

# Racial/Ethnic Disparities Among Persons Newly Diagnosed with HIV in New York State, 2011 - 2020

## Introduction

The number of persons newly diagnosed with HIV (PNDWH) in the United States continues to decline, but racial/ethnic disparities in prevention, diagnosis, and treatment persist and, in many cases, have widened over the course of the epidemic.<sup>1</sup> This national trend is mirrored in New York State (NYS).

Over half (55.0%) of the NYS population was composed of non-Hispanic White persons, but this group comprised less than a fifth (19.7%) of the 30,596 PNDWH in NYS in 2020. Non-Hispanic Black persons comprised 14.4% of the state population in 2020, but 45.7% of PNDWH, and Hispanic individuals comprised 19.5% and 29.5% of these populations, respectively.<sup>2</sup> This brief further examines patterns of racial/ethnic disparity in HIV diagnosis in NYS from 2011 to 2020.

## Data Sources and Methods

Demographic information of individuals diagnosed with HIV in NYS through December 2020 was extracted from the NYS HIV Registry at the end of March 2021. Population size estimates were obtained from the United States Census, Vintage 2020 Population Estimates, released July 2021. Trends among PNDWH were analyzed by race/ethnicity group.

## Findings

Figure 1 shows the race/ethnicity distribution of PWNDH in NYS from 2011 to 2020. The percentage of non-Hispanic White PNDWH steadily decreased from 2014 to 2018 with a slight increase in 2019 and 2020. The percentage of PNDWH who were Hispanic increased from 28.2% in 2014 to a peak of 31.1% in 2019 and the percentage of PNDWH who identified as non-Hispanic Black increased from a low of 41.6% in 2013 to 45.7% in 2020. The percentage of Asian/Pacific Islander PNDWH increased from 3.1% in 2011 to 5.3% in 2016 and has since fallen to 4.1% in 2020. The percentage of PNWDH who were Multi-Race remained relatively stable from 2011 to 2020, with a

## Highlights

- The rate of HIV diagnosis per 100,000 population decreased across all racial/ethnic groups from 2011 to 2020.
- Racial/ethnic disparities persist and are more evident in 2020 than in 2011. The HIV diagnosis rate among non-Hispanic Black persons was nearly 8x that of non-Hispanic White persons in 2020.
- Racial/ethnic disparities are starker among women, transgender, and gender non-binary /non-conforming persons and those reporting heterosexual contact as their HIV transmission risk.

<sup>1</sup> Centers for Disease Control and Prevention. Social determinants of health among adults with diagnosed HIV infection, 2019. *HIV Surveillance Supplemental Report 2022*;27(No. 2).

<sup>2</sup> NYS population size estimates from United States Census, Vintage 2020 Population Estimates; released July 2021.

peak in 2018 (1.2%), and the percentage of persons who identified as Native American was similarly small and stable over this time period, with a peak of 0.3% in 2018 to a low of zero in 2017.

Figure 2 provides a visualization of the race/ethnicity distribution of PNDWH from 2011 to 2020 in comparison to that of the NYS general population in 2020. In 2011, non-Hispanic White individuals comprised 24.6% of PNDWH in NYS, but 58.0% of the state population. By 2020, this group comprised 19.7% of HIV diagnoses and 55.0% of the population. The proportion of non-Hispanic Black PNDWH has grown since 2011, while the percentage of non-Hispanic Black persons within the state population decreased slightly. The proportion of Hispanic persons in the state population has grown (17.9% in 2011 and 19.3% in 2020) and so has the proportion of Hispanic PNDWH (27.3% to 29.3%).

HIV diagnosis rates were generated based on estimated population size. Table 1 examines these rates over time. In 2011, an estimated 20.4 per 100,000 NYS residents were newly diagnosed with HIV. By 2020, this rate dropped to 10.0 per 100,000, approximately a 51.0% decline. In this time period, the estimated HIV diagnoses rate dropped most substantially among non-Hispanic White persons (8.6 to 3.6 per 100,000 residents, -58.1%). Non-Hispanic Black persons continually had the highest rate of HIV diagnosis (62.1 in 2011, 31.7 in 2020) and one of the lowest percent changes from 2011 to 2020 (-49.0%). The diagnosis rate among Asian/Pacific Islander individuals fell from 8.3 to 4.5 per 100,000 residents (-45.8%), 3.8 to 3.6 per 100,000 Multi-Race individuals (-5.3%), and 17.6 to 8.7 per 100,000 for Native American individuals (-50.6%).

Table 2 compares the HIV diagnosis rate in each race/ethnicity group with that of non-Hispanic White persons in the same year. In 2011, the HIV diagnosis rate among non-Hispanic Black persons (62.1 per 100,000) was 7.2 times that of non-Hispanic White persons (8.6 per 100,000) and by 2020 was 8.8 times higher. The rate among Hispanic persons was 3.6 times that of non-Hispanic White persons in 2011 and increased to 4.3 times higher in 2020. During this time period, this disparity in diagnosis rate increased among all race/ethnicity groups when compared with that of non-Hispanic White individuals.

Figures 3 and 4 examine additional demographic stratifications by gender and transmission risk. Race/ethnicity disparity is more evident among women (current gender) than among men newly diagnosed with HIV. From 2011 – 2020, 59.8% of women newly diagnosed with HIV identified as non-Hispanic Black, 24.7% Hispanic, and 11.8% non-Hispanic White, with little variation in these proportions over the decade. In the same time period, 38.4% of men newly diagnosed with HIV identified as non-Hispanic Black, 30.6% Hispanic, and 25.2% non-Hispanic White. Approximately 84.3% of transgender and gender non-binary/non-conforming (TG/NB/NC) persons newly diagnosed with HIV from 2011-2020 identified as Hispanic or non-Hispanic Black, compared to 72.6% of PNDWH in general, and 10.5% of TG/NB/NC PNDWH identified as non-Hispanic White, compared to 22.1% of PNDWH in general.

Mirroring trends seen in the overall population of PNWDH, the proportion of non-Hispanic White persons among PNDWH reporting a history of male-to-male sexual contact (MSM) decreased from 2011 to 2018, but has since increased in 2020 to 22.5%. The proportion of non-Hispanic Black MSM increased steadily since 2011, peaking in 2020 at 38.8%. Disparity was even more evident among persons reporting heterosexual contact. From 2011-2020, approximately 61.6% of persons in this group identified as non-Hispanic Black, 23.8% Hispanic, and 10.9% non-Hispanic White. These proportions remained relatively stable throughout this time period with little variation.

Conversely, among PNDWH reporting a history of injection drug use (IDU), the proportion of non-Hispanic White persons increased from 27.4% in 2011 to 51.4% in 2020, while the proportion of non-Hispanic Black persons declined from 41.5% to 27.0%.

## **Discussion**

The race/ethnicity distribution of PNWDH has varied substantially from the overall population of New York State, indicating persistent disparity in race/ethnicity among those receiving an HIV diagnosis. Over the course of the past decade, HIV diagnosis rates decreased across all racial/ethnic groups while the disparity in rates between non-Hispanic White individuals and all other race/ethnicity groups has increased. In 2020, despite a 49% decline since 2011, the HIV diagnosis rate among non-Hispanic Black individuals in NYS still remained higher than any other race/ethnicity group. In 2011, the rate among this group was 7.2 times that of non-Hispanic White individuals, and by 2020 the gap widened to 8.8 times.

In 2020, the HIV diagnosis rate for non-Hispanic White persons (3.6 per 100,000) was lower than that of all other racial/ethnic groups. The degree of this disparity widened since 2011, particularly in comparison with non-Hispanic Black (31.7 per 100,000) and Hispanic persons (15.3 per 100,000). Further, the decline in diagnosis rate from 2011 to 2020 was substantially greater among non-Hispanic White persons than members of all other race/ethnicity groups.

These findings indicate that racial/ethnic disparities in HIV diagnosis in NYS have remained relatively constant, with non-Hispanic Black and Hispanic individuals disproportionately overrepresented amongst persons newly diagnosed with HIV. This disparity is particularly evident in particular subgroups, including women, TG/NB/NC persons, and individuals reporting heterosexual contact as their HIV transmission risk. While there have been many successes in HIV prevention over the course of the past decade, targeted efforts to reduce racial/ethnic disparity should be a priority as we look toward ending the epidemic in NYS.

## Tables and Figures

Figure 1. Percentage of Persons Newly Diagnosed with HIV by Race/Ethnicity, NYS, 2011-2020

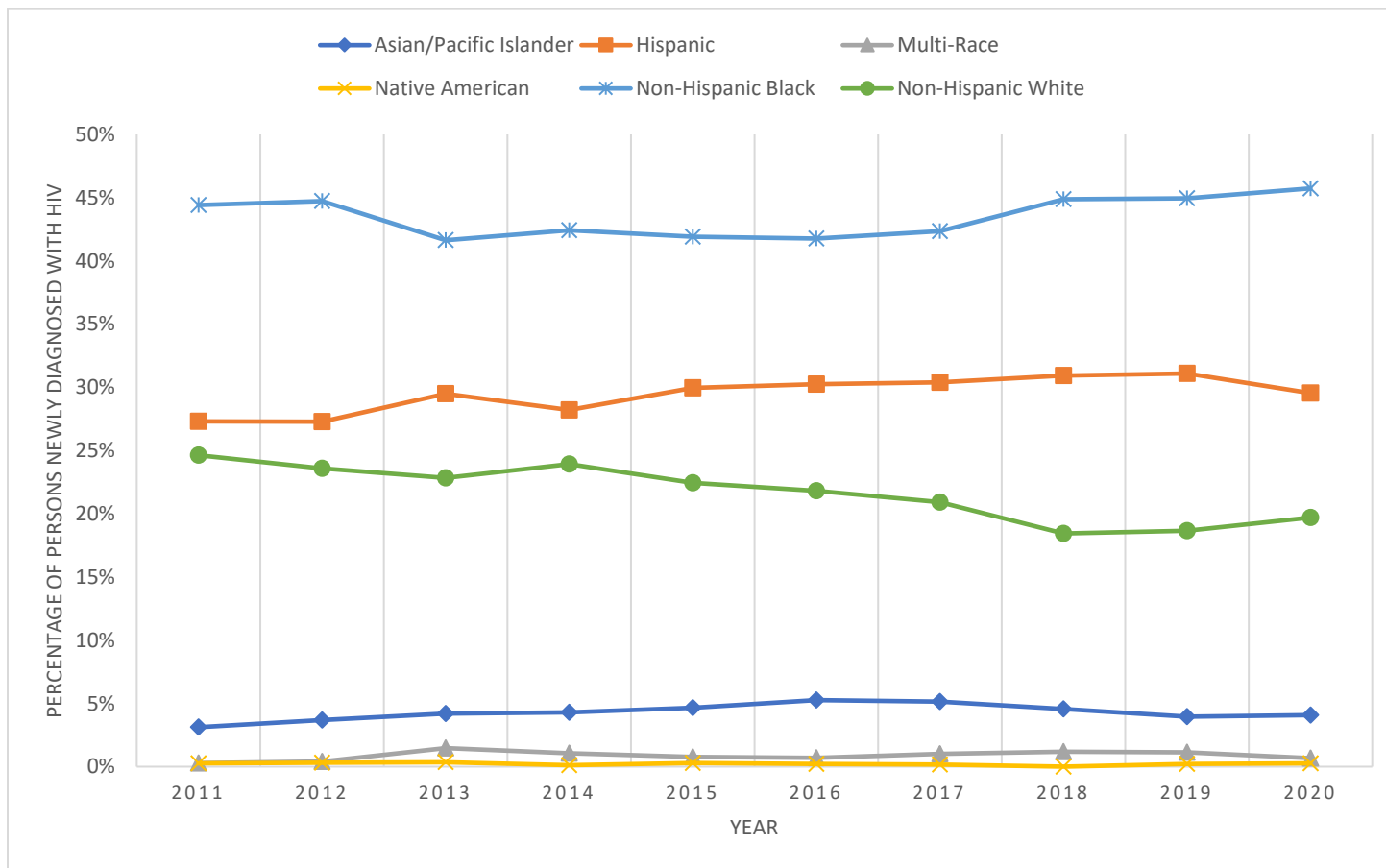
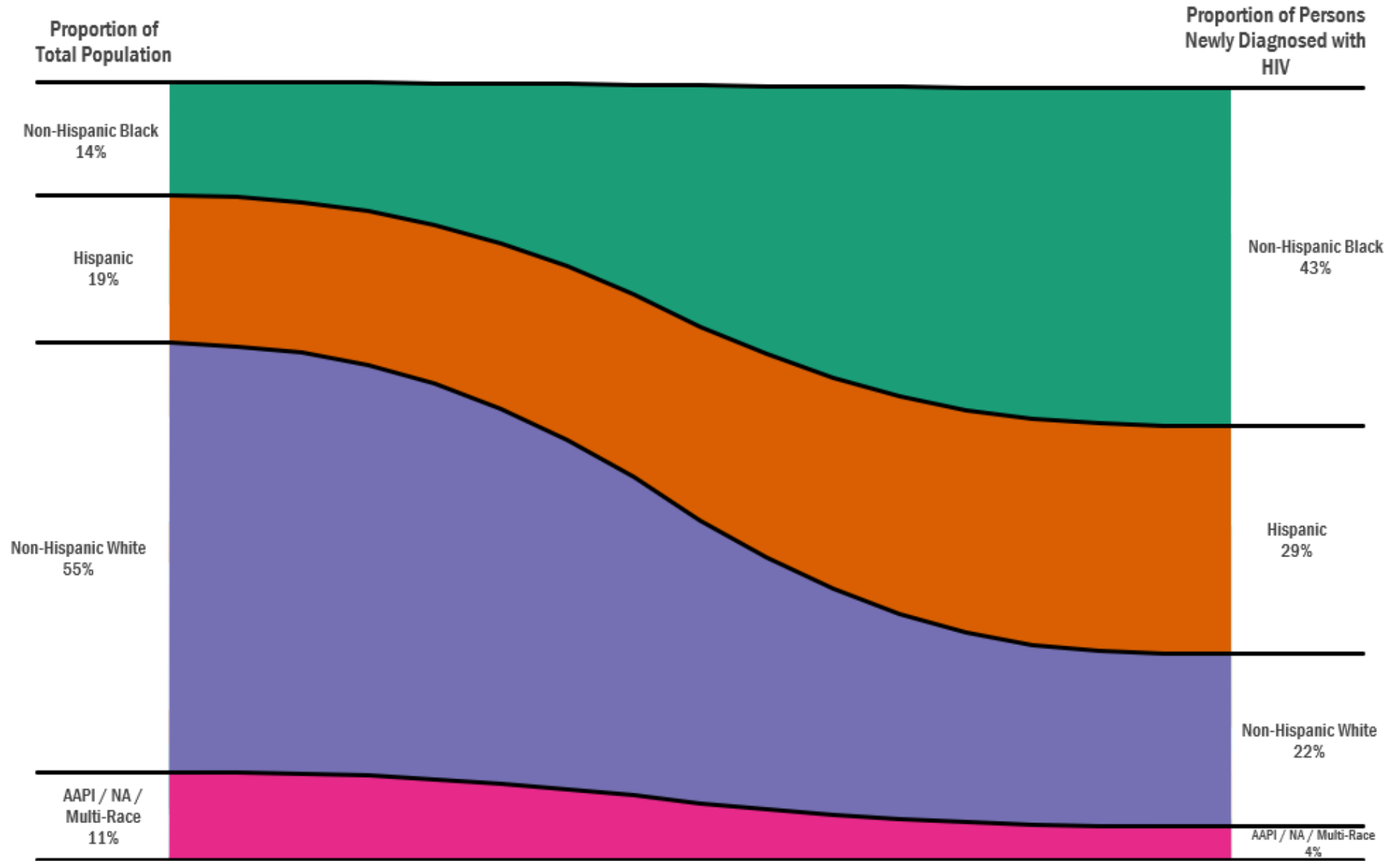


Figure 2. Race/Ethnicity Composition of Persons Newly Diagnosed with HIV, 2011-2020, in Comparison with the General Population, NYS 2020



AAPI: Asian/Pacific Islander NA: Native American

Figure 3. Persons Newly Diagnosed with HIV by Race/Ethnicity and Gender, NYS, 2011 to 2020

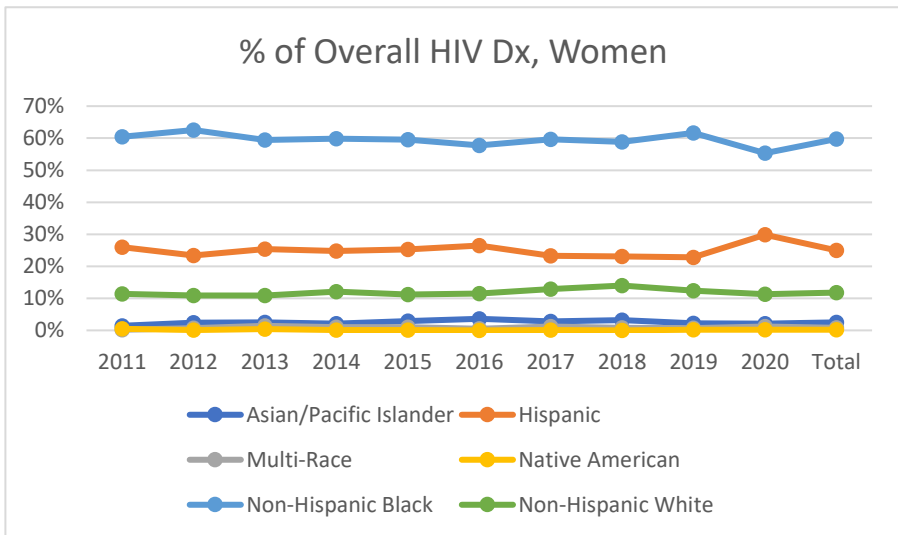
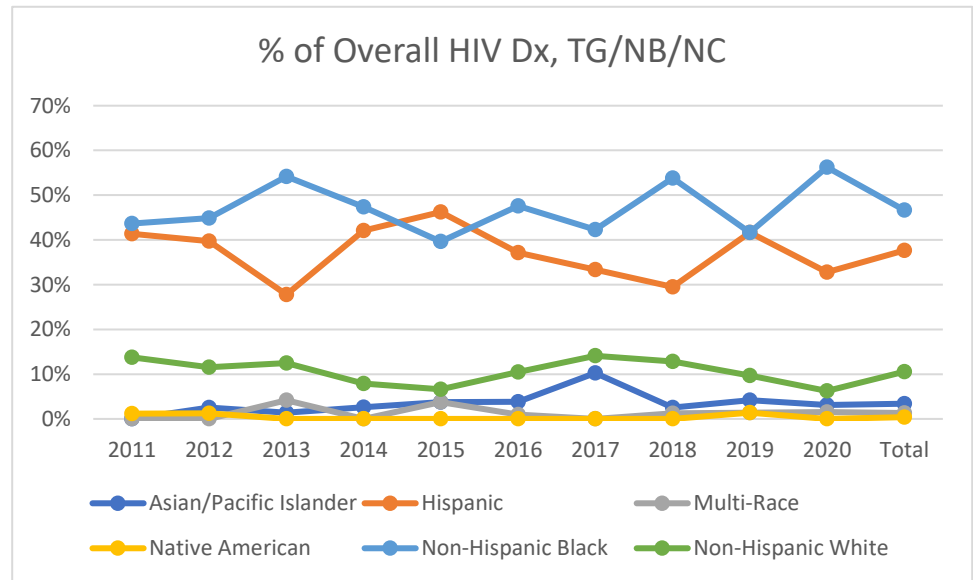
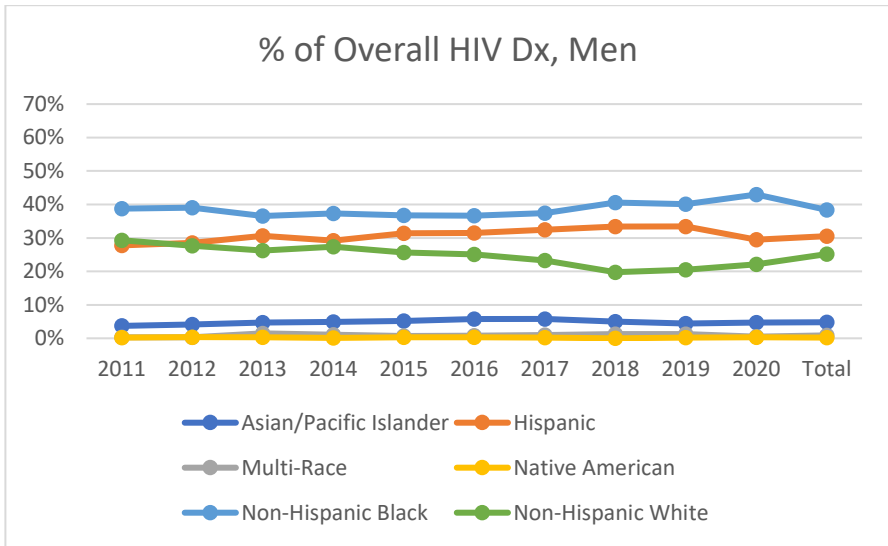


Figure 4. Persons Newly Diagnosed with HIV by Race/Ethnicity and Reported Transmission Risk, NYS, 2011 to 2020

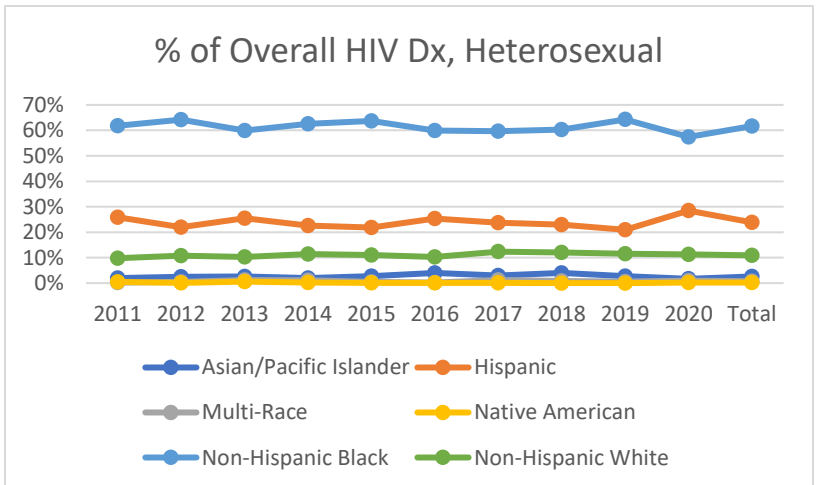
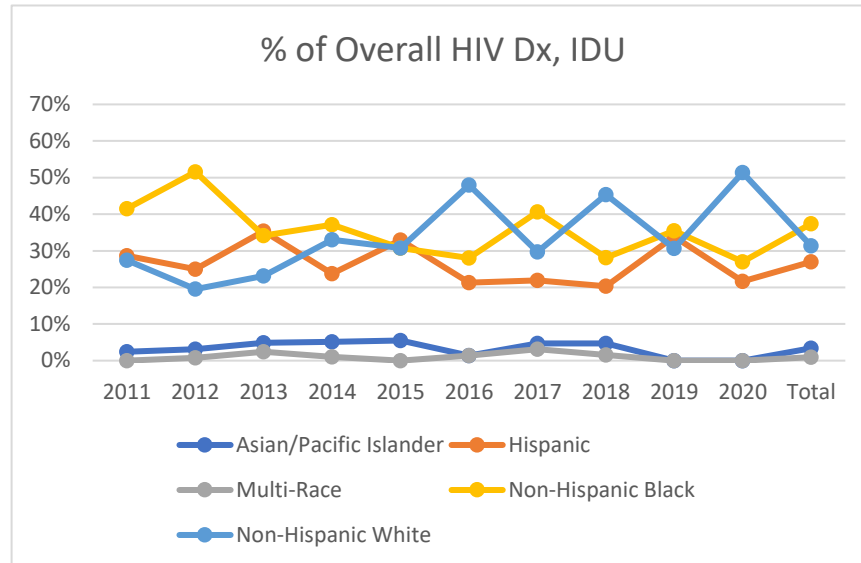
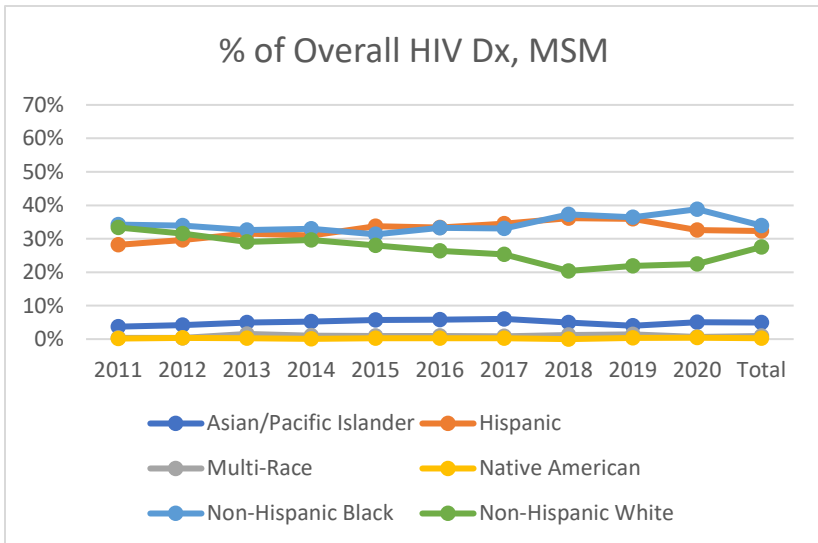


Table 1. HIV Diagnosis Rate per 100,000 Population by Race/Ethnicity, NYS, 2011-2020

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	% Change (2011-2020)
Asian/Pacific Islander	8.3	8.8	9.3	9.2	9.2	9.3	8.6	6.7	5.4	4.5	-45.8%
Hispanic	31.0	28.4	28.5	27.0	26.7	24.4	23.6	21.1	19.8	15.3	-50.6%
Multi-Race	3.8	5.0	16.5	11.6	7.6	6.3	8.5	8.6	7.6	3.6	-5.3%
Native American	17.6	19.2	20.8	6.9	15.5	10.3	8.6	0.0	8.6	8.7	-50.6%
Non-Hispanic Black	62.1	58.0	50.6	51.6	48.0	43.8	43.0	40.4	38.2	31.7	-49.0%
Non-Hispanic White	8.6	7.7	7.1	7.4	6.6	5.9	5.5	4.3	4.1	3.6	-58.1%

Table 2. HIV Diagnosis Rate Compared to Rate Among Non-Hispanic White Persons, NYS, 2011 to 2020

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Asian/Pacific Islander	1.0	1.1	1.3	1.2	1.4	1.6	1.6	1.6	1.3	1.3
Hispanic	3.6	3.7	4.0	3.6	4.0	4.1	4.3	4.9	4.8	4.3
Multi-Race	0.4	0.6	2.3	1.6	1.2	1.1	1.5	2.0	1.9	1.0
Native American	2.0	2.5	2.9	0.9	2.3	1.7	1.6	0.0	2.1	2.4
Non-Hispanic Black	7.2	7.5	7.1	7.0	7.3	7.4	7.8	9.4	9.3	8.8
Non-Hispanic White	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref

New York State Department of Health  
 AIDS Institute  
 Division of Epidemiology, Evaluation, and Partner Services  
 Data Analysis and Research Translation  
 BHAE@health.ny.gov