CARE AND CLINICAL STATUS OF PEOPLE NEWLY DIAGNOSED WITH HIV AND PEOPLE LIVING WITH HIV IN NEW YORK CITY, 2018

HIV Epidemiology Program
New York City Department of Health and Mental Hygiene

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http://www1.nyc.gov/site/doh/data/data-sets/epi-surveillance-slide-sets.page

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PEOPLE LIVING WITH HIV (PLWH)

PEOPLE NEWLY DIAGNOSED WITH HIV IN NYC, 2018

- **1,917** people newly diagnosed with HIV in NYC in 2018

TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV IN NYC, 2014-2018

Timely initiation of care among people newly diagnosed with HIV increased in NYC between 2014 and 2018.

Timely initiation of care is defined as HIV viral load, CD4, or genotype test drawn within 1 month (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, 2019.

TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY GENDER IN NYC, 2018
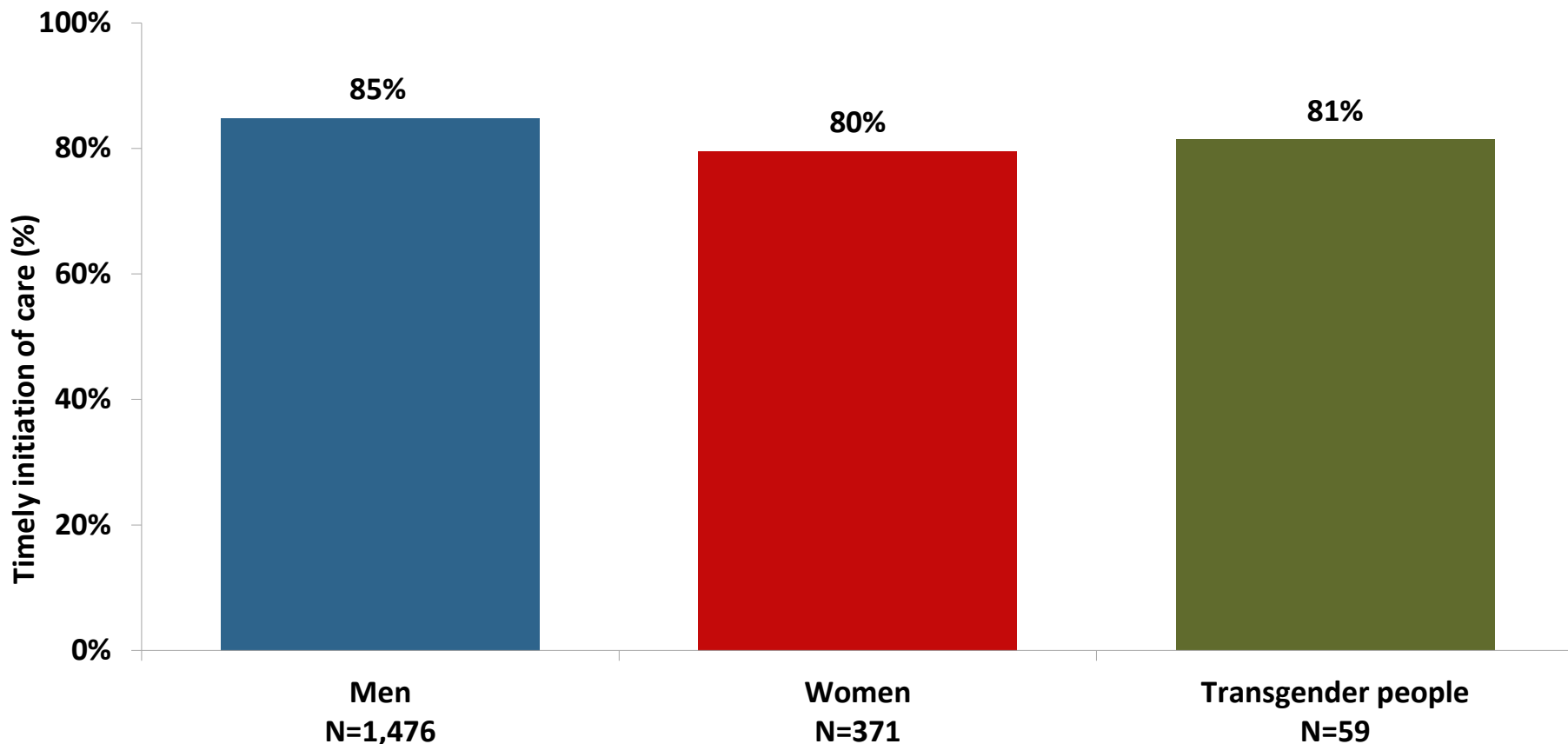
Among people newly diagnosed with HIV in NYC in 2018, a larger proportion of men were timely linked to care than women and transgender people.

Timely initiation of care is defined as HIV viral load, CD4, or genotype test drawn within 1 month (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, 2019.

TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY RACE/ETHNICITY IN NYC, 2018

Among people newly diagnosed with HIV in NYC in 2018, a smaller proportion of Black people were timely linked to care compared with people of other racial/ethnic groups.

TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY AGE IN NYC, 2018

Timely initiation of care (%)

Age	Value
0-12 N=2	100%
13-19 N=69	83%
20-29 N=670	86%
30-39 N=517	83%
40-49 N=274	80%
50-59 N=255	84%
60+ N=119	85%

Among people newly diagnosed with HIV in NYC in 2018, people ages 40-49 years had the smallest proportion timely linked to care.

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TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY TRANSMISSION RISK IN NYC, 2018

Among people newly diagnosed with HIV in NYC in 2018, people with injection drug use history had the smallest proportion timely linked to care.

MSM=men who have sex with men; IDU=injection drug use history; TG-SC=Transgender people with sexual contact.
Timely initiation of care is defined as HIV viral load, CD4, or genotype test drawn within 1 month (30 days) of HIV diagnosis. People diagnosed at death have been excluded.
New diagnoses with unknown transmission risk are not shown.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY BOROUGH IN NYC, 2018

Timely initiation of care (%)

- Bronx N=438: 86%
- Brooklyn N=554: 85%
- Manhattan N=373: 86%
- Queens N=356: 86%
- Staten Island N=31: 68%
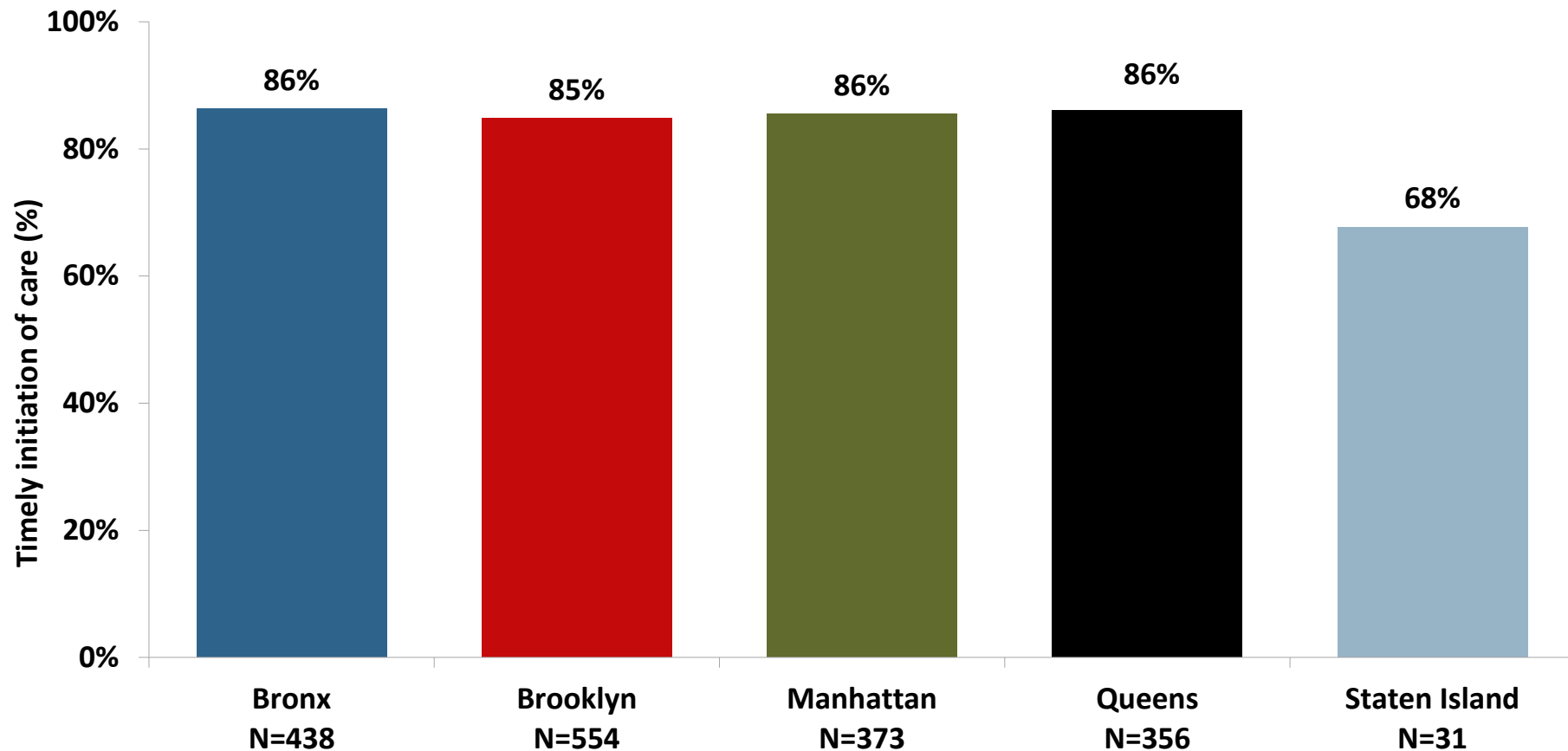
Among people newly diagnosed with HIV in NYC in 2018, residents of Staten Island had the smallest proportion timely linked to care.

Timely initiation of care is defined as HIV viral load, CD4, or genotype test drawn within 1 month (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, 2019.

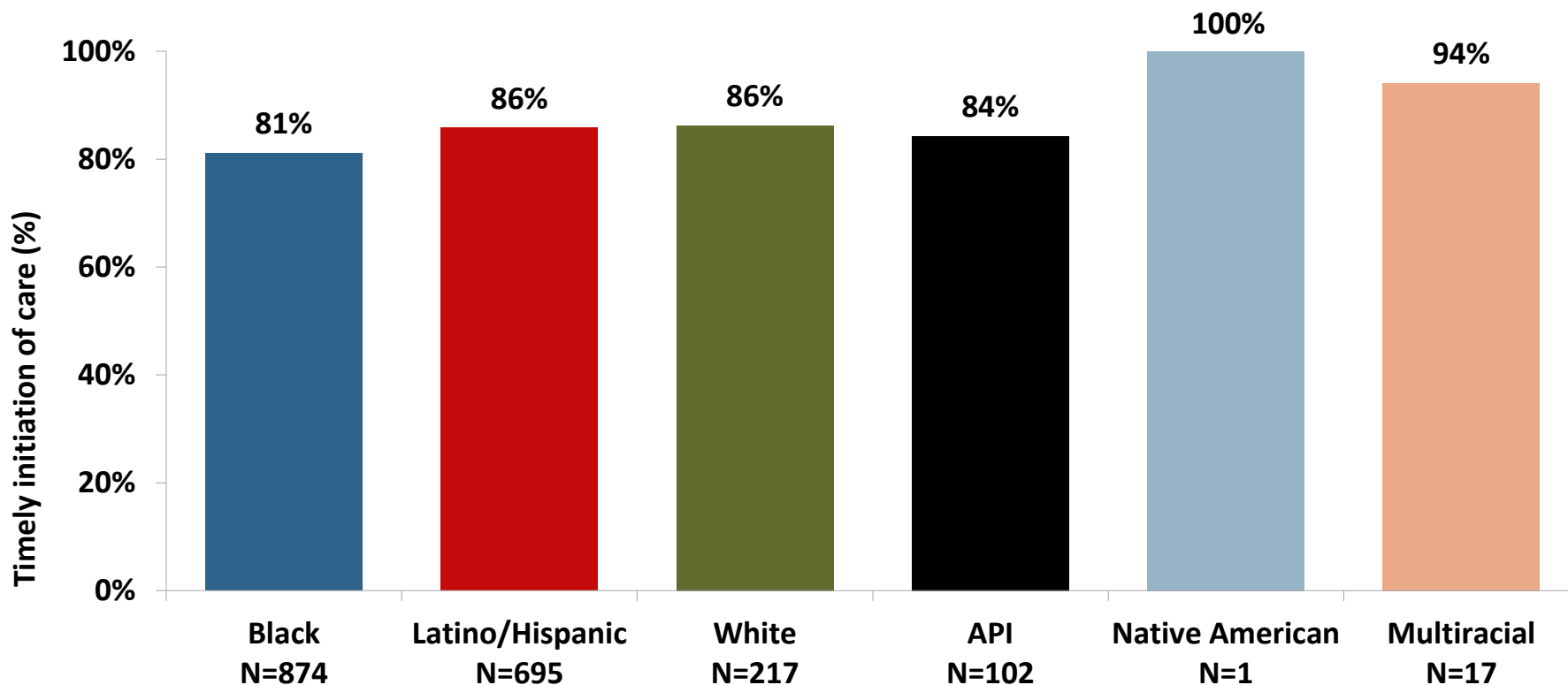# TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY AREA-BASED POVERTY IN NYC, 2018
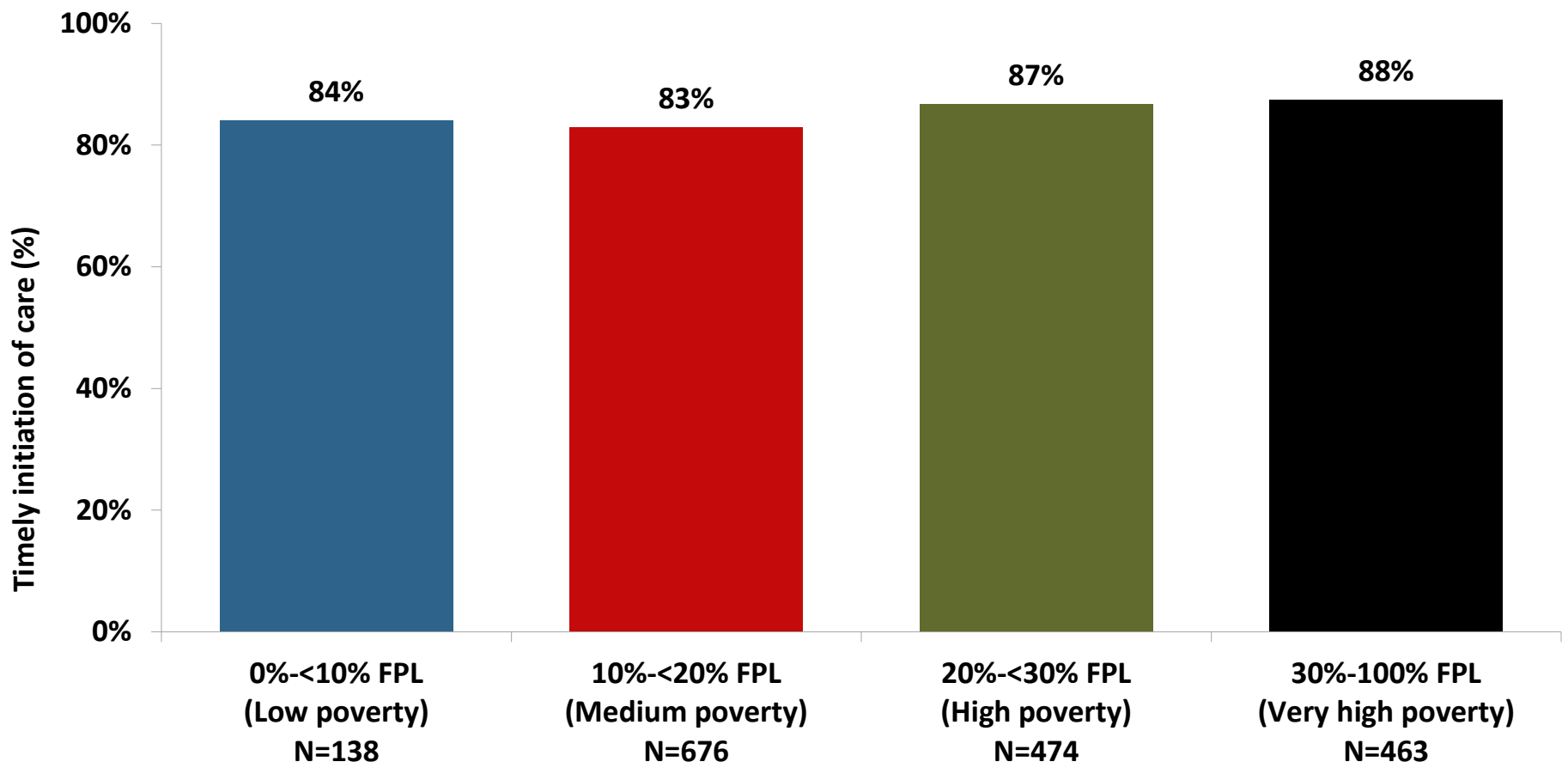
Among people newly diagnosed with HIV in NYC in 2018, residents living in high and very high poverty neighborhoods had larger proportions timely linked to care.

FPL = Federal Poverty Level.
Timely initiation of care is defined as HIV viral load, CD4, or genotype test drawn within 1 month (30 days) of HIV diagnosis. People diagnosed at death have been excluded. New diagnoses without area-based poverty information are not shown.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

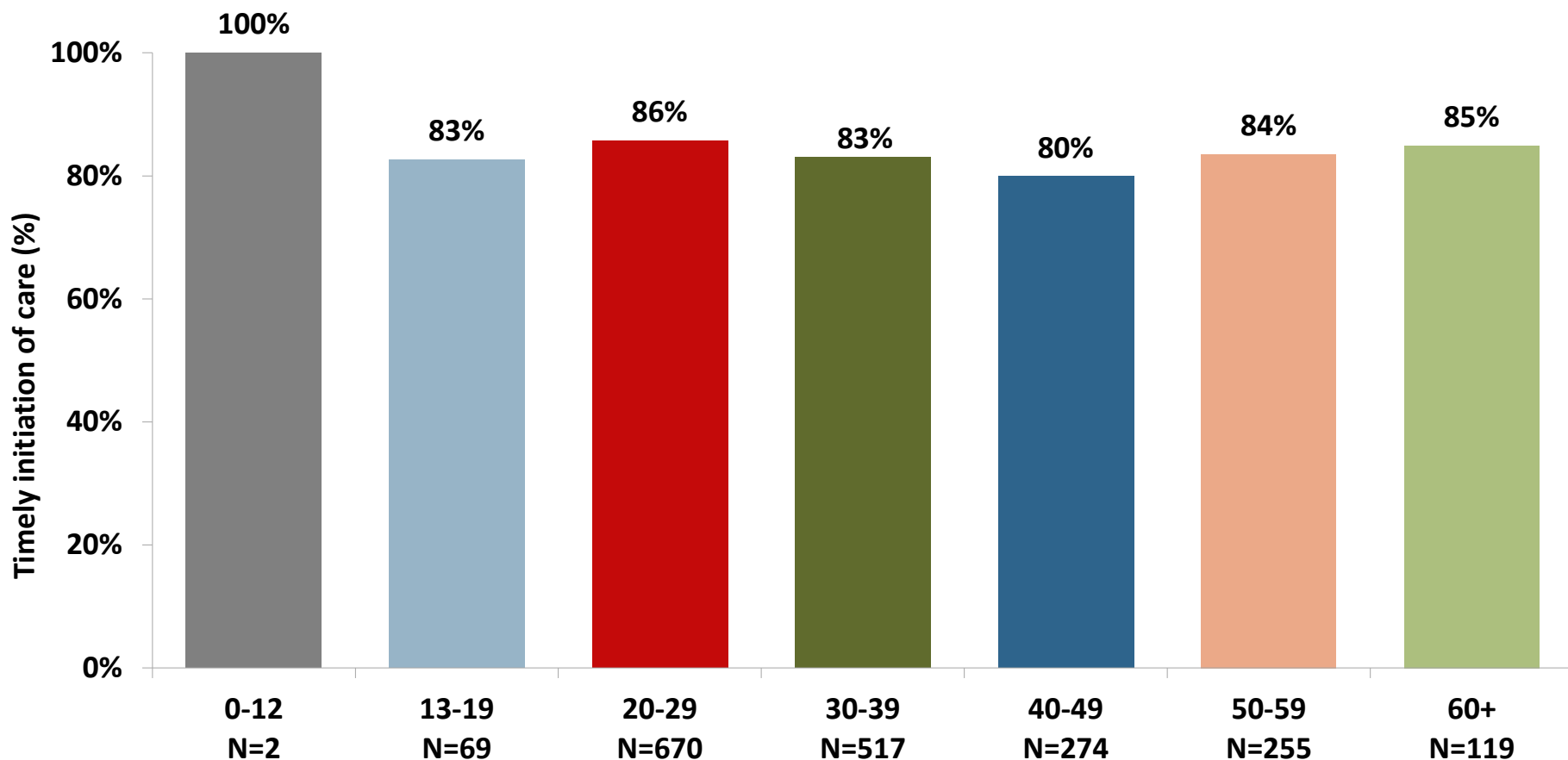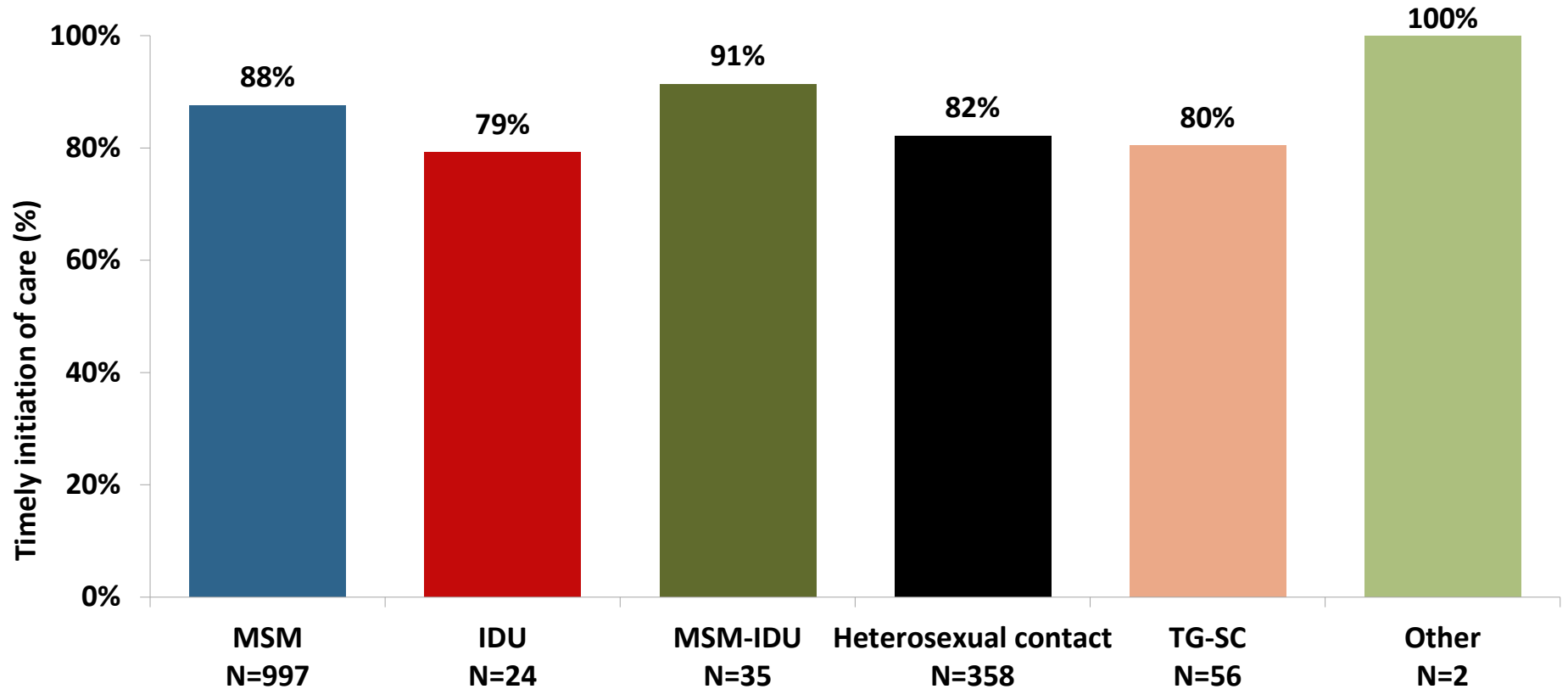# TIMELY INITIATION OF CARE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV BY COUNTRY OF BIRTH IN NYC, 2018
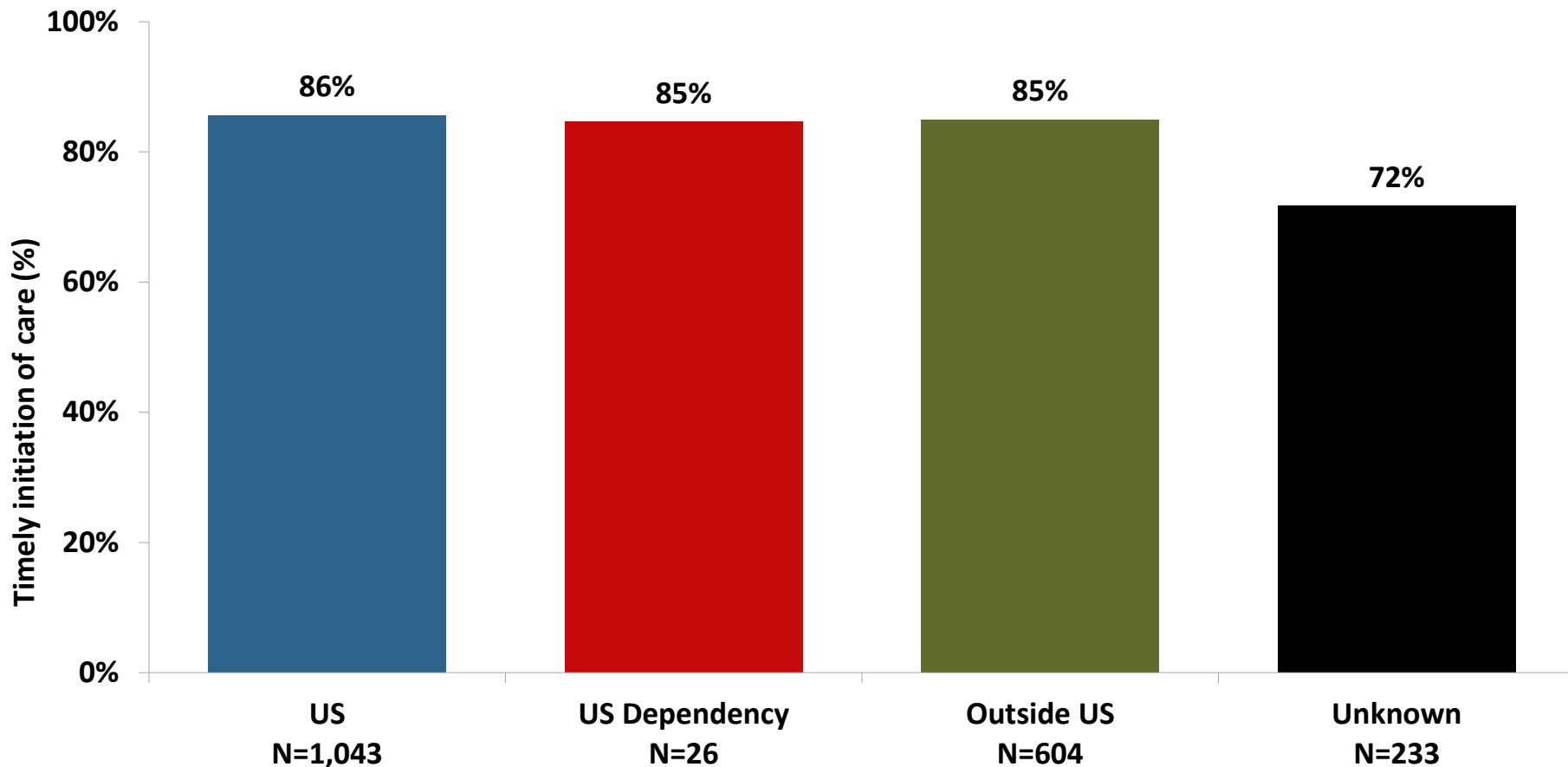
Among people newly diagnosed with HIV in NYC in 2018, there were slight differences in timely initiation of care by country of birth.

Timely initiation of care is defined as HIV viral load, CD4, or genotype test drawn within 1 month (30 days) of HIV diagnosis.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

VIRAL SUPPRESSION WITHIN 3 AND 6 MONTHS OF NEW HIV DIAGNOSIS IN NYC, 2018
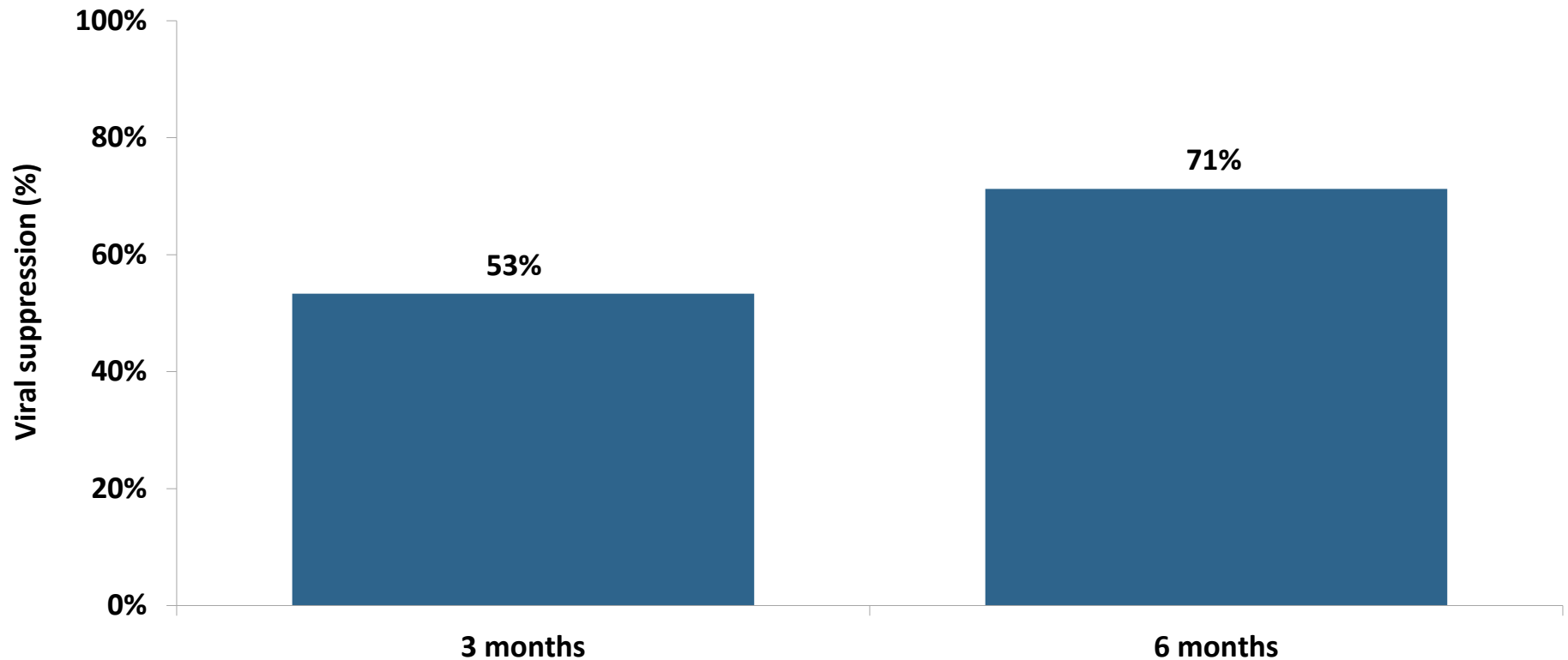
Among people newly diagnosed with HIV in NYC in 2018 (N=1,906), 53% were virally suppressed within 3 months and 71% were suppressed within 6 months of diagnosis.

Viral suppression is defined as viral load <200 copies/mL. People diagnosed at death have been excluded.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

VIRAL SUPPRESSION WITHIN 3 MONTHS OF NEW HIV DIAGNOSIS BY GENDER IN NYC, 2018
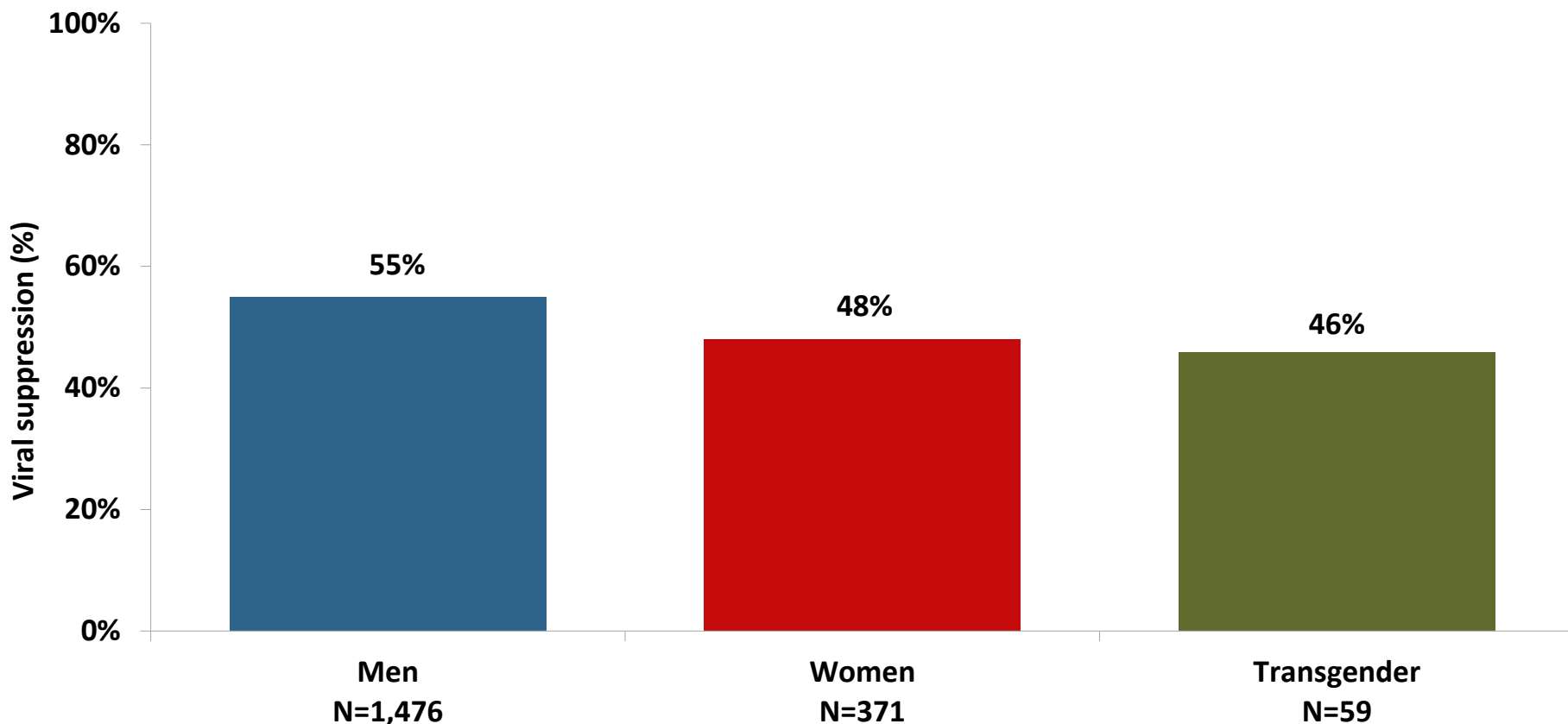
Among people newly diagnosed with HIV in NYC in 2018, a larger proportion of men were virally suppressed within 3 months of diagnosis compared with women and transgender people.

Viral suppression is defined as viral load <200 copies/mL. People diagnosed at death have been excluded.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

VIRAL SUPPRESSION WITHIN 3 MONTHS OF NEW HIV DIAGNOSIS BY RACE/ETHNICITY IN NYC, 2018
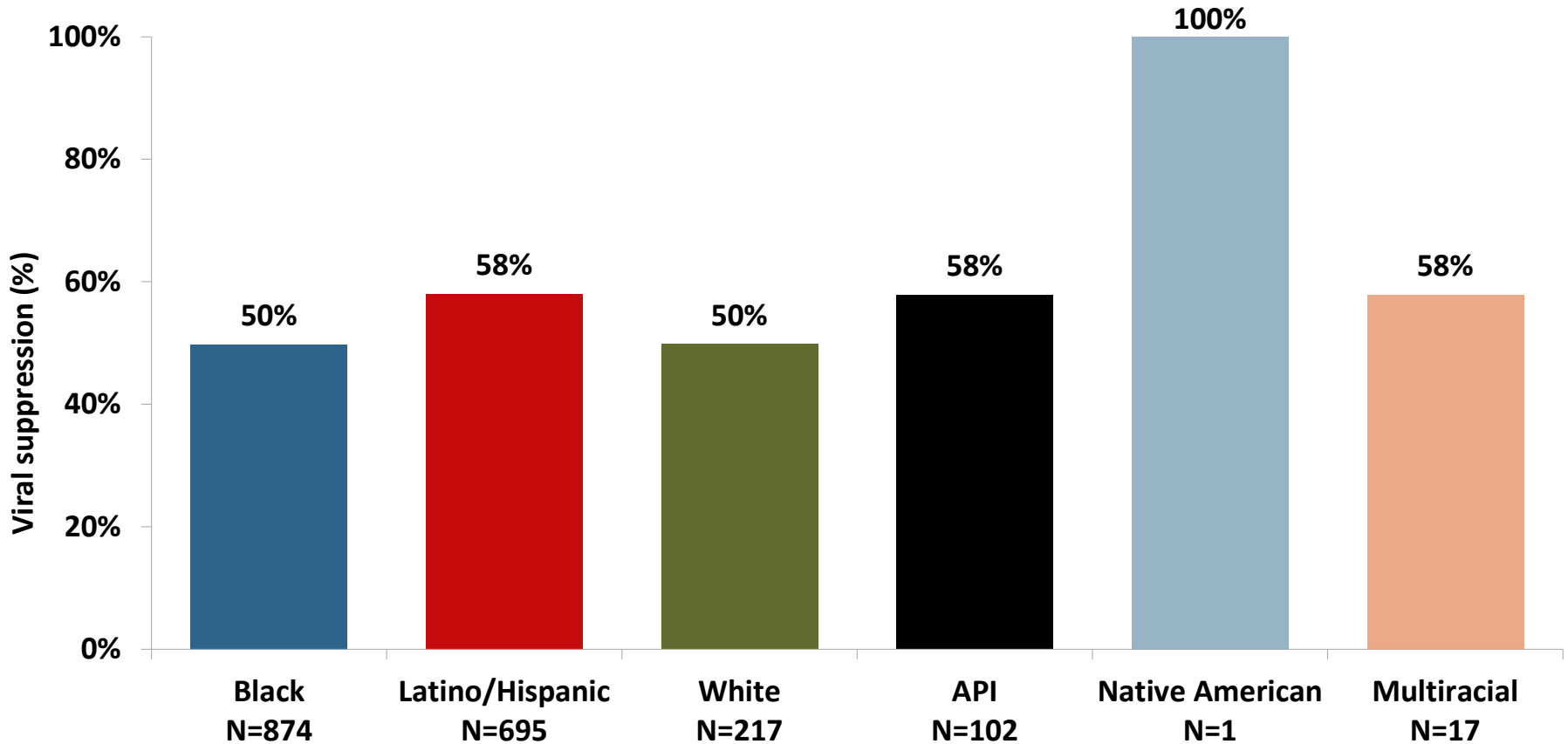
Among people newly diagnosed with HIV in NYC in 2018, Black people and White people had the smallest proportion virally suppressed within 3 months of diagnosis.

Viral suppression is defined as viral load <200 copies/mL. People diagnosed at death have been excluded.
API=Asian/Pacific Islander.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

VIRAL SUPPRESSION WITHIN 3 MONTHS OF NEW HIV DIAGNOSIS BY AGE IN NYC, 2018

Among people newly diagnosed with HIV in NYC in 2018, people ages 13-19 years had the smallest proportion virally suppressed within 3 months of diagnosis.

Viral suppression is defined as viral load <200 copies/mL. People diagnosed at death have been excluded.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

VIRAL SUPPRESSION WITHIN 3 MONTHS OF NEW HIV DIAGNOSIS BY TRANSMISSION RISK IN NYC, 2018

Among people newly diagnosed with HIV in NYC in 2018, transgender people with sexual contact transmission risk had the smallest proportion virally suppressed within 3 months of diagnosis.

MSM=men who have sex with men; IDU=injection drug use history; TG-SC=Transgender people with sexual contact.
Viral suppression is defined as viral load <200 copies/mL. People diagnosed at death have been excluded. People with unknown transmission risk are not shown.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

VIRAL SUPPRESSION WITHIN 3 MONTHS OF NEW HIV DIAGNOSIS BY BOROUGH IN NYC, 2018

Viral suppression (%)

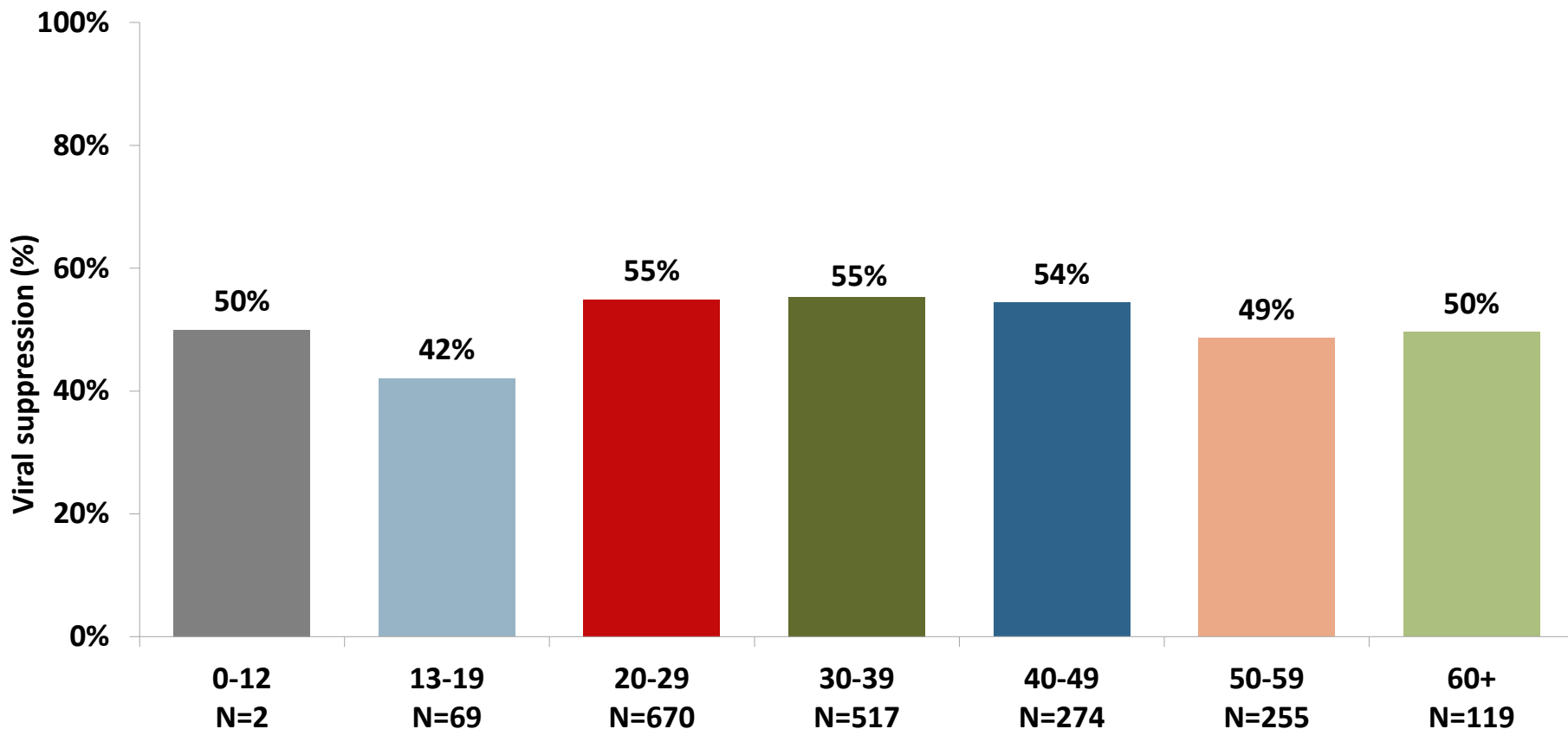| Borough	Viral suppression
Bronx N=438	49%
Brooklyn N=554	50%
Manhattan N=373	56%
Queens N=356	57%
Staten Island N=31	36%
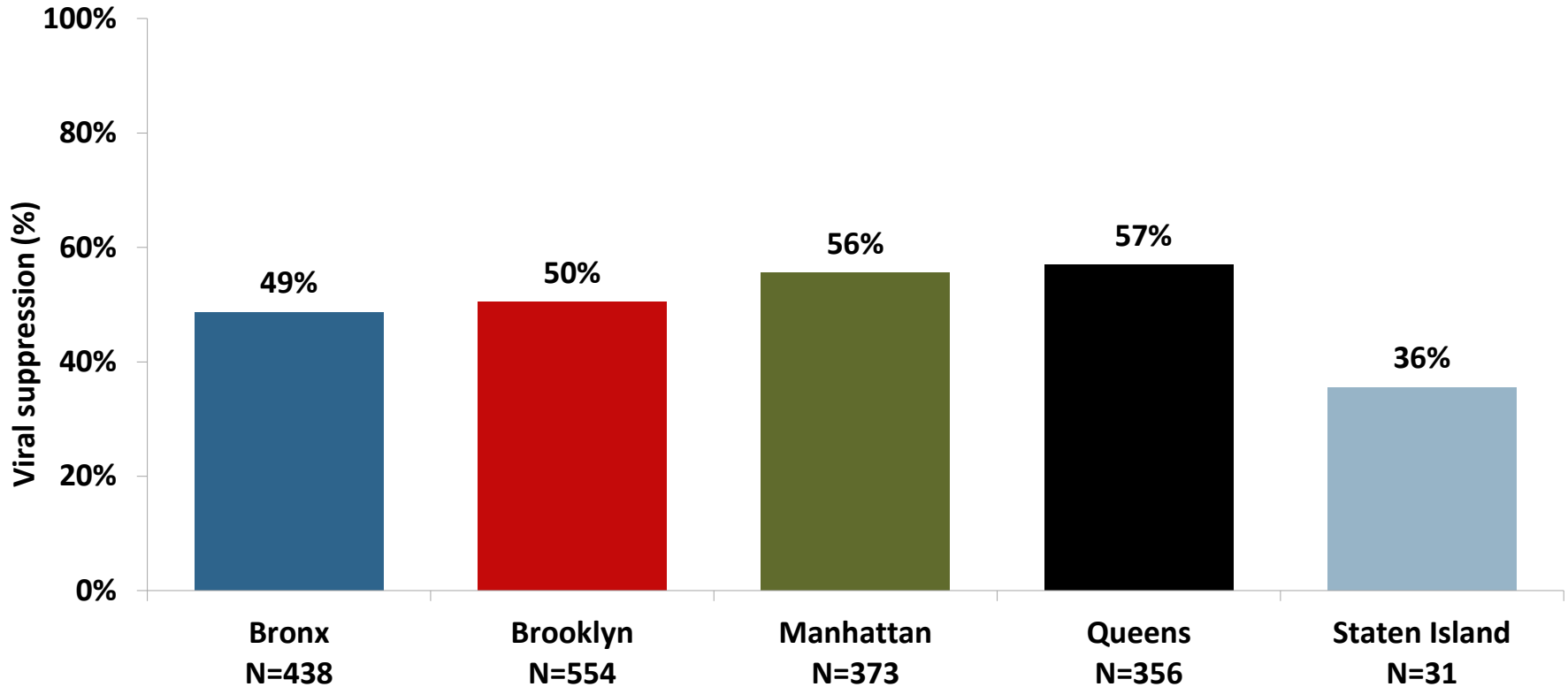
Among people newly diagnosed with HIV in NYC in 2018, Staten Island residents had the smallest proportion virally suppressed within 3 months of diagnosis.

Viral suppression is defined as viral load <200 copies/mL. People diagnosed at death have been excluded.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

VIRAL SUPPRESSION WITHIN 3 MONTHS OF NEW HIV DIAGNOSIS BY AREA-BASED POVERTY IN NYC, 2018
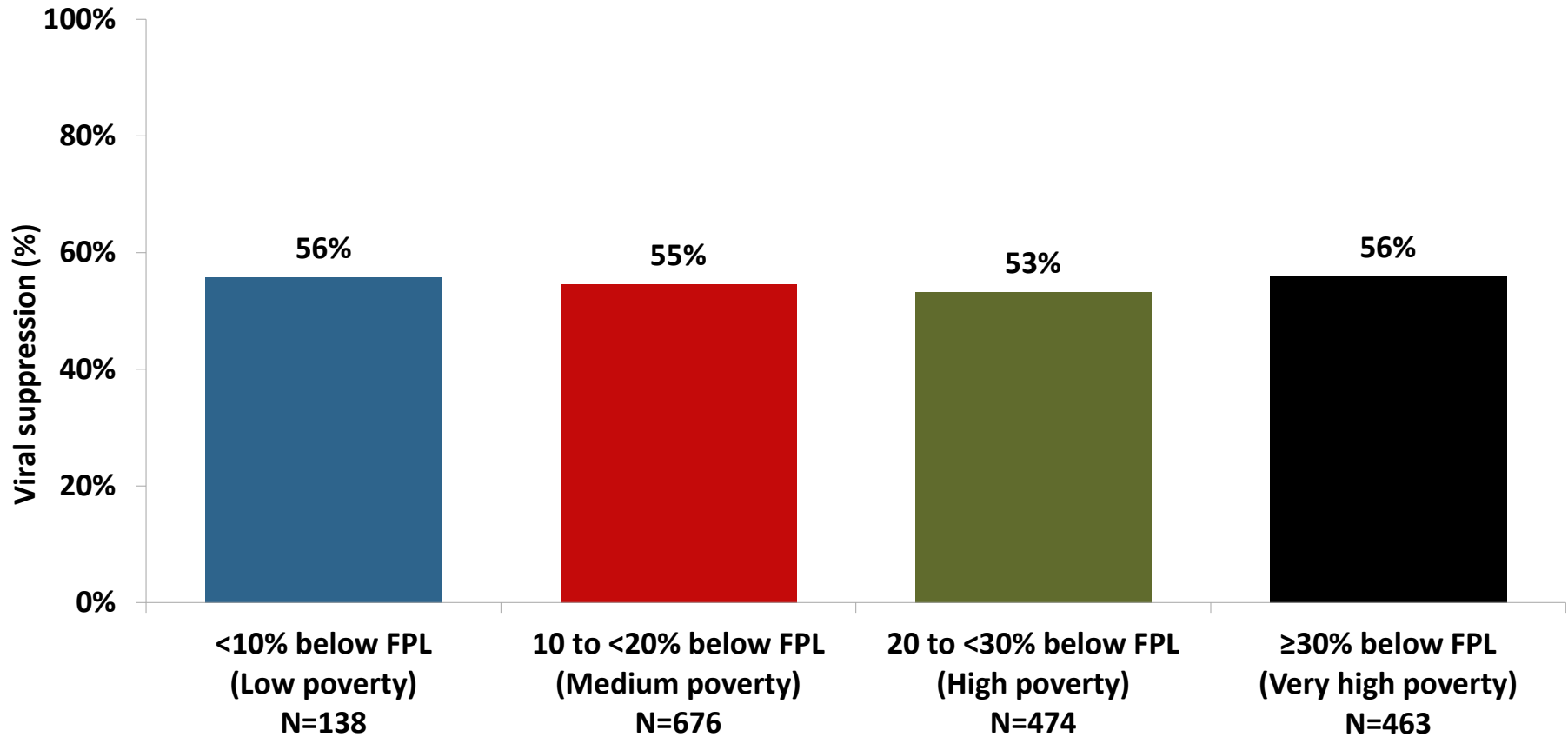
Among people newly diagnosed with HIV in NYC in 2018, there were slight differences in viral suppression within 3 months of diagnosis by area-based poverty.

FPL=Federal Poverty Level.
Viral suppression is defined as viral load <200 copies/mL. People diagnosed at death have been excluded.
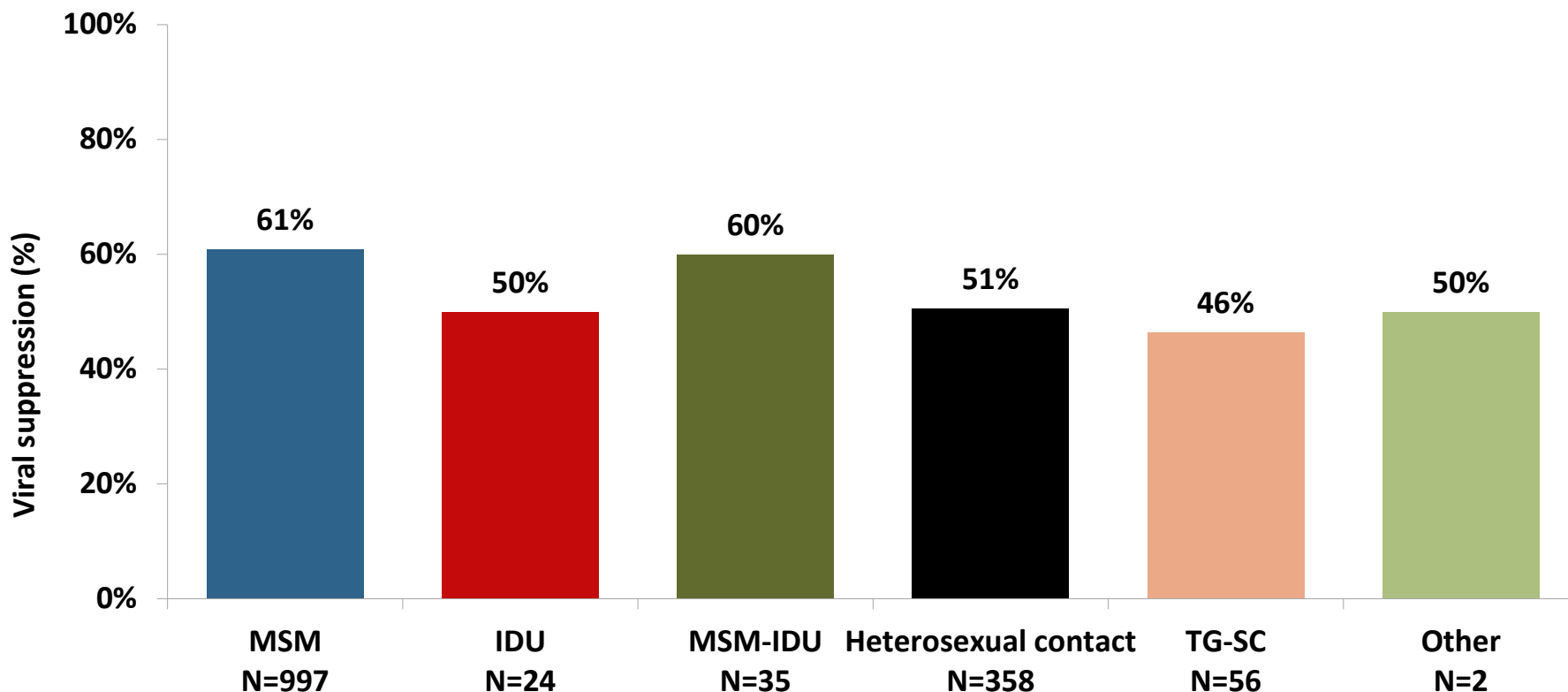New diagnoses without area-based poverty information are not shown.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

VIRAL SUPPRESSION WITHIN 3 MONTHS OF NEW HIV DIAGNOSIS BY COUNTRY OF BIRTH IN NYC, 2018
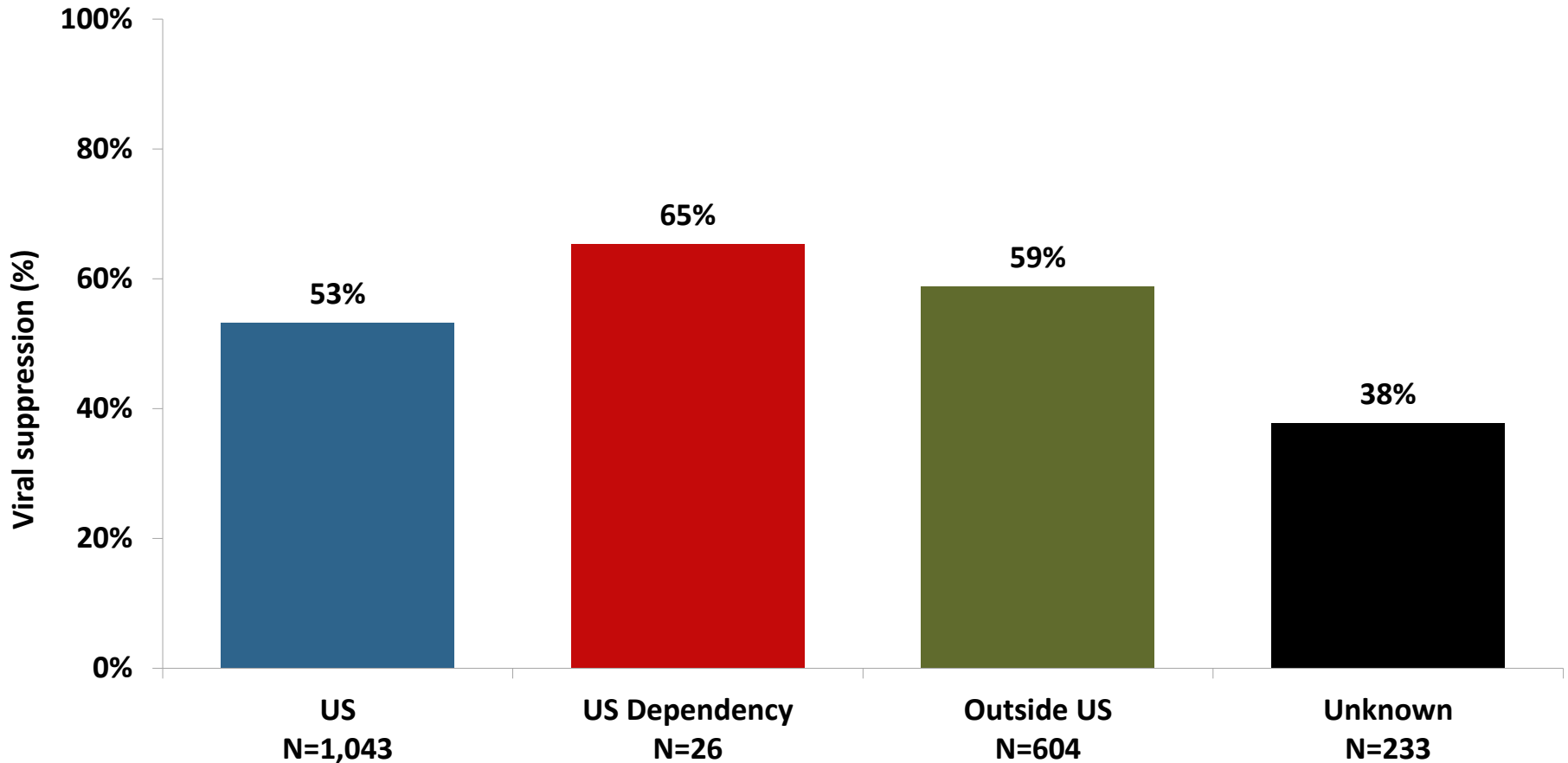
Among people newly diagnosed with HIV in NYC in 2018, people born in a US Dependency had the largest proportion virally suppressed within 3 months of diagnosis.

Viral suppression is defined as viral load <200 copies/mL. People diagnosed at death have been excluded. People with unknown country of birth are not shown. As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

PROPORTION OF NEW HIV-ONLY DIAGNOSES PROGRESSING TO AIDS WITHIN 2 YEARS IN NYC, 2007-2016
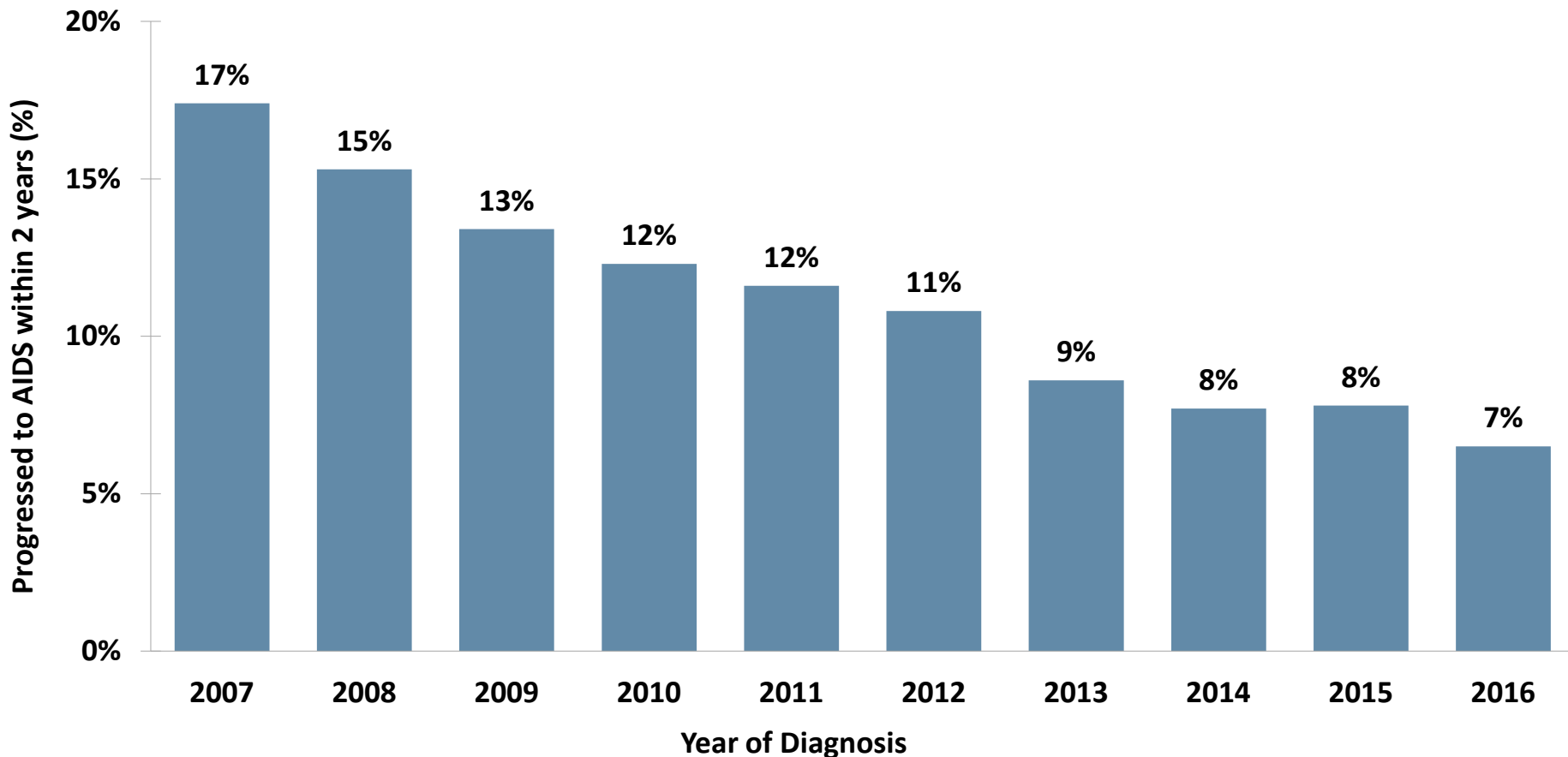
The proportion of people diagnosed with HIV-only in NYC who progressed to AIDS within 2 years of diagnosis decreased by 63% between 2007 and 2016.

PEOPLE LIVING WITH HIV (PLWH)

- **90,800** PLWH in NYC

  – Approximate number of people living with HIV in NYC at the end of 2018

- **84,200** diagnosed PLWH in NYC

  – Approximate number of people living with diagnosed HIV in NYC at the end of 2018, including those diagnosed with HIV in or before 2018, living in NYC at the end of 2018, and reported to the NYC DOHMH by March 31, 2019

VIRAL SUPPRESSION AMONG DIAGNOSED PLWH IN NYC, 2014-2018
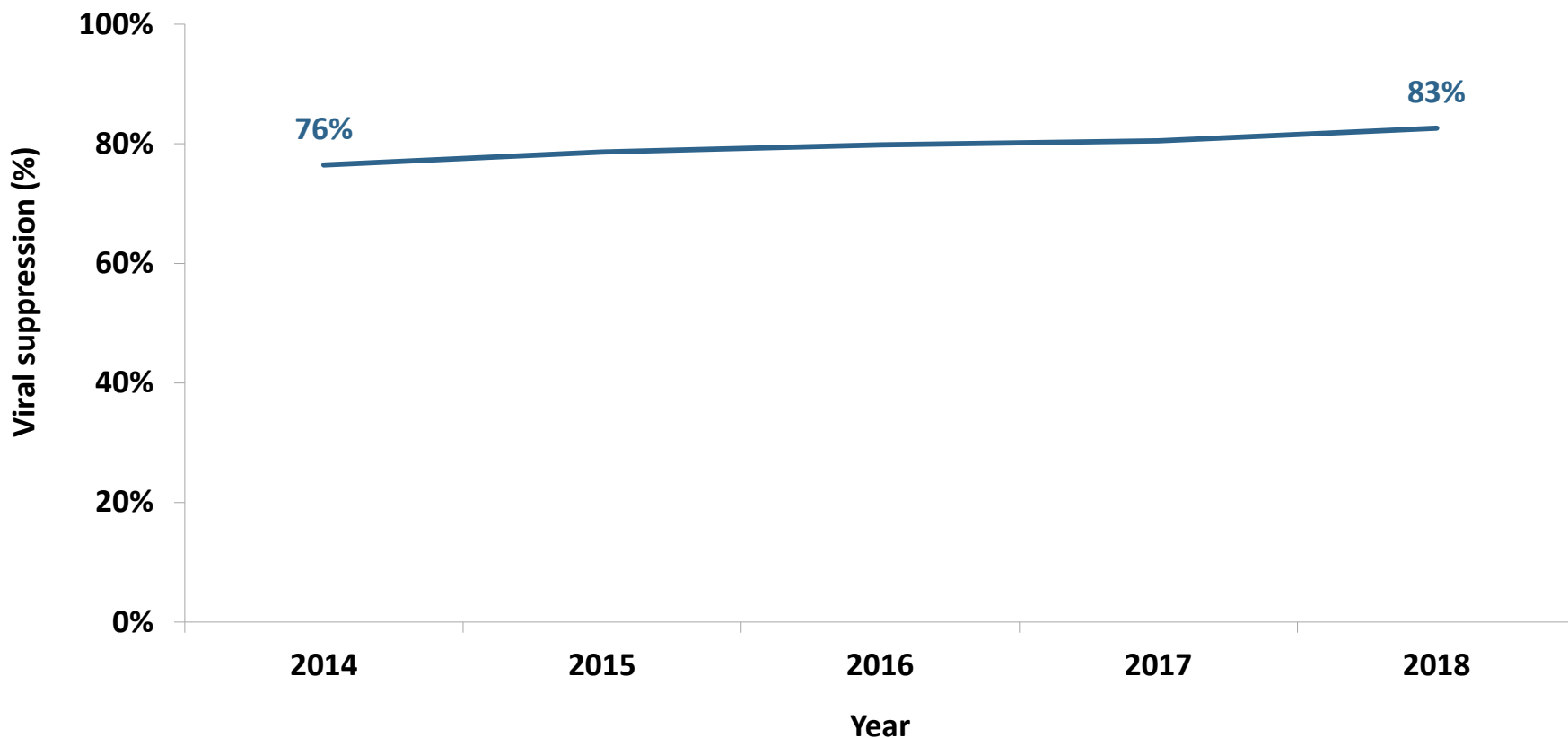
Viral suppression among diagnosed PLWH increased in NYC between 2014 and 2018.

Viral suppression is defined as viral load <200 copies/mL.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY GENDER IN NYC, 2018
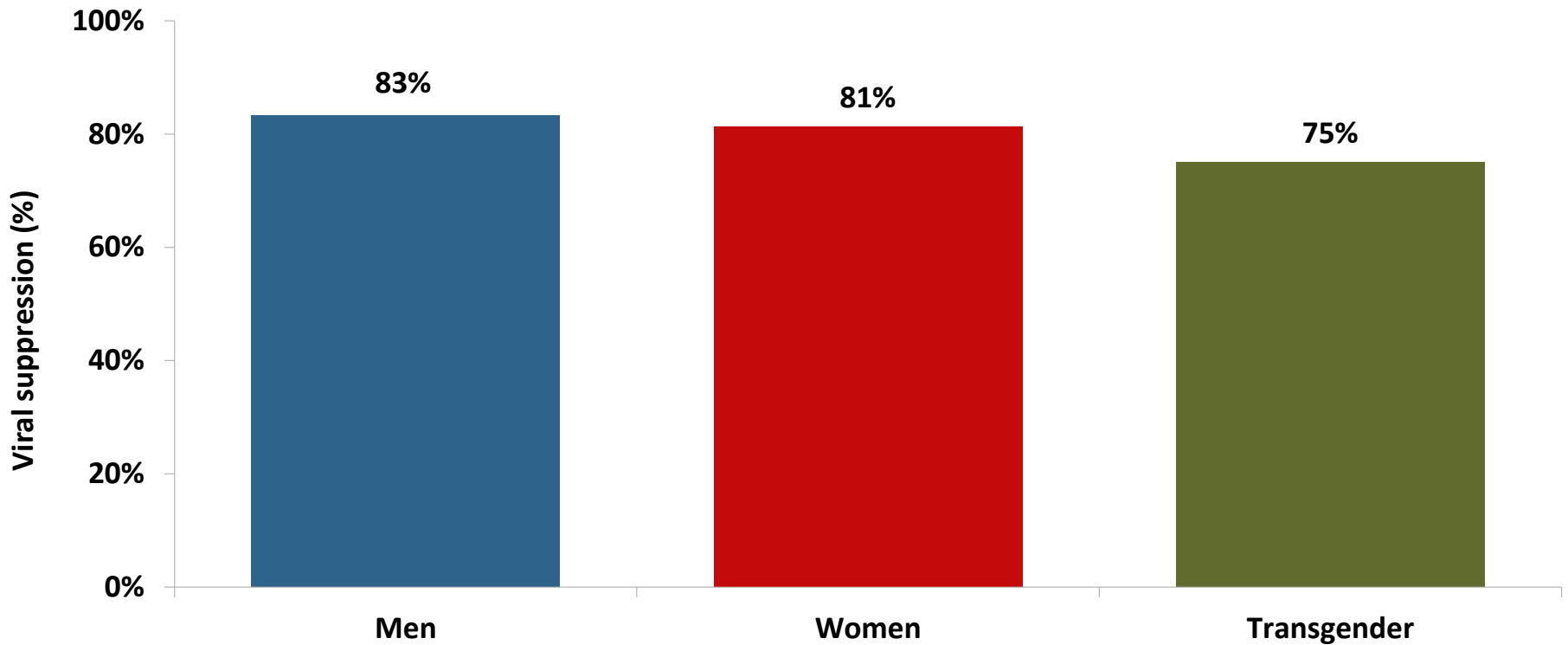
Among diagnosed PLWH in NYC, a smaller proportion of transgender people were virally suppressed than non-transgender men and women.

VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY RACE/ETHNICITY IN NYC, 2018
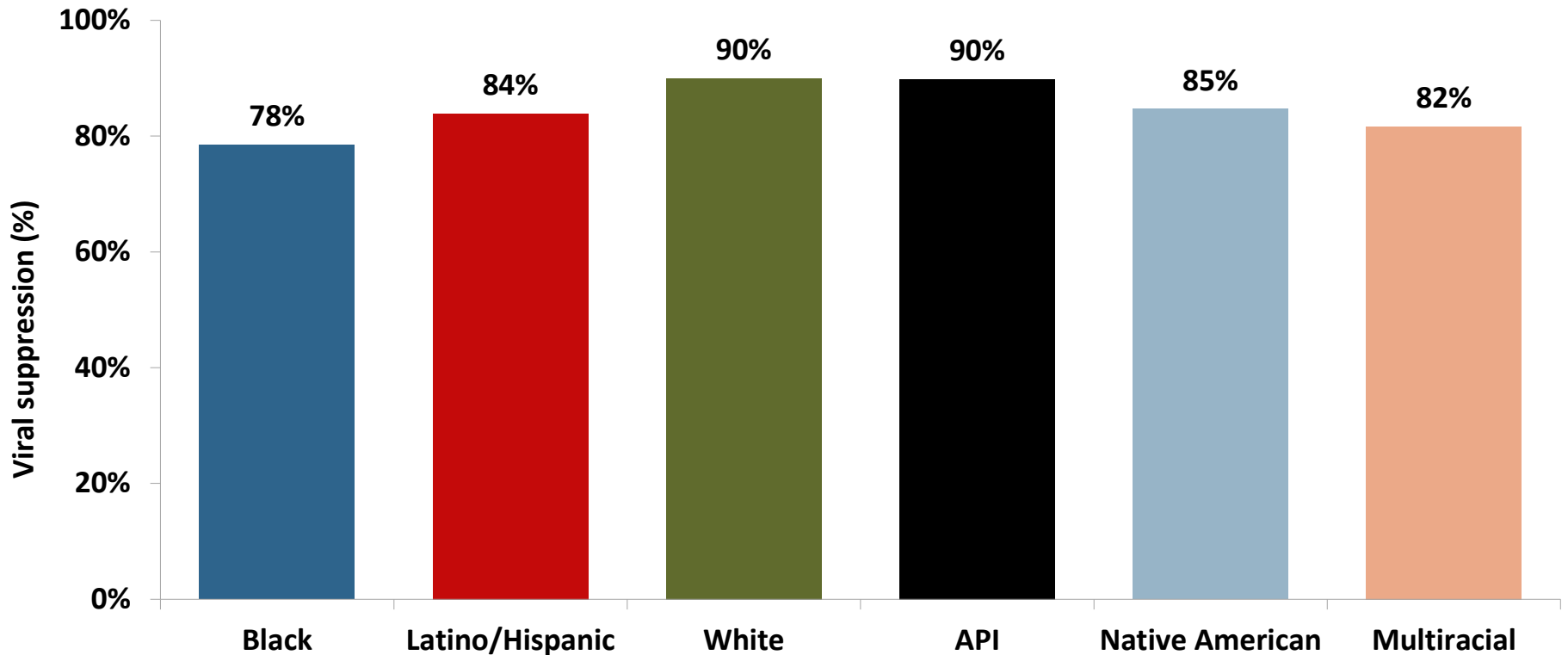
Among diagnosed PLWH in NYC, White people and Asian/Pacific Islander people had the largest proportions virally suppressed among all racial/ethnic groups.

Viral suppression is defined as viral load <200 copies/mL.
API= Asian/Pacific Islander.
People with unknown race/ethnicity are not shown.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY AGE IN NYC, 2018
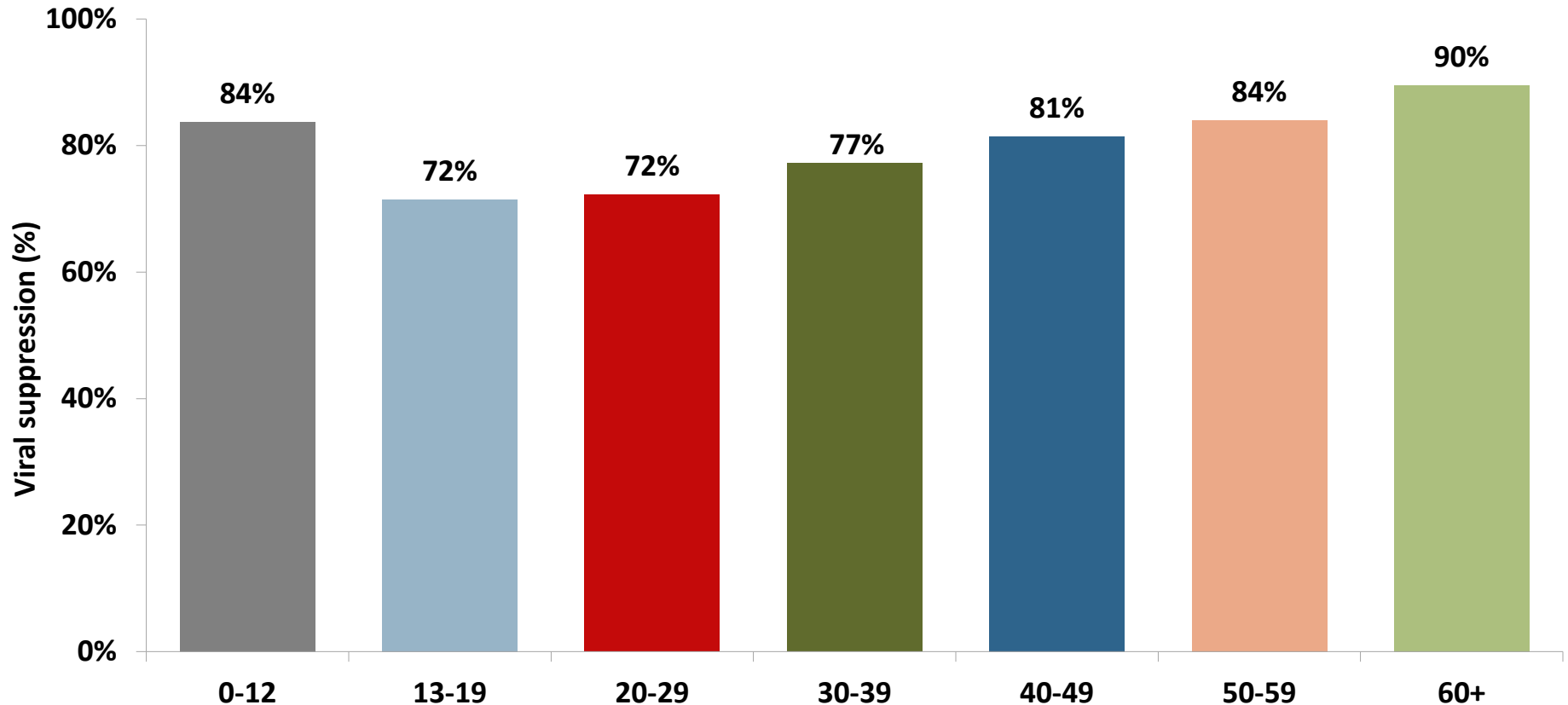
Among diagnosed PLWH in NYC, those ages 60 years and older had the largest proportion virally suppressed compared to other age groups.

Viral suppression is defined as viral load <200 copies/mL.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY TRANSMISSION RISK IN NYC, 2018

Among diagnosed PLWH in NYC, MSM had the largest proportion virally suppressed, and people with perinatal transmission risk had the smallest.

MSM=men who have sex with men; IDU=injection drug use history; TG-SC=Transgender people with sexual contact.
Viral suppression is defined as viral load <200 copies/mL.
People with unknown transmission risk are not shown.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY BOROUGH IN NYC, 2018
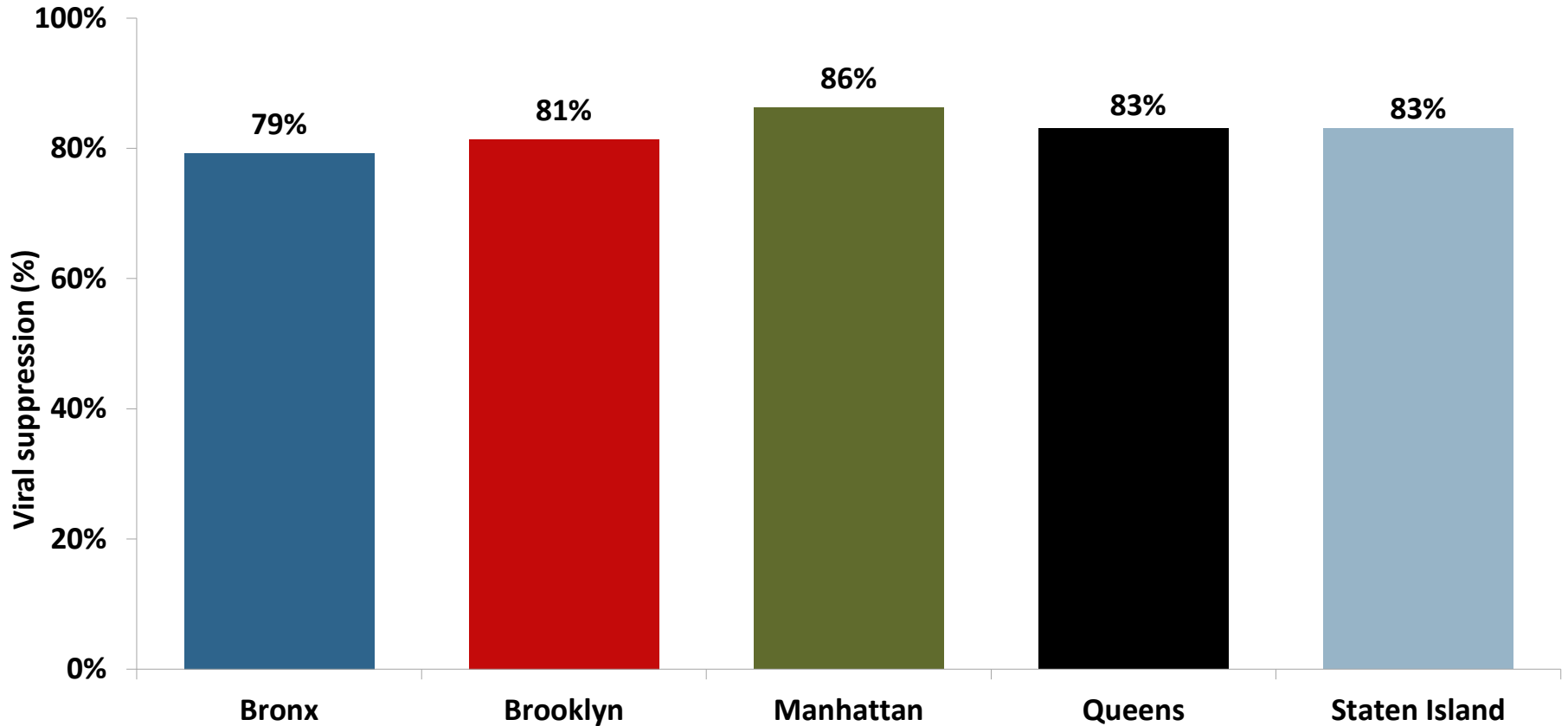
Among diagnosed PLWH in NYC, Bronx residents had the smallest proportion virally suppressed.

Viral suppression is defined as viral load <200 copies/mL.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY AREA-BASED POVERTY IN NYC, 2018

Bar chart. Y-axis: Viral suppression (%), from 0% to 100%.

- <10% below FPL (Low poverty): 89%
- 10 to <20% below FPL (Medium poverty): 88%
- 20 to <30% below FPL (High poverty): 84%
- ≥30% below FPL (Very high poverty): 82%
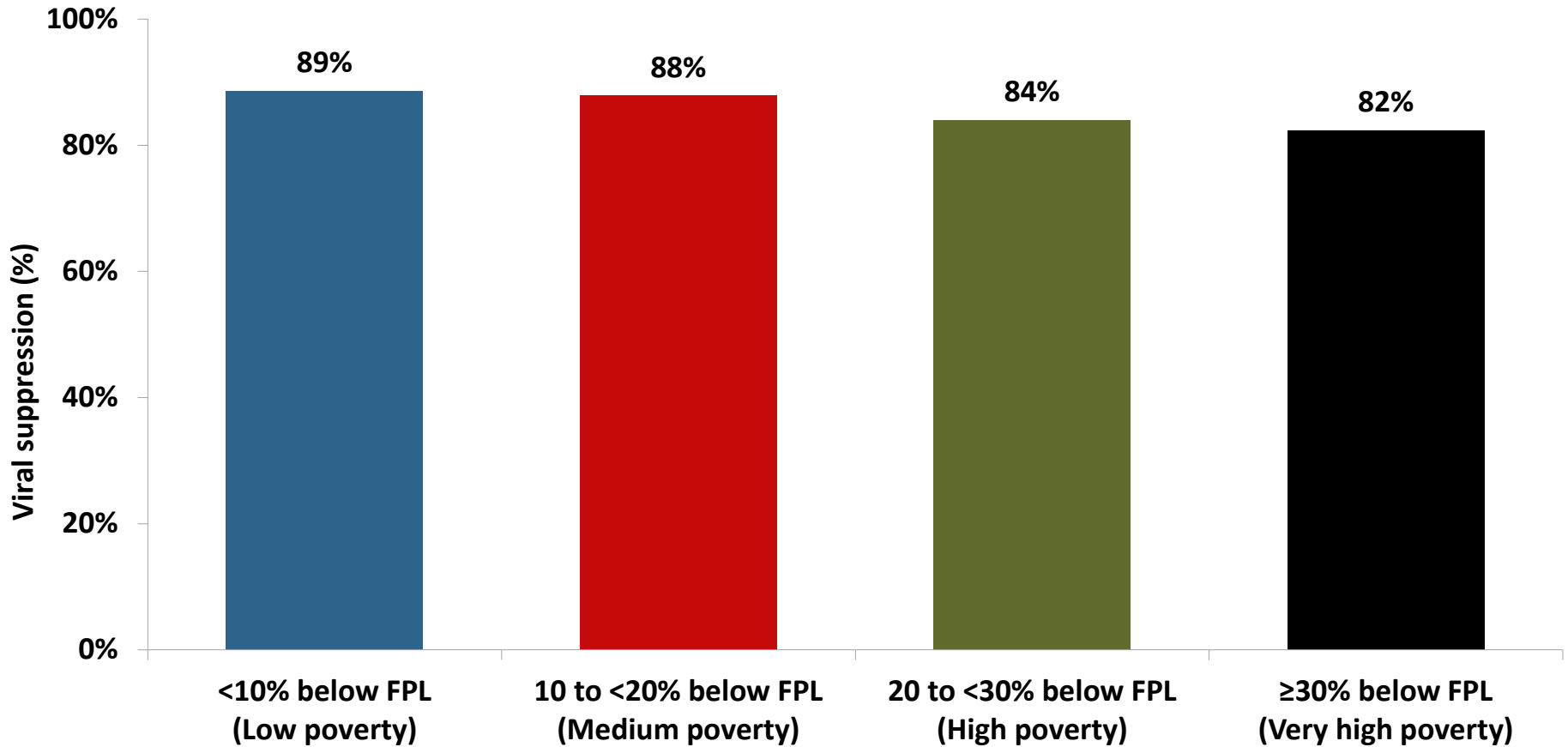
Among diagnosed PLWH in NYC, people living in lower poverty neighborhoods had the largest proportion virally suppressed.

FPL=Federal Poverty Level.
Viral suppression is defined as viral load <200 copies/mL.
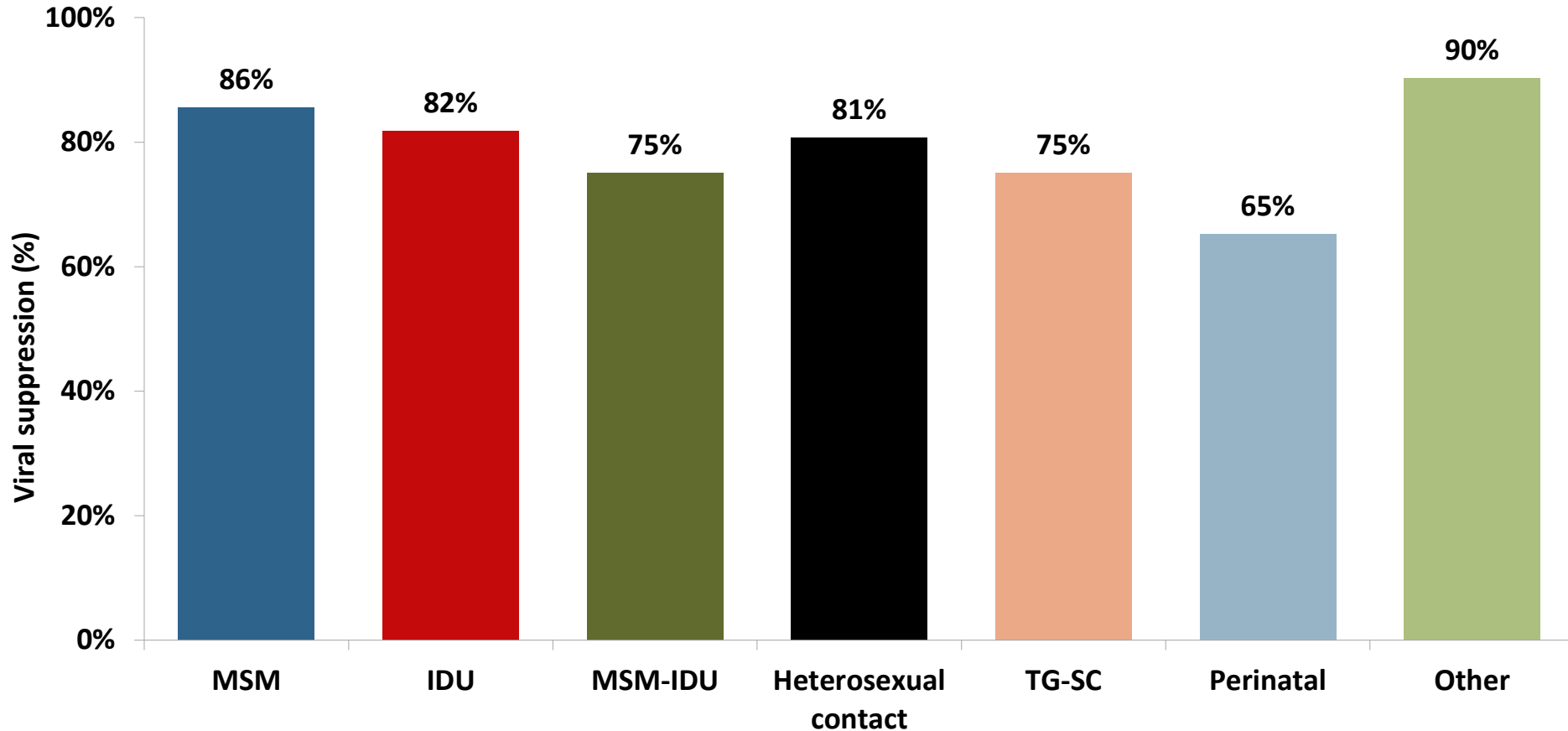PLWH without area-based poverty information are not shown.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

VIRAL SUPPRESSION AMONG DIAGNOSED PLWH BY COUNTRY OF BIRTH IN NYC, 2018
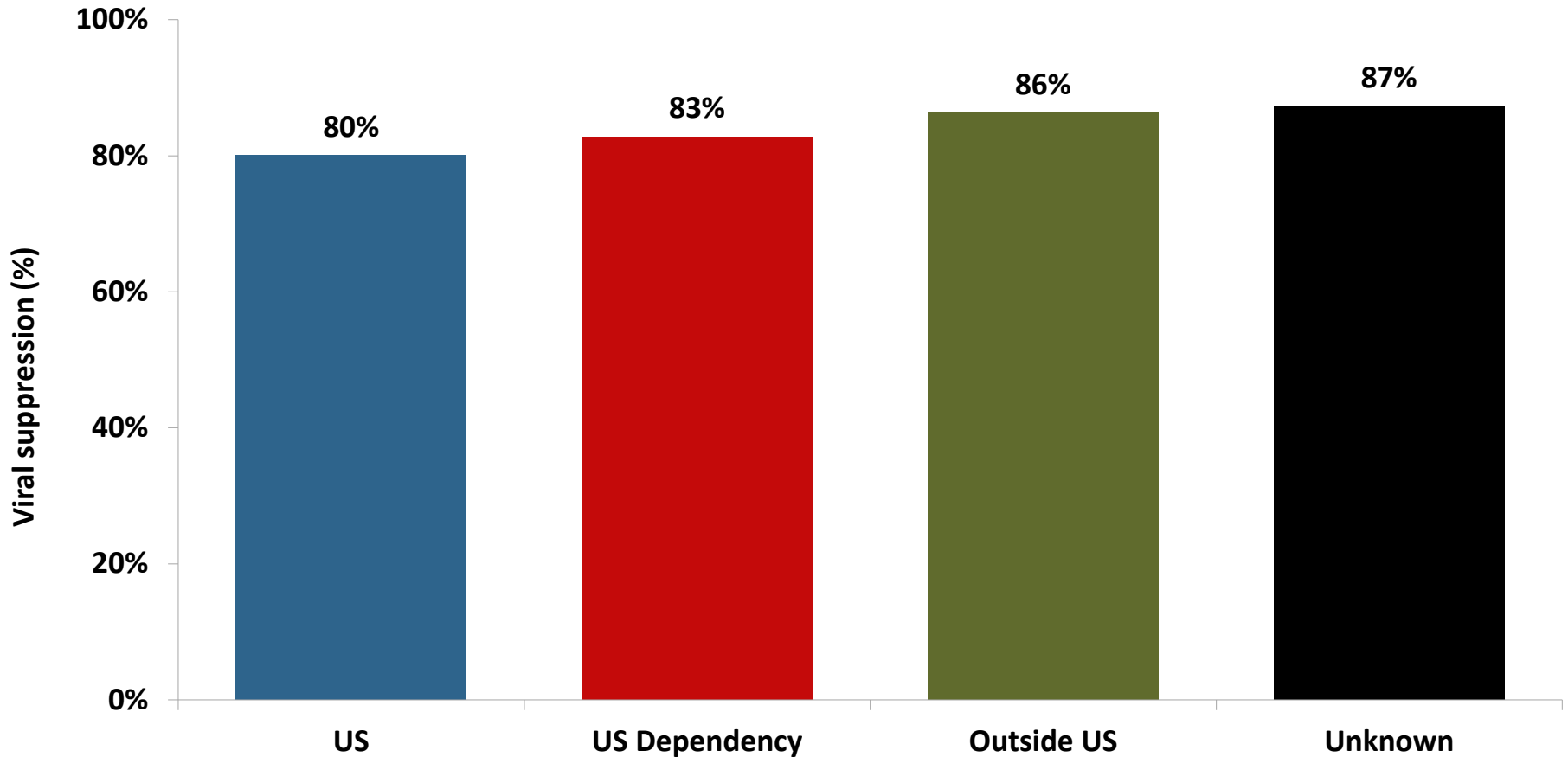
Among diagnosed PLWH in NYC, people born in the US or in a US Dependency had smaller proportions virally suppressed compared with people born outside the US.

Viral suppression is defined as viral load <200 copies/mL. People with unknown country of birth are not shown.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

PROPORTION OF PLWH IN NYC ENGAGED IN SELECTED STAGES OF THE HIV CARE CONTINUUM, 2018
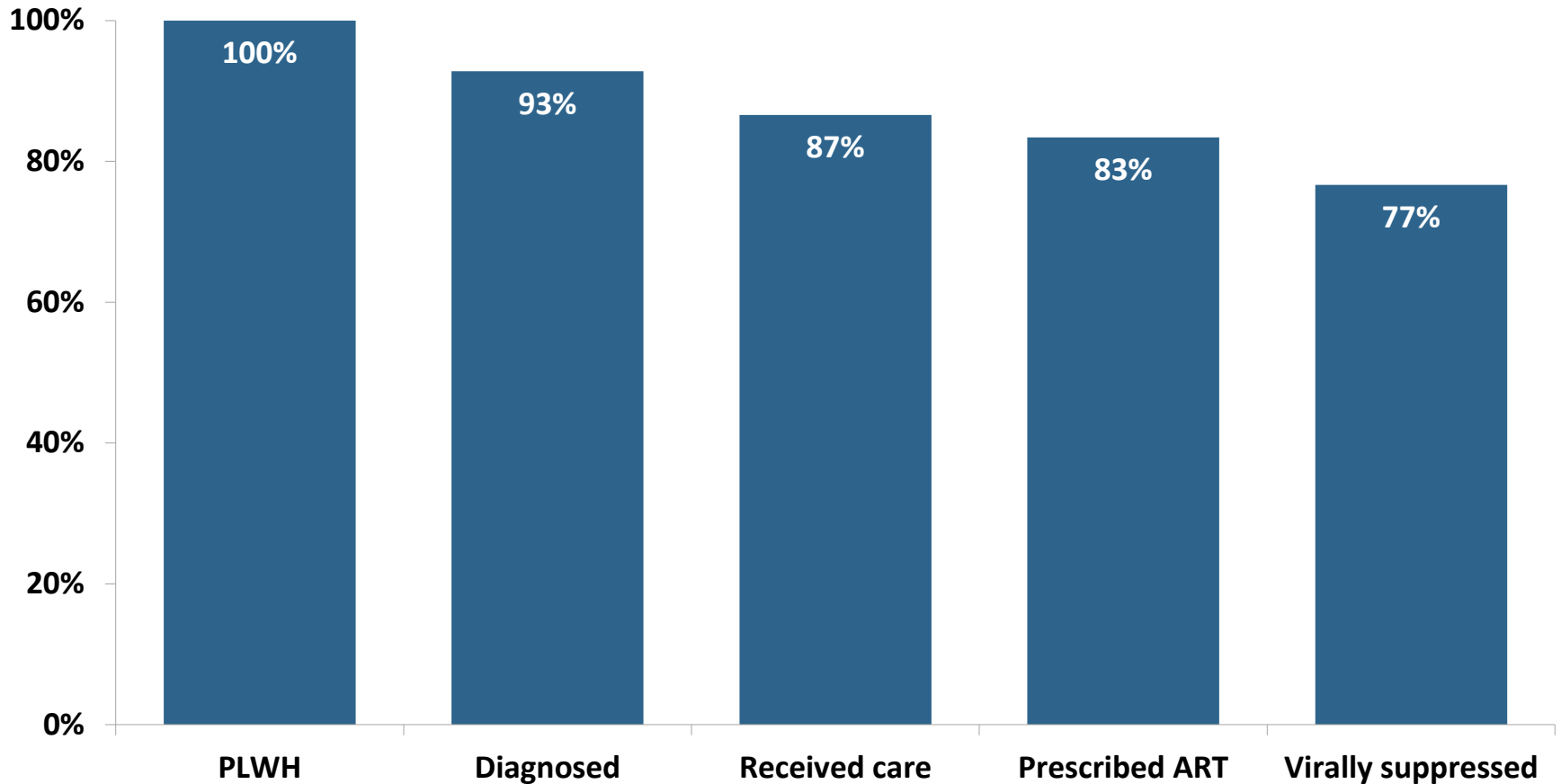
Of approximately 90,800 PLWH in NYC in 2018, 77% had a suppressed viral load.

PROPORTION OF BLACK PLWH IN NYC ENGAGED IN SELECTED STAGES OF THE HIV CARE CONTINUUM, 2018
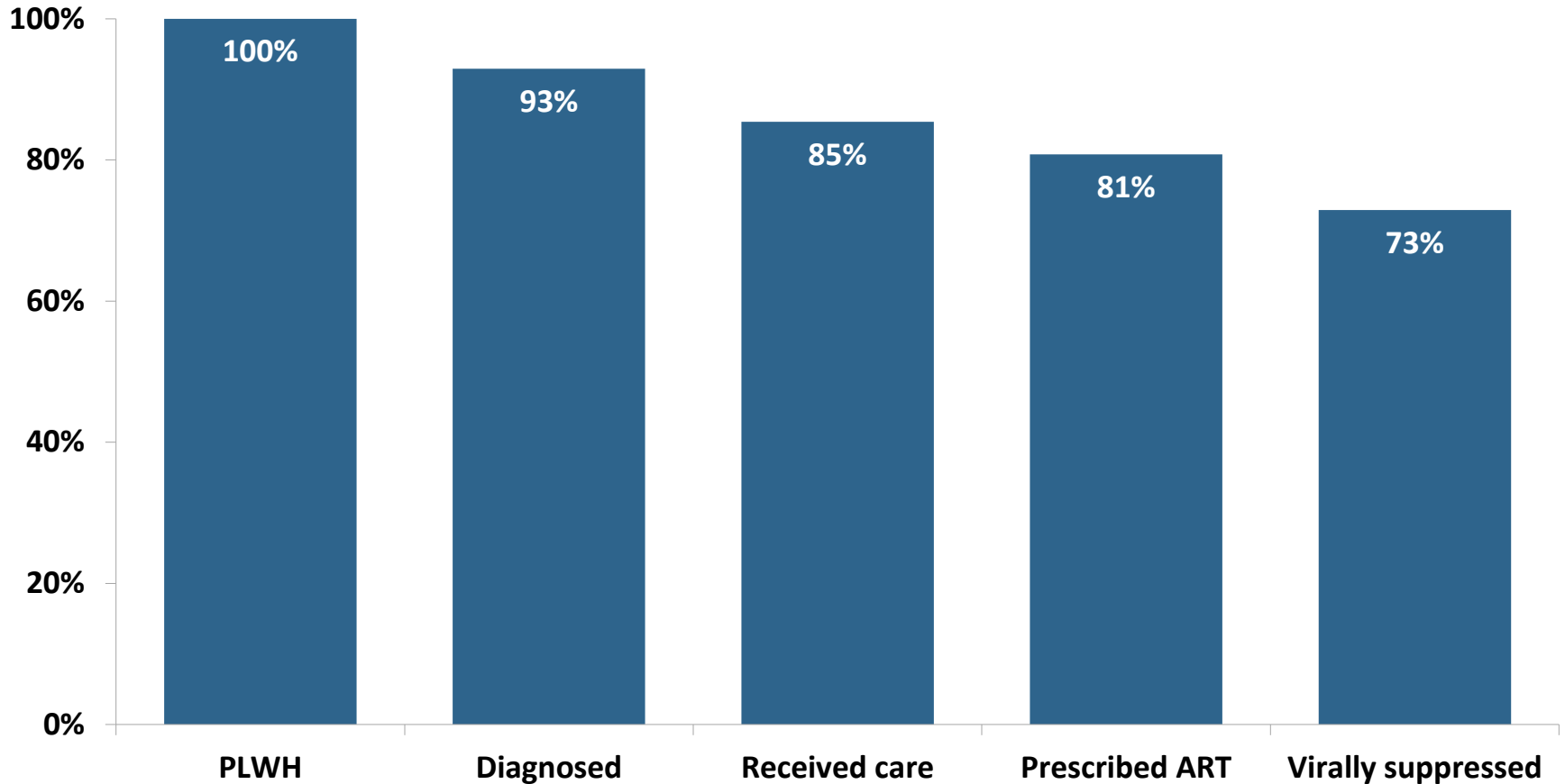
Of approximately 41,300 Black PLWH in NYC in 2018, 73% had a suppressed viral load.

For definitions of the stages of the continuum of care, see Technical Notes.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

PROPORTION OF LATINO/HISPANIC PLWH IN NYC ENGAGED IN SELECTED STAGES OF THE HIV CARE CONTINUUM, 2018
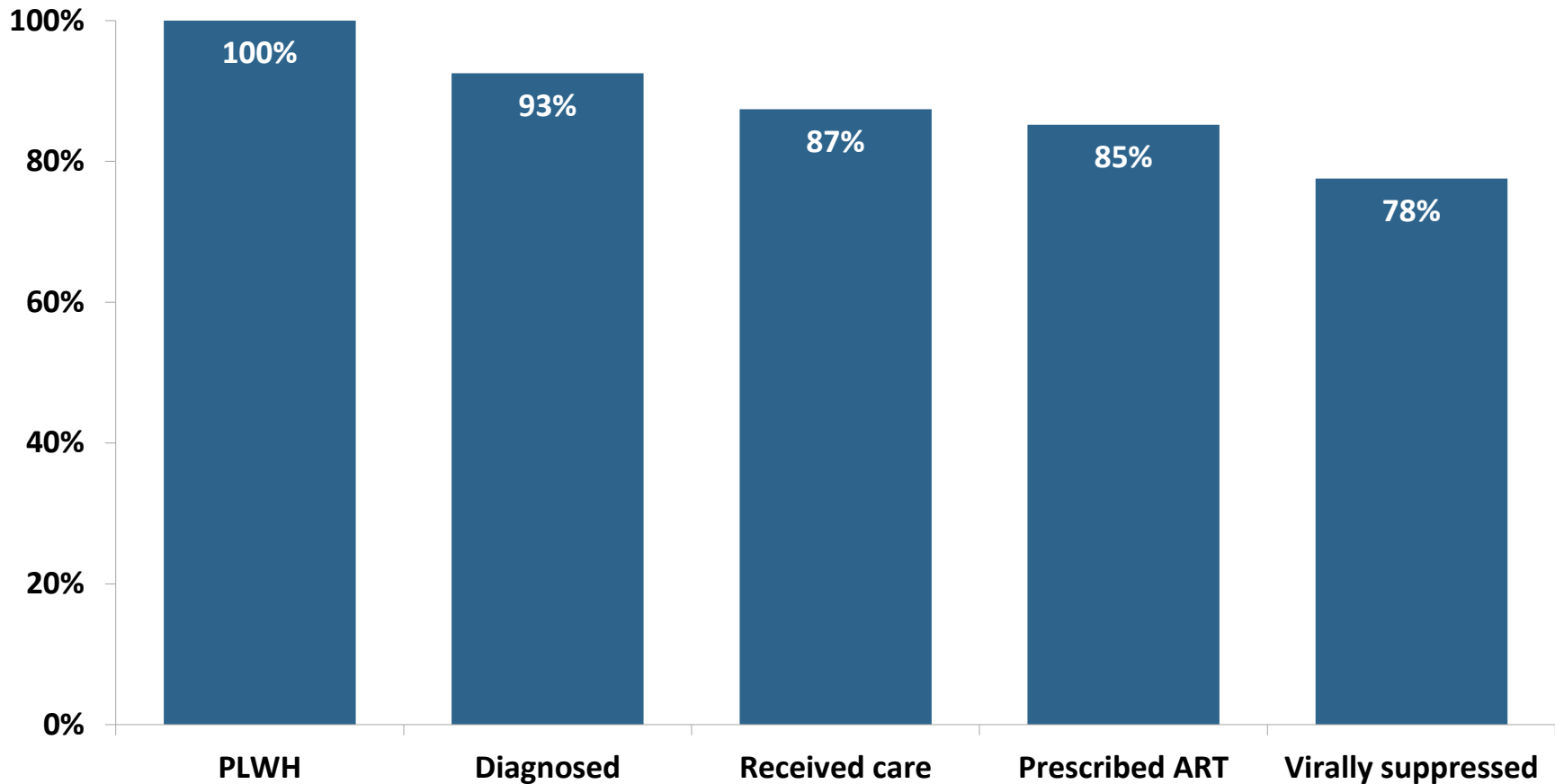
Of approximately 30,800 Latino/Hispanic PLWH in NYC in 2018, 78% had a suppressed viral load.

For definitions of the stages of the continuum of care, see Technical Notes.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

PROPORTION OF WHITE PLWH IN NYC ENGAGED IN SELECTED STAGES OF THE HIV CARE CONTINUUM, 2018
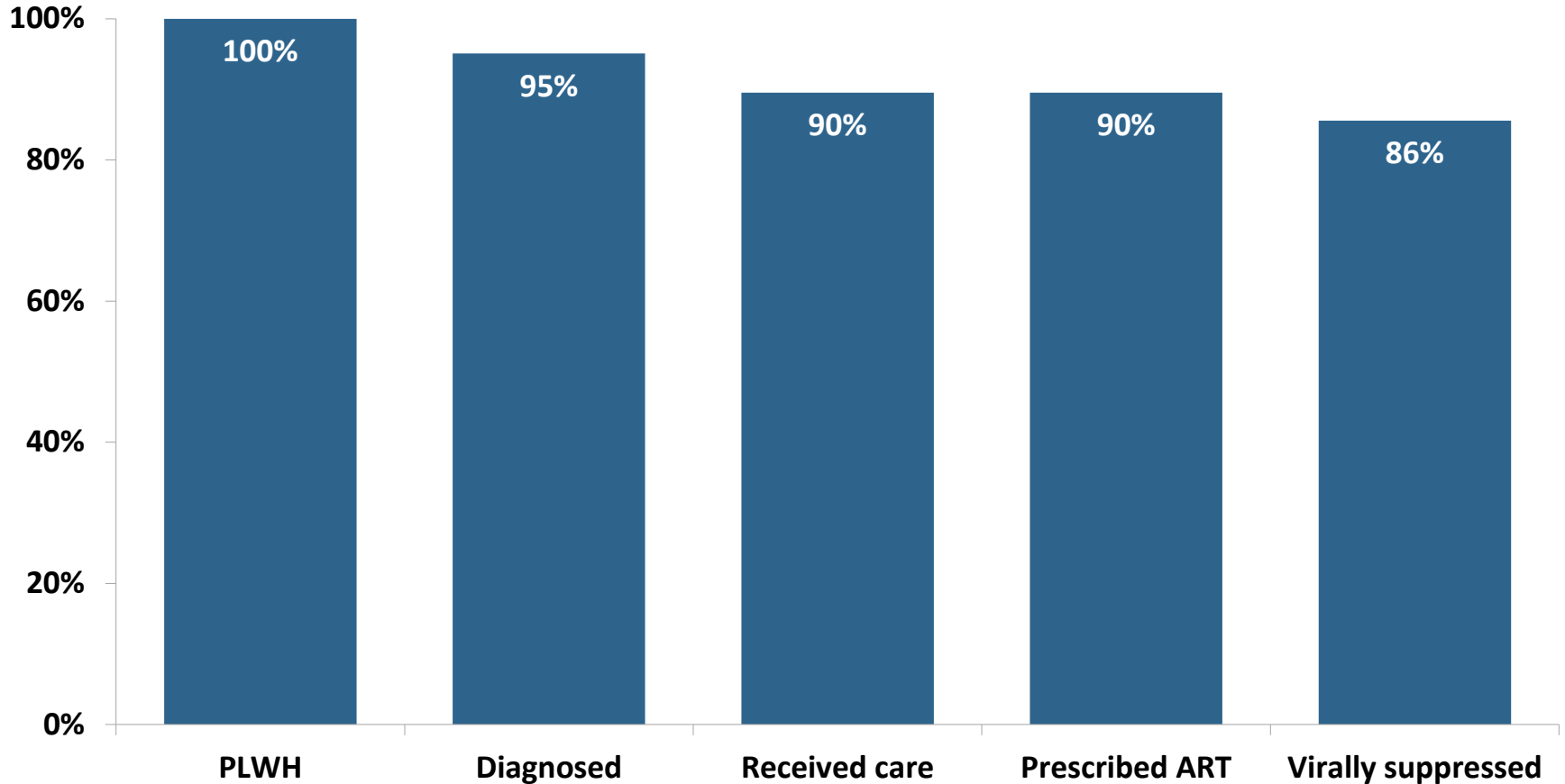
Of approximately 15,400 White PLWH in NYC in 2018, 86% had a suppressed viral load.

For definitions of the stages of the continuum of care, see Technical Notes.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

UNAIDS 90-90-90 TARGETS FOR PLWH IN NYC, OVERALL AND BY RACE/ETHNICITY, 2018

Chart legend:
- Diagnosed
- Diagnosed PLWH on ART
- PLWH on ART virally suppressed

90% target (dashed line)

Overall: 93% / 90% / 92%
Black: 93% / 87% / 90%
Latino/Hispanic: 93% / 92% / 91%
White: 95% / 94% / 96%
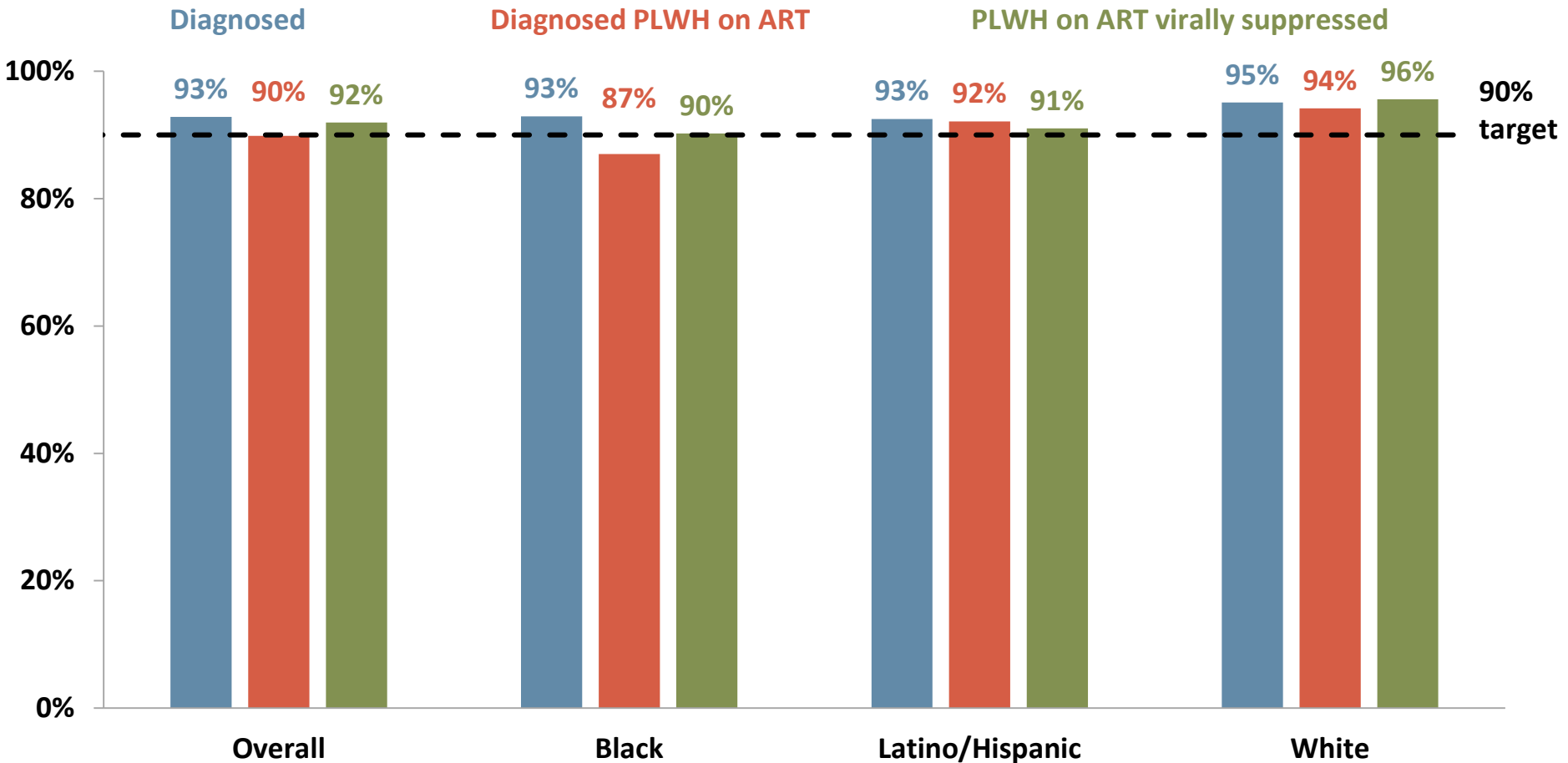
In 2018, NYC reached the UNAIDS 90-90-90 targets overall and among Latino/Hispanic and White PLWH but missed the receiving ART target for Black PLWH.

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2019.

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
  - 2 weeks minimum needed for requests to be completed

APPENDIX 1:
DEFINITIONS AND STATISTICAL NOTES

- "HIV diagnoses" include diagnoses of HIV (non-AIDS) *and* HIV concurrent with AIDS (AIDS diagnosed within 31 days of HIV), unless otherwise specified.
- "Death rates" refer to deaths from all causes, unless otherwise specified. Death rates are calculated as deaths per mid-year PLWH.
- Data presented by "Transmission risk" categories include only individuals with known or identified transmission risk, except when an "unknown" category is presented. . "Other" risk includes people who received treatment for hemophilia, people who received a transfusion or transplant, people with other healthcare-associated transmission, and children with non-perinatal transmission risk.
- "PWH" refers to people with HIV during the reporting period (note: includes people with HIV who remained alive or died during the reporting period); "PLWH" refers to people living with HIV at the end of the reporting period.
- "Women" includes transgender women and "Men" includes transgender men. For more information on transgender surveillance in NYC, please see the "HIV among People identified as Transgender" slide set.
- Surveillance collects information about individuals' current gender identity, when available. These slides display the following gender categories: men, women, transgender (if applicable). 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-report, their diagnosing provider, or medical chart review. This information may or may not reflect the individual's self-identification. Transgender status has been collected routinely since 2005 for newly reported cases. Reported numbers of new transgender HIV diagnoses and transgender PLWH are likely to be underestimates. For more information, see the "HIV among Transgender people in New York City" surveillance slide set available at: www1.nyc.gov/assets/doh/downloads/pdf/dires/hiv-in-transgender-persons.pdf. Surveillance collects information on other gender identity categories, including "Non-binary/Gender non-conforming." In these slides, data for these individuals (N=7 at time of publication) are displayed by sex at birth.
- Area-based poverty is based on NYC ZIP code of residence and is defined as the percent of the population in a given ZIP code whose household income is below the Federal Poverty Level. This measure is not available for people missing ZIP code information or living outside NYC. Income data used for analyses in this report are from the 2007-2011 American Community Survey (ACS) for events occurring in 2006-2009, ACS 2008-2012 for events occurring in 2010, ACS 2009-2013 for events occurring in 2011, and ACS 2010-2014 for events occurring in 2012, ACS 2011-2015 for events occurring in 2013, and ACS 2012-2016 for events occurring in 2014-2017. Cut-points for categories of area-based poverty in NYC were defined by a NYC DOHMH workgroup.

APPENDIX 2:
TECHNICAL NOTES: NYC HIV CARE CONTINUUM

- "People living with HIV": calculated as "HIV-diagnosed" divided by the estimated proportion of people living with HIV (PLWH) who had been diagnosed (92.8%), 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": calculated as PLWH "received care" plus the estimated number of PLWH who were out of care, based on a statistical weighting method. This estimated number aims to account for out-migration from NYC, and therefore is different from the number of PLWH published elsewhere.

  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": PLWH with ≥1 VL or CD4 count or CD4 percent drawn in 2018 and reported to NYC HIV surveillance.

  Source: NYC HIV Surveillance Registry.

- "Prescribed ART": calculated as PLWH "received care" multiplied by the estimated proportion of PLWH prescribed ART in the previous 12 months (96.3%), 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, 2017.

- "Virally suppressed": calculated as PLWH in care with a most recent viral load measurement in 2018 of <200 copies/mL, plus the estimated number of out-of-care 2018 PLWH with a viral load <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.