

# HIV Among People With Perinatally Transmitted HIV in New York City, 2023

HIV Epidemiology Program

New York City Department of Health and Mental Hygiene

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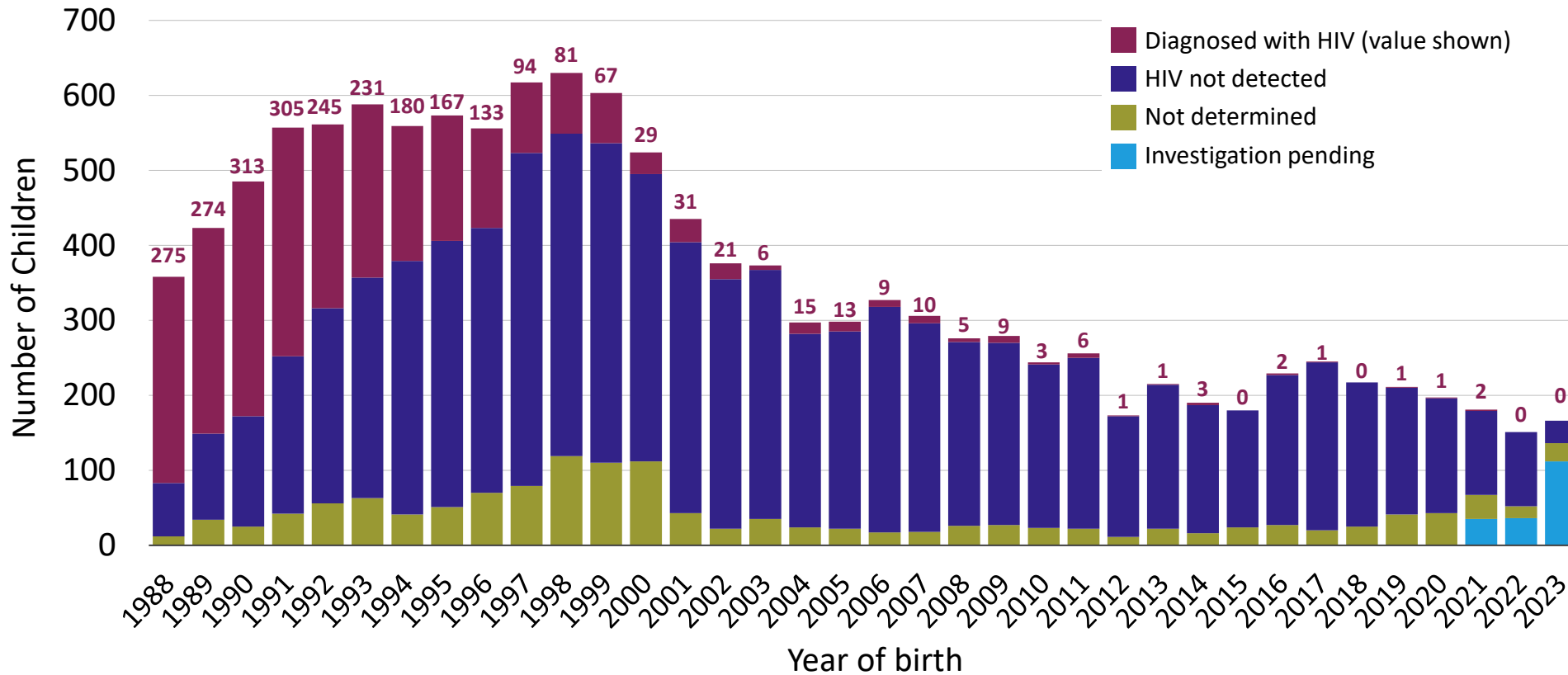
<https://www.nyc.gov/site/doh/data/data-sets/hiv-aids-surveillance-and-epidemiology-reports.page>



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# HIV Among Children With Perinatal Exposure to HIV<sup>1</sup> in New York City by Year of Birth, 1988-2023



**Milestones in Reduction of Perinatal HIV Transmission**

**1985:** CDC recommends that people with HIV avoid breastfeeding.<sup>5,6</sup>

**1994:** ACTG 076 study shows that AZT, the first antiretroviral medicine to treat HIV, reduces perinatal transmission.

**1997:** Routine newborn screening begins in NYS.

**1999:** NYS implements expedited testing in obstetric settings.

**From 2019 to 2023 among HIV-exposed births born to people<sup>2</sup> with HIV at select New York City medical facilities,<sup>3</sup> less than 1% of infants born to people with HIV were diagnosed with HIV. The small number of infants with HIV reflects the success of perinatal HIV prevention interventions.**

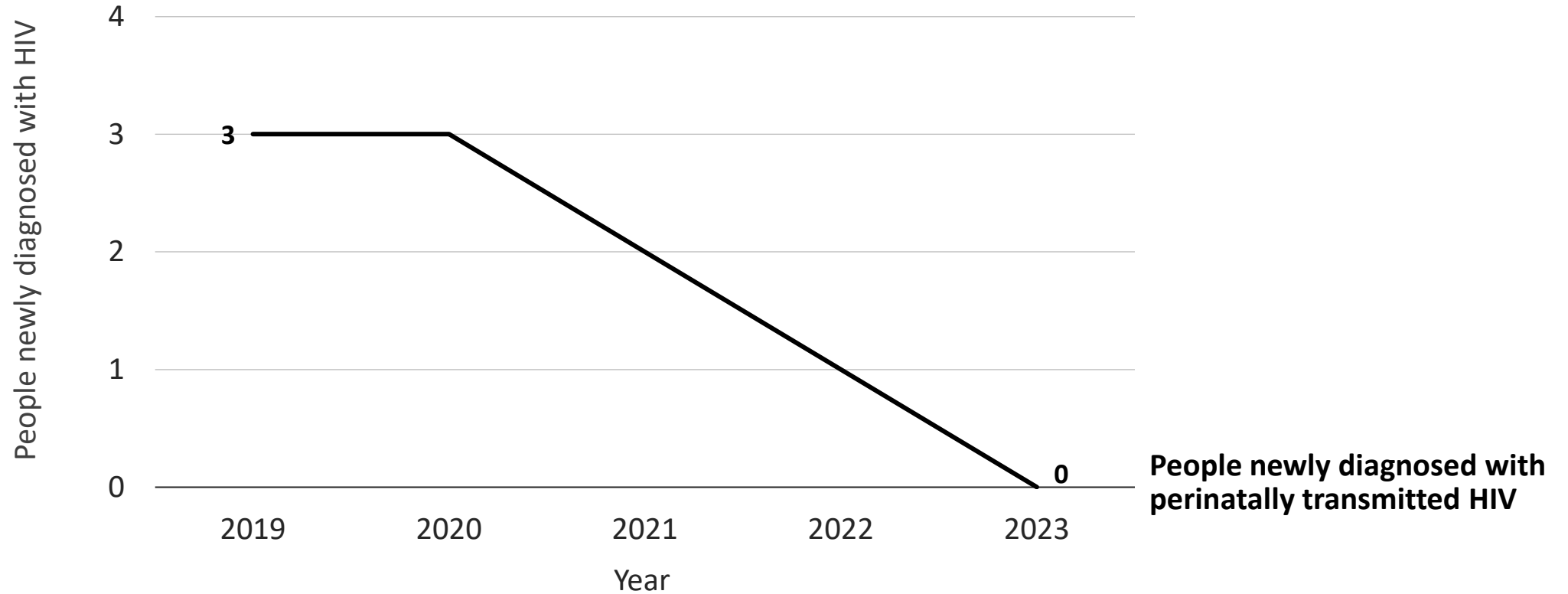


<sup>1</sup>Children born to people with HIV at select NYC medical facilities are followed for two years after birth to determine HIV status. HIV status is labeled as “not determined” if the child is lost to follow-up. <sup>2</sup>On this page, people refers to people with female sex assigned at birth. <sup>3</sup>Includes data collected at high-volume NYC medical facilities that care for the majority of HIV-exposed children and children with HIV. Since 2017, NYC’s perinatal surveillance program has conducted exposure investigations at 21 NYC medical facilities. Children born outside of NYC are not included in this figure. <sup>4</sup>Includes cases diagnosed as of December 31, 2023. As reported to the New York City Department of Health and Mental Hygiene by March 31, 2024.

# Basic Statistics Among People With Perinatally Transmitted HIV in New York City, 2023

- **0 children newly diagnosed with perinatally transmitted HIV**
- **21 people originally diagnosed with perinatally transmitted HIV were newly diagnosed with AIDS**
- **23 deaths among people with perinatally transmitted HIV**

# Number of New HIV Diagnoses Among People With Perinatally Transmitted HIV in New York City, 2019-2023

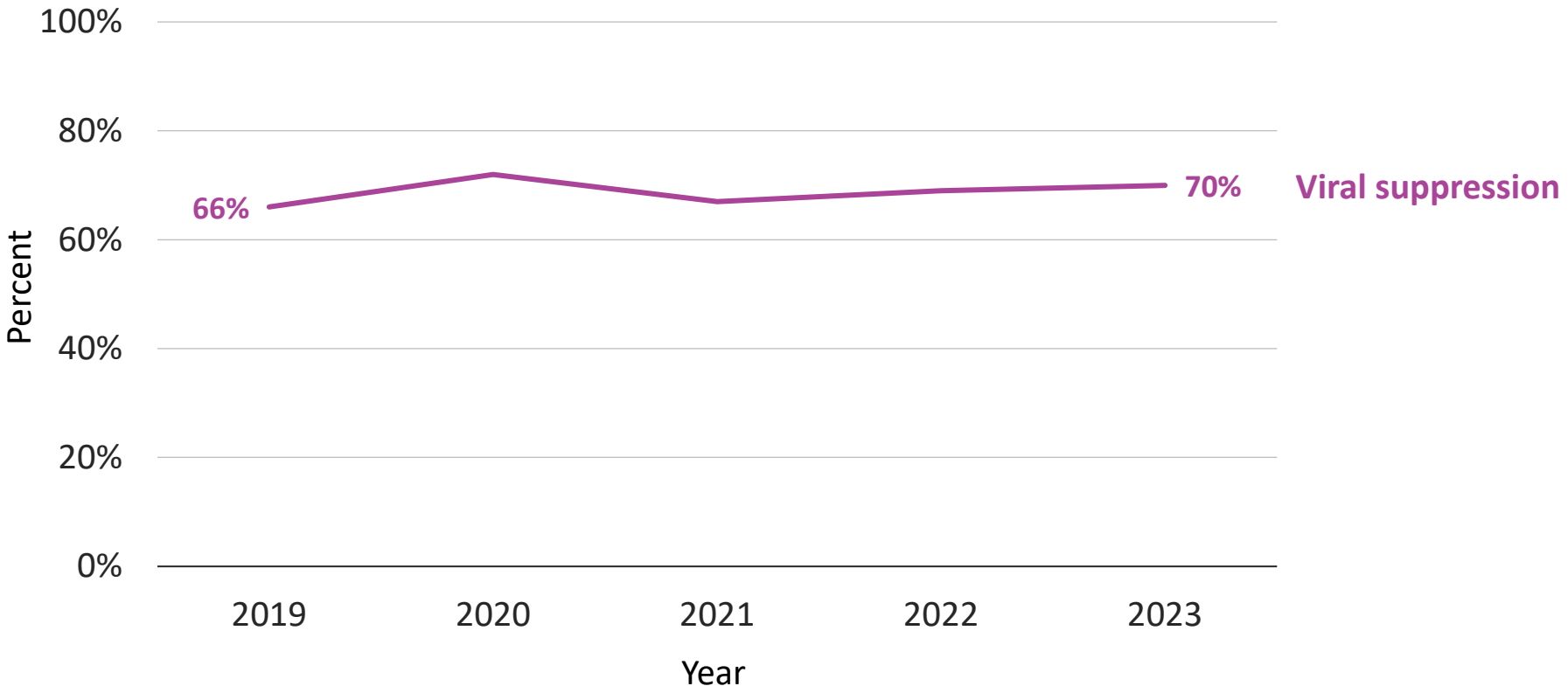


**The number of new HIV diagnoses among people with perinatally transmitted HIV in New York City remained low, with zero people newly diagnosed in 2023.**

# Care Outcomes Among People With Perinatally Transmitted HIV

New York City

# Viral Suppression<sup>1</sup> Among People Diagnosed With Perinatally Transmitted HIV<sup>2</sup> in New York City, 2019-2023



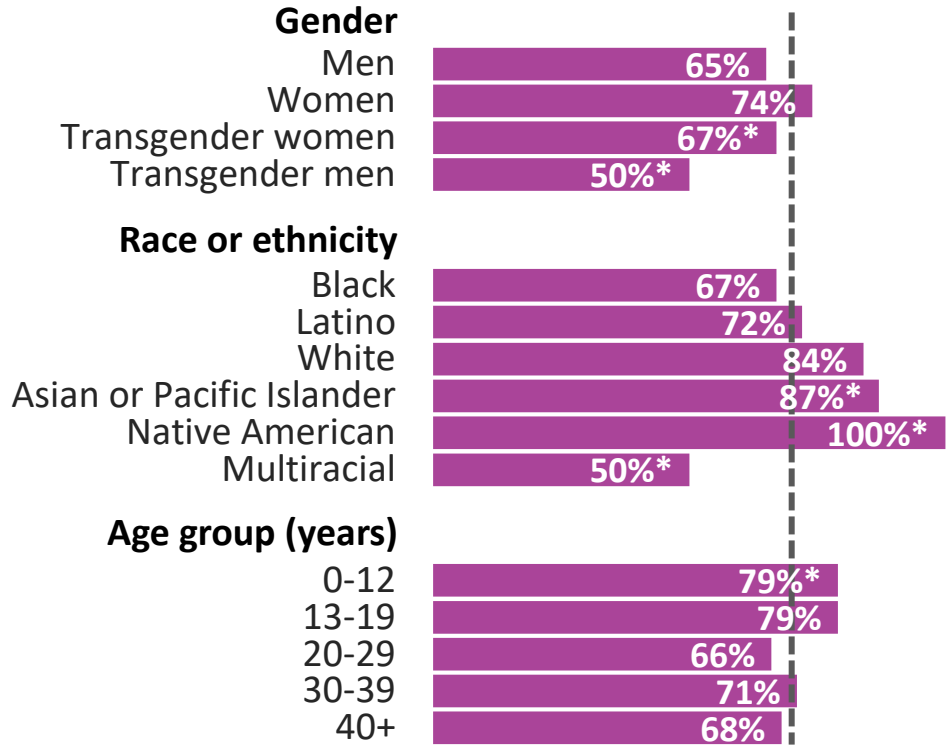
**Viral suppression has increased by four percentage points among people diagnosed with perinatally transmitted HIV in New York City from 2019 to 2023, but it still lags behind the citywide proportion of 84% viral suppression among all people with HIV.**



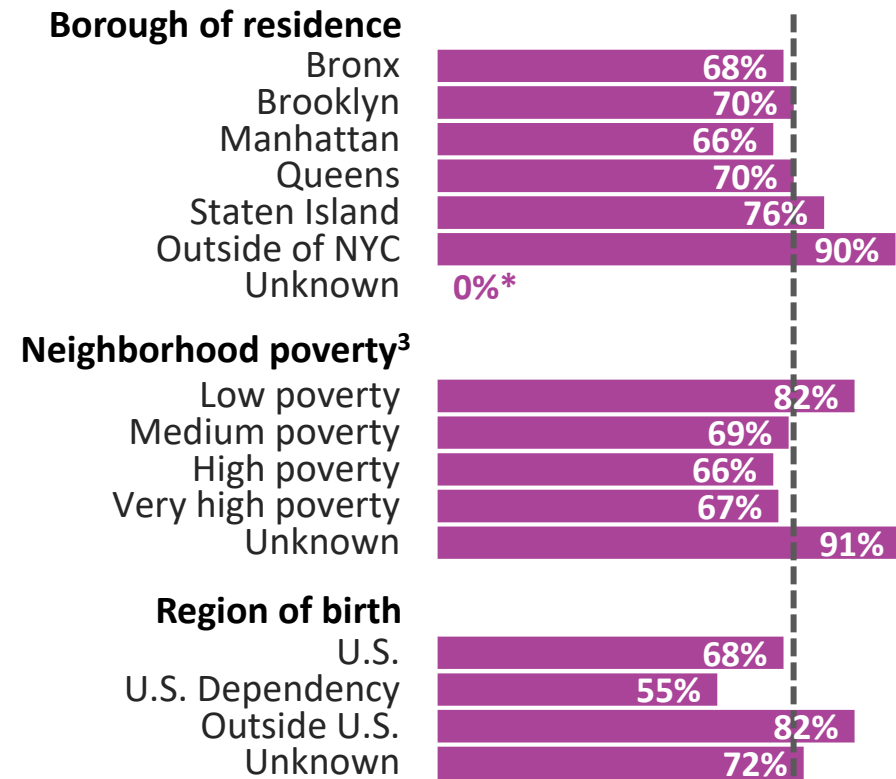
<sup>1</sup>Viral suppression is defined as the last HIV viral load in the calendar year <200 copies/mL.  
<sup>2</sup>People diagnosed with HIV and viral suppression were calculated using the statistical weighting method. For more details and references, see Technical Notes.  
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2024.

# Viral Suppression<sup>1</sup> Among People Diagnosed With Perinatally Transmitted HIV<sup>2</sup> in New York City by Demographic Group, 2023

70% overall among people diagnosed with perinatally transmitted HIV



70% overall among people diagnosed with perinatally transmitted HIV



Differences in viral suppression exist across demographic groups among people diagnosed with perinatally transmitted HIV.



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

<sup>2</sup>People diagnosed with HIV and viral suppression were calculated using the statistical weighting method. For more details and references, see Technical Notes.

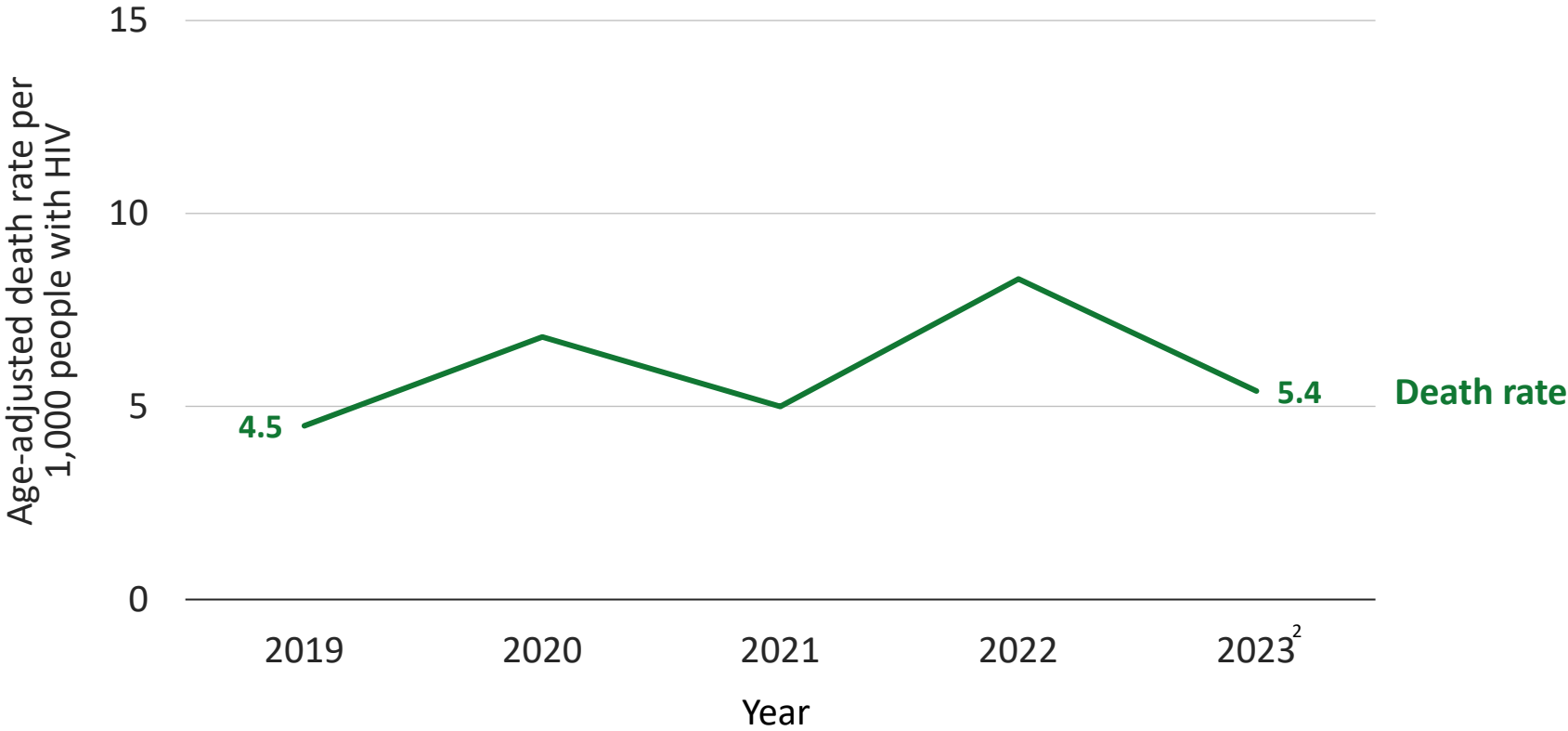
<sup>3</sup>Neighborhood poverty level is determined by the proportion of residents living below the federal poverty level (FPL) in the NYC ZIP code of residence at diagnosis.

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, 2024.



# Age-Adjusted<sup>1</sup> Death Rate per 1,000 People Diagnosed with Perinatally Transmitted HIV in New York City, 2019-2023



The age-adjusted death rate among people with perinatally transmitted HIV increased by 20% from 2019 to 2023. The number of deaths remained low with 23 decedents in 2023.



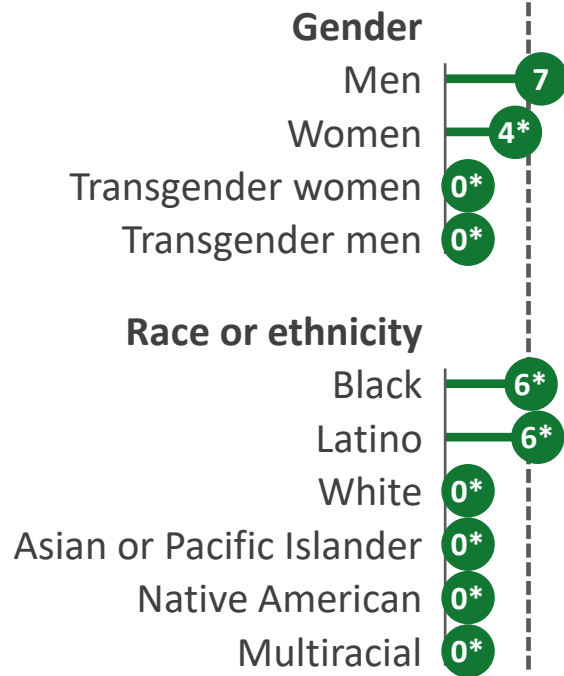
<sup>1</sup>Age-adjusted to the standard 2000 U.S. population. People with ages outside of 10 to 39 years and those newly diagnosed with HIV at death were excluded from the numerator.

<sup>2</sup>Death data for 2023 are incomplete.

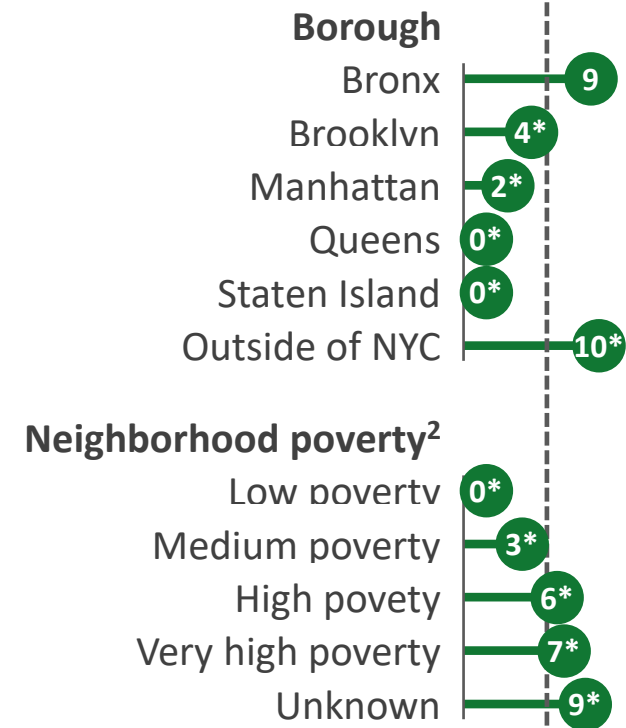
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2024.

# Age-Adjusted<sup>1</sup> Death Rate per 1,000 People Diagnosed with Perinatally Transmitted HIV in New York City by Demographic Group, 2023

5.4 deaths per 1,000 people diagnosed with perinatally transmitted HIV overall



5.4 deaths per 1,000 people diagnosed with perinatally transmitted HIV overall



**Differences in the age-adjusted death rate exist across demographic groups among people diagnosed with perinatally transmitted HIV in New York City.**

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

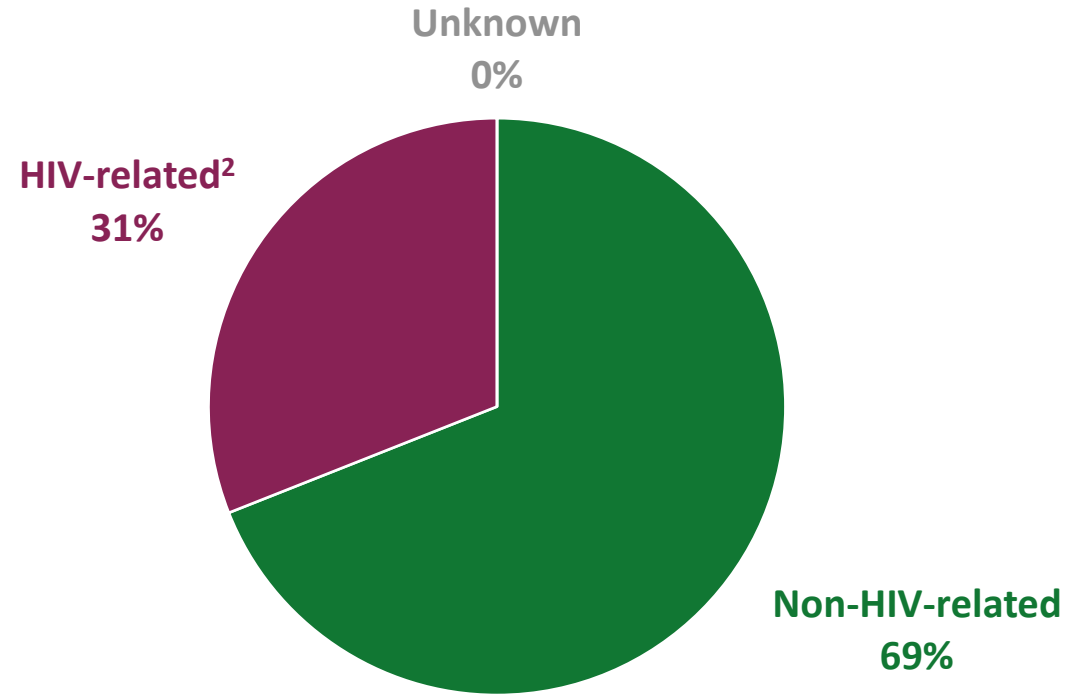
<sup>1</sup>Age-adjusted to the standard 2000 U.S. population. People with ages outside of 10 to 39 years and those newly diagnosed with HIV at death were excluded from the numerator.

<sup>2</sup>Neighborhood 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.

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2024.

# Proportion of Deaths Among People Diagnosed with Perinatally Transmitted HIV in New York City by Cause of Death, 2022<sup>1</sup>



**In 2022, 69% of deaths among people diagnosed with perinatally transmitted HIV were due to non-HIV-related causes. Among these, the top cause was major cardiovascular disease (21%).**

<sup>1</sup>Cause of death data are not yet available for 2023.

<sup>2</sup>ICD10 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://www.nyc.gov/assets/doh/downloads/pdf/vs/2021sum.pdf>.

As reported to the New York City Department of Health and Mental Hygiene by March 31, 2024.

## Appendix: How to Find Our Data

The New York City Department of Health and Mental Hygiene (NYC Health Department) issues the various publications related to our HIV surveillance data, including:



- **Annual HIV surveillance reports, surveillance slide sets, and statistics tables**, available at: <https://www.nyc.gov/site/doh/data/data-sets/hiv-aids-surveillance-and-epidemiology-reports.page>
- **HIV Care Status Reports**, available at: <https://www.nyc.gov/site/doh/health/health-topics/aids-hiv-care-status-reports-system.page>
- **HIV Care Continuum Dashboards**, available at: <https://www.nyc.gov/site/doh/health/health-topics/care-continuum-dashboard.page>

For HIV surveillance data requests, email [HIVReport@health.nyc.gov](mailto:HIVReport@health.nyc.gov). Please allow a minimum of two weeks for requests to be completed.

# Appendix: Definitions and Methodology 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](http://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.

## Methodology 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 HIV Care Continuum

- **People with HIV** is calculated as the number of people diagnosed with 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  $\geq 1$  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.

## Appendix: Acknowledgements

This report was prepared by the HIV Epidemiology Program in the NYC Health Department's Bureau of Hepatitis, HIV, and Sexually Transmitted Infections. We would like to acknowledge staff in the HIV Epidemiology Program's Surveillance Unit, ACE Team, Core HIV Surveillance Special Projects, and Data Support Unit, whose work is the foundation of this report.

The HIV Epidemiology Program's work depends on the participation of NYC providers, New Yorkers with HIV, community members and multiple other contributors. To them we are immensely indebted. Thank you.