

# Missouri Department of Health and Senior Services

## Bureau of HIV, STD, and Hepatitis

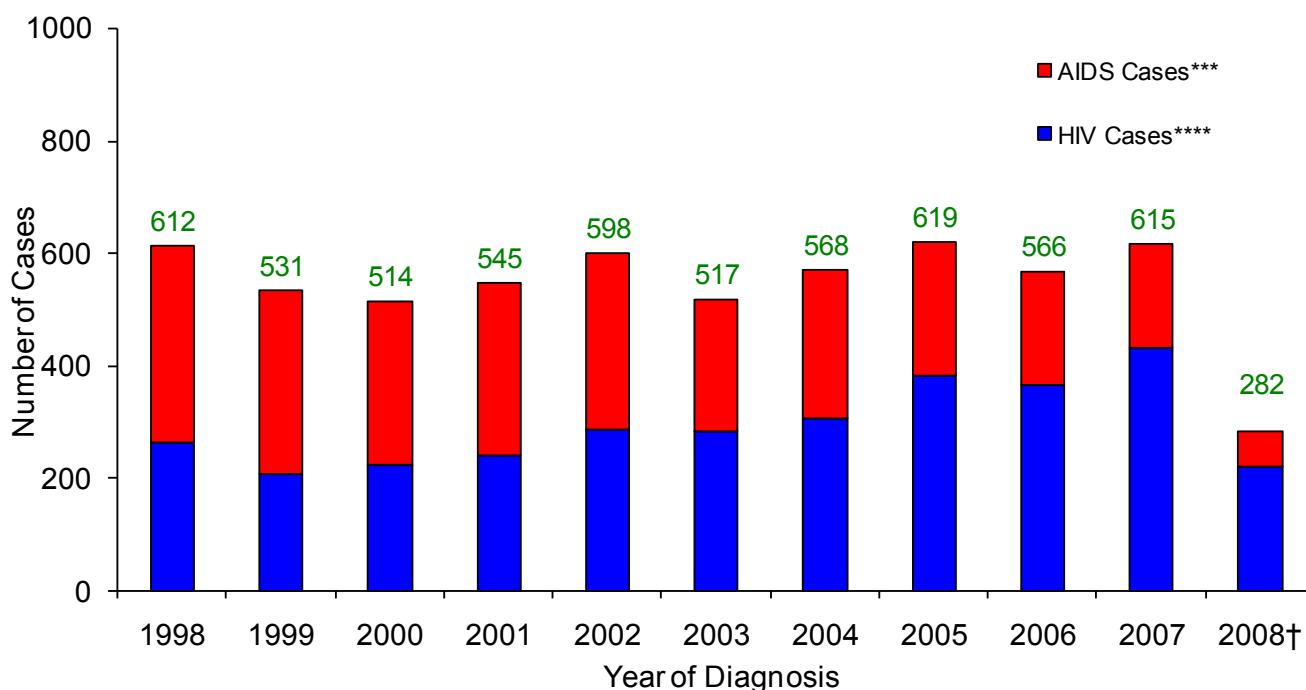
### HIV/STD Statistics

June 2008

#### Notes to the Reader:

- **HIV disease** represents 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 an **AIDS case** (if they are in the later stages of the disease process and have met the case definition for AIDS), or an **HIV case** (if they are in the earlier stages of the disease process and have not met the AIDS case definition). In this report, the sub-classification of HIV or AIDS is based on an individual's status of disease progression as of June 30, 2008.
- The data presented in this report only includes cases **diagnosed** through June 30, 2008, based on information **reported** to the Missouri Department of Health and Senior Services through September 2008. 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 2008 only represent cases diagnosed through June 30, 2008. 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. This may result in discrepancies when comparing the current report to previous epidemiological data.

**Figure 1. HIV disease cases, by current status\* and year of diagnosis\*\*, Missouri, 1998—2008†**



\*HIV case vs. 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 an AIDS case, was documented by the Department).

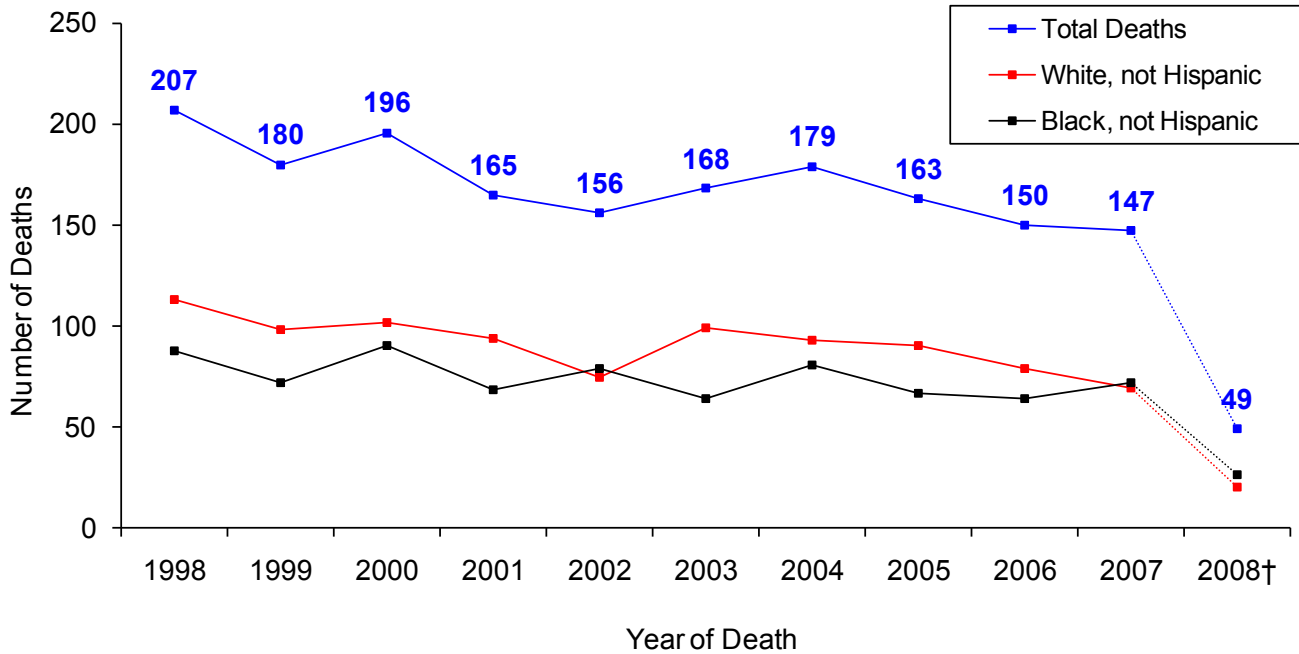
†Only includes cases diagnosed through June 30, 2008 and reported by September 30, 2008.

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of June 30, 2008.

- Since 1982, there have been a total of 16,596 HIV disease cases diagnosed through June 30, 2008.
- Between 1998 and 2007, the number of new HIV disease diagnoses has ranged from 514 cases in 2000, to 619 cases in 2005. Overall, the number of new cases has remained relatively stable from 1998 to 2007.
- There have been 282 new HIV disease diagnoses from January to June 2008. The majority of these individuals were classified as HIV cases, not AIDS as of June 30, 2008.
- The differences in the number of individuals sub-classified as AIDS cases are due to the progression of the disease over time. For those diagnosed with HIV disease in 1998, a larger number are currently classified as AIDS cases compared to those diagnosed in 2007 because they have been living with the virus longer.

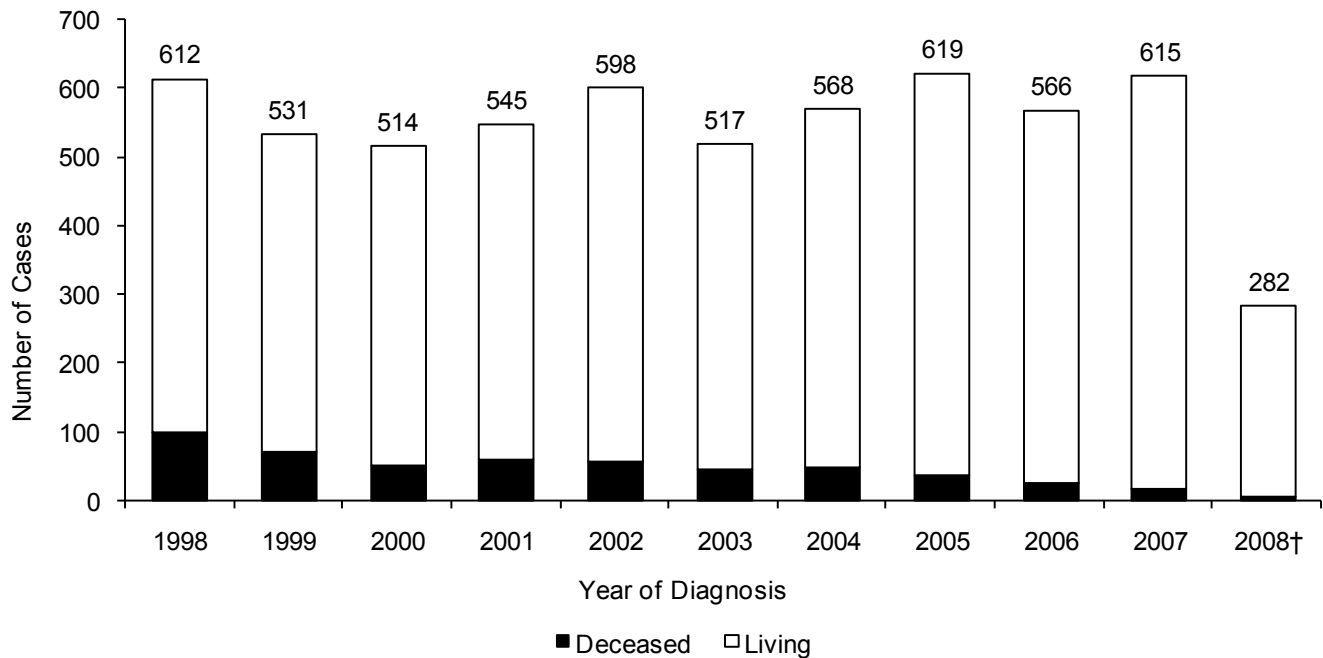
**Figure 2. HIV disease deaths\*, by selected race, by year of death, Missouri, 1998—2008†**



\*Includes deaths that have occurred among those diagnosed with HIV disease in Missouri.

†Only includes deaths through June 30, 2008, and reported by September 30, 2008.

**Figure 3. Persons diagnosed with HIV disease by current vital status\* and year of diagnosis\*\*, Missouri, 1998—2008†**



\*Vital status on June 30, 2008.

\*\*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 an AIDS case, was documented by the Department).

†Only includes events occurring through June 30, 2008 and reported by September 30, 2008.

- The total number of deaths among those diagnosed with HIV disease in Missouri decreased from 1998 to 2007 (Figure 2), likely due to the introduction of highly actively antiretroviral therapy (HAART) in 1996.
- A larger number of those diagnosed in 1998 have died as of June 30, 2008 compared to those diagnosed in 2007, likely due to differences in the length of time living with the virus and current age (Figure 3).

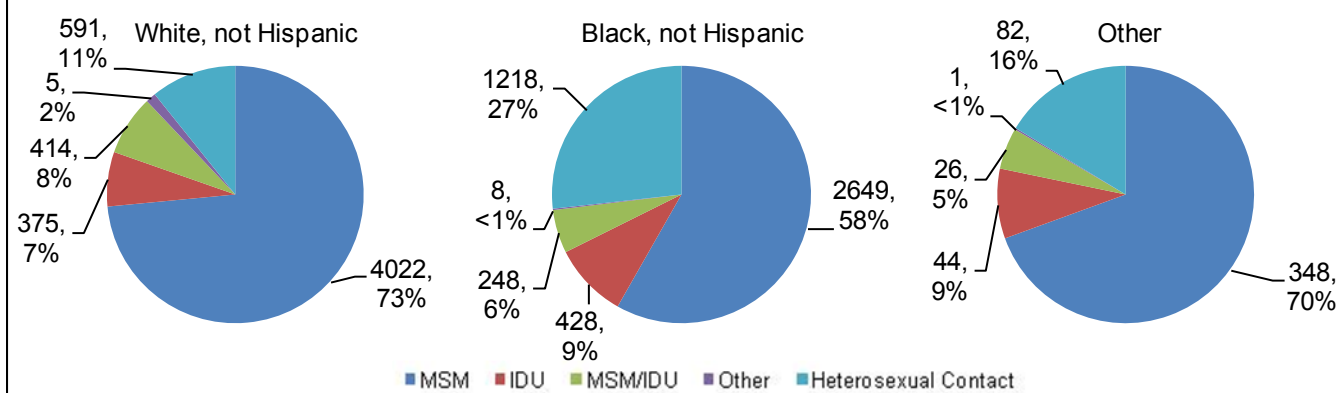
Table 1. Diagnosed and living HIV disease* cases by sex, by race/ethnicity, by race/ethnicity and sex, and current age***, Missouri, 2008†					
Sex	HIV Disease*				
	Diagnosed 2008†		Living 2008†		Rate**
	Cases	%	Cases	%	
Male	230	81.6%	8,858	83.5%	308.5
Female	52	18.4%	1,755	16.5%	58.4
<b>Total</b>	<b>282</b>	<b>100.0%</b>	<b>10,613</b>	<b>100.0%</b>	<b>180.5</b>
<b>Race/Ethnicity</b>					
White	116	41.1%	5,503	51.9%	112.7
Black	146	51.8%	4,604	43.4%	664.8
Hispanic	16	5.7%	362	3.4%	202.9
Asian	3	1.1%	44	0.4%	46.1
American Indian	0	0.0%	23	0.2%	74.8
Other/Unknown	1	0.4%	77	0.7%	N/A
<b>Total</b>	<b>282</b>	<b>100.0%</b>	<b>10,613</b>	<b>100.0%</b>	<b>180.5</b>
<b>Race/Ethnicity-Males</b>					
White Male	102	44.3%	4,898	55.3%	205.0
Black Male	110	47.8%	3,535	39.9%	1084.9
Hispanic Male	15	6.5%	306	3.5%	325.2
Asian Male	3	1.3%	32	0.4%	69.0
American Indian Male	0	0.0%	22	0.2%	142.2
Other/Unknown Male	0	0.0%	65	0.7%	N/A
<b>Total</b>	<b>230</b>	<b>100.0%</b>	<b>8,858</b>	<b>100.0%</b>	<b>308.5</b>
<b>Race/Ethnicity-Females</b>					
White Female	14	26.9%	605	34.5%	24.3
Black Female	36	69.2%	1,069	60.9%	291.5
Hispanic Female	1	1.9%	56	3.2%	66.4
Asian Female	0	0.0%	12	0.7%	24.5
American Indian Female	0	0.0%	1	0.1%	6.6
Other/Unknown Female	1	1.9%	12	0.7%	N/A
<b>Total</b>	<b>52</b>	<b>100.0%</b>	<b>1,755</b>	<b>100.0%</b>	<b>58.4</b>
<b>Current Age***</b>					
<2	2	0.7%	4	0.0%	2.5
2-12	0	0.0%	33	0.3%	3.9
13-18	8	2.8%	57	0.5%	11.5
19-24	67	23.8%	344	3.3%	71.8
25-44	155	55.0%	5,009	47.4%	316.9
45-64	46	16.3%	4,775	45.1%	312.9
65+	4	1.4%	354	3.3%	44.9
<b>Total</b>	<b>282</b>	<b>100.0%</b>	<b>10,576</b>	<b>100.0%</b>	<b>179.9</b>
*Includes all individuals diagnosed with the HIV virus, regardless of current status (i.e., HIV or AIDS).					
**Per 100,000 population based on 2007 MDHSS estimates.					
†Only includes cases diagnosed or living as of June 30, 2008 and reported by September 30, 2008.					
***Based on age as of June 30, 2008. Current age is missing for 37 living cases.					

- There are 10,613 individuals living with HIV disease that were diagnosed in Missouri through June 30, 2008.
- A greater proportion of the newly diagnosed cases occurred among blacks compared to living cases.
- The majority of newly diagnosed cases are between the ages of 25-44 years old (55.0%). The majority of living cases are currently between the ages of 25-44 (47.4%) and 45-64 (45.1%).

Exposure category	HIV Disease			
	2008 <sup>†</sup>		Living*	
<b>Adult/Adolescent</b>				
Men who have sex with men	136	48.6%	7,019	66.7%
Men who have sex with men and inject drugs	11	3.9%	688	6.5%
Injecting drug use	7	2.5%	847	8.0%
Heterosexual contact	10	3.6%	1,891	18.0%
Hemophilia/coagulation disorder	0	0.0%	65	0.6%
Blood transfusion or tissue recipient	0	0.0%	14	0.1%
No indicated risk (NIR)	116	41.4%	-----	-----
<b>ADULT/ADOLESCENT SUBTOTAL</b>	<b>280</b>	<b>100.0%</b>	<b>10,527 **</b>	<b>100.0%</b>
<b>Pediatric (&lt;13 years old)</b>				
<b>PEDIATRIC SUBTOTAL</b>	<b>2</b>	<b>100.0%</b>	<b>86</b>	<b>100.0%</b>
<b>TOTAL</b>	<b>282</b>		<b>10,613</b>	

\*Cases with no identified risk were proportionately re-distributed to known exposure categories.  
<sup>†</sup>Only includes cases diagnosed through June 30, 2008 and reported by September 30, 2008.  
 \*\*Includes 3 cases with a confirmed "other" exposure category.

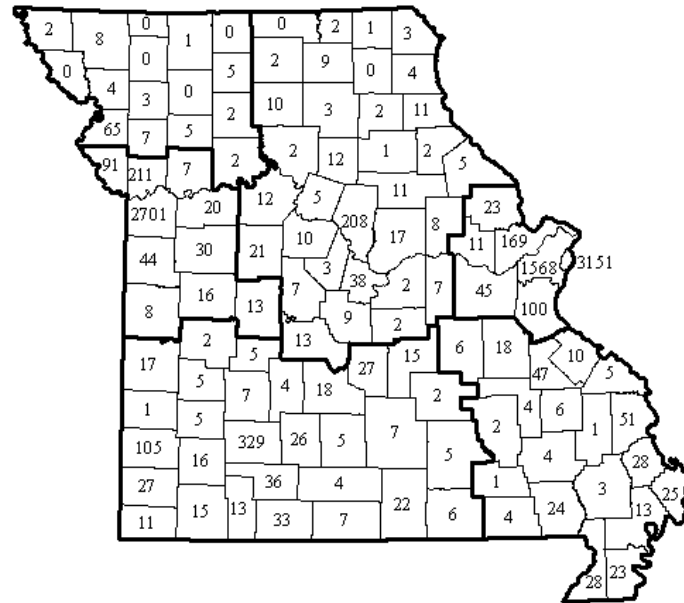
**Figure 4. Living HIV disease cases by adjusted\* exposure category and race/ethnicity, Missouri, 2008<sup>†</sup>**



\*Cases with no identified risk were proportionately re-distributed to known exposure categories. Percentages may not total 100 due to rounding.  
<sup>†</sup>Only includes cases diagnosed and living as of June 30, 2008 and reported by September 30, 2008.

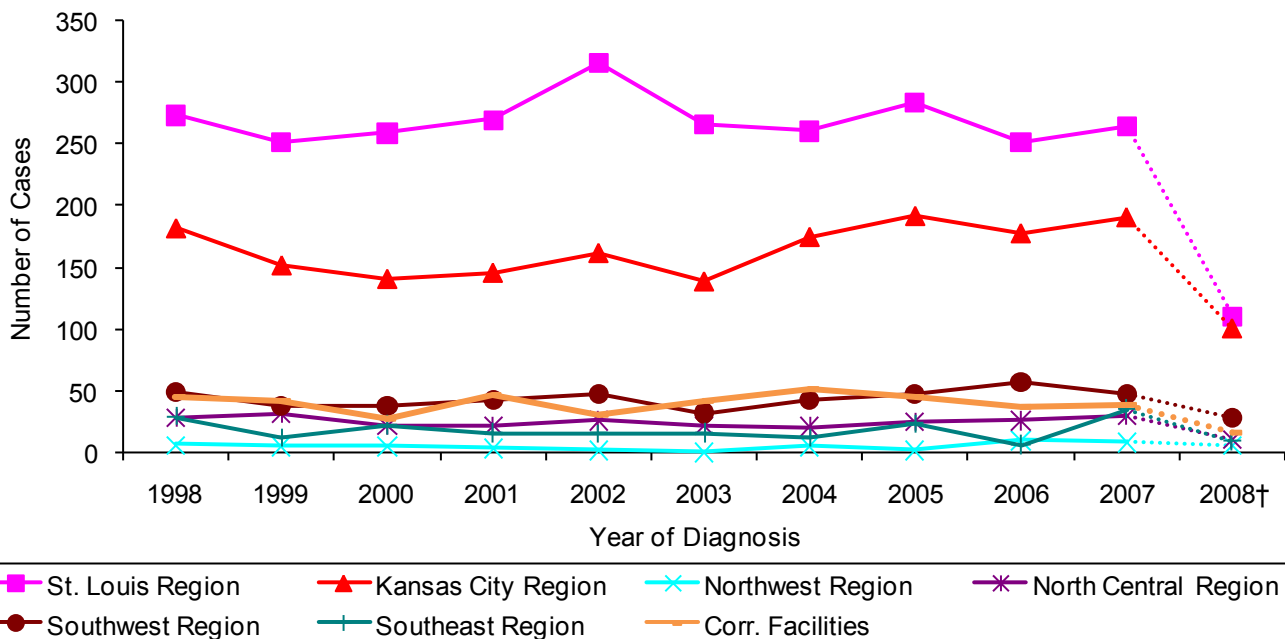
- Of cases diagnosed from January to June 2008, 41.4% did not have a reported risk as of September 30, 2008. Surveillance activities have been implemented to resolve cases reported with unknown risk information. These cases will not be proportionately re-distributed until the end of the surveillance follow-up period (Table 2).
- The majority of living cases are attributed to men who have sex with men (66.7%), followed by heterosexual contact (18.0%). 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, 73% of living cases are attributed to men who have sex with men, compared to 58% among blacks. In contrast, heterosexual contact represents the exposure category for 27% of living black cases, but only 11% of living white cases.

**Figure 5. Number of persons living with HIV disease by county of residence\* and HIV region at time of diagnosis, Missouri, 1982-2008†**



\*Based on residence at time of most recent diagnosis of HIV or AIDS. Excludes persons diagnosed in Missouri correctional facilities and 14 cases missing county of residence at time of diagnosis.  
 †Includes those living with HIV disease as of June 30, 2008 and reported by September 30, 2008.

**Figure 6. Persons diagnosed with HIV disease by HIV region at time of diagnosis, Missouri, 1998-2008†**



†Only includes cases diagnosed through June 30, 2008 and reported by September 30, 2008.

- Figure 5 presents the number of cases still presumed to be living whose most recent diagnosis (i.e. HIV or 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.
- The number of cases diagnosed in each geographic region has remained relatively stable from 1998 to 2007. In the Kansas City region the number of new diagnoses increased from 2003 to 2007, after decreasing from 1998 to 2003 (Figure 6).

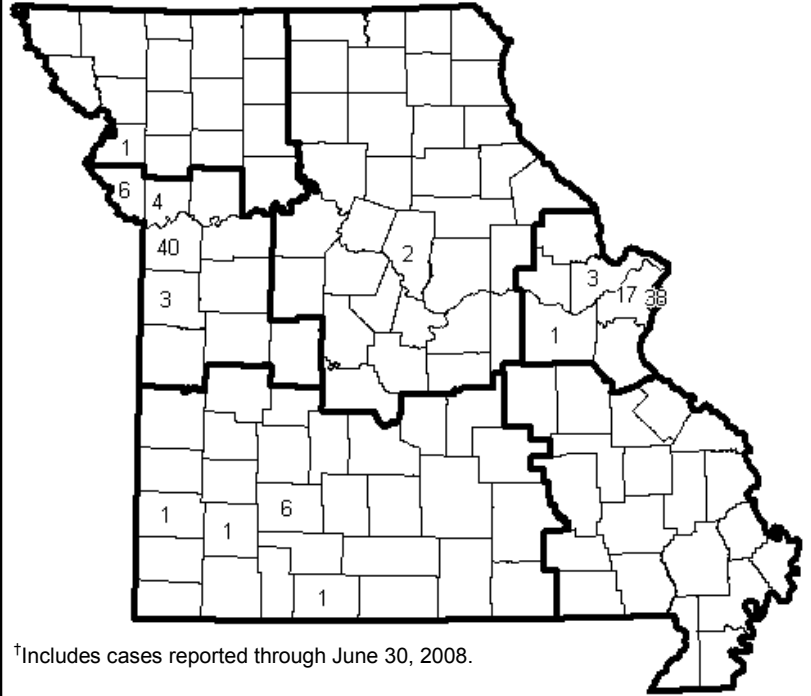
## PRIMARY AND SECONDARY (P&S) SYPHILIS

**Table 3. Reported P&S syphilis cases, by race, by geographic area, by sex, Missouri, 2008<sup>†</sup>**

Missouri	Cases		
	Male	Female	Total
White	51	8	59
Black	47	6	53
Other/Unknown*	11	1	12
<b>Total Cases</b>	<b>109</b>	<b>15</b>	<b>124</b>
<b>St. Louis Region</b>			
White	17	2	19
Black	35	4	39
Other/Unknown*	1	0	1
<b>Total Cases</b>	<b>53</b>	<b>6</b>	<b>59</b>
<b>Kansas City Region</b>			
White	24	5	29
Black	12	2	14
Other/Unknown*	9	1	10
<b>Total Cases</b>	<b>45</b>	<b>8</b>	<b>53</b>
<b>Northwest Region</b>			
White	1	0	1
Black	0	0	0
Other/Unknown*	0	0	0
<b>Total Cases</b>	<b>1</b>	<b>0</b>	<b>1</b>
<b>North Central Region</b>			
White	2	0	2
Black	0	0	0
Other/Unknown*	0	0	0
<b>Total Cases</b>	<b>2</b>	<b>0</b>	<b>2</b>
<b>Southwest Region</b>			
White	7	1	8
Black	0	0	0
Other/Unknown*	1	0	1
<b>Total Cases</b>	<b>8</b>	<b>1</b>	<b>9</b>
<b>Southeast Region</b>			
White	0	0	0
Black	0	0	0
Other/Unknown*	0	0	0
<b>Total Cases</b>	<b>0</b>	<b>0</b>	<b>0</b>

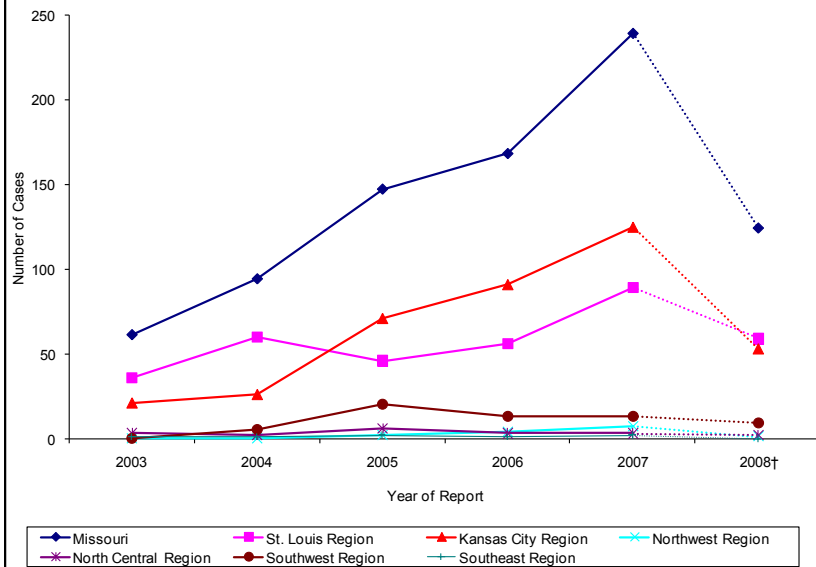
<sup>†</sup>Includes cases reported through June 30, 2008.  
 \*Includes cases identified with Hispanic ethnicity.

**Figure 7. Reported P&S syphilis cases by county, Missouri, 2008<sup>†</sup>**



<sup>†</sup>Includes cases reported through June 30, 2008.

**Figure 8. Reported P&S syphilis cases by geographic area and year of report, Missouri, 2003-2008<sup>†</sup>**



<sup>†</sup>Only includes cases reported through June 30, 2008.

- There have been a total of 124 P&S syphilis cases reported through June 30, 2008 in Missouri (Table 3).
- From 2003 to 2007 there has been an increase in the number of reported P&S syphilis cases in Missouri overall. Trends for 2008 cannot be assessed at this time (Figure 8).
- Of the P&S syphilis cases reported from January 1 to June 30, 2008, 38 (30.6%) were co-infected with HIV. All co-infections were diagnosed among males. Thirty-five of the co-infections were attributed to men who have sex with men, 1 was attributed to heterosexual contact, and 2 co-infections had no identified risk.

## EARLY LATENT SYPHILIS

**Table 4. Reported early latent syphilis cases, by race, by geographic area, by sex, Missouri, 2008†**

Missouri	Cases		
	Male	Female	Total
White	32	8	40
Black	26	5	31
Other/Unknown*	4	4	8
<b>Total Cases</b>	<b>62</b>	<b>17</b>	<b>79</b>

St. Louis Region			
	Male	Female	Total
White	9	1	10
Black	19	3	22
Other/Unknown*	2	0	2
<b>Total Cases</b>	<b>30</b>	<b>4</b>	<b>34</b>

Kansas City Region			
	Male	Female	Total
White	9	5	14
Black	7	1	8
Other/Unknown*	2	4	6
<b>Total Cases</b>	<b>18</b>	<b>10</b>	<b>28</b>

Northwest Region			
	Male	Female	Total
White	0	0	0
Black	0	0	0
Other/Unknown*	0	0	0
<b>Total Cases</b>	<b>0</b>	<b>0</b>	<b>0</b>

North Central Region			
	Male	Female	Total
White	2	0	2
Black	0	1	1
Other/Unknown*	0	0	0
<b>Total Cases</b>	<b>2</b>	<b>1</b>	<b>3</b>

Southwest Region			
	Male	Female	Total
White	11	1	12
Black	0	0	0
Other/Unknown*	0	0	0
<b>Total Cases</b>	<b>11</b>	<b>1</b>	<b>12</b>

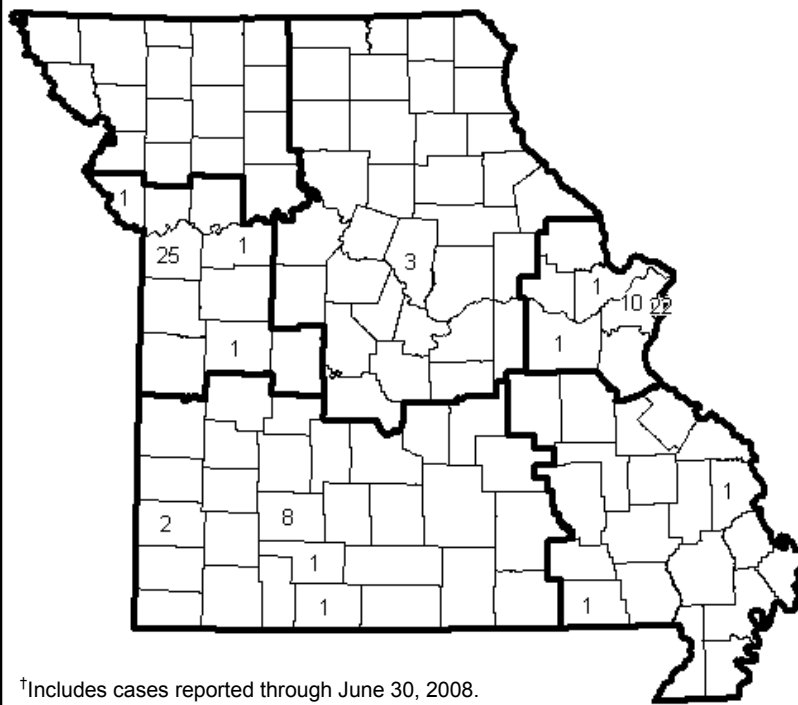
  

Southeast Region			
	Male	Female	Total
White	1	1	2
Black	0	0	0
Other/Unknown*	0	0	0
<b>Total Cases</b>	<b>1</b>	<b>1</b>	<b>2</b>

†Includes cases reported through June 30, 2008.

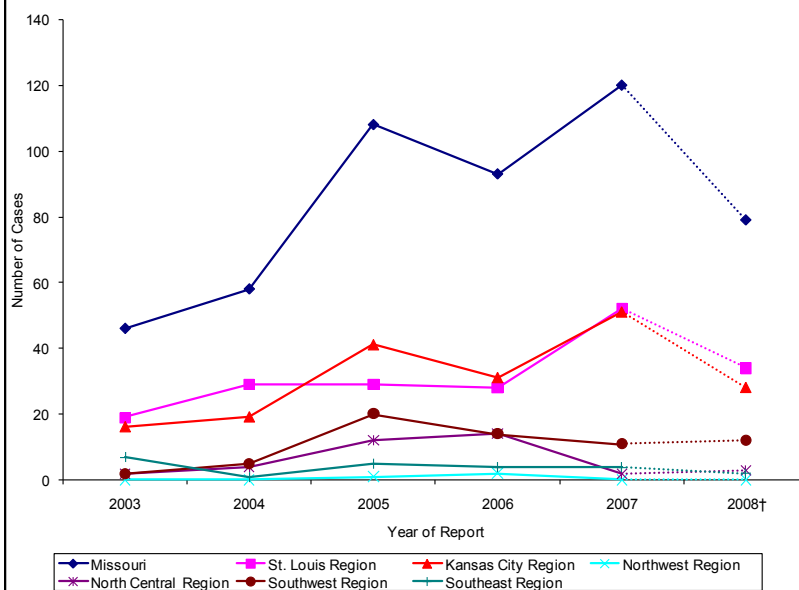
\*Includes cases identified with Hispanic ethnicity.

**Figure 9. Reported early latent syphilis cases by county, Missouri, 2008†**



†Includes cases reported through June 30, 2008.

**Figure 10. Reported early latent syphilis cases by geographic area and year of report, Missouri, 2003-2008†**



†Only includes cases reported through June 30, 2008.

- A total of 79 early latent syphilis cases have been reported in Missouri through June 30, 2008 (Table 4).
- Overall from 2003 to 2007 there has been an increase in the number of reported early latent syphilis cases in Missouri, with slight decrease in 2006. Trends for 2008 cannot be assessed at this time (Figure 10).
- Of the early latent syphilis cases reported from January 1 to June 30, 2008, 27 (34.2%) were co-infected with HIV. Males represented 26 of the 27 co-infections diagnosed. Twenty-three of the co-infections were attributed to men who have sex with men, 2 were attributed to men who have sex with men and injection drug use, 1 was attributed to heterosexual contact, and 1 had no identified risk.

## GONORRHEA

**Table 5. Reported gonorrhea cases, by race, by geographic area, by sex, Missouri, 2008<sup>†</sup>**

Missouri	Cases		
	Male	Female	Total
White	165	545	710
Black	1,288	1,288	2,576
Other/Unknown*	275	455	730
<b>Total Cases</b>	<b>1,728</b>	<b>2,288</b>	<b>4,016</b>

St. Louis Region			
	Male	Female	Total
White	41	85	126
Black	714	703	1417
Other/Unknown*	153	267	420
<b>Total Cases</b>	<b>908</b>	<b>1,055</b>	<b>1,963</b>

Kansas City Region			
	Male	Female	Total
White	46	156	202
Black	397	454	851
Other/Unknown*	61	111	172
<b>Total Cases</b>	<b>504</b>	<b>721</b>	<b>1,225</b>

Northwest Region			
	Male	Female	Total
White	3	13	16
Black	2	2	4
Other/Unknown*	3	2	5
<b>Total Cases</b>	<b>8</b>	<b>17</b>	<b>25</b>

North Central Region			
	Male	Female	Total
White	28	112	140
Black	77	66	143
Other/Unknown*	21	19	40
<b>Total Cases</b>	<b>126</b>	<b>197</b>	<b>323</b>

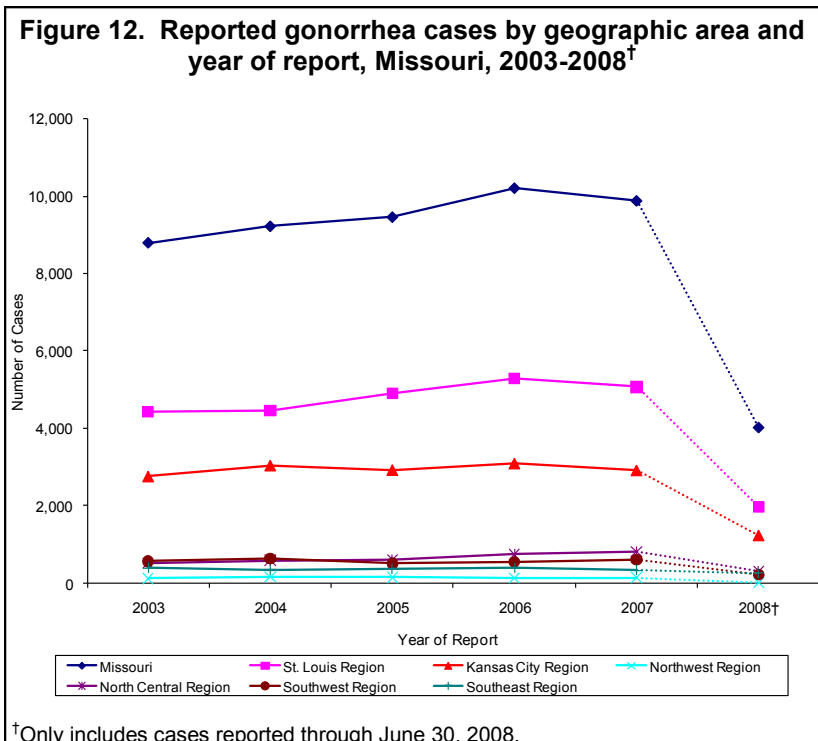
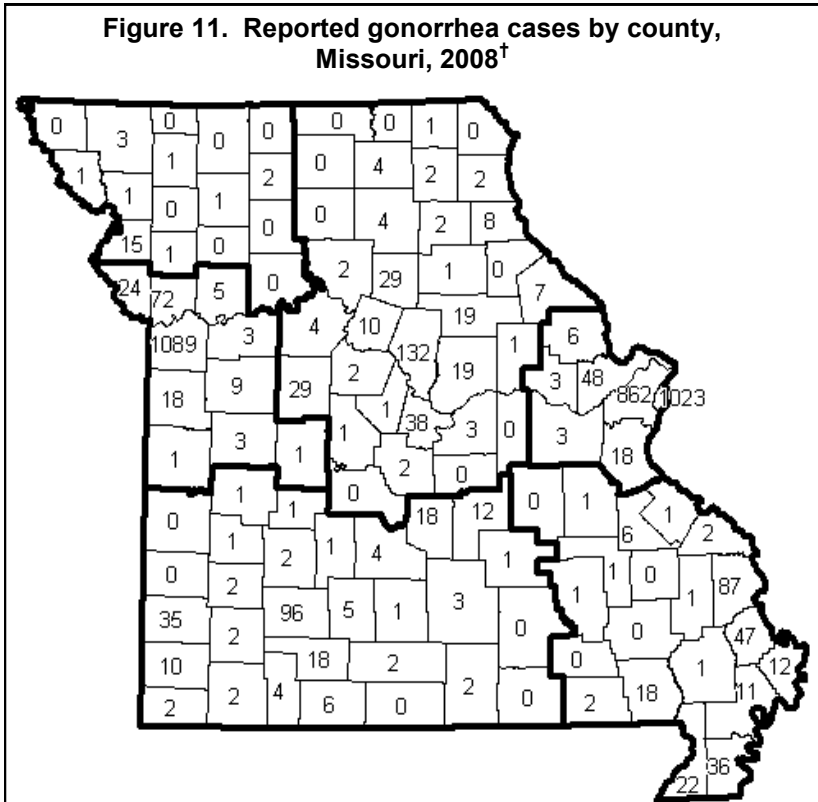
  

Southwest Region			
	Male	Female	Total
White	29	114	143
Black	23	9	32
Other/Unknown*	20	36	56
<b>Total Cases</b>	<b>72</b>	<b>159</b>	<b>231</b>

Southeast Region			
	Male	Female	Total
White	18	65	83
Black	75	54	129
Other/Unknown*	17	20	37
<b>Total Cases</b>	<b>110</b>	<b>139</b>	<b>249</b>

<sup>†</sup>Includes cases reported through June 30, 2008.  
 \*Includes cases identified with Hispanic ethnicity.



- A total of 4,016 gonorrhea cases have been reported in Missouri through June 30, 2008 (Table 5).
- The number of reported gonorrhea cases in Missouri increased from 2003 to 2006, with a slight decrease in 2007. Trends for 2008 cannot be assessed at this time (Figure 12).



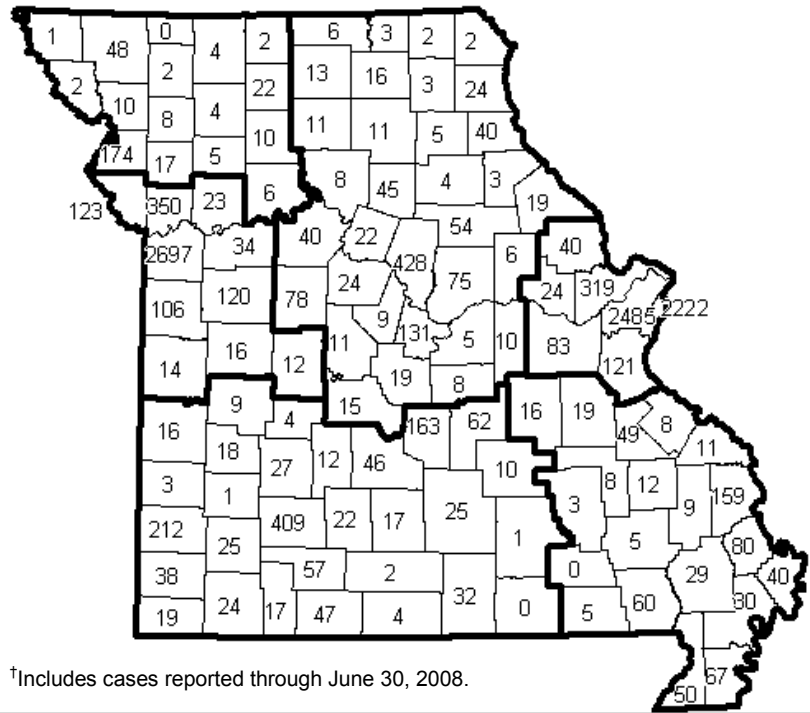
## CHLAMYDIA

**Table 6. Reported chlamydia cases, by race, by geographic area, by sex, Missouri, 2008†**

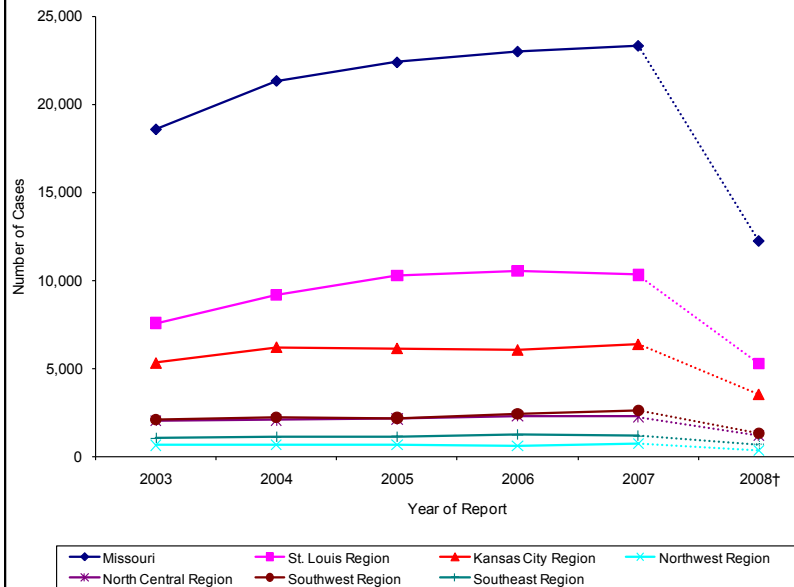
	Cases		
	Male	Female	Total
<b>Missouri</b>			
White	633	2,774	3,407
Black	1,917	3,513	5,430
Other/Unknown*	753	2,646	3,399
<b>Total Cases</b>	<b>3,303</b>	<b>8,933</b>	<b>12,236</b>
<b>St. Louis Region</b>			
White	127	413	540
Black	1,016	1,931	2,947
Other/Unknown*	415	1,392	1,807
<b>Total Cases</b>	<b>1,558</b>	<b>3,736</b>	<b>5,294</b>
<b>Kansas City Region</b>			
White	160	696	856
Black	651	1,151	1,802
Other/Unknown*	181	656	837
<b>Total Cases</b>	<b>992</b>	<b>2,503</b>	<b>3,495</b>
<b>Northwest Region</b>			
White	48	175	223
Black	17	22	39
Other/Unknown*	17	36	53
<b>Total Cases</b>	<b>82</b>	<b>233</b>	<b>315</b>
<b>North Central Region</b>			
White	110	508	618
Black	125	201	326
Other/Unknown*	54	152	206
<b>Total Cases</b>	<b>289</b>	<b>861</b>	<b>1,150</b>
<b>Southwest Region</b>			
White	142	718	860
Black	45	63	108
Other/Unknown*	61	293	354
<b>Total Cases</b>	<b>248</b>	<b>1,074</b>	<b>1,322</b>
<b>Southeast Region</b>			
White	46	264	310
Black	63	145	208
Other/Unknown*	25	117	142
<b>Total Cases</b>	<b>134</b>	<b>526</b>	<b>660</b>

†Includes cases reported through June 30, 2008.  
\*Includes cases identified with Hispanic ethnicity.

**Figure 13. Reported chlamydia cases by county, Missouri, 2008†**



**Figure 14. Reported chlamydia cases by geographic area and year of report, Missouri, 2003-2008†**



- A total of 12,236 chlamydia cases have been reported in Missouri through June 30, 2008 (Table 6).
- From 2003 to 2007 there has been an increase in the number of reported chlamydia cases in Missouri overall. Trends for 2008 cannot be assessed at this time (Figure 14).