

HIV EPIDEMIOLOGY & FIELD SERVICES SEMIANNUAL REPORT

Covering January 1, 2011 - June 30, 2011

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Publication schedule: This report reflects events occurring through June 30, 2011, and reported by March 31, 2012, unless otherwise stated. It represents diagnoses made through nine months prior to the publication date because case reporting is 90% 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

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HIGHLIGHTS FROM THE FIRST HALF OF 2011

- As of June 30, 2011, 111,949 persons had been diagnosed and reported in New York City and were presumed to be living with HIV/AIDS (PLWHA).
 - 47,861 (43%) of PLWHA are 50 years or older, an increase of 8% from the same period in 2010.
- In the first half of 2011, there were 1,749 new diagnoses of HIV/AIDS in New York City:
 - For the first time in NYC in a given reporting period, more than half (51.4%) of new HIV/AIDS diagnoses were among men who have sex with men (MSM).
 - Also for the first time, less than one-fifth of new HIV diagnoses (19.6%) were made concurrently with an AIDS diagnosis.
 - Certain age and race/ethnic groups were disproportionately affected by HIV/AIDS in the first half of 2011: one-third (33.4%) of new HIV/AIDS diagnoses among males were in young men aged 20-29; 93% of new HIV/AIDS diagnoses among females were in black or Hispanic women.
 - 94 persons were newly diagnosed with HIV in the acute phase (5.4% of all new HIV diagnoses); 12.8% were women and 80.9% were MSM. Of all new HIV diagnoses among MSM during this timeframe, 8.5% were acute HIV infections.
 - The geographic distribution of HIV/AIDS in New York City is varied: Manhattan had the largest proportion of PLWHA (29.7%), while Brooklyn had the largest proportion of new HIV/AIDS diagnoses (28.3%).

HIV-related Partner Notification and Testing in New York City, June 2006-June 2011

The Field Services Unit (FSU) of the HIV Epidemiology Program of NYC DOHMH was established in June 2006 to assist HIV medical providers and patients diagnosed with HIV infection with partner services and linkage to medical care. By the end of 2011, FSU staff members were stationed in 55 clinical facilities, tuberculosis clinics citywide, and NYC jails.

FSU interviewed 625 (36%) persons newly diagnosed with HIV infection in NYC in the first half of 2011. This is an increase of 29% since the same time period in 2010 (Figure 1).

As a result of FSU partner services conducted in 2011, 818 partners were notified, 517 were tested for HIV infection, and 66 were newly diagnosed with HIV (Figure 2). Since 2006, 220 partners have been newly diagnosed with HIV as a result of partner services provided by FSU.

Figure 1. Proportion of Newly Diagnosed HIV Patients Interviewed by FSU

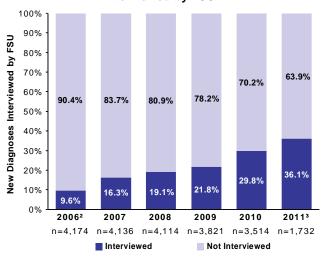
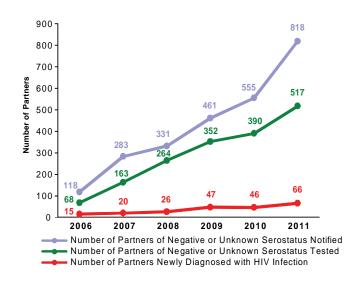


Figure 2. Outcomes of Partner Notification by FSU



^{1.} http://www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf.

^{2.} FSU created in June 2006, so data for 2006 are for June-December 2006 only.

^{3. 2011} data are for January-June 2011 only.

^{4.} Notifications are based on the year the index patient was assigned. For example, a patient assigned in 2009 may have a partner who is notified in 2010.

Table 1. HIV/AIDS diagnoses and deaths occurring January 1, 2011, through June 30, 2011, and persons diagnosed and reported in New York City and presumed to be living with HIV/AIDS as of June 30, 2011

	HIV diagnoses ¹								AIDS diagnoses³		PLWHA as of 6/30/2011		Deaths ⁴	
	Total		Without AIDS		Concurrent with AIDS diagnosis ²					•				
	N	%	N	%	N	%	Row %	N	%	N	%	N	%	
Total	1,749	100.0	1,406	100.0	343	100.0	19.6	1,145	100.0	111,949	100.0	876	100.0	
Sex														
Male	1,351	77.2	1,093	77.7	258	75.2	19.1	836	73.0	79,739	71.2	617	70.4	
Female	398	22.8	313	22.3	85	24.8	21.4	309	27.0	32,210	28.8	259	29.6	
Race/Ethnicity ⁵														
Black	818	46.8	640	45.5	178	51.9	21.8	625	54.6	50,026	44.7	452	51.6	
Hispanic	558	31.9	448	31.9	110	32.1	19.7	363	31.7	36,393	32.5	287	32.8	
White	313	17.9	266	18.9	47	13.7	15.0	138	12.1	22,936	20.5	124	14.2	
Asian/Pacific Islander	57	3.3	49	3.5	8	2.3	14.0	18	1.6	1,875	1.7	10	1.1	
Native American	1	0.1	1	0.1	0	0.0	0.0	1	0.1	255	0.2	3	0.3	
Multiracial	2	0.1	2	0.1	0	0.0	0.0	0	0.0	53	0.0	0	0.0	
Unknown	0	0.0	0	0.0	0	0.0	0.0	0	0.0	411	0.4	0	0.0	
Age group (years) ⁶														
0-12	6	0.3	6	0.4	0	0.0	0.0	0	0.0	278	0.2	0	0.0	
13-19	97	5.5	92	6.5	5	1.5	5.2	27	2.4	1,311	1.2	1	0.1	
20-29	528	30.2	472	33.6	56	16.3	10.6	192	16.8	8,332	7.4	21	2.4	
30-39	453	25.9	362	25.7	91	26.5	20.1	276	24.1	16,527	14.8	57	6.5	
40-49	385	22.0	283	20.1	102	29.7	26.5	378	33.0	37,640	33.6	229	26.1	
50-59	211	12.1	144	10.2	67	19.5	31.8	202	17.6	33,003	29.5	332	37.9	
60+	69	3.9	47	3.3	22	6.4	31.9	70	6.1	14,858	13.3	236	26.9	
Borough of residence														
Bronx	356	20.4	273	19.4	83	24.2	23.3	282	24.6	23,544	21.0	223	25.5	
Brooklyn	495	28.3	378	26.9	117	34.1	23.6	347	30.3	27,371	24.4	254	29.0	
Manhattan	447	25.6	379	27.0	68	19.8	15.2	259	22.6	33,291	29.7	237	27.1	
Queens	254	14.5	208	14.8	46	13.4	18.1	155	13.5	15,953	14.3	110	12.6	
Staten Island	16	0.9	8	0.6	8	2.3	50.0	12	1.0	1,895	1.7	22	2.5	
Outside NYC	174	9.9	153	10.9	21	6.1	12.1	70	6.1	9,192	8.2	27	3.1	
Unknown	7	0.4	7	0.5	0	0.0	0.0	20	1.7	703	0.6	3	0.3	
Transmission risk														
Men who have sex with men	899	51.4	765	54.4	134	39.1	14.9	411	35.9	38,773	34.6	158	18.0	
Injection drug use history	73	4.2	58	4.1	15	4.4	20.5	121	10.6	20,301	18.1	321	36.6	
Heterosexual ⁷	387	22.1	293	20.8	94	27.4	24.3	292	25.5	21,707	19.4	159	18.2	
Perinatal	6	0.3	6	0.4	0	0.0	0.0	22	1.9	2,490	2.2	7	0.8	
Other	0	0.0	0	0.0	0	0.0	0.0	0	0.0	246	0.2	1	0.1	
Unknown	384	22.0	284	20.2	100	29.2	26.0	299	26.1	28,432	25.4	230	26.3	
Clinical status as of 6/30/2011														
HIV (non-AIDS)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	45,269	40.4	153	17.5	
AIDS	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	66,680	59.6	723	82.5	

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 expanded further 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 medical providers to talk to HIV-infected patients about partner notification and report such patients' known sex or needle-sharing partners to the health department. Providers can fill in the Medical Provider HIV/AIDS and Partner/Contact Report Form (PRF) or call the NYC DOHMH Contact Notification Assistance Program (CNAP) at (212) 693-1419. Providers can refer HIV-infected patients to CNAP for direct assistance with partner notification.

For more information about the New York State HIV reporting and partner notification law and CNAP, visit: http://www.nyc.gov/html/doh/html/dires/hcpreporting_how.shtml.

PLWHA=Persons living with HIV/AIDS; n/a=Not applicable. All percents are column percents unless otherwise indicated.

The for events reported by March 31, 2012. 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 2011 and includes concurrent HIV/AIDS diagnosis. 4 Includes deaths from

any cause in persons with HIV/AIDS. ⁵ For technical notes on race/ethnicity: http://www.nyc.gov/html/doh/html/ah/hivtables.shtml#abbrev.
⁶ For HIV and AIDS diagnoses, age at diagnosis; for PLWHA, age as of June 30, 2011; and for deaths, age at death. ⁷ Includes persons who had heterosexual sex with a person they know to be HIV-infected, an injection drug user, or a person who has received blood products. For females only, also includes history of prostitution, multiple sex partners, sexually transmitted disease, crack/cocaine use, sex with a bisexual male, probable heterosexual transmission as noted in medical chart, or sex with a male and negative history of injection drug use.

Table 2. HIV/AIDS diagnoses and deaths occurring January 1, 2011, through June 30, 2011, and persons diagnosed and reported in New York City and presumed to be living with HIV/AIDS as of June 30, 2011¹, by sex

and reported in	New IC	HIV diagnoses ¹								PLWHA as of 6/30/2011		Deaths ⁴	
	Total		Without AIDS		Concurrent with AIDS diagnosis ²								
	N	%	N	%	N	%	Row %	N	%	N	%	N	%
Total (Male and Female)	1,749	100.0	1,406	100.0	343	100.0	19.6	1,145	100.0	111,949	100.0	876	100.0
Male Race/Ethnicity ⁵	1,351	100.0	1,093	100.0	258	100.0	19.1	836	100.0	79,739	100.0	617	100.0
Black	560	41.5	440	40.3	120	46.5	21.4	414	49.5	31,250	39.2	302	48.9
Hispanic	445	32.9	358	32.8	87	33.7	19.6	281	33.6	25,929	32.5	204	33.1
White Asian/Pacific Islander	293 51	21.7 3.8	249 44	22.8 4.0	44 7	17.1 2.7	15.0 13.7	125 15	15.0 1.8	20,493 1,531	25.7 1.9	102 7	16.5 1.1
Native American	1	0.1	1	0.1	0	0.0	0.0	1	0.1	183	0.2	2	0.3
Multiracial	1	0.1	1	0.1	0	0.0	0.0	0	0.0	38	0.0	0	0.0
Unknown Age group (years) ⁶	0	0.0	0	0.0	0	0.0	0.0	0	0.0	315	0.4	0	0.0
0-12	2	0.1	2	0.2	0	0.0	0.0	0	0.0	134	0.2	0	0.0
13-19	71	5.3	68	6.2	3	1.2	4.2	16	1.9	660	0.8	1	0.2
20-29 30-39	451 362	33.4 26.8	405 288	37.1 26.3	46 74	17.8 28.7	10.2 20.4	160 206	19.1 24.6	6,213 11,578	7.8 14.5	16 38	2.6 6.2
40-49	278	20.6	204	18.7	74	28.7	26.6	267	31.9	26,515	33.3	150	24.3
50-59	146	10.8	97	8.9	49	19.0	33.6	141	16.9	23,535	29.5	229	37.1
60+	41	3.0	29	2.7	12	4.7	29.3	46	5.5	11,104	13.9	183	29.7
Bronx Bronx	230	17.0	175	16.0	55	21.3	23.9	189	22.6	14,170	17.8	150	24.3
Brooklyn	363	26.9	277	25.3	86	33.3	23.7	247	29.5	17,616	22.1	172	27.9
Manhattan	398	29.5	338	30.9	60	23.3	15.1	211	25.2	27,213	34.1	185	30.0
Queens Staten Island	197 11	14.6 0.8	162 6	14.8 0.5	35 5	13.6 1.9	17.8 45.5	111 8	13.3 1.0	11,384 1,228	14.3 1.5	71 16	11.5 2.6
Outside NYC	145	10.7	128	11.7	17	6.6	11.7	57	6.8	7,601	9.5	20	3.2
Unknown	7	0.5	7	0.6	0	0.0	0.0	13	1.6	527	0.7	3	0.5
Transmission risk Men who have sex with men	899	66.5	765	70.0	134	51.9	14.9	411	49.2	38,773	48.6	158	25.6
Injection drug use history	58	4.3	44	4.0	134	5.4	24.1	90	10.8	14,413	18.1	222	36.0
Heterosexual ⁷	69	5.1	49	4.5	20	7.8	29.0	70	8.4	5,695	7.1	53	8.6
Perinatal Other	2 0	0.1 0.0	2 0	0.2 0.0	0 0	0.0 0.0	0.0 0.0	14 0	1.7 0.0	1,214 125	1.5 0.2	4 0	0.6 0.0
Unknown	323	23.9	233	21.3	90	34.9	27.9	251	30.0	19,519	24.5	180	29.2
Clinical status as of 6/30/2011										-,-			
HIV (non-AIDS)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	32,237	40.4	113	18.3
AIDS	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	47,502	59.6	504	81.7
Female 5	398	100.0	313	100.0	85	100.0	21.4	309	100.0	32,210	100.0	259	100.0
Race/Ethnicity ⁵ Black	258	64.8	200	63.9	58	68.2	22.5	211	68.3	18,776	58.3	150	57.9
Hispanic	113	28.4	90	28.8	23	27.1	20.4	82	26.5	10,464	32.5	83	32.0
White	20	5.0	17	5.4	3	3.5	15.0	13	4.2	2,443	7.6	22	8.5
Asian/Pacific Islander Native American	6 0	1.5 0.0	5 0	1.6 0.0	1 0	1.2 0.0	16.7 0.0	3 0	1.0 0.0	344 72	1.1 0.2	3 1	1.2 0.4
Multiracial	1	0.3	1	0.3	0	0.0	0.0	Ö	0.0	15	0.0	Ö	0.0
Unknown	0	0.0	0	0.0	0	0.0	0.0	0	0.0	96	0.3	0	0.0
Age group (years) ⁶ 0-12	4	1.0	4	1.3	0	0.0	0.0	0	0.0	144	0.4	0	0.0
13-19	26	6.5	24	7.7	2	2.4	7.7	11	3.6	651	2.0	0	0.0
20-29	77	19.3	67	21.4	10	11.8	13.0	32	10.4	2,119	6.6	5	1.9
30-39	91	22.9	74	23.6	17	20.0	18.7	70	22.7	4,949	15.4	19	7.3
40-49 50-59	107 65	26.9 16.3	79 47	25.2 15.0	28 18	32.9 21.2	26.2 27.7	111 61	35.9 19.7	11,125 9,468	34.5 29.4	79 103	30.5 39.8
60+	28	7.0	18	5.8	10	11.8	35.7	24	7.8	3,754	11.7	53	20.5
Borough of residence	400	04.7	00	04.0	00	00.0	00.0	00	00.4	0.074	00.4	70	00.0
Bronx Brooklyn	126 132	31.7 33.2	98 101	31.3 32.3	28 31	32.9 36.5	22.2 23.5	93 100	30.1 32.4	9,374 9,755	29.1 30.3	73 82	28.2 31.7
Manhattan	49	12.3	41	13.1	8	9.4	16.3	48	15.5	6,078	18.9	52	20.1
Queens	57	14.3	46	14.7	11	12.9	19.3	44	14.2	4,569	14.2	39	15.1
Staten Island Outside NYC	5 29	1.3 7.3	2 25	0.6 8.0	3 4	3.5 4.7	60.0 13.8	4 13	1.3 4.2	667 1,591	2.1 4.9	6 7	2.3 2.7
Unknown	29 0	0.0	25 0	0.0	0	0.0	0.0	13 7	2.3	1,591	4.9 0.5	0	0.0
Transmission risk	ŭ	0	ŭ		-			•	0		0	ŭ	
Injection drug use history	15	3.8	14	4.5	1	1.2	6.7	31	10.0	5,888	18.3	99	38.2
Heterosexual ['] Perinatal	318 4	79.9 1.0	244 4	78.0 1.3	74 0	87.1 0.0	23.3	222 8	71.8 2.6	16,012 1,276	49.7 4.0	106 3	40.9 1.2
Other	0	0.0	0	0.0	0	0.0	0.0	0	0.0	1,276	4.0 0.4	3 1	0.4
Unknown	61	15.3	51	16.3	10	11.8	16.4	48	15.5	8,913	27.7	50	19.3
Clinical status as of 6/30/2011		1		/	/	/	<i>I</i> .	1		40.000	40.5	40	45.4
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	13,032 19,178	40.5 59.5	40 219	15.4 84.6
	11/4	11,14	11/4	1,, u	11, U	11/4	1174	11, 4	, u	. 5, . 7 6	55.0		30

PLWHA=Persons living with HIV/AIDS; n/a=Not applicable. All percents are column percents unless otherwise indicated. Footnotes appear at the bottom of Table 1.

The First Decade of HIV Reporting in New York City

HIV/AIDS Surveillance 2000-Present

In 1983, New York State mandated reporting of all AIDS diagnoses, thus formalizing the surveillance that began with the first reports of AIDS in 1981. On June 1, 2000, another surveillance milestone was reached: the implementation of reporting of HIV diagnoses that had yet not progressed to AIDS and the reporting by laboratories of all Western blot tests for HIV antibody, all detectable viral loads, and all CD4 results <500 cells/µL. On June 1, 2005, laboratory reporting was expanded to include all viral load and CD4 values and all nucleotide sequences obtained for genotypic analysis. New York State thus became the first in the nation to mandate comprehensive electronic HIV-related laboratory reporting.¹

New York City's HIV/AIDS surveillance data are maintained in a secure registry that is continuously updated with new, confirmed diagnoses and laboratory reports and vital events on existing cases. The registry contains a cumulative total of over 220,000 cases and more than 6 million laboratory records.

6,000 Male Female Black Hispanic White Other races Numer of new HIV diagnoses 5,000 4,000 3,000-2,000-1,000 0 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 Ν 5,921 5,222 4,705 4,304 4,359 4,157 4,117 4,092 3,782 3,481

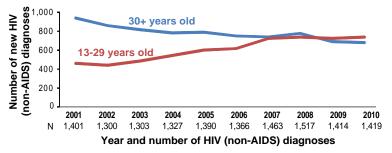
Figure 1. New HIV diagnoses overall and by sex and race/ethnicity², New York City 2001-2010

The number of new HIV diagnoses decreased between 2001 and 2010, overall as well as by sex and in major racial/ethnic groups.

Year and number of HIV diagnoses

The first decade of HIV surveillance saw a steady decrease in the number of new diagnoses overall and in males, females, blacks, Hispanics, and whites (Figure 1). By race, the largest declines were among blacks and Hispanics. The proportion of diagnoses that is among males increased. Other sentinel epidemiologic events include the near-elimination of perinatal transmission, the steady decrease in all-cause and HIV-related mortality among persons with HIV/AIDS, decreased new diagnoses among injecting drug users, and the steady rise in the proportion of new diagnoses attributed to MSM. Features of this last trend are: (1) In 2009, for the first time the number of new HIV (non-AIDS) diagnoses among MSM aged <30 years surpassed the number in MSM aged ≥30 (Figure 2). (2) While the total





number of new HIV (non-AIDS) diagnoses among MSM had small changes between 2001 and 2010, new diagnoses among young MSM have increased steadily, while new diagnoses among MSM aged ≥30 have decreased. (3) Whereas the largest share of newly diagnosed MSM aged ≥30 are white, almost 80% of newly diagnosed young MSM are black or Hispanic and less than 20% are white.

At the same time, the overall NYC epidemic is aging and becoming more diverse. Among persons living with HIV/ AIDS, the percentage aged 50 years and over doubled, increasing from 19% in 2001 to 42% in 2010. The proportion of new HIV diagnoses among foreign-born New Yorkers increased from 18% in 2001 to 31% in

2010. These trends are likely to continue as antiretroviral therapy coverage expands and survival improves, and as NYC continues to be an immigration gateway.

Surveillance in the Next Decade of HIV/AIDS in NYC

What lies ahead for surveillance? New diagnostic testing technology promises to narrow the window period between infection and detection of HIV, improving surveillance of acute and early infection. New techniques for estimating incidence are on the horizon. If current trends continue, we anticipate further declines in new diagnoses and mortality. Surveillance will continue to monitor sentinel events: diagnosis, progression to AIDS, and death. However, advances in knowledge and treatment of HIV have transformed it from an inevitably fatal to a chronic condition, prompting changes in local prevention and care policy. Surveillance has already begun to monitor outcomes such as engagement in care, viral suppression, and transmitted resistance to antiretroviral therapy, information which promises to benefit efforts to address HIV/AIDS in the city.

^{1.} Torian LV, Henning KJ, Kellerman SE, Frieden TR. Striving toward comprehensive HIV/AIDS surveillance: the view from New York City. Public Health Rep. 2007; 122 (Suppl 1): 4-6.

² "Other races" includes Asians and Pacific Islanders, Native Americans, multiracial persons and persons of unknown race, who are combined due to small numbers.