

HIV/AIDS Surveillance Report 2019

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

(Data complete through 2017, preliminary for 2018)



CABINET FOR HEALTH AND FAMILY SERVICES DEPARTMENT FOR PUBLIC HEALTH

Andy Beshear Governor

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Eric C. Friedlander
Secretary

Steven J. Stack, MD
Commissioner

Dear Reader:

Enclosed please find Kentucky's HIV/AIDS Annual Surveillance Report 2019, which contains data on HIV infections among Kentuckians reported to the Department for Public Health. This annual edition is a Centers for Disease Control and Prevention (CDC) grant deliverable and is produced to fulfill the requirements of Funding Opportunity Announcement (FOA): PS18-1802.

Confidential AIDS reporting started in 1982, whereas legislation requiring confidential HIV name-based reporting was not enacted until July 2004. Prior to July 2004, HIV infections were reported with a unique code. Section I (and throughout the report) profiles the HIV infections diagnosed among Kentuckians, regardless of progression to AIDS. A total of 10,794 cumulative HIV infections were diagnosed and reported as of December 31, 2018. Of these HIV infections, 62% have progressed to AIDS as of the report date.

Section II profiles new HIV infections diagnosed among Kentuckians. In calendar year 2017, there were 362 new HIV infections diagnosed among Kentucky residents, a diagnosis rate of 8.1 per 100,000, which shows a little increase from the rate of 7.6 per 100,000 population for 2016. Trends among people with 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 Kentuckians with HIV infection who were diagnosed with AIDS within 30 days of initial HIV diagnosis, also referred to as concurrent diagnoses. Analyses focus on the most recent 10 year period: January 1, 2009, through December 31, 2018. Twenty-three percent of the 3,416 individuals with new HIV disease diagnoses within that period were diagnosed with AIDS within 30 days of the initial HIV diagnosis.

Please read the data source and technical notes on pages 3-5 for further information concerning interpretation of the data. The data presented in this report are available at

https://chfs.ky.gov/agencies/dph/dehp/hab/Documents/AnnualReport2019.pdf

To receive e-mail updates when new HIV/AIDS statistical reports are released online, please send a blank email to the following address: mailto:subscribe-dph-semiannualreport@listserv.ky.gov.

Sincerely,

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Release Date: August, 2020

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Suggested citation: Kentucky Cabinet for Health and Family Services. Department for Public Health. *HIV/AIDS Surveillance Report, 2019*; vol. 19. https://chfs.ky.gov/agencies/dph/dehp/hab/Pages/default.aspx . Published August, 2020. Accessed [date].

For all media inquiries, please call the Office of Communications at (502) 564-6786 for assistance.

Kentucky Department for Public Health HIV/AIDS useful links:

HIV Reporting and Statistics:

Fillable Adult HIV Confidential Case Report Form:

https://chfs.ky.gov/agencies/dph/dehp/hab/Documents/ACRF Fillable.pdf

Fillable Pediatric HIV Confidential Case Report Form:

https://chfs.ky.gov/agencies/dph/dehp/hab/Documents/PCRF Fillable.pdf

HIV Prevention:

Syringe Services Programs:

https://chfs.ky.gov/agencies/dph/dehp/hab/Pages/kyseps.aspx

HIV Test Sites in Kentucky:

https://chfs.ky.gov/agencies/dph/dehp/hab/Documents/KYHIVTestSites.pdf

HIV Services:

HIV Care Coordinator Regions and Contact Information:

https://chfs.ky.gov/agencies/dph/dehp/hab/Documents/KYHIVCCRs.pdf

Ryan White Services Eligibility Application:

https://chfs.ky.gov/agencies/dph/dehp/hab/Documents/RWEligApp.pdf

Kentucky HIV/AIDS Annual Surveillance Report 2019

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 December 31, 2018. 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.

<u>Population data</u>: 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://www.ksdc.louisville.edu/ Accessed April 07, 2019.

HIV/AIDS Reporting Requirements Effective August 1, 2020

According to state regulation 902 KAR 2:020 Reportable Disease Surveillance, Section 16, health professionals licensed under KRS chapters 311 through 314, health facilities licensed under KRS 216.015(13), and medical laboratories licensed under KRS chapter 333 are required to report HIV and AIDS cases to the Kentucky Department for Public Health within five business days of diagnosis.

Cases of confirmed HIV and AIDS are reported to the Kentucky Department for Public Health's HIV/AIDS Surveillance Program at 866-510-0008* on the Confidential Adult HIV Case Report form for patients \geq 13 years of age at the time of diagnosis. Data from the case report forms are compiled to produce this report.

Additional case reporting information can be found on the Kentucky HIV/AIDS Section Website: https://chfs.ky.gov/agencies/dph/dehp/hab/Pages/reportsstats.aspx

*Note: The previous Bullitt, Henry, Jefferson, Oldham, Shelby, Spencer, and Trimble Counties' reporting route through Louisville Metro has been discontinued. All reporting now will go through routing noted above.

Key Terminology

The terminology used in this report is in a format consistent with CDC's technical guidelines for HIV surveillance grantees in the United States, and also consistent with the National HIV Surveillance Report, available online at: https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html

Age: Current Age: An individual's age or age group as of December 31, 2018.

Age at Diagnosis: An individual's age or age group at the time of initial HIV disease diagnosis.

"Adults and adolescents" refers to persons aged 13 years and older.

"Pediatric" refers to persons aged less than 13 years.

<u>AIDS (Acquired Immunodeficiency Syndrome)</u>: 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 T-lymphocyte count of less than 200 cells/ml of blood. The CD4 T-lymphocyte count takes precedence over the CD4 T-lymphocyte percentage, and a percentage of less than 14% is considered only if the count is missing.

Concurrent Diagnosis: Both HIV and AIDS are diagnosed within a 30-day period.

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

<u>HIV (Human Immunodeficiency Virus)</u>: 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.

<u>HIV Disease:</u> 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 (AIDS).

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Race and Ethnicity: Ethnicity categories include Hispanic and not Hispanic. Data for all not Hispanic persons are displayed in combination with their racial groupings, which include:

- ♦ White
- ♦ Black or African American
- Asian
- Native Hawaiian or other Pacific Islander
- ♦ American Indian or Alaska Native

Kentucky's HIV data are collected for all racial and ethnic groupings. However, due to small numbers, data for the following racial groups are aggregated into the "other" designation: American Indian or Alaska Native, Native Hawaiian or Pacific Islander, and persons of multiple races.

<u>Sex</u>: Sex designations in this report are based on a person's sex assignment at birth. According to the CDC, transgender is an umbrella term that is used to identify persons whose sex assigned at birth does not match current gender identity or expression. Data for transgender persons are not presented in this report because information on gender identity (a person's internal understanding of his or her gender or the gender with which a person identifies) is not consistently collected or documented in the data sources used by the HIV Surveillance Program. HIV Surveillance personnel collect this information, when available, from sources such as case report forms submitted by health care or HIV testing providers and medical records, or by matching with other databases (e.g., Ryan White program data). In May 2012, CDC issued guidance to state and local programs on methods for collecting data on transgender persons and working with transgender-specific data. However, characterization of HIV infection among transgender persons in Kentucky would require supplemental data from special studies.

<u>Transmission Category</u>: 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 who 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, such as an injection drug user, a bisexual male (females only), or a person with hemophilia/coagulation disorder.
- Female Heterosexual Contact (FHC): A female who does not fit in the heterosexual contact category above, with no reported injection drug use, but reported 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. 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.
- **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 (COPHI) 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 category have been re-assigned to that category beginning in June 2012.

Technical Notes

- 1. <u>Reporting Delays</u> 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 2018 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. <u>Place of Residence</u> HIV data are presented based on residence at the time the 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. <u>Vital Status</u> 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. <u>Transmission Route</u> Despite the 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 CDC. See the "Key Terminology" list on page 4 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 occasionally result in missing information. Enhanced surveillance activities have been implemented 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 resolve duplicate reporting, CDC initiated the Routine Interstate Duplicate Review (RIDR) project 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 to assign the case one state residency based on residence at the earliest date of diagnosis. Due to 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. <u>Small Numbers</u> 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 fewer than ten cases because of the low reliability of rates based on the 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 HIV 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 who 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 as of December 31, 2018, Kentucky

					Kentuc	ky					
		White	e, Not	Blacl	k, Not			Otl	he r/		
		Hisp	oanic	His	panic	Hisp	oanic	Unk	nown	TOT	TAL
	Age Group	No.	%	No.	%	No.	%	No.	%	No.	%
	<13	27	<1	31	1	0	0	1	<1	59	1
	13-19	136	2	166	6	6	1	15	7	323	4
Ħ	20-29	1,594	28	933	35	161	40	84	40	2,772	31
MALE	30-39	2,017	36	773	29	147	36	60	28	2,997	34
\mathbf{z}	40-49	1,278	23	531	20	57	14	34	16	1,900	21
	50+	588	10	229	9	32	8	17	8	866	10
	TOTAL	5,640	100	2,663	100	403	100	211	100	8,917	100
	<13	14	2	20	2	1	1	1	1	36	2
\Box	13-19	42	5	52	6	5	6	3	4	102	5
	20-29	248	29	256	29	36	44	19	28	559	30
FEMALE	30-39	284	33	284	33	19	23	22	32	609	32
Ξ	40-49	163	19	160	18	15	19	18	26	356	19
$\overline{\mathbf{x}}$	50+	103	12	101	12	5	6	6	9	215	11
	TOTAL	854	100	873	100	81	100	69	100	1,877	100

⁽¹⁾ Includes HIV disease cases diagnosed from the beginning of the epidemic as of December 31, 2018.

Since the beginning of the HIV epidemic in 1982, the majority (83%) of HIV cases diagnosed among Kentuckians have been reported among males (8,917 cases). In terms of age at time of diagnosis, more male HIV cases were diagnosed at ages 30-39 (2,997 or 34%) than any other age grouping. Among white males, the highest percentage of cumulative cases was aged 30-39 years at the time of diagnosis (36%). Among black males, 35% of cases were aged 20-29 years and 29% were aged 30-39 years at time of diagnosis. The percentage of Hispanic males aged 20-29 at time of diagnosis (40%) was higher when compared to blacks (35%) and whites (28%). Conversely, Hispanic males had the lowest percentage of cases diagnosed at ages 40-49 years (14%) as compared to black males and white males (20% 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 patterns exist among females with HIV disease. More females were diagnosed with HIV disease at ages 30-39 (609 or 32%) than in any other age category. For females cases, age at identification was nearly identical across age groups for black and white females, while Hispanic females were most often identified in the 20-29 year age group (44%).

^{*}Age at initial HIV diagnosis.

Table 2. Cumulative⁽¹⁾ Adult/Adolescent* HIV Disease Cases By Transmission Route, Race/Ethnicity, and Sex as of December 31, 2018, Kentucky

		White	e, Not	Blac	k, Not			Otl	ner/			
		Hisp	Hispanic		Hispanic		Hispanic		Unknown		TOTAL	
	Transmission Category	No.	%	No.	%	No.	%	No.	%	No.	%	
	MSM ⁽²⁾	4,114	73	1,468	56	242	60	139	66	5,963	67	
	IDU ⁽³⁾	333	6	335	13	33	8	13	6	714	8	
Ξ	MSM/IDU	394	7	155	6	10	2	8	4	567	6	
	Heteros exual ⁽⁴⁾	219	4	234	9	39	10	16	8	508	6	
MALE	Other ⁽⁵⁾	88	2	16	1	0	0	0	0	104	1	
	Undetermined ⁽⁶⁾	465	8	424	16	79	20	34	16	1,002	11	
	TOTAL ⁽⁷⁾	5,613	100	2,632	100	403	100	210	100	8,858	100	
	$IDU^{(3)}$	215	26	165	19	11	14	11	16	402	22	
Ξ	Heterosexual ⁽⁴⁾	408	49	407	48	44	55	39	57	898	49	
AI	Female Heterosexual ⁽⁸⁾	147	18	227	27	21	26	14	21	409	22	
\mathbf{Z}	Other ⁽⁵⁾	12	1	5	1	0	0	0	0	17	1	
FEMALE	Undetermined ⁽⁶⁾	58	7	49	6	4	5	4	6	115	6	
	TOTAL ⁽⁷⁾	840	100	853	100	80	100	68	100	1,841	100	

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

Among adult/adolescent males, the majority of cumulative HIV cases reported the primary route of exposure as MSM (67%), while among adult/adolescent women, most (49%) were exposed through heterosexual contact with a person with HIV or at high risk for HIV infection (e.g., a person who injects drugs). Adult/adolescent minority males (13% of black males and 8% 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 as compared to 56% of all adult/adolescent black males and 60% of all adult/adolescent Hispanic males.

The most reported risk factor for adult/adolescent female cases in each racial/ethnic group was heterosexual contact. When including female heterosexual contact as a risk category, only 6% of adult/adolescent females have undetermined routes of transmission compared to 11% of adult/adolescent males. Adult/adolescent Hispanic males (20%) and black males (16%) have higher percentages of cases without an identified risk factor than adult/ adolescent white males (8%). The existence of large percentages of cases without known routes of transmission poses a barrier to the provision of effective responses to the epidemic within these groups. Risk factor information forms the basis for program planning, service provision, and guides resource allocation.

⁽¹⁾ Includes HIV disease cases diagnosed from the beginning of the epidemic as of December 31, 2018.

⁽²⁾ MSM = Men Who Have Sex With Men.

⁽³⁾ IDU = Injection Drug Use.

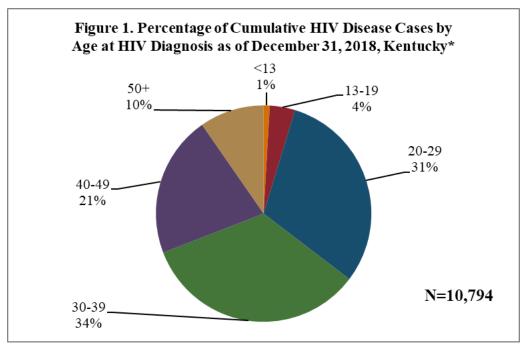
^{(4) &}quot;Heterosexual" includes persons who have had heterosexual contact with a person with HIV or at risk for HIV.

^{(5) &}quot;Other" includes persons who had a transfusion/transplant or hemophilia/coagulation disorder listed as mode of transmission or pediatric cases diagnosed as adults.

^{(6) &}quot;Undetermined" refers to persons whose route of exposure to HIV is unknown. This includes persons who are under investigation, dead, lost to investigation or refused interview, and persons whose mode of exposure remains undetermined after investigation.

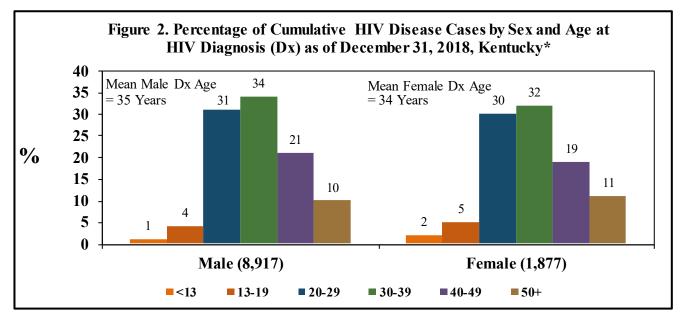
⁽⁷⁾ Percentages may not total 100% due to rounding.

^{(8) &}quot;Female Heterosexual" = A female not reporting drug use, but reporting sex with male. See terminology on page 4 for additional definition.



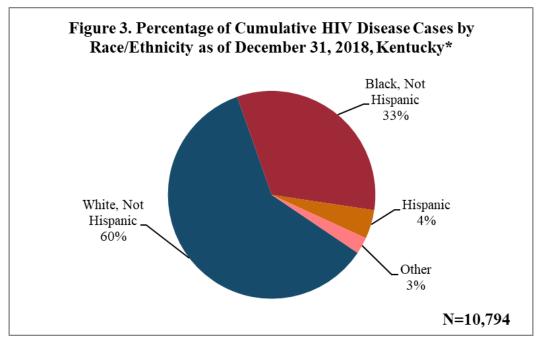
^{*} Percentages may not total 100% due to rounding.

Figure 1 shows the distribution of cumulative Kentucky HIV cases by age at diagnosis. One-third (34%) of cumulative HIV cases in Kentucky were aged 30-39 years at time of diagnosis. Persons aged 20-29 years also account for almost a third of cumulative cases (31%). Children (aged <13 years at diagnosis) and teenagers (aged 13-19 years) account for the smallest percentages of cases at less than 5% each.



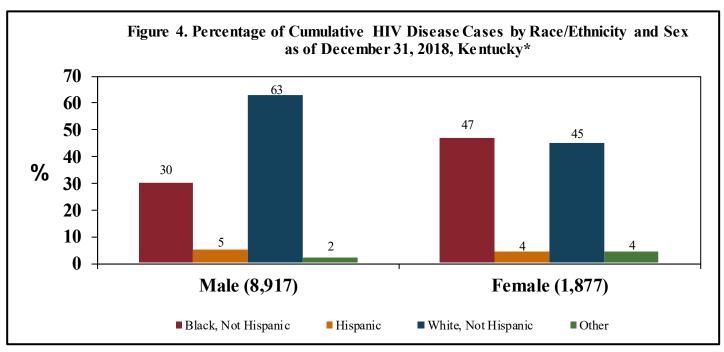
^{*} Percentages may not total 100% due to rounding.

Figure 2 shows the percentage of HIV cases by age group and sex. Cumulatively, 8,917 male HIV cases have been diagnosed, of which 34% 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 (32%). The mean age at diagnosis is 35 years for males and 34 years for females.



^{*} Percentages may not total 100% due to rounding.

Figure 3 shows that 60% of cumulative HIV cases diagnosed in Kentucky are in whites, 33% are in blacks, and 4% are in Hispanics.



^{*} Percentages may not total 100% due to rounding.

Figure 4 shows the percentages of cumulative HIV cases within each sex group by race/ethnicity. Among males, the majority are white (63%) 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 at 47% and 45%, respectively.

Cumulative Adult/Adolescent HIV Diagnoses by Transmission Route, Kentucky

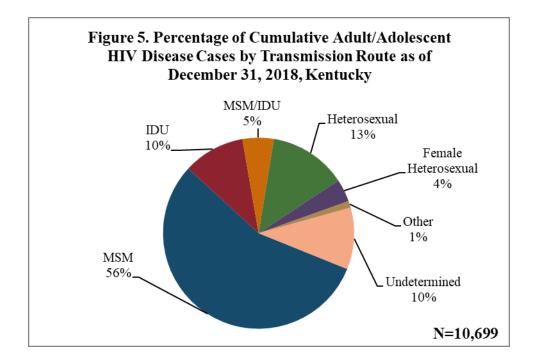


Table 3. Cumulative Adult/Adolescent HIV Disease Cases by Transmission Route as of December 31, 2018, Kentucky						
Transmission Route	No.	%				
MSM	5,963	56				
IDU	1,116	10				
MSM/IDU	567	5				
Heterosexual	1,406	13				
Female Heterosexual*	409	4				
Other†	121	1				
Undetermined	1,117	10				
Total**	10,699	100				

^{*}Female Heterosexual = A female not reporting drug use, but reporting sex with male. See terminology on page 4 for additional definition.

In Kentucky, 56% of cumulative adult/adolescent HIV cases identified their primary transmission route as men who have sex with men (MSM) as shown in Figure 5. Thirteen percent of adult/adolescent HIV cases reported heterosexual contact as their primary transmission route, 10% reported injection drug use (IDU), and 5% reported both MSM and IDU. Ten 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.

^{**}Percentages may not total 100% due to rounding.

^{†&}quot;Other" includes persons with 'transfusion/transplant' or 'hemophilia/coagulation' listed as mode of transmission. Also includes persons with perinatal exposure, but who were diagnosed as an adult. See Table 12 for perinatal data.

Total HIV

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 as of December 31, 2018, Kentucky⁽¹⁾

Total Living with

Total HIV

Total Living with

ADD/County	Disease Cases ⁽²⁾	HIV Disease ⁽³⁾	ADD/County	Disease Cases ⁽²⁾
Barren River	385	246	Buffalo Trace	59
Allen	20	11	Bracken and Robertson*	8
Barren	47	27	Fleming	8
Butler	15	14	Lewis	16
Edmonson and Metcalfe*	17	10	Mason	27
Hart	13	7	Widom	21
Logan	30	19		
Monroe	16	10	Cumberland Valley	210
Simpson	20	12	Bell	22
Warren	207	136	Clay	33
w arren	207	130	Harlan	23
			Jackson	16
Big Sandy	85	53	Knox	21
Floyd	24	15	Laurel	46
Johnson and Magoffin*	15	7	Rockcastle	10
Martin	11	10	Whitley	39
Pike	35	21	w nitic y	3)
TIKC	33	21	FIVCO	150
	-		Boyd	92
Bluegrass	2,101	1,491	Carter	20
Anderson	33	22	Elliott and Lawrence*	17
Bourbon	34	25	Greenup	21
Boyle	37	26	Greenap	21
Clark	56	41	-	
Estill	12	8	Gateway	109
Fayette	1,438	1,012	Bath	14
Franklin	104	72	Menifee	11
Garrard	12	8	Montgomery	28
Harrison	13	9	Morgan	34
Jessamine	76	59	Rowan	22
Lincoln	15	8	Tto Wull	
Madison	119	93	Green River	307
Mercer	34	19	Daviess	153
Nicholas	7	6	Hancock and Webster*	13
Powell	12	8	Henderson	64
Scott	64	48	McLean	10
Woodford	35	27	Ohio	14
	dential county at time		OHIO	11

⁽¹⁾ One case was missing residential county at time of diagnosis.

(Continued on page 12)

⁽²⁾ Total cases with HIV disease regardless of progression to AIDS, both living and deceased.(3) Living cases regardless of current residence.

^{*} Cases combined due to confidentiality guidelines.

Nelson

Washington

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

Table 4 (continued). Cumulative and Living HIV Disease Cases By Residential Area Development District (ADD) and County at Time of Diagnosis as of December 31, 2018, Kentucky⁽¹⁾

ADD/County	Total HIV Disease Cases ⁽²⁾	Total Living with HIV Disease ⁽³⁾	ADD/County	Total HIV Disease Cases ⁽²⁾	Total Living with HIV Disease ⁽³⁾
Kentucky River	90	61	Northern Kentucky	911	617
Breathitt and Owsley*	8	5	Boone	149	106
Knott	15	13	Campbell	194	133
Lee and Leslie*	8	4	Carroll	19	15
Letcher	22	13	Gallatin and Owen*	9	6
Perry	31	22	Grant	35	24
Wolfe	6	4	Kenton	496	326
	·	·	Pendleton	9	7
KIPDA/North Central	5,185	3,328	Pennyrile	344	192
Bullitt	98	74	Caldwell	23	12
Henry	32	23	Christian	23 161	108
Jefferson	4,759	3,065	Crittenden	101	6
Oldham	190	3,003 89	Hopkins	45	21
Shelby	85	66	Livingston	15	7
*	21	11	Lyon	17	5
Spencer and Trimble*	21	11	Muhlenberg	34	16
			Todd		
Lake Cumberland	181	129		23 16	8 9
Adair and Cumberland*	12	8	Trigg	10	9
	10	8 7	Purchase	328	197
Casey Clinton	13	10	Ballard and Carlisle*	15	8
Ciinton Green	8			38	8 22
		6	Calloway		
McCreary Pulaski	20 68	19 44	Fulton Graves	11 58	8 37
Russell	13 24	8 20	Hickman Marshall	9	8 15
Taylor				26	
Wayne	13	7	McCracken	171	99
T 1 70 '7	240		(1) One case was missing re		
Lincoln Trail	348	237	(2) Total cases with HIV di	sease regardless of progre	ssion to AIDS,
Breckinridge	17	7	both living and deceased.	0	
Grayson	18	10	(3) Living cases regardless of		
Hardin -	214	155	* Cases combined due to co	onfidentiality guidelines.	
Larue	5	4			
Marion	18	9			
Meade	25	17			

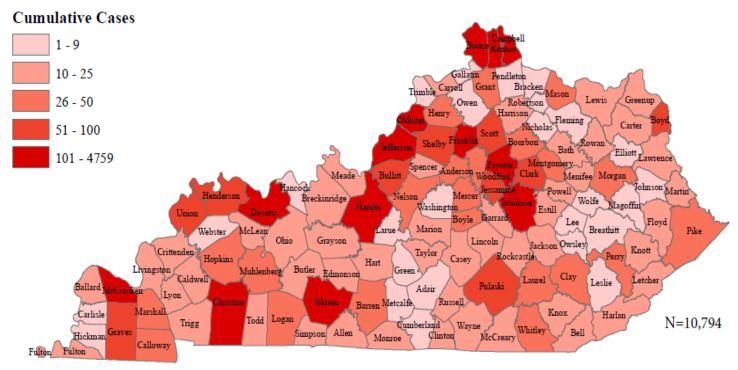
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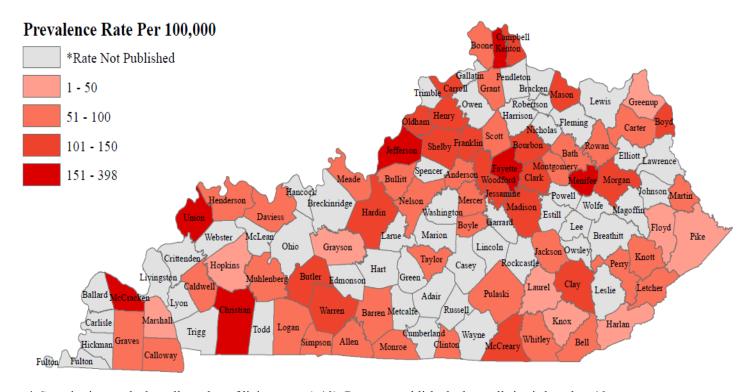
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Figure 6. Cumulative HIV Disease Cases Diagnosed By Residential County at Time of Diagnosis as of December 31, 2018, Kentucky*



^{*}One case was missing residential county at time of diagnosis

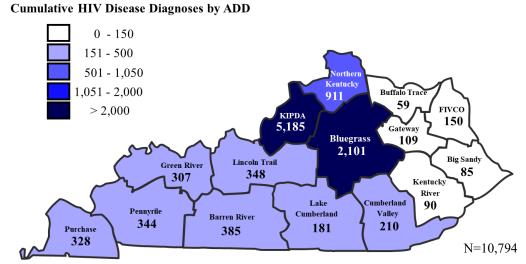
Figure 7. HIV Disease Prevalence Rates By Residential County at Time of Diagnosis as of December 31, 2018, Kentucky



^{*} Counties in gray had small number of living cases (<10). Rates not published when cell size is less than 10

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

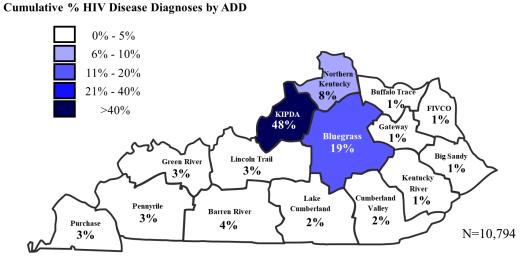
Figure 8. Cumulative HIV Disease Diagnoses by Area Development District (ADD) of Residence at Time of HIV Diagnosis as of December 31, 2018, Kentucky*



*One case was missing residential county information at time of diagnosis.

Figure 8 indicates that the highest number of cumulative HIV cases, 5,185 (48%), resided 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, 2,101 (19%), followed by the Northern Kentucky ADD, including a portion of the Cincinnati metropolitan area, with 911 (8%) of cumulative cases.

Figure 9. Percentage of Cumulative HIV Disease Diagnoses by Area Development District (ADD) of Residence at Time of HIV Diagnosis as of December 31, 2018, Kentucky*



*One case was missing residential county information at time of diagnosis.

Figure 9 shows the percentage of the cumulative 10,794 HIV cases statewide that were diagnosed within each ADD. The percentage of diagnoses by ADD ranged from 1% of total statewide cases residing in each of Buffalo Trace, Gateway, FIVCO, Big Sandy, and Kentucky River ADDs to almost half (48%) residing in the KIPDA ADD at time of diagnosis.

Persons Living with HIV Disease Diagnoses by Demographics, Kentucky

Table 5. Living HIV Disease Diagnoses By Transmission Route, Race/Ethnicity, and Sex as of December 31, 2018. Kentucky⁽¹⁾

		White	e, Not	Black	k, Not			Oth	er/		
		Hisp	*	His	oanic	Hisp	anic	Unkı	nown	TO	ΓAL
	Transmission Category	No.	%	No.	%	No.	%	No.	%	No.	%
	$MSM^{(2)}$	2,601	75	1,052	60	220	62	123	67	3,996	69
	IDU ⁽³⁾	170	5	140	8	22	6	8	4	340	6
[-]	MSM/IDU	237	7	73	4	7	2	6	3	323	6
MALE	Heterosexual ⁽⁴⁾	123	4	149	9	35	10	15	8	322	6
lacksquare	Perinatal	13	<1	23	1	0	0	1	1	37	1
\geq	Other ⁽⁵⁾	15	<1	4	<1	0	0	0	0	19	<1
	Undetermined ⁽⁶⁾	331	9	308	18	70	20	30	16	739	13
	Male Subtotal ⁽⁷⁾	3,490	100	1,749	100	354	100	183	100	5,776	100
	$IDU^{(3)}$	134	23	76	13	8	11	9	16	227	17
(Heteros exual ⁽⁴⁾	290	50	283	48	40	56	29	51	642	49
FEMALE	Female Heteros exual ⁽⁸⁾	114	20	188	32	19	27	14	25	335	26
I	Perinatal	10	2	14	2	1	1	1	2	26	2
	Other ⁽⁵⁾	0	0	2	<1	0	0	0	0	2	<1
\subseteq	Undetermined ⁽⁶⁾	36	6	29	5	3	4	4	7	72	6
	Female Subtotal ⁽⁷⁾	584	100	592	100	71	100	57	100	1,304	100
	$MSM^{(2)}$	2,601	64	1,052	45	220	52	123	51	3,996	56
	IDU ⁽³⁾	304	7	216	9	30	7	17	7	567	8
9	MSM/IDU	237	6	73	3	7	2	6	3	323	5
	Heteros exual ⁽⁴⁾	413	10	432	18	75	18	44	18	964	14
	Female Heteros exual ⁽⁸⁾	114	3	188	8	19	4	14	6	335	5
	Perinatal	23	1	37	2	1	<1	2	1	63	1
Ţ	Other ⁽⁵⁾	15	<1	6	<1	0	0	0	0	21	<1
ALL LIVING	Undetermined ⁽⁶⁾	367	9	337	14	73	17	34	14	811	11
7	TOTAL ⁽⁷⁾	4,074	100	2,341	100	425	100	240	100	7,080	100

- (1) Includes living HIV disease cases diagnosed from the beginning of the epidemic as of December 31, 2018.
- (2) MSM = Men Who Have 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 or 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 4 for additional definition.

Table 5 shows living HIV cases diagnosed through December 31, 2018, by demographic and behavioral characteristics. There are 7,080 Kentuckians reported to be living with HIV (prevalence rate of 158.9 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 the disease through MSM contact (69%), whereas the majority of Kentucky females contracted HIV through heterosexual contact (49%). An additional 26% 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.

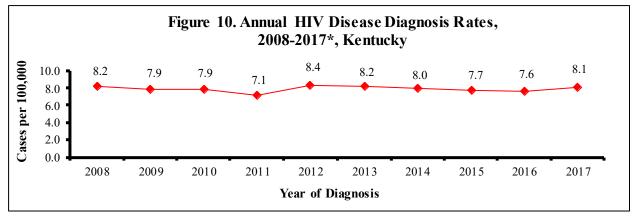
Section II: New HIV Infections Diagnosed among Kentuckians, as of December 31, 2018

As of December 31, 2018, a total of 10,794 cumulative HIV infections among Kentuckians had been reported to the Department for Public Health's HIV/AIDS Surveillance Program since AIDS reporting started in 1982. Of these infections, 62% have progressed to AIDS. The number of new HIV infections diagnosed since 2007 are presented in Table 6 along with the percentage from each year that have progressed to AIDS. Of the 4,150 HIV infections diagnosed since 2007, 1,598 (39%) had progressed to AIDS as of December 31, 2018.

Table 6. Number of HIV Infections per Year of Diagnosis (2007-2018 [†])							
and Percentage that Progressed to AIDS in the Course of Illness as of							
December 31, 2018 Kentucky							
Year of HIV Diagnosis	TOTAL HIV/AIDS*	Percentage that Progressed to AIDS†					
	No.	%					
2007	382	52%					
2008	352	54%					
2009	341	48%					
2010	343	45%					
2011	311	45%					
2012	367	37%					
2013	360	35%					
2014	351	32%					
2015	340	28%					
2016	338	35%					
2017	362	27%					
2018†	303	21%					
TOTAL	4150	39%					

^{*}Total HIV infections regardless of disease progression.

Figure 10 displays annual HIV diagnosis rates among Kentuckians. The annual HIV diagnosis rate has remained fairly steady from 2008 to 2017 with slight fluctuations between 7.1 to 8.4 cases per 100,000 population.



^{*}Data are current as of December 31, 2018. 2018 data are considered preliminary due to reporting delays and not included in trend analysis.

[†]Data reported as of December 31, 2018.

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), 2017⁽¹⁾

Table 7. Estimated* Annual HIV Disease Diagnosis Rates per 100,000 Population by Residence at Time of Diagnosis, 2017

Rank	Area of Residence	Rate
1	Washington, DC	46.3
2	Georgia	24.9
3	Florida	22.9
4	Louisiana	22.1
5	Maryland	17.0
6	Nevada	16.5
7	Texas	15.4
8	Mississippi	14.3
8	South Carolina	14.3
10	New York	14.0
11	Alabama	13.5
12	Delaware	13.0
13	North Carolina	12.8
14	New Jersey	12.3
15	California	11.4
16	Arizona	10.9
17	Tennessee	10.3
17	Virginia	10.3
19	Illinois	9.9
20	Arkansas	9.7
21	Massachusetts	8.8
22	Ohio	8.8
23	Pennsylvania	8.5
24	Missouri	8.3
25	Colorado	7.9
25	Kentucky**	7.9

Rank	Area of Residence	Rate
27	Indiana	7.8
27	Michigan	7.8
27	Rhode Island	7.8
30	Oklahoma	7.7
31	Connecticut	7.4
32	Washington	6.0
33	Hawaii	5.7
34	New Mexico	5.5
35	Minnesota	5.0
36	North Dakota	4.8
36	Oregon	4.8
38	Nebraska	4.6
39	Wisconsin	4.5
40	South Dakota	4.3
40	West Virginia	4.3
42	Kansas	4.1
43	Iowa	4.0
44	Alaska	3.9
45	Utah	3.7
46	Montana	3.0
46	Vermont	3.0
48	Idaho	2.7
49	New Hampshire	2.5
50	Maine	2.2
51	Wyoming	1.7

11.8

Estimated National HIV Diagnosis Rate per 100,000, 2017:

In 2017, the annual estimated national HIV diagnosis rate was 11.8 per 100,000 population. The diagnosis rates among the 50 States and Washington, DC ranged from 1.7 per 100,000 population (Wyoming) to 46.3 per 100,000 (Washington, DC). Kentucky ranked 25th with an estimated diagnosis rate of 7.9 per 100,000.

¹U.S. estimated rates from Centers for Disease Control and Prevention. HIV Surveillance Report, 2017; vol.29 http://www.cdc.gov/hiv/library/reports/surveillance/. Published November 2018. Accessed March 2019.

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

^{**}Kentucky's rate is estimated by CDC using a different methodology and should not be compared directly to reported data elsewhere in this report.

New HIV Diagnosis: Kentucky vs. The United States, 2017

Table 8. New HIV Diagnoses* by Demographics, 2017, Kentucky						
Number of New Cases	% of New HIV cases ⁽¹⁾					
294	81					
67	19					
1	<1					
362	100					
1	<1					
69	19					
199	55					
87	24					
6	2					
362	100					
220	61					
108	30					
24	7					
10	3					
362	100					
_						
190	52					
47	13					
30	8					
16	4					
1	<1					
1	-1					
	entucky Number of New Cases 294 67 1 362 1 69 199 87 6 362 220 108 24 10 362 190 47 30					

*HIV	diagnoses	regardless	of disease	progression
------	-----------	------------	------------	-------------

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

TOTAL

362

Table 9. Estimated New U.S. HIV Infections* by							
Demographics, 2017 ⁽⁵⁾							
	Number						
	of New	% of New					
Characteristics	Cases (6)	HIV cases (1)					
SEX							
Male (adult/adolescent)	30,870	81					
Female (adult/adolescent)	7,312	19					
Child (<13 yrs)	99	<1					
TOTAL [†]	38,281	100					
AGE AT DIAGNOSIS‡	99	<1					
13-24	8,090	21					
25-44	20,615	54					
45-64	8,613	22					
65+	864	2					
$TOTAL^\dagger$	38,281	100					
RACE/ETHNICITY							
White, Not Hispanic	10,048	26					
Black, Not Hispanic	16,690	44					
Hispanic	9,461	25					
Other	2,082	5					
TOTAL [†]	38,281	100					
TRANSMISSION ROUTE							
MSM ⁽²⁾	25,513	67					
IDU ⁽³⁾	2,344	6					
MSM/IDU	1,241	3					
Heterosexual	9,003	24					
Perinatal	73	<1					
Other/Undetermined ⁽⁴⁾	106	<1					
TOTAL [†]	38,280	100					

⁽⁵⁾ U.S. cases from Centers for Disease Control and Prevention. *HIV* Surveillance Report: Diagnoses of HIV Infection in the United States and Dependent Areas, 2017: 29.

Kentucky's distribution of HIV cases by sex and age at diagnosis (Table 8) closely parallels that of the U.S. (Table 9). However, the percentage of new HIV cases in Kentuckians that are white, not Hispanic, is much greater than in the U.S. population (61% vs. 26%, respectively). This can be partially attributed to the greater percentage of white, not Hispanic, persons in Kentucky's general population (85.6%) as compared to the U.S. population (61.5%). United States cases have been adjusted for reporting delays and missing risk factors. Kentucky cases have not been adjusted for reporting delays and missing risk factors. The percentage of Kentuckians diagnosed with IDU as a risk factor (13%) is more than double as compared to the U.S. percentage (6%). https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_15_5YR_S0601&prodType=table

100

⁽²⁾ MSM = Men Who Have Sex With Men

⁽³⁾ IDU = Injection Drug Use

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

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

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

Table 10. Adult	Table 10. Adult/Adolescent ⁽¹⁾ HIV Diagnoses by Year of Diagnosis, Sex, Age at Diagnosis, Race/Ethnicity, and															
				T	rans m	ission	Route	, Ken	tucky							
Characteristics	1982	-12	201	13	201	14	201	15	201	16	201	7 ⁽²⁾	2018	8 ⁽²⁾	Tot	tal
SEX	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male	7,176	83	295	83	286	83	284	84	284	85	294	81	239	79	8,858	83
Female	1,483	17	62	17	58	17	55	16	52	15	67	19	64	21	1,841	17
TOTAL ⁽³⁾	8,659	100	357	100	344	100	339	100	336	100	361	100	303	100	10,699	100
AGE AT DIAGNOSIS*																
13-19	334	4	10	3	14	4	14	4	13	4	13	4	27	9	425	4
20-29	2,597	30	121	34	109	32	141	42	124	37	133	37	106	35	3,331	31
30-39	3,077	36	84	24	87	25	76	22	98	29	97	27	87	29	3,606	34
40-49	1,880	22	76	21	86	25	58	17	55	16	58	16	43	14	2,256	21
50+	771	9	66	18	48	14	50	15	46	14	60	17	40	13	1,081	10
TOTAL ⁽³⁾	8,659	100	357	100	344	100	339	100	336	100	361	100	303	100	10,699	100
RACE/ETHNICITY																
White, Not Hispanic	5,288	61	208	58	199	58	185	55	176	52	219	61	178	59	6,453	60
Black, Not Hispanic	2,825	33	112	31	101	29	127	37	116	35	108	30	96	32	3,485	33
Hispanic	347	4	19	5	31	9	13	4	33	10	24	7	16	5	483	5
Other/Unknown	199	2	18	5	13	4	14	4	11	3	10	3	13	4	278	3
TOTAL ⁽³⁾	8,659	100	357	100	344	100	339	100	336	100	361	100	303	100	10,699	100
<u>TRANSMISSION</u>																
<u>ROUTE</u>																
MS M ⁽⁴⁾	4,809	56	215	60	205	60	209	62	197	59	190	53	138	46	5,963	56
IDU ⁽⁵⁾	960	11	20	6	11	3	15	4	18	5	47	13	45	15	1,116	10
MS M/IDU	466	5	14	4	11	3	15	4	16	5	30	8	15	5	567	5
Heterosexual ⁽⁶⁾	1,256	15	34	10	28	8	28	8	25	7	16	4	19	6	1,406	13
Female Heterosexual ⁽⁷⁾	246	3	26	7	33	10	25	7	27	8	29	8	23	8	409	4
Other ⁽⁸⁾	119	1	1	0	0	0	1	0	0	0	0	0	0	0	121	1
Undetermined ⁽⁹⁾	803	9	47	13	56	16	46	14	53	16	49	14	63	21	1,117	10
TOTAL ⁽³⁾	8,659	100	357	100	344	100	339	100	336	100	361	100	303	100	10,699	100

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

Table 10 shows a breakdown of new adult/adolescent HIV diagnoses by year of diagnosis and demographic characteristics. Cumulative data are presented through December 31, 2018. New diagnoses over the most recent years for which data are complete, 2013-2017, have been predominantly among males, whites, and males reporting sexual contact with other males. New HIV cases over the five year period 2013-2017 were also highest among persons 20-29 years old in comparison to other age groups.

^{*}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 as of December 31, 2018. 2018 data are not used in trend analyses due to reporting delays.

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

⁽⁴⁾ MSM = Men Who Have Sex With Men.

⁽⁵⁾ IDU = Injection Drug Use.

^{(6) &}quot;Heterosexual" includes persons who have had heterosexual contact with a person with HIV or at risk for HIV.

^{(7) &}quot;Female Heterosexual" = A female not reporting drug use, but reporting sex with male. See terminology on page 4 for additional definition.

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

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

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

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

	Race/Ethnicity, and Transmission Route, Kentucky															
Characteristics	1982	2-12	201	13	201	14	20:	15	201	16	201	7 ⁽²⁾	201	8 ⁽²⁾	Tot	al
<u>S EX</u>	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male	5,049	84	102	81	95	84	82	85	99	84	84	85	50	79	5,561	84
Female	979	16	24	19	18	16	14	15	19	16	15	15	13	21	1,082	16
TOTAL ⁽³⁾	6,028	100	126	100	113	100	96	100	118	100	99	100	63	100	6,643	100
AGE AT DIAGNOSIS*																
13-19	172	3	1	1	1	1	1	1	4	3	1	1	5	8	185	3
20-29	1,665	28	30	24	20	18	20	21	21	18	19	19	14	22	1,789	27
30-39	2,307	38	30	24	26	23	24	25	40	34	29	29	17	27	2,473	37
40-49	1,325	22	30	24	43	38	22	23	25	21	26	26	12	19	1,483	22
50+	559	9	35	28	23	20	29	30	28	24	24	24	15	24	713	11
TOTAL ⁽³⁾	6,028	100	126	100	113	100	96	100	118	100	99	100	63	100	6,643	100
RACE/ETHNICITY																
White, Not Hispanic	3,752	62	72	57	60	53	53	55	66	56	64	65	37	59	4,104	62
Black, Not Hispanic	1,901	32	39	31	35	31	32	33	40	34	24	24	19	30	2,090	31
Hispanic	251	4	8	6	13	12	5	5	10	8	8	8	3	5	298	4
Other/Unknown	124	2	7	6	5	4	6	6	2	2	3	3	4	6	151	2
TOTAL ⁽³⁾	6,028	100	126	100	113	100	96	100	118	100	99	100	63	100	6,643	100
TRANSMISSION ROUTE																
MSM ⁽⁴⁾	3,345	55	62	49	61	54	57	59	58	49	45	45	23	37	3,651	55
IDU ⁽⁵⁾	775	13	12	10	3	3	4	4	6	5	9	9	10	16	819	12
MSM/IDU	362	6	4	3	3	3	2	2	2	2	8	8	1	2	382	6
Heterosexual ⁽⁶⁾	928	15	15	12	15	13	7	7	9	8	5	5	1	2	980	15
Female Heterosexual ⁽⁷⁾	120	2	9	7	10	9	8	8	10	8	9	9	8	13	174	3
Other ⁽⁸⁾	114	2	0	0	0	0	1	1	0	0	0	0	0	0	115	2
Undetermined ⁽⁹⁾	384	6	24	19	21	19	17	18	33	28	23	23	20	32	522	8
TOTAL ⁽³⁾	6,028	100	126	100	113	100	96	100	118	100	99	100	63	100	6,643	100
17777 11 11 11																

[†]HIV disease cases that have progressed to AIDS include only persons reported with an AIDS diagnosis as of December 31, 2018.

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 December 31, 2018, were predominantly male, white, and males reporting sexual contact with other males.

^{*}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 December 31, 2018. 2018 data not used in trend analyses due to reporting delays.

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

⁽⁴⁾ MSM = Men Who Have Sex With Men.

⁽⁵⁾ IDU = Injection Drug Use.

^{(6) &}quot;Heterosexual" includes persons who have had heterosexual contact with a person with HIV or at risk for HIV.

^{(7) &}quot;Female Heterosexual" = A female not reporting drug use, but reporting sex with male. See terminology on page 3 for additional definition.

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

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

Table 12. Number and Percentage of Cumulative Pediatric ⁽¹⁾ HIV Disease Cases By Transmission Route and Race/Ethnicity as of December 31, 2018, Kentucky										
	White, Not Black, Not Hispanic Hispanic				e r ⁽²⁾ nown	TOTAL				
Transmission Route	No.	%	No.	%	No.	%	No.	%		
Pediatric Hemophilia/Coagulation Disorder	10	24	1	2	0	0	11	12		
Perinatal Exposure, Mother with HIV	27	66	43	84	3	100	73	77		
Pediatric Transfusion/Transplant	2	5	0	0	0	0	2	2		
Pediatric risk not identified or reported	2	5	7	14	0	0	9	9		
TOTAL ⁽³⁾ 41 100 51 100 3 100 95 100										

- (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

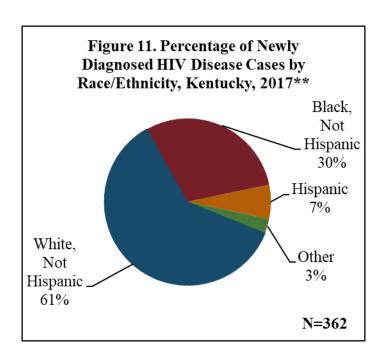
Table 13. Nun	Table 13. Number and Percentage of Cumulative Pediatric (1) HIV Disease Cases by Disease Status and Year of															
	Diagnosis, Kentucky															
	1982	-2012	20	13	20	14	20	15	20	16	20	17	201	8 ⁽²⁾	То	tal
Disease Status	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
HIV infections																
without AIDS	32	40	3	100	7	100	1	100	2	100	1	100	0	0	46	48
HIV infections																
with AIDS	49	60	0	0	0	0	0	0	0	0	0	0	0	0	49	52
Total ⁽³⁾	81	100	3	100	7	100	1	100	2	100	1	100	0	0	95	100

- (1) Cases are classified as Pediatric if they are less than 13 years of age at time of diagnosis.
- (2) Data reported as of December 31, 2018.
- (3) Percentages may not total 100% due to rounding.

There have been 95 pediatric HIV cases reported to the Kentucky HIV/AIDS surveillance program (Table 12 and Table 13) since reporting began in 1982. The majority of reported pediatric cases (77%) were due to perinatal transmission through an HIV-infected mother, 11 cases were reported with a primary exposure route of pediatric hemophilia or coagulation disorders, and two cases were due to pediatric transfusion or transplant (Table 12). Since 1991, there have been no pediatric HIV cases with hemophilia or coagulation disorders reported as the route of exposure. The two pediatric cases reported with pediatric transfusion or transplant as the risk factor were diagnosed in 1987 or earlier. Eighty-four percent of the 51 pediatric HIV cases among blacks were due to perinatal exposure as compared to 66% of the 41 pediatric HIV cases among whites. Only one pediatric HIV case has been reported among Hispanics. The majority (59%) of the 73 cumulative perinatal exposures from a mother with HIV were in blacks.

Table 13 shows disease progression to AIDS as of December 31, 2018. Eighty-one (85%) of the cumulative 95 pediatric cases in Kentucky were diagnosed prior to 2013. Seven or fewer new pediatric HIV cases have been reported during each of the most recent five years, and none of these cases had progressed to AIDS as of the report date.

New HIV Disease Cases by Race/Ethnicity, Kentucky



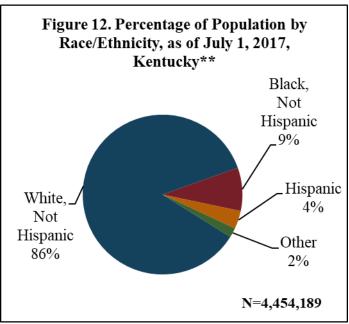


Figure 11 shows the race/ethnicity percentage distribution for newly diagnosed HIV cases among Kentuckians in 2017, the latest year data are considered complete. The majority of cases diagnosed in 2017 were white (61%), followed by black (30%). Seven percent of new cases diagnosed in 2017 were Hispanic and 3% were persons of other races, including American Indian/Alaska Native, Native Hawaiian/Pacific Islander, and persons of multiple races.

Figure 12 shows the percentage race/ethnicity distribution of Kentucky's population based on the 2017 population estimates. The majority of Kentuckians are white, not-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 cases among blacks and Hispanics in relation to their representation in the general population. Blacks accounted for 30% of new HIV cases diagnosed in 2017 yet comprised just 9% of Kentucky's population in 2017. Similarly, Hispanics accounted for 7% of newly diagnosed HIV cases in 2017 yet comprised only 4% of Kentucky's population in that same year.

Rates of new diagnoses by race/ethnicity and sex are presented in Table 14, further highlighting racial disparities.

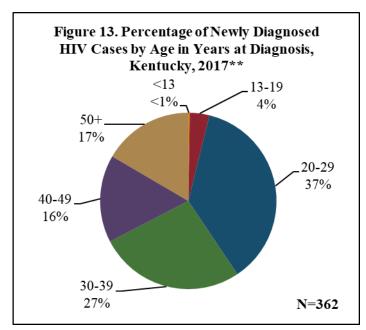
Table 14. Number	Table 14. Number and Rate of New HIV Diagnoses by Race/Ethnicity and Sex, Kentucky, 2017										
	M	ale	Fen	nale	Total No	Total					
Race/Ethnicity	No of Cases	Rate*	No of Cases	Rate*	of Cases	Rate					
Hispanic	22	24.9	2	†	24	14.7					
Black, not Hispanic	88	45.4	20	10.2	108	27.7					
White, not Hispanic	175	9.4	45	2.3	220	5.8					
Other	9	21.7	1	†	10	11.7					
Total	294	13.4	68	3.0	362	8.1					

^{*}Rate per 100,000 based on census data estimates for racial and gender distribution for Kentucky in 2017.

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

^{**} Percentages may not total 100% due to rounding.

New HIV Disease Cases by Age at Diagnosis, Kentucky



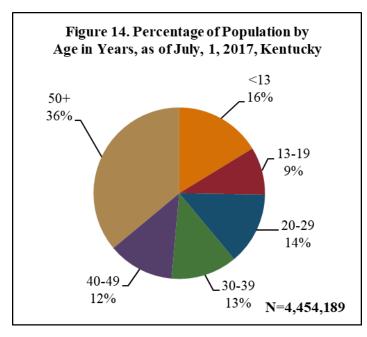


Figure 13 shows the percentage age distribution of newly diagnosed HIV cases among Kentuckians in 2017 at time of HIV diagnosis. The highest percentage of new diagnoses was reported among Kentuckians aged 20-29 years (37%). Kentuckians aged 30-39 and 40-49 years accounted for 27% and 16% of new cases, respectively. Kentuckians aged 50+ years accounted for 17% of new cases diagnosed in 2017.

Figure 14 shows the percentage distribution of Kentucky's population based on 2017 population estimates by age, which can be directly compared to the percentages in each age group that were newly diagnosed in 2017. 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 proportion of these groups in the general population.

Table 15. Number and Rate of New HIV Diagnoses by Age at Diagnosis and Race/Ethnicity§, Kentucky, 2017										
Black not Hispanic White not Hispanic										
Age at Diagnosis	No. of Cases									
20-29	48	72.7	66	13.2						
30-39	25	49.9	66	14.1						
40-49	12	27.2	41	8.5						
50+	15	14.3	42	2.9						

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

Rates of new diagnoses in 2017 (Table 15) were higher among blacks across all age groups in comparison to whites. These relative rates were highest among 20-year-olds and 50+-year-olds at the time of diagnosis. However, the rates among blacks in all age groups were at least three times higher than the rates among their white counterparts of the same age group. Rates among Hispanics are not presented due to small numbers.

^{**} Percentages may not total 100% due to rounding

^{*}Rate per 100,000 based on census data estimates for racial and age distribution for Kentucky in 2017.

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, 1982-2018⁽²⁾, Kentucky

District	(ADD) of Residence	ce at I ir	ne ot H	IIV Dia	gnosis,	1982-4	2018~,	Kentu	ску	
AREA DEVELOPMENT DISTRICT	CASES & RATES ⁽¹⁾	1982- 2012*	2013	2014	2015	2016	2017	2018(2)	TOTAL CASES ⁽³⁾	% of Total
1. Barren River	Cases	303	13	16	13	15	13	12	385	4%
	Rate per 100,000		4.5	5.5	4.4	5.0	4.3			
2. Big Sandy	Cases Rate per 100,000	59	5	2	4	5	5	5	85	1%
3. Bluegrass	Cases	1,661	104	73	70	65	65	63	2,101	19%
	Rate per 100,000		13.1	9.2	8.7	8.0	7.9		***************************************	
4. Buffalo Trace	Cases Rate per 100,000	51	0	2	0	3	0	3	59	1%
5. Cumberland Valley	Cases	159	6	9	11	9	11	5	210	2%
_	Rate per 100,000				4.7		4.7			
6. FIVCO	Cases Rate per 100,000	129	2	0	3	5	8	3	150	1%
7. Gateway	Cases Rate per 100,000	84	2	8	4	3	4	4	109	1%
8. Green River	Cases	255	11	12	10	3	8	8	307	3%
	Rate per 100,000		5.1	5.6	4.6					
9. KIPDA/	Cases	4,289	144	151	147	164	157	133	5,185	48%
North Central	Rate per 100,000		14.6	15.3	14.8	16.4	15.6			
10. Kentucky River	Cases Rate per 100,000	63	5	9	7	1	5	0	90	1%
11. Lake Cumberland	Cases	139	13	4	9	3	11	2	181	2%
	Rate per 100,000		6.2				5.3			
12. Lincoln Trail	Cases	257	12	22	9	16	11	21	348	3%
	Rate per 100,000		4.4	8.0		5.9	4.0			
13. Northern KY	Cases	731	17	23	34	25	46	35	911	8%
	Rate per 100,000		3.8	5.1	7.5	5.5	10.0			
14. Pennyrile	Cases	282	11	8	10	17	12	4	344	3%
	Rate per 100,000		5.0		4.6	7.9	5.6			
15. Purchase	Cases	277	15	12	9	4	6	5	328	3%
	Rate per 100,000		7.6	6.1						
TOTAL (CASES ⁽³⁾	8,739	360	351	340	338	362	303	10,793	100%

⁽¹⁾ Rates are only listed for years of diagnosis 2013-2017. Data for 2018 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.

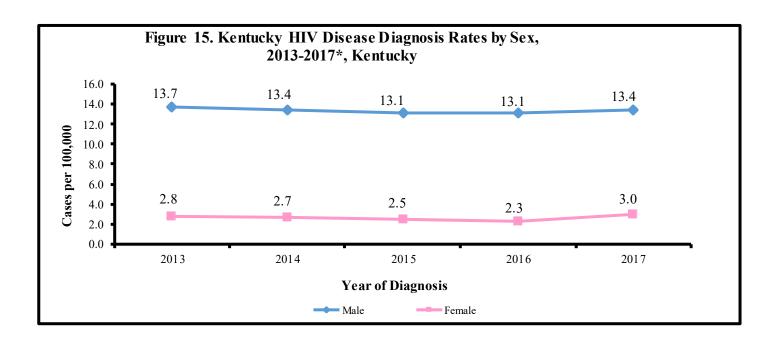
⁽²⁾ Data reported as of December 31, 2018. Rates are not published for 2018 because data are not complete.

⁽³⁾ Total HIV disease cases both living and deceased, regardless of progression to AIDS; Total HIV cases reported are 10,794—1 HIV case had unknown residential information.

^{*}Rates are not published due to multi-year aggregation of data.

Table 16 shows the HIV disease cases and diagnosis rates by year of HIV diagnosis and Area Development District (ADD) of residence at time of HIV diagnosis. The majority of the cases can be accounted for by the three urban ADDs, i.e., KIPDA, Bluegrass, and Northern Kentucky ADDs. The rates are higher in general for KIPDA ADD followed by Bluegrass ADD, which includes the cities of Louisville and Lexington respectively. The Northern Kentucky ADD showed a distinct increase in 2017, which on separate investigation was found to be mainly associated with people who inject drugs.

Trends in HIV Disease Diagnosis Rates by Sex, 2013-2017, Kentucky

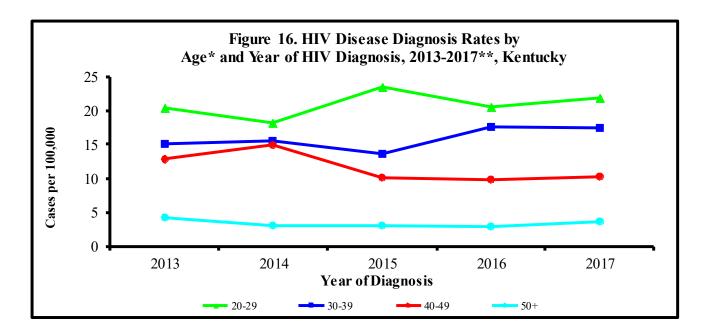


^{*}Data for 2018 are not included in trend analyses since they are considered provisional due to reporting delays.

Males represent the majority (83%) of cumulative HIV cases diagnosed among Kentuckians. The yearly diagnosis rates among males have remained almost stable over the five year period shown. From 2013 to 2017, the HIV diagnosis rates among males fluctuated between 4.5 to 5.7 times higher then the rate for females (Figure 15).

The female HIV diagnosis rates have remained fairly stable over the most recent five years, between 2.3 to 3.0 cases per 100,000 females. The highest HIV diagnosis rate among females within the most recent five years was in 2017 at 3.0 newly diagnosed cases per 100,000 females.

Trends in HIV Disease Diagnosis Rates by Age at HIV Diagnosis, 2013-2017, Kentucky



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

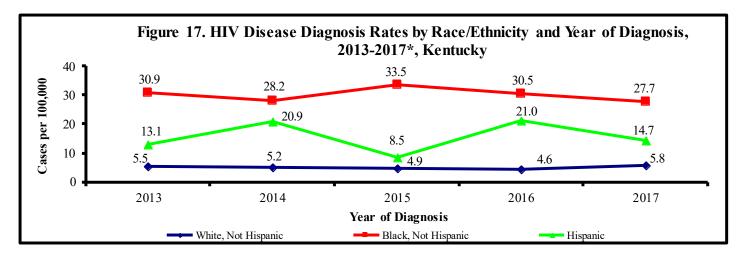
Figure 16 shows HIV diagnosis rates by age category over the most recent five years (2013-2017) with complete data. The diagnosis rates among Kentuckians in the 30-39 and 40-49 year age groups reveal a slight upward trend from 2013 to 2014, while rates in the 20-29 year age group decreased during this time. Between 2014 and 2015, the rate increased among the 20-29 year age group, while rates in the 30-39 and 40-49 year age groups decreased. Between 2015 and 2016 the rates in 30-39 year age group increased, while the rates decreased for 20-29 and 40-49 year age group. The rates remained almost stable for all the age groups between 2016 and 2017. The yearly diagnosis rates among those 50 years and over remained almost stable over the five year period shown.

Table 17. Mean Age at Time of HIV Diagnosis, 2013-2017, Kentucky									
HIV Diagnosis Year	Mean Age	Age Range							
2013	36.3	2-75							
2014	35.2	0-73							
2015	34.5	1-80							
2016	34.6	0-71							
2017	35.5	0-70							

Table 17 shows the mean ages and actual age ranges at time of HIV diagnosis from 2013-2017. The mean ages of Kentuckians at time of HIV diagnosis in the five-year period ranged between 34.5-36.3 years (age range 0-80 years).

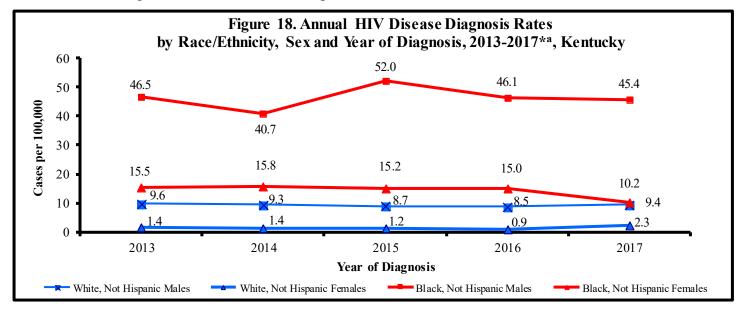
^{**}Data for 2018 are not included in trend analyses since they are considered provisional due to reporting delays.

Trends in HIV Disease Diagnosis Rates by Race/Ethnicity, 2013-2017, Kentucky



^{*}Data for 2018 are not included in trend analyses since they are considered provisional due to reporting delays.

Figure 17 shows that between 2013 and 2017, the HIV diagnosis rates for blacks fluctuated between 4.8 to 6.8 times higher than whites. The diagnosis rates for Hispanics were between 1.7 to 4.6 times higher than whites over the same five year period. The trends among whites have remained almost steady. The rates for blacks decreased between 2013 and 2014, increased in 2015, and then decreased between 2015 and 2017. The rates for Hispanics increased between 2013 and 2014, decreased in 2015, then increased to the highest level of 21.0 in 2016, but again decreased to 14.7 cases per 100,000 in 2017.

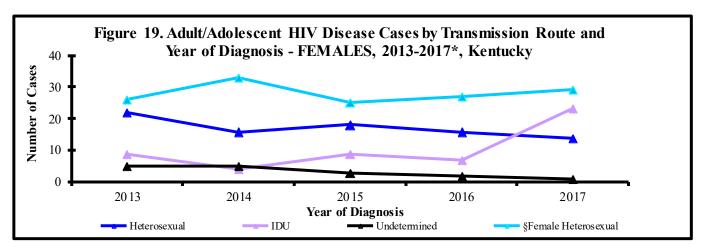


^{*}Data for 2018 are not included in trend analyses since they are considered provisional due to reporting delays.

Figure 18 presents diagnosis rates from 2013 through 2017 for blacks and whites by sex. Black males and black females had consistently higher rates of new diagnoses in comparison to their white counterparts. The HIV diagnosis rates among black males fluctuated between 4.4 to 6.0 times higher than that of white males. The rates among black females were 4.4 to 16.7 times higher than those of white females over the five year period.

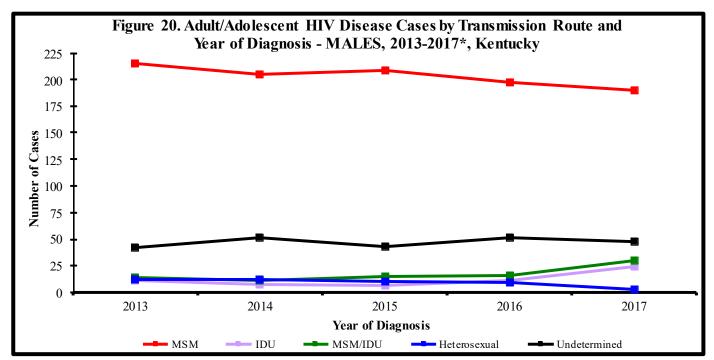
^a Rates for Hispanic cases by sex are not presented due to the small number of cases reported.

Trends in HIV Disease Diagnosis Rates by Route of Transmission and Sex, 2013-2017, Kentucky



^{*}Data for 2018 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 4.

Figure 19 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," now if they have reported sexual contact with a male of unknown sero-status or unknown behaviors and no drug use, they are re-classified as FHC. This change was applied to all the years shown. The number of new female cases reporting IDU as the primary route of transmission varied from 6.9% (2014) to 34.3% (2017) of the total cases for each year, with abrupt increase in 2017.



*Data for 2018 are not included in trend analyses since they are considered provisional due to reporting delays.

In Figure 20, which depicts trends for adult/adolescent males by transmission route, the largest number of cases diagnosed each year from 2013 to 2017 reported MSM as their primary risk factor. The second largest number of cases were those with an undetermined risk. The number of males reporting IDU, MSM and IDU, and heterosexual contact as the primary route of transmission were similar throughout the five year period.

Section III: HIV Infections Diagnosed Concurrently with AIDS among Kentuckians as of December 31, 2018

During the most recent 10 year period for which data are available (January 1, 2009, to December 31, 2018), a total of 3,416 HIV disease cases were diagnosed among Kentuckians. Of these, 1,210 (35%) had progressed to AIDS as of December 31, 2018.

e 18. AIDS Cases Diagnosed within the 10 Year Period January 1, 2009-December 3 2018 by Time (in days) from HIV Diagnosis to AIDS Diagnosis, Kentucky						
Time to AIDS Diagnosis (Days)	No.	%				
≤30 Days †	778	64				
31-60 Days	91	8				
61-90 Days	52	4				
91-365 Days	118	10				
>365 Days	171	14				
Total	1,210	100				

†Cases diagnosed with AIDS within 30 days of initial HIV diagnosis are considered concurrent diagnoses. Note: 2,206 HIV-only cases diagnosed in the same timeframe are not included in the table as they had not progressed to AIDS as of December 31, 2018.

778 (22.8%) of the 3416 HIV disease cases diagnosed in the most recent 10 years were diagnosed with AIDS within 30 days of the initial HIV diagnosis - also known as a "concurrent diagnosis."

The distribution of progression to AIDS (in days) for the 1,210 AIDS cases is shown in Table 18. Sixty-four percent of the 1,210 AIDS cases diagnosed in the most recent 10 years were diagnosed with AIDS within 30 days of the initial HIV diagnosis.

According to the Centers for Disease Control and Prevention (CDC)* late testers are those who have an AIDS diagnosis within one year of initial HIV diagnosis. During the presented time period, 1,039 (30.4%) of the 3,416 Kentuckians diagnosed with HIV disease were late testers.

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

Concurrent Diagnoses by Selected Characteristics, 2009-2018*, Kentucky

Table 19. HIV Infections Diagnosed in the Most Recent 10 Year Period (January 1, 2009-December 31, 2018) that were Diagnosed Concurrently with AIDS (within 30 Days of HIV Diagnosis) and those without a Concurrent

Diagnosis** by Sex, Age at Diagnosis, Race/Ethnicity, and Transmission Category, Kentucky

Diagnosis by Sex, Age at		ncurrent AIDS	HIV Without Co		Total HIV		
	Diag	nosis*	Diagn	osis**	Disease Dia	agnos es * * *	
Characteristics	No.	% ⁽¹⁾	No.	% ⁽¹⁾	No.	% (1)	
SEX							
Male	640	82	2,165	82	2,805	82	
Female	138	18	473	18	611	18	
AGE AT DIAGNOSIS							
<13	0	0	29	1	29	1	
13-19	13	2	152	6	165	5	
20-29	142	18	1,042	39	1,184	35	
30-39	221	28	621	24	842	25	
40-49	207	27	495	19	702	21	
50+	195	25	299	11	494	14	
RACE/ETHNICITY- Female							
White, Not Hispanic	52	38	232	49	284	46	
Black, Not Hispanic	73	53	204	43	277	45	
Hispanic	10	7	16	3	26	4	
Other/Unknown	3	2	21	4	24	4	
RACE/ETHNICITY- Male							
White, Not Hispanic	405	63	1,202	56	1,607	57	
Black, Not Hispanic	151	24	736	34	887	32	
Hispanic	64	10	137	6	201	7	
Other/Unknown	20	3	90	4	110	4	
TRANSMISSON CATEGORY							
MSM ⁽²⁾	381	49	1,528	58	1,909	56	
IDU ⁽³⁾	61	8	179	7	240	7	
MSM/IDU	20	3	119	5	139	4	
Heterosexual ⁽⁴⁾	75	10	207	8	282	8	
Female Heterosexual ⁽⁵⁾	69	9	198	8	267	8	
Perinatal	0	0	23	1	23	1	
Other ⁽⁶⁾	1	<1	3	<1	4	<1	
Undetermined ⁽⁷⁾	171	22	381	14	552	16	
TOTAL	778	100	2,638	100	3,416	100	

^{*}Concurrent is defined as being diagnosed with both HIV and AIDS within a 30 day period.

^{**}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, 2009 through December 31, 2018 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 Who Have Sex With Men.

⁽³⁾ IDU = Injection Drug Use.

^{(4) &}quot;Heterosexual" includes persons who have had heterosexual contact with a person with HIV or at risk for HIV.

^{(5) &}quot;Female Heterosexual" = A female not reporting drug use, but reporting sex with male. See terminology on page 4.

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

^{(7) &}quot;Undetermined" refers to persons whose mode of exposure to HIV is unknown. This includes persons who are under investigation, dead, lost to investigation or refused interview, and persons whose mode of exposure remains undetermined after investigation.

Concurrent Diagnoses by Selected Characteristics, 2009-2018, Kentucky (Narrative)

Table 19 (page 30), examines the distribution of HIV cases among Kentuckians diagnosed between January 1, 2009 and December 31, 2018 by sex, age at diagnosis, race/ethnicity, and transmission route. Data are presented for cases diagnosed concurrently with AIDS (diagnosed with AIDS within a 30 day period after an initial HIV diagnosis), cases without a concurrent HIV/AIDS diagnosis (anyone who did not have an AIDS diagnosis within 30 days of the initial HIV diagnosis, whether they developed AIDS or not), and for all cases diagnosed with HIV (regardless of AIDS diagnosis status) within the 10 year period.

Of the 3,416 Kentuckians diagnosed with HIV disease during the 10 year period, about a quarter (778 or 24%) were diagnosed with HIV and AIDS concurrently (within 30 days).

During the 10 year period presented, males consistently represent the highest number of diagnosed cases of HIV, with and without a concurrent AIDS diagnosis at 82%.

The distribution by age at diagnosis differs between the two groups, with the highest percentages of concurrent cases being aged 30-39 years (28%), while the highest percentages among non–concurrently diagnosed cases were aged 20-29 years (39%).

The racial/ethnic distribution of cases diagnosed concurrently with AIDS differs by sex. Among females, the highest percentage of concurrent diagnoses were among black females (53%), followed by white and Hispanic females (38% and 7%, respectively). However, among males, the majority of concurrent diagnoses were among white males (63%). Twenty-four percent of concurrently diagnosed cases in males were among black males and 10% 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 have a similar distribution to those without a concurrent diagnosis, with the majority of cases among those with a concurrent diagnosis reporting male-to-male sexual contact as the mode of transmission (49%), followed by persons reporting heterosexual exposure (10%). There were no children (<13 years at diagnosis) reported with a concurrent diagnosis. Twenty-two percent of concurrently diagnosed HIV and AIDS cases have an undetermined transmission route, which creates challenges for prevention initiatives aimed at increasing early testing and engagement in care.

HIV Diagnoses by Area Development District (ADD), January 1, 2009-December 31, 2018

Figure 21. Number of HIV Disease Diagnoses within each Area Development District of Residence at Time of Diagnosis, for the Most Recent 10 years,
January 1, 2009—December 31, 2018, Kentucky

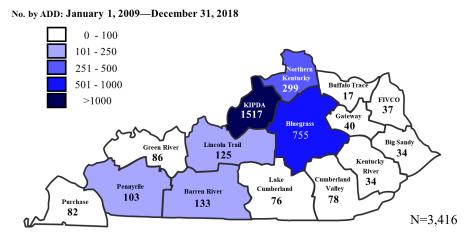
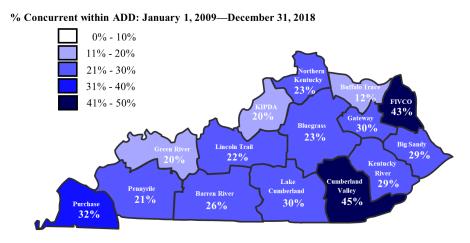


Figure 21 displays the total number of HIV infections (3,416) diagnosed between January 1, 2009, and December 31, 2018, by ADD of residence at time of HIV diagnosis. Data represent the total number of HIV cases in each ADD, regardless of disease progression status. The highest number of cases (1,517 or 44%) diagnosed during this time period were among residents of the KIPDA ADD, which includes the city of Louisville. The second highest number of cases (755 or 22%) resided in the Bluegrass ADD, which includes the city of Lexington. The ADDs in eastern Kentucky had the lowest number of HIV cases diagnosed and reported during this period.

Figure 22. Percentage of All HIV Disease Diagnoses within each Area Development District of Residence at Time of Diagnosis, who have a Concurrent Diagnosis of AIDS, for the Most Recent 10 Years, January 1, 2009 – December 31, 2018, Kentucky



Note: The percentages presented in Figure 22 represent the proportion of concurrent diagnoses out of the total for each individual ADD. Totals for each ADD are presented in Figure 21.

Figure 22 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, 2009, and December 31, 2018. The percentage of concurrent HIV and AIDS diagnoses within each ADD ranged from 12% to 45%. The ADDs with the highest proportion of concurrent HIV and AIDS cases were in the eastern Kentucky region: Cumberland Valley and FIVCO ADDs (45% and 43% respectively). The percentages in ADDs that had <50 total cases (see figure 21) should be interpreted with caution due to the small number of cases.

HIV Diagnoses by Care Coordinator Region, January 1, 2009-December 31, 2018, Kentucky

Figure 23. Number of New HIV Disease Diagnoses within each Care Coordinator Region of Residence at Time of Diagnosis, for the Most Recent 10 Years, January 1, 2009--December 31, 2018, Kentucky

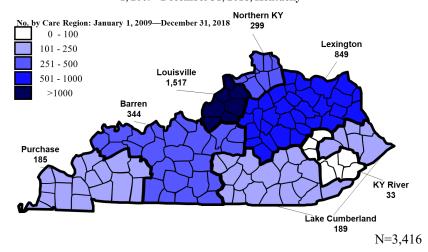
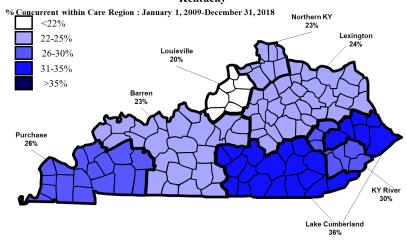


Figure 23 shows the total number of new HIV infections (regardless of disease progression status) diagnosed between January 1, 2009, and December 31, 2018, by Care Coordinator Region based on place of residence at time of HIV diagnosis. A Care Coordinator Region is defined based on the specific counties of the state for which clinical and support services are provided by a state-funded agency (agencies listed on page 34). The highest number of cases (1,517 or 44%) diagnosed in this period occurred among residents of the Louisville Region. The second highest number of diagnoses (849 or 25%) occurred in residents of the Lexington Region.

Figure 24. Percentage of All HIV Disease Diagnoses within each Care Coordinator Region of Residence at Time of Diagnosis, who have a Concurrent Diagnosis of AIDS, for the Most Recent 10 Years, January 1, 2009—December 31, 2018, Kentucky



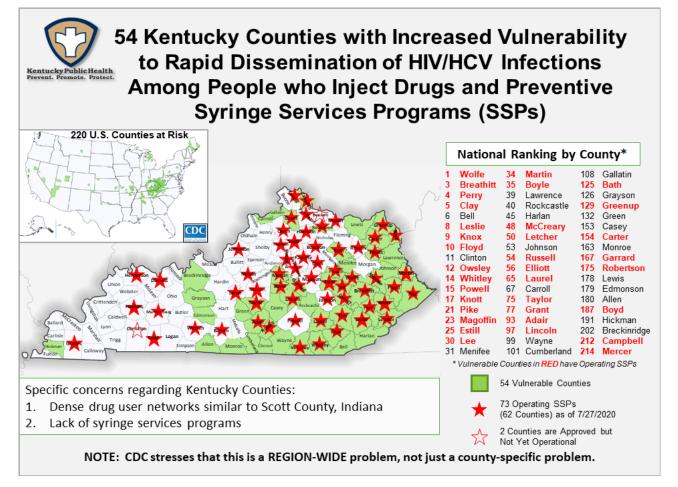
Note: The percentages presented in Figure 24 represent the proportion of concurrent diagnoses out of the total for each individual region. Totals for each region are presented in Figure 23. Owsley County is currently being served by both the Lake Cumberland and KY River District Health Departments (HD). In Figures 23 & 24 Owsley County is included only in the KY River District HD, and Graves and Todd Counties are included in Purchase District HD.

Figure 24 shows the percentage of total HIV cases within each Care Coordinator Region that were concurrently diagnosed with AIDS (within 30 days of an initial HIV diagnosis) between January 1, 2009, and December 31, 2018. The percentage of concurrent HIV and AIDS diagnoses within each care region ranged from 20% to 36%. 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 Lake Cumberland Region (36%) and Kentucky River Region (30%). For cases diagnosed concurrently, testing was likely not conducted near time of initial infection.

HIV Care Coordinator Regions, Kentucky

Map for Counties Covered	Region Name and Address	Counties Covered:				
	Purchase Region: Heartland Cares, Inc. 619 N 30 th Street Paducah, KY 42001 (270) 444-8183 (877) 444-8183 Fax: (270) 444-8147	Ballard Caldwell Calloway Carlisle	Christian Crittenden Fulton Graves	Hickman Hopkins Livingston Lyon	McCracken Marshall Muhlenberg Todd Trigg	
	Barren Region: Matthew 25 452 Old Corydon Road Henderson, KY 42420 (270) 826-0200 (866) 607-6590 Fax: (270) 826-0212	Allen Barren Breckin- ridge Butler Daviess Edmonson	Grayson Hancock Hardin Hart Henderson Larue	Logan McLean Marion Meade Metcalfe Monroe	Nelson Ohio Simpson Union Warren Washington Webster	
	Louisville Region: U of L 550 Clinic 501 E Broadway, Suite 120 Louisville, KY 40202 (502) 852-2008 Fax: (502) 852-2510	Bullitt Henry Jefferson Oldham	Shelby Spencer Trimble			
	Northern Kentucky Region: Northern KY Dist HD 8001 Veterans Memorial Drive Florence, KY 41042 (859) 341-4264 Fax: (859) 578-3689	Boone Campbell Carroll Gallatin Grant	Kenton Owen Pendleton			
	Lexington Region: UK Bluegrass Care Clinic 740 S. Limestone, K512 UK Medical Center Lexington, KY 40536 (859) 323-5544 (866) 761-0206 Fax: (859) 257-3477	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	
	Lake Cumberland Region: Lake Cumberland Dist HD 500 Bourne Avenue Somerset, KY 42501 (606) 678-4761 (800) 928-4416 Fax: (606) 678-2708	Adair Bell Breathitt Casey Clay Clinton Cumber- land	Floyd Green Harlan Jackson Johnson Knox	Laurel Magoffin Martin McCreary Owsley Pike	Pulaski Rockcastle Russell Taylor Wayne Whitley	
	Kentucky River Region: Kentucky River Dist HD 441 Gorman Hollow Road Hazard, KY 41701 (606) 439-2361 Fax: (606) 439-0870	Knott Lee Leslie Letcher	Owsley Perry Wolfe			
	Graves County HD 416 Central Ave Mayfield, KY 42066 (270) 247-3553		inty is covered by Purchase Regio		ealth Department ,	
	Todd County HD 205 Public Square Elkton, KY 42220 (270) 265-2362		y is covered by T urchase Region.	odd County Healt	n Department , as	

Harm Reduction Programs and HIV Outbreak Vulnerability



HIV Counseling and Testing Sites, Kentucky

The HIV Prevention Program at the Department for Public Health sponsors several HIV counseling and testing sites in each of the 120 counties across the state. Sponsored non-clinical agencies offer rapid-rapid HIV-1/2 antibody testing and can provide results within 1 to 20 minutes. Those with reactive results from an initial rapid test can be tested immediately with a different brand of rapid test that is less sensitive than the initial rapid test. Clients receiving reactive results from both rapid tests are almost certainly infected with HIV and can be promptly linked to an HIV care provider without waiting days or weeks for a confirmatory test. Sponsored clinical agencies offer a rapid finger stick HIV 1/2 antibody test.

All state sponsored testing sites offer anonymous or confidential HIV testing at **free or minimal cost** by appointment and/or on a walk in basis. Pre-test and post-test counseling are offered at all agencies.

A listing of state sponsored HIV testing sites is provided on the next page. Please note that this list only includes those testing sites that are funded by the Kentucky Department for Public Health to administer testing and **IS NOT** an all-inclusive list of testing centers in the Commonwealth of Kentucky.

For a comprehensive list of HIV testing sites, please visit: https://chfs.ky.gov/agencies/dph/dehp/hab/Pages/prevention.aspx http://www.aidsvu.org

¹Journal of Acquired Immune Deficiency Syndrome 2016;73:323–331

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	Nicho las ville	(859) 885-4149
Allen County Health Department	Scottsville	(270) 237-4423	Johnson County Health Department	P a ints ville	(606) 789-2590
Anders on 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	Owings ville	(606) 674-9646	Larue County Health Department	Hodgenville	(270) 358-3844
Bell County Health Department	P ine ville	(606) 248-2862	Laurel County Health Department	London	(606) 864-5187
Boone County Health Department Bourbon County Health Department	Florence Paris	(859) 363-2060	Lawrence County Health Department Lee County Health Department	Lo uis a Beattyville	(606) 638-4389
Boyd County Health Department	Ashland	(859) 987-1915 (606) 324-7181	Les lie County Health Department	Hyden	(606) 464-2492 (606) 672-2393
Boyle County Health Department	Danville	(859) 236-2053	Letcher County Health Department	Whites burg	(606) 633-2945
Bracken County Health Department	Bro o ks ville	(606) 735-2157	Lewis County Health Department	Vanceburg	(606) 796-2632
Breathitt County Health Department	Jackson	(606) 666-5274	Linco ln County Health Department	Stanford	(606) 756 2652
Breckinridge County Health Department	Hardins burg	(270) 756-5121	Livings to n County Health Department	Smithland	(270) 928-2193
Bullitt County Health Department	Shepherds ville	(502) 543-2415	Logan County Health Department	Russellville	(270) 726-8341
Butler County Health Department	Mo rganto wn	(270) 526-3221	Lyon County Health Department	Eddyville	(270) 388-9763
Caldwell County Health Department	P rince to n	(270) 365-6571	Madis on County Health Department	Richmond	(859) 626-4241
Callo way County Health Department	Murray	(270) 753-3381	Madis on County Health Department - Berea	Berea	(859) 986-1192
Campbell County Health Department	Newport	(859) 431-1704	Mago ffin County Health Department	Salyers ville	(606) 349-6212
Carlis le County Health Department	Bardwell	(270) 628-5431	Marion County Health Department	Lebanon	(270) 692-3393
Carroll County Health Department	Carro llto n	(502) 732-6641	Mars hall County Health Department	Benton	(270) 527-1496
(Carter Co.) 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	Mays ville	(606) 564-9447
Christian County Health Department	Hopkins ville	(270) 887-4160	(McCracken Co.) 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 Crittenden County Health Department	Albany Marion	(606) 387-5711 (270) 965-5215	McLean County Health Department Meade County Health Department	Calhoun	(270) 273-3062 (270) 422-3988
Cumberland County Health Department	Burkes ville	(270) 864-2206	Menifee County Health Department	Brandenburg Frenchburg	(606) 768-2151
Daviess County Health Department	Owens boro	(270) 686-7744	Mercer County Health Department	Harro ds burg	(859) 734-4522
Edmons on County Health Department	Bro wns ville	(270) 597-2194	Metcalfe County Health Department	Edmonton	(270) 432-3214
Elliott County Health Department	Sandy Hook	(606) 738-5205	Monroe County Health Department	To mpkins ville	(270) 487-6782
Es till County Health Department	Irvine	(606) 723-5181	Montgomery County Health Department	Mount Sterling	(859) 498-3808
(Fayette Co.) AVOL (AIDS Volunteers, Inc.)	Lexington	(859) 225-3000	Morgan County Health Department	West Liberty	(606) 743-3744
(Fayette Co.) Bluegrass Community Health Center	Lexington	(859) 259-2635	Muhlenberg County Health Department	CentralCity	(270) 754-3200
(Fayette Co.) Lex-Fayette Health Department	Lexington	(859) 288-2323	Nelson County Health Department	Bards to wn	(502) 348-3222
(Fayette Co.) Moveable Feast Lexington	Lexington	(859) 252-2867	Nicholas County Health Department	Carlis le	(859) 289-2188
Fleming County Health Department	F lemings burg	(606) 845-6511	Ohio County Health Department	Hartford	(270) 298-3663
Floyd County Health Department	Prestonsburg	(606) 886-2788	Oldham County Health Department	LaGrange	(502) 222-3516
Franklin County Health Department	Frankfort	(502) 564-4269	Owen County Health Department	Owenton	(502) 484-5736
Fulton County Health Department	Fulton	(270) 472-1982	Ows ley County Health Department	Booneville	(606) 593-5181
Fulton County Health Department – Hickman	Hickman Wars aw	(270) 236-2825	Pendleton County Health Department	Falmouth	(859) 654-6985
Gallatin County Health Department		(859) 567-2844 (859) 792-2153	Perry County Health Department Pike County Health Department	Hazard Pikeville	(606) 436-2196 (606) 437-5500
Garrard County Health Department Grant County Health Department	Lancas ter Williams to wn	(859) 824-5074	P o well County Health Department	Stanton	(606) 437-3300
Graves County Health Department	Mayfield	(270) 247-3553	P ulas ki County Health Department	Somerset	(606) 679-4416
Grays on County Health Department	Leitchfield	(270) 259-3141	Roberts on County Health Department	Mount Olivet	(606) 724-5222
Green County Health Department	Greens burg	(270) 932-4341	Rockcastle County Health Department	Mt. Vernon	(606) 256-2242
Greenup County Health Department	Greenup	(606) 473-9838	Rowan County Health Department	Morehead	(606) 784-8954
Hancock County Health Department	Hawesville	(270) 927-8803	Russell County Health Department	James to wn	(270) 343-2181
Hardin County Health Department	Eliza be thto wn	(270) 765-6196	Scott County Health Department	Georgeto wn	(502) 863-3971
Harlan County Health Department	Harlan	(606) 573-4820	Shelby County Health Department	Shelbyville	(502) 633-1231
Harris on County Health Department	Cynthiana	(859) 234-2842	Simps on County Health Department	Franklin	(270) 586-8261
Hart County Health Department	Munfordville	(270) 524-2511	Spencer County Health Department	Taylors ville	(502) 477-8146
(Henders on Co.) Matthew 25 AIDS Services	Henderson	(270) 826-0200	Taylor County Health Department	Campbells ville	(270) 465-4191
Henders on County Health Department	Henderson	(270) 826-3951	Todd County Health Department	Elkton	(270) 265-2362
Henry County Health Department	NewCastle	(502) 845-2882	Trigg County Health Department	Cadiz	(270) 522-8121
Hickman County Health Department	C linto n	(270) 653-6110	Trimble County Health Department	Bedford	(502) 255-7702
Hopkins County Health Department Jackson County Health Department	Madisonville McKee	(270) 821-5242 (606) 287-8421	Union County Health Department Warren County Health Department	Morganfield Bowling Green	(270) 389-1230 (270) 781-2490
(Jeffers on Co.) Dixie Health Center	Lo uis ville	(502) 937-7277	Washington County Health Department	Springfield	(859) 336-3989
(Jeffers on Co.) Harambee Health Center, Inc.	Lo uis ville	(502) 593-5939	Wayne County Health Department	Monticello	(606) 348-7464
(Jeffers on Co.) LouMetro HD - Fam Plan/Methador		(502) 574-6660	Webster County Health Department	Dixon	(270) 639-9315
(Jeffers on Co.) Louis ville-Metro HD - Specialty	Louis ville	(502) 574-6697	Whitley County Health Department	Corbin	(606) 549-3380
(Jeffers on Co.) Louis ville-Metro HD - TB Clinic	Louis ville	(502) 574-6617	Wolfe County Health Department	Campton	(606) 668-3 185
(Jeffers on Co.) Newburg Health Center	Lo u is ville	(502) 458-0778	Woodford County Health Department	Versailles	(859) 873-4541
(Jeffers on Co.) The More Center	Lo u is ville	(502) 574-6414			

(502) 636-4540

(Jeffers on Co.) Volunteers of America – Louis ville Louis ville