Bronx Community Health Dashboard:
HIV and AIDS

Created: 5/4/2017
Last Updated: 10/23/2017

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

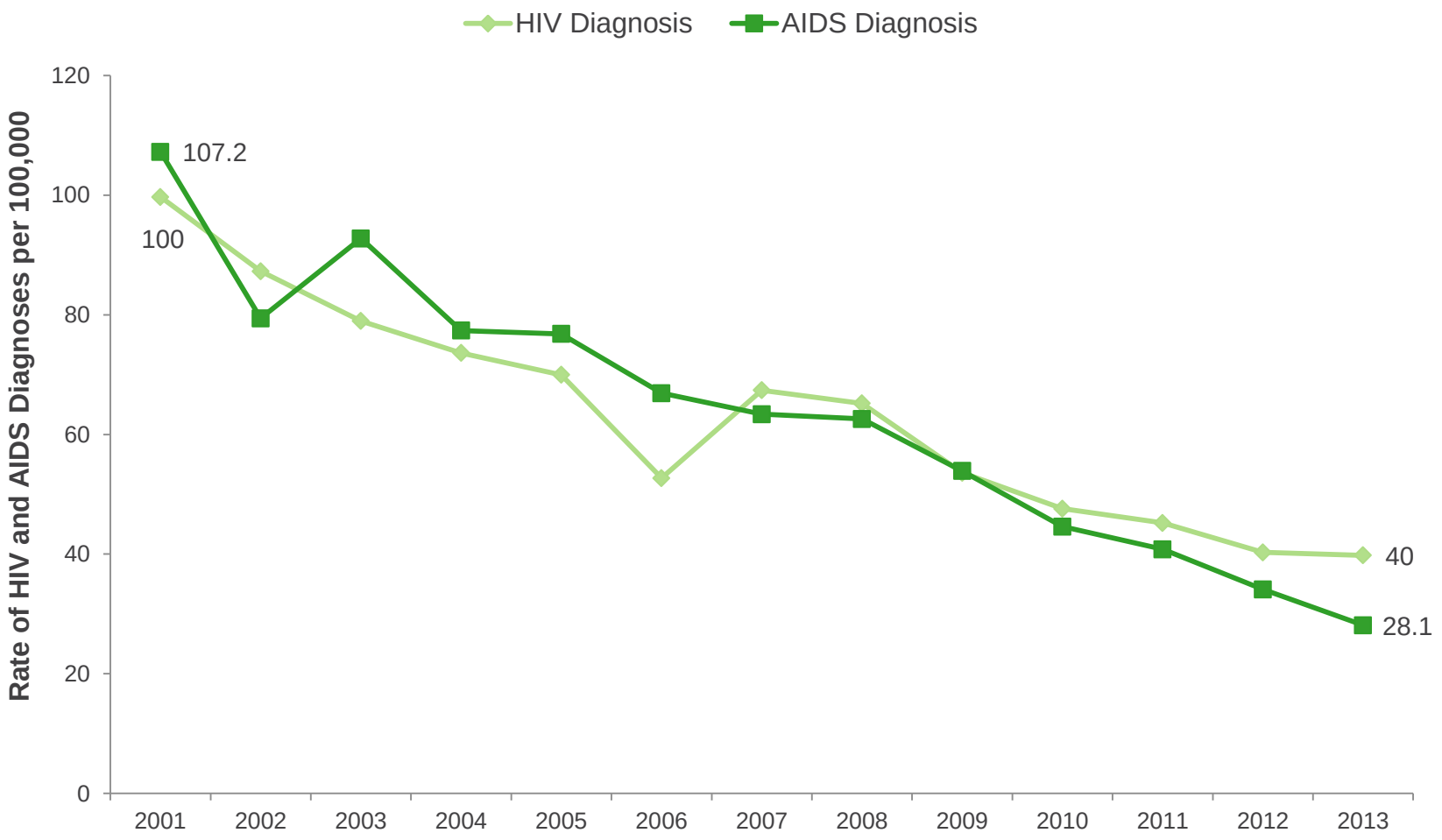
Bronx residents with lower incomes and less education are more likely to have had an HIV/AIDS test

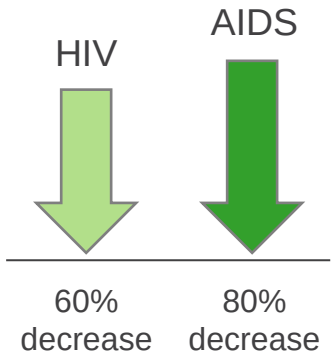
Bronx residents have the highest likelihood of ever having an HIV/AIDS screening compared to other boroughs

Newly diagnosed Bronx residents equally likely to initiate care, but somewhat less likely to have viral suppression, 2015

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

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, 2001-2013. Analysis by Montefiore OCPH.

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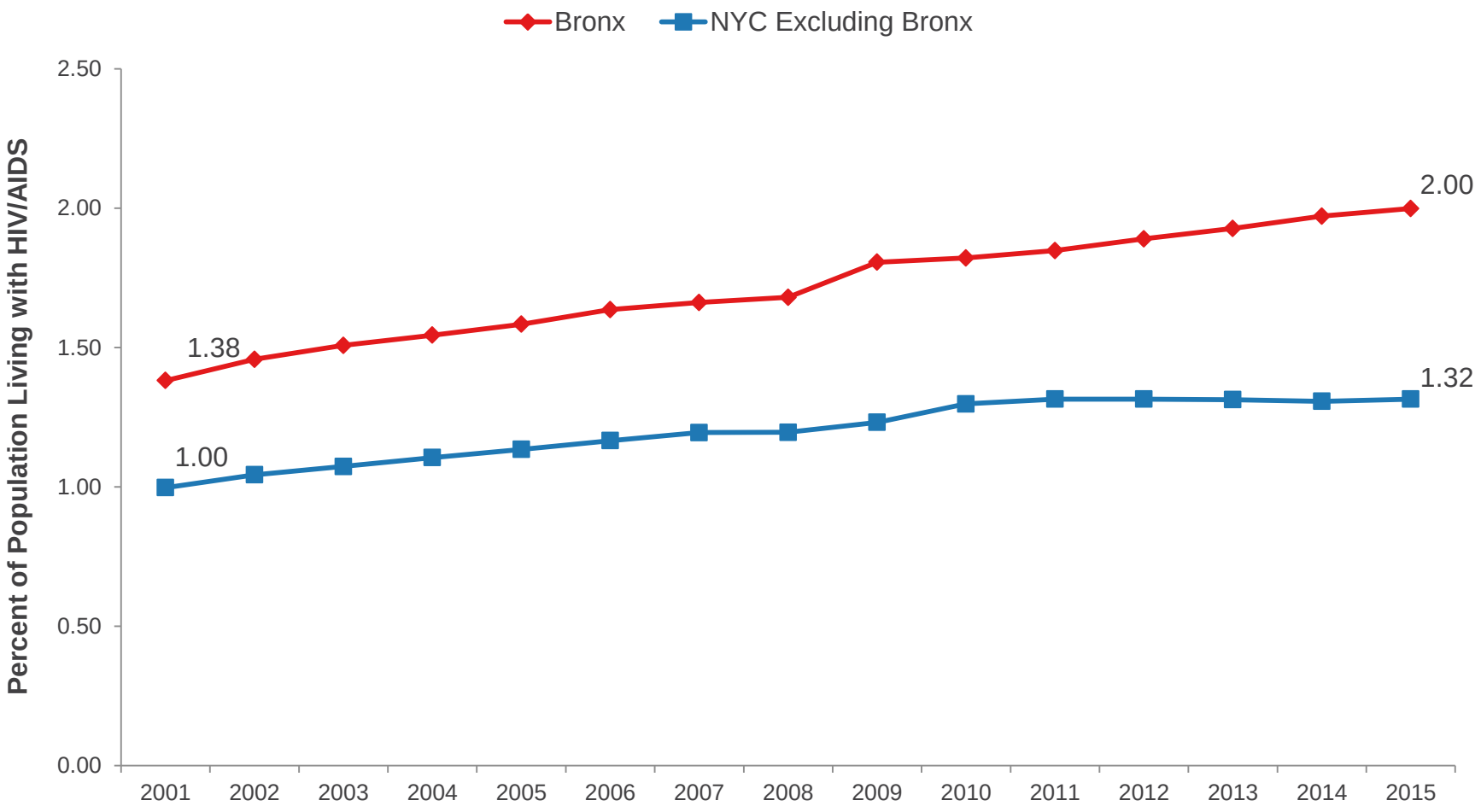
The percent of Bronx residents living with HIV has been steadily increasing over the last 15 years



Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2013. Analysis by Montefiore OCPH.

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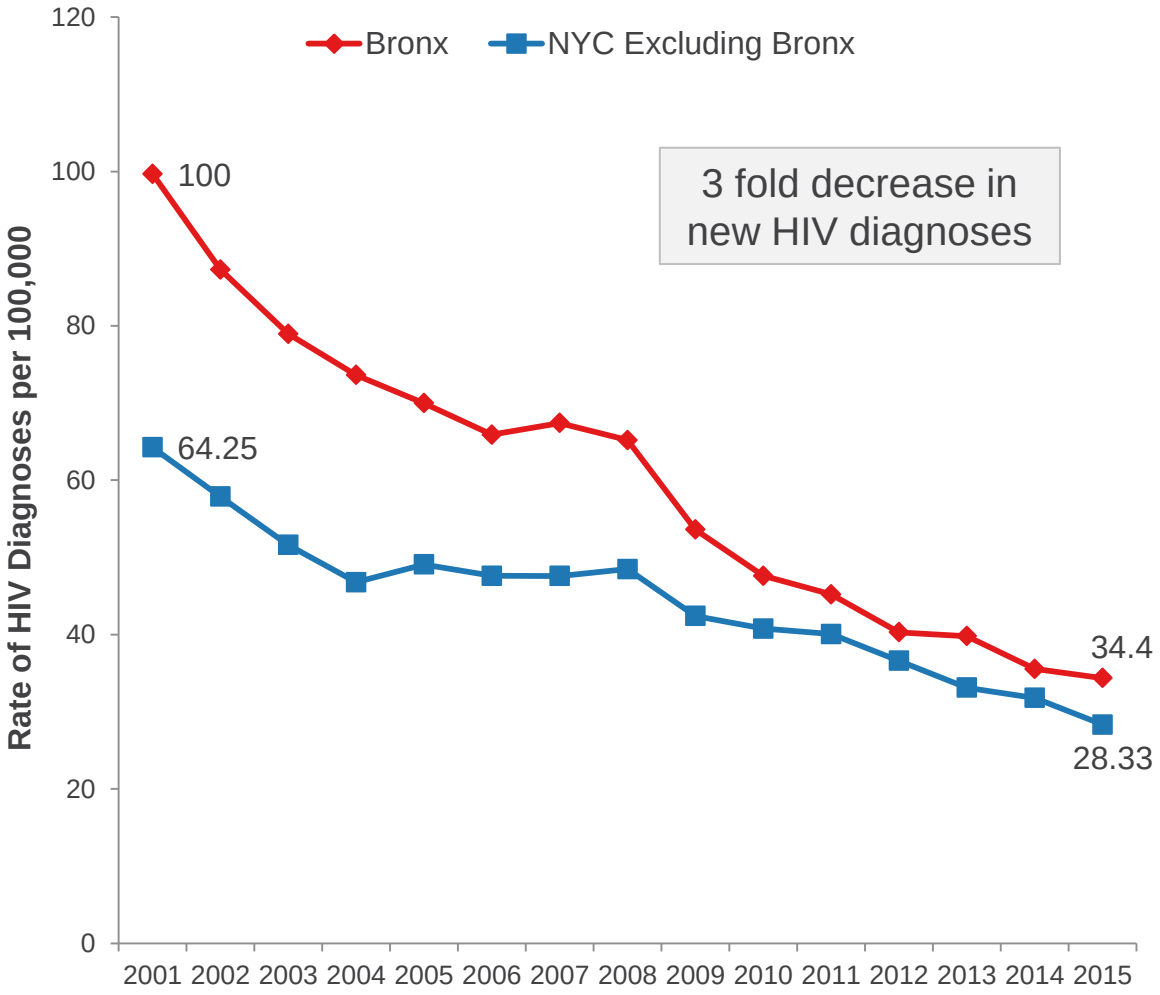
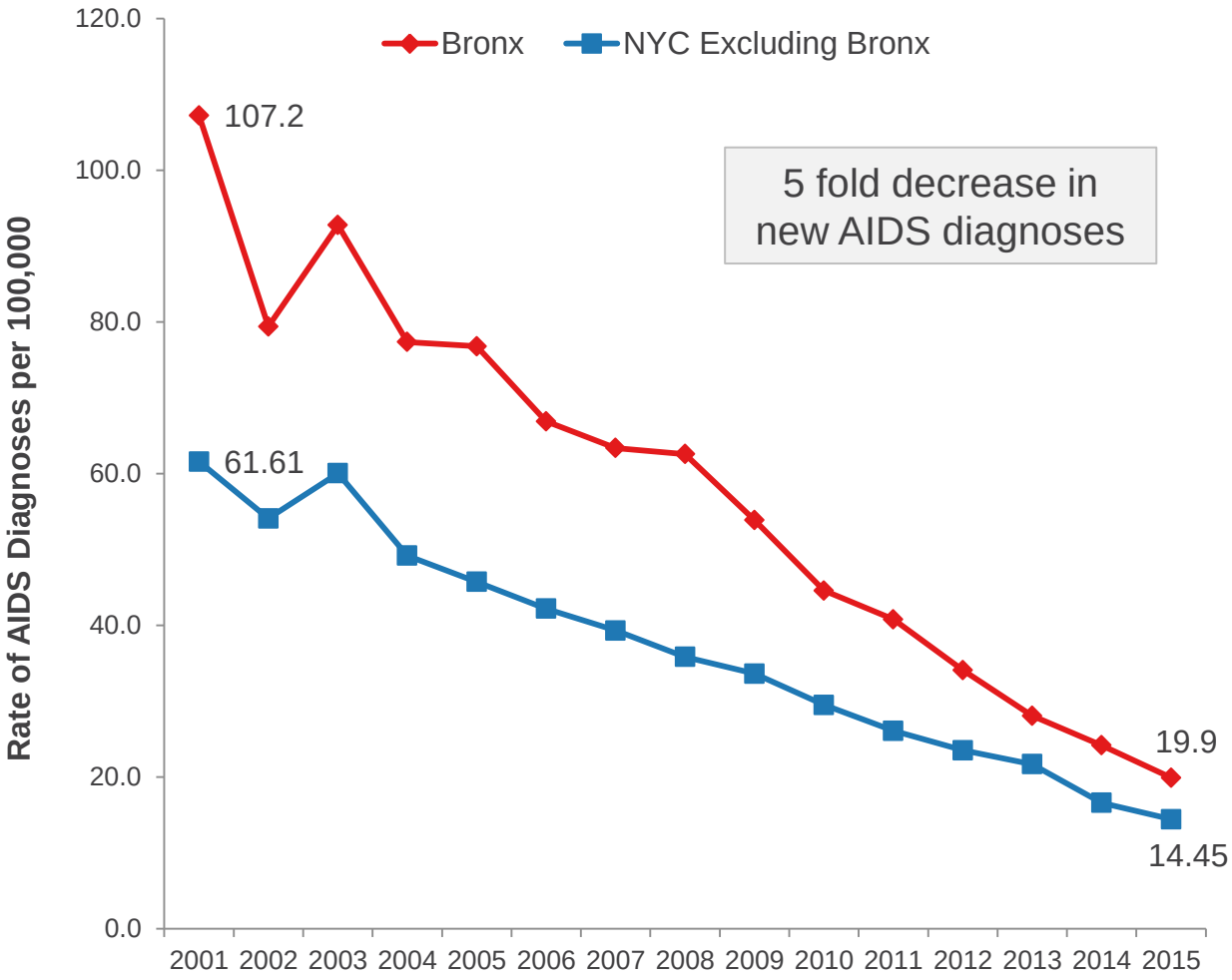
New HIV and AIDS diagnoses rates are falling





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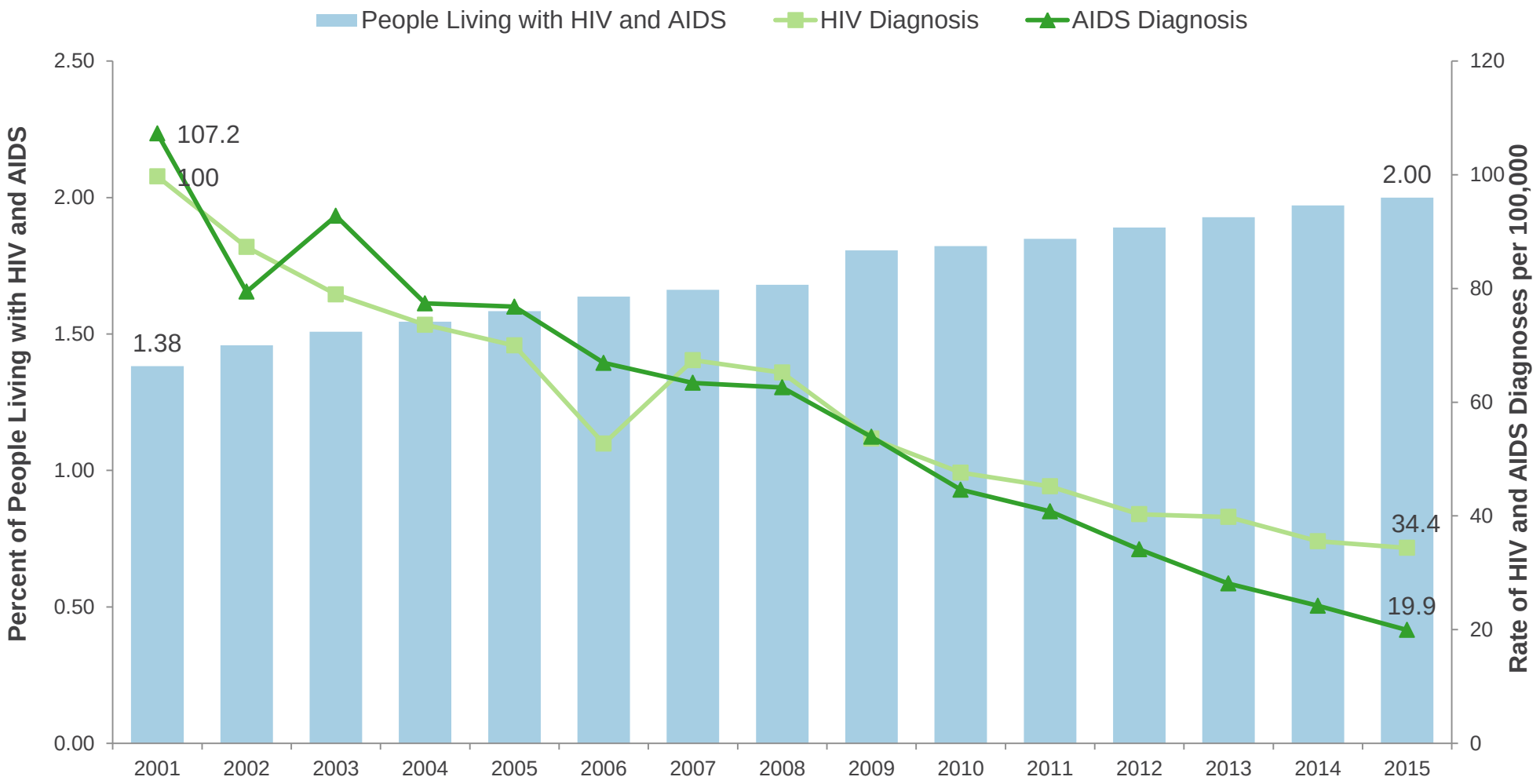
Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2013. Analysis by Montefiore OCPH.

The rate of new HIV/AIDS cases is falling but the rate of people living with HIV/AIDS is increasing



Note different axis scales

Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2015. Analysis by Montefiore OCPH.

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HIV Testing

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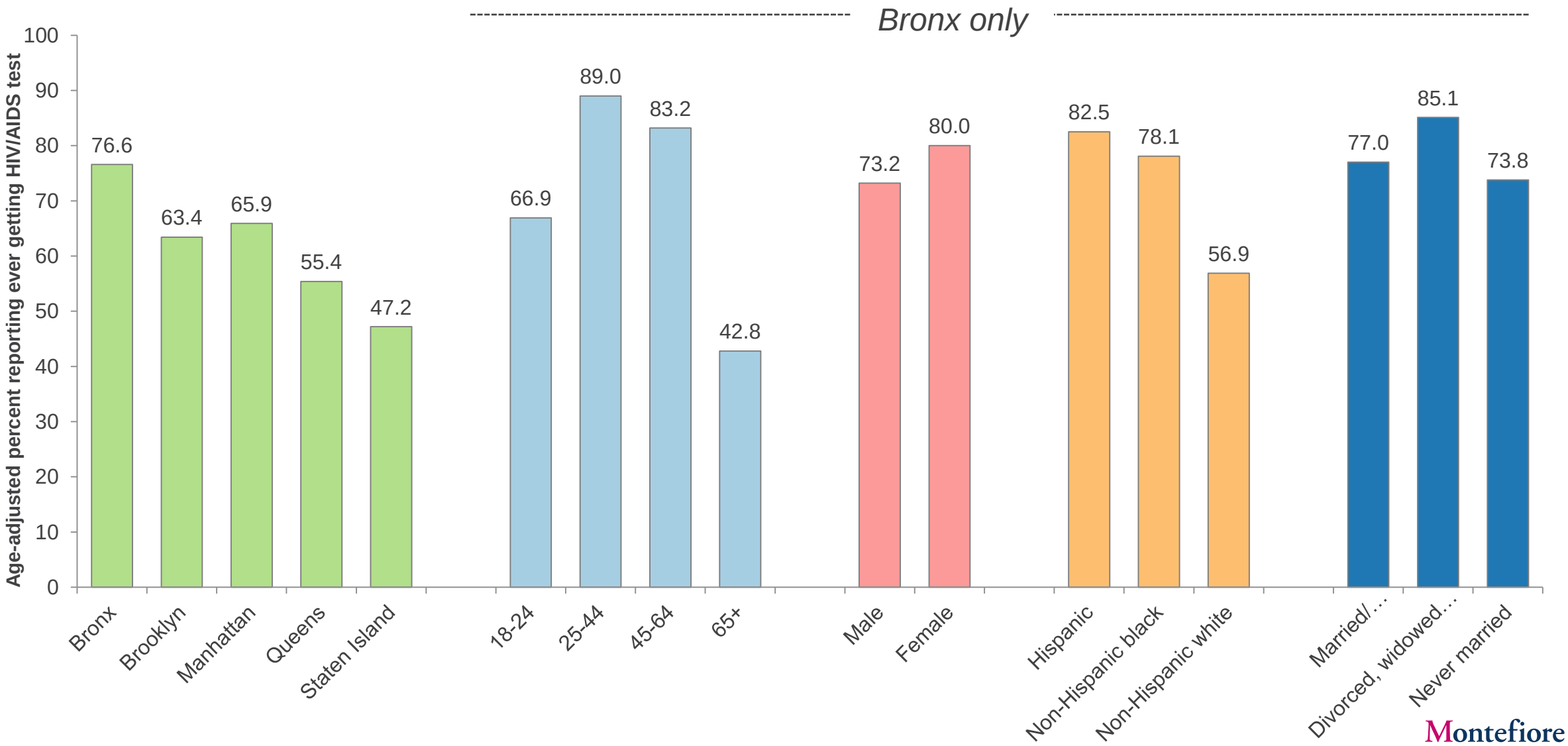
Bronx adult residents more likely to have ever had an HIV/AIDS test compared to other boroughs



Data source: Community Health Survey, 2015. Analysis by Montefiore OCPH.
Age results not age-adjusted.

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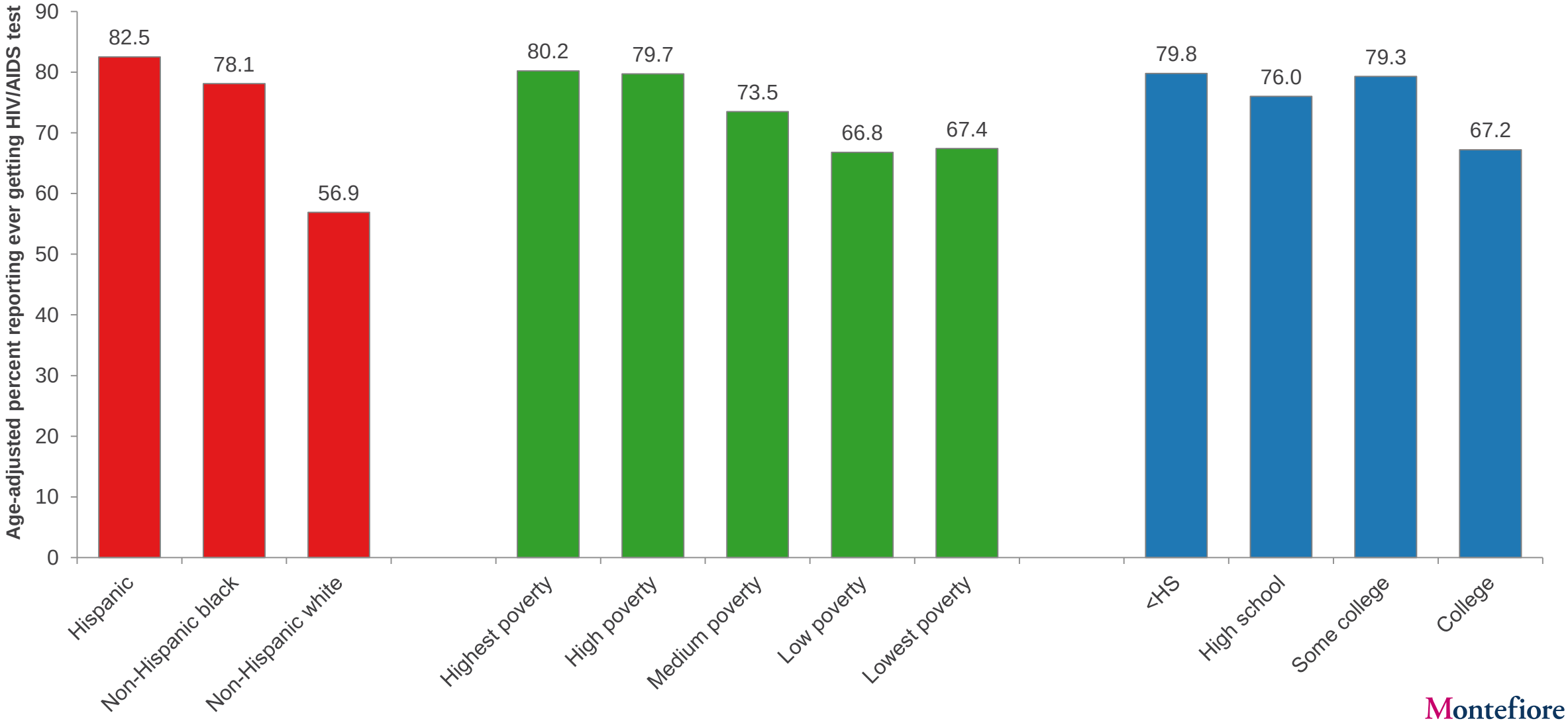
Residents with lower incomes and less education more likely to have ever had an HIV/AIDS test



Data source: Community Health Survey, 2015. Analysis by Montefiore OCPH.

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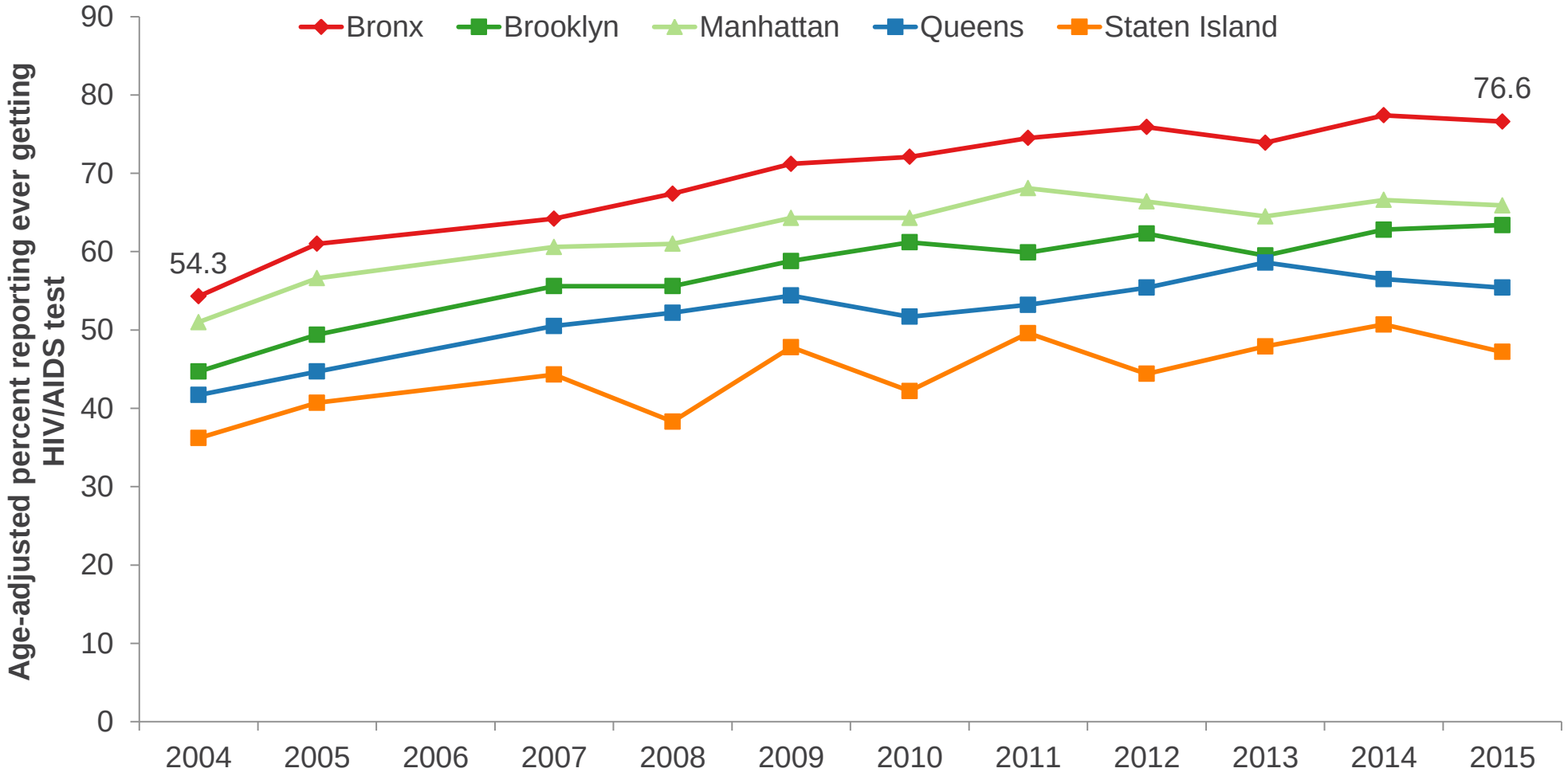
Since 2004, the Bronx has had the highest percentage of people ever getting an HIV/AIDS test



Data source: Community Health Survey, 2004-2015. Analysis by Montefiore OCPH.
Comparable data not collected in 2006.

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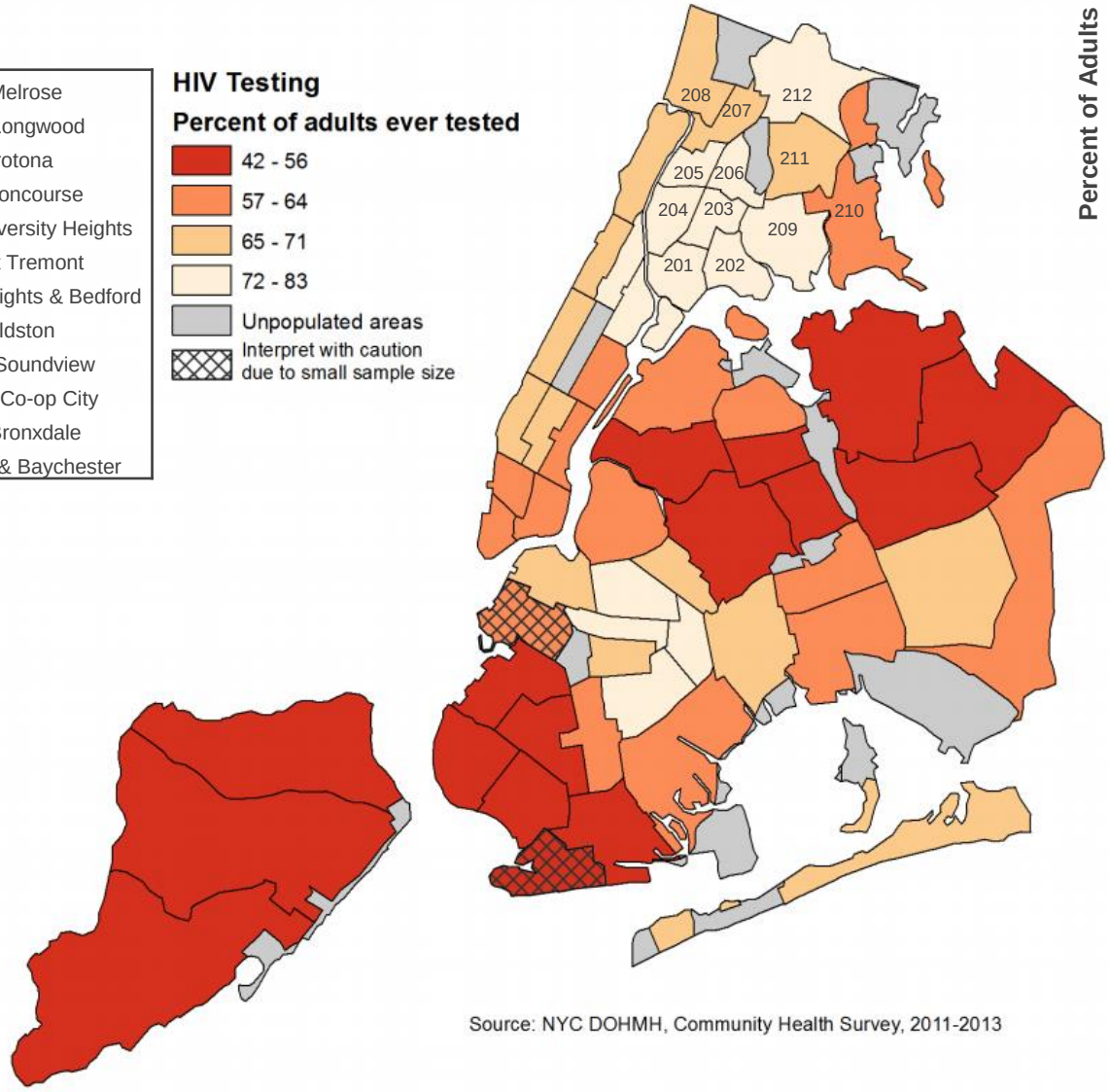
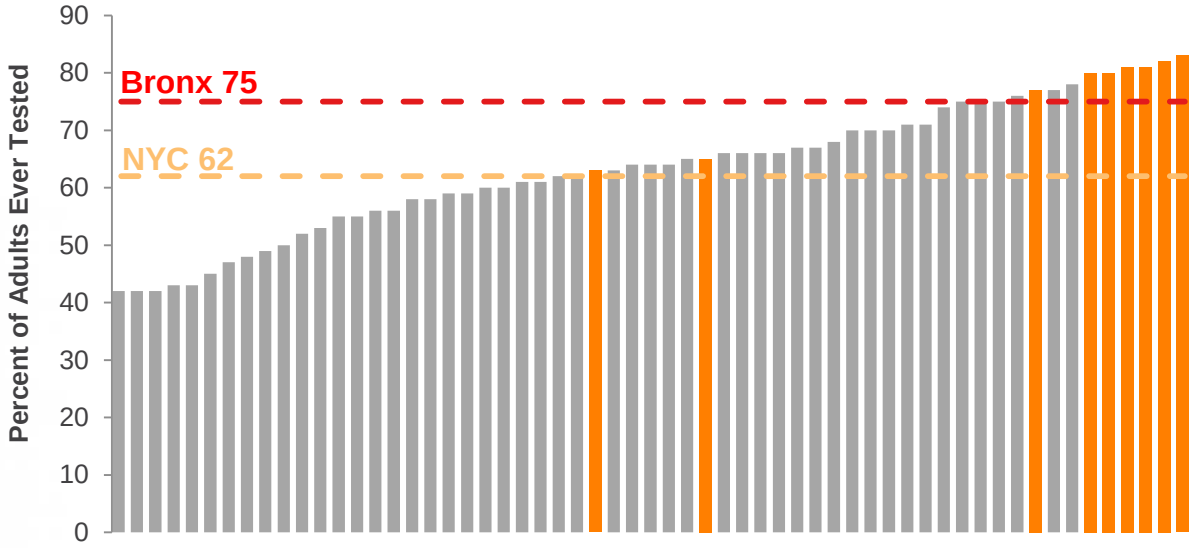
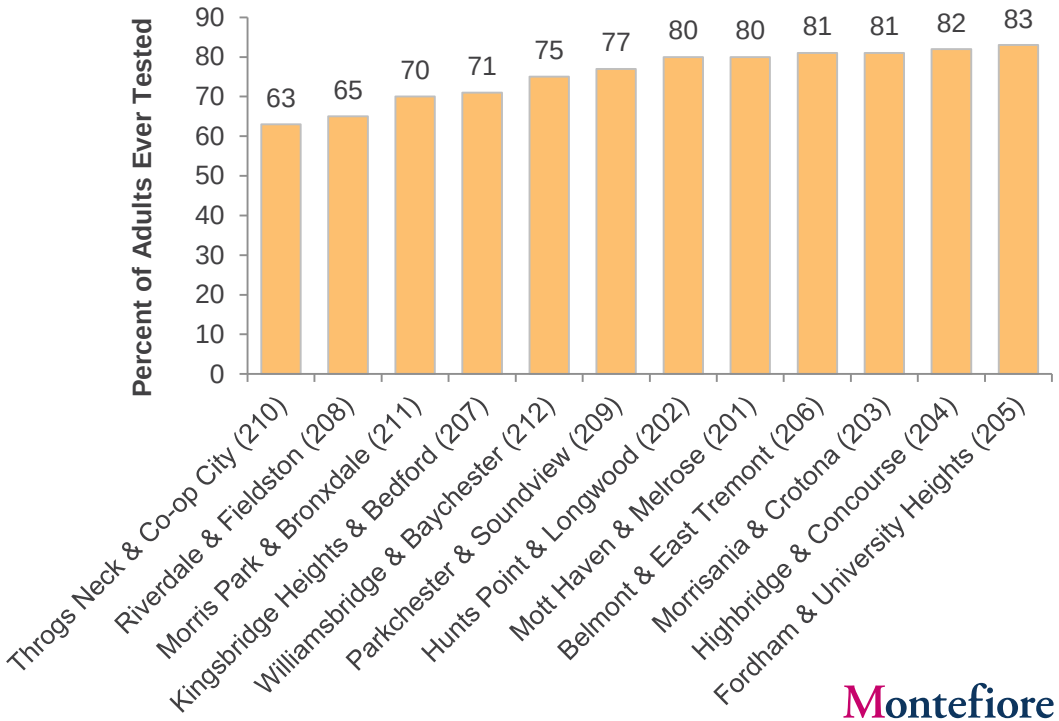
7 of 10 community districts with highest HIV testing are in the Bronx

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







Data source: NYC Community Health Profiles.

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HIV Diagnoses in the Bronx

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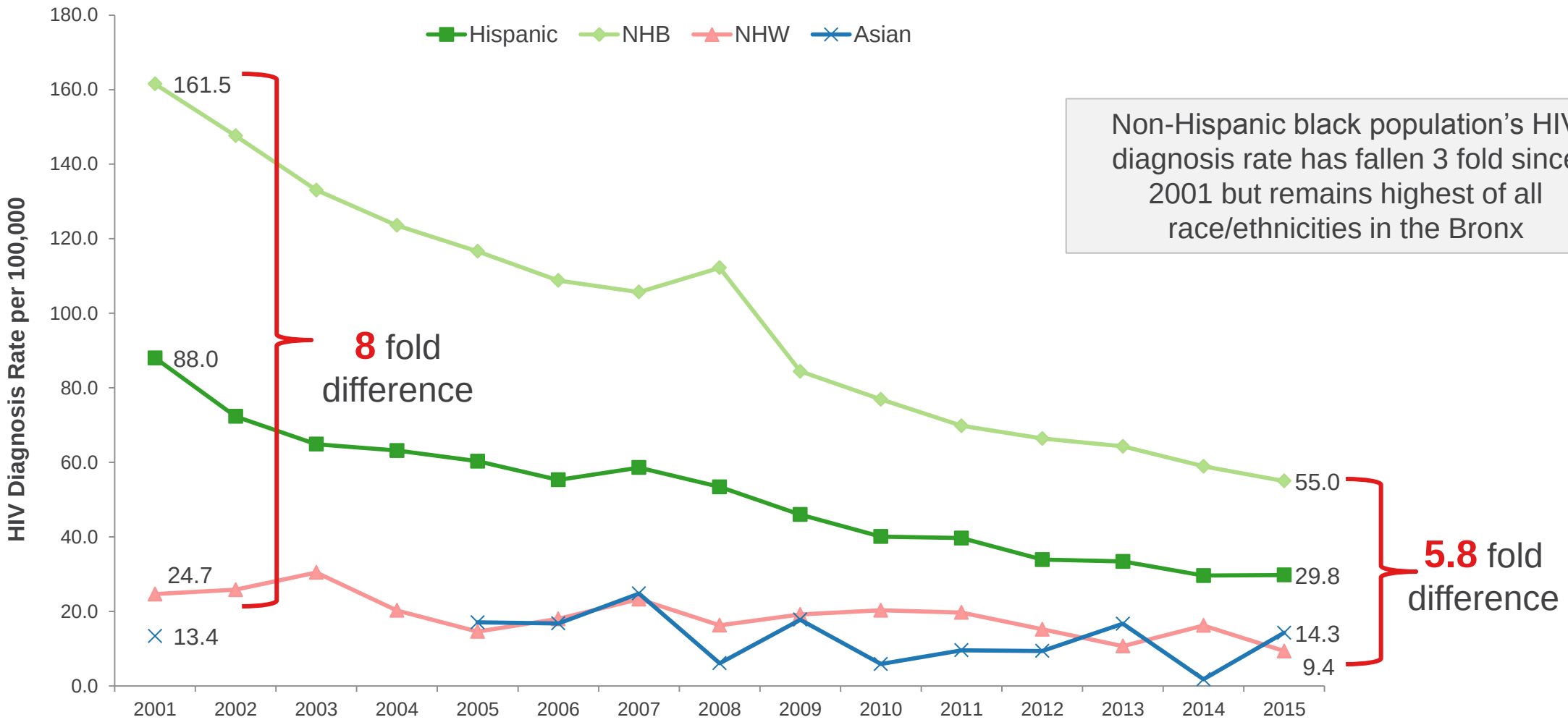
HIV diagnosis rate disparities amongst race/ethnicities in the Bronx have fallen 30% over last 14 years



Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2015. Analysis by Montefiore OCPH.
2002-2004 data for Asian population is statistically unstable.

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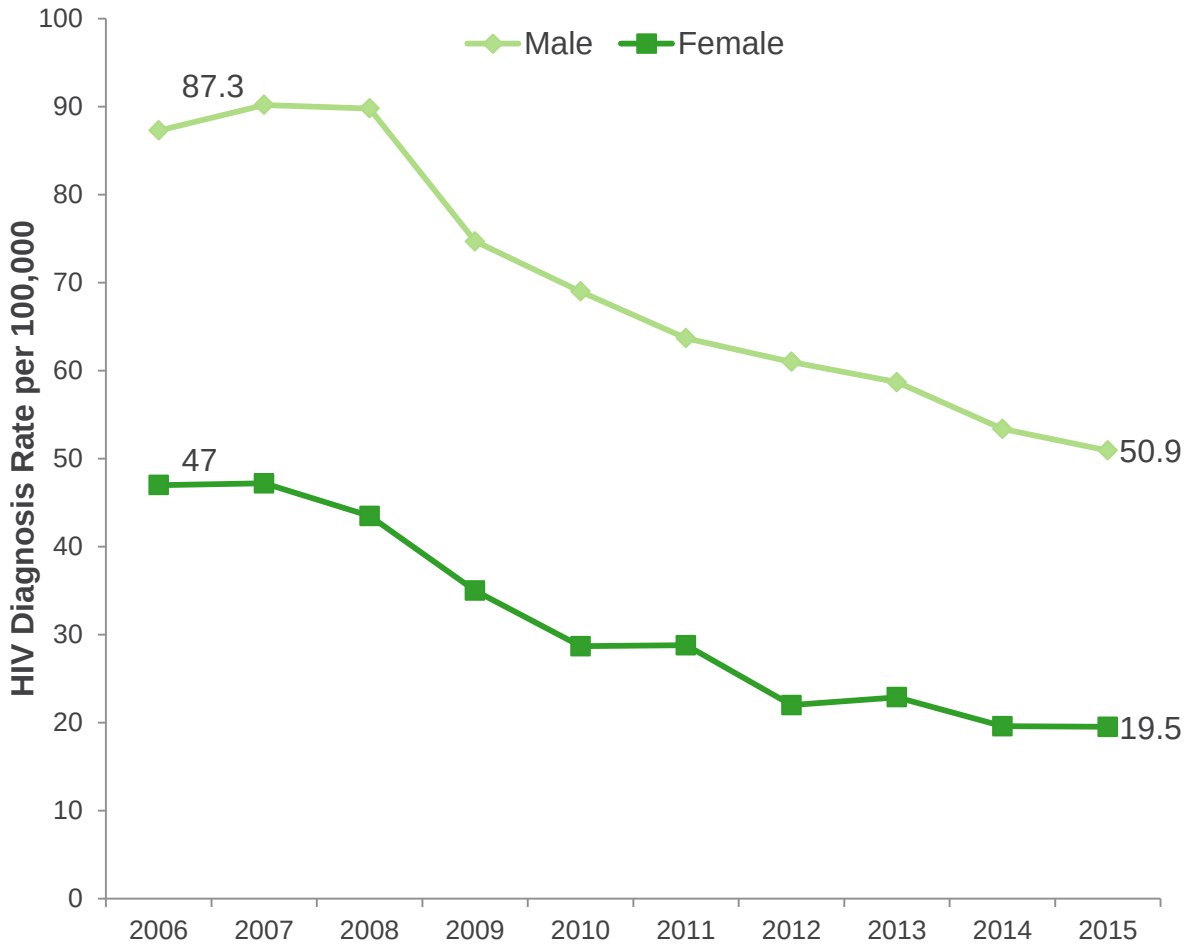
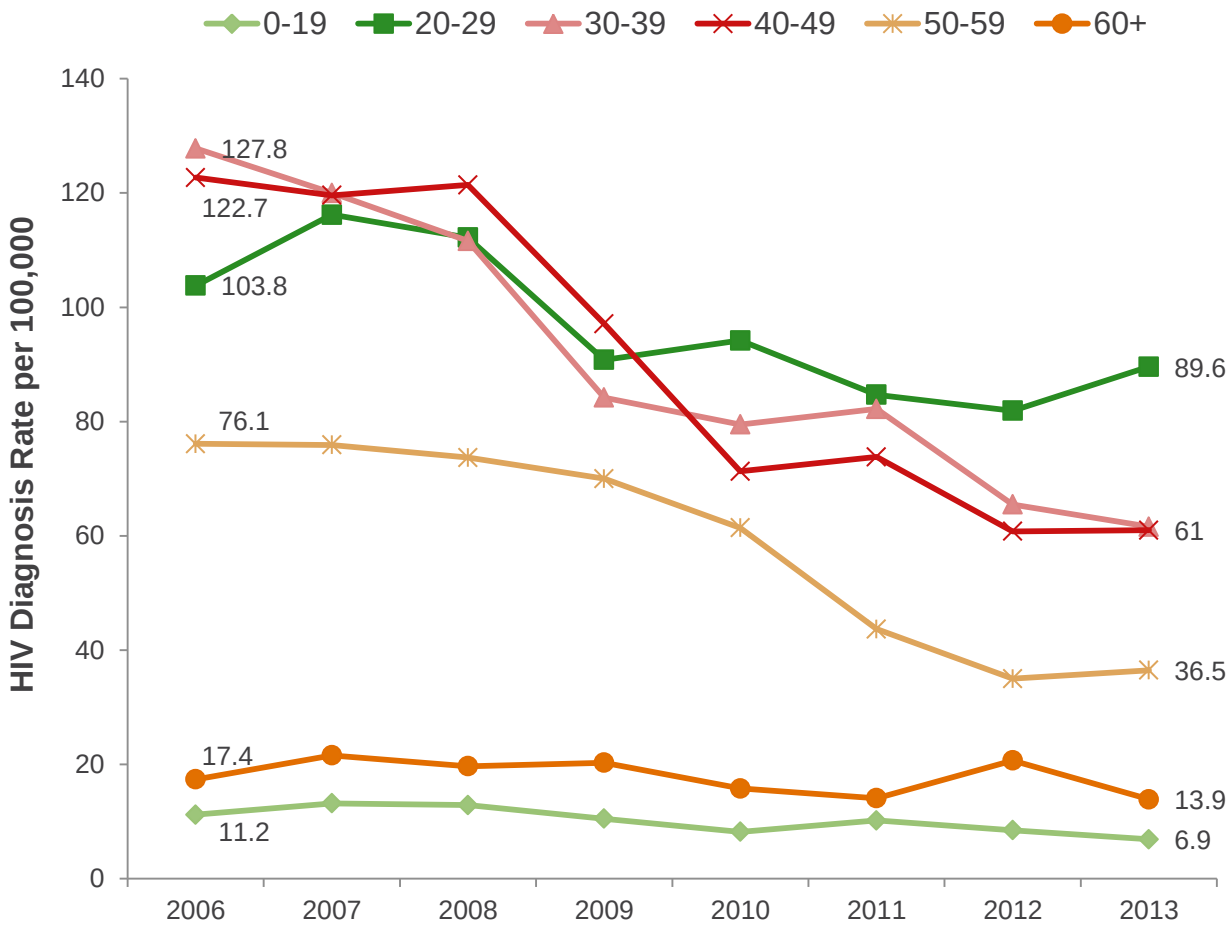
Males in the Bronx have higher rates of HIV diagnoses





Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2006-2015. Analysis by Montefiore OCPH.
Age results not age-adjusted.

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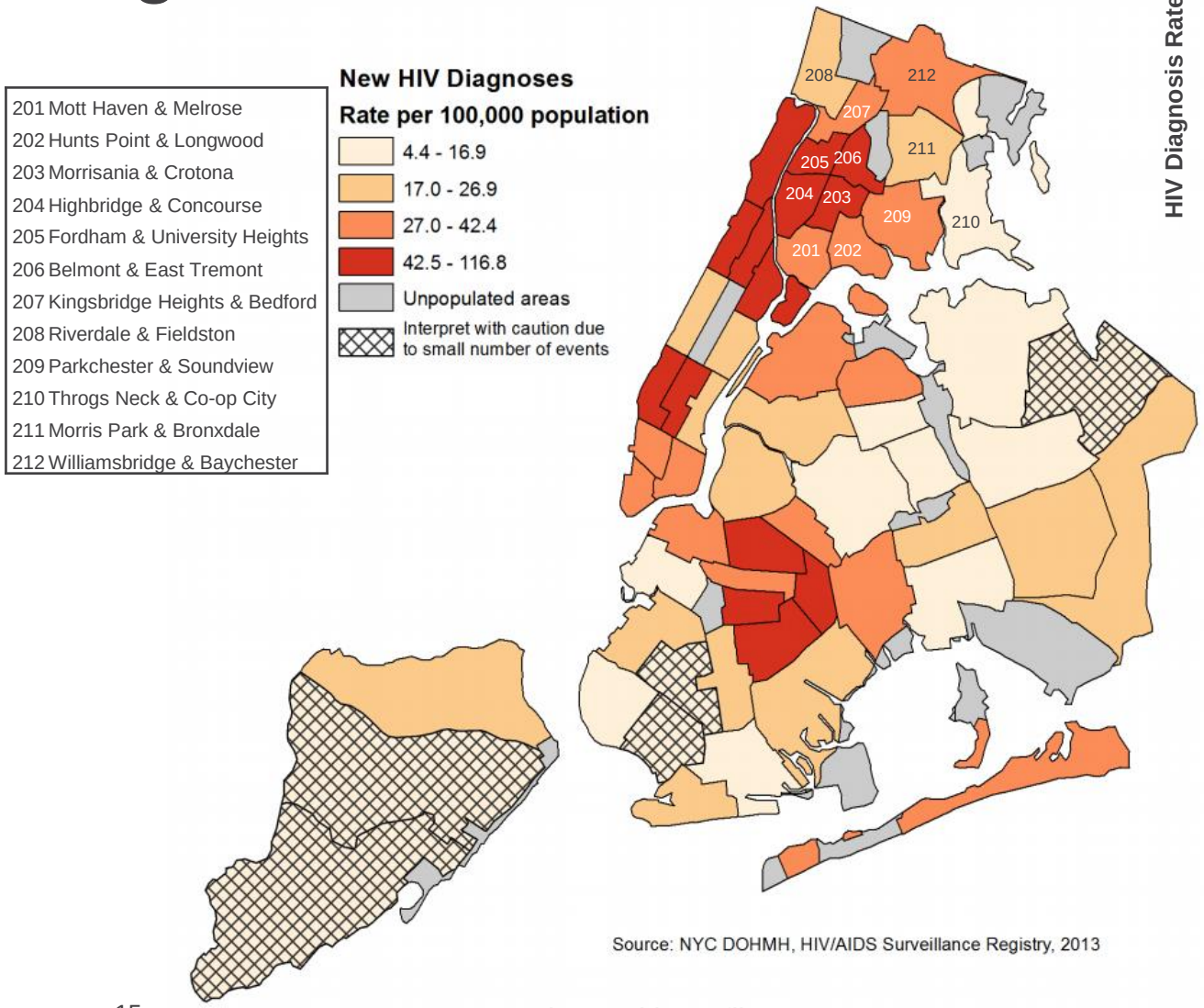
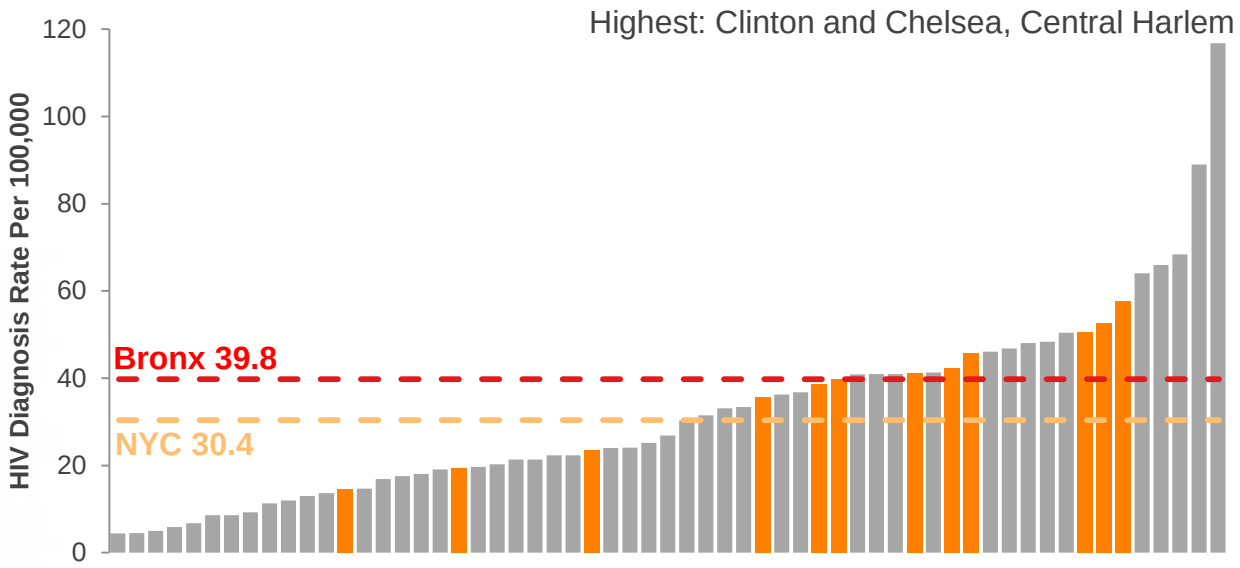
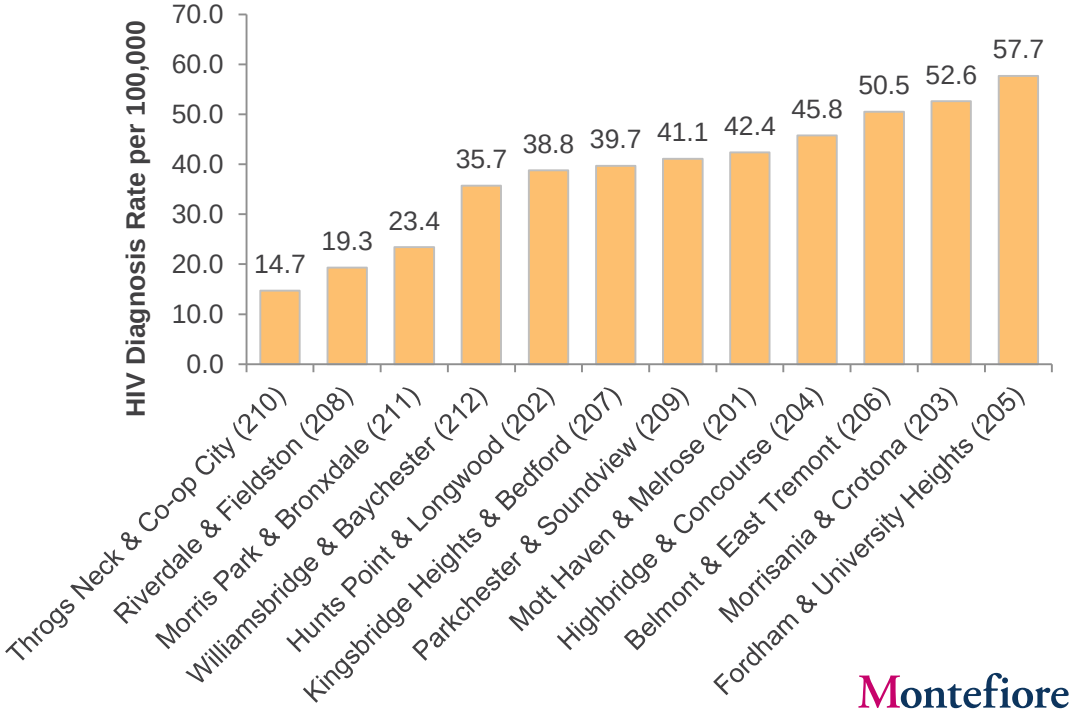
3 of 10 community districts with highest rates of HIV diagnoses are in the Bronx







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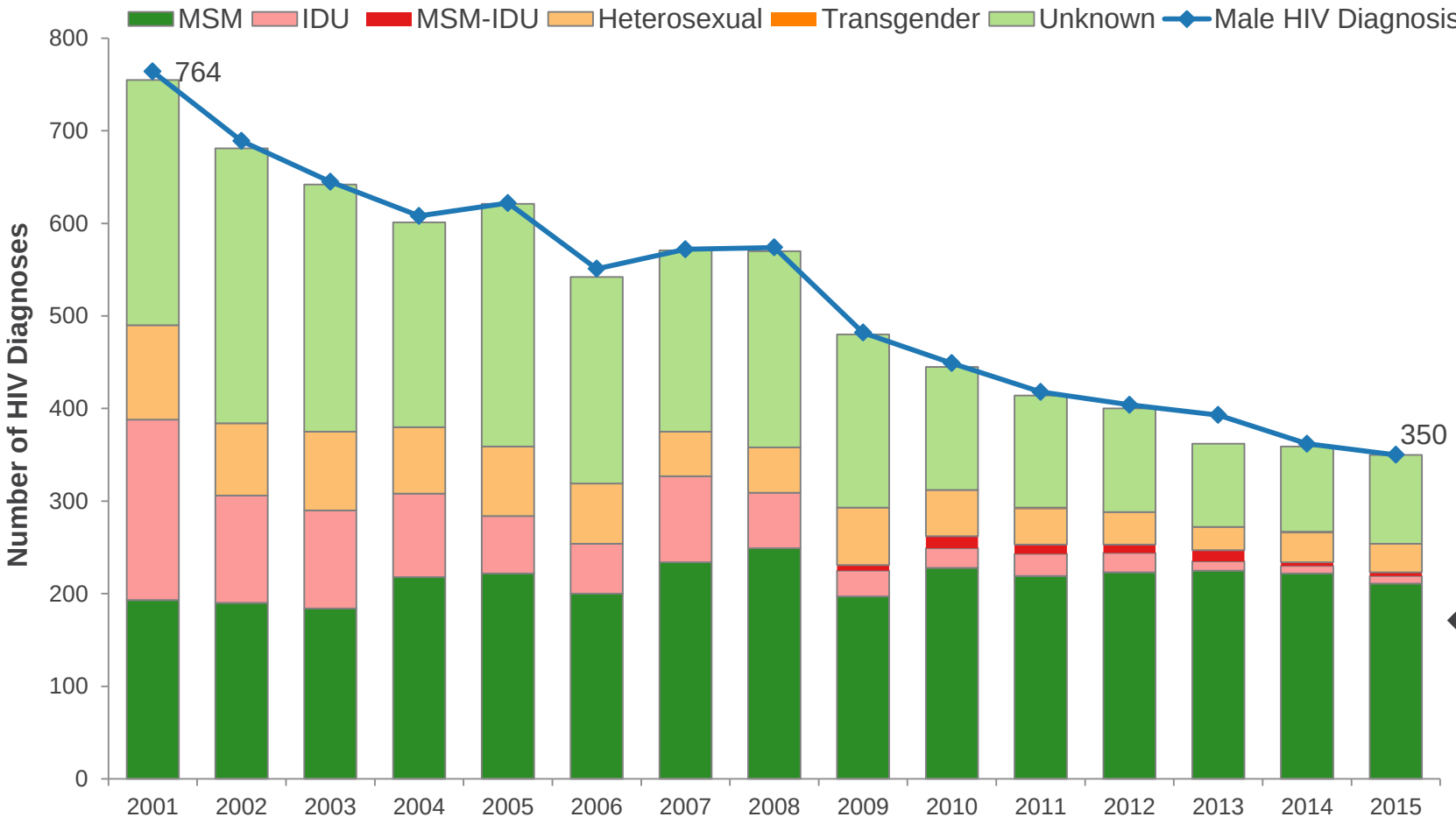
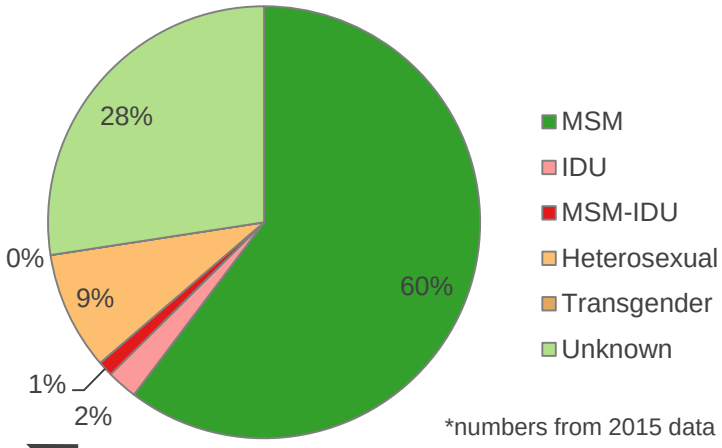
Data source: NYC Community Health Profiles.

HIV Diagnoses rate in the Bronx is highest and increasing for men who have sex with men





*numbers from 2015 data

Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2015. Analysis by Montefiore OCPH.
Combined MSM-IDU category was not created until 2009.

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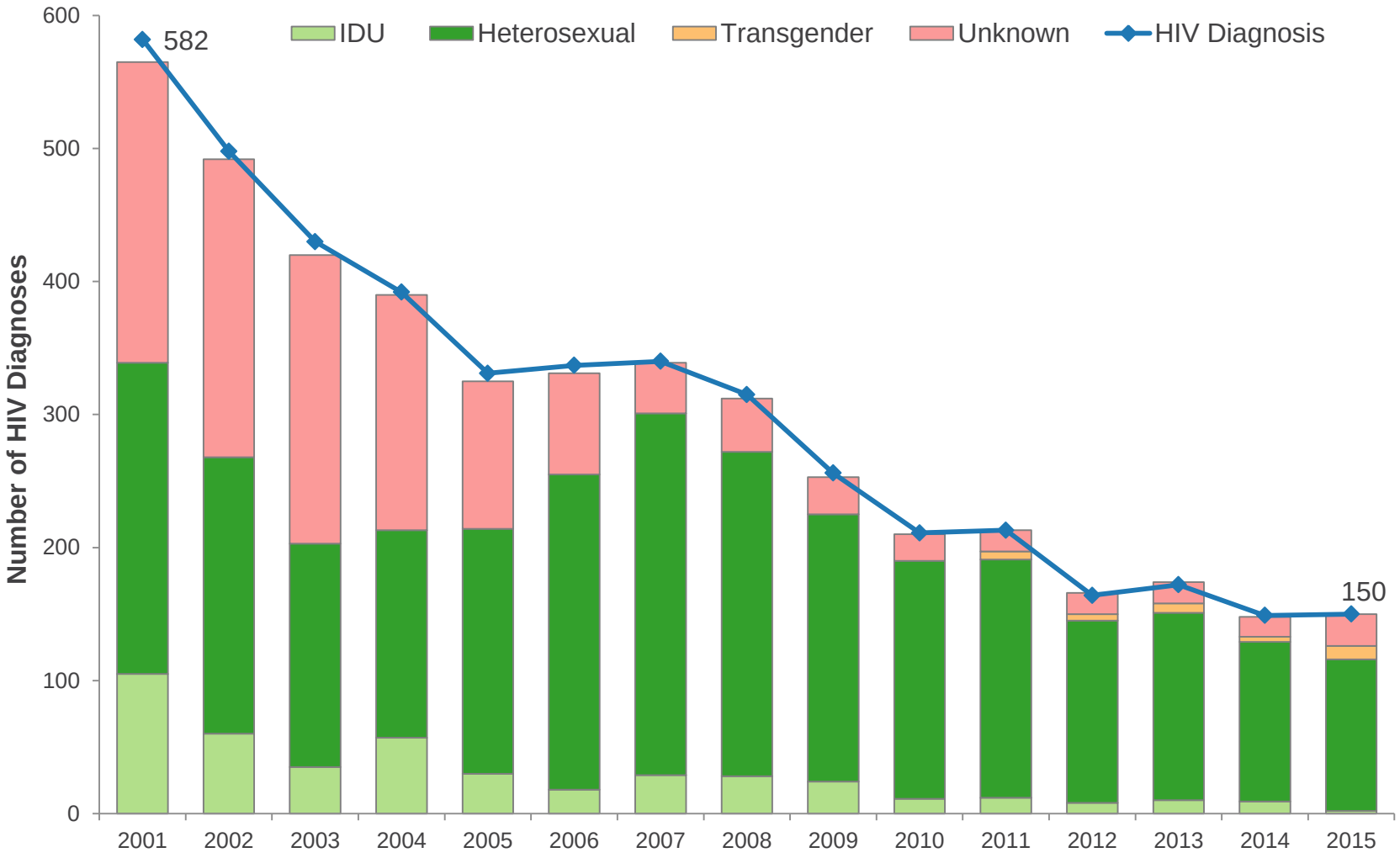
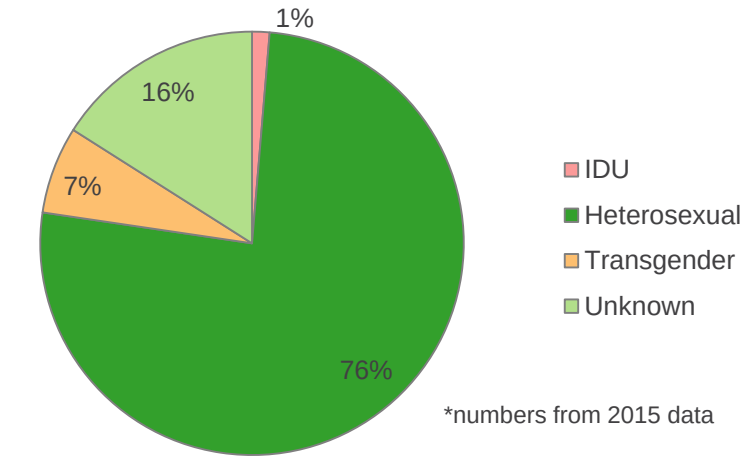
HIV diagnosis rate is highest for females with heterosexual contact in the Bronx





*numbers from 2015 data

Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2015. Analysis by Montefiore OCPH.
Data values falling below 10 are not displayed on chart.

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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

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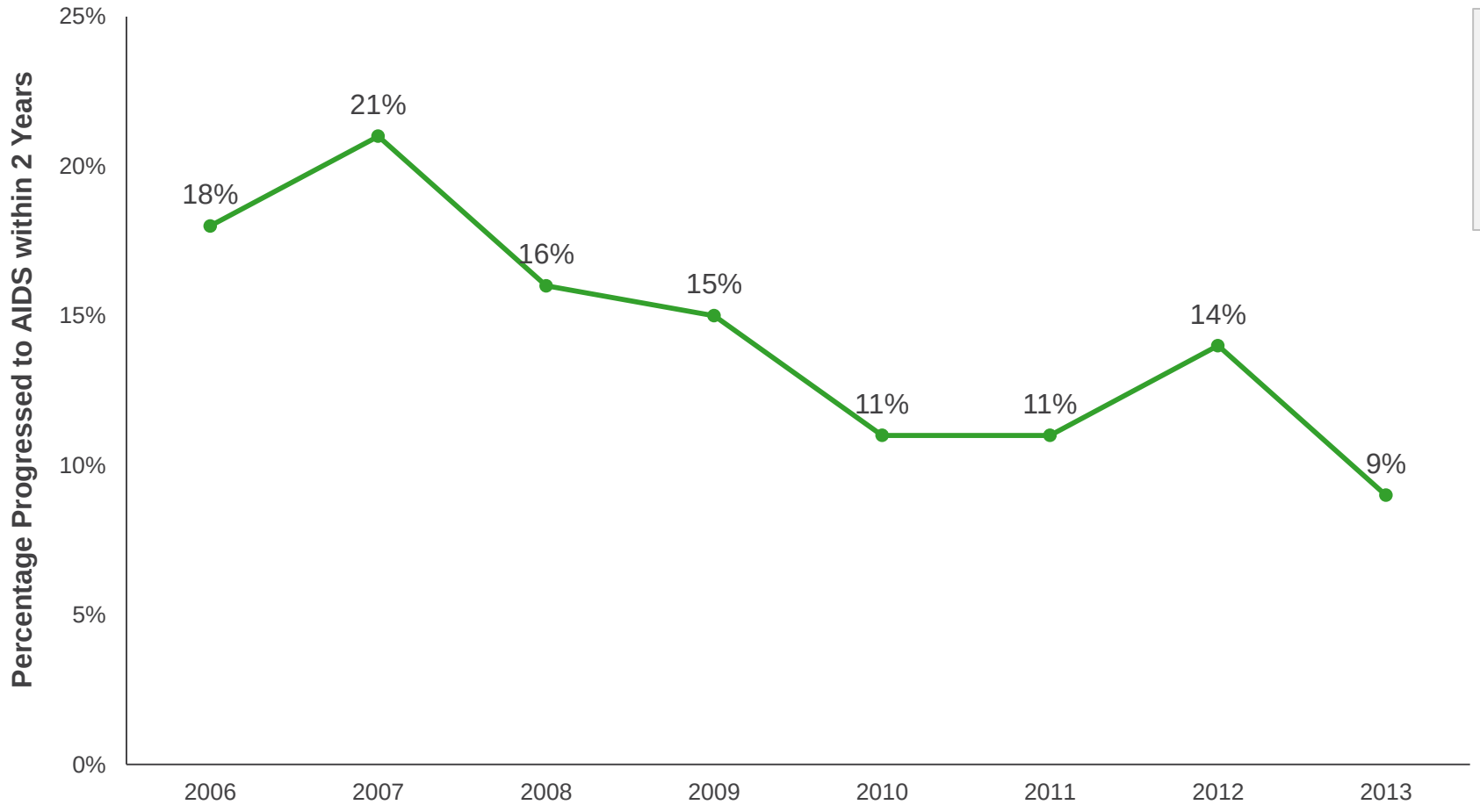
The proportion of new HIV-only diagnoses that progressed to AIDS within 2 years decreased 50% in the Bronx between 2006 and 2013



People are classified as having AIDS if they either have one or more AIDS-defining opportunistic illnesses (based on1993 CDC case definition) or a laboratory test indicating suppressed CD4+ cell counts (<200 cells/µL)

Data source: Care and Clinical Status of People Diagnosed with HIV and People Living with HIV/AIDS in NYC, 2015.
As reported to the New York City Department of Health and Mental Hygiene by June 30, 2016.

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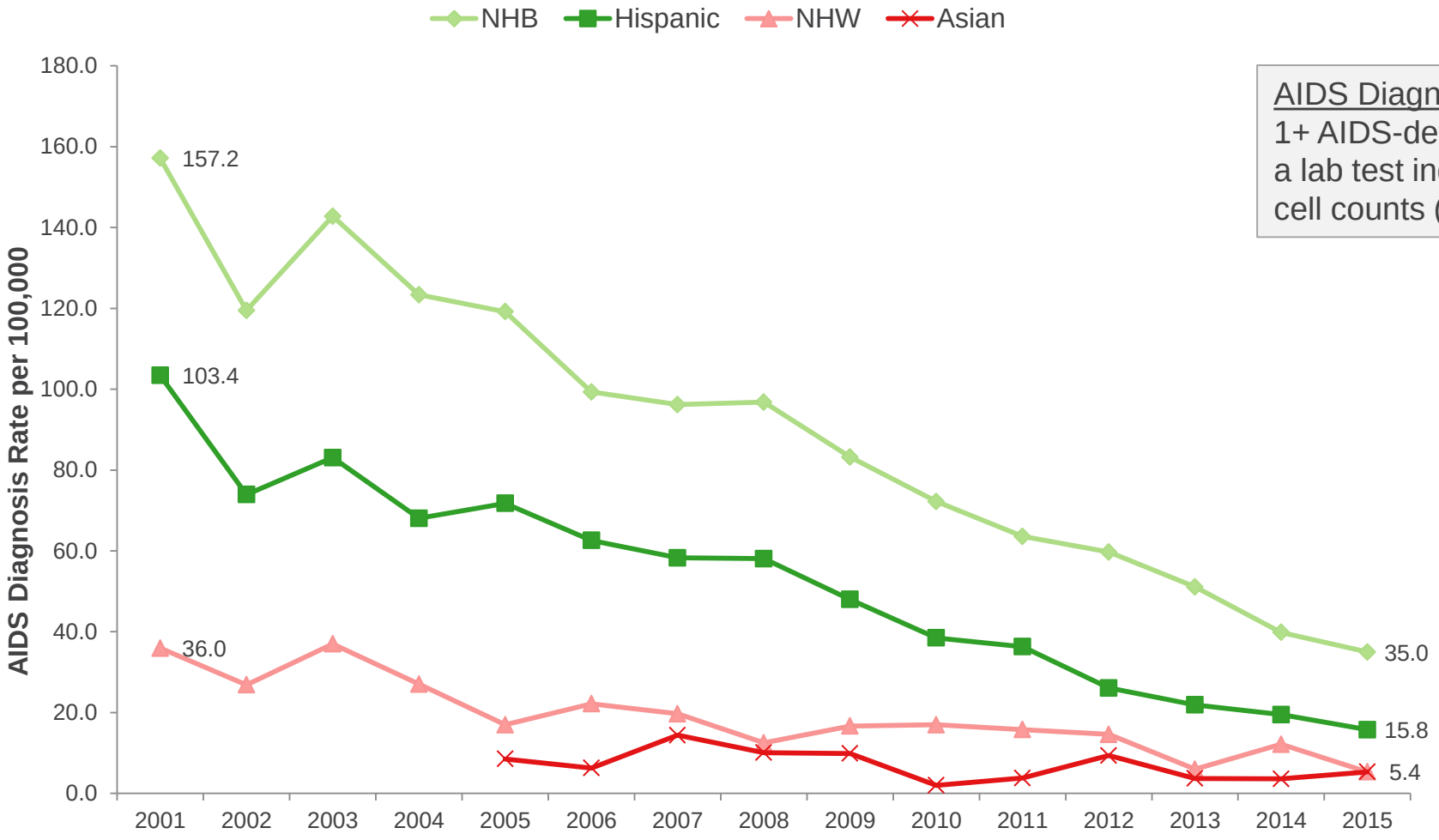
AIDS diagnoses rates are highest amongst non-Hispanic blacks in the Bronx



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Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2015. Analysis by Montefiore OCPH.
2001-2004 data for Asian population unstable.

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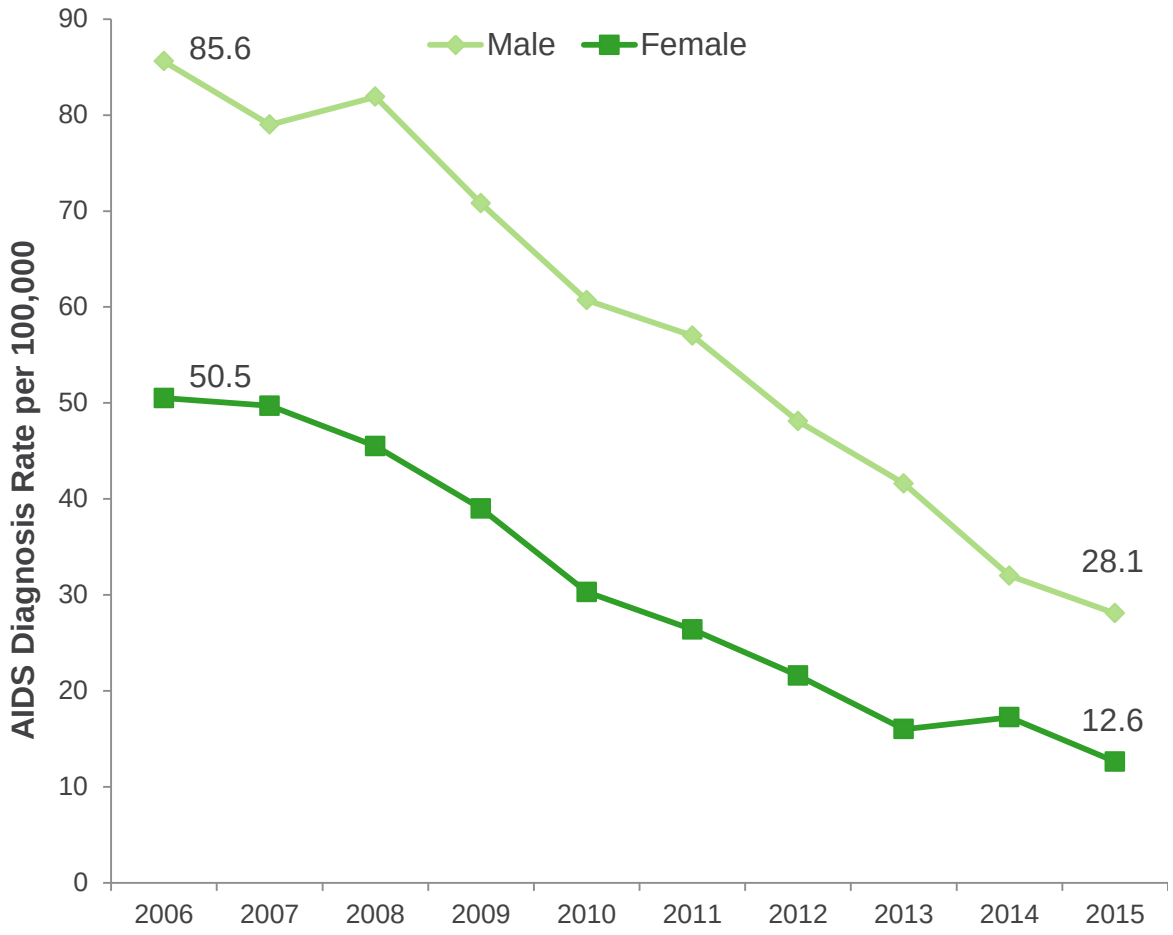
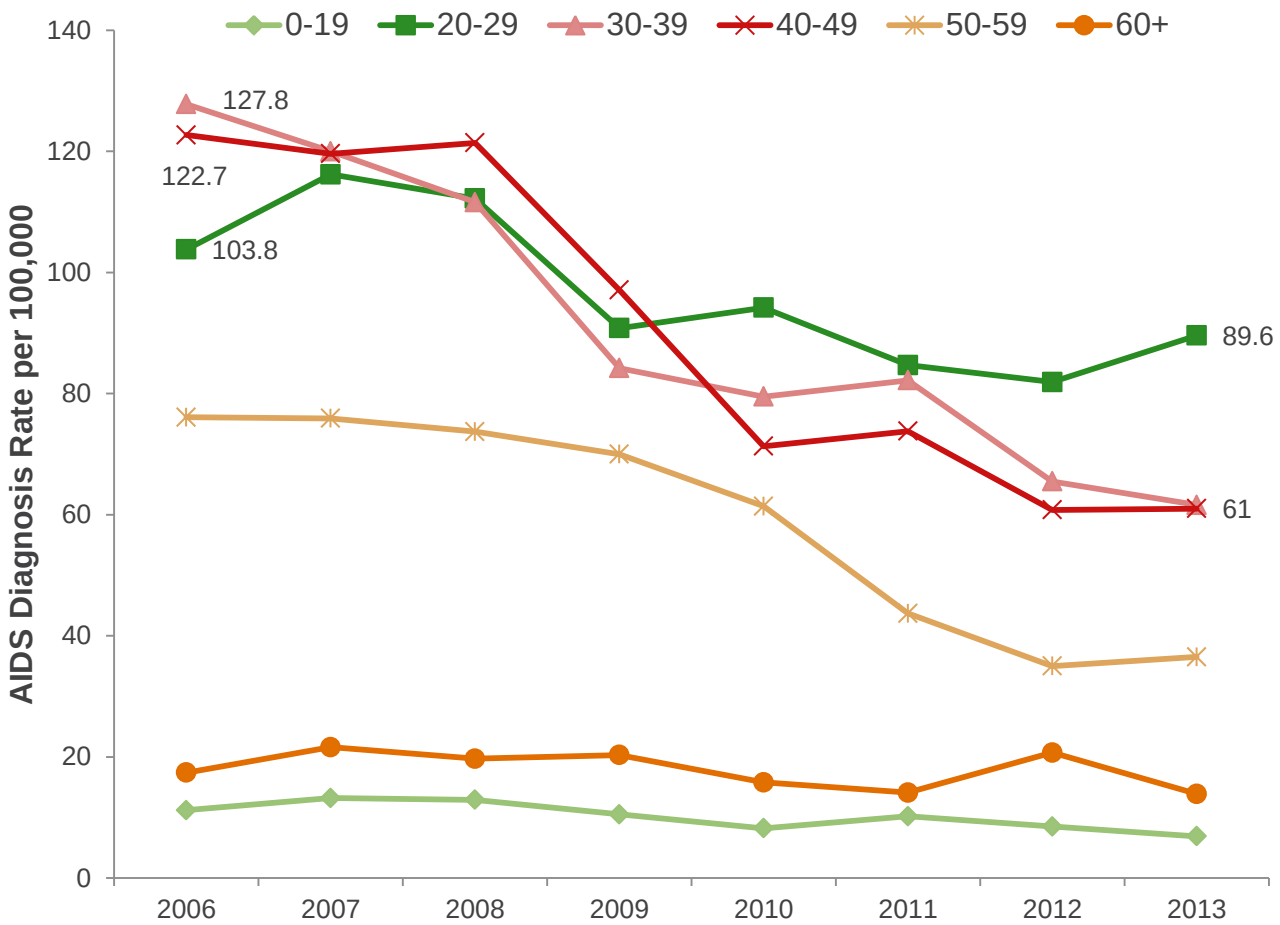
Males in the Bronx have higher rates of AIDS diagnoses





Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2015. Analysis by Montefiore OCPH.
HIV diagnosis rates pre-2006 are unavailable

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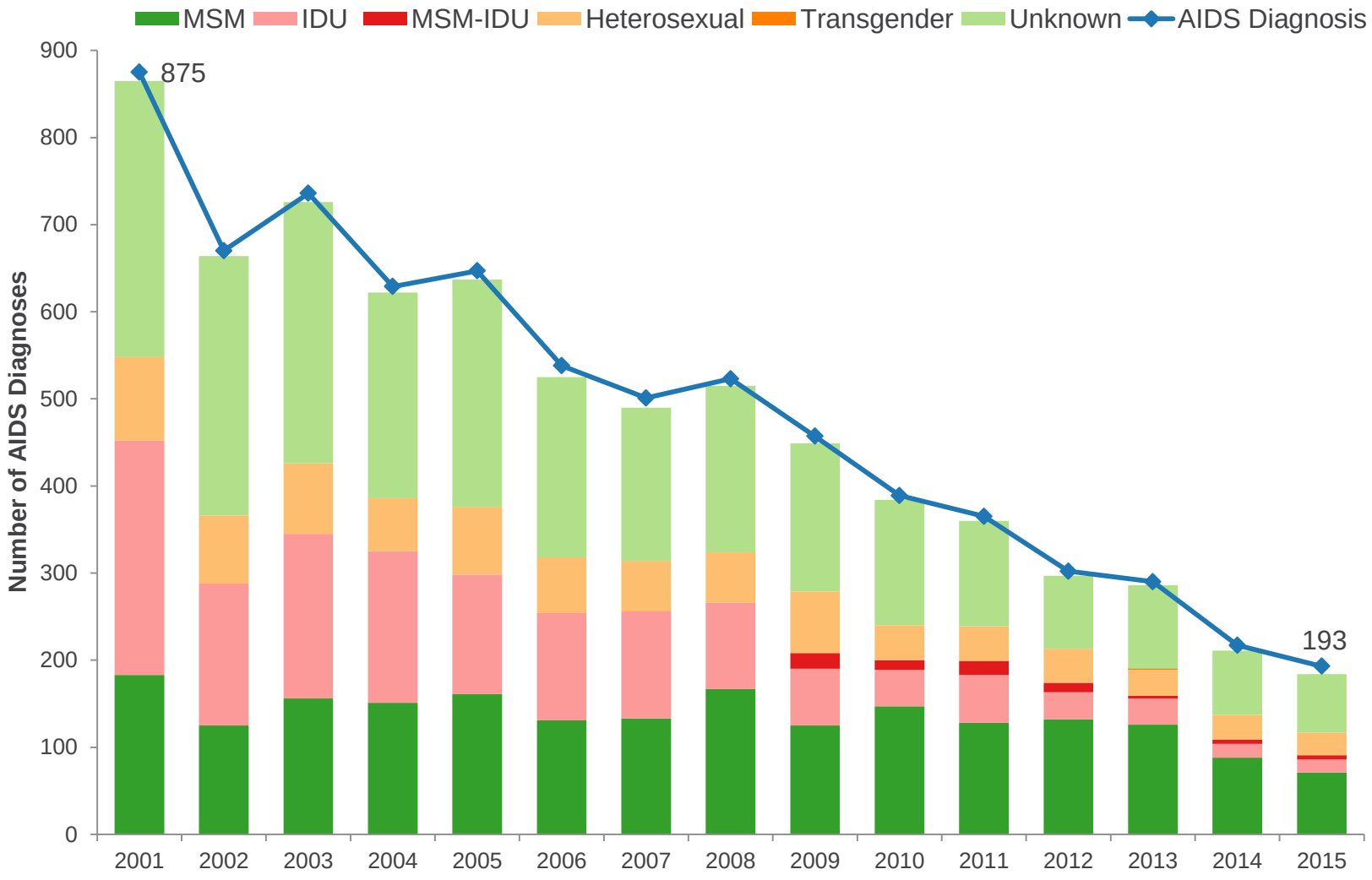
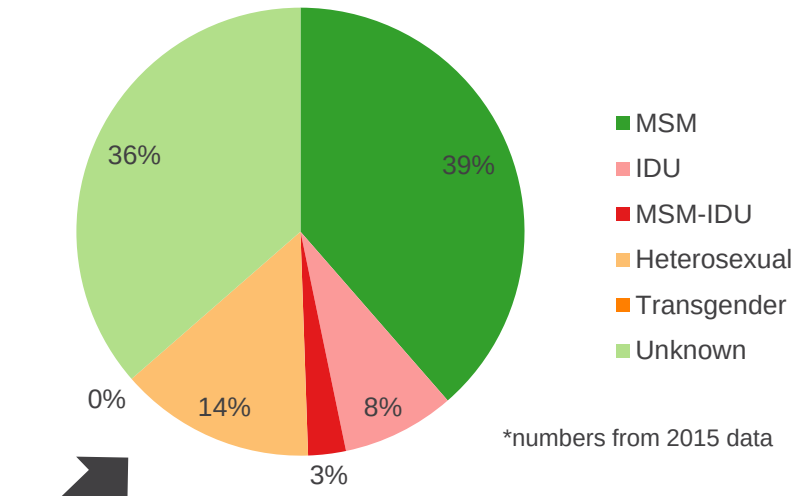
In the Bronx, AIDS diagnoses are highest for men who have sex with men





*numbers from 2015 data

Data source: New York City HIV/AIDS Annual Surveillance Statistics, 2001-2015. Analysis by Montefiore OCPH.
MSM-IDU category was not created until 2009; 2002 values for Transgender are not statistically significant.

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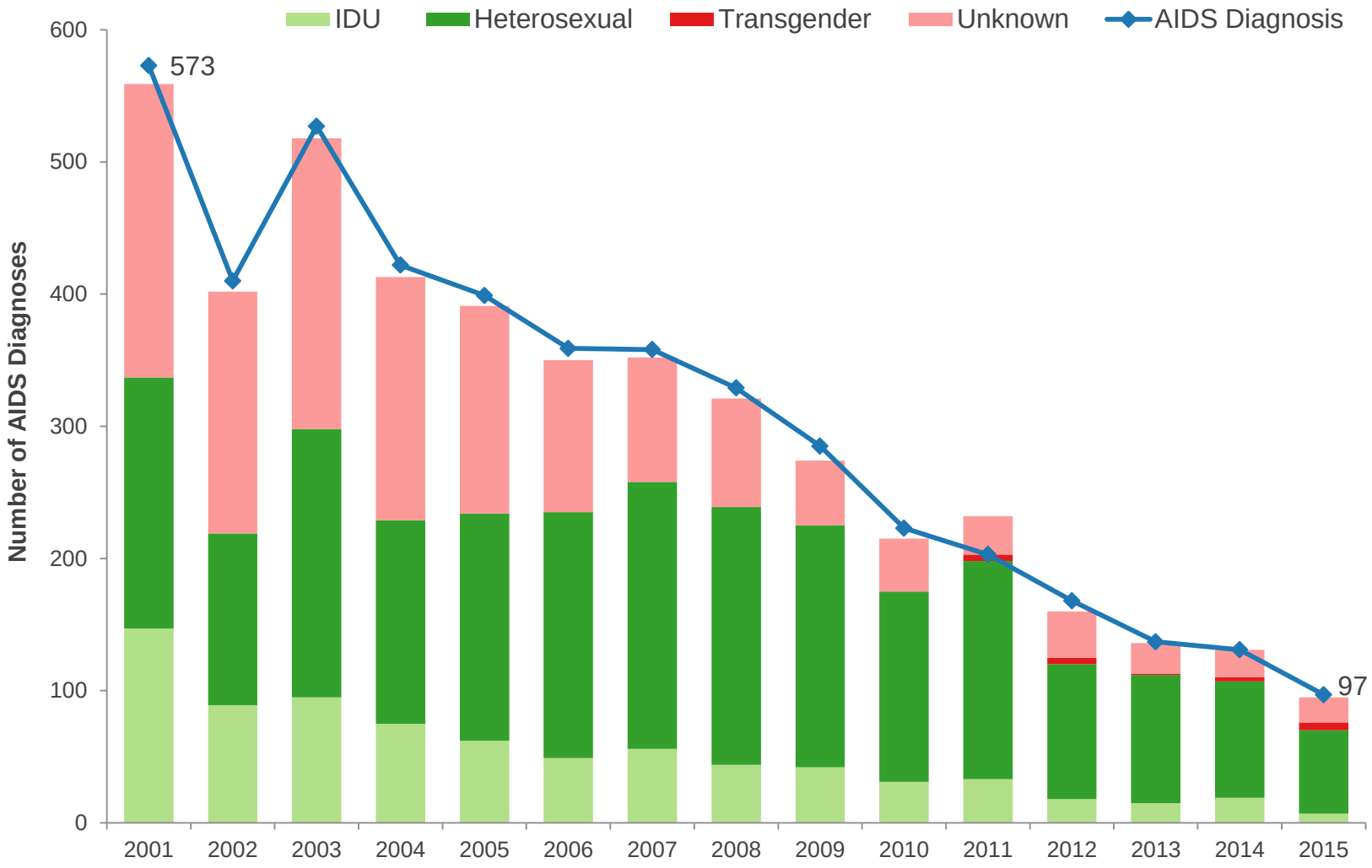
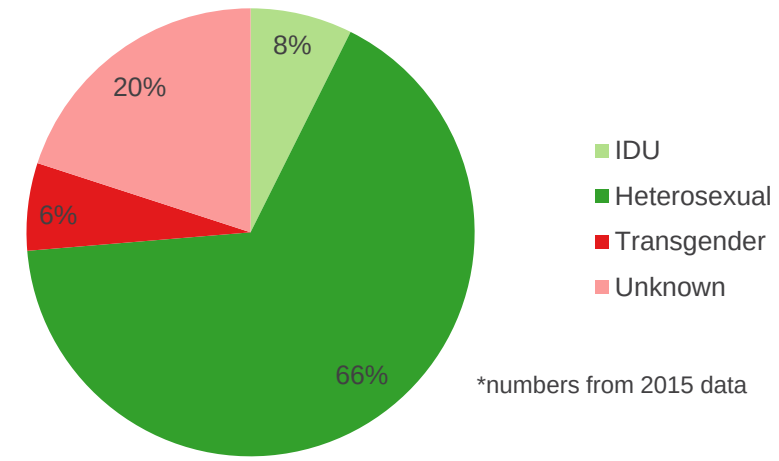
In the Bronx, AIDS diagnoses are highest for females with heterosexual contact





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MSM-IDU category was not created until 2009; 2002 values for Transgender are not statistically significant.

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HIV/AIDS Related Care in the Bronx

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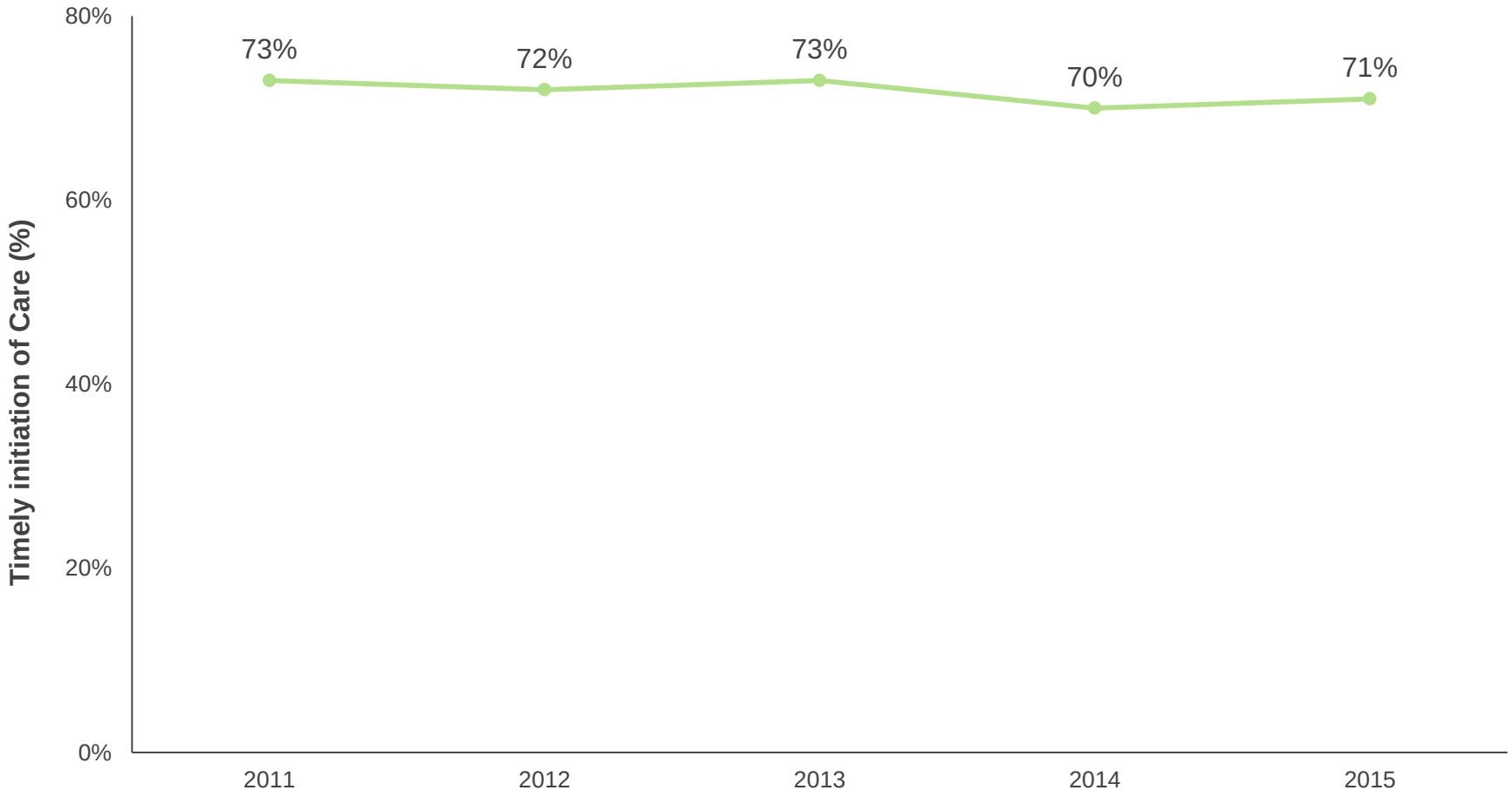
Timely initiation of care among newly diagnosed people with HIV remained steady in the Bronx between 2011 and 2015

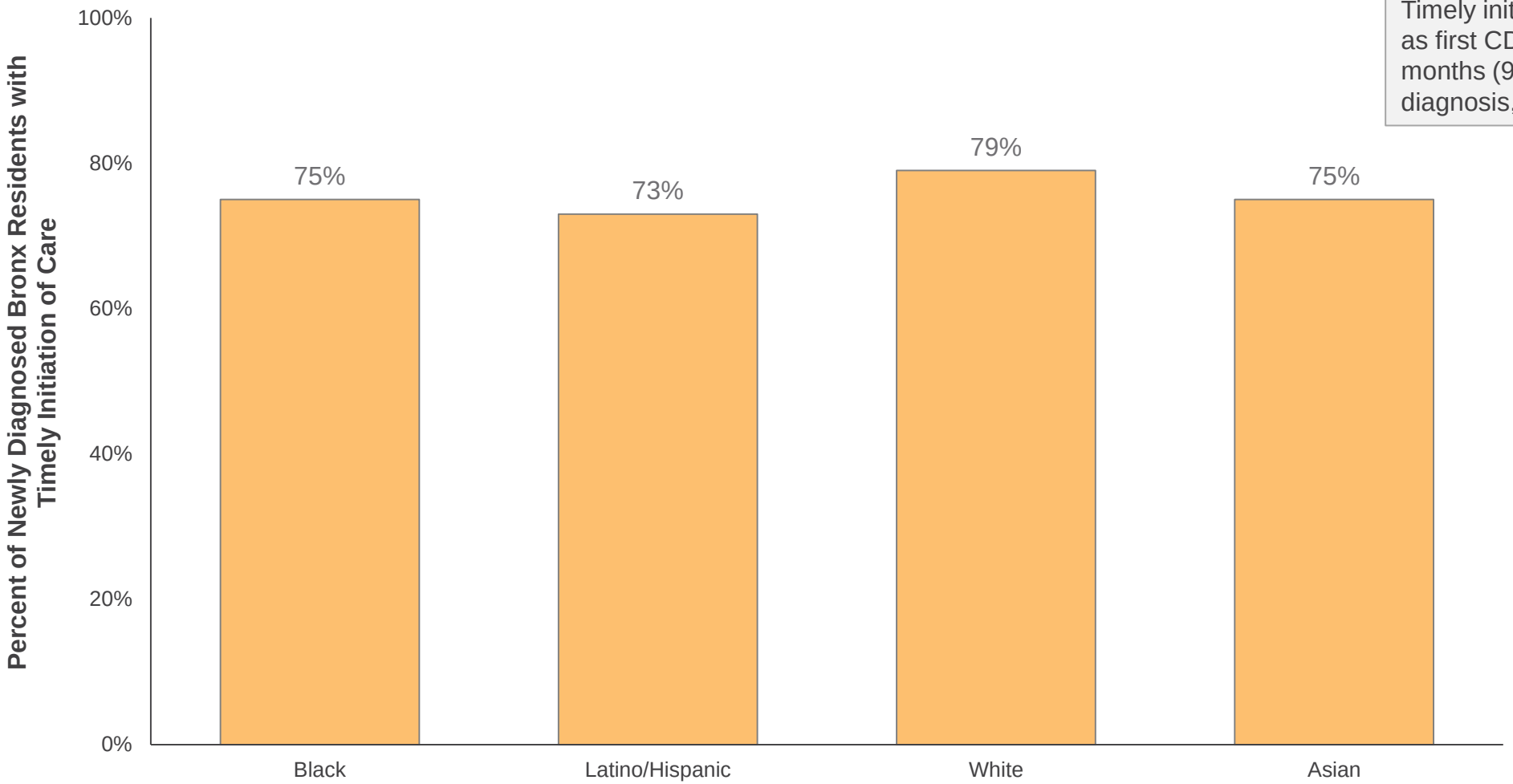


Timely initiation of care is defined as first CD4 or VL drawn within 3 months (91 days) of HIV diagnosis, following a 7-day lag

Data source: Care and Clinical Status of People Diagnosed with HIV and People Living with HIV/AIDS in NYC, 2015.
As reported to the New York City Department of Health and Mental Hygiene by June 30, 2016.

Among Bronx residents newly diagnosed with HIV in 2015, Whites were most likely to have timely initiation of care

Timely initiation of care is defined as first CD4 or VL drawn within 3 months (91 days) of HIV diagnosis, following a 7-day lag



Data source: Care and Clinical Status of People Diagnosed with HIV and People Living with HIV/AIDS in NYC, 2015.
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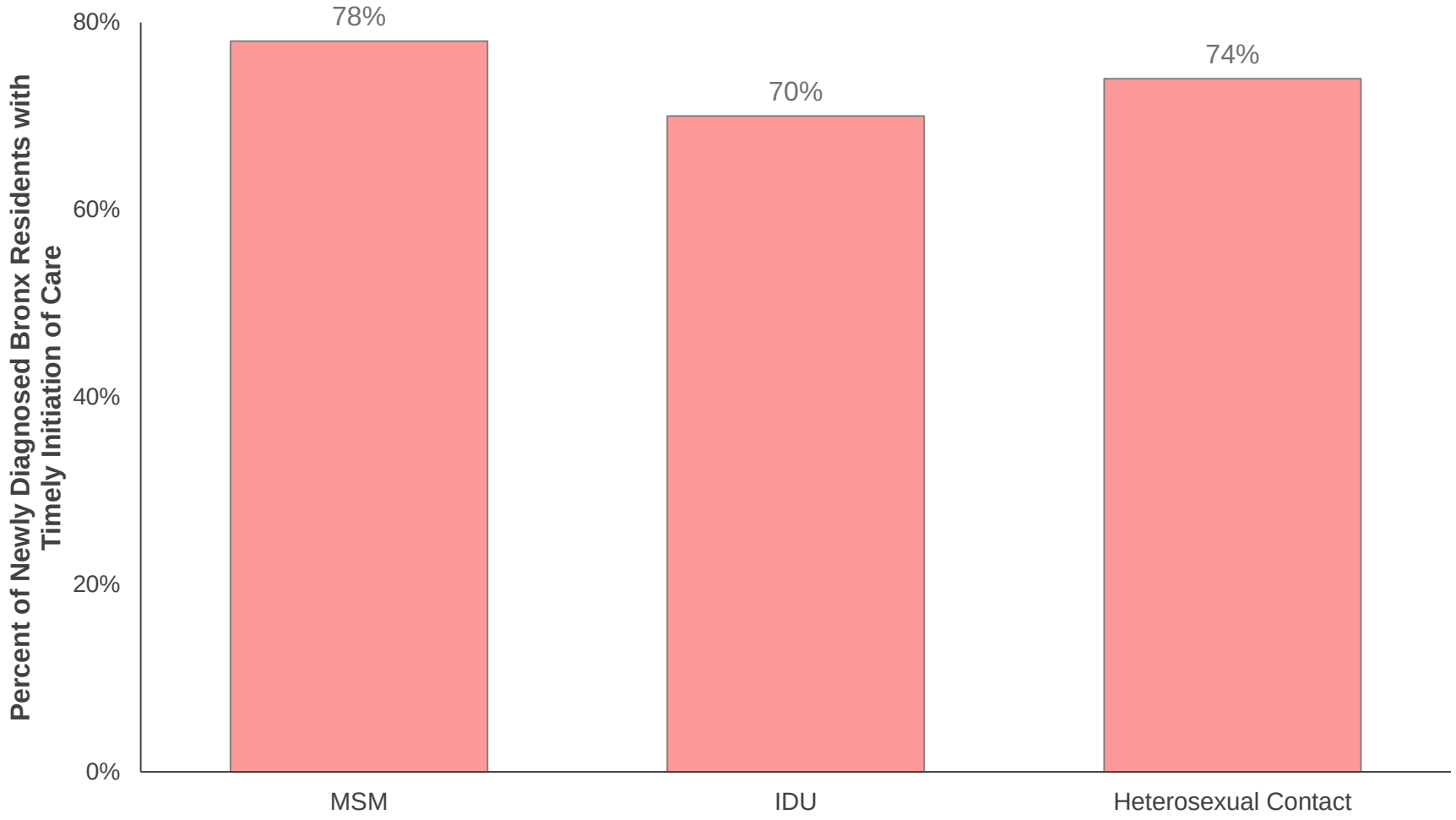
Among Bronx residents newly diagnosed with HIV in 2015, MSM were most likely to have timely initiation of care



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Data source: Care and Clinical Status of People Diagnosed with HIV and People Living with HIV/AIDS in NYC, 2015.
As reported to the New York City Department of Health and Mental Hygiene by June 30, 2016.

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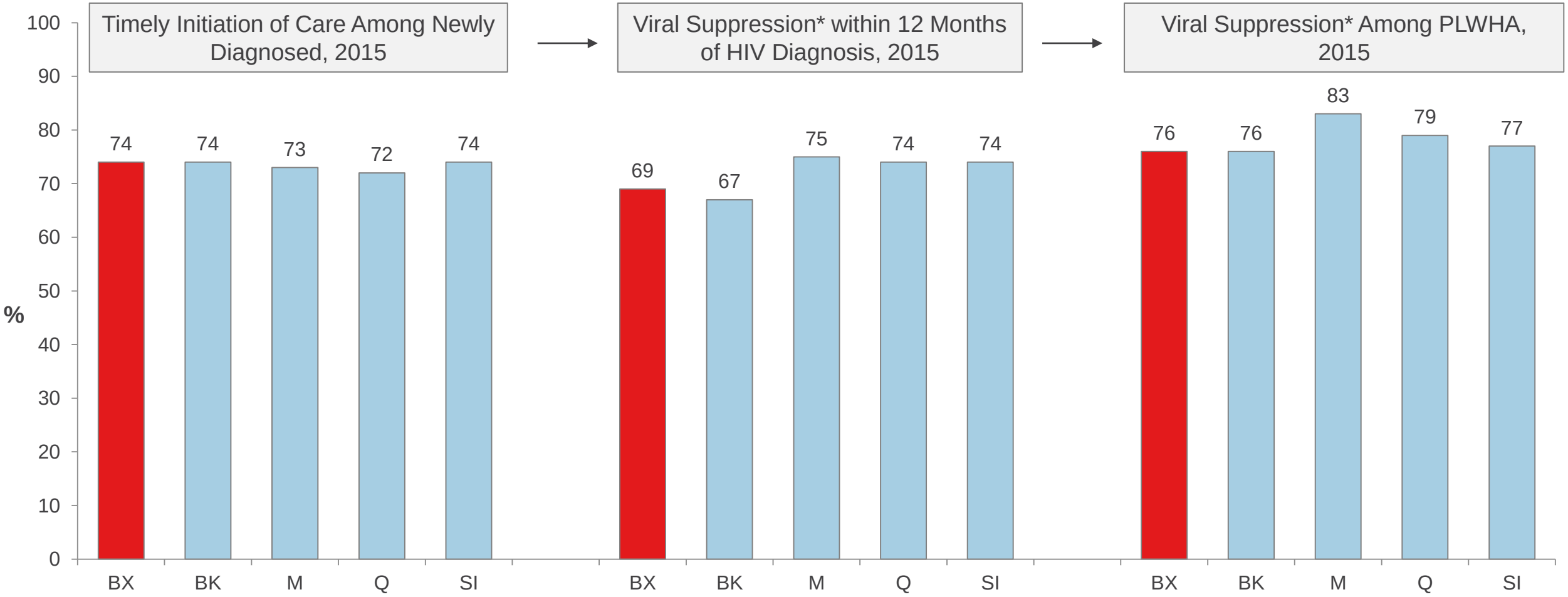
Newly diagnosed Bronx residents equally likely to initiate care, but somewhat less likely to have viral suppression, 2015

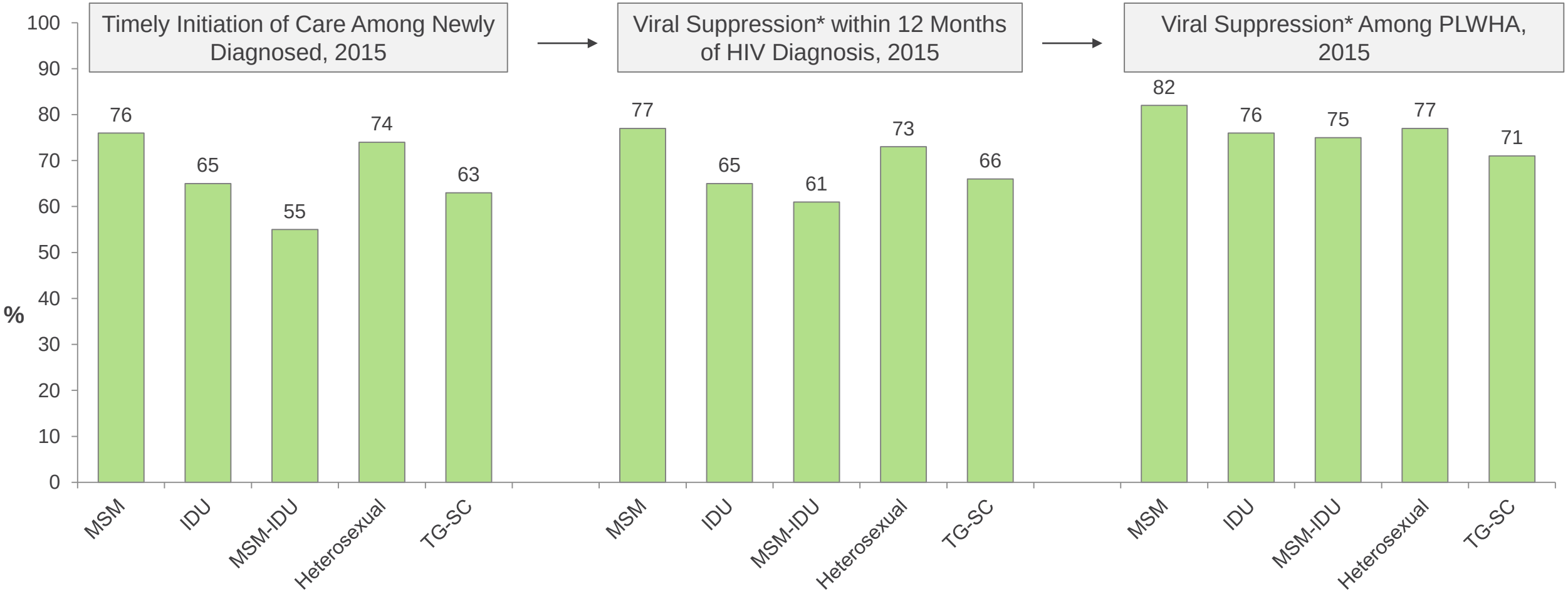


Timely initiation: First CD4 or viral load drawn within 91 days of diagnosis, following a 7-day lag

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

Data source: Care and Clinical Status of People Newly Diagnosed with HIV and People Living with HIV/AIDS in NYC, 2015. New York City Department of Health & Mental Hygiene, 2016.

HIV/AIDS related care by risk category for all of New York City, 2015

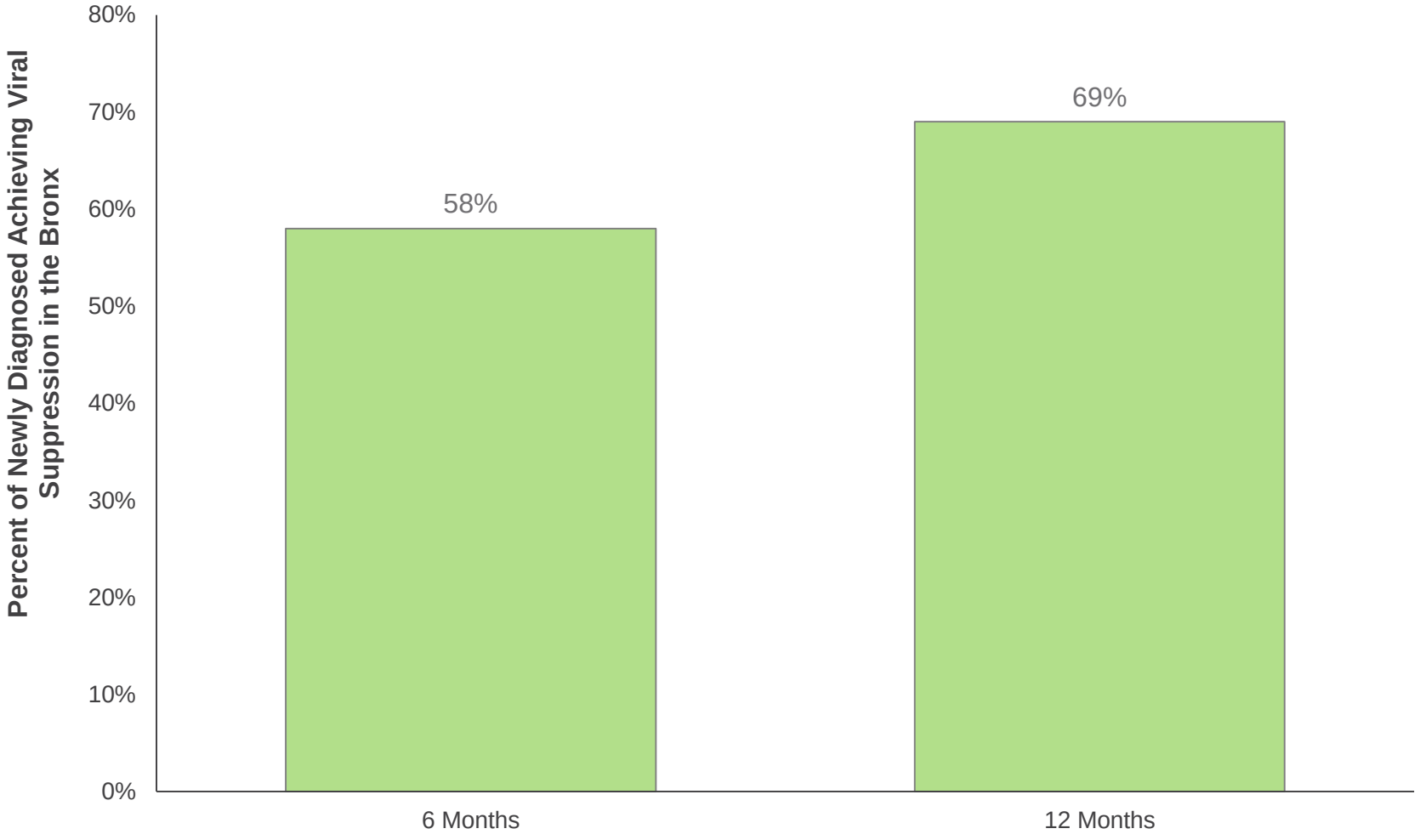


Timely initiation: First CD4 or viral load drawn within 91 days of diagnosis, following a 7-day lag

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

Data source: Care and Clinical Status of People Newly Diagnosed with HIV and People Living with HIV/AIDS in NYC, 2015. New York City Department of Health & Mental Hygiene, 2016. MSM = men who have sex with men, IDU = injection drug users, TG-SC = transgender-sexual contact

Among those newly diagnosed with HIV in the Bronx in 2015, 58% achieved viral suppression within 6 months and 69% within 12 months of diagnosis



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

Data source: Care and Clinical Status of People Diagnosed with HIV and People Living with HIV/AIDS in NYC, 2015.
As reported to the New York City Department of Health and Mental Hygiene by June 30, 2016.

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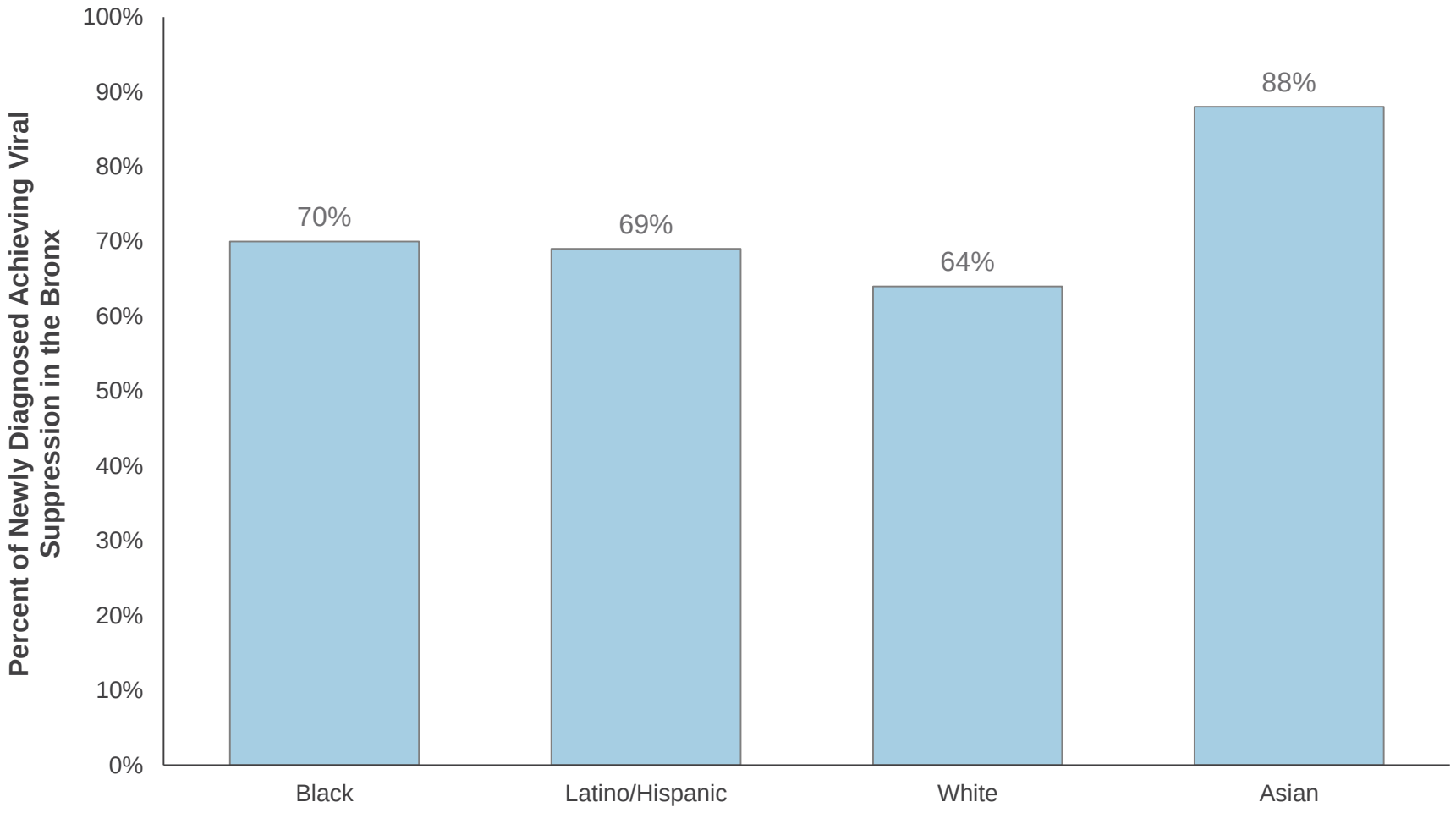
Among people newly diagnosed with HIV in the Bronx in 2015, Whites were the least likely to have achieved viral suppression within 12 months of diagnosis



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

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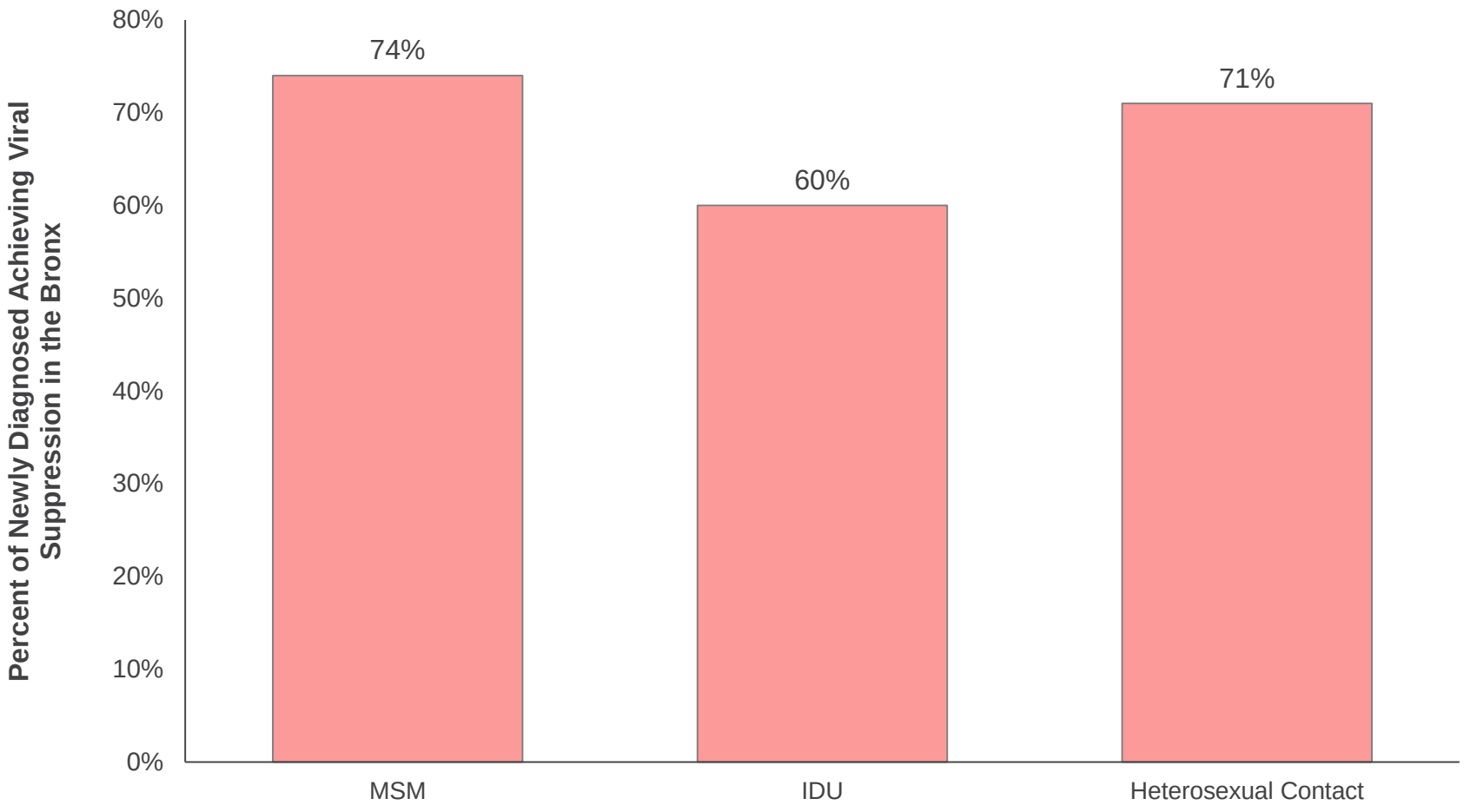
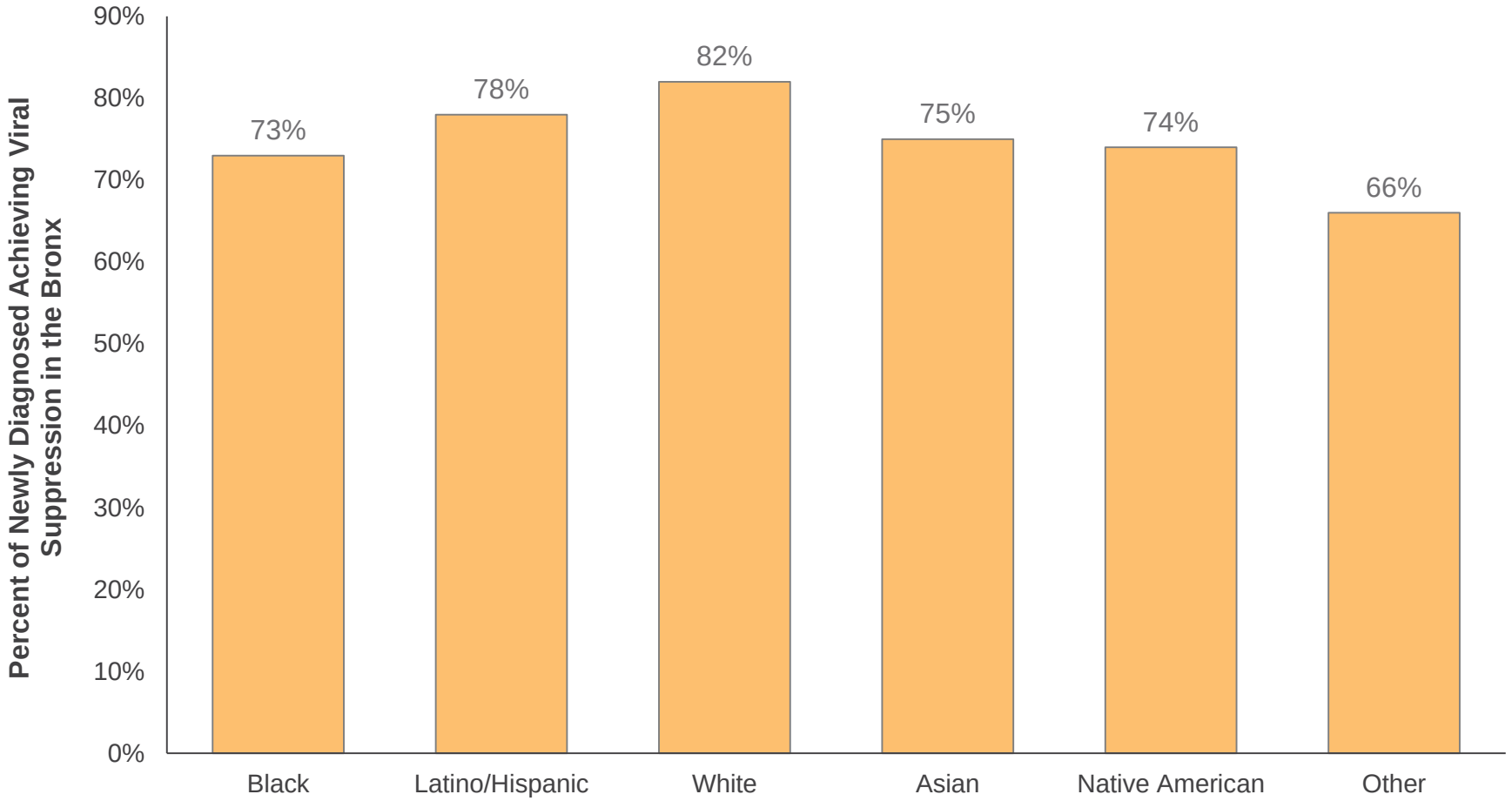
Among people newly diagnosed with HIV in the Bronx in 2015, MSM were most likely to have achieved viral suppression within 12 months of diagnosis



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

Data source: Care and Clinical Status of People Diagnosed with HIV and People Living with HIV/AIDS in NYC, 2015.
As reported to the New York City Department of Health and Mental Hygiene by June 30, 2016.

Among diagnosed PLWHA in the Bronx, Whites had the highest viral suppression proportion among all racial/ethnic groups.



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As reported to the New York City Department of Health and Mental Hygiene by June 30, 2016.

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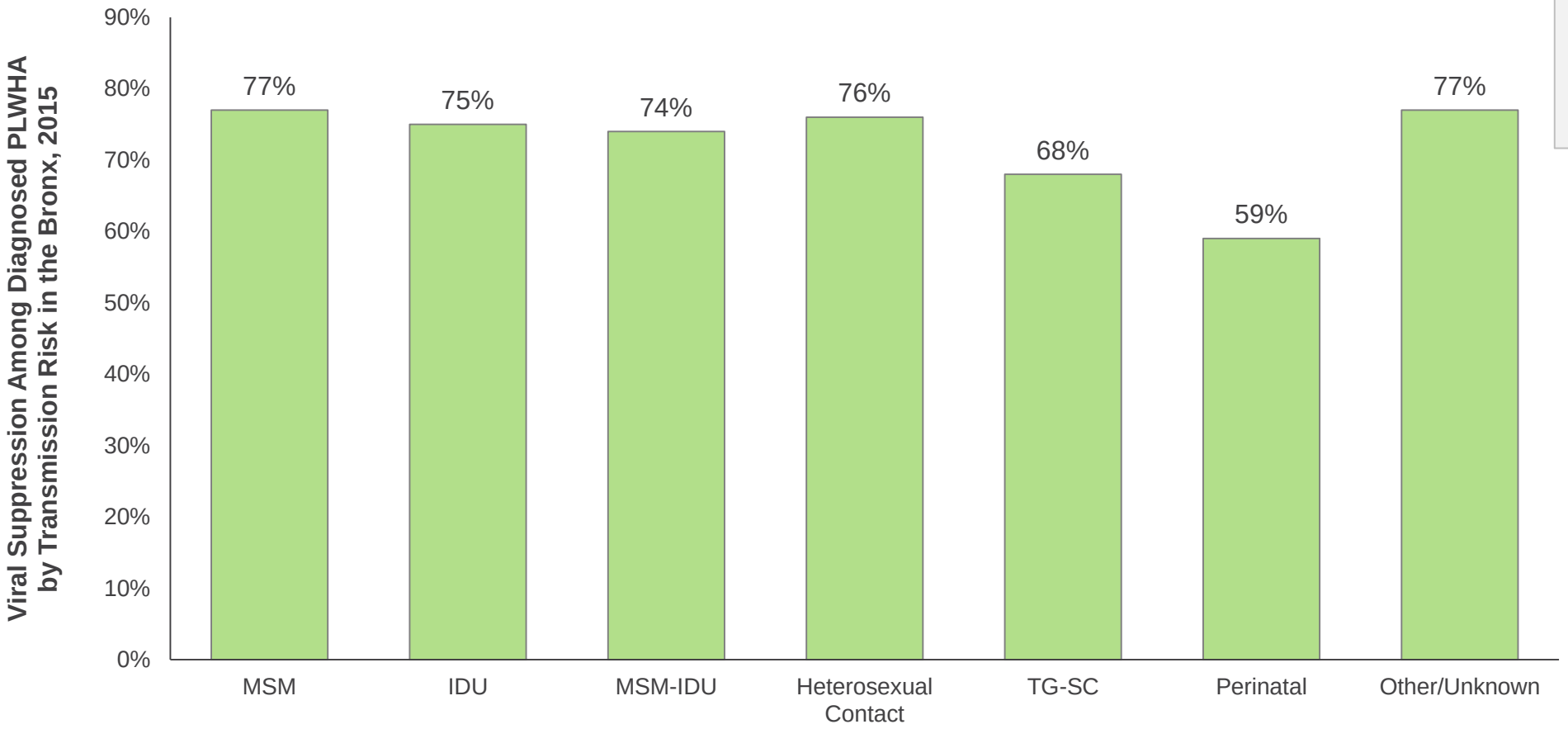
Among diagnosed PLWHA in NYC, MSM had the highest viral suppression proportion, and people with perinatal transmission risk had the lowest

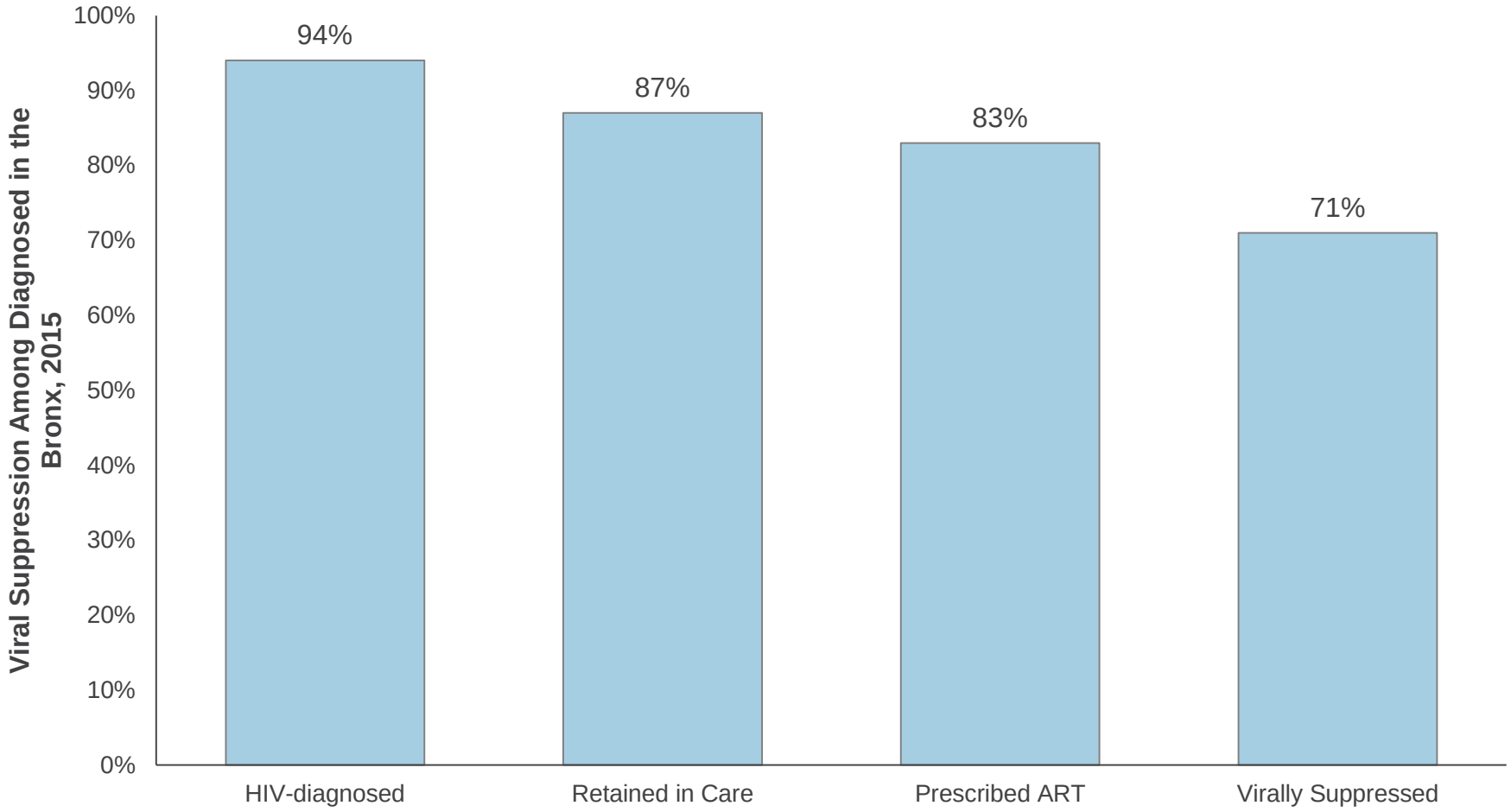


Viral suppression is defined as viral load ≤200 copies/mL

TG-SC = Transgender people with sexual contact

Data source: Care and Clinical Status of People Diagnosed with HIV and People Living with HIV/AIDS in NYC, 2015.
As reported to the New York City Department of Health and Mental Hygiene by June 30, 2016.

Of approximately 24,100 PLWHA in the Bronx in 2015, 71% had a suppressed viral load



PLWHA categories are not mutually exclusive

Data source: Care and Clinical Status of People Diagnosed with HIV and People Living with HIV/AIDS in NYC, 2015.
As reported to the New York City Department of Health and Mental Hygiene by June 30, 2016.

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HIV/AIDS Mortality in the Bronx

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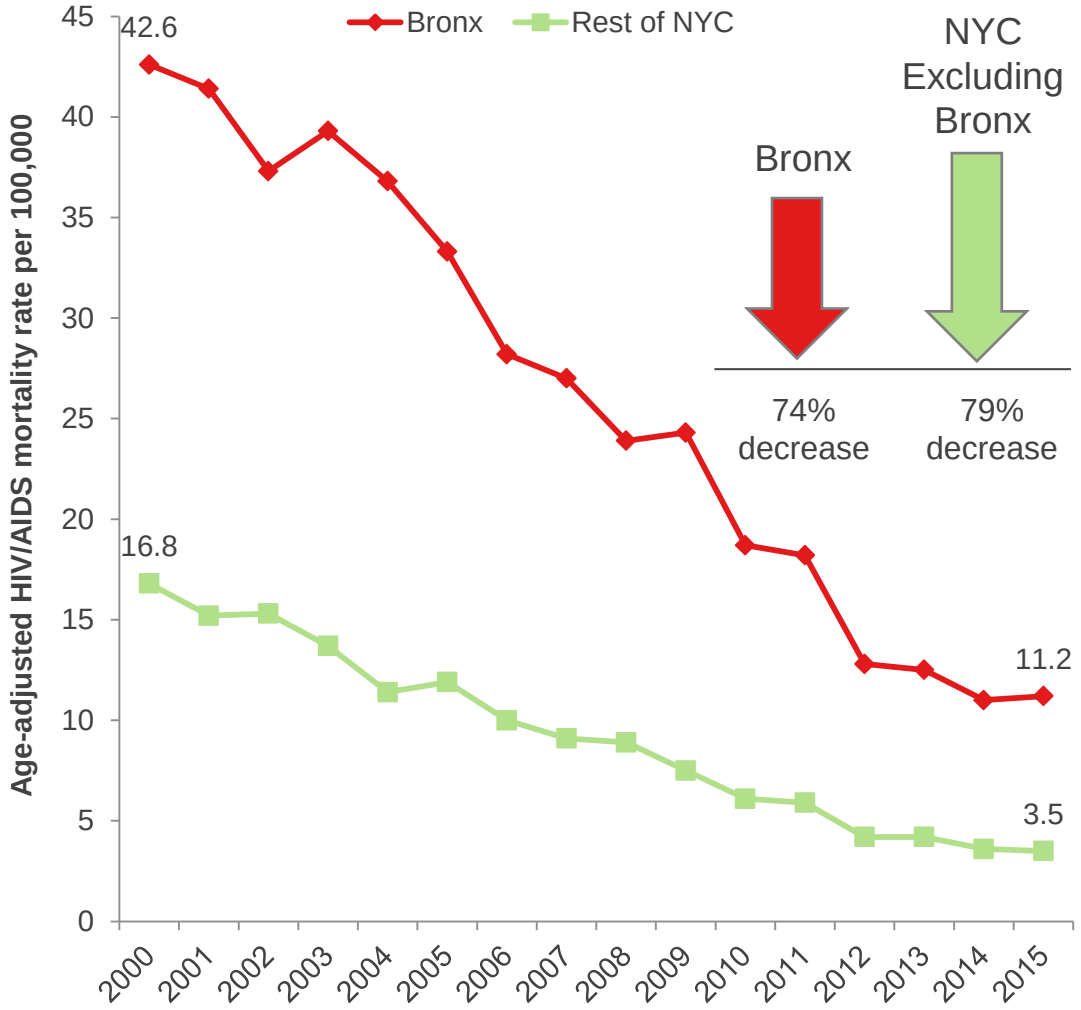
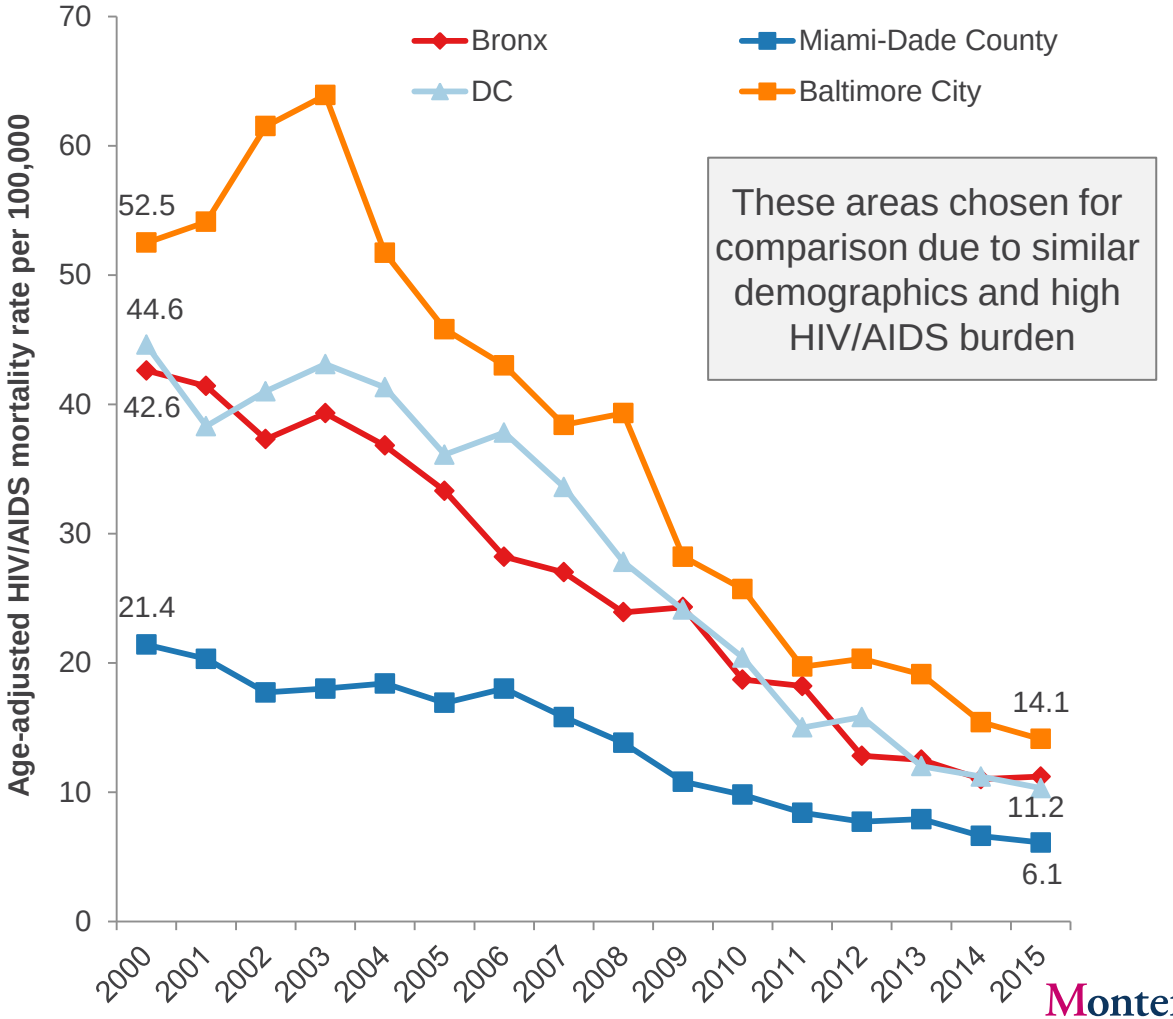
HIV Mortality rates have fallen nearly 4-fold since 2000

Bronx -- 2000: 3rd leading cause of death | 2014: 9th leading cause of death





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

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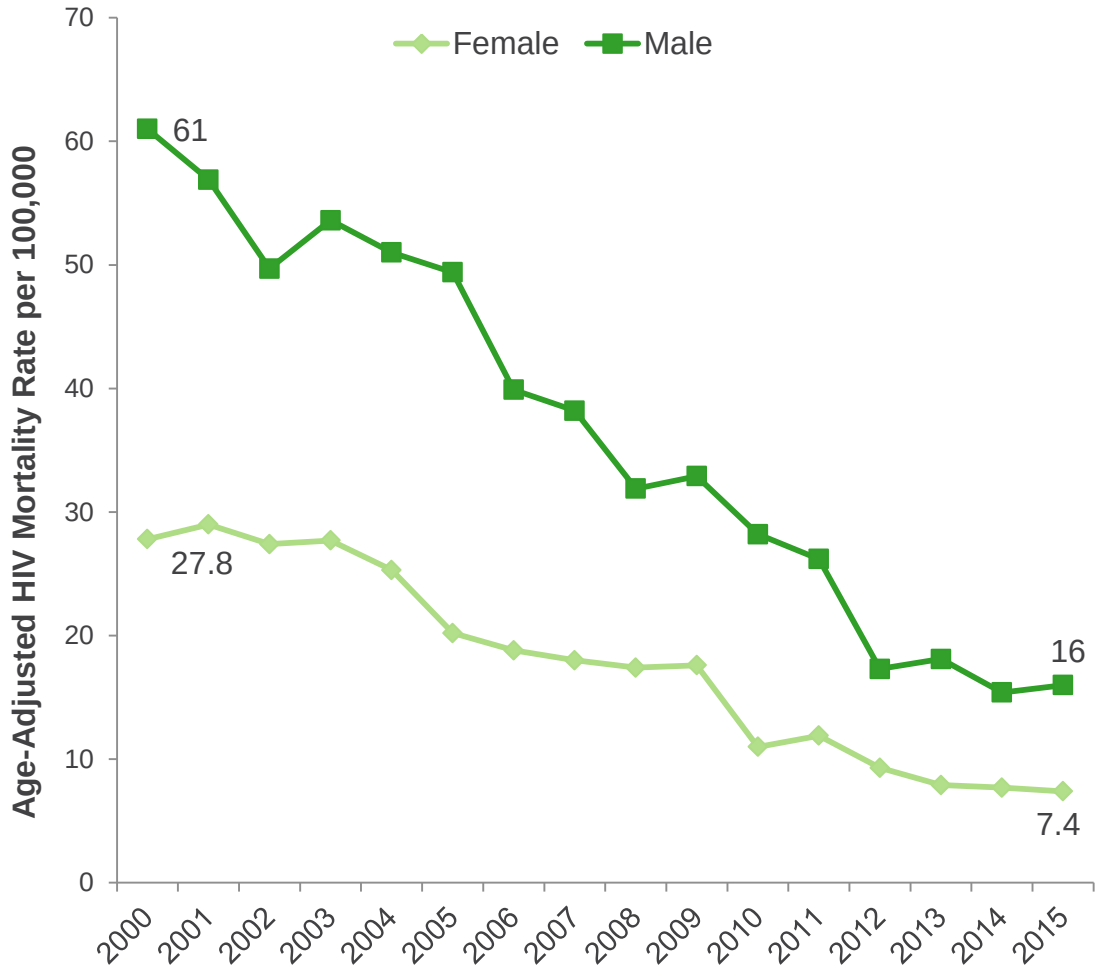
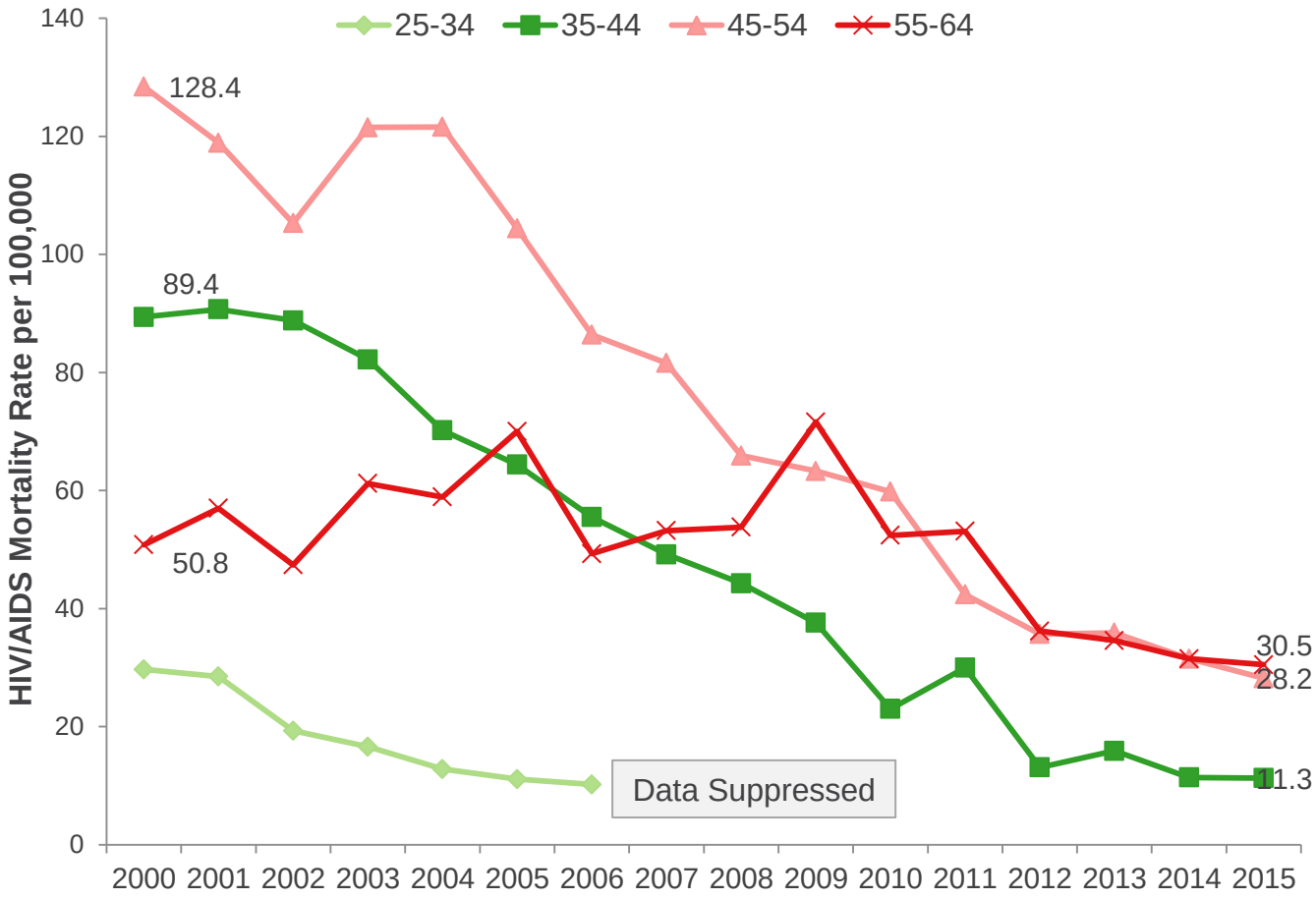
Data source: Underlying Cause of Death 2000-2015. Analysis by Montefiore OCPH.

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





Data source: Underlying Cause of Death, 2000-2015. Analysis by Montefiore OCPH.
Age-specific rates are not age-adjusted. 25-34 year data unstable after 2006. 65+ data unstable for all years.

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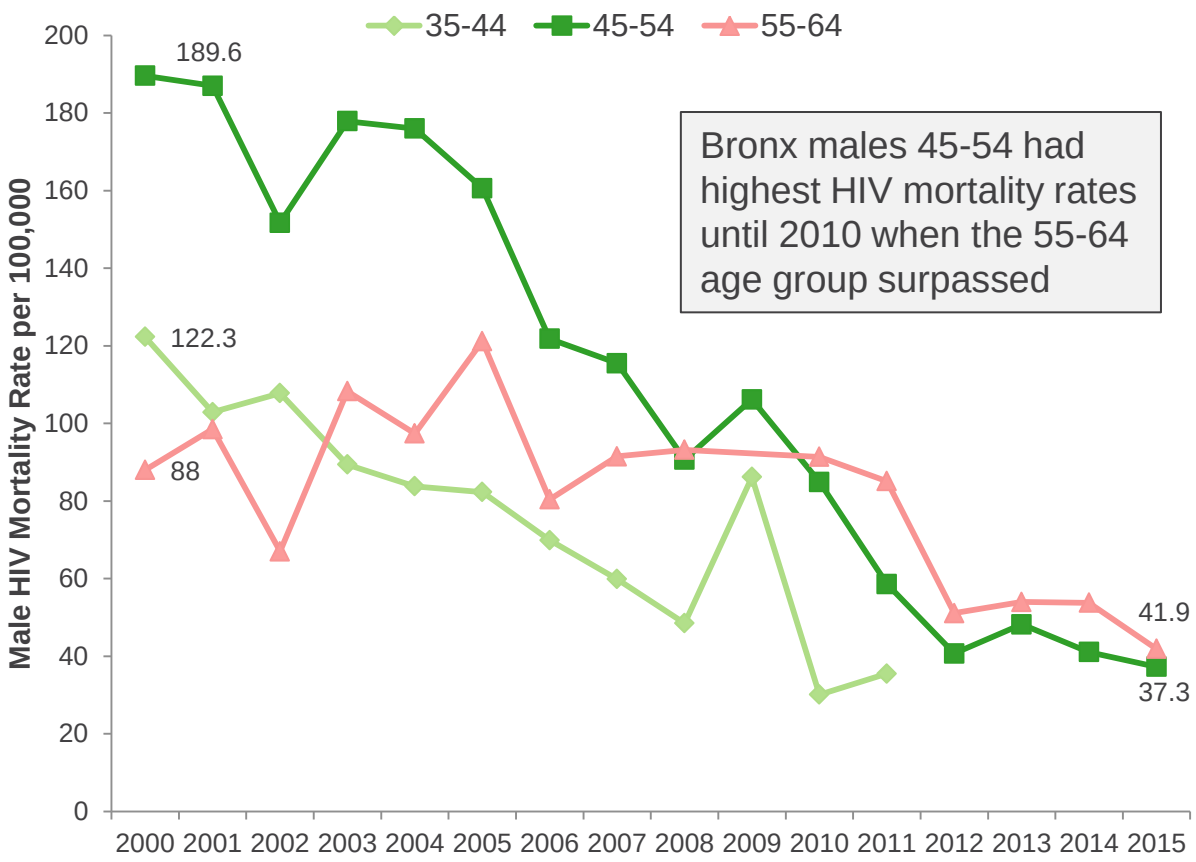
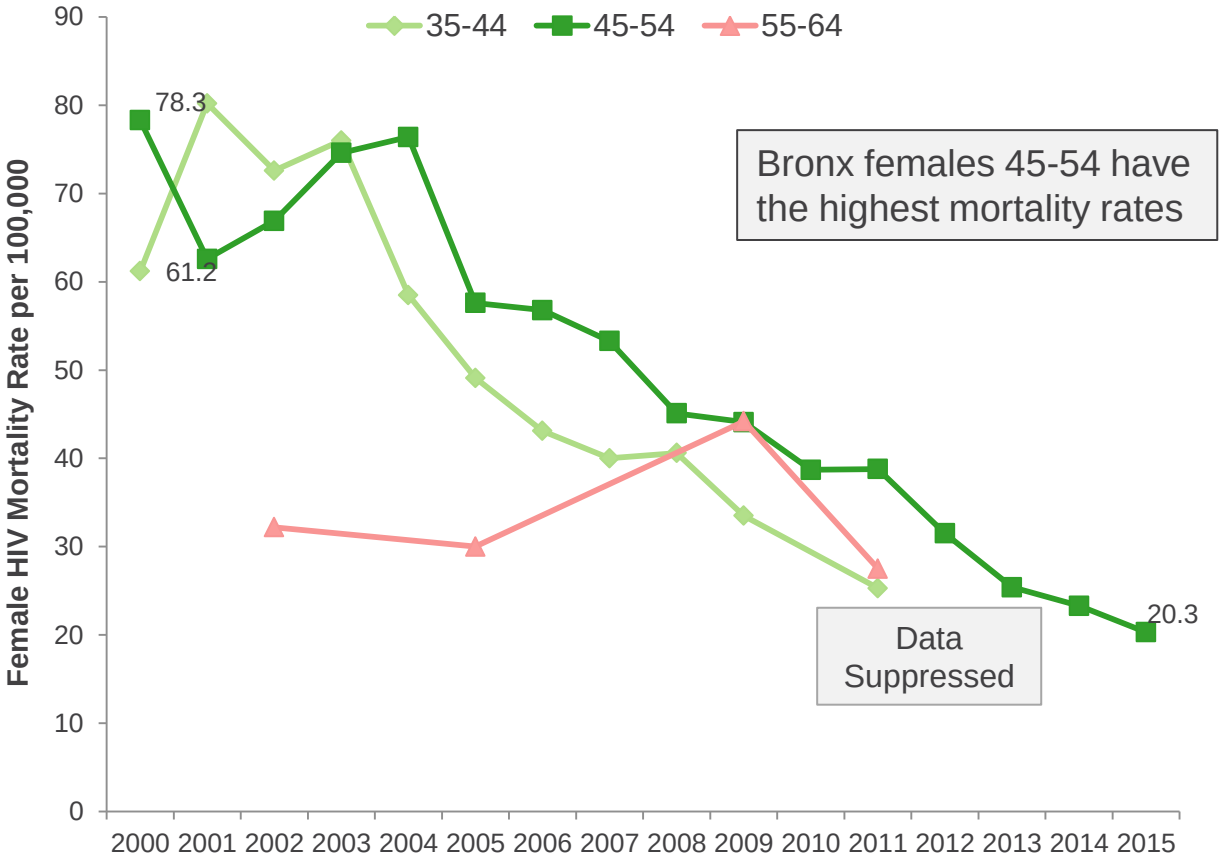
Bronx 45-54 year old male and females with HIV have the highest mortality rates





Data source: Underlying Cause of Death, 2000-2015. Analysis by Montefiore OCPH.
Age-specific rates are not age-adjusted. 25-34 and 65+ year data for male and female unstable for all years.

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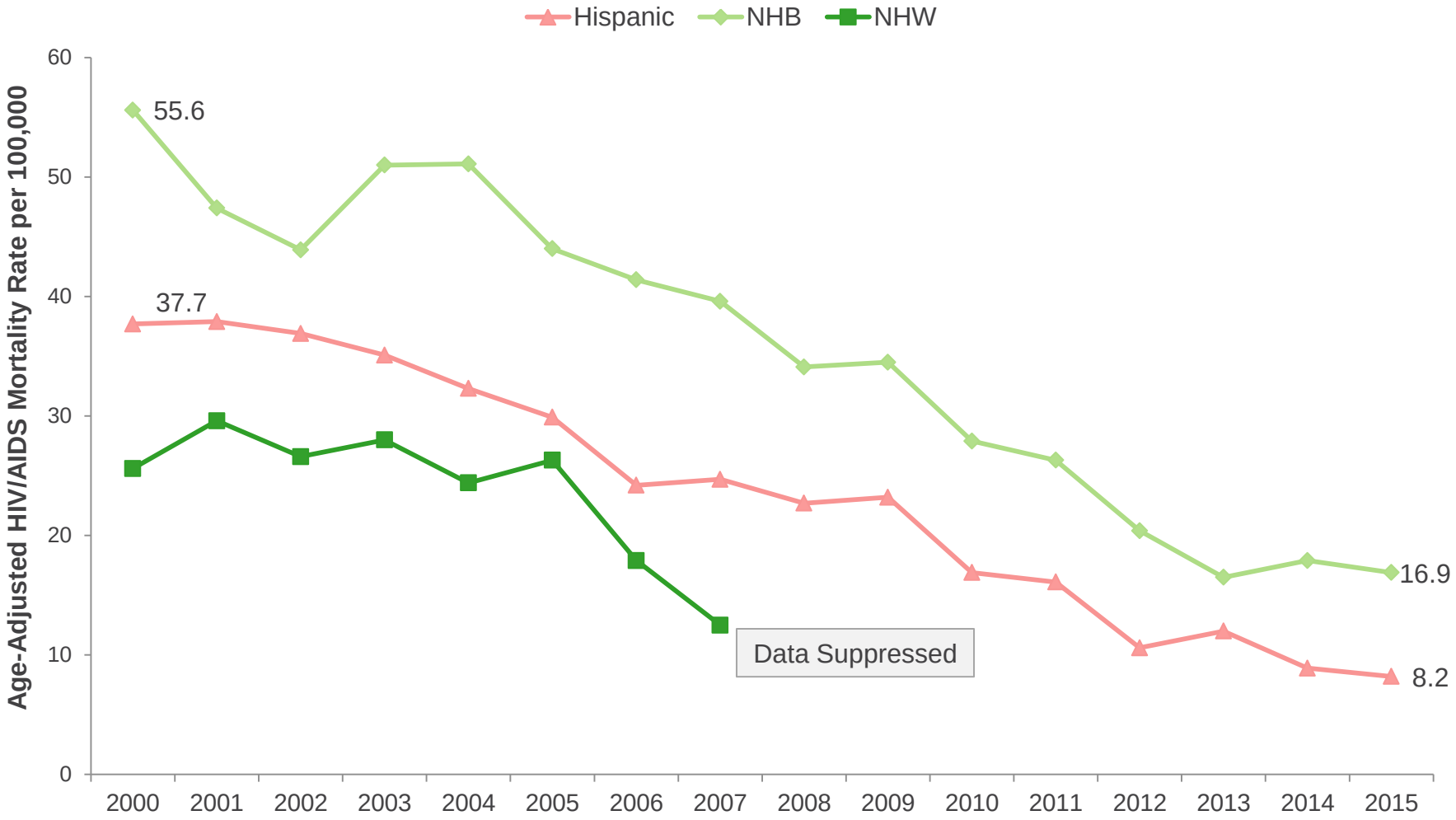
HIV/AIDS mortality rates are highest for non-Hispanic blacks in the Bronx



Data source: Underlying Cause of Death, 2000-2015. Analysis by Montefiore OCPH.
Non-Hispanic White data 2008-2015 statistically unstable

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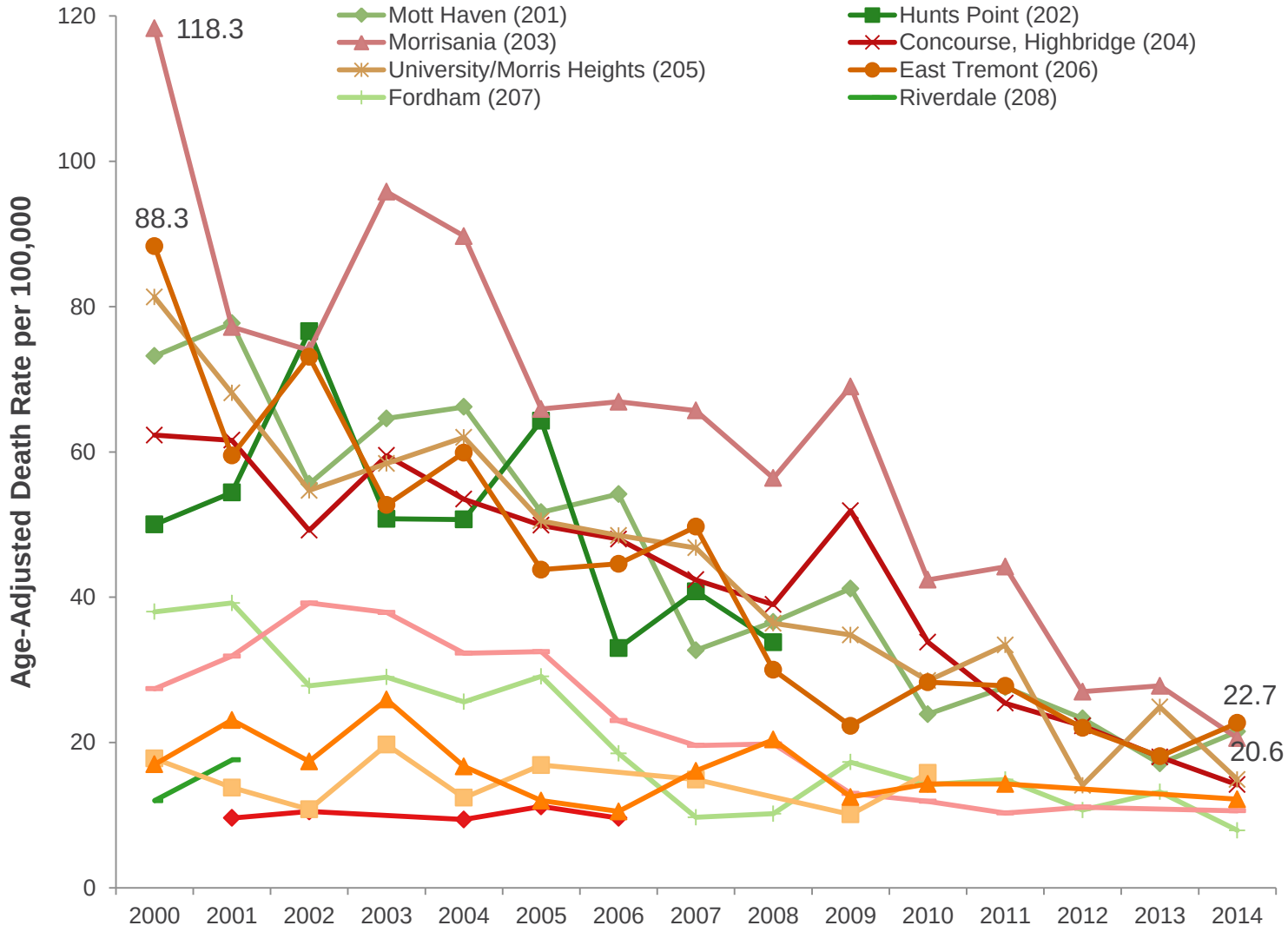
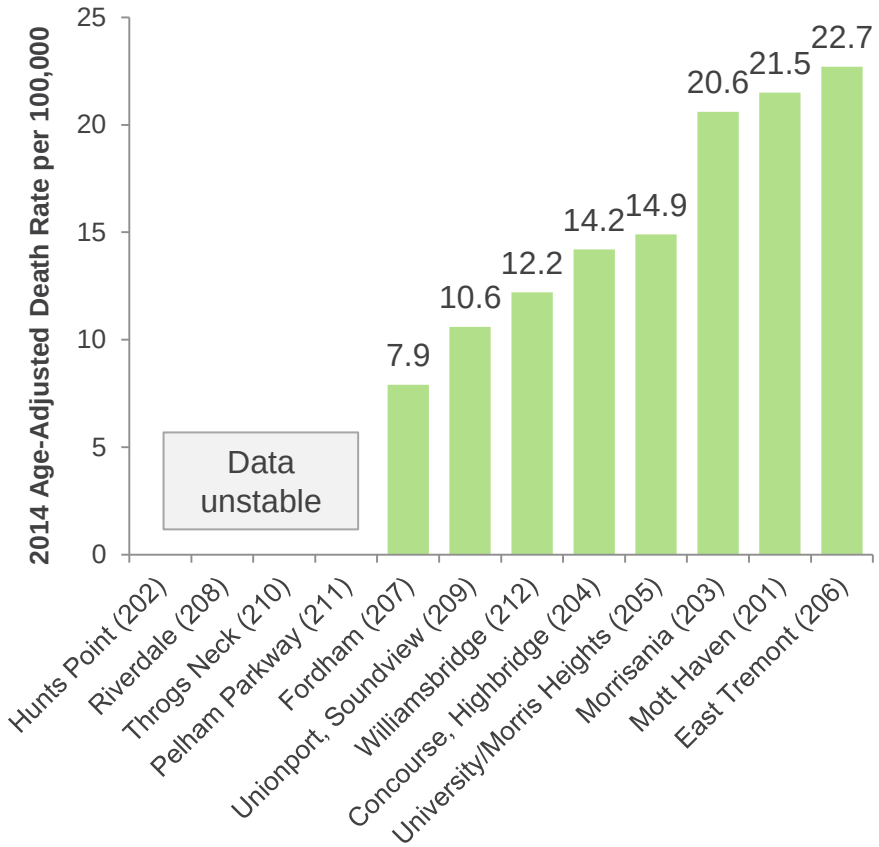
Morrisania has had the highest rate of HIV/AIDS Mortality but in 2014, East Tremont surpassed Morrisania





Data source: New York City HIV/AIDS Mortality Data, 2000-2014. Analysis by Montefiore OCPH.
Hunts Point, Riverdale, Throngs Neck, Pelham Parkway are statistically unstable

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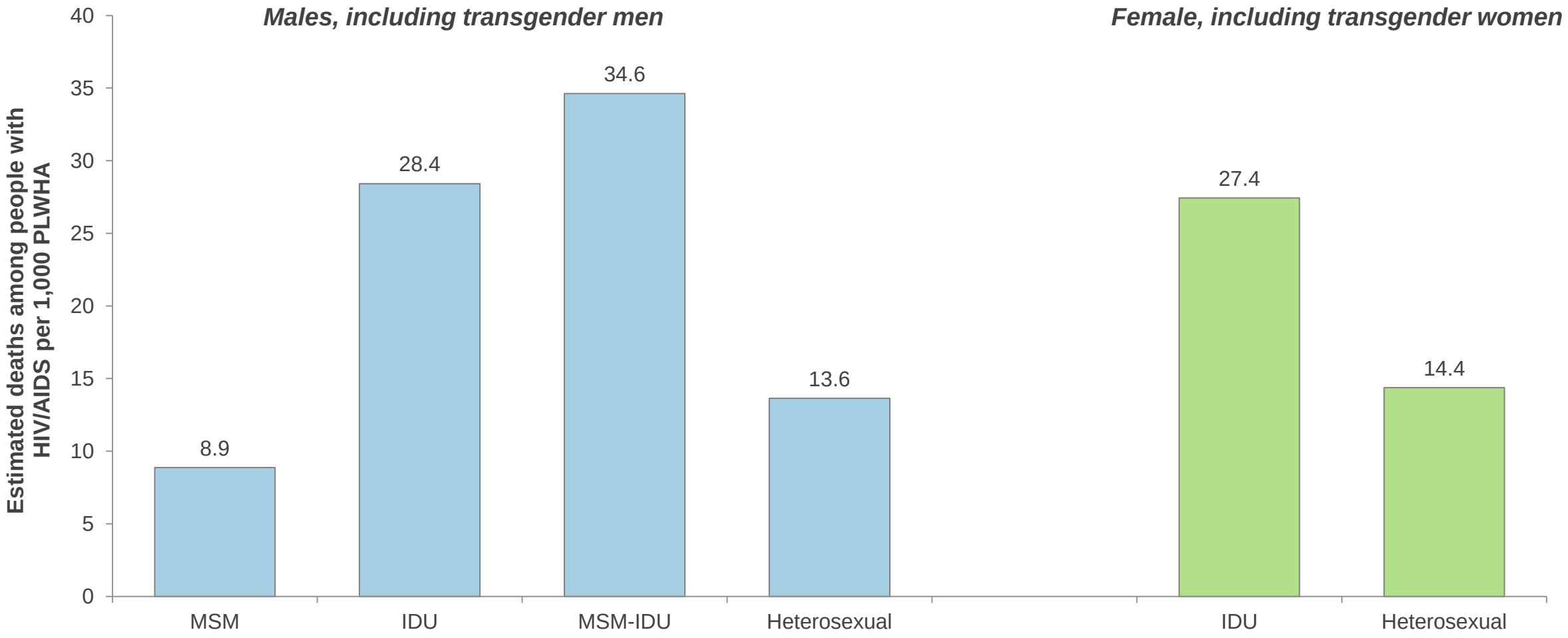
There are dramatic disparities in all-cause mortality among people living HIV/AIDS in the Bronx

Note: Different analysis approach from previous slides.



Data source: Calculated from NYC HIV/AIDS Annual Surveillance Statistics, 2014-15. Analysis by OCPH.
MSM = men who have sex with men, IDU = injection drug users. Not age-adjusted.

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Technical notes – NYC HIV Care Continuum

"HIV-infected": calculated as "HIV-diagnosed" divided by the estimated proportion of people living with HIV/AIDS (PLWHA) who had been diagnosed (94.2%), based on a back-calculation method.

Source: NYC HIV Surveillance Registry. Method: Hall HI, et al. Prevalence of Diagnosed and Undiagnosed HIV Infection — United States, 2008-2012. *MMWR* 2015;64(24):657-662.

"HIV-diagnosed": calculated as PLWHA "retained in care" plus the estimated number of PLWHA 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 PLWHA 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.

"Retained in care": PLWHA with ≥1 VL or CD4 count or CD4 percent drawn in 2015, and reported to NYC HIV surveillance.

Source: NYC HIV Surveillance Registry.

"Prescribed ART": calculated as PLWHA "retained in care" multiplied by the estimated proportion of PLWHA prescribed ART in the previous 12 months (95.5%), based on the weighted 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, 2014.

"Virally suppressed": calculated as PLWHA in care with a most recent viral load measurement in 2015 of ≤200 copies/mL, plus the estimated number of out-of-care 2015 PLWHA 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.

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 Colin Rehm, PhD, Manager of Research & Evaluation (crehm@montefiore.org).