

HIV/STI Integrated Epidemiologic Profile 2013

**Infectious Disease Branch
Center for Health Protection
Arkansas Department of Health**



Arkansas Department of Health
Keeping Your Hometown Healthy

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EXECUTIVE SUMMARY

At the end of 2013, there were 5,226 persons living with HIV/AIDS (PLWHA) in the State of Arkansas. Of these, 2,327 (44.5%) were AIDS cases and 2,899 (55.5%) were HIV cases. This is a 63.1% increase in the number of persons living with HIV/AIDS since 2000.

During 2013, a total of 345 newly diagnosed HIV/AIDS cases were reported to the HIV Surveillance Program, for an incidence rate of 11.7 per 100,000 persons in Arkansas. The distribution of newly diagnosed cases between HIV and AIDS has been stable since 2009. Of the 345 newly diagnosed cases, 139 (40.3%) were AIDS cases and 206 (59.7%) were HIV cases.

HIV/AIDS is disproportionately distributed across Arkansas' population. Non-Hispanic blacks were more likely to be newly diagnosed than any other racial/ethnic group. Blacks accounted for 53.6% of all new HIV/AIDS diagnoses in 2013 in Arkansas. The rate of newly diagnosed HIV/AIDS among blacks in 2013 was 39.5 per 100,000, about 7 times that among whites and about 4 times that among Hispanics. Male-to-male sexual contact (MSM) was the most common known mode of transmission, followed by high-risk heterosexual transmission. These patterns are congruent with national statistics. The most impacted age groups in 2013 were 25-to-34-year-olds, with 98 newly diagnosed cases, and 15-to-24-year-olds, with 92 newly diagnosed cases. The number of new diagnoses among youth aged 15–24 increased by 50.8 % from 2009 to 2013 in Arkansas. This is consistent with a national increase in the percentage of cases among youth. The Centers for Disease Control and Prevention (CDC) recently reported that approximately 7% of the 1.1 million persons living with HIV/AIDS are between the ages of 15 and 24.¹

Highlights of the regional trends were as follows:

- Forty-seven percent of all newly diagnosed HIV/AIDS cases from 2009 to 2013 resided in the Central Public Health Region. This region also had the highest rate (270.1 per 100,000) and the highest regional percentage (42.5%) of persons living with HIV/AIDS at the end of 2013.
- The Northwest Public Health Region had the greatest regional percentage of newly diagnosed HIV/AIDS cases among Hispanics (36.5%) between 2009 and 2013. This region had the second-largest regional percentage of newly diagnosed cases having a risk factor of MSM (18.2%) between 2009 and 2013, after the Central Region (51.1%).
- The Southeast Public Health Region had the second greatest regional percentage of newly diagnosed HIV/AIDS cases among blacks (17.8%) between 2009 and 2013, after the Central Region (52.4%).
- The Southwest Public Health Region had the second highest rate of Persons living with HIV/AIDS at the end of 2013 (158.6 per 100,000).
- The Northeast Public Health Region had the second greatest regional percentage of newly diagnosed HIV/AIDS cases among youth aged 15 to 24 (14.9%), after the Central Region (52.2%).

INTRODUCTION

Introduction

This epidemiologic profile provides detailed information about the current HIV/AIDS epidemic in the State of Arkansas. Data from the HIV Surveillance Program and multiple other sources were reviewed to create this document that addresses the following key questions:

What are the socio-demographic characteristics of the general population in Arkansas?

What is the scope of the HIV/AIDS epidemic in Arkansas?

What are the indicators of risk for HIV/AIDS infection in Arkansas?

What are the patterns of utilization of HIV services for persons in Arkansas?

What are the number and characteristics of person who know they are HIV positive but who are not receiving primary medical care?

Each of the questions represents a section of the report, which includes relevant data and interpretation.

Data Sources

Data were compiled from a variety of sources to provide the most complete picture of the epidemic in Arkansas. When interpreting the data, note that each of the data sources has strengths and limitations. A brief description of each data source is provided below.

Arkansas Department of Health

Core HIV/AIDS Surveillance

The Arkansas Department of Health (ADH) began conducting HIV/AIDS surveillance in 1983. On July 1, 1999, the Arkansas statutes requiring confidential name-based HIV reporting were instituted. All HIV and AIDS cases diagnosed or treated in the State of Arkansas are reportable to the Arkansas Department of Health's HIV/AIDS Surveillance Program. Standardized case report forms are used to collect demographics, vital status, laboratory and clinical results, as well as risk factor information on all cases. All surveillance data are entered into the HIV/AIDS Reporting System (eHARS), the standardized database developed by CDC.

Limitations: HIV Surveillance data can provide only a minimum of estimates of the number of persons known to be infected with the condition. HIV/AIDS surveillance is totally reliant on positive laboratory test results and the fulfillment of disease reporting requirements by providers and laboratories.

Ryan White Part B Program

The Ryan White Part B Program in the State of Arkansas has been assisting Arkansans living with HIV and AIDS via a variety of resources since 1991, after the enactment of the Federal Comprehensive AIDS Resources Emergency (CARE) Act in 1990. The Ryan White CARE Act (RWCA) ensures quality and availability of care for medically underserved individuals and families affected by HIV/AIDS. The Ryan White Part B Program in Arkansas maintains a database within the STI/HIV/TB/Hepatitis C Section at ADH. Data collected include client demographics, diagnostic status, financial eligibility and vital status information.

Limitations: Data are collected only from clients who know their HIV status and who are eligible for Ryan White services.

AIDS Drug Assistance Program (ADAP)

The ADAP is a state-administered program located within the Arkansas Department of Health's Infections Disease Branch that provides medications free of charge to persons living with HIV/AIDS who meet program eligibility requirements.

Limitations: The data is not generalizable to all HIV-infected persons in Arkansas because data is only collected on persons who know their HIV status. Clients in ADAP are eligible to receive care/treatment services through the Ryan White Part B Program or are financially eligible to receive ADAP services because of partial medication coverage through public or private insurance.

Sexually Transmitted Disease (STD) Surveillance

The Arkansas Department of Health STI Program conducts statewide surveillance of chlamydia, gonorrhea and syphilis infections. Services provided include partner counseling, referral services and treatment. Data are collected in the Sexually Transmitted Disease Management Information System (STD*MIS). These data can serve as a surrogate marker for unsafe sexual practices and demonstrate the prevalence of changes in specific behaviors.

Limitations: The data is dependent upon compliance with reporting laws and is limited to positive test results. In the case of some STDs, the patient may be asymptomatic.

Health Statistics Data

The Vital Records Branch collects information on all births and deaths that occur in the State of Arkansas. A Cause of Death query was performed on the publicly available Arkansas Center for Health Statistics Query System, at <http://www.healthy.arkansas.gov/programsServices/healthStatistics>. The yearly numbers and rates of HIV-associated deaths occurring in Arkansas were determined for 1990 to 2013, using ICD-10 diagnosis codes for HIV (B20–B24).

Limitations: Deaths resulting from HIV or with HIV as an underlying cause may be underreported on death certificates. Death records are less timely than AIDS case reports. Notably, in 1999 a new cause-of-death tabulation was developed in the form of ICD-10 (International Classification of Diseases) codes. Before 1999, the ICD-9 classification was used. There are differences in mortality rates between the two codes. In this document, no adjustments have been made in mortality rates with respect to ICD-9 and ICD-10 codes.

Behavioral Risk Factor Surveillance System

The Arkansas Department of Health compiles and analyzes statewide survey data from the CDC-sponsored Behavioral Risk Factor Surveillance System (BRFSS), which asks respondents over the telephone about behavioral health risk factors. BRFSS data are representative of the general, non-institutionalized population of an area. A question on whether the respondent has ever had an HIV test (not including those done because of blood donation) has been asked annually as part of the Standard Core Questions. We present results from 2004 to 2010 for Arkansas.

Limitations: BRFSS data are self-reported and thus, the information may be subject to recall bias. As a telephone survey, the sample is limited to households with a telephone. In 2011, the methodology of the BRFSS changed substantially to include cell phone numbers and college students living in dormitories. Therefore, results from 2011 and later years are not comparable to those from earlier years.

Hospitalizations

All non-federal hospitals report procedure charges to the Arkansas Department of Health. Data come from existing hospital administrative records and include demographics, diagnoses, procedures performed, and charges. The data are accessible at the Agency for Healthcare Research and Quality's Healthcare Cost and Utilization Project (HCUP), <http://hcupnet.ahrq.gov/>

Limitations: ADH does not collect this data from hospital emergency departments, hospital outpatient clinics, physicians' offices, free-standing outpatient surgery centers, or hospices. Notably, ADH does not collect data from out-of-state hospitals that likely treat a number of Arkansas residents living near the state borders.

Pregnancy Risk Assessment Monitoring System (PRAMS)

The Pregnancy Risk Assessment Monitoring System (PRAMS) is a joint research project between the Health Statistics Branch of the Arkansas Department of Health and the CDC. The PRAMS survey was started by the CDC in 1987 to provide states information they needed to reduce the number and percentage of babies that are low birth weight and to prevent infant mortality. The PRAMS survey collects information from new mothers about their experiences and behaviors before, during, and after their pregnancy that might affect the health of their baby.

Limitations: PRAMS data are self-reported and subject to social desirability bias and recall bias, which could lead to inaccurate estimates.

Population Data

U.S. Census Bureau, National Center for Health Statistics

Bridged-Race Postcensal Population Estimates, Vintage 2014

To provide population estimates by single-race categories, the National Center for Health Statistics provides "bridged-race" estimates starting with the 2000 Census. These estimates combine the Census's 31 categories (5 single-race and 26 multiple-race) into 4 single-race categories: White, Black, American Indian or Alaska Native, and Asian/Pacific Islander. Hispanic ethnicity is shown separately, exclusive of the racial categories.

Limitations: Because persons reporting multiracial backgrounds in the Census are statistically assigned a dominant race in the bridged-race dataset, subpopulation totals by race are statistical estimates, not actual counts.

Sociodemographic Data

U.S. Census Bureau, American Community Survey

2008–2012 Five-year Estimates

The American Community Survey (ACS) covers a broad range of topics about social, economic, demographic, and housing characteristics of the U.S. population. It is a continuous, ongoing survey with results updated yearly. ACS results for poverty, educational attainment, and insurance by race/ethnicity were obtained for Arkansas. ACS results are presented for five single races: White, Black, Asian, American Indian or Alaska Native, and Asian/Pacific Islander. Persons of Hispanic or Latino ethnicity can belong to any racial category.

Limitations: Because the 2008–2012 5-Year Estimates include people sampled over a broad time range, it is inappropriate to interpret the results as coming from any one year or time point within this period. These results are not comparable to single-year or 3-year estimates from the ACS or other sources. The totals shown in tables derived from the ACS are the number of people surveyed, not the total population.

Direct and Indirect Measures of Risk Behavior

Arkansas Department of Human Services, Division of Behavioral Health Services

Alcohol/Drug Management Information System (ADMIS) Substance Table, April 2014

The Arkansas Department of Human Services provided data on the number of intramuscular and intravenous drug users treated from 2009 to 2013, stratified by sex, race, and age. Primary drug types used by clients were condensed into the most common types listed.

Limitations: These data come from state-funded inpatient treatment facilities. The treated inpatients are a subset of all injecting-drug users (IDU) that does not include clients being treated as outpatients, clients not receiving treatment, and clients receiving non-state funded care.

Centers for Disease Control and Prevention, Youth Risk Behavior Survey (YRBS)

The Youth Risk Behavior Survey is a national survey of students in secondary schools that is conducted biennially in odd-numbered years. It asks students about their behavior in six categories of health-risk behaviors.

Limitations: Because the YRBS relies on self-reported information, reporting of sensitive behavioral information may not be accurate; under- or over-reporting may occur. Answers are subject to recall bias. The results are representative of young people who are enrolled in high school, and cannot be generalized to all young people in an area.

CORE EPIDEMIOLOGIC QUESTIONS

Question 1

What are the socio-demographic characteristics of the general population in Arkansas?

SUMMARY

Population: In 2013, the estimated total population for the State of Arkansas was 2,958,765. This represents a 10.7% increase from the 2000 Census report of 2,673,400. According to 2013 estimates, the population of 75 counties in Arkansas ranges from 5,219 in Calhoun County to 391,536 in Pulaski County.

With a total land area of 53,179 square miles, the population density of Arkansas was 56 persons per square mile in 2010. County-level population density ranged from 8.5 persons/square mile in Calhoun County to 504 persons/square mile in Pulaski County. Fifty-six percent of the state population lives in urban areas, compared to 44% in rural areas.

Public Health Regional Structure: The State of Arkansas is geographically divided into five Public Health Regions: Northwest, Northeast, Central, Southwest, and Southeast. They range in size from 7 counties (Central) to 19 counties (Northwest) and in population from 263,307 (Southeast) to 821,400 (Central). Each region includes at least one metropolitan area, as defined by the Census: Fayetteville-Bentonville and Fort Smith in Northwest, Memphis and Jonesboro in Northeast, Little Rock in Central, Pine Bluff in Southeast, and Texarkana and Hot Springs in Southwest.

Demographic Composition: From 2000 to 2010, Arkansas became more diverse as the total population increased. Hispanics, Asians, and Pacific Islanders increased as a percentage of the total population. In 2013, the racial and ethnic composition of the state was estimated to be 75% White non-Hispanic, 16% Black non-Hispanic, 7% Hispanic, 2% Asian/Pacific Islander, and 1% American Indian.

Age and Sex: Along with the rest of the nation, Arkansas' population is getting older. In 2010 the median age was 37.4 years, compared to 36.0 years in 2000. In 2013, this pattern remained relatively stable. Males and females are about equally represented in Arkansas—at 49.1% and 50.9% of the population, respectively.

Poverty, Income, and Education: The median household income of Arkansans in 2009–2013 was \$40,768. In the same years, 19.2% of Arkansans were living below poverty level, compared to 15.4% of Americans. Of Arkansans aged 25 or more, 83.7% had received a high school diploma (not including a GED) and 20.1% held a Bachelor's degree or higher by 2009–2013.

Insurance Status: In 2013, Arkansas was ranked 14th in the country in the percentage of uninsured. Among those aged 18 to 64, 1 out of every 5 Americans was uninsured, compared to 1 in 4 Arkansans. Arkansans belonging to minority racial and ethnic groups were more likely to be uninsured in 2009–2013.

DEMOGRAPHICS

From 2000 to 2010, Arkansas became more diverse as the total population increased.¹ Hispanics, Asians, and Pacific Islanders increased as a percentage of the total population. People of Hispanic or Latino ethnicity increased from 3.2% to 6.4% of the population, more than doubling in number. Asians increased from 0.8% to 1.2%, almost doubling in number. Pacific Islanders increased from 0.06% to 0.2%, more than tripling in number. In the same period, the percentage of whites decreased from 80.0% to 77.0% and the percentage of blacks remained similar, from 15.7% to 15.4%. In 2013, minorities continued to increase their share of the general population (Figure 1, Table 1).

Figure 1.

Distribution of the Population of Arkansas by Race/ethnicity, 2013

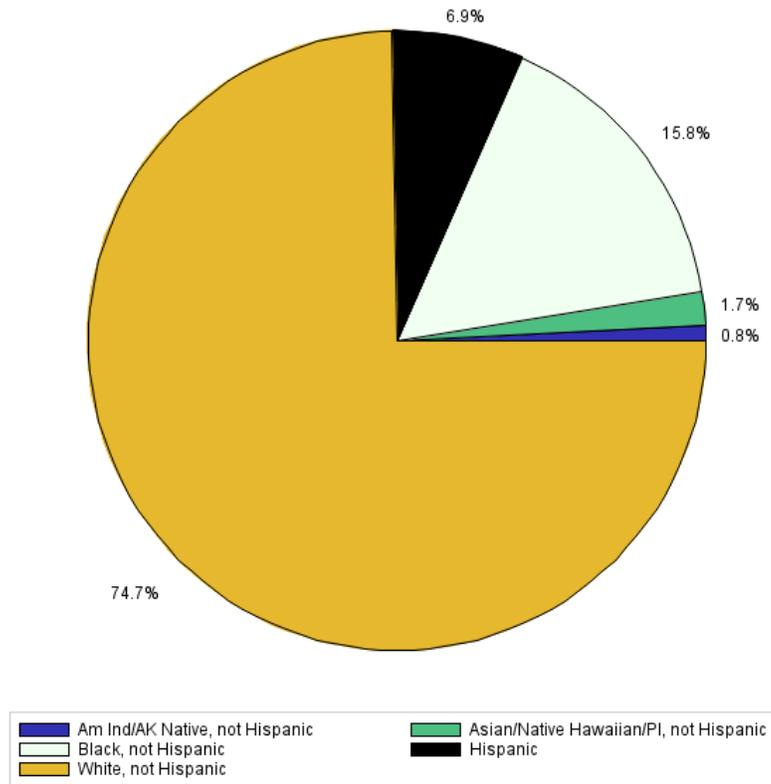


Table 1. Percentage distribution of the population by race/ethnicity for each sex, Arkansas 2013

Race/ethnicity	Male (n = 1,453,181)	Female (n = 1,505,584)	Total
White, non-Hispanic	74.7%	74.7%	74.7%
Black, non-Hispanic	15.3%	16.3%	15.8%
Hispanic	7.5%	6.4%	6.9%
Asian/Native Hawaiian/PI, non-Hispanic	1.7%	1.8%	1.7%
Am Ind/AK Native, non-Hispanic	0.8%	0.8%	0.8%

Source: National Center for Health Statistics, Vintage 2014 Bridged-Race Postcensal Population Estimates

The racial makeup of Arkansas follows a geographic pattern. Blacks contribute a higher proportion of the population along the Mississippi River Delta and southern parts of the state and are less well represented in the north and northwest.² The Public Health Regions reflect this pattern as well, with the Southeast having the highest percentage of blacks (43.1%) and the Northwest the lowest (3.0%).

Hispanics are most concentrated in the Northwest Region, where they make up 11.7% of the population. Asians and Pacific Islanders are also found in greatest numbers in the Northwest (3.0%), largely because of immigration from the Marshall Islands.

Along with the rest of the nation, Arkansas' population is getting older. In 2010 the median age was 37.4 years, compared to 36.0 years in 2000.¹ The younger age groups, from 15 to 44 years of age, have decreased their representation over time, while the older age groups, ages 45 and up, increased as a proportion of the total population. In 2012, this pattern remained relatively stable (Table 2). Males and females are about equally represented in Arkansas, at 49.9% and 50.1% of the population, respectively.

Table 2. Distribution of the general population by age group and sex, Arkansas 2013

Age group (yrs.)	Males (n = 1,453,181)	Females (n = 1,505,584)	Total (n = 2,958,765)
<13	17.9%	16.6%	17.2%
13–14	2.8%	2.6%	2.7%
15–24	14.3%	13.3%	13.8%
25–34	13.3%	12.7%	13.0%
35–44	12.5%	12.2%	12.3%
45–54	13.3%	13.2%	13.2%
55–64	12.1%	12.7%	12.4%
65+	13.8%	16.8%	15.4%

Source: National Center for Health Statistics, Vintage 2014 Bridged-Race Postcensal Population Estimates

SOCIOECONOMIC STATUS

Poverty

In 2009–2013, 19.2% of Arkansans were living below poverty level, compared to 15.4% of Americans. Urban areas of the state reflect greater poverty levels compared to rural areas (15.9% vs. 12.0%, respectively). The Southeast Region led the state with 26.4% of residents living in poverty, compared to 14.3% in the Central Region (Table 3). In the counties most affected by the HIV epidemic, 4 of the 5 with poverty levels greater than 20% were in the Southeast Region (Phillips, Lee, St. Francis, Monroe); the fifth was Crittenden County in the Northeast Region.

Table 3. Percentage of the population under the poverty level statewide, in Public Health Regions, and in selected counties, Arkansas 2009–2013

Area*	Percent under poverty level	Margin of error (+/-)
Arkansas	19.2%	0.3%
Arkansas -- Urban	21.2	0.5%
Arkansas -- Rural	16.7	0.4%
Central	14.3%	0.5%
Garland	20.7%	1.6%
Pulaski	17.2%	0.9%
Northwest	20.3%	0.5%
Benton	12.2%	0.9%
Sebastian	21.2%	1.3%
Washington	20.7%	1.3%
Northeast	22.1%	0.7%
Craighead	20.6%	1.4%
Crittenden	26.3%	2.1%
Southwest	26.4%	0.8%
Miller	19.5%	2.2%
Union	21.5%	2.3%
Southeast	26.4%	0.9%
Cleveland	17.7%	3.9%
Jefferson	23.9%	1.7%
Lee	31.5%	3.7%
Monroe	28.8%	4.0%
Phillips	33.5%	3.6%
St. Francis	28.4%	3.0%

*Statewide, Public Health Regions, and selected counties are shown. These counties were ranked in the top 10 for HIV prevalence or HIV prevalence rate in 2013.

Source: Census Bureau. American Community Survey 2009–2013 Five-year Estimates, Table B17018 - Poverty Status in the Past 12 Months of Families by Household Type by Educational Attainment of Householder. Available at www.census.gov/acs/www/data_documentation/summary_file/

Educational attainment

In Arkansans aged 25 or older, 77.3% had received a high school diploma (not including a GED) and 19.8% held a Bachelor’s degree or higher by 2008–2012.³ Slightly more urban than rural residents had a high school diploma (79.3% vs 74.9%), and substantially more urban residents had a college degree (24.4% vs. 14.5%).

Insurance status

In 2013, Arkansas was ranked 14th in the country in the percentage of uninsured.³ This ranking was prior to the implementation of the private option. While 1 out of every 5 Americans aged 18 to 64 was uninsured, 1 in 4 Arkansans in the same age group did not have public or private health care coverage. Compared to 20.6% of working-age Americans, 24.9% of working-age Arkansans were uninsured.

Many counties in the Northwest region had higher uninsured levels in 2013 than the statewide average, especially Searcy County (37.0%).⁴ Many counties in the Southwest also had higher levels of uninsured, especially Sevier County (38.8%). Except for Garland County, Central region counties had less uninsured than the state average.

Arkansans belonging to minority racial and ethnic groups were more likely to be uninsured in 2009–2013. At 51.8%, a much larger percentage of the Hispanic population in Arkansas was uninsured than the black (27.9%) or white (23.5%) population (Table 4). The least populated minority groups, American Indian (AI) or Alaska Native (AN), and Native Hawaiian (NH) or other Pacific Islander (PI), also had noticeably higher uninsured levels (29.3% and 35.6%, respectively). Although the percentage of uninsured AI/AN and NH/PI is greater than that for whites or blacks, these estimates are less precise than those for larger populations.

Table 4. Adults aged 18–64 without health insurance in Arkansas by race/ethnicity, 2009–2013

Race/ethnicity	Adults aged 18 to 64	Number of uninsured	Uninsured (%)	Margin of error (%)
White	1,379,801	324,180	23.5%	0.4%
Black or African American	270,993	75,738	27.9%	0.7%
Hispanic or Latino*	107,974	55,984	51.8%	1.4%
Asian	26,349	6,154	23.4%	2.7%
American Indian or Alaska Native (AI/AN)	11,699	3,430	29.3%	4.1%
Native Hawaiian or other Pacific Islander (NH/PI)	3,145	1,121	35.6%	8.1%

*Respondents who identified as being of Hispanic, Latino, or Spanish origin. People in this category could be of any race.

Source: American Community Survey 2009–2013 Five-year Estimates, Tables C27001A, C27001B, C27001I, C27001D, C27001C, C27001E: Health Insurance Coverage Status by Age (race/ethnicity). Accessed at www.census.gov/acs/www/data_documentation/summary_file/

Question 2

What is the scope of the HIV/AIDS epidemic in Arkansas?

In 1983, ADH began monitoring the disease known as Acquired Immunodeficiency Syndrome (AIDS). This surveillance was further enhanced on July 1, 1999, with the addition of legislation instituting confidential name-based reporting of HIV infection.

As the epidemic continues to change and the number of people living with the disease continues to grow, it is becoming more challenging to plan for HIV prevention and care in Arkansas. Due to limited resources, it is imperative that efforts are focused on identifying those populations most affected and most at risk for HIV infection.

This section provides detailed information about demographic and risk characteristics of HIV infected persons and trends in the statewide epidemic. It describes cases diagnosed through 2013 and reported through January 2015. The regional epidemiological profiles included at the end of this section, provides a more detailed description of the epidemic in each public health region. Unless otherwise noted, all data comes from Arkansas eHARS.

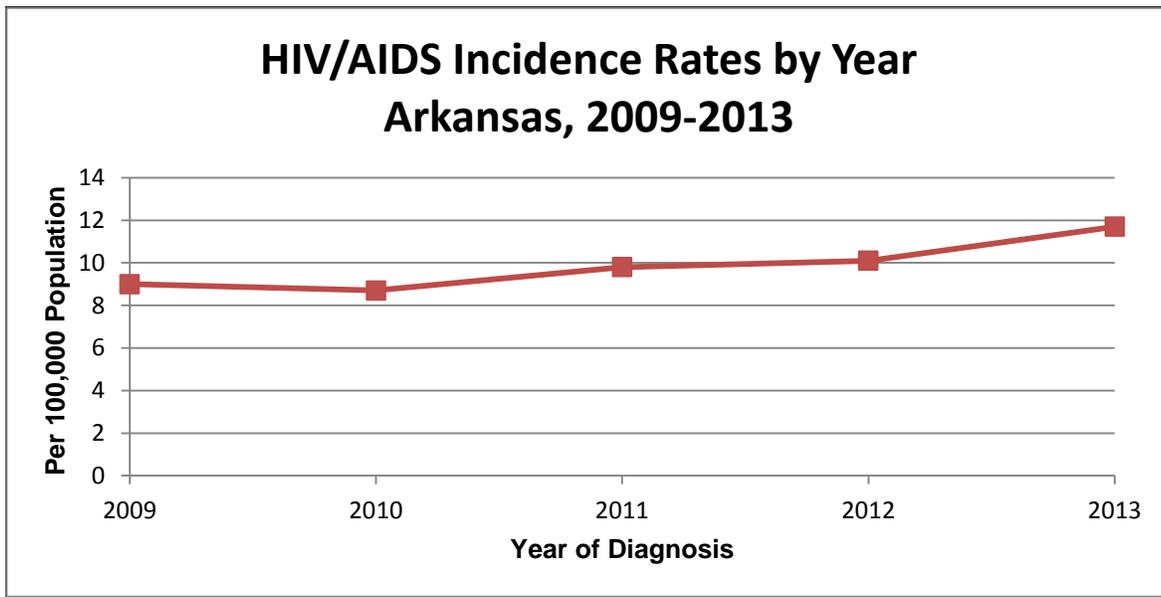
HIGHLIGHTS

- During 2013, among all newly diagnosed HIV/AIDS cases, 139 (40.3%) were AIDS cases and 206 (59.7%) were HIV (non-AIDS) cases.
- At the end of 2013, 5,226 persons were presumed to be living with HIV/AIDS in Arkansas. Of those, 44.5% (2,327 persons) had an AIDS diagnosis.
- The number of deaths due to AIDS continues to decline with continued advancements in antiretroviral drugs and treatment regimens. From 2009 to 2013, there was an average of 67 deaths per year.
- The HIV/AIDS infection rate for blacks (39.5 per 100,000) continues to rise and is disproportionately high compared to other racial and ethnic groups in the state; in 2013 the infection rate for blacks was approximately seven times higher than that for whites (5.7 per 100,000) and four times that for Hispanics (10.3 per 100,000).
- In 2013, over 53% of the newly diagnosed HIV/AIDS cases were black non-Hispanic.
- Black men (64.7 per 100,000) and Hispanic men (13.9 per 100,000) had the highest rate of infection compared to any other racial or ethnic groups in Arkansas.

OVERALL HIV/AIDS TRENDS

In 2013, there were a total of 345 newly diagnosed cases of HIV/AIDS in the State of Arkansas. This number reflects those persons whose HIV infection (including AIDS) was first diagnosed in 2013 and was reported to the Arkansas Department of Health. From 2009 to 2013, the rate of newly diagnosed HIV/AIDS cases increased from 9 per 100,000 in 2009 to 11.7 per 100,000 in 2013 (Figure 2).

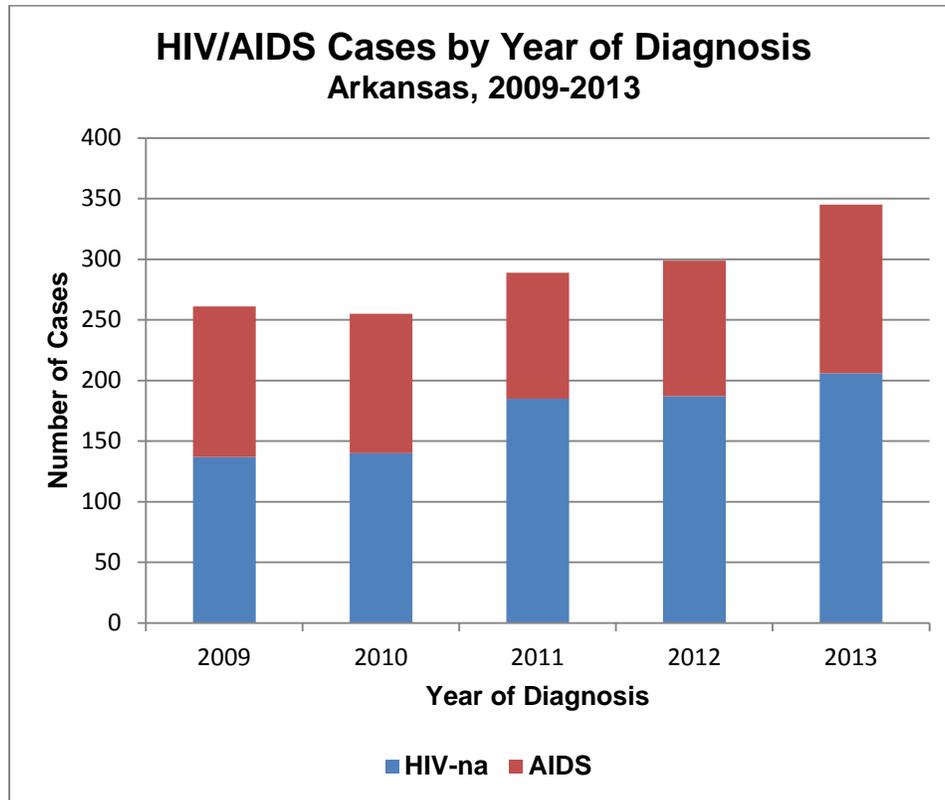
Figure 2.



In 2013, 139 AIDS cases and 206 HIV cases were newly diagnosed and reported in the State of Arkansas. This is a 50.4% increase in HIV cases and a 12.1% increase in AIDS cases, compared to those newly diagnosed and reported in 2009 (Figure 3). Since 2009, an average of 290 new cases of HIV/AIDS have been diagnosed and reported annually to the surveillance program.

The number of newly diagnosed cases of HIV/AIDS in Arkansas has been on an upward trend since 2010 (Figure 3). In 2013, there was a 35.3% increase in the number of newly diagnosed HIV/AIDS cases relative to 2010.

Figure 3.



Note: na= not AIDS

As shown in the figure above (Figure 3), since 2009 more cases are entering the system with an HIV diagnosis compared to previous years. This could be an indication of earlier testing or increased awareness for HIV screening growing across the state.

It is possible to have cases diagnosed simultaneously as AIDS and HIV, due to delays in testing. If a person is diagnosed with AIDS and HIV in the same year, they are counted as an AIDS case to prevent “double-counting.” Once diagnosed with AIDS, a person does not re-enter the HIV category even if they no longer meet the case definition of AIDS. For example, a person who is HIV positive in 2007 and subsequently develops *Pneumocystis pneumonia* (PCP), an AIDS-defining condition, in 2012, becomes an AIDS case in 2012. However, if the condition is resolved, the person is not reclassified as an HIV case.

Among the newly diagnosed cases of HIV infection in 2013, 86 (24.9%) were simultaneously diagnosed with both HIV and AIDS at the time of initial diagnosis. The proportion of cases reported as converting from HIV to AIDS within one year has remained relatively stable over the past 5 years (Figure 4A). On average, Arkansas has approximately 80 cases annually that enter the system with a simultaneous diagnosis of HIV and AIDS. The time between conversion from HIV to AIDS is usually a good indicator of time of infection. Usually there is about a 10-year period between initial HIV infection and progression to AIDS. In light of this, caution should be taken when assessing the age at diagnosis of AIDS cases, because cases having a simultaneous diagnosis of HIV and AIDS had more than likely been positive for a number of years and unaware of their status. In Arkansas from 2009-2013 approximately 60-70 percent of new AIDS cases were diagnosed as AIDS at initial testing or within one year of being tested (Figure 4B).

Figure 4A.

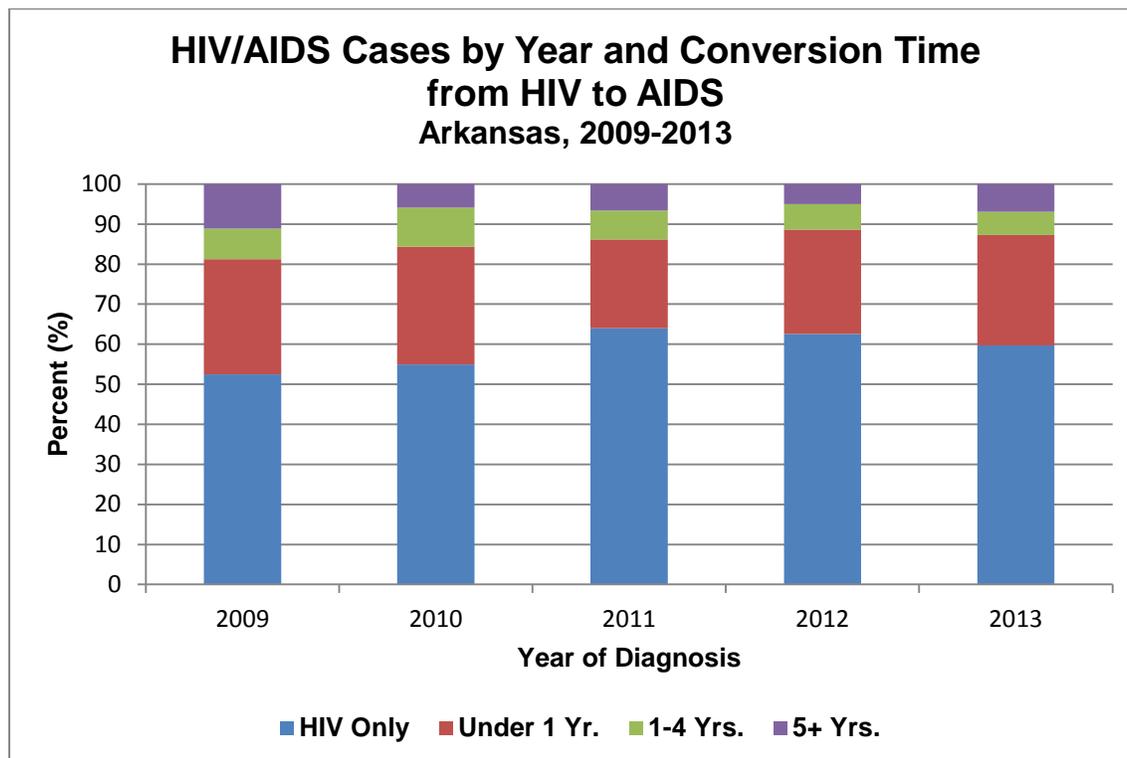
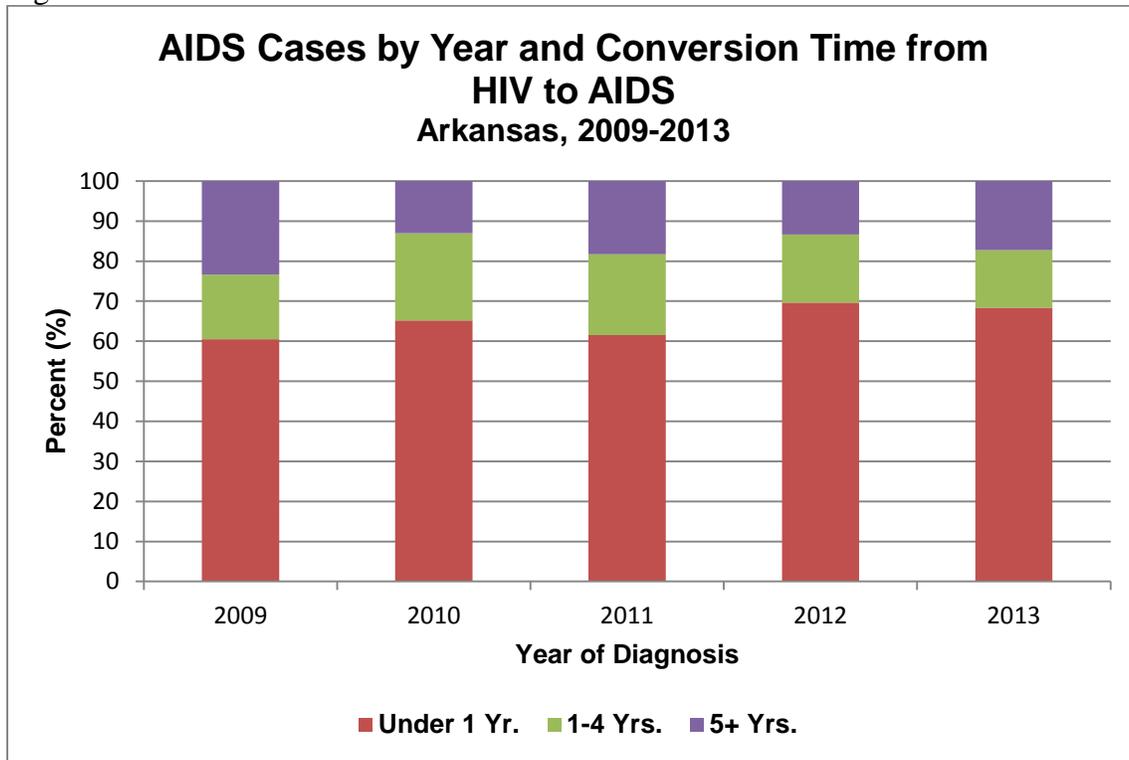
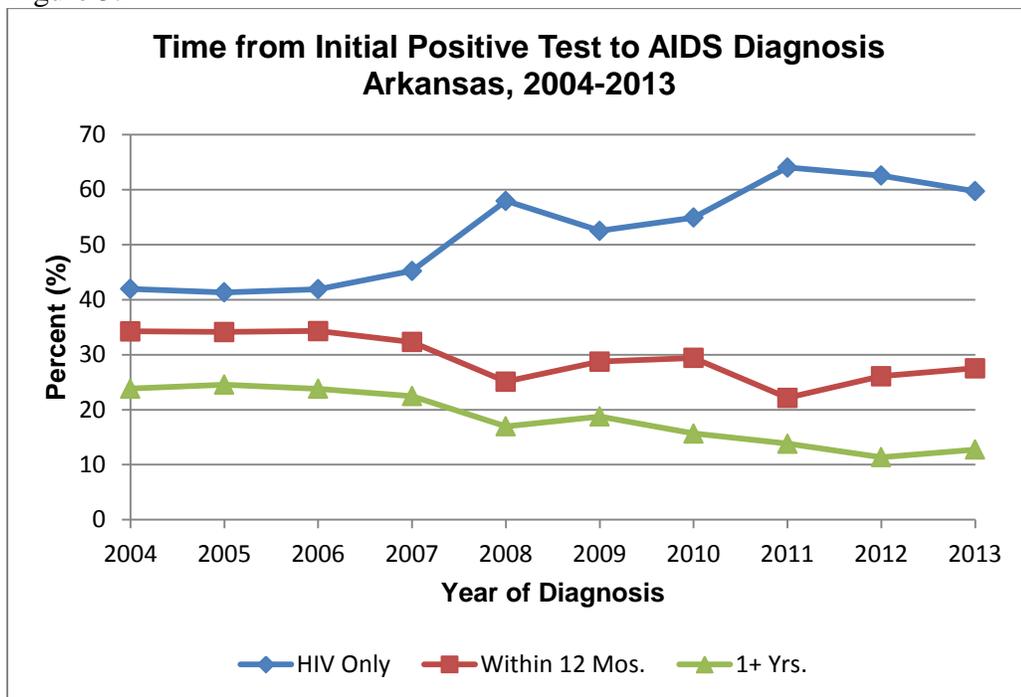


Figure 4B.



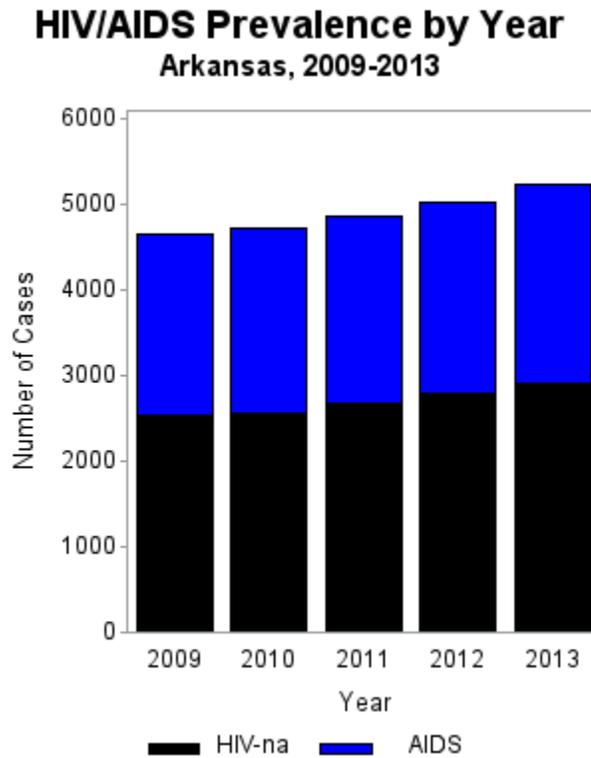
According to the CDC, approximately one-third of all diagnoses still occur late (where the diagnosis of AIDS occurs concurrently or within a year of HIV diagnosis)⁵. In Arkansas, approximately 25–40% of HIV/AIDS cases were diagnosed at an already immunocompromised state, as shown by progression to AIDS within a year (Figure 5). Cases entering HIV medical care at such a late stage tend to have poor treatment outcomes and survival rates.

Figure 5.



As of December 31, 2013, there were a total of 5,226 persons living with HIV/AIDS in the State of Arkansas reported to the Surveillance Program. This estimated prevalence is an approximation of the number of persons actually living with HIV/AIDS at a particular period of time. This number does not include persons who are infected, but have not been tested for the virus, or persons who have been tested but not reported to the Surveillance Program. The estimated number of prevalent cases in Arkansas has consistently increased from 2009 to 2013 (Figure 6).

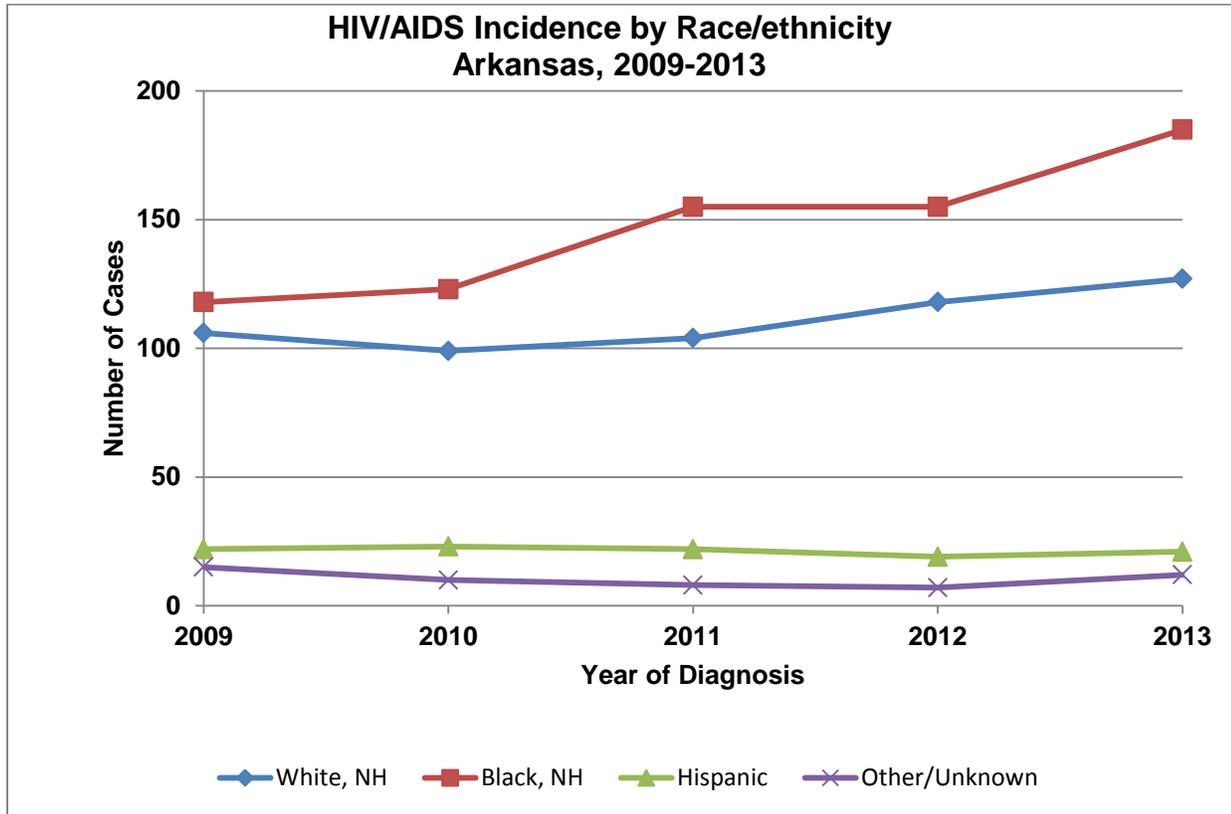
Figure 6.



Note: na= not AIDS

Assessing the true prevalence of persons living with HIV/AIDS in Arkansas is a difficult task. Our jurisdiction has a large number of transient cases. There are a number of HIV/AIDS cases residing in Arkansas that were diagnosed in other jurisdictions (*not* included in our totals), as well as a large number of cases initially diagnosed in Arkansas that have moved to other locations (*that are* included in our totals). Interstate migration is a common occurrence nationally. In Arkansas, we see this effect with the State of Texas in the Texarkana metropolitan area, and with the State of Tennessee in the West Memphis/Memphis metropolitan area. There is also no more than a three-hour drive to any of the six neighboring states. There were approximately 2,327 persons living with AIDS in Arkansas at the end of 2013, compared to 1,341 at the end of 2000 (not shown). The number of persons living with HIV (not AIDS) has also increased, from 1,863 in 2000 to 2,899 at the end of 2013.

Figure 7.



In Arkansas, minority populations continue to be disproportionately affected by HIV/AIDS. Although only 25.3% of the state’s population is composed of racial/ethnic minorities, these groups represented 63.2% of the newly diagnosed HIV/AIDS cases in 2013 and 51% of persons living with HIV/AIDS. The percentage of HIV/AIDS cases diagnosed among minorities in Arkansas has steadily increased since 2000 by 21.8% (not shown).

The greatest number of newly diagnosed cases of HIV/AIDS in 2013 was among non-Hispanic blacks (185) (Figure 7). The racial/ethnic group having the next-highest number of newly diagnosed cases in 2013 was non-Hispanic whites (127), followed by Hispanics (21). Since 2009, the percentage of newly diagnosed cases in non-Hispanic blacks has increased from 38.7% to 53.6%.

In 2013, the disease burden was greatest among blacks. Non-Hispanic blacks comprised 53.6% of the 345 newly diagnosed cases in 2013, while only representing 15.8% of Arkansas’ population. Blacks have the highest rate of HIV/AIDS infection (39.5 per 100,000) (Table 5)—about seven times that in whites (5.7 per 100,000) and about four times that in Hispanics (10.3 per 100,000). Hispanics currently comprise 6.9% of the state’s population; the burden of disease for this racial/ethnic group is also disproportionate to their demographic makeup in the state.

Of the newly diagnosed HIV/AIDS cases in Arkansas in 2013, 80% were male and 20% were female. Young adults between the ages of 15 and 24 made up 26.7% of the newly diagnosed cases in 2013; this is comparable to the 18% living with HIV/AIDS in the state. About 52% of newly diagnosed HIV/AIDS cases were between the ages of 25 and 44.

The Central and Northwest Regions continue to be the most affected regions in the state, by numbers and percentages of newly diagnosed HIV/AIDS cases and persons living with HIV/AIDS. These areas contain large metropolitan areas. On the other hand, the Southeast Region has the second-highest rates of newly diagnosed HIV/AIDS (17.5 per 100,000) and persons living with HIV/AIDS (267.4 per 100,000). The Central Region continues to have the highest rates of newly diagnosed HIV/AIDS cases (21.7 per 100,000) and persons living with HIV/AIDS (270.1 per 100,000) (Table 5).

Table 5. Characteristics of Persons Infected with HIV/AIDS, Arkansas, 2013

	HIV/AIDS Incidence*			HIV/AIDS Prevalence**		
	N	%	Rate	N	%	Rate
Gender						
Male	276	80.0%	19.0	4013	76.8%	276.2
Female	69	20.0%	4.6	1213	23.2%	80.6
Race/ethnicity						
White, non-Hispanic	127	36.8%	5.7	2512	48.1%	113.6
Black, non-Hispanic	185	53.6%	39.5	2271	43.5%	485.0
Hispanic	21	6.1%	10.3	264	5.1%	129.4
Other, non-Hispanic	12	3.5%	15.9	133	2.5%	176.1
Unknown	0	0.0%	-	46	0.9%	-
Age Group						
<13	1	0.3%	0.2	43	0.8%	8.4
13-14	0	0.0%	0.0	9	0.2%	11.2
15-24	92	26.7%	22.6	943	18.0%	231.6
25-34	98	28.4%	25.5	1793	34.3%	466.8
35-44	81	23.5%	22.2	1541	29.5%	422.4
45-54	48	13.9%	12.3	681	13.0%	174.0
55-64	19	5.5%	5.2	178	3.4%	48.6
65+	6	1.7%	1.3	37	0.7%	8.1
Unknown	0	0.0%	-	1	0.0%	-
Public Health Region						
Central	178	51.6%	21.7	2219	42.5%	270.1
Northeast	41	11.9%	7.4	718	13.7%	130.1
Northwest	53	15.4%	5.3	1067	20.4%	107.1
Southeast	46	13.3%	17.5	704	13.5%	267.4
Southwest	27	7.8%	8.3	516	9.9%	158.6
Unknown	0	0.0%	-	2	0.1%	-
Total	345	100.0%	11.7	5226	100.0%	176.6

* HIV/AIDS Incidence is defined as the number of new HIV-NA (NA= not AIDS) and new AIDS cases diagnosed during the period specified.

** HIV/AIDS Prevalence is defined as the number of persons living with HIV-NA (NA= not AIDS) or AIDS during the period specified.

+ Rates are per 100,000 population.

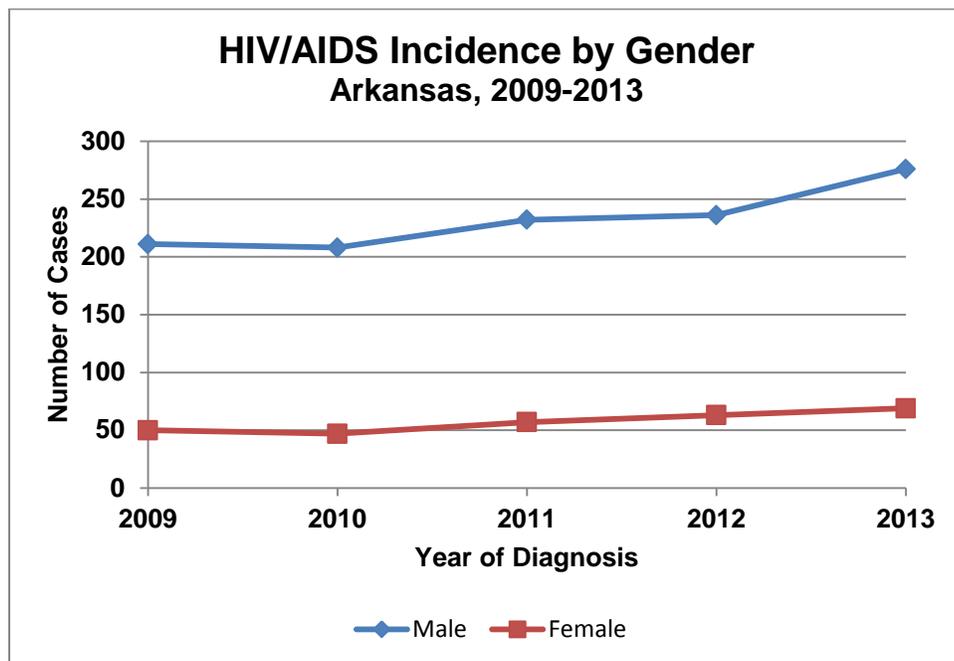
- No available denominator for these categories.

Data Source: Arkansas eHARS (enhanced HIV/AIDS Reporting System) retrieved January 2, 2015.

HIV/AIDS, BY SEX AND RACE/ETHNICITY

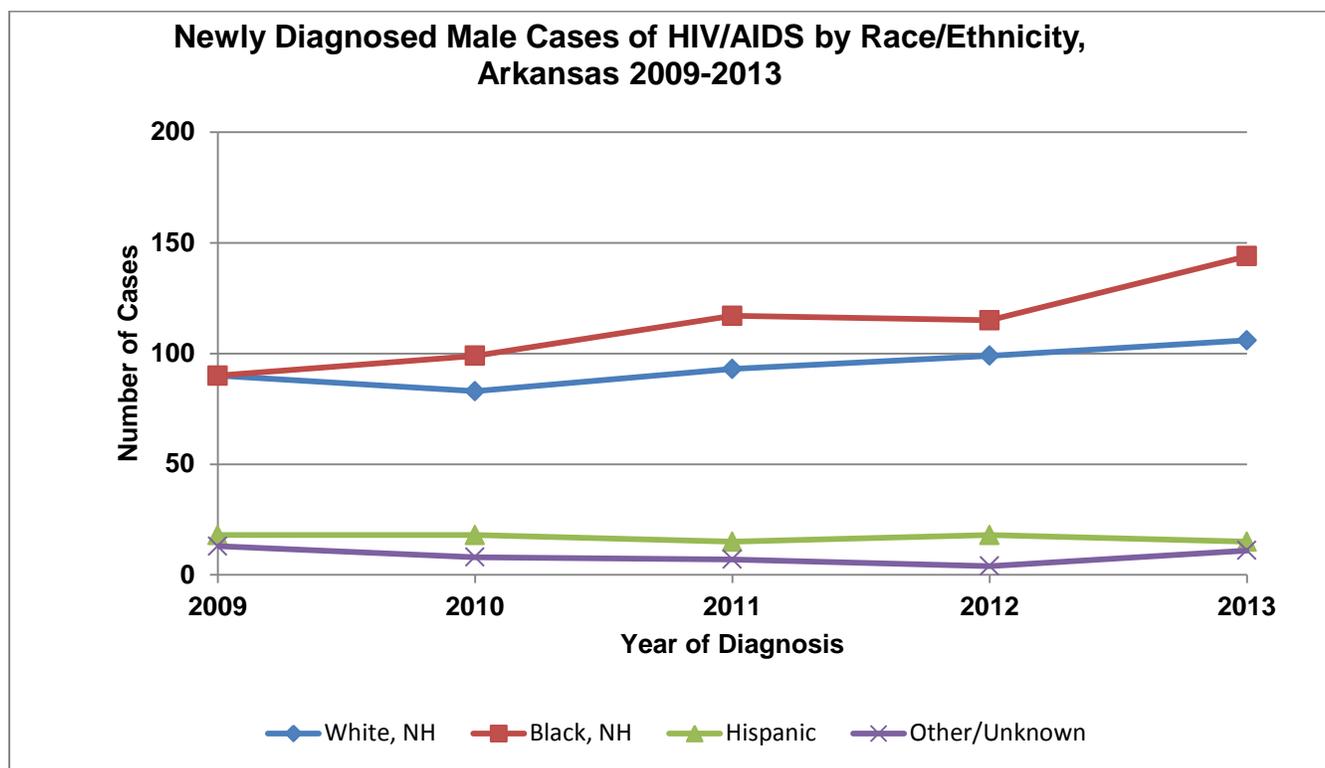
In 2013, there were 5,226 people in Arkansas living with HIV/AIDS. As of December 31st of the same year, there were 345 newly diagnosed cases of HIV/AIDS. Of those newly diagnosed, 276 were male and 69 were female (Table 5). The burden of infection has traditionally been within the male population in Arkansas, as it is nationally. New HIV/AIDS cases among males in Arkansas have increased slightly over the past 5 years, with an average of 233 males being diagnosed annually. The number of female cases has been relatively stable from 2009 to 2013, with an average of 57 females per year being diagnosed with HIV/AIDS (Figure 8).

Figure 8.



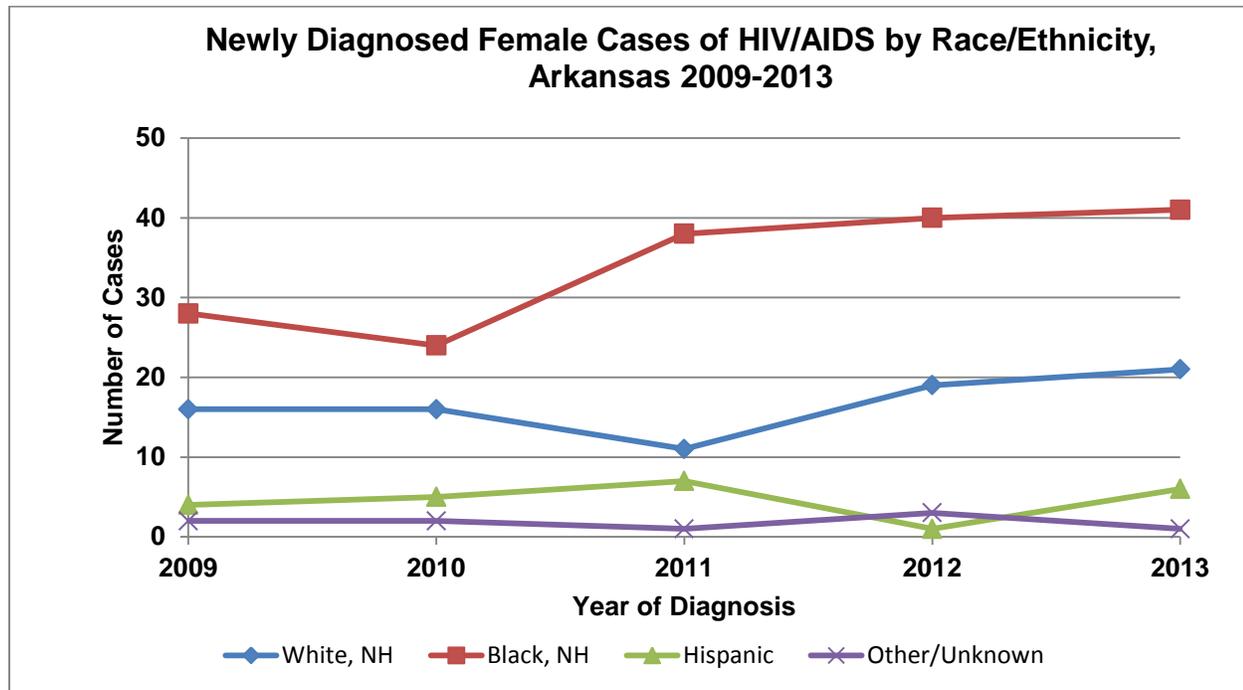
80% of newly diagnosed cases in 2013 were males. Of these cases, 38.4% were white, 52.2% black, 5.4% Hispanic, and the remaining 4% were Asian/Pacific Islander, American Indian/Alaska Native, multi-race, or unknown. The greatest number of newly diagnosed male cases were blacks, followed by whites and Hispanics (Figure 9). Relative to their population, black males have been consistently disproportionately impacted by HIV. The rate of new infection among black males (64.7 per 100,000) was 6.6 times higher than that of white males (9.8 per 100,000) and 4.7 times that of Hispanic males (13.9 per 100,000). There was 60% increase in the number of newly diagnosed black male cases from 2009 (90 cases) to 2013 (144 cases), also the rate of new infection among black males has increased from (41.6 per 100,000) in 2009 to (64.7 per 100,000) in 2013.

Figure 9.



Since 2009, the number of cases among black females and white females has varied over the years (Figure 10). The numbers of cases among Hispanic women and the Other/Unknown category have remained relatively stable. Of the 69 newly diagnosed females in 2013, 30.4% were white, 59.4% were black, and 8.7% were Hispanic. The greatest burden of new infection among females in 2013 was in non-Hispanic blacks, at 16.7 per 100,000, compared to 6.3 per 100,000 among Hispanic females and 1.9 per 100,000 among non-Hispanic whites. This is consistent with current national trends.

Figure 10.



The HIV/AIDS epidemic in Arkansas disproportionately affects both males and females in the black community. Arkansas statistics show congruence with the national data in this regard. Although blacks make up only 15.8% of the population in Arkansas, they have the highest rate of infection (39.5 per 100,000) compared to any other racial or ethnic group (Table 6). In 2013, blacks accounted for 53.6% of the newly diagnosed HIV/AIDS cases in Arkansas with rate 39.5 per 100,000. Black women comprised 11.9% of all newly diagnosed cases of HIV/AIDS in 2013 with a rate of 16.7 per 100,000 compared to white women comprising 6.1% with a rate of 1.9 per 100,000, and Hispanic women comprising only 1.7% of all new cases (Table 6) with rate of 6.3 per 100,000.

Table 6. HIV/AIDS Incidence* by Race/ethnicity and Gender, Arkansas, 2013

Race/ethnicity	Males		Females		Total		
	N	%**	N	%**	N	%**	Rate+
White, non-Hispanic	106	30.7%	21	6.1%	127	36.8%	5.7
Black, non-Hispanic	144	41.7%	41	11.9%	185	53.6%	39.5
Hispanic	15	4.4%	6	1.7%	21	6.1%	10.3
Other, non-Hispanic	11	3.2%	1	0.3%	12	3.5%	15.9
Total	276	80.0%	69	20.0%	345	100.0%	11.7

* HIV/AIDS Incidence is defined as the number of new HIV-NA (NA= not AIDS) and new AIDS cases diagnosed during the period specified.

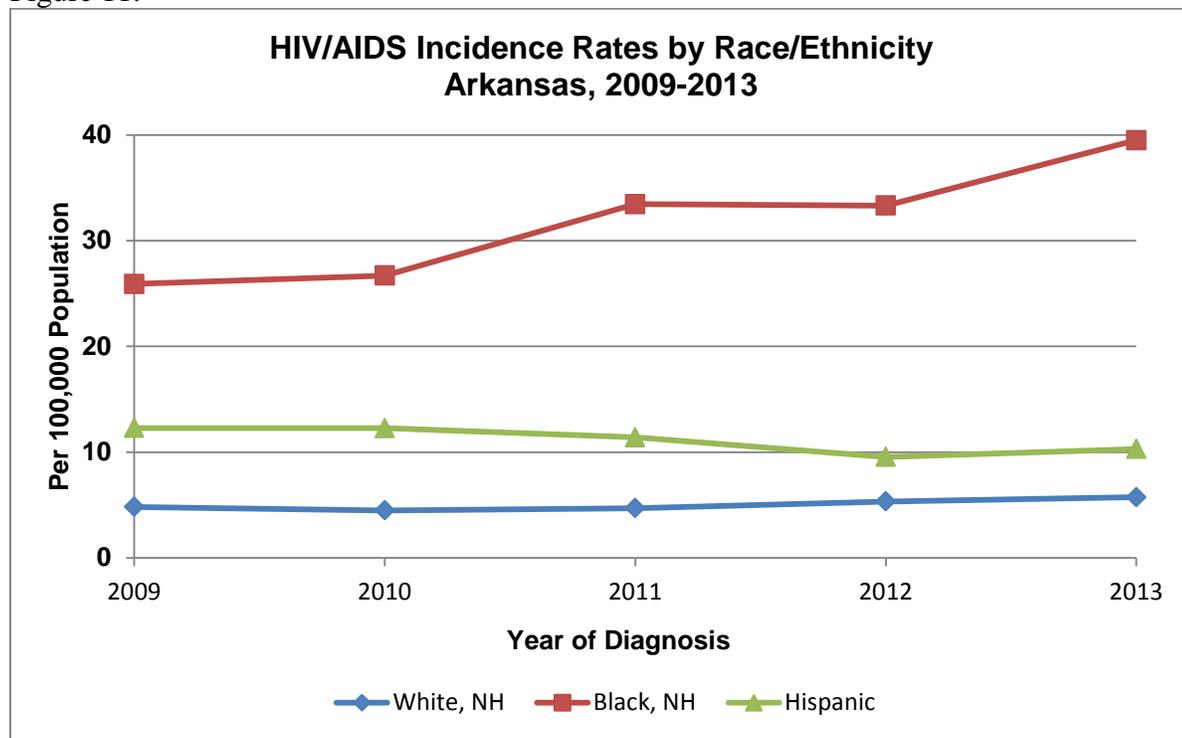
** Calculated as a percentage of all newly diagnosed HIV disease in 2013.

+ Rates are per 100,000 population.

Data Source: Arkansas eHARS (enhanced HIV/AIDS Reporting System) retrieved January 2, 2015.

From 2009 to 2013, the rate of infection among blacks in Arkansas increased (Figure 11). In 2013, the rate in non-Hispanic blacks was 39.5 per 100,000 compared to 25.9 per 100,000 in 2009. This is approximately 7 times greater than the rate among non-Hispanic whites (5.7 per 100,000) and 4 times greater than the rate among Hispanics (10.3 per 100,000) during the same year (Figure 11, Table 5).

Figure 11.



HIV/AIDS, BY AGE GROUP

In 2013, youth between the ages of 15 and 24 accounted for over one fourth (26.7%) of the 345 newly diagnosed HIV/AIDS cases in Arkansas (Table 7). This is comparable to the national statistic of 26% of all new HIV infections occurring between the ages of 13 and 24.⁶ In 2013, males age 15-to-24 comprised 22.3% of newly diagnosed HIV/AIDS cases in Arkansas, compared to 15.4% in 2009; increases in the number of cases among this population is being seen nationally as well. In Arkansas persons between the ages of 25-44 accounted for over half (51.9%) of the newly diagnosed HIV/AIDS cases (Table 7); in particular males between the ages of 25-44 made up 41.2% of newly diagnosed HIV/AIDS cases in Arkansas, compared to 46.2% in 2009. The majority of newly diagnosed cases among women (53.6%) in Arkansas occurred in the 25-to-44 age range, and 21.7% in women between the ages of 15 and 24. Persons over the age of 55 made up 7.3% of newly diagnosed HIV/AIDS cases in Arkansas in 2013.

Table 7. HIV/AIDS Incidence* by Age Group and Gender, Arkansas, 2013

Age Group	Male		Female		Total	
	N	%	N	%	N	%
<13	1	0.4%	0	0.0%	1	0.3%
13-14	0	0.0%	0	0.0%	0	0.0%
15-24	77	27.9%	15	21.7%	92	26.7%
25-34	79	28.6%	19	27.5%	98	28.4%
35-44	63	22.8%	18	26.1%	81	23.5%
45-54	34	12.3%	14	20.3%	48	13.9%
55-64	18	6.5%	1	1.5%	19	5.5%
65+	4	1.5%	2	2.9%	6	1.7%
Total	276	100.0%	69	100.0%	345	100.0%

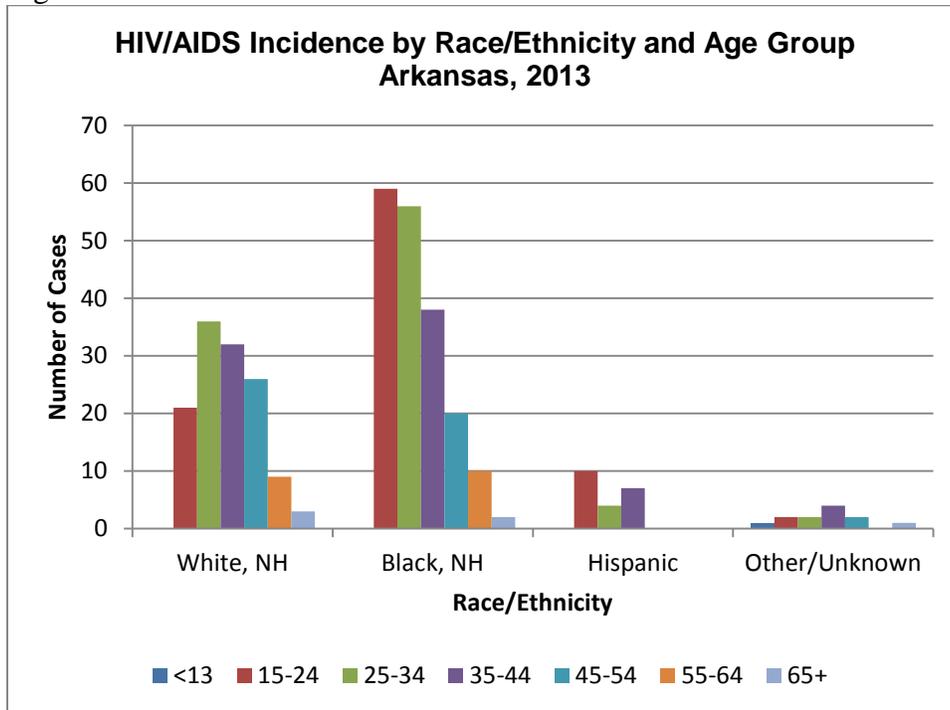
* HIV/AIDS Incidence is defined as the number of new HIV-NA (NA= not AIDS) and new AIDS cases diagnosed during the period specified.

Data Source: Arkansas eHARS (enhanced HIV/AIDS Reporting System) retrieved January 2, 2015.

HIV/AIDS, BY RACE/ETHNICITY AND AGE GROUP

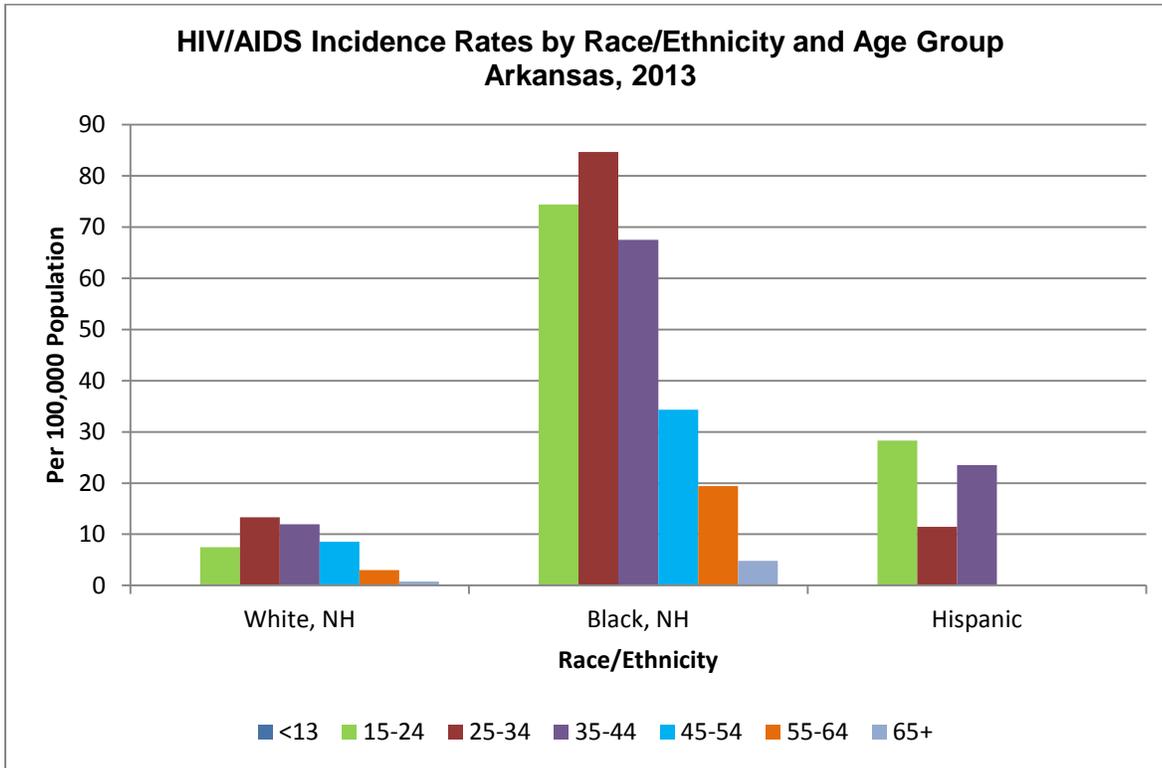
Blacks between the ages of 15-24 accounted for the greatest number of newly diagnosed HIV/AIDS cases in 2013, compared to all other combined age, race, and ethnicity groups (Figure 12). This age group also had the second highest rate of new HIV/AIDS diagnoses, (74.4 per 100,000) following black 25-44 year olds (84.7 per 100,000) (Figure 13). Nationally, approximately 60% of new infections occur in black youth.⁶ The next most impacted age and race/ethnicity groups in Arkansas were 25-34 year-old blacks and whites respectively.

Figure 12.



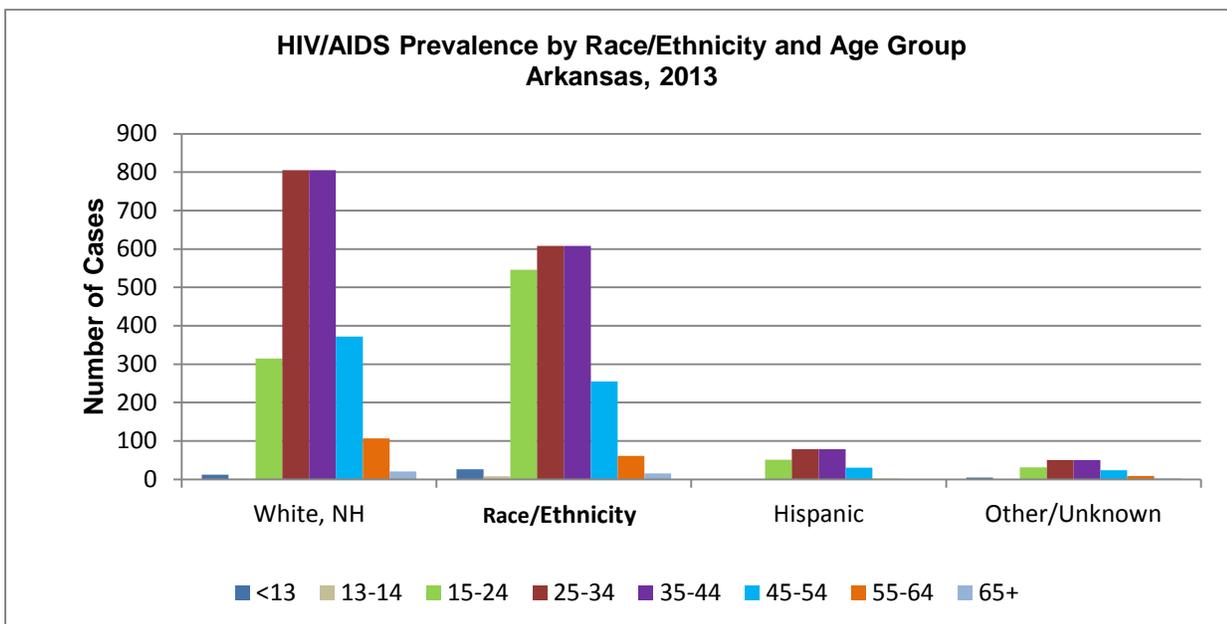
Although the number of newly diagnosed cases between blacks and whites was similar within some age groups, the rate of new diagnoses shows vast disparities between age, race, and ethnicity groups by taking population size into account. For example, while the number of cases among 25-to-34-year-olds was 56 in blacks and 36 in whites, the incidence rate in this age group was 84.7 per 100,000 for blacks, versus 13.4 per 100,000 in whites (Figure 13). The rates of new diagnoses show that blacks experience a disproportionately large burden of HIV/AIDS in all age groups, when compared to whites (Figure 13). Hispanics also share a disproportionate burden of new diagnoses when compared to whites, especially in the 15-24 age group.

Figure 13.



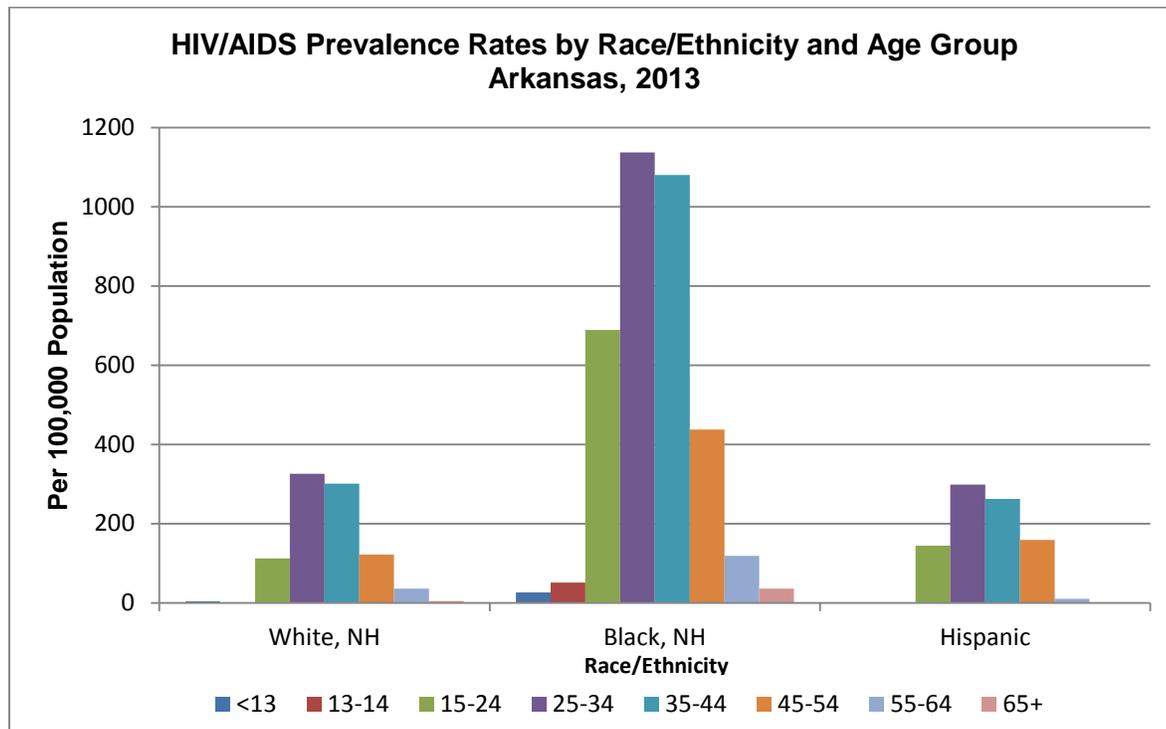
Comparing the estimated prevalence at the end of 2013 among age and racial/ethnic groups shows similar patterns to those in the newly diagnosed cases. Across race/ethnicity groups, whites had the most people living with HIV/AIDS in the 25-to-34, 35-to-44, and 45-to-54 age groups (Figure 14).

Figure 14.



However, the prevalence rates for whites in the same age groups (326.4, 300.8, and 121.9 per 100,000 respectively) were considerably lower than the prevalence rates for blacks in the same age groups (1,137.4; 1,080.8; and 437.5 per 100,000; respectively) (Figure 15).

Figure 15.

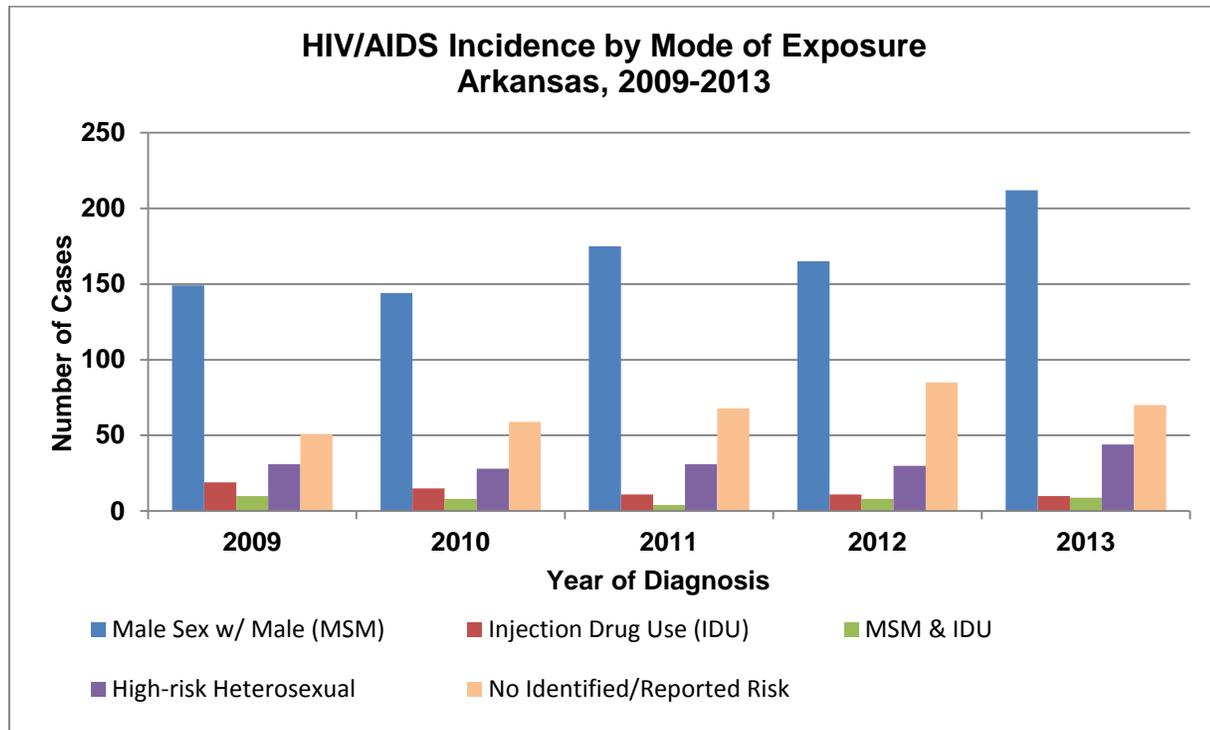


HIV/AIDS, BY MODE OF EXPOSURE

The mode of exposure looks at behaviors that put people at risk for becoming infected with HIV/AIDS. There is a hierarchy of behaviors that place people at greater risk of infection. Below, the top four categories of reported risks are shown, alongside cases with “no identified risk” (NIR) (Figure 16). Male-to-male sexual contact (MSM) continues to be the predominant known exposure category for newly diagnosed cases of HIV/AIDS in Arkansas. This trend is consistent with national findings.

The number of newly diagnosed cases noting MSM as the primary risk factor has increased in the last five years, from 149 in 2009 (57.1% of all cases) to 212 in 2013 (61.4% of all cases). The second most commonly noted mode of exposure was high-risk heterosexual contact—sexual contact with a partner known to be HIV-infected or at high risk for acquiring HIV. From 2009 to 2013, cases reporting high-risk heterosexual contact increased from 31 in 2009 (11.9%) to 44 in 2013 (12.8%). In 2013, another 2.9% of cases noted injection drug use (IDU), and 2.6% indicated both MSM and IDU as their primary risk factor.

Figure 16.

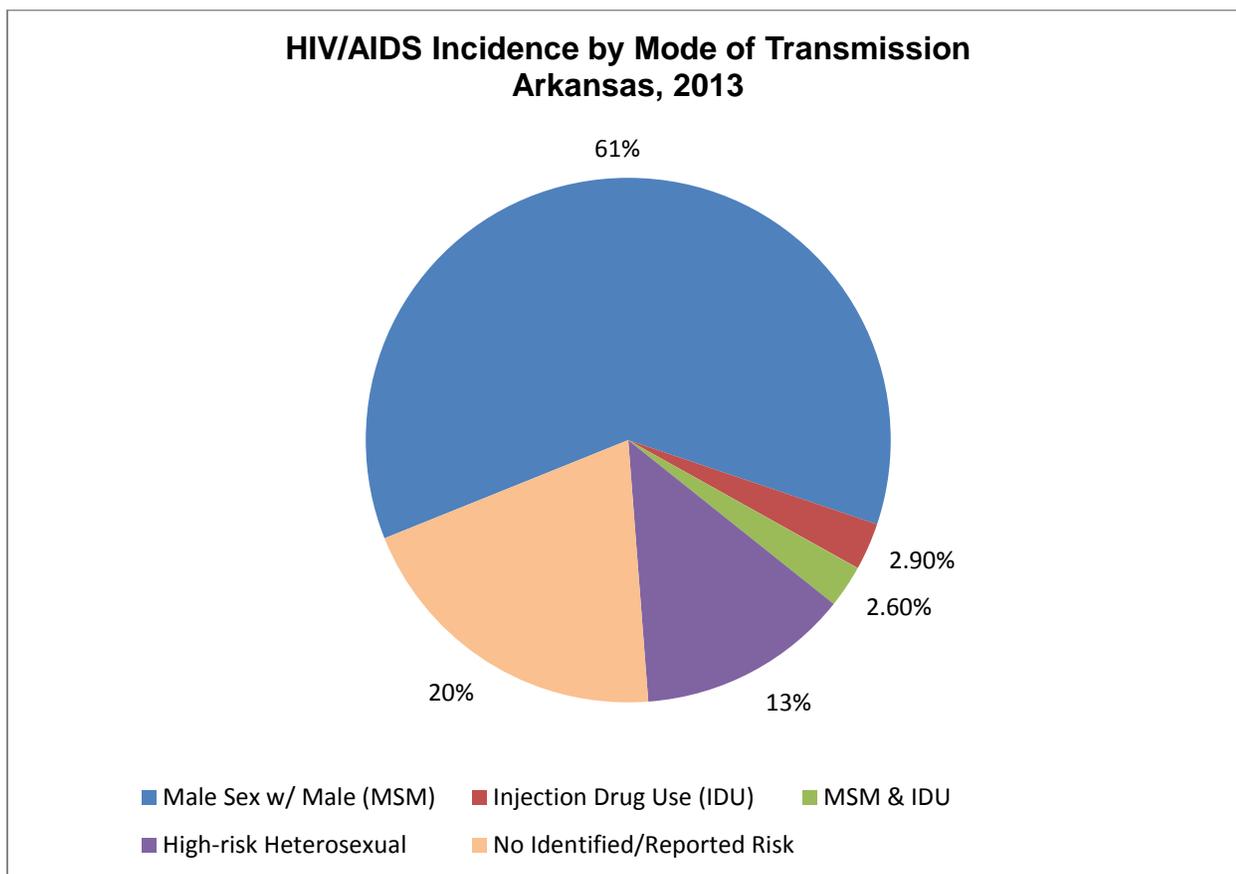


In 2013, 20.3% of newly diagnosed HIV/AIDS cases had no identified risk factors (Figure 16), an increase from 19.5% of cases in 2009. Obtaining risk factor information has become increasingly difficult over the years. This denotes an increased need for provider education on the importance of discussing risk factors with patients at the time of diagnosis.

According to the CDC guidelines, risk factors correspond to the one-year period “before the first positive HIV test or AIDS diagnosis.” The CDC considers risk factor ascertainment a high priority in the collection of surveillance data. Identification of risk factors enables the HIV Prevention Program and community planning bodies to identify target groups and focus their programs and messages accordingly.

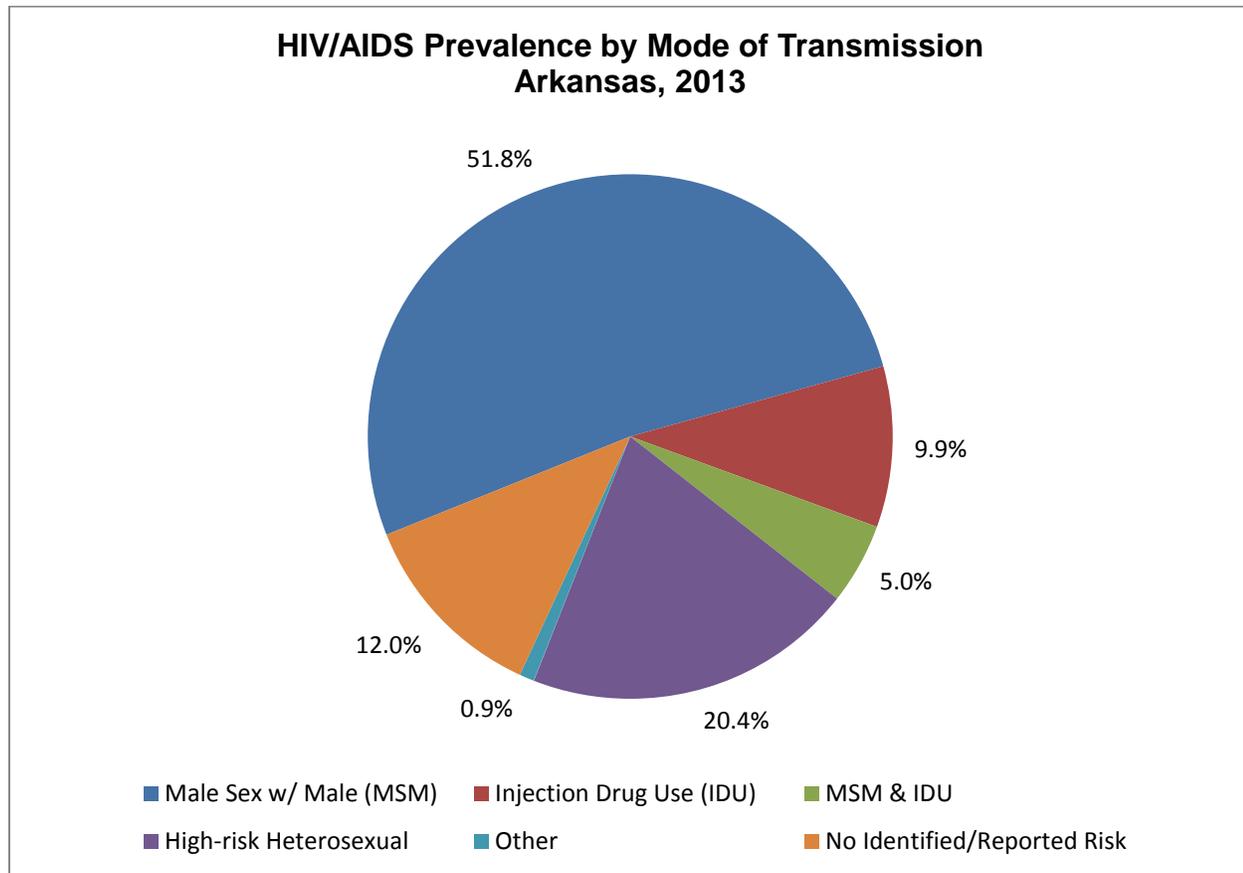
Arkansas has a small percentage of cases attributing risk to intravenous drug use (IDU). This finding is consistent with data collected since the institution of HIV and AIDS case reporting in Arkansas. This is comparable to national statistics, which note that HIV transmission via IDU has decreased substantially since 1993.

Figure 17.



Persons living with HIV/AIDS in 2013 had a higher percentage of identified risks, 88% (Figure 18), when compared to newly diagnosed cases in 2013 with identified risk factors, and 80% (Figure 17). In general, the percentage of cases attributed to each known risk factor was greater in 2013-prevalent cases than in newly diagnosed cases. However, 61% of newly diagnosed cases in 2013 noted MSM (Figure 17), compared to 51.8% of prevalent cases in 2013 (Figure 18). This may indicate that persons diagnosed in recent years are more willing to disclose a risk status of MSM.

Figure 18.



Regional comparisons of exposure categories provide a basis for targeted prevention intervention development in various areas across the state. These data provide several key planning variables such as geographic location and raw case numbers, which provide insight into the type and amount of resources needed in a particular area. Regionally, male-to-male sexual contact continues to be the predominant mode of exposure among persons living with HIV/AIDS in Arkansas. The Central and Northwest Regions had the greatest percentages of cases noting MSM as a risk factor. The Southeast Region had the largest proportion of cases noting injection drug use (IDU) as a risk factor in the state, followed by the Northwest and Southwest Regions. The Southwest Region had the greatest percentage of cases noting high-risk heterosexual contact as their primary risk factor, followed by the Northeast Region (Table 8).

Table 8. HIV/AIDS Prevalence by Exposure Category and Public Health Region, Arkansas, 2013

Exposure Category	Central	Northeast	Northwest	Southeast	Southwest	Unknown	Total
Male Sex w/ Male (MSM)	1271	327	589	296	222	1	2706
Injection Drug Use (IDU)	157	73	127	98	59	1	515
MSM & IDU	101	28	74	31	27	0	261
High-risk Heterosexual	366	196	175	183	147	0	1067
Other	20	6	10	6	6	0	48
No Identified Risk	304	88	92	91	55	0	629
Total	2219	718	1067	704	516	2	5226

** HIV/AIDS Prevalence is defined as the number of persons living with HIV-NA (NA= not AIDS) or AIDS during the period specified.

Data Source: Arkansas eHARS (enhanced HIV/AIDS Reporting System) retrieved January 2, 2015.

Table 9. HIV/AIDS Prevalence by Exposure Category and Public Health Region, Arkansas, 2013

Exposure Category	Central (% in region)	Northeast (% in region)	Northwest (% in region)	Southeast (% in region)	Southwest (% in region)	Unknown	Total Cases
Male Sex w/ Male (MSM)	57.3%	45.5%	55.2%	42.1%	43.0%	50.0%	2706
Injection Drug Use (IDU)	7.1%	10.2%	11.9%	13.9%	11.4%	50.0%	515
MSM & IDU	4.6%	3.9%	6.9%	4.4%	5.2%	0.0%	261
High-risk Heterosexual	16.5%	27.3%	16.4%	26.0%	28.5%	0.0%	1067
Other	0.9%	0.8%	0.9%	0.9%	1.2%	0.0%	48
No Identified Risk	13.7%	12.3%	8.6%	12.8%	10.7%	0.0%	629
Total Cases	2219	718	1067	704	516	2	5226

** HIV/AIDS Prevalence is defined as the number of persons living with HIV-NA (NA= not AIDS) or AIDS during the period specified.

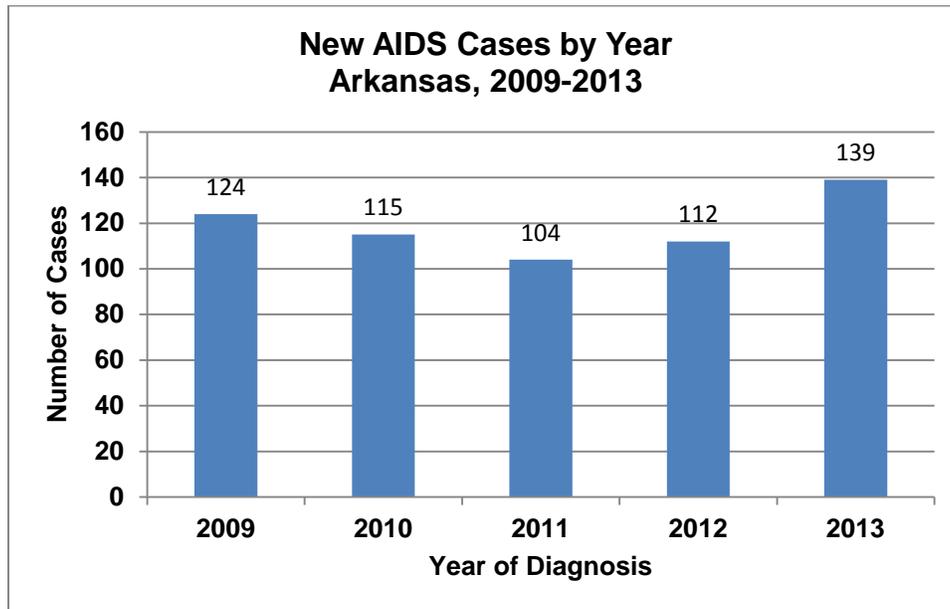
Data Source: Arkansas eHARS (enhanced HIV/AIDS Reporting System) retrieved January 2, 2015.

AIDS TRENDS AND HIV/AIDS MORTALITY

AIDS Trends

Since 2009, there has not been a consistent trend in the number of newly diagnosed cases of AIDS in Arkansas (Figure 19). The number of newly diagnosed AIDS cases decreased from 124 in 2009 to 104 in 2011, then increased to 112 in 2012 and 139 in 2013 (Figure 19).

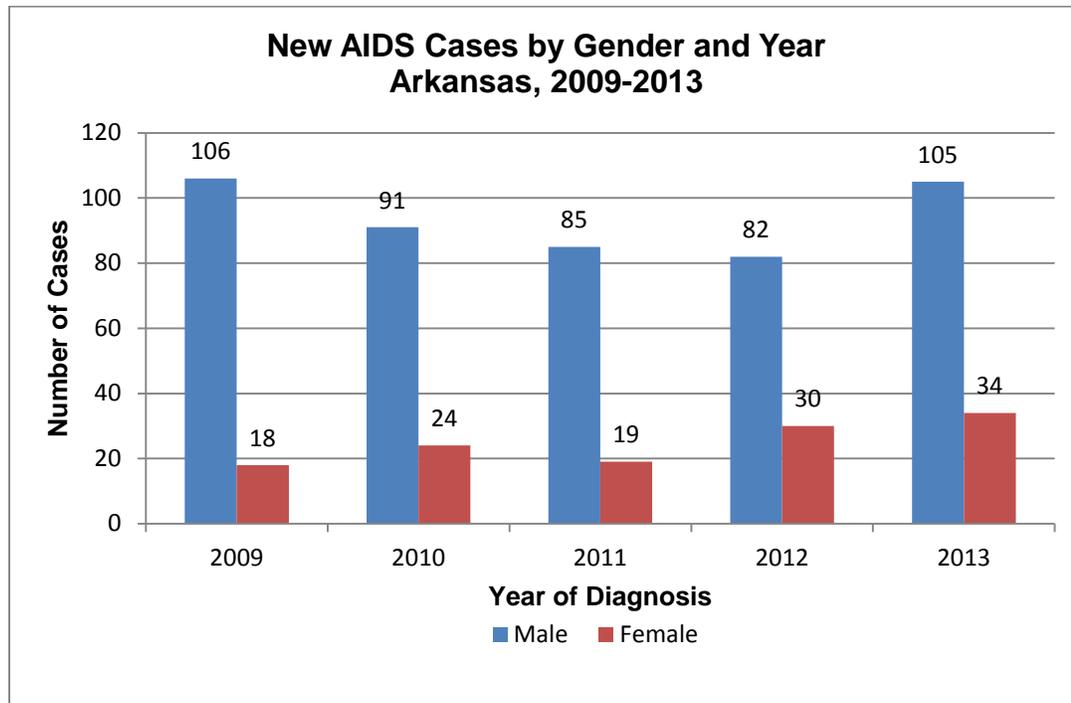
Figure 19.



Males continue to be the gender most impacted by AIDS in Arkansas, as well as nationally. In 2013, there were 105 newly diagnosed AIDS cases among males in Arkansas, less than 1% decrease from the 2009 total of 106. After holding relatively steady from 2009 to 2011, the number of newly diagnosed females with AIDS increased 88.8% in the last 5 years from 18 in 2010 to 34 in 2013 (Figure 20).

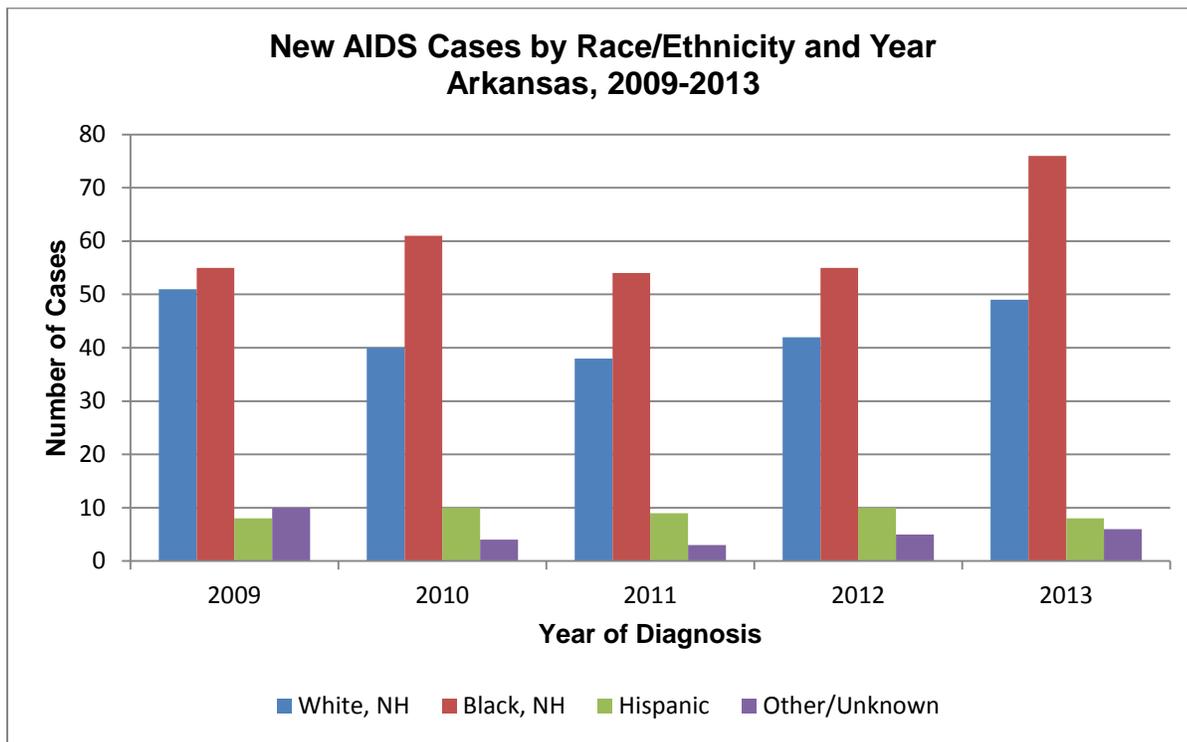
The face of HIV/AIDS is rapidly changing in Arkansas as is the case nationally. Over the past few years, the proportion of cases among minorities has continued to increase. For example, the percentage of newly diagnosed AIDS cases among minorities in 2013 was 64.7%, compared to 58.9% in 2009. This shift towards minorities is also being seen nationally. According to CDC's 2013 HIV in the United States: At a Glance infographic; blacks comprised approximately 12% of the nation's population and accounted for an estimated 44% of the new HIV/AIDS infections in 2010 and Hispanics comprised 16% of the population and accounted for an estimated 21% of new HIV/AIDS infections in 2010. The rate of infection among non-Hispanic blacks is higher than that for any other minority group in Arkansas. From 2009 to 2013, the number of newly diagnosed AIDS cases in non-Hispanic blacks has increased, while the number of newly diagnosed AIDS cases in whites has decreased slightly or remained steady (Figure 21). The number of newly diagnosed AIDS cases in Hispanics has remained steady over the same time period.

Figure 20.



Men made up the majority of newly diagnosed and prevalent AIDS cases at the end of 2013 (Table 10). Minorities (blacks, Hispanics, and “Other”) comprised 64.7% of newly diagnosed AIDS cases in 2013 and represented 50.0% of people living with AIDS in 2013 and made up 25.3% of the whole population. This could indicate disparities in care or in the severity of disease progression at the time of AIDS diagnosis. Among prevalent AIDS cases, the most common ages at the time of diagnosis were 25–34 years and 35–44 years. Newly diagnosed AIDS cases were more evenly distributed among the 25–34, 35–44, and 15–24 year age groups. This could indicate that late diagnoses (with the diagnosis coming well after HIV infection occurred) are still occurring in Arkansas.

Figure 21.



Regionally, the greatest percentages of AIDS cases were located in the Central and Northwest Public Health Regions, home to the major metropolitan areas of the state. The primarily urban Little Rock-North Little Rock-Conway metropolitan statistical area (MSA) continues to have the largest concentration of newly diagnosed and prevalent AIDS cases. This MSA accounted for approximately 43.2% of the newly diagnosed AIDS cases and 37.9% of the prevalent AIDS cases in Arkansas. The Central Region had the highest AIDS prevalence rate (118.1 per 100,000 population) in the State of Arkansas in 2013. The Southeast Region had the second-highest prevalence rate in the state, at 113.6 per 100,000 (Table 10).

Table 10. Characteristics of Persons with AIDS, Arkansas, 2013

	AIDS Incidence*		AIDS Prevalence*	
	N	%	N	%
Gender				
Male	105	75.5%	1840	79.1%
Female	34	24.5%	487	20.9%
Race/ethnicity				
White, non-Hispanic	49	35.3%	1161	49.9%
Black, non-Hispanic	76	54.7%	964	41.4%
Hispanic	8	5.8%	124	5.3%
Other, non-Hispanic	6	4.3%	75	3.2%
Unknown	0	0.0%	3	0.1%
Age Group				
<13	0	0.0%	27	1.2%
13-14	0	0.0%	1	0.0%
15-24	17	12.2%	197	8.5%
25-34	36	25.9%	778	33.4%
35-44	39	28.1%	832	35.8%
45-54	30	21.6%	377	16.2%
55-64	13	9.4%	97	4.2%
65+	4	2.9%	18	0.8%
Unknown	0	0.0%	0	0.0%
Public Health Region				
Central	72	51.8%	970	41.7%
Northeast	15	10.8%	311	13.4%
Northwest	23	16.6%	511	22.0%
Southeast	19	13.7%	299	12.9%
Southwest	10	7.2%	235	10.1%
Unknown	0	0.0%	1	0.0%
Total	139	100.0%	2327	100.0%

* AIDS Incidence is defined as the number of new AIDS cases diagnosed during the period specified.

** AIDS Prevalence is defined as the number of persons living with AIDS during the period specified.

Data Source: Arkansas eHARS (enhanced HIV/AIDS Reporting System) retrieved January 2, 2014.

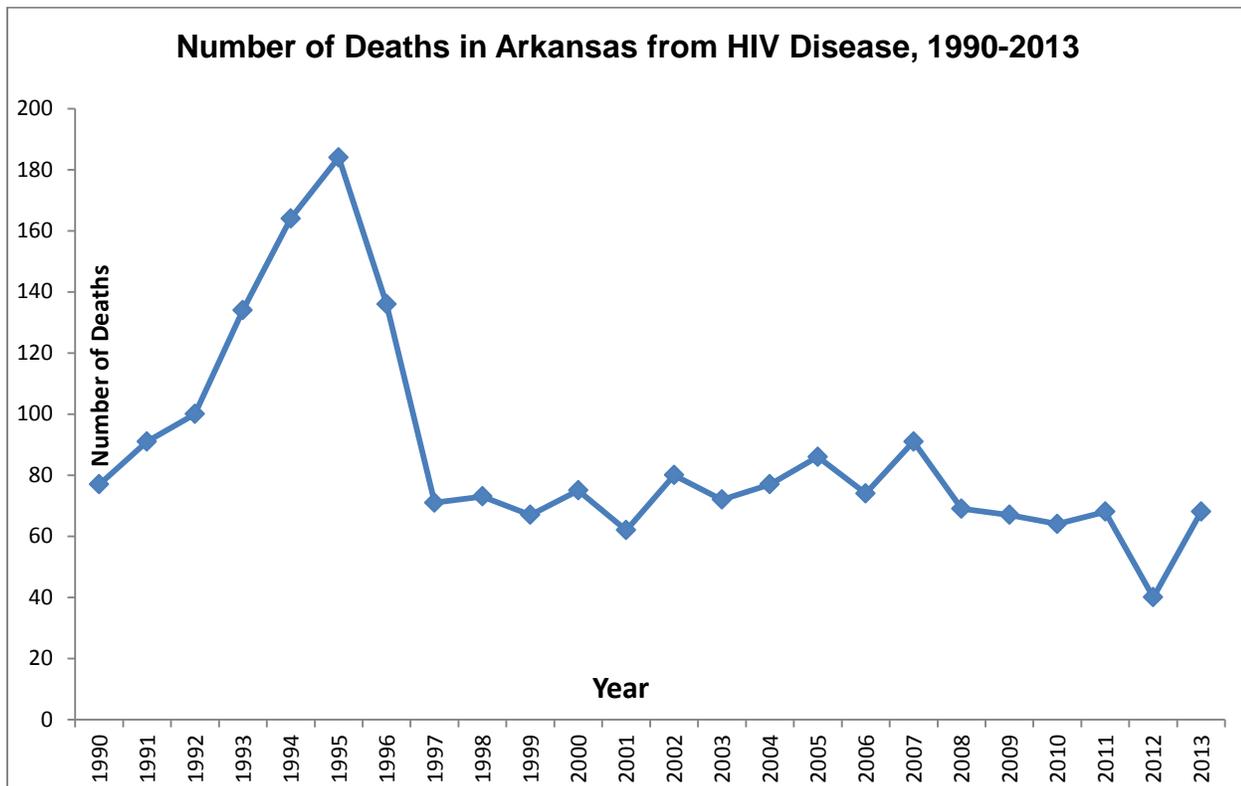
Mortality

The introduction of Highly Active Antiretroviral Therapy (HAART) in 1996 has greatly impacted the life span of persons living with HIV and AIDS. These medications have been extremely effective in the treatment of HIV infection—so much so, that they have altered the natural progression of HIV disease. According to the CDC, studies have shown that patients taking HAART have experienced significant reductions in HIV viral loads, even reductions to undetectable levels. HAART has also aided in decreasing the incidence of opportunistic infections (which are one of the main indicators of HIV infection progressing to AIDS), hospitalizations and deaths.⁷ Arkansas surveillance data reflects the national trend of sharp declines in AIDS-related deaths compared to previous years. AIDS surveillance data no longer accurately represent trends in HIV transmission; rather, AIDS surveillance data now reflect differences in access to testing and treatment, as well as the failure of certain treatments. Consequently, AIDS incidence and deaths since 1996 provide a measure for identifying and describing the populations for whom treatment may not have been accessible, or effective.

HIV/AIDS Mortality

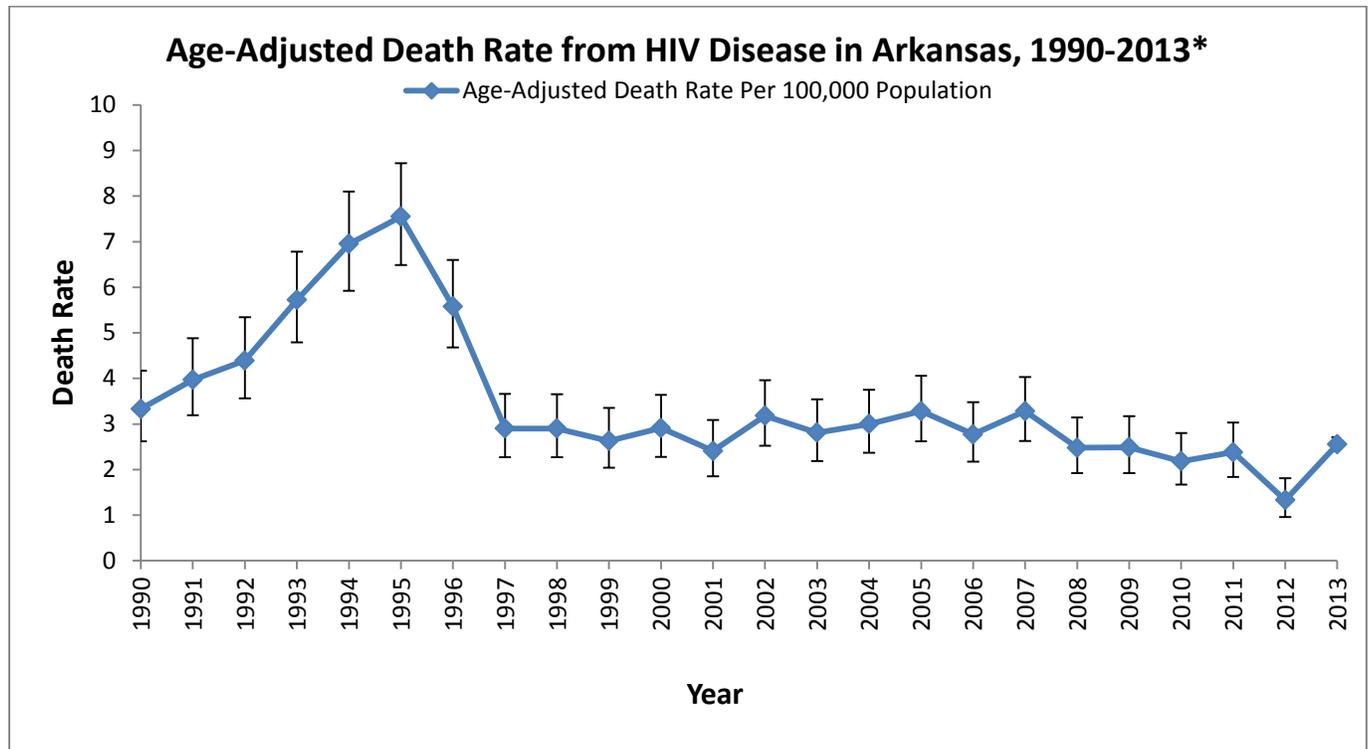
According to causes of death listed on Arkansas death certificates, the number of HIV-related deaths rose sharply from the early to mid-1990s, during the height of the HIV epidemic. From the peak in 1995, HIV-related deaths dropped precipitously with the widespread introduction of HAART in 1996.⁸ Since 1997, annual HIV-related deaths in Arkansas have remained relatively stable (Figure 22), at a rate of 2–4 deaths per 100,000 population (Figure 23). In 2012 the number of HIV-related deaths was the lowest recorded since 1990.

Figure 22.



Source: Department of Health, ICD10 Cause of Death Query, Death Certificates

Figure 23.

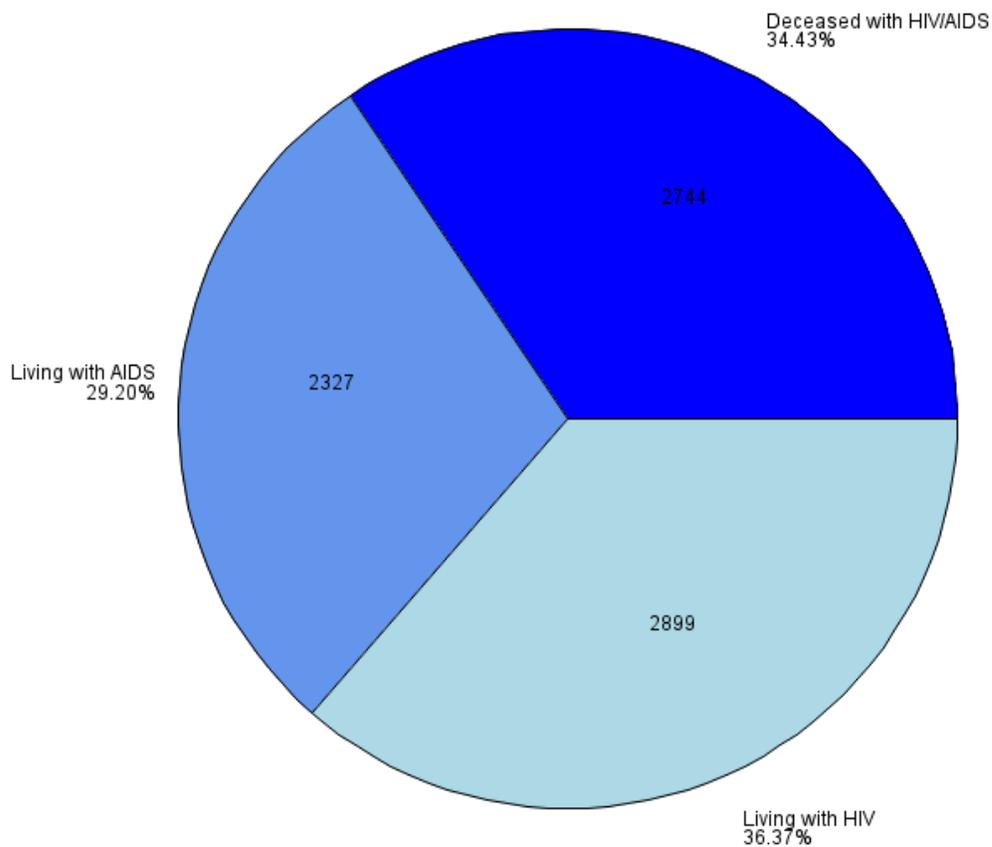


*bars indicates the 95% confidence interval around each point
Source: Department of Health, ICD10 Cause of Death Query, Death Certificates

The number of deaths due to HIV/AIDS in Arkansas continues to decrease. According to the Arkansas HIV/AIDS surveillance system data, 2,744 deaths have been attributed to HIV/AIDS as of December 31, 2013 (Figure 24, Table 11). The majority of persons with HIV/AIDS who have died were men (81.9%); this is consistent with the 79.1% of persons living with AIDS in Arkansas who were men (Table 11). The greatest percentage of deaths occurred among cases with a reported risk of MSM (53.1%). Approximately 56.6% of the deceased cases were white, 40.9% were black, and 1.5% were Hispanic.

Figure 24.

Cumulative Reported HIV/AIDS Cases by Current Status Arkansas, 2013



The Central Region had the greatest percentage of HIV/AIDS-related deaths (39.1%), compared to other regions of the state (Table 10). The Central Region also had the greatest percentage of persons living with AIDS (41.7%) as of December 31, 2013. The number of persons living with AIDS has remained stable across all demographic groups in the state. In 2013, the AIDS prevalence rate was 80.3 per 100,000, compared to 71.9 per 100,000 in 2009.

Table 11. Characteristics of Persons with HIV/AIDS Who Died and Persons Living with HIV/AIDS, Arkansas, 2013

	Deaths among Persons with HIV/AIDS through 2013		Persons Living with AIDS through 2013	
	N	%	N	%
Gender				
Male	2,247	81.9%	1,840	79.1%
Female	497	18.1%	487	20.9%
Race/Ethnicity				
White, non-Hispanic	1,552	56.6%	1,161	49.9%
Black, non-Hispanic	1,122	40.9%	964	41.4%
Hispanic	42	1.5%	124	5.3%
Other, non-Hispanic	27	1.0%	75	3.2%
Unknown	1	0.0%	3	0.1%
Age Group				
<13	19	0.7%	27	1.2%
13-14	4	0.2%	1	0.0%
15-24	230	8.4%	197	8.5%
25-34	962	35.1%	778	33.4%
35-44	891	32.5%	832	35.8%
45-54	408	14.9%	377	16.2%
55-64	163	5.9%	97	4.2%
65+	67	2.4%	18	0.8%
Unknown	0	0.0%	0	0.0%
Exposure Category				
Male Sex w/ Male (MSM)	1,458	53.1%	1,255	53.9%
Injection Drug Use (IDU)	393	14.3%	252	10.8%
MSM & IDU	225	8.2%	131	5.6%
High-risk Heterosexual	483	17.6%	470	20.2%
Other	69	2.5%	31	1.3%
No Identified Risk	116	4.2%	188	8.1%
Public Health Region				
Central	1,074	39.1%	970	41.7%
Northeast	401	14.6%	311	13.4%
Northwest	577	21.0%	511	22.0%
Southeast	373	13.6%	299	12.9%
Southwest	314	11.4%	235	10.1%
Unknown	5	0.2%	1	0.0%
Total	2,744	100.0%	2,327	100.0%

Data Source: Arkansas eHARS (enhanced HIV/AIDS Reporting System) retrieved January 2, 2014.

REGIONAL PROFILES

CENTRAL REGION	
Counties in Central Region	Faulkner, Garland, Grant, Lonoke, Perry, Pulaski, Saline
2013 Estimated Population of Central Region	821,400
Prevalent HIV/AIDS Presumed Living in Central Region	2,219

Regional Information

The Central Region is located in the geographic center the state and includes seven counties as well as the state capital, Little Rock. This is geographically the smallest region in the state. Non-Hispanic whites make up 71.4% of the region’s population, non-Hispanic blacks 21.4%, Hispanics 5.0%, Asian or Pacific Islanders 1.7%, and less than 1% of the population is Native American. The Central Region contains the highest and the sixth-highest counties, by total population density.

Newly Diagnosed HIV/AIDS, 2009–2013

In the Central Region, there were 685 newly diagnosed HIV/AIDS cases between 2009 and 2013 (Table 12). The majority of the cases were males (83.9%). The infection rate for this region during this time was 17 per 100,000 per year, the highest in the state. During this time period, blacks made up the majority of the newly diagnosed HIV/AIDS cases (56.2%), followed by whites (34.7%), Hispanics (5.4%), unknown race/ethnicity (0.9%), and other races (2.8%). Approximately 30.4% of the newly diagnosed cases between 2009 and 2013 were between the ages of 25 and 34 years old. This region also had a large percentage of cases reported among youth and young adults aged 15 to 24 (26.1%). Male-to-male sexual contact (MSM) was the primary known risk factor (62.9%). Less common primary risk factors were heterosexual contact (8.6% of cases), injection drug use (IDU) (1.8%), and MSM & IDU (1.2%). At the time of reporting, 25.4% of cases had no identified risk factors reported.

Table 12. Central Public Health Region — HIV/AIDS Incidence and Prevalence as of December 31, 2013

	HIV Incidence 2009-2013		AIDS Incidence 2009-2013		HIV/AIDS Incidence 2009-2013		HIV Prevalence as of Dec. 2013		AIDS Prevalence as of Dec. 2013		HIV/AIDS Prevalence as of Dec. 2013	
	N	%	N	%	N	%	N	%	N	%	N	%
Gender												
Male	365	84.7	210	82.7	575	83.9	1,013	81.1	792	81.7	1,805	81.3
Female	66	15.3	44	17.3	110	16.1	236	18.9	178	18.4	414	18.7
Age Group												
<13	0	0.0	1	0.4	1	0.2	7	0.6	14	1.4	21	1.0
13-14	1	0.2	0	0.0	1	0.2	4	0.3	0	0.0	4	0.2
15-24	142	33.0	37	14.6	179	26.1	322	25.8	97	10.0	419	18.9
25-34	135	31.3	73	28.7	208	30.4	444	35.6	303	31.2	747	33.7
35-44	87	20.2	59	23.2	146	21.3	300	24.0	341	35.2	641	28.9
45-54	47	10.9	52	20.5	99	14.5	130	10.4	164	16.9	294	13.3
55-64	17	3.9	25	9.8	42	6.1	34	2.7	42	4.3	76	3.4
65+	2	0.5	7	2.8	9	1.3	7	0.6	9	0.9	16	0.7
Unknown	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	1	0.1
Race/Ethnicity												
White, non-Hispanic	163	37.8	75	29.5	238	34.7	553	44.3	437	45.1	990	44.6
Black, non-Hispanic	230	53.4	155	61.0	385	56.2	601	48.1	451	46.5	1,052	47.4
Hispanic	23	5.3	14	5.5	37	5.4	43	3.4	42	4.3	85	3.8
Other, non-Hispanic	9	2.1	10	3.9	19	2.8	29	2.3	39	4.0	68	3.1
Unknown	6	1.4	0	0.0	6	0.9	23	1.8	1	0.1	24	1.1
Exposure Category												
Male Sex w/ Male (MSM)	284	65.9	147	57.9	431	62.9	696	55.7	575	59.3	1,271	57.3
Injection Drug Use (IDU)	5	1.2	7	2.8	12	1.8	75	6.0	82	8.5	157	7.1
MSM & IDU	3	0.7	5	2.0	8	1.2	50	4.0	51	5.3	101	4.6
High-risk Heterosexual	28	6.5	31	12.2	59	8.6	209	16.7	157	16.2	366	16.5
Other	0	0.0	1	0.4	1	0.2	7	0.6	13	1.3	20	0.9
No Identified Risk	111	25.8	63	24.8	174	25.4	212	17.0	92	9.5	304	13.7
Total	431	100.0	254	100.0	685	100.0	1,249	100.0	970	100.0	2,219	100.0

Note: Due to rounding, percentages may not add to 100.

Data Source: Arkansas eHARS (enhanced HIV/AIDS Reporting System) retrieved January 2, 2015.

NORTHEAST REGION	
Counties in Northeast Region	Cleburne, Clay, Craighead, Crittenden, Cross, Fulton, IZard, Greene, Independence, Jackson, Lawrence, Mississippi, Poinsett, Randolph, Sharp, Stone, White, Woodruff
2013 Estimated Population of Northeast Region	551,994
Prevalent HIV/AIDS Presumed Living in Northeast Region	718

Regional Information

The Northeast Region, which borders the state of Tennessee, makes up part of the Memphis Transitional Grant Area (TGA). It consists of 18 counties, including the Jonesboro area where Arkansas State University is located. This region has the largest percentage of Non-Hispanic whites (82.3%) in the state. Non-Hispanic blacks and Hispanics comprise 13.3% and 3.3% of this region's population respectively followed by Asians and Native Americans making up 1.1%.

Newly Diagnosed HIV/AIDS, 2009–2013

Between 2009 and 2013, the Northeast Region had a total of 207 newly diagnosed HIV/AIDS cases (Table 13). The HIV infection rate for the Northeast Region was 7.5 per 100,000 per year. Males made up the majority (71.5%) of newly diagnosed HIV cases. Blacks made up the largest percentage of newly diagnosed HIV cases (54.1%), followed by whites (36.7%) and Hispanics (7.3%). Cases occurred most commonly in the 25-34 age group (25.6%), followed by the 15-24 age group (24.6%) and the 45-54 age group (23.2%). Notably, 21.7% of all newly diagnosed HIV/AIDS cases occurred in 35-44-year olds. The most commonly reported primary risk was male-to-male sexual contact (MSM) (49.8%), followed by high-risk heterosexual contact (19.3%), injection drug use (IDU) (6.8%), and MSM & IDU (3.9%). The remaining 20.3% had no identified risk factors reported.

Table 13. Northeast Public Health Region — HIV/AIDS Incidence and Prevalence as of December 31, 2013

	HIV Incidence 2009-2013		AIDS Incidence 2009-2013		HIV/AIDS Incidence 2009-2013		HIV Prevalence as of Dec. 2013		AIDS Prevalence as of Dec. 2013		HIV/AIDS Prevalence as of Dec. 2013	
	N	%	N	%	N	%	N	%	N	%	N	%
Gender												
Male	82	70.7	66	72.5	148	71.5	249	61.2	231	74.3	480	66.9
Female	34	29.3	25	27.5	59	28.5	158	38.8	80	25.7	238	33.2
Age Group												
<13	1	0.9	0	0.0	1	0.5	3	0.7	2	0.6	5	0.7
13-14	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	1	0.1
15-24	39	33.6	12	13.2	51	24.6	119	29.2	30	9.7	149	20.8
25-34	36	31.0	17	18.7	53	25.6	140	34.4	92	29.6	232	32.3
35-44	19	16.4	26	28.6	45	21.7	96	23.6	107	34.4	203	28.3
45-54	17	14.7	31	34.1	48	23.2	42	10.3	63	20.3	105	14.6
55-64	1	0.9	5	5.5	6	2.9	6	1.5	14	4.5	20	2.8
65+	3	2.6	0	0.0	3	1.5	1	0.3	2	0.6	3	0.4
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Race/Ethnicity												
White, non-Hispanic	42	36.2	34	37.4	76	36.7	187	46.0	164	52.7	351	48.9
Black, non-Hispanic	62	53.5	50	55.0	112	54.1	196	48.2	128	41.2	324	45.1
Hispanic	10	8.6	5	5.5	15	7.3	17	4.2	12	3.9	29	4.0
Other, non-Hispanic	1	0.9	2	2.2	3	1.5	4	1.0	7	2.3	11	1.5
Unknown	1	0.9	0	0.0	1	0.5	3	0.7	0	0.0	3	0.4
Exposure Category												
Male Sex w/ Male (MSM)	58	50.0	45	49.5	103	49.8	169	41.5	158	50.8	327	45.5
Injection Drug Use (IDU)	10	8.6	4	4.4	14	6.8	47	11.6	26	8.4	73	10.2
MSM & IDU	4	3.5	4	4.4	8	3.9	15	3.7	13	4.2	28	3.9
High-risk Heterosexual	18	15.5	22	24.2	40	19.3	113	27.8	83	26.7	196	27.3
Other	0	0.0	0	0.0	0	0.0	2	0.5	4	1.3	6	0.8
No Identified Risk	26	22.4	16	17.6	42	20.3	61	15.0	27	8.7	88	12.3
Total	116	100.0	91	100.0	207	100.0	407	100.0	311	100.0	718	100.0

Note: Due to rounding, percentages may not add to 100. NA= not AIDS

Data Source: Arkansas eHARS (enhanced HIV/AIDS Reporting System) retrieved January 2, 2015

NORTHWEST REGION	
Counties in Northwest Region	Baxter, Benton, Boone, Carroll, Conway, Crawford, Franklin, Johnson, Logan, Madison, Marion, Newton, Pope, Searcy, Sebastian, Scott, Van Buren, Washington, Yell
2013 Estimated Population of Northwest Region	996,698
Prevalent HIV/AIDS Presumed Living in Northwest Region	1,067

Regional Information

The Northwest Region which borders Oklahoma on the west and Missouri to the north is comprised of 19 counties, and includes the Fort Smith, Fayetteville-Springdale-Rogers, and Bentonville metropolitan areas. Also located in this region are the University of Arkansas and the headquarters for Wal-Mart, J. B. Hunt, and Tyson. This region is arguably the most economically advantaged area of the state. Non-Hispanic whites account for 80.9% of the population, non-Hispanic blacks 3.0%, Hispanics 11.7%, Asians 3.0%, and Native Americans 1.4%. This region holds the largest percentage of Hispanics in the state; and many Marshallese have made the Northwest their home.

Newly Diagnosed HIV/AIDS, 2009–2013

The Northwest Region had a total of 260 newly diagnosed HIV/AIDS cases between 2009 and 2013 (Table 14). Of these, 79.6% were male and 20.4% were female. The rate of infection during this period was 5.3 per 100,000 per year. Most newly diagnosed cases in this region were white (70.0%), while 10.8% were black and 15.0% were Hispanic. The major age groups impacted were the 35-44 age group (31.2%), followed by the 25-34 age group (28.9%) and the 45-54 age group (17.7%). The primary risk factor reported was male-to-male sexual contact (MSM) (59.2%), followed by high-risk heterosexual contact (10.4%). Less common risk factors were injection drug use (IDU) (6.2%) and MSM & IDU (4.2%). The remaining 20.0% had no identified risk factors reported.

Table 14. Northwest Public Health Region — HIV/AIDS Incidence and Prevalence as of December 31, 2013

	HIV Incidence 2009-2013		AIDS Incidence 2009-2013		HIV/AIDS Incidence 2009-2013		HIV Prevalence as of Dec. 2013		AIDS Prevalence as of Dec. 2013		HIV/AIDS Prevalence as of Dec. 2013	
	N	%	N	%	N	%	N	%	N	%	N	%
Gender												
Male	108	79.4	99	79.8	207	79.6	427	76.8	420	82.2	847	79.4
Female	28	20.6	25	20.2	53	20.4	129	23.2	91	17.8	220	20.6
Age Group												
<13	2	1.5	0	0.0	2	0.8	4	0.7	4	0.8	8	0.8
13-14	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	1	0.1
15-24	32	23.5	3	2.4	35	13.5	103	18.5	24	4.7	127	11.9
25-34	41	30.2	34	27.4	75	28.9	208	37.4	178	34.8	386	36.2
35-44	32	23.5	49	39.5	81	31.2	148	26.6	204	39.9	352	33.0
45-54	18	13.2	28	22.6	46	17.7	67	12.1	81	15.9	148	13.9
55-64	9	6.6	8	6.5	17	6.5	21	3.8	18	3.5	39	3.7
65+	2	1.5	2	1.6	4	1.5	4	0.7	2	0.4	6	0.6
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Race/Ethnicity												
White, non-Hispanic	94	69.1	88	71.0	182	70.0	430	77.3	404	79.1	834	78.2
Black, non-Hispanic	20	14.7	8	6.5	28	10.8	59	10.6	37	7.2	96	9.0
Hispanic	18	13.2	21	16.9	39	15.0	54	9.7	54	10.6	108	10.1
Other, non-Hispanic	4	2.9	7	5.7	11	4.2	11	2.0	15	2.9	26	2.4
Unknown	0	0.0	0	0.0	0	0.0	2	0.4	1	0.2	3	0.3
Exposure Category												
Male Sex w/ Male (MSM)	82	60.3	72	58.1	154	59.2	293	52.7	296	57.9	589	55.2
Injection Drug Use (IDU)	7	5.2	9	7.3	16	6.2	63	11.3	64	12.5	127	11.9
MSM & IDU	7	5.2	4	3.2	11	4.2	38	6.8	36	7.1	74	6.9
High-risk	14	10.3	13	10.5	27	10.4	91	16.4	84	16.4	175	16.4
Other	0	0.0	0	0.0	0	0.0	5	0.9	5	1.0	10	0.9
No Identified Risk	26	19.1	26	21.0	52	20.0	66	11.9	26	5.1	92	8.6
Total	136	100.0	124	100.0	260	100.0	556	100.0	511	100.0	1,067	100.0

Note: Due to rounding, percentages may not add to 100.

Data Source: Arkansas eHARS (enhanced HIV/AIDS Reporting System) retrieved January 2, 2015

SOUTHEAST REGION	
Counties in Southeast Region	Arkansas, Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson, Lee, Lincoln, Monroe, Phillips, Prairie, St. Francis
2012 Estimated Population of Southeast Region	263,307
Prevalent HIV/AIDS Presumed Living in Southeast Region	704

Regional Information

The Southeast Region includes 14 counties. This region is dominated by the most economically deprived area of the state, known as the Mississippi Delta. It has the largest percentage of Non-Hispanic blacks in the state, at 43.1%. Non-Hispanic whites account for 52.6% of the population, Hispanics 3.4%, and Native Americans and Asians less than 1%.

Newly Diagnosed HIV/AIDS, 2009–2013

There were 173 newly diagnosed HIV/AIDS cases between 2009 and 2013 in the Southeast Region (Table 15). The average rate of infection was 12.8 per 100,000 per year over the five-year period. Of these, 73.4% were male and 26.6% were female. The percentage of cases by race/ethnicity were as follows: 75.7% black, 13.3% white, and 5.8% Hispanic. Almost a third of newly diagnosed cases were aged 25-34, compared to 22.5% of cases aged 35 to 44, the next most common age group. Notably, over 1 in 5 cases occurred in the 15-24 age group (20.2%). Male-to-male sexual contact (MSM) was the most commonly reported risk factor (46.2%), followed by high-risk heterosexual contact (13.3%) and injection drug use (IDU) (11.0%), and MSM & IDU (2.3%). The remaining 26.6% of cases had no identified risk factors reported.

Table 15. Southeast Public Health Region — HIV/AIDS Incidence and Prevalence as of December 31, 2013

	HIV Incidence 2009-2013		AIDS Incidence 2009-2013		HIV/AIDS Incidence 2009-2013		HIV Prevalence as of Dec. 2013		AIDS Prevalence as of Dec. 2013		HIV/AIDS Prevalence as of Dec. 2013	
	N	%	N	%	N	%	N	%	N	%	N	%
Gender												
Male	73	76.0	54	70.1	127	73.4	292	72.1	226	75.6	518	73.6
Female	23	24.0	23	29.9	46	26.6	113	27.9	73	24.4	186	26.4
Age Group												
<13	0	0.0	0	0.0	0	0.0	1	0.3	3	1.0	4	0.6
13-14	0	0.0	0	0.0	0	0.0	3	0.7	0	0.0	3	0.4
15-24	25	26.0	10	13.0	35	20.2	114	28.2	31	10.4	145	20.6
25-34	33	34.4	25	32.5	58	33.5	133	32.8	117	39.1	250	35.5
35-44	19	19.8	20	26.0	39	22.5	98	24.2	105	35.1	203	28.8
45-54	11	11.5	14	18.2	25	14.5	44	10.9	31	10.4	75	10.7
55-64	8	8.3	7	9.1	15	8.7	9	2.2	10	3.3	19	2.7
65+	0	0.0	1	1.3	1	0.6	3	0.7	2	0.7	5	0.7
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Race/Ethnicity												
White, non-Hispanic	16	16.7	7	9.1	23	13.3	81	20.0	60	20.1	141	20.0
Black, non-Hispanic	73	76.0	58	75.3	131	75.7	291	71.9	220	73.6	511	72.6
Hispanic	6	6.3	4	5.2	10	5.8	17	4.2	7	2.3	24	3.4
Other, non-Hispanic	1	1.0	8	10.4	9	5.2	10	2.5	11	3.7	21	3.0
Unknown	0	0.0	0	0.0	0	0.0	6	1.5	1	0.3	7	1.0
Exposure Category												
Male Sex w/ Male (MSM)	50	52.1	30	39.0	80	46.2	172	42.5	124	41.5	296	42.1
Injection Drug Use (IDU)	5	5.2	14	18.2	19	11.0	50	12.4	48	16.1	98	13.9
MSM & IDU	2	2.1	2	2.6	4	2.3	13	3.2	18	6.0	31	4.4
High-risk Heterosexual	10	10.4	13	16.9	23	13.3	101	24.9	82	27.4	183	26.0
Other	0	0.0	1	1.3	1	0.6	2	0.5	4	1.3	6	0.9
No Identified Risk	29	30.2	17	22.1	46	26.6	67	16.5	23	7.7	90	12.8
Total	96	100.0	77	100.0	173	100.0	405	100.0	299	100.0	704	100.0

Note: Due to rounding, percentages may not add to 100.

Data Source: Arkansas eHARS (enhanced HIV/AIDS Reporting System) retrieved January 2, 2015.

SOUTHWEST REGION	
Counties in Southwest Region	Calhoun, Clark, Columbia, Dallas, Hempstead, Howard, Hot Spring, Lafayette, Little River, Miller, Montgomery, Nevada, Ouachita, Pike, Polk, Sevier, Union
2012 Estimated Population of Southwest Region	325,366
Prevalent HIV/AIDS Presumed Living in Southwest Region	516

Regional Information

The Southwest Region consists of 17 counties in the lower portion of the state bordering Oklahoma, Texas and Louisiana. Included in this area is the bi-state city of Texarkana. Non-Hispanic whites account for 69.4% of the population, non-Hispanic blacks 23.4%, Hispanics 5.9%, and Asians and Native Americans 1.3%.

Newly Diagnosed HIV/AIDS, 2009–2013

There were 123 newly diagnosed HIV/AIDS cases in the Southwest Region between 2009 and 2013 (table 16). Of these, 85.4% were male and 14.6% were female. The average rate of infection in the Southwest Region was 7.5 per 100,000 per year. Most newly diagnosed cases occurred in blacks (64.2%), followed by whites (28.5%) and Hispanics (4.9%). The most common age group reported was 15 to 24-year-olds (34.2%), followed by the 25-34 age group (24.4%) and the 35-44 age group (16.3%). 61.8% of the cases noted male-to-male sexual contact (MSM) as their primary risk factor. Less commonly reported risk factors were high-risk heterosexual contact (12.2%), injection drug use (IDU) (4.1%), and MSM & IDU (6.5%). The remaining 15.5% of cases had no identified risk factors reported.

Table 16. Southwest Public Health Region — HIV/AIDS Incidence and Prevalence as of December 31, 2013

	HIV Incidence 2009-2013		AIDS Incidence 2009-2013		HIV/AIDS Incidence 2009-2013		HIV Prevalence as of Dec. 2013		AIDS Prevalence as of Dec. 2013		HIV/AIDS Prevalence as of Dec. 2013	
	N	%	N	%	N	%	N	%	N	%	N	%
Gender												
Male	66	86.8	39	83.0	105	85.4	191	68.0	171	72.8	362	70.2
Female	10	13.2	8	17.0	18	14.6	90	32.0	64	27.2	154	29.8
Age Group												
<13	0	0.0	0	0.0	0	0.0	1	0.4	4	1.7	5	1.0
13-14	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15-24	38	50.0	4	8.5	42	34.2	88	31.3	15	6.4	103	20.0
25-34	21	27.6	9	19.2	30	24.4	89	31.7	87	37.0	176	34.1
35-44	7	9.2	13	27.7	20	16.3	67	23.8	75	31.9	142	27.5
45-54	4	5.3	15	31.9	19	15.5	21	7.5	38	16.2	59	11.4
55-64	5	6.6	6	12.8	11	8.9	11	3.9	13	5.5	24	4.7
65+	1	1.3	0	0.0	1	0.8	4	1.4	3	1.3	7	1.4
Unknown	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Race/Ethnicity												
White, non-Hispanic	19	25.0	16	34.0	35	28.5	100	35.6	95	40.4	195	37.8
Black, non-Hispanic	50	65.8	29	61.7	79	64.2	159	56.6	128	54.5	287	55.6
Hispanic	5	6.6	1	2.1	6	4.9	9	3.2	9	3.8	18	3.5
Other, non-Hispanic	1	1.3	1	2.1	2	1.6	4	1.4	3	1.3	7	1.4
Unknown	1	1.3	0	0.0	1	0.8	9	3.2	0	0.0	9	1.7
Exposure Category												
Male Sex w/ Male (MSM)	52	68.4	24	51.1	76	61.8	120	42.7	102	43.4	222	43.0
Injection Drug Use (IDU)	1	1.3	4	8.5	5	4.1	28	10.0	31	13.2	59	11.4
MSM & IDU	5	6.6	3	6.4	8	6.5	14	5.0	13	5.5	27	5.2
High-risk Heterosexual	9	11.8	6	12.8	15	12.2	83	29.5	64	27.2	147	28.5
Other	0	0.0	0	0.0	0	0.0	1	0.4	5	2.1	6	1.2
No Identified Risk	9	11.8	10	21.3	19	15.5	35	12.5	20	8.5	55	10.7
Total	76	100.0	47	100.0	123	100.0	281	100.0	235	100.0	516	100.0

Note: Due to rounding, percentages may not add to 100.

Data Source: Arkansas eHARS (enhanced HIV/AIDS Reporting System) retrieved January 2, 2015.

Question 3

What are the indicators of risk for HIV/AIDS infection in Arkansas?

The persons most likely to become infected with HIV are those who engage in high-risk behaviors and those who live in communities with a high prevalence of HIV. In an effort to assist our stakeholders with understanding the differing risks for HIV infection in Arkansas, this section examines the trends and characteristics of three high-risk populations: men who have sex with men (MSM), injection drug users (IDU), and heterosexual adults.

This section examines direct and indirect measures of risk behavior in the groups most at risk of acquiring HIV infection. Direct measures provide information about risk behavior that is directly associated with HIV transmission. Indirect measures do not directly describe HIV risk behaviors; but instead provide indicators of possible HIV risk that may need further investigation. For example, an increase in STD rates does not directly indicate that HIV exposure is increasing, but indicates an increase in unprotected sex, which increases the risk of HIV exposure.

HIGHLIGHTS

- Since 2009, the number of syphilis cases in Arkansas has decreased by 42.6%.
- From 2009–2013, the proportion of early syphilis cases in MSM that were co-infected with HIV increased from 38.7% to 50.7%.
- The gonorrhea incidence rate in Arkansas was 134.2 per 100,000 persons in 2013.
- Primary and secondary syphilis incidence rates have declined since 2009, from 10.5 to 5.9 per 100,000 persons.

MEN WHO HAVE SEX WITH MEN (MSM)

Direct Measures of Risk Behavior

According to the CDC, MSM accounted for 63% of new HIV infections in the U.S. in 2010 and 52% of persons living with HIV nationally in 2009.⁹ In Arkansas as well as nationally, male-to-male sexual contact (MSM) has historically been the most commonly reported risk behavior among newly diagnosed cases of HIV/AIDS. In 2013, 63.6% of newly diagnosed HIV/AIDS cases in Arkansas and 56.8% of persons living with HIV/AIDS in Arkansas had MSM or MSM & IDU as their primary risk factor (Figure 16 and Table 8, respectively).

Youth reporting a risk factor of MSM engage in behaviors that increase the risk of HIV infection, according to the latest Youth Risk Behavior Survey (YRBS). Among high school students who reported any sexual contact in 2009–2011, MSM were significantly more likely than other males to have had four or more sexual partners (39.4% vs. 26.9%) and to have ever injected any illegal drug (20.4% vs. 2.9%), but were less likely to report having ever been taught in school about AIDS or HIV (74.6% vs. 86.3%).¹⁰

Indirect Measures of Risk Behavior

The prevalence of sexually transmitted infections in populations is often used as an indicator of high-risk behavior. Between 2009 and 2013, there was a 42.6% decrease in the total number of early syphilis cases in Arkansas (Figure 26). However, at the same time there were no changes in the number of syphilis cases with risk factors of MSM or MSM & IDU (Figure 27).

From 2009–2013, the number of syphilis cases co-infected with HIV (having a previous HIV diagnosis or an HIV diagnosis up to a year after the syphilis diagnosis) increased by 28.1% (Figure 26), and the co-infected cases in MSM with syphilis increased by 31% (Figure 27). In each year during this period, 38.7% to 55.9% of syphilis cases in MSM were co-infected with HIV. In all years, the vast majority of co-infected syphilis-HIV cases (89.7% to 96.2%) were in MSM.

According to the CDC, MSM accounted for 75% of all primary and secondary syphilis in 32 states and the District of Columbia. Since the advent of highly active antiretroviral therapy (HAART), an unintended shift in attitude regarding the severity of becoming HIV-infected has occurred. Researchers have found a sense of complacency among MSM regarding the possibility of acquiring the virus. Researchers noted some of the following reasons for an increase in unprotected sexual activity among MSM: optimism about improved HIV treatment, recreational substance abuse, complex sexual decision making, and increased use of the internet to seek sexual partners¹¹.

Figure 26.

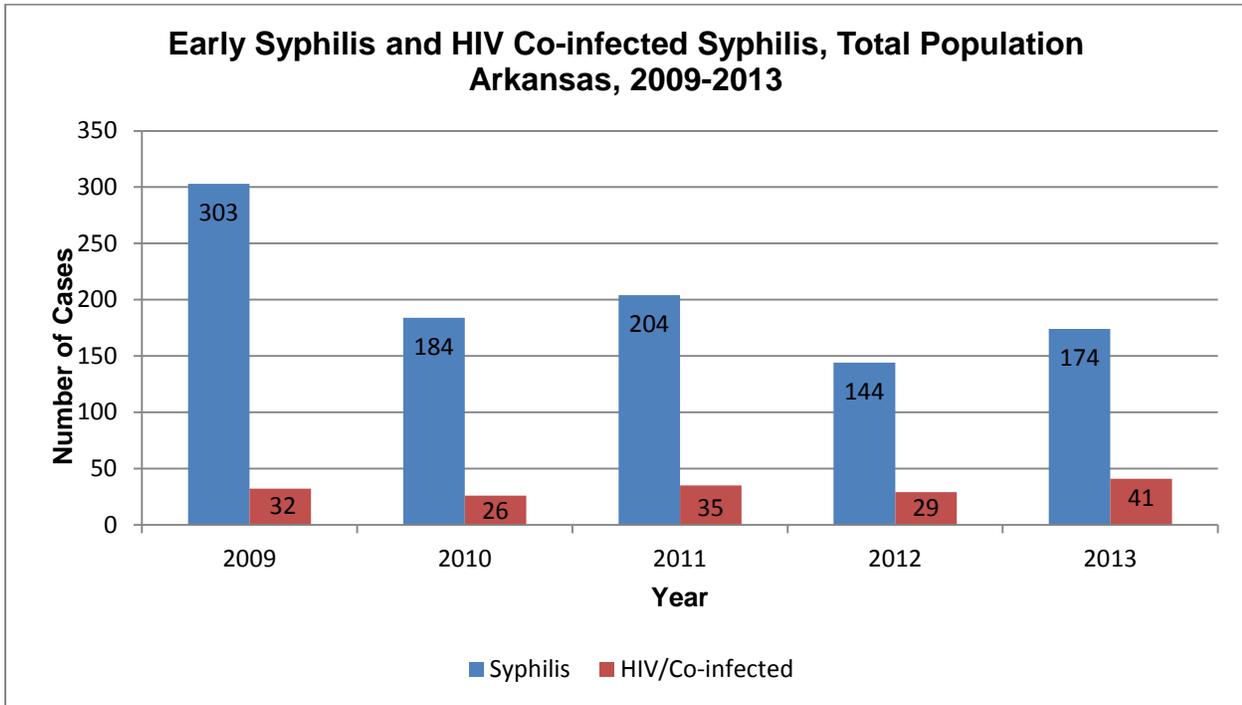
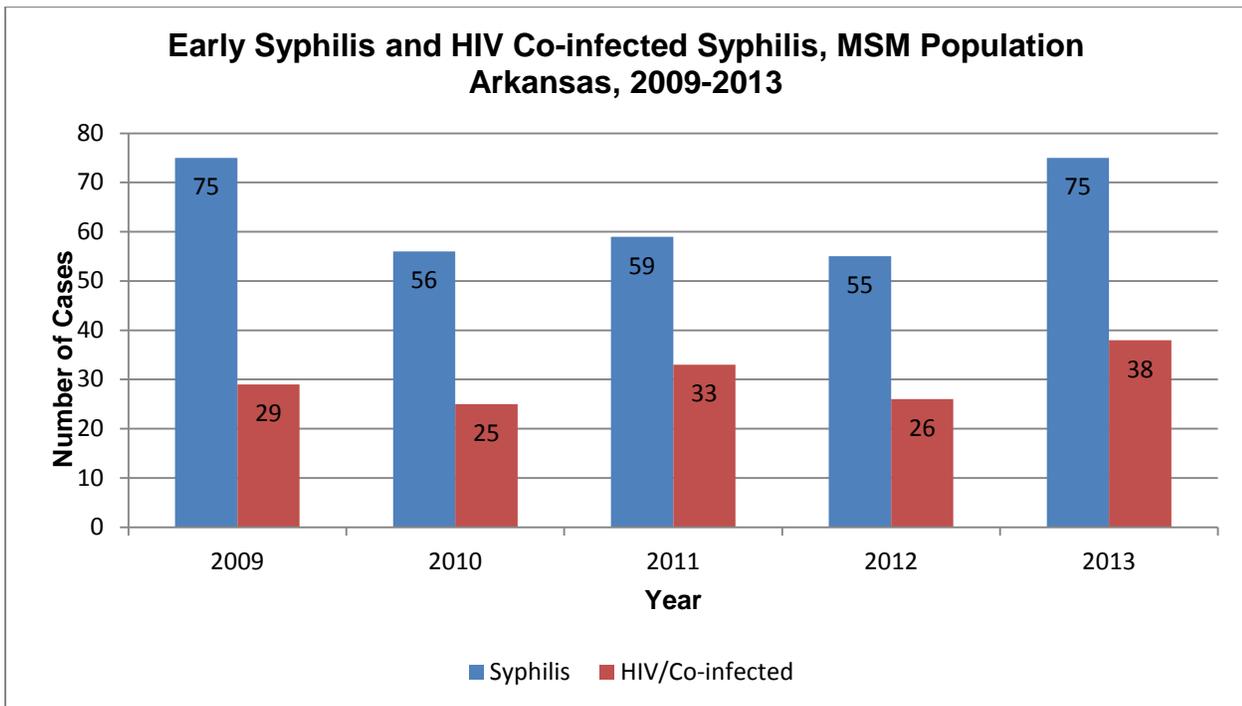


Figure 27.



Risk Factors for Transmission in U.S. Youth

Nationally, from 2009 to 2011, 72.1% of all new HIV infections in youths attending grades 9–12 were attributed to male-to-male sexual contact, 19.8% to heterosexual contact, 4.0% to injection drug use, and 3.7% to male-to-male sexual contact and injection drug use.¹⁰ Among females, 85.7% of new infections were attributed to heterosexual contact vs. 12.9% attributed to injection drug use. Sexually active MSM were significantly more likely than other sexually active males to have used alcohol or drugs (38.5% vs. 24.3%) and less likely to have used a condom (44.3% vs. 70.2%), before their last sexual intercourse.

From 2009 to 2011, among the new HIV infections in U.S. youth attributed to male-to-male sexual contact, 54.4% were in black students, 21.6% were in Hispanic/Latino students, and 20.5% were in white students.¹² Because of the higher prevalence of HIV among blacks, black youth are at higher risk for infection even with similar levels of risk behaviors.¹³

INJECTION DRUG USE (IDU)

Direct Measures of Risk Behavior

Approximately 3% of the newly diagnosed cases of HIV/AIDS in Arkansas in 2013 reported injection drug use (IDU) as their primary risk factor. Another 2.6% reported MSM/IDU as their primary risk factor. At the end of 2013, approximately 10% of persons living with HIV/AIDS in Arkansas had reported injection drug use as their primary risk factor, followed by 5% reporting MSM/IDU.

Indirect Measures of Risk Behavior

HIV Risk Behaviors and HIV Prevalence in IDUs

Although injecting drug users make up 2.6% of the national population, they account for 22% of all people living with HIV.¹⁴ The first large assessment of HIV prevalence in IDUs in over 10 years reported that injection drug users in 20 Metropolitan Statistical Areas (MSAs) continued to engage in high-risk behaviors that increase the risk of HIV transmission.¹⁵ Thirty-five percent of IDUs reported sharing syringes and 58% reported sharing other injection equipment. Seventy percent of men and 73% of women reported unprotected vaginal intercourse in the preceding 12 months, and 25% of men and 21% of women reported unprotected anal intercourse in the preceding 12 months.

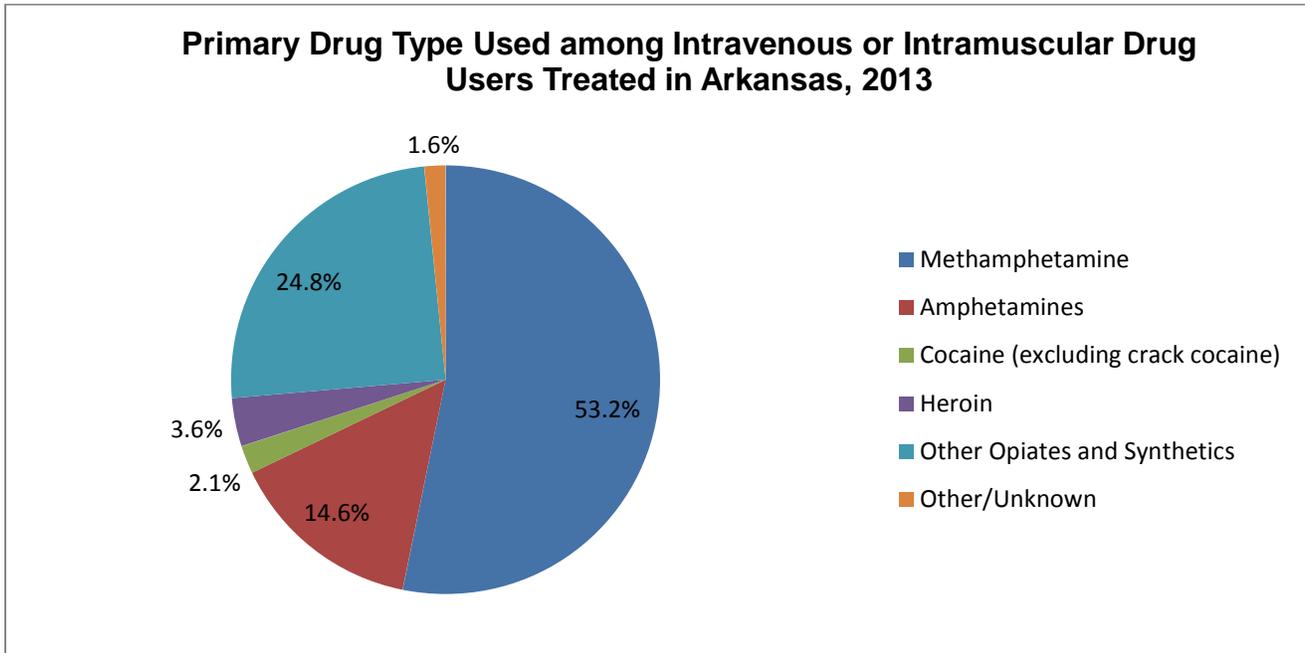
Overall, 9% of survey participants had HIV infection. Four percent of participants were newly identified as being HIV positive, through testing done as part of the survey.¹⁵ Black participants engaged in less risky practices than white IDUs but had a higher prevalence of HIV.

The most commonly injected drugs were heroin (90%), heroin and cocaine combined (58%), and cocaine or crack (49%). Most participants (74%) also reported use of non-injection drugs. Many of the survey participants were black (46%) and most were living below poverty level (80%).

Inpatient treatment for substance abuse in Arkansas

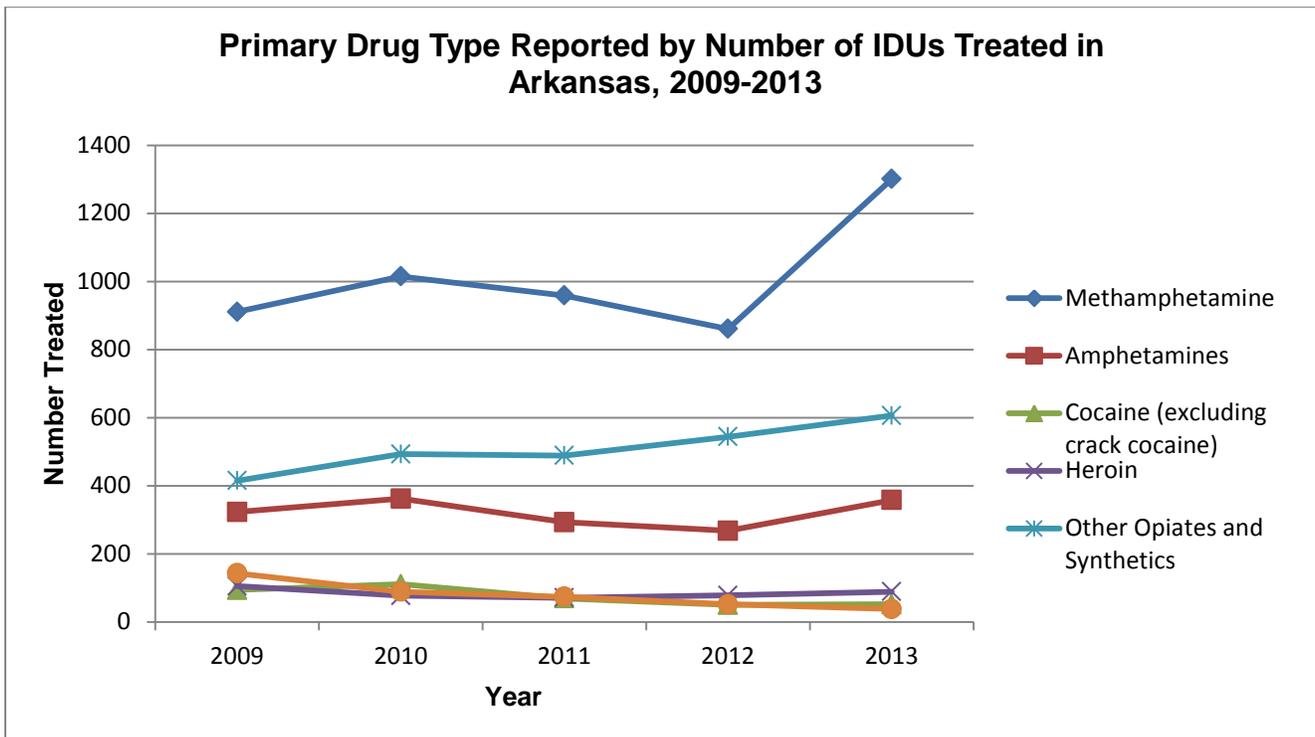
From 2009 to 2013, methamphetamines were the most common primary drug type used by injection drug users being treated in Arkansas for substance abuse (Figure 28). Primary usage of methamphetamine increased from 45.8% to 53.2% of clients from 2009 to 2013, while primary usage of cocaine decreased from 4.7% to 2.1% of clients. Primary use of other opiates and synthetics increased in the same period, from 20.8% to 24.8% of treated IDUs. These trends occurred against a backdrop of 5-year and 3-year decreases in the total number of treated inpatients in Arkansas.

Figure 28.



Source: Arkansas Department of Human Services, Division of Behavioral Health Services

Figure 29.



Source: Arkansas Department of Human Services, Division of Behavioral Health Services

Although the total number of treated inpatients fluctuated over time, it increased by 22.8% from 2009 to 2013 (Figure 29). On the other side there was a drop in newly diagnosed HIV/AIDS cases having IDU or MSM & IDU as the primary mode of transmission, from 11.1% in 2009 to 5.5% in 2013.

In all years, the vast majority of treated inpatients (over 90%) were white and about 6 in 10 clients were male. About 60% of clients were between 20 and 34 years of age, and 20–25% of clients were 35 to 44 years old. Therefore, the 20-to-44-year-old age group comprised at least 80% of the client population each year. The percentage of black patients decreased over time, from 4.4% in 2008 to 1.7% in 2011.

HETEROSEXUAL POPULATIONS

Direct Measures of Sexual Behavior

In 2013, 12.8% of newly diagnosed HIV/AIDS cases in Arkansas reported heterosexual contact as their primary risk factor. Heterosexual risk is traditionally the most common exposure category in females diagnosed with HIV/AIDS, both nationally and in the State of Arkansas. Increasing reports of this particular risk factor are also being noted among newly diagnosed males.

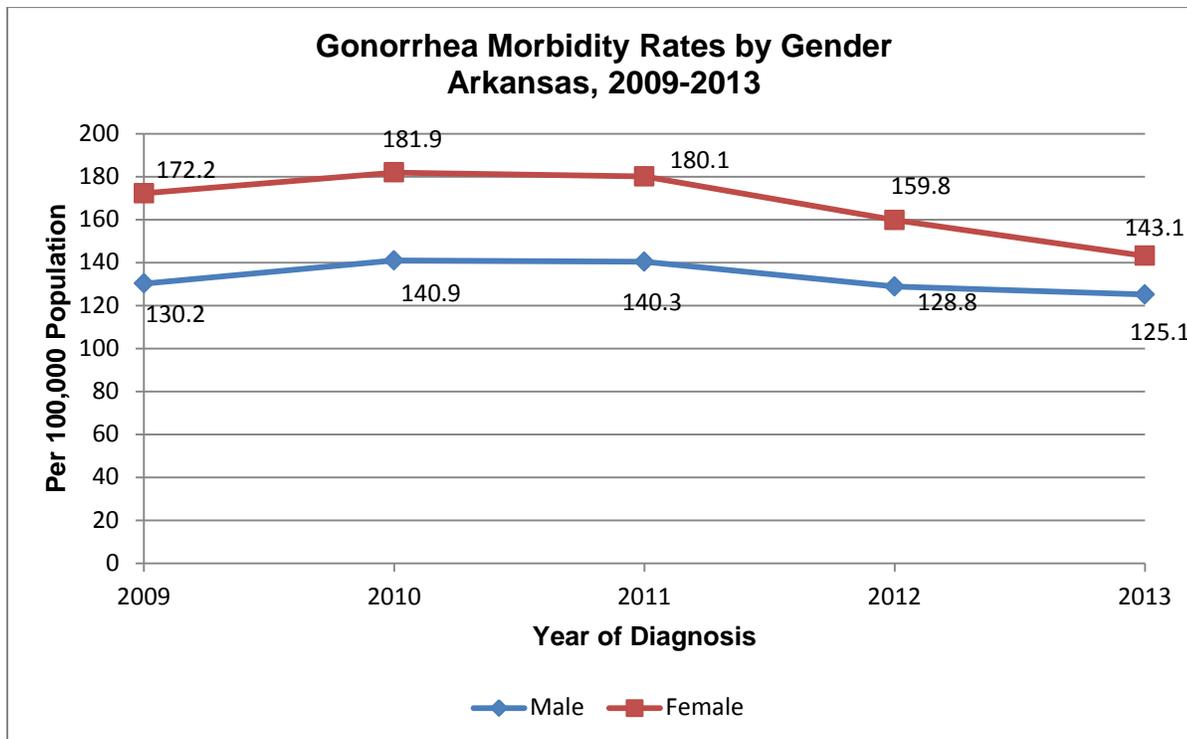
Indirect Measures of Risk Behavior

Sexually Transmitted Disease (STD) surveillance data provide information that may help to identify the potential occurrence of risky sexual behavior. Increases in STD rates do not directly indicate that HIV exposure is increasing. STD rates do, however, indicate an increase in unprotected sexual activity in a particular population. Since 2000, there has been a steady increase in the rate of STDs among Arkansans.

Gonorrhea

In 2013, the overall rate for gonorrhea in the State of Arkansas was 134.2 per 100,000. This is a 11.5% decrease from 2009 but is well above the national rate of 106.7 per 100,000. From 2009 to 2013, the gonorrhea infection rates for women in Arkansas were consistently higher than those for men (Figure 30). In 2013 nationally, for the first time since 2000, the rate of reported gonorrhea cases among men (109.5 cases per 100,000) was higher than the rate among women (102.4 cases per 100,000).¹⁶ Gonorrheal infections in women are usually asymptomatic and often go undiagnosed.

Figure 30.

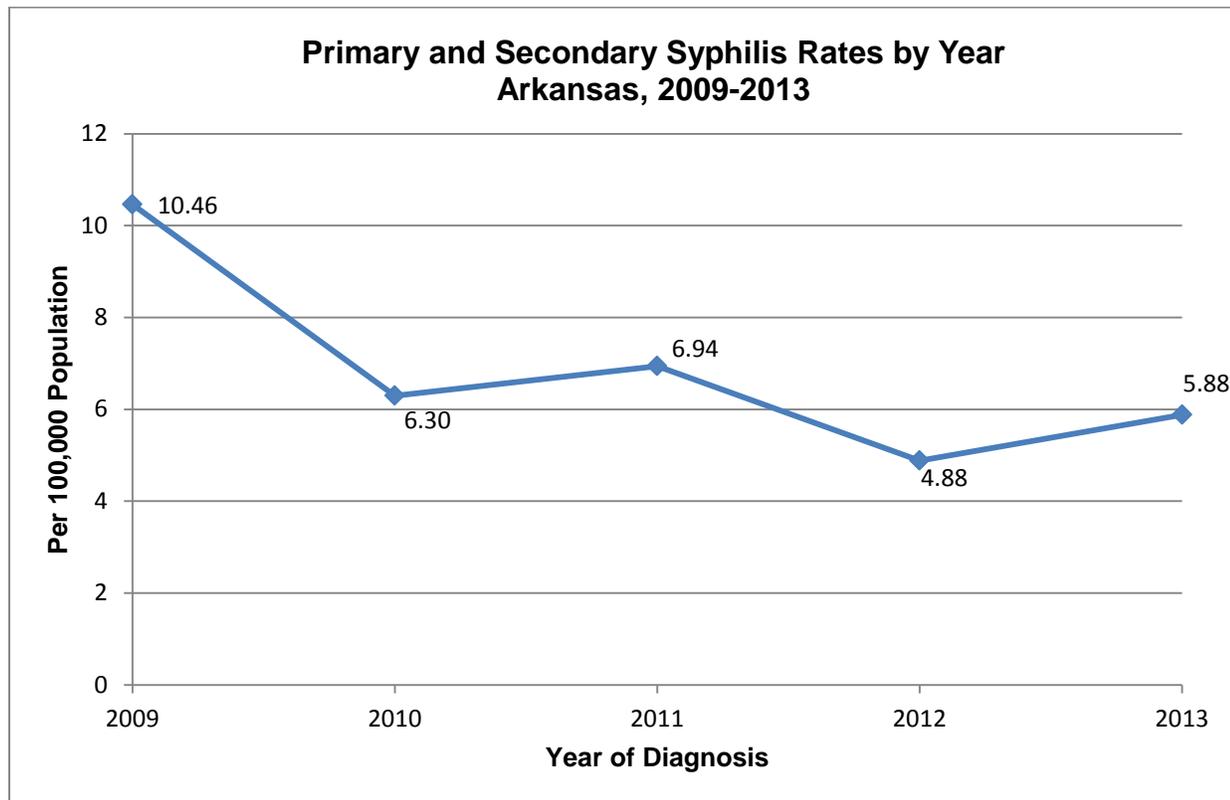


In 2013, there were 3,972 new cases of gonorrhea diagnosed in Arkansas. New cases of gonorrhea were diagnosed in 95% of the counties in the state. Six counties had more than 150 new cases, one of which had over 1,000 new cases (Pulaski).

Syphilis

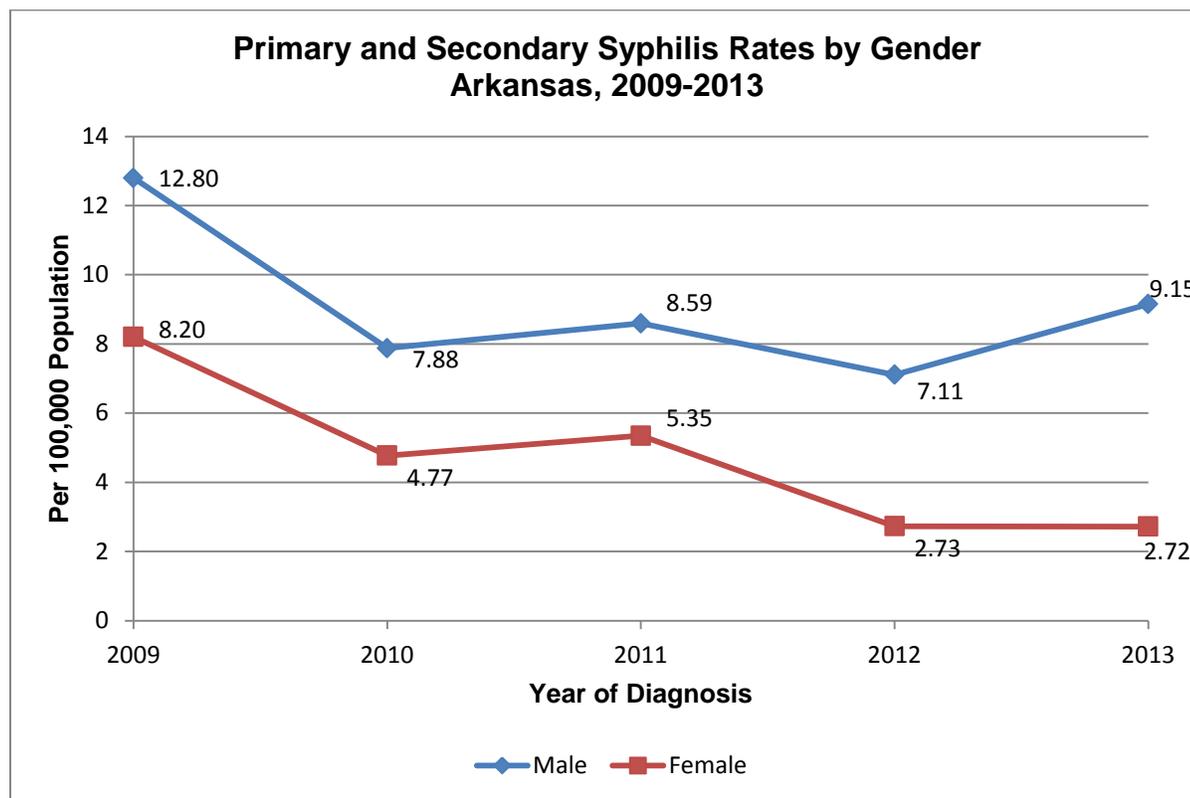
Incidence rates of primary and secondary syphilis in Arkansas have declined over the past five years (Figure 31). In 2013, a total of 174 newly diagnosed early syphilis cases were reported in Arkansas. New cases of early syphilis were reported in 39 counties, with one county (Pulaski) reporting more than 50 cases.

Figure 31.



In Arkansas, the incidence rates of primary and secondary syphilis from 2009 to 2013 have been consistently higher in men than in women. In 2013, the incidence rate for men was 9.15 per 100,000 compared to 2.72 per 100,000 for women (Figure 32). This pattern may be because of an increase in syphilis among MSM. According to the CDC, the national incidence rate for men infected with syphilis increased from 3.3 cases per 100,000 in 2001 to 10.3 cases per 100,000 in 2013.¹⁶

Figure 32.



**RYAN WHITE HIV/AIDS
CARE ACT SPECIAL
QUESTIONS AND
CONSIDERATIONS**

Question 1

What are the patterns of utilization for HIV services of persons in Arkansas?

This section focuses on client utilization of HIV/AIDS services for Care Planning Groups, specifically, the patterns of use of HIV services in the State of Arkansas. The sources of the information were Health Resources and Service Administration (HRSA)-funded programs and supplemental studies conducted to examine specific aspects of HIV care in Arkansas.

HIGHLIGHTS

- In 2013, a total of 1,846 clients were referred for services funded through the Ryan White Part B award in Arkansas.
- The racial/ethnic distribution of those referred in 2013 was primarily non-Hispanic whites (46.0%), followed by blacks (43.3%), Hispanics (6.2%) and Asian/PI (0.3%).
- Testing delays increase the spread of disease and have a severe impact on the health and welfare of HIV-positive individuals who are unaware of their status.
- The CDC recommends testing everyone between the ages of 13–64 for HIV.

In 2013, 1,846 clients were referred for services funded through the Ryan White Part B award in Arkansas. During 2013, the distribution of Ryan White Part B clients by race/ethnicity and sex was directly proportional to the distribution of characteristics among persons known to be living with HIV/AIDS in Arkansas at the end of 2013 (Table 17). The data indicate congruence between the percentages of persons living with HIV/AIDS and those referred for Ryan White care in Arkansas in 2013 by race and gender.

Table 17. Characteristics of Ryan White Part B Clients and Persons Living with HIV/AIDS, Arkansas, 2013

	Ryan White Part B Clients	Persons Living with HIV/AIDS
	(N=1,846)	(N=5,226)
	%	%
Race/Ethnicity		
White, non-Hispanic	46.0	48.1
Black, non-Hispanic	43.3	43.5
Am Ind/AK Nat, non-Hispanic	0.1	0.1
Asian/HI/PI, non-Hispanic	0.3	0.4
Hispanic	6.2	5.1
Other, non-Hispanic	4.1	2.0
Unknown	0.1	0.9
Gender		
Male	76.2	76.8
Female	23.4	23.2
Transgender	0.4	
Age Group		
<13 Yrs	0.1	0.8
13-24 Yrs	7.6	18.2
25-44 Yrs	48.2	63.8
≥45 Yrs	44.2	17.1
Unknown	0.0	0.0

Data Sources: Ryan White Part B Services Program and Arkansas eHARS (enhanced HIV/AIDS Reporting System) Data System

The table below shows the clients served using Ryan White funds in 2013 (Table 18). The average number of visits per client for non-medical case management services was 10.9. The next service type having the greatest number of clients receiving services was medical case management. In 2013, a total of 1,469 clients received services, averaging 13 services each.

Table 18. Utilization of Ryan White Part B Services, by Type of Service, Arkansas, 2013

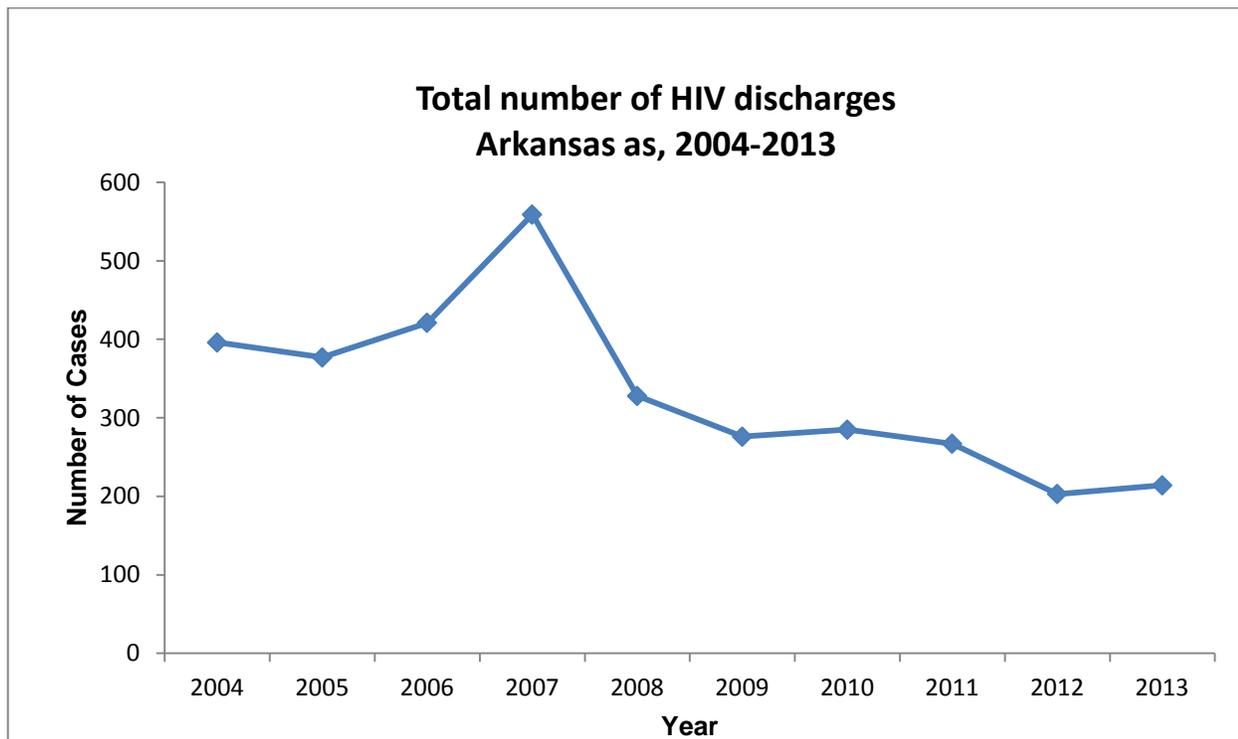
(N=1730)	Case Management	Medical Outpatient/Ambulatory	Health Insurance Continuation	Dental
Clients Receiving Service (#)	1,855	602	236	631
Units of Service Per Client (Avg #)	10.9	2.8	3.3	7.0

Data Source: Ryan White Part B Services Program

Hospital Charges and Length of Stay for Principal Diagnosis – HIV

There were 214 HIV-related hospital stays and 27 stays for other sexually transmitted infections (not including hepatitis) in 2013 in Arkansas. The total number of HIV discharges increased between 2004 and 2007, then steadily declined through 2012 (Figure 33).

Figure 33.

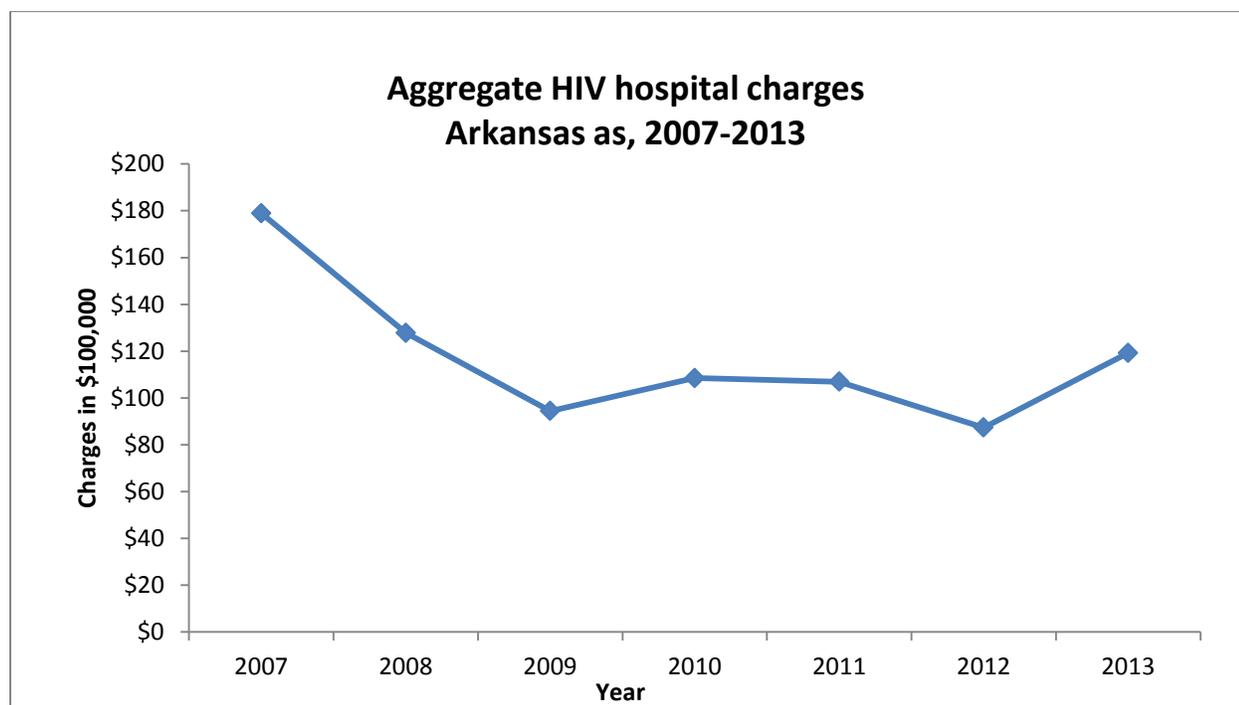


Source: HCUPnet query of State Inpatient Databases (SID) Clinical Classifications Software, Principal Diagnosis - HIV infection

In total, Arkansas hospitals charged \$11,924,300 for HIV-related stays and \$804,648 for stays related to other sexually transmitted infections (not including hepatitis) in 2013. Although the aggregate charges for HIV-related stays in Arkansas dropped from 2007 to 2009, then remained stable through 2012, then

increased in 2013 (Figure 34), the average charge for HIV-related stays and for all stays has increased steadily since 2004 (Figure 35)

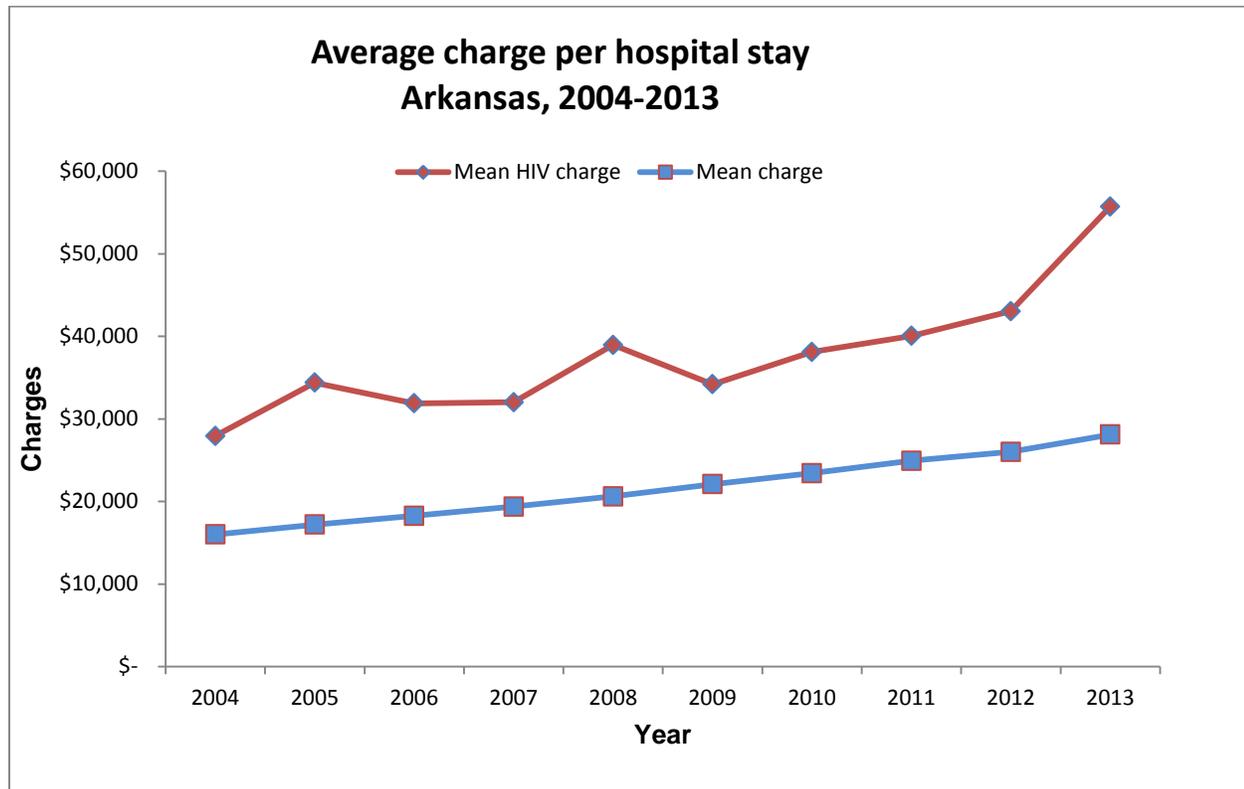
Figure 34.



Source: HCUPnet query of State Inpatient Databases (SID)
Clinical Classifications Software, Principal Diagnosis - HIV infection

The mean charge per HIV-related hospital stay was \$55,721, ranking 31th among mean charges for 260 principal diagnoses averaging \$217,111 to \$5,806 per stay. The mean charge for other sexually transmitted infections (not including hepatitis) ranked 112th, at \$29,802 per stay.

Figure 35.



Source: HCUPnet query of State Inpatient Databases (SID)
Clinical Classifications Software, Principal Diagnosis - HIV infection

From 2004 to 2013, the average-length hospital stay for a principal diagnosis of HIV remained stable, at about 7–10 days compared to about 4–5 days for all diagnoses. In 2013, HIV-related hospital stays in Arkansas averaged 9.9 days, ranking 20st among 260 principal diagnoses with average stays of 39.4 to 1.3 days. The average hospital stay for other sexually transmitted infections (not including hepatitis) lasted 6.9 days, ranking 51st among all principal diagnoses.

AIDS Drug Assistance Program (ADAP)

Since 1987, Congress has appropriated funds to assist states in providing antiretroviral therapy (ART), approved by the Federal Drug Administration (FDA), to AIDS patients. With the initial passage of the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act in 1990, the assistance programs for ART were incorporated into Part B and became commonly known as ADAP. ADAP now provides FDA-approved HIV-related prescription drugs to the underinsured and uninsured persons living with HIV/AIDS. For many people with HIV, access to ADAP serves as a gateway to a broad array of health care and supportive services as well as other sources of coverage, including Medicaid, Medicare part D, and private insurance.

Persons enrolled in ADAP in Arkansas have been able to receive antiretroviral medications and other medications used to treat HIV related illnesses. According to the data collected in CAREWare, 998 clients were served in Arkansas during 2013 (Table 18). Most Arkansas ADAP clients served during this year were male (80.2%) and 25 years of age or older (92.1%). The racial/ethnic distribution of those served in 2013 was predominantly non-Hispanic white (43.6%), non-Hispanic black (40.6%), and Hispanic (8.5%).

Table 18. Characteristics of Patients Served in the AIDS Drug Assistance Program Arkansas, 2013

(N=998)	%
Gender	
Male	80.2
Female	19.5
Transgender	0.3
Race/Ethnicity	
White, non-Hispanic	43.6
Black, non-Hispanic	40.6
Hispanic	8.5
Other, non-Hispanic	7.3
Age Group	
<25 Yrs	7.9
25-44 Yrs	51.5
≥45 Yrs	40.6

Data Source: Arkansas AIDS Drug Assistance Program

HIV TESTING DELAYS

AIDS diagnoses are used by the CDC to compare data nationally. Because there are differences in testing behaviors and treatment outcomes among persons infected with HIV, there are significant variations within the population presenting with AIDS at any given time. With the increased availability of antiretroviral medications, which have often been successful in treating HIV-infected persons, it is important that people be tested early for HIV. Those who are tested early in the course of their infection can benefit from advances in treatment and effective drug combinations. However, a significant number of people are not tested until they are already immunosuppressed, or ill with an opportunistic infection.

According to the CDC, there are approximately 56,000 people diagnosed with HIV annually in the United States. Of the estimated one million persons living with HIV/AIDS in the country, approximately 25% are unaware of their status. The CDC reports that this group of status-unaware accounts for approximately 54–70% of new infections in the country annually, compared to the 75% of status-aware, who contribute roughly 30–46% of new HIV infections in the country annually. In light of these facts, it is essential to improve testing initiatives to capture individuals earlier in their infection, to make them aware of their status and the availability of treatment and care. The CDC issued a revised set of recommendations in 2006 to address the late testing issue. The following suggestions were made:

- Routine voluntary HIV screening for all persons ages 13–64 in healthcare settings, not based on risk.
- Repeat screening of high-risk individuals annually.
- Initiate screening in areas of low or unknown prevalence.¹⁷

Table 19 shows the time between a person's first positive confidential HIV test and AIDS diagnosis, by demographic and risk characteristics in Arkansas. Of the newly diagnosed cases of HIV between 2004 and 2013 that progressed to AIDS within a year of HIV diagnosis, 66.3% were diagnosed with AIDS within a month of their initial HIV test (aka 'late testers'), indicating a simultaneous diagnoses of HIV and AIDS. This is higher than the national estimate of 40% of newly diagnosed cases having simultaneous diagnoses of HIV and AIDS.

Nationally, men tend to test later in their disease progression than women, and blacks have a tendency to test later in their infection than any other racial/ethnic group.⁵ In Arkansas, concurrent diagnosis was most prominent among males, whites, people aged 35 to 44, and MSM.

According to the CDC, approximately one-third of all new diagnoses still occur late.⁵ In Arkansas, 18.7% to 24.9% of new HIV/AIDS diagnoses from 2009 to 2013 entered the system at an already immunocompromised state; that is, either received simultaneous diagnoses of HIV and AIDS or progressed to AIDS within a year (Table 20). Cases entering care at such late time frames tend to have poor treatment outcomes and survival rates. These data should be interpreted cautiously because a person may have been tested earlier, but anonymously.

Table 20. AIDS Cases by Time between First Positive HIV Test and AIDS Diagnosis, Arkansas, 2004-2013

	<= 1 Month (%*)	<= 3 Months (%*)	<= 12 Months (%*)
Gender			
Male	53.3%	67.8%	80.3%
Female	13.0%	16.7%	19.7%
Race/ethnicity			
White, non-Hispanic	30.5%	37.4%	43.9%
Black, non-Hispanic	27.5%	36.7%	44.3%
Hispanic	5.3%	6.8%	8.5%
American Indian/AK Native, non-Hispanic	0.1%	0.3%	0.3%
Asian/HI/PI, non-Hispanic	0.8%	0.9%	1.0%
Multi-race	2.0%	3.1%	3.5%
Age Group			
<13	0.1%	0.2%	0.2%
13-14	0.0%	0.0%	0.0%
15-24	4.6%	7.6%	9.0%
25-34	14.3%	18.1%	23.3%
35-44	23.0%	28.1%	33.3%
45-54	16.2%	21.0%	23.3%
55-64	7.4%	8.4%	9.5%
65+	0.8%	1.1%	1.4%
Exposure Category			
Male Sex w/ Male (MSM)	35.6%	45.1%	53.5%
Injection Drug Use (IDU)	4.0%	5.3%	6.7%
MSM & IDU	1.8%	2.5%	2.9%
High-risk Heterosexual	11.0%	14.3%	17.3%
Transfusion/Hemophiliac	0.0%	0.0%	0.0%
Perinatal Exposure	0.1%	0.1%	0.1%
No Identified Risk	13.8%	17.2%	19.5%
Total Cases	586	747	884
Cumulative Percentage of 12-Month Total	66.3%	84.5%	100.0%

* Percentage of the total number of cases diagnosed with AIDS within 12 months of their first HIV test.

Data Source: Arkansas eHARS (enhanced HIV/AIDS Reporting System) retrieved January 2, 2015.

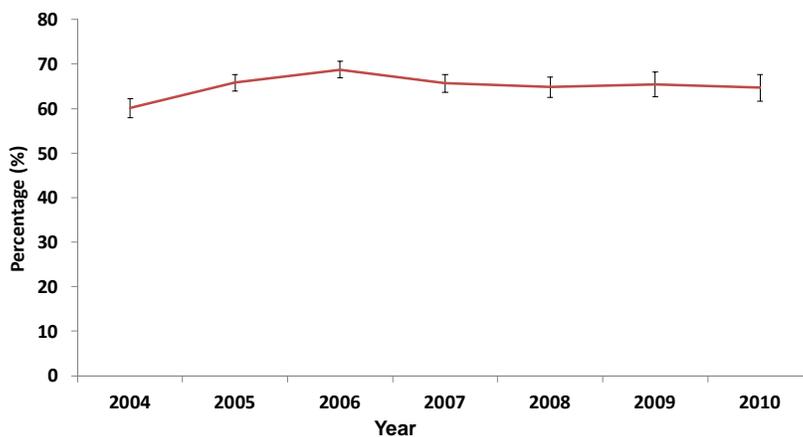
HIV testing prevalence

HIV testing is necessary to identify who is infected, in order to provide medical care and supportive services. As of 2010, an estimated 15.8% of HIV-positive people were not aware of their HIV status.¹⁸ Earlier diagnosis and linkage to care, otherwise known as “test and treat,” can prevent further transmission of HIV through behavioral change by those who are aware of their HIV status as well as through antiretroviral treatment.¹⁹

In every year from 2004 to 2010, at least 60% of Arkansans had never been tested for HIV (Figure 36). Results from 2011 and onward are not comparable to those from previous years, because of changes made to the survey methodology in 2011.²⁰

Figure 36.

Percentage of Arkansans Never Having been Tested for HIV (ages 18–64)



Source: Behavioral Risk Factor Surveillance System (BRFSS)

In 2012, Arkansas was in the bottom group of states in the percentage of adults who had ever been tested for HIV. At 31.1%, Arkansas lagged behind the national percentage of 37.0%.²¹

HIV Test during Pregnancy/Delivery

In Arkansas’ Pregnancy Risk Assessment Monitoring System (PRAMS) survey from 2009 to 2011, 4,062 new mothers were asked a series of questions about obtaining the HIV test during their most recent delivery. The first of these questions asked if they were counseled on getting the HIV test. The majority of the 2,591 women who answered yes were white (65.7%), followed by blacks (22.1%), Hispanics (9.6%) and other races (2.5%). Women between 25–34 years of age (48.0%) were the most likely to have received information on getting an HIV test, followed by women 18–24 years of age (45.3%) and those 35 years and over (6.7%).

Women were also asked if they had an HIV test at any time during their pregnancy/delivery; 2,348 answered yes. The percentage of women who received an HIV test (67%) was congruent with the percentage of mothers who were counseled on the HIV test (64%).

Most women who reported receiving the HIV test were white (66.4%). Blacks (23.5%), Hispanics (7.9%), and other races (2.3%) were less likely to have reported receiving an HIV test. The age group most commonly reporting receiving the HIV test was 25–34 years (48.5%), followed by 18-to-24-year-olds (44.2%) and 35 years or older (7.3%).

The 1,013 women who replied no to receiving an HIV test were asked if they had been offered an HIV test during their most recent pregnancy or delivery. Of the 235 women who responded yes and whose age was known, 56.1% were 25-to-34-year-olds, followed by 18-to-24-year-olds (35.2%) with the remaining 8.7% being 35 and over. Most of the 251 women who reported being offered the test and for whom race/ethnicity was known were white (69.4%), followed by blacks (15.7%), Hispanics (13.2%) and other races (1.6%).

The 275 women who reported being offered an HIV test but did not receive one were asked if they turned down the test. Among the 92 women responding yes, 61.8% were 25–34 year olds, followed by 18–24 year olds (26.5%) and those 35 years and older (11.7%). The majority of new mothers who turned down the HIV test were white (84.2%), followed by black (7.5%), and Hispanic (8.3%).

Question 2

What are the number and characteristics of persons who know they are HIV positive but who are not accessing primary medical care?

The HIV/AIDS Bureau of Health Resources and Services Administration (HRSA) has a guiding principle: that states “to better serve the underserved in response to the HIV/AIDS epidemic’s growing impact among underserved minority and hard to reach populations.” Jurisdictions are charged with assessing the shifting demographics of new HIV/AIDS cases throughout their state. In conjunction with this principle, the Arkansas HIV/AIDS Program is developing methods to better identify persons who know their status but who are not receiving primary medical care.

HIGHLIGHTS

- Total unmet need (People Living with HIV/AIDS in Arkansas and not in care) as of December 31, 2013 2,864.
- Non-Hispanic Whites (49.6%) made up the highest proportion of cases not in care in 2013, when compared to the other major racial/ethnic groups (non-Hispanic Blacks: 42.3% and Hispanics: 5.0%).
- There was a high proportion of cases between the ages of 25–34 that were not in primary care (36.2%) in 2013.
- The Central Region (41.0%) had the highest percentage of cases not in care, followed by the Northwest Region (21.4%).

MEASURING UNMET NEED

Arkansas statutes require that laboratories report all test results indicative of HIV infection in persons residing in Arkansas to the Arkansas Department of Health.

Once the test results have been reported to the HIV/AIDS Surveillance Program, the results can be linked to the records in the HIV/AIDS case registry, which includes the known population of persons living with HIV in Arkansas. Consequently, each HIV-infected person can be characterized as “in care” or “not in care” in a specified time period by the presence or the absence of a laboratory test result (e.g., CD4 cell count or measurement of viral load) or presence on the active ADAP drug treatment registers during that period. This method assumes that laboratory reporting is complete, all HIV-positive persons “in care” will have at least one reportable test result that is reported in Arkansas, and ADAP registration lists are up to date.

The characteristics of persons living with HIV/AIDS in Arkansas and persons “in care” and “not in care” are presented in Table 21. This data refers to cases with a current residence of Arkansas at the time of assessment. The not-in-care population was mostly male (76.6%). Almost half of those not in care were Non-Hispanic white (49.6%), compared to Non-Hispanic black (42.3%) or Hispanic (5.0%). The 25–34 year age group made up 36.2% of cases not in primary care, followed by the 35–44 year age group at 28.0%. The Central Region had the greatest percentage of cases “not in care” in 2013 (41.0%), followed by the Northwest Region (21.4%).

Caution should be noted when reviewing the number of persons not in care.²² The results are limited to the completeness of reports of CD4 counts/percents and viral loads.

It is also important to note that there are a number of Arkansas HIV/AIDS cases that are currently residing in other states that may be accessing care in other jurisdictions. Arkansas regularly conducts routine case de-duplication with other states in efforts to better track cases. There may be some delays in reporting current residence and lab data for these cases that change locations, thus causing an unintentional error in the calculation of the number of Arkansas cases living with HIV/AIDS that are not in care or are unaccounted for at the time of analysis.

Table 21. Characteristics of HIV/AIDS Prevalent* Cases by Care Status, Arkansas, 2013

	Not in Care		In Care		HIV/AIDS Prevalence	
	N	%	N	%	N	%
Gender						
Male	2,195	76.6	1,818	77.0	4,013	76.8
Female	669	23.4	544	23.0	1,213	23.2
Age Group						
<13 Yrs	26	0.9	17	0.7	43	0.8
13-14 Yrs	7	0.2	2	0.1	9	0.2
15-24 Yrs	542	18.9	401	17.0	943	18.0
25-34 Yrs	1,037	36.2	756	32.0	1,793	34.3
35-44 Yrs	803	28.0	738	31.2	1,541	29.5
45-54 Yrs	343	12.0	338	14.3	681	13.0
55-64 Yrs	80	2.8	98	4.2	178	3.4
65+ Yrs	25	0.9	12	0.5	37	0.7
Unknown	1	0.0	0	0.0	1	0.0
Race/Ethnicity						
White, non-Hispanic	1,421	49.6	1,091	46.2	2,512	48.1
Black, non-Hispanic	1,210	42.3	1,061	44.9	2,271	43.5
Am Ind/AK Nat, non-Hispanic	6	0.2	1	0.0	7	0.1
Asian/HI/PI, non-Hispanic	13	0.5	6	0.3	19	0.4
Hispanic	144	5.0	120	5.1	264	5.1
Other, non-Hispanic	35	1.2	72	3.1	107	2.1
Unknown	35	1.2	11	0.5	46	0.9
Exposure Category						
Male Sex w/ Male (MSM)	1,371	47.9	1,335	56.5	2,706	51.8
Injection Drug Use (IDU)	328	11.5	187	7.9	515	9.9
MSM & IDU	160	5.6	101	4.3	261	5.0
High Risk Heterosexual	595	20.8	472	20.0	1,067	20.4
Transfusion/Hemophiliac	13	0.5	6	0.3	19	0.4
Perinatal Exposure	19	0.7	10	0.4	29	0.6
No Identified/Reported Risk	378	13.2	251	10.6	629	12.0
Public Health Region						
Central	1,173	41.0	1,046	44.3	2,219	42.5
Northeast	382	13.3	336	14.2	718	13.7
Northwest	614	21.4	453	19.2	1,067	20.4
Southeast	374	13.1	330	14.0	704	13.5
Southwest	319	11.1	197	8.3	516	9.9
Unknown	2	0.1	0	0.0	2	0.0
Total	2,864	100.0	2,362	100.0	5,226	100.0

*HIV/AIDS Prevalence is defined as the number of persons living with HIV-NA (NA= not AIDS) and AIDS during

Data Source: Arkansas eHARS (enhanced HIV/AIDS Reporting System) Data System; Retrieved January 2, 2015

The Arkansas HIV/AIDS Surveillance Program used the following components in the formula to calculate the unmet need in Arkansas:

Data Sources

Two data sources were utilized based upon access and availability to laboratory data and treatment usage. The first was the enhanced HIV/AIDS Reporting System (eHARS). eHARS is a web-based database that allows for the collection of multiple documents pertaining to cases of HIV and AIDS, such as lab reports, case reports, death certificates, birth certificates, etc. The second was the CAREWare database used by the Ryan White Part B Program. CAREWare contains information pertaining to clients that are accessing care services and receiving assistance for antiretroviral drugs for treatment of HIV/AIDS supported by Ryan White funds.

Estimation Methods

The process for updating the unmet need estimate began by determining the number of PLWHA as of December 31, 2013 from the enhanced HIV/AIDS Reporting System (eHARS). This data was then analyzed for those individuals who had a viral load test or CD4 test obtained in CY 2014. Those persons that had a viral load or CD4 lab were considered to have a “met need.” Next, the dataset of the PLWHA were matched with the dataset of persons received at least one AIDS Drug Assistance Program (ADAP) service from January 1, 2014 to December 31, 2014. Those that had received an ADAP service were considered to have a “met need.”

“Met need” was defined as any living case of HIV/AIDS in Arkansas as of December 31, 2013, having a laboratory result (CD4 count/percent or viral load) or current on ADAP roles during a 12-month time frame between January 1, 2014 through December 31, 2014 in eHARS or CAREWare.

“Unmet need” was determined by estimating the number of living cases of HIV/AIDS in eHARS that were diagnosed prior to January 1, 2014, and did not have any current laboratory tests (CD4 or viral loads) or were not listed on ADAP roles for antiretroviral treatments between January 1, 2014 and December 31, 2014.

Limitations

There are limitations to the unmet need estimation. This method assumes that laboratory reporting is complete and that all HIV-positive persons in care will have at least one test (CD4 count/percent or viral load) result that is reported to the HIV Surveillance program during the time frame specified. It should also be noted that the antiretroviral treatment rolls are limited in that they only contain information pertaining to cases that are currently enrolled in and receiving Ryan White Care. The data estimation is also dependent upon timely and accurate reporting of deaths among cases in Arkansas. If a person died prior to December 31, 2013, and the HIV Surveillance Program was not notified, that person would be counted in this estimate. The Arkansas HIV Surveillance Program conducts annual matches with its Vital Statistics Program to gain the most current death information on HIV/AIDS cases in Arkansas. In addition, persons who move out of state will automatically be counted among those listed as “unmet need” if the HIV Surveillance Program is not notified of changes in residency status or retention in care. The Arkansas HIV Surveillance Program does, however, participate in Routine Interstate Duplicate Review (RIDR), where Arkansas collaborates with other states to assess and resolve potential duplicate cases between the states.

GLOSSARY OF TERMS AND ACRONYMS

ADAP	AIDS Drug Assistance Program
ADH	Arkansas Department of Health
AIDS	Acquired Immune Deficiency Syndrome
BRFSS	Behavioral Risk Factor Surveillance System
CAREWare	The Ryan White Program data base containing information pertaining to cases accessing care services and receiving assistance for antiretroviral drugs for treatment of HIV/AIDS infections supported by Ryan White funds
CDC	Centers for Disease Control and Prevention
eHARS	enhanced HIV/AIDS Reporting System
HAART	Highly Active Antiretroviral Therapy
HIV	Human Immunodeficiency Virus
HRSA	Health Resources and Services Administration
IDU	Intravenous (Injection) Drug Use; illegal drugs administered into the body with a needle
Incidence	Number of new cases of a disease divided by the population at that specific time
MSM	Men who have sex with men (or male-to-male sexual contact)
MSM/IDU	Men who have sex with men and engage in Intravenous (Injection) Drug Use
NIR	No Identified Risk
NRR	No Risk Reported
PLWA	Persons Living With AIDS
PLWH	Persons Living With HIV
PLWHA	Persons Living With HIV/AIDS
PRAMS	Pregnancy Risk Assessment Monitoring System
Prevalence	Number of living cases of HIV or AIDS divided by the population at that specific time
Rate	The proportion of people with a disease in a specific population, over a specific time period
Risk factor	An aspect of personal behavior and environmental exposure, or an inborn or inherited characteristic that is associated with an increased occurrence of disease
STD	Sexually Transmitted Disease
Surveillance	The ongoing, systematic observation of a population for rapid and accurate detection of the occurrence of diseases
TGA	Transitional Grant Area
Unmet Need	The need for HIV-related health services by individuals with HIV who are aware of their status, but are not receiving regular primary health care

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OUTCOMES OF SURVEILLANCE

Type of Data	Definition	How Data is Used
Reported HIV/AIDS Diagnosis	The number of cases reported in a specific population during a specific time period	Useful for understanding reporting changes in an area
HIV/AIDS Prevalence Rate	The HIV/AIDS prevalence for a specific population divided by the number of people in the population	Prevalence rates can better highlight health disparities than number of cases
HIV/AIDS Incidence Rate	The HIV incidence for a specific population divided by the number of people in that population	Incidence rates reflect rates of new infection within a population, and can highlight health disparities
Estimated HIV/AIDS Diagnoses	The number of cases estimated to be diagnosed in a specific population during a specific time period	Serves as a marker of new infections in areas without incidence surveillance
HIV/AIDS Prevalence Estimate	The number of people estimated to be living with HIV/AIDS in a specific area at a specific point in time	Planning and resource allocation, monitoring trends and discrepancies between groups
HIV Incidence Estimate	The number of people estimated to be newly infected with HIV in a specific area during a specific time period	Planning and allocating funds, as well as evaluating the success of prevention programs