Bronx Community Health Dashboard:
HIV and AIDS

Created: 5/4/2017
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See last slide for more information about this project.

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Overview of HIV/AIDS in the Bronx

Disparities exist in early HIV/AIDS detection, but are declining

Bronx residents are being diagnosed with HIV at a lower rate and are living with HIV longer

Bronx residents with lower incomes and less education are more likely to have had an HIV/AIDS test

Bronx residents have the highest likelihood of ever having an HIV/AIDS screening compared to other boroughs

Newly diagnosed Bronx residents equally likely to initiate care, but somewhat less likely to have viral suppression, 2017

AIDS diagnoses are highest in the Bronx amongst non-Hispanic black residents and males

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Fewer people are being newly diagnosed with HIV and AIDS in the Bronx
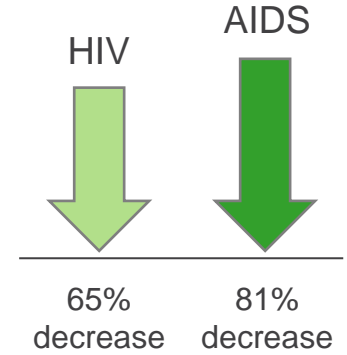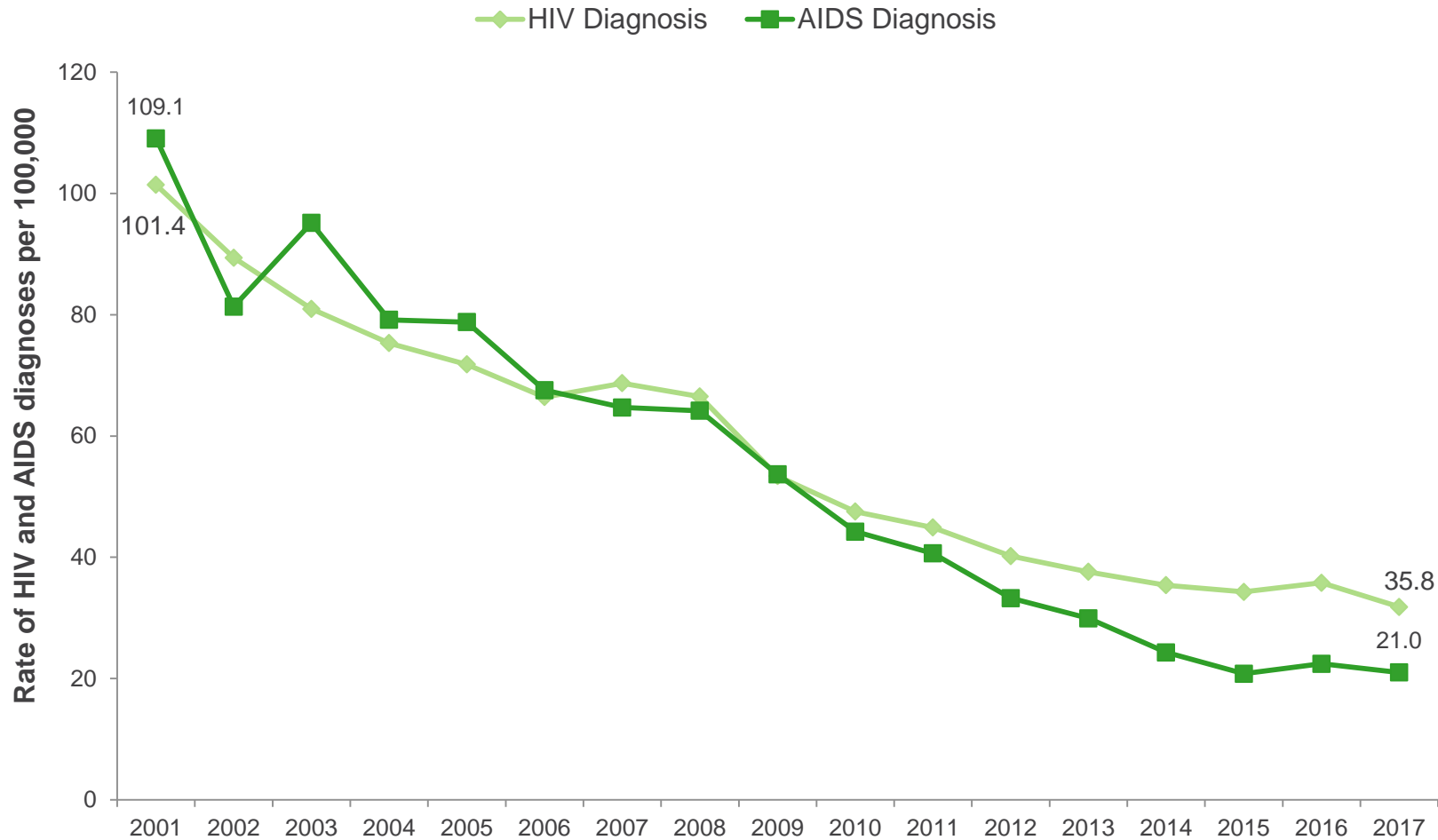
HIV Diagnosis: positive Western blot test in adults and positive PCR (polymerase chain reaction) test in infants <18 months

AIDS Diagnosis: HIV-infected and either 1+ AIDS-defining opportunistic illness or a lab test indicating suppressed CD4+ cell counts (<200 cells/µL)

Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2017.

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The percent of Bronx residents living with HIV/AIDS has been steadily increasing over the last 15 years

Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2017.

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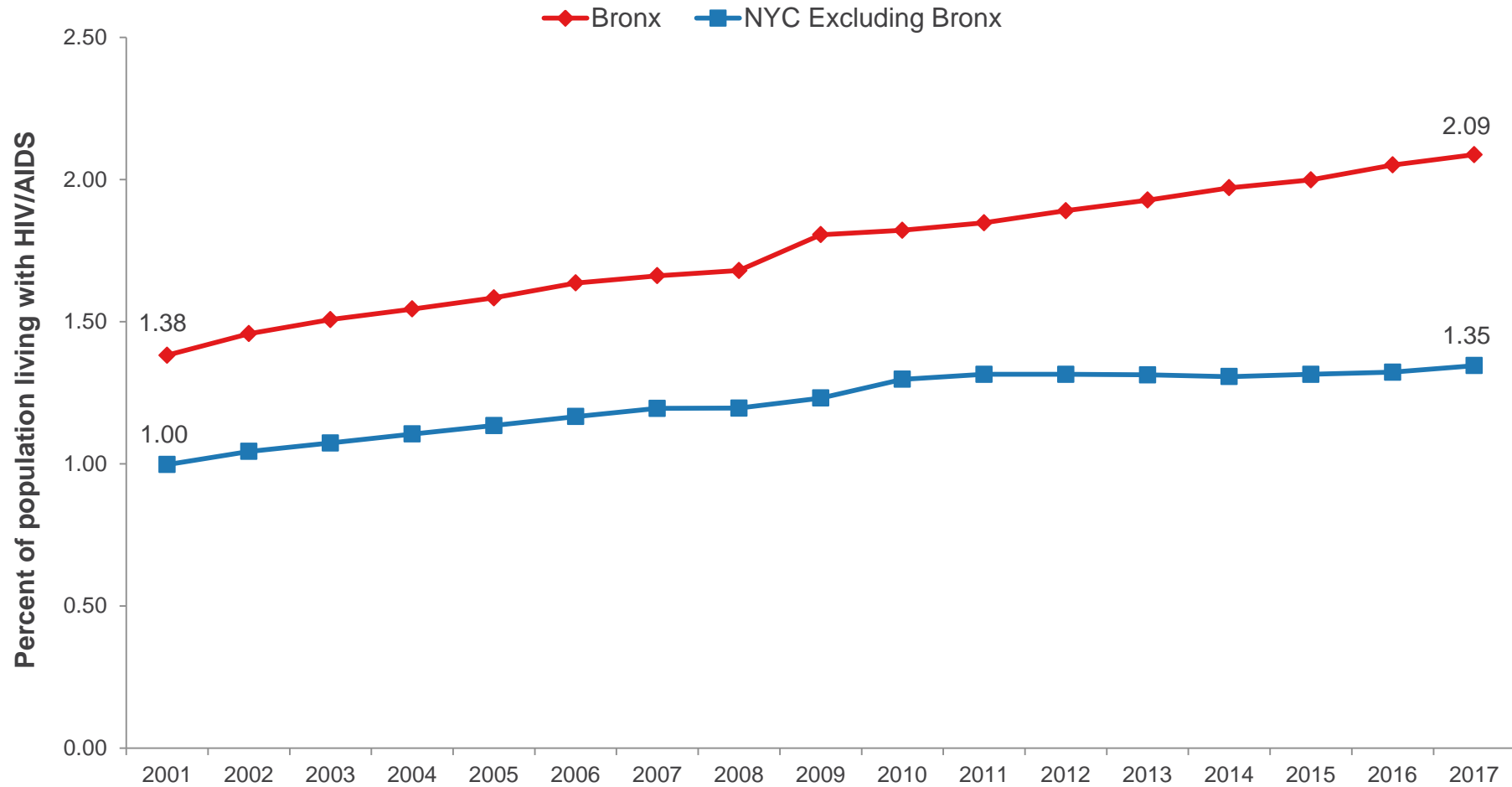
New HIV and AIDS diagnoses rates are falling

3 fold decrease in new HIV diagnoses

5 fold decrease in new AIDS diagnoses

5   Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2017.
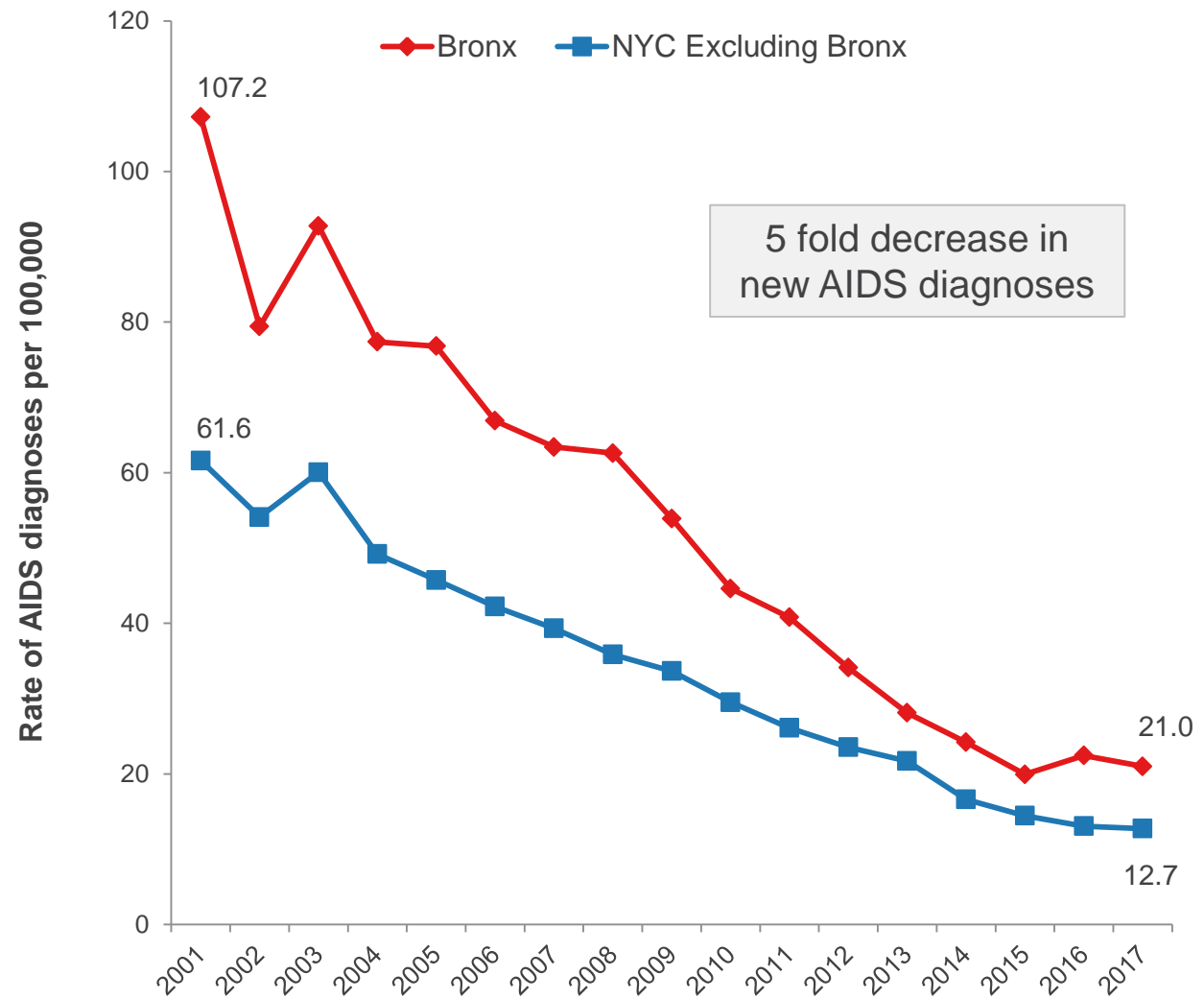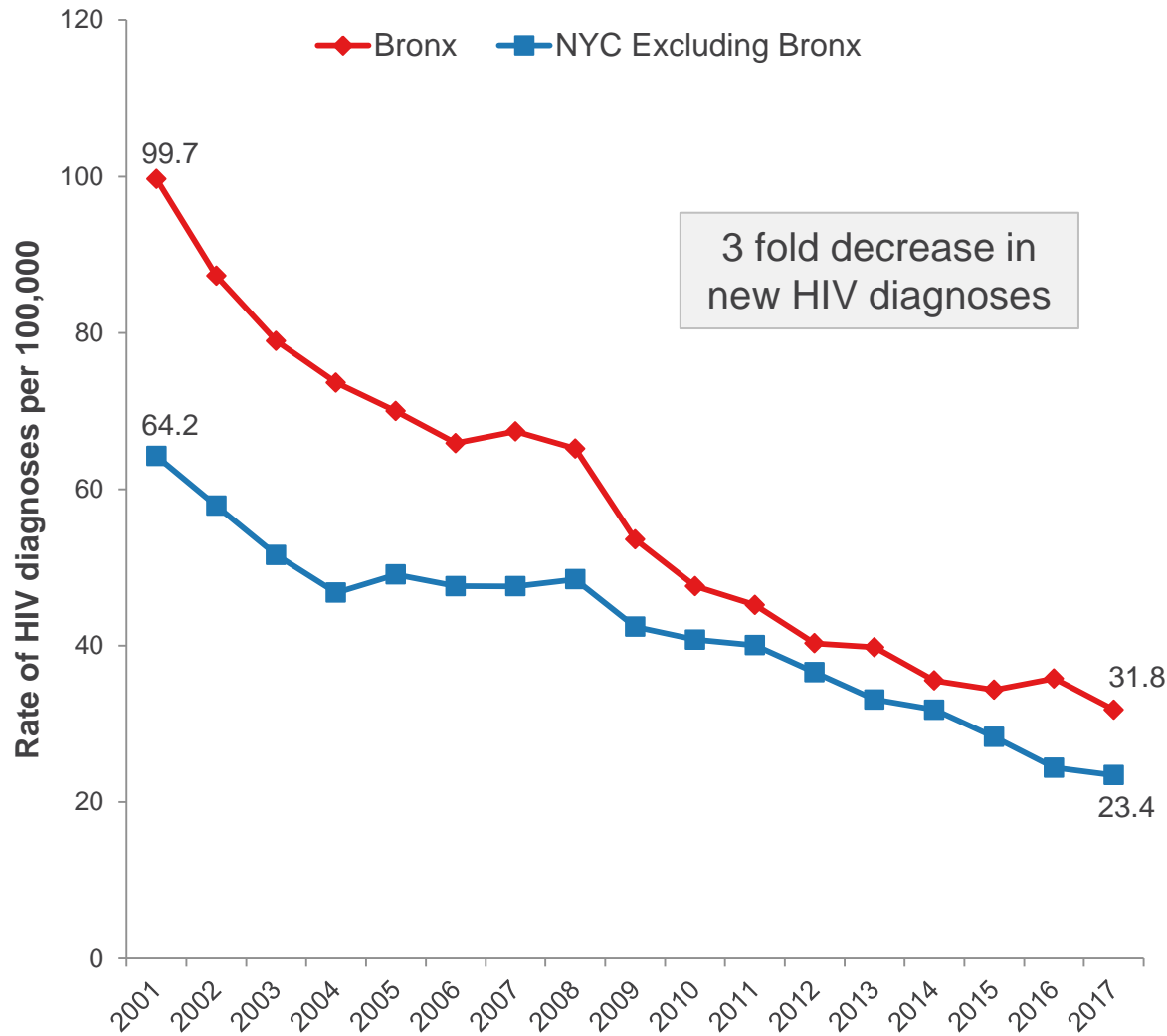
The rate of new HIV/AIDS cases is falling but the rate of people living with HIV/AIDS is increasing

Legend: People Living with HIV/AIDS · HIV Diagnosis · AIDS Diagnosis

Note different axis scales

Y-axis (left): Percent of People Living with HIV and AIDS
Y-axis (right): Rate of HIV and AIDS diagnoses per 100,000

Data labels: 107.2, 99.7, 1.4, 2.1, 31.8, 21.0

X-axis: 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2017.

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HIV Testing

Bronx adult residents are more likely to have ever had an HIV/AIDS test compared to other boroughs

Bronx only

Age-adjusted percent reporting ever getting HIV/AIDS test

Category	Value
Bronx	78.7
Brooklyn	64.2
Manhattan	71.8
Queens	58.2
Staten Island	52.1
18-24	63.9
25-44	89.6
45-64	83.7
65+	55.7
Male	74.5
Female	82.5
Married/coupled	78.3
Divorced/widowed/separated*	85.2
Never married	79.1

Data source: Community Health Survey, 2017.
Age results not age-adjusted.

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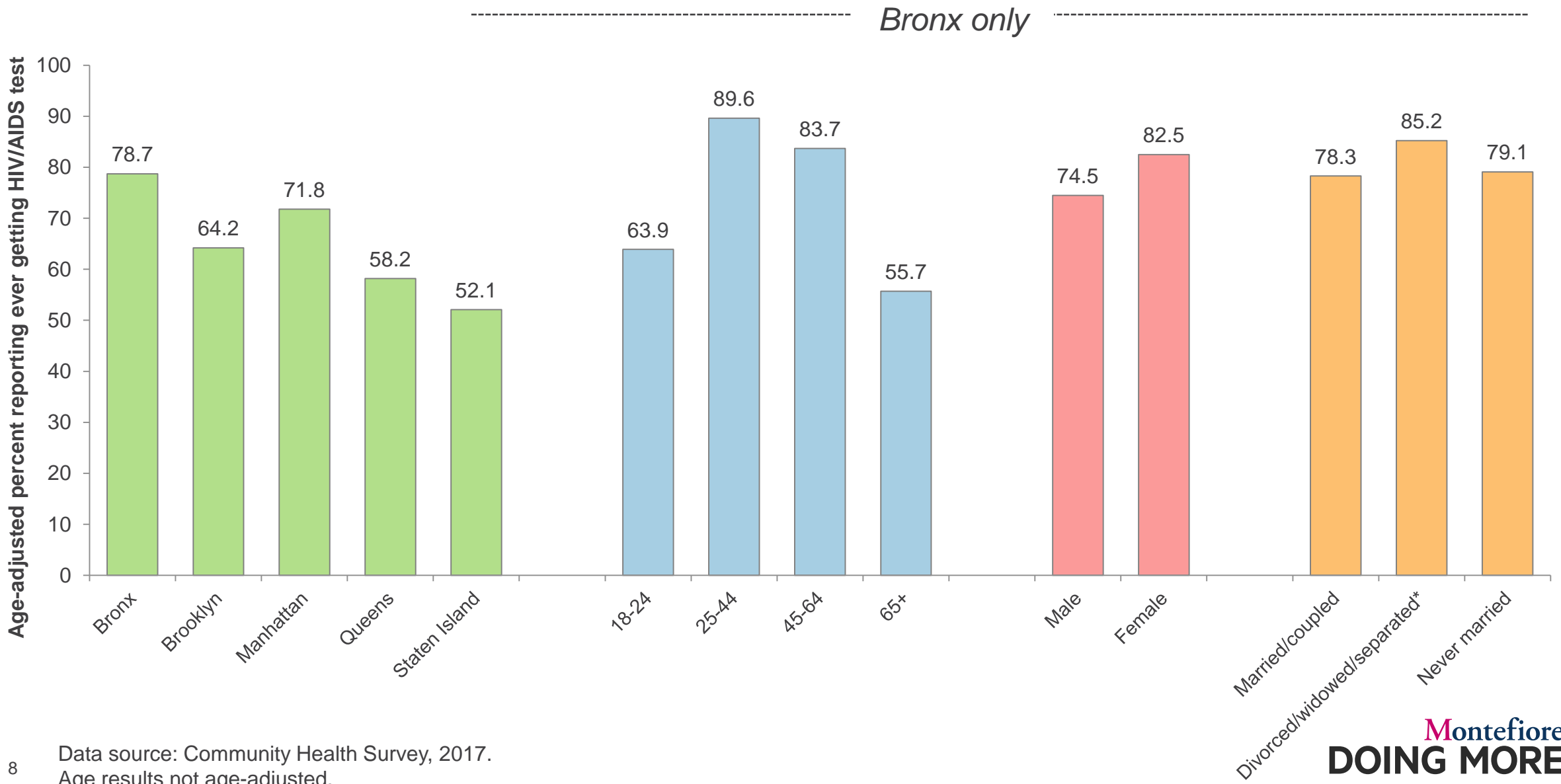
Residents with lower incomes and less education more likely to have ever had an HIV/AIDS test

Age-adjusted percent reporting ever getting HIV/AIDS test

Category	Value
Hispanic	84.9
Non-Hispanic black	78.9
Non-Hispanic white*	62.6
Highest poverty	84.7
High poverty	81.8
Medium poverty	74.6
Low poverty	71.8
Lowest poverty*	63.2
<HS	81.9
High school	79.9
Some college	77.4
College	73.4

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Data source: Community Health Survey, 2017.

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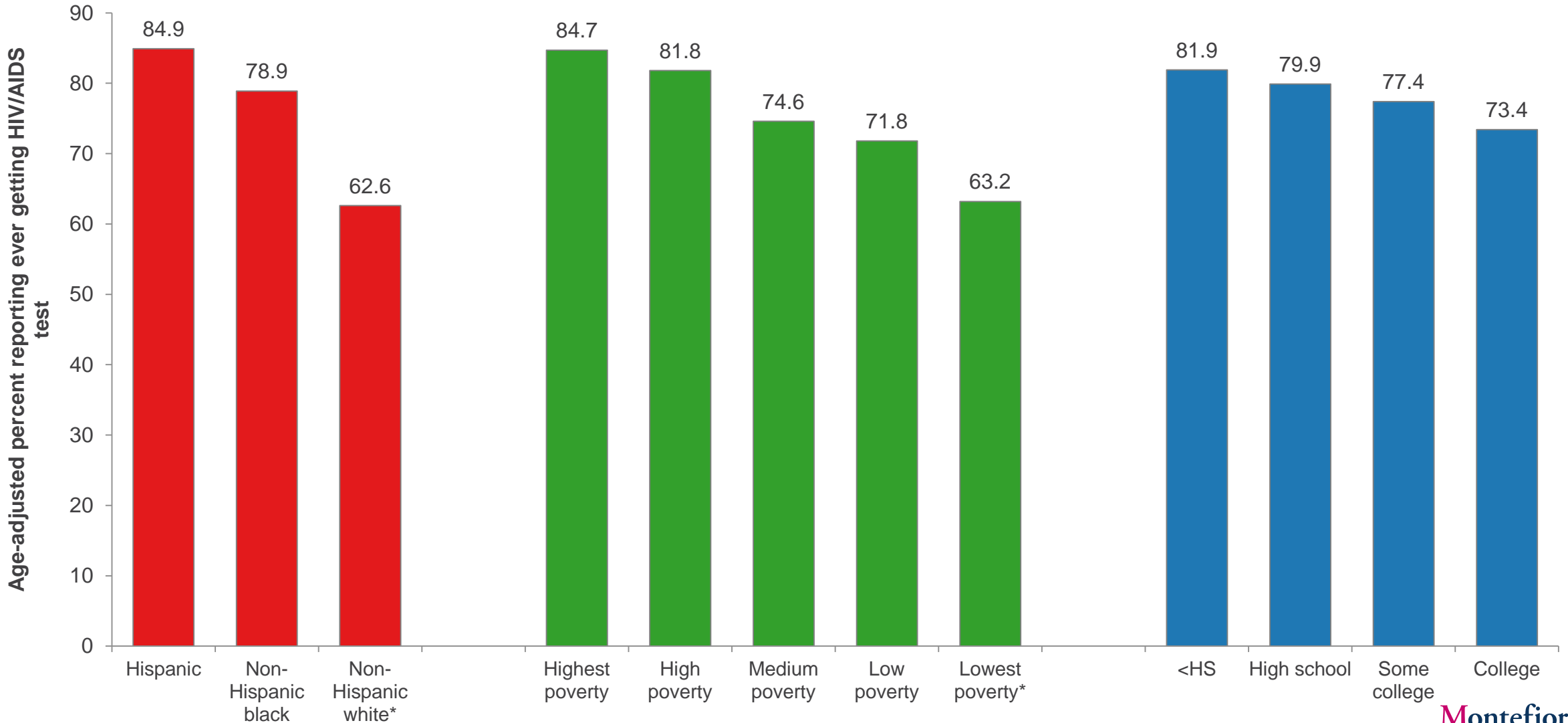
Since 2004, the Bronx has had the highest percentage of people ever getting an HIV/AIDS test

Age-adjusted percent reporting ever getting HIV/AIDS test

Legend: Bronx, Brooklyn, Manhattan, Queens, Staten Island

Starting values (2004): 54.3, 51.0, 44.7, 41.7, 36.2
Ending values (2017): 78.7, 71.8, 64.2, 58.2, 52.1
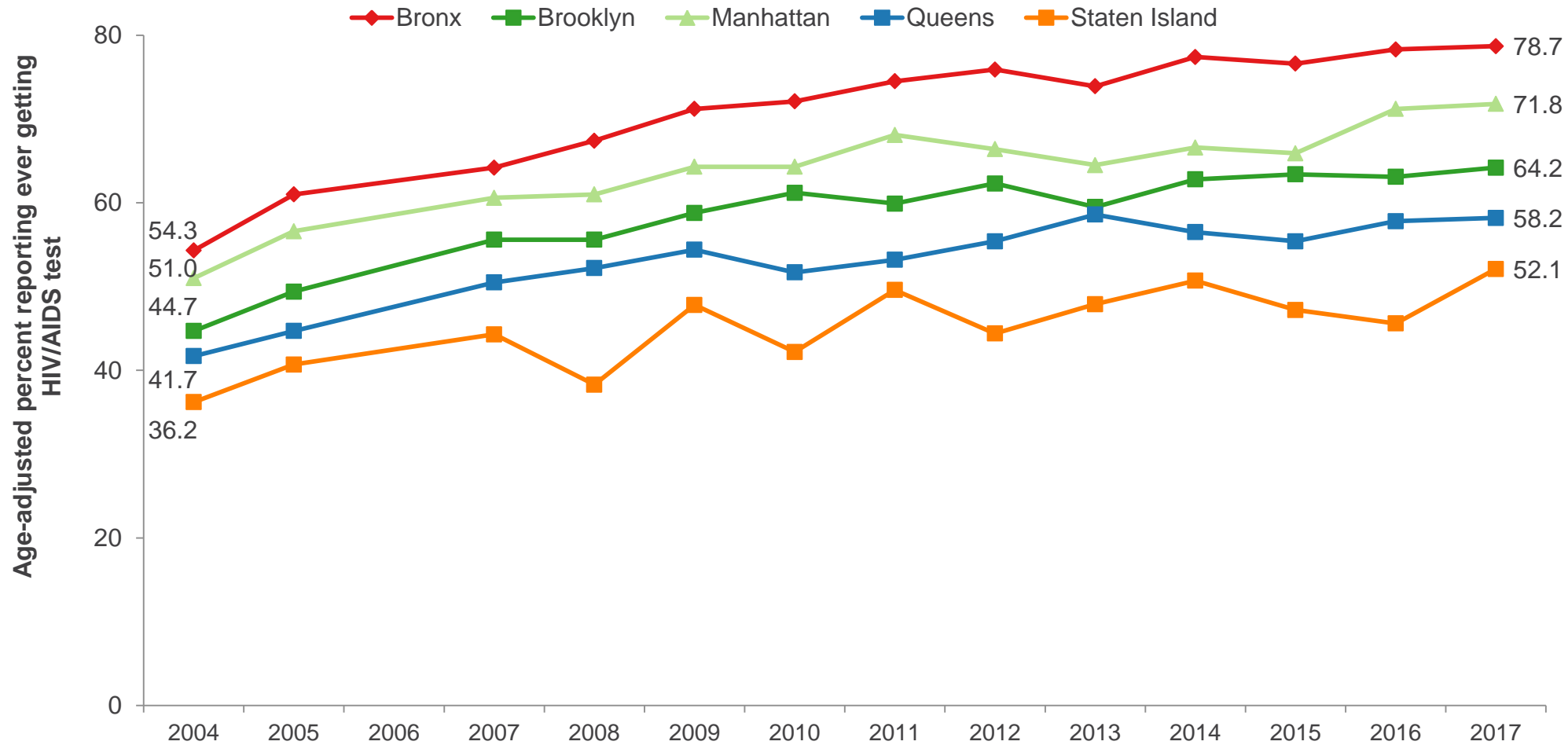
Data source: Community Health Survey, 2004-2017.
Comparable data not collected in 2006.

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HIV Diagnoses in the Bronx

HIV diagnosis rates have decreased in all groups, but disparities remain

Legend: Hispanic | Non-Hispanic Black | Non-Hispanic White | Asian

Y-axis: HIV diagnosis rate per 100,000 (0 to 180)

X-axis: 2001–2017

Non-Hispanic Black: 161.5 (2001) ... 51.9 (2017)
Hispanic: 88.0 (2001) ... 27.3 (2017)
Non-Hispanic White: 24.7 (2001) ... 13.1 (2017)
Asian: 13.4 (2001) ... 3.8 (2017)
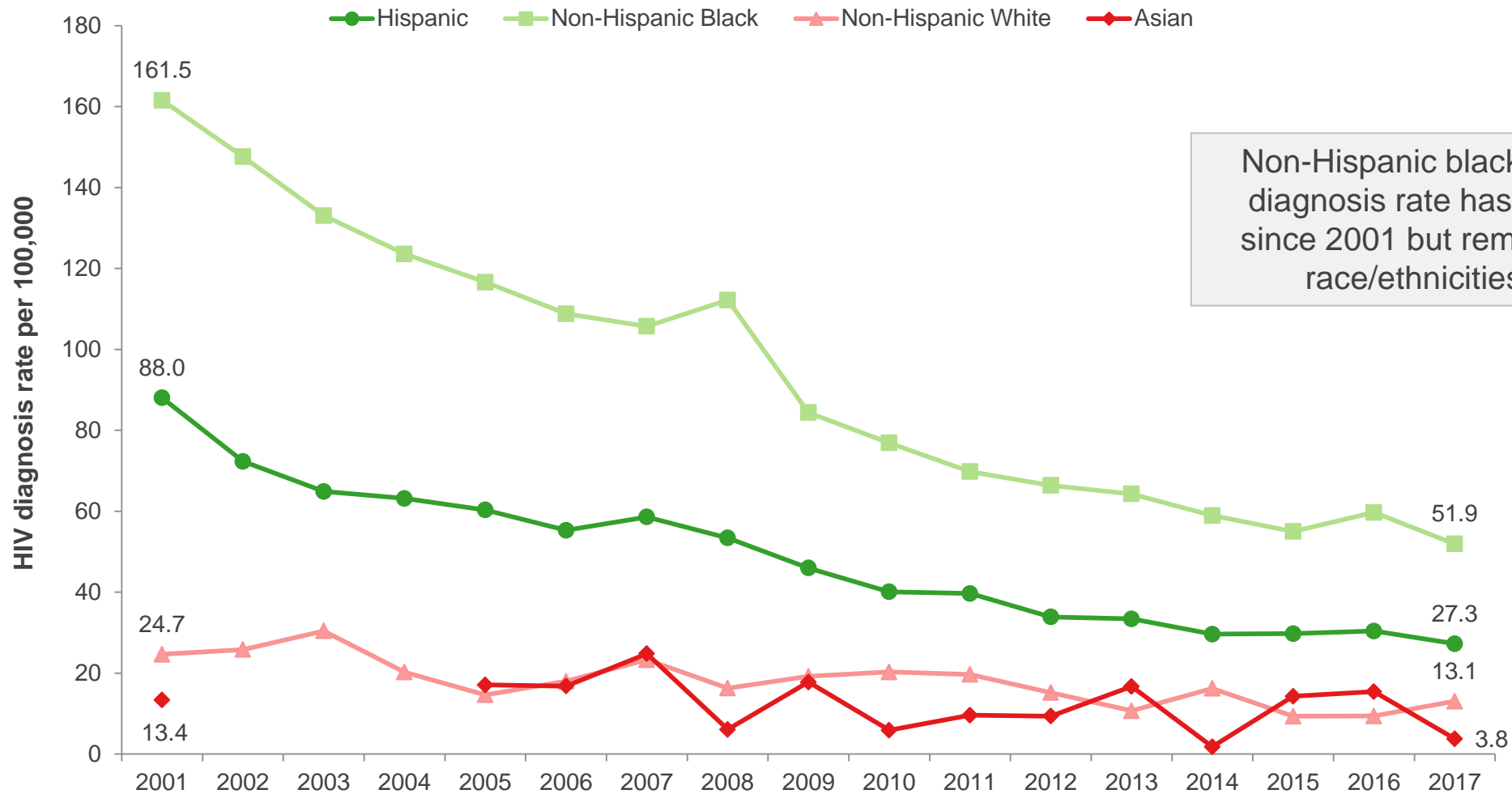
Non-Hispanic black population's HIV diagnosis rate has fallen over 3 fold since 2001 but remains highest of all race/ethnicities in the Bronx

Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2017. 2002-2004 data for the Asian population is unstable. For 2016 and 2017, denominators are from the American Community Survey. For all other years, denominators are DOHMH population estimates.

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Males in the Bronx have higher rates of HIV diagnoses
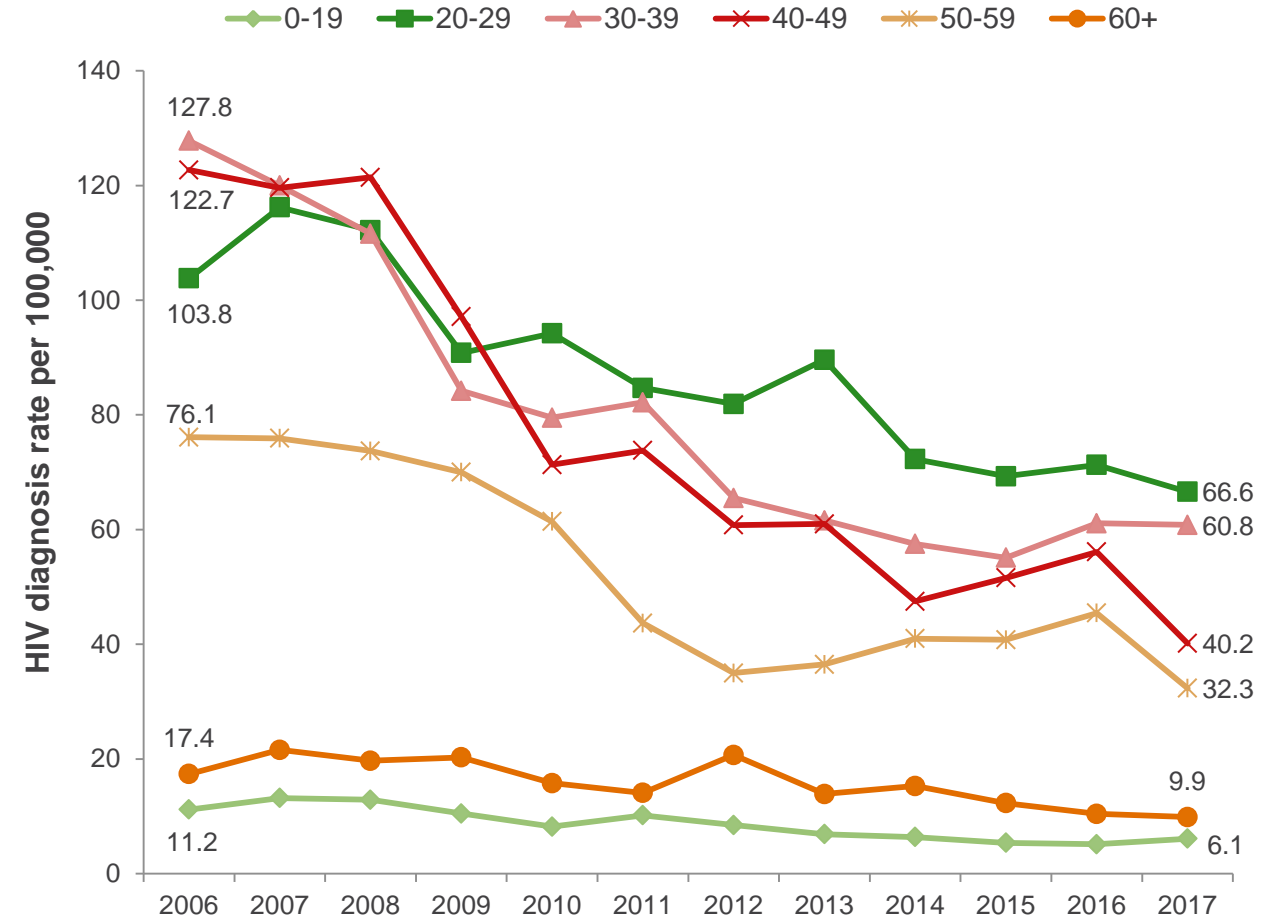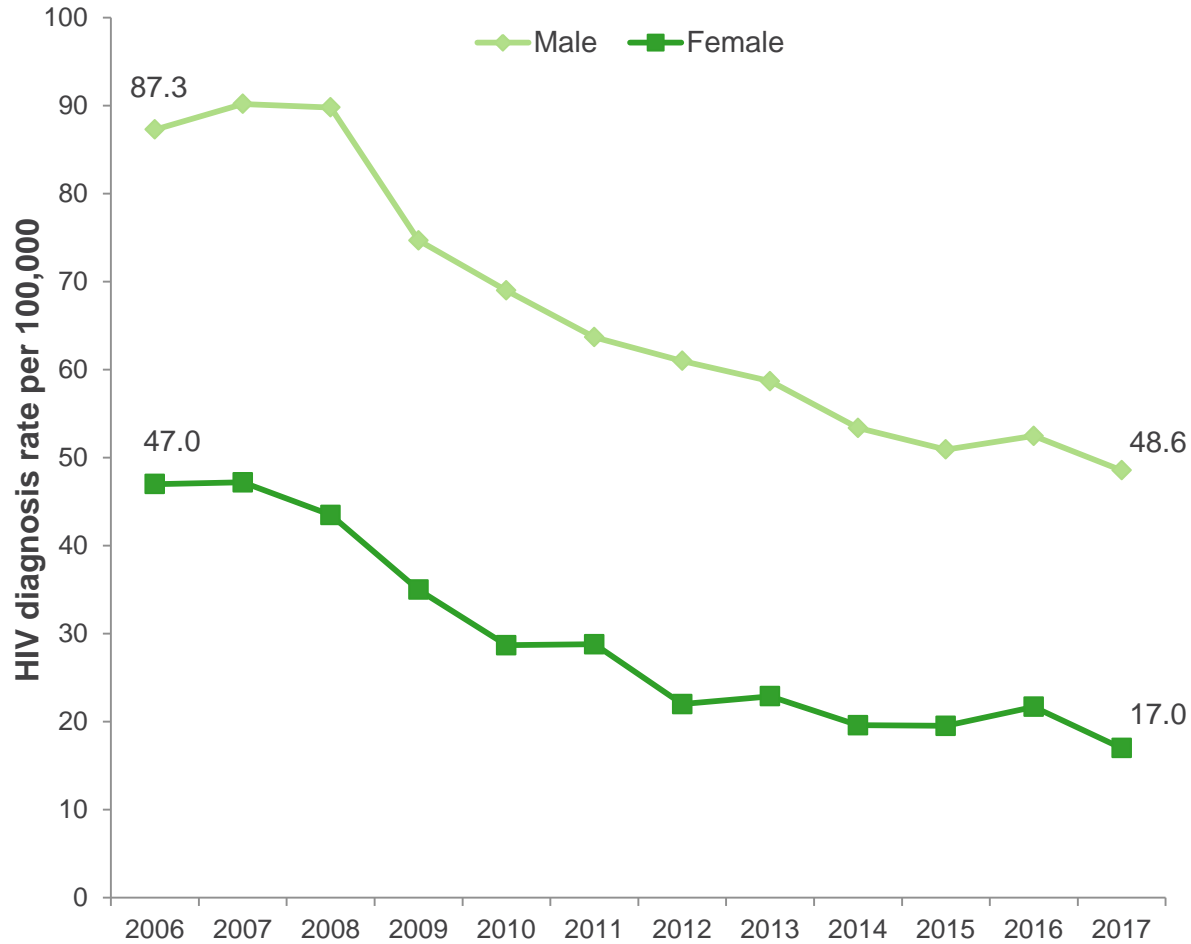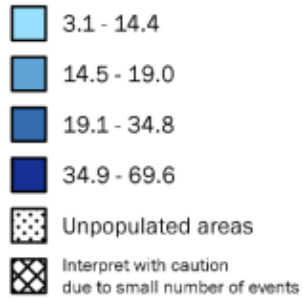

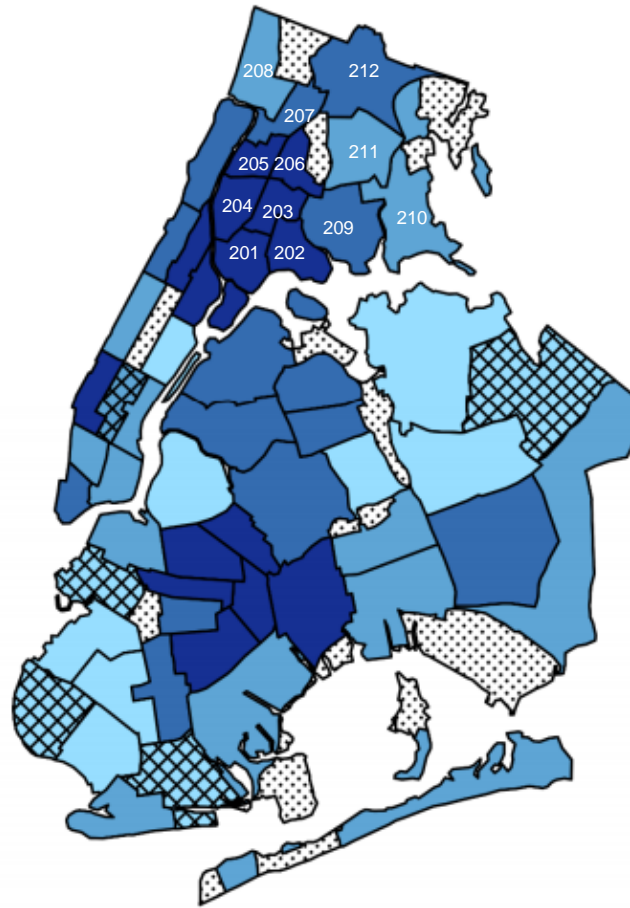Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2006-2017.
For 2016 and 2017, denominators are from American Community Survey. For all other years, denominators are DOHMH population estimates.

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4 of 10 community districts with highest rates of new HIV diagnoses are in the Bronx
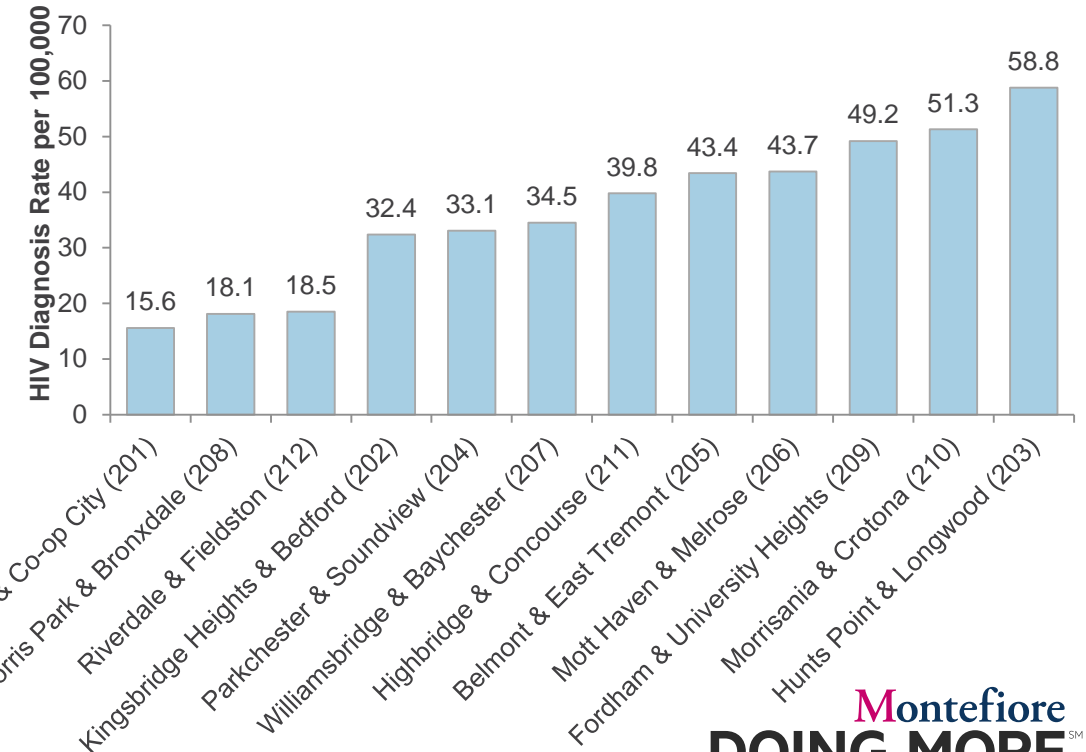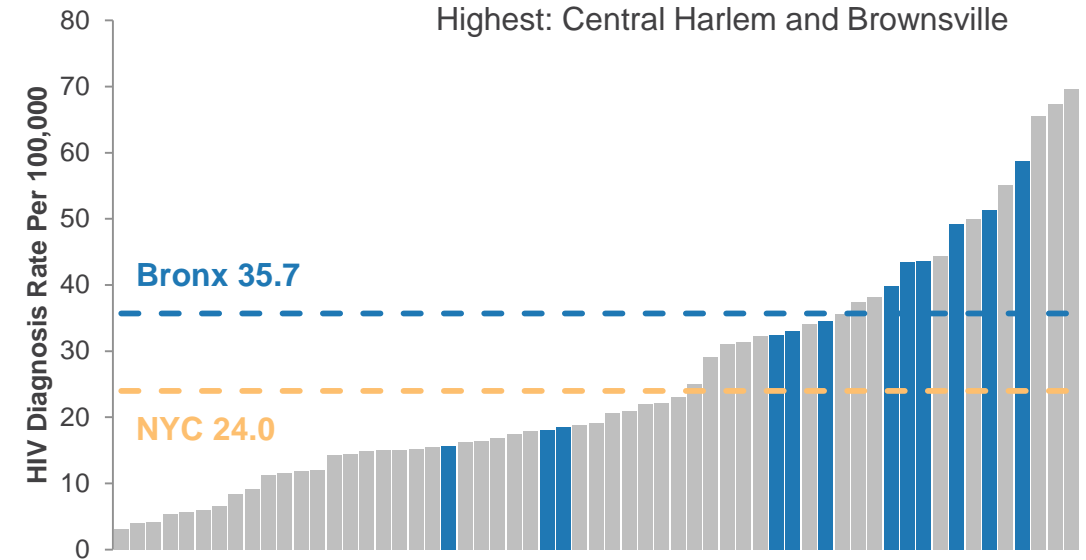
New HIV Diagnoses
Rate per 100,000 people

- 3.1 - 14.4
- 14.5 - 19.0
- 19.1 - 34.8
- 34.9 - 69.6
- Unpopulated areas
- Interpret with caution due to small number of events

201 Mott Haven & Melrose
202 Hunts Point & Longwood
203 Morrisania & Crotona
204 Highbridge & Concourse
205 Fordham & University Heights
206 Belmont & East Tremont
207 Kingsbridge Heights & Bedford
208 Riverdale & Fieldston
209 Parkchester & Soundview
210 Throgs Neck & Co-op City
211 Morris Park & Bronxdale
212 Williamsbridge & Baychester

Source: NYC DOHMH, HIV/AIDS Surveillance Registry, 2016

Highest: Central Harlem and Brownsville

Bronx 35.7

NYC 24.0

HIV Diagnosis Rate Per 100,000

District	Rate
Throgs Neck & Co-op City (201)	15.6
Morris Park & Bronxdale (208)	18.1
Riverdale & Fieldston (212)	18.5
Kingsbridge Heights & Bedford (202)	32.4
Parkchester & Soundview (204)	33.1
Williamsbridge & Baychester (207)	34.5
Highbridge & Concourse (211)	39.8
Belmont & East Tremont (205)	43.4
Mott Haven & Melrose (206)	43.7
Fordham & University Heights (209)	49.2
Morrisania & Crotona (210)	51.3
Hunts Point & Longwood (203)	58.8

Data source: NYC Community Health Profiles, 2018.

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In the Bronx, HIV diagnoses are highest for men who have sex with men

Legend: MSM · IDU · MSM-IDU · Heterosexual · Transgender · Perinatal · Unknown · Male HIV Diagnosis
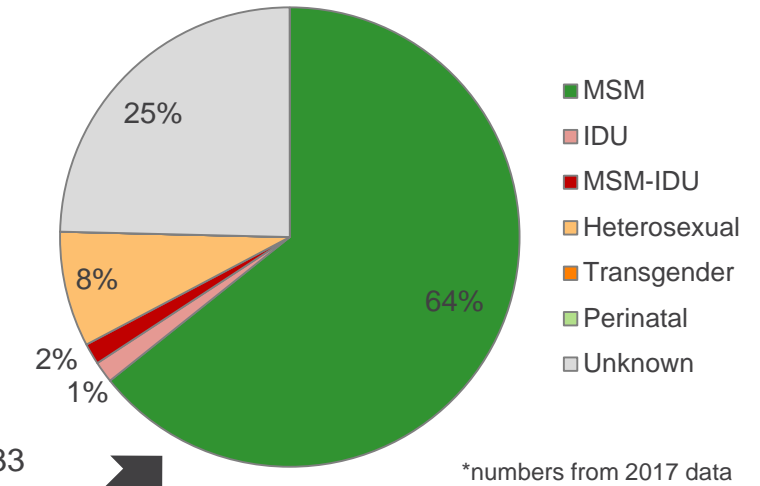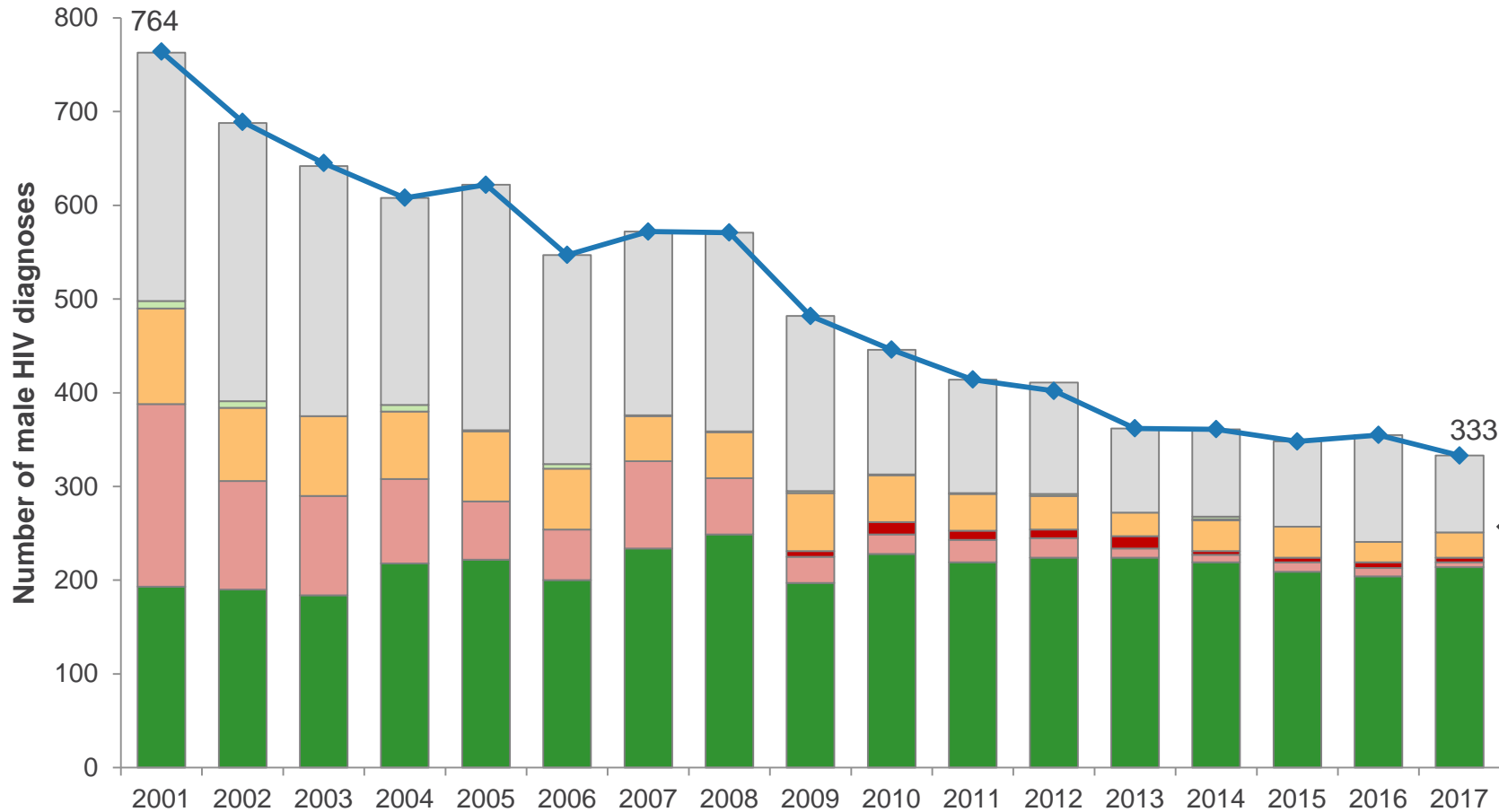
Y-axis: Number of male HIV diagnoses

2001: 764
2017: 333

Pie chart (*numbers from 2017 data):
- MSM: 64%
- Unknown: 25%
- Heterosexual: 8%
- MSM-IDU: 2%
- IDU: 1%

Abbreviations
MSM=men who have sex with men
IDU=people who inject drugs
MSM-IDU=men who have sex with men and inject drugs

15 Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2017.

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HIV diagnoses are highest for females with heterosexual contact in the Bronx

Legend: IDU, Heterosexual, Transgender, Perinatal, Unknown, Female HIV Diagnosis

Y-axis: Number of female HIV diagnoses (0–600)

X-axis years: 2001–2017

582 (2001), 131 (2017)

Pie chart (*numbers from 2017 data):
- IDU: 3%
- Heterosexual: 81%
- Transgender: 7%
- Unknown: 9%
- Perinatal

Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2017.

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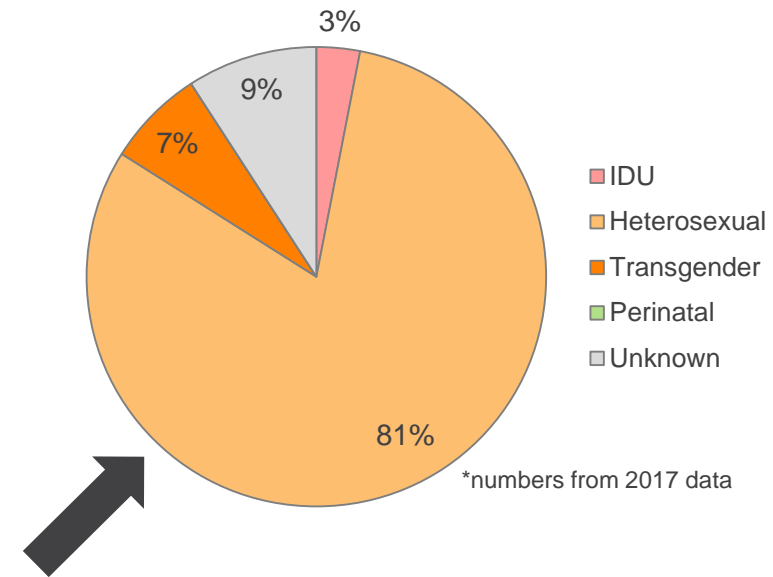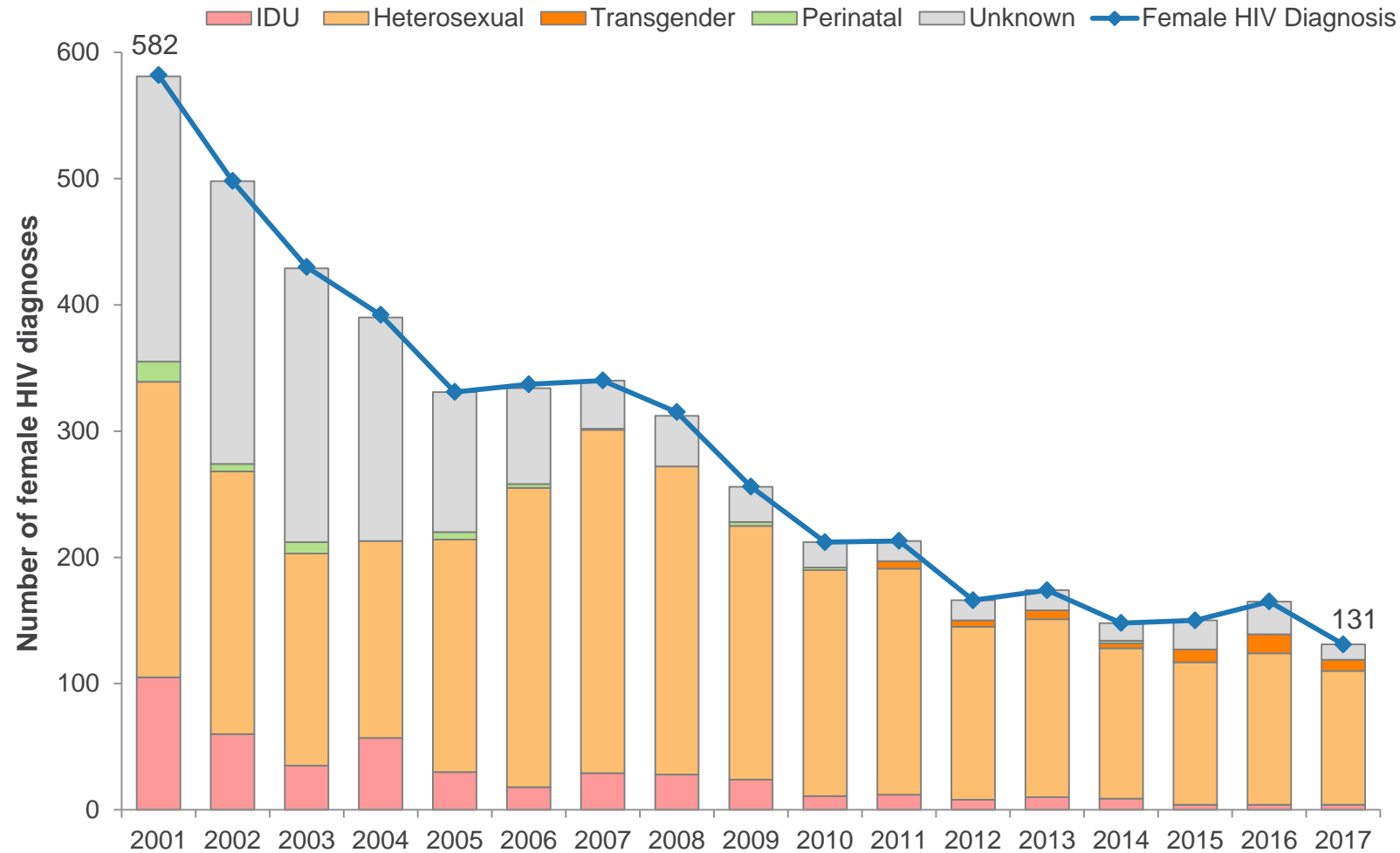
AIDS Diagnoses in the Bronx

AIDS diagnosis is defined as:
1) Those diagnosed concurrent with HIV
2) Those who transitioned from HIV to AIDS

AIDS diagnoses rates are highest among the non-Hispanic black population in the Bronx
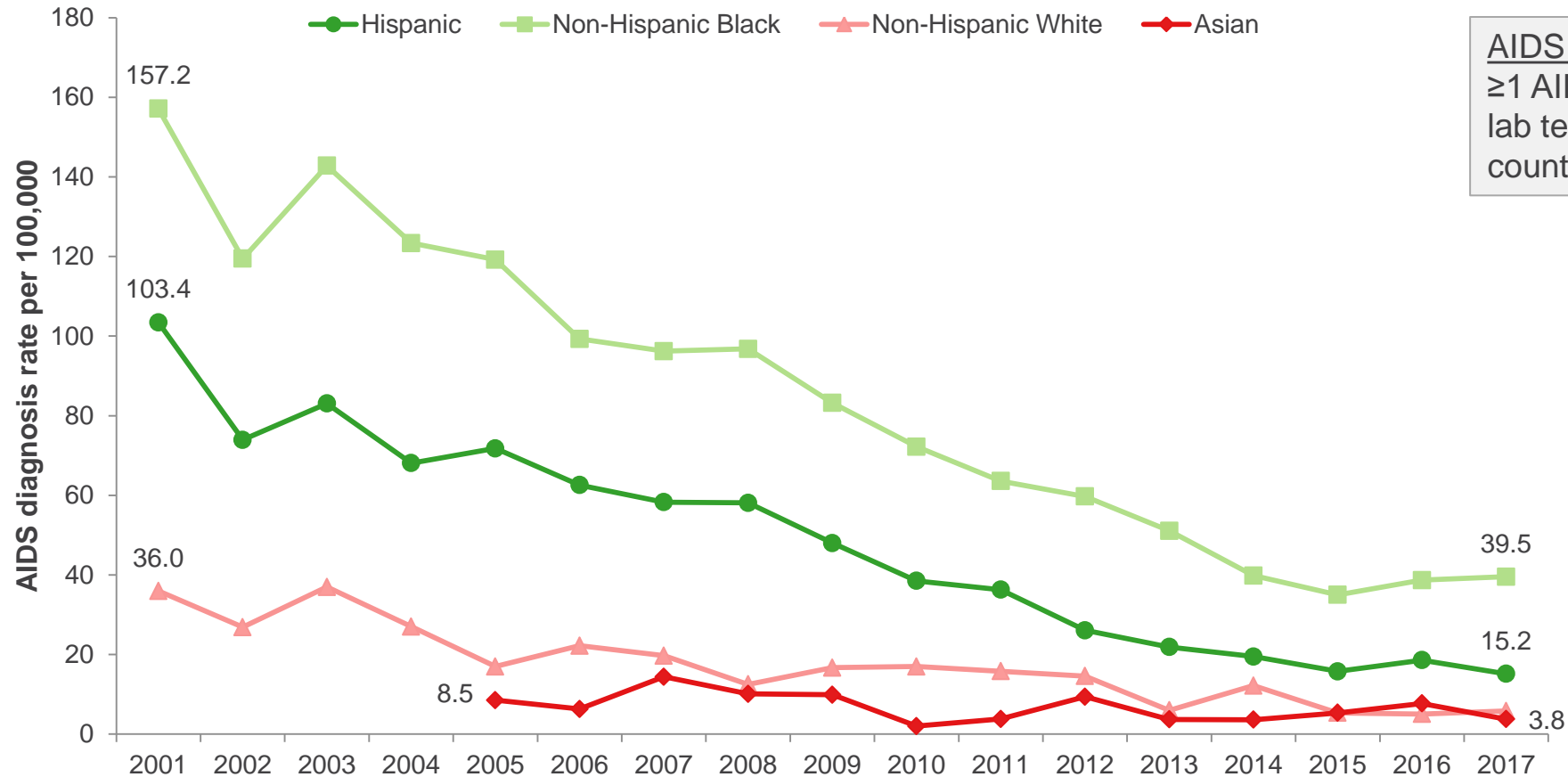
AIDS Diagnosis: HIV-infected and either ≥1 AIDS-defining opportunistic illness or a lab test indicating suppressed CD4+ cell counts (<200 cells/μL)

Legend: Hispanic, Non-Hispanic Black, Non-Hispanic White, Asian

Y-axis: AIDS diagnosis rate per 100,000

Data values labeled: 157.2, 103.4, 36.0, 8.5, 39.5, 15.2, 3.8

X-axis: 2001–2017

Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2017.
2001-2004 data for Asian population is unstable.
For 2016 and 2017, denominators are from American Community Survey. For all other years, denominators are DOHMH population estimates.

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Males in the Bronx have higher rates of AIDS diagnoses
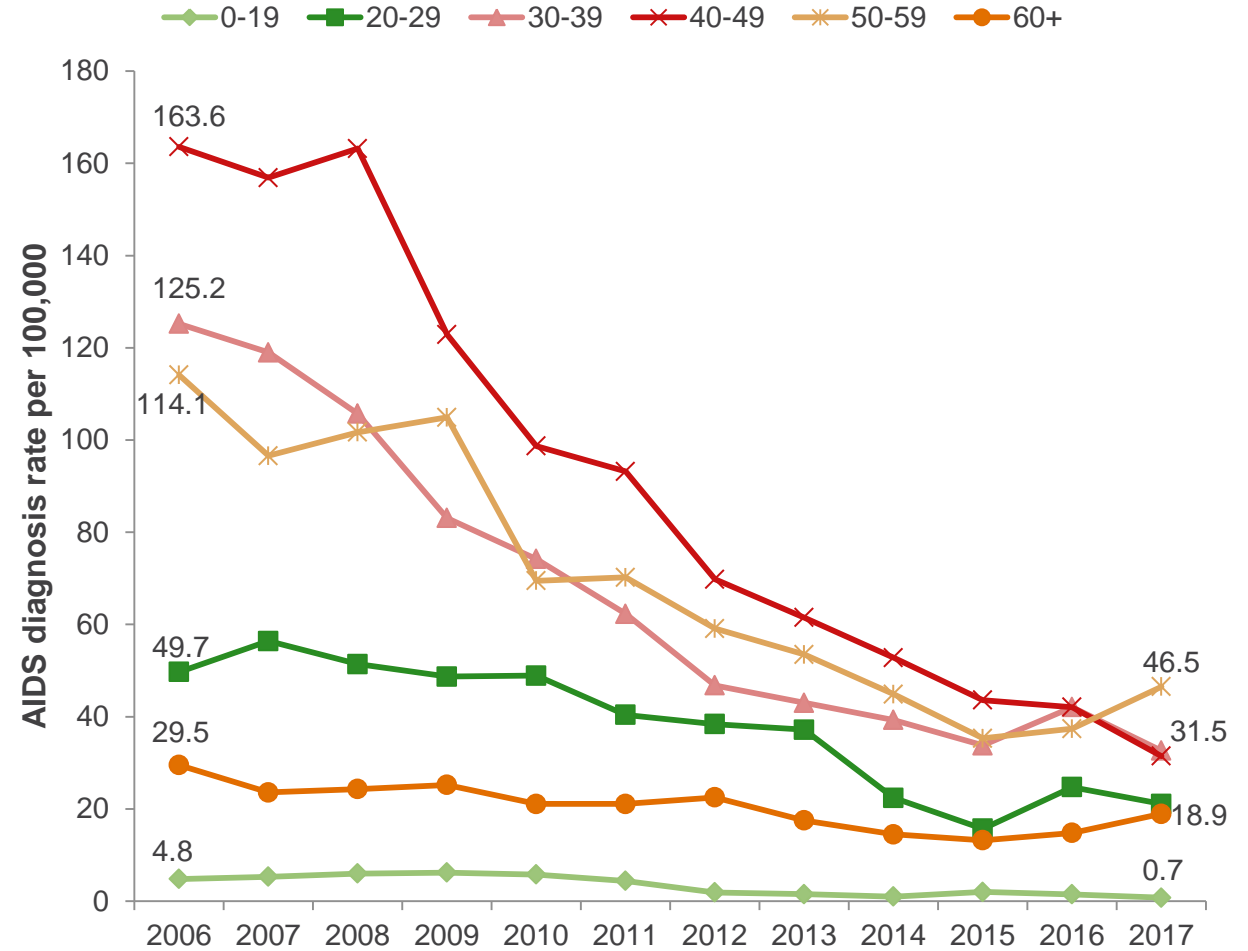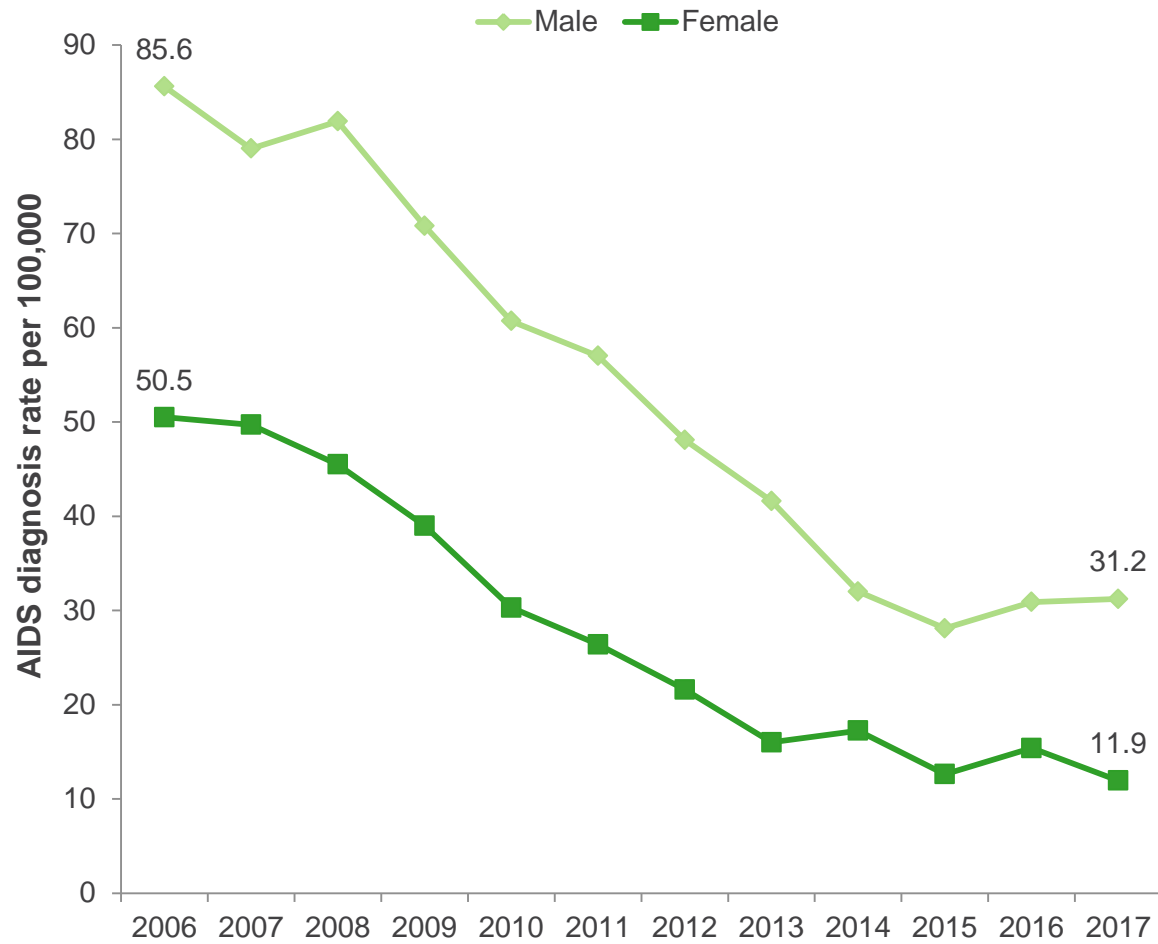
Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2017.
AIDS diagnosis rates pre-2006 are unavailable.
For 2016 and 2017, denominators are from American Community Survey. For all other years, denominators are DOHMH population estimates.

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In the Bronx, AIDS diagnoses are highest for men who have sex with men

Legend: MSM — IDU — MSM-IDU — Heterosexual — Transgender — Perinatal — Unknown — AIDS Diagnosis

Number of male AIDS diagnoses (y-axis: 0, 300, 600, 900)

Years: 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017

AIDS Diagnosis labeled values: 875 (2001), 214 (2017)

*numbers from 2017 data

Pie chart (legend: MSM, IDU, MSM-IDU, Heterosexual, Transgender, Perinatal, Unknown):
- MSM 40%
- IDU 10%
- MSM-IDU 6%
- Transgender 11%
- Perinatal 2%
- Unknown 31%

Abbreviations
MSM=men who have sex with men
IDU=people who inject drugs
MSM-IDU=men who have sex with men and inject drugs

Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2017.
MSM-IDU category was not created until 2009; Transgender category was not created until 2011.

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In the Bronx, AIDS diagnoses are highest for females with heterosexual contact

Legend: IDU, Heterosexual, Transgender, Perinatal, Unknown, AIDS Diagnosis

Y-axis: Number of female AIDS diagnoses

2001: 573

2017: 92

Pie chart (*numbers from 2017 data):
- IDU: 11%
- Heterosexual: 64%
- Transgender: 6%
- Perinatal: 2%
- Unknown: 17%

Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2017.
MSM-IDU category was not created until 2009; Transgender category was not created until 2011.

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HIV/AIDS Related Care in the Bronx

Timely initiation of care among those newly diagnosed with HIV slightly increased in the Bronx between 2013 and 2017
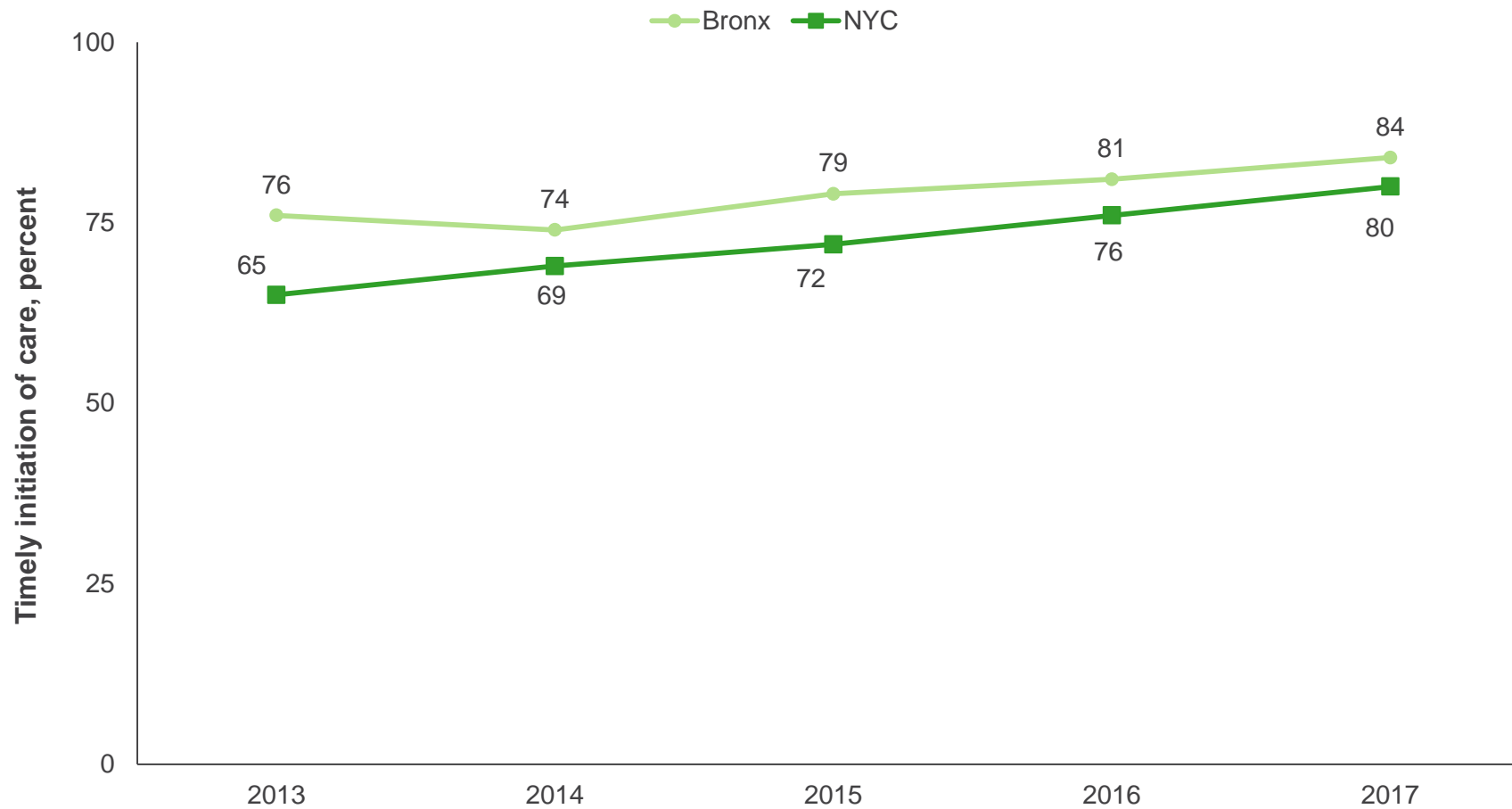
Timely initiation of care is defined as first CD4 or VL drawn within 30 days of HIV diagnosis

Data source: HIV/AIDS in the Bronx, New York City, 2017.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2018.

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Among Bronx residents newly diagnosed with HIV in 2017, Hispanic residents were most likely to have timely initiation of care
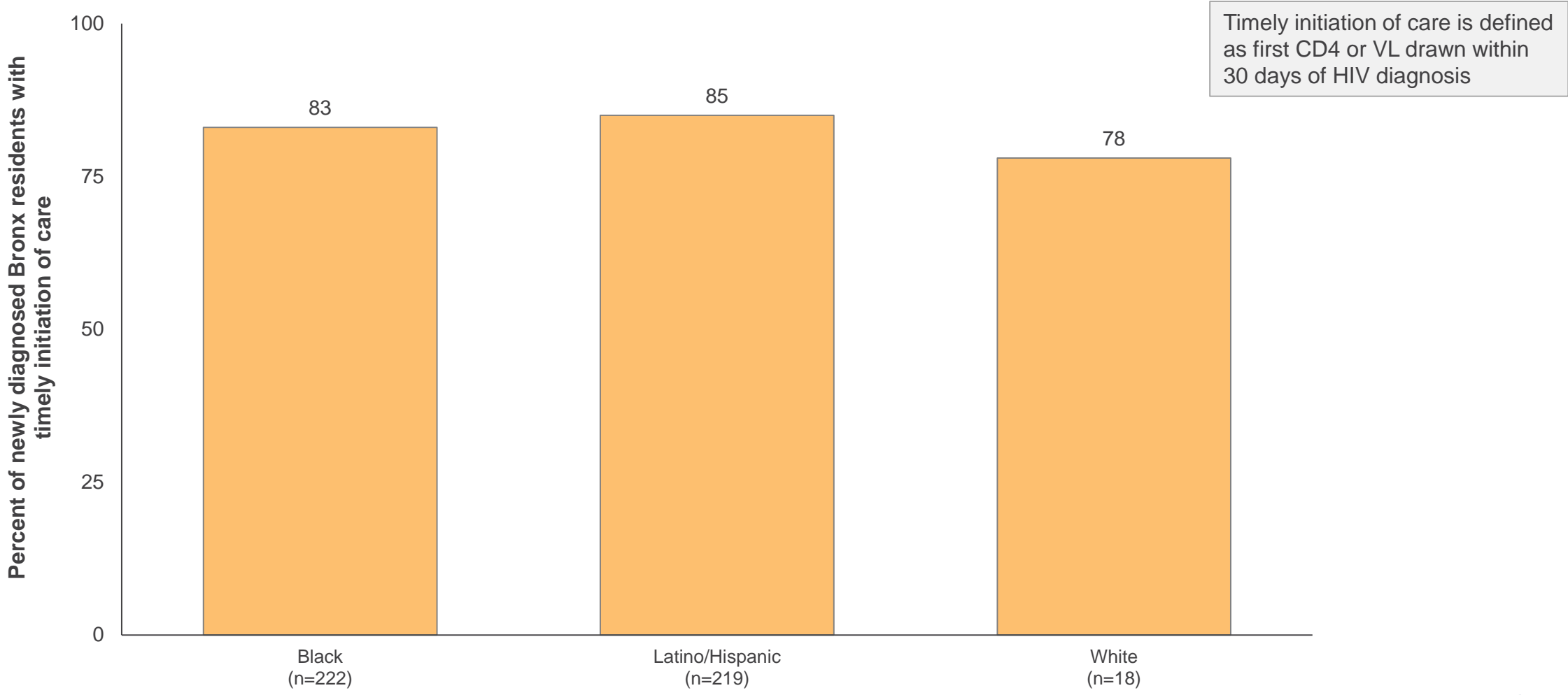
Timely initiation of care is defined as first CD4 or VL drawn within 30 days of HIV diagnosis

Percent of newly diagnosed Bronx residents with timely initiation of care

Category	Value
Black (n=222)	83
Latino/Hispanic (n=219)	85
White (n=18)	78

Data source: HIV/AIDS in the Bronx, New York City, 2017.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2018.

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Among Bronx residents newly diagnosed with HIV in 2017, MSM-IDU were most likely to have timely initiation of care
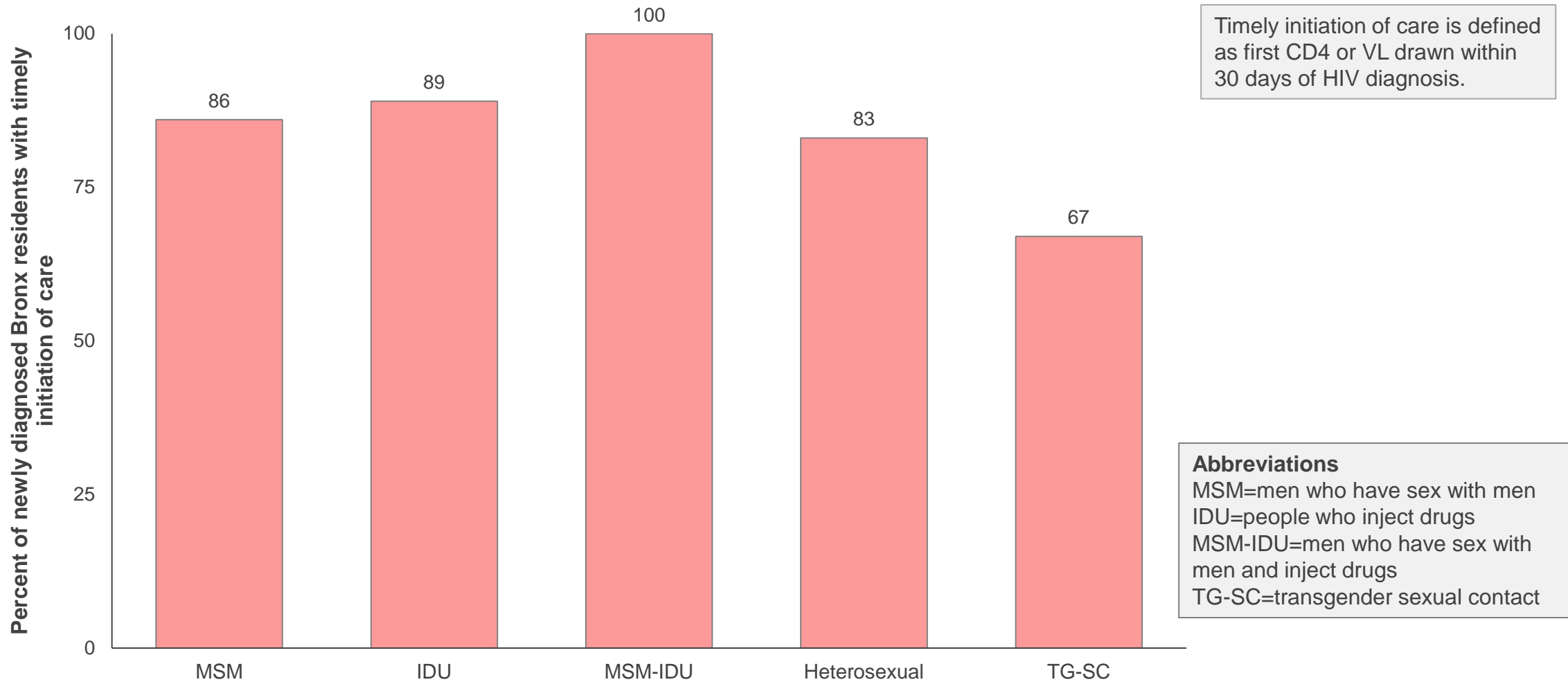
Timely initiation of care is defined as first CD4 or VL drawn within 30 days of HIV diagnosis.

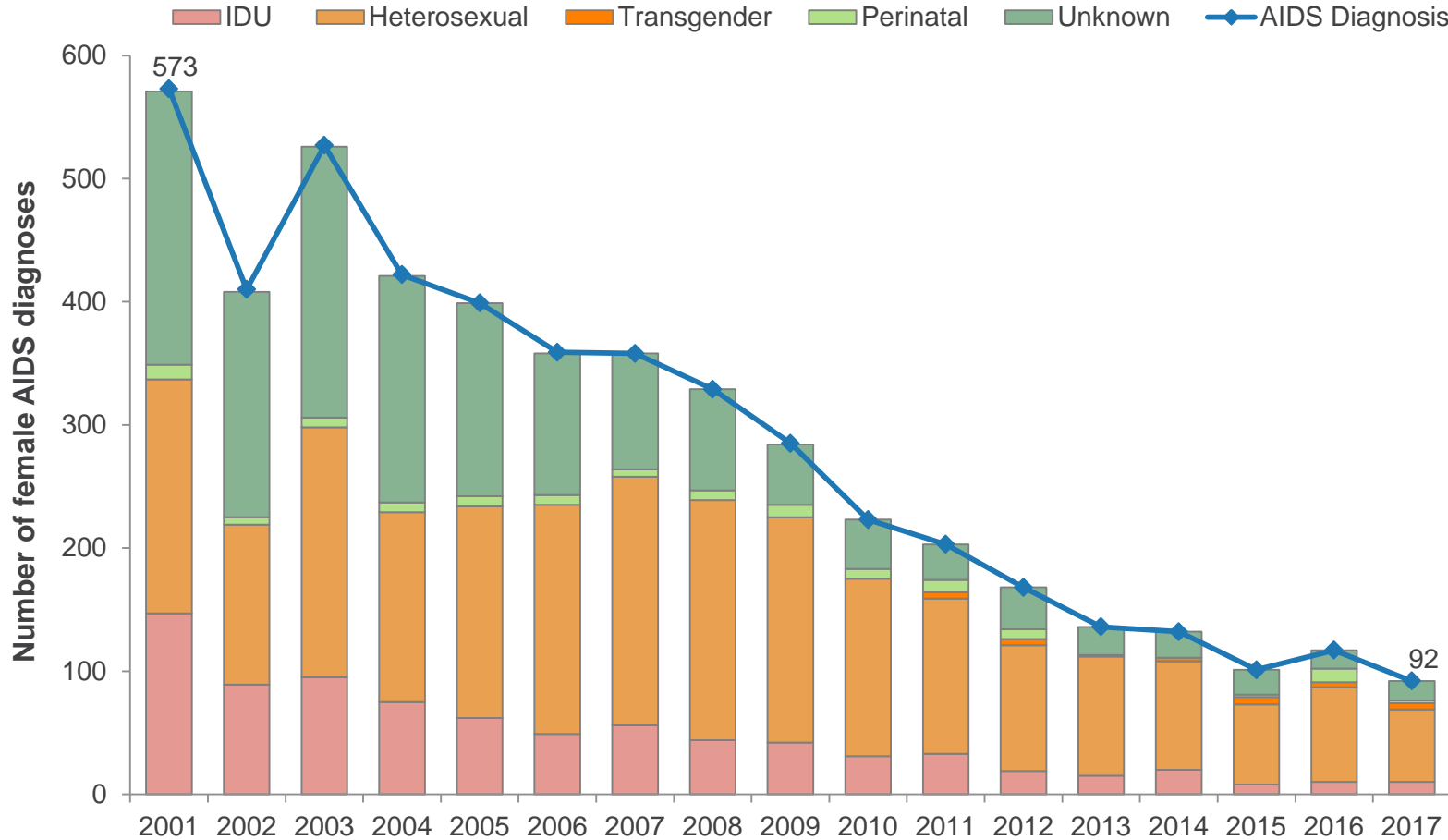**Abbreviations**
MSM=men who have sex with men
IDU=people who inject drugs
MSM-IDU=men who have sex with men and inject drugs
TG-SC=transgender sexual contact

Percent of newly diagnosed Bronx residents with timely initiation of care

MSM	IDU	MSM-IDU	Heterosexual	TG-SC
86	89	100	83	67

Data source: HIV/AIDS in the Bronx, New York City, 2017.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2018.

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Newly diagnosed Bronx residents are equally likely to initiate care, but somewhat less likely to have viral suppression, 2017

Timely Initiation of Care Among Newly Diagnosed, 2017

Viral Suppression* within 6 Months of HIV Diagnosis, 2017

Viral Suppression* Among PLWHA, 2017

Timely initiation: First CD4 or viral load drawn within 30 days of diagnosis

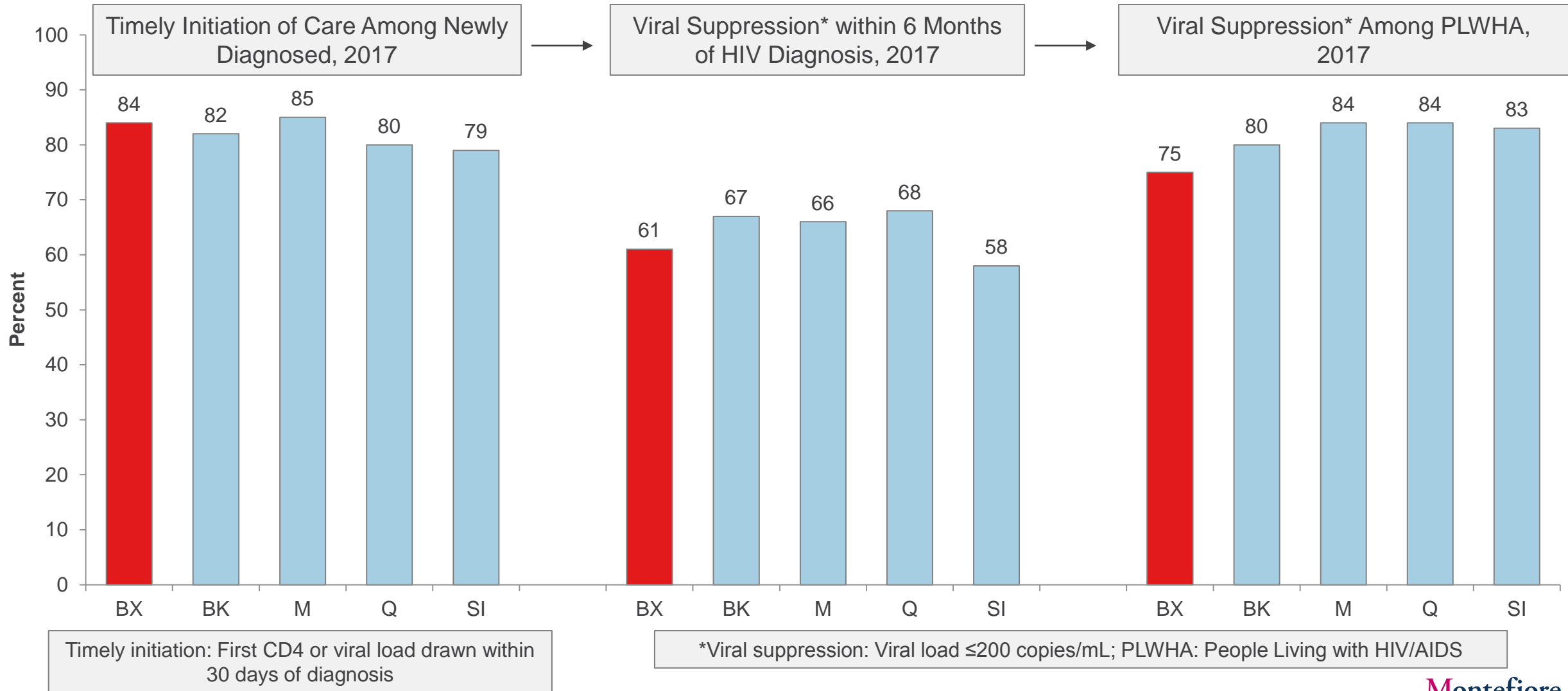*Viral suppression: Viral load ≤200 copies/mL; PLWHA: People Living with HIV/AIDS

Data source: HIV/AIDS in the Bronx, New York City, 2017.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2018.

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HIV/AIDS related care by risk category for <u>all of New York City</u>, 2017

Timely Initiation of Care Among Newly Diagnosed, 2017 → Viral Suppression* within 6 Months of HIV Diagnosis, 2017 → Viral Suppression* Among PLWHA, 2017

Timely Initiation of Care Among Newly Diagnosed, 2017
- MSM: 83
- IDU: 84
- MSM-IDU: 81
- Heterosexual: 77
- TG-SC: 76

Viral Suppression* within 6 Months of HIV Diagnosis, 2017
- MSM: 69
- IDU: 60
- MSM-IDU: 56
- Heterosexual: 65
- TG-SC: 63

Viral Suppression* Among PLWHA, 2017
- MSM: 84
- IDU: 78
- MSM-IDU: 75
- Heterosexual: 78
- TG-SC: 76
- Perinatal: 61
- Other/Unknown: 79

Percent

Timely initiation: First CD4 or viral load drawn within 30 days of diagnosis

*Viral suppression: Viral load ≤200 copies/mL; PLWHA: People Living with HIV/AIDS

Data source: HIV/AIDS in the Bronx, New York City, 2017.
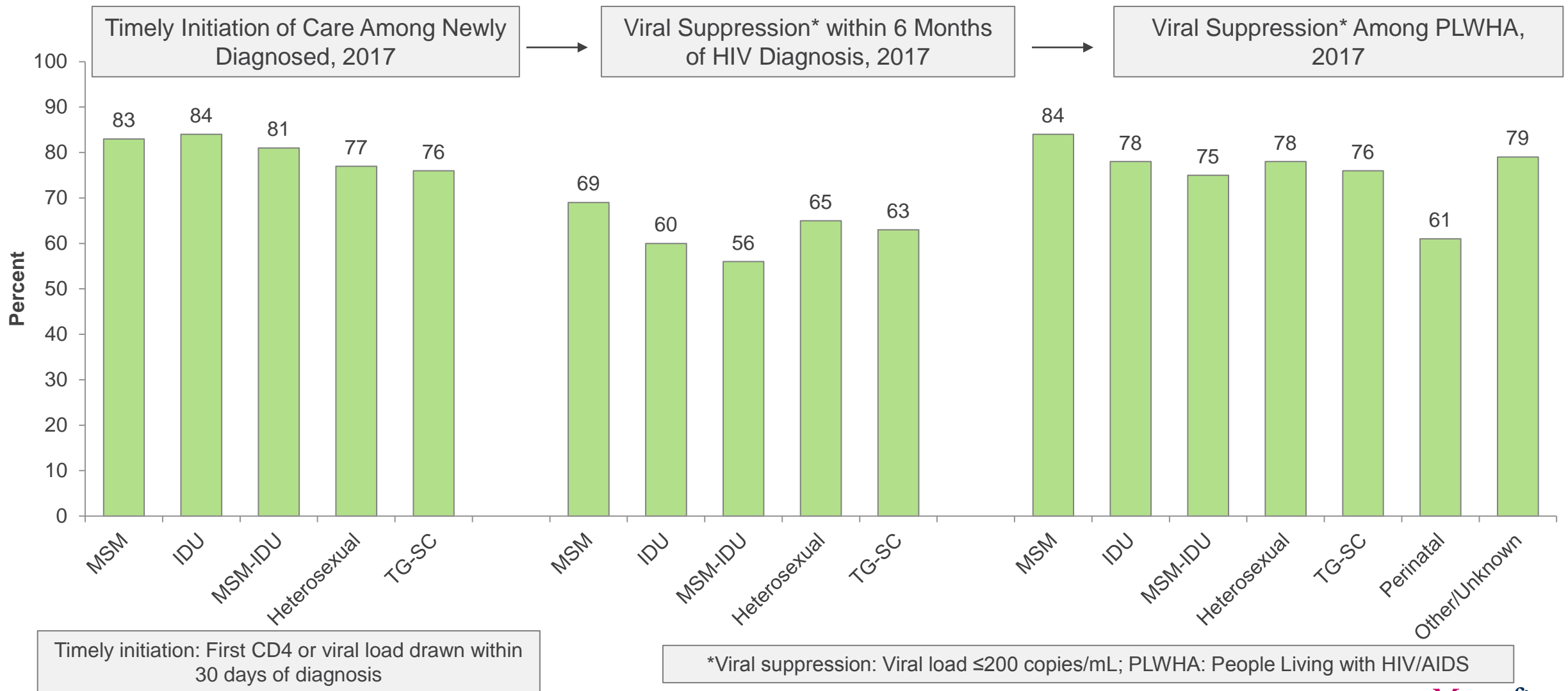As reported to the New York City Department of Health and Mental Hygiene by March 31, 2018.

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Among Bronx residents newly diagnosed with HIV, 41% achieved viral suppression within 3 months and 61% within 6 months

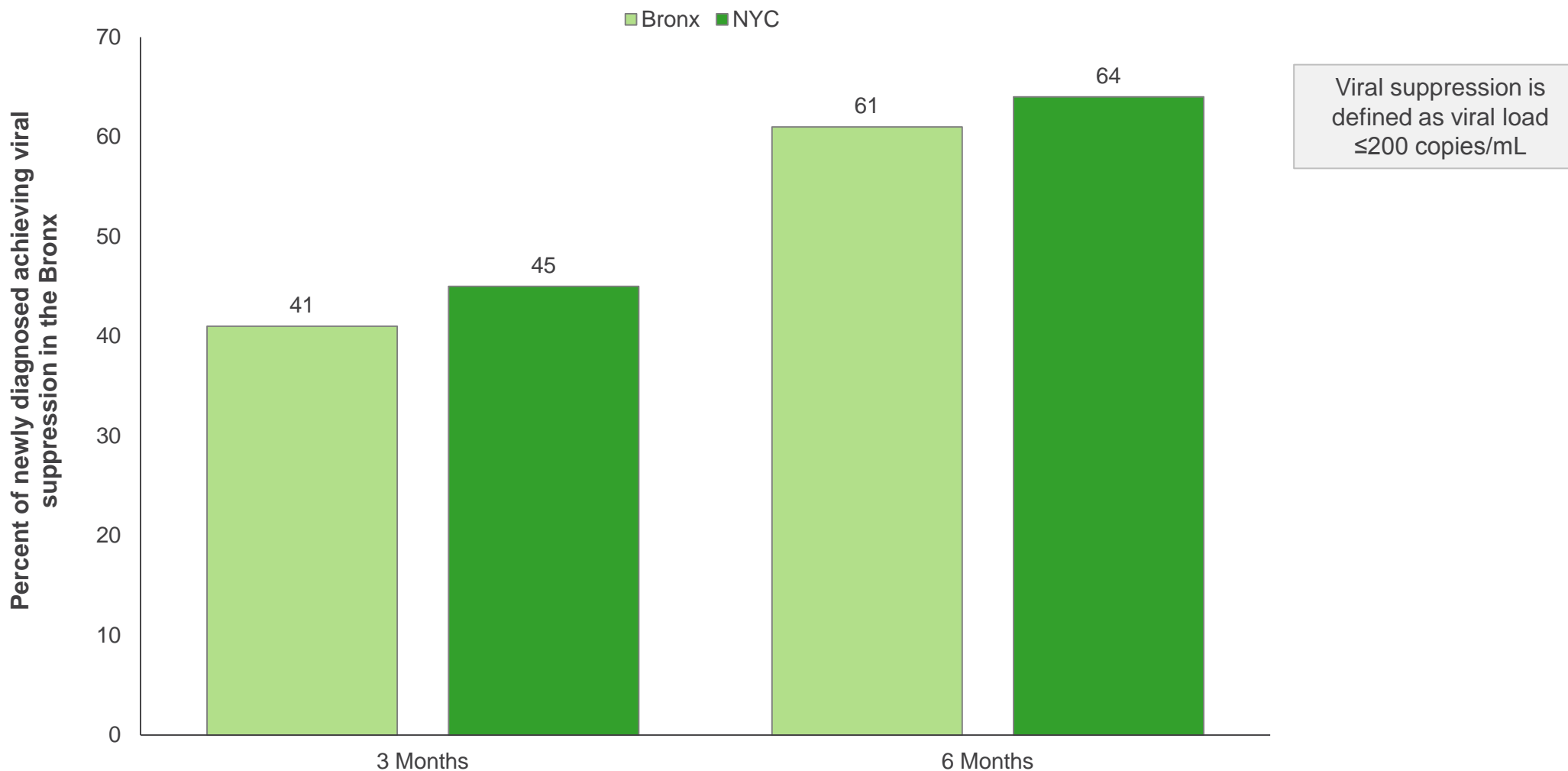Viral suppression is defined as viral load ≤200 copies/mL

Data source: HIV/AIDS in the Bronx, New York City, 2017.
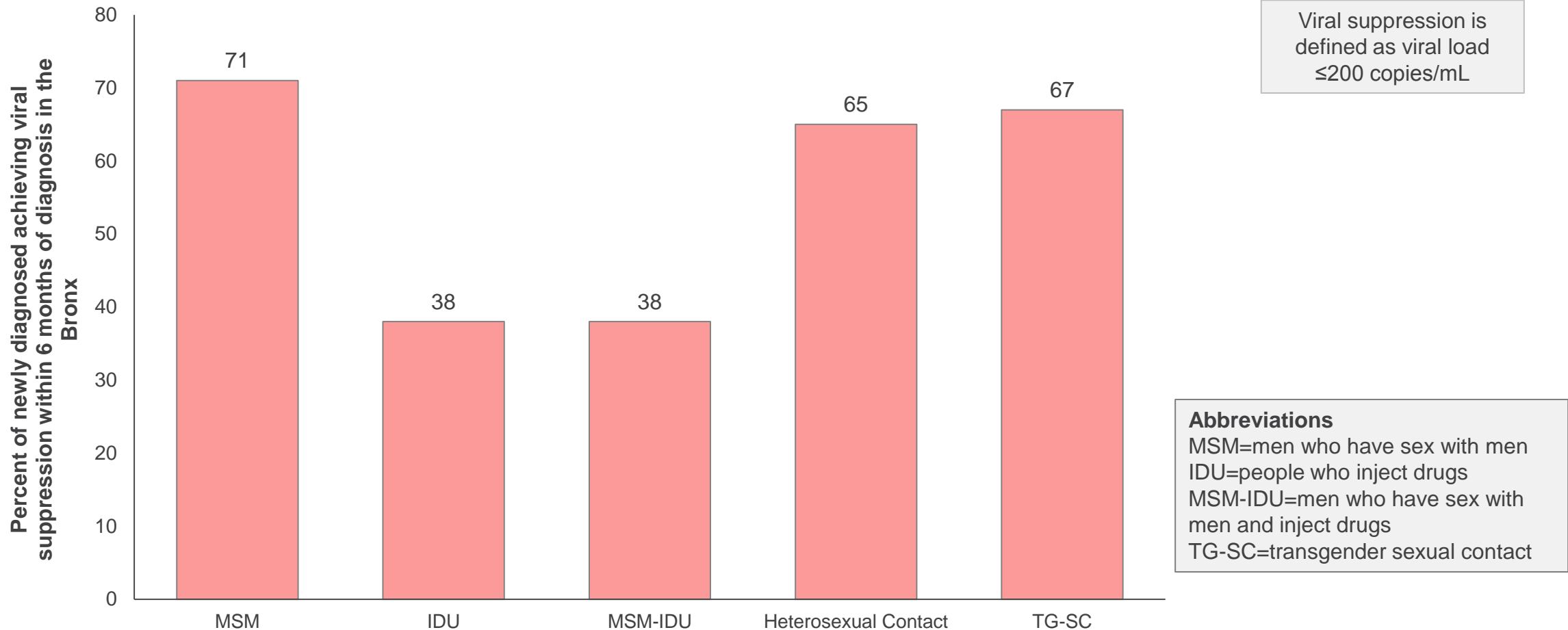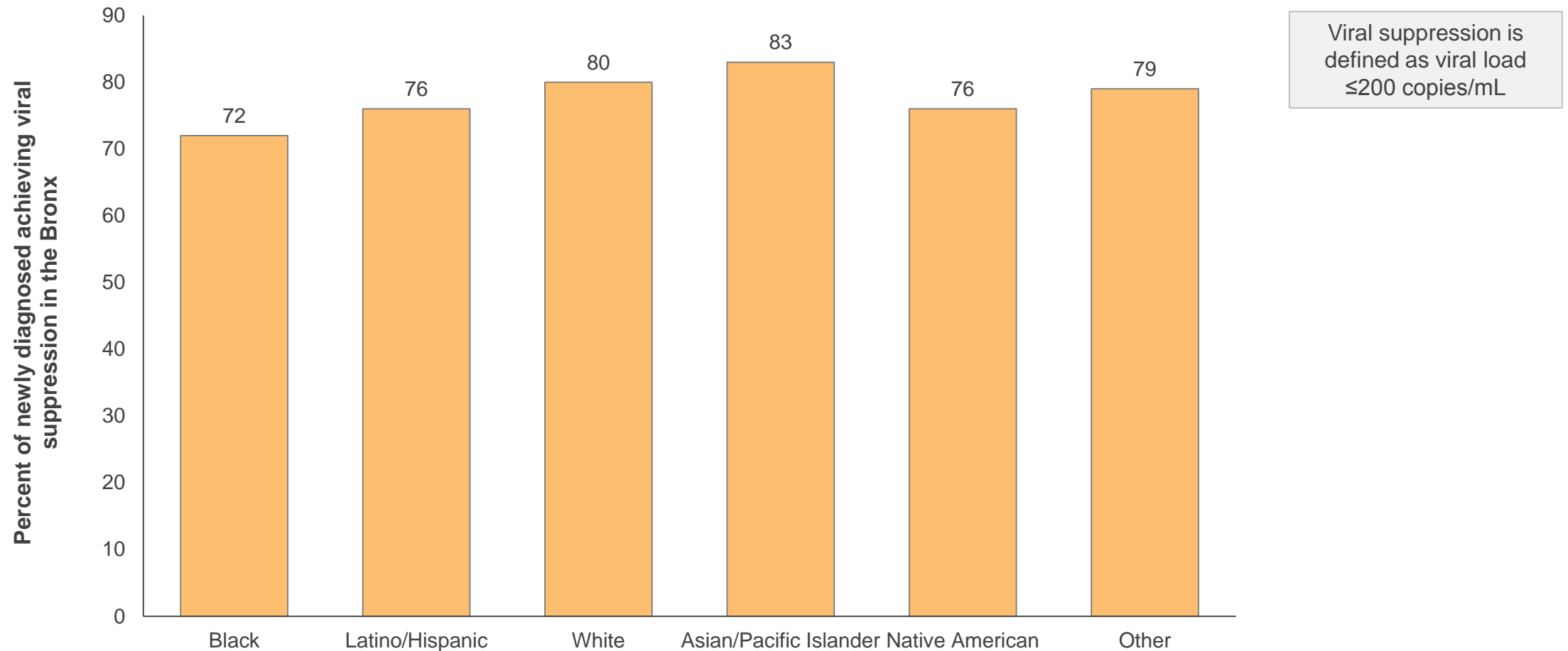As reported to the New York City Department of Health and Mental Hygiene by March 31, 2018.

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Among people newly diagnosed with HIV in the Bronx, MSM were most likely to achieve viral suppression within 6 months

Viral suppression is defined as viral load ≤200 copies/mL

Abbreviations
MSM=men who have sex with men
IDU=people who inject drugs
MSM-IDU=men who have sex with men and inject drugs
TG-SC=transgender sexual contact

Percent of newly diagnosed achieving viral suppression within 6 months of diagnosis in the Bronx

Category	Value
MSM	71
IDU	38
MSM-IDU	38
Heterosexual Contact	65
TG-SC	67

Data source: NYC HIV Surveillance Registry, 2016. Data not available for 2017.

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Among diagnosed PLWHA in the Bronx, non-Hispanic black residents had the lowest viral suppression proportion

Viral suppression is defined as viral load ≤200 copies/mL

Bar chart — Percent of newly diagnosed achieving viral suppression in the Bronx:
- Black: 72
- Latino/Hispanic: 76
- White: 80
- Asian/Pacific Islander Native American: 83
- (Native American): 76
- Other: 79

Data source: HIV/AIDS in the Bronx, New York City, 2017. PLWHA = People Living with HIV/AIDS.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2018.

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Among diagnosed PLWHA in NYC, people with perinatal transmission risk had the lowest viral suppression proportion

Viral suppression is defined as viral load ≤200 copies/mL

Abbreviations
MSM=men who have sex with men
IDU=people who inject drugs
MSM-IDU=men who have sex with men and inject drugs
TG-SC=transgender sexual contact

Data source: HIV/AIDS in the Bronx, New York City, 2017. PLWHA = People Living with HIV/AIDS.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2018.
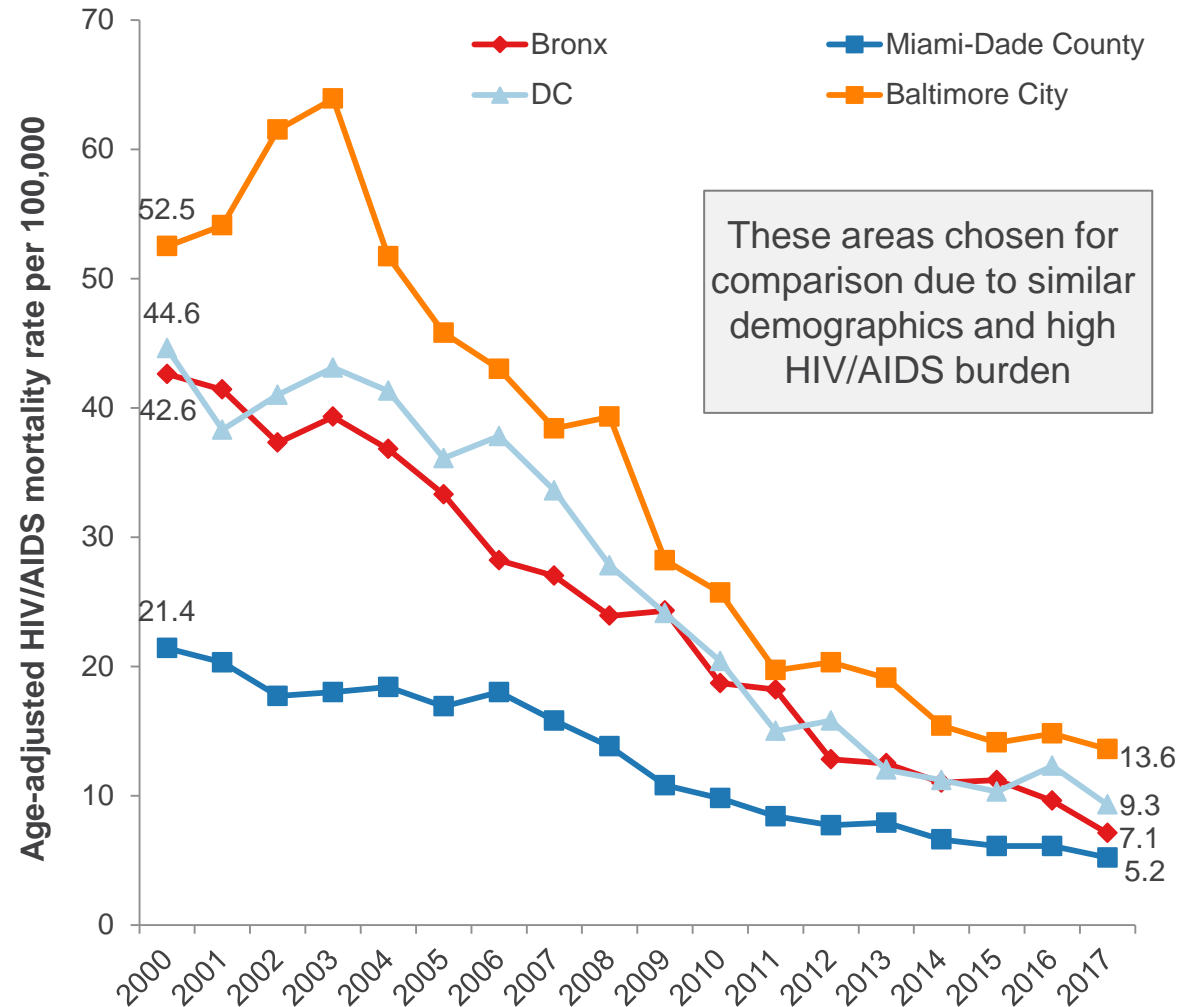
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Of approximately 25,300 PLWHA in the Bronx in 2017, 69% had a suppressed viral load

Viral suppression is defined as viral load ≤200 copies/mL

% of PLWHA who are…

Category	Value
Retained in Care (defined as ≥1 viral load/CD4 measurement)	86
Prescribed anti-retroviral therapy	80
Virally Suppressed	69

Data source: HIV/AIDS in the Bronx, New York City, 2017. PLWHA = People Living with HIV/AIDS.
As reported to the New York City Department of Health and Mental Hygiene by March 31, 2018.

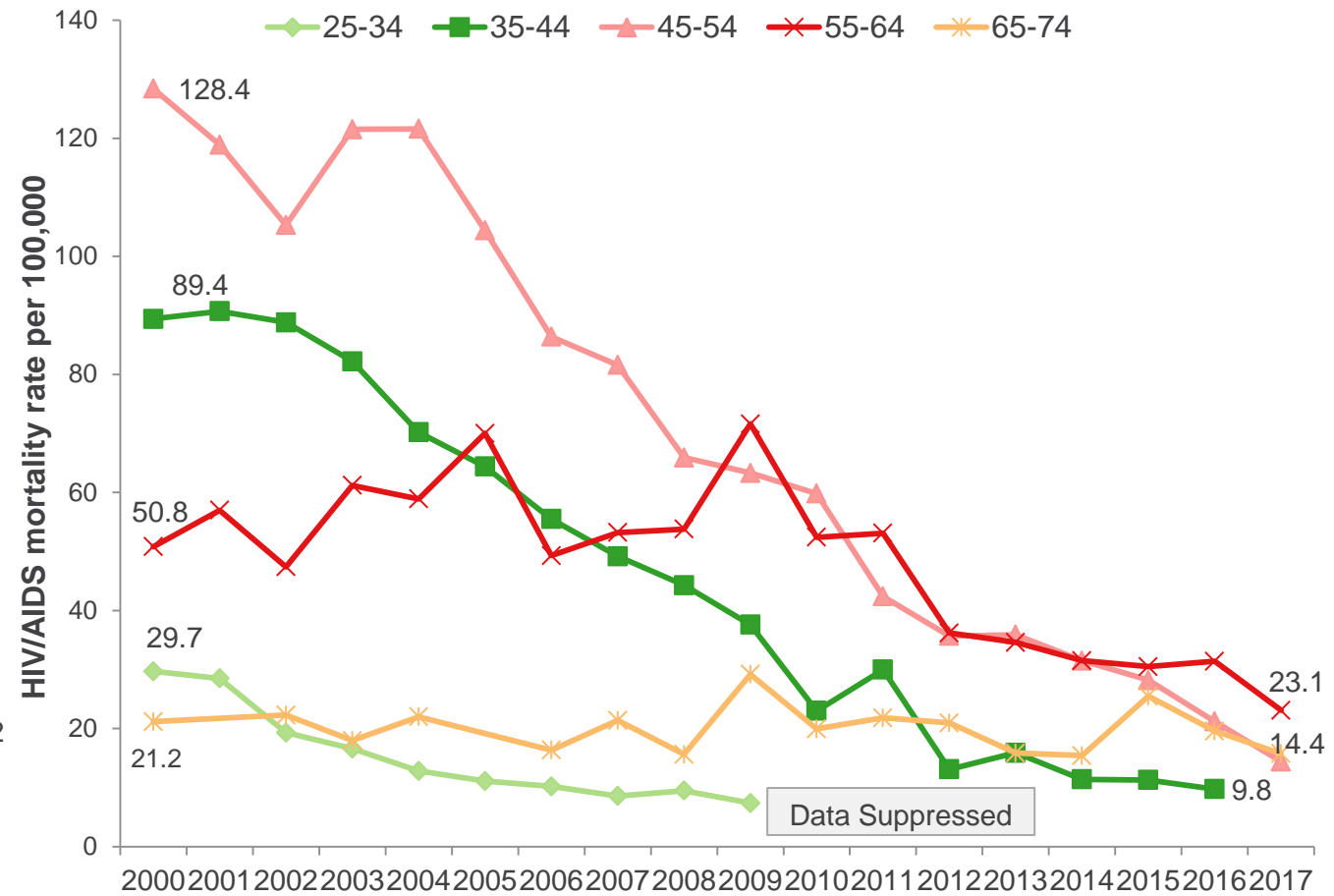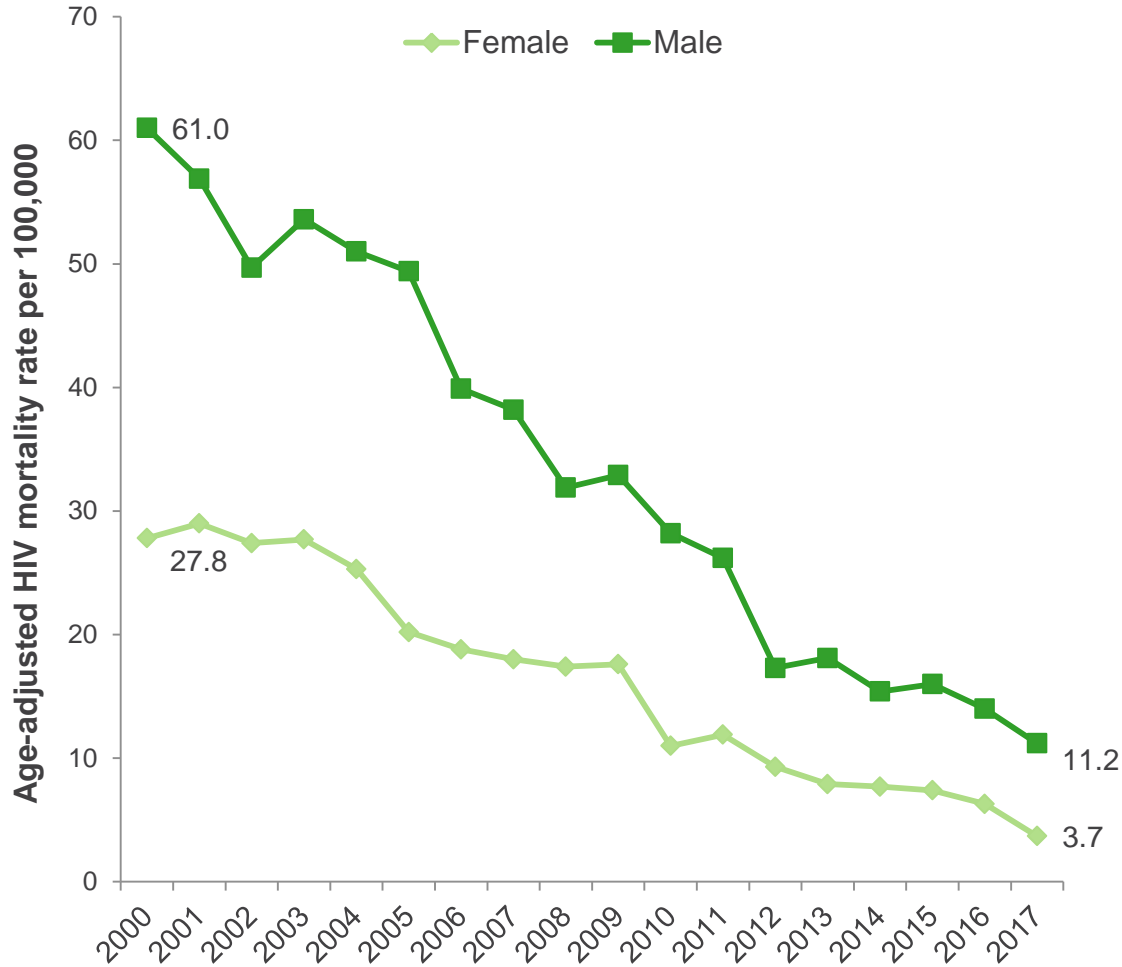**Montefiore**
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HIV/AIDS Mortality in the Bronx

HIV mortality rates have fallen over 4-fold since 2000

Bronx -- 2000: 3rd leading cause of death | 2017: 12th leading cause of death

These areas chosen for comparison due to similar demographics and high HIV/AIDS burden

Data source: Underlying Cause of Death, 2000-2017.

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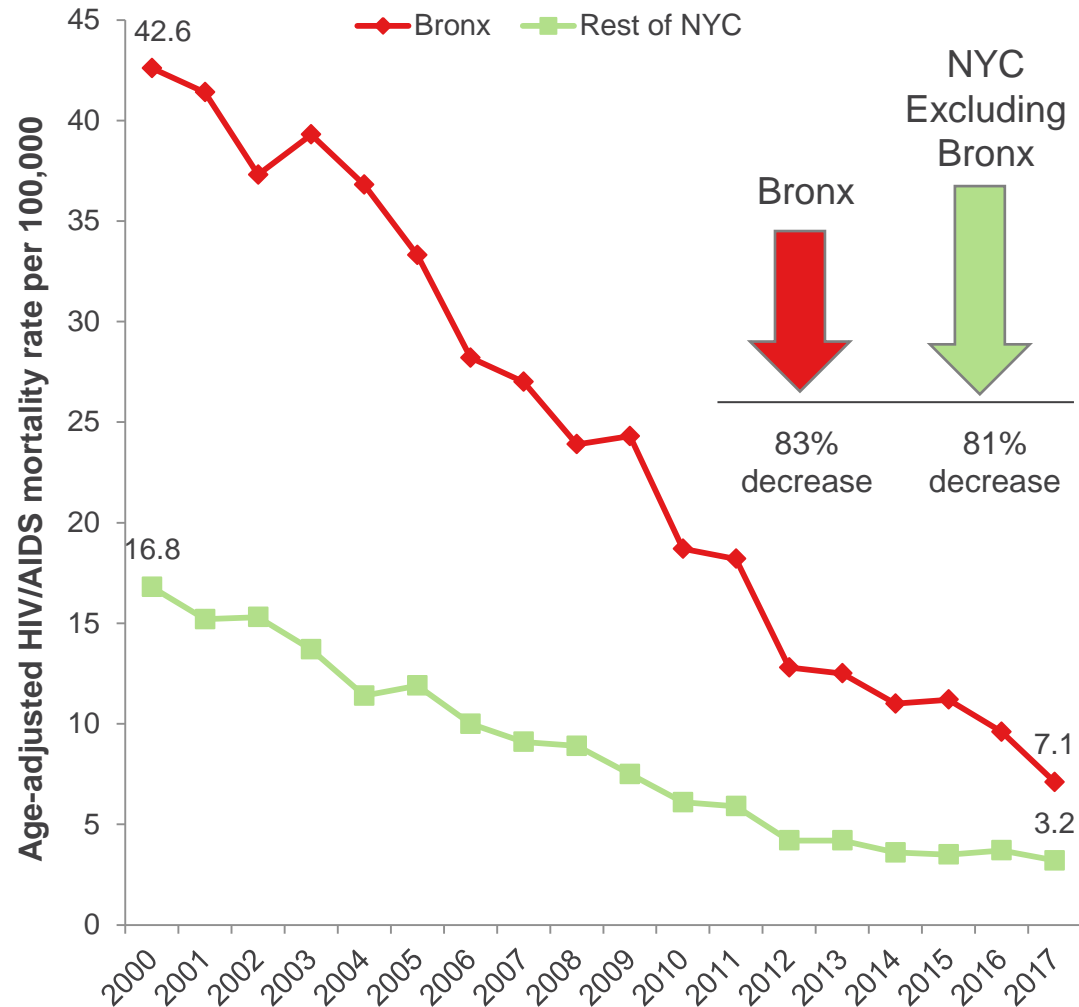
Males and 45-64 year olds have highest rates of HIV mortality in the Bronx

Data source: Underlying Cause of Death, 2000-2017.
Age-specific rates are not age-adjusted. 25-34 year data unstable after 2006. 35-44 unstable after 2016.

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HIV/AIDS mortality rates are highest for the non-Hispanic black population in the Bronx

Data source: Underlying Cause of Death, 2000-2017.
Data on non-Hispanic white respondents statistically unstable 2008-2017.

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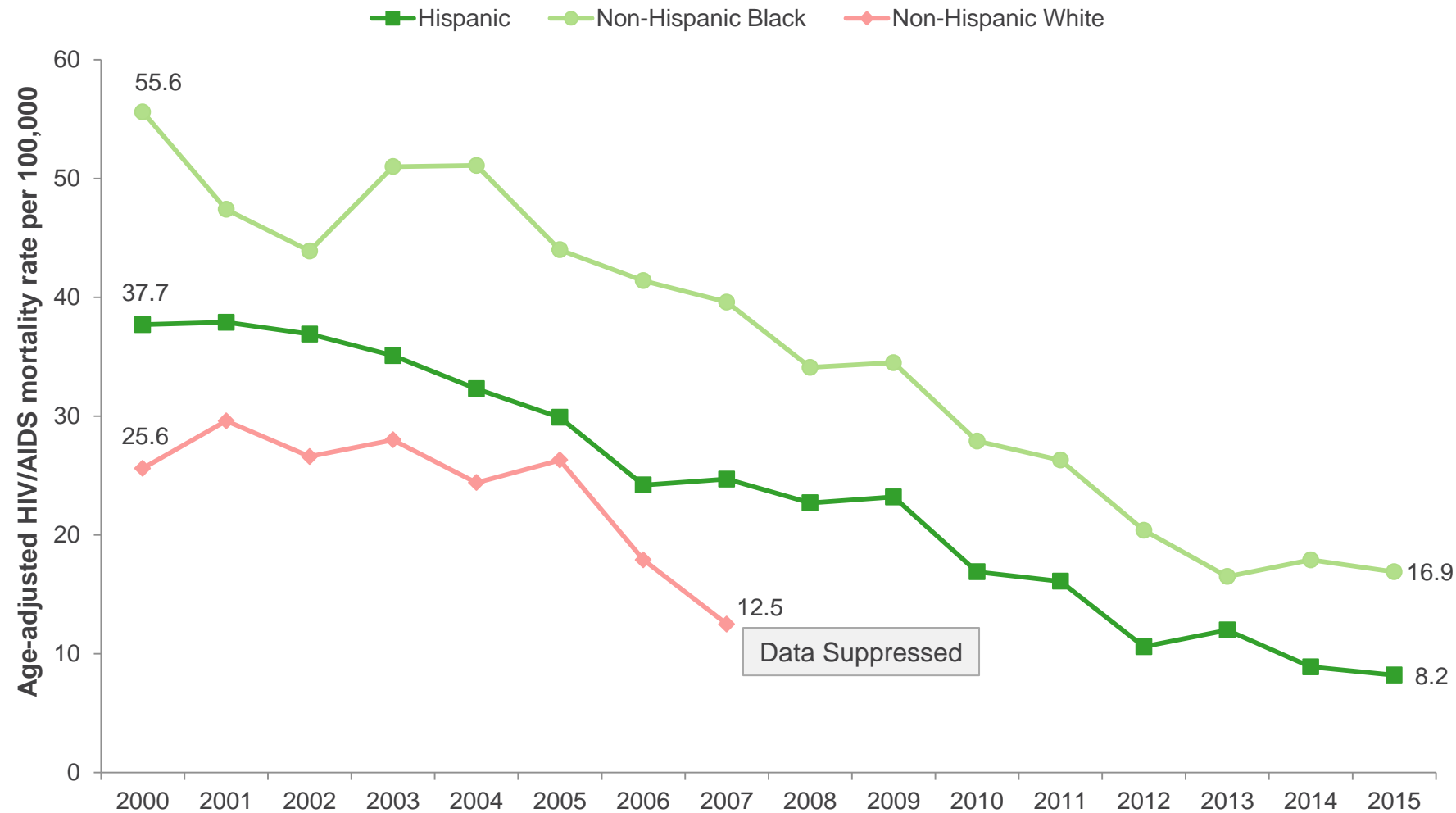
There are dramatic disparities in <u>all-cause mortality</u> among people living HIV/AIDS in the Bronx

Note: Different analysis approach from previous slides.

Males, including transgender men

Female, including transgender women

Abbreviations
MSM=men who have sex with men
IDU=people who inject drugs
MSM-IDU=men who have sex with men and inject drugs

Estimated deaths among people with HIV/AIDS per 1,000 PLWHA

Category	Value
MSM	8.0
IDU	30.7
MSM-IDU	21.2
Heterosexual	11.4
IDU (Female)	26.3
Heterosexual (Female)	8.8
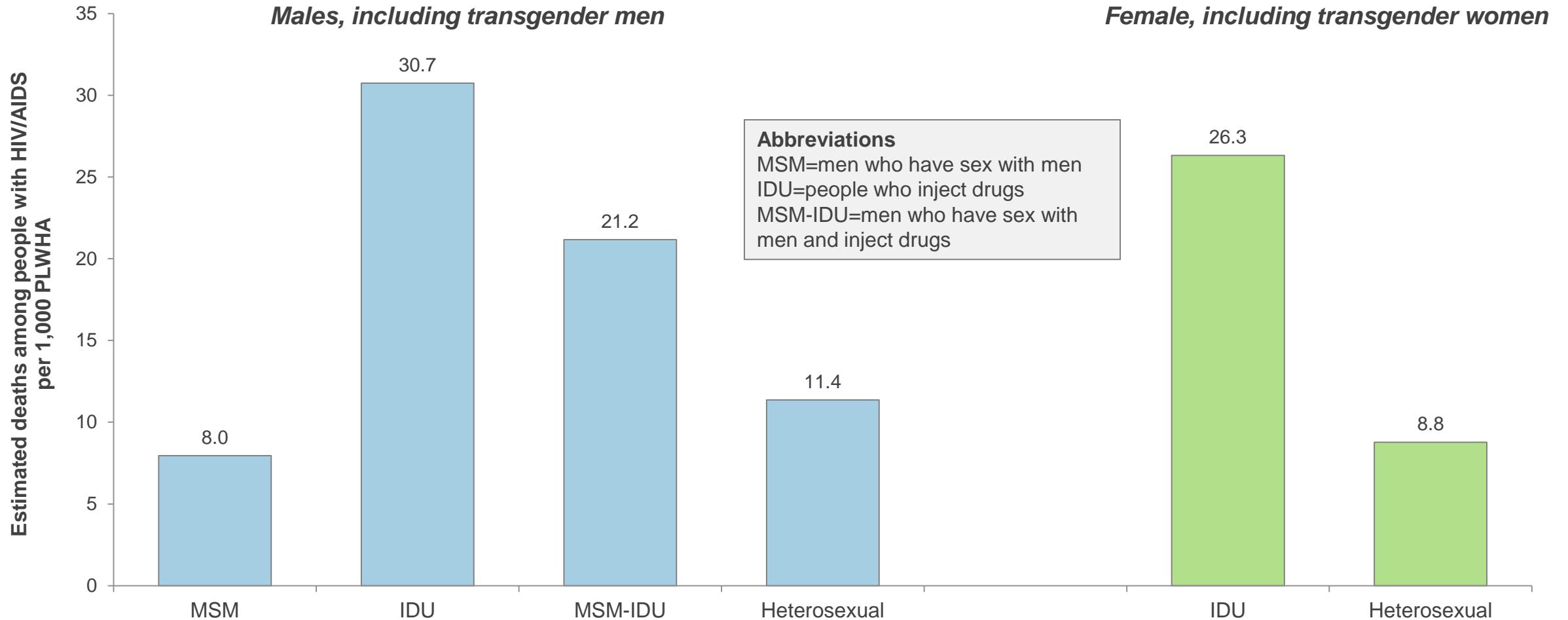
Data source: Calculated from NYC HIV/AIDS Annual Surveillance Statistics, 2016-17.
All-cause mortality can include any cause of death, not necessarily HIV/AIDS.

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About the Community Health Dashboard Project

- The goal of the project is to provide Bronx-specific data on risk factors and health outcomes with an emphasis on presenting data on trends, socio-demographic differences (e.g., by age, sex, race/ethnicity, etc.) and sub-county/neighborhood level data

- Data will be periodically updated as new data becomes available.

- Produced by Montefiore's Office of Community & Population Health using publicly-available data sources

- For more information please contact us at OCPHDept@montefiore.org

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