

HIV IN STATEN ISLAND, 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>

TABLE OF CONTENTS (1)

SLIDE NUMBER:

OVERALL

5. HIV IN STATEN ISLAND, 2021

NEW DIAGNOSIS

6. NEW HIV DIAGNOSES IN STATEN ISLAND, 2017-2021

7. NUMBER OF NEW HIV DIAGNOSES BY GENDER IN STATEN ISLAND, 2017-2021

8. NUMBER OF NEW HIV DIAGNOSES BY RACE/ETHNICITY IN STATEN ISLAND, 2017-2021

9. NUMBER OF NEW HIV DIAGNOSES BY AGE IN STATEN ISLAND, 2017-2021

10. NUMBER OF NEW HIV DIAGNOSES BY RACE/ETHNICITY AND AGE IN STATEN ISLAND, 2021

11. NUMBER OF NEW HIV DIAGNOSES BY TRANSMISSION CATEGORY IN STATEN ISLAND, 2017-2021

12. NUMBER OF NEW HIV DIAGNOSES BY AREA-BASED POVERTY LEVEL IN STATEN ISLAND, 2017-2021

13. PERCENTAGE OF NEW HIV DIAGNOSES AMONG PEOPLE BORN OUTSIDE THE US BY REGION OF BIRTH, STATEN ISLAND, 2021

TABLE OF CONTENTS (2)

SLIDE NUMBER:

PEOPLE NEWLY DIAGNOSED WITH HIV

- 14. TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV IN NYC AND STATEN ISLAND, 2017-2021
- 15. TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY GENDER IN STATEN ISLAND, 2021
- 16. TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY RACE/ETHNICITY IN STATEN ISLAND, 2021
- 17. TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY AGE IN STATEN ISLAND, 2021
- 18. TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY TRANSMISSION CATEGORY IN STATEN ISLAND, 2021
- 19. TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY AREA-BASED POVERTY IN STATEN ISLAND, 2021
- 20. TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY REGION OF BIRTH IN STATEN ISLAND, 2021
- 21. MAP OF TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY UHF NEIGHBORHOOD IN NYC, 2021
- 22. VIRAL SUPPRESSION WITHIN 3 AND 6 MONTHS OF NEW HIV DIAGNOSIS IN NYC AND STATEN ISLAND, 2021
- 23. VIRAL SUPPRESSION WITHIN 3 MONTHS AMONG PEOPLE NEWLY DIAGNOSED WITH HIV IN NYC AND STATEN ISLAND, 2017-2021

TABLE OF CONTENTS (3)

SLIDE NUMBER:

PEOPLE LIVING WITH HIV (PLWH)

- 24. VIRAL SUPPRESSION AMONG DIAGNOSED PLWH IN NYC AND STATEN ISLAND, 2017-2021
- 25. VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY GENDER IN STATEN ISLAND, 2021
- 26. VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY RACE/ETHNICITY IN STATEN ISLAND, 2021
- 27. VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY AGE IN STATEN ISLAND, 2021
- 28. VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY TRANSMISSION CATEGORY IN STATEN ISLAND, 2021
- 29. VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY AREA-BASED POVERTY LEVEL IN STATEN ISLAND, 2021
- 30. VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY REGION OF BIRTH IN STATEN ISLAND, 2021
- 31. MAP OF VIRAL SUPPRESSION BY UHF NEIGHBORHOOD IN NYC, 2021
- 32. PROPORTION OF PLWH IN STATEN ISLAND ENGAGED IN SELECTED STAGES OF THE HIV CARE CONTINUUM, 2021

DEATHS

- 33. AGE-ADJUSTED DEATH RATES AMONG PLWH IN NYC OVERALL AND BY BOROUGH, 2017-2021
- 34. CAUSES OF DEATH AMONG PWH IN STATEN ISLAND, 2020

OTHER

- 35. HOW TO FIND OUR DATA
- 36-37. APPENDIX: DEFINITIONS AND STATISTICAL NOTES

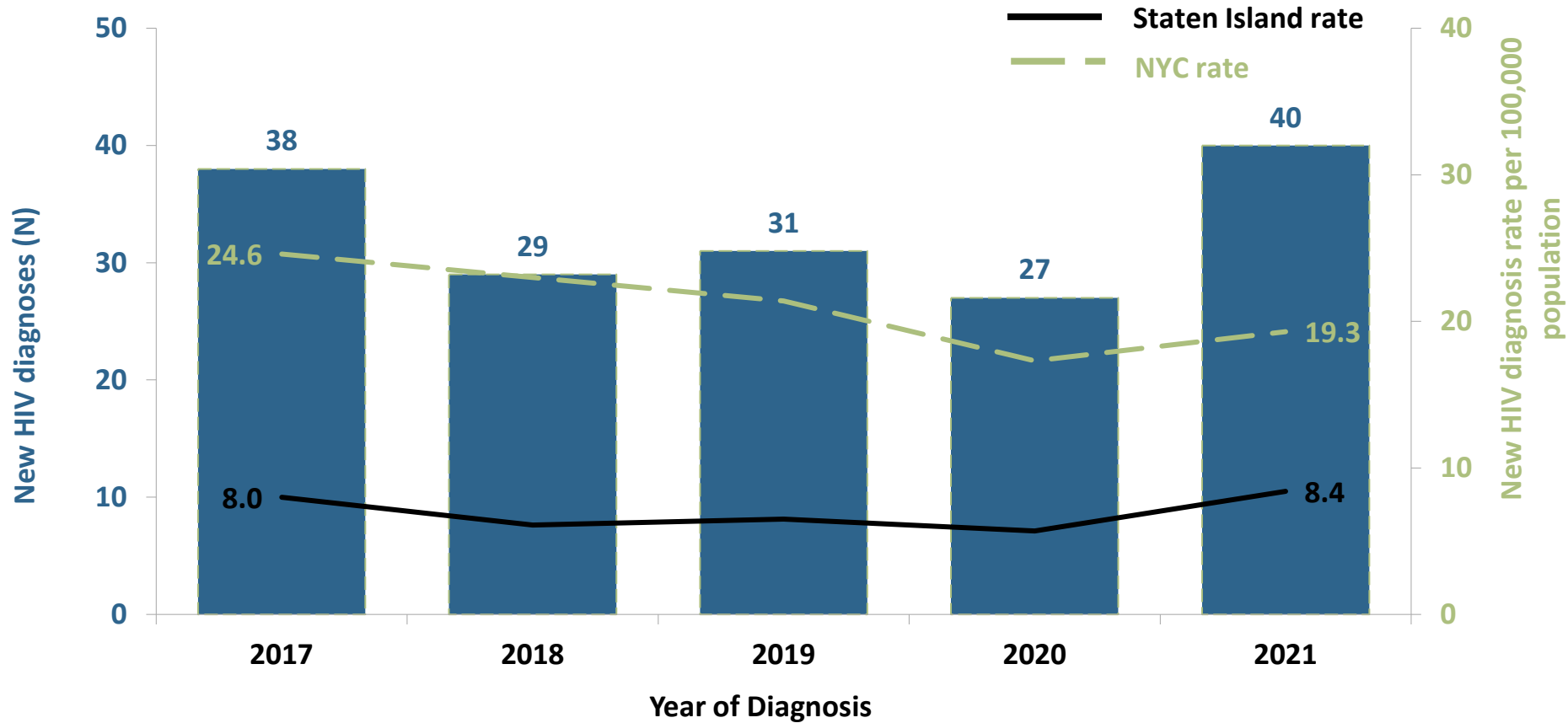
- 38. TECHNICAL NOTES: HIV CARE CONTINUUM

HIV IN STATEN ISLAND, 2021

BASIC STATISTICS

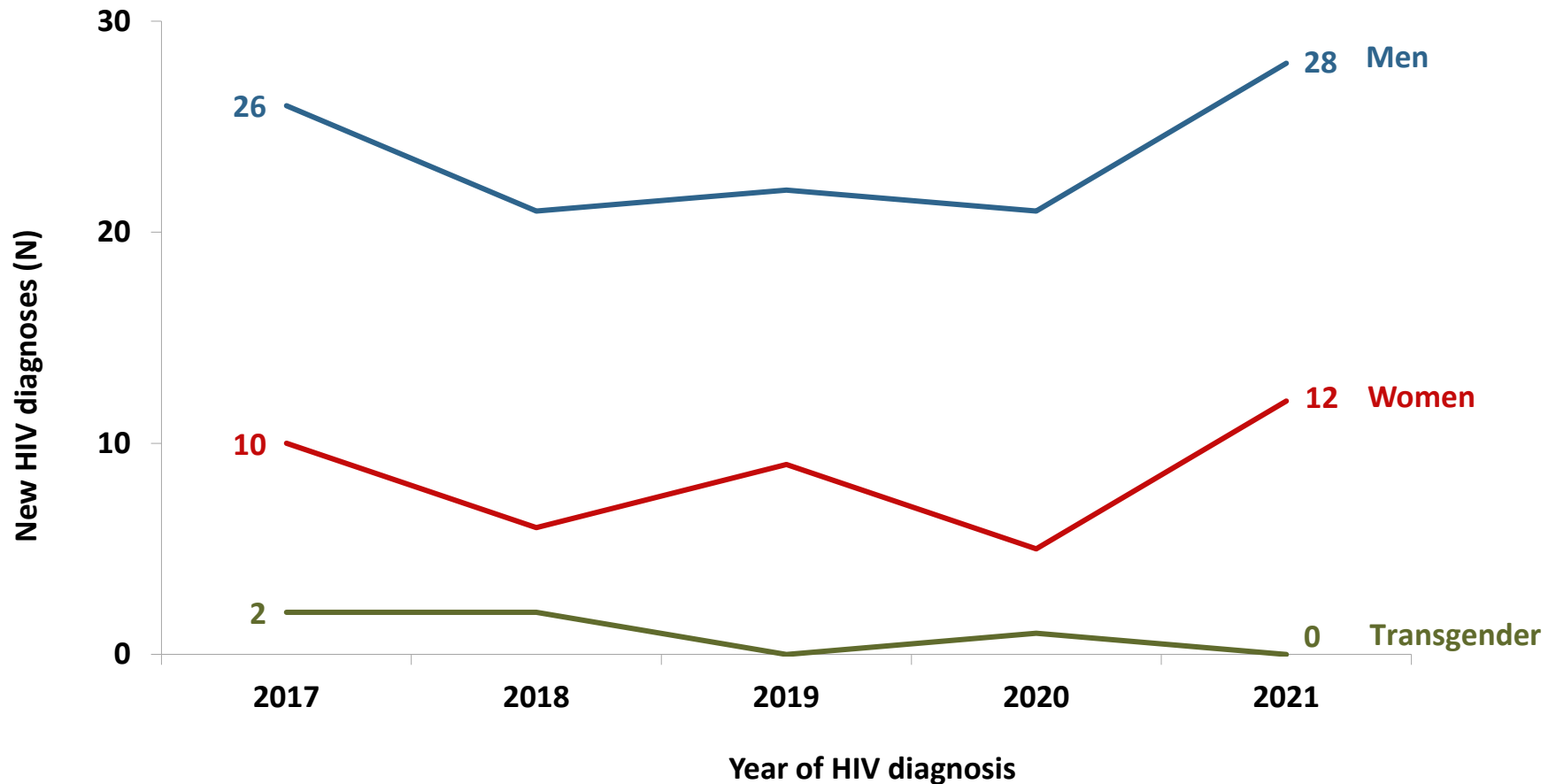
- **6% of all New Yorkers live in Staten Island**
- **40 new HIV diagnoses**
 - 3% of all HIV diagnoses in NYC
 - Includes 10 HIV diagnoses concurrent with an AIDS diagnosis (25%)
- **29 new AIDS diagnoses**
- **40 deaths among people with HIV**
 - 8.2 deaths per 1,000 people with HIV¹

NEW HIV DIAGNOSES IN STATEN ISLAND, 2017-2021



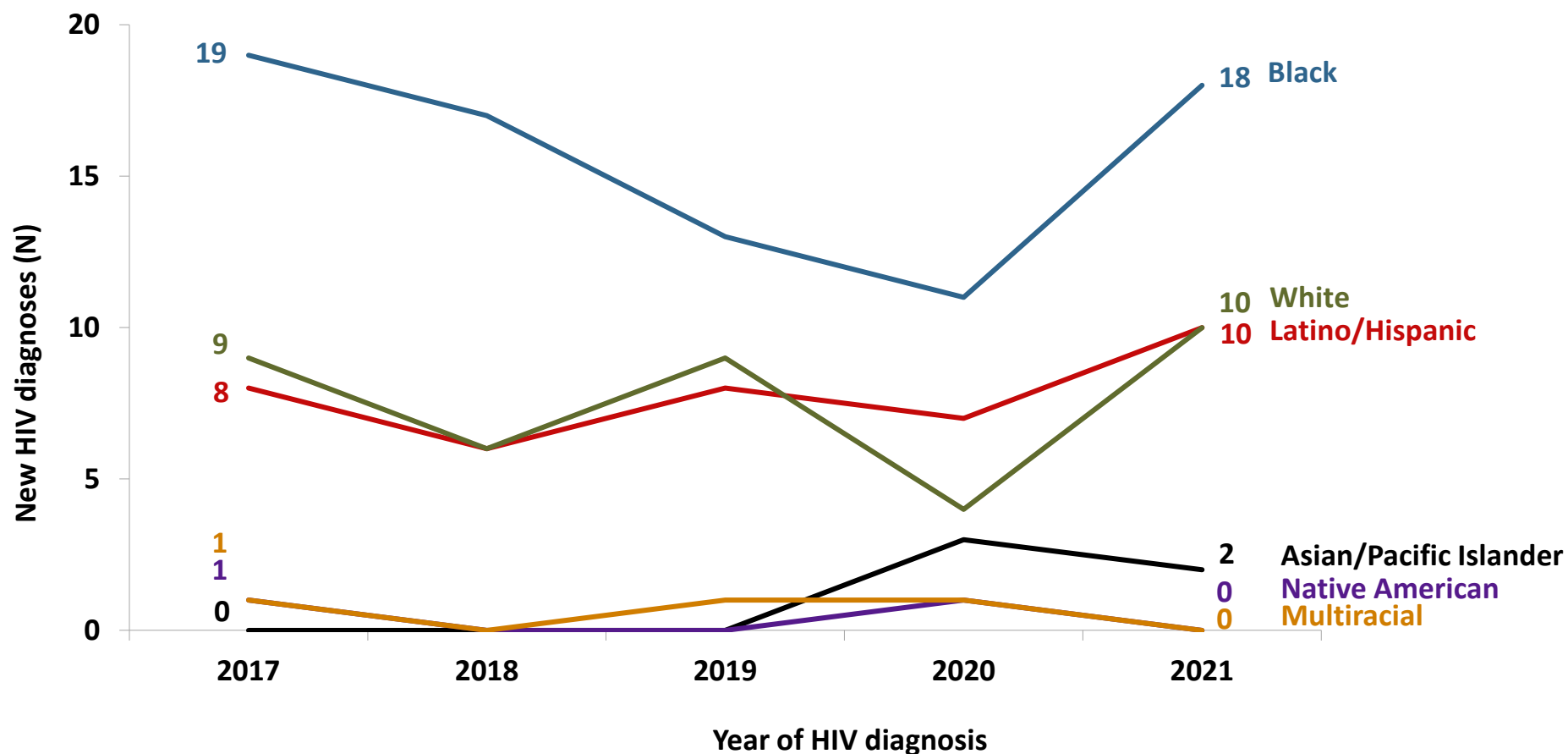
The number and rate of new HIV diagnoses in Staten Island increased in 2021 after a period of generally decreasing values. The rate of new HIV diagnoses was lower in Staten Island than in NYC overall.

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



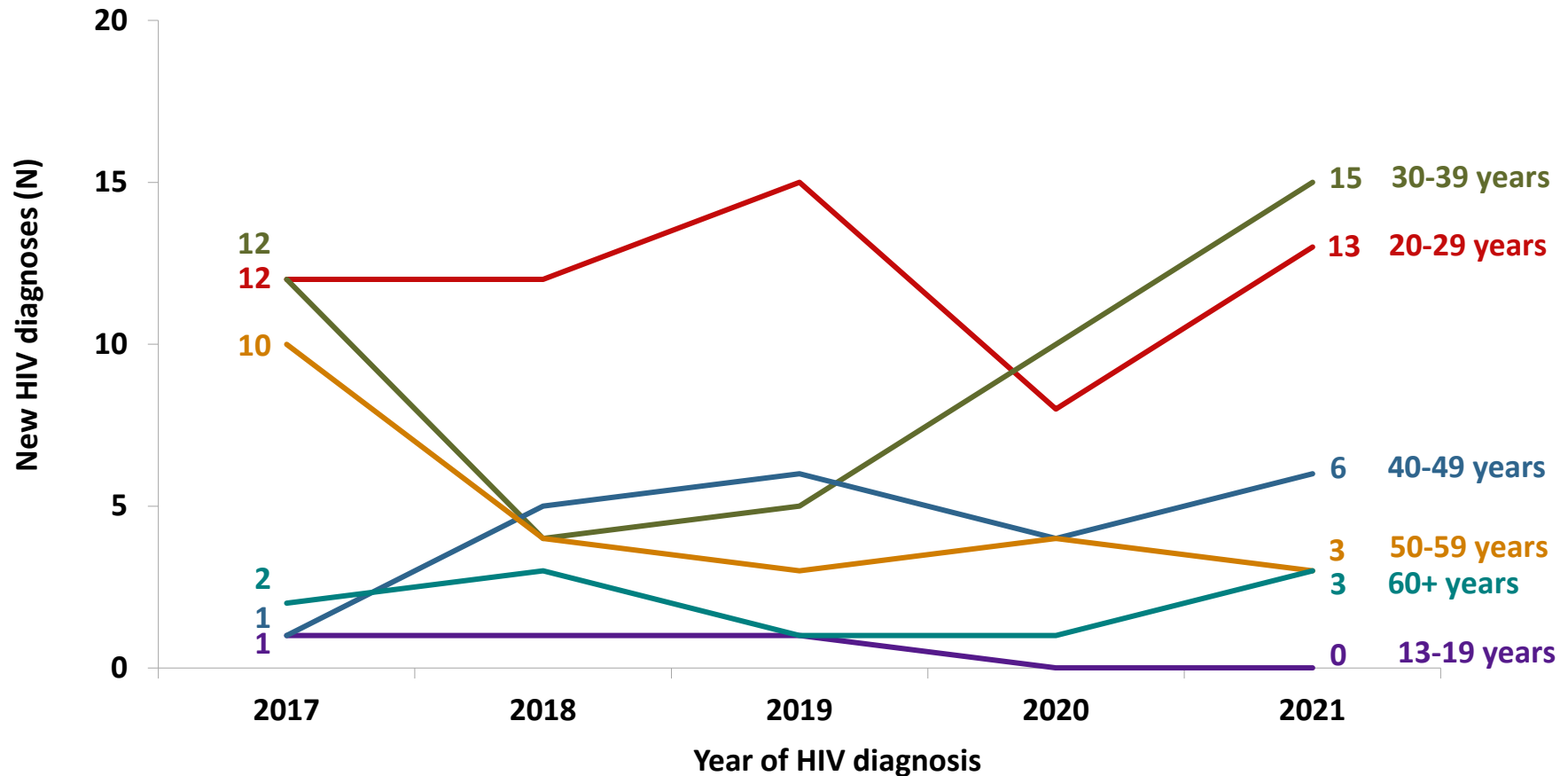
Between 2017 and 2021, the number of new HIV diagnoses remained relatively stable by gender in Staten Island.

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



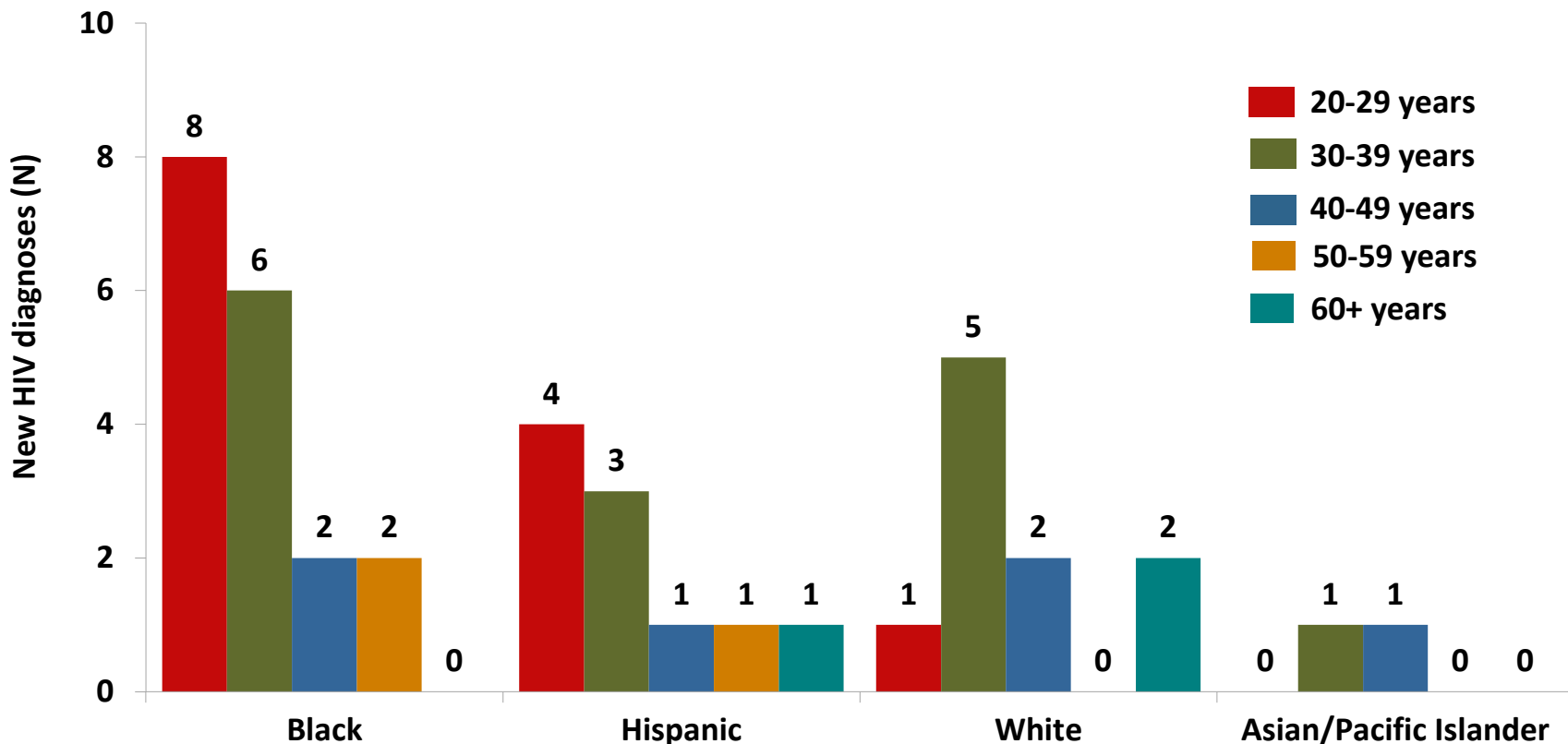
Between 2017 and 2021, HIV diagnoses remained relatively stable by race/ethnicity in Staten Island. Black people accounted for most new diagnoses during this period.

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



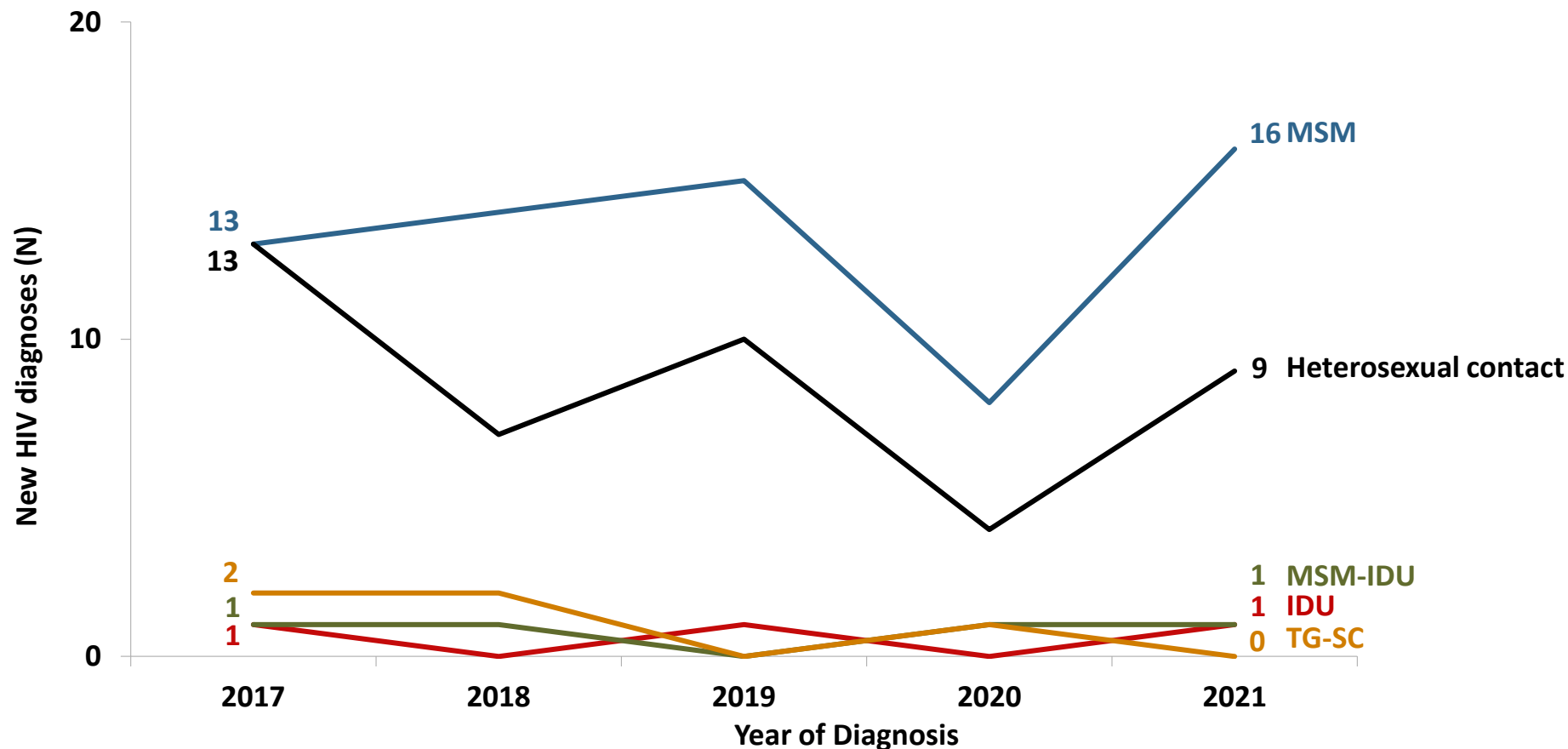
Between 2017 and 2021, new HIV diagnoses increased among some age groups in Staten Island. People aged 30 to 39 years experienced the greatest increase in new HIV diagnoses in Staten Island, although numbers remain relatively small for each group.

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



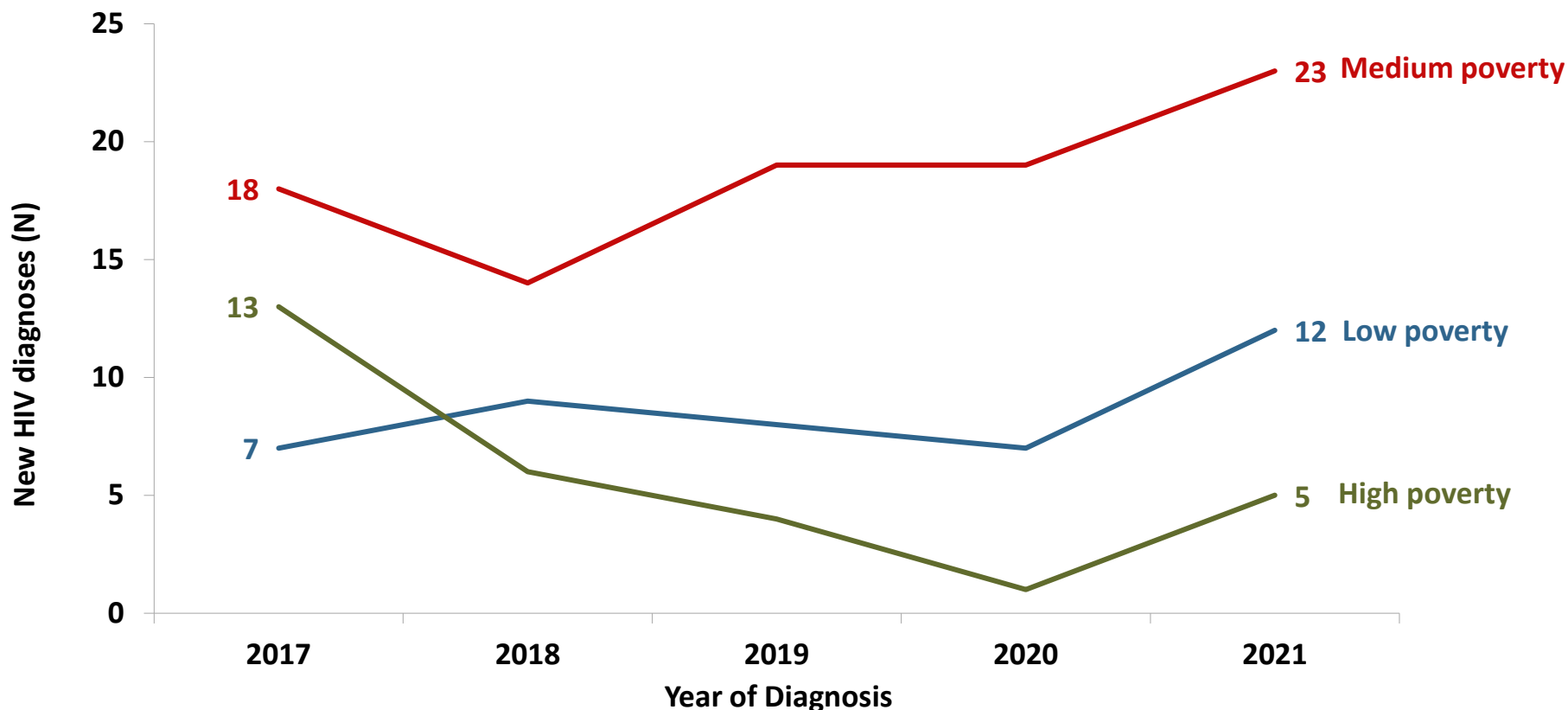
Black people aged 20 to 39 years and White people aged 30 to 39 years accounted for the largest proportions of new HIV diagnoses by age and race/ethnicity in Staten Island in 2021.

NUMBER OF NEW HIV DIAGNOSES BY TRANSMISSION CATEGORY IN STATEN ISLAND, 2017-2021



Between 2017 and 2021, the number of new HIV diagnoses remained relatively flat across all transmission categories in Staten Island.

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



Between 2017 and 2021, the number of new HIV diagnoses increased in low- and medium-poverty neighborhoods in Staten Island, although numbers remain relatively small for each group.

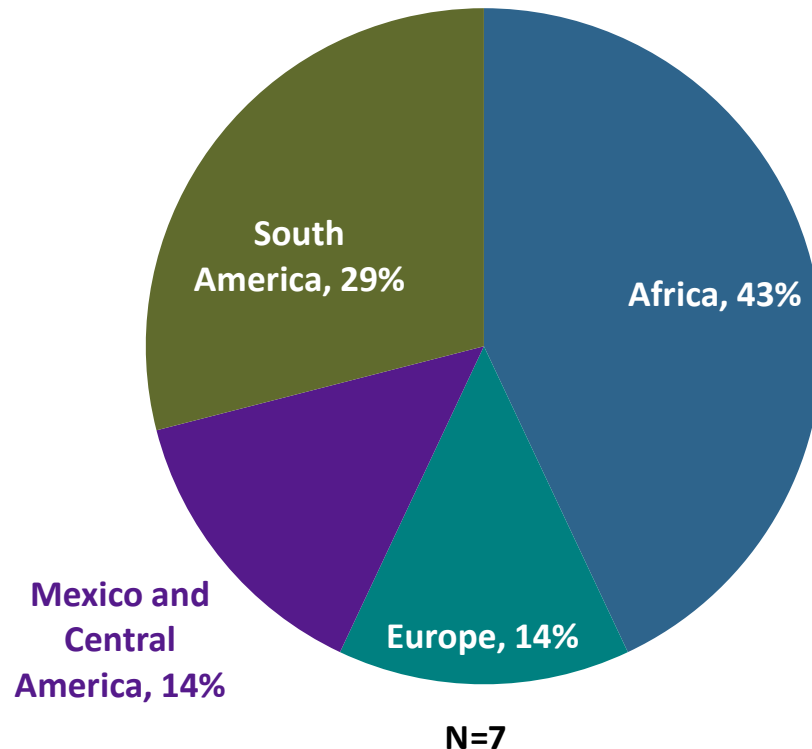
¹Area-based poverty level is determined by the proportion of residents living below the federal poverty level (FPL) in the NYC ZIP code of residence at diagnosis.

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). Staten Island does not have any ZIP codes that designated as very high poverty.

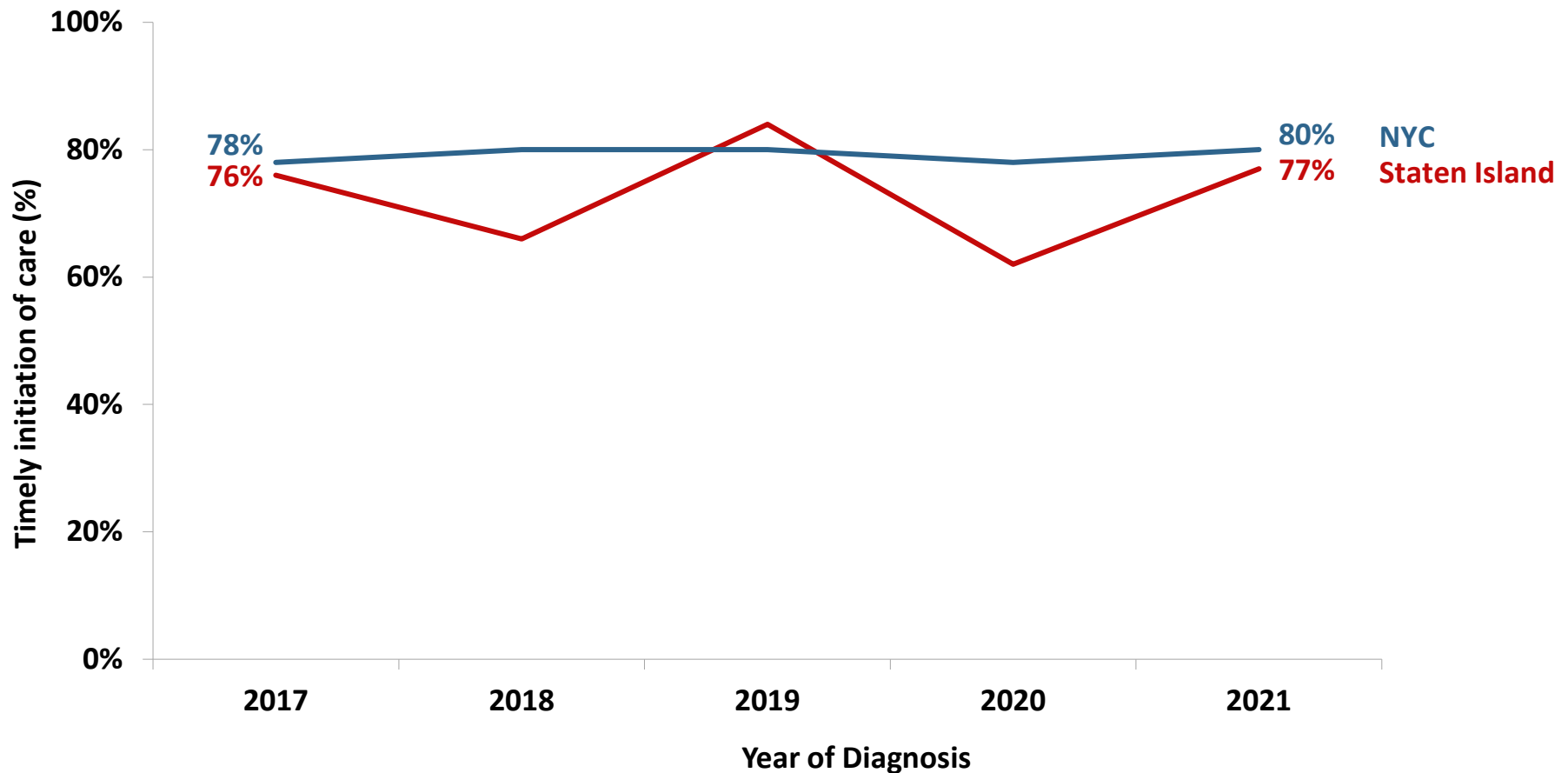
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

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



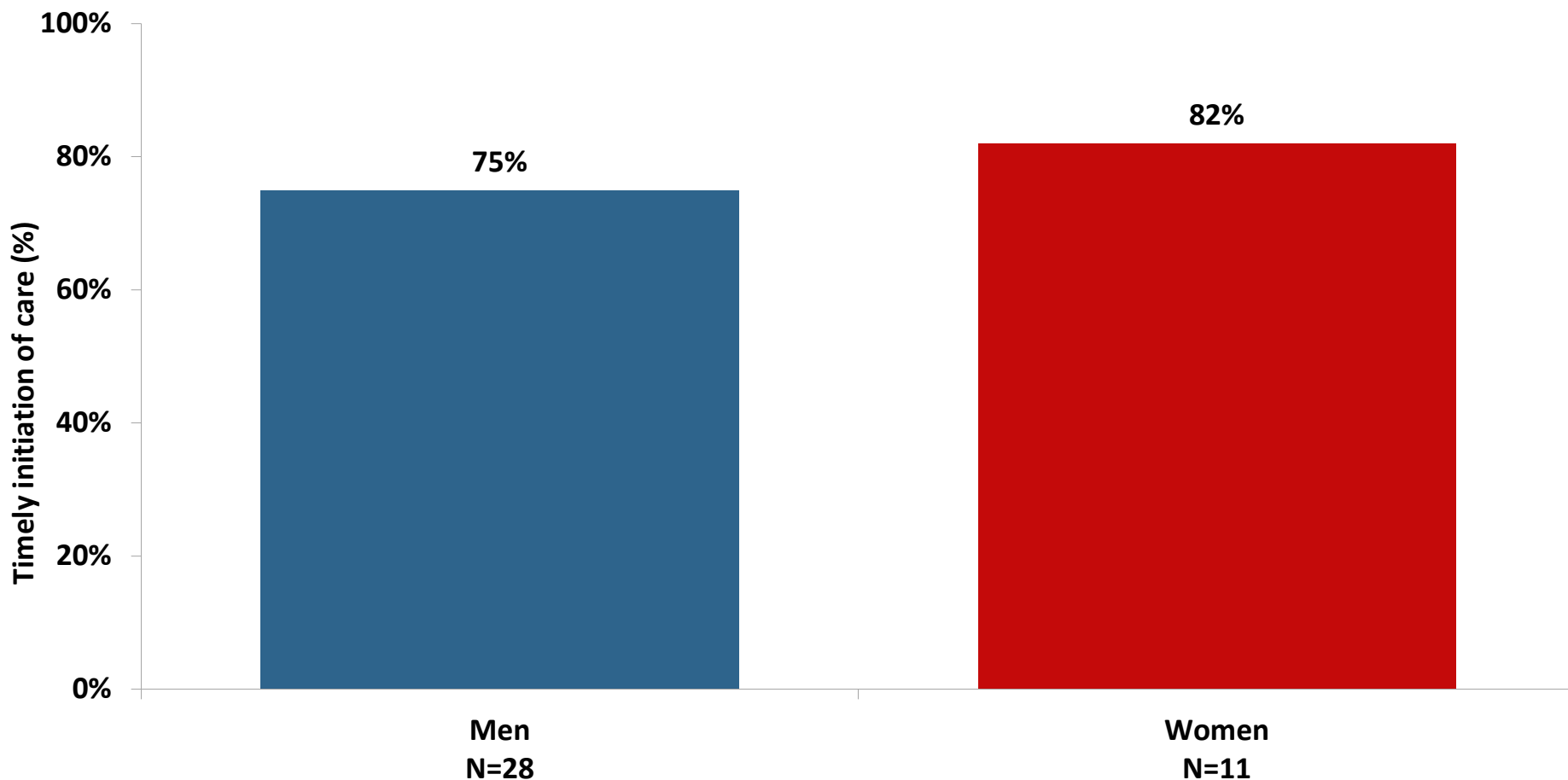
There were 7 people born outside of the U.S. newly diagnosed with HIV in Staten Island in 2021. People born in Africa accounted for the greatest proportion of these new HIV diagnoses.

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



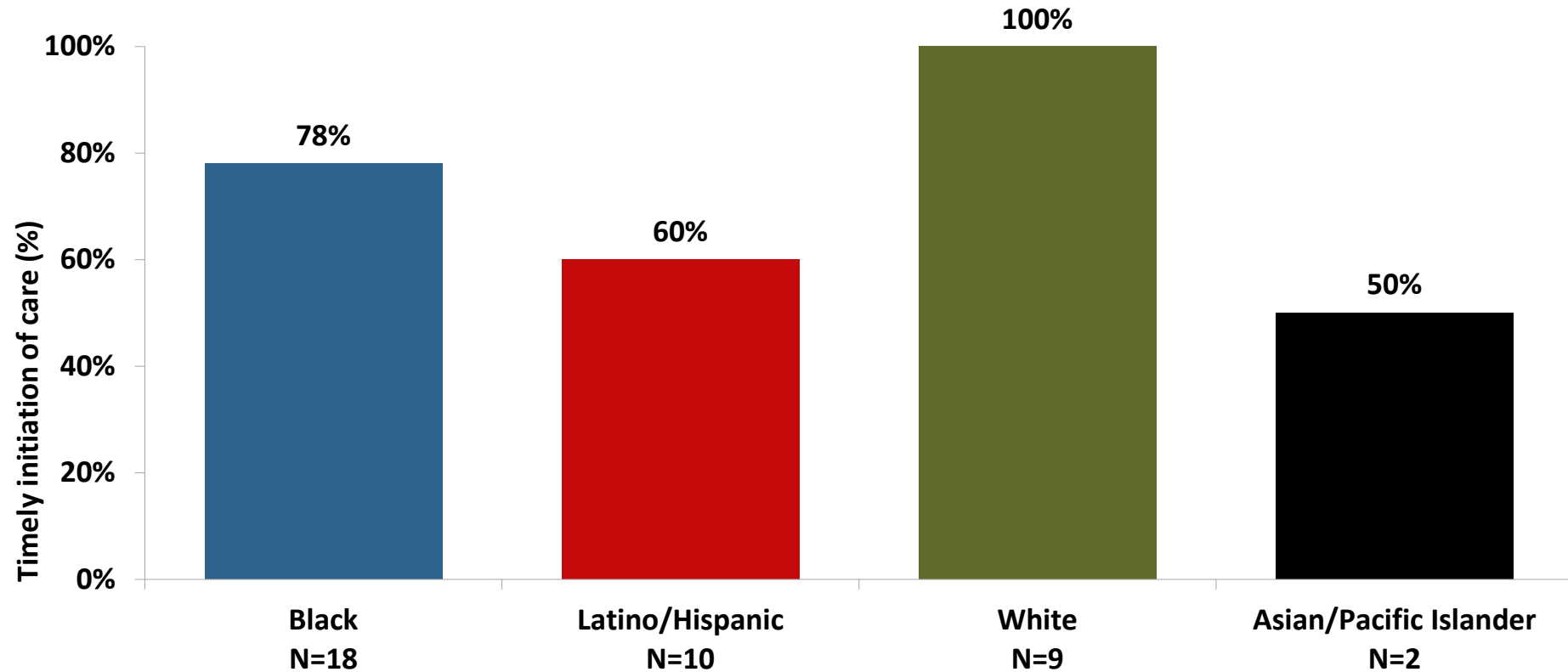
Between 2017 and 2021, timely initiation of care among people newly diagnosed with HIV in Staten Island generally fell below that of NYC overall.

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



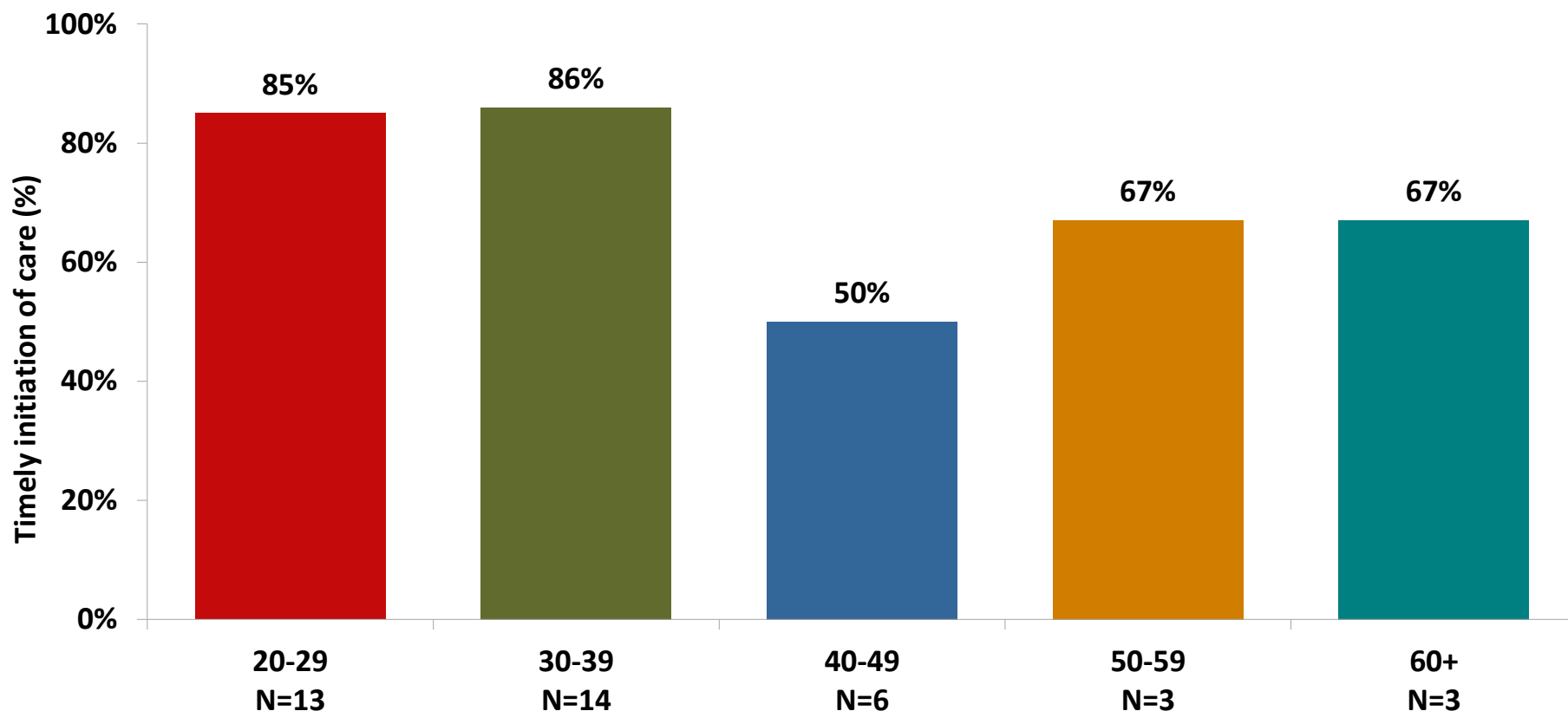
Among people newly diagnosed with HIV in Staten Island in 2021, a lower proportion of men were linked to care within 30 days of diagnosis.

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



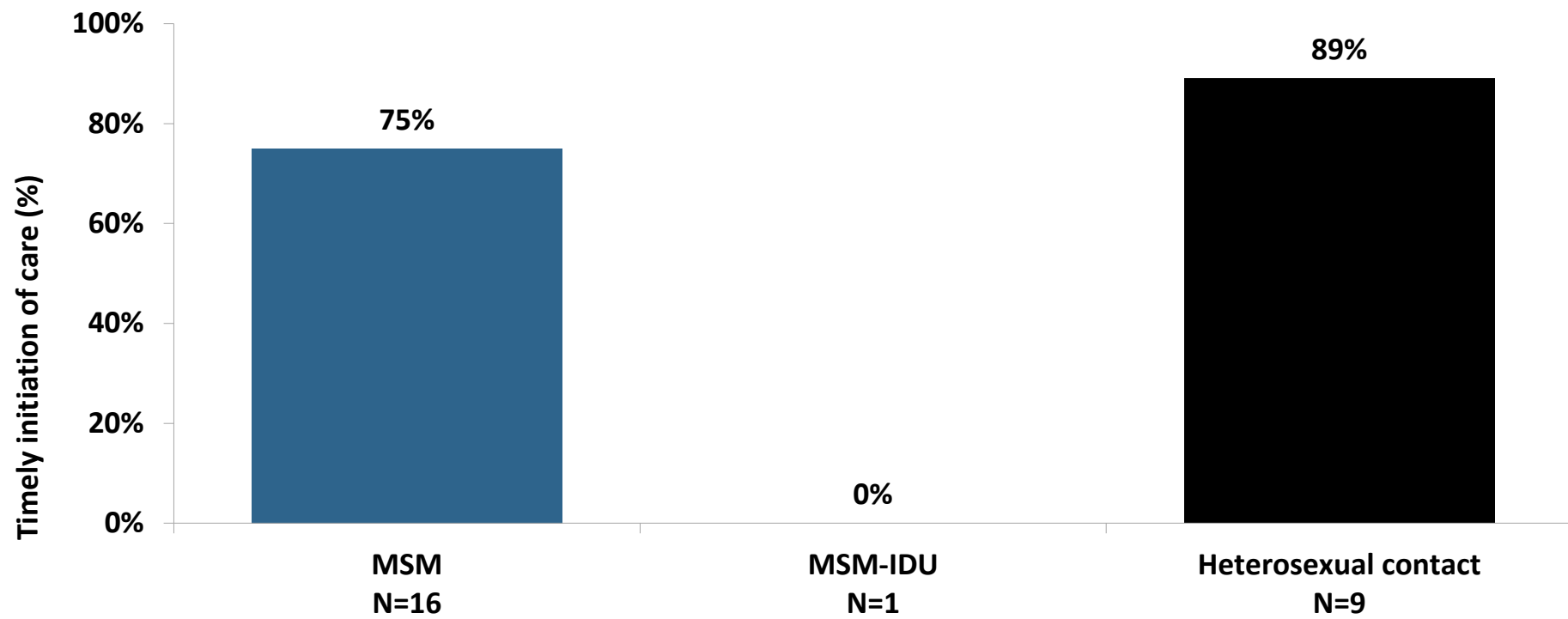
Among people newly diagnosed with HIV in Staten Island in 2021, White people had the highest proportion of people linked to care within 30 days of diagnosis.

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



Among people newly diagnosed with HIV in Staten Island in 2021, people aged 40 to 49 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 STATEN ISLAND, 2021



Among people newly diagnosed with HIV in Staten Island in 2021, people with heterosexual contact had the highest proportion linked to care within 30 days of diagnosis.

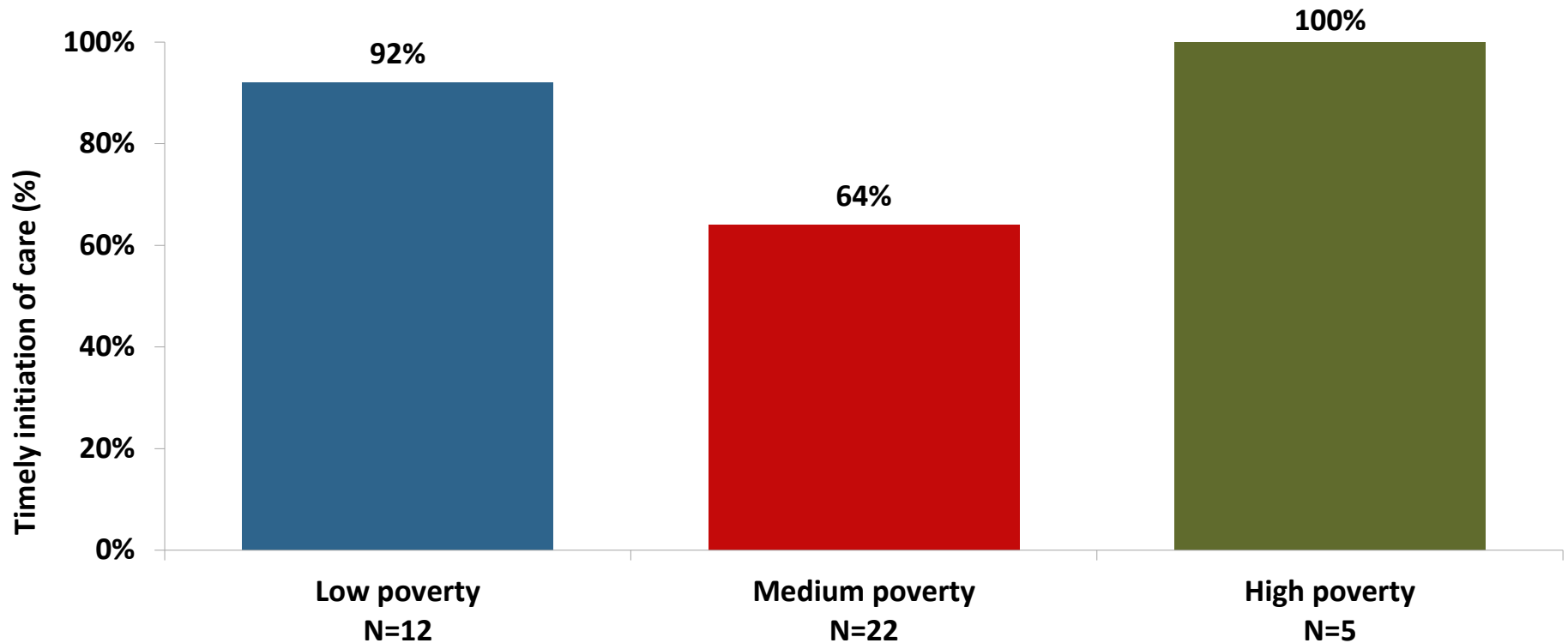
MSM=men who have sex with men; IDU=history of injection drug use.

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 IDU (N=0), perinatal (N=0), transgender people with sexual contact (N=0), other (N=0), or unknown (N=13) transmission category are not displayed.

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

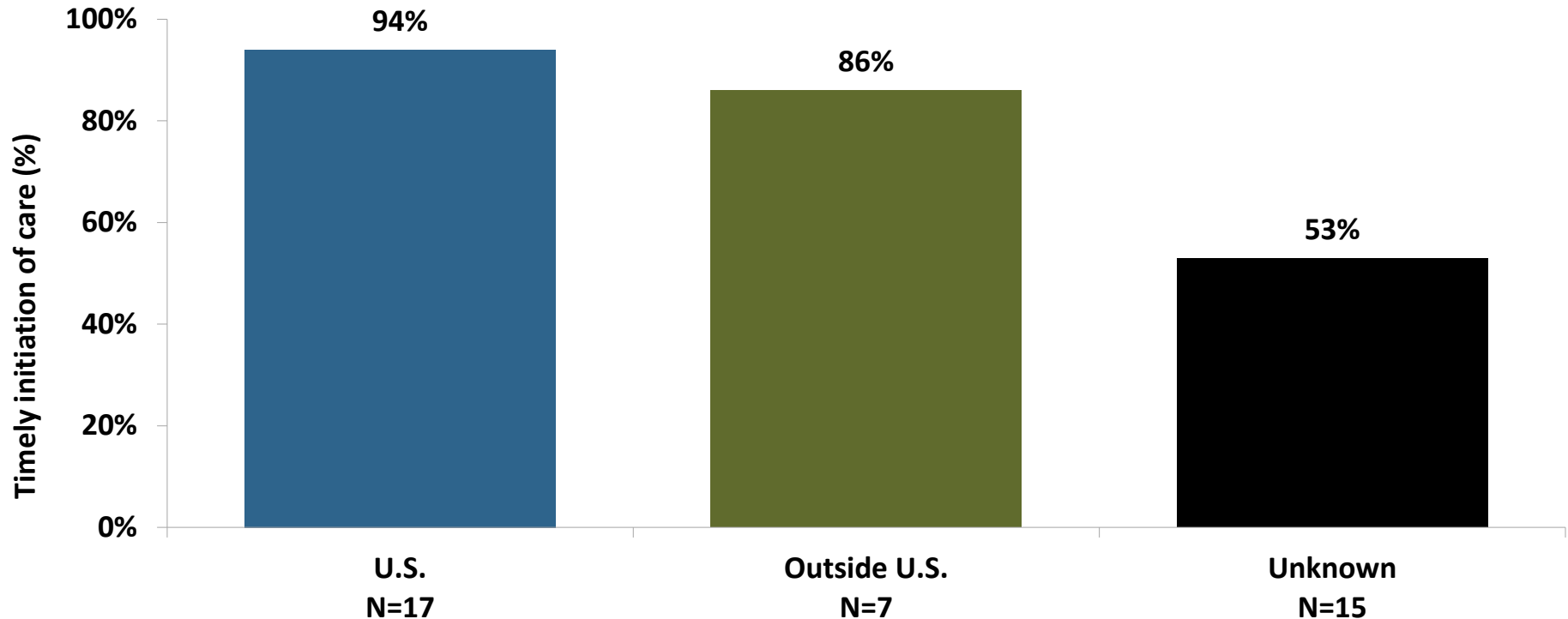
TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY AREA-BASED POVERTY IN STATEN ISLAND, 2021



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

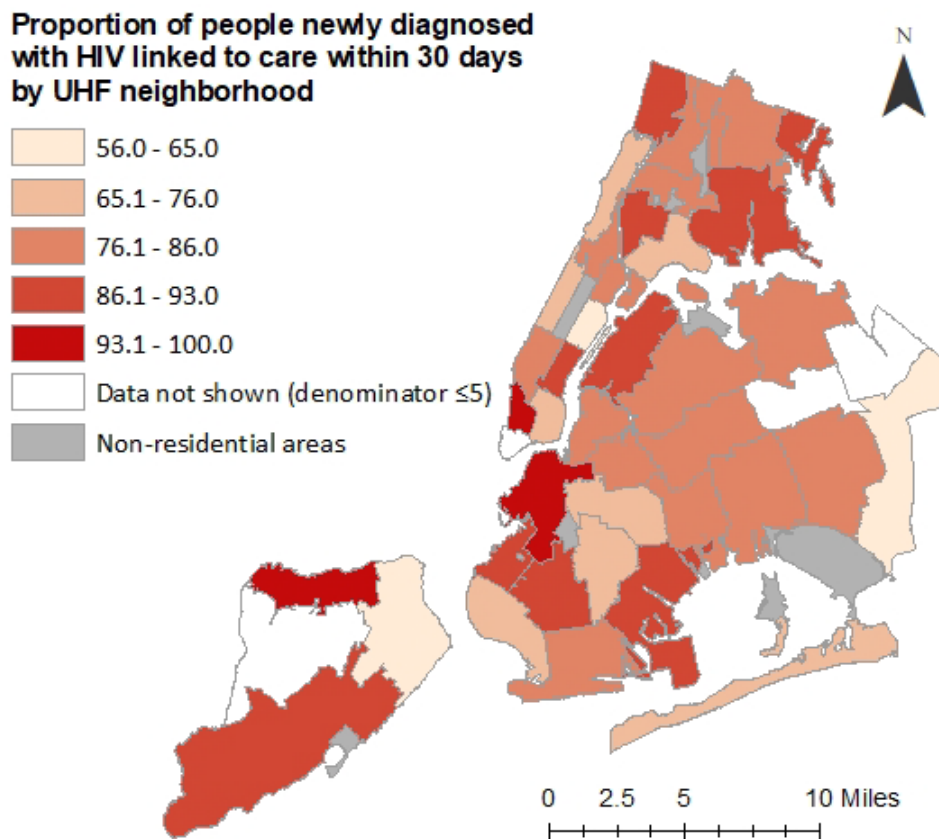
¹Area-based poverty level is determined by the proportion of residents living below the federal poverty level (FPL) in the NYC ZIP code of residence at diagnosis. Low poverty=<10% below FPL; Medium poverty=10 to <20% below FPL; High poverty=20 to <30% below FPL; Very high poverty=≥30% below FPL. Timely 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). Staten Island does not have any ZIP codes that designated as very high poverty. 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 STATEN ISLAND, 2021



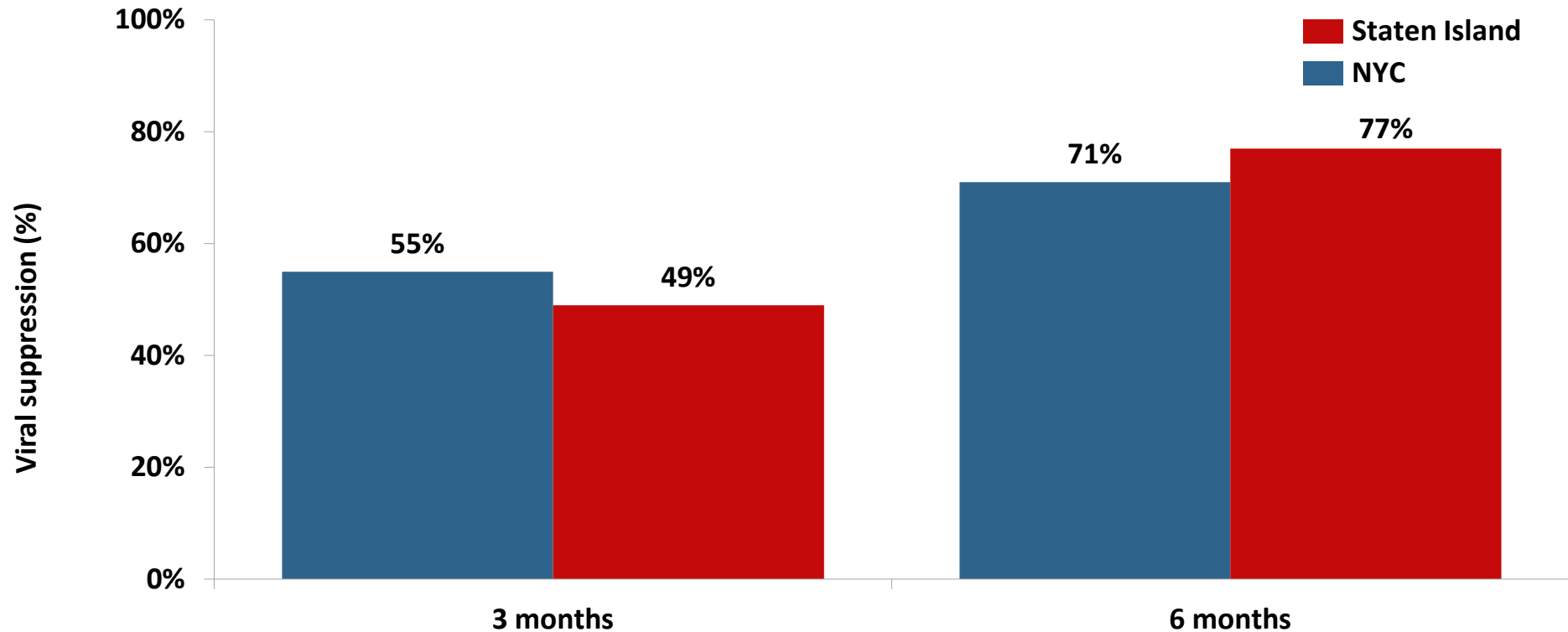
Among people newly diagnosed with HIV in Staten Island in 2021, people born in the U.S. had the highest proportion linked to care within 30 days of diagnosis.

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



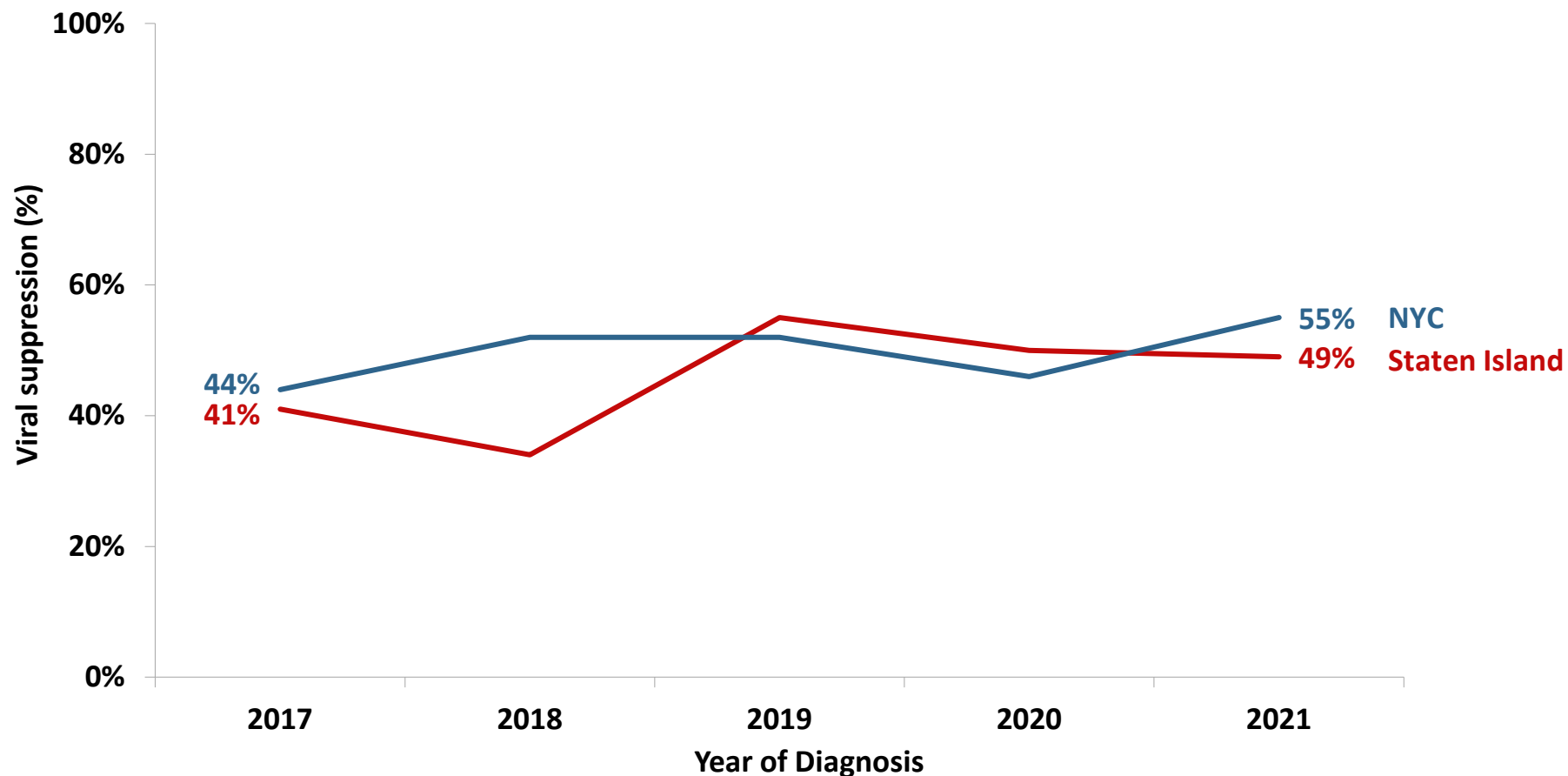
The Staten Island neighborhood with the lowest proportion of people linked to care within 30 days of diagnosis in 2021 was Stapleton-St. George (59%).

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



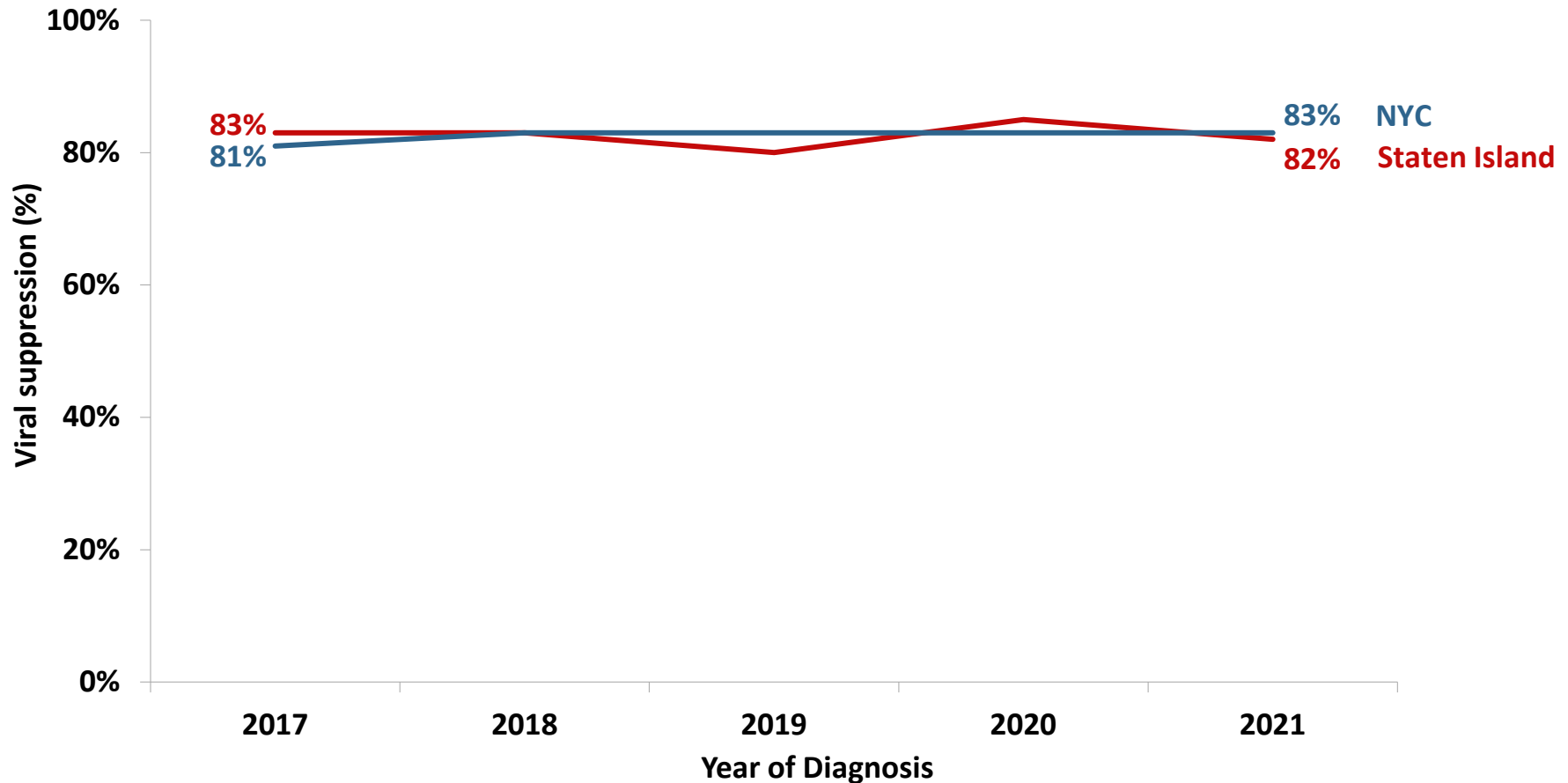
Among people newly diagnosed with HIV in 2021, compared with NYC overall, a lower proportion of Staten Island residents achieved viral suppression within 3 months of diagnosis, but a higher proportion achieved viral suppression within 6 months of diagnosis.

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



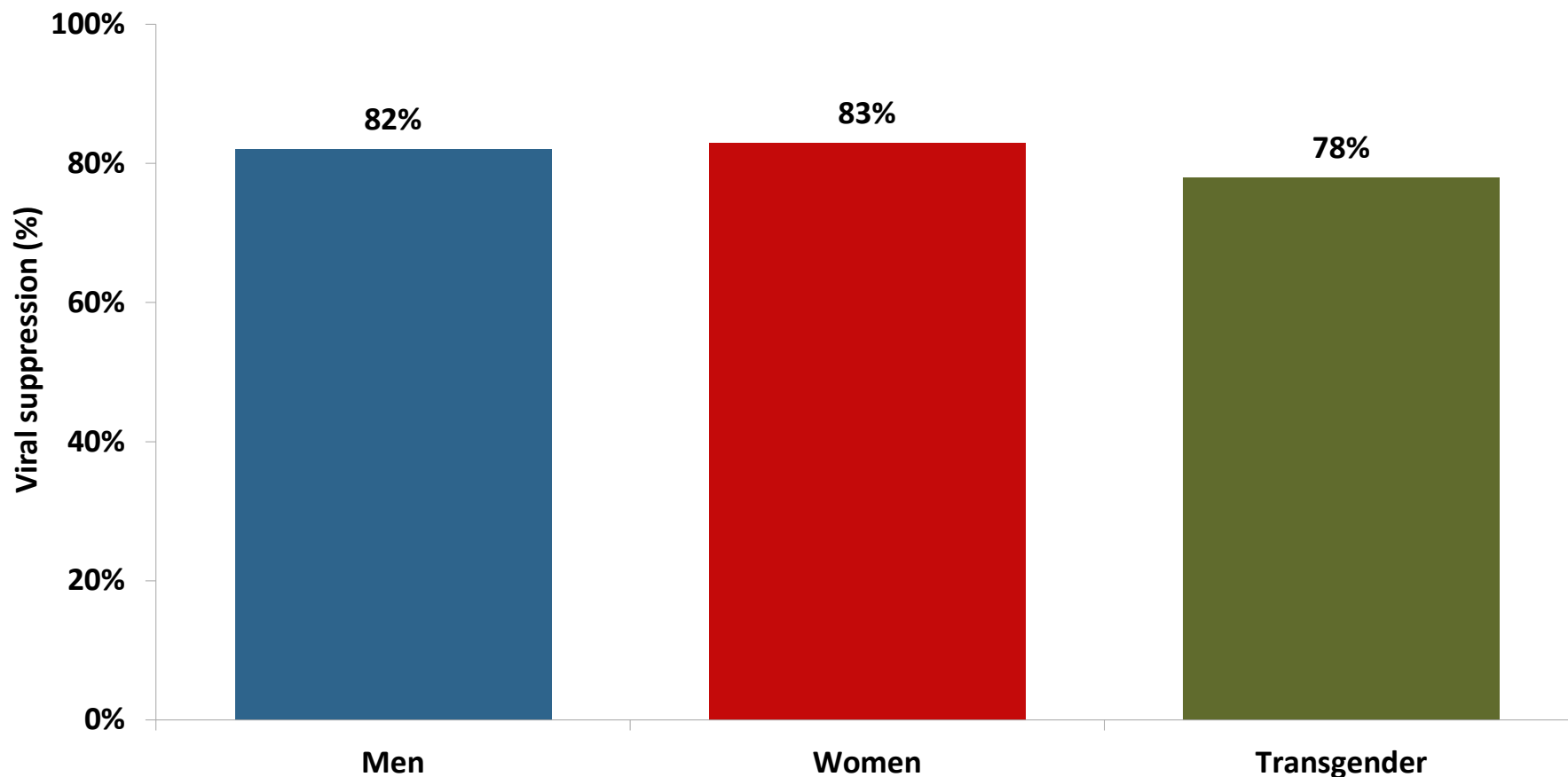
Between 2017 and 2021, viral suppression within 3 months among people newly diagnosed with HIV increased in Staten Island and in NYC overall.

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



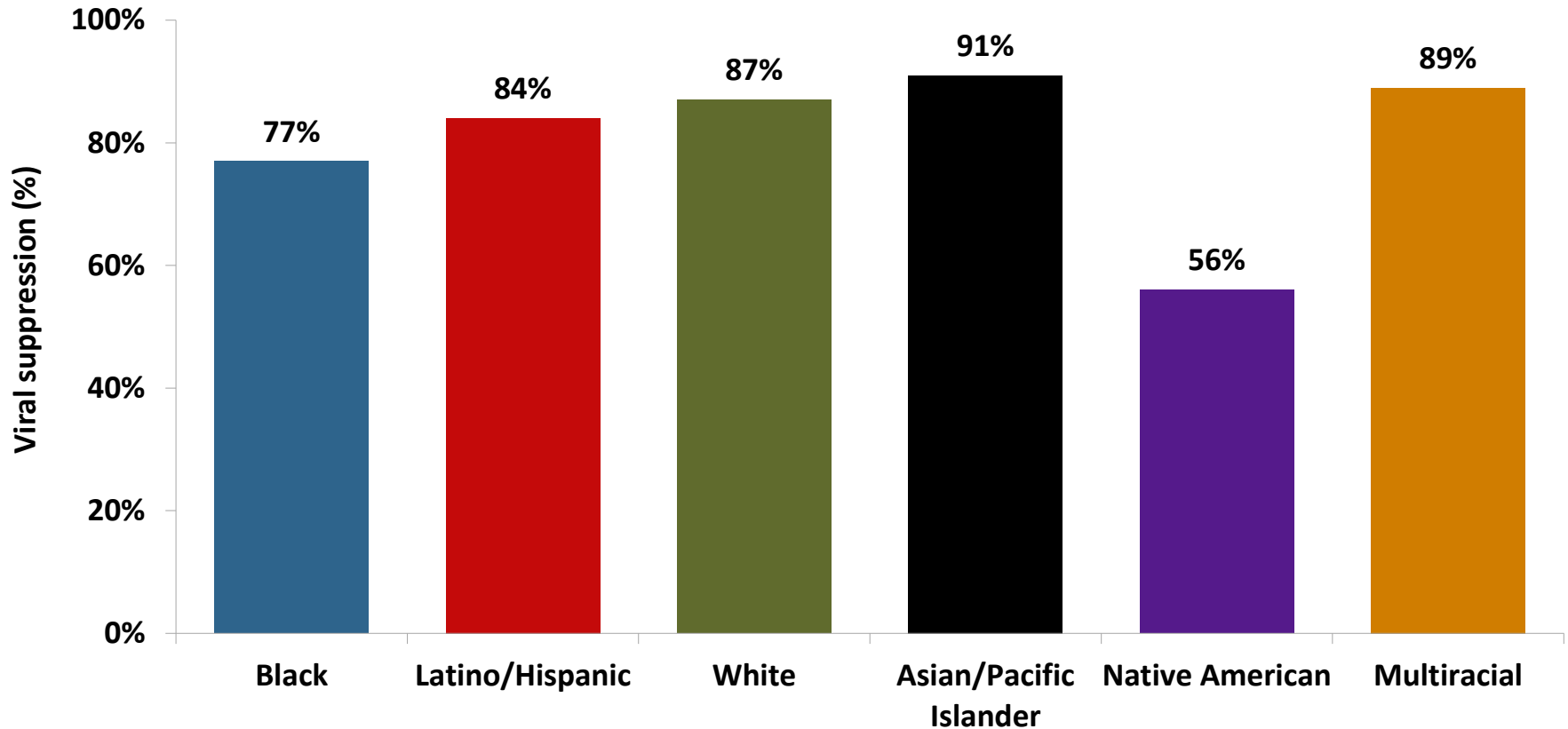
Between 2017 and 2021, viral suppression among all diagnosed people with HIV (PWH) remained relatively stable in Staten Island and in NYC overall.

VIRAL SUPPRESSION AMONG DIAGNOSED PWH BY GENDER IN STATEN ISLAND, 2021



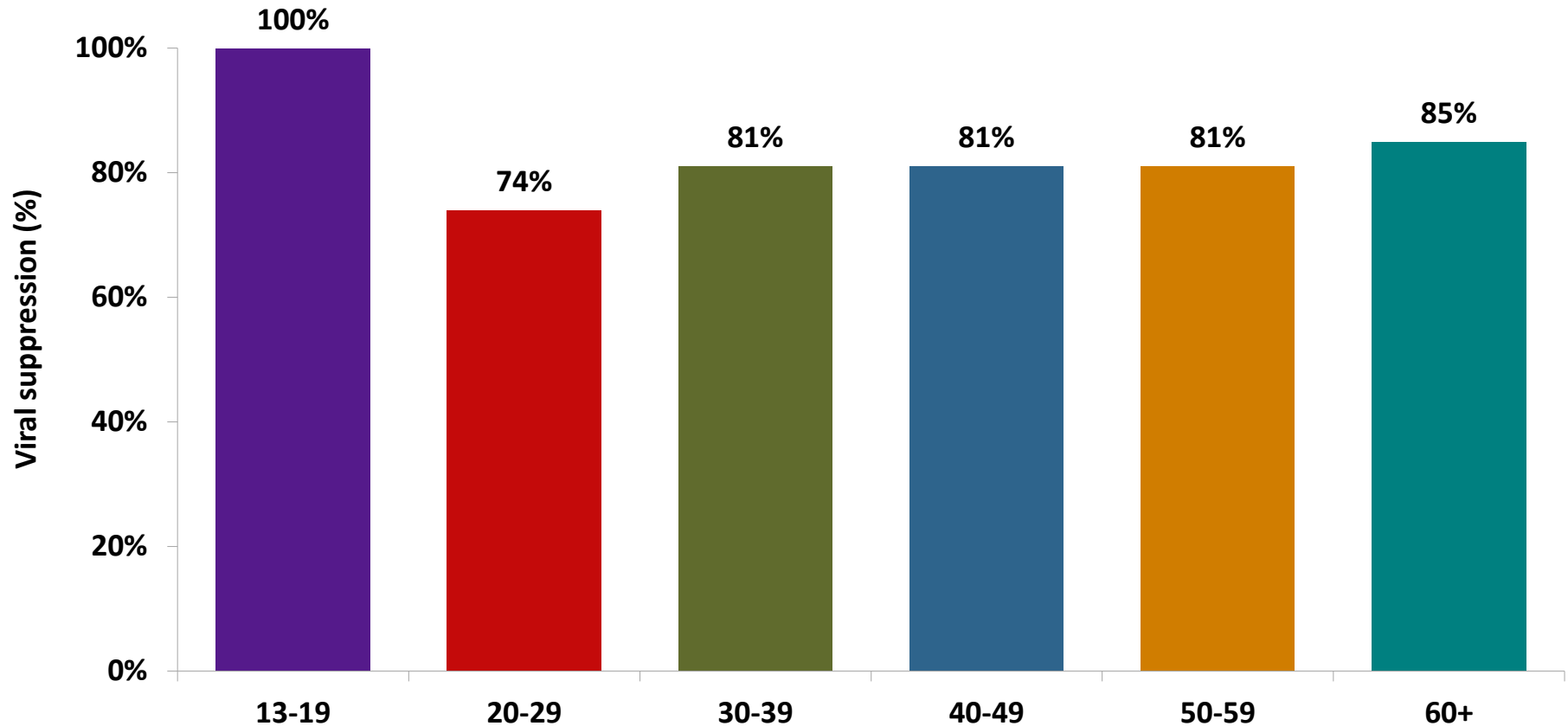
Among diagnosed people with HIV (PWH) in Staten Island, a smaller proportion of transgender people were virally suppressed compared to men and women.

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



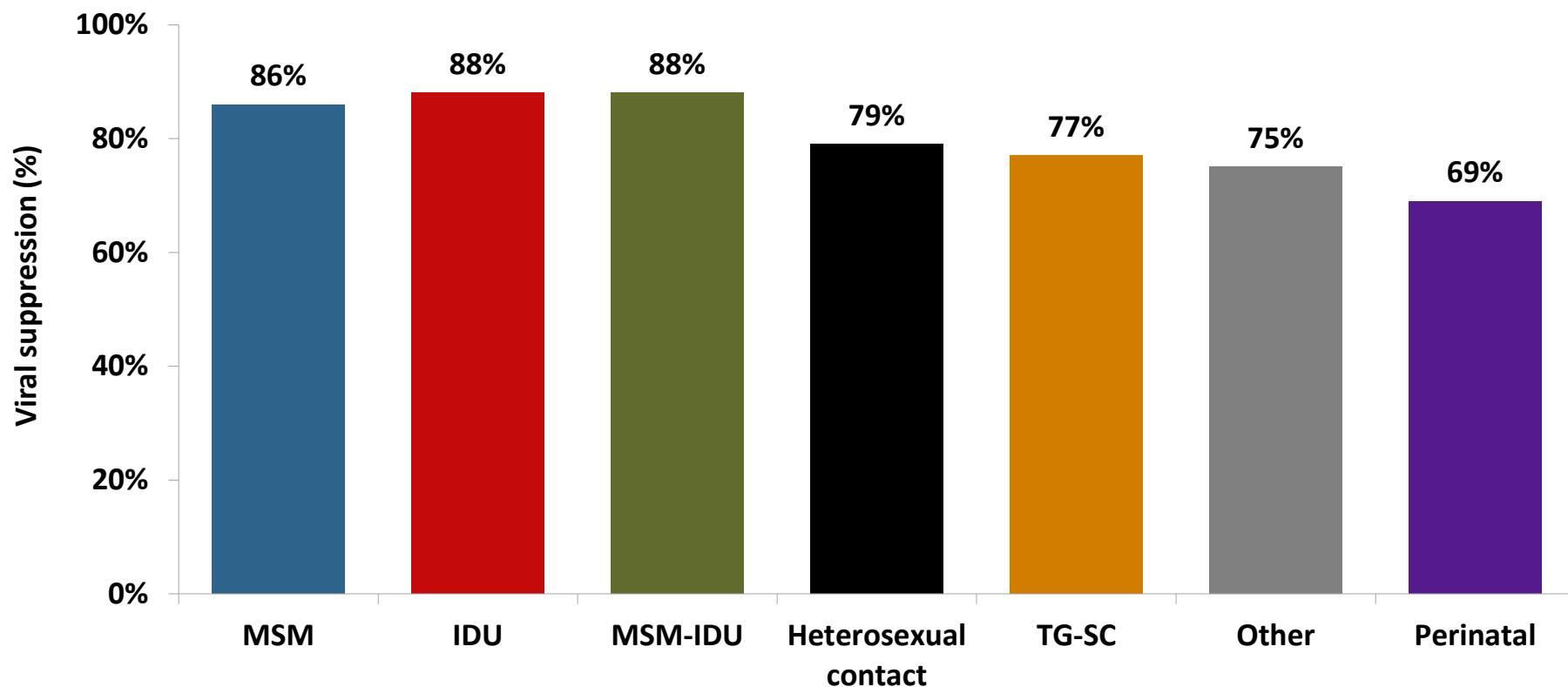
Among diagnosed people with HIV (PWH) in Staten Island, Native American people had the lowest proportion virally suppressed by race/ethnicity.

VIRAL SUPPRESSION AMONG DIAGNOSED PWH BY AGE IN STATEN ISLAND, 2021



Among diagnosed people with HIV (PWH) in Staten Island, people aged 20 to 29 years had the lowest proportion virally suppressed by age group.

VIRAL SUPPRESSION AMONG DIAGNOSED PWH BY TRANSMISSION CATEGORY IN STATEN ISLAND, 2021



Among diagnosed people with HIV (PWH) in Staten Island, people with perinatal transmission had the lowest proportion virally suppressed by transmission category.

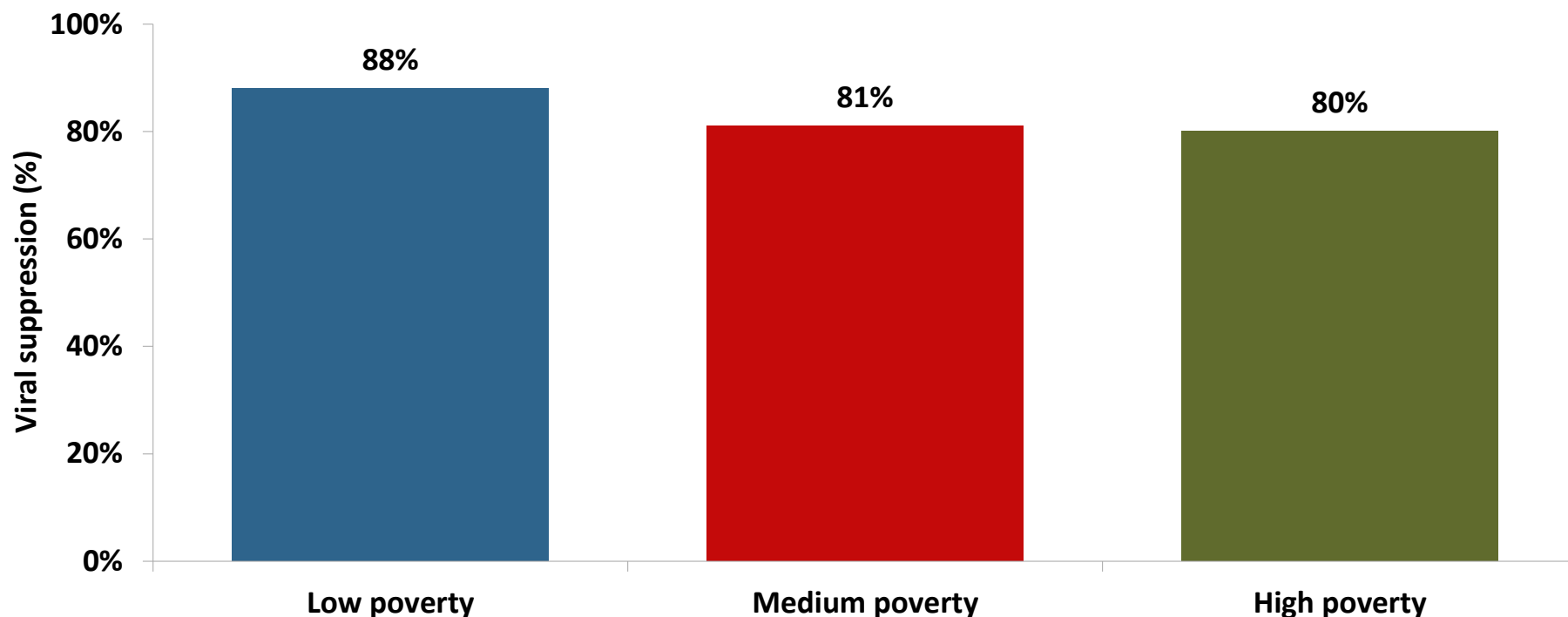
MSM=men who have sex with men; IDU=history of injection drug use; TG-SC=transgender people with sexual contact.

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 LEVEL IN STATEN ISLAND, 2021



Among diagnosed people with HIV (PWH) in Staten Island, people living in low-poverty neighborhoods had the highest proportion virally suppressed by area-based poverty level.¹

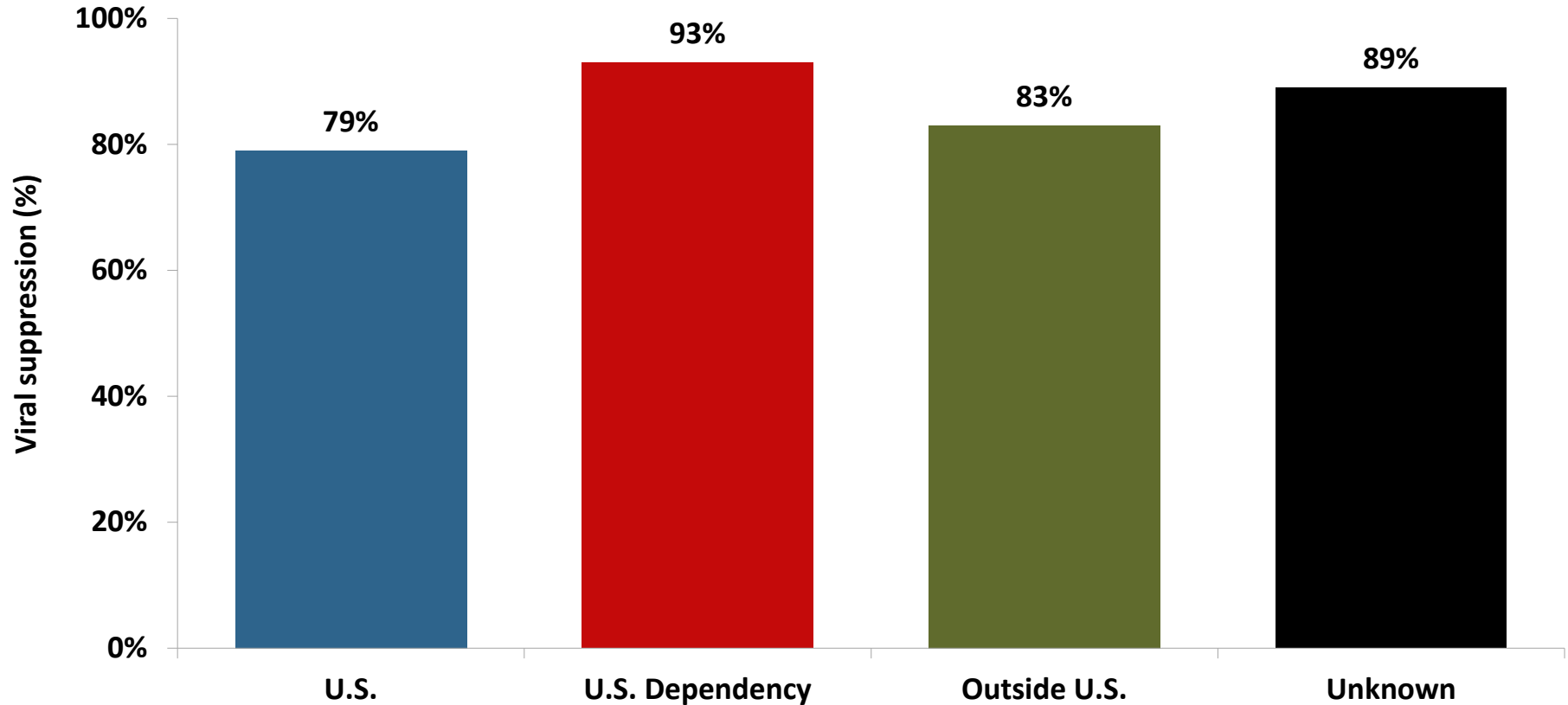
¹Area-based poverty level is determined by the proportion of residents living below the federal poverty level (FPL) in the NYC ZIP code of residence at diagnosis. Low poverty=<10% below FPL; Medium poverty=10 to <20% below FPL; High poverty=20 to <30% below FPL; Very high poverty= \geq 30% below FPL.

PWH without area-based poverty information not displayed. Staten Island does not have any ZIP codes that designated as very high poverty.

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

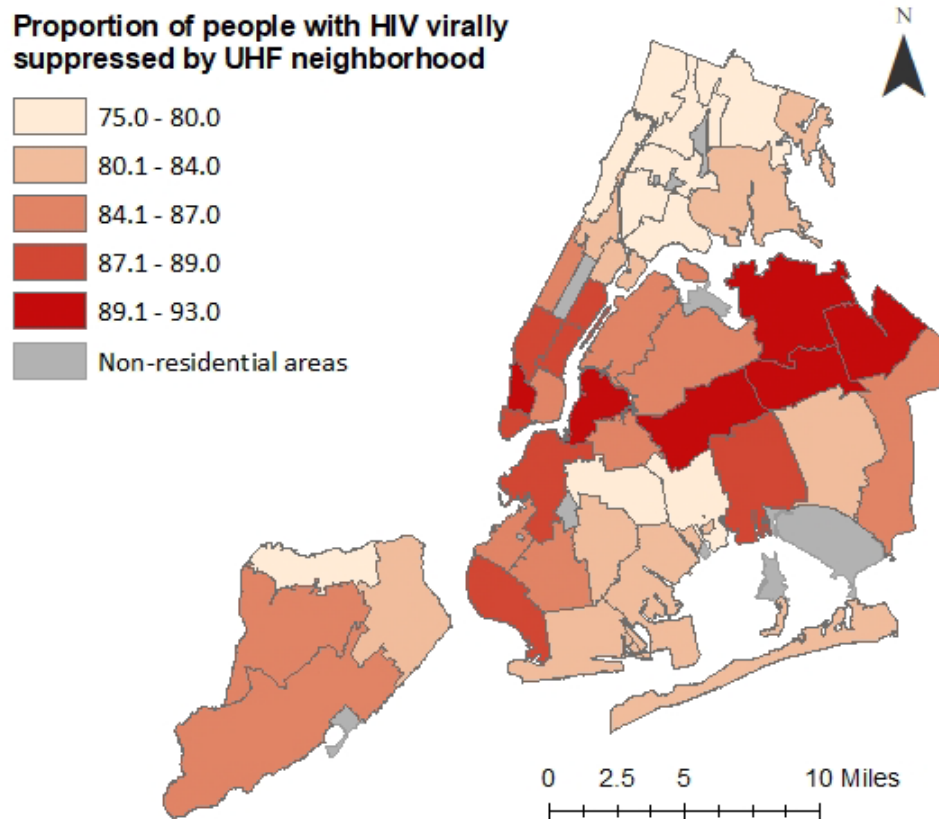
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2022.

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



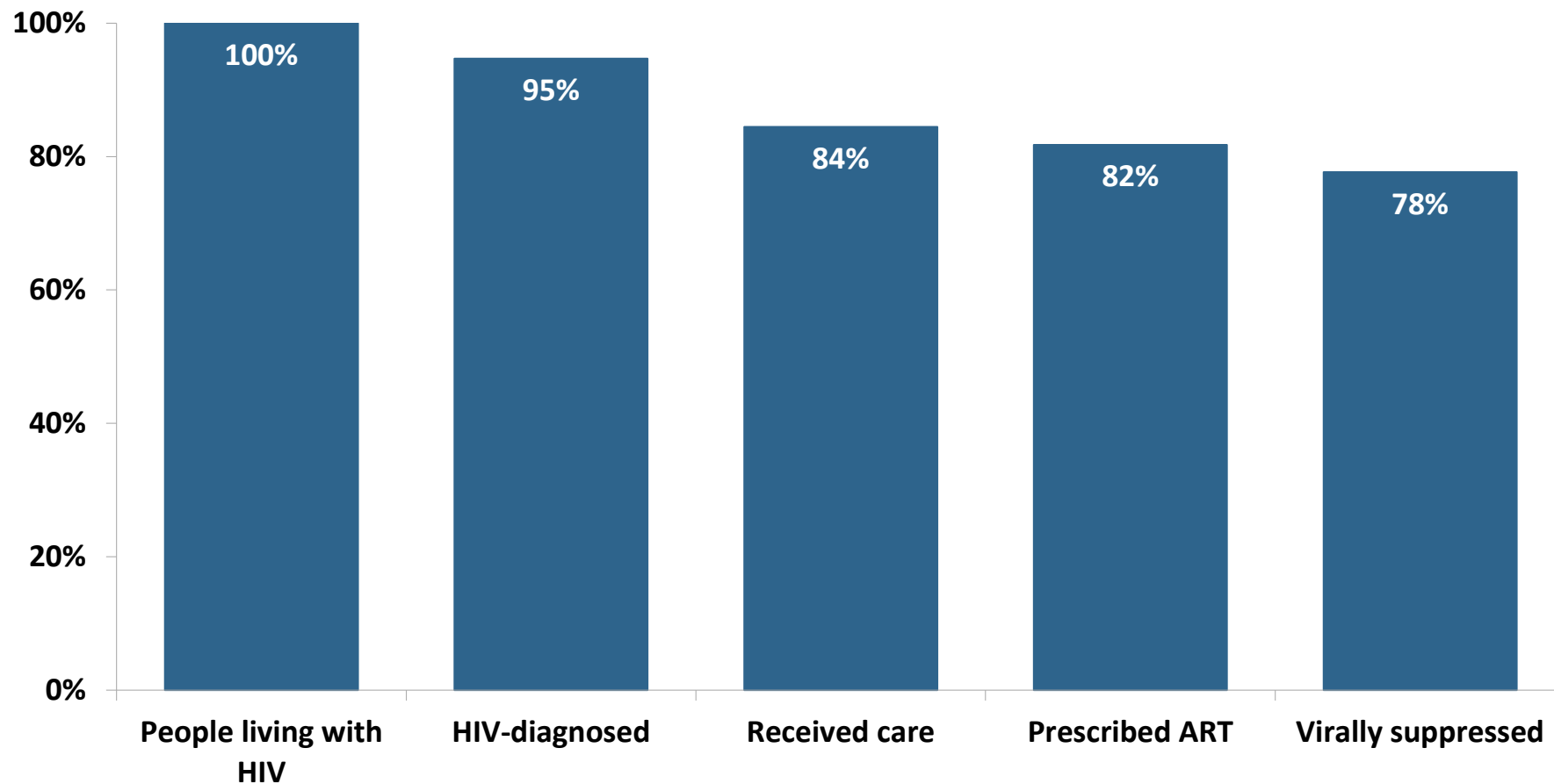
Among diagnosed people with HIV (PWH) in Staten Island, people born in U.S. dependencies had a higher proportion virally suppressed compared with people born in the U.S. or outside of the U.S.

VIRAL SUPPRESSION BY UHF NEIGHBORHOOD IN NYC, 2021



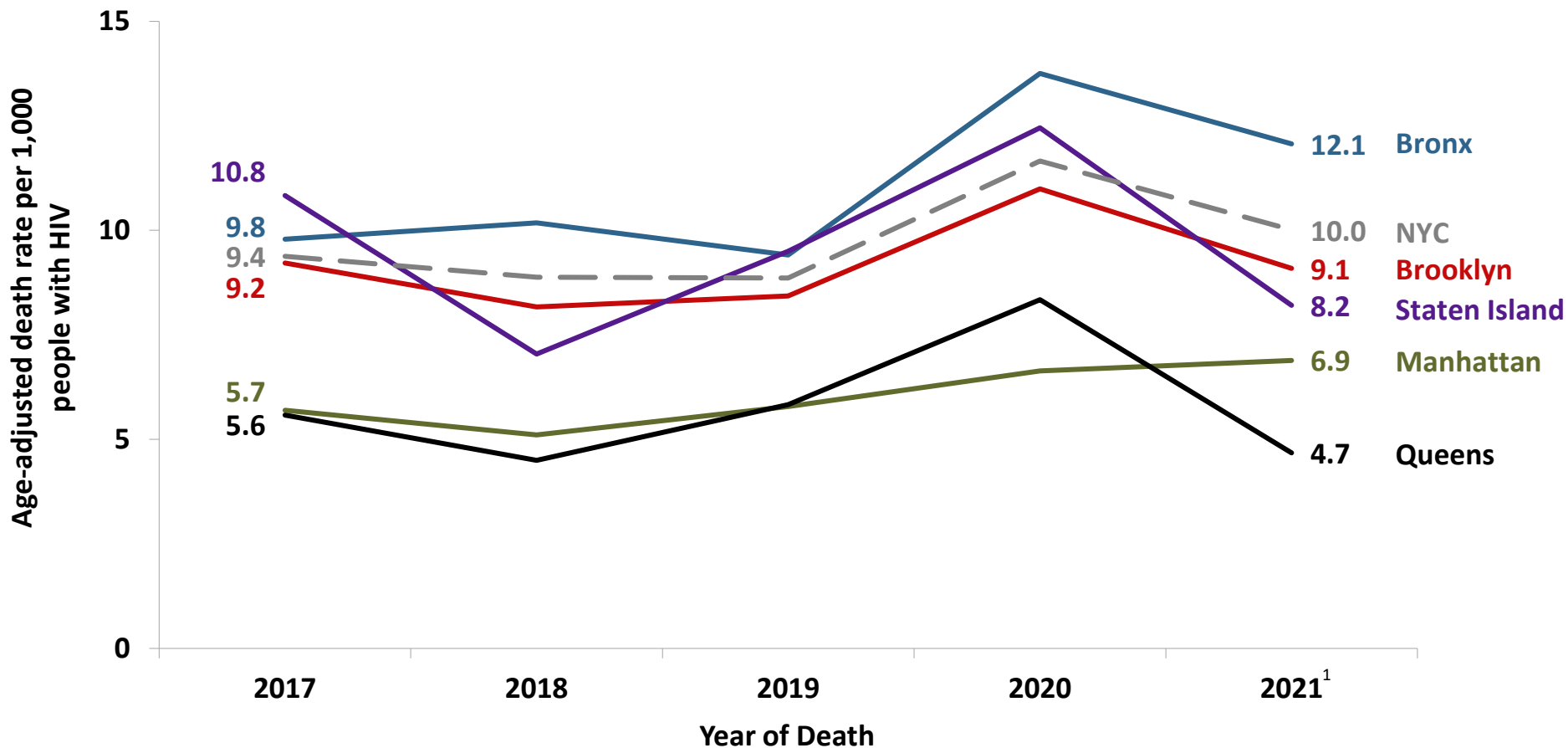
The Staten Island neighborhood with the lowest proportion of people with HIV (PWH) virally suppressed in 2021 was Port Richmond (78%).

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



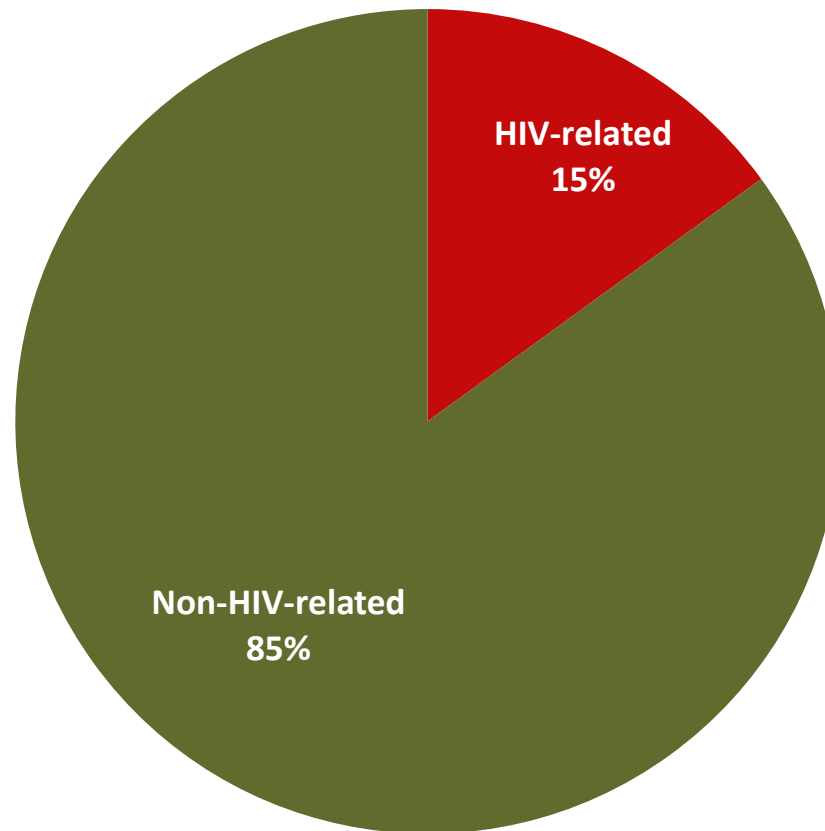
Of approximately 2,000 people living with HIV (PLWH) in Staten Island in 2021, 78% had a suppressed viral load.

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 among people with HIV in Staten Island was highest in 2020.

CAUSE OF DEATH AMONG PEOPLE WITH HIV IN STATEN ISLAND, 2020¹



In 2020, 85% of deaths among people with HIV in Staten Island were due to non-HIV-related causes. Of these, the top causes were COVID-19 (31%), cardiovascular diseases (22%), 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.