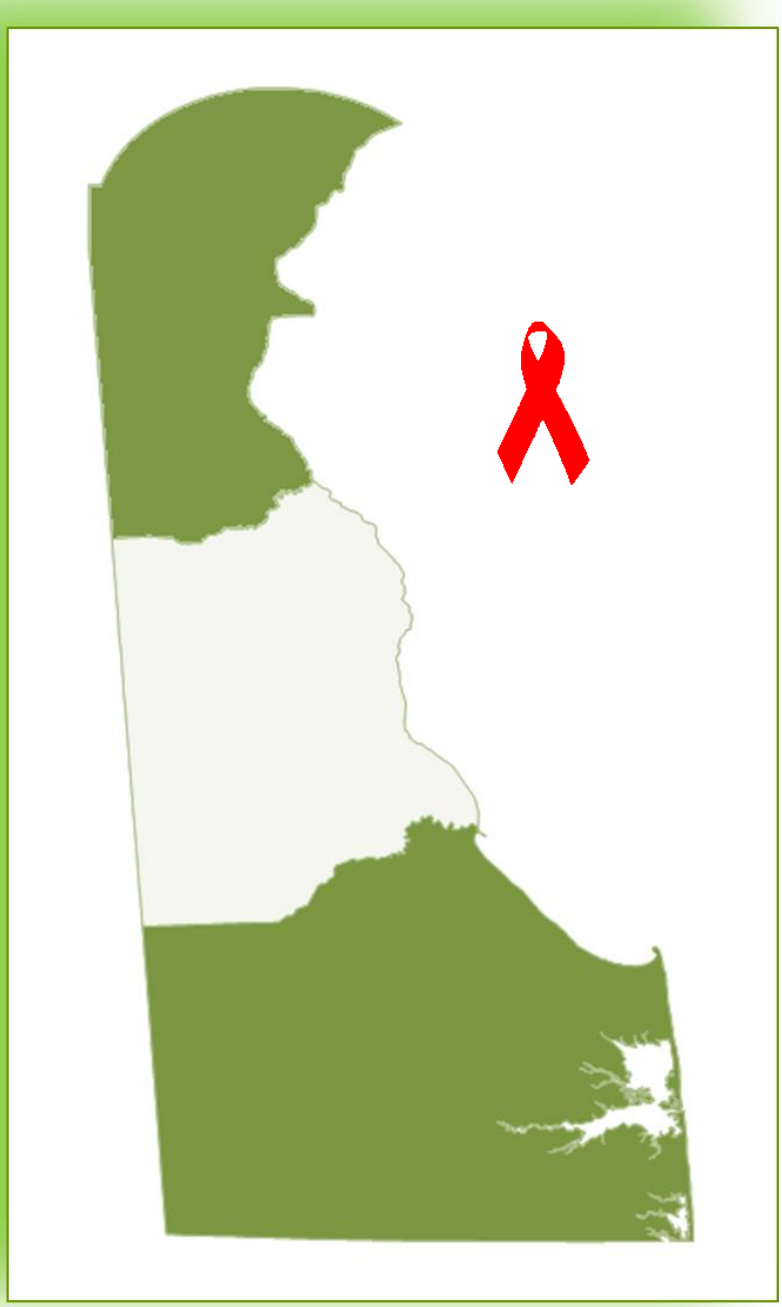
2010
Delaware HIV/AIDS Surveillance Report



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Division of Public Health
Health Promotion and Disease Prevention

HIV/AIDS Epidemiology
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Table of Contents

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Executive Summary

In 2009, 1,291 Delawareans were living with HIV and another 2,181 were living with AIDS. In that same year, the cumulative number of HIV/AIDS cases in Delaware reached 5,139. Delaware's AIDS incidence rate at 14.8 cases per 100,000, is among the highest in the nation. In 2007, Delaware's AIDS incidence rate was the 6th highest in the United States. By 2008, Delaware's AIDS incidence rate had decreased marginally to a level which ranked 8th highest in the nation. (CDC, HIV/AIDS Surveillance Report, 2008) The number of new infections diagnosed in Delaware currently stands at 165 cases per year.

The statewide distribution of Delaware's HIV/AIDS cases closely follows county-level population estimates. New Castle County – the most populous of Delaware's three counties – has the highest percentage of HIV/AIDS cases. Cases in New Castle County are largely confined to the densely populated Wilmington metropolitan area. Though Wilmington comprises 14% of the New Castle County population, it accounts for 43% of the county's individuals living with HIV/AIDS. It is noteworthy that in 2009, 29% of all newly diagnosed HIV cases in Delaware occurred among minorities residing in the City of Wilmington.

Males account for the majority (71%) of HIV/AIDS cases ever diagnosed in Delaware. However, in recent years, Delaware females have accounted for an increasingly larger percentage of the total HIV/AIDS cases. For example, in 1990, 24% of newly diagnosed AIDS cases were female; in 2009, females accounted for 30% of newly diagnosed cases.

African-Americans carry a disproportionate share of the state's HIV/AIDS burden. Despite representing just 21% of Delaware's total population, African-Americans accounted for 66% of all HIV/AIDS cases ever diagnosed in the state. This racial disparity is more pronounced in Delaware compared to the U.S., and persists for both HIV and AIDS when considered as two separate disease states. African-American males account for 38% of all male AIDS cases in the U.S., but 62% of all male AIDS cases in Delaware. Similarly, African-American women comprise 62% of all female AIDS cases in the U.S., but nearly 80% of all female AIDS cases in Delaware.

Consistent with U.S. trends, the majority (67%) of HIV/AIDS cases ever reported in Delaware were diagnosed among adults aged 30-49. In Delaware and the U.S., fewer than 3% of HIV/AIDS cases ever reported were diagnosed among adults age 60 and older.

Pediatric HIV/AIDS cases, which are defined as cases diagnosed among children under the age of 13 years, account for just 1% of cases ever reported in both Delaware and the U.S. In Delaware, 78% of all pediatric HIV/AIDS cases were diagnosed among African-American children. From 2008-2009 a total of 35 Delawarean women infected with HIV gave birth to infants; all but one infant born to these HIV-infected mothers

tested negative for the disease. There has been only one positive infant born in Delaware in the past four years.

Among all new HIV infections diagnosed in Delaware in 2009, the largest percentage of cases (39%; N=62) were attributable to men having sex with men. Heterosexual transmission and injection drug use accounted for an additional 33% (N=53) and 15% (N=24) of newly diagnosed HIV cases, respectively. An additional 2% of new cases (N=3) were attributable to both MSM (men who havie sex with men) and injection drug use. The remaining 11% (N=19) of cases fell into the “Other Risk” or “No Risk Identified” behavioral categories.

Within Delaware, the mode of HIV transmission varies among the three counties. In New Castle County, African-American injection drug users account for the majority of new HIV diagnoses. In Sussex County, new cases are predominantly diagnosed among Caucasian men who have sex with men.

From 1981 through December 2009, a total of 2,122 Delawareans who had AIDS died. In the past decade, the survival rate for Delawareans living with AIDS has dramatically increased. In addition to improvements in the life expectancy for Delawareans with AIDS, those with HIV are also living longer prior to progression of the disease to AIDS. Earlier diagnosis of HIV infection, improved medical management and the development of highly active anti-retroviral drugs have all contributed to the dramatic improvement in HIV/AIDS survival rates.

Background and Introduction

Delaware initiated AIDS surveillance and reporting in 1981. In 2001, the Delaware Division of Public Health (DPH) expanded surveillance efforts and began collecting data on Delawareans infected with HIV. HIV/AIDS surveillance efforts heavily rely on data compiled from healthcare professionals and laboratories throughout the state.

The Human Immunodeficiency Virus (HIV) is the underlying biological agent that weakens an individual's immune system, facilitating the development of Acquired Immune Deficiency Syndrome (AIDS). Except for an initial viral response, the HIV may not manifest itself with symptoms for some time after infection. Following the progression of HIV to AIDS, symptoms of the virus typically advance to a state where a clinical diagnosis may be made by a physician. AIDS may manifest as specific infections, cancers, or cellular changes within a patient's immune system.

Analysis of HIV/AIDS incidence and prevalence data is a crucial component to combating the disease. The Delaware HIV Consortium and the Delaware HIV/AIDS Planning Council rely on accurate surveillance data to guide the development of HIV prevention efforts, as well as HIV/AIDS healthcare planning and services administration. Surveillance data allows DPH to monitor the progress of risk reduction and disease prevention, and also influences the amount of federal funds that Delaware receives to assist in the fight against HIV/AIDS.

This report largely focuses on three main areas of interest: (1) the socio-demographic characteristics; (2) the scope of the HIV/AIDS epidemic; and (3) the pattern of service utilization among Delawareans living with HIV/AIDS.

HIV/AIDS Surveillance in Delaware

Delaware's HIV/AIDS surveillance efforts largely focus on three fundamental epidemiological concepts: person, place, and time.

- **Person**: Identifying the mode by which an individual contracts HIV is a crucial first step in an investigation, as this information is used to guide future prevention efforts. In Delaware, HIV/AIDS surveillance staff help characterize mode of HIV transmission using case report forms, personal interviews, and medical record reviews.

- **Place**: Attempts to determine the geographic area where HIV transmission may have occurred. In this report, "place" generally refers to the county of residence at time of HIV/AIDS diagnosis. Every effort is made to identify the location of HIV/AIDS transmission among Delawareans, regardless of whether diagnosis and/or treatment occur within the state. (Delaware engages in data-sharing agreements with other states to identify Delawareans who may have been diagnosed or who seek treatment outside of the state).

- **Time**: DPH relies on two dates to help characterize HIV disease trends in Delaware: (1) date of diagnosis and (2) date report is received by the DPH HIV/AIDS Surveillance Office. Excessive time-lag between these two dates complicates the process of data analysis and accurate surveillance. For this reason, the HIV/AIDS Surveillance Office works with healthcare practitioners and laboratories across the state to facilitate timely reporting of all recently diagnosed cases. Additionally, this report is written based on data that has matured 12 months (2009 data). The successes of timely reporting and active surveillance methods allow the majority of this report to include data pertaining to date of diagnoses.

Patient confidentiality is crucial for maintaining an effective HIV/AIDS surveillance system. The DPH HIV/AIDS Surveillance Office adheres to detailed data confidentiality protocols that mandate physical, operational, and personnel security standards when working with HIV/AIDS data. Data confidentiality standards must be maintained as a condition of receiving federal funding for surveillance activities.

Methods

Data Source Descriptions, Limitations and Precautions

In addition to HIV/AIDS surveillance data collected by DPH, this report includes data from the U.S. Census Bureau, the Centers for Disease Control and Prevention (CDC), and the Health Resources and Services Administration of the U.S. Department of Health and Social Services (DHSS). A brief description of each data source is found below.

Delaware Division of Public Health (DPH): provides statewide HIV testing and counseling data via the Delaware HIV Counseling and Testing System database. Healthcare practitioners and centers use standardized data collection forms to report information on Delawareans tested in public clinics across the state, as well as for those seeking HIV counseling.

This report also contains data derived from Delaware-specific *Sexually Transmitted Infection and Disease Reports*, DPH publications that include statewide data pertaining to sexually transmitted diseases (STDs; e.g., gonorrhea, chlamydia, and syphilis). STD data are helpful for identifying populations at increased risk for contracting HIV.

Birth and death information, originating directly from birth and death certificates provides Delaware-specific morbidity and mortality data. Doctors, hospitals, and clinics in Delaware are required to report birth and death certificate data. However, in terms of mortality data, it is important to note that the data quality is dependent upon death certificate data provided by physicians. Some physicians may not note a diagnosis of HIV/AIDS on death certificates. This may be due to family request, physician lack of knowledge regarding HIV status, or failure to record underlying causes of death. For these reasons, the number of AIDS-related deaths may be artificially suppressed not only in Delaware, but across the nation.

U.S. Census Bureau: provides Delaware-specific county-level population data. Data estimates are complete and standardized nationwide through 2009. Data from the most recent Census year (2000) are used to provide interim one-year estimates for non-Census years (e.g., 2001-2009).

The Centers for Disease Control and Prevention (CDC): provides national-level HIV/AIDS trend data via the Evaluation HIV/AIDS Reporting System (EHARS). EHARS is used nationwide for storing HIV/AIDS surveillance data. State-specific HIV/AIDS data (both prevalence and incidence data) are available through EHARS. While it represents an advanced public health surveillance system, it is possible that actual HIV/AIDS prevalence and incidence counts are underreported in EHARS. Delays in reporting and noncompliance contribute to this underreporting. While HIV data are reported to the CDC by all 50 states, the quality of HIV surveillance data for some states has not met the minimum level for inclusion in analyses.

The quality of Delaware's EHARS data has improved substantially in recent years, largely in response to the proactive efforts of the HIV/AIDS Surveillance Office and field workers. Via increased record reviews and education of healthcare professionals and laboratories regarding the proper methods for reporting HIV/AIDS cases, case report forms in Delaware reflect more accurate data regarding newly diagnosed HIV/AIDS cases. Delaware has made significant improvements in death ascertainment within EHARS which will continue to help improve data for those living with HIV disease in the state.

This report also utilizes data from the CDC-published *HIV/AIDS Surveillance Report*. Data from the *HIV/AIDS Surveillance Report* summarizes national and state-level trends with respect to the HIV/AIDS epidemic.

Data derived from the Youth Risk Behavior Survey (YRBS) are also included in the current report. YRBS represents an ongoing surveillance effort by the CDC with the overall goal of identifying risk factor trends among youth (e.g., nutrition patterns, substance use, accidents, sexual behaviors, and delinquency). These data are then used to explore the relationship between risk behaviors and health. YRBS uses self-administered, anonymous questionnaires to collect data from high school students in odd-numbered years. The Delaware Department of Education oversees the implementation of YRBS. In Delaware, YRBS response rates are very high; 84% of students approached for participation complete a questionnaire.

Health Resources and Services Administration (HRSA), U.S. Department of Health and Social Services (DHSS): provides data related to HIV/AIDS service utilization patterns via the Ryan White Data Reports (RDR). States receiving federal Ryan White dollars use these funds to provide medical and support services to those infected with HIV/AIDS. Ryan White funds are also used to provide health insurance coverage and prescription drugs for those with the disease. HRSA receives information from states and uses the data to monitor HIV/AIDS service utilization patterns across the nation.

While RDR data are limited to those individuals with HIV/AIDS who seek healthcare, these data are nonetheless important for future healthcare planning.

Data Specifics

- In 1993, the CDC expanded the AIDS case definition to include individuals diagnosed with the disease who did not yet display several AIDS indicators (including severely compromised immune system with CD_4 counts <200 µ/L or <14%, invasive cervical cancer, recurrent pneumonia, and pulmonary mycobacterium tuberculosis infection).

The expansion in case definition in the early 1990s resulted in an increase in the prevalence of AIDS cases, observable at the local, state, and national levels. It is important to note that the AIDS case definition was modified again in 2007; however, the impact of the most recent case definition on Delaware's HIV/AIDS statistics is not yet known.

- In 2001, 20 years after the initiation of AIDS surveillance, Delaware initiated HIV surveillance. In this report, 2001-2009 HIV data are combined with AIDS data. For reporting years prior to 2001 (i.e., 1981-2000), data reflect AIDS case counts only. The inclusion of HIV cases beginning with reporting year 2001 created a sharp increase in HIV/AIDS case counts. This increase in cases is a methodological artifact and does not represent a true increase in the actual number of HIV/AIDS counts in Delaware.

- Per DPH data release policy, data in this report may be combined or suppressed to ensure patient confidentiality. No Delaware-specific HIV/AIDS data are released in a format that may allow for individual identification. Any combined or suppressed data are identified in footnotes.

Definition of Terms

Adolescent:	An individual between the ages of 13 and 19.
Adult/Adolescent case:	Patient is 13 years or older at the time of diagnosis.
Epidemiology:	A branch of medical science that deals with incidence, distribution and control of a disease in a population.
Heterosexual:	Persons with a history of sexual contact with a person of the opposite sex.
Incidence Rate:	A measure of the rate of development of a disease in population over a period of time. This rate is calculated by dividing the number of new cases diagnosed in a population during a specific time period by the size of the population during the same time period.

NIR case:	No Identified Risk case. NIR cases may be reclassified as information is obtained via a complete epidemiologic investigation.
Pediatric case:	Patient is younger than age 13 at the time of diagnosis.
Prevalence:	The percentage of a population that is affected with a particular disease at a specific point in time.
Rate:	Number of cases in a population divided by the total size of the population. Rates allow for the direct comparison of groups with different population sizes.
Transfusion case:	Person who acquired the HIV virus as a result of receiving blood or blood products.
Year of diagnosis:	The year when the disease event was first confirmed by medical personnel.
Year of report:	The year when the case was reported to the Delaware HIV/AIDS Surveillance Office.

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	Delaware Division of Public Health
EHARS	Evaluation HIV/AIDS Reporting System (CDC database)
HAART	Highly active anti-retroviral therapy
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
STD (STI)	Sexually Transmitted Disease (Infection)
YRBS	Youth Risk Behavior Survey

1. Socio-Demographic Characteristics of the State of Delaware

Delaware is the second smallest state in the U.S. in terms of geographic size, measuring 100 miles from north to south and 30 miles from west to east and comprises of three counties, New Castle, Kent, and Sussex. New Castle County, located in the northern portion of Delaware, is the most densely populated and is home to 60% of the state population. Almost 12% of New Castle County residents live in the city of Wilmington. Centrally-located Kent County, home to 18% of Delawareans includes a blend of urban, suburban, and agricultural zones. Dover Air Force Base and the state capital (Dover) are located in Kent County. The remaining 22% of Delawareans live in Sussex County, the southernmost of the three counties. Sussex County is largely rural and home to a large number of poultry, dairy, and crop-growing farms and facilities. Eastern Sussex County includes the beach communities and draws a large number of retirees each year.

In 2009, Delaware's population was estimated at 885,122, representing 0.3% of the total U.S. population. The majority of Delawareans (67.0%) are Caucasian; African-Americans and Hispanics comprise 21% and 7%, respectively. Approximately 4% of Delawareans are Asian, Pacific Islander, Native American or multi race. Females account for 51% of the population, similar to the national gender distribution. See Table 1, below, for racial distributions at the county-level.

Table 1: Delaware racial distribution by county, 2009

County	Caucasian N (%)	African-American N (%)	Hispanic N (%)	Other N (%)	Total N (County %)
New Castle	341,100 (64%)	121,652 (23%)	42,622, (8%)	29,260 (5%)	534,634 (60%)
Sussex	149,340 (78%)	25,039 (13%)	13,938 (7%)	4,430 (2%)	192,747 (22%)
Kent	107,397 (68%)	35,870 (23%)	7,332 (5%)	7,142 (4%)	157,741 (18%)
Delaware	597,837 (67%)	182,561 (21%)	63,892 (7%)	32,009 (5%)	885,122 (100%)

Source: U.S. Census Bureau; Rows sum to 100%

The median age of Delawareans is 38. Compared to the general U.S. population, Delawareans have a slightly higher median annual household income ($57,270 vs. $52,175, respectively) and similar patterns of educational attainment to that of the general U.S. population. Approximately 87% have a high school diploma compared to 84% of the U.S. population. Twenty-seven percent have earned a bachelor's degree or higher which is equivalent to the U.S. population. Eleven percent of Delaware residents report speaking a language other than English in the home.

2. Scope of the HIV/AIDS Epidemic in Delaware and the U.S.

Between 1981 and 2009, 5,139 Delawareans were diagnosed with HIV or AIDS. Males account for 71% of all cases ever diagnosed in the state. African-Americans account for 66% of all cases and represent a disproportionate share of the state's HIV/AIDS burden. Caucasian and Hispanic Delawareans account for 28% and 6% of all cases, respectively. The largest percentage of HIV/AIDS cases have been diagnosed among adults ages 30-39. New Castle County accounts for the majority of HIV/AIDS cases ever diagnosed in the state. See Table 2, for a breakdown of Delaware's HIV and AIDS cases by gender, race, age, and county.

Table 2: Delaware reported HIV/AIDS cases, 1981-2009*

	HIV Cases N (%)	AIDS Cases N (%)	Total (HIV/AIDS) Cases N (%)
Total Cases	**1,200 (100%)**	**3,939 (100%)**	**5,139 (100%)**
Gender			
Males	786 (65%)	2,858 (73%)	3,644 (71%)
Females	414 (35%)	1,081 (27%)	1,495 (29%)
Race			
Caucasian	350 (29%)	1,070 (27%)	1,420 (28%)
African-American	755 (63%)	2,630 (67%)	3,385 (66%)
Hispanic	80 (7%)	209 (5%)	289 (6%)
Other / Unknown	15 (1%)	30 (< 1%)	45 (< 1%)
Age Group (Years at Diagnosis)			
< 13	15 (1%)	27 (< 1%)	42 (< 1%)
13-19	74 (6%)	22 (< 1%)	96 (2%)
20-29	300 (25%)	510 (13%)	810 (16%)
30-39	391 (33%)	1,541 (39%)	1,932 (38%)
40-49	291 (24%)	1,289 (33%)	1,580 (31%)
50+	129 (11%)	550 (14%)	679 (13%)
County			
New Castle (NCC)	888 (74%)	2,977 (76%)	3,865 (75%)
NCC,City of Wilmington	*551 (46%)*	*1,983 (50%)*	*2,534 (49%)*
NCC, non-Wilmington	*337 (28%)*	*994 (25%)*	*1,331 (26%)*
Kent County	121 (10%)	389 (10%)	510 (10%)
Sussex County	191 (16%)	573 (14%)	764 (15%)

Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)
Note: In Delaware, AIDS and HIV surveillance efforts began in 1981 and 2001, respectively.
Chart represents cumulative Delaware diagnosed cases regardless of current vital status.

Living with HIV/AIDS

In 2009, 2,181 Delawareans were living with AIDS and 1,291 were living with HIV. Approximately 15% of those living with HIV/AIDS moved to the state after diagnosis.

Prevalence and Incidence

The 2007 U.S. HIV and AIDS prevalence rates were 275.4 and 152.5 per 100,000, respectively. In comparison, Delaware's 2009 HIV and AIDS prevalence rates were 145.8 and 246.4 per 100,000, respectively. Therefore, while Delaware's HIV prevalence rate is 47% less than that of the U.S., Delaware's AIDS prevalence rate is 62% greater than the U.S. rate.

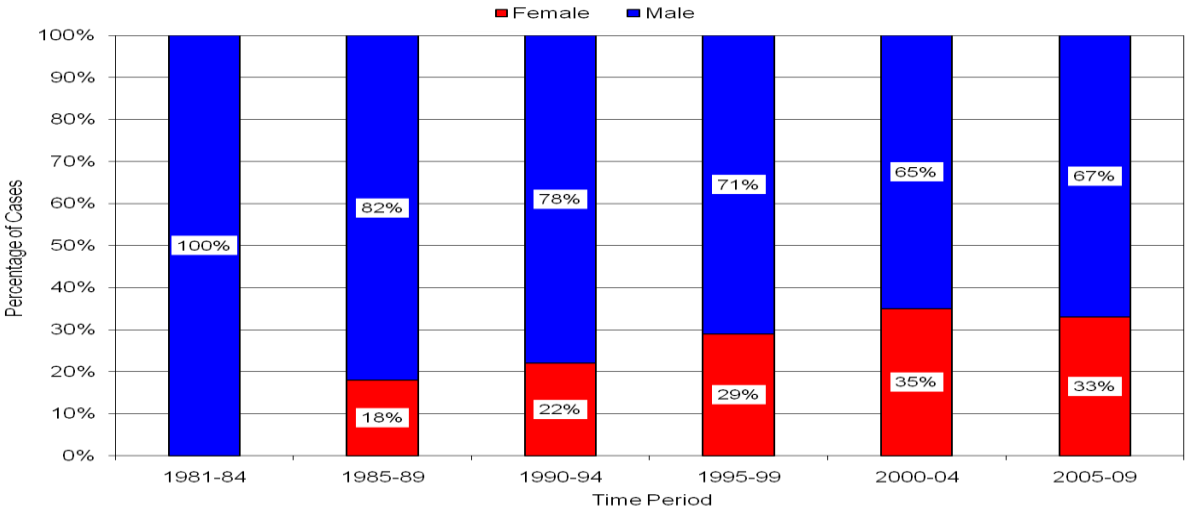
Incidence rates describe the extent to which new cases are diagnosed and represent the speed with which a disease spreads within a population. In the U.S., the 2008 AIDS incidence rate was 12.2 per 100,000. Delaware's AIDS incidence rate, at 13.1 per 100,000 is, marginally higher than the overall 2008 U.S. rate. In 2008, Delaware AIDS incidence rate ranked 8th among all states.

HIV/AIDS prevalence and incidence data are unavailable for smaller, hard-to-reach populations, such as the homeless, transgendered, and the mentally ill. Additionally, some HIV/AIDS cases are diagnosed through routine screenings (e.g., blood donations) and little additional information is available regarding individuals' risk factors.

Gender

Since the initiation of AIDS surveillance in 1981 and HIV surveillance in 2001, males have accounted for the majority of cases diagnosed annually in Delaware. However, as shown in Figure 1, Delaware females have accounted for a growing proportion of HIV/AIDS cases diagnosed each year. That trend has begun to reverse with female cases declining from 35% (2000-2004) to 33% (2005-2009). Before 1984, no female HIV/AIDS cases were diagnosed in Delaware.

Figure 1: Delaware HIV/AIDS cases, by gender, 1981-2009 (N=5,139)



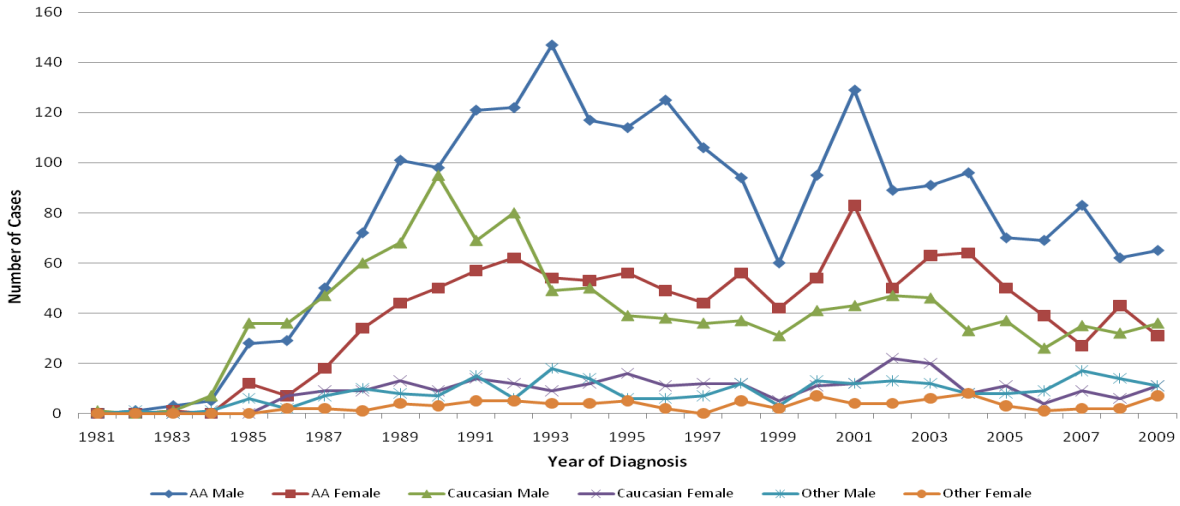
Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Race/Ethnicity

Delaware's HIV/AIDS epidemic continues to disproportionately affect the African-American population who comprise 21% of the Delaware population, but account for 63% and 67% of the State's HIV and AIDS cases, respectively.

As shown in Figure 2, males account for more cases than females within each race category (i.e., Caucasian, African-American, Hispanic, and Other).

Figure 2: Delaware HIV/AIDS cases, by race and gender, 1981-2009 (N=5,139)



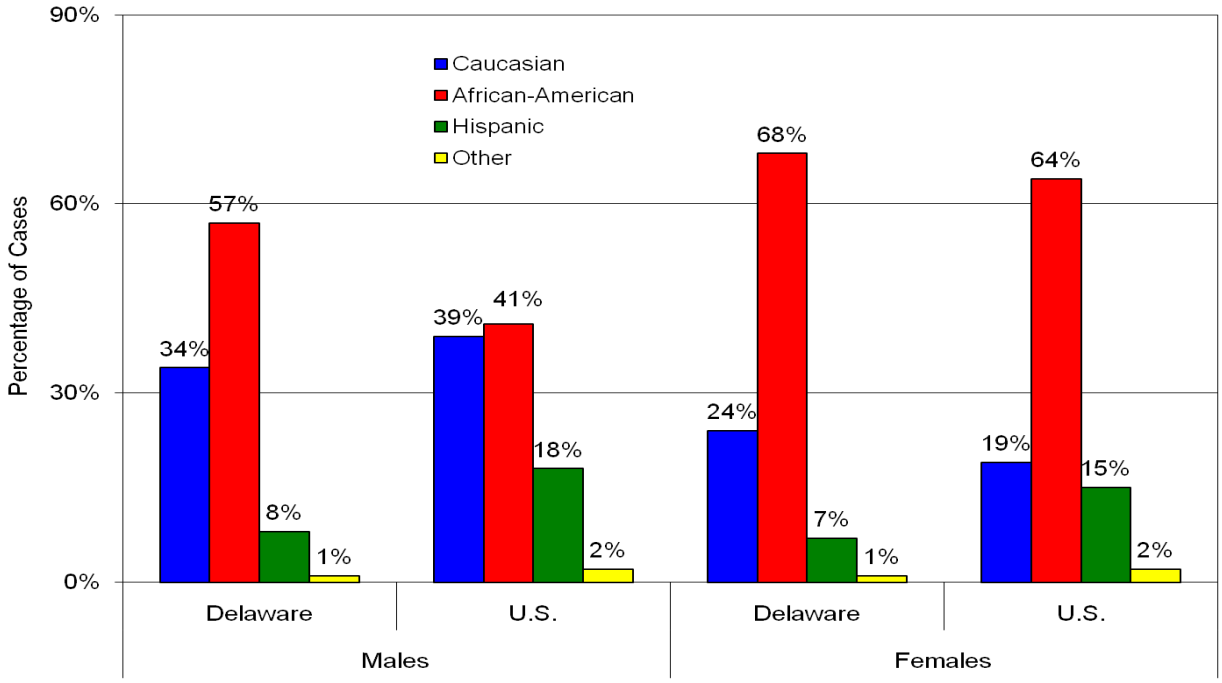
Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Delaware's racial disparity persists even when HIV and AIDS are considered as two separate disease entities. Figures 3 and 4 with accompanying data tables indicate that the magnitude of this racial disparity in Delaware is greater than that in the U.S.

African-American males account for 41% of all males living with HIV (non AIDS) in the U.S., but 57% in Delaware.

African-American females account for 64% of all females living with HIV (non AIDS) in the U.S., and 68% in Delaware. Among Delaware's pediatric cases, African-Americans account for 77% of living HIV cases. The U.S. pediatric age breakdown data is not available.

Figure 3: Living HIV cases, by race and gender: Delaware vs. U.S., (DE=2009, US=2007)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Table 3: Persons living in Delaware with HIV at year end 2009 by race and gender (N=1291)

Race	Male N (%)	Female N (%)	Total N (%)
Caucasian	287 (34%)	110 (24%)	397 (31%)
African American	474 (57%)	308 (68%)	782 (61%)
Hispanic	66 (8%)	30 (7%)	96 (7%)
Other	12 (1%)	4 (1%)	16 (1%)
Total	839 (100%)	452 (100%)	1291 (100%)

Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

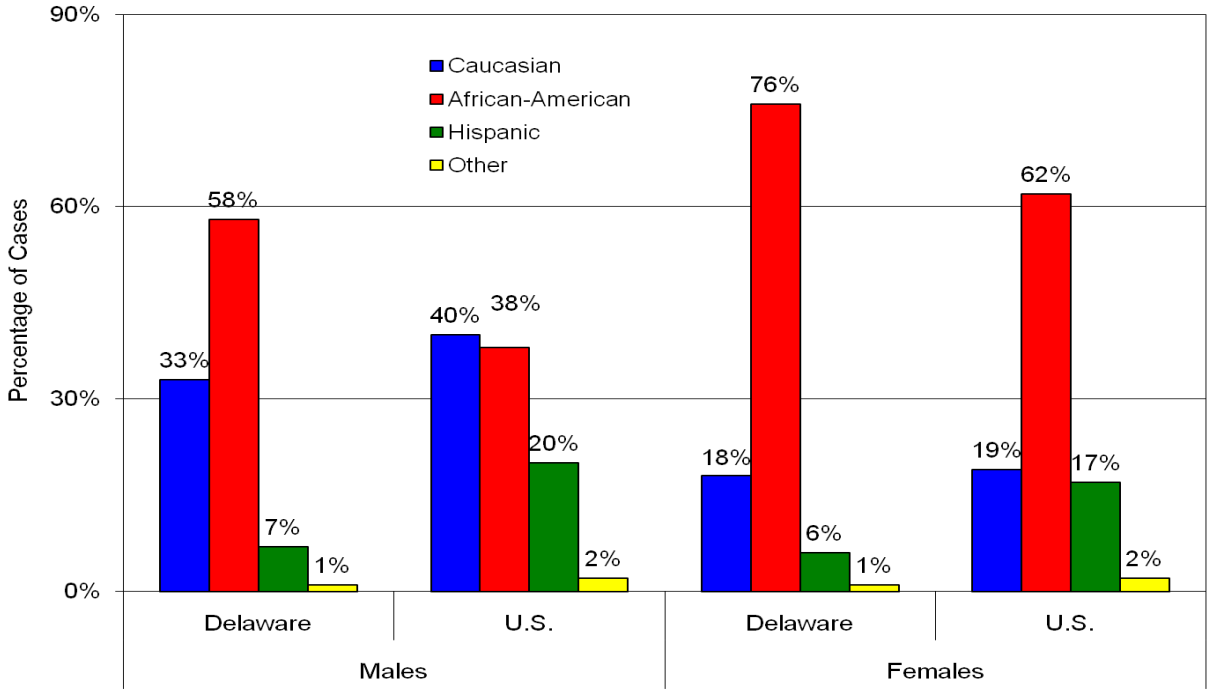
Table 4: Persons living in the U.S. with HIV at year end 2007 by race and gender (N=561,040)

Race	Male N (%)	Female N (%)	Total N (%)
Caucasian	157,066 (39%)	28,067 (19%)	185,133 (33%)
African American	167,569 (41%)	94,790 (64%)	262,359 (47%)
Hispanic	71,827 (18%)	22,970 (15%)	94,797 (17%)
Other	7,442 (2%)	2,768 (2%)	10,210 (2%)
Total	403,904 (100%)	148,595 (100%)	561,040 (100%)*

Source: CDC, HIV/AIDS Surveillance Report
***Includes national pediatric cases = 8,541 (no breakdown available)**

Compared to HIV, Delaware's racial disparity for AIDS is even more pronounced. African-American males account for 38% of males living with AIDS in the U.S. In Delaware, this figure is 58%. African-American females account for 62% of females living with AIDS in the U.S. In Delaware, this figure is 76%. African-Americans account for 76% of Delaware's pediatric cases living with AIDS.

Figure 4: Living AIDS cases, by race and gender: Delaware vs. U.S., (DE=2009, US=2007)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Table 5: Persons living in Delaware with AIDS at year end 2009 by race and gender (N=2,181)

Race	Male N (%)	Female N (%)	Total N (%)
Caucasian	506 (33%)	118 (18%)	624 (29%)
African American	884 (58%)	505 (76%)	1,389 (64%)
Hispanic	110 (7%)	37 (6%)	147 (7%)
Other	15 (1%)	6 (1%)	21 (1%)
Total	1,515 (100%)	666 (100%)	2,181 (100%)

Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Table 6: Persons living in the U.S. with AIDS at year end 2007 by race and gender (N=453,662)

Race	Male N (%)	Female N (%)	Total N (%)
Caucasian	138,422 (40%)	19,580 (19%)	158,002 (35%)
African American	131,752 (38%)	64,256 (62%)	196,008 (43%)
Hispanic	67,929 (20%)	17,617 (17%)	85,546 (19%)
Other	7,982 (2%)	2,279 (2%)	10,261 (2%)
Total	346,085 (100%)	103,732 (100%)	453,662 (100%)*

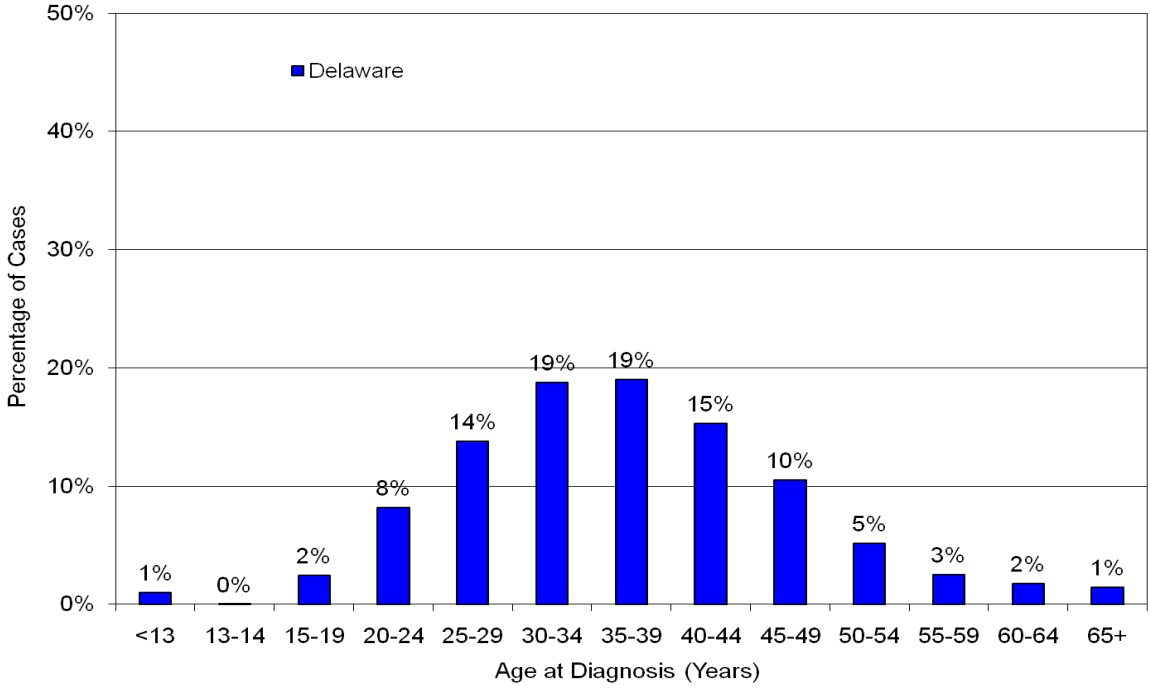
Source: CDC, HIV/AIDS Surveillance Report
***Includes national pediatric cases = 3,845 (no breakdown available)**

Hispanics represent approximately 7% of the state's population and account for 7% of persons living with AIDS in Delaware.

Age at Diagnosis

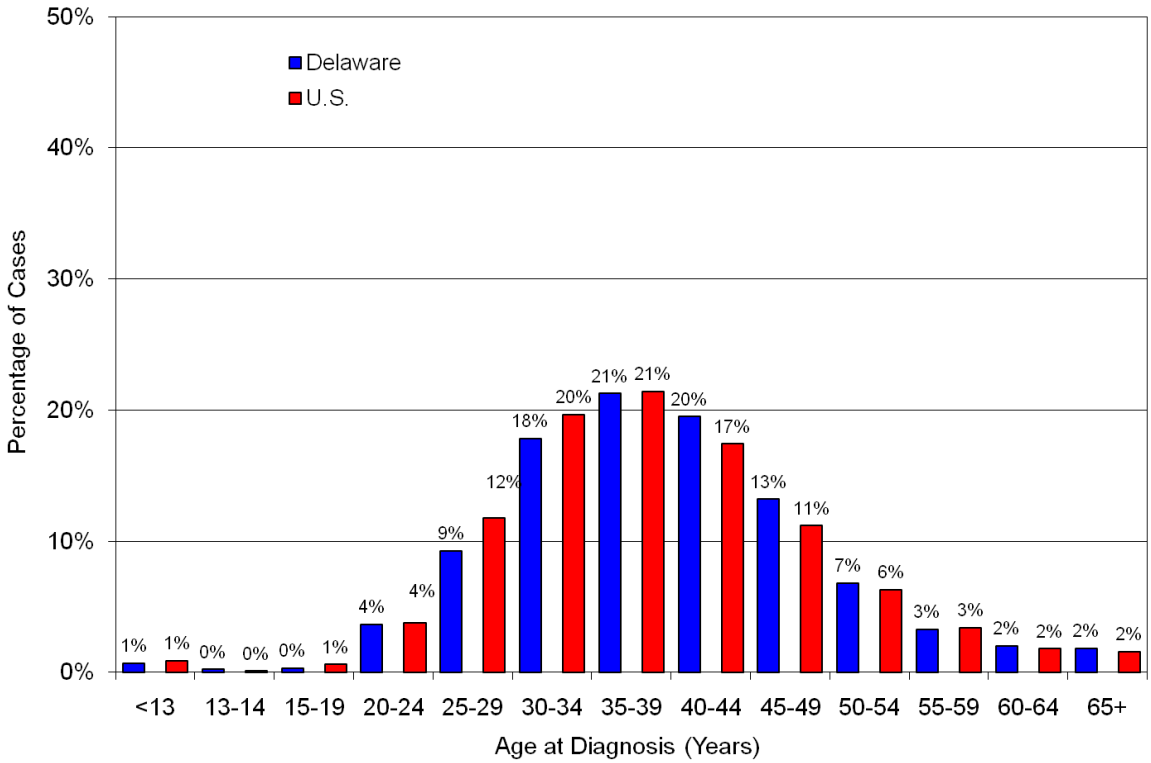
The majority of persons diagnosed with HIV/AIDS in Delaware were between the ages of 30-39 (Figure 5). This is similar to trends observed in the U.S. (Figure 6). HIV/AIDS diagnoses are less common among young children and older adults. In Delaware and the U.S., only 1% of AIDS cases are diagnosed among those under the age of 13. Adults age 50 and older account for 14% of HIV/AIDS cases in Delaware and 13% of cases nationwide.

Figure 5: Delaware HIV/AIDS cases, by age at HIV disease diagnosis, 1981-2009*



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)
***Cumulative HIV disease diagnosis date information not available for U.S. data**

Figure 6: AIDS Cases, by Age at AIDS diagnosis: Delaware and U.S., 1981-2009

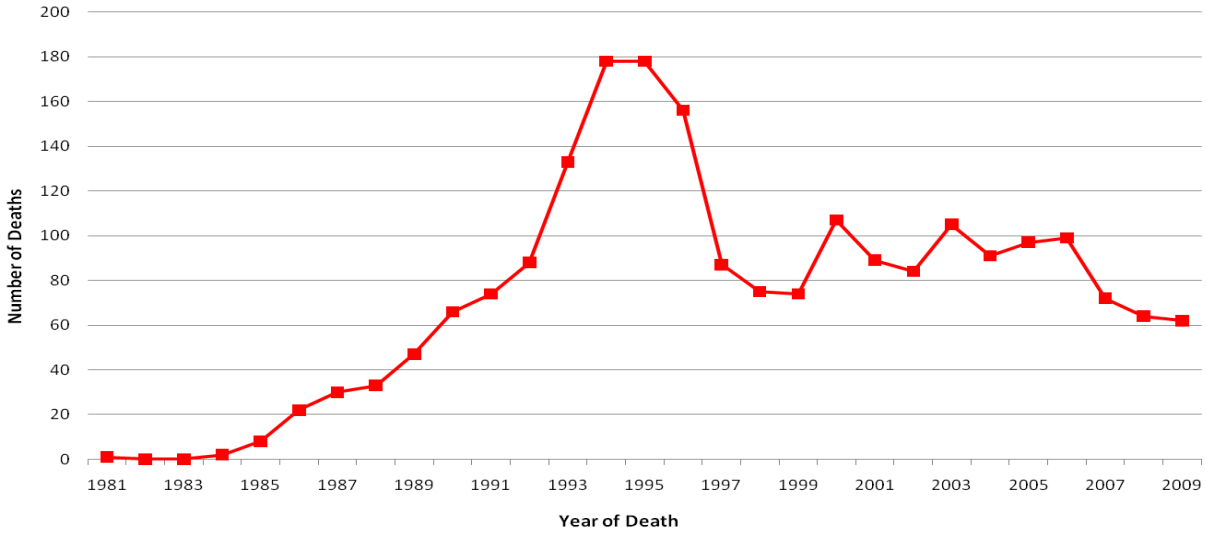


Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS) & 2008 U.S. HIV/AIDS Report

Mortality

Between 1981 and 2009, a total of 2,122 Delawareans with AIDS died. The number of deaths of persons with AIDS in Delaware has declined in recent years (Figure 7).

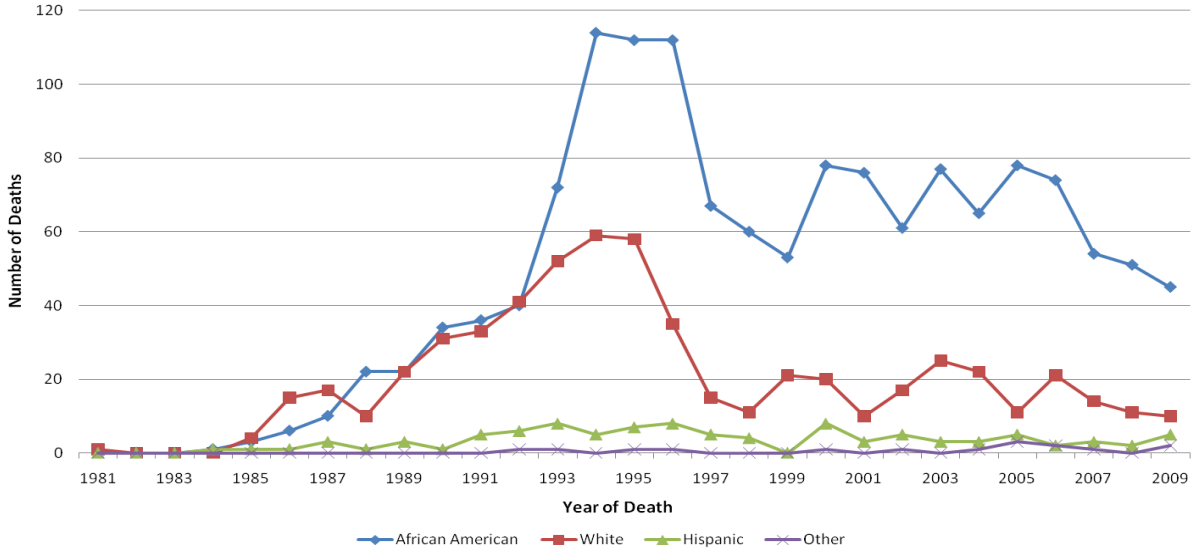
Figure 7: Delaware AIDS deaths, by year, 1981-2009 (N=2,122)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Following a peak in the mid 1990s, the number of AIDS deaths in Delaware decreased among all races. Figure 8 shows a decline among Caucasians and African Americans of 60% and 83% respectively when data from 2009 is compared with 1995 (the peak).

Figure 8: Delaware AIDS deaths by race, 1981 to 2009 (N=2,122)

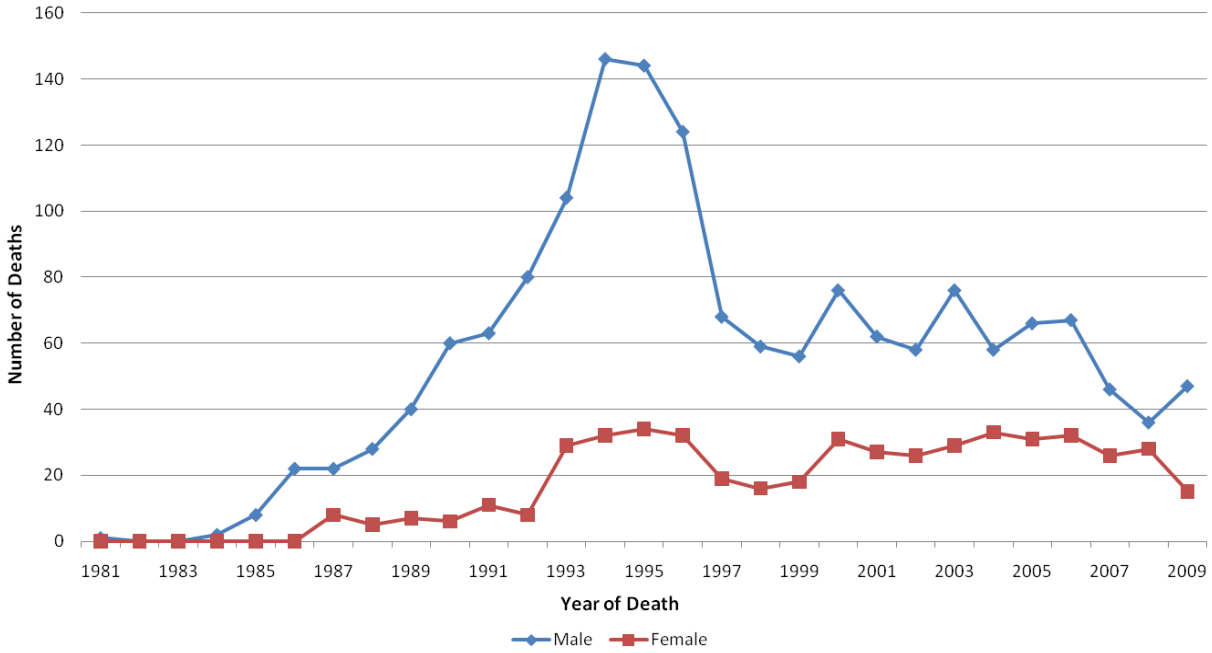


Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Annual deaths among Delaware males with AIDS have declined sharply since its peak during the mid-1990s (Figure 9). Deaths among Delaware females with AIDS rose

modestly in the mid-1990s, and have remained fairly stable through 2008, ticking down slightly in 2009 (Figure 9).

Figure 9: Delaware AIDS deaths by gender, 1981 to 2009 (N=2,122)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Delaware's trends in death of persons with AIDS follow those observed at the national level. The annual number of AIDS deaths has declined among U.S. Caucasians, African- Americans, and Hispanics. On the other hand, annual AIDS-related deaths have slightly increased among the Asian/Pacific Islander and American Indian/Alaskan Native populations in the U.S. The annual number of AIDS-related deaths has declined across all geographic regions. Currently, the Northeast and South experience the highest number of AIDS deaths in the nation; the Midwest region of the U.S. continues to experience the fewest AIDS-related deaths. Behavioral surveillance data also suggests that the number of annual AIDS-related deaths continue to decline among men who have sex with men (MSM) and intravenous drug users (IDU).

Factors contributing to this decline include earlier diagnosis of HIV/AIDS, progress in the medical management of HIV, and the introduction of highly active anti-retroviral therapy (HAART). As survival rates increase for persons living with HIV/AIDS, society will face increased costs associated with chronic disease management.

AIDS deaths number noted in this profile reflect data from the Delaware Ehars system and may not be a direct reflection of Delaware Vital Statistics information. At the time of this writing Delaware is beginning the process of implementing electronic National Death Index matching and data importation which will allow for better expression of primary and secondary causes of death in the next iteration of this document.

3. Mode of Disease Transmission

Transmission Category Hierarchy

In an effort to monitor disease transmission trends, newly diagnosed HIV/AIDS cases are assigned to a category in the CDC-established HIV transmission risk hierarchy, shown below. Case assignment indicates the risk factor most likely to have been responsible for HIV transmission. If a newly diagnosed case reports more than one suspected mode of HIV transmission, the case is classified using the highest risk category in the hierarchy. The one exception to this rule involves males with a history of both sexual contact with other men and injecting drug use; these individuals comprise a separate exposure category (Risk Category 3).

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. Sexual contact with an injecting drug user
    b. Sexual contact with a bisexual male
    c. Sexual contact with a person with hemophilia
    d. Sexual contact with a transfusion recipient with HIV
    e. Sexual contact with a transplant recipient with HIV
    f. Sexual contact 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

Some newly reported HIV cases have not been assigned to an exposure risk category and are pending further investigation; these cases are referred to as "no identified risk" (NIR) cases. In the U.S., 14% of HIV cases reported from 2005-2008 were classified as NIR cases. The NIR category generally includes cases for which the reporting source does not have the risk information available. For example, private laboratories and blood banks generally do not have data pertaining to individuals' risk behaviors. Even some hospital-reported HIV/AIDS cases may lack risk factor data; occasionally, lab tests are completed during inpatient hospitalizations and results arrive after patient discharge.

The CDC-established standard for case assignment to a transmission risk category is 85% (no more than 15% of HIV/AIDS cases should be classified as NIR). Surveillance personnel in Delaware place a high priority on case assignment to the appropriate transmission risk category. Among all HIV and AIDS cases ever diagnosed in Delaware, only 3.1% are classified as NIR.

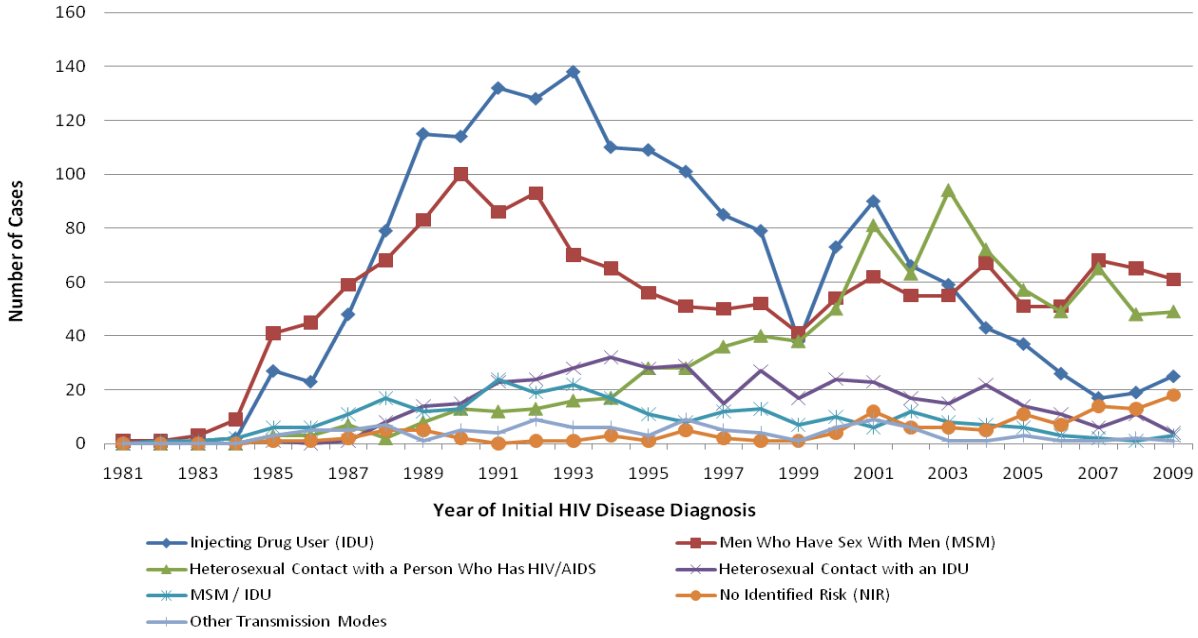
Mode of HIV Transmission:

The mode of HIV transmission within a population reflects individuals' behavioral risk factors. Interestingly, patterns of disease transmission shift over time. In Delaware, mode of HIV transmission at the beginning of the HIV/AIDS epidemic (1981-1994) differs from patterns of disease transmission in more recent years (Figure 10).

From 1993-2009, the percentage of newly diagnosed HIV/AIDS cases attributable to injection drug use (IDU) dropped substantially. In 1993, 49% of HIV/AIDS cases diagnosed among Delawareans were attributable to IDU. However, since 1994, the percentage of cases attributable to IDU fell to 16% in 2009. The proportion of Delaware's HIV/AIDS cases diagnosed among men who have sex with men (MSM) remains at 38% when comparing 1990 (year of highest number of MSM cases) to 2009. It is noteworthy that MSM has been resurgent since 1999 and is now the highest ranking risk factor for HIV infection in Delaware in 2009.

In Delaware, the percentage of cases attributable to heterosexual contact with a person who has HIV/AIDS substantially increased from 1985 until 2003. From 2003 on, HIV infections attributable to heterosexual contact has decreased significantly. It is not unusual for cases that were attributable to heterosexual contact with a person who has HIV/AIDS to be later re-assigned to a different risk category if it is determined that the sexual partner who has HIV/AIDS is also an IDU and/or a bisexual. Cases attributable to other modes of transmission include pediatric cases infected via perinatal exposure, transfusion recipients, and those infected from working in a healthcare or laboratory setting. Cases representing other modes of transmission continue to account for a very small percentage of all HIV/AIDS cases in the state.

Figure 10: Delaware HIV/AIDS cases, by mode of transmission, 1981-2009 (N=5139)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Table 7: Delaware HIV/AIDS cases, by mode of transmission, 2005-2009 and cumulative (N=5,139)

	2005 N (%)	2006 N (%)	2007 N (%)	2008 N (%)	2009 N (%)	Cumulative N (%)
Mode of Transmission						
Injection Drug Use (IDU)	37 (21%)	26 (18%)	17 (10%)	19 (12%)	15 (16%)	1,784 (35%)
Men Who have Sex with Men (MSM)	51 (28%)	51 (34%)	68 (39%)	65 (41%)	61 (38%)	1,563 (30%)
Heterosexual contact with PWH/A	57 (32%)	49 (33%)	65 (38%)	48 (30%)	49 (30%)	892 (19%)
Heterosexual contact with an IDU	14 (8%)	11 (7%)	6 (3%)	11 (7%)	4 (2%)	409 (8%)
IDU and are MSM	6 (3%)	3 (2%)	2 (1%)	1 (1%)	3 (2%)	260 (5%)
No Identified Risk (NIR)	11 (6%)	7 (5%)	14 (8%)	13 (8%)	18 (11%)	127 (2%)
Other Modes	3 (2%)	1 (1%)	1 (1%)	2 (1%)	1 (1%)	104 (2%)
Totals	179 (100%)	148 (100%)	173 (100%)	159 (100%)	161 (100%)	5139 (100%)

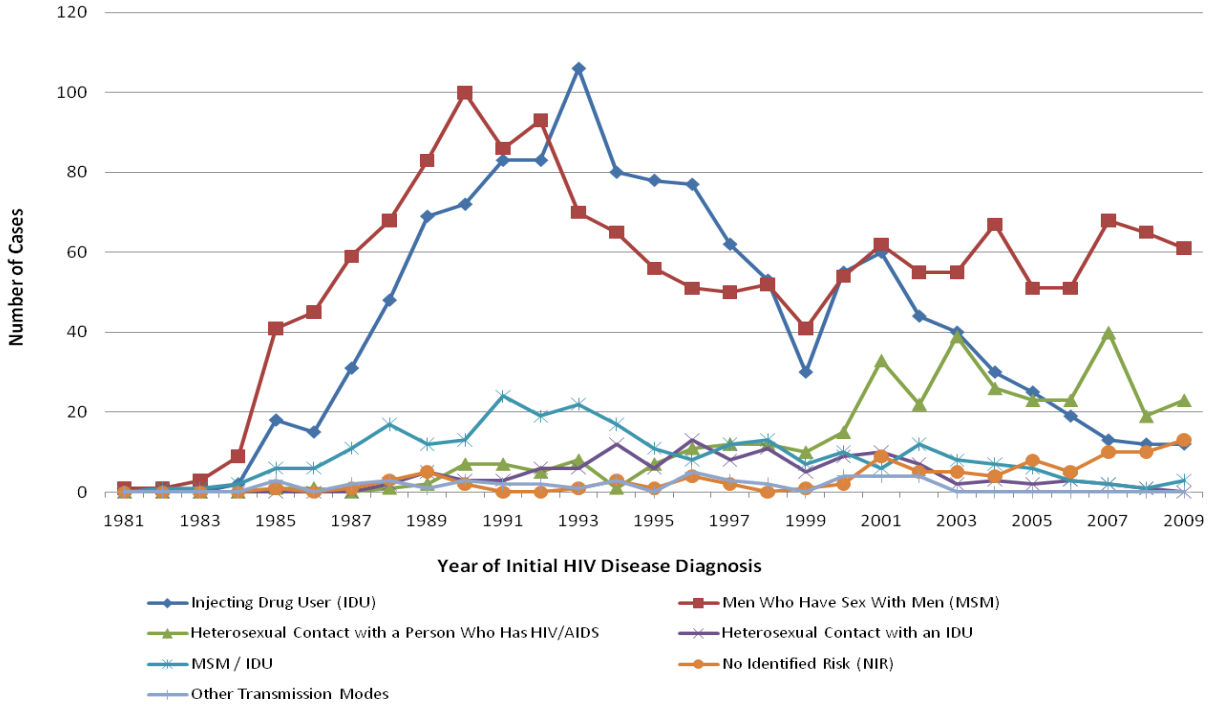
Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

As an interesting comparison, 63% of all HIV/AIDS cases ever diagnosed in Delaware were related to risky sexual behavior while 35% were related to intravenous drug use. Five-percent of those classified as risky sexual behavior were MSM's who also engaged in intravenous drug use. Historical trends in the mode of HIV transmission among Delawareans differ by gender. Gender-specific modes of HIV transmission are explored in more detail below.

HIV Transmission among Delaware Males

Between 1990 and 2009, the percentage of male HIV/AIDS cases attributable to IDU and MSM/IDU declined in Delaware. As shown in figure 11, IDU-attributable cases among males fell from 50% in 1993 to 11% in 2009. While the total number of MSM-attributable cases fell from a high of 100 (50%) in 1990 to 61 (54%) in 2009, it is noteworthy that MSM cases as a percentage among males has been resurgent since 2000 and is higher than in 1990. MSM has been the highest ranking exposure risk among males since 2000 and the highest overall exposure risk since 2006. MSM/IDU-attributable cases fell from 12% in 1992 to only 3% 2009. In Delaware, the percentage of male HIV/AIDS cases attributable to heterosexual contact has increased from only 1% in 1994 to a peak of 30% in 2004 and ended 2009 at 21%

Figure 11: Delaware HIV/AIDS cases among males, by mode of transmission, 1981-2009 (N=3,644)



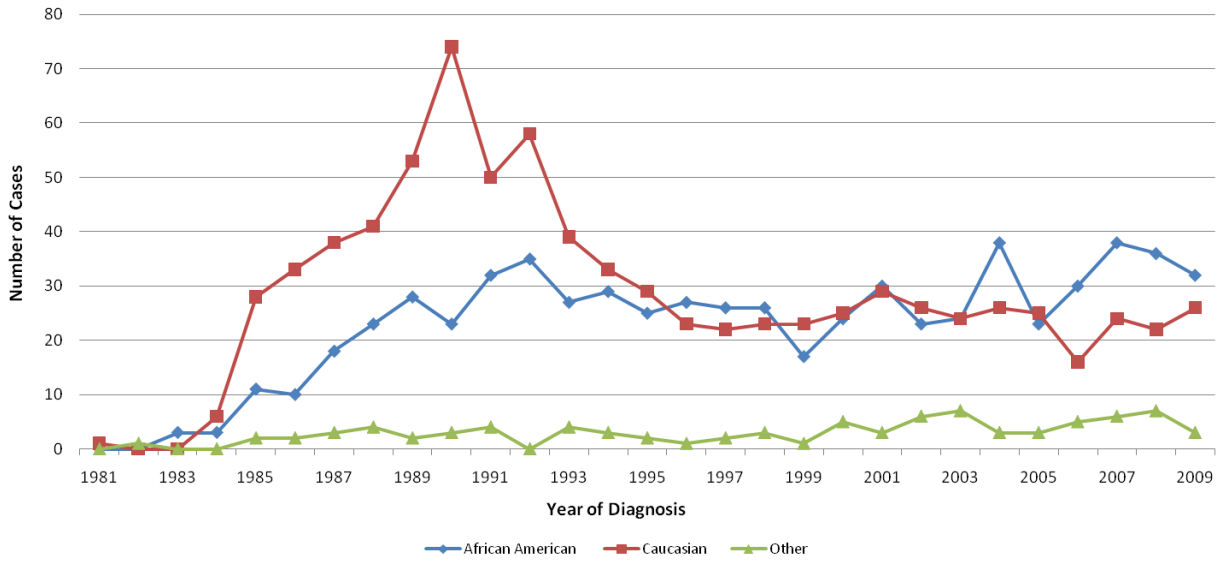
Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

HIV/AIDS cases attributable to different modes of transmission (i.e., IDU, MSM, MSM/IDU, and heterosexual contact) often differ demographically. Below, the subpopulation of Delawarean men diagnosed with HIV/AIDS is explored in detail, by mode of transmission.

Men Who Have Sex with Men (MSM). Since 1981, a total of 1,563 MSM-attributable cases have been diagnosed in Delaware and account for 43% of all HIV/AIDS cases ever diagnosed among males in Delaware. Closely following population percentages, the majority (66%) of MSM cases were diagnosed in New Castle County. Kent and Sussex Counties accounted for 11% and 23% of MSM-attributable cases, respectively.

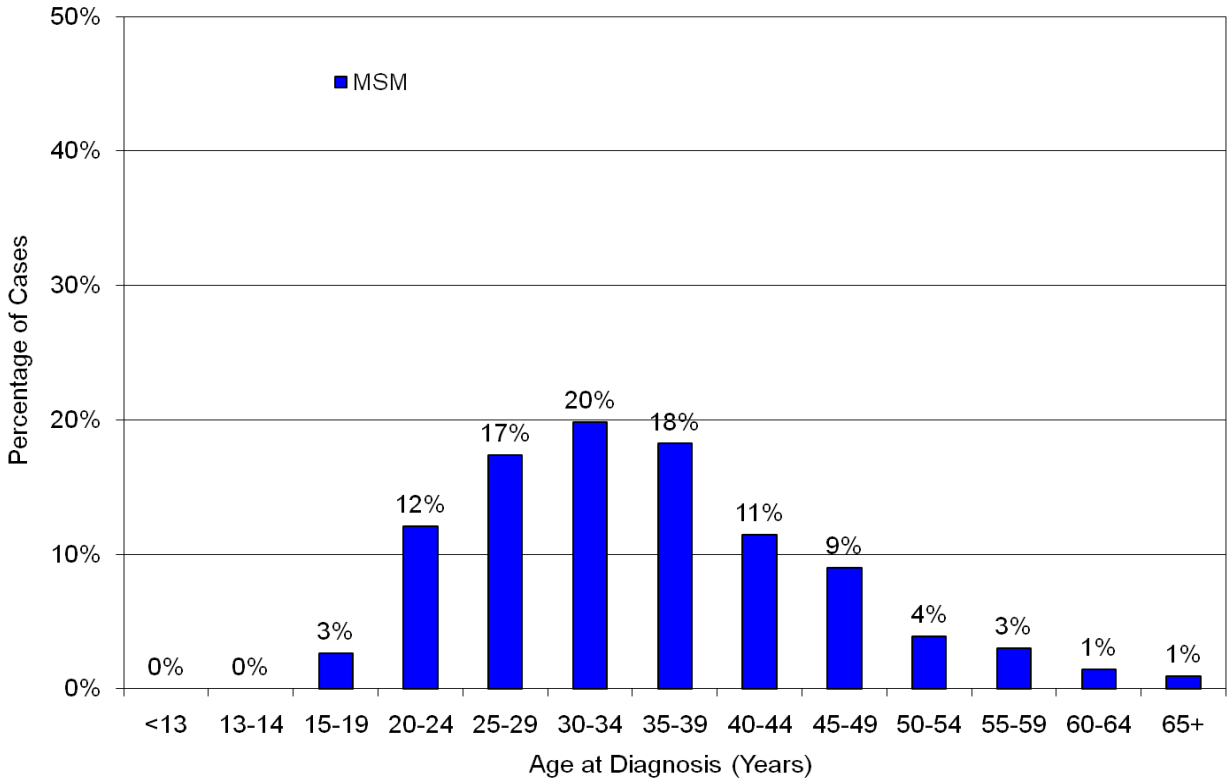
As shown in Figure 12 and Table 8, the demographic composition of HIV/AIDS cases attributable to MSM has shifted with time. In the early 1990's, African Americans accounted 34% of MSM cases. From 2006-2009 that level increased to 56%. During this same time period the proportion of MSM cases for Caucasians fell from 63% to 36%. The proportion of MSM-related cases among Hispanic Delawareans has remained fairly stable since 1981. The majority of MSM-related cases were diagnosed among men ages 20-39 as shown in Figure 13.

Figure 12: Delaware HIV/AIDS cases attributable to MSM, by race, 1981-2009 (N=1,563)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Figure 13: Delaware HIV/AIDS cases attributable to MSM, by age, 1981-2009 (N=1,563)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Table 8: Delaware HIV/AIDS cases attributable to MSM, by race and age, 2005-2009 and cumulative (N=1,563)

	2005 N (%)	2006 N (%)	2007 N (%)	2008 N (%)	2009 N (%)	Cumulative N (%)
Total Cases	51	51	68	65	126	
Race						
Caucasian	25 (49%)	16 (31%)	24 (35%)	22 (34%)	26 (43%)	817 (52%)
African-American	23 (45%)	30 (59%)	38 (56%)	36 (55%)	32 (52%)	661 (42%)
Hispanic/Other	3 (6%)	5 (10%)	6 (9%)	7 (11%)	3 (5%)	85 (5%)
Age Group (Years at Diagnosis)						
<13	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
13-14	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
15-19	3 (6%)	3 (6%)	3 (4%)	5 (8%)	7 (11%)	41 (3%)
20-24	5 (10%)	13 (25%)	17 (25%)	9 (14%)	17 (28%)	189 (12%)
25-29	6 (12%)	8 (16%)	12 (18%)	11 (17%)	5 (8%)	272 (17%)
30-34	3 (6%)	6 (12%)	6 (9%)	8 (12%)	6 (10%)	310 (20%)
35-39	10 (20%)	9 (18%)	9 (13%)	8 (12%)	6 (10%)	285 (18%)
40-44	12 (24%)	3 (6%)	7 (10%)	11 (17%)	7 (11%)	179 (11%)
45-49	6 (12%)	4 (8%)	11 (16%)	7 (11%)	9 (15%)	141 (9%)
50-54	2 (4%)	1 (2%)	2 (3%)	3 (5%)	2 (3%)	61 (4%)
55-59	2 (4%)	2 (4%)	0 (0%)	2 (3%)	0 (0%)	47 (3%)
60-64	2 (4%)	2 (4%)	1 (1%)	1 (2%)	0 (0%)	23 (1%)
65+	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (3%)	15 (1%)

Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

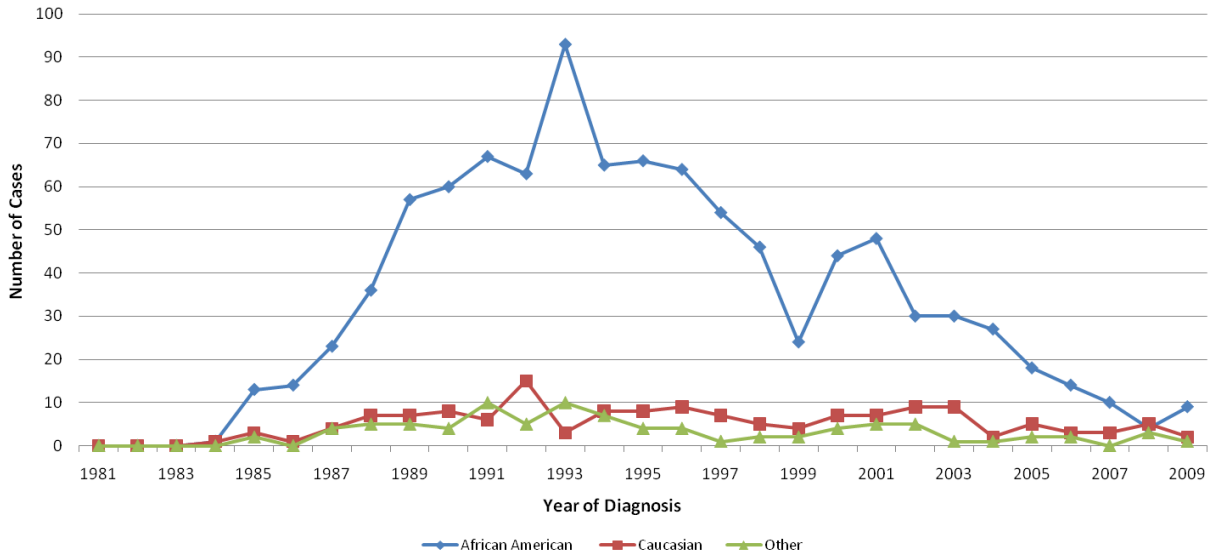
Male Injecting Drug Users (IDU). From 1981-2009, 1,217 IDU-attributable cases of HIV/AIDS were diagnosed among Delaware males and account for 33% of all cases ever diagnosed among Delaware men. Eighty-five percent of all male IDU-attributable cases were diagnosed among New Castle County residents; Kent and Sussex Counties account for 7% and 8% of IDU-attributable cases among males, respectively.

The vast majority (81%) of all IDU-attributable cases among Delaware men were diagnosed within the African-American population. In 1993, 93 (88%) IDU related HIV cases were diagnosed among African-American men. In 2009, this number had declined to only 9 (75%) cases. As shown in Figure 14, while the percentage of African American men in Delaware having an HIV diagnoses attributable to IDU remains high, the total number of cases has dropped dramatically. The number of IDU cases among Caucasian males and those listed in the "other" category (including Hispanics) have remained very stable since 1987, (Figure 14). The majority of IDU-related cases were diagnosed among men ages 35-44 as shown in Figure 15.

As shown Figure 14, the annual number of IDU-attributable cases diagnosed among Delaware men has declined fairly steadily since the mid 1990s. The apparent peak in male IDU cases that occurred in 1993 largely reflects the expansion of the AIDS definition in that same year.

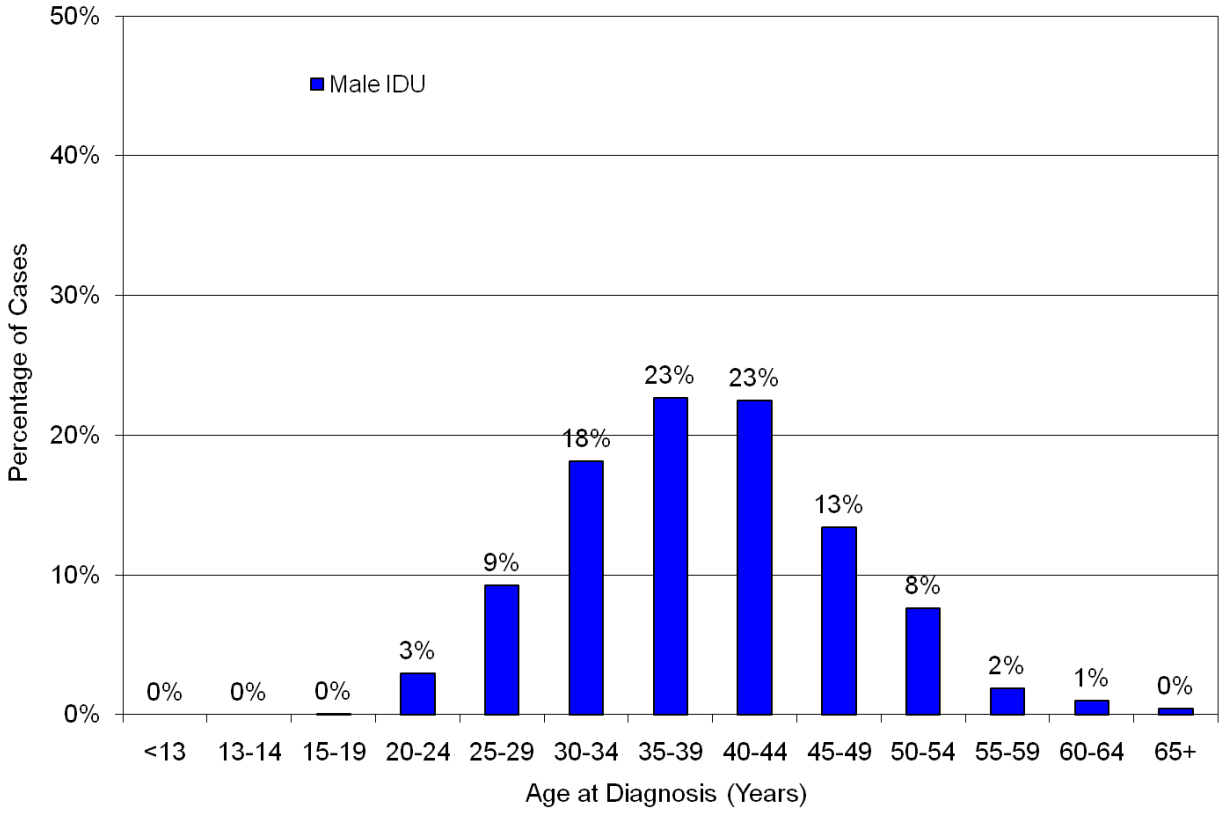
It is likely that the sub-population of male IDUs in Delaware that has not yet adopted safer injection and sexual practices has reached near complete saturation in terms of HIV/AIDS. That is, the annual number of newly diagnosed IDU-attributable cases among males will likely reflect the rate by which new male IDUs join the population and fail to adopt safer injection practices.

Figure 14: Delaware HIV/AIDS cases among males attributable to IDU, by race, 1981-2009 (N=1,217)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Figure 15: Delaware HIV/AIDS cases among males, attributable to IDU, by age at diagnoses, 1981-2009 (N=1,217)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Table 9: Delaware HIV/AIDS cases among males, attributable to IDU, by race and age, 2005-2009 and cumulative (N=1,217)

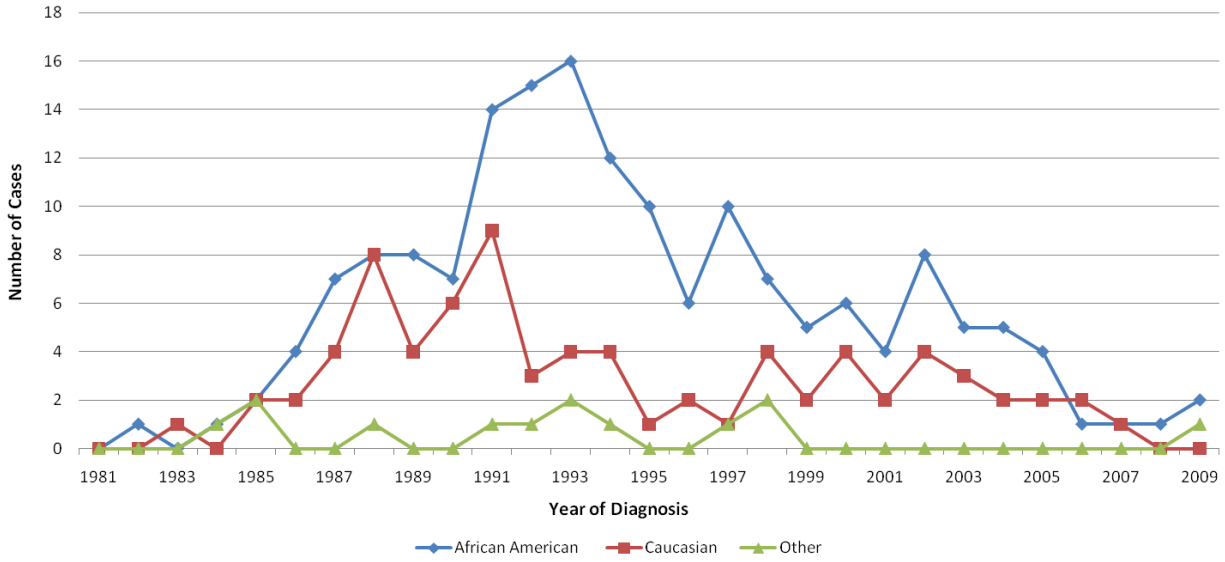
	2005 N (%)	2006 N (%)	2007 N (%)	2008 N (%)	2009 N (%)	Cumulative* N (%)
Total Cases	25	19	13	12	12	
Race						
Caucasian	5 (20%)	3 (16%)	3 (23%)	5 (42%)	2 (17%)	148 (12%)
African-American	18 (72%)	14 (74%)	10 (77%)	4 (33%)	9 (75%)	980 (81%)
Hispanic/Other	2 (8%)	2 (11%)	0 (0%)	3 (25%)	1 (8%)	89 (7%)
Age Group (Years)						
<13	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
13-14	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
15-19	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (<1%)
20-24	1 (4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	36 (3%)
25-29	2 (8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	113 (9%)
30-34	0 (0%)	0 (0%)	1 (8%)	2 (17%)	1 (8%)	221 (18%)
35-39	3 (12%)	3 (16%)	1 (8%)	1 (8%)	0 (0%)	276 (23%)
40-44	4 (16%)	2 (11%)	3 (23%)	4 (33%)	0 (0%)	274 (23%)
45-49	7 (28%)	6 (32%)	4 (31%)	3 (25%)	5 (42%)	163 (13%)
50-54	6 (24%)	5 (26%)	3 (23%)	1 (8%)	3 (25%)	93 (8%)
55-59	1 (4%)	2 (11%)	0 (0%)	0 (0%)	2 (17%)	23 (2%)
60-64	1 (4%)	1 (5%)	1 (8%)	0 (0%)	1 (8%)	12 (1%)
65+	0 (0%)	0 (0%)	0 (0%)	1 (8%)	0 (0%)	5 (<1%)

Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)
***The cumulative total represents all persons 1981 through 2009**

Men Who Have Sex with Men and Who Also Inject Drugs (MSM/IDU). Since 1981, 260 MSM/IDU-attributable cases of HIV/AIDS have been diagnosed among Delaware men and account for 7% of all male HIV/AIDS cases ever diagnosed in the state. The majority of MSM/IDU cases (79%) were diagnosed among males in New Castle County with Kent and Sussex Counties accounting for 8% and 12% of cases, respectively.

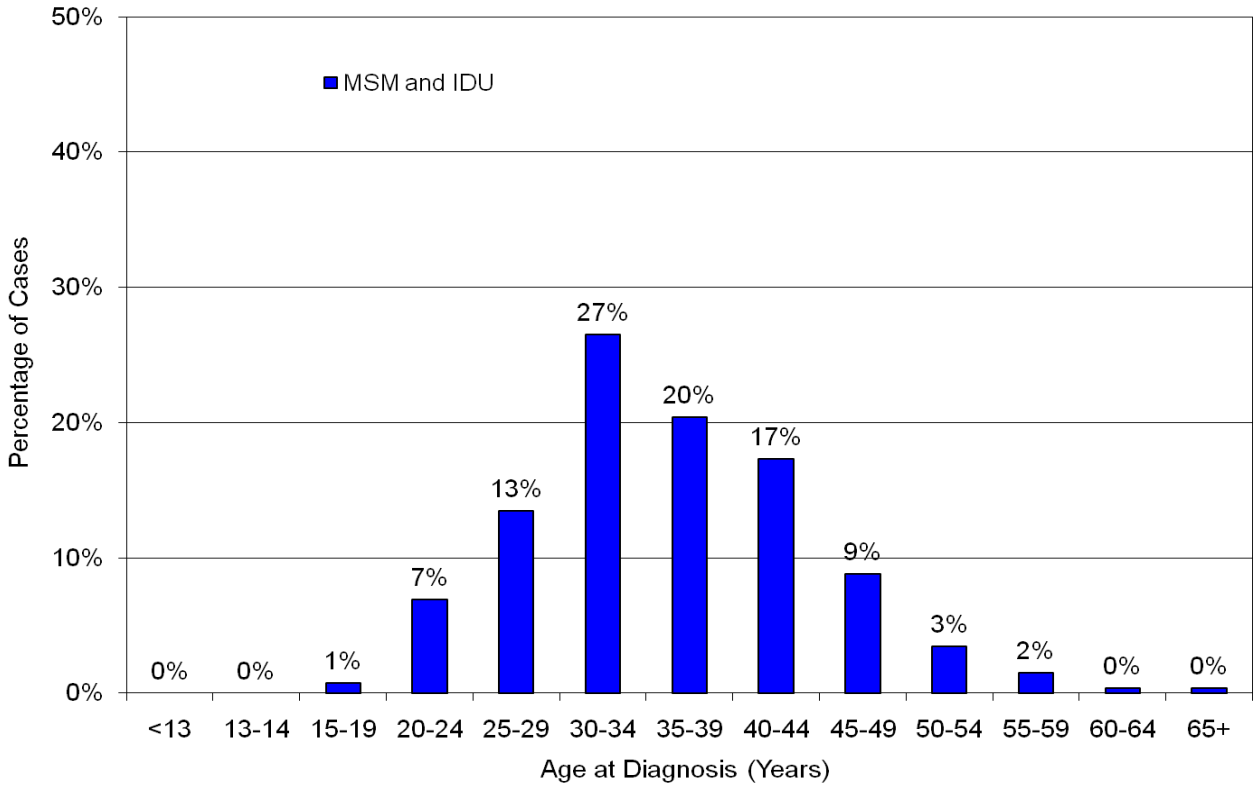
As shown in Table 10, approximately 65% of all MSM/IDU cases ever diagnosed in the state were among African-Americans. Caucasians account for 30% of MSM/IDU cases. MSM/IDU has declined from a high of 24 cases in 1991 to only 3 in 2009 (Figure 16). African-Americans have accounted for the majority of MSM/IDU attributable cases in the history of the HIV/AIDS epidemic in Delaware. In Delaware, men between the ages of 30-39 at diagnosis are the group most likely to be affected through MSM/IDU exposure (Figure 17).

Figure 16: Delaware HIV/AIDS cases among males attributable to MSM/IDU, by race, 1981-2009 (N=260)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Figure 17: Delaware HIV/AIDS cases among males, attributable to MSM/IDU, by age at diagnoses, 1981-2009 (N=260)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Table 10: Delaware HIV/AIDS cases attributable to MSM who are also IDU, by race and age, 1981-2009 (N=260)*

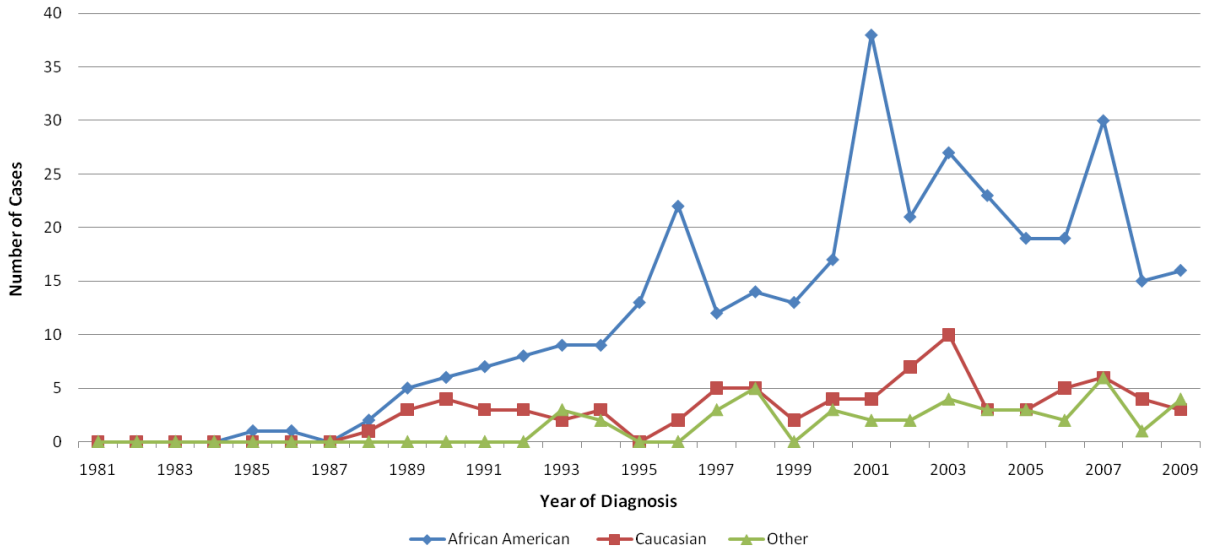
	1981 - 2009 N (%)
Total Cases	260
Race	
Caucasian	77 (30%)
African-American	170 (65%)
Hispanic/Other	13 (5%)
Age Group (Years at Diagnosis)	
<13	0 (0%)
13-14	0 (0%)
15-19	2 (1%)
20-24	18 (7%)
25-29	35 (13%)
30-34	69 (27%)
35-39	53 (20%)
40-44	45 (17%)
45-49	23 (9%)
50-54	9 (3%)
55-59	4 (2%)
60-64	1 (<1%)
65+	1 (<1%)

Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)
***Due to low annual numbers this table is limited to cumulative figures for this category**

Heterosexual Transmission among Males. Heterosexual transmission accounted for 472 HIV/AIDS cases diagnosed among Delaware males since 1981, representing 13% of all HIV/AIDS cases ever diagnosed in this group. Twenty-five percent of male heterosexual cases were males who had sexual contact with a female IDU partner. Seventy percent of all male heterosexual HIV/AIDS cases were diagnosed among New Castle County males, 19% were Sussex County males and the remaining 11% were diagnosed among Kent County males.

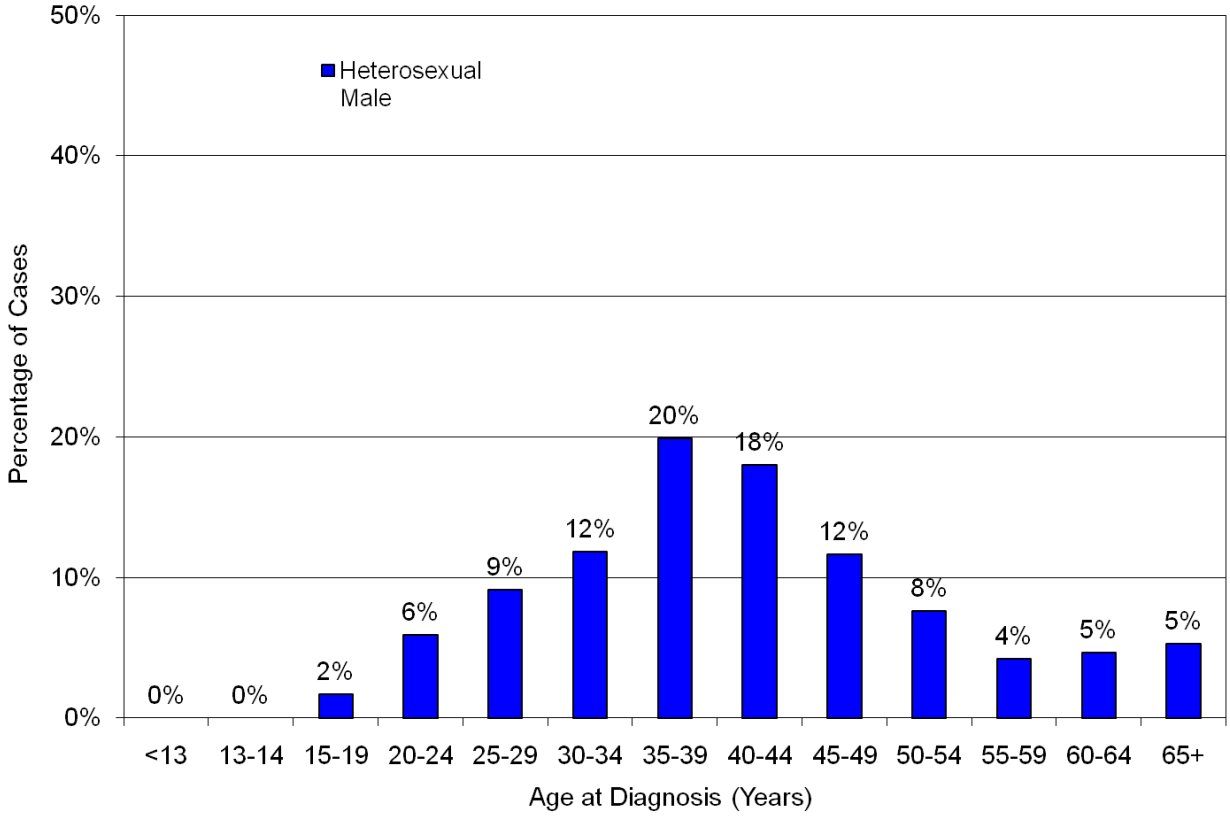
In 2001, there were 44 cases of HIV/AIDS attributable to heterosexual contact among Delaware men. This was the highest number in a single year. In 2009 this number was only 23. This is a significant decrease in numbers though the percentage drop is only 2% (from 23% to 21% respectively). As shown in Table 11, African-American males account for 74% of cases contracted through heterosexual transmission. Caucasians and Hispanics/Others accounted for 17% and 9% respectively. As shown in Figure 19, males between the ages of 35-44 at diagnosis are primarily affected within this category.

Figure 18: Delaware HIV/AIDS cases among males attributable to heterosexual contact, by race, 1981-2009 (N=472)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Figure 19: Delaware HIV/AIDS cases among males, heterosexual contact, by age at diagnosis, 1981-2009 (N=472)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Table 11: Delaware HIV/AIDS cases among males, attributable to heterosexual contact, by race and age, 1981-2009 (N=472)*

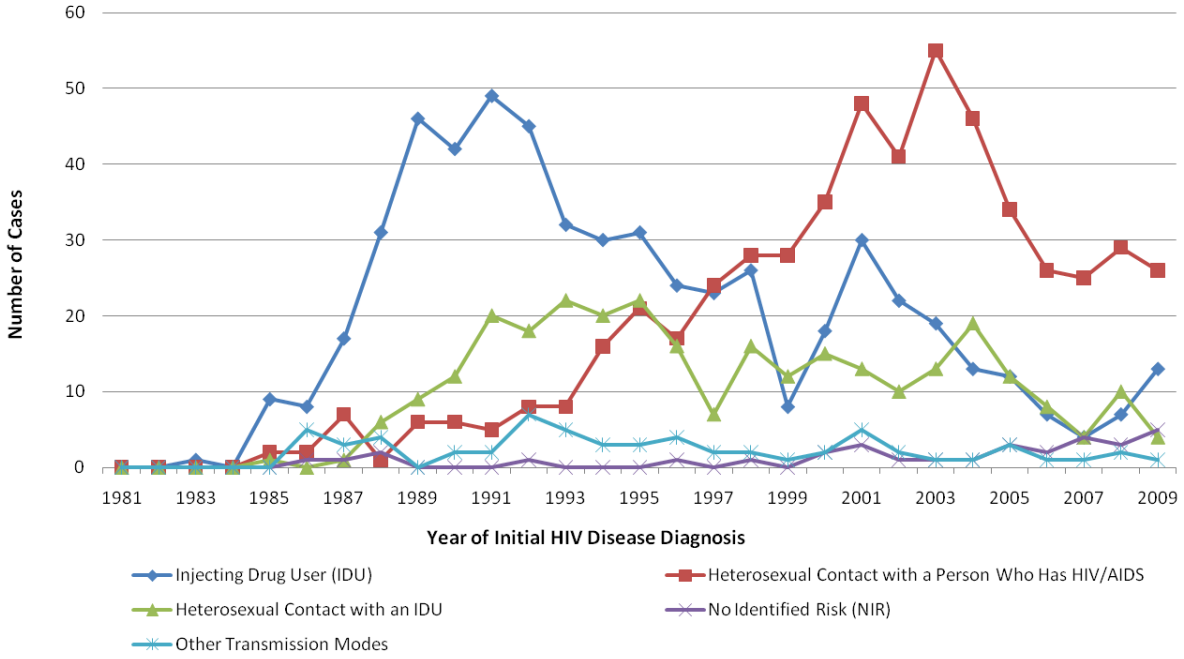
	1981 - 2009 N (%)
Total Cases	472
Race	
Caucasian	82 (17%)
African-American	347 (74%)
Hispanic/Other	43 (9%)
Age Group (Years at Diagnosis)	
<13	0 (0%)
13-14	0 (0%)
15-19	8 (2%)
20-24	28 (6%)
25-29	43 (9%)
30-34	56 (12%)
35-39	94 (20%)
40-44	85 (18%)
45-49	55 (12%)
50-54	36 (8%)
55-59	20 (4%)
60-64	22 (5%)
65+	25 (5%)

Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)
***Due to low annual numbers this table is limited to cumulative figures for this category**

HIV Transmission Mode among Delawarean Females

As shown in Figure 20, between 1991 and 2007, the number of female HIV/AIDS cases in Delaware attributable to IDU declined. However these numbers have been resurgent from 2007-2009 which may be a reflection of increased testing, a testament to the success of Delaware's Needle Exchange Pilot Program which also provides HIV counseling and testing services and has identified cases which may otherwise have been missed. In 1991, heterosexual contact with an HIV-positive male accounted for only 7% of all female HIV/AIDS cases. In 2007, this percentage increased to 66%, and in 2009 this percentage was 53%.

Figure 20: Delaware HIV/AIDS cases among females, by mode of transmission, 1981-2009 (N=1,495).



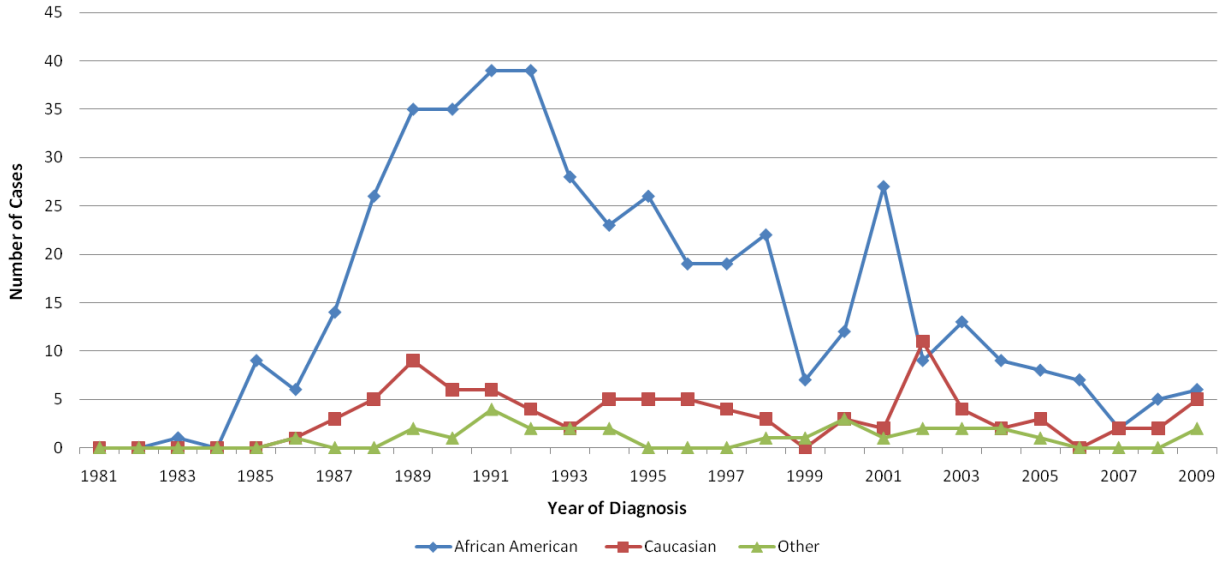
Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Female Injecting Drug Users (IDUs). Since 1981, 567 IDU-attributable cases of HIV/AIDS have been diagnosed among Delaware females, accounting for 38% of all HIV/AIDS cases in this group. Eighty-nine percent of female IDU-attributable cases were diagnosed among female residents in New Castle County, 6% in Kent County and 5% in Sussex County.

As shown in Figure 21, the highest number of female IDU related HIV/AIDS cases in Delaware occurred in 1991 with 49 cases recorded which comprised 64% of the total female HIV/AIDS cases for that year. By 2007 these numbers had decreased to 4 (11%) and by 2009 there is a recognizable resurgence to 13 cases (27%). Overall, the number of IDU-attributable cases among Delaware females decreased 137% from 1991-2009. As shown in Table 12, African-American females account for 79% of cases in this group while Caucasians and Hispanics/Others account for 16% and 5% respectively. Females between the ages of 30-39 at diagnosis are primarily affected within this category (Figure 22).

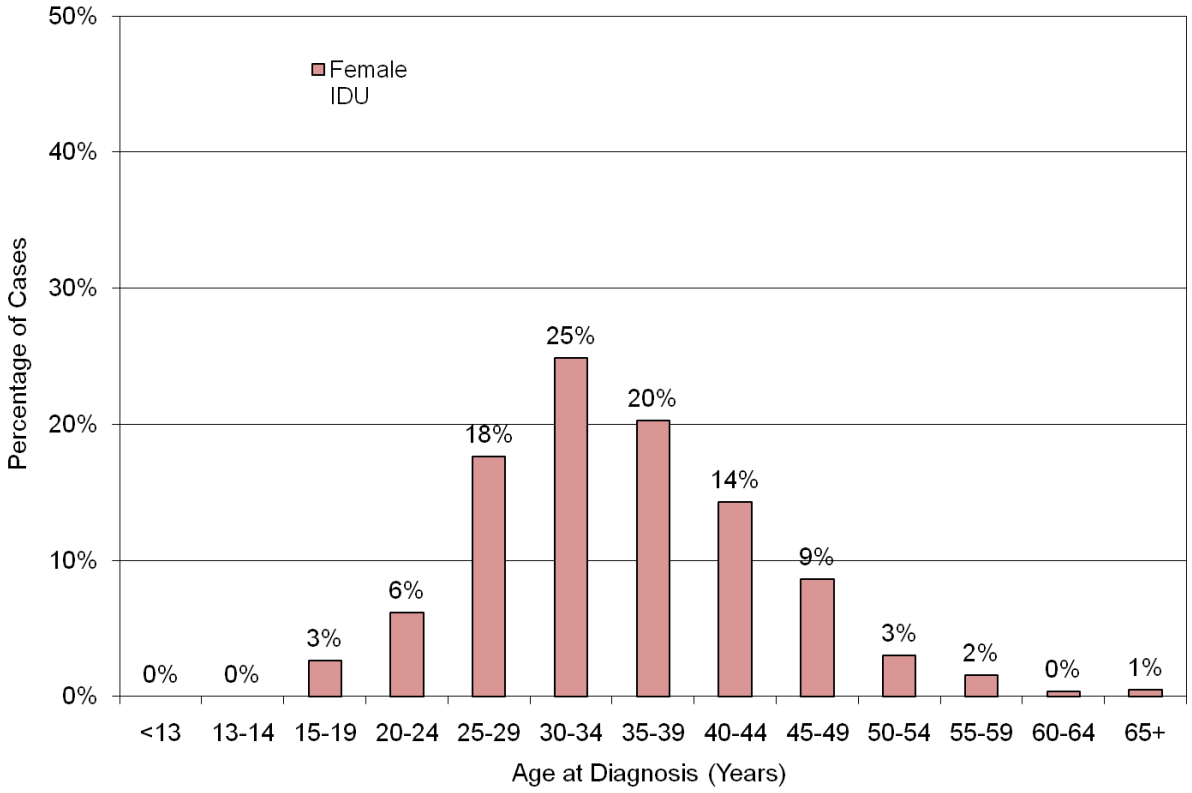
As with males, it is likely that the sub-population of female IDUs in Delaware that has not yet adopted safer injection and sexual practices is approaching saturation in terms of HIV/AIDS and the annual number of newly diagnosed IDU-attributable cases among females will likely reflect the rate by which new female IDUs join the population and fail to adopt safe practices.

Figure 21: Delaware HIV/AIDS cases among females attributable to IDU, by race, 1981-2009 (N=567)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Figure 22: Delaware HIV/AIDS cases among females, attributable to IDU, by age at diagnosis, 1981-2009 (N=567)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Table 12: Delaware HIV/AIDS cases among females, attributable to IDU, by race and age, 1981-2009 (N=567)*

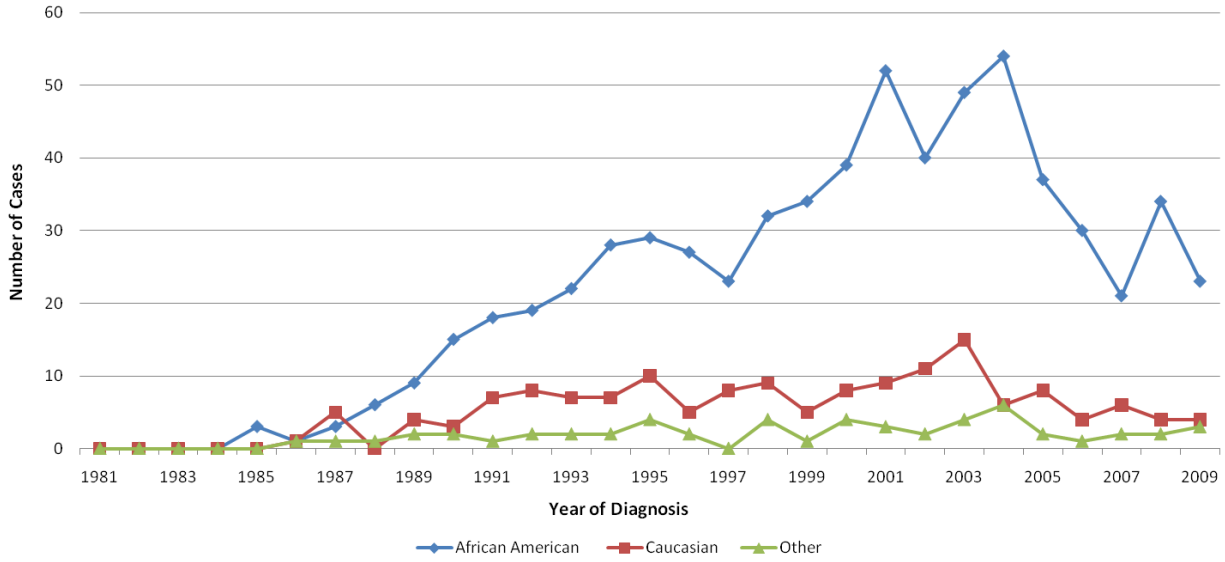
	1981 - 2009 N (%)
Total Cases	567
Race	
Caucasian	92 (16%)
African-American	469 (79%)
Hispanic/Other	29 (5%)
Age Group (Years)	
<13	0 (0%)
13-14	0 (0%)
15-19	15 (3%)
20-24	36 (6%)
25-29	100 (18%)
30-34	141 (25%)
35-39	115 (20%)
40-44	81 (14%)
45-49	49 (9%)
50-54	17 (3%)
55-59	9 (2%)
60-64	2 (<1%)
65+	3 (1%)

Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)
***Due to low annual numbers this table is limited to cumulative figures for this category**

Heterosexual Transmission among Females. Heterosexual transmission accounted for 856 HIV/AIDS cases diagnosed among Delawarean females since 1981, representing 57% of all HIV/AIDS cases ever diagnosed among this group. Nineteen percent of female heterosexual cases had sexual contact with a male IDU partner. Seventy-four percent of all female heterosexual HIV/AIDS cases were in New Castle County, 13% in Sussex County and the remaining 13% in Kent County.

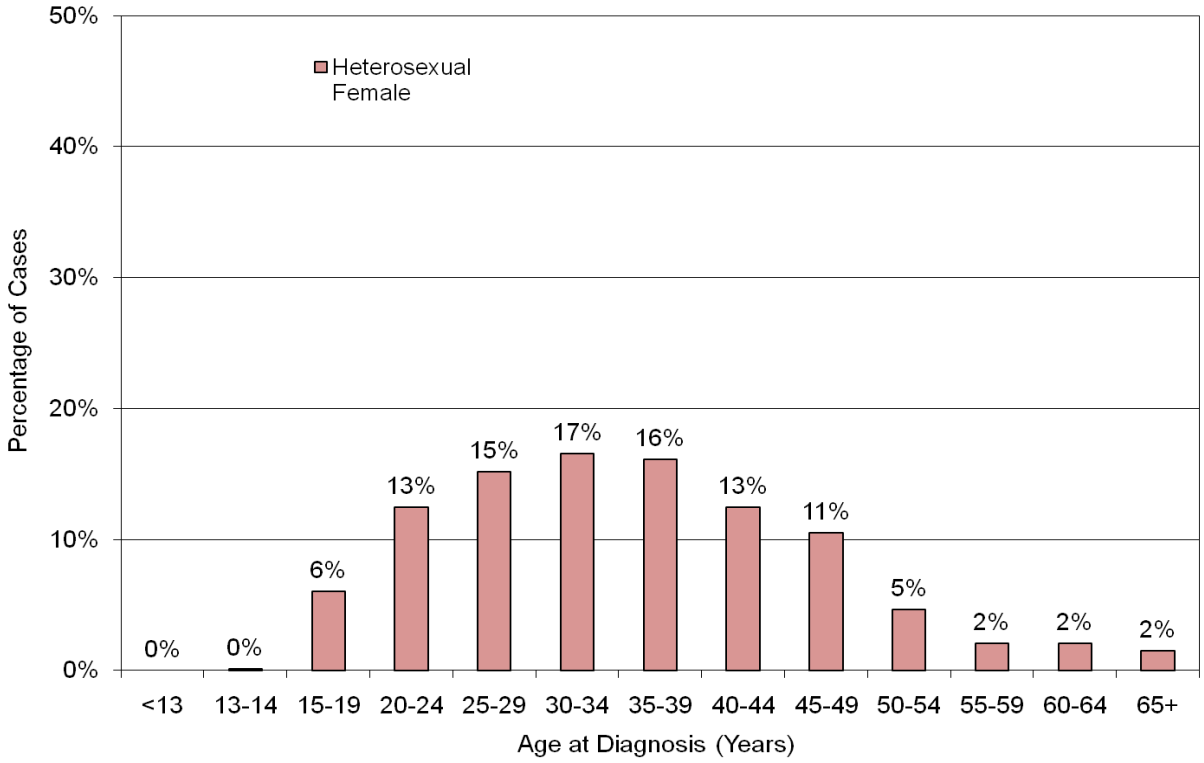
In 2003, there were 68 cases of HIV/AIDS attributable to heterosexual contact among Delaware females. This was the highest number in a single year. In 2009 the number was 30, a 127% decrease. As a percentage of the total HIV/AIDS cases in this category for 2003 and 2009 the rate dropped from 77% to 61% respectively. As shown in Table 13, African-American females account for approximately three-quarters of cases. Caucasians and Hispanics/Others accounted for 18% and 6% respectively. As shown in Figure 24, females between the ages of 30-39 at diagnosis are primarily affected within this category.

Figure 23: Delaware HIV/AIDS cases among females attributable to heterosexual contact, by race, 1981-2009 (N=856)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Figure 24: Delaware HIV/AIDS cases among females, heterosexual contact, by age at diagnosis, 1981-2009 (N=856)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

Table 13: Delaware HIV/AIDS cases among females, attributable to heterosexual contact, by race and age, 1981-2009 (N=856)*

	1981 - 2009 N (%)
Total Cases	856
Race	
Caucasian	154 (18%)
African-American	648 (75%)
Hispanic/Other	54 (6%)
Age Group (Years at Diagnosis)	
<13	0 (0%)
13-14	1 (<1%)
15-19	52 (6%)
20-24	107 (13%)
25-29	130 (15%)
30-34	142 (17%)
35-39	138 (16%)
40-44	107 (13%)
45-49	90 (11%)
50-54	40 (5%)
55-59	18 (2%)
60-64	18 (2%)
65+	13 (2%)

Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)
***Due to low annual numbers this table is limited to cumulative figures for this category**

4. Pediatric HIV/AIDS Cases in Delaware

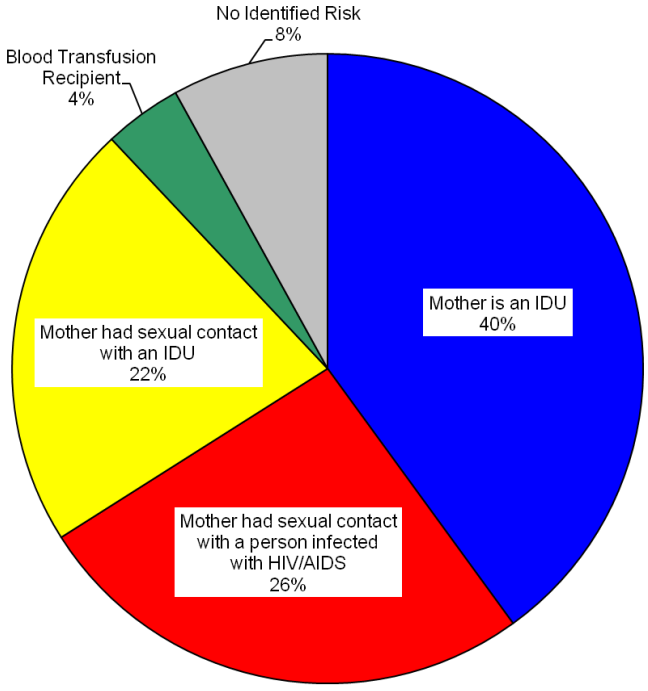
From 1981-2009, 54 children under the age of 13 were diagnosed with HIV/AIDS of whom 10 died from the disease. In 2008, Delaware's pediatric AIDS prevalence rate was 45% greater than that of the U.S. (4.5 per 100,000 vs. 3.1 per 100,000, respectively).

The majority (78%) of pediatric HIV/AIDS cases in Delaware were diagnosed among African-Americans. Caucasians and Hispanics accounted for 15% and 4% of pediatric HIV/AIDS cases, respectively.

Seventy-five percent of pediatric HIV/AIDS cases were diagnosed in New Castle County. Kent and Sussex County accounted for 15% and 10% of pediatric HIV/AIDS cases, respectively.

Perinatal exposure accounts for nearly 90% of pediatric HIV/AIDS cases ever diagnosed in the state. Forty percent of pediatric cases contracted the disease from mothers who were IDUs, 26% contracted the disease from mothers who had sexual contact with a person infected with HIV/AIDS and 22% contracted the disease from mothers who had sexual contact with an IDU. Four percent of pediatric cases contracted the disease through blood transfusions while 8% had no identifiable risk.

Figure 25: Delaware pediatric HIV/AIDS cases, by mode of transmission, 1981-2009 (N=54)



Source: Delaware Evaluation HIV/AIDS Reporting System (EHARS)

5. HIV Counseling and Testing in Delaware

From January 1, 2008 through December 31, 2009, over 30,000 Delawareans received HIV counseling services through the state's 99 testing and counseling sites. During the same two-year time period, 27,938 HIV tests were performed of which 130 (0.47%) were positive.

As shown in Table 14, females accounted for 52% of all Delawareans who received counseling services, as well as 52% of all HIV tests performed from 2008-2009. Females accounted for 22% of all positive tests during this period.

49% of all those seeking HIV counseling and testing services were African-American. African-Americans accounted for 68% of all positive HIV tests performed in Delaware from 2008-2009. Caucasians accounted for slightly more than 33% of all Delawareans receiving HIV counseling and testing services within the same period; however, they accounted for just over 20% of all positive HIV diagnoses.

Delawareans age 20-29 were most likely to seek HIV counseling and testing services; 46% of all those receiving HIV counseling and 45% of all those tested for HIV were age 20-29. Delawareans age 20-29 also represented the age group with the largest percentage of HIV positive tests; residents in this age group accounted for 32% of all positive HIV tests reported from 2008-2009.

In terms of transmission risk category, the largest percentage of Delawareans seeking HIV counseling and testing services were those at risk of infection through heterosexual contact. Among this sub-population, 0.21% of individuals tested HIV-positive. From 2008-2009, the MSM sub-population had the largest percentage of positive HIV tests. During this time period, just over 3% of MSM who were tested for HIV were found to be HIV positive. It is also important to note that nearly 13% of all those who received HIV counseling and testing services did not acknowledge any transmission risk factor.

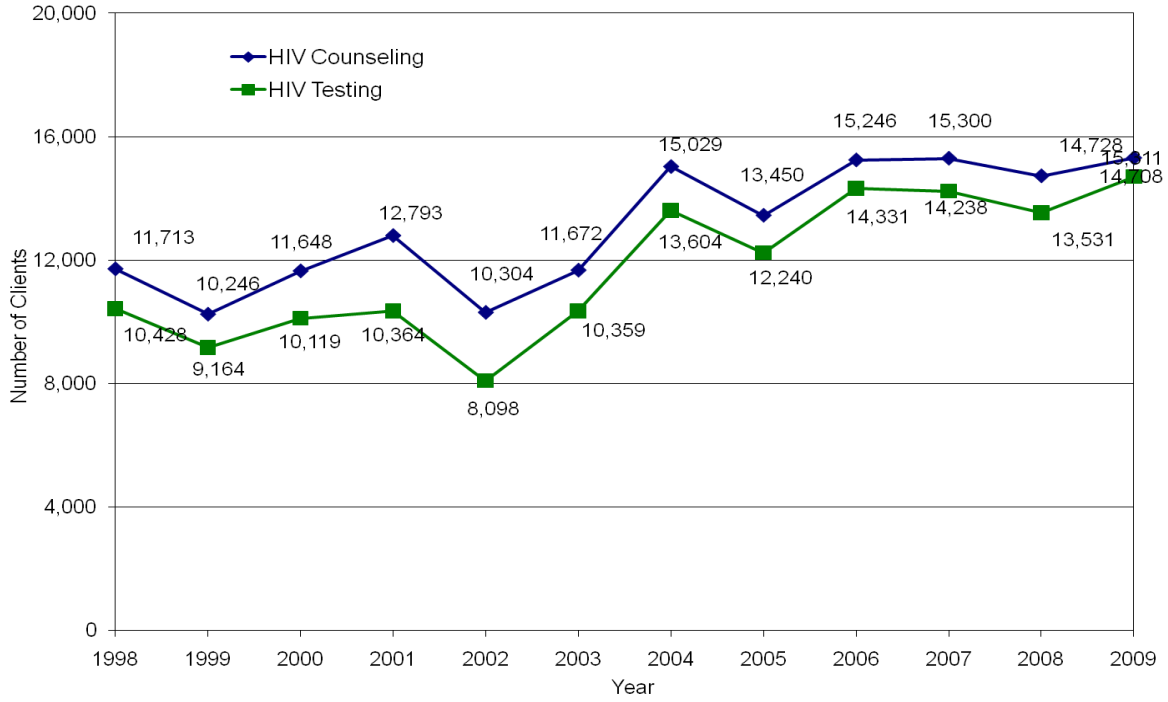
Table 14: Utilization of State HIV counseling and testing services in Delaware, 2008 - 2009.

	Delawareans Counseled (N)	HIV Tests Perfomed in Delaware (N)	Positive HIV Tests (N)	Positive HIV Tests (Row %)
Total	**30039**	**27938**	**130**	**0.47%**
Gender				
Male	14509 (48%)	13442 (48%)	102 (78%)	0.76%
Female	15528 (52%)	14494 (52%)	28 (22%)	0.19%
Not Specified	2 (<1%)	2 (<1%)	0	0.00%
Race/Ethnicity				
Caucasian	10086 (34%)	9664 (35%)	28 (22%)	0.29%
African American	14812 (49%)	13475 (48%)	89 (68%)	0.66%
Hispanic	4605 (15%)	4410 (16%)	12 (9%)	0.27%
Asian/Pacific Islander	334 (1%)	198 (1%)	0	0.00%
Am Indian/ AK Native	47 (<1%)	47 (<1%)	0	0.00%
Other / Not Specified	155 (<1%)	144 (<1%)	1 (<1%)	0.69%
Age Groups (Years)				
<13	21 (<1%)	21 (<1%)	0	0.00%
13-19	1984 (7%)	1859 (7%)	13 (10%)	0.70%
20-29	13685 (46%)	12581 (45%)	41 (32%)	0.33%
30-39	6641 (22%%)	6247 (22%)	33 (25%)	0.53%
40-49	4577 (15%)	4285 (15%)	33 (25%)	0.77%
>50	2751 (9%)	2616 (9%)	10 (8%)	0.38%
Age Not Specified	380 (<1%)	329 (1%)	0	0.00%
Transmission Risk Category				
Heterosexual/ No Other Risk	16984 (57%)	16412 (59%)	34 (26%)	0.21%
Sex W/ Partner At Risk	2916 (10%)	2455 (9%)	5 (4%)	0.20%
MSM	2199 (7%)	1872 (7%)	57 (44%)	3.04%
Heterosexual/IDU	1833 (6%)	1536 (5%)	9 (7%)	0.59%
Sex W/ HIV Positive Person	449 (1%)	448 (1%)	10 (8%)	2.23%
MSM/IDU	57 (<1%)	57 (<1%)	1 (<1%)	1.75%
No Acknowledeged Risk	3840 (13%)	3559 (13%)	14 (11%)	0.39%
Other	1761 (6%)	1599 (6%)	0	0.00%

Source: Delaware HIV Counseling and Testing System

As shown in Figure 26, the number of Delawareans receiving HIV counseling and testing services has substantially increased in recent years. In 1998, 11,713 individuals received HIV counseling and 10,428 were tested for HIV. By 2009, these figures had increased 31% and 38%, respectively, to 15,311 and 14,407.

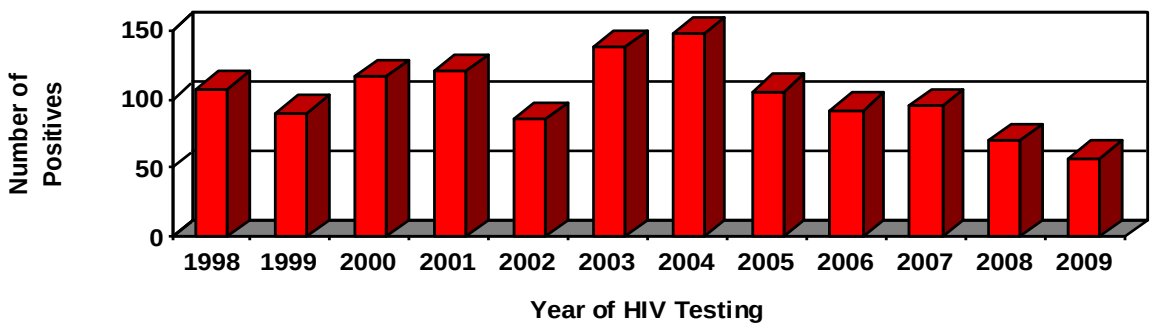
Figure 26: Annual number of Delawareans receiving HIV counseling and testing services, 1998-2009



Source: Delaware HIV Counseling and Testing System[5]

Figure 27 shows the annual number of positive HIV tests performed among Delawareans since 1998. In 2003 and 2004, the annual number of positive HIV tests peaked. Since then, the number has trended downward. All relevant data appears to indicate positive outcomes for Delaware's prevention efforts across nearly all risk groups.

Figure 27: Annual number of positive HIV tests performed among Delawareans, 1998-2009



Source: Delaware HIV Counseling and Testing System[5]

6. Utilization Patterns of HIV Services among Delawareans

To investigate utilization patterns of HIV Services across the state, DPH largely relies on data compiled by the Health Resources and Service Administration (HRSA). Delaware grantees who receive funding through multiple title programs submit data to HRSA for national-level HIV/AIDS surveillance purposes.

One such title program is the Ryan White HIV/AIDS Program. Ryan White funding is awarded for the purposes of improving the quality, availability, and coordination of healthcare and support services for individuals and families affected by HIV/AIDS. Ryan White funding also facilitates access to recommended pharmaceuticals via the AIDS Drug Assistance Program (ADAP).

In 2008 and 2009, a total of 1,368 clients received services funded through Ryan White program. Table 15 compares the demographic characteristics of the unduplicated HIV-infected clients receiving services funded by Ryan White HIV/AIDS Treatment Modernization Act Programs in 2008 through 2009 to the distribution of living HIV/AIDS cases in Delaware through 2009.

Table 15: Demographic characteristics of clients receiving services through Ryan White in 2008 and 2009 compared to Delaware living HIV/AIDS cases

Demographics	Ryan White 2008-2009 N (%)	Living HIV/AIDS Cases Through 2009 N (%)
Total	**1,368 (100%)**	**3,472 (100%)**
Ethnicity		
Hispanic or Latino Origin	34 (2%)	243 (7%)
Non-Hispanic	1,334 (98%)	3,229 (93%)
Unknown/Unreported Ethnicity	0 (0%)	0 (0%)
Race – (Non Hispanic)		
Caucasian (Non-Hispanic)	418 (31%)	1,021 (32%)
African American (Non-Hispanic)	897 (66%)	2,171 (67%)
Other*	53 (3%)	37 (1%)
Unknown/Unreported Race	0 (0%)	0 (0%)
Gender		
Male	903 (66%)	2,354 (68%)
Female	460 (34%)	1,118 (32%)
Unknown/Transgender	5 (<1%)	0 (0%)
Current Age (Years)		
Less than 13 years	1 (<1%)	12 (<1%)
13 - 19	4 (<1%)	32 (1%)
20 - 29	78 (5%)	253 (7%)
30 - 39	201 (15%)	550 (16%)
40 - 49	519 (38%)	1,347 (39%)
50+	565 (41%)	1,278 (37%)
Unknown/Unreported	0 (0%)	0 (0%)

Source: Ryan White Data Reports/EHARS *Other includes Asian, American Indian, and Multi-racial

Table 16: Demographic characteristics of clients served in 2008-2009 AIDS Drug Assistance Program (ADAP) compared to living Delaware HIV/AIDS reported cases through 2009

Client Characteristics	ADAP 2007-2009 N (%)	Living with HIV/AIDS Through 2009 N (%)
Total	**1,181 (100%)**	**3,472 (100%)**
Gender		
Male	784 (66%)	2,354 (68%)
Female	392 (34%)	1,118 (32%)
Unknown/Trans	5 (<1%)	0 (0%)
Ethnicity		
Hispanic/Latino	30 (3%)	243 (7%)
Non-Hispanic or Latino	1,151 (97%)	3,229 (93%)
Race		
Caucasian	347 (29%)	1,021 (32%)
African American	781 (66%)	2,171 (67%)
Other/Unknown	53 (5%)	37 (1%)
Current Age (Years)		
0-19	4 (1%)	44 (1%)
20-29	73 (6%)	253 (7%)
30-39	181 (15%)	550 (16%)
40-49	449 (38%)	1,347 (39%)
50+	474 (40%)	1,278 (37%)

Source: Ryan White Data Reports, Delaware Evaluation HIV/AIDS Reporting System (EHARS)

In Delaware, Ryan White Treatment Modernization Act funding was awarded to the following three provider types:

1. **Hospital-Based Clinics**
    a. A.I. DuPont Hospital for Children
    b. Infectious Disease Wellness Clinics (IDWC) jointly sponsored by Christiana Care Health Services and DPH
        i. Wilmington Hospital Annex
        ii. Porter State Service Center (closed for repairs in September 2009)
        iii. Kent Wellness
        iv. Sussex Wellness
2. **Community-Based Organizations (CBOs)**
    a. AIDS Delaware
    b. Beautiful Gate Outreach Center
    c. Brandywine Counseling and Community Services
    d. Case Management Services
    e. Catholic Charities
    f. Central Delaware Committee on Drug and Alcohol Abuse Inc
    g. Connections Community Support Programs Inc
    h. Delaware HIV Consortium
    i. Ministry of Caring
    j. Sussex County AIDS Council

3. Delaware Division of Public Health (DPH)

Ryan White funding covers a wide range of support services to residents affected by HIV/AIDS. Below is a list of services provided by Ryan White funding; in parentheses is the number of Delawareans who accessed the particular service from 2008-2009:

- Health education and case management services (949)
- Dental services (1272)
- Food-bank or home food deliveries (338)
- Direct State Services including nutritional supplements, disposable medical supplies, eye exams, and eye glasses (444)
- Emergency financial assistance (416)
- Transportation services (343)
- Housing assistance services (158)
- Health insurance services (144)
- Mental health and nutritional counseling (10)
- Durable medical supplies (4)

Infectious Disease Wellness Clinics (IDWCs) are especially important to Delawareans affected by HIV/AIDS. In 2009, IDWCs served as the main treatment location for 44% and 54% of all Delawareans living with HIV and AIDS, respectively. The majority of Delawareans with HIV/AIDS receive treatment from IDWCs regardless of county of residence.

In 2009, 1,528 Delawareans with HIV/AIDS accessed services at one of the state's IDWCs. Seventy-six percent of those received Highly Active Antiretroviral Therapy (HAART) at an IDWC location. In addition to treating HIV/AIDS, IDWCs perform other important wellness services including TB, STI, and Hepatitis C screening and treatment.

IDWCs also provide critical gynecological/obstetric care to Delaware females with HIV/AIDS. In 2009, 550 females with HIV/AIDS accessed services at the state's IDWCs. IDWCs are equipped to perform pelvic examinations and pap tests. Of the 550 women accessing IDWC services, 32 (6%) were pregnant and 18 of the 32 pregnant women (56%) began receiving prenatal care in the first trimester of pregnancy. An additional 8 pregnant women began receiving prenatal care in the second trimester. 25 (78%) pregnant women received antiretroviral medication to prevent transmission of HIV to their children. By December 31, 2009, 12 infants were born and none were HIV-positive.

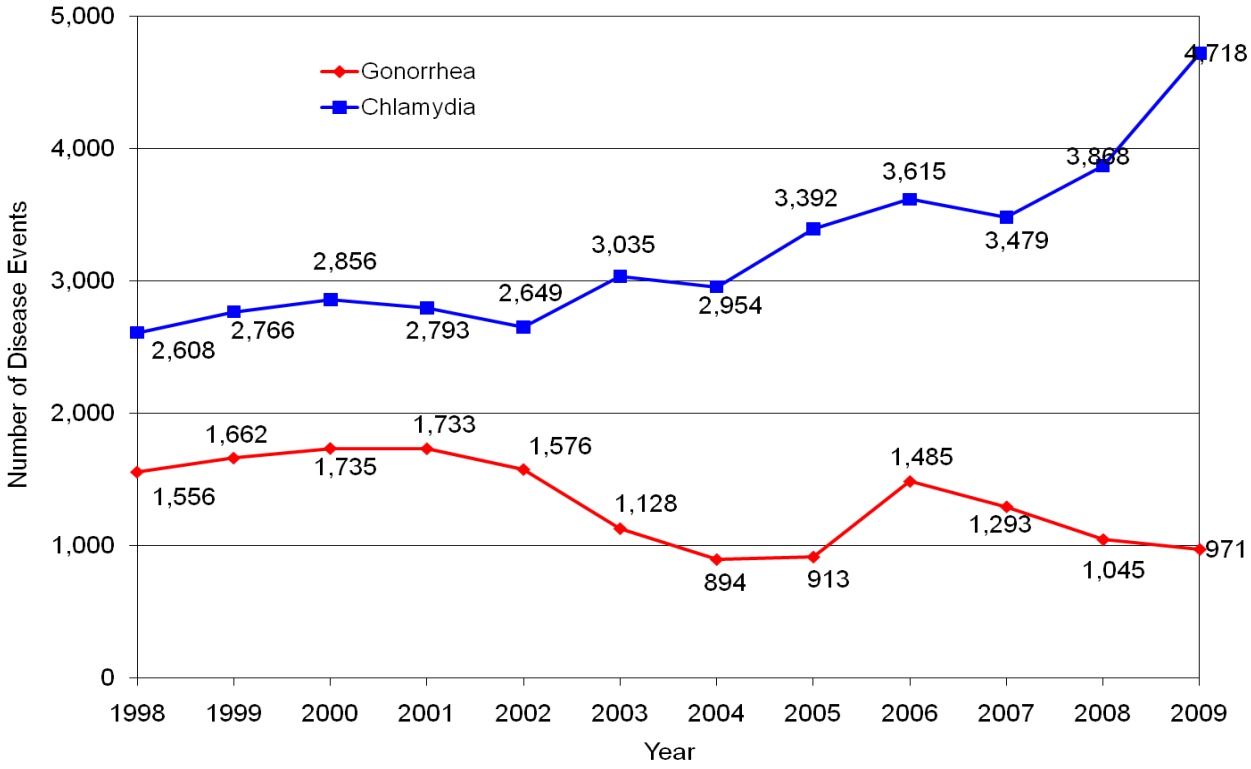
7. Sexually Transmitted Diseases (STDs) among Delawareans

In the field of HIV/AIDS prevention, concurrent sexually transmitted disease (STD) data are helpful for identifying populations at increased risk for transmission of the HIV virus. Like STDs, the HIV virus can also be transmitted through unprotected sexual contact. Furthermore, the presence of an STD can facilitate HIV transmission both by increasing viral load and providing ulcerations through which the HIV virus can enter the body.

In Delaware, STD data (including data related to gonorrhea, chlamydia, and primary and secondary syphilis) are reported by STD clinics, private physician offices, correctional facilities, outpatient facilities and laboratories. Data are reported to the Delaware Division of Public Health (DPH). DPH compiles the data and generates statewide STD data for surveillance purposes. Individuals may be diagnosed with an STD more than once during a reporting period; recurrent cases may reflect infection recurrence and/or treatment failure. Therefore, the total number of STD cases may be greater than the total number of individuals diagnosed with an STD.

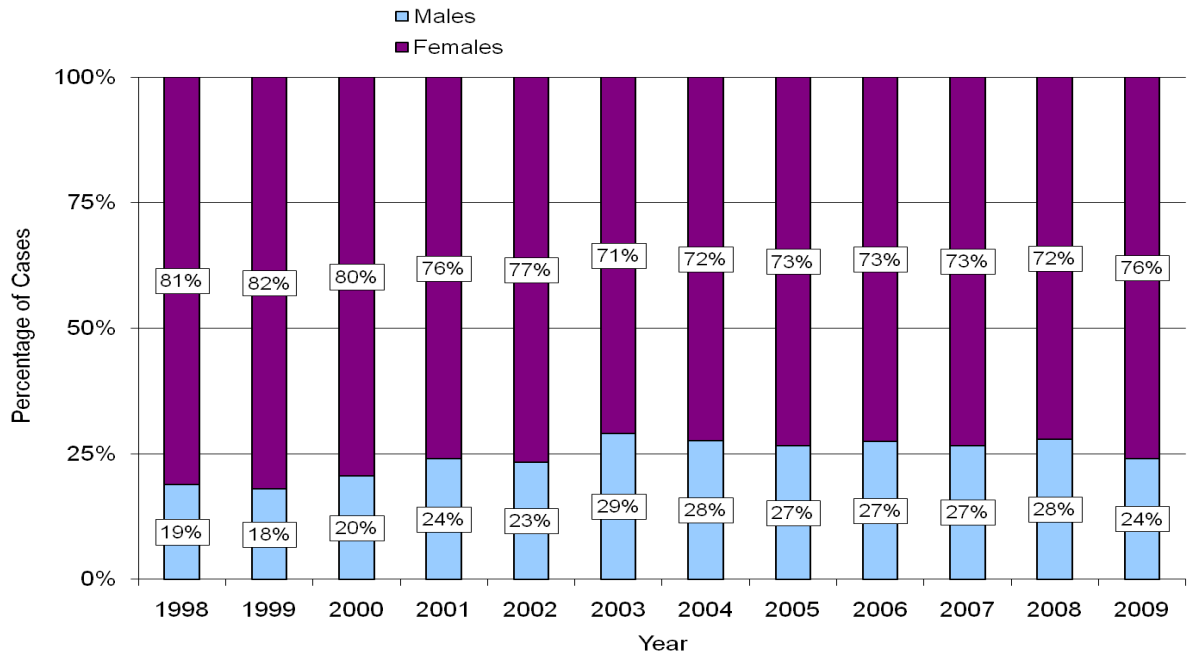
While the annual number of gonorrhea cases in Delaware has declined in recent years, the annual number of chlamydia cases has sharply increased (Figure 28). In 1998, 2,608 cases of chlamydia were diagnosed statewide. In 2009, this number had increased 81% to 4,718. Chlamydia continues to be an especially salient public health problem among Delawarean females. As shown in Figure 29, female Delawareans accounted for the vast majority of chlamydia cases diagnosed each year from 1998-2009. Data from 1998-2009 indicates no clear trend in the number of annual syphilis cases diagnosed statewide (Figure 30).

Figure 28: Annual number of chlamydia and gonorrhea disease events among Delawareans, 1998-2008



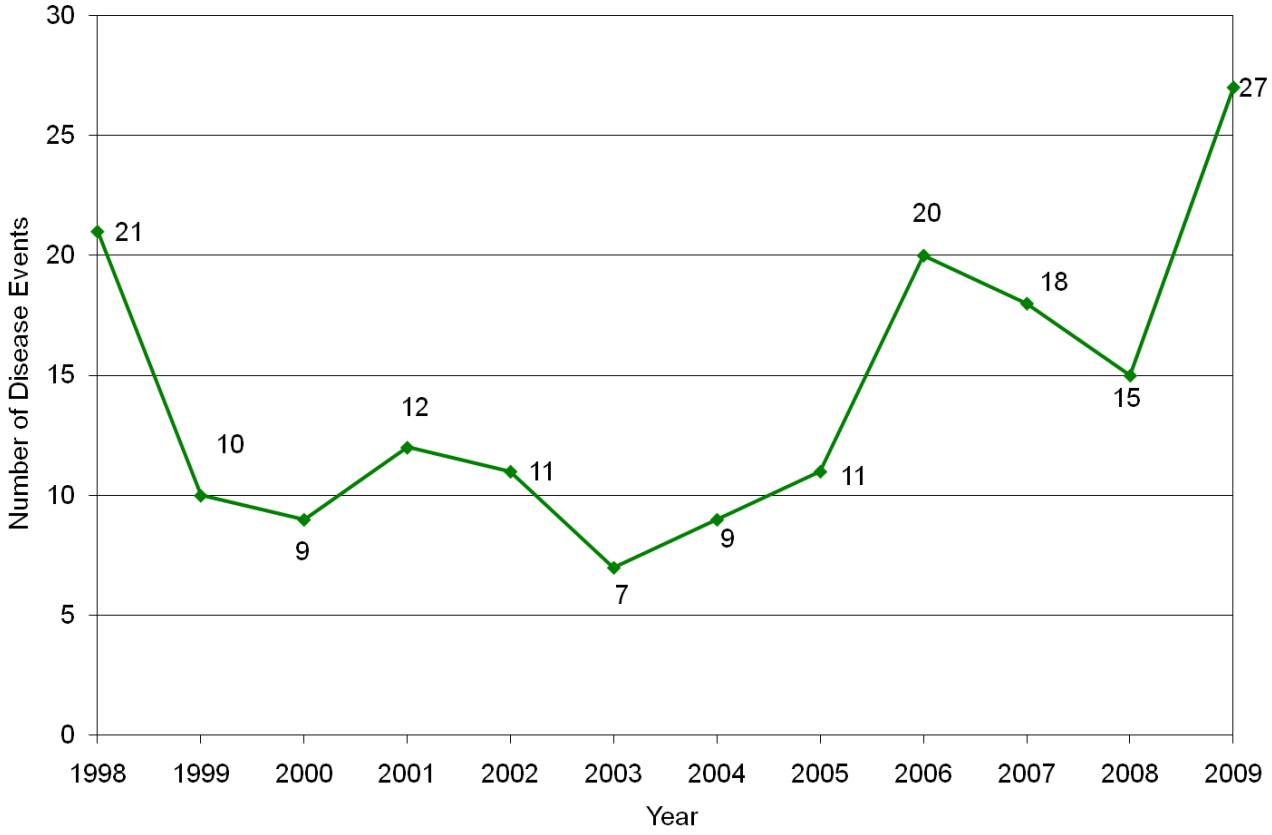
Source: Delaware Sexually Transmitted Infection and Disease Reports

Figure 29: Annual Number chlamydia cases among Delawareans, by gender, 1998-2008



Source: Delaware Sexually Transmitted Infection and Disease Reports

Figure 30: Annual number syphilis primary and secondary cases among Delawareans, 1998-2009



Source: Delaware Sexually Transmitted Infection and Disease Reports

It is notable that syphilis elimination funding was increased beginning 2008 and with it the ability to increase screening. In 2009 there was an 80% increase in identified syphilis cases from the previous year due to increased screening (Figure 30).

8. Risk Factors among Delaware Youth

To investigate HIV/AIDS risk factor patterns among Delaware youth, DPH accessed data from the Youth Risk Behavior Survey (YRBS). YRBS represents an ongoing surveillance effort by the CDC with the overall goal of identifying risk factor trends among youth (e.g., nutrition patterns, substance use, accidents, sexual behaviors, and delinquency). These data are then used to explore the relationship between risk behaviors and health.

YRBS uses self-administered, anonymous questionnaires to collect data from high school students in odd-numbered years. The Delaware Department of Education oversees the implementation of YRBS. In 2009, a total of 2,388 Delaware youth from 38 Delaware public high schools participated in YRBS. YRBS data are representative of all Delaware students in grades 9-12.

Delaware-specific YRBS results, in terms of the percentage of Delaware youth respondents engaging in health risk behaviors, are as follows:

Alcohol Use

- 71.0% had at least one drink of alcohol in their lifetime
- 23.5% had their first drink of alcohol before age 13
- 43.7% had at least one drink of alcohol on one or more of the past 30 days
- 23.7% had five or more drinks of alcohol in a row at least once in the past 30 days

Other Drug Use

- 42.8% used marijuana at least once in their lifetime
- 11.4% tried marijuana for the first time before age 13
- 25.8% used marijuana one or more times during the past 30 days
- 5.8% used one or more forms of cocaine at least once in their lifetime
- 2.8% used one or more forms of cocaine at least once in the past 30 days
- 11.1% sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high at least once in their lifetime
- 2.5% used heroin at least once in their lifetime
- 4.0% used methamphetamines at least once in their lifetime
- 2.6% used a needle to inject any illegal drug into their body at least once in their lifetime
- 20.9% were offered, sold, or given an illegal drug on school property by someone during the past 12 months

Sexual Behaviors

- 57.5% had sexual intercourse at least once in their lifetime
- 21.0% had sexual intercourse with four or more people during their lifetime
- 42.9% had sexual intercourse with one or more people during the past three months

Sexual Behaviors (continued)

Of students who had sexual intercourse during the past three months:

- 22.1% drank alcohol or used drugs during last sexual intercourse
- 62.0% used a condom during last sexual intercourse
- 19.6% used birth control pills during last sexual intercourse
- 88.5% had been taught in school about AIDS or HIV infection.

9. Delaware MMP Data, 2008 Patient Interviews

What is the Medical Monitoring Project (MMP)?

- MMP is an ongoing population-based surveillance system to assess clinical outcomes and behaviors of HIV-infected adults receiving care in the U.S.
- It is currently conducted in 17 states and 6 cities by local and state public health departments in collaboration with the Centers for Disease Control and Prevention (CDC).
- Delaware currently has 15 participating infectious disease clinics statewide.
- There were 271 clients out of a selected 400 which were interviewed in 2008. One patient had incomplete data and was not included in this report.

What kind of data is collected and how might it be of interest to physicians and planners?

- The following provides a few examples of the type of self-reported data collected in the patient interview:
- This data represents a relatively compact look at key points out of hundreds of data variables. The MMP Program at the federal level uses these variables to guide planning and to develop recommendations on the best methodology to overcome barriers to accessing proper treatment among HIV infected persons in the United States.

Patient Demographic Information

Table 17: Delaware MMP Interview clients by race and gender (N=270)

	Male (N=172) N (%)	Female (N=98) N (%)	Total (N=270) N (%)
White, non-Hispanic	48 (18%)	16 (6%)	64 (24%)
Black, non-Hispanic	114 (42%)	72 (27%)	186 (69%)
Hispanic	7 (2%)	5 (2%)	12 (4%)
Other	3 (1%)	5 (2%)	8 (3%)

"Other" racial group includes: American-Indian, Multiracial, etc...
Source: Delaware 2008 MMP Program Interview Dataset

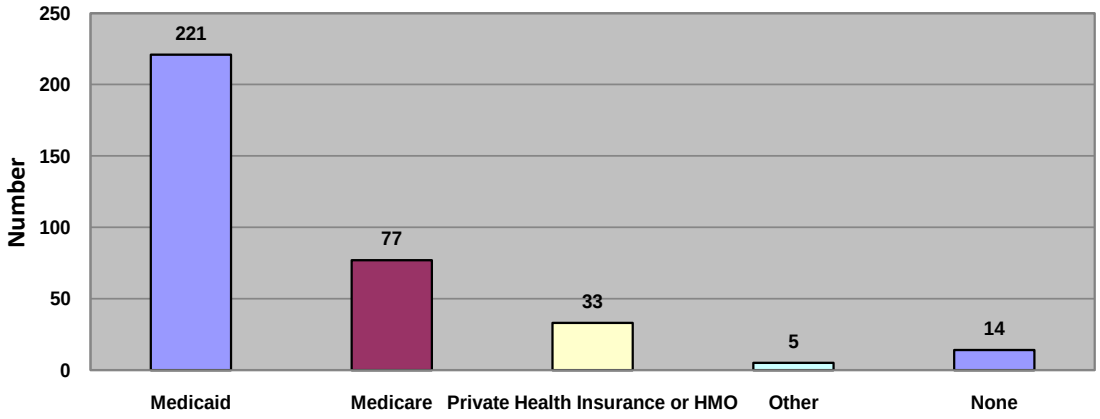
Table 18: Delaware MMP interview clients age at time of interview by gender (N=270)

	Male (N=172) N (%)	Female (N=98) N (%)	Total (N=270) N (%)
18-24	3 (1%)	2 (7%)	5 (8%)
25-34	12 (4%)	17 (6%)	29 (11%)
35-44	47 (17%)	26 (10%)	73 (27%)
45-54	85 (31%)	36 (13%)	121 (45%)
55+	25 (9%)	17 (6%)	42 (15%)

Source: Delaware 2008 MMP Program Dataset

Medical Coverage in the Last 12 Months

Figure 31: Delaware MMP Interviewed clients who had health insurance within 12 months of the interview. (N=256)*



Source: Delaware 2008 MMP Program Interview Dataset
***Categories are not mutually exclusive**

It is noteworthy that 5% of all clients interviewed had no insurance of any sort.

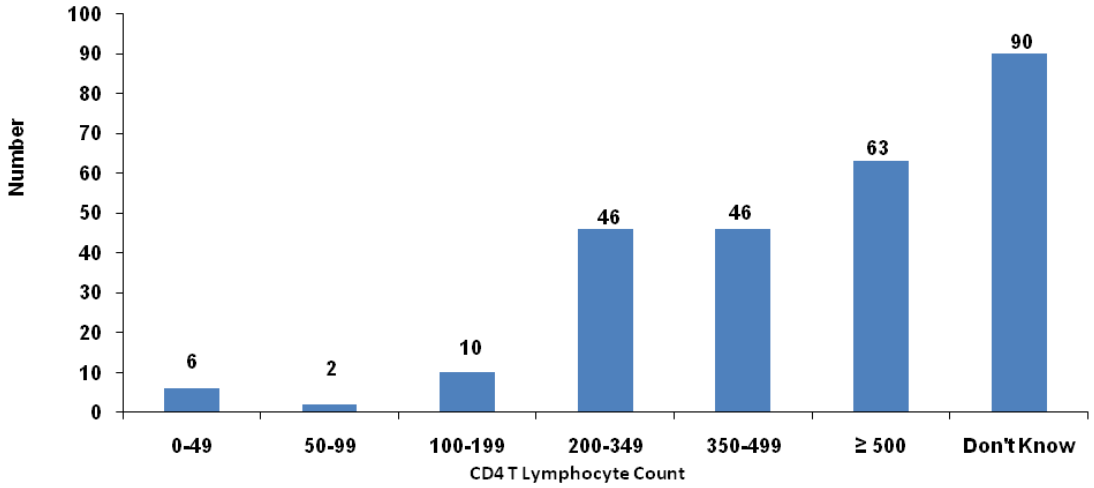
Clinical Outcomes

Table 19: Median number (and range) of self-reported CD4+ and HIV viral load tests (counts) in the Last 12 months among Delaware MMP interview clients by gender (N=263)

	Male (N=168)	Female (N=95)	Total (N= 263)
CD4+ count	3.0 (1.0 – 12.0)	3.0 (1.0 – 12.0)	3.0 (1.0 – 12.0)
HIV viral load	3.0 (1.0 – 12.0)	3.0 (1.0 – 12.0)	3.0 (1.0 – 12.0)

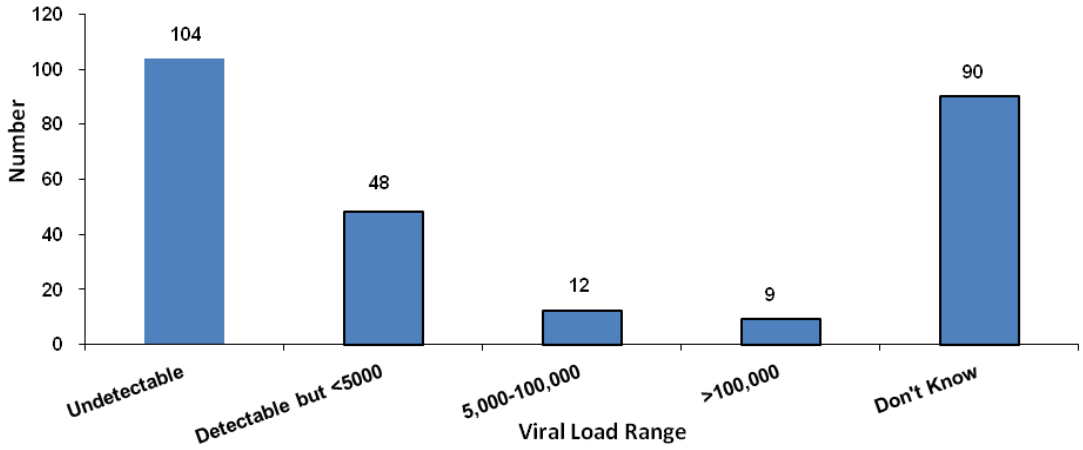
Source: Delaware 2008 MMP Program Interview Dataset

Figure 32: Most Recent CD4 T Lymphocyte count in the Last 12 months among Delaware MMP interview clients who had CD4 laboratory processed. (N=263).



Source: Delaware 2008 MMP Program Interview Dataset

Figure 33: Most recent viral load test in the last 12 months among Delaware MMP interview clients who had viral load laboratory test processed. (N=263).



Source: Delaware 2008 MMP Program Interview Dataset

Table 20: Time between HIV diagnosis and entry into care among Delaware MMP interview clients (N=240)

	Male (N=154) No. (%)	Female (N=86) No. (%)	Total (N=240) No. (%)
Less than or equal to 3 months	117 (49%)	69 (29%)	186 (77%)
Between 3 and 12 months	5 (2%)	3 (1%)	8 (3%)
Greater than 12 months	32 (13%)	14 (6%)	46 (19%)

Source: Delaware 2008 MMP Program Interview Dataset

Table 21: Antiretroviral therapy use in the last 12 months among Delaware MMP interview clients (N=262)

	Male (N=166) No. (%)	Female (N=96) No. (%)	Total (N=262) No. (%)
No	18 (7%)	20 (8%)	38 (14%)
Yes	148 (56%)	76 (29%)	224 (85%)

Source: Delaware 2008 MMP Program Dataset

Sexual Behavior

Table 22: Number of sexual partners in the last 12 months among Delaware MMP interview clients*

	MSM (N=54) No. (%)	MSW (N=71) No. (%)	WSM (N=60) No. (%)
One	32 (59%)	53 (75%)	52 (87%)
Two or more	22 (41%)	18 (25%)	8 (13%)

***Men who have sex with men (MSM), men who have sex with women (MSW), women who have sex with men (WSM); note that these MSM and MSW are not mutually exclusive categories**
Source: Delaware 2008 MMP Program Interview Dataset

Table 23: Reported unprotected vaginal or anal sex with at least one partner in the last 12 months among Delaware MMP interview clients*

	MSM (N=41) No. (%)	MSW (N=57) No. (%)	WSM (N=56) No. (%)
No	26 (63%)	46 (81%)	38 (68%)
Yes	15 (37%)	11 (19%)	18 (32%)

Source: Delaware 2008 MMP Program Interview Dataset

Substance Use

Table 24: Have ever injected drugs, Delaware MMP client interview response (N=270).

	Male (N=172) N (%)	Female (N=98) N (%)	Total (N=270) N (%)
No	112 (41%)	69 (25%)	181 (67%)
Yes	60 (22%)	29 (11%)	89 (33%)

Source: Delaware 2008 MMP Program Interview Dataset

Table 25: Injection drug use in the last 12 months, Delaware MMP client interview response (N=267).

	Male (N=170) N (%)	Female (N=96) No (%)	Total (N=267) N (%)
No	166 (62%)	69 (25%)	181 (67%)
Yes	4 (1%)	29 (11%)	89 (33%)

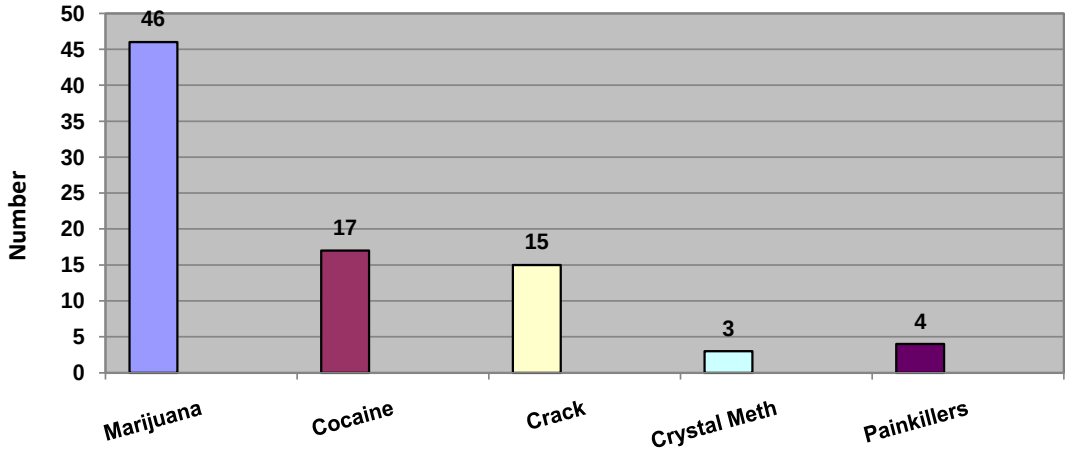
Source: Delaware 2008 MMP Program Interview Dataset

Table 26: Non-injection drug use in the last 12 months, Delaware MMP client interview response (N=270).

	Male (N=172) N (%)	Female (N=98) No (%)	Total (N=270) No. (%)
No	130 (48%)	77 (28%)	207 (77%)
Yes	42 (15%)	21 (8%)	63 (23%)

Source: Delaware 2008 MMP Program Interview Dataset

Figure 34: Top five commonly used non-injection drugs (excluding alcohol) among Delaware MMP interview clients (N=63)



Source: Delaware 2008 MMP Program Interview Dataset

Conclusion

Despite medical advances and disease prevention efforts, HIV/AIDS continues to have a devastating impact on the health and well-being of Delawareans. Recent EHARS data indicate that there are approximately 729 HIV-positive Delawareans who have not received care within a 12 month period ending September 2009. The need to reach HIV-positive Delawareans earlier in the disease process is and must continue to be a high priority. Ensuring continuous medical treatment for Delawareans with HIV/AIDS is nothing short of a life-saving effort. Interventions must address at-risk populations and tailor intervention efforts to each population's unique cultural, economic, religious and sexual context.

It is our hope that the data contained in this report will help efforts to prevent future cases of HIV/AIDS among Delawareans by identifying populations most at risk for the disease and tailoring HIV prevention and treatment services accordingly.

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APPENDIX A
Delaware HIV/AIDS Report Feedback

The purpose of this form is to provide the HIV/AIDS Surveillance staff with feedback from their end-users regarding the ease of use and applicability of this report to prevention care planning activities.

Please complete this feedback form and send it to the HIV/AIDS Surveillance Office, Delaware Division of Public Health, Thomas Collins Bldg, Suite 12, Rm 203L, 540 S Dupont Hwy, Dover, DE 19901

1. Of which planning group are you a member?

☐ Delaware HIV Planning Council ☐ Formulary Committee ☐ Policy Committee

2. Was the HIV/AIDS Report easy to read?

☐ Yes ☐ No ☐ Somewhat

3. How were the findings of the HIV/AIDS Report communicated to you?

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

4. Were the findings of the HIV/AIDS Report clear to you?

☐ Yes ☐ No ☐ Somewhat

If not, explain why.

_____

_____

5. Was the HIV/AIDS Report useful to your planning process?

☐ Yes ☐ No ☐ Somewhat

If not, explain why.

_____

_____

6. Describe how you used the HIV/AIDS Report in your planning activities?

_____

_____

7. How can the next HIV/AIDS Report be improved?

_____

_____

7a: What specific questions could be included in the next HIV/AIDS Report?

_____

_____

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

☐ No

☐ Yes, please send the report to me by:
Include your contact information, as appropriate

☐ Email _____
☐ Fax _____
☐ Mail _____

9. Data from this HIV/AIDS Report 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, _____