HIV, STDs, and TB:
An Overview of Testing Results
(1997)

prepared for

Delaware Department of Health and Social Services
Division of Public Health

by

Edward C. Ratledge

and

Anne M. Gurchik

Center for Applied Demography & Survey Research
College of Human Resources, Education, and Public Policy
University of Delaware

Newark, Delaware 19716

May 1999

The University of Delaware is committed to assuring equal opportunity to all persons and does not discriminate on the basis of race, color, gender, religion, ancestry, national origin, sexual preference, veteran status, age, or disability in its educational programs, activities, admissions, or employment practices as required by Title IX of the Educational Amendments of 1972, Title VI of the Civil Rights Act of 1964, the Rehabilitation Act of 1973, the Americans with Disabilities Act, other applicable statutes, and University policy. Inquiries concerning these statutes and information regarding campus accessibility and Title VI should be referred to the Affirmative Action Officer, 305 Hullihen Hall, 302/831-2835 (voice), 302/831-4552(TDD).

TABLE OF CONTENTS

	Page
List of Figures	iv
List of Tables	v
List of Maps	vi
Introduction	1
AIDS-Related Morbidity & Mortality Trends	1
1997 HIV Counseling & Testing Survey	4
Sexually Transmitted Diseases	15
Tuberculosis	37

LIST OF FIGURES

Figure **Page**

HIV C&T Related

2-1 Persons Testing HIV Positive by Gender (1997) 6
2-2 Persons Testing HIV Positive by Race (1997) 6
2-3 Persons Testing HIV Positive by Race and Gender (1997) 7
2-4 Persons Testing HIV Positive by County (1997) 8
2-5 Persons Testing HIV Positive by Age Group (1997) 8

STD Related

3-1 Reported STD Incidence (1997 STD Data) by County 15
3-2 Reported STD Incidence (1997 STD Data) by Race 17
3-3 Reported STD Incidence (1997 STD Data) by Race & Gender 17
3-4 Reported STD Incidence (1997 STD Data) by Age Group 18
3-5 STD Reporting Site (1997 STD Data) by County 19
3-6 STD Reporting Site (1997 STD Data) by Gender 21
3-7 STD Reporting Site (1997 STD Data) by Race 21
3-8 STD Reporting Site (1997 STD Data) by Race (Men only) 22
3-9 STD Reporting Site (1997 STD Data) by Race (Women only) 23
3-10 STD Reporting Site (1997 STD Data) by Age Group 24
3-11 Gonorrhea Diagnosis (1997 STD Data) by STD Reporting Site 26
3-12 Gonorrhea Incidence (1997 STD Data) by Gender 27
3-13 Gonorrhea Incidence (1997 STD Data) by Race 27
3-14 Gonorrhea Incidence (1997 STD Data) by Gender - CAUCASIANS 28
3-15 Gonorrhea Incidence (1997 STD Data) by Gender - AFRICAN AMERICANS 29
3-16 Syphilis Incidence (1997 STD Data) by Race 32
3-17 Syphilis Incidence (1997 STD Data) by Gender 33
3-18 Syphilis Incidence (1997 STD Data) by Age Group 34

TB Related

4-1 Persons Diagnosed with TB by County (1997) 37
4-2 Persons Diagnosed with TB by Race (1997) 38
4-3 Persons Diagnosed with TB by Age Group (1997) 39

LIST OF TABLES

Figure **Page**

Morbidity & Mortality Related

1-1 Delaware AIDS-Related Mortality Rates (Five Year Averages) 1
1-2 U.S. & Mid-Atlantic AIDS Case Rates (1995-1997) 2
1-3 AIDS Case Rates for Wilmington & Other Mid-Atlantic Metro Areas 3

HIV Counseling & Testing Related

2-1 High HIV Pre-test Counseling Demand Zip Codes (1997) 5
2-2 Zip Codes with High Numbers of HIV Positive Cases (1997) 9
2-3 HIV Positive Cases by Site Where Tested (1997) 10
2-4 HIV Positive Cases by County & Testing Site (1997) 11
2-5 HIV Positive Cases by Mode of Transmission (1997) 11
2-6 HIV Positive Cases by Mode of Transmission & County (1997) 12

STD Related

3-1 Zip Codes with High STD Incidence (1997) 16
3-2 Zip Codes with High STD Incidence (From Public Testing Facilities – 1997) ... 20
3-3 Gonorrhea Diagnoses by Type & Location (1997) 25
3-4 Zip Codes with High Gonorrhea Incidence (1997) 25
3-5 Gonorrhea Incidence by Age Group (1997) 30
3-6 Syphilis Diagnoses by Type & Location (1997) 31
3-7 Zip Codes with High Syphilis Incidence (1997) 31

TB Related

4-1 TB Cases by Quarter (1997) 38
4-2 TB Cases by Identified Risk Factor (1997) 39

LIST OF MAPS

Map Page

Delawareans Seeking HIV Counseling by Zip Code (1997) 13
Delawareans Diagnosed HIV+ by Zip Code (1997)..... 14
Delawareans Diagnosed with Syphilis by Zip Code (1997)..... 35
Delawareans Diagnosed with Gonorrhea by Zip Code (1997)..... 36

INTRODUCTION

The purpose of this report is two-fold. It is first designed to assess, at least in part, unmet HIV programming and service needs. It is also designed to evaluate: (a) if at-risk populations have been accurately targeted for HIV-related programs and services, (b) if programming and services has effectively impacted targeted populations and (c) if demand for services accurately reflects ***need*** for services.

This report will be divided into several sections. Using national and state data, it is hoped that the first section of this report will provide the reader with a better understanding of not only how Delaware compares with the rest of the nation, but also any shifts in morbidity and mortality trends. The second section of this report will provide the reader with results of the 1997 Counseling and Testing Reporting System (C&T). Where possible, this section will examine service demand and service need throughout the state. STD and TB reporting results from 1997 will be reviewed in the third and fourth sections of this report.

AIDS-RELATED MORBIDITY AND MORTALITY TRENDS:

In Delaware, the number of HIV infection and AIDS-related deaths has begun to fall. There was roughly a 19 percent decrease in the number of AIDS deaths in 1997 (132), when compared with the previous year (163). *(Bureau of Health Planning & Resource Management, Summer 1998)*[1]

TABLE 1-1

Delaware AIDS-Related Mortality Rates (Five-Year Averages)

AREA	FIVE-YEAR AVERAGE			
	1989-1993	1990-1994	1991-1995	1992-1996
Delaware	7.4	9.1	11.0	12.1
New Castle	7.9	9.7	11.4	12.8
Kent	6.3	7.6	9.0	9.2
Sussex	6.8	8.6	11.6	12.2

Source: Delaware Division of Public Health's Vital Statistics Annual Report, 1993-1996.

[1] Bureau of Health Planning & Resource Management. (1998). *Delaware Vital Statistics Annual Report 1996*. Delaware Division of Public Health, Dover.

As of 1996, AIDS continued to be a top ten leading cause of death for Caucasian males and African American males and females. Among 25-44 year-olds, AIDS-related death is the leading cause of death. *(Bureau of Health Planning & Resource Management, Summer 1998)*

Although AIDS is regarded as a disease that primarily affects men, it should be pointed out that an increasing percentage of women are dying from it each year. In 1996, 23 percent of AIDS-related Delaware deaths represent women compared with 19% in 1995.

TABLE 1-2

U.S. & Mid-Atlantic AIDS Case Rates (1995-1997)

State/Region	AIDS Case Rate (per 100,000)		
	1995	1996	1997
U.S.	27.2	25.1	21.8
Delaware	44.1	39.4	31.6
Pennsylvania	19.7	19.4	15.9
Maryland	51.1	44.4	36.8
New Jersey	55.5	44.7	40.1

Source: Centers for Disease Control, 1998.

Although Delaware's AIDS case rate is 60% higher than the U.S. average, it is comparable with most other states in the Mid-Atlantic region. With the exception of Pennsylvania, roughly 35 of every 100,000 persons was believed to have AIDS, in 1997. (See Table 1-2, above)

It should also be noted that when reviewing the AIDS case rates of U.S. metropolitan areas, the City of Wilmington has a case rate which is over twice that of the average metropolitan area with a population size of 50,000-500,000. In fact, according to Table 1-3, below, Wilmington's AIDS case rate is slightly higher than the case rate of the average metropolitan area of 500,000 or more people.

TABLE 1-3

AIDS Case Rates for Wilmington & Other Mid-Atlantic Metro Areas

City	AIDS Cases Rate (per 100,00)		
	1995	1996	1997
Wilmington, DE	48.5	43.5	35.1
Philadelphia, PA	36.6	33.7	30.2
Baltimore, MD	69.4	61.6	51.6
U.S. Metro Areas (50,000-500,000 pop.)	16.6	14.9	13.2
U.S. Metro Areas (500,000+ population)	37.1	33.9	29.3

Source: Centers for Disease Control, 1998.

1997 HIV COUNSELING AND TESTING SURVEY

As part of Delaware's HIV counseling and testing procedures, clients are asked to answer questions regarding their reasons for seeking counseling and, in some cases, testing. The responses to these questions, along with results of testing (if applicable) and other site and demographic data is logged, by HIV counselors, onto CDC scan sheets. Anyone receiving state or federal funding to provide HIV counseling and testing is required to complete C&T scan sheets.

In 1997, C & T data was collected from a number of sites. They are as follows:

- Family Planning
- Prenatal Clinics
- TB Clinics
- STD Clinics
- State HIV Counseling and Testing Sites
- University of Delaware
- Drug Treatment Facilities
- Prison Sites
- Delaware State Hospital
- Field Visits

SEEKING COUNSELING SERVICES

In 1997, 11,047 people received counseling services and that represented a 7.7% decrease from 1996. Of those counseled, 47% were African-American, 46% percent were Caucasian, and six percent reported being Hispanic[2]. It should be noted that while these results are ***not*** representative of the general population (only about 18% of the state's population is African American; 80% is Caucasian; and 2% is Hispanic), they do tend to reflect the racial demographics of groups at highest HIV infection risk.

With regard to age, it is interesting to note that 67% of those receiving pre-test counseling were ages 18-34 years. Another 17 percent were 35-44 years old. About nine percent of those receiving HIV

[2] Hispanic is classified as a separate RACE. Thus, it is not possible to differentiate between white Hispanics, black Hispanics, asian Hispanics and native american Hispanics.

counseling were between the ages of 10 and 17. These results tend to reflect the wide-held belief that HIV and AIDS affects primarily the young. Unfortunately, and possibly as a result of this belief, incidence rates among older Americans have been increasing in recent years.

Roughly 55 percent of those pre-test counseled were women. Again, this is not surprising, given that infection rates among women have increased dramatically since the mid-1980s.

TABLE 2-1

High HIV Pre-Test Counseling Demand Zip Codes (1997)

Zip Code	City	Number of Clients	Percent of Total 1996 Pre-Test Counseling
19901	Dover	922	8.3
19802	Wilmington	975	8.8
19801	Wilmington	738	6.7
19720	New Castle	656	5.9
19805	Elsmere	688	6.2
19711	Newark	476	4.3
19904	Dover	410	3.7
19947	Georgetown	495	4.5

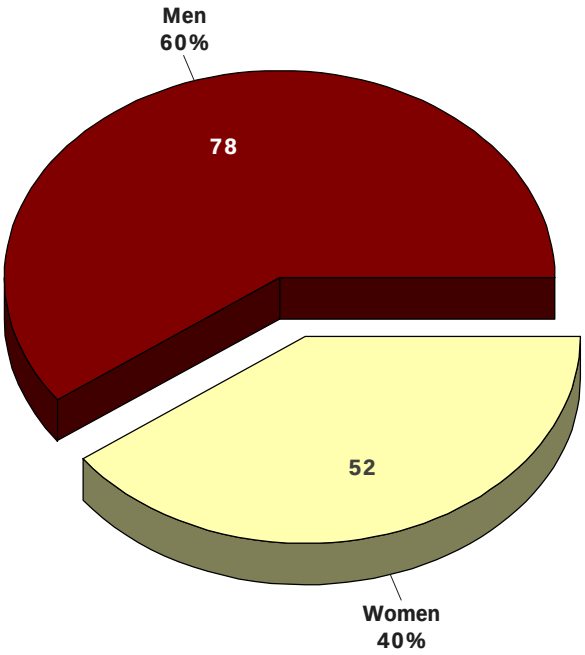
Source: Center for Applied Demography & Survey Research, University of Delaware

Lastly, it should be noted that 5,360 or 48.4% of all clients receiving counseling services came from just eight Delaware zip codes (see Table 2-1, above). Please refer to the map provided at the end of this section for a more complete picture.

PERSONS DIAGNOSED HIV POSITIVE (1997)

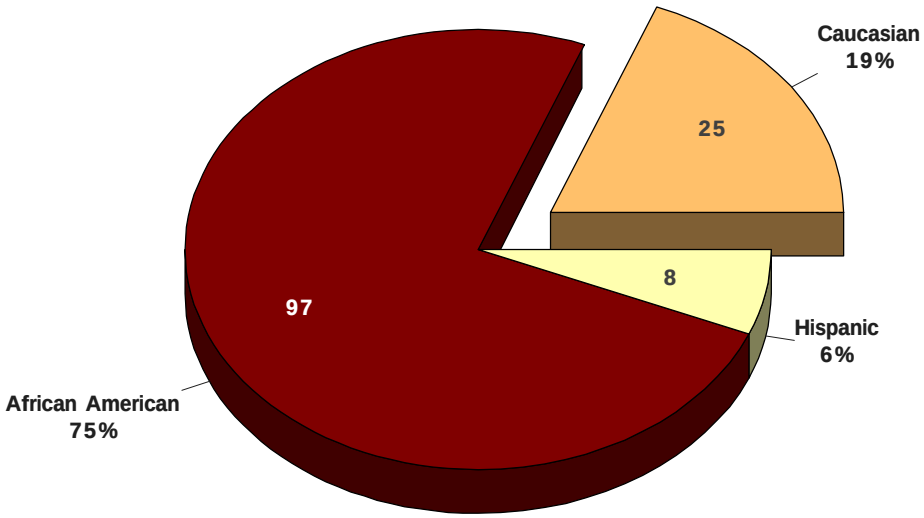
Of the 9,720 tested for HIV, 130 (1.3%) tested positive for the disease. Of them, nearly 40% (n=52) were women (see Figure 2.1, below).

Figure 2-1
Persons Testing HIV Positive
By Gender (1997)



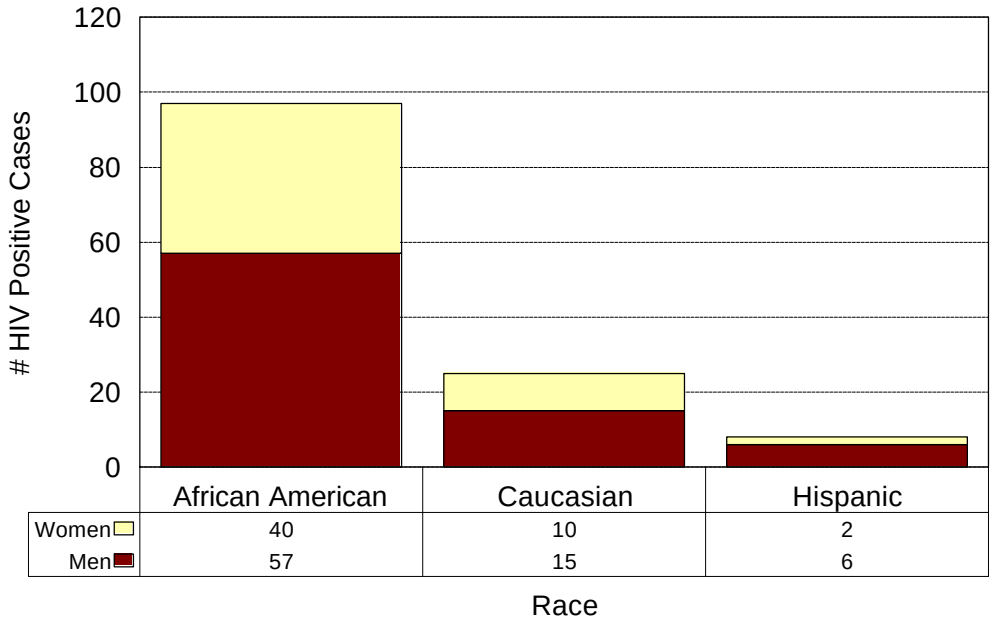
Source: Center for Applied Demography and Survey Research, University of Delaware

Figure 2-2
Persons Testing HIV Positive
by Race (1997)



Source: Center for Applied Demography and Survey Research, University of Delaware

Figure 2-3
Persons Testing HIV Positive
by Race and Gender (1997)



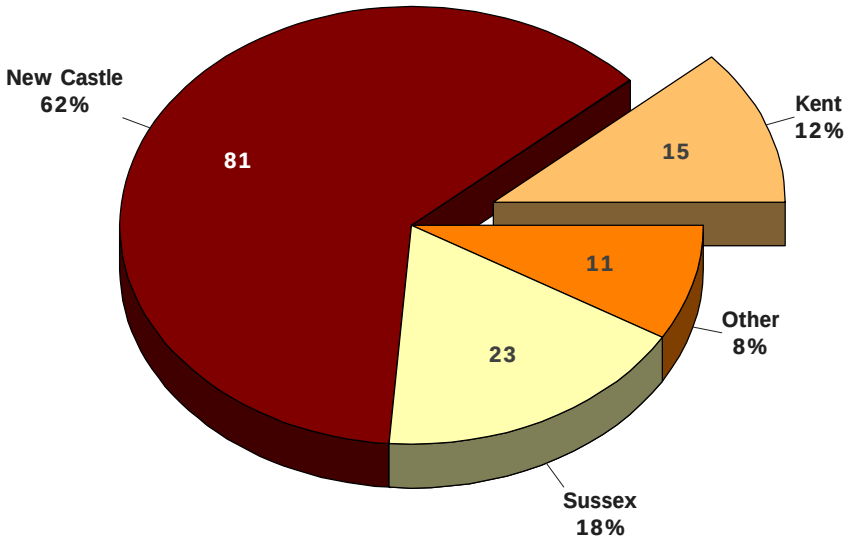
Source: Center for Applied Demography and Survey Research, University of Delaware

African Americans make up the vast majority of HIV positive cases. As highlighted in Figure 2-2 (above), three of every four persons diagnosed HIV positive were African American. It is also interesting to note that the proportion of women for both Caucasian and African American is essentially the same with Hispanic women being less likely to test positive.

Nearly two-thirds of Delaware's 1997 HIV positive cases were identified as living in New Castle County, with proportionally smaller numbers in Kent and Sussex counties (see Figure 2-4, below). The proportion in Sussex County is somewhat higher than one might expect although with small numbers, it is difficult to reach any conclusion.

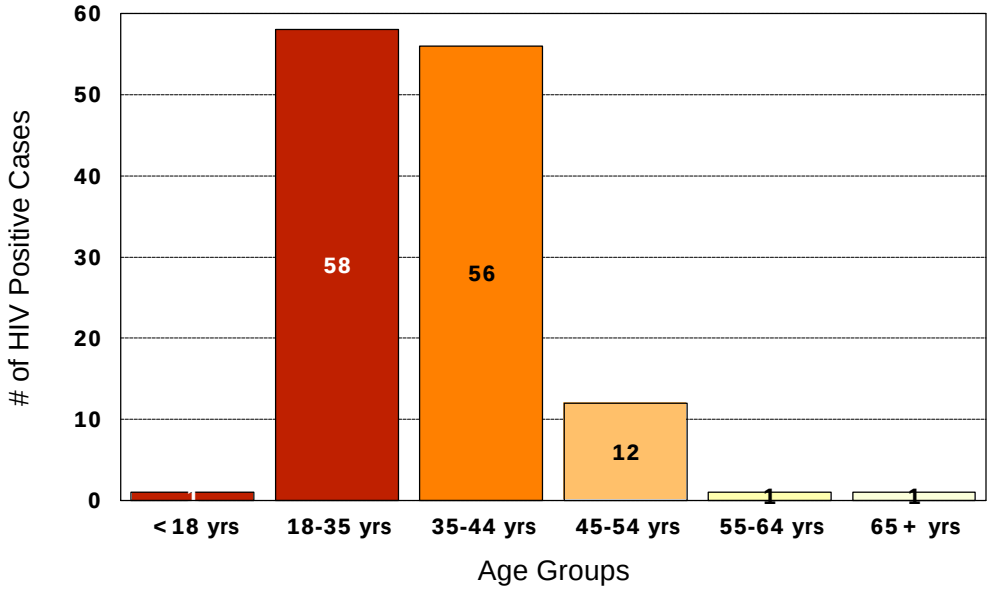
As expected, young adults comprise the vast majority of Delaware's reported 1997 HIV+ cases (Figure 2-5 below). Nearly half of those testing positive were in the 18-34 age group. Most of the rest (43%) were in the next older age group. Only one case was reported for those under the age of 18 and another was reported for those past the age of 64.

Figure 2-4
Persons Testing HIV Positive
by County (1997)



Source: Center for Applied Demography and Survey Research, University of Delaware

Figure 2-5
Persons Testing HIV Positive
by Age Group (1997)



Source: Center for Applied Demography and Survey Research, University of Delaware

Interestingly, the communities which earlier expressed high demand for HIV counseling and testing are not necessarily those with high numbers of Delawareans who tested positive. For instance, the City of Wilmington appears to have a higher need for services than it does demand. While only 15.5 percent of the demand for counseling services came from two predominantly Wilmington zip codes (19801 and 19802), 29.3 percent of Delaware's 1997 HIV positive cases were identified in these same zip codes. In contrast, while 12 percent of the HIV counseling demand comes from two Dover zip codes (19901 and 19904), they represent about seven percent of those identified as being HIV positive. While about 1.4% of those tested in the state were HIV positive, the rates for Wilmington were more than double that rate.

TABLE 2-2

Zip Codes with High Numbers of HIV Positive Cases (1997)

Zip Code	City	Number of Cases	Percent of Total 1997 HIV Positive Cases
19801	Wilmington	20	15.4
19805	Elsmere	9	6.9
19720	New Castle	15	11.5
19802	Wilmington	18	13.9
19901	Dover	5	3.9
19809	Bellefonte	6	4.6
19904	Dover	4	3.0
19973	Seaford	5	3.9
		82 of 132	63.1

Source: Center of Applied Demography & Survey Research, University of Delaware

It should be noted that nearly 63 percent of the total number of HIV positive cases reported represent residents of just eight Delaware zip codes. Each, as illustrated in Table 2-2 (above), is residence to four or more new HIV positive cases (NOTE: Fewer than four new HIV positive cases were identified in any of Delaware's other 60 zip codes). Please refer to the map provided at the end of this section for a more complete picture.

TABLE 2-3

HIV Positive Cases by Site Where Tested (1997)

Site Tested	All Tests	Percent of All Tests	HIV+ Cases	Percent of HIV+ Cases
HIV C&T Sites	1876	17.0	35	26.9
STD Clinics	4900	44.4	54	41.6
Drug Treatment Facility	273	2.5	9	6.9
Family Planning	1659	15.0	5	3.8
Prenatal/OBGYN	810	7.3	3	2.3
TB Clinic	90	0.8	0	0.0
Prison Facility	916	8.3	17	13.1
Hospital/Private Physician	26	0.2	4	3.1
Field Visit	67	0.6	3	2.3
Other	430	3.9	0	0
TOTAL	11,047	100.0	130	100.0

Source: Center of Applied Demography & Survey Research, University of Delaware

STD Clinics are currently the largest single source for testing people for HIV. Those clinics also identify the largest portion of the HIV positive cases statewide (Table 2-3, above). HIV Counseling and testing sites are second in both categories; however, a much higher proportion of their clients is found to be HIV positive. Prison facilities identify the third highest number of HIV positive cases.

Although the sample size is too small to be considered statistically significant, it is worth noting that while the majority of Sussex County HIV positive cases were identified at an HIV Counseling and Testing Site, half of all New Castle County HIV positive cases were identified at an STD Clinic. In Kent County, on the other hand, almost half of all new HIV positive cases were identified by a drug treatment facility (Table 2-4, below).

TABLE 2-4

HIV Positive Cases By County & Testing Site (1997)

Site Tested	County					
	New Castle		Kent		Sussex	
	cases	%	cases	%	cases	%
HIV C&T Sites	18	22.2	2	13.3	11	47.8
STD Clinics	42	51.9	1	6.7	8	34.8
Drug Treatment Facility	0	0	7	46.7	1	4.3
Family Planning	4	4.9	0	0.0	0	0
Prenatal/OBGYN	0	0	2	13.3	0	0
TB Clinic	0	0	0	0	0	0
Prison Facility	13	16	2	13.3	2	8.7
Hospital/Private Physician	4	4.9	0	0	0	0
Field Visit	0	0	1	6.7	1	4.3
TOTAL	81	100.0	15	100.0	23	100.0

Source: Center of Applied Demography & Survey Research, University of Delaware

TABLE 2-5

HIV Positive Cases by Mode of Transmission (1997)

Mode of Transmission	# HIV+ Cases	Percent of HIV+ Cases
Same-Sex Contact (men only)	34	26.2
Intravenous Drug Use	33	25.4
STD Diagnosis	23	17.7
Other	40	30.7
TOTAL	130	100.0

Source: Center of Applied Demography & Survey Research, University of Delaware

While it can be said that men having sex with men account for the highest number of HIV positive cases reported in 1997, they in no way represent the majority of new cases. As illustrated in Table 2-5 (above), same-sex (male) contact accounts for only 26 percent of the cases. Intravenous drug use (IDU)

represents 25 percent, and other sources account for the balance of Delaware's new HIV positive cases. Twenty three percent of new cases represent those who were also diagnosed with another sexually transmitted disease.

TABLE 2-6

HIV Positive Cases by Mode of Transmission & County (1997)

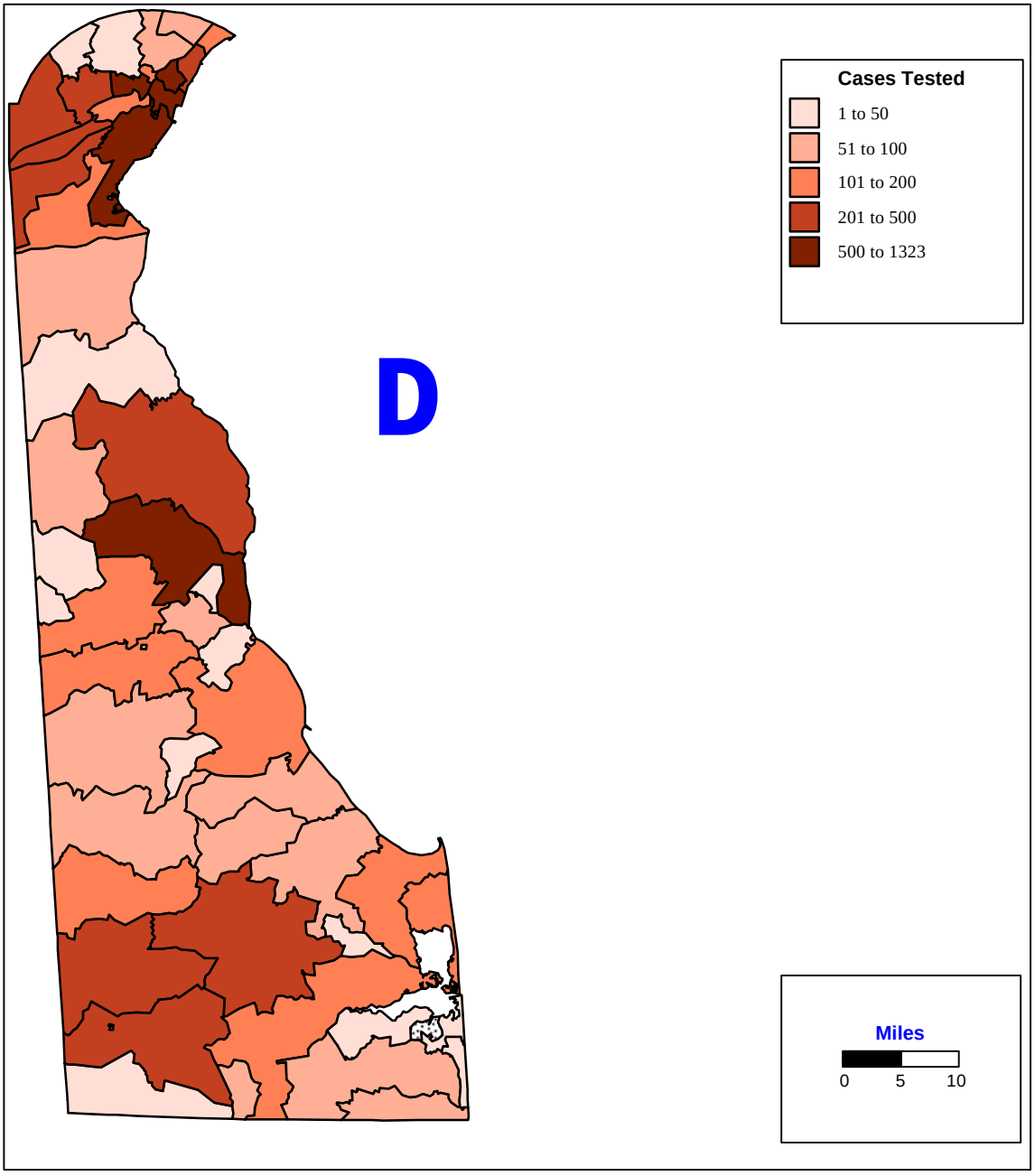
Site Tested	County					
	New Castle		Kent		Sussex	
	cases	%	cases	%	cases	%
Same-Sex Contact (men only)	16	19.8	6	40.0	9	39.1
Intravenous Drug Use	28	34.6	1	6.7	2	8.7
STD Diagnosis	15	18.5	2	13.3	4	17.4
Other	22	27.1	6	40.0	8	34.8
TOTAL	81	100.0	15	100.0	23	100.0

Source: Center of Applied Demography & Survey Research, University of Delaware

It should also be noted that mode of transmission rates varied across Delaware's three counties. As highlighted in Table 2-6 (above), although sample sizes are small, Kent and Sussex county residents are more likely to have become infected as a result of men having sex with men. Less than 10 percent were infected via heterosexual intravenous drug use. In New Castle County, heterosexual intravenous drug use was a much more prevalent risk than in either Kent or Sussex counties. Since the numbers are small, these patterns are likely to be volatile over time and five-year averages are probably more appropriate.

Delawareans Seeking HIV Counseling

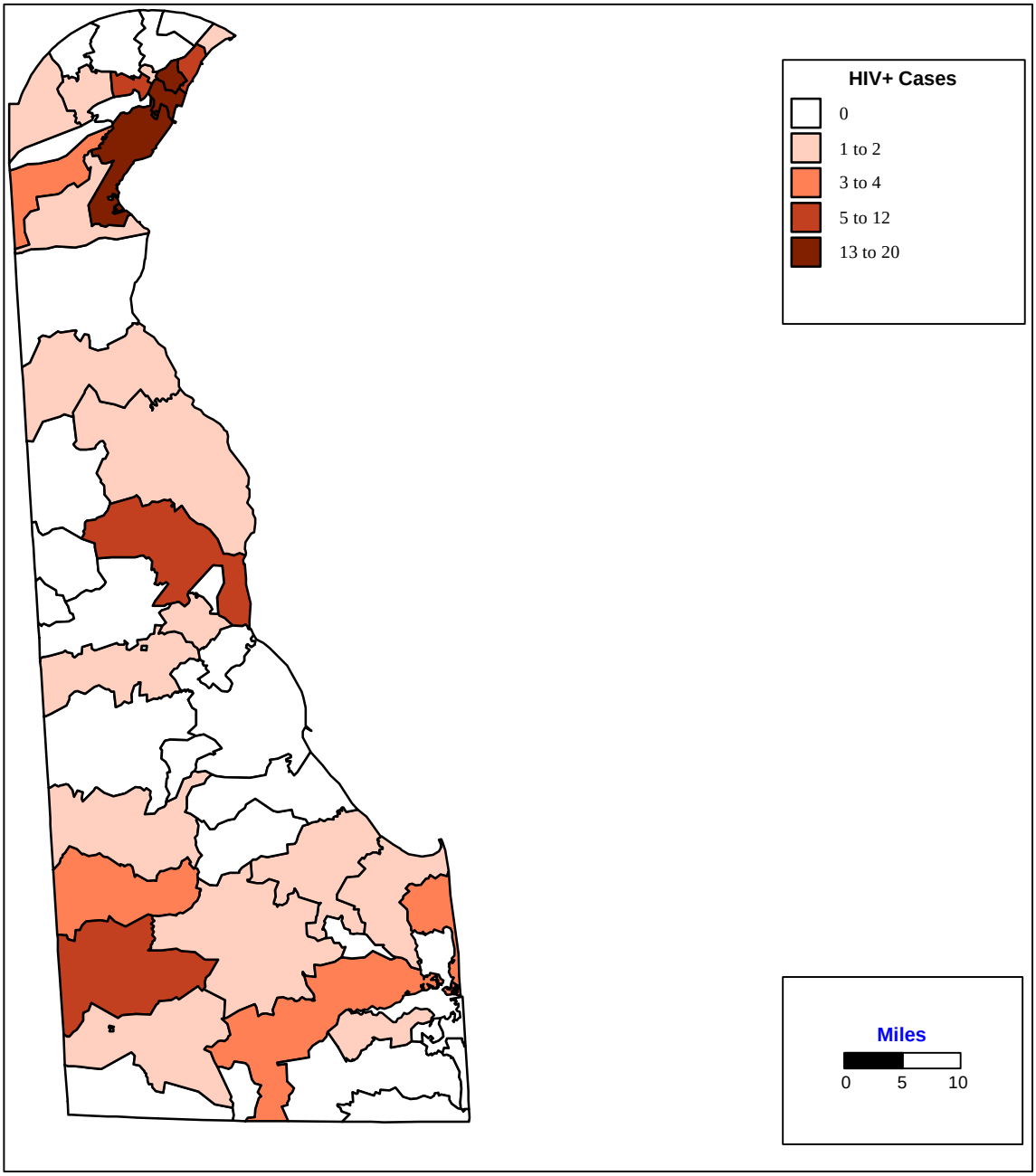
by Zip Code (1997)



Source: Center for Applied Demography and Survey Research, University of Delaware

Delawareans Diagnosed HIV+

by Zip Code (1997)

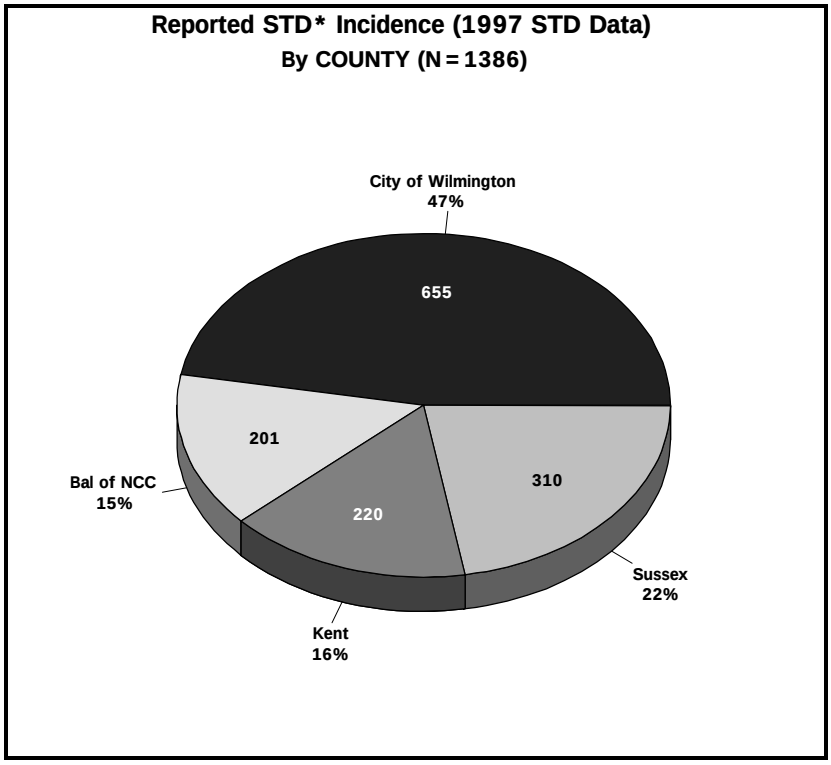


Source: Center for Applied Demography and Survey Research, University of Delaware

SEXUALLY TRANSMITTED DISEASES

According to a recent report released by CDC, gonorrhea and syphilis (primary and secondary) are two of the top five most reported STDs. The study also indicated that young Americans were most at risk.[3]

Figure 3-1



In 1997, a total of 1,386 cases of gonorrhea and/or syphilis were reported in Delaware. This represents a 12 percent ***decrease*** from the previous year. Forty-seven percent of those cases were identified as living in the City of Wilmington. Another 22 percent involve Sussex County residents. Respectively, as indicated in Figure 3-1 (above), 15 percent of 1996 gonorrhea/syphilis cases were each identified in Kent and the balance of New Castle County.

Interestingly, nearly two-thirds of STD incidence reported in 1997 represent residents of just eight of Delaware's 68 residential (i.e.: non-special, non-P.O. Box) zip codes. (See Table 3-1, below)

[3] Morbidity & Mortality Weekly. (1997). 46:28, pp 638-640.

TABLE 3-1

Zip Codes with High STD Incidence (1997)

Zip Code	Community Affected	Number of Cases	% of Total Number of 1997 STD Cases (N=1385)
19802	Wilmington	290	20.9%
19801	Wilmington	172	12.4%
19805	Wilmington	133	9.6%
19901	Dover	84	6.1%
19720	New Castle	84	6.1%
19973	Seaford	69	5.0%
19933	Bridgeville	52	3.8%
19904	Dover	44	3.2%

Source: Center for Applied Demography & Survey Research, University of Delaware

African Americans are more likely to be diagnosed with an STD than their Caucasian or Hispanic counterparts. As highlighted in Figure 3-2 (below), although African Americans make up less than 20 percent of Delaware's total population, they account for 84 percent of the total number of gonorrhea and/or syphilis cases reported in 1997. Caucasians account for a 13 percent of the STD cases diagnosed.

Although in 1996 women were about as likely as men to be diagnosed with an STD, in 1997, women were about 10 percent more likely to have reported having an STD. Fifty-five percent of the STD cases reported involved women. It should be noted that Caucasian women are considerably more likely than their male counterparts to be diagnosed with an STD. The number of African American and Hispanic women diagnosed with an STD was equal to the number of African American or Hispanic men diagnosed in 1997. As noted in Figure 3-3 (below), of the African Americans diagnosed with a STD, 51 percent were women and 49 percent were men. In the case of Hispanics, 50 percent were men and 50 percent were women. However, among the Caucasian Delawareans who were diagnosed, only 27 percent of the STD cases identified represent infected men; 73 percent represent STD infected women.

Figure 3-2

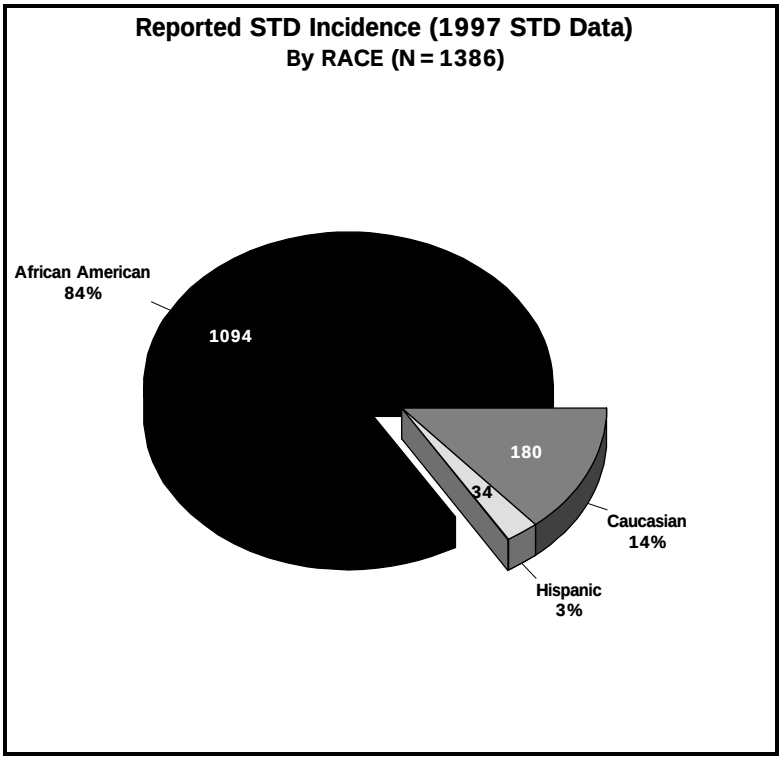


Figure 3-3

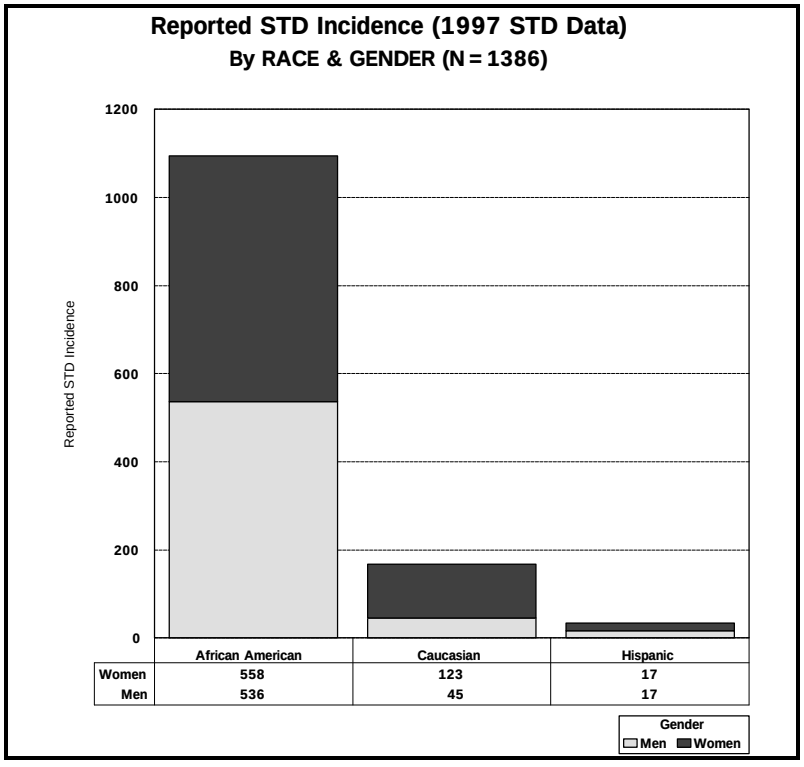
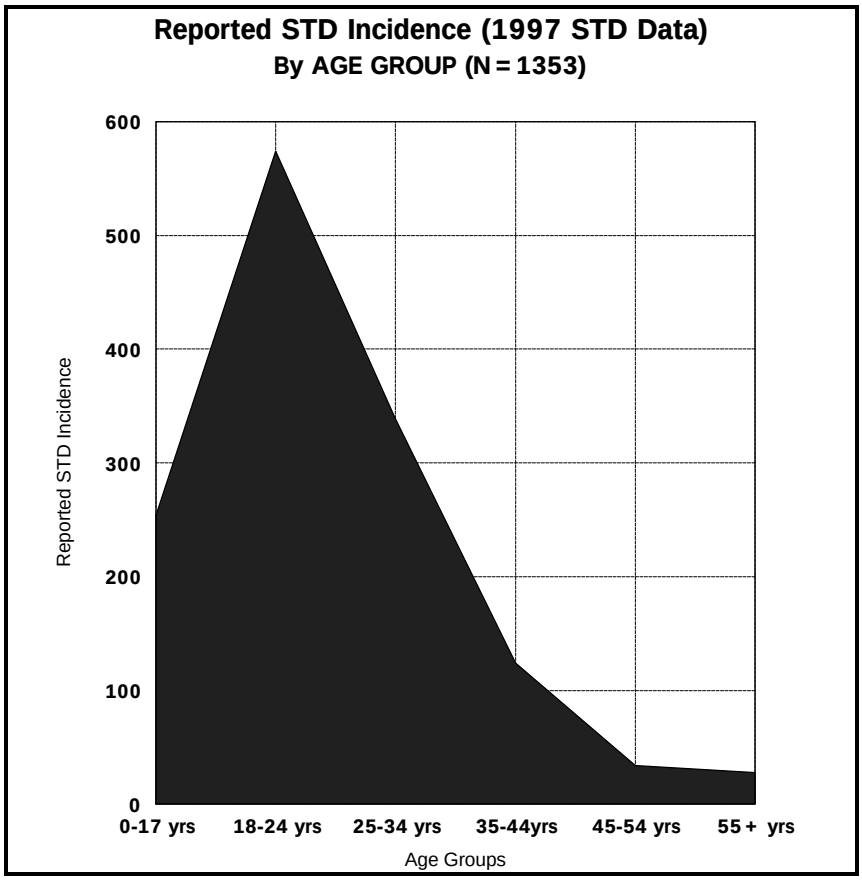


Figure 3-4

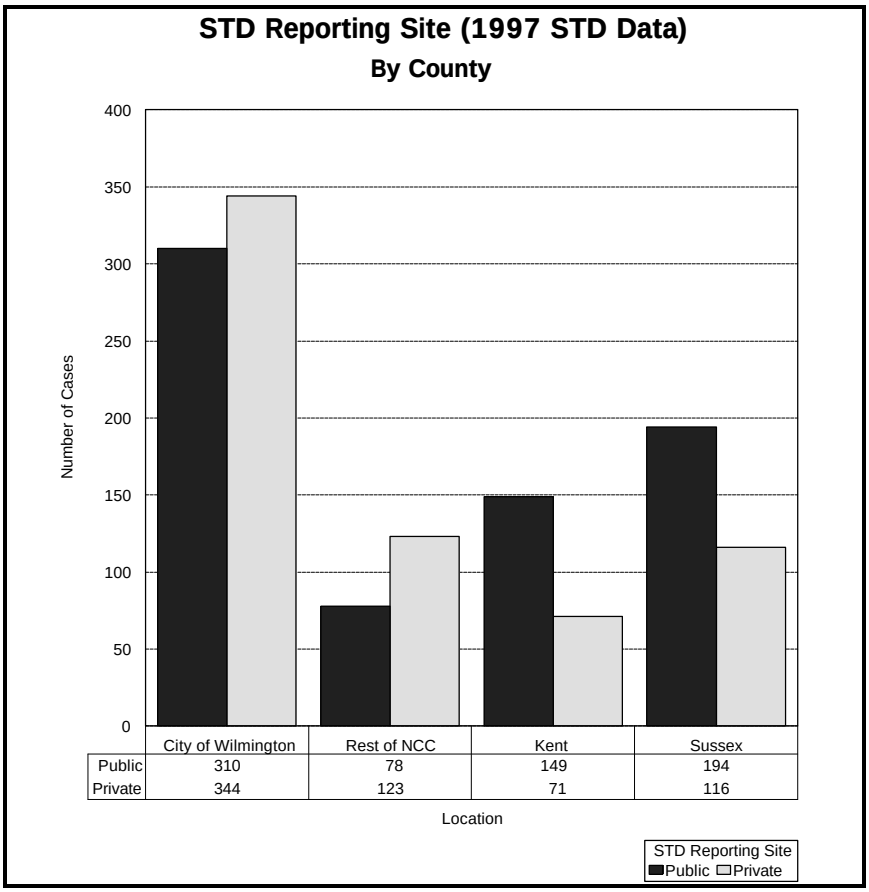


Older adolescents and young adults appear to be significantly more likely to be diagnosed with an STD than any other age group. As illustrated in Figure 3-4 (above), two-thirds of all gonorrhea and syphilis cases reported involved clients ages 18 to 34 years. In fact, 18-24 year-olds alone account for more than one-third of the STD cases reported in 1997.

Public v. Private STD Reporting Sites

All of 1997 STD data came from one of two STD reporting site types: (1) a private facility (e.g.: physician's office, HMO, etc.) or (2) a public (non-military) facility (e.g.: public health clinic, STD clinic, state hospital, etc.).

Figure 3-5



Residents of Kent and Sussex counties appear to be increasingly reliant on public facilities for STD testing. As indicated in Figure 3-5 (above), those living in Kent and Sussex counties appear to be more likely to use public STD testing sites than their northern Delaware counterparts. Roughly two-thirds of southern Delawareans were diagnosed at a public facility. In contrast, fewer than half of New Castle County (including City of Wilmington) residents appear to have learned they had an STD from a public facility.

Not surprisingly, residents of some Delaware zip codes were more likely to rely on public facilities than others. Eleven communities seemed particularly reliant on public facilities. In fact, they account for nearly three-quarters of the total number of STD cases reported by public facilities (see Table 3-2, below).

TABLE 3-2

Zip Codes with High STD Incidence (From Public Testing Facilities - 1997)

Zip Code	Community Affected	Number of Cases	% of Total Number of 1997 STD Cases - FROM PUBLIC SITES ONLY (n=731)
19802	Wilmington	146	20.0%
19801	Wilmington	92	12.6%
19901	Dover	59	8.1%
19805	Elsmere	53	7.3%
19973	Seaford	44	6.0%
19904	Dover	36	4.9%
19720	New Castle	35	4.8%
19933	Bridgeville	32	4.4%
19960	Lincoln	20	2.7%
19966	Millsboro	20	2.7%
Total (n=731) **PUBLIC ONLY**	---	537	73.5%

Source: Center for Applied Demography & Survey Research, University of Delaware

It is worth noting that no more than 14 STD diagnoses were identified by public reporting sites in any of the remaining 59 Delaware zip codes.

As in 1996, men appear to be more than 1.5 times more likely than women to be diagnosed at a public STD reporting site. Whereas 70 percent of the men diagnosed with either gonorrhea or syphilis were identified by a public facility, only 40 percent of women were diagnosed by such a site.

Figure 3-6

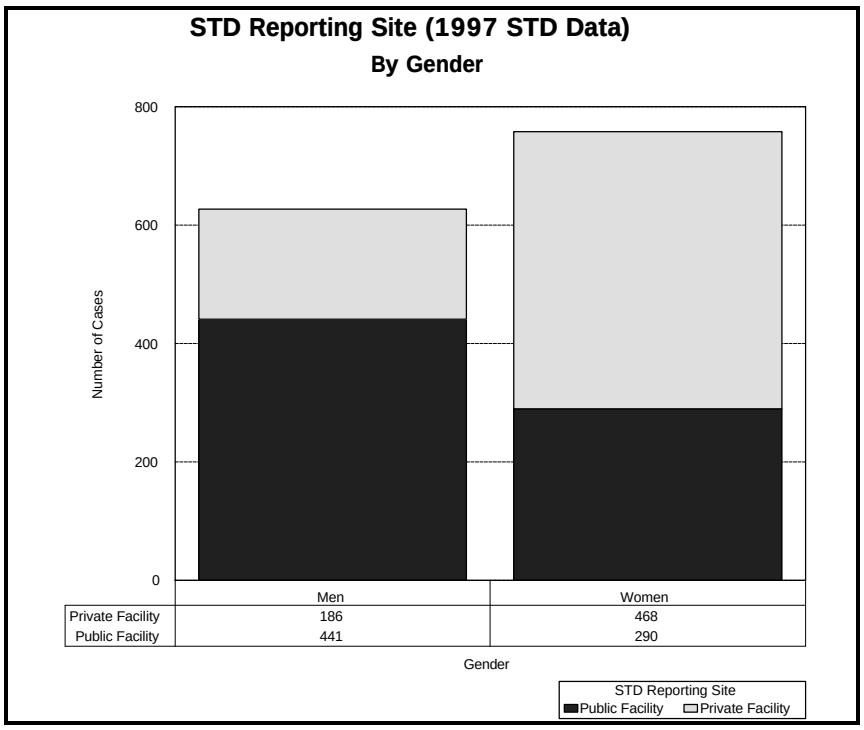
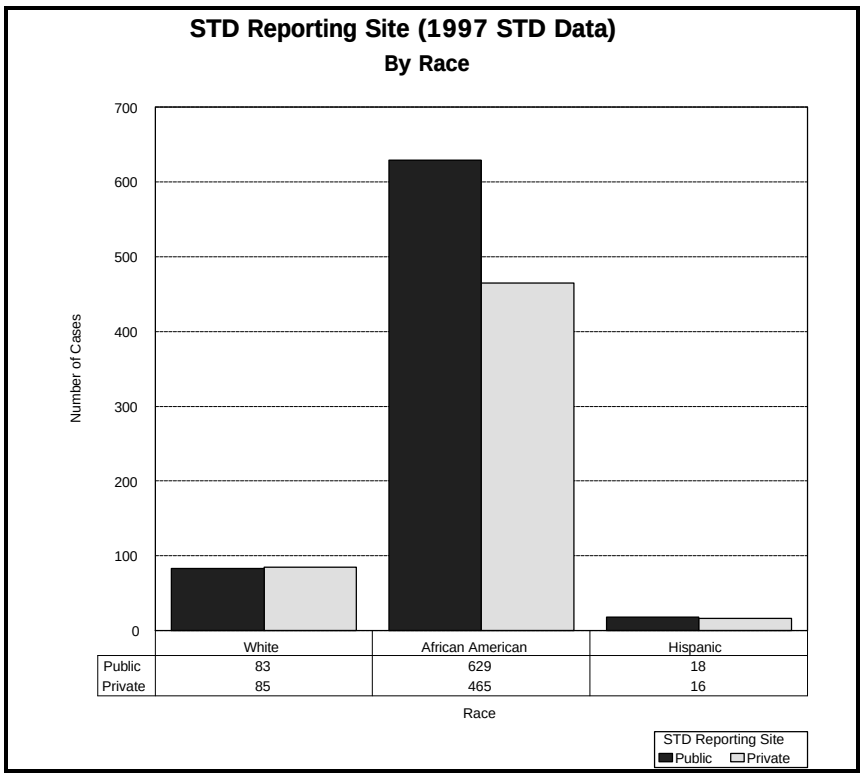
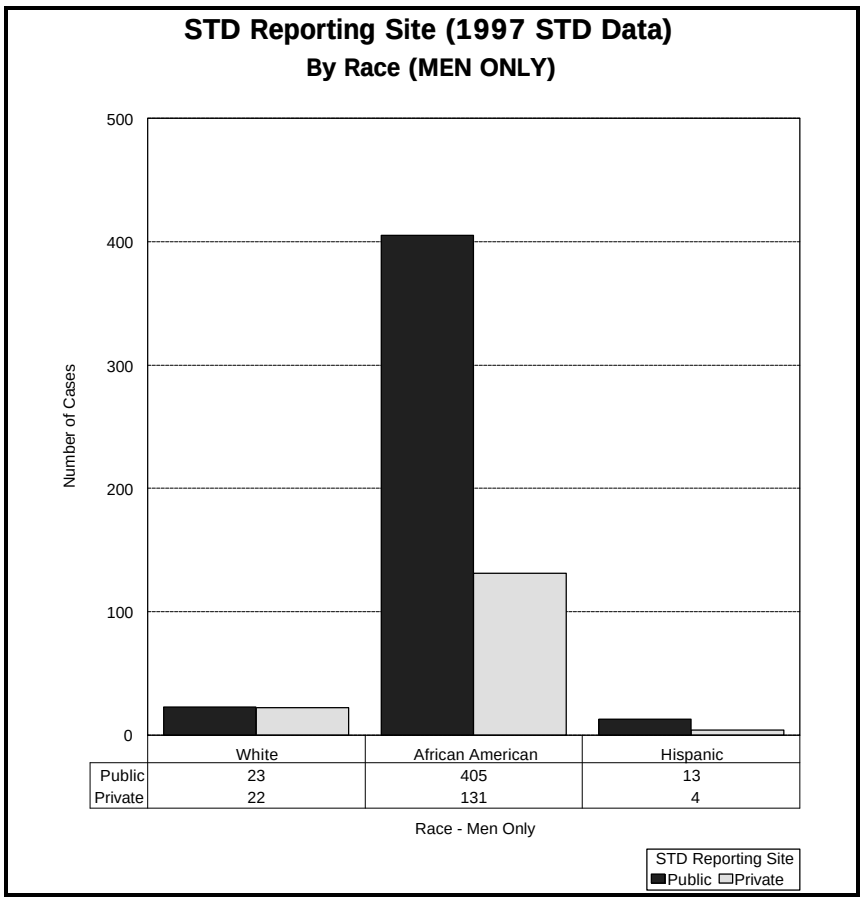


Figure 3-7



With regard to race minorities are most likely to rely on public facilities for their STD testing. As indicated in Figure 3-7 (above), while fewer than half of Caucasian Delawareans who were diagnosed with an STD were identified by a public facility (n=83), more than half of both African Americans (n=629) and Hispanics (n=18) appear to have been diagnosed at a public STD testing facility. It should be noted, however, that in 1996, roughly two-third of minorities were tested at a public site. One possible explanation for this shift may be attributed to the fact that fewer New Castle County and City of Wilmington residents relied on public facilities in 1997.

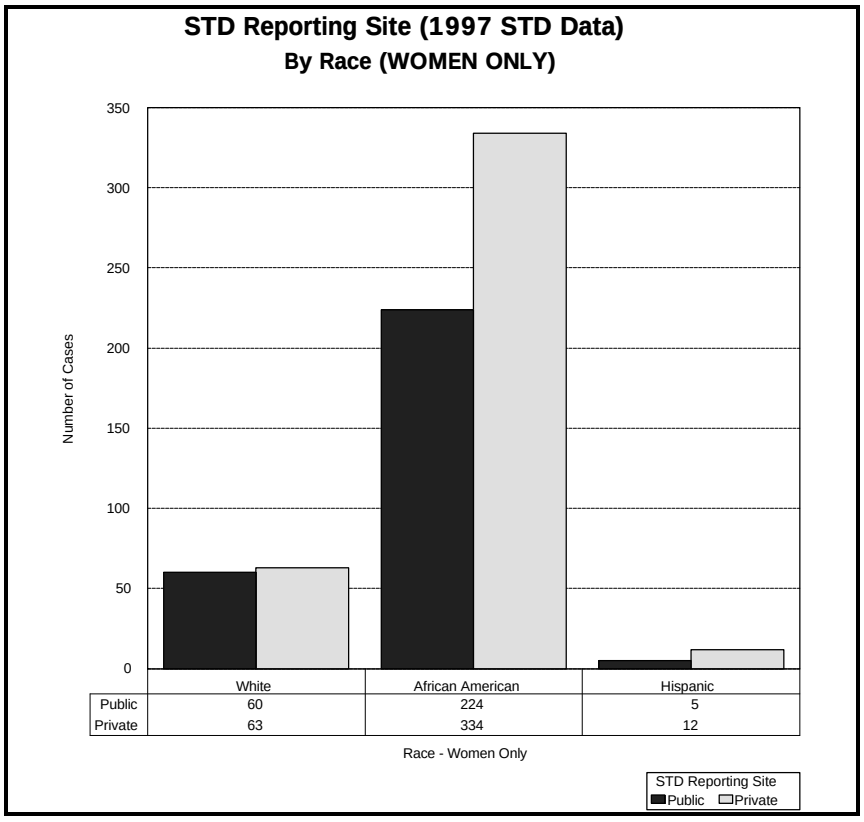
Figure 3-8



While Caucasian men appear to be as likely as Caucasian women to use public testing facilities, it is interesting to note that African American men are nearly twice as likely as their female counterparts to use a public testing facility. As highlighted in Figure 3-8 (above), while three-quarters of African

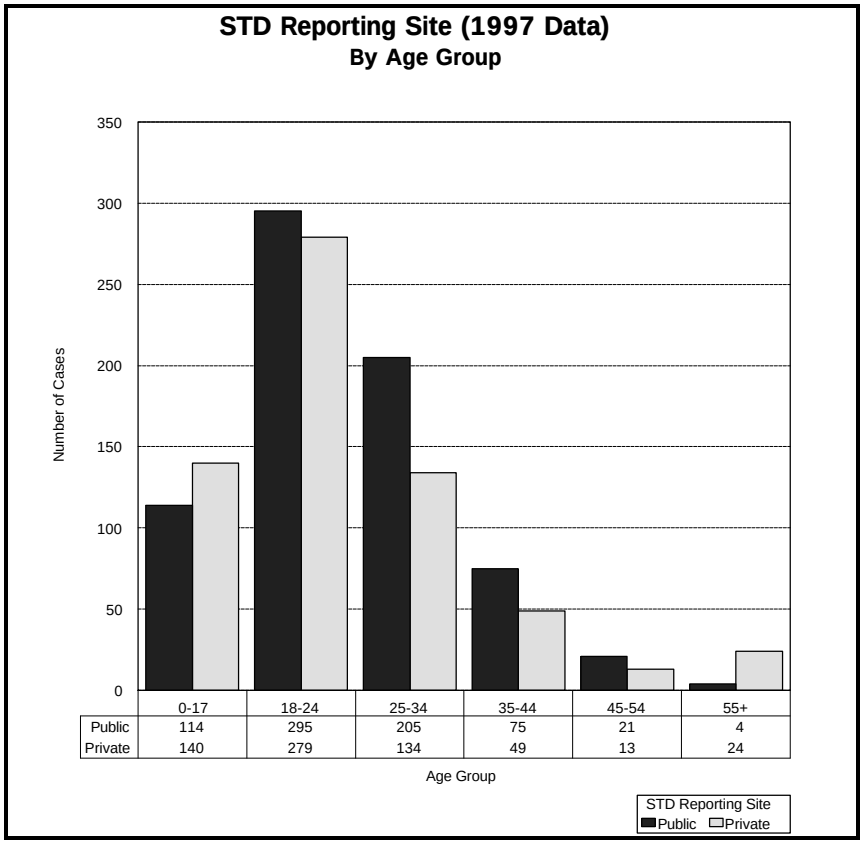
American men were identified by a public reporting site, only 40 percent of African American women were. Hispanic men are roughly 2.5 times more likely than their female counterparts to use public facilities. Seventy-six percent of the men were identified by such a site. In contrast, only 29 percent of Hispanic women were diagnosed by a public facility.

Figure 3-9



It is interesting to note that 18-24 year-olds appear to be somewhat less likely to rely on public testing sites. Whereas in 1996 more than 55 percent were tested at a public facility, only about half were in 1997. Conversely, it should also be pointed out that 25-54 year-olds are somewhat more likely to rely on public facilities. In 1996, roughly 55 percent of 25-54 year-olds were tested at a public facility. In 1997, over 60 percent of were tested at a public site.

Figure 3-10



Gonorrhea

Gonorrhea is the most often reported STD. It, unlike most other STDs, is more prevalent among women than men. In fact, incidence rates among African American women are three times higher than those found among African American men.

The young are especially at-risk. In 1994, the nationally reported gonorrhea incidence rate among teen girls was 79.3 (per 100,000). Among teen boys, it was 19.4.

According to Delaware's Notifiable Disease Surveillance System, 1,273 gonorrhea cases were reported in 1997. This represents a 13 percent ***decrease*** from the previous year. Of the cases reported in 1997:

- 1226 = Uncomplicated Gonorrhea
- 30 = Gonorrhea PID
- 17 = Antibiotic Resistant Gonorrhea

As in 1996, nearly half (n = 624) of all 1997 gonorrhea cases reported involved City of Wilmington residents. Twenty percent were reported in Sussex County. Respectively, about 15 percent of the cases reported in 1997 were in New Castle and Kent counties.

TABLE 3-3

Gonorrhea Diagnoses by Type & Location (1997)

Gonorrhea Diagnosis					Percent of Cases
	Wilmington	Balance of NCC	Kent Cnty	Sussex Cnty	
Uncomplicated Gonorrhea	599	183	193	251	96.3%
Gonorrhea PID	15	3	5	7	2.4%
Antibiotics Resistant	10	0	6	1	1.3%
Total Number of 1997 Gonorrhea Cases	**624**	**186**	**204**	**259**	**---**
% of Total Number of 1997 Gonorrhea Cases	**49.0%**	**14.6%**	**16.0%**	**20.3%**	100.0%

Source: Center for Applied Demography & Survey Research, University of Delaware

It is also worth noting that the number of gonorrhea incidences reported represent residents of a relatively low number of Delaware communities. In fact, when reviewing 1997 gonorrhea incidence by zip code, it was noted that 741 gonorrhea cases (58%) represent Delawareans from just six of 68 zip codes. (See Table 3-4, below)

TABLE 3-4

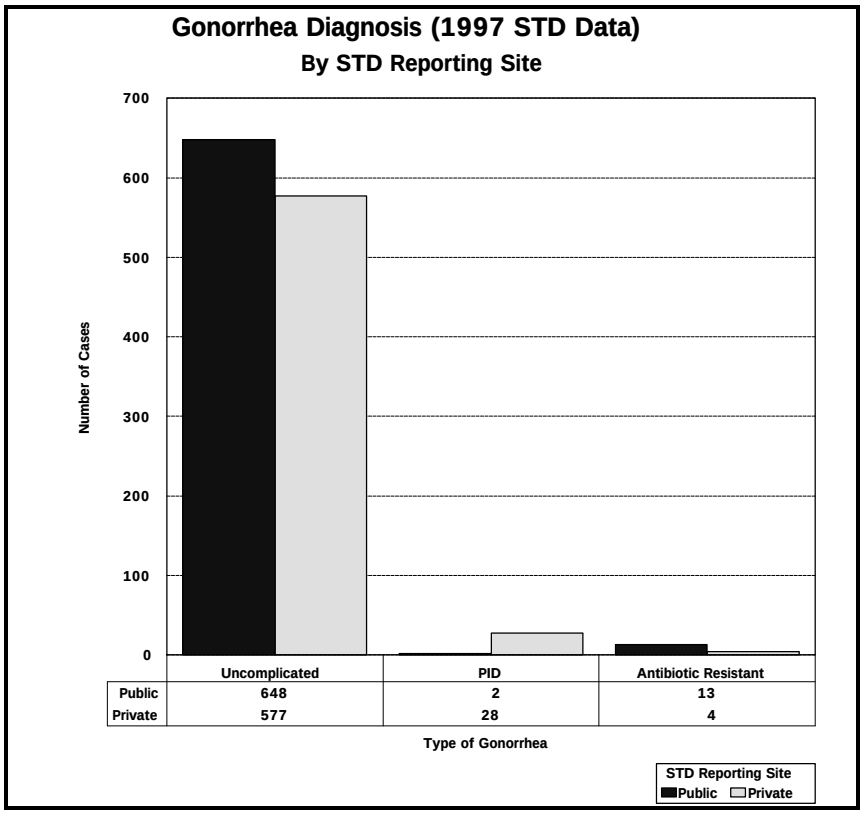
Zip Codes with High Gonorrhea Incidence (1997)

Zip Code	Community Affected	Number of Cases	% of Total Number of 1997 Gonorrhea Cases
19802	Wilmington	272	21.4%
19801	Wilmington	157	12.3%
19805	Elsmere	112	8.8%
19901	Dover	75	5.9%
19720	New Castle	73	5.7%
19973	Seaford	52	4.1%

Source: Center for Applied Demography & Survey Research, University of Delaware

Fewer than 50 gonorrhea cases were reported in any of the other 62 Delaware zip codes. In fact, fewer than 15 gonorrhea cases were identified in most Delaware communities. For a complete view, refer to the maps at the end of this section.

Figure 3-11



It is interesting to note that while all but two of the 30 (93%) gonorrhea PID cases were identified by private reporting sites, uncomplicated and antibiotic resistant gonorrhea cases were more likely to be identified by a public reporting site. As noted above, 53 percent of Delaware's uncomplicated gonorrhea cases and 76 percent of its antibiotic resistant cases were identified by public facilities.

As in 1996, female Delawareans are, again, about 10 percent more likely to have gonorrhea than their male counterparts. As illustrated in Figure 3-12 (below), 55 percent of gonorrhea cases reported in 1997 involved women.

African Americans account for the vast majority of gonorrhea cases identified in 1997. According to Figure 3-13 (below), more than eight of every ten Delawareans diagnosed, with gonorrhea were African American.

Figure 3-12

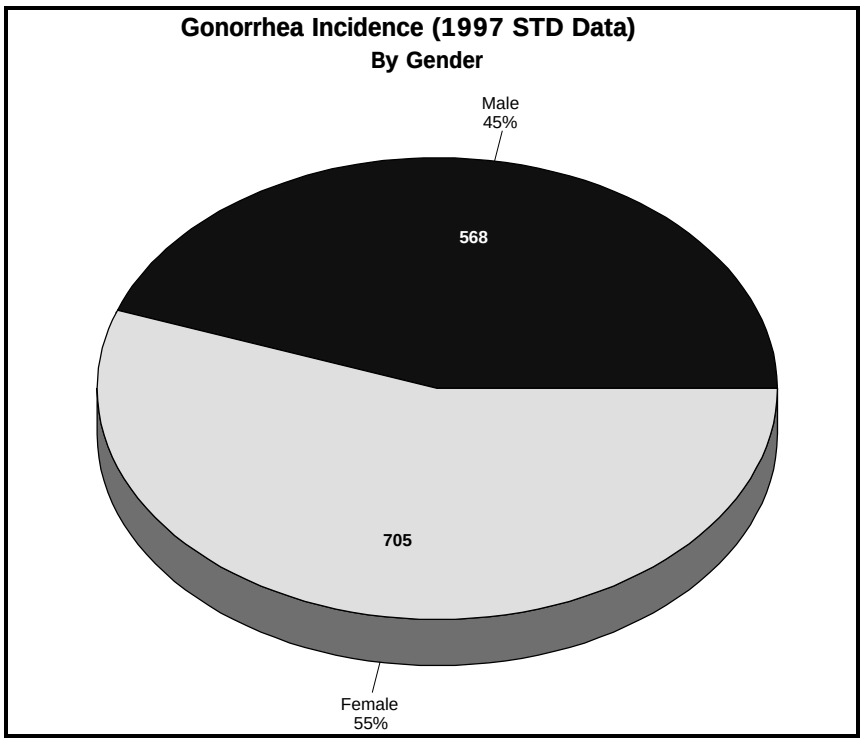
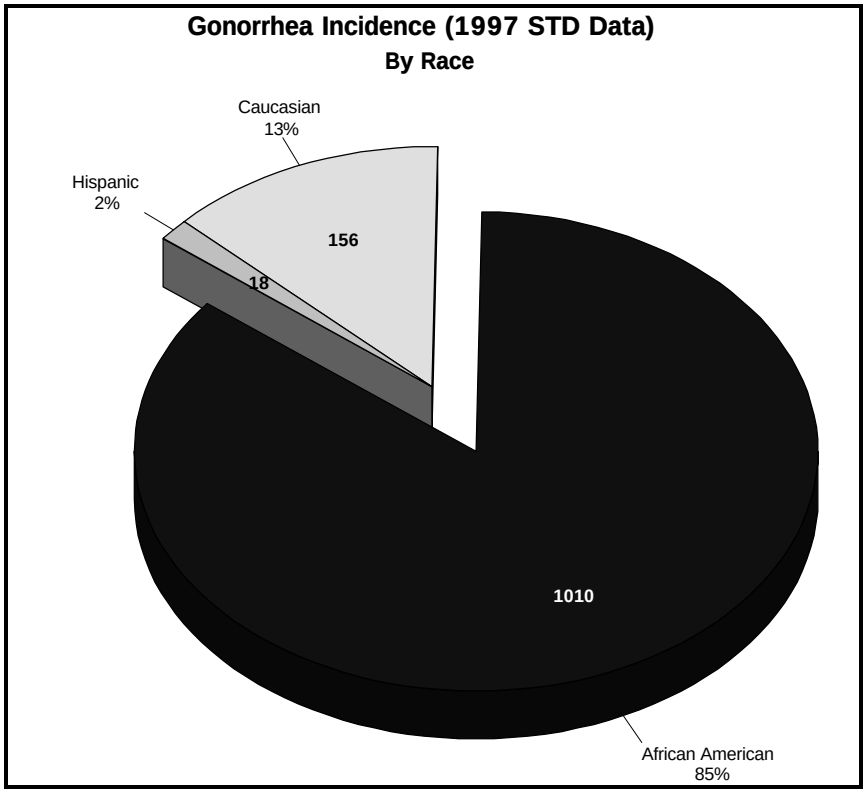


Figure 3-13



In contrast, only 13 percent of those diagnosed with gonorrhea were Caucasian; another two percent were Hispanic. These findings are similar to those found in 1996.

As was the case in 1996, it should be noted that, in 1997, while Caucasian women continue to be nearly three times more likely than their male counterparts to be diagnosed with gonorrhea, African American women still appear to be no more likely than their male counterparts to be diagnosed (see Figures 3-14 & 3-15, below). Unlike the previous year, however, in 1997, Hispanic women were three times more likely than men to have gonorrhea. In 1996, Hispanic women were as likely as their male counterparts to have gonorrhea.

Figure 3-14

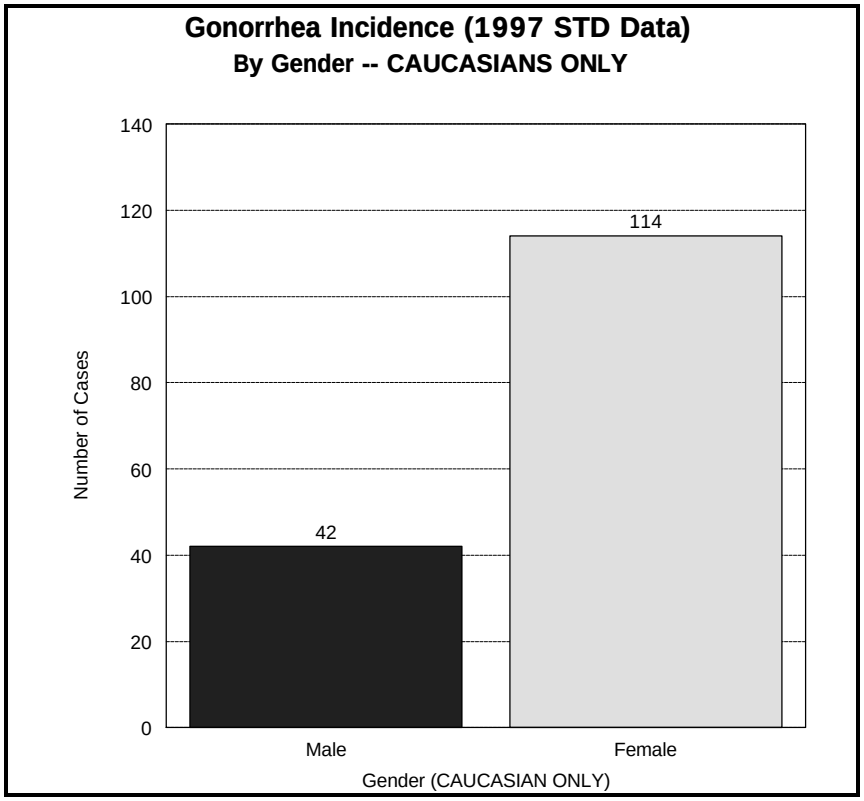
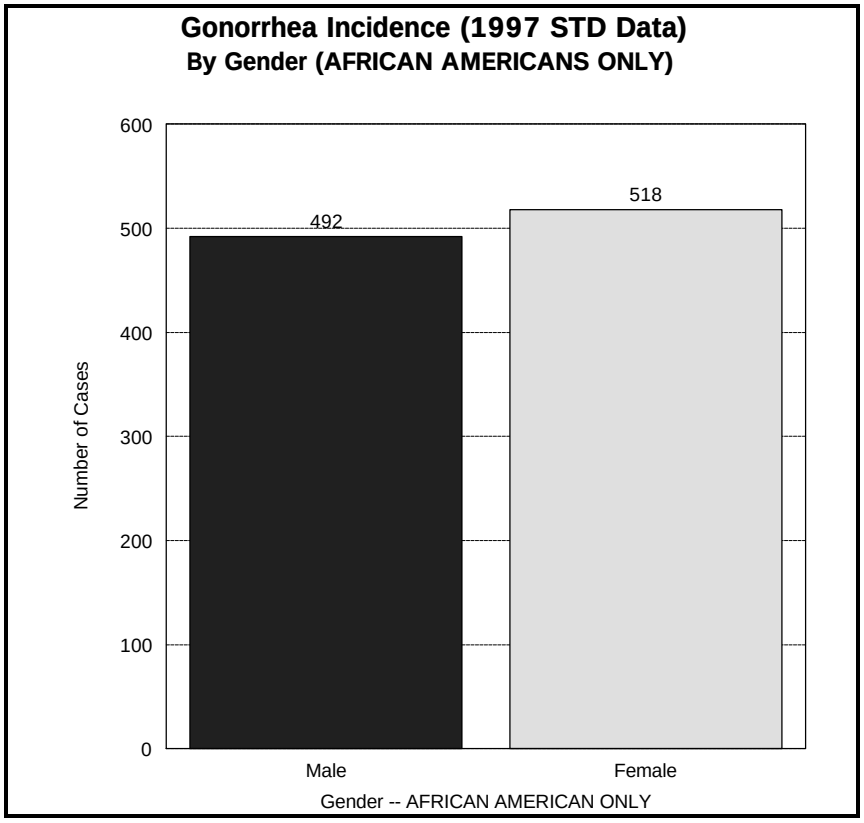


Figure 3-15



Young Delawareans are, by far, most likely to have been diagnosed with gonorrhea in 1997. As is highlighted in Table 3-5 (below), those under 34 account for 90 percent of the gonorrhea cases identified. In fact, 18-24 year-olds, alone, account for almost half of Delaware's identified gonorrhea cases. These results are comparable to those reported in 1996.

TABLE 3-5

Gonorrhea Incidence by Age Group (1997)

Age Group	Number of Gonorrhea Cases	Percent of Gonorrhea Cases
0-12	3	0.2%
13-15	74	5.9%
16-17	175	14.0%
18-24	568	45.4%
25-34	303	24.2%
35-44	87	7.0%
45-54	21	1.7%
55-64	2	0.2%
65+	18	1.4%
TOTAL	1251	100.0%

Source: Center for Applied Demography & Survey Research, University of Delaware

Syphilis

In 1997, 113 syphilis cases were reported in Delaware. This is a roughly nine percent ***decrease*** when compared to the number of cases reported in 1996. Of those reported in 1997, 45 percent were identified in Sussex County. Another 27 percent were reported in the City of Wilmington. Of the remainder, 13 percent were identified as living in New Castle County (excluding Wilmington); 14 percent live in Kent County.

Interestingly, although numbers are too small to be considered statistically significant, the City of Wilmington experienced a 34 percent *decrease* in the number of syphilis case reported, when compared with cases reported in 1996. It should also be noted than unlike most of the state, which experienced a decline in the number of syphilis cases reported, Sussex County experienced a sharp *increase* (+19%). In 1996, 43 syphilis cases were reported. In 1997, 51 cases were identified in Sussex County.

TABLE 3-6

Syphilis Diagnoses by Type & Location (1997)

Syphilis Diagnosis	Wilmington	Balance of NCC	Kent Cnty	Sussex Cnty	PERCENT
Primary Syphilis	0	0	0	12	10.6%
Secondary Syphilis	0	1	2	7	8.8%
Early Latent Syphilis	9	1	11	16	32.7%
Late Latent Syphilis	22	13	3	14	46.0%
Congenital Syphilis	0	0	0	2	1.8%
Total Number of 1997 Syphilis Cases	31	15	16	51	----
% of Total Number of 1997 Syphilis Cases	27.4%	13.3%	14.2%	45.1%	100.0%

Source: Center for Applied Demography & Survey Research, University of Delaware

It should be noted that nearly 60 percent of Delaware's 113 reported syphilis cases can be found in just five zip codes. (See Table 3-7, below)

TABLE 3-7

Zip Codes with High Syphilis Incidence (1997)

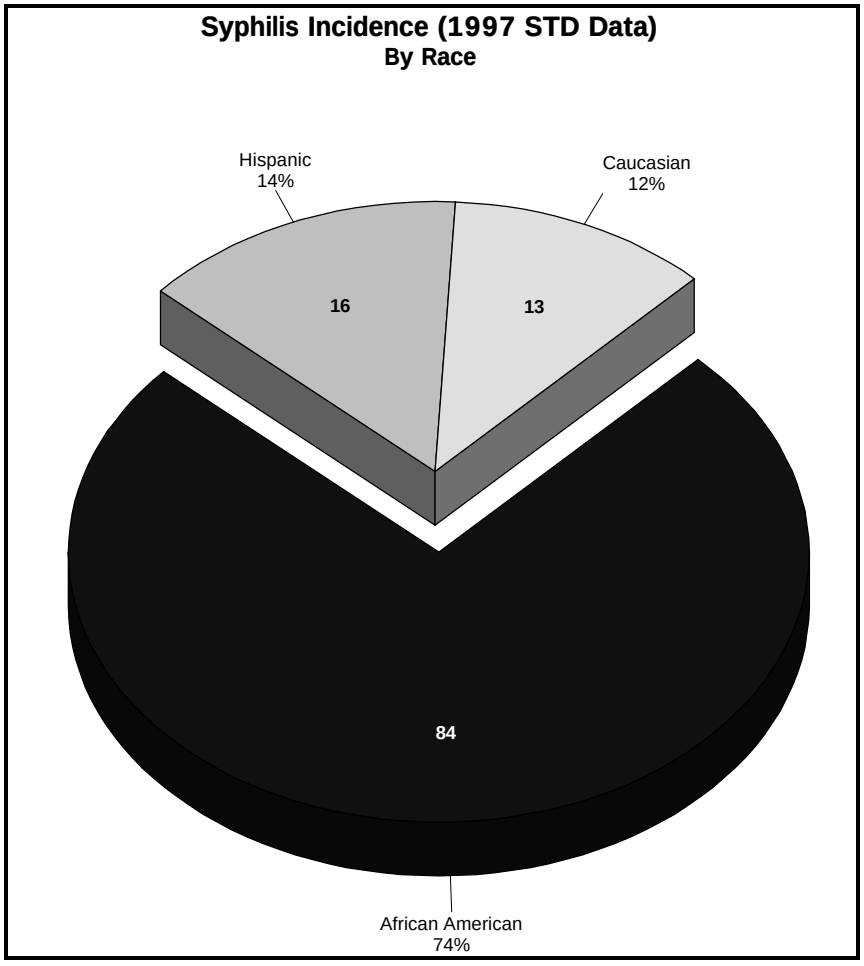
Zip Code	Community Affected	Number of Cases	% of Total Number of 1997 Syphilis Cases (N=113)
19805	Wilmington	13	11.5%
19933	Bridgeville	13	11.5%
19973	Seaford	13	11.5%
19720	New Castle	10	8.8%
19801	Wilmington	10	8.8%
19802	Wilmignton	7	6.2%

Source: Center for Applied Demography & Survey Research, University of Delaware

Fewer than eight syphilis cases were reported in each of the remaining 64 Delaware zip codes. Most reported having fewer than two cases. For a complete view refer to the maps at the end of this section.

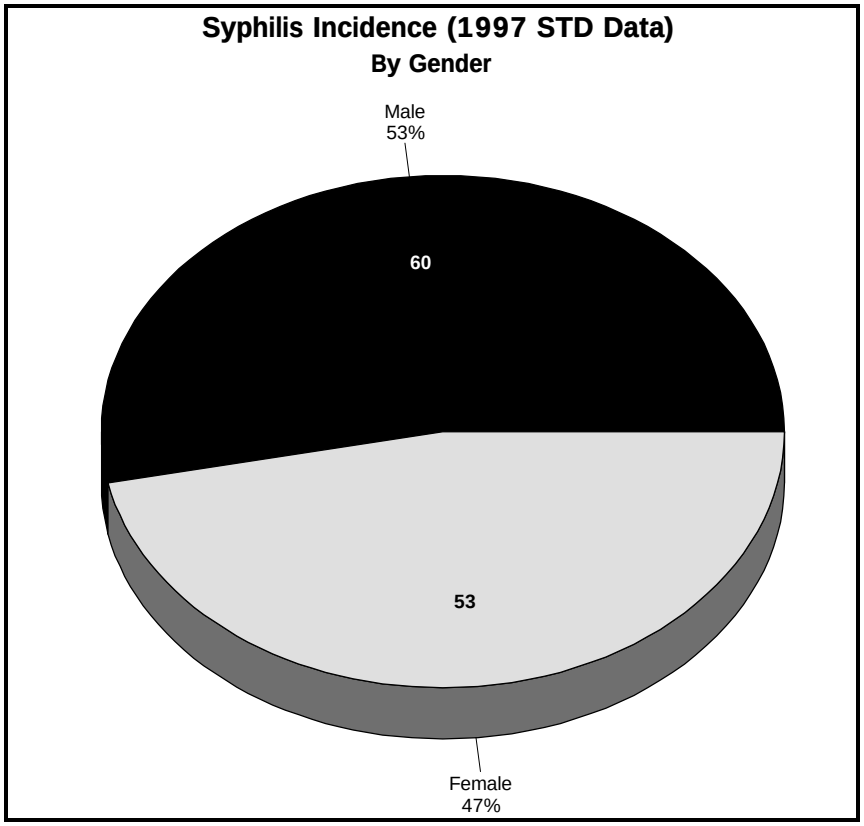
One reason why a disproportionate number of syphilis cases were reported in Sussex County may be related to the fact that Hispanics appear to be disproportionately more likely to be affected. As highlighted in Figure 3-16 (below), in 1997, Hispanics were slightly more likely than Caucasians to be identified as having syphilis. Fourteen percent of the total cases reported involved Hispanics. About 12 percent of those identified were Caucasian. Seventy-four percent of all syphilis cases involve African Americans. These results are comparable to those found in 1996.

Figure 3-16



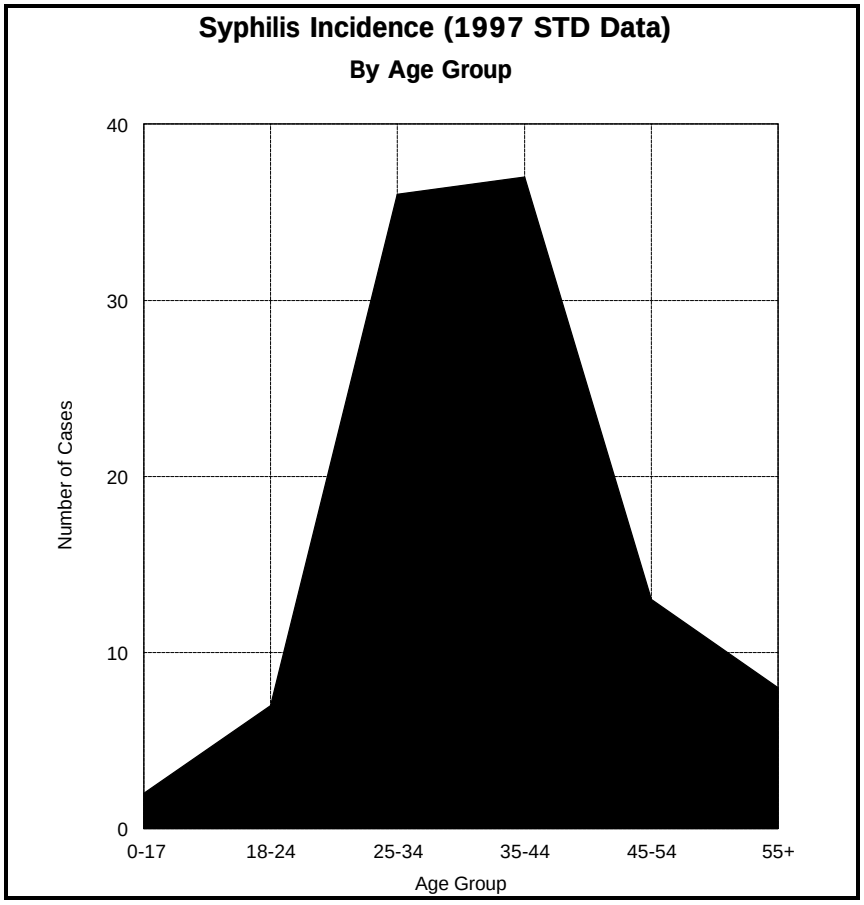
Men appear to be slightly more likely than women to be diagnosed with syphilis. According to Figure 3-17 (below), 53 percent of all identified cases involved men. In 1996, nearly 60 percent of the syphilis cases reported were male.

Figure 3-17



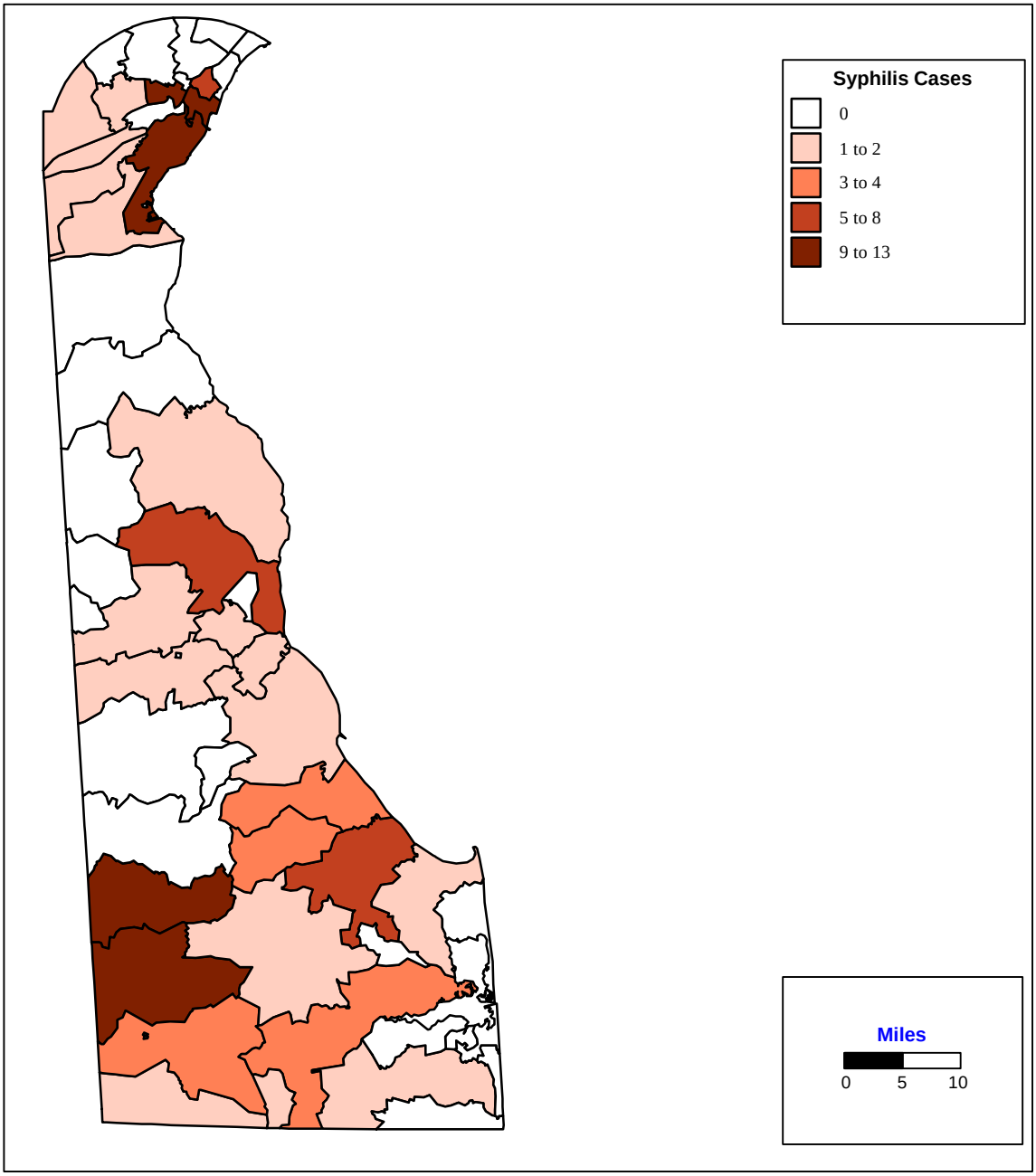
While gonorrhea is more likely to affect adolescents and young adults, syphilis appears to be more likely to affect middle-aged adults. As illustrated in Figure 3-18 (below), 84 percent of those diagnosed with syphilis were between the ages of 25 and 54. Over 70 percent were 25-44 years of age. Fewer than 10 percent of the cases reported involved an individual under age 25.

Figure 3-18


Syphilis Incidence (1997 STD Data)
By Age Group
Number of Cases
40
30
20
10
0
0-17
18-24
25-34
35-44
45-54
55+
Age Group

Delawareans Diagnosed with Syphilis

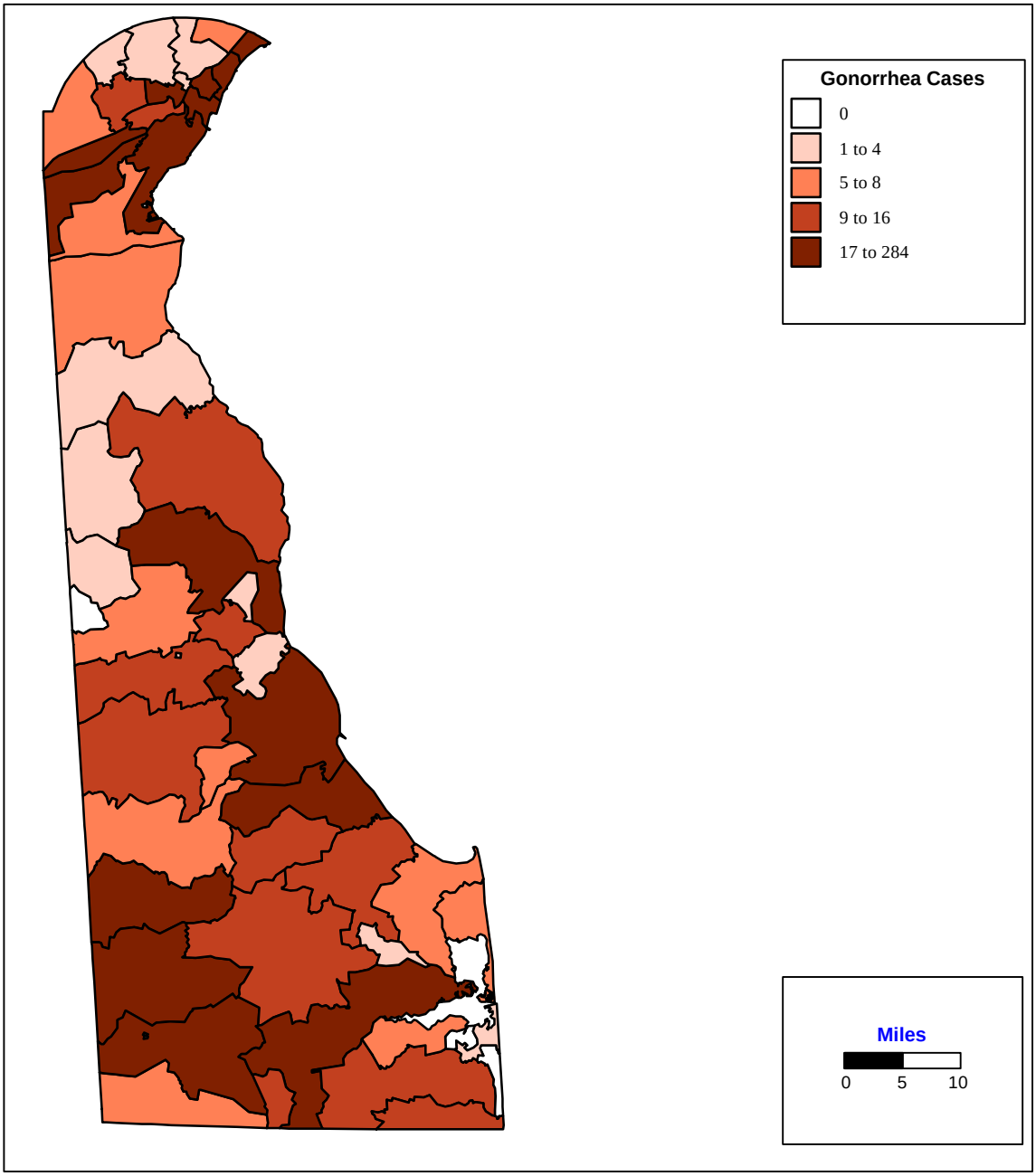
by Zip Code (1997)



Source: Center for Applied Demography and Survey Research, University of Delaware

Delawareans Diagnosed with Gonorrhea

by Zip Code (1997)



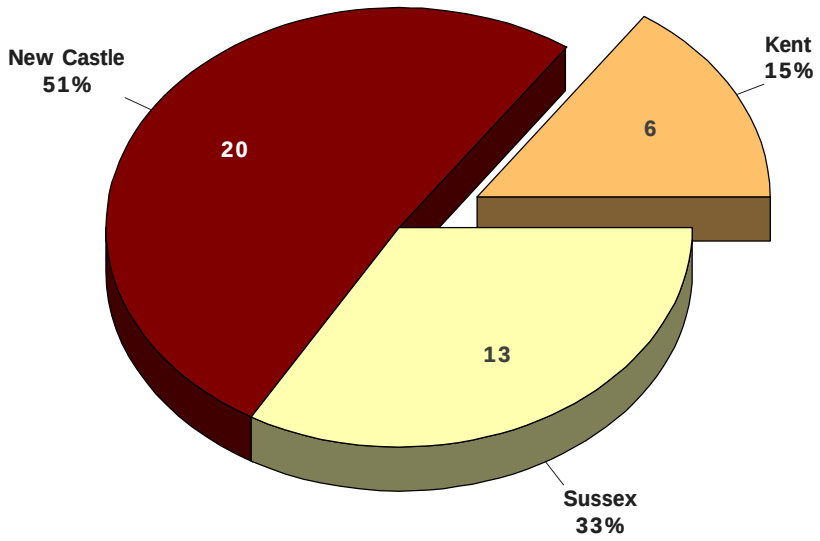
Source: Center for Applied Demography and Survey Research, University of Delaware

TUBERCULOSIS

Because it is believed that persons with tuberculosis (TB) are at increased risk of being HIV-positive, it is important to gain some understanding about those who have been diagnosed with TB.

In 1996, 43 TB cases were identified. Of them, 56 percent were identified in New Castle County. Another 23 percent were identified in Sussex County; 21 percent of Delaware's TB cases were identified in Kent County.

Figure 4-1
Persons Diagnosed with TB
by County (1997)



Source: Center for Applied Demography and Survey Research, University of Delaware

Interestingly, as highlighted in Table 4-1 (below), similar numbers of TB cases are reported in the first three-quarters. A much larger proportion (35.9%) is reported during the fourth quarter (October-December). These numbers, however, are small and thus are subject to a significant amount of variation. In 1996, 40% of the cases were reported in the second quarter.

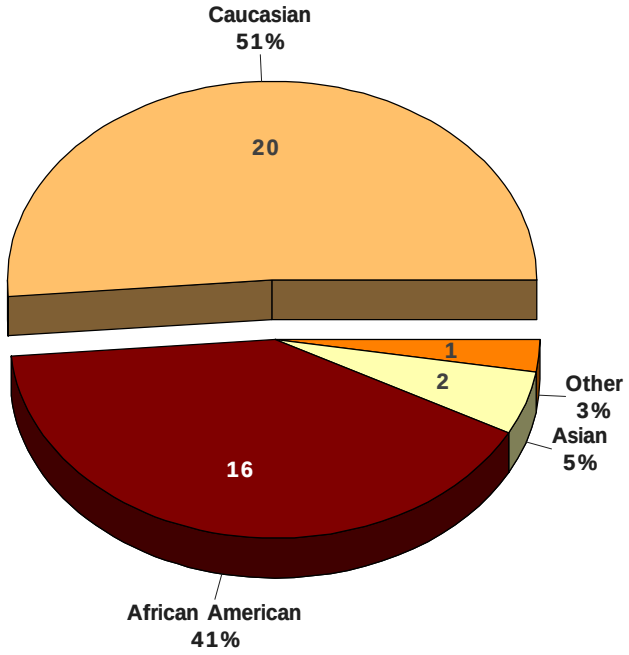
TABLE 4-1
TB Cases by Quarter (1997)

Quarter	Number of Cases	Percent
First (Jan-Mar)	8	20.5
Second (Apr-June)	9	23.1
Third (Jul-Sept)	8	20.5
Fourth (Oct-Dec)	14	35.9
TOTAL 1996 CASES	39	100.0

Source: Center for Applied Demography & Survey Research, University of Delaware

With regard to race, it should be pointed out that half of the people diagnosed with TB are minorities. Two of every five is African American (Figure 4-2, below).

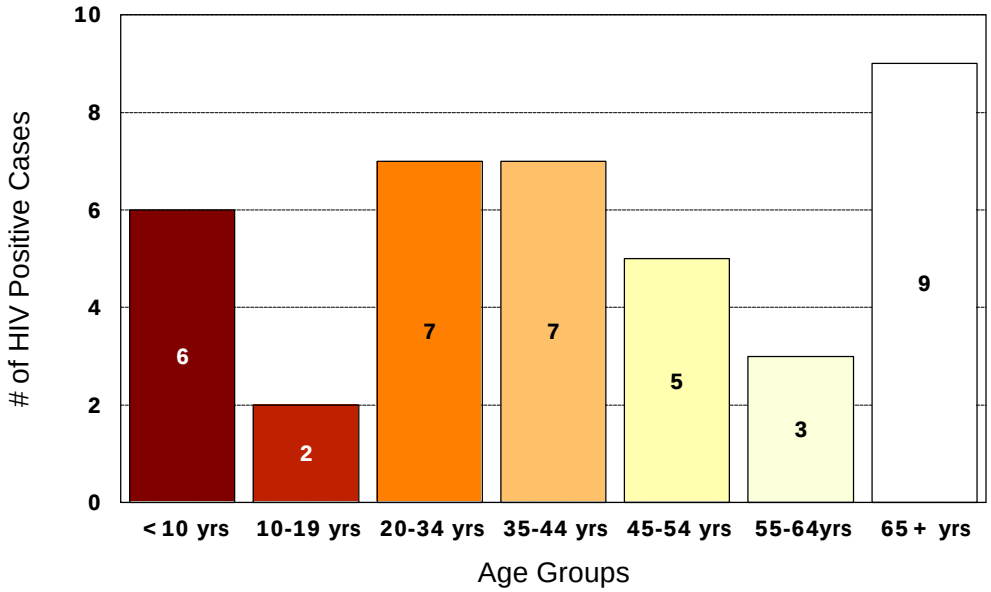
Figure 4-2
Persons Diagnosed with TB
by Race (1997)



Source: Center for Applied Demography and Survey Research, University of Delaware

Almost 62% (n=24) of the tuberculosis cases reported in 1997 involved men. This is slightly lower than the proportion observed in 1996.

Figure 4-3
Persons Diagnosed with TB
by Age Group (1997)



Source: Center for Applied Demography and Survey Research, University of Delaware

As illustrated in Figure 4-3 (above), the TB cases reported in 1997 are distributed similarly across the age spectrum. Of the 39 cases identified, 18 percent involved individuals ages 20-34. Another 23 percent involved persons 65+ years and 20 percent of TB cases involved children and adolescents.

TABLE 4-2
TB Cases by Identified Risk Factor (1997)

Identified Risk Factor	Number of Cases	Percent of Cases (N=39)
HIV-positive[4]	4	10.3
Homeless	0	0.0
Resident of Correctional Facility	1	2.6
Reside in Long-Term Care Facility	6	15.4
IDU	1	2.6
Drugs (Non-IDU)	2	5.1
Excessive Alcohol Intake	3	7.7

Source: Center for Applied Demography & Survey Research, University of Delaware

[4] It should be noted that only 37% (n=16) of those identified with TB appear to have ALSO been screened for HIV. Thus the number of people with TB who are also HIV-positive could be higher than reported.

Because certain lifestyle behaviors are believed to increase one's risk of contracting tuberculosis, those identified as having the disease appear to have been asked a series of questions designed to determine what risks they may have taken which increased their infection risks. They appear to have been asked, for instance, if they were homeless at any point during the previous year. Additional questions looked at such factors as: (a) correctional facility residency, (b) long-term care facility residency, (c) injected drug use (IDU), (d) other drug use (non-IDU), (e) "excessive alcohol" intake patterns and (f) occupation. Several clients also appear to have been screened for the AIDS-virus. Results are highlighted in Table 4-2, above.