



# HIV/AIDS Surveillance Report June 2014

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



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

**Steven L. Beshear**  
Governor

275 East Main Street, HS1GWA  
Frankfort, KY 40621  
(502) 564-3970  
Fax: (502) 564-9377  
[www.chfs.ky.gov](http://www.chfs.ky.gov)

**Audrey Tayse Haynes**  
Secretary

December 2014

Dear Reader:

Enclosed, please find the June 2014 issue of Kentucky's HIV/AIDS Surveillance Report which contains data on HIV infections among Kentuckians reported to the Department for Public Health.

Section I profiles cumulative and living HIV infections diagnosed among Kentuckians, regardless of progression to AIDS. Confidential AIDS reporting started in 1982, whereas legislation requiring confidential HIV name-based reporting was not enacted until July of 2004. Prior to that, HIV infections were reported with a unique code. HIV infections presented in this section (and throughout the report) include all HIV infections diagnosed, regardless of progression to AIDS. A total of 9,281 cumulative HIV infections were diagnosed and reported as of June 30, 2014. Of these HIV infections, 65% had progressed to AIDS as of the report date.

Section II profiles new HIV infections diagnosed among Kentuckians. In calendar year 2012, there were 377 new HIV infections diagnosed among Kentucky residents, at a diagnosis rate of 8.6 per 100,000 population. Trends among newly diagnosed infections are presented in this section, and disparities by race/ethnicity, age at diagnosis, sex and mode of transmission are highlighted.

Section III profiles HIV infections diagnosed with AIDS within 30 days of initial HIV diagnosis, also referred to as concurrent diagnoses. Analyses focus on the most recent 10.5 year period: January 1, 2004 through June 30, 2014. Twenty-six percent of the 3,576 new HIV disease diagnoses within that period were diagnosed within 30 days of the initial HIV diagnosis.

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/NR/ronlyres/13385B34-C9D1-42B6-B019-C0BA7A104D37/0/HIVAIDSAnnualReportJune2014.pdf>. 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).

Sincerely,

Peace Julie Nakayima, MPH  
Epidemiologist



## HIV/AIDS Surveillance Report Production:

Kentucky HIV/AIDS Branch  
Division of Epidemiology and Health Planning  
Department for Public Health  
Cabinet for Health and Family Services

**Address:** Kentucky Department for Public Health  
HIV/AIDS Branch  
275 East Main Street, HS2E-C  
Frankfort, KY 40621

**Phone:** (502) 564-6539 or (800) 420-7431  
(866) 510-0008 (Case Reporting only)  
(866) 510-0005 (KADAP Clients only)

**Fax:** (502) 564-9865 (non-confidential)

**Web site:** <http://chfs.ky.gov/dph/epi/hiv aids.htm>

**HIV/AIDS Program Staff**  
Branch Manager: Karen Sams  
Administrative Assistant: Kay Loftus

### For more information:

### Email Address

- ◆ **Care Coordinator/ Case Management Program**—Andrea Fiero Andrea.Fiero@ky.gov
- ◆ **KADAP Program Administrator**—Kelly Cunnagin KellyB.Cunnagin@ky.gov
- ◆ **HIV Health Insurance Continuation Program/KADAP Coordinator**—Gloria Dennis Gloria.Dennis@ky.gov
- ◆ **Ryan White Part B Program Administrator**— Vacant
- ◆ **Ryan White Services Program Manager**—Robert Burns Robert.Burns@ky.gov
- ◆ **HIV/AIDS Case Reporting**—Medina Tipton Medina.Tipton@ky.gov
- ◆ **HIV/AIDS Statistics**—Julie Nakayima Peace.Nakayima@ky.gov  
—Radmila Choate Radmila.Choate@ky.gov
- ◆ **HIV Prevention Administrative Section Supervisor**— Gayle Yocum Gayle.Yocum@ky.gov
- ◆ **HIV Prevention Initiatives**
  - ◆ **MSM Initiatives**—Mark Johnson MarkA.Johnson@ky.gov
  - ◆ **Minority Initiatives**—Beverly Mitchell Beverly.Mitchell@ky.gov
  - ◆ **Injection Drug User Initiatives**—Mahri Bahati Mahri.Bahati@ky.gov
- ◆ **HIV/AIDS Continuing Professional Education Program**—Greg Lee Greg.Lee@ky.gov
- ◆ **For media inquiries, please call (502) 564-6786 for assistance.**

## Data Sources

The HIV/AIDS Annual Report presents data regarding HIV disease cases diagnosed among Kentuckians and reported to the Kentucky Department for Public Health's HIV/AIDS Surveillance Program through June 30, 2014. In this annual edition, HIV disease cases diagnosed among Kentuckians are presented, regardless of disease progression. 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, 2010. Available at <http://ksdc.louisville.edu>. Accessed August 12, 2014.

## 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, depending on county of residence.

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's 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

**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 less than 14% of the total white blood cells (lymphocytes).

**HIV Disease:** Data include persons with a diagnosis of HIV infection regardless of stage of disease. This includes persons with HIV (non-AIDS), as well as those who have advanced stages of the disease, i.e., AIDS.

**Date of Report:** The date an HIV disease diagnosis is reported to the Kentucky HIV/AIDS Surveillance Program.

**Date of Diagnosis:** The date of an individual's initial HIV disease diagnosis.

**Transmission Category:** Classification used to summarize the behavior or event most likely responsible for disease transmission. Each case is only included in a single transmission route.

- ◆ **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.
- ◆ **Heterosexual Contact:** A person reporting specific heterosexual contact with a person known to have, or to be at high risk for, HIV infection E.g., an injection drug user, a bisexual male (females only), or a person with hemophilia/coagulation disorder.
- ◆ **Female Heterosexual Contact (FHC):** Different than heterosexual contact above and applies only to persons whose birth sex is female. It includes a female who doesn't fit in the heterosexual contact category above, with no reported injection drug use, but reports sexual contact with a male and no additional information about the male's HIV status or behaviors. This category was accepted by the CDC in 2010 and Kentucky's data were revised starting with the June 2012 annual report to incorporate it. Cases previously categorized as "undetermined" and meeting this criteria were re-classified.
- ◆ **Hemophilia:** Individuals receiving clotting factor for hemophilia/coagulation disorder.
- ◆ **Perinatal:** Individuals born to a mother with HIV or a mother with an exposure history listed in the transmission category hierarchy.

Transmission Category (continued):

- ◆ **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.
- ◆ **Undetermined/No Identified Risk (NIR):** Individuals reporting no exposure history to HIV through any of the modes listed in the transmission category hierarchy above. Cases previously classified in this category who meet the Female Heterosexual Contact have been re-assigned beginning in June 2012.

**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 statistics for the most recent years of diagnosis may not be complete. Therefore the data for 2013 and 2014 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- HIV data are presented based on residence at the time initial HIV infection was diagnosed. Data presented on living cases reflect those originally diagnosed while living 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, routine matches with Kentucky death certificates (vital statistics registry) and Social Security Death Master Files (SSDMF).
4. Transmission Route- Despite possible existence of multiple methods through which HIV was transmitted, cases are assigned a single most likely transmission route 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 route. 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, including the re-classification of females into the "Female Heterosexual Contact" category.
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. Data suppression rules are applied based on the population denominators for analyses below the state level. Additional numerator suppression rules are applied for groups or geographic areas that have <500,000 population. Rates are not 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 Disease, 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. This term is used interchangeably with HIV disease. 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 diagnosed with HIV, and had not progressed to AIDS as of the report date. Concurrent diagnosis with AIDS includes those who were diagnosed with AIDS within 30 days of initial HIV diagnosis. See "Key Terminology" on page 3 for a description of how HIV and AIDS are defined.

## Section I: Cumulative and Living HIV Infections Diagnosed through June 30, 2014, Kentucky

	Age Group	White, Not Hispanic		Black, Not Hispanic		Hispanic		Other/Unknown		TOTAL	
		No.	%	No.	%	No.	%	No.	%	No.	%
<b>MALE</b>	<13	24	<1	26	1	0	0	0	0	50	1
	13-19	116	2	128	6	3	1	9	6	256	3
	20-29	1,374	28	759	33	117	39	50	34	2,300	30
	30-39	1,803	37	715	31	112	38	48	32	2,678	35
	40-49	1,135	23	494	21	40	13	32	21	1,701	22
	50+	457	9	201	9	26	9	10	7	694	9
	<b>TOTAL<sup>(2)</sup></b>	<b>4,909</b>	<b>100</b>	<b>2,323</b>	<b>100</b>	<b>298</b>	<b>100</b>	<b>149</b>	<b>100</b>	<b>7,679</b>	<b>100</b>
<b>FEMALE</b>	<13	13	2	17	2	1	1	1	2	32	2
	13-19	39	5	45	6	5	7	3	5	92	6
	20-29	212	30	223	29	28	42	14	23	477	30
	30-39	233	33	257	34	16	24	20	33	526	33
	40-49	135	19	146	19	12	18	17	28	310	19
	50+	79	11	76	10	5	7	5	8	165	10
	<b>TOTAL<sup>(2)</sup></b>	<b>711</b>	<b>100</b>	<b>764</b>	<b>100</b>	<b>67</b>	<b>100</b>	<b>60</b>	<b>100</b>	<b>1,602</b>	<b>100</b>

(1) Includes HIV disease cases diagnosed from the beginning of the epidemic through June 30, 2014.

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

\*Age at initial HIV diagnosis.

Since the beginning of the epidemic, the majority of HIV cases diagnosed among Kentuckians have been reported among males (7,679, 83%). In terms of age at diagnosis, more male HIV cases were diagnosed in their 30's (2,678, 35%) than any other decade. Among white males the highest percentages of cumulative cases were aged 30-39 years at the time of diagnosis (37%). Among black males, 33% of cases were aged 20-29 years and 31% were aged 30-39 years at time of diagnosis. The percentage of Hispanic males in their 20's at time of diagnosis (39%) was higher compared to blacks (33%) and whites (28%). Conversely, Hispanic males had the lowest percentage of cases aged 40-49 years at time of diagnosis (13%), compared with black males and white males (21% and 23% respectively). Six percent of black males were teenagers at time of diagnosis compared to 2% of white males and 1% of Hispanic males.

Similar results exist among females with HIV. More females were diagnosed with HIV infection in their 30's (526, 33%) than any other decade. Similar percentages of black and white females were diagnosed in that same decade of life (33% each). The highest percentage of Hispanic females was diagnosed with HIV in their 20's (42%). Hispanic females tend to be younger at the time of diagnosis than their racial and ethnic counterparts.

**Table 2. Cumulative<sup>(1)</sup> Adult/Adolescent\* HIV Disease Cases By Transmission Route, Race/Ethnicity, and Sex through June 30, 2014, Kentucky**

	Transmission Category	White, Not Hispanic		Black, Not Hispanic		Hispanic		Other/Unknown		TOTAL	
		No.	%	No.	%	No.	%	No.	%	No.	%
<b>MALE</b>	MSM <sup>(2)</sup>	3,554	73	1,194	52	148	50	91	61	4,987	65
	IDU <sup>(3)</sup>	272	6	328	14	32	11	12	8	644	8
	MSM and IDU	300	6	145	6	7	2	6	4	458	6
	Heterosexual <sup>(4)</sup>	205	4	215	9	33	11	13	9	466	6
	Other <sup>(5)</sup>	88	2	14	1	0	0	0	0	102	1
	Undetermined <sup>(6)</sup>	466	10	401	17	78	26	27	18	972	13
	<b>TOTAL<sup>(7)</sup></b>	<b>4,885</b>	<b>100</b>	<b>2,297</b>	<b>100</b>	<b>298</b>	<b>100</b>	<b>149</b>	<b>100</b>	<b>7,629</b>	<b>100</b>
<b>FEMALE</b>	IDU <sup>(3)</sup>	149	21	152	20	9	14	10	17	320	20
	Heterosexual <sup>(4)</sup>	366	52	366	49	37	56	35	59	804	51
	Female Heterosexual <sup>(8)</sup>	109	16	165	22	15	23	9	15	298	19
	Other <sup>(5)</sup>	12	2	4	1	0	0	0	0	16	1
	Undetermined <sup>(6)</sup>	62	9	60	8	5	8	5	8	132	8
	<b>TOTAL<sup>(7)</sup></b>	<b>698</b>	<b>100</b>	<b>747</b>	<b>100</b>	<b>66</b>	<b>100</b>	<b>59</b>	<b>100</b>	<b>1,570</b>	<b>100</b>

\*Cases are classified as adult/adolescent if they were 13 years of age or older at time of HIV diagnosis.

(1) Includes HIV disease cases diagnosed from the beginning of the epidemic through June 30, 2014.

(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) "Other" includes persons who had a transfusion/transplant or hemophilia/coagulation disorder listed as mode of transmission or pediatric cases diagnosed as adults.

(6) "Undetermined" refers to persons whose route 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 remains undetermined after investigation.

(7) Percentages may not total 100% due to rounding

(8) Female Heterosexual = A female not reporting drug use, but reporting sex with male. See terminology on page 3 for additional definition.

The majority of cumulative adult/adolescent male HIV infections (65%) were reported with MSM as the primary route of exposure, while among adult/adolescent women, the majority (51%) were exposed through heterosexual contact with a person with HIV or at high risk for HIV contraction, e.g., a person who injects drugs. Adult/adolescent minority males (14% of black males and 11% of Hispanic males) reported higher percentages of IDU as the route of transmission, in comparison to non-minority adult/adolescents (6% of whites). Conversely, a higher percentage of adult/adolescent white males (73%) reported MSM as the primary route of transmission in comparison to 52% of all adult/adolescent black males and 50% of all adult/adolescent Hispanic males.

The majority of adult/adolescent female cases within each racial/ethnic group were infected through heterosexual contact. After factoring in female heterosexual contact as a risk category, a higher percentage of infections with undetermined routes of transmission exists among adult/adolescent males (13%) than adult/adolescent females (8%). Adult/adolescent Hispanic males (26%) and black males (17%) have higher percentages of cases without an identified risk factor than adult/adolescent white males (10%). The existence of large percentages of infections without known routes 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 and service provision and guides resource allocation.

## Cumulative HIV Diagnoses by Age at Diagnosis and Sex, Kentucky

Figure 1 shows the distribution of cumulative Kentucky HIV cases by age at diagnosis. Over one-third (34%) of cumulative HIV cases in Kentucky were aged 30-39 years at time of diagnosis. Persons aged 20-29 years account for almost a third of cumulative infections (30%). Children (<13 years at diagnosis) and teenagers account for the smallest percentages of cases at less than 5% each.

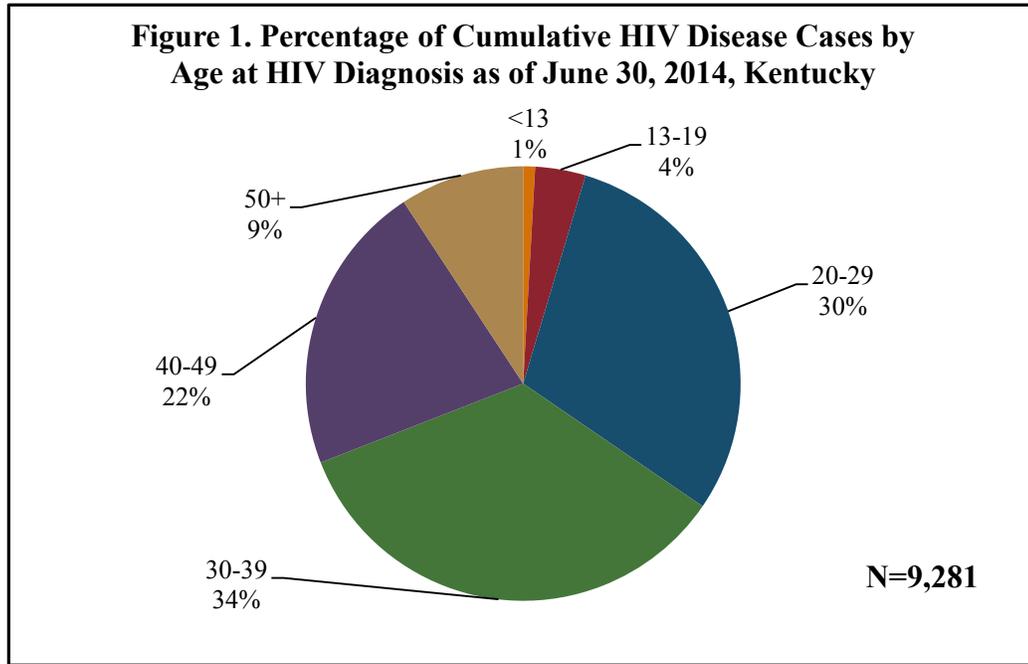
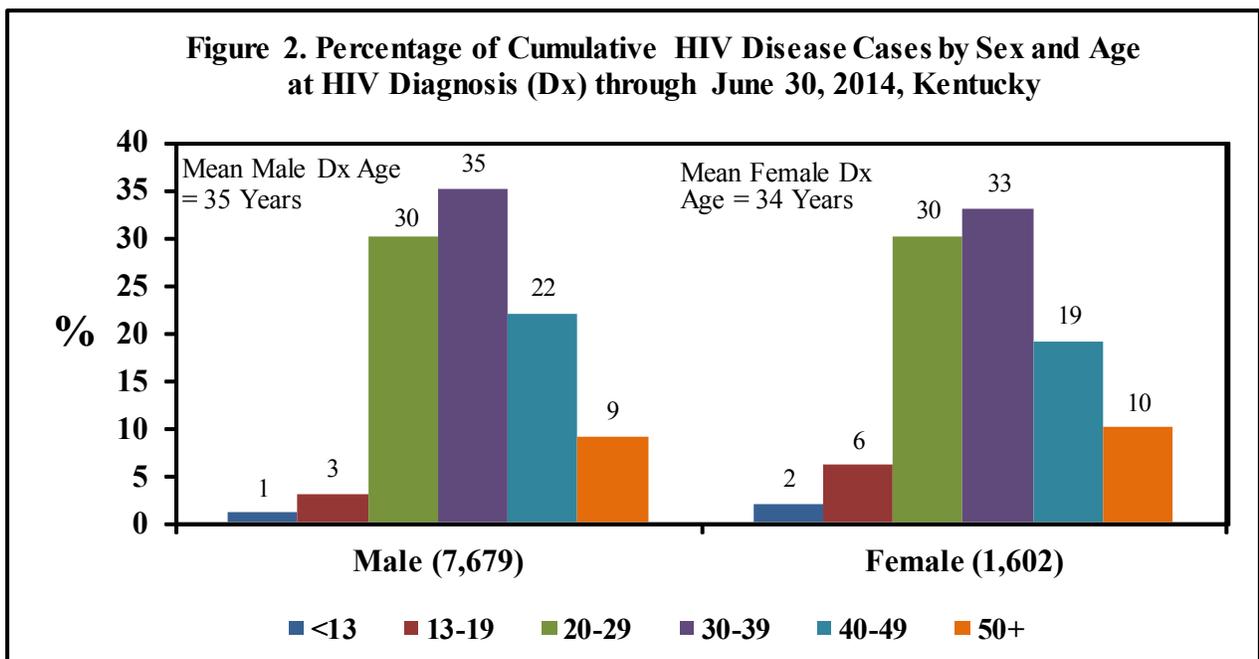


Figure 2 shows the percentage of HIV cases by age group and sex (percentages add up to 100% by sex). Cumulatively, 7,679 male HIV cases have been diagnosed, of which 35% were aged 30-39 years at time of diagnosis. Similarly, females aged 30-39 years at time of diagnosis accounted for the highest percentage of cumulative HIV cases by age group among females (33%). The mean age at diagnosis for males is 35 ( $\pm 10.6$ ) years and 34 ( $\pm 11.8$ ) years for females.



## Cumulative HIV Diagnoses by Race/Ethnicity and Sex, Kentucky

Figure 3 shows that 61% of cumulative HIV cases diagnosed in Kentucky are in whites. One-third are in blacks, and 4% are in Hispanics.

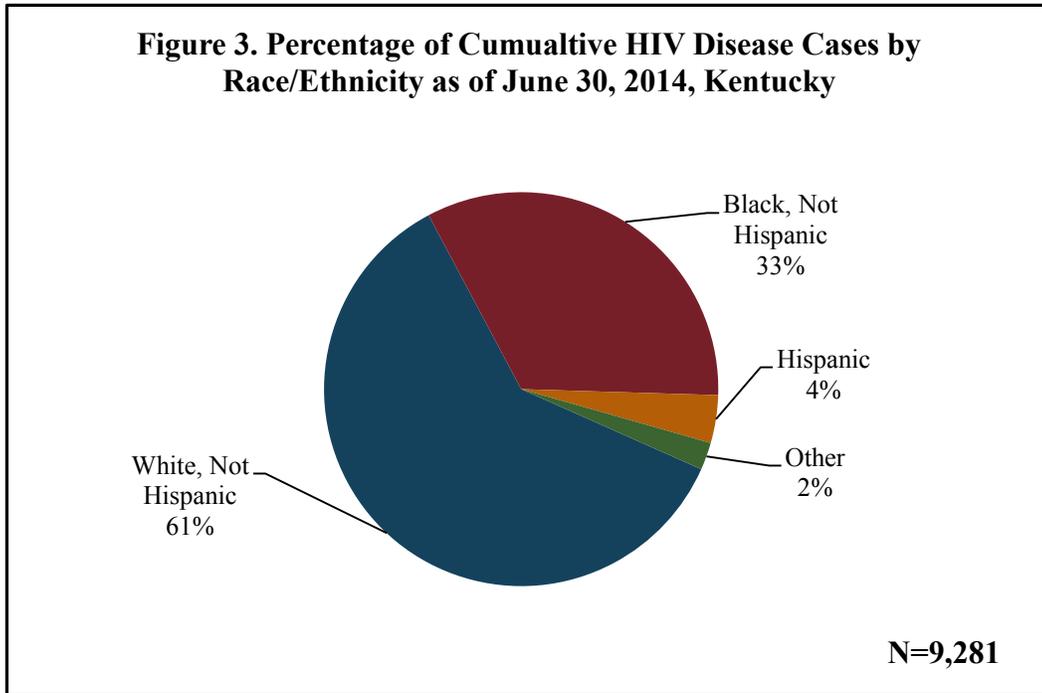
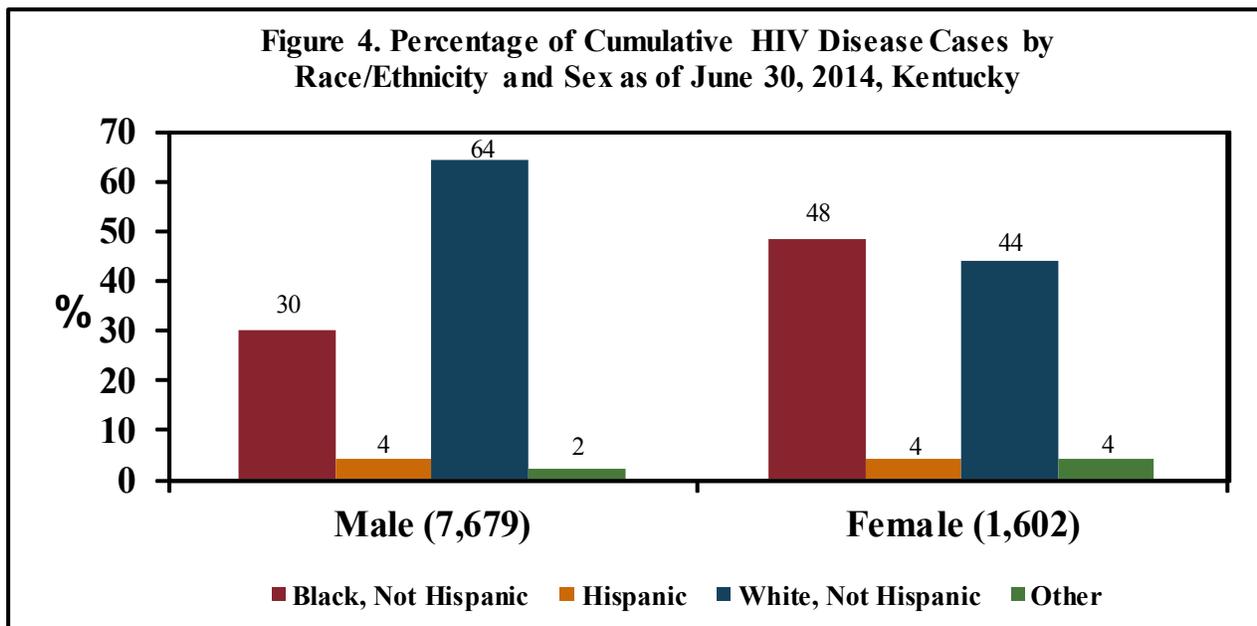
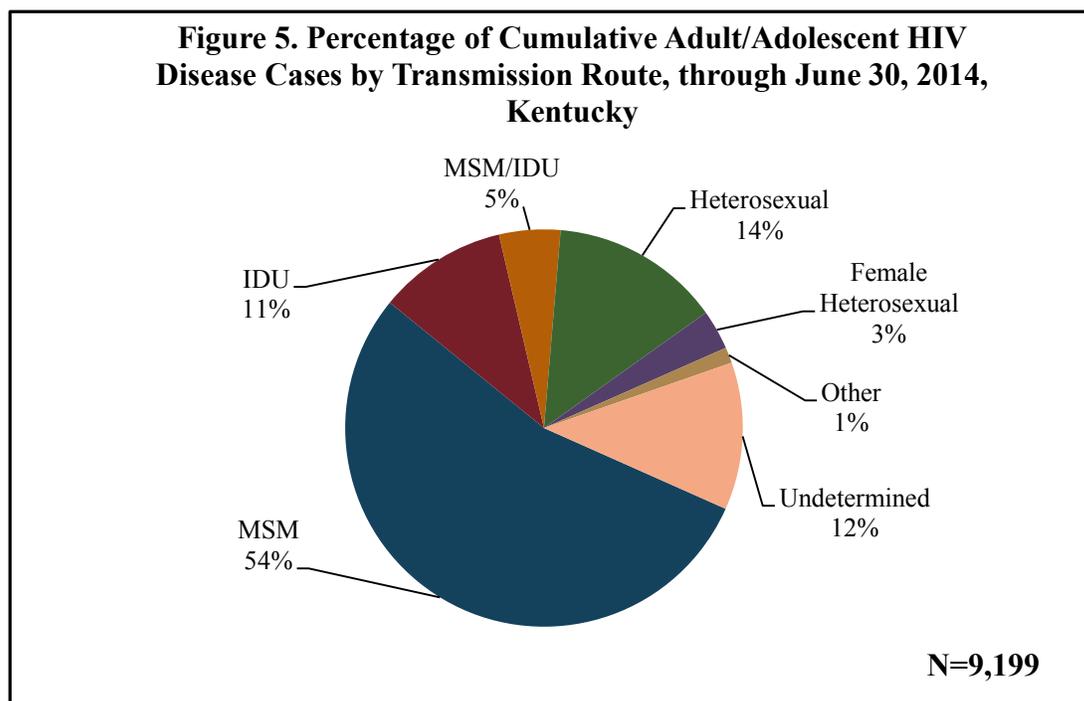


Figure 4 shows the percentages of cumulative HIV cases within each sex group by race/ethnicity (percentages add up to 100% by sex). Among males, the majority are white (64%), with black males accounting for 30% of cumulative cases. The distribution among females by racial/ethnic grouping differs from males, with black females accounting for a higher percentage of cases than white females: 48% and 44%, respectively.



## Cumulative Adult/Adolescent HIV Diagnoses by Transmission Route, Kentucky



**Table 3. Cumulative Adult/Adolescent HIV Disease Cases by Transmission Route, through June 30, 2014, Kentucky**

Transmission Route	No.	%
MSM	4,987	54
IDU	964	11
MSM/IDU	458	5
Heterosexual	1,270	14
Female Heterosexual*	298	3
Other†	118	1
Undetermined	1,104	12
Total**	9,199	100

\*Female Heterosexual = A female not reporting drug use, but reporting sex with male. See terminology on page 3 for additional definition.

\*\*Percentages may not total 100% due to rounding.

†"Other" includes persons with 'transfusion/transplant' or 'hemophilia/coagulation' listed as mode of transmission. Also includes persons with perinatal exposure but were diagnosed as an adult.

In Kentucky, 54% of cumulative adult/adolescent HIV cases identified their primary transmission route as men who have sex with men (MSM), as shown in Figure 5. Fourteen percent of adult/adolescent HIV cases reported heterosexual contact as their primary transmission route, 11% reported injection drug use (IDU), and 5% reported both MSM and IDU. Twelve percent of cumulative adult/adolescent HIV cases were reported without a risk factor identified. Cumulative adult/adolescent HIV case frequencies for each route of exposure are displayed in Table 3.

## Cumulative HIV Diagnoses by Residential Area Development District (ADD) and County at Time of Diagnosis, Kentucky

**Table 4. Cumulative and Living HIV Disease Cases By Residential Area Development District (ADD) and County at Time of Diagnosis, through June 30, 2014, Kentucky**

ADD/County	Total HIV Disease Cases <sup>(1)</sup>	Total Living with HIV Disease <sup>(2)</sup>	ADD/County	Total HIV Disease Cases <sup>(1)</sup>	Total Living with HIV Disease <sup>(2)</sup>
<b>Barren River</b>	<b>324</b>	<b>200</b>	<b>Buffalo Trace</b>	<b>51</b>	<b>32</b>
Allen	16	8	Bracken	7	5
Barren	43	25	Fleming	6	3
Butler	14	14	Lewis	15	8
Edmonson	7	5	Mason	23	16
Hart	11	7	Robertson	0	0
Logan	25	14			
Metcalfe	7	3	<b>Cumberland Valley</b>	<b>169</b>	<b>106</b>
Monroe	15	10	Bell	20	14
Simpson	19	13	Clay	29	22
Warren	167	101	Harlan	22	11
			Jackson	11	6
<b>Big Sandy</b>	<b>64</b>	<b>40</b>	Knox	18	12
Floyd	17	11	Laurel	33	20
Johnson	8	3	Rockcastle	6	4
Magoffin	5	4	Whitley	30	17
Martin	7	6			
Pike	27	16	<b>FIVCO</b>	<b>134</b>	<b>81</b>
			Boyd	82	48
<b>Bluegrass</b>	<b>1,809</b>	<b>1,279</b>	Carter	16	11
Anderson	28	19	Elliott	5	4
Bourbon	31	23	Greenup	21	14
Boyle	31	23	Lawrence	10	4
Clark	52	38			
Estill	10	6	<b>Gateway</b>	<b>88</b>	<b>59</b>
Fayette	1,237	864	Bath	8	5
Franklin	93	63	Menifee	10	9
Garrard	10	6	Montgomery	21	17
Harrison	10	6	Morgan	30	14
Jessamine	67	53	Rowan	19	14
Lincoln	11	6			
Madison	97	73	<b>Green River</b>	<b>269</b>	<b>167</b>
Mercer	31	18	Daviess	129	74
Nicholas	6	6	Hancock	6	3
Powell	11	8	Henderson	60	35
Scott	55	45	McLean	7	5
Woodford	29	22	Ohio	11	7
			Union	52	42
			Webster	4	1

(1) Total cases with HIV disease regardless of progression to AIDS, both living and deceased.

(2) Living cases regardless of current residence.

Note: Residence at diagnosis missing for 1 cumulative case and 1 living case.

Continued on page 11

## Cumulative HIV Diagnoses by Residential Area Development District (ADD) and County at Time of Diagnosis, Kentucky (continued)

**Table 4. Cumulative and Living HIV Disease Cases By Residential Area Development District (ADD) and County at Time of Diagnosis, through June 30, 2014, Kentucky (continued)**

ADD/County	Total HIV Disease Cases <sup>(1)</sup>	Total Living with HIV Disease <sup>(2)</sup>	ADD/County	Total HIV Disease Cases <sup>(1)</sup>	Total Living with HIV Disease <sup>(2)</sup>
<b>Kentucky River</b>	<b>68</b>	<b>44</b>	<b>Northern Kentucky</b>	<b>750</b>	<b>495</b>
Breathitt	4	2	Boone	120	84
Knott	9	7	Campbell	155	103
Lee	6	5	Carroll	16	12
Leslie	2	0	Gallatin	2	1
Letcher	20	12	Grant	31	20
Owsley	3	3	Kenton	413	265
Perry	18	11	Owen	5	3
Wolfe	6	4	Pendleton	8	7
<b>KIPDA/North Central</b>	<b>4,530</b>	<b>2,905</b>	<b>Pennyryle</b>	<b>294</b>	<b>158</b>
Bullitt	88	69	Caldwell	23	13
Henry	28	20	Christian	128	81
Jefferson	4,153	2,669	Crittenden	9	7
Oldham	172	84	Hopkins	40	16
Shelby	71	55	Livingston	14	8
Spencer	10	7	Lyon	18	7
Trimble	8	1	Muhlenberg	29	12
<b>Lake Cumberland</b>	<b>154</b>	<b>110</b>	Todd	20	7
Adair	7	4	Trigg	13	7
Casey	9	7	<b>Purchase</b>	<b>296</b>	<b>185</b>
Clinton	10	8	Ballard	10	5
Cumberland	4	3	Calloway	39	26
Green	8	6	Carlisle	5	3
McCreary	18	17	Fulton	9	6
Pulaski	56	35	Graves	49	32
Russell	12	8	Hickman	8	7
Taylor	18	16	Marshall	21	14
Wayne	12	6	McCracken	155	92
<b>Lincoln Trail</b>	<b>280</b>	<b>190</b>			
Breckinridge	13	6			
Grayson	16	10			
Hardin	168	119			
Larue	5	4			
Marion	16	8			
Meade	26	20			
Nelson	32	21			
Washington	4	2			

(1) Total cases with HIV disease regardless of progression to AIDS, both living and deceased.

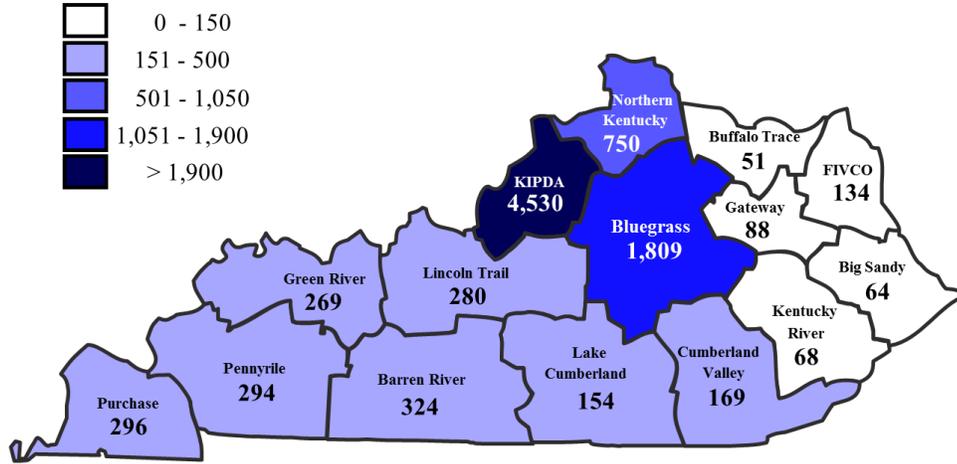
(2) Living cases regardless of current residence.

Note: Residence at diagnosis missing for 1 cumulative case and 1 living case.

## Cumulative HIV Diagnoses by Area Development District (ADD), Kentucky

**Figure 6. Cumulative HIV Disease Diagnoses by Area Development District (ADD) of Residence at Time of HIV Diagnosis through June 30, 2014, Kentucky**

Cumulative HIV Disease Diagnoses by ADD

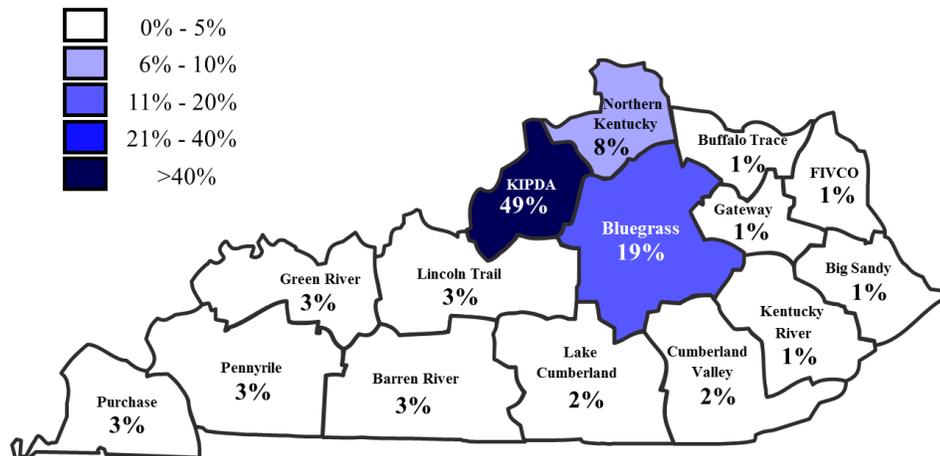


Note: 1 case missing ADD at time of diagnosis. Total cumulative cases=9,281.

Figure 6. The highest number of cumulative HIV cases (4,530, 49%) were residing in the KIPDA ADD at the time of diagnosis, which includes the city of Louisville. The Bluegrass ADD, which includes the city of Lexington, had the second highest number of HIV cases diagnosed (1,809, 19%), followed by the Northern Kentucky ADD with the third highest number of HIV cases diagnosed through June 30, 2014 (750, 8%).

**Figure 7. Percentage of Cumulative HIV Disease Diagnoses by Area Development District (ADD) of Residence at Time of HIV Diagnosis through June 30, 2014, Kentucky**

Cumulative % HIV Disease Diagnoses by ADD



Note: 1 cases missing ADD at time of diagnosis. Total cumulative cases=9,281. Percentages may not total 100% due to rounding.

Figure 7 shows the percentage of cumulative HIV cases that were diagnosed within each ADD. The percentage of infections by ADD ranged from 1% of cases residing in each of Buffalo Trace, Gateway, FIVCO, Big Sandy, and Kentucky River ADDs to almost half (49%) residing in KIPDA ADD at time of diagnosis.

## Living HIV Disease Diagnoses by Demographics, Kentucky

	Transmission Category	White, Not Hispanic		Black, Not Hispanic		Hispanic		Other/Unknown		TOTAL	
		No.	%	No.	%	No.	%	No.	%	No.	%
<b>MALE</b>	MSM <sup>(2)</sup>	2,207	73	830	55	132	51	83	63	3,252	66
	IDU <sup>(3)</sup>	131	4	153	10	22	8	7	5	313	6
	MSM and IDU	168	6	67	4	4	2	5	4	244	5
	Heterosexual <sup>(4)</sup>	122	4	138	9	31	12	12	9	303	6
	Perinatal	10	<1	19	1	0	0	0	0	29	1
	Other <sup>(5)</sup>	17	1	3	<1	0	0	0	0	20	<1
	Undetermined <sup>(6)</sup>	353	12	308	20	70	27	24	18	755	15
	<b>Male Subtotal<sup>(7)</sup></b>	<b>3,008</b>	<b>100</b>	<b>1,518</b>	<b>100</b>	<b>259</b>	<b>100</b>	<b>131</b>	<b>100</b>	<b>4,916</b>	<b>100</b>
<b>FEMALE</b>	IDU <sup>(3)</sup>	84	17	72	13	6	10	9	17	171	15
	Heterosexual <sup>(4)</sup>	265	54	271	50	33	57	28	54	597	53
	Female Heterosexual <sup>(8)</sup>	83	17	137	25	14	24	9	17	243	21
	Perinatal	9	2	12	2	1	2	1	2	23	2
	Other <sup>(5)</sup>	0	0	1	<1	0	0	0	0	1	<1
	Undetermined <sup>(6)</sup>	46	9	46	9	4	7	5	10	101	9
	<b>Female Subtotal<sup>(7)</sup></b>	<b>487</b>	<b>100</b>	<b>539</b>	<b>100</b>	<b>58</b>	<b>100</b>	<b>52</b>	<b>100</b>	<b>1,136</b>	<b>100</b>
<b>ALL LIVING</b>	MSM <sup>(2)</sup>	2,207	63	830	40	132	42	83	45	3,252	54
	IDU <sup>(3)</sup>	215	6	225	11	28	9	16	9	484	8
	MSM and IDU	168	5	67	3	4	1	5	3	244	4
	Heterosexual <sup>(4)</sup>	387	11	409	20	64	20	40	22	900	15
	Female Heterosexual <sup>(8)</sup>	83	2	137	7	14	4	9	5	243	4
	Perinatal	19	1	31	2	1	<1	1	1	52	1
	Other <sup>(5)</sup>	17	<1	4	<1	0	0	0	0	21	<1
	Undetermined <sup>(6)</sup>	399	11	354	17	74	23	29	16	856	14
<b>TOTAL<sup>(7)</sup></b>	<b>3,495</b>	<b>100</b>	<b>2,057</b>	<b>100</b>	<b>317</b>	<b>100</b>	<b>183</b>	<b>100</b>	<b>6,052</b>	<b>100</b>	

(1) Includes living HIV disease cases diagnosed from the beginning of the epidemic through June 30, 2014.

(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) "Other" includes persons who had exposure through hemophilia/coagulation disorder, transfusion/transplant or pediatric cases diagnosed as adults.

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

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

(8) "Female Heterosexual" includes a female who does not report drug use as an exposure, but does report sex with male. See terminology on page 3 for additional definition.

Table 5 shows living HIV cases diagnosed through June 30, 2014 by demographic and behavioral characteristics. There are 6,052 Kentuckians reported to be living with HIV, at a prevalence rate of 137.6 cases per 100,000. The distribution of behavioral characteristics varied by race/ethnicity and sex, but the majority of Kentucky males living with HIV contracted it through MSM contact (66%), whereas the majority of Kentucky females contracted HIV through heterosexual contact (53%). An additional 21% of females reported "female heterosexual contact" which is different than "heterosexual contact" in that the behavioral risk or sero-status of the male partner is unknown.

## Section II: New HIV Infections Diagnosed among Kentuckians, through June 30, 2014

As of June 30, 2014, a total of 9,281 cumulative HIV infections had been reported among Kentuckians to the Department for Public Health’s HIV/AIDS Surveillance Program since AIDS reporting started in 1982. The numbers of new HIV infections diagnosed since 2003 are presented in Table 6. HIV name-based reporting was introduced in mid-2004 and reporting increased and has stabilized since then. Of the 3,852 HIV infections diagnosed since 2003, 1,756 (46%) had progressed to AIDS as of June 30, 2014.

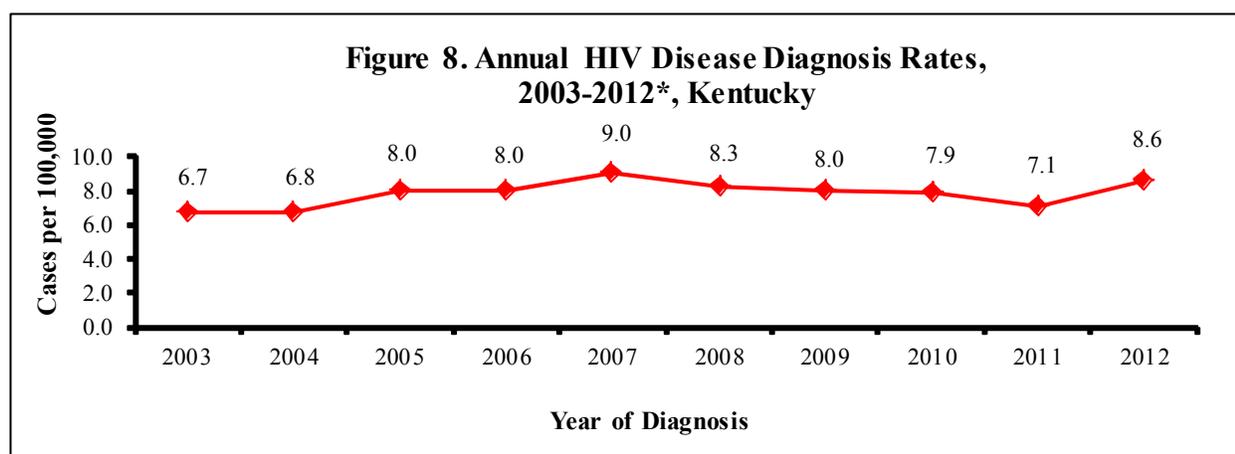
The annual HIV diagnosis rates among Kentuckians are presented in Figure 8. The annual HIV diagnosis rate has remained fairly steady from 2003 to 2012, with slight fluctuations between 6.7 to 9 cases per 100,000 population.

**Table 6. HIV Infections Diagnosed by Current Disease Status and Year of HIV Diagnosis, 2004-2014, Kentucky**

Year of HIV Diagnosis	New HIV Infections <i>without</i> AIDS	New HIV infections <i>with</i> AIDS	TOTAL**
	No.	No.	No.
2003	109	167	276
2004	105	176	281
2005	155	180	335
2006	142	195	337
2007	207	177	384
2008	182	173	355
2009	205	142	347
2010	204	141	345
2011	186	126	312
2012	252	125	377
2013	268	124	392
2014*	81	30	111
<b>TOTAL</b>	<b>2,096</b>	<b>1,756</b>	<b>3,852</b>

\*Data reported through June 30, 2014.

\*\*Total HIV infections regardless of disease progression.



\*Data are current as of June 30, 2014. 2013 data are considered preliminary due to reporting delays and therefore not included in trend analysis.

**Estimated Annual HIV Disease Diagnosis Rates per 100,000.  
A Comparison of Kentucky to Other States and Washington, DC., Using National Data  
from the Centers for Disease Control and Prevention (CDC), 2012<sup>(1)</sup>**

**Table 7. Estimated\* Annual HIV Disease Diagnosis Rates by Residence at Time of Diagnosis, 2012**

Rank	Area of Residence	Rate
1	Washington, DC	140.2
2	Georgia	40.8
3	Maryland	30.8
4	Louisiana	27.1
5	Florida	26.4
6	New York	21.3
7	New Jersey	20.6
8	Texas	18.0
9	Illinois	17.0
10	Mississippi	16.5
11	Delaware	16.3
12	South Carolina	16.2
13	Massachusetts	15.4
14	California	15.3
15	North Carolina	15.1
16	Tennessee	14.5
17	Alabama	14.1
18	Nevada	13.6
19	Virginia	12.3
20	Pennsylvania	11.7
21	Arizona	10.4
22	Ohio	9.8
23	Missouri	9.3
<b>24</b>	<b>Kentucky**</b>	<b>9.1</b>
25	Connecticut	8.9
26	Michigan	8.6

Rank	Area of Residence	Rate
27	Oklahoma	8.2
28	Indiana	8.0
28	Rhode Island	8.0
30	Colorado	7.8
31	Washington	7.6
32	Oregon	6.8
33	Arkansas	6.3
34	Minnesota	6.2
35	New Mexico	5.9
36	Kansas	5.6
37	Hawaii	5.3
38	West Virginia	4.6
39	Nebraska	4.4
40	Alaska	4.2
40	Wisconsin	4.2
42	Iowa	4.1
43	New Hampshire	4.0
43	Utah	4.0
45	Maine	3.8
46	South Dakota	3.5
47	Montana	2.3
48	Idaho	2.1
49	North Dakota	1.6
50	Wyoming	1.4
51	Vermont	1.0

<sup>1</sup>U.S. estimated rates from Centers for Disease Control and Prevention. HIV Surveillance Report, 2012; vol.24 <http://www.cdc.gov/hiv/topics/surveillance/resources/reports/>. Published November 2014. Accessed December 2014.

\*Estimated numbers resulted from statistical adjustment that accounted for reporting delays, but not incomplete reporting.

\*\*Kentucky's rate is estimated by CDC and should not be compared to reported data elsewhere in this report.

**Estimated National HIV Diagnosis Rate, 2012:**

**15.3**

In 2012, the annual estimated national HIV diagnosis rate was 15.3 per 100,000 population. The diagnosis rates among the 50 States and Washington, DC ranged from 1.0 per 100,000 population (Vermont) to 140.2 per 100,000 (Washington, DC). Kentucky ranked 24<sup>th</sup> with an estimated diagnosis rate of 9.1 per 100,000.

## New HIV Infections: Kentucky vs. The United States, 2012

Characteristics	Number of New Cases	% of New HIV cases <sup>(1)</sup>
<b>SEX</b>		
Male (adult/adolescent)	313	83
Female (adult/adolescent)	60	16
Child (<13 yrs)	4	1
<b>TOTAL</b>	<b>377</b>	<b>100</b>
<b>AGE AT DIAGNOSIS‡</b>		
<13	4	1
13-24	100	27
25-44	191	51
45-64	77	20
65+	5	1
<b>TOTAL</b>	<b>377</b>	<b>100</b>
<b>RACE/ETHNICITY</b>		
White, Not Hispanic	200	53
Black, Not Hispanic	143	38
Hispanic	19	5
Other/Unknown	15	4
<b>TOTAL</b>	<b>377</b>	<b>100</b>
<b>TRANSMISSION ROUTE</b>		
MSM <sup>(2)</sup>	189	50
IDU <sup>(3)</sup>	20	5
MSM/IDU	11	3
Heterosexual	14	4
Perinatal	3	1
Other/Undetermined <sup>(4)</sup>	140	37
<b>TOTAL</b>	<b>377</b>	<b>100</b>

\*HIV diagnoses regardless of disease progression.

(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.

‡Age at initial HIV diagnosis.

Characteristics	Number of New Cases <sup>(6)</sup>	% of New HIV cases <sup>(1)</sup>
<b>SEX</b>		
Male (adult/adolescent)	38,160	80
Female (adult/adolescent)	9,586	20
Child (<13 yrs)	242	<1
<b>TOTAL†</b>	<b>47,988</b>	<b>100</b>
<b>AGE AT DIAGNOSIS‡</b>		
<13	242	<1
13-24	10,291	21
25-44	24,061	50
45-64	12,473	26
65+	921	2
<b>TOTAL†</b>	<b>47,988</b>	<b>100</b>
<b>RACE/ETHNICITY</b>		
White, Not Hispanic	13,291	28
Black, Not Hispanic	22,581	47
Hispanic	9,816	20
Other	2,302	5
<b>TOTAL†</b>	<b>47,990</b>	<b>100</b>
<b>TRANSMISSION ROUTE</b>		
MSM <sup>(2)</sup>	30,695	64
IDU <sup>(3)</sup>	3,314	7
MSM/IDU	1,356	3
Heterosexual	12,190	25
Perinatal	161	<1
Other/Undetermined	271	1
<b>TOTAL†</b>	<b>47,987</b>	<b>100</b>

(5) U.S. cases from Centers for Disease Control and Prevention. *HIV Surveillance Report: HIV Infection and AIDS in the United States*, 2012: 24.

(6) These numbers do not represent actual cases, rather they are point estimates which have been adjusted for reporting delays and missing risk-factor information, but not for incomplete reporting.

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

Kentucky's distribution of HIV cases by sex and age at diagnosis (Table 8) closely parallels that of the U.S. (Table 9). However, compared to U.S. data, the percentage of cases who are white is greater among Kentuckians. This is likely due to the greater percentage of white persons in Kentucky's general population, compared to the U.S. population. United States cases have been adjusted for missing risk factors. Kentucky cases have not been adjusted for missing risk factors.

## Adult/Adolescent HIV Diagnoses Regardless of Progression to AIDS†, Kentucky

**Table 10. Adult/Adolescent<sup>(1)</sup> HIV Diagnoses by Year of Diagnosis, Sex, Age at Diagnosis, Race/Ethnicity, and Transmission Route, Kentucky**

Characteristics	1982-08		2009		2010		2011		2012		2013 <sup>(2)</sup>		2014 <sup>(2)</sup>		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>SEX</b>																
Male	6,095	83	282	81	265	78	262	85	313	84	320	82	92	84	7,629	83
Female	1,236	17	65	19	75	22	46	15	60	16	70	18	18	16	1,570	17
<b>TOTAL<sup>(3)</sup></b>	<b>7,331</b>	<b>100</b>	<b>347</b>	<b>100</b>	<b>340</b>	<b>100</b>	<b>308</b>	<b>100</b>	<b>373</b>	<b>100</b>	<b>390</b>	<b>100</b>	<b>110</b>	<b>100</b>	<b>9,199</b>	<b>100</b>
<b>AGE AT DIAGNOSIS*</b>																
13-19	260	4	24	7	16	5	15	5	22	6	9	2	2	2	348	4
20-29	2,164	30	95	27	110	32	101	33	146	39	123	32	38	35	2,777	30
30-39	2,765	38	88	25	89	26	64	21	79	21	92	24	27	25	3,204	35
40-49	1,555	21	95	27	74	22	86	28	79	21	91	23	31	28	2,011	22
50+	587	8	45	13	51	15	42	14	47	13	75	19	12	11	859	9
<b>TOTAL<sup>(3)</sup></b>	<b>7,331</b>	<b>100</b>	<b>347</b>	<b>100</b>	<b>340</b>	<b>100</b>	<b>308</b>	<b>100</b>	<b>373</b>	<b>100</b>	<b>390</b>	<b>100</b>	<b>110</b>	<b>100</b>	<b>9,199</b>	<b>100</b>
<b>RACE/ETHNICITY</b>																
White, Not Hispanic	4,577	62	206	59	153	45	170	55	198	53	219	56	60	55	5,583	61
Black, Not Hispanic	2,365	32	112	32	148	44	104	34	141	38	138	35	36	33	3,044	33
Hispanic	245	3	21	6	25	7	23	7	19	5	20	5	11	10	364	4
Other/Unknown	144	2	8	2	14	4	11	4	15	4	13	3	3	3	208	2
<b>TOTAL<sup>(3)</sup></b>	<b>7,331</b>	<b>100</b>	<b>347</b>	<b>100</b>	<b>340</b>	<b>100</b>	<b>308</b>	<b>100</b>	<b>373</b>	<b>100</b>	<b>390</b>	<b>100</b>	<b>110</b>	<b>100</b>	<b>9,199</b>	<b>100</b>
<b>TRANSMISSION ROUTE</b>																
MSM <sup>(4)</sup>	4,036	55	191	55	165	49	172	56	189	51	195	50	39	35	4,987	54
IDU <sup>(5)</sup>	867	12	22	6	19	6	13	4	20	5	21	5	2	2	964	10
MSM and IDU	414	6	11	3	4	1	6	2	11	3	10	3	2	2	458	5
Heterosexual <sup>(6)</sup>	1,122	15	37	11	39	11	27	9	14	4	24	6	7	6	1,270	14
Female Heterosexual <sup>(7)</sup>	147	2	25	7	32	9	17	6	32	9	35	9	10	9	298	3
Other <sup>(8)</sup>	116	2	0	0	0	0	0	0	2	1	0	0	0	0	118	1
Undetermined <sup>(9)</sup>	629	9	61	18	81	24	73	24	105	28	105	27	50	45	1,104	12
<b>TOTAL<sup>(3)</sup></b>	<b>7,331</b>	<b>100</b>	<b>347</b>	<b>100</b>	<b>340</b>	<b>100</b>	<b>308</b>	<b>100</b>	<b>373</b>	<b>100</b>	<b>390</b>	<b>100</b>	<b>110</b>	<b>100</b>	<b>9,199</b>	<b>100</b>

†HIV disease cases include persons with HIV alone and those who have progressed to AIDS.

\*Age at time of initial HIV diagnosis.

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

(2) Data reported through June 30, 2014. 2013 and 2014 data are 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) Female Heterosexual = A female not reporting drug use, but reporting sex with male. See terminology on page 3 for additional definition.

(8) "Other" includes persons who had exposure through hemophilia/coagulation disorder, transfusion/transplant, or perinatal, but diagnosed as an adult.

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

Table 10 shows a breakdown of new adult/adolescent HIV diagnoses by year of diagnosis and demographic characteristics. Cumulative data are presented through June 30, 2014. New diagnoses over the most recent years have been predominantly among males, whites, and males reporting sexual contact with other males. By age at HIV diagnosis, new HIV cases over the five year period 2009-2013 were highest among persons aged 20-29 years old in comparison to other age groups.

## Adult/Adolescent HIV Diagnoses that have Progressed to AIDS†, Kentucky

Table 11. Adult/Adolescent<sup>(1)</sup> HIV Disease Cases with AIDS by Year of Initial HIV Diagnosis, Sex, Age at Diagnosis, Race/Ethnicity, and Transmission Route, Kentucky

Characteristics	1982-08		2009		2010		2011		2012		2013 <sup>(2)</sup>		2014 <sup>(2)</sup>		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>SEX</b>																
Male	4,499	84	118	83	111	79	109	87	106	85	97	78	26	87	5,066	84
Female	838	16	24	17	30	21	17	13	19	15	27	22	4	13	959	16
<b>TOTAL<sup>(3)</sup></b>	<b>5,337</b>	<b>100</b>	<b>142</b>	<b>100</b>	<b>141</b>	<b>100</b>	<b>126</b>	<b>100</b>	<b>125</b>	<b>100</b>	<b>124</b>	<b>100</b>	<b>30</b>	<b>100</b>	<b>6,025</b>	<b>100</b>
<b>AGE AT DIAGNOSIS *</b>																
13-19	136	3	4	3	3	2	4	3	3	2	0	0	0	0	150	2
20-29	1,489	28	30	21	33	23	24	19	35	28	20	16	2	7	1,633	27
30-39	2,114	40	41	29	41	29	31	25	22	18	33	27	7	23	2,289	38
40-49	1,150	22	48	34	35	25	42	33	36	29	32	26	14	47	1,357	23
50+	448	8	19	13	29	21	25	20	29	23	39	31	7	23	596	10
<b>TOTAL<sup>(3)</sup></b>	<b>5,337</b>	<b>100</b>	<b>142</b>	<b>100</b>	<b>141</b>	<b>100</b>	<b>126</b>	<b>100</b>	<b>125</b>	<b>100</b>	<b>124</b>	<b>100</b>	<b>30</b>	<b>100</b>	<b>6,025</b>	<b>100</b>
<b>RACE/ETHNICITY</b>																
White, Not Hispanic	3,379	63	84	59	64	45	74	59	74	59	71	57	13	43	3,759	62
Black, Not Hispanic	1,676	31	43	30	53	38	36	29	40	32	41	33	11	37	1,900	32
Hispanic	185	3	11	8	17	12	11	9	8	6	8	6	5	17	245	4
Other/Unknown	97	2	4	3	7	5	5	4	3	2	4	3	1	3	121	2
<b>TOTAL<sup>(3)</sup></b>	<b>5,337</b>	<b>100</b>	<b>142</b>	<b>100</b>	<b>141</b>	<b>100</b>	<b>126</b>	<b>100</b>	<b>125</b>	<b>100</b>	<b>124</b>	<b>100</b>	<b>30</b>	<b>100</b>	<b>6,025</b>	<b>100</b>
<b>TRANSMISSION ROUTE</b>																
MSM <sup>(4)</sup>	2,979	56	78	55	65	46	64	51	61	49	49	40	9	30	3,305	55
IDU <sup>(5)</sup>	704	13	14	10	11	8	9	7	12	10	12	10	1	3	763	13
MSM and IDU	332	6	7	5	2	1	1	1	5	4	2	2	0	0	349	6
Heterosexual <sup>(6)</sup>	842	16	16	11	16	11	15	12	3	2	8	6	2	7	902	15
Female Heterosexual <sup>(7)</sup>	71	1	7	5	13	9	8	6	10	8	10	8	2	7	121	2
Other <sup>(8)</sup>	113	2	0	0	0	0	0	0	0	0	0	0	0	0	113	2
Undetermined <sup>(9)</sup>	296	6	20	14	34	24	29	23	34	27	43	35	16	53	472	8
<b>TOTAL<sup>(3)</sup></b>	<b>5,337</b>	<b>100</b>	<b>142</b>	<b>100</b>	<b>141</b>	<b>100</b>	<b>126</b>	<b>100</b>	<b>125</b>	<b>100</b>	<b>124</b>	<b>100</b>	<b>30</b>	<b>100</b>	<b>6,025</b>	<b>100</b>

†HIV disease cases that have progressed to AIDS include only persons reported with an AIDS diagnosis as of June 30, 2014.

\*Age at time of initial HIV diagnosis.

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

(2) Data reported through June 30, 2014. 2013 and 2014 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) Female Heterosexual= A female not reporting drug use, but reporting sex with male. See terminology on page 3 for additional definition.

(8) "Other" includes persons who had exposure through hemophilia/coagulation disorder, transfusion/transplant, or perinatal, but diagnosed as an adult.

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

Table 11 shows a breakdown of adult/adolescent HIV diagnoses that have progressed to AIDS, by year of initial HIV diagnosis and demographic characteristics. Newly diagnosed cases that had progressed to AIDS as of June 30, 2014 were predominantly male, white, and males reporting sexual contact with other males. By age at HIV diagnosis, new AIDS cases over the five year period 2009-2013 were highest among persons aged 40-49 years old in 2009, 2011 and 2012, and among 30-39 year olds in 2010 and 2013.

## Pediatric HIV Disease Cases, Kentucky

Transmission Route	White, Not Hispanic		Black, Not Hispanic		Other <sup>(2)</sup> Unknown		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Pediatric Hemophilia/Coagulation Disorder	10	27	1	2	0	0	11	13
Perinatal Exposure, Mother with HIV	23	62	36	84	2	100	61	74
Pediatric Transfusion/Transplant	2	5	0	0	0	0	2	2
Pediatric risk not identified or reported	2	5	6	14	0	0	8	10
<b>TOTAL<sup>(3)</sup></b>	<b>37</b>	<b>100</b>	<b>43</b>	<b>100</b>	<b>2</b>	<b>100</b>	<b>82</b>	<b>100</b>

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

(2) Other includes Hispanics and persons of other races.

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

Disease Status	1982-2008		2009		2010		2011		2012		2013		2014 <sup>(2)</sup>		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>HIV infections without AIDS</b>	19	29	0	0	5	100	4	100	4	100	2	100	1	100	35	43
<b>HIV infections with AIDS</b>	47	71	0	0	0	0	0	0	0	0	0	0	0	0	47	57
<b>Total<sup>(3)</sup></b>	<b>66</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>100</b>	<b>4</b>	<b>100</b>	<b>4</b>	<b>100</b>	<b>2</b>	<b>100</b>	<b>1</b>	<b>100</b>	<b>82</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, 2014.

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

There have been 82 pediatric HIV infections reported to the Kentucky HIV/AIDS surveillance program (Table 12 and Table 13) since AIDS reporting began in 1982. The majority of reported pediatric infections (74%) were due to perinatal transmission through an HIV-infected mother, 11 infections were reported with a primary exposure route of pediatric hemophilia or coagulation disorders, and two infections were due to pediatric transfusion or transplant (Table 12). Since 1991, there have been no pediatric HIV infections with hemophilia or coagulation disorders reported as the route of exposure. The two pediatric infections reported with pediatric transfusion or transplant as the risk factor were diagnosed in 1987 or earlier. Thirty-six (84%) of the 43 pediatric HIV infections among blacks were due to perinatal exposure, compared to 62% of the 37 pediatric HIV infections among whites, which were due to this route of transmission. Only one pediatric HIV infection has been reported among Hispanics. The majority (59%) of the sixty-one cumulative perinatal exposures from a mother with HIV were in blacks.

Sixty-six (80%) of the cumulative 82 infections were diagnosed prior to 2009. Five or fewer new cases have been reported during each of the most recent five years (Table 13). The majority (57%) of cumulative pediatric HIV infections had progressed to AIDS as of June 30, 2014.

### New HIV Disease Cases by Race/Ethnicity, Kentucky

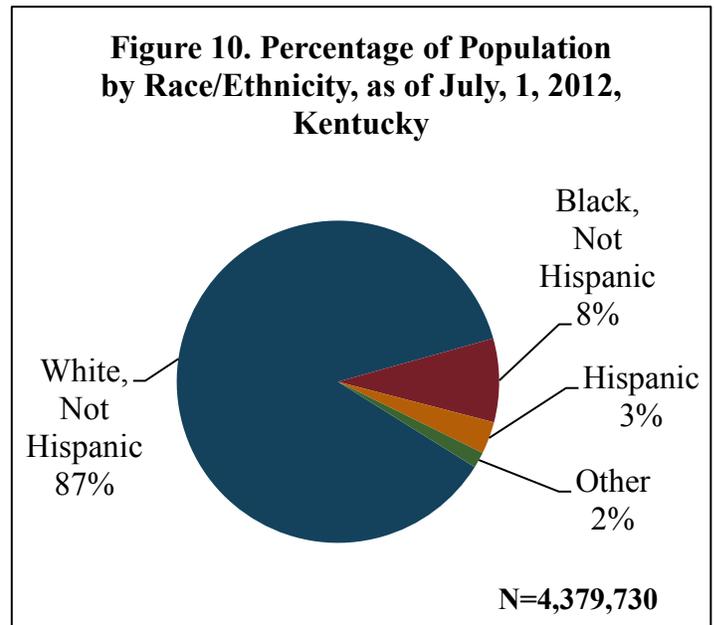
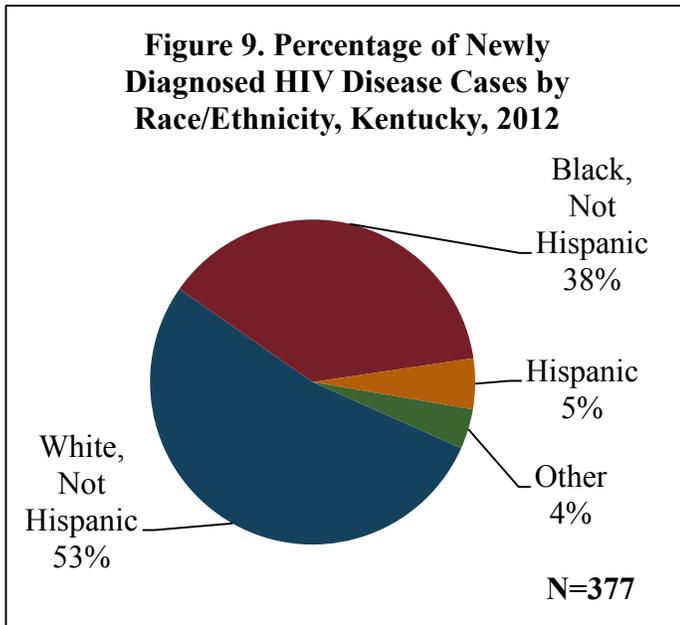


Figure 9 shows the percentage of newly diagnosed HIV cases among Kentuckians in 2012, the latest year data are considered complete, by race/ethnicity. The majority of cases diagnosed in 2012 were white (53%) followed by blacks (38%). Five percent of new cases in 2012 were diagnosed among Hispanics and 4% among persons of other races, including American Indians/Alaskan Natives, Native Hawaiian/Pacific Islanders and persons of multiple races.

Figure 10 shows the percentage distribution of Kentucky’s population based on the 2012 population estimates by race/ethnicity. The majority of Kentuckians are white, non-Hispanic. Persons who identify with multiple races were grouped under the “other” category.

HIV racial disparities are highlighted by these two graphs, showing higher percentages of new infections among blacks and Hispanics in relation to their representation in the general population. Blacks accounted for 38% of new HIV cases diagnosed in 2012, yet comprised just 8% of Kentucky’s population in 2012. Similarly, Hispanics accounted for 5% of newly diagnosed HIV cases in 2012, yet comprised only 3% of Kentucky’s population in that same year.

Rates of new diagnoses are presented in Table 14, which further highlight racial disparities by sex.

<b>Table 14. Number and Rate of New HIV Diagnoses by Race/Ethnicity and Sex, Kentucky, 2012</b>				
<b>Race/Ethnicity</b>	<b>Male</b>		<b>Female</b>	
	<b>No of Cases</b>	<b>Rate*</b>	<b>No of Cases</b>	<b>Rate*</b>
Hispanic	18	24.7	1	†
Black, not Hispanic	110	52.8	33	11.6
White, not Hispanic	173	9.3	27	1.4

\*Rate per 100,000.

†Rates are not published when cell size is less than 10.

### New HIV Disease Cases by Age at Diagnosis, Kentucky

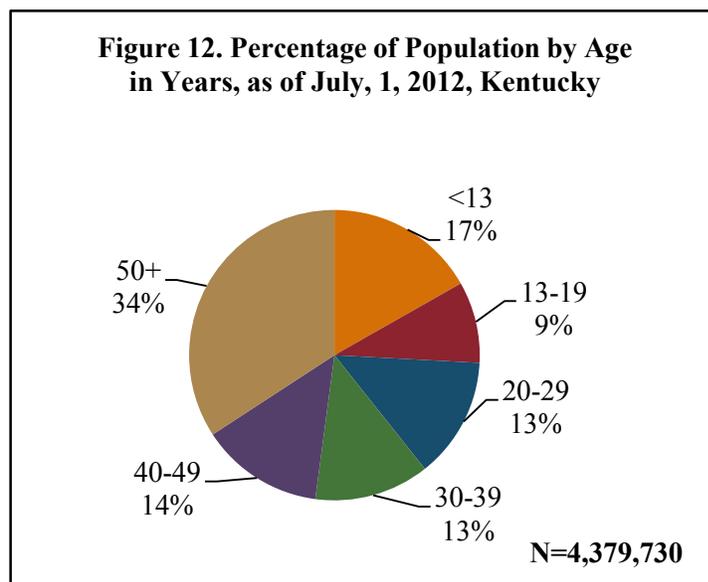
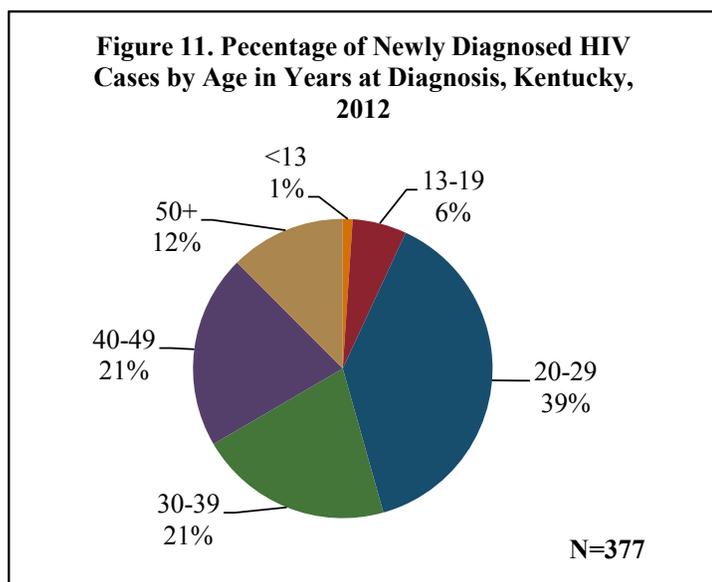


Figure 11 shows the percentage of newly diagnosed HIV cases among Kentuckians in 2012 by age category at time of HIV diagnosis. The highest percentages of new diagnoses were reported among Kentuckians aged 20-29 years (39%). Kentuckians in their 30's and 40's accounted for 21% each of new cases diagnosed in 2012.

Figure 12 shows the percentage distribution of Kentucky's population based on the 2012 population estimates by age, which can be directly compared to the percentages in each age group that were newly diagnosed in 2012. HIV-related disparities by age are highlighted by these two graphs. Higher percentages of new diagnoses occurred among persons in age groups 20-29, 30-39, and 40-49 years, in comparison to the representation of these groups in the general population.

Rates of new diagnoses (Table 15) were higher among blacks across all age groups, in comparison to whites in 2012. These differences in rates of new cases in 2012 were highest among 50+ year olds and 20 year olds at time of diagnosis. However, the rates among blacks in all age groups were at least four times higher than the rates among their white counterparts. Rates among Hispanics are not presented due to small numbers.

<b>Table 15. Number and Rate of New HIV Diagnoses by Age at Diagnosis and Race/Ethnicity§, Kentucky, 2012</b>				
<b>Age at Diagnosis</b>	<b>Black not Hispanic</b>		<b>White not Hispanic</b>	
	<b>No of Cases</b>	<b>Rate*</b>	<b>No of Cases</b>	<b>Rate*</b>
20-29	67	125.8	62	12.8
30-39	24	51.6	47	9.7
40-49	19	41.7	53	9.9
50+	17	19.0	29	2.1

§Rates among pediatric cases (<13 years), teens and Hispanics by age at diagnosis not published due to small numbers.

\*Rate per 100,000.

†Rates not published when cell size is less than 10.

**Table 16. HIV Disease Cases and Diagnosis Rates by Year of HIV Diagnosis and Area Development District (ADD) of Residence at Time of HIV Diagnosis, 1982-2014<sup>(2)</sup>, Kentucky**

AREA DEVELOPMENT DISTRICT	CASES & RATES <sup>(1)</sup>	1982-2008*	2009	2010	2011	2012	2013	2014 <sup>(2)</sup>	TOTAL CASES <sup>(3)</sup>	% of Total
1. Barren River	Cases	256	13	7	13	16	13	6	324	3%
	Rate per 100,000		4.6		4.5	5.6	4.5			
2. Big Sandy	Cases	50	5	0	2	2	5	0	64	1%
	Rate per 100,000									
3. Bluegrass	Cases	1,348	74	87	75	86	107	32	1,809	19%
	Rate per 100,000		9.7	11.3	9.6	11.0	13.5			
4. Buffalo Trace	Cases	42	4	1	0	4	0	0	51	1%
	Rate per 100,000									
5. Cumberland Valley	Cases	132	8	7	5	7	6	4	169	2%
	Rate per 100,000									
6. FIVCO	Cases	114	6	2	3	6	3	0	134	1%
	Rate per 100,000									
7. Gateway	Cases	68	5	3	5	2	2	3	88	1%
	Rate per 100,000									
8. Green River	Cases	221	10	6	10	8	11	3	269	3%
	Rate per 100,000		4.7		4.7		5.1			
9. KIPDA/ North Central	Cases	3,686	160	159	135	180	168	42	4,530	49%
	Rate per 100,000		16.8	16.5	14.0	18.5	17.1			
10. Kentucky River	Cases	55	0	1	3	2	4	3	68	1%
	Rate per 100,000									
11. Lake Cumberland	Cases	105	5	9	11	9	13	2	154	2%
	Rate per 100,000				5.3		6.3			
12. Lincoln Trail	Cases	223	10	10	5	8	14	10	280	3%
	Rate per 100,000		3.8	3.7			5.1			
13. Northern KY	Cases	608	27	31	30	31	19	4	750	8%
	Rate per 100,000		6.2	7.1	6.8	7.0	4.2			
14. Pennyrile	Cases	240	11	14	6	11	12	0	294	3%
	Rate per 100,000		5.0	6.4		5.0	5.5			
15. Purchase	Cases	248	9	8	9	5	15	2	296	3%
	Rate per 100,000						7.7			
<b>TOTAL CASES<sup>(3)</sup></b>		<b>7,396</b>	<b>347</b>	<b>345</b>	<b>312</b>	<b>377</b>	<b>392</b>	<b>111</b>	<b>9,280</b>	<b>100%</b>

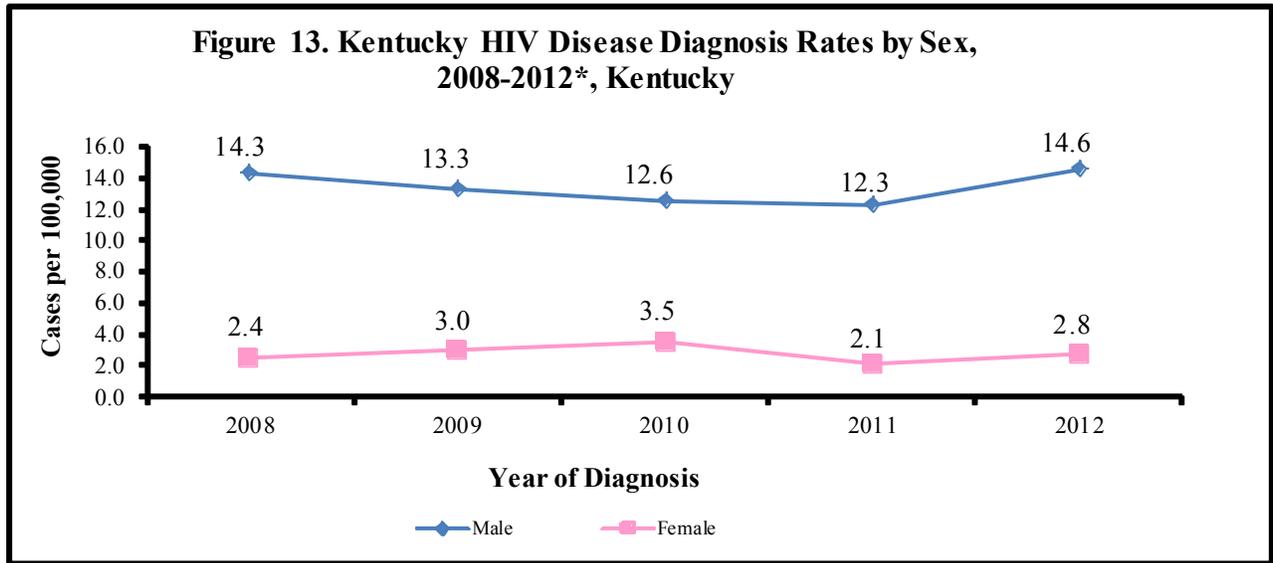
(1) Rates are only listed for years of diagnosis 2009-2013. Data for 2013 and 2014 are provisional due to reporting delays and are subject to change. Due to the small numbers of HIV cases reported in some ADDs, please interpret the corresponding rates with caution. Rates are not published when cell size is less than 10.

(2) Data reported through June 30, 2014. Rates are not published for 2014 because data are not complete.

(3) Total HIV disease cases both living and deceased, regardless of progression to AIDS; Total HIV cases reported are 9,281—1 HIV case had unknown residential information.

\*Rates are not published due to multi-year aggregate of data.

## Trends in HIV Disease Diagnosis Rates by Sex, 2008-2012, Kentucky

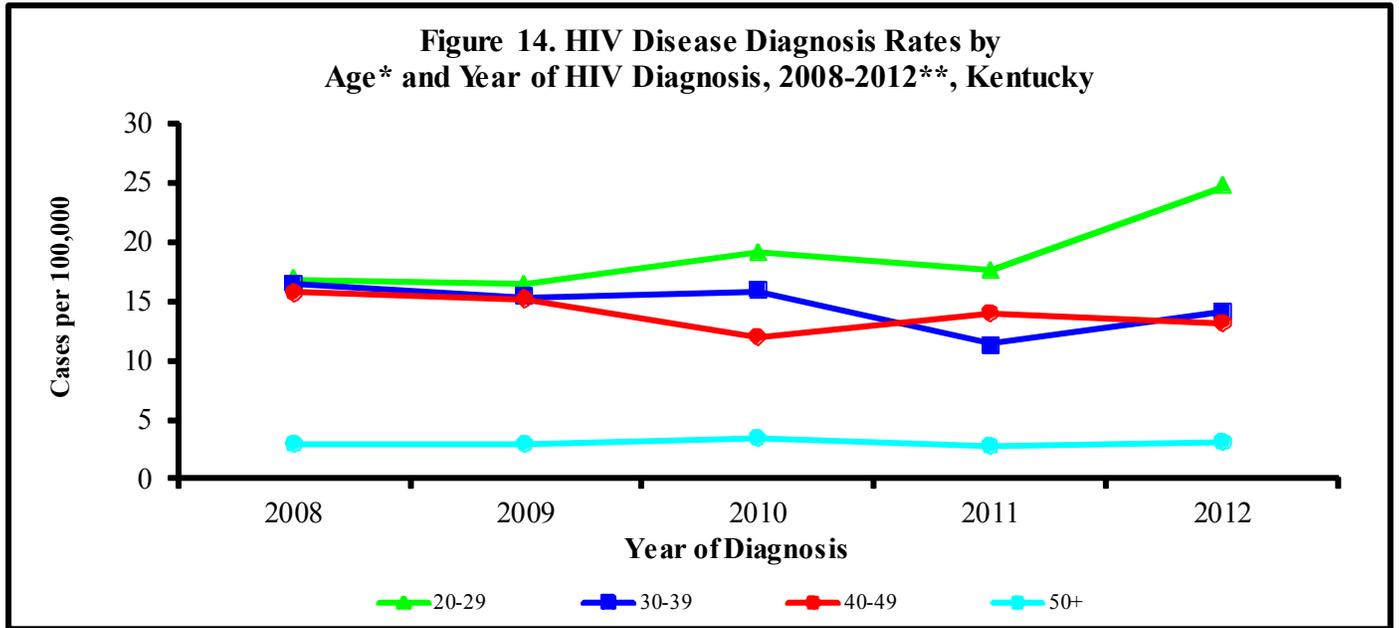


\*Data for 2013 and 2014 are not included in trend analyses since they are considered provisional due to reporting delays.

Males represent the majority (83%) of cumulative HIV cases diagnosed among Kentuckians. The yearly diagnosis rates among males have remained stable over the five year period shown. From 2008 to 2012, the HIV diagnosis rates among males fluctuated between 3.6 to 5.9 times higher than for females (Figure 13).

The female HIV diagnosis rates have remained fairly stable over the most recent five years, between 2.1 to 3.5 cases per 100,000 females. The highest HIV diagnosis rate among females within the most recent five years was in 2010 at 3.5 per 100,000 females.

### Trends in HIV Disease Diagnosis Rates by Age at HIV Diagnosis, 2008-2012, Kentucky



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

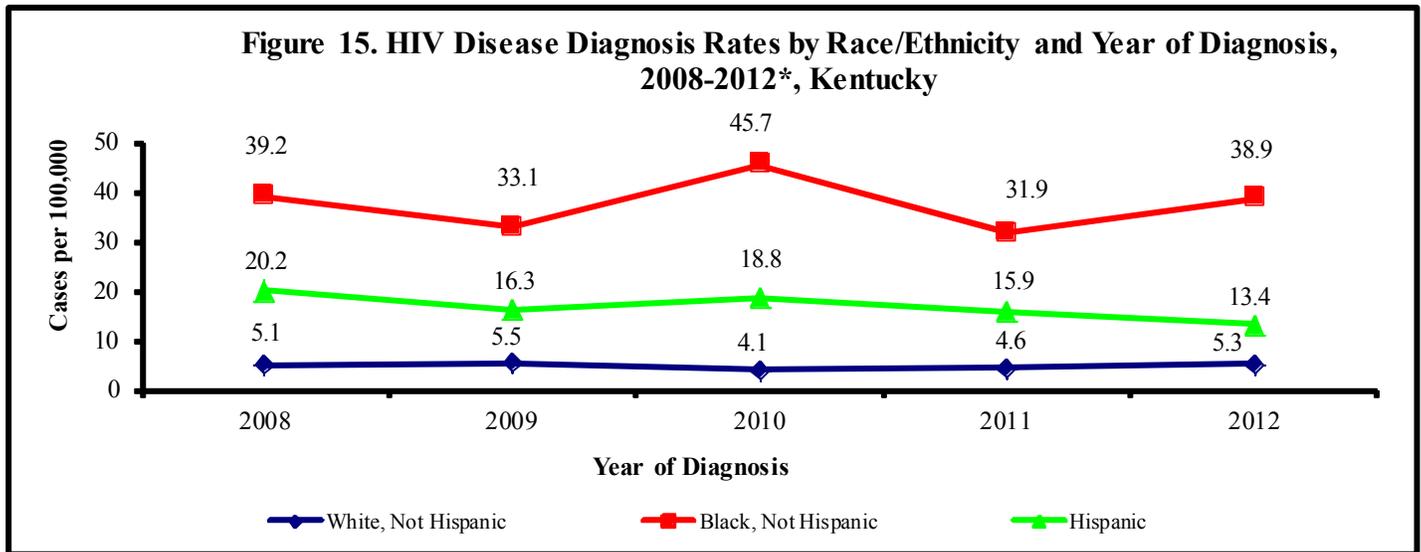
\*\*Data for 2013 and 2014 are not included in trend analyses since they are considered provisional due to reporting delays.

Figure 14 shows the HIV diagnosis rates over the most recent five years (2008-2012), presented by age category. The diagnosis rates among Kentuckians aged 30+ years fluctuated slightly over the five year period. Among those aged 20-29 years, diagnosis rates are trending upward over the five-year period.

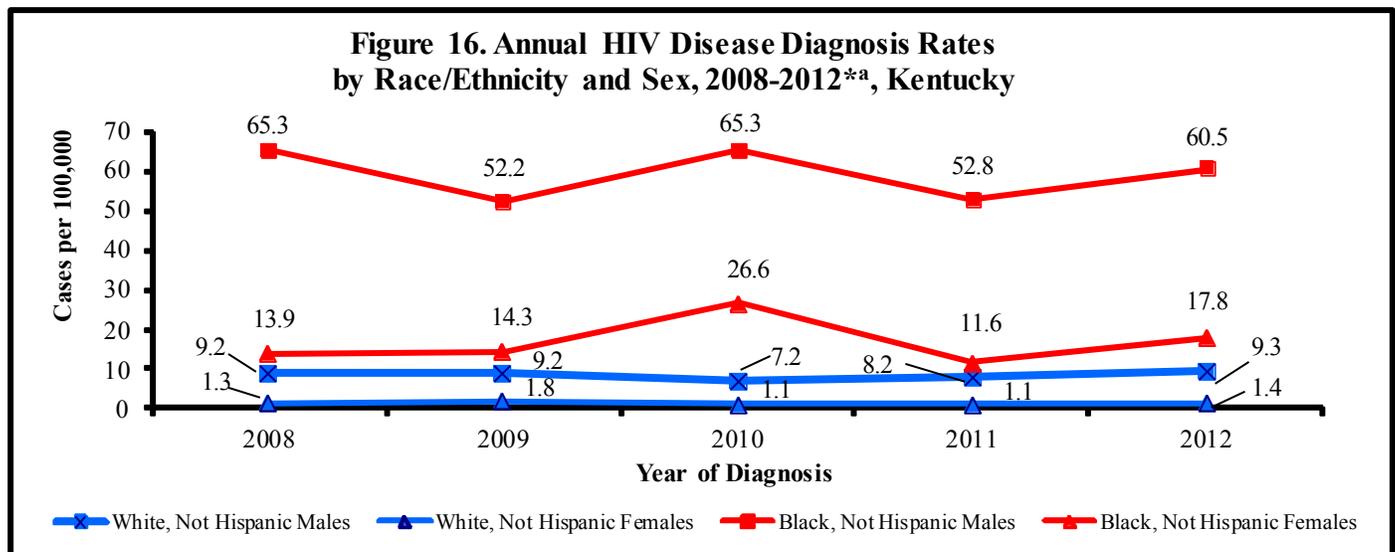
HIV Diagnosis Year	Mean Age	Age Range
2008	35.8	4-65
2009	36.2	14-74
2010	35.2	2-74
2011	35.8	0-79
2012	33.9	1-78

Table 17 shows the mean ages and actual age ranges at time of HIV diagnosis from 2008-2012. The mean ages of Kentuckians at time of HIV diagnosis in the five-year period ranged between 35.2-36.2 years (age range 0-79 years).

## Trends in HIV Disease Diagnosis Rates by Race/Ethnicity, 2008-2012, Kentucky



\*Data for 2013 and 2014 are not included in trend analyses since they are considered provisional due to reporting delays.



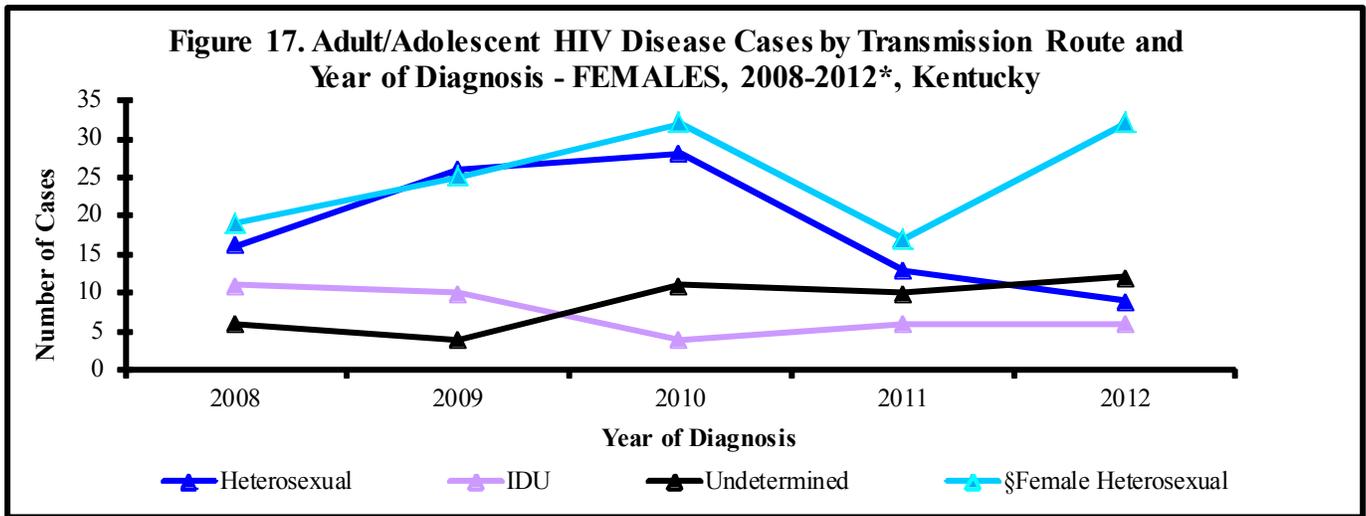
\*Data for 2013 and 2014 are not included in trend analyses since they are considered provisional due to reporting delays.

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

Figure 15 shows that between 2008 and 2012, the HIV diagnosis rates for blacks fluctuated between 6.0 to 11.1 times higher than for whites. The diagnosis rates for Hispanics have been between 3.0 to 4.6 times higher than for whites. The overall trends for blacks and Hispanics show slight fluctuations and the trends among whites have remained steady.

Figure 16 presents diagnosis rates from 2008 through 2012 for blacks and whites by sex. Black males and black females had consistently higher rates of new infections in comparison to their white counterparts. The HIV diagnosis rates among black males fluctuated between 5.7 to 9.1 times higher than that of white males. The rates among black females were 7.9 to 24.1 times higher than those of white females over the five year period.

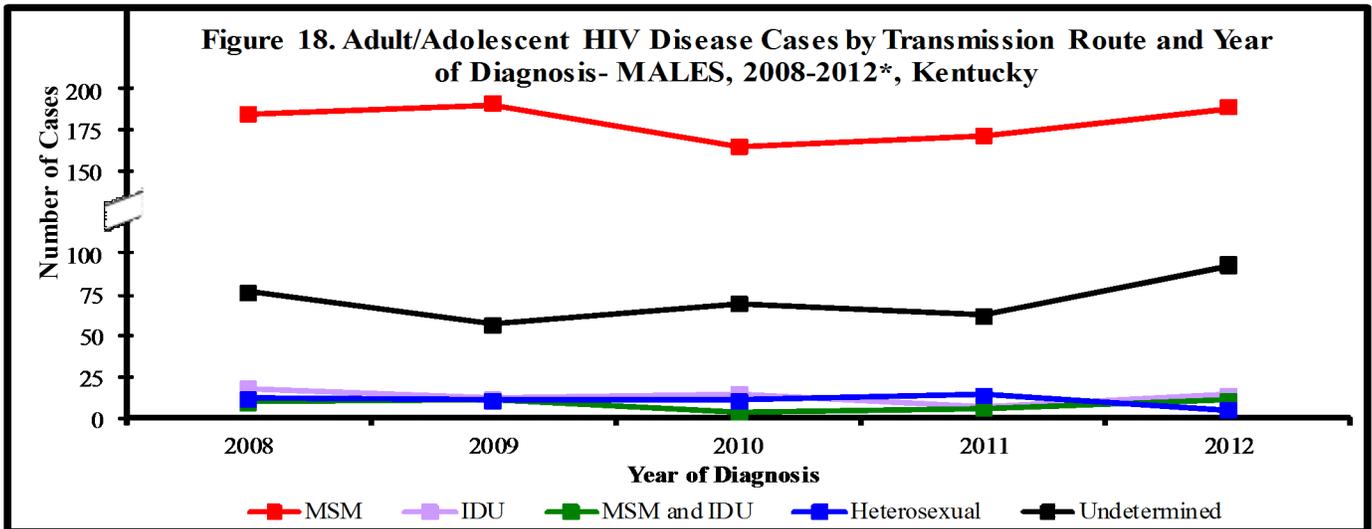
## Trends in HIV Disease Diagnosis Rates by Route of Transmission and Sex, 2008-2012, Kentucky



\*Data for 2013 and 2014 are not included in trend analyses since they are considered provisional due to reporting delays.

§Female Heterosexual Contact = A female not reporting drug use, but reporting sex with male with unknown HIV status or risk. See terminology on page 3.

Figure 17 shows Kentucky’s adult/adolescent female HIV cases by transmission route and year of diagnosis. The largest number of new female cases reported female heterosexual contact (FHC) as their primary route of transmission, followed by heterosexual contact over the five year period. Females reporting FHC were previously classified as “undetermined” but if they have reported sexual contact with a male of unknown sero-status or unknown behaviors and no drug use, they are now re-classified as FHC. The number of new female cases reporting IDU as the primary route of transmission remained fairly steady.



\*Data for 2013 and 2014 are not included in trend analyses since they are considered provisional due to reporting delays.

§Female Heterosexual Contact = A female not reporting drug use, but reporting sex with male with unknown HIV status or risk. See terminology on page 3.

In Figure 18, which depicts trends for adult/adolescent males, MSM accounted for the largest number of cases diagnosed each year from 2008 to 2012. The second largest number of cases belong to those with an undetermined risk. The number of males reporting IDU, MSM and IDU, and heterosexual contact as the primary route of transmission was similar throughout the five year period. Please note the break in y-axis in Figure 18.

### Section III: HIV Infections Diagnosed Concurrently with AIDS among Kentuckians through June 30, 2014

During the most recent 10.5 year period for which data are available (January 1, 2004 through June 30, 2014), a total of 3,576 HIV disease cases were diagnosed among Kentuckians. Of these, 1,589 (44%) had progressed to AIDS by June 30, 2014.

The distribution of progression to AIDS (in days) for the 1,589 AIDS cases is shown in Table 18. Fifty-nine percent of the 1,589 AIDS cases diagnosed in the most recent 10.5 years progressed to AIDS within 30 days of the initial HIV diagnosis-also known as concurrent diagnoses.

According to Centers for Disease Control and Prevention (CDC)<sup>1</sup>, late testers are those who have an AIDS diagnosis within one year of initial HIV diagnosis. During the presented time period, 1,295 (36%) of the 3,576 Kentuckians diagnosed with HIV disease were late testers.

**Table 18. AIDS Cases Diagnosed within the 10.5 Year Period January 1, 2004-June 30, 2014 by Time (in days) from HIV Diagnosis to AIDS Diagnosis, Kentucky**

<b>Time to AIDS Diagnosis (Days)</b>	<b>No.</b>	<b>%</b>
≤30 Days †	931	59
31-60 Days	135	8
61-90 Days	79	5
91-365 Days	150	9
>365 Days	294	19
<b>Total</b>	<b>1,589</b>	<b>100</b>

†Cases diagnosed with AIDS within 30 days of initial HIV diagnosis are considered concurrent diagnoses. Note: 1,987 HIV-only cases diagnosed in the same timeframe are not included in table as they had not progressed to AIDS as of June 30, 2014.

<sup>1</sup> CDC. Late versus early testing of HIV—16 sites, United States, 2000-2003. MMWR 2003; 52(25): 581-586.

## Concurrent Diagnoses by Selected Characteristics, 2004-2014\*, Kentucky

**Table 19. HIV Infections Diagnosed in the Most Recent 10.5 Year Period (January 1, 2004-June 30, 2014) that were Diagnosed Concurrently with AIDS (within 30 Days of HIV Diagnosis) and non-concurrently with AIDS\*\* by Sex, Age at Diagnosis, Race/Ethnicity, and Transmission Category, Kentucky**

Characteristics	HIV with Concurrent AIDS Diagnosis*		HIV Without Concurrent AIDS Diagnosis**		Total HIV Disease Diagnoses***	
	No.	% <sup>(1)</sup>	No.	% <sup>(1)</sup>	No.	% <sup>(1)</sup>
<b><u>SEX</u></b>						
Male	765	82	2,145	81	2,910	81
Female	166	18	500	19	666	19
<b><u>AGE AT DIAGNOSIS</u></b>						
<13	2	<1	27	1	29	1
13-19	10	1	158	6	168	5
20-29	143	15	908	34	1,051	29
30-39	268	29	656	25	924	26
40-49	322	35	612	23	934	26
50+	186	20	284	11	470	13
<b><u>RACE/ETHNICITY- Female</u></b>						
White, Not Hispanic	55	33	222	44	277	42
Black, Not Hispanic	87	52	228	46	315	47
Hispanic	15	9	24	5	39	6
Other/Unknown	9	5	26	5	35	5
<b><u>RACE/ETHNICITY- Male</u></b>						
White, Not Hispanic	475	62	1,182	55	1,657	57
Black, Not Hispanic	186	24	780	36	966	33
Hispanic	84	11	114	5	198	7
Other/Unknown	20	3	69	3	89	3
<b><u>TRANSMISSION CATEGORY</u></b>						
MSM <sup>(2)</sup>	427	46	1,409	53	1,836	51
IDU <sup>(3)</sup>	92	10	154	6	246	7
MSM and IDU	27	3	75	3	102	3
Heterosexual <sup>(4)</sup>	126	14	310	12	436	12
Female Heterosexual <sup>(5)</sup>	49	5	164	6	213	6
Perinatal	2	<1	20	1	22	1
Other <sup>(6)</sup>	0	0	3	<1	3	<1
Undetermined <sup>(7)</sup>	208	22	510	19	718	20
<b>TOTAL</b>	<b>931</b>	<b>100</b>	<b>2,645</b>	<b>100</b>	<b>3,576</b>	<b>100</b>

\*Concurrent is defined as having an HIV and AIDS diagnosis within 30 days.

\*\*Without AIDS diagnosis 30 days after initial HIV diagnosis. Includes both HIV (non AIDS) cases and those with an AIDS diagnosis more than 30 days after initial HIV diagnosis.

\*\*\*Total diagnoses January 1, 2004 through June 30, 2014 with HIV, regardless of AIDS diagnosis status.

(1) Percentages may not total to 100% due to rounding. Percentages for each characteristic add up to 100% by column.

(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) Female Heterosexual = A female not reporting drug use, but reporting sex with male. See terminology on page 3.

(6) "Other" includes persons who had exposure through hemophilia, transfusion/transplant, or perinatal, but diagnosed as an adult.

(7) "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 remains undetermined after investigation.

## Concurrent Diagnoses by Selected Characteristics, 2004-2014, Kentucky (Narrative)

Table 19 (page 28) examines the distribution of HIV cases among Kentuckians diagnosed between January 1, 2004, and June 30, 2014, by sex, age at diagnosis, race/ethnicity and transmission route. Data are presented for cases diagnosed concurrently with AIDS within a 30 day period after initial HIV diagnosis, cases without a concurrent HIV/AIDS diagnosis, and for all cases diagnosed with HIV (regardless of AIDS diagnosis status) within the 10.5 year period.

Of the 3,576 Kentuckians diagnosed with HIV disease during the 10.5 year period presented, 26% (931) were diagnosed with HIV and AIDS concurrently (within 30 days).

The distribution of cases diagnosed over the most recent 10.5 years by sex shows the percentage of males with a concurrent diagnosis is nearly identical to those with a non-concurrent diagnosis (82% and 81% respectively). The distribution by age at diagnosis differs between the two groups, with the highest percentages of concurrent cases being aged 40-49 years (35%) while their non-concurrent counterparts were younger (34% aged 20-29 years).

The racial/ethnic distribution of cases diagnosed concurrently with AIDS differs by sex. Among females, the majority of concurrent diagnoses were among black females (52%), followed by white and Hispanic females (33% and 9%, respectively). However, among males, the majority of concurrent diagnoses were among white males (62%). Twenty-four percent of concurrently diagnosed cases were among black males and 11% were among Hispanic males. The percentages of concurrent diagnoses among Hispanic males and Hispanic females are comparable. Caution should be taken when interpreting the data for the 'other' and 'unknown' race/ethnicity categories, as the numbers of cases are small.

Data by route of transmission show HIV cases diagnosed concurrently with AIDS within 30 days have an identical distribution to those without a concurrent diagnosis, with the highest percentage of cases among those with a concurrent diagnosis reporting male-to-male sexual contact as the mode of transmission (46%), followed by persons reporting heterosexual exposure (14%). There were only two children (<13 years at diagnosis) reported with a concurrent diagnosis. Almost a quarter (22%) of cases with concurrent HIV and AIDS diagnoses have an undetermined transmission route, which creates challenges for prevention initiatives to increase early testing and engagement in care.

## HIV Infections by Area Development District (ADD), January 1, 2004-June 30, 2014, Kentucky

**Figure 19. Number of HIV Disease Diagnoses within each Area Development District of Residence at Time of Diagnosis, for the Most Recent 10.5 years, January 1, 2004—June 30, 2014, Kentucky**

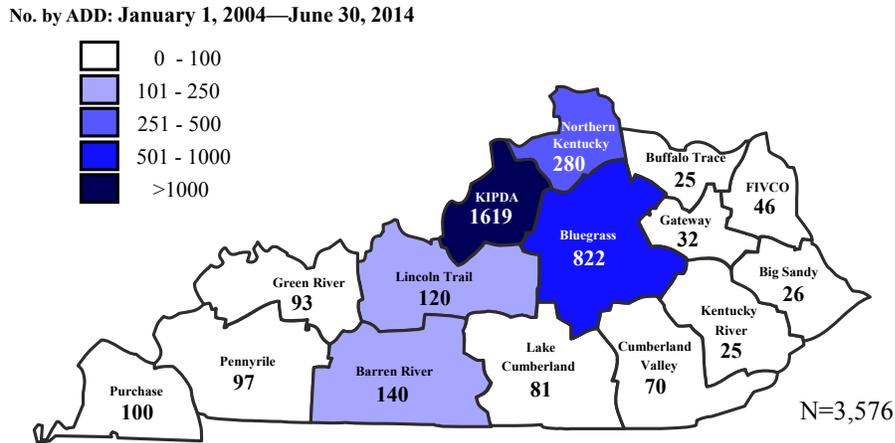


Figure 19 examines the total number of HIV infections diagnosed between January 1, 2004 and June 30, 2014 by ADD of residence at time of HIV diagnosis. Data represent the total number of HIV cases in each ADD, regardless of disease progression status. The highest number of cases (1619, 45%) diagnosed during this time period were among residents of the KIPDA ADD, which includes the city of Louisville. The second highest number of cases (822, 23%) resided in the Bluegrass ADD, which includes the city of Lexington. The ADD's in eastern Kentucky had the lowest number of HIV cases diagnosed and reported during this period.

**Figure 20. Percentage of Concurrent HIV Disease Diagnoses within each Area Development District of Residence at Time of Diagnosis, for the Most Recent 10.5 Years, January 1, 2004 – June 30, 2014, Kentucky**

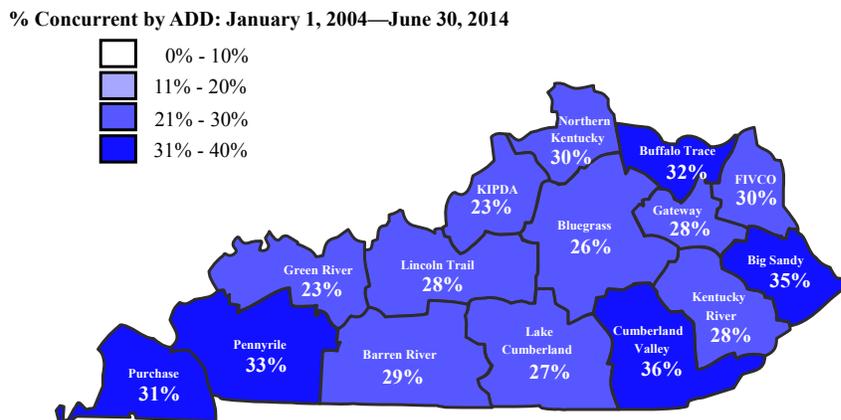


Figure 20 shows the percentage of total HIV cases within each ADD that were concurrently diagnosed with AIDS within 30 days of initial HIV diagnosis, between January 1, 2004 and June 30, 2014. The percentage of concurrent HIV and AIDS infections diagnosed ranged from 23% to 36% among the ADDs. The ADDs with the highest proportion of concurrent HIV and AIDS infections were in the eastern Kentucky region; Cumberland Valley, Big Sandy, Buffalo Trace ADDs (36% , 35%, and 32% respectively) and in the eastern Kentucky region; Pennyryle 33% and Purchase 31%. The percentages in ADDs which had <50 of cases should be interpreted with caution.

## HIV Infections by Care Coordinator Region, January 1, 2004-June 30, 2014, Kentucky

**Figure 21. Number of HIV Disease Diagnoses within each Care Coordinator Region of Residence at Time of Diagnosis, for the Most Recent 10.5 Years, January 1, 2004–June 30, 2014, Kentucky**

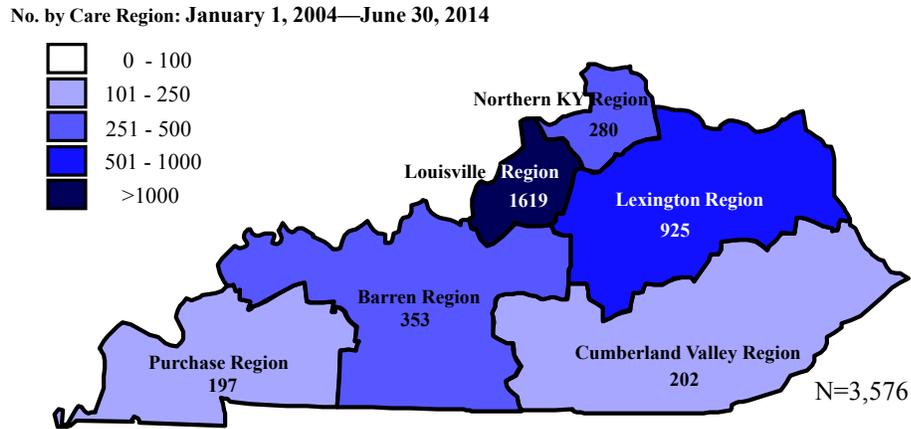


Figure 21 shows the total number of new HIV infections (regardless of disease progression status) diagnosed between January 1, 2004 and June 30, 2014 by Care Coordinator region of residence at time of HIV diagnosis. A care coordinator region defines the specific counties of the state for which clinical and support services are provided by the state-funded agency (agencies listed on page 32). The highest number of infections (1619, 45%) diagnosed in this period occurred among residents of the Louisville region. The second highest number of infections (925, 26%) occurred in residents of the Lexington region.

**Figure 22. Percentage of Concurrent HIV Disease Diagnoses within each Care Coordinator Region of Residence at Time of Diagnosis, for the Most Recent 10.5 Years, January 1, 2004–June 30, 2014, Kentucky**

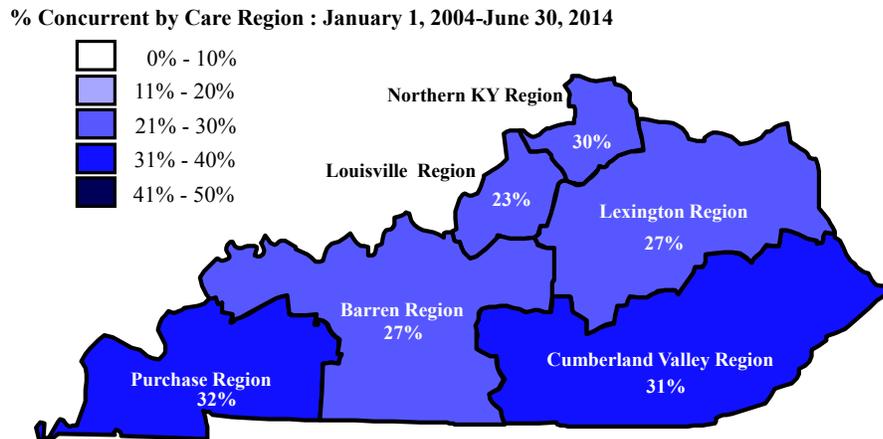


Figure 22 shows the percentage of new HIV cases within each Care Coordinator region that were concurrently diagnosed with AIDS (within 30 days of an initial HIV diagnosis), between January 1, 2004 and June 30, 2014. The percentage of concurrent HIV and AIDS infections diagnosed ranged from 23% to 32%. In all regions, approximately a quarter or more of cases diagnosed within each jurisdiction were concurrent diagnoses, with the highest proportions of concurrent HIV and AIDS cases residing in the Purchase region (32%), Cumberland Valley region (31%), and Northern Kentucky region (30%). For cases diagnosed concurrently, it is possible that either testing was not conducted near time of initial infection, or enrollment into care was delayed. This is evident by disease progression to AIDS within a 30 day period.

## HIV Care Coordinator Regions, Kentucky

<p><b>Barren Region</b></p> 	<p><b>Matthew 25</b>                      452 Old Corydon Road                      Henderson, KY 42420                      (270) 826-0200                      (866) 607-6590                      fax: (270) 826-0212</p>	<p><b>Counties Covered:</b></p>			
		Allen Barren Breckinridge Butler Daviss Edmonson	Grayson Hancock Hardin Hart Henderson Larue	Logan McLean Marion Meade Metcalfe Monroe	Nelson Ohio Simpson Union Warren Washington Webster
<p><b>Cumberland Valley Region</b></p> 	<p><b>Cumberland Valley Dist. HD</b>                      PO Box 158                      Manchester Square Shopping Ctr. Suite 205                      Manchester, KY 40962                      (606) 599-0112                      (888) 425-7282 (for client use only)                      fax: (606) 596-0266                      Some Cumberland Valley clients are covered by Lexington Region</p>	<p><b>Counties Covered:</b></p>			
		Adair Bell Breathitt Casey Clay Clinton Cumberland Floyd	Green Harlan Jackson Johnson Knott Knox Laurel Lee	Leslie Letcher Magoffin Martin McCreary Owsley Perry Pike	Pulaski Rockcastle Russell Taylor Wayne Whitley Wolfe
<p><b>Lexington Region</b></p> 	<p><b>Bluegrass Care Clinic, UK</b>                      740 S. Limestone, K512                      UK Medical Center                      Lexington, KY 40536                      (859) 323-5544                      866-761-0206                      fax: (859) 257-3477</p>	<p><b>Counties Covered:</b></p>			
		Anderson Bath Bourbon Boyd Boyle Bracken Carter Clark	Elliott Estill Fayette Fleming Franklin Garrard Greenup Harrison	Jessamine Lawrence Lewis Lincoln Madison Mason Menifee Mercer	Montgomery Morgan Nicholas Powell Robertson Rowan Scott Woodford
<p><b>Louisville Region</b></p> 	<p><b>University of Louisville Care Coordination Program</b>                      501 E. Broadway, Suite 120                      Louisville, KY 40202                      (502) 852-2488                      fax: (502) 8522510</p>	<p><b>Counties Covered:</b></p>			
		Bullitt Henry	Jefferson Oldham	Shelby Spencer	Trimble
<p><b>Northern Kentucky Region</b></p> 	<p><b>Northern Ky District Health Dept.</b>                      2388 Grandview Drive                      Ft. Mitchell, KY 41017                      (859) 341-4264                      fax: (859) 578-3689</p>	<p><b>Counties Covered:</b></p>			
		Boone Campbell	Carroll Gallatin	Grant Kenton	Owen Pendleton
<p><b>Purchase Region</b></p> 	<p><b>Heartland Cares, Inc.</b>                      619 N. 30th Street                      Paducah, KY 42001                      (270) 444-8183                      (877) 444-8183                      fax: (270) 444-8147</p>	<p><b>Counties Covered:</b></p>			
		Ballard Caldwell Calloway Carlisle	Christian Crittenden Fulton Graves	Hickman Hopkins Livingston Lyon	McCracken Marshall Muhlenberg Todd Trigg

For more information, contact the nearest Care Coordinator Agency, or the Care Coordinator Program Administrator, (502) 564-6539



## State Sponsored HIV Counseling and Testing Sites, Kentucky

County / Agency	City	Phone	County / Agency	City	Phone
Adair County Health Department	Columbia	(270) 384-2286	Jessamine County Health Department	Nicholasville	(859) 885-4149
Allen County Health Department	Scottsville	(270) 237-4423	Johnson County Health Department	Paintsville	(606) 789-2590
Anderson County Health Department	Lawrenceburg	(502) 839-4551	Kenton County Health Department	Covington	(859) 431-3345
Ballard County Health Department	La Center	(270) 665-5432	Knott County Health Department	Hindman	(606) 785-3144
Barren County Health Department	Glasgow	(270) 651-8321	Knox County Health Department	Barbourville	(606) 546-3486
Bath County Health Department	Owingsville	(606) 674-9646	Larue County Health Department	Hodgenville	(270) 358-3844
Bell County Health Department	Pineville	(606) 248-2862	Laurel County Health Department	London	(606) 864-5187
Boone County Health Department	Florence	(859) 363-2060	Lawrence County Health Department	Louisville	(606) 638-4389
Bourbon County Health Department	Paris	(859) 987-1915	Lee County Health Department	Beattyville	(606) 464-2492
Boyd County Health Department	Ashland	(606) 324-7181	Leslie County Health Department	Hyden	(606) 672-2393
Boyle County Health Department	Danville	(859) 236-2053	Letcher County Health Department	Whitesburg	(606) 633-2945
Bracken County Health Department	Brooks ville	(606) 735-2157	Lewis County Health Department	Vanceburg	(606) 796-2632
Breathitt County Health Department	Jackson	(606) 666-5274	Lincoln County Health Department	Stanford	(606) 365-3106
Breckinridge County Health Department	Hardinsburg	(270) 756-5121	Livingston County Health Department	Smithland	(270) 928-2193
Bullitt County Health Department	Shepherdsville	(502) 543-2415	Logan County Health Department	Russellville	(270) 726-8341
Butler County Health Department	Morgantown	(270) 526-3221	Lyon County Health Department	Eddyville	(270) 388-9763
Caldwell County Health Department	Princeton	(270) 365-6571	Madison County Health Department	Richmond	(859) 626-4241
Calloway County Health Department	Murray	(270) 753-3381	Madison County Health Department - Berea	Berea	(859) 986-1192
Campbell County Health Department	Newport	(859) 431-1704	Magoffin County Health Department	Salyersville	(606) 349-6212
Carlisle County Health Department	Bardwell	(270) 628-5431	Marion County Health Department	Lebanon	(270) 692-3393
Carroll County Health Department	Carrollton	(502) 732-6641	Marshall County Health Department	Benton	(270) 527-1496
(Carter) West Carter Health Center	Olive Hill	(606) 286-5588	Martin County Health Department	Inez	(606) 298-7752
Casey County Health Department	Liberty	(606) 787-6911	Mason County Health Department	Maysville	(606) 564-9447
Christian County Health Department	Hopkinsville	(270) 887-4160	Heartland Cares Clinic	Paducah	(270) 444-8183
Clark County Health Department	Winchester	(859) 744-4482	McCracken County Health Department	Paducah	(270) 444-9631
Clay County Health Department	Manchester	(606) 598-2425	McCreary County Health Department	Whitley City	(606) 376-2412
Clinton County Health Department	Albany	(606) 387-5711	McLean County Health Department	Calhoun	(270) 273-3062
Crittenden County Health Department	Mario n	(270) 965-5215	Meade County Health Department	Brandenburg	(270) 422-3988
Cumberland County Health Department	Burkesville	(270) 864-2206	Menifee County Health Department	Frenchburg	(606) 768-2151
Davies County Health Department	Owensboro	(270) 686-7744	Mercer County Health Department	Harrodsburg	(859) 734-4522
Edmons on County Health Department	Brownsville	(270) 597-2194	Metcalfe County Health Department	Edmonton	(270) 432-3214
Elliott County Health Department	Sandy Hook	(606) 738-5205	Monroe County Health Department	Tompkinsville	(270) 487-6782
Estill County Health Department	Irvine	(606) 723-5181	Montgomery County Health Department	Mount Sterling	(859) 498-3808
(Fayette) AHEC Lexington	Lexington	(859) 281-6086	Morgan County Health Department	West Liberty	(606) 743-3744
(Fayette) AVOL (AIDS Volunteers, Inc.)	Lexington	(859) 225-3000	Muhlenberg County Health Department	Central City	(270) 754-3200
(Fayette) Bluegrass Community Health Center	Lexington	(859) 259-2635	Nelson County Health Department	Bards town	(502) 348-3222
(Fayette) Lex-Fayette Health Department	Lexington	(859) 288-2323	Nicholas County Health Department	Carlisle	(859) 289-2188
(Fayette) Moveable Feast Lexington	Lexington	(859) 252-2867	Ohio County Health Department	Hartford	(270) 298-3663
Fleming County Health Department	Flemingsburg	(606) 845-6511	Oldham County Health Department	LaGrange	(502) 222-3516
Floyd County Health Department	Presidentsburg	(606) 886-2788	Owen County Health Department	Owenton	(502) 484-5736
Franklin County Health Department	Frankfort	(502) 564-4269	Owsley County Health Department	Booneville	(606) 593-5181
Fulton County Health Department	Fulton	(270) 472-1982	Pendleton County Health Department	Falmouth	(859) 654-6985
Fulton County Health Department – Hickman	Hickman	(270) 236-2825	Perry County Health Department	Hazard	(606) 436-2196
Gallatin County Health Department	Warsaw	(859) 567-2844	Pike County Health Department	Pikeville	(606) 437-5500
Garrard County Health Department	Lancaster	(859) 792-2153	Powell County Health Department	Stanton	(606) 663-4360
Grant County Health Department	Williams town	(859) 824-5074	Pulaski County Health Department	Somers et	(606) 679-4416
Graves County Health Department	Mayfield	(270) 247-3553	Roberts on County Health Department	Mount Olivet	(606) 724-5222
Grays on County Health Department	Leitchfield	(270) 259-3141	Rockcastle County Health Department	Mt. Vernon	(606) 256-2242
Green County Health Department	Greensburg	(270) 932-4341	Rowan County Health Department	Morehead	(606) 784-8954
Greenup County Health Department	Greenup	(606) 473-9838	Russell County Health Department	James town	(270) 343-2181
Hancock County Health Department	Hawesville	(270) 927-8803	Scott County Health Department	Georgetown	(502) 863-3971
Hardin County Health Department	Elizabeth town	(270) 765-6196	Shelby County Health Department	Shelbyville	(502) 633-1231
Harlan County Health Department	Harlan	(606) 573-4820	Simpson County Health Department	Franklin	(270) 586-8261
Harrison County Health Department	Cynthiana	(859) 234-2842	Spencer County Health Department	Taylor sville	(502) 477-8146
Hart County Health Department	Munfordsville	(270) 524-2511	Taylor County Health Department	Campbells ville	(270) 465-4191
(Henders on) Matthew 25 AIDS Services	Henders on	(270) 826-0200	Todd County Health Department	Elkton	(270) 265-2362
Henders on County Health Department	Henders on	(270) 826-3951	Trigg County Health Department	Cadiz	(270) 522-8121
Henry County Health Department	New Castle	(502) 845-2882	Trimble County Health Department	Bedford	(502) 255-7702
Hickman County Health Department	Clinton	(270) 653-6110	Union County Health Department	Morganfield	(270) 389-1230
Hopkins County Health Department	Madisonville	(270) 821-5242	Warren County Health Department	Bowling Green	(270) 781-2490
Jackson County Health Department	McKee	(606) 287-8421	Western Kentucky University – Health Services	Bowling Green	(270) 745-2273
(Jefferson) Dixie Health Center	Louisville	(502) 937-7277	Washington County Health Department	Springfield	(859) 336-3989
(Jefferson) Harambee Health Center, Inc.	Louisville	(502) 593-5939	Wayne County Health Department	Monticello	(606) 348-7464
(Jefferson) Lou.-Metro HD - Family/Methadone	Louisville	(502) 574-6660	Webster County Health Department	Dixon	(270) 639-9315
(Jefferson) Louisville-Metro HD - Specialty Clinic	Louisville	(502) 574-6697	Whitley County Health Department	Corbin	(606) 549-3380
(Jefferson) Louisville-Metro HD - TB Clinic	Louisville	(502) 574-6617	Wolfe County Health Department	Campton	(606) 668-3185
(Jefferson) Middleburg Clinic	Louisville	(502) 245-1074	Woodford County Health Department	Versailles	(859) 873-4541
(Jefferson) Newburg Health Center	Louisville	(502) 458-0778			
(Jefferson) The More Center	Louisville	(502) 574-6444			
(Jefferson) Volunteers of America – Louisville	Louisville	(502) 636-4540			

## WHAT YOU SHOULD KNOW ABOUT HIV & AIDS

### WHAT IS AIDS?

AIDS is the Acquired Immune Deficiency Syndrome – a serious illness that makes the body unable to fight infection. A person with AIDS is susceptible to certain infections and cancers. When a person with AIDS cannot fight off infections, this person becomes ill. These infections can eventually kill a person with AIDS.

### WHAT CAUSES AIDS?

The human immunodeficiency virus (HIV) causes AIDS. Early diagnosis of HIV infection is important! If you have been told that you have HIV, you should get prompt medical treatment. In many cases, early treatment can enhance a person's ability to remain healthy as long as possible. Free or reduced cost anonymous and confidential testing with counseling is available at most local health departments in Kentucky. After being infected with HIV, it takes between two weeks to six months before the test can detect antibodies to the virus.

### HOW IS THE HIV VIRUS SPREAD?

- \* Sexual contact (oral, anal, or vaginal intercourse) with an infected person when blood, pre-ejaculation fluid, semen, rectal fluids or cervical/vaginal secretions are exchanged.
- \* Sharing syringes, needles, cotton, cookers and other drug injecting equipment with someone who is infected.
- \* Receiving contaminated blood or blood products (very unlikely now because blood used in transfusions has been tested for HIV antibodies since March 1985).
- \* An infected mother passing HIV to her unborn child before or during childbirth, and through breast feeding.
- \* Receipt of transplant, tissue/organs, or artificial insemination from an infected donor.
- \* Needle stick or other sharps injury in a health care setting involving an infected person. Infections can sometimes be prevented by taking post-exposure prophylaxis anti-retroviral drugs. Strict adherence to universal precautions is the best way to prevent exposures.

### YOU CANNOT GET HIV THROUGH CASUAL CONTACT SUCH AS:

- \* Sharing food, utensils, or plates
- \* Touching someone who is infected with HIV
- \* Hugging or shaking hands
- \* Donating blood or plasma (this has NEVER been a risk for contracting HIV)
- \* Using public rest rooms
- \* Being bitten by mosquitoes or other insects
- \* Using tanning beds (always clean before and after use)

### HOW CAN I PREVENT HIV/AIDS?

- \* Do not share needles or other drug paraphernalia.
- \* Do not have sexual intercourse except with a monogamous partner whom you know is not infected and who is not sharing needles. If you choose to have sex with anyone else, use latex condoms (rubbers), female condoms or dental dams, and water based lubricants every time you have sex.
- \* Educate yourself and others about HIV infection and AIDS.

### PREGNANCY AND HIV/AIDS

- \* Mothers can pass HIV infection to their babies during pregnancy, labor and delivery, and by the child ingesting infected breast milk.
- \* Without treatment, about 25% (1 out of 4) of the babies born to HIV infected women will get HIV.
- \* Medical treatment for the HIV infected woman during pregnancy, labor, and delivery can reduce the chance of the baby getting HIV from its mother to less than 2% (less than 2 out of 100).
- \* An HIV infected mother should not breastfeed her newborn baby.

**WHAT IS UNSAFE SEX?**

- \* Vaginal, anal, or oral sex without using a condom or dental dam
- \* Sharing sex toys
- \* Contact with HIV infected blood, pre-ejaculation fluid, semen, rectal fluids or cervical/vaginal secretions

**WHAT IS "SAFER" SEX?**

- \* Abstinence (not having sex of any kind)
- \* Sex only with a person who does not have HIV, does not practice unsafe sex, or inject drugs
- \* Using either a male or female condom or dental dam (for oral sex)

**How to use a latex condom:**

1. Use a new latex condom every time you have sex.
2. The condom should be rolled onto the erect (hard) penis, pinching ½ inch at the tip of the condom to hold the ejaculation (semen) fluid. Air bubbles should be smoothed out.
3. Use plenty of WATER-BASED lubricants such as K-Y Jelly, including a drop or two inside the condom, before and during intercourse. DO NOT USE oil-based lubricants such as petroleum jelly, mineral oil, vegetable oil, Crisco, or cold cream.
4. After ejaculating, withdraw the penis holding the condom at the base so it will not slip off.
5. Throw away the used condom into a garbage can and wash hands.

**Remember: You can't tell whether or not someone has HIV just by looking at them!**

**IS TREATMENT AVAILABLE IF I ALREADY HAVE HIV/AIDS?**

After being infected with HIV, it takes between two weeks to six months before antibody tests can detect HIV. **Early diagnosis of HIV infection is important!** If you have HIV, you should get prompt medical treatment. In many cases, early treatment can enhance a person's ability to remain healthy as long as possible. Your doctor will help you determine the best treatment.

**GETTING TESTED FOR HIV:**

**If you have never been tested for HIV, you should be tested at least once.** Free anonymous and confidential rapid antibody testing and counseling are available at every health department in Kentucky. Centers for Disease Control and Prevention (CDC) recommends being **tested at least once a year if you do things that can transmit HIV.** These include:

- \* Injecting drugs or steroids with used injection equipment
- \* Having sex with someone who has HIV or any sexually transmitted disease (STD)
- \* Having more than one sex partner since your last HIV test
- \* Having a sex partner who has had other sex partners since your last HIV test
- \* Having sex for money or drugs (prostitution- male or female)
- \* Having unprotected sex or sex with someone who has had unprotected sex
- \* Having sex with injecting drug user(s)
- \* Having had a blood transfusion between 1978 and 1985
- \* Pregnant women or women desiring to become pregnant

**This agency provides quality services to all patients, regardless of HIV status.**

IF YOU NEED MORE INFORMATION CALL:  
Kentucky HIV/AIDS Program 502-564-6539  
The National AIDS Hotline 1-800-342-AIDS  
Your local health department's HIV/AIDS Coordinator