

Michael R. Bloomberg Mayor

Thomas R. Frieden, MD, MPH Commissioner of Health and Mental Hygiene

# HIV EPIDEMIOLOGY PROGRAM 2ND SEMIANNUAL REPORT

Covering January 1, 2005 – December 31, 2005

nyc.gov/health October 2006

## The New York City Department of Health and Mental Hygiene

#### Vol. 1, No. 2

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**Publication schedule:** This report reflects events occurring through December 31, 2005, and reported by September 30, 2006, 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 Program**

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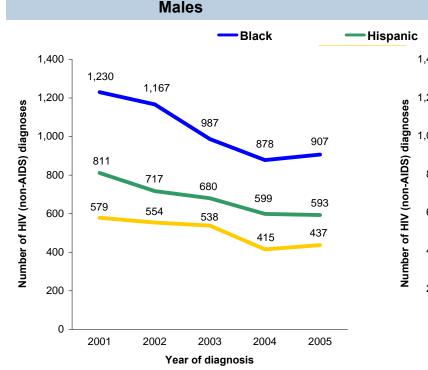
#### HIGHLIGHTS FROM 2005 This report contains the first publication of the 2005 annual

- This report contains the first publication of the 2005 annual surveillance statistics, capping 25 years of continuous AIDS surveillance and 5 years of HIV surveillance in NYC.
- 189,165 cases of HIV and AIDS have been diagnosed and reported in New York City since the beginning of the epidemic.
  93,748 (50%) have died.

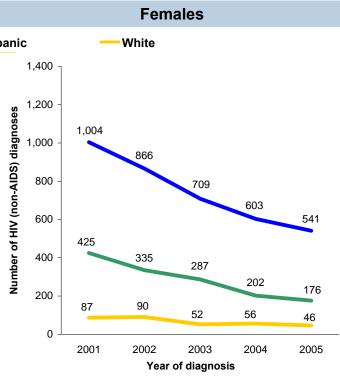
#### New Diagnoses of HIV (non-AIDS):

- The total number of new diagnoses declined from 2,834 in 2004 to 2,781 in 2005. This slight (2%) decline is likely to disappear as late reports are received.
- Between 2004 and 2005, the number of new diagnoses of HIV (non-AIDS) among males increased from 1,945 to 2,003. Increases were observed in black and white males and in men aged 20-29 and 40+.
- The number of new diagnoses attributed to men who have sex with men (MSM) was 1,111 in 2004 and 1,113 in 2005. Diagnoses decreased in black MSM and increased in white and Hispanic MSM. Diagnoses attributed to injecting drug use continued their steady decline from 298 in 2004 to 191 in 2005, a decrease of 36%.
- The number of concurrent diagnoses of HIV/AIDS also declined slightly (2%), from 1,044 in 2004 to 1,019 in 2005. Concurrent HIV/AIDS accounted for 27% of all new diagnoses of HIV in both years.
- Deaths have decreased in both sexes, all races, and all transmission categories. In 2001, persons aged 50+ accounted for 34% of deaths; in 2005, that percentage had risen to 47%.

# HIV (non-AIDS) Diagnoses by Sex and Race/Ethnicity New York City 2001-2005



New diagnoses of HIV (non-AIDS) declined between 2001 and 2004 in black, Hispanic and white males. However, between 2004 and 2005, diagnoses increased 3% in black males and 5% in white males.



New diagnoses of HIV (non-AIDS) declined significantly between 2001 and 2005 in black, Hispanic and white females. The overall five-year decline was 50%.

October 2006

HIV/AIDS diagnoses and deaths occurring January 1, 2005, through December 31, 2005, and persons diagnosed and reported in New York City and presumed to be living with HIV/AIDS as of December 31, 2005<sup>1</sup>

	HIV diagnoses 1/1/2005–12/31/2005 <sup>1</sup>							AIDS diagnoses 1/1/2005–12/31/2005 <sup>3</sup>		PLWHA as of 12/31/2005		Deaths <sup>4</sup> 1/1/2005–12/31/2005	
	Total		Without AIDS		Concurrent with AIDS diagnosis <sup>2</sup>								
	Ν	%	Ν	%	N	%	Row %	Ν	%	Ν	%	Ν	%
Total	3,800	100.0	2,781	100.0	1,019	100.0	26.8	4,094	100.0	95,417	100.0	2,236	100.0
Sex													
Male	2,758	72.6	2,003	72.0	755	74.1	27.4	2,800	68.4	66.200	69.4	1,536	68.7
Female	1,042	27.4	778	28.0	264	25.9	25.3	1,294	31.6	29,034	30.4	700	31.3
Unknown	0	0.0	0	0.0	0	0.0	n/a	0	0.0	183	0.2	0	0.0
Race/Ethnicity													
Black	2,006	52.8	1,448	52.1	558	54.8	27.8	2,111	51.6	42,872	44.9	1,189	53.2
Hispanic	1,077	28.3	769	27.7	308	30.2	28.6	1,266	30.9	30,296	31.8	713	31.9
White	607	16.0	483	17.4	124	12.2	20.4	641	15.7	19,929	20.9	316	14.1
Asian/Pacific Islander	93	2.4	66	2.4	27	2.6	29.0	56	1.4	1,160	1.2	13	0.6
Native American	*	*	*	*	0	0.0	0.0	7	0.2	83	0.1	0	0.0
Other/unknown	13	0.3	11	0.4	*	*	*	13	0.3	1,077	1.1	*	*
Age group (years) <sup>5</sup>	10	0.0		0.1				10	0.0	1,011			
0-12	18	0.5	16	0.6	*	*	*	8	0.2	963	1.0	*	*
13-19	136	3.6	119	4.3	17	1.7	12.5	65	1.6	1,476	1.0	12	0.5
20-29	829	21.8	709	25.5	120	11.8	12.5	432	10.6	5,742	6.0	51	2.3
30-39	1,150	30.3	865	31.1	285	28.0	24.8	1,123	27.4	20,312	21.3	290	13.0
40-49	1,041	27.4	703	25.3	338	33.2	32.5	1,502	36.7	37,731	39.5	824	36.9
50-59	461	12.1	281	10.1	180	17.7	39.0	736	18.0	22,170	23.2	771	34.5
60+	165	4.3	88	3.2	77	7.6	46.7	228	5.6	7,023	7.4	286	12.8
	100	4.0	00	0.2		7.0	40.7	220	0.0	1,020	1.4	200	12.0
Borough of residence	1 0 1 1	27.5	784	28.2	260	25.5	24.9	1.164	28.4	28,940	30.3	C10	27.4
Manhattan	1,044	27.5	784 749	28.2 26.9	260 298	25.5 29.2	24.9 28.5	, -	28.4 25.9			613 666	27.4 29.8
Brooklyn Bronx	1,047 861	27.6	749 599	26.9 21.5	290 262	29.2 25.7	20.5 30.4	1,062 1,019	25.9 24.9	23,530 20,617	24.7 21.6	548	29.0 24.5
Queens	596	22.7 15.7	599 447	21.5 16.1	262 149	25.7 14.6	30.4 25.0	552	24.9 13.5	12,850	13.5	262	24.5 11.7
Staten Island	63	1.7	447	1.8	149	14.0	23.0	62	1.5	1,682	1.8	46	2.1
Unknown/outside NYC	189	5.0	153	5.5	36	3.5	19.0	235	5.7	7,798	8.2	101	4.5
	109	5.0	155	5.5	50	5.5	19.0	255	5.7	1,190	0.2	101	4.5
Transmission risk	4 404	07.4	4 4 4 0	40.0	000	00.0	04 7	4 40 4	07.7	07.004	00.0	000	
Men who have sex with men	1,421	37.4	1,113	40.0	308	30.2	21.7	1,134	27.7	27,661	29.0	322	14.4
Injection drug use history	266	7.0	191	6.9	75	7.4	28.2	632	15.4	21,079	22.1	934	41.8
Heterosexual <sup>6</sup>	767	20.2	554	19.9	213	20.9	27.8	787	19.2	15,921	16.7	333	14.9
Perinatal	17	0.4	15	0.5	*	*	*	37	0.9	2,427	2.5	17	0.8
Other	0	0.0	0	0.0	0	0.0	n/a	12	0.3	424	0.4	7	0.3
Unknown	1,329	35.0	908	32.7	421	41.3	31.7	1,492	36.4	27,905	29.2	623	27.9
Clinical status as of 12/31/2005													
HIV (non-AIDS)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	35,482	37.2	273	12.2
AIDS	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	59,935	62.8	1,963	87.8

PLWHA=Persons living with HIV/AIDS. Cells representing 1-5 person(s) are marked with an asterisk (\*). All percents are column percents unless otherwise indicated.

<sup>1</sup> For events reported by September 30, 2006. <sup>2</sup> 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. <sup>3</sup> AIDS was diagnosed in 2005 and includes concurrent HIV/AIDS diagnosis. <sup>4</sup>Includes deaths from any cause in persons with HIV/AIDS. <sup>5</sup> For HIV and AIDS diagnoses, age at diagnosis; for PLWHA, age as of December 31, 2005; and for deaths, age at death. <sup>6</sup> Includes persons who had heterosexual sex with an HIV-infected person, an injection drug user, or a person who has received blood products; and for females only, history of heterosexual prostitution, multiple sex partners of the opposite sex, sexually transmitted disease, crack/cocaine use, heterosexual sex with a bisexual male, or unspecified probable heterosexual transmission.

#### **Heterosexual Risk**

The Centers for Disease Control and Prevention (CDC) definition of heterosexual transmission of HIV requires a known partner who is HIV-positive or who has a risk factor for HIV. Since many women do not know the risk of their sex partners, many women categorized as having "unknown" risk were likely to have been infected heterosexually.

To address this problem, many surveillance jurisdictions nationwide have added a "probable heterosexual" category with less stringent criteria, including a report of multiple sex partners, sexually transmitted disease, prostitution, crack/cocaine use or notation of probable heterosexual transmission.

In previous HIV surveillance reports, NYC has classified individuals reported with these behaviors in the heterosexual category. In practice, it did not significantly affect the statistics because information on these behaviors was not systematically collected. However, since June 2005, surveillance staff have systematically collected information on behaviors that are probably indicative of heterosexual transmission, if such information is documented on the medical record.

With this semiannual report we have incorporated the behavioral information on transmission risk and modified the definition, as follows:

- Women with no evidence of injection drug use who engaged in behaviors that are probably indicative of heterosexual transmission (above) are assigned to the probable heterosexual category. The rule does not apply to men.
- We no longer include birth in a country where heterosexual transmission is predominant as a criterion for heterosexual transmission.

#### NYC DOHMH HIV Epidemiology Program Semiannual Report

HIV/AIDS diagnoses and deaths occurring January 1, 2005, through December 31, 2005, and persons diagnosed and reported in New York City and presumed to be living with HIV/AIDS as of December 31, 2005<sup>1</sup>, by sex

	HIV diagnoses 1/1/2005–12/31/2005 <sup>1</sup>							AIDS diagnoses 1/1/2005–12/31/2005 <sup>3</sup>		PLWHA as of 12/31/2005		Deaths <sup>4</sup> 1/1/2005–12/31/2005	
	Total Without AIDS			Concurrent with AIDS diagnosis <sup>2</sup>									
	Ν	%	Ν	%	Ν	%	Row %	N	%	Ν	%	N	%
Total (Male and Female)	3,800	100.0	2,781	100.0	1,019	100.0	26.8	4,094	100.0	95,234	100.0	2,236	100.0
Male	2,758	100.0	2,003	100.0	755	100.0	27.4	2,800	100.0	66,200	100.0	1,536	100.0
Race/Ethnicity	4 000	40.7	007	45.0	204	50 F	20.0	4 000	40.0	25.052	20.2	704	40 F
Black Hispanic	1,288 827	46.7 30.0	907 593	45.3 29.6	381 234	50.5 31.0	29.6 28.3	1,293 894	46.2 31.9	25,952 21,173	39.2 32.0	761 511	49.5 33.3
White	553	20.1	437	29.0	116	15.4	20.3	558	19.9	17,425	26.3	249	16.2
Asian/Pacific Islander	79	2.9	56	21.0	23	3.0	29.1	42	1.5	928	1.4	11	0.7
Native American	*	*	*	*	0	0.0	0.0	*	*	59	0.1	0	0.0
Other/unknown	7	0.3	6	0.3	*	*	*	8	0.3	663	1.0	*	*
Age group (years) <sup>5</sup>													
0-12	*	*	*	*	0	0.0	0.0	0	0.0	440	0.7	0	0.0
13-19	100	3.6	87	4.3	13	1.7	13.0	39	1.4	765	1.2	7	0.5
20-29	618	22.4	522	26.1	96	12.7	15.5	299	10.7	3,589	5.4	32	2.1
30-39	869	31.5	650	32.5	219 258	29.0	25.2	762	27.2	13,507	20.4	181	11.8
40-49 50-59	752 308	27.3 11.2	494 189	24.7 9.4	258 119	34.2 15.8	34.3 38.6	1,033 509	36.9 18.2	26,180 16,377	39.5 24.7	540 563	35.2 36.7
60+	106	3.8	56	9.4 2.8	50	6.6	47.2	158	5.6	5,342	24.7 8.1	213	13.9
Borough of residence	100	5.0	50	2.0	50	0.0	77.2	150	5.0	0,042	0.1	215	15.5
Manhattan	840	30.5	636	31.8	204	27.0	24.3	878	31.4	23,180	35.0	457	29.8
Brooklyn	711	25.8	494	24.7	217	28.7	30.5	675	24.1	14,508	21.9	419	27.3
Bronx	557	20.2	383	19.1	174	23.0	31.2	627	22.4	12,243	18.5	356	23.2
Queens	457	16.6	340	17.0	117	15.5	25.6	400	14.3	8,955	13.5	186	12.1
Staten Island	42	1.5	32	1.6	10	1.3	23.8	37	1.3	1,041	1.6	31	2.0
Unknown/outside NYC	151	5.5	118	5.9	33	4.4	21.9	183	6.5	6,273	9.5	87	5.7
Transmission risk													
Men who have sex with men	1,421	51.5	1,113	55.6	308	40.8	21.7	1,134	40.5	27,661	41.8	322	21.0
Injection drug use history	196	7.1	135	6.7	61	8.1	31.1	449	16.0	14,968	22.6	689	44.9
Heterosexual <sup>6</sup> Perinatal	219	7.9	145	7.2	74 0	9.8 0.0	33.8 0.0	256 13	9.1 0.5	4,782 1,180	7.2 1.8	103 8	6.7 0.5
Other	0	0.0	0	0.0	0	0.0	0.0 n/a	*	0.5	216	0.3	o *	0.5
Unknown	918	33.3	606	30.3	312	41.3	34.0	943	33.7	17,393	26.3	409	26.6
Clinical status as of 12/31/2005	0.0	0010		00.0	0.2		00	0.10	0011	,000	20.0		2010
HIV (non-AIDS)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	23,685	35.8	191	12.4
AIDS	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	42,515	64.2	1,345	87.6
Female	1,042	100.0	778	100.0	264	100.0	25.3	1,294	100.0	29,034	100.0	700	100.0
Race/Ethnicity								-					
Black	718	68.9	541	69.5	177	67.0	24.7	818	63.2	16,920	58.3	428	61.1
Hispanic	250	24.0	176	22.6	74	28.0	29.6	372	28.7	9,123	31.4	202	28.9
White	54	5.2	46	5.9	8	3.0	14.8	83	6.4	2,504	8.6	67	9.6
Asian/Pacific Islander	14	1.3	10	1.3	*	*	*	14	1.1	232	0.8	*	*
Native American	0	0.0	0	0.0	0	0.0	n/a	*	*	24	0.1	0	0.0
Other/unknown	6	0.6					-		-	231	0.8		
Age group (years) <sup>°</sup> 0-12	13	1.2	11	1.4	*	*	*	8	0.6	523	1.8	*	*
13-19	36	3.5	32	4.1	*	*	*	26	2.0	711	2.4	*	*
20-29	211	20.2	187	24.0	24	9.1	11.4	133	10.3	2,149	7.4	19	2.7
30-39	281	27.0	215	27.6	66	25.0	23.5	361	27.9	6,773	23.3	109	15.6
40-49	289	27.7	209	26.9	80	30.3	27.7	469	36.2	11,463	39.5	284	40.6
50-59	153	14.7	92	11.8	61	23.1	39.9	227	17.5	5,747	19.8	208	29.7
60+	59	5.7	32	4.1	27	10.2	45.8	70	5.4	1,668	5.7	73	10.4
Borough of residence													
Manhattan	204	19.6	148	19.0	56	21.2	27.5	286	22.1	5,757	19.8	156	22.3
Brooklyn	336	32.2	255	32.8	81	30.7	24.1	387	29.9	8,843	30.5	247	35.3
Bronx	304	29.2	216	27.8	88	33.3	28.9	392	30.3	8,373	28.8	192	27.4
Queens Staten Island	139 21	13.3 2.0	107 17	13.8 2.2	32	12.1	23.0	152 25	11.7 1.9	3,895 641	13.4 2.2	76 15	10.9 2.1
Unknown/outside NYC	38	2.0 3.6	35	2.2 4.5	*	*	*	25 52	4.0	1,525	2.2 5.3	15	2.1
Transmission risk	50	5.0	55	4.5				52	ч.U	1,020	5.5	14	2.0
Injection drug use history	70	6.7	56	7.2	14	5.3	20.0	183	14.1	6,111	21.0	245	35.0
Heterosexual <sup>6</sup>	548	52.6	409	52.6	139	52.7	20.0 25.4	531	41.0	11,139	38.4	230	32.9
Perinatal	13	1.2	11	1.4	*	*	*	24	1.9	1,247	4.3	9	1.3
Other	0	0.0	0	0.0	0	0.0	n/a	7	0.5	208	0.7	*	*
Unknown	411	39.4	302	38.8	109	41.3	26.5	549	42.4	10,329	35.6	214	30.6
Clinical status as of 12/31/2005													
HIV (non-AIDS)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	11,614	40.0	82	11.7
AIDS	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	17,420	60.0	618	88.3

PLWHA=Persons living with HIV/AIDS. Cells representing 1-5 person(s) are marked with an asterisk (\*). All percents are column percents unless otherwise indicated.

<sup>1</sup> For events reported by September 30, 2006. <sup>2</sup> 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. <sup>3</sup> AIDS was diagnosed in 2005 and includes concurrent HIV/AIDS diagnosis. <sup>4</sup>Includes deaths from any cause in persons with HIV/AIDS. <sup>5</sup> For HIV and AIDS diagnoses, age at diagnosis; for PLWHA, age as of December 31, 2005; and for deaths, age at death. <sup>6</sup>Includes persons who had heterosexual sex with an HIV-infected person, an injection drug user, or a person who has received blood products; and for females only, history of heterosexual postitution, multiple sex partners of the opposite sex, sexually transmitted disease, crack/cocaine use, heterosexual sex with a bisexual male, or unspecified probable heterosexual transmission.

Rates of reported HIV diagnoses, PWHA, and deaths among PWHA by United Hospital Fund (UHF) neighborhood, New York City 2005<sup>1</sup>

	,			
	HIV diagnoses <sup>2</sup> per 100,000 population	Reported PWHA as percent of population	Age-adjusted death rate per 1,000 PWHA <sup>3</sup>	Population from 2000 Census
Total	47.5	1.2	22.9	8,008,278
Bronx <sup>4</sup>	64.8	1.6	26.5	1,327,690
Crotona – Tremont	82.7	2.1	27.5	199,530
Fordham – Bronx Park	62.7	1.5	24.0	250,491
High Bridge – Morrisania	100.1	2.4	29.7	189,755
Hunts Point – Mott Haven	104.2	2.3	32.2	122,875
Kingsbridge – Riverdale	21.4	0.5	26.1	88,989
Northeast Bronx	33.9	0.8	23.4	185,998
Pelham – Throgs Neck	40.7	1.1	21.0	290,052
Brooklyn⁴	42.5	1.0	27.9	2,465,326
Bedford/Stuyvesant – Crown Heights	93.9	1.9	32.5	317,296
Bensonhurst – Bay Ridge	7.2	0.2	28.2	194,558
Borough Park	11.7	0.3	23.9	324,411
Canarsie – Flatlands	30.3	0.5	17.2	197,819
Coney Island - Sheepshead Bay	12.9	0.4	32.7	286,901
Downtown – Heights – Park Slope	43.8	1.3	26.1	214,696
East Flatbush – Flatbush	65.4	1.2	17.6	316,734
East New York	64.5	1.4	33.3	173,716
Greenpoint	31.3	0.7	28.6	124,449
Sunset Park	15.8	0.6	32.4	120,441
Williamsburg – Bushwick	60.2	1.7	32.8	194,305
Manhattan⁴	68.3	1.9	19.8	1,529,375
Central Harlem – Morningside Heights	132.4	2.6	31.9	151,113
Chelsea – Clinton	135.0	4.3	11.4	122,998
East Harlem	108.2	2.6	32.6	108,092
Gramercy Park – Murray Hill	57.0	1.6	17.5	124,477
Greenwich Village – Soho	90.8	2.3	14.1	83,709
Lower Manhattan	48.6	1.2	15.3	30,895
Union Square – Lower East Side	49.2	1.5	18.1	197,138
Upper East Side	20.2	0.6	14.5	218,167
Upper West Side	35.6	1.4	21.6	222,109
Washington Heights – Inwood	50.2	1.2	21.5	270,677
Queens⁴	26.6	0.6	20.3	2,242,159
Bayside – Little Neck	1.1	0.1	23.3	88,164
Flushing – Clearview	11.7	0.2	20.6	255,542
Fresh Meadows	8.6	0.3	17.4	93,148
Jamaica	39.2	0.9	23.2	285,568
Long Island City – Astoria	28.1	0.7	19.5	220,960
Ridgewood – Forest Hills	15.4	0.4	20.0	240,901
Rockaway	28.1	0.7	35.9	106,738
Southeast Queens	26.5	0.4	13.8	203,670
Southwest Queens	23.3	0.4	22.2	269,952
West Queens	37.7	0.8	17.7	477,516
Staten Island <sup>4</sup>	14.2	0.4	27.3	443,728
Port Richmond	28.7	0.6	22.1	62,788
South Beach – Tottenville	4.4	0.2	13.2	179,892
Stapleton – St. George	21.5	0.7	29.7	116,227
Willowbrook	9.4	0.2	56.1	84,821

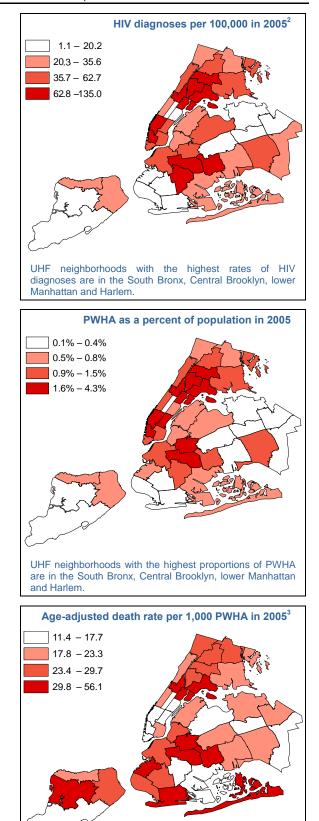
PWHA = Persons with HIV/AIDS. Map categories defined by neighborhood quartile.

<sup>1</sup> Based on data reported through September 30, 2006.

<sup>2</sup> Includes diagnoses of HIV without AIDS and HIV concurrent with AIDS.

<sup>3</sup> Age-adjusted to the city-wide population of PWHA in 2005.

<sup>4</sup> Borough level data include persons residing in unknown UHF neighborhoods.



The UHF neighborhoods most affected by HIV also have the highest death rates among PWHA, with the exception of lower Manhattan.