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AIDS Activities Coordinating Office (AACO) Annual Surveillance Report 2009

HIV/AIDS in Philadelphia

~Cases Reported through June 2010~

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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, 2009 and reported through June 30, 2010. In July 2009, AACO transitioned to a new database software designed to enhance surveillance capabilities. **This transition resulted in the reassignment of jurisdiction for some cases between Philadelphia and the Commonwealth of Pennsylvania. Because of these changes, differences may exist for prior year totals between this report and any previous reports.**

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 so 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, 2009)

	HIV (Non-AIDS)		AIDS		HIV/AIDS	
	N	%	N	%	N	%
Total	7,767	100.0 %	20,507	100.0 %	28,274	100.0 %
Race						
Black	5,088	65.5 %	13,535	66.0 %	18,623	65.8 %
White	1,565	20.1 %	4,662	22.7 %	6,227	22.0 %
Hispanic	961	12.3 %	2,115	10.3 %	3,076	10.8 %
Multi-race	76	0.9 %	86	0.4 %	162	0.5 %
Asian	53	0.6 %	87	0.4 %	140	0.4 %
Other/Unk	24	0.3 %	22	0.1 %	46	0.1 %
Gender						
Female	2,550	32.8 %	4,770	23.2 %	7,320	25.8 %
Male	5,217	67.1 %	15,737	76.7 %	20,954	74.1 %
Age Category						
Unknown	0	0	2,594	12.6 %	2,594	9.1 %
13-19	427	5.4 %	419	2.0 %	846	2.9 %
20-29	2,200	28.3 %	4,029	19.6 %	6,229	22.0 %
30-39	2,456	31.6 %	6,813	33.2 %	9,269	32.7 %
40-49	1,861	23.9 %	4,414	21.5 %	6,275	22.1 %
50+	823	10.5 %	2,238	10.9 %	3,061	10.8 %
Transmission Risk						
MSM	2,284	29.4 %	7,298	35.5 %	9,582	33.8 %
IDU	1,879	24.1 %	7,019	34.2 %	8,898	31.4 %
Heterosexual	3,193	41.1 %	4,900	23.8 %	8,093	28.6 %
MSM/IDU	148	1.9 %	913	4.4 %	1,061	3.7 %
Other	*	0.0 %	72	0.3 %	77	0.2 %
No Risk Reported	258	3.3 %	305	1.4 %	563	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, 2009)

	1980-2005		2007		2008		2009		Total	
	N	%	N	%	N	%	N	%	N	%
Total	25,147	100.0 %	1,151	100.0 %	1,044	100.0 %	932	100.0 %	28,274	100.0 %
Race										
Black	16,571	65.8 %	746	64.8 %	686	65.7 %	620	66.5 %	18,623	65.8 %
White	5,657	22.4 %	238	20.6 %	181	17.3 %	151	16.2 %	6,227	22.0 %
Hispanic	2,648	10.5 %	137	11.9 %	148	14.1 %	143	15.3 %	3,076	10.8 %
Multi-race	123	0.4 %	14	1.2 %	20	1.9 %	*	0.5 %	162	0.5 %
Asian	108	0.4 %	13	1.1 %	7	0.6 %	12	1.2 %	140	0.4 %
Other/Unk	40	0.1 %	*	0.2 %	*	0.1 %	*	0.1 %	46	0.1 %
Gender										
Female	6,438	25.6 %	320	27.8 %	312	29.8 %	250	26.8 %	7,320	25.8 %
Male	18,709	74.3 %	831	72.1 %	732	70.1 %	682	73.1 %	20,954	74.1 %
Age Category										
Unknown	2,594	10.3 %	0	0	0	0	0	0	2,594	9.1 %
13-19	653	2.5 %	75	6.5 %	67	6.4 %	51	5.4 %	846	2.9 %
20-29	5,359	21.3 %	291	25.2 %	275	26.3 %	304	32.6 %	6,229	22.0 %
30-39	8,550	34.0 %	279	24.2 %	224	21.4 %	216	23.1 %	9,269	32.7 %
40-49	5,458	21.7 %	314	27.2 %	275	26.3 %	228	24.4 %	6,275	22.1 %
50+	2,533	10.0 %	192	16.6 %	203	19.4 %	133	14.2 %	3,061	10.8 %
Transmission Risk										
MSM	8,532	33.9 %	350	30.4 %	343	32.8 %	357	38.3 %	9,582	33.8 %
IDU	8,459	33.6 %	199	17.2 %	137	13.1 %	103	11.0 %	8,898	31.4 %
Heterosexual	6,785	26.9 %	568	49.3 %	512	49.0 %	228	24.4 %	8,093	28.6 %
MSM/IDU	1,016	4.0 %	20	1.7 %	16	1.5 %	9	0.9 %	1,061	3.7 %
Other	77	0.3 %	0	0	0	0	0	0	77	0.2 %
No Risk Reported	278	1.1 %	14	1.2 %	36	3.4 %	235	25.2 %	563	1.9 %

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

Table 3. Newly-diagnosed HIV by Year and Selected Characteristics, Philadelphia Residents, 2006-2008

	Year of Dx					
	2007		2008		2009	
	N	Col %	N	Col %	N	Col %
Total	892	100.0 %	949	100.0 %	911	100.0 %
Race						
Black	575	64.4 %	617	65.0 %	605	66.4 %
White	178	19.9 %	164	17.2 %	149	16.3 %
Hispanic	115	12.8 %	140	14.7 %	140	15.3 %
Multi-race	12	1.3 %	20	2.1 %	*	0.5 %
Asian	10	1.1 %	6	0.6 %	11	1.2 %
Other/Unk	*	0.2 %	*	0.2 %	*	0.1 %
Gender						
Female	247	27.6 %	291	30.6 %	247	27.1 %
Male	645	72.3 %	658	69.3 %	664	72.8 %
Age Category						
< 13	*	0.1 %	9	0.9 %	*	0.1 %
13-19	70	7.8 %	62	6.5 %	49	5.3 %
20-29	252	28.2 %	264	27.8 %	303	33.2 %
30-39	221	24.7 %	206	21.7 %	210	23.0 %
40-49	231	25.8 %	247	26.0 %	219	24.0 %
50+	117	13.1 %	161	16.9 %	129	14.1 %
Transmission Risk						
MSM	280	31.3 %	309	32.5 %	350	38.4 %
IDU	148	16.5 %	125	13.1 %	102	11.1 %
Heterosexual	435	48.7 %	456	48.0 %	216	23.7 %
MSM/IDU	15	1.6 %	15	1.5 %	9	0.9 %
Pediatric	*	0.1 %	7	0.7 %	*	0.1 %
No Risk Reported	13	1.4 %	37	3.8 %	233	25.5 %

Name-based HIV reporting was implemented in October 2005. Data for the first three complete years of reporting indicate that the majority of newly-diagnosed HIV cases are among African-American males. The most commonly documented risk category is heterosexual, followed by MSM and IDU.

Newly-diagnosed HIV cases may not represent new infections due to the nature of undiagnosed HIV disease. The CDC has developed algorithms for estimating the number of new HIV cases. New estimates of recent HIV infection in Philadelphia will be available in upcoming reports.

New HIV cases are identified either through laboratory reporting of Western-blot, low CD4 lymphocyte, or HIV viral load tests. Reported labs are matched against existing cases, and new cases are investigated through medical record abstractions. New HIV cases are also identified through physician reporting and city-funded HIV counseling and testing sites.

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

Table 4. AIDS Diagnoses by Year and Selected Characteristics, Philadelphia Residents, 2007-2009

	Year of Dx					
	2007		2008		2009	
	N	Col %	N	Col %	N	Col %
Total	693	100.0 %	469	100.0 %	216	100.0 %
Race						
Black	466	67.2 %	323	68.8 %	157	72.6 %
White	142	20.4 %	76	16.2 %	29	13.4 %
Hispanic	61	8.8 %	51	10.8 %	27	12.5 %
Multi-race	19	2.7 %	14	2.9 %	*	0.4 %
Asian	*	0.5 %	*	0.6 %	*	0.9 %
Other/Unk	*	0.1 %	*	0.4 %	0	0
Gender						
Female	223	32.1 %	148	31.5 %	49	22.6 %
Male	470	67.8 %	321	68.4 %	167	77.3 %
Age Category						
< 13	0	0	*	0.4 %	0	0
13-19	*	0.7 %	13	2.7 %	9	4.1 %
20-29	97	13.9 %	70	14.9 %	51	23.6 %
30-39	166	23.9 %	109	23.2 %	46	21.2 %
40-49	259	37.3 %	137	29.2 %	64	29.6 %
50+	166	23.9 %	138	29.4 %	46	21.2 %
Transmission Risk						
MSM	188	27.1 %	127	27.0 %	72	33.3 %
IDU	159	22.9 %	78	16.6 %	24	11.1 %
Heterosexual	328	47.3 %	238	50.7 %	63	29.1 %
MSM/IDU	9	1.2 %	13	2.7 %	*	0.9 %
Pediatric	0	0	*	1.0 %	*	0.4 %
No Risk Reported	9	1.2 %	8	1.7 %	54	25.0 %

More than two-thirds of new AIDS cases are among African-Americans. The majority of cases (69%) are among males and the most commonly documented risk category is heterosexual, followed by MSM and IDU. More than half of all cases are 40 years of age or older when diagnosed with AIDS.

Treatment advances, including highly active antiretroviral therapy (HAART) may be responsible for the decrease in new AIDS diagnoses. These treatments help reduce viral loads and increase CD4 counts, reducing the likelihood of AIDS-defining opportunistic infections.

Early detection and treatment of HIV may also impact the number of new AIDS cases by reducing the number of cases that are not identified until they have progressed to AIDS.

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

Table 5. Persons Living with AIDS by Selected Characteristics†
Philadelphia Residents, 2009

Total Race	Total	
	N	Col %
	11,362	100.0 %
Black	7,577	66.6 %
White	2,326	20.4 %
Hispanic	1,316	11.5 %
Asian	68	0.5 %
Multi-race	61	0.5 %
Other/Unk	14	0.1 %
Gender		
Female	3,151	27.7 %
Male	8,211	72.2 %
Age Category		
Unknown	*	0.0 %
< 13	22	0.1 %
13-19	97	0.8 %
20-29	478	4.2 %
30-39	1,533	13.4 %
40-49	4,359	38.3 %
50+	4,870	42.8 %
Transmission Risk		
MSM	3,415	30.0 %
IDU	3,633	31.9 %
Heterosexual	3,604	31.7 %
MSM/IDU	419	3.6 %
Pediatric	141	1.2 %
Other	13	0.1 %
No Risk Reported	137	1.2 %

In Philadelphia...

~Over 25% of
Persons Living with
AIDS are women.

~Two-thirds are
African-American.

~More than half are
over 40

~Nearly one-third
report heterosexual
risk behavior.

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office
†Age as of December 31, 2009

Table 6. Persons Living with AIDS by Race and Selected Characteristics*
Philadelphia Residents, 2009

	Race					
	Black		White		Hispanic	
	N	Col %	N	Col %	N	Col %
Total	7,577	100.0 %	2,326	100.0 %	1,316	100.0 %
Gender						
Female	2,376	31.3 %	362	15.5 %	379	28.7 %
Male	5,201	68.6 %	1,964	84.4 %	937	71.2 %
Age Category						
Unknown	*	0.0 %	0	0	0	0
< 13	21	0.2 %	0	0	*	0.0 %
13-19	82	1.0 %	6	0.2 %	9	0.6 %
20-29	357	4.7 %	53	2.2 %	58	4.4 %
30-39	1,084	14.3 %	233	10.0 %	167	12.6 %
40-49	2,860	37.7 %	936	40.2 %	521	39.5 %
50+	3,170	41.8 %	1,098	47.2 %	560	42.5 %
Transmission Risk						
MSM	1,870	24.6 %	1,280	55.0 %	214	16.2 %
IDU	2,497	32.9 %	538	23.1 %	574	43.6 %
Heterosexual	2,722	35.9 %	375	16.1 %	447	33.9 %
MSM/IDU	268	3.5 %	95	4.0 %	50	3.7 %
Pediatric	116	1.5 %	10	0.4 %	15	1.1 %
Other	7	0.0 %	*	0.1 %	*	0.1 %
No Risk Reported	97	1.2 %	24	1.0 %	14	1.0 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office
*Age as of December 31, 2009

Table 7. Persons Living with AIDS by Gender and Selected Characteristics*
Philadelphia Residents, 2009

	Gender			
	Female		Male	
	N	Col %	N	Col %
Total	3,151	100.0 %	8,211	100.0 %
Race				
Black	2,376	75.4 %	5,201	63.3 %
White	362	11.4 %	1,964	23.9 %
Hispanic	379	12.0 %	937	11.4 %
Asian	10	0.3 %	58	0.7 %
Multi-race	21	0.6 %	40	0.4 %
Other/Unk	*	0.0 %	11	0.1 %
Age Category				
Unknown	0	0	*	0.0 %
< 13	11	0.3 %	11	0.1 %
13-19	41	1.3 %	56	0.6 %
20-29	131	4.1 %	347	4.2 %
30-39	551	17.4 %	982	11.9 %
40-49	1,345	42.6 %	3,014	36.7 %
50+	1,072	34.0 %	3,798	46.2 %
Transmission Risk				
MSM	0	0	3,415	41.5 %
IDU	1,148	36.4 %	2,485	30.2 %
Heterosexual	1,893	60.0 %	1,711	20.8 %
MSM/IDU	0	0	419	5.1 %
Pediatric	66	2.0 %	75	0.9 %
Other	*	0.1 %	9	0.1 %
No Risk Reported	40	1.2 %	97	1.1 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office
*Age as of December 31, 2009

Table 8. Persons Living with HIV/AIDS by Selected Characteristics*
Philadelphia Residents, 2009

Total Race	Total	
	N	Col %
	19,237	100.0 %
Black	12,741	66.2 %
White	3,876	20.1 %
Hispanic	2,324	12.0 %
Multi-race	137	0.7 %
Asian	122	0.6 %
Other/Unk	37	0.1 %
Gender		
Female	5,766	29.9 %
Male	13,471	70.0 %
Age Category		
Unknown	11	0.0 %
< 13	74	0.3 %
13-19	241	1.2 %
20-29	1,771	9.2 %
30-39	3,213	16.7 %
40-49	6,920	35.9 %
50+	7,007	36.4 %
Transmission Risk		
MSM	5,780	30.0 %
IDU	5,400	28.0 %
Heterosexual	6,805	35.3 %
MSM/IDU	561	2.9 %
Pediatric	272	1.4 %
Other	17	0.0 %
No Risk Reported	402	2.0 %

In Philadelphia...

~Almost 30% of Persons Living with HIV/AIDS are women.

~Two-thirds are African-American.

~More than 70% are over 40

~Heterosexual sex is the most common risk behavior.

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office
*Age as of December 31, 2009

Table 9. Persons Living with HIV/AIDS by Race and Selected Characteristics*
Philadelphia Residents, 2009

	Race					
	Black		White		Hispanic	
	N	Col %	N	Col %	N	Col %
Total	12,741	100.0 %	3,876	100.0 %	2,324	100.0 %
Gender						
Female	4,325	33.9 %	677	17.4 %	683	29.3 %
Male	8,416	66.0 %	3,199	82.5 %	1,641	70.6 %
Age Category						
Unknown	9	0.0 %	*	0.0 %	*	0.0 %
< 13	61	0.4 %	*	0.1 %	7	0.3 %
13-19	188	1.4 %	20	0.5 %	32	1.3 %
20-29	1,300	10.2 %	223	5.7 %	204	8.7 %
30-39	2,147	16.8 %	560	14.4 %	421	18.1 %
40-49	4,442	34.8 %	1,516	39.1 %	876	37.6 %
50+	4,594	36.0 %	1,551	40.0 %	783	33.6 %
Transmission Risk						
MSM	3,210	25.1 %	2,051	52.9 %	403	17.3 %
IDU	3,533	27.7 %	879	22.6 %	940	40.4 %
Heterosexual	5,149	40.4 %	727	18.7 %	815	35.0 %
MSM/IDU	349	2.7 %	138	3.5 %	65	2.7 %
Pediatric	205	1.6 %	24	0.6 %	43	1.8 %
Other	10	0.0 %	*	0.1 %	*	0.0 %
No Risk Reported	285	2.2 %	52	1.3 %	56	2.4 %

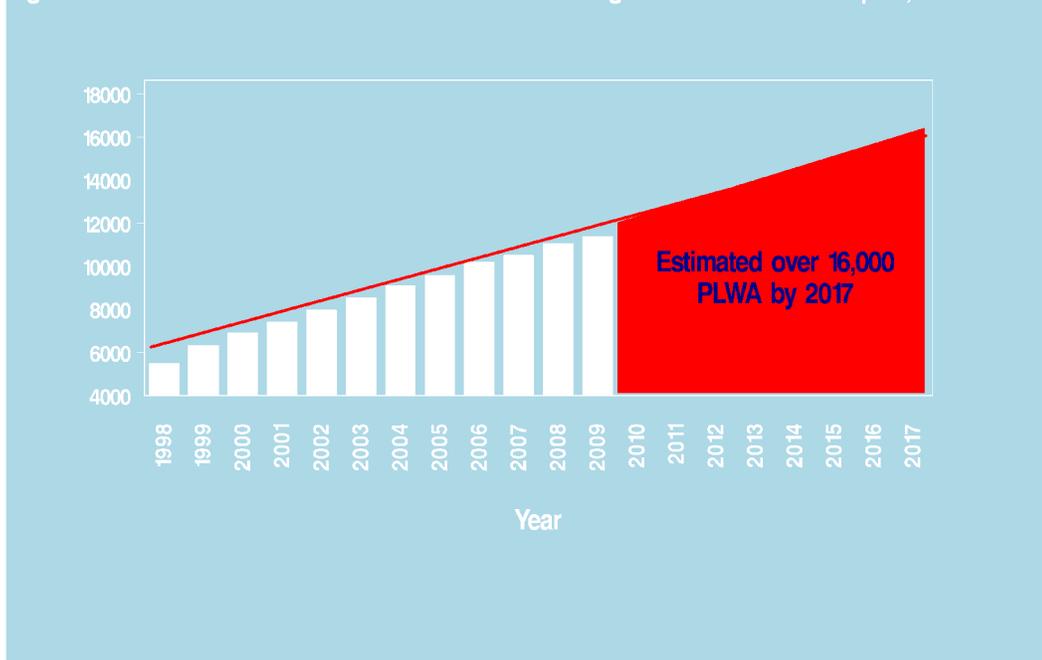
Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office
*Age as of December 31, 2009

Table 10. Persons Living with HIV/AIDS by Gender and Selected Characteristics*
Philadelphia Residents, 2009

	Gender			
	Female		Male	
	N	Col %	N	Col %
Total	5,766	100.0 %	13,471	100.0 %
Race				
Black	4,325	75.0 %	8,416	62.4 %
White	677	11.7 %	3,199	23.7 %
Hispanic	683	11.8 %	1,641	12.1 %
Multi-race	45	0.7 %	92	0.6 %
Asian	23	0.3 %	99	0.7 %
Other/Unk	13	0.2 %	24	0.1 %
Age Category				
Unknown	*	0.0 %	9	0.0 %
< 13	37	0.6 %	37	0.2 %
13-19	96	1.6 %	145	1.0 %
20-29	502	8.7 %	1,269	9.4 %
30-39	1,184	20.5 %	2,029	15.0 %
40-49	2,247	38.9 %	4,673	34.6 %
50+	1,698	29.4 %	5,309	39.4 %
Transmission Risk				
MSM	0	0	5,780	42.9 %
IDU	1,754	30.4 %	3,646	27.0 %
Heterosexual	3,726	64.6 %	3,079	22.8 %
MSM/IDU	0	0	561	4.1 %
Pediatric	126	2.1 %	146	1.0 %
Other	*	0.0 %	12	0.0 %
No Risk Reported	155	2.6 %	247	1.8 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office
*Age as of December 31, 2009

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



Advances in treatment options means that people are living longer with HIV/AIDS, and it is estimated that over 16,000 persons will be living with AIDS in Philadelphia by 2017.

Since its introduction in 1996, highly active anti-retroviral therapy (HAART) has had a significant impact on the management and treatment of HIV.

AACO uses data collected through routine laboratory reporting for several surveillance projects. The presence of CD4 or viral load test results within 3 months of HIV diagnosis is used to assess entry to HIV medical care. Viral load test results, along with geographic analyses of living HIV/AIDS cases, are used to assess emerging markers of disease transmission such as 'community viral load'.

The lab data presented in this report indicate that approximately 45% of persons living with HIV/AIDS in Philadelphia had a documented lab test result reported to AACO in 2009.

Figure 2. Documented Lab Data For Persons Living with HIV/AIDS

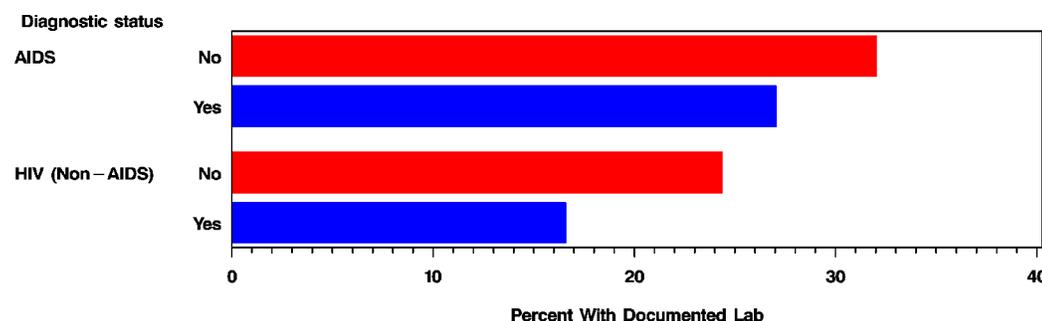
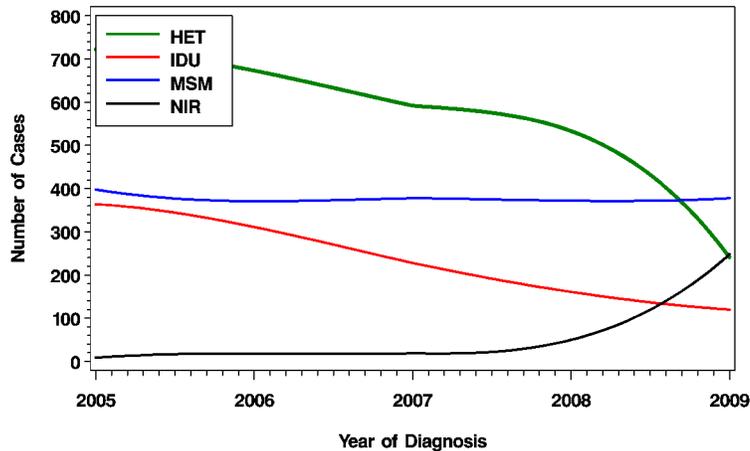
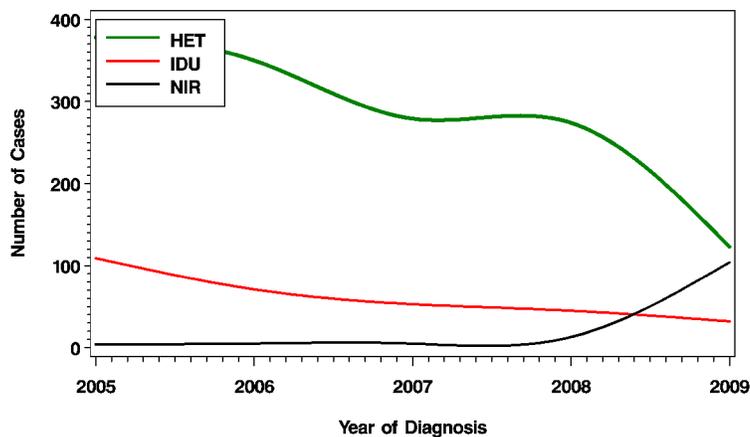


Figure 3. Risk Category Trend by Year: MSM, Hetero and IDU, 2005–2009



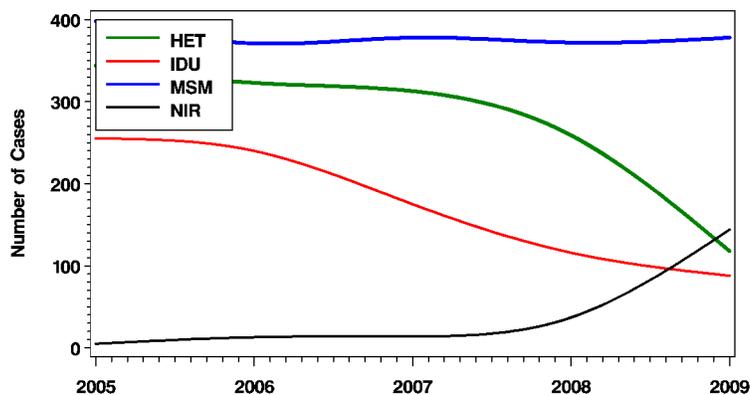
Overall: Recent trends in HIV/AIDS transmission risk indicate that cases associated with injection drug use (IDU) have decreased substantially, possibly due to the success of needle exchange. Cases associated with male-to-male sexual contact (MSM) have levelled off. New requirements for documentation of heterosexual risk behavior have resulted in an increase in No Identified Risk (NIR) category.

Figure 4. Risk Category Trend by Year: Females, 2005–2009



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

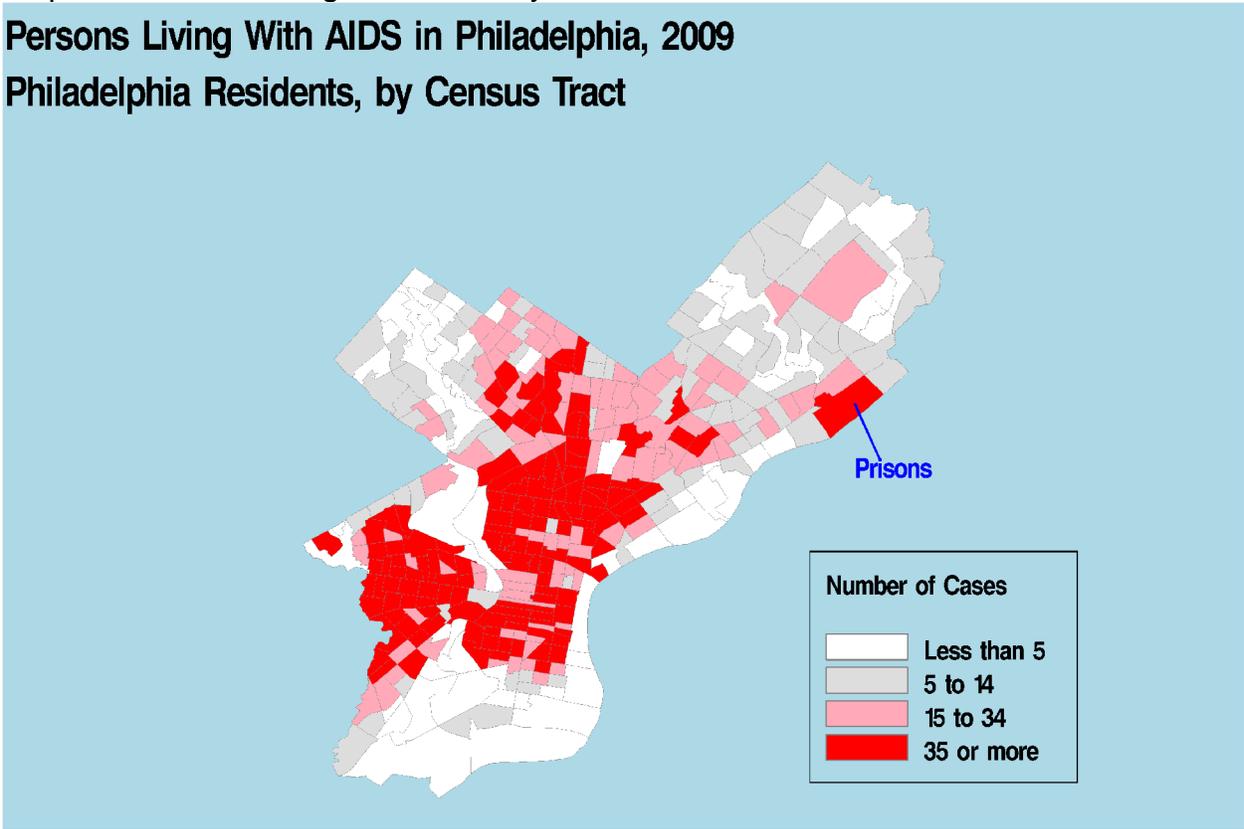
Figure 5. Risk Category Trend by Year: Males, 2005–2009



Males: As in previous years of the epidemic, the majority of male HIV/AIDS cases are among men who have sex with men (MSM). However, in recent years a larger proportion of male cases have reported only heterosexual contact. The number and percentage of male cases associated with injection drug use has decreased dramatically over the past five years.

Map 1. Persons Living With AIDS by Census Tract, 2009

Persons Living With AIDS in Philadelphia, 2009
Philadelphia Residents, by Census Tract



Map 2. Newly Diagnosed HIV by Census Tract, 2009

Newly Diagnosed HIV in Philadelphia, 2009
Philadelphia Residents, by Census Tract

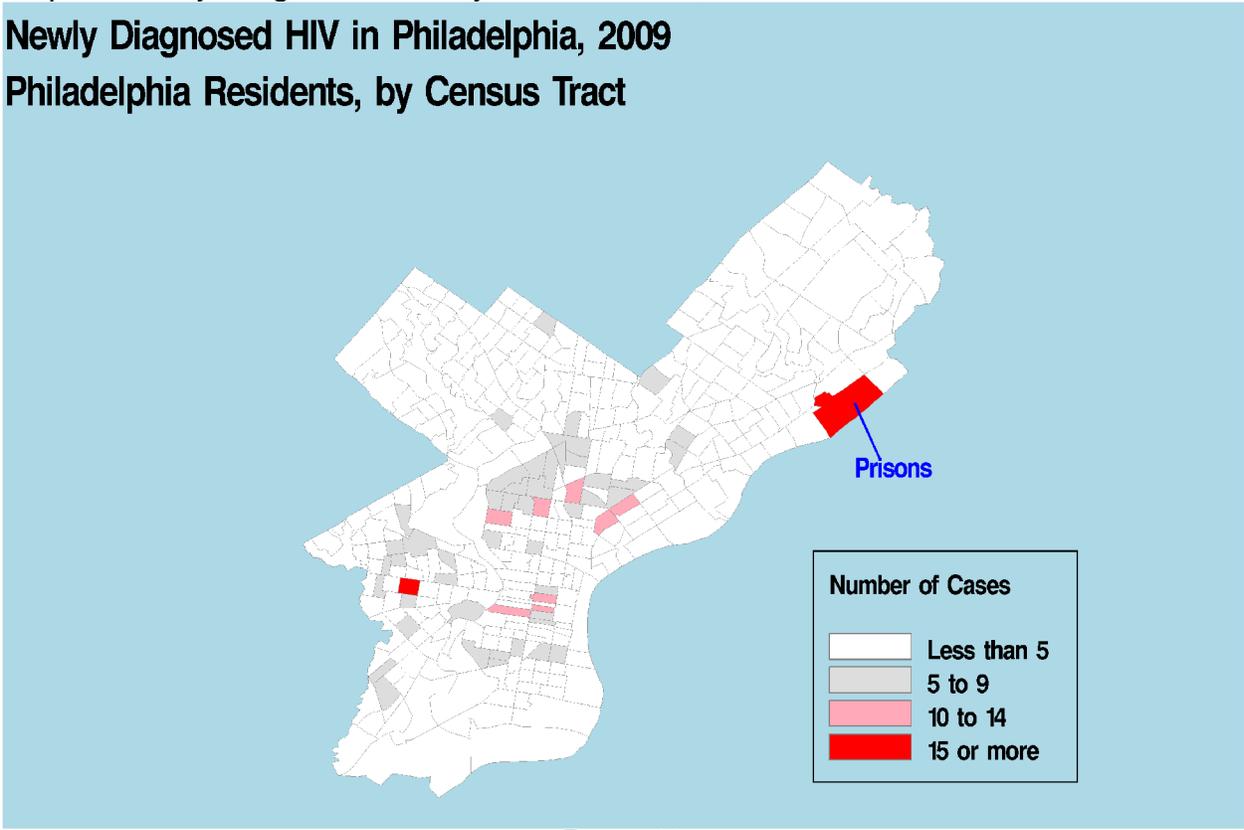


Table 11. Concurrent* HIV/AIDS, Demographics and Transmission Risk Among Incident HIV Diagnoses, Philadelphia Residents, 2008

	Non-concurrent		Concurrent HIV/AIDS		Total	
	N	Row %	N	Row %	N	Col %
Total	770	81.1 %	179	18.8 %	949	100.0 %
Sex						
Female	233	80.0 %	58	19.9 %	291	30.6 %
Male	537	81.6 %	121	18.3 %	658	69.3 %
Race/Ethnicity						
Black	509	82.4 %	108	17.5 %	617	65.0 %
White	135	82.3 %	29	17.6 %	164	17.2 %
Hispanic	106	75.7 %	34	24.2 %	140	14.7 %
Multi-race	12	60.0 %	8	40.0 %	20	2.1 %
Asian	6	100.0 %	0	0	6	0.6 %
Other/Unk	*	100.0 %	0	0	*	0.2 %
Age at HIV Dx						
< 13	9	100.0 %	0	0	9	0.9 %
13-19	56	90.3 %	6	9.6 %	62	6.5 %
20-29	232	87.8 %	32	12.1 %	264	27.8 %
30-39	167	81.0 %	39	18.9 %	206	21.7 %
40-49	190	76.9 %	57	23.0 %	247	26.0 %
50+	116	72.0 %	45	27.9 %	161	16.9 %
Transmission Risk						
MSM	267	86.4 %	42	13.5 %	309	32.5 %
IDU	101	80.8 %	24	19.2 %	125	13.1 %
Heterosexual	357	78.2 %	99	21.7 %	456	48.0 %
MSM/IDU	11	73.3 %	*	26.6 %	15	1.5 %
Pediatric	7	100.0 %	0	0	7	0.7 %
No Risk Reported	27	72.9 %	10	27.0 %	37	3.8 %

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

Table 12. Perinatal HIV Exposures by Outcome and Selected Characteristics Among Live Births, Philadelphia Residents, 2005-2009

	Child HIV Status					
	HIV+		HIV-/Indet		Total	
	N	Col %	N	Col %	N	Col %
Total	13	100.0 %	548	100.0 %	561	100.0 %
Race						
Black	9	69.2 %	470	85.7 %	479	85.3 %
Other/UNK	*	7.6 %	*	0.9 %	6	1.0 %
White	*	23.0 %	73	13.3 %	76	13.5 %
Marital Status						
Unknown	*	15.3 %	43	7.8 %	45	8.0 %
Single	10	76.9 %	458	83.5 %	468	83.4 %
Married	*	7.6 %	42	7.6 %	43	7.6 %
Divorced	0	0	*	0.9 %	*	0.8 %
Prenatal Care*						
Adequate	*	15.3 %	201	36.6 %	203	36.1 %
Inadequate	*	23.0 %	59	10.7 %	62	11.0 %
Intermediate	*	15.3 %	201	36.6 %	203	36.1 %
Unknown	6	46.1 %	87	15.8 %	93	16.5 %

The overall goal of the enhanced perinatal surveillance program is to provide funds to target and follow the progress toward maximal reduction of perinatal transmission. This program addresses the Healthy People 2010 focus areas of “Advancing HIV Prevention” by further decreasing perinatal HIV transmission and decrease the number of perinatally acquired AIDS cases. The City of Philadelphia currently conducts pediatric HIV surveillance on infants born to HIV-infected mothers in addition to active pediatric HIV and AIDS surveillance. HIV became reportable by name in the City of Philadelphia on October 6, 2005. The regulation specifically calls for reporting of all perinatal exposures of a newborn to HIV.

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office. *Based on Kessner Scale of Prenatal Care

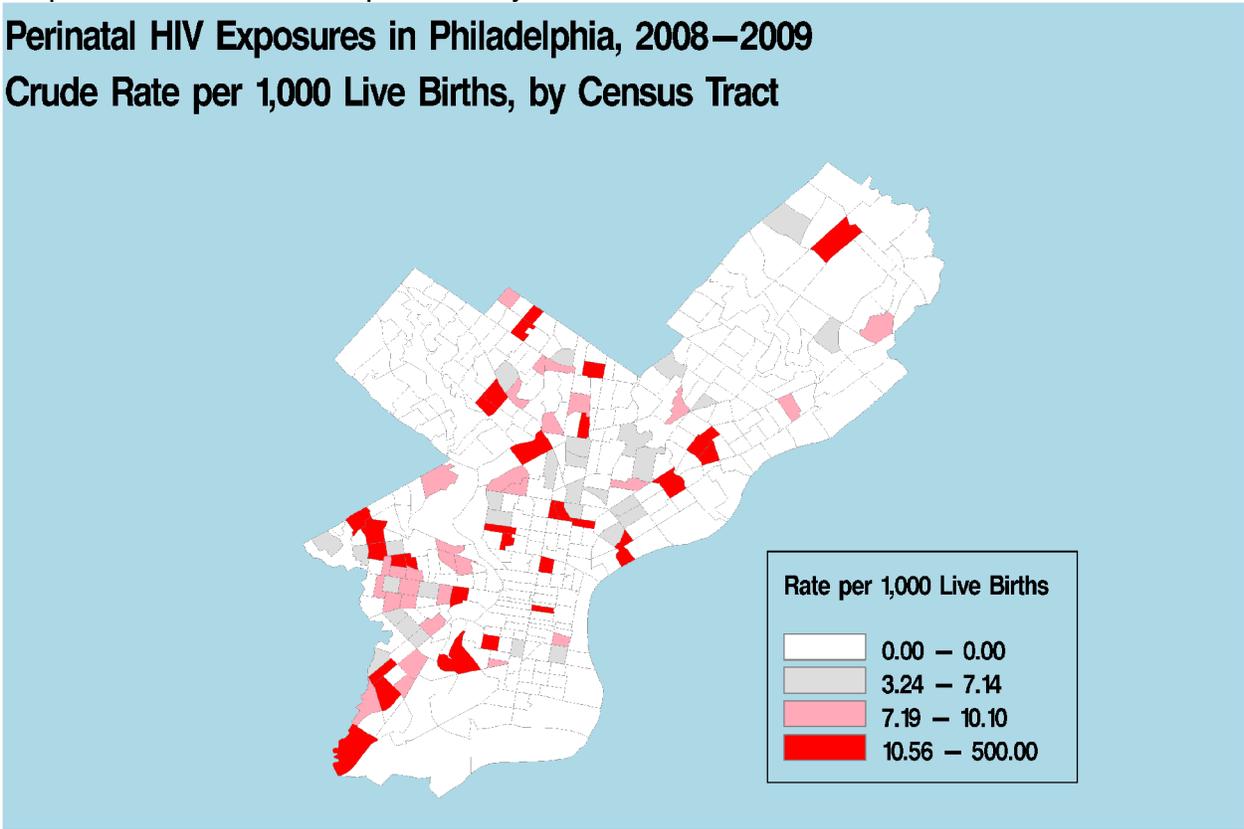
All children born to HIV-infected mothers who are reported to the Philadelphia Health Department AIDS Surveillance Unit in accordance with the Philadelphia Health Code are followed up and a pediatric HIV/AIDS case report form is completed. The medical records of HIV-infected mothers and their HIV-exposed infants are accessed to collect data from these records.

Enhanced surveillance methods include supplemental reviews of medical records of both mother and all perinatally exposed infants to assess counseling and testing, prenatal care, and treatment, longitudinal follow-up to assess infection status of infants, initiation of HIV-related care, and long-term outcomes.

Matching HIV/AIDS and birth registries are conducted to help ensure that all mother/infant pairs are identified and the data are representative of all HIV-infected pregnant women. The infants identified through enhanced surveillance are followed up every 6 months to determine their infection status and, if they meet the HIV/AIDS case definition, continue to be followed to determine their vital status.

Map 3. Perinatal HIV Exposures by Census Tract, 2008-2009

Perinatal HIV Exposures in Philadelphia, 2008–2009
Crude Rate per 1,000 Live Births, by Census Tract



Map 4. Live Births by Census Tract, 2008-2009

Live Births in Philadelphia, 2008–2008
Percent of Total, by Census Tract

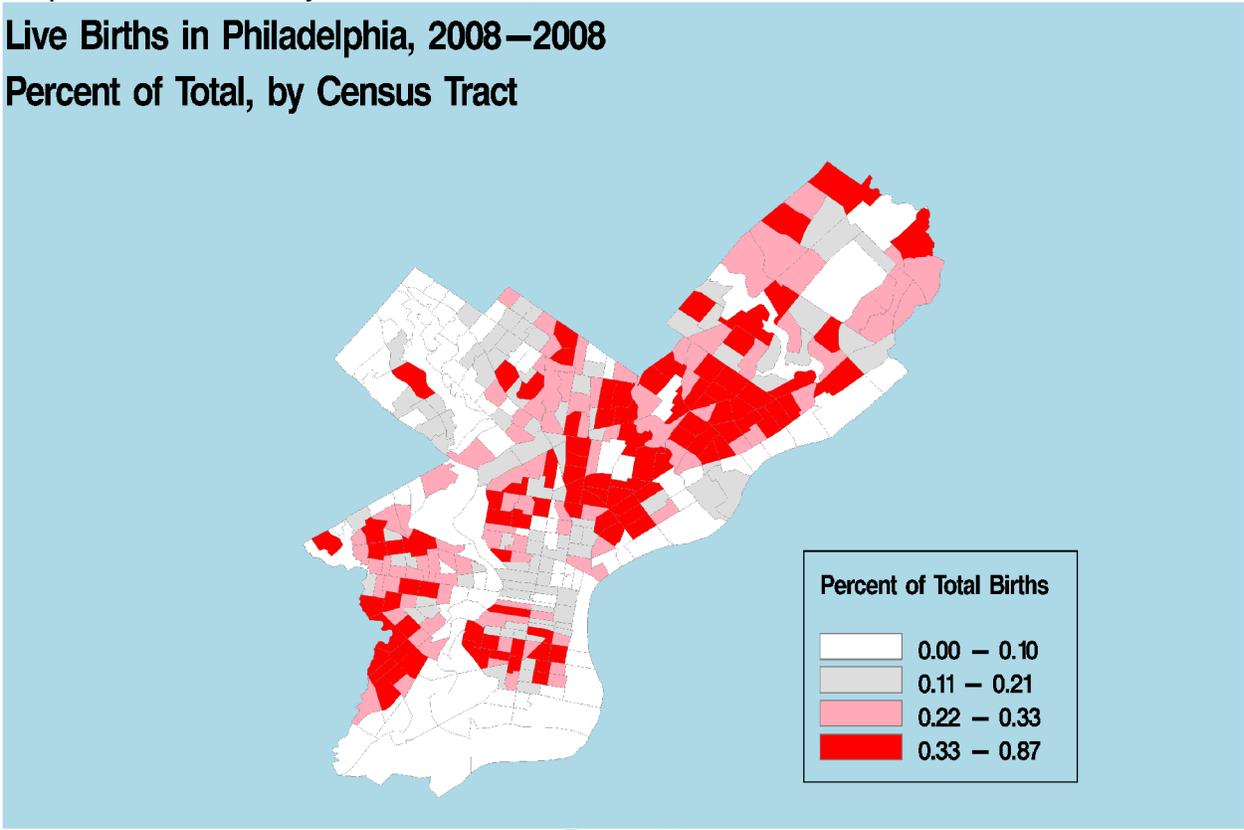


Table 13. Lab Results Reported by Month, 2009

Report	Western Blot	CD4	Viral Load	Total
January	294	598	2,949	3,841
February	262	656	2,367	3,285
March	289	632	2,387	3,308
April	208	1,000	1,994	3,202
May	252	1,052	1,792	3,096
June	240	1,511	2,628	4,379
July	248	1,420	2,641	4,309
August	210	1,445	1,973	3,628
September	228	1,542	2,007	3,777
October	220	1,543	1,710	3,473
November	152	1,225	1,389	2,766
December	176	1,379	1,463	3,018
Total	2,779	14,003	25,300	42,082

The Philadelphia Department of Public Health conducts surveillance at public and private laboratories. Laboratory surveillance received reports from sixteen sources during the progress report period. Implementation of HIV surveillance was accompanied by an expansion of the list of laboratory reportable conditions to include all FDA approved tests that are indicative of HIV infection (i.e. HIV Western Blots, CD4 counts, HIV viral loads, HIV genotypes, etc.). Currently, 93% of laboratory reports are received electronically improving efficiency and timeliness of reporting. Laboratories from all sources are combined with case data and used to monitor access to, and continuity of, care received in Philadelphia.

Electronic laboratory reports are received either weekly or monthly depending on the reporting source. Laboratory and other reports are electronically matched with existing eHARS (Enhanced HIV/AIDS Reporting System) cases by name including aliases, date of birth, and social security number using an algorithm developed within the AIDS Surveillance Unit. Possible matches are visually reviewed for added accuracy. Unmatched reports are assigned to Surveillance Officers (SO) for investigation.

When the investigation is completed the Surveillance officer will complete an Adult HIV/AIDS confidential case form and give it to the Surveillance Supervisor for review. Our capability to perform electronic database matches within the Surveillance Unit to screen incoming data with the laboratory-tracking database and the HIV/AIDS databases has allowed quick identification of records that require updating and those that require a new investigation to be followed up by Disease Investigators.

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.

Kessner Index: A classification system for adequacy of prenatal care that takes into account month in which prenatal care began, number of prenatal visits and length of gestation.

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; also known as vertical transmission.

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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Any questions about this report should be directed to:

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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-to-date surveillance data for Philadelphia or your hospital/reporting site/geographic area or presentations regarding the importance and methods of reporting AIDS cases. If interested, please contact Kathleen A. Brady, M.D. at (215) 685-4778 to schedule a meeting time.

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