

**Oklahoma Statewide Epidemiologic Profile  
For HIV Prevention Community Planning****Executive Summary**

Oklahoma's statewide epidemiologic profile describes populations affected by Human Immunodeficiency Virus (HIV) and trends in transmission patterns among persons who are already infected. It is likely that HIV transmission will continue to occur among persons with similar characteristics who practice the same risk behaviors in the same communities where other persons are already infected.

The majority of HIV and Acquired Immune Deficiency Syndrome (AIDS) cases have been reported as living within the urban areas of Oklahoma at their time of initially testing positive for HIV and being diagnosed with AIDS. Every region of the state has had cases of HIV and AIDS; therefore, every region has felt some impact. Although more whites have been reported than any other racial/ethnic group, blacks have experienced the greatest impact, with 3 ¼ to 8 times the rate per 100,000 population.

Death rates have decreased in HIV infected individuals, from 1994 to 2003 and it is expected that deaths will fall in 2004 as well, however the number of deaths for CY 2003 has not been determined. Through December 2003, about 5,461 persons known to be HIV infected are currently living in Oklahoma, this calculates to a prevalence rate of 158.3 per 100,000 population statewide; this includes individuals diagnosed somewhere other than Oklahoma who now live in Oklahoma. Since 1981, a total of 8,369 (combined HIV and AIDS) infected persons have been reported as residing in Oklahoma at their time of diagnosis.

From 1999 through 2003, the predominant mode of HIV exposure in Oklahoma has been male-to-male sexual contact, which accounts for 55% of the modes of transmission. In 2003, MSMs accounted for 47% of all AIDS cases. A substantial proportion of cases were attributed to heterosexual contact (12%), heterosexual injection drug use (4%) and injection drug use in males who have sex with males (9%). Most cases among men initially reported without risks are eventually reclassified to the male-to-male sexual contact or the injection drug use exposure categories based on evaluation of past medical history. Among women, most cases initially reported without risk are eventually reclassified to the heterosexual and injection drug use exposure categories. However, risk was not specified for 17% of the modes of transmission and was reclassified as "Other/Risk not Reported or Identified" exposure category.

In Oklahoma, blacks have been disproportionately affected by HIV/AIDS and the data (AIDS, HIV and Sexually Transmitted Disease surveillance) suggest that they are probably still at high risk for HIV exposure. Analysis of sexually transmitted disease case reports (early syphilis, gonorrhea and chlamydia) all demonstrate blacks to have the highest reported rates of infection or 1999 through 2003. Blacks age 15-24, in particular, have the most disproportionate rates, from 6 to 80 times greater than reported in whites.

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## **Oklahoma Statewide Epidemiologic Profile For HIV Prevention Community Planning**

### **Introduction**

#### **General Comments**

This epidemiologic profile should thoroughly characterize the HIV epidemic among the various populations in Oklahoma and should identify characteristics of both HIV infected persons and HIV negative persons at high-risk and in need of prevention services. While the information provided by the epidemiologic profile is a starting point for the needs assessment step of community planning, it also must be considered when setting priorities. Importantly, community planning group members should understand the meaning, strengths, and limitations of the data.

The epidemiologic profile should address four key questions:

- 1) What are the sociodemographic characteristics of the population?**
- 2) What is the impact of HIV/AIDS on the population?**
- 3) Who is at risk for becoming infected with HIV?**
- 4) What is the geographic distribution of HIV infection?**

Question 1 seeks information on important characteristics of the population of the planning region and provides the background for understanding the dynamics of the HIV epidemic. Question 2 asks for information about the magnitude and impact of the HIV epidemic in the planning region.

Question 3 asks for the most crucial information for understanding, which population groups are at high risk for becoming infected with HIV. Most of the data that are widely available to answer Question 3 describe those currently infected with HIV, with the assumption that those who have become infected, particularly persons most recently infected, are characteristic of those in the community most likely to become infected in the near future. Question 4 seeks information to describe the geographic distribution of HIV infected persons in the planning region.

In many regions, data from certain analyses cannot be presented because of small numbers of HIV infections or AIDS cases. Reporting small numbers of cases may lead to a breach of confidentiality and to the inadvertent disclosure of a person's identity. Showing data with small numbers may be acceptable only if there is no risk of such inadvertent disclosure.

New segments in this edition of the profile include: Female AIDS cases by region of the state, HIV Prevalence by Area Code (used in Ryan White Care Act planning), and Persons seeking HIV testing at state-sponsored Counseling and Testing Sites by region of state.

**Question 1. What are the sociodemographic characteristics of the population?**

**Prevention planning value:**

Provides background on diversity of population and context for assessing potential HIV impact relative to other regions.

**Key components:**

- Total population size
- Proportion of the area's total population represented by region
- Race/ethnicity
- Socioeconomic characteristics

**Key issues:**

- Socioeconomic measures may help identify groups at high risk
- Census data are the principal source of population information

**1.1 What are the sociodemographic characteristics of the population?**

The HIV epidemic in the United States is a composite of multiple, unevenly distributed epidemics in different regions and among different population groups. These population groups may comprise persons who practice similar high-risk behavior, such as injecting drugs or having unprotected sex with an infected partner. **Although race and ethnicity are not risk factors for HIV transmission, they are markers for complex underlying social, economic, and cultural factors that affect personal behavior and health.**<sup>1</sup> Low socioeconomic status in particular is associated with morbidity and premature mortality;<sup>2</sup> unemployment and poverty are correlated with decreased access to health education, preventive services, and medical care, resulting in an increased risk for disease.<sup>1</sup> Although the racial/ethnic composition of Oklahoma's population is relatively homogeneous, the social, economic, and cultural context of HIV infection must be considered when designing and implementing prevention programs for diverse populations.

The U.S. Department of Commerce distributes published and unpublished data for large areas such as census regions, states, metropolitan areas, counties, cities, and for small areas down to the size of a city block.<sup>3</sup> In addition to providing a regional snapshot of the entire population, census data are the principal source of denominator data for calculating AIDS incidence rates (the number of cases per 100,000 population). Census data also may be useful for the HIV prevention needs assessment.

■ **Size and distribution of the population**

Oklahoma ranks 18th in area among the 50 states and covers approximately 70,000 square miles located in the geographic center of the United States. The state is divided into 77 counties, with the 2000 census reflecting a population of 3,450,654 (9.7% increase) compared to the population of 3,145,585 determined by the 1990 census. A population density of 49.3 persons per square mile reflects Oklahoma's rural character. Twelve of Oklahoma's counties are totally rural, having no community with a population as large as 2,500. Approximately sixty percent (60.8%) of the state's residents reside in five metropolitan statistical areas (MSA): Oklahoma City (N=1,083,346), Tulsa (N=803,235), Lawton (N=114,996), and Enid (N=57,813). Additionally Sequoyah County (N=38,972) residents are included in the Ft. Smith, Arkansas MSA.

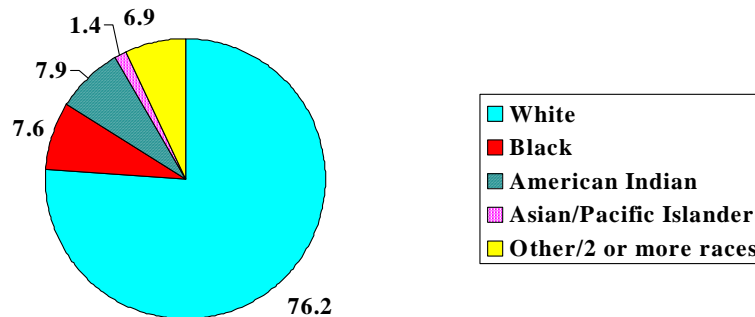
Local health units comprise the service delivery network of the public health system in Oklahoma. Sixty-nine counties of the state's 77 are served by county health departments. In the other eight counties, certain minimal services are provided by either OSDH or nearby county health departments. These local health units provide services for all citizens. Although the economically disadvantaged may find health services crucial, yet they are underserved. Programs provided by the health departments are at low or no cost. For those where a cost is assessed, a graduated fee scale is used based on the individual's ability to pay.

Each of the county health departments has a basic staff consisting of a medical director, administrative director, nurses, sanitarians and child guidance personnel, as well as administrative and clerical staff. Most can offer specialized services through nutritionists, social workers, nurse practitioners and others who are assigned on a regional basis to one or more county health departments. The actual delivery of most of the agencies' environmental services is accomplished through county health department sanitarians. At the Oklahoma State Department of Health (OSDH), Community Health Services provide direction and support services and is responsible for supervision of all personnel and programs at the county level. The Oklahoma State Board of Health administratively establishes two of Oklahoma counties, Oklahoma and Tulsa.

■ **Racial/ethnic composition of the population**

Of the state's total population, 49.8% are female and 50.2% are male. The 2000 US Census handled racial information differently than in the past. Individuals were able to report themselves as one racial category or more than one racial category and they were also asked if they were of Hispanic origin. The 2000 Census estimated Oklahomans as White (76.2%), American Indian (7.9%), Black (7.6%), Asian/ Pacific Islander (1.4%) and 2 or more races / other (6.9%). The number of persons of Hispanic or Latino Origin more than doubled from 86,160 in 1990 to 179,304 in 2000. Oklahomans with Hispanics/Latino origin represents 5.2% of the 2000 population.

## Oklahoma's Population by Race Determined by the 2000 US Census



### Measures of social and economic status

The per capita income in Oklahoma is \$23,517 with a median household income of \$30,002.

Approximately 16% of Oklahoma households are below poverty level; this compares to 13.8% nationally are below the poverty level, although in some counties this includes more than 30% of households.

### 1.2 Summary

In Oklahoma, the majority of the population:

- ◆ Live in metropolitan regions
- ◆ Are white
- ◆ Live above the poverty level.

**Question 2. What is the impact of HIV/AIDS on the population?**

**Prevention planning value:**

Documents the extent of existing HIV infection in broad population groups within the region. Provides a basis for comparison with national data and a framework for closer examination of impact among specific population groups.

**Key components:**

AIDS cases

- Number of AIDS cases
- Proportion of total AIDS cases in the project area
- Number of AIDS cases diagnosed each year (epidemic curve)
- Annual rate of reported AIDS cases per 100,000 population

HIV-related deaths

- Number of deaths occurring in the HIV infected, these may or may not be HIV-related deaths

HIV (not AIDS) cases

HIV infection

- Estimate of number of HIV-infected persons

**Key issues:**

- Trends in reported AIDS cases are difficult to interpret because of the 1993 expansion of the case definition.
- Trends in proportion of AIDS cases attributed to different modes of HIV transmission may identify emerging patterns of transmission.
- Although the median time from HIV infection to AIDS is approximately 10 years (that is, 50% of persons develop an AIDS-defining opportunistic infection within 10 years of HIV infection), AIDS develops much earlier in some persons; thus, emerging patterns will be seen earlier than the commonly cited "10-year" lag. Although HIV-reporting data (cases among persons reported with HIV infection without AIDS) are commonly thought to be "more recent," they are not representative of all infected people, and studies indicate that a majority of persons are tested for HIV infection only one year before they develop an AIDS-defining opportunistic infection.

**Question 2. What is the impact of HIV/AIDS on the population?**

**2.1 What is the impact of AIDS on the population?**

The following data are based on AIDS Surveillance data unless otherwise stated.

Question 2

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- **Proportion (percentage) of Oklahoma’s population for region compared with proportion (percentage) of each region’s total AIDS cases as of Dec 2003.**

<b>Percentage of Oklahoma’s Population for Region Compared With Percentage of each Region’s Total AIDS Cases</b>			
<b>Region</b>	<b>% Population</b>	<b>% of AIDS Cases</b>	<b>Compared to Expected</b>
Northeast	16.3 %	8.0%	↓ 8.3 %
Northwest (including Enid MSA)	5.8%	2.5%	↓ 3.3 %
Southeast (including Sequoyah County - Ft Smith MSA)	11.9 %	5.5%	↓ 6.4 %
Southwest (including Lawton MSA)	11.3%	6.8%	↓ 4.5 %
Oklahoma City MSA	31.4%	46.9%	↑ 15.5 %
Tulsa MSA	23.3%	30.3%	↑ 7.0 %

If all things are equal, the percentage of expected AIDS cases in each region of the state should be equal to the percentage of people living in that region of the state. For example, since 31.4% of the population lives in the Oklahoma City MSA, it is *expected* that approximately 30% of the cases of AIDS in Oklahoma will reside in the Oklahoma City MSA. If using the proportion (here represented as a percentage) of the population living within any region to predict the proportion (impact) of AIDS cases in their community, only Oklahoma City and Tulsa MSAs have a larger than expected percentage of the AIDS diagnosed in their area. This relates to a larger impact on these metropolitan communities than expected. The remaining regions have a smaller than expected percentage of AIDS diagnosed in their area hence a smaller than expected impact if all behaviors, risks and prevalence of the disease are equal.

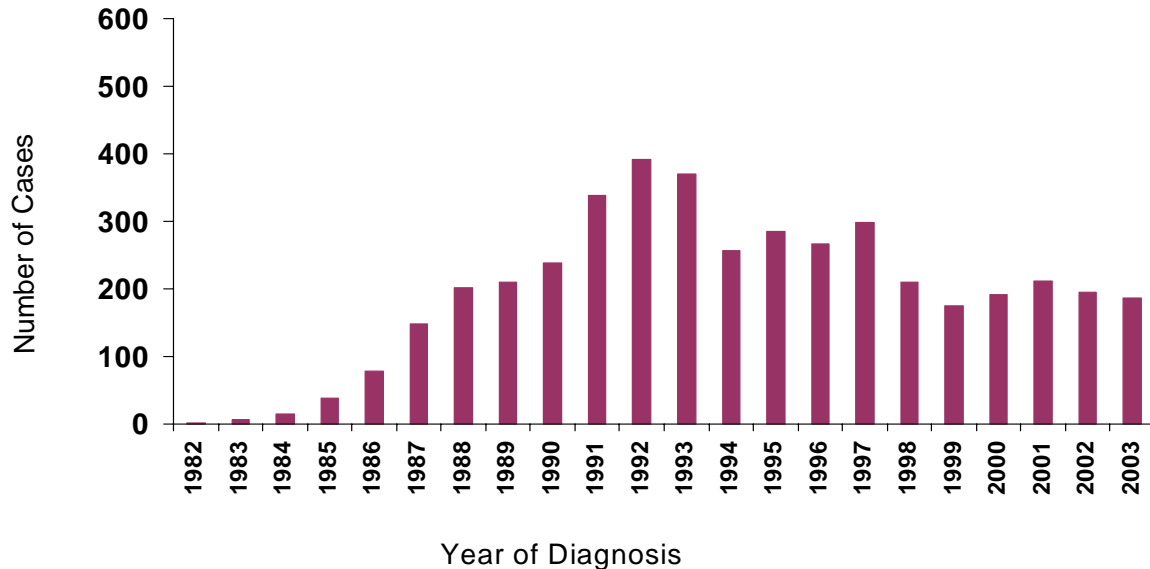
It is imperative to remember surveillance data represents the cases of a disease, which we know about. It in no way tells us the true number of individuals who are actually infected with a disease. Another important item to understand or question is “*How is surveillance for a specific disease performed in my state?*”. The answer to this question greatly affects how much value must be placed on these numbers when assessing their impact. If the surveillance system is reliant on only passive reports, less significance (*not* in the statistical sense) can be given to these data, since they probably do not include all cases. *Oklahoma’s surveillance system is built around an active surveillance model.* This means in addition to receiving passive reports, surveillance epidemiologists look for cases from a variety of providers and provider types. Laboratories, private physicians, inpatient hospitalizations, outpatient care, death registries and HIV Counseling and Testing sites, etc. are some of the types of providers which are contacted regularly to ensure new cases are reported and/or updates to cases are received. In unpublished studies done by the HIV/STD Service, only 45-65% of HIV and AIDS cases are received passively. Therefore if we as a program relied only on passive reporting, 45-55% of cases would not be reported.

■ **Epidemic curve of total AIDS cases by year of diagnosis**

After the AIDS surveillance case definition for adults and adolescents was expanded on January 1, 1993, the number of cases reported substantially increased. The increase predominantly reflected the reporting of persons with HIV-related conditions diagnosed before that date that were not eligible for reporting until their conditions were added to the AIDS surveillance case definition. For the reason of changes in case definition and others, which affect reporting of cases, such as changes in staffing patterns, analysis of AIDS cases should be done on date of diagnosis, not date of report, when possible. However, date of diagnosis data for very recent years is incomplete; data through 2002 should be considered complete.

An epidemiologic curve, demonstrates a gradual increase in number of AIDS cases diagnosed by year until 1991, when a large increase is reflected, almost 100 cases more than diagnosed the prior year. It is important to note that Oklahoma began collecting CD4+ lymphocyte data on a special study basis in 1991. The State Board of Health made CD4+ values of less than 500 cells/ $\mu$ l reportable. The peak year of AIDS cases diagnosed is 1992 with 1993 closely behind. After 1993 the number of AIDS cases diagnosed is back to slightly greater level as observed prior to the initiation of CD4+ reporting. Likewise, the number of cases diagnosed in 2000 and 2001 increased as auditing of medical records and other epidemiologic follow-up for these years was completed. However, since we have now entered the era of HAART (Highly Active Anti-Retroviral Treatment) we can expect with individuals entering into care early and receiving highly effective therapies, that the numbers of AIDS cases diagnosed each year will continue to decrease as reflected in 2002 and 2003. In that respect, the prevalence of AIDS cases will increase over time as people in HAART treatment live longer.

## AIDS Cases in Oklahoma by Year of Diagnosis



■ **AIDS cases and annual rates per 100,000 population, for most recent 5 year period**

AIDS Cases by Year of Report										
Region of State	Number of AIDS Cases Reported					Annual Rate per 100,000				
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
<b>State of Oklahoma</b>	135	323	238	195	190	3.9	9.4	6.9	5.7	5.5
<b>Oklahoma City MSA</b>	37	188	116	101	82	3.4	17.4	10.7	9.3	7.6
<b>Tulsa MSA</b>	67	64	72	51	66	8.3	8.0	9.0	6.3	8.2
<b>Northeast</b>	13	22	25	16	15	2.3	3.9	4.4	2.8	2.7
<b>Northwest</b>	2	8	3	2	4	1.0	4.0	1.5	1.0	2.0
<b>Southeast</b>	5	20	13	9	12	1.2	4.9	3.2	2.2	3.0
<b>Southwest</b>	11	21	9	16	11	2.8	5.4	2.3	4.1	2.8

For the State of Oklahoma, the number of AIDS cases has continued to decrease since 2000; almost 100 fewer AIDS cases were reported in 2001 than in 2000. In contrast, 2000 had ~2 ½ times as many cases reported than 1999. Two very different factors likely influence this phenomenon. Firstly, with the availability of HAART (highly active anti-retroviral therapy), we expect to observe few individuals progressing on to an AIDS diagnosis. However, the field epidemiologist based in Oklahoma City became and remained vacant for a significant portion of 1999. Again, note that these data represent date of report, which is influenced by a variety of issues that are not related to trends in

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the disease. It is possible that we as field epidemiologists have “trained” providers to respond and report infections and cases when contacted, instead of encouraging the provider to report when they first encounter a new positive or case in their practice. This may represent the Pavlov’s Dog principle in action. However, it is important to point out that once a field epidemiologist covering the central portion of the state (including the Oklahoma City metropolitan area) was hired and trained, the number of AIDS cases reported during 2000 increased dramatically from the prior years.

Compare this striking increase in the OKC MSA to the steady number reported out of the Tulsa metro area: the Tulsa area has had the same individual working as a field epidemiologist in that area for more than a decade. The major point being that high employee turnover in a position can and does greatly affect the program’s ability to continue routine (active) surveillance for a condition which surveillance is difficult under ideal situations. By report year 2001, the reporting level appears to have ‘normalized’ in that the backlog of unreported cases had been taken care of and the numbers returned to an expected level.

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■ **AIDS cases and annual rates per 100,000 population, for most recent 5-year period**

AIDS Cases by Year of Diagnosis										
Region of State	Number of AIDS Cases Diagnosed					Annual Rate per 100,000				
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
<b>State of Oklahoma</b>	172	189	202	194	186	5.0	5.5	5.9	5.6	5.4
<b>Oklahoma City MSA</b>	78	80	109	93	83	7.2	7.4	10.1	8.6	7.7
<b>Tulsa MSA</b>	49	63	58	55	63	6.1	7.8	7.2	6.8	7.8
<b>Northeast</b>	18	16	21	17	15	3.2	2.8	3.7	3.0	2.7
<b>Northwest</b>	4	5	3	2	4	2.0	2.5	1.5	1.0	2.0
<b>Southeast</b>	12	9	14	9	12	2.9	2.2	3.4	2.2	3.0
<b>Southwest</b>	11	16	8	18	9	2.8	4.1	2.0	4.6	2.3

The stability of both AIDS case numbers and rates over the few years have returned when analyzed by date of diagnosis instead of date of report. This can partially be explained by the fact that all major hospitals have completed their audits of discharge summary data requested by our Service and the Epidemiologist position based in Oklahoma City is filled and training is complete. However, HAART (highly active anti-retroviral therapy) must be considered the major contributing factor for the downward trend.

■ **AIDS cases and annual rates per 100,000 population by race/ethnicity and sex, for 2002 and 2003 years of diagnosis**

AIDS Cases by Year of Diagnosis								
Race / Ethnicity	Males				Females			
	2002		2003		2002		2003	
	#	Rate	#	Rate	#	Rate	#	Rate
<b>White</b>	98	7.2	94	6.9	10	0.7	13	0.9
<b>Black</b>	46	36.1	34	26.7	13	9.7	9	6.7
<b>Hispanic</b>	10	N/A*	11	N/A*	1	N/A*	2	N/A*
<b>American Indian</b>	13	10.2	13	10.2	3	2.2	7	5.2
<b>Asian/ Pacific Islander</b>	0	0	2	9.3	1	4.2	1	4.2
<b>Total</b>	167	10.2	154	9.4	28	1.6	32	1.9

N/A\* cannot calculate with 2000 Census numbers. HIV data collected with Hispanic as Race, Census data collected with Hispanic as Ethnicity.

Most sections of the 2000 U.S. Census data are now published and available, therefore no sections necessitate utilization of 1990 Census data for rate calculations. Race by gender and race by age data calculations are now made with the 2000 populations; since the overall population of Oklahoma has increased slightly, these rates will “look” slightly lower than if the 1990 Census was used. The AIDS Case rate per 100,000 for blacks is ~3 ½ to 8 times greater than any other race/ethnicity (black males ~3 ½ to 4 and black females ~5 ¾ to 8 times); the other rates are not significantly different from one

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another when the issue of small numbers is taken into consideration. The rate by year of diagnosis for blacks has continued to be much higher than rates observed in other racial/ethnic groups, the magnitude may be smaller than in the past (rate diagnosed in blacks ~5 times greater than observed in whites in 1992-4) keeping in mind that 2003 diagnosis date is definitely incomplete and 2002 data is considered mostly complete. Both the case rate (impact of the HIV epidemic) and the number of cases (magnitude of the HIV epidemic) should be considered when setting priorities for prevention activities. However, conclusions must be drawn cautiously when rates are based on very small numbers. In areas with a small population, very few cases may yield very high rates. The Centers for Disease Control and Prevention AIDS Surveillance Branch Office of Statistics and Data Management recommends that rates based on a numerator less than 50 and a denominator less than 100,000 should be interpreted with caution.

■ **Number of AIDS cases and percent of total, by exposure category and sex for most recent years of diagnosis**

<b>AIDS Cases by Year of Diagnosis By Gender by Exposure Behavior</b>								
<b>Exposure Behavior</b>	<b>Males</b>				<b>Females</b>			
	<b>2002</b>		<b>2003</b>		<b>2002</b>		<b>2003</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Men who have sex with Men (MSM)	100	59.9	87	56.5	N/A	N/A	N/A	N/A
Injection Drug Use (IDU)	18	10.8	19	12.4	7	25.0	8	25.0
MSM & IDU	24	14.4	17	11.1	N/A	N/A	N/A	N/A
Hemophilia / Coagulation Disorder	0	0	0	0	0	0	0	0
Heterosexual Contact	8	4.8	5	3.2	12	42.9	16	50.0
Sex with IDU	5		1		2		7	
Sex with MSM	0		0		3		4	
Sex with Hemophiliac	0		0		0		0	
Sex with Transfusion Recipient	0		0		0		1	
Sex with HIV+ Risk Not Identified	3		4		7		4	
Received Transfusion or Tissue	1	0.5	1	0.6	0	0	0	0
Other / Risk not Reported or Identified	16	9.6	25	16.2	9	32.1	8	25
<b>Total</b>	<b>167</b>	<b>100</b>	<b>154</b>	<b>100</b>	<b>28</b>	<b>100</b>	<b>32</b>	<b>100</b>

There is a decrease in diagnosed cases in males (8%), however cases in females demonstrate a large increase (14%) although one must not forget that with as very small numbers in females, a small increase in absolute number can result in what appears to be a large percentage. In addition, we can expect more cases to be submitted with a diagnose year of 2003. Remember 2003 diagnosis year data is not yet complete and 2002 may not be totally complete; however, data for 2001 and prior years should be considered complete. According to unpublished local studies, 50% of AIDS cases are reported within the first month of diagnosis, 86% of cases are reported within 12 months of diagnosis and 95% within 2 years (1990 through 2001 data). Examination of the proportionate distribution of cases among population groups shows that the majority of cases in both years were

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among males, and that most cases among men were attributed to male-to-male sexual contact; this is similar to what has occurred in prior years. Of the small number of females diagnosed with AIDS during 2002 and 2003 the largest portion of cases were infected through sex with an infected partner or injection drug use of those for which we know their exposure behavior; this is similar to what has occurred in prior years.

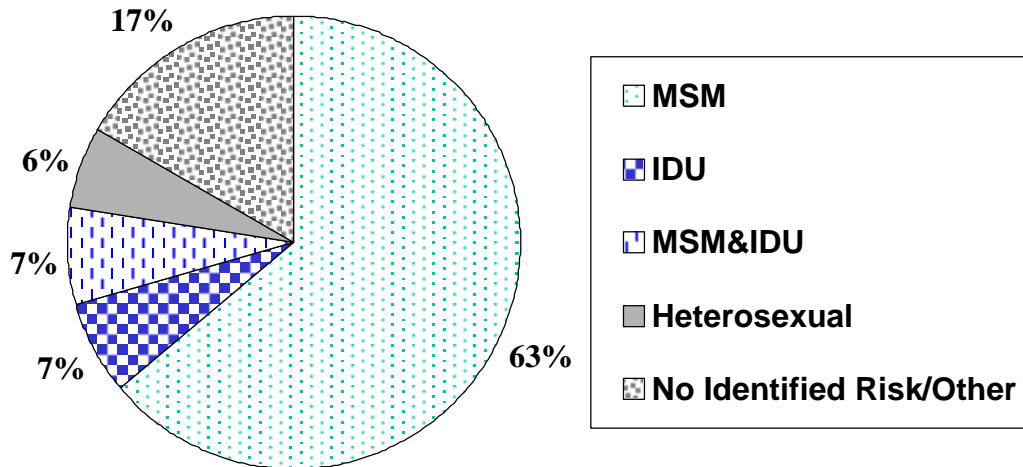
■ **Male AIDS cases by exposure category and race/ethnicity, for most recent years of diagnosis**

<b>AIDS Cases for Year of Diagnosis 2002 and 2003 combined For Adult/Adolescent Males by Race and Exposure Behavior</b>								
<b>Exposure Behavior</b>	<b>Race /Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	123	63	43	54	14	52	7	39
Injection Drug Use (IDU)	23	12	7	9	4	15	3	17
MSM & IDU	23	12	11	14	3	11	4	22
Hemophilia / Coagulation Disorder	0	0	0	0	0	0	0	0
Heterosexual Contact	5	3	5	6	2	7	1	5
Sex with IDU	2		1		2		1	
Sex with MSM	0		0		0		0	
Sex with Hemophiliac	0		0		0		0	
Sex with Transfusion Recipient	0		0		0		0	
Sex with HIV+ Risk Not Identified	3		4		0		0	
Received Transfusion or Tissue	1	1	1	1	0	0	0	0
Other / Risk not Reported or Identified	21	11	13	16	4	15	3	17
<b>Total</b>	<b>196</b>	<b>100</b>	<b>80</b>	<b>100</b>	<b>27</b>	<b>100</b>	<b>18</b>	<b>100</b>

\* Other refers to Hispanic, Asian/ Pacific Islanders, Persons of Mixed Race, and Unknown.

Although concerns about small cell sizes require grouping racial/ethnic categories and 2 years of data, the above table still provides valuable information about the AIDS epidemic among Oklahoma males. From 2002 through 2003, 61% of cases reported were among white males; this is similar to what has occurred in prior years. For all categories of race/ethnicity the highest proportion of cases were attributed to male-to-male sexual contact, this is similar to what has occurred in prior years.

## Oklahoma HIV Cases in Males Diagnosed in 2002 and 2003 by Exposure Behavior



During diagnosis years 2002 and 2003, the majority (63%) of AIDS cases in males can be attributed to male-to-male sexual contact; this percentage may increase over time since a large percentage (17%) have no risk reported (NIR). History has demonstrated the NIR category will decrease to around 5% by the time these individuals have been diagnosed for several years and their exposure has been adequately assessed. We need to emphasize that, due to personal nature of sexual behavior, a large percentage of NIR either refuse to disclose their sexual risk behavior or the provider does not ask/document the risk.

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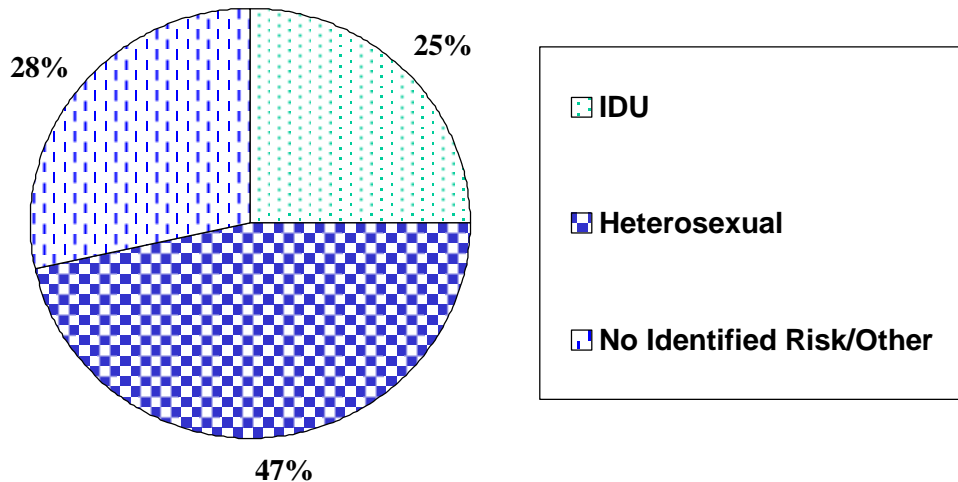
■ Female AIDS cases by exposure category and race/ethnicity, for most recent years of diagnosis

AIDS Cases for Year of Diagnosis 2002 and 2003 combined For Adult/Adolescent Females by Race and Exposure Behavior								
Exposure Behavior	Race /Ethnicity							
	White		Black		Am. Indian		Other*	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Injection Drug Use (IDU)	10	42	0	0	6	55	0	0
MSM & IDU	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hemophilia / Coagulation Disorder	0	0	0	0	0	0	0	0
Heterosexual Contact	10	42	13	59	3	27	2	50
Sex with IDU	4		4		0		1	
Sex with MSM	3		3		1		0	
Sex with Hemophiliac	0		0		0		0	
Sex with Transfusion Recipient	0		1		0		0	
Sex with HIV+ Risk Not Identified	3		5		2		1	
Received Transfusion or Tissue	0	0	0	0	0	0	0	0
Other / Risk not Reported or Identified	4	16	9	41	2	18	2	50
Total	24	100	22	100	11	100	4	100

- Other refers to Hispanic, Asian/ Pacific Islanders, Persons of Mixed Race, and Unknown.

Although concerns about small cell sizes require grouping racial/ethnic categories and 2 years of data, the above table still provides valuable information about the AIDS epidemic among Oklahoma females. From 2002 through 2003, 39% of cases reported were among white females; this is somewhat lower; the norm has been between 60-70% in prior years. For all categories of race/ethnicity the highest proportion of cases were attributed to heterosexual contact (48%) with injection drug use (26%) closely behind; this is similar to what has occurred in prior years. From the heterosexually acquired cases, a large portion of women (39%) did not know how their sex partner became infected or were not willing to share this information with their health care provider closely followed by a large portion of women (32%) who had sex with an IDU.

## Oklahoma AIDS Cases in Females Diagnosed in 2002 and 2003 by Exposure Behavior



During diagnosis years 2002 and 2003, the majority (47%) of AIDS cases in females can be attributed to heterosexual contact; this percentage may increase over time since a large percentage (28%) have no risk reported (NIR). History has demonstrated the NIR category will decrease to around 5% by the time these individuals have been diagnosed for several years and their exposure has been adequately assessed.

### 2.2 What is the impact of HIV-related deaths?

How many HIV-related deaths occurred in the most recent years? Characterizing HIV-related mortality is an additional measure of the impact of HIV on the state.

#### ■ HIV-related deaths by sex and race/ethnicity for most recent year(s) of report

Deaths for each calendar year were obtained from the Vital Records Division of the Oklahoma State Department of Health. Name and Date of Birth were utilized to electronically match these records with the HIV/AIDS database by surveillance staff. All records, which appeared to be potential matches, were verified to ensure they were the correct patients. Numbers reflect all persons who died in Oklahoma who were reported as having HIV/AIDS, although not all of their deaths were due to being infected with HIV.

Question 2

*Epidemiologic Profile: 2004*

Oklahoma Deaths from HIV/AIDS By Year of Death Crude Deaths vs. Cause-Specific and Cause specific Rates			
Year	Number of Resident Deaths in Oklahoma	Number of Deaths in HIV Infected	Rate per 1,000 Deaths
1994	32,082	314	9.8
1995	32,431	280	8.6
1996	32,872	185	5.6
1997	33,780	118	3.5
1998	33,803	99	2.9
1999	33,933	100	2.9
2000	34,707	80	2.3
2001	34,489	46	1.3
2002	35,346	90	2.5
2003	Not available	Not available	Not available

**2.3 What is the impact of HIV on the region?**

Impact can be determined in a several ways. Either how many compared to the expected number or how many persons in the region are *currently* living and infected with HIV, i.e. what is the prevalence of HIV infection?

- **Proportion (percentage) of Oklahoma’s population for region compared with proportion (percentage) of each region’s total HIV infection (non AIDS) cases.**

Percentage of Oklahoma’s Population for Region Compared With Percentage of each Region’s Total HIV (not AIDS) Cases through 2003			
Region	% Population	% of HIV Cases	Compared to Expected
Northeast	16.3	6.2	↓ 10.1%
Northwest (including Enid MSA)	5.8	2.7	↓ 3.1 %
Southeast (including Sequoyah County - Ft Smith MSA)	4.9	4.5	↓ 0.4 %
Southwest (including Lawton MSA)	11.3	8.6	↓ 2.7 %
Oklahoma City MSA	31.4	47.5	↑ 16.1%
Tulsa MSA	23.3	30.5	↑ 7.2%

If all things are equal, the percentage of expected HIV (not AIDS) cases in each region of the state should be equal to the percentage of people living in that region of the state. For example, since 31.4% of the population lives in the Oklahoma City MSA, it is *expected* that approximately 30% of the cases of HIV infection (not AIDS) in Oklahoma will reside in the Oklahoma City MSA. If using the proportion (here represented as a percentage) of the population living within any region to predict the proportion (impact) of AIDS cases in their community, only Oklahoma City and Tulsa MSAs have a larger than expected percentage diagnosed in their area. This relates to a larger impact on these metropolitan communities than expected. The remaining regions have a smaller than expected percentage diagnosed in their area hence a smaller than expected impact if all behaviors, risks and prevalence of the disease are equals.

Question 2

*Epidemiologic Profile: 2004*

■ **HIV (not AIDS) cases and annual rates per 100,000 population by race/ethnicity and sex, for most recent years of diagnosis**

HIV (not AIDS) Cases by Year of Diagnosis								
Race / Ethnicity	Males				Females			
	2002		2003		2002		2003	
	#	Rate	#	Rate	#	Rate	#	Rate
<b>White</b>	78	5.7	76	5.6	16	1.1	14	1.0
<b>Black</b>	28	22.0	31	24.3	13	9.7	10	7.4
<b>Hispanic</b>	9	N/A*	7	N/A*	1	N/A*	2	N/A*
<b>American Indian</b>	7	5.5	6	4.7	3	2.2	3	2.2
<b>Asian/ Pacific Islander</b>	1	4.6	1	4.6	1	4.2	1	4.2
<b>Total</b>	123	7.5	121	7.4	34	2.0	30	1.7

N/A\* cannot calculate with 2000 Census numbers. HIV data collected with Hispanic as Race, Census data collected with Hispanic as Ethnicity.

Most sections of the 2000 U.S. Census data are now published and available, therefore no sections necessitate utilization of 1990 Census data for rate calculations. Race by gender and race by age data calculations are now made with the 2000 populations; since the overall population of Oklahoma has increased slightly, these rates will “look” slightly lower than if the 1990 Census was used. The HIV (not AIDS) Case rate per 100,000 for blacks is 3¼ to 4¾ times greater than any other race/ethnicity (black males 3.9 to 5.3 and black females 2.3 to 8.8 times); the other rates are not significantly different from one another when the issue of small numbers is taken into consideration. The rate by year of diagnosis for blacks has continued to be much higher than rates observed in other racial/ethnic groups, the magnitude may be smaller than in the past (rate diagnosed in blacks ~5 times greater than observed in whites in 1992-4) keeping in mind that 2003 diagnosis date is definitely incomplete and 2002 data is considered mostly complete. Both the case rate (impact of the HIV epidemic) and the number of cases (magnitude of the HIV epidemic) should be considered when setting priorities for prevention activities. However, conclusions must be drawn cautiously when rates are based on very small numbers. In areas with a small population, very few cases may yield very high rates. The Centers for Disease Control and Prevention AIDS Surveillance Branch Office of Statistics and Data Management recommends that rates based on a numerator less than 50 and a denominator less than 100,000 should be interpreted with caution.

Question 2

*Epidemiologic Profile: 2004*

■ **Number of HIV (not AIDS) cases and percent of total, by exposure category and sex for most recent years of diagnosis**

<b>HIV (not AIDS) Cases by Year of Diagnosis By Gender by Exposure Behavior</b>								
<b>Exposure Behavior</b>	<b>Males</b>				<b>Females</b>			
	<b>2002</b>		<b>2003</b>		<b>2002</b>		<b>2003</b>	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	78	63.4	76	62.3	N/A	-	N/A	-
Injection Drug Use (IDU)	7	5.7	9	7.4	9	26.5	6	20.0
MSM & IDU	9	7.3	8	6.6	N/A	-	N/A	-
Hemophilia / Coagulation Disorder	0	0	0	0	0	0	0	0
Heterosexual Contact	10	8.1	4	3.3	13	38.2	11	36.7
Sex with IDU	2		1		6		4	
Sex with MSM	0		0		1		1	
Sex with Hemophiliac	0		0		0		0	
Sex with Transfusion Recipient	0		0		0		0	
Sex with HIV+ Risk Not Identified	8		3		6		6	
Received Transfusion or Tissue	2	1.6	1	0.8	1	2.9	2	6.6
Other / Risk not Reported or Identified	17	13.9	24	19.6	11	32.4	11	36.7
<b>Total</b>	<b>123</b>	<b>100.0%</b>	<b>122</b>	<b>100.0%</b>	<b>34</b>	<b>100.0%</b>	<b>30</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/ Pacific Islanders, Persons of Mixed Race, and Unknown.

Although there was no significant change in the number of cases reported among males comparing 2002 to 2003, this should not be interpreted as no change of the incidence or prevalence of infection. Remember 2003 diagnosis year data is not yet complete and 2002 may not be totally complete; however, data prior to 2002 should be considered complete. According to unpublished local studies, 55% of HIV cases are reported within the first month of diagnosis, 86% of cases are reported within 12 months of diagnosis and 92% within 2 years (1990 through 2000 data). The number of females reported has remained stable within +/- 12% for the last several years with the exception of 1999 when only 23 females were reported. Examination of the proportionate distribution of cases among population groups shows that the majority of cases in both years were among males, and that most cases among males were attributed to male-to-male sexual contact; this is similar to what has occurred in prior years. Of the few females diagnosed with HIV infection during 2002 and 2003, the largest portion of cases were infected through sex with an infected partner or injection drug use of those for which we know their exposure behavior; this is similar to what has occurred in prior years.

Question 2

*Epidemiologic Profile: 2004*

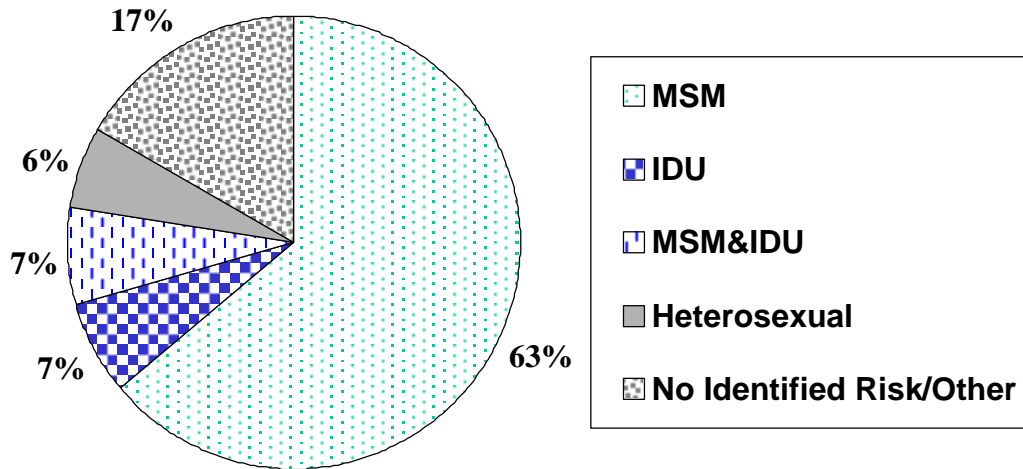
■ **Male HIV (not AIDS) cases by exposure category and race/ethnicity, for most recent years of diagnosis**

<b>HIV (not AIDS) Cases for Year of Diagnosis 2002 and 2003 combined For Adult/Adolescent Males by Race and Exposure Behavior</b>								
<b>Exposure Behavior</b>	<b>Race /Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Men who have sex with Men (MSM)	103	66.0	32	53.3	6	42.9	13	86.6
Injection Drug Use (IDU)	11	7.1	2	3.3	2	14.3	1	6.7
MSM & IDU	13	8.3	2	3.3	2	14.3	0	0
Hemophilia / Coagulation Disorder	0	0	0	0	0	0	0	0
Heterosexual Contact	8	5.1	4	6.7	1	7.1	1	6.7
Sex with IDU	2		0		0		1	
Sex with MSM	0		0		0		0	
Sex with Hemophiliac	0		0		0		0	
Sex with Transfusion Recipient	0		0		0		0	
Sex with HIV+ Risk Not Identified	6		4		1		0	
Received Transfusion or Tissue	2	1.3	1	1.7	0	0	0	0
Other / Risk not Reported or Identified	19	12.2	19	31.7	3	21.4	0	0
<b>Total</b>	<b>156</b>	<b>100.0%</b>	<b>60</b>	<b>100.0%</b>	<b>14</b>	<b>100.0%</b>	<b>15</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/ Pacific Islanders, Persons of Mixed Race, and Unknown.

Although concerns about small cell sizes require grouping racial/ethnic categories and 2 years of data, the above table still provides valuable information about the HIV epidemic among Oklahoma males. From 2002 through 2003, 64% of cases reported were among white males; this is similar to what has occurred in prior years. For all categories of race/ethnicity the highest proportion of cases were attributed to male-to-male sexual contact, this is similar to what has occurred in prior years.

## Oklahoma HIV Cases in Males Diagnosed in 2002 and 2003 by Exposure Behavior



During diagnosis years 2002 and 2003, the majority (63%) of HIV cases in males can be attributed to male-to-male sexual contact; this percentage may increase over time since a large percentage (17%) have no risk reported (NIR). History has demonstrated the NIR category will decrease to around 5% by the time these individuals have been diagnosed for several years and their exposure has been adequately assessed.

Question 2

*Epidemiologic Profile: 2004*

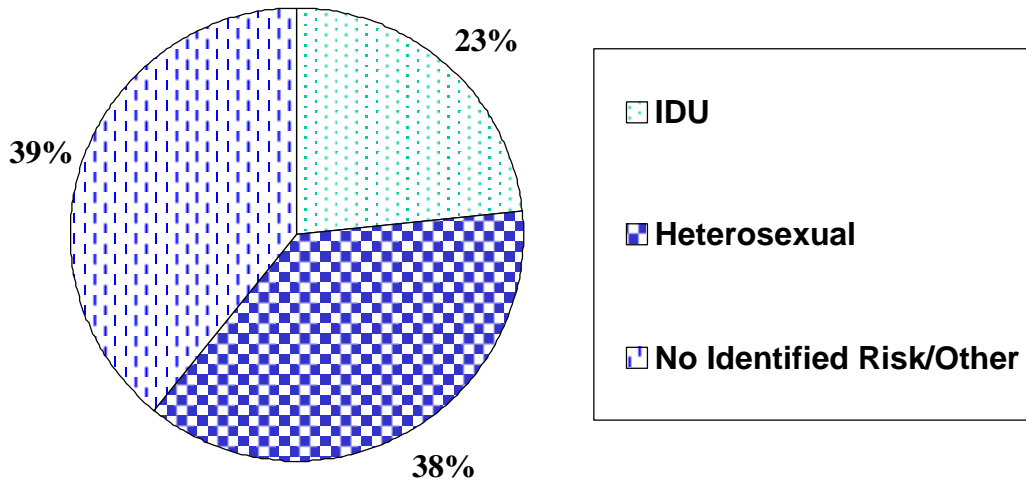
■ **Female HIV (not AIDS) cases by exposure category and race/ethnicity, for most recent years of diagnosis**

<b>HIV (not AIDS) Cases for Year of Diagnosis 2002 and 2003 combined For Adult/Adolescent Females by Race and Exposure Behavior</b>								
<b>Exposure Behavior</b>	<b>Race /Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Injection Drug Use (IDU)	12	40.0	1	4.4	2	33.3	0	0
MSM & IDU	0	0	0	0	0	0	0	0
Hemophilia / Coagulation Disorder	0	0	0	0	0	0	0	0
Heterosexual Contact	13	43.3	6	26.0	3	50.0	2	40.0
Sex with IDU	6		2		2		0	
Sex with MSM	1		0		0		1	
Sex with Hemophiliac	0		0		0		0	
Sex with Transfusion Recipient	0		0		0		0	
Sex with HIV+ Risk Not Identified	6		4		1		1	
Received Transfusion or Tissue	0	0	2	8.7	1	16.7	0	0
Other / Risk not Reported or Identified	5	16.7	14	60.9	0	0	3	60.0
<b>Total</b>	<b>30</b>	<b>100.0%</b>	<b>23</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/ Pacific Islanders, Persons of Mixed Race, and Unknown.

Although concerns about small cell sizes require grouping racial/ethnic categories and 2 years of data, the above table still provides valuable information about the HIV epidemic among Oklahoma females. From 2002 through 2003, 47% of cases reported were among white females; this is similar to what has occurred in prior years, the norm has been between 60-70% in prior years. For all categories of race/ethnicity the highest proportion of cases were attributed to heterosexual contact (38%) with injection drug use (23%) closely behind; this is similar to what has occurred in prior years. Of the heterosexual cases a large portion of women (50%) had sex with an infected partner but did not know how their sex partner became infected or were willing to share this information with her health care provider closely followed by those who had sex with an IDU (42%).

## Oklahoma HIV Cases in Females Diagnosed in 2002 and 2003 by Exposure Behavior



During diagnosis years 2002 and 2003, the majority (38%) of HIV cases in females can be attributed to heterosexual contact; this percentage may increase over time since a large percentage (39%) have no risk reported (NIR). History has demonstrated the NIR category will decrease to around 5% by the time these individuals have been diagnosed for several years and their exposure has been adequately assessed.

### ■ Estimate the number of HIV infected persons in the state

While the death data from section 2.2 may be used to describe the overall impact of HIV in terms of AIDS cases and deaths, they do not characterize the HIV epidemic in terms of the number of persons currently living and infected with HIV. A simple method that may be used to estimate HIV prevalence, based on estimated AIDS Opportunistic Infections (OIs) among adults and adolescents, is to extrapolate from national estimates. Dr. John Karon, a statistician with CDC developed this simple method. The estimated prevalence (persons living with HIV infection) in Oklahoma of AIDS OIs as of 12/31/95, adjusting for reporting delays:

<b>Estimated Prevalence of HIV based on AIDS OIs in Oklahoma by Gender As of 12/31/95</b>	
Males	3,080 - 3,920
Females	360 – 480

The estimate of HIV prevalence represents HIV infections among all adults and adolescents living with HIV infection, including those diagnosed with AIDS. Because prevalence refers to persons **currently** infected, infections among persons who have died are not included in the estimates.

Limitation: Prevalence estimation methods allow a gross estimate of the number of infected persons. The smaller the number of AIDS cases used in the calculations, the less reliable the estimates. Estimates are rounded off; estimates cannot be made to the nearest person and should be presented as a plausible range. Estimates of the number of HIV infected persons by 1) age group, 2) race/ethnicity, 3) mode of exposure to HIV, and 4) geographic areas with moderate or low incidence of AIDS are very imprecise and, in general, should not be attempted. Oklahoma is a state with a moderate to low incidence of HIV.

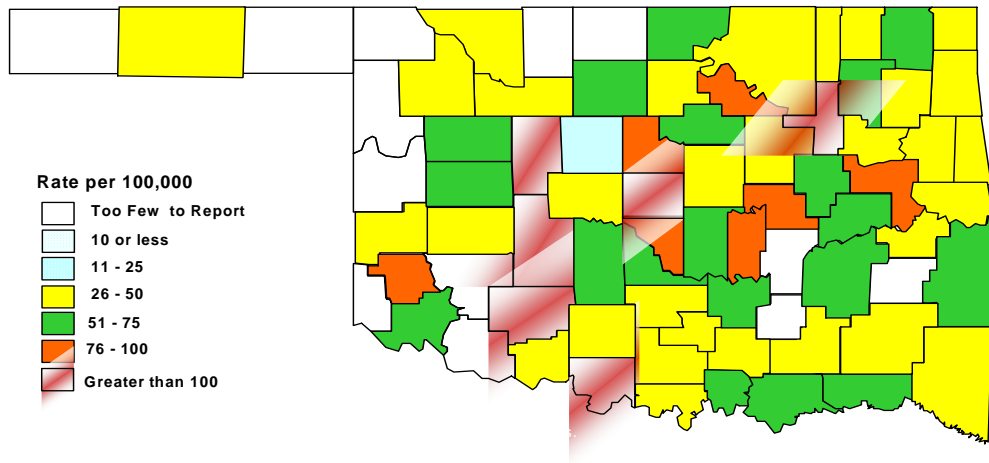
Although estimation of HIV prevalence in Oklahoma yields an imprecise estimate, it is done to emphasize that the number of persons currently infected is much larger than the number of persons reported with HIV or AIDS, because not all persons currently infected with HIV have been tested. Studies have estimated that a large proportion of HIV infected persons seek testing only when they are known to be exposed or have become sick.<sup>4</sup> HIV reporting data provide only a minimum estimate of the number of persons known to be infected, that is, the numbers of persons who have sought testing, have tested positive and have been reported.

Question 2

*Epidemiologic Profile: 2004*

■ **Known Prevalence of HIV infected persons in the state**

**HIV Prevalence\* by County  
December 2003**



Question 2

*Epidemiologic Profile: 2004*

Oklahoma HIV Infection Prevalence by Residence at Diagnosis through December 31, 2003.

County	Living HIV + AIDS Cases	Prevalence Rate per 100,000	County	Living HIV + AIDS Cases	Prevalence Rate per 100,000
Adair	10	47.5	Lincoln	9	28.1
Alfalfa	*	*	Logan	36	88.4
Atoka	6	43.2	Love	4	45.3
Beaver	*	*	Major	3	39.8
Beckham	7	35.4	Marshall	8	60.7
Blaine	15	125.3	Mayes	13	33.9
Bryan	23	63.0	McClain	19	68.5
Caddo	31	102.8	McCurtain	14	40.7
Canadian	83	94.6	McIntosh	14	72.0
Carter	20	43.8	Murray	4	31.7
Cherokee	17	30.6	Muskogee	66	95.0
Choctaw	11	65.2	Noble	4	35.1
Cimarron	*	*	Nowata	5	47.3
Cleveland	195	86.5	Okfuskee	9	76.2
Coal	*	*	Oklahoma	1704	258.0
Comanche	190	162.6	Okmulgee	22	55.4
Cotton	4	45.4	Osage	18	40.5
Craig	13	73.6	Ottawa	14	42.2
Creek	34	47.5	Pawnee	13	78.3
Custer	14	61.2	Payne	41	60.1
Delaware	10	27.0	Pittsburg	32	72.8
Dewey	3	63.3	Pontotoc	19	54.1
Ellis	*	*	Pottawatomie	46	70.2
Garfield	46	69.2	Pushmataha	4	34.3
Garvin	8	29.4	Roger Mills	*	*
Grady	30	57.1	Rogers	47	66.5
Grant	*	19.4	Seminole	19	76.3
Greer	6	99.0	Sequoyah	15	38.5
Harmon	*	*	Stephens	19	44.0
Harper	*	*	Texas	8	39.8
Haskell	6	42.4	Tillman	*	*
Hughes	*	*	Tulsa	1271	225.6
Jackson	16	59.8	Wagoner	21	36.5
Jefferson	8	117.3	Washington	24	49.0
Johnston	5	28.5	Washita	4	34.8
Kay	30	54.1	Woods	3	33.0
Kingfisher	5	21.5	Woodward	9	48.7
Kiowa	*	*	Unk/Other Counties	4	N/A
Latimer	*	*	Out Of State	873	N/A
LeFlore	33	56.1	<b>Total**</b>	<b>5,329</b>	<b>154.4</b>

#### **2.4 Summary**

- ◆ Every region of the state has had reported HIV/AIDS cases, both urban and rural, therefore every region has been impacted to some extent.
- ◆ The number of whites reported is much greater than any other racial/ethnic group, although when using rate per 100,000 diagnosed in 2002 and 2003 to make the impact comparable, blacks have ~3 to 5 times the impact. Most males are infected through male-to-male sexual contact. Most females are infected through heterosexual contact, with injection drug use closely following.
- ◆ Death rates for HIV infected individuals have declined from 1994 to 2002
- ◆ Statewide the known prevalence of HIV infection (persons living with HIV and AIDS) is 158.3 per 100,000 population; this includes individuals diagnosed somewhere other than Oklahoma who now live in Oklahoma.

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**Question 3**

Epidemiologic Profile: 2004

**Question 3: Who is at risk of becoming infected with HIV?**

*Note: Risk is determined by the frequency of high-risk behavior combined with the prevalence of HIV infection in the community.*

*Describes HIV/AIDS in population groups including:*

- 1) Men who have sex with men
- 2) Injecting drug users
- 3) Persons exposed to HIV through heterosexual contact
- 4) Women
- 5) Children
- 6) Adolescents and young adults
- 7) Racial/ethnic minority groups
- 8) Other groups important to the community

**Prevention planning value:**

Provides regional information on HIV infection among population groups at high risk for HIV infection. Helps planning groups identify groups most affected in their own regions. Directly supports setting priorities for prevention needs among specific target populations.

**Key components:**

AIDS cases:

- Number of cases reported each year in each population group

HIV infection:

- Number of reported HIV infections in each population group for each year

STD cases:

- Number of syphilis cases

Behavioral data:

- Local/regional studies of behavior and behavioral determinants
- Youth Risk Behavior Survey (YRBS) data

**Key issues:**

- Risk is highest among those who engage in high-risk behavior in communities with a high prevalence of HIV infection.
- Identified groups are neither mutually exclusive nor exhaustive.
- Results based on small numbers of persons must be interpreted cautiously.
- Behavioral information largely depends on available local studies.
- Data on specific groups will likely be subsets of larger analysis.
- Confidentiality may prohibit cross-tabulations involving small numbers in specific sub-populations. Aggregation (grouping) of data may be necessary.

**Question 3. Who is at risk for becoming infected with HIV?**

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### **Question 3**

Epidemiologic Profile: 2004

The persons most likely to become infected with HIV are those who engage in high-risk behavior with persons in communities with a high prevalence of HIV infection. The frequency of high-risk behavior combined with the HIV prevalence in sexual or drug-using networks determines a person's risk for becoming infected. The answers to Question 3 will help community planning group members understand the varying risks for HIV infection among different population groups.

Those at highest risk for HIV infection are likely to be persons who practice the same risk behavior in the same communities as persons who are already infected. Thus, analyzing the characteristics of persons recently infected should help identify those groups of persons at highest risk for becoming infected. However, since there are very few data on incidence (new infections) of HIV infections, one must use data on those currently known to be infected. To answer Question 3, the most recent data available should be used. For example, use AIDS cases diagnosed in 2002 and 2003 rather than cumulative totals from 1981. Data from early in the epidemic may not represent emerging HIV transmission patterns. Although the average period from HIV infection to AIDS (according to the 1987 case definition) is approximately 10 years,<sup>5</sup> a proportion of persons will develop AIDS within 3 to 5 years of infection; thus analysis of trends in proportions of AIDS cases may reveal emerging patterns in HIV transmission that are more recent than the frequently cited "10 years." Perhaps more importantly, emerging patterns may be identified through trend analysis of HIV prevalence in the absence of HIV incidence data.

HIV infection in the United States disproportionately affects certain groups in the population, particularly men who have sex with men and racial and ethnic minority communities. Epidemiologic profiles must clearly describe the distribution of HIV, the populations at highest risk for HIV infection, and the current and potential impact of HIV among them. Although there are many ways to examine the population, at least seven (excluding a category for "other" groups unique or important to certain regions) should be characterized:

- 1) Men who have sex with men (MSM)
- 2) Injection drug users (IDU), Heterosexual and MSMs
- 3) Persons exposed to HIV through heterosexual contact
- 4) Women
- 5) Children
- 6) Adolescents and young adults
- 7) Racial/ethnic minorities
- 8) Other groups which are unique and/or important to the community. These may be groups that are at particularly high risk or particularly vulnerable to HIV, e.g., prisoners, commercial sex workers, migrant workers, etc.

These groups are neither mutually exclusive nor exhaustive. Groups 1-3 comprise persons who share behaviors that put them at high risk for HIV infection. Groups 4-8 represent additional groups of importance for prevention programs, many of which are included in groups 1-3.

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### **Question 3**

Epidemiologic Profile: 2004

#### **3.1 Men who have sex with men (MSM)**

##### **Assessment of the current situation--what are the characteristics of those who are infected?**

Several sources of data are available to assist in describing the level of HIV infection among different groups of men who have sex with men.

##### **■ AIDS surveillance data**

These data provide information on AIDS cases and characteristics of persons being diagnosed with severe HIV disease.

- **AIDS cases among men who have sex with men, by race/ethnicity for each year of diagnosis**

In Oklahoma, AIDS cases among men who have sex with men have been increasing steadily since the beginning of the epidemic, with the highest number of cases among white men, this is not to say the proportion of cases attributed to this behavior has continued to increase.

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**Question 3**

Epidemiologic Profile: 2004

<b>AIDS Cases in Men who have Sex with Men By Year of Diagnosis and Race/ Ethnicity</b>					
<b>Year of Diagnosis</b>	<b>Race / Ethnicity</b>				
	<b>White</b>	<b>Black</b>	<b>Am. Indian</b>	<b>Other*</b>	<b>Total</b>
<b>1982</b>	0	1	0	0	1
<b>1983</b>	5	0	0	0	5
<b>1984</b>	8	1	0	0	9
<b>1985</b>	23	4	1	0	28
<b>1986</b>	41	3	1	2	47
<b>1987</b>	90	5	2	0	97
<b>1988</b>	104	20	5	4	133
<b>1989</b>	114	16	7	4	141
<b>1990</b>	125	22	5	4	156
<b>1991</b>	173	20	21	8	222
<b>1992</b>	189	38	22	12	261
<b>1993</b>	190	24	16	7	237
<b>1994</b>	106	23	10	4	143
<b>1995</b>	115	19	9	9	152
<b>1996</b>	110	26	8	4	148
<b>1997</b>	112	27	15	6	160
<b>1998</b>	71	24	3	7	105
<b>1999</b>	57	17	6	8	88
<b>2000</b>	64	17	8	3	92
<b>2001</b>	65	23	1	10	99
<b>2002</b>	62	26	7	5	100
<b>2003</b>	58	17	7	6	88
<b>Total</b>	1882	373	154	103	2512

*Other\* includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.*

Of the 2,512 males reported as AIDS cases attributed to male-to-male sexual contact:

- ➔ 74.9% are white
- ➔ 25.1% are men of color
  - 14.8% are black
  - 6.1% are American Indian
  - 5.3% are Other/Unknown

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**Question 3**

Epidemiologic Profile: 2004

**■ HIV Counseling and Testing (C&T) program data**

These data provide information on HIV tests performed in predominantly publicly funded C&T sites.

Data are on tests performed rather than on individuals tested and thus may include multiple results from persons (both HIV positive and negative) who seek repeat testing. Duplicates are excluded from analysis in Oklahoma's data set for those individuals testing positive.

These data may be more useful for evaluating services in the needs assessment than for targeting specific groups at high risk.

<b>HIV Counseling and Testing data for Men who have Sex with Men By Year of Test and Race/ Ethnicity</b>										
<b>Year of Test</b>	<b>Race / Ethnicity</b>									
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>		<b>Total</b>	
	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>
<b>1990</b>	1,180	151	92	23	22	2	30	0	1,324	176
<b>1991</b>	1,875	268	133	32	57	9	43	8	2,108	317
<b>1992</b>	2,175	204	183	39	108	11	77	6	2,543	260
<b>1993</b>	1,859	149	155	27	73	8	93	12	2,180	196
<b>1994</b>	1,848	134	157	8	107	9	111	10	2,223	161
<b>1995</b>	899	64	136	13	63	6	48	2	1,146	85
<b>1996</b>	800	42	113	15	71	4	44	1	1,028	62
<b>1997</b>	870	67	99	14	80	8	50	4	1,099	93
<b>1998</b>	907	31	117	18	58	2	65	2	1,147	53
<b>1999</b>	1,281	80	98	13	75	4	102	4	1,556	101
<b>2000</b>	1,028	39	80	9	69	7	76	5	1,253	60
<b>2001</b>	963	69	73	14	71	6	84	11	1,191	100
<b>2002</b>	976	57	116	14	89	5	107	5	1,288	81
<b>2003</b>	1,095	57	116	8	81	3	140	11	1,432	79
<b>Total</b>	17,756	1,412	1,668	247	1,024	84	1,070	81	21,518	1,824

*Other\* includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.*

The peak year of testing for MSMs through OSDH sponsored C&T sites across all racial/ethnic populations was in 1992, the calendar year following Ervin "Magic" Johnson's announcement of his HIV positive status. In 1991, the percent positivity (# of positives divided by tests performed times 100) was the highest for all racial categories (average positivity 15%) except for blacks. For blacks, 1990's testing results had higher positivity than 1991 (25% compared to 24%). For all groups percent positivity in individuals who self identify as MSMs has steadily decreased to a 3½ - 8.0% with the exception of blacks, which averages almost 16%.

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**Question 3**

Epidemiologic Profile: 2004

**■ HIV-infection surveillance data**

These data provide information on persons in earlier stages of HIV infection than those reported through AIDS surveillance; however, HIV infection reporting data are more dependent upon patterns of HIV testing than are AIDS surveillance data. These data represent only persons with diagnosed and reported HIV infection who have not progressed on to an AIDS diagnosis. Because these numbers will be substantially lower than other estimates of HIV prevalence, HIV infection reporting data should not be used to estimate HIV incidence.

- **HIV cases among men who have sex with men, by race/ethnicity for each year of diagnosis**

<b>HIV Infections (not AIDS) in Men who have Sex with Men By Year of 1<sup>st</sup> Seropositive Test and Race/ Ethnicity</b>					
<b>Year of 1<sup>st</sup> Test</b>	<b>Race / Ethnicity</b>				<b>Total</b>
	<b>White</b>	<b>Black</b>	<b>Am. Indian</b>	<b>Other*</b>	
<b>1984</b>	1	0	0	0	1
<b>1985</b>	20	4	3	0	27
<b>1986</b>	28	1	2	1	32
<b>1987</b>	44	1	2	2	49
<b>1988</b>	58	8	5	1	72
<b>1989</b>	50	14	3	3	70
<b>1990</b>	74	16	6	3	99
<b>1991</b>	50	13	4	0	67
<b>1992</b>	58	12	1	2	73
<b>1993</b>	50	17	2	9	78
<b>1994</b>	46	12	2	1	61
<b>1995</b>	55	18	1	1	75
<b>1996</b>	60	9	8	0	77
<b>1997</b>	78	14	5	6	103
<b>1998</b>	59	25	5	2	91
<b>1999</b>	63	11	4	6	84
<b>2000</b>	53	13	8	5	79
<b>2001</b>	38	13	6	3	60
<b>2002</b>	52	14	4	9	78
<b>2003</b>	51	18	2	5	76
<b>Total</b>	988**	233	73	59**	1,352**

*Other\* includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.*

*\*\*Total includes one white male and one other whose date of test is unknown.*

When reviewing absolute numbers, white MSMs have by far the greatest number of HIV infections reported, 988 (73.1%) individuals compared to the next largest racial group, black, having reported

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### Question 3

Epidemiologic Profile: 2004

233 (17.2%) individuals. Important things to remember are that these are individuals who have not progressed on to an AIDS diagnosis and who have either sought testing to determine their HIV status or due to signs and symptoms were tested. These reported cases cannot determine HIV incidence, only new HIV infections regardless if they have been tested or not determines HIV incidence.

When comparing new reports of HIV infection (above table) to positive tests from C&T sites (previous table), until 1996 more individuals tested positive at C&T test sites each year than new HIV infections were reported. One item, which can be gathered from this information, is that individuals are “confirming” they have received *their* correct result, that is to say, no laboratory errors or mislabeling of name or Soundex.

#### ■ Surveillance of bacterial sexually transmitted diseases

Persons recently infected with bacterial sexually transmitted diseases (STDs) represent a group of sexually active people who recently had unprotected intercourse with persons infected with bacterial STDs who may also be infected with HIV. The extent to which STD rates correlate with HIV risk will depend on the prevalence of HIV infection within the sexual network of persons practicing unsafe sex and on the local dynamics of STD transmission. While STD rates may be an imperfect surrogate marker for risk of HIV infection, these rates are a reliable indicator of high-risk behavior (i.e., unprotected sexual intercourse). Groups with high rates of STDs are potentially at increased risk for the introduction and spread of HIV infection.

While STD surveillance data include little or no data on behavior risk, the majority of women who present with STDs are infected heterosexually. STDs in men, however, may be a marker of high-risk sexual activity with either men or women.

In many areas, reporting from institutions supported by public funds (e.g., STD clinics) is more complete than from other sources (e.g., private practitioners). Thus, STD trends may not be representative of all segments of the population.<sup>6</sup> However, in Oklahoma, major emphasis is placed on obtaining data from all types of sources through active surveillance.

#### • Total Early Syphilis:

In Oklahoma, when analyzing syphilis we include Early Latent (EL) Syphilis with Primary and Secondary Syphilis (P&S), this is termed Early Syphilis. Early Syphilis is an infection with the bacterium *Treponema pallidum*, a spirochete, for not more than one (1) year. Syphilis passes through several stages of infection. A lesion or chancre at the site of inoculation characterizes the Primary stage. Often this chancre is not noticeable and appears to heal without treatment. The Secondary stage classically has a rash on the palms of the hands and the soles of the feet. This rash also appears to heal without treatment. Early Latent Syphilis is a stage without signs or symptoms, which can appear between Primary and Secondary or between episodes of Secondary. P&S syphilis are reported to and by the Centers for Disease Control and Prevention (CDC), however EL is not routinely reported unless the state participates in electronic line item reporting through the National Electronic Transmission Surveillance System (NETSS).

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**Question 3**

Epidemiologic Profile: 2004

Data on transmission of Early Syphilis attributed to MSMs is skewed by default and unreliable due to the hierarchical arrangement of the risk behaviors in our data analysis program. However, transmission of Early Syphilis attributed to MSMs constitutes a very small portion of all Early Syphilis, estimated at less than 3%.

**Summarize data on men who have sex with men used to answer Question 3.1.**

- ◆ The majority of reported cases of HIV and AIDS in MSM are white.
- ◆ Male-to-male sexual contact has contributed to very few cases of early syphilis.
- ◆ In the last ten (10) years, almost 13,500 MSMs have sought HIV testing at public C&T sites.

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**Question 3**

Epidemiologic Profile: 2004

**3.2 Injection drug use****■ AIDS surveillance**

<b>AIDS Cases in Injection Drug Users By Year of Diagnosis and Race/Ethnicity and Gender</b>										
<b>Year of Diagnosis</b>	<b>Race/Ethnicity</b>									
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>		<b>Total</b>	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<b>1982</b>	0	0	0	0	0	0	0	0	0	0
<b>1983</b>	0	0	0	0	0	0	0	0	0	0
<b>1984</b>	1	0	0	0	0	0	0	0	1	0
<b>1985</b>	1	0	1	0	0	0	0	0	2	0
<b>1986</b>	0	0	1	1	0	0	0	0	1	1
<b>1987</b>	5	2	2	2	0	0	0	0	7	4
<b>1988</b>	7	3	2	1	2	0	1	0	12	4
<b>1989</b>	9	2	6	0	1	0	3	1	19	3
<b>1990</b>	13	5	2	2	0	0	1	0	16	7
<b>1991</b>	9	7	6	2	1	1	4	0	20	10
<b>1992</b>	18	4	5	2	4	0	3	3	30	9
<b>1993</b>	14	9	5	5	5	0	3	0	27	14
<b>1994</b>	16	7	4	1	3	1	2	2	25	11
<b>1995</b>	19	1	7	1	3	0	2	0	31	2
<b>1996</b>	14	14	9	2	2	1	0	1	25	18
<b>1997</b>	22	5	5	3	3	1	1	1	31	10
<b>1998</b>	15	4	4	0	3	0	1	0	23	4
<b>1999</b>	9	2	2	1	4	1	1	0	16	4
<b>2000</b>	14	7	3	3	5	3	0	0	22	13
<b>2001</b>	13	3	3	2	2	1	1	0	19	6
<b>2002</b>	10	6	5	0	2	0	1	0	18	7
<b>2003</b>	13	4	2	0	2	4	2	0	19	8
<b>Total</b>	222	85	74	28	42	13	26	8	364	135

*Other\* includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.*

Of the 499 persons with AIDS attributed to injection drug use, 73% were male, 44.4% were white.

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**Question 3**

Epidemiologic Profile: 2004

<b>AIDS Cases in MSM&amp;IDUs By Year of Diagnosis and Race/Ethnicity</b>					
<b>Year of Diagnosis</b>	<b>Race/Ethnicity</b>				<b>Total</b>
	<b>White</b>	<b>Black</b>	<b>Am. Indian</b>	<b>Other*</b>	
<b>1982</b>	0	0	0	0	0
<b>1983</b>	1	0	0	0	1
<b>1984</b>	2	1	0	0	3
<b>1985</b>	6	0	0	0	6
<b>1986</b>	19	0	0	1	20
<b>1987</b>	16	3	1	0	20
<b>1988</b>	23	6	2	0	31
<b>1989</b>	26	3	0	0	29
<b>1990</b>	23	3	8	0	34
<b>1991</b>	36	5	4	0	45
<b>1992</b>	29	9	7	0	45
<b>1993</b>	32	9	3	3	47
<b>1994</b>	20	7	0	0	27
<b>1995</b>	24	11	4	2	41
<b>1996</b>	17	4	3	2	26
<b>1997</b>	27	3	1	1	32
<b>1998</b>	17	3	3	0	23
<b>1999</b>	13	1	1	0	15
<b>2000</b>	12	3	0	0	15
<b>2001</b>	10	5	9	0	24
<b>2002</b>	14	6	1	2	23
<b>2003</b>	8	4	0	7	19
<b>Total</b>	<b>375</b>	<b>86</b>	<b>47</b>	<b>18</b>	<b>526</b>

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

Of the 526 persons with AIDS attributed to MSM&IDU, 71.3% were white, 16.3% black and 9% American Indian.

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**Question 3**

Epidemiologic Profile: 2004

**■ HIV Counseling and Testing**

<b>HIV Counseling and Testing data for Heterosexual Injection Drug Users Males By Year of Test and Race/Ethnicity</b>										
<b>Year of Test</b>	<b>Race/Ethnicity</b>									
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>		<b>Total</b>	
	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>Positive</i>
<b>1990</b>	469	9	34	2	17	1	12	1	532	13
<b>1991</b>	563	16	71	7	32	2	27	3	693	28
<b>1992</b>	777	25	83	3	60	4	30	1	950	33
<b>1993</b>	802	13	65	3	76	0	29	2	972	18
<b>1994</b>	626	8	69	5	53	1	28	2	776	16
<b>1995</b>	585	5	62	0	48	0	17	0	712	5
<b>1996</b>	629	4	38	1	76	0	29	0	772	5
<b>1997</b>	626	7	62	2	52	1	28	0	768	10
<b>1998</b>	590	3	30	1	56	0	15	0	691	4
<b>1999</b>	544	10	19	0	53	1	24	0	640	11
<b>2000</b>	405	6	17	1	50	3	25	2	497	12
<b>2001</b>	398	5	20	0	50	0	13	0	481	5
<b>2002</b>	527	2	41	0	78	0	16	0	662	2
<b>2003</b>	464	4	100	0	73	1	25	0	662	5
<b>Total</b>	<b>8,005</b>	<b>117</b>	<b>711</b>	<b>25</b>	<b>774</b>	<b>14</b>	<b>318</b>	<b>11</b>	<b>9,808</b>	<b>167</b>

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

Of the 9,808 males who were IDUs testing during the period of 1990-2003, 81.6% were white. Of the 167 positives, 70.1% were white.

Positivity Rates (number testing positive divided by total tested in a category times 100) observe the following ranges by group:

White                    0 – 3 %  
Black                    0 – 10%  
American Indian    0 – 7 %  
Total tested         <1 – 4 % positivity

**Question 3**

Epidemiologic Profile: 2004

<b>HIV Counseling and Testing data for Heterosexual Injection Drug Users Females By Year of Test and Race/Ethnicity</b>										
<b>Year of Test</b>	<b>Race/Ethnicity</b>									
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>		<b>Total</b>	
	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>
<b>1990</b>	419	6	34	2	29	1	6	0	488	9
<b>1991</b>	469	3	44	4	43	0	10	1	566	8
<b>1992</b>	710	9	71	2	88	2	22	3	891	16
<b>1993</b>	647	13	57	1	78	0	18	0	800	14
<b>1994</b>	624	3	63	0	59	0	17	0	763	3
<b>1995</b>	621	5	46	0	55	0	20	0	742	5
<b>1996</b>	712	4	49	0	72	0	12	0	845	4
<b>1997</b>	741	6	48	1	77	1	28	1	894	9
<b>1998</b>	663	2	31	2	81	0	33	0	808	4
<b>1999</b>	581	4	33	0	56	0	28	0	698	4
<b>2000</b>	505	4	21	0	65	0	17	0	608	4
<b>2001</b>	404	3	9	0	63	1	9	1	485	5
<b>2002</b>	453	2	12	0	102	1	18	0	585	3
<b>2003</b>	478	6	40	0	72	0	22	0	612	6
<b>Total</b>	<b>8,027</b>	<b>70</b>	<b>558</b>	<b>12</b>	<b>940</b>	<b>6</b>	<b>260</b>	<b>6</b>	<b>9,785</b>	<b>94</b>

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

Of the 9,785 females who were IDUs testing during the period of 1990-2003, 82% were white. Of the 94 positives, 74.5% were white.

Positivity Rates (number testing positive divided by total tested in a category times 100) observe the following ranges by group:

White                    0 – 2 %  
 Black                    0 – 9 %  
 American Indian    0 – 3 %  
 Total tested         <1 – 2 % positivity

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**Question 3**

Epidemiologic Profile: 2004

<b>HIV Counseling and Testing data for MSM&amp;IDUs By Year of Test and Race/Ethnicity</b>										
<b>Year of Test</b>	<b>Race/Ethnicity</b>									
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>		<b>Total</b>	
	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>	<i>tested</i>	<i>positive</i>
<b>1990</b>	107	24	10	1	4	1	4	0	125	26
<b>1991</b>	137	15	12	3	4	4	4	1	157	23
<b>1992</b>	218	35	11	5	15	0	4	0	248	40
<b>1993</b>	197	39	10	5	18	4	6	0	231	48
<b>1994</b>	209	30	6	0	13	3	8	1	236	34
<b>1995</b>	103	7	8	2	11	1	6	1	128	11
<b>1996</b>	143	8	13	1	13	4	8	1	177	14
<b>1997</b>	147	13	12	2	15	5	9	1	183	21
<b>1998</b>	186	15	8	2	22	0	11	1	227	18
<b>1999</b>	205	11	9	2	22	0	10	1	246	14
<b>2000</b>	137	9	5	0	23	1	8	2	173	12
<b>2001</b>	129	13	5	0	20	0	9	0	163	13
<b>2002</b>	125	7	11	2	24	0	12	0	172	9
<b>2003</b>	159	11	11	1	25	1	7	4	202	17
<b>Total</b>	<b>2,202</b>	<b>237</b>	<b>131</b>	<b>26</b>	<b>229</b>	<b>24</b>	<b>106</b>	<b>13</b>	<b>2,668</b>	<b>300</b>

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

Of the 2,668 MSM & IDUs testing during the period of 1990-2003, 82.5% were white. Of the 300 positives, 79% were white.

Positivity Rates (number testing positive divided by total tested in a category times 100) observe the following ranges by group:

White                    5 – 22%  
Black                    0 – 50%  
American Indian    0 – 100%  
Total tested           5 – 21% positivity

**Question 3**

Epidemiologic Profile: 2004

■ **HIV infection surveillance**

<b>HIV Cases (not AIDS) in Injection Drug Users By Year of Diagnosis and Race/Ethnicity and Gender</b>										
<b>Year of Diagnosis</b>	<b>Race/Ethnicity</b>									
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>		<b>Total</b>	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<b>1983</b>	0	0	1	0	0	0	0	0	1	0
<b>1984</b>	0	0	0	0	0	0	0	0	0	0
<b>1985</b>	1	1	0	0	0	0	0	0	1	1
<b>1986</b>	2	1	1	0	0	0	0	0	3	1
<b>1987</b>	4	1	1	0	1	0	0	0	6	1
<b>1988</b>	11	2	6	1	1	0	0	1	18	4
<b>1989</b>	6	6	5	3	1	1	3	0	15	10
<b>1990</b>	12	6	4	1	0	0	0	1	16	8
<b>1991</b>	2	1	3	0	0	0	0	0	5	1
<b>1992</b>	8	5	7	2	0	1	0	1	15	9
<b>1993</b>	9	3	4	2	1	2	1	0	15	7
<b>1994</b>	12	1	3	1	2	0	3	0	20	2
<b>1995</b>	10	4	3	1	1	2	3	0	17	7
<b>1996</b>	5	7	1	0	0	0	1	0	7	7
<b>1997</b>	15	8	2	3	1	0	1	0	19	11
<b>1998</b>	11	7	3	0	1	1	0	0	15	8
<b>1999</b>	9	4	4	0	0	3	1	1	14	8
<b>2000</b>	13	9	2	1	1	2	0	0	16	12
<b>2001</b>	10	7	1	1	2	2	1	0	14	10
<b>2002</b>	5	7	1	0	1	1	1	1	8	9
<b>2003</b>	2	2	0	1	1	0	6	3	9	6
<b>Total</b>	<b>147</b>	<b>82</b>	<b>52</b>	<b>17</b>	<b>14</b>	<b>15</b>	<b>21</b>	<b>8</b>	<b>234</b>	<b>122</b>

*Other\* includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.*

Of the 356 persons with HIV infection (which has not progressed to an AIDS diagnosis) attributed to injection drug use, 65.7% were male, 64.3% were white.

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**Question 3**

Epidemiologic Profile: 2004

<b>HIV Cases in MSM&amp;IDUs By Year of Diagnosis and Race/Ethnicity</b>					
<b>Year of Diagnosis</b>	<b>Race/Ethnicity</b>				<b>Total</b>
	<b>White</b>	<b>Black</b>	<b>Am. Indian</b>	<b>Other*</b>	
<b>1984</b>	1	0	0	0	1
<b>1985</b>	7	0	0	0	7
<b>1986</b>	5	0	0	0	5
<b>1987</b>	8	1	0	0	9
<b>1988</b>	9	4	2	0	15
<b>1989</b>	14	5	3	0	22
<b>1990</b>	16	2	1	0	19
<b>1991</b>	14	4	1	3	22
<b>1992</b>	13	1	0	0	14
<b>1993</b>	15	3	0	0	18
<b>1994</b>	8	2	1	0	11
<b>1995</b>	7	1	1	1	10
<b>1996</b>	10	2	2	1	15
<b>1997</b>	14	4	1	1	20
<b>1998</b>	15	1	1	0	17
<b>1999</b>	12	1	0	0	13
<b>2000</b>	6	2	1	1	10
<b>2001</b>	8	2	2	1	13
<b>2002</b>	6	1	0	2	9
<b>2003</b>	2	0	0	6	8
<b>Total</b>	<b>190</b>	<b>36</b>	<b>16</b>	<b>16</b>	<b>258</b>

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

Of the 258 persons with HIV attributed to MSM&IDU, 73.6% are white, 14.0% are black and 6.2% are American Indian.

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**Question 3**

Epidemiologic Profile: 2004

Transmission of Early Syphilis attributed to unsafe sexual practices of IDUs constitutes a very small portion of all Early Syphilis, estimated at less than 2% - 4%. Data on transmission of Early Syphilis attributed to MSMs is skewed by default and unreliable due to the hierarchical arrangement of the risk behaviors in our data analysis program.

**Summarize data on injecting drug users used to answer Question 3.2.**

- ◆ The majority of IDUs reported as HIV or AIDS are white and male.
- ◆ The majority of IDUs testing at public C&T sites were white.
- ◆ Injection Drug Use is not a significant behavioral component to the transmission of Early Syphilis, however it has increased slightly over the past 3 - 5 years.

**3.3 Persons at high risk for HIV infection through heterosexual contact**

Heterosexual contact is considered the HIV exposure mode for persons whose only reported risk is heterosexual contact with a partner who is either HIV infected or known to be at high risk for HIV infection. In addition, persons who report heterosexual contact with a high-risk partner and who received a transfusion before March 1985 are categorized in the heterosexual HIV exposure mode group. Persons considered to be high-risk partners are bisexual men, injection drug users, and recipients of clotting-factor concentrates or HIV infected blood transfusions.

**■ AIDS surveillance**

While heterosexually acquired AIDS is increasing rapidly, the data will vary widely by region of the country and state-to-state. In areas with low HIV seroprevalence among injection drug users, the proportion of cases attributed to heterosexual contact will likely be below.

**Question 3**

Epidemiologic Profile: 2004

<b>AIDS Cases in Heterosexual Acquired By Year of Diagnosis and Race/Ethnicity and Gender</b>										
<b>Year of Diagnosis</b>	<b>Race/Ethnicity</b>									
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>		<b>Total</b>	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<b>1984</b>	0	0	0	0	0	0	0	0	0	0
<b>1985</b>	0	0	0	0	0	0	0	0	0	0
<b>1986</b>	0	0	0	0	0	1	0	0	0	1
<b>1987</b>	0	3	0	0	0	0	0	0	0	3
<b>1988</b>	0	0	0	0	0	0	0	1	0	1
<b>1989</b>	3	2	0	3	0	1	0	1	3	7
<b>1990</b>	2	10	1	0	0	0	0	0	3	10
<b>1991</b>	0	4	3	3	1	2	1	0	4	9
<b>1992</b>	2	10	3	3	0	1	4	0	9	14
<b>1993</b>	0	10	4	5	0	1	0	2	4	18
<b>1994</b>	5	4	1	8	0	3	0	0	6	15
<b>1995</b>	4	9	3	1	0	2	1	0	8	12
<b>1996</b>	4	12	4	4	0	1	0	0	8	17
<b>1997</b>	5	15	2	2	0	3	0	0	7	20
<b>1998</b>	8	7	4	1	0	0	1	0	13	8
<b>1999</b>	1	5	1	1	0	2	0	0	2	8
<b>2000</b>	8	15	5	6	0	4	0	0	13	25
<b>2001</b>	7	11	4	5	0	2	2	3	13	21
<b>2002</b>	3	6	2	5	2	1	2	1	9	13
<b>2003</b>	1	5	1	8	0	2	3	4	5	19
<b>Total</b>	<b>53</b>	<b>128</b>	<b>38</b>	<b>55</b>	<b>3</b>	<b>26</b>	<b>14</b>	<b>12</b>	<b>107</b>	<b>221</b>

*Other\* includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.*

Of the 328 persons with AIDS attributed to heterosexual acquisition, 67.5% are female and 55.2% are white. In reviewing these individuals' sex partners, the risks can be summarized as follows:

- ➔ 43% of the males with AIDS infected through heterosexual relations had sex with an IDU
- ➔ Of the females with AIDS infected through heterosexual relations
  - 41.6% had sex with an IDU
  - 24.9% had sex with a Bi-sexual male

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### **Question 3**

Epidemiologic Profile: 2004

#### **■ Surveillance of bacterial sexually transmitted diseases**

Persons recently infected with bacterial sexually transmitted diseases (STDs) represent a group of sexually active people who recently had unprotected intercourse with persons infected with bacterial STDs who may also be infected with HIV. The extent to which STD rates correlate with HIV risk will depend on the prevalence of HIV infection within the sexual network of persons practicing unsafe sex and on the local dynamics of STD transmission. While STD rates may be an imperfect surrogate marker for risk of HIV infection, these rates are a reliable indicator of high-risk behavior (i.e., unprotected sexual intercourse). Groups with high rates of STDs are potentially at increased risk for the introduction and spread of HIV infection.

While STD surveillance data include little or no data on behavior risk, the majority of women who present with STDs are infected heterosexually. STDs in men, however, may be a marker of high-risk sexual activity with either men or women.

In many areas, reporting from institutions supported by public funds (e.g., STD clinics) is more complete than from other sources (e.g., private practitioners). Thus, STD trends may not be representative of all segments of the population.<sup>7</sup> However, in Oklahoma, major emphasis is placed on obtaining data from all types of sources through active surveillance.

#### **• Total Early Syphilis:**

While the presence of syphilis indicates high-risk behavior, the absence of syphilis does not indicate absence of risk, rather it may be a marker of effective syphilis control (e.g., men who have sex with men in a sexual network with low prevalence of syphilis). Inferences about areas with low syphilis rates should be made with caution. Areas with high syphilis rates should be considered for targeting, prevention efforts.

**Question 3**

Epidemiologic Profile: 2004

<b>Total Early Syphilis By Year of Diagnosis and Race/Ethnicity and Gender</b>										
<b>Year of Diagnosis</b>	<b>Race/Ethnicity</b>									
	<b>White</b>		<b>Black</b>		<b>American Indian</b>		<b>Other*</b>		<b>Total</b>	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<b>1992</b>	49	60	264	285	7	19	15	7	335	371
<b>1993</b>	59	76	225	234	4	15	13	10	301	335
<b>1994</b>	44	45	129	111	10	24	21	13	204	193
<b>1995</b>	42	60	169	153	7	17	21	13	239	243
<b>1996</b>	38	54	151	128	5	11	13	5	207	198
<b>1997</b>	24	35	107	68	12	14	7	5	150	122
<b>1998</b>	33	35	79	61	9	19	8	14	129	129
<b>1999</b>	52	55	92	55	12	32	34	11	190	153
<b>2000</b>	52	67	37	34	7	9	15	11	111	121
<b>2001</b>	43	28	34	25	9	10	19	15	105	78
<b>2002</b>	33	19	52	35	6	9	26	5	117	68
<b>2003</b>	31	13	46	28	2	2	10	2	89	45
<b>Median</b>	<b>42.5</b>	<b>49.5</b>	<b>99.5</b>	<b>64.5</b>	<b>7</b>	<b>14.5</b>	<b>15</b>	<b>10.5</b>	<b>170</b>	<b>141</b>

*Other\* includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.*

In 2003, 32.8% of early syphilis cases occurred in whites and 46.2% among blacks. During 2003, 4.5% of cases were in individuals' age 15-19, 19.4% were in 20-24 year olds, and 12.7% were in 25-29 year olds. However, the largest portion (58.9%) of early syphilis cases occurred among individuals age 30 to 49 years with a male to female ratio of approx. 2 ½:1.

In 2002, 28.1% of early syphilis cases occurred in whites and 47.0% among blacks. During 2002, 3.2% of cases were in individuals' age 15-19, 11.9% were in 20-24 year olds, and 11.4% were in 25-29 year olds. However, the largest portion (61.1%) of early syphilis cases occurred among individuals age 30 to 49 years with a male to female ratio of approx. 2:1.

In 2001, 38.8% of early syphilis cases occurred in whites and 32.2% among blacks. During 2001, 5.5% of cases were in individuals' age 15-19, 17.5% were in 20-24 year olds, and 14.2% were in 25-29 year olds. However, the largest portion (50.3%) of early syphilis cases occurred among individuals age 30 to 49 years with a male to female ratio of 1½: 1.

In 2000, 51.3% of early syphilis cases occurred in whites and 30.6% among blacks. During 2000, 7.8% of cases were in individuals' age 15-19, 15.1% were in 20-24 year olds, and 14.2% were in 25-29 year olds. However, the largest portion (52.6%) of early syphilis cases occurred among individuals age 30 to 49 years with similar numbers of cases among men and women.

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### Question 3

Epidemiologic Profile: 2004

In 1999, 42.9% of early syphilis cases occurred among blacks. During 1999, 7.3% of cases were in individuals' age 15-19, 11.7% were in 20-24 year olds, and 17.5% were in 25-29 year olds. However, the largest portion (55.9%) of early syphilis cases occurred among individuals age 30 to 49 years. Cases in females outnumbered those in males by 11%.

In 1998, 54.3% of early syphilis cases occurred among blacks. The largest portion (53.9%) of these cases occurred among individuals age 30 to 49 years with exactly the same numbers in males as females.

When reviewing early syphilis over the past ten (10) years, the majority of cases reported occurred among blacks (median 54.7% with a range of 30.6-68.9). Overall, the number of cases among men 53.3% was almost equal to women (46.3%) with median of 53.3% for men (range of 47.8-66.4%) and with median of 46.7% for women (range 33.6-52.2%). For the ten-year period, the majority of the reported cases (52%) occurred among individuals age 20 to 34 years. Relatively, the 30-34 year old is impacted the greatest (241.7 populations per 100,000) followed by the 25-29 year old (234.5 population per 100,000 populations). When calculating an annual rate per 100,000 populations by race/ethnicity for Early Syphilis these rates range from:

26.7 – 232.1 per 100,000 for black males  
18.6 – 237.4 per 100,000 for black females  
1.9 – 4.7 per 100,000 for white males  
0.9 – 5.7 per 100,000 white females

Populations can artificially be made the same size (using a rate per 100,000) so “apples can be compared to apples, not oranges to apples”. For every 1 white male being reported as having a diagnosis of Early Syphilis in 2003, over 16 black males are being reported. For every 1 white female being reported as having a diagnosis of Early Syphilis, over 20 black females are being reported.

**If these data serve as a marker for risk for HIV infection, black men and women ages 30 to 49 may be at the highest risk for HIV infection.** In the United States, reported rates of primary and secondary syphilis (annual cases per 100,000 population) declined by nearly half in all racial and ethnic groups from 1990 through 1993. Reported syphilis rates were highest among blacks and lowest among whites and Asian/Pacific Islanders. Although numbers continue to decline through 2003, reported rates in blacks are still the highest and whites and Asian/Pacific Islanders are the lowest.

- **Gonorrhea cases**

The same can be said for the presence of gonorrhea as was stated for the presence of syphilis, this indicates high-risk behavior; however, the absence of gonorrhea does not indicate absence of risk, rather it may be a marker of effective gonorrhea control (e.g., individuals in a sexual network have a low prevalence of gonorrhea). Inferences about areas with low gonorrhea rates should be made with caution. Many issues can affect these rates such as: 1) if screening a program is in place, 2) criteria used for screening, 3) Technology used for testing (culture vs. DNA), 4) surveillance methods and

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**Question 3**

Epidemiologic Profile: 2004

emphasis. Areas with high gonorrhea rates should be considered for targeting prevention efforts. Gonorrhea has been reported in Oklahoma since the 1940s, therefore its' reportability is well established and ingrained in health care providers. The rare instances when reporting of cases "falls through the cracks" can be attributed to the belief by the provider that the case has already been reported by someone else; for example, the doctor in the emergency room believes the charge nurse has already reported the case.

<b>Gonorrhea By Year of Diagnosis and Race/Ethnicity and Gender</b>										
<b>Year of Diagnosis</b>	<b>Race/Ethnicity</b>									
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>		<b>Total</b>	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<b>1992</b>	404	826	2,692	1,639	70	188	161	150	3,327	2,803
<b>1993</b>	323	687	1,922	1,443	46	179	132	126	2,423	2,435
<b>1994</b>	304	866	2,170	1,727	51	202	159	202	2,684	2,997
<b>1995</b>	266	812	1,855	1,528	37	170	94	114	2,252	2,624
<b>1996</b>	321	815	1,882	1,327	42	217	96	113	2,341	2,472
<b>1997</b>	272	706	1,738	1,401	63	180	81	89	2,154	2,376
<b>1998</b>	320	787	1,648	1,444	40	247	84	117	2,092	2,595
<b>1999</b>	307	657	1,460	1,360	43	214	92	118	1,902	2,349
<b>2000</b>	269	725	1,412	1,397	48	206	94	110	1,823	2,438
<b>2001</b>	352	788	1,572	1,407	59	241	98	140	2,081	2,576
<b>2002</b>	368	779	1,504	1,466	76	247	106	116	2,054	2,608
<b>2003</b>	410	874	1,358	1,260	69	222	103	118	1,940	2,474
<b>Median</b>	320.5	787.5	1,693	1,425	49.5	210	97	117.5	2,123	2,525

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

Of the 4,414 cases of gonorrhea diagnosed in 2003, 59.3% are reported in blacks. This relates (using a rate per 100,000 population) to 1,064 in black males compared to 30.1 in white males and 936.1 in black females compared to 61.3 in white females.

In 2002, 63.7% of the 4,662 cases of gonorrhea diagnosed are reported in blacks. This relates (using a rate per 100,000 population) to 1,179.3 in black males compared to 27.0 in white males and 1,089.2 in black females compared to 54.7 in white females.

Gonorrhea infections diagnosed in 2001 show that 64.4% of the cases are reported in blacks. This relates (using a rate per 100,000 population) to 1,232.6 in black males compared to 25.8 in white males and 1,045.3 in black females compared to 55.3 in white females.

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### **Question 3**

Epidemiologic Profile: 2004

Blacks account for 60.3% of the 4,261 cases of gonorrhea diagnosed in 2000. This relates (using a rate per 100,000 population) to 1,107.1 in black males compared to 19.7 in white males and 1,037.9 in black females compared to 50.9 in white females.

Of the 4,551 cases of gonorrhea diagnosed in 1999, 66.2% are reported in blacks. This relates (using a rate per 100,000 population) to 1,144.8 in black males compared to 22.5 in white males and 1,010.4 in black females compared to 46.8 in white females.

Of the 4,687 cases of gonorrhea diagnosed in 1998, 66% are reported in blacks. This relates (using a rate per 100,000 population) to 1,448.9 in black males compared to 25.5 in white males and 1,202.7 in black females compared to 59.2 in white females.

- **Chlamydia cases**

The same can be said for the presence of chlamydia as was stated for gonorrhea and syphilis infections. This indicates high-risk behavior; however the absence of chlamydia does not indicate absence of risk, rather it may be a marker of effective chlamydia control (e.g., individuals in a sexual network have a low prevalence of chlamydia). Inferences about areas with low chlamydia rates should be made with caution. Many issues can affect these rates such as: 1) if screening programs are in place, 2) criteria used for screening, 3) technology used for testing (culture vs. DNA), 4) surveillance methods and emphasis. Areas with high chlamydia rates should be considered for targeting prevention efforts.

Chlamydia is the newest (most recent) of the traditional sexually transmitted diseases to be made reportable, in 1988. However knowledge of chlamydia's reportability was not well known by providers prior to 1995-96. Through thorough auditing projects, the Surveillance and Analysis Program has been able to increase reporting of chlamydia and the accuracy of the reporting by a minimum of 50%. Prior to report year 1995, approximately 2 of all cases reported were missing age, race or gender of the patient. Screening began in 1994 but by late 1996 many more screening sites had been added to the Chlamydia Screening Project funded by Region VI Infertility Prevention Grants. Since January 1998, all County Health Department's STD, Family Planning (FP) and Maternity (OB) clinics have had screening available for clients who fall into the screening criteria. An eligible chlamydia screening criteria are as follows:

1. Less than 25 years old
2. Signs or symptoms of chlamydia
3. Sex partner of someone infected with chlamydia
4. 1<sup>st</sup> exam in clinic in 12 months
5. Placement of an IUD

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**Question 3**

Epidemiologic Profile: 2004

<b>Chlamydia</b>										
<b>By Year of Diagnosis and Race/Ethnicity and Gender</b>										
<b>Year of Diagnosis</b>	<b>Race/Ethnicity</b>									
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>		<b>Total</b>	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<b>1992</b>	172	1,669	334	1,316	39	679	100	794	645	4,458
<b>1993</b>	139	1,505	176	1,270	37	724	117	919	469	4,418
<b>1994</b>	137	1,563	218	1,387	40	639	160	1,049	555	4,638
<b>1995</b>	272	2,458	317	1,707	50	696	53	311	692	5,172
<b>1996</b>	350	2,669	593	1,831	61	718	102	354	1,106	5,572
<b>1997</b>	364	2,688	578	2,051	62	864	124	443	1,128	6,046
<b>1998</b>	495	3,212	831	2,307	82	877	164	556	1,572	6,952
<b>1999</b>	517	3,262	808	2,448	87	973	159	687	1,561	7,370
<b>2000</b>	571	3,570	823	2,501	92	933	177	781	1,663	7,785
<b>2001</b>	645	3,902	940	2,623	88	1,129	197	770	1,870	8,424
<b>2002</b>	660	4,092	1,000	2,830	106	1,169	270	866	2,036	8,957
<b>2003</b>	722	4,229	949	2,617	111	1,014	235	824	2,017	8,684
<b>Median</b>	429.5	2,950	700.5	2,179	72	870.5	159.5	775.5	1,344.5	6,499

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

Of the 10,701 cases of chlamydia diagnosed in 2003, 46.3% are reported in whites, 34.8% are reported in blacks and 81.5% are reported in females. This relates to a rate per 100,000 population of 744.1 in black males compared to 53.0 in white males, and 1,944.3 in black females compared to 296.7 in white females.

Analyses of the 10,993 chlamydia cases diagnosed in 2002 show that 43.2% are reported in whites, 34.6% are reported in blacks and 81.8% are reported in females. This relates to a rate per 100,000 population of 784.1 in black males compared to 48.4 in white males, and 2,102.5 in black females compared to 287.1 in white females.

In 2001, 10,294 cases of chlamydia are diagnosed of which 44.2% are reported in whites, 34.6% are reported in blacks and 81.8% are reported in females. This relates to a rate per 100,000 population of 737.0 in black males compared to 47.3 in white males, and 1,948.7 in black females compared to 273.8 in white females.

Of the 9,448 cases of chlamydia diagnosed in 2000, 43.8% are reported in whites, 35.2% are reported in blacks and 82.4% are reported in females. This relates to a rate per 100,000 population of 645.3 in black males compared to 41.9 in white males, and 1,858.1 in black females compared to 250.5 in white females.

### Question 3

Epidemiologic Profile: 2004

Of the 8,931 cases of chlamydia diagnosed in 1999, 42.3% are reported in whites, 36.5% are reported in blacks and 82.5% are reported in females. This relates to a rate per 100,000 population of 633.5 in black males compared to 37.9 in white males, and 1,818.7 in black females compared to 228.9 in white females.

Of the 8,524 cases of chlamydia diagnosed in 1998, 43.5% are reported in whites, 36.8% are reported in blacks and 81.6% are reported in females. This relates to a rate per 100,000 population of 730.6 in black males compared to 39.5 in white males, and 1,921.6 in black females compared to 241.7 in white females.

#### ■ HIV infection surveillance

HIV reporting data on exposure mode for persons who report only heterosexual contact must be interpreted with caution; these data are not consistently collected in all areas. In Oklahoma before an individual can be documented as having acquired infection through heterosexual relations, we must have verification from the person's provider that the sex partner is infected. However, in many cases, the partner is not yet willing to share what their risk factors are with the provider and their sex partner. Often for a period of time the risk is attributed to "heterosexual with someone HIV infected" instead of the specific risk, such as "heterosexual with a bisexual male".

<b>HIV Cases (not AIDS) in Heterosexual Acquired Cases By Year of Diagnosis and Race/Ethnicity and Gender</b>										
Year of Diagnosis	Race/Ethnicity									
	White		Black		Am. Indian		Other*		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1987	1	3	0	0	0	0	0	0	1	3
1988	1	2	0	0	0	0	0	1	1	3
1989	2	5	4	2	0	0	1	1	7	8
1990	0	4	1	5	0	0	0	0	1	9
1991	6	4	3	3	0	1	0	0	9	8
1992	1	3	4	8	0	3	0	0	5	14
1993	2	9	2	2	0	0	2	3	6	14
1994	1	6	0	5	1	0	0	1	2	12
1995	2	5	2	3	0	3	0	0	4	11
1996	2	8	3	3	0	0	1	0	6	11
1997	1	14	3	5	0	0	0	1	4	20
1998	2	13	1	6	0	0	0	0	3	19
1999	6	5	3	1	1	0	1	0	11	6
2000	2	8	3	2	1	1	0	2	6	13
2001	0	8	3	2	0	0	0	4	3	14
2002	4	6	4	4	1	2	1	1	10	13
2003	1	1	0	0	0	1	3	9	4	11
<b>Total</b>	<b>34</b>	<b>104</b>	<b>36</b>	<b>51</b>	<b>4</b>	<b>11</b>	<b>9</b>	<b>23</b>	<b>83</b>	<b>189</b>

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

\*\* One (1) white female tested positive, however the year of first test is unknown.

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### Question 3

Epidemiologic Profile: 2004

Of the 272 persons with HIV attributed to heterosexual acquisition, 69.5% are female and 50.7% are white. In reviewing these individuals' sex partners, the risks can be summarized as follows:

- ➔ 48.2 of the males with HIV infected through heterosexual relations had sex with an IDU.
- ➔ Of the females with HIV infected through heterosexual relations
  - 38.1% had sex with an IDU
  - 17.5 had sex with an MSM
  - 45.3% do not know their partners' risk

#### ■ Behavioral Risk Factor Surveillance System (BRFSS):

Data are available from state and local BRFSS coordinators. The BRFSS is a population-based telephone survey (active in all states) that includes core questions on knowledge and attitudes on a variety of health issues including HIV/AIDS. This is a general population survey of adults aged 18 years and older, residing in households with telephones. In some states, additional HIV behavior questions are being evaluated; Oklahoma is not one of these states. BRFSS was begun in Oklahoma in 1982. A booklet with data is available through the Health Education and Information Service (HEIS) of the state health department. This booklet summarizes results for the major risk factors as follows:

- Alcohol - prevalence of chronic drinking
- Alcohol - binge drinking
- Alcohol - drinking and driving
- Diabetes
- Fruit and vegetable consumption
- Health care insurance and access
- Mammography and clinical breast examination
- Pap smear test
- Obesity
- Seat belt use
- Sedentary life style
- Smoking

Although questions related to AIDS (perception of AIDS, attitude to HIV positive persons, and testing for AIDS) are included annually in the survey, these are not summarized in the book but are available by special request. Below are summaries of the preliminary 2001 survey's HIV questions in Oklahoma:

➔ *A pregnant woman with HIV can get treatment to help reduce the chances that she will pass the virus on to her baby. True or False?*

True	74.2%
False	25.8%

➔ *There are medical treatments available that are intended to help a person who is infected with HIV to live longer. True or False?*

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**Question 3**

Epidemiologic Profile: 2004

True	97.2%
False	2.8%
<b>→ How important do you think it is for people to know their HIV status by getting tested?</b>	
Very important	96.1%
Somewhat important	3.6%
Not at all important	0.3%
<b>→ Have you ever been tested for HIV, Yes or No?</b>	
Yes	37.5%
No	62.5%
<b>→ Not including blood donations, in what month and year was your last HIV test?</b>	
1990 and before	5.0%
1991-1995	13.2%
1996-2000	29.8%
2001-2003	52.1%
<b>→ Not including blood donations, which of these would you say was the main reason for your last HIV test?</b>	
Was required	22.9%
Someone suggested	2.0%
My choice	21.6%
Pregnant	16.8%
Part of check-up	26.9%
Other	9.8%
<b>→ Where did you have your last HIV test?</b>	
Doctor or HMO	39.4%
Testing site	4.1%
Hospital or Clinic	47.6%
Jail or Prison	1.0%
Home	1.7%
Other	6.2%
<b>→ Risk factor for respondents that have ever been tested for HIV.</b>	
Not at risk	37.5%
At risk	62.5%
<b>→ Risk factor for respondents that have ever participated in high-risk behavior.</b>	
Not at risk	96.2%
At risk	3.8%
<b>→ Risk factor for respondents that have ever been counseled on prevention of STD through condom use.</b>	

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**Question 3**

Epidemiologic Profile: 2004

Not at risk	8.8%
At risk	91.2%

➔ *In the past 12 months, has a doctor, Nurse or other Health Professional talked to you about preventing sexually transmitted diseases through condom use, Yes or No?*

Yes	8.8%
No	91.2%

➔ *Do any of the following situations apply to you? You do not need to tell me which one: You have used intravenous drugs in the past 12 months, or you have been treated for a sexually transmitted or venereal disease in the past year, or you have given or received money or drugs in exchange for sex in the past year, you had anal sex without a condom in the past year, Yes or No?*

Yes	3.8%
No	96.2%

No addition, locally generated questions about HIV risk behaviors have been included on Oklahoma's BRFSS; these are the only analyses of BRFSS data recommended for the epidemiologic profile. Because conclusions about risk cannot be drawn from these data, information about knowledge and attitudes may be more useful in planning community-wide education programs than for targeting specific high-risk groups.

**Summarize data on persons at risk for becoming infected with HIV through heterosexual contact used to answer Question 3.3.**

- ◆ The majority of heterosexual AIDS cases are in white females. Of these females over  $\frac{1}{3}$  almost half had sex with an IDU and about  $\frac{1}{5}$  had sex with a bisexual male.
- ◆ Of the males with AIDS who acquired their infection through heterosexual contact, half had sex with an IDU. Over half of the males who heterosexually acquired HIV had sex with an IDU.
- ◆ Three quarters of early syphilis cases had been reported in blacks until 1999 then the proportion began to fall (42.9%). From 2000 through 2003, the number of cases observed in whites is 38.9% compared to blacks at 39.6%, however, the rates per 100,000 population is 5 times higher in blacks than whites. The infection is usually diagnosed in individuals between the ages of 30 - 49.
- ◆ The majority of gonorrhea cases are reported in blacks, particularly in males.
- ◆ The majority of chlamydia cases are reported in white females.
- ◆ The majority of HIV cases are in heterosexual white females, who had sex with an IDU or a bisexual male.

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### **Question 3**

Epidemiologic Profile: 2004

#### **3.4 Women**

Most women are infected through injection drug use or through heterosexual contact with an injection drug user or a bisexual male. Data on women should be presented because:

- 1) Specific prevention programs can be targeted to women;
- 2) Women can be reached in different locations from men (e.g., reproductive and prenatal health clinics);
- 3) The proportion of AIDS cases and HIV infections among women has been increasing; and
- 4) Pediatric HIV infection is nearly entirely caused by transmission from infected mothers nationwide.

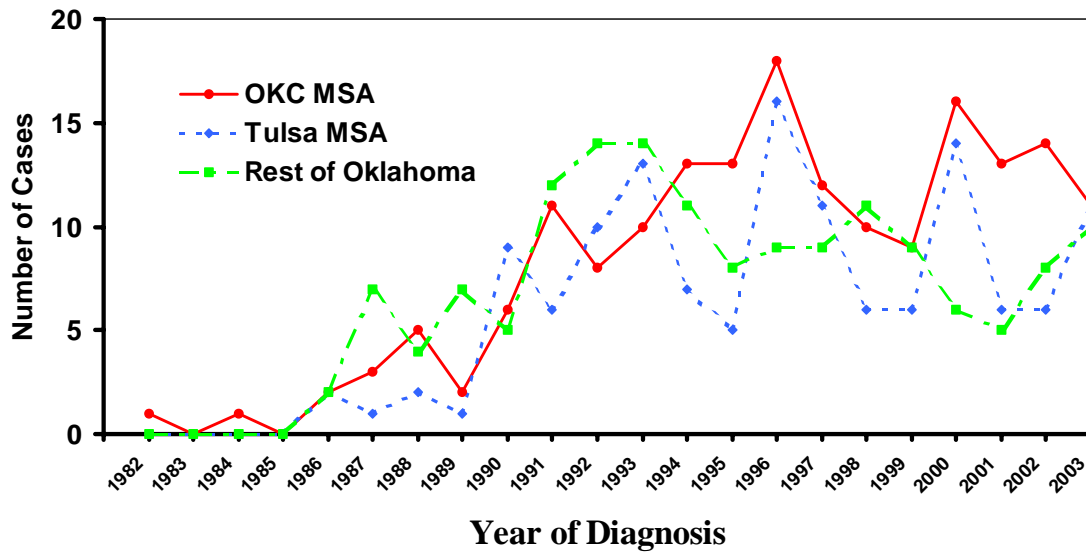
#### **■ AIDS Cases in Females by Region of Oklahoma**

The HIV epidemic is composed of multiple separate epidemics in states, health districts, counties, and even by gender. To demonstrate the impact of HIV disease in females across the state, two graphs are presented to below. The first graph shows **number** of AIDS cases diagnosed by year in the different regions of the state. However, better understand how these areas are impacted, the second graph shows AIDS cases in females by the rate per 100,000 population.

**Question 3**

Epidemiologic Profile: 2004

## Oklahoma AIDS Cases in Females by Region

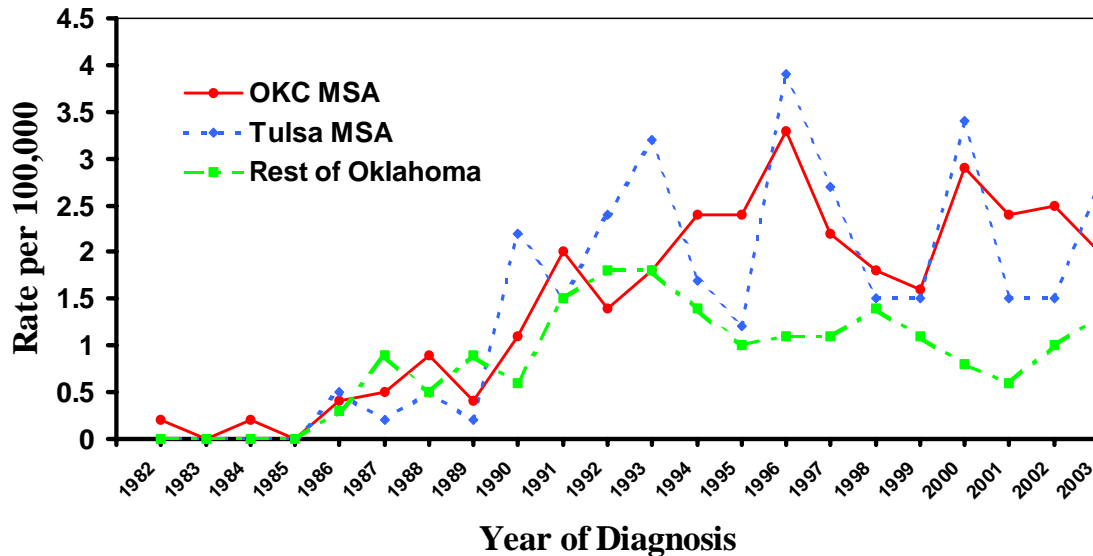


When reviewing this graph it demonstrates that Oklahoma City MSA has the most AIDS cases diagnosed in females since the beginning of the epidemic in the early 1980's.

**Question 3**

Epidemiologic Profile: 2004

## Oklahoma AIDS Cases in Females By Region by Rate per 100,000



Above is the graph demonstrating female AIDS cases by rate per 100,000. When reviewing this graph the “picture” has changed; clearly the Tulsa MSA has borne a similar if not greater impact when specifically looking at AIDS cases diagnosed in females.

### ■ HIV screening of civilian applicants for military service

The civilian applicant for military service (CAMS) survey provides information on a large proportion of young Americans. Statistical data for CAMS from 2000 to 2003 is presently not available. Specifically, Oklahoma applicants for military service have shown that 52% are less than 20 years of age. In the United States, 6,510,836 Americans have been screened for HIV infection when applying for military service. A total of 5,065 HIV infections have been diagnosed. The rate has declined since testing was initiated, this can be attributed to a greater understanding among potential applicants that they will be screened and excluded from service if identified as HIV positive. The military began screening applicants in October 1985; through December 2000, 112,270 Oklahomans have been screened. Over this entire time, only 47 individuals have tested positive for HIV; 46 of are males (94,153 tested) and 1 is female (18,117 tested).

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### Question 3

Epidemiologic Profile: 2004

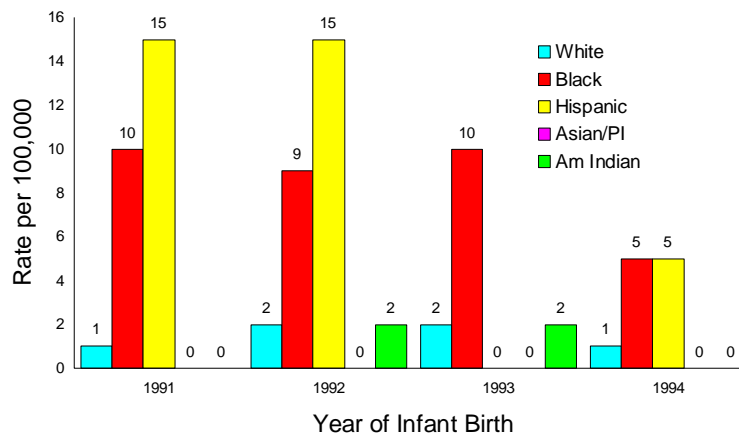
#### ■ Survey of Childbearing Women

Women bearing children are inherently at increased risk for acquiring STDs, including HIV. A number of childbearing women receive little or no prenatal care; consequently, they may not be aware of having an STD or HIV infection. Pregnant women may also be unaware of the impact infection can have on their health or that of their unborn children.

In an attempt to target those pregnant women, who may be at increased risk for HIV, we can utilize data provided by the Survey of Childbearing Women. This blinded, unlinked survey, which is Oklahoma-specific, was part of a CDC-supported study performed in most states. The survey used blood spot specimens submitted for mandated metabolic screening on all newborn infants. Once personal identifiers were removed, the specimens were tested for the presence of HIV antibodies. Newborns carry maternal antibodies; therefore, data derived from these screenings provided a view of the HIV seroprevalence rate in Oklahoma childbearing women (by race, age groups and geography). This data can be used to estimate the seroprevalence rate among all women, thus providing direction for targeted intervention and prevention efforts.

**Oklahoma Survey of Childbearing Women  
HIV Seropositive Rate per 100,000 by Race/Ethnicity  
by Year of Infant Birth**

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#### ■ Behavioral Studies

Women who engage in sex with women may be at high risk for HIV infection through sexual contact with men, or through injection drug use. Although routinely published AIDS surveillance summaries do not include female-to-female sex as an HIV exposure category, data on women who report sex with women are collected as a part of AIDS case surveillance and can be analyzed and presented. The following is from a report on female-to-female sexual contact and HIV transmission.<sup>8</sup> Of 1,122 women reported with HIV/AIDS between January 1990 and September 1993 and interviewed as part of Supplemental HIV/AIDS Surveillance Project (SHAS) of CDC, 65 (5.8%) reported sexual contact with another woman in the past five years. Of these women, most (63/65) had HIV risk factors

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**Question 3**

Epidemiologic Profile: 2004

related to sex with men or drug use, and one had received a blood transfusion prior to March 1985. One woman may have been infected from female-to-female sexual contact as suggested by the risk behavior and clinical status of some of her female partners. Although female-to-female transmission of HIV is apparently rare, female sexual contact should be considered a possible means of HIV transmission among women who have sex with women. Importantly, sexual identity (lesbian, bisexual, and heterosexual) does not necessarily predict sexual practices, and inaccurate assumptions based on reported sexual orientation could result in a failure to address risk behaviors.

A recent analysis of data on women attending public STD clinics in Los Angeles showed that bisexual women were much more likely than heterosexual women to engage in behavior that increase their risk for HIV infection. For example, bisexual women were more likely than heterosexual women to report injection drug use (24% vs. 4%), cocaine use in the past six months (39% vs. 13%), sex with a bisexual man (36% vs. 4%), sex with a man who injects drugs (37% vs. 10%), anal intercourse (42% vs. 15%), and trading sex for money or drugs (43% vs. 11%). (Source: Los Angeles County Health Department)

### **3.5 Children**

HIV, an important cause of childhood morbidity and mortality, is now the seventh leading cause of death among children 1 to 4 years of age in the United States.<sup>9</sup> Among these children, perinatal transmission accounts for most HIV infection. In the United States, approximately 7000 infants, of whom 1,400 to 2,100 are HIV infected, are born to HIV infected women each year.<sup>8</sup>

The results of the National Institutes of Health study (ACTG 076) indicate that HIV infected pregnant women could reduce HIV transmission to their infants by as much as  $\beta$  by taking zidovudine (AZT or ZDV) during pregnancy and delivery.<sup>10</sup> To identify those women who could benefit from ZDV therapy, routine HIV counseling and voluntary testing is recommended for all pregnant women.<sup>12</sup> AIDS cases diagnosed in children less than 13 years of age are termed Pediatric cases.

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**Question 3**

Epidemiologic Profile: 2004

**■ AIDS surveillance**

<b>Pediatric AIDS Cases By Year of Diagnosis and Race/Ethnicity</b>					
<b>Year of Diagnosis</b>	<b>Race/Ethnicity</b>				<b>Total</b>
	<b>White</b>	<b>Black</b>	<b>Am. Indian</b>	<b>Other*</b>	
<b>1986</b>	1	0	0	0	1
<b>1987</b>	4	0	0	1	5
<b>1988</b>	3	0	0	0	3
<b>1989</b>	0	0	0	0	0
<b>1990</b>	3	1	0	0	4
<b>1991</b>	2	0	0	1	3
<b>1992</b>	0	0	0	0	0
<b>1993</b>	1	0	0	0	1
<b>1994</b>	1	0	0	0	1
<b>1995</b>	1	0	0	0	1
<b>1996</b>	1	1	1	0	3
<b>1997</b>	0	1	0	0	1
<b>1998</b>	0	0	0	0	0
<b>1999</b>	0	0	0	0	0
<b>2000</b>	1	0	0	0	1
<b>2001</b>	1	0	0	0	1
<b>2002</b>	0	0	0	0	0
<b>2003</b>	0	0	0	0	0
<b>Total</b>	19	3	1	2	25

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

To date, the majority (30 of 59, or 50.8%) of pediatric HIV infections in Oklahoma were pediatric AIDS, 7 (11.9%) were from perinatal HIV exposure. Of the perinatal HIV exposure, none was attributed to blood transfusion or receipt of blood clotting factor. Majority of the Pediatric AIDS were acquired through maternal sex with an IDU. About 66.7% of pediatric AIDS cases were reported among white children. These data suggest that pregnant white women in Oklahoma should have ready access to HIV counseling and testing and ZDV therapy early in their pregnancy to reduce the probability of transmitting HIV to their infants.

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**Question 3**

Epidemiologic Profile: 2004

**■ HIV surveillance**

<b>Pediatric HIV (non AIDS) Cases By Year of Diagnosis and Race/Ethnicity</b>					
<b>Year of Diagnosis</b>	<b>Race/Ethnicity</b>				<b>Total</b>
	<b>White</b>	<b>Black</b>	<b>Am. Indian</b>	<b>Other*</b>	
<b>1985</b>	1	0	0	0	1
<b>1986</b>	2	0	0	0	2
<b>1987</b>	0	0	0	0	0
<b>1988</b>	0	0	1	0	1
<b>1989</b>	0	0	0	1	1
<b>1990</b>	0	0	0	0	0
<b>1991</b>	0	0	0	0	0
<b>1992</b>	0	0	0	0	0
<b>1993</b>	0	0	1	0	1
<b>1994</b>	0	0	1	0	1
<b>1995</b>	3	1	0	0	4
<b>1996</b>	3	0	0	0	3
<b>1997</b>	1	0	0	0	1
<b>1998</b>	0	0	0	0	0
<b>1999</b>	3	1	0	0	4
<b>2000</b>	0	0	0	1	1
<b>2001</b>	2	1	0	1	4
<b>2002</b>	0	0	0	0	0
<b>2003</b>	0	1	0	1	2
<b>Total</b>	15	4	3	4	26

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

The majority (65.4%) of pediatric AIDS cases in Oklahoma were acquired perinatally; 5 (19%) were acquired from clotting factor. Over 57% of pediatric AIDS cases were reported among white children.

**3.6 Adolescents and Young Adults**

Adolescents and young adults at highest risk for infection are young men who have sex with men. In addition, young women exposed through heterosexual contact are at risk for infection. Injection drug use is not a frequently reported mode of HIV exposure in this age group. Adolescents are an important group to consider for targeted prevention activities for several reasons:

- ➔ An estimated 16% of all adult/adolescents with AIDS reported through March 1992 were infected as adolescents
- ➔ 31% of those exposed through heterosexual contact were infected as teenagers<sup>11</sup>
- ➔ Many adolescents practice high-risk sexual behavior

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**Question 3**

Epidemiologic Profile: 2004

➔ Adolescents may be less likely than older persons to use methods to protect themselves from infection.

**■ AIDS surveillance**

<b>Adolescent/Young Adult AIDS Cases By Year of Diagnosis and Age at Diagnosis</b>			
<b>Year of Diagnosis</b>	<b>Age at Diagnosis</b>		
	<b>13 - 19</b>	<b>20 – 24</b>	<b>Total</b>
<b>1983</b>	0	3	3
<b>1984</b>	0	2	2
<b>1985</b>	0	5	5
<b>1986</b>	0	9	9
<b>1987</b>	1	7	8
<b>1988</b>	2	8	10
<b>1989</b>	2	10	12
<b>1990</b>	4	13	17
<b>1991</b>	1	12	13
<b>1992</b>	0	16	16
<b>1993</b>	4	11	15
<b>1994</b>	1	10	11
<b>1995</b>	1	8	9
<b>1996</b>	1	6	7
<b>1997</b>	0	7	7
<b>1998</b>	1	10	11
<b>1999</b>	1	6	7
<b>2000</b>	1	8	9
<b>2001</b>	0	5	5
<b>2002</b>	4	6	10
<b>2003</b>	2	4	6
<b>Total</b>	26	166	192

Of the 192 adolescent /young adults reported as being diagnosed with AIDS, 86.5% were between the ages of 20 and 24. These young adults were probably infected with HIV while still in their teens.

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**Question 3**

Epidemiologic Profile: 2004

<b>Adolescent/Young Adult AIDS Cases By Race, Mode of Exposure and Age at Diagnosis</b>									
<b>Mode of Exposure</b>	<b>Age at Diagnosis</b>								<b>Total</b>
	<b>13 - 19</b>				<b>20 - 24</b>				
	Race/Ethnicity				Race/Ethnicity				
	White	Black	Am Ind	Other*	White	Black	Am Ind	Other*	
<b>MSM</b>	3	1	1	1	65	17	6	6	100
<b>IDU</b>	0	0	0	0	12	3	3	2	20
<b>MSM&amp;IDU</b>	0	0	1	0	19	3	2	0	25
<b>Hemophilia</b>	13	0	0	0	3	0	0	0	16
<b>Heterosexual</b>	1	3	0	0	8	5	1	0	18
<b>Transfusion</b>	0	0	0	0	1	0	0	0	1
<b>Risk Not Specified/ Other**</b>	1	1	0	0	2	5	2	1	12
<b>Total</b>	18	5	2	0	110	33	14	8	192

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

*Other\*\** Patients were diagnosed with AIDS as adults but have evidence of being infected as children. They are counted as adults/adolescent cases in this table and as pediatric elsewhere.

Of the 192 adolescent/young adults reported as being diagnosed with AIDS:

- ➔ 52.1% are males who have sex with males
- ➔ 23.4% inject drugs (includes MSM&IDU)
- ➔ 66.7% are white.

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**Question 3**

Epidemiologic Profile: 2004

**■ Surveillance of bacterial sexually transmitted diseases****• Early Syphilis cases**

<b>Early Syphilis Cases in Adolescents/Young Adults By Year of Diagnosis and Race/ Ethnicity and Gender Incidence Rate per 100,000 Population</b>										
<b>Year of Diagnosis</b>	<b>Race/Ethnicity</b>									
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>		<b>Total</b>	
<b>Age</b>	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<b>1999(all ages)</b>	4.1	4.1	80.9	45.8	9.8	24.8	N/A	N/A	12.4	9.5
<b>15-19</b>	5.4	6.9	25.9	47.3	0	42.4	N/A	N/A	7.5	14.2
<b>20-24</b>	4.5	6.9	91.8	100.6	21.3	21.7	N/A	N/A	15.8	18.6
<b>2000(all ages)</b>	4.1	5.0	32.5	28.3	5.7	7.0	N/A	N/A	7.3	7.5
<b>15-19</b>	1.1	5.7	8.6	28.4	0	25.4	N/A	N/A	2.5	13.3
<b>20-24</b>	7.9	10.4	18.4	60.4	10.6	32.6	N/A	N/A	12.5	17.7
<b>2001(all ages)</b>	3.2	2.0	26.7	18.6	7.1	7.4	N/A	N/A	6.4	4.5
<b>15-19</b>	1.1	3.4	0	9.5	0	8.5	N/A	N/A	2.5	6.2
<b>20-24</b>	5.7	4.6	36.7	80.5	10.6	21.7	N/A	N/A	11.7	15.9
<b>2002(all ages)</b>	2.6	1.4	40.3	26.5	4.5	6.5	N/A	N/A	6.9	3.9
<b>15-19</b>	0.0	1.1	7.8	0	0	7.4	N/A	N/A	1.4	2.3
<b>20-24</b>	1.1	4.7	25.2	44.6	0	18.7	N/A	N/A	7.8	10.1
<b>2003(all ages)</b>	2.4	1.0	35.7	21.2	1.5	1.4	N/A	N/A	5.2	2.6
<b>15-19</b>	0	0	0	42.2	0	0	N/A	N/A	0.7	3.8
<b>20-24</b>	5.6	1.2	58.8	71.4	9.3	9.3	N/A	N/A	12.5	8.4

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

Syphilis has traditionally been a disease of adults, not young adults and children; most syphilis cases are diagnosed in individuals over the age of 30. Since 1996 Oklahoma experienced a declining number of Early Syphilis cases in adolescent/young adults. However, in 1999 more cases were diagnosed than in 1998. This apparent reversal of trend was righted when in 2000 the declining trend was continued. Early syphilis in adolescents/young adults diagnosed in 2003 can be summarized as follows: Of the 32 cases reported in individuals ages 15-24

- ➔ 46.9% are female
- ➔ 18.8% are white
- ➔ 62.5% are black
- ➔ 6.3% are Asian/Pacific Islander

**Question 3**

Epidemiologic Profile: 2004

• **Gonorrhea cases**

<b>Gonorrhea Cases in Adolescents/Young Adults By Year of Diagnosis and Race/ Ethnicity and Gender</b>											
<b>Year of Diagnosis</b>	<b>Race/Ethnicity</b>										
	<b>White</b>		<b>Black</b>		<b>American Indian</b>		<b>Other*</b>		<b>Total</b>		
<b>Age</b>	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
<b>1999 (all ages)</b>	307	657	1,460	1,360	43	214	92	118	1,902	2,349	4,259
<b>15-19</b>	54	291	318	545	9	87	19	47	400	970	1,370
<b>20-24</b>	89	196	527	478	12	69	31	37	659	780	1,439
<i>Total Adolescents/ Young Adults</i>	143	487	845	1023	21	156	50	84	1059	1750	2,809
<b>2000 (all ages)</b>	269	725	1,412	1,397	48	206	94	110	1,823	2,438	4,261
<b>15-19</b>	50	313	305	532	8	93	23	49	386	987	1,373
<b>20-24</b>	83	243	492	549	20	59	31	37	626	888	1,514
<i>Total Adolescents/ Young Adults</i>	133	556	797	1,081	28	152	54	86	1,012	1,875	2,887
<b>2001 (all ages)</b>	352	788	1,572	1,407	59	241	98	140	2,081	2,576	4,657
<b>15-19</b>	58	325	339	525	15	100	18	58	430	1,008	1,438
<b>20-24</b>	95	248	534	517	21	80	129	297	686	897	1,583
<i>Total Adolescents/ Young Adults</i>	153	573	873	1,042	36	180	147	355	1,116	1,905	3,021
<b>2002 (all ages)</b>	368	779	1,502	1,465	76	247	107	119	2,053	2,610	4,663
<b>15-19</b>	56	310	355	566	22	92	14	44	447	1,012	1,459
<b>20-24</b>	107	274	480	537	26	101	46	44	659	956	1,615
<i>Total Adolescents/ Young Adults</i>	163	584	835	1,103	48	193	60	367	1,106	2,247	3,074
<b>2003 (all ages)</b>	403	870	1,353	1,246	68	217	101	115	1,925	2,448	4,373
<b>15-19</b>	66	352	280	514	15	82	20	53	381	1,001	1,382
<b>20-24</b>	150	287	470	443	23	79	37	42	680	1,382	2,062
<i>Total Adolescents/ Young Adults</i>	216	639	750	957	38	161	57	95	1,061	2,383	3,444

*Other\* includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.*

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### **Question 3**

Epidemiologic Profile: 2004

Of the cases of gonorrhea diagnosed in 2003:

→ 78.8% are reported in individuals between the ages of 15 and 24

→ 39.0% are in black adolescent/young adults

Incidence rate per 100,000 in blacks 15-19 years old is 6202.6 compared to 430.4 in whites.

Of the cases of gonorrhea diagnosed in 2002:

→ 65.9% are reported in individuals between the ages of 15 and 24

→ 41.1% are in black adolescent/young adults

Incidence rate per 100,000 in blacks 15-19 years old is 7194.8 compared to 376.8 in whites.

Of the cases of gonorrhea diagnosed in 2001:

→ 65% are reported in individuals between the ages of 15 and 24

→ 41% are in black adolescent/young adults

Incidence rate per 100,000 in blacks 15-19 years old is 8649.9 compared to 404.9 in whites.

Of the cases of gonorrhea diagnosed in 2000:

→ 68% are reported in individuals between the ages of 15 and 24

→ 44% are in black adolescent/young adults

→ Incidence rate per 100,000 in blacks 15-19 years old is 8482.8 compared to 384.3 in whites.

Of the cases of gonorrhea diagnosed in 1999:

→ 66% are reported in individuals between the ages of 15 and 24

→ 44% are in black adolescent/young adults

→ Incidence rate per 100,000 in blacks 15-19 years old is 8,437.6 compared to 351.4 in whites.

**Question 3**

Epidemiologic Profile: 2004

• **Chlamydia cases**

<b>Chlamydia Cases in Adolescents/Young Adults By Year of Diagnosis and Race/Ethnicity and Gender</b>											
<b>Year of Diagnosis</b>	<b>Race/Ethnicity</b>										
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>		<b>Total</b>		
<b>Age</b>	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
<b>1999 (all ages)</b>	517	3,262	808	2,448	87	973	159	687	1,561	7,370	8,931
<b>15-19</b>	129	1,609	261	1,096	41	460	32	272	463	3,437	3,900
<b>20-24</b>	214	1,119	292	892	27	301	69	277	602	2,589	3,191
<b>Total Adolescents/ Young Adults</b>	343	2,728	553	1,988	68	761	101	549	1,065	6,026	7,091
<b>2000 (all ages)</b>	571	3,570	823	2,501	92	933	177	781	1,663	7,785	9,448
<b>15-19</b>	157	1,678	217	1,112	25	433	36	291	435	3,514	3,949
<b>20-24</b>	259	1,337	336	950	38	336	80	316	713	2,939	3,652
<b>Total Adolescents/ Young Adults</b>	416	3,015	553	2,062	63	769	116	607	1,148	6,453	7,601
<b>2001 (all ages)</b>	645	3,902	940	2,623	88	1,129	197	770	1,870	8,424	10,294
<b>15-19</b>	174	1,741	250	1,124	27	489	41	292	492	3,646	4,138
<b>20-24</b>	295	1,534	371	1,050	37	418	89	286	792	3,288	4,080
<b>Total Adolescents/ Young Adults</b>	469	3,275	621	2,174	64	907	130	578	1,284	6,934	8,218
<b>2002 (all ages)</b>	660	4,095	999	2,822	106	1,165	270	875	2,035	8,957	10,992
<b>15-19</b>	173	1,934	312	1,210	35	484	55	297	575	3,925	4,500
<b>20-24</b>	299	1,512	371	1,090	44	451	109	346	823	3,399	4,222
<b>Total Adolescents/ Young Adults</b>	472	3,446	683	2,300	79	935	164	643	1,398	7,324	8,722
<b>2003 (all ages)</b>	715	4,188	942	2,581	111	1,000	233	820	2,001	8,589	10,590
<b>15-19</b>	182	1,880	301	1,098	38	400	55	296	576	3,674	4,250
<b>20-24</b>	331	1,642	358	998	47	407	99	331	835	3,378	4,213
<b>Total Adolescents/ Young Adults</b>	513	3,522	659	2,096	85	807	154	627	1,412	7,052	8,463

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

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### **Question 3**

#### Epidemiologic Profile: 2004

Of the cases of chlamydia diagnosed in 2003:

- ➔ 80% are reported in individuals between the ages of 15 and 24
- ➔ 38.1% are in white adolescent/young adults
- ➔ Incidence rate per 100,000 in blacks 15-19 years old is 10928.8 compared to 2,123.0 in whites.

Of the cases of chlamydia diagnosed in 2002:

- ➔ 79.3% are reported in individuals between the ages of 15 and 24
- ➔ 35.6% are in white adolescent/young adults
- ➔ Incidence rate per 100,000 in blacks 15-19 years old is 11889.7 compared to 2,169.3.1 in whites.

Of the cases of chlamydia diagnosed in 2001:

- ➔ 80% are reported in individuals between the ages of 15 and 24
- ➔ 36% are in white adolescent/young adults
- ➔ Incidence rate per 100,000 in blacks 15-19 years old is 12,624.8 compared to 2,088.1 in whites.

Of the cases of chlamydia diagnosed in 2000:

- ➔ 80% are reported in individuals between the ages of 15 and 24
- ➔ 36% are in white adolescent/young adults
- ➔ Incidence rate per 100,000 in blacks 15-19 years old is 11,811.7 compared to 1,913.5 in whites.

Of the cases of chlamydia diagnosed in 1999:

- ➔ 79% are reported in individuals between the ages of 15 and 24
- ➔ 34% are in white adolescent/young adults
- ➔ Incidence rate per 100,000 in blacks 15-19 years old is 11,477.5 compared to 1,712.8 in whites.

**Question 3**

Epidemiologic Profile: 2004

**■ HIV Counseling and Testing**

<b>HIV Counseling and Testing in Adolescents and Young Adults By Year of Test and Race/ Ethnicity and Gender</b>											
<b>Year of Diagnosis</b>	<b>Race/Ethnicity</b>										
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>		<b>Total</b>		
<b>Age</b>	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
<b>1999</b>											
<b>15-19</b>	562	1,004	107	210	49	81	66	85	784	2,822	3,606
<b>20-24</b>	849	1,037	113	226	62	72	112	107	1,136	1,442	2,578
<i>Total Adolescents/ Young Adults</i>	1,411	2,041	220	436	111	153	178	192	1,920	4,264	6,184
<b>2000</b>											
<b>15-19</b>	418	619	81	142	30	65	38	65	567	891	2,916
<b>20-24</b>	610	722	94	245	55	59	95	92	854	1,118	3,944
<i>Total Adolescents/ Young Adults</i>	1028	1,341	175	387	85	124	133	157	1421	2,009	6,860
<b>2001</b>											
<b>15-19</b>	321	371	88	81	42	41	58	39	509	532	1,041
<b>20-24</b>	306	274	42	92	38	20	67	53	453	439	892
<i>Total Adolescents/ Young Adults</i>	627	645	130	173	80	61	125	92	962	971	1,933
<b>2002</b>											
<b>15-19</b>	301	250	93	140	26	33	51	85	471	508	979
<b>20-24</b>	511	453	100	219	63	65	95	111	769	848	1,617
<i>Total Adolescents/ Young Adults</i>	812	703	193	359	89	98	146	196	1,240	1,356	2,596
<b>2003</b>											
<b>15-19</b>	215	226	60	123	31	24	47	56	353	429	782
<b>20-24</b>	513	457	131	209	60	61	132	108	836	835	1,671
<i>Total Adolescents/ Young Adults</i>	728	683	191	332	91	85	179	164	1,189	1,264	2,453

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

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### Question 3

#### Epidemiologic Profile: 2004

Of the Adolescents/Young Adults tested for HIV in 2003:

- ➔ 52.2% are female
- ➔ 58.4% are in white
- ➔ Represent 33.7% of total tests (n=7,279) performed at HIV C&T sites in 2003.
  - ◆ 10.7% of tests performed are 15-19 year olds
  - ◆ 23.0% of tests performed are 20-24 year olds

Of the Adolescents/Young Adults tested for HIV in 2002:

- ➔ 51.5% are female
- ➔ 57.5% are in white
- ➔ Represent 36.7% of total tests (n=7,072) performed at HIV C&T sites in 2002.
  - ◆ 13.8% of tests performed are 15-19 year olds
  - ◆ 22.9% of tests performed are 20-24 year olds

Of the Adolescents/Young Adults tested for HIV in 2001:

- ➔ 50.2% are female
- ➔ 65.8% are in white
- ➔ Represent 28% of total tests (n=6,884) performed at HIV C&T sites in 2001.
  - ◆ 15% of tests performed are 15-19 year olds
  - ◆ 13% of tests performed are 20-24 year olds

Of the Adolescents/Young Adults tested for HIV in 2000:

- ➔ 59% are female
- ➔ 69% are in white
- ➔ Represent 41% of total tests performed at HIV C&T sites in 2000.
  - ◆ 18% of tests performed are 15-19 year olds
  - ◆ 23% of tests performed are 20-24 year olds

Of the Adolescents/Young Adults tested for HIV in 1999:

- ➔ 69% are female
- ➔ 56% are in white
- ➔ Represent 54% of total tests performed at HIV C&T sites in 1999.
  - ◆ 32% of tests performed are 15-19 year olds
  - ◆ 23% of tests performed are 20-24 year olds

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**Question 3**

Epidemiologic Profile: 2004

**■ HIV surveillance**

<b>Adolescents/Young Adult HIV (not AIDS) Cases By Year of Diagnosis and Age at 1<sup>st</sup> Positive Test</b>			
<b>Year of Diagnosis</b>	<b>Age at Diagnosis</b>		
	<b>13 - 19</b>	<b>20 - 24</b>	<b>Total</b>
<b>1983</b>	0	1	1
<b>1984</b>	0	0	0
<b>1985</b>	3	12	15
<b>1986</b>	3	12	15
<b>1987</b>	1	12	13
<b>1988</b>	3	23	26
<b>1989</b>	7	28	35
<b>1990</b>	6	32	38
<b>1991</b>	4	27	31
<b>1992</b>	10	22	32
<b>1993</b>	7	26	33
<b>1994</b>	4	21	25
<b>1995</b>	3	20	23
<b>1996</b>	3	33	36
<b>1997</b>	4	37	41
<b>1998</b>	7	21	28
<b>1999</b>	7	19	26
<b>2000</b>	10	27	37
<b>2001</b>	7	20	27
<b>2002</b>	5	28	33
<b>2003</b>	7	21	28
<b>Total</b>	<b>95</b>	<b>486</b>	<b>543</b>

Of the 543 adolescents and young adults reported as being diagnosed with HIV infection, 89.5% were between the ages of 20 and 24. Since the late 1980s, the number of new HIV infections reported in adolescents and young adults has remained stable with an average of 30-35 cases annually.

**Question 3**

Epidemiologic Profile: 2004

<b>Adolescents/Young Adult HIV Cases (not AIDS)</b>									
<b>By Race, Mode of Exposure and Age at 1<sup>st</sup> Positive Test</b>									
<b>Mode of Exposure</b>	<b>Age at Diagnosis</b>								
	<b>13 - 19</b>				<b>20 - 24</b>				<b>Total</b>
	Race/Ethnicity				Race/Ethnicity				
White	Black	Am Ind	Other*	White	Black	Am Ind	Other*		
<b>MSM</b>	18	14	0	2	150	37	18	11	250
<b>IDU</b>	9	1	1	0	20	10	4	1	46
<b>MSM&amp;IDU</b>	5	2	0	0	40	5	2	1	55
<b>Hemophilia</b>	3	0	0	0	2	0	0	0	5
<b>Heterosexual</b>	10	8	0	0	22	18	3	3	64
<b>Transfusion</b>	1	1	0	0	1	2	0	1	6
<b>Risk Not Specified/ Other**</b>	9	12	2	3	28	40	3	4	101
<b>Total</b>	55	38	3	5	263	112	30	21	527

*Other\** includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.

*Other\*\** Patients were diagnosed with AIDS as adults but have evidence of being infected as children. They are counted as adults/adolescent cases in this table and as pediatric elsewhere

The 582 adolescents and young adults reported as being diagnosed with HIV infection can be summarized as follows:

- ➔ 47.4% are males who have sex with males
- ➔ 19.2% inject drugs (includes MSM&IDU)
- ➔ 12.1% acquired HIV heterosexually
- ➔ 60.39% are white
- ➔ 28.5% are black.

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### **Question 3**

Epidemiologic Profile: 2004

#### **■ Youth Risk Behavior Survey (YRBS)**

The Youth Risk Behavior Survey (YRBS) is one of several surveillance methods developed by the Centers for Disease Control and Prevention (CDC) to collect information on health-risk behaviors contributing to the leading causes of death, illness, disability, and social problems among youth and adolescents in the United States. The YRBS measures the self-reported prevalence of health-risk behaviors among adolescents that not only influence adolescent health, but also put youth at risk for the most significant health and social problems that occur during adolescence and early adulthood. Many behaviors that contribute to preventable adult deaths are initiated during youth. The YRBS focuses on these priority health-risk behaviors:

- Alcohol and other drug use
- Tobacco use
- Sexual behaviors that contribute to unintended pregnancies and sexually transmitted diseases (STDs), including Human Immunodeficiency Virus (HIV) infection
- Behaviors that result in intentional and unintentional injuries
- Dietary behaviors
- Physical activity

The YRBS results can be utilized to develop policies and programs to prevent and/or reduce health risk behaviors among adolescents. Such data help identify public health priorities and provide quantifiable evidence of health risks among our youth that demand public health intervention and action. The YRBS results provide current health and safety habits of high school students so that improvements can be made where needed. These data primarily provide information on youth in school, although out-of-school youth may have higher levels of HIV risk behavior. In Oklahoma, YRBS began in limited distribution in December 1996. To take part in YRBS, the individual school district has to request to be included. Maternal and Child Health (MCH) Service of the state health department manages this survey, providing presentations to school boards and meetings all over the state. From December 1996 through May 2002, 101 schools within the state have participated, providing surveys from approximately 44,035 students. Thirty-nine counties in Oklahoma have had schools participate in the survey; many have been in rural areas. The 2001-02 school year marks the 1<sup>st</sup> time the Middle School YRBS was performed. A total of twenty-six schools participated yielding 4,830 students surveyed. In 2003, a statewide-randomized sampling data was collected covering February through December. 1,384 students from 78 public schools in 27 counties participated and were included in the survey. Remember that these data apply only to youth who attend school and therefore are not representative of all persons in this age group. Nationwide, of persons aged 16-17 years, ~5% were not enrolled in a high school. In addition, the extent of underreporting or over-reporting of behaviors cannot be determined, although survey questions demonstrate good test-retest reliability.



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### Question 3

Epidemiologic Profile: 2004

- 22.2% of students have been offered, sold, or given illegal drugs on school property during the past 12 months.
- **Sexual Behavior:**
  - 51.2% of males and 48.8% of female students have had sexual intercourse.
  - 5.8% of students had initiated sexual intercourse before 13 years of age.
  - Of those students who have had sexual intercourse, 15.6% had done so with more than four persons.
  - Over one-third of all students (37.2%) reported that they were currently sexually active, which was defined as having had sexual intercourse with one or more persons during the past three months preceding the survey.
  - One-quarter of sexually active students (25.3%) reported having alcohol or drugs before last sexual encounter.
  - Of students who had ever had sexual intercourse, 25.6% reported practicing abstinence during the thirty days preceding the survey.
  - 67.2% of sexually active males and 61.2% of sexually active females reported they or their partner had used condoms the last time they had sexual intercourse.
  - Of students who had sexual intercourse during the past three months, 15.6% of males and 19.9% of females reported they or their partner used birth control pills.
  - Unintended pregnancies were highest among female students in grade 11 (8.7%) and grade 12 (7.4%).
  - Approximately three times as many female (12.0%) as male students (4.5%) reported that they had been physically forced to have sexual intercourse.
  - Most students (86%) had been taught about AIDS/HIV in schools.

### 2000-01 OKLAHOMA YOUTH RISK BEHAVIOR SURVEY

- **Percent of high school students who have ever had sexual intercourse.**

In 2003, half (50%) reported ever had sexual intercourse. During school year 2000-01, almost half (46.0%) of respondents reported having had sexual intercourse at least once. The lowest proportion (34.2%) of students reporting intercourse was among 9<sup>th</sup> graders while the highest proportion (59.6%) was among 12<sup>th</sup> graders. These data show that most adolescents have engaged in sexual intercourse before finishing high school.
- **Percent of high school students who have had four or more sexual partners during their lifetime.**

Data in 2003 show that about one-sixth (16%) of students have had four or more sex partners. During school year 2000-01, one third (33.0%) of respondents reported having had four or more partners. Increasing proportions reported multiple partners across grades 9 through 12 (29.0%, 31.9%, 31.5% and 38.3% respectively). These data show that many adolescents report having had multiple sexual partners, a risk for HIV infection.

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### Question 3

Epidemiologic Profile: 2004

- **Percent of sexually active (had sexual intercourse during the past 3 months) high school students who used a condom during last sexual intercourse.**  
In 2003, more than a third (37%) have had sexual intercourse during the past three months. Of those 37%, about 36% did not use a condom and 82% did not use birth control pills during the last sexual intercourse. Data through 2001 report 48% of students had used a condom during their most recent sexual intercourse. Of those students using a method for birth control other than condoms, 10% withdrew and 17% used birth control pills.
- **Percent of high school students who have ever experimented with drugs.**  
The 2003 report show 48% as having used alcohol during the past three months, while 22% used marijuana during the past month. For use of cocaine or inhalants, 9% and 10% respectively answered yes. The survey has questions related to lifetime marijuana use, lifetime cocaine (any form) use, inhalant use and use of other illegal drugs (LSD, PCP, ecstasy, mushrooms, speed, ice or heroin). Over all the categories of drug use and all grade levels, at least a small proportion have tried each. During school year 2000-01, the fewest have tried heroin (4.5% of 9<sup>th</sup> graders to 4.6% of 12<sup>th</sup> graders) and the most have tried marijuana (29.1% of 9<sup>th</sup> graders to 49.7% of 12<sup>th</sup> graders).
- **Percent of high school students who have ever injected drugs.**  
Data through 1999 report, of the 4500 students surveyed 134 (3%) have injected a drug at least once (*data from last year, current data not yet available*).

#### **Summarize data on adolescents used to answer Question 3.6.**

- ◆ The majority of the adolescents and young adults reported as HIV and AIDS are male and white; most of these are MSM but almost ¼ injected drugs.
- ◆ Since few teens seek HIV testing, either due to access, fear or lack of risk belief, STDs are the best surrogate to demonstrate potential risks (unprotected sexual intercourse).
- ◆ High numbers and rates of gonorrhea and chlamydia are observed in Oklahomans age 15-24. Higher rates per 100,000 population in blacks are reported for early syphilis, gonorrhea and chlamydia.

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### **Question 3**

Epidemiologic Profile: 2004

#### **3.7 Racial/ethnic Minorities**

Although transmission of HIV results from certain high-risk behaviors and is not the consequence of one's racial or ethnic group, racial and ethnic minorities have been disproportionately affected by the HIV epidemic. For example, HIV seroprevalence among men who have sex with men, injection drug users, and high-risk heterosexuals is now higher among blacks than among other racial/ethnic groups. Thus, tabulations by race/ethnicity should be highlighted in the epidemiologic profile.

Every reportable STD including HIV and AIDS has disproportionately affected black communities across the state. HIV and AIDS rates per 100,000 population are 3 to 8 times greater in blacks compared to whites. STD rates are 6 (chlamydia) to 80 (early syphilis) times greater in black adolescents/young adults compared to white adolescents/young adults.

#### **3.8 Other Populations**

##### **■ Correctional Facilities**

The Lexington Assessment and Reception Center (LARC) serves as the assessment site for all male and female prisoners entering the Oklahoma Department of Corrections (DOC) system. During the assessment, each inmate is given a thorough psychological and physical examination, which includes serologic testing for the presence of antibodies to HIV and syphilis.

Several important issues must be taken into account when interpreting CFS results. First the numbers represent tests results for each entry into the system and are not adjusted for duplicate entries. If an infected person enters DOC more than once between 1987 and the present, he/she is counted more than once.

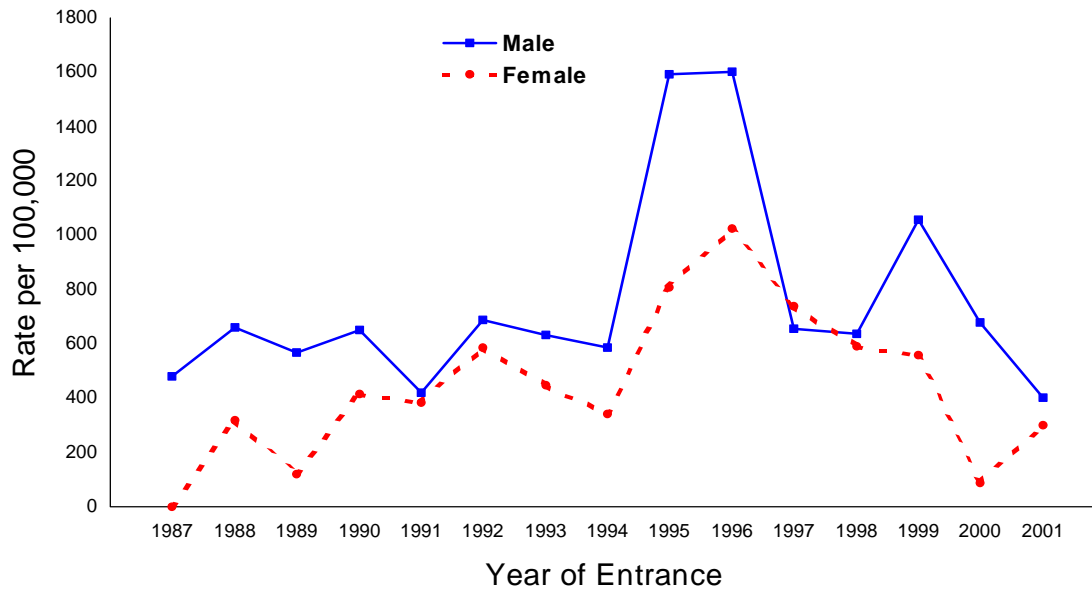
Second, inmates are not routinely screened during incarceration or when they leave DOC's custody. This testing protocol in the DOC prevents the identification of prisoners: (1) in DOC's custody pre-1987, (2) persons in the window period, or (3) those persons infected after entry into the penal system. Therefore, this screening does not encompass all HIV infections within the inmate population and cannot be used exclusively to describe the HIV seroprevalence of Oklahoma inmates.

The data for this section was collected from DOC. Information for HIV seropositivity rate per 100,000 population, based on prisoners entering the DOC, appears in a graph and table below. These information displays HIV infected persons (both HIV and AIDS cases) who have gone through LARC, according to gender and year of assessment.

**Question 3**

Epidemiologic Profile: 2004

**Oklahoma Entrants into Department of Corrections  
Lexington Assessment and Reception Center  
HIV Seroprevalence Rate per 100,000**



**Question 3**

Epidemiologic Profile: 2004

<b>Lexington Assessment and Reception Center (LARC) Seroprevalence Summary Results</b>						
<b>Year</b>	<b>Males</b>			<b>Females</b>		
	<b># Tested</b>	<b># HIV</b>	<b>Rate per 100,000</b>	<b># Tested</b>	<b># HIV</b>	<b>Rate per 100,000</b>
1987	3,324	16	481	327	0	0
1988	5,443	36	661	625	2	320
1989	6,012	34	566	832	1	120
1990	5,667	37	653	723	3	415
1991	5,464	23	421	783	3	383
1992	6,834	47	688	850	5	588
1993	6,008	38	632	897	4	446
1994	5,794	20	588	883	3	339
1995	6,222	99	1,591	991	8	807
1996	6,117	98	1,602	975	10	1,025
1997	6,399	42	656	1,086	8	737
1998	6,267	40	638	1,182	7	592
1999	6,527	49	1,057	1,254	7	558
2000	6,486	44	678	1,123	1	89
2001	6,963	28	402	1,154	3	300
2002	N/A	N/A	N/A	N/A	N/A	N/A
2003	N/A	N/A	N/A	N/A	N/A	N/A

\* N/A data not available, incomplete or not reported by agency

Five (5) to ten (10) times more males than females enter the prison system each year. Although for many years few females tested positive when screened, in most recent years the numbers have increased and continue to remain fairly stable. In 1997 the HIV rate per 100,000 in females surpassed the rate observed in males, however, by 1998 and again through 2000 the higher trend observed in males was reaffirmed. The HIV rate per 100,000 for both males and females entering the prison system is several hundred times greater than the rate by gender in the general population of Oklahoma.

#### ■ Oklahoma Plasma Donors

In an effort to identify persons perceived to be at increased risk for HIV infection, the OSDH yearly collects testing data from all plasma donor centers across the state; this activity began in 1994. Patrons of the centers reflect a broad spectrum of Oklahoma's population. Many donate to feed themselves or their families, earn extra money to accommodate their lifestyle, or simply pay bills. There are also donors at increased risk for HIV infection who need money to support drug and alcohol use, or to buy food and pay bills because they have used that money to support a substance habit. This survey will be ongoing and should provide information that can be used to target effective prevention and intervention strategies.

Blood plasma collection centers pay individuals \$15.00 to \$25.00 per donation which can result in a

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**Question 3**

Epidemiologic Profile: 2004

monthly income of \$100.00 to \$200.00. Each donor is screened before their first donation and must meet age, weight, and general health requirements. Donors must also pass an interview, physical exam and, in most centers, have a social security number and photo identification with a permanent address.

After the donation, each unit is screened for: HIV using an EIA and Western blot, Hepatitis B with testing for HBsAg, Hepatitis C using an anti-HCV, and Syphilis with an RPR and FTA-ABS. A unit is destroyed if a test is positive or if the donor was in poor health or indicated signs of drug use or self-disclosed high-risk activities. A list of deferred donors is kept to prevent further donations.

There are nine major plasma collection centers in Oklahoma. The sites are located in major population centers with three (3) in Oklahoma City, two (2) in Tulsa, and one (1) each in Lawton, Stillwater, Norman, and Muskogee. The Norman and Stillwater centers are located near Oklahoma University and Oklahoma State University and draw clients from the school and town populations.

**Question 3**

Epidemiologic Profile: 2004

Oklahoma Plasma Donation Centers										
Plasma Ctr Site	Donation Time Frame	Total Donations	Test Type							
			Western Blot for HIV		HBsAg		anti-HCV		RPR /FTA for Syphilis	
			#	Rate*	#	Rate*	#	Rate*	#	Rate*
1	1/1/96-12/31/96	135,040	1	1	13	10	78	58	13	10
	1/1/97-12/31/97	89,278	2	2.2	11	12.3	39	43.6	7	7.8
	1/1/98-12/31/98	75,504	0	-	9	11.9	61	80.7	7	9.3
	1/1/99-12/31/99	79,059	0	-	8	10.1	53	67.0	5	6.3
	1/1/00-12/31/00	74,438	2	2.7	11	14.8	59	79.3	5	6.7
	1/1/01-12/31/01	79,674	1	1.3	4	5.0	61	76.6	2	2.5
	1/1/02-12/31/02	67,928	1	1.5	2	2.9	53	78.0	2	2.9
	1/1/03-12/31/03	68,008	0	-	4	5.9	37	54.5	0	-
2	1/1/96-12/31/96	164,584	10	6	22	13	270	164	31	19
	1/1/97-12/31/97	123,417	8	6.4	20	16.2	123	99.6	18	14.5
	1/1/98-12/31/98	124,496	6	4.8	10	8.0	140	112.5	22	17.7
	1/1/99-12/31/99	112,569	7	6.2	15	13.3	101	89.7	11	9.8
	1/1/00-12/31/00	106,491	5	4.7	10	9.4	70	65.7	12	11.3
	1/1/01-12/31/01	106,751	4	3.7	8	7.5	91	85.2	4	3.7
	1/1/02-12/31/02	98,372	4	4.1	14	14.2	77	78.3	11	11.2
	1/1/03-12/31/03	88,451	3	3.4	9	10.2	53	59.9	9	10.2
3	1/1/96-12/31/96	13,005	1	8	7	54	55	423	2	15
	1/1/97-12/31/97	11,616	0	-	1	8.6	30	258.2	0	-
	1/1/98-12/31/98	11,851	0	-	2	16.9	20	168.8	1	8.4
	1/1/99-12/31/99	13,641	0	-	2	14.7	25	183.3	1	7.3
	1/1/00-12/31/00	14,363	0	-	2	13.9	22	153.2	1	7.0
	1/1/01-12/31/01	16,010	1	6.2	4	24.9	28	174.9	1	6.2
	1/1/02-12/31/02	OOB*	-	-	-	-	-	-	-	-
	1/1/03-12/31/03	OOB*	-	-	-	-	-	-	-	-
4	1/1/96-12/31/96	33,416	3	9	1	3	59	176	2	6
	1/1/97-12/31/97	27,474	0	-	1	3.6	29	105.5	2	7.2
	1/1/98-12/31/98	14,885	2	13.4	0	-	20	134.4	2	13.4
	1/1/99-12/31/99	23,395	4	17.1	2	8.5	18	76.9	1	4.3
	1/1/00-12/31/00	23,990	4	16.7	3	12.5	20	83.4	7	29.2
	1/1/01-12/31/01	21,209	2	9.4	2	9.4	26	122.6	6	28.3
	1/1/02-12/31/02	31,940	1	3.1	0	-	24	75.1	32	100.2
	1/1/03-12/31/03	30,300	0	-	3	9.9	20	66.0	0	-
5	1/1/96-12/31/96	27,121	0	-	1	4	36	133	1	4
	1/1/97-12/31/97	26,098	0	-	4	15.3	27	103.4	7	26.8
	1/1/98-12/31/98	24,805	7	28.2	3	12.1	14	56.4	2	8.1
	1/1/99-12/31/99	20,549	3	14.6	1	4.9	15	73.0	4	19.5
	1/1/00-12/31/00	24,877	0	-	0	-	8	32.2	1	4.0
	1/1/01-12/31/01	22,323	0	-	1	4.5	10	44.8	0	-
	1/1/02-12/31/02	25,041	2	8.0	1	4.0	14	55.9	0	-
	1/1/03-12/31/03	27,194	0	-	0	-	5	18.4	2	7.4

**Question 3**

Epidemiologic Profile: 2004

6	1/1/96-12/31/96	58,263	4	7	13	22	106	182	68	117
	1/1/97-12/31/97	59,685	10	16.7	22	36.8	178	298.2	35	58.6
	1/1/98-12/31/98	50,689	7	13.8	3	5.9	115	226.8	18	35.5
	1/1/99-12/31/99	37,938	0	-	4	10.5	3	7.9	11	29.0
	1/1/00-12/31/00	46,896	2	4.3	4	8.5	54	115.1	12	25.6
	1/1/01-12/31/01	44,352	2	4.5	3	6.8	62	139.8	18	40.6
	1/1/02-12/31/02	47,655	4	8.4	5	10.5	73	153.2	25	52.5
	1/1/03-12/31/03	51,292	3	5.8	9	17.5	53	103.3	7	13.6
7	1/1/96-12/31/96	31,994	0	0	9	28	95	297	8	2
	1/1/97-12/31/97	32,696	6	18.3	8	24.4	68	207.9	7	21.4
	1/1/98-12/31/98	32,330	18	55.7	11	34.0	102	315.5	4	12.4
	1/1/99-12/31/99	32,034	6	18.7	8	25.0	43	134.2	2	6.2
	1/1/00-12/31/00	30,833	3	9.7	2	6.5	52	168.7	10	32.4
	1/1/01-12/31/01	24,410	3	12.3	5	20.5	29	118.9	17	69.6
	1/1/02-12/31/02	OOB*	-	-	-	-	-	-	-	-
	1/1/03-12/31/03	OOB*	-	-	-	-	-	-	-	-
8	1/1/96-12/31/96	40,942	0	0	9	22	163	398	3	7
	1/1/97-12/31/97	49,221	15	30.4	13	26.4	46	94.3	5	10.1
	1/1/98-12/31/98	43,331	7	15.2	15	34.6	42	96.9	5	11.5
	1/1/99-12/31/99	35,478	3	8.4	1	2.8	26	73.3	4	11.3
	1/1/00-12/31/00	36,989	0	-	2	5.4	30	81.1	3	8.1
	1/1/01-12/31/01	33,357	5	14.9	5	14.9	33	98.9	0	-
	1/1/02-12/31/02	33,343	0	-	4	12.0	21	63.0	4	12.0
	1/1/03-12/31/03	32,803	0	-	2	6.1	9	27.4	2	6.1
9	1/1/96-12/31/96	44,028	3	7	13	30	117	266	14	32
	1/1/97-12/31/97	41,199	10	24.2	15	36.4	71	172.3	9	21.8
	1/1/98-12/31/98	31,233	4	12.8	7	22.4	39	124.9	4	12.8
	1/1/99-12/31/99	27,641	9	32.6	4	14.5	30	108.5	4	14.5
	1/1/00-12/31/00	24,771	2	8.1	4	16.2	21	85.0	3	12.1
	1/1/01-12/31/01	23,937	6	25.1	5	20.9	33	137.9	10	41.8
	1/1/02-12/31/02	OOB*	-	-	-	-	-	-	-	-
	1/1/03-12/31/03	OOB*	-	-	-	-	-	-	-	-

Rate calculated per 100,000 Donations/Specimens for time period. OOB\*: the center ceased operations (closed)

Of greatest note from the plasma donor data: over a quarter-million plasma donations are collected and tested for a variety of sexually transmitted diseases and/or bloodborne pathogens each year in our state. Not only is there great variability of positives from each disease and each site, but also the numbers and rates do not have much stability from year to year within site.

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**Question 3**

Epidemiologic Profile: 2004

**■ Oklahoma Job Corps**

Job Corps is the nation's largest residential employment and educational training program for economically challenged youth, ages 16 to 24. The U.S. Department of Labor funds Job Corps. Job Corps' mission is to teach young adults the skills they need to become employable and independent, and place them in meaningful jobs or to further their education.

Job Corps is a self-paced, voluntary program. Because Job Corps is a self-paced program, lengths of stay vary. Students may remain enrolled for up to two years, but the average length of stay is approximately seven months. Applicants must agree to abide by Job Corps' rules and regulations, including a zero tolerance policy for drugs and violence.

Job Corps has a proven curriculum of academic, vocational, and life skills training as well as opportunities to earn a GED or high school diploma. Job Corps offers vocational training in more than 100 occupations in industries including health care, automotive, information technology, hospitality, and construction.

There are four Job Corps locations in the state of Oklahoma. The sites are located in Tahlequah, Indianahoma, Guthrie and Tulsa. Upon arrival at the each site, the students are given a physical exam. The students at Oklahoma Job Corps centers can be residents of Oklahoma, Texas, New Mexico, Arkansas or Louisiana.

**Question 3**

Epidemiologic Profile: 2004

<b>Oklahoma Job Corps</b>										
Site	Donation Time Frame	Total Donations	Test Type							
			Western Blot for HIV		RPR and FTA for Syphilis		Gonorrhea		Chlamydia	
			# Positive	Rate*	# Positive	Rate*	# Positive	Rate*	# Positive	Rate*
1	1/1/99-12/31/99	245	0	-	0	-	1	408.1	18	7,346.9
	1/1/00-12/31/00	578	0	-	0	-	2	346.0	8	1,384.1
	1/1/01-12/31/01	491	0	-	0	-	1	203.7	12	2,444.0
	1/1/02-12/31/02	486	0	-	0	-	4	823.0	33	6,790.1
	1/1/03-12/31/03	446	0	-	0	-	8	1,793.7	28	6,278.0
2	1/1/99-12/31/99	466	0	-	0	-	6	1,287.6	11	2,360.5
	1/1/00-12/31/00	470	0	-	2	425.5	4	851.1	11	2,340.4
	1/1/01-12/31/01	294	0	-	2	680.3	3	1,020.4	16	5,442.2
	1/1/02-12/31/02	288	0	-	0	-	0	-	19	5,208.3
	1/1/03-12/31/03	291	0	-	0	-	2	687.3	15	5,154.6
3	1/1/99-12/31/99	900	1	111.1	14	1,555.5	18	2,000.0	44	4,888.9
	1/1/00-12/31/00	1,178	1	84.9	2	169.8	25	2,122.2	40	3,395.6
	1/1/01-12/31/01	1,102	1	90.7	1	90.7	50	4,537.2	50	4,537.2
	1/1/02-12/31/02	1,215	1	82.3	0	-	22	1,810.7	26	2,139.9
	1/1/03-12/31/03	1,322	1	75.6	2	151.3	8	605.1	97	7,337.4
4	1/1/99-12/31/99	301	0	-	0	-	14	4,651.2	22	7,309.0
	1/1/00-12/31/00	497	0	-	4	804.8	15	3,018.1	21	4,225.4
	1/1/01-12/31/01	412	0	-	0	-	23	5,582.5	42	10,194.2
	1/1/02-12/31/02	494	1	202.4	0	-	22	4,453.4	61	12,348.2
	1/1/03-12/31/03	387	1	258.4	0	-	21	5,426.4	53	13,695.1

\*Rate calculated per 100,000 Donations for time period.

Of greatest note from the Job Corps data: over two thousand students enter training centers and are tested for a variety of sexually transmitted diseases and/or bloodborne pathogens each year in our state. There is great variability in the number and rate of positives from each disease and each site.

**Question 4. What is the geographic distribution of HIV infection?**

**Prevention planning value:**

Provides planning groups with information about possible locations for prevention activities which may offer access to individuals at high risk for HIV. In many areas, HIV is geographically concentrated in areas where groups at high risk live.

Directly supports decisions about priorities among HIV prevention needs and possible interventions.

**Key components:**

AIDS Cases

- AIDS cases by residence at diagnosis (recent years)

STD Surveillance Data

- STD rates by county

**Key issues:**

- HIV infection and risk behaviors are unevenly distributed within the region
- Identifying geographic concentrations can point to locations where prevention programs may be needed.
- Use of data at the zip code or census tract level must protect individual identities
- Data maps are excellent for presentations; tables and graphs may also be useful.

**Question 4: What is the geographic distribution of HIV infection?**

The HIV epidemic is composed of multiple separate epidemics in states, health districts, counties, and even municipalities. Because of the uneven distribution of HIV and risk behavior for HIV both geographically and within populations, it is important for planning groups to understand where HIV is concentrated and where persons at highest risk for HIV infection may be reached for prevention activities.

Geographic areas can be described at several levels within the state, including geographic regions, health districts, counties, city, urban/rural/frontier, zip code, and census tracts. Data maps are excellent for describing the geographic distribution of HIV/AIDS and surrogate data, such as STD incidence, and should be used whenever possible.

**Question 4**  
**Epidemiologic Profile: 2004**

HIV reporting and AIDS case data may also be useful in conjunction with the needs assessment. Health-care facilities are sites where persons at highest risk for HIV acquisition or transmission may be reached for primary and secondary prevention activities. In addition, many of these sites collect relevant HIV or STD data. Populations at high-risk for HIV acquisition or transmission may be reached for targeted interventions in a variety of settings, e.g., sexually transmitted disease clinics, drug treatment centers, tuberculosis clinics, and clinics for homeless and runaway youth.

To accurately portray the HIV epidemic and other STDs, reported cases have been grouped into regions of Oklahoma. Oklahoma is divided into five (5) Metropolitan Statistical Areas (MSAs) and four (4) regional quadrants. For our purposes here three (3) of the MSAs are grouped with the quadrant of the state in which they are located: Enid MSA is combined with the Northwest quadrant, Lawton MSA is combined with the Southwest quadrant and Sequoyah County (Ft. Smith, AR MSA) is combined with the Southeast quadrant.

<b>Metropolitan Statistical Areas (MSAs) Defined by County</b>					
<b>MSA</b>	<b>Enid</b>	<b>Lawton</b>	<b>Oklahoma City</b>	<b>Fort Smith, AR</b>	<b>Tulsa</b>
<b>Population</b>					
<b>1990 Census</b>	<b>56,735</b>	<b>111,486</b>	<b>958,839</b>	<b>33,828</b>	<b>708,954</b>
<b>2000 Census</b>	<b>57,813</b>	<b>114,996</b>	<b>1,083,346</b>	<b>38,972</b>	<b>803,235</b>
Counties	Garfield	Comanche	Oklahoma Canadian Cleveland McClain Logan Pottawatomie	Sequoyah	Tulsa Creek Rogers Osage Wagoner

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Quadrants of Oklahoma Defined by County</b>				
<b>Quadrant</b>	<b>Northeast</b>	<b>Southeast</b>	<b>Southwest</b>	<b>Northwest</b>
<b>Population 1990 Census</b>	<b>514,926</b>	<b>347,565</b>	<b>269,433</b>	<b>143,819</b>
<b>2000 Census</b>	<b>563,493</b>	<b>370,122</b>	<b>275,336</b>	<b>143,341</b>
<b>Counties</b>	Adair Cherokee Craig Delaware Kay Lincoln Mayes McIntosh Muskogee Noble Nowata Okfuskee Okmulgee Ottawa Pawnee Payne Washington	Atoka Bryan Choctaw Coal Garvin Haskell Hughes Johnston Latimer LeFlore Marshall McCurtain Murray Pittsburg Pontotoc Pushmataha Seminole	Beckham Caddo Carter Cotton Grady Greer Harmon Jackson Jefferson Kiowa Love Stephens Tillman Washita	Alfalfa Beaver Blaine Cimarron Custer Dewey Ellis Grant Harper Kingfisher Major Roger Mills Texas Woods Woodward

**4.2 What data can be used to describe the geographic distribution of HIV infection?**

■ **AIDS surveillance**

● **AIDS cases by residence at diagnosis for most recent year.**

In 2003, 80% of newly diagnosed AIDS cases in Oklahoma resided in the metropolitan areas, particularly Oklahoma and Tulsa counties (69.9%). Over the past five years 5 counties have had an average of approximately 3 or more new AIDS cases diagnosed annually. These counties include:

Cleveland	6.2	Oklahoma	83.8
Comanche	5.4	Tulsa	58.0
Oklahoma	83.8	Statewide average 2.5 cases per county per year	

**Question 4**  
**Epidemiologic Profile: 2004**

- **AIDS cases by residence at diagnosis and race/ethnicity for most recent years of diagnosis.**

<b>AIDS Cases Diagnosed in 2001, 2002 and 2003 By Region of Residence and Race/Ethnicity</b>												
<b>Region</b>	<b>White</b>			<b>Black</b>			<b>American Indian</b>			<b>Other*</b>		
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
Northeast	11	13	10	5	3	1	3	2	4	2	1	0
Northwest (including Enid MSA)	3	0	4	0	1	0	0	0	0	0	1	0
Southeast (including Ft Smith MSA)	8	6	5	2	1	3	2	1	4	1	1	0
Southwest (including Lawton MSA)	4	10	7	2	3	2	0	3	0	1	2	0
Oklahoma City MSA	65	47	49	23	33	17	8	4	9	7	9	8
Tulsa MSA	30	29	38	12	18	20	4	5	5	8	3	0

*Other\* includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.*

Of the 186 AIDS Cases diagnosed in residents of Oklahoma in 2003:

- ➔ 78.5% lived in the Tulsa or Oklahoma City area
- ➔ 0% of the NW quadrant's AIDS cases are persons of color
- ➔ 75% of the SE quadrant's AIDS cases are persons of color
- ➔ 32.6% of Oklahoma City MSAs AIDS cases are persons of color
- ➔ 39% of Tulsa MSAs AIDS cases are persons of color
- ➔ 20% of the SW quadrant's AIDS cases are persons of color
- ➔ 33.3% of the NE quadrant's AIDS cases are persons of color

Of the 195 AIDS Cases diagnosed in residents of Oklahoma in 2002:

- ➔ 62.6% lived in the Tulsa or Oklahoma City area
- ➔ 100% of the NW quadrant's AIDS cases are persons of color
- ➔ 25% of the SE quadrant's AIDS cases are persons of color
- ➔ 48.4% of Oklahoma City MSAs AIDS cases are persons of color
- ➔ 46.3% of Tulsa MSAs AIDS cases are persons of color
- ➔ 36.4% of the SW quadrant's AIDS cases are persons of color
- ➔ 27.8% of the NE quadrant's AIDS cases are persons of color

Of the 201 AIDS Cases diagnosed in residents of Oklahoma in 2001:

- ➔ 78% lived in the Tulsa or Oklahoma City area
- ➔ 0% of the NW quadrant's AIDS cases are persons of color
- ➔ 38% of the SE quadrant's AIDS cases are persons of color
- ➔ 37% of Oklahoma City MSAs AIDS cases are persons of color
- ➔ 44% of Tulsa MSAs AIDS cases are persons of color
- ➔ 43% of the SW quadrant's AIDS cases are persons of color
- ➔ 48% of the NE quadrant's AIDS cases are persons of color

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**Question 4**  
**Epidemiologic Profile: 2004**

Of the 189 AIDS Cases diagnosed in residents of Oklahoma in 2000:

- ➔ 76% lived in the Tulsa or Oklahoma City area
- ➔ 0% of the NW quadrant's AIDS cases are persons of color
- ➔ 44% of the SE quadrant's AIDS cases are persons of color
- ➔ 34% of Oklahoma City MSAs AIDS cases are persons of color
- ➔ 40% of Tulsa MSAs AIDS cases are persons of color
- ➔ 38% of the SW quadrant's AIDS cases are persons of color
- ➔ 44% of the NE quadrant's AIDS cases are persons of color

Of the 172 AIDS Cases diagnosed in residents of Oklahoma in 1999:

- ➔ 74% lived in the Tulsa or Oklahoma City area
- ➔ 75% of the NW quadrant's AIDS cases are persons of color
- ➔ 25% of the SE quadrant's AIDS cases are persons of color
- ➔ 33% of Oklahoma City MSAs AIDS cases are persons of color
- ➔ 41% of Tulsa MSAs AIDS cases are persons of color
- ➔ 73% of the SW quadrant's AIDS cases are persons of color
- ➔ 50% of the NE quadrant's AIDS cases are persons of color

Of the 206 AIDS Cases diagnosed in residents of Oklahoma in 1998:

- ➔ 73% lived in the Tulsa or Oklahoma City area
- ➔ 40% of the NW quadrant's AIDS cases are persons of color
- ➔ 20% of the SE quadrant's AIDS cases are persons of color
- ➔ 35% of Oklahoma City MSAs AIDS cases are persons of color
- ➔ 39% of Tulsa MSAs AIDS cases are persons of color
- ➔ 27% of the SW quadrant's AIDS cases are persons of color
- ➔ 29% of the NE quadrant's AIDS cases are persons of color

Of the 281 AIDS Cases diagnosed in residents of Oklahoma in 1997:

- ➔ 77% lived in the Tulsa or Oklahoma City area
- ➔ 33% of the NW quadrant's AIDS cases are persons of color
- ➔ 27% of the SE quadrant's AIDS cases are persons of color
- ➔ 33% of Oklahoma City MSAs AIDS cases are persons of color
- ➔ 28% of Tulsa MSAs AIDS cases are persons of color
- ➔ 21% of the SW quadrant's AIDS cases are persons of color
- ➔ 20% of the NE quadrant's AIDS cases are persons of color

**Question 4**  
**Epidemiologic Profile: 2004**

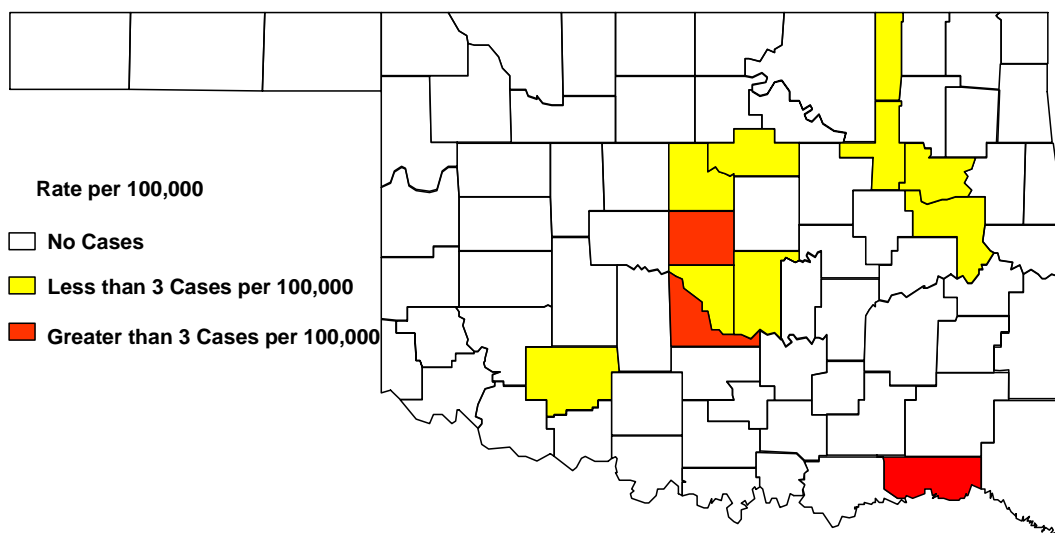
■ **Surveillance of bacterial sexually transmitted diseases:**

While the presence of syphilis indicates high-risk behavior, the absence of syphilis does not indicate absence of risk; rather it may be a marker of effective syphilis control (e.g., men who have sex with men in a sexual network with low prevalence of syphilis). Inferences about areas with low syphilis rates should be made with caution. Areas with high syphilis rates should be considered for targeting prevention efforts. Clinics diagnosing and treating persons with syphilis are also places where persons at high risk may be reached.

- **Early Syphilis cases and rates by residence at diagnosis for most recent year of report**  
In 2003, the largest numbers of early syphilis cases were reported residing in Oklahoma County (108), Tulsa County had the next largest (13) followed closely by Cleveland County with (3). Of Oklahoma's 77 counties, 12 had an early syphilis case reported, however eight (8) of the counties, Choctaw, Logan, McClain, Muskogee, Payne, Pottawatomie, Wagoner, and Washington had only 1 case each and Comanche county with 2 cases. Four (4) counties had high syphilis rates (> 3 per 100,000).

Comparatively in 2002, the largest numbers of early syphilis cases were reported in residents in Oklahoma County (134), Tulsa County had the next largest (23) cases followed closely by Muskogee County (5). Of Oklahoma's 77 counties, 19 had an early syphilis case reported, however eleven (11) of the counties, Caddo, Canadian, Cleveland, Comanche, Ellis, Le Flore, Logan, Okmulgee, Osage, Payne, Pittsburg, Rogers, Seminole, Wagoner, and Woodward had only 1 or 2 cases. Nine (9) counties had high syphilis rates (> 3 per 100,000).

## Early Syphilis in 2003 Counties with Cases



**Question 4**  
**Epidemiologic Profile: 2004**

**HIV Surveillance**

• **HIV cases by residence at diagnosis for most recent year.**

In 2003, 90% of newly diagnosed HIV infections in Oklahoma resided in the metropolitan areas, particularly Oklahoma and Tulsa counties (69%). Over the past five years, 8 counties have had an average of 2 or more new HIV infections diagnosed annually. These counties include:

Canadian	2.6	Oklahoma	65.2
Cleveland	3.8	Payne	2.4
Comanche	6.4	Rogers	2.0
Muskogee	2.0	Tulsa	43.2
Statewide average 2.0 infections diagnosed per county per year			

**HIV Infections Diagnosed in 2001, 2002 and 2003  
 By Region of Residence and Race/Ethnicity**

Region	White			Black			American Indian			Other*		
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
Northeast	4	11	9	1	8	5	2	1	3	0	2	2
Northwest (including Enid MSA)	1	3	5	0	1	1	0	0	1	0	2	1
Southeast (including Ft Smith MSA)	3	7	11	1	0	3	2	1	2	0	2	0
Southwest (including Lawton MSA)	3	10	6	4	6	2		3	0	1	3	0
Oklahoma City MSA	32	74	73	18	37	34	6	9	11	10	13	9
Tulsa MSA	36	39	47	13	20	27	4	6	4	4	5	1

*Other\* includes Hispanic, Asian/Pacific Islander and Unknown; these racial/ethnic categories have been combined to insure confidentiality since the Hispanic and Asian/PI communities in Oklahoma are relatively small.*

Of the 151 HIV infections diagnosed in 2003:

- ➔ 68.2% lived in the Tulsa or Oklahoma City area
- ➔ 33.3% of the SE quadrant's HIV cases are persons of color
- ➔ 35.7% of Oklahoma City MSAs HIV cases are persons of color
- ➔ 33.3% of the NE quadrant's HIV cases are persons of color
- ➔ 50% of Tulsa MSAs HIV cases are persons of color
- ➔ 0% of the SW quadrant's HIV cases are persons of color
- ➔ 100% of the NW quadrant's HIV cases are persons of color

Of the 157 HIV infections diagnosed in 2002:

- ➔ 69.4% lived in the Tulsa or Oklahoma City area
- ➔ 100% of the SE quadrant's HIV cases are persons of color
- ➔ 41% of Oklahoma City MSAs HIV cases are persons of color
- ➔ 43% of the NE quadrant's HIV cases are persons of color
- ➔ 42.9% of Tulsa MSAs HIV cases are persons of color
- ➔ 50% of the SW quadrant's HIV cases are persons of color
- ➔ 0% of the NW quadrant's HIV cases are persons of color

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**Question 4**  
**Epidemiologic Profile: 2004**

Of the 145 HIV infections diagnosed in 2001:

- ➔ 85% lived in the Tulsa or Oklahoma City area
- ➔ 50% of the SE quadrant's HIV cases are persons of color
- ➔ 52% of Oklahoma City MSAs HIV cases are persons of color
- ➔ 43% of the NE quadrant's HIV cases are persons of color
- ➔ 37% of Tulsa MSAs HIV cases are persons of color
- ➔ 63% of the SW quadrant's HIV cases are persons of color
- ➔ 0% of the NW quadrant's HIV cases are persons of color

Of the 169 HIV infections diagnosed in 2000:

- ➔ 75% lived in the Tulsa or Oklahoma City area
- ➔ 31% of the SE quadrant's HIV cases are persons of color
- ➔ 44% of Oklahoma City MSAs HIV cases are persons of color
- ➔ 33% of the NE quadrant's HIV cases are persons of color
- ➔ 25% of Tulsa MSAs HIV cases are persons of color
- ➔ 36% of the SW quadrant's HIV cases are persons of color
- ➔ 50% of the NW quadrant's HIV cases are persons of color

Of the 180 HIV infections diagnosed in 1999:

- ➔ 74% lived in the Tulsa or Oklahoma City area
- ➔ 29% of the SE quadrant's HIV cases are persons of color
- ➔ 39% of Oklahoma City MSAs HIV cases are persons of color
- ➔ 42% of the NE quadrant's HIV cases are persons of color
- ➔ 29% of Tulsa MSAs HIV cases are persons of color
- ➔ 25% of the SW quadrant's HIV cases are persons of color
- ➔ 0% of the NW quadrant's HIV cases are persons of color

Of the 203 HIV infections diagnosed in 1998:

- ➔ 74% lived in the Tulsa or Oklahoma City area
- ➔ 44% of the SE quadrant's HIV cases are persons of color
- ➔ 41% of Oklahoma City MSAs HIV cases are persons of color
- ➔ 38% of the NE quadrant's HIV cases are persons of color
- ➔ 39% of Tulsa MSAs HIV cases are persons of color
- ➔ 47% of the SW quadrant's HIV cases are persons of color
- ➔ 33% of the NW quadrant's HIV cases are persons of color

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**Question 4**

***Epidemiologic Profile: 2004***

Of the 221 HIV infections diagnosed in 1997:

- ➔ 81% lived in the Tulsa or Oklahoma City area
- ➔ 38% of the SE quadrant's HIV cases are persons of color
- ➔ 35% of Oklahoma City MSAs HIV cases are persons of color
- ➔ 20% of the NE quadrant's HIV cases are persons of color
- ➔ 28% of Tulsa MSAs HIV cases are persons of color
- ➔ 29% of the SW quadrant's HIV cases are persons of color

Of the 188 HIV infections diagnosed in 1996:

- ➔ 78% lived in Tulsa or Oklahoma City area
- ➔ 69% of the SW quadrant's HIV cases are persons of color
- ➔ 50% of the NE quadrant's HIV cases are persons of color
- ➔ 28% of Oklahoma City MSAs HIV cases are persons of color
- ➔ 29% of Tulsa MSAs HIV cases are persons of color
- ➔ 25% of the SE quadrant's HIV cases are persons of color

**Question 4**  
**Epidemiologic Profile: 2004**

■ **HIV prevalence**

Prevalence estimates by regions of the state are useful to observe how known HIV infection is distributed differently in different areas of the state. Remember HIV prevalence is all known living persons diagnosed with HIV infection (HIV plus AIDS cases who are living) at a given point in time (December 2003).

<b>HIV Prevalence</b> <b>By Race by Exposure Behavior</b> <b>State of Oklahoma</b> <b>Includes Cases Originally Diagnosed and/or Tested Out-of-State</b> <b>Dec 2003</b>								
Exposure Behavior	Race /Ethnicity							
	White		Black		Am. Indian		Other*	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	1,980	55.2	480	39.3	160	47.6	124	39.4
Injection Drug Use (IDU)	453	12.6	148	12.1	68	20.2	51	16.2
MSM & IDU	425	11.8	101	8.3	47	14.0	23	7.3
Hemophilia/Coagulation Disorder	22	0.6	2	0.2	0	0	1	0.3
Heterosexual Contact	306	8.5	177	14.5	34	10.1	48	15.2
Sex with IDU	127		61		13		21	
Sex with MSM	35		13		7		3	
Sex with Hemophiliac	3		0		0		1	
Sex with Transfusion Recipient	2		3		0		0	
Sex with HIV+ Risk Not Identified	139		100		14		23	
Received Transfusion or Tissue	24	0.7	16	1.3	1	0.3	5	1.6
Other/Risk not Reported or Identified	379	10.6	297	24.3	26	7.8	63	20.0
<b>Total</b>	<b>3,589</b>	<b>100%</b>	<b>1,221</b>	<b>100%</b>	<b>336</b>	<b>100%</b>	<b>315</b>	<b>100%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 5,461 prevalent HIV infections in Oklahoma as of December 2003, 65.7% are white, 22.4% are black and 6.2% are American Indian. Within all racial/ethnic categories, MSM is the most common exposure method ranging from ~39% for other to 55% for white.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>HIV Prevalence By Race by Exposure Behavior Residing in the 405 and 580 Area Codes Dec 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	995	53.1	279	40.5	73	47.4	68	39.8
Injection Drug Use (IDU)	239	12.8	81	11.8	34	22.1	28	16.4
MSM & IDU	222	11.8	58	8.4	15	9.7	13	7.6
Hemophilia/Coagulation Disorder	12	0.6	1	0.1	0	0.0	0	0.0
Heterosexual Contact	171	9.1	84	12.2	16	10.4	20	11.7
Sex with IDU	73		30		5		9	
Sex with MSM	25		11		3		2	
Sex with Hemophiliac	2		0		0		1	
Sex with Transfusion Recipient	2		1		0		0	
Sex with HIV+ Risk Not Identified	69		42		8		8	
Received Transfusion or Tissue	14	0.7	10	1.5	1	0.6	3	1.8
Other/Risk not Reported or Identified	221	11.8	176	25.5	15	9.7	39	22.8
<b>Total</b>	<b>1,874</b>	<b>100.0</b>	<b>689</b>	<b>100.0</b>	<b>154</b>	<b>100.0</b>	<b>171</b>	<b>100.0</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 2,888 prevalent HIV infections in 405/580 Area Codes as of December 2003, 64.9% are white, 23.9% are black and 5.3% are American Indian. Within every racial/ethnic category, MSM is the most common exposure method ranging from ~40% for other to ~53% for white.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>HIV Prevalence By Race by Exposure Behavior Residing in the 918 Area Code Dec 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	708	59.5	143	42.6	73	47.4	30	40.5
Injection Drug Use (IDU)	134	11.3	33	9.8	29	18.8	11	14.9
MSM & IDU	128	10.8	24	7.1	25	16.2	5	6.8
Hemophilia/Coagulation Disorder	9	0.8	0	0.0	0	0.0	1	1.4
Heterosexual Contact	100	8.4	59	17.6	17	11.0	11	14.9
Sex with IDU	40		26		8		4	
Sex with MSM	9		2		4		1	
Sex with Hemophiliac	0		0		0		0	
Sex with Transfusion Recipient	0		2		0		0	
Sex with HIV+ Risk Not Identified	51		29		5		6	
Received Transfusion or Tissue	7	0.6	6	1.8	0	0.0	1	1.4
Other/Risk not Reported or Identified	104	8.7	71	21.1	10	6.5	15	20.3
<b>Total</b>	<b>1,190</b>	<b>100.0</b>	<b>336</b>	<b>100.0</b>	<b>154</b>	<b>100.0</b>	<b>74</b>	<b>100.0</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 1,754 prevalent HIV infections in 918 Area Code as of December 2003, 67.8% are white, 19.2% are black and 8.8% are American Indian. Within every racial/ethnic category, MSM is the most common exposure method ranging from ~41% for other to ~60% for white.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>HIV Prevalence By Race by Exposure Behavior Oklahoma City MSA Dec 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	827	57.7	225	42.1	48	46.2	56	45.2
Injection Drug Use (IDU)	163	11.4	65	12.1	22	21.2	19	15.3
MSM & IDU	170	11.9	49	9.2	11	10.6	10	8.1
Hemophilia/Coagulation Disorder	6	0.4	1	0.2	0	0.0	0	0.0
Heterosexual Contact	104	7.3	60	11.2	12	11.5	15	12.1
Sex with IDU	46		21		4		8	
Sex with MSM	17		9		3		1	
Sex with Hemophiliac	1		0		0		1	
Sex with Transfusion Recipient	2		1		0		0	
Sex with HIV+ Risk Not Identified	38		29		5		5	
Received Transfusion or Tissue	11	0.8	9	1.7	1	1.0	1	0.8
Other/Risk not Reported or Identified	152	10.6	126	23.6	10	9.6	23	18.5
<b>Total</b>	<b>1,433</b>	<b>100.0</b>	<b>535</b>	<b>100.0</b>	<b>104</b>	<b>100.0</b>	<b>124</b>	<b>100.0</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 2,197 prevalent HIV infections in Oklahoma City MSA as of December 2003, 65.2% are white, 24.4% are black and 4.7% are American Indian. Within every racial/ethnic category, MSM is the most common exposure method ranging from ~42% for black to ~58% for white.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>HIV Prevalence By Race by Exposure Behavior Tulsa MSA Dec 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	595	61.6	129	43.6	52	52.0	26	40.6
Injection Drug Use (IDU)	101	10.5	25	8.4	15	15.0	9	14.1
MSM & IDU	107	11.1	21	7.1	19	19.0	5	7.8
Hemophilia/Coagulation Disorder	5	0.5	0	0.0	0	0.0	1	1.6
Heterosexual Contact	76	7.9	51	17.2	9	9.0	9	14.1
Sex with IDU	30		23		4		3	
Sex with MSM	7		2		1		0	
Sex with Hemophiliac	0		0		0		0	
Sex with Transfusion Recipient	0		2		0		0	
Sex with HIV+ Risk Not Identified	39		24		4		6	
Received Transfusion or Tissue	4	0.4	5	1.7	0	0.0	0	0.0
Other/Risk not Reported or Identified	78	8.1	65	22.0	5	5.0	14	21.9
<b>Total</b>	<b>966</b>	<b>100.0</b>	<b>296</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>	<b>64</b>	<b>100.0</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 1,426 prevalent HIV infections in Tulsa MSA as of December 2003, 67.7% are white, 20.8% are black and 7% are American Indian. Within every racial/ethnic category, MSM is the most common exposure method ranging from ~41% for other to ~62% for white.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>HIV Prevalence By Race by Exposure Behavior Northeast Quadrant Dec 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	112	52.3	17	37.0	23	42.6	4	44.4
Injection Drug Use (IDU)	30	14.0	8	17.4	9	16.7	0	0.0
MSM & IDU	19	8.9	3	6.5	7	13.0	1	11.1
Hemophilia/Coagulation Disorder	2	0.9	0	0.0	0	0.0	0	0.0
Heterosexual Contact	20	9.3	6	13.0	8	14.8	2	22.2
Sex with IDU	8		3		3		2	
Sex with MSM	3		0		3		0	
Sex with Hemophiliac	0		0		0		0	
Sex with Transfusion Recipient	0		0		0		0	
Sex with HIV+ Risk Not Identified	9		3		2		0	
Received Transfusion or Tissue	3	1.4	1	2.2	0	0.0	1	11.1
Other/Risk not Reported or Identified	28	13.1	11	23.9	7	13.0	1	11.1
<b>Total</b>	<b>214</b>	<b>100.0</b>	<b>46</b>	<b>100.0</b>	<b>54</b>	<b>100.0</b>	<b>9</b>	<b>100.0</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 323 prevalent HIV infections in the Northeast Quadrant as of December 2003, 66.3% are white, 14.2% are black and 16.7% are American Indian. Within every racial/ethnic category, MSM is the most common exposure method ranging from ~37% for black to ~52% for white.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>HIV Prevalence            By Race by Exposure Behavior            Northwest Quadrant (including Enid MSA)            Dec 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Men who have sex with Men (MSM)	26	29.5	4	33.3	0	0.0	3	33.3
Injection Drug Use (IDU)	18	20.5	2	16.7	2	50.0	3	33.3
MSM & IDU	14	15.9	1	8.3	1	25.0	0	0.0
Hemophilia/Coagulation Disorder	0	0.0	0	0.0	0	0.0	0	0.0
Heterosexual Contact	14	15.9	3	25.0	0	0.0	0	0.0
Sex with IDU	6		1		0		0	
Sex with MSM	1		0		0		0	
Sex with Hemophiliac	0		0		0		0	
Sex with Transfusion Recipient	0		0		0		0	
Sex with HIV+ Risk Not Identified	7		2		0		0	
Received Transfusion or Tissue	0	0.0	0	0.0	0	0.0	0	0.0
Other/Risk not Reported or Identified	16	18.2	2	16.7	1	25.0	3	33.3
<b>Total</b>	<b>88</b>	<b>100.0</b>	<b>12</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>9</b>	<b>100.0</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 113 prevalent HIV infections in the Northwest Quadrant as of December 2003, 77.9% are white, 10.6% are black and 3.5% are American Indian. Within three of the four racial/ethnic category, MSM is the most common exposure method ranging from ~30% for white to 33% for black. Only in the American Indian was Injection Drug Use the most common exposure behavior.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>HIV Prevalence</b> <b>By Race by Exposure Behavior</b> <b>Southeast Quadrant (including Sequoyah County, FT Smith MSA)</b> <b>Dec 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Men who have sex with Men (MSM)	74	43.0%	9	37.5%	12	40.0%	2	22.2%
Injection Drug Use (IDU)	27	15.7%	3	12.5%	13	43.3%	4	44.4%
MSM & IDU	20	11.6%	3	12.5%	2	6.7%	0	0.0%
Hemophilia/Coagulation Disorder	5	2.9%	0	0.0%	0	0.0%	0	0.0%
Heterosexual Contact	25	14.5%	7	29.2%	2	6.7%	1	11.1%
Sex with IDU	11		3		1		1	
Sex with MSM	5		1		0		0	
Sex with Hemophiliac	1		0		0		0	
Sex with Transfusion Recipient	0		0		0		0	
Sex with HIV+ Risk Not Identified	8		3		0		0	
Received Transfusion or Tissue	2	1.2%	0	0.0%	0	0.0%	0	0.0%
Other/Risk not Reported or Identified	19	11.0%	2	8.3%	1	3.3%	2	22.2%
<b>Total</b>	<b>172</b>	<b>100.0%</b>	<b>24</b>	<b>100.0%</b>	<b>30</b>	<b>100.0%</b>	<b>9</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 235 prevalent HIV infections in the Southeast Quadrant in December 2003, 73.2% are white, 10.2% are black and 12.8% are American Indian. Within every racial/ethnic category, MSM is the most common exposure method ranging from ~22% for other to ~43% for American Indian.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>HIV Prevalence</b> <b>By Race by Exposure Behavior</b> <b>Southwest Quadrant (including Lawton MSA)</b> <b>Dec 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Men who have sex with Men (MSM)	72	37.5	38	33.9	12	57.1	7	23.3
Injection Drug Use (IDU)	32	16.7	11	9.8	3	14.3	5	16.7
MSM & IDU	22	11.5	5	4.5	0	0.0	1	3.3
Hemophilia/Coagulation Disorder	3	1.6	0	0.0	0	0.0	0	0.0
Heterosexual Contact	32	16.7	19	17.0	3	14.3	4	13.3
Sex with IDU	12		5		1		1	
Sex with MSM	1		1		0		0	
Sex with Hemophiliac	0		0		0		0	
Sex with Transfusion Recipient	0		0		0		0	
Sex with HIV+ Risk Not Identified	19		13		2		3	
Received Transfusion or Tissue	1	0.5	1	0.9	0	0.0	2	6.7
Other/Risk not Reported or Identified	30	15.6	38	33.9	3	14.3	11	36.7
<b>Total</b>	<b>192</b>	<b>100.0</b>	<b>112</b>	<b>100.0</b>	<b>21</b>	<b>100.0</b>	<b>30</b>	<b>100.0</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 355 prevalent HIV infections in the Southwest Quadrant as of May 2002, 54.1% are white, 31.5% are black and 5.9% are American Indian. Within all racial/ethnic category, MSM is the most common exposure method ranging from ~34% for black to ~57% for American Indian. When the exposure behavior has been adequately assessed, the large percentage attributed to Other/ Risk not reported or Identified should level out at a more representative number.

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## *Question 4*

### *Epidemiologic Profile: 2004*

#### ■ **Recent HIV Testing Data**

Looking at where people live who have sought and received HIV testing during the past five years gives us our best look at recent exposure behaviors. It is important to remember that this doesn't represent everyone who is at risk or infected in Oklahoma, but only those who have been tested. A myriad of reasons can contribute to why someone does or does not seek testing, including:

- ➔ Level of understanding about risk behaviors
- ➔ Cultural/gender sensitivity of prevention messages
- ➔ Availability of testing sites
- ➔ Fear of test results
- ➔ Confidentiality concerns
- ➔ Socioeconomic factors that may contribute to accessing health care in general
- ➔ Lack of family or peer support.

Below you will find data on persons seeking HIV testing at state-sponsored Counseling and Testing (C&T) sites. These data represent all persons seeking testing and **do not** reflect only positive results. Include are combined data from both confidential and anonymous sites. You will notice that the exposure behaviors listed from C&T data are slightly different and expanded from the data collected from HIV/AIDS case reports.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing                      By Race by Exposure Behavior                      State of Oklahoma                      Tested in 1999 through 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Men who have sex with Men (MSM)	5,330	19.0%	484	7.2%	664	23.9%	232	6.9%
Injection Drug Use (IDU)	4,765	16.9%	310	4.6%	384	13.8%	470	14.1%
MSM & IDU	759	2.7%	41	0.6%	115	4.1%	45	1.3%
Sex Partner at Risk	5,608	19.9%	1,201	17.9%	557	20.1%	573	17.1%
STD Diagnosis	1,271	4.5%	1,016	15.1%	138	5.0%	254	7.6%
Sex for Drugs or Money	170	0.6%	182	2.7%	18	0.6%	34	1.0%
Sex While Using Non-Injection Drug	3,445	12.3%	996	14.8%	424	15.3%	439	13.1%
Hemophilia or Blood Recipient	176	0.6%	56	0.8%	21	0.8%	20	0.6%
Victim of Sexual Assault	328	1.2%	86	1.3%	31	1.1%	37	1.1%
Health Care Exposure	318	1.1%	64	1.0%	20	0.7%	44	1.3%
Other/Risk not Reported or Identified	5,946	21.1%	2,274	33.9%	403	14.5%	1,197	35.8%
<b>Total</b>	<b>28,116</b>	<b>100.0%</b>	<b>6,710</b>	<b>100.0%</b>	<b>2,775</b>	<b>100.0%</b>	<b>3,345</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 40,946 HIV tests from state sponsored C&T sites, performed from 1999 through 2003 in the State of Oklahoma, 68.7% are white, 16.4% are black, 8.2% are other and 6.8% are American Indian. Within every racial/ ethnic category except American Indian, Sex Partner at Risk is the most common exposure method, for those reporting any risk, ranging from ~17% for other to ~20% for white. Within the American Indian racial group, the prevalent risk behavior was MSM. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing</b> <b>By Race by Exposure Behavior</b> <b>State of Oklahoma</b> <b>Tested in 1999 through 2003</b> <b>Males</b>								
Exposure Behavior	Race/Ethnicity							
	White		Black		Am. Indian		Other*	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	5,330	35.8%	484	16.9%	384	27.3%	512	29.3%
Injection Drug Use (IDU)	2,336	15.7%	197	6.9%	303	21.6%	97	5.5%
MSM & IDU	759	5.1%	41	1.4%	115	8.2%	45	2.6%
Sex Partner at Risk	1,541	10.3%	442	15.5%	166	11.8%	230	13.2%
STD Diagnosis	360	2.4%	382	13.4%	34	2.4%	90	5.1%
Sex for Drugs or Money	85	0.6%	83	2.9%	9	0.6%	28	1.6%
Sex While Using Non-Injection Drug	1,663	11.2%	384	13.4%	222	15.8%	215	12.3%
Hemophilia or Blood Recipient	58	0.4%	10	0.4%	9	0.6%	8	0.5%
Victim of Sexual Assault	34	0.2%	5	0.2%	3	0.2%	2	0.1%
Health Care Exposure	124	0.8%	18	0.6%	10	0.7%	11	0.6%
Other/Risk not Reported or Identified	2,603	17.5%	811	28.4%	150	10.7%	511	29.2%
<b>Total</b>	<b>14,893</b>	<b>100.0%</b>	<b>2,857</b>	<b>100.0%</b>	<b>1,405</b>	<b>100.0%</b>	<b>1,749</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

\* Unclassified males or females were not included in this table.

Of the 20,904 HIV tests in males from state sponsored C&T sites, performed from 1999 through 2003 in the State of Oklahoma, 71.2% are white, 13.7% are black, 8.4% are other and 6.7% are American Indian. Within every racial/ ethnic category except black, MSM is the most common exposure method, for those reporting any risk, ranging from ~27% for American Indian to ~36% for white. The most common exposure method in blacks tested at C&T sites was Other/risk not reported or identified. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing</b> <b>By Race by Exposure Behavior</b> <b>State of Oklahoma</b> <b>Tested in 1999 through 2003</b> <b>Females</b>								
Exposure Behavior	Race/Ethnicity							
	White		Black		Am. Indian		Other*	
	#	%	#	%	#	%	#	%
Injection Drug Use (IDU)	2,427	18.4%	113	2.9%	361	26.4%	93	5.8%
Sex Partner at Risk	4,065	30.8%	757	19.7%	391	28.5%	343	21.5%
STD Diagnosis	911	6.9%	633	16.4%	104	7.6%	164	10.3%
Sex for Drugs or Money	85	0.6%	99	2.6%	9	0.7%	6	0.4%
Sex While Using Non-Injection Drug	1,782	13.5%	612	15.9%	202	14.7%	224	14.0%
Hemophilia or Blood Recipient	118	0.9%	46	1.2%	12	0.9%	12	0.8%
Victim of Sexual Assault	294	2.2%	81	2.1%	28	2.0%	35	2.2%
Health Care Exposure	194	1.5%	46	1.2%	10	0.7%	33	2.1%
Other/Risk not Reported or Identified	3,341	25.3%	1,462	38.0%	253	18.5%	686	43.0%
<b>Total</b>	<b>13,217</b>	<b>100.0%</b>	<b>3,849</b>	<b>100.0%</b>	<b>1,370</b>	<b>100.0%</b>	<b>1,596</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

\* Unclassified males or females were not included in this table.

Of the 20,032 HIV tests in females from state sponsored C&T sites, performed from 1999 through 2003 in the State of Oklahoma, 66.0% are white, 19.2% are black, 8.0% are other and 6.8% are American Indian. Within the racial/ ethnic category except blacks and other\*, Sex Partner at Risk is the most common exposure method, for those reporting any risk, ranging from ~29% for American Indian to ~31% for white. Within blacks and other\*, Other/Risk not Reported or Identified is the most common exposure. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing                      By Race by Exposure Behavior                      Oklahoma City MSA                      Tested in 1999 through 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Men who have sex with Men (MSM)	2,766	27.8%	276	8.8%	145	20.1%	295	22.5%
Injection Drug Use (IDU)	1,395	14.0%	176	5.6%	108	14.9%	56	4.3%
MSM & IDU	327	3.3%	25	0.8%	39	5.4%	24	1.8%
Sex Partner at Risk	1,264	12.7%	494	15.8%	99	13.7%	181	13.8%
STD Diagnosis	221	2.2%	218	7.0%	14	1.9%	31	2.4%
Sex for Drugs or Money	73	0.7%	113	3.6%	9	1.2%	5	0.4%
Sex While Using Non-Injection Drug	945	9.5%	549	17.5%	112	15.5%	150	11.5%
Hemophilia or Blood Recipient	26	0.3%	13	0.4%	2	0.3%	3	0.2%
Victim of Sexual Assault	81	0.8%	24	0.8%	5	0.7%	13	1.0%
Health Care Exposure	72	0.7%	19	0.6%	5	0.7%	17	1.3%
Other/Risk not Reported or Identified	2,789	28.0%	1,224	39.1%	185	25.6%	534	40.8%
<b>Total</b>	<b>9,959</b>	<b>100.0%</b>	<b>3,131</b>	<b>100.0%</b>	<b>723</b>	<b>100.0%</b>	<b>1,309</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 15,122 HIV tests from state sponsored C&T sites, performed from 1999 through 2003 in the Oklahoma City MSA, 65.9% are white, 20.7% are black, 8.7% are other and 4.8% are American Indian. Within every racial/ ethnic category, Other/Risk not Reported or Identified is the most common exposure method, for those reporting any risk, ranging from ~26% for American Indian and other to ~41% for Other. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing</b> <b>By Race by Exposure Behavior</b> <b>Oklahoma City MSA</b> <b>Tested in 1999 through 2003</b> <b>Males</b>								
Exposure Behavior	Race/Ethnicity							
	White		Black		Am. Indian		Other*	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	2,766	44.6%	276	18.3%	145	33.6%	295	36.6%
Injection Drug Use (IDU)	750	12.1%	123	8.2%	53	12.3%	26	3.2%
MSM & IDU	327	5.3%	25	1.7%	39	9.0%	24	3.0%
Sex Partner at Risk	422	6.8%	232	15.4%	44	10.2%	75	9.3%
STD Diagnosis	77	1.2%	93	6.2%	4	0.9%	16	2.0%
Sex for Drugs or Money	23	0.4%	49	3.3%	2	0.5%	3	0.4%
Sex While Using Non-Injection Drug	427	6.9%	190	12.6%	60	13.9%	81	10.1%
Hemophilia or Blood Recipient	10	0.2%	3	0.2%	1	0.2%	1	0.1%
Victim of Sexual Assault	11	0.2%	1	0.1%	1	0.2%	2	0.2%
Health Care Exposure	30	0.5%	9	0.6%	2	0.5%	5	0.6%
Other/Risk not Reported or Identified	1,363	22.0%	505	33.5%	80	18.6%	277	34.4%
<b>Total</b>	<b>6,206</b>	<b>100.0%</b>	<b>1,506</b>	<b>100.0%</b>	<b>431</b>	<b>100.0%</b>	<b>805</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

\* Unclassified males or females were not included in this table.

Of the 8,948 HIV tests in males from state sponsored C&T sites, performed from 1999 through 2003 in the Oklahoma City MSA, 69.4% are white, 16.8% are black, 9% are other and 4.8% are American Indian. Within American Indian, white, and Other, MSM is the most common exposure method, for those reporting any risk, ranging from ~34% for American Indian to ~45% in white. Within black, Other/Risk not Reported or Identified is the most common behavior (~34%). Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing</b> <b>By Race by Exposure Behavior</b> <b>Oklahoma City MSA</b> <b>Tested in 1999 through 2003</b> <b>Females</b>								
Exposure Behavior	Race/Ethnicity							
	White		Black		Am. Indian		Other*	
	#	%	#	%	#	%	#	%
Injection Drug Use (IDU)	645	17.2%	53	3.3%	55	18.8%	30	6.0%
Sex Partner at Risk	841	22.4%	262	16.1%	55	18.8%	106	21.0%
STD Diagnosis	144	3.8%	125	7.7%	10	3.4%	15	3.0%
Sex for Drugs or Money	50	1.3%	64	3.9%	7	2.4%	2	0.4%
Sex While Using Non-Injection Drug	518	13.8%	359	22.1%	52	17.8%	69	13.7%
Hemophilia or Blood Recipient	16	0.4%	10	0.6%	1	0.3%	2	0.4%
Victim of Sexual Assault	70	1.9%	23	1.4%	4	1.4%	11	2.2%
Health Care Exposure	42	1.1%	10	0.6%	3	1.0%	12	2.4%
Other/Risk not Reported or Identified	1,426	38.0%	719	44.2%	105	36.0%	257	51.0%
<b>Total</b>	<b>3,752</b>	<b>100.0%</b>	<b>1,625</b>	<b>100.0%</b>	<b>292</b>	<b>100.0%</b>	<b>504</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

\* Unclassified males or females were not included in this table.

Of the 6,173 HIV tests in females from state sponsored C&T sites, performed from 1999 through 2003 in the Oklahoma City MSA, 60.8% are white, 26.3% are black, 8.2% are other and 4.7% are American Indian. Within every racial/ ethnic category, Other/Risk not Reported or Identified is the most common exposure method, for those reporting any risk, ranging from ~36% for American Indian to ~51% for Other\*. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing            By Race by Exposure Behavior            Tulsa MSA            Tested in 1999 through 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Men who have sex with Men (MSM)	1,973	19.5%	169	6.6%	169	13.9%	188	12.8%
Injection Drug Use (IDU)	1,690	16.7%	85	3.3%	324	26.6%	87	5.9%
MSM & IDU	301	3.0%	13	0.5%	61	5.0%	17	1.2%
Sex Partner at Risk	1,921	19.0%	410	16.1%	252	20.7%	247	16.8%
STD Diagnosis	666	6.6%	586	23.0%	86	7.1%	159	10.8%
Sex for Drugs or Money	73	0.7%	56	2.2%	5	0.4%	28	1.9%
Sex While Using Non-Injection Drug	1,730	17.1%	356	14.0%	177	14.6%	223	15.1%
Hemophilia or Blood Recipient	78	0.8%	37	1.5%	10	0.8%	11	0.7%
Victim of Sexual Assault	136	1.3%	52	2.0%	14	1.2%	22	1.5%
Health Care Exposure	119	1.2%	38	1.5%	8	0.7%	18	1.2%
Other/Risk not Reported or Identified	1,437	14.2%	743	29.2%	110	9.0%	474	32.2%
<b>Total</b>	<b>10,124</b>	<b>100.0%</b>	<b>2,545</b>	<b>100.0%</b>	<b>1,216</b>	<b>100.0%</b>	<b>1,474</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 15,359 HIV tests from state sponsored C&T sites, performed from 1999 through 2003 in the Tulsa MSA, 65.9% are white, 25.1% are black, 7.9% are American Indian and 9.6% are other. Within racial/ ethnic category, the most common exposure method for whites is MSM and for blacks, it is Other/Risk not Reported or Identified. Within the American Indian and Other racial/ethnic groups, IDU and Other/Risk not Reported or Identified respectively are the most common exposure method for those reporting any risk. In blacks seeking testing, an STD diagnosis is the secondary exposure behavior. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing</b> <b>By Race by Exposure Behavior</b> <b>Tulsa MSA</b> <b>Tested in 1999 through 2003</b> <b>Males</b>								
Exposure Behavior	Race/Ethnicity							
	White		Black		Am. Indian		Other*	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	1,973	37.9%	169	18.4%	169	30.1%	188	27.8%
Injection Drug Use (IDU)	814	15.7%	48	5.2%	137	24.4%	44	6.5%
MSM & IDU	301	5.8%	13	1.4%	61	10.9%	17	2.5%
Sex Partner at Risk	477	9.2%	100	10.9%	53	9.4%	93	13.8%
STD Diagnosis	170	3.3%	199	21.7%	19	3.4%	54	8.0%
Sex for Drugs or Money	49	0.9%	30	3.3%	4	0.7%	24	3.6%
Sex While Using Non-Injection Drug	818	15.7%	153	16.7%	76	13.5%	97	14.3%
Hemophilia or Blood Recipient	25	0.5%	6	0.7%	3	0.5%	3	0.4%
Victim of Sexual Assault	8	0.2%	3	0.3%	1	0.2%	0	0.0%
Health Care Exposure	53	1.0%	7	0.8%	5	0.9%	5	0.7%
Other/Risk not Reported or Identified	513	9.9%	190	20.7%	33	5.9%	151	22.3%
<b>Total</b>	<b>5,201</b>	<b>100.0%</b>	<b>918</b>	<b>100.0%</b>	<b>561</b>	<b>100.0%</b>	<b>676</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

\* Unclassified males or females were not included in this table.

Of the 7,356 HIV tests in males from state sponsored C&T sites, performed from 1999 through 2003 in the Tulsa MSA, 70.7% are white, 12.5% are black, 9.2.0% are other and 7.6% are American Indian. Within every racial/ ethnic category except black, MSM is the most common exposure method, for those reporting any risk, ranging from ~28% for other and American Indian to 38% for white. In blacks tested, STD diagnosis is the most common exposure behavior at ~21%. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing</b> <b>By Race by Exposure Behavior</b> <b>Tulsa MSA</b> <b>Tested in 1999 through 2003</b> <b>Females</b>								
Exposure Behavior	Race/Ethnicity							
	White		Black		Am. Indian		Other*	
	#	%	#	%	#	%	#	%
Injection Drug Use (IDU)	976	16.0%	58	3.6%	176	25.2%	44	8.9%
Sex Partner at Risk	1,444	29.3%	308	19.0%	199	30.4%	154	19.3%
STD Diagnosis	496	10.1%	387	23.8%	67	10.2%	105	13.2%
Sex for Drugs or Money	24	0.5%	26	1.6%	1	0.2%	4	0.5%
Sex While Using Non-Injection Drug	912	18.5%	203	12.5%	101	15.4%	126	15.8%
Hemophilia or Blood Recipient	53	1.1%	31	1.9%	7	1.1%	8	1.0%
Victim of Sexual Assault	128	2.6%	49	3.0%	13	2.0%	22	2.8%
Health Care Exposure	66	1.3%	31	1.9%	3	0.5%	13	1.6%
Other/Risk not Reported or Identified	923	18.8%	553	34.0%	77	11.8%	323	40.5%
Total	4,921	100.0%	1,625	100.0%	655	100.0%	798	100.0%

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

\* Unclassified males or females were not included in this table.

Of the 7,999 HIV tests in females from state sponsored C&T sites, performed from 1999 through 2003 in the Tulsa MSA, 61.5% are white, 20.3% are black, 10.0% are other and 8.2% are American Indian. Within every racial/ ethnic category except black and other, Sex Partner at Risk is the most common exposure method, for those reporting any risk, ranging from ~29% for white to ~30% for American Indian. In blacks and other race tested, Other/Risk not Reported or Identified is the most common exposure behavior at ~34% and ~41% respectively. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing                      By Race by Exposure Behavior                      Northeast Quadrant                      Tested in 1999 through 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Men who have sex with Men (MSM)	276	10.7%	15	5.4%	45	9.9%	14	12.0%
Injection Drug Use (IDU)	454	17.6%	13	4.7%	131	28.9%	11	9.4%
MSM & IDU	32	1.2%	0	0.0%	6	1.3%	2	1.7%
Sex Partner at Risk	674	26.1%	70	25.4%	96	21.2%	24	20.5%
STD Diagnosis	105	4.1%	39	14.1%	19	4.2%	10	8.5%
Sex for Drugs or Money	11	0.4%	5	1.8%	1	0.2%	0	0.0%
Sex While Using Non-Injection Drug	316	12.2%	33	12.0%	84	18.5%	11	9.4%
Hemophilia or Blood Recipient	16	0.6%	2	0.7%	4	0.9%	1	0.9%
Victim of Sexual Assault	35	1.4%	4	1.4%	6	1.3%	0	0.0%
Health Care Exposure	39	1.5%	2	0.7%	5	1.1%	2	1.7%
Other/Risk not Reported or Identified	624	24.2%	93	33.7%	56	12.4%	42	35.9%
<b>Total</b>	<b>2,582</b>	<b>100.0%</b>	<b>276</b>	<b>100.0%</b>	<b>453</b>	<b>100.0%</b>	<b>117</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 3,428 HIV tests from state sponsored C&T sites, performed from 1999 through 2003 in the Northeast Quadrant of Oklahoma, 75.3% are white, 8.1% are black, 3.4% are other and 13.2% are American Indian. Within black and other racial/ ethnic categories, Other/Risk not Reported or Identified is the most common exposure method, for those reporting any risk, at ~34% and 3~36% respectively. Within white and American Indian racial/ethnic category, Sex Partner at Risk and IDU are the most common exposure method, for those reporting any risk ranging from ~26% for white to ~29% for American Indian respectively. Only in American Indians tested was Sex while using non-injection drug the most common exposure behavior at ~29%. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing</b> <b>By Race by Exposure Behavior</b> <b>Northeast Quadrant</b> <b>Tested in 1999 through 2003</b> <b>Males</b>								
Exposure Behavior	Race/Ethnicity							
	White		Black		Am. Indian		Other*	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	276	23.3%	15	12.8%	45	20.6%	14	23.7%
Injection Drug Use (IDU)	212	17.9%	8	6.8%	61	28.0%	6	10.2%
MSM & IDU	32	2.7%	0	0.0%	6	2.8%	2	3.4%
Sex Partner at Risk	184	15.5%	25	21.4%	30	13.8%	7	11.9%
STD Diagnosis	27	2.3%	16	13.7%	5	2.3%	5	8.5%
Sex for Drugs or Money	7	0.6%	0	0.0%	1	0.5%	0	0.0%
Sex While Using Non-Injection Drug	171	14.4%	17	14.5%	50	22.9%	6	10.2%
Hemophilia or Blood Recipient	7	0.6%	0	0.0%	2	0.9%	1	1.7%
Victim of Sexual Assault	3	0.3%	1	0.9%	1	0.5%	0	0.0%
Health Care Exposure	12	1.0%	0	0.0%	2	0.9%	1	1.7%
Other/Risk not Reported or Identified	256	21.6%	35	29.9%	15	6.9%	17	28.8%
<b>Total</b>	<b>1,187</b>	<b>100.0%</b>	<b>117</b>	<b>100.0%</b>	<b>218</b>	<b>100.0%</b>	<b>59</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

\* Unclassified males or females were not included in this table.

Of the 1,581 HIV tests in males from state sponsored C&T sites, performed from 1999 through 2003 in the Northeast Quadrant of Oklahoma, 75.1% are white, 7.4% are black, 3.7% are other and 13.8% are American Indian. Black and other racial/ ethnic category has the same exposure behavior in common, Other/Risk not reported or Identified is the most common behavior in black tested (~29.9%), and others tested (~28.8%), Sex while using non-injection drugs is the most common behavior in American Indians tested (~28%), and MSM is the most common behavior in white tested (~28%). Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing</b> <b>By Race by Exposure Behavior</b> <b>Northeast Quadrant</b> <b>Tested in 1999 through 2003</b> <b>Females</b>								
Exposure Behavior	Race/Ethnicity							
	White		Black		Am. Indian		Other*	
	#	%	#	%	#	%	#	%
Injection Drug Use (IDU)	241	17.3%	5	3.2%	70	29.8%	5	8.6%
Sex Partner at Risk	489	35.1%	45	28.5%	66	28.1%	17	29.3%
STD Diagnosis	78	5.6%	23	14.6%	14	6.0%	5	8.6%
Sex for Drugs or Money	4	0.3%	5	3.2%	0	0.0%	0	0.0%
Sex While Using Non-Injection Drug	145	10.4%	16	10.1%	34	14.5%	5	8.6%
Hemophilia or Blood Recipient	9	0.6%	2	1.3%	2	0.9%	0	0.0%
Victim of Sexual Assault	32	2.3%	3	1.9%	5	2.1%	0	0.0%
Health Care Exposure	27	1.9%	2	1.3%	3	1.3%	1	1.7%
Other/Risk not Reported or Identified	367	26.4%	57	36.1%	41	17.4%	25	43.1%
<b>Total</b>	<b>1,392</b>	<b>100.0%</b>	<b>158</b>	<b>100.0%</b>	<b>235</b>	<b>100.0%</b>	<b>58</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

\* Unclassified males or females were not included in this table.

Of the 1,392 HIV tests in females from state sponsored C&T sites, performed from 1999 through 2003 in the Northeast Quadrant of Oklahoma, 75.5% are white, 8.6% are black, 3.1% are other and 12.8% are American Indian. Partner at Risk is the most common behavior in whites tested (~35.1%), IDU diagnosis is the most common behavior in American Indians tested (~29.8%), Other/Risk not Reported or Identified is the most common risk behavior in blacks and others tested with ~36.1% and ~43.1% respectively. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing            By Race by Exposure Behavior            Northwest Quadrant (including Enid MSA)            Tested in 1999 through 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Men who have sex with Men (MSM)	72	7.5%	4	5.3%	4	8.3%	3	4.0%
Injection Drug Use (IDU)	197	20.6%	2	2.6%	11	22.9%	5	6.7%
MSM & IDU	15	1.6%	1	1.3%	4	8.3%	2	2.7%
Sex Partner at Risk	187	19.6%	25	32.9%	7	14.6%	18	24.0%
STD Diagnosis	42	4.4%	18	23.7%	1	2.1%	6	8.0%
Sex for Drugs or Money	4	0.4%	0	0.0%	1	2.1%	1	1.3%
Sex While Using Non-Injection Drug	64	6.7%	4	5.3%	9	18.8%	6	8.0%
Hemophilia or Blood Recipient	18	1.9%	0	0.0%	2	4.2%	2	2.7%
Victim of Sexual Assault	23	2.4%	0	0.0%	0	0.0%	0	0.0%
Health Care Exposure	17	1.8%	0	0.0%	0	0.0%	1	1.3%
Other/Risk not Reported or Identified	317	33.2%	22	28.9%	9	18.8%	31	41.3%
<b>Total</b>	<b>956</b>	<b>100.0%</b>	<b>76</b>	<b>100.0%</b>	<b>48</b>	<b>100.0%</b>	<b>75</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 1,155 HIV tests in from state sponsored C&T sites, performed from 1999 through 2003 in the Northwest Quadrant (including Enid MSA) of Oklahoma, 82.8% are white, 6.6% are black, 6.5% are other and 4.2% are American Indian. Within the racial/ ethnic category for White and other racial/ethnic groups, Other/Risk not Reported or Identified is the most common exposure method, for those reporting any risk, ranging from ~33.2% for whites to ~41.3% for others. In the American Indians and blacks tested, the most common exposure behaviors are IDU (~22.9%) and Sex Partner at Risk (~32.9) respectively. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing</b> <b>By Race by Exposure Behavior</b> <b>Northwest Quadrant (including Enid MSA)</b> <b>Tested in 1999 through 2003</b> <b>Males</b>								
Exposure Behavior	Race/Ethnicity							
	White		Black		Am. Indian		Other*	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	72	17.7%	4	12.5%	4	14.8%	3	8.1%
Injection Drug Use (IDU)	87	21.4%	1	3.1%	2	7.4%	2	5.4%
MSM & IDU	15	3.7%	1	3.1%	4	14.8%	2	5.4%
Sex Partner at Risk	40	9.9%	4	12.5%	2	7.4%	7	18.9%
STD Diagnosis	11	2.7%	9	28.1%	0	0.0%	0	0.0%
Sex for Drugs or Money	1	0.2%	0	0.0%	0	0.0%	1	2.7%
Sex While Using Non-Injection Drug	29	7.1%	1	3.1%	8	29.6%	5	13.5%
Hemophilia or Blood Recipient	7	1.7%	0	0.0%	1	3.7%	2	5.4%
Victim of Sexual Assault	2	0.5%	0	0.0%	0	0.0%	0	0.0%
Health Care Exposure	6	1.5%	0	0.0%	0	0.0%	0	0.0%
Other/Risk not Reported or Identified	136	33.5%	12	37.5%	6	22.2%	15	40.5%
Total	406	100.0%	32	100.0%	27	100.0%	37	100.0%

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 502 HIV tests in males from state sponsored C&T sites, performed from 1999 through 2003 in the Northwest Quadrant (including Enid MSA) of Oklahoma, 80.9% are white, 6.4% are black, 7.4% are other and 5.4% are American Indian. All but American Indian racial/ethnic group reported Other/Risk not Reported or Identified as the common exposure behavior. Within the American Indians, Sex While Using Non-Injection Drug is the most common exposure behavior in those tested (~29.6%). Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing            By Race by Exposure Behavior            Northwest Quadrant (including Enid MSA)            Tested in 1999 through 2003            Females</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Injection Drug Use (IDU)	110	20.0%	1	2.3%	9	42.9%	3	7.9%
Sex Partner at Risk	147	26.7%	21	47.7%	5	23.8%	11	28.9%
STD Diagnosis	31	5.6%	9	20.5%	1	4.8%	6	15.8%
Sex for Drugs or Money	3	0.5%	0	0.0%	1	4.8%	0	0.0%
Sex While Using Non-Injection Drug	35	6.4%	3	6.8%	1	4.8%	1	2.6%
Hemophilia or Blood Recipient	11	2.0%	0	0.0%	1	4.8%	0	0.0%
Victim of Sexual Assault	21	3.8%	0	0.0%	0	0.0%	0	0.0%
Health Care Exposure	11	2.0%	0	0.0%	0	0.0%	1	2.6%
Other/Risk not Reported or Identified	181	32.9%	10	22.7%	3	14.3%	16	42.1%
<b>Total</b>	<b>550</b>	<b>100.0%</b>	<b>44</b>	<b>100.0%</b>	<b>21</b>	<b>100.0%</b>	<b>38</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 653 HIV tests in females from state sponsored C&T sites, performed from 1999 through 2003 in the Northwest Quadrant (including Enid MSA) of Oklahoma, 84.2% are white, 6.7% are black, 5.8% are other and 3.2% are American Indian. Within white and other racial/ ethnic category, Other/Risk not Reported or Identified is the most common exposure method, for those reporting any risk, ranging from ~32% for American Indians to ~42.1% for other races. Sex Partner at Risk ~47.7% and IDU ~42.9% are the most common exposure behavior in blacks and American Indians respectively. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing</b> <b>By Race by Exposure Behavior</b> <b>Southeast Quadrant (including Sequoyah County, Ft. Smith, AR MSA)</b> <b>Tested in 1999 through 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Men who have sex with Men (MSM)	123	5.1%	3	1.9%	8	3.8%	4	4.5%
Injection Drug Use (IDU)	573	24.0%	12	7.5%	67	31.8%	5	5.6%
MSM & IDU	49	2.1%	0	0.0%	4	1.9%	0	0.0%
Sex Partner at Risk	947	39.6%	86	53.4%	78	37.0%	29	32.6%
STD Diagnosis	77	3.2%	13	8.1%	8	3.8%	2	2.2%
Sex for Drugs or Money	3	0.1%	2	1.2%	1	0.5%	0	0.0%
Sex While Using Non-Injection Drug	152	6.4%	13	8.1%	17	8.1%	6	6.7%
Hemophilia or Blood Recipient	24	1.0%	0	0.0%	2	0.9%	2	2.2%
Victim of Sexual Assault	28	1.2%	2	1.2%	1	0.5%	0	0.0%
Health Care Exposure	40	1.7%	1	0.6%	1	0.5%	4	4.5%
Other/Risk not Reported or Identified	373	15.6%	29	18.0%	24	11.4%	37	41.6%
<b>Total</b>	<b>2,389</b>	<b>100.0%</b>	<b>161</b>	<b>100.0%</b>	<b>211</b>	<b>100.0%</b>	<b>89</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 2,850 HIV tests from state sponsored C&T sites, performed from 1999 through 2003 in the Southeast Quadrant (including Sequoyah County, Ft. Smith, AR MSA) of Oklahoma, 83.8% are white, 5.6% are black, 3.1% are other and 7.4% are American Indian. Within every racial/ ethnic category except other races, Sex Partner at Risk is the most common exposure method, for those reporting any risk, ranging from ~37% for American Indians to ~53.4% for black. For other races, the most common exposure behavior is Other/Risk not Reported or Identified. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing</b> <b>By Race by Exposure Behavior</b> <b>Southeast Quadrant (including Sequoyah County, Ft. Smith, AR MSA)</b> <b>Tested in 1999 through 2003</b> <b>Males</b>								
Exposure Behavior	Race/Ethnicity							
	White		Black		Am. Indian		Other*	
	#	%	#	%	#	%	#	%
Men who have sex with Men (MSM)	123	13.3%	3	5.3%	8	7.8%	4	9.5%
Injection Drug Use (IDU)	221	23.8%	6	10.5%	33	32.4%	1	2.4%
MSM & IDU	49	5.3%	0	0.0%	4	3.9%	0	0.0%
Sex Partner at Risk	249	26.8%	29	50.9%	30	29.4%	10	23.8%
STD Diagnosis	21	2.3%	4	7.0%	2	2.0%	2	4.8%
Sex for Drugs or Money	2	0.2%	0	0.0%	1	1.0%	0	0.0%
Sex While Using Non-Injection Drug	82	8.8%	5	8.8%	11	10.8%	5	11.9%
Hemophilia or Blood Recipient	4	0.4%	0	0.0%	2	2.0%	1	2.4%
Victim of Sexual Assault	4	0.4%	0	0.0%	0	0.0%	0	0.0%
Health Care Exposure	17	1.8%	1	1.8%	1	1.0%	0	0.0%
Other/Risk not Reported or Identified	156	16.8%	9	15.8%	10	9.8%	19	45.2%
<b>Total</b>	<b>928</b>	<b>100.0%</b>	<b>57</b>	<b>100.0%</b>	<b>102</b>	<b>100.0%</b>	<b>42</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 1,129 HIV tests in males from state sponsored C&T sites, performed from 1999 through 2003 in the Southeast Quadrant (including Sequoyah County, Ft. Smith, AR MSA) of Oklahoma, 82.2% are white, 5.0% are black, 3.7% are other and 9.0% are American Indian. Within every the white and black racial/ ethnic category, Sex Partner at Risk is the most common exposure method, for those reporting any risk, ranging from ~26.8% for white to ~50.9% for black. In other races and American Indians tested, Other/Risk not Reported or Identified ~45.2% and IDU ~32.4% is the most common exposure behavior correspondingly. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing</b> <b>By Race by Exposure Behavior</b> <b>Southeast Quadrant (including Sequoyah County, Ft. Smith, AR MSA)</b> <b>Tested in 1999 through 2003</b> <b>Females</b>								
Exposure Behavior	Race/Ethnicity							
	White		Black		Am. Indian		Other*	
	#	%	#	%	#	%	#	%
Injection Drug Use (IDU)	352	24.1%	6	5.8%	34	31.2%	4	8.5%
Sex Partner at Risk	698	47.8%	57	54.8%	48	44.0%	19	40.4%
STD Diagnosis	56	3.8%	9	8.7%	6	5.5%	0	0.0%
Sex for Drugs or Money	1	0.1%	2	1.9%	0	0.0%	0	0.0%
Sex While Using Non-Injection Drug	70	4.8%	8	7.7%	6	5.5%	1	2.1%
Hemophilia or Blood Recipient	20	1.4%	0	0.0%	0	0.0%	1	2.1%
Victim of Sexual Assault	24	1.6%	2	1.9%	1	0.9%	0	0.0%
Health Care Exposure	23	1.6%	0	0.0%	0	0.0%	4	8.5%
Other/Risk not Reported or Identified	217	14.9%	20	19.2%	14	12.8%	18	38.3%
<b>Total</b>	<b>1,461</b>	<b>100.0%</b>	<b>104</b>	<b>100.0%</b>	<b>109</b>	<b>100.0%</b>	<b>47</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 1,721 HIV tests in females from state sponsored C&T sites, performed from 1999 through 2003 in the Southeast Quadrant (including Sequoyah County, Ft. Smith, AR MSA) of Oklahoma, 84.9% are white, 6.0% are black, 2.7% are other and 6.0% are American Indian. Within every racial/ethnic category, Sex Partner at Risk is the most common exposure method, for those reporting any risk, ranging from ~40% for other to ~55% for black. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing                      By Race by Exposure Behavior                      Southwest Quadrant (including Lawton MSA)                      Tested in 1999 through 2003</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Men who have sex with Men (MSM)	105	5.3%	16	3.3%	13	11.5%	6	2.3%
Injection Drug Use (IDU)	440	22.1%	22	4.5%	22	19.5%	26	10.1%
MSM & IDU	32	1.6%	2	0.4%	1	0.9%	0	0.0%
Sex Partner at Risk	587	29.5%	108	22.2%	24	21.2%	73	28.3%
STD Diagnosis	153	7.7%	139	28.6%	10	8.8%	41	15.9%
Sex for Drugs or Money	5	0.3%	5	1.0%	1	0.9%	0	0.0%
Sex While Using Non-Injection Drug	229	11.5%	38	7.8%	20	17.7%	40	15.5%
Hemophilia or Blood Recipient	13	0.7%	4	0.8%	1	0.9%	1	0.4%
Victim of Sexual Assault	24	1.2%	4	0.8%	3	2.7%	2	0.8%
Health Care Exposure	30	1.5%	4	0.8%	0	0.0%	2	0.8%
Other/Risk not Reported or Identified	374	18.8%	144	29.6%	18	15.9%	67	26.0%
<b>Total</b>	<b>1,992</b>	<b>100.0%</b>	<b>486</b>	<b>100.0%</b>	<b>113</b>	<b>100.0%</b>	<b>258</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 2,849 HIV tests from state sponsored C&T sites, performed from 1999 through 2003 in the Southwestern Quadrant (including Lawton MSA) of Oklahoma, 69.9% are white, 17.1% are black, 9.1% are other and 4.0% are American Indian. Within all but the black racial/ ethnic category, Sex Partner at Risk is the most common exposure method, for those reporting any risk, ranging from ~21% in American Indian to ~30 in white tested. For blacks tested, an STD diagnosis (~28.6%) was the most common exposure behavior. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing            By Race by Exposure Behavior            Southwest Quadrant (including Lawton MSA)            Tested in 1999 through 2003            Males</b>								
<b>Exposure Behavior</b>	<b>Race/Ethnicity</b>							
	<b>White</b>		<b>Black</b>		<b>Am. Indian</b>		<b>Other*</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Men who have sex with Men (MSM)	105	11.6%	16	7.7%	13	21.0%	6	4.9%
Injection Drug Use (IDU)	245	27.1%	11	5.3%	16	25.8%	18	14.8%
MSM & IDU	32	3.5%	2	1.0%	1	1.6%	0	0.0%
Sex Partner at Risk	160	17.7%	47	22.6%	7	11.3%	37	30.3%
STD Diagnosis	51	5.6%	58	27.9%	4	6.5%	13	10.7%
Sex for Drugs or Money	2	0.2%	3	1.4%	1	1.6%	0	0.0%
Sex While Using Non-Injection Drug	133	14.7%	16	7.7%	15	24.2%	20	16.4%
Hemophilia or Blood Recipient	4	0.4%	1	0.5%	0	0.0%	0	0.0%
Victim of Sexual Assault	6	0.7%	0	0.0%	0	0.0%	0	0.0%
Health Care Exposure	6	0.7%	1	0.5%	0	0.0%	0	0.0%
Other/Risk not Reported or Identified	160	17.7%	53	25.5%	5	8.1%	28	23.0%
<b>Total</b>	<b>904</b>	<b>100.0%</b>	<b>208</b>	<b>100.0%</b>	<b>62</b>	<b>100.0%</b>	<b>122</b>	<b>100.0%</b>

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 1,296 HIV tests in males from state sponsored C&T sites, performed from 1999 through 2003 in the Southwestern Quadrant (including Lawton MSA) of Oklahoma, 69.8% are white, 16.0% are black, 9.4% are other and 4.8% are American Indian. IDU is the most common exposure behavior in whites (~27.1%) and American Indians (~25.8%) tested. STD diagnosis is the most common exposure behavior in blacks tested (~27.9%). Sex Partner at Risk is the most common behavior in other races tested (~30.3%). Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

**Question 4**  
**Epidemiologic Profile: 2004**

<b>Persons Seeking HIV Counseling and Testing                      By Race by Exposure Behavior                      Southwest Quadrant (including Lawton MSA)                      Tested in 1999 through 2003                      Females</b>								
Exposure Behavior	Race/Ethnicity							
	White		Black		Am. Indian		Other*	
	#	%	#	%	#	%	#	%
Injection Drug Use (IDU)	195	17.9%	11	4.0%	6	11.8%	8	5.9%
Sex Partner at Risk	427	39.2%	61	22.0%	17	33.3%	36	26.5%
STD Diagnosis	102	9.4%	80	28.9%	6	11.8%	28	20.6%
Sex for Drugs or Money	3	0.3%	2	0.7%	0	0.0%	0	0.0%
Sex While Using Non-Injection Drug	96	8.8%	22	7.9%	5	9.8%	20	14.7%
Hemophilia or Blood Recipient	9	0.8%	3	1.1%	1	2.0%	1	0.7%
Victim of Sexual Assault	18	1.7%	4	1.4%	3	5.9%	2	1.5%
Health Care Exposure	24	2.2%	3	1.1%	0	0.0%	2	1.5%
Other/Risk not Reported or Identified	214	19.7%	91	32.9%	13	25.5%	39	28.7%
Total	1,088	100.0%	277	100.0%	51	100.0%	136	100.0%

\* Other refers to Hispanic, Asian/Pacific Islanders, and Persons of Mixed Race and Unknown.

Of the 1,552 HIV tests in females from state sponsored C&T sites, performed from 1999 through 2003 in the Southwestern Quadrant (including Lawton MSA) of Oklahoma, 70.1% are white, 17.8% are black, 8.8% are other and 3.3% are American Indian. Within every racial/ ethnic category except one, Sex Partner at Risk is the most common exposure method, for those reporting any risk, ranging from ~33% for American Indian to ~39.2% for white. In blacks and other races tested, the most common exposure behavior was Other/Risk not reported or Identified with ~32.9% for black and ~28.7% for other. Once adequate risk assessment has been performed for those persons infected with HIV, risk is typically reclassified into one of the traditional risk behaviors.

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**Question 4**

***Epidemiologic Profile: 2004***

**Summarize key findings from Question 4.3**

- ◆ The majority of HIV cases reported lived in the Oklahoma City and Tulsa areas.
- ◆ The proportion of persons of color reported each year by region of the state was neither stable nor predictable.
- ◆ The most frequent exposure behavior in those testing positive for HIV for all racial/ethnic categories is MSM.
- ◆ However when reviewing the persons seeking testing at C&T sites, the most common exposure behavior varied greatly by race/ethnicity and by region of the state.

**Conclusions**

HIV and AIDS have impacted every region of the state. The urban areas have had the largest number of cases and the largest proportion of cases, by both percentage and rate per 100,000 population. Although more whites have been diagnosed and reported with HIV/AIDS, blacks have experienced rates of HIV and AIDS are 3 ¼ to 8 times greater than rates observed in whites, hence the impact has been more substantial within in their communities.

With the sheer number and rate per 100,000 of sexually transmitted diseases diagnosed each year in Oklahomans age 15-24, these individuals, of all racial/ethnic groups and gender, are placing themselves at risk of becoming HIV infected through unprotected sexual contact. Although these ages have not been the bulk of cases reported with either HIV or AIDS, if an individual or individuals in their sexual networks ever become infected with HIV, Oklahoma could encounter a large increase. Somehow more of these teens and young adults have to understand that by having unprotected sex, they are placing themselves at risk of not only HIV but also other STDs and unplanned pregnancies.

**Adjustment** A summarizing procedure for a statistical measure in which the effects of differences in composition of the populations being compared have been minimized by statistical methods. Examples are adjustment by regression analysis and by standardization. Adjustment often is performed on rates or relative risks, commonly because of differing age distributions in populations that are being compared. The mathematical procedure commonly used to adjust rates for age difference is direct or indirect standardization (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Audit** An examination or review that establishes the extent to which a condition, process, or performance conforms to predetermined standards or criteria (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Behavioral Risk Factor** A characteristic or behavior that is associated with increased probability of a specific outcome; the term does not imply a causal relationship (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Blinded study** A study in which the observer(s) and/or the subjects are kept ignorant of the group to which the subjects are assigned, as in an experiment, or of the population from which the subjects come, as in a non-experimental study. When both observer and subjects are kept ignorant, we refer to a double-blinded study. If the statistical analysis is also done in ignorance of the group to which the subjects belong, the study is described as triple-blind. The intent of keeping subjects and/or investigators blinded, i.e., unaware of knowledge that might introduce a bias, is to eliminate the effects of such biases. To avoid confusion about the meaning of the word “blind” some authors prefer to describe such studies as “masked” (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Census** An enumeration of a population, originally intended for purposes of taxation and military service. Census enumeration of a population usually records identities of all persons in every place of residence, with age, or birth date, sex, occupation, national origin, language, marital status, income, and relationship to head of household, in addition to information on the dwelling place (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Census Tract** An area for which details of population structure is separately tabulated at a periodic census; normally it is the smallest unit of analysis of (published) census tabulations. Census tracts are chosen because they have well-defined boundaries, sometimes the same as local political jurisdictions, sometimes defined by conspicuous geographical features such as main roads, rivers. In urban areas census tracts may be further subdivided, e.g. into city blocks, but published tables do not contain details to this level (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Chart** The medical dossier of a patient (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Clustering** A closely grouped series of events or cases of a disease, or other health-related phenomena with well-defined distribution patterns, in relation to time or place or both. The term is

normally used to describe aggregation of relatively uncommon events or diseases, e.g., leukemia, multiple sclerosis (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Community** A group of individuals organized into a unit, or manifesting some unifying trait or common interest; loosely, the locality or catchment area population for which a service is provided, or more broadly, the state, nation or body politic (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Criterion** A principle or standard by which something is judged (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Death Rate** An estimate of the proportion of a population that dies during a specified period. The numerator is the number of persons dying during the period; the denominator is the size of the population, usually estimated as the mid-year population. This rate is an estimate of the person-time death rate, i.e., the death rate per 10<sup>n</sup> person-years. If the rate is low, it is also a good estimate of the cumulative death rate. This rate is also called the crude death rate (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Denominator** The lower portion of a fraction used to calculate a rate or ratio (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Diagnosis** the process of determining health status and factors responsible for producing it; may be applied to an individual, family, group or community. The term is applied both to the process of determination and to its findings (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Distribution** The complete summary of the frequencies of the values or categories of a measurement made on a group of persons. The distribution tells either how many or what proportion of the group was found to have each value (or each range of values) out of all the possible values that the quantitative measure can have (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Effectiveness** The extent to which a specific intervention, procedure, regimen, or service when deployed in the field, does what is intended to do for a defined population (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Endemic Disease** The constant presence of a disease or infectious agent within a given geographic area or population group; may also refer to the usual prevalence of a given disease within such area or group (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Epidemic** [from the Greek *epi* (upon), *demos* (people)] The occurrence in a community or region of cases of an illness, specific health-related behavior or other health-related event clearly in excess of normal expectancy. The community or region, and the period in which the cases occur, are specified precisely (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Epidemic Curve** A graphic plotting of the distribution of cases by time of onset (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Epidemiology** the study of the distribution and determinants of health-related states or events in specified populations, and the application of this study to control health problems (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Estimate** A measure or a statement about the value of some quantity is said to be an estimate if it is known, believed, or suspected to incorporate some degree of error (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Ethnic group** A social group characterized by a distinctive social and cultural tradition, maintained within the group from generation to generation, a common history and origin, and a sense of identification with the group. Members of the group have distinctive features in their life, shared experiences, and often a common genetic heritage. These features may be reflected in their health and disease experience (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Evaluation** A process that attempts to determine as systematically and objectively as possible the relevance, effectiveness, and impact of activities in the light of their objectives. Several varieties of evaluations can be distinguished, e.g., evaluation of structure, process and outcome (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Follow-up** Observation over a period of time of an individual, group, or initially defined population whose appropriate characteristics have been assessed in order to observe changes in health status or health-related variables (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**“Gold Standard”** A jargon term, used to describe a method, procedure, or measurement that is widely accepted as being the best available. Often used to compare with new methods (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**HAART** An acronym for Highly Active Anti-Retroviral Therapy. Also termed combination therapy or the HIV cocktail. Includes nucleoside and non-nucleoside antilogs and protease inhibitors or any combination of these drugs.

**ICD** International Classification of Disease. The classification of specific conditions and groups of conditions determined by an internationally representative group of experts who advise the World Health Organization (WHO), which publishes the complete list in a periodically revised book. Every disease entity is assigned a number. AIDS and HIV are classified from 042.0-042.9 (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Incidence** The number of instances of illness commencing, or of persons falling ill, during a given period in a specific population. More generally, the number of new events, e.g., new cases of a disease in a defined population, within a specified period of time. The term incidence is sometimes

wrongly used to denote incidence rate (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Incidence Rate** The rate at which new events occur in a population. The numerator is the number of new events that occur in defined period; the denominator is the population at risk of experiencing the event during this period, sometimes expressed as person-time (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Informed Consent** Voluntary consent given by a subject or by a person responsible for a subject (e.g., a parent or guardian) for participation in an investigation, immunization program, treatment regimen, etc., after being informed of the purpose, methods, procedures, benefits and risks. Awareness of risk is necessary for any subject to make an informed choice. The term also refers to consent for medical care (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Life Events** Changes or disruptions in the pattern of living that may be associated with or produce changes in health. The relationship of “life stress” and “emotional stress” to onset of several kinds of serious chronic disease such as coronary heart disease and hypertension has been the subject of epidemiologic studies (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Life Style** The set of habits and customs that is influenced, modified, encouraged or constrained by the lifelong process of socialization. These habits and customs include use of substances such as alcohol, tobacco, tea, coffee; dietary habits, exercise, etc., which have important implications for health and are often the subject of epidemiologic investigations (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Measurement of Association** A quantity that expresses the strength of association between variables. Commonly used measures of association are differences between means, proportions or rates, the rate ratio, the odds ratio, and correlation and regression coefficients (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Misclassification** The erroneous classification of an individual, a value, or an attribute into a category other than that to which it should be assigned. The probability of misclassification may be the same in all study groups (non-differential) or may vary between groups (differential) (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Morbidity** Any departure, subjective or objective, from the physiological or psychological well-being. In this sense, sickness, illness and morbid condition are similarly defined and synonymous (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Natural History of Disease** The course of a disease from onset (inception) to resolution. Many diseases have certain well-defined stages that, taken all together, are referred to the natural history in question. These stages are as follows: 1) stage of pathological onset, 2) pre-symptomatic stage, 3) clinically manifests disease. Detection and intervention can alter the natural history of a disease.

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The term has also been used to mean “descriptive epidemiology of disease” (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Numerator** The upper portion of a fraction used to calculate a rate or a ratio (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Opportunistic Infection** Infection with organism(s) that are normally innocuous, e.g., commensals in the human, but become pathogenic when the body’s immunologic defenses are compromised (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Pandemic** An epidemic occurring over a very wide area and usually affecting a large proportion of the population (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Peer Review** Process of review of research proposals; manuscripts submitted of publication, abstracts submitted for presentation at scientific meetings, whereby these are judged for scientific and technical merit by other scientists in the same field. Also refers to review of clinical performance, when it is a form of medical audit (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Percentile** The set of divisions that produce exactly 100 equal parts in a series of continuous values, such as children’s heights or weights (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Prevalence** The number of instances of a given disease or other condition in a given population at a designated time; sometimes used to mean prevalence rate (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Proportion** A type of ratio in which the numerator is included in the denominator (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Qualitative Data** Observations or information characterized by measurement on a categorical scale, i.e., a dichotomous or nominal scale, or if the categories are ordered, an ordinal scale. Examples are gender, hair color, death or survival, and nationality (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Quantitative Data** Data in numerical quantities such as continuous measurements or counts (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Race** Persons who are relatively homogeneous with respect to biological inheritance (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Range of Distribution** The difference between the largest and smallest values in a distribution (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Ranking Scale** (Ordinal Scale) A scale that arrays the members of a group from high to low according to the magnitude of the observations, assigns numbers to the ranks, and neglects distances between members of the array (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Rate** A rate is a measure of the frequency of a phenomenon. In epidemiology, demography, and vital statistics, a rate is an expression of the frequency with which an event occurs in a defined population; the use of rates rather than raw numbers is essential for comparison of experience between populations at different times, different places, or among different classes of persons (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Ratio** The value obtained by dividing one quantity by another; a general term of which rate, proportion, Percentage, etc., are subsets. The important difference between a proportion and a ratio is that the numerator of a proportion is included in the population defined by the denominator, whereas this is not necessarily so for a ratio. A ratio is an expression of the relationship between a numerator and a denominator where the two usually are separate and distinct quantities, neither being included in the other (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Screening** Screening was defined in 1951 by the US Commission on Chronic Illness as, “The presumptive identification of unrecognized disease or defect by the application of tests, examinations or other procedures, which can be applied rapidly. A screening test is not meant to be diagnostic ” (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Soundex code** A sequence of letters used for recording names phonetically, especially in record linkage (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Spectrum of Disease** The full range of manifestations of a disease; a vague term, that can mean everything from mild or sub-clinical or precursor states to fulminating, florid disease, or alternatively the natural history of a disease from onset to resolution (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Standard** Something that serves as a basis for comparison; a technical specification or written report drawn up by experts based on the consolidated results of scientific study, technology, and experience, aimed at optimum benefits and approved by a recognized and representative body (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Standardization** A set of techniques used to remove as far as possible the effects of differences in age or other confounding variables, when comparing two or more populations (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

**Statistical Significance** Statistical methods allow an estimate to be made of the probability of the observed or greater degree of association between independent and dependent variables under the null hypothesis. From this estimate, in a sample of given size, the statistical “significance” of a result can be stated. Usually the level of statistical significance is stated by the P Value (John M. Last, *A Dictionary of Epidemiology*, 2<sup>nd</sup> Edition, 1988).

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