



*Epidemiologic
Profile of*

**HIV and
AIDS**

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CONNECTICUT DEPARTMENT OF
PUBLIC HEALTH

Keeping Connecticut Healthy

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Executive Summary

Description of the State of Connecticut: The Connecticut population is about 1.3% of the total US population. Ninety five percent of Connecticut residents live within metropolitan areas. The 2000 census found that 77.5% of Connecticut residents were White, 8.7% were Black, 0.2% were American Indian, 2.4% were Asian, and 9.4% were Hispanic. Connecticut residents had higher incomes, lower unemployment rates, and were more highly educated than United States residents as a whole. Other data shows high rates of teen pregnancy and substance abuse. There is a growing need for services for the homeless, and treatment for mental illness and substance abuse services. This suggests that there are a number of populations at risk of contracting HIV.

Epidemiologic Trends in HIV and AIDS in Connecticut: In the year 2000, 1.4% of the AIDS cases in the United States, were reported among Connecticut residents. Connecticut ranks 18th among states in the number of reported AIDS cases and 8th in the rate of AIDS cases per 100,000 population. AIDS cases diagnosed in Connecticut in 1999 are largely among men (69%). However, cases diagnosed among women continue to grow from 26% of cases reported in 1995 to almost 38% of cases reported in 2000. The percentage of AIDS cases reported among minority groups is disproportionately high, with 30.7% of cases reported in 1999 in Connecticut reported among Blacks and 29.3% reported among Hispanics. More than 75% of cases reported in Connecticut in 1999 were reported among individuals aged 30-49. Since the new antiretroviral treatments became available in 1996, HIV infected persons have been living longer and healthier. As a result of the highly active antiretroviral (HAART) therapy, the number of AIDS cases reported to the Department of Public Health has declined dramatically from 1,763 in 1993 to 600 in 1999. Similarly, deaths in persons previously diagnosed with AIDS in Connecticut have decreased by 62% from 1995 to 1999. AIDS cases vary from one CPG planning region to another – for instance, in northwest Connecticut cases are largely among white men who have sex with men, while in south-central Connecticut cases are largely among African American IDUs. Cases in the state are concentrated in the state's three largest cities: Bridgeport, Hartford and New Haven.

HIV and AIDS in Behavioral Risk Groups: The largest risk groups among AIDS cases reported in Connecticut in 1999 are injection drug uses (IDU) (37%), followed by MSM (20%) and heterosexual transmission (19%). Cases diagnosed among MSM have begun to shift in recent years to include a higher percentage of cases among MSM of color – paralleling the broader shift of the epidemic into minority populations. IDUs continue to represent the largest percent of cases in the state – and almost 70% of cases diagnosed among IDUs are reported in the state's largest cities. Heterosexual women represent a growing proportion of cases diagnosed in the state.

HIV and AIDS in other populations: There are a number of populations on which adequate data to assess HIV risk is not available. These include smaller groups of racial and ethnic minorities such as Native Americans, Asians, transgendered community, the homeless, the deaf and hard of hearing, and the mentally ill. There are populations about which we have additional data due to routine screening such as blood donors, and pregnant women. Perinatal surveillance indicates that the number of pregnant women delivering live newborns has plateaued and that the number of infected newborns has decreased. Screening of blood donations found very low seroprevalence (0.05%).

Other Data on HIV and AIDS: Roughly 1% of publicly funded counseling and testing clients in Connecticut are HIV seropositive. Groups showing the highest seroprevalence rates are Blacks (1.5%), Hispanics (1.5%), MSM/IDUs (6.5%), MSM (3.5%) and heterosexual IDUs (3%). While sexually transmitted disease rates have fallen across the board, rates among youths between 20 and 24 year old, continue to be high. High rates of Hepatitis C among IDUs seeking counseling and testing suggest that IDUs must often contend with both HIV and HCV.

I. Introduction

The objective of the Epidemiology Profile is to provide the State of Connecticut HIV/AIDS Community Planning Group (CPG), and other interested parties, with a comprehensive understanding of the impact of HIV on the State. This profile serves as a starting point in the development of a needs assessment and gap analysis that ultimately will allow the CPG to set priorities and make the best possible decisions for targeting HIV prevention activities. Its intent is to describe the nature of the HIV/AIDS epidemic in Connecticut based on indicators of HIV/AIDS incidence, prevalence and risk using AIDS cases data, counseling and testing statistics, STD rates, and other epidemiological markers.

The Connecticut CPG has divided the state into seven regions to facilitate its HIV Prevention Planning efforts. These regions, which cover Connecticut's eight counties, include the Northwest Region (Litchfield County), Northcentral Region (Hartford County), Northeast Region (Tolland and Windham Counties), Southwest Region (Fairfield County), Southcentral Region (Middlesex and New Haven Counties), and Southeast Region (New London County). The Department of Correction comprises a region all to itself. The largest cities in the state, which are epicenters of the epidemic (Hartford, New Haven, Bridgeport, Stamford, Waterbury and Danbury), are distributed throughout the regions.

This profile uses epidemiological data as its foundation. However, it also recognized that knowledge of the effectiveness of HIV prevention activities, an understanding of the community, and knowledge of local values and beliefs are all essential factors that will ultimately be used to make important decisions and develop a comprehensive HIV Prevention Plan. Data sources for this report are listed in the Appendix. In addition, the following Department of Public Health data files are used:

AIDS Case Data: Data on AIDS cases are a lagging indicator of HIV risk behavior since individuals diagnosed with AIDS may have been infected with HIV many years prior. Hence, AIDS case data may indicate HIV risk behavior that happened in previous years. Moreover, AIDS case reporting can take six to twelve months, from time of diagnosis to time of report. Therefore, reporting can not be considered complete for any given point in time until a year later. In addition, analysis of AIDS case data was affected by the change in the definition of AIDS in 1993, which led to a peak immediately followed by a drop in the number of cases diagnosed.

Despite these limitations, AIDS case reports contain much valuable information, not only about the race, age, gender, and geographic location of the person living with AIDS; but also about mode of transmission. A treating physician or staff member most often completes AIDS case reports. Therefore, AIDS case reports are not helpful for populations who may not seek medical care for their HIV disease. Additional cases of AIDS in Connecticut are found through death certificates and medical records review conducted by the Department of Public Health's AIDS epidemiologists.

Since private lab reporting of positive HIV tests in Connecticut includes few demographic indicators and no unique identification, AIDS case reports offer the most complete information on HIV risk in the demographic categories most useful to HIV prevention planning. Hence this profile relies heavily on this data.

HIV Counseling and Testing Data: HIV counseling and testing data is collected at all DPH publicly funded test sites. Because no unique identifiers are collected on the virology form used for the data set, individuals are counted each time they come in for a counseling session. In addition, the counseling and testing sample, may not be representative of the larger Connecticut population. Therefore, the seroprevalence (percent of positive test results) cannot be associated with the seroprevalence in the population at large. For instance, while 1.3% of clients seeking testing in 2000 tested seropositive it can not be assumed that 1.3% of people statewide are HIV positive.

Despite its limits, HIV counseling and testing data offers a great deal of information on individuals who believe themselves to be at risk and seek counseling and testing to minimize that risk.

Sexually Transmitted Diseases Data: In Connecticut gonorrhea, chlamydia and syphilis are all reportable STDs. Individuals diagnosed with these diseases are at increased risk of contracting or spreading HIV. This is true both because HIV can be spread through the same unprotected sexual contact that spreads STDs, and because the presence of an STD can facilitate HIV transmission both by increasing viral load and by providing ulcerations through which HIV can pass. STD case data, while well reported, is limited, the data collected does not include some information important for HIV planning such as gender of sexual partners, or drug use.

Co-infection with Hepatitis C or Tuberculosis (TB): Hepatitis C is a good marker for injection drug use risk as both HIV and Hepatitis C are bloodborne pathogens. Between April and September 1999, the Connecticut Department of Public Health conducted a seroprevalence survey of HCV among individuals who were attending HIV counseling and testing at 38 non-drug treatment sites and 24 drug-treatment sites. Two thousand, one hundred and thirty three leftover blood samples collected from those HIV counseling and testing facilities were tested anonymously for the HCV antibody. The study found that the prevalence of HCV infection was highest among injection drug users. Although there has been a decline in TB cases in Connecticut from 1999 to 2000, the percentage of TB cases reported recently among foreign-born persons has increased. Moreover, it is likely that there is an underestimate of the true HIV prevalence among persons with TB in Connecticut since not all TB patients are tested for HIV infection and not all HIV test results are reported to the TB Control Program.

The Epidemiologic Profile begins in Section II with the description of the demographic characteristics of the State of Connecticut that includes background information on sub-populations at high risk for HIV infection. Section III includes information on general epidemiological trends in AIDS incidence, prevalence, and mortality. Section IV describes HIV and AIDS with respect to behavioral risk groups. Section V describes the epidemiology of HIV and AIDS among other populations known to be at risk for HIV infection who do not fall exclusively within one of the behavioral risk groups. Section VI includes other data that is important in understanding the State of Connecticut's HIV/AIDS epidemic. Finally, a glossary of terminology is included as an appendix for persons not familiar with epidemiological terms. Sources of data included in this document are also attached. Please note that tables and graphs may include data from different time periods that were available at the time of the writing.

The Connecticut Department of Public Health AIDS Division, prepared this edition of the Epidemiological Profile in collaboration with the HIV/AIDS Surveillance and Perinatal Infectious Disease Prevention program, the Sexually Transmitted Diseases program and the Tuberculosis Control program. Because this report will be up-dated on a regular basis, we urge readers to contact us with comments, suggestions or criticisms so that we can continue to improve the publication. Please forward all correspondence to:

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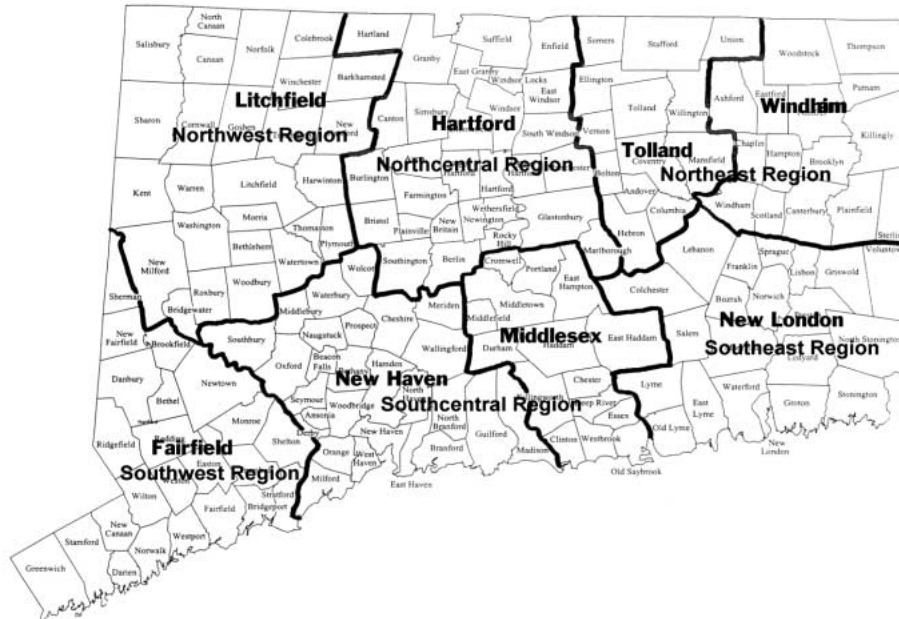
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II Description of the State of Connecticut

Geography: Connecticut occupies a land area of 4,845 square miles. In 1992, 99.5% of Connecticut consisted of non-federal land. The states land use was forested 57.3%, cropland 7.5%, pasture 3.6%, rangeland 0%, urban and built-up areas 26.6%, other 4.5%. Connecticut consists of 8 counties and 169 towns, 6 geographical Community Planning Group regions and 1 region comprising the Department of Correction Inmate population. The geographical areas are shown in Figure II-1

Figure II-1. Connecticut Towns, Counties, and CPG Regions



Population: Connecticut is considered a densely populated state, with a population density of 702.9 people per square mile. This compares with the total US population density of 79 people per square mile. The population of Connecticut was estimated by the U.S. Census Bureau to be 3,405,565 in 2000. This constitutes an increase of 3.6% since 1990 (Table II-1). Ninety five percent of the people live within metropolitan areas.

Age/Gender: The median age for residents of Connecticut is 34.4 years. Preschoolers (aged 0-4) account for 6.9% of the population. School-aged children between 5 and 17 years of age are 15.9 %, adults 18-64 years of age 63.6 %, and 13.6% of Connecticut residents are 65 or older. The State population is 48.5% male and 51.5% female. Twenty four percent of Connecticut's population is less than 18 years of age. The age cohorts of the population of Connecticut are shown in Figure II-2.

Growth Trends: The population of Connecticut increased by 3.6% between 1990 to the year 2000. This trend of increasing population size is prevalent across all racial and ethnic groups except for Whites, which, decreased by 4.2%. The most significant increases were seen in Hispanic groups (50.3 %), and Asians (67.8%). Blacks or African Americans increased by 13.3% during the same time period. These population changes are shown in table II-1. An important demographic trend in Connecticut and the U.S. is the overall "aging" of the population. The greatest impact will occur after the "baby-boom" generation reaches age 65 years and older (beginning around 2010). However, large increases in the "very old" (age 85 years and older) will occur prior to 2010, and continue thereafter.

Table II-1. Changes in the Composition of Connecticut Population 1990 and 2000

	1990		2000		Change	
	N	%	N	%	N	%
Non-Hispanic						
White	2,754,184	83.8%	2,638,845	77.5%	(115,339)	-4.2%
Black*	260,840	7.9%	295,571	8.7%	34,731	13.3%
Amer. Indian**	5,950	0.2%	7,267	0.2%	1,317	22.1%
Asian	48,616	1.5%	81,564	2.4%	32,948	67.8%
NHOPI***	498	0.0%	958	0.0%	460	92.4%
Other	3,912	0.1%	8,141	0.2%	4,229	108.1%
Hispanic****	213,116	6.5%	320,323	9.4%	107,207	50.3%
Total	3,287,116	100.0%	3,405,565	100.0%	18,449	3.6%

* Black or African American

** American Indian and Alaska Native

*** Native Hawaiian and other Pacific Islander;

**** Hispanic or Latino (of any race).

2000 data shown as one race. 74,848 (2.2%) individuals classified themselves in two or more races, 4,375 in three or more. Example, 295,571 are single race black, 318,619 are black in combination; 339,078 are black in combination with other race(s) and includes Hispanic black or African American.

Figure II-2. Population of Connecticut by Age Category -1999

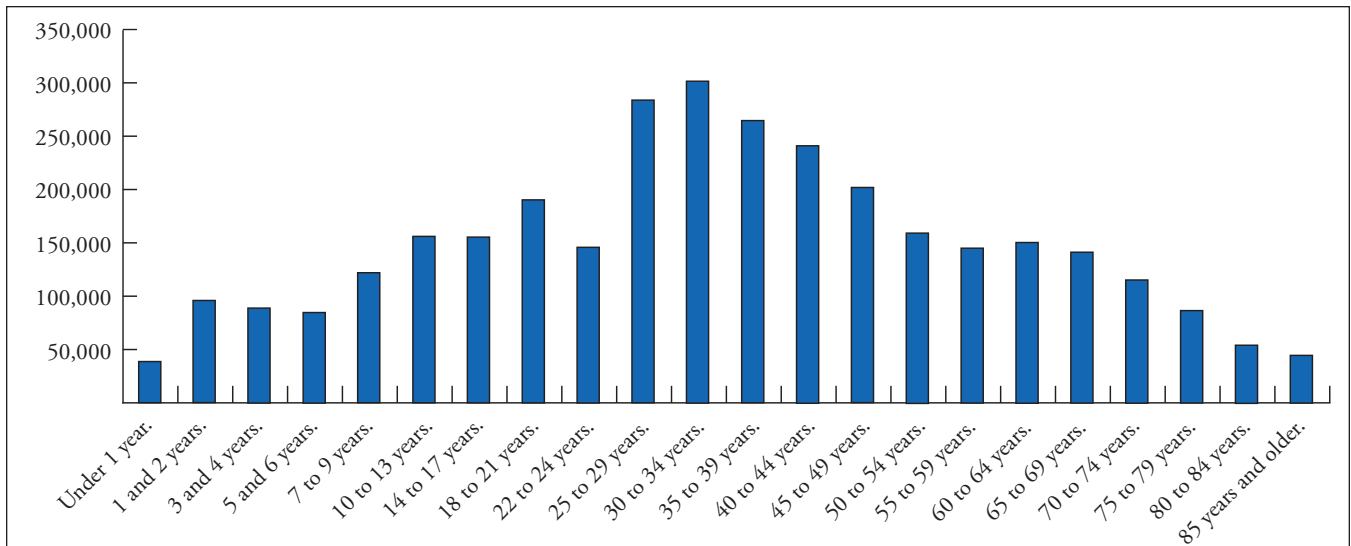
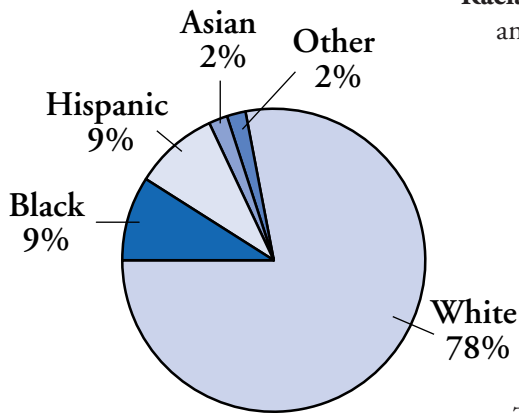


Figure II-3. Population of Connecticut by Race/Ethnicity.



Racial Composition: The 2000 census for the State of Connecticut shows an increase in overall growth since 1990. Specifically, there was a decrease in the White population and an increase in other racial and ethnic groups. In the year 2000, 78% of the population were White, 9% were Black or African American, 2% were Asian, 9% were Hispanic and 2% comprised all other groups as shown in Figure II-3.

Community Planning Regions: The Connecticut HIV Prevention Community Planning Group (CPG) is responsible in conducting the needs assessment for the State of Connecticut in order to determine gaps in HIV prevention services. In addition, the CPG sets priorities for federally-funded HIV prevention programs for the state.

The CPG develops the Comprehensive HIV Prevention Plan for the state in collaboration with the Department of Public Health. The CPG has divided Connecticut's eight counties into six HIV community planning regions based on population size and rates of HIV infection. The Department of Correction is considered the 7th separate planning region because of their contribution to a large number of AIDS cases. The CPG designated the county of Litchfield as the Northwest Region; Hartford county as the Northcentral Region; Windham and Tolland counties as the NorthEast Region, Fairfield county as the Southwest Region, New Haven and Middlesex counties as the Southcentral Region, and New London as the Southeast Region. Table 1-2 presents the distribution of Connecticut population by racial/ethnic group and by the CPG Regions. Please note the different population composition in these six regions.

Table II-2. Distribution of Connecticut Populations by Regions and Race/Ethnicity

Region	White		Black		Hispanic		Asian/ PI		Total
	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region	
Northwest	175,103	96%	1,824	1%	3,648	2%	1,824	1%	182,399
Northcentral	630,550	76%	99,561	12%	91,264	11%	24,890	3%	829,671
Northeast	218,876	92%	4,758	2%	9,516	4%	4,758	2%	237,909
Southwest	631,001	75%	92,547	11%	92,547	11%	25,240	3%	841,334
Southcentral	802,969	85%	75,574	8%	47,233	5%	18,893	2%	944,669
Southeast	216,523	88%	12,302	5%	12,302	5%	4,921	2%	246,049
Total	2,675,022		286,565		256,511		80,527		3,282,031

Recent Immigrants: Refugees to Connecticut in the past decade have come from many different nations and cultures. Large numbers of refugees have come from Asia and Eastern Europe, including Vietnamese, (3,856) Cambodians, (1,786) Laotians, (1,289) Russians, (3,067) Bosnians, (1,129) and Poles (1,075). It should be noted that these numbers are small in comparison to the number of African American and Hispanic (in particular Puerto Rican) residents of Connecticut.

Employment: In March 2001, there were 1,684,400 people employed in non-farm occupations in Connecticut. This represents a 0.5% increase from 2000. The manufacturing industry showed a 1.6% decline in employment, while service occupations showed a 1.2% increase. Thirty three thousand people were unemployed during March 2001, indicating an unemployment rate of 1.9%. This compares with 4.3% nationwide.

Poverty and Income: Median household income was \$46,508 in Connecticut in 1998 compared to \$38,885 for the nation. During the same period of time, 9.5% of Connecticut residents were living below the poverty line. In the U.S., 12.7% were below the poverty level. In 1997, 65% of the Connecticut's civilian population was employed with an average annual pay of \$38,895.

Homeless: Between October 1998 and September 1999, 16,657 different people used state-funded housing shelters in Connecticut, a 4.6% increase over the previous year. Shelters housed 1,635 families and more than 3,000 children. During the same period of time 9,935 people were turned away due to lack of bed space. Among adults who resided in shelters, 49% had no income, 17% were employed, and 6% were veterans. More than 40% of the shelter users were African American, 35% were White, and about 23% were Hispanic.

Education: Approximately 79% of persons 25 years or older are high school graduates or higher. This contrasts to 75% for the nation. Twenty seven percent of Connecticut residents have college degrees compared to 20% nation-wide.

Mortality Rates: There were 29,409 deaths among Connecticut residents in 1997. The crude death rate was 9.0 deaths per 1,000 population. Of the total deaths, 47.8% were males; 92.9% were White; 6.3% were Black; and 2.6% were Hispanic. The five leading causes of death in 1997 for persons of all ages and independent of sex was: heart disease (33.1%); malignant neoplasms (24.1%); cerebrovascular disease (6.5%); chronic obstructive pulmonary disease (4.3%); and pneumonia and Influenza (4.2%).

Infant Health: In 1996, the number of infant (children less than one year of age) deaths and the infant mortality rate fell to the lowest recorded values in Connecticut's history. There were 286 resident infant deaths (down from 322 in 1995), and the overall infant mortality rate dropped from 7.3 to 6.4 per 1,000 live births. The neonatal mortality rate, based on 205 deaths to infants less than 28 days old, was 4.6 deaths per 1,000 live births, down from 5.4 in 1995; about seven out of ten infant deaths (71.7%) occurred during the neonatal period. The post neonatal mortality rate (based on 81 deaths to infants 28 days to 364 days old) was 1.8 deaths per 1,000 live births, down from 1.9 in 1995. There were 6.4 infant deaths per 1,000 live births in Connecticut in 1996 compared to 7.3 per 1,000 in the US, making the state 34th in the nation. Eight percent of all births were to teenage mothers as compared to 13% in all of the United States. According to the US Census Bureau, Statistical Abstracts, 1999, Connecticut ranked 47th in teen pregnancies.

Incarcerated Persons: In January 2000, 17,305 inmates were incarcerated at Connecticut State Department of Correction facilities. Forty seven percent of the inmates were Black or African American while Whites and Hispanics each accounted for 26% of the inmate population. Fourteen percent of inmates were younger than 21 and 7% were 45 or older. Forty four percent were residents of three of the largest cities in the state, Hartford, New Haven, and Bridgeport.

Persons with Mental Illness: From July 1, 1998 through June 30, 1999, 37,041 mental health clients received services through the State of Connecticut Department of Mental Health and Addiction Services (DMHAS). In addition, 28,158 substance abuse clients received a total of 40,500 episodes of outpatient and/or residential care. DMHAS serves approximately half of the persons in Connecticut estimated to have a severe and persistent mental illness. Roughly 37% of people who abuse alcohol and 53% of people who abuse drugs also have at least one serious mental

illness. Sixty eight percent of AIDS cases are connected to substance abuse. Alcohol is identified as a problem substance in 77% of all service encounters of used by dual diagnosis clients. Dual-diagnosis clients are much more likely to use repeat services. Fourteen percent of inpatients and 11% of community mental health clients identify themselves as Hispanic in origin. Seventy three percent of all services episodes used by Latino substance abuse clients identify heroin as a problem substance.

Teen Pregnancy: In 1995, the birth rate was 39.3 per 1,000 women 15 to 19 years of age. Of those 30% were Hispanic, 22% were Black, non-Hispanic, and 13% were White non-Hispanic. By 1998 the birth rate dropped to 35.8. During 1998, among the 99,230 females 15 to 19 years old in Connecticut, there were 3,550 births, 2,648 abortions, and the pregnancy rate was 62.5 per 1,000 women.

Summary:

- Connecticut occupies a land area of 4,845 square miles
- The population of Connecticut was estimated by the U.S. Census Bureau to be 3,405,565 in 2000
- Ninety five percent of the people live within metropolitan areas
- The median age for Connecticut is 34.4 years of age
- From 1990 to the year 2000, the population of Connecticut increased by 3.6%
- In 1999, about 20 percent of the population of Connecticut consisted of racial and ethnic minority groups
- Connecticut consists of 8 counties, 169 towns and 7 CPG Regions
- Twenty four percent of Connecticut's population is less than 18 years of age and 14% are 65 or older
- Approximately 53% of persons 25 years or older are high school graduates and 12% are college graduates
- Median household money income was \$46,508 in 1998 while 9.5% of Connecticut residents were living below the poverty line
- There was 6.4 infant death per 1,000 live births in Connecticut in 1996
- In 1995, the birth rate was 39.3 per 1,000 women 15 to 19 years of age
- Large numbers of refugees have come to Connecticut from Asia and Eastern Europe
- In March 2001 there were 1,684,400 people employed in non-farm occupations in Connecticut
- Approximately 53% of persons 25 years or older are high school graduates
- In January 2000, there were 17,305 inmates incarcerated at Connecticut Department of Correction facilities.
- During FY 1998-99, 37,041 mental health clients received services through the State of Connecticut Department of Mental Health and Addiction Services (DMHAS)

III. Epidemiologic Trends in HIV and AIDS in Connecticut

A cumulative total of 11,574 persons diagnosed with AIDS and 5,661 AIDS-related deaths were reported in the State of Connecticut between 1982, when AIDS was designated as a reportable disease in Connecticut, and December 31, 2000.

AIDS Trends for Connecticut vs. the United States

Connecticut population is about 1.3% of the total U.S. population. During the 1980s, Connecticut contributed approximately 1.2% of the total U.S. AIDS cases. By June 2000, Connecticut contributed 1.6% of all reported AIDS cases in the U.S. Connecticut ranks the 18th among states in the number of reported AIDS cases from 1999-2000 and the 8th in the rate of AIDS cases per 100,000 population. In the year 2000, the total number of reported AIDS cases was 608 for the state of Connecticut. The annual rate of reported AIDS cases per 100,000 population was 19.7 compared to 15.5 of the total U.S. population. Figure III-1 presents AIDS cases by gender and year of report from 1980 to 2000. The number of reported AIDS cases in Connecticut has declined in the past several years. In late 1995, the first protease inhibitors became available for treatment of AIDS patients. By 1996, highly active antiretroviral therapy (HAART), a multi-drug regimen containing a protease inhibitor, became the standard of practice for AIDS care. The recent decline is probably due to the highly active antiretroviral therapy.

There are notable differences in the characteristics of cases reported in Connecticut and those reported nationally. Table III-1 presents a comparison of AIDS cases reported in Connecticut in 1999 and the U.S. cases reported from 1998-1999 by gender, race/ethnicity, age group, and exposure categories. Although males represented the majority of AIDS cases for both the U.S. and Connecticut (77 U.S.; 69 CT), a higher percentage of female cases was reported in Connecticut (31 Connecticut vs. 23 U.S.). The racial/ethnic distribution of persons with AIDS differs markedly between Connecticut and the U.S. White represented the largest racial/ethnic group of persons with AIDS diagnosed in Connecticut (39%), while nationally 33% of persons diagnosed with AIDS were white. In contrast, 31% of persons diagnosed with AIDS in Connecticut were African-American, compared to 46% in the U.S. The U.S. and Connecticut rates were similar for all age groups. The majority of AIDS cases in Connecticut were IDUs (37%) followed by MSM (20%). In contrast, MSM represented the largest exposure group in the U.S. (34%) followed by IDUs (22%).

Figure III-1. AIDS cases by gender and year of report, Connecticut, 1980 - 2000.

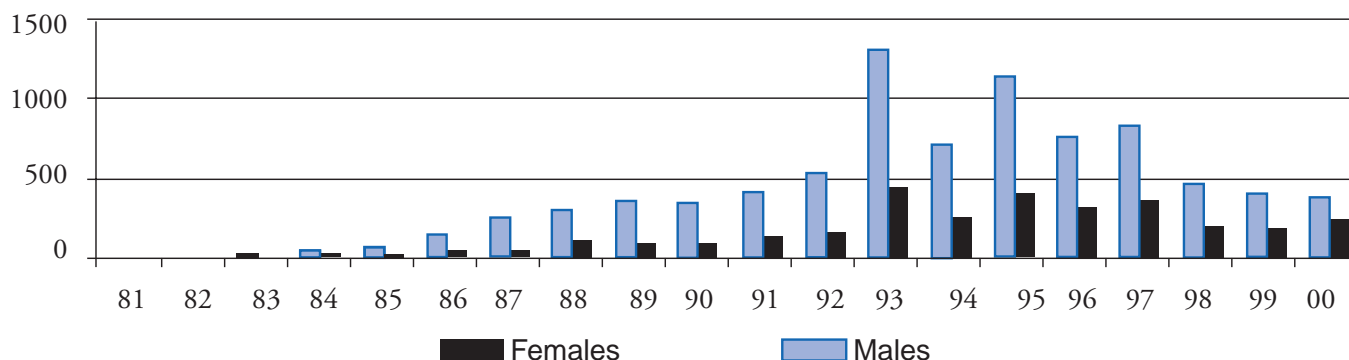


Table III-1. AIDS cases in the United States (1998-1999) and Connecticut (1999) by gender, racial/ethnicity, age group, and exposure category

	US (1, 2)		Connecticut (3)	
	No.	%	No.	%
Gender				
Male	36,074	76.6	412	68.7
Female	11,007	23.4	188	31.3
Race				
White	15,443	32.9	235	39.2
Black	21,728	46.3	184	30.7
Hispanic	9,255	19.7	176	29.3
Other/Unk	517	1.1	5	0.8
Age				
<13	316	0.7	2	0.3
13-19	262	0.6	5	0.8
20-29	6,146	13.4	51	8.5
30-39	19,475	42.4	242	40.3
40-49	13,777	30.0	217	36.2
50+	6,009	13.1	83	13.8
Risk Category				
MSM	15,999	34.0	118	19.7
IDU	10,536	22.4	224	37.3
MSM/IDU	1,940	4.1	6	1.0
Adult Hemophiliac	171	0.4	4	0.7
Heterosexual	7,051	15.0	111	18.5
Transfusion	266	0.6	1	0.2
Undetermined	10,798	22.9	130	21.7
Pediatric	322	0.7	6	1.0
Total	47,083	100	600	100

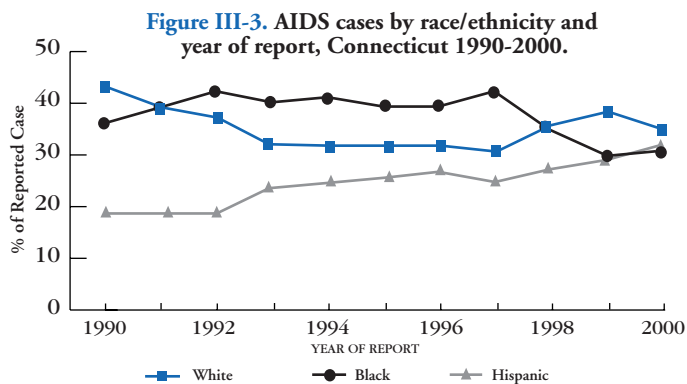
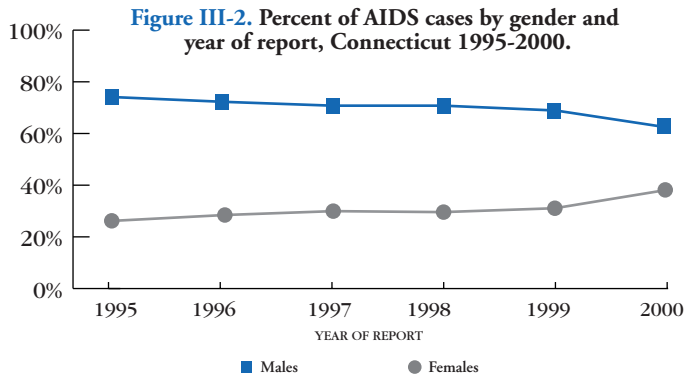
(1) U.S. data from CDC, HIV/AIDS Surveillance Report, June 1999, Reported cases July 1998-June 1999.

(2) U.S. data categories do not add to total because of missing information.

(3) Connecticut DPH Reported cases in 1999.

AIDS in Adolescents and Adults

Gender: The percentage of adult/adolescent males diagnosed with AIDS each year is consistently larger than the percent of female diagnosed with AIDS in the same year (Figure III-2). However, the percentage of males AIDS cases continues to decline from 74% in 1995 to 62% in 2000. Although the absolute number of AIDS cases has declined among both male and female, the porportion of female AIDS cases has increased slowly from 26% in 1995 to 38% in 2000.



Race/ethnicity: Figure III-3 presents the distribution of AIDS cases by race/ethnicity and year of report. The race/ethnic composition of adolescents and adults with AIDS in Connecticut has changed over time. The percentage of AIDS cases that are Hispanic population has increased from 19% in 1992 to 32% in 2000. However, the percentage of AIDS cases that are African-American has been stable from 1990-1997 and began to decline in 1998. The racial/ethnic distribution of 1,250 adult male cases diagnosed between 1998 and 2000 were 47% white, 31% African-American, and 29% Hispanic. Among 610 female AIDS cases diagnosed in the same time period, the three racial groups of white, African-American and Hispanic were distributed equally at about 31-32%.

Age: The majority of reported AIDS cases in 1999 (80%) were among persons 30-49 years of age. The rates did not change over time since 1990. Given that the median time interval from HIV infection to AIDS diagnosis is approximately 10 years (before the HAART era), these data suggest that most HIV infections in this group occurred among persons less than 39 years old. The median age of persons living with AIDS is 43 years old.

Exposure category: Table III-2 presents percentage of AIDS cases by exposure categories and gender between 1998 and 2000. For males with AIDS, the proportion of men who have sex with men (MSM) has decreased from 29% in 1998 to 22% in 2000. The proportion of male IDUs or those who are MSM/IDU has fluctuated between 4-8% over the same time period. The percentage of men with AIDS who were exposed to HIV via heterosexual contact with an HIV-positive or high-risk partner has also decreased, from 15% to 11%.

The increase in the other/NIR category in recent years is an artifact of the time delay required to resolve cases with no identified risk (NIR). Most of men diagnosed with AIDS who are initially categorized as NIR are reclassified as MSM following further investigation.

For females with AIDS, the proportion of cases due to injection drug use has slightly decreased from 42% in 1998 to 38% in 1999 and 39% in 2000. The percentage of female AIDS cases associated with heterosexual contact with an HIV-positive or high-risk partner has also decreased from 55% in 1998 to 37% in 2000. Most of the women initially reported with an unknown risk are reclassified into the heterosexual category. However, a portion of the decrease in each female AIDS exposure category may be due to non-classified NIR.

Table III-2. AIDS cases by exposure category and gender, Connecticut, 1998 -2000.

Exp. cat.	1998		1999		2000		1998		1999		2000	
	Male No.	Female (%)	Male No.	Female (%)	Male No.	Female (%)	Male No.	Female (%)	Male No.	Female (%)	Male No.	Female (%)
MSM	133	(29)	0		119	(29)	0		84	(22)	0	
IDU	214	(46)	83	(42)	157	(38)	71	(38)	160	(42)	89	(39)
MSM/IDU	17	(4)	0		8	(2)	0		7	(2)	0	
Hetero	70	(15)	100	(51)	56	(14)	89	(48)	42	(11)	84	(37)
Other/NIR	30	(6)	12	(6)	73	(18)	25	(14)	86	(23)	56	(24)
Total	464		195		413		185		379		229	

HIV and AIDS in Children

As of December 2000, 189 children less than 13 years of age have been reported with AIDS in Connecticut. The number of children diagnosed with AIDS in Connecticut declined from a peak of 25 in 1993, to 19 in 1996, to 2 children in 2000. The decrease in the number of children with AIDS in recent years is probably due to the effectiveness of providing antiretroviral treatment to HIV-positive pregnant women as well as providing treatment to HIV-infected children.

Between 1995 and 2000, 399 children were reported with perinatal HIV exposure. Only 4.8% of these children were confirmed HIV-positive. The racial/ethnic distribution for children born with perinatal HIV exposure were 55% African-American, 31% Hispanic, 13% white and 1.2% Asian/Pacific Islander.

Children living with AIDS: As of December 2000, 77 of the 177 children who were less than 13 years of age when diagnosed with AIDS were still living in Connecticut. The average age of these children is now 11 years and 25% are now teenagers. Although the number of children diagnosed with AIDS is small, prevention of secondary HIV transmission will become an important issue as these adolescents become sexually active and reach reproductive age. In addition, many will lose their family members to AIDS and will continue to need support services.

HIV Testing in Pregnant Women: HIV-infected women who do not receive prenatal care and therefore cannot have access to HIV testing and antiretroviral treatment are more likely to transmit HIV vertically to their infants. To maximize HIV prevention efforts, women must be identified as having HIV infection as early as possible during pregnancy and offered antiretroviral therapy. Connecticut Public Act 99.2 of the Special Session, passed in June 1999, mandates that all prenatal care providers offer HIV counseling and testing to pregnant women. It also requires that women who have not been tested during pregnancy, be tested at delivery unless they decline. Furthermore, newborns of women who have not been tested during pregnancy or at delivery are to be tested shortly after birth.

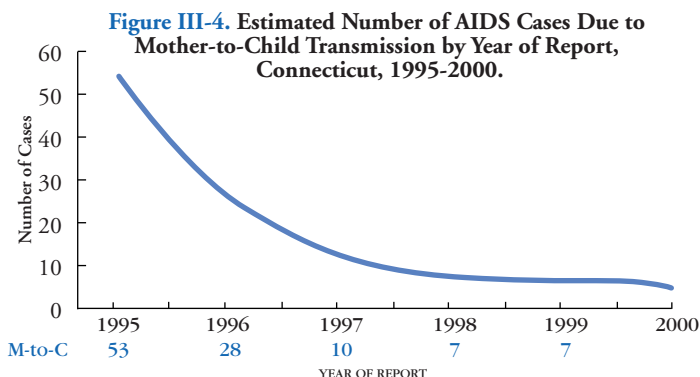
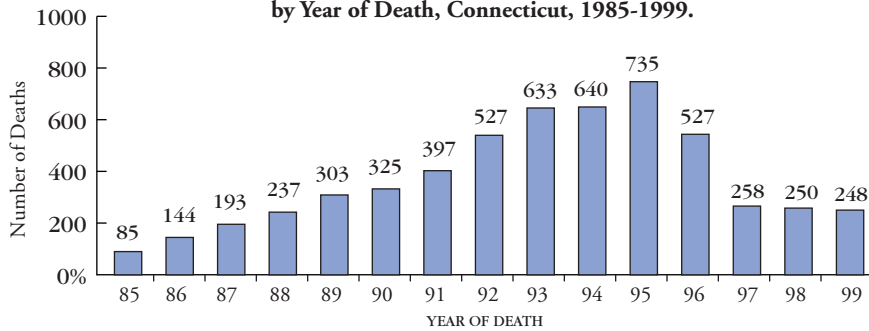


Figure III-4 illustrates the estimated number of AIDS cases among children of less than 13 years of age who acquired their HIV infection from their mothers (categorized under mother-to-child or vertical transmission). There is a decreasing trend from 53 cases in 1995 to seven cases in 1999. The effectiveness of providing antiretroviral treatment to HIV-positive pregnant women as well as providing treatment to HIV-infected children since 1996 have a major role in reducing the pediatric AIDS cases in Connecticut.

AIDS-Related Mortality

Since the new antiretroviral treatments became available in 1996, HIV infected persons have been living longer and healthier. As a result of the highly active antiretroviral (HAART) therapy, the number of AIDS cases reported to the Department of Public Health has declined dramatically from 1,763 in 1993 to 600 in 1999. Similarly, deaths in persons previously diagnosed with AIDS in Connecticut have decreased by 62% from 1995 to 1999 (Figure III-5).

Figure III-5. Number of Deaths in People with AIDS by Year of Death, Connecticut, 1985-1999.

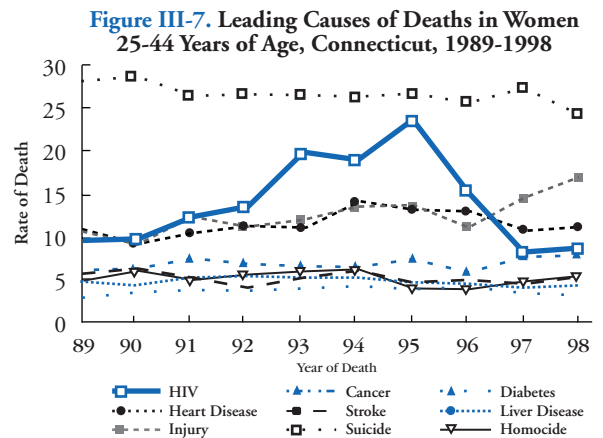
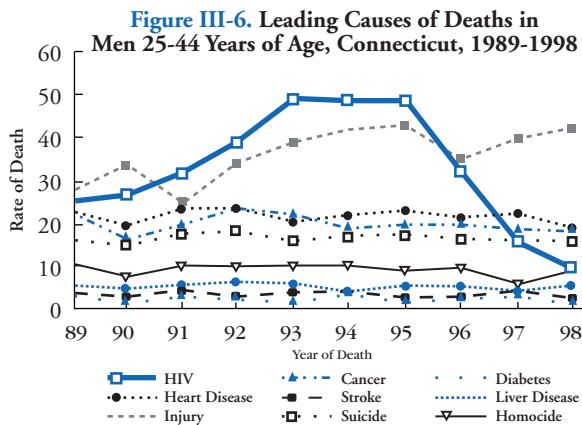


The probability of dying with AIDS during the years 1994 to 1998 is shown in Table III-3. The top two rows show the number of persons living with AIDS and the number and percent of AIDS deaths in each year. The bottom section of Table III-3 indicates whether there was an association between death in persons with AIDS and race/ethnicity, risk behavior, sex, and age within each year. Values with asterisks indicate a statistically significant association.

Table III-3. Trends in Mortality in Selected Groups, Connecticut, 1994-1998

	1994	1995	1996	1997	1998
Persons living with AIDS	4,174	4,729	5,044	5,250	5,455
Deaths N (%)	621 (14.9)	724 (15.3)	518 (10.2)	251(4.8)	238 (4.4)
Adjusted Relative Risk (RR)					
	1994	1995	1996	1997	1998
Black	1.0	1.1	1.1	1.1	1.1
Hispanic	0.6**	0.8	0.8	1.1	1.1
IDU	1.0	0.7**	1.0	1.0	1.2
MSM	1.1	0.8**	1.0	0.8	0.9
Female	1.0	0.8*	0.9	0.9	1.1
Diagnosis > 50 yrs	1.4*	1.6**	1.4	1.5	2.1**
* p<0.05, ** p<0.001					

In the mid- 1990's, HIV/AIDS was the leading cause of death in Connecticut among men 25-44 years of age. However, by 1998, HIV/AIDS ranked fifth (Figure III-6). Among women 25-44 years of age, HIV/AIDS ranked second from 1992 to 1996. By 1998, HIV/AIDS dropped to fourth (Figure III-7).



Person Living with AIDS

As of December 2000, the Centers for Disease Control and Prevention (CDC) estimated that there were 43,512 people living with AIDS in the U.S. after adjusting for reporting delay. The three states that had the largest populations of persons living with AIDS in the U.S. in December 2000 were New York, California and Florida. At the end of 2000, a total of 5,809 persons were living with AIDS in Connecticut, yielding an AIDS prevalence of 178 per 100,000 population. Table III-4 presents number of persons living with AIDS by gender, age group and racial/ethnicity. Males represented 71% of persons living with AIDS. The highest prevalence rates were among African-American and Hispanic populations (808 per 100,000 and 659 per 100,000, respectively). The number of persons living with AIDS in Connecticut continues to increase. This trend is largely due to the availability of highly active antiretroviral treatment. Therefore, fewer HIV-infected individuals progress to AIDS, and persons who have been diagnosed with AIDS live longer. As a result, AIDS prevalence in Connecticut increased by 28% from 1996 to 2000. This increasing number of persons living with AIDS has an important impact on the resources needed for health care and HIV prevention services. Figures III-8 and III-9 present number of persons living with AIDS by race/ethnicity and exposure category in Connecticut from 1990 to 2000. There is an increasing number of AIDS cases over time, particularly in African-Americans and injection drug users. At present, in contrast to AIDS case reporting, the state of Connecticut's HIV case reporting system can not unduplicated clients who are tested for HIV. Therefore, the estimated number of person living with HIV is not available.

HIV Counseling and Testing Data: In 2000, it was estimated that about 5,800 persons in Connecticut are currently living with HIV infection. Approximately 3,000 of these persons are unaware of their infection. At present, with the availability of the highly active antiretroviral therapy, it is important that HIV-infected persons get diagnosed as early as possible. With early detection, many individuals can benefit from advances in HIV medical treatment, take precautions to prevent the transmission of HIV to others, and notify at-risk sexual and needle sharing partners of the need to be tested. It is also important to know that adherence to treatment regimens may be difficult for many persons and the treatments are not equally effective for everyone. Viral resistance against the therapies may develop during the long-term treatment.

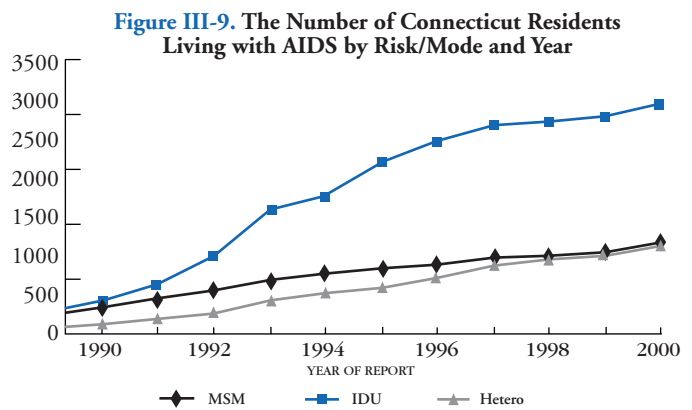
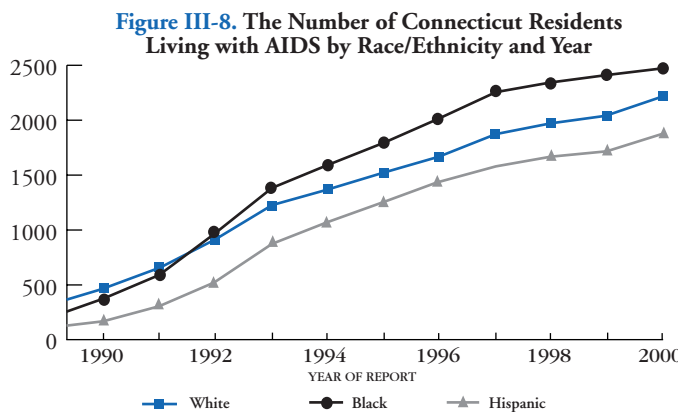


Table III-4. AIDS Cases Diagnosed in 1999 by Gender, Race/Ethnicity, and Age Group, Connecticut (1) (2).

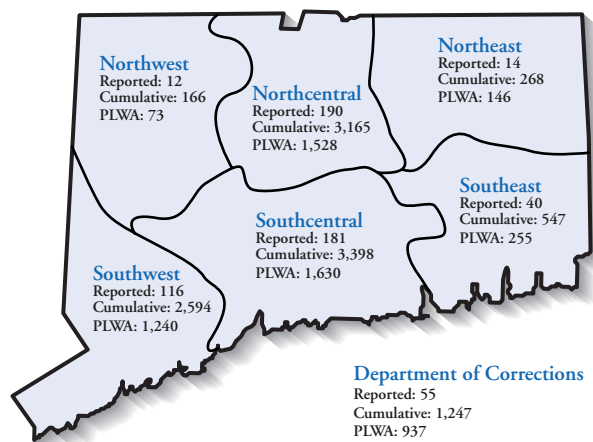
Male	White			Black			Hispanic			Asian/PI			Native American			Total		
	Age (yrs)	Pop	No. Rate	Pop	No.	Rate	Pop	No.	Rate	Pop	No.	Rate	Pop	No.	Rate	Pop	No.	Rate
0 - 9	174,493	-	-	24,526	1	4.1	29,239	-	-	6,009	-	-	519	-	-	234,786	1	0.4
10 - 19	161,121	-	-	23,559	3	12.7	23,085	-	-	5,127	-	-	469	-	-	213,361	3	1.4
20 - 29	158,256	6	3.8	20,762	4	19.3	22,965	15	65.3	6,062	1	16.5	500	1	200.0	208,545	27	12.9
30 - 39	230,256	52	22.6	23,370	31	132.6	22,415	35	156.1	7,428	1	13.5	576	-	-	284,045	119	41.9
40 - 49	207,733	53	25.5	16,146	43	266.3	13,754	32	232.7	4,982	-	-	446	-	-	243,061	128	52.7
50 - 59	138,639	16	11.5	10,123	15	148.2	7,458	8	107.3	2,690	-	-	282	-	-	159,192	39	24.5
60 - 69	105,970	8	7.5	6,513	4	61.4	3,883	1	25.8	1,294	-	-	156	-	-	117,816	13	11.0
70 - 79	85,561	3	3.5	3,304	-	-	1,849	1	54.1	578	-	-	99	-	-	91,391	4	4.4
80+	37,153	-	-	1,140	-	-	819	-	-	195	-	-	43	-	-	39,350	-	-
Total	1,299,182	138	10.6	129,443	101	78.0	125,467	92	73.3	34,365	2	5.8	3,090	1	32.4	1,591,547	334	21.0
Female	White			Black			Hispanic			Asian/PI			Native American			Total		
Age (yrs)	Pop	No.	Rate	Pop	No.	Rate	Pop	No.	Rate	Pop	No.	Rate	Pop	No.	Rate	Pop	No.	Rate
0 - 9	165,893	-	-	23,928	-	-	27,386	-	-	5,575	-	-	438	-	-	223,220	-	-
10 - 19	152,188	1	0.7	22,704	2	8.8	22,043	-	-	4,965	-	-	412	-	-	202,312	3	1.5
20 - 29	152,628	4	2.6	21,676	8	36.9	22,372	5	22.3	6,498	-	-	513	-	-	203,687	17	8.3
30 - 39	229,123	21	9.2	26,746	23	86.0	23,178	22	94.9	7,204	-	-	532	-	-	286,783	66	23.0
40 - 49	212,539	17	8.0	19,850	23	115.9	14,967	19	126.9	5,484	-	-	489	-	-	253,329	59	23.3
50 - 59	144,159	5	3.5	13,122	4	30.5	8,600	4	46.5	2,727	-	-	276	-	-	168,884	13	7.7
60 - 69	119,021	-	-	8,434	-	-	4,785	1	20.9	1,533	-	-	195	-	-	133,968	1	0.7
70 - 79	117,903	-	-	5,190	2	38.5	2,946	-	-	763	-	-	126	-	-	126,928	2	1.6
80+	79,142	-	-	2,562	-	-	1,501	-	-	284	-	-	91	-	-	83,580	-	-
Total	1,372,596	48	3.5	144,212	62	43.0	127,778	51	39.9	35,033	-	-	3,072	-	-	1,682,691	161	9.6
Total	2,671,778	186	7.0	273,655	163	59.6	253,245	143	56.5	69,398	2	2.9	6,162	1	16.2	3,274,238	495	15.1

(1) 1996 population estimates.
(2) Rates per 100,000 population.

Geographic Distribution of AIDS in the State of Connecticut

Connecticut has 106 local or regional health departments. These health departments serve jurisdictions that have been aggregated into six HIV/AIDS community planning regions. These geographic planning regions fall into two groups: the more urban Southwest, Southcentral, and Northcentral regions; and the less densely populated Northwest, NorthEast, and Southwest. The distribution of number of AIDS cases reported in 2000, cumulative AIDS cases from 1981-2000, and number of persons living with AIDS in 2000 are shown below. The largest number of cumulative AIDS cases were reported in the Southcentral (3,398), Northcentral (3,165), and Southwest (2,594) regions, respectively. The Department of Correction reported 1,247 AIDS cases as of December 2000. The estimated number of persons living with AIDS in Connecticut was 5,809 in 2000. Figure III-10 illustrates the geographic distribution of persons reported with AIDS by regions through December 31, 2000. Note the higher cumulative AIDS case counts in the more urban regions.

Figure III-10. Reported AIDS Cases; Cumulative AIDS Cases; Persons Living with AIDS; By CPG Regions, Connecticut, 2000



Southcentral Region (New Haven and Middlesex Counties): By the end of 2000, the cumulative number of persons reported with AIDS in the Southcentral Region was 3,476. Males accounted for 71% of the Southcentral Region residents diagnosed with AIDS. Forty-seven percent of the Southcentral Region residents diagnosed with AIDS were IDUs and 23% were MSM. The racial/ethnic makeup of the Southcentral Region residents diagnosed with AIDS was 45% African American; 37% white; and 19% Hispanic.

Northcentral Region (Hartford County): By the end of 2000, the cumulative number of persons reported with AIDS in the Northcentral Region was 3,211. Males accounted for 75% of the Northcentral Region residents diagnosed with AIDS. Fifty percent of the Northcentral Region residents diagnosed with AIDS were IDUs and 24% were MSM. The racial/ethnic makeup of the Northcentral Region residents diagnosed with AIDS was 36% African American; 31% white; and 33% Hispanic.

Southwest Region (Fairfield County): By the end of 2000, the cumulative number of persons reported with AIDS in the Southwest Region was 2,651. Males accounted for 73% of the Southwest Region residents diagnosed with AIDS. Forty percent of the Southwest Region residents diagnosed with AIDS were IDUs and 28% were MSM. The racial/ethnic makeup of the Southwest Region residents diagnosed with AIDS was 40% white; 39% African American; and 20% Hispanic.

Southeast Region (New London County): By the end of 2000, the cumulative number of persons reported with AIDS in the Southeast Region was 553. Males accounted for 71% of the Southeast Region residents diagnosed with AIDS. Forty-three percent of the Southeast Region residents diagnosed with AIDS were IDUs and 29% were MSM. The racial/ethnic makeup of the Southeast Region residents diagnosed with AIDS was 56% white; 28% African American; and 16% Hispanic.

Northeast Region (Windham County and Tolland County): By the end of 2000, the cumulative number of persons reported with AIDS in the Northeast Region was 270. Males accounted for 76% of the Northeast Region residents diagnosed with AIDS. Forty-one percent of the Northeast Region residents diagnosed with AIDS were IDUs and 29% were MSM. The racial/ethnic makeup of the Northeast Region residents diagnosed with AIDS was 60% white; 16% African American; and 23% Hispanic.

Northwest Region (Litchfield County): By the end of 2000, the cumulative number of persons reported with AIDS in the Northwest Region was 166. Males accounted for 89% of the Northwest Region residents diagnosed with AIDS. Fifty-five percent of the Northwest Region residents diagnosed with AIDS were MSM and 17% were IDUs. The racial/ethnic makeup of the Northwest Region residents diagnosed with AIDS was 86% white; 7% African American; and 5% Hispanic.

Department of Correction (Statewide): Connecticut correctional facilities contribute a large number of persons reported with AIDS. By the end of 2000, the cumulative number of inmates reported with AIDS from the Department of Correction was 1,247. Males accounted for 82% of the inmates diagnosed with AIDS. Eighty-four percent of the inmates diagnosed with AIDS were IDUs, 4% were MSM/IDU, and 2% were MSM. The racial/ethnic makeup of the inmates diagnosed with AIDS was 48% African American; 33% Hispanic; and 18% white.

AIDS Surveillance: The AIDS surveillance system is the main source of knowledge about the groups of people and the numbers of people getting HIV in Connecticut. Cases that meet the CDC's AIDS definition are reported to the state health department by health providers. The case reports are several pages long. They report name, demographics (sex, age, race, ethnicity, address), HIV test result, and (CD4 counts). Epidemiologists from the state health department actively seek out reports of new cases by visiting hospitals, checking discharge diagnosis registries, and reviewing the state death registry. HIV surveillance is the reporting of HIV infections, using the public health reporting system. Table III-5 compares the number and percent of AIDS cases with HIV by gender and age. The table shows similar trends for both HIV infection and AIDS.

Table III-5. Comparison of HIV and AIDS Cases in Connecticut 1999

Age	Male				Female				Total			
	AIDS		HIV		AIDS		HIV		AIDS		HIV	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<13	0	0.0%	1	0.3%	2	1.1%	2	0.9%	2	0.3%	3	0.5%
13 - 19	3	0.7%	3	0.8%	2	1.1%	5	2.3%	5	0.8%	8	1.4%
20 - 29	31	7.5%	45	12.6%	20	10.6%	44	20.0%	51	8.5%	89	15.4%
30 - 39	157	38.1%	139	38.9%	85	45.2%	89	40.5%	242	40.3%	229	39.5%
40 - 49	158	38.3%	123	34.5%	59	31.4%	65	29.5%	217	36.2%	188	32.6%
50 - 59	41	10.0%	35	9.8%	17	9.0%	11	5.0%	58	9.7%	46	8.0%
60+	22	5.3%	11	3.1%	3	1.6%	4	1.8%	25	4.2%	15	2.6%
Total	412	100.0%	357	100.0%	188	100.0%	220	100.0%	600	100.0%	577	100.0%

Summary:

- The AIDS Surveillance system at DPH is the main source of knowledge about groups of people and numbers of people living with AIDS and getting HIV in Connecticut. All information collected is sent to the Centers for Disease Control and Prevention (CDC) in Atlanta.
- A cumulative total of 11,574 persons have been diagnosed with AIDS in Connecticut between 1982 and 2000.
- There have been 5,661 AIDS related deaths in Connecticut during that same time period.
- Males represent the majority of cases for both the US and Connecticut
- Between 1998 and 2000 1,250 adult males and 610 adult females were diagnosed with AIDS in Connecticut
- A higher percentage of female AIDS cases are reported in Connecticut than in the US
- Injection drug users (IDU) make up 37% of AIDS cases in Connecticut followed by Men who have sex with men (MSM) with 20%
- Nationally MSM make up the largest exposure group
- The percentage of adult adolescent males diagnosed with AIDS each year is consistently larger than the percent of females diagnosed in the same year even though the rates continue to decline in males and increase in females
- Since the beginning of the AIDS epidemic in Connecticut, the percent of persons diagnosed with AIDS, reported cumulatively is: African Americans 31%, Whites 39%, and Hispanics 29%.
- The percentage of AIDS cases in the Hispanic population has increased from 195 in 1992 to 32% in 2000
- The percentage of AIDS cases in African Americans has remained stable and Whites have been declining

- The median age of persons living with AIDS (PLWA) is 43 years
- As of December 2000 189 children (less than 13) have been reported with AIDS in Connecticut
- Because of antiretroviral treatment of HIV positive pregnant women and their HIV infected children the number of children diagnosed with AIDS has decreased from 25 in 1993 to 2 in 2000.
- There are 177 children still living with AIDS in Connecticut
- In June 1999 Connecticut passed a Public Act which mandates all prenatal care providers offer HIV counseling and testing to pregnant women
- It is estimated there are 43,512 people living with AIDS in the US
- There are 5,809 persons living with AIDS in Connecticut. 71% are male
- The number of persons living with AIDS continues to increase largely due to the availability of highly antiretroviral treatment (HAART)
- Connecticut's HIV case reporting system cannot unduplicate individuals reported. Therefore, there is no estimate for persons living with HIV
- Connecticut has six geographic HIV Community Planning Regions and the Department of Correction as an additional area
- The largest number of cumulative AIDS cases were reported in Southcentral (New Haven county) 3,398, Northcentral (Hartford county) 3,165, and Southwest (Fairfield county) 2,594, regions.

IV. HIV and AIDS in Behavioral Risk Groups

Behavioral risk groups have been defined to describe characteristics of persons at-risk for acquiring HIV infection. Five behavioral risk groups have been defined as for this epidemiological profile: 1) Men who have sex with men (MSM);

2) Male IUDs who have sex with men; 3) Heterosexual male IDUs; 4) Female IUDs; and 5) Heterosexual women. Available epidemiological data on each of the behavioral risk group will be summarized in the following section. Please note that data were not adjusted for no identified risk (NIR) and reporting delays.

Men Who Have Sex With Men (MSM)

Since 1981, when AIDS became a reportable disease in Connecticut, men who have sex with men (MSM) accounted for the second largest risk group after the injection drug users. As of December 31, 2000, a cumulative total of 2,664 MSM with AIDS were reported to the Connecticut Department of Public Health.

MSM represent 23% of AIDS cases reported in Connecticut through 2000 and 20% of AIDS cases reported in Connecticut in 1999.

A comparison between MSM who were diagnosed with AIDS from 1990-1995 and those who were diagnosed from 1996-2000 shows the changing face of the epidemic. Table IV-1 describes the demographic characteristics of AIDS cases among the MSM in 2-time periods of 1990-1995 and 1996-2000. The total number of AIDS cases reported in Connecticut in the earlier period of 1990-1995 was 2,130. In contrast, the total number of AIDS cases reported in five years (1996-2000) was markedly decreased to 553, about a quarter of the previous five years. The shift of HIV epidemic among the MSM in Connecticut, which is consistent of the national data, indicates the effectiveness of HIV prevention services and treatment provided to these MSM.

**Table IV-1. Men Who Have Sex With Men: Demographic Characteristics
By Year Of Diagnosis, Connecticut 1990-2000.**

Variable	1990 - 1995 (n = 2,130*)		1996 - 2000 (n = 553)	
	No.	(%)	No.	(%)
Age group				
13-19	1	(0)	2	(0)
20-29	386	(18)	72	(13)
30-39	933	(44)	256	(46)
40-49	529	(25)	144	(26)
50+	281	(13)	79	(14)
Race/ethnicity				
White	1488	(70)	352	(64)
Black	397	(19)	111	(20)
Hispanic	227	(11)	88	(16)
Asian/PI	8	(0)	1	(0)
Nat Amer./AN	6	(0)	1	(0)

*4 Cases have an unknown Race/ethnicity

The racial/ethnic distribution of MSM diagnosed with AIDS from 1990-1995 differs from that of MSM diagnosed more recently. Although a large proportion of those MSM diagnosed with AIDS in the past five years are still white (64%), this rate has fallen since 1990-1995 (70%). The proportion of AIDS cases diagnosed among black MSM remain stable over time but the rate among Hispanics MSM has increased from 11% from 1990-1995 to 16% in the past five years. There was no report of AIDS cases among Asian and Pacific Islanders or Native Americans. The age distribution is similar in the two groups. The majority of the MSM who have been reported with AIDS are over 30 years of age.

Figure IV-1. AIDS Cases Among Men Who Have Sex With Men (MSM) By Race/Ethnicity and Year of Report, Connecticut, 1981 - 2000.

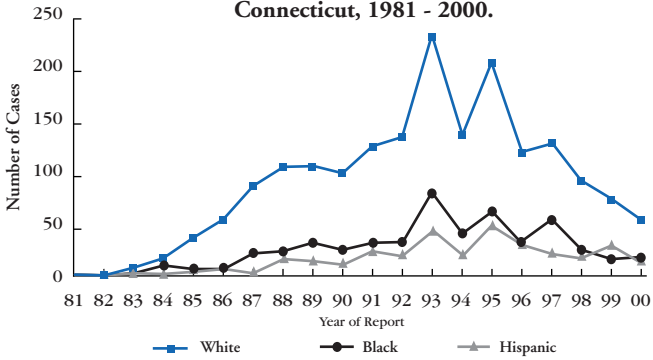


Table IV-2. Number and Percentage of HIV CTS Test Results Among MSM By Age and Race/Ethnicity, Connecticut 2000

Category	Number Tested	No.	HIV+ (%)
Age			
13-19	61	1	(1.6)
20+	1,074	39	(3.6)
Race/Ethnicity			
White	732	14	(1.9)
Black	167	13	(7.8)
Hispanic	205	10	(4.9)
Other	31	3	(9.7)
Total	1,135	40	(3.5)

Reported AIDS cases among the MSM declined substantially between 1993 and 2000. Figure IV-1 presents AIDS cases among MSM by race/ethnicity and year of report from 1981 to 2000. The largest racial/ethnic group of MSM with AIDS is white. Black and Hispanic share similar number of AIDS cases. Due to the lack of information related to sexual orientation obtained from available STD data, no additional analysis was performed on STD rates among the MSM.

Between 1996-2000, 535 MSMs were diagnosed with AIDS in Connecticut Two hundred and forty four (46%) resided in the following major cities: Hartford 69, New Haven 64, Bridgeport 52, Stamford 44, and Waterbury 15.

Table IV-2 describes the percentage of HIV test results obtained from 1,135 men who have sex with men who sought publicly funded counseling and testing services in 2000. Forty (3.5%) of them tested positive for HIV antibody. HIV prevalence rates are much higher among Blacks (7.8%) and Hispanics (4.9%) compared to Whites (1.9%) who sought counseling and testing at these publicly-funded CTS facilities.

HIV/AIDS surveillance data are not available for men who have sex with men and women (bisexual men). Therefore, no information related to this behavioral risk group is included in this document.

Male injection drug users who also have sex with men (MSM/IDU) rank as the seventh largest group of AIDS cases. As of December 31, 2000, a cumulative total of 409 MSM/ IDUs were reported with AIDS to the Connecticut Department of Public Health. MSM/IDUs represent 3.5% of AIDS cases reported in Connecticut through 2000 and 1.3% of AIDS cases reported in Connecticut in 1999.

Table IV-3 describes the demographic characteristics of AIDS cases among MSM/IDU in two time periods (1990-1995 and 1996-2000). The total number of AIDS cases reported in Connecticut in the earlier period of 1990-1995 was 342. In contrast, the total number of AIDS cases reported in the past five years (1996-2000) was markedly decreased to 71.

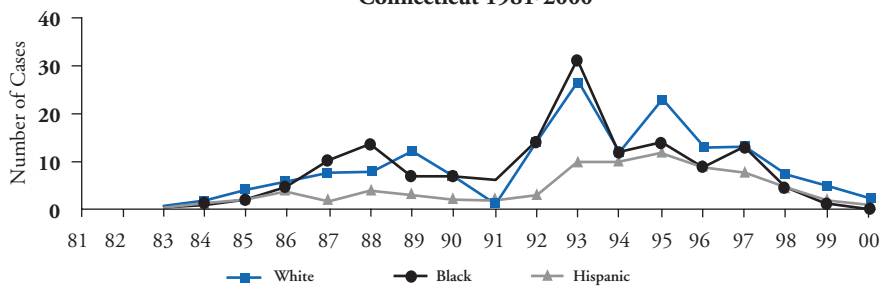
In the past five years MSM/IDU who have been reported with AIDS in Connecticut are mainly white (38%), with 34% of cases among blacks and 28% of cases among Hispanics. The majority of the MSM/IDU who have been reported with AIDS are age 30 and older.

Table IV-3. Men Who Have Sex With Men (MSM) And Inject Drug Users (IDU): Demographic Characteristics By Year Of Diagnosis, Connecticut 1990-2000

Variable	1990 - 1995		1996 - 2000	
	No.	(%)	No.	(%)
Age group				
13-19	0	(-)	0	(-)
20-29	72	(21)	4	(6)
30-39	174	(51)	31	(52)
40-49	81	(24)	24	(34)
50+	15	(4)	6	(8)
Race/ethnicity				
White	140	(41)	27	(38)
Black	130	(38)	24	(34)
Hispanic	72	(21)	20	(28)
Asian/PI	0	(-)	0	(-)
Nat Amer.	0	(-)	0	(-)

Figure IV-2 presents the number of AIDS cases among MSM/IDU by year of report. The number of AIDS cases peaked in 1993 and has declined dramatically since then. The distribution of age and race/ethnicity for MSM/IDUs diagnosed with AIDS in both time periods are similar.

Figure IV-2. AIDS Cases among men who have sex with men (MSM) and inject drugs (IDU) by Race/Ethnicity and Year of Report, Connecticut 1981-2000



Heterosexual Male Injection Drug Users

Since 1981, when AIDS became a reportable disease in Connecticut, the majority of persons diagnosed with AIDS have been heterosexual male injection drug users (IDUs). Although the heterosexual male IDU continues to be the dominant exposure category, the percentage of persons diagnosed with AIDS each year that are heterosexual IDU has fallen steadily over time among all racial/ethnic groups. As of December 31, 2000, a cumulative total of 4,157 heterosexual male IDUs were reported with AIDS to the Connecticut Department of Public Health.

Heterosexual male IDUs represent 36% of AIDS cases reported in Connecticut through 2000 and 26% of AIDS cases reported in Connecticut in 1999.

Table IV-4 describes the demographic characteristics of heterosexual male IDUs diagnosed with AIDS in two time periods of 1990-1995 and 1996-2000. The total number of AIDS cases reported in Connecticut in the earlier period of 1990-1995 was 3,107. In contrast, the total number of AIDS cases reported in the past five years (1996-2000) was markedly decreased to 1,074.

The age distribution has shifted to the older age group in the past five years. Over 80% of the heterosexual male IDUs were diagnosed with AIDS when they were between 30 and 49 years of age. The racial/ethnic distribution of heterosexual male IDUs diagnosed with AIDS is similar in the 2-time periods. In the past five years, the highest percentage of heterosexual male IDUs with AIDS are Black (41%); 33% are Hispanics; 25% are white; and only one case is Asian/Pacific Islander.

Between 1996-2000, 1051 male IDUs were diagnosed with AIDS in Connecticut. Seven hundred and thirty six (70%) resided in the following major cities: Hartford 347, New Haven 177, Bridgeport 106, Waterbury 67, and Stamford 39.

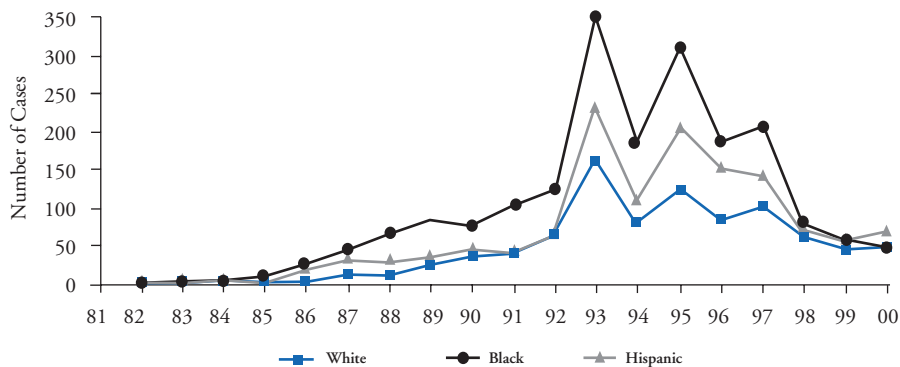
**Table IV-4. Men Who Inject Drugs (IDU): Demographic Characteristics
By Year Of Diagnosis, Connecticut 1990-2000**

Variable	1990 - 1995 (n = 3,107*)		1996 - 2000 (n = 1,074)	
	No.	(%)	No.	(%)
Age group				
13-19	4	(0)	1	(0)
20-29	311	(10)	58	(5)
30-39	1,597	(51)	423	(39)
40-49	1,001	(32)	471	(44)
50+	194	(6)	121	(11)
Race/ethnicity				
White	634	(20)	271	(25)
Black	1,503	(48)	445	(41)
Hispanic	956	(31)	357	(33)
Asian/PI	4	(0)	1	(0)
Nat Amer.	6	(0)	-	(-)

*4 Cases have an unknown Race/ethnicity

There was a 66% decrease in the number of heterosexual male IDUs diagnosed with AIDS in 1990-1995 compared to 1996-2000. Figure IV-3 shows reported AIDS cases among heterosexual male IDUs between 1981 and 2000. A substantial decline in AIDS cases is demonstrated in this figure. Among the possible reasons for his falling trend may be a result of effective HIV intervention program through the needle exchange services available in five of Connecticut's major cities of Hartford, Bridgeport, Danbury, New Haven and Stamford.

Figure IV-3. AIDS Cases among men who inject drugs (IDU) by Race/Ethnicity and Year of Report, Connecticut 1981-2000



Female Injection Drug Users

Female IDUs accounted for the third largest group, after heterosexual male injection drugs users and MSM. As of December 31, 2000, a cumulative total of 1,553 female IDUs were reported with AIDS to the Connecticut Department of Public Health. Similar to the heterosexual male IDU, female IDU continues to be one of the dominant exposure categories. The percentage of persons diagnosed with AIDS each year that are female IDU has fallen steadily over time among all racial/ethnic groups.

Female IDUs represent 13% of AIDS cases reported in Connecticut through 2000 and 12% of AIDS cases reported in Connecticut in 1999.

Table IV-5 shows the demographic characteristics of AIDS cases among female injection drug users in two time periods of 1990-1995 and 1996-2000. The total number of AIDS cases reported in Connecticut in the earlier period of 1990-1995 was 908. In contrast, the total number of AIDS cases reported from 1996-2000 has declined almost 50%.

**Table IV-5. Women Who Inject Drugs (IDU): Demographic Characteristics
AIDS Cases by Year Of Diagnosis, Connecticut 1990-2000**

Variable	1990 - 1995		1996 - 2000	
	No.	(%)	No.	(%)
(n = 908*)				
(n =450)				
Age group				
13-19	3	(0)	1	(0)
20-29	169	(19)	57	(13)
30-39	495	(55)	207	(46)
40-49	207	(23)	163	(36)
50+	34	(4)	22	(5)
Race/ethnicity				
White	280	(31)	132	(29)
Black	421	(46)	198	(44)
Hispanic	202	(22)	119	(26)
Asian/PI	1	(0)	1	(0)
Nat Amer/AN	2	(0)	-	(-)

*2 Cases have an unknown Race/ethnicity

In the past five years, the largest racial/ethnic group of female injection drug users who have been reported with AIDS in Connecticut have been Black (44%), with 29% of cases among Whites, 26% among Hispanics, and one case among Asian/Pacific Islanders. Similar to the heterosexual male IDU, the age distribution has shifted to the older age group in the past five years. Over 80% of the heterosexual male IDUs were diagnosed with AIDS when they were between 30 and 49 years of age. The majority of the female injection drug users who have been reported with AIDS are in the age group of 30-39 years. The needle exchange program services established in Connecticut in 1990 may have an impact in reducing the number of AIDS cases among female IDUs.

Between 1996-2000, 436 female IDUs were diagnosed with AIDS in Connecticut. Three hundred and two (69%) resided in the following major cities: Hartford 124, New Haven 60, Bridgeport 54, Waterbury 34, and Stamford 30.

Heterosexual Females

Heterosexual females are the fourth largest group of AIDS cases reported since the beginning of the epidemic in Connecticut. As of December 31, 2000, a cumulative total of 1,198 heterosexual female were reported with AIDS to the Connecticut Department of Public Health. Heterosexual female represent 10% of AIDS cases reported in Connecticut through 2000 and 15% of AIDS cases reported in Connecticut in 1999.

Table IV-6 describes the demographic characteristics of AIDS cases among heterosexual females in two time periods of 1990-1995 and 1996-2000. The total number of AIDS cases reported in Connecticut in the earlier period of 1990-1995 was 640. From 1996-2000, the total number of AIDS cases reported has fallen to 483, a 25% decrease.

The age distribution is not similar in the two periods. The racial/ethnic distribution is also similar in the two periods. The large proportion of heterosexual females diagnosed with AIDS from 1996-2000 are blacks (42%) and Hispanics (34%), a smaller percentage (23%) are whites, and only one case was diagnosed among Native Americans/Alaska Natives.

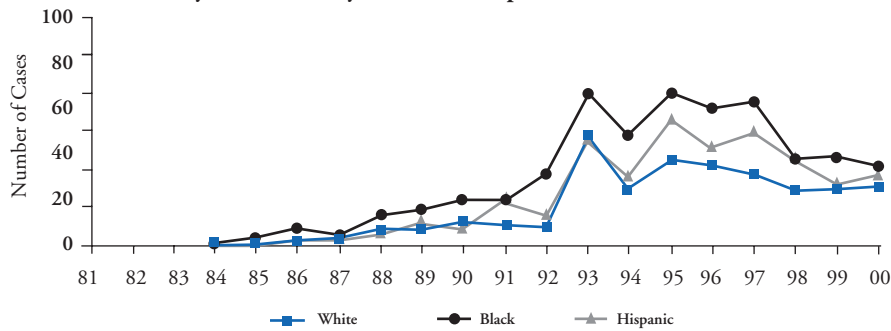
**Table IV-6. Female Heterosexuals: Demographic Variable
AIDS Cases by Year Of Diagnosis, Connecticut 1990-2000**

Variable	1990 - 1995		1996 - 2000	
	No.	(%)	No.	(%)
	(n = 640*)		(n = 483)	
Age group				
13-19	8	(1)	5	(1)
20-29	159	(25)	79	(16)
30-39	291	(45)	213	(44)
40-49	123	(19)	129	(27)
50+	59	(9)	57	(12)
Race/ethnicity				
White	165	(26)	113	(23)
Black	274	(43)	204	(42)
Hispanic	197	(32)	165	(34)
Asian/PI	1	(0)	-	(-)
Nat Amer/AN	2	(0)	1	(0)

*1 cases has an unknown race/ethnicity

There was a 25% increase in number of heterosexual females diagnosed with AIDS in 1996 - 2000 compared to 1990 - 1995. Figure IV-5 presents reported AIDS cases among heterosexual females declined between 1993 and 2000. The decline in number of AIDS cases is shown in this figure.

Figure IV-5. AIDS Cases Among Heterosexual Females by Race/Ethnicity and Year of Report, Connecticut 1981-2000



Summary:

- Behavioral risk groups describe characteristics of persons at-risk for acquiring HIV infection.
- MSM (men who have sex with men) are the second largest risk group of persons with AIDS. A cumulative total of 2,664 cases have been reported in MSM. MSM represent 20% of AIDS cases reported in 1999.
- The racial/ethnic distribution of MSM diagnosed with AIDS has changed over time. White MSM have decreased 64% and the rate among Hispanics has increased from 11% in 1990 to 16% since 1995. Black MSM have remained stable.
- Counseling and testing data from publicly funded sites for 2000 reported 1,135 MSM were tested and 40 (3.5%) were HIV positive. Blacks had the highest prevalence rate.
- Male IDU (injection drug users) continue to be the largest exposure category. Cumulatively 4,157 have been reported to DPH. They comprise 26% of AIDS cases reported in 1999.
- Female IDU are the third largest group of persons with AIDS in CT. They comprise 12% of the AIDS cases reported in 1999.
- Men who inject drugs who have sex with men rank as the seventh largest group with AIDS. They represent 1.3% of AIDS cases reported in 1999.
- Heterosexual females are the fourth largest group with AIDS reported in CT. They represent 15% of cases reported in 1999. The total number of AIDS cases reported in females has declined by 25% from 1996 to 2000.
- A large portion of heterosexual females diagnosed with AIDS from 1996-2000 are Black (42%) and Hispanic (34%), a small percentage are white (23%). There was 1 case among Native American/Alaska Natives.

V. HIV and AIDS in Other Populations

Native Americans: According to the 2000 U.S. Census Bureau, there are approximately 2.5 million Native Americans in United States and about 10,000 in Connecticut. The largest tribe in Connecticut is the "Pequot". While there are many cultural, behavioral and social differences across tribes, there are also similarities among them in regard to health issues. Due to very small numbers and the absence of tribal information on HIV and on AIDS cases report forms, data for Native American and Alaskan Natives (NA/ANs) are presented here in aggregate form.

The Indian Health Service branch of the Public Health Service reported 2,722 AIDS cases among NA/AN in 1999. During that same period, the average number of annual HIV infections was 120 nation wide. As of December 31, 2000, a cumulative total of 20 NA/AN persons with AIDS were reported to the Connecticut Department of Public Health. NA/ANs represents 0.2% of the total persons reported with AIDS in Connecticut.

In the year 2000, 64 persons who identified themselves as NA/AN received HIV counseling and testing services at publicly funded counseling and testing sites in Connecticut. Of these, 58 (91%) persons consented for HIV test. The test results were all negative.

Pregnant women: Beginning in the early 1990s, Connecticut law required that pregnant women be made aware of the availability of HIV testing. Since 1999, physicians were required by statute, to offer HIV testing to pregnant women twice during pregnancy, and to test the women who haven't been tested during pregnancy, at delivery, unless they decline. If the woman tested HIV positive, she is to be referred to receive appropriate care and services. Table V-1 presents data obtained from HIV seroprevalence survey of pregnant women and their newborns between 1993 and 1998 by year of birth. The rates of HIV-positive declined steadily from 2.9% in 1993 to 1.4% in 1998 for pregnant women, and from 19% in 1993 to 3% in 1998 for the newborns.

In 2000, 1,525 pregnant women were tested for HIV antibody at publicly funded clinics in Connecticut. Two of them were confirmed positive for HIV antibody. Both women were Hispanic and between the ages of 20 to 29. One reported with no acknowledged risk and the other reported Heterosexual contact and no other risks.

Table V-1. HIV Seroprevalence Among Pregnant Women and Perinatal Transmission of HIV by Year of Birth, Connecticut 1993 - 1998

Year of Delivery	Births	HIV+ mothers* N	(Rate**)	HIV+newborns N	(%)
1993	46,761	133	(2.9)	25	(19)
1994	45,795	100	(2.2)	21	(21)
1995	44,261	78	(1.8)	8	(10)
1996	44,331	63	(1.4)	5	(8)
1997	43,948	66	(1.5)	2	(3)
1998	43,601	63	(1.4)	2	(3)

*1993 - 1994 estimated from Survey of Childbearing women; 1995 - 1998 surveillance.

**Rate HIV+ preganant women per 1,000 births.

Immigrants: Neither the AIDS case reports received by the AIDS Surveillance Program or the HIV counseling and testing system include information on HIV/AIDS testing among immigrants. However, since there is a substantial degree of co-infection between HIV and TB it may be useful to examine the Connecticut towns with the highest number of immigrants who have been diagnosed with TB. Between 1996 and 2000, immigrants with diagnosed with TB have been reported in the following towns: Hartford (86), Bridgeport (68), Stamford (57), New Haven (47), Danbury (36) and Waterbury (30).

Homeless or undocumented persons: HIV and AIDS are exceptionally difficult to enumerate and accurately assess among homeless persons. In 2000 there were 536 HIV tests among Connecticut's homeless, and 13 were HIV positive. Of these, seven were new positive tests (five males and two females). Three were white, three were Hispanic, and one was of another race or ethnicity. All seven were older than 20 and four were between ages of 30 and 50. One of the HIV positive cases was a MSM, three were IDUs, two had a sex partner at risk and one had sex for drugs or money. Among the 310 undocumented persons tested, two were first time positives (one male and one female). Both were Hispanic, between the ages of 20 and 29, and had a sex partner at risk.

Blood Donors: The screening of HIV and HCV antibodies was implemented in the State of Connecticut beginning in 1982. The blood bank routinely screens each unit of donated blood for HIV-1, HIV-2 and HCV antibodies. The p24 antigen is also screened to exclude blood units that were recently infected with HIV-1. In 2000, the total of 157,878 units of donated blood collected from the Red Cross Blood Bank in Connecticut were screened. Seventy-five units were tested positive for HCV antibody. Five units were tested positive for HIV-1 antibody and one unit was tested positive for p24 antigen. Although none was tested positive for HIV-2 antibody, one unit was "indeterminate" for HIV-2 antibody.

Incarcerated and post-incarcerated persons: Approximately 17,000 inmates were incarcerated at 20 state correctional institutions in 2000. From 1980 through 2000, there has been 1,247 reported AIDS cases at the Department of Correction (DOC) facilities. In 2000 there were 55 AIDS cases reported by DOC, a 30% drop from 80 cases of the previous year (1999). Males accounted for 76% of the reported AIDS cases. By race/ethnicity, 15% were white, 47% were black, and 38% were Hispanic. Sixty percent were injection drug users.

During the year 2000, 5,340 males and 1,302 females received HIV counseling at a DOC institution. Table V-2 presents the demographic characteristics and exposure category of inmates who received counseling and testing services at the Department of Correction in 2000. The total of 6,642 inmates received HIV counseling and 5,584 were tested for HIV antibody (4,496 males and 1,088 females). Of these, 65 were tested HIV-positive. The majority of the HIV positives were male (69%), black (41%) or Hispanic (37%), aged 30-39 (40%). More than half (53%) of those who tested positive were heterosexual injection drug users. Men who have sex with men accounted for 9% of the positives, less than the group that reported having a sex partner at risk (15%).

**Table V-2. HIV Counseling and Testing Data
from the Department of Correction During 2000**

Groups	Number of Counseled Clients	Number of HIV Tests	Number of Positive Tests	Percent HIV Positive
Gender				
Male	5,340	4496	45	69 %
Female	1,302	1088	20	31%
Race/Ethnicity				
White	1973	1674	14	22%
Black	2542	2059	27	41%
Hispanic	2024	1772	24	37%
Other	103	89	0	0%
Age Groups				
Under 13	0	0	0	0%
13-19	529	461	0	0%
20-29	2643	2234	11	17%
30-39	2413	2031	26	40%
40-49	914	747	23	31%
50 and over	143	111	5	5%
Age Unknown	0	0	0	7%
Risk				
MSM IDU	33	29	1	2%
MSM	111	96	6	9%
Heterosexual IDU	1485	1265	34	52%
Sex Partner at Risk	951	808	10	15%
STD Diagnosis	1163	1028	6	9%
Sex for Drugs/Money	201	172	2	3%
Sex While Using Drugs	1298	1175	3	5%
HEM/Blood Recipient	33	24	0	0%
Victim of Sexual Assault	49	38	1	2%
Health Care Exposure	23	19	0	0%
No Acknowledged Risk	76	30	0	0%
Heterosexual, No Other Risk	1189	877	2	3%
Other Risk	30	23	0	0%
Total	6642	5584	65	

*2 Cases have an unknown Race/ethnicity

Persons with Disabilities and Special Needs: The Office of Protection and Advocacy for Persons with Disabilities (better known as "P&A") is an independent State agency created to safeguard and advance the civil and human rights of people with disabilities in Connecticut. During the past year, P&A staff and subcontractors provided information and referral services to 7229 individuals seeking assistance. P&A staff members responded to 627 calls concerning special education, 587 questions about housing rights and choices, and 421 employment related inquiries. Although these numbers represented an important segment of the total Connecticut population in 2000, no comprehensive HIV survey has been conducted among persons with physical, learning, emotional or behavioral disabilities in Connecticut.

Persons with Severe and Persistent Mental Illness: Some individuals with severe and persistent mental illness engage in behaviors that put them at high risk for HIV infection such as injection and non-injection drug use, alcohol abuse and/or unprotected sex with multiple partners. Neither the AIDS case reports received by the AIDS Surveillance Program or the HIV counseling and testing system include information on HIV/AIDS testing among persons with severe and persistent mental illness.

Transgendered Persons: There are very limited data available on the transgendered population in Connecticut or anywhere else in the U.S. In addition, we do not know of any reliable estimates of the size of the transgendered population. The AIDS case reports received by the AIDS Surveillance Program do not include complete information on transgendered status and therefore no data are included in this document.

Adolescents: Adolescents (13-19 years old) accounted for 0.3% of cumulative reported AIDS cases and 0.6% of AIDS cases reported in Connecticut in 1999.

Table V-3 presents the demographic characteristics of AIDS cases among adolescents in two time periods of 1990-1995 and 1996-2000. Due to a very small number of AIDS cases reported among adolescents each year, interpretation of these data needs to be made with cautions. The total number of AIDS cases reported in Connecticut in the earlier period of 1990-1995 was 21. In contrast, the total number of AIDS cases reported in the past five years (1996-2000) was decreased to 14. The gender distribution in this group is different from AIDS cases as a whole. In this group the proportion of female cases is larger than males.

The racial/ethnic distribution of adolescents diagnosed with AIDS from 1990-1995 differs from those diagnosed recently. A large proportion of adolescents diagnosed with AIDS from 1996-2000 are Hispanics (50%) and white (29%), and a small percentage (21%) are black.

**Table IV-7. Adolescents (13-19): Demographic Characteristics
By Year Of Diagnosis, Connecticut, 1990-2000**

Variable	1990 - 1995 (n = 21)		1996 - 2000 (n = 14)	
	No.	(%)	No.	(%)
Gender				
Male	8	(38)	6	(43)
Female	13	(62)	8	(57)
Race/ethnicity				
White	8	(38)	4	(29)
Black	7	(33)	3	(21)
Hispanic	6	(29)	7	(50)
Asian/PI	-	(-)	-	(-)
Nat Amer/AN	-	(-)	-	(-)

Supplement to HIV/AIDS Surveillance (SHAS) Data

The supplement to HIV/AIDS Surveillance (SHAS) project is a cross-sectional interview study that began in Connecticut in collaboration with the Centers for Disease Control and Prevention since 1991 to augment data collected from routine AIDS surveillance. This in-depth interview collects information related to risk behavior and access to HIV prevention and care services. Persons with AIDS, who are at least 18 years of age and are able to complete the interview are eligible. All persons reported with AIDS who were receiving care at six medical facilities in Hartford and New Haven were asked to participate when they arrived for an outpatient appointment or were admitted to the hospital.

From 1991-1998, 1,253 adults with AIDS agreed to complete SHAS interviews in Connecticut. Most persons interviewed were male (72%), or black or Hispanic, or aged 30-39 years. Of persons interviewed 688 (55%) reported having ever injected an illicit drug with a needle. Among these injectors, 585 (85%) reported having shared needles and/or syringes, 7% of 907 male IDUs were men who have sex with men. The median age of injection was 19 years for men and 20 years for women. The primary drug of choice injected among 346 female IDUs was heroin (50%). Twenty-five percent injected cocaine and 25% injected speedball (cocaine and heroin). For male IDUs, 44% injected heroin, 30% injected cocaine and 26% injected speedball.

Of 346 female IDUs, 41% had used crack in a crack house and 15% had sex in a crack house while using crack. Among 35 women who received money for sex, 6 (17%) never used condoms when having sex and 11 (31%) used condoms every time.

Commercial sex workers: The term commercial sex worker is used here to identify all persons who have ever traded sex for money, drugs or other basic needs such as food or shelter. The AIDS case reports received by the AIDS Surveillance Program does not include information on HIV/AIDS testing among commercial sex workers. The following SHAS data include information on persons with AIDS only. Based on 346 interviews with female IDUs who reported with AIDS in Connecticut from 1991-1998, 35 (10%) received money for sex. During the year 2000, 373 clients who reported trading sex for drugs or money were tested at publicly funded clinics in Connecticut for HIV. Seven of these were HIV positive.

Summary:

- There are 2.5 million Native Americans in the US and about 10,000 in Connecticut. Twenty NA/AN persons with AIDS have been reported to DPH. Of the 58 NA/AN persons tested for HIV in publicly funded sites all were HIV negative.
- HIV seroprevalence rates for pregnant women and their newborns have declined from 2.9% in 1993 to 1.4% in 1998 for women and 19% in 1993 to 3% in 1998 for newborns.
- Among the 537 HIV tests performed among the homeless population in 2000 at HIV counseling and testing sites, 13 were HIV positive.
- Screening Connecticut's blood supply for HIV and HCV was implemented in Connecticut beginning 1982. In 2000, 157,878 units of donated were screened. Seventy five units were HCV positive and 5 tested positive for HIV.
- Approximately, 17,000 inmates are incarcerated in Connecticut correctional facilities. In 2000, 55 AIDS cases were reported, a 30% drop from 1999. Males account for 76% of cases. Forty-seven percent were Black, and 69% IDU.
- Adolescents (13-19 years) accounted for 0.6% of AIDS cases reported in 1999. The racial/ethnic distribution of adolescents diagnosed has changed from 1996 to 2000. Fifty percent are Hispanic, 29% white and 21% Black.
- SHAS interview data is used to augment routine AIDS surveillance data. Persons with AIDS, 18 years and older are interviewed. Since 1991 72% have been male, Black or Hispanic, and aged 30-39 years.
- SHAS interviews include persons who trade sex for money, drugs or other basic needs. Based on 346 interviews with IDU, 10% received money for sex.

VI. Other Data on HIV and AIDS

HIV Counseling and Testing Data: In 2000, there were 103 publicly funded confidential and anonymous HIV test sites (CTS) in seven of Connecticut's eight counties. An additional 20 CTS sites were located at Department of Correction facilities throughout the State. Table VI-1 shows the Number of site type in each CPG region.

Limitations: HIV counseling and testing data are based on the number of HIV tests conducted at these testing facilities and not on the number of individuals tested. Due to the lack of unique identifiers, an individual is counted each time they receive a test at these testing facilities. In addition, the seroprevalence data obtained from testing facilities may not represent the seroprevalence in the general population because these data are based on only persons who access HIV testing at these facilities. HIV seroprevalence may be different for persons who were tested elsewhere or for persons who have not been tested for HIV infection.

Table VI-1. Number of HIV Counseling and Testing Site Types in Each CPG Region

	Northwest	Northcentral	Northeast	Southwest	Southcentral	Southeast
HIV CTS		3		5	3	1
STD		2		5	3	2
Drug Treatment		4		9	7	2
Family Planning		1		4	2	
Prenatal/OB				1	2	
CHC/PHC		2	1	2	3	
Prisons/Jails		4	6	2	4	4
Hosp/PMD	4			2	6	2
Field Visit		2		1		
Other		7		8	6	1
Total	4	25	7	39	36	12

CTS data are based on the number of HIV tests conducted and not on number of persons tested. Table VI-2. shows that from January to December 2000, a total of 19,929 pre-test counseling sessions were provided and 18,498 HIV tests were performed, with acceptance rate of 93%. Of the total HIV tests, 233 (1.26%) were HIV positive. Males accounted for 70% of the positives. Close to 40% of the seropositives were Hispanic and more than a third were Black. There were only 2 positive test results among the 2,113 test of 13 to 19 year old clients with a seropositive rate of 0.09%. Although heterosexual IDUs accounted for the highest number of positives (76), MSMs and MSM IDUs showed the highest HIV positively rate: 6.49 and 3.52, respectively.

Table VI-2. HIV Counseling and Testing Data from Publicly Funded Clinics in Connecticut During 2000

Groups	Number of Counseled Clients	Number of HIV Tests	Number of Positive Tests	Percent HIV Positive
Gender				
Male	12,285	11,208	163	1.45%
Female	7,643	7,289	70	0.96%
Race/Ethnicity				
White	6,968	6,563	51	0.78%
Black	6,250	5,609	85	1.52%
Hispanic	6,243	5,891	92	1.56%
Other	468	435	5	1.15%
Age Groups				
Under 13	9	9	0	0.00%
13-19	2,228	2,113	2	0.09%
20-29	7,327	6,798	53	0.78%
30-39	6,373	5,860	90	1.54%
40-49	3,047	2,825	64	2.27%
50 and over	941	890	24	2.70%
Age Unknown	4	3	0	0.00%
Risk				
MSM IDU	83	77	5	6.49%
MSM	1,193	1,135	40	3.52%
Heterosexual IDU	2,844	2,578	76	2.95%
Sex Partner at Risk	4,151	3,945	62	1.57%
STD Diagnosis	2,780	2,617	12	0.46%
Sex for Drugs/Money	405	373	7	1.88%
Sex While Using Drugs	2,678	2,479	8	0.32%
HEM/Blood Recipient	63	54	1	1.85%
Victim of Sexual Assault	125	113	1	0.88%
Health Care Exposure	78	73	0	0.00%
No Acknowledged Risk	290	238	3	1.26%
Heterosexual, No Other Risk	5,131	4,719	18	0.38%
Other Risk	108	97	0	0.00%
Total	19,929	18,498	233	1.26%

HIV counseling and testing data by services/clinic type and race/ethnicity are shown in Table VI-3. The table indicates that with the exception of inmates tested in prisons, most testing among Hispanics and Blacks are performed at community health centers, local health departments, and STD sites. The highest seropositive rate is found at drug treatment facilities.

Table VI-3. Number of HIV Tests, HIV Positive Tests, and Percent Positive by Race/Ethnicity and Site Type Among Clients Tested for HIV Infection at Publicly Funded Testing Sites in Connecticut During 2000

Treatment Site	Test Result	White	Black	Hispanic	Other	Total
Health Department	# of Tests	1526	618	700	84	2928
	# Positive	9	14	25	3	51
	% Positive	0.59	2.27	3.57	3.57	1.74
STD Treatment	# of Tests	1029	1286	575	131	3021
	# Positive	1	14	2	0	17
	% Positive	0.09	1.09	0.35	0	0.56
Drug Treatment	# of Tests	477	153	330	5	965
	# Positive	4	2	11	0	17
	% Positive	0.84	1.31	3.33	0	1.76
Family Planning	# of Tests	74	223	549	11	857
	# Positive	3	10	2	0	15
	% Positive	4.05	4.48	0.36	0	1.7
Prenatal/OB	# of Tests	68	140	336	36	580
	# Positive	0	0	2	0	2
	% Positive	0	0	0.60	0	0.34
Community or Private Health Center	# of Tests	647	449	741	66	1903
	# Positive	3	8	17	1	29
	% Positive	0.46	1.78	2.29	1.52	1.52
Prison/Jail	# of Tests	1674	2059	1772	79	5584
	# Positive	14	27	24	0	65
	% Positive	0.84	1.13	1.35	0	1.16
Hospital or Private Medical Doctor	# of Tests	711	281	505	57	1554
	# Positive	13	6	4	1	24
	% Positive	1.83	2.14	0.79	1.75	1.54
Mobile Vans or Community Outreach	# of Tests	107	88	225	14	434
	# Positive	2	2	2	0	6
	% Positive	1.87	2.27	0.89	0	1.38
Other Sites	# of Tests	187	312	158	15	672
	# Positive	2	2	3	1	8
	% Positive	1.08	0.64	1.90	6.67	1.19
Total	# of Tests	6563	5608	5891	436	18,498
	# Positive	51	85	92	5	233
	% Positive	0.78	1.52	1.56	1.15	1.26

The number of HIV Tests, HIV positive tests, and percent positive by race/ethnicity, and exposure among male and female clients tested for HIV infection in 2000 are shown in Table VI-4. Among male blacks, injection drug users have the highest seropositivity rate (9.00%). This compares with 4.64% for Hispanic IDU and 0.85% for White IDU. Among female clients, Blacks show the highest seropositive rates for both injection drug use (4.26%) and for heterosexual contact (1.13%).

Table VI-4. Number of HIV Tests, HIV Positive Tests, and Percent Positive by Race/Ethnicity and Exposure Among Clients Tested for HIV Infection at Publicly Funded Testing Sites in Connecticut During 2000

Male Exposure Category		Test Result	White	Black	Hispanic	Other	Total
Men who have sex with men	# of Tests		732	167	205	31	1135
	# Positive		14	13	10	3	40
	% Positive		1.19	7.78	4.88	9.7	3.52
Injection drug use	# of Tests		828	200	690	13	3,521
	# Positive		7	18	32	0	57
	% Positive		0.85	9.00	4.64	0	3.26
Heterosexual contact	# of Tests		895	746	637	63	2,341
	# Positive		1	3	2	0	6
	% Positive		0.11	0.40	0.31	0	0.26
Other	# of Tests		1,686	2,367	1,827	121	6,001
	# of Positive		10	24	25	1	60
	% Positive		1.30	1.40	2.40	0.83	1.00
Total	# Tests		4,141	3,480	3,359	228	11,208
	# Positive		32	58	69	4	163
	% Positive		0.77	1.67	2.05	1.75	1.45
Female Exposure Category		Test Result	White	Black	Hispanic	Other	Total
Injection drug use	# of Tests		520	94	229	4	847
	# Positive		10	4	5	0	19
	% Positive		1.92	4.26	2.18	0	2.24
Heterosexual contact	# of Tests		627	531	1,119	101	2,378
	# Positive		2	6	4	0	12
	% Positive		0.32	1.13	0.36	0	0.50
Other	# of Tests		1,274	1,504	1,184	102	4,064
	# Positive		7	17	14	1	39
	% Positive		0.55	0.66	0.76	0	0.95
Total	# of Tests		2,421	2,129	2,532	207	7,289
	# Positive		19	27	23	1	70
	% Positive		0.78	1.27	0.91	0.48	0.96

The CTS data system records client information by preprinted Counseling and Testing ID number. Each time a client is counseled and tested they receive a new number. Therefore, in many cases, CTS data includes multiple test results for the same individual, which can not be unduplicated. However clients are asked if they have ever tested positive for HIV before. This allows for the collection of data on new seropositive cases. Table IV-1a and Table IV-1b contrasts the trends in number and percent of new seropositive tests with total seropositive tests from 1991 to 2000. Over the ten-year period, new seropositives varied from between 60 to 80 percent of total positive tests. In addition, the Percent of seropositives continues to decline at about the same rate in both groups.

Figure VI-1a. Trends in the Number and Percent of HIV+ Clients at Publicly Funded Clinics in Connecticut, 1991 - 2000

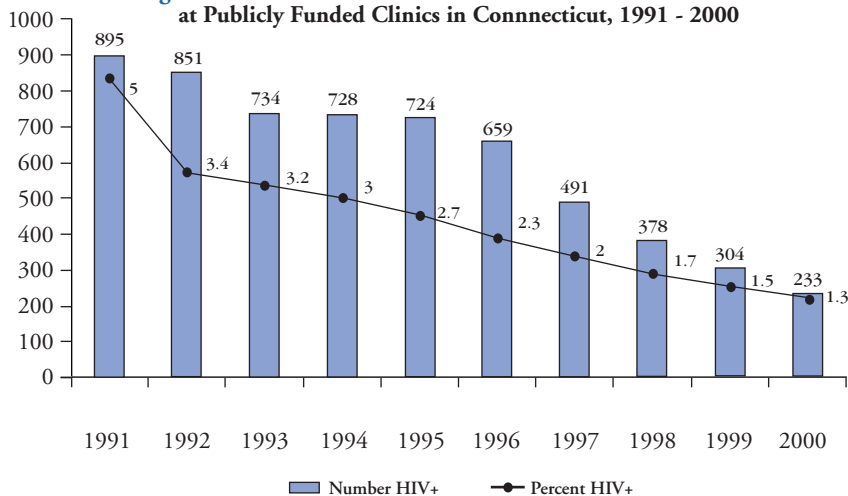
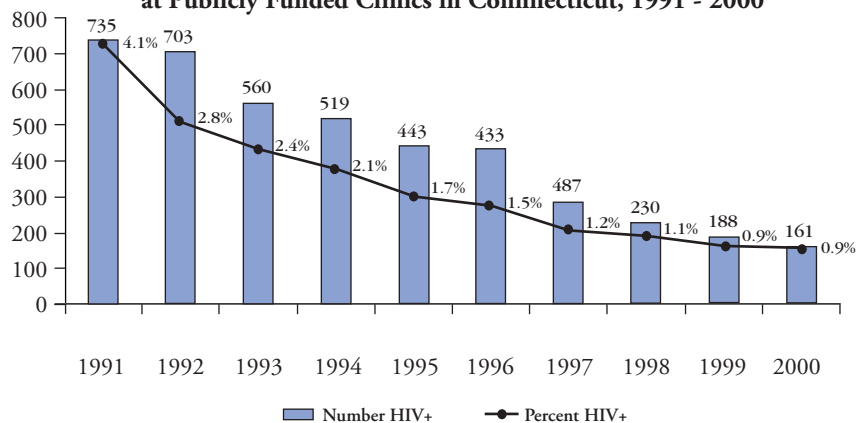


Figure VI-1b. Trends in the Number and Percent of New HIV+ Clients at Publicly Funded Clinics in Connecticut, 1991 - 2000



Sexually Transmitted Diseases (STDs) as an Indicator for HIV/AIDS Risk: Individuals diagnosed with an STD share one or more common risk factors with persons diagnosed with HIV infection. The presence of STD indicates that an individual has had unprotected sex. Some STDs, such as syphilis, herpes, or chancroid, produce open sores that increase the likelihood that HIV from an infected partner will enter the blood stream. Co-infection with HIV and gonorrhea, a non-ulcerative inflammatory STD, increases HIV viral shedding and increases the viral load in genital secretions, thereby enhancing the likelihood of HIV transmission to a sexual partner. The STDs that are reportable in Connecticut include syphilis, gonorrhea, and chlamydia.

The number of primary and secondary syphilis cases among heterosexual males has declined steadily from 215 cases in 1991 to six cases in 2000. Whites represented the largest number of individuals diagnosed with primary and secondary Syphilis in Connecticut. Figure VI-2a shows reported primary and secondary syphilis cases by race/ethnicity from 1991 to 2000.

Gonorrhea can act as a marker or sentinel STD, particularly for young adults. Gonorrhea rates have been falling steadily, particularly among African-Americans. Similar to syphilis, Whites represent the largest number of gonorrhea cases diagnosed in Connecticut. The total number of gonorrhea cases among African-Americans declined steadily from 3,219 cases in 1990, to 1,318 cases in 2000 (Figure VI-2b). In 1999, the total number of 3,316 cases of gonorrhea were reported in Connecticut, 29% among young adults aged 20-24 years and 28% among adolescents (Figure VI-3).

Figure VI-2a. Reported Primary and Secondary Syphilis, By Race/Ethnicity, Connecticut 1991-2000.

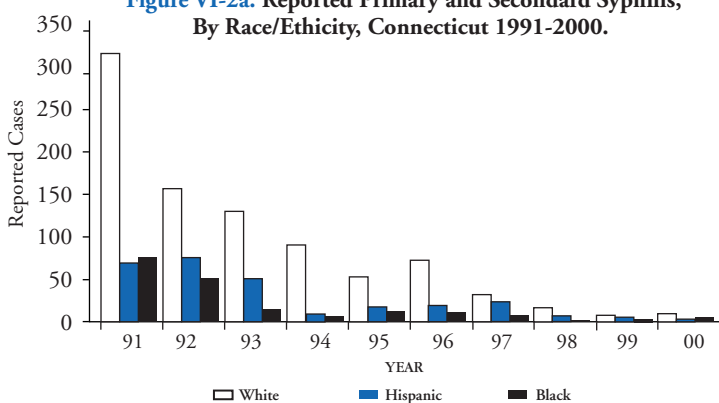
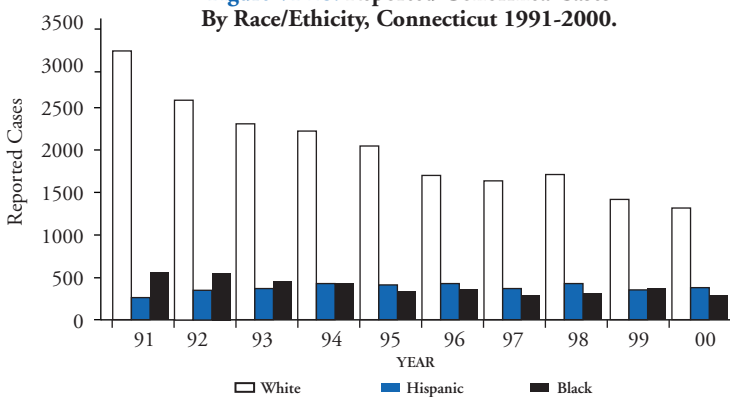


Figure VI-2b. Reported Gonorrhea Cases By Race/Ethnicity, Connecticut 1991-2000.



Chlamydia may also be used as a marker of high-risk sexual behavior, particularly among adolescents. Chlamydia surveillance was initiated in Connecticut in July 1990. Chlamydia is the most common STD reported among adolescents and young adults in Connecticut. Chlamydia prevalence rates fluctuated between 1991 and 2000 in all racial/ethnic groups, with the highest rates among African-Americans (Figure VI-4).

Figure VI-3. Percent Reported Gonorrhea Cases By Age Group, Connecticut 1999

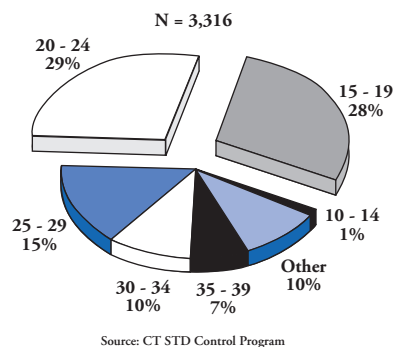
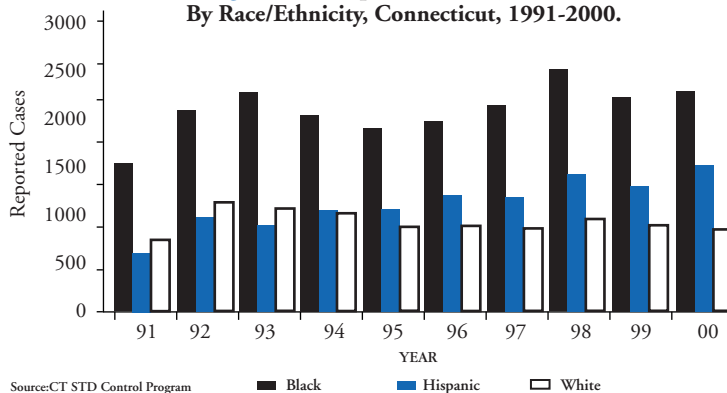


Figure VI-4. Reported Chlamydia Cases By Race/Ethnicity, Connecticut, 1991-2000.



Chlamydia and gonorrhea rates are higher than AIDS rates across all major cities in Connecticut (Table VI-5) and over a long period of time (Figure VI-5). These rates follow a geographic distribution pattern similar to AIDS rates. Syphilis rates, although much lower than AIDS rates, also follow a similar pattern to AIDS rates. The high chlamydia and gonorrhea rates in Bridgeport, Hartford, New Haven and Waterbury cities are of particular concern.

HIV and AIDS in Persons with Hepatitis Co-infection:

The increasing spread of Hepatitis C virus (HCV) presents difficult challenges to public health officials due to common risk factors between HIV and other blood-borne diseases. HCV can lead to liver damage, cirrhosis and hepatocellular carcinoma. Chronic hepatitis C and its complications account for 8,000-10,000 deaths annually and is the leading reason for liver transplantation. It is estimated that 2.7 million Americans are infected with HCV. Over 80% of those infected with acute hepatitis C will develop chronic liver disease over the course of a few years. Identification of persons with HCV infection is part of the strategy to reduce the burden of HCV infection and HCV-related disease in the U.S. Because injection drug use is a major risk factor for both HIV and HCV transmission, publicly funded HIV counseling and testing sites may have a role in HCV prevention. Between April and September 1999, the Connecticut Department of Public Health conducted a seroprevalence survey of HCV among individuals who were attending HIV counseling and testing at 38 non-drug treatment sites and 24 drug-treatment sites. 2,133 leftover blood samples collected from those HIV counseling and testing facilities were tested anonymously for HCV antibody. The overall prevalence was 9.8% for HCV antibody, 1.3% for HIV antibody and 0.3% for both HIV and HCV antibody. Of blood samples collected from non-drug treatment sites, 128 (6.9%) were tested positive for

Figure VI-5. Chlamydia, Gonorrhea and AIDS Cases By Year of Report, Connecticut 1990-2000.

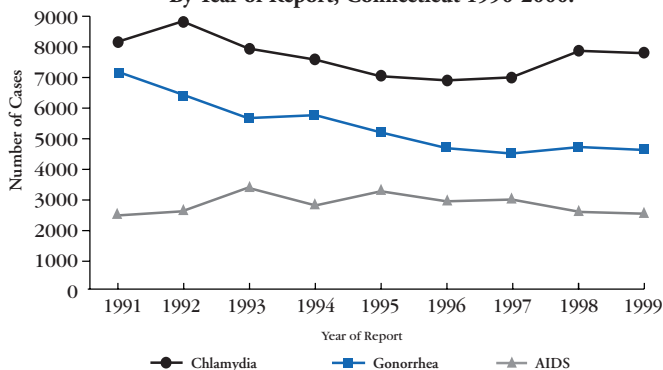


Table VI-5. Distribution of AIDS, Syphilis, Gonorrhea and Chlamydia Rates By Major Cities, Connecticut, 2000

City	Pop	Rates (per 100,000 pop)			
		AIDS	Syphilis	Gonorrhea	Chlamydia
Bridgeport	136,764	49	0.7	301	677
Hartford	126,568	122	6.8	547	1,276
New Haven	119,481	67	1.6	361	698
Waterbury	103,670	55	0.9	227	421
Danbury	65,517	6	0.0	11	118
Greenwich	58,463	0	0.0	7	27
Middletown	44,192	23	0.0	60	218
Norwich	35,305	14	0.0	77	272
Torrington	35,053	14	0.0	26	64
New London	22,330	76	0.0	155	503

Population, 1998 estimates; AIDS, early syphilis, gonorrhea and chlamydia cases reported in 2000.

HCV antibody. In contrast, 78 of 194 (40.1%) blood samples collected from drug-treatment sites were tested positive for HCV antibody. The prevalence of HCV infection was similarly high among injection drug users at both types of facility (65% at non-drug treatment sites and 69% at drug-treatment sites).

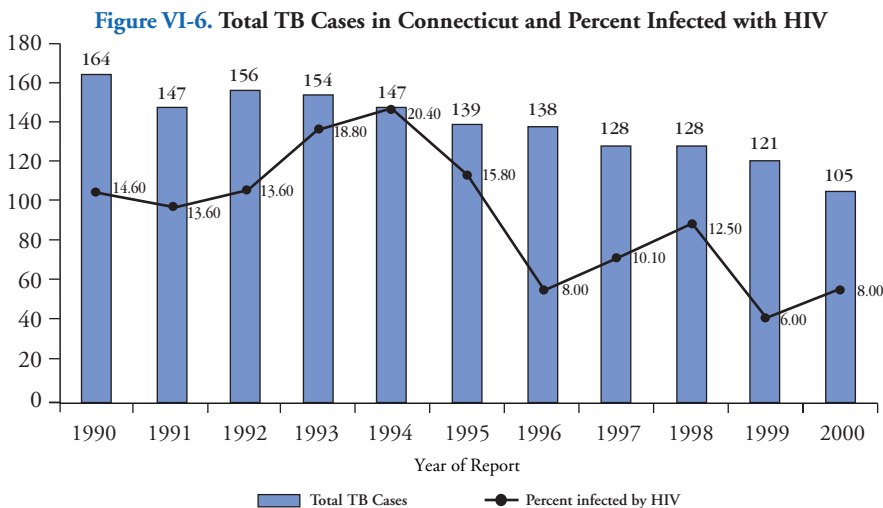
The majority of HCV-positive persons were at the age of 30 or older. Among those who tested positive for HCV, 38% were Hispanics, 44% were whites and 18% were African Americans. There were no gender differences in this study survey.

Routine screening of blood donor for HCV has been shown to reduce the risk of HCV infection through blood transfusion to near zero. Although percutaneous exposure is widely recognized as the most common route of HCV transmission, other studies suggest that as many as 10% of HCV cases may be linked to sexual transmission in the absence of injection drug use.

HIV and AIDS in Persons with Tuberculosis Co-infection:

Individuals infected with tuberculosis (TB) who are also HIV-infected have a much higher risk of developing tuberculosis. In 1989, the Advisory Committee for the Elimination of Tuberculosis recommended that "all patients diagnosed with TB should be offered HIV counseling and testing." Testing TB patients for HIV infection will assure the appropriate management of TB in an HIV-infected patient, and assist with monitoring the prevalence of HIV infection among persons with TB.

The number of persons diagnosed with TB in Connecticut has declined 36% from 164 cases in 1990 to 105 in 2000. However, the percentage of TB cases reported recently among foreign-born persons has increased 30% from 1990 to 2000. Figure VI-6 presents the prevalence of HIV infection among TB cases reported from 1990 through 2000. The highest percentage of TB/HIV co-infected cases was reported in 1994 (20.4%). It is most likely that there is an underestimate of the true HIV prevalence among persons with TB in Connecticut since not all TB patients are tested for HIV infection. In addition, HIV test results may not be reported to the TB Control Program.



Summary:

- Connecticut has 103 publicly funded confidential and anonymous HIV testing sites. CT's correctional facilities also have voluntary HIV testing.
- HIV Counseling and testing data is based on the number of HIV tests not persons testing since individuals may test repeatedly. Testing is offered in all CPG regions of the state.
- In 2000, 18,498 tests were performed, 233 were HIV positive. Males accounted for 70% of the positives. Forty percent were Hispanic and more than one third were Black. There were 2 positive tests among 13-19 years. The majority were IDU.
- Individuals with STDs are at increased risk for HIV from an infected partner. Some STDs such as syphilis, herpes, or chancroid produce open sores allowing HIV to enter the bloodstream.
- In Connecticut syphilis, gonorrhea, and chlamydia are reportable STDs.
- African Americans represent the largest number of individuals diagnosed with primary and secondary syphilis. They also represent the largest number of cases of gonorrhea and chlamydia.
- In 1999, 3,316 cases of gonorrhea were reported. Twenty-nine percent among young adults (20-24 years) and 28% among adolescents. Chlamydia is the most common STD reported among adolescents and young adults.
- Among persons tested in HIV CTS associated with substance abuse treatment, the prevalence of HCV infection was highest among IDUs.
- Individuals infected with tuberculosis (TB) who are also infected with HIV have a much higher risk of developing TB disease.
- The Advisory Committee for the Elimination of TB recommended in 1989 that all patients diagnosed with TB should be offered HIV counseling and testing.
- TB has declined in CT from 164 cases in 1990 to 105 in 2000. However, the percent in individuals who are foreign-born has increased 30% in that same time period.
- Accurate HIV prevalence information among persons with TB in CT is not available since all persons with TB infection are not tested for HIV. The highest percentage of TB/HIV co-infection in persons with TB was reported in 1994 (20.4%).

VII. Appendix

Glossary

AIDS – acquired immunodeficiency syndrome. AIDS results from infection with a blood-borne sexually transmitted virus called Human Immunodeficiency Virus (HIV) AIDS damages the immune and can result in neurological problem, infections, or cancers.

Active antiretroviral therapy - see Highly Active Anti-Retroviral Therapy (HAART).

Adjustment – a mathematical procedure to permit comparison of two or more populations in which background differences in the distribution of covariables are removed.

Aggregate – to collect or gather into a mass or whole.

Anonymous – in anonymous testing, client’s identifying information is not linked to testing information.

Antibody – a substance produced by white blood cells to counteract antigens.

Antigen – any substance that provokes an immune response when introduced into the body, viruses and bacteria are antigens

Baby-boom - a marked rise in birthrate (as in the U.S. immediately following the end of World War II).

Behaviorally bisexual – describing a person who has sex with male and female partners, but who may self-identify as heterosexual.

Behavioral intervention – behavioral interventions aim to change individual behaviors only, without explicit or direct attempts to change the norms (social or peer) of the community (e.g., geographically defined area) or the target population (e.g. drug users or men having sex with men). Typical example of these interventions include health education, risk education counseling, and other individual-level interventions.

Case – a person who has a disease of interest.

Case-fatality rate – the proportion of persons with a particular disease who die from that disease within a specified period of time.

CD4 (or T4) – a type of white cell that oversees the action of the human immune system and is the main target of HIV. Also called a helper T-cell.

Cerebrovascular disease - a general term which encompasses a variety of diseases which affect the arteries which supply the brain.

Chlamydia - infections caused by Chlamydia trachomatis are the most common bacterial sexually transmitted infection, with an calculated annual incidence of 4.5 million cases in the United States. Chlamydia can cause a spectrum of infections including conjunctivitis and pneumonia in newborn infants.

Chronic obstructive pulmonary disease - a progressive disease process that most commonly results from smoking. Chronic obstructive pulmonary disease is characterized by difficulty breathing, wheezing and a chronic cough. Complications include bronchitis, pneumonia and lung cancer.

Cohort – a group of persons who share a common attribute, such as birth in a particular year or residence in a particular area, who are followed over time.

Community Planning Groups (CPGs) – groups responsible for conducting HIV Prevention Community Planning; CPGs are composed of community representatives, scientists and other technical experts, and staff of non-governmental organizations, and departments of health, education, and substance abuse prevention.

Confidence interval (C.I.) – a range of values for a measure that is believed to contain the true value within a specified level (e.g., 95%) of certainty.

Confidential HIV testing – a person is tested for HIV and gives his or her name; specimens are marked with a code number, but can be linked to a name.

Correctional institution – prison or jail.

Counseling and testing – the voluntary process of client-centered, interactive information sharing in which an individual is made aware of the basic information about HIV/AIDS, testing procedures, how to prevent the transmission and acquisition of HIV infection, and given tailored support on how to adapt this information to their life.

Cumulative – pertaining to the total number of persons reported or diagnosed with AIDS at a specified point in time.

Cumulative incidence – the risk of developing a particular disease within a specified period of time.

Data – specific information or facts that are collected. A data element is usually a discrete or single measure. Examples of client-level data elements are sex, race/ethnicity, age, and neighborhood.

Demographics – the statistical characteristics of human populations such as age, race, ethnicity, and sex that can provide insight into the development, culture, and sex-specific issues that the intervention will need to account for.

EIA – enzyme immunoassay. Sometimes referred to as ELISA (see below). A common used screening test to detect antibodies to HIV.

ELISA – enzyme-linked immunosorbent assay. A blood test which indicates the presence of antibodies to HIV. The HIV ELISA test indicates if HIV infection has occurred, and does not by itself mean that the person has severe immune system damage.

Epidemic – a disease that spreads rapidly through a demographic segment of the human population, such as everyone in a given geographic area; a military base, or similar population unit; or everyone of a certain age or sex, such as the children or women of a region. Epidemic diseases can be spread from person to person or from a contaminated source such as food or water.

Epidemiologic profile – a description of the current status, distribution, and impact of an infectious disease or other health-related condition in a specified geographic area.

Epidemiology – the study of the distribution and determinants of health-related states or events in specified populations, and the application of this study to the control of health problems.

Exposure – contact with or possession of a characteristic that is suspected to influence the risk of developing a particular disease.

Gender – a classification of sex.

Gonorrhea - a bacterium which is a principal cause for sexually transmitted disease in males and females. The infection is due to *Neisseria gonorrhoeae* which is transmitted sexually in most cases. It is marked in males by urethritis with pain and pus, but is commonly asymptomatic in females, although it may produce severe pelvic infection. In both sexes it can cause skin lesions, arthritis and rarely meningitis or endocarditis.

Hepatitis C Virus (HCV) - a form of viral hepatitis, previously referred to as nonA nonB hepatitis, has been the most common form of blood transfusion acquired hepatitis. Transmission through sexual contact is considered much less common than infection due to blood exposure. Risk factors include recent blood transfusion, IV drug abuse or occupational exposure to blood products. There is no specific treatment. There is a test for hepatitis C antibody which indicates prior exposure.

Highly Active Anti-Retroviral Therapy (HAART) - anti-HIV drug therapy, often requiring a cocktail of several drugs that is prescribed to many HIV-positive people, even before they develop symptoms of AIDS.

HIV – a type of retrovirus (human immunodeficiency virus) that is responsible for acquired immunodeficiency syndrome. Two closely related species have been identified.

Type 1: the predominant retrovirus recognized as the agent that induces AIDS.

Type 2: a virus closely related to HIV-1 that also leads to immune suppression. HIV-2 is not as virulent as HIV-1 and is epidemic only in West Africa.

HIV-1 - see HIV

HIV-2 - see HIV

Hepatitis B – a form of viral hepatitis, or inflammation of the liver, caused by an infectious agent called the hepatitis B virus (HBV). HBC may be transmitted through contact with infected body fluids, including blood, saliva, seminal fluid, vaginal secretions, and breast milk.

IDU – injection drug user; people who are at risk for HIV infection through the use of equipment used to inject drugs (e.g., syringes, needles, cookers, spoons, etc.).

Immigrant - one that immigrates: as a person who comes to a country to take up permanent residence

Incidence – the number of new cases of a disease that occur in a specified population during a specified time period.

Indeterminate test result – a possible result of a Western blot, which may represent a recent HIV infection or be a false-positive.

Incarcerated – in prison or jail.

Influenza - an acute viral infection involving the respiratory tract, occurring in isolated cases, in epidemics, or in pandemics (striking many continents simultaneously or in sequence). It is marked by inflammation of the nasal mucosa, the pharynx and conjunctiva and by headache and severe, often generalized myalgia. Fever, chills and prostration are common. The incubation period is one to three days and the disease ordinarily lasts for three to ten days. Influenza is caused by a number of serologically distinct strains of virus, designated A B and C.

Jurisdictions - the power, right, or authority to interpret and apply the law; or the authority of a sovereign power to govern or legislate; or the limits or territory within which authority may be exercised.

Malignant -tending to become progressively worse and to result in death. Having the properties of anaplasia, invasion and metastasis in medicine. The term is applied to invasive forms of cancer.

Mortality rate – the rapidity with which persons with a given population die from a particular disease.

MSM – men who have sex with men. Men who report sexual contact with other men (i.e., homosexual contact) or men who report sexual contact with both men and women (i.e., bisexual contact).

MSM/IDU- men who report both sexual contact with other men and injection drug use.

NIR – no identified risk.

Needs assessment – the process of obtaining and analyzing information from a variety of sources in order to determine the needs of a particular client, population, or community.

Neoplasm - new and abnormal growth of tissue, which may be benign or cancerous.

Neonatal mortality rate - the number of children dying under 28 days of age divided by the number of live births that year.

Odds Ratio – the odds of a particular exposure among persons with a specific disease divided by the corresponding odds of exposure among persons without the disease of interest.

Opportunistic Infectious (OIs) – those diseases which are caused by agents that are commonly present in our bodies or environment but cause disease only when there is a change from normal, healthy conditions, such as when the immune system becomes depressed.

Percutaneous - through or across the skin.

Perinatal - pertaining to or occurring in the period shortly before and after birth, variously defined as beginning with completion of the twentieth to twenty eighth week of gestation and ending 28 days after birth.

PLWA – person living with AIDS.

Pneumonia - inflammation and infection of the lungs.

Prevalence - the proportion of persons in a given population who have a particular disease at a point or interval of time.

Proportion – the ratio of a part of the whole to the whole.

Protease inhibitor – a drug that interferes with the production of new infectious viral particles.

Public health surveillance – an ongoing, systematic process of collecting, analyzing and using data on specific health conditions and diseases, in order to monitor these health problems, such as the Centers for Disease Control and Prevention's (CDC) surveillance system for AIDS.

Publicly funded - paid for with government funds

P-24 – protein antigen from HIV's core that can be measured in blood and other body fluids.

P-value – a statement of the probability that the difference observed could have occurred by chance; usually expressed by the symbol < (less than) and a decimal notation such as 0.01, 0.05, or followed by the abbreviation n.s. (not significant).

Rate – measure of the probability of the development of a disease in a specified population during a specified period of time.

Refugee - one that flees; especially : a person who flees to a foreign country or power to escape danger or persecution

Report delay – the period between the date a reportable disease is diagnosed by a physician and the date that the diagnosis is reported to public health officials.

Relative risk – the ratio of the risk of disease or death among the exposed to the risk among the unexposed; this usage is synonymous with risk ratio.

Risk behavior – behavior that places a person at risk for disease; for HIV/AIDS, includes such factors as sharing of injection drug use equipment, unprotected male-to-male sexual contact, commercial sex work without the use of condoms. Risk factor includes non- behavioral elements.

Screening test – an initial test, usually designed to be sensitive, to identify all persons with a given condition or infection, such as enzyme immunoassay [EIA] or enzyme-linked immunosorbent assay [ELISA].

Secondary source data – existing information that was collected by someone else, but which you can analyze or re-analyze and use. Such data may be in "raw" (unanalyzed) or analyzed form.

Sensitivity – the probability that a test will be positive when infection or condition is present.

Seroconversion – initial development of detectable antibodies specific to a particular antigen; the change of a serologic test result from negative to positive as a result of antibodies induced by the introduction of antigens or microorganisms into the host.

Seroprevalence – HIV seroprevalence refers to the number of persons in a population who test HIV+ based on serology (blood serum) specimens; often presented as a percent of the total specimens tested or as a ratio per 1,000 persons tested.

Sexually exposed – exposed to an infectious agent as a result of sexual intercourse with an infected partner.

Sexually transmitted diseases (STDs) – diseases that spread from one sexual partner to another as a result of sexual intercourse.

Specificity – the probability that a test will be negative when the infection or condition is not present.

Surrogate marker – variables or factors that are known to be associated with the outcome of interest (HIV infection) or a behavior that causes the outcome (unprotected sex) that can be measured and reported when the data on the desired outcome is not available. For example, if there are no HIV prevalence data available for a population, STD prevalence data can be looked at as a surrogate marker for HIV infection.

Surveillance – the ongoing and systematic collection, analysis, and interpretation of data about a disease or health condition. This most commonly comes as reports from health providers or clinical laboratories to public health officials. Collecting blood samples for the purpose of surveillance is called serosurveillance.

Syphilis – a contagious disease that can be spread sexually or from infected mother to her child, caused by the organism *Treponema pallidum*. Also known as lues and "bad blood."

Target populations – Groups of people who are to be reached through some action or intervention. In HIV prevention community planning, refers to populations that are the focus of HIV prevention efforts due to high rates of HIV infection, usually defined based on a review of the HIV epidemiologic profile, and high levels of risky behavior. Groups often defined based on a combination of characteristics such as race or ethnicity, age, gender, risk factor/behavior, and geographic location.

Transgender – a general term for any person who adopts a gender identity that does not strictly identify with their biological sex (i.e., a biological male who identifies as a woman, or vice-versa). The term transgender includes biological males who live their entire lives as women and biological females who live their entire lives as men whether or not they have had surgical procedures to alter the appearance of their genitalia. The term also refers to individuals who either publicly or privately cross-dress (dress in clothing traditionally worn by another gender), and those who are intersexed (born with ambiguous genitalia and/or sex chromosome).

Transmission categories – in describing HIV/AIDS cases, same as exposure categories; how an individual may have been exposed to HIV, such as injecting drug use, men who have sex with men, and heterosexual contact.

Trichomonas vaginitis – an STD caused by a one-celled protozoa, *Trichomonas vaginalis*. The disease in women can present as a vaginal discharge or produce no symptoms. Men usually have no symptoms but carry the microbe in the urethra or prostrate.

Tuberculosis – an infectious disease that is caused by *Mycobacterium tuberculosis*, which is spread by coughing. The organism may grow in the lungs and in other tissues such as liver, bone or brain.

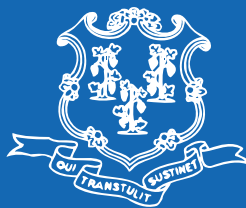
Viral load - The number of viral particles (usually HIV) in a sample of blood plasma. HIV viral load is increasingly employed as a surrogate marker for disease progression. It is measured by PCR and bDNA tests and is expressed in number of HIV copies or equivalents per milliliter.

Voluntary HIV testing – Test subjects have the opportunity to accept or refuse HIV testing.

Western blot – a blood test used to detect HIV antibody. Compared to the ELISA, the Western blot is more specific and expensive. It can be used to confirm the results of the ELISA test.

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