



Michael A. Nutter, **Mayor**  
Donald F. Schwarz, MD, **Deputy Mayor, Health and Opportunity,**  
**Health Commissioner**  
Nan Feyler, JD, MPH, **Chief of Staff**  
Jane Baker, **AACO Director**



# **AIDS Activities Coordinating Office Annual Surveillance Report 2008**

## **HIV/AIDS in Philadelphia**

**~Cases Reported through June 2009~**

Mark Shpaner, MD, Surveillance Program Manager  
Kathleen A. Brady, MD, Medical Epidemiologist  
Michael Eberhart, MPH, Epidemiologist

# Philadelphia Department of Public Health

## AIDS Activity Coordinating Office

### 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, 2008 and reported through June 30, 2009.

**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.**

## Table of Contents

	Page
Table 1. Cumulative Adult HIV (Non-AIDS) and AIDS Cases.....	4
Table 2. Cumulative Adult HIV/AIDS Cases.....	5
Table 3. Newly-diagnosed HIV.....	6
Table 4. AIDS Diagnoses by Year.....	7
Table 5. Persons Living with AIDS.....	8
Table 6. Persons Living with AIDS by Race.....	9
Table 7. Persons Living with AIDS by Gender.....	10
Table 8. Persons Living with HIV/AIDS.....	11
Table 9. Persons Living with HIV/AIDS by Race.....	12
Table 10. Persons Living with HIV/AIDS by Gender.....	13
Figure 1. Actual and Predicted Persons Living with AIDS 1998-2017.....	14
Figure 2. Use of HAART Among Persons Living with HIV/AIDS.....	14
Figure 3. Risk Category Trends.....	15
Figure 4. Risk Category Trends - Females.....	15
Figure 5. Risk Category Trends - Males.....	15
Map 1. Persons Living with AIDS by Census Tract.....	16
Map 2. Newly Diagnosed HIV by Census Tract.....	16
Table 11. Concurrent HIV/AIDS, 2007.....	17
Table 12. Perinatal HIV Exposure, 2005-2008.....	18
Map 3. Perinatal HIV Exposures by Census Tract.....	19
Map 4. Live Births by Census Tract.....	19
Table 13. Reported Laboratory Tests.....	20
Definitions.....	21

Table 1. Cumulative Adult HIV (Non-AIDS) and AIDS Cases by Selected Characteristics Philadelphia Residents (Diagnosed Through December 31, 2008)

	HIV (Non-AIDS)		AIDS		HIV/AIDS	
	N	%	N	%	N	%
<b>Total</b>	7,275	100.0 %	20,191	100.0 %	27,466	100.0 %
<b>Race</b>						
<b>Black</b>	4,787	65.8 %	13,392	66.3 %	18,179	66.1 %
<b>Hispanic</b>	863	11.8 %	2,049	10.1 %	2,912	10.6 %
<b>White</b>	1,542	21.1 %	4,639	22.9 %	6,181	22.5 %
<b>Other/UNK</b>	83	1.1 %	111	0.5 %	194	0.7 %
<b>Gender</b>						
<b>Male</b>	4,869	66.9 %	15,552	77.0 %	20,421	74.3 %
<b>Female</b>	2,406	33.0 %	4,639	22.9 %	7,045	25.6 %
<b>Age Category</b>						
<b>UNK</b>	0	0	2,778	13.7 %	2,778	10.1 %
<b>&lt;13</b>	0	0	*	0.0 %	*	0.0 %
<b>13-19</b>	393	5.4 %	415	2.0 %	808	2.9 %
<b>20-29</b>	1,981	27.2 %	3,891	19.2 %	5,872	21.3 %
<b>30-39</b>	2,357	32.3 %	6,649	32.9 %	9,006	32.7 %
<b>40-49</b>	1,779	24.4 %	4,301	21.3 %	6,080	22.1 %
<b>50+</b>	765	10.5 %	2,153	10.6 %	2,918	10.6 %
<b>Transmission Risk</b>						
<b>MSM</b>	2,066	28.3 %	7,280	36.0 %	9,346	34.0 %
<b>IDU</b>	1,775	24.3 %	6,808	33.7 %	8,583	31.2 %
<b>MSM/IDU</b>	158	2.1 %	993	4.9 %	1,151	4.1 %
<b>Hemophil</b>	*	0.0 %	22	0.1 %	24	0.0 %
<b>Hetero</b>	3,235	44.4 %	4,814	23.8 %	8,049	29.3 %
<b>Transplant/Transfusion</b>	*	0.0 %	44	0.2 %	46	0.1 %
<b>NIR</b>	37	0.5 %	226	1.1 %	263	0.9 %
<b>Pediatric</b>	0	0	*	0.0 %	*	0.0 %
<b>Other</b>	0	0	*	0.0 %	*	0.0 %

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 Residents (Diagnosed Through December 31, 2008)

	1980-2005		2006		2007		2008		Total	
	N	%	N	%	N	%	N	%	N	%
<b>Total</b>	23,735	100.0 %	1,291	100.0 %	1,269	100.0 %	1,171	100.0 %	27,466	100.0 %
<b>Race</b>										
<b>Black</b>	15,696	66.1 %	896	69.4 %	818	64.4 %	769	65.6 %	18,179	66.1 %
<b>Hispanic</b>	2,459	10.3 %	143	11.0 %	159	12.5 %	151	12.8 %	2,912	10.6 %
<b>White</b>	5,453	22.9 %	228	17.6 %	272	21.4 %	228	19.4 %	6,181	22.5 %
<b>Other/UNK</b>	127	0.5 %	24	1.8 %	20	1.5 %	23	1.9 %	194	0.7 %
<b>Gender</b>										
<b>Male</b>	17,789	74.9 %	887	68.7 %	920	72.4 %	825	70.4 %	20,421	74.3 %
<b>Female</b>	5,946	25.0 %	404	31.2 %	349	27.5 %	346	29.5 %	7,045	25.6 %
<b>Age Category</b>										
<b>UNK</b>	2,775	11.6 %	*	0.2 %	0	0	0	0	2,778	10.1 %
<b>&lt;13</b>	*	0.0 %	0	0	0	0	0	0	*	0.0 %
<b>13-19</b>	600	2.5 %	57	4.4 %	77	6.0 %	74	6.3 %	808	2.9 %
<b>20-29</b>	5,000	21.0 %	266	20.6 %	313	24.6 %	293	25.0 %	5,872	21.3 %
<b>30-39</b>	8,113	34.1 %	324	25.0 %	309	24.3 %	260	22.2 %	9,006	32.7 %
<b>40-49</b>	5,001	21.0 %	399	30.9 %	357	28.1 %	323	27.5 %	6,080	22.1 %
<b>50+</b>	2,242	9.4 %	242	18.7 %	213	16.7 %	221	18.8 %	2,918	10.6 %
<b>Transmission Risk</b>										
<b>MSM</b>	8,250	34.7 %	347	26.8 %	386	30.4 %	363	30.9 %	9,346	34.0 %
<b>IDU</b>	7,974	33.5 %	253	19.5 %	214	16.8 %	142	12.1 %	8,583	31.2 %
<b>MSM/IDU</b>	1,083	4.5 %	25	1.9 %	27	2.1 %	16	1.3 %	1,151	4.1 %
<b>Hemophil</b>	24	0.1 %	0	0	0	0	0	0	24	0.0 %
<b>Hetero</b>	6,114	25.7 %	664	51.4 %	640	50.4 %	631	53.8 %	8,049	29.3 %
<b>Transplant/Transfusion</b>	46	0.1 %	0	0	0	0	0	0	46	0.1 %
<b>NIR</b>	240	1.0 %	*	0.1 %	*	0.1 %	19	1.6 %	263	0.9 %
<b>Pediatric</b>	*	0.0 %	0	0	0	0	0	0	*	0.0 %
<b>Other</b>	*	0.0 %	0	0	0	0	0	0	*	0.0 %

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					
	2006		2007		2008	
	N	Col %	N	Col %	N	Col %
<b>Total</b>	1,279	100.0 %	1,256	100.0 %	1,174	100.0 %
<b>Race</b>						
<b>Black</b>	889	69.5 %	810	64.4 %	771	65.6 %
<b>Hispanic</b>	141	11.0 %	157	12.5 %	152	12.9 %
<b>White</b>	225	17.5 %	269	21.4 %	228	19.4 %
<b>Other/UNK</b>	24	1.8 %	20	1.5 %	23	1.9 %
<b>Gender</b>						
<b>Male</b>	880	68.8 %	911	72.5 %	822	70.0 %
<b>Female</b>	399	31.1 %	345	27.4 %	352	29.9 %
<b>Age Category</b>						
<b>&lt;13</b>	*	0.0 %	*	0.0 %	11	0.9 %
<b>13-19</b>	58	4.5 %	77	6.1 %	72	6.1 %
<b>20-29</b>	262	20.4 %	306	24.3 %	290	24.7 %
<b>30-39</b>	322	25.1 %	304	24.2 %	258	21.9 %
<b>40-49</b>	394	30.8 %	356	28.3 %	322	27.4 %
<b>50+</b>	242	18.9 %	212	16.8 %	221	18.8 %
<b>Transmission Risk</b>						
<b>MSM</b>	343	26.8 %	379	30.1 %	361	30.7 %
<b>IDU</b>	248	19.3 %	213	16.9 %	138	11.7 %
<b>MSM/IDU</b>	25	1.9 %	27	2.1 %	15	1.2 %
<b>Hetero</b>	659	51.5 %	634	50.4 %	630	53.6 %
<b>NIR</b>	*	0.1 %	*	0.1 %	19	1.6 %
<b>Pediatric</b>	*	0.1 %	*	0.0 %	11	0.9 %

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. For information regarding HIV incidence in Philadelphia, please see Table 14 of this report.

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, 2006-2008

	Year of Dx					
	2006		2007		2008	
	N	Col %	N	Col %	N	Col %
<b>Total</b>	752	100.0 %	726	100.0 %	504	100.0 %
<b>Race</b>						
<b>Black</b>	542	72.0 %	501	69.0 %	352	69.8 %
<b>Hispanic</b>	74	9.8 %	66	9.0 %	52	10.3 %
<b>White</b>	125	16.6 %	151	20.7 %	93	18.4 %
<b>Other/UNK</b>	11	1.4 %	8	1.1 %	7	1.3 %
<b>Gender</b>						
<b>Male</b>	516	68.6 %	499	68.7 %	348	69.0 %
<b>Female</b>	236	31.3 %	227	31.2 %	156	30.9 %
<b>Age Category</b>						
<b>&lt;13</b>	0	0	0	0	*	0.3 %
<b>13-19</b>	14	1.8 %	7	0.9 %	12	2.3 %
<b>20-29</b>	86	11.4 %	100	13.7 %	70	13.8 %
<b>30-39</b>	189	25.1 %	180	24.7 %	113	22.4 %
<b>40-49</b>	269	35.7 %	266	36.6 %	165	32.7 %
<b>50+</b>	194	25.7 %	173	23.8 %	142	28.1 %
<b>Transmission Risk</b>						
<b>MSM</b>	197	26.1 %	200	27.5 %	136	26.9 %
<b>IDU</b>	173	23.0 %	159	21.9 %	85	16.8 %
<b>MSM/IDU</b>	16	2.1 %	9	1.2 %	10	1.9 %
<b>Hetero</b>	364	48.4 %	357	49.1 %	266	52.7 %
<b>NIR</b>	*	0.2 %	*	0.1 %	*	0.3 %
<b>Pediatric</b>	0	0	0	0	*	0.9 %

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, 2008

Total Race	Total	
	N	Col %
	11,032	100.0 %
<b>Black</b>	7,338	66.5 %
<b>Hispanic</b>	1,275	11.5 %
<b>White</b>	2,335	21.1 %
<b>Other/UNK</b>	84	0.7 %
<b>Gender</b>		
<b>Male</b>	8,020	72.6 %
<b>Female</b>	3,012	27.3 %
<b>Age Category</b>		
<b>&lt;13</b>	33	0.2 %
<b>13-19</b>	112	1.0 %
<b>20-29</b>	508	4.6 %
<b>30-39</b>	1,765	15.9 %
<b>40-49</b>	4,361	39.5 %
<b>50+</b>	4,253	38.5 %
<b>Transmission Risk</b>		
<b>MSM</b>	3,398	30.8 %
<b>IDU</b>	3,478	31.5 %
<b>MSM/IDU</b>	450	4.0 %
<b>Hemophil</b>	6	0.0 %
<b>Hetero</b>	3,483	31.5 %
<b>Transplant/Transfusion</b>	6	0.0 %
<b>NIR</b>	54	0.4 %
<b>Pediatric</b>	156	1.4 %
<b>Other</b>	*	0.0 %

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, 2008

Table 6. Persons Living with AIDS by Race and Selected Characteristics\*  
Philadelphia Residents, 2008

	<b>Race</b>					
	<b>Black</b>		<b>Hispanic</b>		<b>White</b>	
	<b>N</b>	<b>Col %</b>	<b>N</b>	<b>Col %</b>	<b>N</b>	<b>Col %</b>
<b>Total</b>	7,338	100.0 %	1,275	100.0 %	2,335	100.0 %
<b>Gender</b>						
<b>Male</b>	5,058	68.9 %	912	71.5 %	1,980	84.7 %
<b>Female</b>	2,280	31.0 %	363	28.4 %	355	15.2 %
<b>Age Category</b>						
<b>&lt;13</b>	29	0.3 %	*	0.3 %	0	0
<b>13-19</b>	95	1.2 %	8	0.6 %	9	0.3 %
<b>20-29</b>	381	5.1 %	55	4.3 %	64	2.7 %
<b>30-39</b>	1,255	17.1 %	200	15.6 %	281	12.0 %
<b>40-49</b>	2,832	38.5 %	534	41.8 %	972	41.6 %
<b>50+</b>	2,746	37.4 %	474	37.1 %	1,009	43.2 %
<b>Transmission Risk</b>						
<b>MSM</b>	1,843	25.1 %	200	15.6 %	1,321	56.5 %
<b>IDU</b>	2,388	32.5 %	564	44.2 %	518	22.1 %
<b>MSM/IDU</b>	294	4.0 %	60	4.7 %	95	4.0 %
<b>Hemophil</b>	*	0.0 %	*	0.0 %	*	0.1 %
<b>Hetero</b>	2,638	35.9 %	427	33.4 %	379	16.2 %
<b>Transplant/Transfusion</b>	*	0.0 %	*	0.0 %	*	0.0 %
<b>NIR</b>	39	0.5 %	7	0.5 %	6	0.2 %
<b>Pediatric</b>	130	1.7 %	15	1.1 %	11	0.4 %
<b>Other</b>	*	0.0 %	0	0	0	0

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office  
\*Age as of December 31, 2008

Table 7. Persons Living with AIDS by Gender and Selected Characteristics\*  
Philadelphia Residents, 2008

	<b>Gender</b>			
	<b>Male</b>		<b>Female</b>	
	<b>N</b>	<b>Col %</b>	<b>N</b>	<b>Col %</b>
<b>Total</b>	7,950	100.0 %	2,998	100.0 %
<b>Race</b>				
<b>Black</b>	5,058	63.6 %	2,280	76.0 %
<b>Hispanic</b>	912	11.4 %	363	12.1 %
<b>White</b>	1,980	24.9 %	355	11.8 %
<b>Age Category</b>				
<b>&lt;13</b>	20	0.2 %	13	0.4 %
<b>13-19</b>	60	0.7 %	52	1.7 %
<b>20-29</b>	346	4.3 %	154	5.1 %
<b>30-39</b>	1,083	13.6 %	653	21.7 %
<b>40-49</b>	3,076	38.6 %	1,262	42.0 %
<b>50+</b>	3,365	42.3 %	864	28.8 %
<b>Transmission Risk</b>				
<b>MSM</b>	3,364	42.3 %	0	0
<b>IDU</b>	2,367	29.7 %	1,103	36.7 %
<b>MSM/IDU</b>	449	5.6 %	0	0
<b>Hemophil</b>	6	0.0 %	0	0
<b>Hetero</b>	1,641	20.6 %	1,803	60.1 %
<b>Transplant/Transfusion</b>	*	0.0 %	*	0.1 %
<b>NIR</b>	38	0.4 %	14	0.4 %
<b>Pediatric</b>	82	1.0 %	74	2.4 %
<b>Other</b>	0	0	*	0.0 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office  
\*Age as of December 31, 2008

Table 8. Persons Living with HIV/AIDS by Selected Characteristics\*  
Philadelphia Residents, 2008

Total Race	Total	
	N	Col %
	18,640	100.0 %
<b>Black</b>	12,334	66.1 %
<b>Hispanic</b>	2,216	11.8 %
<b>White</b>	3,913	20.9 %
<b>Other/UNK</b>	177	0.9 %
<b>Gender</b>		
<b>Male</b>	13,081	70.1 %
<b>Female</b>	5,559	29.8 %
<b>Age Category</b>		
<b>UNK</b>	*	0.0 %
<b>&lt;13</b>	83	0.4 %
<b>13-19</b>	287	1.5 %
<b>20-29</b>	1,699	9.1 %
<b>30-39</b>	3,466	18.5 %
<b>40-49</b>	6,966	37.3 %
<b>50+</b>	6,138	32.9 %
<b>Transmission Risk</b>		
<b>MSM</b>	5,546	29.7 %
<b>IDU</b>	5,267	28.2 %
<b>MSM/IDU</b>	606	3.2 %
<b>Hemophil</b>	8	0.0 %
<b>Hetero</b>	6,828	36.6 %
<b>Transplant/Transfusion</b>	7	0.0 %
<b>NIR</b>	107	0.5 %

(Continued)

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, 2008

Table 9. Persons Living with HIV/AIDS by Race and Selected Characteristics\*  
Philadelphia Residents, 2008

	<b>Race</b>							
	<b>Black</b>		<b>Hispanic</b>		<b>White</b>		<b>Other/UNK</b>	
	<b>N</b>	<b>Col %</b>	<b>N</b>	<b>Col %</b>	<b>N</b>	<b>Col %</b>	<b>N</b>	<b>Col %</b>
<b>Total</b>	12,334	100.0 %	2,216	100.0 %	3,913	100.0 %	177	100.0 %
<b>Gender</b>								
<b>Male</b>	8,144	66.0 %	1,569	70.8 %	3,235	82.6 %	133	75.1 %
<b>Female</b>	4,190	33.9 %	647	29.1 %	678	17.3 %	44	24.8 %
<b>Age Category</b>								
<b>UNK</b>	*	0.0 %	0	0	0	0	0	0
<b>&lt;13</b>	69	0.5 %	9	0.4 %	*	0.1 %	0	0
<b>13-19</b>	229	1.8 %	30	1.3 %	26	0.6 %	*	1.1 %
<b>20-29</b>	1,232	9.9 %	197	8.8 %	239	6.1 %	31	17.5 %
<b>30-39</b>	2,315	18.7 %	463	20.8 %	635	16.2 %	53	29.9 %
<b>40-49</b>	4,476	36.2 %	850	38.3 %	1,590	40.6 %	50	28.2 %
<b>50+</b>	4,012	32.5 %	667	30.0 %	1,418	36.2 %	41	23.1 %
<b>Transmission Risk</b>								
<b>MSM</b>	3,012	24.4 %	379	17.1 %	2,087	53.3 %	68	38.4 %
<b>IDU</b>	3,481	28.2 %	900	40.6 %	870	22.2 %	16	9.0 %
<b>MSM/IDU</b>	379	3.0 %	87	3.9 %	137	3.5 %	*	1.6 %
<b>Hemophil</b>	*	0.0 %	*	0.0 %	*	0.1 %	0	0
<b>Hetero</b>	5,173	41.9 %	800	36.1 %	777	19.8 %	78	44.0 %
<b>Transplant/Transfusion</b>	*	0.0 %	*	0.0 %	*	0.0 %	0	0
<b>NIR</b>	72	0.5 %	12	0.5 %	11	0.2 %	12	6.7 %
<b>Pediatric</b>	210	1.7 %	36	1.6 %	24	0.6 %	0	0
<b>Other</b>	*	0.0 %	0	0	0	0	0	0

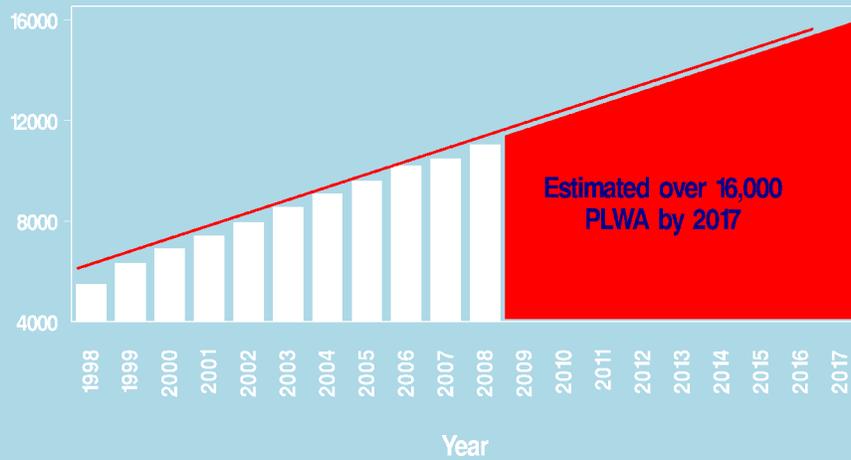
Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office  
\*Age as of December 31, 2008

Table 10. Persons Living with HIV/AIDS by Gender and Selected Characteristics\*  
Philadelphia Residents, 2008

	<b>Gender</b>			
	<b>Male</b>		<b>Female</b>	
	<b>N</b>	<b>Col %</b>	<b>N</b>	<b>Col %</b>
<b>Total</b>	13,081	100.0 %	5,559	100.0 %
<b>Race</b>				
<b>Black</b>	8,144	62.2 %	4,190	75.3 %
<b>Hispanic</b>	1,569	11.9 %	647	11.6 %
<b>White</b>	3,235	24.7 %	678	12.1 %
<b>Other/UNK</b>	133	1.0 %	44	0.7 %
<b>Age Category</b>				
<b>UNK</b>	*	0.0 %	0	0
<b>&lt;13</b>	40	0.3 %	43	0.7 %
<b>13-19</b>	175	1.3 %	112	2.0 %
<b>20-29</b>	1,160	8.8 %	539	9.6 %
<b>30-39</b>	2,136	16.3 %	1,330	23.9 %
<b>40-49</b>	4,809	36.7 %	2,157	38.8 %
<b>50+</b>	4,760	36.3 %	1,378	24.7 %
<b>Transmission Risk</b>				
<b>MSM</b>	5,546	42.3 %	0	0
<b>IDU</b>	3,547	27.1 %	1,720	30.9 %
<b>MSM/IDU</b>	606	4.6 %	0	0
<b>Hemophil</b>	8	0.0 %	0	0
<b>Hetero</b>	3,158	24.1 %	3,670	66.0 %
<b>Transplant/Transfusion</b>	*	0.0 %	*	0.0 %
<b>NIR</b>	74	0.5 %	33	0.5 %
<b>Pediatric</b>	139	1.0 %	131	2.3 %
<b>Other</b>	0	0	*	0.0 %

Source: Philadelphia Department of Public Health, AIDS Activities Coordinating Office  
\*Age as of December 31, 2008

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 collects data on the use of HAART through medical record abstractions. These data may not reflect the actual numbers of persons currently taking HAART, but do provide an overall picture of the percent of persons who have ever been prescribed anti-retroviral therapy.

Based on these data, over 70% of all persons living with AIDS have been prescribed HAART, and nearly half of all persons living with HIV (Non-AIDS) have been prescribed HAART.

Figure 2. Use of HAART Among Persons Living with HIV/AIDS

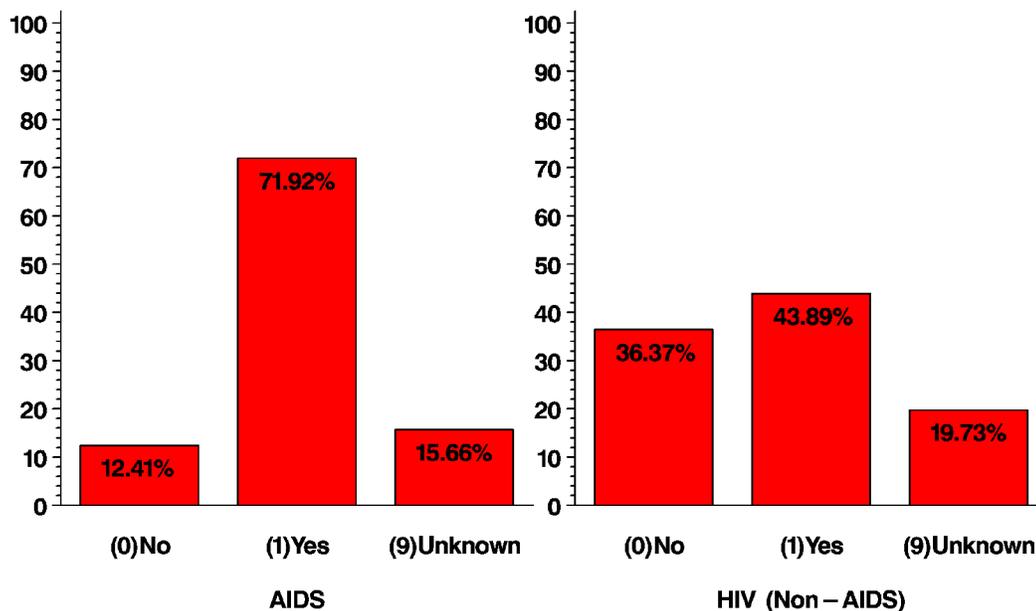
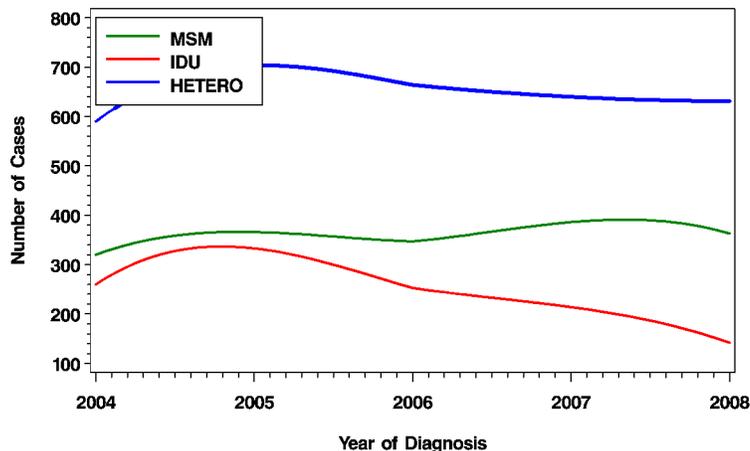
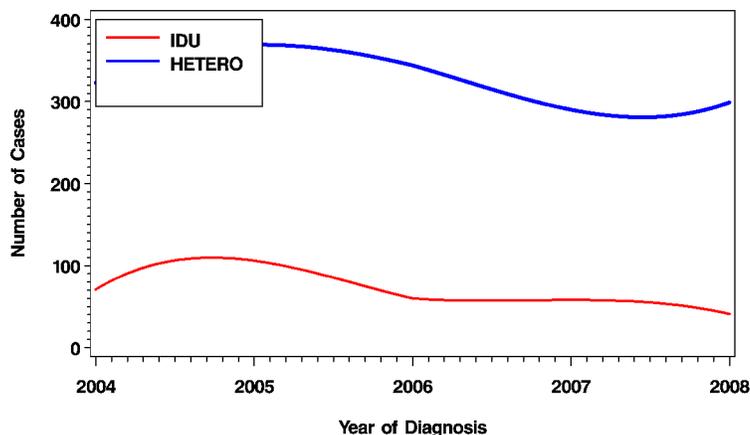


Figure 3. Risk Category Trend by Year: MSM, Hetero and IDU, 2004 – 2008



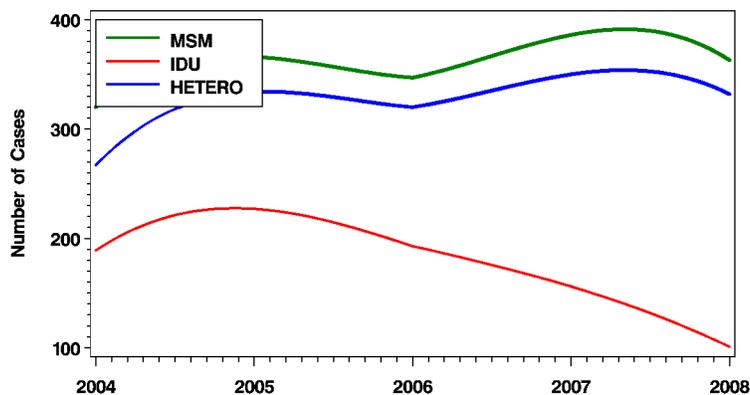
Overall: Recent trends in HIV/AIDS transmission risk indicate that cases associated with injection drug use (IDU) have decreased substantially, possibly due to the success of needle exchange. Cases associated with male-to-male sexual contact (MSM), which had been leveling off, seem to be increasing again. However, over the past several years, heterosexual contact has been driving the epidemic in Philadelphia.

Figure 4. Risk Category Trend by Year: Females, 2004 – 2008



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)

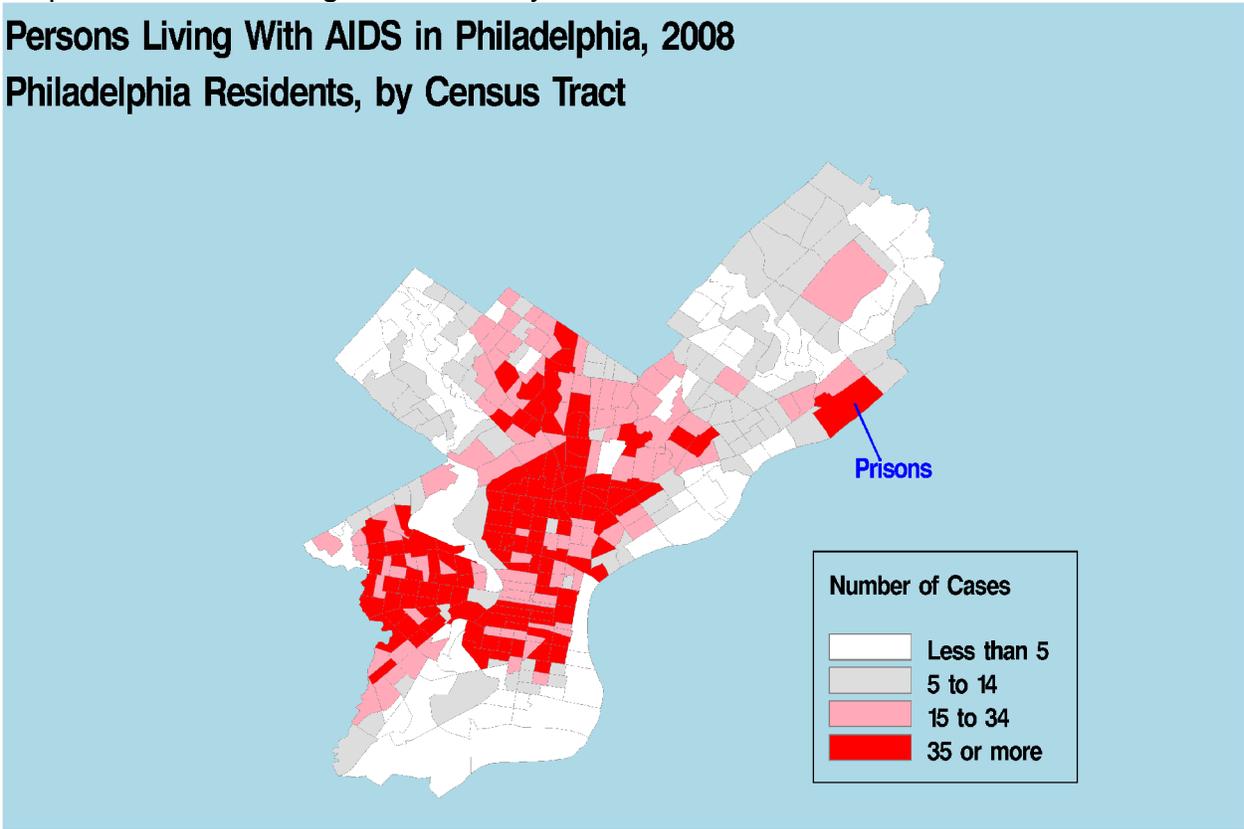
Figure 5. Risk Category Trend by Year: Males, 2004 – 2008



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, 2008

**Persons Living With AIDS in Philadelphia, 2008**  
**Philadelphia Residents, by Census Tract**



Map 2. Newly Diagnosed HIV by Census Tract, 2008

**Newly Diagnosed HIV in Philadelphia, 2008**  
**Philadelphia Residents, by Census Tract**

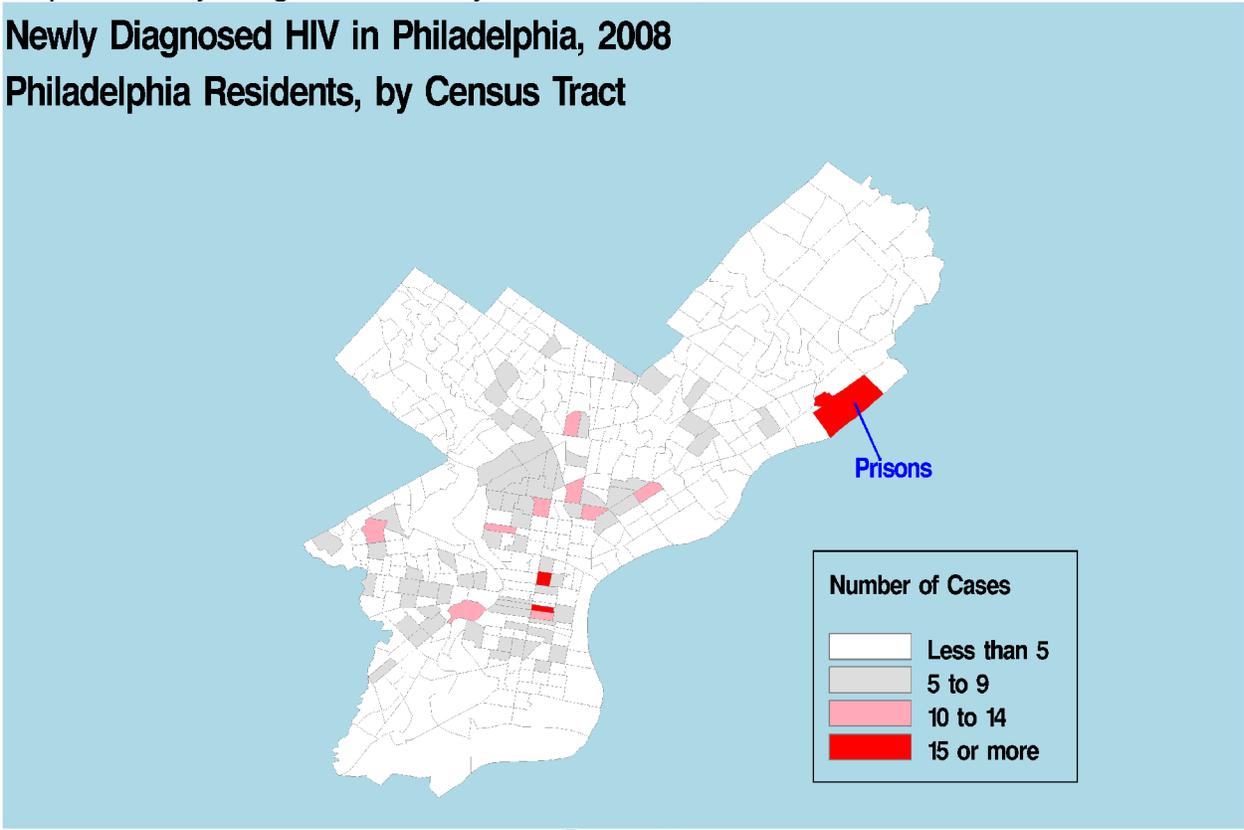


Table 11. Concurrent\* HIV/AIDS, Demographics and Transmission Risk Among Incident HIV Diagnoses, Philadelphia Residents, 2007

	Non-concurrent		Concurrent HIV/AIDS		Total	
	N	Row %	N	Row %	N	Col %
<b>Total</b>	811	64.5 %	445	35.4 %	1,256	100.0 %
<b>Sex</b>						
<b>Male</b>	588	64.5 %	323	35.4 %	911	72.5 %
<b>Female</b>	223	64.6 %	122	35.3 %	345	27.4 %
<b>Race/Ethnicity</b>						
<b>Black</b>	510	62.9 %	300	37.0 %	810	64.4 %
<b>Hispanic</b>	120	76.4 %	37	23.5 %	157	12.5 %
<b>White</b>	170	63.1 %	99	36.8 %	269	21.4 %
<b>Other/UNK</b>	11	55.0 %	9	45.0 %	20	1.5 %
<b>Age at HIV Dx</b>						
<b>&lt;13</b>	*	100.0 %	0	0	*	0.0 %
<b>13-19</b>	68	88.3 %	9	11.6 %	77	6.1 %
<b>20-29</b>	237	77.4 %	69	22.5 %	306	24.3 %
<b>30-39</b>	201	66.1 %	103	33.8 %	304	24.2 %
<b>40-49</b>	206	57.8 %	150	42.1 %	356	28.3 %
<b>50+</b>	98	46.2 %	114	53.7 %	212	16.8 %
<b>Transmission Risk</b>						
<b>MSM</b>	251	66.2 %	128	33.7 %	379	30.1 %
<b>IDU</b>	133	62.4 %	80	37.5 %	213	16.9 %
<b>MSM/IDU</b>	19	70.3 %	8	29.6 %	27	2.1 %
<b>Hetero</b>	406	64.0 %	228	35.9 %	634	50.4 %
<b>NIR</b>	*	50.0 %	*	50.0 %	*	0.1 %
<b>Pediatric</b>	*	100.0 %	0	0	*	0.0 %
<b>Country of Birth</b>						
<b>US or unknown</b>	711	63.7 %	404	36.2 %	1,115	88.7 %
<b>Foreign or US dependency</b>	100	70.9 %	41	29.0 %	141	11.2 %

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, 2005-2008

	Child HIV Status					
	HIV+		HIV-/Indet		Total	
	N	Col %	N	Col %	N	Col %
<b>Total</b>	14	100.0 %	452	100.0 %	466	100.0 %
<b>Race</b>						
<b>Black</b>	11	78.5 %	386	85.3 %	397	85.1 %
<b>White</b>	*	21.4 %	62	13.7 %	65	13.9 %
<b>Other/UNK</b>	0	0	*	0.8 %	*	0.8 %
<b>Marital Status</b>						
<b>Unknown</b>	*	14.2 %	20	4.4 %	22	4.7 %
<b>Single</b>	11	78.5 %	397	87.8 %	408	87.5 %
<b>Married</b>	*	7.1 %	31	6.8 %	32	6.8 %
<b>Divorced</b>	0	0	*	0.8 %	*	0.8 %
<b>Prenatal Care*</b>						
<b>Adequate</b>	*	21.4 %	168	37.1 %	171	36.6 %
<b>Inadequate</b>	*	21.4 %	47	10.3 %	50	10.7 %
<b>Intermediate</b>	*	14.2 %	160	35.3 %	162	34.7 %
<b>Unknown</b>	6	42.8 %	77	17.0 %	83	17.8 %

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

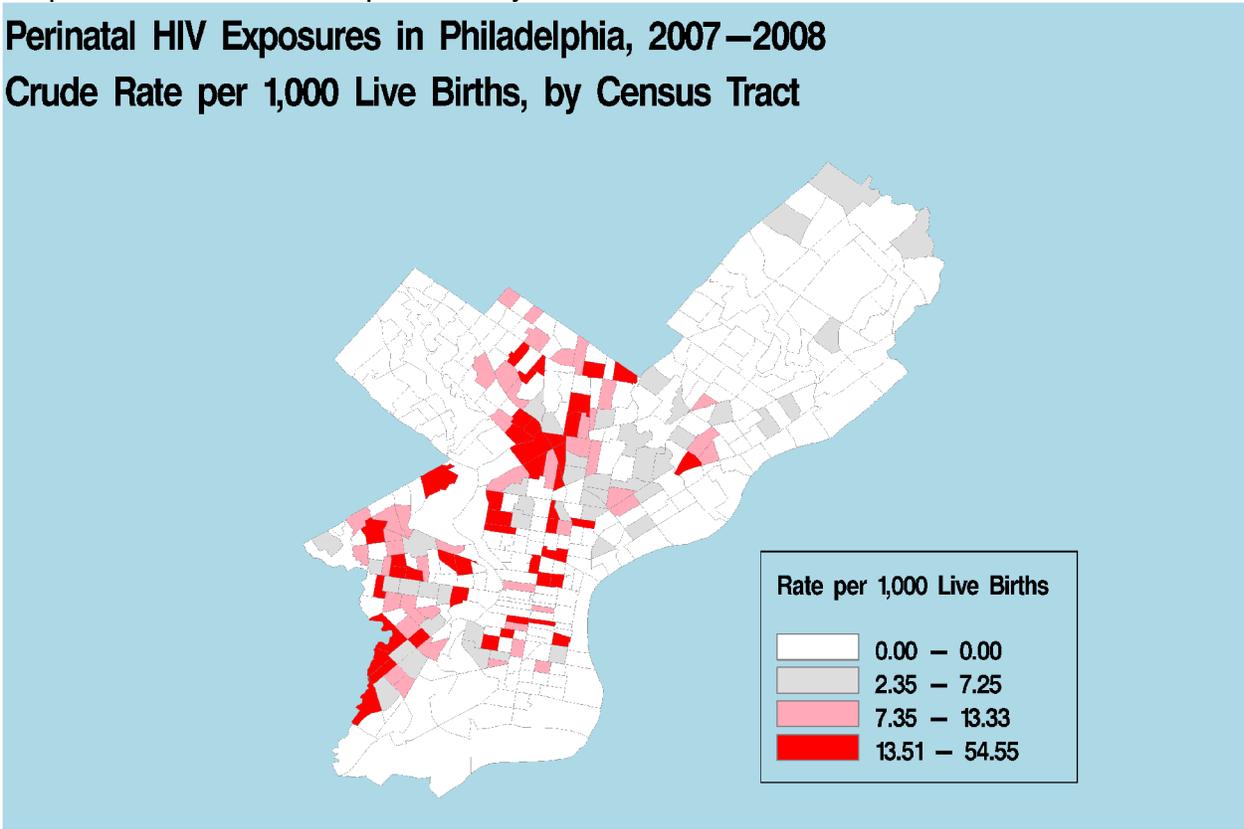
All children born to HIV-infected mothers who are reported to the Philadelphia Health Department AIDS Surveillance Unit in accordance with the Philadelphia Health Code are followed up and a pediatric HIV/AIDS case report form is completed. The medical records of HIV-infected mothers and their HIV-exposed 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, 2007-2008

**Perinatal HIV Exposures in Philadelphia, 2007–2008**  
**Crude Rate per 1,000 Live Births, by Census Tract**



Map 4. Live Births by Census Tract, 2007-2008

**Live Births in Philadelphia, 2007–2008**  
**Percent of Total, by Census Tract**

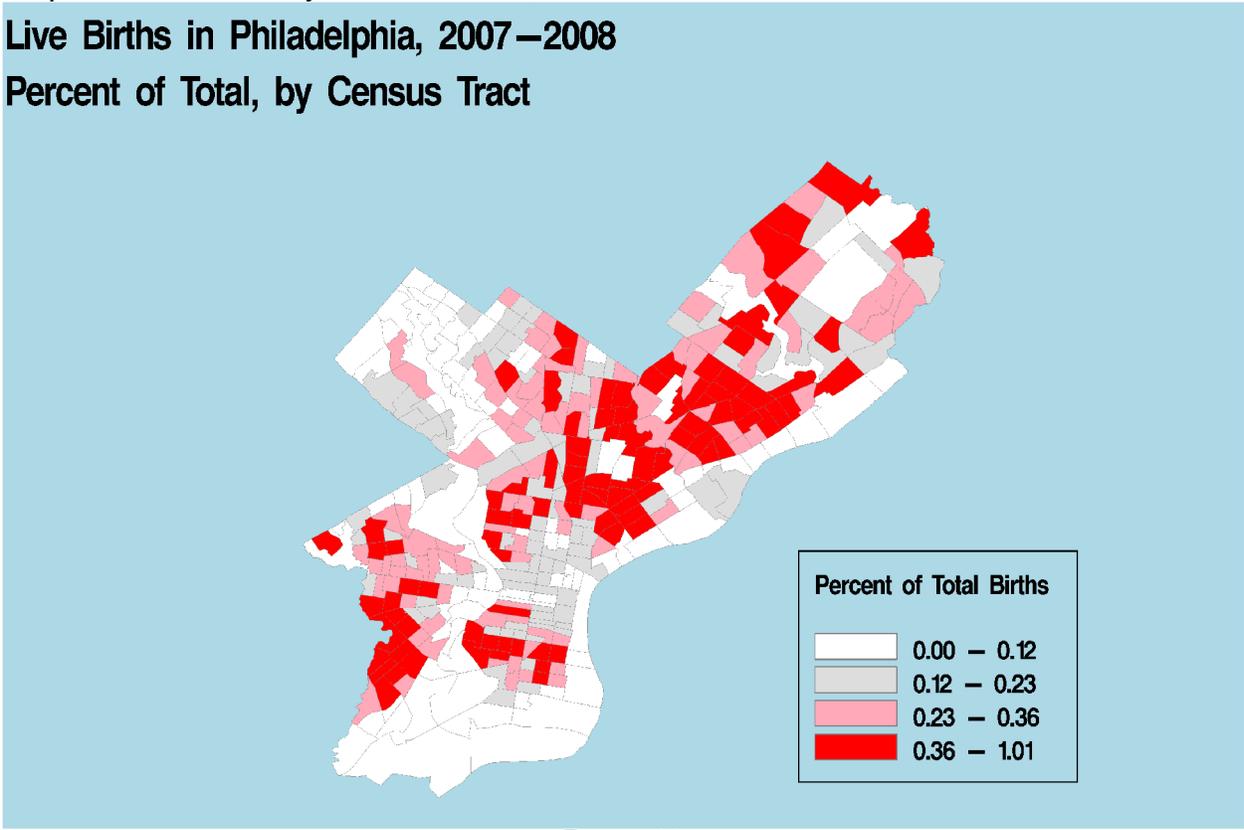


Table 13. Lab Results Reported by Month, 2008

<b>Report</b>	<b>Western Blot</b>	<b>CD4</b>	<b>Viral Load</b>	<b>Total</b>
<b>January</b>	200	839	3,236	4,275
<b>February</b>	187	633	2,728	3,548
<b>March</b>	220	640	2,877	3,737
<b>April</b>	200	648	2,777	3,625
<b>May</b>	210	702	2,177	3,089
<b>June</b>	196	547	2,407	3,150
<b>July</b>	265	621	3,590	4,476
<b>August</b>	227	533	3,296	4,056
<b>September</b>	249	520	3,888	4,657
<b>October</b>	373	564	4,743	5,680
<b>November</b>	283	511	3,976	4,770
<b>December</b>	282	515	3,719	4,516
<b>Total</b>	2,892	7,273	39,414	49,579

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 into a unified SQL dependent relational database.

Electronic laboratory reports are received either weekly or monthly depending on the reporting source. Laboratory and other reports are electronically matched with existing HARS (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.

**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.

**STARHS:** Serologic Testing Algorithm for Recent HIV Seroconversion. Testing method used for Incidence Surveillance. BED human immunodeficiency virus 1 capture enzyme immunoassay (BED) used on remnant serum to distinguish between 'recent' and 'long-standing' infections and estimate incidence at a population level.

**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.

**AACO, PDPH  
1101 Market Street  
8th Floor  
Philadelphia, PA 19107**

**Mailing Address  
Street Number and Name  
City, State 98765-4321**

**Any questions about this report should be directed to:**

**Michael Eberhart, MPH  
AACOEPI@PHILA.GOV**

**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](mailto: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.**

**Cover photograph by B. Krist for Greater Philadelphia Tourism Marketing Corporation.**