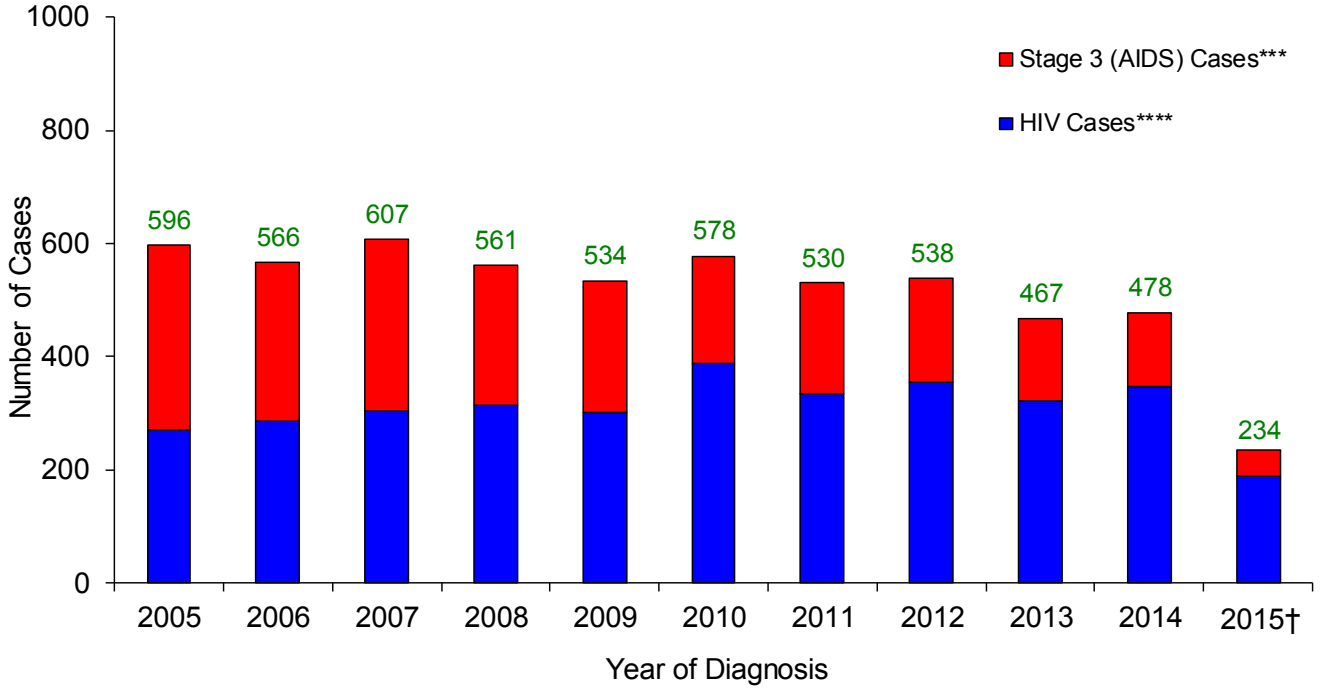
Missouri Department of Health and Senior Services
Bureau of Reportable Disease Informatics
HIV/STD Statistics June 2015

Notes to the Reader:

- **HIV disease** includes all individuals diagnosed with the human immunodeficiency virus (HIV), regardless of the stage of disease progression. All persons with HIV disease can be sub-classified as either a **stage 3 (acquired immunodeficiency syndrome (AIDS)) case** (if they are in the later stages of the disease process and have met the case definition for stage 3 (AIDS)), or an **HIV case** (if they are in the earlier stages of the disease process and have not met the stage 3 (AIDS) case definition). In this report, the sub-classification of HIV or stage 3 (AIDS) is based on an individual's status of disease progression as of June 30, 2015.
- The data presented in this report only include cases **diagnosed** through June 30, 2015, based on information **reported** to the Missouri Department of Health and Senior Services through September 2015. The difference between the date of diagnosis and the date of report represents delays in case reporting.
- When assessing trends over time, please note that data presented for 2015 only represent cases diagnosed through June 30, 2015. All data are subject to change.
- Additional data quality assurances undertaken in the past year have improved data quality, but have resulted in changes in the number of reported cases over time and the number of persons living with HIV.

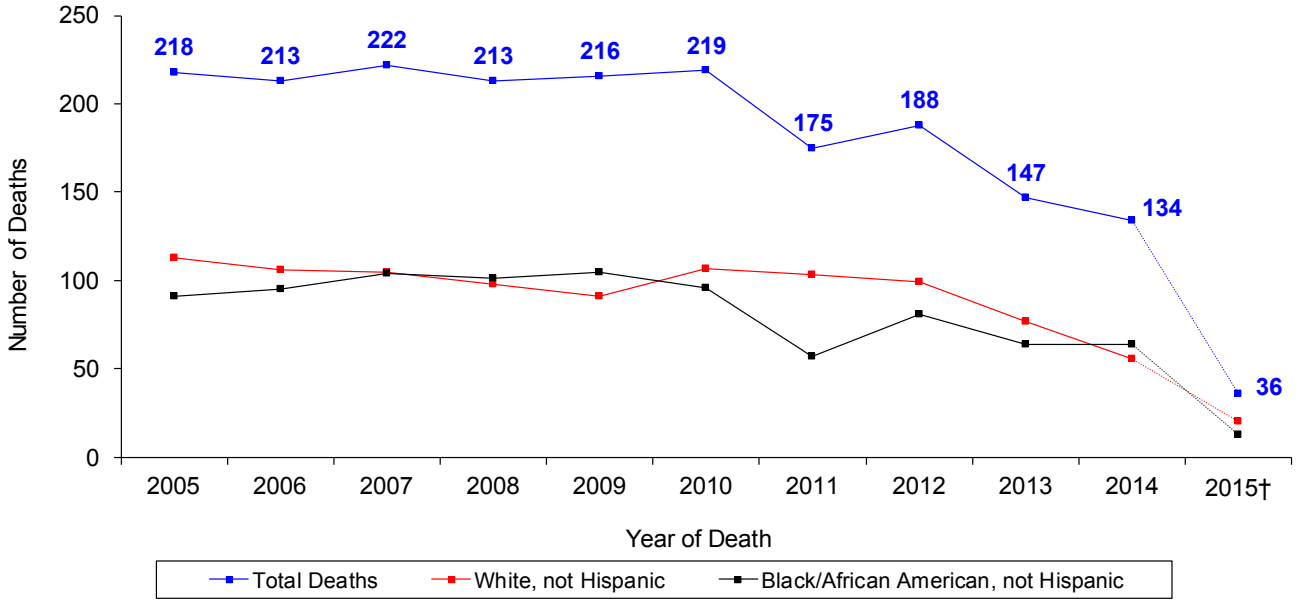
Figure 1. HIV disease cases, by current status* and year of diagnosis, Missouri, 2005—2015†**



*HIV case vs. stage 3 (AIDS) case
**Cases are indicated by year of initial diagnosis reported to the Missouri Department of Health and Senior Services. (The year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by the Department).
†Only includes cases diagnosed through June 30, 2015 and reported by September 30, 2015.
***These cases were either: 1) initially reported as HIV cases and then later reclassified as stage 3 (AIDS) cases because they subsequently met the stage 3 (AIDS) case definition; or 2) initially reported as stage 3 (AIDS) cases.
****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for stage 3 (AIDS) as of June 30, 2015.

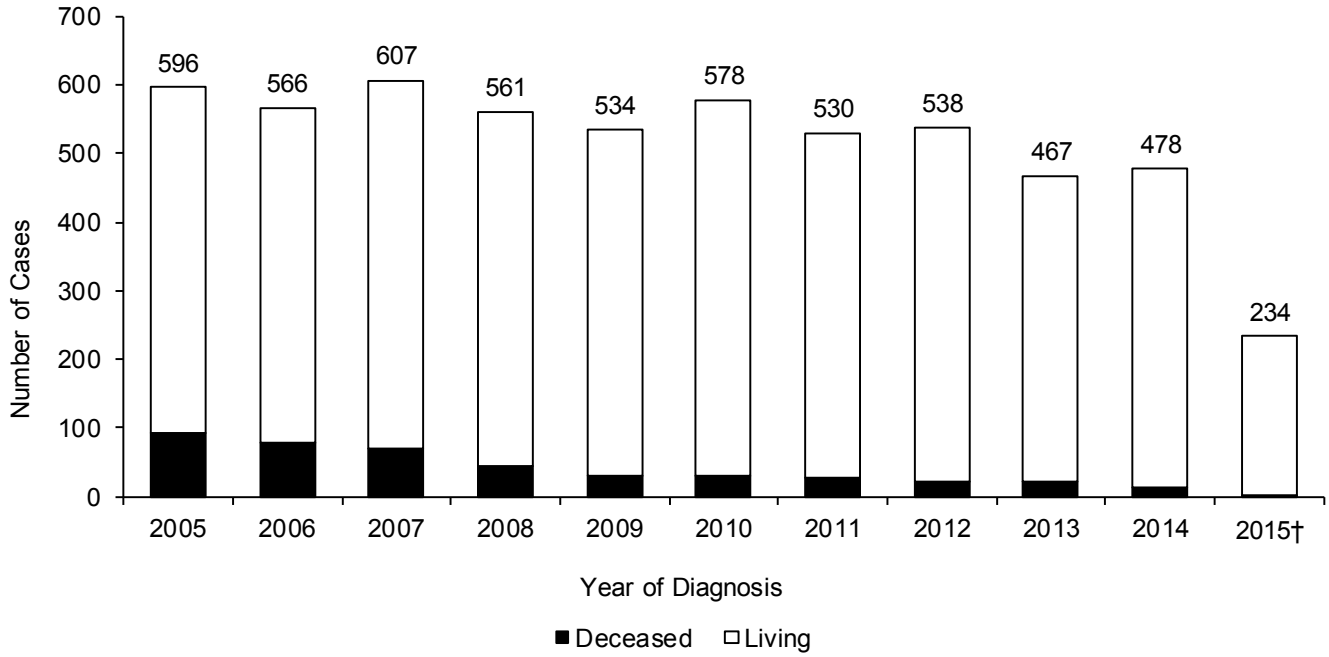
- Since 1982, there have been a total of 20,091 HIV disease cases diagnosed through June 30, 2015.
- There have been 234 new HIV disease diagnoses from January to June 2015. In comparison, there were 246 new HIV disease diagnoses reported during the same time period in 2014[1].
- The differences in the number of individuals sub-classified as stage 3 (AIDS) cases are due to the progression of the disease over time. For those diagnosed with HIV disease in 2005, a larger number are currently classified as stage 3 (AIDS) cases compared to those diagnosed in 2014 because they have been living with the virus longer.

Figure 2. HIV disease deaths*, by selected race, by year of death, Missouri, 2005—2015†



*Includes deaths that have occurred among those diagnosed with HIV disease in Missouri.
†Only includes deaths through June 30, 2015 and reported by September 30, 2015.

Figure 3. Persons diagnosed with HIV disease by current vital status* and year of diagnosis, Missouri, 2005—2015†**



*Vital status on June 30, 2015.
**Cases are indicated by year of initial diagnosis reported to the Missouri Department of Health and Senior Services. (The year in which the first diagnosis of the person, whether as an HIV case or a stage 3 (AIDS) case, was documented by the Department).
†Only includes events occurring through June 30, 2015 and reported by September 30, 2015.

- The total number of deaths among those diagnosed with HIV disease in Missouri remained generally stable from 2005 to 2010 (Figure 2). The decline since 2011 may be due to delays in death reporting.
- A larger proportion of those diagnosed in 2005 have died as of June 30, 2015 compared to those diagnosed in 2014, likely due to differences in the length of time living with the virus and current age (Figure 3).

Table 1. Diagnosed and living HIV disease* cases by sex, by race/ethnicity, by race/ethnicity and sex, and current age*, Missouri, 2015†**

	Diagnosed 2015†		Living 2015†		
Sex	Cases	%	Cases	%	Rate**
Male	198	84.6%	10,011	82.7%	336.6
Female	36	15.4%	2,093	17.3%	67.7
Total	**234**	**100.0%**	**12,104**	**100.0%**	**199.6**
Race/Ethnicity					
White	103	44.0%	5,874	48.5%	120.9
Black/African American	113	48.3%	5,526	45.7%	786.9
Hispanic	9	3.8%	500	4.1%	208.1
Asian/Pacific Islander	3	1.3%	79	0.7%	65.4
American Indian/Alaskan Native	0	0.0%	12	0.1%	46.9
Two or More Races/Unknown	6	2.6%	113	0.9%	N/A
Total	**234**	**100.0%**	**12,104**	**100.0%**	**199.6**
Race/Ethnicity-Males					
White Male	91	46.0%	5,207	52.0%	218.1
Black/African American Male	93	47.0%	4,222	42.2%	1,263.9
Hispanic Male	8	4.0%	420	4.2%	337.8
Asian/Pacific Islander Male	1	0.5%	61	0.6%	106.5
American Indian/Alaskan Native Male	0	0.0%	12	0.1%	93.0
Two or More Races/Unknown Male	5	2.5%	89	0.9%	N/A
Total	**198**	**100.0%**	**10,011**	**100.0%**	**336.6**
Race/Ethnicity-Females					
White Female	12	33.3%	667	31.9%	27.0
Black/African American Female	20	55.6%	1,304	62.3%	354.1
Hispanic Female	1	2.8%	80	3.8%	69.0
Asian/Pacific Islander Female	2	5.6%	18	0.9%	28.3
American Indian/Alaskan Native Female	0	0.0%	0	0.0%	0.0
Two or More Races/Unknown Female	1	2.8%	24	1.1%	N/A
Total	**36**	**100.0%**	**2,093**	**100.0%**	**67.7**
Current Age* **					
<2	0	0.0%	0	0.0%	0.0
2-12	1	0.4%	33	0.3%	3.9
13-18	9	3.8%	43	0.4%	9.1
19-24	51	21.8%	514	4.2%	99.4
25-44	121	51.7%	4,603	38.0%	300.0
45-64	46	19.7%	6,294	52.0%	390.7
65+	6	2.6%	617	5.1%	66.2
Total	**234**	**100.0%**	**12,104**	**100.0%**	**199.6**

*Includes all individuals diagnosed with the HIV virus, regardless of current status (i.e., HIV or stage 3 (AIDS)).
†Only includes cases diagnosed or living as of June 30, 2015 and reported by September 30, 2015.
**Per 100,000 population based on 2014 MDHSS estimates.
***Based on age as of June 30, 2015.
Note: Percentages may not total due to rounding.

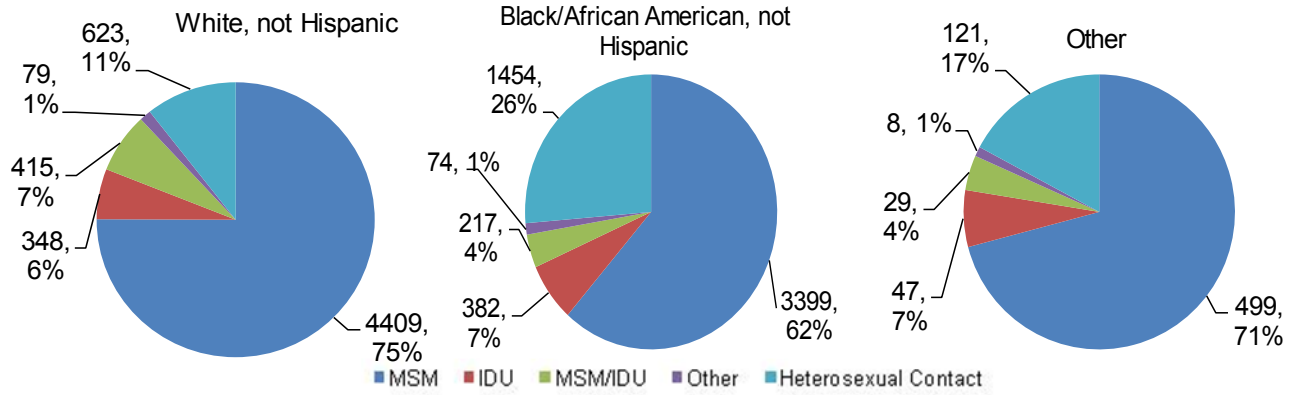
- There are 12,104 individuals living with HIV disease that were diagnosed in Missouri through June 30, 2015.
- A greater proportion of the newly diagnosed cases occurred among blacks/African Americans compared to living cases.
- The greatest proportion of newly diagnosed cases occurred among persons 25-44 years of age (51.7%). Persons 45-64 years of age represented the largest proportion of those living with HIV disease (52.0%).

Table 2. New and living HIV disease cases by exposure category, Missouri 2015†

Exposure category	HIV Disease 2015†		HIV Disease Living*	
Adult/Adolescent				
Men who have sex with men (MSM)	150	64.4%	8,307	69.2%
Men who have sex with men and inject drugs (MSM/IDU)	5	2.1%	661	5.5%
Injecting drug use (IDU)	11	4.7%	777	6.5%
Heterosexual contact	39	16.7%	2,198	18.3%
Hemophilia/coagulation disorder	0	0.0%	42	0.4%
Blood transfusion or tissue recipient	0	0.0%	10	0.1%
No indicated risk (NIR)	28	12.0%	-----	-------
ADULT/ADOLESCENT SUBTOTAL	**233**	**100.0%**	**11,998 ****	**100.0%**
Pediatric (<13 years old)				
PEDIATRIC SUBTOTAL	**1**	**100.0%**	**106**	**100.0%**
TOTAL	**234**		**12,104**	

*Cases with no identified risk were proportionately re-distributed to known exposure categories.
†Only includes cases diagnosed through June 30, 2015 and reported by September 30, 2015.
**Includes 3 cases with a confirmed "other" exposure category.

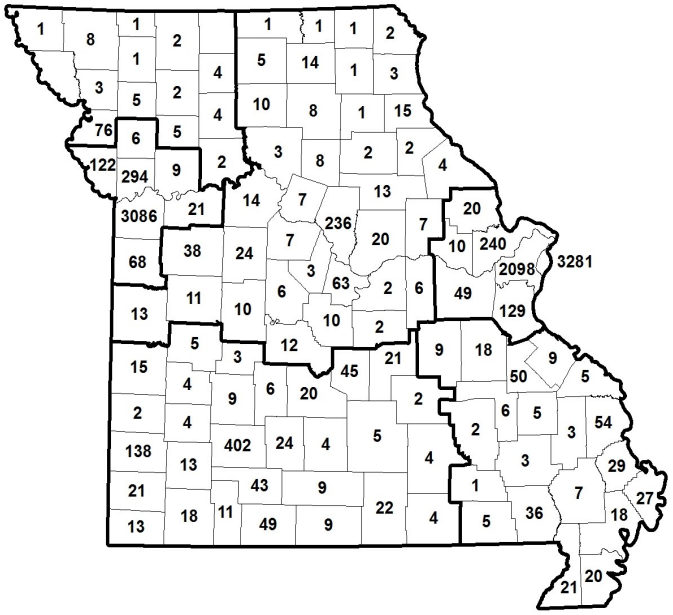
Figure 4. Living HIV disease cases by adjusted* exposure category and race/ethnicity, Missouri, 2015†



*Cases with no identified risk were proportionately re-distributed to known exposure categories. Percentages may not total 100 due to rounding.
†Only includes cases diagnosed and living as of June 30, 2015 and reported by September 30, 2015.

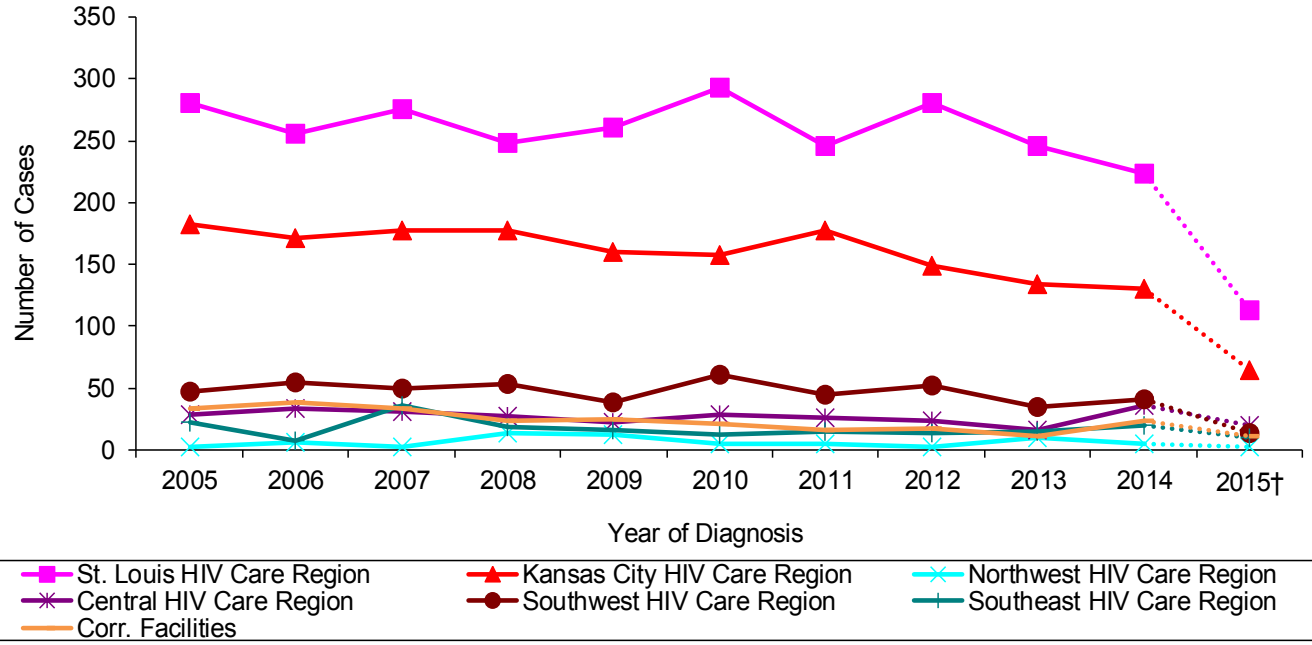
- Of adult/adolescent cases diagnosed from January 1 to June 30, 2015, 12.0% did not have a reported risk as of September 30, 2015. Surveillance activities have been implemented to resolve cases reported with unknown risk information. These cases will not be proportionately re-distributed until the end of the surveillance follow-up period (Table 2).
- The majority of adult/adolescent living cases are attributed to MSM (69.2%), with cases attributed to heterosexual contact representing the second greatest proportion (18.3%). Cases with missing exposure category information have been proportionately re-distributed into known exposure categories (Table 2).
- There are differences in the distribution of exposure categories among living cases by race/ethnicity (Figure 4). Among whites, 75.1% of living cases are attributed to MSM, compared to 61.5% among blacks/African Americans. In contrast, heterosexual contact represents the exposure category for 26.3% of living black/ African American cases, but only 10.6% of living white cases.

Figure 5. Number of persons living with HIV disease by county of residence* and HIV care region at time of diagnosis, Missouri, 1982-2015†



*Based on residence at time of most recent diagnosis of HIV or stage 3 (AIDS). Excludes persons diagnosed in Missouri correctional facilities (n=719).
†Includes those living with HIV disease as of June 30, 2015 and reported by September 30, 2015.

Figure 6. Persons diagnosed with HIV disease by HIV care region at time of diagnosis, Missouri, 2005-2015†



†Only includes cases diagnosed through June 30, 2015 and reported by September 30, 2015.

- Figure 5 presents the number of cases still presumed to be living whose most recent diagnosis (i.e. HIV or stage 3 (AIDS)) occurred in the county. It does not reflect the current number of cases living in the county. The majority of living cases were diagnosed in Jackson County, St. Louis City, and St. Louis County.
- Although the St. Louis HIV Care Region represents approximately 35% of Missouri's general population, over the period from 2005 to 2015, the St. Louis HIV Care Region represented 48% of the new HIV diagnoses in Missouri (Figure 6).

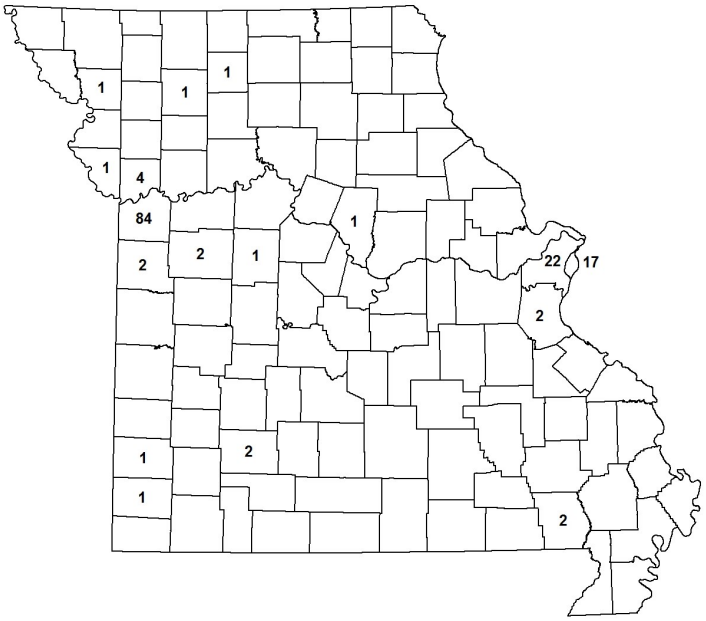
PRIMARY AND SECONDARY (P&S) SYPHILIS

Table 3. Reported P&S syphilis cases, by race, by geographic area, by sex, Missouri, 2015†

Missouri	Cases Male	Female	Total
White	47	9	56
Black/African American	64	13	77
Other/Unknown*	11	1	12
Total Cases	**122**	**23**	**145**
St. Louis HIV Care Region			
White	10	0	10
Black/African American	21	3	24
Other/Unknown*	6	1	7
Total Cases	**37**	**4**	**41**
Kansas City HIV Care Region			
White	28	8	36
Black/African American	40	10	50
Other/Unknown*	5	0	5
Total Cases	**73**	**18**	**91**
Northwest HIV Care Region			
White	2	1	3
Black/African American	0	0	0
Other/Unknown*	0	0	0
Total Cases	**2**	**1**	**3**
Central HIV Care Region			
White	1	0	1
Black/African American	3	0	3
Other/Unknown*	0	0	0
Total Cases	**4**	**0**	**4**
Southwest HIV Care Region			
White	4	0	4
Black/African American	0	0	0
Other/Unknown*	0	0	0
Total Cases	**4**	**0**	**4**
Southeast HIV Care Region			
White	2	0	2
Black/African American	0	0	0
Other/Unknown*	0	0	0
Total Cases	**2**	**0**	**2**

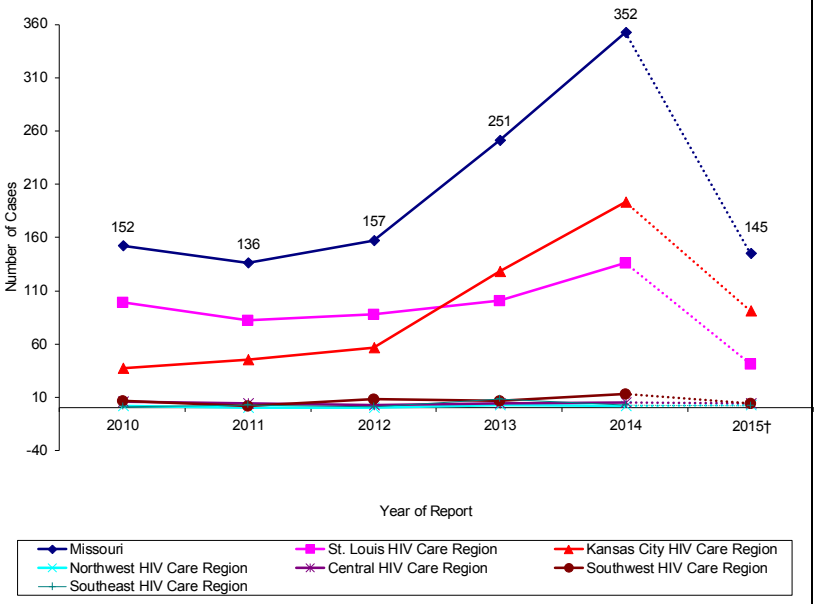
†Includes cases reported through June 30, 2015.
*Includes cases identified with Hispanic ethnicity.

Figure 7. Reported P&S syphilis cases by county, Missouri, 2015†



†Includes cases reported through June 30, 2015.

Figure 8. Reported P&S syphilis cases by geographic area and year of report, Missouri, 2010-2015†



†Only includes cases reported through June 30, 2015.

- From 2010 through 2011 there was a downward trend in reported cases of P&S syphilis in Missouri. The number of reported cases increased from 2012 to 2014. Overall, Missouri has 145 reported cases through June 2015 compared to 167 for the same time period in 2014[1]. The reduction in the number of reported cases is primarily attributed to the reduction in the number of reported cases in the St. Louis HIV Care Region, where 41 cases of P&S syphilis were reported through June 2015 compared to 68 during the same time period in 2014[1].
- Of the P&S syphilis cases reported from January 1 to June 30, 2015, 36 (24.8%) were co-infected with HIV in Missouri. All 36 of the co-infections were diagnosed among males. Thirty-one of the co-infections were attributed to MSM, three were attributed to MSM/IDU, one was attributed to IDU, and one co-infection had no identified risk.

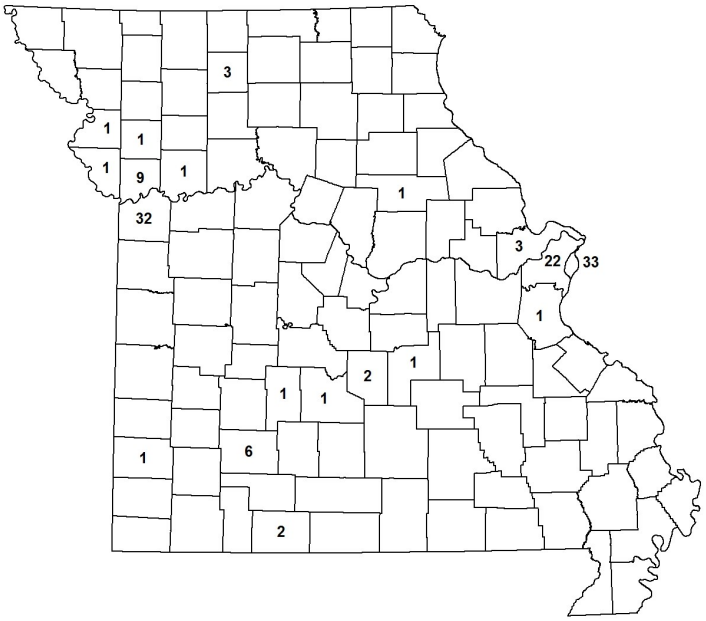
EARLY LATENT SYPHILIS

Table 4. Reported early latent syphilis cases, by race, by geographic area, by sex, Missouri, 2015†

Missouri	Cases Male	Female	Total
White	43	12	55
Black/African American	29	19	48
Other/Unknown*	15	4	19
Total Cases	**87**	**35**	**122**
St. Louis HIV Care Region			
White	15	6	21
Black/African American	20	8	28
Other/Unknown*	7	3	10
Total Cases	**42**	**17**	**59**
Kansas City HIV Care Region			
White	16	2	18
Black/African American	8	11	19
Other/Unknown*	6	1	7
Total Cases	**30**	**14**	**44**
Northwest HIV Care Region			
White	1	2	3
Black/African American	1	0	1
Other/Unknown*	0	0	0
Total Cases	**2**	**2**	**4**
Central HIV Care Region			
White	0	1	1
Black/African American	0	0	0
Other/Unknown*	0	0	0
Total Cases	**0**	**1**	**1**
Southwest HIV Care Region			
White	11	1	12
Black/African American	0	0	0
Other/Unknown*	2	0	2
Total Cases	**13**	**1**	**14**
Southeast HIV Care Region			
White	0	0	0
Black/African American	0	0	0
Other/Unknown*	0	0	0
Total Cases	**0**	**0**	**0**

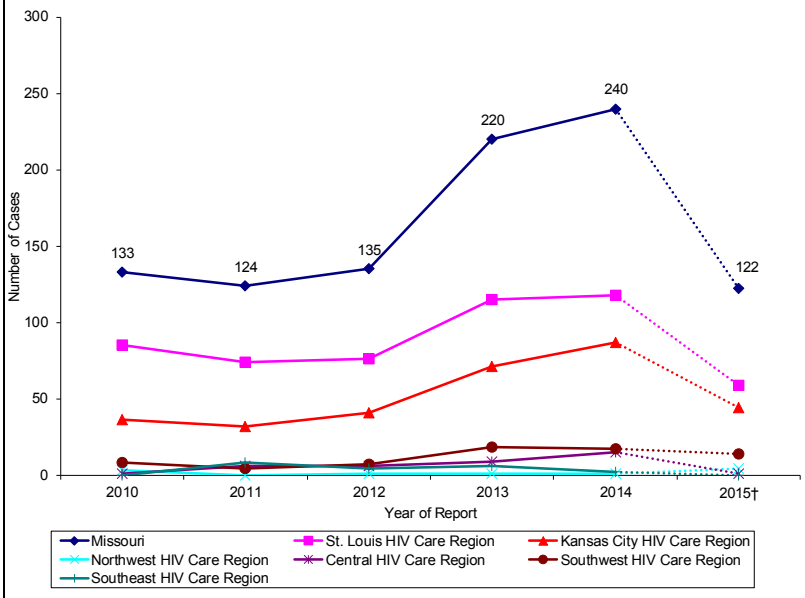
†Includes cases reported through June 30, 2015.
*Includes cases identified with Hispanic ethnicity.

Figure 9. Reported early latent syphilis cases by county, Missouri, 2015†



†Includes cases reported through June 30, 2015.

Figure 10. Reported early latent syphilis cases by geographic area and year of report, Missouri, 2010-2015†



†Only includes cases reported through June 30, 2015.

- From 2010 to 2011 there was a slight decrease in the number of reported early latent syphilis cases in Missouri. The number of reported early syphilis cases increased from 2011 to 2014. Overall, Missouri has 122 reported cases through June 2015 compared to 117 for the same time period in 2014[1].
- Of the early latent syphilis cases reported from January 1 to June 30, 2015, 36 (29.5%) were co-infected with HIV in Missouri. Males represented all co-infections diagnosed. Thirty-four of the co-infections were attributed to MSM and two were attributed to MSM/IDU.

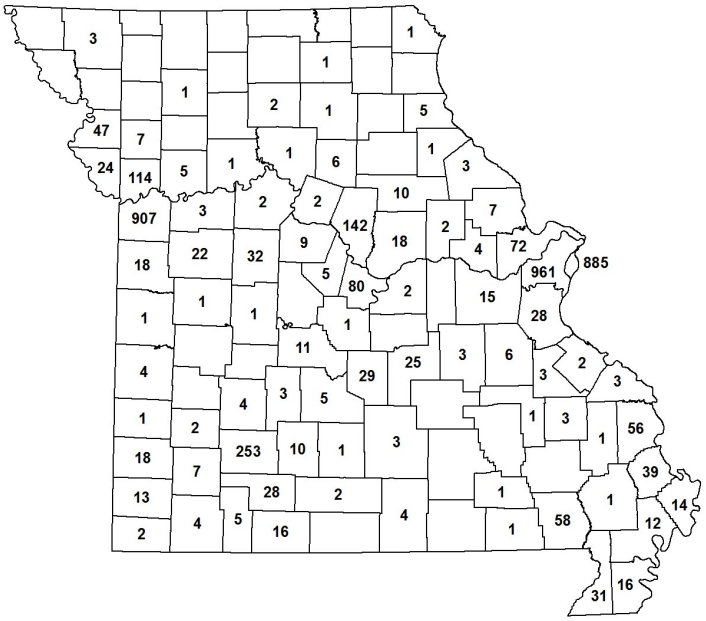
GONORRHEA

Table 5. Reported gonorrhea cases, by race, by geographic area, by sex, Missouri, 2015†

	Cases		
Missouri	Male	Female	Total
White	576	594	1,170
Black/African American	1,280	1,114	2,394
Other/Unknown*	298	292	590
Total Cases	**2,154**	**2,000**	**4,154**
St. Louis HIV Care Region			
White	107	93	200
Black/African American	813	668	1,481
Other/Unknown*	149	142	291
Total Cases	**1,069**	**903**	**1,972**
Kansas City HIV Care Region			
White	171	157	328
Black/African American	295	320	615
Other/Unknown*	70	65	135
Total Cases	**536**	**542**	**1,078**
Northwest HIV Care Region			
White	11	26	37
Black/African American	3	8	11
Other/Unknown*	4	0	4
Total Cases	**18**	**34**	**52**
Central HIV Care Region			
White	90	101	191
Black/African American	73	43	116
Other/Unknown*	26	29	55
Total Cases	**189**	**173**	**362**
Southwest HIV Care Region			
White	164	157	321
Black/African American	39	17	56
Other/Unknown*	36	26	62
Total Cases	**239**	**200**	**439**
Southeast HIV Care Region			
White	33	60	93
Black/African American	57	58	115
Other/Unknown*	13	30	43
Total Cases	**103**	**148**	**251**

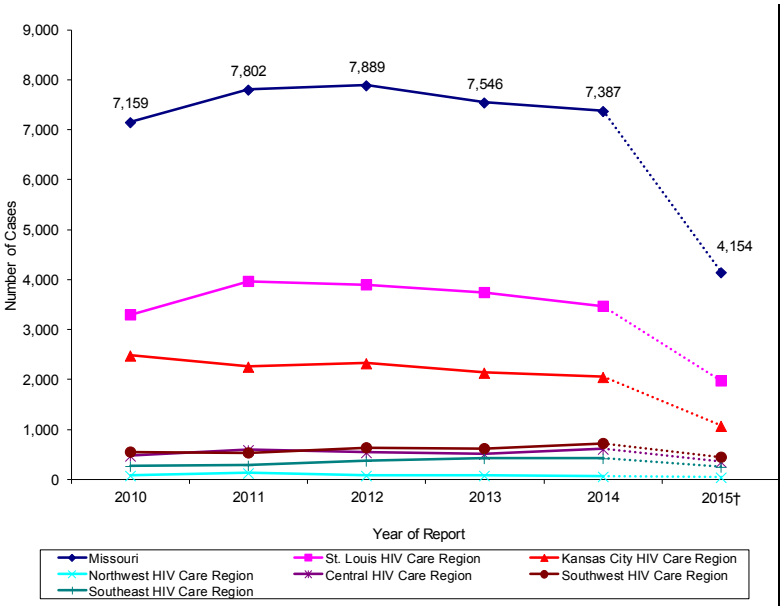
†Includes cases reported through June 30, 2015.
*Includes cases identified with Hispanic ethnicity.

Figure 11. Reported gonorrhea cases by county, Missouri, 2015†



†Includes cases reported through June 30, 2015.

Figure 12. Reported gonorrhea cases by geographic area and year of report, Missouri, 2010-2015†



†Only includes cases reported through June 30, 2015.

- A total of 4,154 gonorrhea cases have been reported in Missouri through June 30, 2015 (Table 5).
- The number of reported gonorrhea cases in Missouri increased from 2010 to 2012 and then decreased from 2012 to 2014 (Figure 12). More gonorrhea cases have been reported during the first six months of 2015 (4,154) compared to the same time period in 2014 (3,448[1]).

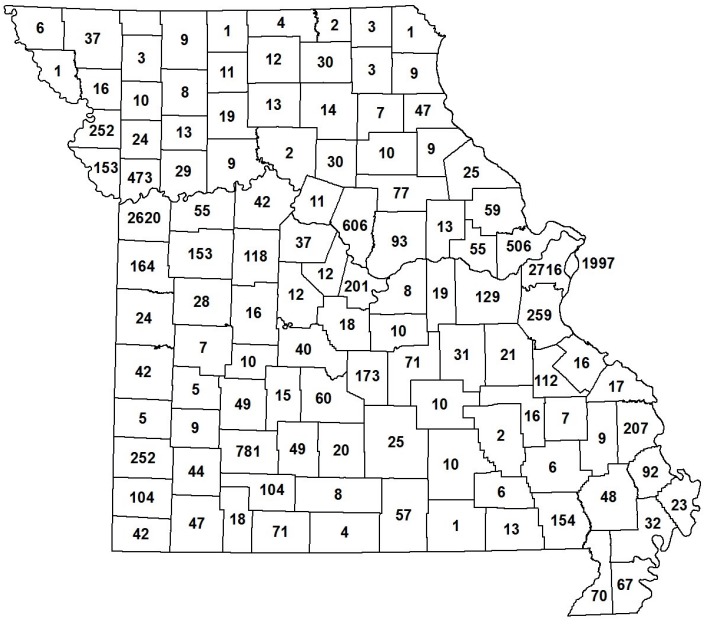
CHLAMYDIA

Table 6. Reported chlamydia cases, by race, by geographic area, by sex, Missouri, 2015†

	Cases		
Missouri	Male	Female	Total
White	1,647	4,195	5,842
Black/African American	1,956	3,522	5,478
Other/Unknown*	843	2,272	3,115
Total Cases	**4,446**	**9,989**	**14,435**
St. Louis HIV Care Region			
White	377	808	1,185
Black/African American	1,094	2,113	3,207
Other/Unknown*	358	971	1,329
Total Cases	**1,829**	**3,892**	**5,721**
Kansas City HIV Care Region			
White	339	902	1,241
Black/African American	498	978	1,476
Other/Unknown*	231	570	801
Total Cases	**1,068**	**2,450**	**3,518**
Northwest HIV Care Region			
White	69	224	293
Black/African American	21	27	48
Other/Unknown*	18	36	54
Total Cases	**108**	**287**	**395**
Central HIV Care Region			
White	287	793	1,080
Black/African American	135	195	330
Other/Unknown*	98	251	349
Total Cases	**520**	**1,239**	**1,759**
Southwest HIV Care Region			
White	458	1,085	1,543
Black/African American	106	67	173
Other/Unknown*	104	273	377
Total Cases	**668**	**1,425**	**2,093**
Southeast HIV Care Region			
White	117	383	500
Black/African American	102	142	244
Other/Unknown*	34	171	205
Total Cases	**253**	**696**	**949**

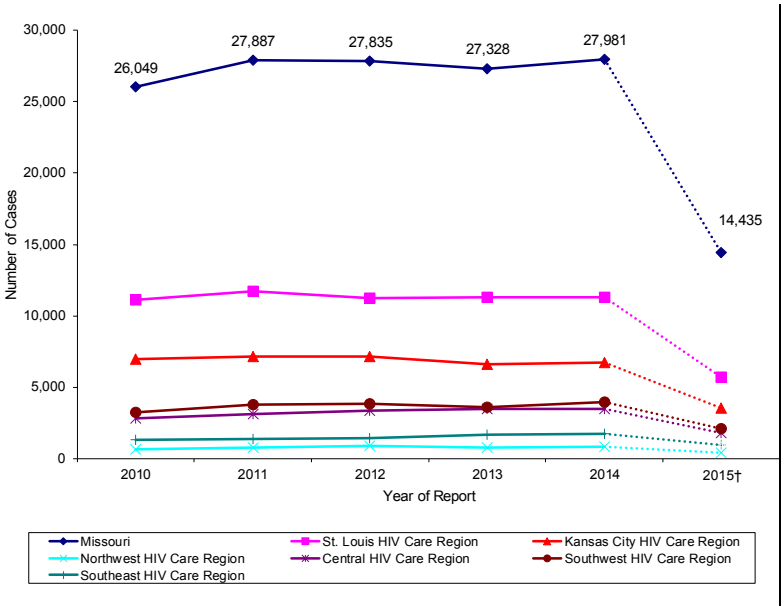
†Includes cases reported through June 30, 2015.
*Includes cases identified with Hispanic ethnicity.

Figure 13. Reported chlamydia cases by county, Missouri, 2015†



†Includes cases reported through June 30, 2015.

Figure 14. Reported chlamydia cases by geographic area and year of report, Missouri, 2010-2015†



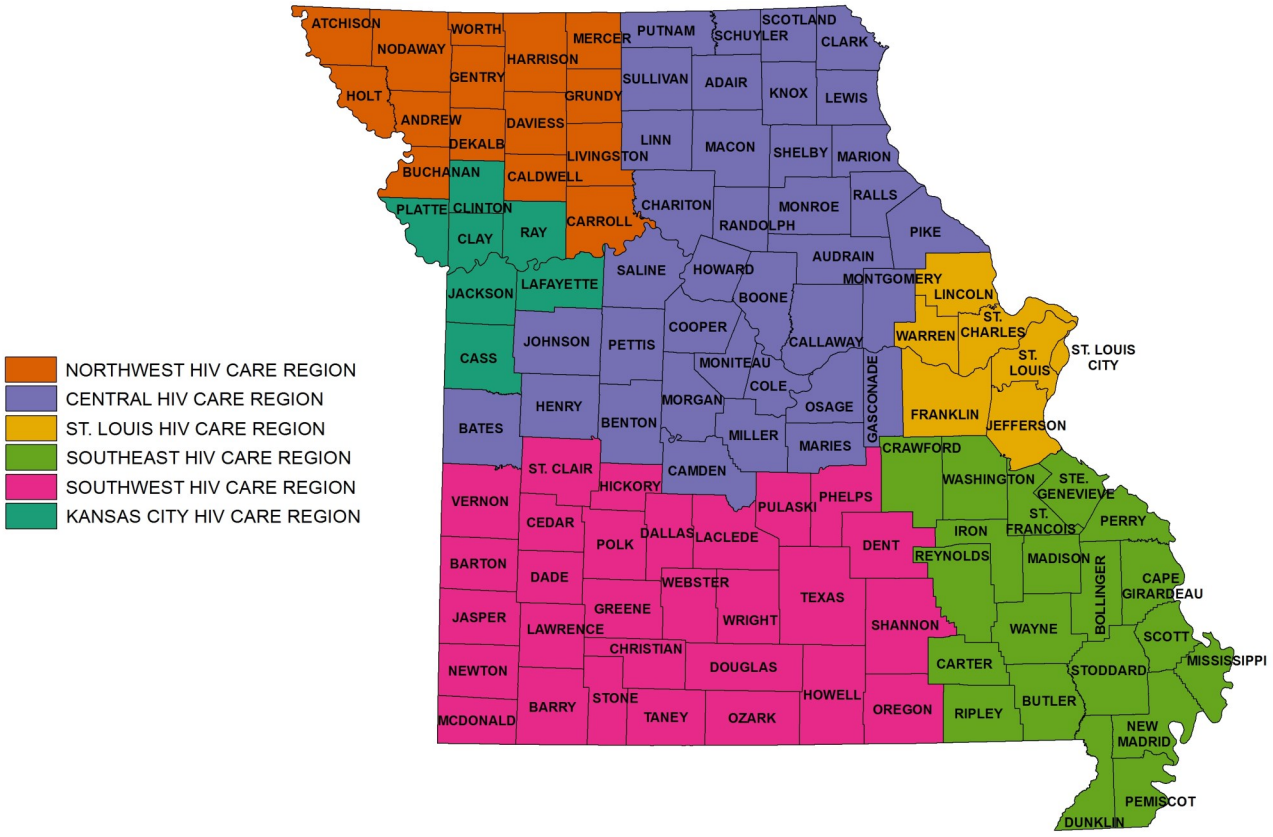
†Only includes cases reported through June 30, 2015.

- A total of 14,435 chlamydia cases have been reported in Missouri through June 30, 2015 (Table 6).
- From 2010 to 2011 there was a gradual increase in the number of reported chlamydia cases in Missouri overall. This was followed by decreases in 2012 and 2013, and then an increase in 2014 (Figure 14). More cases of chlamydia have been reported in the first six months of 2015 (14,435) compared to the same time period in 2014 (13,506[1]).

References

1. Missouri Department of Health and Senior Services. HIV/STD Statistics, June 2014. http://health.mo.gov/data/hivstdaids/pdf/14statsheet.pdf. Published November 2014.

Appendix

HIV Care Region vs. HIV Region: Previous *HIV/STD Statistics* reports divided the state into geographic regions known as HIV Regions using the HIV prevention planning regions. Based on guidance from the Bureau of HIV, STD, and Hepatitis (BHSH), the data in the 2015 *HIV/STD Statistics* report are presented by HIV care regions in an effort to align with future goals to have a single definition for the geographic regions used for HIV planning. Beginning with the *2014 Epidemiologic Profiles of HIV, STD, and Hepatitis in Missouri*, the state was divided into geographic regions known as HIV care regions using the HIV medical case management (care) regions. The transition to care regions resulted in some changes. The North Central HIV Region is now known as the Central HIV Care Region. The remaining five regions retained the same names. The counties comprising the St. Louis, Southeast, and Southwest HIV Care Regions remained the same. The Northwest HIV Care Region no longer contains Clinton County. Clinton County now belongs in the Kansas City HIV Care Region. The Kansas City HIV Care Region no longer contains Johnson, Bates, Henry, and Benton Counties. These four counties now belong in the Central HIV Care Region. As a result of these changes, regional data in the 2015 *HIV/STD Statistics* report should not be compared to previous reports. Additionally, calculations for the past ten years were recalculated using the HIV care regions at the regional level in order to accurately display trends over time in the 2015 *HIV/STD Statistics* report.

MISSOURI HIV CARE REGIONS