

# HIV/AIDS Semi-Annual Report June 2009

Kentucky Cabinet for Health and Family Services  
Department for Public Health  
HIV/AIDS Branch



**CABINET FOR HEALTH AND FAMILY SERVICES  
DEPARTMENT FOR PUBLIC HEALTH**

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**Janie Miller**  
Secretary

Dear Reader:

Enclosed please find the June 2009 issue of the HIV/AIDS Semi-Annual Report for Kentucky. Section I profiles AIDS infections diagnosed in Kentucky. As of June 30, 2009, there were 5,129 AIDS cases reported, of which 2,812 are presumed to be currently living with AIDS. Confidential AIDS case reporting started in 1982 and AIDS data are current as of June 30, 2009.

Section II profiles HIV infections diagnosed in Kentucky, regardless of progression to AIDS. A total of 1,583 HIV infections were diagnosed and reported between January 1, 2005 and June 30, 2009 under the confidential name-based reporting system. Legislation requiring confidential HIV case reporting by name was enacted in July of 2004. The HIV/AIDS Surveillance Program is continuing to evaluate HIV cases previously reported under the old code-based identification system. Therefore, prevalence estimates of all people living with HIV infection in Kentucky are not available.

Presently, HIV disease data presented are limited to a small section near the end of the report (section II), but have been expanded to include HIV incidence by demographic characteristics. Over time, the surveillance program will continue to increase the amount of HIV disease data in the report. Please read the data source and technical notes on pages 3 and 4 for further information concerning interpretation of the data.

The data presented in this report are available at <http://chfs.ky.gov/dph/epi/HIVAIDS/surveillance.htm>. To receive e-mail updates when new HIV/AIDS statistical reports are released online, please send a blank e-mail to the following address: [subscribe-dph-semiannualreport@listserv.ky.gov](mailto:subscribe-dph-semiannualreport@listserv.ky.gov).

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## Data Source

The HIV/AIDS Semi-Annual Report presents data regarding AIDS cases diagnosed and reported to the Kentucky Department for Public Health HIV/AIDS Surveillance Program through June 30, 2009. In this edition, data regarding HIV cases diagnosed and reported between January 1, 2005 and June 30, 2009 will be presented. The data only include those persons who have been confidentially tested and reported to the HIV/AIDS Surveillance Program. No adjustments are made to the data presented to account for undiagnosed, anonymously tested, or unreported cases.

Kentucky population estimates used in the calculation of rates were obtained from the Kentucky State Data Center, source: Population Division, U.S. Census Bureau. December 22, 2008. Available at <http://ksdc.louisville.edu/kpr/popest/est.htm>. Accessed February 15, 2009.

## HIV/AIDS Reporting Requirements

According to state regulation 902 KAR 2:020, Section 7, health professionals licensed under KRS chapters 311 through 314, health facilities licensed under KRS chapter 216B, and laboratories licensed under KRS chapter 333 are required to report HIV and AIDS cases to the Kentucky Department for Public Health or the Louisville Metro Department for Public Health and Wellness within five business days of diagnosis.

Cases residing in the Kentucky counties of Bullitt, Henry, Jefferson, Oldham, Shelby, Spencer, and Trimble are reported to the Surveillance Nurse Consultant at the Louisville Metro Department for Public Health and Wellness at 502-574-6574. All other cases are reported to the Kentucky Department for Public Health HIV/AIDS Surveillance Program at 866-510-0008. Case information from both sites is combined at the Kentucky Department for Public Health to produce this report. Additional case reporting information can be found on the Kentucky HIV/AIDS Branch Web site: <http://chfs.ky.gov/dph/epi/HIVAIDS/surveillance.htm>.

## Key Terminology

Date of Report: The date HIV infection or AIDS diagnosis is reported to the Kentucky HIV/AIDS Surveillance Program.

Date of Diagnosis: The date HIV infection or AIDS is diagnosed.

HIV (Human Immunodeficiency Virus): A retrovirus that infects the helper T cells of the immune system, resulting in immunodeficiency. HIV is diagnosed by a positive confirmatory antibody test or positive/detectable viral detection test.

AIDS (Acquired Immunodeficiency Syndrome): Advanced stage of HIV infection characterized by severe immune deficiency. Diagnosed by the presence of at least one of 26 opportunistic illnesses or a CD4 laboratory test less than 200 cells/ml of blood or 14% of the total white blood cells (lymphocytes).

Transmission Category: Classification used to summarize the risk factor most likely responsible for disease transmission. Each case is only included in a single transmission category.

- ◆ **Men Who Have Sex With Men (MSM)**: Men who report having sexual contact with other men.
- ◆ **Injection Drug Use (IDU)**: Individuals that report injecting nonprescription drugs.
- ◆ **MSM/IDU**: Men who report having sex with other men and also inject nonprescription drugs.
- ◆ **High-Risk Heterosexual Contact (HRH)**: A person reporting heterosexual relations with an injection drug user, a bisexual male (females only), a person with hemophilia/coagulation disorder, or a person with documented HIV infection.
- ◆ **Hemophilia**: Individuals receiving clotting factor for hemophilia/coagulation disorder.
- ◆ **Blood Transfusion/Organ Transplant**: Individuals who received blood transfusions or organ transplants. Individuals with a transfusion date listed after March 1985 are considered cases of public health importance and are followed to verify the mode of transmission.
- ◆ **Perinatal**: Individuals born to a mother with HIV or a mother with an exposure history listed in the transmission category hierarchy.
- ◆ **Undetermined/No Identified Risk (NIR)**: Individuals reporting no exposure history to HIV through any of the modes listed in the transmission category hierarchy.

## Technical Notes

1. Reporting Delays- Delays exist between the time HIV infection is diagnosed and the time the infection is reported to the HIV/AIDS Surveillance Program. As a result of reporting delays, case numbers for the most recent years of diagnosis may not be complete and therefore the data from 2008 and 2009 are considered provisional and will not be presented in the analysis of trends. The data presented in this report have not been adjusted for reporting delays.
2. Place of Residence- Data are presented based on the residence at the time HIV infection or AIDS was diagnosed. Therefore, no data are available to determine the number of people who are currently living with HIV infection in Kentucky, but were originally diagnosed in another state. Data presented on living cases reflect those originally diagnosed in Kentucky that are still presumed to be living, regardless of their current residence.
3. Vital Status- Cases are presumed to be alive unless the HIV/AIDS Surveillance Program has received notification of death. Current vital status information for cases is ascertained through routine site visits with major reporting sites, reports of death from providers, reports of death from other states' surveillance programs, and routine matches with Kentucky death certificates.
4. Transmission Category- Despite possible existence of multiple methods through which HIV was transmitted, cases are assigned a single most likely transmission category based on a hierarchy developed by the Centers for Disease Control and Prevention (CDC). See the "Key Terminology" list on page 3 for a description of the transmission categories. A limitation of the dataset is the large number of cases reported with an undetermined transmission category. Currently, surveillance data are collected through hard copy case reports, telephone reports and chart reviews, which sometimes results in missing information. Enhanced surveillance activities have been implemented to attempt to resolve case reports with missing risk factor information.
5. Routine Interstate Duplicate Review (RIDR)- Case duplication between states can occur and has become more of an issue due to the mobility of our society. To help respond to potential duplication problems, the CDC initiated the Interstate Duplication Evaluation Project (IDEP), now called Routine Interstate Duplicate Review (RIDR), in 2004. RIDR compares patient records throughout the nation in order to identify duplicate cases. The states with duplicate cases contact one another to compare patient profiles in order to determine the state to which the case belongs, based on residence at the earliest date of diagnosis. Because of this process, the cumulative number of cases within Kentucky may change, but the process has increased the accuracy of Kentucky's data by reducing the chance that a case has been counted more than once nationally.
6. Small Numbers- Data release limitations are set to ensure that the information cannot be used to inadvertently identify an individual. When the population size for the smallest unit of analysis presented is less than 1,000 and the cell size is less than or equal to five, the specific number will not be released. Information on any geographic region lower than the county level will not be released. Rates will not be released when the numerator is less than 10 cases because of the low reliability of rates based on a small number of cases.
7. Difference between HIV Infection, HIV without AIDS, and concurrent diagnosis of HIV with AIDS- HIV infection includes all individuals diagnosed with the HIV virus regardless of the stage of disease progression. The data are presented based on the date of the first diagnosis reported to the HIV/AIDS Surveillance Program. HIV without AIDS includes individuals that were not diagnosed with AIDS during the same calendar month as the initial HIV diagnosis. Concurrent diagnosis with AIDS includes those newly diagnosed with HIV and AIDS during the same calendar month. See "Key Terminology" on page 3 for a description of how HIV and AIDS are diagnosed.

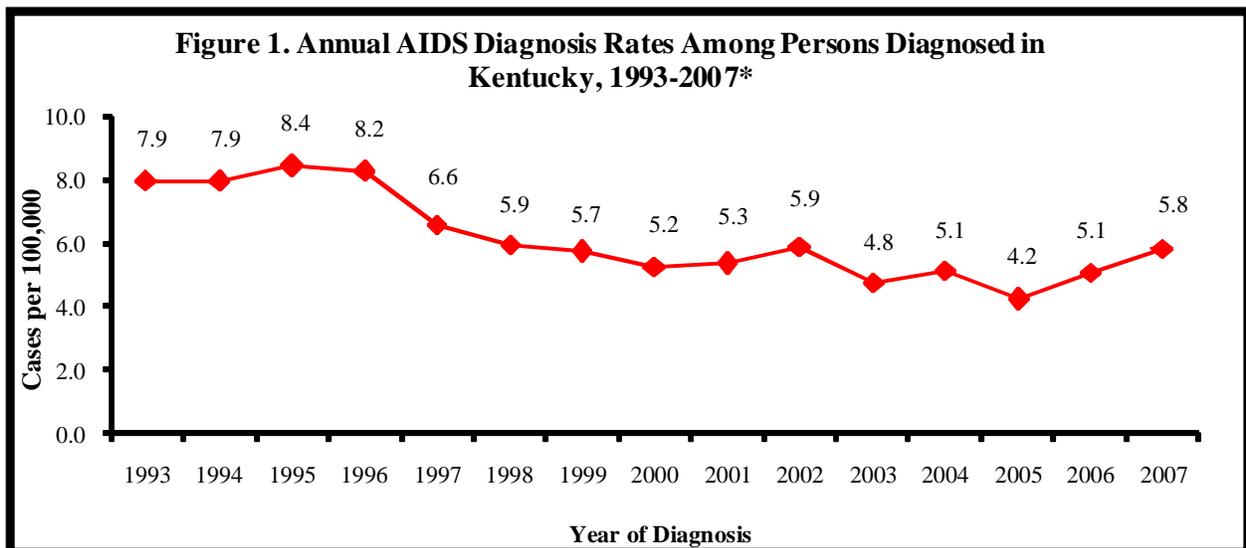
## Section I: AIDS Infections Diagnosed in Kentucky

As of June 30, 2009, there were a total of 5,129 AIDS cases reported in Kentucky to the Department for Public Health’s HIV/AIDS Surveillance Program since 1982. Of these reported cases, 2,812 are still presumed to be living. In 2007, there were 246 new AIDS cases diagnosed. As of June 30, 2009, 258 new AIDS cases were diagnosed and reported to the Kentucky HIV/AIDS Surveillance Program for 2008 (Table 1). The annual AIDS diagnosis rate among persons in Kentucky shows a trend by year of diagnosis (Figure 1). The annual AIDS diagnosis rate has remained fairly steady from 2000 to 2007, with slight fluctuations.

**Table 1. AIDS Cases by Year of Diagnosis**

Year of Diagnosis	Number of Cases
1994	306
1995	327
1996	323
1997	260
1998	237
1999	230
2000	212
2001	217
2002	240
2003	196
2004	212
2005	176
2006	213
2007	246
2008	258
2009*	65

\*Data reported through June 30, 2009



\*Data are current as of June 30, 2009. However, data for 2008 are considered provisional due to reporting delays and are not presented in trend analysis.

## Annual AIDS Diagnosis Rate per 100,000<sup>(1)</sup> A Comparison of Kentucky to Other States, 2007

**Table 2. Annual AIDS Diagnosis Rate by State**

Rank	Area of Residence	Rate	Rank	Area of Residence	Rate
1	District of Columbia	148.1	26	Arkansas	6.9
2	New York	24.9	<b>27</b>	<b>Kentucky</b>	<b>6.9</b>
3	Maryland	24.8	28	Washington	6.6
4	Florida	21.7	29	Oregon	6.4
5	Louisiana	20.5	30	Rhode Island	6.2
6	Delaware	19.8	31	Michigan	6.2
7	Georgia	19.7	32	Hawaii	6.1
8	South Carolina	16.8	33	Ohio	6.1
9	Connecticut	15.1	34	New Mexico	5.7
10	Pennsylvania	14.1	35	Indiana	5.2
11	California	13.5	36	Kansas	4.8
12	New Jersey	13.4	37	Alaska	4.7
13	Nevada	13.1	38	Nebraska	4.5
14	Texas	12.4	39	West Virginia	4.2
15	Mississippi	12.1	40	New Hampshire	3.9
16	North Carolina	11.3	41	Minnesota	3.8
17	Tennessee	10.7	42	Wisconsin	3.6
18	Illinois	10.5	43	Maine	3.5
19	Massachusetts	9.5	44	Utah	2.6
20	Arizona	9.2	45	Montana	2.6
21	Missouri	9.2	46	Wyoming	2.5
22	Alabama	8.4	47	Iowa	2.5
23	Virginia	8.2	48	South Dakota	1.9
24	Colorado	7.3	49	Idaho	1.5
25	Oklahoma	7.3	50	North Dakota	1.3
			51	Vermont	1.0

(1) U.S. rates from Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report: HIV Infection and AIDS in the United States, 2007:19*

<b>United States AIDS Diagnosis Rate:</b>	<b>12.4</b>
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In 2007, Kentucky ranked 27<sup>th</sup> in the nation, with an AIDS diagnosis rate of 6.9 per 100,000 population. This rate signified an increase in AIDS disease among the Kentucky population as Kentucky ranked 37<sup>th</sup> in 2006 with an AIDS rate of 4.9 per 100,000 population. This could be as a result of improved case reporting and case finding efforts.

## Cumulative AIDS Statistics: Kentucky vs. The United States

**Table 3. Kentucky AIDS Cases Cumulative through June 30, 2009**

Characteristics	Total Cases	% of AIDS cases <sup>(1)</sup>
<b>SEX</b>		
Male (adult/adolescent)	4,300	84%
Female (adult/adolescent)	795	16%
Child (<13 yrs)	34	1%
<b>TOTAL</b>	<b>5,129</b>	<b>100%</b>
<b>AGE AT DIAGNOSIS</b>		
<13	34	1%
13-24	325	6%
25-44	3,706	72%
45-64	1,017	20%
65+	47	1%
<b>TOTAL</b>	<b>5,129</b>	<b>100%</b>
<b>RACE/ETHNICITY</b>		
White, Not Hispanic	3,306	64%
Black, Not Hispanic	1,612	31%
Hispanic	182	4%
Other/Unknown	29	1%
<b>TOTAL</b>	<b>5,129</b>	<b>100%</b>
<b>TRANSMISSION CATEGORY</b>		
MSM <sup>(2)</sup>	2,794	54%
IDU <sup>(3)</sup>	677	13%
MSM/IDU	297	6%
Heterosexual	778	15%
Perinatal	28	1%
Other/Undetermined <sup>(4)</sup>	555	11%
<b>TOTAL</b>	<b>5,129</b>	<b>101%</b>

(1) Percentages may not always total 100% due to rounding

(2) MSM=Men Having Sex With Men

(3) IDU=Injection Drug Use

(4) Includes hemophilia, blood transfusion, and risk not reported or not identified.

Kentucky's distribution of AIDS cases by age at diagnosis (Table 3) closely parallels that of the U.S. distribution (Table 4). However, compared to U.S. data, the percentage of cases who are white is greater in Kentucky. This could be due to the greater percentage of white persons in Kentucky's general population.

**Table 4. Estimated United States AIDS Cases Cumulative through 2007<sup>(5)</sup>**

Characteristics	Total Cases <sup>(6)</sup>	% of AIDS cases <sup>(1)</sup>
<b>SEX</b>		
Male (adult/adolescent)	810,676	80%
Female (adult/adolescent)	198,544	19%
Child (<13 yrs)	9,209	1%
<b>TOTAL<sup>†</sup></b>	<b>1,018,429</b>	<b>100%</b>
<b>AGE AT DIAGNOSIS</b>		
<13	9,209	1%
13-24	45,433	4%
25-44	719,221	71%
45-64	228,713	22%
65+	15,853	2%
<b>TOTAL<sup>†</sup></b>	<b>1,018,429</b>	<b>100%</b>
<b>RACE/ETHNICITY</b>		
White, Not Hispanic	404,465	40%
Black, Not Hispanic	426,003	42%
Hispanic	169,138	17%
Other	11,724	1%
<b>TOTAL<sup>†</sup></b>	<b>1,011,330</b>	<b>100%</b>
<b>TRANSMISSION CATEGORY</b>		
MSM <sup>(2)</sup>	487,695	48%
IDU <sup>(3)</sup>	255,859	25%
MSM/IDU	71,242	7%
Heterosexual	176,157	17%
Perinatal	8,434	1%
Other/Undetermined	19,041	2%
<b>TOTAL<sup>†</sup></b>	<b>1,018,428</b>	<b>100%</b>

(5) U.S. cases from Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report: HIV Infection and AIDS in the United States*, 2007: 19.

(6) These numbers do not represent actual cases, rather they are point estimates which have been adjusted for reporting delay and for redistribution of cases originally reported with unknown risk.

† Totals among subpopulations may be different because values were calculated independently.

In addition, a greater percentage of Kentucky AIDS cases report their primary mode of exposure to be men having sex with men (MSM) at 54% in comparison to 48% of U.S. AIDS cases.

Table 5. Cumulative and Living AIDS Cases By Area Development District (ADD) and County at Time of Diagnosis

ADD/County	Total AIDS Cases <sup>(1)</sup>	Living with AIDS
<b>Barren River</b>	<b>181</b>	<b>89</b>
Allen	12	8
Barren	23	7
Butler	1	1
Edmonson	3	2
Hart	6	3
Logan	19	10
Metcalfe	4	0
Monroe	9	5
Simpson	8	4
Warren	96	49
<b>Big Sandy</b>	<b>44</b>	<b>25</b>
Floyd	13	9
Johnson	7	3
Magoffin	2	1
Martin	4	4
Pike	18	8
<b>Bluegrass</b>	<b>974</b>	<b>571</b>
Anderson	11	4
Bourbon	12	6
Boyle	19	15
Clark	24	16
Estill	4	0
Fayette	680	392
Franklin	50	26
Garrard	7	5
Harrison	8	5
Jessamine	27	15
Lincoln	10	5
Madison	45	28
Mercer	17	9
Nicholas	1	1
Powell	8	6
Scott	30	22
Woodford	21	16

(1) Total cases both living and deceased  
 Note: Residence at diagnosis missing for 6 cases

ADD/County	Total AIDS Cases <sup>(1)</sup>	Living with AIDS
<b>Buffalo Trace</b>	<b>37</b>	<b>21</b>
Bracken	4	2
Fleming	5	3
Lewis	11	5
Mason	17	11
Robertson	0	0
<b>Cumberland Valley</b>	<b>102</b>	<b>57</b>
Bell	13	10
Clay	19	16
Harlan	11	3
Jackson	4	1
Knox	8	5
Laurel	23	11
Rockcastle	4	2
Whitley	20	9
<b>FIVCO</b>	<b>88</b>	<b>50</b>
Boyd	52	32
Carter	14	9
Elliott	3	2
Greenup	13	5
Lawrence	6	2
<b>Gateway</b>	<b>54</b>	<b>36</b>
Bath	4	2
Menifee	3	2
Montgomery	14	13
Morgan	22	11
Rowan	10	7
<b>Green River</b>	<b>172</b>	<b>95</b>
Daviess	91	50
Hancock	4	1
Henderson	43	28
McLean	3	1
Ohio	10	6
Union	16	8
Webster	5	1

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Table 5. Cumulative and Living AIDS Cases By Area Development District (ADD) and County at Time of Diagnosis  
(continued)

ADD/County	Total AIDS Cases <sup>(1)</sup>	Living with AIDS
<b>Kentucky River</b>	<b>47</b>	<b>30</b>
Breathitt	4	4
Knott	1	0
Lee	6	5
Leslie	3	1
Letcher	16	8
Owsley	3	3
Perry	10	7
Wolfe	4	2
<b>KIPDA/North Central</b>	<b>2387</b>	<b>1262</b>
Bullitt	21	12
Henry	14	7
Jefferson	2171	1147
Oldham	140	72
Shelby	30	17
Spencer	5	3
Trimble	6	4
<b>Lake Cumberland</b>	<b>71</b>	<b>42</b>
Adair	4	3
Casey	3	1
Clinton	4	2
Cumberland	3	3
Green	3	1
McCreary	3	2
Pulaski	32	16
Russell	6	4
Taylor	7	5
Wayne	6	5
<b>Lincoln Trail</b>	<b>144</b>	<b>85</b>
Breckinridge	9	5
Grayson	11	6
Hardin	83	51
Larue	1	0
Marion	8	4
Meade	15	11
Nelson	14	6
Washington	3	2

ADD/County	Total AIDS Cases <sup>(1)</sup>	Living with AIDS
<b>Northern Kentucky</b>	<b>430</b>	<b>234</b>
Boone	59	35
Campbell	84	43
Carroll	9	5
Gallatin	3	2
Grant	18	9
Kenton	248	131
Owen	3	3
Pendleton	6	6
<b>Pennyrile</b>	<b>202</b>	<b>101</b>
Caldwell	14	8
Christian	76	45
Crittenden	4	2
Hopkins	32	10
Livingston	10	5
Lyon	17	8
Muhlenberg	22	8
Todd	18	9
Trigg	9	6
<b>Purchase</b>	<b>191</b>	<b>109</b>
Ballard	7	4
Calloway	24	13
Carlisle	2	1
Fulton	6	3
Graves	23	12
Hickman	3	2
Marshall	14	8
McCracken	112	66

(1) Total cases both living and deceased

Note: Residence at diagnosis missing for 6 cases

**Table 6. AIDS Cases and Diagnosis Rates by Year of Diagnosis and Area Development District (ADD) of Residence at Time of Diagnosis**

<b>DISTRICT</b>	<b>CASES &amp; RATES<sup>(1)</sup></b>	<b>1982-2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009<sup>(2)</sup></b>	<b>TOTAL CASES<sup>(3)</sup></b>	<b>%</b>
1. Purchase	Cases	147	9	3	10	13	8	1	191	4%
	Rate per 100,000				5.1	6.7				
2. Pennyrite	Cases	167	6	6	5	6	8	4	202	4%
	Rate per 100,000									
3. Green River	Cases	135	9	3	5	9	8	3	172	3%
	Rate per 100,000									
4. Barren River	Cases	130	11	8	9	7	14	2	181	4%
	Rate per 100,000		4.2				5.1			
5. Lincoln Trail	Cases	111	6	6	5	7	7	2	144	3%
	Rate per 100,000									
6. KIPDA/ North Central	Cases	1848	90	79	92	123	125	30	2387	47%
	Rate per 100,000		10.0	8.8	10.1	13.4	13.5			
7. Northern Kentucky	Cases	331	26	16	17	11	20	9	430	8%
	Rate per 100,000		6.3	3.9	4.0	2.6	4.6			
8. Buffalo Trace	Cases	26	1	5	0	1	4	0	37	1%
	Rate per 100,000									
9. Gateway	Cases	41	0	2	2	4	3	1	53	1%
	Rate per 100,000									
10. FIVCO	Cases	66	3	2	5	8	3	1	88	2%
	Rate per 100,000									
11. Big Sandy	Cases	36	1	1	0	3	3	0	44	1%
	Rate per 100,000									
12. Kentucky River	Cases	36	0	0	4	5	2	0	47	1%
	Rate per 100,000									
13. Cumberland Valley	Cases	79	4	5	3	5	5	1	102	2%
	Rate per 100,000									
14. Lake Cumberland	Cases	52	3	2	6	2	5	1	71	1%
	Rate per 100,000									
15. Bluegrass	Cases	752	43	38	48	42	42	9	974	19%
	Rate per 100,000		6.0	5.2	6.5	5.6	5.6			
<b>TOTAL CASES</b>		<b>3,957</b>	<b>212</b>	<b>176</b>	<b>211</b>	<b>246</b>	<b>257</b>	<b>64</b>	<b>5,123</b>	<b>100%</b>

(1) Rates are only listed for years of diagnosis 2004 - 2008. Data for 2008 and 2009 are provisional due to reporting delay and are subject to change. Due to the small numbers of AIDS cases reported in some ADDs, please interpret the corresponding rates with caution. Rates are not published when cell size is less than 10.

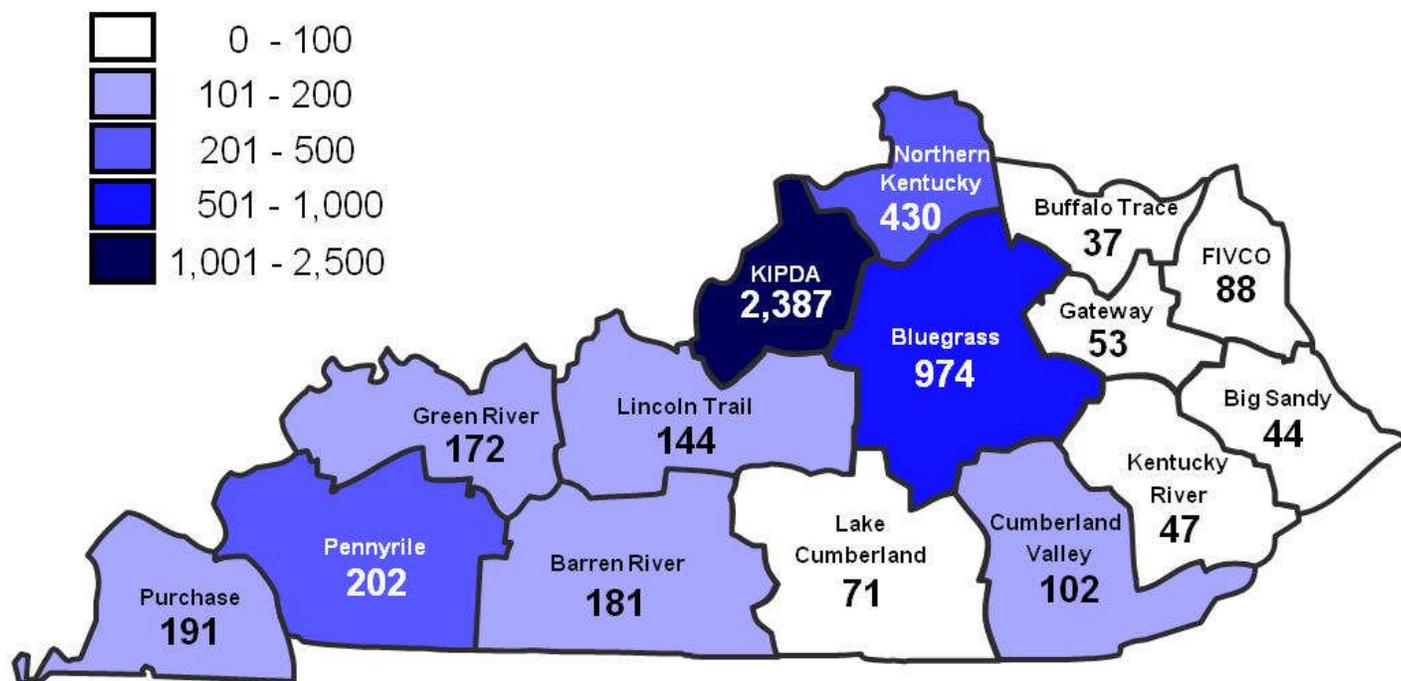
(2) Data reported through June 30, 2009.

(3) Total AIDS Cases both Living and Deceased; Total AIDS cases reported are 5,123—6 AIDS cases with unknown residential information.

## Cumulative AIDS Statistics by Area Development District (ADD)

**Figure 2. Cumulative AIDS Cases by Area Development District (ADD) of Residence at Time of Diagnosis through June 30, 2009**

### Cumulative AIDS Diagnoses by ADD



The largest number of cumulative AIDS infections (n=2,387, 47%) were residing in the KIPDA ADD, which includes the city of Louisville, at the time of diagnosis (Figure 2). The Bluegrass ADD, which includes the city of Lexington, has the second largest number of AIDS infections (n=974, 19%) diagnosed in Kentucky, followed by the Northern Kentucky ADD with the third largest number of AIDS infections (n=430, 8%) diagnosed in Kentucky.

## Adult/Adolescent AIDS Cases

**Table 7. Adult/Adolescent<sup>(1)</sup> AIDS Cases by Year of Diagnosis**

Characteristics	1982-03	%	2004	%	2005	%	2006	%	2007	%	2008	%	2009 <sup>(2)</sup>	%	Total	% <sup>(3)</sup>
<b>SEX</b>																
Male	3369	86%	168	80%	140	80%	166	78%	193	78%	209	81%	55	85%	4300	84%
Female	559	14%	42	20%	35	20%	47	22%	53	22%	49	19%	10	15%	795	16%
<b>TOTAL<sup>(3)</sup></b>	<b>3928</b>	<b>100%</b>	<b>210</b>	<b>100%</b>	<b>175</b>	<b>100%</b>	<b>213</b>	<b>100%</b>	<b>246</b>	<b>100%</b>	<b>258</b>	<b>100%</b>	<b>65</b>	<b>100%</b>	<b>5095</b>	<b>100%</b>
<b>AGE AT DIAGNOSIS</b>																
13-19	29	1%	0	0%	1	1%	1	0%	1	0%	5	2%	0	0%	37	1%
20-29	764	19%	37	18%	23	13%	33	15%	37	15%	49	19%	12	18%	955	19%
30-39	1777	45%	77	37%	66	38%	62	29%	88	36%	77	30%	16	25%	2163	42%
40-49	984	25%	75	36%	61	35%	73	34%	82	33%	84	33%	27	42%	1386	27%
50+	374	10%	21	10%	24	14%	44	21%	38	15%	43	17%	10	15%	554	11%
<b>TOTAL<sup>(3)</sup></b>	<b>3928</b>	<b>100%</b>	<b>210</b>	<b>100%</b>	<b>175</b>	<b>100%</b>	<b>213</b>	<b>100%</b>	<b>246</b>	<b>100%</b>	<b>258</b>	<b>100%</b>	<b>65</b>	<b>100%</b>	<b>5095</b>	<b>100%</b>
<b>RACE/ETHNICITY</b>																
White, Not Hispanic	2647	67%	125	60%	100	57%	111	52%	129	52%	140	54%	40	62%	3292	65%
Black, Not Hispanic	1174	30%	70	33%	59	34%	84	39%	92	37%	98	38%	15	23%	1592	31%
Hispanic	90	2%	14	7%	15	9%	16	8%	23	9%	16	6%	8	12%	182	4%
Other/Unknown	17	0%	1	0%	1	1%	2	1%	2	1%	4	2%	2	3%	29	1%
<b>TOTAL<sup>(3)</sup></b>	<b>3928</b>	<b>100%</b>	<b>210</b>	<b>100%</b>	<b>175</b>	<b>100%</b>	<b>213</b>	<b>100%</b>	<b>246</b>	<b>100%</b>	<b>258</b>	<b>100%</b>	<b>65</b>	<b>100%</b>	<b>5095</b>	<b>100%</b>
<b>TRANSMISSION CATEGORY</b>																
MSM <sup>(4)</sup>	2241	57%	102	49%	92	53%	102	48%	109	44%	121	47%	27	42%	2794	55%
IDU <sup>(5)</sup>	546	14%	34	16%	16	9%	25	12%	31	13%	21	8%	4	6%	677	13%
MSM and IDU	251	6%	20	10%	5	3%	7	3%	7	3%	5	2%	2	3%	297	6%
Hemophilia/Blood Disorder	83	2%	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%	85	2%
Heterosexual <sup>(6)</sup>	567	14%	38	18%	48	27%	46	22%	44	18%	31	12%	4	6%	778	15%
Transfusion/Transplant	35	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	35	1%
Undetermined <sup>(7)</sup>	205	5%	15	7%	14	8%	33	15%	55	22%	79	31%	28	43%	429	8%
<b>TOTAL<sup>(3)</sup></b>	<b>3928</b>	<b>100%</b>	<b>210</b>	<b>100%</b>	<b>175</b>	<b>100%</b>	<b>213</b>	<b>100%</b>	<b>246</b>	<b>100%</b>	<b>258</b>	<b>100%</b>	<b>65</b>	<b>100%</b>	<b>5095</b>	<b>100%</b>

(1) Cases are classified as Adult/Adolescent if they are 13 years of age or older at time of diagnosis.

(2) Data reported through June 30, 2009. 2008 and 2009 data not used in trend analyses due to reporting delays.

(3) Percentages may not total 100% due to rounding.

(4) MSM = Men Having Sex With Men

(5) IDU = Injection Drug Use

(6) "Heterosexual" includes persons who have had heterosexual contact with a person with HIV or at risk for HIV.

(7) "Undetermined" refers to persons whose mode of exposure to HIV is unknown. This includes persons who are under investigation, deceased, lost to investigation, refused interview, and persons whose mode of exposure remains undetermined after investigation.

Table 7 shows a breakdown of new AIDS diagnoses by year of AIDS diagnosis and demographic characteristics among adults/adolescents. Data are presented for the last five years, but 2008 and 2009 data are incomplete due to reporting delays. Minorities are disproportionately impacted by AIDS as shown above. In 2008, blacks made up 7.6% of Kentucky's population, but accounted for 38% of new AIDS diagnoses in the same year. Similarly, Hispanics who accounted for 2.4% of the general population in 2008 comprised 6% of new AIDS diagnoses. The number of infections diagnosed with heterosexual mode of exposure has decreased since 2006.

## Adult/Adolescent AIDS Cases

**Table 8. Cumulative Adult/Adolescent<sup>(1)</sup> AIDS Cases By Transmission Category, Race/Ethnicity, and Sex through June 30, 2009**

	Transmission Category	White, Not Hispanic		Black, Not Hispanic		Hispanic		Other/Unknown		TOTAL	
		No.	%	No.	%	No.	%	No.	%	No.	% <sup>(2)</sup>
<b>MALE</b>	MSM <sup>(3)</sup>	2145	73%	578	48%	61	41%	10	53%	2794	65%
	IDU <sup>(4)</sup>	198	7%	242	20%	29	20%	6	32%	475	11%
	MSM and IDU	192	7%	98	8%	7	5%	0	0%	297	7%
	Hemophilia/Coagulation Disorder	75	3%	8	1%	0	0%	0	0%	83	2%
	Heterosexual <sup>(5)</sup>	147	5%	145	12%	16	11%	1	5%	309	7%
	Transfusion/Transplant	18	1%	4	0%	0	0%	0	0%	22	1%
	Undetermined <sup>(6)</sup>	157	5%	126	10%	35	24%	2	11%	320	7%
	<b>TOTAL</b>	<b>2932</b>	<b>100%</b>	<b>1201</b>	<b>100%</b>	<b>148</b>	<b>100%</b>	<b>19</b>	<b>100%</b>	<b>4300</b>	<b>100%</b>
<b>FEMALE</b>	IDU <sup>(4)</sup>	92	26%	100	26%	8	24%	2	20%	202	25%
	Hemophilia/Coagulation Disorder	2	1%	0	0%	0	0%	0	0%	2	0%
	Heterosexual <sup>(5)</sup>	214	59%	227	58%	21	62%	7	70%	469	59%
	Transfusion/Transplant	10	3%	3	1%	0	0%	0	0%	13	2%
	Undetermined <sup>(6)</sup>	42	12%	61	16%	5	15%	1	10%	109	14%
	<b>TOTAL</b>	<b>360</b>	<b>100%</b>	<b>391</b>	<b>100%</b>	<b>34</b>	<b>100%</b>	<b>10</b>	<b>100%</b>	<b>795</b>	<b>100%</b>

(1) Cases are classified as Adult/Adolescent if they are 13 years of age or older at time of diagnosis.

(2) Percentages may not total to 100 due to rounding.

(3) MSM = Men Having Sex With Men

(4) IDU = Injection Drug Use

(5) "Heterosexual" includes persons who have had heterosexual contact with a person with HIV or at risk for HIV.

(6) "Undetermined" refers to persons whose mode of exposure to HIV is unknown. This includes persons who are under investigation, dead, lost to investigation, refused interview, and persons whose mode of exposure remain undetermined after investigation.

Majority (65%) of male AIDS infections were reported with MSM as their primary mode of exposure while among women, majority (59%) were exposed through heterosexual contact with a person with HIV or at high risk for HIV contraction e.g. a person who injects drugs. Minority males (20% of black cases and 20% of Hispanic cases) reported higher percentages of IDU as the mode of transmission, in comparison to non-minorities (7% of White male cases). Conversely, more White males (73%) reported MSM as the primary mode of transmission in comparison to 48% of all black males and 41% of all Hispanic males.

Among the race categories, Hispanic males had the highest proportion of infections reported without identified risk factors (24%), in comparison to black males (10%) and white males (5%). Among females, 16% of black, 15% of Hispanic and 12% of white infections were reported with no risk factor identified. Overall, a higher percentage of infections with undetermined modes of transmission exist among females (14%) than males (7%). The existence of large percentages of infections without known modes of transmission poses a barrier to provision of effective responses to the epidemic within the groups in question, because risk factor information forms the basis for program planning, service provision and guides resource allocation.

## Pediatric AIDS Cases

**Table 9. Cumulative Pediatric<sup>(1)</sup> AIDS Cases By Risk and Race/Ethnicity through June 30, 2009**

Transmission Category	White, Not Hispanic		Black, Not Hispanic		Other/Unknown		TOTAL	
	No.	%	No.	%	No.	%	No.	% <sup>(2)</sup>
Pediatric Hemophilia/Coagulation Disorder	3	21%	1	5%	0	0%	4	12%
Perinatal Exposure, Mother with HIV	9	64%	19	95%	0	0%	28	82%
Pediatric Transfusion/Transplant	2	14%	0	0%	0	0%	2	6%
<b>TOTAL</b>	<b>14</b>	<b>100%</b>	<b>20</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>34</b>	<b>100%</b>

(1) Cases are classified as Pediatric if they are less than 13 years of age at time of diagnosis.

(2) Percentages may not total to 100 due to rounding.

**Table 10. Pediatric<sup>(1)</sup> AIDS Cases by Year of Diagnosis**

Transmission Category	1982-03	%	2004	%	2005	%	2006	%	2007	%	2008	%	2009 <sup>(2)</sup>	%	Total	% <sup>(3)</sup>
Pediatric Hemophilia/Coagulation Disorder	4	13%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	4	12%
Perinatal Exposure, Mother with HIV	25	81%	2	100%	1	100%	0	0%	0	0%	0	0%	0	0%	28	82%
Pediatric Transfusion/Transplant	2	6%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	6%
<b>Total</b>	<b>31</b>	<b>100%</b>	<b>2</b>	<b>100%</b>	<b>1</b>	<b>100%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>NA</b>	<b>0</b>	<b>NA</b>	<b>34</b>	<b>100%</b>

(1) Cases are classified as Pediatric if they are less than 13 years of age at time of diagnosis.

(2) Data reported through June 30, 2009.

(3) Percentages may not total 100 due to rounding.

Overall, there have been 34 pediatric AIDS infections reported to the Kentucky HIV/AIDS surveillance program (Table 9 and Table 10) since reporting began in 1982. Thirty one of these infections (91%) were diagnosed prior to 2004. The majority of reported pediatric infections were due to perinatal transmission through an HIV infected mother (28), 4 infections were reported with a primary mode of exposure due to pediatric hemophilia or coagulation disorders, and 2 infections were reportedly due to pediatric transfusion or transplant (Table 10). Since 1989 there have been no pediatric AIDS infections with hemophilia or coagulation disorders as the reported mode of exposure. The two pediatric infections reported with pediatric transfusion or transplant as the risk factor were diagnosed in 1988. No pediatric AIDS infections due to perinatal exposure have been reported since 2005. Nineteen (95%) of the 20 pediatric AIDS infections among blacks were due to perinatal exposure in comparison to 9 (64%) of 14 pediatric AIDS infections among whites, which were due to this route of transmission. No pediatric AIDS infections have been reported among Hispanics.

## Cumulative AIDS Cases

**Table 11. Cumulative<sup>(1)</sup> AIDS Cases By Age at Diagnosis, Race/Ethnicity, and Sex through June 30, 2009**

	Age Group	White, Not Hispanic		Black, Not Hispanic		Hispanic		Other/Unknown		TOTAL	
		No.	%	No.	%	No.	%	No.	%	No.	% <sup>(2)</sup>
<b>MALE</b>	<13	7	≤1%	14	1%	0	0%	0	0%	21	0%
	13-19	18	1%	12	1%	1	1%	0	0%	31	1%
	20-29	507	17%	221	18%	46	31%	3	16%	777	18%
	30-39	1273	43%	494	41%	64	43%	6	32%	1837	43%
	40-49	805	27%	353	29%	26	18%	8	42%	1192	28%
	50+	329	11%	121	10%	11	7%	2	11%	463	11%
	<b>TOTAL<sup>(2)</sup></b>	<b>2939</b>	<b>100%</b>	<b>1215</b>	<b>100%</b>	<b>148</b>	<b>100%</b>	<b>19</b>	<b>100%</b>	<b>4321</b>	<b>100%</b>
<b>FEMALE</b>	<13	7	2%	6	2%	0	0%	0	0%	13	2%
	13-19	3	1%	2	1%	1	3%	0	0%	6	1%
	20-29	81	22%	78	20%	15	44%	4	40%	178	22%
	30-39	147	40%	165	42%	11	32%	3	30%	326	40%
	40-49	81	22%	106	27%	4	12%	3	30%	194	24%
	50+	48	13%	40	10%	3	9%	0	0%	91	11%
	<b>TOTAL<sup>(2)</sup></b>	<b>367</b>	<b>100%</b>	<b>397</b>	<b>100%</b>	<b>34</b>	<b>100%</b>	<b>10</b>	<b>100%</b>	<b>808</b>	<b>100%</b>

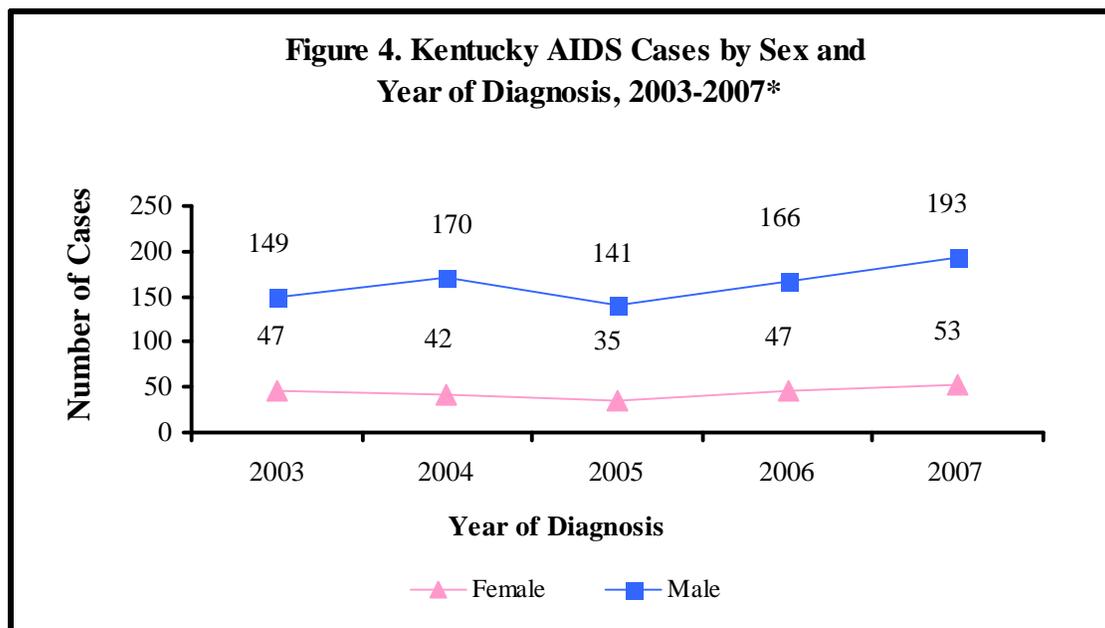
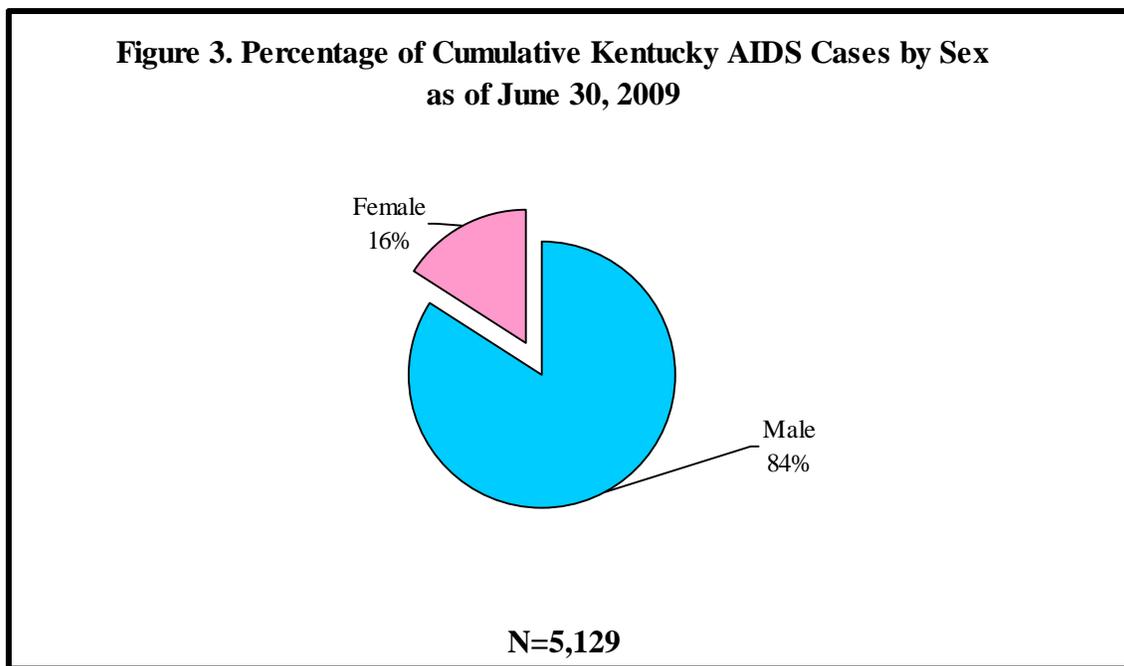
(1) Includes both Adult/Adolescent and Pediatric AIDS cases.

(2) Percentages may not total 100 due to rounding.

The highest number of male AIDS infections were diagnosed in their 30s (1,837, 43%) and 40s (1,192, 28%). Among all male race categories, the highest proportion were aged 30-39 years: Hispanics and whites, 43%; blacks, 41%. Among the 20-29 year age group, Hispanic males had the highest percentage of cases (31%), whereas black and white males had comparatively higher percentages among 40 year olds: 29% and 27% respectively. The percentage of infections among Hispanic males aged 40 or older (25%) was much smaller than the total percentage of AIDS cases among all males in that age group (39%). More than half (53%) of male infections with unknown/ other race were aged 40 years or older, but due to small numbers, the percentages should be interpreted with caution.

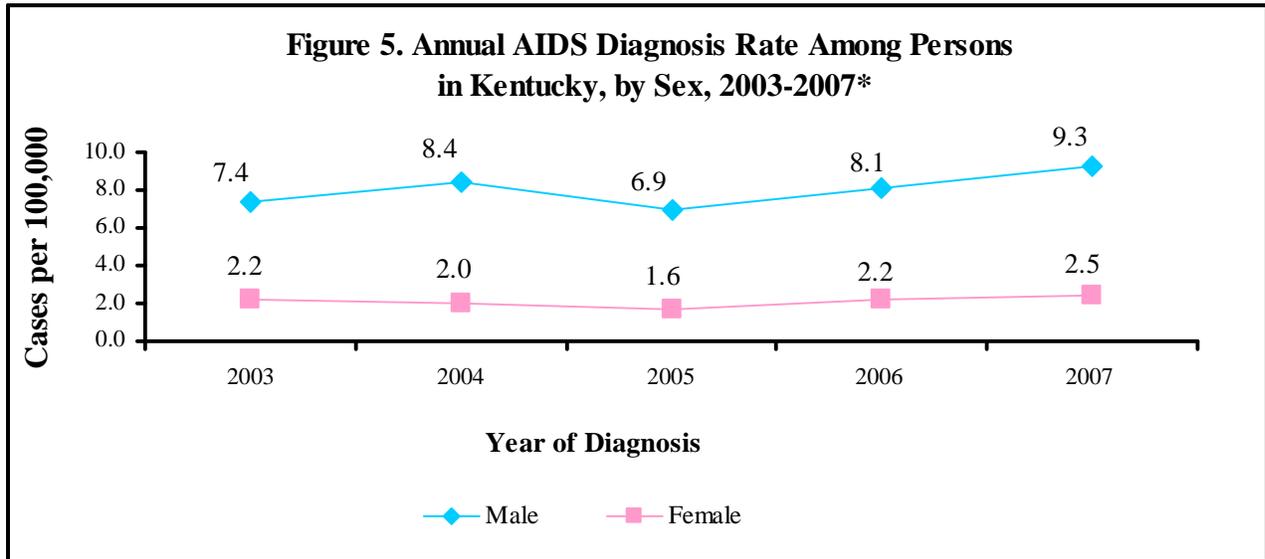
Similar trends exist among female racial and age groups. The highest number of all female AIDS infections were also diagnosed in their 30s (326, 40%). A far higher percentage of Hispanic females were diagnosed in their 20s (44%) compared to black females (20%) and white females (22%). Whereas the majority of black (165, 42%) and white (147, 40%) females were diagnosed in their 30s, only 11 (32%) of Hispanic females were diagnosed while in that same decade of life. Overall, male and female Hispanic AIDS cases tend to be much younger than their racial and ethnic counterparts.

## AIDS Cases in Kentucky by Sex



\*Data for 2008 and 2009 are not included in trend analyses since they are considered provisional due to reporting delays; all data are subject to change due to reporting delays.

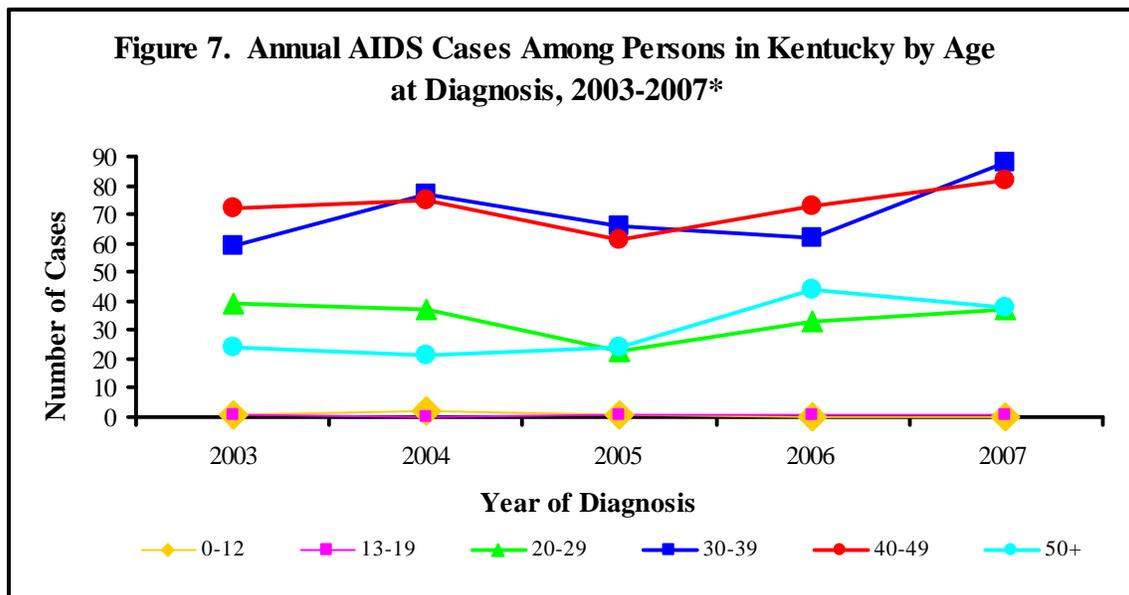
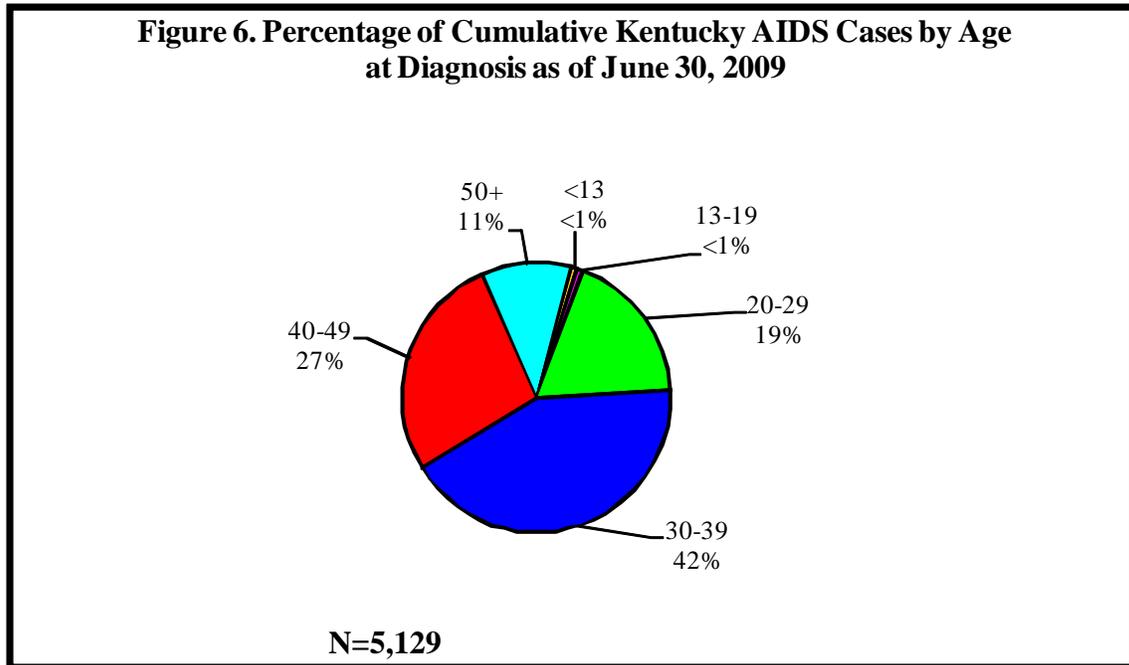
## AIDS Diagnosis Rates in Kentucky by Sex



\*Data for 2008 are not included in trend analyses since they are considered provisional due to reporting delays; all data are subject to change due to reporting delays.

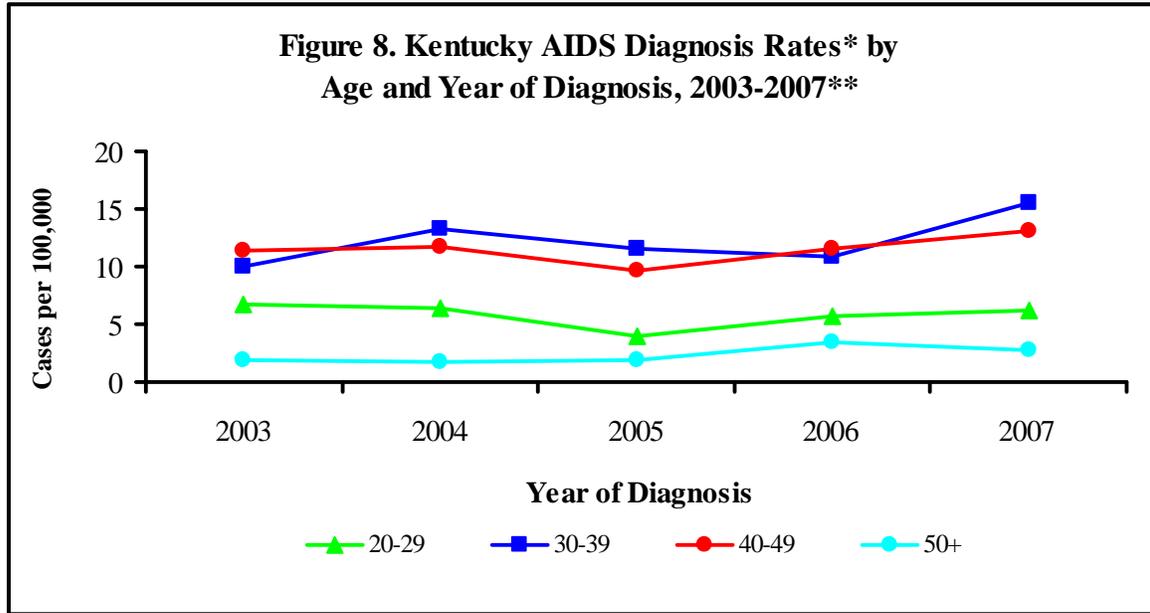
Males represent the majority (84%) of total AIDS cases reported in Kentucky (Figure 3). On average from 2003 to 2007, the AIDS diagnosis rate among males was almost four times higher than for females (Figure 5). The number of male AIDS cases diagnosed and the yearly diagnosis rate increased every year, except for 2005 when there was a decrease. The female AIDS diagnosis rate has remained fairly steady from 2003 to 2007, with a slight decrease seen in 2004 and 2005. These trends will continue to be monitored as data become available.

## AIDS Cases in Kentucky by Age at Diagnosis



\*Data for 2008 are not included in trend analyses since they are considered provisional due to reporting delays; all data are subject to change due to reporting delays.

## AIDS Diagnosis Rates in Kentucky by Age at Diagnosis



\*Due to the small numbers of AIDS cases reported, rates are not presented for age groups 0-12 and 13-19 years old.

\*\*Data for 2008 and 2009 are not included in trend analyses since they are considered provisional due to reporting delays; all data are subject to change due to reporting delays.

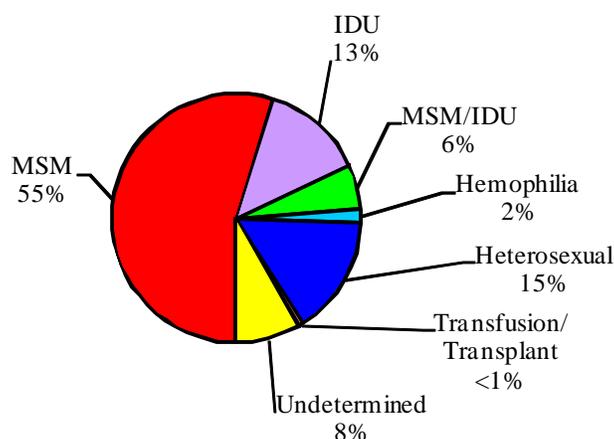
Cumulatively, the largest percentage of AIDS cases were diagnosed in their 30s (42%), followed by those in their 40s (27%) (Figure 6). The number of AIDS cases diagnosed among those less than 20 years of age has remained low between 2003 and 2007 (Figure 7). From 2003 to 2007, the AIDS diagnosis rate has been highest among those in their 30s and 40s (Figure 8). In 2005, there was a slight decrease in the AIDS diagnosis rate for those aged 20-49 years. In 2006, there was a slight increase in the diagnosis rates for all age categories presented, except among those 30 to 39 years of age. The mean age at AIDS diagnosis was between 38 to 41 years old from 2003 to 2007 (Table 12). The highest age at diagnosis in this time period was 79 years, which occurred in 2007.

**Table 12. Age at Reported AIDS Diagnosis, Kentucky 2003-2007**

Year	Highest Age	Lowest Age	Mean Age
2003	70	6	38.3
2004	69	<1	37.8
2005	67	10	39.5
2006	73	19	40.4
2007	79	18	39.2

## AIDS Cases in Kentucky by Transmission Category

**Figure 9. Percentage of Cumulative Kentucky Adult/Adolescent AIDS Cases by Transmission Category through June 30, 2009**



N=5,095

**Table 13. Cumulative Kentucky Adult/Adolescent AIDS Cases by Transmission Category**

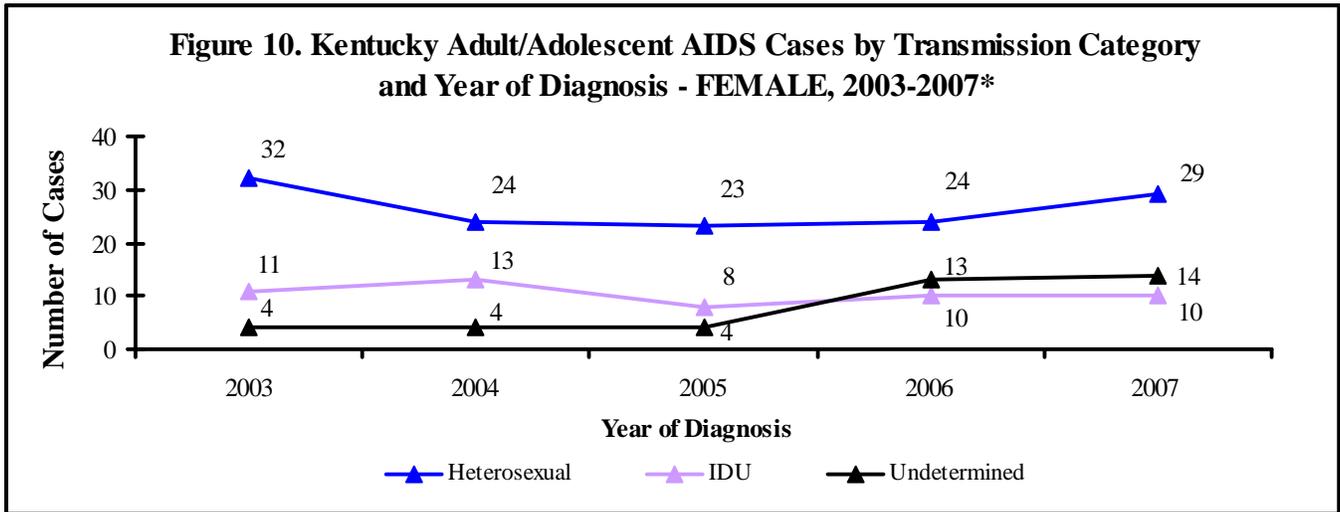
Transmission Category	N
MSM	2,794
IDU	677
MSM/IDU	297
Hemophilia	85
Heterosexual	778
Transfusion/Transplant	35
Undetermined	429
<b>Total</b>	<b>5,095</b>

Note: 34 pediatric cases not included.

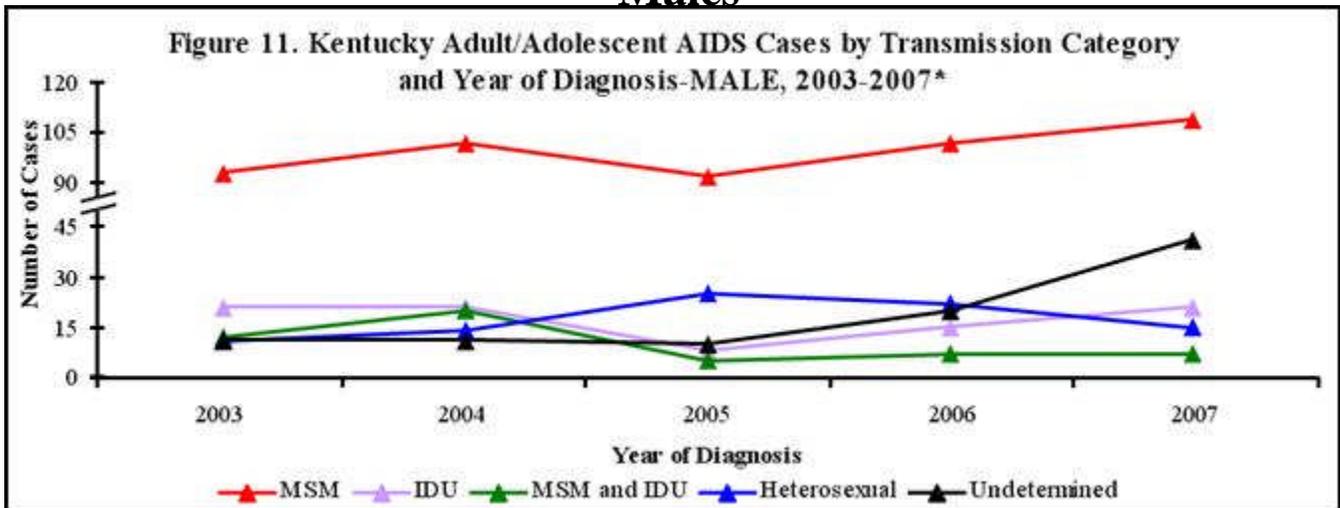
In Kentucky, 55% of cumulative adult/adolescent AIDS cases identified their primary transmission category as men who have sex with men (MSM), as shown in Figure 9. Fifteen percent of adult/adolescent AIDS cases reported their primary transmission category as heterosexual contact, 13% reported injection drug use (IDU), and 6% reported both MSM and IDU. Eight percent of cumulative AIDS cases were reported without a risk factor identified. Cumulative adult/adolescent AIDS case numbers for each mode of exposure are displayed in Table 13.

## AIDS Cases in Kentucky by Transmission Category and Sex

### Females



### Males

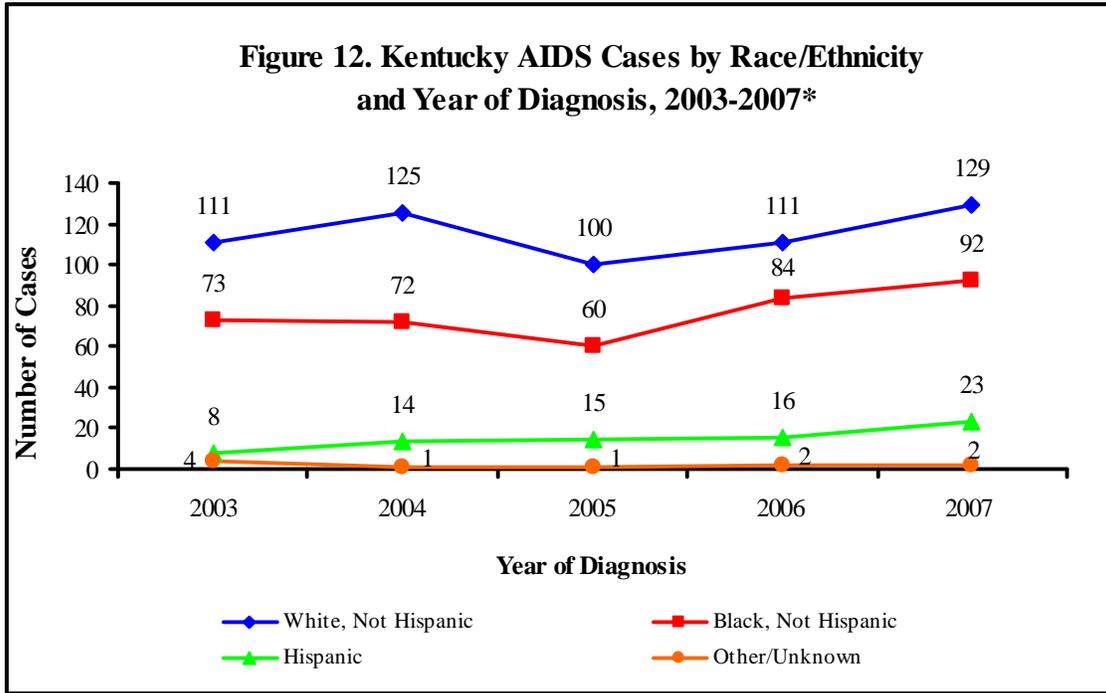


\*Data for 2008 are not included in trend analyses since they are considered provisional due to reporting delays; all data are subject to change due to reporting delays.

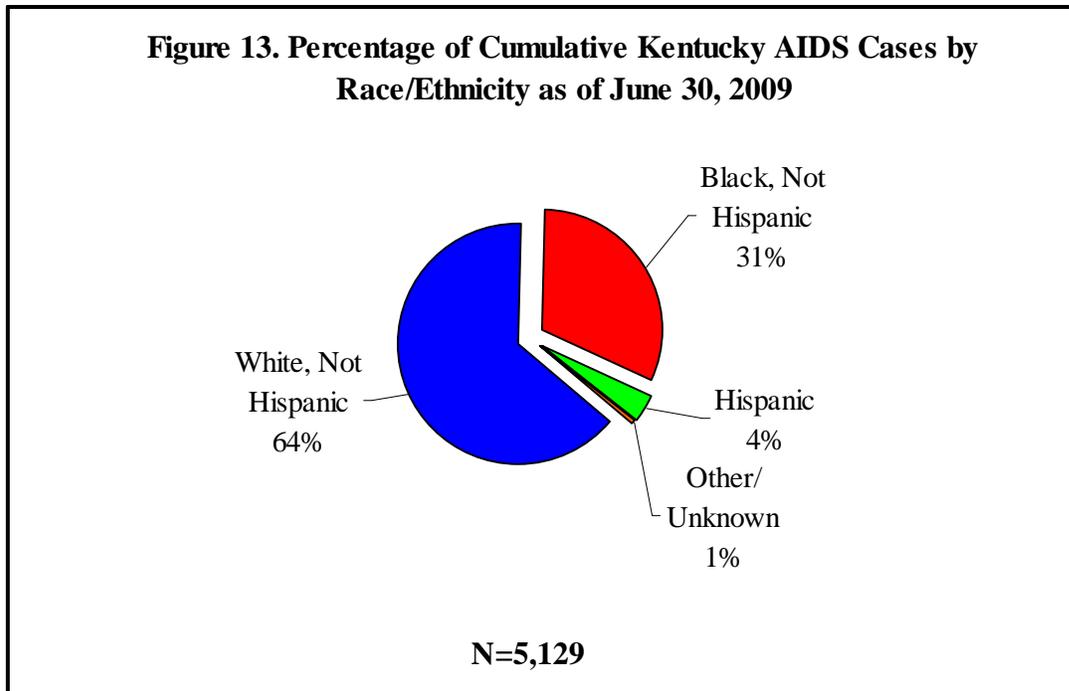
In figure 11, please note the break in the y-axis for number of cases diagnosed.

Figure 10 and Figure 11 show female and male Kentucky adult/adolescent AIDS cases by transmission category and year of diagnosis. The number of cases among females reporting heterosexual contact was highest in 2003 (32 cases) but remained fairly steady from 2004 to 2006 with an increase in 2007 (Figure 10). The number of female cases reporting IDU as their primary mode of transmission has remained fairly steady, with a drop in 2005. In Figure 11 for adult/adolescent males, MSM accounted for the largest number of cases diagnosed each year from 2003 to 2007. The number of males reporting IDU as their primary mode of transmission decreased from 2003 to 2005, but increased slightly in 2006 and 2007. Adult/adolescent AIDS cases among males attributed to heterosexual contact increased from 2003 to 2005 but have since decreased. For both sexes, the number of cases with an undetermined transmission category increased in 2006, but remained stable among females while it increased for males in 2007.

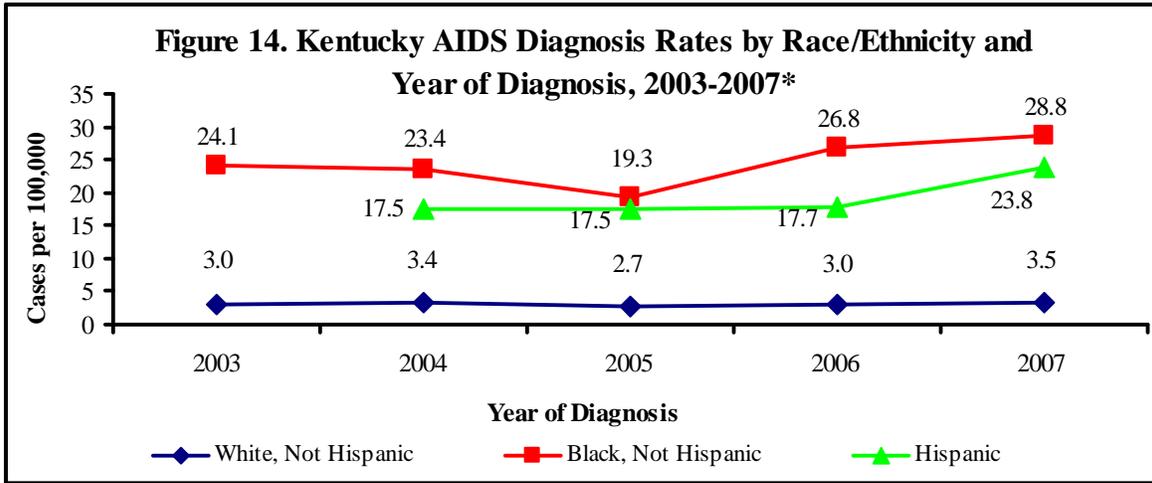
## AIDS Cases in Kentucky by Race/Ethnicity



\*Data for 2008 are not included in trend analyses since they are considered provisional due to reporting delays; all data are subject to change due to reporting delays.

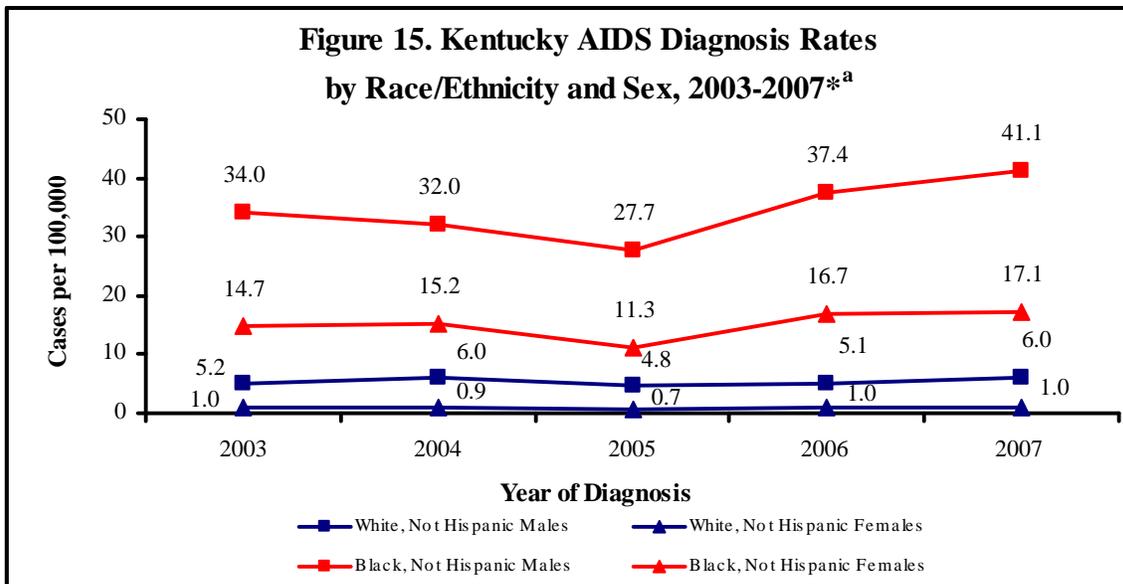


## AIDS Diagnosis Rates in Kentucky by Race/Ethnicity



\*Data for 2008 are not included in trend analyses since they are considered provisional due to reporting delays; all data are subject to change due to reporting delays.

Note: The diagnosis rate for Hispanics in 2003 is not presented because the number of cases diagnosed was less than 10.



\*Data for 2008 are not included in trend analyses since they are considered provisional due to reporting delays; all data are subject to change due to reporting delays.

<sup>a</sup>Rates for Hispanic cases by sex are not presented due to the small number of cases reported.

On average from 2003-2007, the AIDS diagnosis rate for blacks was approximately eight times higher than for whites, and five times higher for Hispanics than for whites in Kentucky (Figure 14). For blacks and whites, the rate dropped in 2005, but remained steady for Hispanics (Figure 14). The diagnosis rate among black males has steadily decreased between 2003 and 2005 (Figure 15). The diagnosis rates for both black males and black females increased between 2005 to 2007. This trend will continue to be monitored. The diagnosis rates among white males and females have remained fairly steady from 2003 to 2007 (Figure 15).

## AIDS Mortality Rates in Kentucky

**Table 14. Kentucky AIDS Deaths 2005 - All Ages**

	White, Not Hispanic			Black, Not Hispanic			Hispanic			Total		
	Deaths	Rate*	Rank	Deaths	Rate*	Rank	Deaths	Rate*	Rank	Deaths	Rate*	Rank
Male	28	1.6	25th	21	13.9	10th	0			49	2.4	22nd
Female	7	0.4	30th	4	2.5	20th	1	2.9	15th**	12	0.6	30th
<b>Total</b>	<b>35</b>	<b>0.9</b>	<b>29th</b>	<b>25</b>	<b>8.1</b>	<b>14th</b>	<b>1</b>	<b>1.2</b>	<b>17th</b>	<b>61</b>	<b>1.5</b>	<b>24th</b>

**Table 15. Kentucky AIDS Deaths 2005 - Age Group 25-44**

	White, Not Hispanic			Black, Not Hispanic			Hispanic			Total		
	Deaths	Rate*	Rank	Deaths	Rate*	Rank	Deaths	Rate*	Rank	Deaths	Rate*	Rank
Male	14	2.7	8th	8	18.3	5th	0			22	3.8	8th
Female	5	1.0	12th	2	4.4	8th	1	8.4	2nd**	8	1.4	12th
<b>Total</b>	<b>19</b>	<b>1.7</b>	<b>11th</b>	<b>10</b>	<b>11.2</b>	<b>5th</b>	<b>1</b>	<b>3.2</b>	<b>7th</b>	<b>30</b>	<b>2.6</b>	<b>10th</b>

Data Source: Office of Vital Statistics, Kentucky Department for Public Health/Cabinet for Health & Family Services

\* Rate per 100,000 population

\*\*Tied with two other causes of death

**Table 16. Kentucky AIDS Cases<sup>(1)</sup>  
Living and Deceased as of June 30, 2009**

Diagnosis Year	Total Cases	Living	Deceased	Mortality <sup>(1)</sup>
1982	3	0	3	100%
1983	7	0	7	100%
1984	15	0	15	100%
1985	31	1	30	97%
1986	36	1	35	97%
1987	65	4	61	94%
1988	121	5	116	96%
1989	161	17	144	89%
1990	175	21	154	88%
1991	215	28	187	87%
1992	279	43	236	85%
1993	303	73	230	76%
1994	306	109	197	64%
1995	327	148	179	55%
1996	323	186	137	42%
1997	260	172	88	34%
1998	237	151	86	36%
1999	230	161	69	30%
2000	212	146	66	31%
2001	217	166	51	24%
2002	240	184	56	23%
2003	196	163	33	17%
2004	212	182	30	14%
2005	176	143	33	19%
2006	213	185	28	13%
2007	246	216	30	12%
2008	258	245	13	5%
2009	65	62	3	5%
<b>TOTAL*</b>	<b>5129</b>	<b>2812</b>	<b>2317</b>	<b>45%</b>

(1) The percentage of AIDS cases diagnosed in a year who are now deceased based on information received through June 30, 2009.

In 2005, AIDS was the 24<sup>th</sup> leading cause of death for all Kentuckians (Table 14). AIDS was the 14<sup>th</sup> leading cause of death among blacks, 17<sup>th</sup> among Hispanics, and 29<sup>th</sup> among whites in Kentucky. For black males of any age in Kentucky, AIDS ranked as the 10<sup>th</sup> leading cause of death.

In 2005, among Kentuckians aged 25-44, AIDS was the 10<sup>th</sup> leading cause of death (Table 15). Among those aged 25-44, AIDS ranked as the 5<sup>th</sup> leading cause of death for black males, 8<sup>th</sup> among white males and black females, and 12<sup>th</sup> among white females. Among Hispanic females ages 25-44, AIDS tied as the 2<sup>nd</sup> leading cause of death with two other causes. Among those aged 25-44 in 2005, the AIDS death rate for blacks was approximately six times higher than for whites.

Overall, 45% of those reported with AIDS have died since the beginning of the epidemic in Kentucky (Table 16).

## AIDS Case Fatality Rates

**Table 17. Kentucky AIDS Case Fatality Rate Five Years  
Following AIDS Diagnosis**

Diagnosis Year	Total Cases	Status 5 Years Following AIDS Diagnosis		Case Fatality Rate <sup>(1)</sup>
		Living	Deceased	
1982	3	0	3	100%
1983	7	1	6	86%
1984	15	1	14	93%
1985	31	3	28	90%
1986	36	4	32	89%
1987	65	10	55	85%
1988	121	12	109	90%
1989	161	33	128	80%
1990	175	29	146	83%
1991	215	45	170	79%
1992	279	72	207	74%
1993	303	108	195	64%
1994	306	151	155	51%
1995	327	201	126	39%
1996	323	239	84	26%
1997	260	203	57	22%
1998	237	170	67	28%
1999	230	180	50	22%
2000	212	157	55	26%
2001	217	172	45	21%
2002	240	186	54	23%
2003	196	163	33	17%
<b>TOTAL</b>	<b>3959</b>	<b>2140</b>	<b>1819</b>	<b>46%</b>

Table 17 examines the proportion of individuals who died within five years of their AIDS diagnosis (i.e., case fatality rate). The data show a decline in case fatality rates over time. For example of the 175 individuals diagnosed with AIDS in 1990, 146 (83%) died within 5 years, while only 17% of those diagnosed in 2003 died within 5 years. The decline in case fatality rates since 1982 is likely due to an increased understanding of the virus, which has resulted in new medical monitoring techniques, improved supportive care and better treatment strategies, such as antiretroviral therapy.

## Section II: HIV Infections Diagnosed in Kentucky

### Notes to the Reader:

- Only cases first diagnosed in the first full year of confidential name-based HIV reporting (2005) or later are included in this section.
- Trend data will not be presented at this time due to the limited number of years available for analysis.
- As with AIDS data, reporting delays also exist for the HIV data, especially in the most recent years.
- The data presented in this section on HIV infections should **not** be compared directly to the cumulative AIDS data presented in the previous section because unlike the cumulative AIDS data, the HIV data only extend over a period of four and a half years.

**Table 18. Kentucky HIV Diagnoses, 2005-2009**

Year of Diagnosis	Total HIV Diagnoses	Without AIDS**		Concurrent with AIDS Diagnosis***	
	N	N	%	N	%
2005	334	251	75%	83	25%
2006	345	264	77%	81	23%
2007	404	308	76%	96	24%
2008	375	281	75%	94	25%
2009*	125	101	81%	24	19%
<b>Total</b>	<b>1583</b>	<b>1205</b>	<b>76%</b>	<b>378</b>	<b>24%</b>

\*Data reported through June 30, 2009.

\*\*Without AIDS diagnosis in the same calendar month as the HIV diagnosis.

\*\*\* Concurrent is defined as having an HIV and AIDS diagnosis in the same calendar month.

Between January 1, 2005 and June 30, 2009 there have been a total of 1,583 HIV infections reported in Kentucky (Table 18). Of these infections, 24% were concurrently diagnosed with AIDS during the same calendar month as the initial HIV diagnosis. While the number of new HIV infections spiked in calendar year 2007, the proportion of concurrent diagnoses has remained fairly steady from 2005 through 2008.

Table 19 (page 27) examines the distribution of HIV infections among individuals diagnosed between January 1, 2005 and June 30, 2009 by sex, age at diagnosis, race/ethnicity, transmission category, and stage of disease progression at time of diagnosis. Over two-thirds (81%) of HIV infections were male. Eighty-three percent of all HIV infections diagnosed in this time period were among individuals 20-49 years of age. There were differences in the distribution of age at diagnosis between HIV without AIDS cases and cases concurrently diagnosed. For example, although individuals diagnosed between 40-49 years of age made up 25% of the cases diagnosed with HIV without AIDS, this age group represented the highest proportion (39%) of all cases concurrently diagnosed with AIDS. In comparison, individuals diagnosed between 20-29 years of age represented 30% of the HIV without AIDS diagnoses, but only represented 13% of all cases concurrently diagnosed with AIDS. Minorities are disproportionately impacted as blacks represented 36% and Hispanics 7% of all diagnosed HIV infections in the reported period, yet accounted for only 7.6% and 2.4% of the general Kentucky population respectively in 2008. Unlike other races, Hispanics had almost half of their total cases diagnosed concurrently with AIDS (n=44, 41%), in comparison to 205, 23% of total white cases and 126, 22% of total Black cases. A sizable percentage (30%) of cases has an undetermined transmission category, which makes it difficult to interpret the HIV risk distribution of cases.

## HIV Diagnoses in Kentucky by Selected Characteristics, 2005-2009\*

**Table 19. Kentucky HIV Diagnoses by Sex, Age at Diagnosis, Race/Ethnicity, and Transmission Category, 2005-2009\***

Characteristics	Total HIV Diagnoses		Without AIDS**		Concurrent with AIDS Diagnosis***	
	N	% <sup>(1)</sup>	N	% <sup>(1)</sup>	N	% <sup>(1)</sup>
<b><u>SEX</u></b>						
Male	1285	81%	975	81%	310	82%
Female	298	19%	230	19%	68	18%
<b><u>AGE AT DIAGNOSIS</u></b>						
<13	10	1%	9	1%	1	0%
13-19	77	5%	75	6%	2	1%
20-29	407	26%	356	30%	51	13%
30-39	437	28%	322	27%	115	30%
40-49	452	29%	304	25%	148	39%
50+	200	13%	139	12%	61	16%
<b><u>RACE/ETHNICITY</u></b>						
White, Not Hispanic	874	55%	669	56%	205	54%
Black, Not Hispanic	568	36%	442	37%	126	33%
Hispanic	108	7%	64	5%	44	12%
Other	27	2%	24	2%	3	1%
Unknown	6	0%	6	0%	0	0%
<b><u>TRANSMISSION CATEGORY</u></b>						
MSM <sup>(2)</sup>	747	47%	592	49%	155	41%
IDU <sup>(3)</sup>	107	7%	68	6%	39	10%
MSM and IDU	36	2%	30	2%	6	2%
Heterosexual <sup>(4)</sup>	211	13%	152	13%	59	16%
Perinatal	8	1%	7	1%	1	0%
Undetermined <sup>(5)</sup>	474	30%	356	30%	118	31%
<b>TOTAL</b>	<b>1583</b>	<b>100%</b>	<b>1205</b>	<b>100%</b>	<b>378</b>	<b>100%</b>

\*Data reported January 1, 2005 through June 30, 2009.

\*\*Without AIDS diagnosis in the same calendar month as the HIV diagnosis.

\*\*\* Concurrent is defined as having an HIV and AIDS diagnosis in the same calendar month.

(1) Percentages may not total to 100 due to rounding.

(2) MSM = Men Having Sex With Men.

(3) IDU = Injection Drug Use.

(4) "Heterosexual" includes persons who have had heterosexual contact with a person with HIV or at risk for HIV.

(5) "Undetermined" refers to persons whose mode of exposure to HIV is unknown. This includes persons who are under investigation, dead, lost to investigation, refused interview, and persons whose mode of exposure remain undetermined after investigation.

## HIV Diagnoses in Kentucky by Demographic Characteristics, 2005-2009<sup>(1)</sup>

**Table 20. Kentucky HIV Diagnoses by Sex, Age at Diagnosis, Race/Ethnicity, Transmission Category and Year of Diagnosis 2005-2009**

Characteristics	2005	%	2006	%	2007	%	2008	%	2009 <sup>(1)</sup>	%	Total	%
<b><u>SEX</u></b>												
Male	269	81%	288	83%	308	76%	317	85%	103	82%	1285	81%
Female	65	19%	57	17%	96	24%	58	15%	22	18%	298	19%
<b>TOTAL<sup>(2)</sup></b>	<b>334</b>	<b>100%</b>	<b>345</b>	<b>100%</b>	<b>404</b>	<b>100%</b>	<b>375</b>	<b>100%</b>	<b>125</b>	<b>100%</b>	<b>1583</b>	<b>100%</b>
<b><u>AGE AT DIAGNOSIS</u></b>												
<13	5	1%	2	1%	2	0%	1	0%	0	0%	10	1%
13-19	12	4%	9	3%	29	7%	21	6%	6	5%	77	5%
20-29	85	25%	81	23%	101	25%	99	26%	41	33%	407	26%
30-39	96	29%	98	28%	114	28%	102	27%	27	22%	437	28%
40-49	91	27%	106	31%	115	28%	105	28%	35	28%	452	29%
50+	45	13%	49	14%	43	11%	47	13%	16	13%	200	13%
<b>TOTAL<sup>(2)</sup></b>	<b>334</b>	<b>100%</b>	<b>345</b>	<b>100%</b>	<b>404</b>	<b>100%</b>	<b>375</b>	<b>100%</b>	<b>125</b>	<b>100%</b>	<b>1583</b>	<b>100%</b>
<b><u>RACE/ETHNICITY</u></b>												
White, Not Hispanic	199	60%	190	55%	207	51%	201	54%	77	62%	874	55%
Black, Not Hispanic	106	32%	132	38%	156	39%	142	38%	32	26%	568	36%
Hispanic	22	7%	17	5%	30	7%	26	7%	13	10%	108	7%
Other/Unknown	7	2%	6	2%	11	3%	6	2%	3	2%	33	2%
<b>TOTAL<sup>(2)</sup></b>	<b>334</b>	<b>100%</b>	<b>345</b>	<b>100%</b>	<b>404</b>	<b>100%</b>	<b>375</b>	<b>100%</b>	<b>125</b>	<b>100%</b>	<b>1583</b>	<b>100%</b>
<b><u>TRANSMISSION CATEGORY</u></b>												
MSM <sup>(3)</sup>	173	52%	186	54%	171	42%	166	44%	51	41%	747	47%
IDU <sup>(4)</sup>	25	7%	24	7%	30	7%	22	6%	6	5%	107	7%
MSM and IDU	11	3%	9	3%	6	1%	6	2%	4	3%	36	2%
Heterosexual <sup>(5)</sup>	81	24%	52	15%	54	13%	18	5%	6	5%	211	13%
Perinatal	5	1%	1	0%	1	0%	1	0%	0	0%	8	1%
Undetermined <sup>(6)</sup>	39	12%	73	21%	142	35%	162	43%	58	46%	474	30%
<b>TOTAL<sup>(2)</sup></b>	<b>334</b>	<b>100%</b>	<b>345</b>	<b>100%</b>	<b>404</b>	<b>100%</b>	<b>375</b>	<b>100%</b>	<b>125</b>	<b>100%</b>	<b>1583</b>	<b>100%</b>

(1) Data reported January 1, 2005 through June 30, 2009.

(2) Percentages may not total 100% due to rounding.

(3) MSM = Men Having Sex With Men

(4) IDU = Injection Drug Use

(5) "Heterosexual" includes persons who have had heterosexual contact with a person with HIV or at risk for HIV.

(6) "Undetermined" refers to persons whose mode of exposure to HIV is unknown. This includes persons who are under investigation, deceased, lost to investigation, refused interview, and persons whose mode of exposure remains undetermined after investigation.

Table 20 shows the number of new HIV cases by year of diagnosis and demographics. In 2007, there was an increase in the number of females reported with HIV infection (n=96), but it has dropped since. MSM had a 12% decrease in the number of infections diagnosed in 2007 in comparison to 2006, whereas the number of cases with undetermined mode of exposure has continued to increase. In terms of race, minorities are disproportionately impacted by HIV disease. In 2008 for instance, blacks and Hispanics made up 7.6% and 2.4% of Kentucky's population respectively, but accounted for 38% and 7% of new HIV diagnoses in the state respectively. For blacks, this was over four times their general representation in the population, and three

## HIV Diagnoses in Kentucky by Selected Characteristics, 2005-2009\*

**Table 21. Kentucky HIV Diagnoses by Sex, Age at Diagnosis, and Race/Ethnicity, 2005-2009\***

	Age Group	White, Not Hispanic		Black, Not Hispanic		Hispanic		Other		Unknown		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>MALE</b>	<13	2	0%	3	1%	0	0%	0	0%	0	0%	5	0%
	13-19	13	2%	41	10%	2	2%	3	17%	2	33%	61	5%
	20-29	174	23%	117	28%	31	36%	5	28%	1	17%	328	26%
	30-39	209	28%	107	25%	34	39%	5	28%	1	17%	356	28%
	40-49	264	35%	97	23%	14	16%	4	22%	1	17%	380	30%
	50+	87	12%	60	14%	6	7%	1	6%	1	17%	155	12%
	<b>Total</b>	<b>749</b>	<b>100%</b>	<b>425</b>	<b>100%</b>	<b>87</b>	<b>100%</b>	<b>18</b>	<b>100%</b>	<b>6</b>	<b>100%</b>	<b>1285</b>	<b>100%</b>
<b>FEMALE</b>	<13	1	1%	3	2%	0	0%	1	11%	0	N/A	5	2%
	13-19	7	6%	6	4%	1	5%	2	22%	0	N/A	16	5%
	20-29	35	28%	31	22%	11	52%	2	22%	0	N/A	79	27%
	30-39	35	28%	38	27%	7	33%	1	11%	0	N/A	81	27%
	40-49	30	24%	39	27%	1	5%	2	22%	0	N/A	72	24%
	50+	17	14%	26	18%	1	5%	1	11%	0	N/A	45	15%
	<b>Total</b>	<b>125</b>	<b>100%</b>	<b>143</b>	<b>100%</b>	<b>21</b>	<b>100%</b>	<b>9</b>	<b>100%</b>	<b>0</b>	<b>N/A</b>	<b>298</b>	<b>100%</b>

\*Data reported January 1, 2005 through June 30, 2009.

Table 21 examines the distribution of HIV infections among individuals diagnosed between January 1, 2005, and June 30, 2009, within race/ethnicity categories by sex and age at diagnosis. Caution should be taken when interpreting the data for the other and unknown race/ethnicity categories as the number of cases is small which causes amplification in the percentages. The largest number of female HIV cases (143, 48%) were reported among blacks, indicating a disproportionate impact, as blacks represented only 7.6% of all females in Kentucky in mid 2008.

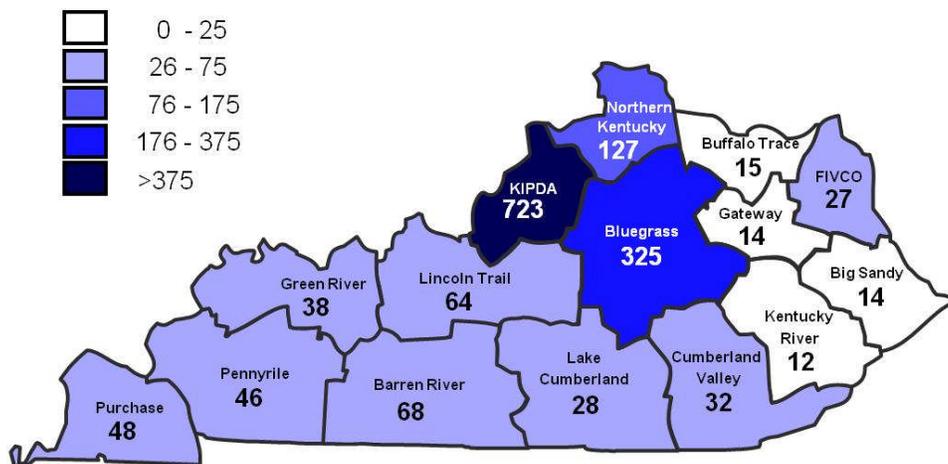
Among all males, majority of cases were diagnosed in their 40s (380, 30%). A similar trend exists among white males, but for black males and Hispanic males, the majority were diagnosed in their 20s and 30s respectively.

Among all females, majority of cases were diagnosed between the ages of 20-39. A similar trend exists among white females, but for black females, majority were aged 30-49 years and 20-29 years for Hispanics at the time of diagnosis. A greater proportion of both Hispanic males (75%) and females (85%) were diagnosed between the ages of 20-39 years, as compared to 49% for black females, 51% for white males, 53% for black males and 56% for white females within the same age category.

## HIV Infections by Area Development District (ADD)

Figure 16. HIV Diagnoses by Area Development District (ADD) of Residence at Time of Diagnosis

Total HIV Diagnoses by ADD, January 1, 2005 – June 30, 2009



Note: 2 cases missing ADD at time of diagnosis.

Figure 16 examines the total number of HIV infections diagnosed between January 1, 2005 and June 30, 2009 by ADD. The data represent the total number of HIV infections, regardless of disease progression status in each ADD. The largest number of infections (n=723, 46%) diagnosed in this period were residing in the KIPDA ADD, which includes the city of Louisville. The second largest number of infections (n=325, 21%) were residents of the Bluegrass ADD at the time of diagnosis. The ADD's in the eastern Kentucky region had the smallest number of HIV infections diagnosed and reported during this period.

Figure 17. Percent of HIV Infections Reporting Concurrent Diagnoses with AIDS by Area Development District (ADD) of Residence at Time of Diagnosis, January 1, 2005-June 30, 2009

% Concurrent Diagnoses by ADD, January 1, 2005 – June 30, 2009

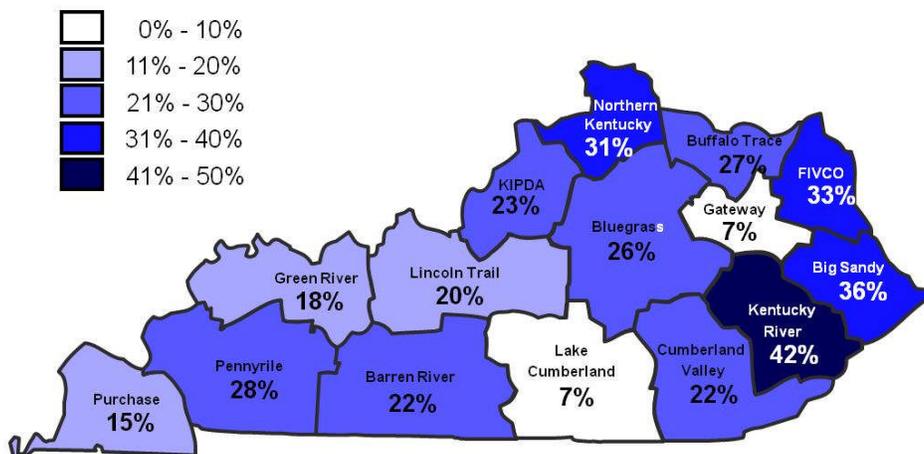


Figure 17 presents the percentage of total HIV infections within each ADD that were concurrently diagnosed with AIDS from January 1, 2005 to June 30, 2009. The percentage of concurrent HIV and AIDS infections diagnosed ranged from 0% to 42% among the ADDs. The ADDs with the top 2 highest proportion of concurrent HIV and AIDS infections were diagnosed in the eastern Kentucky region: the Kentucky River (42%) and Big Sandy (36%) ADDs. However, there were only a total of 12 and 14 HIV infections diagnosed in these ADDs respectively, so percentages should be interpreted with caution as small numbers amplify the percentages. The Northern Kentucky and FIVCO ADDs also had comparatively higher percentages of concurrent diagnoses: 31% and 33% respectively.

# HIV Counseling and Testing Sites

## Ora-Quick

Ora-Quick tests are a type of screening performed on oral mucosal transudate (OMT) in which results are ready in 20 minutes. The oral fluid based rapid test received FDA approval on March 26, 2004. Several agencies working in association with the state HIV Prevention grant are currently using rapid testing. Other agencies are being encouraged to begin using rapid testing. If your agency is interested in becoming an Ora-Quick site, please contact Tom Collins at (502) 564-6539 ext 3559.

### State Sponsored Ora-Quick Testing Sites\*

All state sponsored testing sites, offer **free** anonymous or confidential HIV testing. Testing hours and locations may vary. **Please contact the center to verify whether an appointment is needed or if walk-ins are acceptable.**

Area Health Education Center-Louisville  
Park Duvalle Comm. Health Center  
3015 Wilson Avenue  
Louisville, KY 40211  
(502) 774-4401 ext 1260 or (502) 776-5785

Kentucky Department for Public Health  
275 East Main Street  
Frankfort, Kentucky 40621  
(502) 564-6539 or (800) 420-7431

Area Health Education Center-Covington  
1030 Old State Road  
Park Hills, KY 41011  
(859) 442-1191

Lexington-Fayette County Health Department  
650 Newtown Pike  
Lexington, KY 40508  
(859) 288-2437

Area Health Education Center-Lexington  
Black & Williams Neighborhood Center  
498 Georgetown Street  
Lexington, KY 40508  
(859) 281-6086

Louisville Metro Public Health and Wellness  
850 Barrett Avenue, Suite 301  
Louisville, KY 40204  
(502) 574-5600

AIDS Volunteers of Lexington (AVOL)  
225 Walton Avenue, Suite 110  
Lexington, KY 40502  
(859) 225-3000

Matthew 25 AIDS Services  
452 Corydon Road  
Henderson, KY 42420  
(270) 826-0200

Bluegrass Community Health Center  
126 Cisco Road  
Lexington, KY 40504  
(859) 259-0717

Northern Kentucky District Health Dept.  
610 Medical Village Drive,  
Edgewood, KY 41017  
(859) 341-4264

Heartland CARES  
619 North 30th St  
Paducah, KY 42001

Owensboro Task Force  
224 South Ewing Road  
Owensboro, KY 42301  
(270) 993-6647

\*Please note that this list only includes those testing sites that are funded by the Kentucky Department for Public Health to administer Ora-Quick testing and **IS NOT** an all inclusive list of testing centers in the Commonwealth of Kentucky.

# HIV Counseling and Testing Sites

## State Sponsored Ora-Quick Testing Sites\* continued

All state sponsored testing sites, offer **free** anonymous or confidential HIV testing. Testing hours and locations may vary. **Please contact the center to verify whether an appointment is needed or if walk-ins are acceptable.**

Planned Parenthood of the Bluegrass  
508 West 2nd Street  
Lexington, KY 40508  
(859) 252-8494

Planned Parenthood—Louisville  
1025 S. Second Street  
Louisville, KY 40203  
(502) 584-2473

Volunteers of America—Louisville  
850 Barrett Avenue, Suite 302  
Louisville, KY 40204  
(502) 574-5373

Volunteers of America—Lexington  
1400 North Forbes Road  
Lexington, KY 40511  
(859) 254-3469

Western Kentucky University Health Services  
1906 College Heights Boulevard #8400  
Bowling Green, KY 42101-1041  
(270) 745-5033 or (270) 745-5653

\*Please note that this list only includes those testing sites that are funded by the Kentucky Department for Public Health to administer Ora-Quick testing and **IS NOT** an all inclusive list of testing centers in the Commonwealth of Kentucky.