

HIV EPIDEMIOLOGY & FIELD SERVICES SEMIANNUAL REPORT

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Publication schedule: This report reflects events occurring through June 30, 2007, and reported by March 31, 2008, unless otherwise stated. It represents diagnoses made through nine months prior to the publication date because case reporting is 85% complete by that time. Because cases continue to be reported for many months, the final numbers can be expected to be higher.

To receive this report via e-mail, send an e-mail request to: hivreport@health.nyc.gov

For electronic versions of this and other HIV-related reports, visit: http://www.nyc.gov/html/doh/html/dires/hivepi.shtml

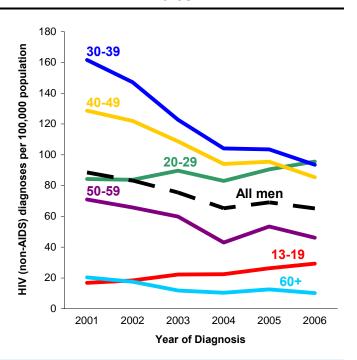
HIV Epidemiology and Field Services Program 346 Broadway, Room 706, CN44, New York, NY 10013 Tel: (212) 442-3388 Fax: (212) 788-2520

HIGHLIGHTS FROM THE FIRST HALF OF 2007

- 100,642 persons were diagnosed and reported in New York City and presumed to be living with HIV/AIDS through the first half of 2007, including 38,294 living with HIV (not diagnosed with AIDS) and 62,348 living with AIDS.
- In the first half of 2007, there were 1,406 new diagnoses of HIV (non-AIDS) in New York City.
 - HIV (non-AIDS) was newly diagnosed among 253 men who have sex with men aged 13-29 in the first half of 2007, a slight increase over the 245 cases diagnosed at the same time last year (up 8 cases; a 3% increase).
- Concurrent HIV/AIDS diagnosis accounted for 24.7% of all HIV diagnoses in the first half of 2007, with higher proportions among older persons and men in whom transmission risk is unknown.
- 954 persons with HIV/AIDS in New York City died in the first half of 2007.
 - Injection drug users accounted for 20.8% of all persons living with HIV/AIDS but 36.9% of all deaths to persons with HIV/AIDS.
 - While HIV disease accounted for a majority of deaths due to known causes among persons with HIV/AIDS, an increasing proportion are due to non-HIV-related causes (41.7% in the first half of 2007).

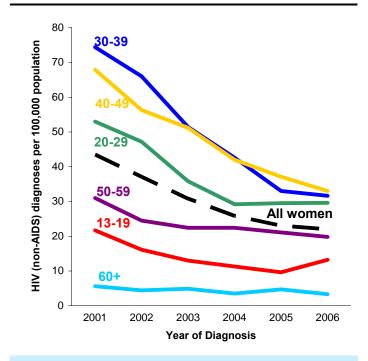
HIV (Non-AIDS) Diagnosis Rates by Age and Sex New York City, 2001 – 2006*

Males



New HIV (non-AIDS) diagnoses in men have declined overall since 2001. However, in young men aged 13-19 and 20-29, rates have been increasing.

Females



New HIV (non-AIDS) diagnoses in women have declined overall since 2001. However, in some age groups (13-19 and 20-29), rates have remained the same or have increased in 2005 and 2006.

^{*} Rates based on 2000 Census population data.

HIV/AIDS diagnoses and deaths occurring January 1, 2007, through June 30, 2007, and persons diagnosed and reported in New York City and presumed to be living with HIV/AIDS as of June 30, 2007¹

	HIV diagnoses 1/1/2007–6/30/2007 ¹						AIDS diagnoses 1/1/2007-6/30/2007 ³		PLWHA as of 6/30/2007		Deaths ⁴ 1/1/2007–6/30/2007		
	Total		Without AIDS		Concurrent with AIDS diagnosis ²								
	N	%	N	%	N	%	Row %	N	%	N	%	N	%
Total	1,866	100.0	1,406	100.0	460	100.0	24.7	1,694	100.0	100,642	100.0	954	100.0
Sex													
Male	1,368	73.3	1,030	73.3	338	73.5	24.7	1161	68.5	70,240	69.8	645	67.6
Female	498	26.7	376	26.7	122	26.5	24.5	533	31.5	30,402	30.2	309	32.4
Race/Ethnicity													
Black	969	51.9	717	51.0	252	54.8	26.0	879	51.9	45,652	45.4	509	53.4
Hispanic	519	27.8	397	28.2	122	26.5	23.5	511	30.2	31,930	31.7	294	30.8
White	313	16.8	245	17.4	68	14.8	21.7	268	15.8	21,055	20.9	138	14.5
Asian/Pacific Islander	58	3.1	42	3.0	16	3.5	27.6	31	1.8	1,311	1.3	10	1.0
Native American	6	0.3	5	0.4	1	0.2	16.7	2	0.1	105	0.1	0	0.0
Other/unknown	1	0.1	0	0.0	1	0.2	100.0	3	0.2	589	0.6	3	0.3
Age group (years) ⁵													
0-12	6	0.3	5	0.4	1	0.2	16.7	1	0.1	728	0.7	1	0.1
13-19	79	4.2	72	5.1	7	1.5	8.9	32	1.9	1,567	1.6	5	0.5
20-29	472	25.3	393	28.0	79	17.2	16.7	221	13.0	6,383	6.3	23	2.4
30-39	504	27.0	400	28.4	104	22.6	20.6	405	23.9	19,002	18.9	102	10.7
40-49	498	26.7	358	25.5	140	30.4	28.1	594	35.1	39,002	38.8	310	32.5
50-59	218	11.7	129	9.2	89	19.3	40.8	326	19.2	25,269	25.1	348	36.5
60+	89	4.8	49	3.5	40	8.7	44.9	115	6.8	8,691	8.6	165	17.3
Borough of residence													
Manhattan	524	28.1	391	27.8	133	28.9	25.4	460	27.2	30,630	30.4	247	25.9
Brooklyn	487	26.1	355	25.2	132	28.7	27.1	489	28.9	24,889	24.7	272	28.5
Bronx	439	23.5	338	24.0	101	22.0	23.0	405	23.9	21,868	21.7	264	27.7
Queens	271 36	14.5	210	14.9	61	13.3	22.5 27.8	233	13.8	13,916	13.8	101	10.6
Staten Island Unknown/outside NYC	109	1.9 5.8	26 86	1.8 6.1	10 23	2.2 5.0	21.8	30 77	1.8 4.5	1,772 7,567	1.8 7.5	26 44	2.7 4.6
	109	5.6	00	0.1	23	5.0	21.1	11	4.5	7,507	7.5	44	4.0
Transmission risk	700	07.0	500	40.0	4.40	00.0	00.4	40.4	00.0	00.407	00.0	4.47	45.4
Men who have sex with men	708	37.9	566	40.3	142	30.9	20.1	494	29.2	30,487	30.3	147	15.4
Injection drug use history	119	6.4	90	6.4	29	6.3	24.4	230	13.6	20,899	20.8	352	36.9
Heterosexual ⁶	451	24.2	339	24.1	112	24.3	24.8	387	22.8	17,892	17.8	161	16.9
Perinatal Other	5 1	0.3 0.1	5 0	0.4 0.0	0 1	0.0 0.2	0.0 100.0	16 4	0.9 0.2	2,442 289	2.4 0.3	7 3	0.7 0.3
Unknown	582	31.2	406	28.9	176	38.3	30.2	563	33.2	28,633	28.5	3 284	29.8
	302	31.2	400	20.9	170	30.3	30.2	303	JJ.2	20,000	20.0	204	23.0
Clinical status as of 6/30/2007	- l-	- /c	m/r	-/-	-/-	-/-	/	·- /-	- /-	20.204	20.2	440	10.4
HIV (non-AIDS) AIDS	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	38,294 62,348	38.0 62.0	118 836	12.4 87.6
AIDO	n/a	n/a	n/a	II/a	II/a	II/a	II/a	n/a	II/a	02,348	02.0	030	07.0

PLWHA=Persons living with HIV/AIDS. All percents are column percents unless otherwise indicated.

Which HIV-related events are reportable in New York State, and who is required to report?

In 1998, New York State expanded AIDS case reporting to include HIV (Chapter 163 of the Laws of 1998, PHL Article 21). The law took effect on **June 1, 2000** and was amended on **June 1, 2005**. All diagnostic and clinical providers (doctors, nurses, physician assistants, and all others diagnosing HIV or providing care to HIV-infected persons) and laboratories are required by law to report the following events:

Events reportable by providers on the required New York State Provider Report Form (PRF)

- Diagnoses of HIV infection
- Diagnoses of HIV illness in a previously unreported individual (i.e., HIV illness not meeting the AIDS case definition)
- Diagnoses of AIDS-defining conditions

Events reportable by laboratories

- All positive Western blot test results
- All viral load test results (detectable and undetectable)
- All CD4 test results
- All viral nucleotide sequence results

For assistance in reporting a case of HIV/AIDS, to receive Provider Report Forms, or to obtain more information, please call (212) 442-3388



TALK TO US CNAP (212) 693-1419

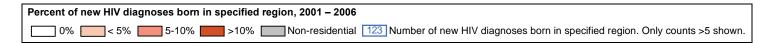
New York State law also requires that PRFs contain names of sexual or needle-sharing partners of the infected person known to medical providers or those whom the infected person wishes to have notified of their possible exposures. Providers can utilize and/or refer HIV-infected persons to the NYC DOHMH Contact Notification Assistance Program (CNAP) at (212) 693-1419 for assistance in carrying out partner notification.

For more information about the New York State HIV reporting and partner notification law and CNAP, visit: www.health.state.ny.us/diseases/aids/regulations

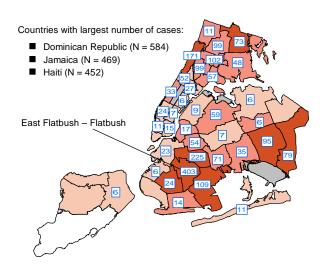
¹ For events reported by March 31, 2008. ² HIV diagnosed concurrently with AIDS (within 31 days of HIV diagnosis). Row percent is percent of total HIV diagnoses that were concurrent with AIDS diagnoses. ³ AIDS was diagnosed in 2007 and includes concurrent HIV/AIDS diagnosis. ⁴ Includes deaths from any cause in persons with HIV/AIDS. ⁵ For HIV and AIDS diagnoses, age at diagnosis; for PLWHA, age as of June 30, 2007; and for deaths, age at death. ⁶ Includes persons who had heterosexual sex with an HIV-infected person, an injection drug user, or a person who has received blood products. For females only, also includes sex with a male and at least one of the following: history of prostitution, multiple male sex partners, sexually transmitted disease, crack/cocaine use, or sex with a bisexual male; probable heterosexual transmission as noted in medical chart; or negative history of injection drug user.

HIV Diagnoses in New York City by Region of Birth and UHF Neighborhood, 2001 – 2006¹

The percent of New Yorkers newly diagnosed with HIV who are foreign-born increased from 17% in 2001 to 27% in 2006. During these six years, there were 5,804 new HIV diagnoses among foreign-born persons, the majority of whom were born in the Caribbean and West Indies, Central and South America, Africa and Asia. HIV-infected foreign-born persons are represented in every UHF neighborhood, but certain areas have higher proportions from specific regions of the world compared to others, as shown below.

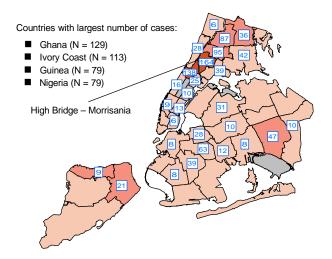


Caribbean and West Indies (N = 2,256)²



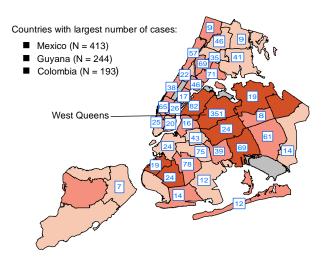
East Flatbush - Flatbush in central Brooklyn is the UHF neighborhood with the largest number (403) and percent (32%) of new HIV diagnoses born in the Caribbean or west Indies.

Africa $(N = 1,124)^2$



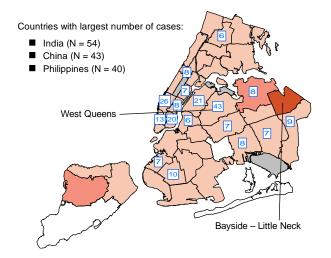
The UHF neighborhood with the largest number (164) and percent (12%) of new HIV diagnoses born in Africa is High Bridge - Morrisania in the Bronx.

Central and South America $(N = 1,742)^2$ **Includes Mexico**



The UHF neighborhood of West Queens has the largest number (351) and percent (32%) of new HIV diagnoses born in Central or South America.

Asia $(N = 322)^2$ Includes Middle East



West Queens is the UHF neighborhood with the largest number of new HIV diagnoses born in Asia (43). The neighborhood with the largest percent of new HIV diagnoses born in Asia is Bayside - Little Neck, Queens (15%).

Based on data reported to the New York City Department of Health and Mental Hygiene by September 30, 2007.

² Region of birth totals include persons whose place of residence was unknown.

Undiagnosed HIV Infection among New York City Jail Entrants, 2006

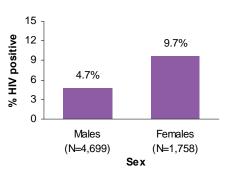
Results of a Blinded Serosurvey

Correctional facilities present unique opportunities for HIV diagnosis and initiation of care because HIV prevalence is higher among inmates than in the general population. Jails are the entry point into the correctional system and would appear to be ideal settings for HIV screening; however, they are complex and dynamic environments, and length of stay is customarily short. In an effort to increase knowledge of HIV serostatus among inmates, the NYC correctional system introduced routine voluntary rapid testing in 2004, resulting in a fourfold increase in HIV testing. In 2005, it was the largest volume reporter of HIV diagnoses in NYC. During 2006, a blinded serosurvey was conducted to estimate HIV prevalence in persons newly admitted to the NYC correctional system and estimate the proportion of infections that were undiagnosed. Remnant serum from routine syphilis screening was collected. Data on consecutive new jail admissions were matched to NYC HIV/AIDS Surveillance Registry (HARS) and information on self-reported HIV status was collected to allow estimation of whether HIV infections were previously diagnosed. After all personal identifiers were removed from all specimens and data, serum was tested for HIV.

Findings From Past NYC Jail System HIV Serosurveys

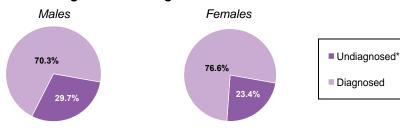
Female 40 Male % HIV positive 30 25.7% 25.1% 22.4% 19.0% 19.4% 18.1% 20 16.2% 12.3% 12.7% 7.0% 7.6% 6.6% 10 0 1989 1991 1992 1997 1998 1996 (N=2,478) (N=2,232)(N=2,580)(N=5,414)(N=5,428)(N=9,001)Year of Serosurvey

2006 HIV Seroprevalence in New Jail Admissions



- In the last NYC jail serosurvey conducted in 1998, HIV prevalence was 7.6% in males and 18.1% in females.
- In 2006, HIV prevalence dropped to 4.7% in males, 9.7% in females and 6.1% overall in new jail admissions.
- HIV prevalence was 33.3% among males who reported ever having sex with a man (MSM). Among inmates who reported ever injecting illicit drugs (IDUs), HIV prevalence was 15.3% in males and 23.2% in females.
- Among all inmates who tested HIV+ during serosurvey testing, 105 overall (29.7% of males and 23.4% of females) appeared to have undiagnosed HIV infection at admission.*

% Undiagnosed* Among HIV-infected Jail Admissions



- Only 10 (10.7%) of the 105 undiagnosed reported a history of MSM or IDU activity, factors that are traditionally targeted for testing.
- Of the 105 previously undiagnosed, 12 (11%) were newly diagnosed by the jail HIV testing program, but 73 (70%) had declined HIV testing at intake.

Limitations

- Only 63% of male and 61% of female new admissions had remnant specimens available for testing.
- New admissions without a specimen had evidence of higher prevalence in HARS.
- Assuming that the distribution of all HIV-infected persons is similar to new admissions matching to HARS, the estimated true prevalence would be:
 - 6.5% in males
 - 13.9% in females
- HARS matching is an imperfect process.

Conclusions and Recommendations

- HIV prevalence in new admissions has decreased since the last jail serosurvey in 1998. As was the case in past serosurveys, prevalence is twice as high in women as in men.
- Despite a recent fourfold increase in jail testing, most undiagnosed infections are not identified, largely because of low acceptance of HIV rapid testing.
- Most undiagnosed did not report recognized HIV risk factors. This finding supports routine voluntary testing for all jail entrants over targeted testing of jail entrants with known or disclosed risk factors.

^{*} Infections in which inmates did not self-report being HIV-infected and were not in HARS.