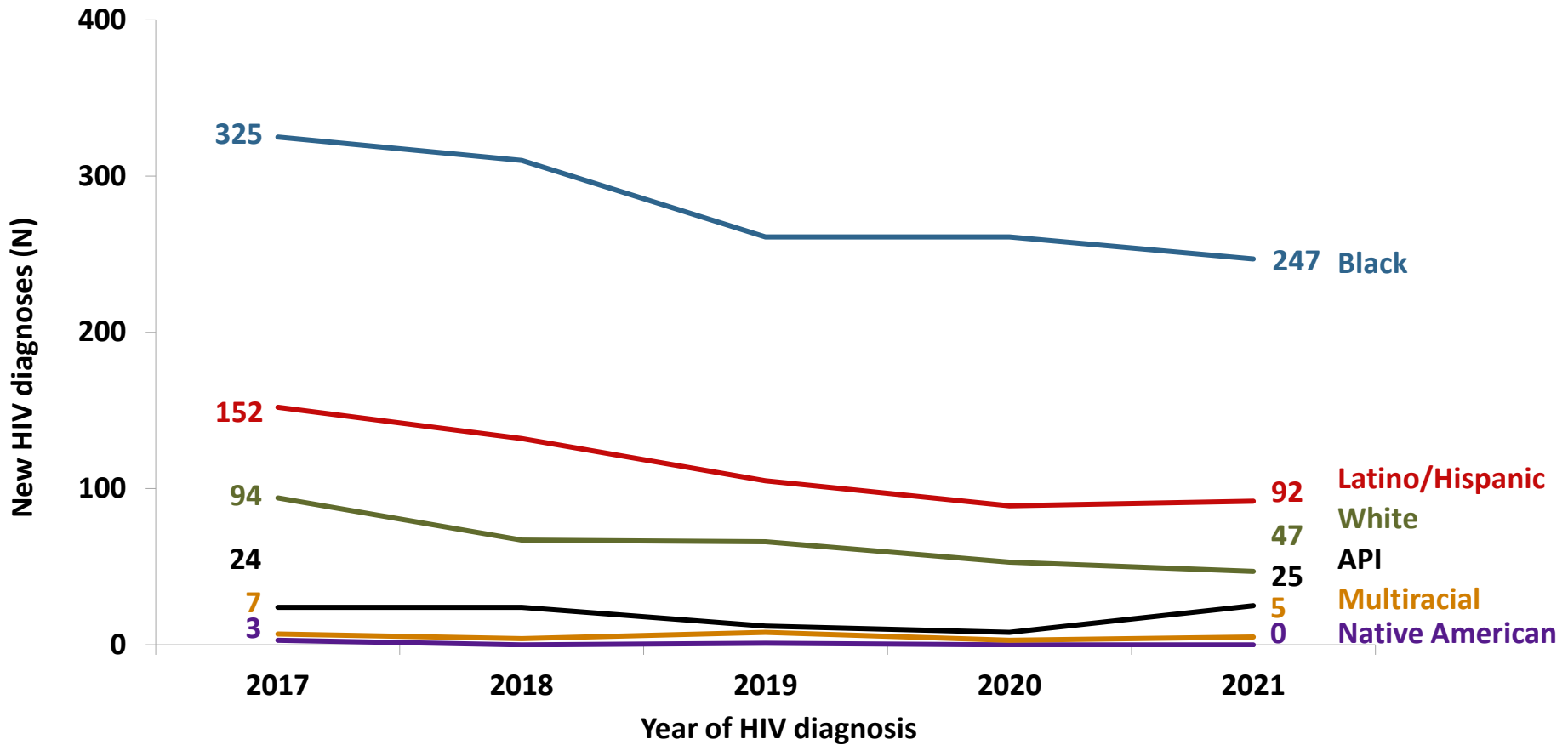
The number and rate of new HIV diagnoses decreased in Brooklyn between 2017 and 2021, with a 2021 HIV diagnosis rate lower than NYC overall.

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



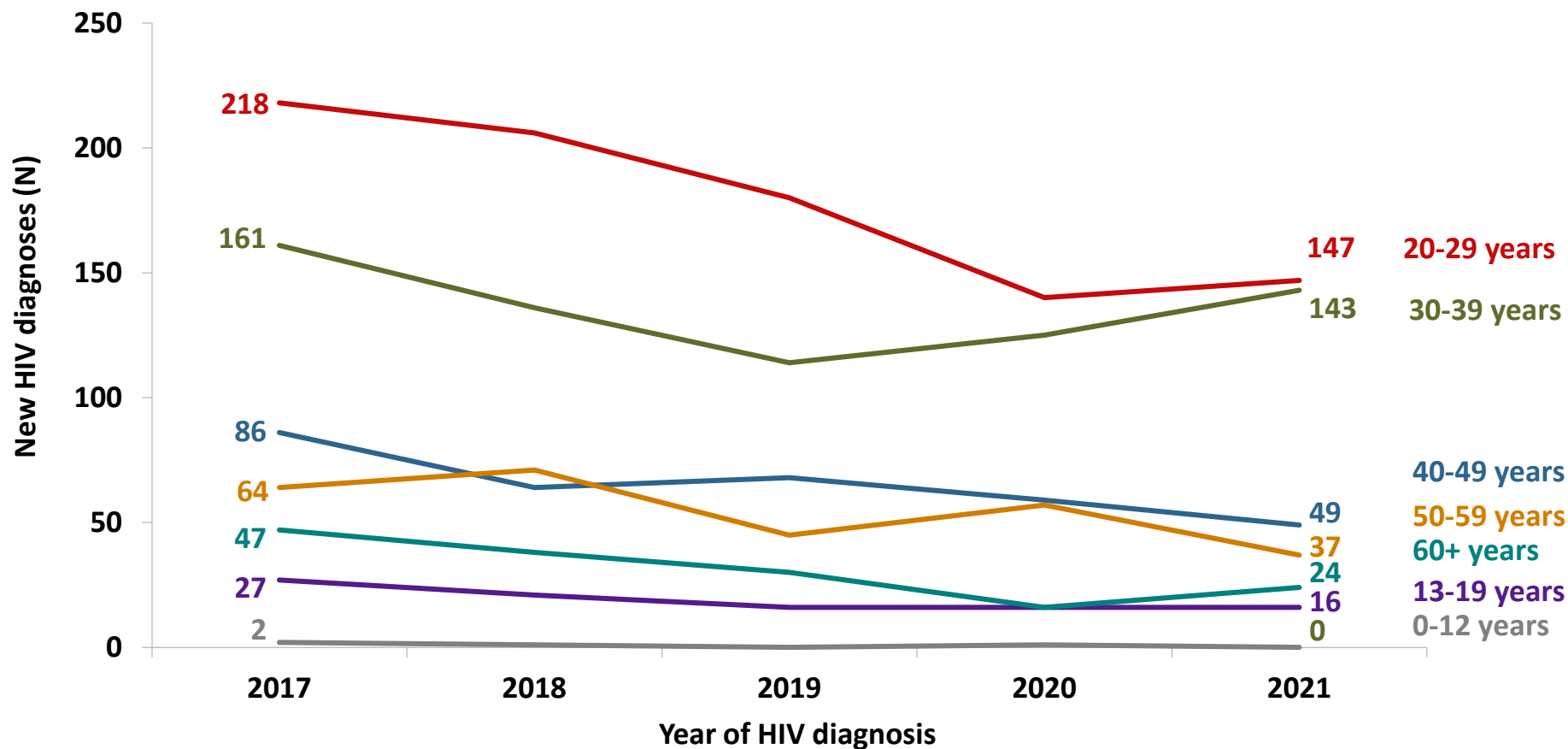
Between 2017 and 2021 in Brooklyn, the number of new HIV diagnoses decreased among men and women, while remaining relatively flat among transgender people.

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



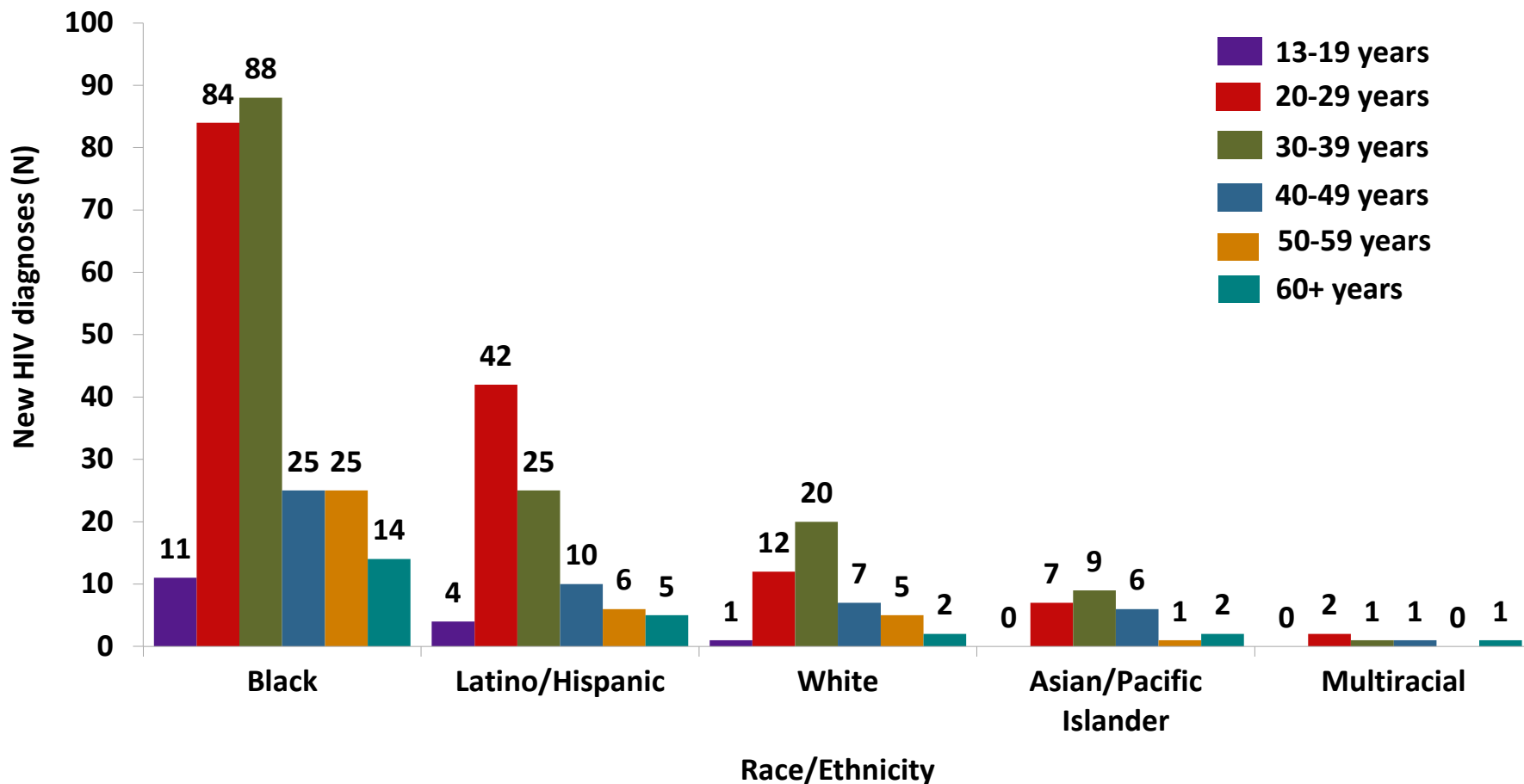
New HIV diagnoses decreased or remained stable across all race/ethnicity groups. Black people accounted for the largest number of new diagnoses in Brooklyn.

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



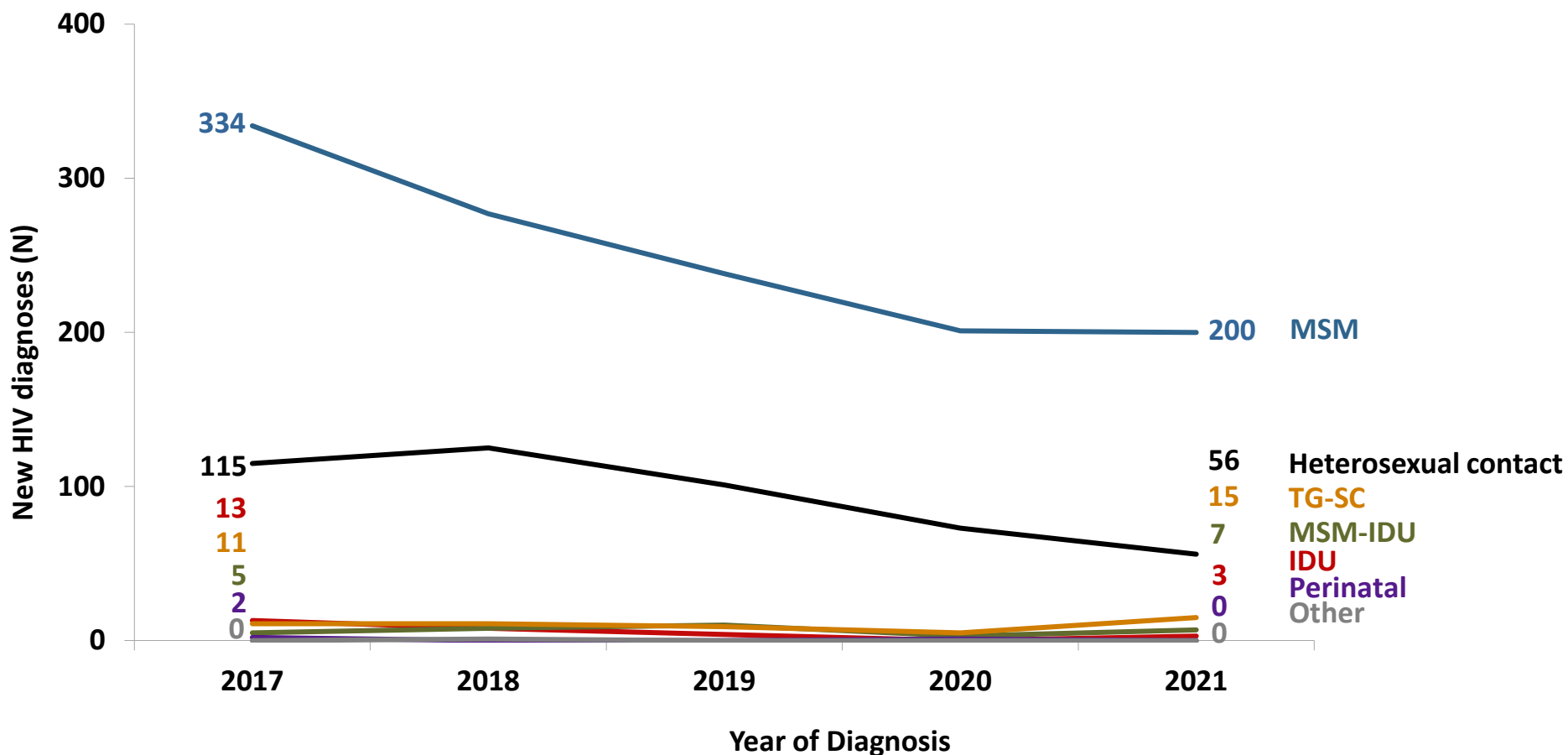
People aged 20 to 39 years had the highest numbers of new HIV diagnoses in Brooklyn. New diagnoses decreased across most age groups.

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



Black people aged 20 to 39 years and Latino/Hispanic people aged 20 to 29 years accounted for the largest number of new HIV diagnoses in Brooklyn in 2021.

NUMBER OF NEW HIV DIAGNOSES BY TRANSMISSION CATEGORIES IN BROOKLYN, 2017-2021



Between 2017 and 2021, the number of new HIV diagnoses decreased among all transmission categories in Brooklyn.

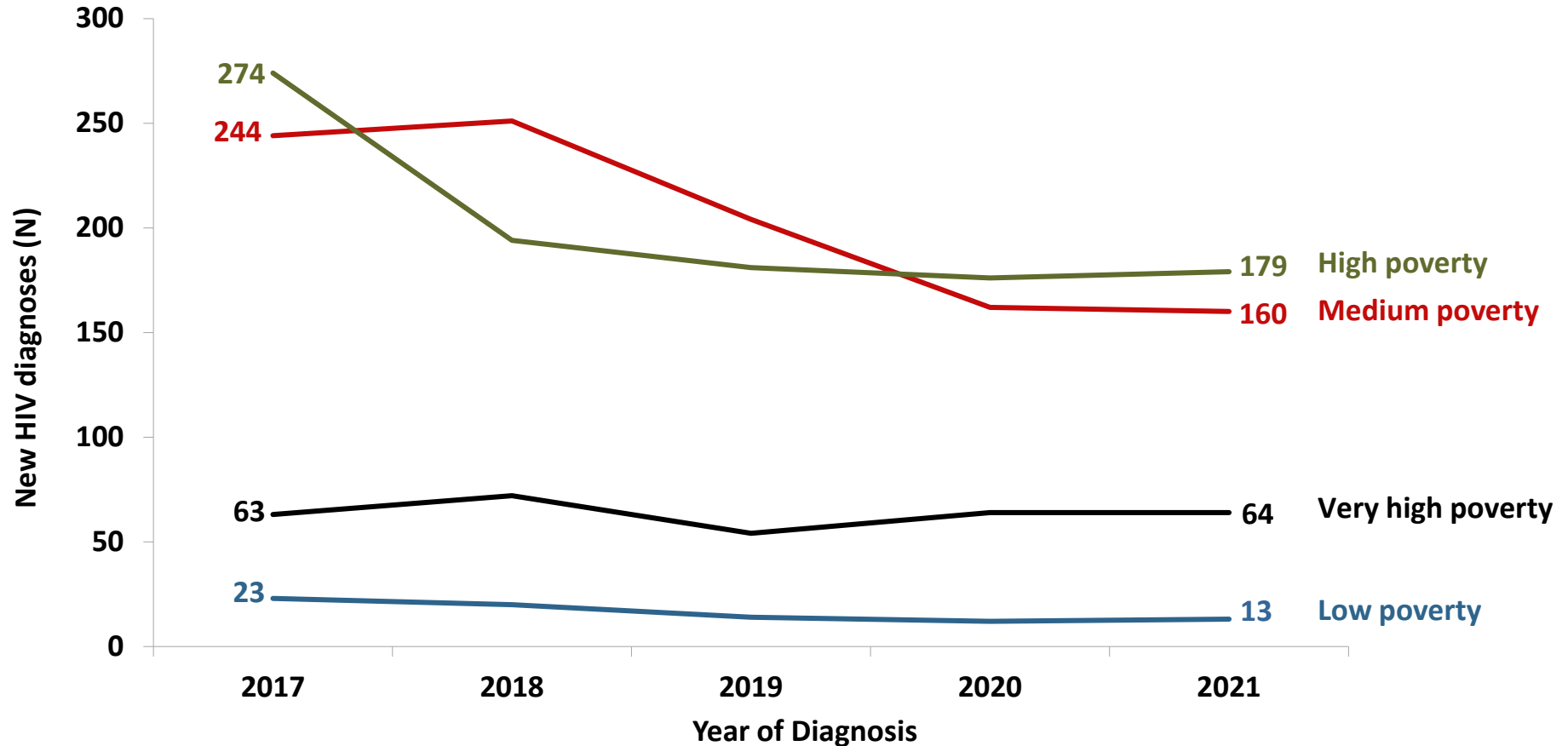
MSM=men who have sex with men; IDU=history of injection drug use; TG-SC=transgender people with sexual contact.

People with unknown transmission category are not displayed. In Brooklyn, there were 135 people newly diagnosed with HIV with an unknown transmission category in 2021.

For new HIV diagnoses among Other transmission category, there were N=0 in 2017, N=1 in 2018, N=0 in 2019, N=0 in 2020, and N=0 in 2021.

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

NUMBER OF NEW HIV DIAGNOSES BY AREA-BASED POVERTY LEVEL¹ IN BROOKLYN, 2017-2021



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

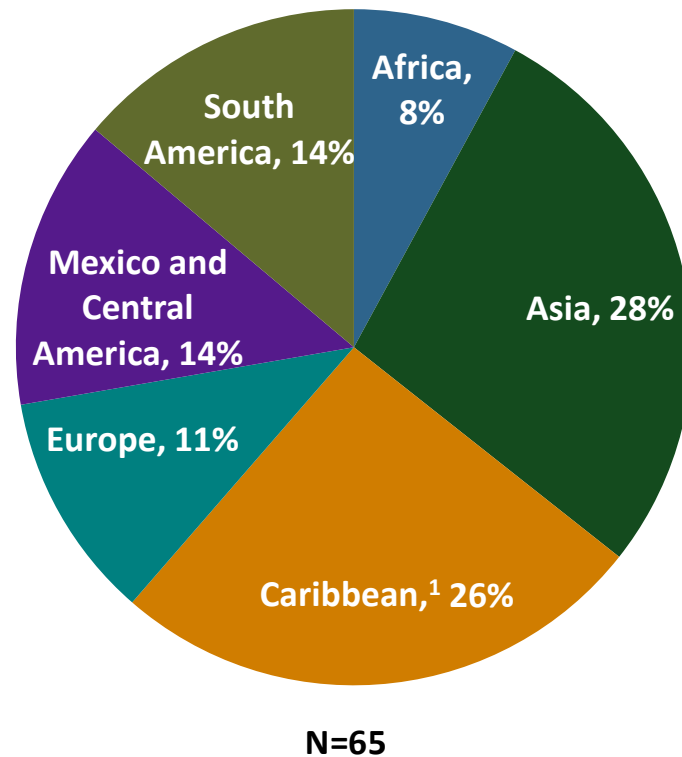
¹Area-based poverty level is determined by the proportion of residents living below the federal poverty level (FPL) in the NYC ZIP code of residence at diagnosis.

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).

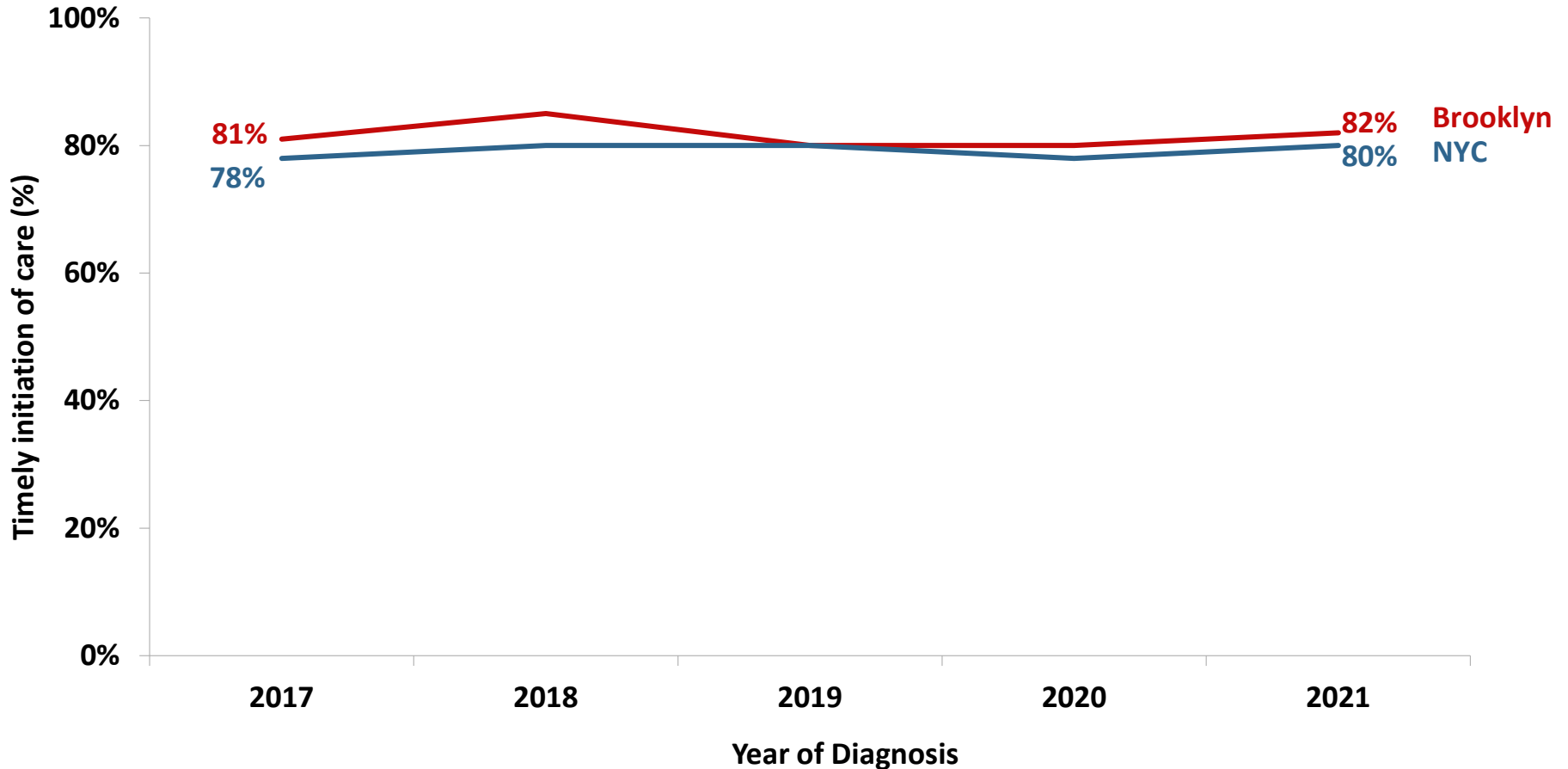
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

PERCENTAGE OF NEW HIV DIAGNOSES AMONG PEOPLE BORN OUTSIDE OF THE US BY REGION OF BIRTH, BROOKLYN, 2021



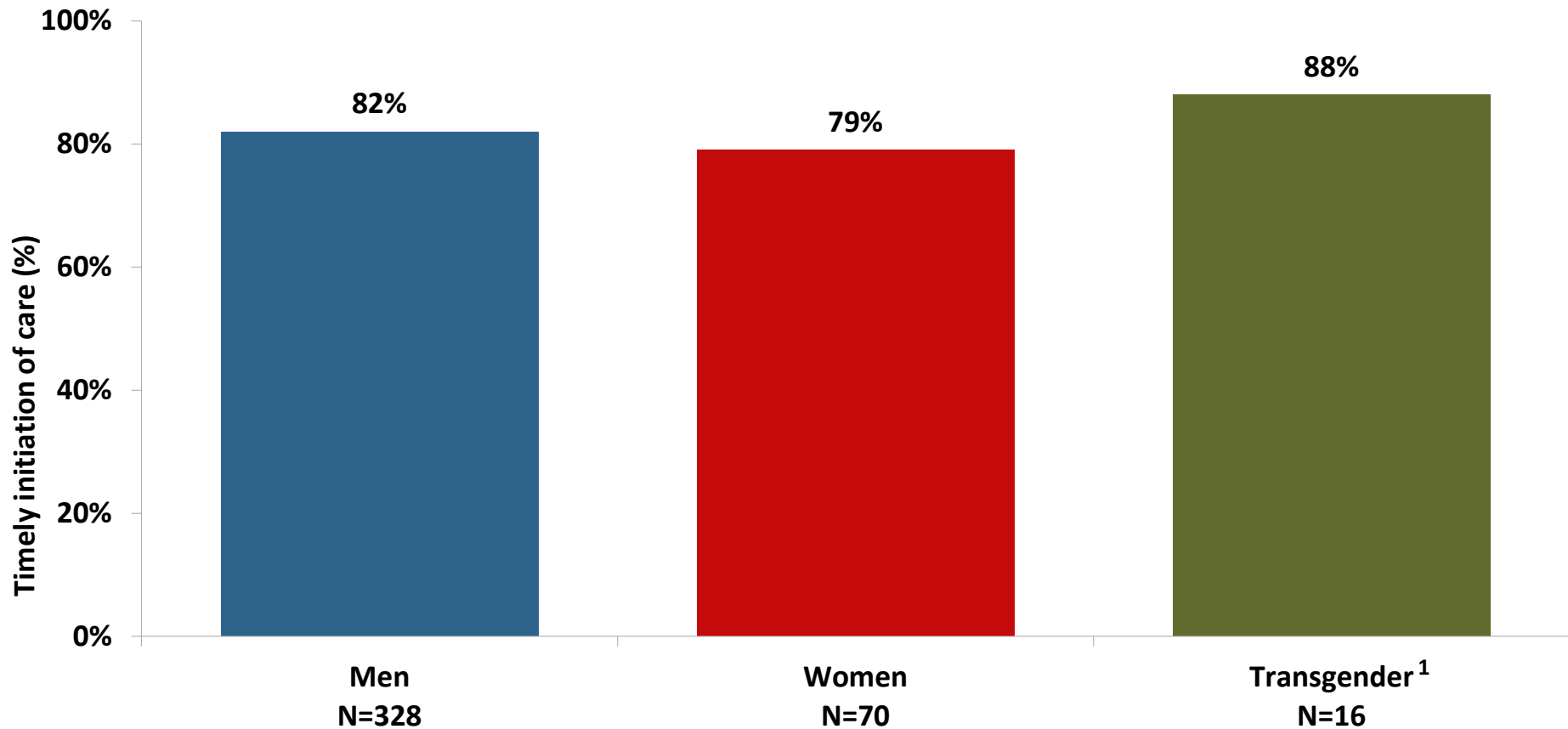
There were 65 people born outside of the United States newly diagnosed with HIV in Brooklyn in 2021. People born in the Caribbean¹ or Asia accounted for over 50% of these new HIV diagnoses.

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



Between 2017 and 2021, timely initiation of care among people newly diagnosed with HIV remained relatively stable in Brooklyn and in NYC overall.

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



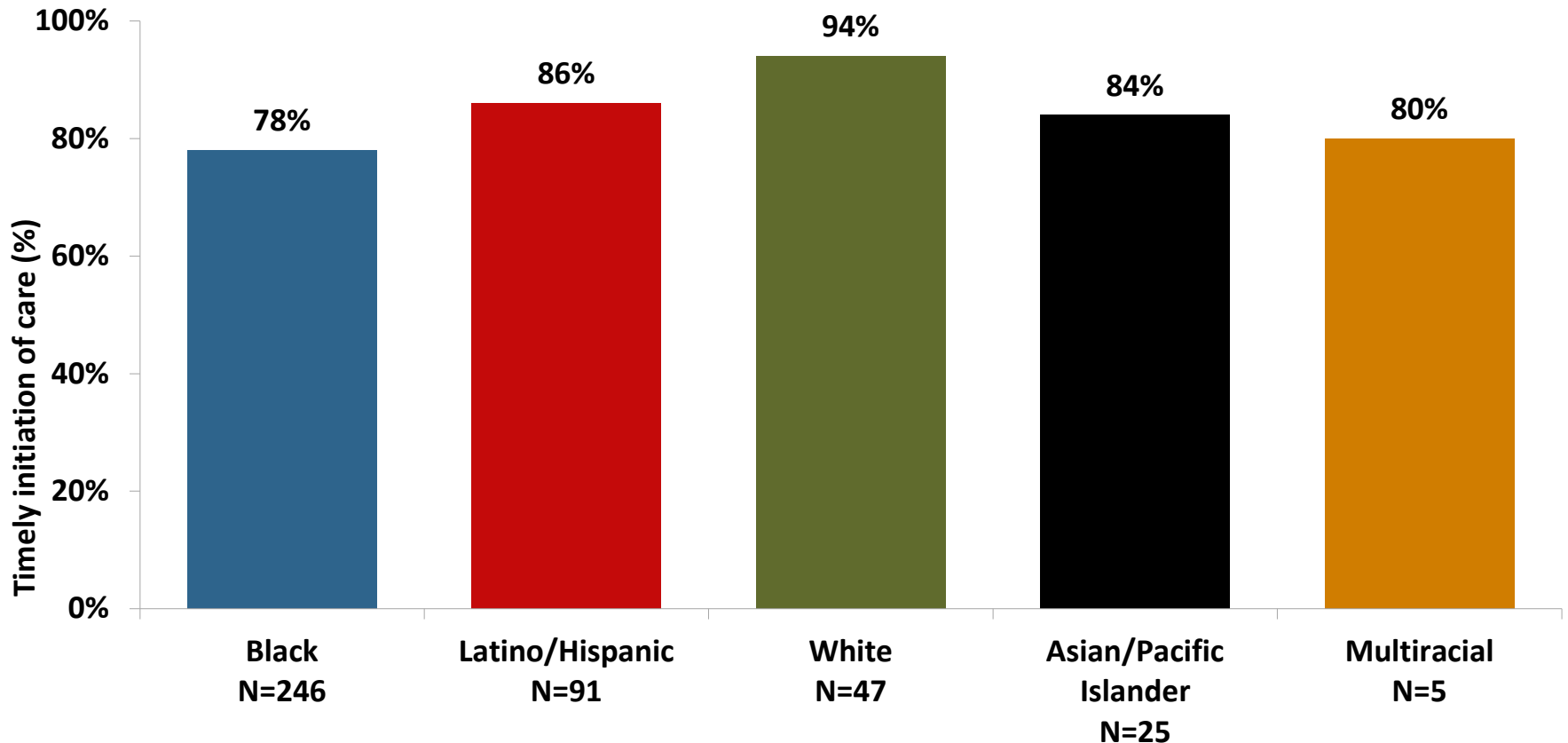
Among people newly diagnosed with HIV in Brooklyn in 2021, women had the lowest proportion linked to care within 30 days of diagnosis.

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.

¹In 2021 in Brooklyn, there were N=13 new diagnoses among transgender women, and N=3 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 BROOKLYN, 2021



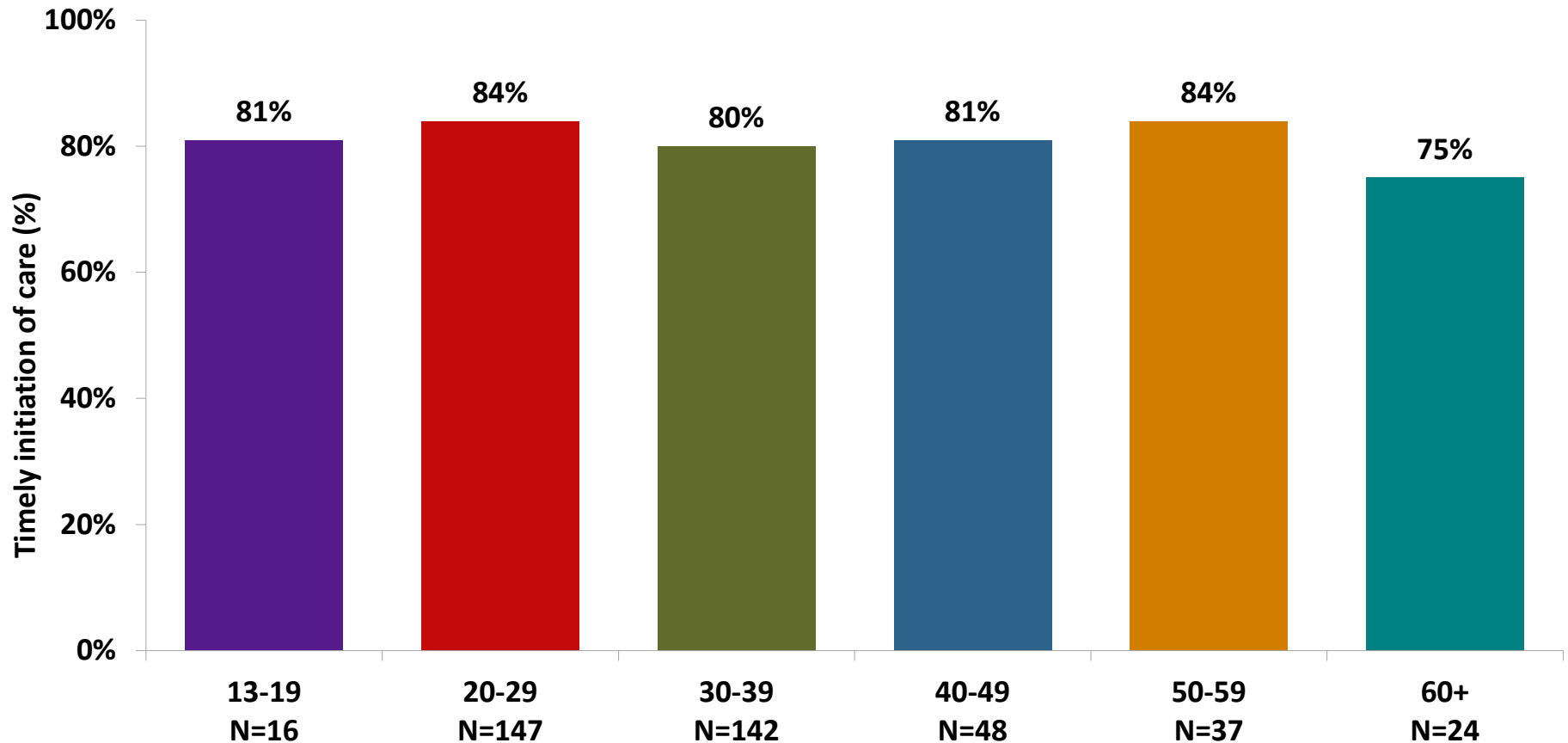
Among people newly diagnosed with HIV in Brooklyn in 2021, White people had the highest proportion linked to care within 30 days of diagnosis.

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 Native American people are not displayed (N=0).

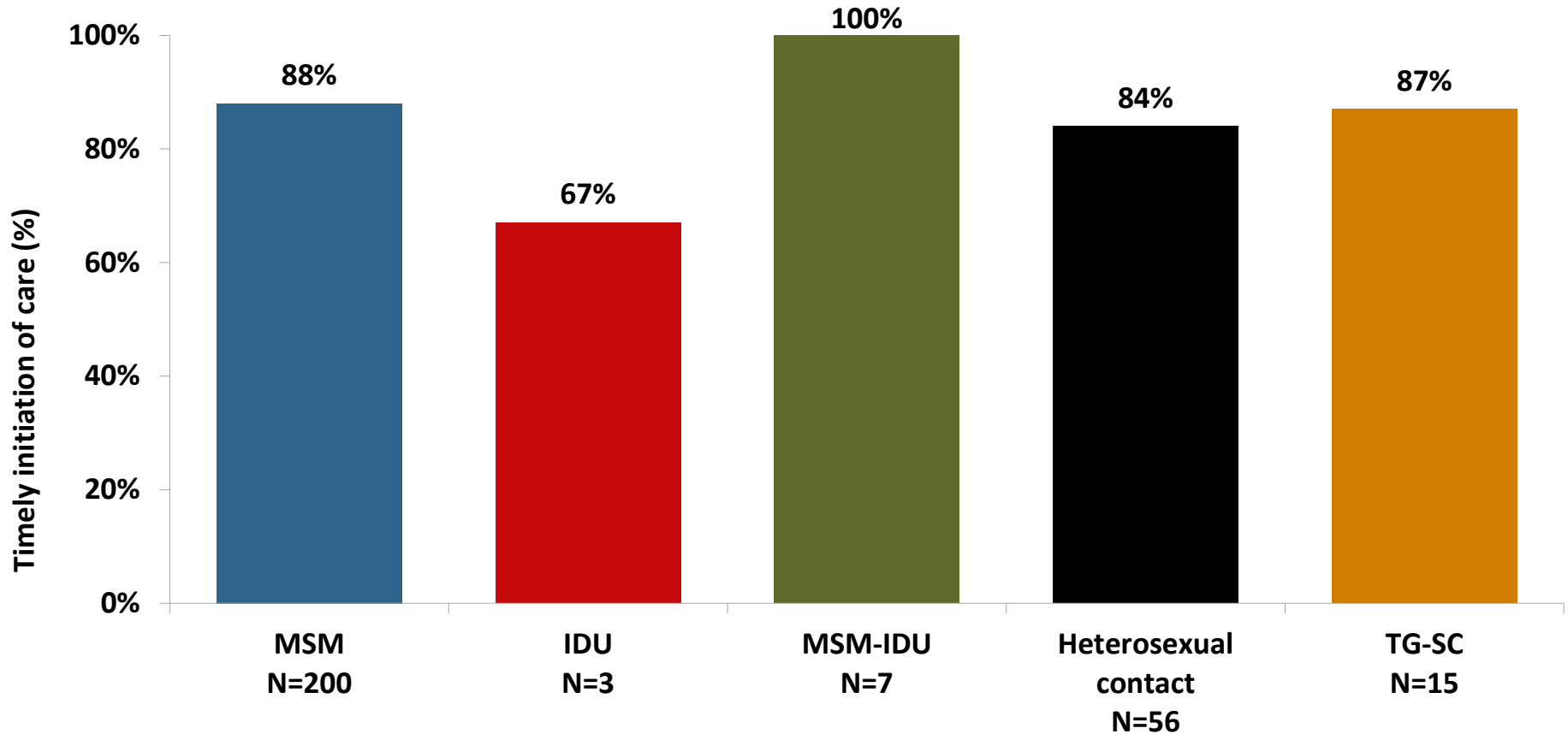
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

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



Among people newly diagnosed with HIV in Brooklyn in 2021, people aged 60+ years had the lowest proportion linked to care within 30 days of diagnosis.

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



Among people newly diagnosed with HIV in Brooklyn in 2021, people with a history of injection drug use had the lowest proportion linked to care within 30 days of diagnosis.

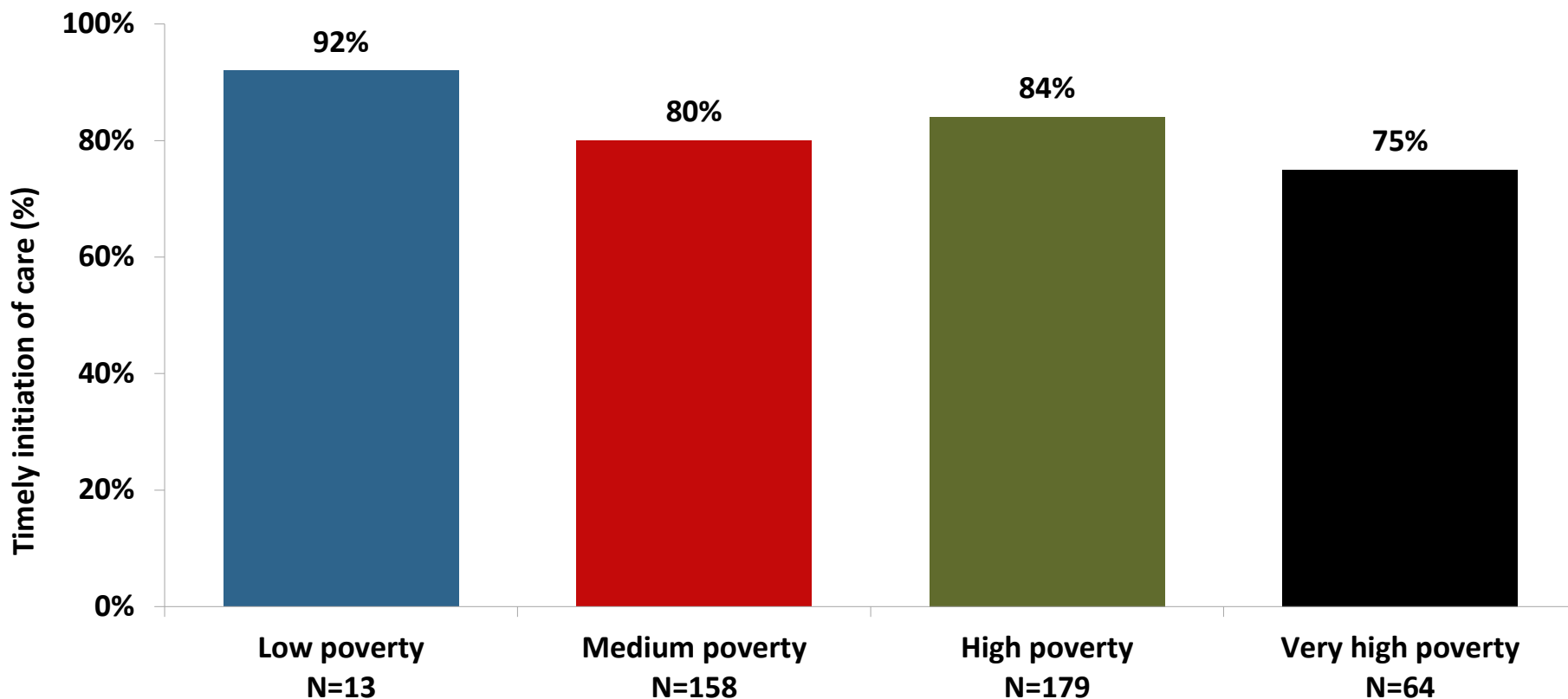
MSM=men who have sex with men; IDU=history of injection drug use; TG-SC=transgender people with sexual contact.

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=133) 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 POVERTY¹ IN BROOKLYN, 2021



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

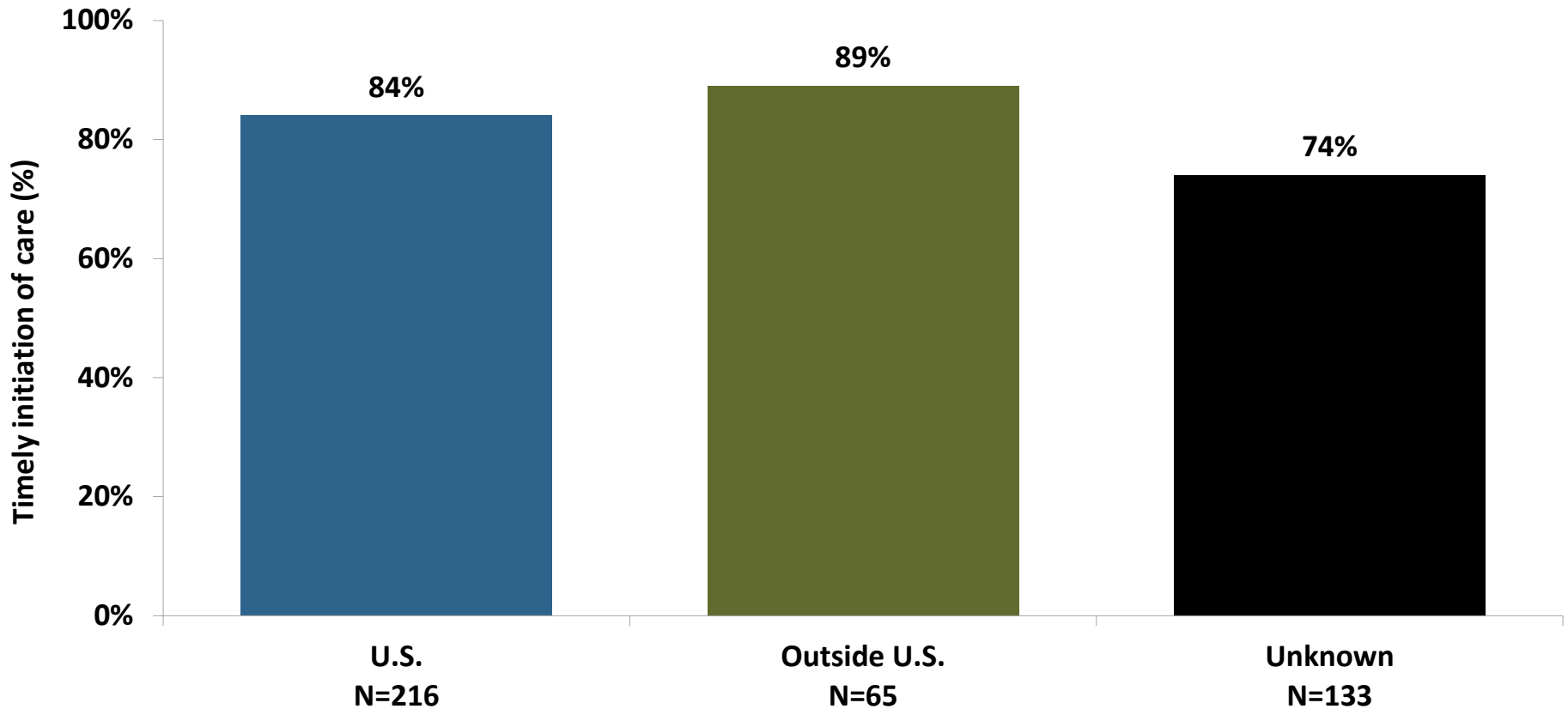
¹Area-based poverty level is determined by the proportion of residents living below the federal poverty level (FPL) in the NYC ZIP code of residence at diagnosis. Low poverty=<10% below FPL; Medium poverty=10 to <20% below FPL; High poverty=20 to <30% below FPL; Very high poverty= \geq 30% below FPL.

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).

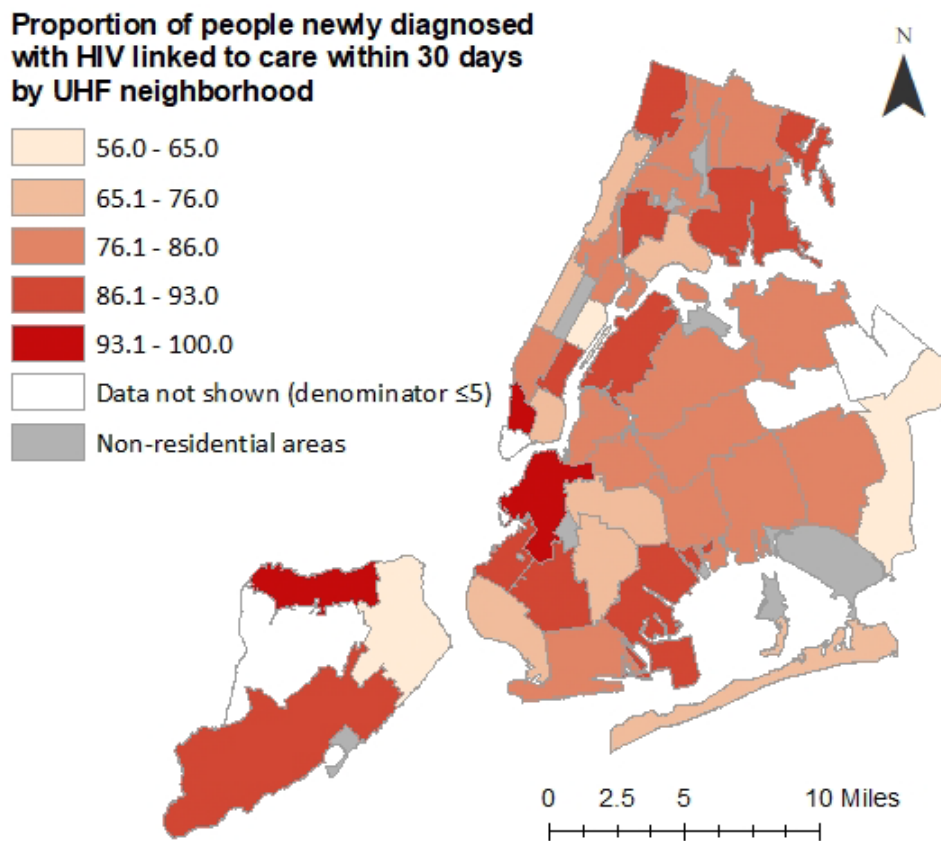
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

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



Among people newly diagnosed with HIV in Brooklyn in 2021, people 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



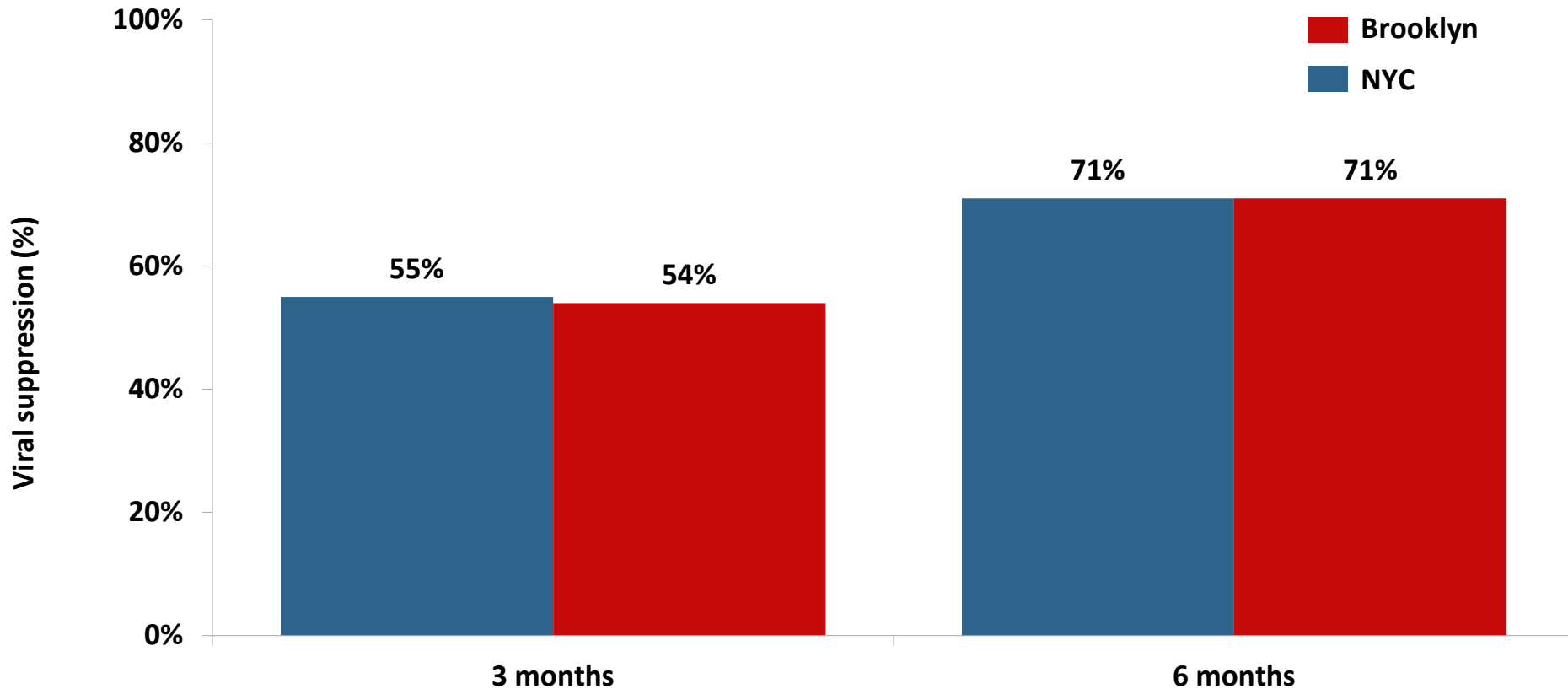
Brooklyn neighborhoods with the lowest proportions of people linked to care within 30 days of diagnosis in 2021 were Bensonhurst-Bay Ridge (71%), East Flatbush-Flatbush (74%), and Bedford Stuyvesant-Crown Heights (75%).

UHF=United Hospital Fund.

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.

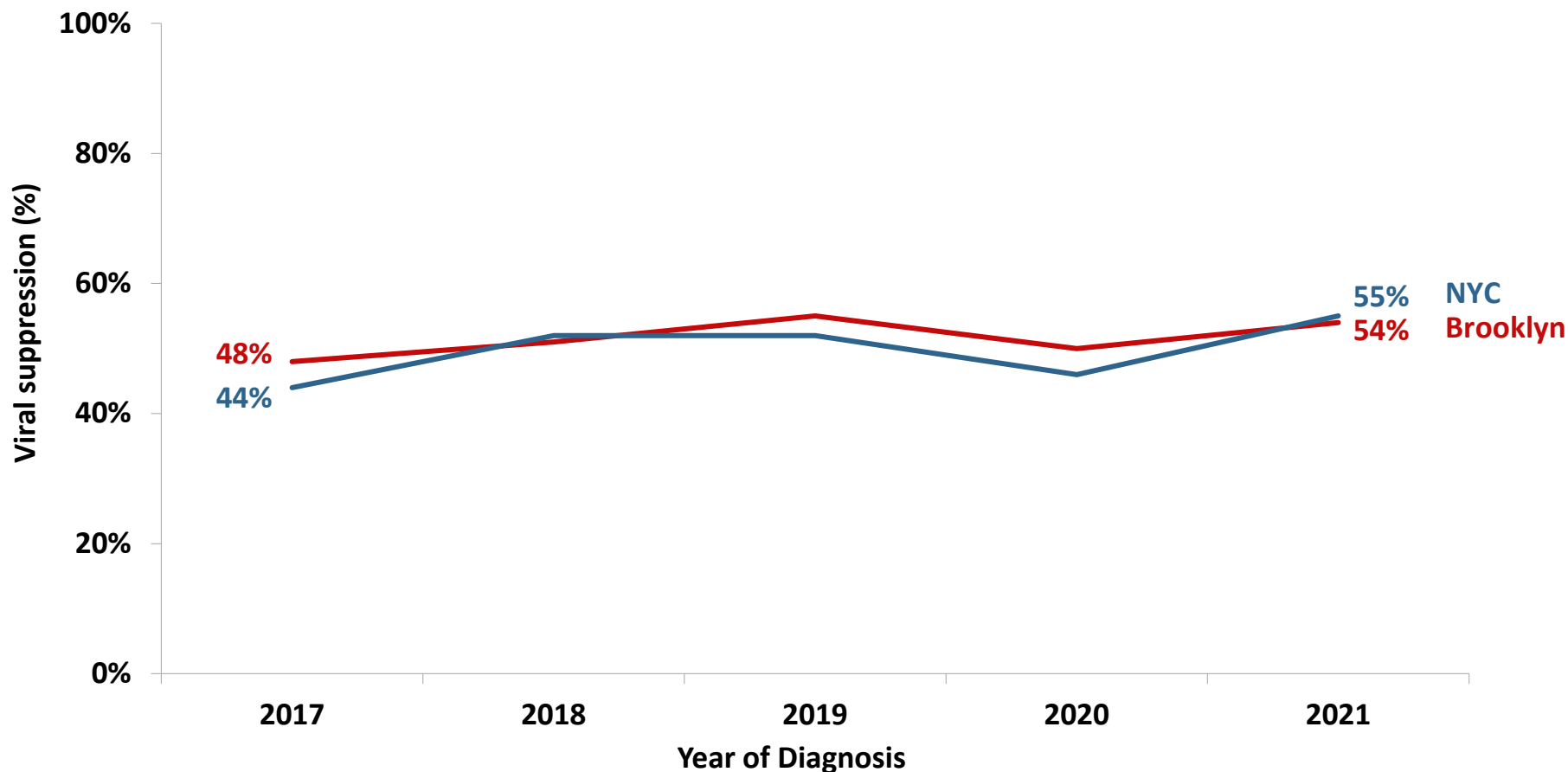
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

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



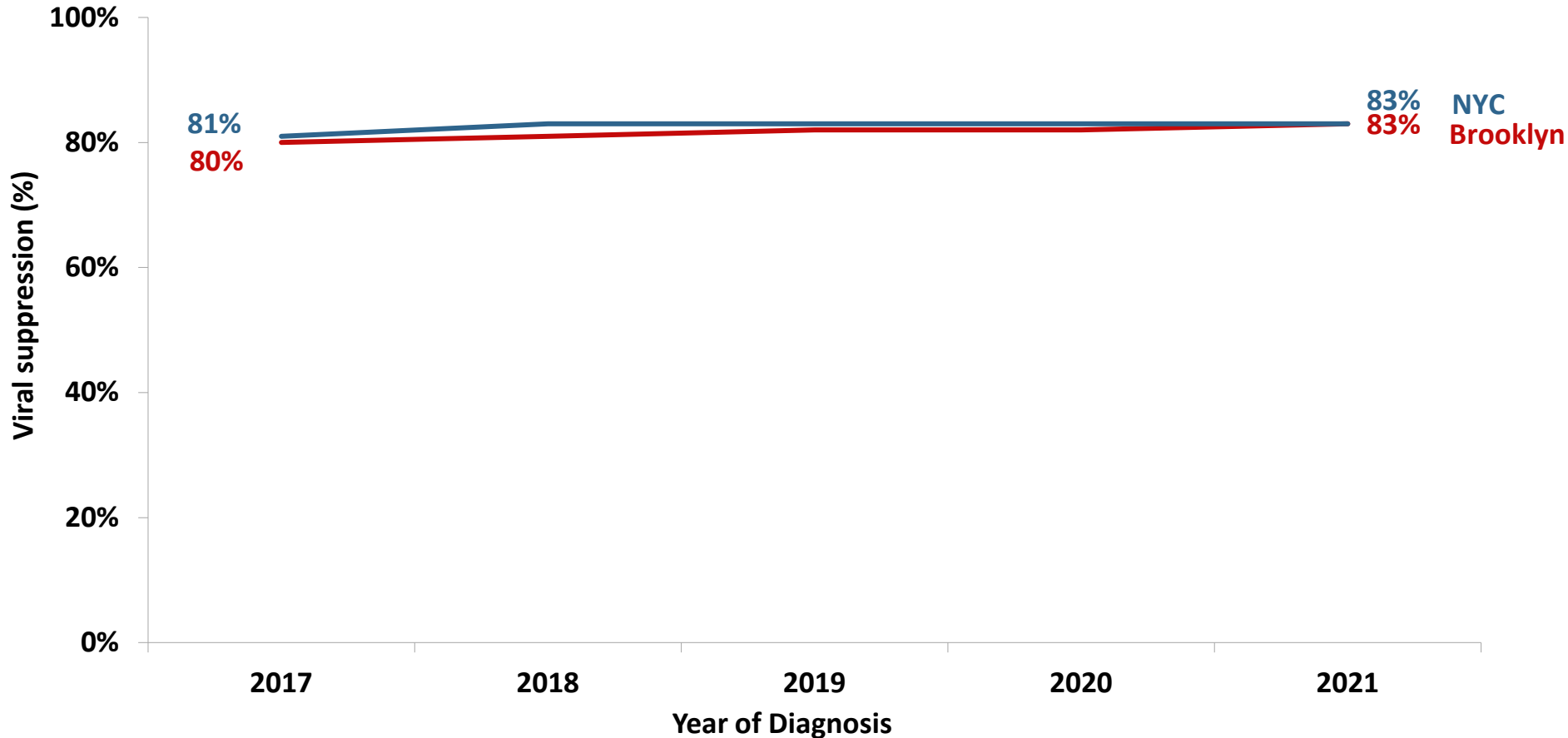
Among people newly diagnosed with HIV in 2021, a slightly lower proportion of Brooklyn residents achieved viral suppression within 3 months of diagnosis compared to NYC overall.

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



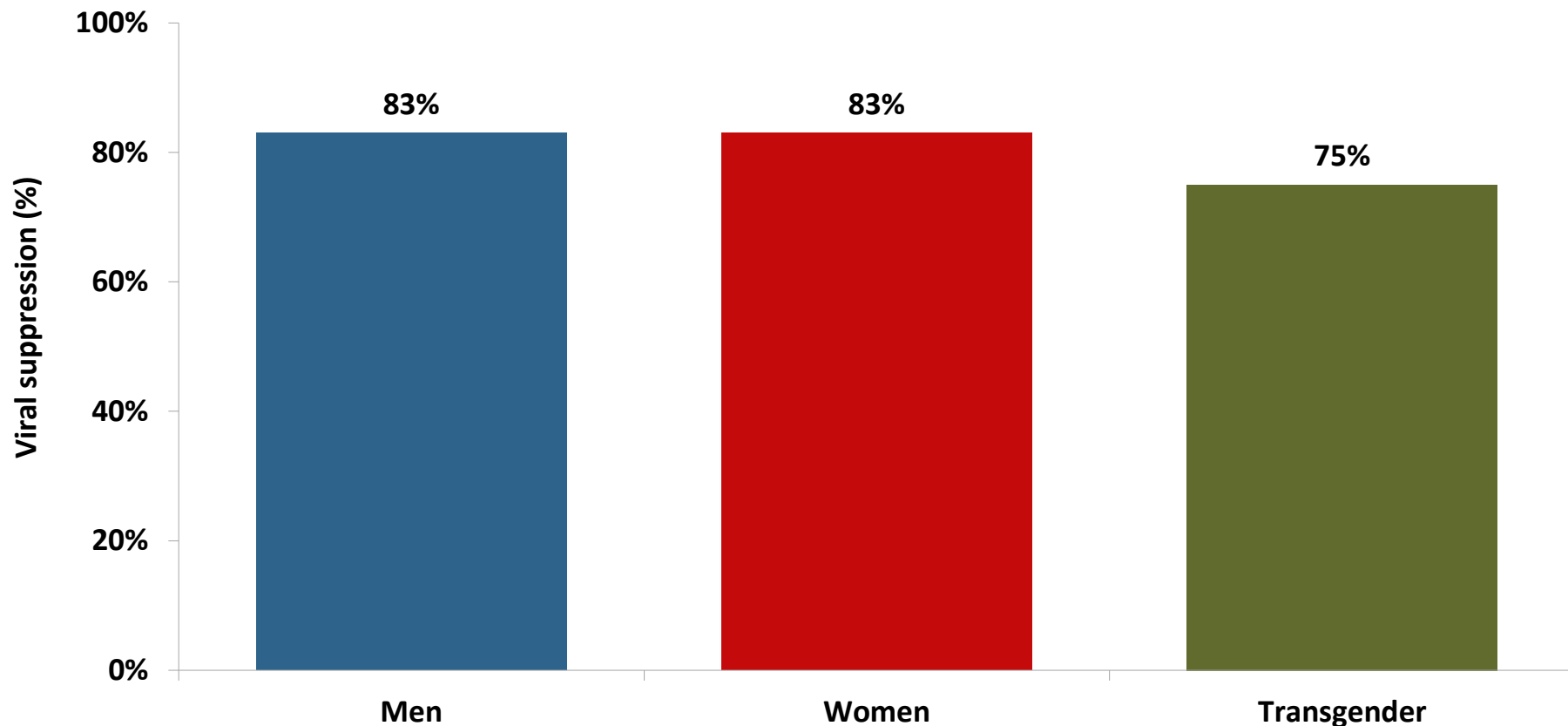
Between 2017 and 2021, viral suppression within 3 months among people newly diagnosed with HIV increased in Brooklyn and in NYC overall.

VIRAL SUPPRESSION AMONG DIAGNOSED PWH IN NYC AND BROOKLYN, 2017-2021



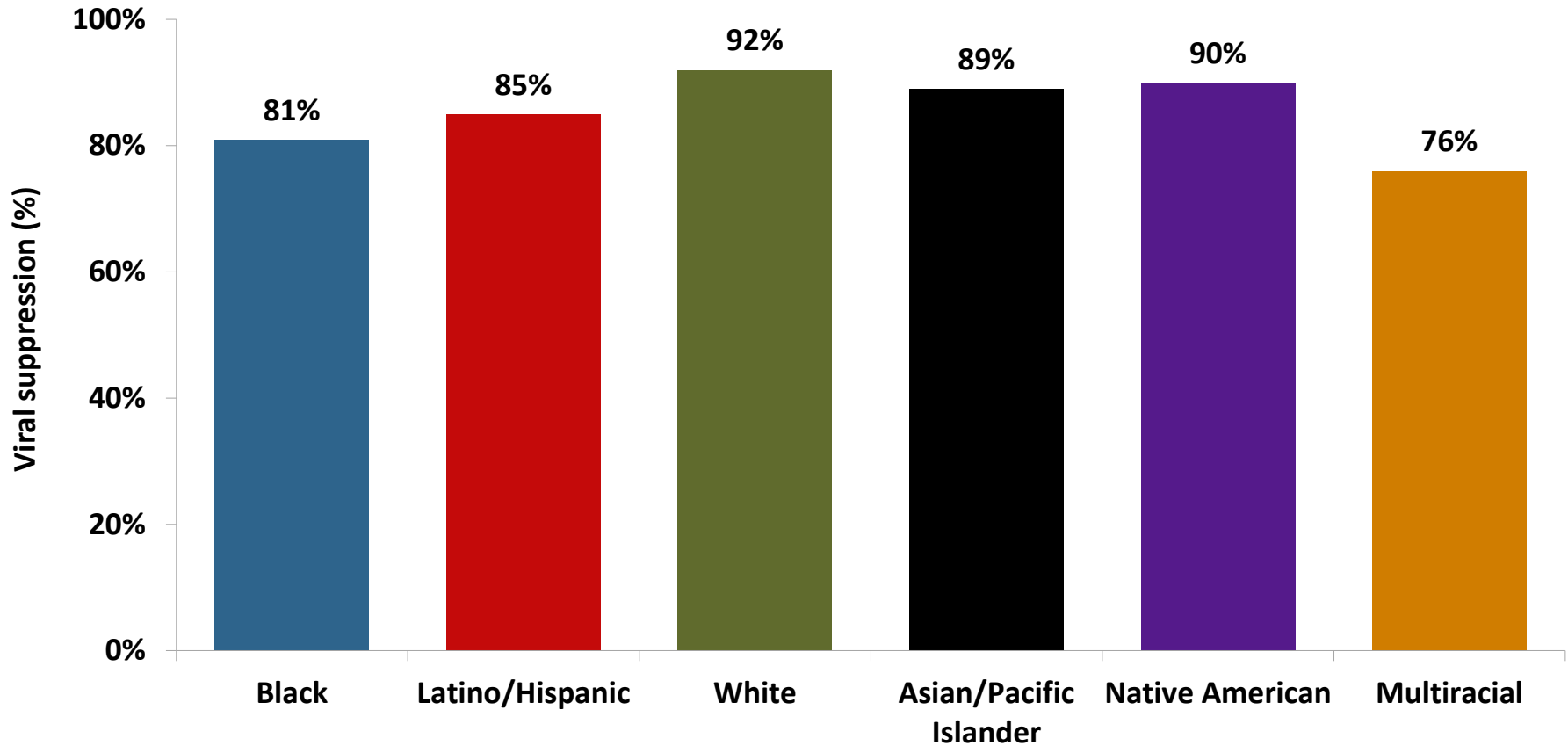
Between 2017 and 2021, viral suppression among all diagnosed people with HIV (PWH) slightly increased in Brooklyn and in NYC overall.

VIRAL SUPPRESSION AMONG DIAGNOSED PWH BY GENDER IN BROOKLYN, 2021



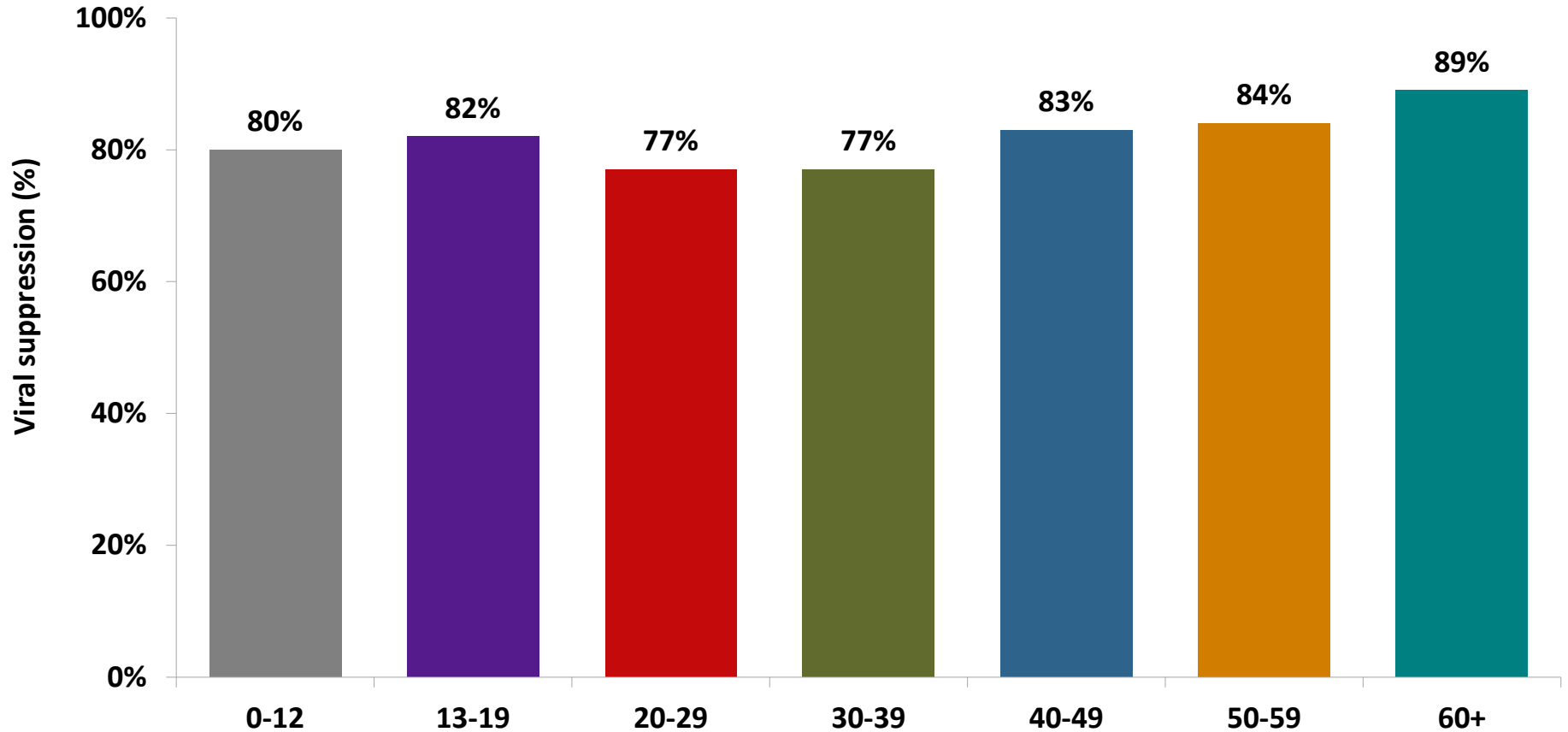
Among diagnosed people with HIV (PWH) in Brooklyn, transgender people had the lowest proportion virally suppressed by gender.

VIRAL SUPPRESSION AMONG DIAGNOSED PWH BY RACE/ETHNICITY IN BROOKLYN, 2021



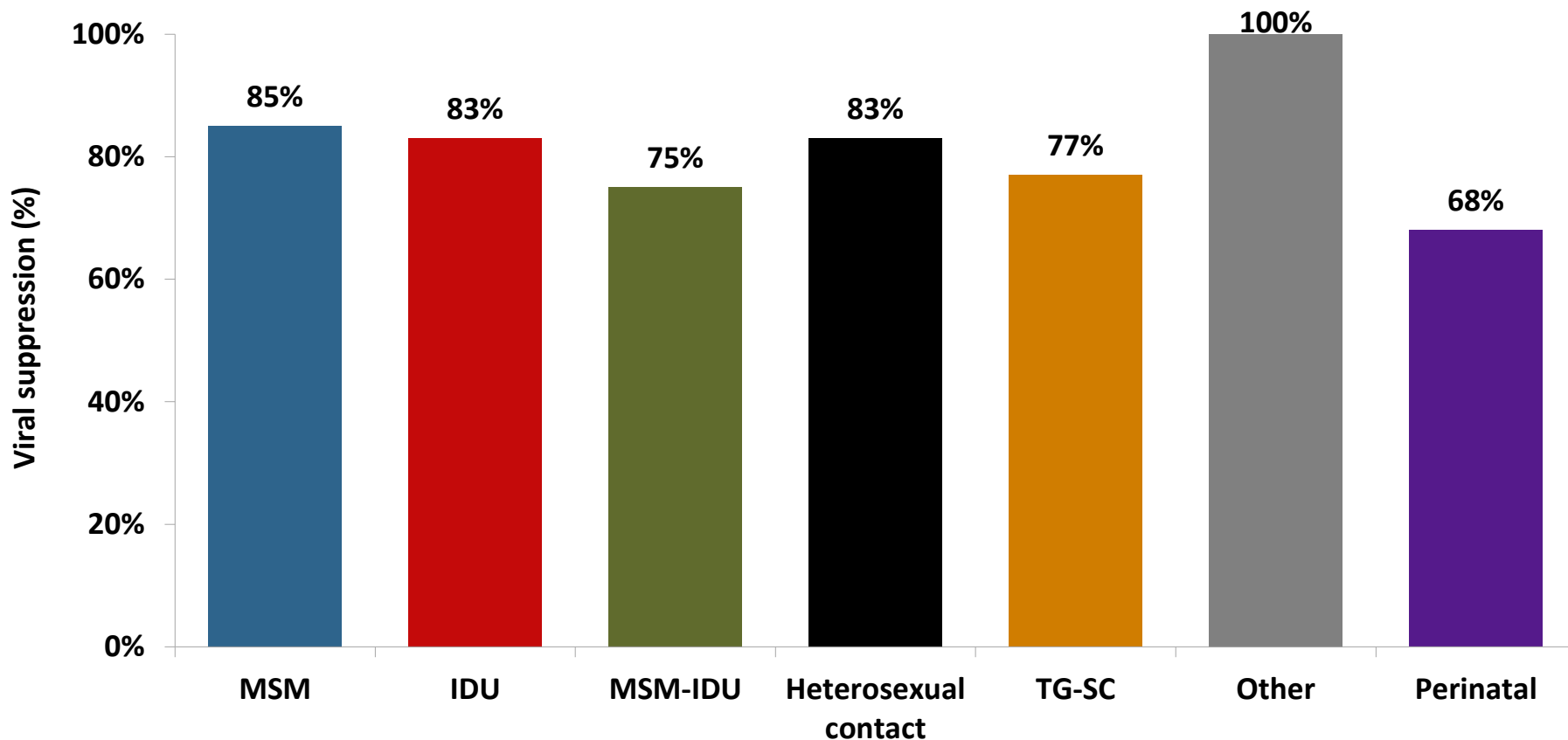
Among diagnosed people with HIV (PWH) in Brooklyn, White people had the highest proportion virally suppressed by race/ethnicity.

VIRAL SUPPRESSION AMONG DIAGNOSED PWH BY AGE IN BROOKLYN, 2021



Among diagnosed people with HIV (PWH) in Brooklyn, people aged 20 to 39 years had the lowest proportion virally suppressed and people aged 60+ years had the highest proportion virally suppressed.

VIRAL SUPPRESSION AMONG DIAGNOSED PWH BY TRANSMISSION CATEGORY IN BROOKLYN, 2021



Among diagnosed people with HIV (PWH) in Brooklyn, people with perinatal transmission had the lowest proportion virally suppressed.

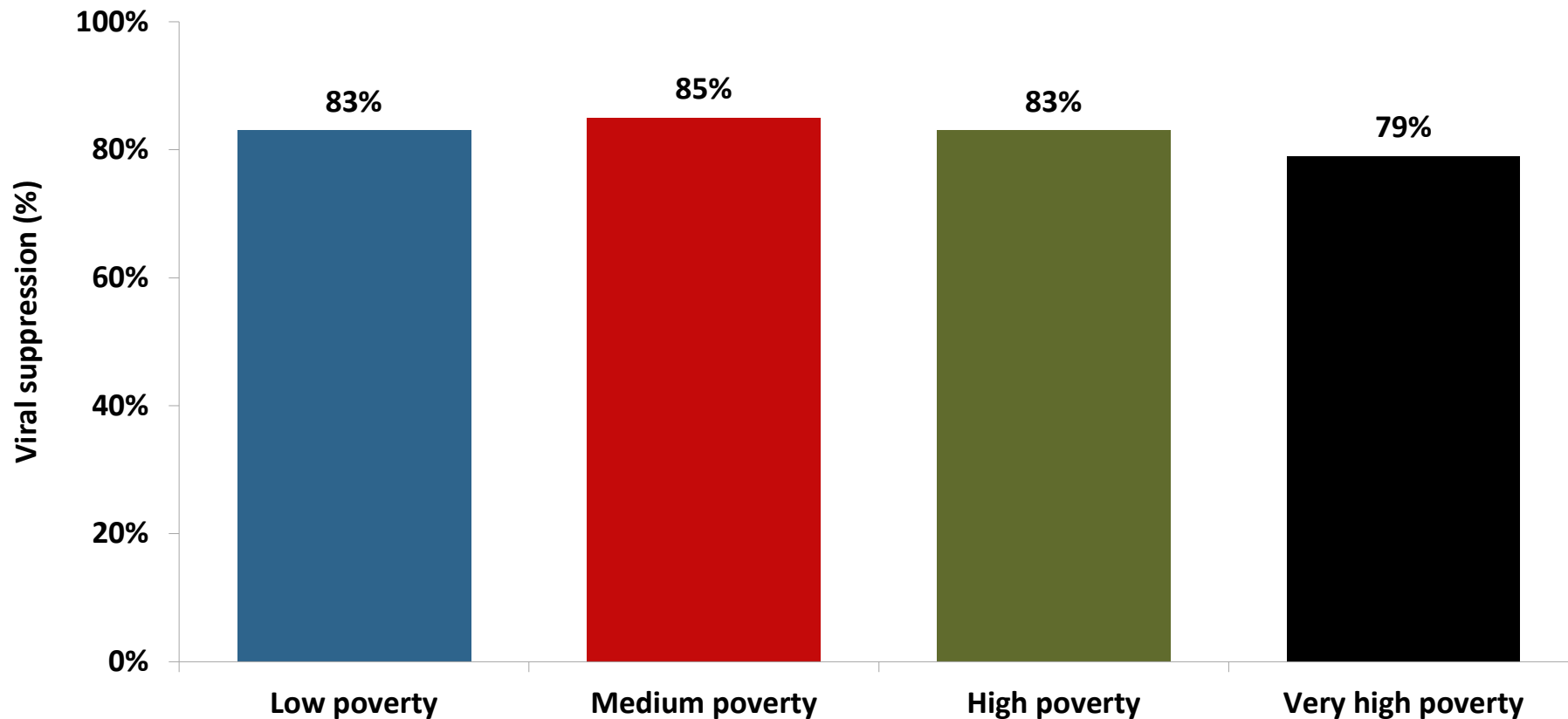
MSM=men who have sex with men; IDU=history of injection drug use; TG-SC=transgender people with sexual contact.

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.

VIRAL SUPPRESSION AMONG DIAGNOSED PWH BY AREA-BASED POVERTY LEVEL¹ IN BROOKLYN, 2021



Among diagnosed people with HIV (PWH) in Brooklyn, people living in very high poverty neighborhoods had the lowest proportion virally suppressed.

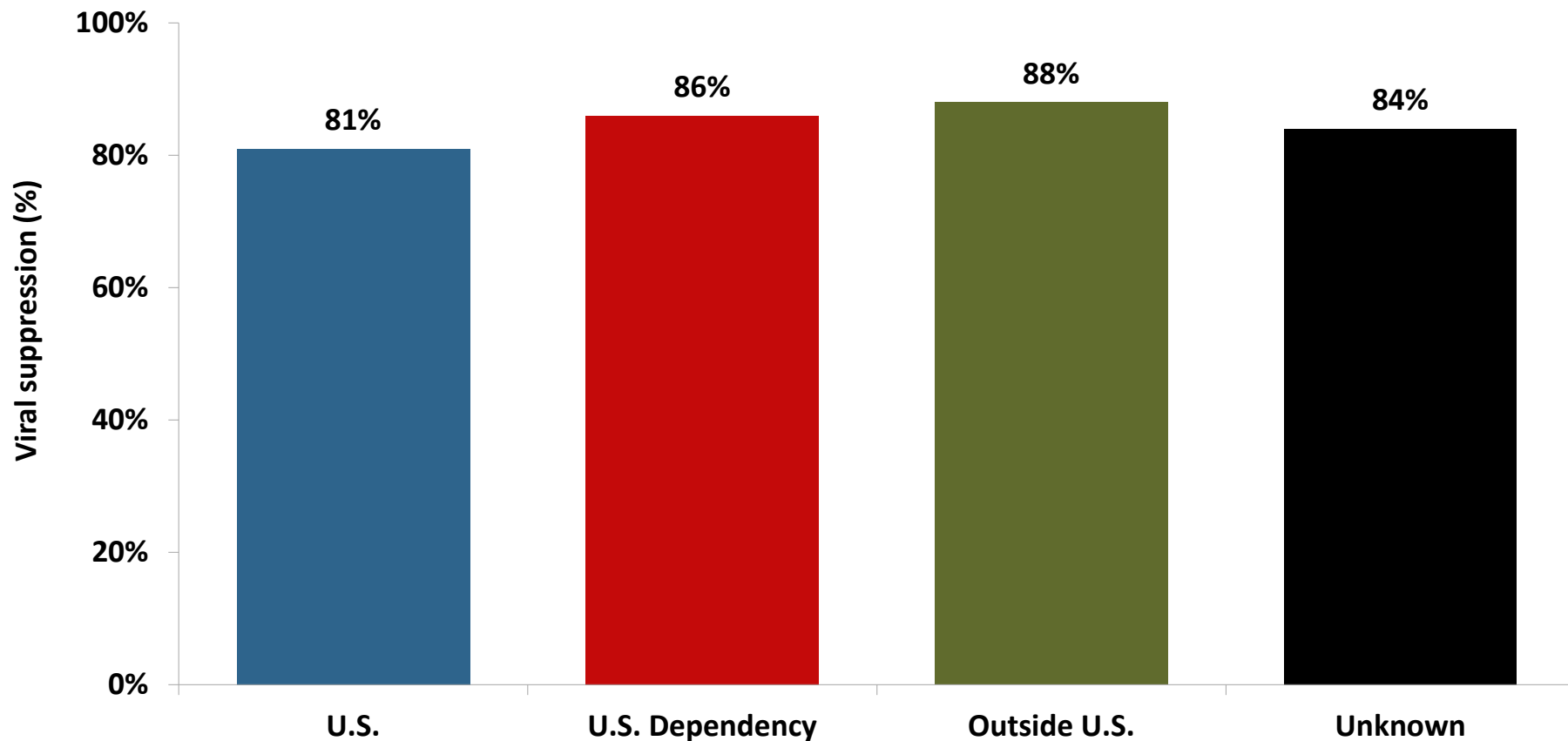
¹Area-based poverty level is determined by the proportion of residents living below the federal poverty level (FPL) in the NYC ZIP code of residence at diagnosis. Low poverty=<10% below FPL; Medium poverty=10 to <20% below FPL; High poverty=20 to <30% below FPL; Very high poverty= \geq 30% below FPL.

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.

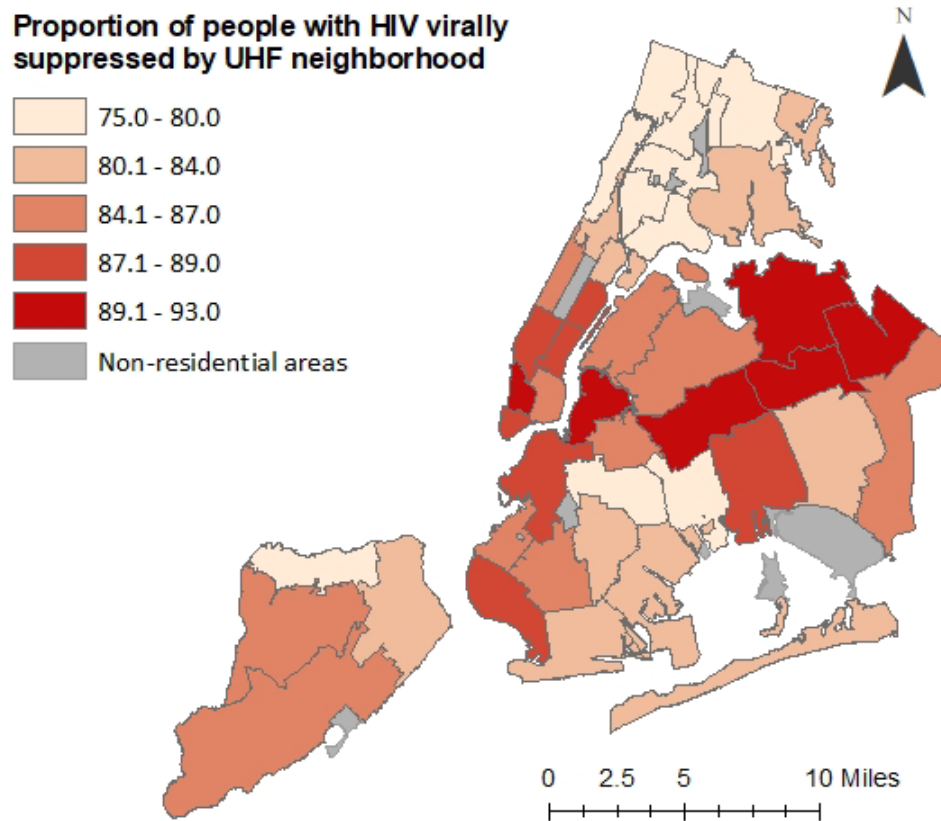
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

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



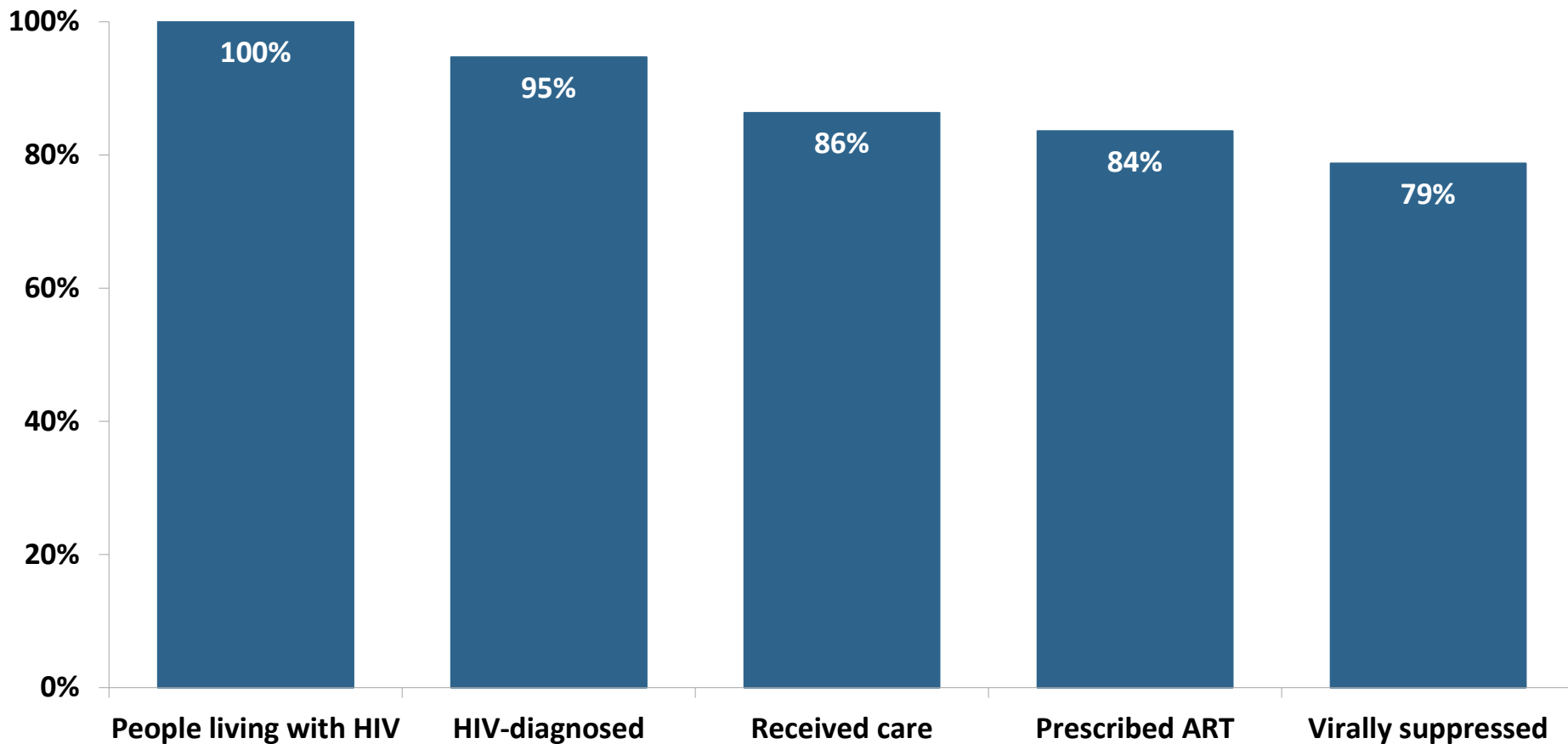
Among diagnosed people with HIV (PWH) in Brooklyn, people born in the U.S. had the lowest proportion virally suppressed.

VIRAL SUPPRESSION BY UHF NEIGHBORHOOD IN NYC, 2021



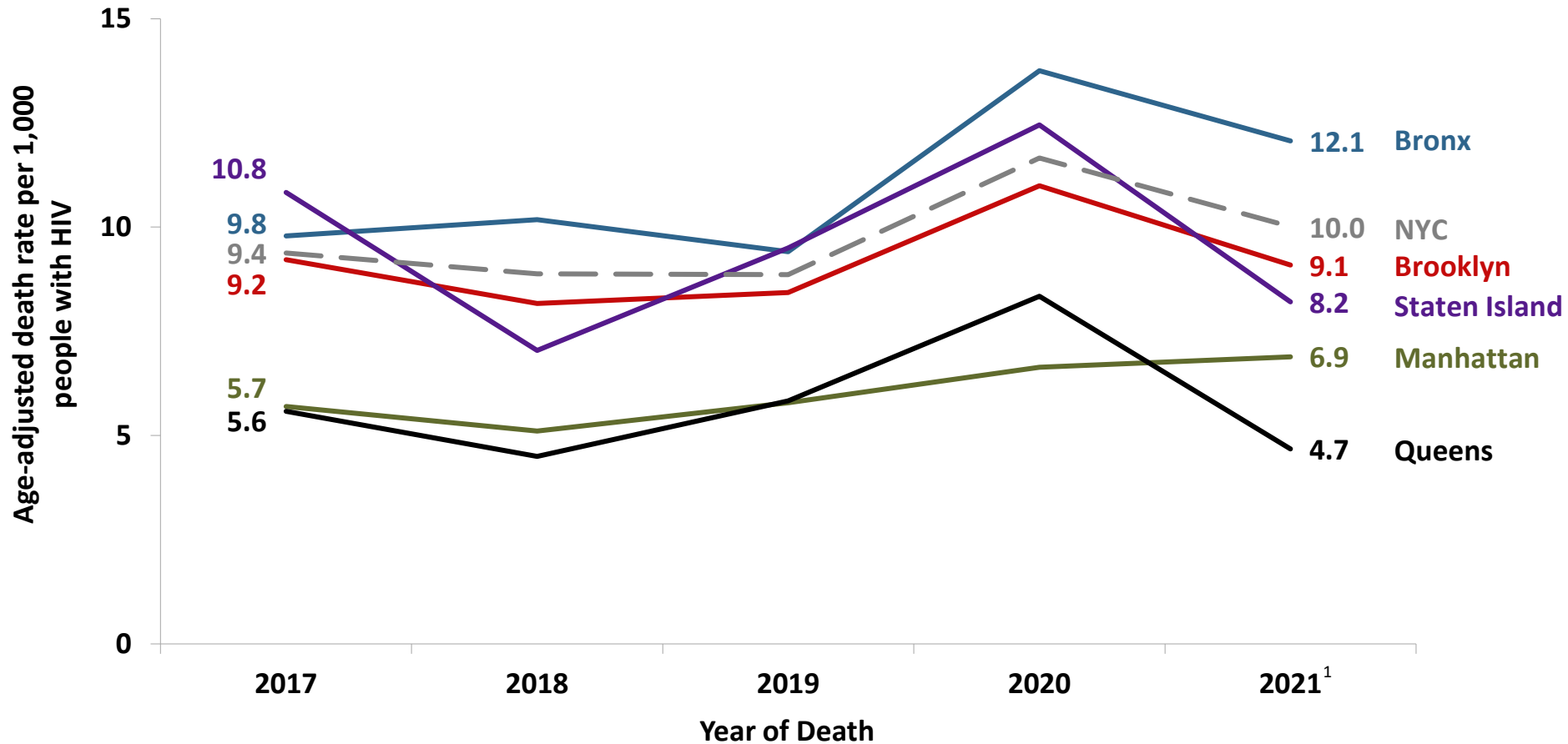
Brooklyn neighborhoods with the lowest proportions of virally suppressed people with HIV (PWH) in 2021 were Bedford Stuyvesant-Crown Heights (80%), East New York (80%), and Canarsie-Flatlands (83%).

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



Of approximately 22,400 people living with HIV (PLWH) in Brooklyn in 2021, 79% had a suppressed viral load.

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



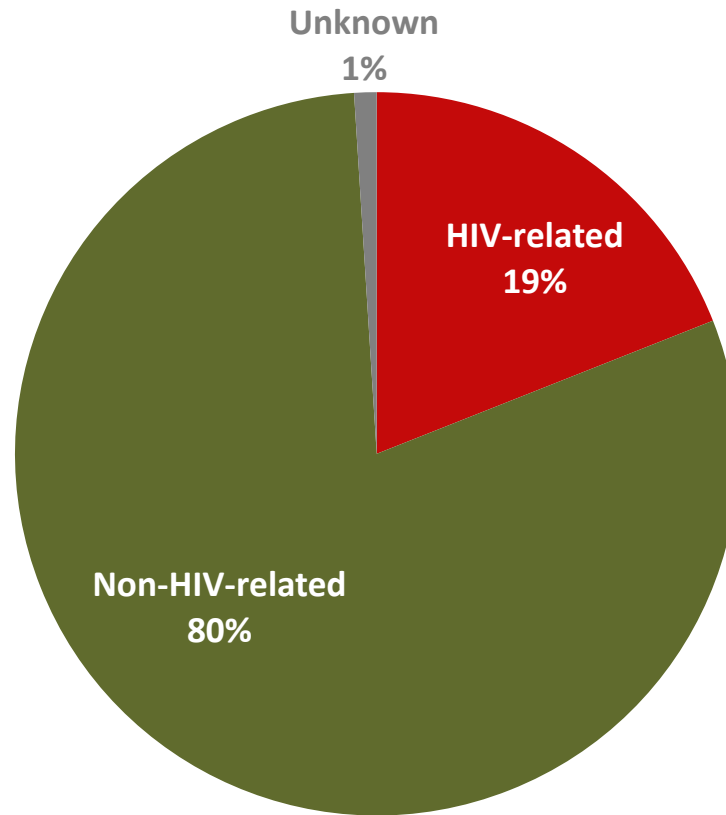
Between 2017 and 2021, the age-adjusted death rate in Brooklyn was slightly lower than NYC overall. The Bronx had the highest age-adjusted death rate in 2021.

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.

CAUSE OF DEATH AMONG PEOPLE WITH HIV IN BROOKLYN, 2020¹



In 2020, 80% of deaths among people with HIV in Brooklyn were due to non-HIV-related causes. Among these, the top causes were COVID-19 (25%), cardiovascular disease (19%), and non-HIV-related cancers (16%).

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

²ICD10 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.

HOW 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

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.