

**State of Alabama**  
**HIV Surveillance**  
**2012 Annual Report**  
**Finalized**

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## **A. BACKGROUND**

Since 1982, the Alabama Department of Public Health (ADPH) has been conducting HIV and AIDS case surveillance on all patients diagnosed with HIV in Alabama. Confidential, name-based reporting began in 1987 when the Alabama Notifiable Disease Laws were amended requiring all facilities, private and public, including laboratories and hospitals, to report all HIV cases. As of 2011, all positive HIV tests, CD4 results, and viral loads became reportable to ADPH under Alabama Public Health Law. Between 1982 and 2012, a total of 17,903 cases of HIV infection among Alabama residents were reported to ADPH. At the end of 2012, 66% (11,815) were known to be living. The Centers for Disease Control and Prevention (CDC) estimates that 18% of HIV positive individuals are unaware of their infection. Taking the prevalence estimate into consideration, an additional 3,000 Alabama residents are likely infected and unaware of their positive HIV status.

The HIV epidemic affects persons in all gender, age, race, ethnicity, and socioeconomic groups and in every county in Alabama. However, the effect has not been the same for all groups. At the beginning of the epidemic, the majority of HIV infections occurred in White men who have sex with men (MSM). Recent trends suggest a shift in the HIV epidemic toward African Americans and high-risk heterosexual activity. With the number of deaths among people diagnosed with HIV continuing to decline and the number of people living with HIV continuing to increase, the importance of identifying populations most affected and at risk for HIV infection is paramount. Alabama must be diligent in planning effective HIV prevention and care efforts with the allocation of limited resources. This report provides demographics, risk characteristics, and trends of HIV infections diagnosed among Alabama residents through 2012.

## **B. HIGHLIGHTS**

- At the end of 2012, 11,815 Alabama residents were known to be living with HIV and 4,838 (41%) had progressed to AIDS. CDC estimates 18% of persons infected with HIV are unaware of their status. Applying this prevalence estimate suggests 14,426 Alabama residents may be infected with HIV.
- 661 newly diagnosed HIV infections were reported among Alabama residents in 2012. This number is an underestimate as it does not account for individuals unaware of their status.
- There are persons living with HIV in every county in Alabama. The number continues to increase each year. In 2012, more HIV cases were diagnosed in Jefferson County than any other county. However, the rate of HIV diagnoses was greatest in Montgomery County.
- African Americans continue to be disproportionately affected by HIV in Alabama. Comprising 26% of the population, 68% of newly diagnosed HIV infections occurred in African Americans during 2012. African American males were 6.5 times as likely to be diagnosed with HIV as White males while the rate of HIV in African American females was 12.5 times that of White females.
- Alabama is experiencing a downward shift in the age distribution of newly diagnosed HIV infections as adolescents and young adults (15-29 years) emerged as the most affected age group.
- While male-to-male sexual activity continues to be the predominant mode of exposure for HIV infection, heterosexual contact is the second most common mode of exposure.

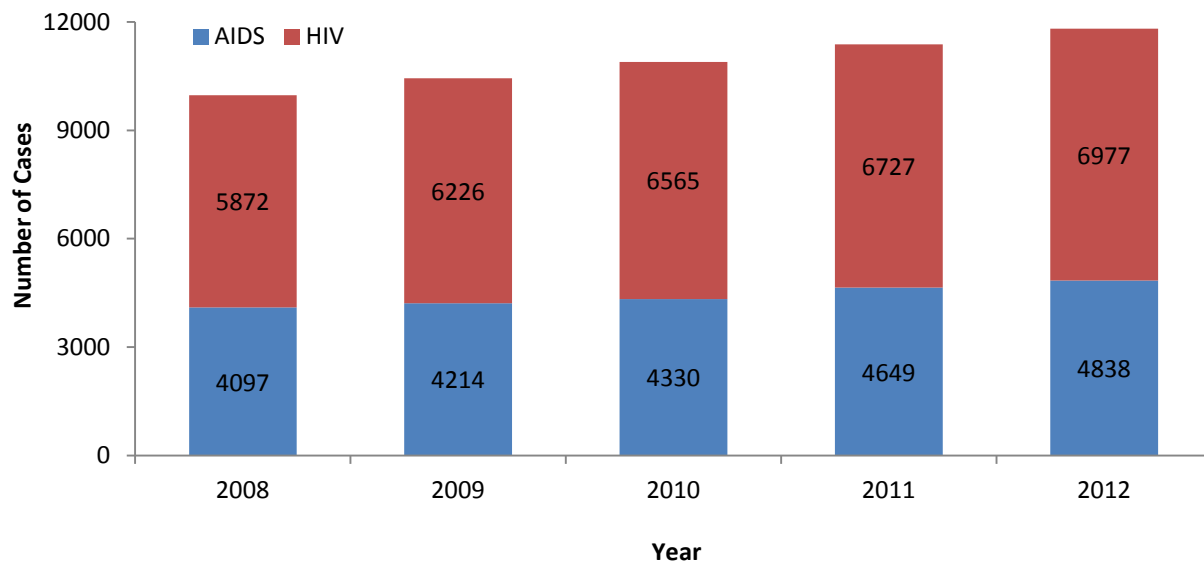
- African American males reporting sex with another male represent the majority of new HIV cases occurring among adolescents and young adults aged 15 to 29 years.
- Sixty-six percent of newly diagnosed HIV infections were linked to care in 2012. However, Alabama’s estimated unmet need is 51% as 5,996 of the 11,815 persons living with HIV as of December 31, 2012 did not access care during 2012.
- The number of new HIV infections continues to outweigh the number of deaths among people diagnosed with HIV, largely due to the success and widespread utilization of highly active antiretroviral therapy (HAART) in 1995.

### C. OVERALL TRENDS

The state of Alabama continues to experience an HIV epidemic of moderate magnitude when contrasted to the experience of other states. As of December 31, 2012, a cumulative total of 17,903 HIV infections have been diagnosed among Alabama residents. During 2012, 661 newly diagnosed HIV infections were reported among Alabama residents.

The proportion of persons living with HIV infection increased 21% between 2008 and 2012 (Figure 1). This trend is largely due to the introduction of effective drug treatment and therapies, which can often delay the progression from HIV to AIDS and from AIDS to death. A total of 11,815 persons diagnosed with HIV in Alabama were known to be living at the end of 2012, and 4,838 (41%) of these individuals have progressed to AIDS. This number represents a minimum estimate as it does not include HIV infected persons who have not been tested. An additional 3,000 Alabama residents are likely infected and unaware of their status.

**Figure 1. Persons Living with HIV and AIDS (PLWHA), Alabama 2008-2012**



Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control. PLWHA include persons living as of December 31st for the year reported.

African Americans continue to be disproportionately affected by the HIV epidemic compared to other racial and ethnic groups (Table 1). Although only 26% of Alabama’s population is African American, 68% of newly diagnosed HIV cases and 65% of all persons living with HIV in 2012 were African American.

**Table 1. Characteristics of Newly Diagnosed and Prevalent HIV Cases, Alabama 2012**

Characteristic	Newly Diagnosed Cases, Number (%)	Prevalent Cases, Number (%)
<b>Gender</b>		
Male	523 (79.1)	8503 (72.0)
Female	138 (20.9)	3312 (28.0)
<b>Race/Ethnicity</b>		
African American, Not Hispanic	450 (68.1)	7728 (65.4)
White, Not Hispanic	169 (25.6)	3458 (29.3)
Hispanic	15 (2.3)	240 (2.0)
Other/Unknown	27 (4.1)	389 (3.3)
<b>Age Group (years)</b>		
<13	4 (0.6)	31 (0.3)
13-19	34 (5.1)	38 (0.3)
20-29	263 (39.8)	1432 (12.1)
30-39	150 (22.7)	2328 (19.7)
40-49	117 (17.7)	3575 (30.1)
≥50	93 (14.1)	4371 (37.0)
Unknown	0 (0.0)	40 (0.3)
<b>Mode of Exposure</b>		
Men who have Sex with Men (MSM)	340 (51.4)	4929 (41.7)
Heterosexual Contact	142 (21.5)	3702 (31.3)
Injection Drug Use (IDU)	8 (1.2)	840 (7.1)
MSM/IDU	8 (1.2)	463 (3.9)
Perinatal Exposure	4 (0.6)	81 (0.7)
Transfusion/Hemophilia	0 (0.0)	30 (0.3)
Undetermined	159 (24.1)	1770 (15.0)
<b>Public Health Area (PHA)</b>		
PHA 1	15 (2.8)	213 (1.8)
PHA 2	54 (8.2)	1003 (8.5)
PHA 3	45 (6.8)	496 (4.2)
PHA 4	190 (28.7)	3342 (28.3)
PHA 5	36 (5.5)	458 (3.9)
PHA 6	37 (5.6)	540 (4.6)
PHA 7	17 (2.6)	357 (3.0)
PHA 8	112 (16.9)	2265 (19.2)
PHA 9	33 (5.0)	526 (4.5)
PHA 10	36 (5.5)	735 (6.2)
PHA 11	86 (13.0)	1820 (15.4)
Unknown	-	60 (0.5)
<b>Total</b>	<b>661 (100)</b>	<b>11,815 (100)</b>

Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control.

Note: Newly diagnosed age group represents age at diagnosis. Prevalent age group represents current age. Females with undetermined mode of exposure reclassified as heterosexual contact. Percentages may not sum 100% due to rounding.

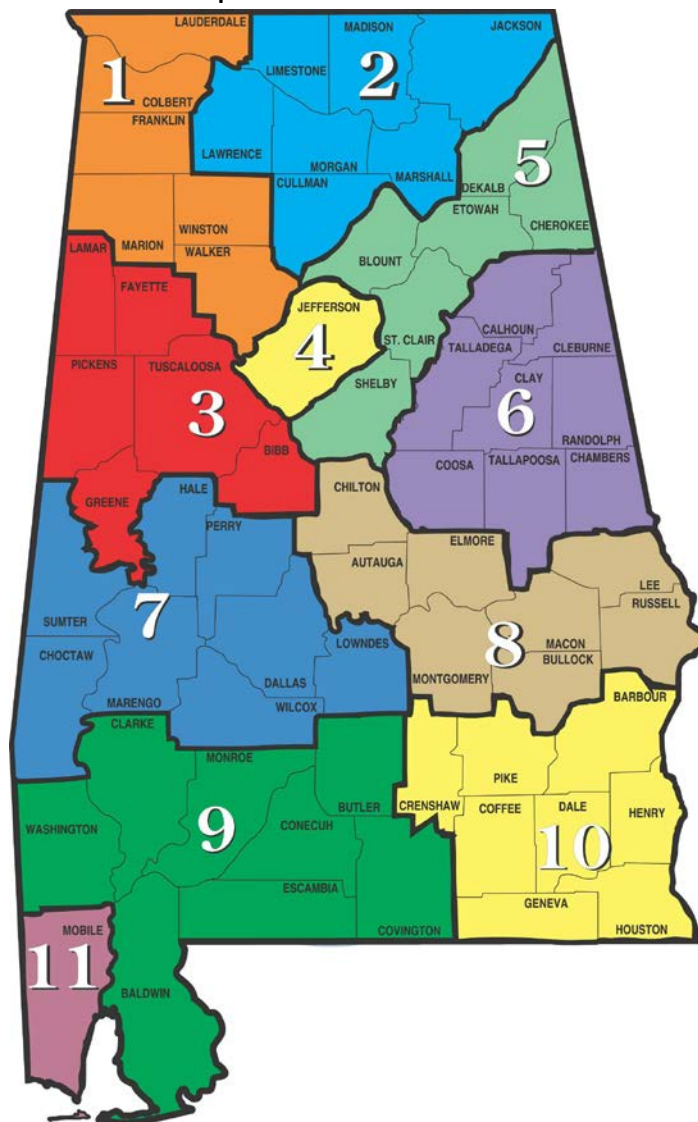
The majority of the newly diagnosed HIV infections in 2012 occurred among adults in their twenties and thirties; 40% were between 20 and 29 years old while another 23% were between 30 and 39 years old (Table 1). The majority of persons living with HIV (i.e., prevalent cases) were 40 years or older. The HIV

population is aging as a result of effective use of drug treatment and therapies. This will eventually impact the State of Alabama’s ability to provide adequate medical and social services (i.e. Ryan White and Medicaid) for the aging HIV population.

During 2012, the majority (51%) of newly diagnosed HIV infections and 42% of prevalent infections occurred among MSM (Table 1). Heterosexual contact was the second leading risk factor for HIV infection, representing 22% of newly diagnosed cases and 32% of prevalent cases, after reclassifying females with undetermined mode of exposure to heterosexual contact.

During 2012, more than half of all newly diagnosed (59%) and prevalent (63%) HIV infections resided in Public Health Areas (PHAs) 4, 8, and 11, where the cities of Birmingham, Montgomery, and Mobile are located (Table 1 and Figure 2).

**Figure 2. Alabama Public Health Area Map**



Source: Alabama Department of Public Health.

Between 2008 and 2012, Jefferson, Mobile, Montgomery, Madison, and Tuscaloosa Counties have consistently reported the highest number of new HIV cases, accounting for over 60% of HIV infections diagnosed in Alabama (Table 2). Jefferson, Madison, Mobile, and Montgomery Counties are considered major urban centers (>200,000 population) while Tuscaloosa is considered a minor urban center (100,000-200,000 population). It should be noted that Jefferson County is the most populous county in Alabama with over 650,000 residents and reports approximately 28% of newly diagnosed HIV infections every year.

**Table 2. Top 5 Counties with the Highest Frequency of Newly Diagnosed HIV Cases, Alabama 2008 – 2012**

County	2008		2009		2010		2011		2012	
	No. (%)	Rate	No. (%)	Rate	No. (%)	Rate	No. (%)	Rate	No. (%)	Rate
Jefferson	187 (26.2)	28.6	193 (27.8)	29.3	194 (28.0)	29.5	209 (29.6)	31.7	190 (28.7)	28.9
Madison	48 (6.7)	14.3	38 (5.5)	11.3	35 (5.1)	10.5	44 (6.2)	13.4	38 (5.8)	11.3
Mobile	100 (14.3)	24.2	109 (15.7)	26.6	92 (13.3)	22.3	95 (13.4)	23.0	86 (13.0)	20.8
Montgomery	90 (12.6)	40.1	84 (12.1)	36.6	76 (11.0)	33.1	80 (11.3)	34.9	69 (10.4)	30.1
Tuscaloosa	23 (3.2)	11.8	25 (3.6)	12.8	31 (4.5)	15.9	26 (3.7)	13.4	33 (5.0)	17.0
Statewide	713 (100)	14.9	694 (100)	14.5	692 (100)	14.5	707 (100)	14.8	661 (100)	13.8

Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control.

Note: All rates are per 100,000 county population, calculated using the 2010 United States Census report. Percentages may not sum 100% due to rounding.

However, the rate of new HIV cases among Alabama counties varies from year to year with many rural areas (<100,000 population) experiencing the highest rates of HIV infection (Table 3). Jefferson and Montgomery Counties are the only non rural areas ranking among the top five between 2008 and 2012, with Montgomery County consistently ranking each year. Eight counties (Bullock, Butler, Greene, Hale, Henry, Lowndes, Macon, and Pickens) ranked among the top five are considered extremely rural, with populations under 25,000 residents per county. The high rates seen in these counties indicate a need for increased HIV prevention efforts in focused rural areas.

**Table 3. Counties Ranking Among the Top Five HIV Incidence Rates, Alabama 2008-2012**

County	2008, N=713	2009, N=694	2010, N=692	2011, N=707	2012, N=661
Bullock	36.7	18.3	27.5	9.2	18.3
Butler	23.9	9.5	9.5	4.8	23.9
Chambers	11.7	23.4	26.3	32.1	14.6
Dale	29.9	29.9	17.9	2.0	4.0
Dallas	36.5	18.3	11.4	25.1	29.7
Greene	22.1	44.2	-	11.1	22.1
Hale	19.0	25.4	44.4	44.4	6.3
Henry	11.6	34.7	5.8	17.3	17.3
Jefferson	28.6	29.3	29.5	31.7	28.9
Lowndes	17.7	26.6	53.1	53.1	-
Macon	32.6	32.6	32.6	18.6	18.6
Montgomery	40.1	36.6	33.1	34.9	30.1
Pickens	5.1	5.1	15.2	10.1	30.4
Russell	30.2	18.9	30.2	9.4	13.2

Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control.

Note: Shaded rates indicate top five incidence rankings each year. All rates are per 100,000 county population, calculated using the 2010 United States Census report.

**D. HIV BY RACE, ETHNICITY, AND GENDER**

The HIV epidemic continues to disproportionately affect African Americans. In 2012, the rate of HIV diagnosis among African American males was 6.5 times that of White males (Table 4). The difference was even more pronounced among African American females, who are 12.5 times as likely to become infected with HIV as White females.

**Table 4. Newly Diagnosed HIV Cases by Race, Ethnicity, and Sex, Alabama 2012**

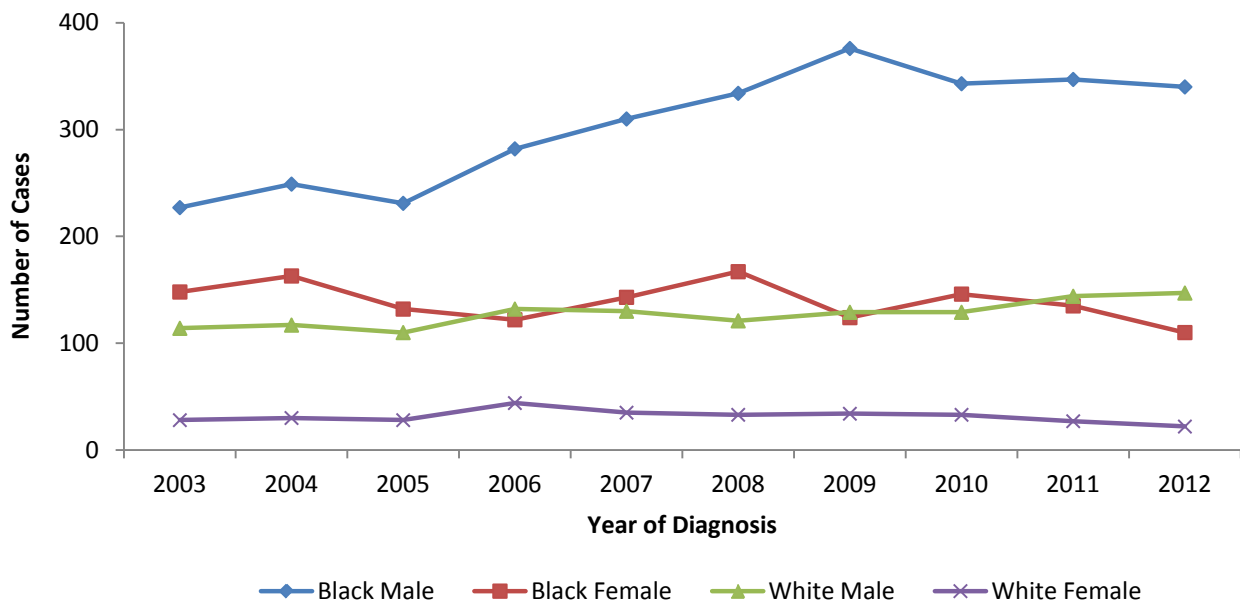
Race/Ethnicity	Males		Females		Total	
	Number (%)	Rate	Number (%)	Rate	Number (%)	Rate
Black, Not Hispanic	340 (65.0)	57.8	110 (79.7)	16.3	450 (68.1)	35.6
White, Not Hispanic	147 (28.1)	8.9	22 (15.9)	1.3	169 (25.6)	5.0
Hispanic	12 (2.3)	34.8	3 (2.2)	8.5	15 (2.4)	21.4
Other/Unknown	24 (4.6)	55.5	3 (2.2)	6.6	27 (4.1)	30.5
Total	523 (100)	22.9	138 (100)	5.6	661 (100)	13.8

Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control.

Note: All rates are per 100,000 population, calculated using race/ethnicity reported in the 2010 United States Census report. Percentages may not sum 100% due to rounding.

African American males continue to have the highest number of new HIV cases reported each year (Figure 3), averaging 47% of cases reported over the past 10 years. The number of new HIV cases reported among African American females during the past 10 years averaged 139 (range 110-167), with African American females surpassing White males in the annual number of new HIV cases during six of the past ten years. The number of new HIV cases has remained steady among White females.

**Figure 3. Trends in Newly Diagnosed HIV Cases by Race and Sex, 2003-2012**



Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control.



**E. HIV BY AGE GROUP**

In 2012, the majority of newly diagnosed HIV infections occurred among young adults in their twenties (40%), and then declined with age (Table 5). However, men experienced a sharper decline with age than women. Forty-three percent of males were diagnosed during their twenties, compared to 29% of females. In contrast, only 12% of men were age fifty or older at diagnosis compared to 20% of women.

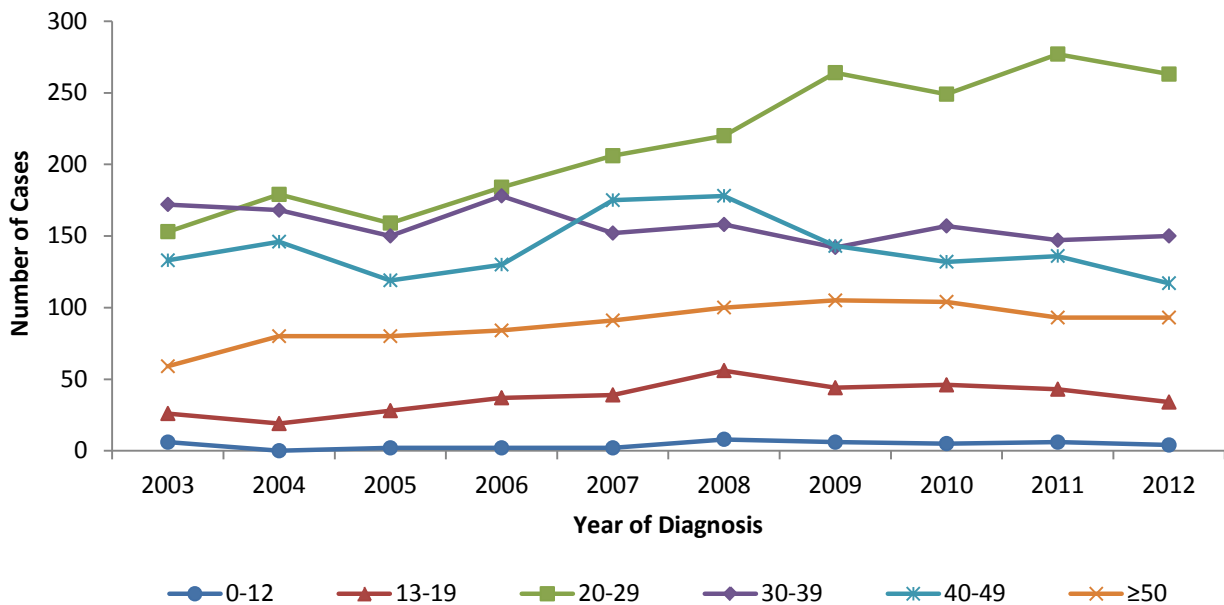
**Table 5. Newly Diagnosed HIV Cases by Age Group and Sex, Alabama 2012**

Age Group (years)	Males (N=523), Number (%)	Females (N=138), Number (%)	Total (N=661), Number (%)
0-12	1 (0.2)	3 (2.2)	4 (0.6)
13-19	32 (6.2)	2 (1.4)	34 (5.1)
20-29	223 (42.6)	40 (29.0)	263 (39.8)
30-39	116 (22.2)	34 (24.6)	150 (22.7)
40-49	86 (16.4)	31 (22.5)	117 (17.7)
≥50	65 (12.4)	28 (20.3)	93 (14.1)

Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control.

In 2004, a downward shift in the age distribution of Alabama’s HIV epidemic occurred as young adults in their twenties emerged as the most affected age group (Figure 4). Prior to 2004, the majority of new HIV cases were reported among adults in their thirties. This downward shift in Alabama’s newly diagnosed HIV population calls for increased prevention efforts targeting a younger population.

**Figure 4. Trends in Newly Diagnosed HIV Cases by Age Group, Alabama 2003-2012**



Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control.

**F. HIV BY MODE OF EXPOSURE**

During 2012, MSM represented the majority (51%) of newly diagnosed HIV infections and heterosexual contact represented 22% of infections, after reclassifying females with undetermined mode of exposure to heterosexual contact (Table 6). Whites reported a slightly higher percentage of MSM among newly diagnosed cases than African Americans (58% and 50%, respectively) while heterosexual contact accounted for 26% of new infections in African Americans compared to 11% in Whites.

**Table 6. Newly Diagnosed HIV Cases by Mode of Exposure and Race/Ethnicity, Alabama 2012**

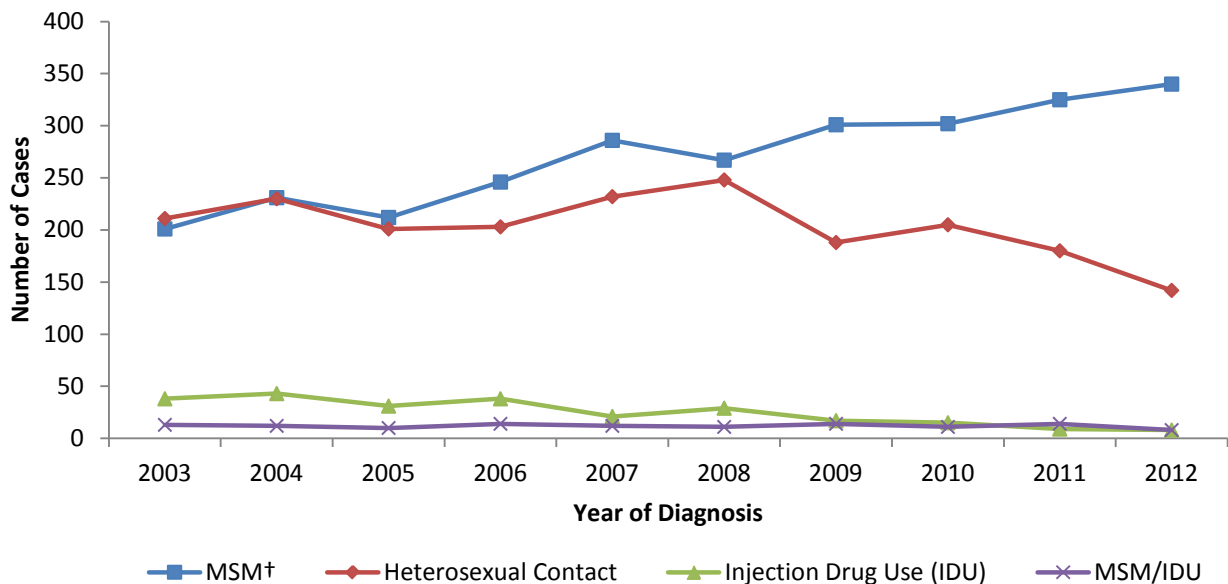
Mode of Exposure	African American, Number (%)	White, Number (%)	Hispanic, Number (%)	Total, Number (%)
Men who have Sex with Men (MSM)	226 (50.2)	98 (58.0)	4 (26.7)	340 (51.4)
Heterosexual Contact	116 (25.8)	19 (11.2)	4 (26.7)	142 (21.5)
Injection Drug Use (IDU)	3 (0.7)	5 (3.0)	-	8 (1.2)
MSM/IDU	3 (0.7)	4 (2.8)	1 (6.7)	8 (1.2)
Perinatal Exposure	1 (0.4)	1 (0.6)	-	4 (0.6)
Undetermined	100 (22.2)	42 (24.9)	6 (40.0)	159 (24.1)
Total	450 (100)	169 (100)	15 (100)	661 (100)

Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control.

Note: Females with undetermined mode of exposure reclassified as heterosexual contact. Percentages may not sum 100% due to rounding.

In 2005, MSM surpassed heterosexual contact as the leading risk factor for HIV infection (Figure 5). Over the past 10 years, newly diagnosed HIV infections among MSM has increased while the number of new cases reported among heterosexuals has decreased. This trend indicates prevention efforts should focus on MSM while maintaining current efforts to decrease the spread of HIV among heterosexuals.

**Figure 5. Trends in Newly Diagnosed HIV Cases by Mode of Exposure, Alabama 2003-2012**



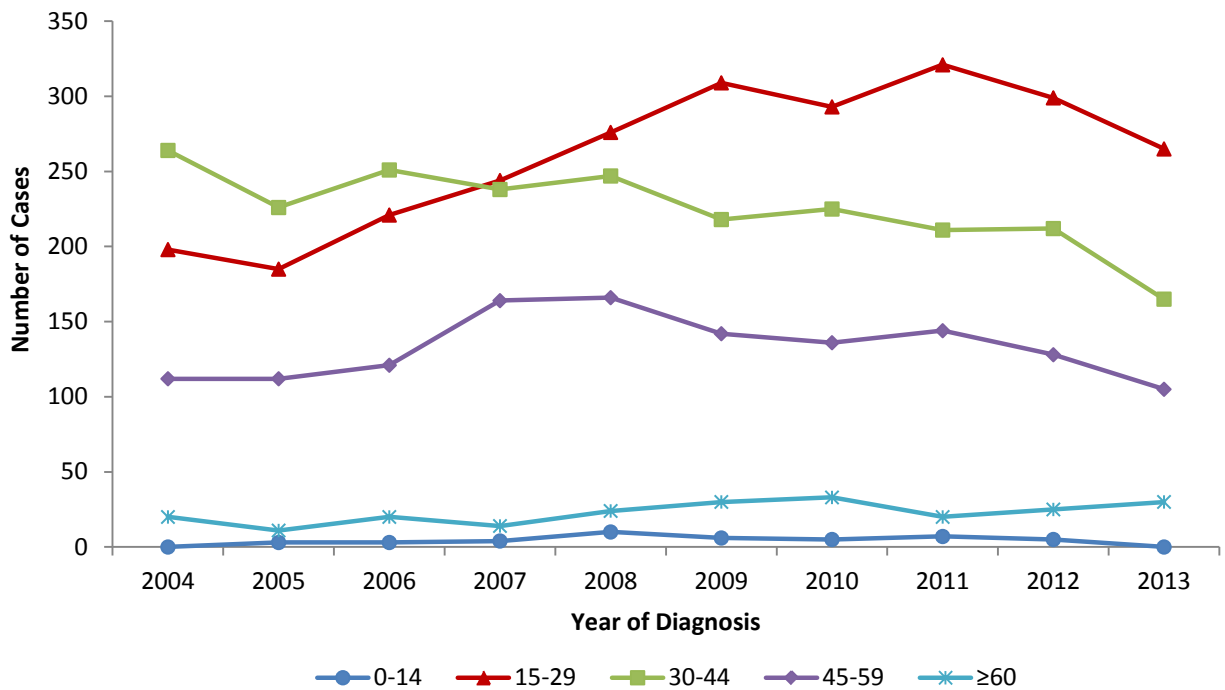
Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control.

Note: Females with undetermined mode of exposure reclassified as heterosexual contact.

### G. HIGH RISK TARGET GROUPS

As described in Section E. HIV by Age Group, a downward shift in the age distribution of Alabama’s HIV epidemic occurred as young adults in their twenties emerged as the most affected age group (Figure 4). This downward shift calls for further analysis to identify at risk target populations within this age group. Adolescents and young adults (15-29 years) are now Alabama’s most affected age group (Figure 6). Prior to 2007, the majority of newly diagnosed HIV infections were reported among 30-45 year olds. To be effective, HIV treatment and prevention efforts must focus on Alabama’s adolescent and young adult population.

**Figure 6. Trends in Newly Diagnosed HIV Cases by Age Group, Alabama 2004-2013**



Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control.

Note: 2013 data remain incomplete due to delayed reporting; data will be finalized December 31, 2014.

Adolescents and young adults (15-29 years) are twice as likely to be infected with HIV as the average Alabama resident (Table 7). During 2012, the rate of HIV infection was 30.3 per 100,000 Alabama residents aged 15-29 years compared to 13.9 per 100,000 residents of any age. African American males represented the majority of infections in adolescents and young adults, with 10 times the risk of becoming infected with HIV as the average Alabama resident in 2012. African American males 15-29 years old were 11 times more likely to become infected with HIV than white males the same age. The risk was even more pronounced among African American females, who were nearly 15 times as likely to become infected with HIV as white females 15-29 years old during 2012. The rate of African American males currently aged 15-29 years and living with HIV through December 31, 2013 was 2.5 times the rate of all persons living with HIV infection diagnosed in Alabama.

**Table 7. HIV Infection Rates Among Adolescents and Young Adults (15-29 Years) by Race, Alabama 2012-2013**

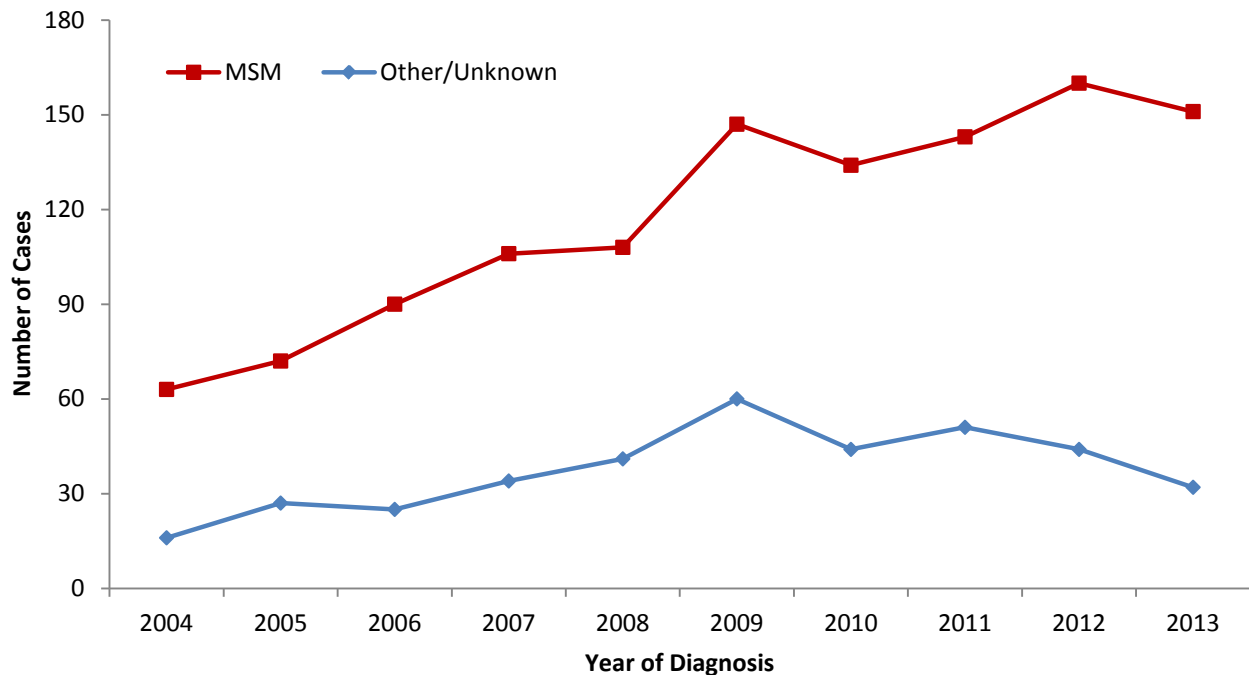
Characteristics	Newly Diagnosed, 2012		Newly Diagnosed, 2013†		Persons Living with HIV, 2013‡	
	Number (%)	Rate	Number (%)	Rate	Number (%)	Rate
African Americans	241 (80.6)	79.0	212 (80.0)	69.5	1318 (79.4)	432.2
Males	204 (68.2)	138.4	183 (69.1)	124.1	1064 (64.1)	721.6
Females	37 (12.4)	23.5	29 (10.9)	18.4	254 (15.3)	161.3
Whites	46 (15.4)	7.2	45 (17.0)	7.0	250 (15.1)	38.9
Males	41 (13.7)	12.5	38 (14.3)	11.6	202 (12.2)	61.6
Females	5 (1.7)	1.6	7 (2.6)	2.2	48 (2.9)	15.2
All Races	299 (100)	30.3	265 (100)	26.9	1660 (100)	168.2
Statewide Total*	669 (100)	13.9	565 (100)	11.7	12391 (100)	257.0

Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control.

Note: †2013 data remain incomplete due to delayed reporting; data will be finalized December 31, 2014. Rates per 100,000 Alabama residents age 15-29 years by race reported in United States Census Bureau, 2012 Population Estimates. ‡Persons living with HIV currently 15-29 years old and living through December 31, 2013. \*Statewide total includes all race and age groups; rates per 100,000 total Alabama residents.

Among adolescent and young adult African American males, sex with another male is the predominant risk factor reported among newly diagnosed HIV infections (Figure 7). Recent trends show an alarming increase in the number of HIV infections among African American males aged 15-29 years reporting sex with another male during the previous 10 years. Identification of African American men who have sex with men (MSM) aged 15-29 years as an at risk target group should guide prevention efforts. Effective HIV treatment and prevention programs must focus on these individuals to prevent future infections.

**Figure 7. Trends in Newly Diagnosed HIV Cases Among Adolescent and Young Adult African American Males (15-29 Years) by Mode of Exposure, Alabama 2004-2013**



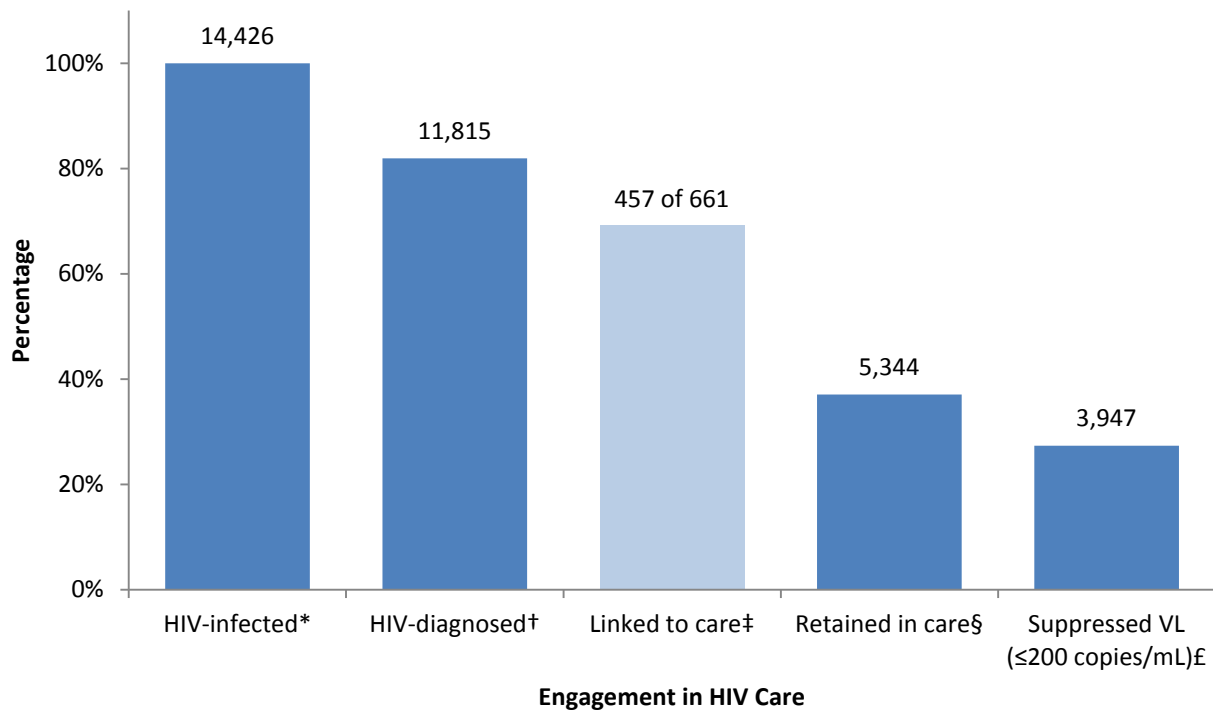
Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control.

Note: 2013 data remain incomplete due to delayed reporting; data will be finalized December 31, 2014.

## H. HIV TREATMENT CASCADE

The CDC estimates 18% of persons infected with HIV are unaware of their status. Application of the prevalence estimate predicts as many as 14,426 Alabama residents were living with HIV infection as of December 31, 2012 (Figure 8). During 2012, 66% of the 661 newly diagnosed HIV infections were linked to care within 3 months of diagnosis. Of the 11,815 persons living with HIV, 37% were retained in care, as evidenced by one or more CD4 or viral load results reported during 2012, and 27% reported a suppressed viral load ( $\leq 200$  copies/mL) at least once during 2012. As viral load is considered a measure of infectivity, maintaining a suppressed viral load may decrease the likelihood of infecting another person.

**Figure 8. Percentage of HIV-infected Persons Engaged in Continuum of HIV Care, Alabama 2012**



Sources: Alabama Department of Public Health; CDC. HIV Surveillance Supplemental Report, 2012;17(No. 3, part A).  
Abbreviations: HIV - human immunodeficiency virus; VL - viral load.

\*Estimated using number of persons diagnosed with HIV infection in Alabama and living through December 31, 2012 (11,815) and the national HIV prevalence estimate (18.1%); n=14,426. This estimate should be interpreted with caution as the HIV-prevalence estimate is intended for use with national data and loses accuracy when applied to smaller population subsets, such as state-level data.

†Number of persons diagnosed with HIV infection in Alabama and living through December 31, 2012; n=11,815.

‡Number of persons diagnosed with HIV infection in Alabama during 2012 (661) linked to care within 3 months of diagnosis; n=457.

§Number of persons diagnosed with HIV infection in Alabama and living through December 31, 2012 (11,815) that accessed care during 2012, evidenced by  $\geq 1$  CD4 or viral load laboratory result during 2012; n=5,344.

£Number of persons diagnosed with HIV infection in Alabama and living through December 31, 2012 (11,815) that had a viral load result  $\leq 200$  copies/mL during 2012; n=3,947.

**H. HIV UNMET NEED**

ADPH updated the notifiable disease law to require reporting of all HIV infections, including asymptomatic infections, AIDS, CD4 counts, and viral loads in June 2011. The change requires all private and public laboratories to report CD4 counts and viral loads. Before the law change, measuring Alabama’s unmet need had limitations as HIV viral loads, CD4 cell counts  $\geq 200$  copies per  $\mu\text{l}$  or  $\geq 20\%$ , and other tests indicative of HIV infection and HIV management were not reportable. With the notifiable disease law change, limitations to calculating Alabama’s unmet need should diminish over time.

According to the Health Resources and Services Administration (HRSA), HIV/AIDS Bureau (HAB), Unmet Need for HIV primary medical care is defined as no evidence of any of the following three components of HIV primary medical care during a specified 12-month time frame: viral load testing, CD4 count, or provision of anti-retroviral therapy (ART).

Using the HRSA/HAB Unmet Need Framework and HIV surveillance data collected in the Enhanced HIV/AIDS Reporting System (eHARS), Alabama’s estimated Unmet Need during 2012 was 5,996. Of the 11,815 persons diagnosed with HIV in Alabama and living as of December 31, 2012, 51% did not access HIV primary medical care during the past 12 months (January 1, 2012 through December 31, 2012).

**Table 8. Framework Utilized to Calculate Unmet Need as Determined by HRSA/HAB**

HIV Population Size	Data Source	Number
PLWA as of December 31, 2012	eHARS	4,838
PLWH as of December 31, 2012	eHARS	6,977
HIV Care Patterns	Data Source	Number (%)
PLWA who received specified services† in 12-month period	CD4/VL reported in eHARS	2,855 (59.0)
PLWH who received specified services† in 12-month period	CD4/VL reported in eHARS	2,964 (42.5)

Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control.

Abbreviations: eHARS - Enhanced HIV/AIDS Reporting System; HAB – HIV/AIDS Bureau; HRSA – Health Resources and Services Administration; PLWA - persons living with AIDS; PLWH - persons living with HIV, non-AIDS; VL – viral load.

†Specified services include any of the following three components of HIV primary medical care during the 12-month time frame from January 1, 2012 through December 31, 2012: VL testing, CD4 count, or provision of anti-retroviral therapy (ART).

A = Number of persons living with AIDS (PLWA) as of December 31, 2012

B = Number of persons living with HIV, non-AIDS (PLWH) as of December 31, 2012

C = Percent PLWA who received HIV primary medical care from January 1, 2012 to December 31, 2012

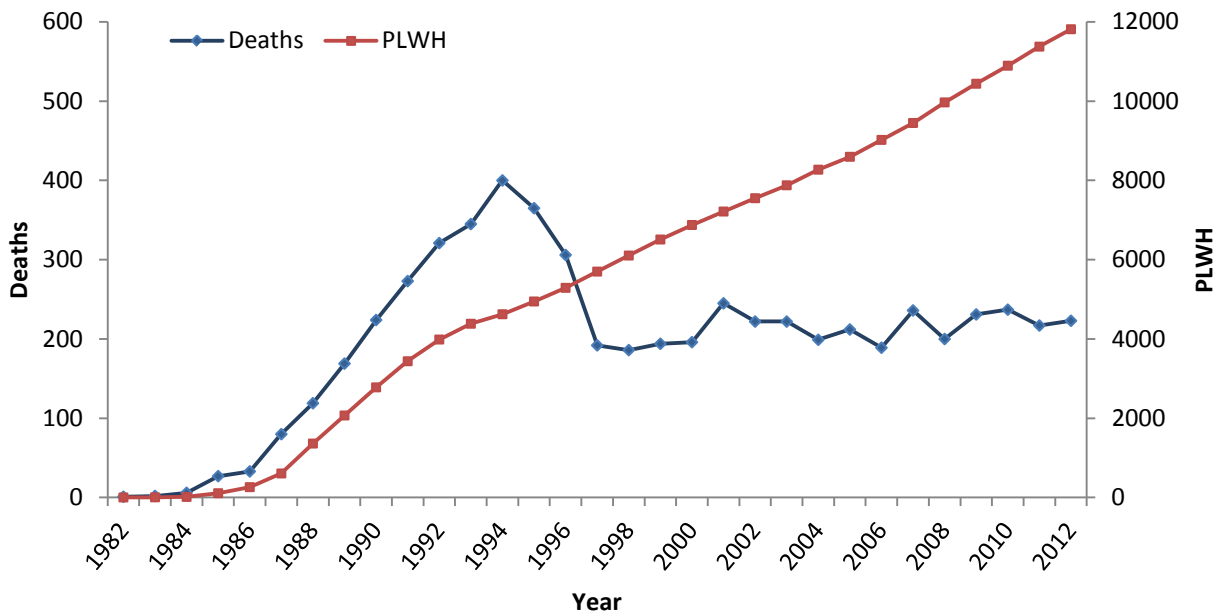
D = Percent PLWH who received HIV primary medical care from January 1, 2012 to December 31, 2012

$$\begin{aligned}
 \text{Unmet Need} &= [A*(1-C)] + [B*(1-D)] \\
 &= [4,838*(1-0.590)] + [6,977*(1-0.425)] \\
 &= [4,838*0.41] + [6,977*0.575] \\
 &= [1,984] + [4,012] \\
 &= 5,996
 \end{aligned}$$

## I. HIV MORTALITY

Following the introduction and widespread utilization of highly active antiretroviral therapy (HAART) in 1995, the number of deaths among people diagnosed with HIV significantly declined (Figure 9). Since 1997, the number of deaths has fluctuated around 200 per year (range 186-245). However, the number of persons living with HIV continues to increase with 11,815 persons reported at the end of 2012. The longevity of persons living with HIV infection in Alabama has a significant impact on the State’s resources for providing care and social services to the HIV positive population.

**Figure 9. Persons Living with HIV (PLWH) and Deaths, Alabama 1982-2012**



Source: Alabama Department of Public Health, Division of HIV/AIDS Prevention and Control.  
 Note: PLWH include persons living as of December 31st for the year reported.