

New York State
HIV Epidemiological Profile
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Abbreviations

ACS	American Community Survey
AHI	Acute HIV Infection
AI	AIDS Institute
AIDS	Acquired Immune Deficiency Syndrome
AN	Alaskan Native
BHAE	Bureau of HIV/AIDS Epidemiology
Blood Prod	Blood Product
BRFSS	Behavioral Risk Factor Surveillance System
BSTDPE	Bureau of STD Prevention and Epidemiology
CDC	Centers for Disease Control and Prevention
CD4	Cluster of Differentiation 4 cell (T4 cell, a receptor for HIV in humans)
CSTE	Council of State and Territorial Epidemiologists
DOCCS	Department of Corrections and Community Supervision
DOH	Department of Health
eHARS	Enhanced HIV and AIDS Reporting System
FPHC	Female Presumed Heterosexual Contact
FSU	Field Services Unit
HCV	Hepatitis C Virus
Hetero	Heterosexual
HIV	Human Immunodeficiency Virus
HS	High School
IDU	Injection Drug Use(r)
MMP	Medical Monitoring Project
MSA	Metropolitan Statistical Area(s)
MSM	Men who have Sex with Men
n	Number
Native Amer	Native American
NH	Native Hawaiian
NHANES	National Health and Nutrition Examination Survey
NHAS	National HIV/AIDS Strategy
NHBS	National HIV Behavioral Surveillance
NYC	New York City
NYC DOHMH	New York City Department of Health and Mental Hygiene
NYS	New York State
PCSI	Program Collaboration and Service Integration
PI	Pacific Islander
PLWDHI	People Living with Diagnosed HIV Infection
ROS	Rest of State (refers to the geographic area of NYS, excluding NYC)
SPARCS	Statewide Planning and Research Cooperative System
STD	Sexually Transmitted Disease
US	United States

Introduction

A core purpose of the 2016 New York State (NYS) HIV Epidemiological Profile is to provide program planners and decision makers with a broad description of the sociodemographic, geographic, behavioral, and clinical characteristics of HIV-infected persons and those at risk for HIV infection in NYS.

This report is divided into three parts. The first provides an overview of NYS's sociodemographic characteristics as a descriptive backdrop for the HIV epidemic in the state. The second presents HIV epidemiologic data to highlight HIV burden in certain populations and communities. The third section includes a selection of graphs and figures that address indicators of risk for HIV infection, along with the scope of sexually transmitted diseases (STDs) and hepatitis C—important correlates of HIV—in the state. The appendix contains HIV epidemiologic data specific to each Ryan White region in the state.

There have been many successes in the trajectory of HIV in NYS. At the height of the epidemic, as many as 14,000 New Yorkers were being diagnosed every year; that number is now down below 3,500. Transmission among injection drug users has plunged 90% since the early 2000s. There were zero mother-to-child HIV transmissions out of 404 HIV-exposed births in 2015. However, as the data in this document show, there is still work to do to bring the epidemic under control. Sustained effort is needed to ensure these gains are experienced by all New Yorkers.

Sexually transmitted diseases (STDs), hepatitis C and HIV affect similar populations and communities. The steady increase of STD incidence in NYS illustrates the continued need for STD prevention and treatment. People with STDs are more likely to become infected with HIV if they are exposed to it. Syphilis was on the verge of elimination twice in the United States (US)—once in the 1960s and again in the late 1990s—yet the disease is rapidly re-emerging, particularly among men who have sex with men. Increases in hepatitis C incidence and opioid abuse trends point to ongoing drug-related risk behavior which, left unchecked, could undercut New York's success in preventing HIV transmission among people who inject drugs: one of the state's crowning public health achievements.

Despite having the heaviest HIV burden in the country, New York has made “Ending the Epidemic” a goal that is at once aspirational and achievable: a local framework for New York that now has traction nationally. The epidemiologic data in this profile catalog NYS's considerable progress towards the Ending the Epidemic goals, and highlights populations, metrics, and disease co-morbidities where focused action continues to be needed.

Section A. Sociodemographic Characteristics of New York State

In this section, five year estimates from the 2010-2014 American Community Survey (ACS) are analyzed to present the sociodemographic characteristics of the NYS population in 2014. United States (US) census data are also presented to show trends. The following tables and figures show the population estimates of NYS by sex at birth, race and ethnicity, age group, place of birth, languages spoken, educational attainment, and poverty. Some of these estimates are presented by year (based on decennial census data), by NYS metropolitan area, and/or by region. Two regions are defined: New York City (NYC; including Bronx, Kings, New York, Queens, and Richmond counties) and the Rest of State (ROS; all counties but NYC).

Table A1 – NYS Population Estimates by Region, Sex, Age, and Race/Ethnicity, 2014

- The NYS population was estimated to be 19.6 million in 2014. NYC and ROS made up 42.6% and 57.4% of the state's population, respectively.
- Females accounted for 51.5% of the state's population.
- Not-Hispanic White was the largest race group, making up 57.3% of the total population. People who identified as Hispanic or Latino made up 18.2% of the total population in 2014 and Not-Hispanic Black/African American persons made up 14.4%.
- 25-49 was the largest age group, accounting for 34.3% of the total population.

2014 Population Estimates	NYS		NYC		ROS	
	Estimate	%	Estimate	%	Estimate	%
Total	19,594,330	100.0%	8,354,889	42.6%	11,239,441	57.4%
Sex at Birth						
Male	9,495,978	48.5%	3,976,564	47.6%	5,519,414	49.1%
Female	10,098,352	51.5%	4,378,325	52.4%	5,720,027	50.9%
Race/Ethnicity						
Not-Hispanic or Latino	16,034,686	81.8%	5,946,906	71.2%	10,087,780	89.8%
<i>White</i>	11,220,383	57.3%	2,735,082	32.7%	8,485,301	75.5%
<i>Black/African American</i>	2,824,566	14.4%	1,886,662	22.6%	937,904	8.3%
<i>Asian</i>	1,511,457	7.7%	1,098,961	13.2%	412,496	3.7%
<i>Am Indian & Al Native</i>	47,213	0.2%	15,951	0.2%	31,262	0.3%
<i>Native Hawaiian & Pl</i>	4,700	0.0%	2,363	0.0%	2,337	0.0%
<i>Other Race</i>	96,258	0.5%	68,656	0.8%	27,602	0.2%
<i>Two or More Races</i>	330,109	1.7%	139,231	1.7%	190,878	1.7%
Hispanic or Latino	3,559,644	18.2%	2,407,983	28.8%	1,151,661	10.2%
Age						
14 and Under	3,515,195	17.9%	1,492,716	17.9%	2,022,479	18.0%
15 - 24	2,745,049	14.0%	1,136,038	13.6%	1,609,011	14.3%
25 - 49	6,716,254	34.3%	3,184,919	38.1%	3,531,335	31.4%
50 - 64	3,852,559	19.7%	1,487,926	17.8%	2,364,633	21.0%
65 and Over	2,757,436	14.1%	1,048,971	12.6%	1,708,465	15.2%

Figure A2 – NYS Population, 1960-2014

- The NYS population grew from 17.6 million in 1980 to 19.6 million in 2014.

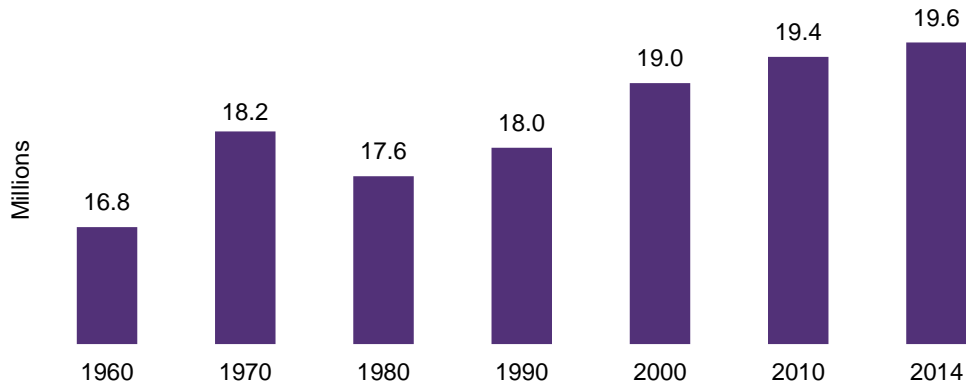
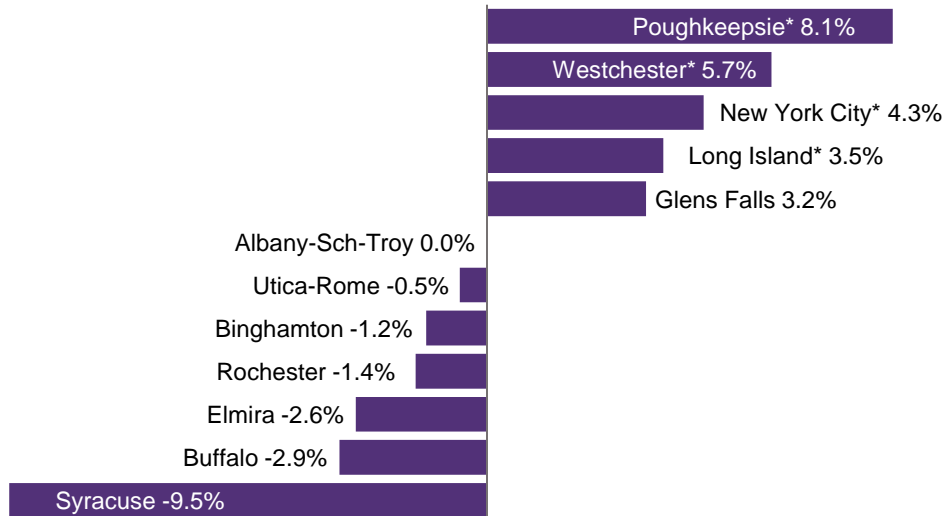


Figure A3 – Relative Population Growth/Decline in NYS Metropolitan Areas, 2000-2014

- From 2000-2014, the Poughkeepsie-Newburgh-Middletown area showed the largest percent increase (8.1%, gaining over 50,000 persons), whereas the Syracuse area showed the largest percent decrease (-9.5%, losing nearly 70,000 persons).
- NYC grew by the largest number (about 347,000 persons), showing a 4.3% increase.
- The Albany-Schenectady-Troy metropolitan area population experienced a 0.56% decrease from 2000 to 2010 and then an increase of 0.56% from 2010 to 2014.



* Counties are combined: Poughkeepsie = Dutchess + Orange; Westchester = Westchester + Rockland + Putnam; New York City = Bronx + Kings + New York + Queens + Richmond; Long Island = Nassau + Suffolk.

Figure A4 – NYS Population by Race/Ethnicity, by Region, 2014

- 75.5% of the ROS population identified as not-Hispanic White, compared to 32.7% of the NYC population.
- A higher percentage of persons living in NYC identified as Hispanic/Latino, Black/African American, or Asian (28.8%, 22.6%, and 13.2%, respectively) compared to ROS (10.2%, 8.3%, and 3.7%, respectively).

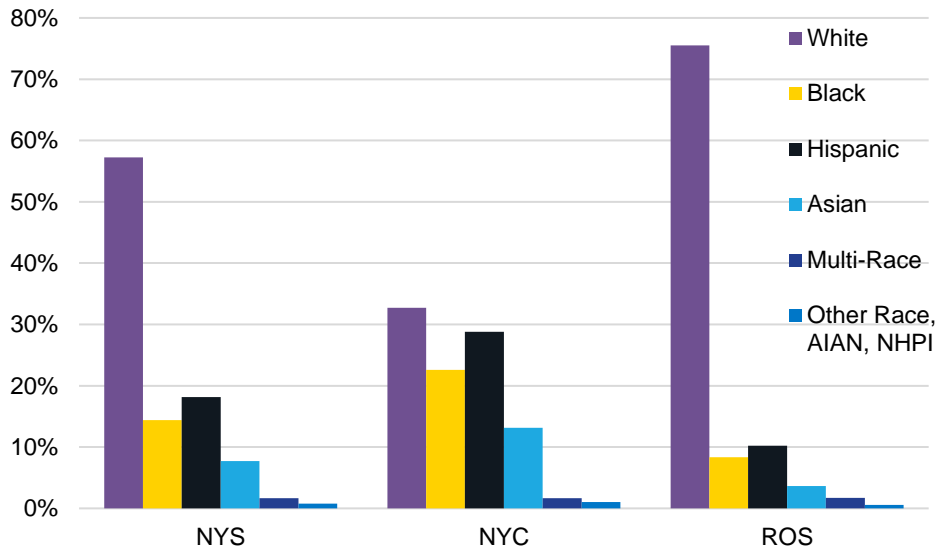


Figure A5 – NYS Population by Sex, by Region, 2014

- In 2014, females accounted for 52.4% of the NYC population and 50.9% of the ROS population.

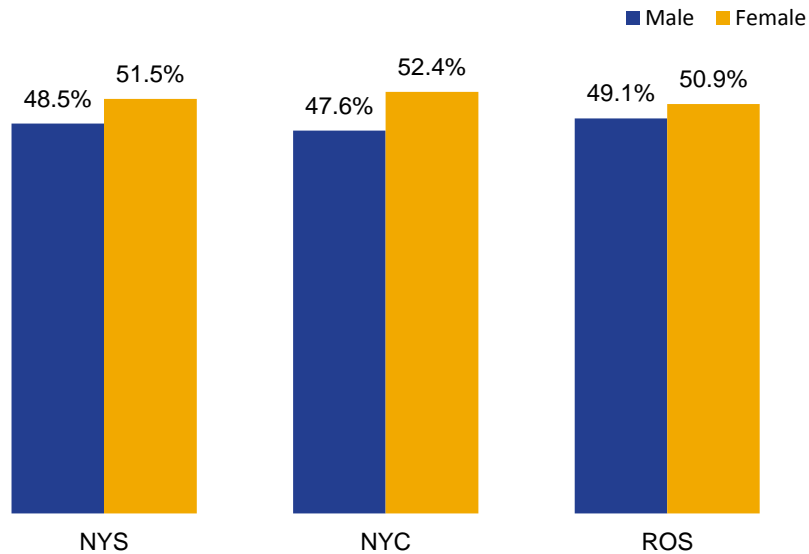


Table A6 – NYS Population Estimates by Nativity and Languages Spoken, 2014

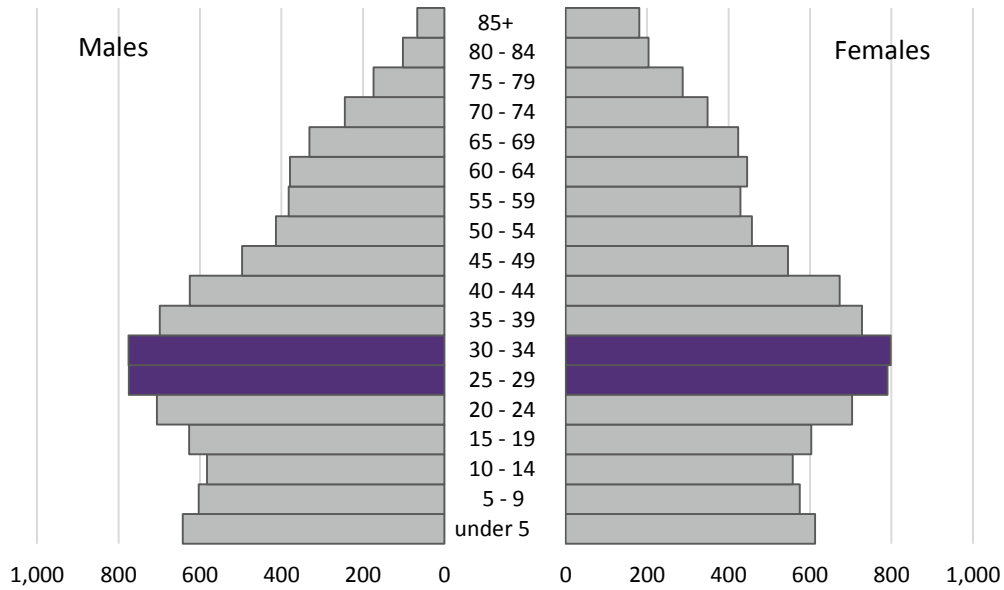
- In 2014, the foreign-born population made up 37.1% in NYC and 11.3% in ROS, and overall 22.3% in NYS.
- Whereas the distribution of the foreign born population by their languages spoken at home is fairly stable across the regions, the percent of native-born people who speak languages other than English is higher in NYC than in ROS.
- After English, Spanish is the most common language in the state. Percentages were almost identical between NYC and ROS (30.9% vs. 30.6%, respectively).

2014 Population Estimates	NYS		NYC		ROS	
	Estimate	%	Estimate	%	Estimate	%
Total	19,594,330	100.0%	8,354,889	42.6%	11,239,441	57.4%
Place of Birth						
Native Born	15,218,385	77.7%	5,251,162	62.9%	9,967,223	88.7%
Foreign Born	4,375,945	22.3%	3,103,727	37.1%	1,272,218	11.3%
Language Spoken at Home (for persons aged 5+ years)						
Native Born:	14,071,537	100.0%	4,720,489	100.0%	9,351,048	100.0%
<i>English Only</i>	11,819,068	84.0%	3,249,093	68.8%	8,569,975	91.6%
<i>Spanish</i>	1,398,904	9.9%	962,416	20.4%	436,488	4.7%
<i>Other Indo-European</i>	577,966	4.1%	311,370	6.6%	266,596	2.9%
<i>Asian/PI Languages</i>	177,453	1.3%	129,775	2.7%	47,678	0.5%
<i>Other Languages</i>	98,146	0.7%	67,835	1.4%	30,311	0.3%
Foreign-Born:	4,352,535	100.0%	3,088,108	100.0%	1,264,427	100.0%
<i>English Only</i>	1,048,632	24.1%	737,132	23.9%	311,500	24.6%
<i>Spanish</i>	1,342,539	30.8%	955,010	30.9%	387,529	30.6%
<i>Other Indo-European</i>	1,059,497	24.3%	720,670	23.3%	338,827	26.8%
<i>Asian/PI Languages</i>	719,770	16.5%	542,402	17.6%	177,368	14.0%
<i>Other Languages</i>	182,097	4.2%	132,894	4.3%	49,203	3.9%

Figure A7 – NYS Population Pyramids, Sex and Age, 1990, 2014

- In 1990, the largest age groups were “25-29” and “30-34.”
- In 2014, the top two age groups were the 20-24 year old and 25-29 year old groups among males and the 45-49 year old and 50-54 year old groups among females. Combined, the largest age groups in 2014 were the 50-54 year old (7.3%) and 20-24 year old groups (7.3%).

NYS Population, 1990 (in thousands)



NYS Population, 2014 (in thousands)

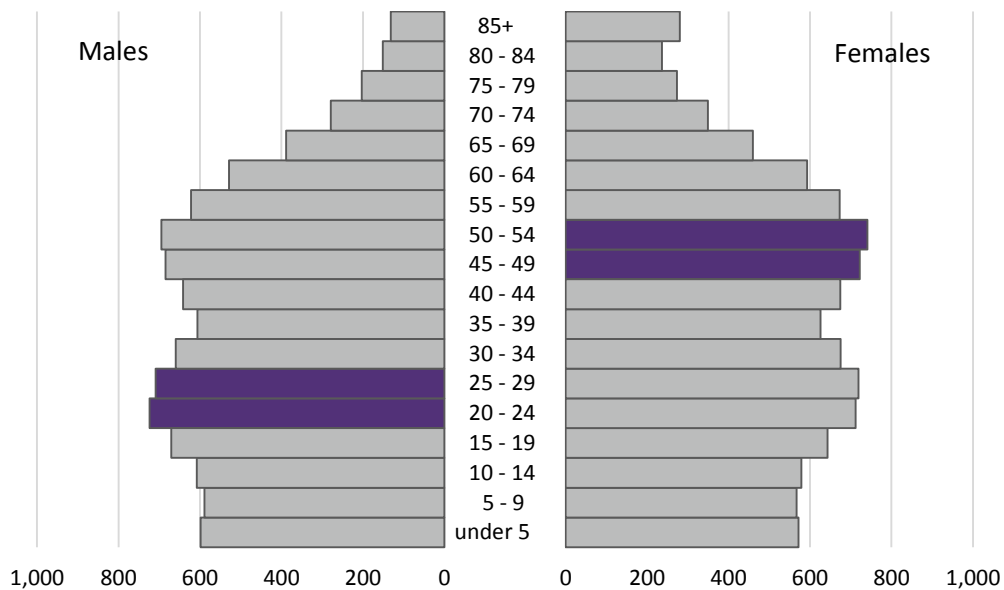


Figure A8 – Educational Attainment among NYS Population, 2014

- Among the NYS population age 25 and over, the percent of people with a high school diploma or less than a high school diploma decreased slightly from 43.8% in 2010 to 41.6% in 2014. The percent of people with some college or an academic degree increased from 56.2% in 2010 to 58.5% in 2014.

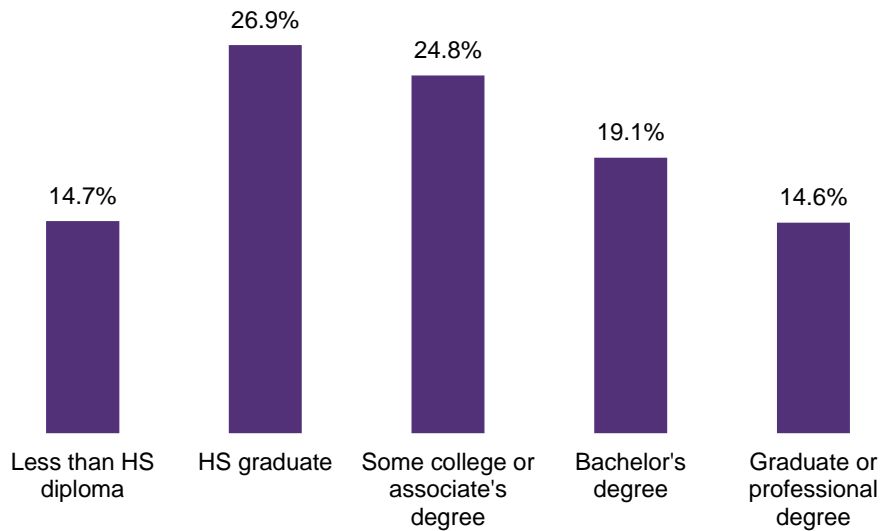


Table A9 – NYS Population by Percentage of Federal Poverty Level, by Race/Ethnicity, 2014

- Statewide, 15.9% of all people were living at the federal poverty level in 2014.¹ By race/ethnicity, fewer not-Hispanic Whites were living at the FPL (10.2%), compared with Hispanic/Latinos (26.5%), American Indians and Alaska Natives (24.7%), and Black/African Americans (23.1%).
- According to the 2010-2014 ACS 5-Year Estimates data, 12.0% of all families in NYS in 2014 were living at the FPL; the median household income was \$58,687; and the unemployment rate was 5.6% in NYS in 2014.

	50% FPL	100% FPL	125% FPL
Population for whom poverty status is determined	7.1%	15.9%	20.2%
Not-Hispanic or Latino	6.2%	13.5%	17.3%
<i>White</i>	4.6%	10.2%	13.2%
<i>Black/African American</i>	11.7%	23.1%	28.6%
<i>Asian</i>	7.6%	18.8%	24.2%
<i>American Indian and Alaska Native</i>	10.4%	24.7%	31.7%
<i>Native Hawaiian and Other Pacific Islander</i>	3.2%	13.1%	15.0%
<i>Other Race</i>	9.0%	17.5%	22.7%
<i>Two or More Races</i>	9.5%	20.0%	24.9%
Hispanic or Latino	11.2%	26.5%	33.5%

Section B. Scope of HIV Burden in New York State

New York State leads the nation in the number of people living with diagnosed HIV/AIDS. Approximately 18% of the nation's cumulative AIDS diagnoses have occurred in NYS, and New York ranks second to only Washington, DC in terms of its AIDS diagnosis rate. The number of new HIV diagnoses has fallen steadily over the past 10 years. Despite this promising trend, NYS still accounts for approximately 10% of the nation's new HIV diagnoses. Of particular note, MSM and persons of color remain disproportionately affected by HIV/AIDS in NYS. Disparities among young MSM of color and women of color are particularly pronounced. Substantial work remains to ensure that favorable trends in the HIV epidemic persist.

HIV/AIDS Data Definitions

NYSDOH and NYC DOHMH maintain separate HIV surveillance systems for rest of state and NYC, respectively. HIV/AIDS epidemiology data in this report are derived from the NYSDOH BHAIE HIV surveillance system unless otherwise indicated in a note at the bottom of the table or graph. HIV data for NYC derived from the NYSDOH BHAIE HIV surveillance system may differ from NYC data presented in other HIV epidemiologic reports produced by NYC DOHMH. Unless otherwise noted, cases included in this report were diagnosed through December 31, 2014, and the data are current as of April 2016. Additional information about HIV/AIDS surveillance data collection, data processing, and reporting procedures in New York State is available by visiting the NYSDOH website (<http://www.health.ny.gov/diseases/aids/general/statistics/index.htm>) or NYC DOHMH website (<http://www1.nyc.gov/site/doh/data/data-sets/aids-hiv-epidemiology-and-field-services.page>).

Living AIDS Cases

All reported individuals living with AIDS at the end of the reporting period.

Living HIV Cases

All reported individuals living with diagnosed HIV infection who have not developed AIDS at the end of the reporting period.

Newly Diagnosed AIDS Cases

Cases reported to surveillance with AIDS for the first time. Includes AIDS cases that have never been reported before and cases initially reported as HIV infection that have subsequently developed AIDS.

Newly Diagnosed HIV Cases

HIV diagnoses that have been reported for the first time through laboratory reporting of an approved, positive multi-step algorithm, a positive Western blot antibody test, a positive HIV detection test (culture, P24 antigen), a detectable nucleic acid test or by a physician reporting of an initial HIV diagnosis, regardless of concurrent or subsequent AIDS diagnosis.

HIV Transmission Risk Category

Information on possible mode(s) of HIV exposure or transmission risk is typically given to health care providers during routine medical history taking; most often, NYSDOH obtains the information from review of the patient's medical records. An individual can be exposed to HIV through more than one route. However, per CDC guidance for surveillance, only one exposure mechanism is considered. (The category of "men who have sex with men and inject drugs" is the only exception to this.)

Persons identified with more than one potential exposure route are classified in accordance with the following CDC-defined hierarchy of exposure category (ordered by probability of transmission as recognized early in the epidemic). Based on this hierarchy, for example, a woman who may have been exposed to HIV through both injection drug use and through heterosexual contact with an HIV-infected partner would be classified only as an injection drug user, since that mode of exposure precedes heterosexual contact in the hierarchy.

Adults:

Men who have sex with men and inject drugs

Men who have sex with men (includes bisexual men)

Injection drug users

Hemophiliacs or persons with other clotting disorders

Heterosexual contact with an injection drug user, a bisexual man, a hemophiliac, an HIV-positive blood product recipient, or a person with documented HIV or AIDS

Transfusion or transplant recipient

Confirmed other risk (e.g. cases of public health importance)

Female presumed heterosexual contact (*For a case to be classified as FPHC the HIV Surveillance record for the case must show all of the following: (a) sex at birth is female, (b) case does not meet requirements for any other transmission risk group, (c) no indication of injection drug use, and (d) heterosexual contact not specifically denied.*)

Adult with undetermined mode of exposure

Children:

Hemophiliacs or children with other clotting disorders

Mother is an injection drug user

Mother had sex with an injection drug user, a bisexual man, a hemophiliac, an HIV-positive blood transfusion recipient, a person with documented HIV or AIDS

Mother received a transfusion or blood products

Mother had AIDS or is HIV-positive

Transfusion or transplant recipient

Pediatric other risk

Child with undetermined mode of exposure

Individuals with an undetermined mode of exposure may fall into one of several categories: persons for whom public health representatives have not completed data collection, persons for

whom no mode of exposure was identified because the individual died or was lost to follow-up, persons with lack of exposure information in the medical chart, and persons for whom adequate follow-up information revealed no identifiable exposure mechanism.

Diagnosis Date

The earliest date on which a clinical or laboratory diagnosis of HIV or AIDS is documented on a provider report form, laboratory report or in the patient's medical chart. This date may be months, or even years, earlier than the date the case was reported to the health department.

Case Rates

Rates are based on the number of cases per 100,000 population using the US Census Bureau's 2010 Decennial Census SF1 files.

Residence

In this report new HIV diagnoses are assigned to the county of residence at the time of diagnosis, as reported in the surveillance record. Living cases are assigned to the most recent known county of residence within NYS before December 31, 2014. Living cases thus include persons diagnosed in other jurisdictions and living in NYS at the end of 2014, but excludes persons diagnosed in NYS and known to be living outside NYS at the end of 2014.

Prisoners in state correctional facilities

In this report, "prisoners" refers to persons diagnosed or reported from one of the NYS Department of Corrections and Community Supervision (DOCCS) facilities throughout NYS or resident in a state corrections facility at the end of 2014.

In this report, tabulations for the whole state and for NYC include individuals characterized as prisoners. In less populated geographic areas, prisoners may be a significant percentage of living cases, and information is most useful to local communities if incarcerated individuals are categorized separately from other community residents. Prisoners are excluded from non-NYC Ryan White area figures and tables throughout this report, unless otherwise indicated.

HIV/AIDS Figures

The following tables and figures provide a detailed picture of the HIV/AIDS epidemic in NYS. Data are provided that summarize the distribution of HIV/AIDS cases in NYS as of December, 2014, as well as the distribution and selected trends among HIV cases newly diagnosed in 2014. Most results are shown by gender and age group, race/ethnicity, transmission risk category, and region. Description and interpretation of major findings are provided in bulleted text above each figure.

Laboratory Indicators of Engagement in HIV/AIDS Care - the “Cascades” Figures

Beginning with Figure B87, laboratory-based indicators of engagement in care are presented. The NYSDOH HIV/AIDS surveillance system routinely receives reports of HIV-related laboratory tests performed within NYS or for persons who are NYS residents. These tests are used primarily for disease surveillance, that is, to detect cases of HIV infection. However, the tests can also be used as indirect measures for contact with the medical care system to indicate how promptly people enter care after their initial HIV diagnosis and whether they subsequently remain in care after diagnosis. The count of persons in each bar of the cascade pictures have been rounded to the nearest hundred. This was done to simplify the cascade presentation and to preserve the anonymity of individuals in Ryan White Regions with a small number of persons living with diagnosed HIV infection. The actual counts are available by request from the AIDS Institute.

Additional Information

To ask questions about information in this report, please call the Bureau of HIV/AIDS Epidemiology, AIDS Institute, New York State Department of Health, at 518-474-4284 or submit an inquiry at BHAE@health.state.ny.us.

Questions about HIV/AIDS epidemiological data in NYC may be directed to the NYC HIV Surveillance Unit; 212-442-3388; HIVReport@health.nyc.gov.

Figure B1 – Trends in HIV and AIDS Cases, New York State, 2002-2014

- HIV diagnoses and deaths among people with HIV/AIDS have declined markedly over the past decade.
- While diagnoses and deaths have both dropped, the number of new diagnoses has remained higher than the number of deaths, and the number of persons living with diagnosed HIV infection (PLWDHI) has risen to nearly 113,000 by the end of 2014.

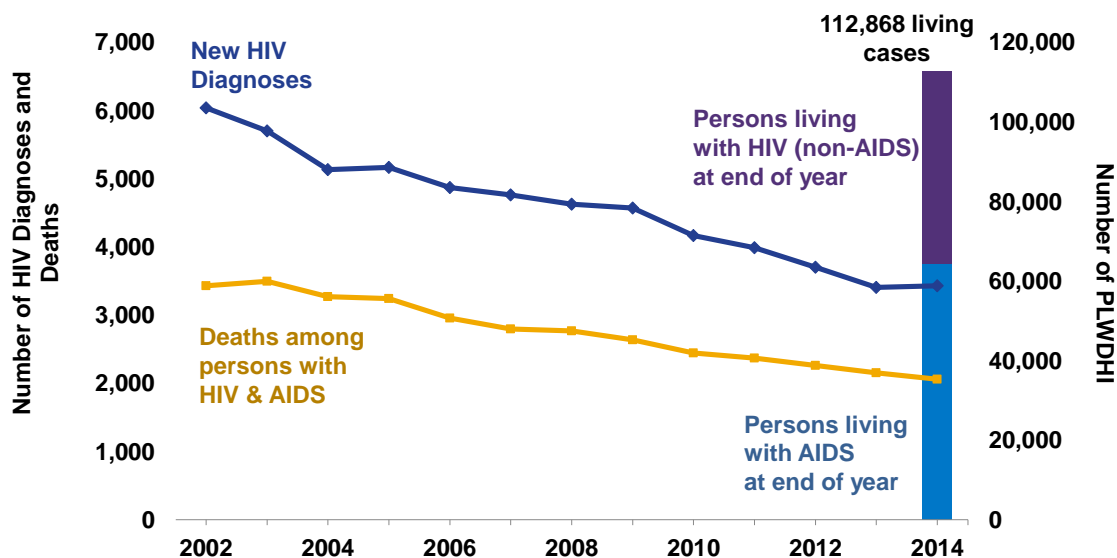


Figure B2 – HIV Prevalence and Number HIV Positive Childbearing Women in NYS by Year of Delivery, 1988-2015

- Since peaking in the early 1990s the number of HIV positive mothers (and the prevalence rate) has been steadily decreasing.

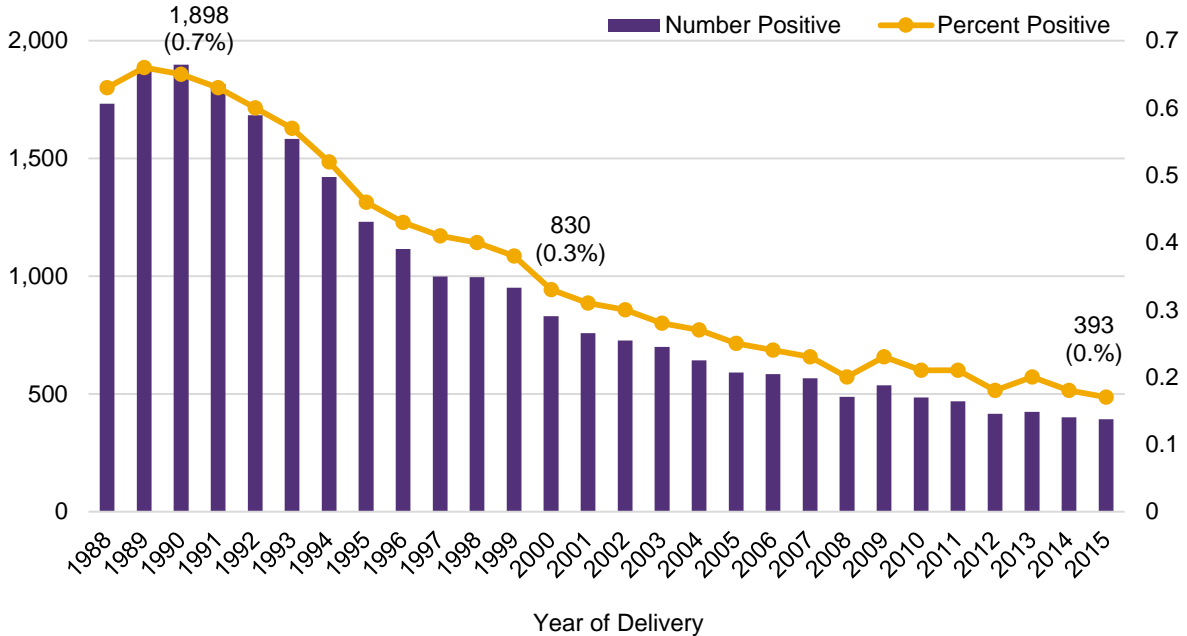


Figure B3 – HIV Prevalence among Childbearing Women by Year of Delivery and Region of Residence, New York State, 1988-2015

- While there has been a statewide decrease in the number of HIV positive mothers giving birth, there are differences by region.

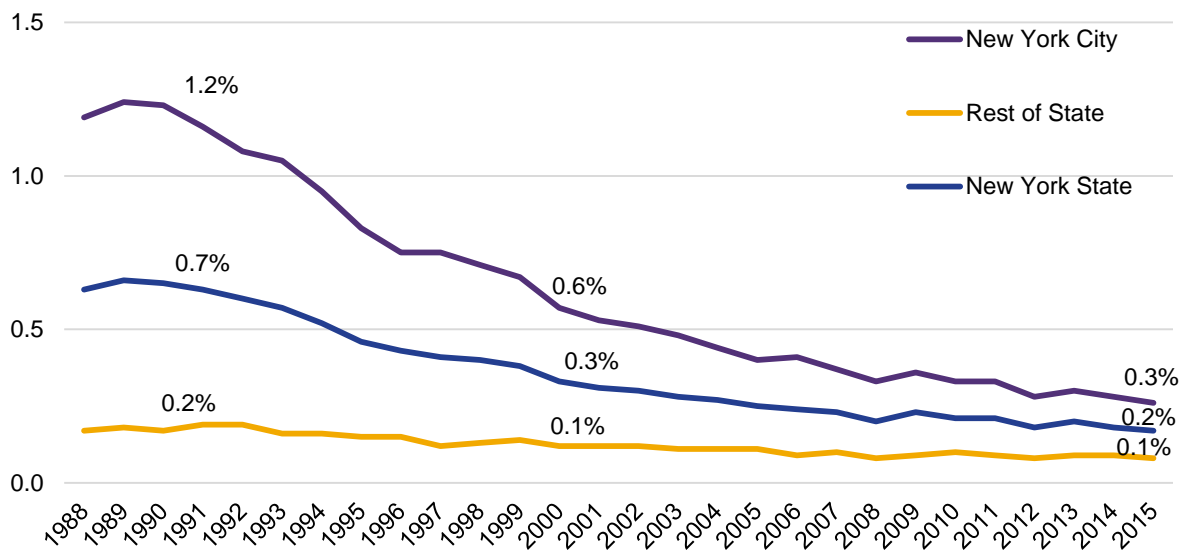


Figure B4 – Percent of Women Aware of HIV Status Prior to Delivery by Year of Delivery, New York State, 1997-2015

- With the introduction of expedited testing in 1999, the percentage of women aware of their HIV status prior to delivery increased from 64% in 1997 to 91% in 2000. Since then the percentage has risen and held steady at 96% in 2015.

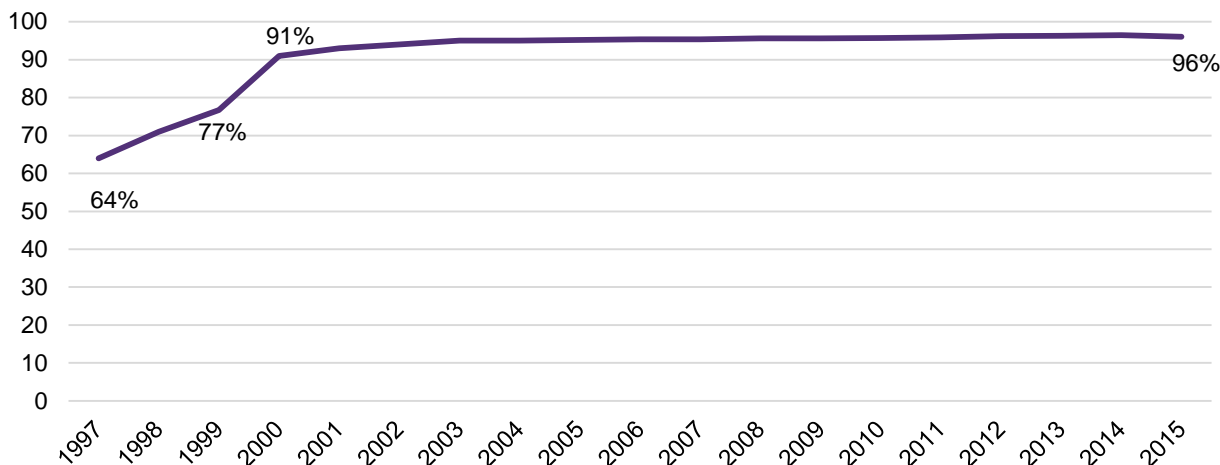
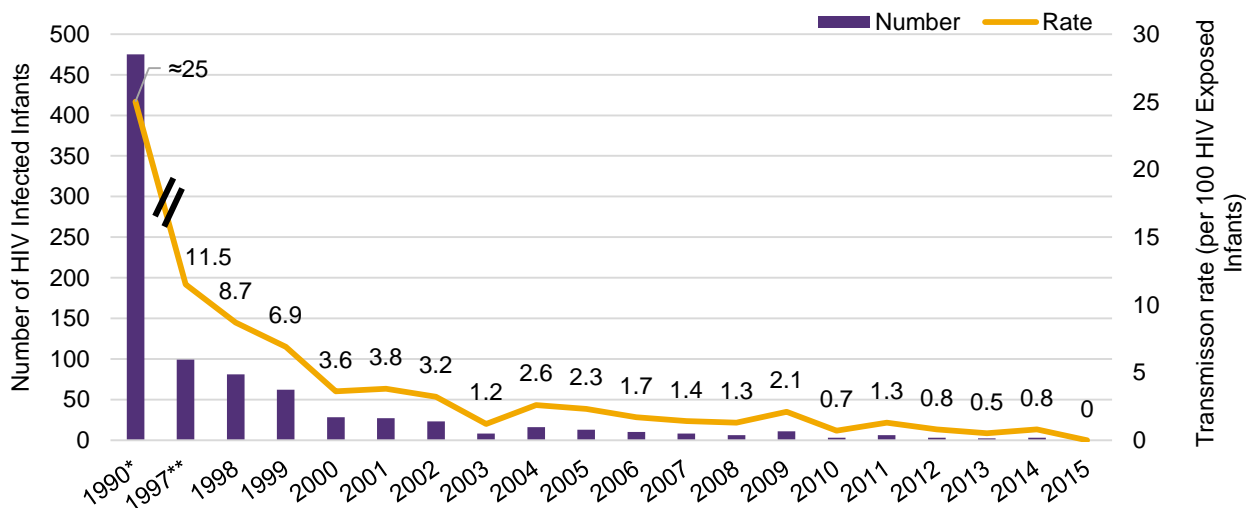


Figure B5 – Number and Rate of Mother-to-Child HIV Transmissions by Year of Delivery, New York State, 1997-2015

- For historical perspective, in 1997, 99 HIV-infected infants were born in New York State.
- Since then, the rate has continued to decline and in 2013 and 2015, NYS met CDC’s criteria of elimination: (1) A transmission rate of less than one percent of exposed infants, and (2) Less than 1 case of Mother-To-Child Transmission per 100,000 live births.



* 1990 - estimate based on 1,898 exposures and an estimated 25% transmission rate

**1997 data include February-December births.

Figure B6 – Persons Newly Diagnosed with HIV Infection by Selected Characteristics, New York State, 2014

- In 2014, males greatly outnumbered females among new diagnoses; new diagnoses among MSM greatly outnumbered those in other risk categories.
- Across race/ethnicity groups, not-Hispanic Blacks were the largest group, and Hispanics second-largest.
- Diagnoses were most numerous in persons age 30-39, but substantial numbers of diagnoses were seen across all age groups from age 20-59.

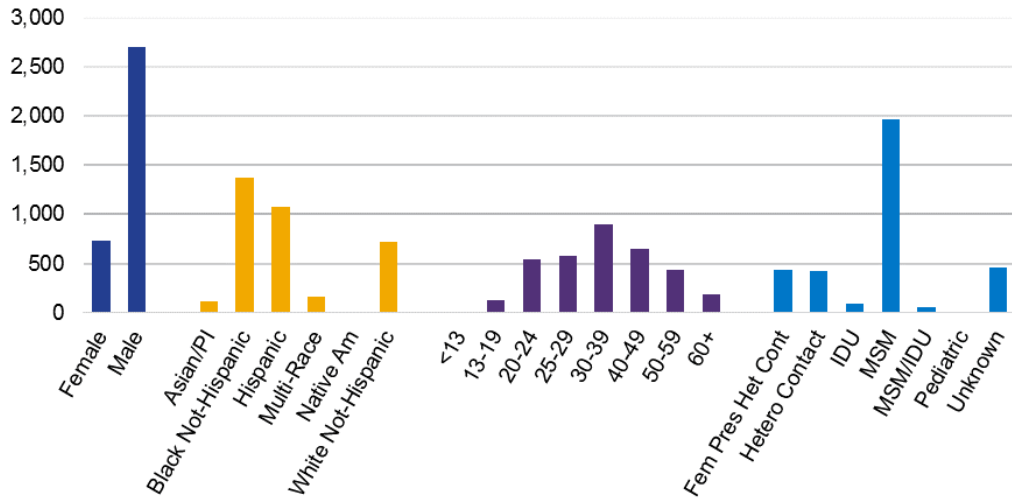


Figure B7 – PLWDHI by Selected Characteristics, New York State, 2014

- As with newly diagnosed cases, males, persons of Black not-Hispanic or Hispanic race/ethnicity and those with MSM transmission risk made up the largest number of PLWDHI.
- The largest number of cases were ages 40-49 and 50-59, reflecting the increased success of medical care in extending the lifespan of PLWDHI.

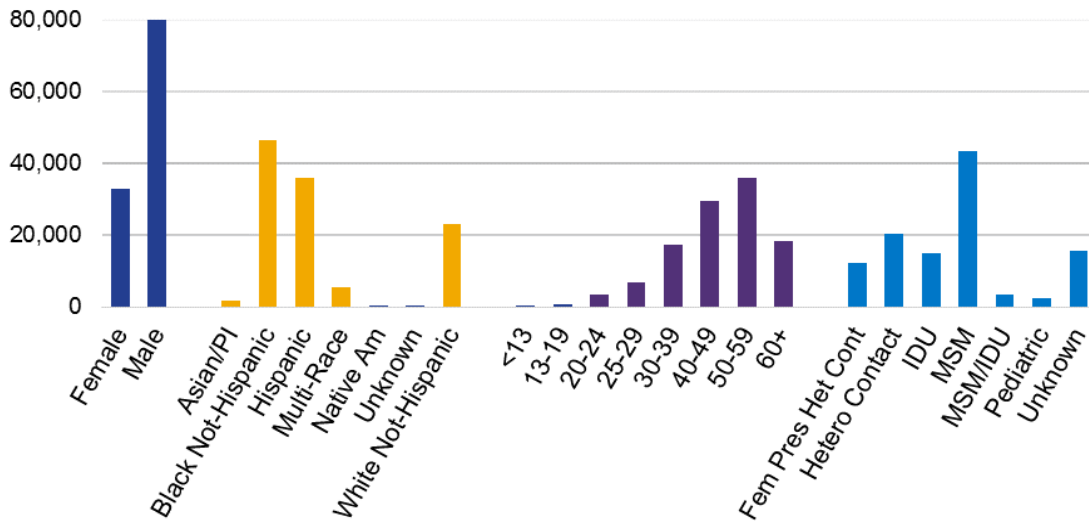


Figure B8 – PLWDHI by Sex at Birth and Race/Ethnicity, New York State, 2014

- The epidemic has affected males more dramatically than females, and has disproportionately affected Black and Hispanic males and females compared to persons of other races/ethnicities.
- The vast majority of living HIV/AIDS cases, both male and female, were Black or Hispanic in 2014. Black and Hispanic persons made up 83% of living male and 68% of living female cases.

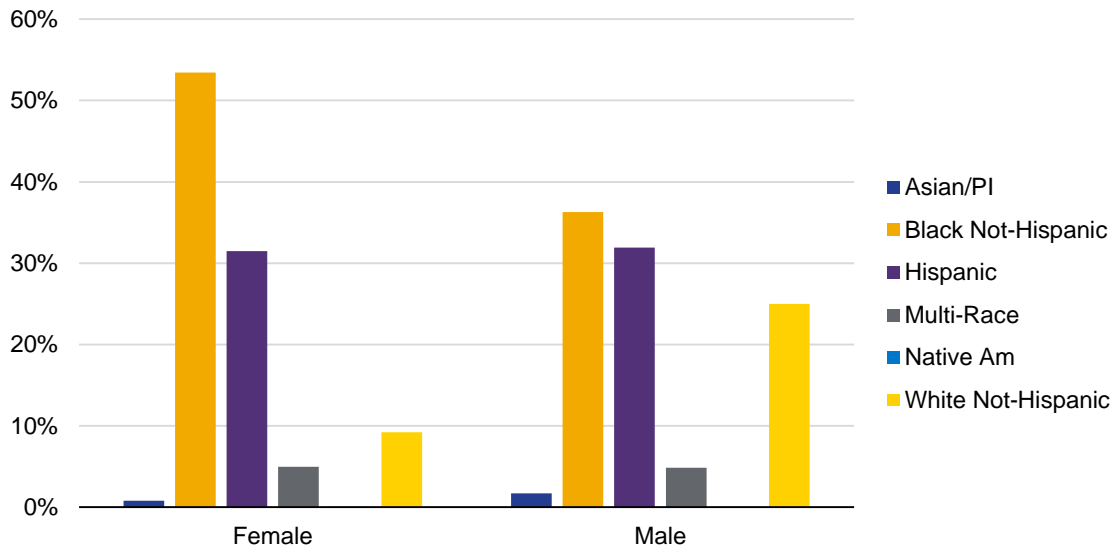


Figure B9 – PLWDHI by Sex at Birth and Age, New York State, 2014

- In 2014, the largest concentration of PLWDHI, about one third, was ages 50 to 59.
- Female PLWDHI tend to be somewhat older than males, reflecting their older age at diagnosis.

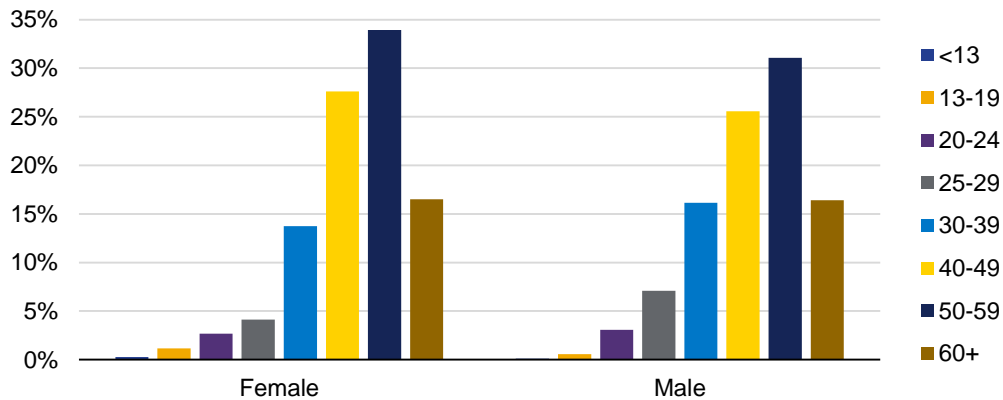


Figure B10a – Females Living with Diagnosed HIV Infection by Transmission Risk, NYS, 2014

- In 2014, four-fifths of female PLWDHI had heterosexual or presumed heterosexual contact transmission risk.

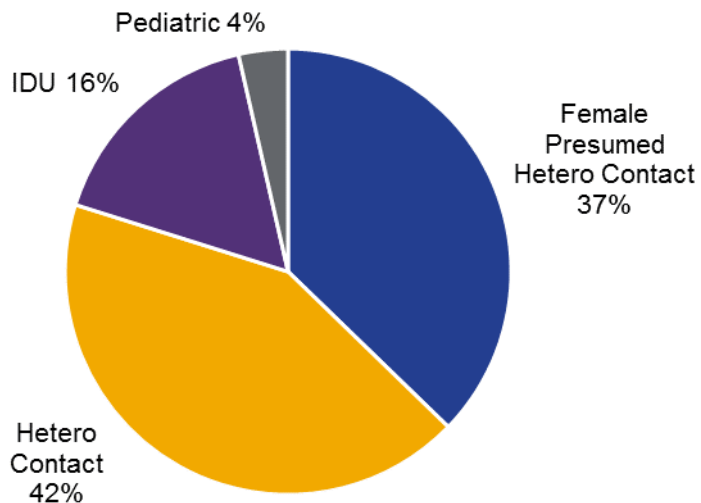


Figure B10b – Males Living with Diagnosed HIV Infection by Transmission Risk, NYS, 2014

- In 2014, 60% of male PLWDHI had MSM and MSM/IDU risk.
- For one fifth of cases no transmission risk could be identified.

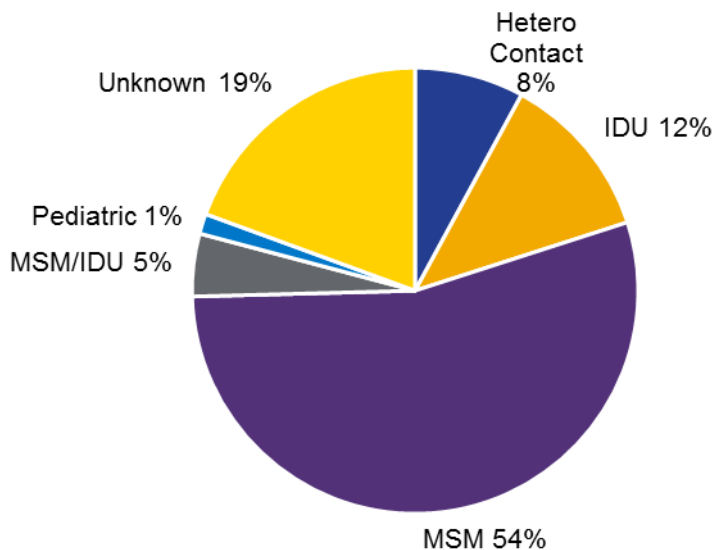


Figure B11 – PLWDHI by Transmission Risk and Race/Ethnicity, New York State, 2014

- Race/ethnicity composition varied across risk groups in 2014.
- Among PLWDHI with heterosexual (male/female) or female presumed heterosexual risk, Blacks made up the largest group (55%). Among IDU cases, Hispanics were most numerous (43%).
- MSM PLWDHI were more or less equally distributed between White (35%), Black (29%), and Hispanic (29%).

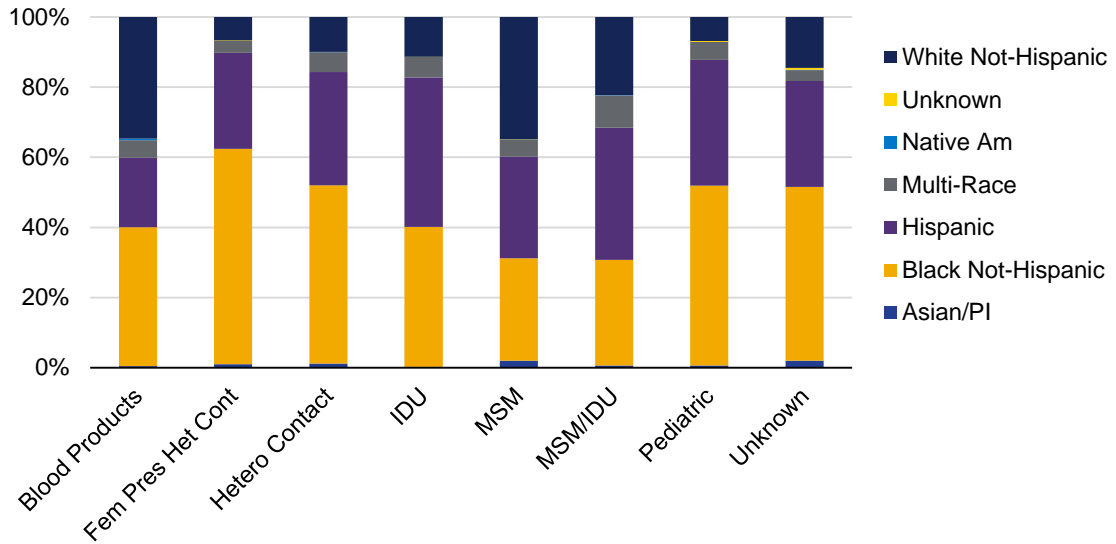


Figure B12 – PLWDHI by Sex at Birth and Race/Ethnicity, New York City, 2014

- In NYC in 2014, the greatest proportion of female PLWDHI was Black (57.5%), followed by Hispanics (33.7%).
- Among males, equivalent proportions were Black (38.5%) and Hispanic (34.1%); Whites made up a smaller proportion (21.7%).

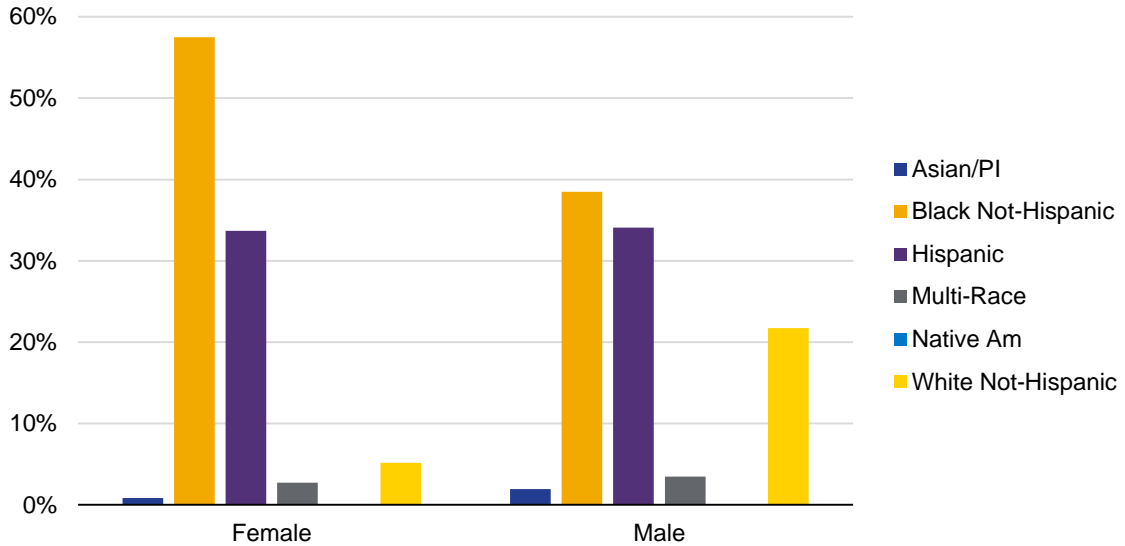


Figure B13 – PLWDHI by Sex at Birth and Age Group, New York City, 2014

- In 2014, just over half of female PLWDHI were age 50 and over, with the largest concentration in the 50-59 age range (34%).
- Male PLWDHI were somewhat younger, with 46% age 50 and over. However, as with females, the single largest group was aged 50-59 (30%).

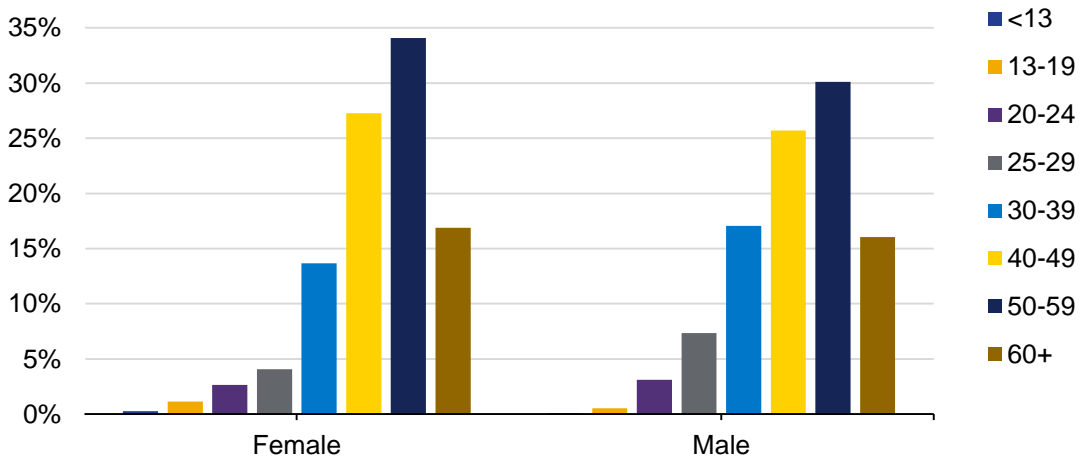


Figure B14a – Females Living with Diagnosed HIV Infection by Transmission Risk, New York City, 2014

- In 2014, 80% of female PLWDHI had heterosexual or presumed heterosexual contact transmission risk.

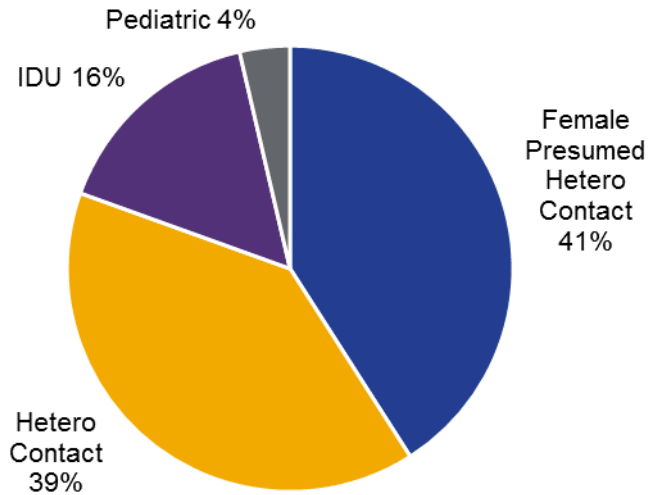


Figure B14b – Males Living with Diagnosed HIV Infection by Transmission Risk, New York City, 2014

- In 2014, the majority of male PLWDHI had MSM transmission risk.
- For one fifth of cases no transmission risk could be identified.

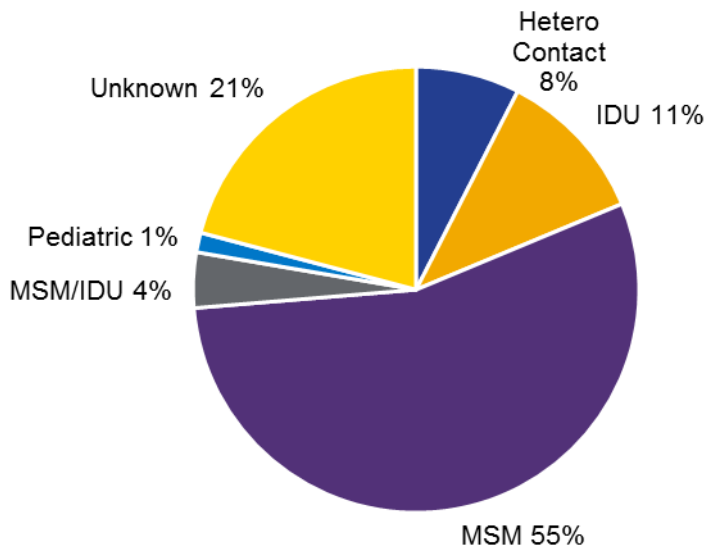


Figure B15 – PLWDHI by Transmission Risk and Race/Ethnicity, New York City, 2014

- In 2014, race/ethnicity composition varied across risk groups of NYC PLWDHI.
- Among PLWDHI with heterosexual (male/female) and female presumed heterosexual risk cases, Blacks made up the largest group (58.6%). Among IDU cases, Hispanics were most numerous (46.4%).
- Black, Hispanic, and White made up nearly equal percentages (31% each) of PLWDHI with MSM risk.

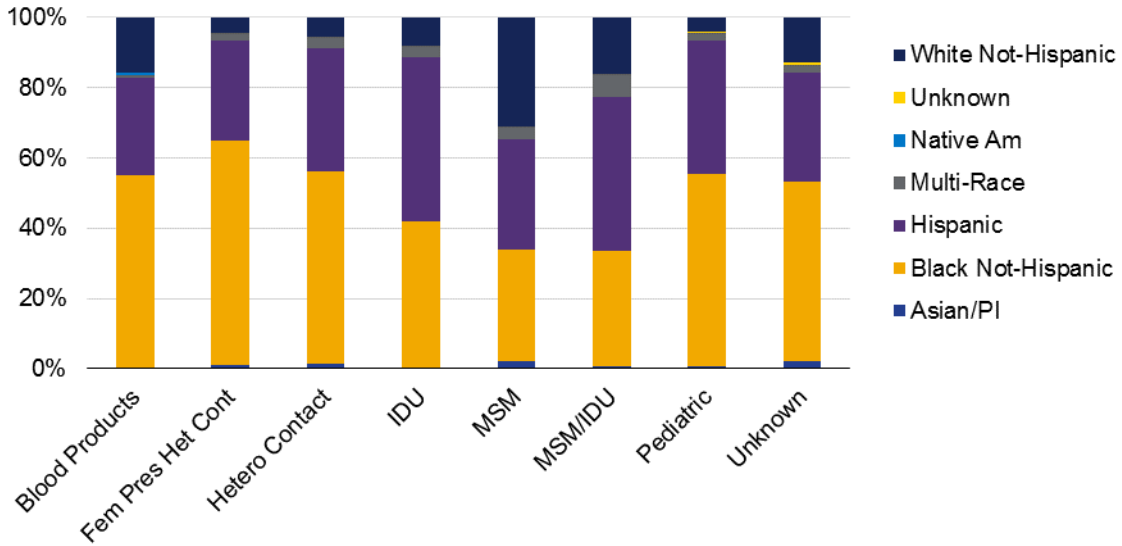


Figure B16 – PLWDHI by Sex at Birth and Race/Ethnicity, Rest of State, 2014

- In ROS in 2014, most female PLWDHI were Black (39%), followed by White Not-Hispanic (24%) and Hispanic (24%).
- Among males, White Not-Hispanic (39%) made up the majority while Black Not-Hispanic (28%) and Hispanic (24%) proportions were roughly similar.

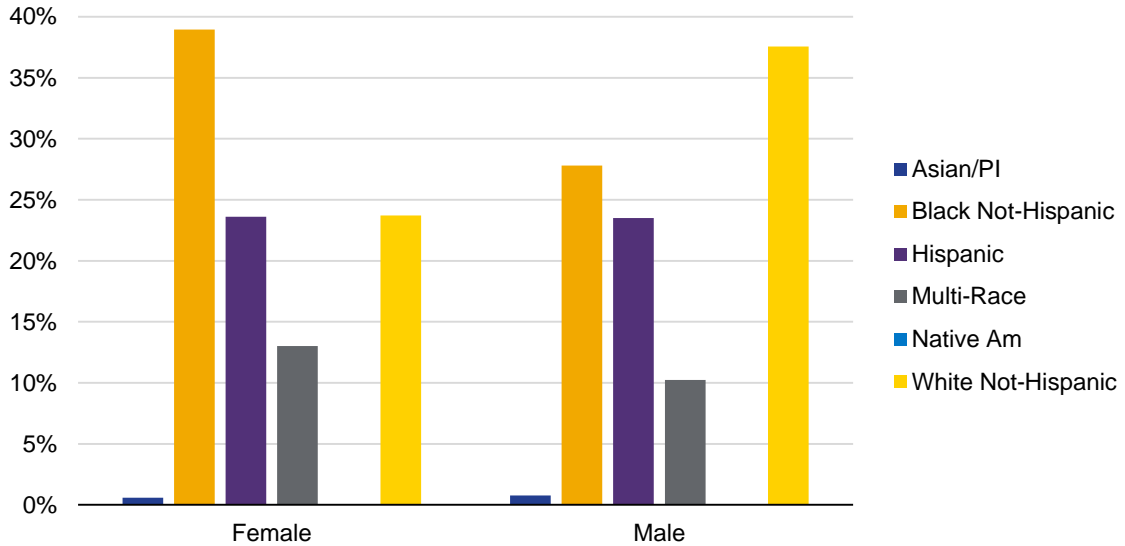


Figure B17 – PLWDHI by Sex at Birth and Age Group, Rest of State, 2014

- Just under half of female PLWDHI were age 50 and over (49%), with the largest concentration in the 50-59 age range (33%).
- Male PLWDHI were somewhat older, with 53% age 50 and over. However, as with females, the single largest group was aged 50-59 (35%).

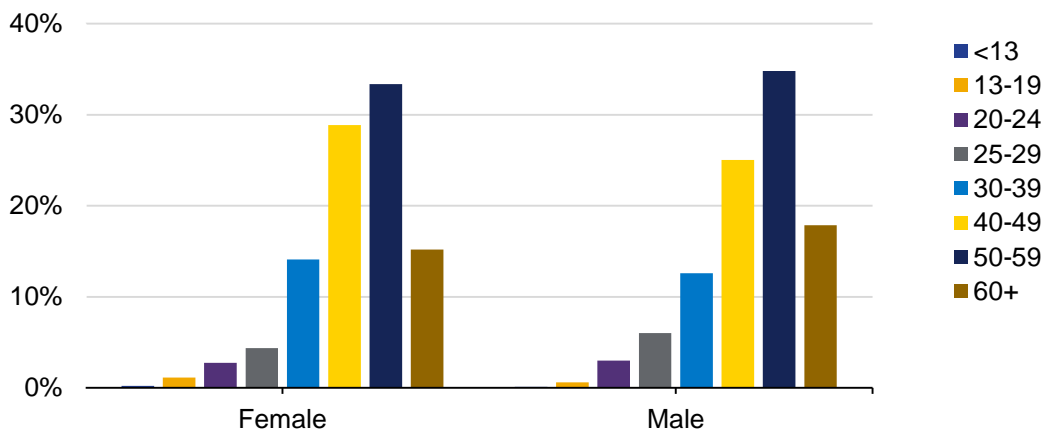


Figure B18a – PLWDHI by Transmission Risk among Females, Rest of State, 2014

- In 2014, 77% of female PLWDHI had heterosexual or presumed heterosexual contact transmission risk.

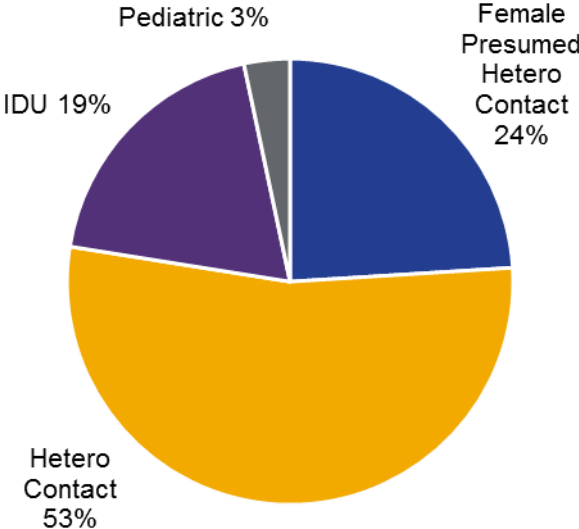


Figure B18b – PLWDHI by Transmission Risk among Males, Rest of State, 2014

- In 2014, the majority of male PLWDHI (53%) had MSM transmission risk.
- 16% of PLWDHI had no identified transmission risk.

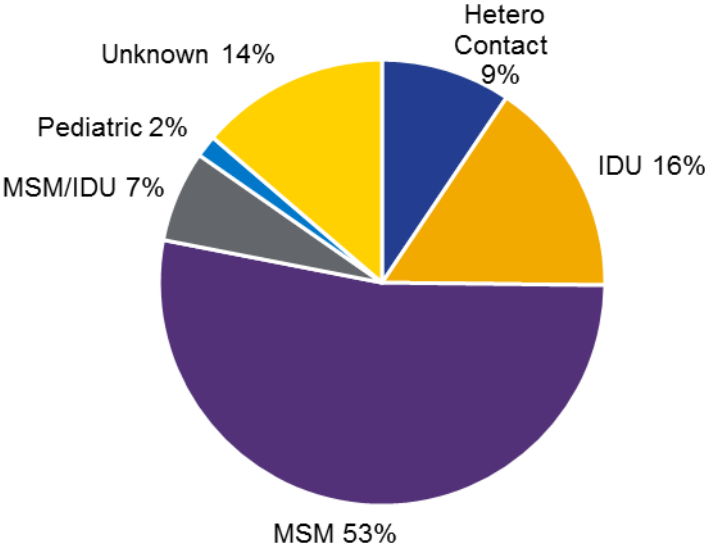


Figure B19 – PLWDHI by Transmission Risk and Race/Ethnicity, Rest of State, 2014

- The race/ethnicity composition varied across risk groups in 2014.
- Blacks were the largest group among PLWDHI with heterosexual (39%), female presumed heterosexual (46%), and IDU risk (34%).
- In contrast to NYC and NYS as a whole, in ROS, most MSM were White Not-Hispanic (51%).

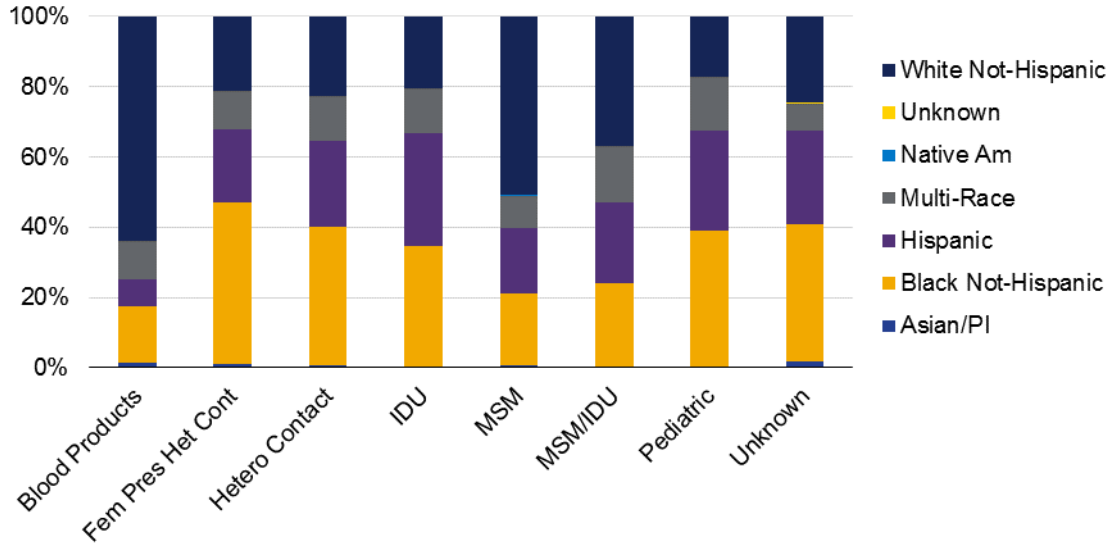


Figure B20 – PLWDHI by Sex at Birth and Race/Ethnicity, Nassau/Suffolk, 2014

- In Nassau/Suffolk in 2014, the greatest proportion of female PLWDHI were Black (42%), followed by Hispanics (26.7%) and White Not-Hispanics (21%).
- Among males, White Not-Hispanics (38.6%) made up the majority while the proportion of Black Not-Hispanics (24.8%) and Hispanics (26.7%) was roughly similar.

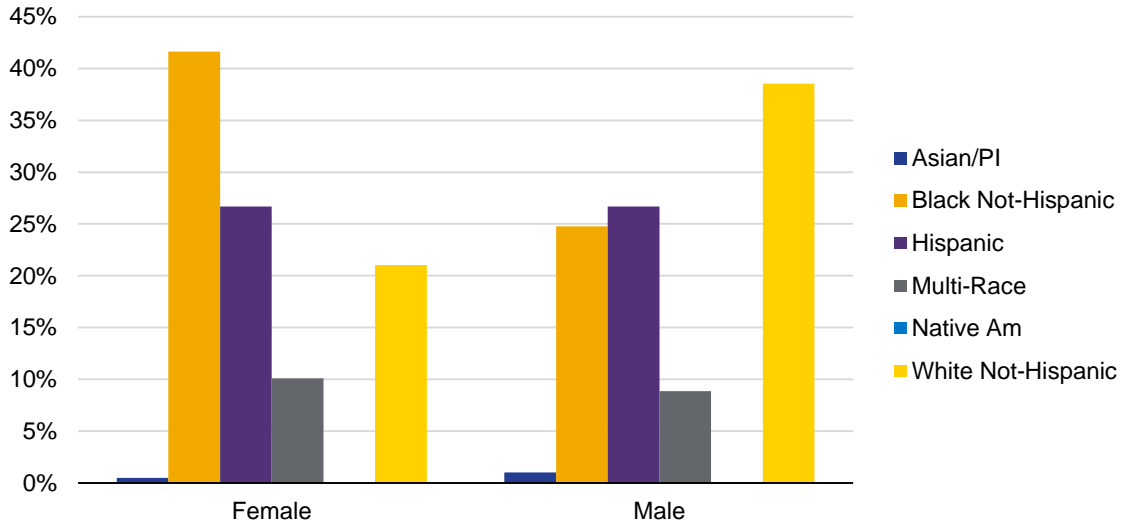


Figure B21 – PLWDHI by Sex at Birth and Age Group, Nassau/Suffolk, 2014

- Just over half of female PLWDHI were age 50 and older (53%), with the largest concentration in the 50-59 age range (35%). The next largest group was age 40-49 (27%).
- As with females, just over half of male PLWDHI (52%) were age 50, and the single largest group was aged 50-59 (34%).

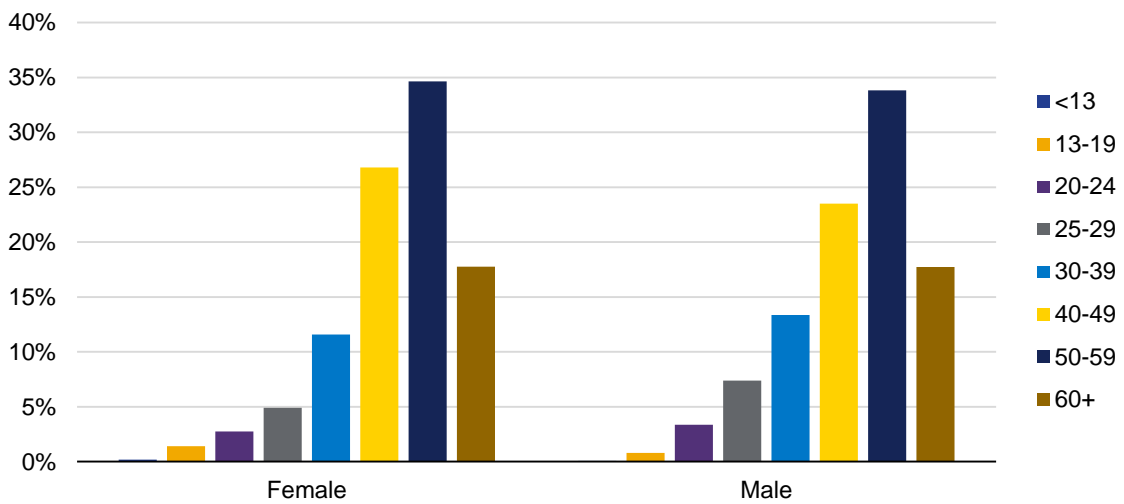


Figure B22a – Females Living with Diagnosed HIV by Transmission Risk, Nassau/Suffolk, 2014

- 81% of female PLWDHI had heterosexual and presumed heterosexual contact transmission risk in 2014.

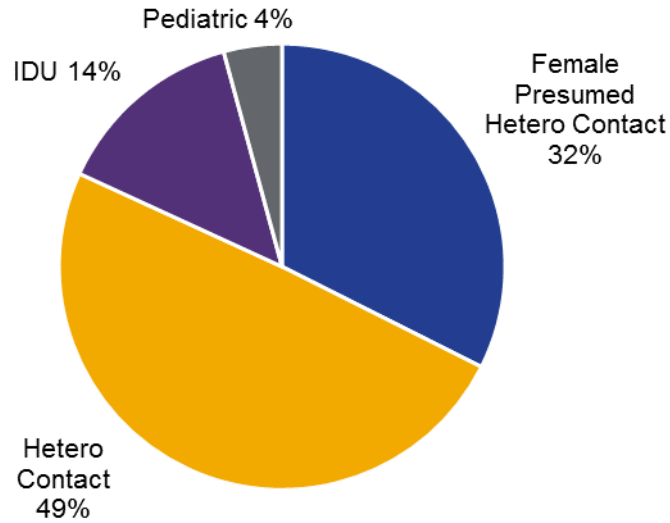


Figure B22b – Males Living with Diagnosed HIV by Transmission Risk, Nassau/Suffolk, 2014

- The majority of male PLWDHI (62%) had MSM or MSM/IDU transmission risk in 2014.
- For about 18% of male PLWDHI no transmission risk could be identified.

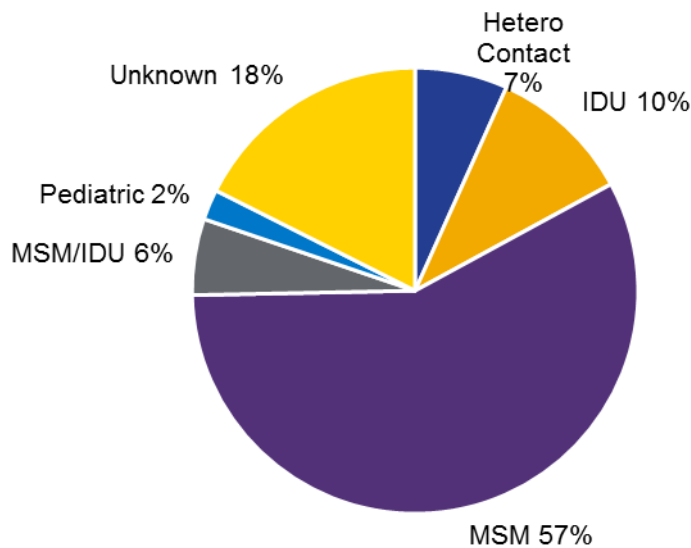


Figure B23 – PLWDHI by Transmission Risk and Race/Ethnicity, Nassau/Suffolk, 2014

- Race/ethnicity composition varied across risk groups in 2014.
- Blacks made up the largest proportion of PLWDHI among heterosexual (male/female) (41%) and female presumed heterosexual (48%) risk groups.
- Among PLWDHI with IDU risk, the proportion Black (35%) and White (33%) were similar.
- The largest proportion of MSM PLWDHI was White (46%).

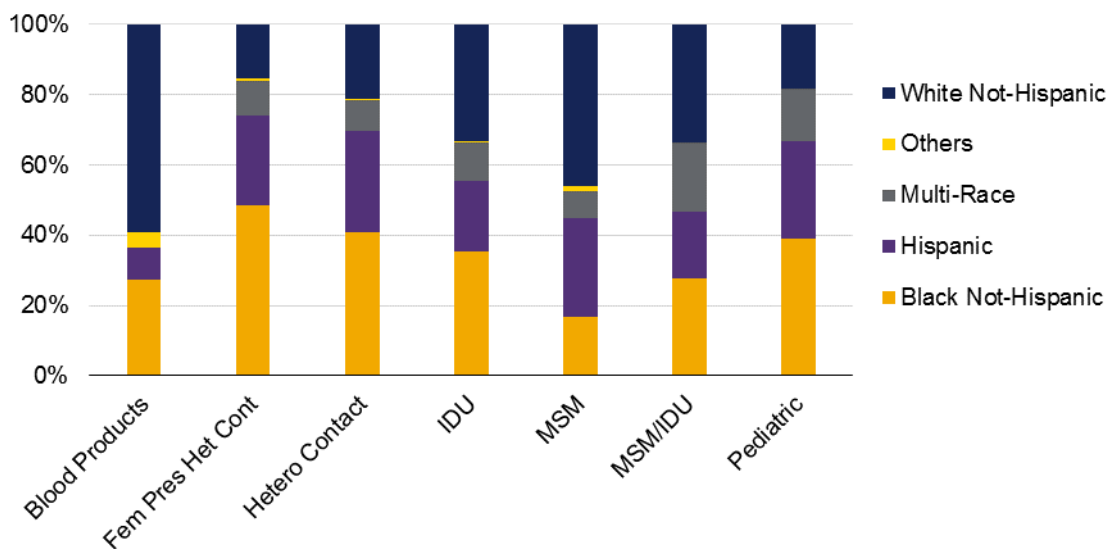


Figure B24 – Newly Diagnosed HIV Cases by Sex at Birth and Race/Ethnicity, New York State, 2014

- In NYS in 2014, the race/ethnicity distribution of males and females differs importantly for new HIV diagnoses.
- Among the 735 newly diagnosed females, the majority were Black (58%), with fewer Hispanics (26%) and many fewer Whites (10%).
- Among the 2,699 newly diagnosed males, about one-third each were Black (35%) and Hispanic (33%): fewer were White (24%).

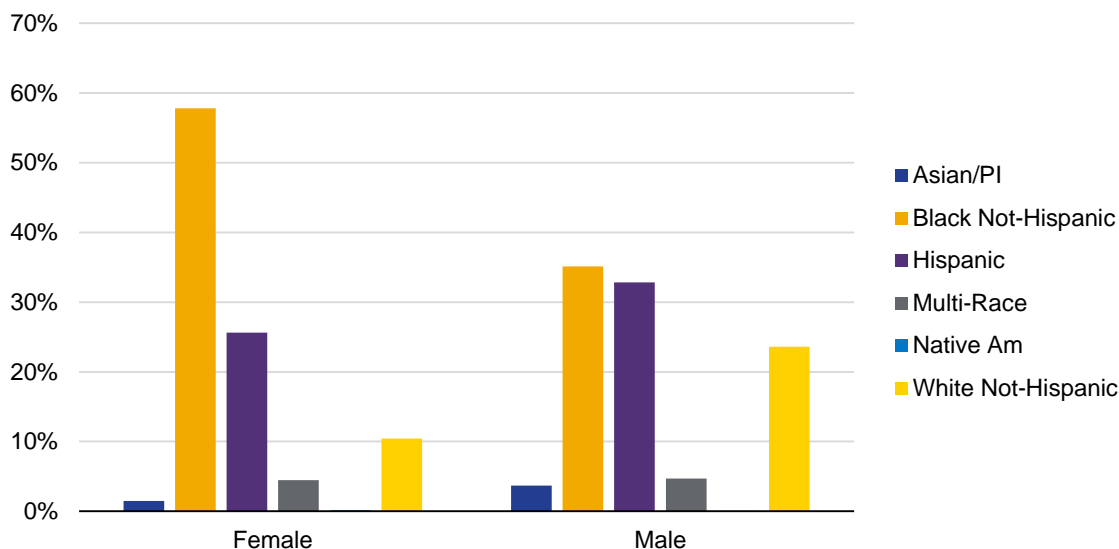


Figure B25 – Newly Diagnosed HIV Cases by Sex at Birth and Age at Diagnosis, NYS, 2014

- In 2014, both males and females newly diagnosed with HIV were concentrated in the 30-39 year old age group (28% and 26%, respectively).
- Males tended to be younger at diagnosis (40% under age 30) than females (24%).

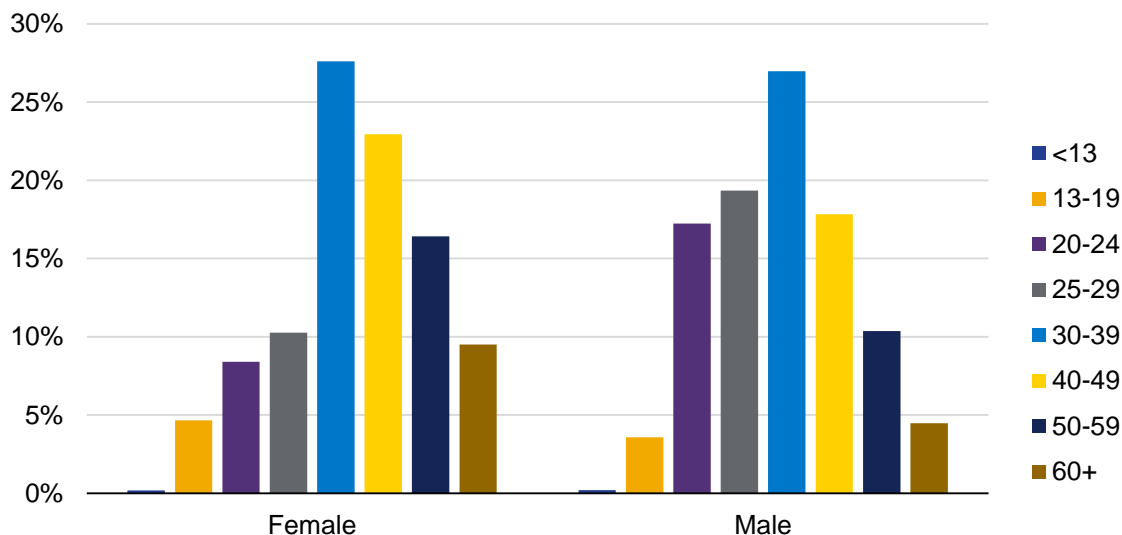


Figure B26a – Newly Diagnosed HIV Cases by Transmission Risk, Females, New York State, 2014

- Nearly all (94%) newly diagnosed females had heterosexual or presumed heterosexual contact transmission risk in 2014.

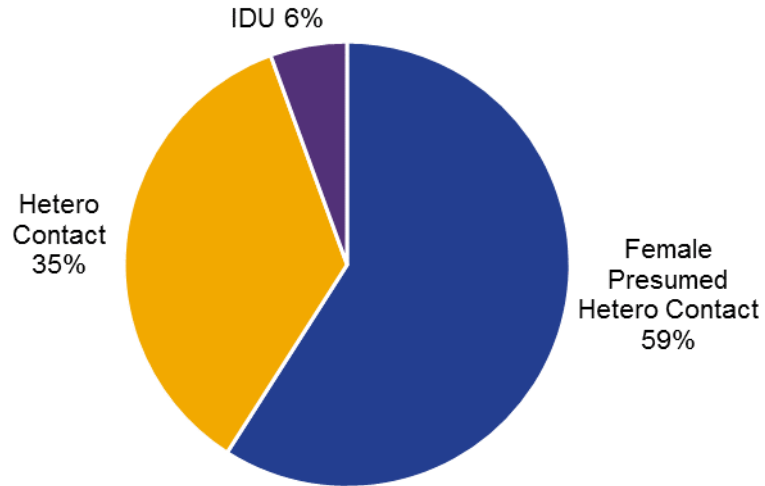


Figure B26b – Newly Diagnosed HIV Cases by Transmission Risk, Males, New York State, 2014

- Three-quarters (75%) of newly diagnosed males had MSM and MSM/IDU risk in 2014.
- 17% of newly diagnosed males had no identified transmission risk.

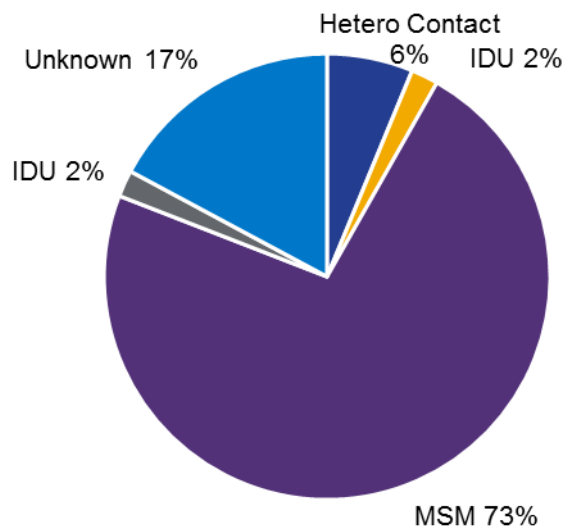


Figure B27 – Newly Diagnosed HIV Cases by Transmission Risk and Race/Ethnicity at Diagnosis, New York State, 2014

- Race/ethnicity composition varied across risk groups in 2014.
- Among the 860 heterosexual and female presumed heterosexual risk cases, Blacks made up the largest group (56% and 63%, respectively).
- The racial/ethnic distribution of the 1,957 newly diagnosed MSM and 94 newly diagnosed IDU were similar: Hispanics (35% of MSM, 32% of IDU) were most numerous, followed by Black Not-Hispanics (30% of MSM, 32% of IDU) and Whites (27% of MSM, 28% of IDU).

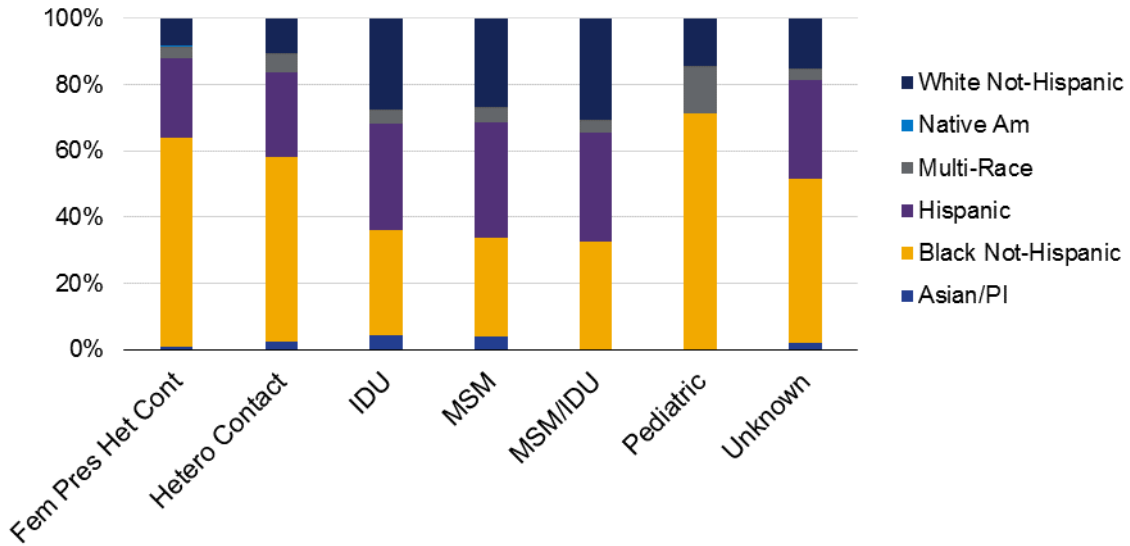


Figure B28 – Newly Diagnosed HIV Cases by Sex at Birth and Race/Ethnicity, New York City, 2014

- In NYC, among the 534 newly diagnosed females in 2014, the majority were Black (64%); there were fewer Hispanics (27%) and far fewer Whites (5%).
- Among the 2,034 newly diagnosed males, equal proportions were Black (37%) and Hispanic (35%); only one-fifth (20%) were White.

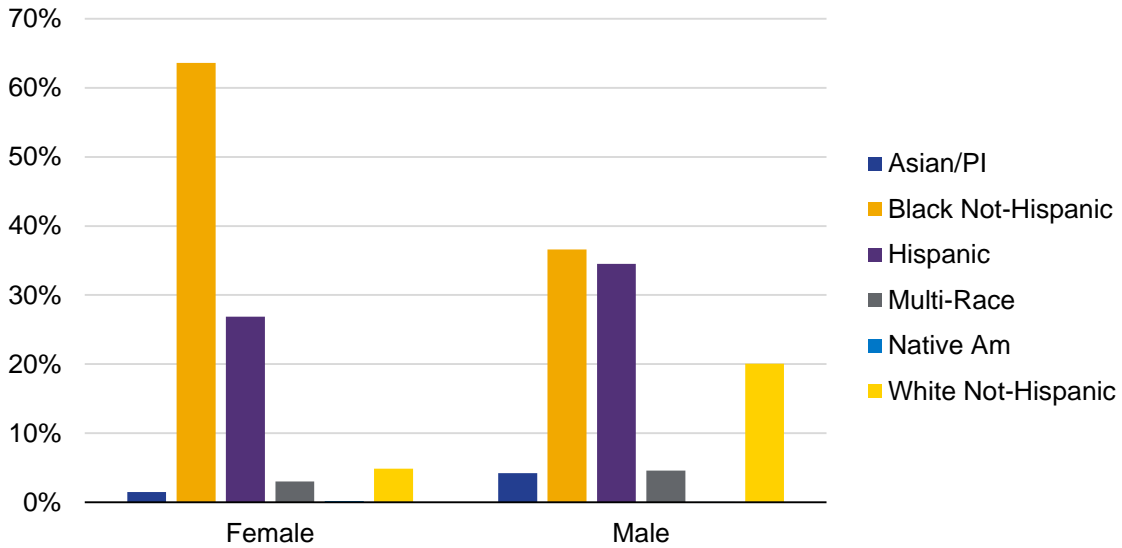


Figure B29 – Newly Diagnosed HIV Cases by Sex at Birth and Age at Diagnosis, New York City, 2014

- Among both males and females, newly diagnosed cases were concentrated in the 30-39 year old age range (28% and 27%, respectively) in 2014.
- Males tended to be younger at diagnosis than females; 41% of newly diagnosed males were under age 30, compared to 24% of females.

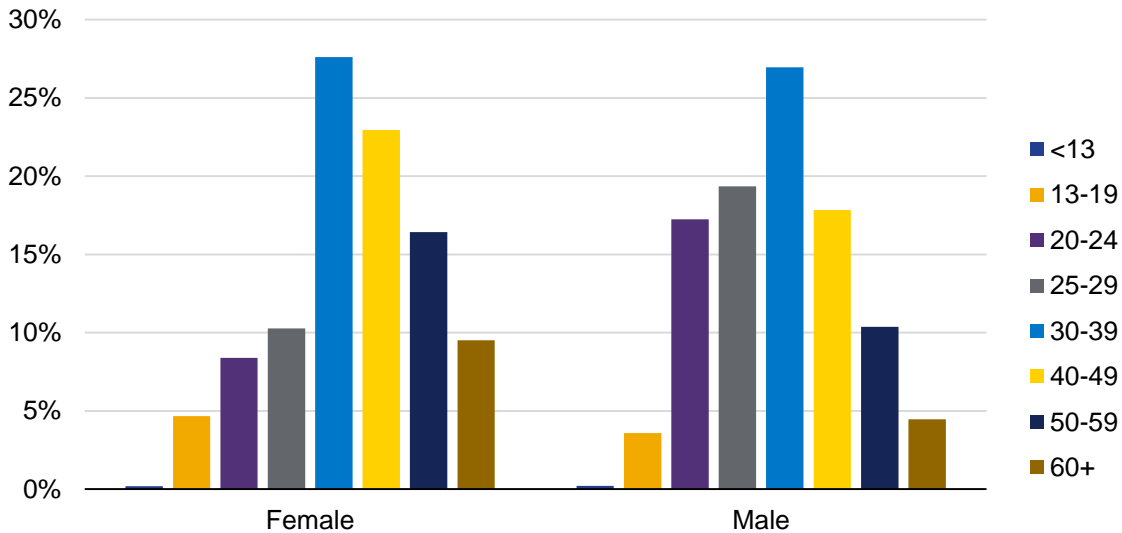


Figure B30a – Newly Diagnosed HIV Cases by Transmission Risk, Females, New York City, 2014

- Nearly all (96%) of female PLWDHI had heterosexual or presumed heterosexual contact transmission risk in 2014.

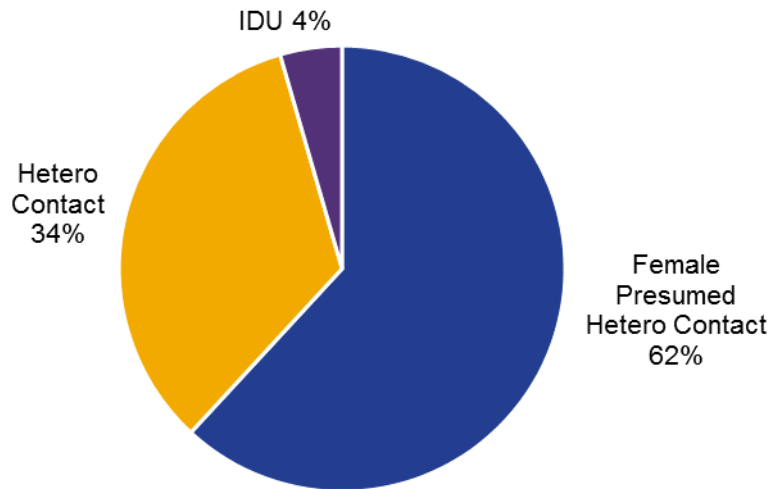


Figure B30b – Newly Diagnosed HIV Cases by Transmission Risk, Males, New York City, 2014

- The majority of male PLWDHI (74%) had MSM transmission risk in 2014.
- 18% of male PLWDHI had no identified transmission risk.

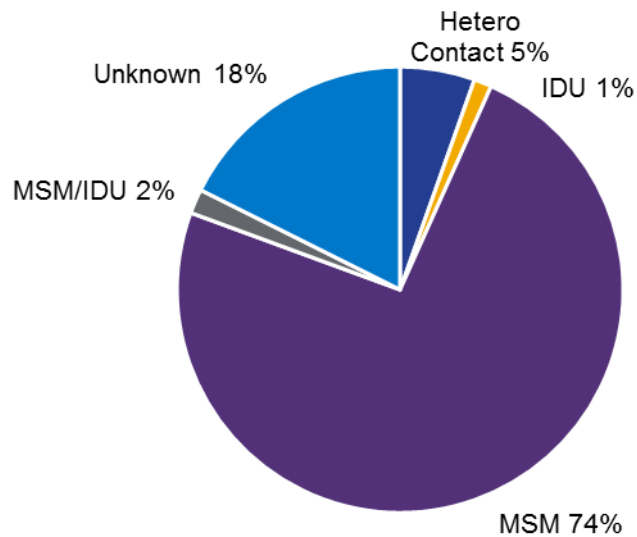


Figure B31 – Newly Diagnosed HIV Cases by Transmission Risk and Race/Ethnicity, New York City, 2014

- Race/ethnicity composition varied across risk groups in 2014.
- Among the 619 heterosexual and female presumed heterosexual risk cases, Blacks made up the largest group (59% and 69%, respectively).
- The racial/ethnic distributions of the 1,500 newly diagnosed MSM and 50 newly diagnosed IDU cases were similar. Hispanics (42% and 37%, respectively) were the largest group, followed by Blacks (34% and 31%) and Whites (23% and 12%).
- Asian/Pacific Islanders made up only 3% of all persons newly diagnosed with HIV in NYS but account for 8% of newly diagnosed IDU.

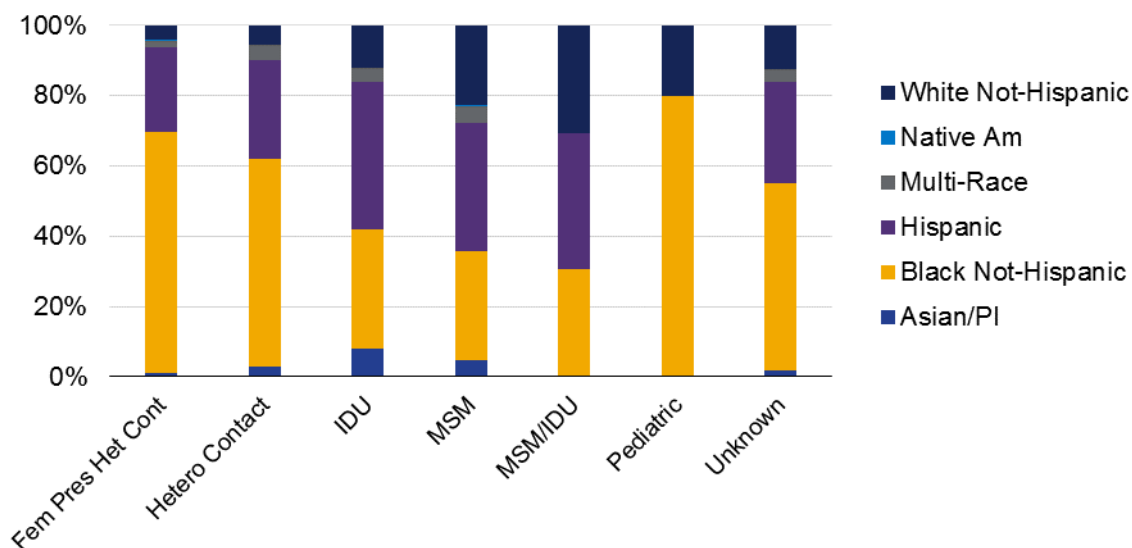


Figure B32 – Newly Diagnosed HIV/AIDS Cases by Sex at Birth and Race/Ethnicity, Rest of State, 2014

- In 2014 in ROS, the greatest proportion of the 201 new female diagnoses were Black (42%), followed by White (25%) and Hispanic (22%).
- Among the 665 males, Whites made up the largest proportion (34%) followed by Blacks (31%) and Hispanics (28%).

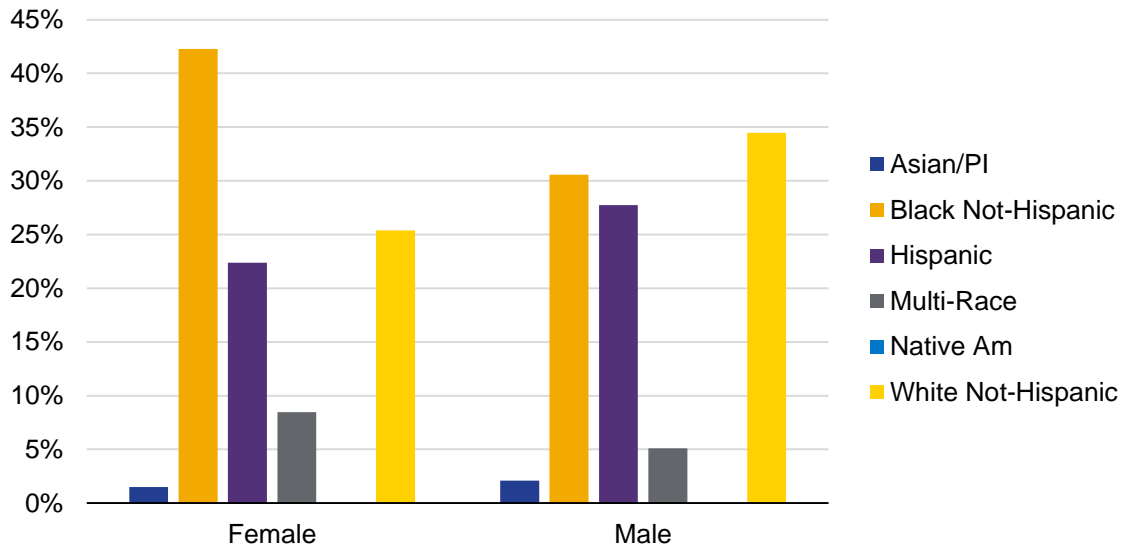


Figure B33 – Newly Diagnosed HIV Cases by Sex at Birth and Age at Diagnosis, Rest of State, 2014

- In 2014, among both males and females newly diagnosed cases were concentrated in the 30-39 year old age range (22% and 29%, respectively).
- Males tended to be younger at diagnosis (40% under age 30) than females (24%).

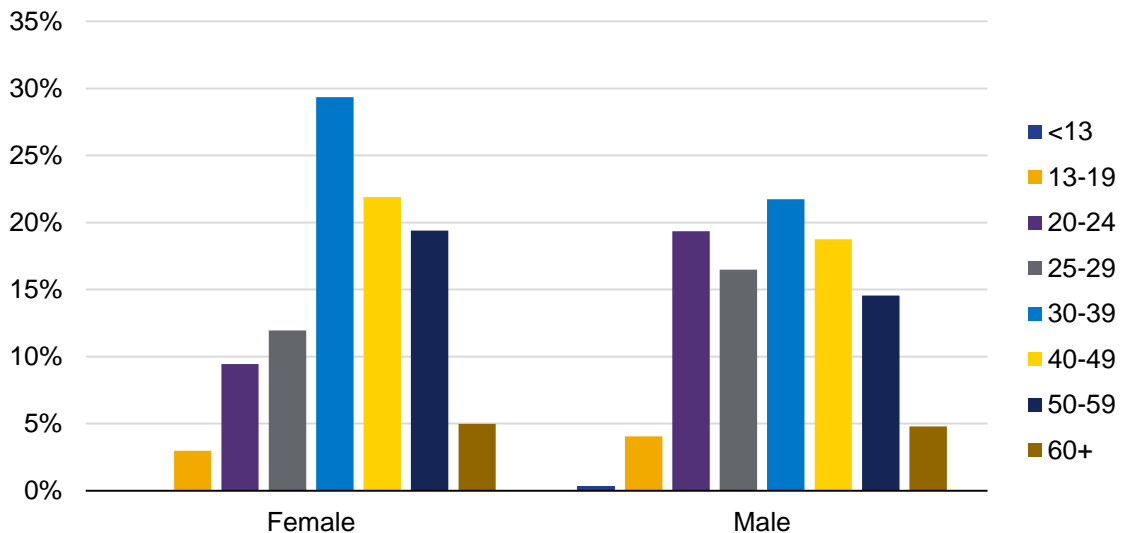


Figure B34a – Newly Diagnosed HIV Cases by Transmission Risk, Females, Rest of State, 2014

- 91% of newly HIV diagnosed females had heterosexual and presumed heterosexual contact transmission risk in 2014.

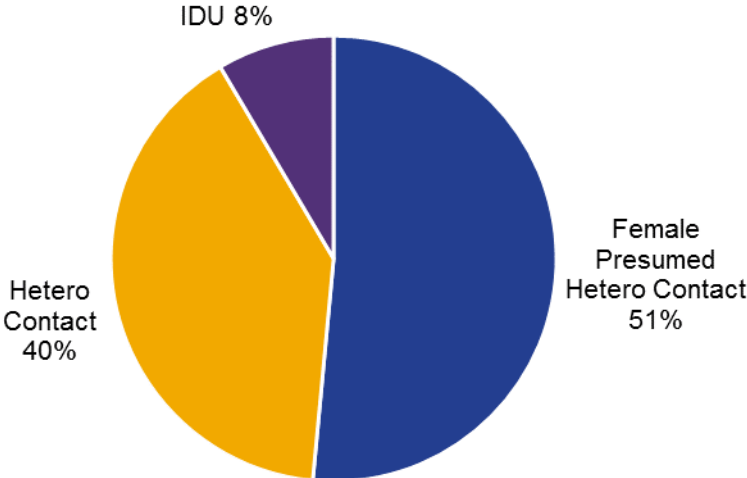


Figure B34b – Newly Diagnosed HIV Cases by Transmission Risk, Males, Rest of State, 2014

- 71% of newly diagnosed males had MSM and MSM/IDU risk in 2014.
- 16% of newly diagnosed males had no identified transmission risk.

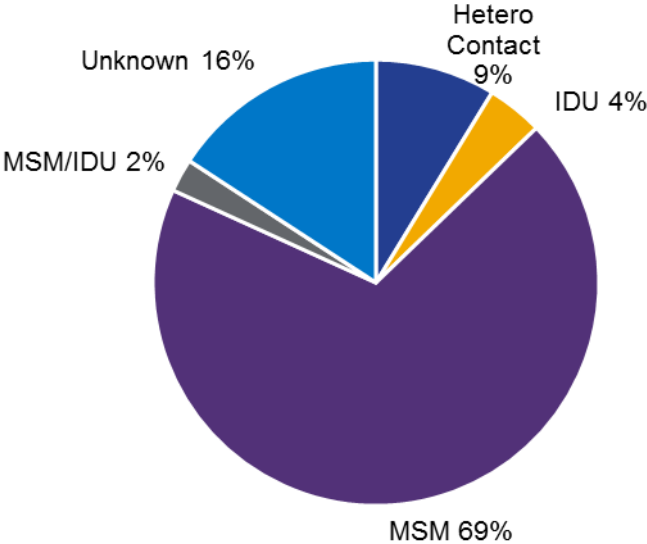


Figure B35 – Newly Diagnosed HIV Cases by Transmission Risk and Race/Ethnicity, ROS, 2014

- The race/ethnicity composition varied across risk groups in 2014.
- Among the 241 heterosexual and female presumed heterosexual risk cases, Blacks made up the largest group (45% and 48%, respectively).
- In contrast to NYC, a larger proportion of the 457 newly diagnosed MSM cases in ROS were White (39% vs. 20%). Similar proportions of newly diagnosed MSM in ROS were Black (26%) and Hispanic (28%).

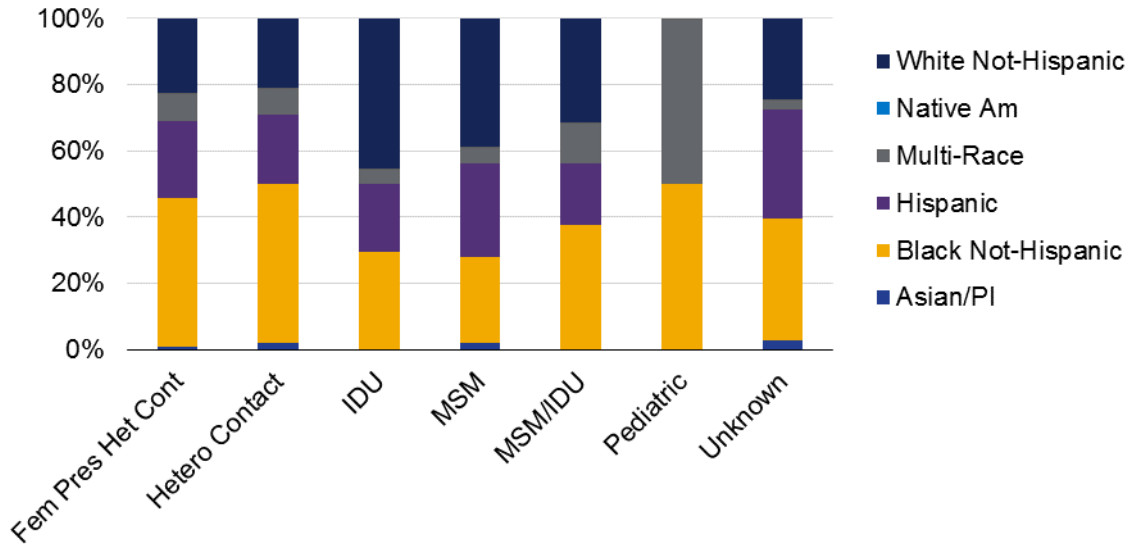


Figure B36 – Newly Diagnosed HIV Cases by Sex at Birth and Race/Ethnicity, Nassau/Suffolk, 2014

- In contrast to NYS outside of Nassau/Suffolk (including NYC) where Blacks predominate among new female diagnoses, in Nassau/Suffolk equal proportions of newly diagnosed females were Black and Hispanic (36% each) in 2014.
- The pattern also differs from the remainder of the state where Blacks account for the largest proportion of new male diagnoses. In Nassau/Suffolk, Hispanics made up the largest proportion of the 138 new male diagnoses (46%), followed by Whites (28%).

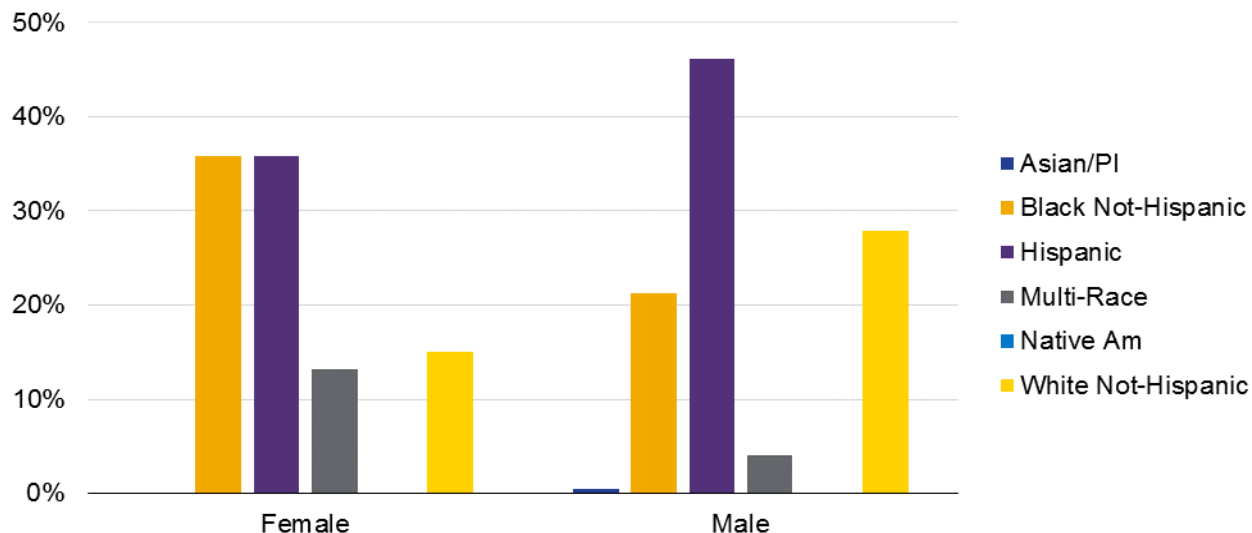


Figure B37 – Newly Diagnosed HIV Cases by Sex at Birth and Age at Diagnosis, Nassau/Suffolk, 2014

- In contrast to other regions of the state, the largest concentration of newly diagnosed females was in the 50-59 year age range (28%) in 2014.
- 38% of males and 26% of females were under age 30 at time of diagnosis.

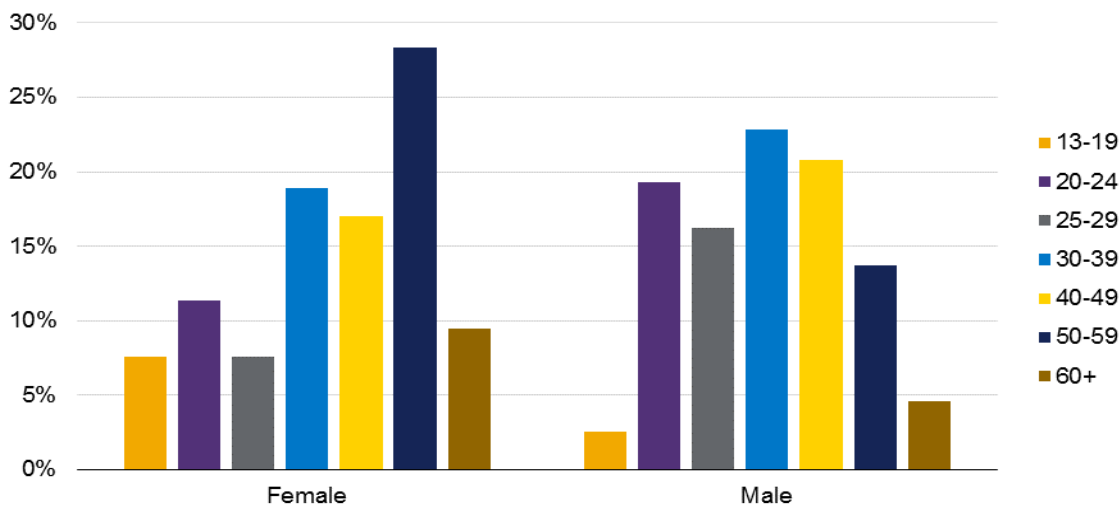


Figure B38a – Newly Diagnosed HIV Cases by Transmission Risk, Females, Nassau/Suffolk, 2014

- Nearly all (98%) newly diagnosed females had heterosexual and presumed heterosexual contact transmission in 2014.

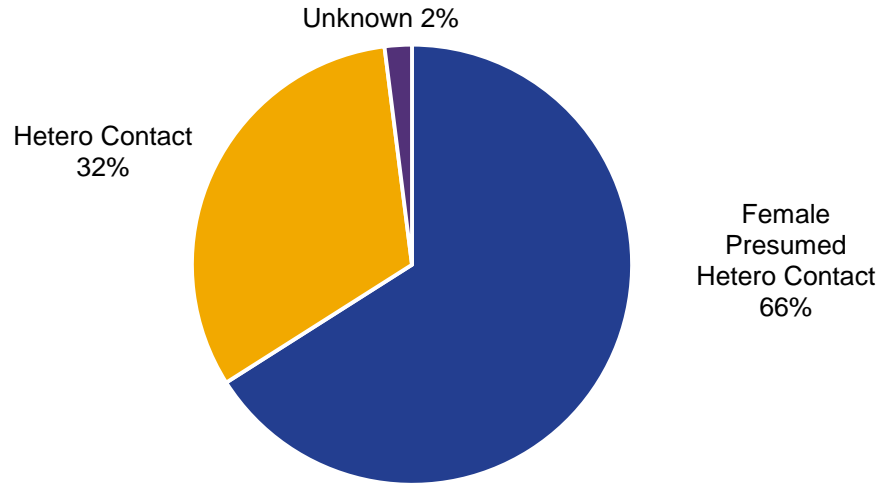


Figure B38b – Newly Diagnosed HIV Cases by Transmission Risk, Males, Nassau/Suffolk, 2014

- The majority of male cases (71%) had MSM or MSM/IDU transmission risk in 2014.
- No transmission risk could be identified for almost one quarter of newly diagnosed males in Nassau/Suffolk.

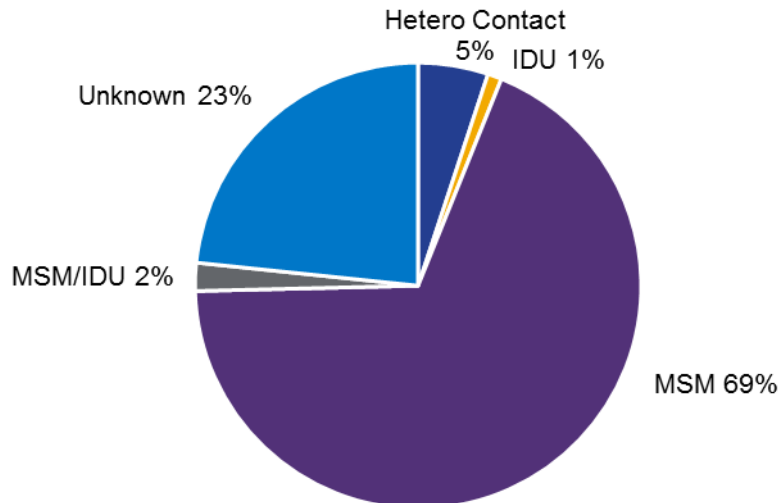


Figure B39 – Newly Diagnosed HIV Cases by Transmission Risk and Race/Ethnicity, Nassau/Suffolk, 2014

- Race/ethnicity composition varied across risk groups in 2014.
- Hispanics accounted for the largest proportion (45%) of MSM cases, followed by Whites (33%).
- The number of IDU and MSM/IDU risk cases were too small for meaningful display. There were no cases with pediatric risk in 2014.

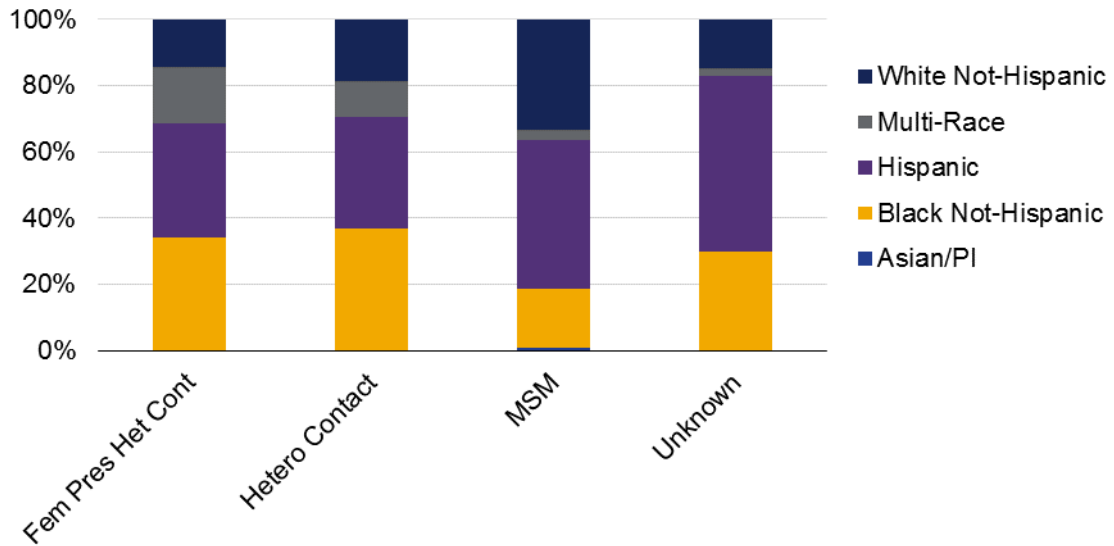


Figure B40 – Newly Diagnosed HIV Cases by Sex at Birth, New York State, 2010-2014

- In NYS, the number of newly diagnosed females declined by 27% during this five-year period in NYS, and the number of newly diagnosed males declined by 15%.
- In 2010 there were 3.1 male diagnoses for every female diagnosis. By 2014 the ratio had risen to 3.7.

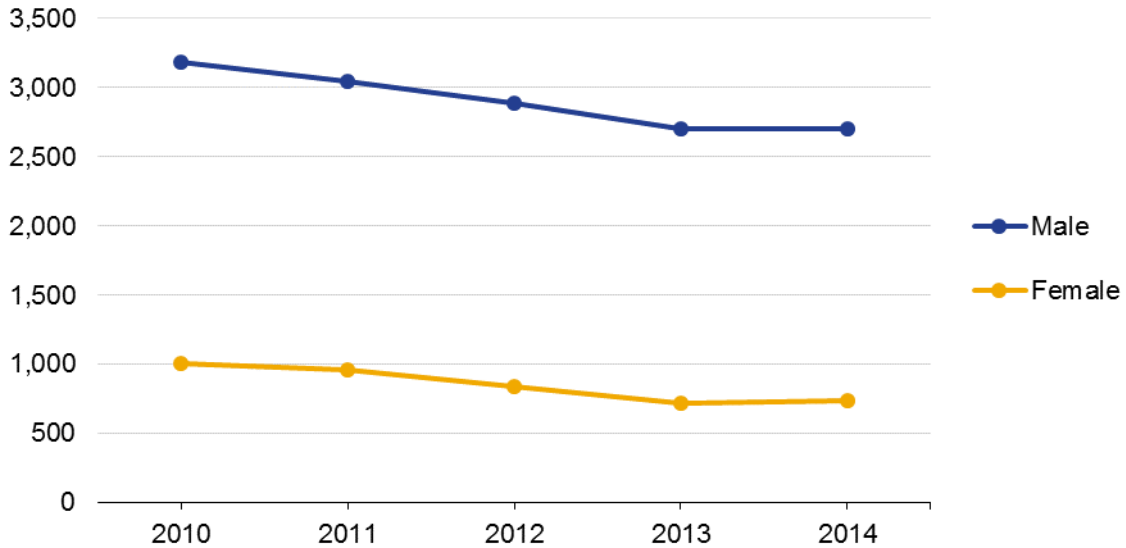


Figure B41 – Newly Diagnosed HIV Cases by Race/Ethnicity, New York State, 2010-2014

- The number of diagnoses among Blacks, Hispanics, and Whites fell by 25%, 14%, and 17%, respectively, over this period.
- In contrast, the number of Asian/Pacific Islander cases, though small, increased by 31%.

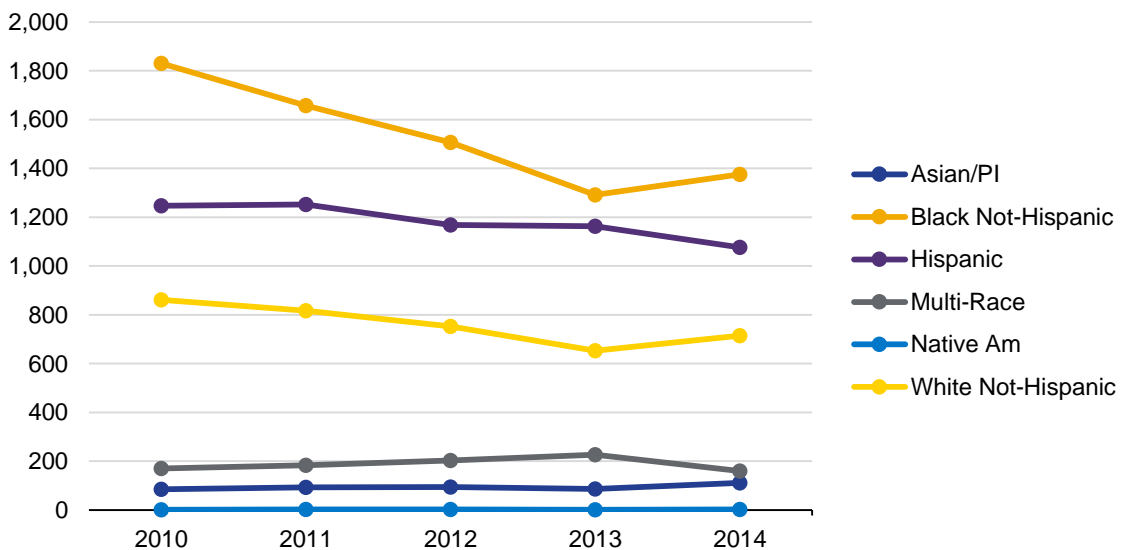


Figure B42 – Newly Diagnosed HIV Cases by Age at Diagnosis, New York State, 2010-2014

- While total diagnoses dropped 18% between 2010 and 2014, trends across age groups varied. For example, there were 7% and 8% declines in the 25-29 and 30-39 age ranges, respectively, while new diagnoses decreased by a third in the 40-49 age group.

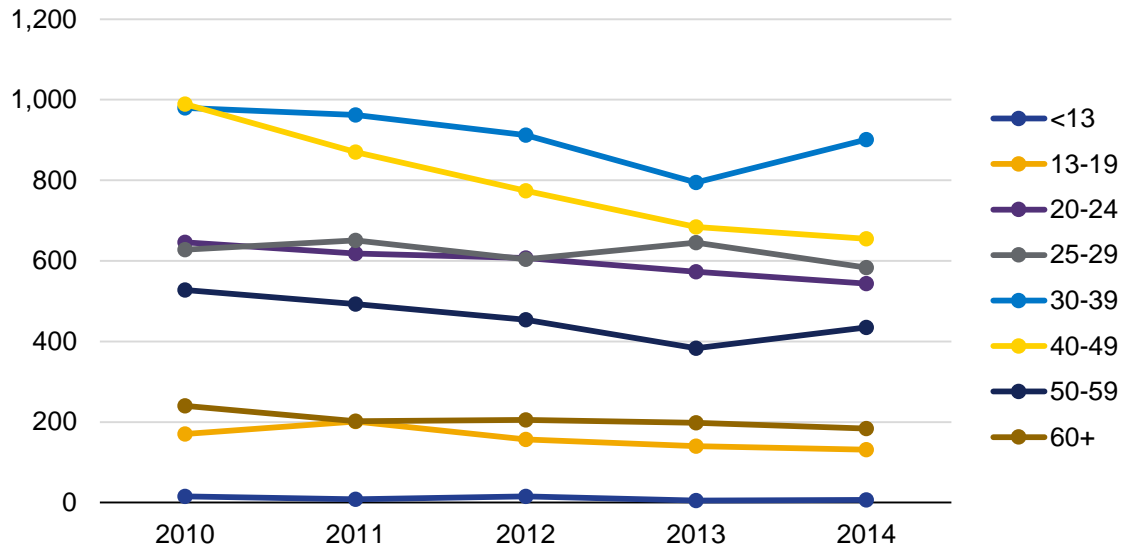


Figure B43 – Newly Diagnosed HIV Cases by Transmission Risk, New York State, 2010-2014

- While total diagnoses declined by 18% in NYS from 2010-2014, the number of MSM diagnoses was stable during that period.
- Steep declines were seen in new diagnoses with pediatric risk (68%) and IDU risk (48%).

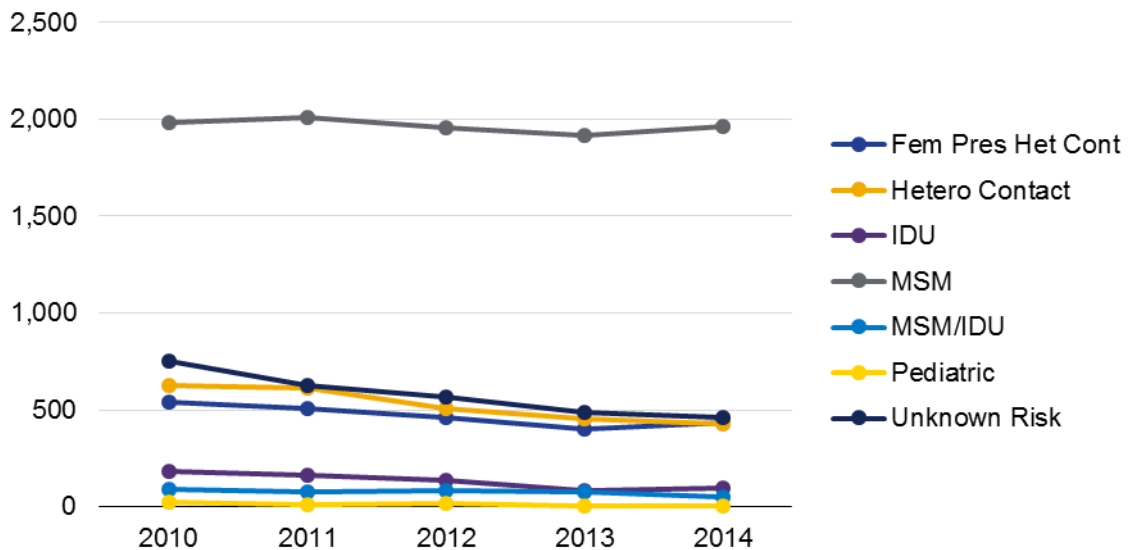


Figure B44 – Newly Diagnosed HIV Cases by Sex at Birth, New York City, 2010-2014

- The number of new diagnoses among females declined by 30% from 2010-2014 in NYC, while the number declined by 18% among males.
- In 2010 there were 3.2 male diagnoses for every female diagnosis. By 2014 the ratio had risen to 3.8.

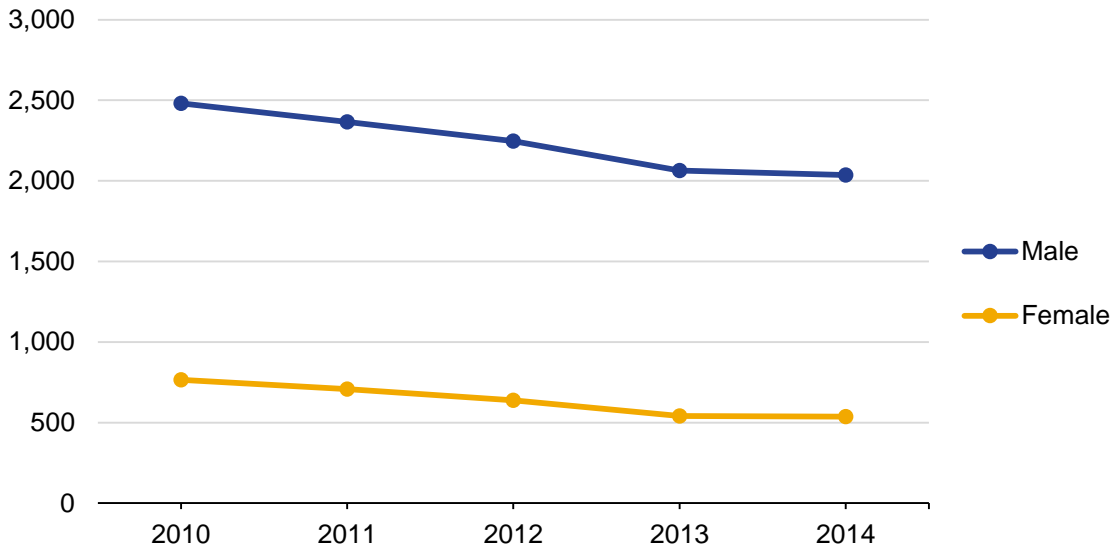


Figure B45 – Newly Diagnosed HIV Cases by Race/Ethnicity, New York City, 2010-2014

- The number of new diagnoses among Blacks, Hispanics, and Whites declined by 28%, 28%, and 20%, respectively, over this period in NYC.
- In contrast, the number of new diagnoses among Asian/Pacific Islanders, though small, rose by 34%.

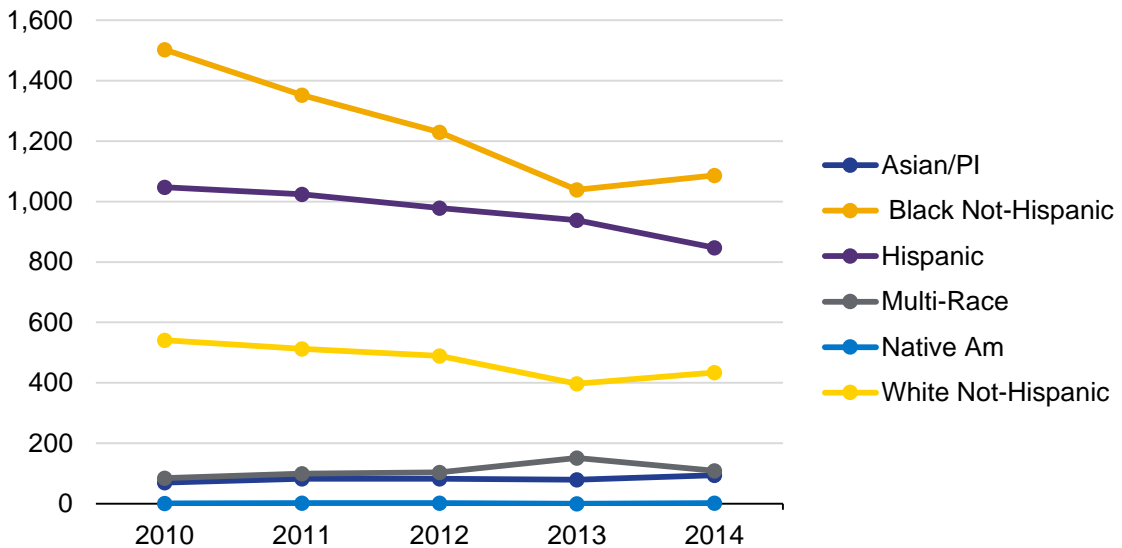


Figure B46 – Newly Diagnosed HIV Cases by Age Group at Diagnosis, New York City, 2010-2014

- While total diagnoses declined by 21% in NYC from 2010-2014, trends across age groups varied.
- For example, the number of new diagnoses among 25-29 and 30-49 year olds declined by only 13% and 11%, respectively, while they fell by a third among 40-49 year olds.

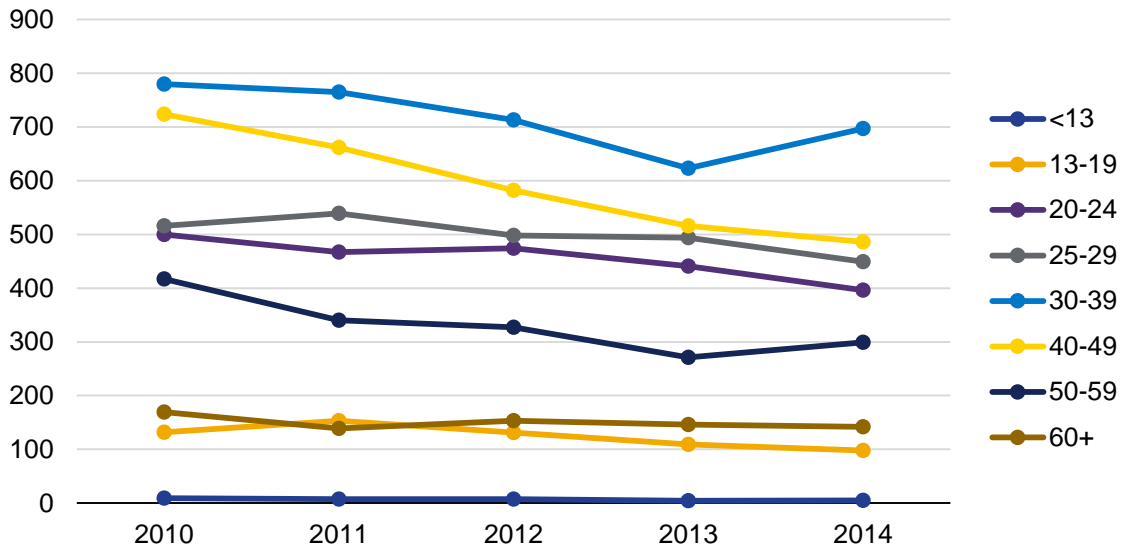


Figure B47 – Newly Diagnosed HIV Cases by Transmission Risk, New York City, 2010-2014

- While total diagnoses fell by 21% in NYC from 2010-2014, the decline in number of MSM diagnoses was smaller (6%).
- Steep declines were seen in new diagnoses with pediatric risk (62%) and IDU risk (59%).

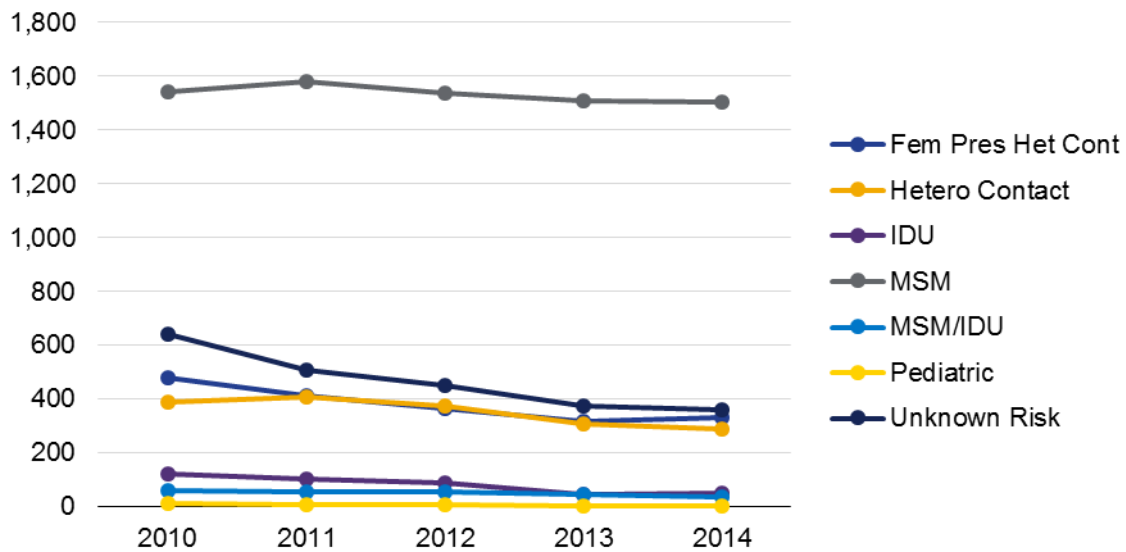


Figure B48 – Newly Diagnosed HIV Cases by Sex at Birth, Rest of State, 2010-2014

- In 2010 there were 2.9 male diagnoses for every female diagnosis in ROS. By 2014 the ratio had risen slightly to 3.3.
- The number of newly diagnosed females declined by 18% in ROS during this five-year period; there was a 5% decline among males.

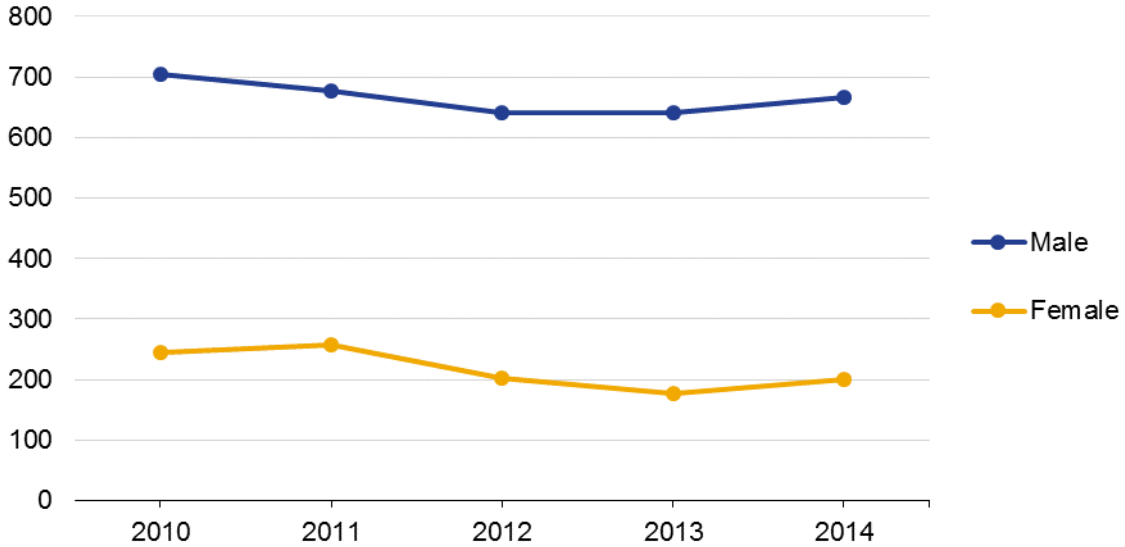


Figure B49 – Newly Diagnosed HIV Cases by Race/Ethnicity, Rest of State, 2010-2014

- The number of new diagnoses among Blacks and Whites each fell by 12% over this period.
- In contrast, the number of Hispanic and Asian/Pacific Islander cases increased by 15% and 13% respectively.

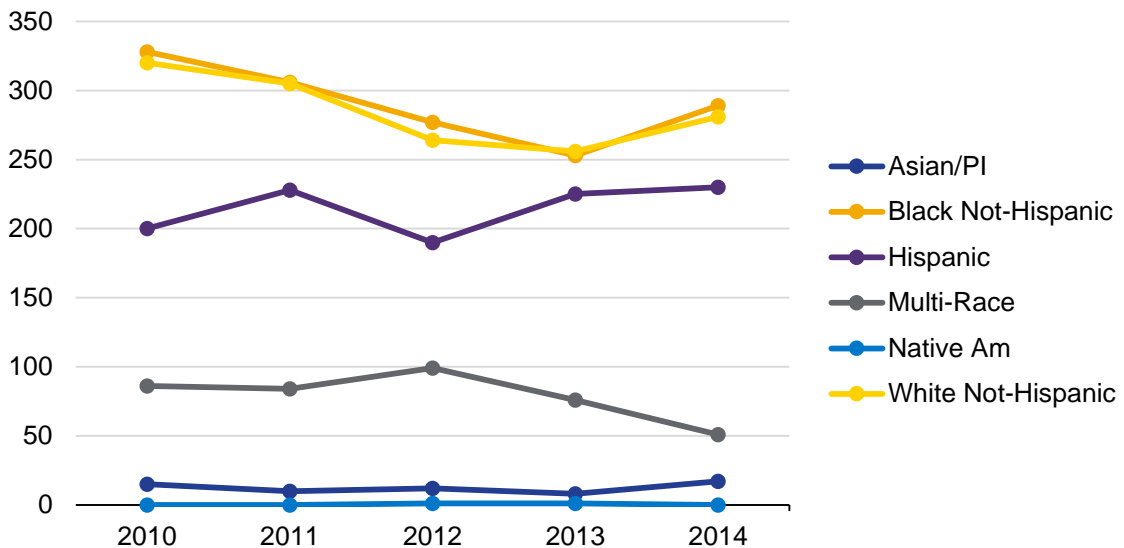


Figure B50 – Newly Diagnosed HIV Cases by Age Group at Diagnosis, Rest of State, 2010-2014

- While total diagnoses dropped 8.5% between 2010 and 2014, trends across age groups varied.
- For example, the 40-49 age range decreased by 36%. The 25-29 age range increased by 21%.

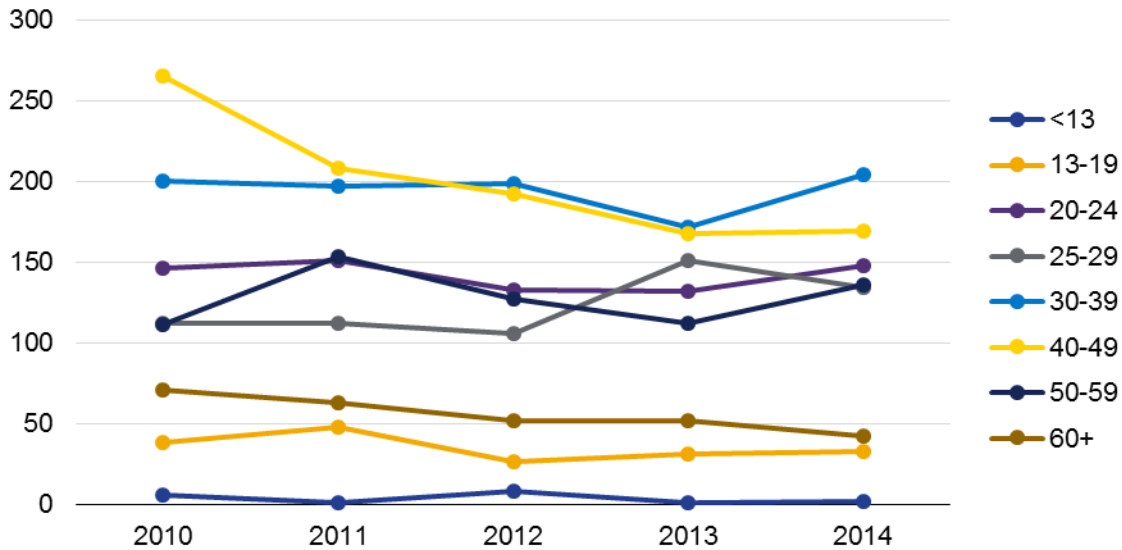


Figure B51 – Newly Diagnosed HIV Cases by Transmission Risk, Rest of State, 2010-2014

- While total diagnoses fell 8.5%, the number of MSM diagnoses increased by 4%.
- Sharp drops were seen in cases with pediatric risk (-77%) and IDU risk (-27%).

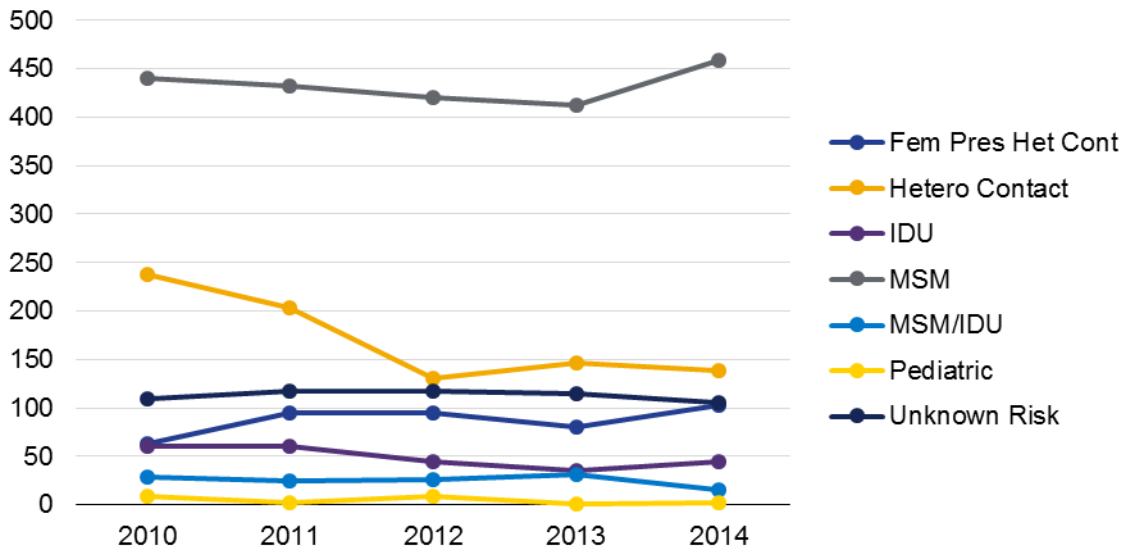


Figure B52 – Newly Diagnosed HIV Cases by Sex at Birth, Nassau/Suffolk, 2010-2014

- In Nassau/Suffolk, the number of newly diagnosed females increased by 6% during this five-year period; there was a 10% increase among males.
- In 2010 there were 3.6 male diagnoses for every female diagnosis. By 2014, this ratio had barely changed (3.7).

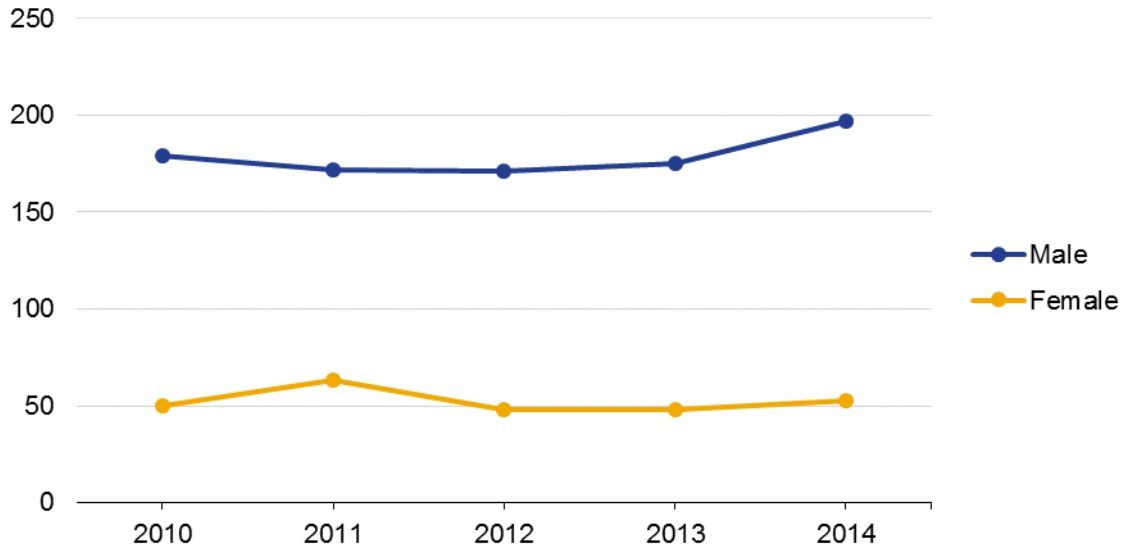


Figure B53 – Newly Diagnosed HIV Cases by Race/Ethnicity, Nassau/Suffolk, 2010-2014

- The number of new diagnoses among Blacks and Whites fell by 1.6% and 12%, respectively, over this period.
- In contrast, the number of diagnoses among Hispanics increased by 53%.

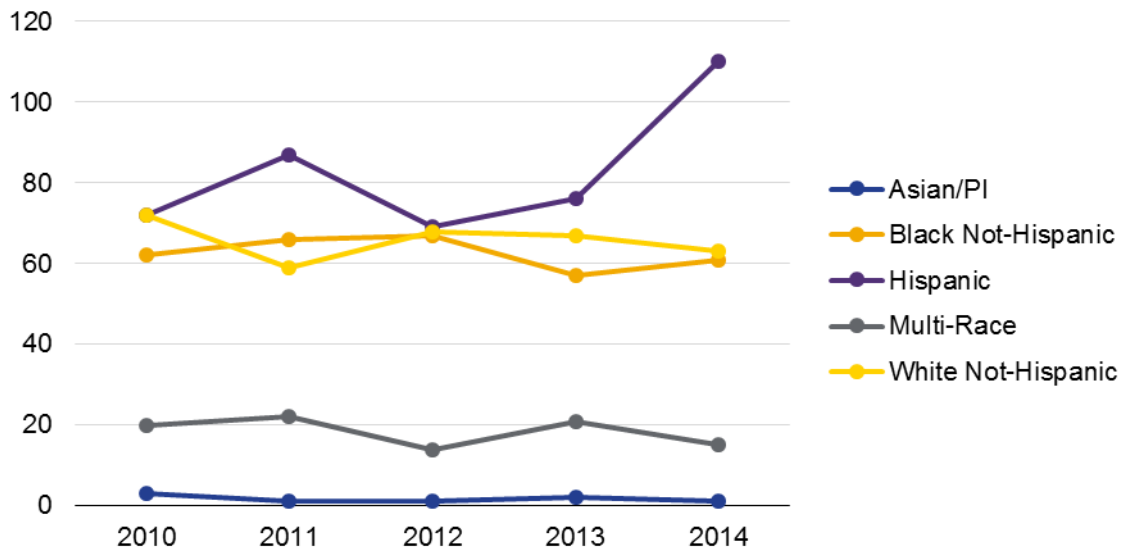


Figure B54 – Newly Diagnosed HIV Cases by Age Group at Diagnosis, Nassau/Suffolk, 2010-2014

- Overall, new HIV diagnoses increased by 9% between 2010 and 2014 for Nassau/Suffolk; most age groups also experienced increases during this period.
- The largest increase (62%) in new diagnoses was in the 50-59 age group.

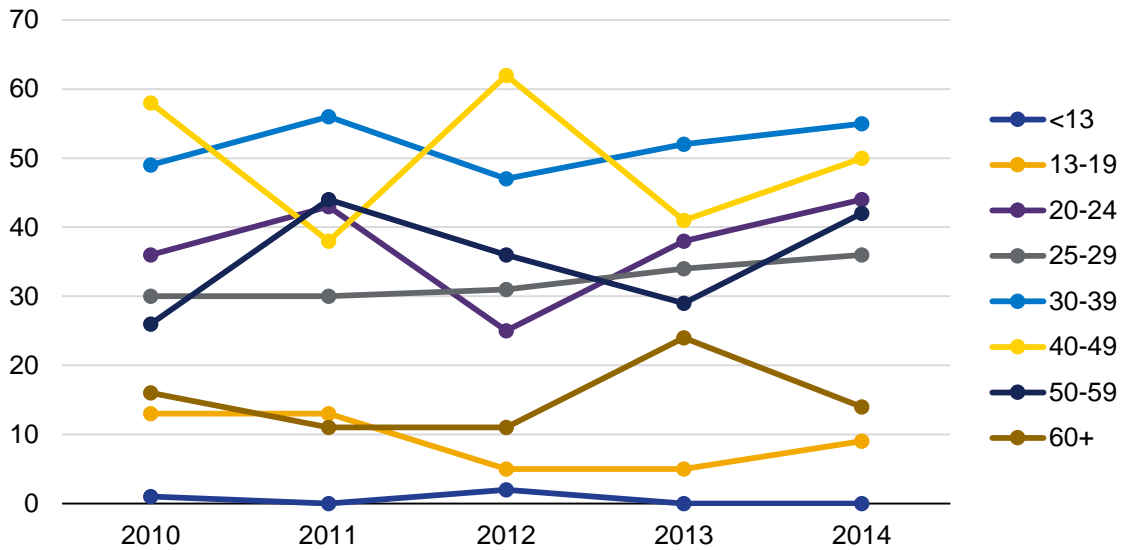


Figure B55 – Newly Diagnosed HIV Cases by Transmission Risk, Nassau/Suffolk, 2010-2014

- The overall number of new diagnoses increased by 9% in Nassau/Suffolk from 2010-2014; during this period, the number of MSM diagnoses also increased (13%).

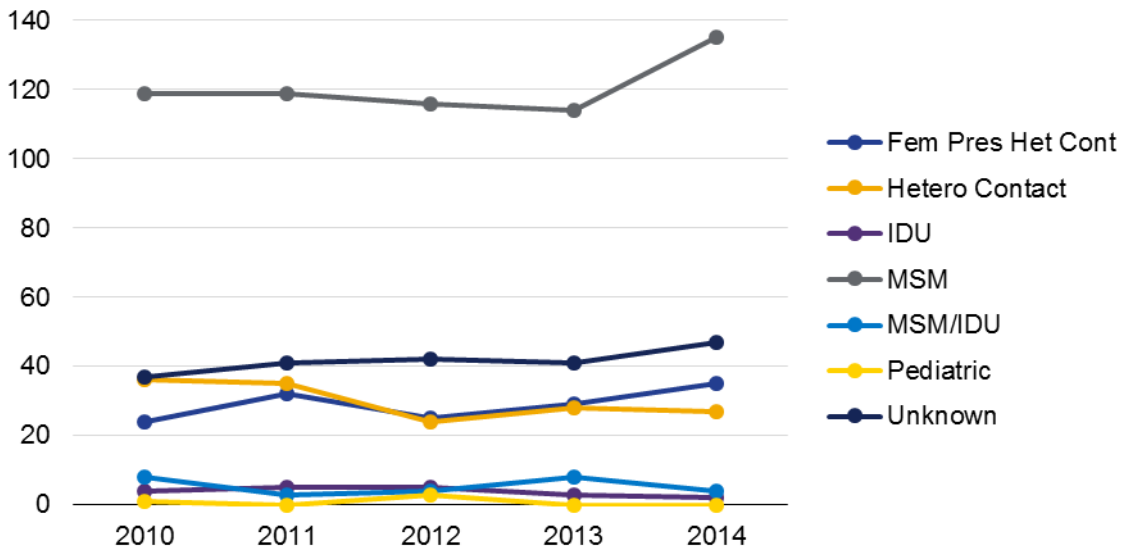


Figure B56 – Newly Diagnosed HIV Cases among Females by Race/Ethnicity, NYS, 2010-2014

- Among women in NYS, Black and Hispanic women continue to be the most heavily affected by HIV/AIDS.
- However, in recent years, the number of new diagnoses among Black and Hispanic women has been falling (by 29% and 28%, respectively, from 2010-2014). White females experienced a 16% decline in new diagnoses in the same period.

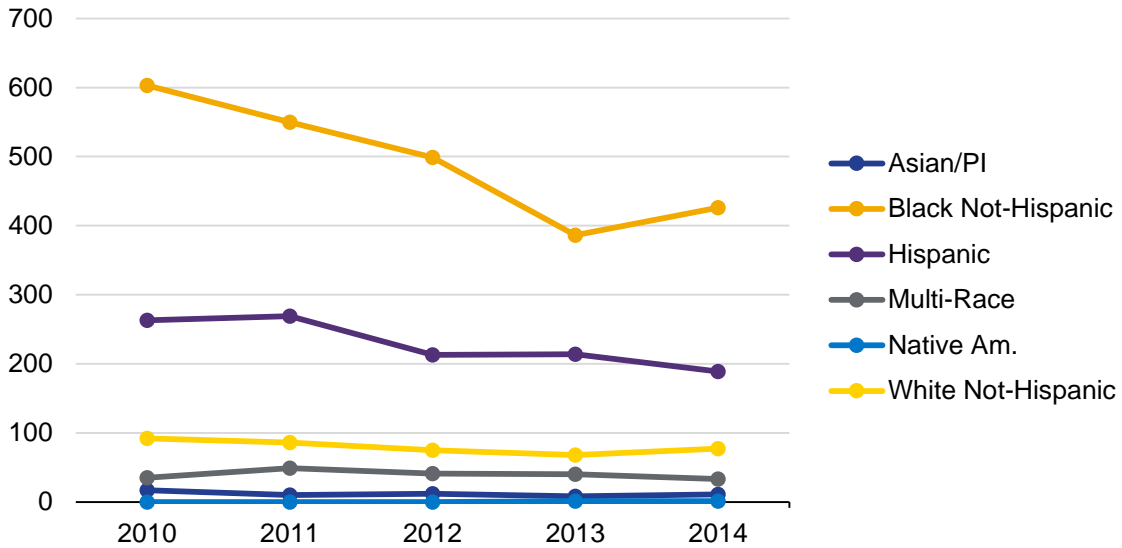


Figure B57 – Newly Diagnosed HIV Cases among Females by Race/Ethnicity, NYC, 2010-2014

- Similar to the state as a whole, Black and Hispanic women in NYC experienced the heaviest burden of HIV, though the numbers of new diagnoses have been decreasing.
- The relative decrease was similar among Black, Hispanic and White women: (~30% each).

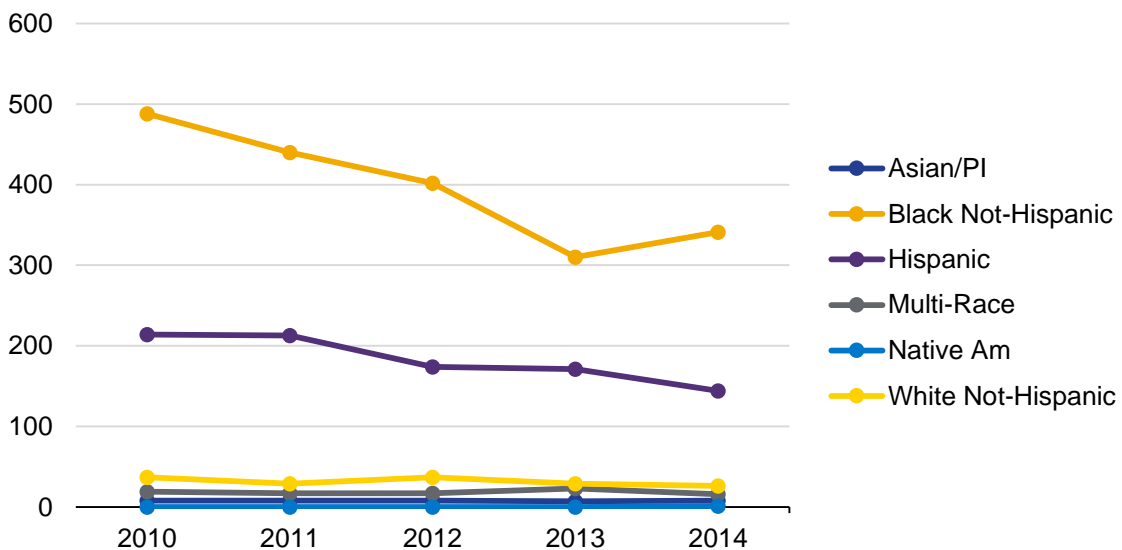


Figure B58 – Newly Diagnosed HIV Cases among Females by Race/Ethnicity, ROS, 2010-2014

- Overall, the number of new diagnoses among females declined by 18% in ROS from 2010-2014.
- The decline was largest for Black women (26%). Hispanic and White females experienced a similar decline in the last five years: 8% and 7%, respectively.

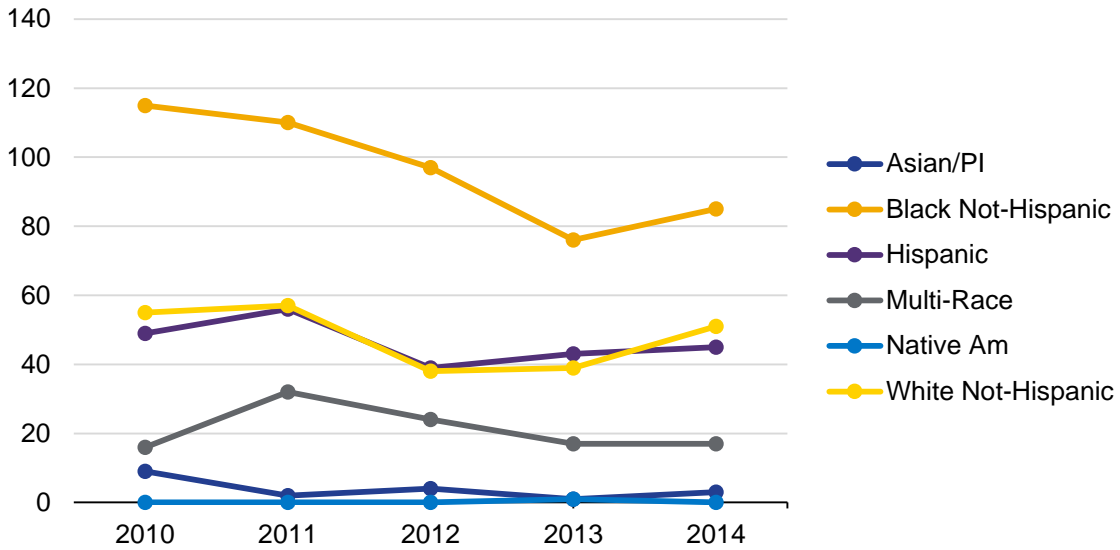


Figure B59 – Newly Diagnosed HIV Cases among Females by Race/Ethnicity, Nassau/Suffolk, 2010-2014

- Unlike the other regions, new HIV diagnoses among women increased slightly in Nassau/Suffolk: around 6%.
- Black females showed a 14% decline over the past five years; however, Hispanic and White rates remained steady.

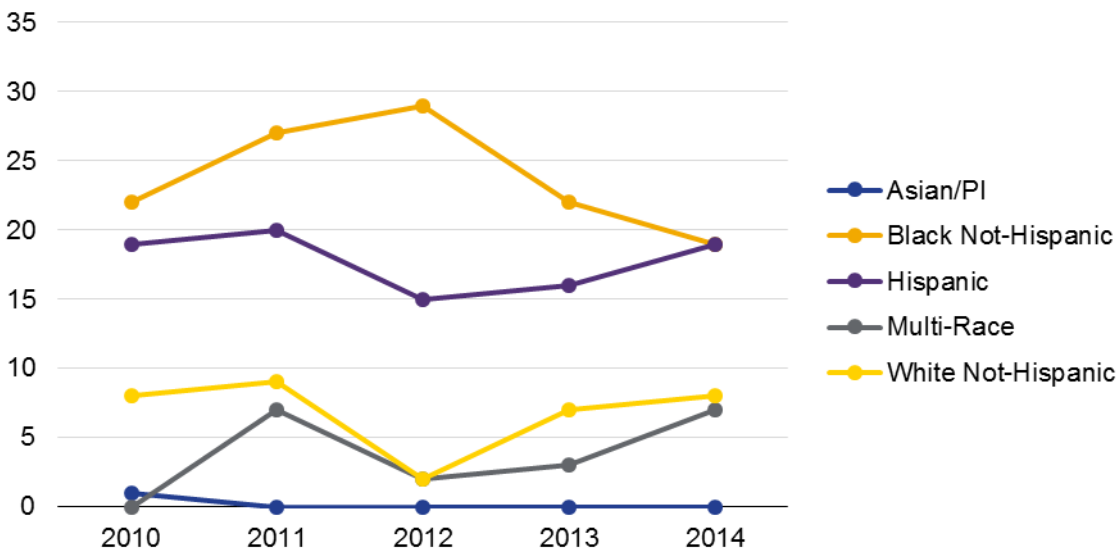


Figure B60 – Newly Diagnosed HIV Cases among MSM by Age Group at Diagnosis, NYS, 2010-2014

- In NYS overall, MSM-risk diagnoses declined only 3% over this five-year period.
- The largest number of diagnoses were in the 20-24, 25-29 and 30-39 year age groups.
- Increases were seen among those age 25-29 and 30-39, 6% and 5% respectively, while diagnoses among those age 20-24 dropped 11%.

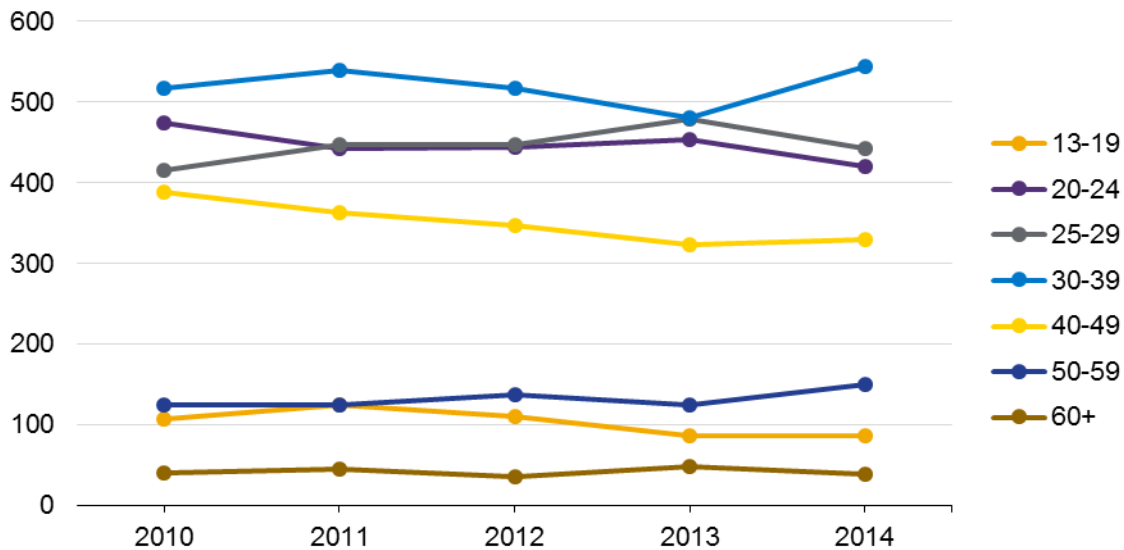


Figure B61– Newly Diagnosed HIV Cases among MSM by Race/Ethnicity, New York State, 2010-2014

- The largest number of MSM-risk diagnoses have been occurring among Hispanics, with somewhat smaller numbers among Blacks and Whites.
- Diagnoses among Hispanics increased 5% during this period. Diagnoses among Asian/Pacific Islanders increased by a large percentage (64%), though the overall number remained low.
- Black MSM and White MSM showed a decline in new cases: 8% and 13% respectively.

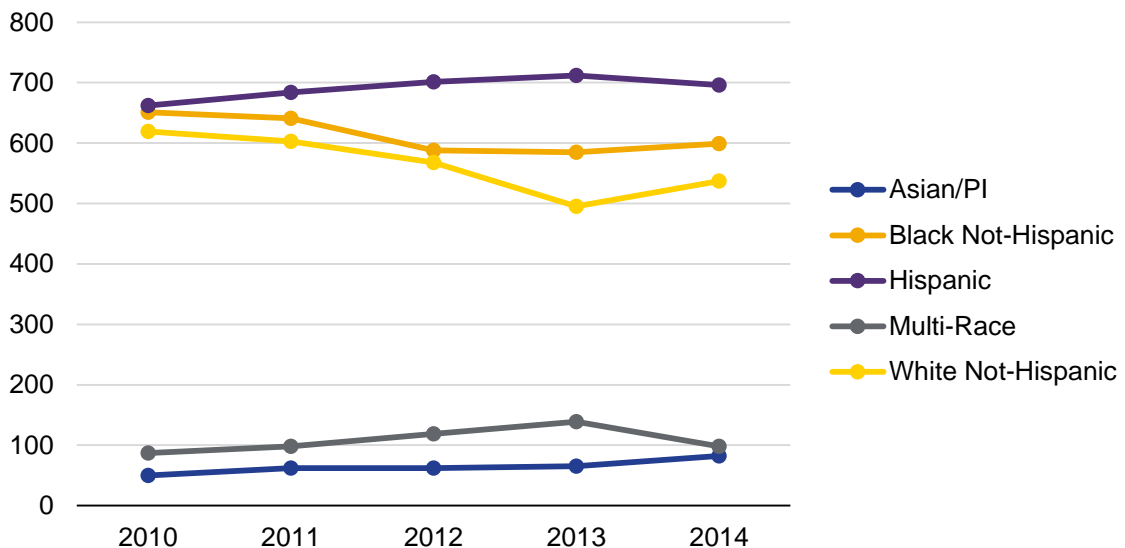


Figure B62 – Newly Diagnosed HIV Cases among MSM by Age Group at Diagnosis, NYC, 2010-2014

- Overall, new diagnoses among MSM declined by 4% in NYC over this five-year period.
- The largest number of diagnoses were in the 20-24, 25-29 and 30-39 year age groups.
- Diagnoses in both the 25-29 and 30-39 year age groups increased (by 3% and 4%, respectively), while diagnoses in the 20-24 year age group declined by 16%.

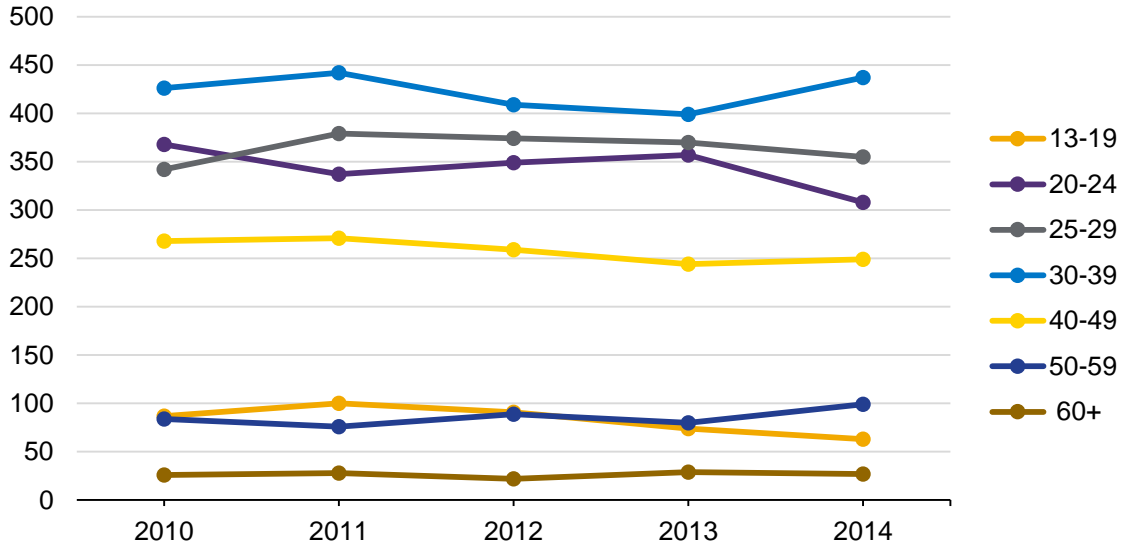


Figure B63 – Newly Diagnosed HIV Cases among MSM by Race/Ethnicity, New York City, 2010-2014

- The largest number of diagnoses among NYC MSM was among Hispanics, followed by Blacks and Whites.
- Diagnoses among Hispanics were steady during this period.
- Black MSM and White MSM showed a decline in new cases, 12% and 14% respectively.

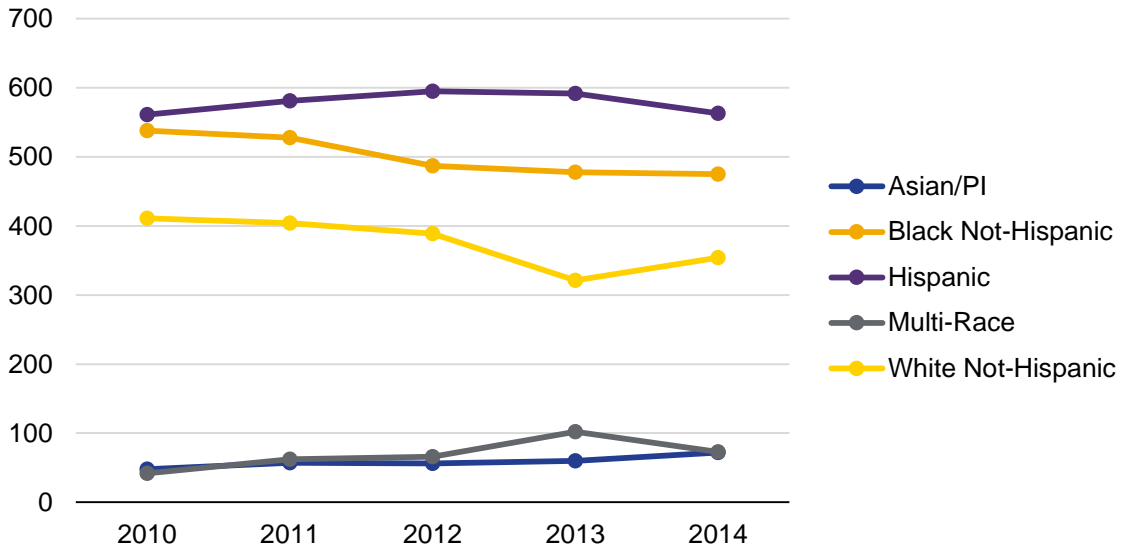


Figure B64 – Newly Diagnosed HIV Cases among MSM by Age Group at Diagnosis, Rest of State, 2010-2014

- New diagnoses among MSM were stable (1% increase) over this five-year period in ROS.
- Diagnoses were concentrated in one or two age groups, but were spread relatively evenly across ages 20-24, 25-29, 30-39 and 40-49.
- Increases were observed in all age ranges except 40-49, where diagnoses declined (-33%).

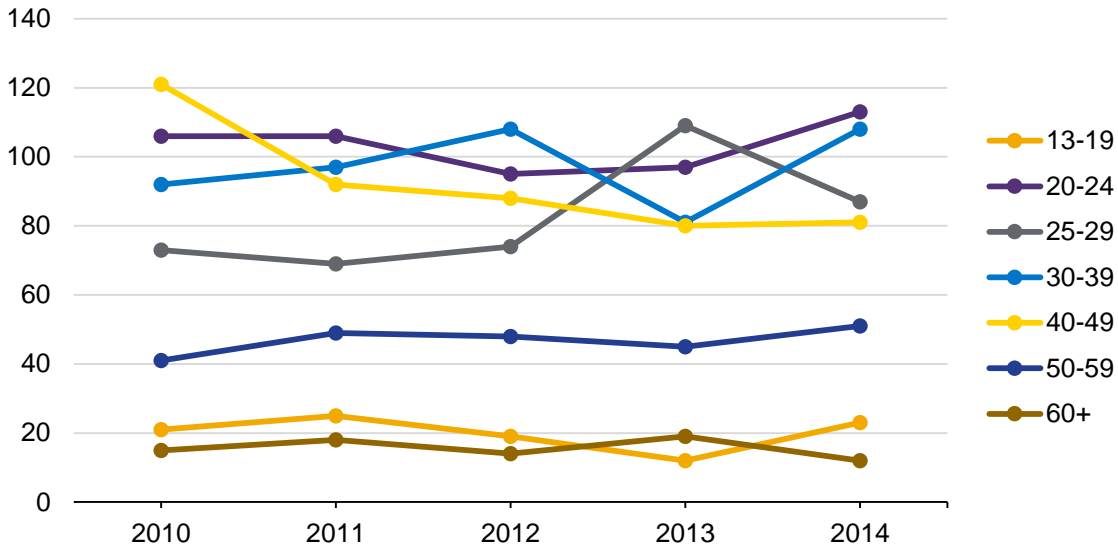


Figure B65 – Newly Diagnosed HIV/Cases among MSM by Race/Ethnicity, Rest of State, 2010-2014

- The largest number of new diagnoses with MSM risk have been occurring among Whites, with somewhat smaller numbers among Blacks and Hispanics.
- There was a steady rise in the number of new diagnoses among Blacks and Hispanics with MSM risk diagnoses, 10% and 30% respectively. Diagnoses among Hispanics increased 5% during this period. Diagnoses among Asian/Pacific Islanders increased by a large percentage (64%), though the overall number remains low.
- In contrast, diagnoses among Whites dropped 12% during this period.

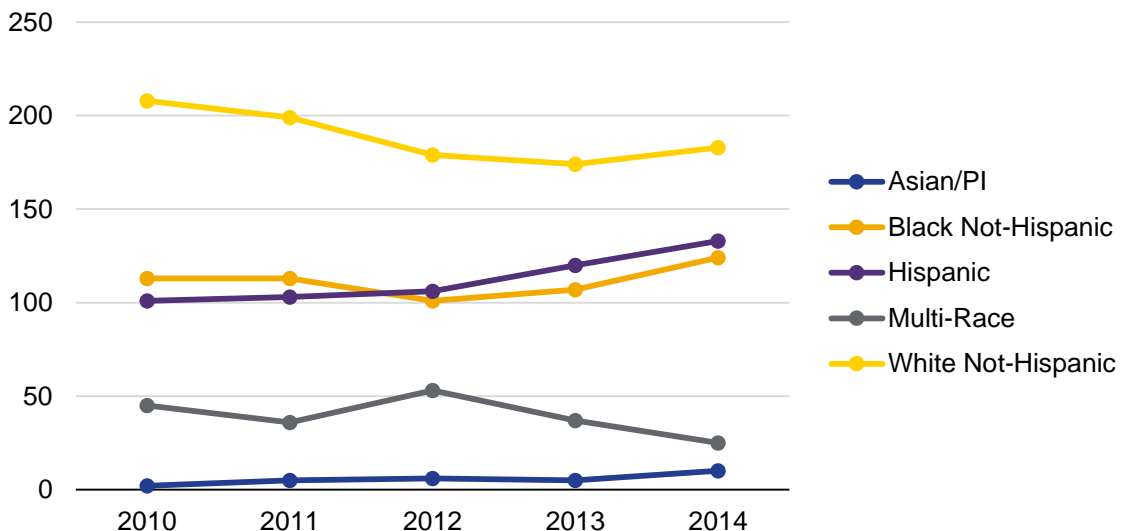


Figure B66 – Newly Diagnosed HIV Cases among MSM by Age Group at Diagnosis, Nassau/Suffolk, 2010-2014

- There was an overall 9% increase in MSM-risk diagnoses in Nassau/Suffolk over this period.
- Because of small numbers, no clear differences in trend can be seen among age groups.

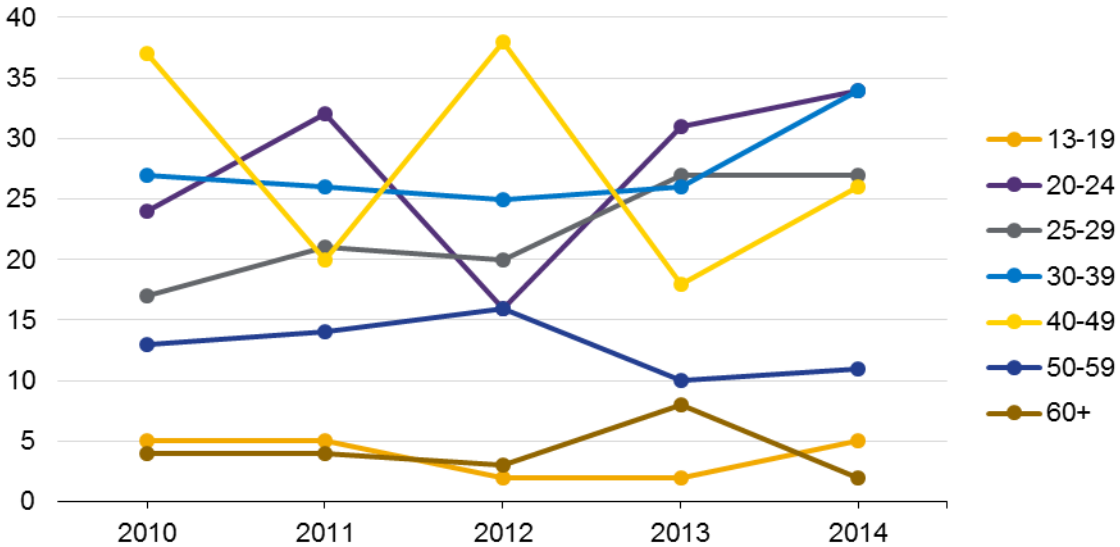


Figure B67 – Newly Diagnosed HIV Cases among MSM by Race/Ethnicity, Nassau/Suffolk, 2010-2014

- Most MSM newly diagnosed in Nassau/Suffolk were White and Hispanic.
- From 2010-2014, diagnoses among Hispanics showed the largest increase (66%), followed by Blacks (25%).
- Diagnoses among Whites dropped 15% over this period.

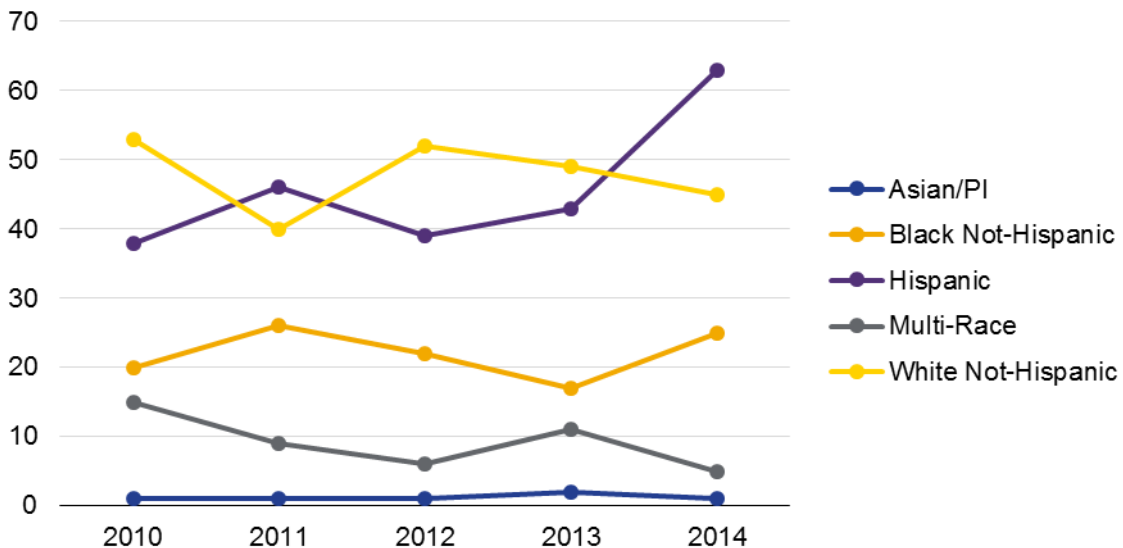


Figure B68 – Deaths among People with HIV by Age at Death, New York State, 2014

- In NYS, three-fourths of the 2,062 deaths among people with HIV in 2014 occurred among persons age 50 and over (37% age 50-59 and 38% age 60+).
- No deaths were recorded in people with HIV under age 20.

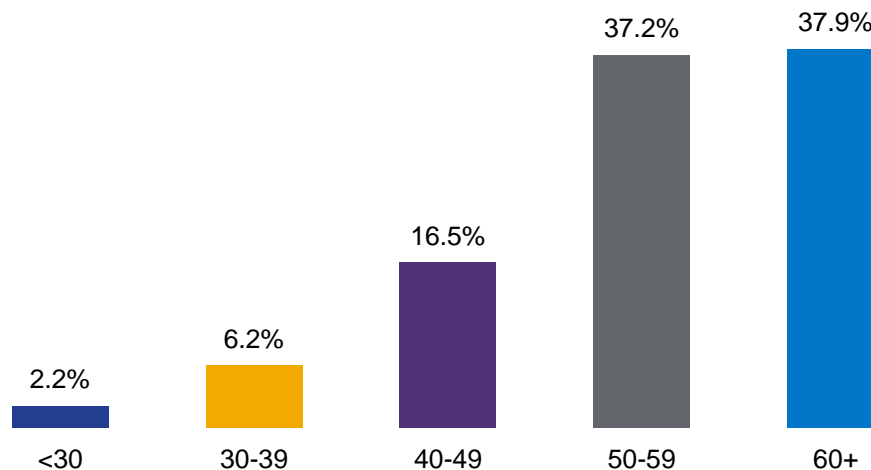


Figure B69 – Deaths among People with HIV by Transmission Risk Group, New York State, 2014

- The largest proportion of deaths occurred among people with IDU risk (31%), followed by MSM risk (22%). However, deaths among people with heterosexual (17%) and female presumed heterosexual risk (9%) combined exceeded the proportion of deaths among MSM.
- IDU made up only 14% of people with HIV in 2014, but 31% of deaths. The large number of deaths among persons in this group was attributable in part to their older age and longer time since infection and diagnosis compared to people in other transmission risk groups.

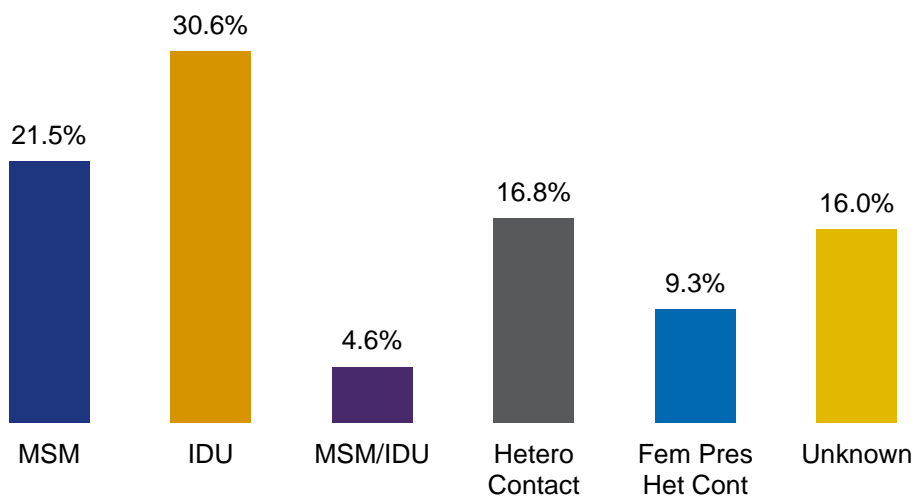


Figure B70 – Deaths among People with HIV by Age at Death, New York City, 2014

- Three-fourths of the 1,652 deaths among NYC people with diagnosed HIV in 2014 occurred among persons age 50 and over (37% age 50-59 and 38% age 60+).

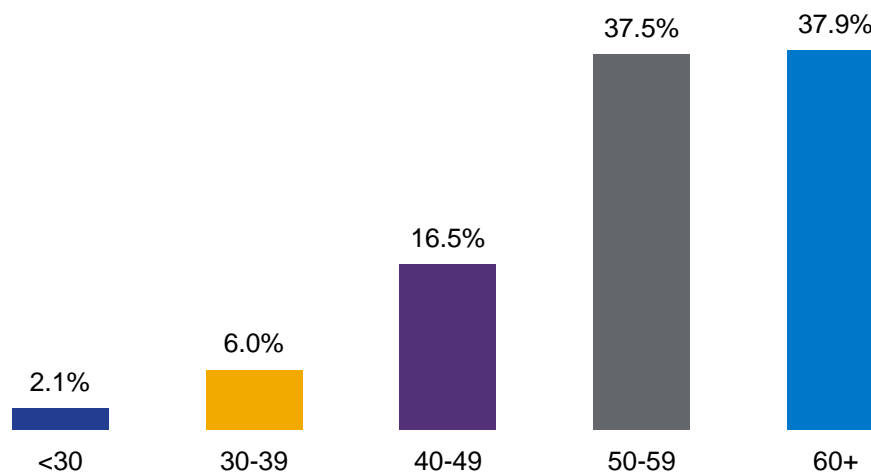


Figure B71 – Deaths among People with HIV by Transmission Risk Group, New York City, 2014

- As with NYS as a whole, the largest proportion of deaths occurred among people with IDU risk (31%), followed by MSM risk (21%). However, deaths among people with heterosexual (16%) and female presumed heterosexual risk (10%) combined exceeded the proportion of deaths among people with MSM risk.
- IDU risk cases made up only 13% of PLWDHI in 2014 in NYC, but 31% of deaths. The high number of deaths among persons in this group was attributable at least in part to older age and longer time since infection and diagnosis.

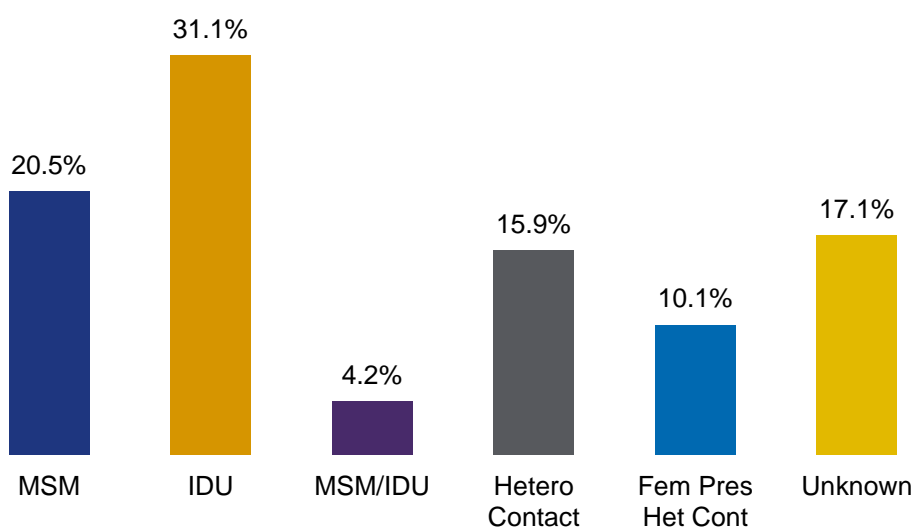


Figure B72 – Deaths among People with HIV by Age at Death, Rest of State, 2014

- The age distribution of ROS people with HIV/AIDS who died was similar to that of NYC. Three-fourths of the 410 deaths among PLWDHI in NYS occurred among persons age 50 and over (36% age 50-59 and 38% age 60+).

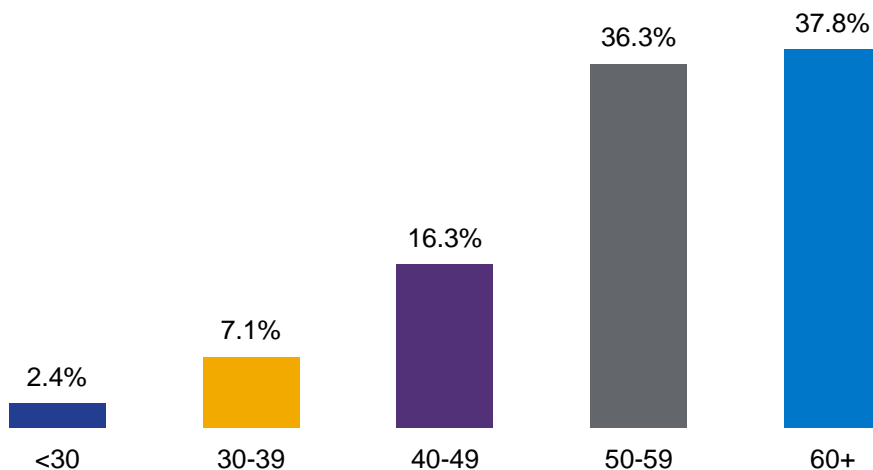


Figure B73 – Deaths among People with HIV by Transmission Risk Group, Rest of State 2010-2014

- The largest proportion of deaths occurred among cases with IDU risk (29%), followed by MSM risk (26%). However, deaths among heterosexual (21%) and female presumed heterosexual cases (6%) combined slightly exceeded the MSM proportion.
- IDU cases, which accounted for 29% of deaths, made up 17% of PLWDHI in 2014.

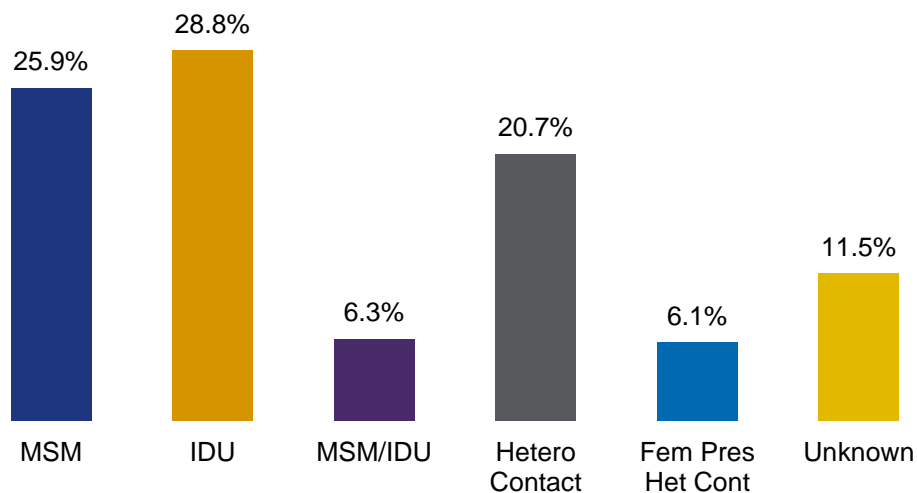


Figure B74 – Deaths among People with HIV by Age Group at Death, Nassau/Suffolk 2010-2014

- Three-fourths of the 91 deaths among people with HIV in Nassau/Suffolk occurred among persons age 50 and over. However within the 50+ group, there were relatively fewer age 50-59 (31%) and more age 60+ (44%).
- Differences between Nassau/Suffolk and the rest of the state should be interpreted with caution because of the small number of deaths overall.

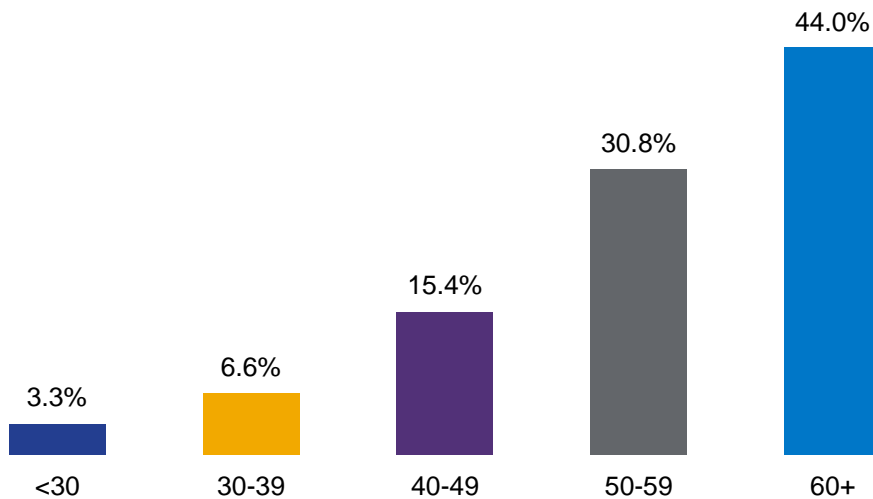


Figure B75 – Deaths among People with HIV by Transmission Risk Group, Nassau/Suffolk, 2014

- In contrast with the rest of the state, the largest proportion of deaths in Nassau/Suffolk occurred among cases with MSM risk (29%). However, deaths with heterosexual (19%) and female presumed heterosexual cases (11%) combined exceeded the MSM proportion.
- IDU cases made up 17% of deaths in 2014, a far smaller proportion than in the rest of the state. IDU risk cases made up only 12% of PLWDHI.

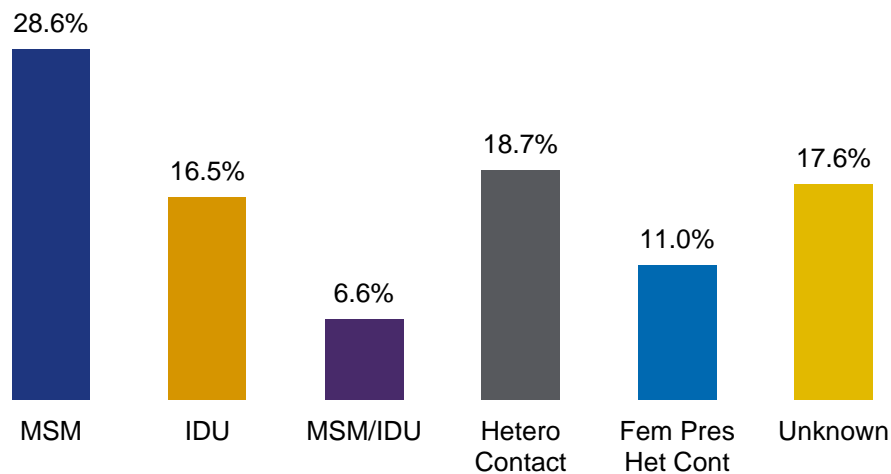


Figure B76 – Newly Diagnosed HIV Cases by New York City Borough, 2014

- 30% of NYC’s 2,568 newly diagnosed persons resided in Brooklyn (Kings Co.) in 2014; 27% were in Manhattan (New York Co.), 21% in Bronx and 20% in Queens. Staten Island (Richmond Co.), the smallest borough, accounted for 2%.

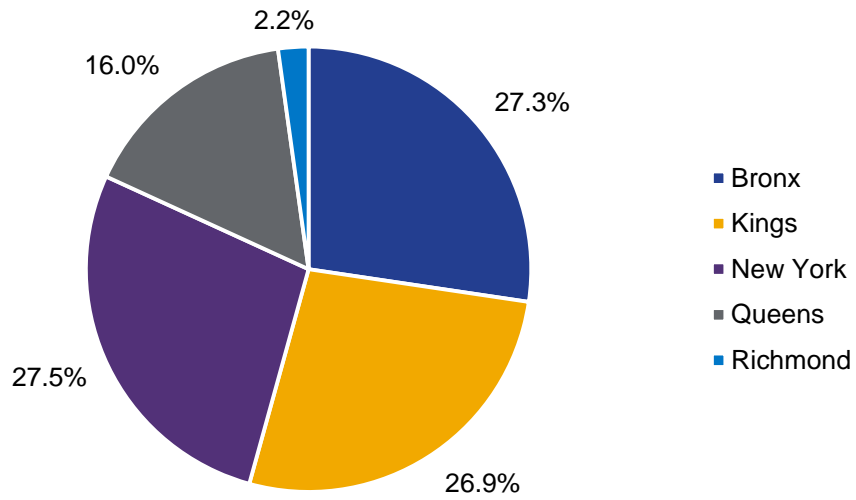
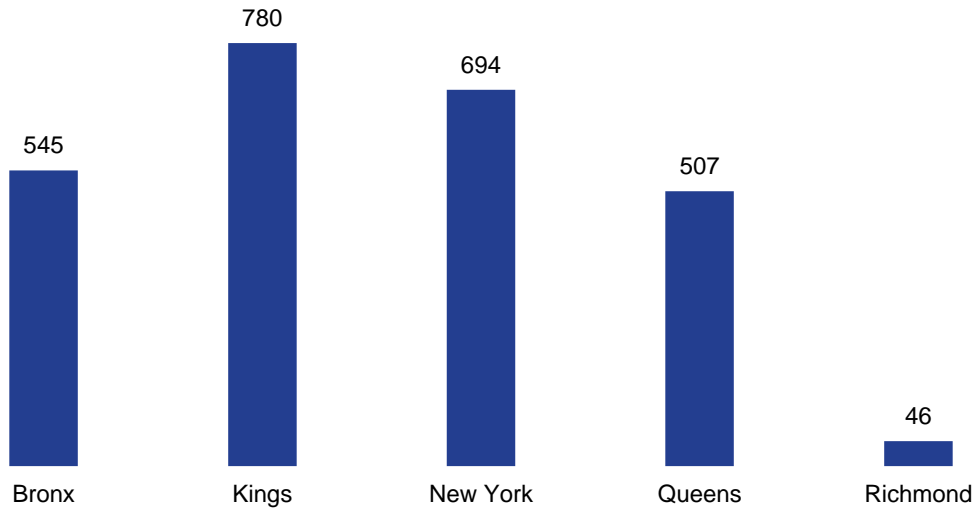


Figure B77 – PLWDHI by New York City Borough, 2014

- In 2014, Bronx, Brooklyn (Kings Co.), and Manhattan (New York Co.) each were home to about 27% of the 89,290 PLWDHI in New York City.

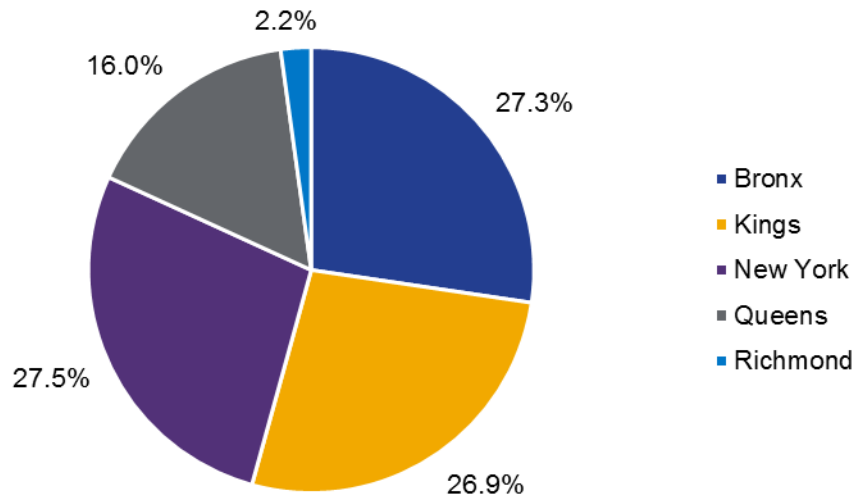
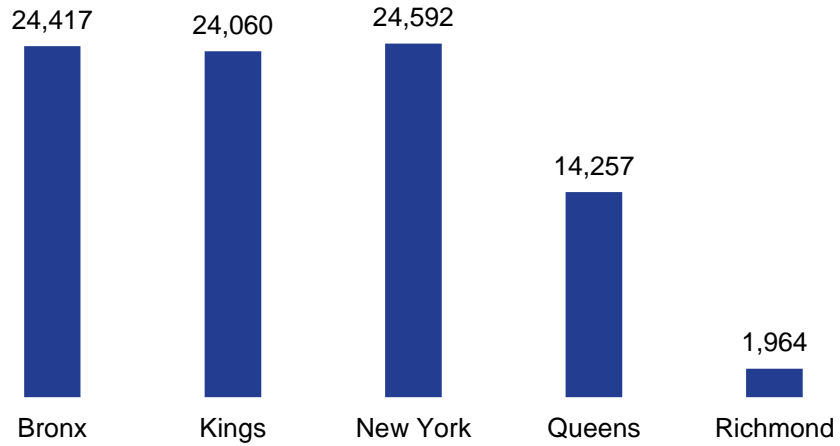


Figure B78 – Prevalence Rates of PLWDHI by Race/Ethnicity and Region, 2014

- In New York State as a whole, the prevalence of diagnosed HIV was 562 PLWDHI per 100,000 persons; in other words, about 1 person in 200 is living with diagnosed HIV infection.
- The prevalence was highest among Blacks (1,564/100,000), but was also high among Hispanics (1,088/100,000). Prevalence among Blacks was eight times higher than among Whites (195/100,000); prevalence among Hispanics was about six times higher than among Whites.
- The overall prevalence of diagnosed HIV in NYC (1,052/100,000) was five times higher than in the rest of the state (ROS).

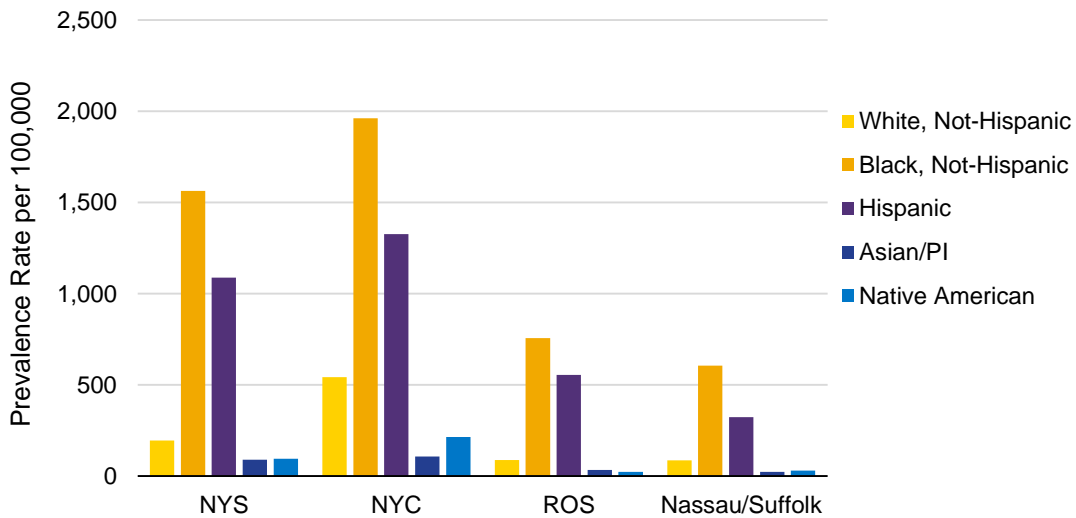


Figure B79 – HIV Diagnosis Rates by Race/Ethnicity and Region, 2014

- In New York State as a whole, the rate of new HIV diagnoses was 17/100,000 persons – 3,434 diagnoses among the 19.7 million people living in the state in 2014.
- The rate was highest among Blacks (44.0/100,000), but was also high among Hispanics (27.3/100,000). The diagnosis rate among Blacks was nearly seven times higher than the rate among Whites of 6.5/100,000; the rate among Hispanics was about four times higher than among Whites.
- The diagnosis rate in NYC (28/100,000) was 3.5 times higher than in ROS.
- Blacks, followed by Hispanics, had the highest diagnosis rate among race/ethnic groups in all regions of NYS, except Nassau/Suffolk where the rates were equivalent to one another.

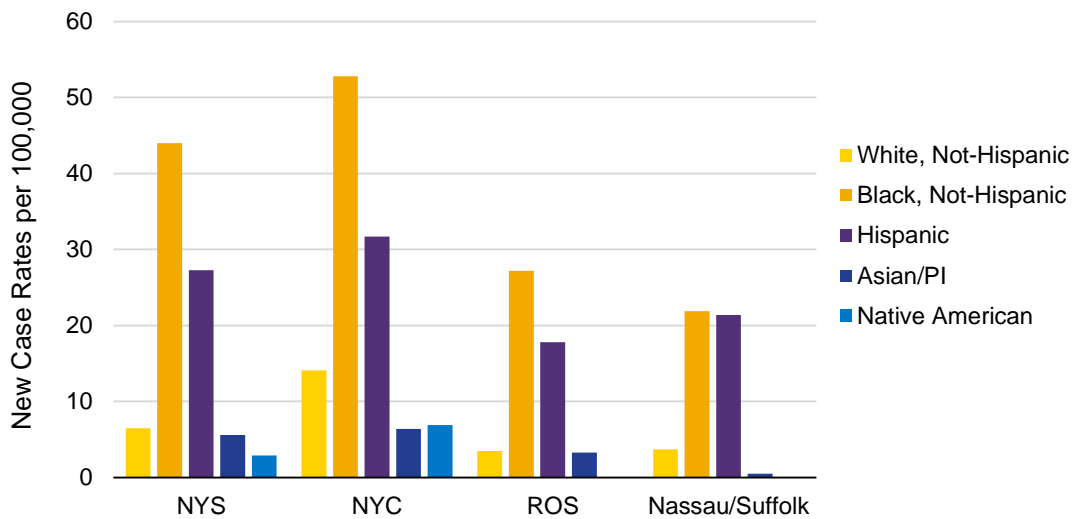
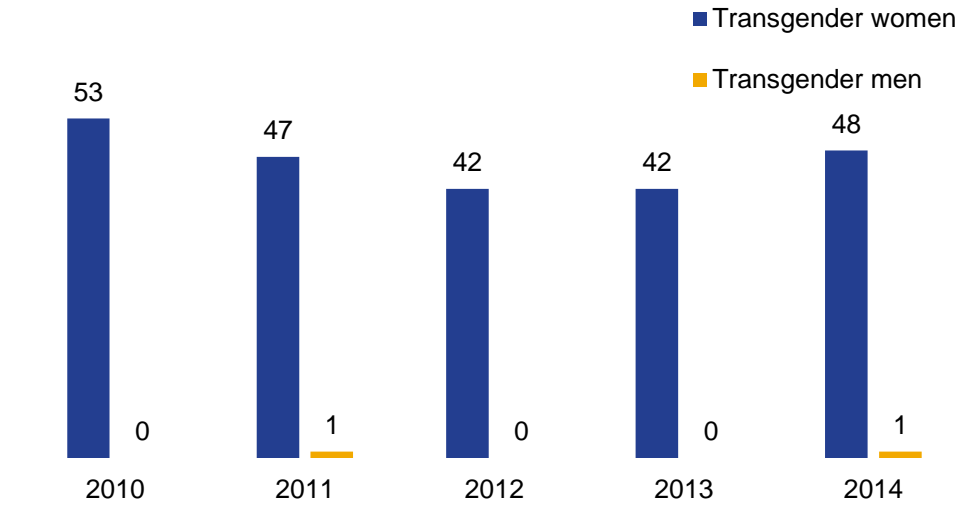


Figure B80 – New HIV diagnoses among transgender people by gender identity and year of diagnosis in NYC, 2010-2014

- Between 2010 and 2014, 234 transgender people were newly diagnosed with HIV in NYC. This included 42-53 transgender women and 0-1 transgender men each year.



As reported to the New York City Department of Health and Mental Hygiene by June 30, 2015.

Table B81 – Characteristics of transgender PLWDHI in NYC, 2014

- In 2014, 1,017 transgender people living in NYC had been diagnosed with HIV; 1,007 were transgender women, while ten were transgender men. 48% were Black, while 41% were Latino/Hispanic. Nearly three-quarters (74.3%) were diagnosed at 30 years of age or older.

	PLWDHI as of 12/31/2014	
	N	%
Total ¹	1,017	100.0
Transgender women	1,007	99.0
Transgender men	10	1.0
Race/Ethnicity		
Black	483	47.5
Latino/Hispanic	421	41.4
White	77	7.6
Other/Unknown ²	36	3.5
Age Group (years) ³		
13-19	7	0.7
20-24	83	8.2
25-29	172	16.9
30-39	327	32.2
40+	428	42.1
Risk Category ⁴		
Sexual contact	867	85.3
Injection drug use history	126	12.4
Other/Unknown	24	2.4

As reported to the New York City Department of Health and Mental Hygiene by June 30, 2015.

¹Includes people identified as transgender by self-report, diagnosing provider, or medical chart review. Transgender women were assigned male sex at birth and currently identify as female. Transgender men were assigned female sex at birth and currently identify as male.

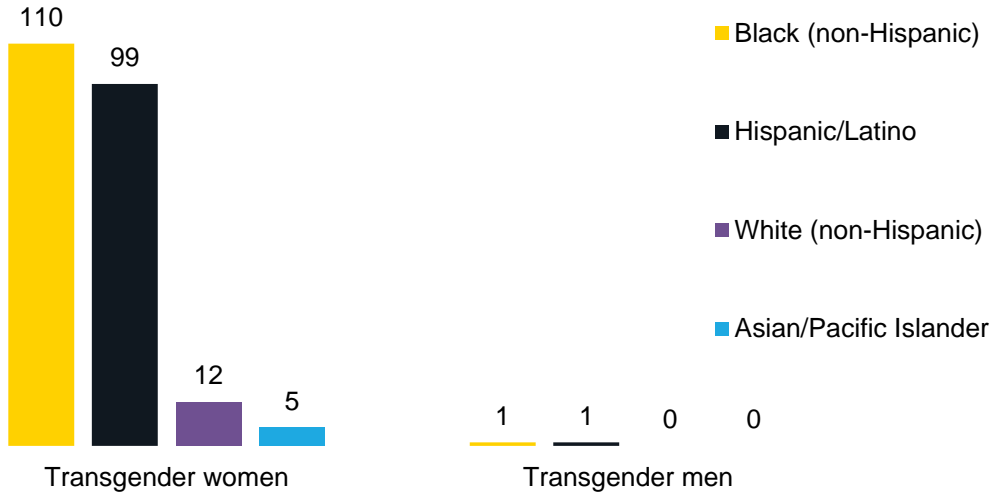
²Includes Asian/Pacific Islander, Native American, and multiracial people.

³Reflects age at diagnosis.

⁴To avoid inappropriately labeling some transgender people as “men who have sex with men” or “heterosexual,” “risk category” here may differ from “transmission risk” presented in other slides in this report or elsewhere in NYC DOHMH’s publications. Among transgender people with HIV, those with a history of injecting drugs were assigned a risk of “injection drug use history.” Non-injectors reporting a male or female sex partner were assigned “sexual contact.”

Figure B82 – New HIV diagnoses among transgender people by gender identity and race/ethnicity NYC, 2010-2014

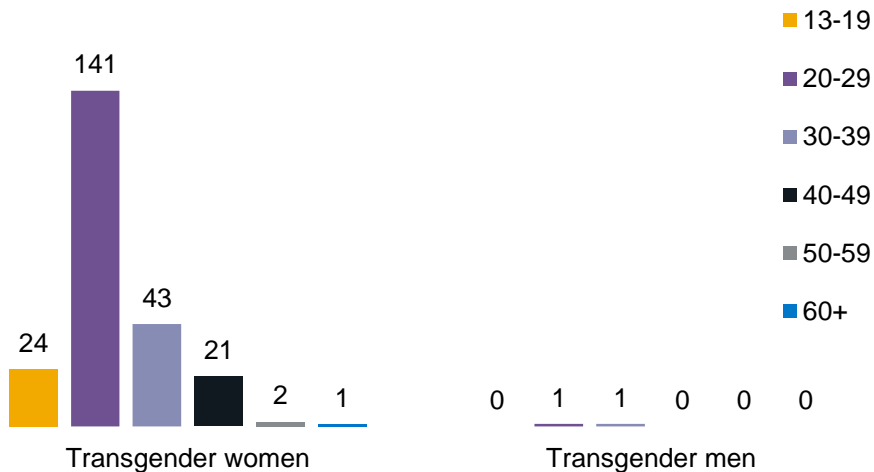
- About 93% of transgender women newly diagnosed with HIV between 2010 and 2014 in NYC were Black or Latino/Hispanic. Newly diagnosed transgender men were Latino/Hispanic and Black. Native American and multiracial groups are not shown because of small numbers (fewer than 5 people each).



As reported to the New York City Department of Health and Mental Hygiene by June 30, 2015.

Figure B83 – New HIV diagnoses among transgender people by gender identity and age at diagnosis, NYC, 2010-2014

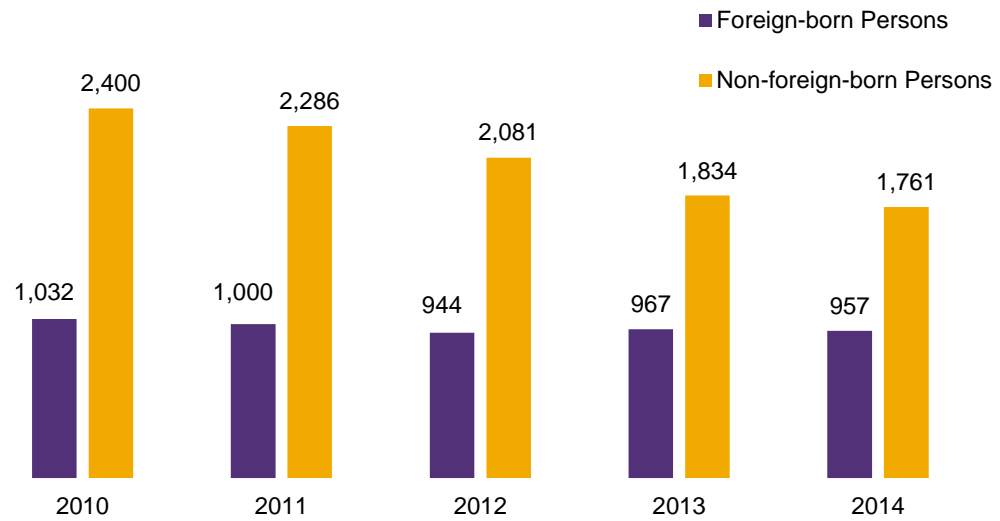
- Newly diagnosed transgender women in NYC were predominantly in their 20s. Newly diagnosed transgender men were in their 20s and 30s.



As reported to the New York City Department of Health and Mental Hygiene by June 30, 2015.

Figure B84 – Number of new HIV diagnoses by area of birth, NYC 2010-2014

- The decline in new HIV diagnoses between 2010 and 2014 was steeper among non-foreign-born people (27%) than among foreign-born people (7%) in NYC.



As reported to the New York City Department of Health and Mental Hygiene by June 30, 2015.

Figure B85 – Estimated Number of New HIV Infections, New York State, 2006-2014

- The estimated number of new HIV infections in NYS is derived using a method developed by the CDC. The estimated numbers of incident HIV infections in NYS, with 95% confidence intervals, are shown below. Between 2006 and 2014, the estimated number of new HIV infections decreased by 41%, from 4,211 to 2,481.

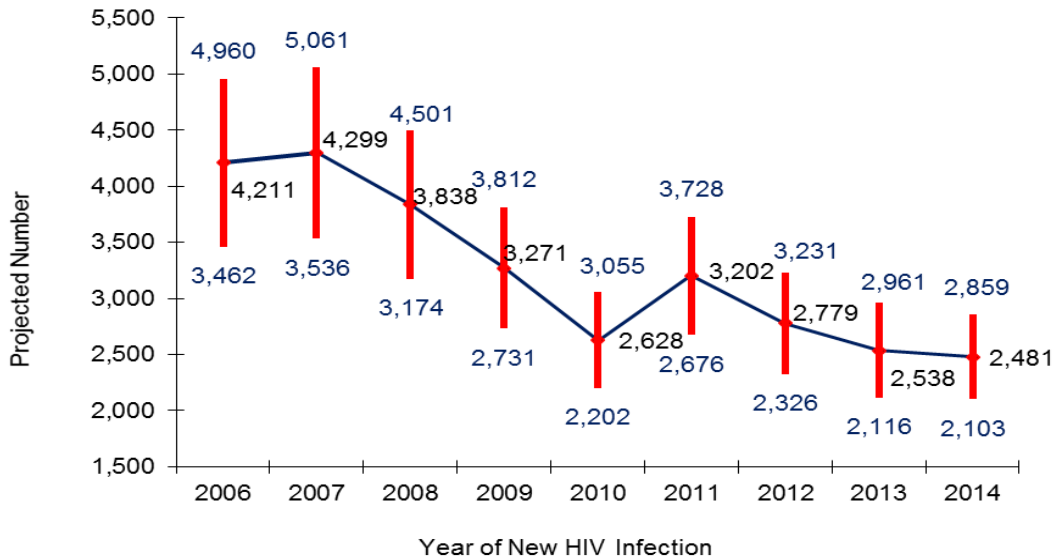


Figure B86 – Estimated Rates for New HIV Infections, New York State, 2006-2014

- The estimated rate of HIV incidence (i.e. the number of new infections per 100,000 population) decreased 43% between 2006 and 2014.

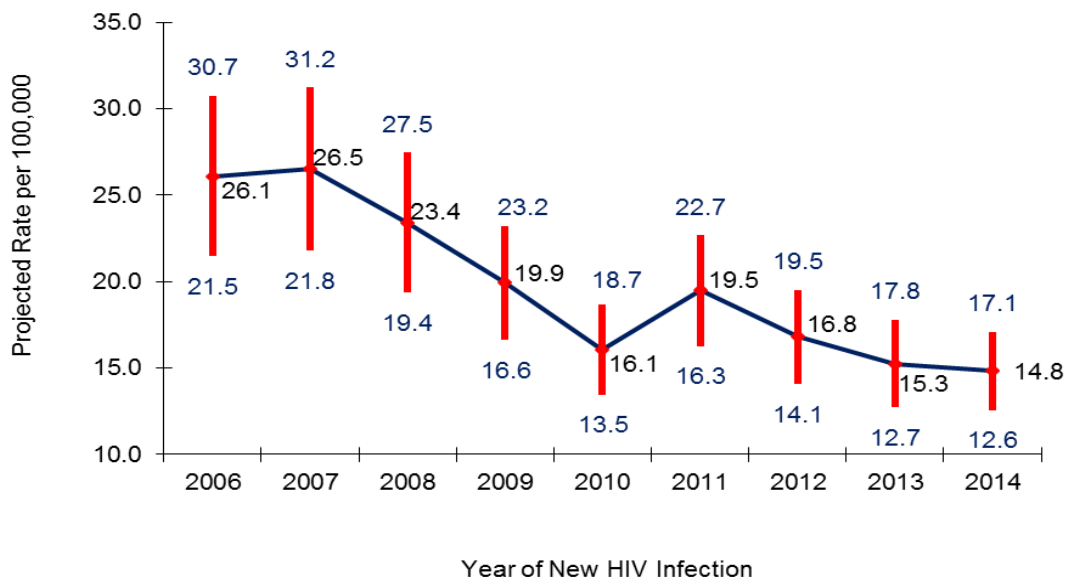
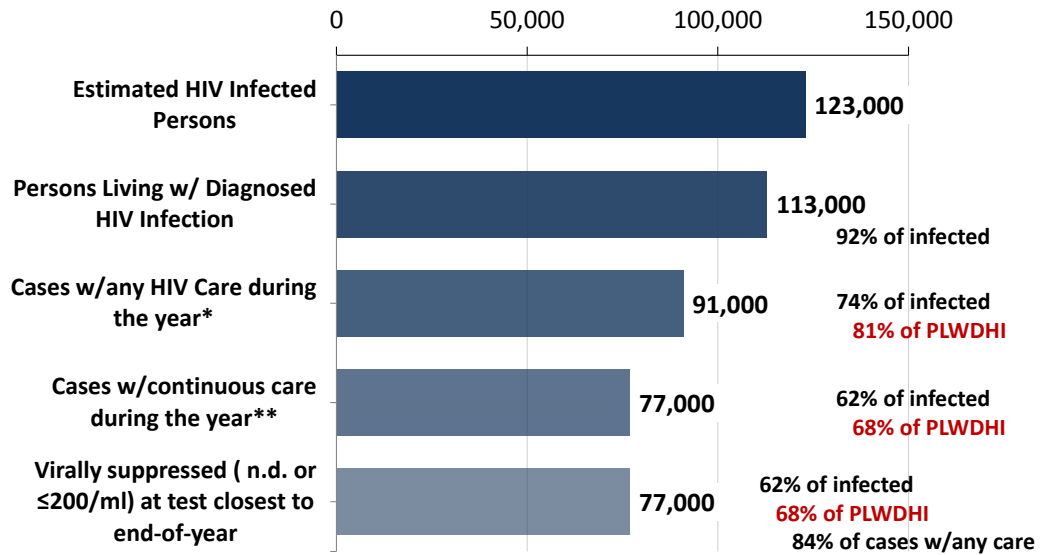


Figure B87 – Cascade of Care, New York State, 2014

- An estimated 123,000 people were living with HIV in NYS in 2014. A total of 113,000 people were living with diagnosed HIV infection, and an estimated 10,000 HIV-infected persons (8%) were not aware of their status.
- Among PLWDHI, 81% had some evidence of HIV-related care during the year.
- About two thirds of PLWDHI showed evidence of continuous care during the year.
- 68% of PLWDHI and 62% of the estimated total infected were virally suppressed.

New York State Cascade of HIV Care, 2014

Persons Residing in NYS† at End of 2014 (6.7% NYC)



* Any VL or CD4 test during the year; ** At least 2 tests, at least 3 months apart

†Based on most recent address, regardless of where diagnosed. Excludes persons with AIDS with no evidence of care for 5 years and persons with diagnosed HIV (non-AIDS) with no evidence of care for 8 years.

Figure B88 – Cascade of Care, New York City, 2014

- An estimated 96,000 people were living with HIV in NYC in 2014. A total of 89,000 people were living with diagnosed HIV infection, and an estimated 7,000 HIV-infected persons (7%) were not aware of their status.
- Among PLWDHI, 81% had some evidence of HIV-related care during the year, but another 19% showed no evidence of care.
- Over two thirds (69%) of PLWDHI showed evidence of continuous care during the year.
- 68% of PLWDHI, who represent 63% of the estimated total infected, were virally suppressed.

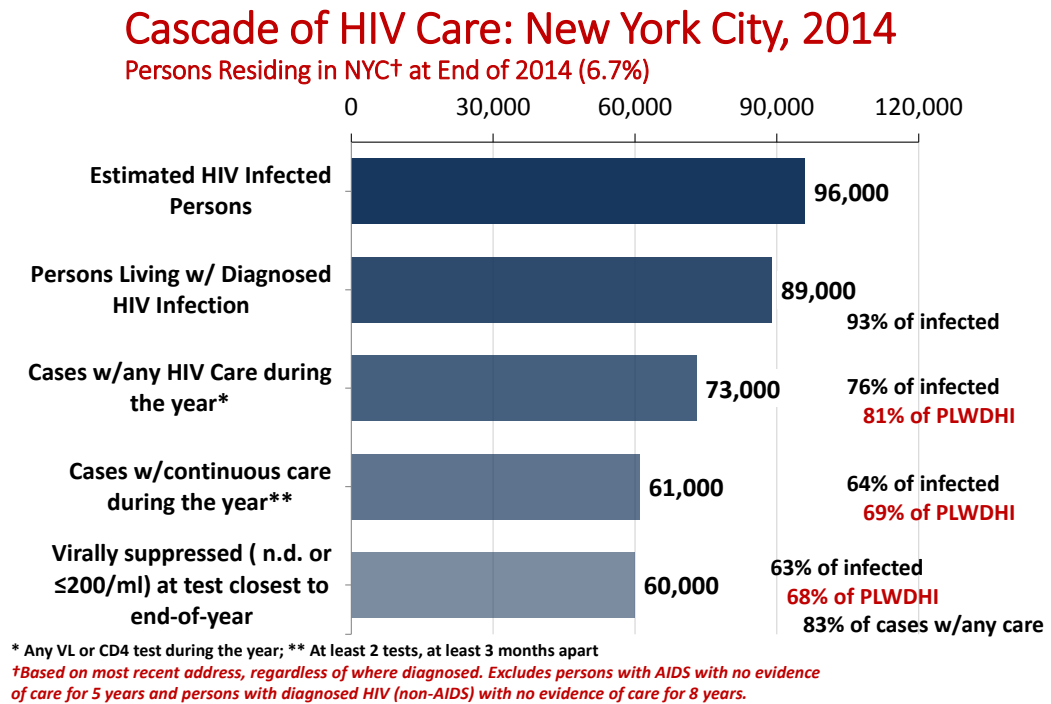
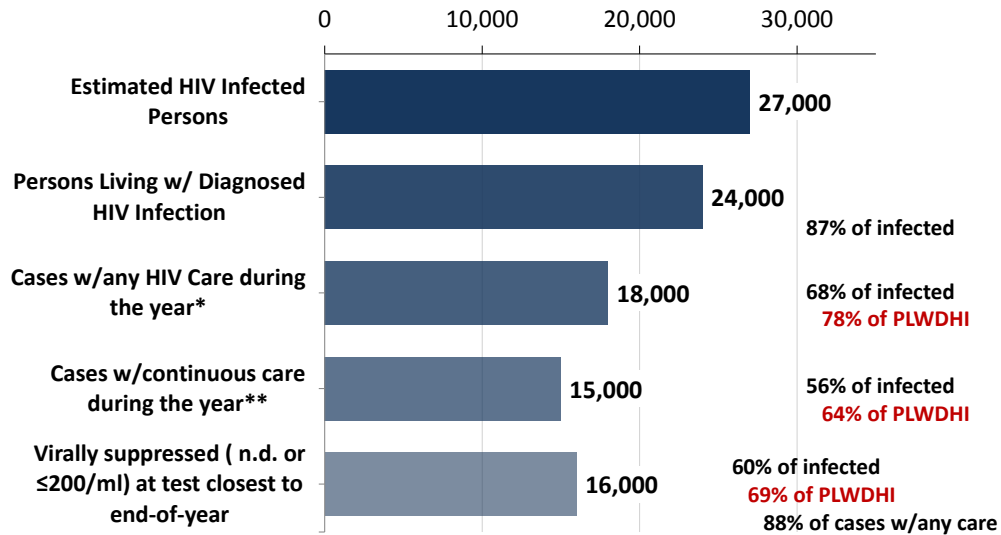


Figure B89 – Cascade of Care, Rest of State, 2014

- An estimated 27,000 people were living with HIV in ROS in 2014. A total of 24,000 were living with diagnosed HIV infection and it is estimated that 3,000 HIV-infected persons (13%) were not aware of their status.
- Among PLWDHI, 78% had some evidence of HIV-related care during the year, but another 22% showed no evidence of care.
- A little under two thirds (64%) of PLWDHI showed evidence of continuous care during the year.
- 69% of PLWDHI, representing 60% of the estimated total infected, were virally suppressed.

Cascade of HIV Care: NYS excluding NYC, 2014

Persons Residing in NYS, excl. NYC[†] at End of 2014



* Any VL or CD4 test during the year; ** At least 2 tests, at least 3 months apart

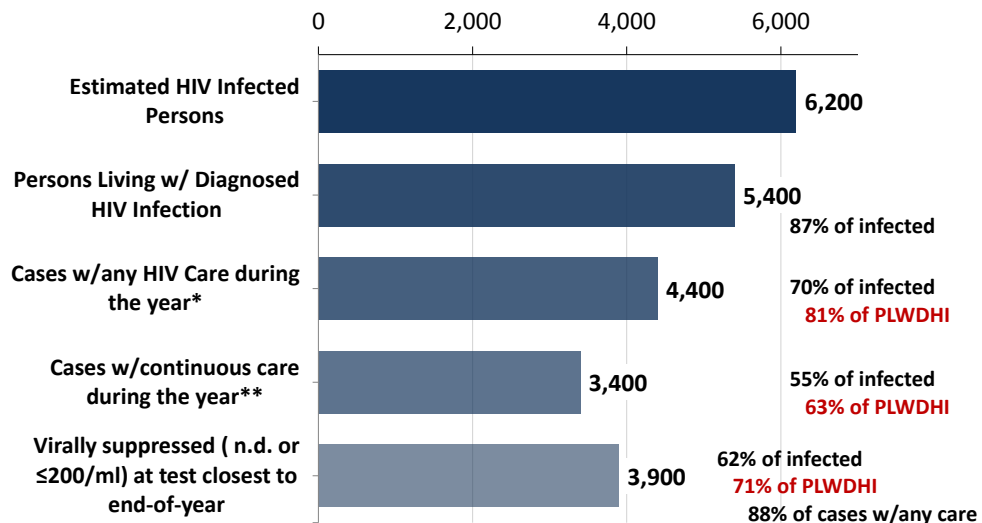
[†]Based on most recent address, regardless of where diagnosed. Excludes persons with AIDS with no evidence of care for 5 years and persons with diagnosed HIV (non-AIDS) with no evidence of care for 8 years.

Figure B90 – Cascade of Care, Nassau/Suffolk, 2014

- The 5,400 PLWDHI in 2014 constitute about 87% of the total number of HIV-infected persons in the Nassau-Suffolk Ryan White Region. It is estimated that 800 HIV-infected persons (13%) are not aware of their status.
- Among PLWDHI, 81% had some evidence of HIV-related care during the year, but another 19% showed no evidence of care.
- A little under two thirds (63%) of PLWDHI showed evidence of continuous care during the year.
- 71% of PLWDHI, representing 62% of the estimated total infected, were virally suppressed.

Cascade of HIV Care: Nassau-Suffolk Ryan White Region

Persons Residing in the Nassau-Suffolk Ryan White Region†, at End of 2014 (excludes prisoner cases)



* Any VL or CD4 test during the year; ** At least 2 tests, at least 3 months apart

†Based on most recent address, regardless of where diagnosed. Excludes persons with AIDS with no evidence of care for 5 years and persons with diagnosed HIV (non-AIDS) with no evidence of care for 8 years.

Figure B91 – Cascade of Care among MSM, New York State, 2014

- In 2014 there were 47,200 PLWDHI with MSM transmission risk in New York State. It is estimated that 7,700 were infected but not aware of their status.
- Among PLWDHI with MSM risk, 81% had some evidence of HIV-related care during the year.
- About two thirds of PLWDHI with MSM risk showed evidence of continuous care during the year.
- 70% of PLWDHI with MSM risk were virally suppressed.

Cascade of HIV Care among Men who Have Sex with Men[§]
 Persons Residing in NYS[†] at End of 2014

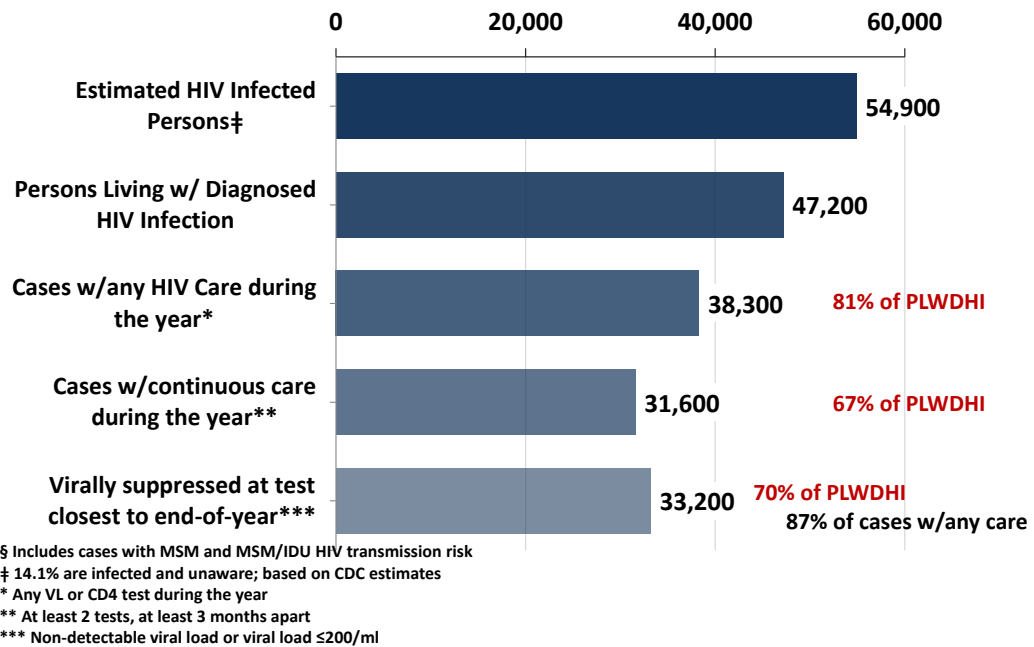
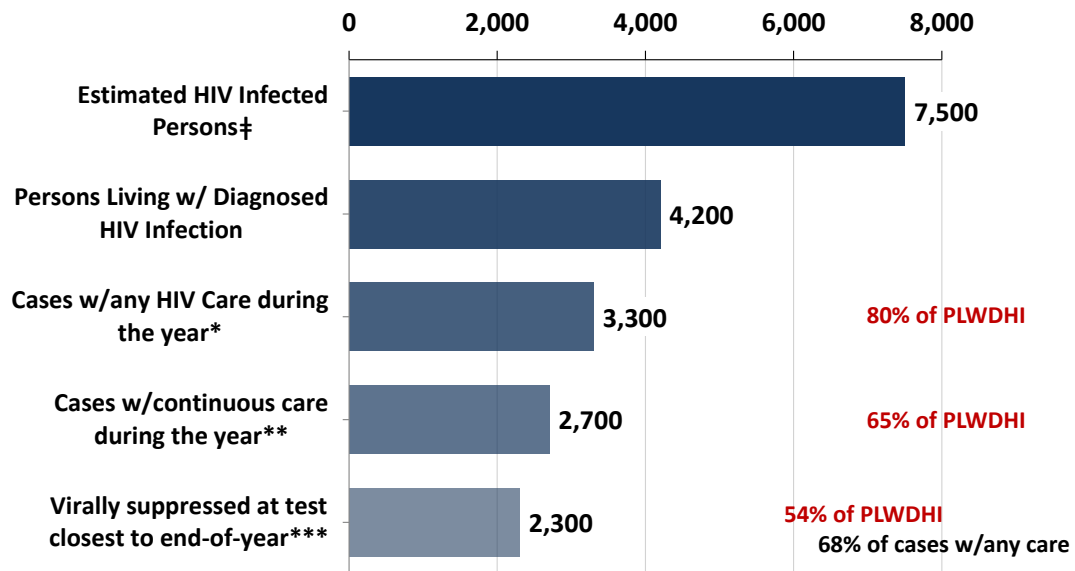


Figure B92 – Cascade of Care, Youth, New York State, 2014

- There were 4,200 PLWDHI age 13-24 in New York State in 2014. It is estimated that 3,300 HIV-infected persons age 13-24 are not aware of their status.
- Among PLWDHI age 13-24, 80% had some evidence of HIV-related care during the year, but another 20% showed no evidence of care.
- About two thirds of PLWDHI age 13-24 showed evidence of continuous care during the year.
- 68% of PLWDHI age 13-24 were virally suppressed.

Cascade of HIV Care among Youth (aged 13-24 years)

Persons Residing in NYS† at End of 2014



‡ 44.2% are infected and unaware; based on CDC estimates

* Any VL or CD4 test during the year

** At least 2 tests, at least 3 months apart

*** Non-detectable viral load or viral load ≤ 200 /ml

Figure B93 – Cascade of Care among Females, New York State, 2014

- A total of 32,900 PLWDHI in New York State in 2014 were female. It is estimated that 4,200 were HIV-infected but not aware of their status.
- Among PLWDHI, 83% had some evidence of HIV-related care during the year, but another 17% showed no evidence of care.
- About 71% of PLWDHI showed evidence of continuous care during the year.
- 68% of PLWDHI were virally suppressed.

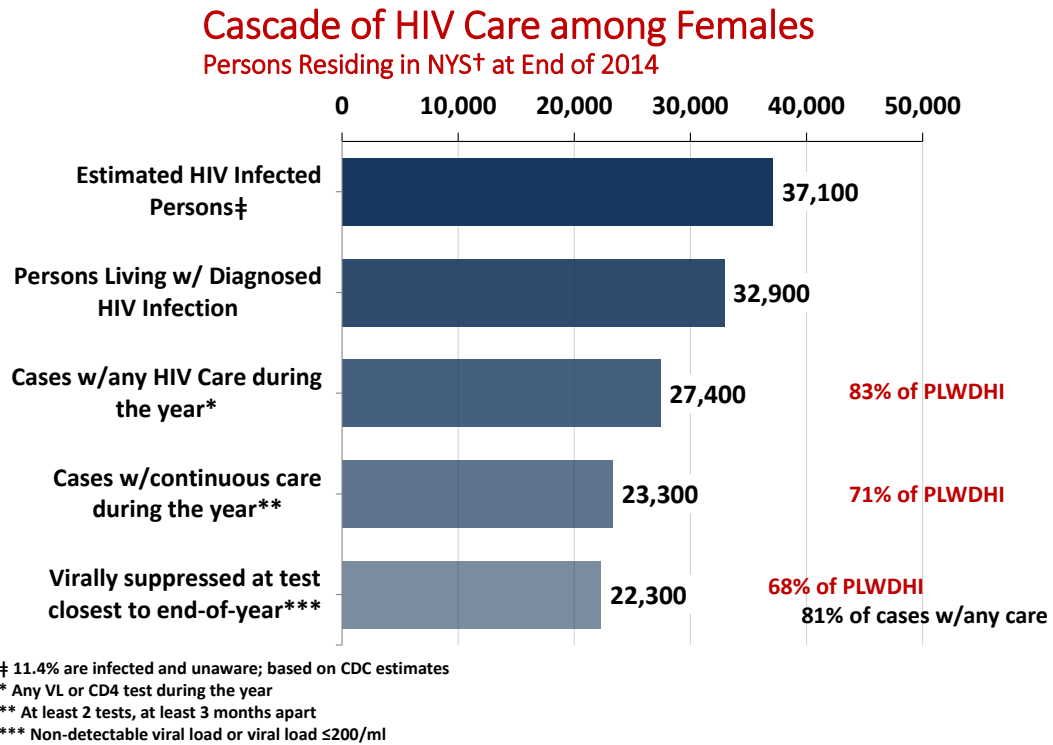
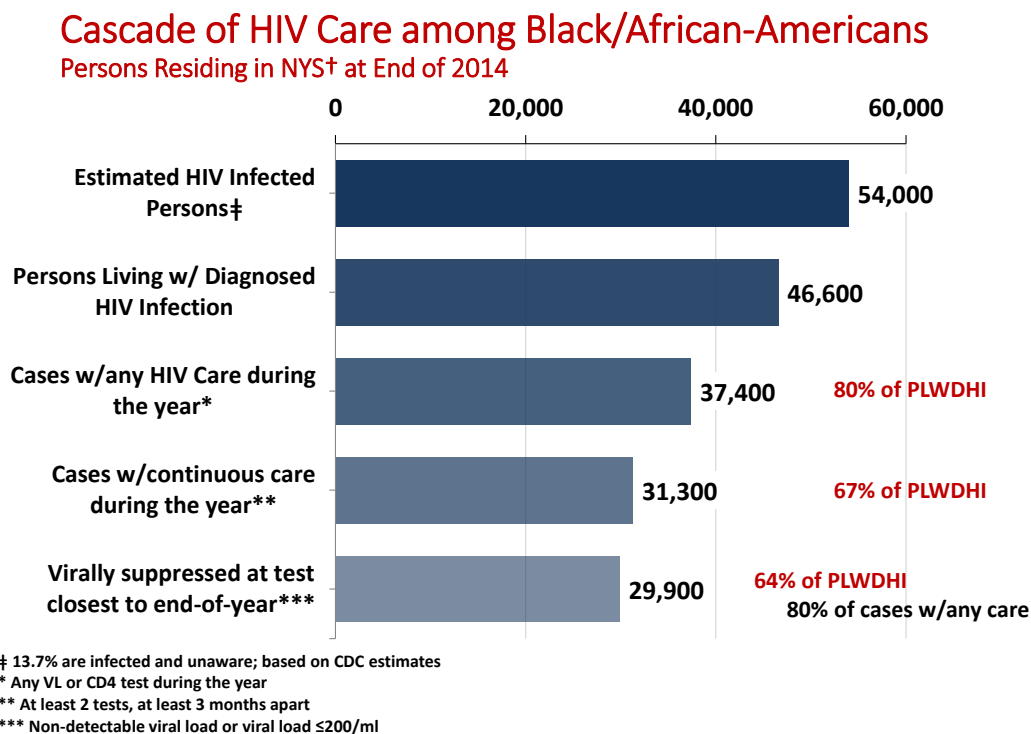


Figure B94 – Cascade of Care among Black/African-Americans, New York State, 2014

- Blacks/African-Americans accounted for 46,600 PLWDHI in 2014 in New York State. It is estimated that 7,400 were HIV-infected but not aware of their status.
- Among PLWDHI, 80% had some evidence of HIV-related care during the year, but another 20% showed no evidence of care.
- About two thirds of PLWDHI showed evidence of continuous care during the year.
- 64% of PLWDHI were virally suppressed.



Section C. Intersecting Risks and Populations: HIV, STDs, and Hepatitis C in NYS

This section of the report brings together an array of data sources (which are cited above individual figures), to help readers understand indicators of risk for HIV infection and the interplay between HIV, STDs, and hepatitis C. This section emphasizes targeted areas of public health where continued focus is needed. Increasing trends in STD and hepatitis C incidence must be addressed to prevent the very serious health consequences associated with these infections (pelvic inflammatory disease, neurological damage, liver disease, death) and to ensure they do not undermine New York’s momentum towards ending AIDS as an epidemic. NYS continues to grapple with a growing opioid addiction crisis, bringing to mind an era in New York when HIV transmission among people who inject drugs was widespread. Among other needs, the data in this section underscore the need for continued action by the state’s harm reduction and syringe exchange providers to defend against re-emergence of injection-related HIV transmission.

HIV Testing

Figure C1 – Percent of New Yorkers Ever Tested and Tested Recently, 2011-2014

- Figure C1 and table C2 show HIV testing data for NYS from the CDC Behavioral Risk Factor Surveillance System (BRFSS). The percent of New Yorkers who have ever been tested for HIV has been around 45% from 2011-2014.
- The percent of those who were tested for HIV in the past 12 months has also been fairly stable at around 45%. Estimated testing in the past 12 months was lowest in 2012 and highest in 2013. Due to missing information of the month or year of last HIV test, the percent of recent HIV testing is estimated as a range.

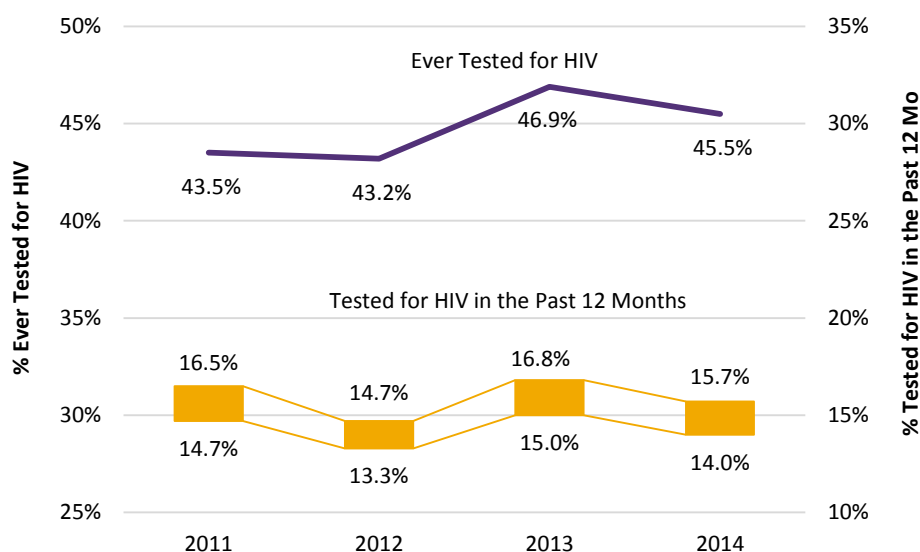


Figure C2 – HIV Testing Rate in New York City, 2014

- Figure C2 shows HIV testing rate for New York City based on data from NYC Community Health Survey 2014, which differs from data reported for NYC through BRFSS. 32.7% of the respondents reported they had HIV testing in the past 12 months, 31.4% reported they had HIV testing more than 12 months ago, and 35.9% reported they were never tested for HIV.

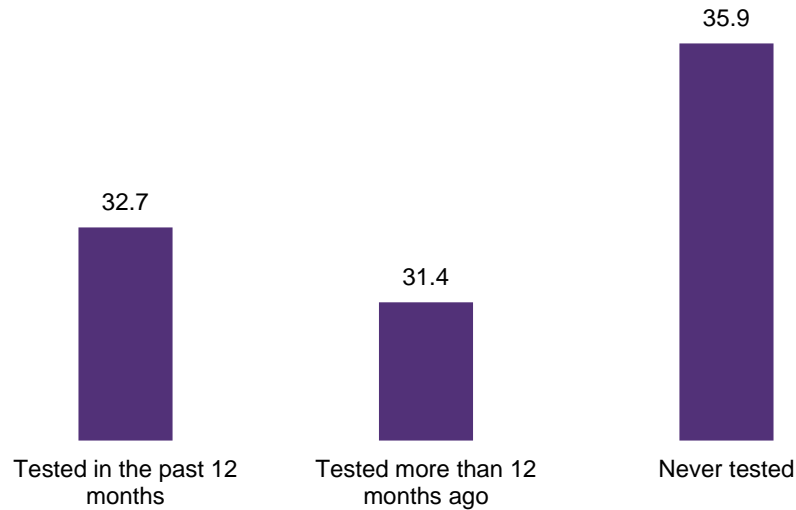


Table C3 – Demographic Breakdown of HIV Testing, 2011-2014

- Table C2 shows the percent of people in NYS who have ever been tested for HIV based on BRFSS data. The HIV testing rate tended to be higher for women than men, except in 2012.
- By age, the HIV testing rate was the highest for the 25-44 age group.
- By race/ethnicity, the HIV testing rate was the highest for Black and Hispanic populations.
- By education attained, the HIV testing rate was the highest for persons without a high school diploma.
- By household income, households that reported lower incomes had higher testing rates.

		2011	2012	2013	2014
Sex	Males	41.2%	43.5%	44.6%	43.7%
	Females	45.6%	42.8%	48.9%	47.0%
Age Group	Age 18-24	43.8%	38.9%	45.3%	38.9%
	Age 25-34	66.6%	66.2%	67.1%	65.2%
	Age 35-44	63.6%	60.4%	66.5%	65.3%
	Age 45-54	45.1%	45.4%	53.5%	52.3%
	Age 55-64	27.9%	33.6%	34.6%	35.6%
	Age 65+	12.9%	14.5%	16.2%	16.5%
Race/Ethnicity	White	34.8%	34.4%	37.4%	36.1%
	Black	64.7%	67.8%	66.8%	69.1%
	Hispanic	62.9%	59.9%	66.9%	63.9%
	Other	37.1%	29.3%	38.9%	35.4%
	Multi-Racial	56.4%	61.0%	58.4%	57.1%
Education Attained	Less than H.S.	49.8%	48.0%	54.5%	55.2%
	H.S. or G.E.D.	37.0%	36.9%	41.4%	41.1%
	Some post-H.S.	42.7%	40.1%	46.7%	43.4%
	College graduate	47.0%	49.0%	48.4%	46.8%
Household Income	Less than \$15,000	54.2%	53.5%	61.3%	59.9%
	\$15,000-\$24,999	51.4%	45.1%	49.5%	48.3%
	\$25,000-\$34,999	39.6%	40.7%	44.5%	48.5%
	\$35,000-\$49,999	37.9%	42.7%	46.7%	43.8%
	\$50,000+	42.0%	43.6%	46.1%	42.2%

Special Analyses

Table C4 – Number of Sex Partners by Partnership Gender Type among Sexually Active HIV+ Persons in Medical Care, ROS, past 12 Months

- These tables show that the majority of New Yorkers interviewed for the Medical Monitoring Project (2011 and 2012), which focuses on persons with HIV that are in medical care, reported a median of 1 sexual partner in the past 12 months. MSM participants in NYC's MMP project a higher median number of sex partners, at 3 partners.
- Note: Partnership types are not mutually exclusive.

Partnership Type	N	Median	Min, Max	Interquartile Range
Male w/ Female	30	1	1, 4	(1, 2)
Male w/ Male	49	1	1, 20	(1, 2)
Female w/ Male	31	1	1, 3	(1, 1)

NYS Medical Monitoring Project, 2011-2012

Table C5 – Number of Sex Partners by Partnership Gender Type among Sexually Active HIV+ Persons in Medical Care, NYC, past 12 Months

Partnership Type	N	Median	Min, Max	Interquartile Range
Male w/ Female	152	1	1, 10	(1, 2)
Male w/ Male	146	3	1, 60	(1, 6)
Female w/ Male	120	1	1, 20	(1, 1)

NYC Medical Monitoring Project, 2011-2012

Figure C6 – Sexual Behavior among MSM on Long Island

- This figure describes sexual behaviors among MSM who participated in the 2014 National HIV Behavioral Surveillance (NHBS) study on Long Island.
- 40% of the 280 men in the NHBS sample reported currently being in a relationship.
- A large number of respondents reported condomless anal sex either in the past 12 months (66%) or the last time that they had sex (42%), suggesting that condomless anal sex is common among sexually active MSM on Long Island.

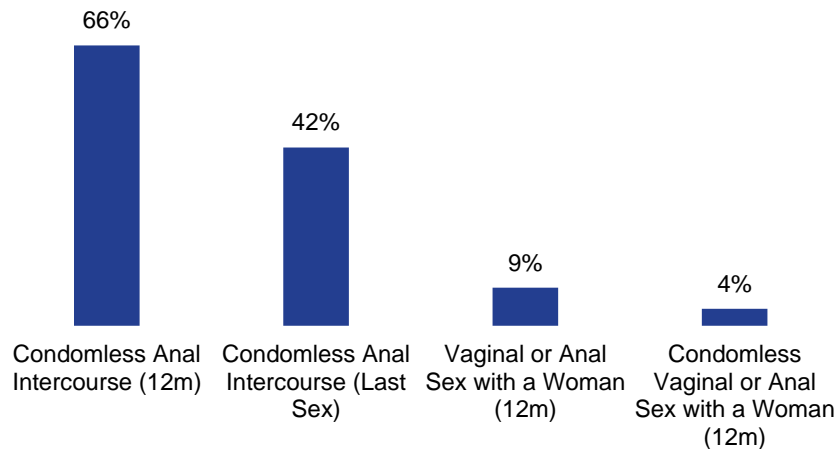


Figure C7 – Condomless Anal Intercourse in past 12 months and at last sex among MSM by Race/Ethnicity in New York City, 2014

- This figure describes condomless anal intercourse among MSM who participated in the 2014 National HIV Behavioral Surveillance (NHBS) study in NYC.
- Overall, 52% of respondents (n=400) reported condomless anal intercourse (CAI) in the past 12 months while 33% reported CAI at last sex. By race/ethnicity, Hispanics most frequently reported CAI in the past 12 months (59%), followed by Whites (53%). By age group, 18-29 year olds most frequently reported CAI in the past 12 months (58%), followed by 40-49 year olds (51%) and 30-39 year olds (48%).

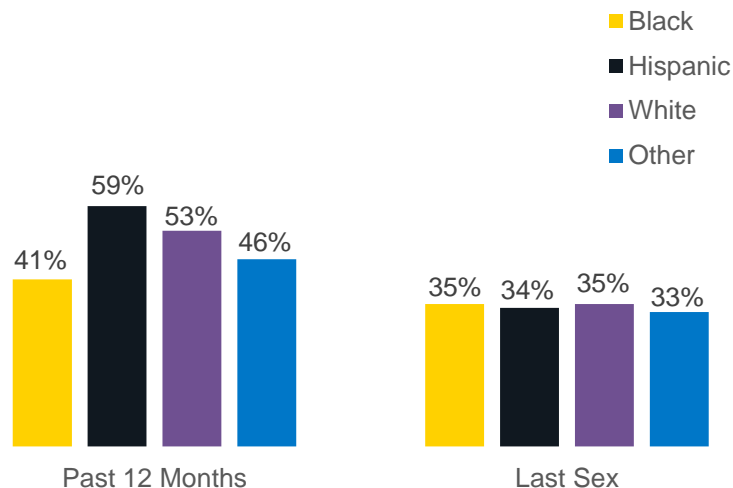


Figure C8 – Condomless Anal Intercourse in past 12 months and at last sex among MSM by Age in New York City, 2014

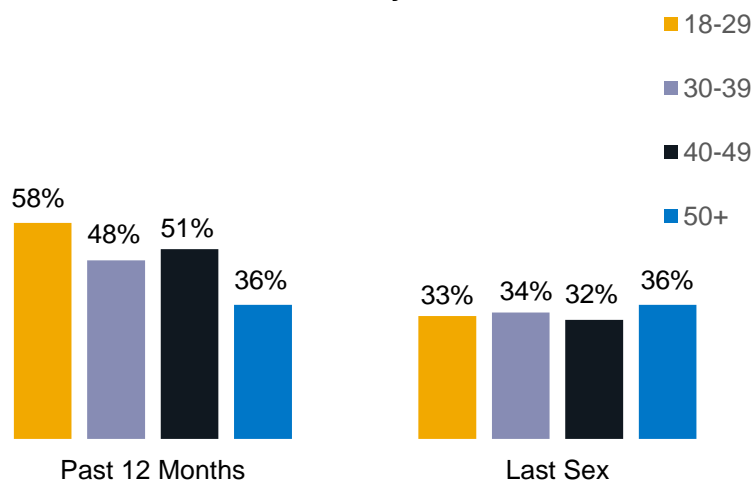
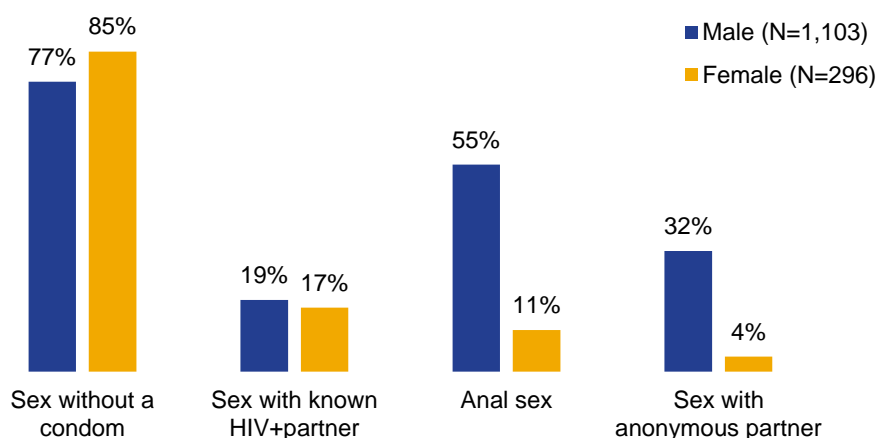


Figure C9 – Sexual risk behaviors within the 12 months prior to interview among people newly diagnosed with HIV and interviewed by the Field Services Unit, NYC, 2014

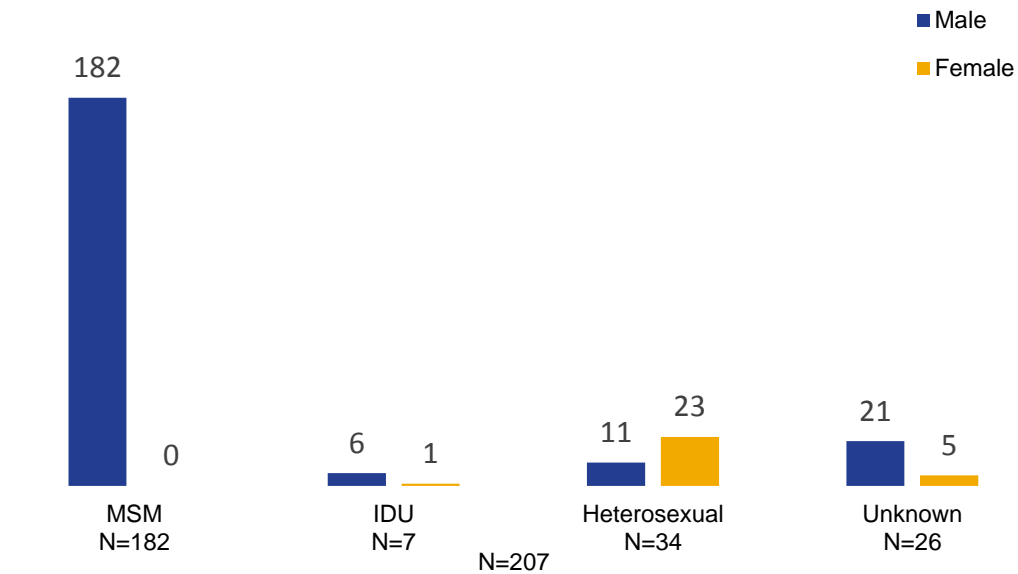
- The NYC Field Services Unit (FSU) within the NYC DOHMH was established in 2006 to assist HIV medical providers and patients diagnosed with HIV with partner services and linkage to care.
- In 2014, FSU interviewed 1,609 newly diagnosed patients; 1,399 reported sexual risk behavior for the 12 months prior to interview.
- Males were more likely than females to report having sex with an HIV-positive partner, sex while drinking, anal sex, and sex with an anonymous partner.
- Females were more likely to report having sex without a condom.



Data reported to the NYCDOHMH Field Services Unit as of October 16, 2015.

Figure C10 – Acute HIV infection by transmission risk category, NYC, 2014

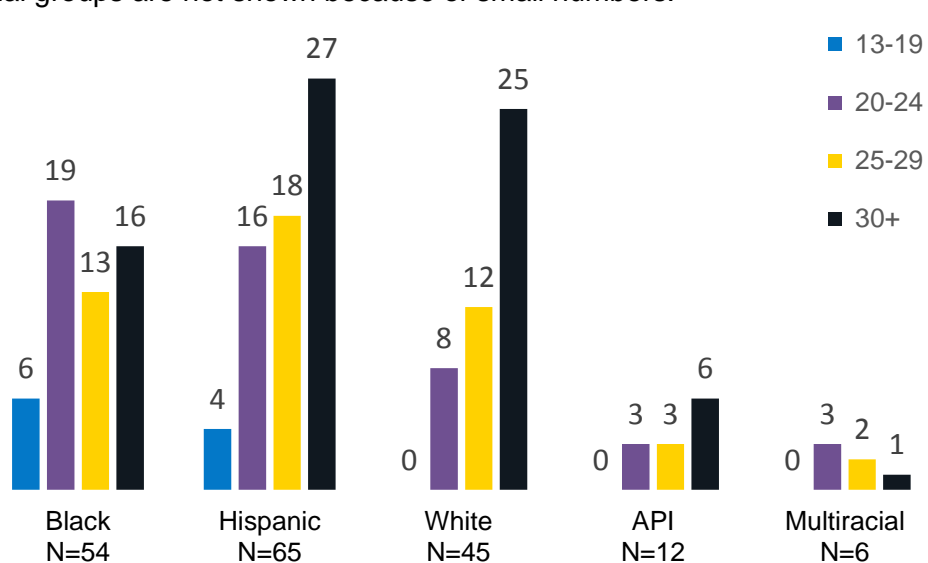
- Acute HIV infection (AHI) is the early, highly-infectious phase of HIV infection. Persons diagnosed during the acute phase represent the leading edge of the HIV epidemic.
- In 2014 in NYC, 207 people were diagnosed with HIV in the acute stage.
- The majority of AHI cases were MSM, who are targeted for AHI screening at DOHMH STD clinics.



As reported to the New York City Department of Health and Mental Hygiene by June 30, 2015.

Figure C11 – Acute HIV infection among MSM by race/ethnicity and age group, NYC, 2014

- Among MSM with AHI, a greater proportion of Black MSM were young compared with Latino/Hispanic, White and Asian/Pacific Islander MSM with AHI. Native American and multiracial groups are not shown because of small numbers.



As reported to the New York City Department of Health and Mental Hygiene by June 30, 2015.

Table C12 – Proportion of people with HIV, Hepatitis B (HBV), Hepatitis C (HCV), Chlamydia, Gonorrhea, Syphilis and Tuberculosis (TB), matching to other disease registries, NYC, 2000-2013

- The NYC DOHMH Program Collaboration and Service Integration (PCSI) initiative works to increase collaboration across HIV/AIDS, STD, tuberculosis (TB), and viral hepatitis programs, by decreasing duplication of efforts across DOHMH programs, improving data sharing across programs to better understand co-occurrence and co-infection of disease, and facilitating delivery of integrated services to the public.
- Of the 151,916 people with HIV who were selected from the NYC HIV surveillance registry from 2000 to 2013 for matching in the PCSI project, the highest co-infection proportions were HIV-Chlamydia (17.2% matched (N=26,149)), and HIV-Hepatitis C (15.2% matched (N=23,152)).

Match Results to Other Disease Registries														
Source Registry	HIV		Hepatitis B		Hepatitis C		Chlamydia ¹		Gonorrhea ¹		Syphilis ¹		Tuberculosis ¹	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
HIV	151,916*				23,152	15.2%	26,149	17.2%	11,494	7.6%	9,781	6.4%	1,693	1.1%
Hepatitis B	8,056	5.1%	156,919*		5,087	3.2%	4,811	3.1%	1,651	1.1%	963	0.6%	591	0.4%
Hepatitis C	23,152	14.4%	5,087	3.2%	160,854*		3,503	2.2%	2,293	1.4%	1,530	1.0%	696	0.4%
Chlamydia ¹	11,306	2.3%	4,811	1.0%	3,503	0.7%	486,790*		69,583	14.3%	4,784	1.0%	386	0.1%
Gonorrhea ¹	11,494	8.2%	1,651	1.2%	2,293	1.6%	69,583	49.6%	140,427*		5,187	3.7%	152	0.1%
Syphilis ¹	9,781	51.0%	963	5.0%	1,530	8.0%	4,784	24.9%	5,187	27.0%	19,196*		65	0.3%
Tuberculosis ¹	1,693	13.2%	591	4.6%	696	5.4%	386	3.0%	152	0.1%	65	0.5%	12,853*	

¹Persons with multiple reports were counted once.

*Number represents number of people selected from each registry between 2000 and 2013 for matching against other NYC disease surveillance registries.

Table C13 – Deaths among people with a single disease vs. deaths among people with multiple diseases (HIV, TB, HBV, HCV, Syphilis, Chlamydia, Gonorrhea), NYC, 2000-2013

- Of the 151,916 people with HIV who were selected from the NYC HIV surveillance registry from 2000 to 2013 for matching in the PCSI project, 102,009 did not match to any other disease registry.
- Among people with HIV only, 15,683 (15.37%) matched to a death record in the Vital Statistics registry. 49,907 people from the HIV registry matched to at least one other disease registry.
- Among co-infected people, a slightly higher proportion (18.58%, N=9,275) matched to a death record in the Vital Statistics registry compared to people with HIV only.

Disease	Total Persons with Disease	Persons With Single Disease	Persons with 1 Disease Who Died		Persons With Multiple Diseases	Persons with ≥ 2 Diseases Who Died		χ ² p-value
			n	%		n	%	
HIV	151,916	102,009	15,683	15.4%	49,907	9,275	18.6%	<0.0001
Tuberculosis	12,853	10,070	1,208	12.0%	2,783	675	24.3%	<0.0001
Chronic Hepatitis B	156,919	140,333	4,702	3.4%	16,586	2,711	16.3%	<0.0001
Chronic Hepatitis C	160,854	130,477	16,604	12.7%	30,377	7,425	24.4%	<0.0001
Syphilis*	19,196	6,312	152	2.4%	12,884	445	3.5%	<0.0001
Gonorrhea	140,427	62,309	627	1.0%	78,118	1,083	1.4%	<0.0001
Chlamydia	486,790	404,031	1,708	0.4%	82,759	1,021	1.2%	<0.0001

* Primary, Secondary or Early Latent Syphilis

Drug User Health

The information presented in this section is courtesy of the *New York State Opioid Poisoning, Overdose, and Prevention: 2015 Report to the Governor and NYS Legislature* (http://www.health.ny.gov/diseases/aids/general/opioid_overdose_prevention/docs/annual_report2015.pdf), which provides an overview of opioid-related mortality and morbidity and other consequences of heroin and prescription opioid misuse across the state over the last five years.

The *Statewide Planning and Research Cooperative System (SPARCS)* is the data source for Table C13 and Figures C14-C16. SPARCS is a comprehensive all-payer data reporting system established in 1979 as a result of cooperation between the health care industry and government. SPARCS collects patient-level detail on patient characteristics, diagnoses and treatments, services, and charges for each hospital inpatient stay and outpatient (ambulatory surgery, emergency department, and outpatient services) visit; and each ambulatory surgery and outpatient services visit to a hospital extension clinic and diagnostic and treatment center licensed to provide ambulatory surgery services. The enabling legislation for SPARCS is located under Section 28.16 of the Public Health Law. SPARCS regulations are under Section 400.18 of Title 10 (Health) of the Official Compilation of Codes, Rules, and Regulations of the State of New York. <https://www.health.ny.gov/statistics/sparcs/>.

Table C14 – Outpatient Emergency Department (ED) Use Without Hospitalization for a Diagnosis of Heroin, Methadone and/or Opiate-Related Narcotics Use by NYC vs. ROS, 2010-2014*

- Statewide, there were 37,347 opioid-related outpatient ED visits without hospitalization in 2014, a 73.1% increase from 2010. Although these data do not necessarily reflect overdoses, they show the increasing prevalence of opioids in ED visits. Table C13 shows the growth (in frequency and rates) in opioid-related hospital ED visits for New York City (NYC) and for the regions outside NYC for the most recent five years.

Region	2010		2011		2012		2013		2014		2010-2014 % Change
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate	
NYC	8,409	102.9	10,782	131.9	12,534	153.3	12,916	158.0	14,691	179.7	74.7%
ROS	12,554	112.1	14,083	125.7	17,645	157.5	19,271	172.0	21,576	192.6	71.9%
Unknown	843	N/A	1,005	N/A	1,302	N/A	1,723	N/A	1,480	N/A	N/A
NYS Total	21,806	112.5	25,870	133.5	31,481	162.5	33,910	175.0	37,747	194.8	73.1%

* The rates are calculated based on the number of ED visits per 100,000 population. The population is based on US Census Bureau data 2010.

Figure C15 – Number of Opioid-Related Outpatient ED Visits by NYC vs. ROS, 2010-2014

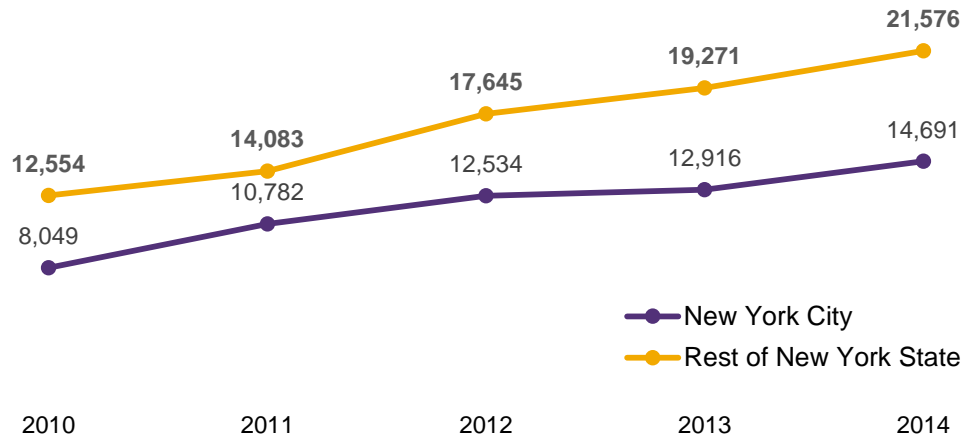


Figure C16 – Frequency of Opioid-Related ED Visits within NYC’s Five Boroughs, 2014

- Within NYC, Kings County (Brooklyn) has had the highest number of ED visits for opioid-related problems in 2014 and historically over the last five years.

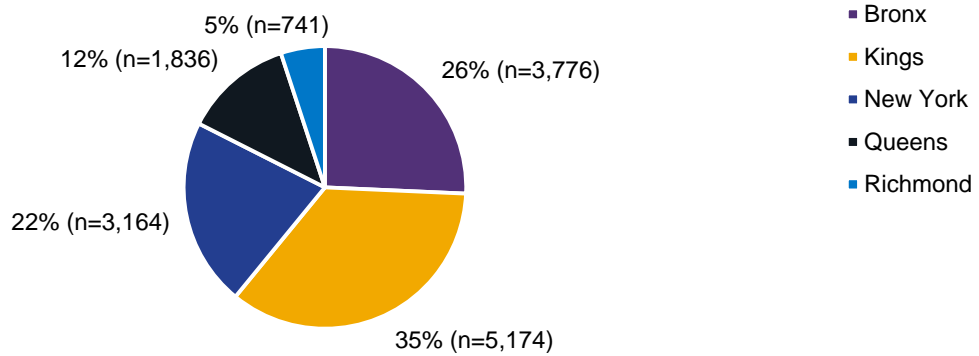


Figure C17 – Frequency of Opioid-Related Outpatient ED Visits, NYC Borough, 2010-2014

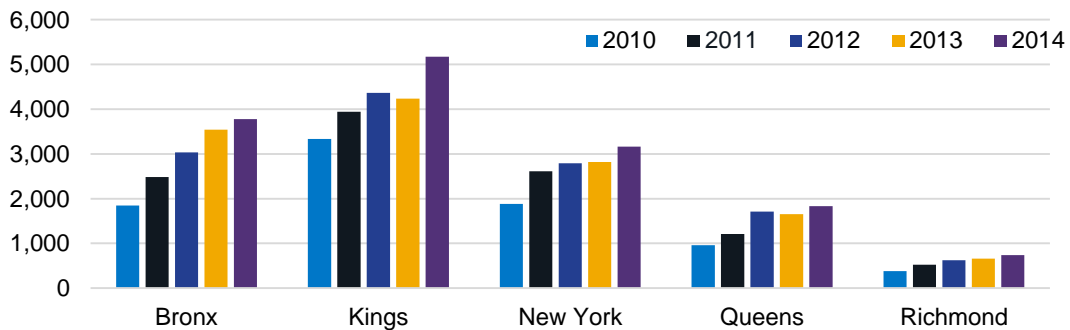
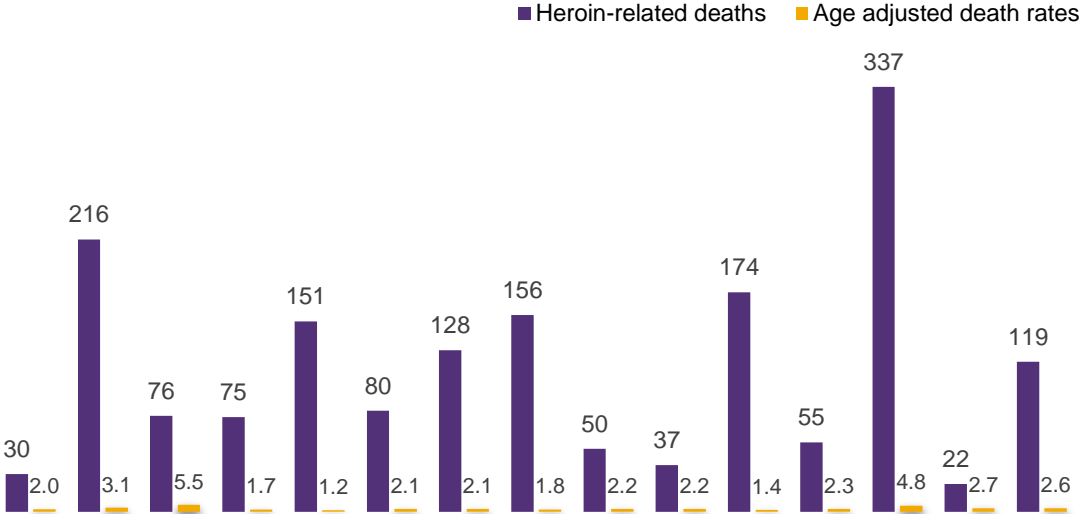


Figure C18 – Total Drug Deaths by NYS County Involving Heroin, 2009 – 2013 (Counties with 20 or more total deaths)

- In 2015, the CDC compiled a list of all counties in the United States with more than 20 reported heroin-related deaths over that time period. Below are the numbers and rates of NYS counties from the CDC's list.



* Rates are per 100,000 population.

Figure C19a – Percent of NHBS Study Participants who Tested Negative for HIV and Used Meth in the Previous 12 Months, NYC, 2004-2014

Figure C19b – Percent of NHBS Study Participants who Tested Positive for HIV and Used Meth in the Previous 12 Months, NYC, 2004-2014

- Methamphetamine use is an emerging risk factor for HIV infection in New York, particularly among MSM. While case surveillance data do not capture this risk directly, data from the National HIV Behavioral Surveillance (NHBS) survey can inform understanding of meth-related trends.
- NHBS focuses on different target populations on rotating annual cycles. NHBS focused on MSM in 2004, 2008, 2011, and 2014.
- In NYC, 13.8% of MSM participants in NHBS-2004, 5.8% of MSM participants in NHBS-2008, 4.3% of MSM participants in NHBS-2011; and 9.2% of MSM participants in NHBS-2014 reported methamphetamine use in the past 12 months.
- The following figures characterize meth use trends among MSM in NYC by age, race/ethnicity, borough, and HIV status.
- Figure C19a presents data on NHBS participants who tested negative for HIV.
 - Among MSM NHBS study participants from 2004-2014 who tested HIV-negative, there was variability by age, race/ethnicity, and NYC borough among those who reported meth use in the previous 12 months.
 - In 2004, 2008, and 2011, the 30-39 age group had the highest percentage reporting meth use compared with other age groups, although the percentage in this group declined over time.
 - By race/ethnicity, from 2004-2014, the percentage of Hispanics and Whites reporting meth use declined, while the percentage was stable among Blacks.
 - By NYC borough, from 2004-2014, the percentage of Manhattan and Brooklyn residents reporting meth use declined; the percentage of Queens residents was stable; and the percentage of Bronx residents increased.
- Figure C19b presents data on NHBS participants who tested positive for HIV.
 - Among MSM NHBS study participants from 2004-2014 who tested HIV-positive, there was variability by age, race/ethnicity, and NYC borough among those who reported meth use in the previous 12 months.
 - By age, the percentage of 18-29 year olds reporting meth use increased and the percentage of 30-39 and 40+ groups reporting meth use declined.
 - By race/ethnicity, from 2004-2014, the percentage of Hispanics and Whites reporting meth use declined, while the percentage increased among Blacks.
 - There was variability by NYC borough from 2004-2014 in the percentage of participants reporting meth use (and numbers of participants by borough fluctuated substantially across cycles).

Note: the numbers of participants in these subgroups tend to be small and fluctuate from cycle to cycle; any potential trends should be interpreted with caution.

Figure C19a – Percent of NHBS Study Participants who Tested *Negative* for HIV and Used Meth in the Previous 12 Months, NYC, 2004-2014

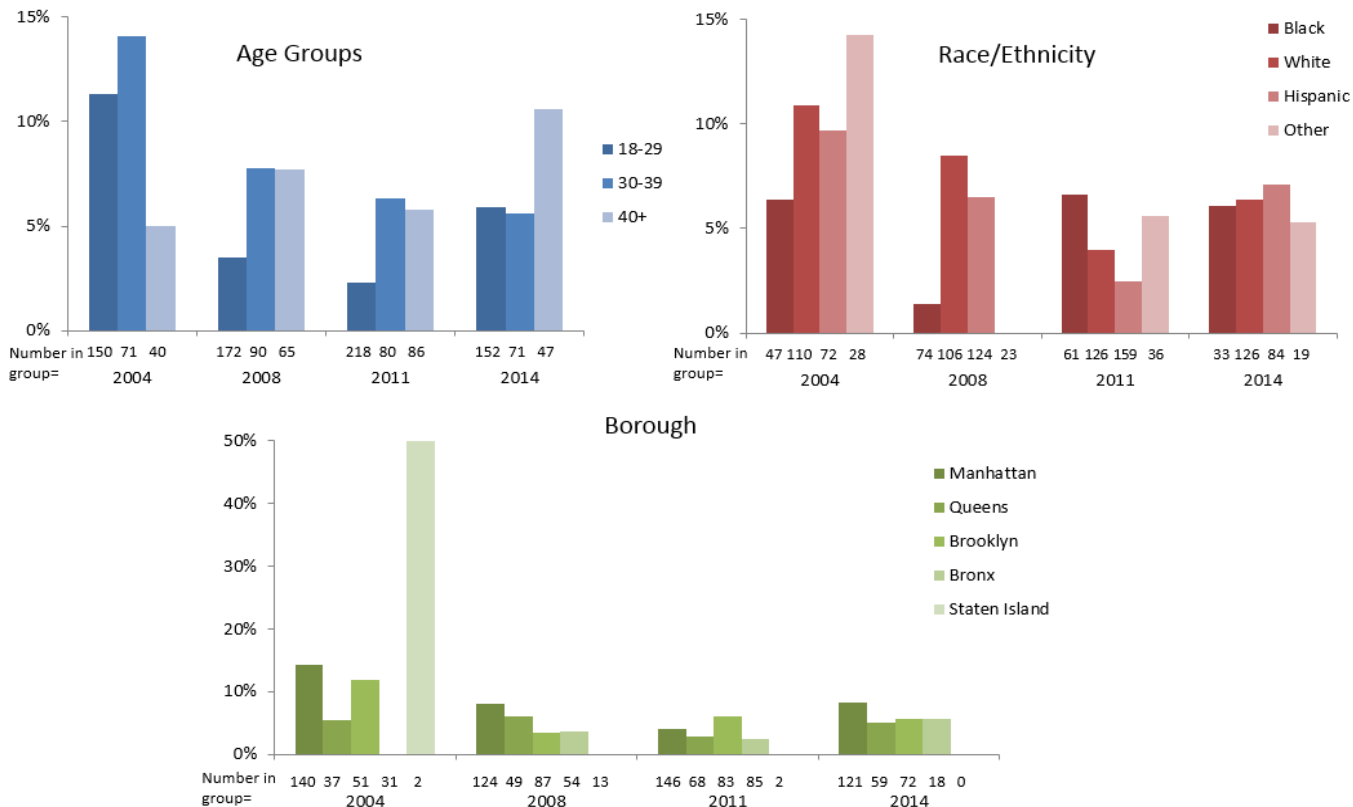
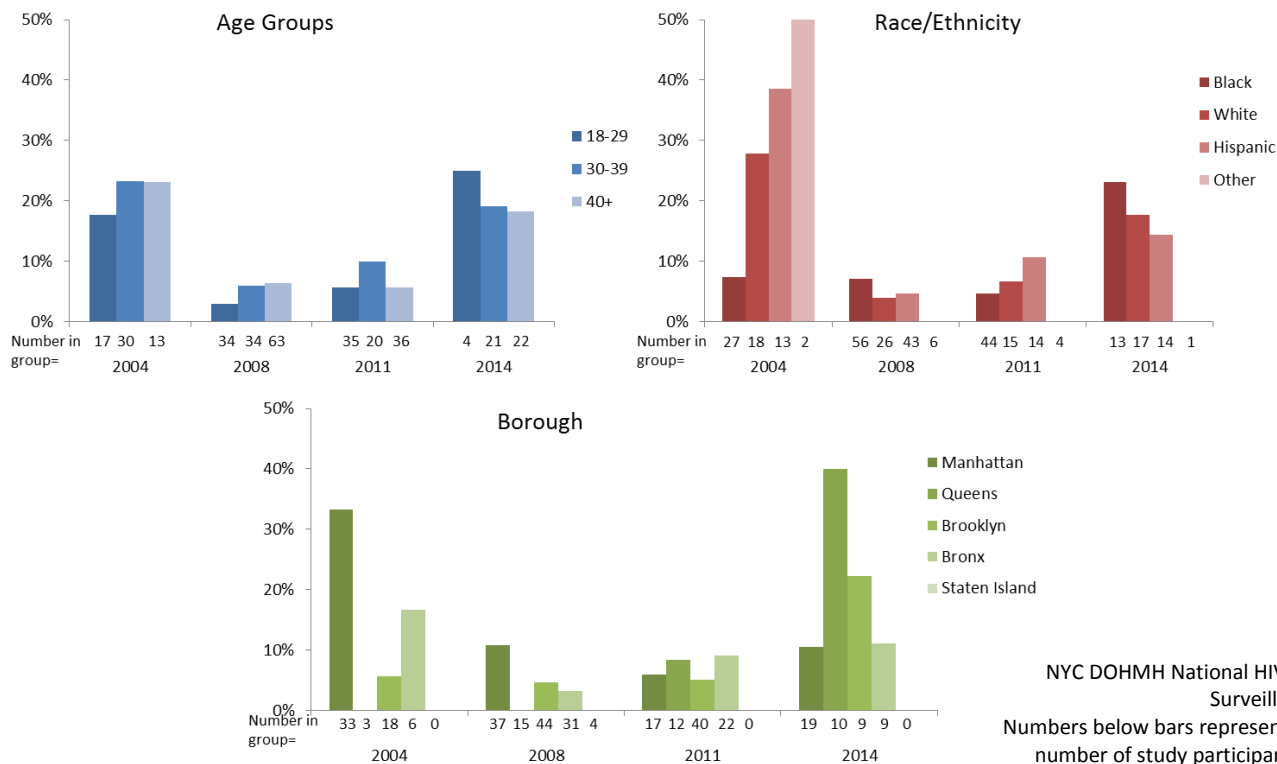


Figure C19b – Percent of NHBS Study Participants who Tested *Positive* for HIV and Used Meth in the Previous 12 Months, NYC, 2004-2014



NYC DOHMH National HIV Behavior Surveillance data. Numbers below bars represent the total number of study participants in each group. Height of bars represents the proportion of participants in that group who reported meth use.

Table C20 – HIV Prevention Drug Awareness Among HIV-Negative NHBS Study Participants by Meth Use in Previous 12 Months, NYC, 2011 and 2014

- Among HIV-negative NHBS study participants, an increasing percentage of respondents reported awareness of PrEP, past use of PEP, and past use of PrEP from 2011 to 2014.
- In both 2011 and 2014, participants reporting meth use in the past 12 months were more likely to be aware of PrEP, have taken PEP, and have taken PrEP than those who did not report meth use in the past 12 months.

	2011		2014	
	No Meth Use Previous 12 Months	Meth Use Previous 12 Months	No Meth Use Previous 12 Months	Meth Use Previous 12 Months
Aware of PrEP	22.8% (98 out of 429)	38.9% (7 out of 18)	70.8% (269 out of 380)	75% (18 out of 24)
Have Taken PEP*	1.9% (8 out of 429)	5.6% (1 out of 18)	4.8% (13 out of 269)	16.7% (3 out of 18)
Have Taken PrEP*	0.5% (2 out of 429)	0% (0 out of 18)	4.8% (13 out of 269)	5.6% (1 out of 18)

NYC DOHMH National HIV Behavior Surveillance data

*PEP and PrEP use questions were asked of all participants in 2011 and only of participants aware of PrEP in 2014.

Sexually Transmitted Diseases

Sexually transmitted diseases (STDs) present a significant health challenge in New York. In 2014, over 130,000 cases of syphilis, gonorrhea, and Chlamydia were reported among New Yorkers, accounting for two-thirds of all reportable communicable diseases. The true burden of STDs is not captured as many cases of syphilis, gonorrhea, and Chlamydia go undiagnosed and unreported and other STDs, such as human papilloma virus, herpes simplex virus and trichomoniasis, are not reportable infections. In addition to increasing a person's risk for acquiring and transmitting HIV infection, STDs can lead to severe reproductive health complications, such as infertility and ectopic pregnancy.

In 2014, increases were seen for syphilis, gonorrhea, and Chlamydia. For syphilis and gonorrhea, these increases were largely driven by increasing rates among men. Trend data show that rates of syphilis among men have increased at an alarming rate, with a 33% increase in 2014. Men account for greater than 90% of infectious syphilis cases. Based on available information, MSM account for 76% of males diagnosed in 2014. Syphilis infection also increases the risk of HIV transmission. Available data for New York State excluding New York City indicates that 35% of men diagnosed with syphilis are HIV-infected.

Some groups bear a disproportionate burden of STD infections, for example young people and persons of color. Surveillance data for 2014 show that young people 15-24 years of age accounted for over 60% of gonorrhea and Chlamydia infections, continuing a trend that has been observed for over a decade. Disparities by race and ethnicity are also apparent. In 2014, rates of infectious syphilis, gonorrhea, and Chlamydia were highest among Black, not-Hispanic men and women. Reversing increasing STD rates relies on the delivery of recommended screening, ensuring appropriate treatment of infected persons, and promoting comprehensive prevention and counseling for affected populations.

Sexually Transmitted Disease Data Definitions

The NYSDOH Bureau of STD Prevention and Epidemiology (BSTDPE) is responsible for generating the surveillance data presented in this report. The data in this report are based on STD cases reported through December 31, 2014, with 2014 surveillance data finalized as of May 5, 2015. All figures are for New York State as a whole unless otherwise noted in the figure title.

STD Cases

By New York State Public Health Law, all NYS residents diagnosed with a suspected or confirmed STD must be reported by providers or laboratories. The list of reportable STDs includes: syphilis, gonorrhea, Chlamydia, lymphogranuloma venereum, chancroid, neonatal herpes simplex virus, and granuloma inguinale (NYC only). In this report, syphilis data are presented for early, or infectious, syphilis cases which includes cases with primary, secondary, or early latent stage of disease. For surveillance purposes, STD cases represent those reported diagnoses that meet the federal case definition. The CDC and the CSTE have published case definitions for notifiable diseases, which establish uniform criteria for reporting cases.

Sex of Sex Partner

Information on sexual risk behaviors is typically gathered during a medical history conducted by a health care provider or during an interview with health department partner services specialists. On January 1, 2008, the CDC implemented requirements for collecting surveillance information

on the sex of the partner(s) to whom the infected patient was exposed. Mandatory reporting of the “sex of sex partner” variable applies to syphilis cases only and is not available for other reportable STDs. The following data categories are used to define “sex of sex partner”:

- Male
- Female
- Male and female
- Refused (patient refused to answer question)
- Unknown
- In this report, the term MSM includes bisexual males.

Diagnosis Date

The date on which a laboratory diagnosis of a reportable STD is documented on a provider report form or a laboratory report.

Case Rates

Crude (unadjusted) and category-specific rates are based on the number of cases per 100,000 population using US Census Bureau Population data with bridged single race estimates for intercensal data through 2014. These data are obtained from the National Cancer Institute’s Surveillance, Epidemiology and End Results Program at <http://seer.cancer.gov/popdata/download.html>

Race/Ethnicity

STD surveillance systems do not include requirements for mandatory reporting of race and ethnicity for STD cases. Availability of such information to surveillance systems relies on documentation on the provider report form or a laboratory report. The percentage of unknown, missing or invalid data for race/ethnicity varies from year to year and by disease for reported STDs. The data on race/ethnicity in this report are based on those cases with available information.

Residence

For purposes of disease reporting, STD cases are assigned to the county of the person’s “usual residence” at the time of diagnosis. The rules for assigning residence are modeled after guidelines used by the US Census Bureau and are intended to prevent the reporting of a case by multiple jurisdictions. For persons who are diagnosed with an STD while living in an institution (e.g. drug treatment center, college/university, psychiatric facility, county or state jail/prison) residence reflects the county in which the institution is located.

Incarcerated Individuals

In this report, as in other STD surveillance reports, the data include cases among incarcerated individuals who were diagnosed with a reportable STD while incarcerated in city/county jails or a NYS DOCCS facility. As described above, residence reflects the address of the correctional facility, rather than the pre-incarceration address.

Additional Information

Please direct questions about STD surveillance data in this report to the Bureau of STD Prevention and Epidemiology, AIDS Institute, New York State Department of Health at 518-474-3598 or by e-mail to stdc@health.state.ny.us.

Figure C21 – Number of STD Infections by Age, 2014

- In 2014, reportable sexually transmitted infections affected young adult New Yorkers with persons 15-24 years of age accounting for 64% of STDs.

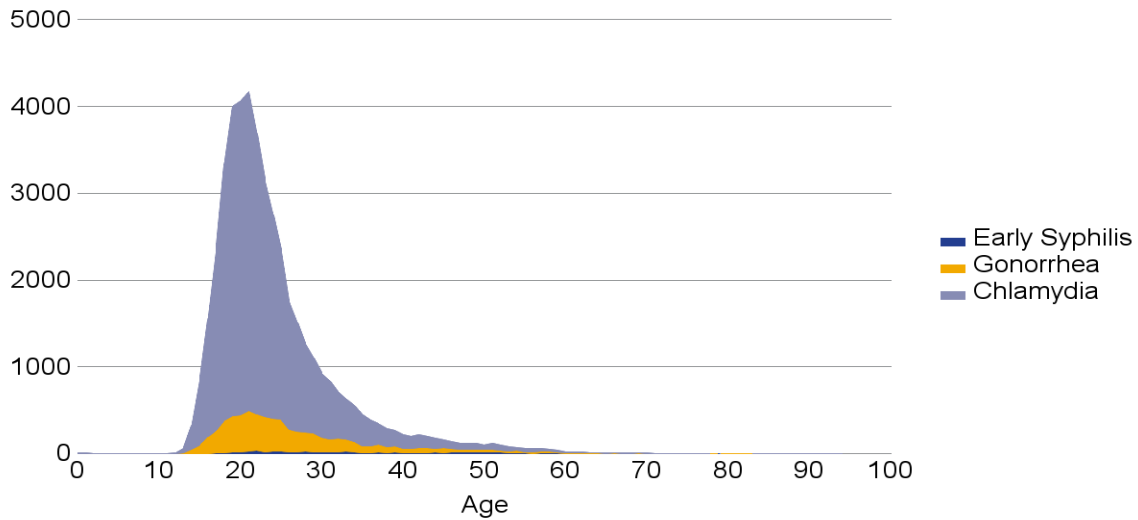


Figure C22 – Percent of Patients with STDs who were also Living with HIV/AIDS, New York State excluding NYC, 2014

- Assessing HIV-STD co-infection has important implications for medical care and prevention.
- The proportion of individuals who were co-infected with HIV and STD varied by type of bacterial STD, with a higher percentage of syphilis patients being HIV-infected followed by gonorrhea and then Chlamydia.
- In general, HIV infection was proportionately higher in male STD patients compared to female STD patients.

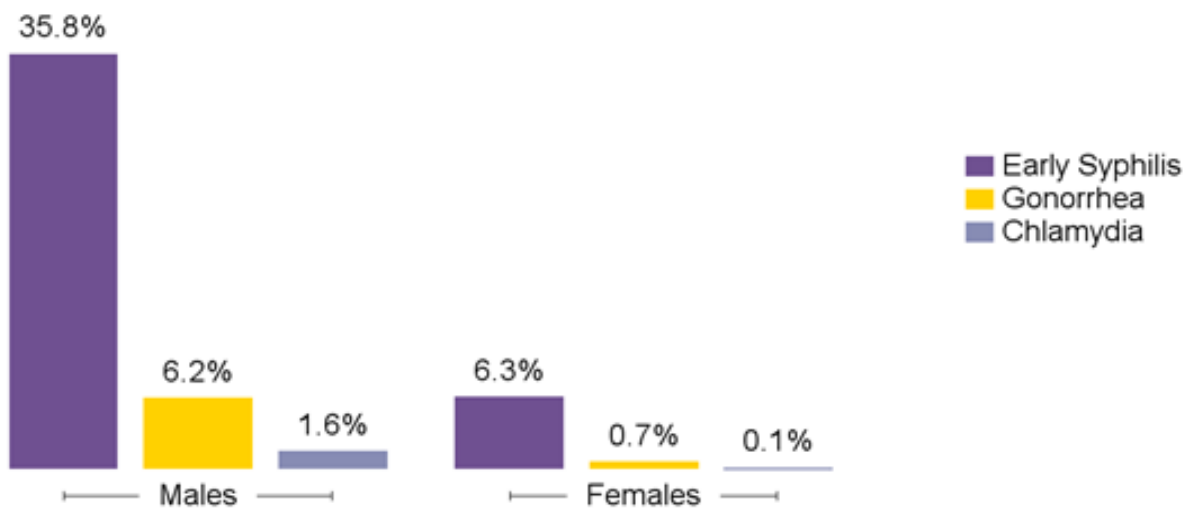


Figure C23 – 80 Years of Early Syphilis Infections by Gender, NYS excluding NYC, 1936-2015

- Increases in syphilis morbidity cycle in 10 year intervals with the highest incidence observed in the 1940s, prior to the availability of penicillin for treatment.
- Following this peak, the next outbreak of syphilis was noted in the early 1990s.
- In 2000, reported cases of early syphilis reached an all-time low, after which the number of cases has increased to 3,991 cases in 2014, a 350% increase over 2001.
- Since 2000, cases among men have accounted for greater than 90% of reported cases.

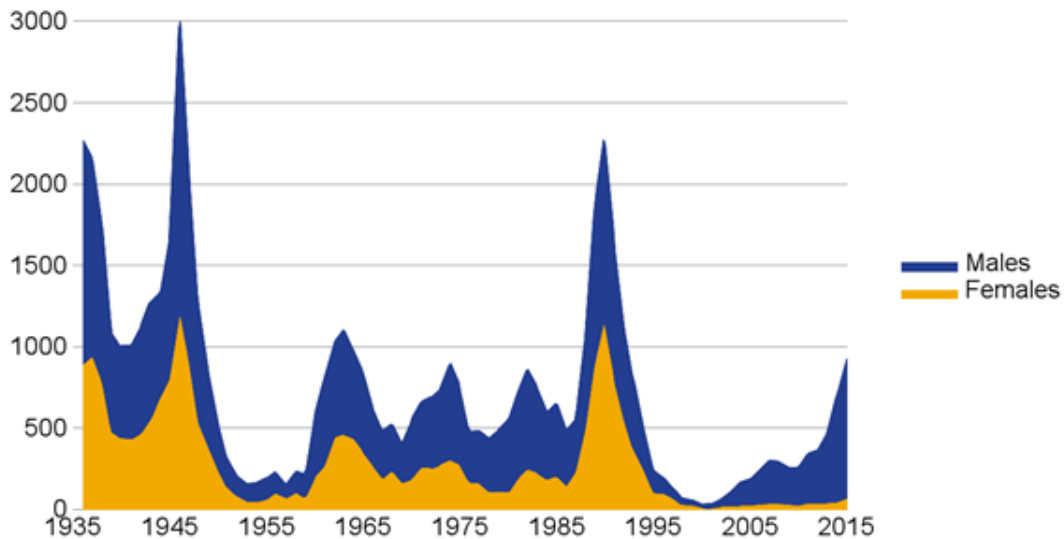


Figure C24 – Early Syphilis Incidence Rate per 100,000 by Gender and Year, 2001-2014

- In 2014, the rate of Early Syphilis among males was 40 cases per 100,000, 20 times higher than the rate among females compared to 2001 when the rate among males was three times higher than that among females.

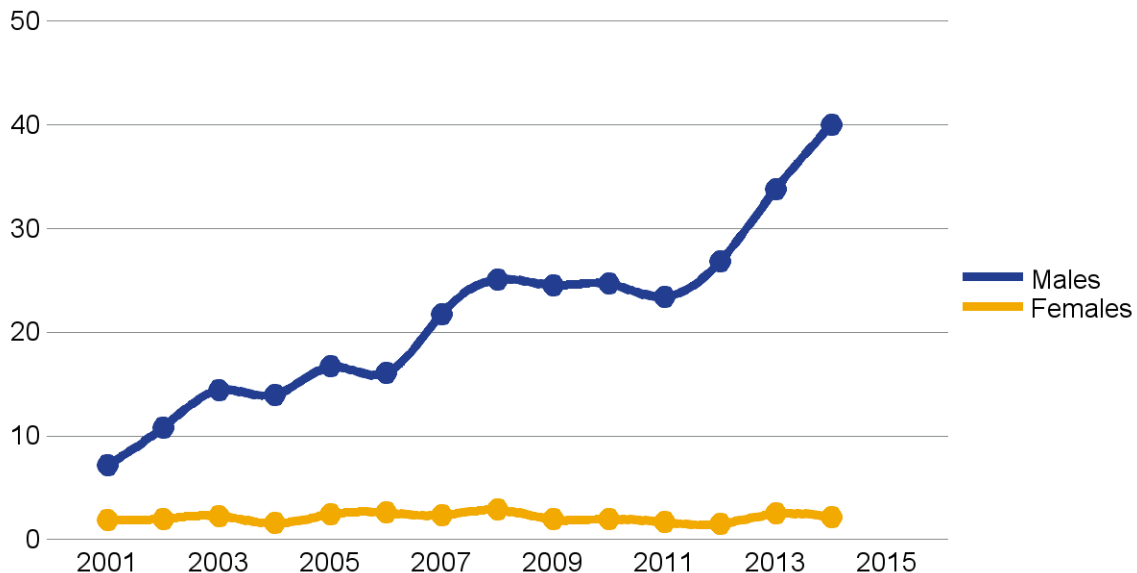


Figure C25 – Early Syphilis Incidence Rate per 100,000 by Race and Gender, 2014

- Black not-Hispanics had a disproportionate burden of early syphilis, regardless of gender.
- Rates among Black not-Hispanic males and females were five and 13 times higher, respectively, than their White not-Hispanic counterparts.

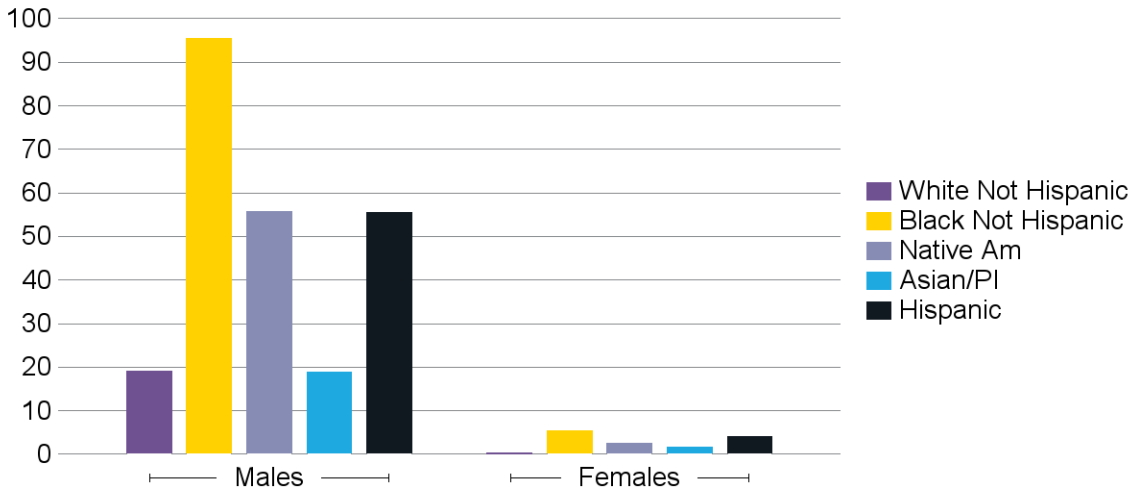


Figure C26 – Early Syphilis Cases by Gender and Age, 2014

- In 2014, the highest rates of early syphilis were seen among men 25-29 and 30-34 years of age.
- Among females, rates of early syphilis were highest among those 25-29 years of age, followed by 20-24 and 30-34 year olds.

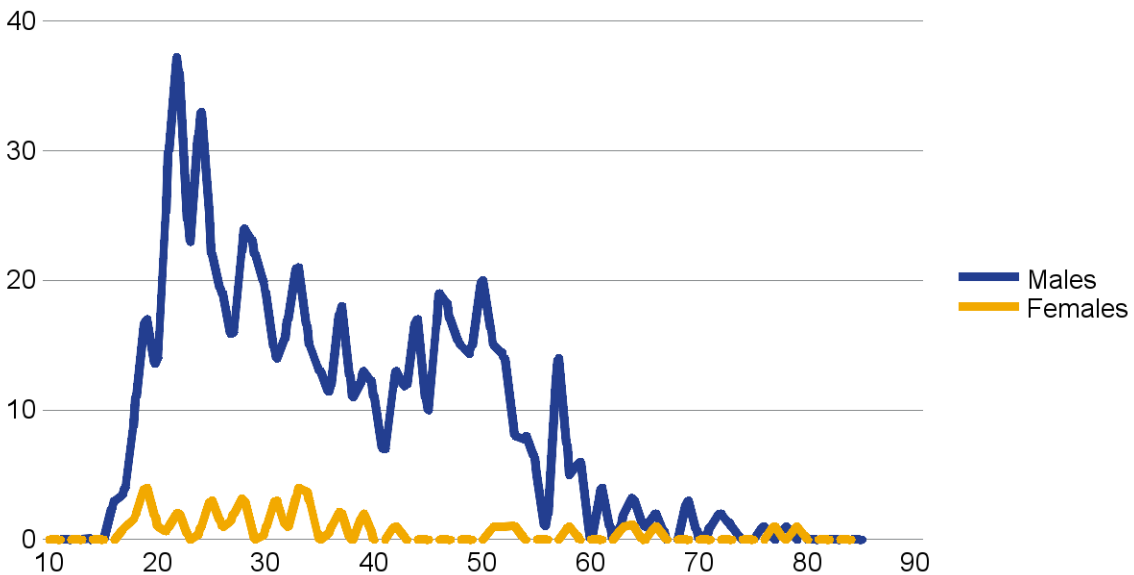


Figure C27 – Early Syphilis Incidence Rate per 100,000 by County, 2014

- New York City boroughs had the highest rates of early syphilis in 2014.
- Counties around New York City (Westchester, Nassau, Suffolk) and major urban upstate counties (e.g. Erie, Monroe, Onondaga, and Albany) had reported case rates exceeding 10 cases per 100,000 population.
- In counties with relatively small populations, such as Greene, Montgomery, Livingston, and Cortland, the syphilis case rate was high even though the actual number of reported cases of early syphilis was low.

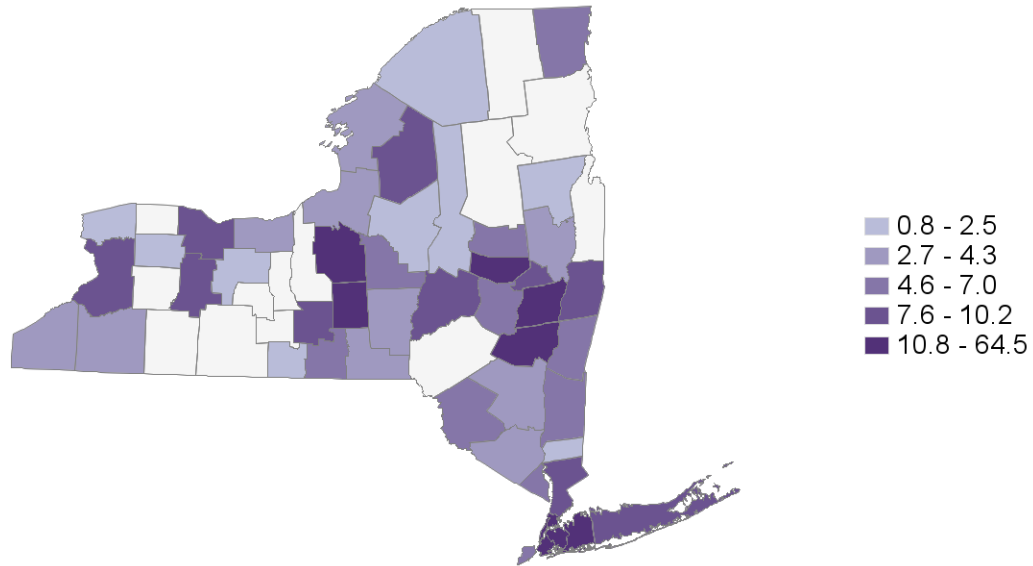


Figure C28 – Early Syphilis Incidence Rate per 100,000 Men by Race and Year, 2001-2014

- In 2014, Black not-Hispanics had the highest rate of syphilis with 95 cases per 100,000 population, continuing a trend observed over the last decade.
- In 2014, the next highest rates were seen among Hispanic and Native American males with each having a rate of 55 cases per 100,000 population.

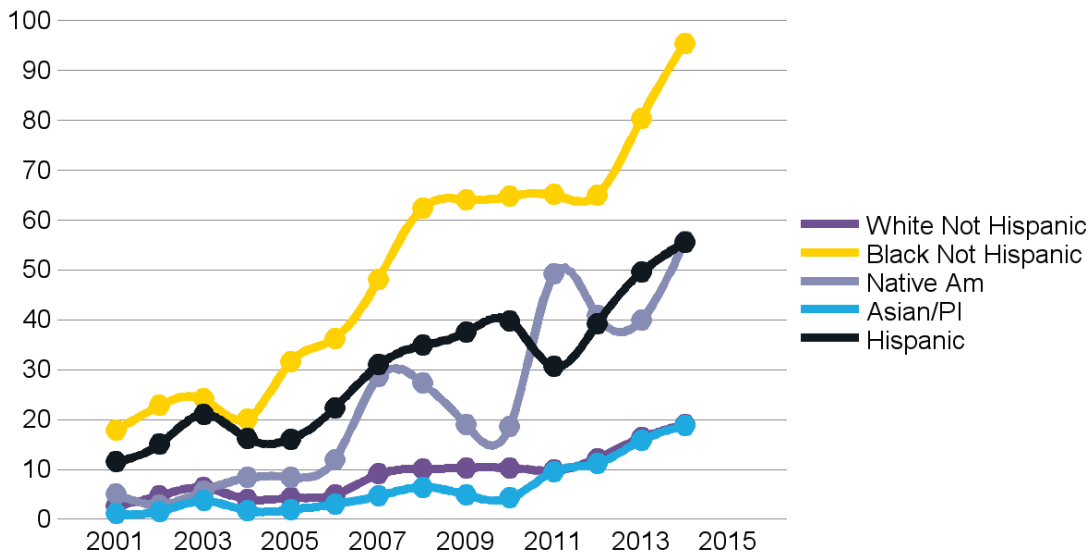


Figure C29 – Early Syphilis Incidence Rate per 100,000 Men by Age and Year, 2001-2014

- Over time, the age distribution of syphilis among men has changed.
- In the early 2000s, rates were highest among men 35-39 years of age.
- Since 2010, the burden has shifted to men 25-29 and 30-34 years of age.
- Increasing rates of infection in men 20-24 years of age is a concern.

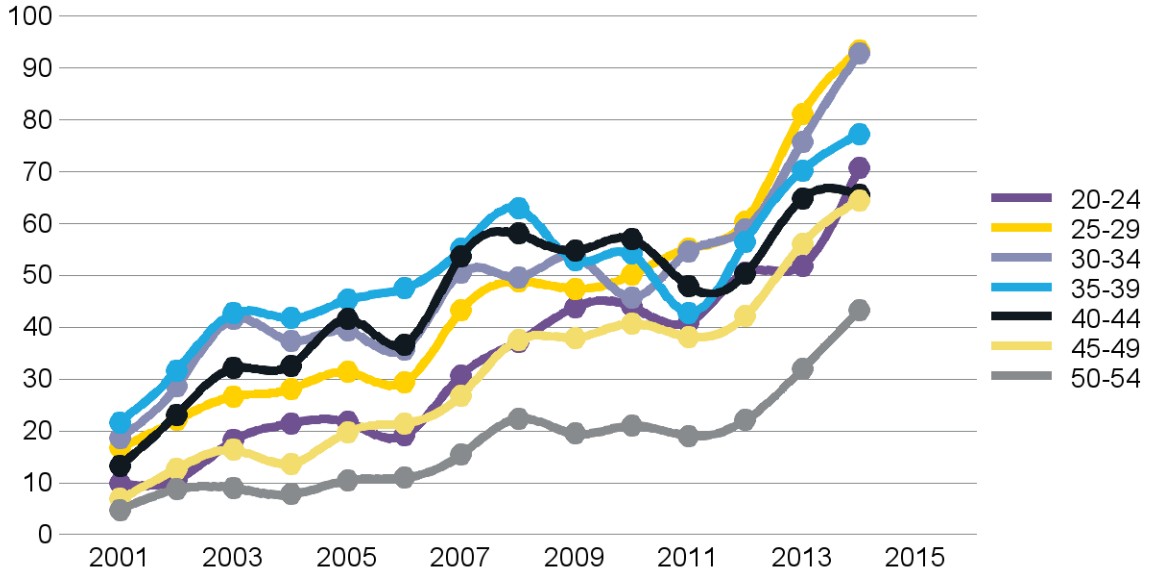


Figure C30 – Early Syphilis Incidence Rate per 100,000 Men by Race and Age, 2014

- In 2014, rates of early syphilis were highest among Black not-Hispanic and White not-Hispanic men 30-34 years of age, whereas among Hispanics rates were highest among men 25-29 years of age.

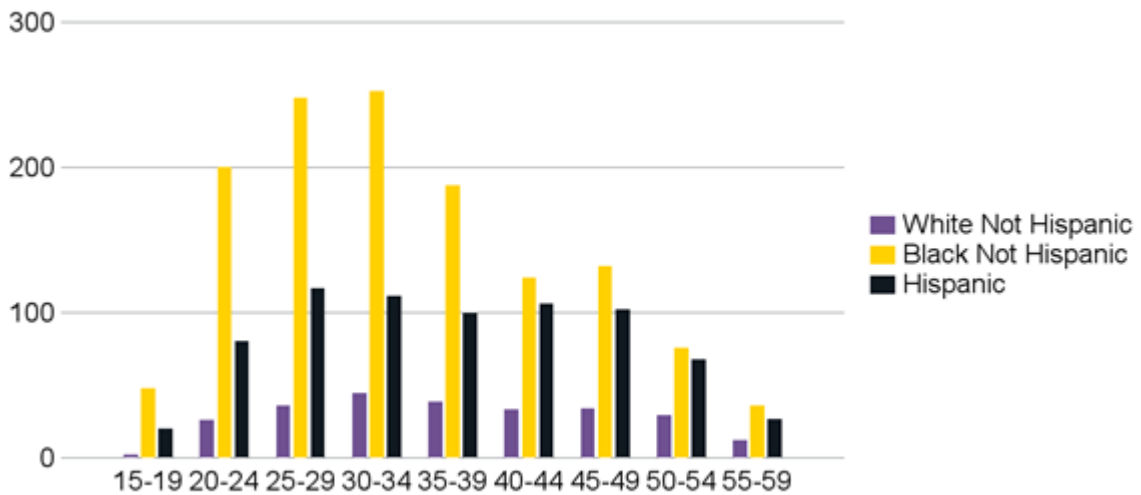


Figure C31 – Percent Distribution of Gender of Sex Partners Identified by Men with Early Syphilis 2014

- In 2014, males accounted for nearly 95% of early syphilis cases and among male cases, the highest proportion was reported among MSM, accounting for 76%.

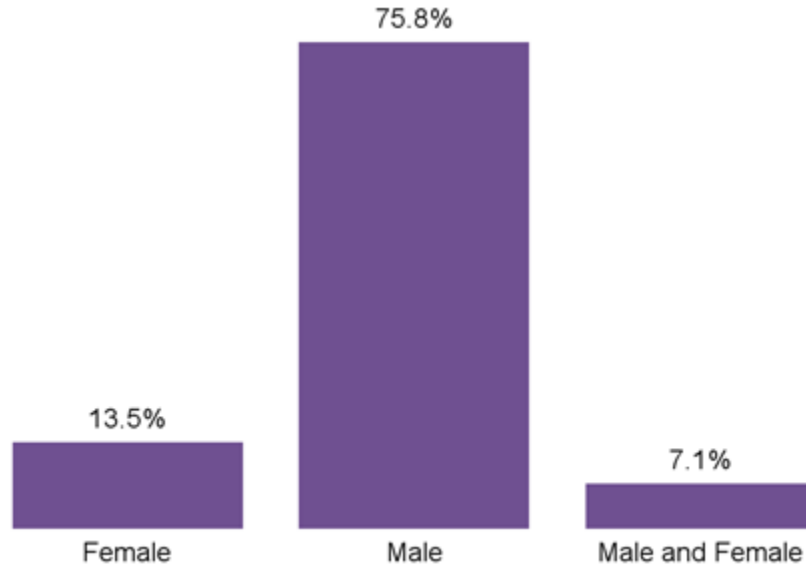


Figure C32 – Ratio of Male to Female Early Syphilis Infections by Year, 2001-2014

- The ratio of male to female cases of early syphilis has steadily increased since 2001, with nearly 18 male cases for every female case reported in 2014.

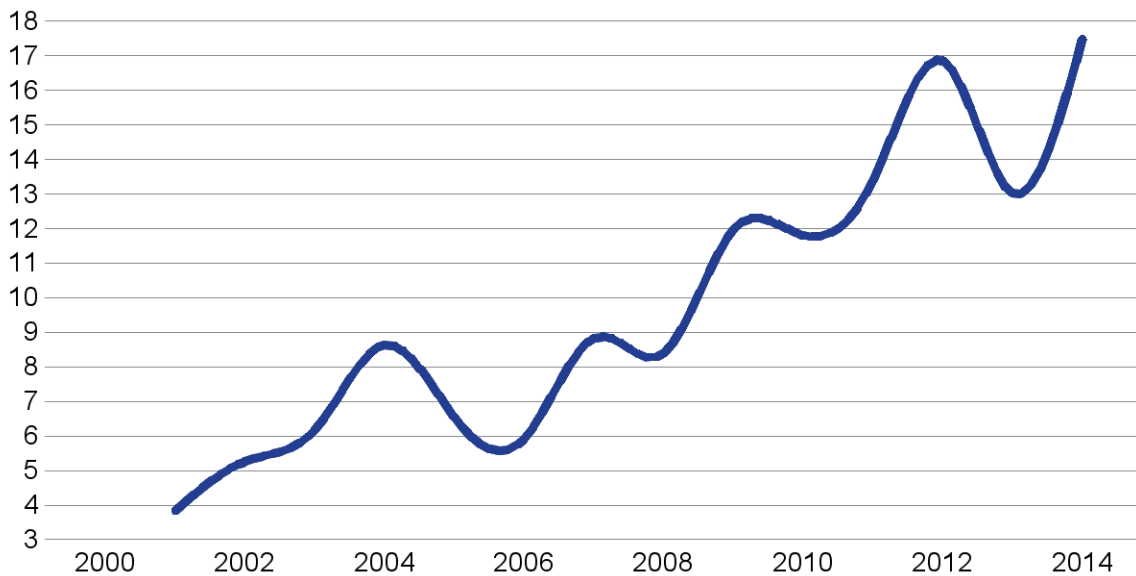


Figure C33 – Female Primary and Secondary Syphilis Infections and Congenital Syphilis Cases by Year, 2005-2014

- The number of congenital syphilis cases increased 155% in 2014 from 9 cases reported in 2012 to 23 cases reported in 2014.
- Congenital syphilis is a preventable infection which results from untreated maternal infection in pregnancy.
- Congenital syphilis prevention relies on screening the mother early in pregnancy and if infected, treating with penicillin therapy started at least 30 days before delivery.

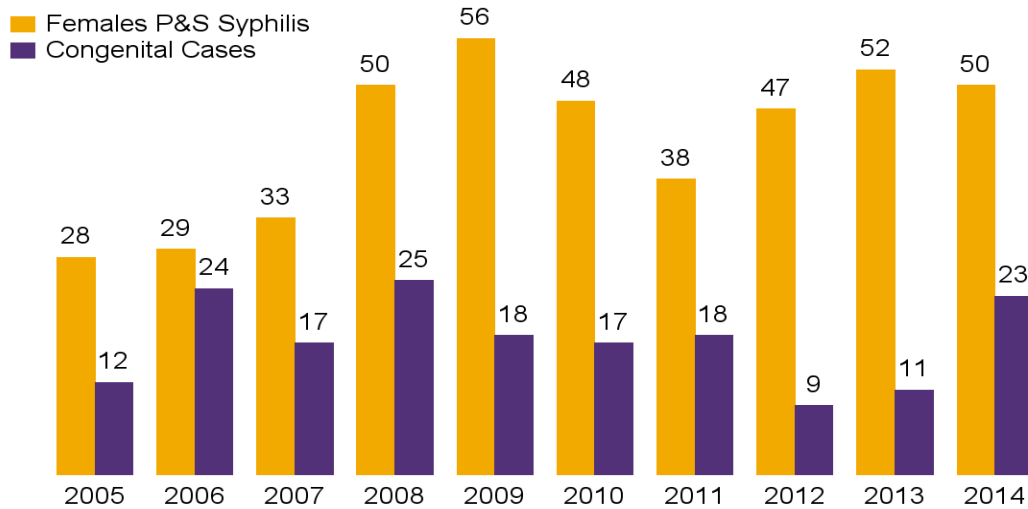


Figure C34 – Gonorrhea Incidence Rate per 100,000 by Gender and Year, 2001-2014

- Trends in gonorrhea by gender have varied over time with rates among females exceeding those among males, until 2006 when this trend reversed.
- In 2014, the male case rate of 138 cases per 100,000 population was nearly two times higher than the rate among females (73.6 cases per 100,000 population).

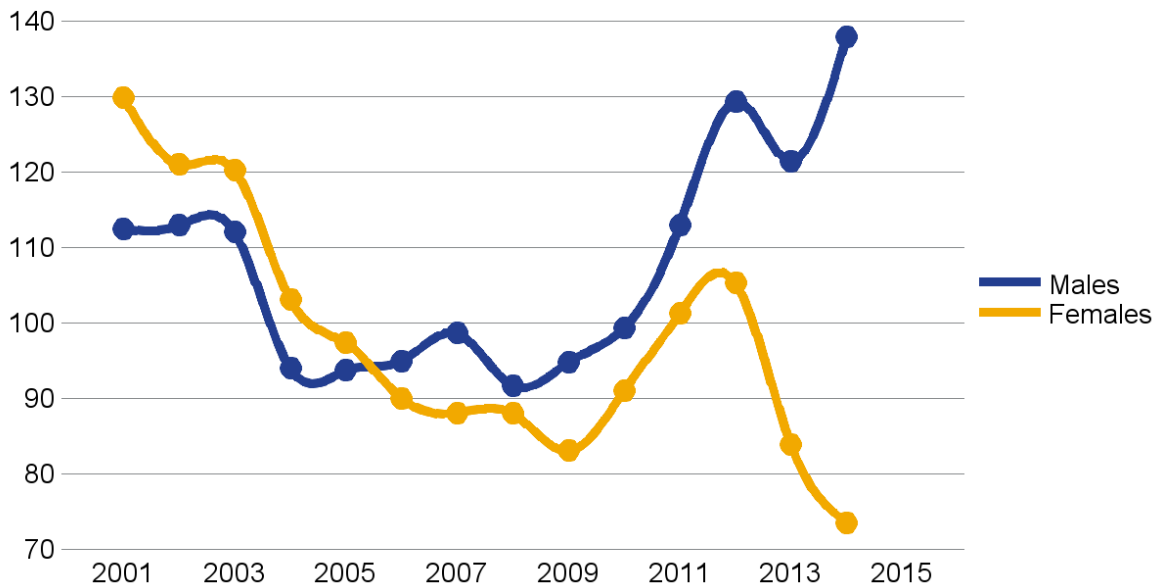


Figure C35 – Gonorrhea Incidence Rate per 100,000 by Race and Gender, 2014

- In 2014, the greatest burden of gonococcal infection was seen among Black not-Hispanic men and women.
- Among Black not-Hispanic males and females, the rate of gonorrhea was 7 and 11 times higher respectively compared to Whites.

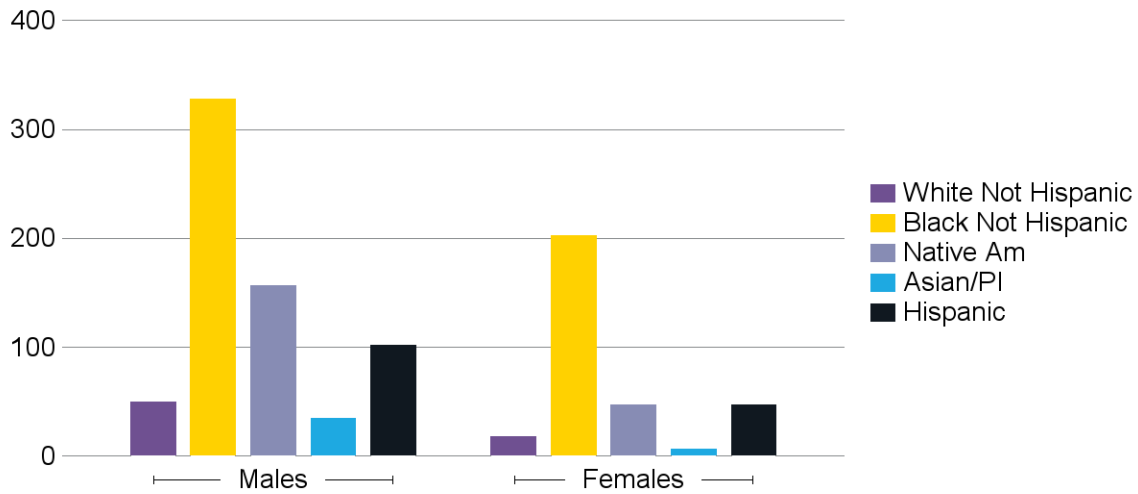


Figure C36 – Gonorrhea Cases by Gender and Age, 2014

- The burden of gonorrhea was highest among young people.
- In 2014, the highest rates of gonorrhea were seen among males 20-24 years of age and females 15-19 years of age, accounting for 26% of male cases and 30% of female cases overall.

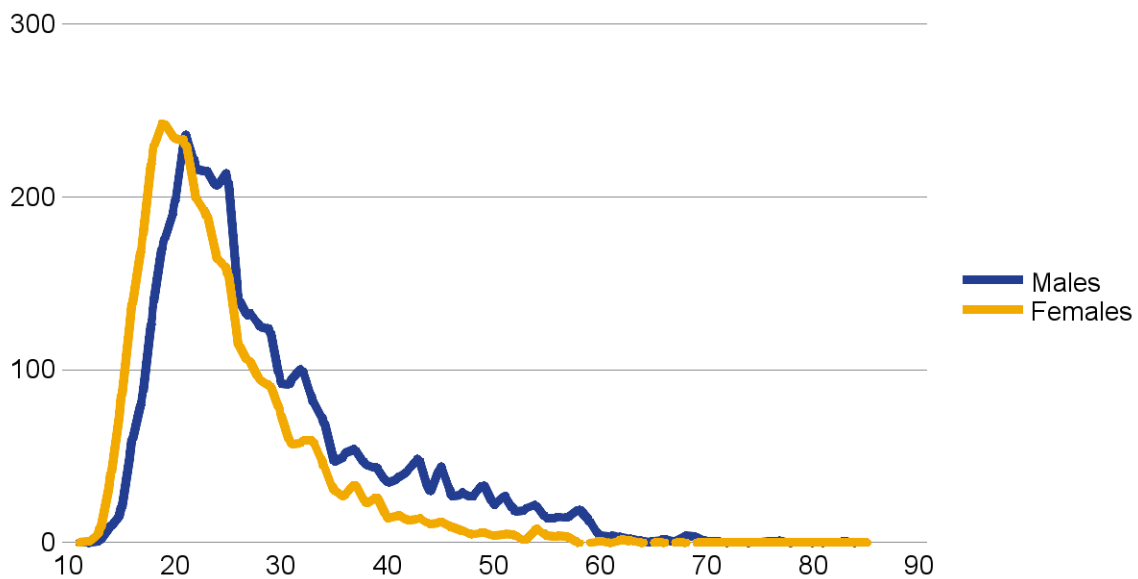


Figure C37 – Gonorrhea Incidence Rate per 100,000 by County, 2014

- In 2014, the highest case rates of gonorrhea (54 to 245 cases per 100,000) were seen in Erie, Niagara, Monroe, Onondaga, Albany, Rensselaer, Schenectady, Orange, and Westchester counties, and the five boroughs of New York City.

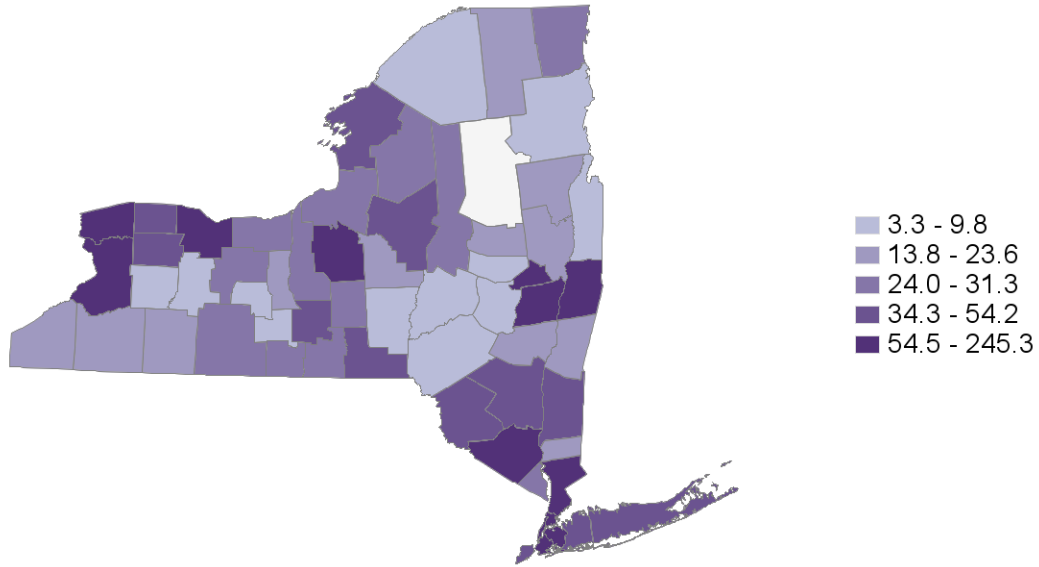


Figure C38 – Chlamydia Incidence Rate per 100,000 by Gender and Year, 2001-2014

- Since Chlamydia became reportable in 2000, it has been the number one reportable communicable disease in New York State.
- The 98,200 cases of Chlamydia reported in 2014 represented a 2% increase over 2013.
- Trends in reported Chlamydia cases by gender demonstrate that cases have consistently been higher among females than males. This difference is primarily attributed to federal screening recommendations which target screening to women under age 25.

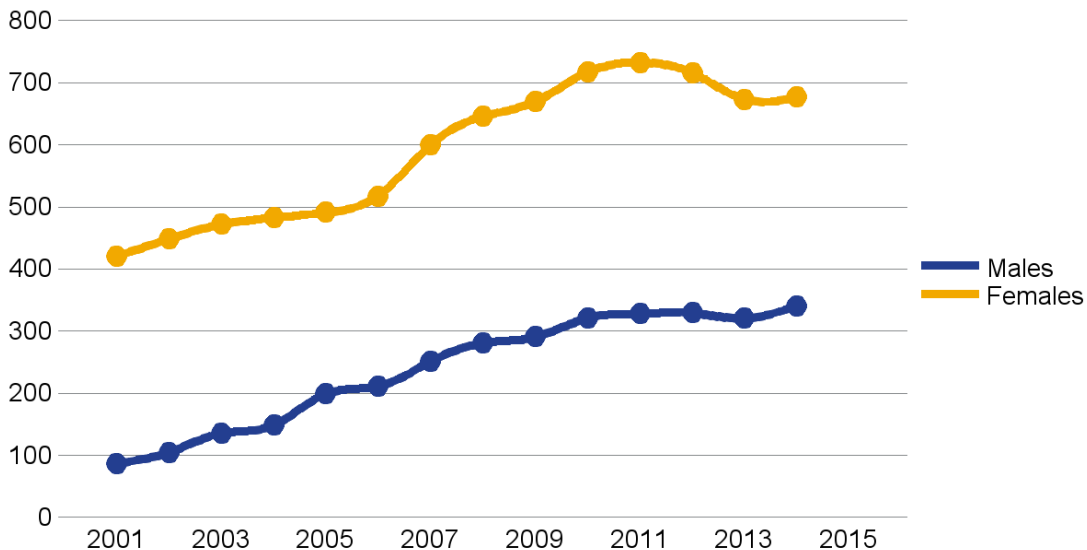


Figure C39 – Chlamydia Incidence Rate per 100,000 by Race and Gender, 2014

- In 2014, the burden of Chlamydia was highest among Black not-Hispanic regardless of gender.
- By gender, the rate of Chlamydia infection among Black-Hispanic males and females was six and five times higher, respectively, than their White counterparts.

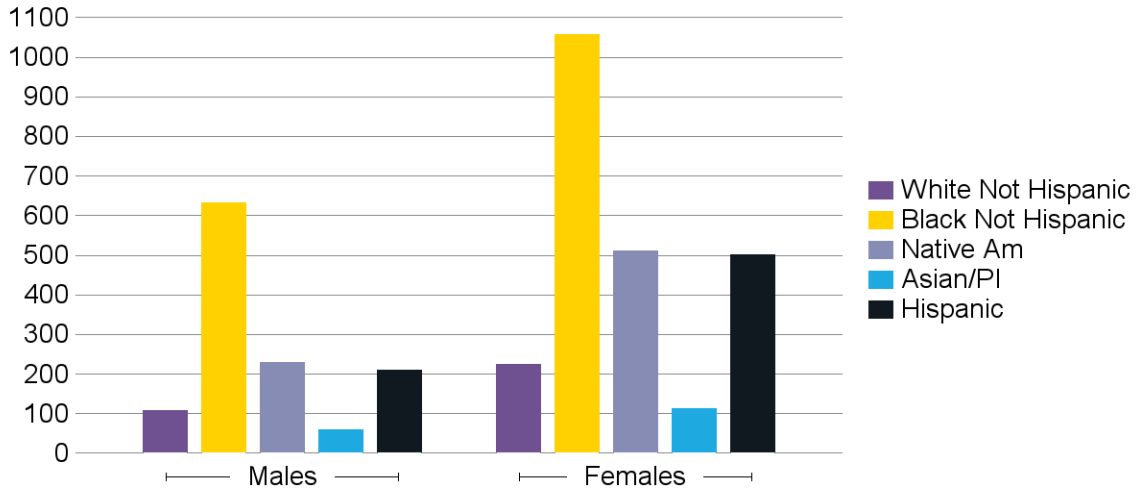


Figure C40 – Chlamydia Cases by Gender and Age, 2014

- In 2014, the majority of Chlamydia diagnoses were among persons 20-24 years of age, with 33% of male cases and 37% of female cases reported in this five year age group.

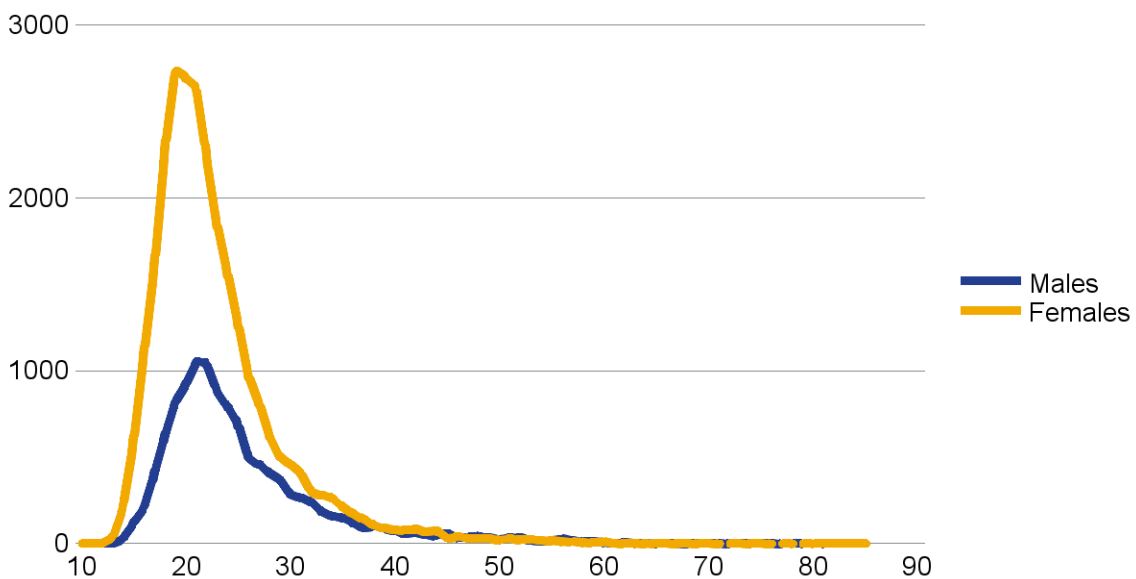
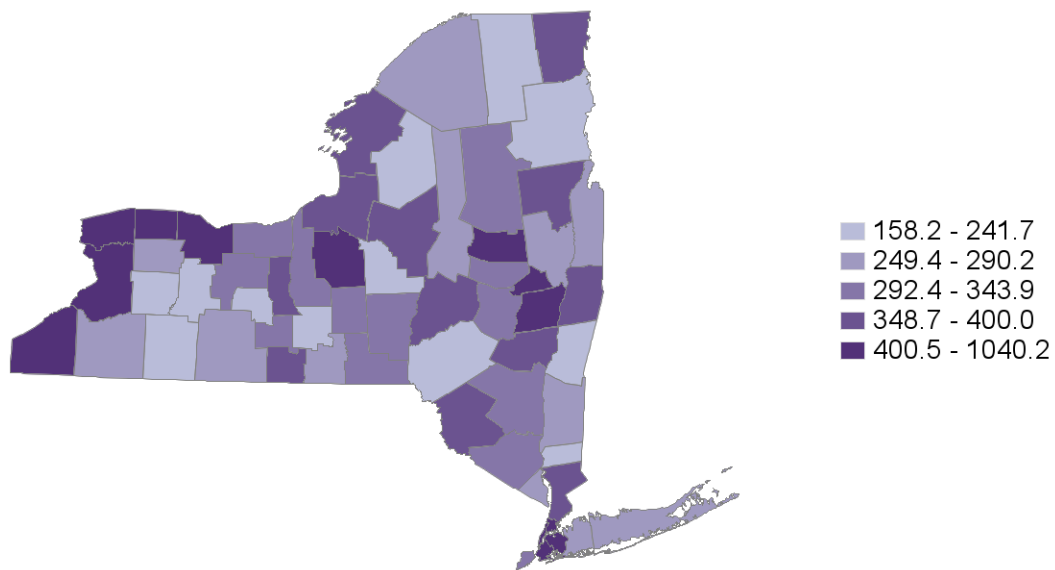


Figure C41 – Chlamydia Incidence Rate per 100,000 by County, 2014

- The distribution of Chlamydia across New York by county shows high incidence of Chlamydia statewide.
- In 2014, the highest rates occurred in the Western region of New York, Onondaga, Fulton, Schenectady, Albany, and Essex counties, and in the New York City boroughs of Bronx, Brooklyn, Manhattan and Queens. In each of these areas, the case rate exceeded 400 cases per 100,000 population.



Hepatitis C

Hepatitis C virus (HCV) infection is the most common chronic blood-borne infection in the US.² It is also the leading cause of liver transplants and the causative agent in 40% of chronic liver disease cases.¹⁻⁶ According to analyses of National Health and Nutrition Examination Survey (NHANES) data, an estimated 3.6 million people in the US have been infected with HCV, and 2.7 million individuals are chronically infected.⁸ An estimated 45-85% of people living with HCV infection do not know they are infected.⁸⁻¹¹

CDC estimates that three out of four persons infected with HCV were born between 1945 and 1965.¹³ The most common risk factor for acquiring HCV infection is injection drug use, with HCV infection prevalence estimates among persons who inject drugs ranging between 40 and 90%.¹⁴ Some states, including NYS, have reported an increase in acute hepatitis C among young people under 30 years of age who inject drugs and live in non-urban areas.¹⁵

Nationally, hepatitis C mortality rates have been rising for at least the last decade and, in 2013, the number of hepatitis C-related deaths exceeded that of the combined total of 60 other nationally notifiable infectious diseases, including HIV, tuberculosis, and pneumococcal disease.^{4-6;16} The annual cost of hepatitis C was estimated to be \$7 billion in 2010 and reached \$18 billion in 2015.¹⁷ However, with the approval of direct-acting antiviral therapies, hepatitis C is now a curable condition for most who are diagnosed and treated.

Hepatitis C surveillance data may reflect the extent of disease less completely than the surveillance systems already described for HIV and STDs. All of these surveillance systems reflect only diagnosed infections, and studies in select populations have shown that HCV testing rates are low, even among traditionally higher risk populations.^{7-8;11;18-18} In NYS, the percent of residents ever infected with HCV is thought to exceed national estimates and hepatitis C-related morbidity and mortality are expected to rise for the next several years.¹⁹⁻²⁰

To increase the number of people who are aware of their hepatitis C status and to promote the appropriate treatment of a population with a disproportionately high level of HCV infection and disease, CDC released “Recommendations for the Identification of Chronic Hepatitis C Virus Infection Among Persons Born During 1945-1965,” in August, 2012.¹² On October 23, 2013, Governor Andrew Cuomo signed the nation’s first state-level HCV testing law. This law requires the one-time offer of an HCV screening test to all persons born between 1945 and 1965 receiving services as an inpatient of a hospital or in a primary care setting. The law went into effect in January 2014.

The following section summarizes trends in reported confirmed acute and chronic/resolved hepatitis C cases in NYS, including NYC, from 2001 through 2014. Additional analyses are presented for selected years and regions. The data presented reflect only reported cases and are not intended to represent incidence (all new infections) or prevalence (all persons currently infected with HCV).

Hepatitis C Data Definitions

The Hepatitis C section includes data collected both by the NYS Department of Health (NYSDOH), Bureau of Communicable Disease Control (for the 57 counties outside of NYC) and the NYC Department of Health and Mental Hygiene (NYCDOHMH), Division of Disease Control, Bureau of Communicable Diseases (for the five boroughs of NYC). For more information on the

surveillance activities of each department, please refer to their respective annual surveillance reports available for download at <http://www.health.ny.gov/diseases/communicable/hepatitis/surveillance.htm> and <http://hepfree.nyc/nyc-health-dept-hep-b-c-annual-report-2014>.

Case Reporting

All clinical laboratories that perform testing on New York residents are required to electronically report any positive hepatitis C test results, along with demographic and other information. Additionally, physicians, hospitals, and other healthcare entities are required to report cases; such reporting is less common.

Case Definitions

Two forms of hepatitis C are defined: acute and past or present (chronic). Reported cases of past or present hepatitis C, referred to here as chronic/resolved, are confirmed based upon laboratory testing results using the CDC/Council of State and Territorial Epidemiologists (CSTE) case definition. Cases that can be classified as acute (below) are excluded from the chronic/resolved classification.

Cases of acute hepatitis C are confirmed based upon clinical symptoms and laboratory testing results using the CDC/CSTE case definition.

Case definitions are periodically modified and applied prospectively to reflect current diagnostic techniques and knowledge. Changes in case definitions are not applied retrospectively to previously reported cases. The definitions that were in effect in 2014, when the most recent data presented in this report were collected, can be seen at <https://wwwn.cdc.gov/nndss/conditions/hepatitis-c-chronic/case-definition/2012> and <https://wwwn.cdc.gov/nndss/conditions/hepatitis-c-acute/case-definition/2012>.

For more information on case definitions, please see the surveillance reports referenced above.

Case Year

The case year presented is the year in which the local health department or laboratories reported the case to the NYSDOH or the NYCDOHMH.

Case Rates

Population counts from the 2010 US Census are used as the denominator for overall case rates per 100,000 and rates by geographic area, and gender. Case rates by age category use 2010 population estimates from the “Annual Estimates of the Civilian Population by Single Year of Age and Sex for the United States and States: April 1, 2010 to July 1, 2014,” available online at <https://www.census.gov/popest/data/state/asrh/2014/SC-EST2014-AGESEX-CIV.html>.

Cases Over Time

The number of cases in a given time period is dynamic and should be interpreted with caution. Unconfirmed cases may be retrospectively updated to confirmed cases as new information becomes available. Therefore, the data presented here may be not be the same as data presented in past or future years; thus, making conclusions regarding trends is difficult for more recent years. The data presented reflects newly reported cases and, except for acute cases, does not represent new infections or information on all persons currently infected.

Incarcerated Persons

This report includes cases in incarcerated individuals. Incarcerated persons are generally counted within the region in which they are incarcerated. The surveillance reports referenced above contain additional information regarding reporting of cases in incarcerated persons.

Age

Age is calculated using case year and date of birth.

Race/Ethnicity

Race/ethnicity is not a required data element for hepatitis C case reporting, and given that most laboratories do not have this information, data are incomplete. Due to the high percentage of individuals with missing information on race/ethnicity, national level data within the racial/ethnic distribution provided from NHANES are the best available data to demonstrate any racial/ethnic disparities. This should be interpreted with caution as NHANES sampling is restricted to non-institutionalized civilian populations only and therefore may underestimate the prevalence, and additionally may not accurately reflect the prevalence within similar racial/ethnic groups in NYS.

Estimates from NHANES suggest that the risk of chronic HCV infection was nationally significantly higher among non-Hispanic Blacks than other racial/ethnic groups during the years 2003-2010.⁷

Additional Information

For further information on surveillance and reporting of hepatitis C, contact the NYSDOH Bureau of Communicable Disease Control, at 518-473-4439. For further information on the data presented here, contact the NYSDOH AIDS Institute, Bureau of Hepatitis Health Care, at 518-486-6806. For information about data pertaining to hepatitis C in NYC, contact Angelica Bocour, MPH, NYCDOHMH, Viral Hepatitis Program, 347-396-7614.

Figure C42 – Confirmed, Chronic/Resolved Hepatitis C Cases Reported by Year: NYS, 2001-2014

- This figure shows the number of confirmed cases of chronic/resolved hepatitis C cases reported in NYS, including NYC, from 2001 through 2014.
- In 2012, CDC issued a report recommending a one-time screening test for hepatitis C for anyone born 1945-1965. In 2014, NYS mandated that patients in this birth cohort who receive inpatient hospital care or primary care be offered a hepatitis C screening test.
- Coinciding with this change, an increase in reported cases occurred in 2014, reversing the previous downward trend seen since 2006.
- Until 2014 there were more cases reported in NYC than ROS. That changed in 2014, when 51.2% of all reported cases were in residents of ROS.
- In 2014, the statewide case rate was 83.4 per 100,000. The rate was higher in NYC (94.1 per 100,000) than in ROS (75.7 per 100,000).

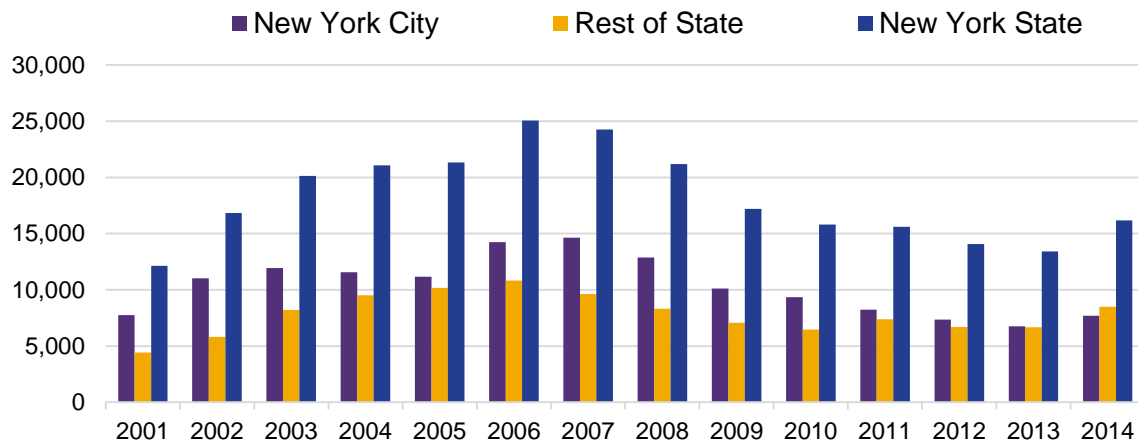
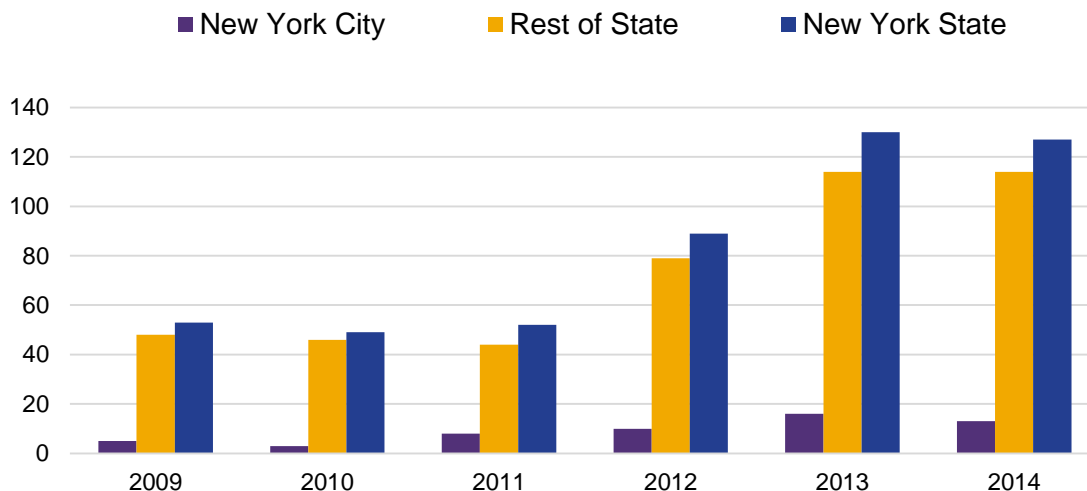


Figure C43 – Confirmed, Acute HCV Cases Reported by Year, NYS, 2009-2014

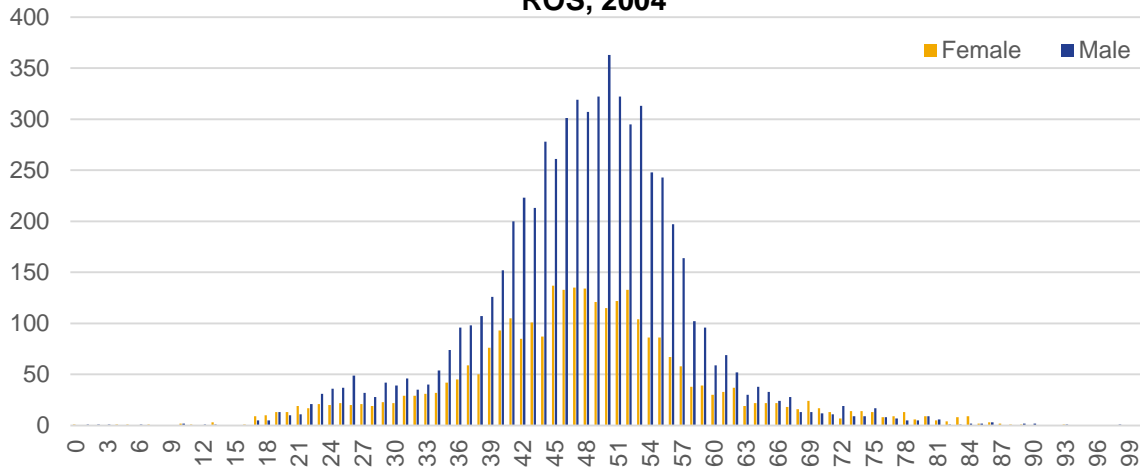
- This figure shows the number of confirmed, acute hepatitis C cases reported since 2009.
- Note that these cases included only symptomatic patients, per the CDC/CSTE case definition. Most acute hepatitis C infections are not accompanied by symptoms, and there is no test to identify acute infection, making diagnosis and discernment from chronic hepatitis C difficult. Therefore, it is assumed that the number of reported cases substantially underestimates the true number of acute hepatitis C infections.
- The higher number of confirmed, acute cases of hepatitis C in ROS, compared to NYC, is likely due to differences in surveillance practices. In ROS nearly all hepatitis C cases are investigated by local health departments, making it more likely acute cases will be identified. In NYC such cases are only identified if reported by a healthcare provider or as part of a healthcare associated infection investigation.



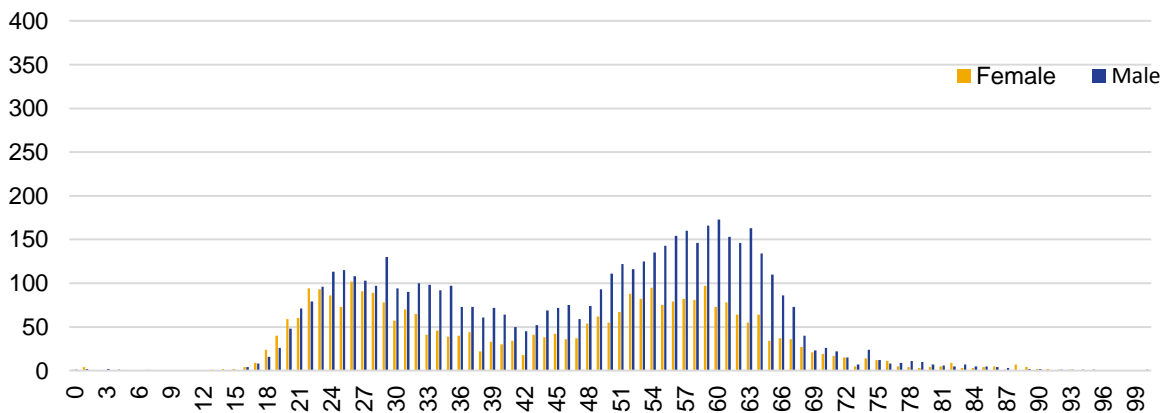
Figures C44 and C45 – Confirmed, Chronic/Resolved Hepatitis C by Age & Sex, ROS, 2004 and 2014

- The following figures show that the age distribution of confirmed, chronic/resolved hepatitis C cases reported to ROS has changed.
- In 2004, the peak of cases was in the 40 to 60 age group. 74% of all cases reported in ROS were in this age group, which approximates the 1945-1965 birth cohort targeted for testing in 2014.
- In 2014, there were two peaks of reported cases. The peak among the older age group (50-70 years of age) approximately reflects individuals in the 1945-1965 birth cohort and accounted for 45.1% of all reported cases. Since 2004, a second peak emerged in a younger age group. Thirty-eight percent of 2014 cases fell in this 20-40 year age group.
- There has also been a shift in the distribution of cases by sex. In 2004, females accounted for 31.9% of the cases. This proportion increased to 38.2% in 2014. In the 22 and under age group, females outnumber males. In 2014, females represented 53.8% of all cases aged 22 and under with 301 cases, compared to 258 among males.

**Confirmed, Chronic/Resolved Hepatitis C by Age & Sex
ROS, 2004**



**Confirmed, Chronic/Resolved Hepatitis C by Age & Sex
ROS, 2014**

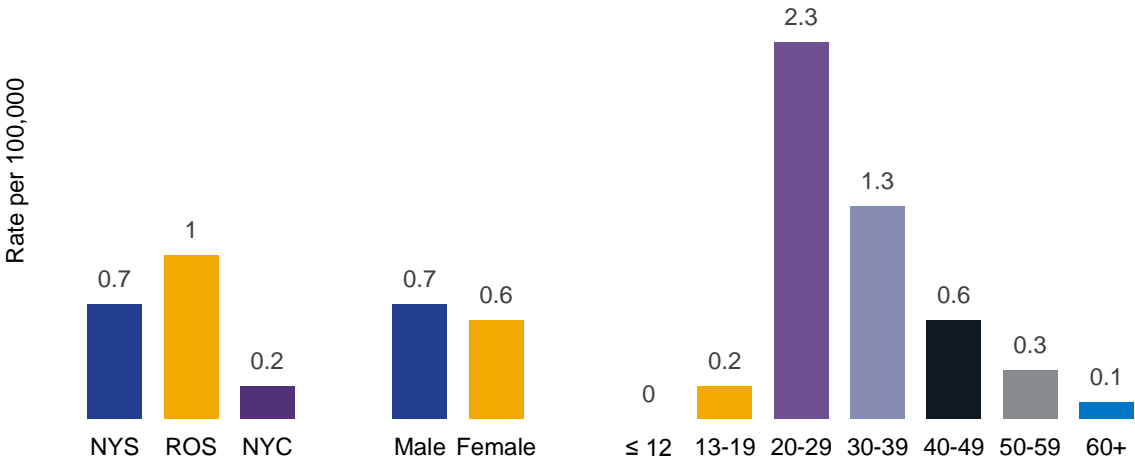


**Figures C46 and C47 – Confirmed, Acute and Chronic/Resolved Hepatitis C, NYS, 2013 – 2014
Average Rates**

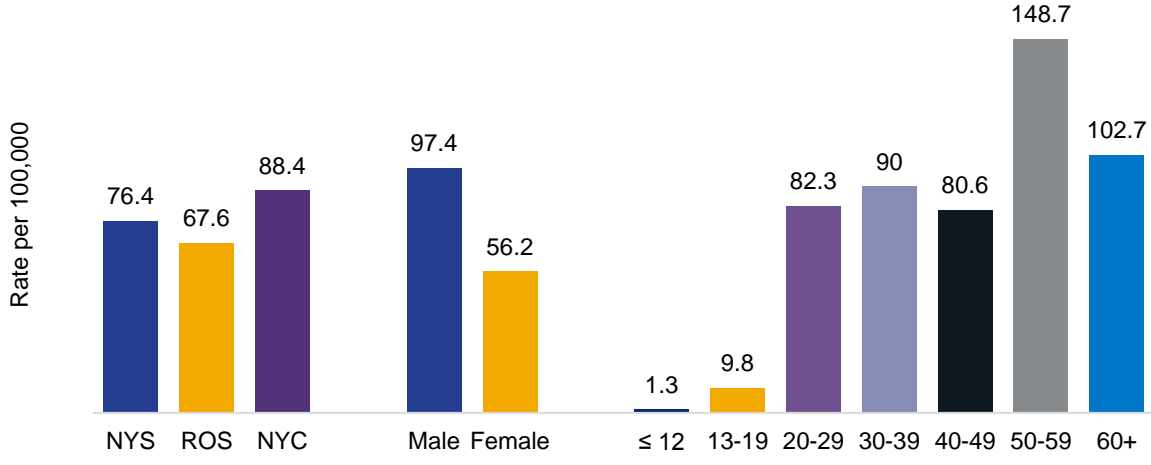
**Tables C48 and C49 – Characteristics of Confirmed, Acute & Chronic/Resolved Hepatitis C Cases,
NYS 2013 – 2014**

- Figures C46 and C47 display the average rates of newly reported cases of confirmed acute and chronic/resolved hepatitis C in NYS in 2013 and 2014. Tables C48 and C49 present a breakdown of demographics and risk factors for reported cases of confirmed, acute and chronic/resolved hepatitis C.
- Statewide, the average case rate per 100,000 for 2013-2014 was 0.7 for acute hepatitis C and 76.4 for chronic/resolved hepatitis C.
- While cases of acute hepatitis C were relatively equally distributed by sex, 61.7% of confirmed chronic/resolved cases of hepatitis C were among males. The average 2013-2014 case rate of chronic/resolved hepatitis C per 100,000 population was 97.4 for males and 56.2 for females.
- Average rates of acute hepatitis C were highest among those aged 20-29 years (2.3 per 100,000). Statewide, almost half (49.2%) of reported cases of confirmed, acute hepatitis C were in persons aged 20-29 years. Reported cases of confirmed, chronic/resolved hepatitis C tended to be among older persons, with 52.3% being at least 50 years of age.
- Average rates of confirmed chronic/resolved hepatitis C per 100,000 population in 2013-2014 were highest in the oldest age groups. Rates by age group were: 12 and under=1.3, 13-19 years=9.8, 20-29 years=82.3, 30-39 years=90.0, 40-49 years=80.6, 50-59 years=148.7, 60+ years=102.7. In 2013-2014, confirmed, chronic/resolved hepatitis C cases in ROS were on average younger than those from NYC. In ROS, 22.6% of cases occurred in persons younger than 30 years of age, compared to 11.1% in NYC. At the same time, 30.0% of cases in NYC were among persons aged 60+ compared to 21.4% of cases from ROS.
- Hepatitis C is of special concern for women of childbearing age because of the risk of perinatal transmission and because hepatitis C treatments are contraindicated for pregnant women due to the medication's teratogenic impact on the fetus. Among women, 89.1% of acute cases of hepatitis C and 48.4% of cases of chronic/resolved hepatitis C were in women aged 15-44 years.
- Information on reasons for testing and risk factors are not commonly available for NYC cases, but are more frequently available for cases reported in ROS. Among acute cases reported in ROS, symptoms of hepatitis (74.1%) and evaluation of elevated liver enzymes (47.8%) were the most common reasons for initiating testing. This percent increases to 76.8% if the 3.5% of acute cases missing information on the reason for testing are excluded. Among reported chronic/resolved cases, the most commonly reported reason for testing (22.1%) was that a patient, although asymptomatic, had risk factors for hepatitis C. This percent increases to 38.1% if the 42.1% of chronic/resolved cases missing information on the reason for testing are excluded.
- Recent injection drug use was the predominant risk factor reported among cases of acute hepatitis C (65.8%), while lifetime history of injection drug use was a major risk factor among cases of chronic/resolved hepatitis C (23.1%). When excluding cases with missing or other information, the proportion of patients with reported injection drug use was 77.3% for acute cases and 54.3% for chronic/resolved cases.

**Confirmed, Acute Hepatitis C
NYS, 2013-14 Average Rates**



**Confirmed, Chronic/Resolved Hepatitis C
NYS, 2013-14 Average Rates**



Characteristics of Confirmed Acute and Chronic/Resolved Hepatitis Cases, NYS, 2013-2014				
	Acute		Chronic/Resolved	
	#	%	#	%
New York State Total	258		29,593	
Rest of State, Excluding New York City (ROS)	228	88.4	15,142	51.2
Capital District Region	42	16.3	1,840	6.2
Central Region	77	29.8	2,407	8.1
Metropolitan Region	46	17.8	6,847	23.1
Western Region	63	24.4	4,048	13.7
New York City	30	11.6	14,451	48.8
Gender	258		29,593	
Male	134	51.9	18,269	61.7
Female	124	48.1	11,234	38.0
Transgender ¹	0	0.0	1	0.0
Unknown	0	0.0	89	0.3
Age	258		29,593	
12 and under	0	0.0	82	0.3
13-19	8	3.1	364	1.2
20-29	127	49.2	4,574	15.5
30-39	65	25.2	4,548	15.4
40-49	34	13.2	4,531	15.3
50-59	18	7.0	7,900	26.7
60 and over	6	2.3	7,567	25.6
Unknown	0	0.0	27	0.1
¹ Information on transgender individuals was not collected in ROS.				
2016. NYC acute hepatitis C data from MMWR: Summary of Notifiable Infectious Diseases (http://www.cdc.gov/mmwr/mmwr_nd/) and (https://www.health.ny.gov/statistics/diseases/communicable/index.htm). NYC chronic/resolved hepatitis C data from NYCDOHMH, Bureau of Communicable Disease, Viral Hepatitis Program. Data frozen June 30, 2015, and generated Mar. 14, 2016.				

Characteristics of Confirmed Acute and Chronic/Resolved Hepatitis Cases, ROS, 2013-2014				
	Acute		Chronic/Resolved	
	#	%	#	%
Race	228		15,142	
White	185	81.1	7,324	48.4
Black	9	3.9	1,499	9.9
Asian/Pacific Islander	0	0.0	171	1.1
American Indian/Alaskan Native	2	0.9	70	0.5
Other/Multiple Races	12	5.3	524	3.5
Unknown	20	8.8	5,554	36.7
Ethnicity	228		15,142	
Hispanic	20	8.8	1,044	6.9
Non-Hispanic	156	68.4	5,485	36.2
Unknown	52	22.8	8,613	56.9
Year of Birth	228		15,142	
1900-1944	2	0.9	708	4.7
1945-1965	17	7.5	7,068	46.7
1966-1983	87	38.2	3,913	25.8
1984-2014	122	53.5	3,426	22.6
Unknown	0	0.0	27	0.2
Reason for Testing (all that apply)	228		15,142	
Symptoms of hepatitis	169	74.1	199	1.3
Asymptomatic, with reported risk factors	22	9.6	3,342	22.1
Asymptomatic, with no reported risk factors	0	0.0	579	3.8
History of hepatitis C ¹	NA	NA	2,101	13.9
Evaluation of elevated liver enzymes	109	47.8	1,812	12.0
Blood/organ donor screening	0	0.0	102	0.7
Age-based (born 1945-65) recommended by CDC in 2013	0	0.0	608	4.0
Other	24	10.5	1,933	12.8
None stated	8	3.5	6,371	42.1
Risk Factors (all that apply)²	228		15,142	
Injected drugs	150	65.8	3,505	23.1
Ever incarcerated	47	20.6	3,413	22.5
Close contact of person with hepatitis C	89	39.0	2,047	13.5
Healthcare exposure	49	21.5	731	4.8
Occupational exposure	9	3.9	397	2.6
Other or unknown	34	14.9	8,683	57.3
¹ Information on patients' history of hepatitis C was not collected for acute cases.				
² Risks related to injection drug use, incarceration, and occupational exposure applied to the 2 weeks to 6 months prior to the onset of symptoms for acute cases and lifetime history for chronic/resolved cases. Healthcare exposure included risks experienced either as a patient or employee. Information on healthcare exposures due to blood transfusions and organ transplants prior to 1992 and receipt of blood clotting factor concentrate prior to 1987 was collected for chronic/resolved cases, while information on these and other medical procedures was collected only for the period 2 weeks to 6 months prior to the onset of symptoms for acute cases.				
2016. NYC acute hepatitis C data from MMWR: Summary of Notifiable Infectious Diseases (http://www.cdc.gov/mmwr/mmwr_nd/) and (https://www.health.ny.gov/statistics/diseases/communicable/index.htm). NYC chronic/resolved hepatitis C data from NYCDOHMH, Bureau of Communicable Disease, Viral Hepatitis Program. Data frozen June 30, 2015, and generated Mar. 14, 2016.				

Appendix 1. Regional Scope of HIV Burden in NYS

The tables in this appendix provide a description of HIV burden among New York State's Ryan White regions.

Table D1 – Newly Diagnosed HIV Cases by Region of Residence at Diagnosis, 2004-2014

Year of Diagnosis	Region of Residence at Diagnosis		
	NYS	NYC	ROS
2004	5,139	4,070	1,069
2005	5,172	4,178	994
2006	4,876	3,918	958
2007	4,766	3,852	914
2008	4,634	3,678	956
2009	4,574	3,633	941
2010	4,173	3,231	942
2011	3,994	3,064	930
2012	3,707	2,869	838
2013	3,410	2,595	815
2014	3,434	2,568	866

Table D2 – Newly Diagnosed HIV Cases by Ryan White Region of Residence at Diagnosis, 2004-2014

Ryan White Region of Residence at Diagnosis								
Year of Diagnosis	Albany	Binghamton	Buffalo	Lower Hudson	Mid-Hudson	Nassau-Suffolk	Rochester	Syracuse
2004	133	17	115	181	100	248	119	85
2005	93	23	119	149	101	237	105	83
2006	87	18	121	183	92	218	102	70
2007	93	14	124	148	65	225	117	64
2008	104	13	112	153	67	253	113	81
2009	82	16	138	157	69	218	127	82
2010	91	12	135	159	63	229	101	85
2011	87	16	128	141	70	234	119	88
2012	84	13	111	133	52	219	96	93
2013	79	14	121	133	52	223	79	76
2014	72	13	115	152	56	250	78	96

Table D3 – Newly Diagnosed HIV Cases by Region of Residence at Diagnosis and Selected Characteristics, 2014

New HIV Diagnoses, 2014	NYS		NYC		ROS	
	N	%	N	%	N	%
Total	3,434	100.0%	2,568	100%	866	100%
Sex at Birth						
Male	2,699	78.6%	2,034	79.2%	665	76.8%
Female	735	21.4%	534	20.8%	201	23.2%
Race/Ethnicity						
White Not-Hispanic	713	20.8%	433	16.9%	280	32.3%
Black Not-Hispanic	1,373	40.0%	1,084	42.2%	289	33.4%
Hispanic	1,075	31.3%	846	32.9%	229	26.4%
Asian/Pacific Islander	111	3.2%	94	3.7%	17	2.0%
Multi-race	160	4.7%	109	4.2%	51	5.9%
Native American	2	0.1%	2	0.1%	0	--
Age at Diagnosis						
<13	7	0.2%	5	0.2%	2	0.2%
13-19	131	3.8%	98	3.8%	33	3.8%
20-24	544	15.8%	396	15.4%	148	17.1%
25-29	581	16.9%	448	17.4%	133	15.4%
30-39	899	26.2%	696	27.1%	203	23.4%
40-49	655	19.1%	486	18.9%	169	19.5%
50-59	435	12.7%	299	11.6%	136	15.7%
60+	182	5.3%	140	5.5%	42	4.8%
Transmission Risk						
Fem Pres Het Cont	432	12.6%	329	12.8%	103	11.9%
Heterosexual	428	12.5%	290	11.3%	138	15.9%
IDU	94	2.7%	50	1.9%	44	5.1%
MSM	1,957	57.0%	1,500	58.4%	457	52.8%
MSM/IDU	52	1.5%	36	1.4%	16	1.8%
Pediatric	7	0.2%	5	0.2%	2	0.2%
Unknown	464	13.5%	358	13.9%	106	12.2%

Table D4 – Newly Diagnosed HIV Cases by Ryan White Region of Residence at Diagnosis and Selected Characteristics, 2014

New HIV Diagnoses, 2014 (Excludes Prisoners)	Albany		Binghamton		Buffalo		Lower Hudson	
	N	%	N	%	N	%	N	%
Total	72	100%	13	100%	115	100%	152	100%
Sex at Birth								
Male	55	76.4%	8	61.5%	90	78.3%	111	73.0%
Female	17	23.6%	5	38.5%	25	21.7%	41	27.0%
Race/Ethnicity								
White Not-Hispanic	41	56.9%	6	46.2%	35	30.4%	32	21.1%
Black Not-Hispanic	13	18.1%	4	30.8%	48	41.7%	62	40.8%
Hispanic	12	16.7%	0	--	18	15.7%	47	30.9%
Asian/Pacific Islander	1	1.4%	0	--	7	6.1%	2	1.3%
Multi-race	5	6.9%	3	23.1%	7	6.1%	9	5.9%
Native American	0	--	0	--	0	--	0	--
Unknown	0	--	0	--	0	--	0	--
Age at Diagnosis								
<13	0	--	0	--	1	0.9%	0	--
13-19	2	2.8%	0	--	10	8.7%	4	2.6%
20-24	13	18.1%	2	15.4%	23	20.0%	18	11.8%
25-29	7	9.7%	2	15.4%	18	15.7%	26	17.1%
30-39	10	13.9%	3	23.1%	22	19.1%	43	28.3%
40-49	20	27.8%	3	23.1%	19	16.5%	31	20.4%
50-59	14	19.4%	1	7.7%	19	16.5%	19	12.5%
60+	6	8.3%	2	15.4%	3	2.6%	11	7.2%
Transmission Risk								
Blood Products	0	--	0	--	0	--	0	--
Fem Pres Het Cont	5	6.9%	2	15.4%	14	12.2%	25	16.4%
Heterosexual	14	19.4%	2	15.4%	10	8.7%	28	18.4%
IDU	7	9.7%	3	23.1%	7	6.1%	7	4.6%
MSM	38	52.8%	5	38.5%	74	64.3%	72	47.4%
MSM/IDU	2	2.8%	0	--	4	3.5%	1	0.7%
Pediatric	0	--	0	--	1	0.9%	0	--
Unknown	6	8.3%	1	7.7%	5	4.3%	19	12.5%

Table D4 – Newly Diagnosed HIV Cases by Ryan White Region of Residence at Diagnosis and Selected Characteristics, 2014

New HIV Diagnoses, 2014 (Excludes Prisoners)	Mid-Hudson`		Nassau/Suffolk		Rochester		Syracuse	
	N	%	N	%	N	%	N	%
Total	56	100%	250	100%	78	100%	96	100%
Sex at Birth								
Male	35	62.5%	197	78.8%	60	76.9%	79	82.3%
Female	21	37.5%	53	21.2%	18	23.1%	17	17.7%
Race/Ethnicity								
White Not-Hispanic	21	37.5%	63	25.2%	25	32.1%	51	53.1%
Black Not-Hispanic	19	33.9%	61	24.4%	35	44.9%	27	28.1%
Hispanic	8	14.3%	110	44.0%	15	19.2%	14	14.6%
Asian/Pacific Islander	1	1.8%	1	0.4%	2	2.6%	2	2.1%
Multi-race	7	12.5%	15	6.0%	1	1.3%	2	2.1%
Native American	0	--	0	--	0	--	0	--
Unknown	0	--	0	--	0	--	0	--
Age at Diagnosis								
<13	0	0.0%	0	0.0%	0	0.0%	1	1.0%
13-19	1	1.8%	9	3.6%	1	1.3%	5	5.2%
20-24	11	19.6%	44	17.6%	14	17.9%	16	16.7%
25-29	7	12.5%	36	14.4%	14	17.9%	16	16.7%
30-39	15	26.8%	55	22.0%	20	25.6%	26	27.1%
40-49	10	17.9%	50	20.0%	14	17.9%	16	16.7%
50-59	11	19.6%	42	16.8%	13	16.7%	13	13.5%
60+	1	1.8%	14	5.6%	2	2.6%	3	3.1%
Transmission Risk								
Blood Products	0	--	0	--	0	--	0	--
Fem Pres Het Cont	8	14.3%	35	14.0%	3	3.8%	10	10.4%
Heterosexual	19	33.9%	27	10.8%	23	29.5%	11	11.5%
IDU	5	8.9%	2	0.8%	2	2.6%	4	4.2%
MSM	19	33.9%	135	54.0%	48	61.5%	52	54.2%
MSM/IDU	2	3.6%	4	1.6%	0	0.0%	2	2.1%
Pediatric	0	0.0%	0	0.0%	0	0.0%	1	1.0%
Unknown	3	5.4%	47	18.8%	2	2.6%	16	16.7%

Table D5 – Living HIV and AIDS Cases as of December 2014 by Region at Last Known Residence, 2014

Living HIV and AIDS Cases, 2014 (Includes Prisoners)	NYS		NYC		ROS	
	N	%	N	%	N	%
Total	112,868	100.0%	89,290	100%	23,578	100%
Disease Stage						
HIV (non-AIDS)	48,442	42.9%	38,478	43.1%	9,964	42.3%
AIDS	64,426	57.1%	50,812	56.9%	13,614	57.7%
Sex at Birth						
Male	79,955	70.8%	63,554	71.2%	16,401	69.6%
Female	32,913	29.2%	25,736	28.8%	7,177	30.4%
Race/Ethnicity						
White Not-Hispanic	23,009	20.4%	15,144	17.0%	7,865	33.4%
Black Not-Hispanic	46,616	41.3%	39,259	44.0%	7,357	31.2%
Hispanic	35,890	31.8%	30,338	34.0%	5,552	23.5%
Asian/Pacific Islander	1,630	1.4%	1,463	1.6%	167	0.7%
Multi-race	5,510	4.9%	2,894	3.2%	2,616	11.1%
Native American	66	0.1%	56	0.1%	10	--
Unknown	147	0.1%	136	0.2%	11	--
Age in 2014						
<13	171	0.2%	139	0.2%	32	0.1%
13-19	819	0.7%	639	0.7%	180	0.8%
20-24	3,340	3.0%	2,651	3.0%	689	2.9%
25-29	7,012	6.2%	5,712	6.4%	1,300	5.5%
30-39	17,423	15.4%	14,348	16.1%	3,075	13.0%
40-49	29,532	26.2%	23,355	26.2%	6,177	26.2%
50-59	36,009	31.9%	27,905	31.3%	8,104	34.4%
60+	18,557	16.4%	14,536	16.3%	4,021	17.1%
Transmission Risk						
Blood Products	202	0.2%	122	0.1%	80	0.3%
Fem Pres Het Cont	12,204	10.8%	10,491	11.7%	1,713	7.3%
Heterosexual	20,278	18.0%	14,920	16.7%	5,358	22.7%
IDU	15,103	13.4%	11,159	12.5%	3,944	16.7%
MSM	43,557	38.6%	34,911	39.1%	8,646	36.7%
MSM/IDU	3,632	3.2%	2,550	2.9%	1,082	4.6%
Pediatric	2,336	2.1%	1,838	2.1%	498	2.1%
Unknown	15,556	13.8%	13,299	14.9%	2,257	9.6%

Table D6 – Living HIV and AIDS Cases as of December 2014 by Ryan White Region at Last Known Residence, 2014

Living HIV and AIDS Cases, 2014 (Excludes Prisoners)	Albany		Binghamton		Buffalo		Lower Hudson	
	N	%	N	%	N	%	N	%
Total	2,725	100%	451	100%	2,598	100%	3,600	100%
Disease Stage								
HIV (non-AIDS)	1,162	42.6%	179	39.7%	1,207	46.5%	1,494	41.5%
AIDS	1,563	57.4%	272	60.3%	1,391	53.5%	2,106	58.5%
Sex at Birth								
Male	1,876	68.8%	298	66.1%	1,801	69.3%	2,307	64.1%
Female	849	31.2%	153	33.9%	797	30.7%	1,293	35.9%
Race/Ethnicity								
White Not-Hispanic	1,273	46.7%	225	49.9%	952	36.6%	747	20.8%
Black Not-Hispanic	606	22.2%	97	21.5%	893	34.4%	1,286	35.7%
Hispanic	452	16.6%	67	14.9%	431	16.6%	1,073	29.8%
Asian/Pacific Islander	21	0.8%	1	0.2%	37	1.4%	13	0.4%
Multi-race	372	13.7%	60	13.3%	285	11.0%	474	13.2%
Native American	0	--	1	0.2%	0	--	3	0.1%
Unknown	1	--	0	--	0	--	4	0.1%
Age in 2014								
<13	2	0.1%	0	--	8	0.3%	1	0.0%
13-19	21	0.8%	1	0.2%	22	0.8%	36	1.0%
20-24	73	2.7%	14	3.1%	95	3.7%	103	2.9%
25-29	124	4.6%	30	6.7%	181	7.0%	171	4.8%
30-39	288	10.6%	68	15.1%	463	17.8%	486	13.5%
40-49	772	28.3%	124	27.5%	709	27.3%	888	24.7%
50-59	954	35.0%	153	33.9%	810	31.2%	1,222	33.9%
60+	491	18.0%	61	13.5%	310	11.9%	693	19.3%
Transmission Risk								
Blood Products	13	0.5%	1	0.2%	8	0.3%	8	0.2%
Fem Pres Het Cont	190	7.0%	38	8.4%	108	4.2%	246	6.8%
Heterosexual	586	21.5%	104	23.1%	645	24.8%	1,192	33.1%
IDU	437	16.0%	85	18.8%	362	13.9%	494	13.7%
MSM	1,086	39.9%	163	36.1%	1,166	44.9%	1,185	32.9%
MSM/IDU	160	5.9%	21	4.7%	162	6.2%	108	3.0%
Pediatric	58	2.1%	11	2.4%	42	1.6%	82	2.3%
Unknown	195	7.2%	28	6.2%	105	4.0%	285	7.9%

Table D6 – Living HIV and AIDS Cases as of December 2014 by Ryan White Region at Last Known Residence, 2014

Living HIV and AIDS Cases, 2014 (Excludes Prisoners)	Mid-Hudson		Nassau/Suffolk		Rochester		Syracuse	
	N	%	N	%	N	%	N	%
Total	2,026	100%	5,439	100%	2,694	100%	2,051	100%
Disease Stage								
HIV (non-AIDS)	828	40.9%	2,284	42.0%	1,179	43.8%	921	44.9%
AIDS	1,198	59.1%	3,155	58.0%	1,515	56.2%	1,130	55.1%
Sex at Birth								
Male	1,282	63.3%	3,722	68.4%	1,948	72.3%	1,439	70.2%
Female	744	36.7%	1,717	31.6%	746	27.7%	612	29.8%
Race/Ethnicity								
White Not-Hispanic	697	34.4%	1,796	33.0%	1,009	37.5%	1,032	50.3%
Black Not-Hispanic	519	25.6%	1,637	30.1%	962	35.7%	521	25.4%
Hispanic	506	25.0%	1,451	26.7%	449	16.7%	255	12.4%
Asian/Pacific Islander	9	0.4%	46	0.8%	8	0.3%	29	1.4%
Multi-race	294	14.5%	503	9.2%	265	9.8%	210	10.2%
Native American	0	--	1	--	1	--	4	0.2%
Unknown	1	--	5	0.1%	0	--	0	--
Age in 2014								
<13	6	0.3%	5	0.1%	4	0.1%	6	0.3%
13-19	24	1.2%	53	1.0%	9	0.3%	13	0.6%
20-24	53	2.6%	172	3.2%	87	3.2%	76	3.7%
25-29	96	4.7%	359	6.6%	166	6.2%	139	6.8%
30-39	231	11.4%	696	12.8%	333	12.4%	328	16.0%
40-49	516	25.5%	1,335	24.5%	714	26.5%	572	27.9%
50-59	733	36.2%	1,854	34.1%	893	33.1%	657	32.0%
60+	367	18.1%	965	17.7%	488	18.1%	260	12.7%
Transmission Risk								
Blood Products	9	0.4%	22	0.4%	9	0.3%	8	0.4%
Fem Pres Het Cont	115	5.7%	552	10.1%	242	9.0%	150	7.3%
Heterosexual	617	30.5%	1,091	20.1%	477	17.7%	439	21.4%
IDU	404	19.9%	621	11.4%	399	14.8%	256	12.5%
MSM	606	29.9%	2,137	39.3%	1,172	43.5%	906	44.2%
MSM/IDU	79	3.9%	205	3.8%	117	4.3%	97	4.7%
Pediatric	62	3.1%	154	2.8%	35	1.3%	36	1.8%
Unknown	134	6.6%	657	12.1%	243	9.0%	159	7.8%

Table D7 – Deaths among HIV and AIDS Cases by Region of Last Known Residence in 2014

Deaths among Living Cases, 2014 (Includes Prisoners)	NYS		NYC		ROS	
	N	%	N	%	N	%
Total	2,062	100.0%	1,652	100%	410	100%
Disease Stage at Death						
HIV (non-AIDS)	380	81.6%	294	82.2%	86	79.0%
AIDS	1,682	18.4%	1,358	17.8%	324	21.0%
Sex at Birth						
Male	1,427	69.2%	1,149	69.6%	278	67.8%
Female	635	30.8%	503	30.4%	132	32.2%
Race/Ethnicity						
White Not-Hispanic	340	16.5%	189	11.4%	151	36.8%
Black Not-Hispanic	896	43.5%	777	47.0%	119	29.0%
Hispanic	666	32.3%	592	35.8%	74	18.0%
Asian/Pacific Islander	10	0.5%	8	0.5%	2	0.5%
Multi-race	149	7.2%	85	5.1%	64	15.6%
Native American	1	--	1	0.1%	0	--
Unknown	0	--	0	--	0	--
Age at Death						
<13	0	--	0	--	0	--
13-19	0	--	0	--	0	--
20-24	14	0.7%	9	0.5%	5	1.2%
25-29	31	1.5%	26	1.6%	5	1.2%
30-39	128	6.2%	99	6.0%	29	7.1%
40-49	340	16.5%	273	16.5%	67	16.3%
50-59	768	37.2%	619	37.5%	149	36.3%
60+	781	37.9%	626	37.9%	155	37.8%
Transmission Risk						
Blood Products	5	0.2%	5	0.3%	0	--
Fem Pres Het Cont	192	9.3%	167	10.1%	25	6.1%
Heterosexual	347	16.8%	262	15.9%	85	20.7%
IDU	631	30.6%	513	31.1%	118	28.8%
MSM	444	21.5%	338	20.5%	106	25.9%
MSM/IDU	95	4.6%	69	4.2%	26	6.3%
Pediatric	19	0.9%	16	1.0%	3	0.7%
Unknown	329	16.0%	282	17.1%	47	11.5%

Table D8 – Deaths among HIV and AIDS Cases by Ryan White Region of Last Known Residence in 2014

Deaths among Living Cases, 2014 (Excludes Prisoners)	Albany		Binghamton		Buffalo		Lower Hudson	
	N	%	N	%	N	%	N	%
Total	48	100%	10	100%	50	100%	57	100%
Disease Stage								
HIV (non-AIDS)	18	37.5%	0	--	17	34.0%	11	19.3%
AIDS	30	62.5%	10	100.0%	33	66.0%	46	80.7%
Sex at Birth								
Male	36	75.0%	7	70.0%	32	64.0%	35	61.4%
Female	12	25.0%	3	30.0%	18	36.0%	22	38.6%
Race/Ethnicity								
White Not-Hispanic	22	45.8%	7	70.0%	20	40.8%	10	17.5%
Black Not-Hispanic	14	29.2%	1	10.0%	17	34.7%	22	38.6%
Hispanic	8	16.7%	0	--	4	8.2%	12	21.1%
Asian/Pacific Islander	0	--	0	--	1	2.0%	0	--
Multi-race	4	8.3%	2	20.0%	8	16.3%	13	22.8%
Native American	0	--	0	--	0	--	0	--
Unknown	0	--	0	--	0	--	0	--
Age at Death								
<13	0	--	0	--	0	--	0	--
13-19	0	--	0	--	0	--	0	--
20-24	0	--	0	--	1	2.0%	0	--
25-29	1	2.1%	0	--	0	--	1	1.8%
30-39	3	6.3%	0	--	6	12.0%	3	5.3%
40-49	8	16.7%	1	10.0%	11	22.0%	11	19.3%
50-59	23	47.9%	3	30.0%	17	34.0%	17	29.8%
60+	13	27.1%	6	60.0%	15	30.0%	25	43.9%
Transmission Risk								
Blood Products	0	--	0	--	0	--	0	--
Fem Pres Het Cont	2	4.2%	0	--	0	--	3	5.3%
Heterosexual	8	16.7%	1	10.0%	11	22.0%	17	29.8%
IDU	13	27.1%	4	40.0%	18	36.0%	18	31.6%
MSM	11	22.9%	3	30.0%	17	34.0%	11	19.3%
MSM/IDU	5	10.4%	1	10.0%	2	4.0%	4	7.0%
Pediatric	0	--	0	--	0	--	0	--
Unknown	9	18.8%	1	10.0%	2	4.0%	4	7.0%

Table D8 – Deaths among HIV and AIDS Cases by Ryan White Region of Last Known Residence in 2014

Deaths among Living Cases, 2014 (Excludes Prisoners)	Mid-Hudson		Nassau/Suffolk		Rochester		Syracuse	
	N	%	N	%	N	%	N	%
Total	44	100%	98	100%	51	100%	43	100%
Disease Stage								
HIV (non-AIDS)	5	11.4%	16	16.3%	9	17.6%	5	11.6%
AIDS	39	88.6%	82	83.7%	42	82.4%	38	88.4%
Sex at Birth								
Male	26	59.1%	67	68.4%	36	70.6%	30	69.8%
Female	18	40.9%	31	31.6%	15	29.4%	13	30.2%
Race/Ethnicity								
White Not-Hispanic	15	34.1%	38	38.8%	17	33.3%	20	47.6%
Black Not-Hispanic	11	25.0%	21	21.4%	18	35.3%	11	26.2%
Hispanic	10	22.7%	22	22.4%	11	21.6%	5	11.9%
Asian/Pacific Islander	0	--	0	--	0	--	1	2.4%
Multi-race	8	18.2%	17	17.3%	5	9.8%	6	14.3%
Native American	0	--	0	--	0	--	0	--
Unknown	0	--	0	--	0	--	0	--
Age at Death								
<13	0	--	0	--	0	--	0	--
13-19	0	--	0	--	0	--	0	--
20-24	2	4.5%	2	2.0%	0	--	0	--
25-29	1	2.3%	1	1.0%	0	--	1	2.3%
30-39	3	6.8%	6	6.1%	3	5.9%	4	9.3%
40-49	7	15.9%	15	15.3%	5	9.8%	8	18.6%
50-59	13	29.5%	34	34.7%	23	45.1%	18	41.9%
60+	18	40.9%	40	40.8%	20	39.2%	12	27.9%
Transmission Risk								
Blood Products	0	--	0	--	0	--	0	--
Fem Pres Het Cont	4	9.1%	10	10.2%	3	5.9%	3	7.0%
Heterosexual	11	25.0%	17	17.3%	11	21.6%	9	20.9%
IDU	11	25.0%	21	21.4%	18	35.3%	8	18.6%
MSM	11	25.0%	26	26.5%	9	17.6%	17	39.5%
MSM/IDU	2	4.5%	6	6.1%	5	9.8%	1	2.3%
Pediatric	2	4.5%	1	1.0%	0	--	0	0.0%
Unknown	3	6.8%	17	17.3%	5	9.8%	5	11.6%

Appendix 2. Additional Resources

- 1) New York State Department of Health:
www.health.ny.gov/diseases/aids/general/statistics/
<https://www.health.ny.gov/statistics/diseases/communicable/>
<http://www.health.ny.gov/diseases/communicable/hepatitis/surveillance.htm>
- 2) New York City Department of Health and Mental Hygiene:
www1.nyc.gov/site/doh/data/data-sets/aids-hiv-epidemiology-and-field-services.page
<https://www1.nyc.gov/site/doh/health/health-topics/sexually-transmitted-diseases.page>
<http://hepfree.nyc/nyc-health-dept-hep-b-c-annual-report-2014>
<https://a816-healthpsi.nyc.gov/epiquery/>
- 3) Ending the Epidemic Dashboard: <http://etedashboardny.org/>

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