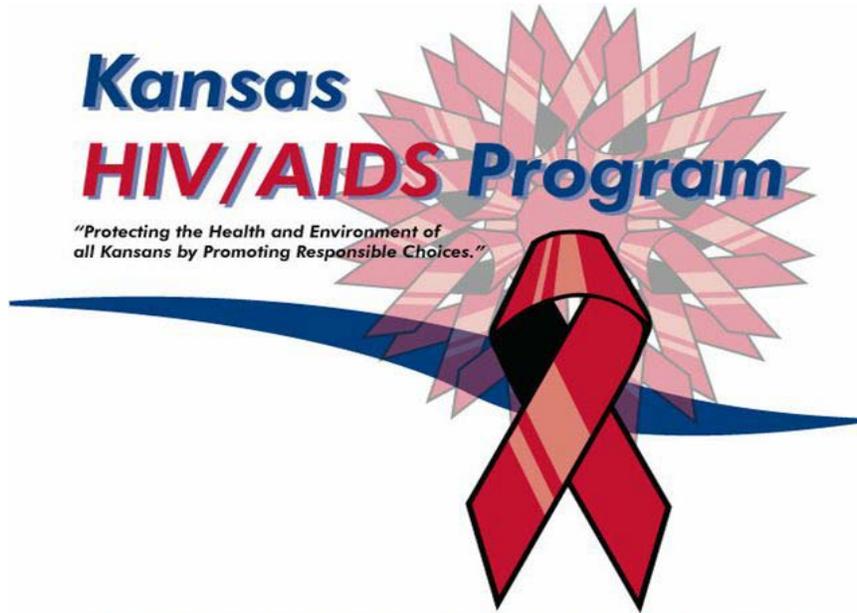


# INTEGRATED EPIDEMIOLOGIC PROFILE 2008

## Kansas HIV/AIDS Program

*"Protecting the Health and Environment of  
all Kansans by Promoting Responsible Choices."*



*The HIV/AIDS Program works to promote public health and enhance the quality of life for Kansas residents by the prevention, intervention, and treatment of HIV and AIDS.*

**HIV/AIDS SURVEILLANCE PROGRAM  
HIV/AIDS SECTION  
BUREAU OF DISEASE CONTROL AND PREVENTION  
KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT**



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## **Executive Summary**

At the end of 2008, a total of 2,559 persons were presumed to be living with HIV infection in the State of Kansas; of these, 56% (1,427) were AIDS cases. Approximately 70% of all counties in Kansas have individuals living with HIV/AIDS. Five of the 105 counties in Kansas contain more than 100 prevalent HIV/AIDS cases. From 2000 to 2008 the number of prevalent cases of HIV/AIDS increased by 105% (1,243 to 2,559).

Due to the advent of highly active antiretroviral therapy (HAART) in 1996, the number of AIDS- related deaths has sharply declined. In the State of Kansas, from 2001-2008 there were on average 40 deaths per year with 34 occurring in 2008. HIV is slowly becoming a chronic health condition as opposed to an acute illness. According to the CDC, persons infected with the disease are now able to live longer and more productive lives with HAART.

Over the past few years, the infection rate for both the non-Hispanic Black and Hispanic populations in the State of Kansas has increased significantly. These two minority groups make up approximately 15% of the State's population and account for approximately 40% of the State's newly diagnosed HIV/AIDS cases, thus showing a need for increased prevention and education efforts in these populations. However, the non-Hispanic Black population shows the greatest burden with the infection rate for Blacks currently seven times that of Whites and four times that of Hispanics.

The total number of newly diagnosed HIV/AIDS cases in Kansas increased by 33% from 132 cases in 2000 to 176 cases in 2008. Among the 176 newly diagnosed cases of HIV/AIDS in 2008, 49% (86) were new AIDS cases and 51% (90) were new HIV (non-AIDS) cases.

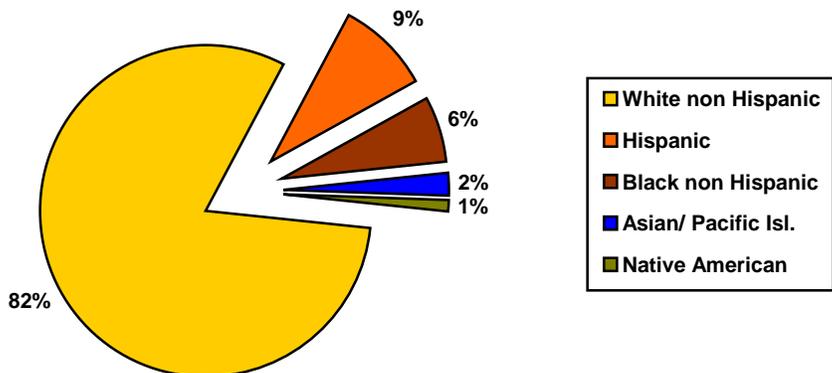
In Kansas, men continue to be the most impacted gender group. In 2008, 21% of newly diagnosed cases of HIV/AIDS were female, which is consistent with trends noted in past years. Men who have sex with men (MSM) continue to be the highest risk population among all of the risk categories in 2008. At the end of 2008 there were a total of 87 newly diagnosed cases noting their exposure risk as MSM, followed by 29 cases noting heterosexual risk. It is worth noting that Black and Hispanic MSM had higher infection rates than their White counterparts. The most impacted age groups were those between the ages of 25-44. This data is consistent with current national statistics for HIV/AIDS.

Region 1, which consists of Wyandotte and Leavenworth counties, had the highest infection rate for newly diagnosed HIV cases, compared to any other region in the State. Region 8 continued to have the largest population of persons living with HIV and AIDS in the State. Regions 2 and 8 had the largest proportion of newly diagnosed female cases of HIV in 2008.

Surveillance data on HIV testing delays indicate that some groups may not fully benefit from recent treatment advances because they do not get tested early enough in their infections. For example, among persons who tested positive during 2004-2008, approximately 43% were concurrently diagnosed with AIDS at the time of their first positive test. This is consistent with national data which shows 40% of newly diagnosed cases are late testers.

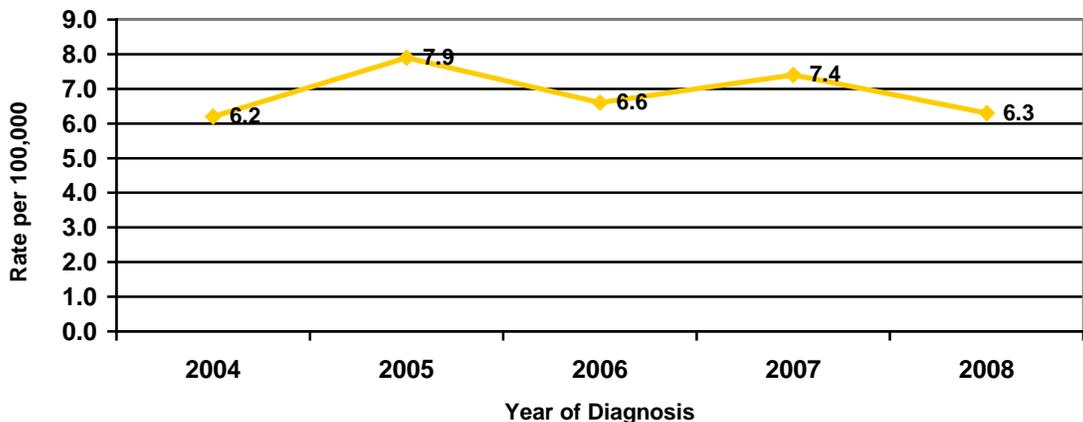
# Overview of Profile Figures

## Kansas State Population Race/Ethnicity Distribution, 2008 Census Estimates



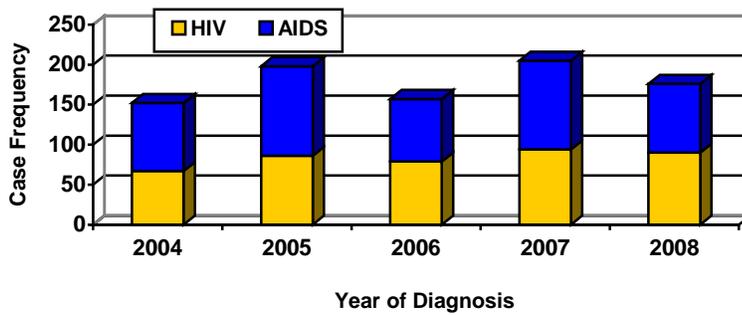
Source: 2008 Population Estimates, Kansas Department of Health & Environment Office of Vital Statistics

## Newly Diagnosed HIV/AIDS Rates in Kansas, 2004-2008



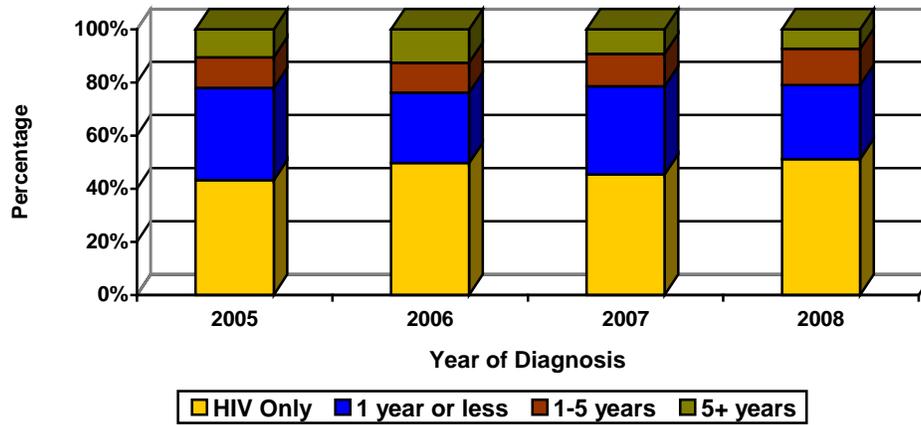
Data Source: Kansas HIV/AIDS Surveillance System: as of December 31, 2009

### Newly Diagnosed HIV/AIDS Cases in Kansas, 2004-2008



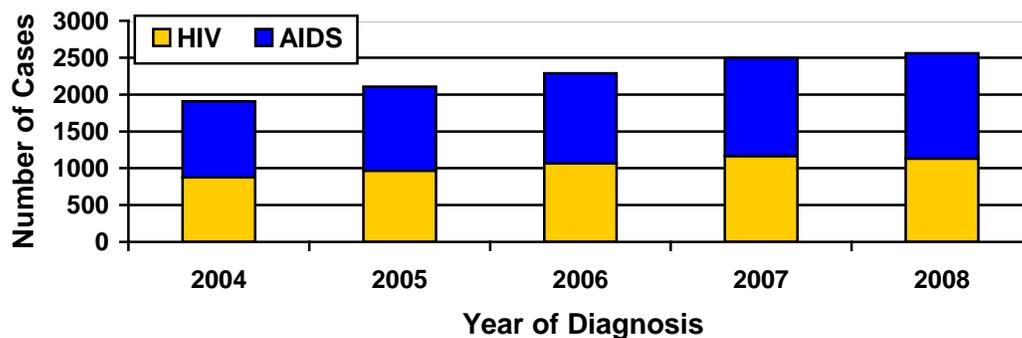
Data Source: Kansas HIV/AIDS Surveillance System; as of December 31, 2009

### Newly Diagnosed HIV Cases by Year & Conversion Time from HIV to AIDS 2005-2008, Kansas



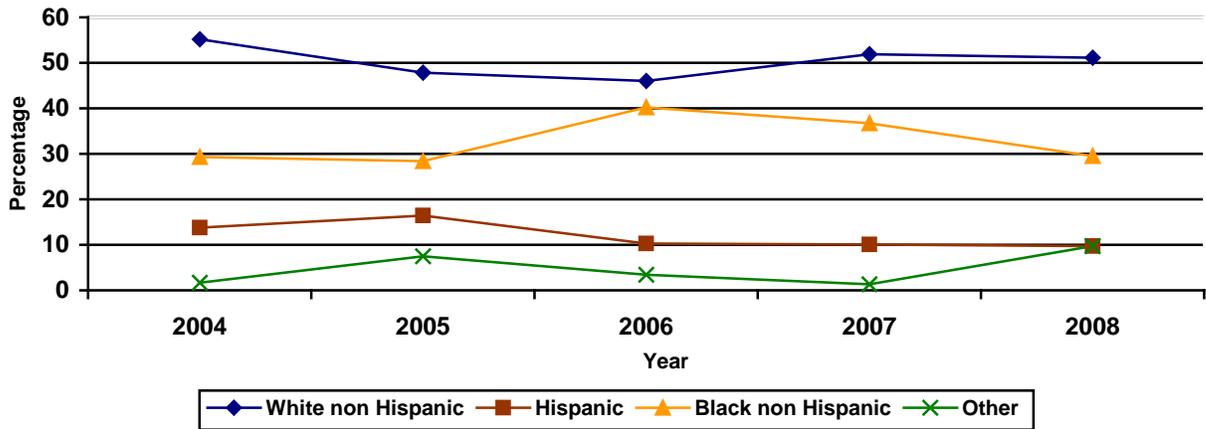
Data Source: Kansas HIV/AIDS Surveillance System; as of December 31, 2009

### Persons Living with HIV and Persons Living with AIDS in Kansas, 2004-2008



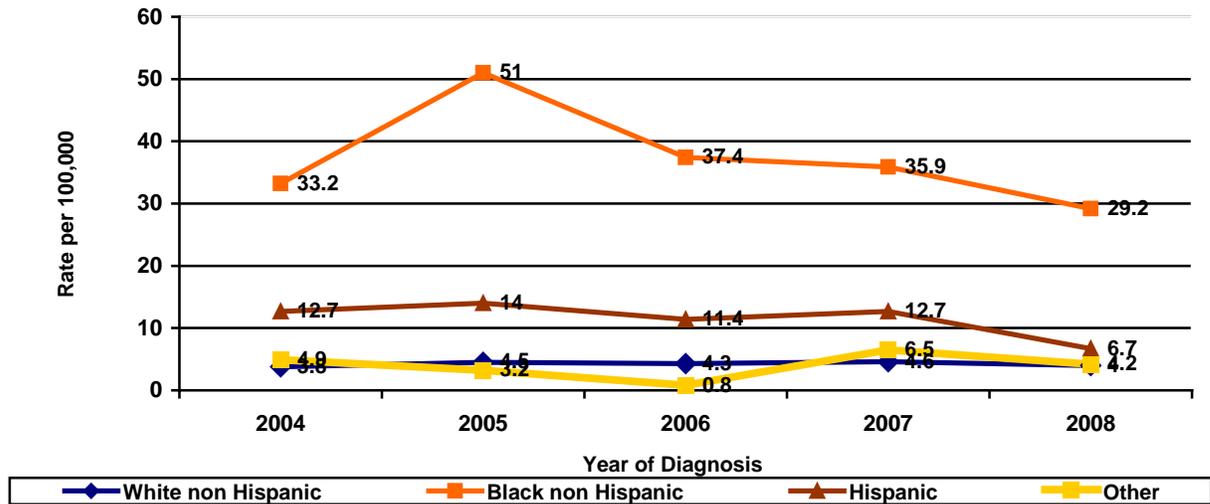
Data Source: Kansas HIV/AIDS Surveillance System; as of December 31, 2009

### Kansas Major Race/Ethnicity Categories by Percent of Newly Diagnosed HIV/AIDS Cases by Year of Diagnosis, 2004-2008



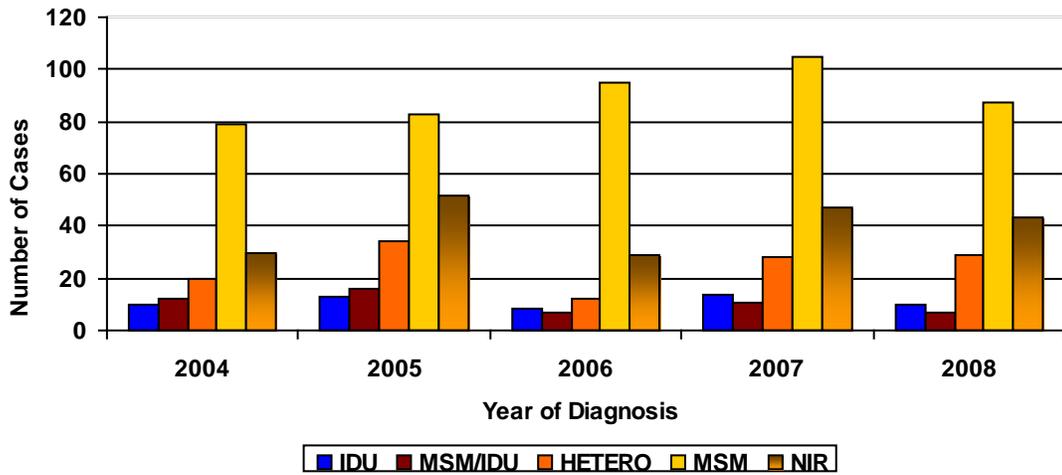
Data Source: Kansas HIV/AIDS Surveillance System; as of December 31, 2009

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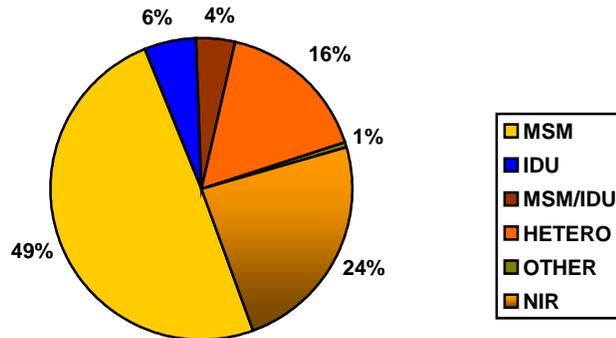
Data Source: Kansas HIV/AIDS Surveillance System; as of December 31, 2009

**Newly Diagnosed HIV/AIDS by Mode of Exposure and Year of Diagnosis in Kansas, 2004-2008**



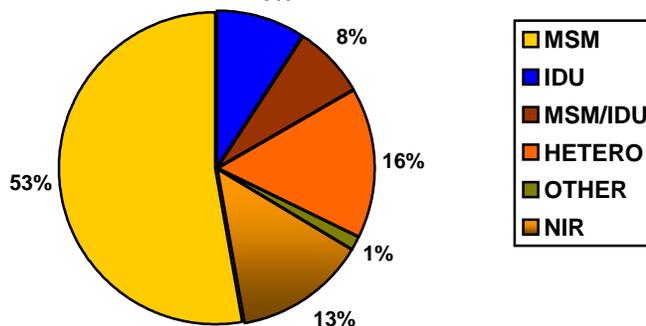
Data Source: Kansas HIV/AIDS Surveillance System; as of December 31, 2009

**Proportion of Newly Diagnosed HIV/AIDS Cases by Mode of Transmission in Kansas, 2008**



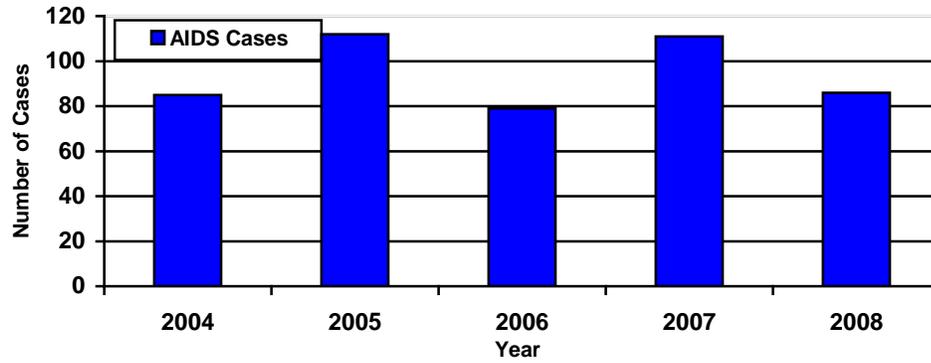
Data Source: Kansas HIV/AIDS Surveillance System; as of December 31, 2009

**Proportion of Living HIV/AIDS cases by Mode of Transmission, Kansas, 2008**



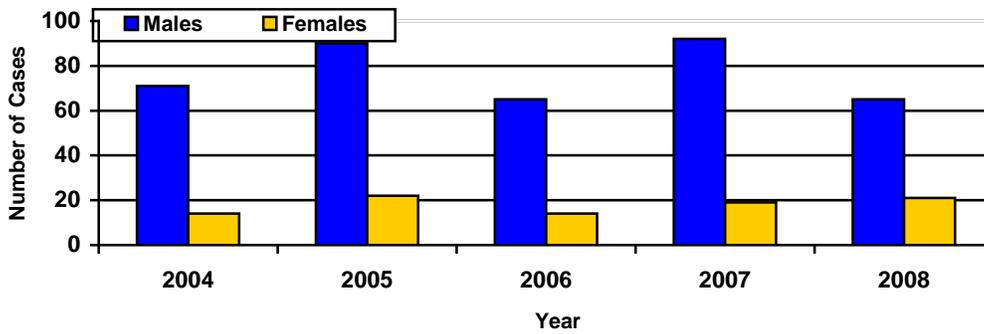
Data Source: Kansas HIV/AIDS Surveillance System; as of December 31, 2009

**Newly Diagnosed AIDS Cases by Year of Diagnosis, Kansas 2004-2008**



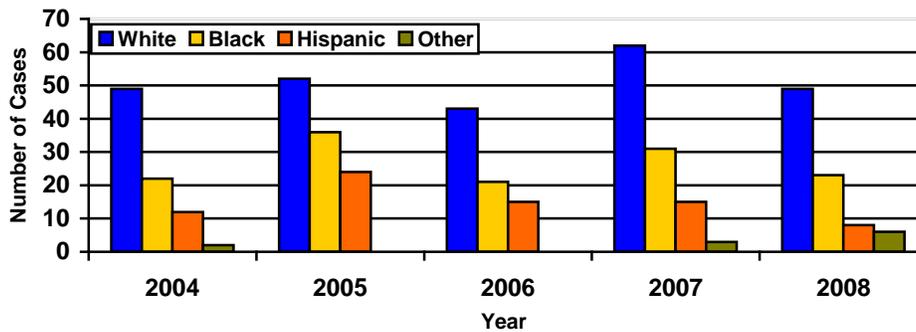
Data Source: Kansas HIV/AIDS Surveillance System; as of December 31, 2009

**Newly Diagnosed AIDS Cases by Gender and Year of Diagnosis in Kansas 2004-2008**



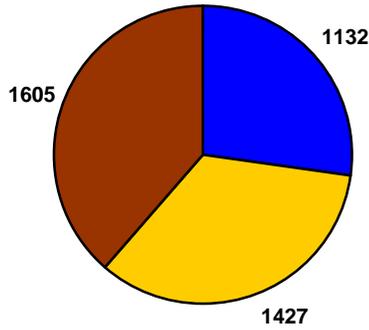
Data Source: Kansas HIV/AIDS Surveillance System; as of December 31, 2009

**Newly Diagnosed AIDS Cases by Race/Ethnicity and Year of Diagnosis, Kansas, 2004-2008**



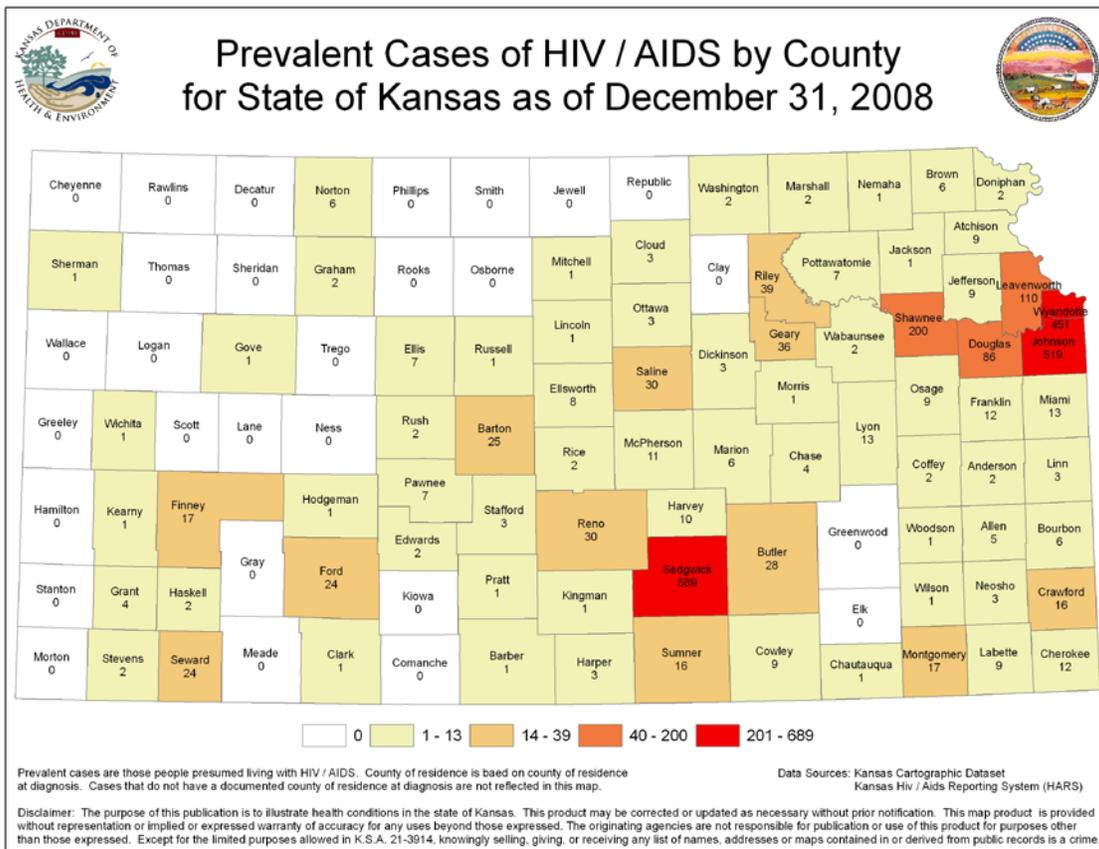
Data Source: Kansas HIV/AIDS Surveillance System; as of December 31, 2009

### Cumulative Reported HIV/AIDS Cases (Living and Deceased) by Current Status, Kansas, 2008

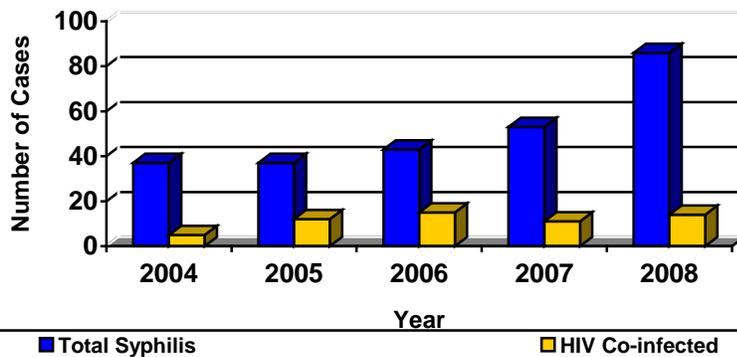


■ Living HIV ■ Living AIDS ■ Deceased HIV/AIDS

Data Source: Kansas HIV/AIDS Surveillance System; as of December 31, 2009

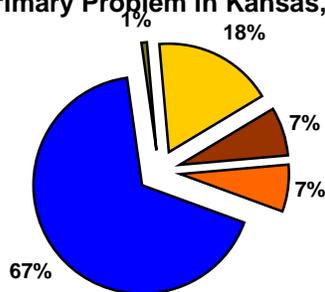


### Early Syphilis & HIV Co-infected Syphilis in Kansas 2004-2008



Data Source: Kansas Department of Health and Environment. Bureau of Disease Control and Prevention STD Section

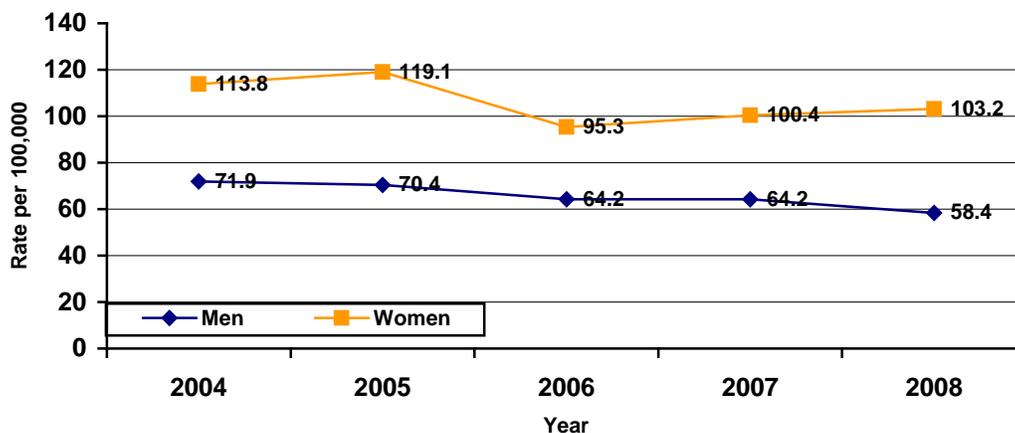
### Injection Drug Use by Primary Problem in Kansas, 2008-2009



■ Methamphetamine ■ Other Drugs ■ Cocaine ■ Heroin ■ Other Opiates

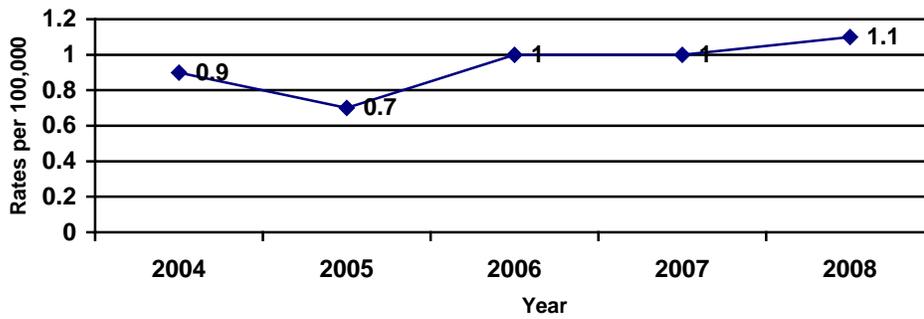
Data Source: Alcohol and Prevention Services, Kansas Client Placement Criteria (KCPC) System, 2009

### Gonorrhea Rates by Gender in Kansas, 2004-2008



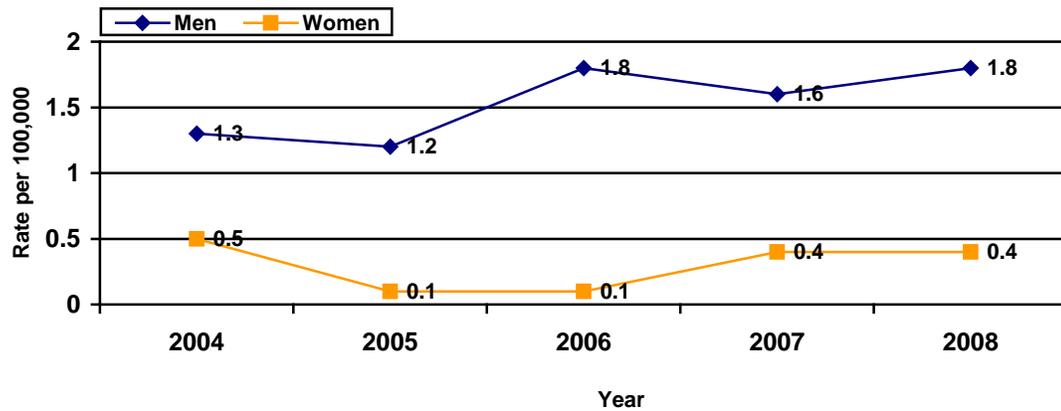
Data Source: Kansas Department of Health and Environment. Bureau of Disease Control and Prevention STD Section

### Primary and Secondary Syphilis Rates in Kansas, 2004-2008



Data Source: Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance, 2008. Atlanta, GA: US Department of Health and Human Services

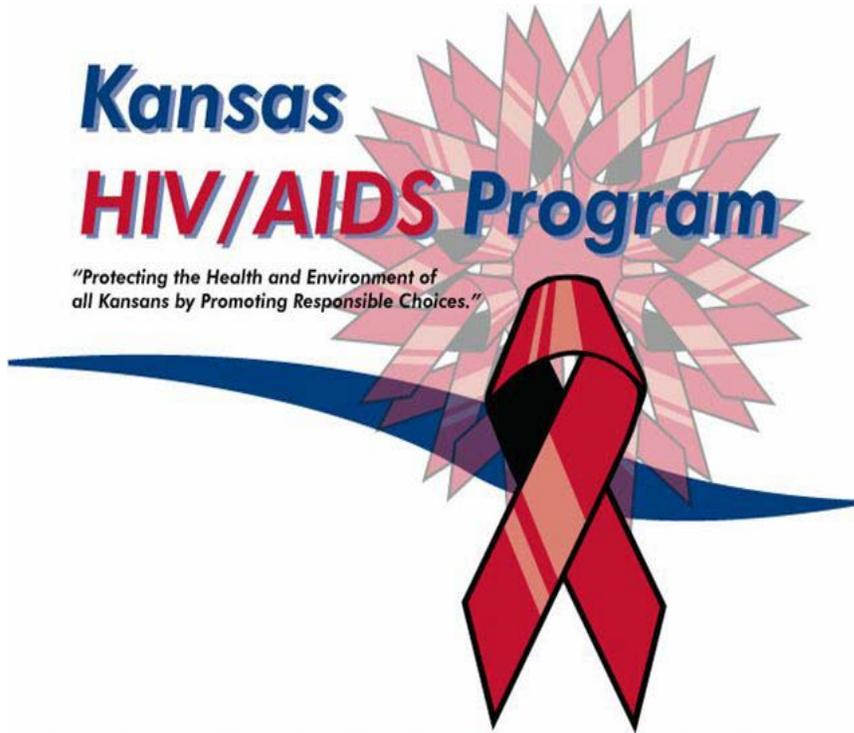
### Primary and Secondary Syphilis Rates in Kansas, by Gender, 2004-2008



Data Source: Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance, 2008. Atlanta, GA: US Department of Health and Human Services

# Kansas HIV/AIDS Program

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## INTRODUCTION

## **Introduction**

This epidemiologic profile provides detailed information about the current HIV/AIDS epidemic in Kansas. Data from HIV Surveillance 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 Kansas?  
What is the scope of the HIV/AIDS epidemic in Kansas?  
What are the indicators of risk for HIV/AIDS infection in Kansas?  
What are the patterns of utilization of HIV services for persons in Kansas?  
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 Kansas. When interpreting the data, keep in mind that each of the data sources has strengths and limitations. A brief description of each data source is provided below.

#### **Core HIV/AIDS Surveillance**

##### **HIV/AIDS Surveillance Data**

The Kansas Department of Health and Environment began conducting HIV/AIDS surveillance in 1983. On July 1, 1999, the Kansas statutes requiring confidential name-based HIV reporting were instituted. All HIV and AIDS cases diagnosed or treated in the State of Kansas are reportable to the Kansas Department of Health and Environment'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 Care Data**

The Ryan White Part B Program in the State of Kansas has been assisting Kansans living with HIV and AIDS via a variety of resources since 1987, before 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 Kansas maintains a database in the HIV/AIDS Program. The program collects client demographics, diagnostic status, financial eligibility and vital status information.

**Limitations:** Data are collected only from clients who know their HIV status.

### **AIDS Drug Assistance Program (ADAP)**

The HIV/AIDS Program at KDHE manages the statewide ADAP program which provides medications free of charge to persons living with HIV/AIDS who meet eligibility requirements. Kansas ADAP utilization data is available through cooperative efforts with the Kansas Social and Rehabilitative Services (SRS).

**Limitations:** All non-SRS databases are reliant on client reporting and case management reporting, which may result in time delays. The data is not generalizable to all HIV infected persons in Kansas; because data is only collected on persons who know their HIV status, are not eligible for health coverage through private insurance, who are currently being provided care / treatment services through Ryan White Part B funded providers and are financially eligible to receive services.

### **Sexually Transmitted Disease (STD) Surveillance**

The KDHE STD Section conducts statewide surveillance and treatment of chlamydia, gonorrhea and syphilis infections. Services include partner counseling, referral services and treatment. Data are collected in the Sexually Transmitted Disease Management Information System (STDMIS). STD data can serve as a surrogate marker of 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.

### **Vital Statistics Data**

The Office of Vital Statistics collects information on all births and deaths that occur in Kansas. The HIV/AIDS Surveillance Program obtains vital status information on all reported cases by matching them with death certificates. The data is also used to determine the number of deaths related to HIV/AIDS, as well as the number of perinatal exposures from birth certificates.

**Limitations:** The HIV Surveillance Program may not receive some death reports for HIV infected individuals, because HIV or AIDS is not listed as an immediate cause of death or an underlying cause of death on the death certificate. The completeness of birth certificates is dependent upon the diligence of the reporting entity.

### **Population Data**

US Census Bureau

The US Census Bureau collects and disseminates population estimates for states and counties every ten years. The data consists of demographic, economic and household characteristics of the population.

**Limitations:** The data is compiled from national statistics and is dependent upon the accuracy of reporting and participation of citizens.

### **Kansas State Data**

Economic and demographic data specific to the population of Kansas were also pulled from the Governor's Economic and Demographic Report which is prepared annually to summarize the state of affairs in Kansas. Also, the Bureau of Local and Rural Health within KDHE provides health profiles for each county in Kansas.

**Limitations:** Local population data have many of the same limitations as federal population data. Completeness of data is dependent upon the accuracy of reporting and

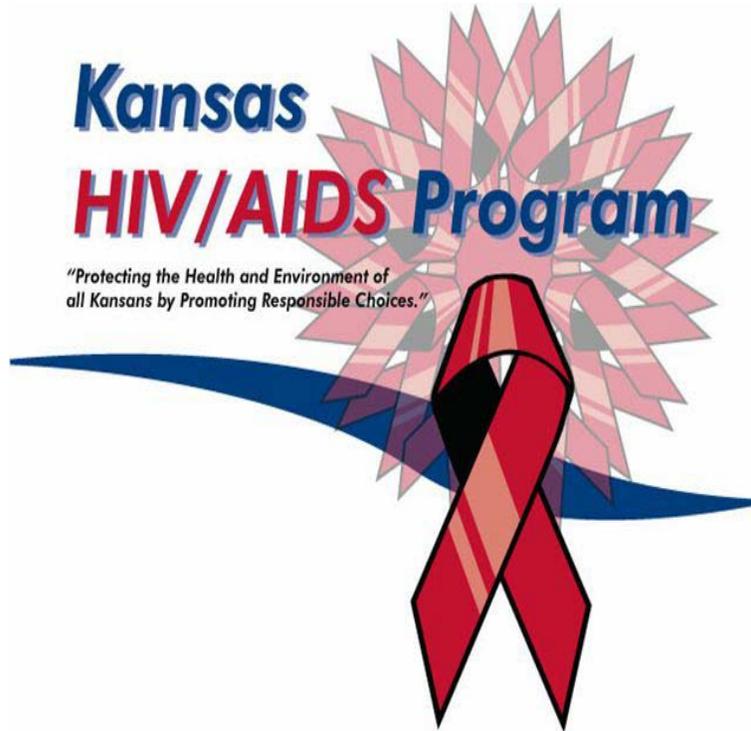
participation of the citizens. Estimates are not specific counts and therefore are more susceptible to unforeseen changes in the population.

## **Methods**

- This profile was created by the HIV/AIDS Surveillance Program of the Bureau of Disease Control and Prevention located in the Kansas Department of Health and Environment. All socioeconomic data, vital statistics data, other infectious disease data, and behavioral data were either downloaded from a public website or obtained by special request.
- Incidence rates were calculated for a 12-month period (January through December) per 100,000 population. The denominators for these rates were obtained from 2008 population estimates from the US Census Bureau. The numerator is the number of reported cases that were diagnosed during the 12-month period.
- All HIV/AIDS data represent the number of cases diagnosed during that calendar year without adjusting for reporting delays. Reporting delays refers to the time between diagnosis of a case and the receipt of the report by the surveillance unit. To minimize reporting delays, all data for 2008 was tabulated in March 2010.

# Kansas HIV/AIDS Program

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## CORE EPIDEMIOLOGIC QUESTIONS

## Question 1

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

## SUMMARY

**Population:** In 2008, the estimated total population for the State of Kansas was 2,802,134 persons. This represents a 4.2% increase from the published 2000 Census report of 2,688,418. The boundaries of Kansas form a nearly perfect rectangle around 105 counties that, according to 2008 population estimates, range from 1,266 persons in Greeley County to 534,093 persons in Johnson County. The population density varies widely across the state with more than 52% of the population living in the eastern third of the state (Regions 1, 2, 3, 4, and 5) and 61% of the population residing in metropolitan areas (county population greater than 50,000).

The total state land area is 81,815 square miles and the average population density is 33.9 persons per square mile. Kansas has three *major* metropolitan areas (counties with a population density greater than 300 persons per square mile) that contain 48% of the state's population. They are Kansas City (Wyandotte Co. and Johnson Co.), Wichita (Sedgwick Co.) and Topeka (Shawnee Co.).

**Public Health Regional Structure:** The KDHE HIV Prevention Section, in conjunction with the Community Planning Group and HIV Case Management Section, divided the state into nine regions for public health planning (see Map, p18). These regions have neither similar geography nor population size. They range in size from 31 counties (Region 7) to two counties (Regions 1 and 2), and surrounding urban centers: Kansas City (Region 1), Olathe/Overland Park/Shawnee (Region 2), Lawrence (Region 3), Topeka (Region 4), Pittsburg (Region 5), Manhattan (Region 6), Salina (Region 7), Wichita (Region 8) and Garden City (Region 9). Region 8 contains the largest proportion of the state's population (27%) and Region 6 contains the smallest (4.7%). The range in the number of counties and the area per region is due to the dramatic differences in population density throughout the state. This interesting mix of land mass and extremes in population density poses a major challenge in creating health education programming for the citizens of Kansas.

**Demographic Composition:** According to the 2008 census data, the racial and ethnic composition of the state was estimated to be 81.1% White non-Hispanic, 9.1% Hispanic, 6.4% Black non-Hispanic, 2.4% Asian/Pacific Islander and 1.0% Native American.

**Age and Sex:** According to the 2008 census estimate, the median age of Kansas' residents was 36.2 years. Based on the reported median age of 32.9 years in the 1990 Census in Kansas, the population is aging slightly. The same data estimates that the proportion of females in the overall population was slightly higher than the proportion of males (50.4% vs. 49.6%).

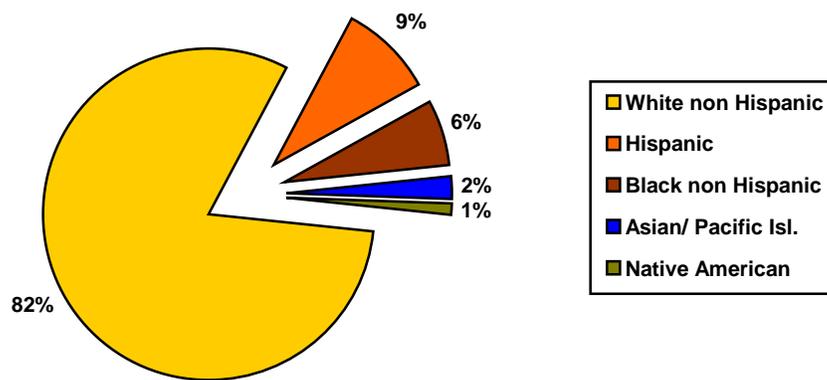
**Poverty, Income, and Education:** The median household income in Kansas in 2008 was \$50,177. The estimated proportion of the population below the federal poverty level in 2008 was 15% in Kansas as compared to 18.0% nationally. Also, at this time there were approximately 22% of children living below poverty in the State of Kansas. In 2008, among individuals 25 years and above, 86% had at least graduated from high school and 25.8% had a bachelor's or higher degree.

## **DEMOGRAPHICS**

The demographic makeup of Kansas is becoming more diverse. Historically, the population of Kansas has been predominantly White non-Hispanic. In 2008, even though the overall makeup remained the same, the proportions of other races and ethnicities displayed an upward trend, especially in the proportion of the Hispanic population. The US Census Bureau estimates that the Hispanic population in Kansas continues to grow, increasing from 3.9% of the total population in 1990 to 8.8% of the total population in 2008.

Figure 1

**Kansas State Population Race/Ethnicity Distribution,  
2008 Census Estimates**



Source: 2008 Estimates, Kansas Department of Health & Environment Office of Vital Statistics

The White non-Hispanic population maintains the majority in every region; however, their percentage of the population in Regions 1 and 9 is much lower than that of the other regions. Region 1 has the largest population of non-Hispanic Blacks in the State of Kansas. This region also has the greatest percentage of non-Hispanic Blacks compared to any other region. Approximately 43% of Kansas' Hispanic population resides in Regions 8 and 9. Although the size of the Hispanic population in these regions is very similar, Hispanics account for 34.1% of the population in Region 9 and only 8.6% of the population in Region 8 (Table 1).

**Table 1: Percentage of the General Population by Race/Ethnicity and by Public Health Region, 2008**

	<b>White, non- Hispanic, %</b>	<b>Black, non- Hispanic, %</b>	<b>Native American, non- Hispanic, %</b>	<b>Asian/PI, non- Hispanic, %</b>	<b>Hispanic, %</b>	<b>Total Population (%)</b>
<b>Region 1</b>	59.4	21.1	0.8	1.8	16.8	8.1
<b>Region 2</b>	85.5	4.3	0.4	3.9	5.6	20.2
<b>Region 3</b>	87.4	3.9	2.0	3.1	3.5	5.7
<b>Region 4</b>	82.5	6.5	1.5	1.2	8.3	10.9
<b>Region 5</b>	91.0	3.3	2.1	0.8	2.8	6.8
<b>Region 6</b>	84.0	7.6	0.7	2.8	4.9	5.2
<b>Region 7</b>	92.0	1.8	0.5	0.8	4.6	10.2
<b>Region 8</b>	79.9	7.2	1.1	2.9	8.9	26.7
<b>Region 9</b>	60.5	1.6	0.6	1.5	35.7	5.8

Source: 2008 Kansas Department of Health and Environment Office of Vital Statistics.

Note: Due to rounding percentages may not add to 100%. Crude populations can be calculated by multiplying the total population by the percent value of concern. PI (Pacific Islander)

Classifying counties based upon population density further describes the distribution of people throughout Kansas and allows for better comparison of counties with similar populations. In Kansas, six of the 105 counties have more than 150 persons per square mile and 54.6 % of the population resides within these counties. The Kansas City metropolitan area which includes Leavenworth, Wyandotte, Johnson, and Miami counties contains 28.1% of the State's population. The Wyandotte and Johnson county areas both have a population density of greater than 1000 persons per square mile.

The percent distribution of population by age group in Kansas is similar to that of the US population. 64.4% of the population in Kansas during 2008 was 25 years of age or older (Table 2).

According to the 2008 census estimates the median age of Kansas residents was 36.2 years. More than 25% of the population is 18 years of age or younger; 13% of the population is 65 or older. The age distribution among males and females in Kansas is similar; however, a slightly higher proportion of females are 65 years and older, a trend also noted in nationwide estimates. The same data estimates that the proportion of females in the overall population was slightly higher than the proportion of males (50.4% vs. 49.6%).

**Table 2: Percentage Distribution of the General Population by Age Group and Gender, Kansas, 2008**

<b>Age Group (yrs.)</b>	<b>Males, % (N=1,391,821)</b>	<b>Females, % (N=1,410,313)</b>	<b>Total Population, % (N=2,802,134)</b>
<b>&lt;13</b>	18.6	17.7	<b>18.0</b>
<b>13-14</b>	2.8	2.6	<b>2.7</b>
<b>15-24</b>	15.4	14.0	<b>14.7</b>
<b>25-34</b>	13.6	12.6	<b>13.1</b>
<b>35-44</b>	13.1	12.7	<b>12.8</b>
<b>45-54</b>	14.6	14.5	<b>14.5</b>
<b>55-64</b>	10.9	11.0	<b>10.9</b>
<b>≥65</b>	11.1	15.1	<b>13.1</b>

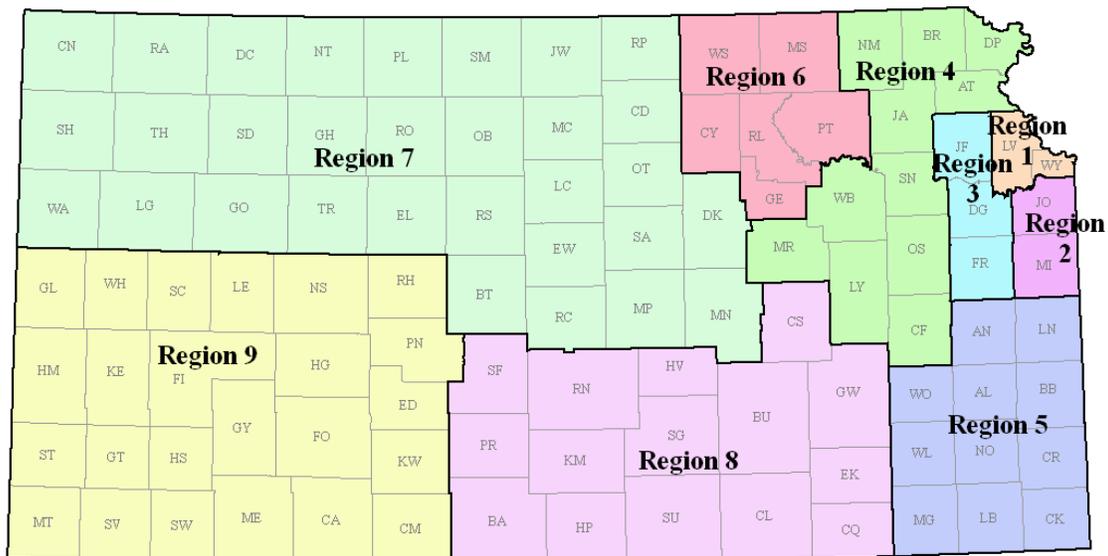
Source: 2008 Estimates, US Census Bureau & CDC Wonder

Note: Due to rounding percentages may not add to 100%. Crude populations can be achieved by multiplying the total population by the percent value of concern.

# SOCIOECONOMIC STATUS

According to the US Census Bureau, there were approximately 401,620 Kansans living below the poverty line in 2008. Approximately 22% of the children residing in Kansas were living below the poverty line in 2008. According to the US Department of Health and Human Services, an income of less than \$17,600 was below 100% poverty for a family of three in 2008. During the 2007-2008 time period, there were approximately 244,900 people living in poverty in the major metropolitan areas of the State of Kansas and an additional 168,300 in the non-metropolitan areas. According to the Kaiser Commission on Medicaid and the Underinsured 2007-2008 report, 12.5% of the state's population had no insurance coverage compared to 15.4% nationally.

## HIV/AIDS Community Planning Regions



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 Kansas Cartographic Dataset  
 Kansas HIV/STD Surveillance Program

Disclaimer: The purpose of this publication is to illustrate the status of the HIV/AIDS epidemic in the state of Kansas. This map product is provided without representation or implied or expressed warranty of accuracy for any uses beyond those expressed. The originating agencies are not responsible for publication or use of this product for purposes other than those expressed. This product may be corrected or updated as necessary without prior notification.

## Question 2

### What is the scope of the HIV/AIDS epidemic in Kansas?

In 1983, KDHE 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 Human Immunodeficiency Virus (HIV) infection. Since that time, the HIV/AIDS epidemic has affected people of nearly all genders, ages and racial/ethnic groups. However, the epidemic has not affected all of these groups equally.

Although White men who have sex with men (MSM) continue to be disproportionately impacted by HIV/AIDS, recent data suggest a change in the epidemic toward Blacks, Hispanics, women, and heterosexuals. Blacks continue to have the highest rate of infection per 100,000 persons compared to any other racial or ethnic group in the State of Kansas. The rate for Hispanics also remains high but has been relatively stable since 2003 to current.

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. Due to limited resources, it is imperative that efforts are focused on identifying those populations most affected and most at risk for HIV infection.

#### HIGHLIGHTS

- During 2008, among all newly diagnosed HIV/AIDS cases, 86 (48.9%) were new AIDS cases and 90 (51.1%) were HIV (non-AIDS) cases.
- At the end of 2008, 2,559 persons were presumed to be living with HIV/AIDS in Kansas. Of those, 55.7% (1,427 persons) had an AIDS diagnosis.
- The number of deaths due to AIDS continues to decline, as HAART therapy becomes more advanced. From 2004-2008, there was an average of 25 deaths per year.
- The HIV infection rate for Blacks continues to be disproportionately high (29.2 per 100,000); in 2008 it was more than seven times higher than that for Whites and four times that for Hispanics. In 2008 approximately 29.5% of the newly diagnosed HIV/AIDS cases were in the Black population.
- The number of women affected by HIV/AIDS is steadily increasing. Women comprised approximately 21% of the newly diagnosed HIV/AIDS cases in 2008. Although the rate of infection per 100,000 is low compared to that of men, it has remained steady over the years. Black women (12.5 per 100,000) have the highest rate of infection compared to any other racial or ethnic group in Kansas.

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 2008 and reported through December 2009. The regional epidemiological profiles included at the end of this section provide a more detailed description of the epidemic in each public health region. Unless noted, all data comes from Kansas eHARS (enhanced HIV/AIDS Reporting System).

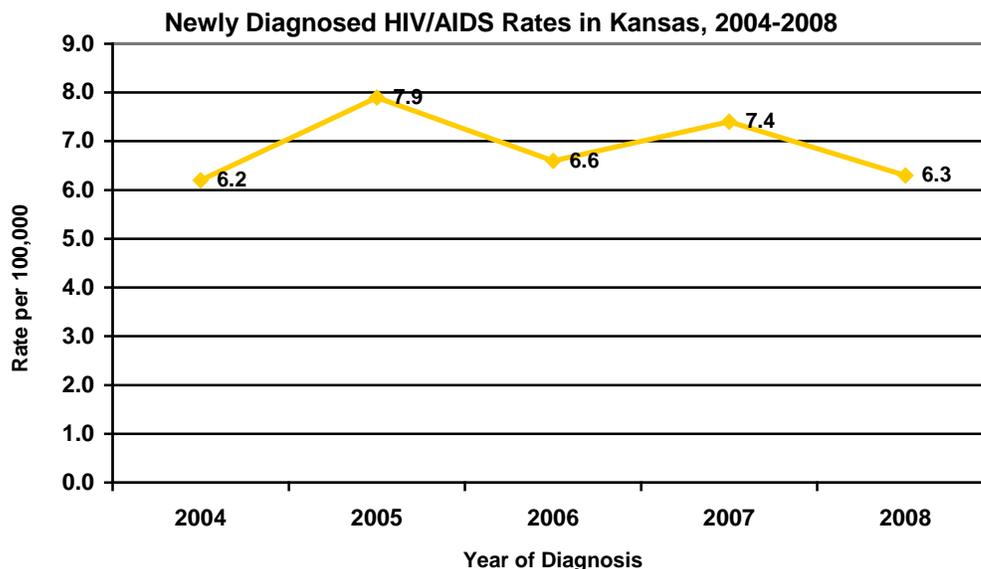
## OVERALL HIV/AIDS TRENDS

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In 2008, 176 new cases of HIV/AIDS were diagnosed in the State of Kansas. This number reflects those persons whose HIV infection (including AIDS) was first diagnosed in 2008 and who were reported to the state health department. It is possible to have cases diagnosed as AIDS and HIV simultaneously, 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 only in order to avoid “double-counting.” Once diagnosed with AIDS, a person does not re-enter the HIV “pool,” even if they no longer meet the case definition of AIDS (e.g. a person who is HIV positive in 2007, and subsequently develops *Pneumocystis carinii* pneumonia (PCP), becomes an AIDS case). However, if the condition is resolved, the person will not be reclassified as an HIV case.

From 2004 to 2007 newly diagnosed HIV/AIDS rates per 100,000 have increased from 6.2 per 100,000 to 7.4 per 100,000 (Figure 2). Newly diagnosed HIV/AIDS rates were the highest in 2005 (7.9 per 100,000).

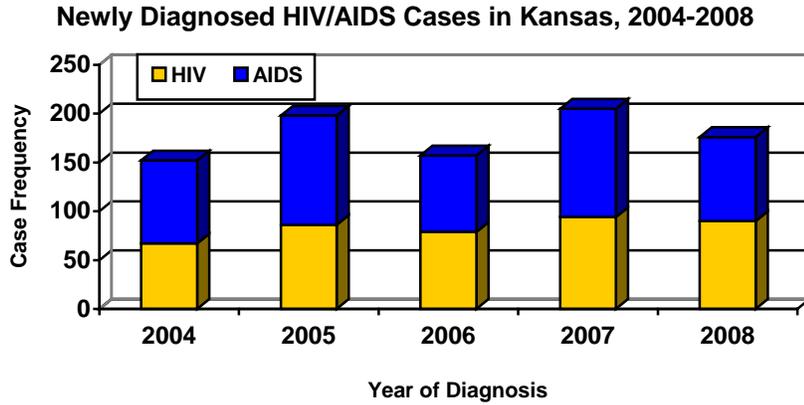
Figure 2



Data Source: Kansas HIV/AIDS Surveillance System; as of December 31, 2009

In 2008, there were a total of 86 AIDS cases and 90 HIV cases newly diagnosed and reported in the State of Kansas. This is a 34 percent increase in HIV cases and a one percent increase in AIDS cases compared to 2004 (Figure 3).

Figure 3

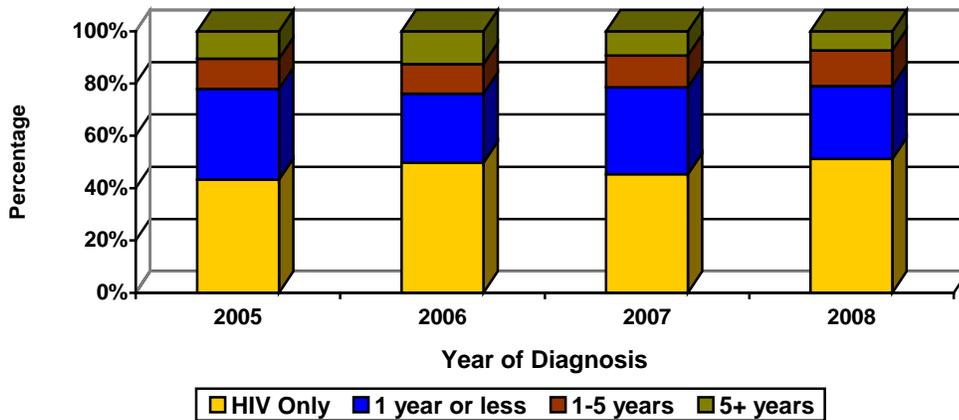


Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009

The number of persons newly diagnosed with HIV or AIDS in Kansas has steadily increased over the past five years. Compared to 2004, there has been a 16% increase in the number of newly diagnosed HIV and AIDS cases. Among the newly diagnosed cases of HIV disease in 2008, 49 (28%) were simultaneously diagnosed with both HIV and AIDS. The proportion of cases reported as converting from HIV to AIDS within one year has remained relatively stable over the years (Figure 4).

Figure 4

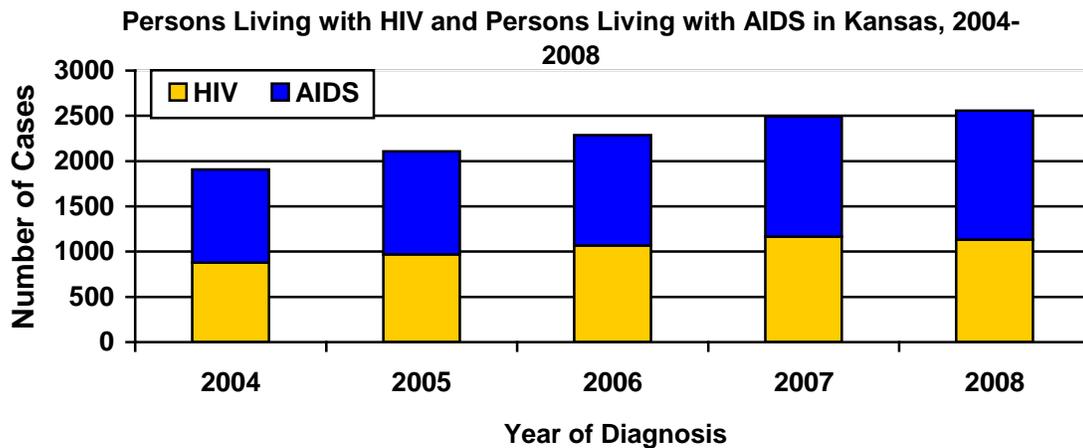
**Newly Diagnosed HIV Cases by Year & Conversion Time from HIV to AIDS  
2005-2008, Kansas**



Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009

Prevalence numbers are an approximation of the number of persons actually living with HIV/AIDS at a particular period of time. The number does not include those persons who are infected and have not been tested for the virus. There were approximately 2,559 persons living with HIV/AIDS in the State of Kansas as of December 31, 2008 (Table 3). As noted in Figure 5 the number of prevalent cases of HIV and AIDS has consistently increased over the 5 year period. In 2004 there were approximately 1,028 persons living with AIDS, compared to 1,427 in 2008. The proportion of HIV and AIDS cases has remained relatively the same from 2004 to 2008. This trend is mainly due to the introduction of antiretroviral drug treatments and therapies, which tend to delay the progression from HIV to AIDS and from AIDS to death.

Figure 5

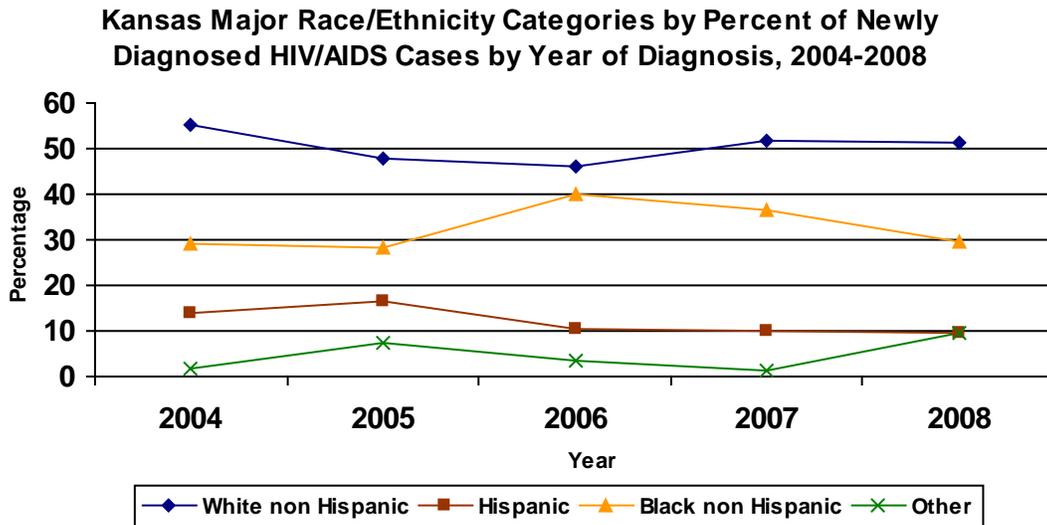


Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009

From 2004-2006, there was a downward trend in the overall number of cases being diagnosed in non-Hispanic Whites and Hispanics in Kansas; compared to an upward trend in the number of cases diagnosed in non-Hispanic Blacks (Figure 6). However in 2008, there was a slight decrease in the proportion of newly diagnosed non-Hispanic Whites, and a slight decrease in the proportion of non-Hispanic Blacks. The proportion of Hispanic cases continues to hold steady.

The minority population continues to be disproportionately affected by HIV/AIDS. Although only 18% of the state's population is minority, these groups represent 48% of the newly diagnosed HIV/AIDS cases in 2008 and 41% of persons living with HIV/AIDS. Blacks in particular make up the greatest number of the minority cases, with 52 of the 176 newly diagnosed cases in 2008. Although Blacks make up only 6% of the population in Kansas, they have the highest rate of HIV/AIDS infection (29.5 per 100,000) compared to any other racial or ethnic group (Table 3). The 2008 rate of HIV/AIDS infection in the Black population in Kansas is seven times higher than that for Whites and four times higher than that for Hispanics.

Figure 6



Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009

The proportion of newly diagnosed HIV/AIDS cases in women in Kansas is currently twenty-one percent; which is consistent with trends noted in past years. This is a six percent increase from the 2006 total. In 2008 compared to 2004, the number of female cases diagnosed each year was roughly the same (40 cases in 2004 to 37 cases in 2008) while the total number of cases increased by 16% (152 cases in 2004 to 176 cases in 2008).

In 2008, approximately 51% of the newly diagnosed HIV/AIDS cases were White, 30% Black and 10% Hispanic. These percentages are congruent with those of the persons living with HIV/AIDS in Kansas as of December 2008. The majority (56%) of the newly diagnosed cases of HIV/AIDS in 2008 were between the ages of 25 and 44 (Table 3). This is consistent with the percentage of cases living with HIV/AIDS in Kansas as of 2008. There was one newly diagnosed infant case of HIV reported in Kansas in 2008. There were no newly diagnosed adolescent cases in the 13-14 age group. The number of newly diagnosed HIV/AIDS cases between the ages of 45 and 64 was equal to 24.5% of the total percent of new cases. The number of newly diagnosed cases in this age grouping has been steadily increasing over the past several years. Regions 1, 2 and 8 continue to be the most affected regions in the State of Kansas. It should be noted that these areas are large urban metropolises in the state. They continue to have the greatest percentages of newly diagnosed cases of HIV/AIDS in the state. This is congruent with the percentages of persons living with HIV/AIDS in the state. Region 1 (16.6 per 100,000) continues to have the highest rate of infection for newly diagnosed HIV/AIDS cases, compared to any other region in the state (Table 3). Prevalence counts were based upon residence at diagnosis. They do not take into consideration the in-state and out – state migration of cases which occurs regularly among persons living with HIV/AIDS.

**Table 3. Characteristics of persons infected with HIV/AIDS, Kansas, 2008**

	NEW HIV/AIDS CASES DIAGNOSED, 2008			PERSONS LIVING WITH HIV/AIDS, THROUGH 2008		
	N	%	Rate <sup>1</sup>	N	%	Rate <sup>1</sup>
<b>TOTAL</b>	176	100.0	6.3	2559	100.0	91.3
<b>GENDER</b>						
Male	139	79.0	10.0	2073	81.0	148.9
Female	37	21.0	2.6	486	19.0	34.5
<b>RACE/ETHNICITY</b>						
Hispanic	17	9.6	6.7	331	12.9	129.6
American-Indian	1	0.6	**	22	0.8	79.4
Asian	1	0.6	**	19	0.7	**
Black Non-Hispanic	52	29.5	29.2	629	24.6	353.1
White Non-Hispanic	90	51.1	4.0	1496	58.4	65.80
Multi-Race	14	8.0	*	46	1.8	*
Unknown	1	0.6	*	16	0.6	*
<b>AGE GROUP (YRS.)</b>						
<13	1	0.6	**	21	0.8	**
13-14	.	.	.	2	0.1	**
15-24	32	18.2	7.8	357	14.0	86.9
25-34	49	27.8	13.3	929	36.3	252.5
35-44	49	27.8	13.6	814	31.8	225.9
45-54	36	20.5	9.1	335	13.1	82.1
55-64	7	4.0	**	78	3.0	25.5
>65	2	1.1	**	23	0.9	**
<b>PUBLIC HEALTH REGION</b>						
1	38	21.6	16.6	553	21.6	241.9
2	40	22.7	7.1	523	20.4	92.5
3	8	4.5	5.0**	102	4.0	63.8
4	16	9.1	5.2**	259	10.1	84.8
5	8	4.5	4.2**	79	3.1	41.3
6	7	4.0	4.8**	88	3.4	60.0
7	11	6.3	3.8**	106	4.1	37.0
8	45	25.6	6.0	763	29.8	101.8
9	3	1.7	1.8**	86	3.4	52.5

<sup>1</sup>Rates per 100,000 persons, @ Age at diagnosis \*\*No available denominator for these categories from the current Census estimates

\*\* Rate Based on very small numbers are not reliable

Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009

## **HIV/AIDS, By RACE/ETHNICITY AND SEX**

In 2008, there were a total of 2,559 people in Kansas living with HIV/AIDS. As of December 31, of the same year there were 176 newly diagnosed cases of HIV/AIDS. There were 139 men and 37 women newly diagnosed with HIV/AIDS in the state (Table 4). The number of female cases increased 12% from the 2004 total of 33 cases. Of the 37 newly diagnosed female cases, 48% were White, 29% Black, 13% Hispanic and the remaining 8% consisted of persons who noted their race as Asian/Pacific Islander, American Indian or Multi-race.

The epidemic disproportionately affects both males and females in the Black community. Kansas statistics show congruence with the national data, in this regard. Although Blacks make up only 6% of the population in Kansas, they have the highest rate of infection compared to any other racial or ethnic group (Table 4). In 2008, Blacks accounted for 29.5% of the newly diagnosed HIV/AIDS cases. Black women comprised 29 percent of the total number of newly diagnosed female cases of HIV/AIDS in 2008. Black females (12.5 per 100,000) in Kansas have the highest rate of HIV/AIDS infection compared to women in any other racial or ethnic group.

**Table 4. Newly Diagnosed HIV/AIDS Cases and Rates, by Race/Ethnicity and Gender, Kansas, 2008**

Race/ethnicity	Males		Females		Total		
	N	%	N	%	N	%	Rate <sup>2</sup>
<b>White, non-Hispanic</b>	72	40.9	18	10.2	90	51.1	4.0
<b>Black, non-Hispanic</b>	41	23.3	11	6.2	52	29.5	29.2
<b>Hispanic</b>	12	6.8	5	2.8	17	9.7	6.7
<b>Other/unknown</b>	14	8.0	3	1.7	17	9.7	**
<b>Total</b>	139	79.0	37	21.0	176	100*	

<sup>1</sup>Calculated as the percentage of all newly diagnosed HIV disease in 2009.

<sup>2</sup>Rates calculated per 100,000

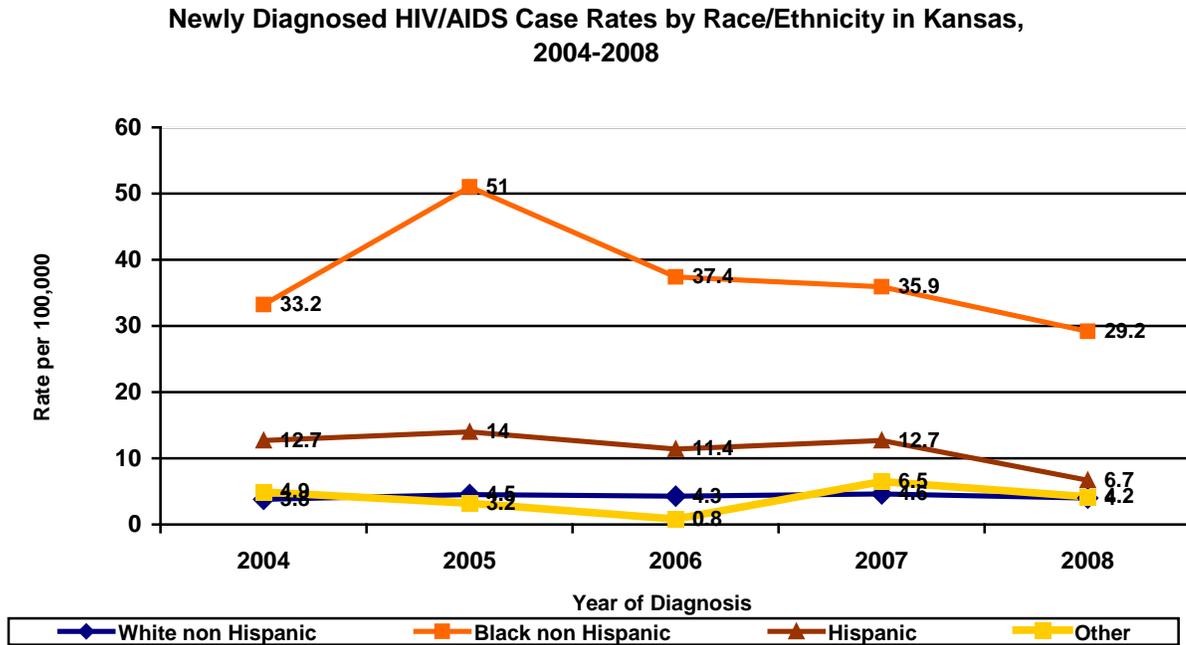
\*Due to rounding percentages may not add up to 100 percent

\*\* Rates based on small numbers are not reliable

Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009

Over the past five years, the number of newly diagnosed HIV/AIDS cases among non-Hispanic Blacks and Hispanics has been increasing. In 2008, the rate among non-Hispanic Blacks was 29.2 per 100,000. This is approximately seven times greater than the rate among the non-Hispanic White population (4.0 per 100,000) and almost four times greater than the rate among the Hispanic population (6.7 per 100,000 during the same year) (Figure 7).

Figure 7



Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009

## **HIV/AIDS, BY AGE GROUP**

In 2008, persons aged 25-44 accounted for a little more than half (55%) of the 176 newly diagnosed HIV/AIDS cases. This is a 9% decrease compared to the number of cases in 2004 in this age range. However, this age range is the most impacted by the condition both nationally and locally. Males between the ages of 25-44 made up 55.6% of the newly diagnosed HIV/AIDS cases in Kansas, compared to 48% in 2004. The majority of newly diagnosed women (67.4%) were also in this age range. Approximately 18% of the newly diagnosed HIV/AIDS cases in 2008 were between the ages of 15 and 24 (Table 5). This current figure for youth has doubled since 2004. Persons over the age of 55 made up approximately 5% of the newly diagnosed HIV/AIDS cases in 2008.

**Table 5. HIV/AIDS Diagnoses by Age Group and Gender, Kansas, 2008**

Age Group (yrs.)*	Males		Females		Total	
	N	% <sup>1</sup>	N	% <sup>1</sup>	N	% <sup>1</sup>
<13	.	.	1	2.7	1	0.6
13-14	.	.	.	.	.	.
15-24	24	17.3	8	21.6	32	18.2
25-34	35	25.2	14	37.8	49	27.8
35-44	41	29.5	8	21.6	49	27.8
45-54	31	22.3	5	13.5	36	20.4
55-64	6	4.3	1	2.7	7	4.0
≥65	2	1.4	.	.	2	1.1
<b>Total</b>	139	100	37	100	176	100

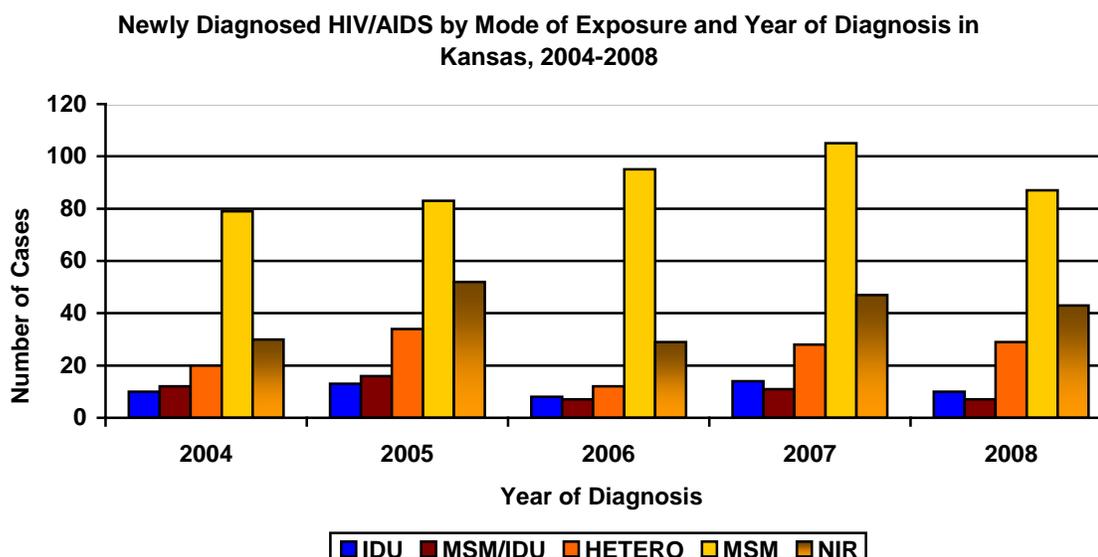
<sup>1</sup>Calculated as the percentage of all newly diagnosed HIV/AIDS Cases in 2008  
*Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009*

\*Age at diagnosis

## **HIV/AIDS, BY MODE OF EXPOSURE**

The mode of exposure looks at behaviors that put people at risk for becoming infected with HIV. The number of cases of newly diagnosed HIV/AIDS by mode of exposure and year of diagnosis are presented below. Figure 8 shows the top four exposure/risk categories, based upon those cases having a reported risk or exposure specified at the time of diagnosis. Male to male sexual (MSM) contact continues to be the predominant exposure category for newly diagnosed cases of HIV/AIDS in Kansas. This trend is consistent with national findings. Over the past five years, there has been a steady increase in the number of cases that note MSM as their primary risk factor. In 2008, there were a total of 87 cases that attributed MSM as the primary risk factor. This was approximately 49% of the total cases for that calendar year. The next most common mode of exposure noted was heterosexual contact (16%). Approximately six percent of the newly diagnosed cases noted intravenous drug use (IDU) as their primary mode of exposure. Another four percent noted male to male sexual contact and intravenous drug use (MSM/IDU) as their primary risk. These low percentages of IDU and MSM/IDU are consistent with historical data pertaining to these exposure groups in Kansas. Lastly, cases that had no risk reported (NRR) or no identified risk (NIR) have also been included. These cases are currently being investigated with hopes of being able to reclassify them into the appropriate risk/exposure categories.

Figure 8



Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009

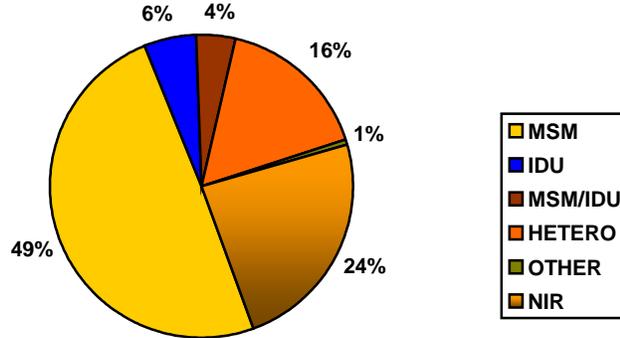
In 2008, approximately 24% of the newly diagnosed HIV/AIDS cases were reported as having no identified risk factor (Figure 9). This category has shown a relatively steady increase since 2004. Obtaining risk factor information has become increasingly difficult over the years. This point denotes an increased need for provider education, regarding the importance of discussing risk factors with patients at the time of diagnosis. Per CDC guidelines, risk factors correspond to the period 'before the first positive HIV test or AIDS diagnosis'. The Centers for Disease Control and Prevention consider risk factor ascertainment a high priority in surveillance. Identification of risk factors enables the

prevention program and community planning bodies to identify target groups and focus their programs and messages accordingly.

Kansas has a small number of cases attributing risk to intravenous drug use. This finding is consistent with data collected since the institution of HIV and AIDS case reporting in Kansas. This is comparable to the national standards, which note that HIV transmission via IDU has decreased substantially since 1993. In 2007, CDC reported a 6% decrease in HIV/AIDS among IDUs in the United States from 2004 (5,263) to 2007(4,939). Kansas also had a very small percentage of cases noting MSM/IDU as their primary risk factor. The number of newly diagnosed heterosexual exposure cases in Kansas has increased by 40% since 2004 (Figure 9).

Figure 9

**Proportion of Newly Diagnosed HIV/AIDS Cases by Mode of Transmission in Kansas, 2008**

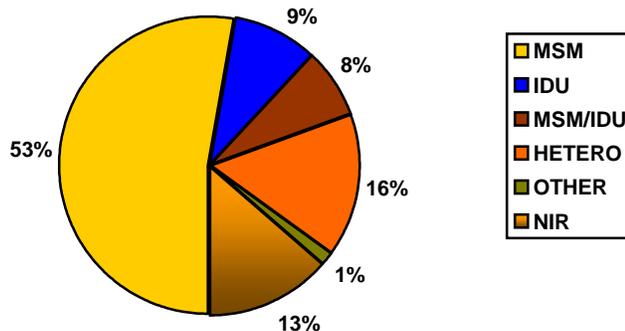


Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009

The proportions by mode of exposure of newly diagnosed cases closely resemble that of prevalent cases in Kansas. For instance, approximately 16% of the newly diagnosed cases reported a risk of heterosexual contact, compared to 16% of prevalent HIV/AIDS cases indicating that same risk factor (Figure 10).

Figure 10

**Proportion of Living HIV/AIDS Cases by Mode of Transmission, Kansas, 2008**



Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009

Table 6. Proportion (%) of Living Kansas HIV/AIDS Cases by Category of Exposure and Region, 2008

Region	MSM	IDU	MSM/IDU	Het Sex	NIR	Other	Total (N)
1	49.0	9.2	5.2	16.9	18.0	0.9	(553)
2	56.5	4.8	5.9	15.9	15.3	1.7	(523)
3	63.7	5.9	8.8	12.7	5.9	2.9	(102)
4	50.6	11.2	8.5	16.2	11.6	0.8	(259)
5	36.7	15.2	8.9	25.3	12.6	1.3	(79)
6	43.7	6.9	9.2	18.4	20.7	1.1	(88)
7	49.0	18.9	9.4	11.3	9.4	1.9	(106)
8	56.5	8.9	9.9	18.6	18.6	1.2	(763)
9	39.5	18.6	3.5	18.6	18.6	1.2	(86)
<b>Total (N)</b>	<b>(1351)</b>	<b>(233)</b>	<b>(195)</b>	<b>(399)</b>	<b>(344)</b>	<b>(37)</b>	<b>(2559)</b>

*Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009  
Other includes: pediatric exposures, blood transfusions/blood products*

Regional comparisons of exposure categories provide a basis for prevention intervention development in various areas across the state. This data provides insight into target population numbers and location. Analysis of regional data shows male to male sexual contact continues to be the predominant mode of exposure among persons living with HIV/AIDS in Kansas. The largest proportions of cases reporting MSM as a risk factor were located in Regions 2, 3, 4 and 8, with Region 3 having the greatest percentage among the four. Region 7 had the largest percent of cases reporting injection drug use (18.9%) as a risk factor in the state, followed by Region 9 (18.6%). Region 5 had the greatest percentage of cases noting heterosexual contact (25.3%) as their primary risk factor in 2008 (Table 6). The largest percentage of cases having no identified risk factor reported was Region 6 (20.7%), followed by Regions 8 and 9 (18.6%), and Region 1 (18.0%).

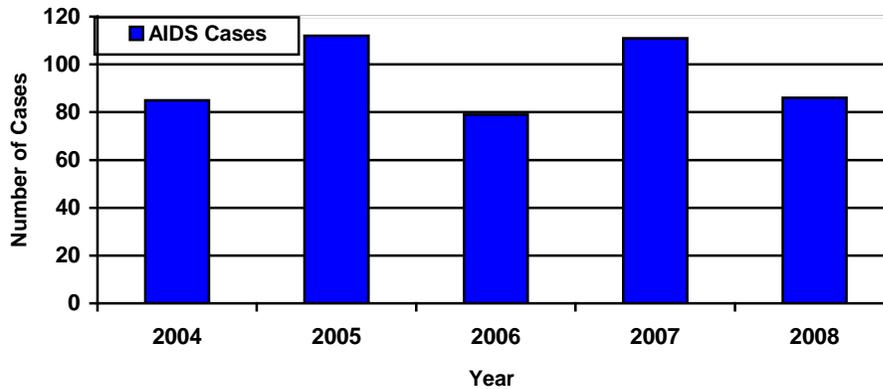
# AIDS TRENDS AND HIV/AIDS MORTALITY

## AIDS Trends

The number of newly diagnosed AIDS cases has increased from 85 in 2004 to 86 in 2008 (Figure 11). This is approximately a 1% increase in newly diagnosed AIDS cases.

Figure 11

Newly Diagnosed AIDS Cases by Year of Diagnosis, Kansas 2004-2008

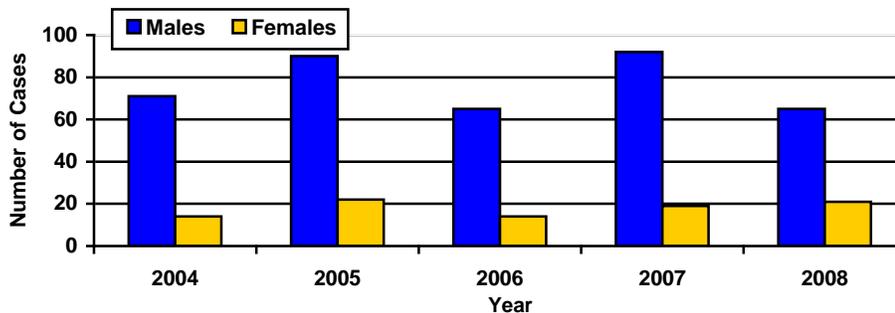


Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009

Males continue to be the primary gender group impacted by AIDS in the State of Kansas. In 2008, there were a total of 65 newly diagnosed AIDS cases among males in Kansas. This is an 8% decrease compared to 2004. The number of female AIDS cases continues to increase, although they are not as voluminous as their male counterparts. In 2008, there were 21 newly diagnosed AIDS cases among females in Kansas (Figure 12). This is a 50% increase from the 2004 total of 14 newly diagnosed cases.

Figure 12

Newly Diagnosed AIDS Cases by Gender and Year of Diagnosis, Kansas, 2004-2008

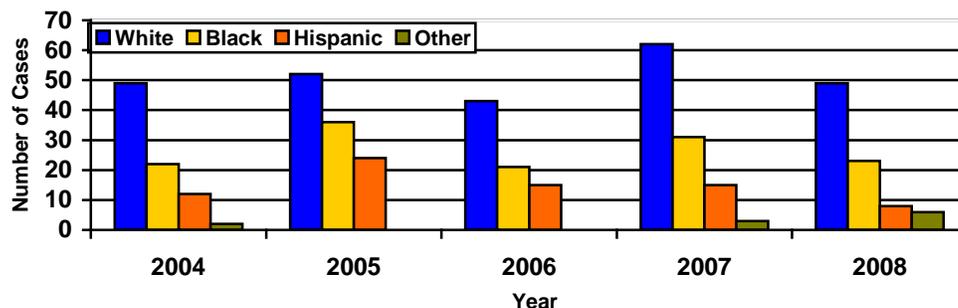


Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009

In 2008, the number of newly diagnosed AIDS cases among all races in Kansas was equal to the number of cases diagnosed in 2004. In Kansas the face of HIV/AIDS is rapidly changing. 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 2008 was 43% compared to 42% in 2004. This shift towards minorities is also being seen nationally. The number of cases among non-Hispanic Blacks is particularly higher than any other minority group in the State of Kansas. The number of non-Hispanic Black and non-Hispanic White newly diagnosed AIDS in 2008 were equal to the number of cases newly diagnosed in 2004. Among Hispanics, there was a 33% decrease in the number of newly diagnosed AIDS cases since 2004 (Figure 13).

Figure 13

**Newly Diagnosed AIDS Cases by Race/Ethnicity and Year of Diagnosis, Kansas, 2004-2008**



Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009

When comparing newly diagnosed AIDS cases to prevalent cases at the end of 2008, it was found that men made up the majority of the cases. The percentages among prevalent and newly diagnosed cases by gender were almost equal. This was also the case when analyzing cases by race/ethnicity. The percentage of prevalent minority cases was 38%, which is relatively close to the 43% seen in the incidence cases for 2008. The most impacted ages are the 25-34 and 35-44 age ranges. Among cases 35-44 years, the percentage is relatively equal for both newly diagnosed and prevalent cases. Comparing the regional data for AIDS cases in 2008, it should be noted that the highest percentage of AIDS cases were located in the major metropolitan areas. The Kansas City and Wichita metropolitan areas both continue to have the majority of newly diagnosed cases as well as the largest number of prevalent cases. The Kansas City metro accounted for approximately 41% of the newly diagnosed AIDS cases and 40% of the prevalent AIDS cases; while the Wichita metro contained 20% of the newly diagnosed and 31.3% of the current prevalent cases in Kansas. Although Region 1 had a smaller population compared to Region 8, it had the highest rate (128.6 per 100,000) of AIDS prevalence in the State of Kansas in 2008. Region 8 had the next highest prevalence rate in the state, which was 59.6 per 100,000.

**Table 7. Characteristics of Persons with AIDS, Kansas, 2008**

	Persons Newly Diagnosed, 2008		Persons Living with AIDS through 2008	
	N	%	N	%
<b>Gender</b>				
Male	65	75.6	1185	83.0
Female	21	24.4	242	17.0
<b>Race/Ethnicity</b>				
White, non-Hispanic	49	57.0	870	61.0
Black, non-Hispanic	23	26.7	325	22.7
Hispanic	8	9.3	190	13.3
Other/Unknown	6	7.0	42	2.9
<b>Age Groups (yrs.)*</b>				
<13	.	.	7	0.5
13-14	.	.	2	0.1
15-24	12	13.9	106	7.4
25-34	23	26.7	507	35.5
35-44	29	33.7	531	37.2
45-54	18	20.9	219	15.3
55-64	3	3.5	44	3.1
≥65	1	1.2	11	0.8
<b>Public Health Regions</b>				
1	15	17.4	294	20.6
2	21	24.4	278	19.5
3	4	4.7	56	3.9
4	10	11.6	160	11.2
5	7	8.1	40	2.8
6	3	3.5	42	2.9
7	7	8.1	66	4.6
8	17	19.8	447	31.3
9	2	2.3	44	3.1
<b>Total</b>	<b>86</b>	<b>100.0</b>	<b>1427</b>	<b>100.0</b>

*Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009*

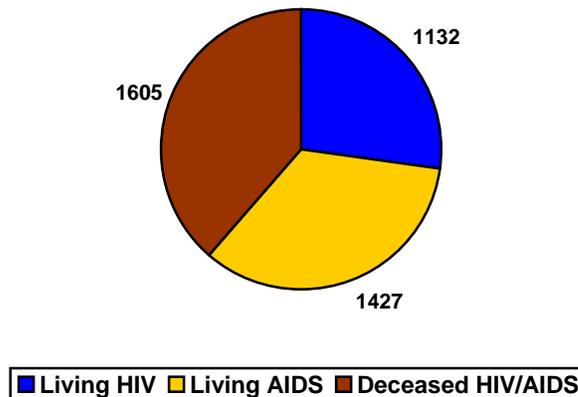
\*Age at diagnosis

## 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 the HIV disease. According to CDC, studies have shown that patients taking HAART have experienced significant reductions in HIV viral loads; some reduced 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 (1). Kansas 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.

Figure 14

**Cumulative Reported HIV/AIDS Cases (Living and Deceased) by Current Status, Kansas, 2008**



Data Source: Kansas HIV/AIDS Surveillance System; As of December 31, 2009

The number of deaths due to HIV/AIDS in Kansas continues to decrease. According to the Kansas Surveillance System records there have been approximately 1,605 deaths due to HIV/AIDS reported in Kansas as of 2008 (Figure 14). The majority of the persons with AIDS who have died were men (90%); which is consistent with the fact that roughly 81% of persons living with AIDS in Kansas were men (Table 8). Approximately 76% of the deceased cases were White, 16% Black and 5% Hispanic. Region 8 had the greatest percentage of AIDS related deaths (33%) compared to any other region in the state. Region 8 also has the greatest percentage of persons living with AIDS as of December 2008. Living AIDS cases continue to increase across all demographic groups. In 2008, the AIDS prevalence rate was 50.9 per 100,000 compared to 37.5 per 100,000 in 2004.

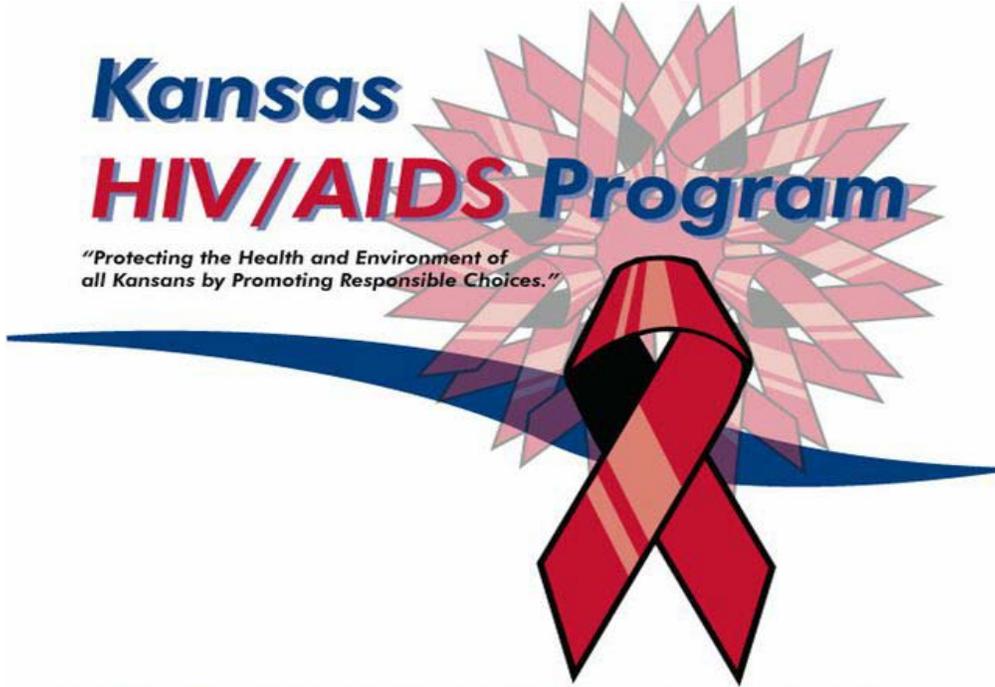
**Table 8. Characteristics of Persons with AIDS Who Died and Persons Living with AIDS, Kansas**

	Deaths among persons with HIV/AIDS, through 2008		Persons Living with AIDS through 2008	
	N	%	N	%
Male	1454	90.6	1185	83.0
Female	151	9.4	242	17.0
<b>Race/Ethnicity</b>				
White, non-Hispanic	1222	76.1	870	61.0
Black, non-Hispanic	260	16.2	325	22.7
Hispanic	90	5.6	190	13.3
Other/Unknown	33	2.0	42	2.9
<b>Age Groups (yrs.)*</b>				
<13	8	0.5	7	0.5
13-14	2	0.1	2	0.1
15-24	69	4.3	106	7.4
25-34	650	40.5	507	35.5
35-44	554	34.5	531	37.2
45-54	199	12.4	219	15.3
55-64	84	5.2	44	3.1
≥65	39	2.4	11	0.8
<b>Public Health Regions</b>				
1	293	18.2	294	20.6
2	277	17.2	278	19.5
3	59	3.7	56	3.9
4	179	11.1	160	11.2
5	88	5.5	40	2.8
6	62	3.9	42	2.9
7	61	3.8	66	4.6
8	533	33.2	447	31.3
9	53	3.3	44	3.1
<b>Total</b>	<b>1605</b>	<b>100.0</b>	<b>1427</b>	<b>100.0</b>

Data Source: Kansas HIV AIDS Reporting System, as of December 31, 2009

# Kansas HIV/AIDS Program

*"Protecting the Health and Environment of  
all Kansans by Promoting Responsible Choices."*

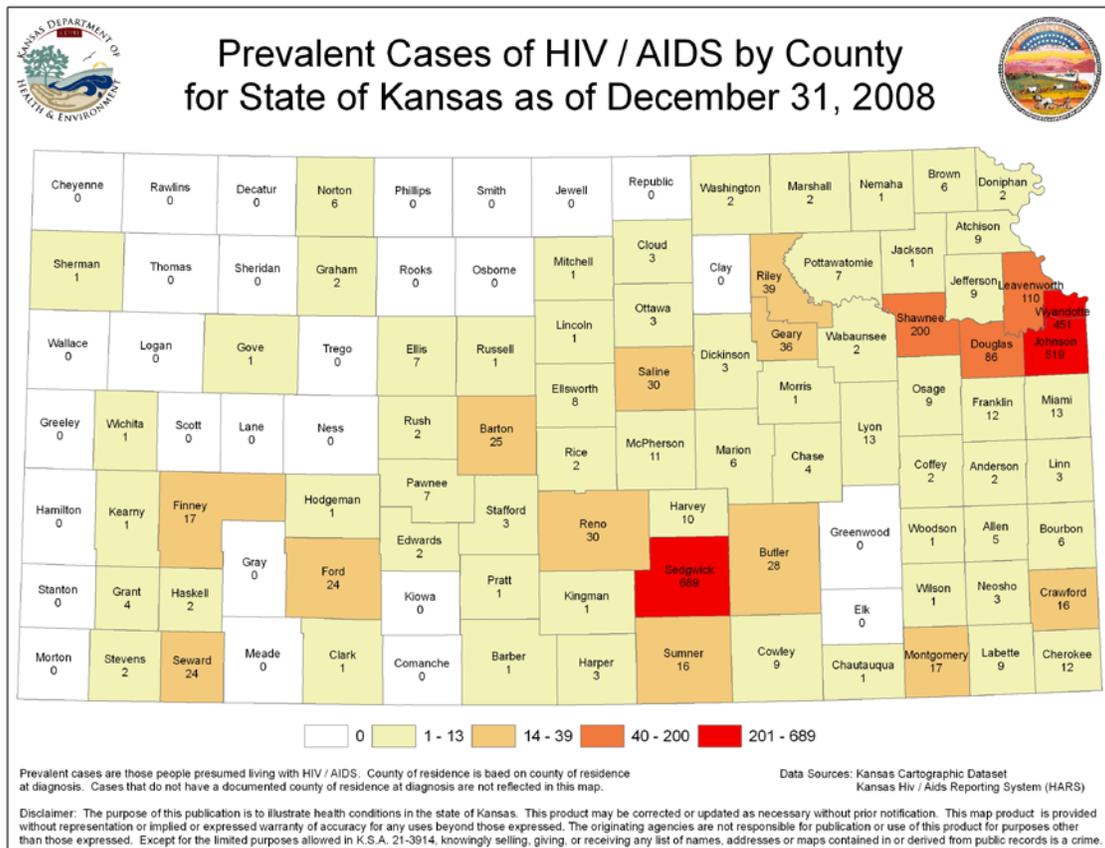


*The HIV/AIDS Program works to promote public health and enhance the quality of life  
for Kansas residents by the prevention, intervention, and treatment of HIV and AIDS.*

## REGIONAL PROFILES

The following pages present each HIV case management planning region in some detail from 2005-2008. The regions having fewer identified cases and smaller numbers of prevalent cases will not be discussed as thoroughly as those regions with larger numbers. This is done mostly to assure the confidentiality of infected persons. Also, smaller numbers mean that rates and proportions are statistically unstable so conclusions drawn are more likely to be erroneous. Changes from one year or group of years may reflect true changes, but are more likely the result of normal variations that present as large changes with smaller numbers.

Figure 15



## REGION 1

Counties in Region 1:	Leavenworth Wyandotte
2008 Estimated Population of Region 1	228,563
Prevalent HIV/AIDS Presumed Living in Region 1	553

### Regional Information

Region 1 is located in the northeastern section of Kansas and consists of two counties and the city of Kansas City, Kansas. This area is a part of the Kansas City Eligible Metropolitan Area (EMA). The EMA consists of both Regions 1 and 2 along with seven counties in Missouri which make up the Kansas City metropolitan area. This is geographically the smallest region in the state. Non-Hispanic Whites make up 59.5% of the region's population, non-Hispanic Blacks 21.1%, Hispanics 16.8%, Asian or Pacific Islanders 1.8% and less than one percent of the population is Native American. This region has the largest percentage of non-Hispanic Blacks and the second largest percentage of Hispanics in the state. Region 1 contains the highest and the sixth highest ranked counties by total population density.

### Newly Diagnosed HIV Disease 2005-2008

In Region 1, there were 76 newly diagnosed HIV cases between 2005 and 2008. The majority of the cases were males (82.9%). The average infection rate for this region during this time was 8.3 per 100,000 per year. This is the highest rate in the state. Over this four year period, Blacks made up the majority of the newly diagnosed HIV cases with 51.3%, followed by Whites (22%) and Hispanics (18%). Analyzing cases by mode of transmission showed male to male sexual contact as the primary risk factor with 57.9%. 27.6% of the cases reported during this time had no risk factor information provided, 13.1% noted heterosexual contact as their risk and the remaining 1.3% reported injection drug use. Approximately 35.5% of the newly diagnosed cases between 2005 and 2008 were between the ages of 25 and 34 years old.

**Table 9. HIV/AIDS Incidence and Prevalence Region 1, by Diagnosis Date as of December 2008**

REGION 1	HIV Incidence		AIDS Incidence		Prevalent HIV		Prevalent AIDS	
	2008		2008		Cases 2008		Cases 2008	
	N	%	N	%	N	%	N	%
<b>Gender</b>								
Male	20	87.0	14	93.3	208	80.3	250	85.0
Female	3	13.0	1	6.7	51	19.7	44	15.0
<b>Age</b>								
<13 yrs	.	.	.	.	2	0.8	1	0.3
13 to 14 Yrs	.	.	.	.	.	.	.	.
15 to 24 Yrs	4	17.4	2	13.3	55	21.2	22	7.5
25 to 34 Yrs	9	39.1	2	13.3	103	39.8	116	39.4
35 to 44 Yrs	3	13.0	8	53.3	65	25.0	102	34.7
45 to 54 Yrs	6	26.1	3	20.0	22	8.5	42	14.2
55 to 64 Yrs	1	4.3	.	.	9	3.5	8	2.7
65 Yrs or older	.	.	.	.	3	1.2	3	1.0
<b>Race</b>								
Hispanic	3	13.0	3	20.0	42	16.2	57	19.4
American Indian/Alaska Native	.	.	.	.	.	.	1	0.3
Asian	.	.	.	.	.	.	2	0.7
Non Hispanic Black	12	52.2	6	40.0	99	38.2	103	35.0
Non Hispanic White	3	13.0	5	33.3	102	39.3	127	43.2
Multi Race	4	17.4	1	6.7	13	5.0	4	1.4
Unknown	1	4.3	.	.	3	1.2	.	.
<b>Exposure Category</b>								
Men who have sex w/ men (MSM)	12	52.2	9	60.0	126	48.6	149	50.7
Injection Drug Use (IDU)	.	.	2	13.3	19	7.3	32	10.9
MSM & IDU	.	.	.	.	8	3.1	21	7.1
Hemophilia/coagulation disorder/Transfusion	.	.	.	.	.	.	3	1.0
Heterosexual Contact	3	13.0	2	13.3	35	13.5	59	20.1
No Risk Reported	8	34.8	2	13.3	70	27.0	29	9.9
Pediatric (All Risks Combined)	.	.	.	.	1	0.4	1	0.3
<b>TOTAL</b>	23	100.0	15	100.0	259	100.0	294	100.0

## REGION 2

Counties in Region 2:	Johnson Miami
2008 Estimated Population of Region 2	565,082
Prevalent HIV/AIDS Presumed Living in Region 2	523

### Regional Information

Region 2, which makes up part of the Kansas City EMA is also located in the northeastern section of Kansas. It consists of two counties in the Kansas City metropolitan area. Johnson County continues to be the most inhabited county in the state. Non-Hispanic Whites make up 85.5% of the population, non-Hispanic Blacks 4.3%, Hispanics 5.9%, Asians 3.8%, and less than one percent of the population is Native American.

### Newly Diagnosed HIV Disease 2005-2008

Between 2005 and 2008, Region 2 had a total of 101 newly diagnosed HIV cases. The average HIV infection rate for Region 2 was 4.6 per 100,000 per year. Males (82.2%) made up the majority of newly diagnosed HIV cases in this region. Whites made up the largest percentage of newly diagnosed HIV cases in this region during this time with 51.5%, followed by Blacks (27.7%), Hispanics (13.9%) and Asians (4.9%). Analyzing cases by mode of transmission revealed the majority of cases noted a risk of male to male sexual contact (52.5%), followed by cases having no identified risk factors (26.7%) and heterosexual contact (14.8%). Approximately thirty-five percent of the newly diagnosed HIV cases were between the ages of 25 and 34.

**Table 10. HIV/AIDS Incidence and Prevalence Region 2, by Diagnosis Date as of December 2008**

REGION 2	HIV Incidence		AIDS Incidence		Prevalent HIV		Prevalent AIDS	
	2008		2008		Cases 2008		Cases 2008	
	N	%	N	%	N	%	N	%
<b>Gender</b>								
Male	17	89.5	13	61.9	201	82.0	231	83.1
Female	2	10.5	8	38.1	44	18.0	47	16.9
<b>Age</b>								
<13 yrs	1	5.3	.	.	3	1.2	2	0.7
13 to 14 Yrs	.	.	.	.	.	.	.	.
15 to 24 Yrs	4	21.0	3	14.3	50	20.4	22	7.9
25 to 34 Yrs	5	26.3	4	19.0	99	40.4	100	36.0
35 to 44 Yrs	4	21.0	8	38.1	56	22.8	101	36.3
45 to 54 Yrs	4	21.0	3	14.3	27	11.0	33	11.9
55 to 64 Yrs	1	5.3	2	9.5	8	3.3	16	5.7
65 Yrs or older	.	.	1	4.8	2	0.8	4	1.4
<b>Race</b>								
Hispanic	2	10.5	2	9.5	23	9.4	26	9.3
American Indian/Alaska Native	.	.	.	.	.	.	1	0.3
Asian	1	5.3	.	.	7	2.8	3	1.1
Non Hispanic Black	5	26.3	9	42.8	49	20.0	58	20.9
Non Hispanic White	10	52.6	8	38.1	159	64.9	186	66.9
Multi Race	1	5.3	2	9.5	3	1.2	4	1.4
Unknown	.	.	.	.	4	1.6	.	.
<b>Exposure Category</b>								
Men who have sex w/ men (MSM)	9	47.4	9	42.8	133	54.3	162	58.3
Injection Drug Use (IDU)	.	.	2	9.5	10	4.1	15	5.4
MSM & IDU	.	.	.	.	16	6.5	15	5.4
Hemophilia/coagulation disorder/Transfusion	.	.	.	.	1	0.4	4	1.4
Heterosexual Contact	2	10.5	5	23.8	35	14.3	48	17.3
No Risk Reported	7	36.8	5	23.8	48	19.6	32	11.5
Pediatric (All Risks Combined)	1	5.3	.	.	2	0.8	2	0.7
<b>TOTAL</b>	19	100.0	21	100.0	245	100.0	278	100.0

## **REGION 3**

Counties in Region 3:	Douglas Jefferson Franklin
2008 Estimated Population of Region 3	159,731
Prevalent HIV/AIDS Presumed Living in Region 3	102

### **Regional Information**

Region 3 is also located in the northeastern section of Kansas and consists of three counties. Douglas County includes the main campus of the University of Kansas and Haskell Indian Nations University. Non-Hispanic Whites account for 87.4% of the population, non-Hispanic Blacks 4.0%, Hispanics 3.4%, Asians 3.1%, and 2.0% of the population is Native American. Region 3 has the second largest proportion of Native American residents in the state.

### **Newly Diagnosed HIV Disease 2005-2008**

Between 2005 and 2008, there were a total of 17 newly diagnosed HIV cases in Region 3. The average rate of infection for this region during this time frame was 2.7 per 100,000 per year. Due to the small number of cases in this region, all data analyses should be interpreted with caution. One hundred percent of the newly diagnosed cases were male. Approximately 88.2% were White, 5.9% were Black and the remaining 5.9% were Native American. The largest percentages of newly diagnosed cases were between the ages of 15-24 and 35-44; both age groups made up 35% of the cases. Analysis of cases by mode of transmission revealed 88% of the cases reported male to male sexual contact as their primary risk factor and the remaining 12% noted MSM/IDU and heterosexual sex.

**Table 11. HIV/AIDS Incidence and Prevalence Region 3, by Diagnosis Date as of December 2008**

REGION 3	HIV Incidence		AIDS Incidence		Prevalent HIV		Prevalent AIDS	
	2008		2008		Cases 2008		Cases 2008	
	N	%	N	%	N	%	N	%
<b>Gender</b>								
Male	4	100.0	2	50.0	42	91.3	44	78.6
Female	.	.	2	50.0	4	8.7	12	21.4
<b>Age</b>								
<13 yrs	.	.	.	.	1	2.2	1	1.8
13 to 14 Yrs	.	.	.	.	.	.	.	.
15 to 24 Yrs	2	50.0	2	50.0	11	23.9	9	16.0
25 to 34 Yrs	2	50.0	1	25.0	17	36.9	15	26.8
35 to 44 Yrs	.	.	1	25.0	13	28.3	16	28.6
45 to 54 Yrs	.	.	.	.	4	8.7	13	23.2
55 to 64 Yrs	.	.	.	.	.	.	2	3.6
65 Yrs or older	.	.	.	.	.	.	.	.
<b>Race</b>								
Hispanic	.	.	.	.	2	4.3	5	8.9
American Indian/Alaska Native	1	25.0	.	.	2	4.3	2	3.6
Asian	.	.	.	.	.	.	.	.
Non Hispanic Black	.	.	1	25.0	7	15.2	8	14.3
Non Hispanic White	3	75.0	3	75.0	34	73.9	40	71.4
Multi Race	.	.	.	.	1	2.2	.	.
Unknown	.	.	.	.	.	.	1	1.8
<b>Exposure Category</b>								
Men who have sex w/ men (MSM)	3	75.0	1	25.0	33	71.7	32	57.1
Injection Drug Use (IDU)	.	.	.	.	1	2.2	5	8.9
MSM & IDU	.	.	.	.	3	6.5	6	10.7
Hemophilia/coagulation disorder/Transfusion	.	.	.	.	.	.	.	.
Heterosexual Contact	1	25.0	2	50.0	5	10.9	8	14.3
No Risk Reported	.	.	1	25.0	3	6.5	3	5.3
Pediatric (All Risks Combined)	.	.	.	.	1	2.2	2	3.6
<b>TOTAL</b>	4	100.0	4	100.0	46	100.0	56	100.0

## REGION 4

Counties in Region 4:	Atchison	Jackson	Osage
	Brown	Lyon	Shawnee
	Coffey	Morris	Wabaunsee
	Doniphan	Nemaha	
2008 Estimated Population of Region 4	305,561		
Prevalent HIV/AIDS Presumed Living in Region 4	259		

### Regional Information

Region 4 is located in the northeast section of Kansas and includes eleven counties as well as the capital city, Topeka. Non-Hispanic Whites account for 82.5% of the population, non-Hispanic Blacks 6.5%, Hispanics 8.3%, Asians 1.2%, and 1.5% of the population is Native American.

### Newly Diagnosed HIV Disease 2005-2008

Region 4 had a total of 27 newly diagnosed HIV cases between 2005 and 2008. The average rate of infection for Region 4 during this period was 2.2 per 100,000 per year. Of the 27 newly reported HIV cases, 55.5% were White, 40.7% were Black and the remaining 3.7% were Native American. Analysis of the mode of transmission showed that 59.2% of the cases reported male to male sexual contact as their primary risk factor, followed by 14.8% of the remaining cases noting heterosexual contact as their primary risk factor. The major age groups impacted during this time frame was the 35-44 age range; making up 33% of the reported cases. All data analyses should be interpreted with caution as the number of cases reported for this region are very small.

**Table 12. HIV/AIDS Incidence and Prevalence Region 4, by Diagnosis Date as of December 2008**

REGION 4	HIV Incidence		AIDS Incidence		Prevalent HIV		Prevalent AIDS	
	2008		2008		Cases 2008		Cases 2008	
	N	%	N	%	N	%	N	%
<b>Gender</b>								
Male	4	66.7	6	60.0	70	70.7	134	83.8
Female	2	33.3	4	40.0	29	29.3	26	16.2
<b>Age</b>								
<13 yrs	.	.	.	.	1	1.0	1	0.6
13 to 14 Yrs	.	.	.	.	.	.	.	.
15 to 24 Yrs	.	.	2	20.0	20	20.2	8	5.0
25 to 34 Yrs	1	16.7	4	40.0	35	35.3	48	30.0
35 to 44 Yrs	3	50.0	2	20.0	32	32.3	73	45.6
45 to 54 Yrs	2	33.3	2	20.0	9	9.1	27	16.9
55 to 64 Yrs	.	.	.	.	2	2.0	2	1.2
65 Yrs or older	.	.	.	.	.	.	1	0.6
<b>Race</b>								
Hispanic	.	.	1	10.0	2	2.0	15	9.4
American Indian/Alaska Native	.	.	.	.	2	2.0	3	1.9
Asian	.	.	.	.	1	1.0	.	.
Non Hispanic Black	1	16.7	2	20.0	28	28.3	40	25.0
Non Hispanic White	5	83.3	6	60.0	65	65.6	101	63.1
Multi Race	.	.	1	10.0	.	.	1	0.6
Unknown	.	.	.	.	1	1.0	.	.
<b>Exposure Category</b>								
Men who have sex w/ men (MSM)	2	33.3	6	60.0	42	42.4	89	55.6
Injection Drug Use (IDU)	1	16.7	1	10.0	15	15.1	14	8.7
MSM & IDU	1	16.7	.	.	6	6.1	16	10.0
Hemophilia/coagulation disorder/Transfusion	.	.	.	.	.	.	3	1.9
Heterosexual Contact	.	.	2	20.0	16	16.2	26	16.2
No Risk Reported	2	33.3	1	10.0	19	19.2	11	6.9
Pediatric (All Risks Combined)	.	.	.	.	1	1.0	1	0.6
<b>TOTAL</b>	6	100.0	10	100.0	99	100.0	160	100.0

## REGION 5

Counties in Region 5:	Allen	Crawford	Neosho
	Anderson	Labette	Wilson
	Bourbon	Linn	Woodson
	Cherokee	Montgomery	
2008 Estimated Population of Region 5	191,192		
Prevalent HIV/AIDS Presumed Living in Region 5	79		

### Regional Information

Region 5 is located in the southeastern section of Kansas and includes eleven counties. The region borders both Oklahoma and Missouri. Non-Hispanic Whites account for 91.0% of the population, non-Hispanic Blacks 3.3%, Hispanics 2.8%, Native Americans 2.1%, and less than one percent of the population in this area is Asian.

### Newly Diagnosed HIV Disease 2005-2008

There were 11 newly diagnosed HIV cases between 2005 and 2008 in Region 5. Due to the extremely small number of newly diagnosed cases in Region 5 all analysis should be interpreted cautiously. The average rate of infection was 1.4 per 100,000 per year in this region over the four year period. Region 5 was the only region having the majority of its newly diagnosed HIV cases being female. Approximately sixty-four percent of the cases were female and the remaining 36% were male. The racial breakdown was 63.6% White, 18.2% Black, 9.1% Hispanic and 9.1% Multi-race. Forty-five percent of the newly diagnosed HIV cases were between the ages of 25 and 34. Analysis of the mode of transmission revealed IDU (27.3%) and heterosexual contact (36.4%) as the major risk factors reported, followed by MSM (9.1%). The remaining 27.3% of the cases had no identified risk factor reported.

**Table 13. HIV/AIDS Incidence and Prevalence Region 5, by Diagnosis Date as of December 2008**

REGION 5	HIV Incidence		AIDS Incidence		Prevalent HIV		Prevalent AIDS	
	2008		2008		Cases 2008		Cases 2008	
	N	%	N	%	N	%	N	%
<b>Gender</b>								
Male	.	.	4	57.1	25	64.1	27	67.5
Female	1	100.0	3	42.8	14	35.9	13	32.5
<b>Age</b>								
<13 yrs	.	.	.	.	.	.	.	.
13 to 14 Yrs	.	.	.	.	.	.	.	.
15 to 24 Yrs	1	100.0	.	.	10	25.6	1	2.5
25 to 34 Yrs	.	.	3	42.8	13	33.3	20	50.0
35 to 44 Yrs	.	.	1	14.3	7	17.9	12	30.0
45 to 54 Yrs	.	.	3	42.8	5	12.8	6	15.0
55 to 64 Yrs	.	.	.	.	2	5.1	1	2.5
65 Yrs or older	.	.	.	.	2	5.1	.	.
<b>Race</b>								
Hispanic	.	.	.	.	2	5.1	2	5.0
American Indian/Alaska Native	.	.	.	.	.	.	2	5.0
Asian	.	.	.	.	.	.	.	.
Non Hispanic Black	.	.	1	14.3	4	10.3	3	7.5
Non Hispanic White	1	100.0	6	85.7	30	76.9	32	80.0
Multi Race	.	.	.	.	2	5.1	1	2.5
Unknown	.	.	.	.	1	2.6	.	.
<b>Exposure Category</b>								
Men who have sex w/ men (MSM)	.	.	3	42.8	12	30.7	17	42.5
Injection Drug Use (IDU)	.	.	.	.	7	17.9	5	12.5
MSM & IDU	.	.	.	.	3	7.7	4	10.0
Hemophilia/coagulation disorder/Transfusion	.	.	.	.	.	.	1	2.5
Heterosexual Contact	.	.	3	42.8	9	23.1	11	27.5
No Risk Reported	1	100.0	1	14.3	8	20.5	2	5.0
Pediatric (All Risks Combined)	.	.	.	.	.	.	.	.
<b>TOTAL</b>	1	100.0	7	100.0	39	100.0	40.0	100.0

## REGION 6

Counties in Region 6:	Clay Geary Marshall	Pottawatomie Riley Washington
2008 Estimated Population of Region 6	146,763	
Prevalent HIV/AIDS Presumed Living in Region 6	88	

### Regional Information

Region 6 is located in the north central portion of Kansas. Six counties make up Region 6. This area includes a major military base and the main campus of Kansas State University. This region has the smallest population of the nine public health planning regions though it is not geographically the smallest region. Non-Hispanic Whites make up 84.1% of the population, non-Hispanic Blacks 7.6%, Hispanics 4.9%, Asians 2.8%, and less than one percent of the population is Native American.

### Newly Diagnosed HIV Disease 2005-2008

Region 6 had a total of thirteen newly diagnosed HIV cases between 2005 and 2008. The average rate of infection was 2.4 per 100,000 per year. Eighty-five percent of the newly diagnosed cases were male and the remaining 15% were female. The demographic make up of the cases was 46.1% Black and 46.1% White; the remaining 7.8% did not report a race. Forty-six percent of the newly diagnosed HIV cases were between the ages of 25 and 34. Stratifying cases by mode of transmission revealed 62% of the cases noted male to male sexual contact as their primary risk factor and the remaining 38% had no identified risk reported. Due to the extremely small number of newly diagnosed cases, all analyses should be interpreted with caution.

**Table 14. HIV/AIDS Incidence and Prevalence Region 6, by Diagnosis Date as of December 2008**

REGION 6	HIV Incidence		AIDS Incidence		Prevalent HIV		Prevalent AIDS	
	2008		2008		Cases 2008		Cases 2008	
	N	%	N	%	N	%	N	%
<b>Gender</b>								
Male	3	75.0	2	66.7	34	73.9	32	76.2
Female	1	25.0	1	33.3	12	26.1	10	23.8
<b>Age</b>								
<13 yrs	.	.	.	.	1	2.2	1	2.4
13 to 14 Yrs	.	.	.	.	.	.	.	.
15 to 24 Yrs	1	25.0	2	66.7	10	21.7	5	11.9
25 to 34 Yrs	2	50.0	.	.	19	41.3	9	21.4
35 to 44 Yrs	.	.	.	.	9	19.6	19	45.2
45 to 54 Yrs	1	25.0	1	33.3	4	8.7	7	16.7
55 to 64 Yrs	.	.	.	.	3	6.5	1	2.3
65 Yrs or older	.	.	.	.	.	.	.	.
<b>Race</b>								
Hispanic	.	.	.	.	3	6.5	3	7.1
American Indian/Alaska Native	.	.	.	.	.	.	.	.
Asian	.	.	.	.	.	.	.	.
Non Hispanic Black	1	25.0	1	33.3	21	45.6	14	33.3
Non Hispanic White	3	75.0	2	66.7	20	43.5	25	59.5
Multi Race	.	.	.	.	.	.	.	.
Unknown	.	.	.	.	2	4.3	.	.
<b>Exposure Category</b>								
Men who have sex w/ men (MSM)	3	75.0	2	66.7	20	43.5	18	42.8
Injection Drug Use (IDU)	.	.	.	.	2	4.3	4	9.5
MSM & IDU	.	.	.	.	.	.	8	19.0
Hemophilia/coagulation disorder/Transfusion	.	.	.	.	.	.	1	2.4
Heterosexual Contact	.	.	.	.	7	15.2	9	21.4
No Risk Reported	1	25.0	1	33.3	16	34.8	2	4.8
Pediatric (All Risks Combined)	.	.	.	.	1	2.2	.	.
<b>TOTAL</b>	4	100.0	3	100.0	46	100.0	42	100.0

## REGION 7

Counties in Region 7:	Barton	Lincoln	Republic
	Cheyenne	Logan	Rice
	Cloud	Marion	Rooks
	Decatur	McPherson	Russell
	Dickinson	Mitchell	Saline
	Ellis	Norton	Sheridan
	Ellsworth	Osborne	Sherman
	Gove	Ottawa	Smith
	Graham	Phillips	Thomas
	Jewell	Rawlins	Trego
	Wallace		
2008 Estimated Population of Region 7	286,096		
Prevalent HIV/AIDS Presumed Living in Region 7	106		

### Regional Information

Region 7 consists of 31 counties that occupy most of the northwestern quarter of Kansas. Thirteen of the counties in Region 7 are considered frontier counties, defined as an average population density of less than six persons per square mile. Consequently, this is the largest region by geographic land area. Non-Hispanic Whites account for 92.0% of the population (the largest percentages of Whites in the state), non-Hispanic Blacks 1.8%, Hispanics 4.9%, and less than one percent of the population is Asian or Native American.

### Newly Diagnosed HIV Disease 2005-2008

There were 14 newly diagnosed HIV cases in Region 7 between 2005 and 2008. 86% were male and the remaining 14% were female. The average rate of infection in Region 7 is 1.2 per 100,000 per year. This rate, as well as all further analyses, should be interpreted with caution as the number of cases is extremely small. The highest percentage of newly diagnosed cases during this time frame was among Whites (50%), followed by Blacks (36%). The majority of the newly diagnosed HIV cases were among persons age 15-24 (36%). Analysis of mode of transmission showed 57.1% of the newly diagnosed HIV cases noted MSM as their primary risk factor. The next highest percentage (21%) had no identified risk factor reported.

**Table 15. HIV/AIDS Incidence and Prevalence Region 7, by Diagnosis Date as of December 2008**

REGION 7	HIV Incidence		AIDS Incidence		Prevalent HIV		Prevalent AIDS	
	2008		2008		Cases 2008		Cases 2008	
	N	%	N	%	N	%	N	%
<b>Gender</b>								
Male	4	100.0	7	100.0	29	72.5	53	80.3
Female	.	.	.	.	11	27.5	13	19.7
<b>Age</b>								
<13 yrs	.	.	.	.	1	2.5	1	1.5
13 to 14 Yrs	.	.	.	.	.	.	.	.
15 to 24 Yrs	2	50.0	.	.	7	17.5	3	4.5
25 to 34 Yrs	2	50.0	2	28.6	11	27.5	18	27.3
35 to 44 Yrs	.	.	2	28.6	11	27.5	27	40.9
45 to 54 Yrs	.	.	3	42.8	6	15.0	14	21.2
55 to 64 Yrs	.	.	.	.	4	10.0	3	4.5
65 Yrs or older	.	.	.	.	.	.	.	.
<b>Race</b>								
Hispanic	1	25.0	.	.	5	12.5	7	10.6
American Indian/Alaska Native	.	.	.	.	.	.	.	.
Asian	.	.	.	.	.	.	1	1.5
Non Hispanic Black	2	50.0	2	28.6	11	27.5	9	13.6
Non Hispanic White	1	25.0	3	42.8	22	55.0	46	69.7
Multi Race	.	.	2	28.6	.	.	3	4.5
Unknown	.	.	.	.	2	5.0	.	.
<b>Exposure Category</b>								
Men who have sex w/ men (MSM)	3	75.0	2	28.6	16	40.0	36	54.5
Injection Drug Use (IDU)	.	.	1	14.3	9	22.5	11	16.7
MSM & IDU	.	.	1	14.3	2	5.0	8	12.1
Hemophilia/coagulation disorder/Transfusion	.	.	.	.	.	.	.	.
Heterosexual Contact	1	25.0	1	14.3	6	15.0	6	9.1
No Risk Reported	.	.	2	28.6	6	15.0	4	6.1
Pediatric (All Risks Combined)	.	.	.	.	1	2.5	1	1.5
<b>TOTAL</b>	4	100.0	7	100.0	40.0	100.0	66	100.0

## REGION 8

Counties in Region 8:	Barber	Elk	Pratt
	Butler	Greenwood	Reno
	Chase	Harper	Sedgwick
	Chautauqua	Harvey	Stafford
	Cowley	Kingman	Sumner
2008 Estimated Population of Region 8	749,675		
Prevalent HIV/AIDS Presumed Living in Region 8	763		

### Regional Information

Region 8 consists of 15 counties and is located in south central Kansas. The region includes one of the state's largest cities, Wichita, and is the most populous of all the regions. Non-Hispanic Whites account for 79.9% of the population, non-Hispanic Blacks 7.2%, Hispanics 8.9%, Asian 2.9%, and 1.1% of the population is Native American. This region contains the largest populations of Hispanics, Asians, and Native Americans in the state.

### Newly Diagnosed HIV Disease 2005-2008

There were 101 newly diagnosed HIV cases in Region 8 between 2005 and 2008. The average rate of infection for this region was 3.4 per 100,000 per year. Seventy-five percent of the newly diagnosed cases were male. Fifty-four percent of the cases were between the ages of 15-34. The largest percentage of cases was among Whites (48.5%), followed by Blacks (36.6%) and Hispanics (8.9%). Stratifying cases by mode of transmission revealed the largest percentage of cases noted MSM (52.5%) as their primary risk factor, followed by 20.8% of the cases having no identified risk factor noted, and 13.9% reporting heterosexual contact as their exposure risk.

**Table 16. HIV/AIDS Incidence and Prevalence Region 8, by Diagnosis Date as of December 2008**

REGION 8	HIV Incidence		AIDS Incidence		Prevalent HIV		Prevalent AIDS	
	2008		2008		Cases 2008		Cases 2008	
	N	%	N	%	N	%	N	%
<b>Gender</b>								
Male	21	75.0	15	88.2	253	80.1	379	84.8
Female	7	25.0	2	11.8	63	19.9	68	15.2
<b>Age</b>								
<13 yrs	.	.	.	.	4	1.3	.	.
13 to 14 Yrs	.	.	.	.	.	.	1	0.2
15 to 24 Yrs	6	21.4	1	5.9	77	24.4	33	7.4
25 to 34 Yrs	6	21.4	5	29.4	110	34.8	162	36.2
35 to 44 Yrs	8	28.6	7	41.2	83	26.3	168	37.6
45 to 54 Yrs	5	17.9	3	17.6	34	10.7	69	15.4
55 to 64 Yrs	2	7.1	1	5.9	6	1.9	11	2.5
65 Yrs or older	1	3.6	.	.	2	0.6	3	0.7
<b>Race</b>								
Hispanic	2	7.1	1	5.9	41	13.0	50	11.2
American Indian/Alaska Native	.	.	.	.	6	1.9	2	0.4
Asian	.	.	.	.	1	0.3	4	0.9
Non Hispanic Black	8	28.6	1	5.9	82	25.9	86	19.2
Non Hispanic White	15	53.6	15	88.2	177	56.0	298	66.7
Multi Race	3	10.7	.	.	8	2.5	6	1.3
Unknown	.	.	.	.	1	0.3	1	0.2
<b>Exposure Category</b>								
Men who have sex w/ men (MSM)	12	42.9	10	58.8	167	52.8	263	58.8
Injection Drug Use (IDU)	2	7.1	1	5.8	30	9.5	38	8.5
MSM & IDU	3	10.7	2	11.8	23	7.3	53	11.8
Hemophilia/coagulation disorder/Transfusion	.	.	.	.	2	0.6	3	0.7
Heterosexual Contact	5	17.9	2	11.8	44	13.9	59	13.2
No Risk Reported	6	21.4	2	11.8	46	14.6	30	6.7
Pediatric (All Risks Combined)	.	.	.	.	4	1.3	1	0.2
<b>TOTAL</b>	28	100.0	17	100.0	316	100.0	447	100.0

## REGION 9

Counties in Region 9:	Clark	Hamilton	Ness
	Comanche	Haskell	Pawnee
	Edwards	Hodgeman	Rush
	Finney	Kearny	Scott
	Ford	Kiowa	Seward
	Grant	Lane	Stanton
	Gray	Meade	Stevens
	Greeley	Morton	Wichita
2008 Estimated Population of Region 9	169,471		
Prevalent HIV/AIDS Presumed Living in Region 9	86		

### Regional Information

Region 9 comprises much of the southwestern corner of Kansas and includes 24 counties, 15 of which are considered frontier counties and average less than 6 persons per square mile. Non-Hispanic Whites make up 61.3% of the population, non-Hispanic Blacks 1.6%, Hispanics 35.0%, Asians 1.5%, and less than one percent of the population is Native American. Region 9 has the highest percentage of Hispanics in the state and the second largest Hispanic population. Region 8 has a much smaller percentage of Hispanics, but a slightly larger Hispanic population than Region 9.

### Newly Diagnosed HIV Disease 2005-2008

In Region 9, there were a total of nine newly diagnosed HIV cases between 2005 and 2008. Due to the extremely small number of newly diagnosed cases, all further analysis should be interpreted with caution. The average rate of infection for Region 9 was 1.3 per 100,000 per year. Seventy-eight percent of the newly diagnosed HIV cases were males. Thirty-three percent were between the ages of 45-54. Hispanics (44%) made up the greatest percentage of newly diagnosed cases, followed by Whites (33%) and Blacks (22%). Analysis of the mode of transmission revealed equal percentages of cases reporting MSM (22%) and IDU (22%) as their primary risk factor. 33% of the cases diagnosed during this time had no risk factor reported.

**Table 17. HIV/AIDS Incidence and Prevalence Region 9, by Diagnosis Date as of December 2008**

REGION 9	HIV Incidence		AIDS Incidence		Prevalent HIV		Prevalent AIDS	
	2008		2008		Cases 2008		Cases 2008	
	N	%	N	%	N	%	N	%
<b>Gender</b>								
Male	1	100.0	2	100.0	26	61.9	35	79.5
Female	.	.	.	.	16	38.1	9	20.5
<b>Age</b>								
<13 yrs	.	.	.	.	.	.	.	.
13 to 14 Yrs	.	.	.	.	.	.	1	2.3
15 to 24 Yrs	.	.	.	.	10	23.8	3	6.8
25 to 34 Yrs	.	.	2	100.0	15	35.7	19	43.2
35 to 44 Yrs	1	100.0	.	.	12	28.6	13	29.5
45 to 54 Yrs	.	.	.	.	5	11.9	8	18.2
55 to 64 Yrs	.	.	.	.	.	.	.	.
65 Yrs or older	.	.	.	.	.	.	.	.
<b>Race</b>								
Hispanic	1	100.0	1	50.0	21	50.0	25	56.8
American Indian/Alaska Native	.	.	.	.	1	2.4	.	.
Asian	.	.	.	.	.	.	.	.
Non Hispanic Black	.	.	.	.	3	7.1	4	9.1
Non Hispanic White	.	.	1	50.0	15	35.7	15	34.1
Multi Race	.	.	.	.	.	.	.	.
Unknown	.	.	.	.	2	4.8	.	.
<b>Exposure Category</b>								
Men who have sex w/ men (MSM)	.	.	1	50.0	14	33.3	20	45.4
Injection Drug Use (IDU)	.	.	.	.	10	23.8	6	13.6
MSM & IDU	.	.	.	.	1	2.4	2	4.5
Hemophilia/coagulation disorder/Transfusion	.	.	.	.	.	.	1	2.3
Heterosexual Contact	.	.	.	.	8	19.0	8	18.2
No Risk Reported	1	100.0	1	50.0	9	21.4	7	15.9
Pediatric (All Risks Combined)	.	.	.	.	.	.	.	.
<b>TOTAL</b>	1	100.0	2	100.0	42	100.0	44	100.0

### Question 3

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

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

The previous section addressed the level of HIV infection in various groups affected by HIV. 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; rather they are 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 risk of HIV exposure.

#### HIGHLIGHTS

- ❖ Since 2004, there has been a steady increase in the number of MSM having co-infection of syphilis and HIV in Kansas.
- ❖ From 2004-2008, the proportion of early syphilis cases among MSM co-infected with HIV increased 180% from 5 cases in 2004 to 14 cases in 2008.
- ❖ The gonorrhea incidence rate in Kansas was 80.9 per 100,000 persons in 2008.
- ❖ Wyandotte County had the highest gonorrhea incidence rate (311.7 per 100,000 persons) compared to any other county in the state in 2008.
- ❖ Primary and secondary syphilis incidence rates have slightly decreased in both men and women.

## MEN WHO HAVE SEX WITH MEN (MSM)

### Direct Measures of Risk Behavior

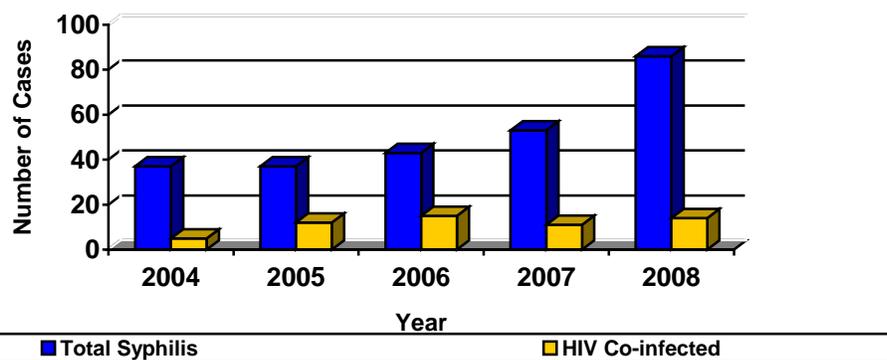
From 2004-2008, there was a 10% increase in newly diagnosed HIV/AIDS cases reporting male to male sexual contact as their primary risk factor in Kansas. In Kansas, male to male sexual contact (MSM) has historically been noted as the risk behavior that is most commonly reported among newly diagnosed cases of HIV and AIDS. This is consistent with national trends. According to the CDC, MSM accounted for 71% of HIV infection among adults and adolescents in 2005 (2).

### Indirect Measures of Risk Behavior

Sexually transmitted disease surveillance data may provide information about the potential occurrence of high risk behavior. From 2004-2008, there were a total of 57 cases of co-morbidity of HIV and syphilis for MSM in Kansas. However, from 2004-2008, the proportion of MSM early syphilis cases co-infected with HIV increased by 180% (Figure 16). This increase in the prevalence of co-morbid cases may be indicative of an increase in MSM engaging in more risky sexual practices, such as unprotected sex with more partners. According to the CDC, this is also a national trend. Since the advent of HAART therapy, 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. According to the CDC, researchers noted some of the following reasons for the 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 partners (3).

Figure 16

Early Syphilis & HIV Co-infected Syphilis in Kansas, 2004-2008



Data Source: Kansas Department of Health and Environment, Bureau of Disease Control & Prevention STD Section

## INJECTION DRUG USERS (IDU)

### Direct Measures of Risk Behavior

Approximately 6% of the newly diagnosed cases of HIV and AIDS in Kansas in 2008 reported injection drug use as their primary risk factor. Another 4% reported MSM/IDU as their primary risk factor. At the end of 2008, approximately 9% of persons living with HIV and AIDS in Kansas had reported injection drug use as their primary risk factor, followed by 8% reporting MSM/IDU.

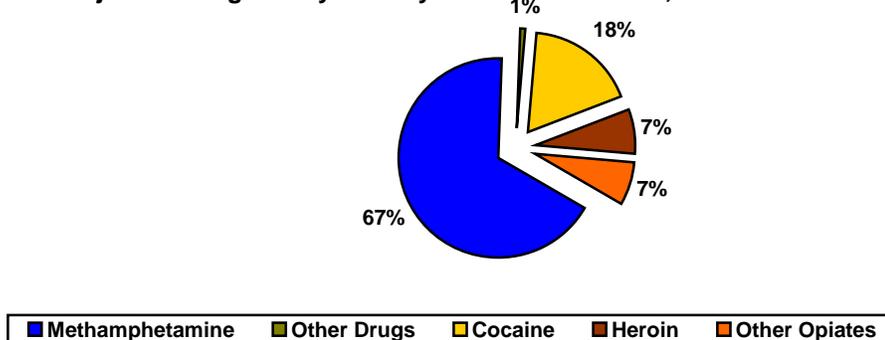
### Indirect Measures of Risk Behavior

According to the CDC, substance use can increase the risk for HIV transmission through the tendency towards risky sexual behaviors while under the influence, as well as through sharing needles or other injection equipment (2, 3). Research has also shown that increased use of methamphetamine is also a concern because methamphetamine use has been associated with both risky sexual behavior for HIV infection and other STDs and with the sharing of injection equipment (4). According to the Mansergh study, methamphetamine and other “party drugs” (ecstasy, ketamine and GHB {gamma hydroxybutyrate}) are sometimes used to decrease social inhibitions and enhance sexual experiences (5). Although this information identifies increases in risky sexual behavior it does not directly indicate that HIV exposure in Kansas is increasing via this means.

The Kansas Client Placement Criteria (KCPC) System is an integral part of Addiction and Prevention Services (AAPS), which helps collect data, related to substance abuse treatment admissions at treatment service centers in Kansas. KCPC data are used to assess the demographic characteristics of injection drug users. According to KCPC, between July 2008 and June 2009, there were approximately 1,039 injection drug users admitted to treatment centers in Kansas. Of these admissions, 697 used methamphetamine, 186 used cocaine/crack, 74 used heroin, and 81 used other drugs (Figure 17).

Figure 17

Injection Drug Use by Primary Problem in Kansas, 2008-2009



Source: Alcohol and Prevention Services, Kansas Client Placement Criteria (KCPC) System, 2009

Approximately 64% of the injection drug users admitted to the treatment centers in Kansas during 2008 were between the ages of 25-44.

# HETEROSEXUAL POPULATIONS

## Direct Measures of Sexual Behavior

Approximately 16% of the newly diagnosed HIV/AIDS cases for 2008 in Kansas reported heterosexual contact as their primary risk factor.

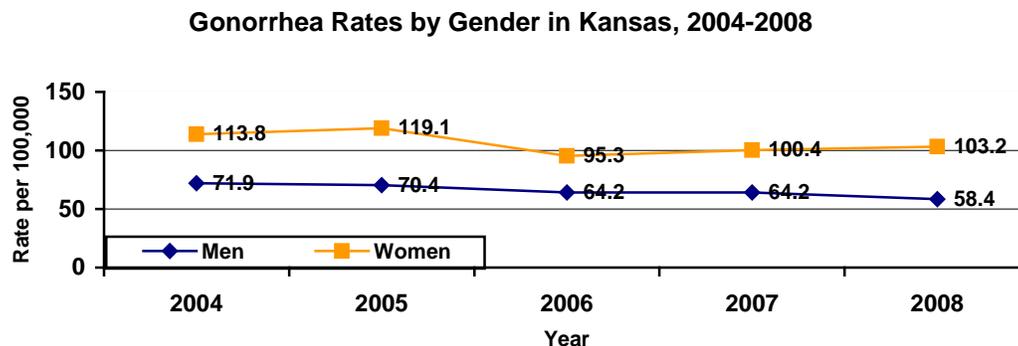
## Indirect Measures of Risk Behavior

STD surveillance provides information that may help to identify potential occurrence of risky heterosexual 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.

## Gonorrhea

The overall rate for gonorrhea in the State of Kansas in 2008 was 80.9 per 100,000, a 1.4% increase from 2006. This is just under the national rate of 111.6 per 100,000. From 2004 to 2008, the gonorrhea infection rates for women in Kansas were consistently higher than those for men in Kansas (Figure 18). This trend is consistent with national STD surveillance data, which shows for 2008 a rate of 119.4 per 100,000 for women and a rate of 103.0 per 100,000 for men (6). The gonorrheal infections in women are usually asymptomatic and often go undiagnosed.

Figure 18



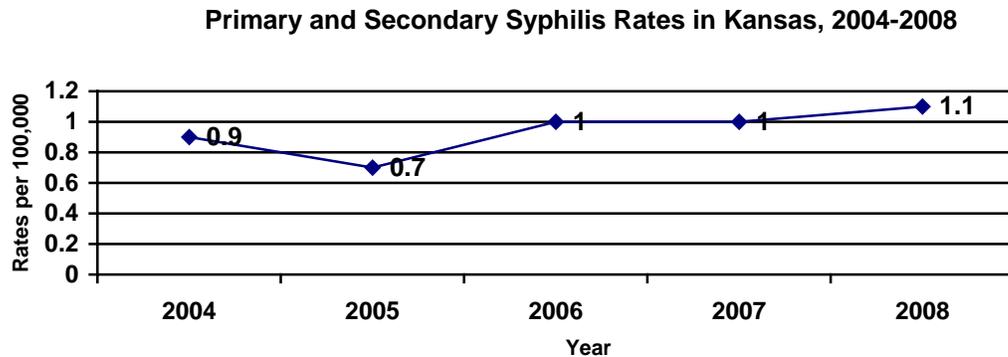
Data Source: Kansas Department of Health and Environment. Bureau of Disease Control & Prevention STD Section

In 2008, there were 2,268 new cases of gonorrhea diagnosed in Kansas. New cases of gonorrhea were diagnosed in 59% of the counties in the state. Three counties had more than 150 new cases, one of which had more than 500 new cases (Sedgwick).

## Syphilis

The primary and secondary syphilis rates in Kansas have been relatively stable over the past four years (Figure 19). In 2008, there were a total of 86 newly diagnosed early syphilis cases reported in Kansas. New cases of early syphilis were reported in the following nine counties: Leavenworth, Wyandotte, Johnson, Miami, Shawnee, Douglas, Geary, Sedgwick, and Lyon.

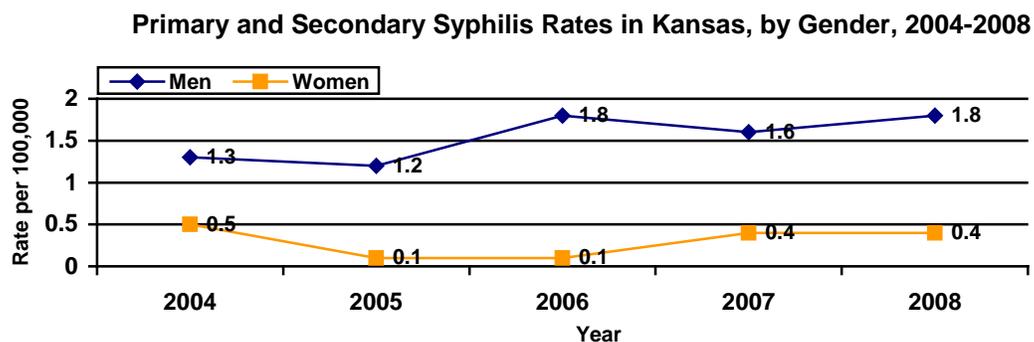
Figure 19



Data Source: Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance, 2008. Atlanta, GA: US Department of Health and Human Services

In Kansas, the incidence rates of primary and secondary syphilis in men from 2004 to 2008 has been consistently higher than that for women. In 2008, the incidence rate for men was 1.8 per 100,000 compared to 0.4 per 100,000 for women (Figure 20). This trend may be due to the increase in syphilis among men who have sex with men. According to the CDC the national incidence rate for men infected with syphilis has increased from 3.3 cases per 100,000 in 2001 to 7.6 cases per 100,000 in 2008. (6)

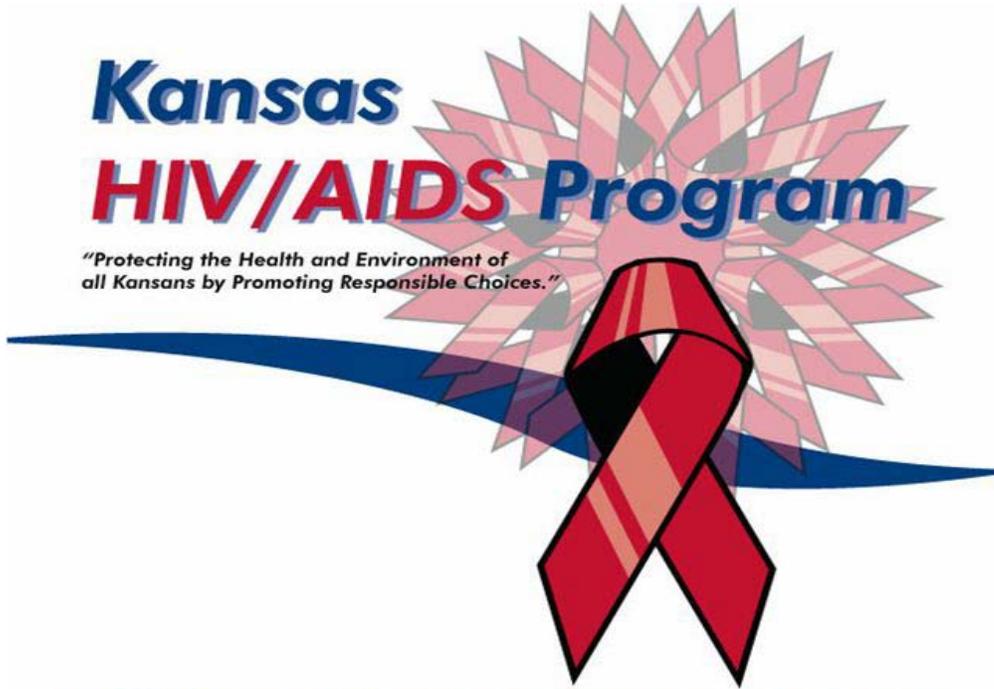
Figure 20



Data Source: Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance, 2008. Atlanta, GA: US Department of Health and Human Services

# **Kansas HIV/AIDS Program**

*"Protecting the Health and Environment of  
all Kansans by Promoting Responsible Choices."*



*The HIV/AIDS Program works to promote public health and enhance the quality of life  
for Kansas residents by the prevention, intervention, and treatment of HIV and AIDS.*

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

## Question 1

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

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 Kansas. The sources of the information were HRSA-funded programs and supplemental studies conducted to examine specific aspects of HIV care in Kansas.

#### HIGHLIGHTS

- In 2008, a total of 1,026 clients received services funded through Ryan White Part B award in Kansas; of these, 371 were new clients.
- Seventy-seven percent of Kansas AIDS Drug Assistance (ADAP) clients receiving services during 2008 were male. The vast majority were 25 years of age or older (98%).
- The racial/ethnic distribution of those served in 2008 was primarily non-Hispanic Whites (51%), followed by non-Hispanic Blacks (23%) and Hispanics (15%).
- Approximately 76% of those served in 2008 lived at or below 200% of the poverty level.

In 2006, the Ryan White HIV/AIDS Treatment Modernization Act of 2006 (Public Law 109-415, December 19, 2006) was passed. The Modernization Act of 2006 provides the Federal HIV/AIDS programs in the Public Health Service (PHS) Act under Title XXVI flexibility to respond effectively to the changing epidemic.

The new law changed how Ryan White funds may be used, with an emphasis on providing life-saving and life-extending services for people living with HIV/AIDS across the country. Key changes in the most recent legislation included:

- The programs will no longer be identified as Title I, II, III, IV and V, but will be identified as Part A, B, C, D, and F.
- New method for determining eligibility for Part A (formerly called Title I) funds gives priority to urban areas with the highest number of people living with AIDS while also helping mid-size cities and areas with emerging needs.

- New method for distributing Part A funds directs money to metropolitan areas with the highest number of people who are HIV-positive. It also encourages outreach and testing, which will get people into treatment sooner and save more lives.
- More money will be spent on direct health care for Ryan White clients. Under the new law, grantees receiving funds under Parts A, B, and C (formerly called Titles I, II and III) must spend at least 75 percent (75%) of funds on “core medical services,” which includes ambulatory outpatient medical care, oral health, mental health, outpatient substance abuse treatment, medical nutritional therapy, medical case management and drug assistance.
- The new law recognizes that HIV/AIDS has had a devastating impact on racial/ethnic minorities in the U.S.; African Americans accounted for 49 percent (49%) of all HIV/AIDS cases diagnosed in 2005. The new law codifies the Minority AIDS Initiative for HRSA's Ryan White programs.

The purpose of Part B funding is to improve the quality, availability, and organization of health care and support services for individuals and families with, or affected by, HIV disease in each state or territory. In addition, the funding provides access to needed pharmaceuticals through ADAP.

In 2008, 1026 clients received services funded through Ryan White Part B award in Kansas; of these, 371 were new clients. During 2008, the distribution of Ryan White Part B clients by race/ethnicity, and sex was similar to the distribution of these characteristics among persons known to be living with HIV/AIDS in Kansas at the end of 2008 (Table 18).

**Table 18. Comparison of Demographic Characteristics of Ryan White Part B Clients and Persons Living with HIV/AIDS, Kansas, 2008**

	<b>Ryan White Part B clients, % (N=1026)</b>	<b>Persons living with HIV/AIDS, % (N=2,559)</b>
<b>Race/Ethnicity</b>		
<b>White, non-Hispanic</b>	52.0	58.4
<b>Black, non-Hispanic</b>	24.0	24.6
<b>Hispanic</b>	13.0	12.9
<b>Asian/Pacific Islander</b>	1.0	0.7
<b>American Indian/ Alaskan Native</b>	1.0	0.8
<b>Multiple Races</b>	9.0	1.8
<b>Unknown</b>	0.0	0.6
<b>Gender</b>		
<b>Male</b>	77.0	81.0
<b>Female</b>	23.0	19.0
<b>Age (yrs.)</b>		
<b>≤13</b>	0.0	0.8
<b>13-24</b>	3.0	14.1
<b>25-44</b>	45.0	68.1
<b>≥45</b>	52.0	17.0

Data Source: Ryan White Part B Service Program

Data Source: Kansas HIV/AIDS Surveillance Program, as of December 31, 2009

### **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 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 D, and private insurance.

Persons enrolled in ADAP in Kansas have been able to receive antiretroviral medications. According to the Kansas Ryan White Database, FACTORS, 723 clients were served in Kansas during 2008. Most Kansas ADAP clients served during this month were male (77%) and 25 years of age or older (98%). The racial/ethnic distribution of those served in 2008 was predominantly non-Hispanic Whites (51%), non-Hispanic Blacks (23%), and Hispanics (15%).

**Table 19. Characteristics of Patients Serviced in the AIDS Drug Assistance Program (N=723), Kansas, 2008**

Patients, %	
<b>Gender</b>	
Male	77.0
Female	23.0
<b>Race/Ethnicity</b>	
White, non-Hispanic	51.0
Black, non-Hispanic	23.0
Hispanic	15.0
Other *	11.0
<b>Age (yrs.)</b>	
<25	2.0
25-44	48.0
≥45	50.0

Data Source: Kansas Ryan White Data System, December 31, 2009.

\*Other includes Asian/Pacific Islander, American Indian/Alaskan Native and Multi race

## HIV TESTING DELAYS

AIDS diagnoses are used by the CDC to compare data nationally. Because there are differences in testing behavior 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 disease 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 annually diagnosed with HIV in the United States. Of the estimated one million persons living with HIV/AIDS in the country, there are approximately 25% that are unaware of their status.

Table 20 shows the time between a person's first positive confidential test and AIDS diagnosis, by demographic and risk characteristics. 43% of the newly diagnosed cases of HIV tested between 2004 and 2008 and reported to the Kansas HIV Surveillance Program were diagnosed with AIDS at the time of their initial test. This is consistent

with the national statistic noting 40% of newly diagnosed cases being late testers. Men tended to test later in their disease progress than women. Non-Hispanic Whites had the greatest tendency to be tested later during the examined time period. Concurrent diagnosis was most prominent among people between the ages of 35 and 44. MSM made up the greatest proportion of “late testers”. The smallest percentage of “late testers” noted injection drug use as their primary risk factor. These data should be interpreted cautiously because a person may have been tested earlier, but anonymously.

**Table 20. Proportion of Persons with AIDS Diagnosis by Time Between First Positive HIV Test Result and AIDS Diagnosis, Kansas 2004-2008**

N=429	AIDS Diagnosis %		
	At time of 1 <sup>st</sup> HIV + test	≤ 3 Months	≤ 12 Months
<b>Gender</b>			
Male	36.6	51.0	53.6
Female	6.7	10.5	11.0
<b>Race/Ethnicity</b>			
White, non-Hispanic	21.0	31.5	32.6
Black non-Hispanic	12.2	17.2	18.4
Hispanic	9.1	11.4	12.1
<b>Exposure Category</b>			
MSM	22.0	30.8	31.2
Injection Drug User	2.3	3.5	4.2
MSM/IDU	3.0	4.2	4.4
High Risk Heterosexual	7.0	10.2	10.7
No Identified Risk	8.9	12.3	13.5
<b>Age</b>			
< 13	.	.	.
13-14	.	.	.
15-24	2.3	3.0	3.3
25-34	11.1	16.8	17.5
35-44	16.8	22.6	24.2
45-54	10.5	14.0	14.0
55-64	2.1	3.5	3.7
65+	0.5	1.4	1.4

Data source: Kansas HIV/AIDS Surveillance System, as of December 31, 2009

## 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 Kansas 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 as of December 31, 2008: People Living with HIV/AIDS and not in care = 1,098.
- Non-Hispanic Whites (49.7%) made up the highest proportion of cases not in care in 2008, when compared to the other major racial/ethnic groups (non-Hispanic Blacks: 28.2% and Hispanics: 17.1%).
- There was a high proportion of cases between the ages of 35-44 that were not in primary care (63%) in 2008.
- Region 1 (27.1%) had the highest percentage of cases not in care, followed by Region 2 (25.1%) and Region 8 (23.1%).

## **MEASURING UNMET NEED**

Kansas statutes require that laboratories report all test results indicative of HIV infection in persons residing in Kansas. The interpretation of results indicating HIV infection currently includes only detectable viral loads. A separate statute requires the reporting of any CD4<sup>+</sup> T-lymphocyte count of less than 500 per micro liter or a CD4<sup>+</sup> T-lymphocyte percent of total lymphocytes less than 29.

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 Kansas. Consequently, for a specified time period, each HIV-infected person can be characterized as “in care” or “not in care” 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 rolls during that period. This method assumes that laboratory reporting is complete and that all HIV-positive persons “in care” will have at least one reportable test result that is reported in Kansas and that ADAP registration lists are up to date.

The characteristics of persons living with HIV/AIDS in Kansas and persons “in care” and “not in care” are presented in Table 21. The data reveals that there is a larger proportion of males not accessing primary care compared to females. Non-Hispanic Whites (49.7%) had the highest proportion of cases not in care in 2008, compared to other race/ethnic groups (Non-Hispanic Blacks: 28.2% and Hispanics: 17.1%). The most impacted age group of persons living with HIV/AIDS and not receiving care was 35-54 year olds. They made up 63% of cases not in primary care followed by 25-34 year olds with 16.2%. Region 1 (27.1%) had the greatest percentage of cases among persons living with HIV/AIDS and “not in care” in 2008, followed by Region 2 (25.1%) and Region 8 (23.1%).

Caution should be noted when reviewing the number of persons not in care. The resultant data is limited to the completeness of reports of CD4 counts/percents and viral loads. Persons having test results outside of the required reporting range for CD4s and viral loads may be included in this total of “not in care”, thus making the total number of cases not accessing care potentially exaggerated.

**Table 21: Characteristics of Prevalent HIV/AIDS Cases & Care Status, Kansas  
2008**

	In Care		Not In Care		Prevalent HIV/AIDS Cases As of December 2008	
	N	%	N	%	N	%
<b>GENDER</b>						
Male	1175	78.0	907	82.6	2073	81.0
Female	330	22.0	191	17.4	486	19.0
<b>AGE</b>						
<13	3	0.2	4	0.4	21	0.8
13 to 14 Years	1	0.1	.	.	2	0.1
15 to 24 Years	55	3.6	19	1.7	357	14.0
25 to 34 Years	297	19.7	178	16.2	929	36.3
35 to 44 Years	420	27.9	373	34.0	814	31.8
45 to 54 Years	532	35.3	326	29.7	335	13.1
55 to 64 Years	167	11.1	137	12.5	78	3.0
65 Years or Older	30	2.0	40	3.6	23	0.9
Unknown Age	.	.	21	1.9	.	.
<b>RACE/ETHNICITY</b>						
Hispanic	41	2.7	188	17.1	331	12.9
American-Indian Non Hispanic	18	1.2	7	0.6	22	0.8
Asian/Pacific Islander Non Hispanic	16	1.1	7	0.6	19	0.7
Black Non Hispanic	379	25.2	310	28.2	629	24.6
White Non Hispanic	1030	68.4	546	49.7	1496	58.4
Multi-Race	3	0.2	17	1.5	46	1.8
Unknown	18	1.2	23	2.1	16	0.6
<b>REGION</b>						
Region 1	213	14.1	304	27.7	553	21.6
Region 2	254	16.9	276	25.1	523	20.4
Region 3	53	3.5	35	3.2	102	4.0
Region 4	164	10.9	96	8.7	259	10.1
Region 5	49	3.3	31	2.8	79	3.1
Region 6	35	2.3	36	3.3	88	3.4
Region 7	74	4.9	28	2.6	106	4.1
Region 8	614	40.8	254	23.1	763	29.8
Region 9	49	3.3	38	3.5	86	3.4
<b>TOTAL</b>	1505	100.0	1098	100.0	2559	100.0

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

**Data Sources:**

Two existing databases were selected 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 browser database which allows for the collection of multiple pieces of information pertaining to cases of HIV and AIDS, such as lab reports, case reports, death certificates, birth certificates, etc. The second was the FACTORS database used by the Ryan White Care Program. FACTORS contains information pertaining to clients that are accessing care services and receiving assistance for antiretroviral drugs for treatment of HIV/AIDS infections supported by Ryan White funds.

**Estimation Methods:**

The population estimates for persons living with HIV and AIDS were abstracted from the Kansas enhanced HIV/AIDS Reporting System (eHARS). The analysis consisted of living cases having a current residence as Kansas in the system as of December 31, 2008. A dataset of ADAP recipients receiving services from January 2009 through December 2009 was pulled from the Kansas FACTORS. The eHARS dataset was then matched with the FACTORS dataset to ensure no duplication or overestimation of cases.

‘**Met need**’ was defined as any living case of HIV/AIDS as of December 31, 2008 having a laboratory result (CD4 count/percent or viral load) or were current on ADAP roles during a 12 month time frame between January 1, 2009 through December 31, 2009 in eHARS or FACTORS.

‘**Unmet need**’ was determined by estimating the number of living cases of HIV/AIDS in eHARS that were diagnosed prior to January 1, 2009 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, 2009 and December 31, 2009.

**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. 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 Kansas. If a person died prior to December 31, 2008 and the HIV Surveillance Program was not notified, that person would be counted in this estimate. The Kansas HIV Surveillance Program does however conduct annual matches with its

Vital Statistics Department to gain the most current death information on HIV/AIDS cases in Kansas. 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. The Kansas HIV Surveillance Program does however participate in Routine Interstate Duplicate Review (RIDR), where Kansas collaborates with other states to assess and resolve potential duplicates between the states.

## Glossary of Terms and Acronyms

<b>ADAP</b>	AIDS Drug Assistance Program
<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>CDC</b>	Centers for Disease Control and Prevention
<b>eHARS</b>	enhanced HIV AIDS Reporting System
<b>EMA</b>	Eligible Metropolitan Area
<b>FACTORS</b>	The Ryan White Program database 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
<b>HAART</b>	Highly Active Antiretroviral Therapy
<b>HIV</b>	Human Immunodeficiency Virus
<b>HRSA</b>	Health Resources and Services Administration
<b>IDU</b>	Intravenous (Injection) Drug Use; illegal drugs administered into the body with a needle
<b>Incidence</b>	Number of new cases of a disease divided by the population at that specific time
<b>KDHE</b>	Kansas Department of Health and Environment
<b>MSM</b>	Men who have sex with men or (male to male sexual contact)
<b>MSM/IDU</b>	Men who have sex with men and engage in Intravenous (Injection) Drug Use
<b>NIR</b>	No Identified Risk
<b>NRR</b>	No Risk Reported
<b>PLWA</b>	Persons Living With AIDS
<b>PLWH</b>	Persons Living With HIV
<b>Prevalence</b>	Number of living cases of HIV or AIDS divided by the population at that specific time
<b>Rate</b>	The proportion of people with a disease over a specific time period
<b>Risk factor</b>	An aspect of personal behavior and environmental exposure, or an inborn or inherited characteristic that is associated with an increased occurrence of disease
<b>STD</b>	Sexually Transmitted Disease
<b>Surveillance</b>	The ongoing, systematic observation of a population for rapid and accurate detection of in the occurrence of diseases.
<b>Unmet Need</b>	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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## APPENDIX

### Outcomes of Surveillance

<b>Type of Data</b>	<b>Definition</b>	<b>How Data is Used</b>
<b>Reported HIV/AIDS Diagnosis</b>	The number of cases reported in a specific population during a specific time period	Useful for understanding reporting changes in an area
<b>HIV/AIDS Prevalence Rate</b>	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
<b>HIV/AIDS Incidence Rate</b>	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
<b>Estimated HIV/AIDS Diagnoses</b>	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
<b>HIV/AIDS Prevalence Estimate</b>	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
<b>HIV Incidence Estimate</b>	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

Data Source: [www.CDC.gov](http://www.CDC.gov)