

PERINATAL HIV AMONG CHILDREN IN NEW YORK CITY, 2020



HIV Epidemiology Program

New York City Department of Health and Mental Hygiene



Published January 2022

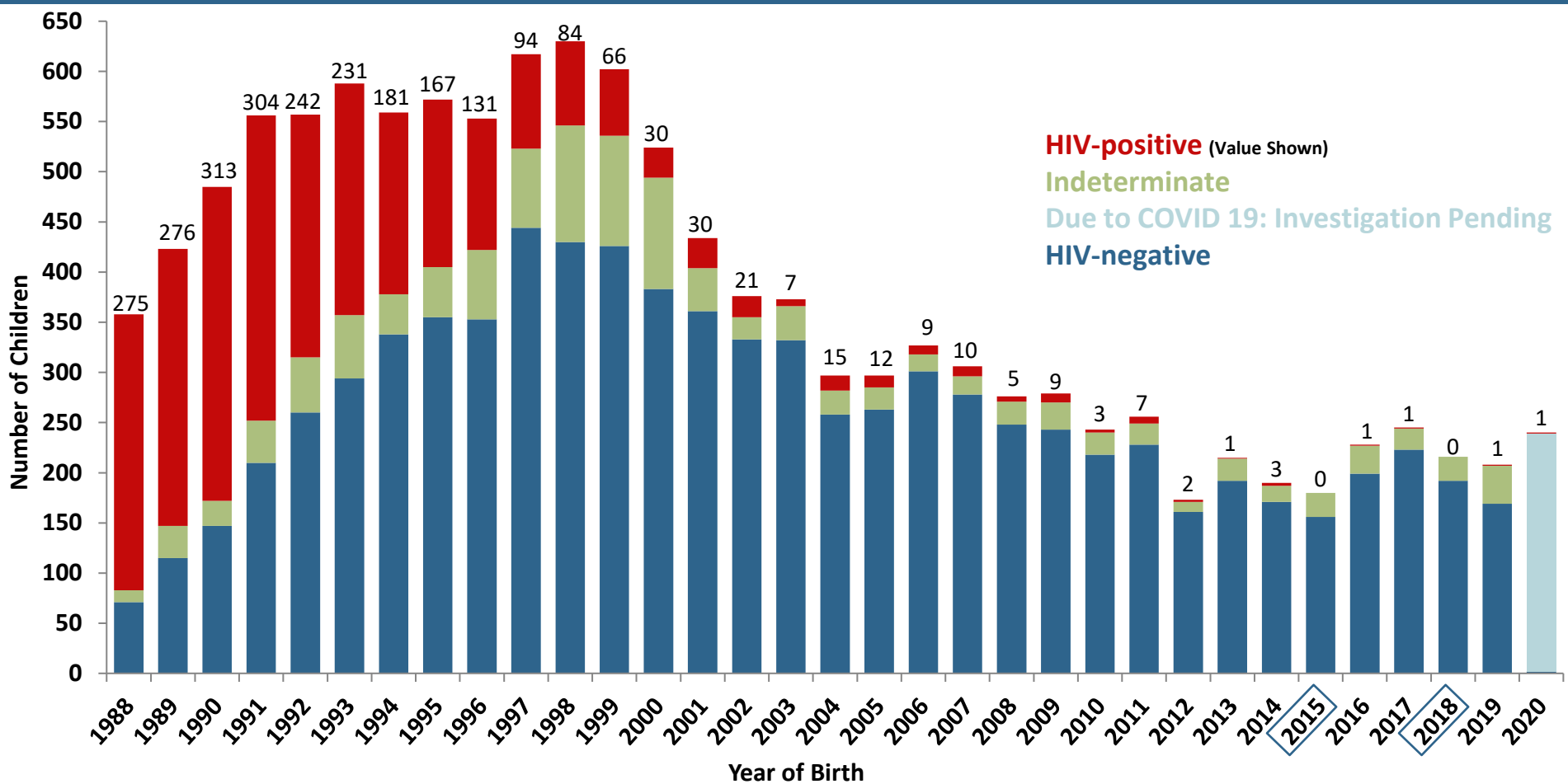
<https://www1.nyc.gov/site/doh/data/data-sets/epi-surveillance-slide-sets.page>

TABLE OF CONTENTS

SLIDE NUMBER:

3. CURRENT HIV STATUS OF CHILDREN BORN TO HIV-POSITIVE PEOPLE AT SELECT NYC MEDICAL FACILITIES IN NYC, 1988-2020
4. CURRENT VITAL STATUS AMONG PERINATALLY HIV-INFECTED CHILDREN DIAGNOSED IN NYC, 1977-2020
5. DEMOGRAPHICS OF PERINATALLY HIV-INFECTED CHILDREN DIAGNOSED IN NYC, 2001-2020
6. AGE AT DIAGNOSIS OF PERINATALLY HIV-INFECTED CHILDREN DIAGNOSED IN NYC, 1979-2020
7. VIRAL SUPPRESSION AMONG PEOPLE LIVING WITH HIV DUE TO PERINATAL TRANSMISSION IN NYC, 2020
8. AGE AT DEATH AMONG PEOPLE WITH HIV DUE TO PERINATAL TRANSMISSION IN NYC, 1981-2020
9. CAUSE OF DEATH AMONG PEOPLE WITH HIV DUE TO PERINATAL TRANSMISSION IN NYC, 1981-2019
10. HOW TO FIND OUR DATA
11. APPENDIX 1: DEFINITIONS AND STATISTICAL NOTES
12. APPENDIX 2: DEFINITIONS

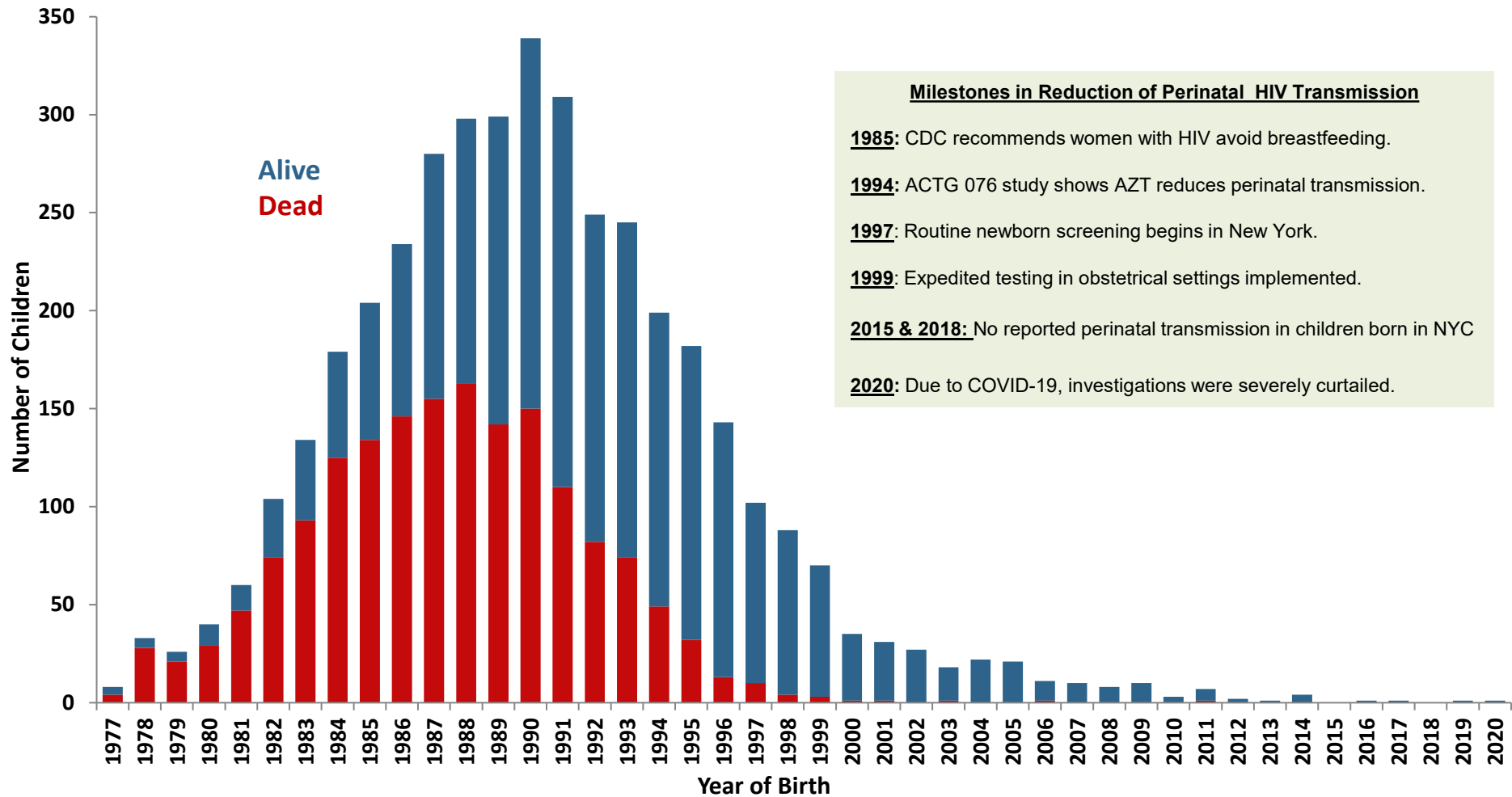
CURRENT HIV STATUS¹ OF CHILDREN BORN TO HIV-POSITIVE PEOPLE² AT SELECT NYC MEDICAL FACILITIES³ IN NYC, 1988-2020⁴



From 2016-2020, less than 1% of infants born to women with HIV were HIV-positive. In 2015 and 2018, there were no reported perinatal transmissions in children born in NYC.

¹Children born to HIV-positive people are followed for 2 years after birth to determine HIV status. HIV status is indeterminate if the child is lost to follow-up.
²Refers to people with female sex at birth.
³Includes data collected at high-volume NYC medical facilities that care for the majority of HIV-exposed and HIV-positive children (N=21 sites). Children born outside NYC are not included in this figure.
⁴Includes cases diagnosed as of December 31, 2020.
 As reported to the New York City Department of Health and Mental Hygiene by May 27, 2021.

CURRENT VITAL STATUS AMONG PERINATALLY HIV-INFECTED CHILDREN¹ DIAGNOSED IN NYC, 1977-2020



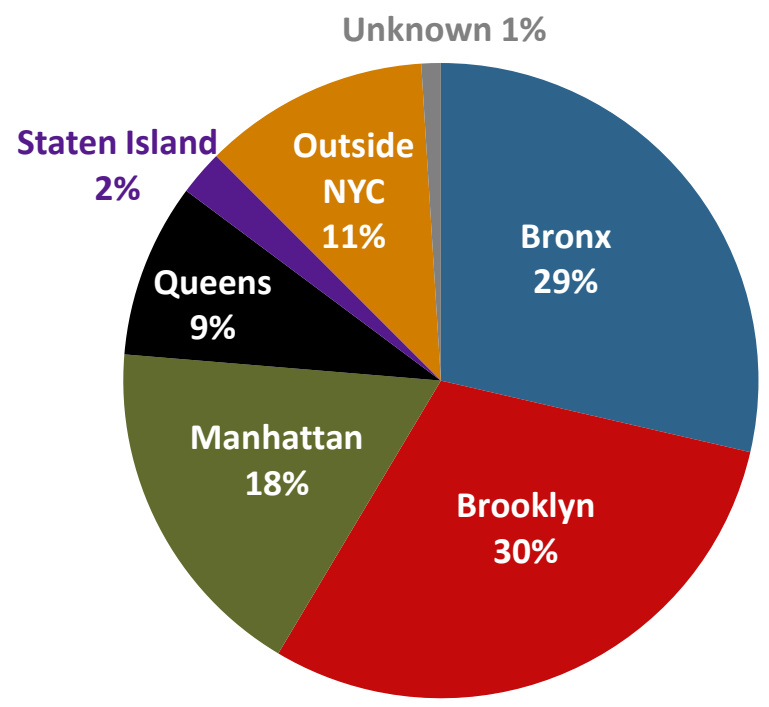
Milestones in Reduction of Perinatal HIV Transmission

- 1985:** CDC recommends women with HIV avoid breastfeeding.
- 1994:** ACTG 076 study shows AZT reduces perinatal transmission.
- 1997:** Routine newborn screening begins in New York.
- 1999:** Expedited testing in obstetrical settings implemented.
- 2015 & 2018:** No reported perinatal transmission in children born in NYC
- 2020:** Due to COVID-19, investigations were severely curtailed.

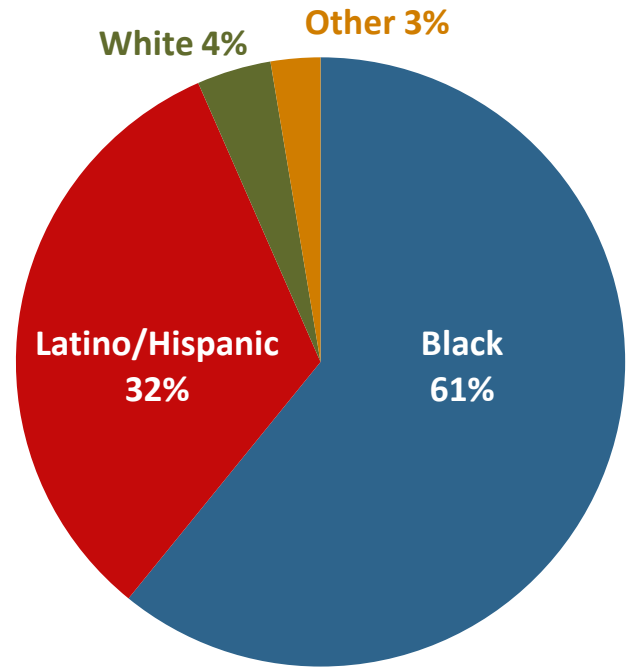
There were 21 children born between 2010 and 2020 with perinatal HIV infection diagnosed in NYC; 95% are currently alive.

¹Children are defined as people diagnosed between the ages of 0-12 years and includes those born in NYC and outside NYC. The number of perinatally HIV-infected children diagnosed in NYC between 1977 and 2020 was N=4,043. As reported to the New York City Department of Health and Mental Hygiene by May 27, 2021.

DEMOGRAPHICS OF PERINATALLY HIV-INFECTED CHILDREN¹ DIAGNOSED IN NYC, 2001-2020



Borough of Residence at Diagnosis

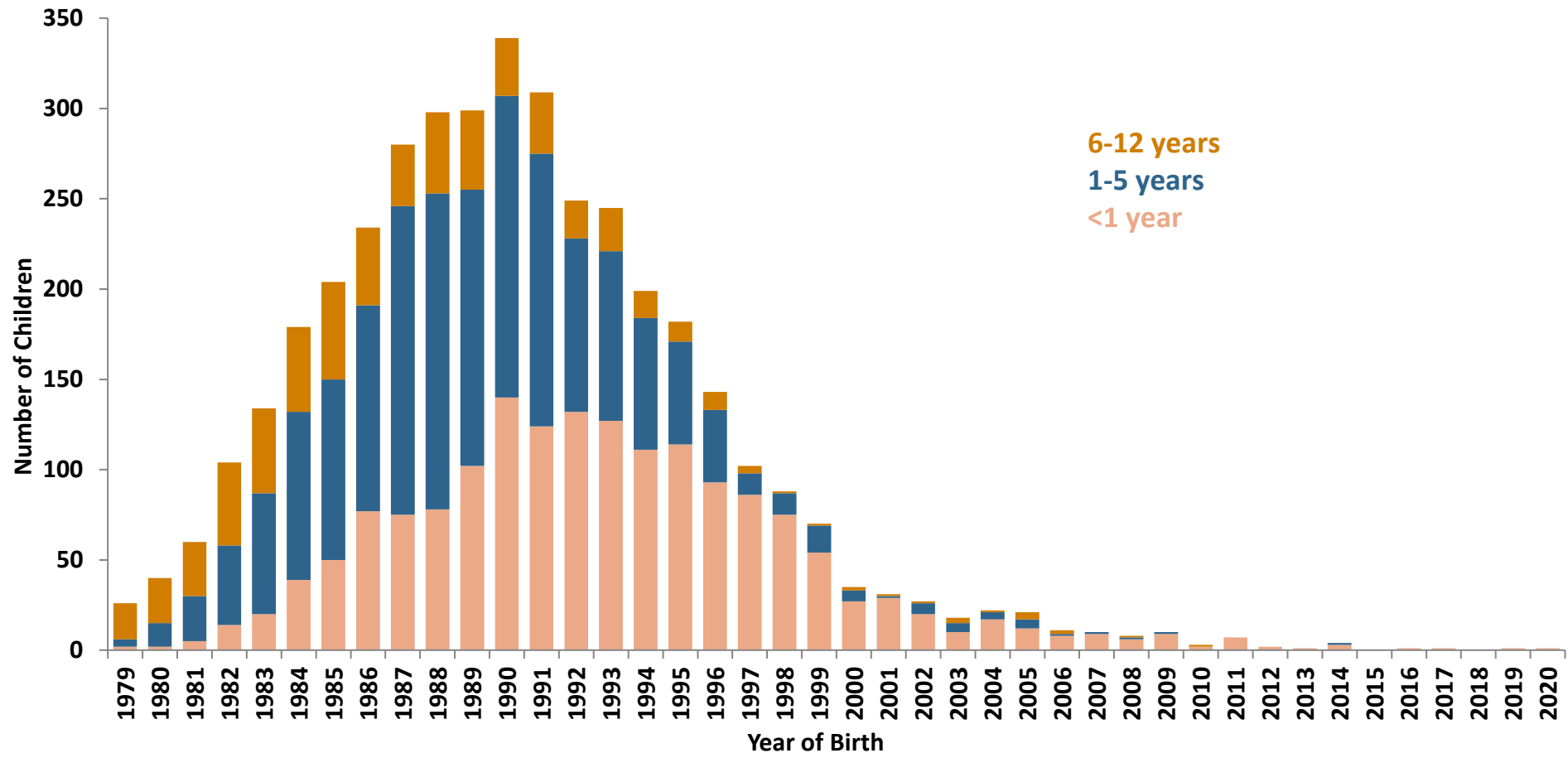


Race/Ethnicity

From 2001 to 2020, the largest proportion of perinatally HIV-infected children resided in Brooklyn or the Bronx at the time of diagnosis. Among all perinatally HIV-infected children, Black and Latino/Hispanic children accounted for the largest proportions.

¹Children are defined as people diagnosed between the ages of 0-12 years and includes those born in NYC and outside NYC. The number of perinatally HIV-infected children diagnosed in NYC between 2001 and 2020 was N=304. The "Other" race/ethnicity category includes Asian/Pacific Islander, Native American, and Multiracial children. As reported to the New York City Department of Health and Mental Hygiene by May 27, 2021.

AGE AT DIAGNOSIS OF PERINATALLY HIV-INFECTED CHILDREN¹ DIAGNOSED IN NYC, 1979-2020

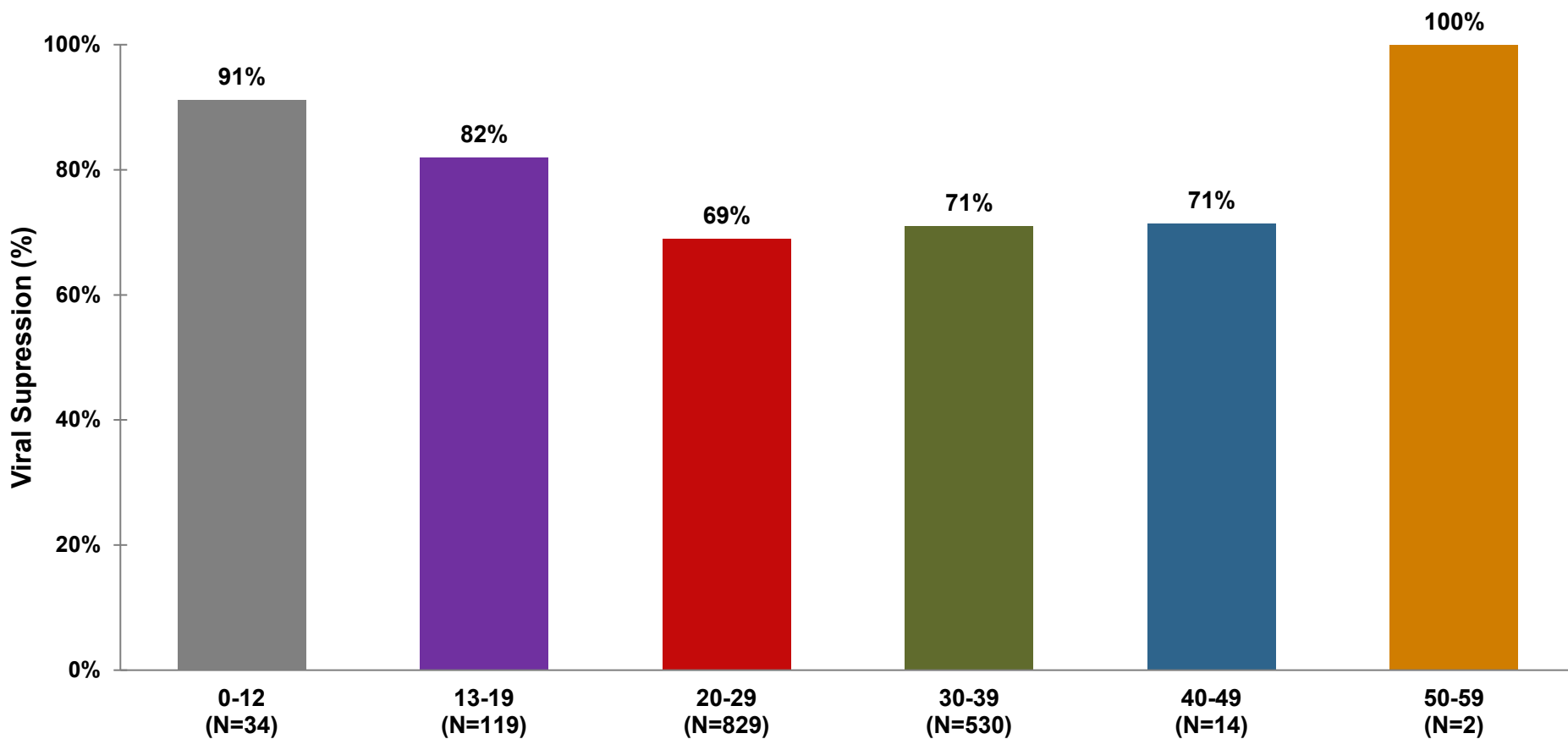


With the introduction of newborn screening and improved HIV testing during pregnancy, there has been a dramatic decline in children diagnosed with perinatal HIV infection at older ages.



¹Children are defined as people diagnosed between the ages of 0-12 years and includes those born in NYC and outside NYC. The number of perinatally HIV-infected children diagnosed in NYC between 1979 and 2020 was N=4,043. As reported to the New York City Department of Health and Mental Hygiene by May 27, 2021.

VIRAL SUPPRESSION AMONG PLWH DUE TO PERINATAL TRANSMISSION BY AGE IN NYC, 2020



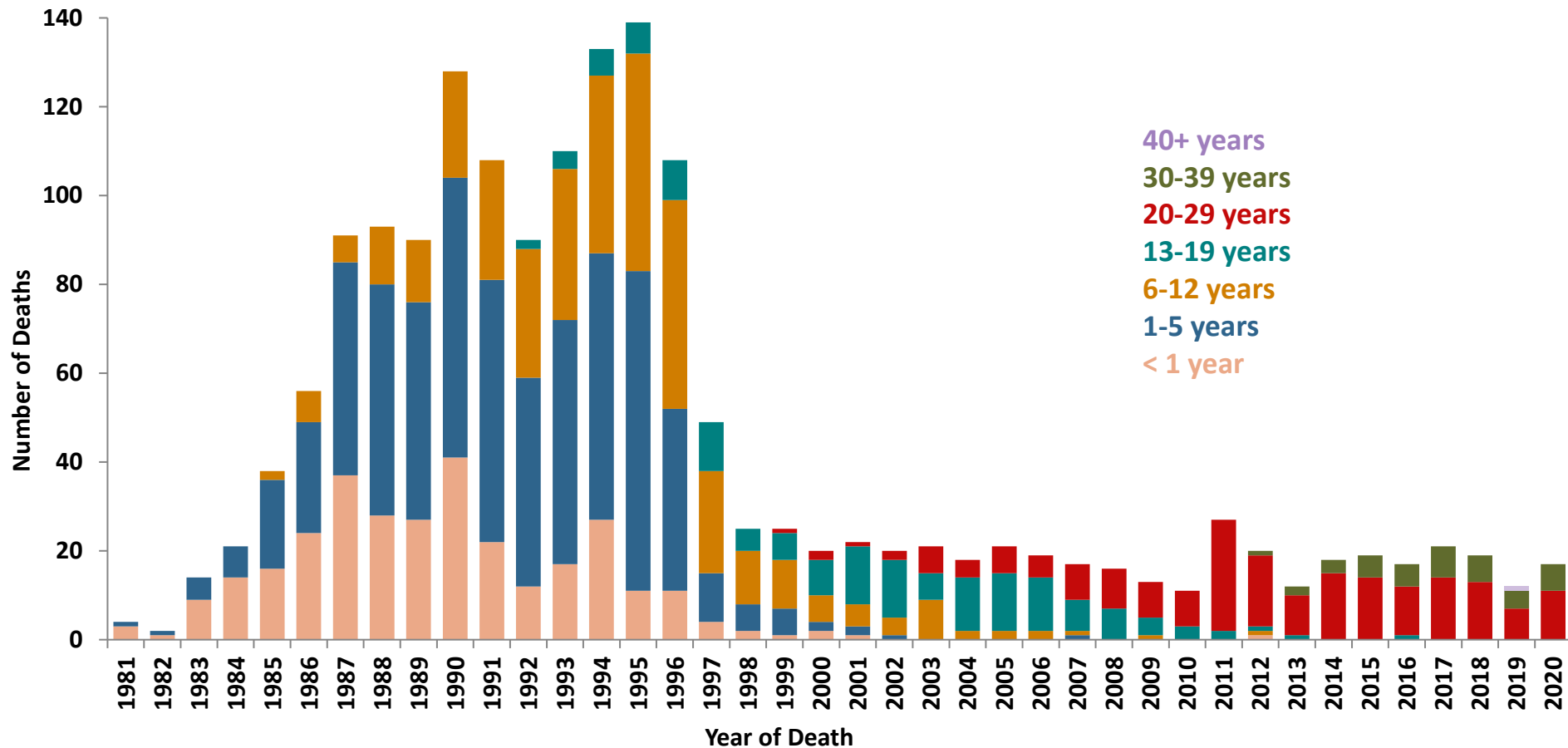
Among diagnosed people living with HIV (PLWH) with perinatally acquired HIV, those ages 20 to 29 had the smallest proportion virally suppressed.

PLWH=people living with HIV.

Viral suppression is calculated as PLWH in care with a most recent viral load measurement in 2020 of <200 copies/mL, plus the estimated number of out-of-care 2020 PLWH with a viral load <200 copies/mL, based on a statistical weighting method. (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.)

As reported to the New York City Department of Health and Mental Hygiene by May 27, 2021.

AGE AT DEATH AMONG PEOPLE WITH HIV DUE TO PERINATAL TRANSMISSION¹ IN NYC, 1981-2020²



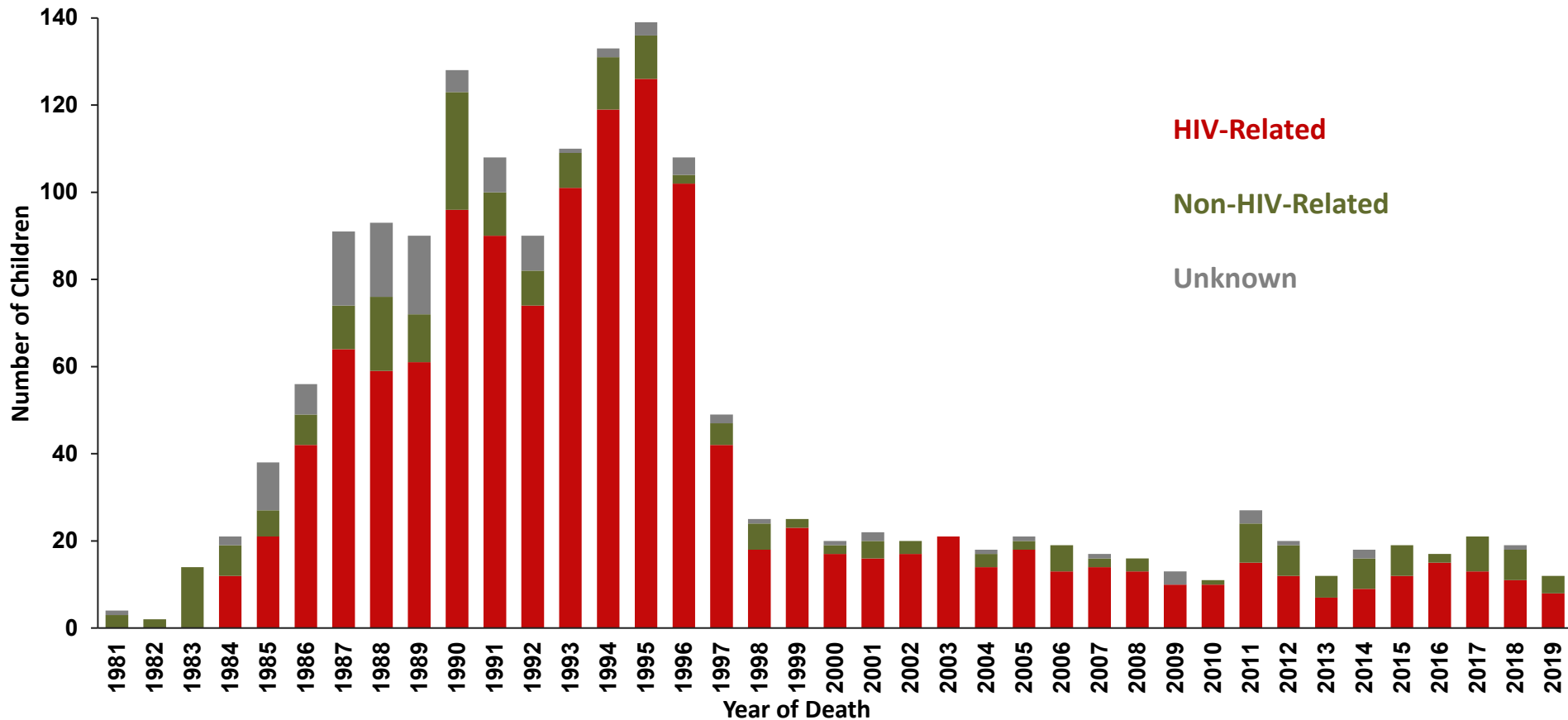
From 2015 to 2020, 98% of all deaths among people with perinatally acquired HIV infection occurred in people ages 20-39. This is a shift from earlier years (prior to 1995), when deaths occurred predominately in children under 6 years of age.

¹Includes people diagnosed with HIV acquired by perinatal transmission before the age of 13 years. Number of deaths among this group from 1981-2020 was N=1,704.

²Death data for 2020 are incomplete.

As reported to the New York City Department of Health and Mental Hygiene by May 27, 2021.

CAUSE OF DEATH AMONG PEOPLE WITH HIV DUE TO PERINATAL TRANSMISSION¹ IN NYC, 1981-2019²



From 2014 to 2018, 67% of all deaths among people with perinatally acquired HIV infection were due to HIV-related causes.

¹People with HIV or AIDS due to perinatal transmission are people diagnosed with HIV acquired by perinatal transmission before the age of 13 years. There was a total of 1,704 deaths in this group from 1981-2020.

²Cause of death data for 2020 are incomplete, and so are not shown here.

³ICD10 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 May 27, 2021.

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
 - Two weeks minimum needed for requests to be completed

APPENDIX 1:

DEFINITIONS AND STATISTICAL NOTES

Perinatal and Pediatric HIV Surveillance

The HIV Epidemiology Program collects data on HIV-exposed and HIV-positive infants and children diagnosed with HIV before 13 years of age. Data are used to monitor the prevention of perinatal transmission. Perinatal and pediatric surveillance data are informed by a range of other activities and data sources, including longitudinal case follow-up, the New York State Department of Health Comprehensive Newborn Screening Program, and CDC-funded special projects related to pediatric HIV.

Death data

Data on deaths occurring in NYC are obtained by matches with the NYC Vital Statistics Registry, medical chart reviews, and provider reports via the Provider Report Form, including HIV-positive autopsies by the Office of the Chief Medical Examiner. Data on deaths occurring outside NYC are from matches with the Social Security Death Master File and National Death Index.

APPENDIX 2:

DEFINITIONS

Definitions:

- Children are defined as people diagnosed between the ages of 0–12 years.
- Perinatal transmission is the designated risk factor for infants who acquired HIV during gestation, birth, or postpartum through breastfeeding to an HIV-positive person.
- “PLWH” refers to people living with HIV during the reporting period and alive at the end of the reporting period.
- “NYC” refers to New York City.
- For more definitions and technical notes see:
<http://www1.nyc.gov/site/doh/data/data-sets/hiv-aids-annual-surveillance-statistics.page>.