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AIDS Activities Coordinating Office (AACO) Surveillance Report 2010

HIV/AIDS in Philadelphia

~Cases Reported through June 2011~

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Surveillance Unit

To Our Readers:

The AACO Surveillance Unit of the Philadelphia Department of Public Health, which conducts HIV/AIDS surveillance for the City of Philadelphia, produces this report. The data in this report reflect cases diagnosed through December 31, 2010 and reported through June 30, 2011.

HIV/AIDS surveillance is the ongoing and systematic collection, analysis, and dissemination of population-based information on HIV/AIDS. There are two basic types of surveillance; active and passive. **Passive surveillance** is a process whereby diagnosing physicians voluntarily submit reports to the Department of Health. **Active surveillance** employs strategies intended to identify unreported cases, and depends on secondary information sources for leads. Information from laboratories, death certificates, direct contact with health care providers and review of medical records, initiate the follow-up investigations. The HIV/AIDS case count in Philadelphia results from a combination of active and passive surveillance. Physicians began reporting AIDS cases to the Department of Health in 1983. Name-based HIV reporting began in October, 2005.

Cases can be reported on a standard CDC report form to our unit by contacting (215) 685-4781 during the day or by mailing the completed form to:

City of Philadelphia Department of Public Health
Post Office Box #58909
Philadelphia, PA 19102-8909

Security and Confidentiality

All information about HIV/AIDS patients is strictly confidential and is collected strictly for epidemiologic purposes. Confidentiality of HIV/AIDS case reports is of critical importance to maintaining effective HIV/AIDS surveillance. Federal, state and local health departments have implemented procedures and policies to assure the confidentiality and security of HIV/AIDS data. CDC is prohibited from accepting patient names, and before records are transmitted electronically, all information is encrypted by a computer program. In addition, strict guidelines govern the release of reports similar to this one, which ensure that HIV/AIDS data are not presented in such a way as to possibly identify any individual with HIV/AIDS. **Maintenance of confidentiality and security safeguards are criteria for federal funding and are a top priority within the Philadelphia HIV/AIDS Surveillance Unit.**

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Table 1. Cumulative Adult HIV (Non-AIDS) and AIDS Cases by Selected Characteristics
Philadelphia Diagnoses (Diagnosed Through December 31, 2010)

	HIV (Non-AIDS)		AIDS		HIV/AIDS	
	N	%	N	%	N	%
Total	7,252	100.0 %	21,436	100.0 %	28,688	100.0 %
Race						
Black	4,570	63.0 %	13,965	65.1 %	18,535	64.6 %
White	1,459	20.1 %	4,671	21.7 %	6,130	21.3 %
Hispanic	993	13.6 %	2,361	11.0 %	3,354	11.6 %
Multi-race	151	2.0 %	333	1.5 %	484	1.6 %
Asian	57	0.7 %	89	0.4 %	146	0.5 %
Other/Unk	22	0.3 %	17	0.0 %	39	0.1 %
Gender						
Female	2,339	32.2 %	5,065	23.6 %	7,404	25.8 %
Male	4,913	67.7 %	16,371	76.3 %	21,284	74.1 %
Age Category						
Unknown	0	0	2,585	12.0 %	2,585	9.0 %
13-19	411	5.6 %	489	2.2 %	900	3.1 %
20-29	2,078	28.6 %	4,377	20.4 %	6,455	22.5 %
30-39	2,276	31.3 %	7,057	32.9 %	9,333	32.5 %
40-49	1,691	23.3 %	4,586	21.3 %	6,277	21.8 %
50+	796	10.9 %	2,342	10.9 %	3,138	10.9 %
Transmission Risk						
MSM	2,277	31.3 %	7,574	35.3 %	9,851	34.3 %
IDU	1,694	23.3 %	7,265	33.8 %	8,959	31.2 %
Heterosexual	2,912	40.1 %	5,240	24.4 %	8,152	28.4 %
MSM/IDU	138	1.9 %	955	4.4 %	1,093	3.8 %
Other	*	0.0 %	72	0.3 %	77	0.2 %
No Risk Reported	226	3.1 %	330	1.5 %	556	1.9 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office

Table 2. Cumulative Adult HIV/AIDS Cases by HIV Diagnosis Year and Selected Characteristics
Philadelphia Diagnoses (Diagnosed Through December 31, 2010)

	1980-2007		2008		2009		2010		Total	
	N	%	N	%	N	%	N	%	N	%
Total	26,000	100.0 %	992	100.0 %	927	100.0 %	769	100.0 %	28,688	100.0 %
Race										
Black	16,814	64.6 %	643	64.8 %	572	61.7 %	506	65.7 %	18,535	64.6 %
White	5,716	21.9 %	159	16.0 %	141	15.2 %	114	14.8 %	6,130	21.3 %
Hispanic	2,887	11.1 %	150	15.1 %	187	20.1 %	130	16.9 %	3,354	11.6 %
Multi-race	431	1.6 %	30	3.0 %	15	1.6 %	8	1.0 %	484	1.6 %
Asian	119	0.4 %	8	0.8 %	10	1.0 %	9	1.1 %	146	0.5 %
Other/Unk	33	0.1 %	*	0.2 %	*	0.2 %	*	0.2 %	39	0.1 %
Gender										
Female	6,656	25.6 %	299	30.1 %	245	26.4 %	204	26.5 %	7,404	25.8 %
Male	19,344	74.4 %	693	69.8 %	682	73.5 %	565	73.4 %	21,284	74.1 %
Age Category										
Unknown	2,585	9.9 %	0	0	0	0	0	0	2,585	9.0 %
13-19	741	2.8 %	66	6.6 %	49	5.2 %	44	5.7 %	900	3.1 %
20-29	5,657	21.7 %	260	26.2 %	310	33.4 %	228	29.6 %	6,455	22.5 %
30-39	8,723	33.5 %	212	21.3 %	208	22.4 %	190	24.7 %	9,333	32.5 %
40-49	5,622	21.6 %	259	26.1 %	219	23.6 %	177	23.0 %	6,277	21.8 %
50+	2,672	10.2 %	195	19.6 %	141	15.2 %	130	16.9 %	3,138	10.9 %
Transmission Risk										
MSM	8,840	34.0 %	335	33.7 %	354	38.1 %	322	41.8 %	9,851	34.3 %
IDU	8,642	33.2 %	135	13.6 %	103	11.1 %	79	10.2 %	8,959	31.2 %
Heterosexual	7,088	27.2 %	480	48.3 %	251	27.0 %	333	43.3 %	8,152	28.4 %
MSM/IDU	1,061	4.0 %	14	1.4 %	11	1.1 %	7	0.9 %	1,093	3.8 %
Other	77	0.2 %	0	0	0	0	0	0	77	0.2 %
No Risk Reported	292	1.1 %	28	2.8 %	208	22.4 %	28	3.6 %	556	1.9 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office

Table 3. Newly-diagnosed HIV by Year and Selected Characteristics, Philadelphia Residents, 2006-2010

	Year of Dx									
	2006		2007		2008		2009		2010	
	N	Col %	N	Col %	N	Col %	N	Col %	N	Col %
Total	940	100.0 %	929	100.0 %	930	100.0 %	913	100.0 %	772	100.0 %
Race										
Black	614	65.3 %	583	62.7 %	600	64.5 %	565	61.8 %	508	65.8 %
White	158	16.8 %	174	18.7 %	147	15.8 %	140	15.3 %	114	14.7 %
Hispanic	123	13.0 %	134	14.4 %	145	15.5 %	183	20.0 %	131	16.9 %
Multi-race	32	3.4 %	26	2.7 %	28	3.0 %	13	1.4 %	8	1.0 %
Asian	7	0.7 %	11	1.1 %	8	0.8 %	10	1.0 %	9	1.1 %
Other/Unk	6	0.6 %	*	0.1 %	*	0.2 %	*	0.2 %	*	0.2 %
Gender										
Female	309	32.8 %	265	28.5 %	289	31.0 %	246	26.9 %	205	26.5 %
Male	631	67.1 %	664	71.4 %	641	68.9 %	667	73.0 %	567	73.4 %
Age Category										
< 13	0	0	*	0.2 %	10	1.0 %	*	0.3 %	*	0.6 %
13-19	49	5.2 %	68	7.3 %	65	6.9 %	47	5.1 %	44	5.6 %
20-29	233	24.7 %	255	27.4 %	255	27.4 %	309	33.8 %	228	29.5 %
30-39	234	24.8 %	237	25.5 %	196	21.0 %	205	22.4 %	191	24.7 %
40-49	269	28.6 %	237	25.5 %	238	25.5 %	211	23.1 %	177	22.9 %
50+	155	16.4 %	130	13.9 %	166	17.8 %	138	15.1 %	127	16.4 %
Transmission Risk										
MSM	252	26.8 %	284	30.5 %	308	33.1 %	345	37.7 %	322	41.7 %
IDU	209	22.2 %	153	16.4 %	126	13.5 %	102	11.1 %	79	10.2 %
Heterosexual	459	48.8 %	462	49.7 %	445	47.8 %	245	26.8 %	331	42.8 %
MSM/IDU	14	1.4 %	15	1.6 %	13	1.3 %	11	1.2 %	7	0.9 %
Pediatric	*	0.1 %	*	0.2 %	9	0.9 %	*	0.4 %	*	0.6 %
No Risk Reported	*	0.5 %	13	1.3 %	29	3.1 %	206	22.5 %	28	3.6 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office

Table 4. AIDS Diagnoses by Year and Selected Characteristics, Philadelphia Residents, 2006-2010

	Year of Dx									
	2006		2007		2008		2009		2010	
	N	Col %	N	Col %	N	Col %	N	Col %	N	Col %
Total	756	100.0 %	658	100.0 %	452	100.0 %	222	100.0 %	239	100.0 %
Race										
Black	523	69.1 %	418	63.5 %	303	67.0 %	140	63.0 %	164	68.6 %
White	114	15.0 %	133	20.2 %	65	14.3 %	28	12.6 %	20	8.3 %
Hispanic	84	11.1 %	70	10.6 %	54	11.9 %	44	19.8 %	52	21.7 %
Multi-race	24	3.1 %	32	4.8 %	26	5.7 %	8	3.6 %	*	0.8 %
Asian	8	1.0 %	*	0.6 %	*	0.6 %	*	0.9 %	*	0.4 %
Other/Unk	*	0.3 %	*	0.1 %	*	0.2 %	0	0	0	0
Gender										
Female	238	31.4 %	210	31.9 %	142	31.4 %	50	22.5 %	54	22.5 %
Male	518	68.5 %	448	68.0 %	310	68.5 %	172	77.4 %	185	77.4 %
Age Category										
< 13	0	0	0	0	*	0.4 %	0	0	*	0.4 %
13-19	13	1.7 %	6	0.9 %	12	2.6 %	10	4.5 %	*	1.2 %
20-29	90	11.9 %	98	14.8 %	65	14.3 %	49	22.0 %	43	17.9 %
30-39	185	24.4 %	154	23.4 %	106	23.4 %	49	22.0 %	60	25.1 %
40-49	263	34.7 %	242	36.7 %	134	29.6 %	61	27.4 %	76	31.7 %
50+	205	27.1 %	158	24.0 %	133	29.4 %	53	23.8 %	56	23.4 %
Transmission Risk										
MSM	199	26.3 %	187	28.4 %	123	27.2 %	74	33.3 %	77	32.2 %
IDU	192	25.3 %	155	23.5 %	86	19.0 %	24	10.8 %	33	13.8 %
Heterosexual	340	44.9 %	303	46.0 %	217	48.0 %	74	33.3 %	113	47.2 %
MSM/IDU	14	1.8 %	9	1.3 %	13	2.8 %	*	1.3 %	*	0.8 %
Pediatric	0	0	0	0	*	1.1 %	0	0	*	0.4 %
No Risk Reported	11	1.4 %	*	0.6 %	8	1.7 %	47	21.1 %	13	5.4 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office

Table 5. Persons Living with AIDS by Selected Characteristics†
Philadelphia Residents, 2010

	Total	
	N	Col %
Total	11,647	100.0 %
Race		
Black	7,448	63.9 %
White	2,295	19.7 %
Hispanic	1,557	13.3 %
Multi-race	264	2.2 %
Asian	72	0.6 %
Other/Unk	11	0.0 %
Gender		
Female	3,162	27.1 %
Male	8,485	72.8 %
Age Category		
Unknown	13	0.1 %
< 13	17	0.1 %
13-19	86	0.7 %
20-29	575	4.9 %
30-39	1,535	13.1 %
40-49	4,272	36.6 %
50+	5,149	44.2 %
Transmission Risk		
MSM	3,640	31.2 %
IDU	3,605	30.9 %
Heterosexual	3,598	30.8 %
MSM/IDU	459	3.9 %
Pediatric	153	1.3 %
Other	16	0.1 %
No Risk Reported	176	1.5 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office
†Age as of December 31, 2010

Table 6. Persons Living with AIDS by Race and Selected Characteristics*
Philadelphia Residents, 2010

	Race					
	Black		White		Hispanic	
	N	Col %	N	Col %	N	Col %
Total	7,448	100.0 %	2,295	100.0 %	1,557	100.0 %
Gender						
Female	2,318	31.1 %	322	14.0 %	436	28.0 %
Male	5,130	68.8 %	1,973	85.9 %	1,121	71.9 %
Age Category						
Unknown	8	0.1 %	0	0	*	0.1 %
< 13	17	0.2 %	0	0	0	0
13-19	68	0.9 %	*	0.1 %	14	0.8 %
20-29	409	5.4 %	60	2.6 %	86	5.5 %
30-39	1,044	14.0 %	208	9.0 %	206	13.2 %
40-49	2,703	36.2 %	844	36.7 %	590	37.8 %
50+	3,199	42.9 %	1,179	51.3 %	658	42.2 %
Transmission Risk						
MSM	1,938	26.0 %	1,297	56.5 %	286	18.3 %
IDU	2,332	31.3 %	516	22.4 %	665	42.7 %
Heterosexual	2,668	35.8 %	330	14.3 %	483	31.0 %
MSM/IDU	275	3.6 %	108	4.7 %	62	3.9 %
Pediatric	118	1.5 %	13	0.5 %	22	1.4 %
Other	6	0.0 %	7	0.3 %	*	0.1 %
No Risk Reported	111	1.4 %	24	1.0 %	37	2.3 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office
*Age as of December 31, 2010

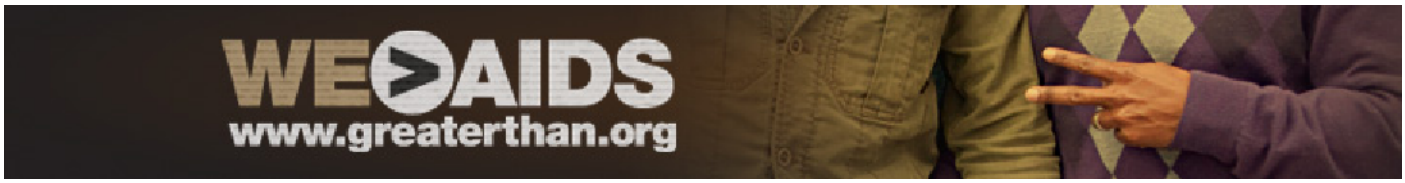


Table 7. Persons Living with AIDS by Gender and Selected Characteristics*
Philadelphia Residents, 2010

	Gender			
	Female		Male	
	N	Col %	N	Col %
Total	3,162	100.0 %	8,485	100.0 %
Race				
Black	2,318	73.3 %	5,130	60.4 %
White	322	10.1 %	1,973	23.2 %
Hispanic	436	13.7 %	1,121	13.2 %
Multi-race	73	2.3 %	191	2.2 %
Asian	11	0.3 %	61	0.7 %
Other/Unk	*	0.0 %	9	0.1 %
Age Category				
Unknown	*	0.1 %	9	0.1 %
< 13	9	0.2 %	8	0.0 %
13-19	42	1.3 %	44	0.5 %
20-29	149	4.7 %	426	5.0 %
30-39	542	17.1 %	993	11.7 %
40-49	1,303	41.2 %	2,969	34.9 %
50+	1,113	35.1 %	4,036	47.5 %
Transmission Risk				
MSM	0	0	3,640	42.8 %
IDU	1,117	35.3 %	2,488	29.3 %
Heterosexual	1,916	60.5 %	1,682	19.8 %
MSM/IDU	0	0	459	5.4 %
Pediatric	73	2.3 %	80	0.9 %
Other	*	0.1 %	12	0.1 %
No Risk Reported	52	1.6 %	124	1.4 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office
*Age as of December 31, 2010

Table 8. Persons Living with HIV/AIDS by Selected Characteristics*
Philadelphia Residents, 2010

	Total	
	N	Col %
Total	19,005	100.0 %
Race		
Black	11,981	63.0 %
White	3,775	19.8 %
Hispanic	2,646	13.9 %
Multi-race	443	2.3 %
Asian	129	0.6 %
Other/Unk	31	0.1 %
Gender		
Female	5,547	29.1 %
Male	13,458	70.8 %
Age Category		
Unknown	25	0.1 %
< 13	69	0.3 %
13-19	204	1.0 %
20-29	1,784	9.3 %
30-39	3,058	16.0 %
40-49	6,619	34.8 %
50+	7,246	38.1 %
Transmission Risk		
MSM	6,026	31.7 %
IDU	5,214	27.4 %
Heterosexual	6,454	33.9 %
MSM/IDU	603	3.1 %
Pediatric	287	1.5 %
Other	20	0.1 %
No Risk Reported	401	2.1 %

Source: Philadelphia Department of Public Health,
AIDS Activities Coordinating Office
*Age as of December 31, 2010

Table 9. Persons Living with HIV/AIDS by Race and Selected Characteristics*
Philadelphia Residents, 2010

	Race					
	Black		White		Hispanic	
	N	Col %	N	Col %	N	Col %
Total	11,981	100.0 %	3,775	100.0 %	2,646	100.0 %
Gender						
Female	4,034	33.6 %	598	15.8 %	753	28.4 %
Male	7,947	66.3 %	3,177	84.1 %	1,893	71.5 %
Age Category						
Unknown	13	0.1 %	*	0.0 %	9	0.3 %
< 13	56	0.4 %	*	0.0 %	8	0.3 %
13-19	150	1.2 %	15	0.3 %	39	1.4 %
20-29	1,267	10.5 %	214	5.6 %	230	8.6 %
30-39	1,939	16.1 %	505	13.3 %	478	18.0 %
40-49	4,050	33.8 %	1,381	36.5 %	974	36.8 %
50+	4,506	37.6 %	1,656	43.8 %	908	34.3 %
Transmission Risk						
MSM	3,200	26.7 %	2,080	55.0 %	530	20.0 %
IDU	3,209	26.7 %	820	21.7 %	1,034	39.0 %
Heterosexual	4,751	39.6 %	634	16.7 %	868	32.8 %
MSM/IDU	348	2.9 %	152	4.0 %	82	3.0 %
Pediatric	206	1.7 %	25	0.6 %	53	2.0 %
Other	9	0.0 %	8	0.2 %	*	0.0 %
No Risk Reported	258	2.1 %	56	1.4 %	77	2.9 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office
*Age as of December 31, 2010

Table 10. Persons Living with HIV/AIDS by Gender and Selected Characteristics*
Philadelphia Residents, 2010

	Gender			
	Female		Male	
	N	Col %	N	Col %
Total	5,547	100.0 %	13,458	100.0 %
Race				
Black	4,034	72.7 %	7,947	59.0 %
White	598	10.7 %	3,177	23.6 %
Hispanic	753	13.5 %	1,893	14.0 %
Multi-race	129	2.3 %	314	2.3 %
Asian	22	0.3 %	107	0.7 %
Other/Unk	11	0.1 %	20	0.1 %
Age Category				
Unknown	10	0.1 %	15	0.1 %
< 13	36	0.6 %	33	0.2 %
13-19	89	1.6 %	115	0.8 %
20-29	464	8.3 %	1,320	9.8 %
30-39	1,074	19.3 %	1,984	14.7 %
40-49	2,141	38.5 %	4,478	33.2 %
50+	1,733	31.2 %	5,513	40.9 %
Transmission Risk				
MSM	0	0	6,026	44.7 %
IDU	1,663	29.9 %	3,551	26.3 %
Heterosexual	3,598	64.8 %	2,856	21.2 %
MSM/IDU	0	0	603	4.4 %
Pediatric	134	2.4 %	153	1.1 %
Other	*	0.0 %	15	0.1 %
No Risk Reported	147	2.6 %	254	1.8 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office
*Age as of December 31, 2010

Figure 1. Actual and Predicted Values of Persons Living with AIDS in Philadelphia, 1998-2017

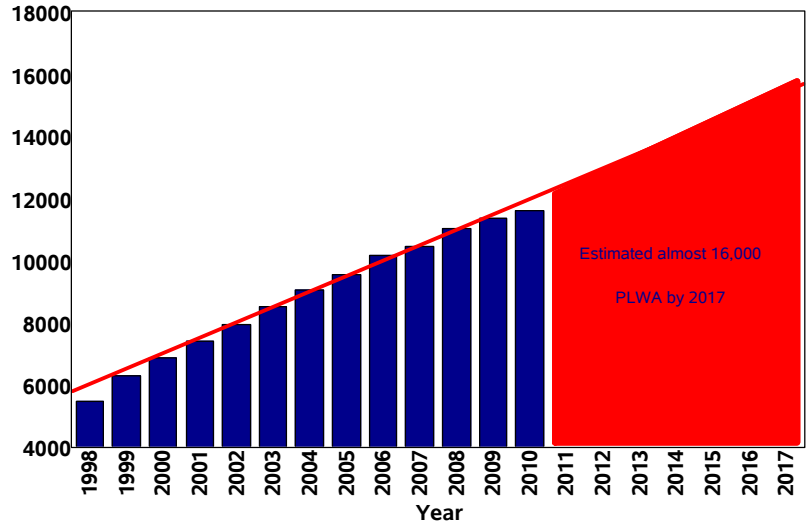


Figure 2. First Reported CD4 Value by Age at HIV Diagnosis

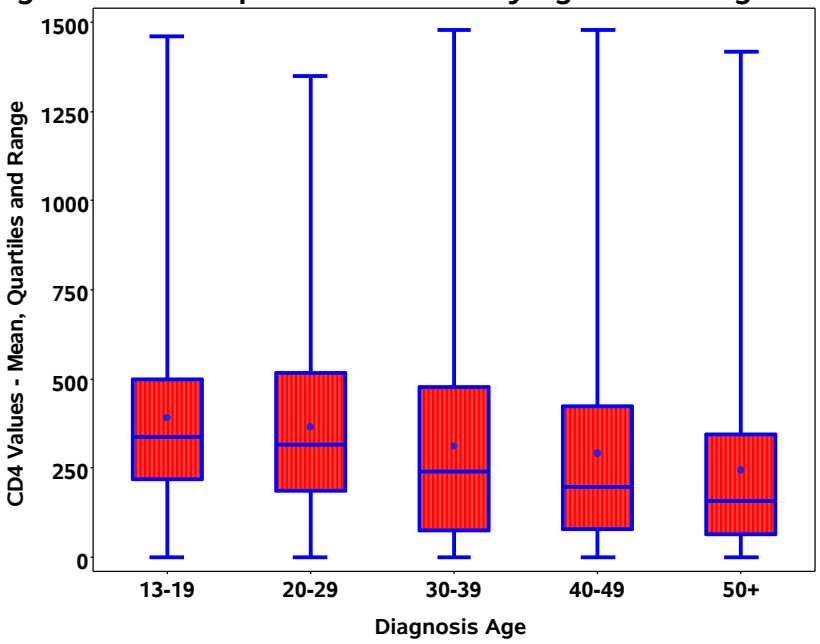
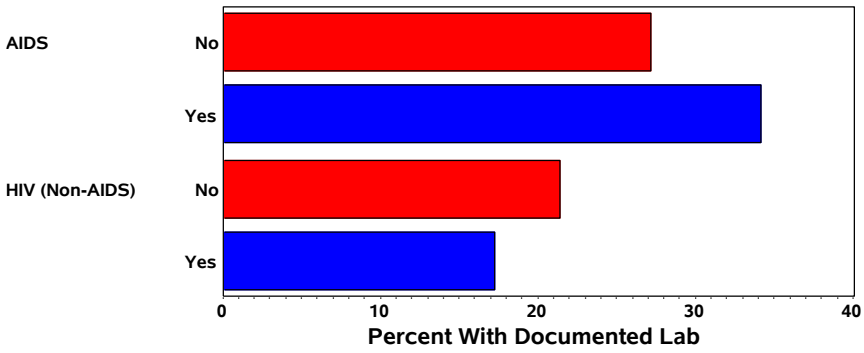


Figure 3. Documented Lab Data For Persons Living with HIV/AIDS



Advances in HIV diagnosis and treatment continue to help persons diagnosed with HIV to live longer, healthier lives. In Philadelphia, it is estimated that by 2017 there will be almost 16,000 persons living with AIDS. This statistic continues to be impacted by the widespread use of highly active antiretroviral therapy (HAART), as well as the diagnosis of approximately 800-900 new HIV cases each year in the City of Philadelphia.

A diagnosis of AIDS is indicated when CD4 values drop below 200 (or 14%). Data from HIV cases diagnosed since 2006 (the first year in which name-based reporting was in place), indicate that there is an inverse relationship between age at diagnosis and the first reported CD4 count. The initial CD4 count decreases as the persons age at diagnosis increases, indicating that HIV testing and diagnosis at an earlier age may improve disease outcomes and prolong a diagnosis of AIDS.

The enhanced HIV/AIDS Reporting System (eHARS) is now able to store and report on an unlimited number of laboratory test results for each documented case of HIV. Since conversion to this new SQLServer database, AACO surveillance staff have been working to import labs previously stored in a separate, stand-alone database. Newly reported CD4 and VL for existing cases, are immediately matched and stored with case data allowing for more detailed analyses of persons living with HIV in Philadelphia.

Figure 4. Risk Category Trend by Year: All Cases, 2005-2010

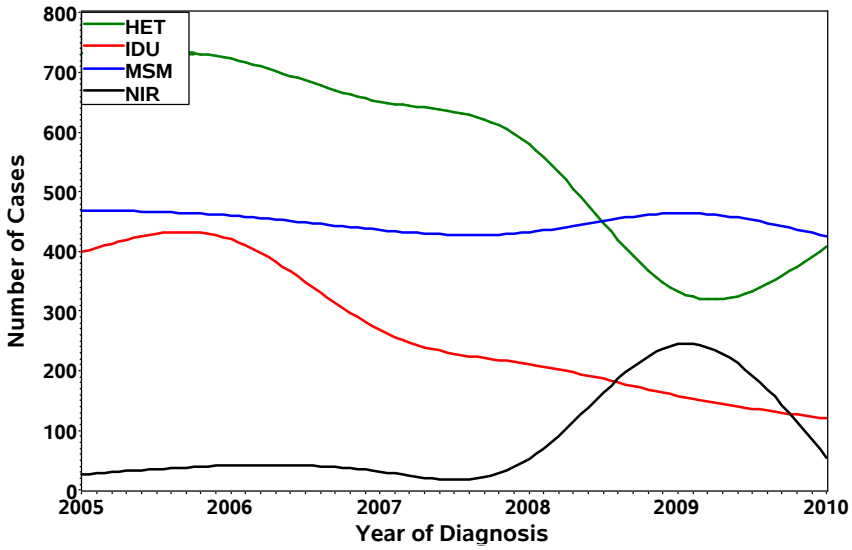


Figure 5. Risk Category Trend by Year: Males, 2005-2010

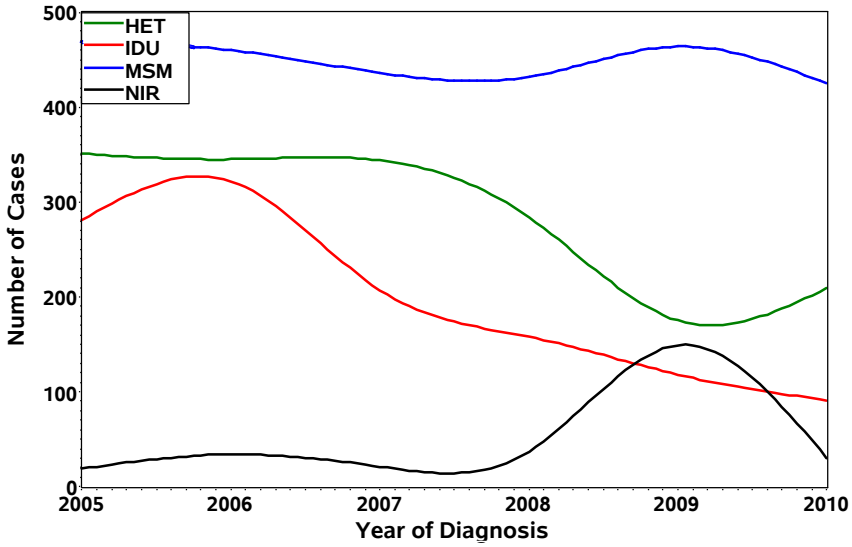
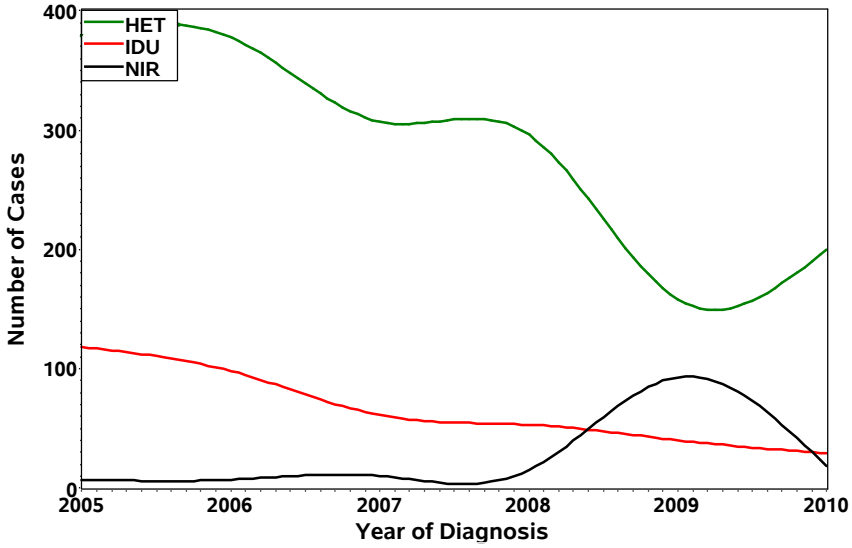


Figure 6. Risk Category Trend by Year: Females, 2005-2010

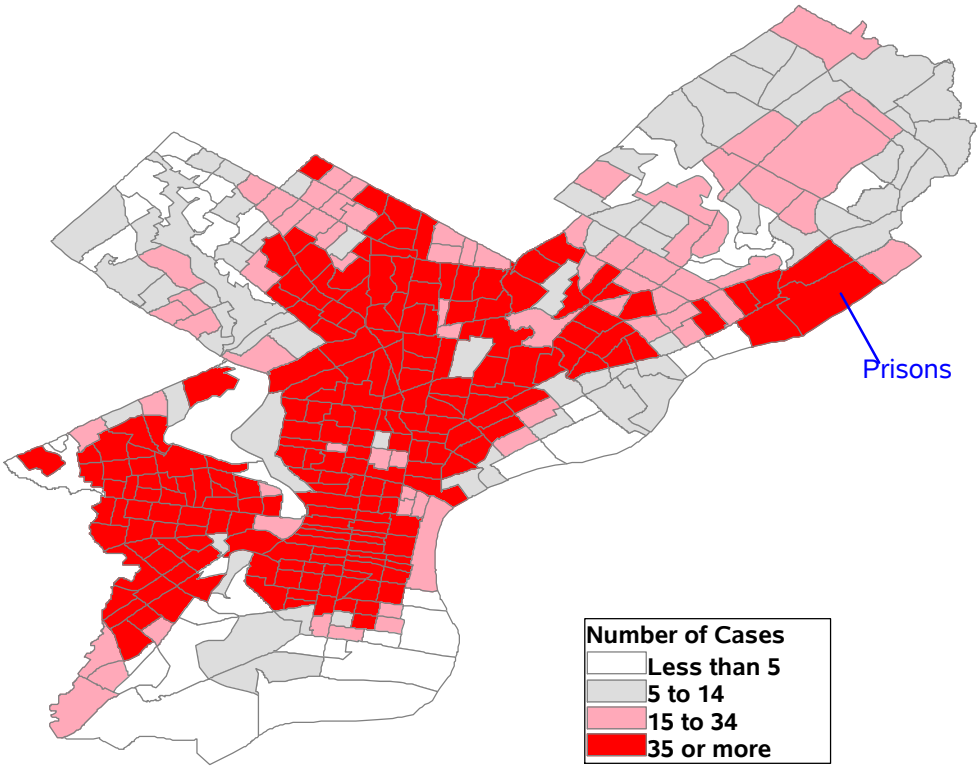


Trends in HIV/AIDS transmission risk continue to show a decline in cases associated with injection drug use(IDU), possibly due to the success of needle exchange and other risk-reduction programs in the City of Philadelphia. Cases associated with male-to-male sexual contact (MSM) have remained constant over the past six years. In 2009, after conversion to a new database classification algorithm, a decrease was seen in heterosexual transmission, along with an increase in those cases classified as NIR - No Identified Risk. Increased investigation by surveillance staff has resulted in more accurate documentation of heterosexual risk, resulting in a reduction of the number of cases classified as NIR.

Among males, the majority of HIV/AIDS cases are associated with male-to-male sexual contact (MSM). This has been the case over the course of the epidemic, however recent trends indicate a larger proportion of male cases associated with heterosexual contact.

Heterosexual contact continues to be the most commonly reported risk factor among female HIV/AIDS cases. Factors associated with heterosexual contact include the number of partners, presence of other sexually transmitted infections, and partner non-disclosure of risk factors (e.g. injection drug use and men who who have sex with men).

Map 1. Persons Living With HIV/AIDS by Census Tract, Philadelphia, 2010



Map 2. Newly Diagnosed HIV by Census Tract, Philadelphia, 2010

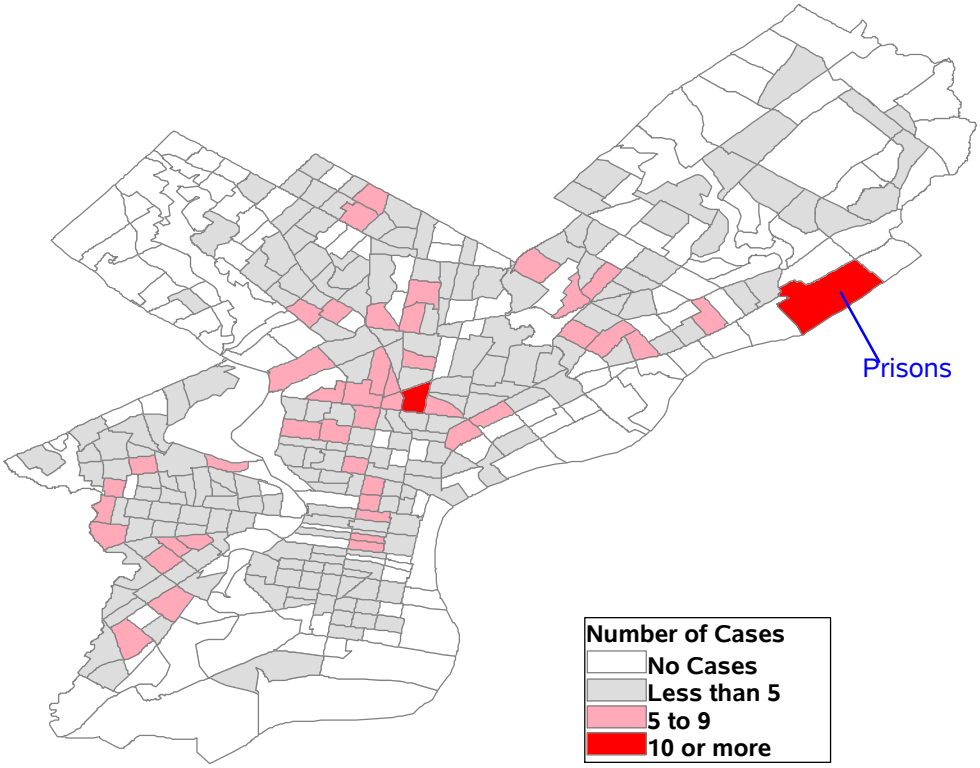


Table 11. Prevalence Rates of HIV/AIDS in Philadelphia, 2010

Category	Population	PLWHA	Rate per 100,000
All	1,517,800	19,005	1,252.1
Female	812,693	5,547	682.5
Male	705,107	13,458	1,908.6
Hispanic	128,913	2,646	2,052.5
Black	644,447	11,981	1,859.1
White	646,292	3,775	584.1
Other Race	98,148	603	614.4
Hispanic Female	65,828	753	1,143.9
Black Female	339,929	4,034	1,186.7
White Female	357,115	598	167.5
Other Female	49,821	162	325.2
Hispanic Male	63,085	1,893	3,000.7
Black Male	304,518	7,947	2,609.7
White Male	289,177	3,177	1,098.6
Other Male	48,327	441	912.5

The Medical Monitoring Project - Philadelphia

The Medical Monitoring Project is a multisite supplemental surveillance project that has been implemented in Philadelphia to assess behavioral and clinical characteristics, as well as quality of care of HIV-infected persons who are receiving medical care. Eligible participants include persons 18 years of age or older who have recieved HIV-related care at one of 26 sampled facilities in Philadelphia between January and April of 2009. Data were collected using a structured face-to-face interview conducted between July 2009 and April 2010. Of the 400 randomly selected participants for the 2009 data collection cycle, 260 persons were interviewed. MMP data collection includes a structured interview and a medical record abstraction (MRA). MRA data are not included in this report, but will be released in subsequent surveillance reports.

Due to the combined facility participation rate (100%) and sampled patient participation rate (65%), Philadelphia interview and MRA data for 2009 have been weighted to reflect the entire population of persons receiving HIV medical care and to control for non-response bias. The data presented here are the first representative data of persons receiving HIV medical care in Philadelphia.

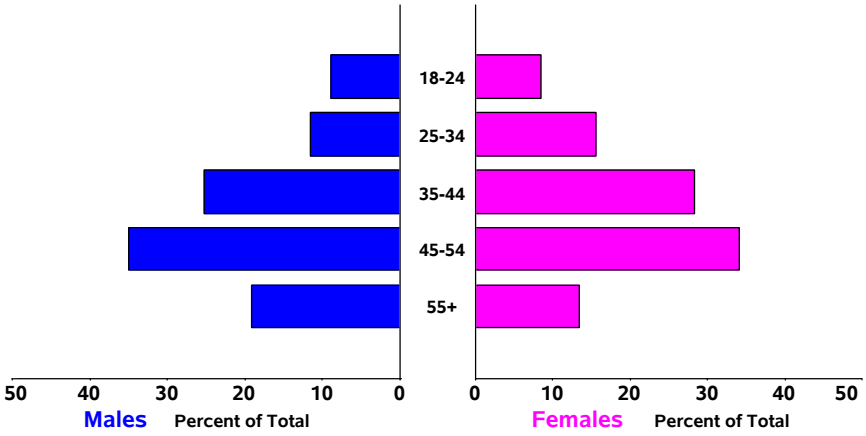
MMP Philadelphia - Results from 2009 Data Collection Cycle

Participants ranged in age from 18 to 80, and the median age at time of interview was 43.9 (95% CI 42.2-45.6). Males ranged in age from 18 to 80 with an average age of 43.9, and females ranged in age from 18 to 66 for an average of 41.9

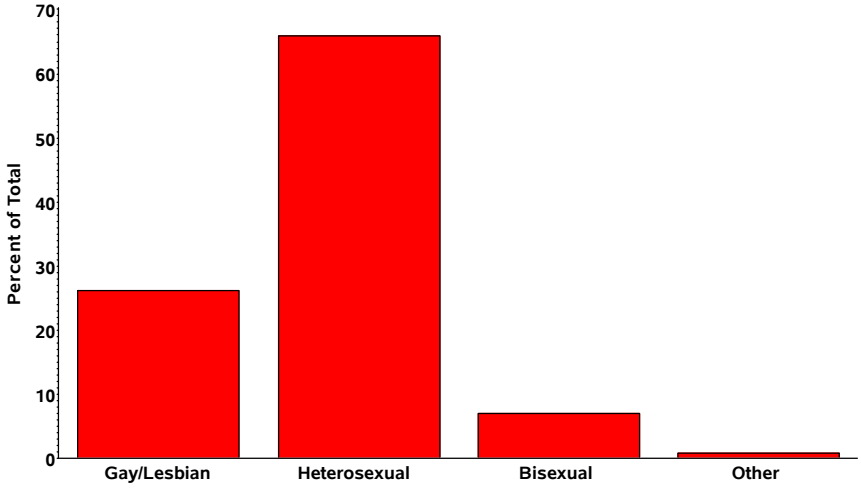
The MMP interview provides participants the opportunity to define their sexual orientation, as opposed to being classified based on reported risk behaviors. Traditional HIV transmission risk categories, including men who have sex with men (MSM), and heterosexual contact may classify risk behavior, but do not necessarily capture information regarding sexual orientation. MMP data indicate that less than 30% of participants identify as gay or lesbian, and the majority of persons receiving HIV care in Philadelphia consider themselves heterosexual.

The interview also includes several questions about routine laboratory testing including the date and value of the first CD4 and HIV viral load (VL), the date and value of the highest CD4 and VL, and the date and value of the lowest CD4 and VL. Participants are also asked to report on the number of CD4 and VL tests performed in the previous 12 months. The results presented here indicate that approximately one-third of participants report that their lowest CD4 value is 350 or higher. These data are important because current laboratory reporting guidelines do not include CD4 values over 350.

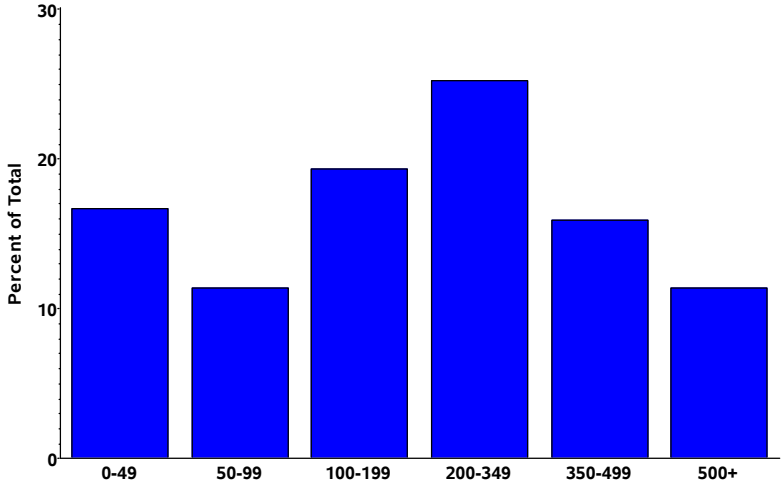
MMP Philadelphia - Age Distribution by Gender



MMP Philadelphia - Sexual Orientation



MMP Philadelphia - Lowest CD4 Count



MMP Philadelphia - Results from 2009 Data Collection Cycle

MMP Philadelphia
Weighted Population Demographics

	Total Col %
Race	
White	19.0 %
Black	61.0 %
Hispanic	17.3 %
Other	2.6 %
Gender	
Male	61.2 %
Female	37.3 %
Transgender	1.4 %
Education	
<High School	32.2 %
High School/GED	36.3 %
>High School	31.3 %
Time HIV+ (Years)	
Unknown	6.1 %
<3	34.3 %
3-5	31.0 %
6+	28.4 %
Annual Income	
UNK	4.1 %
<$10,000	33.6 %
$10,000-29,000	41.8 %
>30,000	20.3 %
Cigarette Smoking	
Never smoked	30.2 %
Daily	41.9 %
Sporadic	9.4 %
Quit	18.3 %

Traditional surveillance data have allowed HIV prevention programs across the country to describe the epidemic and monitor changes in the demographic and geographic distribution of new and prevalent infections for many years. MMP data provide the first opportunity to draw a more complete picture of those persons receiving primary HIV medical care including socioeconomic factors such as income and education, access to and usage of prevention programs and services, ongoing risk factors such as unprotected sex and drug and alcohol use, and a variety of clinical factors including medication adherence, emergency room visits, other sexually transmitted diseases, and vaccinations for influenza, hepatitis A/B, and HPV. Based on the findings presented here, almost 20% of persons receiving HIV care in Philadelphia identify as Hispanic or Latino/a, more than one-third are female, and 1.4% are transgender. Approximately one third have less than a high school education, and just under one third have attended some college.

Approximately one third of persons receiving HIV primary medical care in Philadelphia have been diagnosed within the past three years, and nearly one third have been living with HIV for six or more years. A small percentage either did not know or could not remember when they first tested positive for HIV. Annual household income varied widely, however approximately one third of persons lived on less than $10,000 per year. Less than a third of the sample had never smoked cigarettes, over 40% were daily smokers at the time of interview, and approximately 18% had quit smoking prior to the interview.

The data presented here represent a small percentage of the information gathered in MMP. Additional data to be presented in subsequent reports and publications include clinical indicators such as outpatient visits and laboratory testing (CD4 and VL), mental health and well being assessed using the Patient Health Questionnaire (PHQ) depression scale as well as on-going risk factors such as unprotected sex and drug and alcohol use.

Unweighted data from the national 2007 MMP cycle have recentlly been published by CDC in the MMWR and can be found at http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6011a1.htm?s_cid=ss6011a1_w . Additional information regarding MMP, including a more detailed description of the multi-stage sampling design, as well as copies of the questionnaires, is available at http://www.cdc.gov/hiv/topics/treatment/mmp/data.htm .

Table 12. Concurrent* HIV/AIDS, Demographics and Transmission Risk Among Incident HIV Diagnoses, Philadelphia Residents, 2009

	Non-concurrent		Concurrent HIV/AIDS		Total	
	N	Row %	N	Row %	N	Col %
Total	677	74.1 %	236	25.8 %	913	100.0 %
Sex						
Female	184	74.7 %	62	25.2 %	246	26.9 %
Male	493	73.9 %	174	26.0 %	667	73.0 %
Race/Ethnicity						
Black	410	72.5 %	155	27.4 %	565	61.8 %
Hispanic	136	74.3 %	47	25.6 %	183	20.0 %
White	111	79.2 %	29	20.7 %	140	15.3 %
Multi-race	9	69.2 %	*	30.7 %	13	1.4 %
Asian	9	90.0 %	*	10.0 %	10	1.0 %
Other/Unk	*	100.0 %	0	0	*	0.2 %
Age at HIV Dx						
< 13	*	100.0 %	0	0	*	0.3 %
13-19	39	82.9 %	8	17.0 %	47	5.1 %
20-29	254	82.2 %	55	17.7 %	309	33.8 %
30-39	152	74.1 %	53	25.8 %	205	22.4 %
40-49	147	69.6 %	64	30.3 %	211	23.1 %
50+	82	59.4 %	56	40.5 %	138	15.1 %
Transmission Risk						
MSM	272	78.8 %	73	21.1 %	345	37.7 %
IDU	84	82.3 %	18	17.6 %	102	11.1 %
Heterosexual	168	68.5 %	77	31.4 %	245	26.8 %
MSM/IDU	10	90.9 %	*	9.0 %	11	1.2 %
Pediatric	*	75.0 %	*	25.0 %	*	0.4 %
No Risk Reported	140	67.9 %	66	32.0 %	206	22.5 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office
*Diagnosis of AIDS within 365 days of initial diagnosis of HIV

Concurrent HIV/AIDS diagnosis indicates a missed opportunity to diagnose and treat HIV disease at its earliest stages. Early diagnosis and treatment of HIV has been shown to increase survival time and reduce co-morbidities associated with chronic HIV infection.

The proportion of new cases diagnosed with AIDS within one year of HIV diagnosis has fluctuated in recent years, from 35% in 2007 to 19% in 2008. The data presented here indicate that more than one-quarter (25.8%) of newly diagnised HIV cases in 2009 could have been identified sooner, allowing for earlier intervention with anitretroviral therapy and delays in AIDS diagnosis.

HIV Incidence Estimates

Incidence of disease is defined as the number of new infections in a given time period, typically one year. Due to the nature of HIV infection, true incidence is difficult to measure. Recent infection is rarely accompanied with symptoms, and persons are often unaware of their exposure. Routine testing of all persons at risk for HIV is sporadic at best, and many are not tested and diagnosed until some time after their initial infection. In order to better monitor the epidemic, as well as to guide policies and programs designed to serve those communities most affected by HIV, the CDC has developed new technology and methodology to more directly measure new infections. Since the first incidence estimates were released in 2007 the methodology, and the data used to make these calculations, have improved substantially. The estimates presented here utilize diagnostic testing algorithms designed to detect recent infection, along with testing and treatment history data available for newly diagnosed persons in Philadelphia. These estimates provide the best available indicator of the true number of new HIV infections in Philadelphia. Because these estimates were calculated using the best available data, they should replace any previously released estimates.

Additional information on the methodology used to calculate these estimates, as well as the national estimates calculated by CDC and published in the Journal of the American Medical Association are available here http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2919237/pdf/nihms221178.pdf .

Table 13. HIV Incidence Estimates (Counts, Percents and 95% CI), Philadelphia, 2007-2009

Category	2007, No. (%) [95% CI]	2008, No. (%) [95% CI]	2009, No. (%) [95% CI]
Total	883 (100) [588-1,178]	815 (100) [576-1,054]	941 (100) [659-1,222]
Age, years			
13-24	252 (29) [129-375]	216 (26) [109-322]	281 (30) [143-418]
25-44	475 (54) [262-689]	420 (52) [257-584]	499 (53) [295-704]
45+	156 (18) [40-271]	179 (22) [75-283]	161 (17) [57-266]
Gender			
Male	556 (63) [340-773]	551 (68) [350-724]	718 (76) [467-968]
Female	326 (37) [129-523]	264 (32) [130-383]	223 (24) [108-339]
Race/ethnicity			
Non-Hispanic Black	582 (66) [361-804]	493 (60) [325-661]	591 (63) [383-799]
Other	301 (34) [137-464]	322 (40) [183-461]	350 (37) [175-525]
Transmission Category			
Men who have sex w/ Men	385 (44) [201-568]	332 (41) [190-474}	436 (46) [247-625]
Intravenous Drug User	101 (11) [19-183]	97 (12) [28-166]	136 (14) [38-235]
Heterosexual contact	397(45) [201-593]	387 (47) [222-551]	369 (39) [201-536]

DEFINITIONS

AACO (AIDS Activities Coordinating Office): The office within the Philadelphia Department of Public Health responsible for administering the city's HIV/AIDS Programs.

AIDS (Acquired Immune Deficiency Syndrome): A result of Human Immunodeficiency Virus (HIV) infection, which disables the immune system from effectively fighting numerous opportunistic infections and cancers.

CDC (Centers for Disease Control and Prevention): A federal disease prevention agency, which is part of the U.S. Department of Health and Human Services, that provides national laboratory and health and safety guidelines and recommendations; tracks diseases throughout the world; and performs basic research involving laboratory, behavioral science, epidemiology and other studies of disease.

Confidentiality: Keeping medical information confidential or private.

Diagnosis: Determination of the nature of a case of a disease based on signs, symptoms, and laboratory findings during life. A diagnosis of AIDS for an adult is being HIV antibody-positive in addition to having one opportunistic infection, condition, or disease (e.g. wasting syndrome, PCP, Kaposi's sarcoma, CD4 T-lymphocyte count below 200 or 14%).

Epidemiology: The branch of medical science that deals with the study of incidence, distribution and control of a disease in a population.

HIV (Human Immunodeficiency Virus): The retrovirus that causes AIDS by infecting the T-helper cells.

Incidence: The number or rate of new cases of a disease over defined period of time.

IDU (Injection Drug Use): An HIV/AIDS transmission category.

MSM (Men who have sex with men): An HIV/AIDS transmission category.

MSM/IDU (Men who have sex with men who are also injection drug users): An HIV/AIDS transmission category.

NIR (No Identified Risk): Indicates when documentation is insufficient to assign an HIV/AIDS transmission category based on CDC guidelines.

Perinatal Transmission of HIV: Term used to describe the spread of HIV/AIDS from a mother to her baby that can occur during pregnancy, labor, delivery or breastfeeding.

Prevalence: Total number of cases of a disease in a population over a period of time.

Risk Behavior: Used here to describe activities that put people at risk of contracting HIV/AIDS.

Sexual Orientation: The sexual attraction people feel for others, whether of their own sex, the opposite sex, or both sexes.

Transmission Category: A system that classifies cases by possible HIV transmission risk factors or mode(s) of infection; e.g. IDU, MSM/IDU, perinatal transmission, heterosexual contact.

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To be added or removed from the Epidemiological Update mailing list, to request data from the AIDS Activities Coordinating Office, or to make suggestions for future Epidemiological Updates please email your request to aacoepi@phila.gov.

Please allow at least 10 business days for all data requests.

If you would like more information, surveillance staff may be available to make presentations of up-todate surveillance data for Philadelphia or your hospital/reporting site/geographic area or presentations regarding the importance and methods of reporting HIV/AIDS cases. If interested, please contact Kathleen A. Brady, M.D. at (215) 685-4778 to schedule a meeting time.

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