

HIV Diagnosis and Care Initiation Among Foreign-born Persons in New York City, 2001–2007

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Ellen Wiewel, Hani Nasrallah, David Hanna, Colin Shepard, Lucia Torian and Elizabeth Begier
Bureau of HIV/AIDS Prevention and Control, New York City Department of Health and Mental Hygiene

Contact: Ellen W. Wiewel, MHS
ewiewel@health.nyc.gov
Phone: 212-442-3516
Fax: 212-788-2520



Background

- Foreign-born persons comprise 37% of New York City's population and are less likely than US-born persons to have health insurance
- Foreign-born may be at increased risk for HIV infection through contact with higher-prevalence populations from or in their countries of origin
- Monitoring data on HIV diagnoses and care among foreign-born persons can be used to inform prevention and care measures

- The New York City Department of Health and Mental Hygiene conducts population-based HIV/AIDS surveillance
- New York State law requires named reporting of HIV and AIDS diagnoses, positive Western Blot tests for HIV antibody, and HIV-related laboratory tests monitoring CD4 T cell count and viral load
- Analysis was performed using SAS 9.1 on HIV/AIDS surveillance data reported through September 30, 2008

Methods

- We determined HIV diagnosis trends among foreign-born New Yorkers from 2001–2007
- We compared demographic characteristics of foreign-born and non-foreign-born (i.e., US-born and those with unknown country of birth) diagnosed in 2006–2007, and calculated annualized diagnosis rates per 100,000 population using denominators from American Community Survey 2006
- We assessed HIV progression at diagnosis by comparing foreign-born and non-foreign-born with concurrent HIV/AIDS diagnosis (AIDS within 1 month of HIV diagnosis, indicating late diagnosis) and comparing median initial (within 3 months of diagnosis) CD4 count
- We assessed timeliness of initiation of HIV-related medical care by calculating the percent among the newly diagnosed with a viral load or CD4 count within 3 months of diagnosis

Conclusions

- Since 2001, an increasing percentage of HIV diagnoses in New York City are in foreign-born persons
- Foreign-born persons have more advanced infection at diagnosis, suggesting that their infections remain undiagnosed longer
- Foreign-born newly diagnosed with HIV are more likely to initiate medical care within 3 months than non-foreign-born, but further efforts are needed in both groups to improve care initiation
- Foreign-born New Yorkers may particularly benefit from ongoing efforts to promote routine HIV testing citywide

Results

1. Demographic characteristics of New Yorkers newly diagnosed with HIV in 2006-7, by place of birth

	Foreign-born		Non-foreign-born	
	N	%	N	%
Total	2,077	100%	5,591	100%

Sex and Transmission risk

	Foreign-born	Non-foreign-born
Male	1,419 68%	4,175 75%
Transmission risk, males		
Men who have sex with men	704 50%	2,342 56%
Injection drug use	37 3%	370 9%
Heterosexual	161 11%	264 6%
Perinatal	2 0%	10 0%
Other	1 0%	0 0%
Unknown	514 36%	1,189 28%
Female	658 32%	1,416 25%
Transmission risk, females		
Injection drug use	10 2%	113 8%
Heterosexual	514 78%	904 64%
Perinatal	0 0%	14 1%
Other	0 0%	0 0%
Unknown	134 20%	385 27%

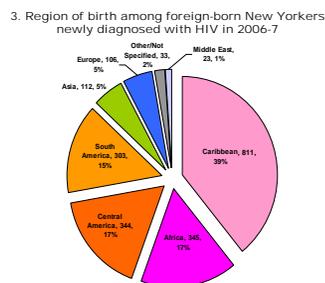
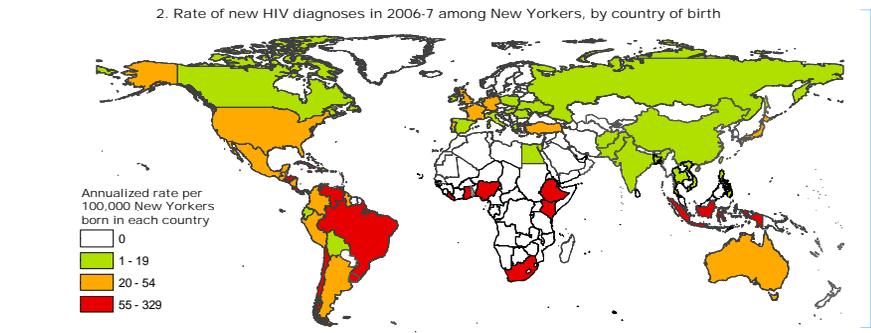
Age at diagnosis (years)

Age Group	Foreign-born	Non-foreign-born
0-12	3 0%	23 0%
13-19	57 3%	290 5%
20-29	484 23%	1,431 26%
30-39	699 34%	1,424 25%
40-49	497 24%	1,490 27%
50-59	237 11%	686 12%
60+	100 5%	247 4%

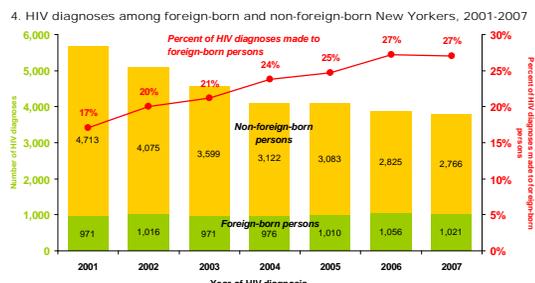
Race/ethnicity

Race/Ethnicity	Foreign-born	Non-foreign-born
Black	937 45%	2,897 52%
Hispanic	860 41%	1,494 27%
White	146 7%	1,122 20%
Asian/Pacific Islander	118 6%	54 1%
Native American	5 0%	7 0%
Other/Unknown	11 1%	17 0%

1. Foreign-born New Yorkers were more likely* than non-foreign-born to be female (with heterosexual transmission risk), in their 30s, and Hispanic, and less likely to have injected drugs. *p<0.01



3. The Caribbean accounted for more HIV diagnoses among foreign-born New Yorkers than any other region.



4. Overall HIV diagnoses declined 2001–2007 (5,684–3,787; p<0.01), but diagnoses among foreign-born New Yorkers increased in number (971–1,021; p<0.13) and as a percent of all cases (17%–27%; p<0.01).

2. New Yorkers from African countries had the highest rates of HIV diagnosis (South Africa, Kenya, Ethiopia and Liberia) followed by New Yorkers from Central and South America (Honduras, Uruguay, Brazil and Costa Rica)

5. Foreign-born persons were more likely than non-foreign-born to:

- Be diagnosed concurrently with AIDS (33% vs. 22%; p<0.01)
- Initiate care within 3 months (78% vs. 72%; p<0.01; for persons diagnosed with HIV only, 69% vs. 65%; p<0.01)
- Have a lower first CD4 count (269; IQR: 86–447, vs. 352; IQR: 156–536; p<0.01)

