

Newly diagnosed positives identified by HIV testing programs in New York City



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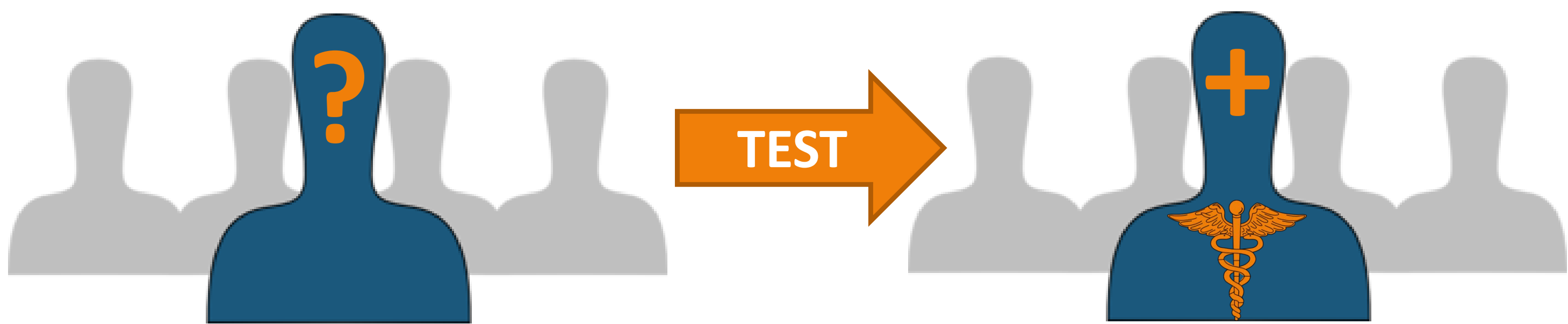
Bureau of HIV/AIDS Prevention and Control

New York City Department of Health and Mental Hygiene



Background

- In the United States, an estimated 21% of persons with HIV are unaware of their status. In 2006, the New York City Department of Health and Mental Hygiene (NYC DOHMH) began expanding HIV testing in NYC.
- Between 2006 and 2010, the number of NYC DOHMH-funded tests increased >400%. One of the goals of expanded HIV testing is to identify HIV-positive persons who are unaware of their status and link them to care. Prompt diagnosis and linkage to care are key to reducing both physical damage related to HIV¹ and preventing forward transmission of the virus.² This poster characterizes the new HIV cases diagnosed by NYC DOHMH-funded testing programs.



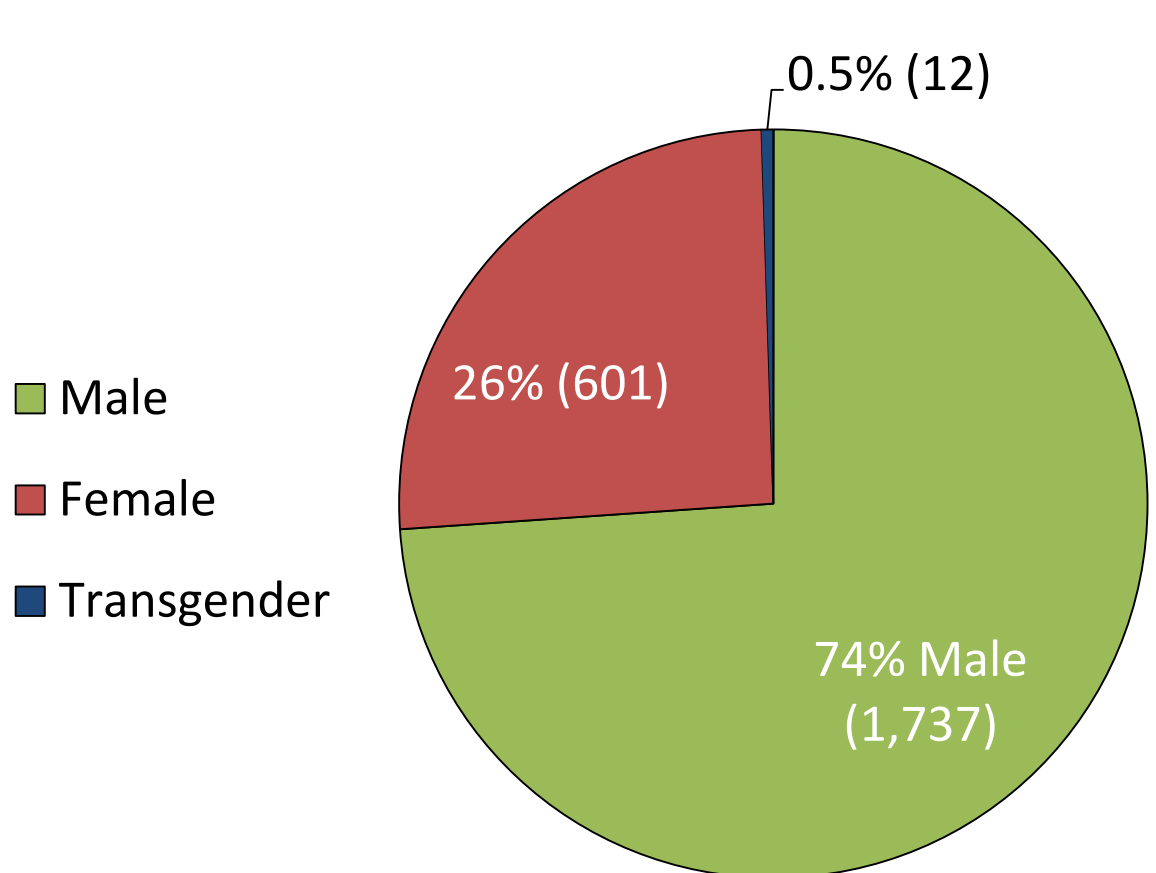
Methods

- NYC DOHMH analyzed preliminary positive cases identified by funded contracts between January 2006 and December 2010. The data comprise only directly-funded HIV testing supported by the Bureau of HIV/AIDS Prevention and Control at the NYC DOHMH. HIV testing conducted by other NYC DOHMH bureaus are not included in this analysis.
- Cases were matched against the NYC HIV/AIDS (HARS) registry and categorized as newly or previously diagnosed. We used evidence of a CD4 count or viral load (VL) as an indication of linkage to medical care. We reviewed the interval between a person's first reported preliminary positive HIV test and the first available CD4 count or viral load to determine the time lag to linkage to care.

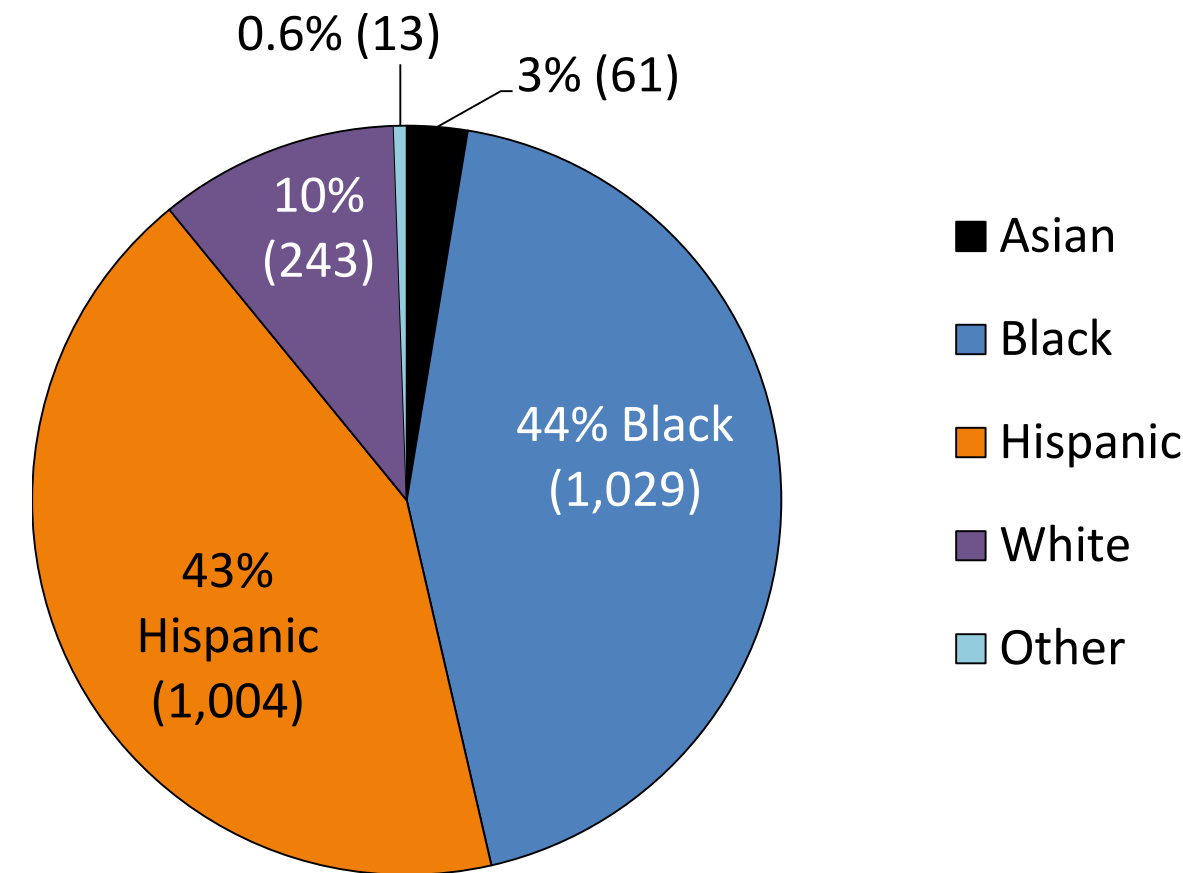
Results

Demographics and Risk³ Characteristics Among 2,350 Persons Newly Diagnosed with HIV in NYC 2006-2010

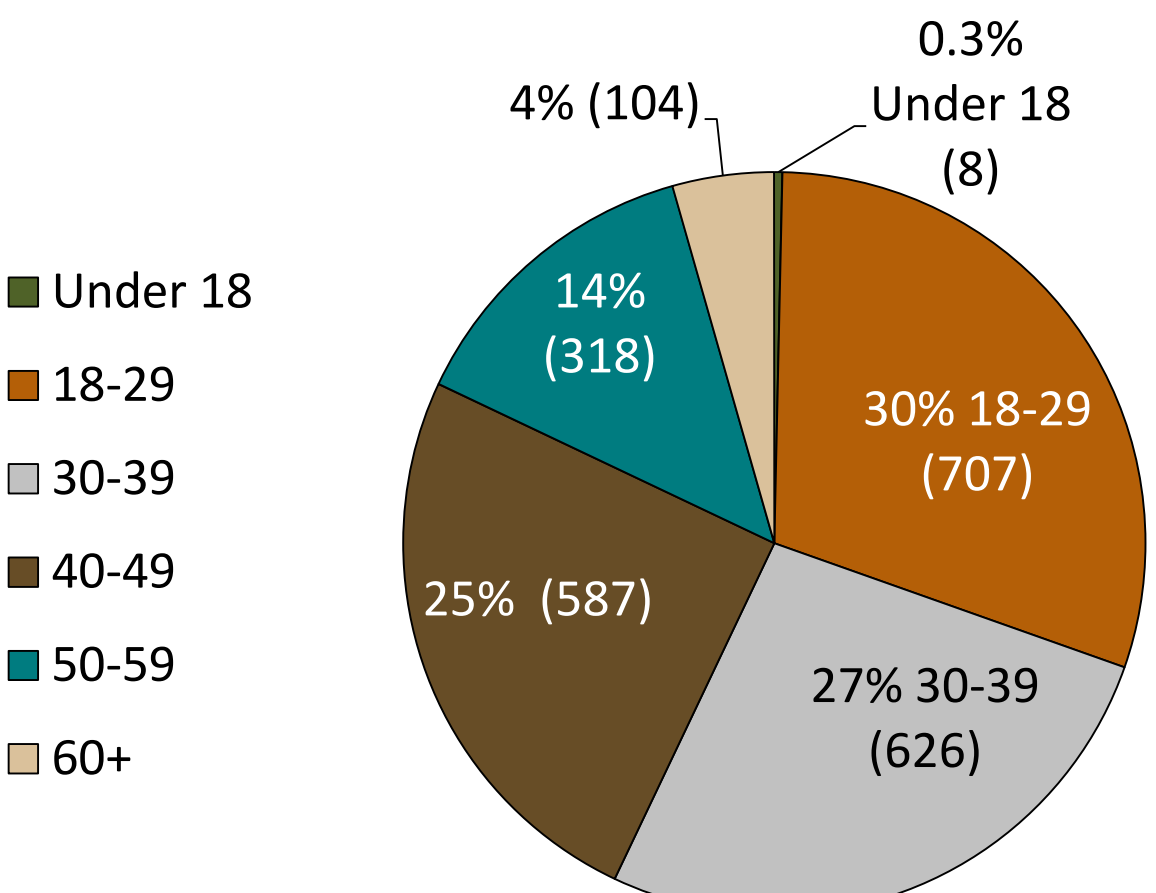
More men were newly diagnosed than women



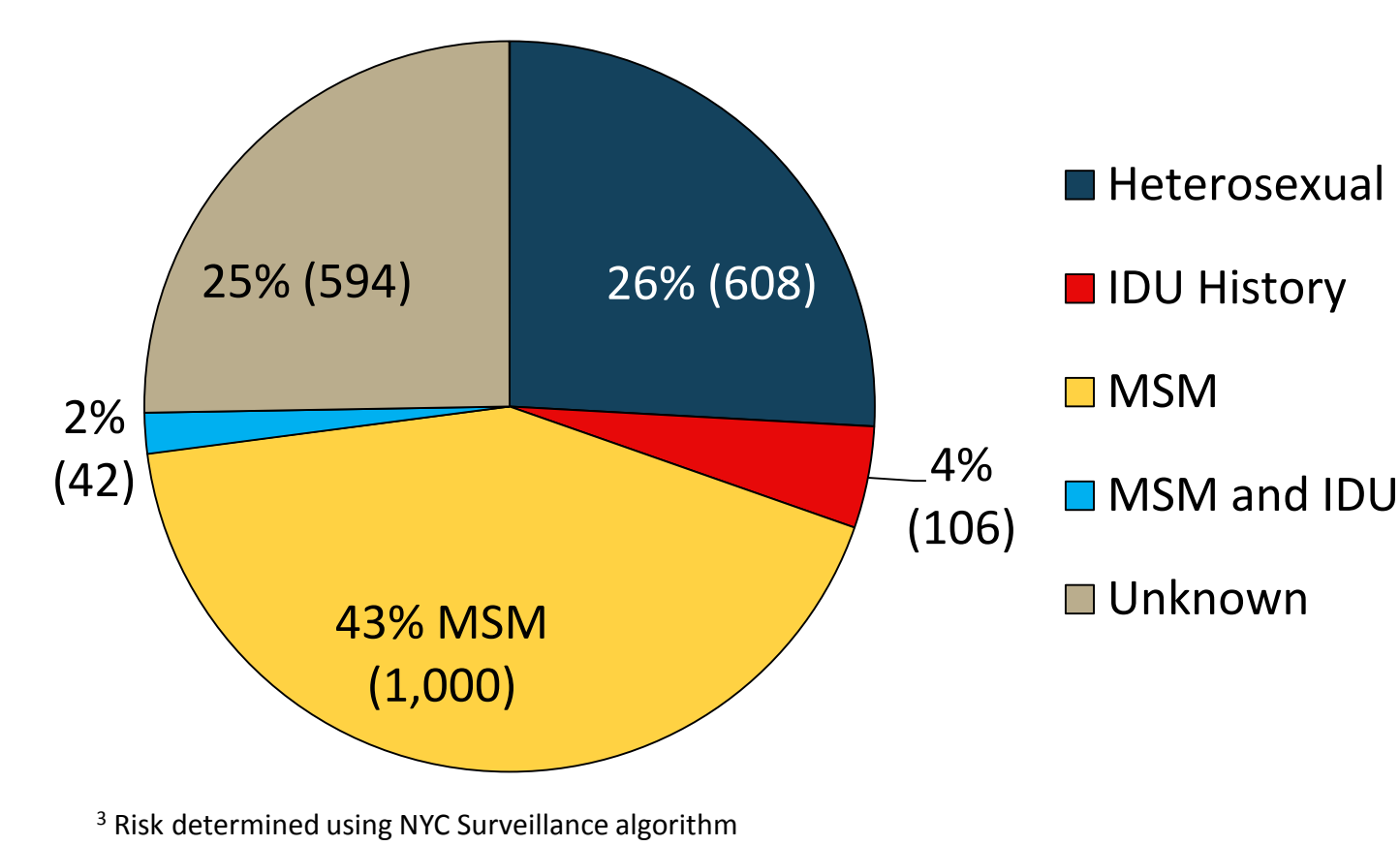
Most new diagnoses were among Blacks and Hispanics



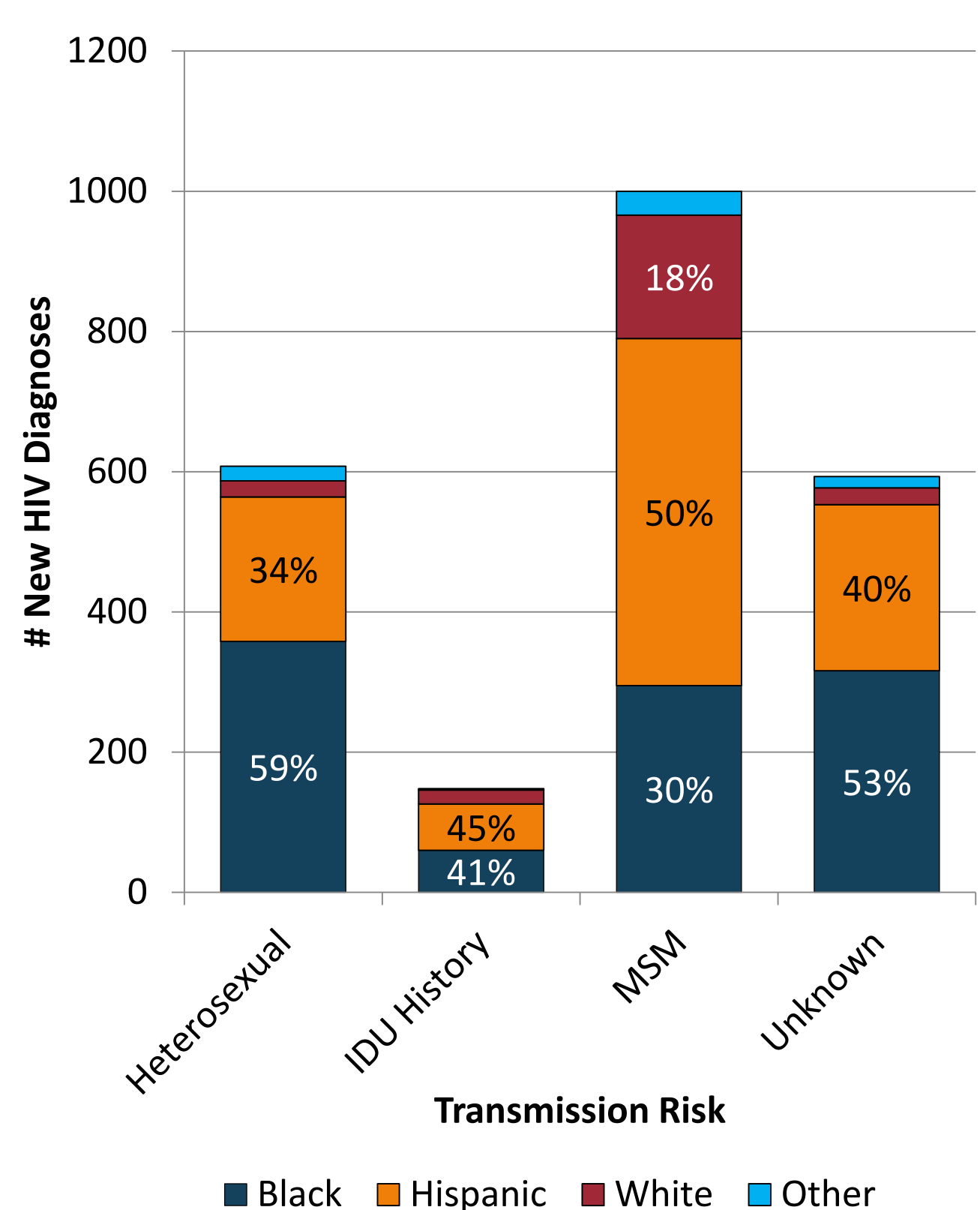
More new diagnoses were among persons under 40



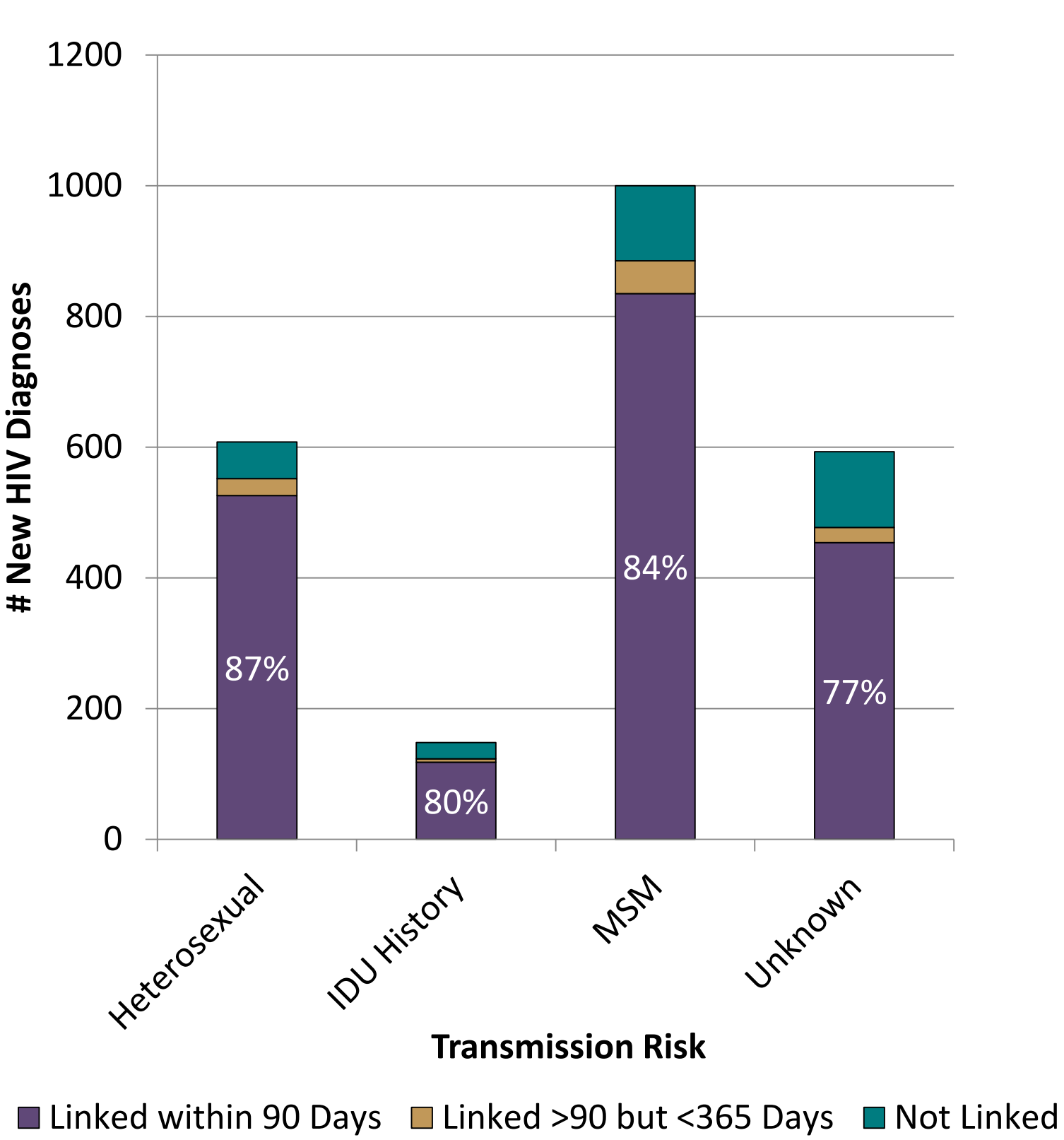
Highest percentage of new diagnoses were among men who have sex with men (MSM)



Blacks report mostly heterosexual transmission risk, while Hispanics and Whites report mostly MSM risk

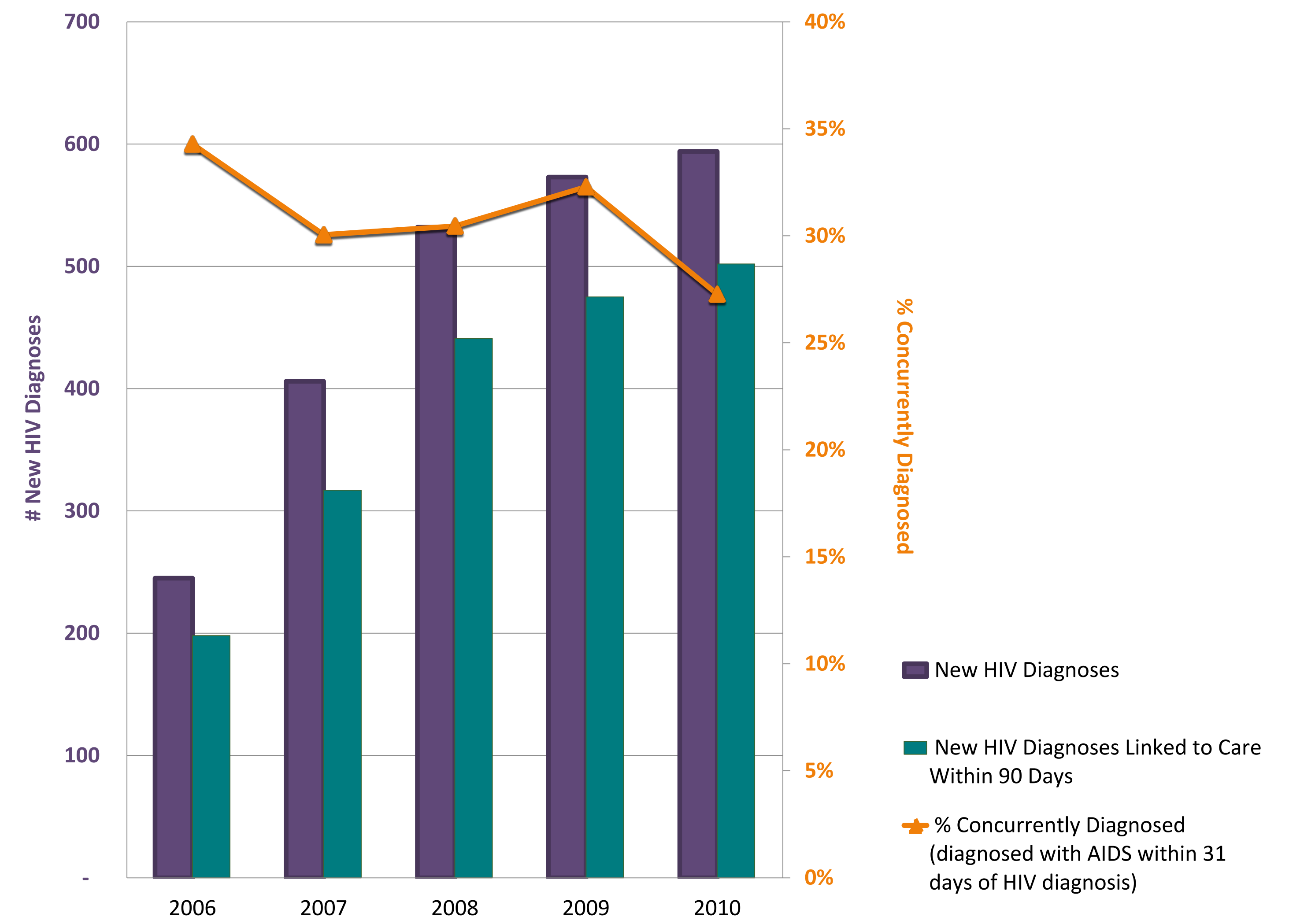


Persons reporting heterosexual risk have higher rates for linkage to care within 90 days than other risk groups



- Total HIV testing increased from 28,000 tests in 2006 to 166,000 in 2010. The percentage of persons newly diagnosed with HIV and linked to medical care was high throughout this period. Overall, 2,350 new cases were found, and 715 individuals were concurrently diagnosed with AIDS.

New HIV Diagnoses, Linkage to Care and Concurrent Diagnoses in NYC, 2006-2010



➤ From 2006-2010, the number of new diagnoses found by NYC DOHMH-funded programs increased significantly ($p < 0.001$).

➤ The proportion of persons concurrently diagnosed with AIDS within 31 days of their new HIV diagnosis by NYC DOHMH-funded programs also significantly declined from 34% to 27% ($p < 0.001$).

Key indicators for linkage to care for HIV positive individuals between 2006 and 2010

	2006		2010		Significance of Estimated Annual % Change 2006-2010 p-value
	N	Col %	N	Col %	
Total New Diagnoses	245	100%	594	100%	<0.001
Concurrent diagnoses, DOHMH (%)	84	34%	162	27%	<0.001
Linked to care within 90 days of HIV test (%)	198	81%	502	85%	<0.001
Of clients who had a CD4 count or VL:					
Median first CD4 (cells/ μ L) [Q1, Q3]	338 (N=199) [88, 486]		352 (N=514) [162, 561]		0.5941
Median first VL (copies/mL) [Q1, Q3]	27418 (N=194) [5610, 100000]		29890 (N=514) [4999, 100000]		<0.001

➤ Between 2006 and 2010, there were statistically significant increases in the number of new diagnoses, the number of clients linked to care within 90 days and the median first post-test viral load. There was a significant decrease in the number of concurrent diagnoses.

Limitations

- The data reported here are not reflective of all HIV testing performed citywide. The NYC DOHMH directly funds only a proportion of the total HIV testing in New York City.
- This analysis uses any reported evidence of either a CD4 count or viral load lab testing as a proxy for provision of primary medical care. Individuals with a CD4 count or viral load drawn within 90 days of their reported HIV test date are considered linked to care, which is consistent with NYC DOHMH's definition at the time of this analysis.
 - This measure may overestimate linkage to care if either of these labs was drawn at the time of testing but the patient never saw a provider.
- Transmission risk is based on NYC DOHMH Surveillance definitions. Risk has not been definitively established for 25% of newly diagnosed positive clients.

Conclusions

- Expanded HIV testing supported by NYC DOHMH led to yearly increases in the number of newly diagnosed cases identified. Early detection of HIV infections rose, while late diagnoses fell. Most new cases are linked to medical care in under 90 days.
- In NYC, expanded testing activities allowed more people to be diagnosed earlier in the course of their infection and promptly linked to care.

Acknowledgments

This work was made possible by expert input from Chris Williams, Sonny Ly, Sheryl Young and Sara Bodach.

References

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