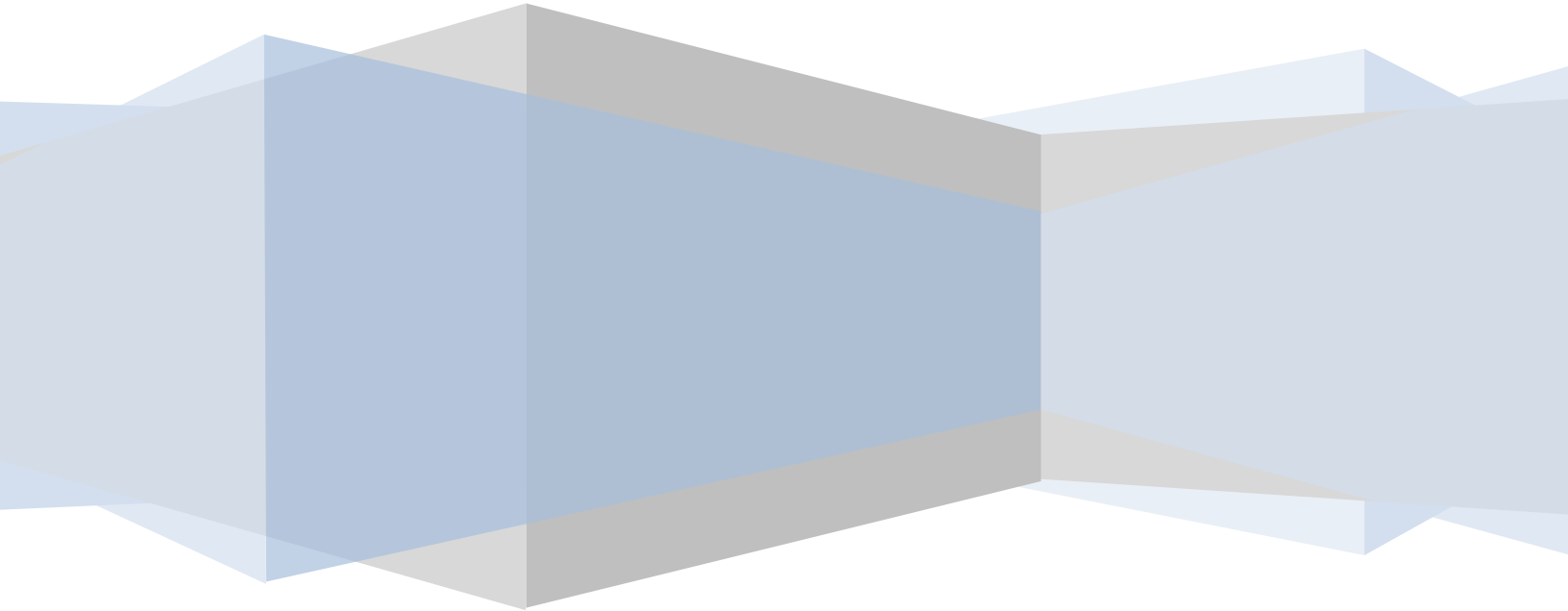
2014 Annual HIV Summary For Mississippi

Mississippi State Department of Health

STD/HIV Office

September 1, 2016



FORWARD

The HIV/AIDS epidemic was first recognized in the United States in 1981. Since that time, all states and U.S. dependent areas have conducted AIDS surveillance by using a standardized, confidential name-based reporting system. Because successful treatment delays the progression of HIV infection to AIDS, AIDS surveillance data alone are insufficient to monitor trends in HIV incidence or to meet federal, state, or local data needs for planning and allocating resources for HIV prevention and care programs. AIDS trends do, however, continue to provide important information about where care and treatment resources are most needed.[1]

An integrated national HIV/AIDS surveillance system has enhanced the ability to monitor and characterize populations affected by the HIV epidemic and provide information on the entire population of HIV-infected persons who have been tested confidentially. In order to acquire high-quality HIV data, The Centers for Disease Control and Prevention (CDC) recommends that all states and U.S. dependent areas adopt confidential name-based public health disease surveillance systems to report cases of HIV infection. As of April 2008, all jurisdictions provide confidential, name based reporting for both HIV infection and AIDS to CDC.[1]

Among the estimated 1.2 million persons living with HIV in the United States in 2011, 14% (or 1 in 7 individuals) had undiagnosed infections.[2] As a result of treatment advances since the late 1990s, the number of people living with HIV has increased dramatically. Despite increasing HIV prevalence and more opportunities for HIV transmission, however, the number of new infections has been relatively stable since the mid-1990s. This means that the transmission rate has been steadily declining – an important prevention success.[3] Approximately 50,000 people become newly infected each year, and in 2014, the estimated rate of diagnoses of HIV infection was 13.8 per 100,000 population.[4]

STAGES OF HIV INFECTION

The Mississippi State Department of Health (MSDH) uses the 2014 HIV case definition for disease staging. The laboratory criteria for defining a confirmed case of HIV infection has changed due to new testing technologies (e.g., Geenius™) and multi-test algorithms. Older HIV confirmatory test technologies such as the Western blot are no longer used.[4]

The term "HIV Diagnosis" is defined as a diagnosis of HIV infection regardless of the stage of disease (stage 0, 1, 2, 3 [AIDS], or unknown) and is used for all persons with a diagnosis of HIV infection. The term "HIV Infection, Stage 3" (AIDS), and its condensed version—stage 3 (AIDS)—refer specifically to persons with diagnosed HIV whose infection was classified as stage 3 (AIDS) during a given year (for diagnoses) or whose infection has ever been classified as stage 3 (AIDS) (for prevalence and deaths).[4] The "date of diagnoses" of HIV infection is the actual date a diagnosis was made by a health provider not the date of report to MSDH (for example, diagnosed by December 31, 2014 and reported to MSDH as of

August 2015). Similarly, the data specific to stage 3 (AIDS) reflect the first date the criteria for stage 3 (AIDS) were met.

HIV diagnoses do not necessarily represent new infections (incidence). Some infections may be classified as recent (e.g., new) but some may be longstanding infection. Because of reporting delays, the actual number of cases diagnosed in a given year may be higher than the numbers of diagnoses of HIV infection (unadjusted) presented for recent years; however, fluctuations in the numbers of diagnoses for a calendar year typically subside after 2 to 3 years of reporting. Where indicated, counts of diagnoses and deaths have been statistically adjusted (estimated) to correct for delays in reporting, but not for incomplete reporting.

Please use caution when interpreting data on diagnoses of HIV infection. HIV surveillance reports may not be representative of all persons with HIV because not all infected persons have been (1) tested or (2) tested at a time when the infection could be detected and diagnosed.

CONTRIBUTING FACTORS

Risk factors for HIV infection including unprotected vaginal, anal, or oral sex with someone who is infected with HIV or whose HIV status is not known, having many sexual partners, or having sex with a sex worker or an IV drug user. Unprotected sex means having sex without using a new latex or polyurethane condom every time.

According to 2013 Youth Risk Behavior Survey data, 54.2% of Mississippi high school students reported having sexual intercourse. Of students reporting sex during the previous three months, 39% stated they did not use a condom during their last sexual encounter. Despite the high number of sexually active youth in Mississippi, from 2001 to 2013, there has been a significant increase in the percentage of students who were never taught about HIV/AIDS in school. [5] Adolescents who engage in unsafe sexual behavior have a higher risk of becoming infected with HIV. The American Academy of Pediatrics recommends evidence-based sexual health education for all adolescents to improve sexual health knowledge and reduce risky behaviors.[6]

Additionally, other sexually transmitted diseases (STD) may increase the risk of HIV infection. Mississippi ranks higher than most states for other STD infections. Primary and secondary (P&S) syphilis is an emerging health risk for men who have sex with men. In CY 2014, the rate of syphilis was 6.3 per 100,000 individuals. Congenital syphilis transmission (from mother to infant) also occurs. There were 16 cases of congenital syphilis in Mississippi from 2010 to 2014.[7]

Untreated STDs in women are a common cause of pelvic inflammatory disease, infertility, and chronic pelvic pain. In addition, they can increase the spread of HIV and cause cancer. Pregnant women and newborns are particularly vulnerable. In 2014, Mississippi ranked 2nd in the nation for both chlamydial and gonorrheal infections. In CY 2014, the rate of chlamydia was 655.4 per 100,000 individuals and the rate for gonorrhea was 188.1 per

100,000 individuals. The reported rate of chlamydial infections among women was 2.3 times higher than the rate reported among men.[7]

DIAGNOSES OF HIV INFECTION

By Year of Diagnosis, 2010-2014-Mississippi

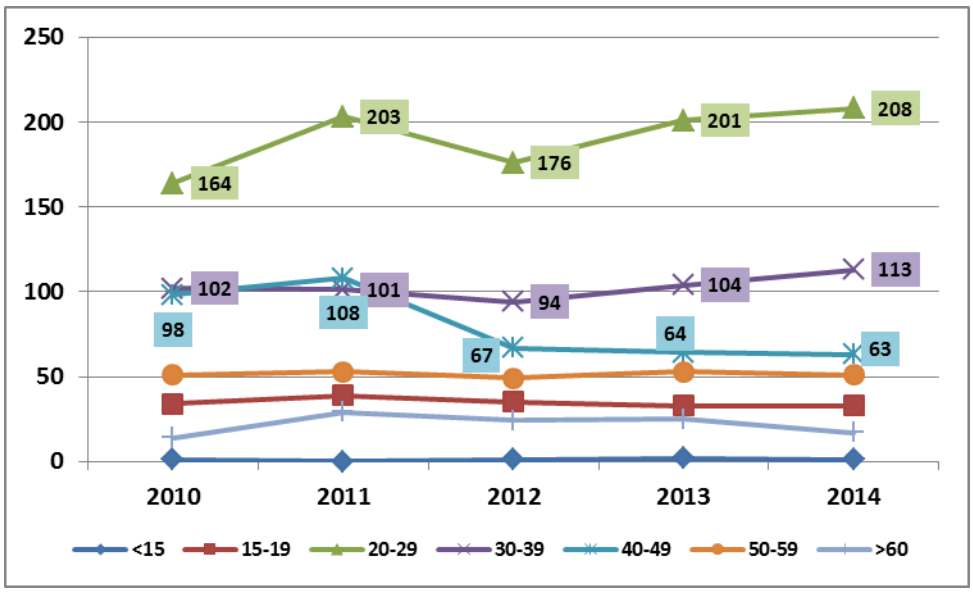
Based on 2014 HIV surveillance data, the CDC ranked Mississippi 9th in the nation for diagnosed HIV infection. Among metropolitan statistical areas (MSAs), the Jackson MSA, which includes Hinds, Madison, Copiah, Rankin, and Simpson Counties, was ranked 4th for diagnosed HIV infection.

Over the past few years, the number of new diagnoses has remained fairly stable, with only a 5% increase in cases from 2010-2014 (average 482 cases each year) (see Table 1). There was a peak in diagnoses in 2011, when there were 533 diagnoses.

By Age Group

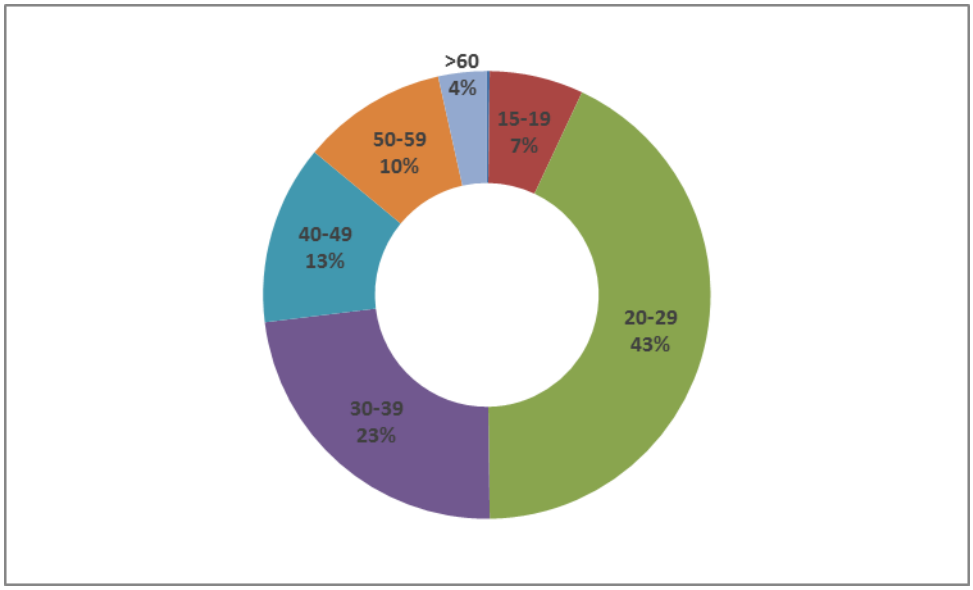
From 2010-2014, cases remained stable among Mississippians under the age of 15, 15-19 year olds, and those 60 and older. While 40-49 year olds saw a 36% drop in the number of cases, 20-29 year olds increased 27% and 30-39 year olds increased 11% (Figure 1).

Figure 1: HIV Diagnoses by Age Group, Mississippi-2010-2014



In 2014, 20-29 year olds were most heavily affected by HIV in Mississippi, but the burden was significant among the younger 20-24 age group (Figure 2 and Table 1).

Figure 2: HIV Diagnoses by Age Group, Mississippi-2014



By Race/Ethnicity

From 2010-2014, Hispanics/Latinos saw a 17% increase in cases, African Americans cases increased 5%, and Whites increased 21% (Figure 3). Disparities exist among racial and ethnic groups; although African Americans make up 37% of Mississippi's population, 78% of 2014 diagnoses were among this group (Figure 4). Correspondingly, 2014 diagnoses rates among African Americans were 7 times the rate among whites and 2 times the rate among Hispanics/Latinos (Figure 5).

Figure 3: HIV Diagnoses by Race/Ethnicity, Mississippi-2010-2014

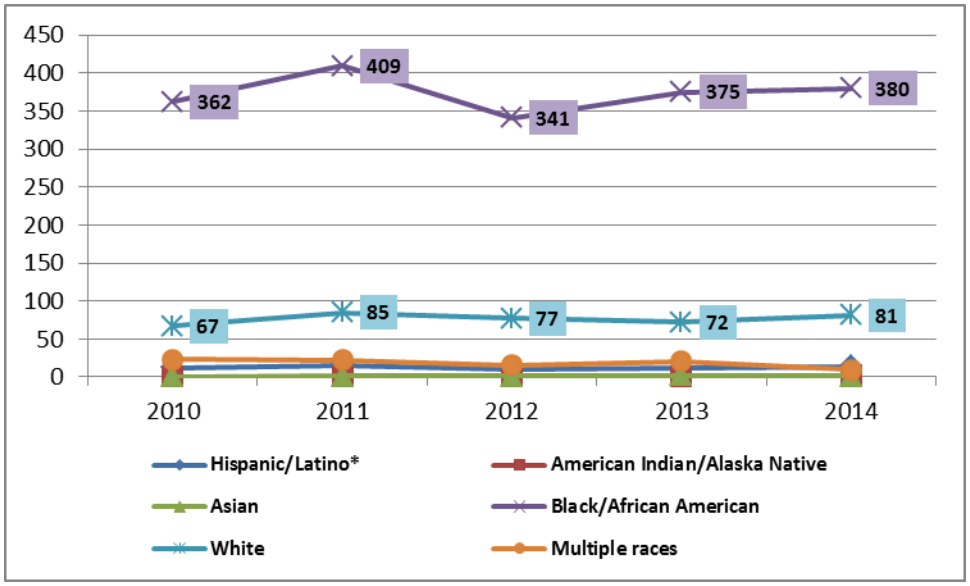


Figure 4: HIV Diagnoses by Race/Ethnicity, Mississippi-2014

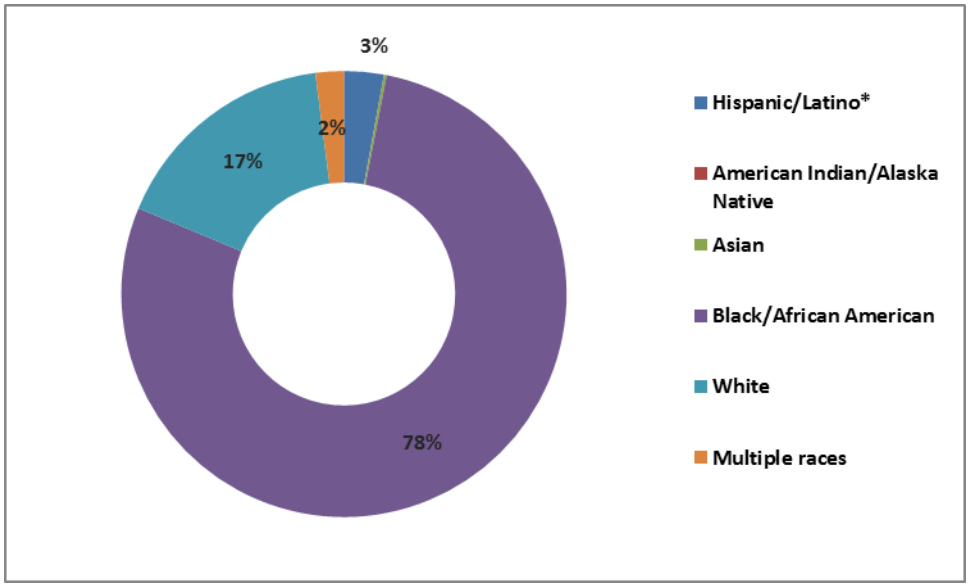
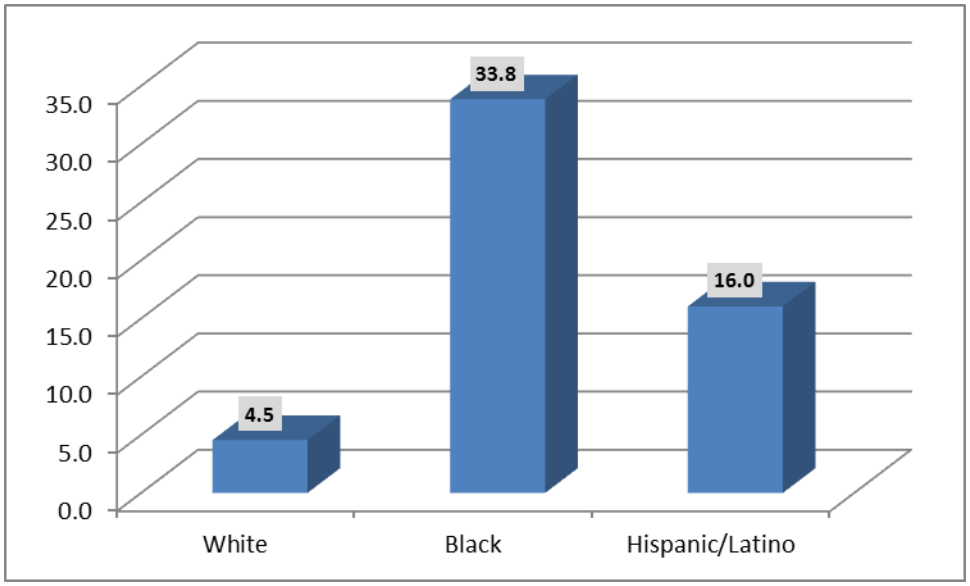


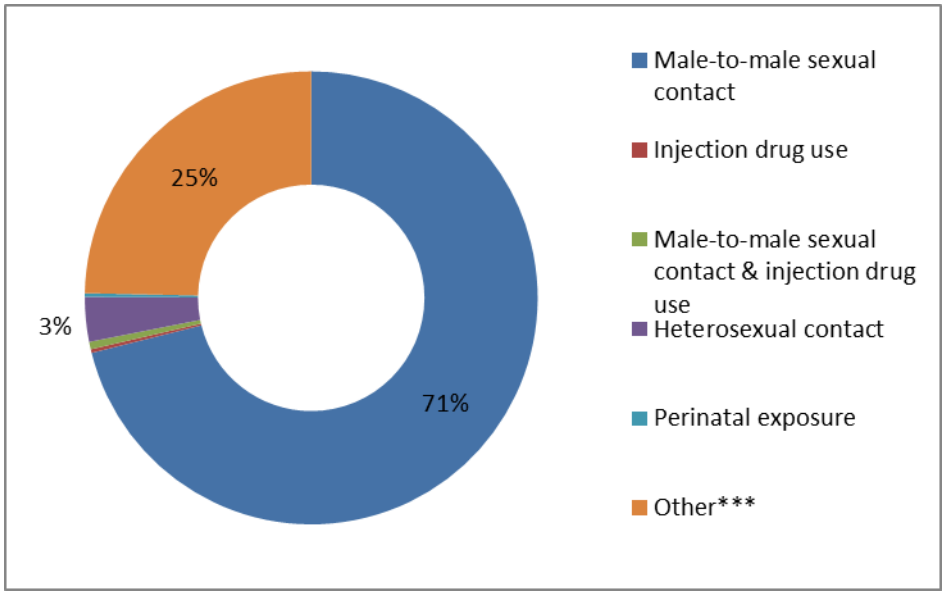
Figure 5: HIV Diagnosis Rates by Race/Ethnicity, Mississippi-2014



By Gender and Transmission Category

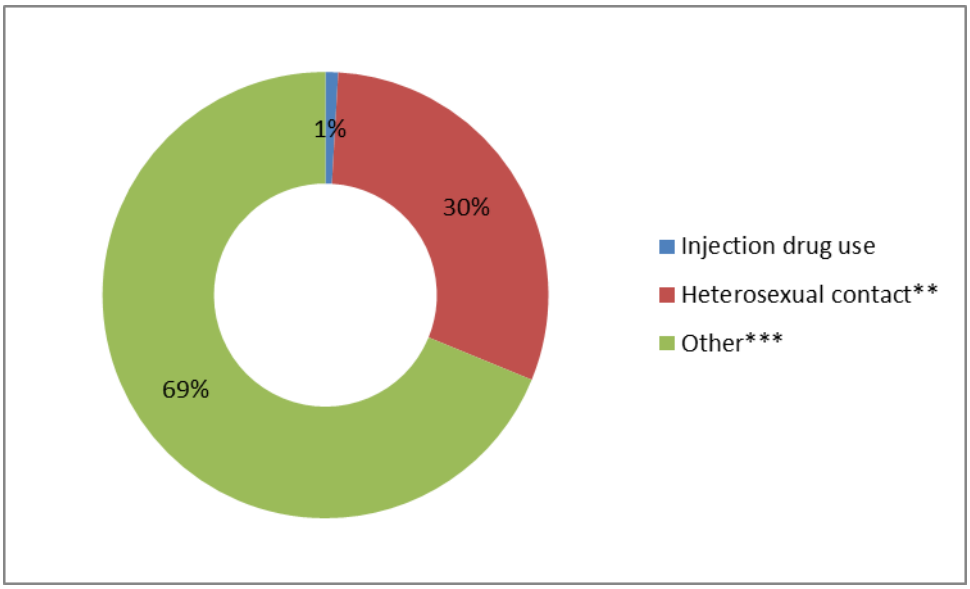
When comparing gender, males represented 78% of cases diagnosed in 2014. Nearly three quarters of male cases (71%) reported male to male sexual contact as their transmission category (Figure 6). Among females, 30% reported heterosexual contact as their transmission category (Figure 7). From 2010-2014, there were only 4 cases reported in individuals under the age of 13; three (75%) of these cases were infected through perinatal exposure.

Figure 6: HIV Diagnosis by Transmission Category among Males, Mississippi-2014



***Includes hemophilia, blood transfusion, and risk factor not reported or not identified.

Figure 7: HIV Diagnosis by Transmission Category among Females, Mississippi-2014



***Includes hemophilia, blood transfusion, and risk factor not reported or not identified.

By County of Residence

From 2010-2014, Hinds County had the highest number of cases reported. In 2014, 1 in 4 or 24% of diagnoses were among Hinds County residents, followed by Harrison (5%), Forrest (5%), DeSoto (4.7%), and Rankin (4.5%) counties (Table 1).

Table 1: Diagnoses of HIV infection, by year of diagnosis and selected characteristics, 2010-2014-Mississippi (based on data reported through 8/10/15)

		2010	2011	2012	2013	2014
Age at HIV Disease Diagnosis (yr)	< 13	1	-	1	2	-
	13-14	-	-	-	-	1
	15-19	34	39	35	33	33
	20-24	95	119	108	127	120
	25-29	69	84	68	74	88
	30-34	54	61	58	56	77
	35-39	48	40	36	48	36
	40-44	53	55	34	41	32
	45-49	45	53	33	23	31
	50-54	30	31	27	29	28
	55-59	21	22	22	24	23
	60-64	10	19	9	14	13
	>= 65	4	10	15	11	4
Sub-total		**464**	**533**	**446**	**482**	**486**
Race/Ethnicity	Hispanic/Latino*	12	16	10	12	14
	American Indian/Alaska Native	-	-	1	-	-
	Asian	-	1	1	2	1
	Black/African American	362	409	341	375	380
	White	67	85	77	72	81
	Multiple races	23	22	16	21	10
Sub-total		**464**	**533**	**446**	**482**	**486**
Transmission Category: Male Adult or Adolescent	Male-to-male sexual contact	205	253	255	251	268
	Injection drug use	6	4	2	4	1
	Male-to-male sexual contact & injection drug use	14	5	2	2	2
	Heterosexual contact**	13	31	33	36	12
	Perinatal exposure	-	-	-	-	1
	Other***	113	101	65	69	93
Sub-total		**351**	**394**	**357**	**362**	**377**
Transmission Category: Female Adult or Adolescent	Injection drug use	7	4	4	4	1
	Heterosexual contact**	23	51	50	63	33
	Perinatal exposure	-	-	-	2	-
	Other***	82	84	34	49	75
Sub-total		**112**	**139**	**88**	**118**	**109**

Transmission Category: Child (<13 Years Old at Diagnosis)	Perinatal exposure	1	-	1	1	-
	Other***	-	-	-	1	-
Sub-total		**1**	**-**	**1**	**2**	**-**
County of Residence at HIV Disease Diagnosis	ADAMS CO.	3	3	11	5	2
	ALCORN CO.	3	2	2	1	4
	AMITE CO.	1	4	3	1	1
	ATTALA CO.	1	1	-	1	2
	BENTON CO.	2	-	-	-	2
	BOLIVAR CO.	8	5	3	7	14
	CALHOUN CO.	-	3	-	-	-
	CARROLL CO.	-	2	2	2	-
	CHICKASAW CO.	5	3	1	3	4
	CHOCTAW CO.	-	-	1	2	-
	CLAIBORNE CO.	3	3	1	4	-
	CLARKE CO.	3	1	2	2	1
	CLAY CO.	1	1	-	2	1
	COAHOMA CO.	7	13	13	18	10
	COPIAH CO.	5	6	7	6	10
	COVINGTON CO.	1	2	2	2	1
	DESOTO CO.	24	17	19	17	23
	FORREST CO.	19	25	27	26	25
	FRANKLIN CO.	-	1	-	-	-
	GEORGE CO.	1	6	-	1	2
	GREENE CO.	-	-	-	-	1
	GRENADA CO.	3	3	4	4	2
	HANCOCK CO.	1	2	7	3	9
	HARRISON CO.	26	33	22	23	26
	HINDS CO.	114	117	129	101	118
	HOLMES CO.	3	4	1	4	2
	HUMPHREYS CO.	4	1	4	1	2
	ITAWAMBA CO.	1	2	1	2	1
	JACKSON CO.	9	11	9	17	11
	JASPER CO.	2	5	1	5	1
	JEFFERSON CO.	1	2	1	2	1
	JEFFERSON DAVIS CO.	1	2	1	1	2
	JONES CO.	9	12	5	10	8
	KEMPER CO.	1	1	1	1	1
	LAFAYETTE CO.	5	4	2	6	5
	LAMAR CO.	4	4	1	2	1

	LAUDERDALE CO.	14	14	15	13	8
	LAWRENCE CO.	3	-	1	1	1
	LEAKE CO.	1	2	2	5	-
	LEE CO.	12	17	7	15	14
	LEFLORE CO.	4	9	3	13	8
	LINCOLN CO.	3	6	3	3	5
	LOWNDES CO.	10	4	6	5	10
	MADISON CO.	5	10	14	15	19
	MARION CO.	5	3	2	3	4
	MARSHALL CO.	6	4	1	3	7
	MONROE CO.	3	5	4	2	1
	MONTGOMERY CO.	3	2	3	-	1
	NESHOBA CO.	3	4	6	2	3
	NEWTON CO.	2	1	2	1	3
	NOXUBEE CO.	-	2	5	4	4
	OKTIBBEHA CO.	7	6	3	6	10
	PANOLA CO.	6	6	3	5	4
	PEARL RIVER CO.	5	3	2	2	1
	PERRY CO.	1	-	1	-	-
	PIKE CO.	10	12	2	11	10
	PONTOTOC CO.	2	2	-	1	-
	PRENTISS CO.	1	3	-	1	1
	QUITMAN CO.	4	1	3	3	-
	RANKIN CO.	28	38	23	29	22
	SCOTT CO.	2	7	5	3	2
	SHARKEY CO.	-	-	1	-	-
	SIMPSON CO.	2	3	3	4	1
	SMITH CO.	-	2	2	-	1
	STONE CO.	3	4	2	2	5
	SUNFLOWER CO.	6	8	3	6	4
	TALLAHATCHIE CO.	2	5	3	1	3
	TATE CO.	-	-	-	1	3
	TIPPAH CO.	-	1	1	3	-
	TISHOMINGO CO.	-	1	1	-	1
	TUNICA CO.	2	1	6	1	2
	UNION CO.	2	2	1	4	1
	WALTHALL CO.	-	2	1	2	2
	WARREN CO.	8	7	6	11	5
	WASHINGTON CO.	16	18	7	6	11
	WAYNE CO.	1	2	-	2	5
	WEBSTER CO.	1	1	-	-	-

	WILKINSON CO.	1	3	1	1	2
	WINSTON CO.	1	-	2	1	-
	YALOBUSHA CO.	1	4	1	3	2
	YAZOO CO.	7	7	6	6	7
Sub-total		**464**	**533**	**446**	**482**	**486**

*Hispanics/Latinos can be of any race.
**Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.
***Includes hemophilia, blood transfusion, and risk factor not reported or not identified.

DIAGNOSIS OF AIDS

By Year of Diagnosis, 2010-2014 and Cumulative

Based on 2014 data, the CDC ranked Mississippi 6th in the nation for diagnosed AIDS. Among metropolitan statistical areas (MSAs), the Jackson MSA, which includes Hinds, Madison, Copiah, Rankin, and Simpson Counties, was ranked 5th for AIDS diagnoses.

Over the past few years, the number of AIDS diagnoses has experienced a downward trend, with a 10% decrease from 2010-2014 (average 331 cases each year) (Table 2). There was a peak in diagnoses in 2013, when there were 393 diagnoses. At the end of 2014, there have been 9,130 AIDS diagnoses reported in Mississippi.

By Age Group

There have been no reports of AIDS for those under the age of 15 except for 2 cases reported in 2014. AIDS rates have been declining; 15-19 year olds experienced a 55% decrease, 40-49 year olds had a 26% decrease, and both 20-29 and 30-39 year olds each experienced a 9% decrease. The rate among those ages 50-59 remained fairly stable and despite most age groups seeing an overall decrease in AIDS cases, individuals age 60 and older experienced a 60% increase (Figure 8).

Even though individuals age 60 and older saw an overall increase over the five year period, 30-39 year olds represented 28% of cases diagnosed in 2014, followed by 23% among 20-29 year olds and 22% among 40-49 year olds (Figure 9).

Figure 8: AIDS Diagnoses by Age Group, Mississippi-2010-2014

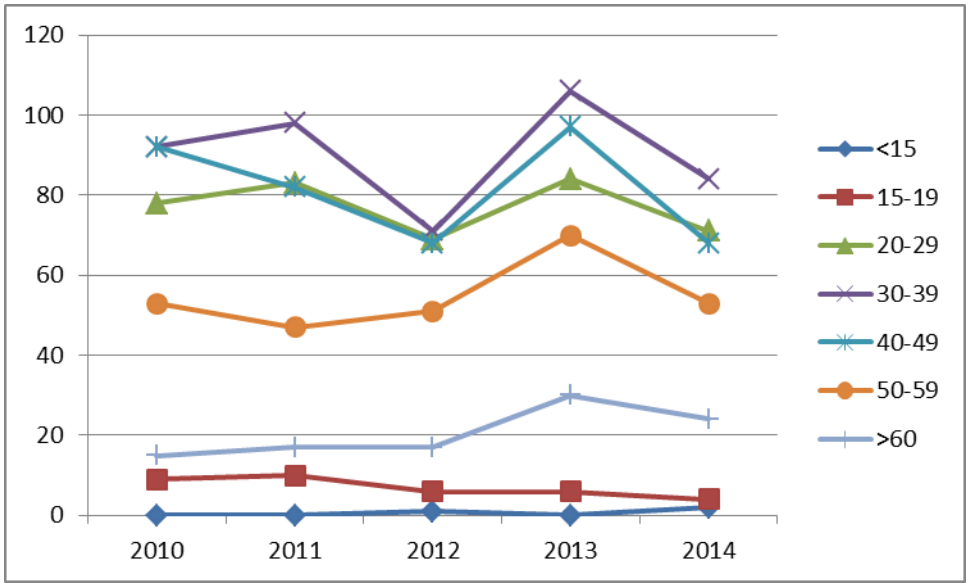
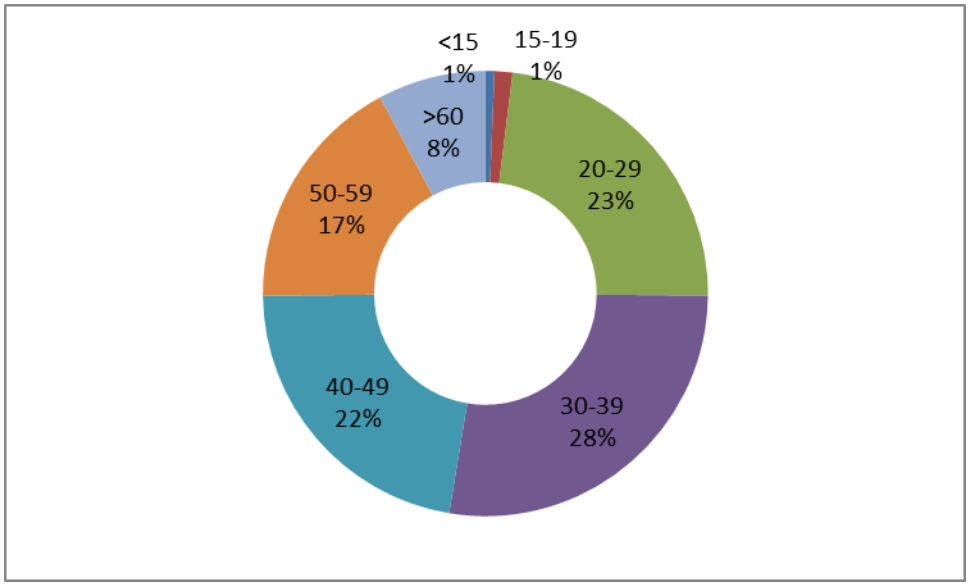


Figure 9: AIDS Diagnoses by Age Group, Mississippi-2014



By Race/Ethnicity

From 2010-2014, African Americans had a 10% decrease in AIDS diagnosis, Hispanics saw nearly a fourfold increase, and cases among Whites decreased 11% (Figure 10). African Americans experience profound disparities for AIDS also. Although African Americans only make up 37% of Mississippi's population, 79% of AIDS diagnoses in 2014 occurred in this population (Figure 11). Correspondingly, AIDS diagnoses rates among African Americans

were nearly 8 times the rate among whites and 1.5 times the rate among Hispanics/Latinos (Figure 12).

Figure 10: AIDS Diagnoses by Race/Ethnicity, Mississippi-2010-2014

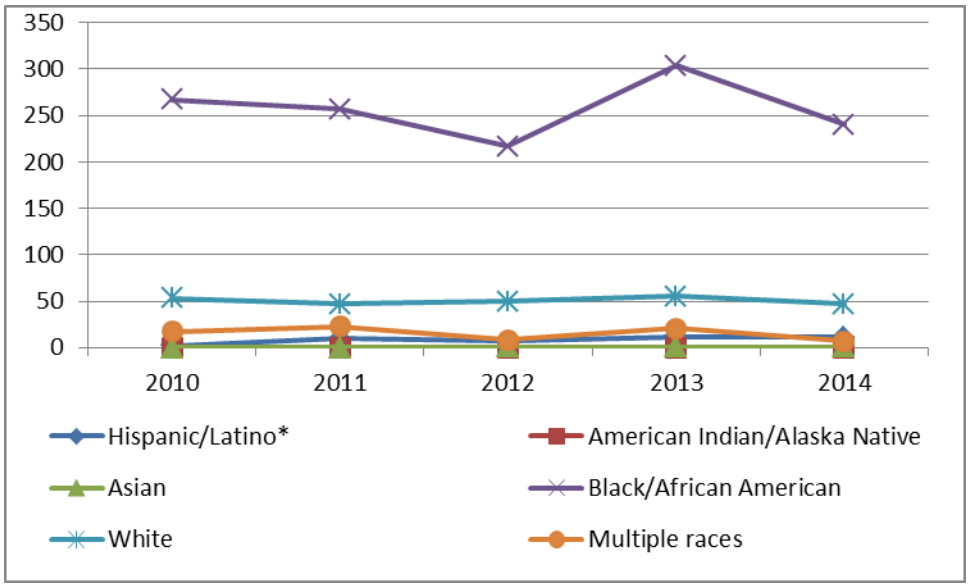


Figure 11: AIDS Diagnoses by Race/Ethnicity, Mississippi 2010-2014

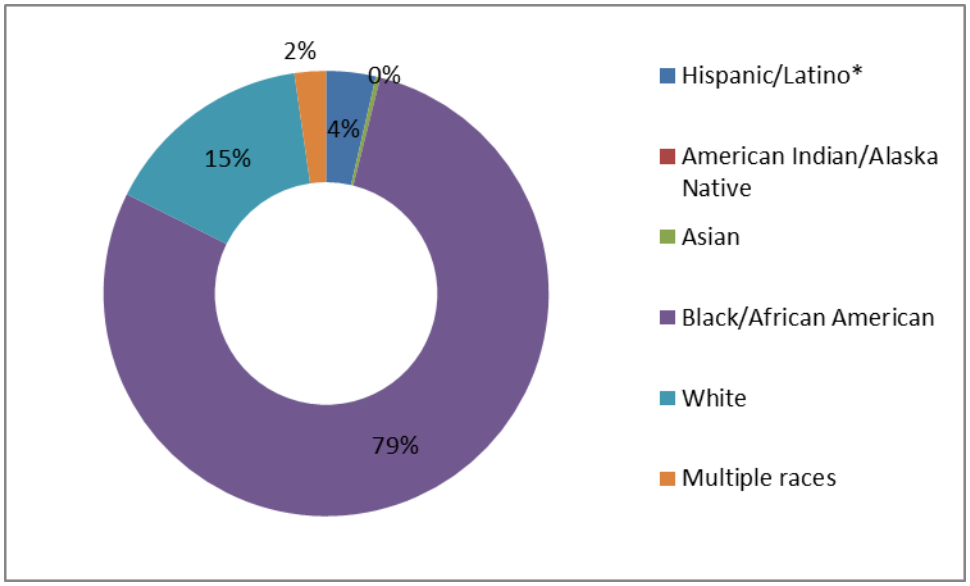
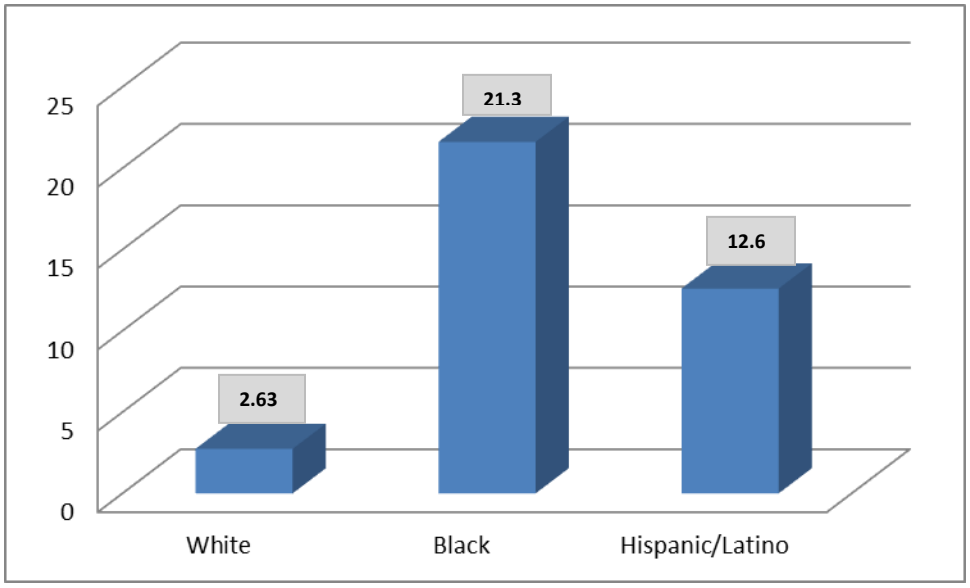


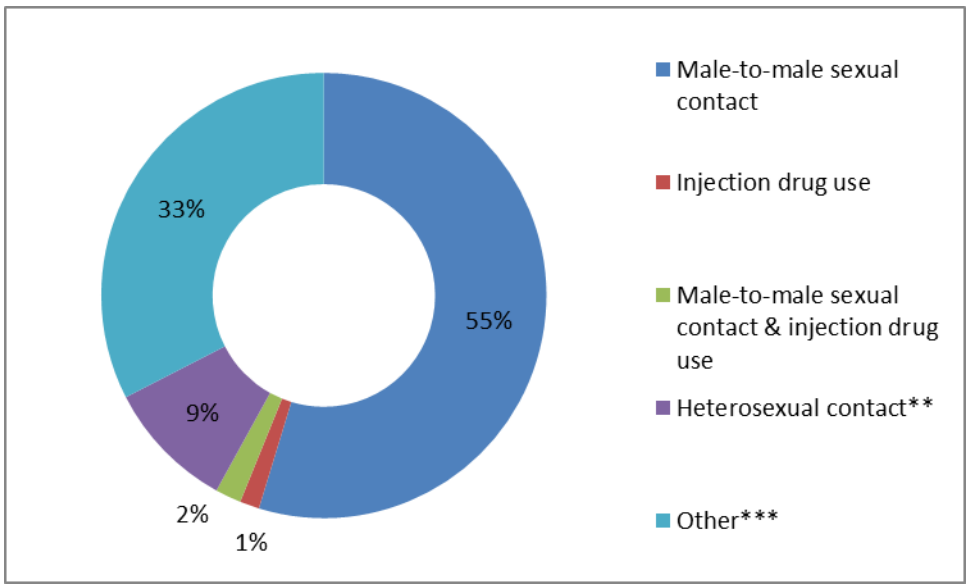
Figure 12: AIDS Diagnoses Rates by Race/Ethnicity, Mississippi 2010-2014



By Gender and Transmission Category

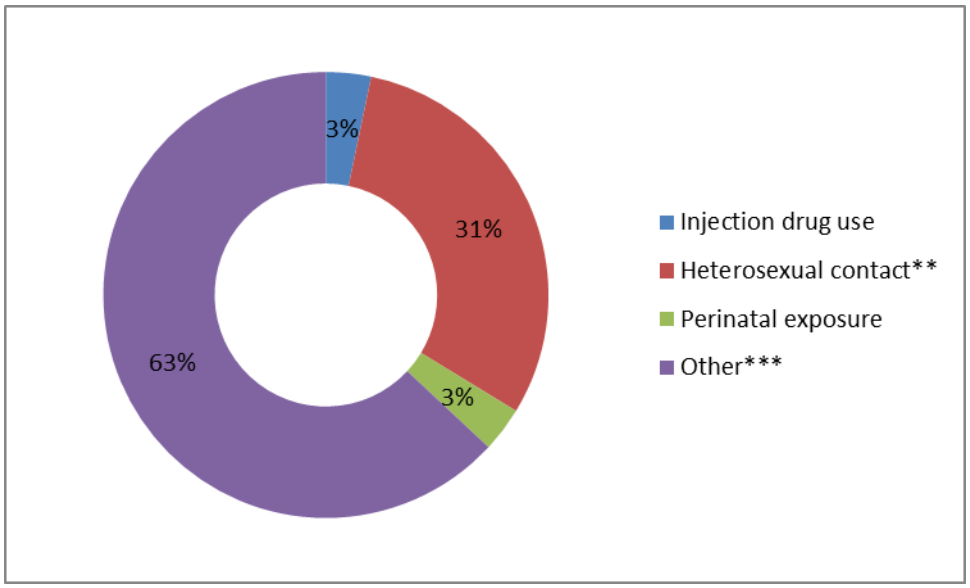
Comparing by gender, males represent 73% of AIDS cases diagnosed in 2014. Nearly 53% of male cases reported male-to-male sexual contact as their transmission category (Figure 13). Among females, nearly 31% reported heterosexual contact as their transmission category (Figure 14). From 2010-2014, there were only 2 cases reported in individuals under the age of 13. Both cases were infected through perinatal exposure.

Figure 13: HIV Diagnosis by Transmission Category among Males, Mississippi-2014



***Includes hemophilia, blood transfusion, and risk factor not reported or not identified.

Figure 14: HIV Diagnosis by Transmission Category among Females, Mississippi-2014



***Includes hemophilia, blood transfusion, and risk factor not reported or not identified.

By County of Residence

From 2010-2014, Hinds County had the highest number of AIDS cases reported. In 2014, 19% of diagnoses were among Hinds County residents, followed by Harrison (7%), and DeSoto (5%) counties (Table 2).

Table 2: Stage 3 (AIDS) by year of diagnosis and selected characteristics, 2010-2014 and cumulative-Mississippi (based on data reported through 8/10/15)

		2010	2011	2012	2013	2014	Cumulative****
Age at AIDS Diagnosis (yr)	< 13	-	-	-	-	2	57
	13-14	-	-	1	-	-	13
	15-19	9	10	6	6	4	132
	20-24	33	41	32	41	36	687
	25-29	45	42	37	43	35	1,331
	30-34	42	59	42	49	42	1,671
	35-39	50	39	29	57	42	1,591
	40-44	42	45	34	49	38	1,307
	45-49	50	37	34	48	30	955
	50-54	35	30	30	37	33	622
	55-59	18	17	21	33	20	369
	60-64	10	11	10	20	13	186

	>= 65	5	6	7	10	11	209
Sub-total		**339**	**337**	**283**	**393**	**306**	**9,130**
Race/Ethnicity	Hispanic/Latino*	2	10	7	12	11	173
	American Indian/Alaska Native	-	-	-	-	-	12
	Asian	-	-	1	1	1	12
	Black/African American	267	257	217	304	240	6,526
	Native Hawaiian/Other Pacific Islander	-	-	-	-	-	1
	White	53	47	50	55	47	2,215
	Multiple races	17	23	8	21	7	190
	Unknown	-	-	-	-	-	1
Sub-total		**339**	**337**	**283**	**393**	**306**	**9,130**
Transmission Category: Male Adult or Adolescent	Male-to-male sexual contact	123	138	125	153	116	3,509
	Injection drug use	6	4	6	4	3	391
	Male-to-male sexual contact & injection drug use	10	7	4	4	4	412
	Heterosexual contact**	13	23	24	26	20	702
	Perinatal exposure	-	-	-	2	-	3
	Other***	73	67	38	73	69	1,624
Sub-total		**225**	**239**	**197**	**262**	**212**	**6,641**
Transmission Category: Female Adult or Adolescent	Injection drug use	8	7	5	10	3	264
	Heterosexual contact**	29	36	32	50	28	1,039
	Perinatal exposure	1	-	1	1	3	9
	Other***	76	55	48	70	58	1,120
Sub-total		**114**	**98**	**86**	**131**	**92**	**2,432**
Transmission Category: Child (<13 Years Old at Diagnosis)	Perinatal exposure	-	-	-	-	2	52
	Other***	-	-	-	-	-	5
Sub-total		**-**	**-**	**-**	**-**	**2**	**57**
County of Residence at AIDS Diagnosis	UNKNOWN	-	1	1	1	-	5
	ADAMS CO.	5	5	4	5	3	131
	ALCORN CO.	3	3	1	2	2	34

	AMITE CO.	2	-	-	-	-	16
	ATTALA CO.	3	3	1	1	3	42
	BENTON CO.	1	-	-	-	-	9
	BOLIVAR CO.	5	9	5	4	13	118
	CALHOUN CO.	-	-	1	-	-	7
	CARROLL CO.	1	-	1	3	1	30
	CHICKASAW CO.	1	3	-	1	2	30
	CHOCTAW CO.	-	-	-	2	-	11
	CLAIBORNE CO.	2	1	2	2	3	36
	CLARKE CO.	1	3	4	2	1	44
	CLAY CO.	2	1	1	1	2	51
	COAHOMA CO.	5	8	7	7	6	175
	COPIAH CO.	6	5	2	11	4	81
	COVINGTON CO.	2	3	3	1	3	42
	DESOTO CO.	11	9	8	9	14	155
	FORREST CO.	14	13	13	12	9	347
	FRANKLIN CO.	1	2	-	1	-	18
	GEORGE CO.	1	5	1	2	1	30
	GREENE CO.	-	1	-	1	-	13
	GRENADA CO.	1	2	3	3	4	89
	HANCOCK CO.	1	1	6	2	1	91
	HARRISON CO.	18	22	17	20	20	600
	HINDS CO.	94	68	70	109	58	2,564
	HOLMES CO.	3	1	5	6	2	93
	HUMPHREYS CO.	1	-	3	2	-	35
	ISSAQUENA CO.	-	-	1	-	-	1
	ITAWAMBA CO.	1	1	-	1	1	13
	JACKSON CO.	7	9	5	7	8	309
	JASPER CO.	2	2	3	4	3	37
	JEFFERSON CO.	1	3	-	-	1	27
	JEFFERSON DAVIS CO.	-	1	2	2	1	35
	JONES CO.	5	7	5	5	6	185
	KEMPER CO.	2	1	3	3	2	16
	LAFAYETTE CO.	-	2	-	4	3	50
	LAMAR CO.	1	4	-	-	2	46
	LAUDERDALE	-	-	1	-	-	1
	LAUDERDALE CO.	7	6	8	10	6	263
	LAWRENCE CO.	3	-	1	2	2	32
	LEAKE CO.	1	1	2	2	1	39
	LEE CO.	2	8	5	12	9	147
	LEFLORE CO.	3	6	4	4	8	145

	LINCOLN CO.	2	3	1	1	1	56
	LOWNDES CO.	4	4	2	11	3	138
	MADISON CO.	11	8	6	12	11	253
	MARION CO.	3	2	2	3	3	65
	MARSHALL CO.	5	4	-	2	7	52
	MONROE CO.	1	3	2	2	1	44
	MONTGOMERY CO.	1	2	-	-	-	29
	NESHOBA CO.	1	1	4	-	2	37
	NEWTON CO.	2	-	2	3	3	54
	NOXUBEE CO.	-	1	2	4	2	28
	OKTIBBEHA CO.	2	2	4	4	5	53
	PANOLA CO.	5	1	3	2	6	62
	PEARL RIVER CO.	5	1	-	1	5	84
	PERRY CO.	3	-	-	-	-	24
	PIKE CO.	10	11	2	5	10	143
	PONTOTOC CO.	-	1	-	2	1	23
	PRENTISS CO.	1	3	-	2	1	21
	QUITMAN CO.	4	1	1	1	-	32
	RANKIN CO.	19	23	14	20	9	372
	SCOTT CO.	2	1	5	3	1	73
	SHARKEY CO.	-	-	-	2	-	18
	SIMPSON CO.	-	1	1	4	-	71
	SMITH CO.	2	3	1	-	1	23
	STONE CO.	2	1	1	2	2	37
	SUNFLOWER CO.	6	6	3	4	7	285
	TALLAHATCHIE CO.	2	-	4	-	3	19
	TATE CO.	1	-	1	-	2	27
	TIPPAH CO.	-	-	1	2	-	12
	TISHOMINGO CO.	-	-	-	1	1	9
	TUNICA CO.	2	3	2	2	-	47
	UNION CO.	-	1	-	2	1	22
	WALTHALL CO.	1	-	-	1	-	35
	WARREN CO.	9	6	8	10	3	193
	WASHINGTON CO.	11	12	6	8	3	198
	WAYNE CO.	1	3	-	1	2	39
	WEBSTER CO.	-	-	-	1	-	11
	WILKINSON CO.	-	2	-	1	1	22
	WINSTON CO.	-	-	2	1	1	23
	YALOBUSHA CO.	-	4	1	-	-	24
	YAZOO	-	1	-	-	-	1

	YAZOO CO.	2	2	3	7	3	128
Sub-total		**339**	**337**	**283**	**393**	**306**	**9,130**

*Hispanics/Latinos can be of any race.
**Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.
***Include hemophilia, blood transfusion, and risk factor not reported or not identified.
****From the beginning of the epidemic through 2014

MEDICAL MONITORING PROJECT

The Medical Monitoring Project (MMP) is a surveillance system that collects data to understand the healthcare experiences and needs of people who are living with HIV/AIDS. It is conducted by the Mississippi State Department of Health and supported by a grant from the CDC. MMP collects data directly from participants through surveys and from their medical records which helps us to better understand who gets the care they need and under what circumstances.[8]

MMP seeks to determine:

- How many people living with HIV are receiving medical care for HIV?
- How easy is it to access medical care, prevention, and support services?
- What are the unmet needs of people living with HIV?
- How is treatment affecting people living with HIV?

Age, Gender, Race, and Time since Diagnosis

Of the MMP participants interviewed from 2009-2013, 13% were ages 18-29 years, 23% ages 30-39, 32% ages 40-49, and 33% were age 50 and older. By race, 19% were White, 79% were African American, 1% was Hispanic or other, and 2% reported being of other race. By gender, 63% of the participants were male, 36% were female, 1% was transgender, and 0.1% was intersex. Three in four, or 72% of MMP participants have been living with HIV infection for five or more years.

Risk Activities

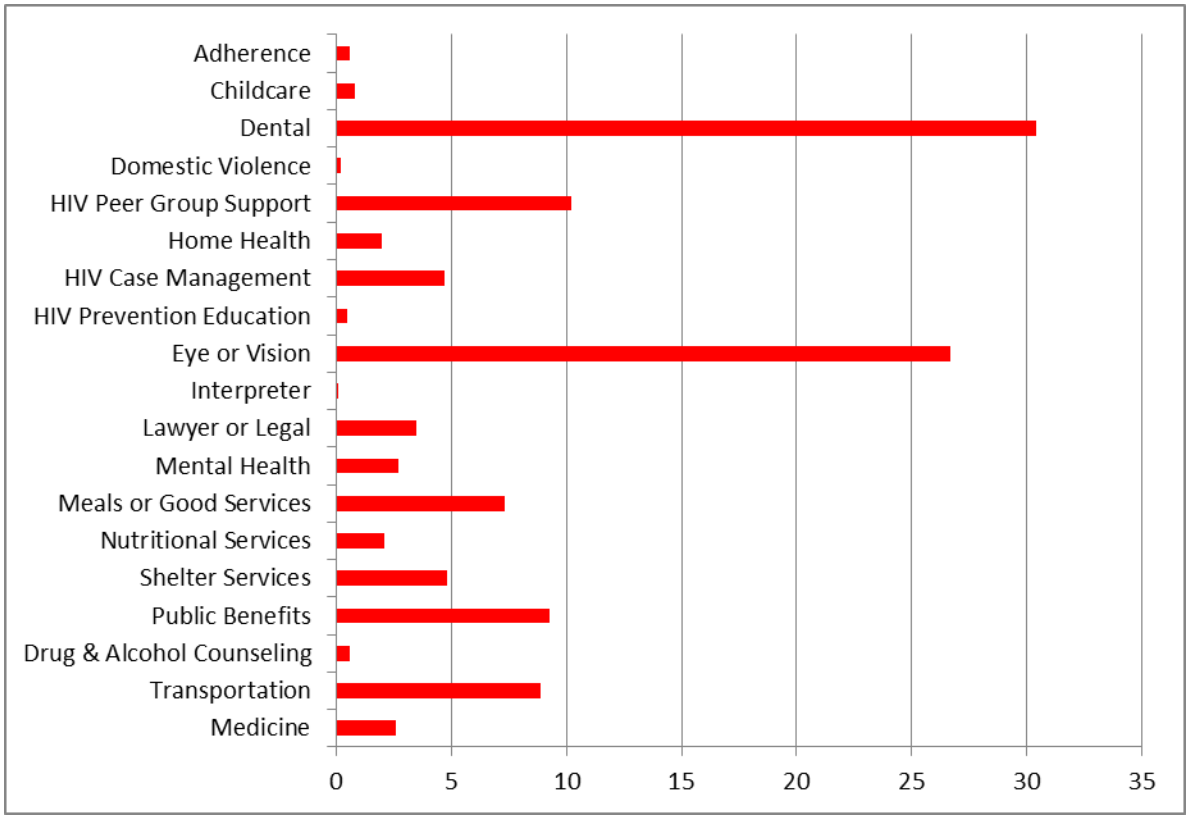
No MMP participant reported a history of injection drug use; however, 19% of the participants reported non-injection drug use, and 10% reported binge drinking. Regarding sexual activity, 33% of MMP participants were men who had sex with men, 30% were men who had sex with women, 35% were women who had sex with men, and 2% reported other sex.

Health Care Services

Sixty-nine percent of MMP participants received HIV counseling from health care workers. Among female MMP participants, 79% received a pap smear. For access to HIV medications, 89% of participants were prescribed anti-retroviral medication and 64% of

these achieved viral suppression. For STD screening, 68% received syphilis screening, 28% gonorrhea screening, and 29% Chlamydia screening. The most reported unmet needs were dental care (30%), eye or vision care (27%), and HIV peer support group services (10%) of those mentioned (Figure 15).

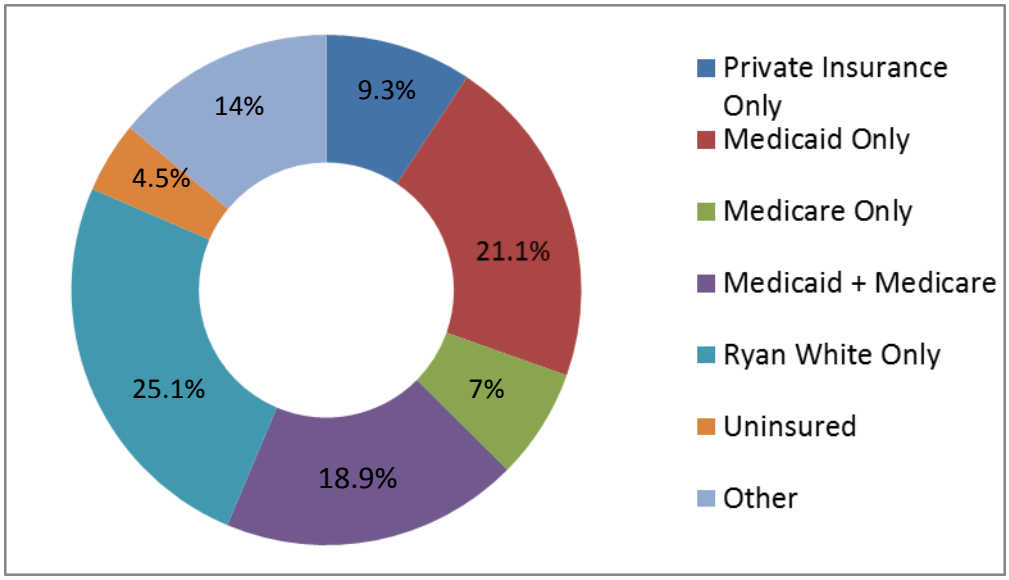
Figure 15: Unmet Needs of MMP Participants



Health Insurance

Of those prescribed HIV antiretroviral (ART) medications, about 21% had Medicaid only, 7% had Medicare only, and 19% had both Medicaid and Medicare, a total of 47% with access to one or both of these benefits. The Ryan White CARE Act provided health care for about 39.1% of participants, 9.3% had private insurance and 4.5% were uninsured.

Figure 16: Health Insurance Enrollment for MMP Participants on ART Meds



HIV CONTINUUM OF CARE

Recent scientific advances have shown that antiretroviral therapy (ART) not only preserves the health of people living with HIV, but also dramatically lowers their risk of transmitting HIV to others by reducing the amount of virus in the body. These developments have transformed the nation's approach to HIV prevention. By ensuring that everyone with HIV is aware of their infection and receiving the treatment they need, we can sharply reduce new infections in the United States.[9]

This vision is central to the National HIV/AIDS Strategy, the nation's roadmap for addressing HIV in the United States. It is also a core focus of CDC's high-impact HIV prevention strategy, which aims to achieve the greatest possible reductions in HIV infections by making sure that resources go to the regions, populations and prevention strategies where they will have the greatest impact. And, it is backed by the HIV Care Continuum Initiative, an effort launched by President Obama in 2013 to increase the impact of HIV diagnosis and care efforts.[9]

What is the HIV Care Continuum?

The ultimate goal of HIV treatment is to achieve viral suppression, meaning the amount of HIV in the body is very low or undetectable. This is important for people with HIV to stay healthy, live longer and reduce their chances of passing HIV to others.

The HIV care continuum consists of several steps required to achieve viral suppression. Specifically, MSDH tracks the proportion of people with HIV who are:

- *Diagnosed* with HIV infection

- *Linked to care**, meaning they visited a heath care provider within three months after learning they were HIV positive
- *Engaged or retained in care***, meaning they received medical care for HIV infection
- *Prescribed antiretroviral therapy* to control their HIV infection
- *Virally suppressed*, meaning that their HIV viral load – the amount of HIV in the blood – is at a very low level

It's important to note that movement along the continuum is not always in one direction. For example, a person who achieved viral suppression might fall back to an earlier step if they do not continue to receive adequate medical care. In addition, not all steps depend on the previous step.

Following a person's HIV diagnosis, patients should be immediately linked into HIV medical care. Linkage into HIV medical care allows for proper monitoring of a person's health and well-being. Linkage to care also provides opportunities for intervention to prevent HIV transmission. Early initiation of HIV treatment and long-term adherence leads to better health outcomes and reduces transmission of infection. Initiation of HIV treatment is dependent on linkage to medical care.

Mississippi's surveillance system is able to monitor linkage to care rates for newly diagnosed persons, using HIV laboratory and surveillance data. Linkage to care within 90 days is defined as having a CD4 count or viral load (VL) test conducted within 90 days of HIV diagnosis. If the diagnosis and the CD4 count or viral load test are conducted on the same day, those persons are considered to be linked to care.

Figure 17 shows Mississippi's HIV Continuum created by the program using data from HIV surveillance and laboratory reporting.

- Column 1 represents HIV Prevalence (Infected). CDC estimates the total number of people living with HIV-whether diagnosed or not- through statistical modeling using national HIV surveillance data from all states.

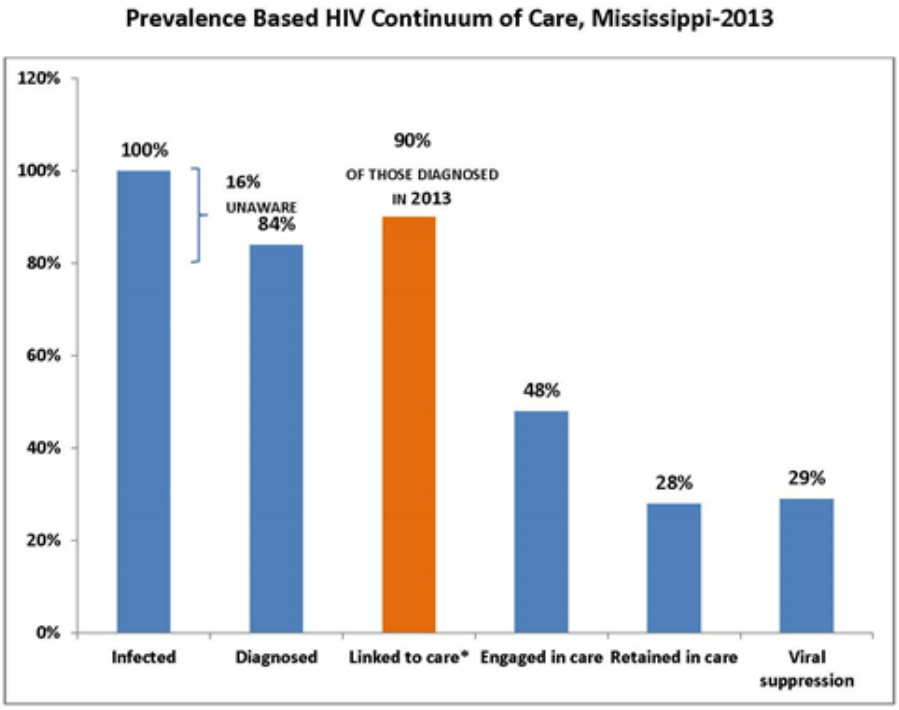
- Column 2 represents HIV diagnoses. HIV diagnosis is the number of people who have been diagnosed and are living with HIV infection as of 12/31/2013, but who were diagnosed before 01/01/2013 and whose current address is in Mississippi.

- Column 3 represents those linked to medical care. This measures the percentage of people diagnosed with HIV in 2013 that had one or more documented viral load or CD4+ test within three months of diagnosis. This measurement is calculated using HIV laboratory data. Because linkage to care is based on a different denominator than other indicators in the continuum, it cannot be directly compared to the other steps. Therefore, linkage to care is shown in a different color.

- Column 4 represents individuals who are engaged in care. The number of people living with HIV disease (PLWH) who had at least one CD4 count or VL test conducted in 2013.
- Column 5 represents the number of people retained in HIV care, which includes the PLWH who had two or more CD4 counts or VL tests conducted in 2013 at least 90 days apart.

- Column 6 represents the number of people who were virally suppressed. Viral suppression is documented by the number of PLWH whose most recent VL test in 2013 was less than or equal to 200 copies/ml.

Figure 17: HIV Continuum of Care, Mississippi-2013



The prevalence-based HIV care continuum shows each step of the continuum as a percentage of the total number of people living with HIV ("HIV prevalence"). Prevalence includes estimates of people whose infection has been diagnosed and people who are infected but don't know it ("undiagnosed").

* Linkage to care measures the percentage of people diagnosed with HIV in a given calendar year who had one or more documented viral load or CD4+ test within three months of diagnosis. Because it is calculated differently from other steps in the continuum, it cannot be directly compared to other steps and is therefore shown in a different color.

How the Continuum Is Used to Monitor Progress and Identify Needs

By tracking the proportion of people living with HIV who are engaged in each of the five separate steps of the HIV care continuum, federal and state health agencies can identify gaps and, over time, pinpoint how, where and when to intervene to improve outcomes along the continuum. This will ultimately help us break the cycle of HIV transmission and reduce new infections, while improving the health of those living with HIV.

At the national level, the HIV care continuum is used to inform decisions about how best to prioritize and target available resources and to monitor national progress in the response to HIV.

At the state and local levels, jurisdictions can use the HIV care continuum – compiled using local data – to determine where improvements are most needed and target resources accordingly.[9]

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