

2004

E
P
I
D
E
M
I
O
L
O
G
I
C
A
L

P
R
O
F
I
L
E



Delaware

HIV/AIDS Epidemiology

Health Promotion & Disease Prevention



*DELAWARE HEALTH
AND SOCIAL SERVICES*
Division of Public
Health



Special Thanks to the Following Individuals

Jaime H. Rivera, MD, FAAP
Director
Delaware Division of Public Health

Paul Silverman, Dr. P.H.
Associate Deputy Director
Health Information & Science

Jill Rogers
Section Chief
Health Promotion & Disease Prevention

Robert S. Jackson, MD
Chief
Communicable Disease Bureau

James C. Welch, RN, HN-C
Director
HIV/AIDS, STD and Hepatitis C Program

Atmaram Nambiar, MD, MPH
HIV/AIDS Surveillance Program Manager

Robert Vella
Health Program Coordinator

HIV/AIDS Surveillance Staff

Bruce Levan
Angela Miller
John Miller
Christina Melvin
Amanda Yarnal

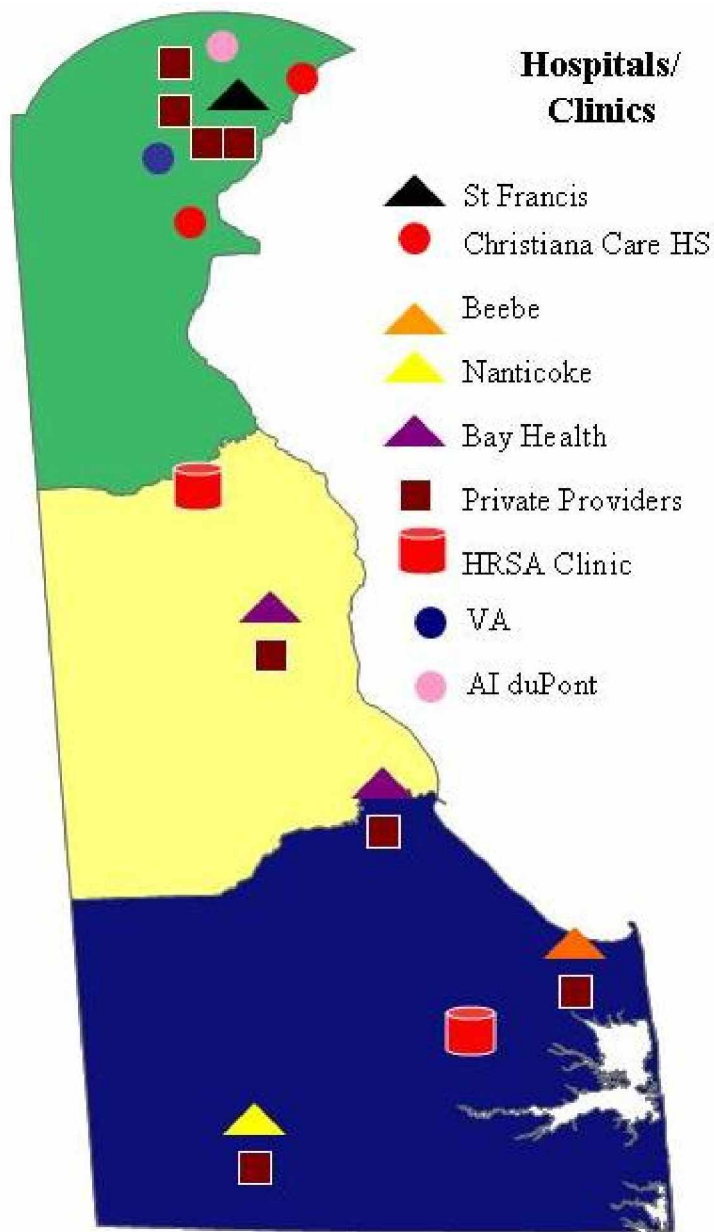


Table of Contents

	Page
<i>Listing of Figures in Profile</i>	iv-v
<i>Listing of Tables and Charts in Profile</i>	vi-vii
<i>Executive Summary</i>	1-3
<i>Background and Introduction</i>	4
<i>Methods</i>	4-11
§ <i>Data Sources - Their Strengths and Limitations</i>	5-8
§ <i>Epidemiology</i>	8-9
§ <i>Definitions of Terms</i>	9-10
§ <i>Abbreviations and Cautions in Using Data</i>	10-11
<i>Question 1: What are the socio-demographic characteristics of the State of Delaware?</i>	12-14
<i>Question 2: What is the scope of the HIV/AIDS epidemic in Delaware?</i>	15-42
• <i>Overview</i>	15-17
• <i>Gender and Race/Ethnicity</i>	17-22
• <i>Age Group</i>	22-23
• <i>Mode of Exposure</i>	23-26
• <i>Adult/Adolescent transmission modes in males</i>	27-34
• <i>Adult/Adolescent transmission modes in females</i>	35-38
• <i>Pediatric HIV/AIDS cases</i>	39-40
• <i>Geographical Location</i>	41-42
<i>Question 3: What are the indicators of risk for HIV/AIDS infection in Delaware?</i>	43-59
§ <i>Supplement to HIV/AIDS Surveillance (SHAS)</i>	43-49
<i>SHAS project data</i>	43-45
<i>Injecting Drug Users (IDU)</i>	45-48
<i>Men Having Sex With Men (MSM)</i>	48-49
<i>Heterosexuals</i>	49
§ <i>HIV Counseling and Testing Data (C/T)</i>	50-55
§ <i>Sexually Transmitted Disease Data (STD)</i>	55-57
§ <i>Youth Risk Behavior Survey (YRBS)</i>	58-59
<i>Question 4: What are the patterns of utilization of services in people with HIV in Delaware?</i>	60-78
§ <i>HRSA Grantee Provided Data</i>	60-69
§ <i>HIV/AIDS Reporting System (HARS) Data</i>	70-74
§ <i>Supplement to HIV/AIDS Surveillance (SHAS) Data</i>	74-78
<i>Conclusions</i>	79
<i>Support</i>	79
<i>Acknowledgements</i>	80
<i>References</i>	81
<i>Appendix A - Heterosexual SHAS Data</i>	82-83
<i>Appendix B - Profile Feedback Form</i>	84-86

For more information, please contact the Delaware Division of Public Health, HIV/AIDS Epidemiology office at (302) 741-2939. Our web site contains monthly statistical updates and provides links to local and national organizations.

Listing of Figures in Profile		
Figure Number	Figure Title	Page
Figure 1.	Comparison of mortality status in Delaware AIDS cases by year of diagnosis 1992 through 2004	17
Figure 2.	Distribution of Delaware HIV/AIDS cases by gender and year of report through 2004	19
Figure 3.	Comparison of Delaware HIV/AIDS cases by gender and race, diagnosed 1992 through 2004	19
Figure 4.	Distribution of Delaware HIV/AIDS cases by race and gender through December 2004	22
Figure 5.	Distribution of Delaware HIV/AIDS cases by age groups through 2004	23
Figure 6.	Distribution of male adult/adolescent HIV/AIDS cases by mode of transmission in Delaware through 2004	27
Figure 7.	HIV/AIDS cases among men who have sex with men (MSM) by race and ethnicity by year of report in Delaware 1983 through 2004	29
Figure 8.	Distribution of men who have sex with men with HIV/AIDS by residence at time of report in Delaware through 2004	29
Figure 9.	HIV/AIDS cases among men who inject drugs (IDU) by year of report in Delaware 1986 through 2004	31
Figure 10.	Men who inject drugs by county of residence in Delaware through December 2004	32
Figure 11.	Distribution of men who have sex with men and inject drugs by county of residence in Delaware through 2004	32
Figure 12.	Distribution of female partner's risk in men reported as heterosexually HIV-infected in Delaware through 2004	33
Figure 13.	Men reported in Delaware as infected through heterosexual contact with a female sexual partner at risk for HIV by county through 2004	34
Figure 14.	HIV/AIDS cases among women who inject drugs (IDU) by year of report in Delaware 1987 through 2004	35
Figure 15.	Women with HIV/AIDS who inject drugs by county of residence in Delaware through December 2004	36
Figure 16.	Distribution of male partner's risk in women reported as heterosexually HIV-infected in Delaware through 2004	37
Figure 17.	Women reported in Delaware as infected through heterosexual contact with a partner at risk for HIV by county of residence through 2004	38
Figure 18.	Distribution of pediatric HIV/AIDS cases by mothers' mode of transmission in Delaware through 2004	39
Figure 19.	National trends in Pediatrics AIDS cases, 1992-2003	40
Figure 20.	Delaware trends in Pediatric AIDS cases, 1992-2004	40
Figure 21.	Percentage of clients SHAS interviewed July 1991 – June 2004 by mode of transmission reported in HARS	44
Figure 22.	IDU SHAS participants who had sex in the 12 months prior to date of interview by gender and number of partners	45

Figure 23.	Male SHAS participants who are IDU and their sexual activity in the 12 months prior to the SHAS interview	46
Figure 24.	Female SHAS participants who are IDU and their sexual activity in the 12 months prior to the SHAS interview	47
Figure 25.	Number of positive HIV tests by county in Delaware 1998-2004	52
Figure 26a.	Distribution of Delaware positive HIV tests in 2003 by modes of transmission	53
Figure 26b.	Distribution of Delaware positive HIV tests in 2004 by modes of transmission	53
Figure 27a.	Comparison of clients electing to be tested for HIV to the clients testing positive for HIV antibodies by race in Delaware in 2003	54
Figure 27b.	Comparison of clients electing to be tested for HIV to the clients testing positive for HIV antibodies by race in Delaware in 2004	54
Figure 28.	Number of clients pre-test counseled in Delaware HIV counseling/testing sites compared to the number who elected to be antibody tested from 1998-2004	55
Figure 29.	Number of positive HIV antibody tests in Delaware HIV counseling and testing sites from 2000 to 2004	55
Figure 30.	Number of chlamydia and gonorrhea disease events in Delaware from 1998 to 2004	56
Figure 31.	Distribution of Delaware chlamydia events by gender from 1998 through 2004	57
Figure 32.	Number of primary or secondary syphilis disease events diagnosed in Delaware in 1998 to 2004	57
Figure 33a.	Distribution of clients attending ID-Wellness clinics by risk factor for transmission of HIV in 2003	67
Figure 33b.	Distribution of clients attending ID-Wellness clinics by risk factor for transmission of HIV in 2004	68
Figure 34a.	Percent of household income of HIV-infected recipients of Ryan White CARE Act funding at the end of 2003 in Delaware	69
Figure 34b.	Percent of household income of HIV-infected recipients of Ryan White CARE Act funding at the end of 2004 in Delaware	69
Figure 35a.	Distribution by treatment location of all living HIV clients residing in Delaware at time of diagnosis through December 2003	70
Figure 35b.	Distribution by treatment location of all living HIV clients residing in Delaware at time of diagnosis through December 2004	71
Figure 36a.	Distribution by treatment location of all living AIDS clients residing in Delaware at time of diagnosis through December 2003	71
Figure 36b.	Distribution by treatment location of all living AIDS clients residing in Delaware at time of diagnosis through December 2004	72
Figure 37a.	County of residence and treatment location for all living HIV cases residing in Delaware and receiving care in 2003	73
Figure 37b.	County of residence and treatment location for all living HIV cases residing in Delaware and receiving care in 2004	73
Figure 38a.	County of residence and treatment location for all living AIDS cases residing in Delaware and receiving care in 2003	74
Figure 38b.	County of residence and treatment location for all living AIDS cases residing in Delaware and receiving care in 2004	74

Listing of Tables and Charts in Profile

Table Number	Table Title	Page
Table 1.	U.S. Census Bureau estimates for the population of Delaware through July 2003	13
Table 2.	U.S. Census Bureau estimates for the population of Delaware by race through July 2003	14
Table 3.	Characteristics of persons reported with HIV/AIDS in Delaware 1983 through 2004	15
Table 4.	Comparison of the characteristics of Delaware residents who died of HIV/AIDS in five year time periods from 1983 - 2004	18
Table 5.	Distribution of Delaware AIDS cases by race/ethnicity and gender in adult/adolescent cases and pediatric cases reported through 2004	20
Table 6.	National distribution of AIDS cases by race/ethnicity and gender in adult/adolescent cases and pediatric cases reported through 2003	20
Table 7.	Distribution of Delaware HIV cases by race/ethnicity and gender in adult/adolescent cases and pediatric cases reported through 2004	21
Table 8.	National distribution of HIV cases by race/ethnicity and gender in adult/adolescent cases and pediatric cases reported through 2003	21
Table 9.	Comparison of all Delaware HIV/AIDS cases by mode of exposure diagnosed through 2001 to cases diagnosed through 2004	24
Table 10.	Comparison of the pre-1993 years of HIV/AIDS cases reported to post-1993 by mode	26
Table 11.	Distribution of adult/adolescent HIV/AIDS cases by gender reported in the pre-1993 years and post-1993 years in Delaware	26
Table 12.	Demographic characteristics of race and age group in men who have sex with men by year of report in Delaware 1983 - 2004	28
Table 13.	Men who inject drugs: demographic characteristics of HIV/AIDS cases by race and age group by year of report in Delaware 1983 - 2004	30
Table 14.	Race and age demographic characteristics in male injecting drug users who also have sex with men by year of report in Delaware 1983 - 2004	31
Table 15.	Demographic characteristics of race and age group in heterosexual men by year of report in Delaware 1983 – 2004	33
Table 16.	Women who inject drugs: demographic characteristics of race and age group by year of report in Delaware 1983 – 2004	35
Table 17.	Heterosexual contact in women: demographic characteristics of race and age group by year of report in Delaware 1983 – 2004	37
Table 18.	HIV/AIDS cases through December 2004 by county with the City of Wilmington and Beach populations illustrated separately	41
Table 19.	Demographics of SHAS interviews conducted July 1991 through June 2004	43
Table 20.	Demographics of clients who seek counseling and testing services in HIV Counseling and Testing Sites in Delaware in 2004	50
Table 21.	Characteristics of students completing the YRBS Survey in 30 Delaware Public High Schools in 2004	58

Table 22.	Demographic characteristics of clients receiving services funded by Ryan White Care Act Title II Programs 2003/2004 compared to Delaware living HIV/AIDS cases in 2003/2004	61
Table 23.	Utilization of Ryan White Title II service, by service type in 2003/2004	61
Table 24.	County locations of the HRSA funded and CCHS\DPH sponsored ID-Wellness clinics in Delaware, 2003/2004	62
Table 25.	Demographic characteristics of clients served through 2003/2004 AIDS Drug Assistance Program (ADAP) compared to living Delaware HIV/AIDS reported cases in 2003/2004	64
Table 26.	Characteristics of HIV-infected patients prescribed HAART (Highly Active Antiretroviral Therapy) in CCHS\DPH ID-Wellness clinics throughout Delaware in 2004	65
Chart Number	Chart Title	
Chart 1.	National and Delaware AIDS statistics by gender and race	21
Chart 2.	National and Delaware HIV statistics by gender and race	22
Chart 3.	National and Delaware HIV and AIDS statistics by gender and mode	25

Executive Summary

Description of the State of Delaware: The estimated population of Delaware for 2003 is 817,491 representing 0.3% of the United States population (290,809,777). Seventy percent of Delaware residents live within urban areas. Of Delaware's residents, 75% are White, 19% are African-American, 5% are Hispanic and 1% are self-identified as 'other'. Delaware residents had higher incomes, a lower unemployment rate, and were more highly educated than United States residents as a whole.

Epidemiological Trends in HIV and AIDS in Delaware: By 2003, the cumulative number of AIDS cases (3,219) in Delaware represented 0.4% of all reported U.S. cases. Delaware ranks 33rd among states in the total cumulative number of reported AIDS cases and, despite being the 2nd smallest state in the U.S., Delaware had the 5th highest rate of new AIDS cases per 100,000 population in 2003 (26.1).

Gender. While 49% of Delaware's population is male, 71% of those infected with HIV/AIDS and reported through 2004 are male. As an artifact of the 2001 implementation of HIV reporting, the difference between the percentage of HIV cases attributed to men and women is smaller than the difference between the percentage of AIDS cases attributed to men and women (24% and 48% respectively). This difference could be interpreted to mean that HIV was more prevalent than AIDS for women. If this was true, it would suggest that women were more resistant to progression of the disease. However, the proportion of AIDS cases diagnosed among women has continued to grow from 15% of cases reported in the 1985 to 1989 period to 36% of cases reported in the 2000-2004 period. In fact, national data suggest that women may progress from HIV to AIDS quicker than men do.

Race/Ethnicity. The proportion of HIV/AIDS cases reported among African-Americans in Delaware is disproportionately high, and the disparity is increasing. While African-Americans represent only 19% of Delawareans, the percentage of new cases attributed to African-Americans had increased from 44% in years 1985-1989 to 67% in years 2000-2004. Currently, over 66% of the cumulative HIV/AIDS cases in the State are among African-Americans. The relative proportion of HIV cases reported since 2001 by ethnicity is very similar to the proportion of AIDS cases reported before 2001--66% of the cumulative AIDS cases since 1983 and 64% of the cumulative HIV cases since 2001 are reported amongst African-Americans. Hispanics represent a relatively small percentage (about 5%) of the Delaware population, and are not disproportionately represented in reported HIV/AIDS rates/cases. Relative to the same periods of time mentioned above, HIV/AIDS rates among Hispanics have declined from 7% to 6% of new infections. DPH is contracting with local agencies to increase availability of HIV counseling and testing and other services to help ensure that the reported rates of HIV and AIDS in this community are not due to under-reporting.

Age. Those aged 30-49 account for more than 70% of AIDS cases reported in Delaware in 2003 and 2004, mirroring the national age distribution. This may be due to the relatively large number of infected people who do not present for testing or treatment until they are symptomatic, and, therefore, may have been infected much earlier than they were reported. However, the age distribution of those who are tested and reported prior to symptoms is very similar to those who present after symptoms and does not support this conclusion. Fewer than 3% of HIV/AIDS cases reported in Delaware and nationally are among those 60 and older. Only 1% of Delaware and national reported HIV/AIDS cases are attributed to those under age 13, defined as pediatric HIV/AIDS cases. Pediatric cases are relatively rare, but occur disproportionately among minorities.

Mortality. AIDS cases have been monitored since 1981 and, until the mid-1990s, the number of those who died in a given year exceeded the number of those living with AIDS and by 2004, 1,815 Delaware residents had died with AIDS. However, with the advent of highly active anti-retroviral therapy (HAART), the number of Delaware residents living with AIDS has increased by 322%, from 550 cases in 1996 to 1,578 in 2002 and 1,775 in 2004. Earlier diagnosis, better medical management of HIV, and the development of HAART led to this dramatic change. Similarly, people are living longer with HIV. In 2001, the first year HIV reporting began in Delaware, the state had 461 people living with the disease. By 2004, 1,070 Delawareans were living with HIV and only 24 died with the disease.

Geography. Delaware's HIV/AIDS cases when distributed by county (excluding the city of Wilmington) closely match population distributions. Wilmington (population 76,664) is disproportionately represented in the HIV/AIDS statistics, making up only 15% of the New Castle County population, but accounting for 60% of the County's HIV/AIDS cases. Within Delaware, the mode of transmission of HIV varies from one area of the state to another. In New Castle County, cases are largely among African-American Injection drug users (IDUs), while in Sussex County cases are for the most part among White men who have sex with men (MSM). It should be noted that 40% of all HIV/AIDS cases in the state occur among minorities in the four central Wilmington zip codes 19801, 19802, 19805, and 19806.

2003-2004 Observations in Behavioral Risk Groups: The largest number of HIV/AIDS cases reported in Delaware in 2003-2004 are attributed to heterosexual transmission at 37% (n=240), men having sex with men (MSM) at 28% (n=183) and injection drug users (IDUs) 25% (n=164). An additional 2% are among those classified as both MSM and injection drug user (IDU). More than half, 59%, of injecting drug users and 53% of heterosexually infected women reported in 2003-2004 are Wilmington residents. Thirty-four percent (n=64) of MSM cases reported in 2003-2004 were in the City of Wilmington, and another 33% (n=61) in New Castle County.

HIV/AIDS in other populations: There are a number of populations on which adequate data to assess HIV risk are not available. These include smaller and hard-to-reach groups such as the homeless, trans-gendered, and mentally ill. There are also populations who are diagnosed through routine screening on whom we have little data (e.g., blood donors). Data indicates that 27 HIV-infected women gave birth to infants in 2004. All the infants served by Ryan White Title IV programs and receiving prophylaxis tested negative for HIV infection. While there has been only one perinatally-infected infant in recent years (2002), trend data shows a decrease in perinatally-infected infants in Delaware.

Counseling and Testing Data: In 2004, one percent of people deciding to get tested at publicly funded counseling and testing sites in Delaware are HIV seropositive. Of those who test positive, 65% are men and 35% women. Racial groups showing the highest seroprevalence are African-Americans 69%, Whites 20% and Hispanics 11%. Thirty percent of positives are MSM while 23% self-reported having no risk other than a sex partner who was at risk for HIV. Heterosexual IDUs comprised 15% of the positive tests in 2004 followed closely by Heterosexual (no other risk) at 13%.

Background and Introduction

Delaware has tracked AIDS cases since 1981 and reported AIDS Surveillance information since the mid-1980s. The Division of Public Health, Delaware Health and Social Services began collecting information on the HIV infected population July 10, 2001 by compiling information from health care professionals, laboratories and physicians throughout the state. The ongoing analysis of current and cumulative AIDS case reporting and of the more recent but developing HIV data is an important community and public health function of the Division of Public Health.

Data presented here are current through December 31, 2004. The Delaware HIV Planning Council, other community prevention planning groups, health educators, and health planners may use the data to help guide risk reduction and public health interventions aimed at reducing the numbers of HIV positive infected individuals in Delaware.

Regulations for the Control of Communicable and Other Disease Conditions were revised in July 2001. The revision includes the reporting of HIV cases, through a "name to code" system to the state HIV/AIDS Epidemiology Office. Forty-one months of HIV data collected through December 31, 2004 are now available to assist prevention and health planning groups with a relatively full scope of incidence, prevalence and related characteristics of the HIV epidemic in Delaware.

Methods

This Epidemiologic Profile describes the distribution, trends, and impact of human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) on the people of Delaware.

- HIV or Human Immunodeficiency Virus is the underlying agent that weakens the immune system in many and thus is the cause of AIDS. Except for initial viral response, HIV may not manifest itself with symptoms for some time after infection.

- AIDS or Acquired Immune Deficiency Syndrome is the stage where the symptoms of the virus have advanced to a state where a clinical diagnosis can be made by a licensed practitioner. Symptoms include certain infections, cancers, and cellular changes in a person's immune system.

This profile provides information for prevention and care planning and education programs centered on HIV. It is an important but by no means the only component needed by the Delaware HIV Consortium and its Planning Council as

input into its ongoing comprehensive strategy to steer prevention and care planning and service efforts in Delaware, as called for by the Health Resources and Services Administration (HRSA) and the Centers for Disease Control and Prevention (CDC). The compiled data will help monitor overall progress and trends, and it will be an indicator in justifying and awarding future funding for prevention and medical/social services.

The four main questions used to outline data in this profile are:

1. What are the socio-demographic characteristics of the State of Delaware?
2. What is the scope of HIV/AIDS epidemic in Delaware?
3. What are the indicators of risk for HIV/AIDS infection in Delaware?
4. What are the patterns of utilization of services in people with HIV in Delaware?

The data to address each question are presented in turn in the profile. Data from a variety of sources are combined, analyzed and presented in response to each of the main questions. Additional subtopics related to specific Delaware populations are also addressed. Sources for data presented include: AIDS surveillance activities, CDC national statistics on HIV/AIDS, HIV counseling and testing annual report, STD data, vital statistics annual report, United States Census Bureau Quick Facts, the Youth Risk Behavior Survey in Delaware, and Ryan White Comprehensive AIDS Resource Emergency (CARE) Act Data Reports (CADR) from HRSA grantees. If the reader has specific questions, the State Surveillance Office can provide assistance locating appropriate data sources.

Data quality varies among the sources. An overview of the strengths and limitations of data sources are provided below. HIV/AIDS surveillance includes case reports of all known HIV sero-positive and AIDS-defined cases in Delaware. The data provided on the HIV/AIDS case reports are only as good as the information provided by the reporting source.

Data Sources - Their Strengths and Limitations

The data source for Delaware demographic information is the United States Census Bureau¹ located at <http://quickfacts.census.gov/qfd/> on the Internet.

Strengths: Data set is complete and standardized nationwide through 2000.

Limitations: The best data estimates are for the Census decades with estimates provided in the interim.

Delaware Vital Statistics Annual Report 2002² – produced by the Delaware Health Statistics Center, provides health statistical data on the morbidity and mortality of all residents of Delaware. Doctors, hospitals, and clinics in Delaware are required to report birth and death certificate data. It can be accessed at www.state.de.us/dhss/dph/hp/2002.html

Strengths: Data set is complete, and it is a good source for mortality data.

Limitations: Data quality is limited to the information provided by physicians on the birth and death certificates and behavior risk data are unavailable. Many physicians do not note HIV/AIDS on death certificates. This may be due to family request, unawareness by physician of HIV status, or notation of primary cause of death only and not secondary causes or underlying disease status. Therefore, due to stigma, confidentiality concerns, failure to test for HIV infections and AIDS related diseases, death data may only reflect immediate cause of death and may not identify an underlying disease status such as HIV/AIDS. The Annual Report has also not been publicly updated since 2002. As mortality data has become better reported in the HIV/AIDS Surveillance mechanisms described below, the Vital Statistics Report has become much less vital to HIV/AIDS reporting.

HIV/AIDS Reporting System³ (HARS) is the software system promulgated by the CDC and used nationwide for storing of HIV/AIDS data. Medical professionals throughout the state submit HIV and AIDS case report forms to the State Surveillance Office. AIDS data is the only consistently reported data across the nation, resulting in population-wide statistics in all states. HIV data, on the other hand, is only reported to the CDC from some states with approved non-anonymous (confidential) reporting procedures (not yet approved in Delaware).

Strengths: Data set for AIDS is quite complete and provides a historical perspective on trends.

Limitations: Case report forms from medical professionals vary in completeness and timeliness. AIDS data may not represent all AIDS-defined individuals due to delays in reporting and noncompliance with reporting policies. HIV data does not represent all people-testing positive in Delaware, as confidential results are the only tests reported and the availability and option for anonymous testing remains at specific testing sites in Delaware. The quality of HARS data has improved substantially in recent years through the proactive efforts of the Surveillance Office and its field workers.

The HIV/AIDS Surveillance Report⁴ through 2003, published by the Centers for Disease Control and Prevention, is used frequently in this Profile for national data and data from other states. This is the national and state by state summary database established by the CDC and is the reporting source for most national statistics. It is released periodically in printed form and updated more often on the Internet <http://www.cdc.gov/hiv/dhap.htm>.

Strengths: National data. Great source for information and for updated slide presentations.

Limitations: Time delay in release of data. The report for the period ending 2004 will not be available until after this profile is completed.

Supplement to HIV/AIDS Surveillance⁵ (SHAS) project is a federally funded grant initiative through which adult HIV/AIDS patients are interviewed for additional information. Surveys address topics including: socio-demographic factors, sexual and medical history, drug and alcohol use, access to medical and social services, gynecological and reproductive histories (females), and preventive therapy.

Questions regarding behavior and treatments allow investigators more detail on these topics than from other sources. All data from SHAS interviews are confidential and linked to surveillance data through patient numbers and not identifying information. The SHAS survey instrument was revised in 2000 and the data in this profile reflects information collected from July 1991 to June 2004. This study has now ended.

Strengths: Confidential data set. SHAS data can be linked to HARS data by patient number.

Limitations: Since respondents' self-report data can be subjective and from the patient's perspective, it can be biased. Responses may be what the patient thinks the interviewer wants to hear rather than the truth. Data may also be skewed toward those healthy enough to participate, and participation is voluntary so it is not fully representative of all clients.

HIV Counseling and Testing Annual Report⁶ is based on data collected on a standardized data collection form from people seeking counseling and possible testing for HIV.

Strengths: Standardized data collection.

Limitations: Not a good source of prevalence data. Report is only for those who are tested in public clinic settings or are seeking specific HIV counseling and testing. Clients who are counseled/tested more than once will appear multiple times in the data but cannot be identified as such. Clients often defer to "sexual partner at risk," rather than identifying specific risk behavior of sexual partner.

Sexually Transmitted Infection and Disease Reports⁷ include the statistical data on sexually transmitted disease (STD) events of gonorrhea, chlamydia and syphilis in Delaware. STD case data are well reported in Delaware but are limited in that the collected data do not include information, such as gender of sexual partners or reports of drug use, important for HIV planning.

Strengths: Standard data collection. Patients at high risk for STDs are at high risk for HIV.

Limitations: Data may include duplicate cases (multiple events of infections in one person), and private providers may under-report.

2003 Youth Risk Behavior Survey⁸ (YRBS) is a self-administered, anonymous questionnaire for Delaware high school students administered in odd-numbered years. The privacy of the student is assured by allowing for anonymous and voluntary participation (participation rates are very high with less than 2% refusals). The YRBS is one component of the surveillance system developed by the Centers for Disease Control and Prevention in collaboration with state and local departments of education and health, federal agencies, and national education and health organizations. The YRBS was designed to focus the nation on behaviors among youth related to the leading causes of mortality and morbidity among both youth and adults. The Delaware Department of Education assumes responsibility for the YRBS. More information may be obtained through

the Department of Education's Adolescent School Health section and on the web at www.state.de.us/drugfree/data.htm

Strengths: Risk assessment ongoing with emphasis on prevention. It is a reasonably representative random survey of Delaware youth, and it provides information on the leading causes of morbidity and mortality for youth -- nutrition, substance use, accidents, sexual activity, sexual orientation, and delinquency.

Limitations: Data are limited to high school students who voluntarily participate in the survey, and the accuracy relies upon self-reported information.

Ryan White CARE Act Data Reports⁹ (CADR) are used to report information about provider and program characteristics providing Ryan White CARE Act services. Data are collected and submitted by grantees of Title II through Title IV to Health Resource and Services Administration (HRSA). At the provider level, the CADR offers unduplicated aggregate counts of all clients served. At the Title II grantee level, the CADR data are duplicated. Utilization of medical and support services, prescription drugs and health insurance coverage are also collected as part of the CADR.

Strengths: Standardized data instrument containing grouped data making it easier to report frequency count data for grouped categories.

Limitations: Currently unable to perform analysis on data that cannot be completely unduplicated as clients may access services from multiple providers. Data are limited to those who access care, treatment or services for HIV.

Epidemiology

When investigating an epidemic, questions relating to person, place and time are important criteria to sort out pertinent information.

- § **Person:** Identifying how a person contracts infections or disease is the first step in the process of prevention. Surveillance staff help characterize a person's mode of exposure to HIV from case report forms, personal interviews and medical record reviews. The exposure is often identified as a risk.
- § **Place:** In this Epidemiological Profile, place generally refers to zip code of residence at time a person is reported as testing positive for HIV or an AIDS diagnosis is made. Every effort is made to collect unduplicated information, and in this process surveillance extends to other states. Whenever reporting sources indicate a patient may have been treated elsewhere or was diagnosed in another state or jurisdiction, surveillance staff will contact the other state for confidential data-sharing purposes.
- § **Time:** Throughout the statistical presentation, date of report and date of diagnosis are used to define time periods. There may be a time lag between when a patient is reported to the Division of Public Health (DPH) Surveillance Office and the actual date they first developed an AIDS-defining condition or tested positive for HIV. **Therefore, date of report is used, unless otherwise stated in a statistical table or figure.**

§ **Risk:** Individuals are identified by behaviors that put them at risk of HIV infection. CDC established a hierarchy to classify a person's most likely route of exposure or HIV risk. Data collected allow a person to be classified by the risk that most likely exposed the individual.

Two noteworthy time specific changes in data collection related to HIV/AIDS affect the data in this profile nationally and locally. Increases in reporting are noted in both timelines.

§ In 1993, the Centers for Disease Control and Prevention (CDC) revised the AIDS case definition. An increase in cases, around 1993 -1994 due to the expanded definition, is noted nationally and locally. The new definition included persons previously unreported until several AIDS indicators were added to the case definition. These indicators include: severe immune-compromised individuals with CD₄ counts <200 µ/L or <14%; invasive cervical cancer; recurrent pneumonia; and pulmonary mycobacterium tuberculosis.

§ Delaware implemented HIV reporting on July 10, 2001. **HIV data is combined with AIDS data in 2001 through 2004, and the change in reporting is a contributing factor in the increased number of cases observed in most tables and figures in the profile.** Unless otherwise stated, all tables and figures that have HIV/AIDS in the title, include HIV data reported from July 10, 2001 through December 2004 combined with AIDS data from 1981 through 2004.

All AIDS patient data are strictly confidential and are collected for epidemiological purposes. Confidentiality of HIV/AIDS case reports is important to maintain an effective HIV/AIDS surveillance system. The Delaware Division of Public Health's HIV/AIDS Surveillance Office has extensive confidentiality and security protocols outlining physical, operational, and personnel security standards. These standards must be maintained to receive federal funding. **Data release policies guide the presentation of data to ensure HIV/AIDS data do not allow for individual identification. Tables must not present data in a manner that would allow for individual identification. Reporting small numbers, in a table, may inadvertently cause an individual to be identified. In these cases data in small cells may be combined; when this is done the fact is generally identified in the footnote.**

Definition of Terms

Adolescent: An individual between the ages of 13 and 19.

Adult/Adolescent case: Patient is 13 years of age or greater at the time of diagnosis.

Epidemiology:	Study of factors (age, race, and gender) that affect disease distribution in the human population.
Heterosexual:	Persons with a history of sexual contact with a person of the opposite sex, and may include heterosexual relations with: injecting drug user; bisexual male; person who had a transplant or transfusion; or person with AIDS or undocumented HIV infection.
Incidence:	Number of new cases divided by the population at that specific time.
NIR case:	No identified risk – risk was unable to be ascertained through investigation to date. NIR cases may be reclassified as information is obtained through a complete epidemiologic investigation.
Pediatric case:	Patient is less than 13 years of age at diagnosis.
Prevalence:	Number of existing cases per standard population.
Rate:	Number of cases divided by specific population of a given group. Rates allow for the direct comparison of different groups by taking into account the varying population size.
Transfusion case:	Person who acquired the virus as a result of receiving blood or blood products.
Year of diagnosis:	Measure of year when the disease event was first detected by medical personnel.
Year of report:	Measure of year that the HIV/AIDS surveillance office received case report.

Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
A/PI	Asian/Pacific Islander
CARE	Comprehensive AIDS Resource Emergency
CADR	CARE Act Data Report
CDC	Centers for Disease Control and Prevention
C/T	Counseling and Testing Services
DHSS	Delaware Health and Social Services
DPH	Division of Public Health
HAART	Highly active anti-retroviral therapy

HARS	HIV/AIDS Reporting System (software)
HIV	Human Immunodeficiency Virus
HRSA	Health Resources and Services Administration
IDU(s)	Injecting Drug User(s)
MSM	Men who have Sex with Men
MSM/IDU	Men who have Sex with Men and Inject Drugs
NA/AN	Native American/Alaskan Native
NIR	No Identified Risk
NRR	No Risk Reported
PWH/A	Person with HIV or AIDS
PLWHA	People living with HIV or AIDS
SCBW	Study of Childbearing Women
SHAS	Supplement to HIV/AIDS Surveillance
STD (STI)	Sexually Transmitted Disease (Infection)
YRBS	Youth Risk Behavior Survey (both national and Delaware specific)

Cautions in Using Data

Readers should use caution when reviewing data. Listed below are “hints” to help you understand the report. If you have further questions, please contact the state surveillance office.

Case rate: A rate is a measure of the frequency of an event (disease) compared to the number of persons in the group in which it occurs. An example: if there are 700 White AIDS cases in Delaware and the White Delaware population was 700,000; the case rate would be 100 per 100,000. That means for every 100,000 people, there would be 100 AIDS cases.

Dates: Be careful interpreting trends over time. Though it may be enticing to jump to conclusions about changes over time – look carefully at the data. Are the changes over an extended period? Is it a small percentage change in one year? Did a change in data collection procedures influence the trend data?

Graphs and tables: Examine the title. Does it indicate a time period? Does the graph represent all cases or just one group (men, women, IDU or MSM)? Are data represented as the number of cases, a percentage, or as a case rate?

Question 1. What are the sociodemographic characteristics of the State of Delaware?

Description of the State of Delaware

Geography

Delaware is the second smallest state, in the U.S., measuring 100 miles from north to south and 30 miles from west to east. Land area accounts for 1,955 square miles and 535 miles of Delaware are covered by water. The geographic center of Delaware is located 11 miles southwest of Dover, the state capital, in Kent County. The Interstate 95 corridor, running from Maine to Florida, crosses through Delaware's northernmost county from Maryland to Pennsylvania, or alternately Interstate 295 to New Jersey and points north via the Delaware Memorial Bridge. The south-eastern portion of Delaware's coast-line with the Atlantic Ocean provides the beach resorts that are the destination of many tourists and split-residency owners of summer homes from the mid-Atlantic region.

Delaware Demographics

Delaware's total population estimate through July of 2003 is 817,491 according to the U.S. Census Bureau. The proportion of the population, by county of residence, is 63% New Castle County, 16% Kent County and 21% Sussex as depicted in Table 1 on the next page. The race and ethnicity distribution in the state (see Table 2 on page 14) is 75% White, 19% Black, 4% of Hispanic origin and the remaining 1% a compilation of Asian, Native Hawaiian and other Pacific Islanders. Seventy percent of the population is urban. Women comprise 51% of the state total population, equivalent to the national distribution by gender. The median age of the Delaware resident is 36 years. Ten percent of Delaware residents report a language other than English is spoken in their home. Median household income of \$47,381 and a per capita income of \$23,305 in Delaware exceed the U.S. incomes \$41,994 and \$21,587 respectively. Eighty-three percent of Delaware residents reported having a high school diploma and 25% a bachelor's degree or higher compared to 80% and 20% for the U.S. respectively.

County Demographics

New Castle County is the smallest county in Delaware, registering 426 square miles according to Quick Facts of the U.S. Census Bureau, with 1,174 persons residing per square mile. The July 2003 estimated population for New Castle County is 515,074 or 63% of Delaware's total population. Fifteen percent (n=76,664) of New Castle County's residents live within the City of Wilmington.

The racial distribution in New Castle County is 73% White, 20% Black, 5% Hispanic and 2% are of multiple/other origins. Gender-wise, New Castle County residents are 51% women and 49% men.

Approximately 7% of the county's residents are under the age of 5, with 19% between 5 and 17, the age group 18-64 comprises 62% and 12% are 65 years and older.

Kent County is the second smallest in landmass with 590 square miles and an estimated population in July of 2003 of 134,390. This represents 16% of the state's entire population with 215 people per square mile. Kent County is the home of Dover Air Force Base and of the State Capital, Dover.

The racial distribution in Kent county is 74% White, 21% Black, 3% are Hispanic or Latino and the remaining 2% combines multiple/ other origins. The gender distribution in Kent is 52% women and 48% men.

Approximately 7% of the county's residents are under the age of 5, with 20% between 5 and 17, the age group 18-64 comprises 61% and 12% are 65 years and older.

Sussex County is the fastest growing and largest county in landmass, measuring 938 square miles, with 167 persons per square mile. Estimated population as of July 2003, based on Quick Facts of the U.S. Census Bureau, is 168,027 or 21% of the state population.

The racial distribution in Sussex is 80% White, 15% Black, 4% Hispanic and the remaining 1% combines multiple/other origins. The gender distribution in Sussex is 52% women and 48% men.

Approximately 6% of the county's residents are under the age of 5, with 17% between 5 and 17, the age group 18-64 comprises 58% and 19% are 65 years and older.

Table 1. U.S. Census Bureau¹ estimates for the population of Delaware through July of 2003

County	July 2003	
	#	%
New Castle	515,074	63%
Sussex	168,027	21%
Kent	134,390	16%
Total	817,491	100%

Table 2. U.S. Census Bureau¹ estimates for the population of Delaware by race through July of 2003

County	White		Black		Hispanic		Other	
	#	%	#	%	#	%	#	%
New Castle	376,004	73%	103,015	20%	25,754	5%	10,301	2%
Sussex	134,422	80%	25,204	15%	6,721	4%	1,680	1%
Kent	99,449	74%	28,222	21%	4,031	3%	2,688	2%
Total	609,875	75%	156,441	19%	36,506	4%	14,669	2%

Question 2. What is the scope of the HIV/AIDS epidemic in Delaware?

Overview of HIV/AIDS Characteristics:

Unless otherwise specified, HIV/AIDS data is based on information from the Delaware HIV/AIDS Reporting System³ (HARS). **It should be noted that HIV data is combined with AIDS data beginning in 2001, and this is a major contributing factor in the increased number of cases observed in most of the trend tables and figures in the profile.** Through December 2004, a total of 4,343 people were reported to DPH with a diagnosis of HIV or AIDS. A total of 1,684 persons have died, representing 39% of the cases. The disproportionately large number of reported cases among Blacks continues to be observed, as reported in previous profiles. This disparity and those related to gender and age group will be considered in detail later in the profile. Table 3 below, provides a brief overview of demographic characteristics of all reported HIV/AIDS cases in Delaware through December 31, 2004.

Table 3. Characteristics of persons reported with HIV/AIDS in Delaware 1981 through 2004, (n=4,343)

	HIV Cases (n=1,080)		HIV/AIDS Cases (n=4,343)	
Gender				
Male	672	62%	3,084	71%
Female	408	38%	1,259	29%
Race/Ethnicity				
White	314	29%	1,222	28%
Black	695	64%	2,864	66%
Hispanic	61	6%	233	5%
Other/Unknown	10	1%	24	<1%
Age Group (yrs)				
<13	16	2%	41	2%
13-19	48	4%	62	4%
20-29	267	25%	688	25%
30-39	395	37%	1,784	37%
40-49	248	23%	1,283	23%
50-59	79	7%	355	7%
60-69	19	2%	107	2%
70+	3	<1%	23	<1%
Geographic Location				
Kent	112	10%*	420	10%*
New Castle (Not Wilm.)	337	31%	1,372	31%
City of Wilmington	471	44%	1,931	44%
Sussex	160	14%	620	14%

*Percentages may not equal 100 due to rounding

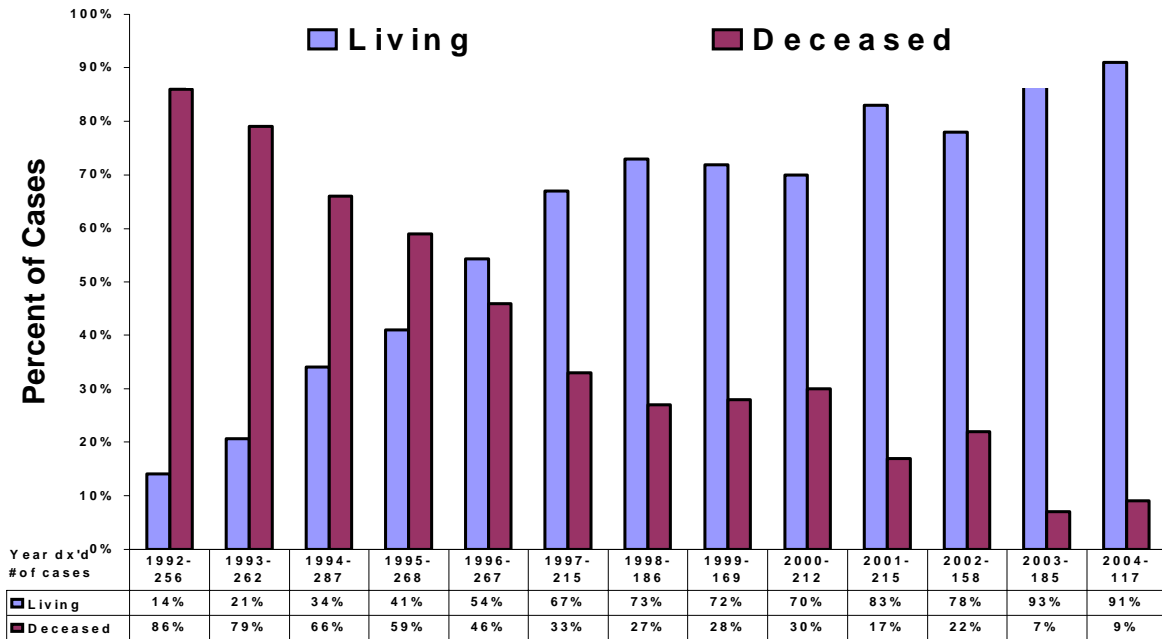
National data are not yet available through 2004 so national comparisons with Delaware data are comparing the Nation in 2003 with Delaware in 2004. National surveillance reports⁴ estimate that at the end of 2003, 902,223 persons have been diagnosed with AIDS since the beginning of the epidemic. An additional 221,065 persons are reported to have HIV infection that has not progressed to AIDS. There are currently 351,614 persons living with HIV/AIDS in the 33 areas (not including Delaware) that practice confidential name based reporting of HIV infection. The national cumulative case rate per 100,000 population was 127.8 for HIV and 167.3 for AIDS at the end of 2003. Delaware's cumulative AIDS rate per 100,000 population was 235.6 for 2004. The National annual rate for reported AIDS cases in 2003 was 15.0 per 100,000; while Delaware's 2004 rate was 19.2. Delaware ranked 8th among states and the District of Columbia for annual case rates per 100,000 population in 2004.

Figure 1 on the next page compares the percentage of people surviving with AIDS who were diagnosed between 1992 and 2004 to the percentage of those who have died through 2004. The graphic clearly illustrates the decrease in fatalities and the increase in the percentage of people living with AIDS. Factors contributing to survival in people diagnosed later in the epidemic are timeliness in referral into care, progress in the medical management of HIV, and the introduction of highly active anti-retroviral therapy (HAART). As encouraging as these trends are, they point out that the nature of the AIDS epidemic is changing. For the first decade and a half, AIDS was often an apparent death sentence with significant medical consequences and use of medical services only in the late stages of the disease. With the development of effective anti-retroviral medicines, the prospect of living with and effectively managing HIV/AIDS has become the norm. The societal consequence over time will be the burden of disease and financial strain associated with long term and expensive management of chronic illness. This dilemma will become even more apparent as states begin to address the yet undiagnosed and untreated prevalence of hepatitis (particularly Hepatitis C).

Data from the Delaware Health Statistics Center² indicates an overall decline in deaths due to HIV/AIDS. In 1999-2000, HIV was listed as the fourth leading cause of death for residents of Delaware in the 25-44 year age group. In 1999-2003 HIV is the 5th leading cause of death in this age group.

At the end of 2004, there were 1,600 living AIDS cases in Delaware and an additional 1,059 persons living with HIV infection that had not progressed to AIDS. Living AIDS cases continue to increase across all demographic groups. In 2004, the prevalence rate (living AIDS cases in Delaware) was 196 per 100,000 population for AIDS and 130 per 100,000 for HIV infection. This represents a 13% increase in the survival rate from AIDS as compared to 2001 (when it had been 173 per 100,000) and a 5% increase from 2002 (186 per 100,000 population).

Figure 1. Comparison of mortality status in Delaware AIDS cases by year of diagnosis (year diagnosed), 1992 through 2004, (n=2,776)



HIV/AIDS by Gender and Race/Ethnicity:

The prevalence rate for female cases in Delaware through 2004 was 216 per 100,000 population (HIV/AIDS living cases). The prevalence rate for male cases in Delaware through 2004 was 441 per 100,000 (1,753 living HIV/AIDS cases).

Table 4 on the next page illustrates how the percentage of deaths in men attributed to AIDS has decreased gradually since the beginning of the epidemic and increased slowly in women. By race, deaths have increased in the Black population and decreased in the Hispanic and White populations. A sharp decline is noted in the deaths of MSM cases over time compared to the gradual increase in deaths among IDUs and heterosexual cases.

Table 4. Comparison of the characteristics of Delaware residents who died of HIV/AIDS in five year time periods from 1981 through 2004, (n=1,659)

Year of Death	Pre-1984		1985-1989		1990-1994		1995-1999		2000-2004		Total	
Variable	#	%*	#	%*	#	%*	#	%*	#	%*	#	%*
Gender												
Male	3	100%	119	86%	448	84%	447	79%	297	71%	1314	79%
Female	**	**	20	14%	86	16%	117	21%	122	29%	345	21%
Race/Ethnicity												
White	**	**	67	48%	214	40%	137	24%	79	19%	498	30%
Black	**	**	63	45%	294	55%	403	72%	319	76%	1080	65%
Hispanic	**	**	9	7%	24	5%	22	4%	18	4%	74	4%
Other	**	**	0	0	2	<1%	2	<1%	3	<1%	7	<1%
Mode of Exposure												
MSM	**	**	85	61%	229	43%	158	28%	81	19%	557	34%
IDU	**	**	27	19%	191	36%	288	51%	219	52%	728	44%
MSM/IDU	**	**	7	5%	45	8%	36	6%	26	6%	116	7%
Hetero/ Contact	**	**	6	4%	49	9%	74	13%	87	21%	216	13%
Other/ NIR	**	**	14	10%	20	4%	8	1%	6	1%	48	3%
Total	3	100%	139	100%	534	100%	564	100%	419	100%	1659	100%

* Percentages may not equal 100 due to rounding

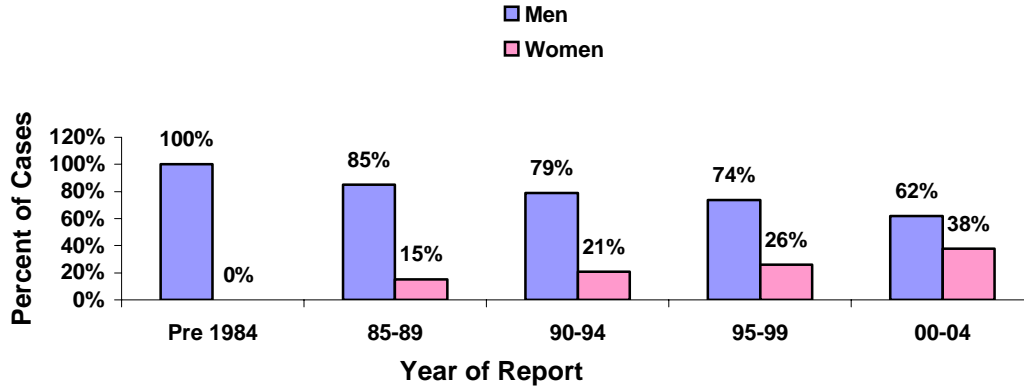
** n is too small to permit reporting

Looking at National data through 2003,⁴ the number of deaths declined in the Midwest and South and increased in the Northeast and West for year 2002 to 2003. The number of deaths related to AIDS declined among Whites and Asian/Pacific Islanders, increased among Hispanics, and remained stable among Blacks and American Indians/Alaskan Natives. By sex and risk, deaths declined in MSM, and male IDUs, while deaths among female IDUs remained stable. Heterosexual cases of both sexes experienced a decline from 1996 to 1998, then increased from 1999 through 2001, decreased slightly in 2002, and then increased in 2003. Delaware numbers are too small to talk about past year significant declines, but the trend is for declining percentages of male deaths and white deaths and an increased percentage for deaths among blacks.

Figure 2 on the next page illustrates the distribution of Delaware HIV/AIDS cases by gender and year of report for the time periods pre-1984, 1985–1989, 1990-1994, 1995-1999 and 2000-2004. The latest time period, 2000-2004 includes the collection of HIV case data implemented beginning in July 2001. A gradual decrease in male HIV/AIDS cases reported from 85% in the 1985-1989 period to 62% in the 2000-2004 period is reflected. The pre-1984 period is shown as a baseline, at which time there were only 3 cases in the state. Most cases, of course, are still among males, though the percentage of cases among females rises from 15% in 1985-1989 to 38% in 2000-2004. Looking at both Table 4 and Figure 2, the overall trend numbers mask what is happening among women, where there is: first, a steady increase in the percentage of female cases

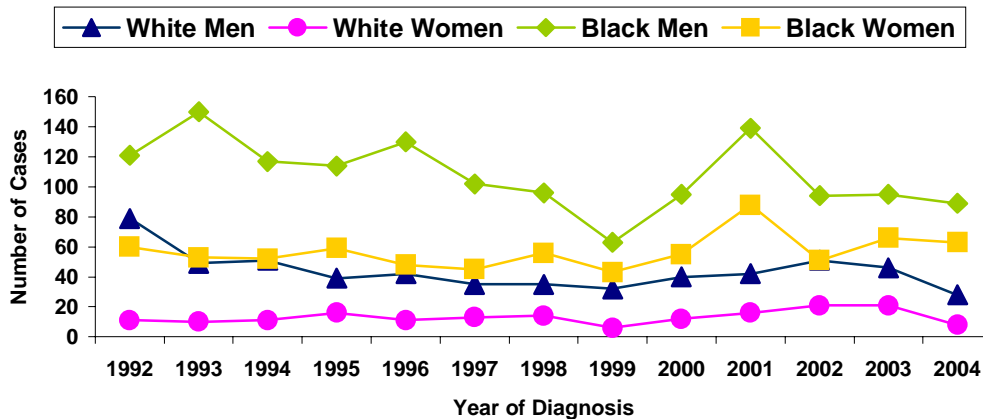
reported with HIV/AIDS; and second, an apparent increase in the number of deaths among women reported in Delaware.

Figure 2. Distribution of Delaware HIV/AIDS cases by gender and year of report through 2004, (n=4,343)



Male HIV/AIDS cases continue to dominate case reports. Males represent 49% of Delaware's population, yet 71% of the HIV/AIDS cases. Females represent 51% of Delaware's population, and 29% of the HIV/AIDS cases. Figure 3 below provides a graphical depiction of both the gender and racial trends in Delaware. Black men represent the majority of cases, followed by Black women. The increase in the year 2001, particularly for Blacks, is again attributed to the onset of HIV reporting.

Figure 3. Comparison of Delaware HIV/AIDS cases by gender and race, diagnosed 1992 through 2004, (n=2,888)



Delaware's HIV/AIDS epidemic continues to disproportionately affect the Black population. Blacks comprise 19% of the state population but 66% of AIDS cases and 64% of HIV cases. Among females, 80% of AIDS cases and 69% of HIV cases are among Blacks, compared with 59% and 64% nationally. The national vs. Delaware comparison is even more striking among males where 62% of AIDS cases and 61% of HIV cases are in the Black population in Delaware, compared

to the national percentages of 35% and 43%, respectively. For pediatric cases, 71% of both HIV and AIDS cases in Delaware are within the Black population. National data on gender/race breakdowns were unavailable for pediatric cases. Tables 5a and 5b and the accompanying chart provide an overview of the racial distribution of Delaware and National AIDS cases respectively. The “other” category in the table includes Asian/Pacific Islanders and Native American/Alaskan Natives.

Table 5. Distribution of Delaware AIDS cases by race/ethnicity and gender in adult/adolescent cases and pediatric cases reported through 2004, (n=3,263)

Race	Adult Male (n=2,400)		Adult Female (n=832)		Pediatric (n=31)		Total (n=3,263)	
	#	%*	#	%*	#	%*	#	%*
White	777	32%	125	15%	6	19%	908	28%
Black	1,484	62%	663	80%	22	71%	2,169	66%
Hispanic	131	6%	38	5%	3	10%	172	5%
Other	8	1%	6	1%	0	0%	14	<1%

* Percentage may not equal 100 due to rounding

Table 6. National distribution of AIDS cases by race/ethnicity and gender in adult/adolescent cases and pediatric cases reported through 2003, (n=902,294)**

Race	Adult Male (n=729,478)		Adult Female (n=163,396)		Pediatric (n=9,420)		Total (n=902,294)	
	#	%*	#	%*	#	%*	#	%*
White	333,437	46%	33,684	21%	1,620	17%	368,741	41%
Black	253,014	35%	96,361	59%	5,562	59%	354,937	39%
Hispanic	133,497	18%	31,554	19%	2,128	23%	167,179	18%
Other	8,214	1%	1,459	1%	86	1%	9,759	1%
Unknown	1316	<1%	338	<1%	24	<1%	1,687	<1%

* Percentages may not equal 100 due to rounding

** Due to the use of point estimates by CDC, the n in this table (902,294) differs from the count for total AIDS cases (902,223)

Chart 1. National and Delaware AIDS statistics by gender and race

National AIDS statistics in men by race	Delaware AIDS statistics in men by race
The distribution of cumulative male AIDS cases through 2003 by race nationally is 46% White, 35% Black, 18% Hispanic and 1% other races.	Delaware's cumulative male AIDS cases through 2004 by race are 32% White, 62% Black, 6% Hispanic and 1% other races.
National AIDS statistics in women by race	Delaware AIDS statistics in women by race
The National distribution of female AIDS cases through 2003 is 21% White, 59% Black, 19% Hispanic and 1% other races.	Delaware's distribution of female AIDS cases through 2004 by race is 15% White, 80% Black, 5% Hispanic and 1% other races.

Tables 7 and 8 below provide data for Delaware and National HIV cases respectively. Again, it should be remembered that the National HIV data are based only on those areas that provide confidential name-based HIV infection reporting.

Table 7. Distribution of Delaware HIV cases by race/ethnicity and gender in adult/adolescent cases and pediatric cases reported through 2004, (n=1,080)

Race	Adult Male (n=663)		Adult Female (n=401)		Pediatric Cases (n=16)		Total (n=1,080)	
	#	%*	#	%*	#	%*	#	%*
White	209	32%	103	26%	2	19%	314	29%
Black	405	61%	277	69%	13	71%	695	64%
Hispanic	42	6%	18	4%	2	10%	62	6%
Other	7	1%	3	1%	n/a	0%	9	<1%

* Percentage may not equal 100 due to rounding

Table 8. National Distribution of HIV cases by race/ethnicity and gender in adult/adolescent cases and pediatric cases reported through 2003, (n=929,985)

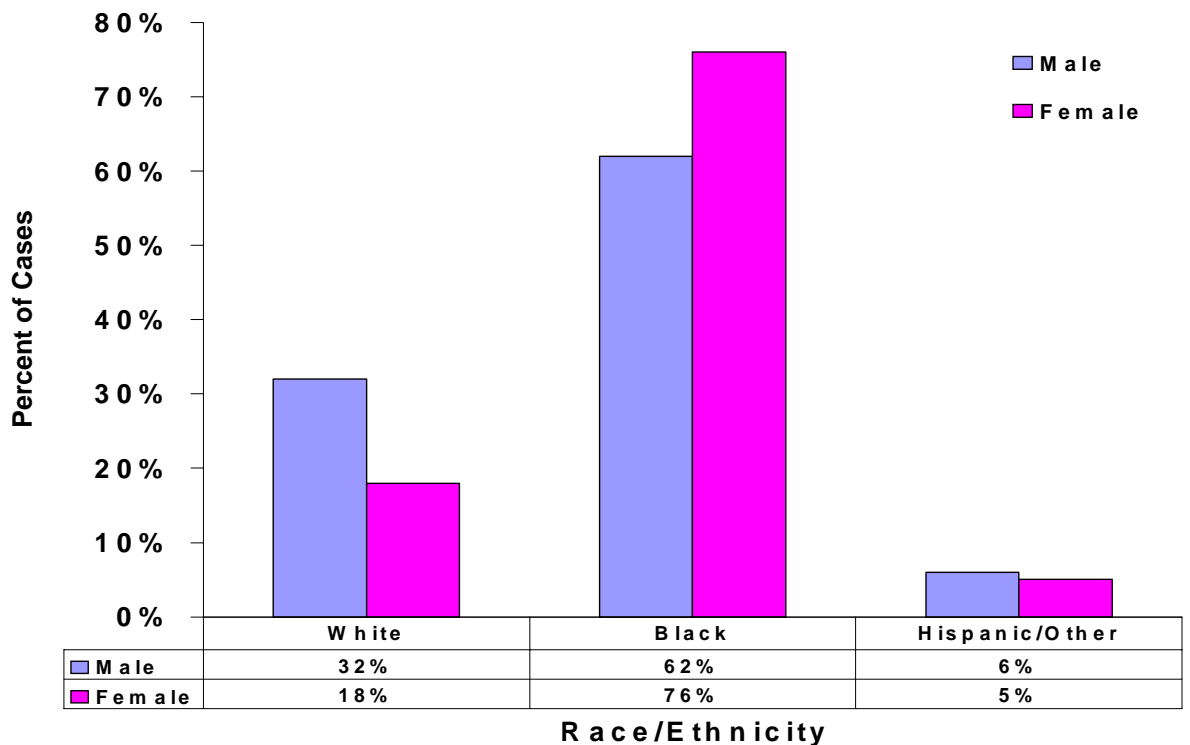
Race	Adult Male (n=152,739)		Adult Female (n=63,740)		Pediatric Cases*		Total (n=216,749)	
	#	%*	#	%*	#	%*	#	%*
White	62,949	41%	13,405	21%	n/a	n/a	76,354	35%
Black	65,316	43%	41,067	64%	n/a	n/a	106,383	49%
Hispanic	21,401	14%	8,194	13%	n/a	n/a	29,595	14%
Other	1,695	1%	615	1%	n/a	n/a	2,310	1%
Unknown	1,378	1%	459	1%	n/a	n/a	1,837	<1%

*Percentage may not equal 100 due to rounding

Chart 2. National and Delaware HIV statistics by gender and race

National HIV statistics in men by race	Delaware HIV statistics in men by race
The distribution of cumulative male HIV cases through 2003 by race nationally is 41% White, 43% Black, 14% Hispanic and 2% other races.	Delaware's cumulative male HIV cases through 2004 by race are 32% White, 61% Black, 6% Hispanic and 1% other races.
National HIV statistics in women by race	Delaware HIV statistics in women by race
The National distribution of female HIV cases by race is 21% White, 64% Black, 13% Hispanic and 1% other races.	Delaware's distribution of female HIV cases through 2004 by race is 69% Black, 26% White, 5% Hispanic and 2% other races.

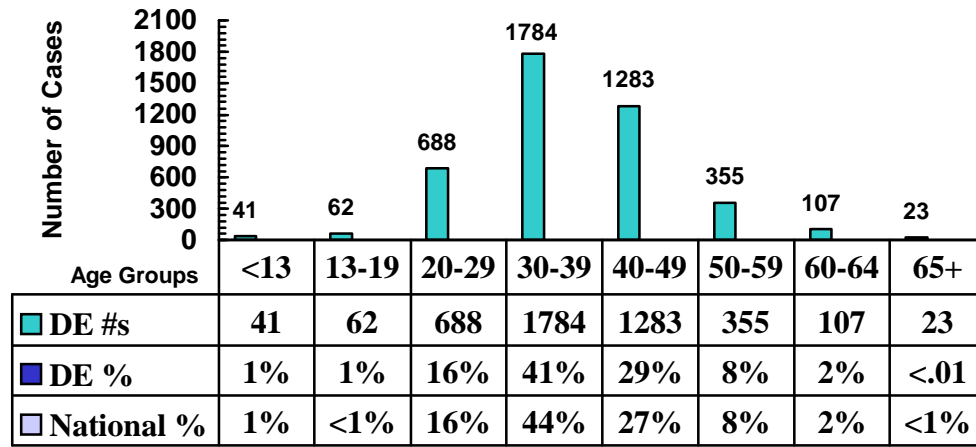
Figure 4. Distribution of Delaware HIV/AIDS cases by race and gender through December 2004, (n=4,343)



HIV/AIDS by Age Group:

Age group refers to the age a person first tests positive for HIV or age at diagnosis of AIDS. When compared by age group, Delaware's HIV/AIDS statistics through 2004 are similar to the national statistics for 2003. As portrayed in Figure 5, on the next page, the percentages differ little.

Figure 5. Distribution of Delaware HIV/AIDS cases by age groups through 2004, (n=4,343)



Delaware's HIV/AIDS cases by age group are very similar to the national estimates. In both Delaware and nationally, over 70% of cases are for those 30 to 49 years of age. Fewer than 3% of HIV/AIDS cases in both Delaware and nationally are for those 60 and older. Only 1% of Delaware and national HIV/AIDS cases are for those under age 13, defined as pediatric HIV/AIDS cases. Pediatric cases, although relatively rare, occur disproportionately among minorities. Delaware pediatric HIV/AIDS cases are addressed separately in more detail beginning on page 39.

HIV/AIDS by Mode of Exposure:

For surveillance purposes, HIV/AIDS cases are counted only once in the hierarchy of exposure categories established by the CDC. Persons with more than one reported mode of exposure to HIV are classified in the category listed first in the hierarchy, except for men with both a history of sexual contact with other men and injecting drug use. They comprise a separate exposure category. This hierarchy of exposure categories in adult/adolescent cases is as follows:

1. Men who have sex with men
2. Injecting drug user
3. Men who have sex with men and inject drugs
4. Heterosexual contact "sex partner at risk"
 - a. sex with an injecting drug user
 - b. sex with a bisexual male
 - c. sex with a person with hemophilia
 - d. sex with a transfusion recipient with HIV
 - e. sex with a transplant recipient with HIV
 - f. sex with a person with HIV/AIDS; with a risk unspecified
5. Transfusion of blood/blood components
6. Transplant of tissue/organs or artificial insemination
7. Worked in a health care or laboratory setting

If a patient admits to certain sexual or drug use behaviors, the patient is ranked along this continuum of possible exposures to HIV. Nationally,⁴ 10% of the AIDS cases reported through December 2003 were “no identified risk” (NIR), while 28% of HIV cases had no identified risk. Surveillance personnel in Delaware place a high priority on determining risk, and 6.6% HIV and 1.5% of AIDS cases in Delaware at the end of 2004 were classified as NIR. The NIR largely reflects cases where the reporting source does not have the risk information to report (e.g., private laboratories, blood banks and lab tests conducted during inpatient hospitalizations where results came after discharge and cases were never linked). Surveillance staff attempt to resolve the “no risk reported” (NRR) cases when reviewing medical records. The difference in NIR percentages between HIV and AIDS, both nationally and in Delaware, is partly a function of time to investigate and collect data. Newer cases tend to be HIV reports, and, over time, the details are obtained by surveillance staff.

Table 9 below illustrates the mode of exposure for all Delaware HIV/AIDS cases and compares the data from the beginning of the epidemic through 1999 to the information available from 2000 through 2004. The mode of exposure or transmission of HIV describes the behavioral characteristics of a person at risk for acquiring HIV infection. Injecting drug use (IDU) is the greatest percentage of cases through 1999 followed by men who have sex with men (MSM). The large increase in heterosexual contact with a person with HIV or AIDS (PWH/A) from 8% to 29% moves it into the most prevalent category in the 2000-2004 era. This rapid change in ranking, though, should be viewed with caution since it has much to do with the reporting of HIV beginning in 2001. Also in general, risk information on initial case report forms is often revised after medical record reviews reveal the “person with HIV or AIDS” is an IDU or bisexual. Other modes of exposure (*) include pediatric cases infected through mothers, transfusion recipients, and additional transmission modes that resulted in less than 2% of Delaware's HIV/AIDS cases in the 2000-2004 era. The increase in NIR cases in the 2000-2004 period is largely a result of inclusion of HIV reporting in this era.

Table 9. Comparison of all Delaware HIV/AIDS cases by mode of exposure diagnosed through 1999 (n=3,147) to cases diagnosed 2000-2004, (n=1,196)

Mode of Exposure	Through 1999		2000 - 2004	
	#	%*	#	%*
Injecting drug use (IDU)	965	43%	286	28%
Men who have sex with men (MSM)	1355	31%	331	24%
Heterosexual contact with PWA	263	8%	345	29%
Heterosexual contact with an IDU	255	8%	97	8%
Men who inject drugs & are MSM	186	6%	34	3%
No identified risk (NIR)	40	1%	79	7%
Other modes	83	3%	24	2%
Total cases	3147	100%	1196	100%

* Percentages may not equal 100 due to rounding

Chart 3. National and Delaware HIV/AIDS statistics by gender and mode

National HIV and AIDS statistics in men by mode	Delaware statistics in men by mode
<p>National statistics through 2003 for AIDS indicate the distribution of male cases by mode are 55% MSM, 21% IDU, 8% MSM/IDU and 6% heterosexual contact. The remaining 10% are related to other modes and cases with risk not identified.</p> <p>National statistics through 2003 for HIV indicate the distribution of male cases by mode are 48% MSM, 13% IDU, 6% MSM/IDU and 8% heterosexual contact. The remaining 25% are related to other modes and cases with risk not identified.</p>	<p>Delaware had 3,084 men reported with HIV/AIDS through 2004. Forty-one percent (n=1,251) were MSM, 38% (n=1,157) were IDU, and 11% (n=329) were heterosexual contact only. Of the 329 heterosexual contacts, sex with a woman with HIV comprised 66% (n=218). Sex with a woman who was an IDU accounted for 34% (n=111). MSM/IDU were reported in 7% (n=220) cases and the remaining 4% (n=57) are related to other modes and cases with risk not identified or reported.</p>
National statistics in women by mode	Delaware statistics in women by mode
<p>National statistics through 2003 for AIDS indicate the distribution of female cases by mode are 45% heterosexual contact, 20% IDU and 1% blood transfusion recipient. The remaining 34% are related to other modes and cases with risk not identified.</p> <p>National statistics through 2003 for HIV indicate the distribution of female cases by mode is 40% heterosexual contact, 14% IDU and 1% blood transfusion recipient. The remaining 45% are related to other modes and cases with risk not identified.</p>	<p>Delaware had 1,259 cases of HIV/AIDS reported in women through 2004. Fifty percent (n=631) of the women with HIV/AIDS in Delaware at the end of 2004 were infected through heterosexual contact. Sex with a person with HIV comprises 61% (n=390) of the heterosexual cases and 38% (n=220) are due to sex with an injecting drug user. Injecting drug use accounts for the transmission of HIV in 42% (n=529) of the remaining women while 8% (n=99) have risk not reported/identified or other.</p>

The early years of the AIDS epidemic in Delaware (1981 - 1993) are quite a different picture than the more recent years (1994 - 2004). Table 10 on the next page compares the top six behavioral groups reported in the first ten-year period to the latter. The number of cases reported in each time period is noted under the year of report. The columns indicate the number of cases in each behavioral group, and the percentage is representative of the whole number reported.

Table 10. Comparison of early (through 1993) HIV/AIDS cases reported to later years (1994-2004) by mode in Delaware, (n=4,343)

Total number of cases reported in the period	Through 1993 (n=954)		1994-2004 (n=3,389)	
	#	%*	#	%*
Behavioral Risk Group				
Men who have sex with men (MSM)	414	43%	837	25%
Men who inject drugs (IDU)	241	25%	916	27%
Women – with male sex partners at risk	49	5%	582	16%
Women who inject drugs (IDU)	106	11%	423	13%
Men – with female sex partner at risk	26	3%	303	9%
Men who inject drugs & are MSM (MSM/IDU)	69	7%	151	4%
All other modes including NIR or NRR cases	49	5%	177	5%

* Percentages may not equal 100 due to rounding

As previously demonstrated, the data in Table 10 above illustrate again the decrease in cases of men who are MSM. By comparing the two eras of the epidemic, the percentages in MSM decreased from 43% in the early era to 25% in the second. The other obvious change is the increase in women with male sex partners at risk, where the heterosexual partners of the women were intravenous drug users, bisexual men and/or HIV infected. The percentage increased over three times, from 5% to 16%. The percentage of men with female sex partners who are at risk through injecting drug use and/or whose female partner is HIV infected tripled from 3% to 9% from the first decade to the second decade respectively.

The next portion of the profile continues to address modes of transmission in adult and adolescent cases of HIV/AIDS. To illustrate changes in the two “AIDS eras,” the data are again separated into two periods in Table 11 below. An increase of close to 100% (from 18% to 32%) is noted in the percentage of female cases reported.

Table 11. Distribution of Adult/Adolescent HIV/AIDS cases by gender in the early period (through 1993) and 1994-2004 period in Delaware, (n=4,291)

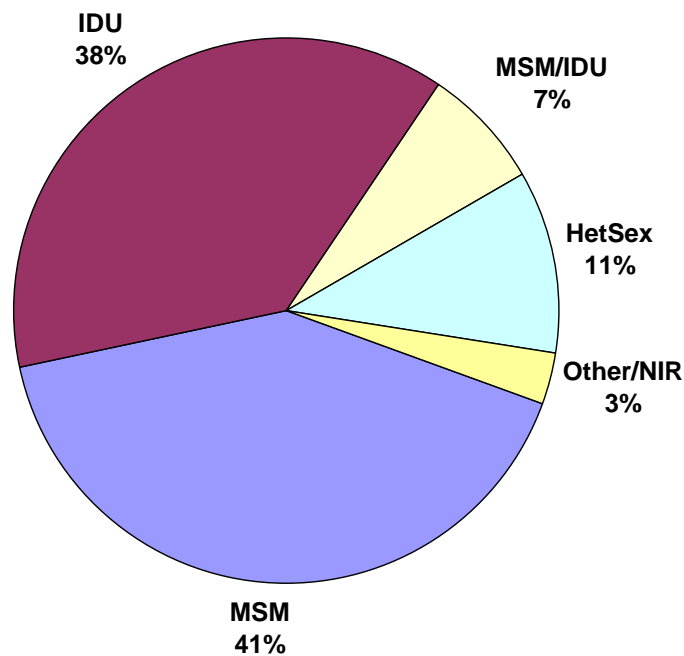
Total number of cases reported in the period	Through 1993 (n=944)		1994-2004 (n=3,347)		Total (n=4,291)	
	#	%*	#	%	#	%*
Gender						
Males	773	82%	2,287	68%	3,060	71%
Females	171	18%	1,060	32%	1,231	29%
Total	944	100%	3,347	100%	4,291	100%

* Percentages may not equal 100 due to rounding

Adult/Adolescent Transmission Modes in Males:

The modes of transmission for HIV/AIDS in Delaware adult/adolescent male cases have changed over time. At the end of 1992, 58% of the cases were MSM, 25% were IDU, and 10% MSM/IDU. Men infected through sex with a woman with HIV or sex with a woman who injected drugs comprised only 3% of the AIDS cases reported. Figure 6 below shows the distribution of modes of transmission through 2004 and illustrates how the percentages have shifted away from MSM and MSM/IDU to increases in IDU and heterosexually infected men in Delaware.

Figure 6. Distribution of male adult/adolescent HIV/AIDS cases by mode of transmission in Delaware through 2004, (n=3,063)



Men Who Have Sex with Men (MSM)

Men who have sex with men represented 43% (n=414) of the 773 male adult/adolescent cases reported in the early period of the epidemic (through 1993). From 1994 through 2004 the percentage of male cases attributed to MSM decreased to 25% (n=837) of the 2,287 cases reported in men in Delaware. The race and age groups for men who have sex with men are shown on the next page in Table 12 and are split into periods to compare any changes in the epidemic among the MSM population from the earlier to the later period.

Table 12. Demographic characteristics of race and age group in HIV/AIDS cases of men who have sex with men by year of report in Delaware 1981– 2004, (n=1,250)

Characteristic	Through 1993 (n=414)		1994 Through 2004 (n= 836)	
	#	%*	#	%*
Race/Ethnicity				
White	270	65%	423	51%
Black	131	32%	365	44%
Hispanic/Other	13	3%	48	6%
Age Groups				
13-19	0	0%	12	1%
20-29	87	21%	181	22%
30-39	195	47%	354	42%
40-49	92	22%	193	23%
50-59	33	8%	61	7%
60-69	7	1%	28	3%
70-79	0	n/a	7	<1%

* Percentages may not equal 100 due to rounding

An increase in the number of MSM cases in men of color is noted in the second time period compared to a decrease in the White population. Additional cases in all age groups from 1994 through 2004 are likely due to the 1993 change in case definition and the 2001 inclusion of HIV reporting data in the surveillance report. The presence of cases in the 13-19 age group and an increase of cases in most other age groups reflects the influence HIV reporting has on the portrait of the epidemic in Delaware.

As of December 31, 2004, a cumulative total of 992 MSM with AIDS had been reported in Delaware and 258 with HIV for a total of 1,251 with HIV/AIDS. Men who have sex with men represent 29% of the cumulative HIV/AIDS cases reported in Delaware through 2004.

As illustrated in Figure 7 on the next page, the number of MSM cases reported by race and ethnicity has remained fairly level in men of Hispanic origin with minimal change over the twenty-year period. Though historically men who have sex with men appear to be most often in the White population on the chart, the number of MSM in the Black population equaled Whites in 2004. The increase in all race/ethnic groups in '93-'94 and in '01-'02 are again the result of the 1993 AIDS case definition change and implementation of HIV reporting respectively.

Figure 7. HIV/AIDS cases among men who have sex with men (MSM) by race and ethnicity by year of report in Delaware 1983 through 2004, (n=1,250)

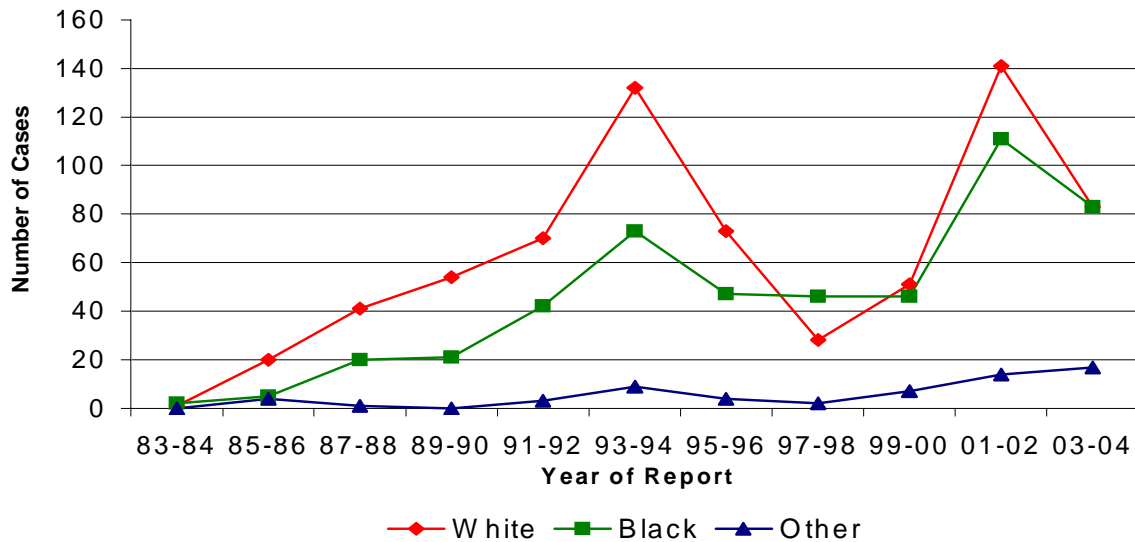
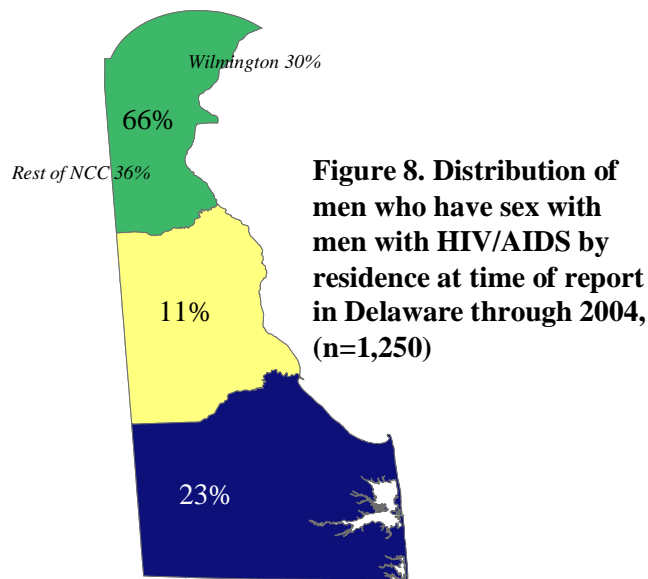


Figure 8 below depicts the geographical distribution of MSM cases in Delaware. The figure shows 66% reside in New Castle County with 30% in zip codes 19801, 19802, 19805 and 19806 (essentially, the City of Wilmington) and 36% in the rest of New Castle County. Twenty-three percent of the MSM cases reside in Sussex County, and 11% percent of the MSM reside in Kent County.



Men Who Inject Drugs

Men who inject drugs represented 31% (n=241) of the 773 male adult/adolescent cases reported in the early period of the epidemic. From 1994 through 2004 the proportion of male IDU cases increased to 40% (n=916) of the 2,287 cases reported in Delaware. The race and age groups for men who inject drugs are shown below and are split into two periods to compare any changes in the epidemic among the IDU population from one decade to the other. The disproportionate number of IDUs in the Black male population is significant.

Table 13. Men who inject drugs: demographic characteristics of HIV/AIDS cases by race and age group by year of report 1983 – 2004 in Delaware, (n=1,157)

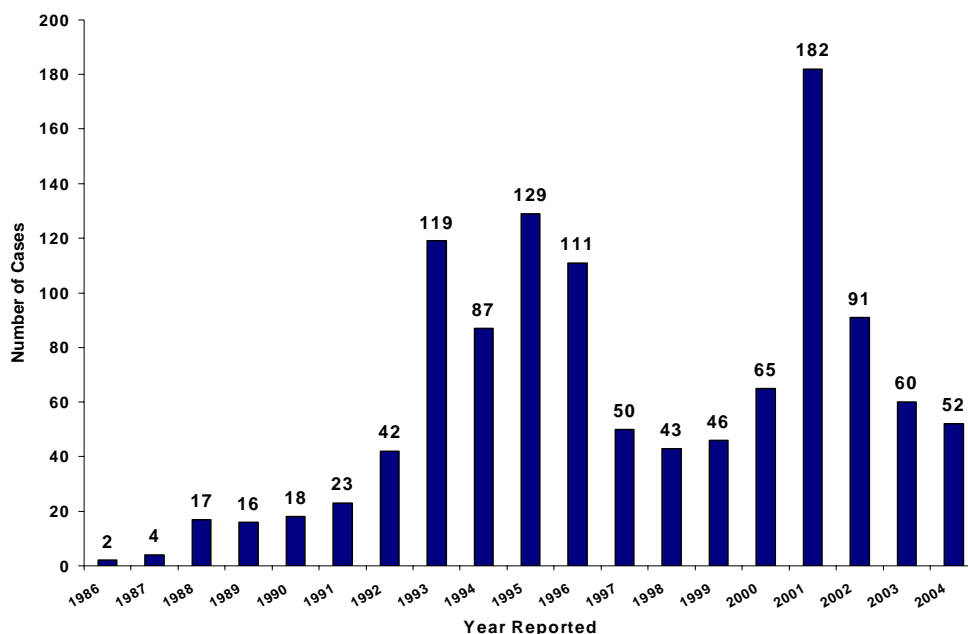
Demographics	Through 1993 (n=241)		1994 Through 2004 (n=916)	
	#	%**	#	%**
Race/Ethnicity				
White	31	13%	102	11%
Black	190	79%	753	82%
Hispanic/Other	20	8%	61	7%
Age Groups				
13-19	0	0%	2	0%
20-29	27	11%	58	6%
30-39	124	52%	318	35%
40-49	76	32%	421	46%
50-59	14	6%	105	12%
60-69	*	n/a	11	1%
70-79	*	n/a	0	0%

*Cases in the 50-79 age groups are merged due to small cell size

** Percentages may not equal 100 due to rounding

Figure 9 on the next page depicts the number of male IDU cases in adult/adolescent HIV/AIDS cases by year of report. Two periods, 1992 to 1993 and 2000 to 2001 reflect nearly a 300% increase in the number of cases reported. Again, the increase is attributed to the change in the AIDS definition and implementation of HIV reporting occurring in the years respectively. Figure 10 on page 32 represents the incidence of men who inject drugs by county.

Figure 9. HIV/AIDS cases among men who are injecting drug users (IDUs) by year of report in Delaware 1986 through 2004, (n=1,157)



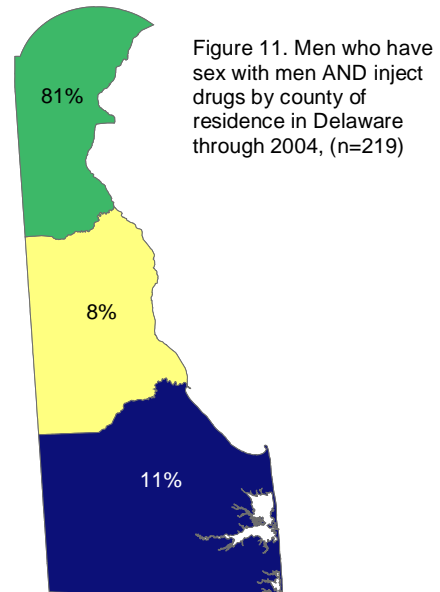
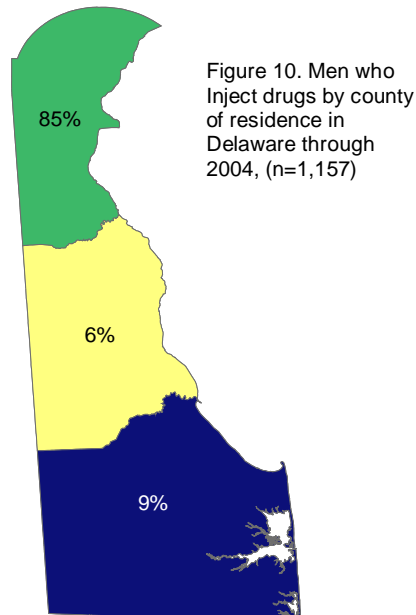
Men Who Inject Drugs and Who Also Have Sex with Men (MSM/IDU)

Male injection drug users who also have sex with men (MSM/IDU) are the fourth highest behavioral risk in Delaware’s HIV/AIDS population. A cumulative total of 219 MSM/IDU cases have been reported through December 2004 representing 7% of the total number of male cases. Table 14 below reports the race and age breakdown of the MSM/IDU cases, and Figure 11, on the next page, reports the distribution by county.

Table 14. Race and age demographic characteristics in male injecting drug users who also have sex with men by year of report, 1981-2004, (n=219)

Demographics	Through 1993 (n=69)		1994 Through 2004 (n=150)	
	#	%*	#	%*
Race/Ethnicity				
White	21	30%	44	29%
Black	43	62%	99	66%
Hispanic/Other	5	7%	7	5%
Age Groups				
13-19	0	0	0	n/a
20-29	11	16%	18	12%
30-39	45	65%	72	48%
40-49	8	12%	49	33%
50-59	5	7%	8	5%
60-69	0	0	3	2%
70-79	0	0	0	n/a

* Percentages may not equal 100 due to rounding



Men Reported with Heterosexual Mode of Transmission Only

Nationally,⁴ 19% of AIDS and 12% of HIV cases cumulatively through 2003 were exposed through heterosexual contact. Of the adult/adolescent males reported with AIDS through 2003 through heterosexual contact, 27% were reported as infected through sex with a female injecting drug user. Among HIV cases, 18% of the heterosexual cases were from sex with a female injection drug user.

Table 15, on the next page, compares the demographics of race/ethnicity and age groups for two time periods of the Delaware epidemic in men who were heterosexually infected with HIV. Both eras indicate Black men and men in the 30-39 year age group are most frequently reported with a heterosexual transmission mode. In the early years of the epidemic prior to 1993, more than two-thirds (67%) of the heterosexual men were Black, and after 1993, more than three-quarters (76%) were Black. White men who were reported as heterosexually infected have decreased by nearly half, from 30% to 17%. The absence of any heterosexual Hispanic men in the first decade is more than likely attributed to lack of HIV education, treatment and/or early intervention in the population that would have aided in detection in the community.

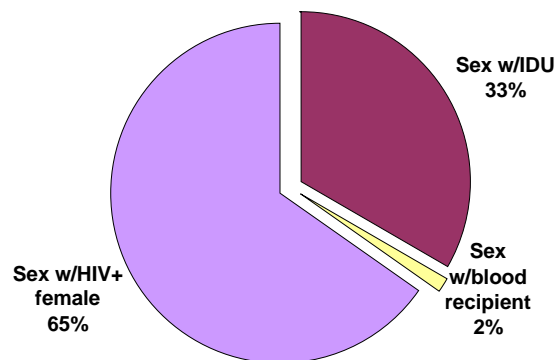
Table 15. Demographic characteristics of race and age group in heterosexual men by year of report in Delaware 1981–2004, (n=333)

Demographics	Through 1993 (n= 27)		1994 Through 2004 (n= 306)	
	#	%*	#	%*
Race/Ethnicity				
White	8	30%	52	17%
Black	18	67%	231	76%
Hispanic/Other	1	4%	23	7%
Age Groups				
13-19	0	0%	4	1%
20-29	3	11%	41	13%
30-39	12	44%	114	37%
40-49	7	26%	85	28%
50-59	2	7%	37	12%
60-69	3	11%	21	7%
70-79	0	0%	4	1%

* Percentages may not equal 100 due to rounding

Delaware men infected through heterosexual contact with a woman, represent 11% of the male population reported cumulatively. Figure 12 below illustrates that sex with an injecting drug user was indicated in 33% (n=111) of the cases, and 65% (n=217) had sex with a woman with HIV. The remaining 2% (n=5) had sex with someone who had received a blood transfusion.

Figure 12. Distribution of female partner’s risk in men reported as heterosexually HIV-infected in Delaware through 2004, (n=333)



The distribution by county of residence in men reported as infected with HIV through heterosexual contact is shown in Figure 13. The vast majority, 71%, of the heterosexually infected men are residents of New Castle County, 16% are from Sussex County and 13% from Kent County.

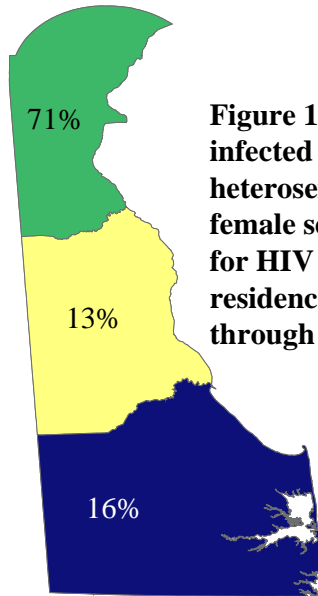


Figure 13. Men reported as infected through heterosexual contact with a female sexual partner at risk for HIV by county of residence in Delaware through 2004, (n=333)

Adult/Adolescent Transmission Modes in Females:

Women Who Inject Drugs

Table 16 below again divides the epidemic into two periods, and shows female injecting drug users by race and age at year of report. The Black IDU female population is the most affected by the HIV/AIDS epidemic in both time periods, and the percentage of IDUs in White females more than doubled. And though the 30-39 year age group is clearly the group most often affected in both decades, the increase in the 20-29 year age group and the finding of cases in the teenage group are significant as well.

Table 16. Women who inject drugs: demographic characteristics of race and age group by year of report in Delaware 1983–2004, (n=528)

Demographics	Through 1993 (n=106)		1994 Through 2004 (n=422)	
	#	%*	#	%*
Race/Ethnicity				
White	7	7%	77	18%
Black	91	86%	330	78%
Hispanic/Other	8	7	15	4%
Age Groups				
13-19	0	0%	11	3%
20-29	10	9%	55	13%
30-39	71	67%	196	46%
40-49	21	20%	137	32%
50-59	4	4 %	14	3%
60-69	0	0%	8	2%
70-79	0	0%	1	1%

*Percentages may not equal 100 due to rounding

Figure 14. HIV/AIDS cases among women who inject drugs (IDU) by year of report in Delaware 1987 through 2004, (n=528)

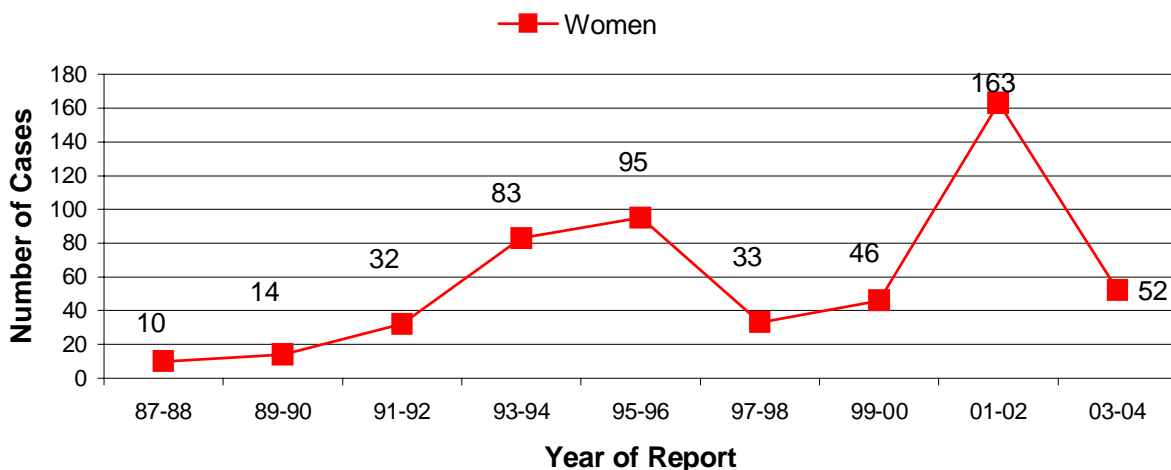
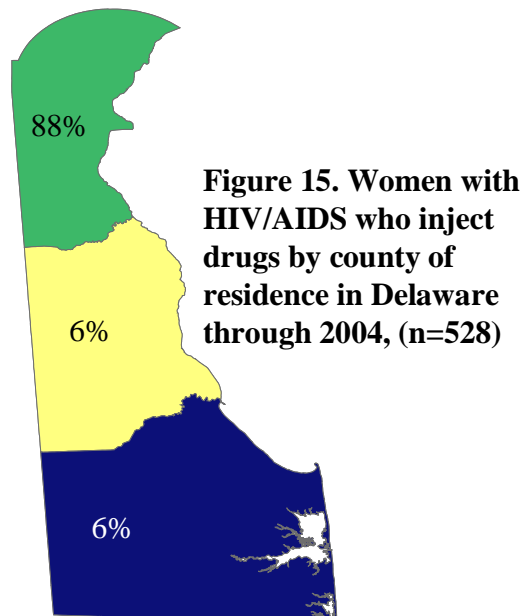


Figure 14, on the preceding page, reflects the number of cases reported in two-year periods for women reported with HIV/AIDS who inject drugs. Again, the increase in the number of cases reported in the '93-'94 period is attributed to the change in the AIDS case definition. The rise in 2001 is due to the implementation of HIV reporting.

Figure 15 below depicts the distribution of women reported with HIV/AIDS who are injecting drug users by county of residence at time of report. New Castle County is illustrated as home to 88% of the women who inject drugs who have HIV infection.



Women with Male Sex Partners at Risk (Heterosexual Contact)

Table 17 on the next page compares women HIV-infected by a male partner in the periods 1983 –1993 and 1994 –2004. In Black and White women the percentages remained remarkably stable over the two periods.

Table 17 also shows a decrease in the percentage of women in the 20-29 and the 30-39 year age groups who were HIV-infected by a male partner. There was a corresponding increase in the number of female cases attributed to heterosexual transmission in the 40-49 age group.

Table 17. Heterosexual contact in women: demographic characteristics of race and age group by year of report in Delaware 1981– 2004, (n= 652)

Demographics	Through 1993 (n=55)		1994 Through 2004 (n=597)	
	#	%*	#	%*
Race/Ethnicity				
White	12	22%	117	21%
Black	40	73%	445	73%
Hispanic/Other	3	5%	35	6%
Age Groups				
13-19	1	2%	25	4%
20-29	19	35%	149	25%
30-39	24	44%	217	36%
40-49	7	13%	152	25%
50-59	2	4%	42	7%
60-69	2	4%	11	2%
70-79	0	0%	1	1%

* Percentages may not equal 100 due to rounding

In Figure 16 below, the women reported with heterosexually acquired HIV are broken down by the risk of the partner thought to have exposed them. Sex with an injecting drug user was reported as the partner's risk in 37% (n=241) of the cases, and 60% (n=389) had sex partners who were HIV positive.

Figure 16. Distribution of male partner's risk in women reported as heterosexually HIV-infected in Delaware through 2004, (n=652)

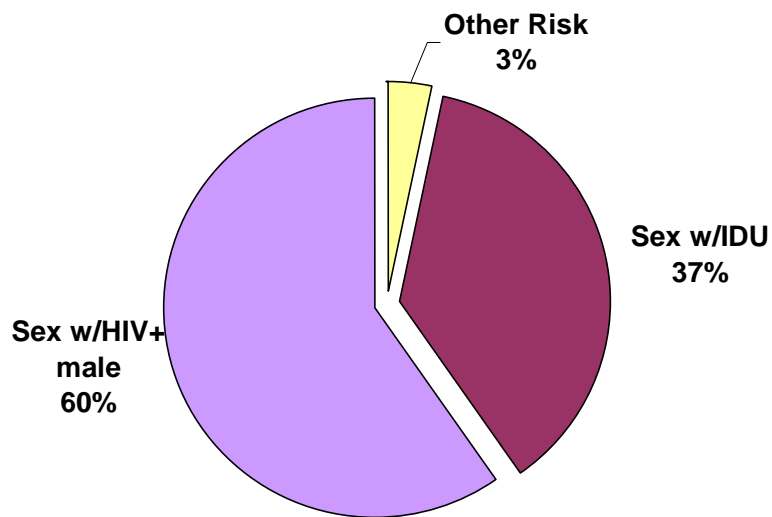


Figure 17 below shows the county of residence where the women were residing at the time they were diagnosed with HIV/AIDS. Nearly three-quarters (73%) reside in New Castle County with the remaining 27% distributed evenly between Kent and Sussex Counties.

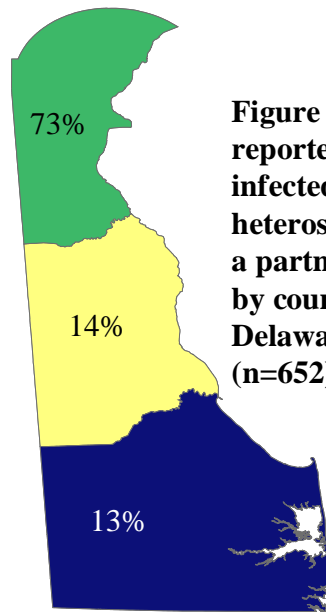
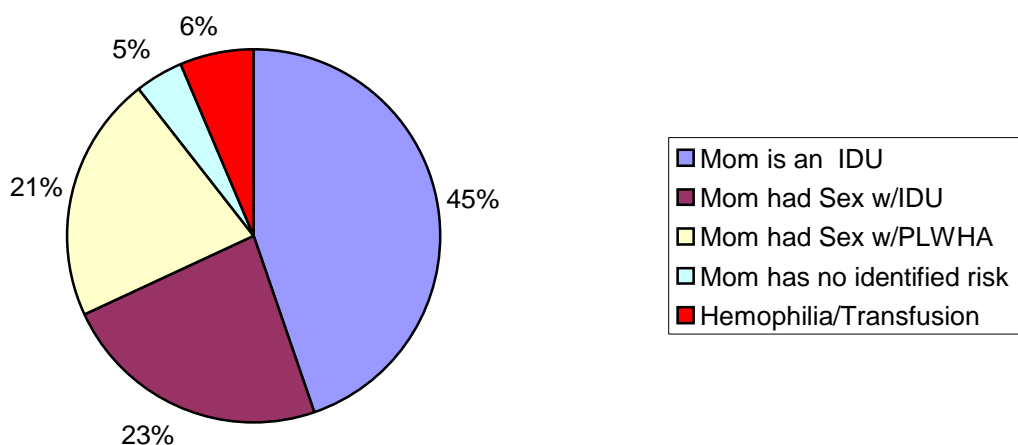


Figure 17. Women reported in Delaware as infected through heterosexual contact with a partner at risk for HIV by county of residence in Delaware through 2004, (n=652)

Pediatric HIV/AIDS Cases:

Through 2004, Delaware had 47 pediatric cases of HIV/AIDS, a small number for statistical reporting. Sixteen have HIV infection and 31 are AIDS defined. Thirty-seven (79%) of the children are living and 10 (21%) have died. Race/Ethnicity distribution for pediatric cases is 74% Black, 17% White and 9% Hispanic. Geographically, 75% (n=35) were living in New Castle County at time of diagnosis of HIV/AIDS, 15% (n=7) in Kent County and 11% (n=5) in Sussex County.

Figure 18. Distribution of pediatric HIV/AIDS cases by mothers' mode of transmission in Delaware through 2004, (n=47)



As depicted in Figure 18 above, forty-five percent of the pediatric cases were born to mothers with HIV disease who were injecting drug users and 23% to mothers who had sex with injecting drug users. Twenty-one percent of the pediatric cases were born to mothers who had sex with someone with HIV/AIDS, and 5% were born to mothers with no identified risk. The perinatal exposures comprise 94% of the risk for pediatric cases in Delaware with hemophilia, transplant or transfusion risks associated to the remaining 6%. In Delaware, no new cases of perinatal exposure were reported to public health in 2003 or 2004.

Nationally⁴ through December 2003, a total of 9,419 children (<13 years of age) had been reported as having AIDS; of these pediatric cases, 5,103 (54%) had died. During 2003, 152 new cases of HIV/AIDS in children were reported. Of the 2003 cases, 86% (131) were transmitted from an HIV positive mother. Among those transmitted from a mother, 35% (53) resulted from mother's sex with an HIV positive male, 11% (17) from mother's injection drug use, while 40% (61) resulted from a maternal transmission where the mother's cause of infection was unidentified. Of note is the comparison with national data in mother's IDU as a cause, which is 11% of national pediatric infections and 45% of Delaware infections.

Figure 19 below shows the national trend in AIDS (not HIV) cases diagnosed in children under the age of 13 from 1993 through 2003. As shown below, there has been a substantial decline in new AIDS cases among pediatric patients.

Figure 19. National trend in pediatric AIDS cases 1992 through 2003, (n= 5,082)

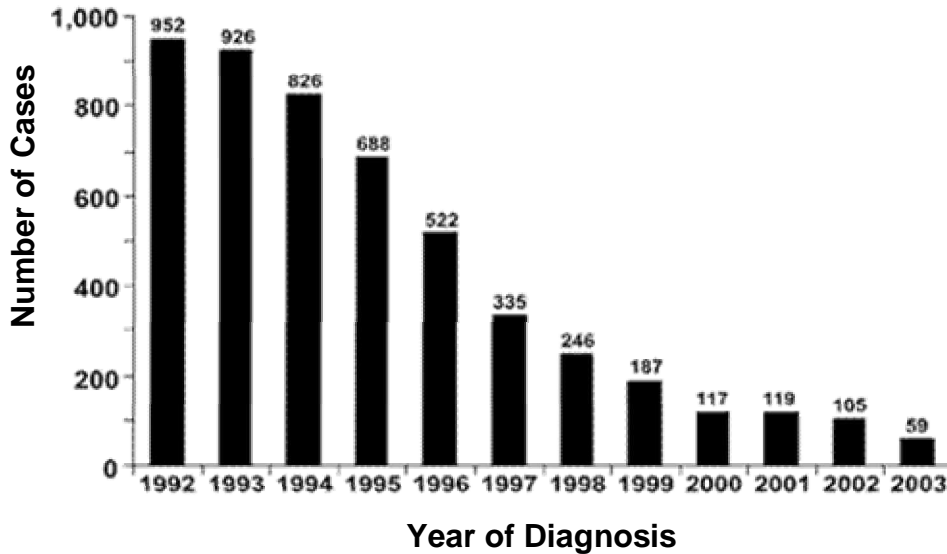
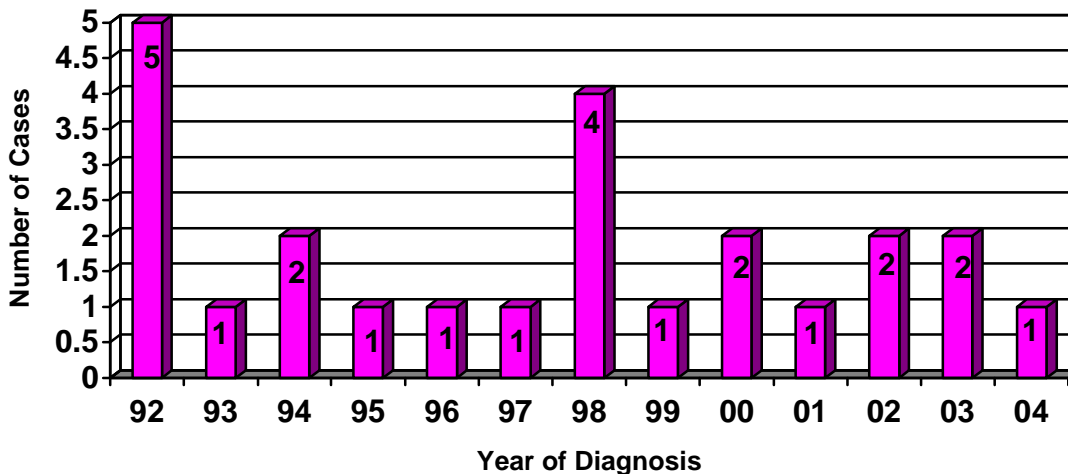


Figure 20 below shows pediatric AIDS cases diagnosed in Delaware through 2004. The state ranks fourth in the Nation (behind Washington DC, Florida and New York) in rate per 100,000 persons in terms of pediatric AIDS cases with a rate of 8.7 per 100,000. The national rate in 2003 was 3.7 per 100,000.

Figure 20. Delaware trend in pediatric AIDS cases diagnosed 1992 through 2004, (n= 24)



HIV/AIDS by Geographical Location:

Table 18. HIV/AIDS cases through December 2004 by county with the city of Wilmington and beach populations illustrated separately, (n= 4,343)

County of Residence	Kent (n=403)		New Castle (n=3,327)				Sussex (n=613)			
			Wilmington		Not Wilmington		Beach		Not Beach	
Demographics	#	%*	#	%*	#	%*	#	%*	Total	%*
Gender										
Male	275	68%	1,321	68%	1,006	72%	154	94%	328	76%
Female	128	32%	609	32%	391	28%	10	6%	121	27%
Total	403	100%	1,930	100%	1,397	100%	164	100%	449	100%
Race/Ethnicity										
White	122	30%	218	11%	579	41%	142	87%	161	36%
Black	245	61%	1,593	83%	744	53%	19	12%	263	59%
Hispanic	36	9%	111	6%	67	5%	3	1%	21	5%
Other	h	0%	8	<1%	7	<1%	h	0%	4	<1%
Total	403	100%	1,930	100%	1,397	100%	164	100%	449	100%
Mode of Exposure										
MSM	131	32%	373	19%	452	32%	139	85%	156	35%
IDU	96	24%	989	51%	480	34%	8	5%	113	25%
MSM/IDU	17	4%	109	6%	69	5%	5	3%	20	4%
Heterosexual Contact	121	30%	382	20%	321	23%	8	5%	128	29%
Pediatric Exposure	7	2%	21	1%	14	1%	0	n/a	5	1%
Other/NIR	31	8%	56	3%	61	4%	4	2%	27	6%
Total	403	100%	1,930	100%	1,397	100%	164	100%	449	100%

*Percentage may not equal 100 due to rounding h merged with Hispanic due to small size

Delaware HIV/AIDS Surveillance has historically distributed morbidity statistics on New Castle County separate from the City of Wilmington. A similarity in the demographic characteristics of people living in zip codes 19801, 19802, 19805 and 19806 and diagnosed with HIV/AIDS illustrated a different epidemic emerging from the downtown area. As depicted in Table 18, sixty-eight percent (shaded in red) of the HIV/AIDS cases in the City of Wilmington are male. Eighty-three percent (shaded in violet) of the HIV/AIDS cases in the City of Wilmington are Black, and fifty-one percent (shaded in pink) are injecting drug users. In the remainder of New Castle County, the percentage of men with HIV/AIDS is slightly greater than in the City of Wilmington at 72% (shaded in green). Modes for transmission of the virus vary between the City of Wilmington and the rest of the county. Rates are higher in the City of Wilmington for IDUs with a rate of 51% (shaded in pink) compared to the rest of New Castle County with 34% (shaded in brown). The reverse is seen in the MSM population where the City of Wilmington is 19% (shaded in blue) and the rest of New Castle County much higher with 32% (shaded in gray). Other modes of transmission are more equally dispersed in both areas.

Although Kent County appears to have the largest percentage of heterosexual cases compared to the other four areas throughout the state, it is because New Castle and Sussex Counties were further broken down by zip codes to depict epicenters of HIV disease.

In Sussex County, the beach area (Zip Codes: 19930, 19944, 19970, 19971 and 19958) HIV/AIDS statistics show cases are 94% male, 87% White and 85% men who have sex with men. The statistics represented in Table 16 above may under-represent the presence of known and diagnosed HIV in these communities. The estimates do not incorporate the men who have sex with men diagnosed elsewhere who have retired and established permanent residency on the shore, or those with dual residencies in Philadelphia, Baltimore and the District of Columbia. The beach area is a much different population than the remainder of Sussex County, and that is reflected in the cases residing throughout the remaining zip codes in Sussex County where three-quarters (76%) are male, 59% are Black and modes of transmission are, for the most part, evenly distributed over MSM, IDU and heterosexual contact.

Question 3. What are the indicators of risk for HIV/AIDS infection in Delaware?

To assist community planning groups address populations at risk for HIV infection, this portion of the profile looks at data collected in other databases. Limitations of the data sets were addressed starting on page 5.

- As an extension of HIV/AIDS surveillance, the Supplement to HIV/AIDS Surveillance⁵ (SHAS) project collects risk behavioral information on adults living with HIV/AIDS.
- HIV Counseling and Testing data is collected at all DPH publicly funded test sites. Counselors assess risk behaviors for HIV infection in pre-test and post-test counseling sessions.
- People seeking treatment for sexually transmitted infection (STI) or disease (STD) share one or more risk factors with persons diagnosed with HIV infection. The existence of an STD indicates the individual has had unprotected sex. Sex with someone who has HIV could increase the possibility of transmission of HIV through a sore and into bloodstream.

Supplement to HIV/AIDS Surveillance⁵ (SHAS) Project Data:

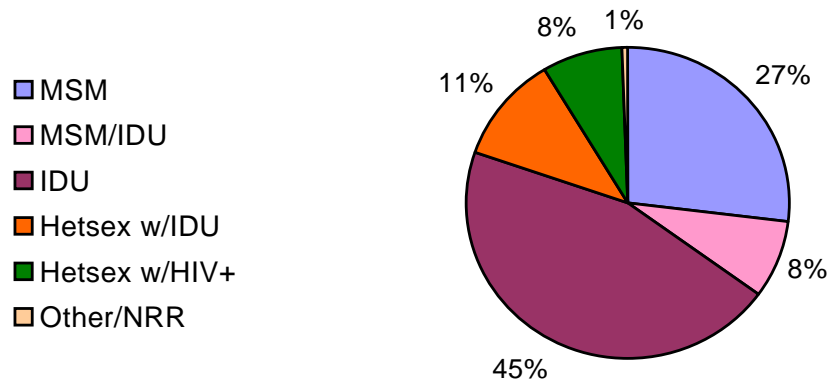
Table 19. Demographics of SHAS interviews conducted July 1, 1991 through June 30, 2004, (n=1,363)

HIV/AIDS interviews completed in Delaware July 1, 1991 through June 30, 2004 (n=1,363)						
Gender	#	%*		Race/Ethnicity	#	%*
Male	901	66%		White	332	24%
Female	462	34%		Black	959	71%
Not Indicated	0	0%		Hispanic all races/Other	72	5%
Total	1363	100%		Total	1263	100%
Interview Location	#	%*		Mode of Transmission	#	%*
Home	750	55%		MSM	369	27%
ID/Wellness clinics	368	27%		IDU	618	45%
Hospital	27	2%		MSM/IDU	108	8%
DPH	82	6%		Hetsex w/IDU	150	11%
Other	136	10%		Hetsex with PWH/A	110	8%
Total	1363	100%		NIR/NRR/Other	8	1%
				Total	1363	100%

* Percentages may not equal 100 due to rounding

Delaware began involvement in the SHAS project as a pilot state in 1991 through supplemental funding from the CDC. Through December 31, 2002, SHAS interviews were only conducted with clients diagnosed with AIDS. Upon implementation of HIV reporting in July 2001, subsequent application was made to the Human Subjects Review Board (HSRB) to include people diagnosed with HIV. Approval was granted in the fall of 2002 and inclusion of HIV positive clients into the SHAS project was initiated in January 2003. Application to interview incarcerated people with HIV and AIDS was made in the winter of 2002. The Delaware HSRB accepted the application and approval was granted at the federal level from the Office of Human Research Protection (OHRP) in March 2003. Delaware is the first surveillance office in the nation to interview subjects in correctional facilities. Though little information collected on prison interviews is included in this profile, the information collected through June 30, 2004 may prove valuable to prevention and treatment program planning for the Department of Correction.

Figure 21. Percentage of clients SHAS interviewed, July 1991 – June 2004 by mode of transmission reported in HARS, (n=1,363)



Most questions relating to behavioral risk in SHAS ask the patient to answer the question in relationship to a time period. One of the following three time periods is used in the data that follows:

- 12 months prior to interview, an anchor date is assigned at onset of interview to simplify the time frame for the participant. An interview conducted June 2003 would cover a calendar year of 12 months back to May 2002.
- Before you tested positive for HIV
- The last time you engaged in a specific activity

Questions asked of the participants in SHAS that may be used to assess the risk behaviors for the transmission of HIV include:

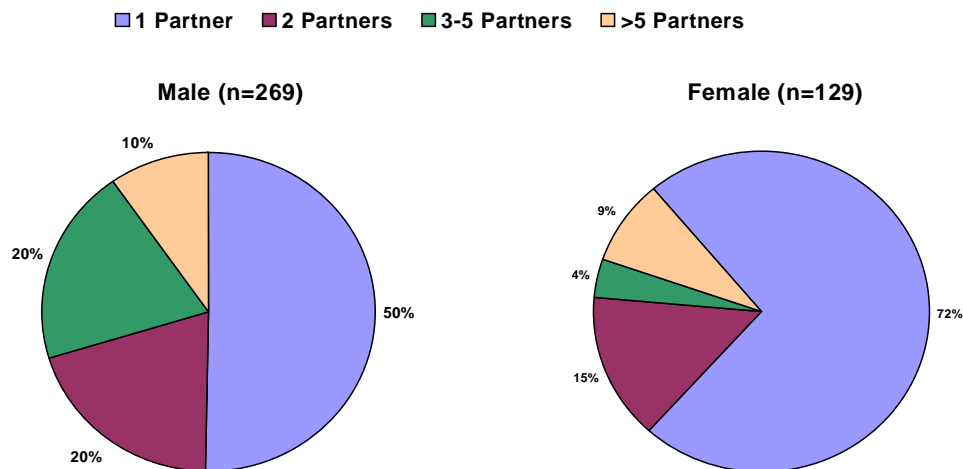
- Number of sex partners
- Frequency of condom use or unprotected sex
- Exchange of money or drugs for sex
- Injecting drug or other substance use
- Needle sharing or preventive measures with needle use

SHAS in Injecting Drug Users (IDUs)

Forty-five percent (n=618) of the SHAS participants interviewed in the period July 1991 through June 2003 were identified by the reporting source as IDU. Of the IDUs interviewed, 84% (n=518) were Black, 11% (n=67) were White and 5% (n=33) were Hispanic/Other. By gender the IDUs were 66% (n=407) male and 34% (n=211) female.

In male injecting drug users, 66% (n=269) had sex in the 12 months prior to the interview. In female injecting drug users, 61% (n=129) had sex in the 12 months prior to the interview.

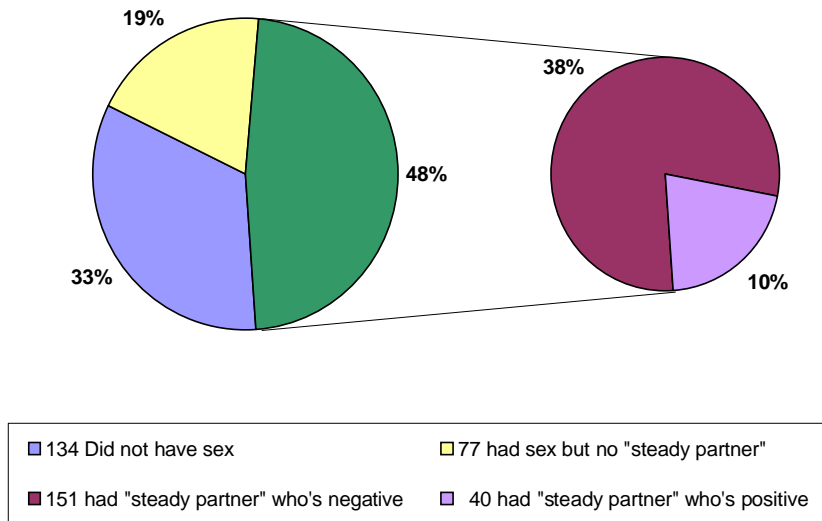
Figure 22. IDU SHAS participants who had sex in the 12 months prior to date of interview by gender and number of partners, (n=398)



Male IDU SHAS Participants

Four-hundred seven of the male SHAS participants were identified by the reporting source as an IDU. One-hundred thirty four (33%) did not have sex in the 12 months prior to the interview. Seventy-seven (19%) had sex but no steady sex partner. Of the 196 who had a steady partner, 40 (10%) knew their steady partner was positive, 151 (38%) knew their steady partner was negative and 5 (1%) did not know their partner's HIV status and isn't illustrated in Figure 21.

Figure 23. Male SHAS participants who are injecting drug users (IDUs) and their sexual activity in the 12 months prior to the SHAS interview, (n=407)



Seventy-nine percent (n=119) of the 151 men with HIV negative partners used condoms during vaginal intercourse.

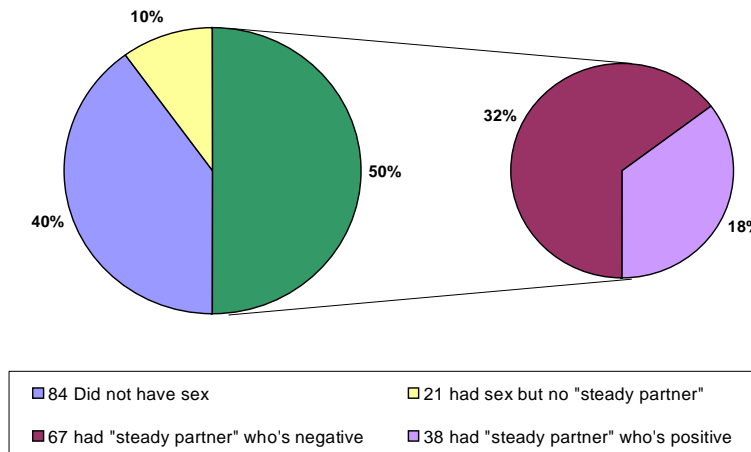
Female IDU SHAS Participants

Two-hundred eleven (54%) of 388 female SHAS participants were identified by reporting sources as IDU. Eighty-four (40%) did not have sex in the 12 months prior to the interview. One hundred twenty-seven (60%) of the 211 female IDU SHAS participants had sex in the 12 months prior to the interview. Of the 127 women who had sex in the time frame, 21 (10%) did not have a "steady partner" and 106 (50%) had a "steady partner".

- 38 women knew their "steady partner" was positive and
- 67 women knew their "steady partner" was negative or did not know status

Sixty-nine percent of the 105 women with “steady partners” used condoms regardless of the “steady partner’s” HIV status.

Figure 24. Female SHAS participants who are IDU and their sexual activity in the 12 months prior to the SHAS interview, (n=211)



One hundred sixty-seven (27%) of the 618 SHAS participants identified by reporting sources as an IDU at time of report denied ever injecting drugs. Fifty-seven (34%) of those who denied ever injecting a drug also denied ever using any non-injecting drugs as well.

Four hundred fifty-one (73%) of the 618 SHAS participants identified by reporting sources as an IDU at time of report responded they had injected a drug. Two hundred fifty-three (56%) said the drug they injected most often was cocaine followed by 117 (26%) who chose heroin as their most often used drug. In addition, more than half (51%) of the injecting drug users had used crack in a crack house and 39% (n=176) had sex in a crack house.

Three hundred sixty-five (81%) of those 451 SHAS participants who claimed to have injected drugs had shared needles and 42% (n=153) cleaned their syringes “every time” while 11% (n=40) “never” cleaned their syringes. Of the 365 who have shared needles, forty-four (12%) have used in the 12 months prior to the interview and the needle was obtained “off the street” by 29 participants and 15 other participants got their needle “from a friend”, “from a drug dealer” or “refused to answer.”

Two hundred eighty-one (77%) of the participants, who used a needle in the 12 months prior to the interview, have been in drug treatment. Eighty-four (30%) had been enrolled in a drug treatment program in the 12 months prior to the interview.

SHAS in Men Who Have Sex with Men (MSM)

Twenty-seven percent (n=369) of the SHAS participants interviewed in the period July 1991 through June 2003 were identified by the reporting source as MSM. Of the MSM interviewed, 52% were White, 44% were Black and 4% were Hispanic or other.

Of the 369 MSM SHAS participants, 11% (n=41) had been treated for an STD in the 12 months prior to the interview date.

Sixty-three (17%) of the MSM said they had been given drugs or money for sex, while 70 (19%) responded they had given someone money or drugs for sex in the 12 months prior to the interview date.

The 369 men reported in HARS as MSM self-identified their sexual orientation as:

- 258 (70%) Homosexual/Gay
- 74 (20%) Heterosexual/Straight
- 37 (10%) selected Bisexual/Other

Of the 369 MSM participants, 284 (77%) said they had sex in the 12 months prior to the interview date and 85 (23%) had not had sex during the time frame.

Data from the SHAS database, not mutually exclusive, on the 284 MSM who had sex in the time frame:

- Two hundred forty-four (86%) identified their sex partners as male only;
- Nine (3%) had both a male and female sex partner;
- Thirty-one (11%) identified their sex partners as female only;
- One hundred fifty-nine (56%) were in a “steady and monogamous relationship”;
- Ninety-one (32%) had fewer than 5 sex partners in the time frame; and
- Forty (14%) had more than 5 partners in the 12 months prior to the interview.

One hundred-nineteen (47%) of the 253 MSMs who had sex in the time frame engaged in sex where they were an anal receptor of their partner the last time they had intercourse. Eighty-nine (75%) of these 119 men used condoms the last time they received anal sex. Ninety-one (36%) of the 253 MSM who had sex in the time frame engaged in sex where they penetrated their partners anally the last time they had sex. Of the 91 men who anally penetrated their partners, the last time they had sex, 77 (85%) used a condom.

One hundred-eleven (30%) of the 369 MSM participants identified their sexual orientation as heterosexual or bisexual. Thirty-three (30%) of the 111 men responded they had sex with a woman in the 12 months prior to the interview. Forty-three percent (n=14) of these 33 said the woman was a “new partner” or someone they had sex with for the first time in the 12 months prior to the SHAS interview. All 33 of the men who had sex with a woman in the past 12 months claimed their partner was either negative or they did not know the female partner’s HIV status. When vaginal and oral intercourse took place, condoms

Delaware HIV/AIDS Epidemiologic Profile 2004 48

were used less than 10% of the time. The 33 MSM participants who had sex with a female denied anal intercourse with their female partners.

Of the 85 (23%) participants who claimed not to have had sex in the twelve months prior to the interview date the main reason for not having sex was identified as “sexual drive had decreased” in 47 (55%). Thirty-eight (45%) responded they “were afraid of infecting someone else with HIV or other STD.”

Heterosexual SHAS Participants

From July 1991 through June 2004, heterosexual SHAS participants comprised 19% (n=260) of those interviewed. Heterosexuals in this portion of the profile include: sex with an IDU, sex with a bisexual man, sex with a person who received a blood transfusion and sex with a person with HIV/AIDS. Due to the small number of those who had sex with bisexual men and those who had sex with a person who received a blood transfusion they are combined with the participants who had sex with someone who is HIV positive or AIDS defined. Their risk is not associated with injecting drug use and their partners are HIV positive or AIDS defined. With the merger, 42% (n=110) are heterosexuals who had sex with a person with HIV/AIDS and 58% (n=150) are heterosexuals who had sex with an IDU.

More detailed information regarding sexual activity and condom usage in heterosexual SHAS participants may be found in Appendix A of profile.

HIV Counseling and Testing Data⁶

Table 20. Demographics of clients who seek counseling and testing services in HIV counseling and testing sites in Delaware 2003 (n=11,672) and 2004 (n=15,029)

Demographics	Number Counseled		Number of HIV Tests		Number of Positive Tests		Percent HIV Positive*	
	2003	2004	2003	2004	2003	2004	2003	2004
Gender								
Male	5690	7247	4978	6494	85	93	2%	1%
Female	5982	6983	5381	6336	44	49	1%	1%
Not specified	0	799	0	774	0	0	0%	0%
Race/Ethnicity								
White	3955	4883	3703	4573	25	28	1%	1%
Black	6101	7492	5263	6571	92	98	2%	1%
Hispanic	1334	1537	1171	1422	12	15	1%	1%
Asian/Pacific Islander	132	142	89	99	0	0	0%	0%
Am Indian/AK Native	31	30	25	28	0	1	0%	4%
Other	111	135	105	126	0	0	0%	0%
Undetermined	8	7	3	7	0	0	0%	0%
Not Specified	0	803	0	778	0	0	0%	0%
Age Groups								
<13	22	32	22	30	0	0	0%	0%
13 - 19	2359	2556	2144	2303	4	5	0%	0%
20 - 29	4737	5935	4170	5294	24	39	1%	1%
30 - 39	2461	2987	2136	2694	42	46	2%	2%
40 - 49	1522	1964	1366	1801	46	39	3%	2%
>= 50	571	739	521	690	13	13	2%	2%
Age Not Specified	0	816	0	792	0	0	0%	0%
Risk								
MSM/IDU	36	39	35	37	4	2	11%	5%
MSM	740	821	721	780	32	43	4%	6%
Heterosexual/IDU	508	689	490	666	21	21	4%	3%
Sex Partner At Risk	1627	2003	1573	1931	20	32	1%	2%
STD Diagnosis	2255	2535	1790	2080	13	10	1%	0%
Sex For Drugs/Money	72	104	71	104	1	0	1%	0%
Sex While Using Drugs	1263	1665	1197	1556	12	10	1%	1%
Hem/Blood Recipient	44	50	44	49	1	0	2%	0%
Victim Sexual Assault	79	112	79	105	2	0	3%	0%
Health Care Exposure	72	59	72	58	0	0	0%	0%
No Acknowledged Risk	775	1095	619	950	4	3	1%	0%
Heterosexual/No Other Risk	4116	4760	3588	4244	19	19	1%	0%
Other	85	105	80	96	0	2	0%	2%
Not Specified	0	990	0	946	0	0	0%	0%

* % HIV positive calculated: # positive tests ÷ # of HIV tests performed.

The demographic information in Table 20, on the previous page, indicates in 2003, the clients seeking HIV counseling and testing services (n=11,672) are:

- 51% women;
- 52% Black, 34% White, and 14% Hispanic, other, or unknown races.
- 41% in the age group 20-29, 21% are 30-39 and 20% are 13-19 years of age.

The demographics for clients deciding to be tested (n=10,365) are:

- 52% women;
- 51% Black, 36% White, and 13% Hispanic or other race/ethnicities;
- 40% in the age group 20-29, 21% are 30-39 and 21% are 13-19 years of age.

The demographics for clients testing positive for HIV (n=129) are:

- 66% are men;
- 71% are Black, 19% are White, and 10% Hispanic or other race/ethnicities;
- 33% in the age group 30-39, 36% are 40-49 and 19% are 20-29 years of age;
- 25% of the positives self-identified as MSM.

For 2004, the clients seeking HIV counseling and testing services (n=15,029) are:

- 51% men;
- 50% Black, 32% White, and 18% Hispanic, other, or unknown races.
- 39% in the age group 20-29, 20% are 30-39 and 17% are 13-19 years of age.

The demographics for clients deciding to be tested (n=13,604) are:

- 51% men;
- 48% Black, 34% White, and 18% Hispanic, other, or unknown races.
- 39% in the age group 20-29, 20% are 30-39 and 17% are 13-19 years of age.

The demographics for clients testing positive for HIV (n=142) are:

- 65% are men;
- 69% are Black, 20% are White, and 11% Hispanic or other race/ethnicities;
- 32% in the age group 30-39, 27% are 40-49 and 27% are 20-29 years of age;
- 30% of the positives self-identified as MSM.

The data shown above illustrates that in 2003 and 2004, men and women sought HIV counseling and testing services at nearly the same rate. Although African Americans represent 19% of Delaware's population, roughly 50% of clients counseled/tested were black. Positive tests coming out of our state funded sites have been consistent over the past two years; two out of three positive tests were attributed to men. In 2003, 71% of the positive HIV tests were among Blacks; in 2004, the percentage slightly dropped to 69%. Roughly 40% of those tested in Delaware were between the ages of 20-29 followed by the 30-39 age group with 20%. Finally in 2003 and 2004, men having sex with men were self-identified as the leading mode of HIV transmission among those testing positive.

Figure 25. Number of positive HIV tests by county in Delaware 1998-2004, (n=866)

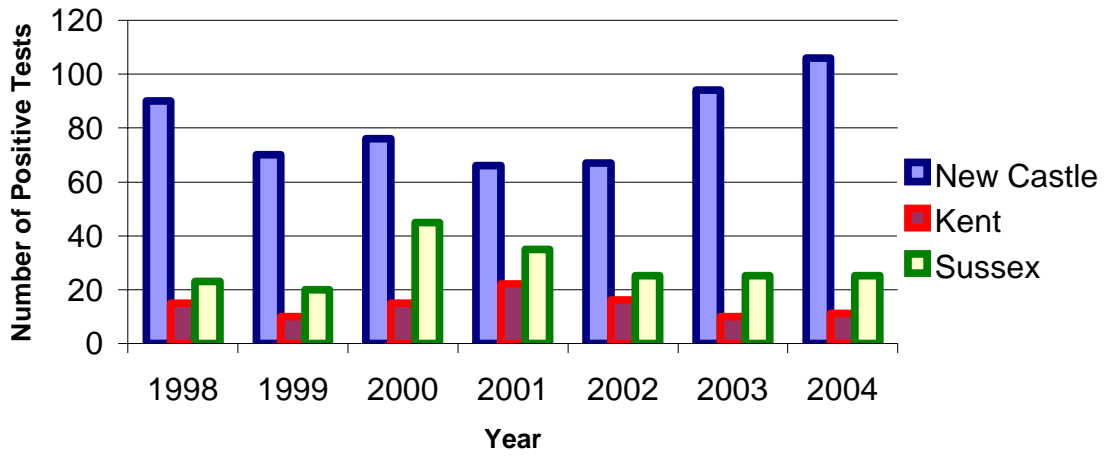
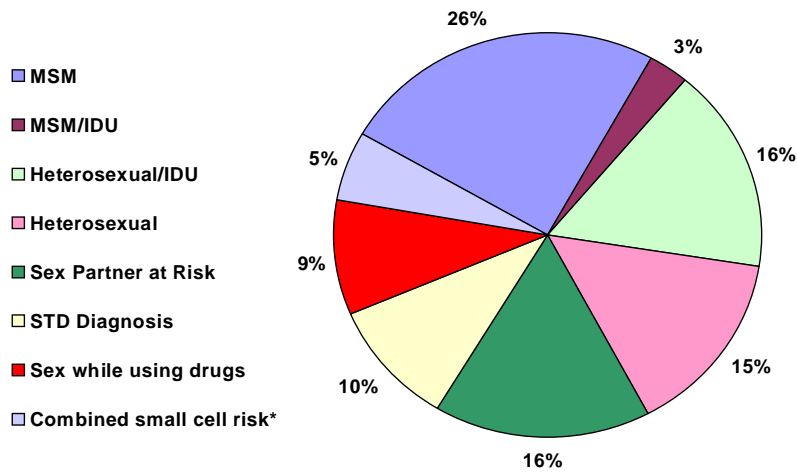
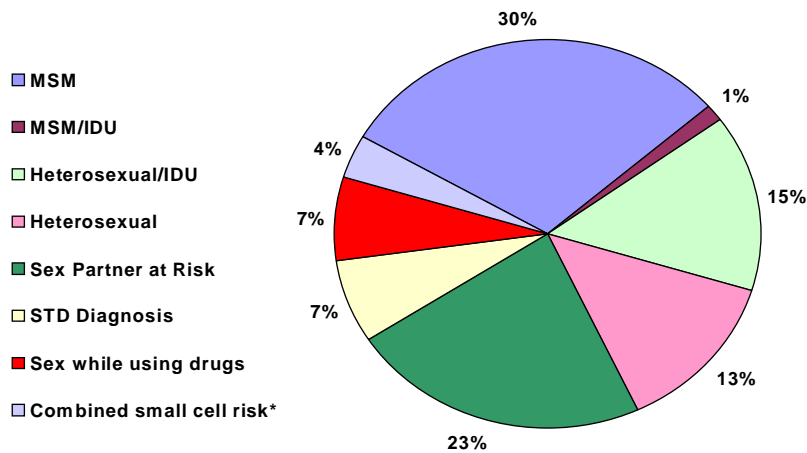


Figure 26a. Distribution of Delaware positive HIV tests in 2003 (n=129) by modes of transmission



*Combined small risk cells include people who reported they were infected through a sexual assault, through sex while using alcohol or non-injecting drugs, and through no acknowledged risk.

Figure 26b. Distribution of Delaware positive HIV tests in 2004 (n=142) by modes of transmission



*Combined small risk cells include people who reported they were infected through a sexual assault, through sex while using alcohol or non-injecting drugs, and through no acknowledged risk.

Figure 27a. Comparison of clients electing to be tested for HIV to the clients testing positive for HIV antibodies by race in Delaware in 2003

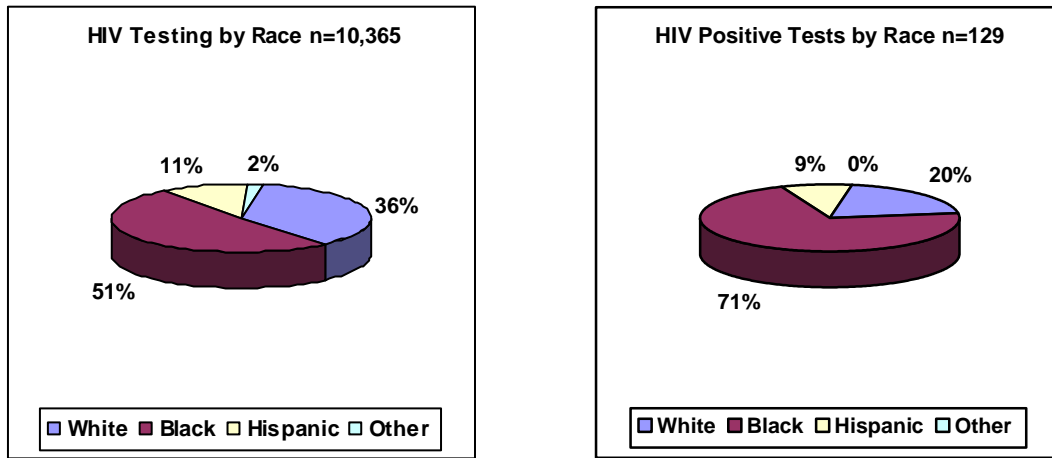


Figure 27b. Comparison of clients electing to be tested for HIV to the clients testing positive for HIV antibodies by race in Delaware in 2004

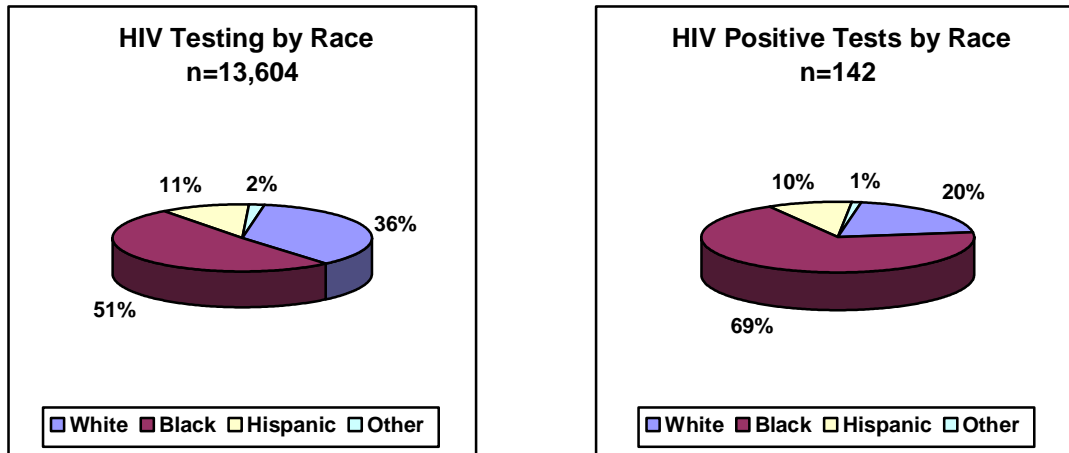


Figure 28. Number of clients pre-test counseled in Delaware HIV counseling and testing sites compared to the number/percentage who elected to be antibody tested from 1998 through 2004, (n=83,405)

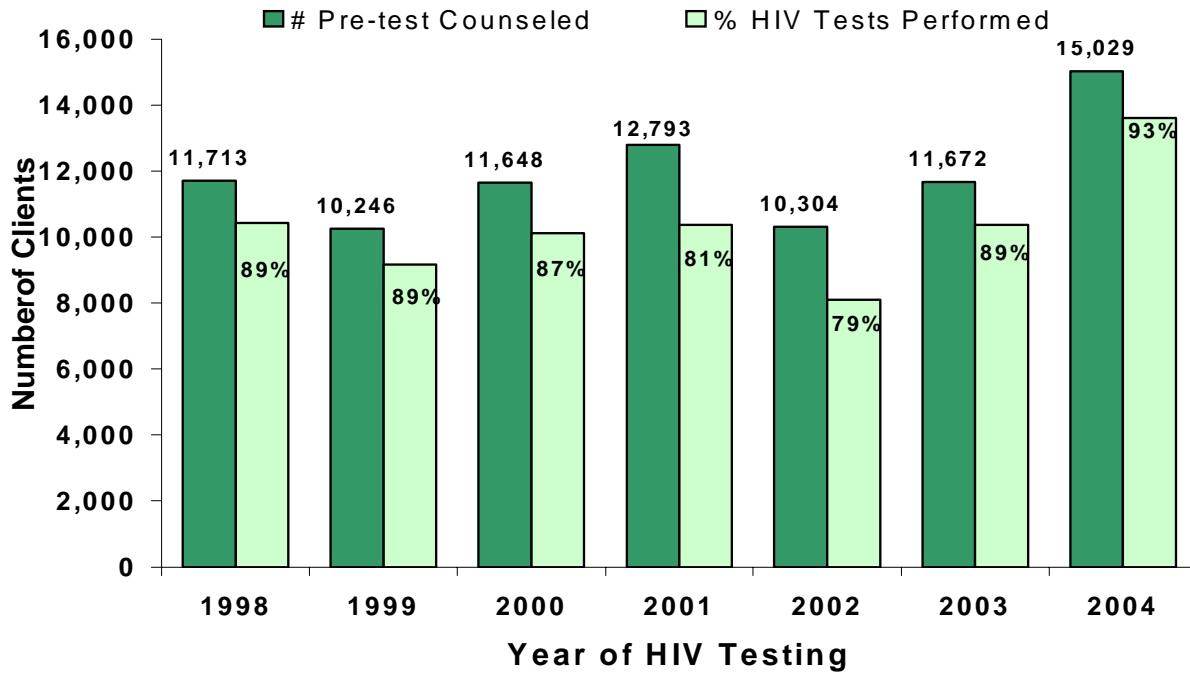
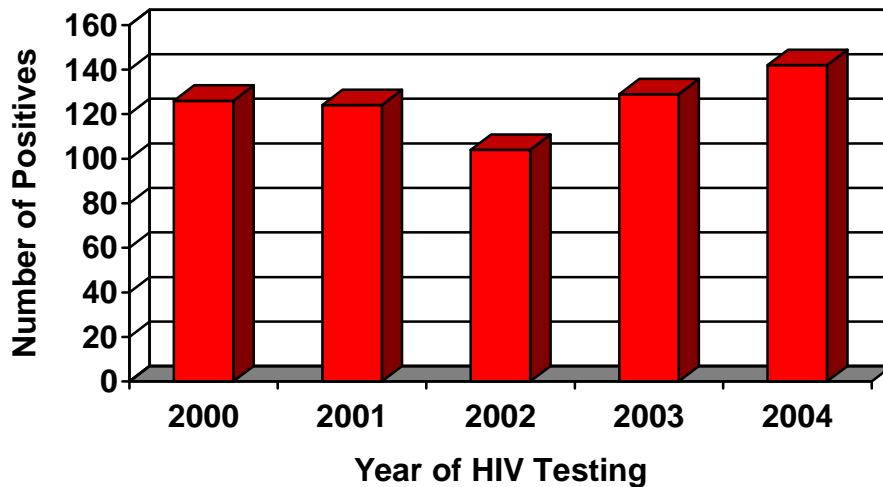


Figure 29. Number of reported positive HIV antibody tests in Delaware HIV counseling and testing sites from 2000 through 2004, (n=625)

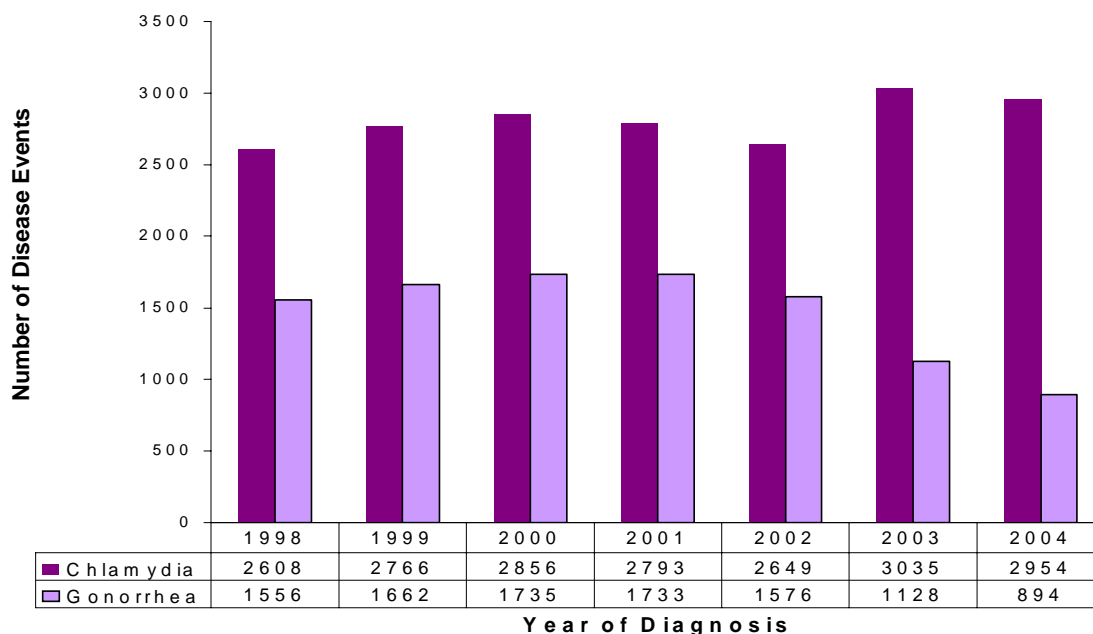


Sexually Transmitted Infection (STI) and Disease Data⁷

In Delaware information on individuals diagnosed with gonorrhea, chlamydia, primary and secondary syphilis is collected at the local level in sexually transmitted disease (STD) clinics, private physician offices, correctional facilities,

outpatient facilities and reported to a centralized office within the Division of Public Health. HIV can be spread through the same unprotected sexual contact that spreads STDs. The presence of an STD can facilitate HIV transmission both by increasing viral load and by providing ulcerations through which HIV can pass. People diagnosed with a STD are at increased risk of contracting or spreading HIV.

Figure 30. Number of chlamydia and gonorrhea disease events in Delaware from 1998 to 2004, (n=29,945)



Due to continued unprotected sexual practices an individual may contract or be diagnosed more than one time in a reporting year. The recurrence of infection or disease, referred to as disease events, may therefore include duplicate diagnoses. According to the Delaware Annual Sexually Transmitted Disease Report⁷, more than 2,600 chlamydia disease events, have occurred every reporting year from 1996 through 2002. Figure 30 above, illustrates the minimal rise and fall in chlamydia and gonorrhea events over a five year period. Each of the events represents behavior that potentially exposes the client to HIV infection.

The figure on the next page shows chlamydia diagnoses by gender. For every male diagnosis, close to four times as many females were diagnosed with chlamydia each year.

Figure 31. Distribution chlamydia events In Delaware by gender through 2004, (n=24,540)

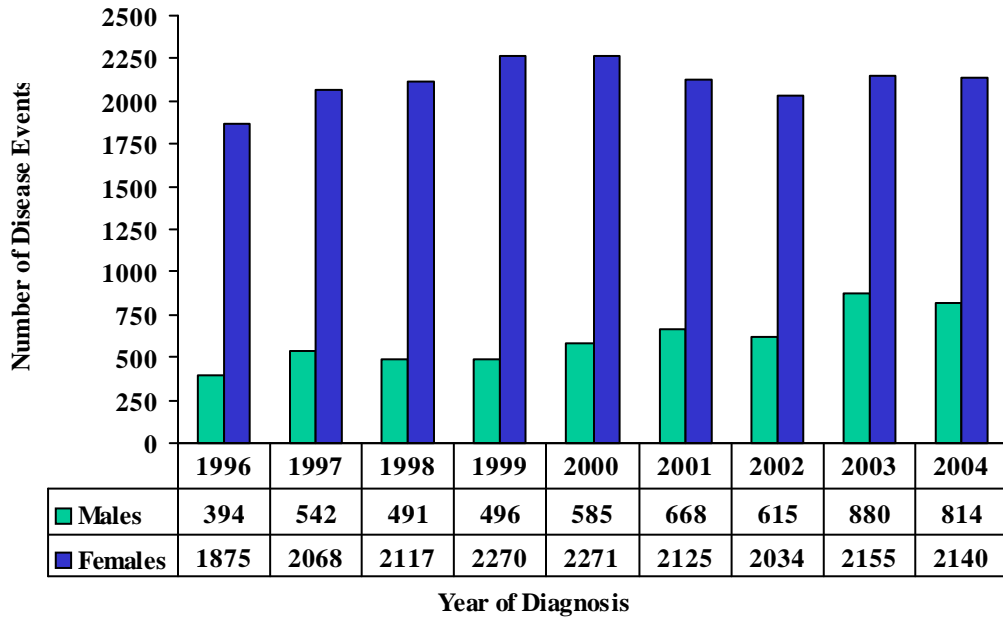
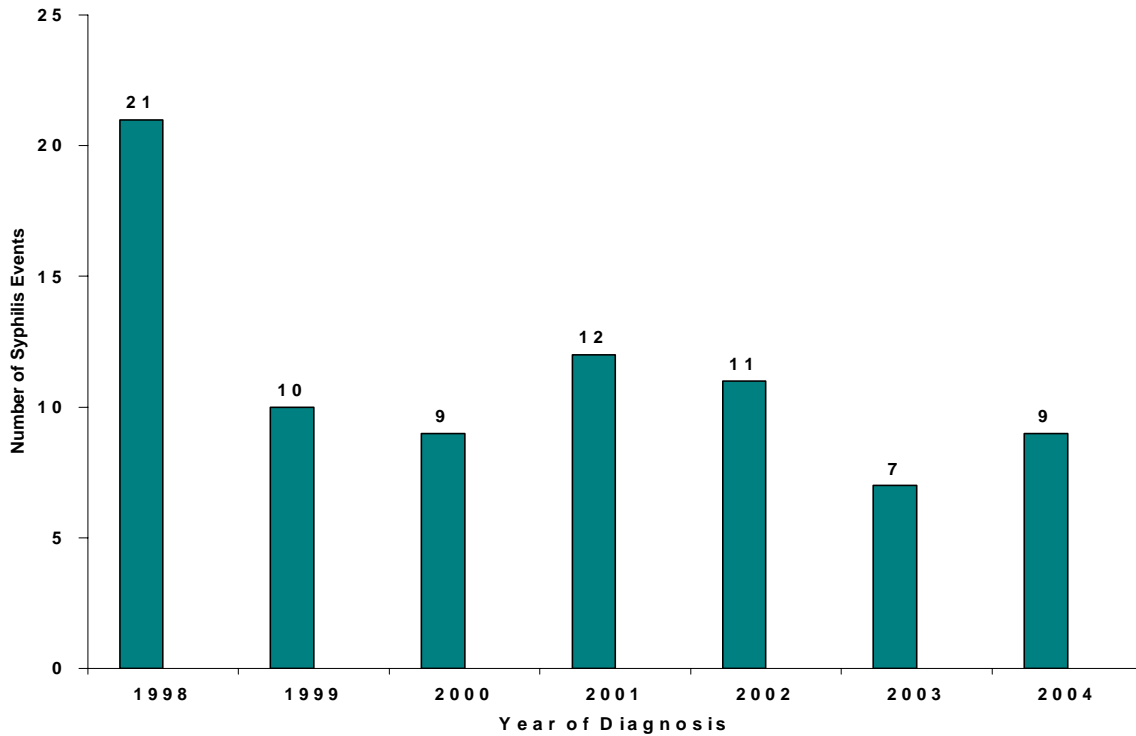


Figure 32 below illustrates the number of primary and secondary syphilis cases decreased by 50% from 1998 to 1999. Syphilis events since 1999 have remained fairly stable through 2004.

Figure 32. Number of primary or secondary syphilis disease events diagnosed in Delaware from 1998 to 2004, (n=79)



2003 Youth Risk Behavior Survey⁸ (YRBS) Data

During the spring of 2003 3,048 students, in 32 Delaware public high schools, participated in the Youth Risk Behavior Survey⁸ (YRBS). The school response rate was 100%, the student response rate was 77%, and the overall response rate was 77%. The results are representative of all students in grades 9-12. The weighted demographic characteristics of the sample are as follows:

Table 21. Characteristics of students completing the YRBS survey in 32 Delaware public high schools in 2003, (n= 3,048)

Gender	%	Grade	%	Race/Ethnicity	%
Female	50%	9 th grade	30%	African American	29%
Male	50%	10 th grade	25%	Hispanic/Latino	6%
		11 th grade	23%	White	63%
		12 th grade	21%	All other races	1%
				Multiple races	1%

* Percentages may not equal 100 due to rounding

Students completed a self-administered, anonymous, 104-item questionnaire. Survey procedures were designed to protect the privacy of students by allowing for anonymous and voluntary participation. Local parental permission procedures were followed before survey administration.

The YRBS is one component of the Youth Risk Behavior Surveillance System developed by the Centers for Disease Control and Prevention in collaboration with representatives from 71 state and local departments of education and health, 19 other federal agencies, and national education and health organizations. The Youth Risk Behavior Surveillance System was designed to focus the nation on behaviors among youth related to the leading causes of mortality and morbidity among both youth and adults and to assess how these risk behaviors change over time. The Youth Risk Behavior Surveillance System measures behaviors that fall into six categories:

1. Behaviors that result in unintentional injuries and violence;
2. Tobacco use;
3. Alcohol and other drug use;
4. Sexual behaviors that result in HIV infection, other sexually transmitted diseases, and unintended pregnancies;
5. Dietary behaviors; and
6. Physical activity.

For this profile, highlights from questions three and four will be addressed.

If you are interested in more information about the Youth Risk Behavior Surveillance System you may contact Janet Ray; Health Education Associate at the Department of Education at 302-857-3320.

Of the students surveyed:

- 78.5% had at least one drink of alcohol on one or more days during their life;
- 30.3% had their first drink of alcohol other than a few sips before age 13;
- 45.4% had at least one drink of alcohol on one or more of the past 30 days;
- 26.6% had five or more drinks of alcohol in a row, that is, within a couple of hours, on one or more of the past 30 days;
- 48.9% used marijuana one or more times during their life;
- 13.4% tried marijuana for the first time before age 13;
- 27.3% used marijuana one or more times during the past 30 days;
- 7.4% used any form of cocaine, including powder, crack, or freebase one or more times during their life;
- 3.8% used any form of cocaine, including powder, crack, or freebase one or more times during the past 30 days;
- 11.4% sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life;
- 4.1% sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during the past 30 days;
- 2.3% used heroin one or more times during their life;
- 6.2% used methamphetamines one or more times during their life;
- 1.7% used a needle to inject any illegal drug into their body one or more times during their life;
- 27.9% were offered, sold, or given an illegal drug on school property by someone during the past 12 months;
- 57.7% had sexual intercourse;
- 20.6% had sexual intercourse with four or more people during their life;
- 42.7% had sexual intercourse with one or more people during the past three months;
- 25.4% had sexual intercourse but have not had sexual intercourse during the past three months;
- Of students who had sexual intercourse during the past three months, 23.9% drank alcohol or used drugs during last sexual intercourse;
- Of students who had sexual intercourse during the past three months, 62.2% used a condom during last sexual intercourse;
- Of students who had sexual intercourse during the past three months, 17.9% used birth control pills during last sexual intercourse;
- 7.7% had been pregnant or gotten someone pregnant one or more times.

Question 4. What are the patterns of utilization of services in people with HIV in Delaware?

The reference data for service utilization are for the most part based upon data provided to Health Resources and Service Administration (HRSA), by grantees in Delaware receiving funding through multiple title programs.

Title II funding is awarded to improve the quality, availability, and coordination of health care and support services for people and families with or affected by HIV disease. The funding also assists with access to recommended pharmaceuticals through the AIDS Drug Assistance Program (ADAP).

In 2003, a total of 3,772 clients received services funded through all Ryan White funding and 981 of them were new clients. Of the 3,772 clients, 94% (n=3,546) were HIV-infected and 226 were HIV-affected. HIV-affected counts the children, spouses and significant other people in the lives of an HIV-infected person that are not themselves infected with HIV. The service provided to HIV-affected individuals was case management.

In 2004, a total of 3,821 clients received services funded through all Ryan White funding and 223 of them were new clients. Of the 3,821 clients, 94% (n=3,593) were HIV-infected and 228 were HIV-affected. HIV-affected counts the children, spouses and significant other people in the lives of an HIV-infected person that are not themselves infected with HIV. The service provided to HIV-affected individuals was case management.

Table 22, on the next page, compares the demographic characteristics of the duplicated HIV-infected clients receiving services that are funded by Ryan White Care Act Title II Programs in 2003 and 2004 to the distribution of living HIV/AIDS cases in Delaware through 2004.

More often than not a client may have received multiple services so the numbers are not mutually exclusive.

Table 22. Demographic characteristics of client visits funded by Ryan White Care Act Title II programs in 2003 and 2004 compared to Delaware living HIV/AIDS cases

Demographics	Percent of CARE Act Clients		Percent of DE Living HIV/AIDS Cases	
	2003 (n=3,546)	2004 (n=3,593)	2003 (n=2,512)	2004 (n=2,869)
Ethnicity				
Hispanic or Latino Origin	5%	5%	6%	6%
Non-Hispanic	95%	95%	94%	94%
Unknown/Unreported Ethnicity	0%	0%	0%	0%
Race				
White (Non-Hispanic)	28%	26%	29%	29%
Black (Non-Hispanic)	68%	70%	64%	64%
Other*	2%	2%	6%	6%
Unknown/Unreported Race	2%	2%	1%	1%
Gender				
Male	64%	65%	67%	67%
Female	36%	35%	33%	33%
Unknown/Transgender	<1%	<1%	0%	0%
Age				
Less than 13 years	2%	1%	1%	1%
14 - 24 years	3%	3%	2%	3%
25 - 44 years	54%	52%	48%	49%
45 - 64 years	40%	43%	47%	44%
65 + years of age	1%	1%	2%	3%
Unknown/Unreported	0%	0%	0%	0%

*Other includes Asian, American Indian, and Multi-racial

The following table illustrates the five most frequently accessed Ryan White Title II services funded in Delaware. The unduplicated number of clients accessing the services is 3,546 in 2003 and 3,593 in 2004. Medical services do not include medications dispensed; medications are found exclusively under the ADAP category.

Table 23. Utilization of Ryan White Title II service, by service type in 2003 (n=3,546) and 2004, (n=3,593)

	Case Management		Dental		Medical*		Mental Health		Substance Abuse	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
Clients Receiving Service (number)	783	906	419	378	1,213	1,224	98	239	0	0

*Outpatient services

Additional services provided with CARE Act funds for 2003 and 2004 are shown below.

2003 data

- 1,213 people were provided Health Education and Risk Reduction
- 993 people were referred for psychosocial\supportive services
- 596 food-bank or home delivery connections were made
- 490 treatment adherence counseling session were held
- 382 people were provided with transportation
- 217 people received emergency financial assistance
- 16 referrals to clinical research were arranged
- 535 client advocacy incidents were reported
- 29 assisted housing connections were arranged

2004 data

- 1,454 people were provided Health Education and Risk Reduction
- 1,079 people were referred for psychosocial\supportive services
- 752 food-bank or home delivery connections were made
- 639 treatment adherence counseling session were held
- 388 people were provided with transportation
- 272 people received emergency financial assistance
- 100 referrals to clinical research were arranged
- 582 client advocacy incidents were reported
- 120 assisted housing connections were arranged

In Delaware, Ryan White CARE Act Title II funding was awarded to three provider types. The provider types are:

1. Hospital-Based clinics that include:
 - DuPont Hospital for Children north of Wilmington,
 - Christiana Care Health Services and Division of Public Health jointly sponsored clinics in the following locations:

Table 24. County locations of the HRSA funded and CCHSIDPH sponsored infectious disease-wellness clinics in Delaware

New Castle County	Kent County	Sussex County
Wilmington Hospital Annex, Riverfront, and Porter State Service Center	Kent Wellness in Smyrna	Sussex Wellness in Georgetown

2. Community Based Organizations that include:

- AIDS Delaware
- American Red Cross
- Beautiful Gate Outreach Center
- Brandywine Counseling Incorporated
- Case Management Services
- Catholic Charities
- Delaware Center for Justice
- Delaware HIV Consortium
- Kent/Sussex County Counseling
- Ministry of Caring
- Sussex County AIDS Council
- Generations Home Health Care Inc.

3. Public Health entities that include:

- Division of Public Health, Delaware Department of Health and Social Services
- Cecil County Health Department, Maryland

Table 25 below illustrates the demographic characteristics of clients in the ADAP program in 2003/2004 compared to the demographics of living HIV/AIDS cases in the HARS database for the same period. The percentages appear similar in most characteristics with the exception of race. In this category, Blacks represent 71% of the living cases in HARS compared to 59% enrolled in ADAP. The difference may be due to the number of clients in the ADAP program designated to the “Unknown\More than one race” category.

Table 25. Demographic characteristics of clients served in 2003/2004 AIDS Drug Assistance Program (ADAP) compared to living Delaware HIV/AIDS reported cases in 2003 and 2004

Client Characteristics	ADAP		ADAP (Percent)		Living with HIV/AIDS		Living with HIV/AIDS (Percent)	
	2003 (n=485)	2004 (n=476)	2003 (%)*	2004 (%)*	2003 (n=2512)	2004 (n=2869)	2003 (%)*	2004 (%)*
Gender								
Male	346	325	71%	68%	1,688	1,914	67%	67%
Female	138	150	28%	32%	824	955	33%	33%
Unknown/ Transgender	1	1	<1%	<1%	0	0	0%	0%
Total	485	476	100%	100%	2,512	2,869	100%	100%
Ethnicity								
Hispanic or Latino	31	28	6%	6%	157	183	6%	6%
Non-Hispanic or Latino	454	448	94%	94%	2,355	2,686	94%	94%
Total	485	476	100%	100%	2,512	2,869	100%	100%
Race								
White	162	165	33%	34%	733	821	29%	29%
Black	277	279	57%	59%	1,607	1,846	64%	64%
Unknown\More than one race	46	32	10%	7%	172	202	7%	7%
Total	485	476	100%	100%	2,512	2,869	100%	100%
Age (Years)								
Less than 2	2	1	<1%	<1%	0	0	0%	0%
2-12	5	4	1%	1%	21	22	1%	1%
13-24	6	10	1%	2%	50	78	2%	3%
25-44	411	254	85%	53%	1,208	1,417	48%	49%
45-64	48	79	10%	17%	1,165	1,272	46%	44%
65 or older	10	128	2%	27%	68	80	3%	3%
Unknown\ Unreported	3	0	1%	0%	0	0	0%	0%
Total	485	476	100%	100%	2,512	2,869	100%	100%

* Percentages may not equal 100 due to rounding

Of 1,213 clients, 637 (53%) attended an ID-Wellness clinic on Highly Active Antiretroviral Therapy (HAART) at the end of 2003. Of the 1,224 clients in 2004, 513 (42%) attended an ID-Wellness clinic on HAART therapy. When the demographics are compared to the number of living HIV/AIDS cases in the HARS database the similarities are significant. The data infers that HIV-infected people in Delaware are being equally served regardless of race, age or gender.

Table 26 below, illustrates the demographic characteristics on the 13% (n=161) of the 1,213 clients attending an ID-Wellness clinic who had an undetectable viral load at the end of 2003. Also in 2004, 12% (n=145) of 1,224 clients had an undetectable viral load. When the characteristics of the clinic clients on ADAP are compared to the living HIV/AIDS cases in the HARS database, there is a direct correlation between the percentages. For example, 62% of Delaware's ADAP dollars are being utilized by African-Americans which represents 64% of those currently living with HIV disease.

Table 26. Characteristics of HIV-Infected patients who are ADAP clients with undetectable viral loads in CCHS\DPH ID-Wellness clinics throughout Delaware in 2003 and 2004

Demographics	ADAP Clients (Percent)		Living HIV/AIDS (Numbers)		Living HIV/AIDS (Percent)	
	2003 (n=161)	2004 (n=145)	2003 (n=2,512)	2004 (n=2,869)	2003 (%)*	2004 (%)*
Gender						
Male	70%	70%	1,688	1,914	67%	67%
Female	29%	29%	824	955	33%	33%
Unknown\Transgender	1%	1%	0	0	0%	0%
Ethnicity						
Hispanic or Latino	7%	8%	157	183	6%	6%
Non-Hispanic or Latino	93%	92%	2,355	2,686	94%	94%
Race						
White	27%	28%	733	821	29%	29%
Black	62%	61%	1,607	1,846	64%	64%
Unknown\More than one race	11%	11%	172	202	7%	7%
Age						
Less than 2 years	0%	0%	0	0	0%	0%
2-12 years	1%	1%	21	22	1%	1%
13-24 years	1%	0%	50	78	2%	3%
25-44 years	53%	48%	1,208	1,417	48%	49%
45-64 years	43%	46%	1,165	1,272	46%	44%
65 years or older	2%	6%	68	80	3%	3%
Unknown\Unreported	0%	0%	0	0	0%	0%

* Percentages may not equal 100 due to rounding

In 2003, 1,213 HIV-infected clients attending ID-Wellness clinics also received the following preventive therapies:

- 1,100 (91%) had a TB skin test (PPD Mantoux), 9 who were treated secondary to positive TB skin test.
- 856 (71%) had screening/testing for syphilis and 3 were positive and treated.
- 75 (6%) had screening/testing for any treatable sexually transmitted infection (STI) other than syphilis and HIV and 41 were treated for an STI other than syphilis and HIV.
- 143 (12%) had screening/testing for hepatitis C and 17 received treatment for hepatitis C.

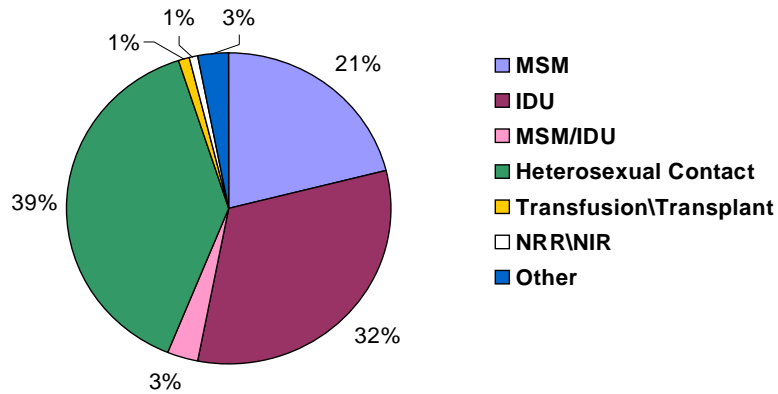
The 468 HIV-infected females attending ID-Wellness clinics also received the following gynecological/obstetric interventions in 2003:

- ◆ 335 (72%) received a pelvic examination and Pap smear during 2003.
- ◆ 23 (5%) of the women were pregnant in 2003.
 - ◆ 13 entered care in the first trimester
 - ◆ 6 entered care in the second trimester
 - ◆ 3 entered care in the third trimester
 - ◆ 1 entered care at the time of delivery
- ◆ 23 (100%) of the pregnant women received antiretroviral medication to prevent transmission of HIV to their children.

Fourteen children were delivered to 23 pregnant HIV-positive women. None of the 14 children were HIV positive.

Figure 33a. on the next page, illustrates 39% (n=471) of the clients attending an ID-Wellness clinic in Delaware in 2003 are clients infected with HIV through heterosexual contact, 32% (n=388) are injecting drug users and 21% (n=258) are MSM.

Figure 33a. Distribution of clients attending ID-Wellness clinics by risk factor for transmission of HIV in 2003, (n=1,213)



In 2004, 1,224 HIV-infected clients attended ID-Wellness clinics and received the following preventive therapies:

- 1,187 (97%) had a TB skin test (PPD Mantoux), 15 who were treated secondary to positive TB skin test.
- 986 (81%) had screening/testing for syphilis and 11 were positive and treated.
- 109 (9%) had screening/testing for any treatable sexually transmitted infection (STI) other than syphilis and HIV and 34 were treated for an STI other than syphilis and HIV.
- 127 (10%) had screening/testing for hepatitis C and 39 received treatment for hepatitis C.

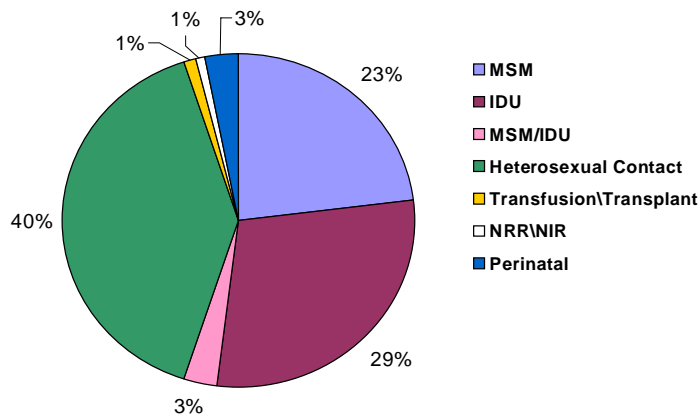
The 464 HIV-infected females attending ID-Wellness clinics also received the following gynecological\obstetric interventions in 2004:

- ◆ 250 (54%) received a pelvic examination and Pap smear during 2004.
- ◆ 27 (6%) of the women were pregnant in 2004.
 - ◆ 22 entered care in the first trimester
 - ◆ 3 entered care in the second trimester
 - ◆ 2 entered care in the third trimester
- ◆ 27 (100%) of the pregnant women received antiretroviral medication to prevent transmission of HIV to their children.

Fourteen children were delivered to 27 pregnant HIV-positive women. None of the 14 children was HIV positive.

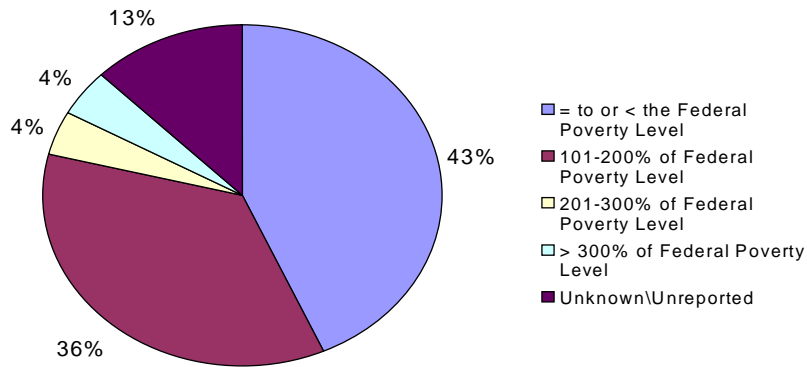
Figure 33b. below illustrates 39% (n=490) of the clients attending an ID-Wellness clinic in Delaware in 2004 are clients infected with HIV through heterosexual contact, 32% (n=355) are injecting drug users and 21% (n=286) are MSM.

Figure 33b. Distribution of clients attending ID-Wellness clinics by risk factor for transmission of HIV in 2004, (n=1,224)



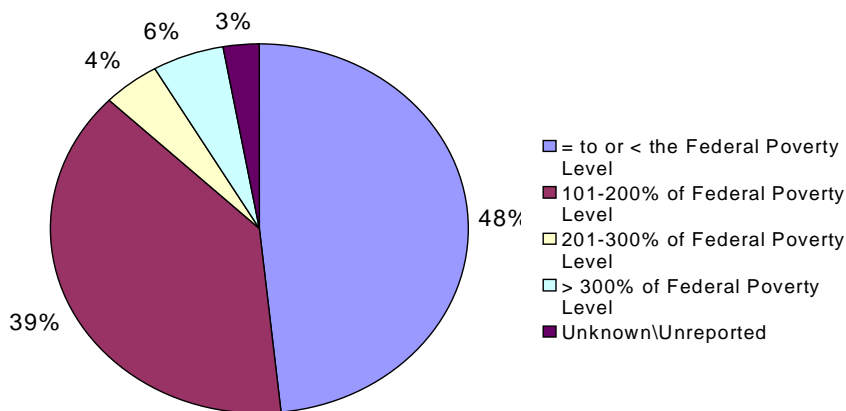
Of the 3,546 HIV-infected Delawareans in 2003 receiving services through Ryan White CARE Act funding, 43% (n=1,540) have income levels equal to or less than the Federal Poverty Level. Thirty-six percent (n=1,259) have income levels between 101% and 200% of the Federal Poverty Level.

Figure 34a. Percent of household income of HIV-infected recipients of Ryan White CARE Act funding at the end of 2003 in Delaware, (n=3,546)



Of the 3,593 HIV-infected Delawareans in 2004 receiving services through Ryan White CARE Act funding, 48% (n=1,734) have income levels equal to or less than the Federal Poverty Level. Thirty-nine percent (n=1,399) have income levels between 101% and 200% of the Federal Poverty Level.

Figure 34b. Percent of household income of HIV-infected recipients of Ryan White CARE Act funding at the end of 2004 in Delaware, (n=3,593)



HIV/AIDS Reporting System (HARS) Data

The HIV/AIDS Reporting System provides the states with the capability of collecting user specified data at the local level. Delaware has for several years collected information on where HIV-infected people are getting their health care. The data is generally collected from laboratory results that indicate the requesting providers name or treatment facility, through line reviews with private physicians, ID and Wellness clinic coordinators, case managers, correctional facilities and through case report forms. The information has become more frequently available since the implementation of HIV reporting in July 2001. Laboratory data is updated as the information becomes available and is generally received no less than twice a year. Due to enhanced laboratory reporting the information on treatment location is considered current for at the least the past 12 months. Anecdotally, to receive no data on a client in a 12-18 month time frame may indicate the client has moved to another state, moved to a treatment facility that is out of state, is receiving care through a health care provider who is not requesting CD₄ or viral load testing or the provider is using a laboratory that is not reporting results to DPH. The final determination that may be made is that the client has dropped out of care.

The following graphs show the utilization of treatment services in Delaware as collected in HARS and extracted for the current profile. Treatment locations are fixed for years ending in 2003 and 2004.

Figure 35a. Distribution by treatment location of all living HIV clients residing in Delaware at time of diagnosis through December 2003, (n=923)

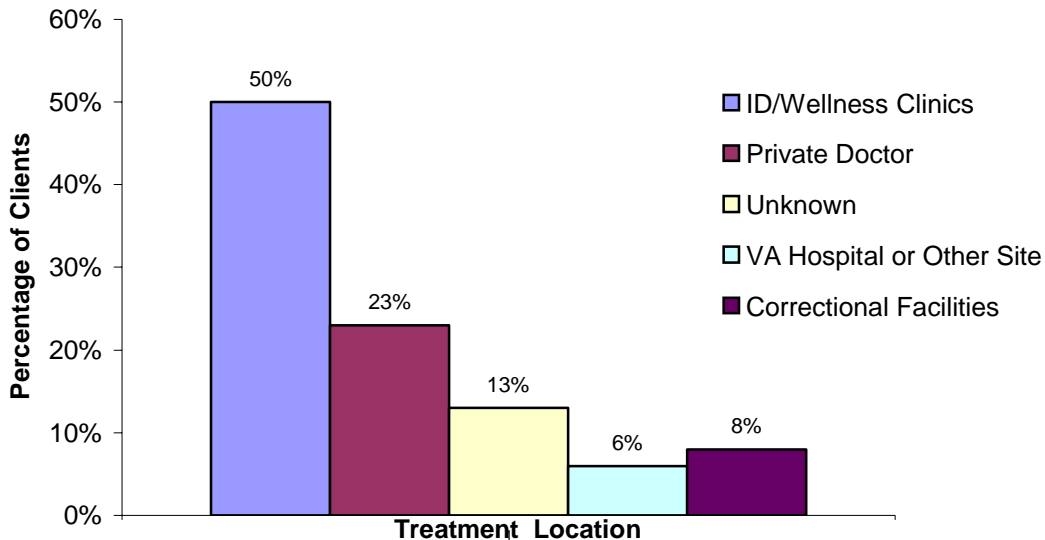


Figure 35b. Distribution by treatment location of all living HIV clients residing in Delaware at time of diagnosis through December 2004, (n=1,036)

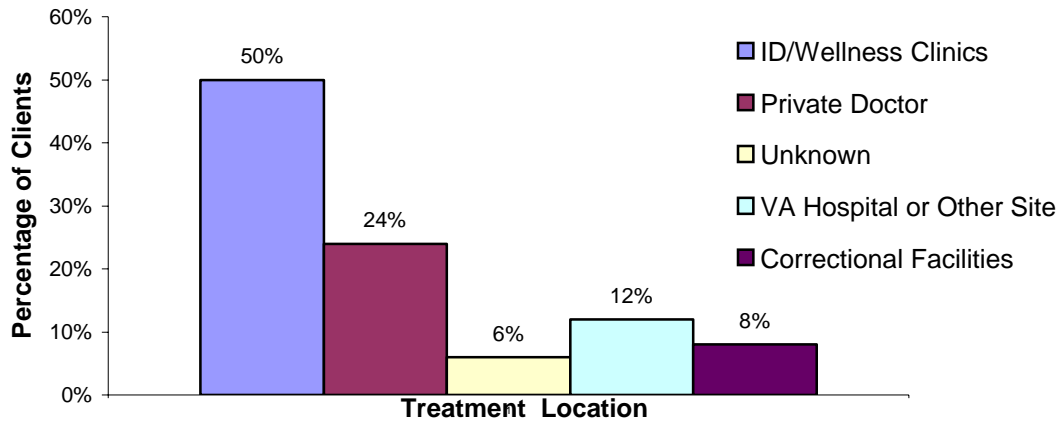


Figure 36a. Distribution by treatment location of all living AIDS clients residing in Delaware at time of diagnosis through December 2003, (n=1,506)

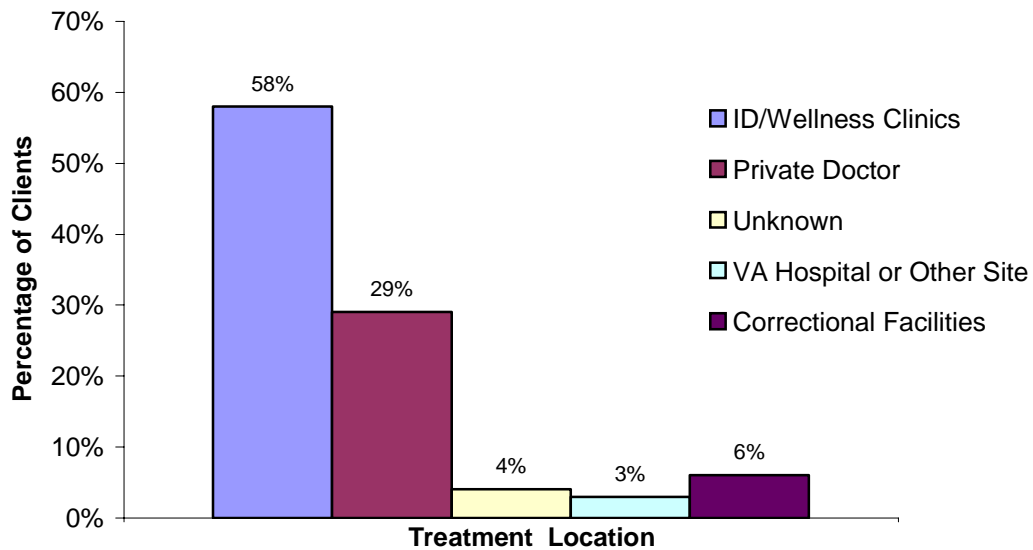
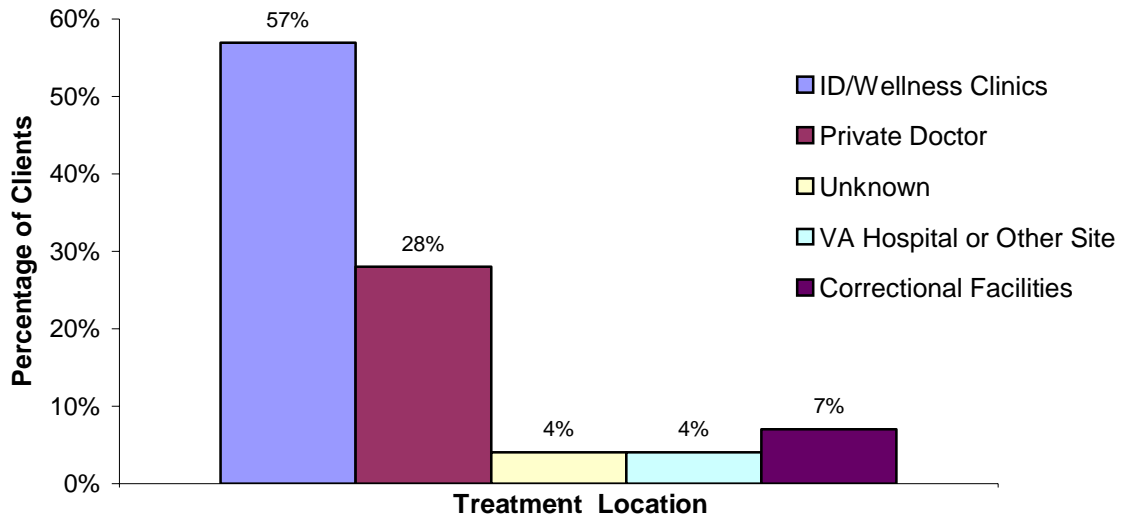


Figure 36b. Distribution by treatment location of all living AIDS clients residing in Delaware at time of diagnosis through December 2004, (n=1,583)



Figures 35a (on page 70), 35b (on page 71), 36a (on page 71) and 36b above indicates over half of all HIV and AIDS patients are receiving care through a wellness clinic, with approximately one-quarter being treated by private doctors. A slightly higher percentage of HIV clients are being treated in a correctional facility when compared to AIDS clients.

Figures 37a and b on the next page illustrates the county of residence and treatment location of living cases as of December 31, 2003. This figure includes 273 non-residents (cases that were diagnosed in a state other than Delaware but are now residing in Delaware) who received care in 2003. There are also 17 clients residing in Delaware who go outside our state to receive their medical care and they are included in with the Veteran’s (VA) or other clinic category. In Delaware, the “other clinic” category includes sites like A.I. duPont Hospital for Children and the Henrietta Johnson Medical Center. As is illustrated in figure 37a on the next page, 538 (55%) HIV-infected clients and 964 (59%) AIDS-infected clients living in Delaware attended an ID/Wellness clinic in each of the three counties in 2003.

Figures 38a and b on page 74 looked at the same data, but for calendar year 2004. One noticeable change is the number of clients seeking care at a private doctor. For HIV-infected clients, this rate jumped from 20% in 2003 to 25% in 2004. Another increase between 2003 and 2004 is the number of clients whose treatment location is unknown. This rate jumped from 11% to 15% among HIV-infected clients and 3% to 5% among clients who progressed to AIDS.

Figure 37a. County of residence and treatment location for all living HIV cases residing in Delaware and receiving care in 2003, (n=982)

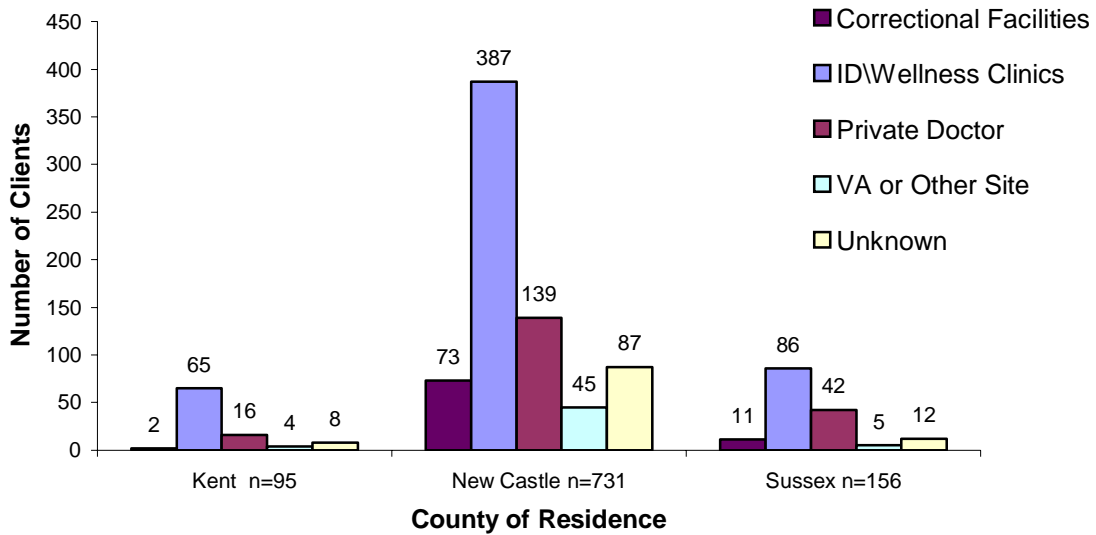


Figure 37b. County of residence and treatment location for all living AIDS cases residing in Delaware and receiving care in 2003, (n=1,643)

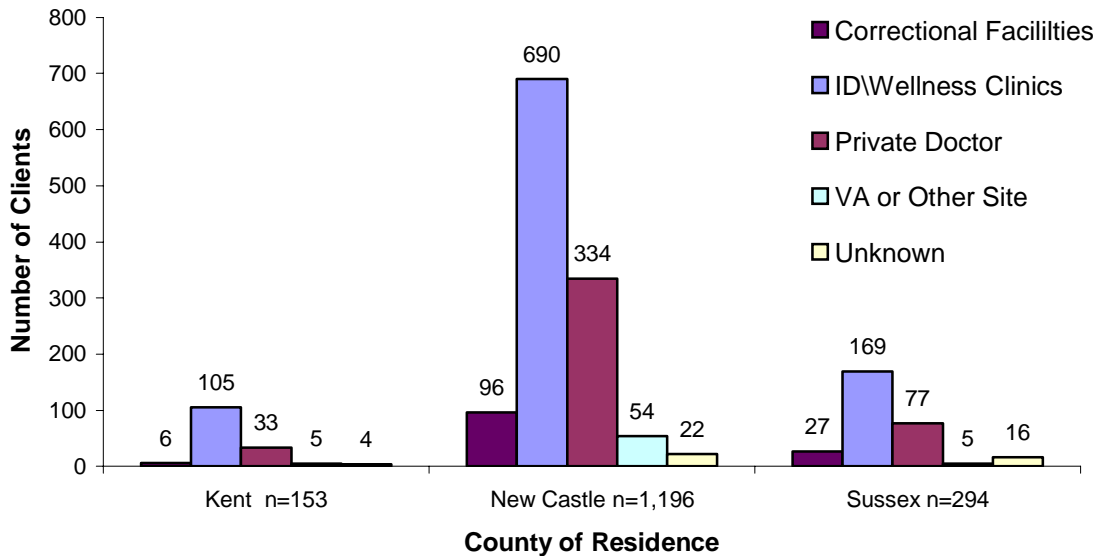


Figure 38a. County of residence and treatment location for all living HIV cases residing in Delaware and receiving care in 2004, (n=1,086)

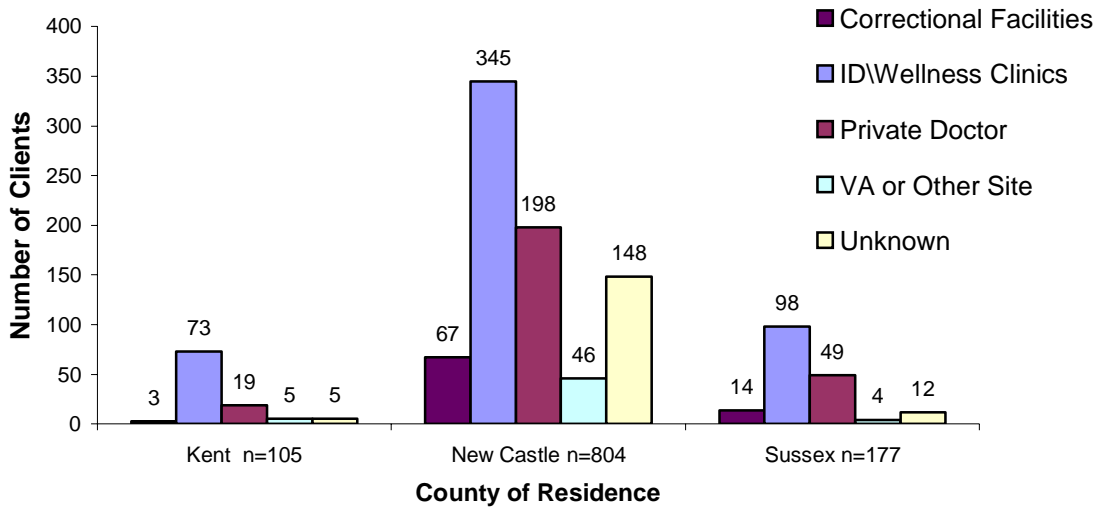
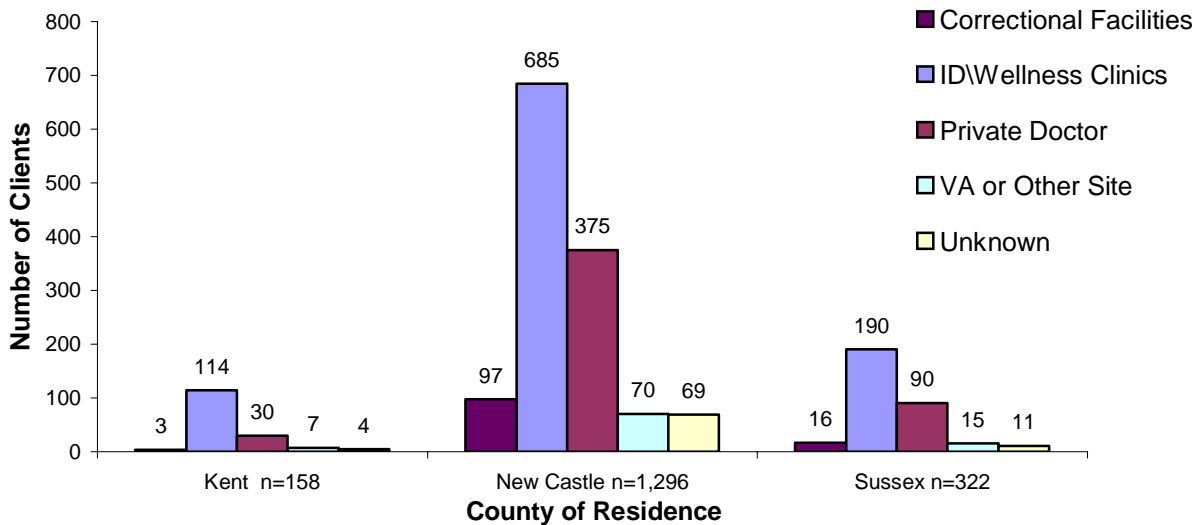


Figure 38b. County of residence and treatment location for all living AIDS cases residing in Delaware and receiving care in 2004, (n=1,776)



Supplemental HIV/AIDS Surveillance (SHAS) Data

The SHAS interview process collected data through 13 questions regarding HIV Testing and Medical Therapy, 32 questions on Preventive Therapy and 29 questions on Health and Social Services. Information regarding availability and utilization of services in the state is collected through the survey. The results of 1363 participants interviewed through the SHAS process from July 1991 through June 30, 2004 are found below.

The answers to the following SHAS questions are shown in percentages.

HIV Testing and Medical Therapy

All participants were asked:

Where were you tested when you had your first positive HIV test?

- ◆ 33% Hospital inpatient, outpatient and emergency room;
- ◆ 21% in Public Health clinics or “AIDS” clinics;
- ◆ 14% in private physician’s office;
- ◆ 10% in HIV counseling and testing site or mobile access;
- ◆ 8% in a community clinic;
- ◆ 8% in a correctional facility;
- ◆ 3% in a drug clinic;
- ◆ 2% at a blood bank;
- ◆ 1% in other types of clinic.

When you first tested positive for HIV, what was the main reason you were tested?

- ◆ 50% due to illness;
- ◆ 26% identified a risk behavior for HIV;
- ◆ 7% would not identify reason;
- ◆ 5% just wanted to know;
- ◆ 3% offered at the clinic;
- ◆ 3% insurance pre-requisite, entrance to military, started new relationship;
- ◆ 3% surgical pre-requisite;
- ◆ 3% pregnancy.

When you first tested positive for HIV, what type of test did you have?

- ◆ 15% anonymous
- ◆ 66% confidential
- ◆ 19% do not know

Has anyone (for example, from the health department or a health care provider) ever offered to tell your sex (or drug using) partners that they may have been exposed to HIV so they can be tested?

- ◆ 67% responded “no” no one ever offered help with notifying partners
- ◆ 32% responded “yes” someone had offered to help notify partners
- ◆ 1% responded “don’t remember”

The 32% (n=436) who answered “yes” to the preceding question were asked:

What was your response when they offered to tell your partners?

- ◆ 72% client chose to notify partners;
- ◆ 12% asked the health department or other person to help with notifying partners;
- ◆ 9% did not want partners told or refused to respond to questions;
- ◆ 5% asked for help with some partners and said they would tell the others;
- ◆ 2% answered with an “other” response.

The 9% (n=39) who did not want their partners told were asked:

What was the main reason you chose not to tell your partners?

- ◆ 31% responded they were “afraid of what the partner(s) would do me”;
- ◆ 13% responded they “didn’t trust the health department/person who offered to tell my partners”;
- ◆ 13% responded they were “afraid my partner(s) would find out it was me who may have infected them”;
- ◆ 43% responded with an “other” answer that did not fit any of the offered responses in the survey.

All participants were asked:

When did you first get medical care after learning you had HIV/AIDS? This includes examinations and viral load or CD₄ testing, even if you are not currently taking any anti-HIV medications?

- ◆ 53% received care within 1 month of learning their HIV status;
- ◆ 12% received care within 3 months;
- ◆ 3% received care within 12 months;
- ◆ 2% received care within 36 months;
- ◆ 6% waited more than 36 months;
- ◆ 24% were unable to provide both a month and year of first care that is required to calculate the variable.

During the past 12 months where did you go most often to get medical care for your HIV infection?

- ◆ 83% receive their HIV medical care through a HRSA funded clinic,
- ◆ 11% through private physician,
- ◆ 2% through Veteran’s Administration Medical Center,
- ◆ 3% through another facility type not specified,
- ◆ 1 % received no care in the last year.

Not counting payment for HIV medicines, about how much did you pay out-of-pocket for health care for your HIV infection in the past 12 months? This includes insurance premiums, deductibles, co-payments, and any other money you may have paid for your HIV care. (out-of-pocket meaning money you pay out that doesn’t get reimbursed).

- ◆ 80% paid no out-of-pocket money in the last 12 months;
- ◆ 6% paid between \$1 and \$100;
- ◆ 2% paid between \$101 and \$200;
- ◆ 3% paid between \$201 and \$300;
- ◆ 4% paid between \$301 and \$999;
- ◆ 5% paid more than \$999.

Has a doctor or health care provider ever told you that your HIV infection had progressed to AIDS?

In the 1,216 surveys completed with AIDS diagnosed clients the responses were:

- ◆ 45% responded “no”, they had not been told they had progressed to AIDS;
- ◆ 52% responded “yes”, they had been told they had progressed to AIDS;
- ◆ 3% responded they “did not know or were not sure”.

In the 147 surveys completed with clients whose medical/diagnostic status was HIV positive at the time of interview the responses were:

- ◆ 98% responded “no”, they had not been told they had progressed to AIDS;
- ◆ 2% responded “yes”, they had been told they had progressed to AIDS.

Has your doctor or health care provider ever told you that you had hepatitis?

- ◆ 64% responded “no” they had not been told they had hepatitis;
- ◆ 36% responded “yes” that they had been told they had hepatitis.

The 36% (n=436) who responded “yes” to having been told they had hepatitis were asked:

What type of hepatitis was it? (multiple types were recorded where indicated)

- ◆ 8% of the participants said they had hepatitis A;
- ◆ 32% of the participants said they had hepatitis B;
- ◆ 50% of the participants said they had hepatitis C;
- ◆ 10% of the participants said they did not know the type of hepatitis they had.

Have you ever had the vaccination to protect against Hepatitis B?

- ◆ 51% participants said they had not received the Hepatitis B vaccine;
- ◆ 35% participants said they had received the vaccine preventative for hepatitis B;
- ◆ 14% participants did not know if they had received the hepatitis B vaccine.

Preventive Therapy

Have you ever taken antiretroviral medicines (an extensive list of antiretrovirals along with generic names is provided to the SHAS participant) to treat your HIV infection?

- ◆ 81% responded “yes” they had taken an antiretroviral medication;
- ◆ 18% responded “no” they had not taken an antiretroviral medication;
- ◆ 1% responded “they did not know or were unsure”.

The 18% (n=245) who responded “no” to the preceding question were asked:

What is the main reason you haven’t taken antiretroviral medications?

- ◆ 18% responded “I recently got into care and haven’t had time to start taking any medications yet”;

- ◆ 37% responded “My doctor said I should wait until later to take medications”;
- ◆ 13% responded “I feel good, I don’t think I need them”;
- ◆ 16% responded “My CD₄ count is still high (or viral load is low) so I decided not to take them”;
- ◆ 11% responded “I’m worried about medication side effects”;
- ◆ 5% responded “I never got around to getting into care/never took the time” or “other” answer.

The 81% (n=1,104) who responded “yes” to having taken an antiretroviral were asked:

In the past 12 months, have you taken a “drug holiday” from your antiretroviral medications? That is, did you not take any doses of one or more of your antiretroviral medications for at least two whole days in a row?

- ◆ 29% (n=320) said “yes” they had taken a “drug holiday” in the past 12 months.

When the 320 were asked:

What was the main reason you took a drug holiday from your antiretroviral medications?

The top four responses were:

- ◆ 19% said “I just got tired of taking them and needed a break”;
- ◆ 15% said “Medication has side effects and makes me feel bad”;
- ◆ 15% said “I was someplace where I couldn’t get my medications (on vacation or out of town)”;
- ◆ 13% said “I felt good and I didn’t think it would hurt not to take them”.

*Have you ever been told you have *Pneumocystis carinii* pneumonia (PCP)?*

- ◆ 4% responded that they “did not know” if they had been told they had PCP;
- ◆ 15% responded “yes” that they had been told they had PCP;
- ◆ 81% responded “no” that they had not been told they had PCP.

Conclusion

Back in 1994, just ten short years ago, 3,282 AIDS cases were reported to the Division of Public Health and only forty-eight percent (n=1,585) were living. At the end of 2004, 4,343 HIV/AIDS cases have been reported to DPH and sixty-six percent (n=2,869) are living.

At the end of 2004, the majority, 39% (n=1,123), of the living cases reside in the City of Wilmington's zip codes 19801, 19802, 19805, and 19806. Thirty percent (n=848) reside in other zip codes in New Castle County, 17% (n=478) reside in Sussex County and 9% (n=268) reside in Kent County. Four percent of those living with HIV/AIDS are incarcerated (n=124). 1% (n=28) of people living with HIV/AIDS have no county of residence on record.

The disproportionate impact of the HIV/AIDS epidemic on African-American Delawareans continues to present prevention providers with ever growing need for early intervention through education, outreach and behaviorally-based interventions. In the City of Wilmington, 82% of those living with HIV (not AIDS) are African-American and of those living with HIV (not AIDS) in New Castle County (outside Wilmington), 59% are African-American. As of the end of 2004, sixty five percent (n=1,097) of Delawareans who have died of HIV/AIDS were African-American and 74% (n=812) of the African-American cases that have died were men.

Nearly two-thirds (62%) of the cumulative male cases in Delaware are African-American and more than three-quarters (76%) of the cumulative female cases are African-American. In Kent County, 61% of those living with HIV (not AIDS) are African-American. In Sussex County, 53% of those living with HIV (not AIDS) are White.

It is our hope that the data contained in this epidemiological report will help to prevent further cases of HIV/AIDS in the State of Delaware by better focusing resources and programs to those most at risk. Today, more Delawareans are living with HIV disease than ever before. Recent data from Christiana Care Health Systems shows that 59% of people presenting for care, seek care only *after* experiencing symptoms of HIV illness and/or receive a diagnosis of AIDS before or at intake for clinic care. The need to reach people earlier in HIV illness has never been more urgent. Interventions must address at-risk populations, as communities and as individuals, and must be tailored, as much as is practical and fundable, to each population's unique cultural, racial, ethnic, economic, religious and sexual mores and practices. HIV testing, partner services, active referral to care, and the responsibility to not pass the virus must be emphasized appropriately and effectively – in tune with the unique needs of each population.

Support

Grant funding through Cooperative Agreement 00005 from the Centers for Disease Control and Prevention (CDC) supported this publication. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

Acknowledgements

Many thanks goes out to the HIV/AIDS Surveillance staff for their hard work and dedication. Our surveillance staff includes John Miller, Christina Melvin, Bob Vella, Angela Miller, Bruce Levan and Doug Trader.

We also would like to thank the following individuals: Ryan White CARE Act grantees and Delaware Ryan White Program Administrator Lucy Luta and staff—Marge Brittingham, Jeanette Killen and Jean McAdams; STD Program Administrator, Cathy Mosley and staff member Sheri Swackhammer, for their assistance with STD data and Amy Edwards for her assistance with the printing of the profile.

We also appreciate the efforts of Steve Martin and Dan O'Connell from the University of Delaware and Susan Tanner from the Delaware HIV Consortium for their assistance in the preparation of this report.

Finally, a special thanks to Dr. Robert Jackson and James C. Welch for their support, guidance, patience and mentoring.

References

1. United States Census Bureau from website: <http://quickfacts.census.gov/qfd/>
2. Delaware Division of Public Health, Health Statistics Center, *Delaware Vital Statistics Annual Report 2002*
3. HIV/AIDS Reporting System (HARS), HIV/AIDS Surveillance, DPH
4. Center for Disease Control and Prevention, *HIV/AIDS Surveillance Report 2003*, Year-end edition Volume 13, No. 2, U.S. HIV and AIDS cases reported through December 2001, <http://www.cdc.gov/hivdhap.htm>
5. Supplemental HIV/AIDS Surveillance (SHAS), HIV/AIDS Surveillance, DPH
6. Division of Public Health, Disease Prevention and Control, HIV/STD/Hepatitis C Section, HIV Counseling and Testing Annual Report 2002, internal document
7. Division of Public Health, Disease Prevention and Control, HIV/STD/Hepatitis C Section, *Sexually Transmitted Disease Annual Report 2002*, internal document.
8. Department of Education, Division of Adolescent and School Health (DASH), Youth Risk Behavior Survey (YRBS), 2003 from website: <http://www.cdc.gov/nccdphp/dash/yrbs/results.htm>
9. Health Resource and Services Administration (HRSA), Ryan White CARE Act Data Reports (CADR) 2003 and 2004.

Heterosexual SHAS Participant Sexual Activity and Condom Use

Of the 14 heterosexual men who were infected with HIV through sex with an IDU, 3 abstained from sex and eleven (79%) had sex with a woman in the 12 months prior to the interview. Eight (73%) of the men, who had sex with a woman, had a single partner only. Two men had between 4 and 6 female partners and one male stated he had sex with 30 women in the 12 months prior to the interview.

Seven (67%) of the 11 men who had sex with a woman, in the time frame, identified themselves as having a “steady sex partner”. Of the seven, 86% (n=6) used a condom when engaging in vaginal intercourse with their partner.

Of the four men who did not have a steady sex partner, 3 (75%) used a condom when engaging in vaginal intercourse. None of the four men had anal sex with their female partner or had given the women oral sex. Three (75%) of the four men had received oral sex from a female partner and 2 (67%) used a condom.

Of the 20 female heterosexuals who were infected through sex with an IDU and interviewed with SHAS, 8 had abstained from sex in the 12 months prior to the interview date.

Of the 44 heterosexuals who had sex with a person with HIV/AIDS, 73% (n=32) are female and 27% (n=12) are male.

Within the female participants, 81% (n=26) had sex with a man in the 12 months prior to the interview date and 77% (n=20) of the 26 had a single partner in the time frame. Five participants had sex with 2-3 male partners and one with 50 or more. Eight (25%) of the 32 women interviewed had a sexually transmitted disease in the 12 months prior to the interview date.

Four (13%) of the 32 participants who had sex with a person with HIV/AIDS had received drugs or money for sex but only one in the 12 months prior to the interview. Only one of the females had ever paid for sex and not within the 12 months prior to the interview.

Thirteen (68%) of the 19 women, who had a steady sex partner in the 12 months prior to the interview date, had vaginal intercourse with their steady sex partner and used a condom. Five (26%) of the 19 females were recipients of oral sex and one (5%) used a barrier or dental dam. Seven (37%) of the 19 women had given their partners oral sex and 3 (16%) of the 7 had used a condom. None of the 19 females engaged in anal intercourse.

Of the seven women who did not have a steady sex partner in the 12 months prior to the interview date, the number of sex partners ranged from 1 to 3. Of the seven women, 4 (57%) had vaginal intercourse and used a condom, 3 (43%) were recipients of oral sex and only one use a barrier or dental dam. Two (29%) of the 7 women without steady sex partners had given oral sex to a man and did

not use a condom. None of the seven women had engaged in anal intercourse in the 12 months prior to the interview date.

Within the 12 heterosexual males who participated in a SHAS interview and had sex with a person with HIV/AIDS, 10 (83%) had sex with a woman in the 12 months prior to the interview date. Eight (80%) of the 10 had a steady female sex partner in the time frame. When having vaginal intercourse with their steady female partner, 70% (n=7) used a condom.

Of the 12 male heterosexual SHAS participants, two (17%) had been treated for a sexually transmitted disease in the 12 months prior to the interview period.

Delaware Epidemiologic Profile Feedback

The purpose of this form is to provide the writers of HIV/AIDS epidemiologic profiles feedback from their end-users regarding the ease of use and applicability of the profile to prevention care planning activities.

Please complete this feedback form and send it to the HIV/AIDS Surveillance Office, Delaware Division of Public Health, Blue Hen Corporate Center, 255 South Bay Road, Suite 218, Dover, DE 19901

1. Of which planning group are you a member?

- Delaware HIV Planning Council
- Formulary Committee
- Policy Committee

2. Was the epidemiologic profile easy to read?

- Yes
- No
- Somewhat

3. How were the findings of the epidemiological profile communicated to you?

- Print Copy Only
- Profile Writers presented epidemiologic profile to planning group
- Other _____

4. Were the findings of the epidemiologic profile clear to you?

- Yes
- No
- Somewhat

If not, explain why.

5. Was the epidemiologic profile useful to your planning process?

- Yes
- No
- Somewhat

If not, explain why.

6. Describe how you used the epidemiologic profile in your planning activities?

7. How can next year's profile be improved?

7a: What specific questions could be included in the next profile?

8. Do you want to receive the quarterly HIV/AIDS statistical report?

- No
- Yes, I already receive the report
- Yes, please send the report to me by:
Include your contact information, as appropriate
 - Email _____
 - Fax _____
 - Mail _____

9. Data from this epidemiological profile is helpful to me as I conduct my job.

- Yes
- No

If yes, how do you use the data?

- Grant writing
- Proposal development
- Resource for presentations
- Other, _____