

HIV in Brooklyn, 2022

HIV Epidemiology Program

New York City Department of Health and Mental Hygiene

Published November 2023

<https://www.nyc.gov/site/doh/data/data-sets/hiv-aids-surveillance-and-epidemiology-reports.page>



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.

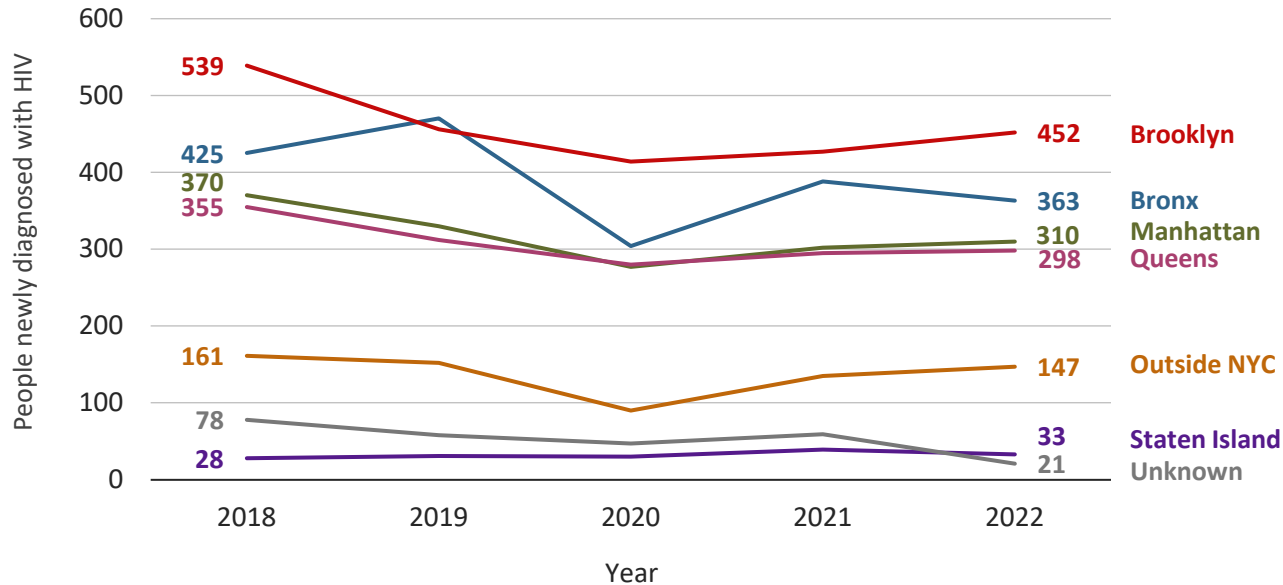
Table of contents

Description	Slide number
Number of new HIV diagnoses in New York City	
by borough	4
Rate of new HIV diagnoses per 100,000 people	
by borough and in New York City overall	5
Basic statistics of HIV in Brooklyn	6
Number of new HIV diagnoses in Brooklyn	
by gender	7
by race or ethnicity	8
by age group	9
by race or ethnicity and age group	10
by area-based poverty	11
by transmission category	12
by place of birth	13
Proportion of new HIV diagnoses and overall population in Brooklyn	
by race or ethnicity	14
by age group	15
by area-based poverty	16
Rate of new HIV diagnoses per 100,000 people in Brooklyn	
by race or ethnicity	17
by age group	18
by area-based poverty	19

Table of contents

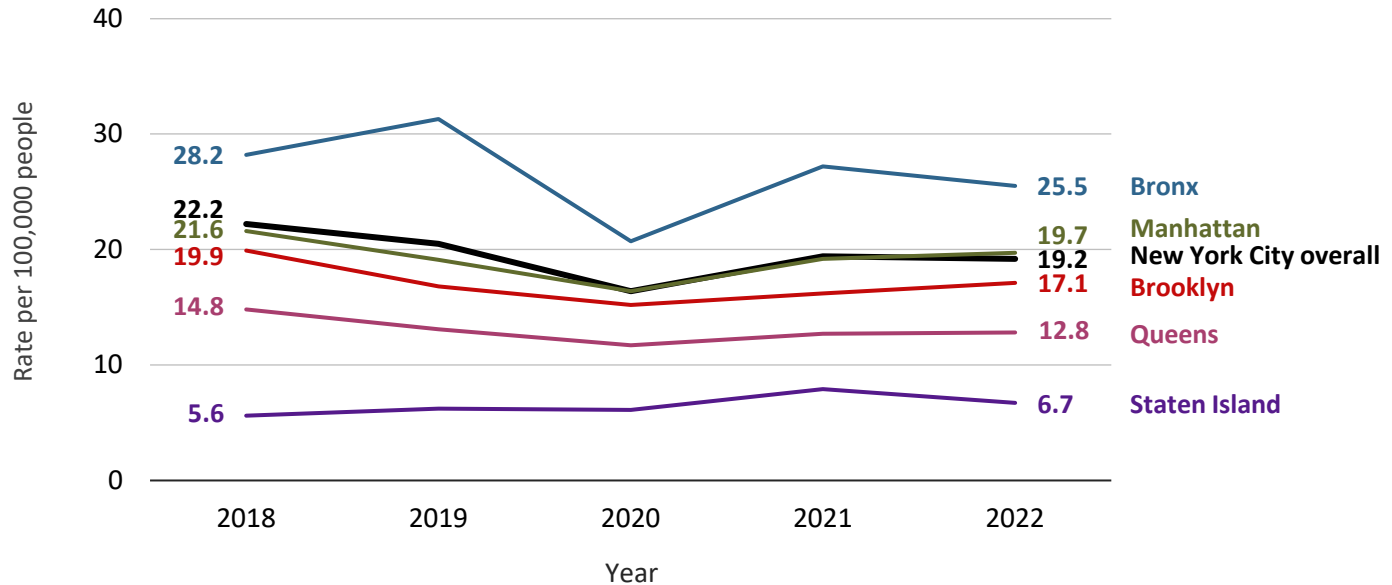
Description	Slide number
Timely initiation of care among people newly diagnosed with HIV	
in Brooklyn and New York City overall	21
in Brooklyn by demographic groups	22
in Brooklyn by United Hospital Fund Neighborhood	23
Viral suppression within three months among people newly diagnosed with HIV	
in Brooklyn and New York City overall	24
in Brooklyn by demographic groups	25
in Brooklyn by United Hospital Fund Neighborhood	26
Viral suppression among people with diagnosed HIV	
in Brooklyn and New York City overall	28
in Brooklyn by demographic groups	29
in Brooklyn by United Hospital Fund Neighborhood	30
Proportion of people with HIV in stages of the HIV care continuum	
in Brooklyn overall and by race or ethnicity	31
Age-adjusted death rate per 1,000 people with HIV	
in Brooklyn and New York City overall	32
in Brooklyn by demographic groups	33
in Brooklyn by United Hospital Fund Neighborhood	34
Proportion of deaths among people with HIV in New York City	
by cause of death	35
Appendices	
How to find our data	36
Methodology and definitions	37
Technical notes on the HIV care continuum	38

Number of new HIV diagnoses in New York City by borough of residence, 2018-2022



The number of new HIV diagnoses decreased or remained stable in all boroughs of residence between 2018 and 2022. Brooklyn and the Bronx consistently experienced the highest number of new HIV diagnoses, representing a combined 50% of new diagnoses in New York City in 2022.

Rate of new HIV diagnoses¹ per 100,000 people in New York City by borough of residence and New York City overall, 2018-2022

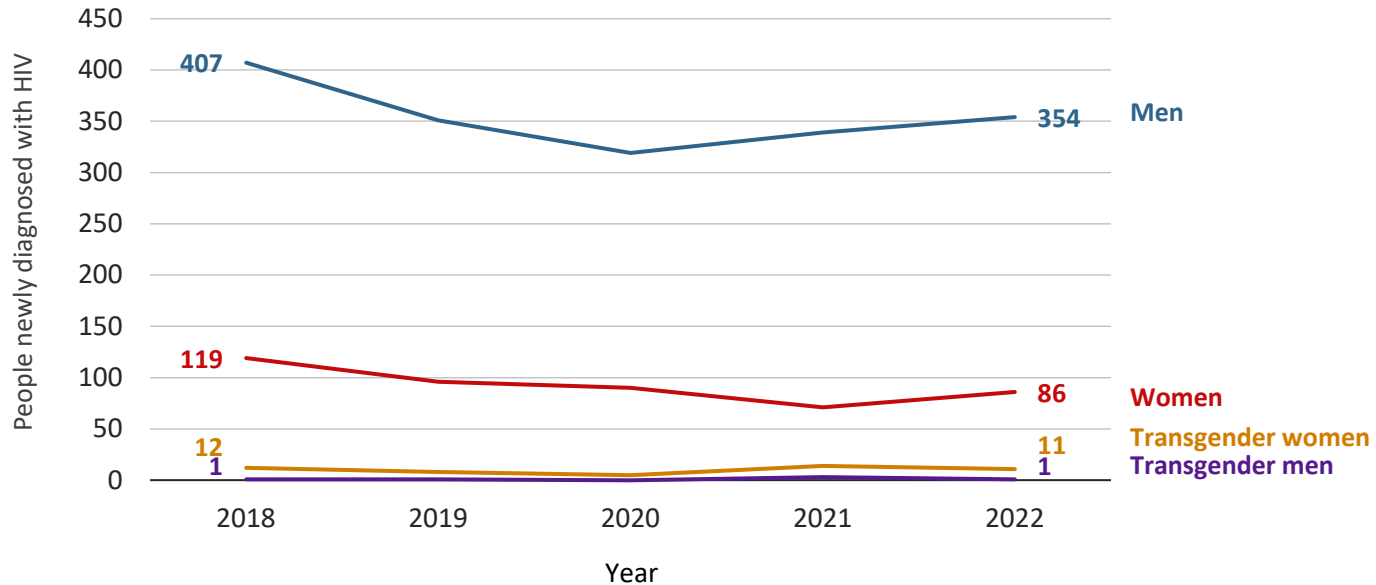


The rate of new HIV diagnoses decreased or remained stable in all boroughs between 2018 and 2022. People in the Bronx consistently experienced the highest rate of new HIV diagnoses, while Brooklyn's rate was lower than the rates in the Bronx, Manhattan, and the overall city rate.

Basic statistics of HIV in Brooklyn, 2022

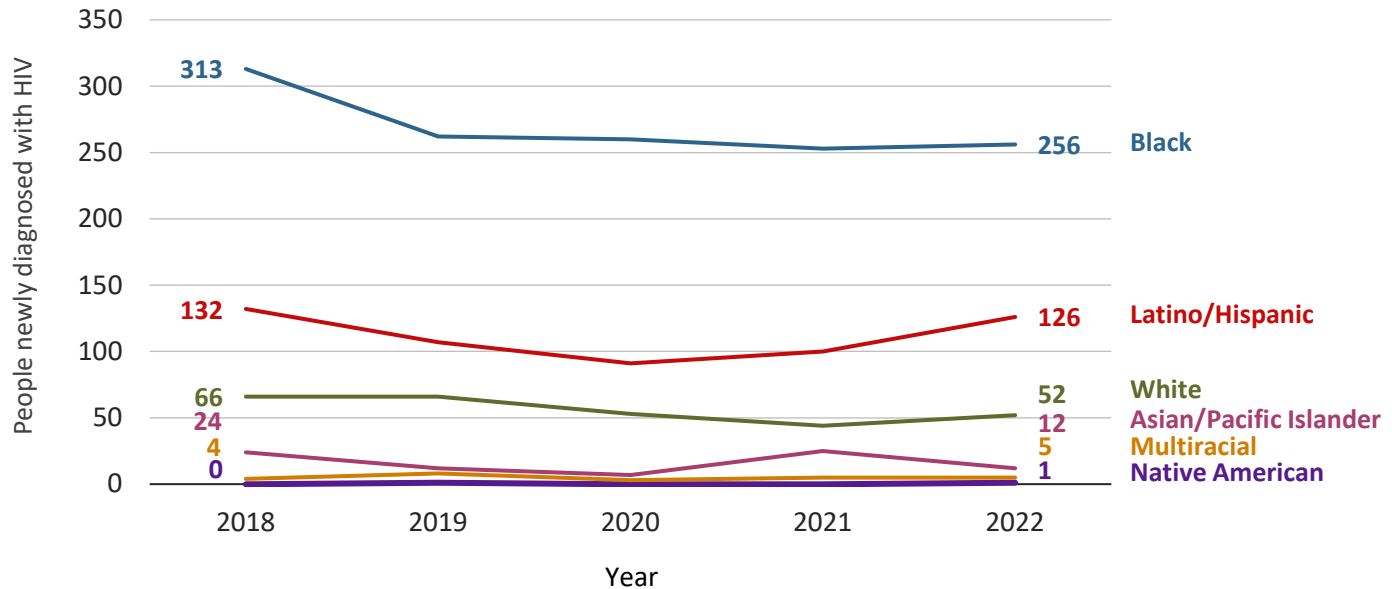
- **452 people newly diagnosed with HIV**
 - Including 80 people concurrently diagnosed with AIDS (17.7% of diagnoses)
- **251 people newly diagnosed with AIDS**
- **22,100 people with HIV¹**
- **409 deaths among people with HIV**
 - 8.3 deaths per 1,000 people with HIV²

Number of new HIV diagnoses in Brooklyn by gender, 2018-2022



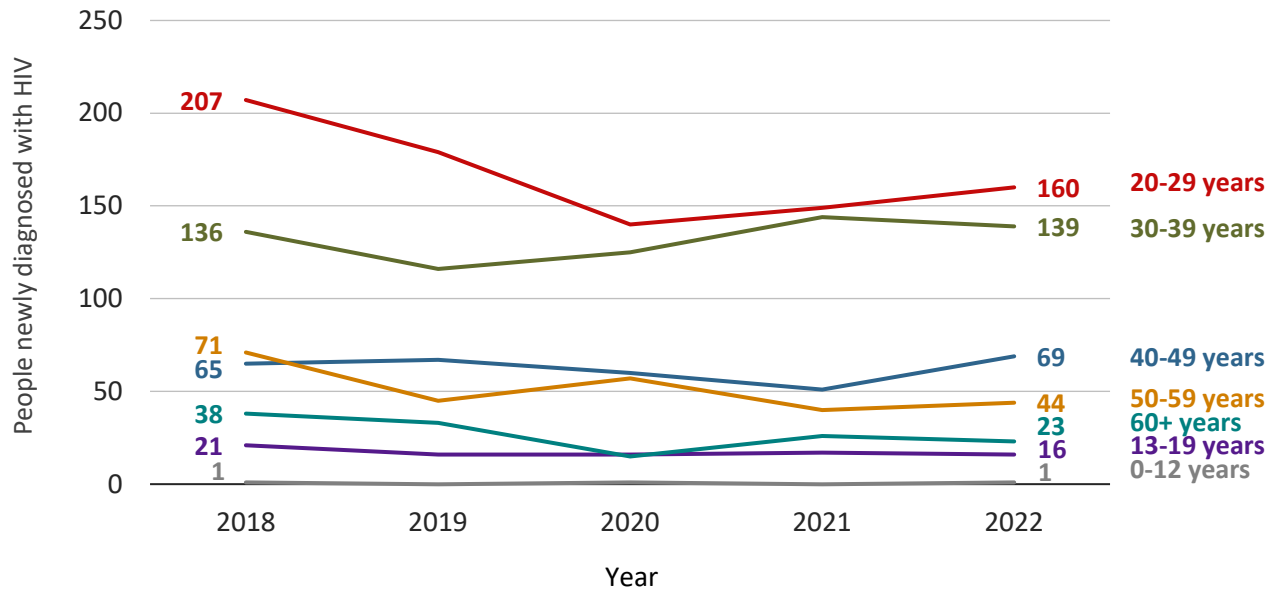
The number of new HIV diagnoses decreased or remained stable in all gender groups between 2018 and 2022. Men consistently experienced the highest number of new HIV diagnoses in Brooklyn, representing 78% of new diagnoses in 2022, similar to the citywide proportion of 79%.

Number of new HIV diagnoses in Brooklyn by race or ethnicity, 2018-2022



The number of new HIV diagnoses decreased or remained stable in all race or ethnicity groups between 2018 and 2022. Black people consistently experienced the highest number of new HIV diagnoses in Brooklyn, representing 57% of new diagnoses in 2022, higher than the citywide proportion of 43%.

Number of new HIV diagnoses in Brooklyn by age group, 2018-2022



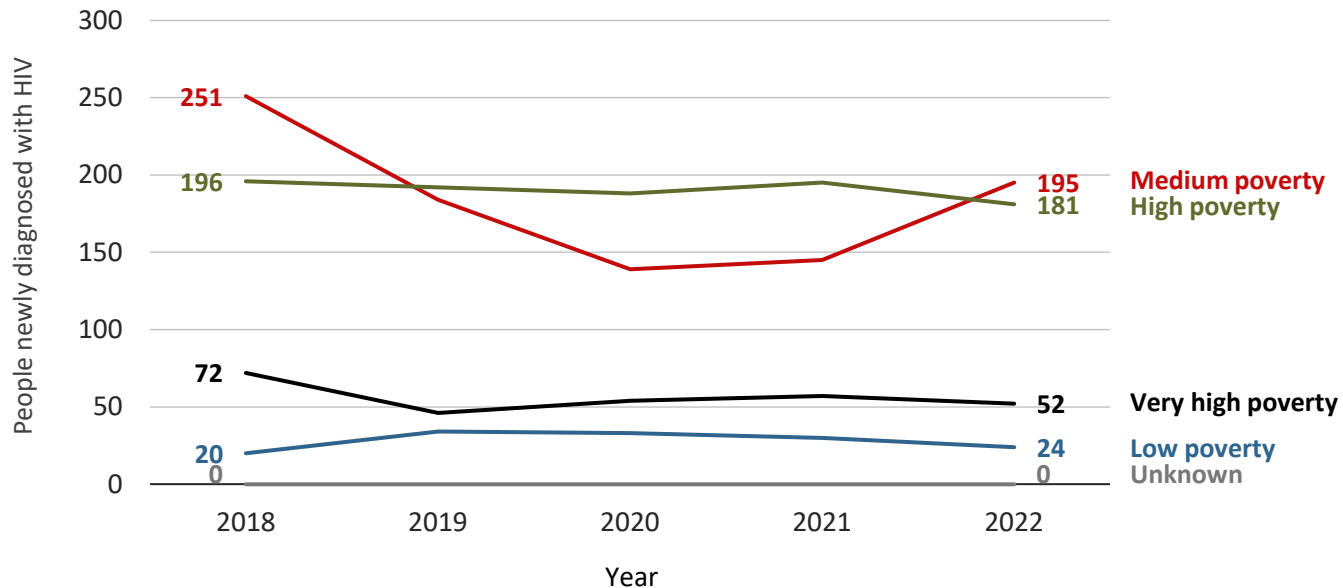
The number of new HIV diagnoses decreased or remained stable in all age groups between 2018 and 2022. People aged 20 to 39 years consistently experienced the highest number of new HIV diagnoses in Brooklyn, representing a combined 66% of new diagnoses in 2022, the same as the citywide proportion.

Number of new HIV diagnoses in Brooklyn by race or ethnicity and age group, 2022



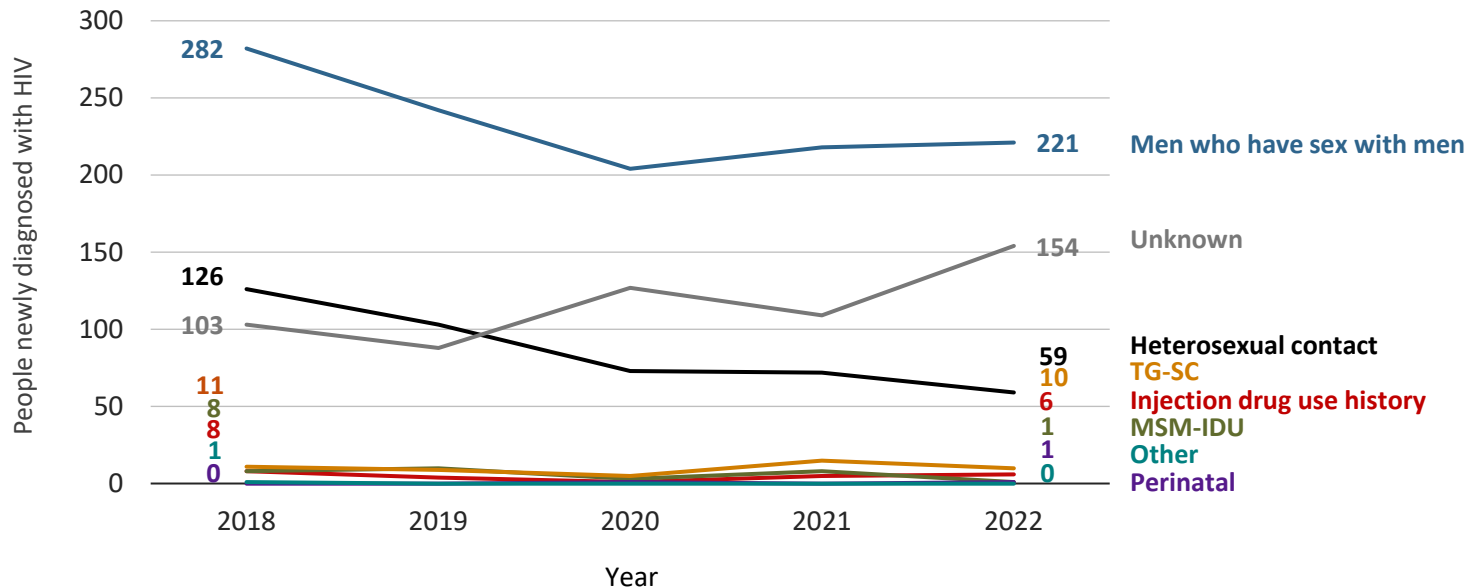
Black and Latino/Hispanic people aged 20 to 39 years in Brooklyn experienced the highest number of new HIV diagnoses in 2022, representing a combined 57% of new diagnoses in 2022, similar to the citywide proportion of 56%.

Number of new HIV diagnoses in Brooklyn by area-based poverty,¹ 2018-2022



The number of new HIV diagnoses decreased or remained stable in all area-based poverty groups between 2018 and 2022. Areas with medium and high poverty consistently experienced the highest number of new HIV diagnoses in Brooklyn, representing a combined 83% of new diagnoses in 2022, higher than the citywide proportion of 59%.

Number of new HIV diagnoses in Brooklyn by transmission category, 2018-2022



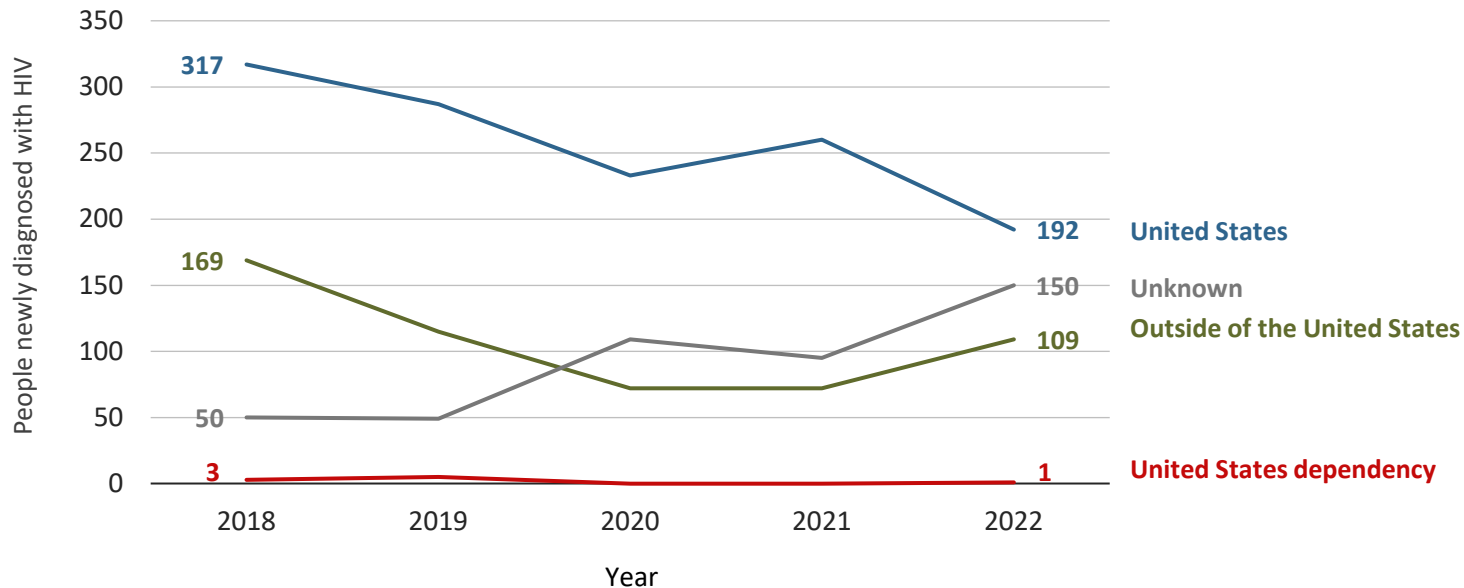
Between 2018 and 2022, there was a 50% increase in people newly diagnosed with HIV with an unknown transmission category.¹ The number of new HIV diagnoses decreased or remained stable for all other transmission categories. Men who have sex with men consistently experienced the highest number of new HIV diagnoses in Brooklyn, representing a combined 50% of new diagnoses in 2022, similar to the citywide proportion of 49%.



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

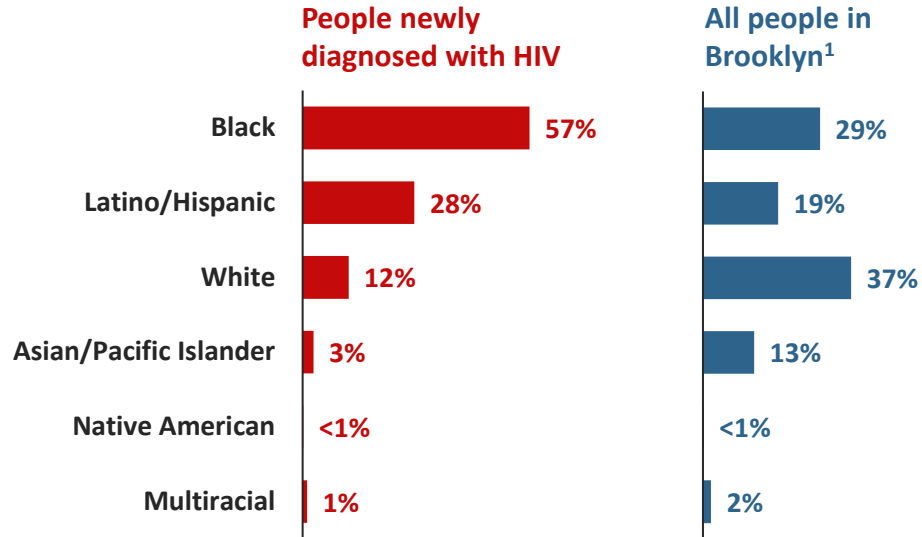
¹The number of people newly diagnosed with HIV with an unknown transmission category increased due to changes in access to medical records after the emergence of COVID-19 in New York City. As reported to the New York City Department of Health and Mental Hygiene by March 31, 2023.

Number of new HIV diagnoses in Brooklyn by place of birth, 2018-2022



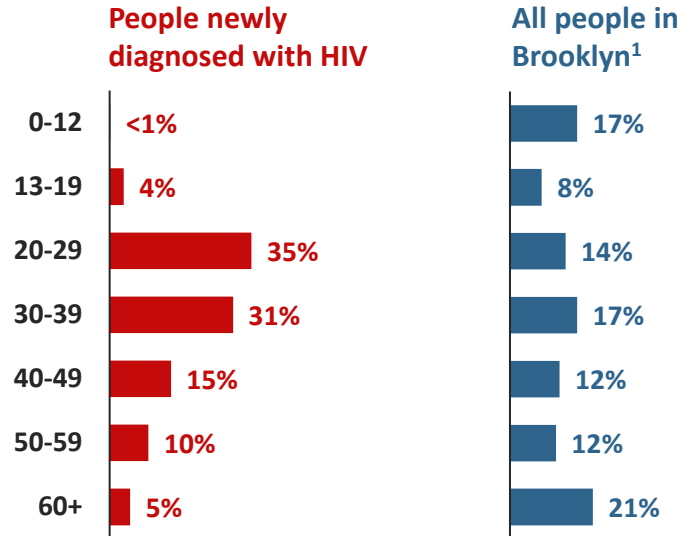
Between 2018 and 2022, there was a 200% increase in people newly diagnosed with HIV with an unknown place of birth.¹ The number of new HIV diagnoses decreased or remained stable for all other places of birth. People born in the United States consistently experienced the highest number of new HIV diagnoses in Brooklyn, representing a combined 42% of new diagnoses in 2022, similar to the citywide proportion of 43%.

Proportion of people newly diagnosed with HIV and all people¹ in Brooklyn by race or ethnicity, 2022



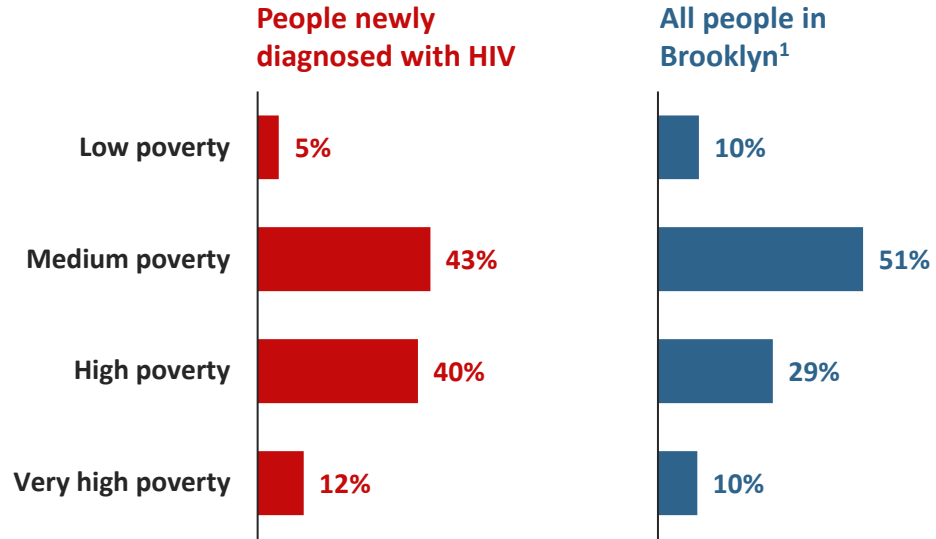
The proportion of new HIV diagnoses among Black and Latino/Hispanic people is higher than their respective proportions among all people in Brooklyn.

Proportion of people newly diagnosed with HIV and all people¹ in Brooklyn by age group, 2022



The proportion of new HIV diagnoses among people aged 20 to 39 years is higher than their respective proportions among all people in Brooklyn.

Proportion of people newly diagnosed with HIV and all people¹ in Brooklyn by area-based poverty,^{2,3} 2022



The proportion of new HIV diagnoses among people living in areas with high or very high poverty is higher than their respective proportions among all people in Brooklyn.

¹NYC population calculated using Health Department population estimates, modified from U.S. Census Bureau intercensal population estimates, updated September 2022.

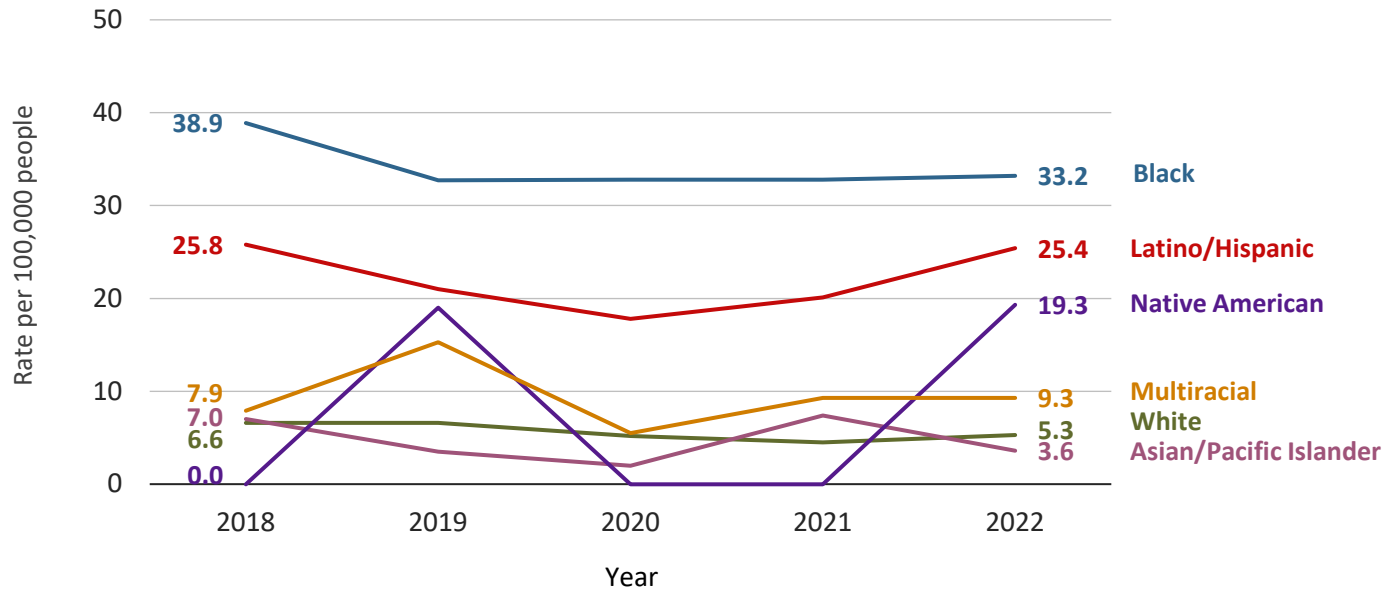
²Area-based poverty level is determined by the proportion of residents living below the federal poverty level (FPL) in the NYC ZIP code of residence at diagnosis.

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.

³Proportions exclude people living in areas with unknown area-based poverty level

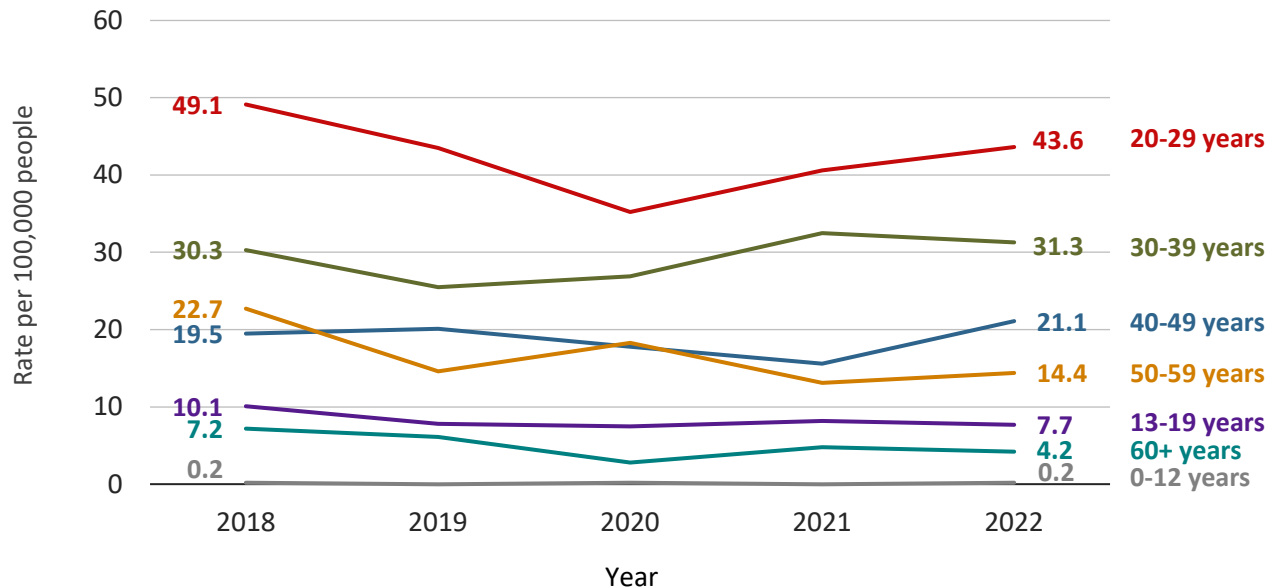
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2023.

Rate of new HIV diagnoses¹ per 100,000 people in Brooklyn by race or ethnicity, 2018-2022



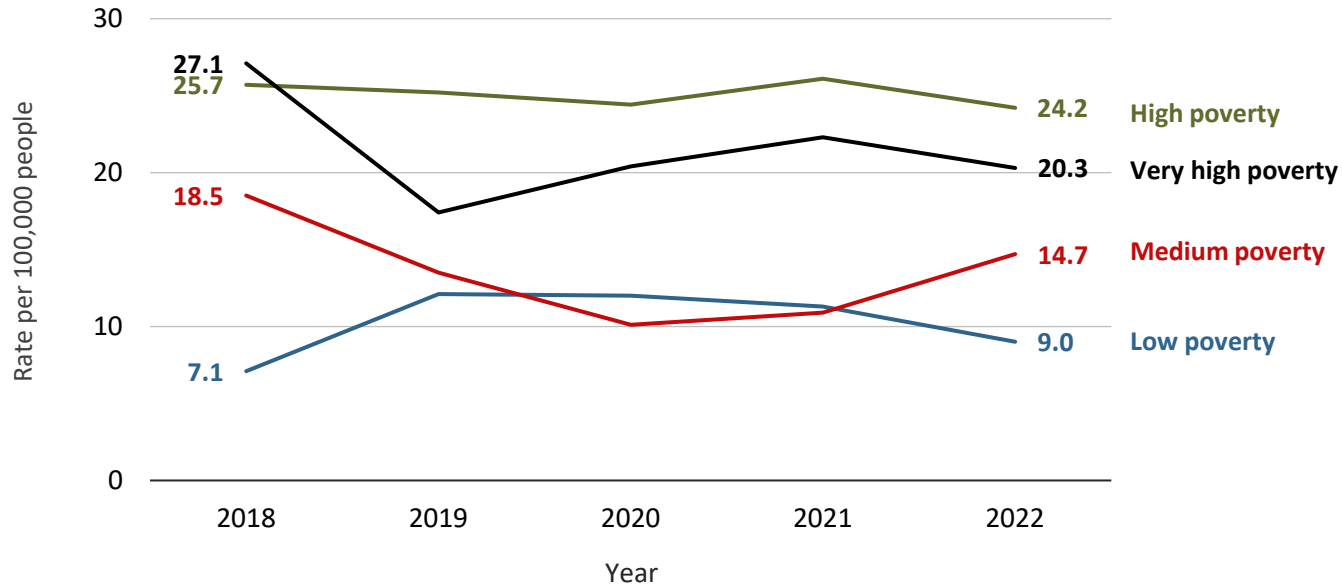
The rate of new HIV diagnoses increased among Native American people, with one person newly diagnosed in 2022; counts remain low, the rate should be interpreted with caution. The rate of new HIV diagnoses decreased or remained stable in all other race or ethnicity groups between 2018 and 2022. Black and Latino/Hispanic people consistently experienced the highest rates of new HIV diagnoses in Brooklyn.

Rate of new HIV diagnoses¹ per 100,000 people in Brooklyn by age group, 2018-2022



The rate of new HIV diagnoses decreased or remained stable in all age groups between 2018 and 2022. People aged 20 to 39 consistently experienced the highest rates of new HIV diagnoses in Brooklyn.

Rate of new HIV diagnoses¹ per 100,000 people in Brooklyn by area-based poverty,² 2018-2022

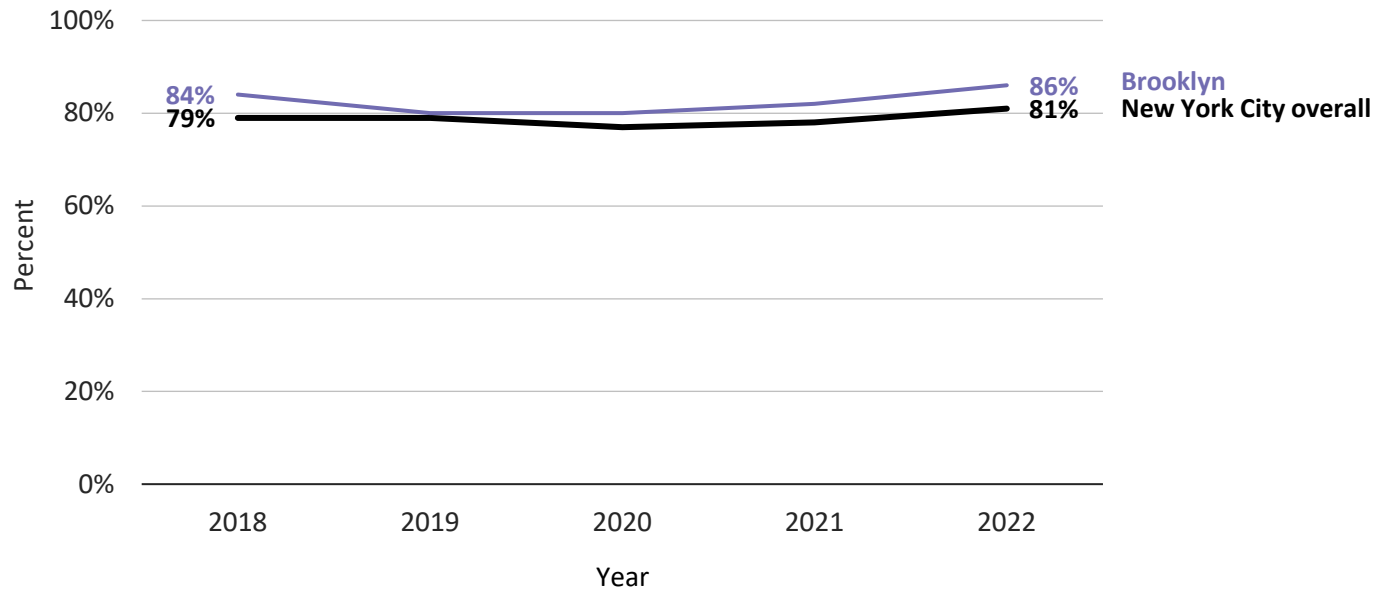


The rate of new HIV diagnoses decreased or remained stable in all area-based poverty groups between 2018 and 2022. People living in areas with high or very high poverty consistently experienced the highest rates of new HIV diagnoses in Brooklyn.



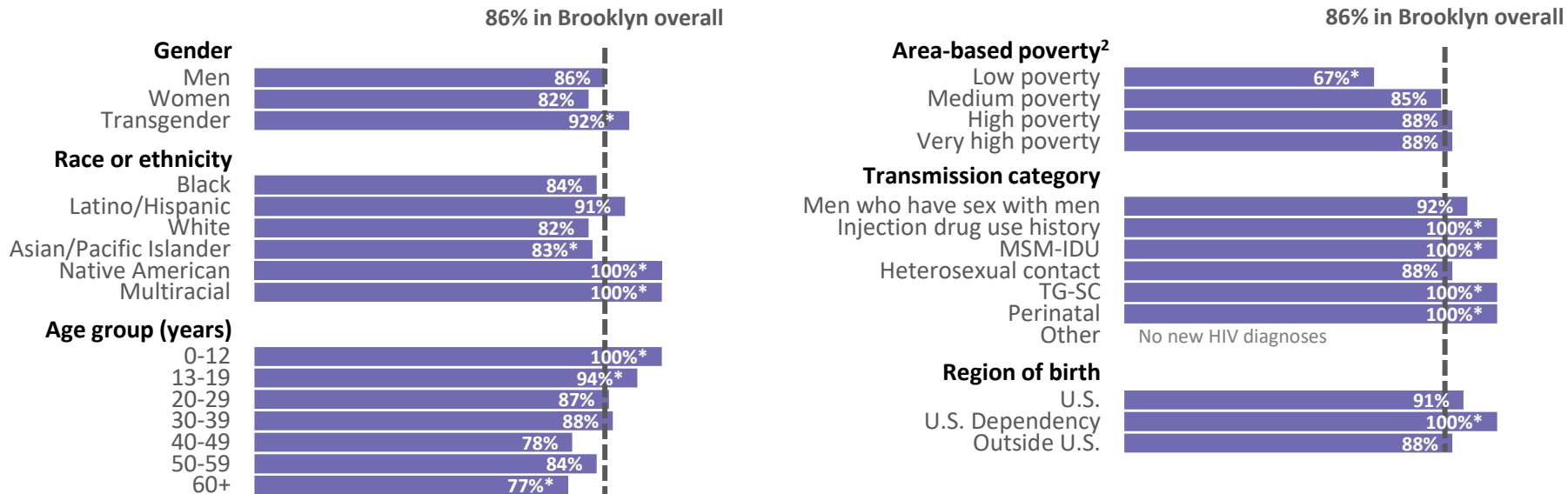
**CARE OUTCOMES AMONG PEOPLE NEWLY
DIAGNOSED WITH HIV IN BROOKLYN**

Timely initiation of care¹ among people newly diagnosed with HIV in Brooklyn and New York City overall, 2018-2022



Timely initiation of care increased by two percentage points in Brooklyn and was slightly higher than New York City overall, from 2018 to 2022.

Timely initiation of care¹ among people newly diagnosed with HIV in Brooklyn by demographic groups, 2022



Inequities in timely initiation of care exist across demographic groups in Brooklyn.

*Data should be interpreted with caution because of small population size.

MSM-IDU=Men who have sex with men and inject drugs; TG-SC=Transgender people with sexual contact.

¹Timely 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.

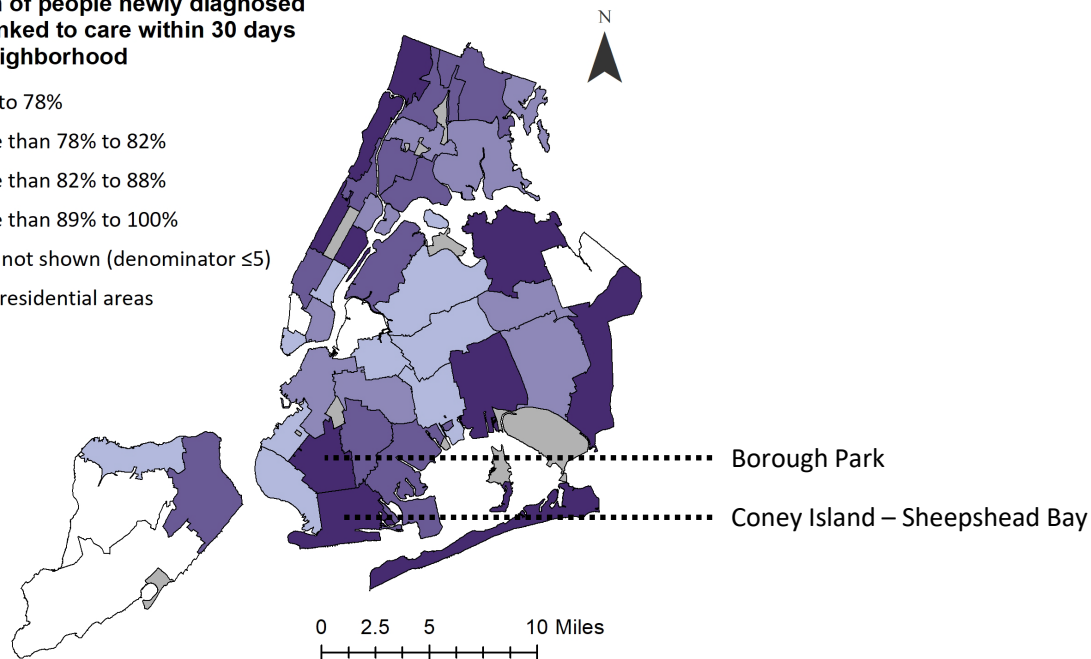
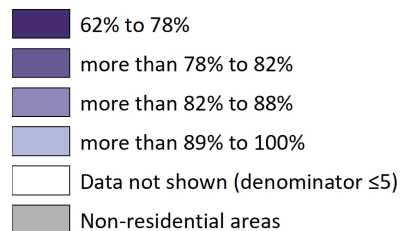
²Area-based poverty level is determined by the proportion of residents living below the federal poverty level (FPL) in the NYC ZIP code of residence at diagnosis.

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.

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2023.

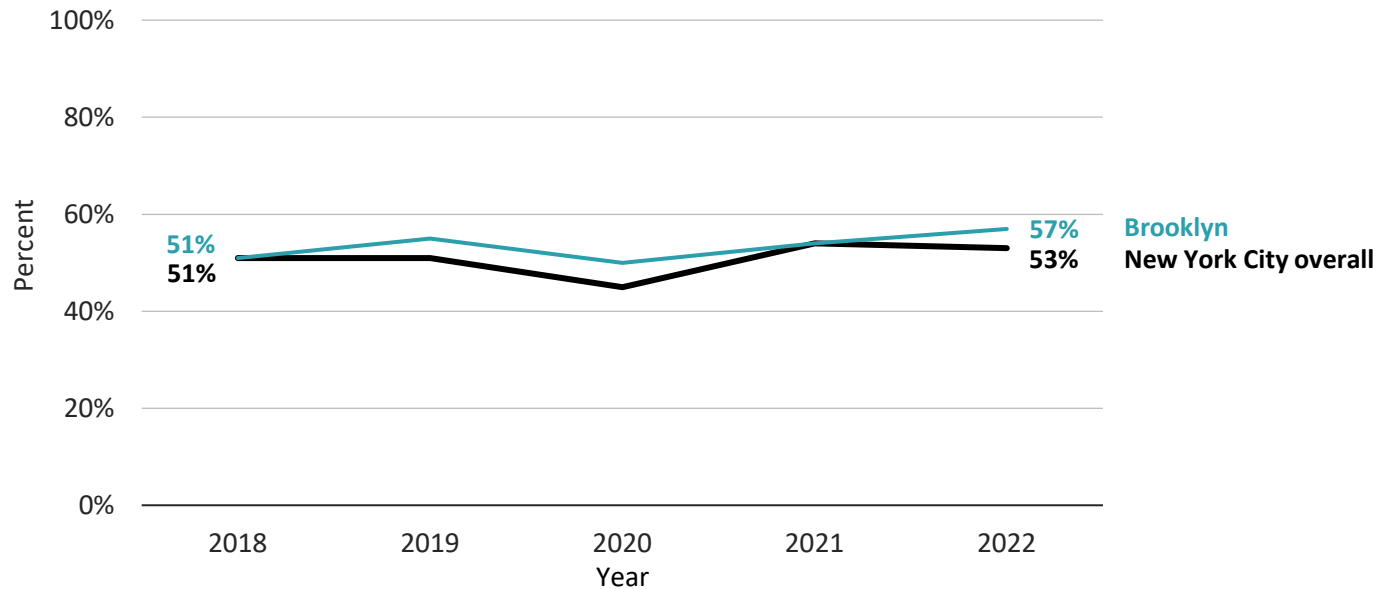
Timely initiation of care¹ among people newly diagnosed with HIV in Brooklyn by United Hospital Fund neighborhood, 2022

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



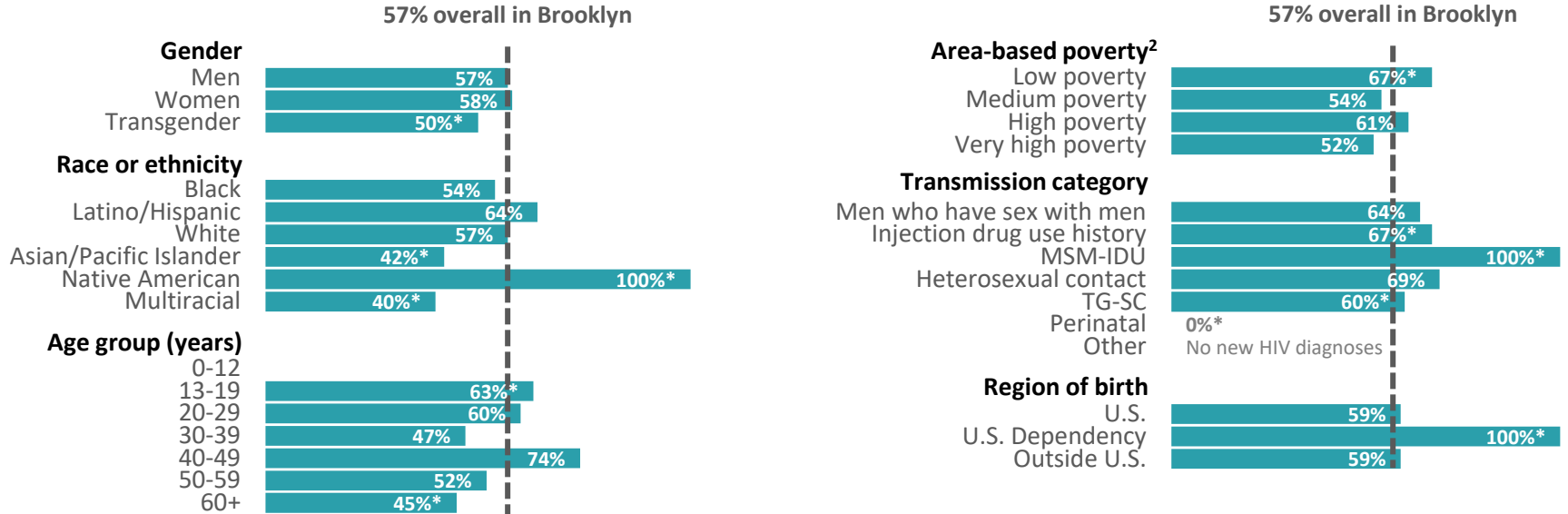
The neighborhoods in Brooklyn with the lowest proportions of people linked to care within 30 days were Borough Park (76%) and Coney Island – Sheepshead Bay (78%).

Viral suppression¹ within three months among people newly diagnosed with HIV in Brooklyn and New York City overall, 2022



Viral suppression within three months of an HIV diagnosis increased by 6% in Brooklyn and was slightly higher than New York City overall, from 2018 to 2022.

Viral suppression¹ within three months among people newly diagnosed with HIV in Brooklyn by demographic group, 2022



Inequities in viral suppression within three months of an HIV diagnosis exist across demographic groups in Brooklyn.

*Data should be interpreted with caution because of small population size.

MSM-IDU=Men who have sex with men and inject drugs; TG-SC=Transgender people with sexual contact.

¹Viral suppression is defined as an HIV viral load in the calendar year <200 copies/mL within three months of diagnosis. People diagnosed at death have been excluded.

²Area-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.

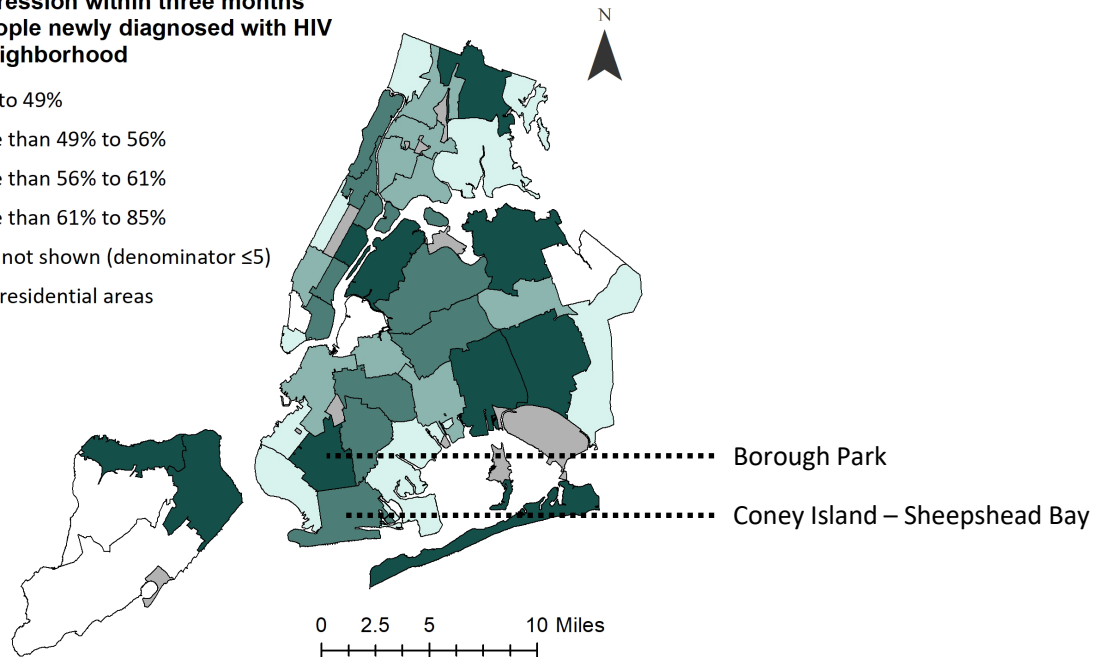
Low poverty=<10% below FPL; Medium poverty=10 to <20% below FPL; High poverty=20 to <30% below FPL; Very high poverty>=30% below FPL.

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2023.

Viral suppression¹ within three months among people newly diagnosed with HIV in Brooklyn by United Hospital Fund neighborhood, 2022

Viral suppression within three months among people newly diagnosed with HIV by UHF neighborhood

- 22% to 49%
- more than 49% to 56%
- more than 56% to 61%
- more than 61% to 85%
- Data not shown (denominator ≤ 5)
- Non-residential areas

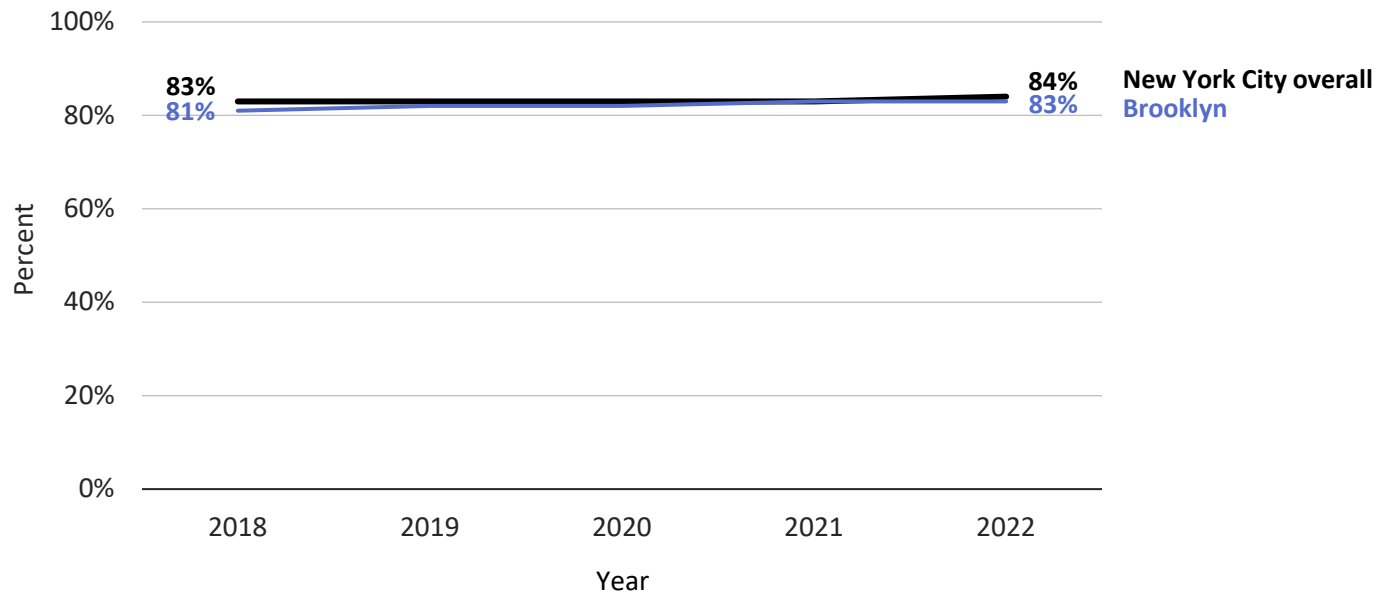


The neighborhoods in Brooklyn with the lowest proportions of people virally suppressed within three months of an HIV diagnosis were Borough Park (40%) and Coney Island – Sheepshead Bay (52%)



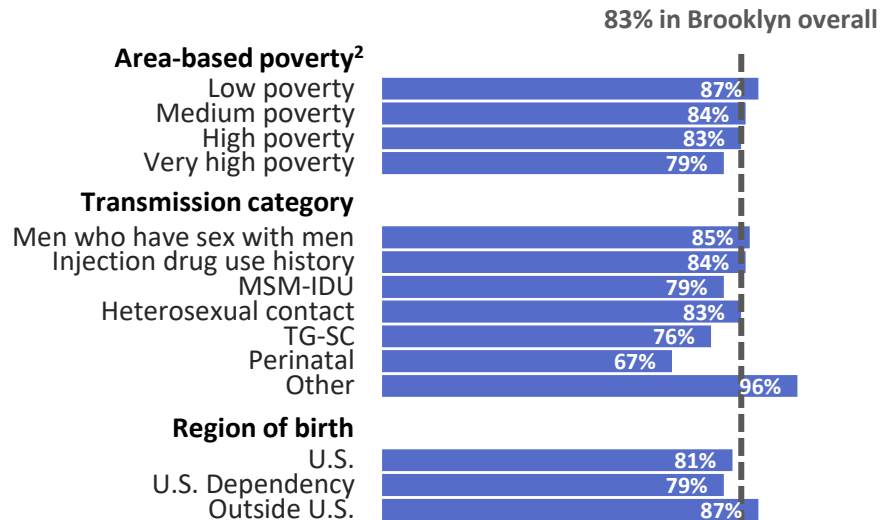
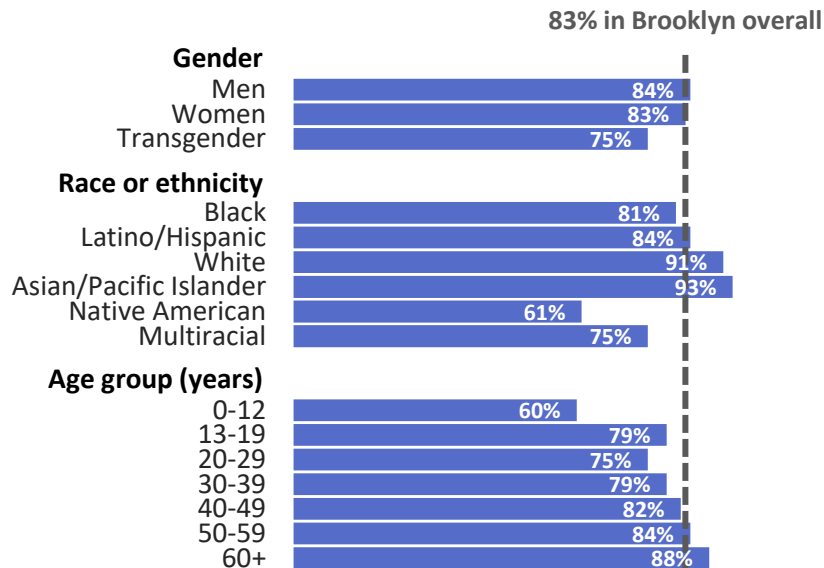
**CARE OUTCOMES AMONG PEOPLE WITH HIV
IN BROOKLYN**

Viral suppression¹ among people with diagnosed HIV in Brooklyn and New York City overall, 2018-2022



Viral suppression increased by two percentage points in Brooklyn and was approximately equivalent to New York City overall, from 2018 to 2022.

Viral suppression¹ among people with diagnosed HIV in Brooklyn by demographic group, 2022



Inequities in viral suppression exist across demographic groups in Brooklyn.

MSM-IDU=Men who have sex with men and inject drugs; TG-SC=Transgender people with sexual contact.

¹Viral suppression is defined as the last HIV viral load in the calendar year <200 copies/mL. People diagnosed at death have been excluded.

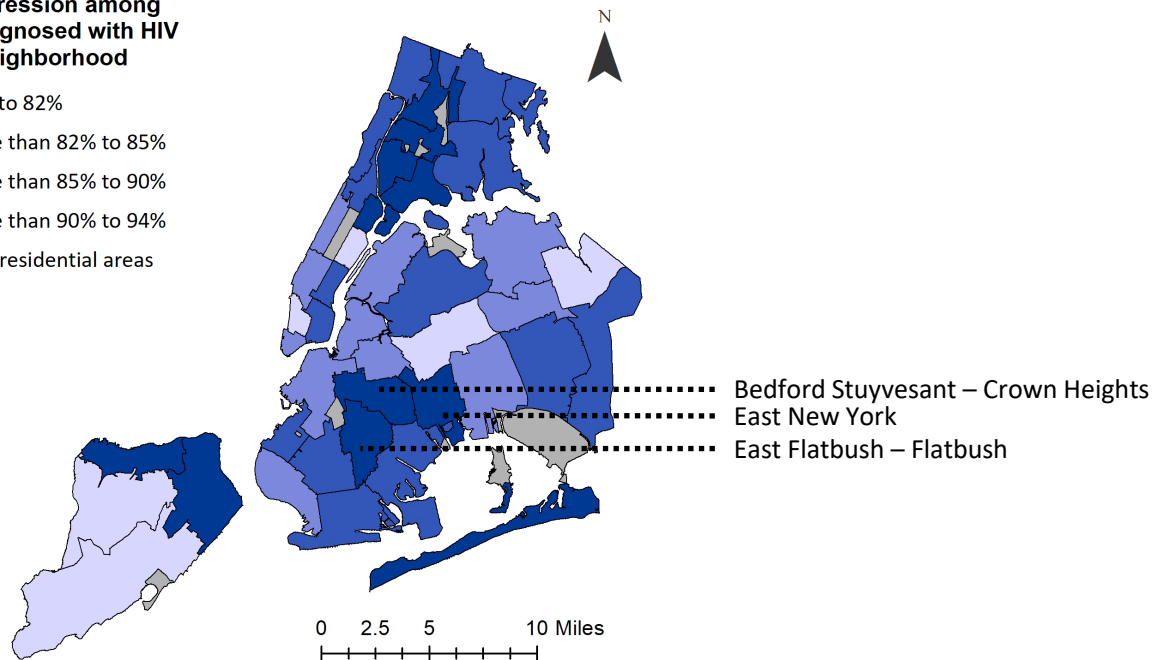
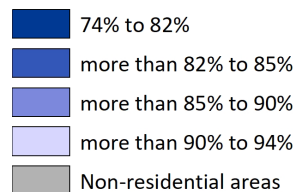
²Area-based poverty level is determined by the proportion of residents living below the federal poverty level (FPL) in the NYC ZIP code of residence at diagnosis.

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.

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2023.

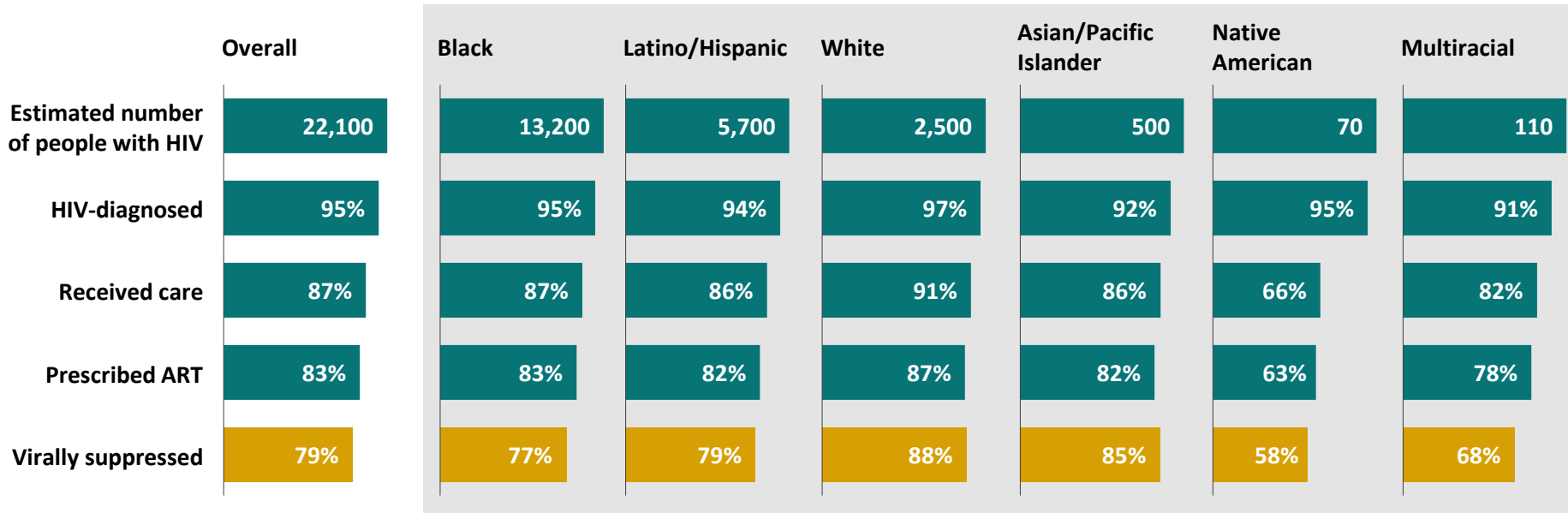
Viral suppression¹ among people with diagnosed HIV in Brooklyn by United Hospital Fund neighborhood, 2022

Viral suppression among people diagnosed with HIV by UHF neighborhood



The neighborhoods in Brooklyn with the lowest proportions of people virally suppressed were Bedford Stuyvesant – Crown Heights (80%), East New York (82%), and East Flatbush – Flatbush (82%).

Proportion of people with HIV in stages of the HIV care continuum^{1,2} in Brooklyn overall and by race or ethnicity,³ 2022



Of approximately 22,100 people with HIV in Brooklyn in 2022, 79% had a suppressed viral load, slightly lower than the citywide proportion of 80%. There were inequities in the HIV care continuum by race or ethnicity in 2022 in Brooklyn.

¹The HIV care continuum is a series of key stages for people with HIV. The denominator for each displayed proportion is the estimated number of people with HIV within a given group.

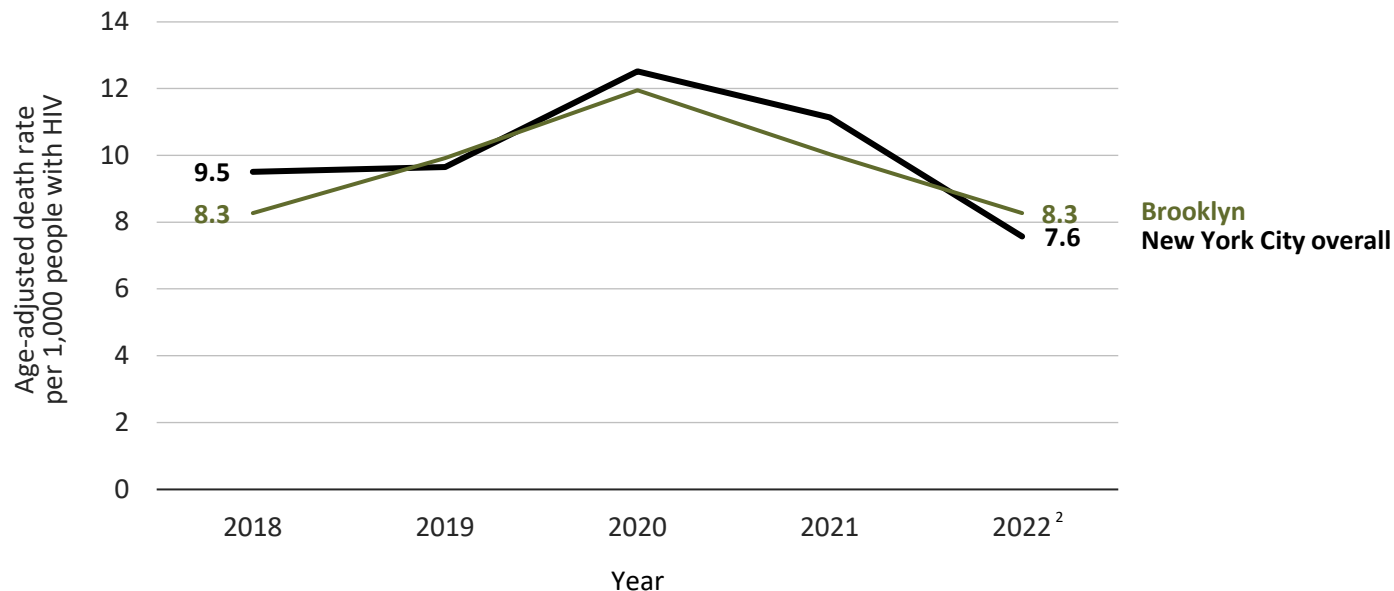
²Proportions in the care continuum may not align between stages due to the use of multiple data sources in calculations (e.g., proportion prescribed ART may be lower than the proportion virally suppressed)

³The estimated number of people with HIV by race or ethnicity may not sum to the overall value due to rounding and the use of specific estimated proportions of people with HIV who have been diagnosed within each race or ethnicity group.

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, 2023.

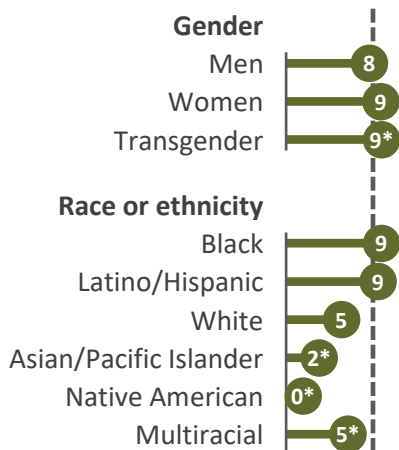
Age-adjusted¹ death rate per 1,000 people with HIV in Brooklyn and New York City overall, 2018-2022



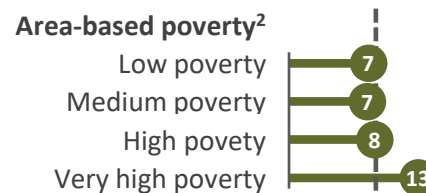
In Brooklyn, the age-adjusted death rate declined 31% since the peak in 2020 and has now returned to the 2018 level. Brooklyn experienced a higher age-adjusted death rate than the citywide rate in 2022.

Age-adjusted¹ death rate per 1,000 people with HIV in Brooklyn by demographic group, 2022

8.3 deaths per 1,000 people with HIV in Brooklyn overall



8.3 deaths per 1,000 people with HIV in Brooklyn overall



Inequities in the age-adjusted death rate exist across demographic groups in Brooklyn.

*Data should be interpreted with caution because of small population size.

MSM-IDU=Men who have sex with men and inject drugs; TG-SC=Transgender people with sexual contact.

¹Age-adjusted to the standard 2000 U.S. population. People newly diagnosed with HIV at death were excluded from the numerator.

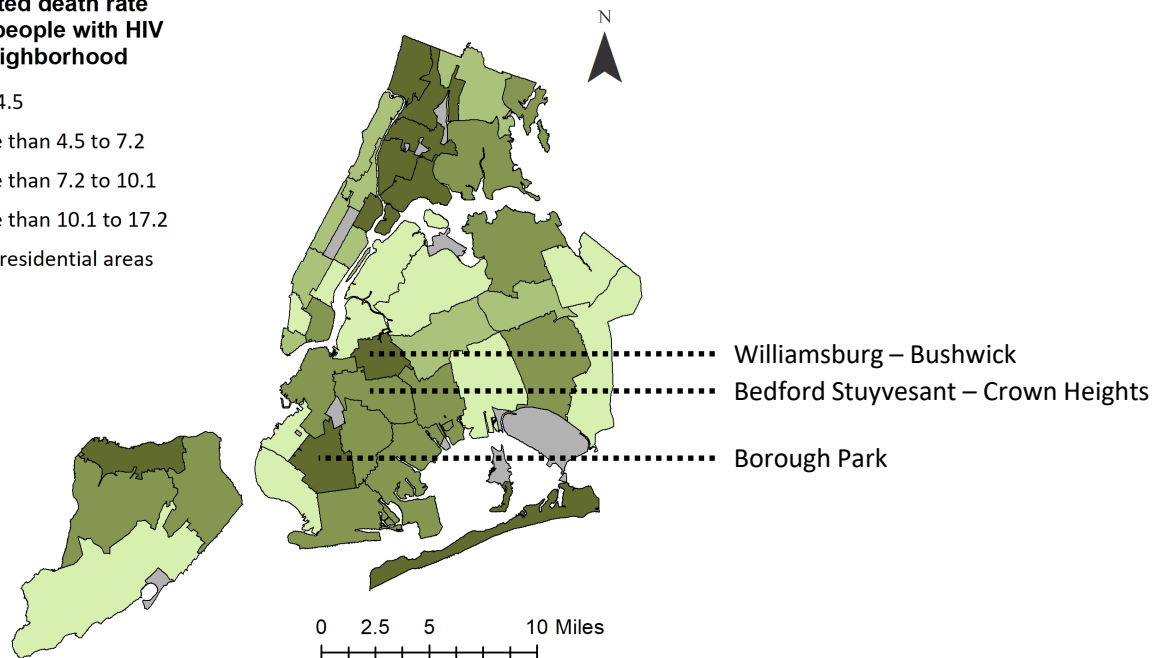
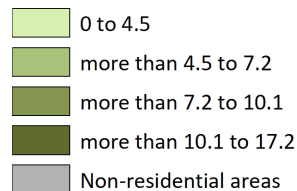
²Area-based poverty level is determined by the proportion of residents living below the federal poverty level (FPL) in the NYC ZIP code of residence at diagnosis.

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.

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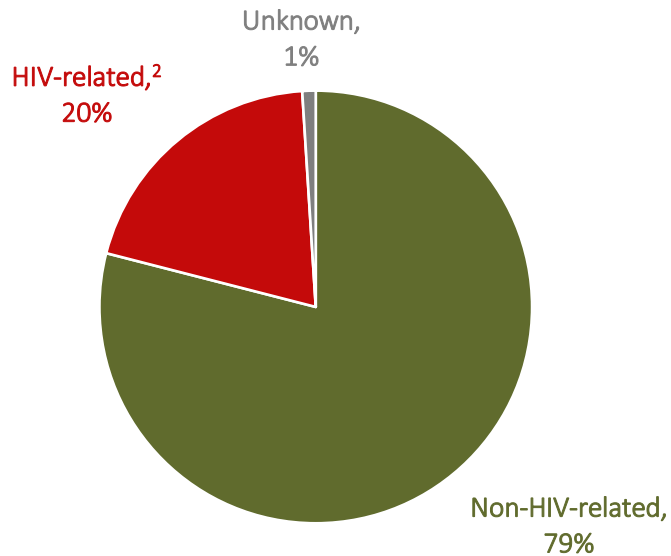
Age-adjusted¹ death rate per 1,000 people with HIV in Brooklyn by United Hospital Fund neighborhood, 2022

Age-adjusted death rate per 1,000 people with HIV by UHF neighborhood



The neighborhoods in Brooklyn with the highest age-adjusted death rates were Borough Park (11.7 per 1,000), Williamsburg – Bushwick (10.3 per 1,000), and Bedford Stuyvesant – Crown Heights (9.7 per 1,000).

Proportion of deaths among people with HIV in Brooklyn by cause of death, 2021¹



In 2021, 79% of deaths among people with HIV in Brooklyn were due to non-HIV-related causes. Among these, the top causes were Cardiovascular disease (27%), non-HIV-related cancers (19%), COVID-19 (11%)

¹Cause of death data are not yet available for 2022.

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, 2023.

Appendix: How to find our data

- **Our program publishes annual surveillance reports, slide sets, and statistics tables:**
 - Annual reports: <https://www.nyc.gov/site/doh/data/data-sets/hiv-aids-surveillance-and-epidemiology-reports.page>
 - Slide sets: <https://www.nyc.gov/site/doh/data/data-sets/hiv-aids-surveillance-and-epidemiology-reports.page>
 - Statistics tables: <https://www.nyc.gov/site/doh/data/data-sets/hiv-aids-surveillance-and-epidemiology-reports.page>
- **Other resources:**
 - HIV Care Status Reports (CSR) system: <https://www.nyc.gov/site/doh/health/health-topics/aids-hiv-care-status-reports-system.page>
 - HIV Care Continuum Dashboards (CCDs): <https://www.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, transgender women, and transgender men. 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" 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.
- **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 on the NYC HIV care continuum

- **People with HIV** is calculated as the number of people with diagnosed HIV 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.
- **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.